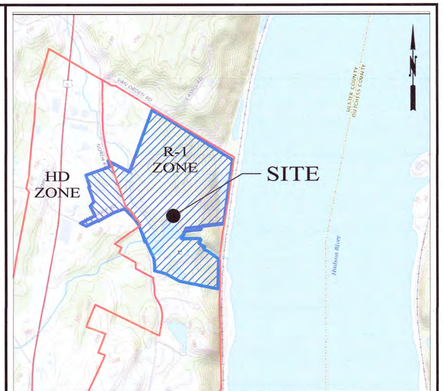
LEGEND

- EXISTING MAJOR 10 FOOT CONTOUR
- EXISTING MINOR 2 FOOT CONTOUR
- PROPOSED MAJOR 10 FOOT CONTOUR
- PROPOSED MINOR 2 FOOT CONTOUR
- TOWN (CITY, VILLAGE, COUNTY, ZONE)
- YARD SETBACK
- SILT FENCE EXIST
- SILT FENCE NEW
- WATER VALVE EXIST
- WATER VALVE NEW
- CULVERT EXIST
- CULVERT NEW
- SEWER LINE EXIST
- SEWER LINE NEW
- GAS LINE EXIST
- GAS LINE NEW
- ELECTRIC LINE EXIST
- ELECTRIC LINE NEW
- COMMUNICATIONS LINE EXIST
- COMMUNICATIONS LINE NEW
- WATER MAIN EXIST
- WATER MAIN NEW
- FORCEMAIN EXIST
- FORCEMAIN NEW
- ADJACENT PROPERTY LINE
- DECK & PORCH
- DEED LINE
- DRIVEWAY & ROAD-ASPHALT
- DRIVEWAY & ROAD-GRAVEL
- FENCE-WIRE
- FENCE-WOOD
- GUARDRAIL
- LIMIT OF DISTURBANCE
- PROPERTY LINE
- RIGHT OF WAY
- STONE WALL
- STREAM & POND & DITCH
- TREE LINE
- UTILITY LINE & POLE
- WETLANDS ADJACENT AREA
- WETLANDS BOUNDARY
- SILT FENCE
- EXIST. UNDGND ELEC.
- PROP. UNDGND ELEC
- PROP. UNDGND CATV
- EXIST. UNDGND CATV
- EXIST. FLOOD ELEVATION
- TREE HOUSE/CABIN NEW
- BUILDING EXIST REMAINS
- BUILDING EXIST REMOVE





LOCATION MAP: USGS NATIONAL MAP
SCALE: 1" = 1000'

APPLICANT

220 NORTH ROAD LLC C/O
ROBERT POLLOCK
PO BOX 444
MILTON, NY 12547

LOTS AND AREA

SBL	ACREAGE
EAST SIDE OF NORTH ROAD, R-1 ZONE	
103.1-2-12.200	
103.1-2-13	
103.1-2-11.200	
103.1-2-10	
103.1-2-11.100	
EAST SIDE TOTAL	±57.7 AC
WEST SIDE OF NORTH ROAD, HD ZONE	
103.1-2-75	
103.1-2-71	
103.1-2-72	
WEST SIDE TOTAL:	±6.0 AC

ZONING REQUIREMENTS

FOR RESIDENTIAL ZONES R-1 AND HD

	R-1 ZONE REQUIRED	R-1 ZONE PROPOSED	HD ZONE REQUIRED	HD ZONE PROPOSED
MINIMUM LOT AREA	1 AC*	±62 AC	2 AC	±62 AC
WITH PUBLIC WATER AND SEWER			1.5 AC	
MINIMUM YARDS				
FRONT YARD	35 FT	≥77 FT	75 FT	≥152 FT
REAR YARD	50 FT	≥304 FT	75 FT	≥75 FT
SIDE YARD				
ONE	35 FT	≥104 FT	25 FT	≥25 FT
BOTH	70 FT	≥104 FT	50 FT	≥50 FT
MINIMUM LOT WIDTH	150 FT	≥1400 FT	200 FT	≥620 FT
MINIMUM LOT DEPTH	200 FT	≥884 FT	200 FT	≥360 FT
MAXIMUM BUILDING COVERAGE	20%	±6.2%	40%	±6.4%
MAXIMUM HEIGHT				
STORIES	2½	2½	4	<4
HEIGHT	35 FT	<35 FT	45 FT**	<35 FT

*Minimum lot sizes in R-1 and R-Ag-1 are subject to percolation tests required under § 155-42, but in no event are less than one (1) acre.
**For buildings in excess of 35 feet in height in the HD Zone, there shall be a visual impact analysis prepared under SEQRA because the HD Zone includes property within the Coastal Boundary Zone. Regarding the alternative means of measurement of height by feet or by number of stories, the lesser of the two alternatives shall apply.

MAP REVISION DATES

DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

Dig Safely. New York
- Call Before You Dig
- Wait The Required Time
- Confirm Utility Response
- Respect The Marks
- Dig With Care

CALL 811
www.digsafelyny.com

PROPERTIES INVOLVED

SBL	OWNER	ADDRESS	TOWN	TYPE	ACREAGE	NOTES
*103.1-2-12.100	Robert Pollock	238-244 North Rd	Marlboro	1 Family Res	±0.3 AC *	
103.1-2-12.200	Robert Pollock	238-244 North Rd	Marlboro	Res Multiple	±39.7 AC	
103.1-2-13	220 North Road Realty LLC	220-236 North Rd	Marlboro	Inn/lodge	±11.0 AC	APPLICANT
103.1-2-11.200	99 S. Elliott Place LLC	26 Van Orden Rd	Marlboro	1 Family Res	±1.3 AC	
103.1-2-10	Robert Pollock	20 Van Orden Rd	Marlboro	2 Family Res	±2.5 AC	
103.1-2-11.100	22 Van Orden LLC	22 Van Orden Rd	Marlboro	1 Family Res	±1.2 AC	
103.1-2-75	99 S Elliott Place LLC	257 North Rd	Marlboro	1 Family Res	±1.4 AC	
103.1-2-71	99 S. Elliot Place LLC	249-251 North Rd	Marlboro	Other Storage	±3.8 AC	
103.1-2-72	Chernobyl Power & Light	8 Mahoney Rd	Marlboro	Auto body	±0.8 AC	
				TOTAL	±62.0 AC	

*±0.3 AC of 103.1-2-12.100 to be added to 103.1-2-200 in a lot line adjustment

PROPOSED BUILDINGS:

	CABINS/TREE HOUSES	35 UNITS
Ⓐ	MODULAR 1 BED: 15 @ ±500 SF	±7,500 SF
Ⓑ	REG. 1 BED: 11 @ ±480 SF	±5,280 SF
Ⓒ	REG. 2 BED: 8 @ ±800 SF)	±6,400 SF
Ⓓ	YURT: 1 @ ±700 SF	±700 SF
	MAIN HOTEL	
Ⓔ	EVENT SPACE, RESTAURANT & BANQUET HALL	±18,000 SF
Ⓕ	HOTEL (65 ROOMS)	±69,000 SF
	ACCESSORY BUILDINGS	
Ⓖ	GATE HOUSE	±520 SF
Ⓗ	HOTEL PANTRY STORAGE	±4,300 SF
	TOTAL PROPOSED:	±111,700 SF

ZONING SETBACKS:

R-1 ZONE	REQUIRED	Ⓕ HOTEL PROPOSED	Ⓔ EVENT SPACE PROPOSED	Ⓐ Ⓑ Ⓒ Ⓓ CABINS PROPOSED	Ⓖ GATE HOUSE PROPOSED
FRONT YARD	35 FT	≥77 FT	≥644 FT	≥271 FT	≥77 FT
REAR YARD	50 FT	≥304 FT	≥860 FT	≥605 FT	≥1340 FT
SIDE YARD					
ONE	35 FT	≥180 FT	≥47 FT	≥104 FT	≥500 FT
BOTH	70 FT	≥630 FT	≥900 FT	≥1100 FT	≥1800 FT

HD ZONE	REQUIRED	Ⓗ PANTRY/STORAGE PROPOSED
FRONT YARD	75 FT	≥152 FT
REAR YARD	75 FT	≥75 FT
SIDE YARD		
ONE	25 FT	≥25 FT
BOTH	50 FT	≥50 FT

INDEX

SHEET	NUMBER	TITLE
I	1 OF 19	INDEX SHEET
SP-1	2 OF 19	SITE PLAN
EC-1	3 OF 19	EXISTING CONDITIONS & PROPERTY LINE REVISIONS
GP-1	4 OF 19	GRADING PLAN - HOTEL
GP-2	5 OF 19	GRADING PLAN - PARKING
RP-1	6 OF 19	DRIVEWAY PROFILE 1
RP-2	7 OF 19	DRIVEWAY PROFILE 2
UP-1	8 OF 19	SEPTIC PLAN OUTFALL #4
UP-2	9 OF 19	SEPTIC PLAN OUTFALL #5
UP-3	10 OF 19	SEPTIC PLAN OUTFALL #6
D-1	11 OF 19	SITE DETAILS
D-2	12 OF 19	WATER DETAILS
SD-1	13 OF 19	SEPTIC DETAILS
SD-2	14 OF 19	SEPTIC DETAILS
D-4	15 OF 19	DRAINAGE DETAILS
SESC-1	16 OF 19	SOIL EROSION AND SEDIMENT CONTROL
D-5	17 OF 19	SOIL EROSION AND SEDIMENT CONTROL DETAILS
TM	18 OF 19	FIRE TRUCK BUS DELIVERY TRUCK ACCESS PLAN
AAP	19 OF 19	ARCHAEOLOGICAL AVOIDANCE PLAN

UNDER SEPARATE COVER:
LANDSCAPING PLANS: LS-1 AND LS-2
ARCHITECTURAL PLANS

INDEX SHEET

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

150 0 150 300 450

Scale: 1" = 150'

NOVEMBER 9, 2023

MEDENBACH, EGGERS & CARR
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STONE RIDGE, NEW YORK (845) 687-0047
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BARRY MEDENBACH, P.E.
NEW YORK LIC. NO. 60142

I
E18 105
SHEET 1 OF 19

Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

Z:\Clients Active\ENGINEERING\E18 105 Pollock Buttermilk Hotel & Conference Center\DWGs\2024-04-22 E18 105 BUTTERMILK FALLS HOTEL AAP.dwg

GRID NORTH
NEW YORK EAST ZONE 1983

N/F
GELA GROUP LLC
SBL:103.1-2-66
L.6103 ~ P.018

NOW
99 S Elliott Place LLC
SBL:103.1-2-75

N/F
Milton 2002 LLC
SBL: 103.1-2-78.100

N/F
SEED LANDSCAPE DESIGN INC.
SBL:103.1-2-79 TOP

N/F
SONO-TEK INDUSTRIAL PARK LLC
SBL:103.1-2-80

N/F. Ticcony, Matthew
SBL: 103.1-2-1.100

N/F
TICCONY & McPECK
SBL:103.1-2-1.200

LANDS OF CHERNOBYL
POWER & LIGHT
SBL:103.1-2-72
L.3857 ~ P.183

LANDS OF
NORTH ROAD PROPERTIES LLC
L.4491 ~ P.066
SBL:103.1-2-71

NORTH ROAD

N/F
AMG MILTON LLC
SBL:103.1-2-70
L.6157 ~ P.342

MAHONEY RD

LANDS OF
MILTON REALTY LLC
SBL:103.1-2-9.2
L.3173 ~ P.206

N/F
MILTON REALTY LLC
SBL:103.1-2-9.1
L.3173 ~ P.206

EXISTING FOOT BRIDGE

N/F
WILLIAM M BEDNARSKI JR
SBL:103.1-2-5
L.2659 ~ P.039

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-4
L.5704 ~ P.319

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-
L.5476 ~ P.2

N/F:
BANAJA, HATIM D
SBL: 103.1-2-9.400

STREAM

N/F
JOHN W & LINDA McELRATH
SBL:103.1-2-6
L.6545 ~ P.154

N/F
JOHN W. TOTTEN
SBL:103.1-2-69
L.2133 ~ P.213

GRAVEL PATH

WOOD BRIDGE

LANDS OF
MILTON REALTY LLC
SBL:103.1-2-9.3
L.3173 ~ P.206

N/F
PHYLLIS A SPOTO
IRREVOCABLE TRUST
SBL:103.1-2-7
L.6246 ~ P.311

N/F
TIMOTHY BOZOYAN
SBL:103.1-2-68
L.2829 ~ P.195

N/F
JAMES D KENT
SBL:103.1-2-67
L.5034 ~ P.081

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-10
L.6490 ~ P.152

N/F
99 S. ELLIOTT
PLACE LLC
SBL:103.1-2-11.2

15' WIDE
ACCESS ROAD

LANDS OF
22 VAN ORDEN LLC
SBL:103.1-2-11.1
L.6903 ~ P.080

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-8
L.6782 ~ P.250

N/F: Ingis, Kyle E
SBL: 96.3-3-1.300

20' WIDE
ACCESS ROAD

N/F
PETER A. RUOLOTO
SBL:103.1-2-14
L.2122 ~ P.350

POND

SHED
COOLER/DRESS

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-15
L.5666 ~ P.039

CEMETERY

BARN

ROAD 1

15' WIDE
ACCESS ROAD

15' WIDE
ACCESS
ROADS

ROAD 2

N/F: Manning, James A
SBL: 96.3-3-2

N/F: Murphy, Brian W
SBL: 96.3-3-3

N/F: Ward, Michael P
SBL: 96.3-3-6.100

N/F: JAMAL, AHMAD I
SBL: 96.3-3-6.200

LANDS OF
220 NORTH ROAD REALTY LLC
SBL:103.1-2-13

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-12.100
CURRENT ±3.5AC
PROPOSED ±3.2AC

PROPOSED
PROPERTY
LINE
ADJUSTMENT
±11,600 SF
±0.27 AC

EVENT SPACE
RESTAURANT
BANQUET HALL

HOTEL

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-12.200

EXISTING POND

RAIL ROAD
TO POUGHKEEPSIE/NYC =>
<= TO ALBANY

N/F
CSX TRANSPORTATION INC
SBL:109.1-2-37
L.3070 ~ P.005

N/F: 220 North Road Realty LLC
SBL: 103.1-2-13

HUDSON RIVER

TOWN OF MARLBOROUGH
TOWN OF LLOYD

N/F
JANET ECKERSON
SBL:96.3-3-7

N/F: CSX Transportation Inc
SBL: 88.17-3-5

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Respect The Marks
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Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

BUILDING KEY

EXISTING BUILDINGS TO REMAIN:

BLDG#	DESCRIPTION	GROSS AREA	STATUS
①	10 BEDROOM INN	7,180 SF	
②	PROPOSED ±2907 SF ADDITION TO EXISTING RESTAURANT	6,025 SF	UNDER CONSTRUCTION
③	EXERCISE ROOM W/ 1 BEDROOM APARTMENT	1,152 SF	
④	2 CAR GARAGE W/1 BEDROOM GUEST ROOM	585 SF	
⑤	2 CAR GARAGE W/1 BEDROOM GUEST ROOM	585 SF	
⑥	1 BEDROOM RESIDENCE	519 SF	
⑦	SPA BUILDING W/ APPROVED SPA EXPANSION	8,064 SF	
⑧	PRIVATE RESIDENCE	2,850 SF	
⑨	120 SEAT BANQUET HALL IN EXISTING BARN W/KITCHEN	6,200 SF	
⑪	AGRICULTURAL BUILDING	1,450 SF	
⑭	STAFF RESIDENCE	1,610 SF	
⑮	STAFF RESIDENCE	1,512 SF	
⑯	WAREHOUSE FOR HOTEL STORAGE	14,366 SF	PARTS TO BE REMOVED
⑲	PRIVATE RESIDENCE	2,464 SF	
⑳	PRIVATE RESIDENCE	1,574 SF	
㉑	PRIVATE RESIDENCE	2,056 SF	
㉒	4 BAY GARAGE	3,000 SF	
㉔	SHED		
㉕	SHED / BEE HOUSES		
㉖	EVENT AREA		

EXISTING BUILDINGS TO BE REMOVED:

BLDG#	DESCRIPTION	GROSS AREA
⑩	PRIVATE RESIDENCE	2,650 SF
⑫	AGRICULTURAL BUILDING	850 SF
⑬	PRIVATE RESIDENCE	800 SF
⑰	SHED	
⑱	SHED	
㉓	CHICKEN COOPS	
㉗	POOL HOUSE	
㉘	SHED	
㉙	FOUNDATION	

PROPOSED BUILDINGS:

