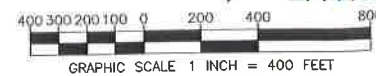


ZONING INFORMATION	
ZONING DISTRICT	AGRICULTURAL/ RESIDENTIAL DISTRICT (AR)
DIMENSIONAL REQUIREMENTS	
LOT AREA:	1 ACRE MIN.
LOT FRONTAGE:	100 FT. MIN.
SETBACK - FRONT YARD:	
FRONT LOT LINE:	30 FT. MIN.
ROAD CENTERLINE:	55 FT. MIN.
SETBACK - SIDE YARD:	
PRINCIPAL STRUCTURE:	20 FT. MIN.
ACCESSORY STRUCTURE:	10 FT. MIN.
SETBACK - REAR YARD:	
PRINCIPAL STRUCTURE:	20 FT. MIN.
ACCESSORY STRUCTURE:	10 FT. MIN.
LOT COVERAGE:	30% MAX.
BUILDING HEIGHT:	35 FT. MAX.

LEGEND	
	PROJECT BOUNDARY LINES
	ABUTTING BOUNDARY LINES
	EXISTING EASEMENT / RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	BUILDING ENVELOPE LINES
	REBAR FOUND
	IRON PIPE FOUND
	REBAR SET
	CALCULATED CORNER
	DRILLED WELL
	ABOVE GRADE
	BELOW GRADE
	NOW OR FORMERLY
	ELECTRICAL PEDESTAL
	UTILITY POLE & OVERHEAD WIRES
	UNDERGROUND ELECTRIC
	BARBED WIRE FENCE
	WOOD FENCE
	DRILLED WELL ISOLATION ZONE
	WASTEWATER ISOLATION ZONE



SURVEY REFERENCES:
 1. PLAN OF LAND FOR EARL & LOTTI ROSEN, PORTION OF "PARAMOUNT FARMS" ON THE NORTHERLY SIDE OF "DUGWAY ROAD", RICHMOND, VERMONT, BY DAVID J. PEATMAN, DATED AUGUST 9, 2000 AND LAST REVISED DECEMBER 21, 2000, AND RECORDED IN THE TOWN OF RICHMOND LAND RECORDS AT MAP SLIDE 96.
 2. EARL & LOTTI ROSEN PROPERTY (PARCEL 2) 11.8± ACRE, DUGWAY ROAD - TOWN HIGHWAY NO.7, RICHMOND, VERMONT BY WARREN A. ROSENSTIEN, DATED OCTOBER 15, 2000, AND RECORDED IN THE TOWN OF RICHMOND LAND RECORDS AT BOOK 9, PG.6.

THIS FINAL PLAT HAS BEEN APPROVED BY RESOLUTION OF THE DEVELOPMENT REVIEW BOARD OF THE TOWN OF RICHMOND, VERMONT, THIS ___ DAY OF ___, 20___, SUBJECT TO THE REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION. SIGNED THIS ___ DAY OF ___, 20___, BY _____ CHAIR.

I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THIS PLAN IS BASED ON INFORMATION ABSTRACTED FROM PERTINENT DEEDS AND/OR OTHER OFFICIAL RECORDS AND CONFORMS TO THE REQUIREMENTS OF 27 V.S.A. § 1403.
 DATED THIS ___ DAY OF ___, 20___, L.S. 735

OWNER:
 SCOTT STRODE
 DEED - Vol 263, PG 221
 SPAN # 519-163-11336
 PARCEL ID # DG1500,c & d

DRAFT FOR REVIEW



- SURVEY NOTES:**
- BEARINGS AND COORDINATES SHOWN HEREON WERE GENERATED FROM SURVEY GRADE GPS READINGS COLLECTED WITH A TOPCON HIPER SR GPS RECEIVER ON RANDOM CONTROL POINTS AND ADJUSTED TO VT GRID NAD83(2011) USING REAL TIME KINEMATIC CORRECTIONS FROM A VIRTUAL REFERENCE STATION GENERATED BY THE VERMONT CORS NETWORK.
 - NO ATTEMPT HAS BEEN MADE TO LOCATE OR IDENTIFY ANY EASEMENTS OR RIGHTS OF WAYS UNLESS OTHERWISE SHOWN ON THIS PLAN.
 - ALL EVIDENCE OF MONUMENTATION FOUND ON THE SURVEYED PREMISES IS SHOWN HEREON. MONUMENTATION FOUND IS CONSIDERED TO BE IN GOOD AND STABLE CONDITION UNLESS OTHERWISE NOTED. ALL IRON PIPE DIMENSIONS PERTAIN TO INSIDE DIAMETER UNLESS OTHERWISE NOTED.
 - ALL REBARS SET ARE 5/8" WITH A CAP STAMPED M. GERVAIS VTL5 735 AND ALL MONUMENTATION FOUND IS AS NOTED.
 - UNAUTHORIZED ALTERATIONS AND/OR MODIFICATIONS TO THIS PLAN SHALL INVALIDATE ANY AND ALL CERTIFICATIONS MADE BY BARNARD & GERVAIS, LLC AND FURTHER ANY PARTIES INVOLVED IN SAID ALTERATIONS AND/OR MODIFICATIONS SHALL BE HELD LIABLE AND MAY BE PROSECUTED IN A COURT OF LAW.
 - BARNARD & GERVAIS, LLC MAKES NO WARRANTIES THAT ALL ENCUMBRANCES THAT EXIST FOR THE SUBJECT PARCEL ARE SHOWN HEREON. ADDITIONAL ENCUMBRANCES THAT MAY EXIST INCLUDE, BUT ARE NOT LIMITED TO, WETLANDS, WELL AND SEPTIC ISOLATION ZONES, HAZARDOUS WASTE SITES AND/OR BROWNFIELDS WITH ASSOCIATED ISOLATION ZONES.
 - THIS SUBDIVISION PLAT IS NOT INTENDING TO CREATE ANY EASEMENTS OTHER THAN THOSE SPECIFICALLY LISTED AND DESCRIBED HEREON. ANY DRIVES, PATHS, TRAILS OR OTHER AMENITIES SHOWN HEREON ARE CONSIDERED PRIVATE UNLESS OTHERWISE NOTED.
 - THE ACCESS FOR LOTS 21 & 22 APPEAR TO FOLLOW TOWN LEGAL TRAIL 2, AS SHOWN ON THE "VERMONT GENERAL HIGHWAY MAP FOR THE TOWN OF RICHMOND", DATED APRIL 26, 2019. NO RESEARCH HAS BEEN CONDUCTED TO DETERMINE ACTUAL RIGHTS OR ALIGNMENT ASSOCIATED WITH SAID TRAIL.
 - THE INTENT OF THIS SURVEY PLAT IS TO ADJUST THE BUILDING ENVELOPES ONLY. ALL BOUNDARY INFORMATION SHOWN HEREON IS FROM SURVEY REFERENCE #1. BARNARD & GERVAIS, LLC DID NOT SURVEY THE PROPERTY BOUNDARIES AND MAKES NO WARRANTIES TO SAID BOUNDARIES.

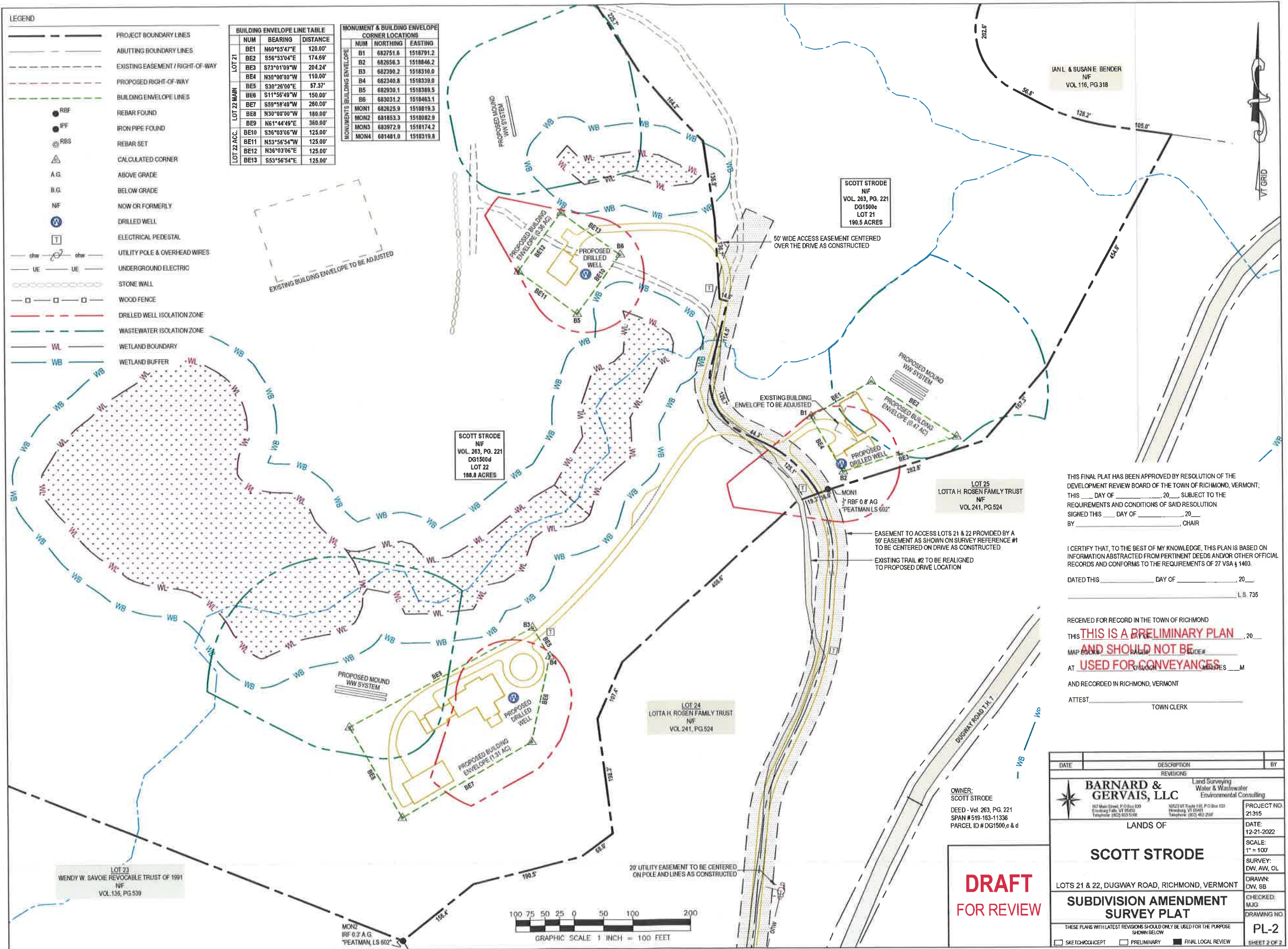
RECEIVED FOR RECORD IN THE TOWN OF RICHMOND
 THIS IS A PRELIMINARY PLAN
 AND SHOULD NOT BE
 USED FOR CONVEYANCES
 AT _____ MINUTES M
 AND RECORDED IN RICHMOND, VERMONT
 ATTEST _____ TOWN CLERK

DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 107 Main Street, P.O. Box 620 Ferrisburgh, VT 05752 Telephone: (802) 525-2526		
PROJECT NO. 21315 DATE: 12-21-2022 SCALE: 1" = 400' SURVEY: DW, AW, CL DRAWN: DW, SB CHECKED: MJG DRAWING NO. PL-1 SHEET 1 OF 2		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW. <input type="checkbox"/> SKETCH/CONCEPT <input type="checkbox"/> PRELIMINARY <input checked="" type="checkbox"/> FINAL LOCAL REVIEW		

- LEGEND**
- PROJECT BOUNDARY LINES
 - ABUTTING BOUNDARY LINES
 - EXISTING EASEMENT / RIGHT-OF-WAY
 - PROPOSED RIGHT-OF-WAY
 - BUILDING ENVELOPE LINES
 - RBF REBAR FOUND
 - IPF IRON PIPE FOUND
 - ⊙ RBS REBAR SET
 - △ CALCULATED CORNER
 - A.G. ABOVE GRADE
 - B.G. BELOW GRADE
 - NF NOW OR FORMERLY
 - ⊙ DRILLED WELL
 - ⊙ ELECTRICAL PEDESTAL
 - ohw --- ohw UTILITY POLE & OVERHEAD WIRES
 - UE --- UE UNDERGROUND ELECTRIC
 - STONE WALL
 - WOOD FENCE
 - DRILLED WELL ISOLATION ZONE
 - WASTEWATER ISOLATION ZONE
 - WL WETLAND BOUNDARY
 - WB WETLAND BUFFER

BUILDING ENVELOPE LINE TABLE		
NUM	BEARING	DISTANCE
BE1	N60°05'47"E	120.00'
BE2	S56°53'04"E	174.68'
BE3	S73°01'09"W	204.24'
BE4	N30°00'00"W	110.00'
BE5	S30°26'00"E	57.37'
BE6	S11°56'49"W	150.00'
BE7	S59°58'49"W	280.00'
BE8	N30°00'00"W	100.00'
BE9	N61°44'49"E	360.00'
BE10	S36°03'06"W	125.00'
BE11	N53°56'54"W	125.00'
BE12	N36°03'06"E	125.00'
BE13	S53°56'54"E	125.00'

MONUMENT & BUILDING ENVELOPE CORNER LOCATIONS		
NUM	NORTHING	EASTING
B1	682751.6	1518791.2
B2	682856.3	1518846.2
B3	682890.2	1518310.0
B4	682340.8	1518339.0
B5	682930.1	1518389.5
B6	683031.2	1518463.1
MON1	682825.9	1518819.3
MON2	681853.3	1518882.9
MON3	683972.9	1518174.2
MON4	681481.0	1518319.8



THIS FINAL PLAT HAS BEEN APPROVED BY RESOLUTION OF THE DEVELOPMENT REVIEW BOARD OF THE TOWN OF RICHMOND, VERMONT; THIS ___ DAY OF ___, 20__ SUBJECT TO THE REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION SIGNED THIS ___ DAY OF ___, 20__ BY _____ CHAIR

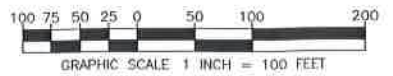
I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THIS PLAN IS BASED ON INFORMATION ABSTRACTED FROM PERTINENT DEEDS AND/OR OTHER OFFICIAL RECORDS AND CONFORMS TO THE REQUIREMENTS OF 27 VSA § 1403. DATED THIS ___ DAY OF ___, 20__ L.S. 735

RECEIVED FOR RECORD IN THE TOWN OF RICHMOND THIS **THIS IS A PRELIMINARY PLAN AND SHOULD NOT BE USED FOR CONVEYANCES** 20__ MAP SCALE: 1" = 100' AT _____ MAP SHEET NO. _____ AND RECORDED IN RICHMOND, VERMONT ATTEST: _____ TOWN CLERK

