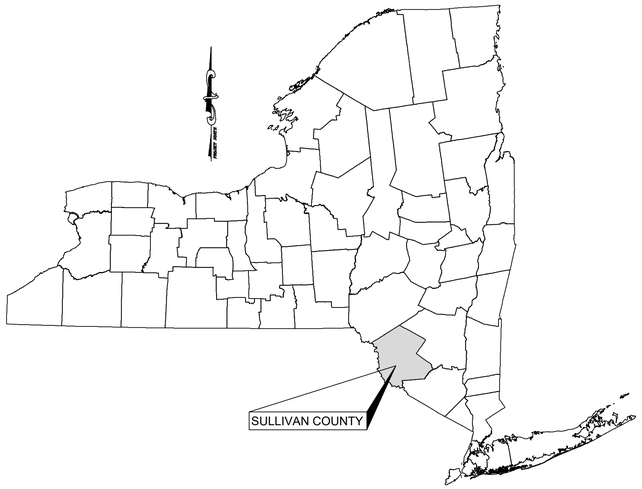


FORESTBURGH POND

NYS ROUTE 42

TOWN OF FORESTBURGH

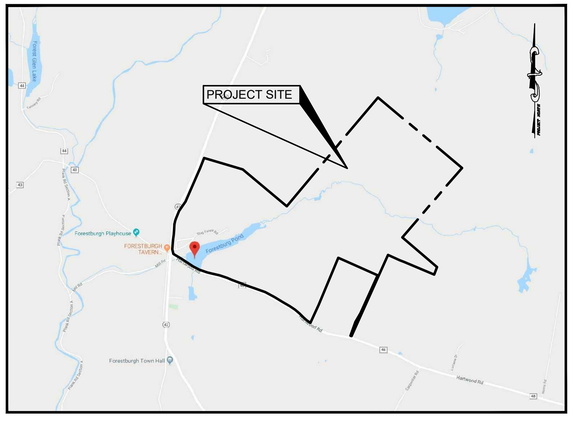
COUNTY OF SULLIVAN STATE OF NEW YORK

APPLICANT/DEVELOPER:

NEW YORK LAND AND LAKES
155 MAIN STREET, SUITE D
ONEONTA, NEW YORK 13820

INDEX OF DRAWINGS

SHEET	TITLE
C010	SURVEY PLAN
C050	OVERALL PLAN
C100	LAYOUT PLAN LOTS NO. 1-NO. 6
C110	LAYOUT PLAN LOTS NO. 7-NO. 15
C120	LAYOUT PLAN LOTS NO. 16-NO. 21
C200	SEWAGE DISPOSAL SYSTEM DETAILS
C210	SEWAGE DISPOSAL SYSTEM NOTES
C220	SEWAGE DISPOSAL SYSTEM DESIGN BASIS
C230	STORMWATER DETAILS



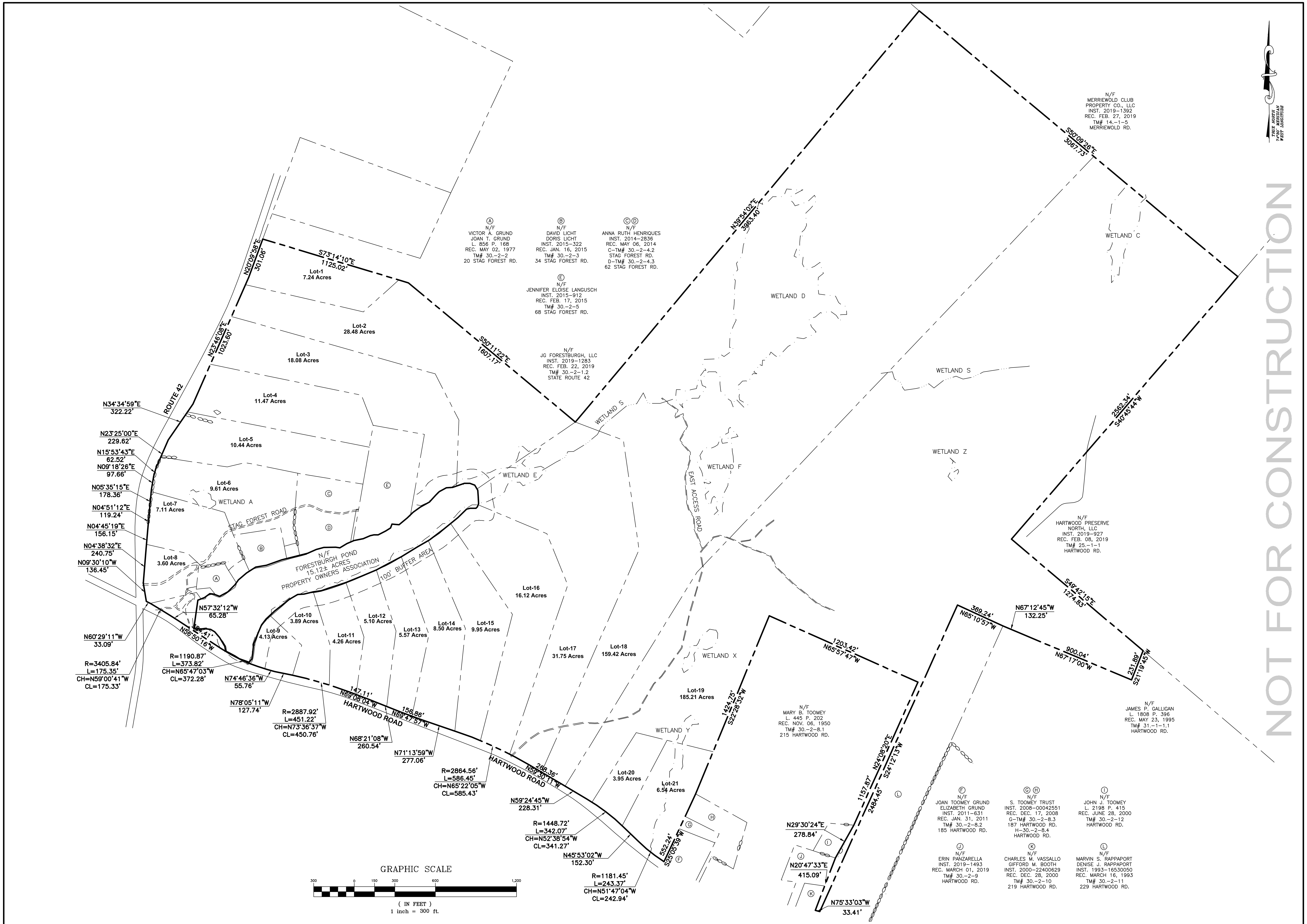
LOCATION MAP
SCALE: 1"=2,000'

DRAWINGS PREPARED BY

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC
58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

PROJECT NO. 392.12119
JANUARY 10, 2020

MARK W. PARKER, P.E. LIC. No. 093972



NOT FOR CONSTRUCTION
TRUE NORTH
74°30' MERIDIAN
WEST LONGITUDE
ROUTE 42
HARTWOOD ROAD
STAG FOREST ROAD
EAST ACCESS ROAD
100' BUFFER AREA
N/F
FORESTBURGH POND
15.12± ACRES
PROPERTY OWNERS ASSOCIATION
Lot-1 7.24 Acres
Lot-2 28.48 Acres
Lot-3 18.08 Acres
Lot-4 11.47 Acres
Lot-5 10.44 Acres
Lot-6 9.61 Acres
Lot-7 7.11 Acres
Lot-8 3.60 Acres
Lot-9 4.13 Acres
Lot-10 3.89 Acres
Lot-11 4.26 Acres
Lot-12 5.10 Acres
Lot-13 5.57 Acres
Lot-14 8.50 Acres
Lot-15 9.95 Acres
Lot-16 16.12 Acres
Lot-17 31.75 Acres
Lot-18 159.42 Acres
Lot-19 185.21 Acres
Lot-20 3.95 Acres
Lot-21 6.54 Acres
WETLAND A
WETLAND C
WETLAND D
WETLAND E
WETLAND F
WETLAND S
WETLAND X
WETLAND Y
WETLAND Z
N20°09'58"E 301.06'
S73°14'10"E 1125.02'
S50°11'22"E 1607.17'
N39°54'02"E 3963.40'
S50°09'26"E 3067.73'
2562.34' S40°45'44"W
S49°42'15"E 1274.83'
231.89' S21°19'45"W
900.04' N67°17'00"W
N67°12'45"W 132.25'
369.24' N65°10'57"W
N24°08'20"E 1157.87'
S24°12'13"W 2484.45'
1203.42' N65°57'47"W
1424.75' S22°28'32"W
552.24' S25°05'39"W
N23°46'08"E 1023.60'
N34°34'59"E 322.22'
N23°25'00"E 229.62'
N15°53'43"E 62.52'
N09°18'26"E 97.66'
N05°35'15"E 178.36'
N04°51'12"E 119.24'
N04°45'19"E 156.15'
N04°38'32"E 240.75'
N09°30'10"W 136.45'
N60°29'11"W 33.09'
R=3405.84' L=175.35' CH=N59°00'41"W CL=175.33'
N57°32'12"W 65.28'
384.41' N56°50'16"W
R=1190.87' L=373.82' CH=N65°47'03"W CL=372.28'
N74°46'36"W 55.76'
N78°05'11"W 127.74'
R=2887.92' L=451.22' CH=N73°36'37"W CL=450.76'
147.11' N69°08'04"W
N68°21'08"W 260.54'
156.86' N69°47'57"W
N71°13'59"W 277.06'
R=2864.56' L=586.45' CH=N65°22'05"W CL=585.43'
268.36' N59°30'11"W
N59°24'45"W 228.31'
R=1448.72' L=342.07' CH=N52°38'54"W CL=341.27'
N45°53'02"W 152.30'
R=1181.45' L=243.37' CH=N51°47'04"W CL=242.94'
N29°30'24"E 278.84'
N20°47'33"E 415.09'
N75°33'03"W 33.41'
Ⓐ N/F VICTOR A. GRUND JOAN T. GRUND L. 856 P. 168 REC. MAY 02, 1977 TM# 30.-2-2 20 STAG FOREST RD.
Ⓑ N/F DAVID LICHT DORIS LICHT INST. 2015-322 REC. JAN. 16, 2015 TM# 30.-2-3 34 STAG FOREST RD.
Ⓒ Ⓓ N/F ANNA RUTH HENRIQUES INST. 2014-2836 REC. MAY 06, 2014 C-TM# 30.-2-4.2 STAG FOREST RD. D-TM# 30.-2-4.3 62 STAG FOREST RD.
Ⓔ N/F JENNIFER ELOISE LANGUSCH INST. 2015-912 REC. FEB. 17, 2015 TM# 30.-2-5 68 STAG FOREST RD.
N/F JG FORESTBURGH, LLC INST. 2019-1283 REC. FEB. 22, 2019 TM# 30.-2-1.2 STATE ROUTE 42
N/F MERRIEWOLD CLUB PROPERTY CO., LLC INST. 2019-1392 REC. FEB. 27, 2019 TM# 14.-1-5 MERRIEWOLD RD.
N/F HARTWOOD PRESERVE NORTH, LLC INST. 2019-927 REC. FEB. 08, 2019 TM# 25.-1-1 HARTWOOD RD.
N/F JAMES P. GALLIGAN L. 1808 P. 396 REC. MAY 23, 1995 TM# 31.-1-1.1 HARTWOOD RD.
N/F MARY B. TOOMEY L. 445 P. 202 REC. NOV. 06, 1950 TM# 30.-2-8.1 215 HARTWOOD RD.
Ⓕ N/F JOAN TOOMEY GRUND ELIZABETH GRUND INST. 2011-631 REC. JAN. 31, 2011 TM# 30.-2-8.2 185 HARTWOOD RD.
Ⓖ Ⓗ N/F S. TOOMEY TRUST INST. 2008-00042551 REC. DEC. 17, 2008 G-TM# 30.-2-8.3 187 HARTWOOD RD. H-30.-2-8.4 HARTWOOD RD.
Ⓘ N/F JOHN J. TOOMEY L. 2198 P. 415 REC. JUNE 28, 2000 TM# 30.-2-12 HARTWOOD RD.
Ⓙ N/F ERIN PANZARELLA INST. 2019-1493 REC. MARCH 01, 2019 TM# 30.-2-9 HARTWOOD RD.
Ⓚ N/F CHARLES M. VASSALLO GIFFORD M. BOOTH INST. 2000-22400629 REC. DEC. 28, 2000 TM# 30.-2-10 219 HARTWOOD RD.
Ⓛ N/F MARVIN S. RAPPAPORT DENISE J. RAPPAPORT INST. 1993-16530050 REC. MARCH 16, 1993 TM# 30.-2-11 229 HARTWOOD RD.
GRAPHIC SCALE
300 0 150 300 600 1,200
(IN FEET)
1 inch = 300 ft.