	CABINS/TREE HOUSES	35 UNITS
Ⓐ	MODULAR 1 BED: 15 @ ±500 SF	±7,500 SF
Ⓑ	REG. 1 BED: 11 @ ±480 SF	±5,280 SF
Ⓒ	REG. 2 BED: 8 @ ±800 SF)	±6,400 SF
Ⓓ	YURT: 1 @ ±700 SF	±700 SF
	MAIN HOTEL	
Ⓔ	EVENT SPACE, RESTAURANT & BANQUET HALL	±18,000 SF
Ⓕ	HOTEL (65 ROOMS)	±69,000 SF
	ACCESSORY BUILDINGS	
Ⓖ	GATE HOUSE	±520 SF
Ⓗ	HOTEL PANTRY STORAGE	±4,300 SF
	TOTAL PROPOSED:	±111,700 SF

MAP REVISION DATES

DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

SITE PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

100 0 100 200 300

Scale: 1" = 100'

NOVEMBER 9, 2023

MEDENBACH, EGGERS & CARR
CIVIL ENGINEERING & LAND SURVEYING, P.C.
STONE RIDGE, NEW YORK (845) 687-0047
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BARRY MEDENBACH, P.E.
NEW YORK LIC. NO. 60142

Z:\Clients Active\ENGINEERING\E18 105 Pollock Buttermilk Hotel & Conference Center\DWG\2024-04-22 E18 105 BUTTERMILK FALLS HOTEL AAAP.dwg

GRID NORTH
NEW YORK EAST ZONE 1983

N/F: West Jericho Turnpike LLC, 380
SBL: 103.1-2-74.100

N/F
GELA GROUP LLC
SBL:103.1-2-66
L.6103 ~ P.018

NOW
99 S Elliott Place LLC
SBL:103.1-2-75

N/F
Milton 2002 LLC
SBL: 103.1-2-78.100

N/F
SEED LANDSCAPE DESIGN INC.
SBL:103.1-2-79 TOP

N/F: Ticcony, Matthew
SBL: 103.1-2-1.100

N/F
SONO-TEK INDUSTRIAL PARK LLC
SBL:103.1-2-80

N/F
TICCONY & McPECK
SBL:103.1-2-1.200

LANDS OF CHERNOBYL
POWER & LIGHT
SBL:103.1-2-72
L.3857 ~ P.183

LANDS OF
NORTH ROAD PROPERTIES LLC
L.4491 ~ P.066
SBL:103.1-2-71

MAHONEY ROAD

NORTH ROAD

ROB
SB
L.6

LANDS OF
MILTON REALTY LLC
SBL:103.1-2-9.2
L.3173 ~ P.206

N/F
MILTON REALTY LLC
SBL:103.1-2-9.1
L.3173 ~ P.206

N/F
WILLIAM M BEDNARSKI JR
SBL:103.1-2-5
L.2659 ~ P.039

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-4
L.5704 ~ P.319

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-3
L.5476 ~ P.257

N/F
AMG MILTON LLC
SBL:103.1-2-70
L.6157 ~ P.342

S 19°36'01" W
48.13'

STREAM

N/F:
BANAJA, HATIM D
SBL: 103.1-2-9.400

N/F
JOHN W & LINDA McELRATH
SBL:103.1-2-6
L.6545 ~ P.154

N/F
JOHN W. TOTTEN
SBL:103.1-2-69
L.2133 ~ P.213

UNDER CONSTRUCTION: 30LF
8x12 CONCRETE CULVERT

(2) CULV

PATIO

GRAVEL PATH

LANDS OF
MILTON REALTY LLC
SBL:103.1-2-9.3
L.3173 ~ P.206

N/F
PHYLLIS A SPOTO
IRREVOCABLE TRUST
SBL:103.1-2-7
L.6246 ~ P.311

168

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-10
L.6490 ~ P.152

SITE LOCUS #1

50' BUFFER

N/F
99 S. ELLIOTT
PLACE LLC
SBL:103.1-2-11.2

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-8
L.6782 ~ P.250

VAN ORDEN ROAD

N/F
JAMES D KENT
SBL:103.1-2-67
L.5034 ~ P.081

N/F
TIMOTHY R. FOSTADAL
SBL:103.1-2-68
L.2929 ~ P.195

EASEMENT
FOR ACCESS
TO SBL
103.1-2-12.100

ASPHALT DRIVE

STREAM

N 23°36'48" E 953.09'

LANDS OF
22 VAN ORDEN LLC
SBL:103.1-2-11.1
L.6903 ~ P.080

N/F: Manning, James A
SBL: 96.3-3-2

N/F
PETER A. RUOLOTO
SBL:103.1-2-14
L.2122 ~ P.350

POND

CASHED
COOKER/OFFICE

CB

GAZEBO

GAZEBO

CASSEL ROAD

LANDS OF
ROBERT POLLOCK
SBL:103.1-2-15
L.5666 ~ P.039

POND

GRAVEL DRIVE

GRAVEL DRIVE

GAZEBO

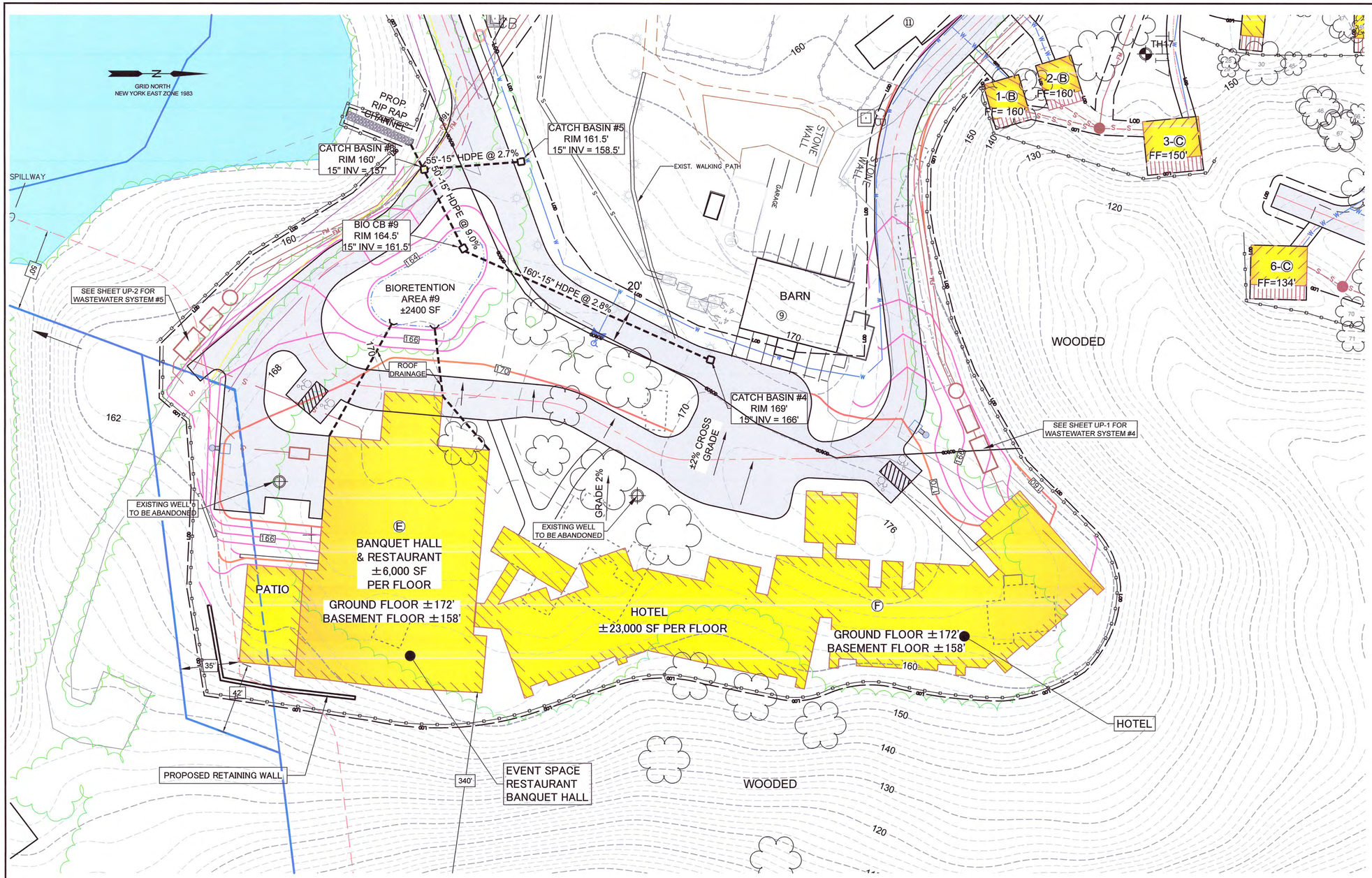
GAZEBO

CB
HYD.

GAZEBO

GAZEBO

GAZEBO



General Utility Notes and Specifications:

General Provisions:

1. All construction activities shall be in compliance with municipal, county state and federal regulations.
2. The protection of adjacent properties or areas on site that are not to be disturbed during construction, shall be the responsibility of the contractor.
3. Any conditions encountered in the field differing from those shown hereon, shall be reported to the design engineer before construction is to proceed.
4. Exploratory excavations shall be performed as needed at all utility connection locations by the contractor to verify existing conditions prior to work. Before connecting to existing utilities, verify existing utility inverts and notify the engineer if any deviation from the plan is required.
5. Where underground or overhead obstructions are encountered in the work, the contractor shall assume all costs for direct or indirect injury to them. Any valve box, valve pit, water service, water main, catch basin, manhole etc. whether or not shown on the drawings shall be protected from damage.
6. The contractor shall maintain service for all existing utilities until no longer necessary.
7. All trenching and shoring shall adhere to OSHA guidelines.
8. Contractor shall comply with all the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-20-001. A current copy of the Stormwater Pollution Prevention Plan (SWPPP) shall be keep on site at all times. Contractor is responsible for conducting weekly inspections (must be qualified by NYSDEC) or retaining a qualified inspector such as the design engineer to perform such inspections.

Excavation and Earthwork:

1. Prior to site disturbance the contractor shall install required erosion & sediment control measures.
2. Strip all topsoil prior to commencing earthwork operations. Topsoil may be stored and reused in lawn and planting areas only.
3. Excavation shall be carried to the lines, grades and slopes shown on the approved plans. All final earthwork shall be smoothly and evenly blended into existing conditions.
4. Remove all vegetation, trees, stumps, grasses, organic soils, debris and deleterious materials from excavated soils to be reused as fill onsite.
5. Where unstable or unsuitable material is encountered at the prescribed bottom grade of the trenches it shall be removed.
6. Contractor shall be responsible for dewatering utility trenches and excavations and for the maintenance of surface drainage during the course of the work.
7. After final grading the contractor shall reapply stockpiled top soil on all lawn and planting areas. Topsoil shall be evenly spread a minimum of 4 (four) inches over all planting areas seeded and mulched in lawn areas or planted as per landscaping plan in planting beds. The contractor shall restore lawns, driveways and other disturbed areas to at least as good a condition as before being disturbed.

Utility Bedding and Backfill:

1. Selected bedding (as specified on the utility typical trench sections heron) shall be provided for the construction of pipe foundations at those locations where the foundations or excavated material, or any portion thereof deemed to be unsuitable for supporting the pipe or structure, or for back filling the cover portion of the trenches to a level one foot above the pipe, or where excavated material consist of a predominance of large stone, boulders or rock which is not suitable for placing in the trench. Certified sieve analysis shall be submitted from the supplier for the engineer's review prior to use.
2. All suitable back fill material shall be placed in layers not exceeding twelve (12) inches in depth, (loose measure), and shall be thoroughly tamped and compacted to a minimum density of 95% standard AASHTO-T99 (ASTM-D698, as amended) compacting test. Compacting equipment shall be of a suitable type for the various back filling operations.
3. **Trench** Backfill specifications:
   A. NYSDOT Right of Way: Trench backfill material shall conform with NYSDOT Section 403 and meeting the gradation below.

   B. Parking and Roads: Trench backfill material shall consist of crushed stone, sand and gravel, crushed shell or onsite material approved by Engineer. The backfill shall consist of hard, sharp, clean granular material, free of organic matter. The material shall be free of any considerable amount of flat, laminated or elongated particles and, silt, clay, limestone, shale or other deleterious matter. The material must be capable of compaction to the densities specified or required. The material shall contain no stones larger than three (3) inches in their largest dimension and no more than 10 percent the material by weight shall pass a No. 200 sieve.

   C. Yard and Grass Areas: Trench backfill material shall consist of onsite onsite material or imported material similar to onsite material.

Drainage:

1. All storm sewer pipe shall be smooth interior HDPE pipe unless noted otherwise.
2. HDPE end sections shall be provided on all drainage pipe inlets or outlets not connected to catch basins or other drainage structures. All outlets shall also be stabilized with rip-rap as per plans.
3. All concrete chambers shall be pre cast concrete to the specifications and dimensions shown hereon. Frames and grates shall be gray iron or ductile iron. Gray iron shall conform with ASTM A 48, Class 30b and ductile iron shall conform with ASTM A 536 and be of a grade appropriate to its intended use to the dimensions and specifications as shown hereon. Any structures subject to vehicle loads shall be able to withstand an H20 loading. Shop drawings shall be submitted to the design engineer for approval prior to construction.
4. The gutters and ditches shall be kept open at all times for surface drainage. No damming or ponding of water, in gutters or other waterways will be permitted except where the engineer shall consider it necessary.
5. The transport of soils to the drainage system shall be avoided during and after construction.
6. All exposed soils shall be stabilized with vegetation, stone or as directed by the engineer.
7. Methods used to control soil erosion and sediment control shall be in accordance with the approved soil erosion and sediment control plan or as directed by the engineer. Contractor shall comply with all the requirements of the SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-20-001. A current copy of the Stormwater Pollution Prevention Plan (SWPPP) shall be keep on site at all times. Contractor is responsible for conducting weekly inspections (must be qualified by NYSDEC) or retaining a qualified inspector such as the design engineer to perform such inspections.

MAP REVISION DATES		
DATE	REVISION	BY
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GRADING AND UTILITY PLAN-HOTEL

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

30 0 30 60 90

Scale: 1" = 30'

NOVEMBER 9, 2023

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GRID NORTH
NEW YORK EAST ZONE 1983

BUTTERMILK FALLS TOTAL FACILITY PARKING ANALYSIS

EXISTING FACILITIES:	REQUIRED
BED & BREAKFAST (14 ROOMS/1)	14
HENRY'S RESTAURANT (150 SEATS/3)	50
SINGLE FAMILY COTTAGE 1x2	2
SPA (11 ROOMS/1)	11
+13 EMPLOYEES	13
BARN BANQUET HALL (120 SEATS/3)	40
OUTSIDE SPECIAL EVENTS (225 SEATS/3)	75
TOTAL EXISTING	205

PROPOSED FACILITIES:	REQUIRED
HOTEL (65 ROOMS)	65
CABINS (35 ROOMS @1)	35
RESTAURANT (60 SEATS/3)	20
BANQUET HALL (300 SEATS/3)	100
+70 EMPLOYEES	70
TOTAL PROPOSED	290
PROJECT TOTAL REQUIRED (290+205)	495
REDUCTION FOR USES NOT IN SERVICE AT SAME TIME	-90
NET TOTAL REQUIRED PARKING	**405**
(ACCESSIBLE PARKING REQUIRED	9)

	PROVIDED
EXISTING PARKING TO REMAIN:	
EAST OF NORTH ROAD	55
WEST OF NORTH ROAD	24
TOTAL EXISTING	79
PROPOSED PARKING:	
EAST OF NORTH ROAD	54
WEST OF NORTH ROAD (GREEN PARKING 83 OF 272)	272
PROPOSED TOTAL PARKING	326
NET TOTAL PARKING	**405**
(NET ACCESSIBLE PARKING	10)

TRUCK PARKING	8
BUS PARKING	3

MAP REVISION DATES

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GRADING AND UTILITY PLAN-PARKING

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

30 0 30 60 90

Scale: 1" = 30'