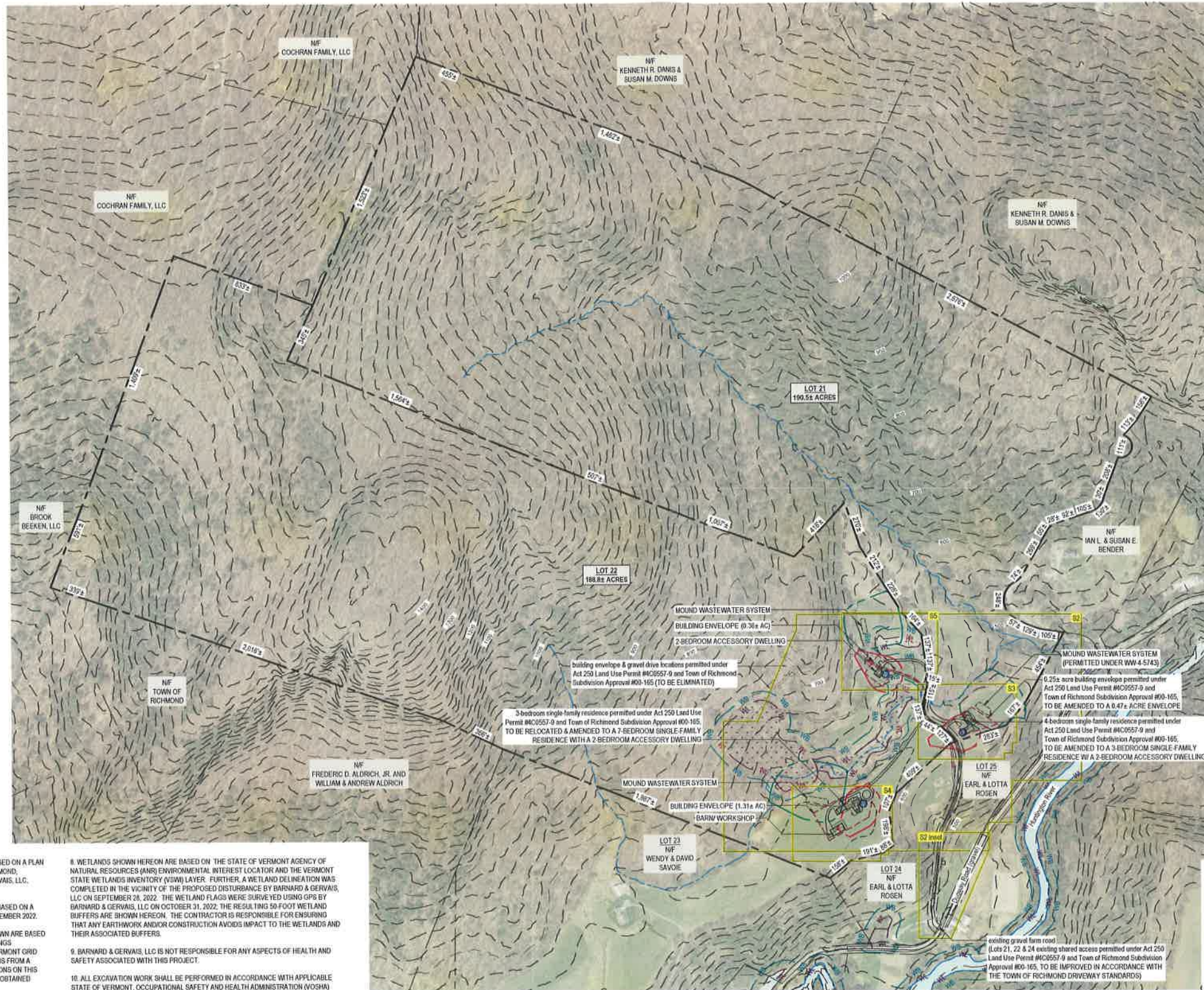
OWNER: SCOTT STRODE
DEED - Vol. 263, PG. 221
SPAN # 519-163-11336
PARCEL ID # DG1500, e & d

DRAFT FOR REVIEW

DATE	DESCRIPTION	BY
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting		
LANDS OF		
SCOTT STRODE		
LOTS 21 & 22, DUGWAY ROAD, RICHMOND, VERMONT		
SUBDIVISION AMENDMENT SURVEY PLAT		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW		
<input type="checkbox"/> SKETCH/CONCEPT	<input type="checkbox"/> PRELIMINARY	<input checked="" type="checkbox"/> FINAL LOCAL REVIEW
PROJECT NO: 21315	DATE: 12-21-2022	SCALE: 1" = 100'
	SURVEY: DW, AW, OL	DRAWN: DW, SB
	CHECKED: MJG	DRAWING NO: PL-2
		SHEET 2 OF 2



ZONING INFORMATION	
ZONING DISTRICT AGRICULTURAL/RESIDENTIAL DISTRICT (AR)	
DIMENSIONAL REQUIREMENTS	
LOT AREA:	1 ACRE MIN.
LOT FRONTAGE:	100 FT. MIN.
SETBACK - FRONT YARD:	
FRONT LOT LINE:	30 FT. MIN.
ROAD CENTERLINE:	55 FT. MIN.
SETBACK - SIDE YARD:	
PRINCIPAL STRUCTURE:	20 FT. MIN.
ACCESSORY STRUCTURE:	10 FT. MIN.
SETBACK - REAR YARD:	
PRINCIPAL STRUCTURE:	20 FT. MIN.
ACCESSORY STRUCTURE:	10 FT. MIN.
LOT COVERAGE:	30% MAX.
BUILDING HEIGHT:	35 FT. MAX.



Project Location Map
Not to Scale

LEGEND	
---	BOUNDARY LINE/R.O.W. (SUBJECT PARCEL)
---	BOUNDARY LINE/R.O.W. (ABUTTING PARCEL)
---	SIDELINE OF EASEMENT
---	EDGE OF ROAD/DRIVE (SURFACE NOTED)
---	100 20 FOOT LIDAR CONTOUR (OBTAINED FROM VCGI DATABASE)
---	100 20 FOOT GROUND SURVEY CONTOUR
---	FINISH GRADE
---	BUILDING ENVELOPE
---	STONE WALL (EXISTING)
---	STREAM CENTERLINE
S	GRAVITY SEWER
FM	FORCE MAIN
W	1-INCH DIAMETER CL200 POLYETHYLENE PLASTIC WATER LINE (UNLESS OTHERWISE NOTED)
---	WELL ISOLATION
---	WASTEWATER ISOLATION
WL	WETLAND BOUNDARY
WB	WETLAND BUFFER
ue	UNDERGROUND ELECTRICAL (EXISTING)
UE	UNDERGROUND ELECTRICAL (PROPOSED)
ohw	UTILITY POLE/OVERHEAD WIRES (EXISTING)
△	SURVEY TRAVERSE STATION
⊗	TEST PIT (TP-01)
⊙	SOIL BORING (SB-01)
⊕	DRILLED WELL (UNLESS OTHERWISE NOTED)

PROJECT NOTES

- THIS IS NOT A BOUNDARY SURVEY. PROJECT PERIMETER LINES ARE BASED ON A PLAN ENTITLED "LANDS OF SCOTT STRODE, LOTS 21 & 22, DUGWAY ROAD, RICHMOND, VERMONT, SUBDIVISION AMENDMENT SURVEY PLAN", BY BARNARD & GERVAIS, LLC, DATED DECEMBER 21, 2022.
- THE LOCATIONS OF EXISTING PHYSICAL FEATURES ON THIS PLAN ARE BASED ON A TOPOGRAPHIC SURVEY COMPLETED BY BARNARD & GERVAIS, LLC IN NOVEMBER 2022.
- THE ELEVATIONS ON THIS PLAN WITHIN THE DASHED BOUNDARIES SHOWN ARE BASED ON NAVD83 (GEOID12B) ESTABLISHED FROM SURVEY GRADE GNSS READINGS COLLECTED WITH A TOPCON Hiper SR GNSS RECEIVER ADJUSTED TO VERMONT GRID ON RANDOM CONTROL POINTS USING REAL TIME KINEMATIC CORRECTIONS FROM A VIRTUAL REFERENCE STATION OF THE VT CORS NETWORK. THE ELEVATIONS ON THIS PLAN OUTSIDE THE DASHED BOUNDARIES SHOWN ARE LIDAR CONTOURS OBTAINED FROM THE STATE OF VERMONT VCGI OPEN DATA PORTAL DATABASE.
- FOR CLARITY, TEXT IDENTIFYING EXISTING ITEMS IS LOWER CASE; TEXT IDENTIFYING PROPOSED ITEMS IS UPPER CASE.
- NO ATTEMPT HAS BEEN MADE TO LOCATE ANY UNDERGROUND UTILITIES BY BARNARD & GERVAIS, LLC. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONTACTING DIG SAFE TO HAVE ANY UNDERGROUND UTILITIES MARKED PRIOR TO ANY EXCAVATION OR SITE WORK. THE CONTRACTOR SHALL NOTIFY THE DIG SAFE NETWORK AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE WASTEWATER DISPOSAL SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, "WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES" EFFECTIVE APRIL 12, 2019.
- THE PROPOSED DRILLED WELL SITES ARE SHOWN BASED ON THE REQUIRED ISOLATION DISTANCES TO THE PROPOSED WASTEWATER DISPOSAL SYSTEMS AND THE ASSOCIATED SYSTEM COMPONENTS. NO WARRANTY IS MADE REGARDING THE WELL YIELD OR WATER QUALITY RELATIVE TO THE DRILLED WELL LOCATIONS SHOWN HEREON.

- WETLANDS SHOWN HEREON ARE BASED ON THE STATE OF VERMONT AGENCY OF NATURAL RESOURCES (ANR) ENVIRONMENTAL INTEREST LOCATOR AND THE VERMONT STATE WETLANDS INVENTORY (VSWI) LAYER. FURTHER, A WETLAND DELINEATION WAS COMPLETED IN THE VICINITY OF THE PROPOSED DISTURBANCE BY BARNARD & GERVAIS, LLC ON SEPTEMBER 28, 2022. THE WETLAND FLAGS WERE SURVEYED USING GPS BY BARNARD & GERVAIS, LLC ON OCTOBER 31, 2022. THE RESULTING 50 FOOT WETLAND BUFFERS ARE SHOWN HEREON. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY EARTHWORK AND/OR CONSTRUCTION AVOIDS IMPACT TO THE WETLANDS AND THEIR ASSOCIATED BUFFERS.
- BARNARD & GERVAIS, LLC IS NOT RESPONSIBLE FOR ANY ASPECTS OF HEALTH AND SAFETY ASSOCIATED WITH THIS PROJECT.
- ALL EXCAVATION WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE STATE OF VERMONT, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) GUIDELINES FOR TRENCH EXCAVATIONS.
- THE CONTRACTOR AND/OR LANDOWNER SHALL ADHERE TO THE GUIDELINES SET FORTH IN THE STATE OF VERMONT EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION SITES. IT IS THE RESPONSIBILITY OF THE LANDOWNER OR SITE CONTRACTOR TO ENSURE THESE GUIDELINES ARE FOLLOWED AND EROSION/SEDIMENT CONTROL MEASURES ARE MAINTAINED THROUGHOUT THE COURSE OF THE PROJECT.
- AS SHOWN, THE PROJECT CONTAINS 23,250 SF OF NEW IMPERVIOUS SURFACE AREA.
- THE PROPERTIES (LOTS 21 & 22) ARE SUBJECT TO STATE OF VERMONT ACT 250 LAND USE PERMIT #R00557-9 AND TOWN OF RICHMOND SUBDIVISION APPROVAL #00-165.

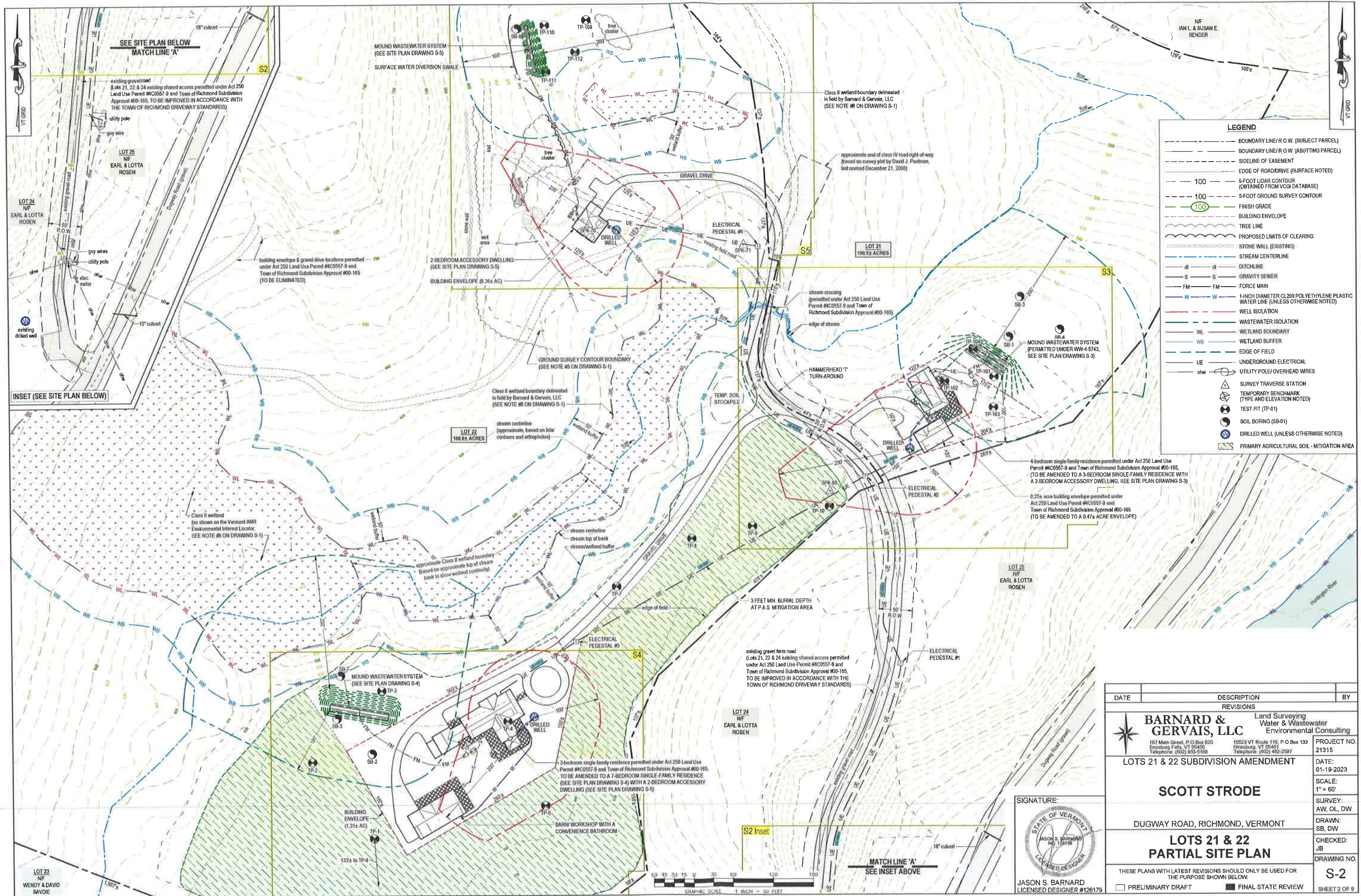


OWNER:
SCOTT STRODE
DEED - Vol. 263, PG. 221
SFAN # 519-163-11336
PARCEL ID # DG1500,c & d

SIGNATURE:

JASON S. BARNARD
LICENSED DESIGNER #126179

DATE	DESCRIPTION	BY
REVISIONS		
 BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 820 Enochburg Falls, VT 05450 Telephone: (802) 933-5168 10523 VT Route 118, P.O. Box 133 Hinesburg, VT 05451 Telephone: (802) 482-2507		
LOTS 21 & 22 SUBDIVISION AMENDMENT		
SCOTT STRODE		
DUGWAY ROAD, RICHMOND, VERMONT		
LOTS 21 & 22 OVERALL SITE PLAN		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW:		
<input type="checkbox"/> PRELIMINARY DRAFT		<input checked="" type="checkbox"/> FINAL STATE REVIEW
PROJECT NO. 21315	DATE: 01-19-2023	SURVEY: AW, OL, DW
	SCALE: 1" = 300'	DRAWN: SB, DW
	CHECKED: JB	DRAWING NO. S-1
		SHEET 1 OF 9