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC
58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

NO.	REVISIONS AND DESCRIPTIONS	DATE:

FORESTBURGH POND NYS ROUTE 42

TOWN OF FORESTBURGH SULLIVAN COUNTY, NY

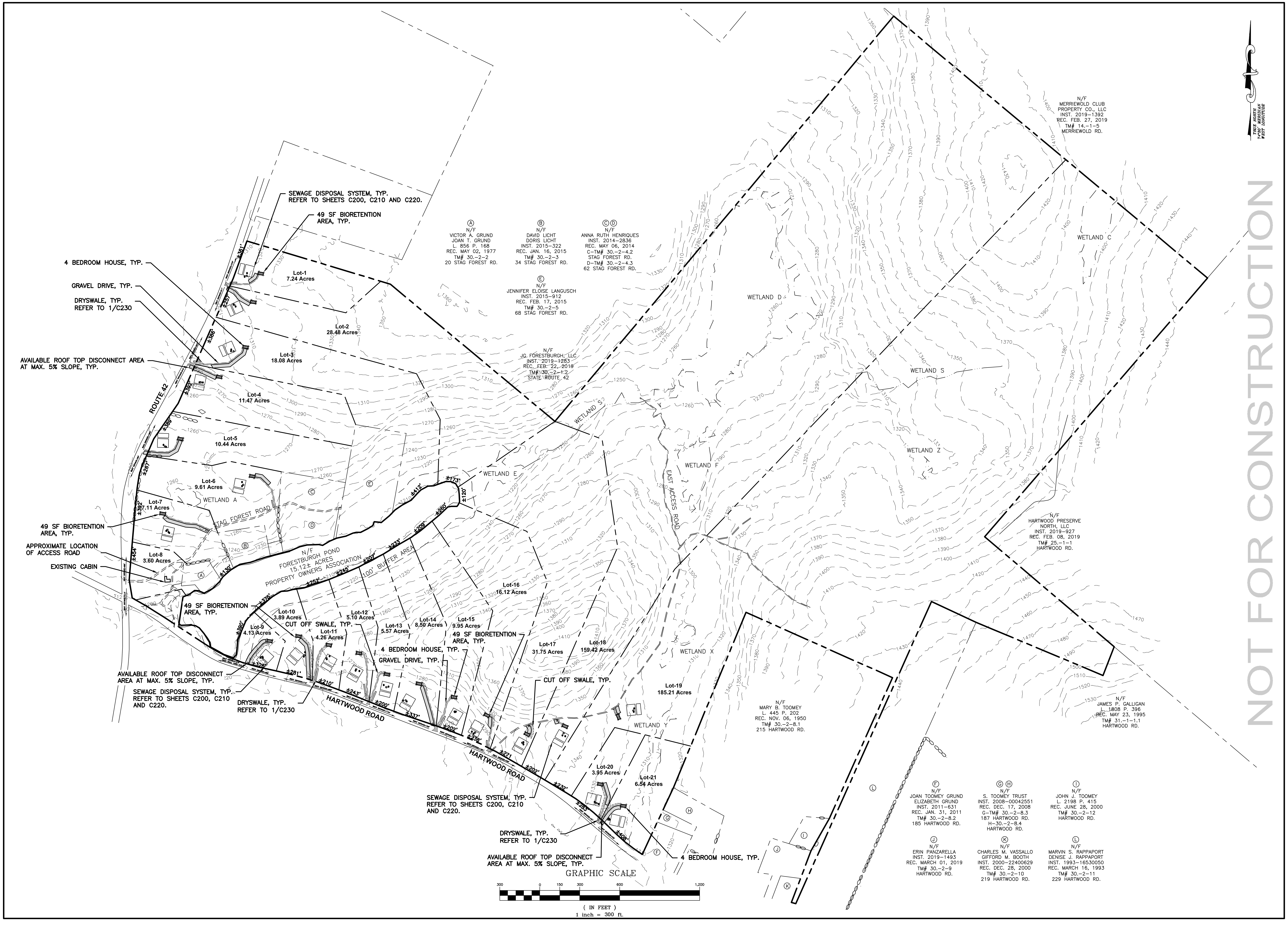
SURVEY PLAN

SHEET NO. C010

PROJECT NO. 0392.12119

DATE: 01/10/2020

CAD FILE NO.: 0392.12119-SITE


SEWAGE DISPOSAL SYSTEM, TYP. REFER TO SHEETS C200, C210 AND C220.
49 SF BIORETENTION AREA, TYP.
4 BEDROOM HOUSE, TYP.
GRAVEL DRIVE, TYP.
DRYSWALE, TYP. REFER TO 1/C230
AVAILABLE ROOF TOP DISCONNECT AREA AT MAX. 5% SLOPE, TYP.
ROUTE 42
Lot-1 7.24 Acres
Lot-2 28.48 Acres
Lot-3 18.08 Acres
Lot-4 11.47 Acres
Lot-5 10.44 Acres
Lot-6 9.61 Acres
Lot-7 37.11 Acres
Lot-8 3.60 Acres
Lot-9 4.13 Acres
Lot-10 3.89 Acres
Lot-11 4.26 Acres
Lot-12 5.10 Acres
Lot-13 5.57 Acres
Lot-14 8.50 Acres
Lot-15 9.95 Acres
Lot-16 16.12 Acres
Lot-17 31.75 Acres
Lot-18 159.42 Acres
Lot-19 185.21 Acres
Lot-20 3.95 Acres
Lot-21 6.54 Acres
WETLAND A
WETLAND C
WETLAND D
WETLAND E
WETLAND F
WETLAND S
WETLAND X
WETLAND Y
WETLAND Z
STAG FOREST ROAD
EAST ACCESS ROAD
HARTWOOD ROAD
APPROXIMATE LOCATION OF ACCESS ROAD
EXISTING CABIN
CUT OFF SWALE, TYP.
N/F FORESTBURGH POND 15.12± ACRES PROPERTY OWNERS ASSOCIATION
100' BUFFER AREA
Ⓐ N/F VICTOR A. GRUND JOAN T. GRUND L. 856 P. 168 REC. MAY 02, 1977 TM# 30.-2-2 20 STAG FOREST RD.
Ⓑ N/F DAVID LICHT DORIS LICHT INST. 2015-322 REC. JAN. 16, 2015 TM# 30.-2-3 34 STAG FOREST RD.
Ⓒ Ⓓ N/F ANNA RUTH HENRIQUES INST. 2014-2836 REC. MAY 06, 2014 C-TM# 30.-2-4.2 STAG FOREST RD. D-TM# 30.-2-4.3 62 STAG FOREST RD.
Ⓔ N/F JENNIFER ELOISE LANGUSCH INST. 2015-912 REC. FEB. 17, 2015 TM# 30.-2-5 68 STAG FOREST RD.
N/F JG FORESTBURGH, LLC INST. 2019-1283 REC. FEB. 22, 2019 TM# 30.-2-1.2 STATE ROUTE 42
N/F MERRIEWOLD CLUB PROPERTY CO., LLC INST. 2019-1392 REC. FEB. 27, 2019 TM# 14.-1-5 MERRIEWOLD RD.
N/F HARTWOOD PRESERVE NORTH, LLC INST. 2019-927 REC. FEB. 08, 2019 TM# 25.-1-1 HARTWOOD RD.
N/F MARY B. TOOMEY L. 445 P. 202 REC. NOV. 06, 1950 TM# 30.-2-8.1 215 HARTWOOD RD.
N/F JAMES P. GALLIGAN L. 1808 P. 396 REC. MAY 23, 1995 TM# 31.-1-1.1 HARTWOOD RD.
Ⓕ N/F JOAN TOOMEY GRUND ELIZABETH GRUND INST. 2011-631 REC. JAN. 31, 2011 TM# 30.-2-8.2 185 HARTWOOD RD.
Ⓖ Ⓗ N/F S. TOOMEY TRUST INST. 2008-00042551 REC. DEC. 17, 2008 G-TM# 30.-2-8.3 187 HARTWOOD RD. H-30.-2-8.4 HARTWOOD RD.
Ⓘ N/F JOHN J. TOOMEY L. 2198 P. 415 REC. JUNE 28, 2000 TM# 30.-2-12 HARTWOOD RD.
Ⓙ N/F ERIN PANZARELLA INST. 2019-1493 REC. MARCH 01, 2019 TM# 30.-2-9 HARTWOOD RD.
Ⓚ N/F CHARLES M. VASSALLO GIFFORD M. BOOTH INST. 2000-22400629 REC. DEC. 28, 2000 TM# 30.-2-10 219 HARTWOOD RD.
Ⓛ N/F MARVIN S. RAPPAPORT DENISE J. RAPPAPORT INST. 1993-16530050 REC. MARCH 16, 1993 TM# 30.-2-11 229 HARTWOOD RD.
TRUE NORTH 74°30' MERIDIAN WEST LONGITUDE
GRAPHIC SCALE
(IN FEET)
1 inch = 300 ft.
NOT FOR CONSTRUCTION

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC
58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

NO.	REVISIONS AND DESCRIPTIONS	DATE:

FORESTBURGH POND
NYS ROUTE 42

TOWN OF FORESTBURGH — SULLIVAN COUNTY, NY

OVERALL PLAN

SHEET NO. **C050**

PROJECT NO. 0392.12119

DATE: 01/10/2020

CAD FILE NO.: 0392.12119-SITE

SEWAGE DISPOSAL SYSTEM, TYP.
REFER TO SHEETS C200, C210 AND C220.

49 SF BIORETENTION AREA, TYP.

4 BEDROOM HOUSE, TYP.

GRAVEL DRIVE, TYP.

DRYSWALE, TYP.
REFER TO 1/C230

AVAILABLE ROOF TOP DISCONNECT AREA AT MAX. 5% SLOPE, TYP.