NOVEMBER 9, 2023

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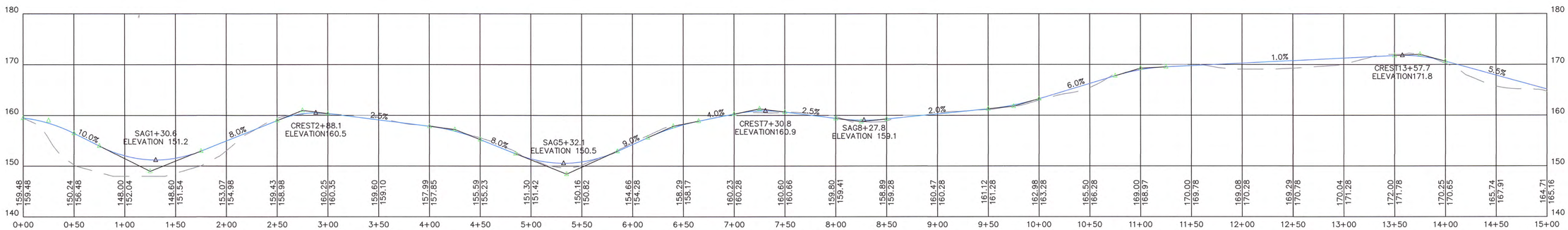
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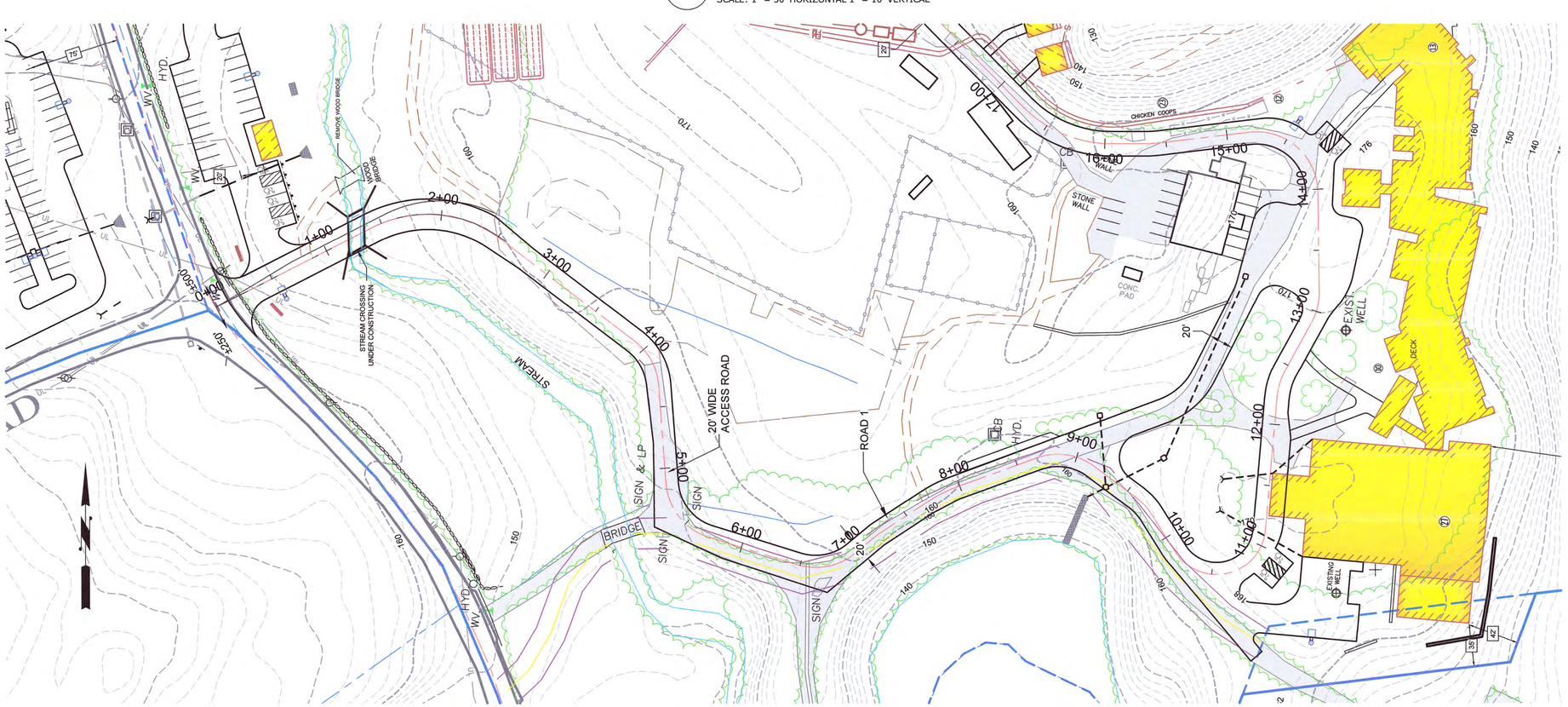
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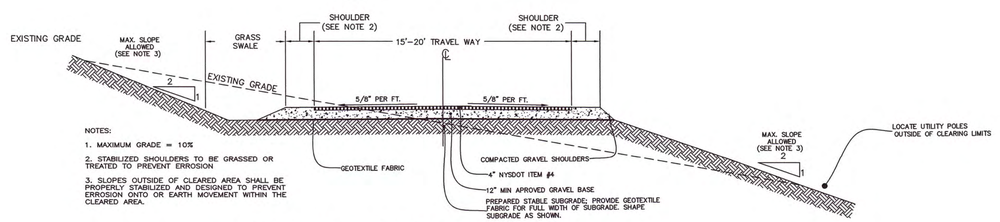
ROAD 1 - PROFILE 1 0+00 to 15+00

SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL



ROAD PLAN 1

SCALE: 1" = 50' HORIZONTAL



NOTES:

1. MAXIMUM GRADE = 10%
2. STABILIZED SHOULDERS TO BE GRASSED OR TREATED TO PREVENT ERROSION
3. SLOPES OUTSIDE OF CLEARED AREA SHALL BE PROPERLY STABILIZED AND DESIGNED TO PREVENT ERROSION ONTO OR EARTH MOVEMENT WITHIN THE CLEARED AREA.

TYPICAL ROAD SECTION

NOT TO SCALE

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DRIVEWAY PROFILE #1

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

50 0 50 100 150

Scale: 1" = 50'

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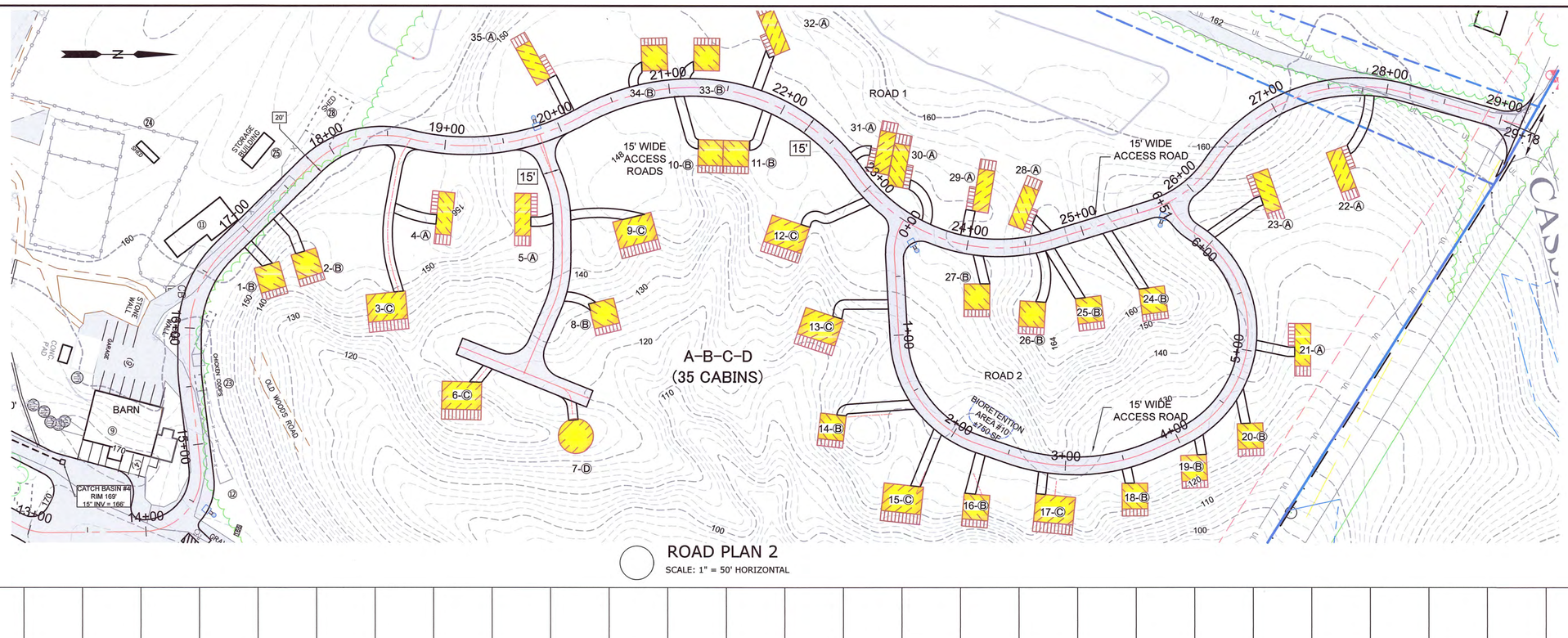
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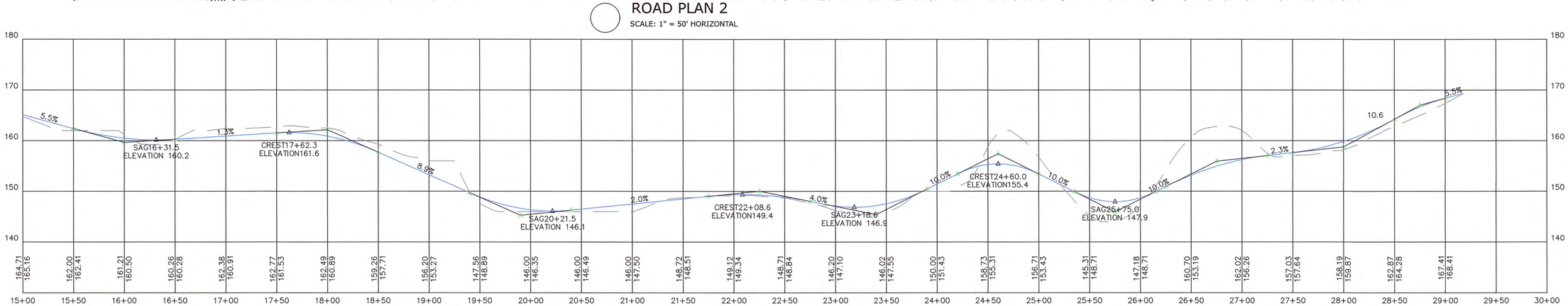
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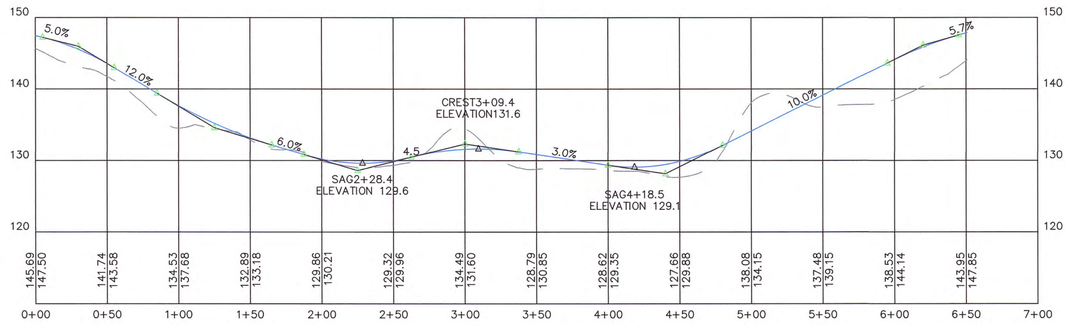
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ROAD PLAN 2
SCALE: 1" = 50' HORIZONTAL



ROAD PROFILE 2 (ROAD 1) 15+00 to 29+18
SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL



ROAD PROFILE 3 (ROAD 2)
SCALE: 1" = 50' HORIZONTAL 1" = 10' VERTICAL

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DRIVEWAY PROFILE #2
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY – NEW YORK

50 0 50 100 150

Scale: 1" = 50'

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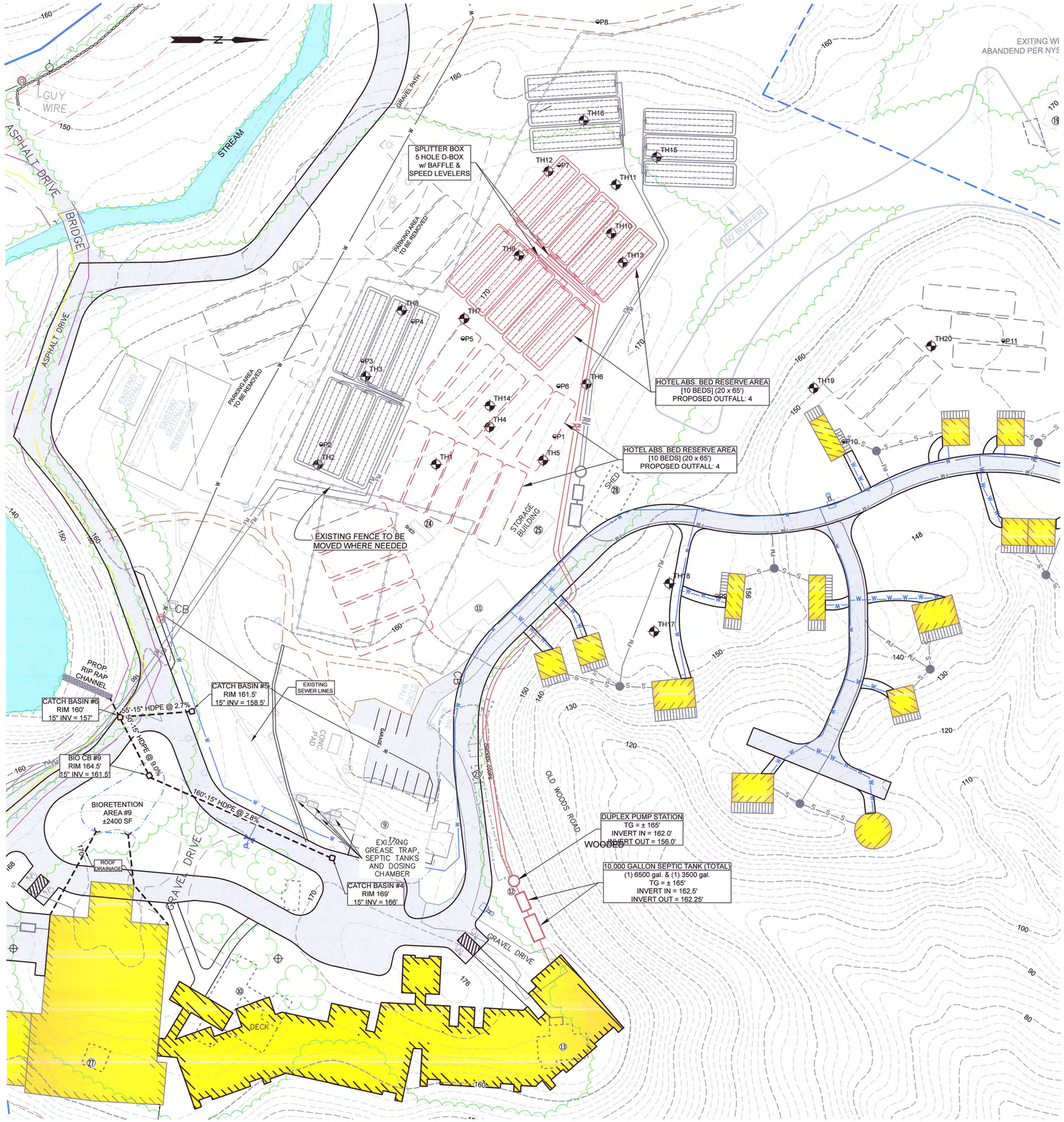
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TEST HOLE DATA

TH# ⌖ DENOTES SOIL TEST HOLE LOCATIONS

Conducted: 7/3/2023
Observed by Chris Kresser

TH # 4
0-12" TOPSOIL
12- 44" SILT LOAM
@32" SEEPAGE

TH # 5
0-29" TOPSOIL
29 - 48" SILT LOAM
NO WATER, ROCK, OR MOTTLING

TH #6
0-16" TOPSOIL
16 - 36" SILT LOAM
36 - 52" GRAVEL LOAM
NO WATER, ROCK, OR MOTTLING

TH # 9
0-16" TOPSOIL
16 - 43" SILT LOAM
AT 41" WATER
NO ROCK OR MOTTLING

TH # 10
0-39" TOPSOIL
39 - 54" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH # 11
0- 10" TOPSOIL
10- 48" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH # 12
0- 16" TOPSOIL
16- 48" SILT LOAM
NO WATER, ROCK, OR MOTTLING

Conducted: 9/6/2023
Observed by Chris Kresser

TH # 13
0-8" TOPSOIL
8 - 58" SILT LOAM
AT 58" MOTTLING
NO WATER OR ROCK

TH # 15
0-6" TOPSOIL
6 - 60" SILT LOAM
60 - 78" SAND GRAVEL

TH # 14
0-10" TOPSOIL
10- 58" SILT LOAM
58 - 80" SAND GRAVEL LOAM
NO WATER, ROCK OR MOTTLING

TH # 16
0-6" TOPSOIL
6- 60" GRAVEL
60-80 FINE SAND

PERC HOLE DATA

P# ◒ DENOTES PERCOLATION TEST LOCATIONS
(COMPLETED ON 7/15/2023)
P1 = 13 MIN./INCH
P6 = 13 MIN./INCH
(COMPLETED ON 9/27/2023)
P7 = xx MIN./INCH