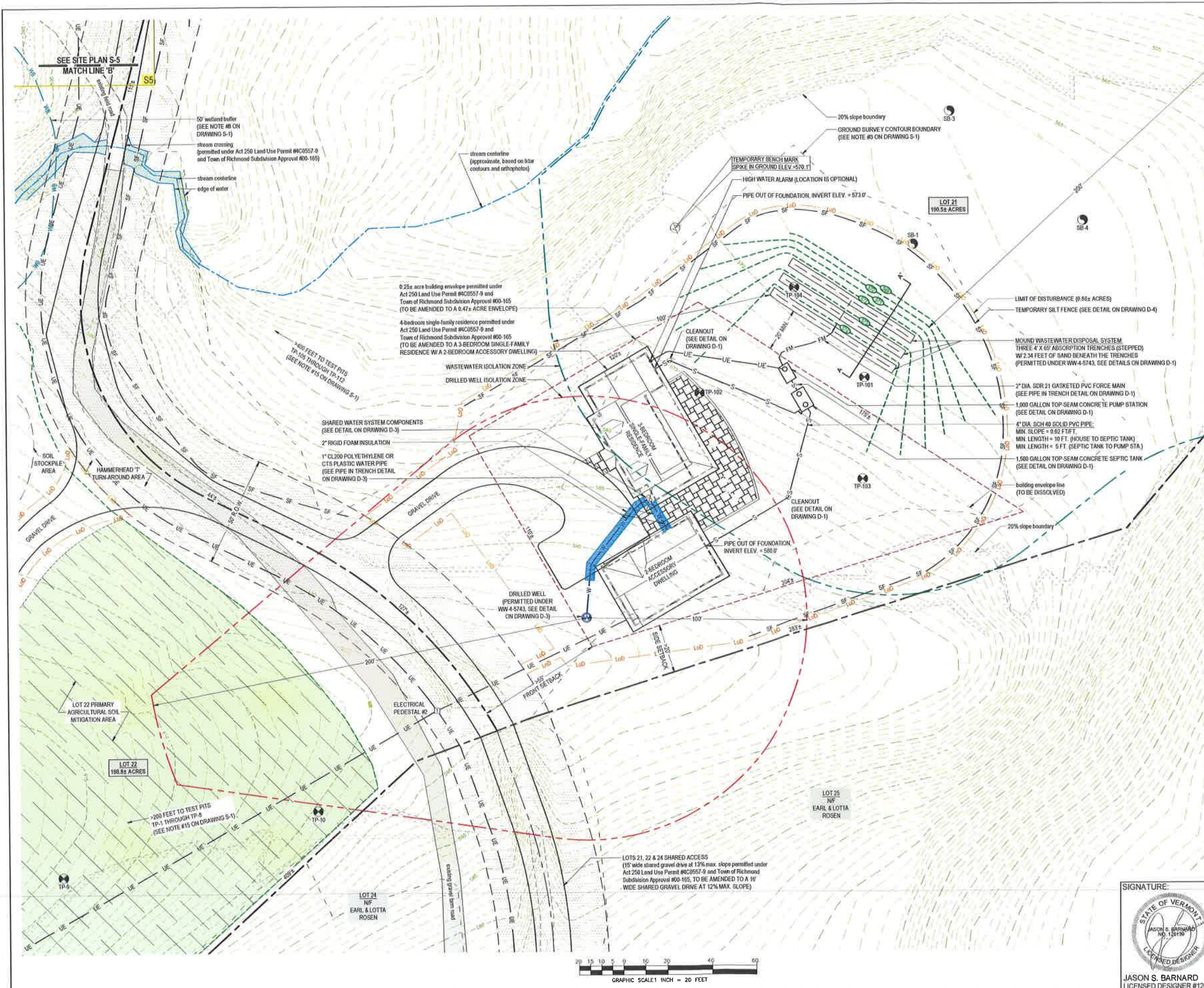
LEGEND	
	BOUNDARY LINE/R.O.W. (SUBJECT PARCEL)
	BOUNDARY LINE/R.O.W. (ABUTTING PARCEL)
	SIDE LINE OF EASEMENT
	EDGE OF ROAD/DRIVE (SURFACE NOTED)
	100 5-FOOT LIDAR CONTOUR (OBTAINED FROM VCOI DATABASE)
	100 5-FOOT GROUND SURVEY CONTOUR
	100 FINISH GRADE
	BUILDING ENVELOPE
	TREE LINE
	PROPOSED LIMITS OF CLEARING
	STONE WALL (EXISTING)
	STREAM CENTERLINE
	DITCHLINE
	GRAVITY SEWER
	FORCE MAIN
	1-INCH DIAMETER CL 200 POLYETHYLENE PLASTIC WATER LINE (UNLESS OTHERWISE NOTED)
	WELL ISOLATION
	WASTEWATER ISOLATION
	WETLAND BOUNDARY
	WETLAND BUFFER
	EDGE OF FIELD
	UNDERGROUND ELECTRICAL
	UTILITY POLE/OVERHEAD WIRES
	SURVEY TRAVERSE STATION
	TEMPORARY BENCHMARK (TYPE AND ELEVATION NOTED)
	TEST PIT (TP-01)
	SOIL BORING (SB-01)
	DRILLED WELL (UNLESS OTHERWISE NOTED)
	PRIMARY AGRICULTURAL SOIL - MITIGATION AREA

DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting		
167 Main Street, P.O. Box 820 Ernstburg Falls, VT 05450 Telephone: (802) 933-5168		10523 VT Route 110, P.O. Box 133 Hinesburg, VT 05401 Telephone: (802) 462-2987
LOTS 21 & 22 SUBDIVISION AMENDMENT		PROJECT NO. 21315
SCOTT STRODE		DATE: 01-19-2023
DUGWAY ROAD, RICHMOND, VERMONT		SCALE: 1" = 60'
LOTS 21 & 22 PARTIAL SITE PLAN		SURVEY: AW, OL, DW DRAWN: SB, DW
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		CHECKED: JB
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		DRAWING NO. S-2
SHEET 2 OF 9		

SIGNATURE:

JASON S. BARNARD
 LICENSED DESIGNER #126179





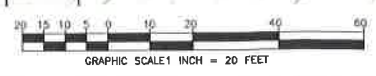
LEGEND

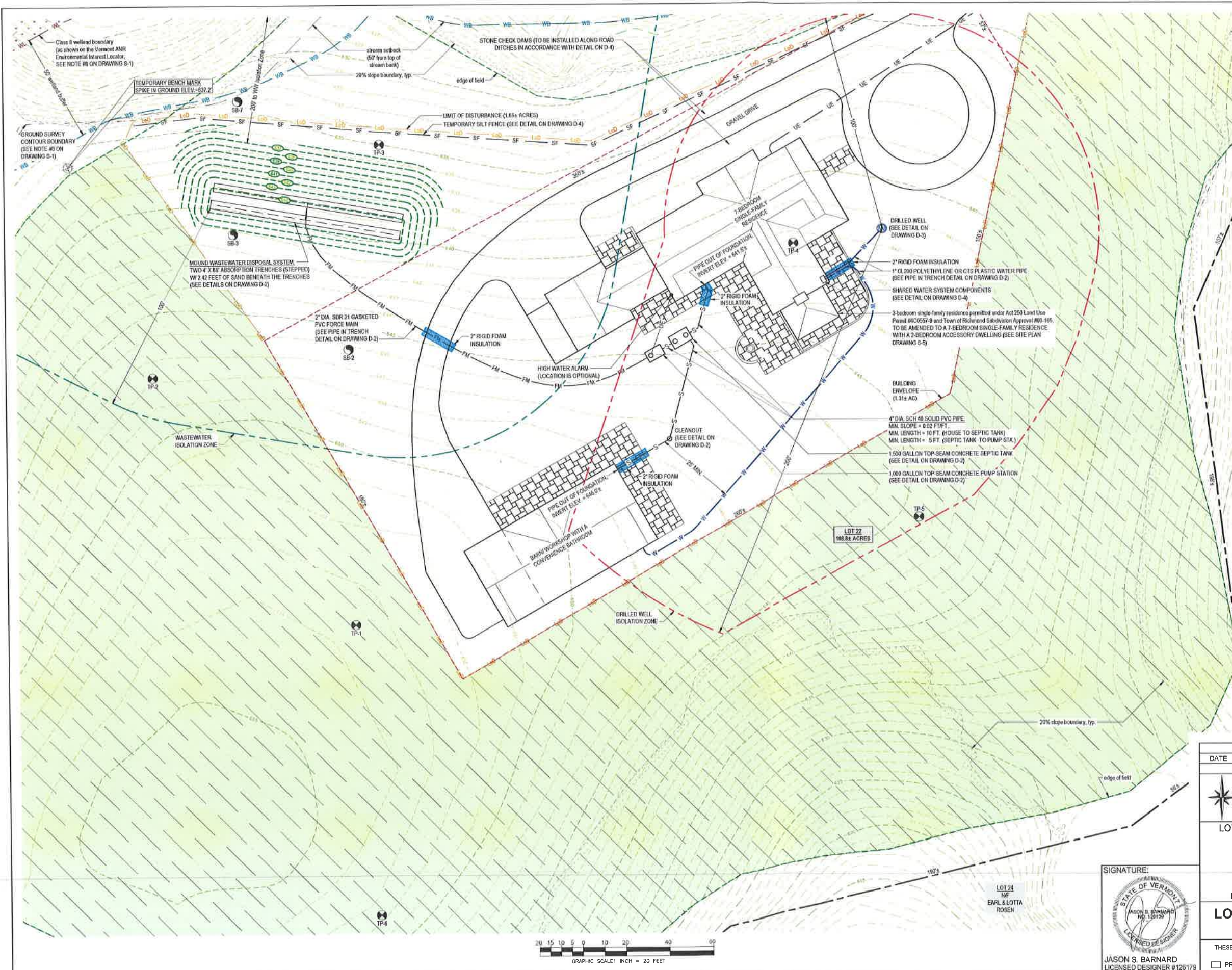
- BOUNDARY LINE/R.O.W. (SUBJECT PARCEL)
- BOUNDARY LINE/R.O.W. (ABUTTING PARCEL)
- - - - - SIDELINE OF EASEMENT
- - - - - EDGE OF ROAD/DRIVE (SURFACE NOTED)
- 100 --- 1-FOOT LIDAR CONTOUR (OBTAINED FROM VCGI DATABASE)
- 100 --- 1-FOOT GROUND SURVEY CONTOUR
- 100 --- FINISH GRADE
- - - - - BUILDING ENVELOPE
- TREE LINE
- - - - - PROPOSED LIMITS OF CLEARING
- STONE WALL (EXISTING)
- STREAM CENTERLINE
- DITCHLINE
- GRAVITY SEWER
- FORCE MAIN
- 1-INCH DIAMETER CL200 POLYETHYLENE PLASTIC WATER LINE (UNLESS OTHERWISE NOTED)
- WELL ISOLATION
- WASTEWATER ISOLATION
- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- WETLAND BUFFER
- EDGE OF FIELD
- 20% SLOPE BOUNDARY
- UNDERGROUND ELECTRICAL (EXISTING)
- UNDERGROUND ELECTRICAL (PROPOSED)
- UTILITY POLE/OVERHEAD WIRES (EXISTING)
- △ SURVEY TRAVERSE STATION
- ⊙ TEMPORARY BENCHMARK (TYPE AND ELEVATION NOTED)
- ⊙ TEST PIT (TP-01)
- ⊙ SOIL BORING (SB-01)
- ⊙ DRILLED WELL (UNLESS OTHERWISE NOTED)

DATE	DESCRIPTION	BY
	REVISIONS	
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting		
167 Main Street, P.O. Box 620 Enosburg Falls, VT 05450 Telephone: (802) 333-5156		10523 VT Route 116, P.O. Box 133 Hinesburg, VT 05461 Telephone: (802) 462-2567
LOTS 21 & 22 SUBDIVISION AMENDMENT		PROJECT NO. 21315
SCOTT STRODE		DATE: 01-19-2023
DUGWAY ROAD, RICHMOND, VERMONT		SCALE: 1" = 20'
LOT 21 SITE PLAN		SURVEY: AW, CL, DW
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		DRAWN: SB, DW
<input type="checkbox"/> PRELIMINARY DRAFT		CHECKED: JB
<input checked="" type="checkbox"/> FINAL STATE REVIEW		DRAWING NO. S-3
SHEET 3 OF 9		

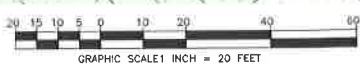
SIGNATURE:

JASON S. BARNARD
 LICENSED DESIGNER #126179





- LEGEND**
- BOUNDARY LINE/R.O.W. (SUBJECT PARCEL)
 - BOUNDARY LINE/R.O.W. (ADJACENT PARCEL)
 - SIDELINE OF EASEMENT
 - EDGE OF ROAD/DRIVE (SURFACE NOTED)
 - 100 --- 1-FOOT LIDAR CONTOUR (OBTAINED FROM VCGI DATABASE)
 - 100 --- 1-FOOT GROUND SURVEY CONTOUR
 - 100 --- FINISH GRADE
 - BUILDING ENVELOPE
 - TREE LINE
 - PROPOSED LIMITS OF CLEARING
 - STONE WALL (EXISTING)
 - STREAM CENTERLINE
 - di di --- DITCHLINE
 - S S --- GRAVITY SEWER
 - FM FM --- FORCE MAIN
 - W W --- 1-INCH DIAMETER CL200 POLYETHYLENE PLASTIC WATER LINE (UNLESS OTHERWISE NOTED)
 - WELL ISOLATION
 - WASTEWATER ISOLATION
 - SF --- SILT FENCE
 - WL --- WETLAND BOUNDARY
 - WB --- WETLAND BUFFER
 - EDGE OF FIELD
 - 20% SLOPE BOUNDARY
 - ue --- UNDERGROUND ELECTRICAL (EXISTING)
 - UE --- UNDERGROUND ELECTRICAL (PROPOSED)
 - chw --- UTILITY POLE/OVERHEAD WIRES (EXISTING)
 - ▲ SURVEY TRAVERSE STATION
 - ⊕ TEMPORARY BENCHMARK (TYPE AND ELEVATION NOTED)
 - ⊙ TEST PIT (TP-01)
 - ⊙ SOIL BORING (SB-01)
 - ⊙ DRILLED WELL (UNLESS OTHERWISE NOTED)
 - PRIMARY AGRICULTURAL SOIL - MITIGATION AREA