ROUTE 42

SIGHT DISTANCE=1570'

SIGHT DISTANCE=611'

SIGHT DISTANCE=557'

SIGHT DISTANCE=819'

SIGHT DISTANCE=1590'

SIGHT DISTANCE=380'

±361'

±357'

±386'

±392'

±389'

±257'

PT-1B
TP-1
PT-1A

PT-2A
TP-2
PT-2B

PT-3B
PT-3A
TP-3

PT-4B TP-4
PT-4A

PT-5A
TP-5
PT-5B

PT-6B
TP-6
PT-6A

Lot-1
7.24 Acres

Lot-2
28.48 Acres

Lot-3
18.08 Acres

Lot-4
11.47 Acres

Lot-5
10.44 Acres

Lot-6
9.61 Acres

WETLAND A

WETLAND E

STAG FOREST ROAD

±173'

±412'

±120'

±260'

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

NOT FOR CONSTRUCTION

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO.	DESCRIPTION	DATE

FORESTBURGH POND
NYS ROUTE 42
TOWN OF FORESTBURGH — SULLIVAN COUNTY, NY

LAYOUT PLAN LOTS NO. 1-NO.6

SHEET NO.
C100

PROJECT NO.
0392.12119

DATE:
01/10/2020

CAD FILE NO.:
0392.12119-SITE

WETLAND A
Lot-7
7.11 Acres
±392'
49 SF BIORETENTION AREA, TYP.
TP-7
PT-7A
PT-7B
PT-7C
STAG FOREST ROAD
1260
1240
1230
1220
1210
1200
Lot-8
3.60 Acres
±454'
EXISTING CABIN
SIGHT DISTANCE=685'
SIGHT DISTANCE=2113'
±130'
N/F
FORESTBURGH POND
15.12± ACRES
PROPERTY OWNERS ASSOCIATION
100' BUFFER AREA
±252'
±245'
±207'
±233'
±209'
±260'
±120'
±375'
±390'
Lot-9
4.13 Acres
Lot-10
3.89 Acres
Lot-11
4.26 Acres
Lot-12
5.10 Acres
Lot-13
5.57 Acres
Lot-14
8.50 Acres
Lot-15
9.95 Acres
1270
1280
1290
1310
1320
1340
1350
TP-9
PT-9A
PT-9B
PT-10A
TP-10
PT-10B
PT-11A
TP-11
PT-11B
TP-12
PT-12A
PT-12B
PT-13B
TP-13
PT-13A
PT-14B
TP-14
PT-14A
PT-15B
TP-15
PT-15A
CUT OFF SWALE, TYP.
4 BEDROOM HOUSE, TYP.
GRAVEL DRIVE, TYP.
SIGHT DISTANCE=578' (NEED SMALL LIMBS CUT)
±326'
SIGHT DISTANCE=589'
±281'
SIGHT DISTANCE=710'
±210'
SIGHT DISTANCE=680'
±243'
SIGHT DISTANCE=749'
±200'
SIGHT DISTANCE=1124'
±337'
SIGHT DISTANCE=726'
±202'
SIGHT DISTANCE=941'
HARTWOOD ROAD
AVAILABLE ROOF TOP DISCONNECT AREA AT MAX. 5% SLOPE, TYP.
SEWAGE DISPOSAL SYSTEM, TYP. REFER TO SHEETS C200, C210 AND C220.
DRYSWALE, TYP. REFER TO 1/C230
GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.
TRUE NORTH
74°30' MERIDIAN
WEST LONGITUDE
NOT FOR CONSTRUCTION

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

NO.	REVISIONS AND DESCRIPTIONS	DATE:

FORESTBURGH POND
NYS ROUTE 42

TOWN OF FORESTBURGH SULLIVAN COUNTY, NY

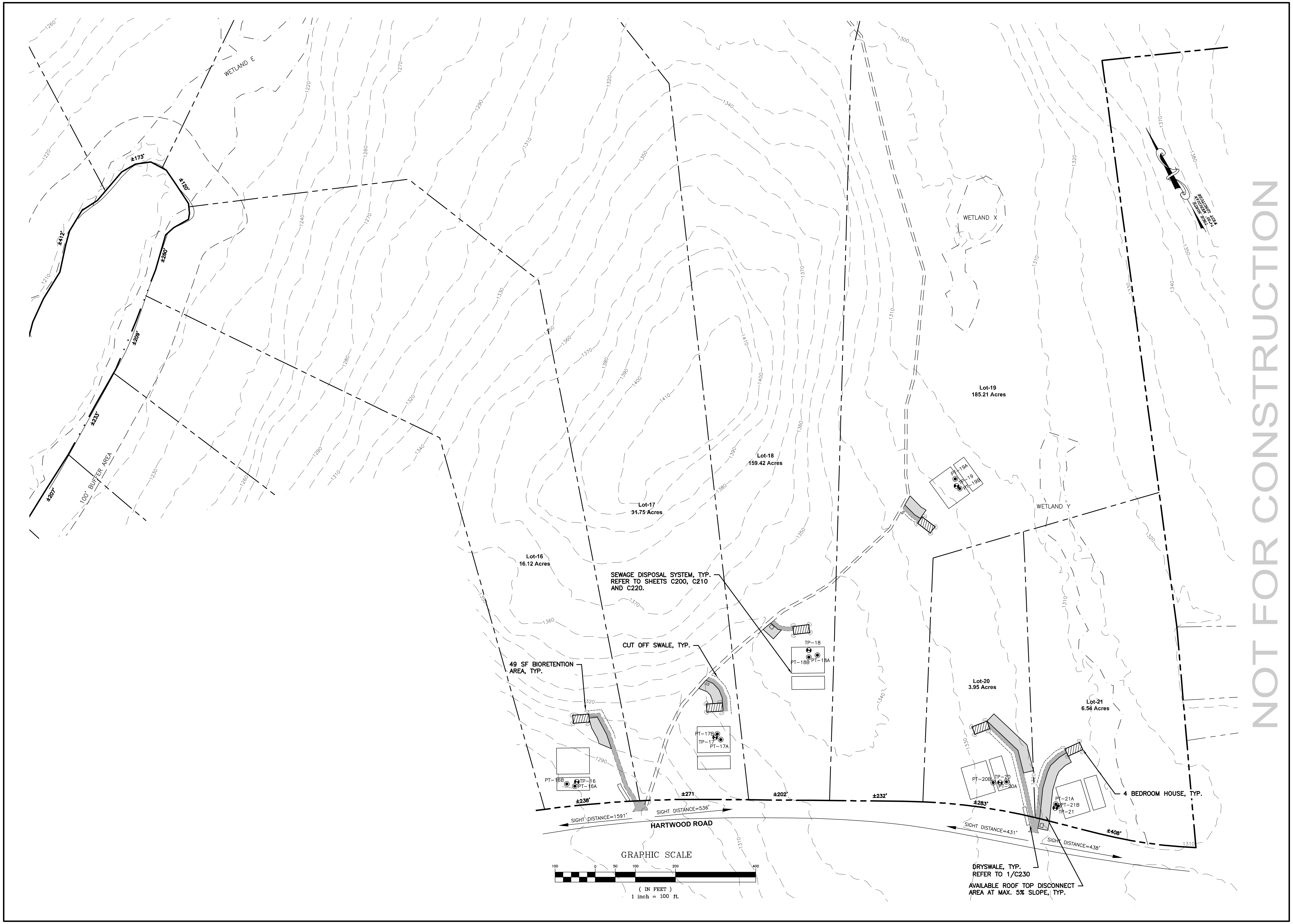
LAYOUT PLAN LOTS NO. 7-NO. 15

SHEET NO.
C110

PROJECT NO.
0392.12119

DATE: 01/10/2020

CAD FILE NO.: 0392.12119-SITE


WETLAND E
±173'
±120'
±412'
±260'
±209'
±233'
±207'
100' BUFFER AREA
Lot-16
16.12 Acres
Lot-17
31.75 Acres
Lot-18
159.42 Acres
Lot-19
185.21 Acres
WETLAND X
WETLAND Y
Lot-20
3.95 Acres
Lot-21
6.54 Acres
TRUE NORTH MERIDIAN 74°30' WEST LONGITUDE
SEWAGE DISPOSAL SYSTEM, TYP. REFER TO SHEETS C200, C210 AND C220.
CUT OFF SWALE, TYP.
49 SF BIORETENTION AREA, TYP.
PT-16B
TP-16
PT-16A
PT-17B
TP-17
PT-17A
TP-18
PT-18B
PT-18A
PT-19A
TP-19
PT-19B
PT-20B
TP-20
PT-20A
PT-21A
PT-21B
TP-21
4 BEDROOM HOUSE, TYP.
±238'
±271
±202'
±232'
±283'
±408'
SIGHT DISTANCE=1591'
SIGHT DISTANCE=536'
SIGHT DISTANCE=431'
SIGHT DISTANCE=438'
HARTWOOD ROAD
DRYSWALE, TYP. REFER TO 1/C230
AVAILABLE ROOF TOP DISCONNECT AREA AT MAX. 5% SLOPE, TYP.
GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.
NOT FOR CONSTRUCTION

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC
58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

NO.	REVISIONS AND DESCRIPTIONS	DATE:

FORESTBURGH POND
NYS ROUTE 42

TOWN OF FORESTBURGH SULLIVAN COUNTY, NY

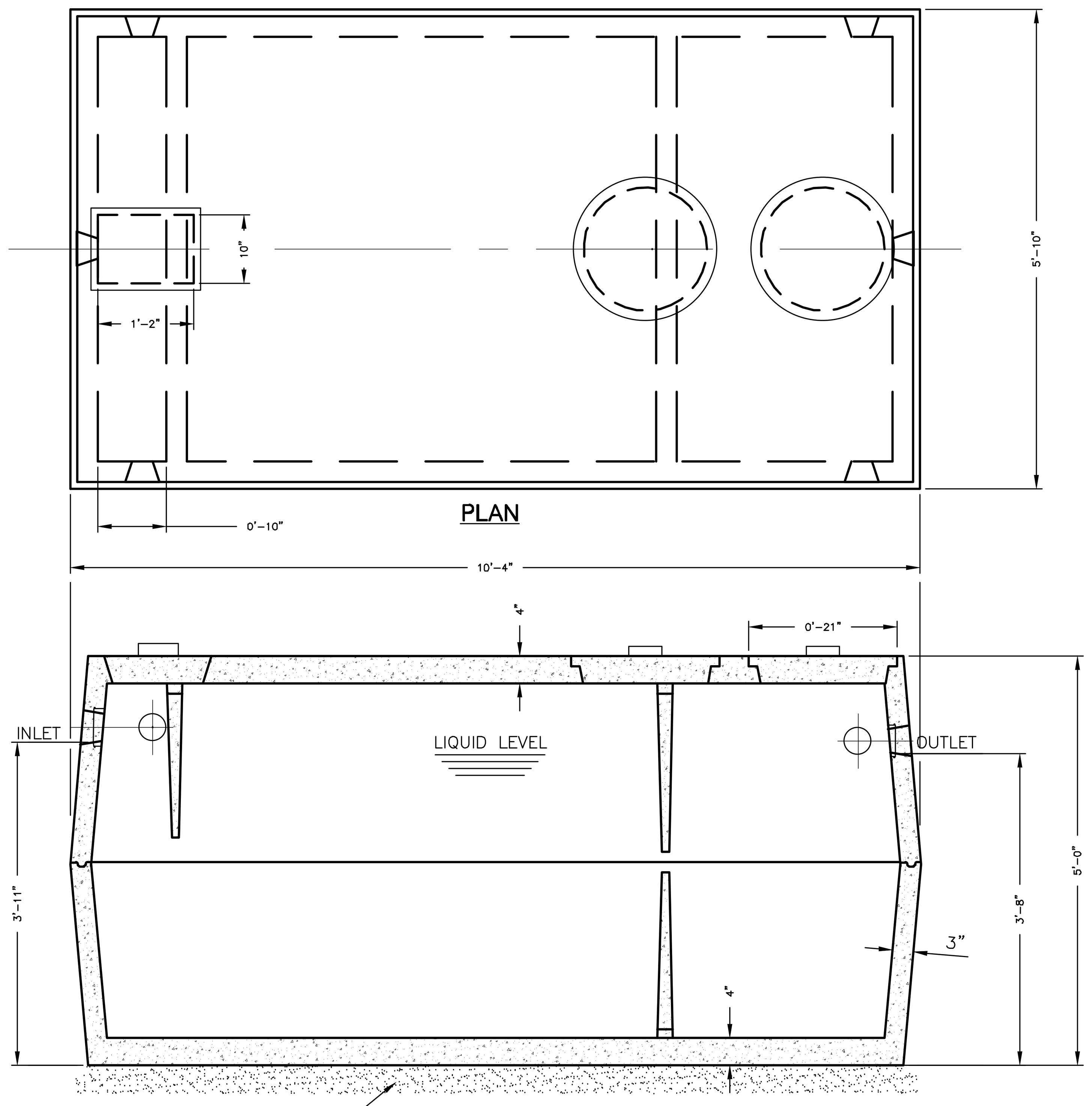
LAYOUT PLAN LOTS NO. 16-NO. 21

SHEET NO.
C120

PROJECT NO.
0392.12119

DATE: 01/10/2020

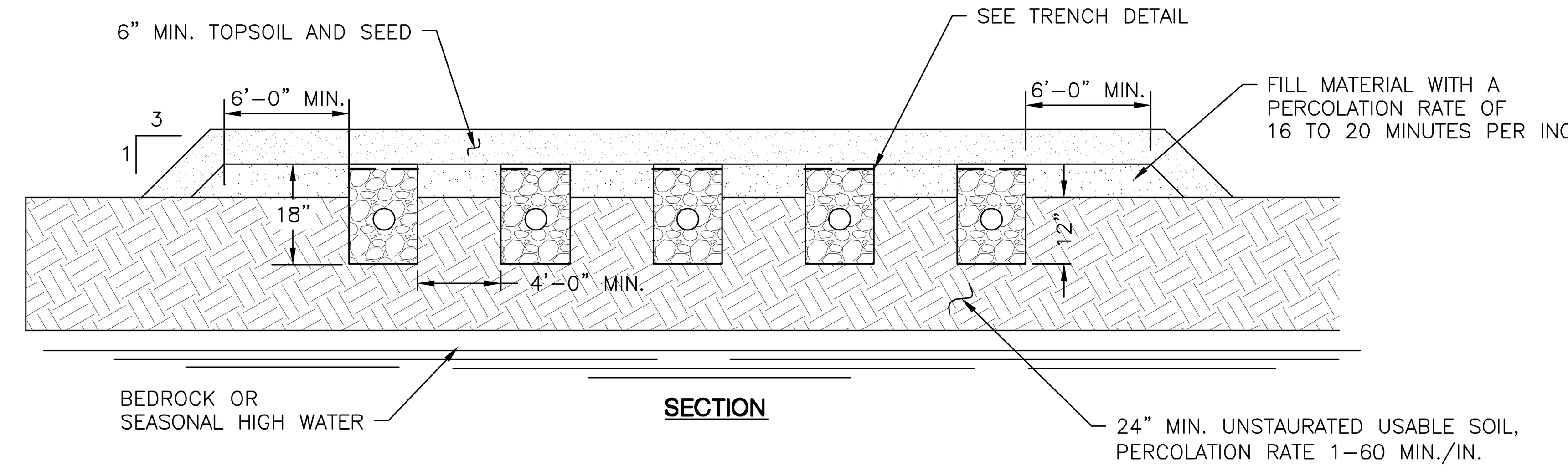
CAD FILE NO.: 0392.12119-SITE



NOTES:
1. NON-TRAFFIC BEARING DESIGN SHOWN.
2. USE H-20 LOADING DESIGN WHEN TANK IS PLACE IN TRAFFIC AREAS.

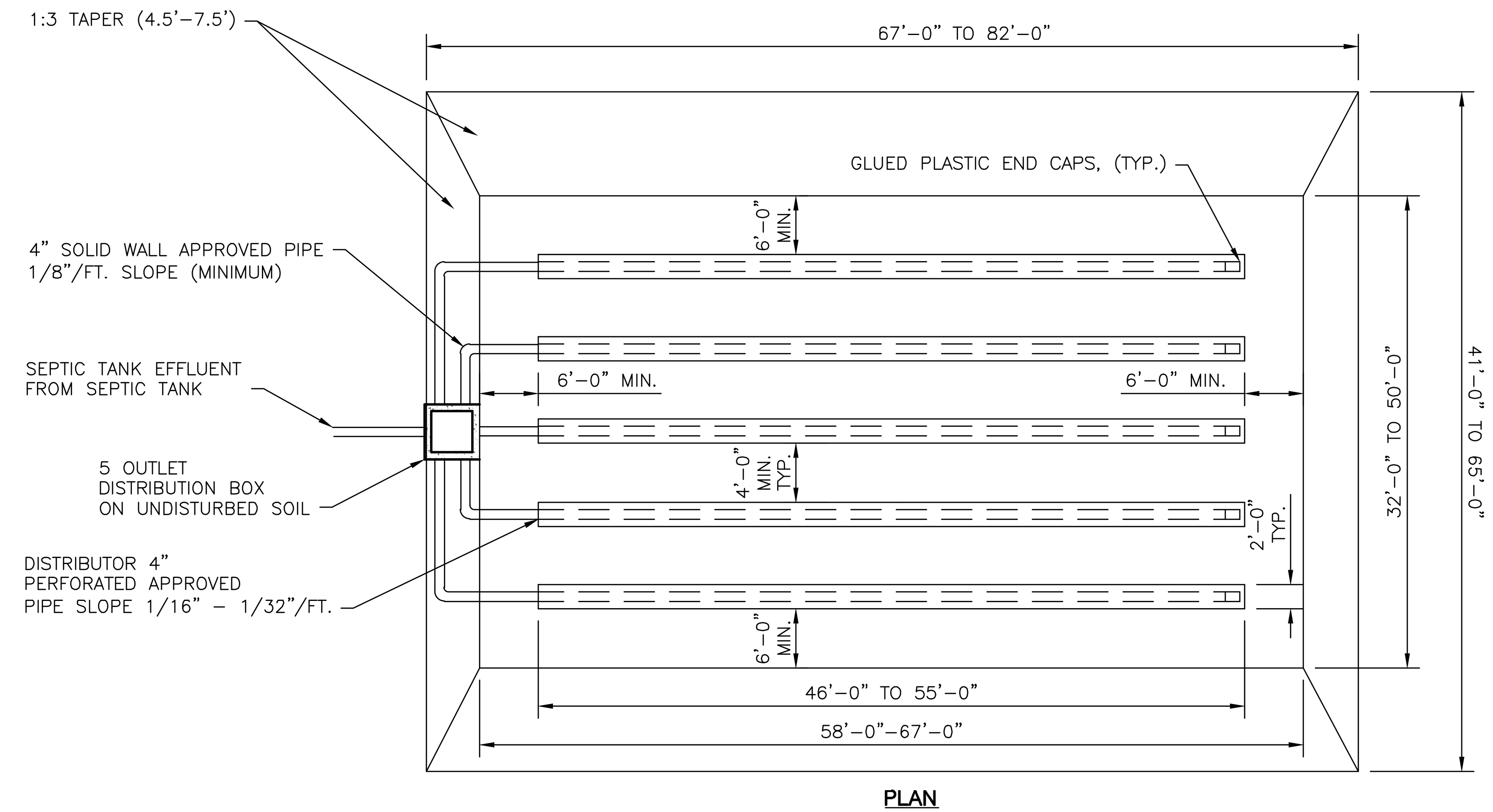
1 C200 1250 GALLON DUAL COMPARTMENT CONCRETE SEPTIC TANK DETAIL

N.T.S.



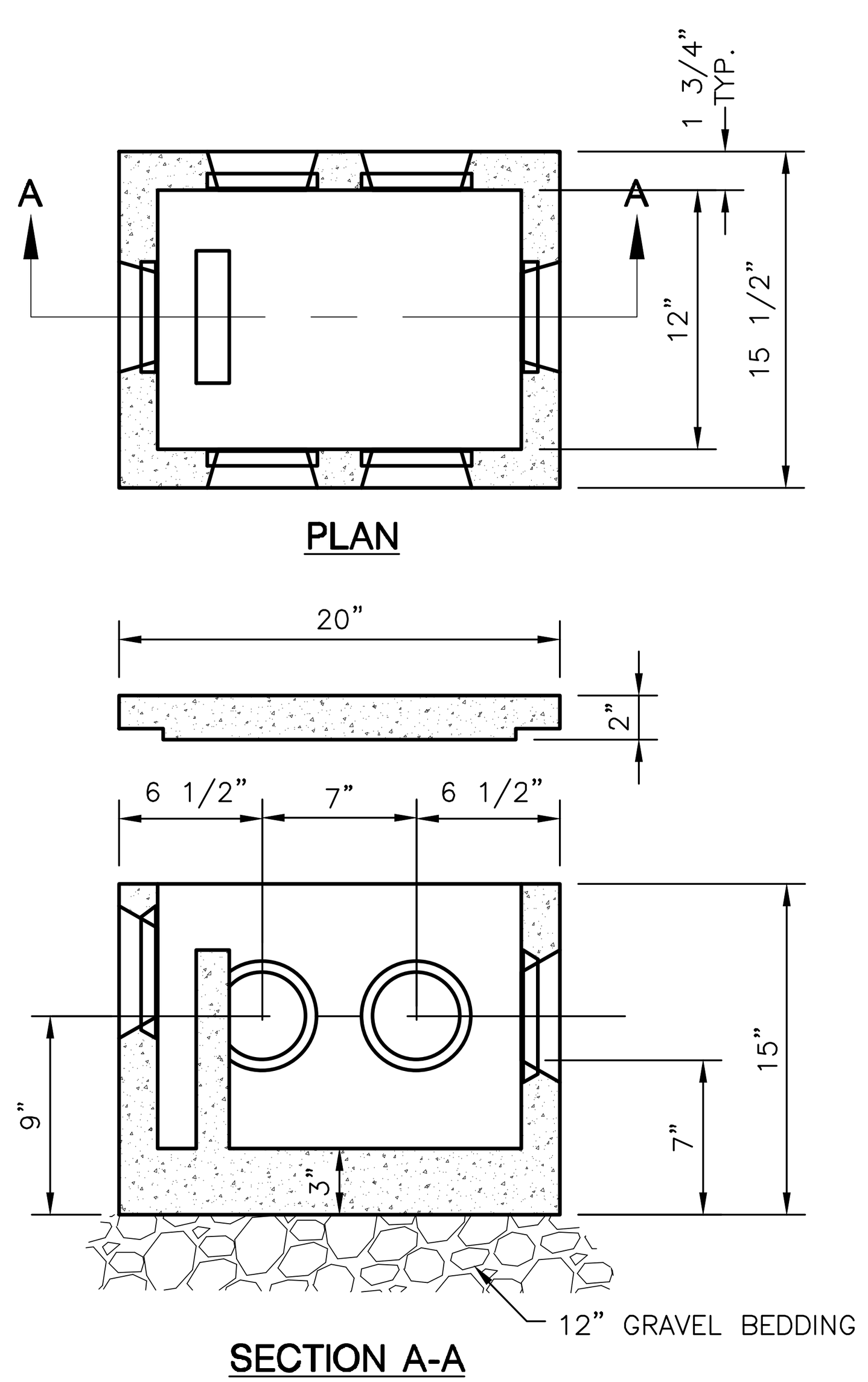
NOTES:

1. BOTTOM OF TRENCHES SHALL BE PLACED ON ORIGINAL USEABLE SOIL
2. USEABLE FILL SHOULD HAVE A PERCOLATION RATE SIMILAR TO BUT NOT FASTER THAN THE USEABLE SOIL PERCOLATION RATE.
3. MAXIMUM DEPTH OF USEABLE FILL PLUS SIX INCHES OF TOPSOIL SHALL NOT EXCEED 30 INCHES.
4. TRENCH BOTTOMS SHALL BE LEVEL. TRENCHES SHALL BE PARALLEL TO GROUND CONTOURS.
5. ON SLOPED SITES, A DIVERSION SWALE SHALL BE CONSTRUCTED UPHILL FROM THE FILL TO PREVENT SURFACE RUNOFF FROM ENTERING THE FILL.
6. EXTEND FILL AT LAST SIX FEET BEYOND ENDS OF TRENCHES BEFORE STARTING 1 ON 3 EDGES OF FILL.
7. HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION AREA.
8. FILL MATERIAL IS CAREFULLY PLACED WITHIN THE ABSORPTION AREA.



2 C200 SHALLOW ABSORPTION TRENCH SYSTEM

N.T.S.