Hotel 65 rooms @ 110 gpd= 7,150 gpd

Proposes 2 septic tanks in series
- one (1) 6000 gal and one (1) 3000 gal
- ten (10) disposal beds 20'x65'

HOTEL ABS. BED DESIGN SPECIFICATIONS

AVERAGE DAILY FLOW = 7150 GPD
STABILIZED PERCOLATION RATE = 20 MIN./INCH
APPLICATION RATE = 0.55 GPD/SQ.FT.
REQUIRED ABSORPTION AREA
= 7150 GPD/0.55(GPD/SQ. FT.) = 13,000 SQ. FT.
PROVIDE (10) BEDS @ 20 FT x 65 FT = 13,000 SQ. FT.
- PUMPING/DOSING VOLUME
FORCE MAIN PIPE VOLUME
640 FT OF 1 ½" PIPE x 0.0918 GALS/FT = 59 GALS
- TOTAL LATERAL PIPE VOLUME
(4) LATS @ 65 FT = 260 FT
(5) BEDS @ 260 FT = 1300 FT OF LATERIALS
1300 FT x 0.653 GALS/FT = 849 GALS
DOSING VOLUME
849 GALS x 75% = 637 GALS + 59 GALS(F.M.) = 696 GALS
849 GALS x 85% = 722 GALS + 59 GALS(F.M.) = 781 GALS

LEGEND

- WATER MAIN NEW
- PROPOSED GRINDER PUMP
- FORCEMAIN NEW

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WASTEWATER PLAN
OUTFALL #4 - HOTEL

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120
Scale: 1" = 40'

FEBRUARY 06, 2024

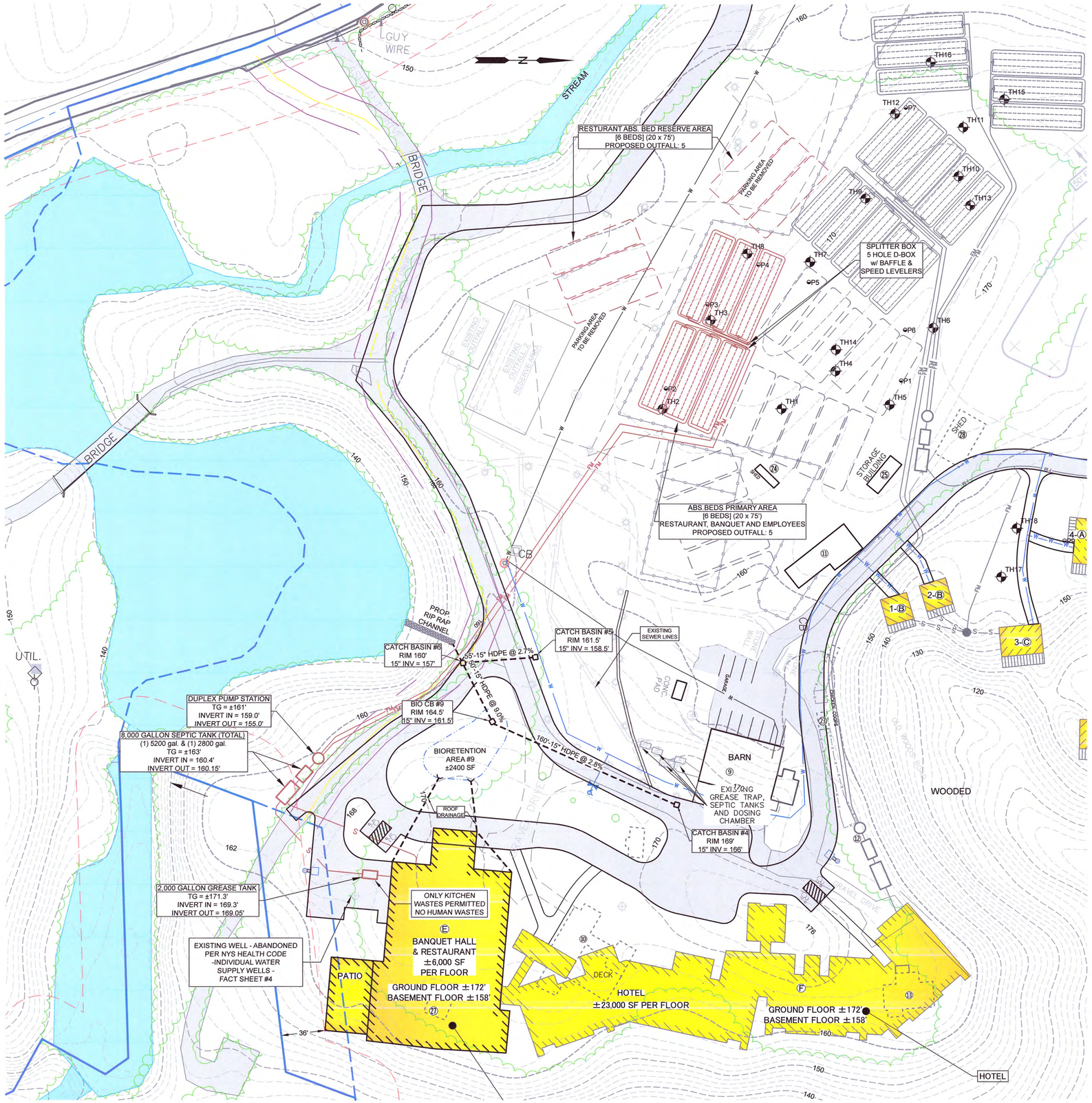
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TEST HOLE DATA

TH# ⊕ DENOTES SOIL TEST HOLE LOCATIONS

Conducted: 7/3/2023
Observed by Chris Kresser

TH #1
0 - 49" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH #2
0-22" TOPSOIL
22-53" SILT LOAM
NO WATER, ROCK OR MOTTLING

TH #3
0-23" TOPSOIL
23- 55" SILT LOAM

TH # 4
0-12" TOPSOIL
12- 44" SILT LOAM
@32" SEEPAGE

TH # 7
0-15 TOPSOIL
15- 50 SILT LOAM
NO WATER ROCK OR MOTTLING

TH # 8
0-33" TOPSOIL
33 - 58" SILT LOAM

Conducted: 9/6/2023
Observed by Chris Kresser

TH # 14
0-10" TOPSOIL
10- 58" SILT LOAM
58 - 80" SAND GRAVEL LOAM
NO WATER, ROCK OR MOTTLING

PERC HOLE DATA

P#⊖DENOTES PERCOLATION TEST LOCATIONS
(COMPLETED ON 7/15/2023)
P2 = 15 MIN./INCH
P3 = 11 MIN./INCH
P4 = 16 MIN./INCH
P5 = 14 MIN./INCH

Restaurant, Banquet Hall and Employees at 4920 gpd:

Propose 2 septic tanks in series - one (1) 5200 gal and one (1) 2800 gal
- six (6) disposal beds 20'x75'

RESTAURANT/BANQUET HALL/EMPLOYEES ABS. BED DESIGN SPECIFICATIONS

AVERAGE DAILY FLOW = 4920 GPD
STABILIZED PERCOLATION RATE = 20 MIN./INCH
APPLICATION RATE = 0.55 G.P.D./SQ.FT.
REQUIRED ABSORPTION AREA
= 4920 GPD/0.55(GPD/SQ.FT.) = 8945 SQ.FT.
PROVIDE (6) BEDS @ 20'x75' = 9000 SQF. IN 2' WIDE
- PUMPING/DOSING VOLUME
FORCE MAIN PIPE VOLUME
535 FT OF 1 ½" PIPE x 0.0918 GALS/FT = 49 GALS
- TOTAL LATERAL PIPE VOLUME
(4) LATS @ 75' = 300 FT
(3) BEDS @ 300 FT/BED = 900 FT OF LATERIALS
900 FT x 0.653 GALS/FT = 588 GALS
DOSING VOLUME
588 GALS x 75% = 441 GALS + 49 GALS(F.M.) = 490 GALS
588 GALS x 85% = 500 GALS + 49 GALS(F.M.) = 549 GALS

MAP REVISION DATES		
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LEGEND
- WATER MAIN NEW
- PROPOSED GRINDER PUMP
- FORCEMAIN NEW

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WASTEWATER PLAN OUTFALL #5 - EVENT

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120
Scale: 1" = 40'

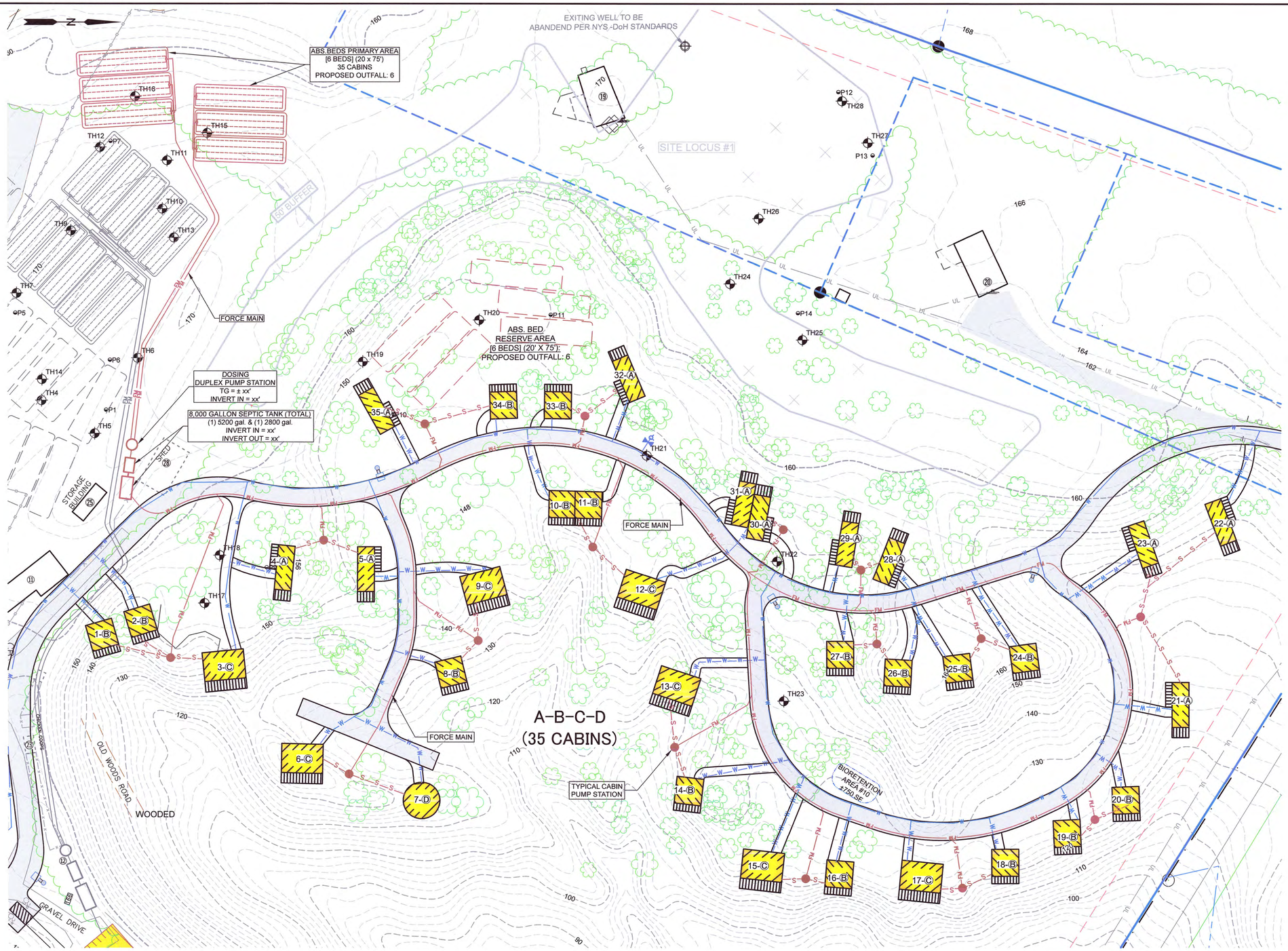
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PROPOSED FLOWS FOR OUTFALL #6:

CABINS/TREE HOUSES – WASTEWATER CALCULATION 110GPD/BR
- Ⓐ MODULAR 1 BED: 15 @ 110GPD = 1650 GPD
- Ⓑ REG. 1 BED: 11 @ 110 GPD = 1210 GPD
- Ⓒ REG. 2 BED: 8 @ 220 GDP = 1760 GPD
- Ⓓ YURT: 1 BED: 1 @ 110 GPD = 110 GPD

TOTAL = 4730 GPD

CABINS ABS. BED DESIGN SPECIFICATIONS

AVERAGE DAILY FLOW = 4730 GPD
STABILIZED PERCOLATION RATE = 20 MIN./INCH
APPLICATION RATE = 0.55 GPD/SQ.FT.
REQUIRED ABSORPTION AREA
= 4730 GPD/0.55(GPD/SQ.FT.) = 8600 SQ.FT.
PROVIDE (6) BEDS @ 20'x75' = 9000 SQ.FT.
- PUMPING/DOSING VOLUME
  FORCE MAIN PIPE VOLUME
  140 FT OF 1 ¼" PIPE x 0.0638 GALS/FT = 9 GALS
- TOTAL LATERAL PIPE VOLUME
  (4) LATS @ 75' = 300 FT
  (3) BEDS @ 300 FT/BED = 900 FT OF LATERIALS
  900 FT x 0.653 GALS/FT = 588 GALS
  DOSING VOLUME
  588 GALS x 75% = 441 GALS + 9 GALS(F.M.) = 450 GALS
  588 GALS x 85% = 500 GALS + 9 GALS(F.M.) = 509 GALS

TEST HOLE DATA

TH#⌖DENOTES SOIL TEST HOLE LOCATIONS

Conducted: 9/6/2023
Observed by Chris Kresser

TH # 17
0-1" TOPSOIL
1-84 SILT LOAM
NO WATER, ROCK, OR MOTTLING

TH # 18
0-1" TOPSOIL
1-84 SILT LOAM
NO WATER, ROCK, OR MOTTLING

TH # 19
0-4" TOPSOIL
4-84" SILT SAND LOAM
AT 84" WATER, NO MOTTLING OR WATER

TH # 20
0-4" TOPSOIL
4-63" SILT LOAM
63-72" MOTTLED CLAY
NO MOTTLING OR WATER

TH # 21
0-1" TOPSOIL
1-30" SAND
30-72 SILT SAND
NO WATER, ROCK, OR MOTTLING

TH # 22
0-1" TOPSOIL
1-42" SILT
42-84" SILT LOAM, TRACE SAND
NO WATER ROCK OR MOTTLING

TH # 23
0-1" TOPSOIL
1-12" SILT LOAM
12-84" SAND
NO WATER, ROCK OR MOTTLING

TH # 24
0-2 TOPSOIL
2-36 SILT LOAM
36-72 COURSE SAND AND GRAVEL
NO WATER ROCK OR MOTTLING

TH #25
0-2" TOPSOIL
2-36" SILT LOAM
36-60" SAND
60-84" SILTY SAND

TH # 26
0-6" TOPSOIL
6-36" SILT LOAM
36-72 SAND GRAVEL
NO WATER, ROCK, OR MOTTLING

TH # 27
0-6" TOPSOIL
6-24" SILT LOAM
24-60 GRAVEL SAND
NO WATER, ROCK, OR MOTTLING

TH#28
0-6" TOPSOIL
6-24" SILT LOAM
24-72" GRAVEL SAND
72-84" SAND

PERC HOLE DATA

P#◒DENOTES PERCOLATION TEST LOCATIONS
(COMPLETED ON 9/27/2023)
- P9 = 10 MIN./INCH
- P10 = 5 MIN./INCH
- P11 = 6 MIN./INCH
- P12 = 7 MIN./INCH
- P13 = 7 MIN./INCH
- P14 = 32 MIN./INCH

LEGEND
- WATER MAIN NEW
- PROPOSED GRINDER PUMP
- FORCEMAIN NEW

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WASTEWATER PLAN

LOW PRESSURE COLLECTION SYSTEM FOR

OUTFALL #6 - COTTAGES

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120
Scale: 1" = 40'

FEBRUARY 06, 2024

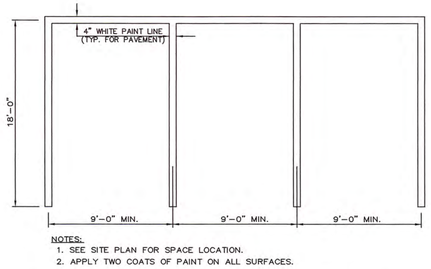
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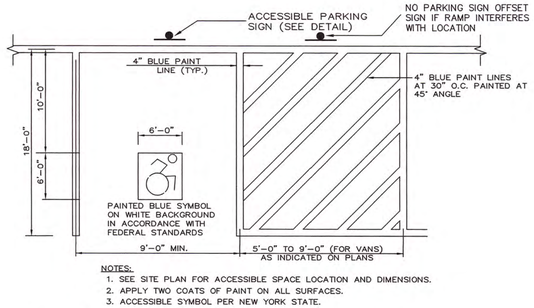
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SHEET 10 OF 19

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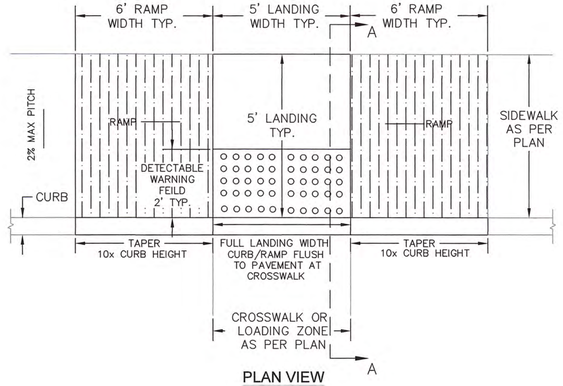
NOTES:
1. SEE SITE PLAN FOR SPACE LOCATION.
2. APPLY TWO COATS OF PAINT ON ALL SURFACES.