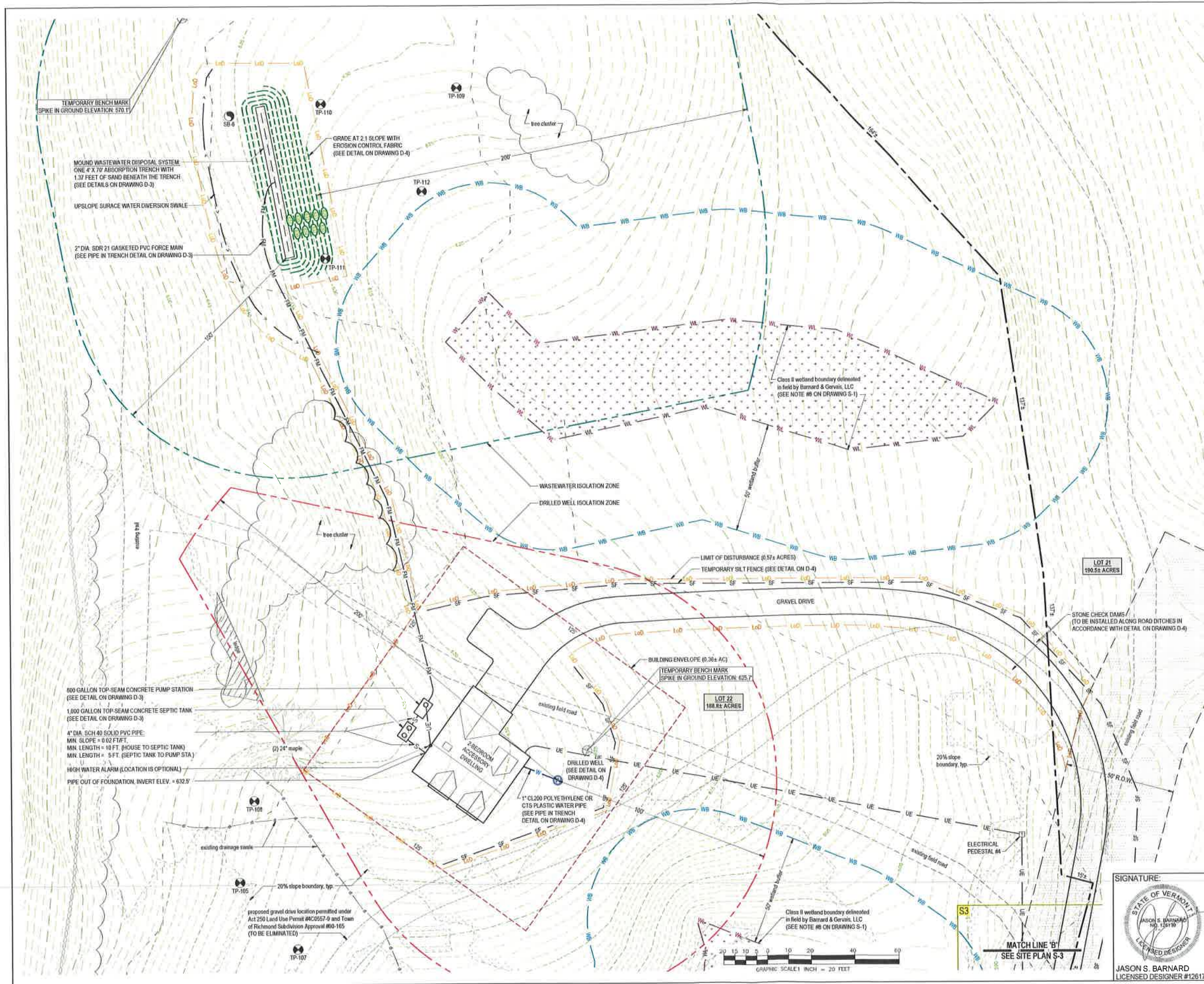


DATE	DESCRIPTION	BY
	REVISIONS	
LOTS 21 & 22 SUBDIVISION AMENDMENT		
SCOTT STRODE		
DUGWAY ROAD, RICHMOND, VERMONT		
LOT 22 PRINCIPAL DWELLING SITE PLAN		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		
<input type="checkbox"/> PRELIMINARY DRAFT	<input checked="" type="checkbox"/> FINAL STATE REVIEW	
PROJECT NO. 21315	DATE: 01-19-2023	
	SCALE: 1" = 20'	
	SURVEY: AW, OL, DW	
	DRAWN: SB, DW	
	CHECKED: JB	
	DRAWING NO. S-4	
	SHEET 4 OF 9	

SIGNATURE:

JASON S. BARNARD
 LICENSED DESIGNER #126179

LOT 24
 MF
 EARL & LOTTA
 ROSEN



LEGEND

- BOUNDARY LINE/R.O.W. (SUBJECT PARCEL)
- BOUNDARY LINE/R.O.W. (ABUTTING PARCEL)
- SIDELINE OF EASEMENT
- EDGE OF ROAD/DRIVE (SURFACE NOTED)
- 1-FOOT LIDAR CONTOUR (OBTAINED FROM VCGI DATABASE)
- 1-FOOT GROUND SURVEY CONTOUR
- FINISH GRADE
- BUILDING ENVELOPE
- TREE LINE
- PROPOSED LIMITS OF CLEARING
- STONE WALL (EXISTING)
- STREAM CENTERLINE
- DITCHLINE
- GRAVITY SEWER
- FORCE MAIN
- 1-INCH DIAMETER CL200 POLYETHYLENE PLASTIC WATER LINE (UNLESS OTHERWISE NOTED)
- WELL ISOLATION
- WASTEWATER ISOLATION
- SILT FENCE
- WETLAND BOUNDARY
- WETLAND BUFFER
- 20% SLOPE BOUNDARY
- UNDERGROUND ELECTRICAL (EXISTING)
- UNDERGROUND ELECTRICAL (PROPOSED)
- UTILITY POLE/OVERHEAD WIRES (EXISTING)
- SURVEY TRAVERSE STATION
- TEMPORARY BENCHMARK (TYPE AND ELEVATION NOTED)
- TEST PIT (TP-01)
- SOIL BORING (SB-01)
- DRILLED WELL (UNLESS OTHERWISE NOTED)

TEMPORARY BENCHMARK SPIKE IN GROUND ELEVATION 579.1

MOUND WASTEWATER DISPOSAL SYSTEM ONE 4' X 7' ABSORPTION TRENCH WITH 1.37 FEET OF SAND BENEATH THE TRENCH (SEE DETAILS ON DRAWING D-3)

UPSLOPE SURFACE WATER DIVERSION SWALE

2" DIA. SDR 21 GASKETED PVC FORCE MAIN (SEE PIPE IN TRENCH DETAIL ON DRAWING D-3)

GRADE AT 2:1 SLOPE WITH EROSION CONTROL FABRIC (SEE DETAIL ON DRAWING D-4)

Class II wetland boundary delineated in field by Barnard & Gervais, LLC (SEE NOTE #8 ON DRAWING S-1)

WASTEWATER ISOLATION ZONE

DRILLED WELL ISOLATION ZONE

LIMIT OF DISTURBANCE (0.57+ ACRES)

TEMPORARY SILT FENCE (SEE DETAIL ON D-4)

LOT 21 190.5+ ACRES

STONE CHECK DAMS (TO BE INSTALLED ALONG ROAD DITCHES IN ACCORDANCE WITH DETAIL ON DRAWING D-4)

800 GALLON TOP-SEAM CONCRETE PUMP STATION (SEE DETAIL ON DRAWING D-3)

1,600 GALLON TOP-SEAM CONCRETE SEPTIC TANK (SEE DETAIL ON DRAWING D-3)

4" DIA. SCH 40 SOLID PVC PIPE MIN. SLOPE = 0.02 FEET

MIN. LENGTH = 18 FT. (HOUSE TO SEPTIC TANK)

MIN. LENGTH = 5 FT. (SEPTIC TANK TO PUMP STA)

HIGH WATER ALARM (LOCATION IS OPTIONAL)

PIPE OUT OF FOUNDATION, INVERT ELEV. = 632.5'

TEMPORARY BENCHMARK SPIKE IN GROUND ELEVATION 625.7

LOT 22 188.8+ ACRES

2-BEDROOM ACCESSORY DWELLING

DRILLED WELL (SEE DETAIL ON DRAWING D-4)

1" CL200 POLYETHYLENE OR CTS PLASTIC WATER PIPE (SEE PIPE IN TRENCH DETAIL ON DRAWING D-4)

20% slope boundary, typ.

20% slope boundary, typ.

20% slope boundary, typ.

proposed gravel drive location permitted under Act 250 Land Use Permit #AC0557-9 and Town of Richmond Subdivision Approval #00-165 (TO BE ELIMINATED)

Class II wetland boundary delineated in field by Barnard & Gervais, LLC (SEE NOTE #8 ON DRAWING S-1)

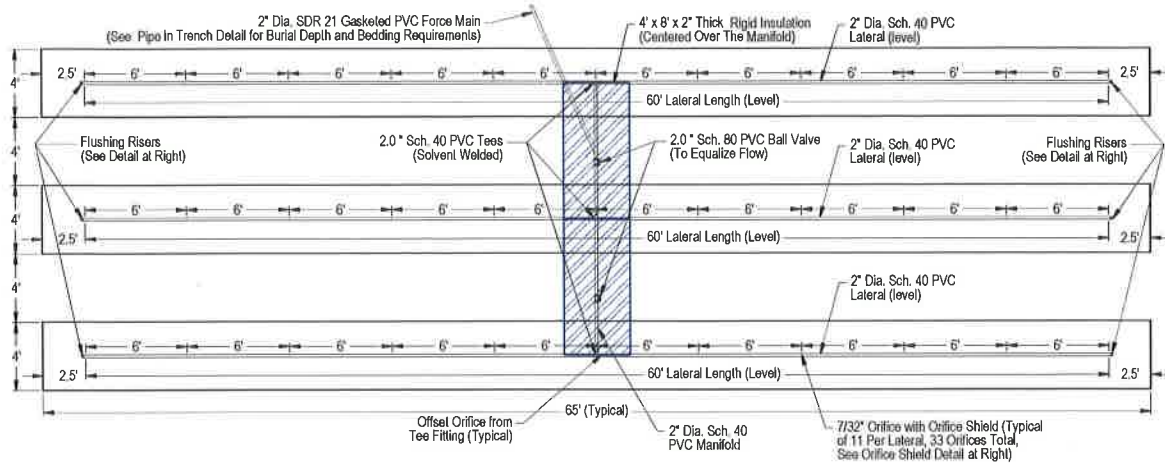


MATCH LINE 'B' SEE SITE PLAN S-3

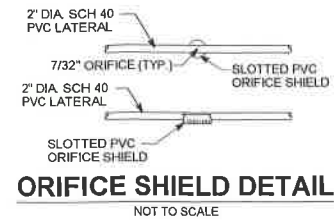
SIGNATURE:

JASON S. BARNARD
LICENSED DESIGNER #126179

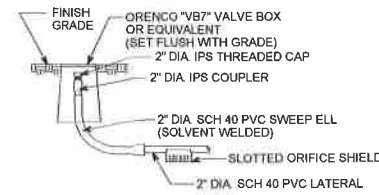
DATE	DESCRIPTION	BY
REVISIONS		
LOTS 21 & 22 SUBDIVISION AMENDMENT		
SCOTT STRODE		
LOT 22 ACCESSORY DWELLING SITE PLAN		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		
DATE:	PROJECT NO.:	BY:
01-19-2023	21315	SCOTT STRODE
SCALE:	SURVEY:	DRAWN:
1" = 20'	AW, OL, DW	SB, DW
CHECKED:	DRAWING NO.:	
JB	S-5	
SHEET 5 OF 9		



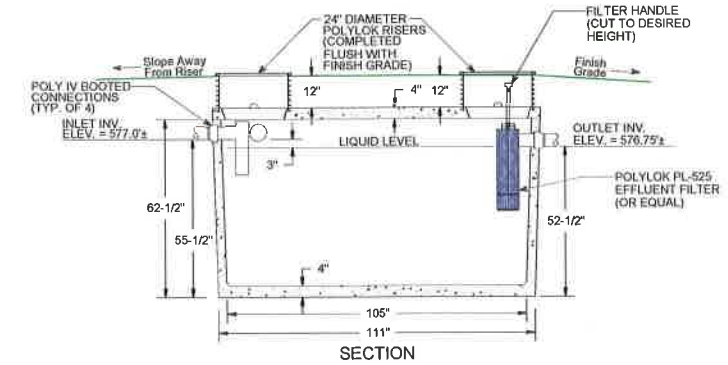
STEPPED MOUND WASTEWATER DISPOSAL SYSTEM PLAN VIEW
SCALE: 1-INCH = 5-FEET



ORIFICE SHIELD DETAIL
NOT TO SCALE

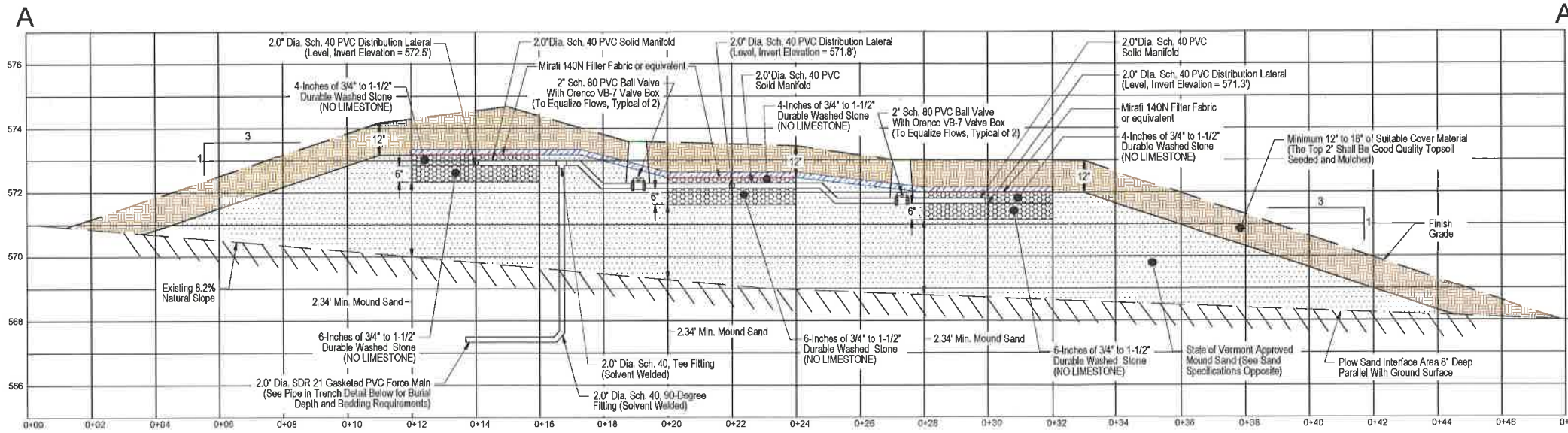


FLUSHING RISER DETAIL
NOT TO SCALE

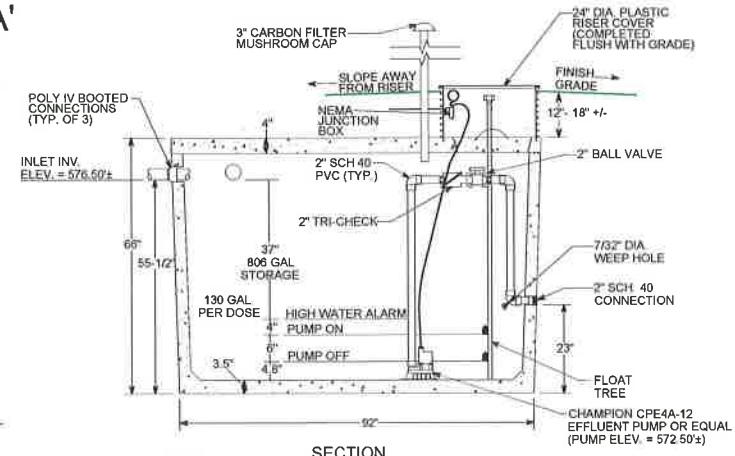


- NOTES:
 1. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF SIX INCHES OF COMPACTED GRANULAR BASE
 2. AN INLET TEE Baffle IS REQUIRED
 3. IF WATER-PROOF BOOTED CONNECTIONS ARE NOT USED, ALL PIPE PENETRATIONS SHALL BE SEALED WITH "WATER PLUS" NON-SHRINK HYDRAULIC CEMENT
 4. EFFLUENT FILTER ACCESS SHALL BE COMPLETED FLUSH WITH FINISH GRADE.

1,500 GALLON TOP-SEAM CONCRETE SEPTIC TANK
NOT TO SCALE



STEPPED MOUND WASTEWATER DISPOSAL SYSTEM SECTION
SCALE: 1-INCH = 2-FEET



- NOTES:
 1. PUMP STATION SHALL BE SET LEVEL ON A MINIMUM OF 6-INCHES OF COMPACTED GRANULAR BASE
 2. PUMP STATION SECTIONS SHALL HAVE BUTYL RUBBER JOINT SEALER
 3. IF WATER-PROOF BOOTED PIPE CONNECTIONS ARE NOT USED, PIPE PENETRATIONS SHALL BE SEALED WITH "WATER PLUS" NON-SHRINK HYDRAULIC CEMENT
 4. ON/OFF FLOAT SWITCH TO BE SET WITH A 6 INCH SWING SETTING TO PROVIDE A 130 GALLON DOSE VOLUME
 5. HIGH WATER LEVEL ALARM AND PUMP STATION SHALL BE WIRED BY A LICENSED ELECTRICIAN
 6. THE HIGH WATER ALARM SHALL BE MOUNTED AT A VISIBLE LOCATION
 7. THE EFFLUENT PUMP SHALL BE CAPABLE OF 44 GPM VS. 15 TDH.