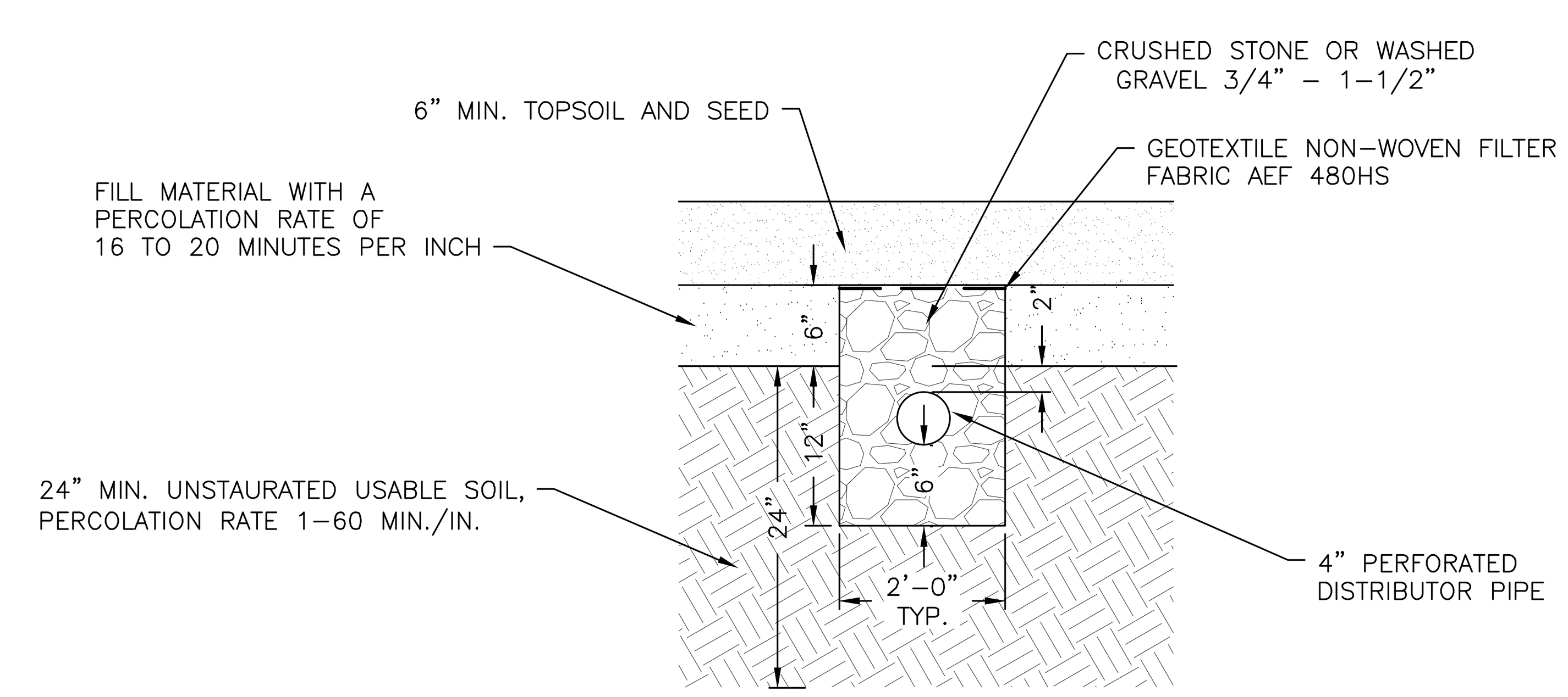


NOTES:

1. ALL UNUSED OUTLETS ON THE PROPOSED DISTRIBUTION BOX DEVICES SHALL BE PLUGGED.

3 C200 FIVE OUTLET PRECAST CONCRETE DISTRIBUTION BOX DETAIL

N.T.S.



4 C200 TRENCH DETAIL

N.T.S.

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC
58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

NO.	REVISIONS AND DESCRIPTIONS	DATE:

FORESTBURGH POND
NYS ROUTE 42

TOWN OF FORESTBURGH SULLIVAN COUNTY, NY

SEWAGE DISPOSAL SYSTEM DETAILS

SHEET NO. **C200**

PROJECT NO. 0392.12119

DATE: 01/10/2020

CAD FILE NO.: 0392.12119-SITE

SHALLOW ABSORPTION TRENCHES

GENERAL INFORMATION

SHALLOW ABSORPTION TRENCHES ARE CONSTRUCTED PARALLEL TO GROUND CONTOURS WITH THE BOTTOM AS LEVEL AS POSSIBLE AND LOCATED AT OR BELOW ORIGINAL GROUND SURFACE LEVEL. THESE SYSTEMS MAY BE USED WHERE SITES CONTAIN AT LEAST TWO FEET BUT LESS THAN FOUR FEET OF PERMEABLE SOIL (I.E., ONE TO 60 MINUTES PER INCH PERCOLATION RATE). DIVERSION OF SURFACE RUNOFF AROUND THE FILL AREA BY MEANS OF DITCHING/BERMING IS REQUIRED UPHILL OF ALL SLOPED SITES. HEAVY EQUIPMENT SHALL NOT ENTER THE ABSORPTION AREA. FILL MATERIAL SHALL HAVE APPROXIMATELY THE SAME PERCOLATION RATE AS THE UNDERLYING PERMEABLE SOIL. FILL MATERIAL, INCLUDING A SIX INCH TOPSOIL LAYER, SHALL NOT BE MORE THAN 30 INCHES ABOVE ORIGINAL GRADE, SHALL EXTEND AT LEAST SIX FEET HORIZONTALLY FROM AND AT THE SAME DEPTH AS THE TRENCH SIDEWALL IN FILL, AND SHALL HAVE A MAXIMUM SLOPE OF ONE VERTICAL TO THREE HORIZONTAL AT THE EDGE TO INTERSECT WITH THE ORIGINAL GROUND SURFACE. A CONVENTIONAL ABSORPTION FIELD SYSTEM (I.E., TRENCHES WITH DISTRIBUTION LINES AND AGGREGATE) IS CONSTRUCTED IN THE FILL AND ORIGINAL SOIL. FILL MORE PERMEABLE THAN THE ON-SITE PERMEABLE SOIL SHALL NOT BE UTILIZED TO AVOID SHORT-CIRCUITING OF WASTEWATER TO THE SURFACE OF THE GROUND.

SITE REQUIREMENTS

THESE SYSTEMS ARE USED WHERE THERE IS AT LEAST TWO FEET BUT LESS THAN FOUR FEET OF USABLE SOIL. VERTICAL SEPARATION DISTANCES BETWEEN TRENCH BOTTOMS AND BOUNDARY CONDITIONS (I.E., BEDROCK, GROUND WATER, AND IMPERMEABLE STRATA). IN ADDITION, THE HORIZONTAL SEPARATION DISTANCES NOTED IN TABLE 2 SHALL BE MET.

DESIGN CRITERIA

A MINIMUM TWO FEET SEPARATION MUST BE MAINTAINED BETWEEN THE BOTTOM OF EACH TRENCH AND ALL BOUNDARY CONDITIONS (I.E., BEDROCK, GROUND WATER, AND IMPERMEABLE STRATA). THE BOTTOM OF EACH TRENCH MUST NOT BE ABOVE THE ORIGINAL GROUND SURFACE AND SHOULD PREFERABLY BE AT LEAST SIX INCHES BELOW ORIGINAL GRADE. AT LEAST TWO PERCOLATION TESTS SHALL BE PERFORMED WITHIN THE PROPOSED ABSORPTION AREA WITH THE BOTTOM OF THE TEST HOLES AT THE DEPTH OF THE PROPOSED TRENCHES OR AT SIX INCHES BELOW GRADE IF THE BOTTOM OF THE PROPOSED TRENCHES WILL BE BETWEEN GRADE AND SIX INCHES BELOW GRADE. THE SLOWEST PERCOLATION RATE OBSERVED SHALL BE USED TO DESIGN THE ABSORPTION FACILITY. FILL MATERIAL SHALL HAVE A PERMEABILITY SIMILAR TO BUT NOT MORE PERMEABLE THAN THE UNDERLYING IN SITU USABLE SOIL. THE DEPTH OF FILL MATERIAL, INCLUDING A SIX INCH TOPSOIL LAYER, SHALL NOT EXCEED 30 INCHES ABOVE THE ORIGINAL GROUND ELEVATION. A CONVENTIONAL ABSORPTION FIELD SYSTEM (I.E., TRENCHES WITH DISTRIBUTION LINES AND AGGREGATE) IS DESIGNED AND CONSTRUCTED IN THE FILL AND ORIGINAL SOIL. PERCOLATION TEST RESULTS OF THE IN SITU FILL MATERIAL (I.E., AT THE BORROW PIT) SHALL BE USED TO ASSURE THAT THE PERMEABILITY OF THE FILL MATERIAL IS COMPATIBLE WITH THE ON-SITE SOIL PERMEABILITY.

CONSTRUCTION

GENERALLY, SITES WITH LARGE TREES, NUMEROUS SMALL TREES, OR LARGE BOULDERS ARE UNSUITABLE FOR A SHALLOW ABSORPTION TRENCH SYSTEM BECAUSE OF THE DIFFICULTY IN PREPARING THE SITE AND THE REDUCED INFILTRATION AREA BENEATH THE SYSTEM. IN AREAS WHICH ARE SUITABLE, ALL TREES AND STUMPS SHALL BE CUT AT GRADE AND REMOVED. OTHER VEGETATION (I.E., BRUSH, VINES, WEEDS, GRASS) SHALL BE CUT AS CLOSE TO GRADE AS POSSIBLE AND REMOVED. ALL LEAVES, LIMBS AND BOULDERS ABOVE GRADE SHALL ALSO BE REMOVED. ROOT STRUCTURE BELOW GRADE SHOULD NOT BE REMOVED. ROTOTILLING OR SOIL SCARIFICATION WITH CONSTRUCTION EQUIPMENT IS NOT RECOMMENDED.

HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION AREA. GRADE STAKES MAY BE USED TO DELINEATE THE LIMITS OF FILL AND PREVENT OVER-EXCAVATION OF ABSORPTION TRENCHES. FILL MATERIAL SHALL BE CAREFULLY PLACED WITHIN THE ABSORPTION AREA. THE EDGE OF THE FILL MATERIAL SHALL BE TAPERED FROM AT LEAST SIX FEET BEYOND ANY TRENCH TO ORIGINAL GRADE AT A SLOPE NO GREATER THAN ONE VERTICAL TO THREE HORIZONTAL. ON SLOPED SITES A DIVERSION DITCH OR BERM SHALL BE CONSTRUCTED ON THE UPHILL, SIDE OF THE FILL MATERIAL TO PREVENT SURFACE RUNOFF FROM ENTERING THE FILL. THE SHALLOW ABSORPTION TRENCH SYSTEM IS CONSTRUCTED IN THE FILL MATERIAL AND UPON OR IN EXISTING IN SITU SOIL. CONSTRUCTION OF TRENCHES AT LEAST SIX INCHES INTO EXISTING IN SITU SOIL IS PREFERRED TO UTILIZE A STABILIZED SIDEWALL INFILTRATIVE SURFACE.

DISTRIBUTION DEVICES

GENERAL INFORMATION

SEPTIC TANK OR AEROBIC UNIT EFFLUENT IS USUALLY CONVEYED TO MULTIPLE ABSORPTION FACILITIES (I.E., LATERALS, SEEPAGE PITS).
FOR THE TREATMENT SYSTEM TO FUNCTION PROPERLY THE SEPTIC TANK/AEROBIC UNIT EFFLUENT MUST BE EQUALLY DISTRIBUTED TO EACH LATERAL OR SEEPAGE PIT UTILIZING PROPERLY DESIGNED DISTRIBUTION DEVICES. SEVERAL TYPES OF DISTRIBUTION DEVICES MAY BE USED TO PERFORM THIS FUNCTION. DISTRIBUTION BOXES ARE MOST COMMONLY USED CONJUNCTION WITH ABSORPTION FIELDS AND SEEPAGE PITS. DISTRIBUTION BOXES MAY BE USED ON SLOPED SITES PROVIDED THE INVERTS OF THE OUTLETS ARE ALL AT THE SAME ELEVATION AND THE FIRST TEN FEET OF OUTLET LINES HAVE THE SAME SLOPE OR SPEED LEVELERS ARE USED. DROP MANHOLES WITH DISTRIBUTION LINES TO ABSORPTION TRENCHES AND SERIAL DISTRIBUTORS WITH ELBOW SECTIONS MAY BE USED WITH SERIAL ABSORPTION TRENCHES ON MODERATE TO STEEP SLOPES.