1 TYPICAL PARKING SPACE DETAIL
NOT TO SCALE

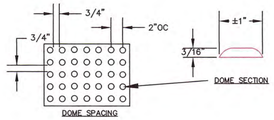


NOTES:
1. SEE SITE PLAN FOR ACCESSIBLE SPACE LOCATION AND DIMENSIONS.
2. APPLY TWO COATS OF PAINT ON ALL SURFACES.
3. ACCESSIBLE SYMBOL PER NEW YORK STATE.

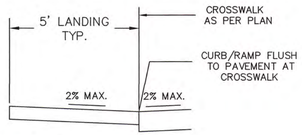
2 ACCESSIBLE PARKING SPACE DETAIL
NOT TO SCALE



PLAN VIEW



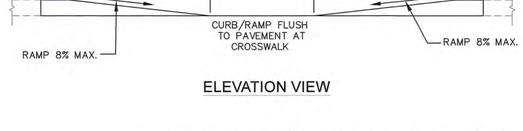
DETECTABLE WARNING FIELD DETAIL



SECTION A-A

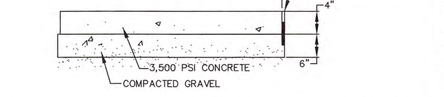
Curb Ramp Notes:

1. A curb ramp is defined as the entire concrete surface which includes the ramp & flared sides. The minimum 5' wide center portion, including the detectable surface, shall have a sloped plane of 8.33% (1:12) maximum, and cross slope, not to exceed 2%. The "flared side" of the ramp shall lie on a slope of 10% (1:10) maximum measured along the curb. The curb ramp shall have a surface tolerance of 1/4" per 10 foot straight edge maximum.
2. The ramp center line and path of travel should be parallel to the sidewalk whenever possible. The full width of the ramp shall lie within the crosswalk area. It is desirable that the location of the ramp be as close as possible to the center of the crosswalk.
3. Existing utility boxes and covers shall be adjusted flush with the curb ramp surface and shall not straddle any change in plane or material. Existing utility box frames and covers shall have matching surface finish on the entire frame and cover. New utility boxes shall not be placed within the detectable border.
4. The surface of the curb ramp and detectable surface material shall be stable, firm and slip resistant. Detectable warning fields shall visually contrast with adjoining surfaces either light on dark or dark on light. The concrete curb ramp surface shall be broom finished transverse to the axis of the ramp and shall be slightly rougher than the finish of the adjacent sidewalk surface.
5. A level landing 5'-0" deep, with a 2% maximum slope in each direction shall be provided at the upper end of each curb ramp to allow safe egress from the ramp surfaces. The width of the level landing shall be at least as wide as the width of the ramp.
6. Seal all joints on sidewalk and ramps. Maximum width of expansion joint is 1/2"



ELEVATION VIEW



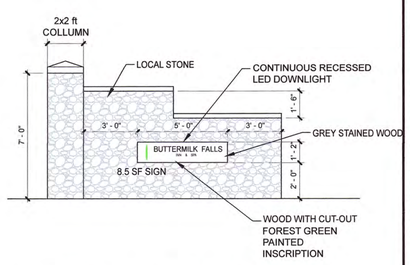


SIDEWALK NOTES:
1. SIDEWALK TO HAVE MEDIUM BROOM FINISH PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAFFIC.
2. CONSTRUCT IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
3. SEE SITE PLAN FOR SIDEWALK LOCATION.
4. PROVIDE ACCESSIBLE RAMPS IN ACCORDANCE WITH STANDARD RAMP DETAIL.
5. SIDEWALKS ARE TO BE HAVE RUNNING SLOPE NO GREATER THAN 5%.
6. PLACE 6x6-W2.0xW2.0 WWF IN CENTER OF SLAB
7. PLACE EXPANSION JOINTS @ 20' MAX.
8. PLACE CONTROL JOINTS AT 4' TO 10' MAX.
9. ALL OTHER SITE SIDEWALKS SHALL BE CONSTRUCTED USING THE MATERIALS AND DEPTHS INDICATED ABOVE.

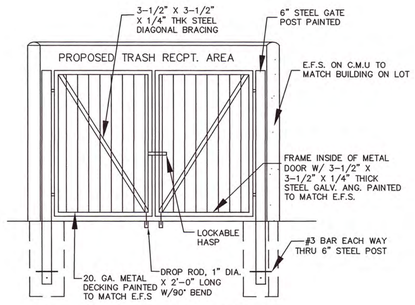
9 SITE PAVEMENT
NOT TO SCALE

3 CONCRETE SIDEWALK DETAIL
NOT TO SCALE

4 DEPRESSED RAMP/DETECTABLE WARNING DETAIL
NOT TO SCALE

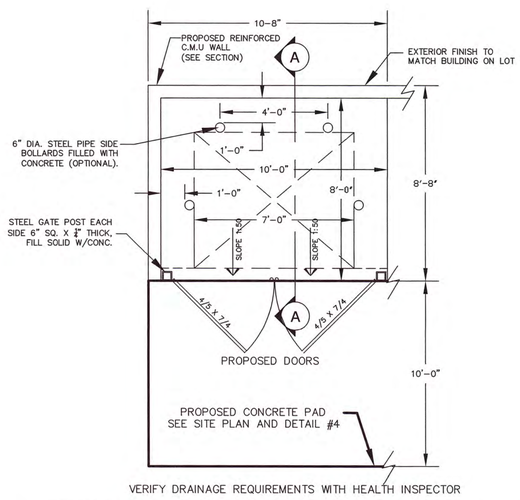


5 MONUMENT SIGN DETAIL
NOT TO SCALE

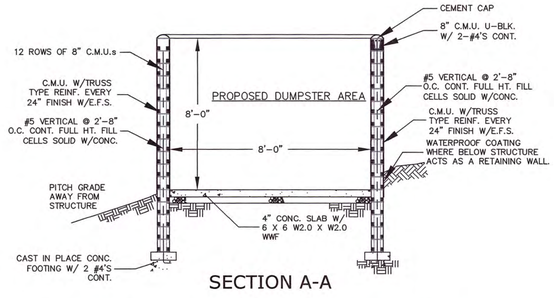


DUMPSTER RECEPTACLE SCREEN ELEVATION

6
SCALE: NOT TO SCALE



7 TYPICAL DUMPSTER RECEPTACLE SCREEN PLAN (6X)
SCALE: NOT TO SCALE



SECTION A-A

8 DUMPSTER RECEPTACLE SCREEN SECTION
SCALE: NOT TO SCALE

MAP REVISION DATES

DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

SITE DETAILS
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

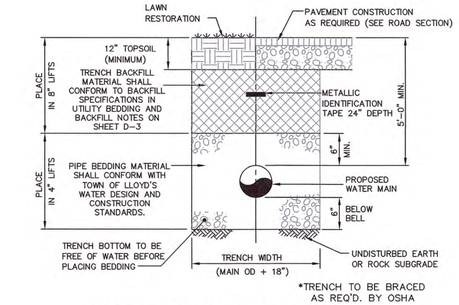
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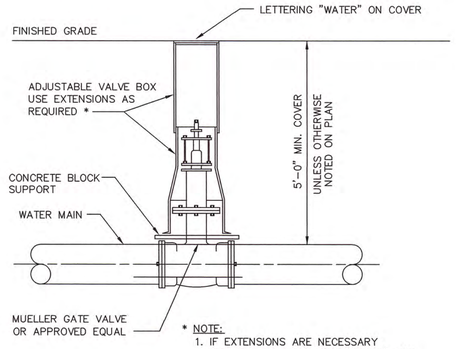
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E18 105
SHEET 11 OF 19

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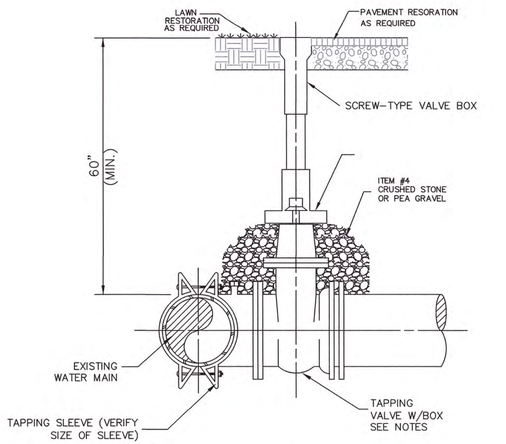
1 TYPICAL WATER MAIN TRENCH DETAIL

NOT TO SCALE



2 TYPICAL GATE VALVE DETAIL

NOT TO SCALE

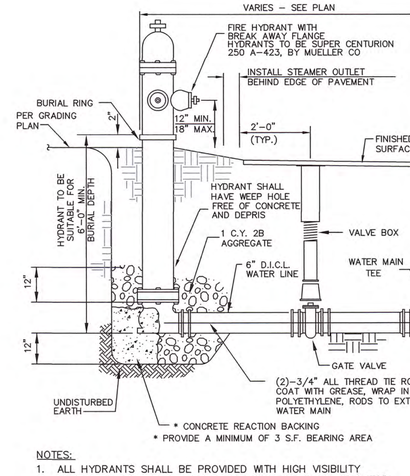


NOTES:

1. TAPPING VALVES SHALL BE RESILIENT WEDGE CONFORMING TO AWWA C509 AND HAVE A MINIMUM OPERATING PRESSURE OF 200 PSI AND BE FACTORY TESTED TO 400 PSI.
2. TAPPING VAVLES SHALL BE MODEL T-2360-19 AS MANUFACTURED BY MULLER CO, OR APPROVED EQUAL.
3. TAPPING SLEEVES SHALL BE STAINLESS STEEL.
4. SELF-CENTERING ALIGNMENT RING EQUIVALENT TO AMERICAN FLOW CONTROL.

3 TYPICAL WET TAP DETAIL

NOT TO SCALE

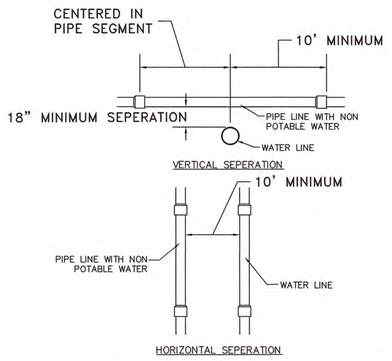


NOTES:

1. ALL HYDRANTS SHALL BE PROVIDED WITH HIGH VISIBILITY HYDRANT MARKERS AND COLOR COATED FIRE FLOW INDICATOR MECHANICALLY ATTACHED TO HYDRANT.
2. HYDRANTS SHALL BE PROVIDED WITH ONE 4-½" PUMPER NOZZLE STORZ FITTING AND TWO (2) 2-½" HOSE CONNECTIONS.

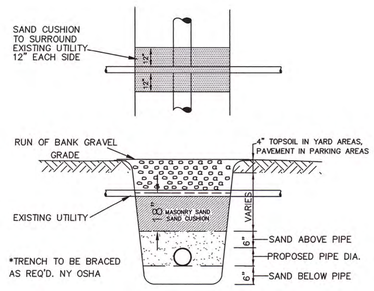
4 TYPICAL FIRE HYDRANT DETAIL

NOT TO SCALE



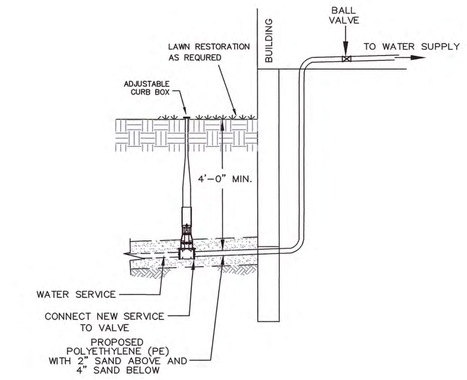
5 WATERLINE SEPERATION

NOT TO SCALE



6 TYPICAL UTILITY LINE CROSSING DETAIL

NOT TO SCALE



7 TYPICAL WATER CONNECTION DETAIL

NOT TO SCALE

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

WATER DETAILS

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

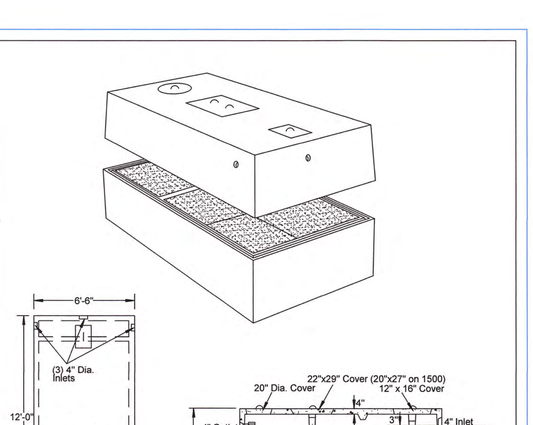
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D-2
E18 105
SHEET 12 OF 19

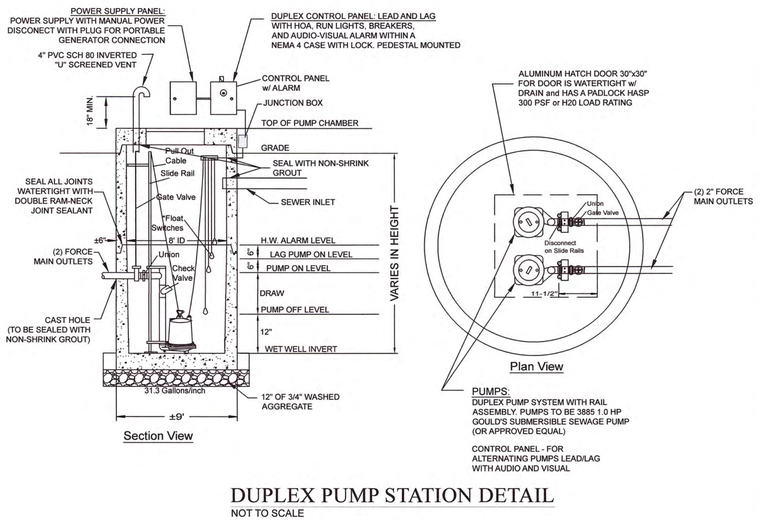
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SPECIFICATIONS	PRECAST GREASE TRAP 2000 GALLONS
Concrete Min. Strength: 4,000 psi at 28 days Reinforcement: #3 Rebar, 6x6x10/10 WWM Air Entrainment: 6% Construction Joint: Butyl Rubber Sealant Pipe Connection: Polylok Seal (patented) Load Rating: 300 psf	Woodard's Concrete Products, Inc. 629 Lybolt Road, Bullville, NY 10915 (845) 361-3471 / Fax 361-1050 Page 8C 7/18/14