1,000 GALLON TOP-SEAM CONCRETE PUMP STATION
NOT TO SCALE

WASTEWATER DISPOSAL SYSTEM CONSTRUCTION AND MAINTENANCE NOTES

- THE WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1 WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES.
- WASTEWATER DISPOSAL SYSTEM LOCATION SHALL BE STAKED OUT BY THE DESIGNER PRIOR TO START OF CONSTRUCTION.
- ATTACHED MOUND SYSTEM CONSTRUCTION INSTRUCTIONS SHALL BE FOLLOWED DURING THE INSTALLATION OF THE REPLACEMENT MOUND-TYPE WASTEWATER SYSTEM.
- THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR INSPECTIONS OF THE SEPTIC TANK, PUMP STATION, FLOWED LAYER, AND PLACEMENT OF THE MOUND SAND.
- THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR A PRESSURE TEST OF THE MOUND SYSTEM PRESSURE DISTRIBUTION NETWORK.
- WASTEWATER SYSTEM FINISH GRADES WILL VARY WITH NATURAL TOPOGRAPHY PRIORITY IS TO MAINTAIN 3 ON 1 MOUND TOE SLOPES.
- SEPTIC TANK EFFLUENT FILTER SHOULD BE REMOVED AND RINSED BACK INTO THE SEPTIC TANK ANNUALLY.
- THE SEPTIC TANK AND PUMP STATION SHOULD BE INSPECTED ANNUALLY AND PUMPED OUT AT LEAST EVERY THREE (3) YEARS OR AS NECESSARY TO PREVENT SOLIDS FROM CARRYING OVER TO THE DISPOSAL SYSTEM.
- FOLLOWING THE MOUND WASTEWATER SYSTEM INSTALLATION, FINISH GRADE SHALL BE SEEDED AND MULCHED WITH A CONSERVATION GRASS SEED MIX.
- WATER SOFTENER BACKWASH, SEPTIC TANK ADDITIVES, GREASE OR SANITIZERS SHALL NOT BE INTRODUCED INTO THE WASTEWATER DISPOSAL SYSTEM.

STATE OF VERMONT MOUND SAND SPECIFICATIONS

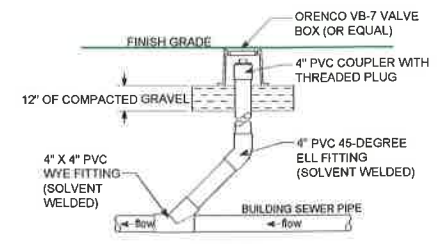
(c) Fill Material: The fill material from the natural soil plowed surface to the top of the trench or bed shall be clean washed silica sand meeting one of the following sieve requirements:

(1) Sieve Number	Opening (mm)	Percent Passing, by Weight
3/8	9.500	85-100
40	0.420	25-75
60	0.240	0-30
100	0.149	0-10
200	0.074	0-5

(2) Sieve Number	Opening (mm)	Percent Passing, by Weight
4	4.750	95-100
8	2.380	80-100
16	1.190	50-85
30	0.590	25-50
50	0.297	10-30
100	0.149	2-10

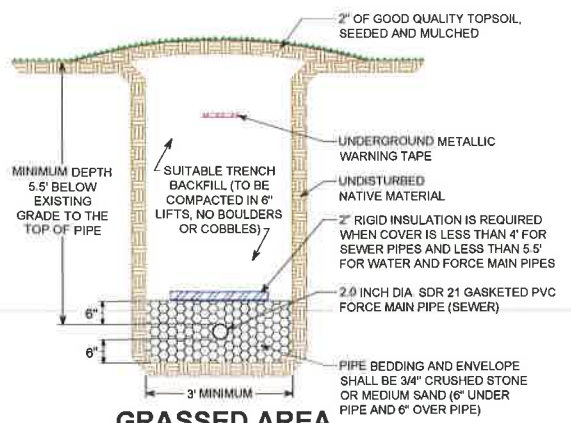
(3) Sieve Number Opening (mm) Percent Passing, by Weight
 3/8 9.500 85-100
 40 0.420 30-50
 200 0.074 0-5

The material must meet the specifications 1, 2, or 3 above. Interpolation of analyses is not permitted. Fill material 2 is ASTM Specification C-33 and is intended for manufactured material.



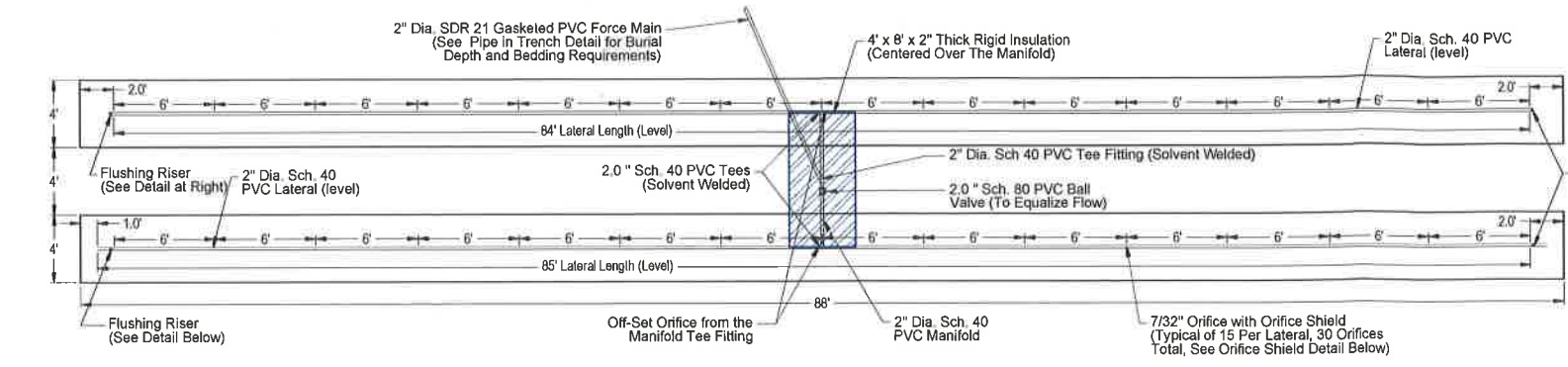
- NOTES:
 1. A CLEANOUT IS REQUIRED AT EACH HORIZONTAL CHANGE IN DIRECTION NOT GREATER THAN 45-DEGREES AND A MINIMUM OF EVERY 100 LINEAR FEET OF BUILDING SEWER.
 2. CLEANOUTS SHALL BE COMPLETED FLUSH WITH FINISH GRADE.
 3. THE CONTRACTOR IS RESPONSIBLE FOR COLLECTING TIES TO THE CLEANOUT.

BUILDING SEWER CLEANOUT DETAIL
NOT TO SCALE



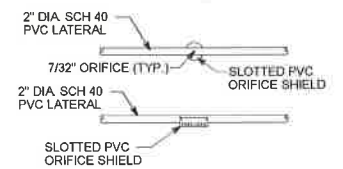
GRASSED AREA PIPE IN TRENCH DETAIL
NOT TO SCALE

DATE	DESCRIPTION	BY
REVISIONS		
 Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 820 Enosburg Falls, VT 05450 Telephone: (802) 833-5188 10523 VT Route 116, P.O. Box 133 Hinesburg, VT 05451 Telephone: (802) 452-2567		
LOTS 21 & 22 SUBDIVISION AMENDMENT		
SCOTT STRODE DUGWAY ROAD, RICHMOND, VERMONT LOT 21 WASTEWATER SYSTEM DETAILS AND NOTES		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW. <input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		
SIGNATURE:		PROJECT NO. 21315
 JASON S. BARNARD LICENSED DESIGNER #126179		DATE: 01-19-2023
		SCALE: AS NOTED
		SURVEY: AW, OL, DW
		DRAWN: SB, DW
		CHECKED: JB
		DRAWING NO. D-1
		SHEET 6 OF 9



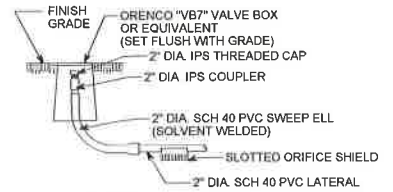
**MOUND WASTEWATER DISPOSAL SYSTEM
TRENCHES PLAN VIEW DETAIL**

SCALE: 1-INCH = 5- FEET



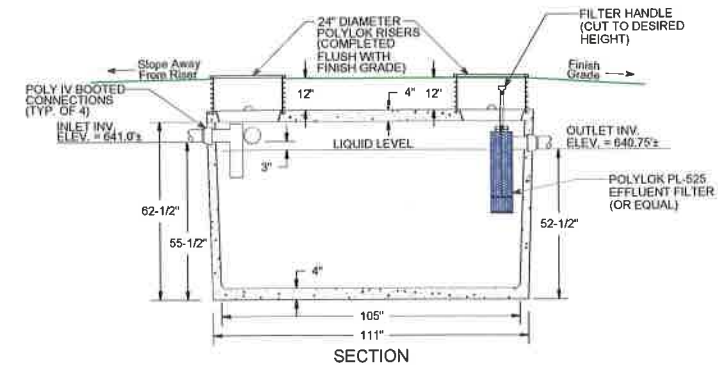
ORIFICE SHIELD DETAIL

NOT TO SCALE



FLUSHING RISER DETAIL

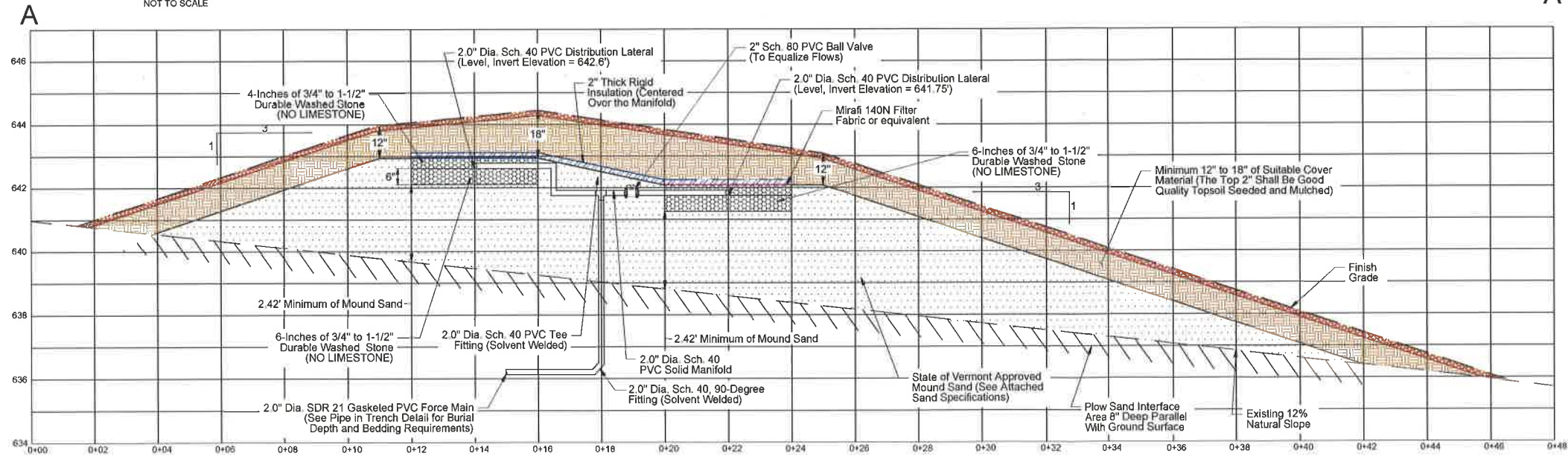
NOT TO SCALE



- NOTES:
 1. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF SIX INCHES OF COMPACTED GRANULAR BASE
 2. AN INLET TEE BAFFLE IS REQUIRED.
 3. IF WATER-PROOF BOOTED CONNECTIONS ARE NOT USED, ALL PIPE PENETRATIONS SHALL BE SEALED WITH "WATER PLUS" NON-SHRINK HYDRAULIC CEMENT.
 4. EFFLUENT FILTER ACCESS SHALL BE COMPLETED FLUSH WITH FINISH GRADE.

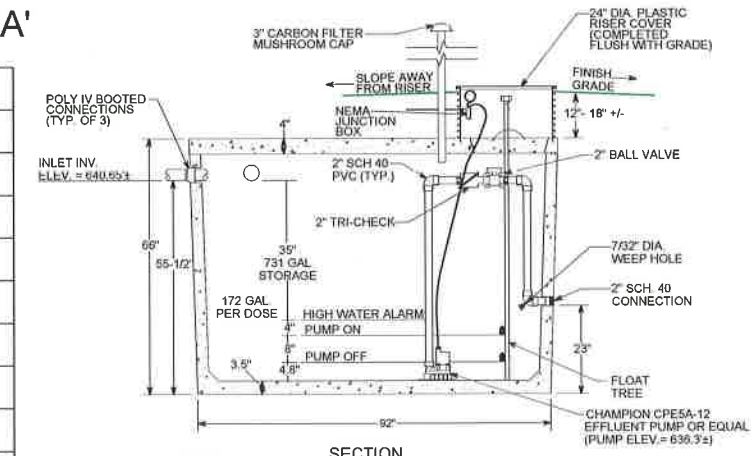
**1,500 GALLON TOP-SEAM
CONCRETE SEPTIC TANK**

NOT TO SCALE



MOUND WASTEWATER DISPOSAL SYSTEM SECTION

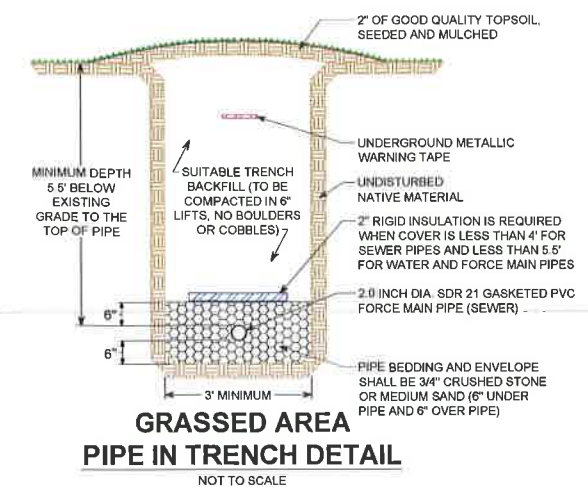
SCALE: 1-INCH = 2- FEET



- NOTES:
 1. PUMP STATION SHALL BE SET LEVEL ON A MINIMUM OF 6-INCHES OF COMPACTED GRANULAR BASE.
 2. PUMP STATION SECTIONS SHALL HAVE BUTYL RUBBER JOINT SEALER.
 3. IF WATER-PROOF BOOTED PIPE CONNECTIONS ARE NOT USED, PIPE PENETRATIONS SHALL BE SEALED WITH "WATER PLUS" NON-SHRINK HYDRAULIC CEMENT.
 4. ON/OFF FLOAT SWITCH TO BE SET WITH A 6 INCH SWING SETTING TO PROVIDE A 172 GALLON DOSE VOLUME.
 5. HIGH WATER LEVEL ALARM AND PUMP STATION SHALL BE WIRED BY A LICENSED ELECTRICIAN.
 6. THE HIGH WATER ALARM SHALL BE MOUNTED AT A VISIBLE LOCATION.
 7. THE EFFLUENT PUMP SHALL BE CAPABLE OF 40 GPM VS 28 TDH.