GRAVITY DISTRIBUTION

THE MAXIMUM LENGTH OF ABSORPTION LINES USED IN CONJUNCTION WITH GRAVITY DISTRIBUTION SHALL BE 60 FEET. GRAVITY PERFORATED DISTRIBUTION LINES SHALL BE INSTALLED WITH A SLOPE OF 1/16 TO 1/32 INCH PER FOOT. THE INVERTS OF PERFORATED DISTRIBUTION LINES SHALL NOT BE INSTALLED DEEPER THAN 24 INCHES BELOW GRADE.

DISTRIBUTION BOX

A DISTRIBUTION BOX IS USED TO EVENLY DISTRIBUTE SETTLED SEWAGE TO SUBSURFACE ABSORPTION LATERALS AND SEEPAGE PITS. DISTRIBUTION BOXES SHOULD BE INSPECTED ANNUALLY TO ASSURE THAT: (A) ALL OUTLET INVERTS ARE AT THE SAME ELEVATION; (B) EXCESSIVE SOLIDS ARE NOT FLOWING OUT OF THE SEPTIC TANK OR AERATION UNIT; AND, (C) ANY REQUIRED BAFFLE IS IN PLACE AS DESIGNED. FOR ACCESSIBILITY, IT IS NECESSARY THAT THE DISTRIBUTION BOX BE LOCATED AND HAVE A REMOVABLE COVER NOT MORE THAN 12 INCHES BELOW GRADE. WHERE, DUE TO SITE CONDITIONS, A DISTRIBUTION BOX MUST BE MORE THAN 12 INCHES BELOW GRADE, AN EXTENSION COLLAR SHALL BE INSTALLED TO HAVE THE COVER WITHIN 12 INCHES OF GRADE. THE LOCATION OF DISTRIBUTION BOX COVERS SHOULD BE IDENTIFIED BY INSTALLING A LOCATION STAKE FROM GRADE TOWARD THE COVER. SUCH STAKES PERMIT RAPID LOCATION FOR INSPECTION/MAINTENANCE WITH MINIMAL LANDSCAPE DISTURBANCE.

TO MINIMIZE FROST ACTION AND REDUCE THE POSSIBILITY OF MOVEMENT ONCE INSTALLED, DISTRIBUTION BOXES MUST BE SET ON A BED OF SAND OR PEA GRAVEL AT LEAST 12 INCHES DEEP. A 12 INCH BED OF AGGREGATE (3/4 TO 1 1/2 INCHES IN DIAMETER) MAY BE USED IN-LIEU-OF THE REQUIRED 12 INCH BED OF SAND OR PEA GRAVEL IF SPEED REVELERS ARE USED ON ALL OUTLETS. THE DROP BETWEEN INLET AND OUTLET INVERTS SHALL BE AT LEAST TWO INCHES. A BAFFLE IS REQUIRED AT THE INLET SIDE OF THE BOX WHEN THE SLOPE OF THE PIPE FROM THE SEPTIC TANK TO THE BOX EXCEEDS 1/2 INCH PER FOOT OR WHEN SIPHON DOSING IS USED. A PARTIALLY TRUNCATED SHORT SANITARY TEE WITH THE BASE TOWARD THE INLET OPEN OR CONTAINING PERFORATIONS MAY BE USED AS A BAFFLE SINCE IT MINIMIZES SHORT-CIRCUITING AND ENABLES ABSORPTION FIELD GASES TO FLOW BACK TO THE SEPTIC TANK AND THENCE UP THE SOIL STACK. WHEN SUCH SHORT SANITARY TEES ARE USED, A MINIMUM OF ONE INCH CLEARANCE BETWEEN THE UNDERSIDE OF THE DISTRIBUTION BOX COVER AND THE TOP OF THE SANITARY TEE SHALL BE PROVIDED TO PERMIT VENTING OF ABSORPTION FACILITY GASES.

THE INVERTS OF BOX OUTLETS SHALL BE AT LEAST TWO INCHES ABOVE THE BOTTOM OF THE BOX TO PREVENT SHORT-CIRCUITING AND REDUCE SOLIDS CARRY-OVER. USE OF ADJUSTABLE OUTLET REVELERS IS RECOMMENDED IN DISTRIBUTION BOXES. DISTRIBUTION BOXES MAY BE CONSTRUCTED IN PLACE OR PURCHASED PREFABRICATED. WHEN CONCRETE IS USED TO CONSTRUCT BOXES, IT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAY SET. PREFABRICATED BOXES MAY BE CONSTRUCTED OF CONCRETE, FIBERGLASS, OR PLASTIC. THE BOXES SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS IN ADDITION TO THE ABOVE-NOTED REQUIREMENTS.

NON-PERFORATED PIPE SHALL BE USED TO CONNECT THE DISTRIBUTION BOX TO THE ABSORPTION FACILITY. THE NON-PERFORATED PIPE SHALL HAVE A MINIMUM SLOPE OF 1/32 INCH PER FOOT AND BE OF TIGHT JOINT CONSTRUCTION ON UNDISTURBED EARTH OR PROPERLY BEDDED THROUGHOUT ITS LENGTH.

PRECAST REINFORCED CONCRETE SEPTIC TANKS

A) CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 POUNDS PER SQUARE INCH (PSI) AT 28 DAYS SET; 3,000 PSI CONCRETE IS RECOMMENDED.

B) WALL THICKNESS SHALL BE A MINIMUM OF THREE INCHES UNLESS THE DESIGN HAS BEEN CERTIFIED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER AS COMPLYING WITH ALL APPROPRIATE REQUIREMENTS FOR THIN-WALL CONSTRUCTION. ALL WALLS, FLOOR, ROOF, AND ACCESS COVERS SHALL CONTAIN REINFORCING TO ASSURE SUPPORT FOR 300 PSF.

C) ALL JOINTS SHALL BE SEALED SUCH THAT THE TANK IS WATERTIGHT.

D) TANKS WITH A JOINT BELOW THE LIQUID LEVEL MUST BE TESTED FOR WATERTIGHTNESS PRIOR TO BACKFILLING.

DESIGN AND INSTALLATION

THE FOLLOWING GENERAL REQUIREMENTS APPLY TO ALL SEPTIC TANKS REGARDLESS OF CONSTRUCTION MATERIAL:

A) A MINIMUM LIQUID DEPTH OF 30 INCHES. THE MAXIMUM DEPTH FOR DETERMINING THE ALLOWABLE DESIGN VOLUME OF A TANK SHALL BE 60 INCHES. DEEPER TANKS PROVIDE EXTRA SLUDGE STORAGE BUT NO CREDITIS GIVEN TOWARD DESIGN VOLUME.

B) THE MINIMUM DISTANCE BETWEEN THE INLET AND OUTLET SHALL BE SIX FEET. ALL TANK SHALL MEET THE MINIMUM SURFACE AREA REQUIREMENT FOR THE SPECIFIC DESIGN VOLUME IN TABLE 3. THE EFFECTIVE LENGTH OF RECTANGULAR TANKS SHOULD NOT BE LESS THAN TWO OR GREATER THAN FOUR TIMES THE EFFECTIVE WIDTH.

C) TANKS MUST BE WATERTIGHT, CONSTRUCTED OF DURABLE MATERIAL, AND NOT SUBJECT TO EXCESSIVE CORROSION, DECAY, FROST DAMAGE, OR CRACKING. WHEN INSTALLED, THE TOP OF ALL TANKS SHALL BE ABLE TO SUPPORT AT LEAST 300 POUNDS PER SQUARE FOOT (PSF).

D) TANK ACCESS COVERS AND MANHOLE COVERS SHALL BE WITHIN 12 INCHES OF FINAL GRADE TO PERMIT INSPECTION AND MAINTENANCE. TANKS SHALL HAVE AT LEAST ONE MANHOLE OPENING AND VISUAL ACCESS OPENINGS ABOVE THE INLET AND OUTLET BAFFLES. A MANHOLE OPENING MAY REPLACE A VISUAL ACCESS OPENING. TANKS WITH A LIQUID DEPTH OF 48 INCHES OR MORE SHALL HAVE A TOP OPENING WITH A MINIMUM OF 20 INCHES IN THE SHORTEST DIMENSION TO ALLOW ENTRY INTO THE TANK. TANKS WITH A LIQUID DEPTH LESS THAN 48 INCHES SHALL HAVE A TOP OPENING THAT IS AT LEAST 12 INCHES IN THE SHORTEST DIMENSION. WHEN THE TOP OF A SEPTIC TANK IS MORE THAN 12 INCHES BELOW FINAL GRADE, WATERTIGHT EXTENSION COLLARS SHALL BE USED TO BRING ACCESS COVERS AND MANHOLE COVERS WITHIN 12 INCHES OF FINAL GRADE. SEPTIC TANK ACCESS COVERS LOCATED AT OR ABOVE GRADE SHOULD BE LOCKABLE TO PREVENT ENTRY BY UNAUTHORIZED PERSONS, ESPECIALLY CHILDREN.

E) TANKS SHALL HAVE INLET AND OUTLET BAFFLES, SANITARY TEES OR OTHER DEVICES TO PREVENT THE PASSAGE OF FLOATING SOLIDS AND TO MINIMIZE DISTURBANCE OF SETTLED SLUDGE OR FLOATING SCUM BY SEWAGE ENTERING AND LEAVING THE TANK. OUTLET DESIGNS INCORPORATING GAS BUBBLE DEFLECTION (I.E., GAS DEFLECTION BAFFLES) ARE STRONGLY RECOMMENDED TO MINIMIZE SOLIDS LOADING OF THE ABSORPTION SYSTEM. INLET AND OUTLET BAFFLES SHALL EXTEND A MINIMUM OF 12 INCHES AND 14 INCHES, RESPECTIVELY, BELOW THE LIQUID LEVEL IN TANKS WITH A LIQUID DEPTH OF LESS THAN 40 INCHES, AND 16 AND 18 INCHES, RESPECTIVELY, IN TANKS WITH A LIQUID DEPTH OF 40 INCHES OR GREATER. THE HORIZONTAL DISTANCE BETWEEN THE OUTLET BAFFLE AND THE OUTLET SHALL NOT EXCEED SIX INCHES. BAFFLES SHALL BE CONSTRUCTED OF A DURABLE MATERIAL NOT SUBJECT TO EXCESSIVE CORROSION, DECAY, OR CRACKING. INCREASING THE DIAMETER OF THE VERTICAL SECTION OF OUTLET SANITARY TEES TO MORE THAN FOUR (4) INCHES IS RECOMMENDED TO DECREASE UPFLOW VELOCITY AND POTENTIAL DISCHARGE OF SUSPENDED SOLIDS TO THE ABSORPTION SYSTEM.

F) THERE SHALL BE A MINIMUM OF ONE INCH CLEARANCE BETWEEN THE UNDERSIDE OF THE ROOF OF THE TANK AND THE TOP OF ALL BAFFLES, AND/OR TEES TO PERMIT VENTING OF TANK GASES. MULTI-CHAMBER AND MULTI-TANK SYSTEMS SHALL ALSO BE DESIGNED TO PERMIT VENTING OF TANK GASES.

TANKS SHALL BE PLACED ON AT LEAST A THREE-INCH BED OF SAND OR PEA GRAVEL. THIS WILL PROVIDE FOR PROPER LEVELING AND BEARING. A FIVE-INCH BED OF AGGREGATE (3/4 TO 1-1/2 INCHES IN DIAMETER) MAY BE USED IN-LIEU-OF THE REQUIRED THREE INCH BED OF SAND OR PEA GRAVEL. ANY ADDITIONAL INSTRUCTIONS PROVIDED BY THE TANK MANUFACTURER SHALL ALSO BE FOLLOWED.

G) THERE SHALL BE A MINIMUM DROP IN ELEVATION OF TWO INCHES BETWEEN THE INVERTS (BOTTOM OF INSIDE OF PIPE) OF THE INLET AND OUTLET PIPES.