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DUPLEX PUMP STATION DETAIL

NOT TO SCALE

PUMP STATION DESIGN DATA

HOTEL

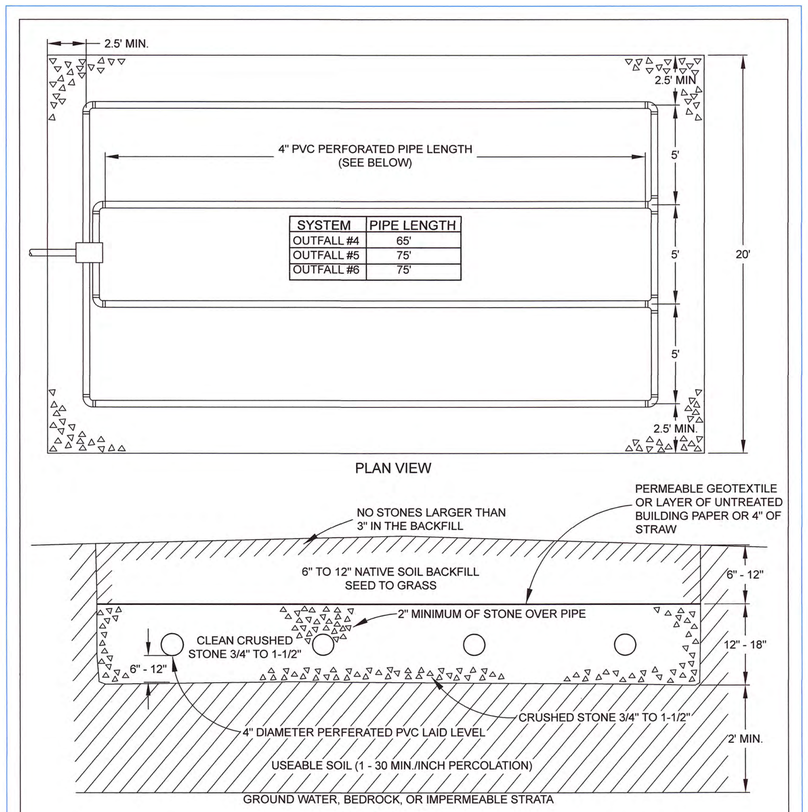
PUMP CYCLE VOLUME = 751 GALLONS
PUMP DRAW = 24"
PUMP CYCLES PER DAY = 9.5
1 ½" FORCE MAIN PIPE
USE 12' HEIGHT CHAMBER

RESTAURANT/BANQUET HALL/EMPLOYEES

PUMP CYCLE VOLUME = 532 GALLONS
PUMP DRAW = 17"
PUMP CYCLES PER DAY = 9.2
1 ½" FORCE MAIN PIPE
USE 8' HEIGHT CHAMBER

CABINS

PUMP CYCLE VOLUME = 501 GALLONS
PUMP DRAW = 16"
PUMP CYCLES PER DAY = 9.4
1 ¼" FORCE MAIN PIPE
USE 8' HEIGHT CHAMBER



SYSTEM	PIPE LENGTH
OUTFALL #4	65'
OUTFALL #5	75'
OUTFALL #6	75'

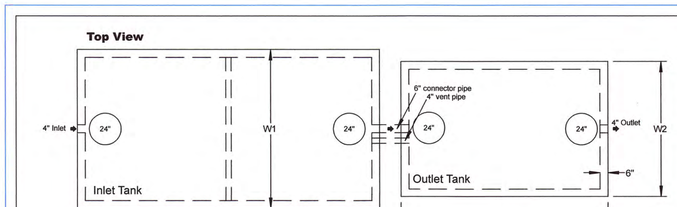
PLAN VIEW

SECTION VIEW

ABSORPTION BED DETAIL

NTS

Top View

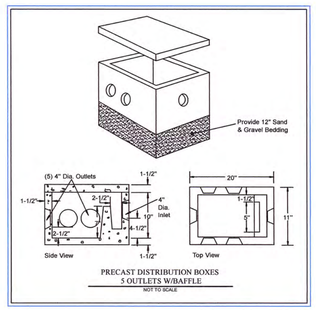


TANK CAPACITY	L1	W1	L2	W2	H	LL	INLET CAP.	OUTLET CAP.	TOTAL Wt.
8,000 gal.	18'-0"	9'-6"	12'-0"	8'-0"	72"	58"	5,200 gal.	2,800 gal.	84,500 lb
10,000 gal.	21'-0"	9'-6"	15'-0"	8'-0"	75"	60"	6,500 gal.	3,500 gal.	98,500 lb

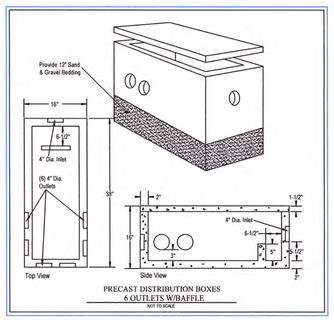
Tank designs are based on the NYSDEC 2012 standards.

SPECIFICATIONS	PRECAST TRAFFIC RATED TANKS 8,000 & 10,000 GALLON SEPTIC or GREASE TANKS
Concrete Min. Strength: 4,000 psi at 28 days Reinforcement: #4 & #5 Rebar / ASTM A615 Air Entrainment: 6% Construction Joint: Butyl Rubber Sealant Pipe Connections: NPC Kor-N-Seal boots Load Rating: HS20-44 + 30% / ASTM C857	Woodard's Concrete Products, Inc. 629 Lybolt Road, Bullville, NY 10915 (845) 361-3471 / Fax 361-1050 Page 5A 11/25/2020

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PRECAST DISTRIBUTION BOXES
5 OUTLETS W/BAFFLE
NOT TO SCALE



PRECAST DISTRIBUTION BOXES
6 OUTLETS W/BAFFLE
NOT TO SCALE

MAP REVISION DATES		
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WASTEWATER DETAILS

FOR LANDS OF

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

FEBRUARY 06, 2024

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CIVIL ENGINEERING & LAND SURVEYING, P.C.
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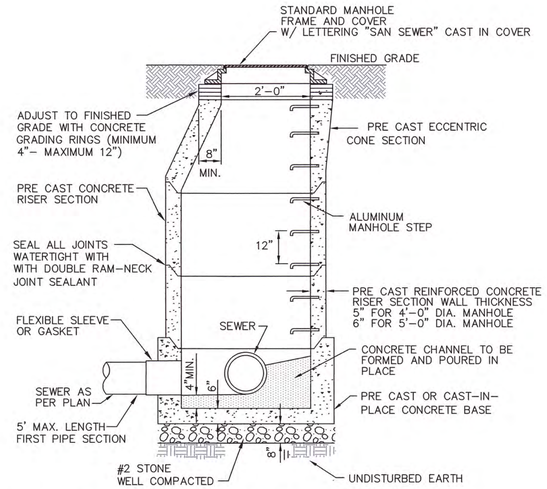
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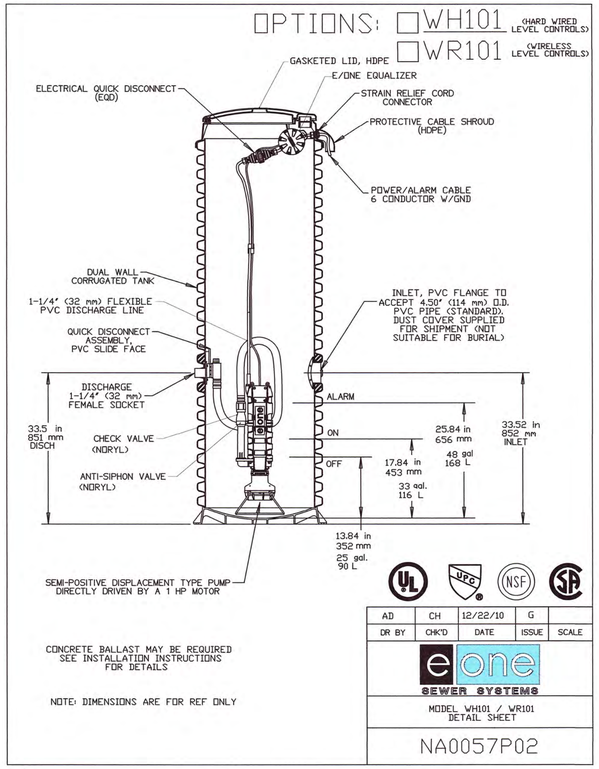
Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

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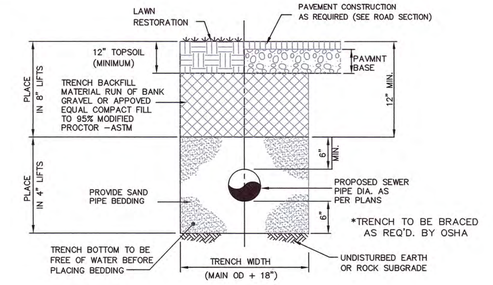
8 TYPICAL SANITARY SEWER MANHOLE

NOT TO SCALE



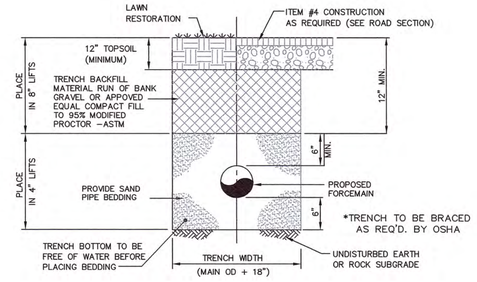
2 TYPICAL COTTAGE PUMP STATION DETAIL

NOT TO SCALE



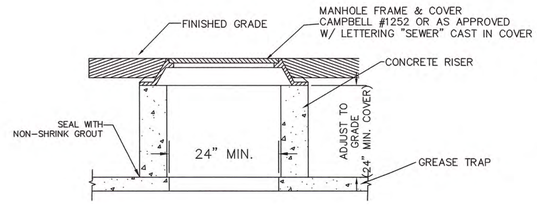
3 TYPICAL SEWER TRENCH DETAIL

NOT TO SCALE



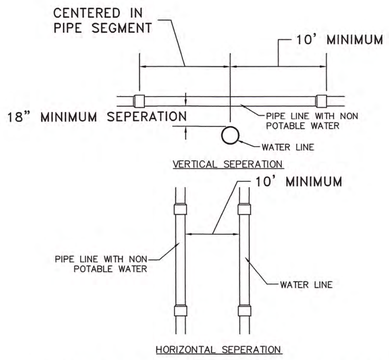
4 TYPICAL FORCE MAIN TRENCH DETAIL

NOT TO SCALE



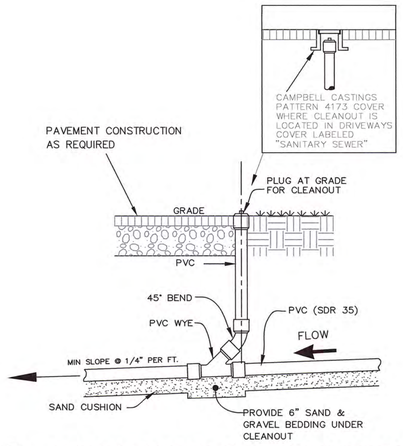
5 TYPICAL CONCRETE RISER AND FRAME

NOT TO SCALE



6 WATERLINE SEPERATION

NOT TO SCALE



7 SEWER LATERAL CLEANOUT DETAIL

NOT TO SCALE

Sanitary Sewer Notes and Specifications

General Provisions:

1. Gravity sewer pipes shall be SDR 35 with ring-tight joints in compliance with ASTM D-3212.
2. Sewer mains in relation to water mains: where possible, sewers shall be laid at least 10 (ten) feet horizontally from any existing or proposed water main. Vertical separation shall be maintained to provide 18 (eighteen) inches between top of sewer invert of the water main at utility crossings. When not possible to obtain the proper vertical separation, SDR-26 PVC pipe shall be used 10 (ten) feet on each side of the water main being crossed.
3. No roof, foundation or storm drains may discharge into the sewage disposal system.
4. All concrete tanks, manholes and chambers etc. shall be pre cast concrete to the specifications and dimensions shown hereon. Frames and covers shall be gray iron or ductile iron. Gray iron shall conform with ASTM A 48, Class 30B and ductile iron shall conform with ASTM A 536 and be of a grade appropriate to its intended use to the dimensions and specifications as shown hereon. Any structures subject to vehicle loads shall be able to withstand an H20 loading. Shop drawings shall be submitted to the design engineer for approval prior to construction.
5. Forcemain shall be HDPE 160 SDR-11 test with compression or fused connection.

Gravity Sewer System Testing:

1. Contractor shall inspect and test the sewer installations as required by the authority having jurisdiction when work is ready for testing. After all tests have been performed, evidence of compliance shall be forwarded to owner/engineer and the authority having jurisdiction prior to acceptance.
2. The contractor shall test and inspect for alignment and infiltration and exfiltration of all sanitary sewers, Infiltration or exfiltration of the sanitary sewer system shall not exceed 0.60 gal/inch of internal pipe diameter per 100' of pipeline per hour with a maximum hydrostatic head at the centerline of the pipe of 25 ft, or as required by the authority having jurisdiction.
3. Infiltration leakage tests shall be run on each single manhole-to-manhole section, or reach, independently of all other manhole-to-manhole sections. A pipeline section under test shall include all pipe and fittings between the two manholes plus the upstream manhole.
4. Each manhole-to-manhole section shall be rejected or accepted based only on results of its own independent section test and not on results of any one test run simultaneously over more than one consecutive manhole-to-manhole section. The only exception allowed; accepting several consecutive manhole-to-manhole sections based on one combined infiltration test indicating zero infiltration.
5. Infiltration tests shall be made by installing a flow measuring device in the downstream manhole of section being tested. Test duration shall be 24 hrs, or for shorter period, provided a steady state flow condition has been achieved in the test period, and results projected to a 24 hr period.
6. Exfiltration tests shall be run on each single manhole-to-manhole section, or reach, independently of all other manhole-to-manhole sections. A pipeline section under test shall include all pipe and fittings between the two man-holes plus the upstream manhole.
7. Exfiltration tests shall be made by measuring the drop in water elevation in the upstream manhole 24 hrs after initial water level is recorded. Initial water level in upstream manhole shall be 2 feet higher than either the top of pipe or groundwater elevation at the downstream manhole. Any manhole-to-manhole section undergoing an exfiltration test must have the next adjacent sections, both upstream and downstream, dry and not under test.
8. Low pressure air testing may be allowed in lieu of exfiltration tests only. When so allowed, test shall be performed under direction of engineer according to ASTM F1417. An air test shall not be run until section of line to be tested has been cleaned of all foreign material by flushing and has been visually inspected.
9. Sewers shall be laid with straight alignment between manholes. Straight alignment shall be checked either using a laser beam or lamping. Testing shall comply with requirements of the authority having jurisdiction.
10. Manholes, which cannot be properly air tested, should be visually inspected and leakage-tested using internal or external hydrostatic pressure. Leakage testing shall comply with requirements of the authority having jurisdiction.
11. In areas where conventional testing is impractical (i.e. areas designated by Engineer where existing services are tied into new line immediately and any blockage could result in health problems) no lines shall be backfilled until each pipe section and connection is inspected and approved.
12. If the allowable rate of infiltration, exfiltration, or air leakage is exceeded, the contractor shall locate points of excessive leakage and shall promptly correct,repair, and bring system up to the standard. Costs of all such repairs and corrective measures, including costs of repeated tests, shall be born by contractor, the sewer line section (including manholes and building services) under test shall not be accepted until these test criteria are met.

Forcemain Test Procedure:

1. Flush and purge all air from the piping to be tested.
2. Close off by valves or other method the piping to be tested.
3. Slowly, add water with a positive displacement pump to raise the system pressure to the maximum determined by the authority having jurisdiction.
4. (The maximum pressure is 1.5 times the design working pressure less the elevation hydrostatic head. Typical design (maximum operating) pressures: for SDR-9 is 200 psi, for SDR-11 is 160 psi, and SDR-13.5 is 128 psi; and is to be reduced for higher temperatures. Typically, the design temperature for HDPE is 73.4 °F. Usually it is the horizontal and above ground sections of the ghex that are above this temperature. Consult the HDPE manufacturer for the temperature reductions for pressure ratings.
5. Allow the test section of piping and test liquid to equalize in temperature.
6. Add make up water as necessary for four (4) hours to maintain test pressure.
7. Reduce pressure by ten (10 psi), by letting water out and then closing the system.
8. Monitor for one (1) hour, do not increase pressure or add water.
9. Pass/Fail Criteria: if no leakage is visually observed and the pressure remains steady (within 5% of the pressure at item # 6) then a passing test is indicated.

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DATE	REVISION	BY
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WASTEWATER DETAILS

FOR LANDS OF

BUTTERMILK FALLS

TOWN OF MARLBOROUGH

ULSTER COUNTY – NEW YORK

FEBRUARY 06, 2024

MEDENBACH & EGGERS

CIVIL ENGINEERING & LAND SURVEYING, P.C.