**1,000 GALLON TOP-SEAM
CONCRETE PUMP STATION**

NOT TO SCALE



**GRASSED AREA
PIPE IN TRENCH DETAIL**

NOT TO SCALE

**WASTEWATER DISPOSAL SYSTEM
CONSTRUCTION AND MAINTENANCE NOTES**

- THE WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES.
- WASTEWATER DISPOSAL SYSTEM LOCATION SHALL BE STAKED OUT BY THE DESIGNER PRIOR TO START OF CONSTRUCTION.
- ATTACHED MOUND SYSTEM CONSTRUCTION INSTRUCTIONS SHALL BE FOLLOWED DURING THE INSTALLATION OF THE REPLACEMENT MOUND-TYPE WASTEWATER SYSTEM.
- THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR INSPECTIONS OF THE SEPTIC TANK, PUMP STATION, FLOWED LAYER, AND PLACEMENT OF THE MOUND SAND.
- THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR A PRESSURE TEST OF THE MOUND SYSTEM PRESSURE DISTRIBUTION NETWORK.
- WASTEWATER SYSTEM FINISH GRADES WILL VARY WITH NATURAL TOPOGRAPHY PRIORITY IS TO MAINTAIN 3 ON 1 MOUND TOE SLOPES.
- SEPTIC TANK EFFLUENT FILTER SHOULD BE REMOVED AND RINSED BACK INTO THE SEPTIC TANK ANNUALLY.
- THE SEPTIC TANK AND PUMP STATION SHOULD BE INSPECTED ANNUALLY AND PUMPED OUT AT LEAST EVERY THREE (3) YEARS OR AS NECESSARY TO PREVENT SOLIDS FROM CARRYING OVER TO THE DISPOSAL SYSTEM.
- FOLLOWING THE MOUND WASTEWATER SYSTEM INSTALLATION, FINISH GRADE SHALL BE SEEDED AND MULCHED WITH A CONSERVATION GRASS SEED MIX.
- WATER SOFTENER BACKWASH, SEPTIC TANK ADDITIVES, GREASE OR SANITIZERS SHALL NOT BE INTRODUCED INTO THE WASTEWATER DISPOSAL SYSTEM.

**STATE OF VERMONT
MOUND SAND SPECIFICATIONS**

(c) Fill Material: The fill material from the natural soil plowed surface to the top of the trench or bed shall be clean washed silica sand meeting one of the following sieve requirements:

(1)	Sieve Number	Opening (mm)	Percent Passing, by Weight
	3/8	4.750	85-100
	40	0.420	25-75
	60	0.240	0-30
	100	0.149	0-10
	200	0.074	0-5

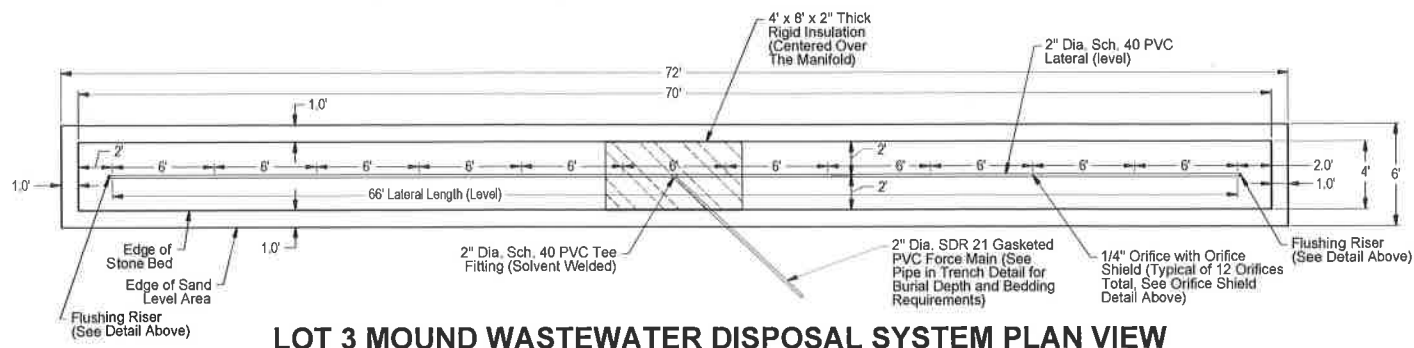
(2)	Sieve Number	Opening (mm)	Percent Passing, by Weight
	4	4.750	95-100
	8	2.360	85-100
	16	1.190	50-85
	30	0.590	25-60
	50	0.297	10-30
	100	0.149	2-10

(3)	Sieve Number	Opening (mm)	Percent Passing, by Weight
	3/8	4.750	85-100
	40	0.420	30-50
	200	0.074	0-5

The material must meet the specifications 1, 2, or 3 above. Interpolation of analyses is not permitted. Fill material 2 is ASTM Specification C-33 and is intended for manufactured material.

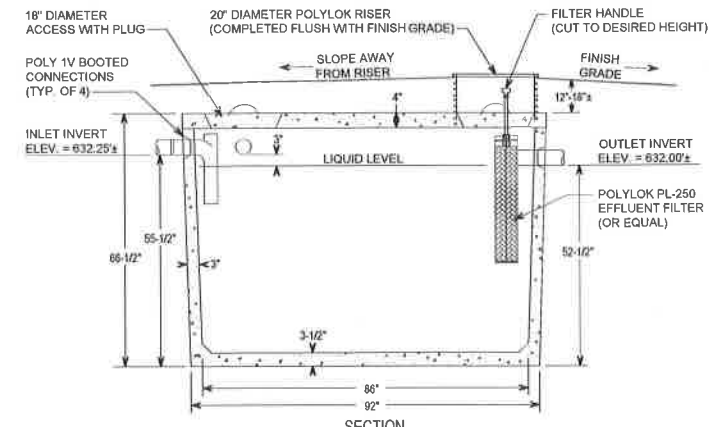
DATE	DESCRIPTION	BY
REVISIONS		
LOTS 21 & 22 SUBDIVISION AMENDMENT		
SCOTT STRODE		
LOT 22 PRINCIPAL DWELLING WASTEWATER SYSTEM DETAILS AND NOTES		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		

DATE	DESCRIPTION	BY
01-19-2023	DATE:	AS NOTED
AW, OL, DW	SURVEY:	SB, DW
JB	CHECKED:	
D-2	DRAWING NO.	
SHEET 7 OF 9		



LOT 3 MOUND WASTEWATER DISPOSAL SYSTEM PLAN VIEW

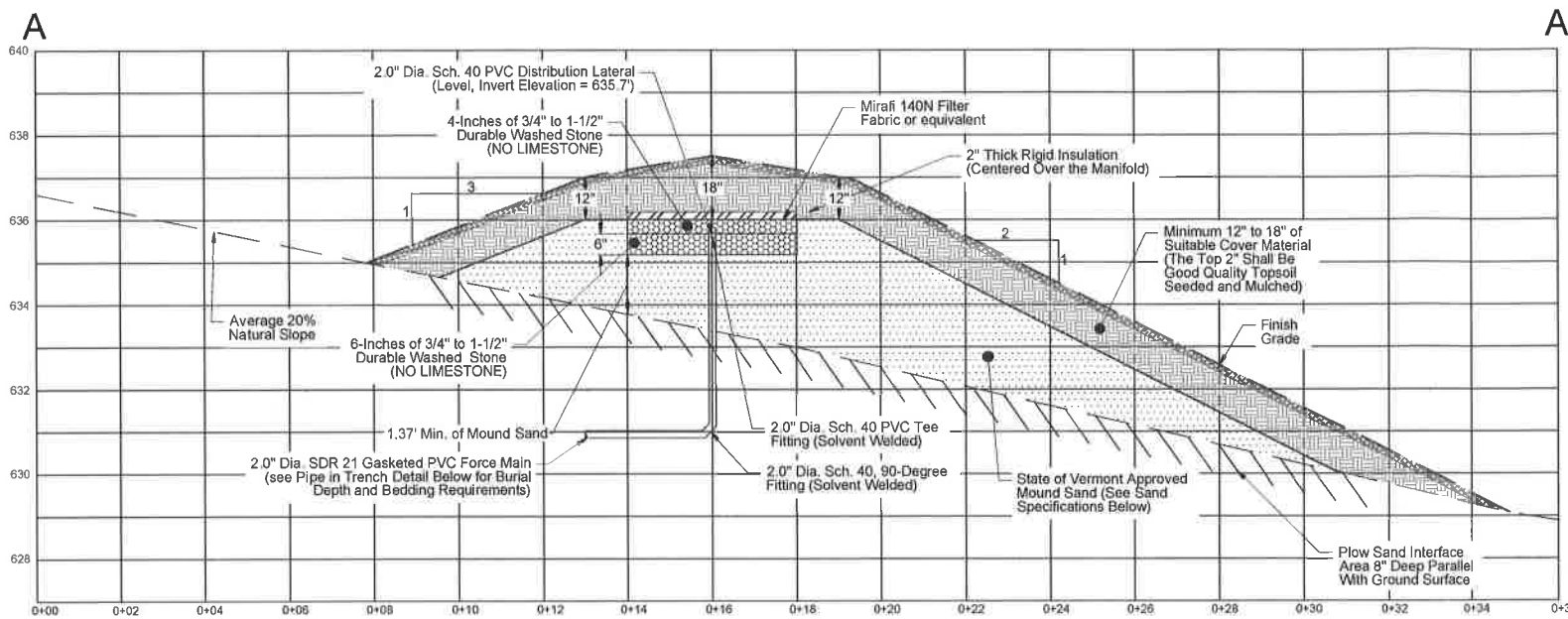
SCALE: 1-INCH = 5-FEET



NOTES:
 1. SEPTIC TANK SHALL BE SET LEVEL ON A MINIMUM OF SIX INCHES OF COMPACTED GRANULAR BASE.
 2. AN INLET TEE BAFFLE IS REQUIRED.
 3. IF WATER-PROOF BOOTED CONNECTIONS ARE NOT USED, ALL PIPE PENETRATIONS SHALL BE SEALED WITH A "WATER PLUG" NON-SHRINK HYDRAULIC CEMENT.
 4. EFFLUENT FILTER ACCESS SHALL BE COMPLETED FLUSH WITH FINISH GRADE.

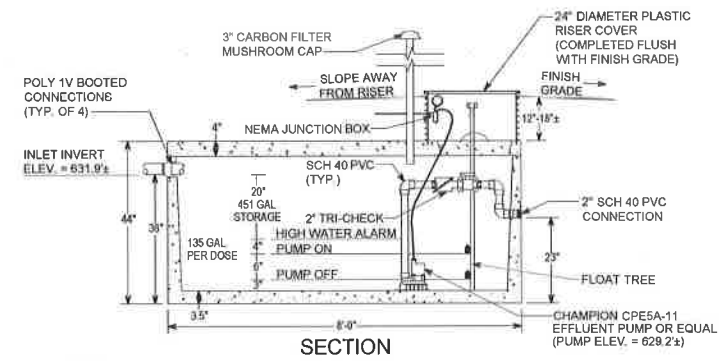
1,000 GALLON TOP-SEAM CONCRETE SEPTIC TANK

NOT TO SCALE



MOUND WASTEWATER DISPOSAL SYSTEM SECTION

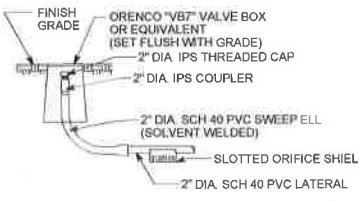
VERTICAL SCALE: 1-INCH = 2-FEET
 HORIZONTAL SCALE: 1-INCH = 2-FEET



NOTES:
 1. PUMP STATION SHALL BE SET LEVEL ON A MINIMUM OF SIX INCHES OF COMPACTED GRANULAR BASE.
 2. PUMP STATION SECTIONS SHALL HAVE BUTYL RUBBER JOINT SEALER.
 3. IF WATER-PROOF BOOTED CONNECTIONS ARE NOT USED, ALL PIPE PENETRATIONS SHALL BE SEALED WITH A "WATER PLUG" NON-SHRINK HYDRAULIC CEMENT.
 4. ON/OFF FLOAT SWITCH TO BE SET WITH A 6-INCH SWING SETTING TO PROVIDE A 135 GALLON DOSE VOLUME.
 5. HIGH WATER LEVEL ALARM AND PUMP STATION SHALL BE WIRED BY A LICENSED ELECTRICIAN.
 6. THE HIGH WATER LEVEL ALARM SHALL BE MOUNTED AT A VISIBLE LOCATION.
 7. THE EFFLUENT PUMP SHALL BE CAPABLE OF 21 GPM VS 24 TDH.

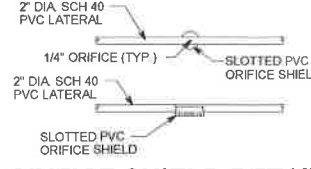
800 GALLON TOP-SEAM CONCRETE PUMP STATION

NOT TO SCALE



FLUSHING RISER DETAIL

NOT TO SCALE

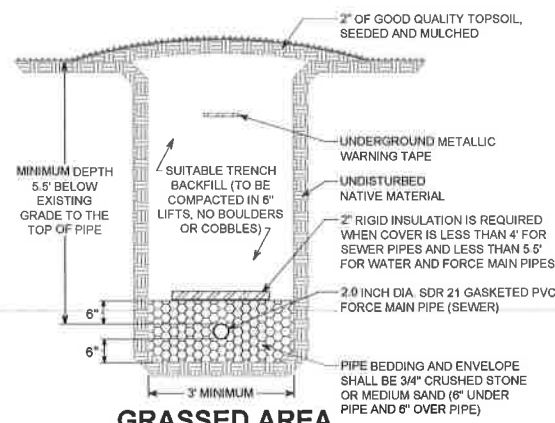


ORIFICE SHIELD DETAIL

NOT TO SCALE

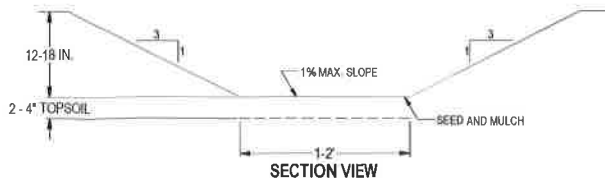
WASTEWATER DISPOSAL SYSTEM CONSTRUCTION AND MAINTENANCE NOTES

1. THE WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES.
2. WASTEWATER DISPOSAL SYSTEM LOCATION SHALL BE STAKED OUT BY THE DESIGNER PRIOR TO START OF CONSTRUCTION.
3. ATTACHED MOUND SYSTEM CONSTRUCTION INSTRUCTIONS SHALL BE FOLLOWED DURING THE INSTALLATION OF THE REPLACEMENT MOUND-TYPE WASTEWATER SYSTEM.
4. THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR INSPECTIONS OF THE SEPTIC TANK, PUMP STATION, PLOWED LAYER, AND PLACEMENT OF THE MOUND SAND.
5. THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR A PRESSURE TEST OF THE MOUND SYSTEM PRESSURE DISTRIBUTION NETWORK.
6. WASTEWATER SYSTEM FINISH GRADES WILL VARY WITH NATURAL TOPOGRAPHY PRIORITY IS TO MAINTAIN 3 ON 1 MOUND TOE SLOPES.
7. SEPTIC TANK EFFLUENT FILTER SHOULD BE REMOVED AND RINSED BACK INTO THE SEPTIC TANK ANNUALLY.
8. THE SEPTIC TANK AND PUMP STATION SHOULD BE INSPECTED ANNUALLY AND PUMPED OUT AT LEAST EVERY THREE (3) YEARS OR AS NECESSARY TO PREVENT SOLIDS FROM CARRYING OVER TO THE DISPOSAL SYSTEM.
9. FOLLOWING THE MOUND WASTEWATER SYSTEM INSTALLATION, FINISH GRADE SHALL BE SEEDED AND MULCHED WITH A CONSERVATION GRASS SEED MIX.
10. WATER SOFTENER BACKWASH, SEPTIC TANK ADDITIVES, GREASE OR SANITIZERS SHALL NOT BE INTRODUCED INTO THE WASTEWATER DISPOSAL SYSTEM.