H) GARBAGE GRINDERS. AN ADDITIONAL 250 GALLONS OF CAPACITY AND SEVEN SQUARE FEET OF SURFACE AREA ARE REQUIRED WHEN A GARBAGE GRINDER CAN REASONABLY BE EXPECTED AT THE TIME OF CONSTRUCTION OR IN THE FUTURE. A GAS DEFLECTION BAFFLE OR OTHER ACCEPTABLE OUTLET MODIFICATION (E.G., GAS BAFFLES) AND A DUAL COMPARTMENT TANK OR TWO TANKS IN SERIES MUST ALSO BE PROVIDED.

I) SEPTIC TANKS MAY BE FORCED TOWARD THE GROUND SURFACE DURING CLEANING OR DEWATERING OPERATIONS IF THEY HAVE BEEN INSTALLED WITHIN THE GROUND WATER ZONE. THIS IS CAUSED BY THE BUOYANCY EFFECT OF THE DISPLACED VOLUME OF THE TANK. SEPTIC TANKS SHOULD NOT BE COMPLETELY DEWATERED IF GROUND WATER LEVELS ARE SIGNIFICANTLY HIGHER THAN THE BOTTOM OF THE TANK UNLESS SAID TANKS ARE PROPERLY ANCHORED. TANKS CONSTRUCTED OF FIBERGLASS, PLASTIC, OR STEEL ARE MORE LIKELY TO FLOAT THAN REINFORCED CONCRETE TANKS BECAUSE OF THEIR LIGHTER WEIGHT PER GIVEN VOLUME.

J) SPECIAL CARE MUST BE TAKEN IN BEDDING THE HOUSE SEWER, SEPTIC TANK, AND OUTLET LINE TO PREVENT UNEVEN SETTLEMENT AND POSSIBLE CRACKING OR RUPTURE WHERE THE INLET AND OUTLET LINES CONNECT TO THE SEPTIC TANK.

TABLE 2
REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS

SYSTEM COMPONENTS	WELL OR SUCTION LINE	TO STREAM, LAKE WATERCOURSE OR WETLAND	DWELLING	PROPERTY LINE	DRAINAGE DITCH OR RAIN GARDENS
HOUSE SEWER (WATERTIGHT JOINTS)	25' IF CAST IRON OR PVC WITH O-RING JOINTS, 50' OTHERWISE	25'	3'	10'	10'
SEPTIC TANK, DOSING TANK WATERTIGHT ETU	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	20'
ABSORPTION FIELD	100'	100'	20'	10'	20'
RAISED SYSTEM OR MOUND	100'	100'	20'	10'	20'
INTERMITTENT SAND FILTER (C)	100'	100'	20'	10'	20'

GENERAL NOTES

1) ALL WORK SHALL CONFORM TO NYSDOH REGULATIONS AND STANDARDS.

2) ALL WORK SHALL BE INSPECTED AND CERTIFIED BY A LICENSED NYS PROFESSIONAL ENGINEER OR HIS REPRESENTATIVE.

3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKEOUT.

4) ALL AREAS WITHIN OR OUTSIDE THE EXISTING EASEMENTS OR ANY CONTRACT LIMITS DESIGNATED, THAT ARE DISTURBED BY CONTRACTORS OPERATIONS SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR, TO THE SATISFACTION OF THE OWNER.

5) CONTRACTOR SHALL CALL DIG SAFELY NY TWO WORKING DAYS BEFORE DIGGING. 1-800-962-7962 NON-MEMBERS MUST BE CONTACTED SEPARATELY.

6) THERE ARE NO GUARANTEE THAT ALL EXISTING UNDERGROUND OR OVERHEAD UTILITIES WHETHER FUNCTIONAL OR ABANDONED, WITHIN THE PROJECT AREA ARE SHOWN ON THIS PLAN. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THIS WORK.

7) KEYSTONE ASSOCIATES ARCHITECTS, ENGINEERS AND SURVEYORS, LLC. IS NOT RESPONSIBLE FOR ANY CONSTRUCTION WORK PERFORMED PRIOR TO FINAL APPROVAL OF ALL PLANS AND SECURING OF ALL PERMITS AND FILING OF ALL MAPS.

8) CONTRACTOR TO COMPLY WITH ALL O.S.H.A. AND OTHER STATE AND LOCAL SAFETY REQUIREMENTS DURING CONSTRUCTION. (PROPER SHORING, ETC.).

9) THE CONTRACTOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY PRIOR TO COMMENCEMENT OF EARTHWORK OPERATIONS. ANY ELEVATION DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED AS PART OF THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.

DESIGN BASIS: FOR ALL SYSTEMS (BASED ON ASSUMED 4 BEDROOMS)

A) AVERAGE DAILY WATER USAGE: (SEE TABLE 1) 4 BEDROOM (440 GPD)

B) SEPTIC TANK SIZE: (SEE TABLE 3) 4 BEDROOM (1250 GAL.)

C) PERCOLATION TEST DATA: *

REFER TO SHEET C220

D) SHALLOW ABSORPTION TRENCHES

RFER TO SHEET C220

E) TEST PIT DATA: *

REFER TO SHEET C220

* PERCOLATION TESTS AND TEST CUT PERFORMED IN NOVEMBER 18, 2019 BY KEYSTONE ASSOCIATES, ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

TABLE I
DESIGN FLOWS FOR VARIOUS HOUSEHOLD PLUMBING FIXTURES

PLUMBING FIXTURES	DESIGN FLOWS GPD PER BEDROOM
WATER SAVING FIXTURES (POST 1991) 1.6 GPF MAX. WATER CLOSETS AND 3.0 GPM MAX. FAUCETS/SHOWERHEADS	110

TABLE 3
MINIMUM SEPTIC TANK CAPACITIES

NUMBER OF BEDROOMS	MINIMUM TANK CAPACITY (GALLONS)	MINIMUM LIQUID SURFACE AREA (SQ. FT.)
1, 2, OR 3	1,000	27
4	1,250	34
5	1,500	40
6	1,750	47

NOTE:
TANK SIZE REQUIREMENTS FOR MORE THAN SIX BEDROOMS SHALL BE CALCULATED BY ADDING 250 GALLONS AND SEVEN SQUARE FEET OF SURFACE AREA FOR EACH ADDITIONAL BEDROOM. A GARBAGE GRINDER SHALL BE CONSIDERED EQUIVALENT TO AN ADDITIONAL BEDROOM FOR DETERMINING TANK SIZE. A HOT TUB/SPA SHOULD BE CONSIDERED EQUIVALENT TO AN ADDITIONAL BEDROOM FOR DETERMINING TANK SIZE.

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com
KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO. | REVISIONS AND DESCRIPTIONS | DATE:

FORESTBURGH POND
NYS ROUTE 42
TOWN OF FORESTBURGH SULLIVAN COUNTY, NY
SEWAGE DISPOSAL SYSTEM NOTES

SHEET NO. C210
PROJECT NO. 0392.12119
DATE: 01/10/2020
CAD FILE NO.: 0392.12119-SITE

DESIGN BASIS: LOT NO. 1

A) PERCOLATION TEST DATA: *
PERC. TEST: 8 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.90 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.90 GPD/SF = 489 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(49' LONG) = 490 SF

C) TEST PIT DATA:
0–4" TOPSOIL AND LEAF LITTER COVER
4"–19" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
19"–33" GRAY FINE SILTY SAND AND SOME GRAVEL
33"–72" COBBLES, PLATEY

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 2

A) PERCOLATION TEST DATA:
PERC. TEST: 19 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.70 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.70 GPD/SF = 629 SF
ABSORPTION AREA PROPOSED: 6 TRENCHES (2' WIDE)(53' LONG) = 636 SF

C) TEST PIT DATA:
0–7" TOPSOIL AND LEAF LITTER COVER
7"–13" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
13"–28" GRAY FINE SILTY SAND AND SOME GRAVEL
28"–72" COBBLES TO BOTTOM

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 3

A) PERCOLATION TEST DATA:
PERC. TEST: 11 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.80 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF

C) TEST PIT DATA:
0–7" TOPSOIL AND LEAF LITTER COVER
7"–14" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
14"–35" GRAY FINE SILTY SAND AND GRAVEL
35"–60" COBBLES AND FINE SILTY SAND AND GRAVEL

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 4

A) PERCOLATION TEST DATA:
PERC. TEST: 6 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.00 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF

C) TEST PIT DATA:
0–7" TOPSOIL AND LEAF LITTER COVER
7"–13" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
13"–33" GRAY FINE SILTY SAND AND GRAVEL
33"–64" DENSE COBBLE LAYER, PLATEY

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 5

A) PERCOLATION TEST DATA:
PERC. TEST: 10 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.90 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.90 GPD/SF = 489 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(49' LONG) = 490 SF

C) TEST PIT DATA:
0–7" TOPSOIL AND LEAF LITTER COVER
7"–13" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
13"–30" GRAY FINE SILTY SAND AND GRAVEL
30"–72" GRAY FINE SILTY SAND AND GRAVEL W/ DENSE COBBLE LAYER, PLATEY

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 6

A) PERCOLATION TEST DATA:
PERC. TEST: 44 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.50 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.50 GPD/SF = 880 SF
ABSORPTION AREA PROPOSED: 8 TRENCHES (2' WIDE)(55' LONG) = 880 SF

C) TEST PIT DATA:
0–7" TOPSOIL WITH MOSS COVER
7"–18" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
18"–72" GRAY COURSE SAND AND GRAVEL W/ SOME SILT TO BOTTOM

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 7

A) PERCOLATION TEST DATA:
PERC. TEST: 28 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.60 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.60 GPD/SF = 735 SF
ABSORPTION AREA PROPOSED: 7 TRENCHES (2' WIDE)(53' LONG) = 742 SF

C) TEST PIT DATA:
0–7" TOPSOIL WITH MOSS COVER
7"–18" REDDISH BROWN FINE SILTY SAND AND SOME GRAVEL
18"–72" GRAY COURSE SAND AND GRAVEL W/ SOME SILT TO BOTTOM

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 8
OMITTED

DESIGN BASIS: LOT NO. 9

A) PERCOLATION TEST DATA:
PERC. TEST: 11 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.80 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF

C) TEST PIT DATA:
0–7" TOPSOIL AND LEAF LITTER COVER
7"–19" LIGHT BROWN, FINE SANDY SILT
19"–30" GRAY FINE SILTY SAND AND SOME GRAVEL
30"–66" COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 10

A) PERCOLATION TEST DATA:
PERC. TEST: 12 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.80 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF

C) TEST PIT DATA:
0–7" TOPSOIL AND LEAF LITTER COVER
7"–15" REDDISH BROWN FINE SANDY SILT AND COBBLES
15"–72" GRAY FINE SILTY SAND AND COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 11

A) PERCOLATION TEST DATA:
PERC. TEST: 6 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.00 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–10" REDDISH BROWN FINE SANDY SILT AND COBBLES
10"–48" GRAY FINE SILTY SAND AND GRAVEL WITH COBBLES AND BOULDERS
48"–60" BOULDERS

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 12

A) PERCOLATION TEST DATA:
PERC. TEST: 8 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.90 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.90 GPD/SF = 489 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(49' LONG) = 490 SF

C) TEST PIT DATA:
0–3" TOPSOIL AND LEAF LITTER COVER
3"–13" REDDISH BROWN FINE SANDY SILT AND COBBLES
13"–25" GRAY FINE SILTY SAND AND GRAVEL WITH COBBLES
25"–64" COBBLES AND BOULDERS

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 13

A) PERCOLATION TEST DATA:
PERC. TEST: 14 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.80 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.80 GPD/SF = 550 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(55' LONG) = 550 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–14" REDDISH BROWN FINE SANDY SILT, COBBLES, DAMP
14"–60" LIGHT BROWN SILTY SAND AND GRAVEL SOME COBBLES, DAMP

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 14

A) PERCOLATION TEST DATA:
PERC. TEST: 3 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.20 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.20 GPD/SF = 367 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(46' LONG) = 368 SF

C) TEST PIT DATA:
0–6" TOPSOIL AND LEAF LITTER COVER
6"–13" REDDISH BROWN, FINE SANDY SILT SOME GRAVEL
13"–33" LIGHT BROWN SILTY SAND AND GRAVEL
33"–72" LIGHT BROWN SILTY SAND AND GRAVEL WITH SOME COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 15