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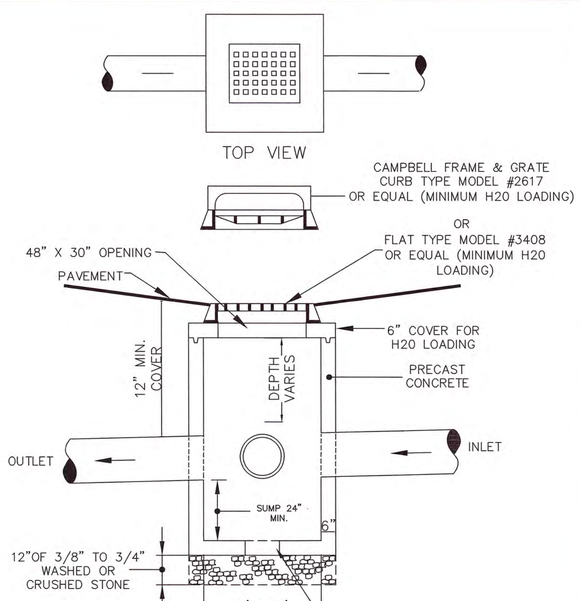
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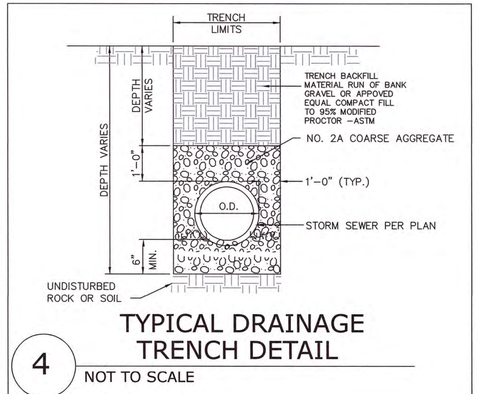
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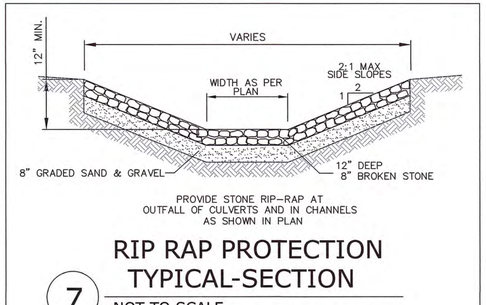
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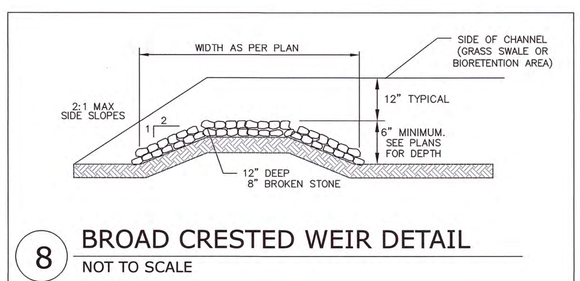
1 TYPICAL CATCH BASIN DETAIL
NOT TO SCALE



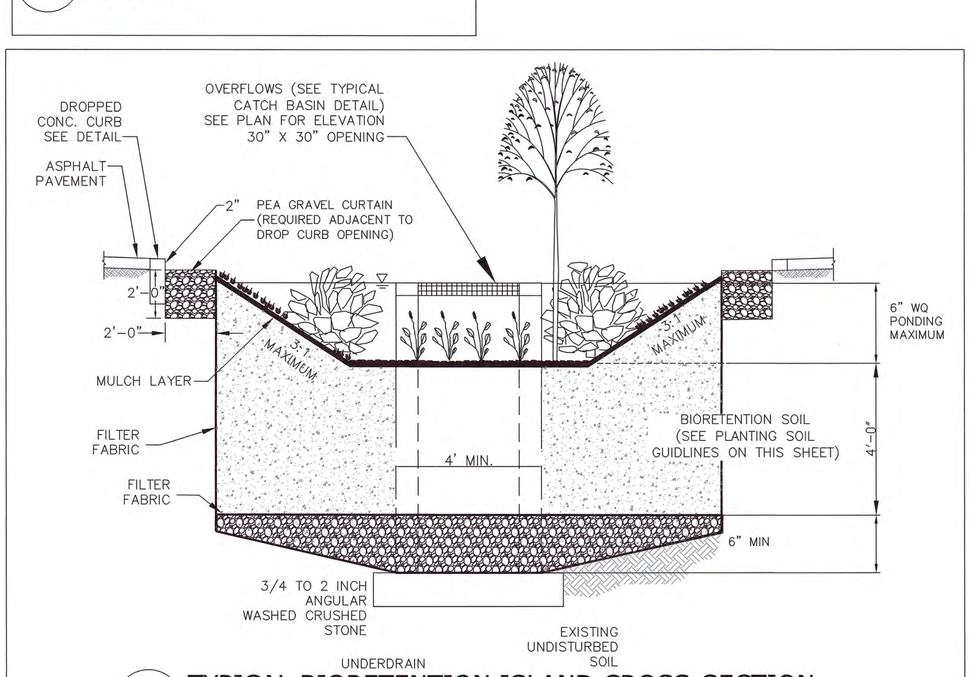
4 TYPICAL DRAINAGE TRENCH DETAIL
NOT TO SCALE



7 RIP RAP PROTECTION TYPICAL-SECTION
NOT TO SCALE



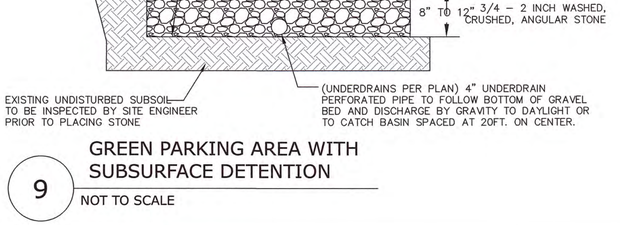
8 BROAD CRESTED WEIR DETAIL
NOT TO SCALE



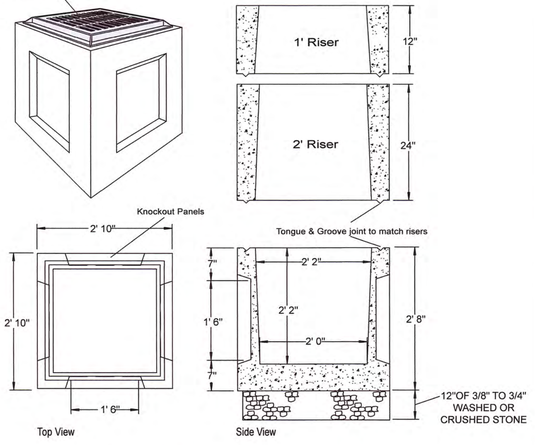
5 TYPICAL BIORETENTION ISLAND CROSS-SECTION
NOT TO SCALE

Green Parking Soil Guidelines:

The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. The planting soil shall be free of noxious weeds with large percent of sand and to be inspected by site engineer prior to placement.

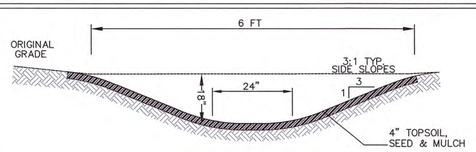


9 GREEN PARKING AREA WITH SUBSURFACE DETENTION
NOT TO SCALE

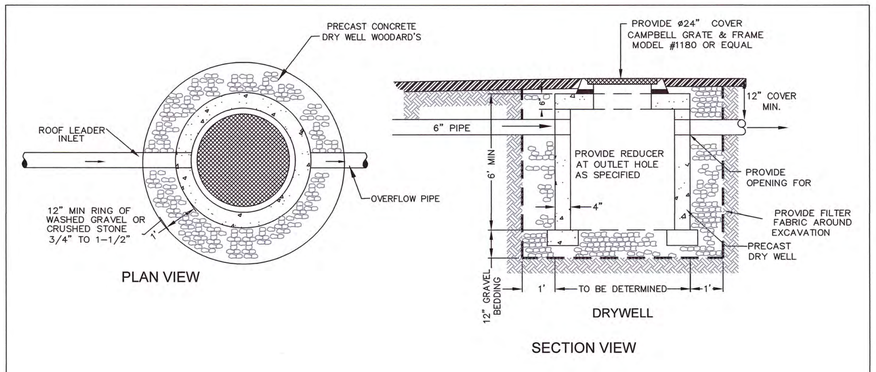


Load Rating: H20 / ASTM C857

2 TYPICAL YARD BASIN DETAIL
NOT TO SCALE



3 GRASS SWALE TYPICAL-SECTION
NOT TO SCALE



6 TYPICAL DRYWELL FOR COTTAGES
NOT TO SCALE

General Construction Notes For Bio-Retention and Stormwater Zones

The bioretention facility may not be constructed until all contributing drainage area has been stabilized.

Planting Soil Guidelines:

The soil shall meet the requirements of NYSDOT ITEM 208.01030022 Bioretetion and Dry Swale soil. The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the bioretention area that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of noxious weeds.

All bioretention areas shall have a minimum of one test according to ITEM 208.01030022 Laboratory Testing for soil Phosphorus Concentration. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the top soil was excavated. Since different labs calibrate their testing equipment differently, all testing results shall come from the same testing facility.

Compaction and Placement of Planting Soil Guidelines:

It is very important to minimize compaction of both the base of the bioretention area and the required
backfill. When possible, use excavation hoes to remove original soil. If bioretention areas are excavated
using a loader, the contractor should use wide track or marsh track equipment, or light equipment with
turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high
pressure tires will cause excessive compaction resulting in reduced infiltration rates and storage volumes
and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation
such as a chisel plow, ripper, or subsoiler. These tilling operations are to refracture the soil profile through
the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically
do not till deep enough to reduce the effects of compaction from heavy equipment. Rototill 2 to 3 inches of sand into the base of the bioretention facility before back filling the required sand
layer. Pump any ponded water before preparing (rototilling) base.

When back filling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then
rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.
When back filling the bioretention facility, place soil in lifts 12" or greater. Do not use heavy equipment
within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply
soils and sand. Grade bioretention materials by hand or with light equipment such as a compact loader or
a dozer/loader with marsh tracks.

Plant Installation

The plant root ball should be planted so 1/8th of the ball is above final grade surface. Root stock of the plant material shall be kept moist during transport and on-site storage. The diameter of
the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain
the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.
Trees shall be braced using 2" X 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural
cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers
defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch is used to amend
the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.

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4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

DETAILS
FOR
BUTTERMILK FALLS
TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

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LEGEND

- TOPSOIL STOCKPILE W/SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- LOD — LIMIT OF DISTURBANCE
- AREAS THAT REQUIRE SLOPE STABILIZATION (SEE SLOPE STABILIZATION DETAIL ON SHEET D–5)
- INLET SEDIMENT TRAP
- CONCRETE WASHOUT

TOTAL AREA OF DISTURBANCE: ±15.4 ACRES

AREA 1a
±4.7 AC

AREA 1b
±0.3 AC

AREA 1c
±1.2 AC

AREA 2
±4.6 AC

AREA 3a
±2.7 AC

AREA 3b
±1.9 AC

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

SOIL EROSION AND SEDIMENT CONTROL

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY – NEW YORK

100 0 100 200 300

Scale: 1" = 100'

JULY 19, 2023

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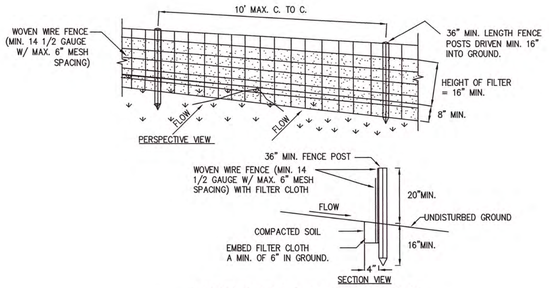
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Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

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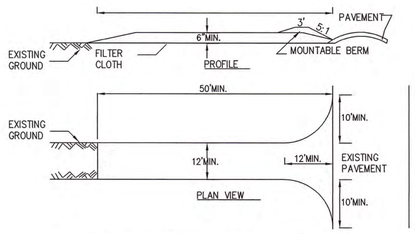


CONSTRUCTION SPECIFICATIONS

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

1 SILT FENCE TYPICAL DETAIL

NOT TO SCALE

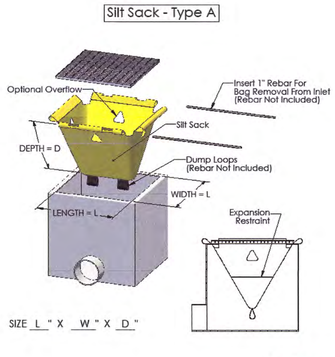


CONSTRUCTION SPECIFICATIONS

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 CON-STRUCTION 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.

2 STABILIZED CONSTRUCTION ENTRANCE DETAIL

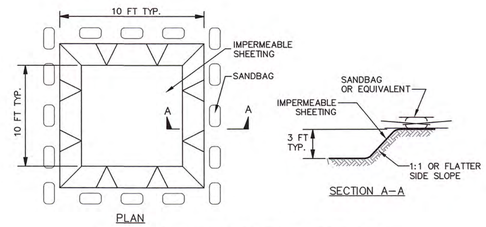
NOT TO SCALE



1. SILT SACK OR EQUAL.

3 INLET SEDIMENT TRAP DETAIL

NOT TO SCALE



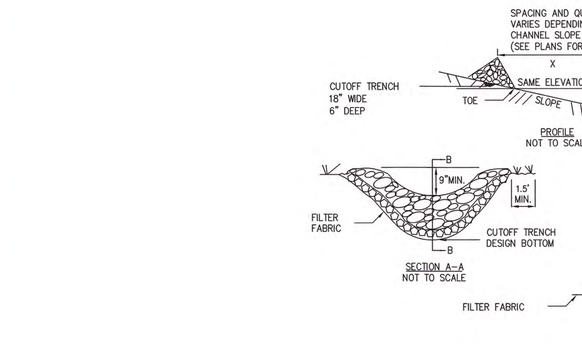
EXCAVATED WASHOUT STRUCTURE

CONSTRUCTION SPECIFICATIONS

1. DESIGNATED TEMPORARY, BELOW GROUND CONCRETE WASHOUT FACILITIES WILL BE CONSTRUCTED AS SHOWN ABOVE. WASHOUTS WILL BE CENTRALLY LOCATED AT THE DISCRETION OF THE INDIVIDUALS WHO MANAGE DAY TO DAY CONSTRUCTION ACTIVITIES. WASHOUTS SHALL HAVE A MINIMUM LENGTH AND WIDTH OF 10 FEET BUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID CONRETE WASTES GERNERTATED FROM WAHOUT OPERTIONS. THE WASHOUT AREAS WILL BE LINED WITH PLASTIC SHEETING AT LEAST 10 MILS THICK AND FREE OF ANY HOLES OR TEARS. SIGNS WILL BE POISTED MARKING THE LOCATION OF THE WAHOUT AREAS.
2. TEMPORARY CONCRETE WASHOUT FACILITIES WILL BE LOCATED A MINIMUM OF (50 FEET) FROM DRAIN INLETS.
3. KEEP THE WASHOUT AREAS WILL BE INSPECTED DAILY TO ENSURE THAT ALL CONRETE WASHING IS BEING DISCHARDE INTO THE WASHOUT AREA, NO LEAKS OR TEARS ARE PRESENT, AND TO IDENTIFY WHEN CONCRETE WASTES NEED TO BE REMOVED. THE WAHOUT AREAS WILL BE CLEANED OUT ONCE THE AREA IS FILLED TO 75 PERCENT OF THE HOLDING CAPACITY. ONCE THE AREA'S HOLDING CAPACITY HAS BEEN REACHED THE CONRETE WASTES WILL BE ALLOWED TO HARDEN , THE CONRETE WILL BE BROKEN UP, REMOVED, AND DISPOSED IN ACCORDANCE WITH LOCAL REGULATIONS. THE PLASTIC SHEET WILL BE REPLACED IF TEARS OCCCUR DURING REMOVAL OF CONCRETE WASTES FROM THE WASHOUT AREA.

4 CONCRETE WASHOUT DETAIL

NOT TO SCALE

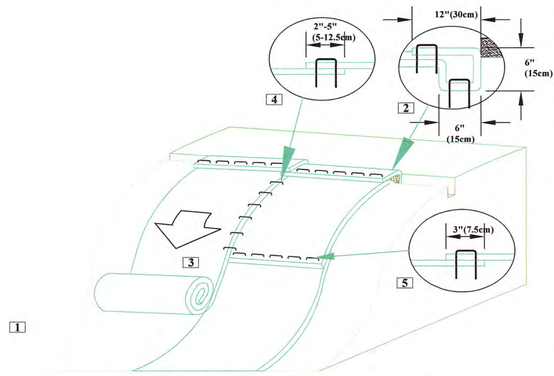


CONSTRUCTION SPECIFICATIONS

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

5 ROCK CHECK DAM TYPICAL DETAIL

NOT TO SCALE



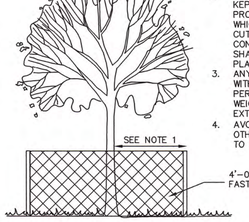
1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs down or horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

6 SLOPE STABILIZATION DETAIL

SCALE: NOT TO SCALE

NOTES:

1. SLOPE STABILIZATION IS TO BE USED ON ALL SLOPES WITH A SLOPE GREATER THAN 3:1



NOTES:

1. FENCE SHALL EXTEND OUT RADIALLY FROM TRUNK TWO FEET FOR EVERY INCH IN DIAMETER TO THE GREATEST EXTENT PRACTICAL.
2. TRENCHING AROUND TREES SHALL BE KEPT OUTSIDE PROTECTIVE FENCING TO PROTECT ROOT SYSTEMS. TREE ROOTS WHICH MUST BE SEVERED SHALL BE CUT CLEAN AND ANY BACKFILL IN CONTACT WITH THE SEVERED ROOTS SHALL BE A TOPSOIL OR APPROVED PLANTING SOIL MIX.
3. ANY GRADING WHICH MUST TAKE PLACE WITHIN FENCE INTERIOR SHALL BE PERFORMED BY HAND OR WITH LIGHT WEIGHT EQUIPMENT TO THE GREATEST EXTENT PRACTICAL.
4. AVOID SPILLS OF OIL/GAS OR ANY OTHER CONTAMINATES AROUND AREAS TO BE PROTECTED.