GRASSED AREA PIPE IN TRENCH DETAIL

NOT TO SCALE



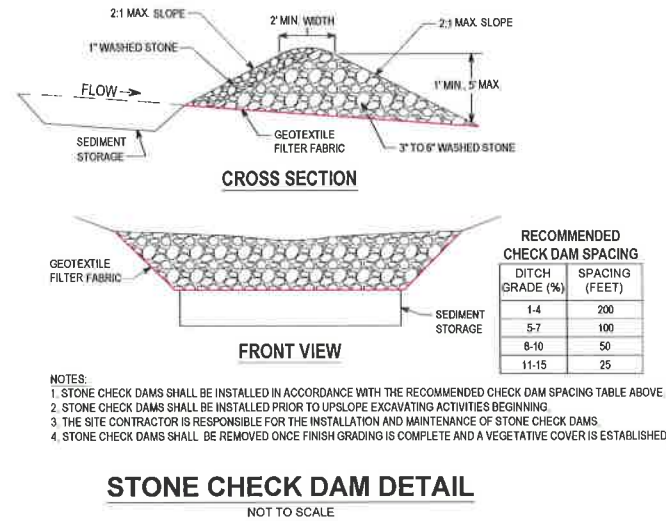
SURFACE WATER DIVERSION SWALE

NOT TO SCALE

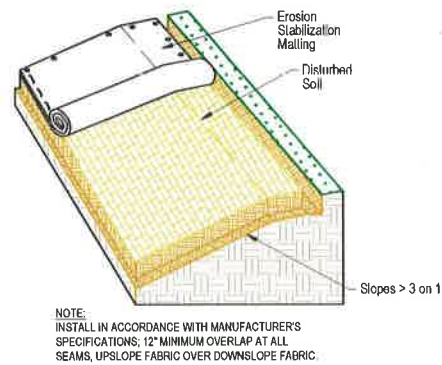
DATE	DESCRIPTION	BY
REVISIONS		
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 820 Ensbury Falls, VT 05450 Telephone: (802) 853-5168 10523 VT Route 116, P.O. Box 133 Hinesburg, VT 05451 Telephone: (802) 492-2997		
PROJECT NO. 21315		DATE: 01-19-2023
LOTS 21 & 22 SUBDIVISION AMENDMENT		SCALE: AS NOTED
SCOTT STRODE		SURVEY: AW, OL, DW
DUGWAY ROAD, RICHMOND, VERMONT		DRAWN: SB, DW
LOT 22 ACCESSORY DWELLING WASTEWATER SYSTEM DETAILS AND NOTES		CHECKED: JB
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		DRAWING NO. D-3
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		SHEET 8 OF 9

SIGNATURE:

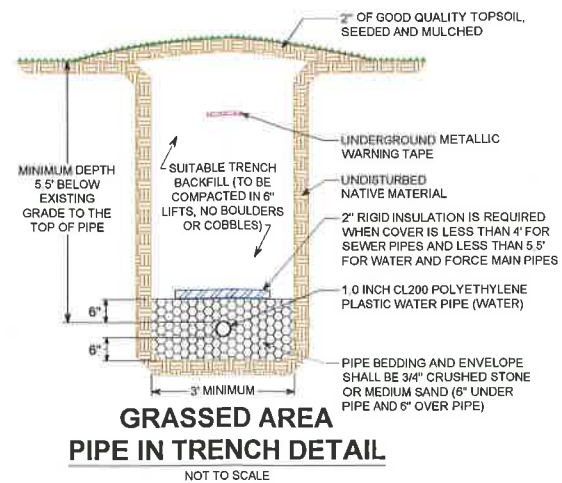
JASON S. BARNARD
 LICENSED DESIGNER #126179



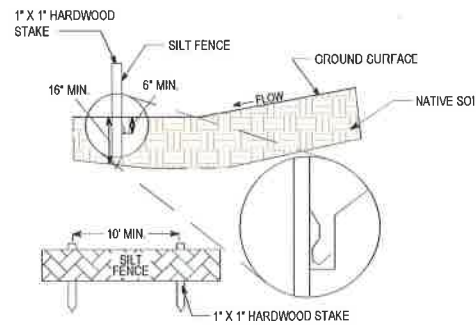
STONE CHECK DAM DETAIL
NOT TO SCALE



ROLLED EROSION FABRIC DETAIL
NOT TO SCALE

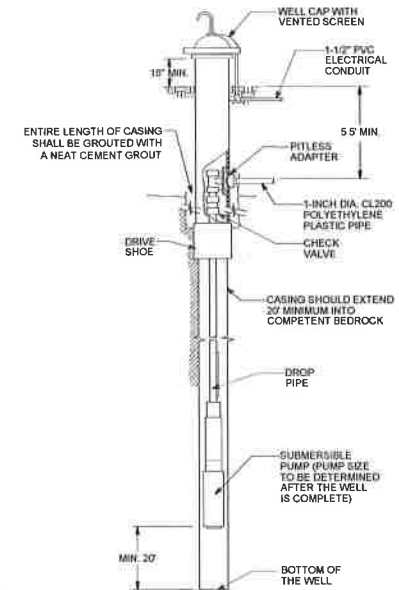


GRASSSED AREA PIPE IN TRENCH DETAIL
NOT TO SCALE



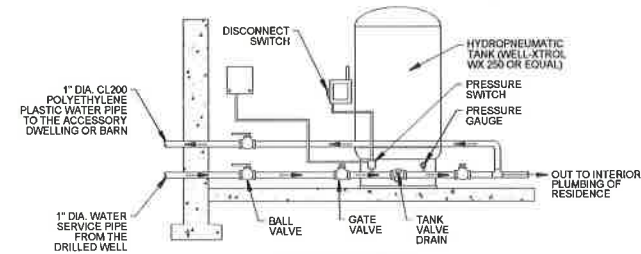
- NOTES:
 1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
 2. SILT FENCE SHALL BE PLACED AS CLOSE TO ALONG GROUND CONTOUR AS POSSIBLE.
 3. SILT FENCE SHALL BE AT LEAST 18 INCHES ABOVE GROUND SURFACE.
 4. SILT FENCE SHALL BE PLACED IN A TRENCH THAT IS A MINIMUM OF 6-INCHES DEEP.
 5. HARDWOOD STAKES SHALL BE ON THE DOWNSLOPE SIDE.
 6. SEAMS BETWEEN THE SILT FENCE SECTIONS SHALL OVERLAP.

SILT FENCE DETAIL
NOT TO SCALE



- NOTES:
 1. THE DRILLED WELL SHALL BE CONSTRUCTED IN ACCORDANCE WITH §1-1206 OF THE STATE OF VERMONT ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, EFFECTIVE APRIL 12, 2019.
 2. THE DRILLED WELL LOCATION SHALL ADHERE TO THE ISOLATION DISTANCES SHOWN ON THE DRILLED WELL ISOLATION TABLE ON THIS DRAWING.

DRILLED WELL CONSTRUCTION DETAIL
NOT TO SCALE



- NOTES:
 1. HYDRO-PNEUMATIC TANK (TO BE DETERMINED).
 2. PRESSURE SWITCH SETTING 40-60 PSI.
- NOTE:
 ALL INTERIOR PLUMBING AND WATER DISTRIBUTION DESIGN TO BE PERFORMED ACCORDING TO APPLICABLE PLUMBING CODE BY A LICENSED PROFESSIONAL.

TYPICAL COMPONENTS FOR A SHARED DRILLED WELL SUBMERSIBLE WELL PUMP WATER SYSTEM
ELEVATION VIEW - NOT TO SCALE

WASTEWATER DISPOSAL SYSTEM CONSTRUCTION AND MAINTENANCE NOTES

- THE WASTEWATER DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES.
- WASTEWATER DISPOSAL SYSTEM LOCATION SHALL BE STAKED OUT BY THE DESIGNER PRIOR TO START OF CONSTRUCTION.
- ATTACHED MOUND SYSTEM CONSTRUCTION INSTRUCTIONS SHALL BE FOLLOWED DURING THE INSTALLATION OF THE REPLACEMENT MOUND-TYPE WASTEWATER SYSTEM.
- THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR INSPECTIONS OF THE SEPTIC TANK, PUMP STATION, FLOWED LAYER, AND PLACEMENT OF THE MOUND SAND.
- THE DESIGNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR A PRESSURE TEST OF THE MOUND SYSTEM PRESSURE DISTRIBUTION NETWORK.
- WASTEWATER SYSTEM FINISH GRADES WILL VARY WITH NATURAL TOPOGRAPHY PRIORITY IS TO MAINTAIN 3 ON 1 MOUND TOE SLOPES.
- SEPTIC TANK EFFLUENT FILTER SHOULD BE REMOVED AND RINSED BACK INTO THE SEPTIC TANK ANNUALLY.
- THE SEPTIC TANK AND PUMP STATION SHOULD BE INSPECTED ANNUALLY AND PUMPED OUT AT LEAST EVERY THREE (3) YEARS OR AS NECESSARY TO PREVENT SOLIDS FROM CARRYING OVER TO THE DISPOSAL SYSTEM.
- FOLLOWING THE MOUND WASTEWATER SYSTEM INSTALLATION, FINISH GRADE SHALL BE SEEDED AND MULCHED WITH A CONSERVATION GRASS SEED MIX.
- WATER SOFTENER BACKWASH, SEPTIC TANK ADDITIVES, GREASE OR SANITIZERS SHALL NOT BE INTRODUCED INTO THE WASTEWATER DISPOSAL SYSTEM.

WATER SUPPLY LEAKAGE AND PRESSURE TESTING

- (a) Water service lines and water service pipes shall be pressure tested and leakage tested according to one of the following procedures prior to placing the potable water supply into service:
 (1) Vermont Plumbing Rules;
 (2) the AWWA; or
 (3) by pressurizing the lines and pipes with water at the working pressure of the system or greater and hold without a drop in pressure for a minimum of 16 minutes capacity prior to placing the structure into service.
 (b) Atmospheric storage structures shall be leakage tested according to the following procedure to ensure water loss is equal to or less than 0.05 of 1 percent of the tank volume:
 (1) filling the tank with potable water and let stand for 24 hours; and
 (2) measuring the loss of water over 24 hours.
 (c) If the water service line, water service pipe, or atmospheric storage structure fails the pressure or leakage test, the cause of the failure shall be repaired, and the line, pipe, or structure retested.

WATER SUPPLY DISINFECTION

- (a) A potable water supply shall be disinfected pursuant to the requirements of Subsection (b), (c), and (d) prior to placing the potable water supply into service and after any servicing or repair of the potable water supply, such as installation of new pipes, wires, casing, or pumps.
 Disinfection of the potable water source shall be completed pursuant to the recommendations by the Vermont Department of Health for disinfecting a water system, or the following method:
 (1) flush the potable water supply until the water runs clear;
 (2) provide an initial dosage of at least 100 mg/L of chlorine in the potable water source;
 (3) circulate the water in the potable water source; and
 (4) allow the water to rest in the potable water source for a minimum of 12 to 24 hours before disposing of the chlorinated water.
 (b) Disinfection of water service lines and water service pipes shall be completed pursuant to the requirements of the Vermont Plumbing Rules or the following method:
 (1) fill the water service line or water service pipe with a water/chlorine solution of 100 mg/L; and
 (2) allow the chlorinated water to rest in the water service line or water service pipe for a minimum of 24 hours before disposing of the chlorinated water.
 (c) Disinfection of water storage tanks shall be completed pursuant to AWWA Standard C652.
 (d) Chlorinated water used to disinfect or resulting from disinfection of potable water supplies shall not be discharged to a wastewater system or to surface water. Proper disposal of the chlorinated water is to the ground surface through sheet flow that infiltrates into the soil or disposal to a wastewater treatment facility, if authorized by the wastewater treatment facility.

DRILLED WELL, REQUIRED MINIMUM ISOLATION DISTANCES

1. THESE DISTANCES APPLY TO DRILLED WELLS SERVING A SINGLE-FAMILY RESIDENCE, WITH A MAXIMUM DAILY DEMAND OF LESS THAN 1.9 GPM.

2. THE DRILLED WELL SHALL BE CONSTRUCTED IN ACCORDANCE WITH §1-1206 OF THE STATE OF VERMONT ENVIRONMENTAL PROTECTION RULES, CHAPTER 1, EFFECTIVE APRIL 12, 2019.

POTENTIAL SOURCE OF CONTAMINATION

- SEWAGE DISPOSAL FIELD WITH FLOWS <2000 GPD
- SUBSURFACE WASTEWATER PIPING
- EDGE OF RESIDENTIAL DRIVE SERVING 3 RESIDENCES OR LESS
- EDGE OF DRIVEWAY, ROADWAY OR PARKING LOT SERVING 3 OR MORE RESIDENCES
- PROPERTY LINE BUILDINGS
- LIMIT OF HERBICIDE APPLICATION ON UTILITY RIGHT-OF-WAY
- SURFACE WATER
- CONCENTRATED LIVESTOCK HOLDING AREAS AND MANURE STORAGE ABOVE GROUND
- IN-GROUND CONCRETE/GEOSYNTHETIC LINED EARTHLEM LINED
- HAZARDOUS OR SOLID WASTE DISPOSAL SITE
- NON-SEWAGE WASTEWATER DISPOSAL FIELDS

SEPARATION DISTANCE

- 200 FEET IF WELL IS DOWNSLOPE
- 100 FEET IF WELL IS UPSLOPE
- 50 FEET
- 5 FEET
- 25 FEET
- 10 FEET
- 5 FEET
- 100 FEET
- 10 FEET
- 200 FEET
- 50 FEET
- 100 FEET
- 200 FEET
- CONTACT DESIGNER
- CONTACT DESIGNER

DATE	DESCRIPTION	BY
REVISIONS		
LOTS 21 & 22 SUBDIVISION AMENDMENT		
SCOTT STRODE		
DUGWAY ROAD, RICHMOND, VERMONT		
WATER SYSTEM(S) DETAILS & NOTES, EROSION CONTROL DETAILS		
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		
PROJECT NO.	DATE:	CHECKED:
21315	01-19-2023	JB
SCALE:	SURVEY:	DRAWING NO.
AS NOTED	AW, OL, DW	D-4
DRAWN:		SHEET 9 OF 9
SB, DW		

SIGNATURE:

JASON S. BARNARD
 LICENSED DESIGNER #126179



Scott Strode
 Lots 21 & 22 Subdivision Amendment
 Dugway Road, Richmond, VT

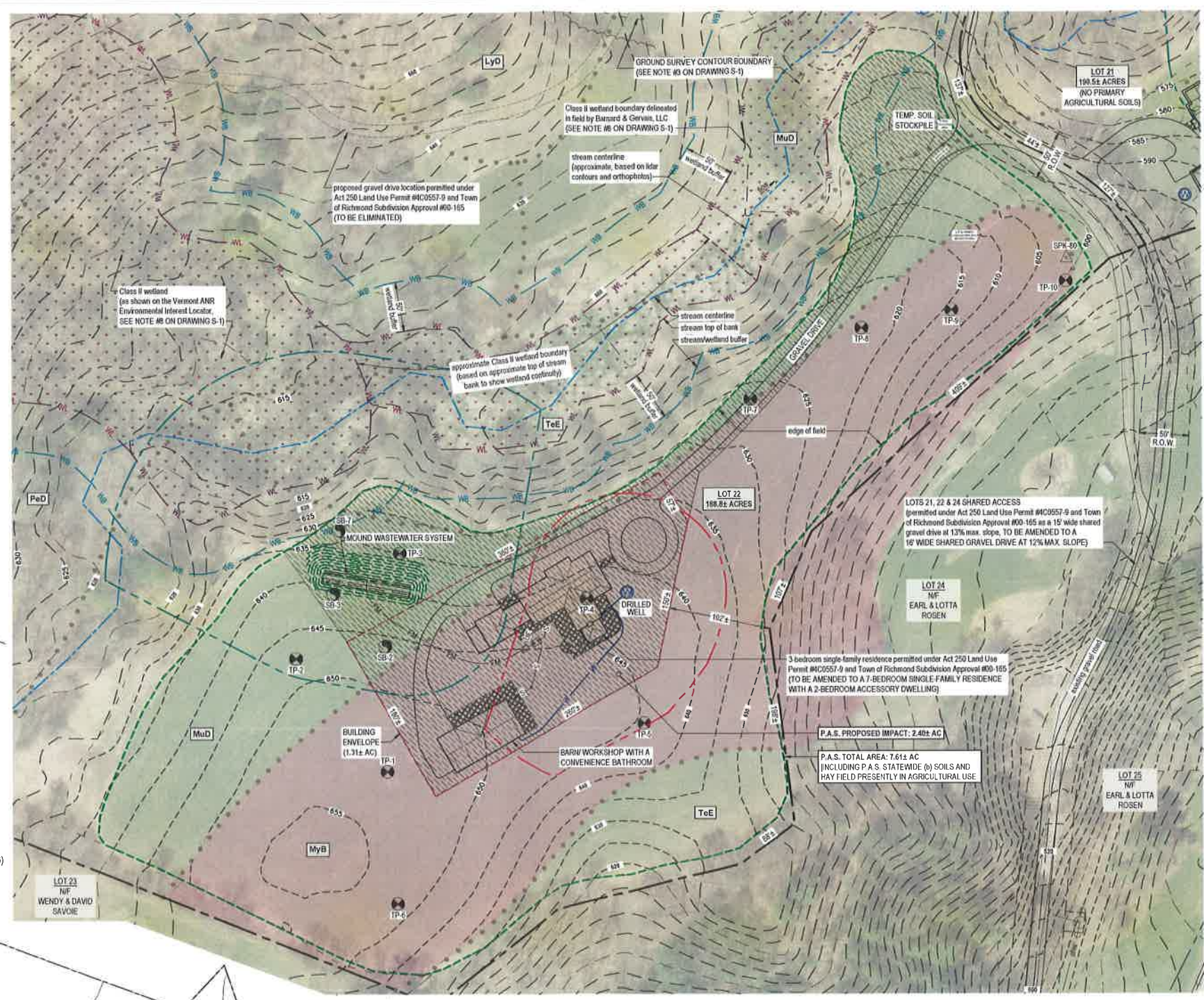
Soil Matrix:
 Please fill out the soil information for the entire parcel in the table below:
 *Note existing impacts as defined by Primary Agricultural Soils (10 VSA § 6001 (15)).
 Lot 21 does not contain Primary Agricultural Soils as defined by 10 VSA § 6001 (15).
 This Soil Matrix includes soils for Lot 22 only.

Key	Soil Type	Ag Value	Total Area Number of Acres (Acres)	Existing Impact (Acres)	Proposed Impact (Acres)
LyD	Lyman-Marlow complex, 5-30% very rocky	10	81.76	0.02	0.00
LyE	Lyman-Marlow complex, 30-60% very rocky	11	82.33	0.02	0.00
MuD	Munson and Bagshaw Silt Loams, 15-25%	8d	11.03	0.02	0.78
MyB	Munson and Rayburn Silt Loams, 2-6%	4d	5.09	0.02	1.22
PeD	Peru Fine Sandy Loam, 20-30%	8d	8.24	0.02	0.00
PsG	Peru Fine Sandy Loam, 0-20% very stony	11	12.46	0.02	0.00
PtE	Peru Fine Sandy Loam, 20-60% very stony	11	16.99	0.02	0.00
TeE	Tenina Escarpments, Silty and Clayey	11	3.52	0.02	0.40
TOTAL			188.84 ±	0.00	2.40 ±

NOTES:
 1. The Proposed impacts listed above pertain to the 2.40± acres of total impact area within the 7.61± acres of Primary Agricultural Soils, including the following: 1.51± acres and surrounding 0.89± to 1.61± soils that are presently in agriculture use (see Primary Agricultural Soils Plan Drawing A-1).

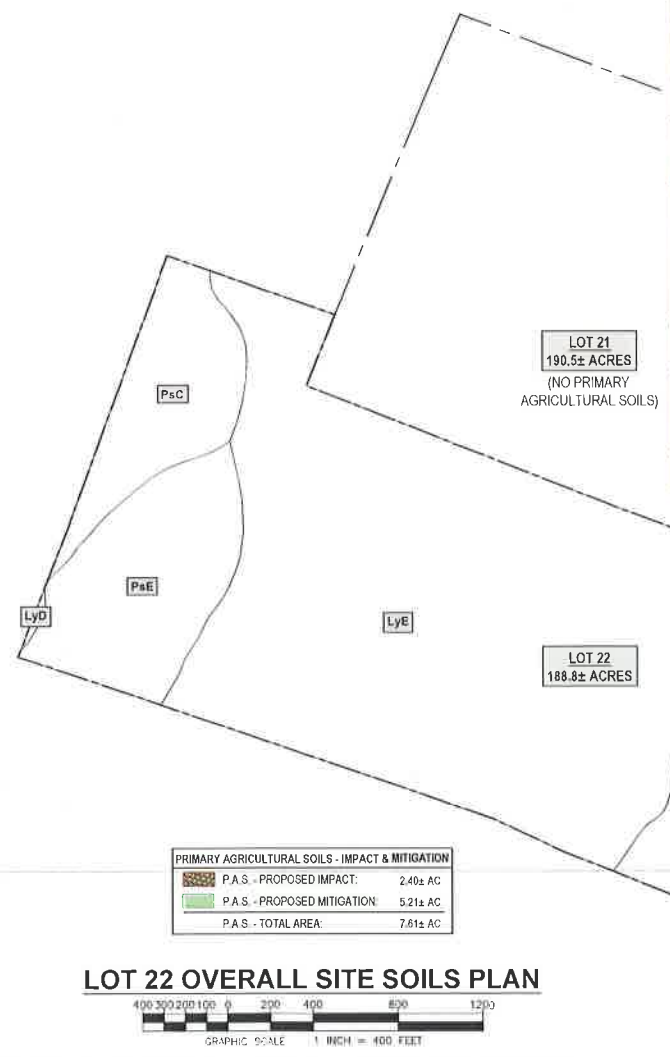
PRIMARY AGRICULTURAL SOILS - IMPACT & MITIGATION				
P.A.S. Soil	Ag Value	Proposed Impact (Acres)	Mitigation Multiplier	Mitigation Area Provided (Acres)
MuD	8d	0.78 AC	*2.00	1.56 AC
MyB	4d	1.22 AC	2.25	2.74 AC
TeE	11	0.40 AC	*2.00	0.81 AC
TOTAL				5.11 AC

*Note: MuD & TeE impacts are assigned a Mitigation Multiplier of 2.00 due to Ag Value > 7 and existing agricultural use as a hay field.

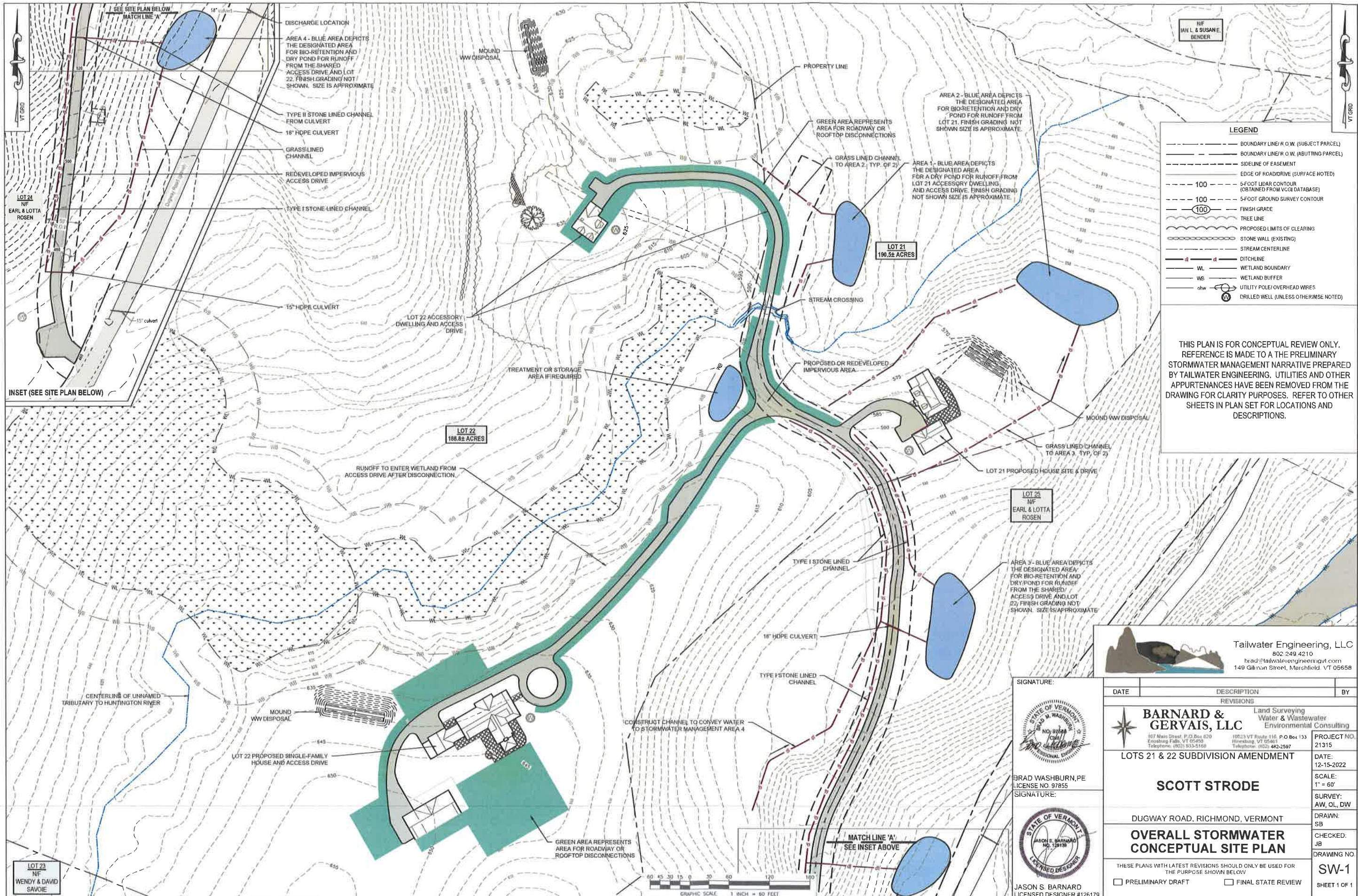


Project Location Map
 Not to Scale

LEGEND	
---	BOUNDARY LINE/ R.O.W. (SUBJECT PARCEL)
---	BOUNDARY LINE/ R.O.W. (ABUTTING PARCEL)
---	SIDELINE OF EASEMENT
---	EDGE OF ROAD/DRIVE (SURFACE NOTED)
---	5-FOOT UDLAR CONTOUR (OBTAINED FROM VCGI DATABASE)
---	100
---	5-FOOT GROUND SURVEY CONTOUR
---	FINISH GRADE
---	BUILDING ENVELOPE
---	STONE WALL (EXISTING)
---	STREAM CENTERLINE
---	DITCHLINE
---	GRAVITY SEWER
---	FORCE MAIN
---	1-INCH DIAMETER CL200 POLYETHYLENE PLASTIC WATER LINE (UNLESS OTHERWISE NOTED)
---	WELL ISOLATION
---	WASTEWATER ISOLATION
---	WETLAND BOUNDARY
---	WETLAND BUFFER
---	UNDERGROUND ELECTRICAL
---	UTILITY POLE/OVERHEAD WIRES
---	SURVEY TRAVERSE STATION
---	TEMPORARY BENCHMARK (TYPE AND ELEVATION NOTED)
---	TEST PIT (TP-01)
---	SOIL BORING (SB-01)
---	DRILLED WELL (UNLESS OTHERWISE NOTED)
---	PRIMARY AGRICULTURAL SOIL - PRIME
---	PRIMARY AGRICULTURAL SOIL - STATEWIDE
---	PRIMARY AGRICULTURAL SOIL - STATEWIDE (A)
---	PRIMARY AGRICULTURAL SOIL - STATEWIDE (B)
---	PRIMARY AGRICULTURAL SOIL - PROPOSED IMPACT
---	SOIL TYPE BOUNDARY
---	EDGE OF FIELD



DATE	DESCRIPTION	BY
BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 820 Ferrisburgh, VT 05450 Telephone: (802) 933-9188		
REVISIONS 10523 VT Route 116, P.O. Box 133 Hinesburg, VT 05450 Telephone: (802) 482-2987		PROJECT NO. 21315
LOTS 21 & 22 SUBDIVISION AMENDMENT		DATE: 12-12-2022
SCOTT STRODE		SCALE: 1" = 60'
DUGWAY ROAD, RICHMOND, VERMONT		SURVEY: AW, OL
PRIMARY AGRICULTURAL SOILS PLAN		DRAWN: SB
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		CHECKED: JB
<input type="checkbox"/> PRELIMINARY DRAFT <input checked="" type="checkbox"/> FINAL STATE REVIEW		DRAWING NO. AG-1
SIGNATURE: JASON S. BARNARD LICENSED DESIGNER #126179		SHEET 1 OF 1



LEGEND

- BOUNDARY LINE/R.O.W. (SUBJECT PARCEL)
- BOUNDARY LINE/R.O.W. (ABUTTING PARCEL)
- - - SIDELINE OF EASEMENT
- - - EDGE OF ROAD/DRIVE (SURFACE NOTED)
- - - 5-FOOT LIDAR CONTOUR (OBTAINED FROM VCGI DATABASE)
- - - 100 5-FOOT GROUND SURVEY CONTOUR
- 100 FINISH GRADE
- TREE LINE
- PROPOSED LIMITS OF CLEARING
- STONE WALL (EXISTING)
- STREAM CENTERLINE
- - - DITCHLINE
- WL WETLAND BOUNDARY
- WB WETLAND BUFFER
- chw UTILITY POLE/OVERHEAD WIRES
- DRILLED WELL (UNLESS OTHERWISE NOTED)

THIS PLAN IS FOR CONCEPTUAL REVIEW ONLY. REFERENCE IS MADE TO A THE PRELIMINARY STORMWATER MANAGEMENT NARRATIVE PREPARED BY TAILWATER ENGINEERING. UTILITIES AND OTHER APPURTENANCES HAVE BEEN REMOVED FROM THE DRAWING FOR CLARITY PURPOSES. REFER TO OTHER SHEETS IN PLAN SET FOR LOCATIONS AND DESCRIPTIONS.

Tailwater Engineering, LLC
 802 249 4210
 brad@tailwaterengineering.com
 149 Gillman Street, Marshfield, VT 05658

SIGNATURE:

 BRAD WASHBURN, PE
 LICENSE NO. 97855
 SIGNATURE:

SIGNATURE:

 JASON S. BARNARD
 LICENSED DESIGNER #126179

DATE	DESCRIPTION	BY
REVISIONS		
 BARNARD & GERVAIS, LLC Land Surveying Water & Wastewater Environmental Consulting 167 Main Street, P.O. Box 620, Winochka Falls, VT 05450 Telephone: (802) 533-5158 10233 VT Route 116, P.O. Box 133, Winochka, VT 05466 Telephone: (802) 482-2597		
LOTS 21 & 22 SUBDIVISION AMENDMENT		PROJECT NO. 21315
SCOTT STRODE		DATE: 12-15-2022
DUGWAY ROAD, RICHMOND, VERMONT		SCALE: 1" = 60'
OVERALL STORMWATER CONCEPTUAL SITE PLAN		SURVEY: AW, OL, DW
THESE PLANS WITH LATEST REVISIONS SHOULD ONLY BE USED FOR THE PURPOSE SHOWN BELOW.		DRAWN: SB
<input type="checkbox"/> PRELIMINARY DRAFT	<input type="checkbox"/> FINAL STATE REVIEW	CHECKED: JB
		DRAWING NO. SW-1
		SHEET 1 OF 1