A) PERCOLATION TEST DATA:
PERC. TEST: 6 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.00 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–10" REDDISH BROWN COURSE SAND WITH SOME SILT
10"–72" BROWN COURSE SAND WITH SOME SILT

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 16

A) PERCOLATION TEST DATA:
PERC. TEST: 5 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.20 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.20 GPD/SF = 367 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(46' LONG) = 368 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–17" REDDISH BROWN FINE SANDY SILT AND GRAVEL
17"–24" LIGHT BROWN SANDY SILT AND GRAVEL
24"–72" LIGHT BROWN SANDY SILT AND GRAVEL WITH SOME COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 17

A) PERCOLATION TEST DATA:
PERC. TEST: 26 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.60 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.60 GPD/SF = 735 SF
ABSORPTION AREA PROPOSED: 7 TRENCHES (2' WIDE)(53' LONG) = 742 SF

C) TEST PIT DATA:
0–5" TOPSOIL WITH LEAF LITTER COVER
5"–17" REDDISH BROWN FINE SANDY SILT AND GRAVEL
17"–24" LIGHT BROWN SANDY SILT AND GRAVEL
24"–72" LIGHT BROWN SANDY SILT AND GRAVEL WITH COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 18

A) PERCOLATION TEST DATA:
PERC. TEST: 5 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.20 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.20 GPD/SF = 367 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(46' LONG) = 368 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–11" REDDISH BROWN, FINE SANDY SILT AND GRAVEL
11"–33" LIGHT BROWN SANDY SILT AND GRAVEL
33"–65" LIGHT BROWN SANDY SILT AND GRAVEL WITH COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 19

A) PERCOLATION TEST DATA:
PERC. TEST: 16 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.70 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.70 GPD/SF = 629 SF
ABSORPTION AREA PROPOSED: 6 TRENCHES (2' WIDE)(53' LONG) = 636 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–10" REDDISH BROWN FINE SANDY SILT AND GRAVEL, DAMP
10"–23" LIGHT BROWN SANDY SILT AND GRAVEL
23"–72" REDDISH BROWN FINE SILTY SAND AND GRAVEL, SOME COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 20

A) PERCOLATION TEST DATA:
PERC. TEST: 6 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 1.00 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/1.00 GPD/SF = 440 SF
ABSORPTION AREA PROPOSED: 4 TRENCHES (2' WIDE)(55' LONG) = 440 SF

C) TEST PIT DATA:
0–5" TOPSOIL AND LEAF LITTER COVER
5"–18" REDDISH BROWN FINE SANDY SILT AND GRAVEL
18"–72" LIGHT BROWN SANDY SILT AND GRAVEL WITH COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

DESIGN BASIS: LOT NO. 21

A) PERCOLATION TEST DATA:
PERC. TEST: 9 MIN./IN. @ 12"

B) SHALLOW ABSORPTION TRENCHES
APPLICATION RATE: 0.90 GPD/SF
ABSORPTION AREA REQUIRED: 440 GPD/0.90 GPD/SF = 489 SF
ABSORPTION AREA PROPOSED: 5 TRENCHES (2' WIDE)(49' LONG) = 490 SF

C) TEST PIT DATA:
0–8" TOPSOIL AND LEAF LITTER COVER
8"–17" REDDISH BROWN FINE SANDY SILT AND GRAVEL
17"–25" LIGHT BROWN SANDY SILT AND GRAVEL
25"–72" LIGHT BROWN SANDY SILT AND GRAVEL AND COBBLES

NO BEDROCK, GROUNDWATER OR MOTTLING ENCOUNTERED.

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC
58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

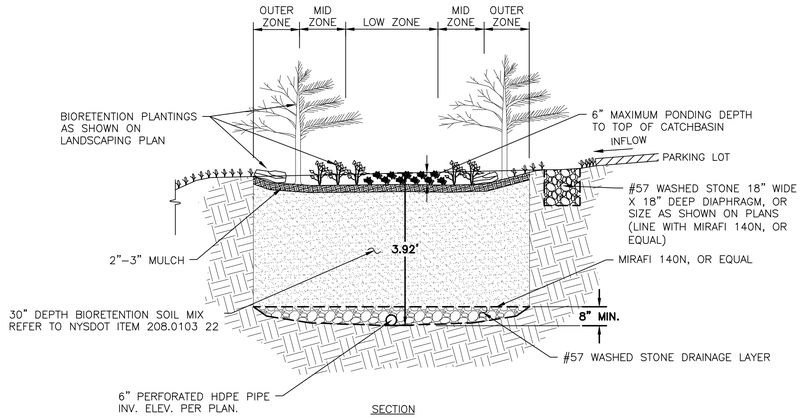
NO.	REVISIONS AND DESCRIPTIONS	DATE:

FORESTBURGH POND
NYS ROUTE 42

TOWN OF FORESTBURGH SULLIVAN COUNTY, NY

SEWAGE DISPOSAL SYSTEM DESIGN BASIS

SHEET NO. **C220**
PROJECT NO. 0392.12119
DATE: 01/10/2020
CAD FILE NO.: 0392.12119–SITE



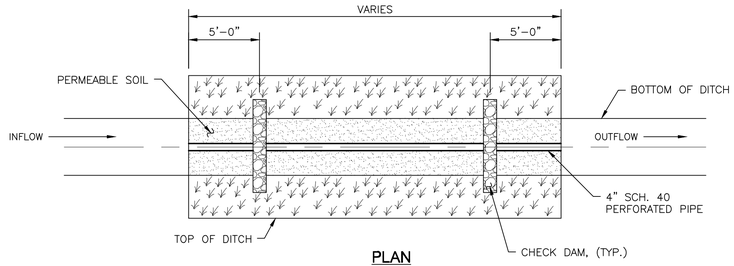
1 C230 BIORETENTION DETAIL

N.T.S.

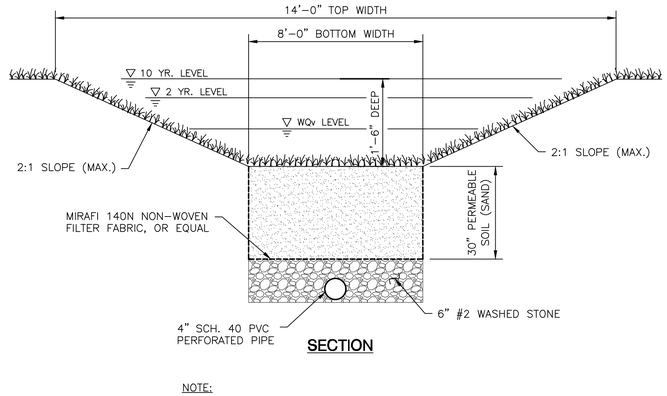
SUGGESTED PLANT LIST:

	LOW ZONE	MID ZONE	OUTER ZONE
HERBACEOUS (PLANTED APPROXIMATELY 2.5' ON CENTER)	ARROW ARUM (PELTANDRA VIRGINICA)		
	BLUE FLAG IRIS (IRIS VERSICOLOR)		
	BLUE JOINT (CALAMAGROTIS CANADENSIS)	BLUE JOINT (CALAMAGROTIS CANADENSIS)	
	BROOMSEDGE (ANDROPOGON VIRGINICUS)		
		CARDINAL FLOWER (LOBELIA CARDINALIS)	CARDINAL FLOWER (LOBELIA CARDINALIS)
	COMMON THREE-SQUARE (SCIRPUS PUNGENS)		
		FOWL MANNAGRASS (GLYCERIA STRIATA)	
	HARDSTEM BULRUSH (SCIRPUS ACUTUS)		
	LIZARD'S TAIL (SAURURUS CERNUUS)		
	PICKERELWEED (PONTEDERIA CORDATA)		
	REDTOP (AGROSTIS ALBA)	REDTOP (AGROSTIS ALBA)	REDTOP (AGROSTIS ALBA)
	RICE CUTGRASS (LEERSIA ORYZOIDES)		
	SEDGES (CAREX SPP.)		
	SOFT RUSH (JUNCUS EFFUSUS)	SOFT RUSH (JUNCUS EFFUSUS)	
	SPATTERDOCK (NUPHAR LUTEUM)		
	SWITCHGRASS (PANICUM VIRGATUM)	SWITCHGRASS (PANICUM VIRGATUM)	SWITCHGRASS (PANICUM VIRGATUM)
	SWEET FLAG (ACORUS CALAMUS)		
SHRUBS (PLANTED APPROXIMATELY 5' ON CENTER)		ARROWWOOD VIBURRIUM (VIBURRIUM DENTATUM)	
	BUTTONBUSH (CEPAHLANTHUS OCCIDENTALIS)	BUTTONBUSH (CEPAHLANTHUS OCCIDENTALIS)	
	COMMON SPICE BUSH (LINDERA BENZOIN)	COMMON SPICE BUSH (LINDERA BENZOIN)	
	ELDERBERRY (SAMBUCUS CANADENSIS)	ELDERBERRY (SAMBUCUS CANADENSIS)	
	RED CHOKE BERRY (PYRUS ARBUTIFOLIA)	RED CHOKE BERRY (PYRUS ARBUTIFOLIA)	
		SHADOWBUSH, SERVICEBERRY (AMELANCHIER CANADENSIS)	
	SILKY DOGWOOD (CORNUS AMOMIUM)	SILKY DOGWOOD (CORNUS AMOMIUM)	
	SPECKLED ALDER (ALNUS RUGOSA)	SPECKLED ALDER (ALNUS RUGOSA)	
	WINTERBERRY (ILEX VERTICILLATA)	WINTERBERRY (ILEX VERTICILLATA)	
		WITCH HAZEL (HAMAMELIS VIRGINIANA)	
TREES (PLANTED APPROXIMATELY 10' ON CENTER)			BLACK CHERRY (PRUNUS SEROTINA)
			BLACKGUM OR SOURGUM (NYSSA SYLVATICA)
			EASTERN HEMLOCK (TSUGA CANADENSIS)
			EASTERN RED CEDAR (JUNIPERUS VIRGINIANA)
			HACKENBERRY (CELTIS OCCIDENTALIS)
			RED MAPLE (ACER RUBRUM)
			SMOOTH ALDER (ALNUS SERRULATA)
			SWAMP WHITE OAK (QUERCUS BICOLOR)
			SWEETGUM (LIQUIDAMBAR STYRACIFLUA)
			SYCAMORE (PLATANUS OCCIDENTALIS)

NOTES:
- CHOOSE PLANTINGS FROM THE ABOVE LIST TO RESEMBLE A RANDOM AND NATURAL SYSTEM AND TO ESTABLISH A DIVERSE, DENSE PLANT COVER TO TREAT STORM WATER RUNOFF AND WITHSTAND URBAN STRESSES FROM INSECT AND DISEASE INFESTATIONS, DROUGHT, TEMPERATURE, WIND AND EXPOSURE.
- HERBACEOUS SPECIES SHOULD BE PLANTED APPROXIMATELY 2.5' ON CENTER.
- SHRUBS SHOULD BE PLANTED APPROXIMATELY 5' ON CENTER.
- TREES SHOULD BE PLANTED APPROXIMATELY 10' ON CENTER.



PLAN

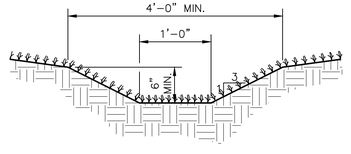


SECTION

NOTE:
PERMEABLE SOIL = SAND (35 TO 60%), SILT (30–55%) AND CLAY (10–25%)

2 C230 DRYSWALE DETAIL

N.T.S.



3 C230 CUTOFF SWALE DETAIL

N.T.S.

NOT FOR CONSTRUCTION

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

FORESTBURGH POND
NYS ROUTE 42
TOWN OF FORESTBURGH
SULLIVAN COUNTY, NY

STORMWATER DETAILS

SHEET NO.
C230

PROJECT NO.
0392.12119

DATE:
01/10/2020

CAD FILE NO.
0392.12119-SITE