7 VEGETATION PROTECTION DETAIL

NOT TO SCALE

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SOIL EROSION AND SEDIMENT CONTROL DETAILS

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH

ULSTER COUNTY ~ NEW YORK

NOVEMBER 9, 2023

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GRID NORTH
NEW YORK EAST ZONE 1983

BUS MOVEMENT

MAHONY RD

NORTH ROAD

20' ENTRANCE

20' EXIT

EXISTING FIRE HYDRANT

EXISTING FIRE HYDRANT

NORTH ROAD

EXISTING FIRE HYDRANT

26FT WIDE CLEARANCE CONCRETE BRIDGE UNDER CONSTRUCTION

STREAM

EXISTING 6" WATER MAIN APPROX. LOCATION

EXISTING BRIDGE

20' WIDE ACCESS ROAD

FIRETRUCK MOVEMENT

EXTEND 6" WATER MAIN TO VAN ORDEN RD

PROPOSED FIRE HYDRANT

EXISTING FIRE HYDRANT

15' WIDE

FIRETRUCK MOVEMENT

15' WIDE

20' WIDE

FIRE APPARATUS TURNAROUND

30' BOX TRUCK MOVEMENT

PROPOSED FIRE HYDRANT

15FT x 120FT HAMMER HEAD

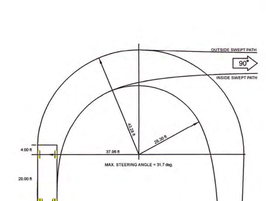
STREAM

EXISTING FIRE HYDRANT

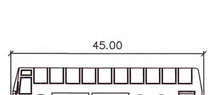


SU feet

Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.00
Steering Angle	: 31.80

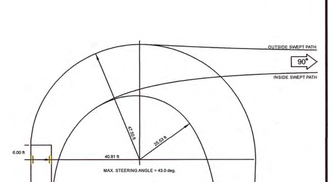


SU
AASHTO 2001 (US)
[ft]

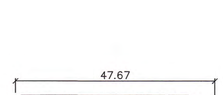


BUS–45 feet

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.00
Steering Angle	: 44.30

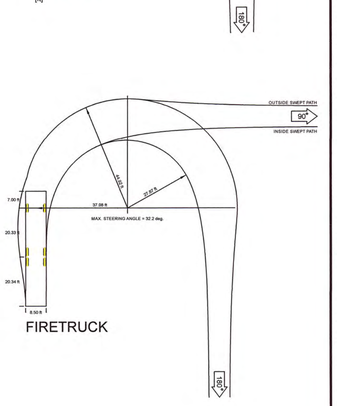


BUS-45
AASHTO 2001 (US)
[ft]



FIRETRUCK feet

Width	: 8.50
Track	: 8.00
Lock to Lock Time	: 6.00
Steering Angle	: 40.00



FIRETRUCK
AASHTO 2001 (US)
[ft]

MAP REVISION DATES

DATE	REVISION	BY
12/11/2023	COMMENTS PER FIRE CHIEF	SL
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

FIRETRUCK ACCESS PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

80 40 0 80 160 340

Scale: 1" = 80'

NOVEMBER 30, 2023

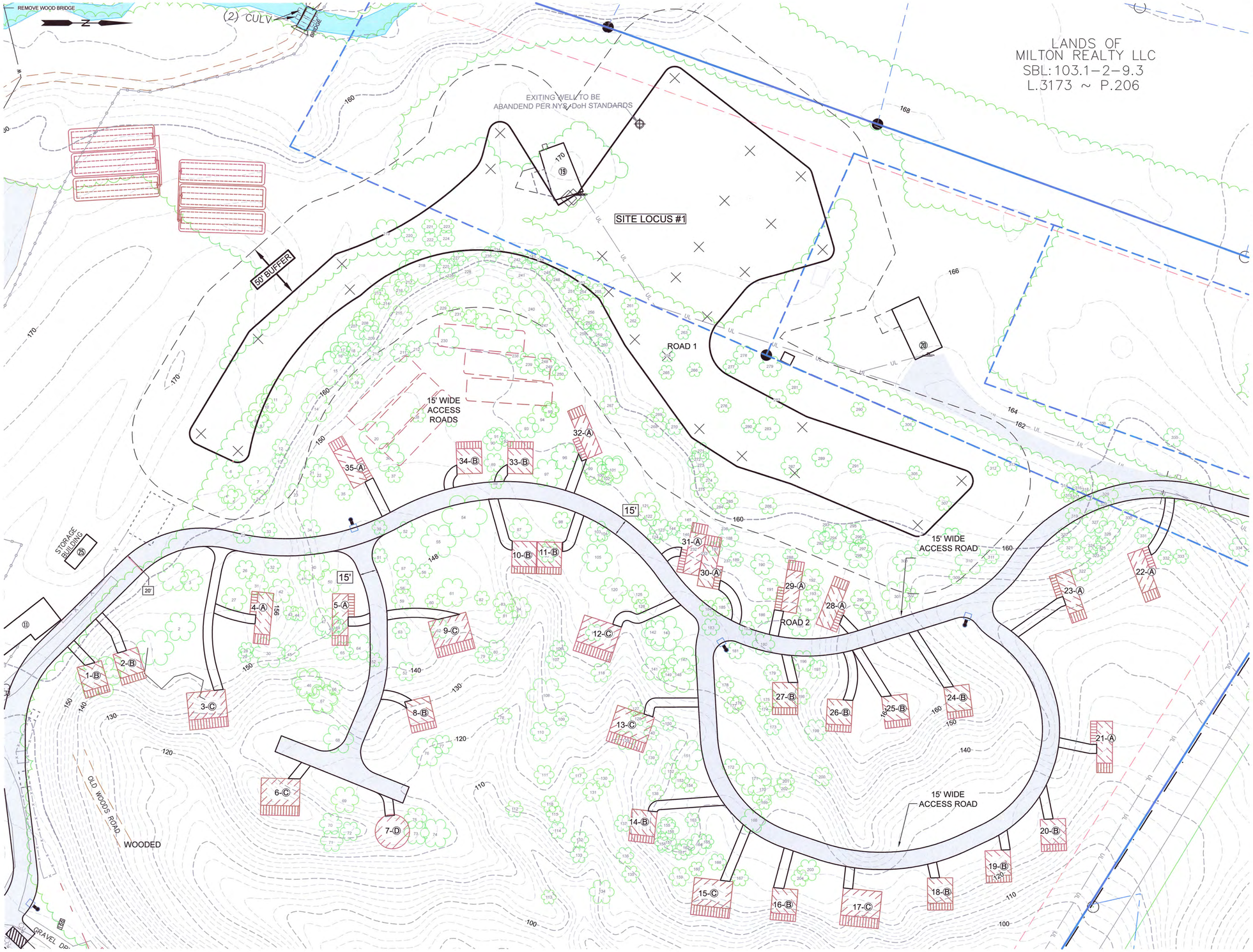
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Any unauthorized alteration or addition to this plan is a violation of Sect. 7209, Subdivision 2 of N.Y.S. Education Law.

Z:\Clients Active\ENGINEERING\E18 105 Pollock Buttermilk Hotel & Conference Center\DWG\2024-04-22 E18 105 BUTTERMILK FALLS HOTEL AAP.dwg



TREE #	SIZE/SPECIES	TREE #	SIZE/SPECIES
1	30" HICKORY	104	12" OAK
2	24" CHERRY	105	24" OAK
3	18" CHERRY	106	14" BEECH
4	16" OAK	107	16" OAK
5	18" OAK	108	30" DECIDUOUS
6	16" OAK	109	12" OAK
7	24" OAK	110	18" MAPLE
8	16" OAK	111	16" MAPLE
9	16" OAK	112	14" BIRCH
10	12" OAK	113	12" MAPLE
11	24" OAK	114	14" OAK
12	14" BEECH	115	12" MAPLE
13	12" BEECH	116	14" MAPLE
14	24"-2-BOLE BIRCH	117	14" MAPLE
15	30" CHERRY	118	16" MAPLE
16	18" MAPLE	119	14" MAPLE
17	12" OAK	120	22" OAK
18	12" OAK	121	24" OAK
19	12" BIRCH	122	18" OAK
20	28" OAK	123	18" OAK
21	20" DECIDUOUS	124	12" OAK
22	16" DECIDUOUS	125	16" MAPLE
23	18" DECIDUOUS	126	12" MAPLE
24	12" CHERRY	127	12" DECIDUOUS
25	16" CHERRY	128	12" DECIDUOUS
26	16" BIRCH	129	16" OAK
27	30" OAK	130	16" ASH
28	12" CHERRY	131	16" MAPLE
29	12" CHERRY	132	14" MAPLE
30	26" OAK	133	14" BIRCH
31	18" CHERRY	134	20" MAPLE
32	12" CHERRY	135	14" MAPLE
33	12" CHERRY	136	14" CHERRY
34	18" MAPLE	137	14" MAPLE
35	14" MAPLE	138	14" DECIDUOUS
36	24" OAK	139	12" DECIDUOUS
37	14" DECIDUOUS	140	12" DECIDUOUS
38	12" MAPLE	141	20" DECIDUOUS
39	12" MAPLE	142	22" OAK
40	24" DECIDUOUS	143	30" OAK
41	12" CHERRY	144	12" OAK
42	20" MAPLE	145	18" DECIDUOUS
43	12" BIRCH	146	16" MAPLE
44	12" CHERRY	147	24" DECIDUOUS
45	14" BEECH	148	30" DECIDUOUS
46	24" OAK	149	12" BEECH
47	24"-2-BOLE DECIDUOUS	150	12" DECIDUOUS
48	20" DECIDUOUS	151	28" DECIDUOUS
49	12" CHERRY	152	14" MAPLE
50	20" DECIDUOUS	153	14" CHERRY
51	12" DECIDUOUS	154	12" MAPLE
52	14" DECIDUOUS	155	14" CHERRY
53	12" MAPLE	156	18" CHERRY
54	36"-2-BOLE OAK	157	18" CHERRY
55	28" OAK	158	12" MAPLE
56	12" CHERRY	159	16" MAPLE
57	18" DECIDUOUS	160	12" MAPLE
58	12" DECIDUOUS	161	14" MAPLE
59	18" DECIDUOUS	162	14" CHERRY
60	14" MAPLE	163	12" MAPLE
61	24" OAK	164	18" CHERRY
62	16" DECIDUOUS	165	12" CHERRY
63	14" MAPLE	166	14" MAPLE
64	22" DECIDUOUS	167	14" MAPLE
65	16" MAPLE	168	20" DECIDUOUS
66	12" MAPLE	169	12" MAPLE
67	24" OAK	170	22" DECIDUOUS
68	24" OAK	171	28" DECIDUOUS
69	22" OAK	172	14" MAPLE
70	18" OAK	173	14" BEECH
71	18" OAK	174	12" MAPLE
72	16" OAK	175	18" CHERRY
73	20" OAK	176	12" MAPLE
74	24" DECIDUOUS	177	14" MAPLE
75	18" OAK	178	14" DECIDUOUS
76	24" DECIDUOUS	179	14" DECIDUOUS
77	18" MAPLE	180	18" MAPLE
78	14" ASH	181	14" BEECH
79	14" DECIDUOUS	182	12" MAPLE
80	18" DECIDUOUS	183	14" DECIDUOUS
81	18" DECIDUOUS	184	14" DECIDUOUS
82	12" DECIDUOUS	185	18" DECIDUOUS
83	18" DECIDUOUS	186	16" MAPLE
84	18" DECIDUOUS	187	12" CHERRY
85	14" OAK	188	16" CHERRY
86	12" DECIDUOUS	189	12" MAPLE
87	18" DECIDUOUS	190	18" OAK
88	12" MAPLE	191	18" CHERRY
89	18" OAK	192	18" CHERRY
90	18" OAK	193	14" BEECH
91	14" MAPLE	194	18" OAK
92	12" OAK	195	18" OAK
93	18" OAK	196	18" CHERRY
94	24" OAK	197	16" BEECH
95	12" MAPLE	198	14" CHERRY
96	22" OAK	199	18" BEECH
97	24" OAK	200	16" MAPLE
98	14" DECIDUOUS	201	14" DECIDUOUS
99	20" OAK	202	16" MAPLE
100	20" OAK	203	18" OAK
101	24" OAK	204	14" MAPLE
102	12" MAPLE	205	12" MAPLE
103	18" DECIDUOUS	206	16" DECIDUOUS

TREE #	SIZE/SPECIES		
207	24" OAK	302	12" MAPLE
208	14" BEECH	303	18" OAK
209	18" BEECH	304	14" CHERRY
210	12" MAPLE	305	12" OAK
211	16" BEECH	306	12" CHERRY
212	14" MAPLE	307	12"-2-BOLE CHERRY
213	14" OAK	308	16" CHERRY
214	12" CHERRY	309	12" CHERRY
207	24" OAK	310	24"-2-BOLE CHERRY
208	14" BEECH	311	12" OAK
209	18" BEECH	312	12" OAK
210	12" MAPLE	313	12" OAK
211	16" BEECH	314	22" LOCUST
212	14" MAPLE	315	12" CHERRY
213	14" OAK	316	20" LOCUST
214	12" CHERRY	317	12" MAPLE
215	18" BEECH	318	20" MAPLE
216	12" CHERRY	319	14" CHERRY
217	16"-2-BOLE CHERRY	320	12" OAK
218	30" OAK	321	18" MAPLE
219	24"-2-BOLE MAPLE	322	16" MAPLE
220	12" MAPLE	323	16" MAPLE
221	12" OAK	324	16" CHERRY
222	12" CHERRY	325	18" SNAG
223	12" CHERRY	326	20" CHERRY
224	14" MAPLE	327	20" CHERRY
225	12" SNAG	328	12" CHERRY
226	18" BEECH	329	20" LOCUST
227	12" MAPLE	330	14" MAPLE
228	26" OAK	331	14" SNAG
229	12" SNAG	332	12" CHERRY
230	24" OAK	333	12" CHERRY
231	12" MAPLE	334	16" MAPLE
232	12" MAPLE	335	16" MAPLE
233	14" SNAG	336	16" MAPLE
234	12" MAPLE		
235	14" MAPLE		
236	14" MAPLE		
237	20" OAK		
238	18" SNAG		
239	18" MAPLE		
240	30" COTTONWOOD		
241	24" OAK		
242	14" BEECH		
243	12" SNAG		
244	18" BEECH		
245	14" BEECH		
246	18" BEECH		
247	14" SNAG		
248	16" MAPLE		
249	16" COTTONWOOD		
250	12" BEECH		
251	18" CHERRY		
252	14" OAK		
253	14" MAPLE		
254	14" CHERRY		
255	12" CHERRY		
256	30" OAK		
257	12" BEECH		
258	20" OAK		
259	20" OAK		
260	14" BEECH		
261	14" CHERRY		
262	12" CHERRY		
263	12" MAPLE		
264	12" CHERRY		
265	12" CHERRY		
266	12" CHERRY		
267	16" COTTONWOOD		
268	20" OAK		
269	12" BEECH		
270	14" CHERRY		
271	14" OAK		
272	14" OAK		
273	20" OAK		
274	14" CHERRY		
275	18" OAK		
276	12" CHERRY		
277	12" CHERRY		
278	16" CHERRY		
279	18" CHERRY		
280	12" CHERRY		
281	12" MAPLE		
282	16" OAK		
283	20" 4-BOLE CHERRY		
284	14" OAK		
285	14" OAK		
286	14" COTTONWOOD		
287	36"-2-BOLE CHERRY		
288	12" OAK		
289	16" CHERRY		
290	12" CHERRY		
291	12" MAPLE		
292	16" OAK		
293	20" 4-BOLE CHERRY		
294	14" OAK		
295	14" OAK		
296	16"-2-BOLE CHERRY		
297	16"-2-BOLE CHERRY		
298	12" OAK		
299	16" CHERRY		
300	16" BEECH		
301	24"-2-BOLE CHERRY		

MAP REVISION DATES		
DATE	REVISION	BY
4/19/2024	REVISED FOR ARCHAEOLOGICAL AVOIDANCE	SL

ARCHAEOLOGICAL AVOIDANCE PLAN

FOR

BUTTERMILK FALLS

TOWN OF MARLBOROUGH
ULSTER COUNTY ~ NEW YORK

40 20 0 40 80 120

Scale: 1" = 40'

FEBRUARY 06, 2024

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