

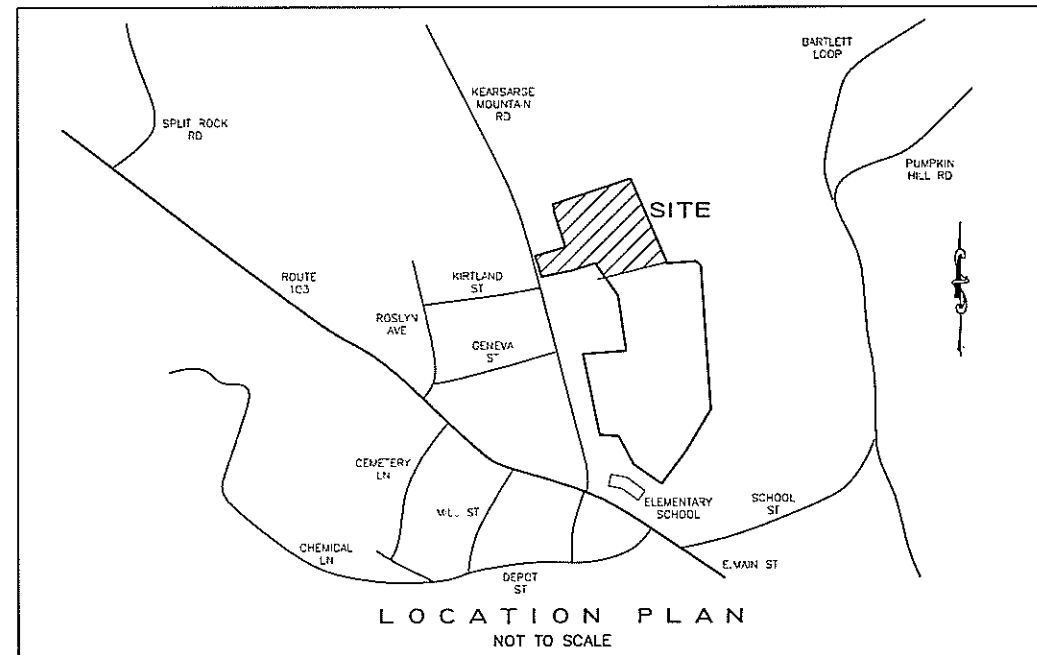
RESIDENTIAL LAND SUBDIVISION

LOCATED AT

TAX MAP 33 LOT 18
KEARSARGE MOUNTAIN ROAD
WARNER, NEW HAMPSHIRE
MERRIMACK COUNTY

Symbols Legend:

--- 10 FT CONTOUR	□ EXISTING CATCH BASIN
--- 2 FT CONTOUR	⊙ PROP. CATCH BASIN
⊖ STONE WALL	▴ RIP RAP APRON
--- PROPOSED DITCH	▬ BASIN BERM
--- EXISTING DITCH	--- SILT FENCE
☀ WETLAND	--- STONE CHECK DAM
--- PROP. DRAIN LINE	⊙ F524.0 SPOT ELEVATION
⊙ TP-1 TEST PIT	→ FLOW DIRECTION
⊙ PERC TEST	--- F524 PROPOSED GRADE CONTOUR
--- OHW OVERHEAD WIRES	▬ PROPOSED EARTH DIVERSION BERM
--- BUILDING SETBACK LINE	--- TREELINE
(T.B.R.) TO BE REMOVED	



Sheet Index:

DWG NO.	DESCRIPTION
1	COVER
2	100 SCALE EXISTING CONDITIONS PLAN
3-6	SUBDIVISION PLAN PLANS
7	GRADE DRAINAGE AND EC
8	UTILITY PLAN
9	ROAD PROFILE
10	SIGHT DISTANCE PLAN & PROFILE
11-16	CONST. DETAILS

Agency Approvals

NHDES - SEWER SYSTEM APPROVAL # PENDING
WATER SYSTEM APPROVAL # PENDING

NOTE:

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE TOWN OF WARNER REGULATIONS, AND THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
- ELEVATIONS ARE BASED ON NGVD 29 DATUM.
- PHYSICAL EVIDENCE OF EXISTING UTILITIES WERE LOCATED ON THE GROUND HOWEVER PRIOR TO ANY CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT DIG-SAFE AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY LOCATIONS.



CONTACT DIG SAFE 72 HOURS
PRIOR TO CONSTRUCTION

THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. THE ENGINEERS MAKE NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ANY UTILITIES (WHETHER THEY BE ABOVE OR BELOW GROUND) PRIOR TO ANY EXCAVATION ON SITE. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-800-3-G-SAFE.

DATE	DESCRIPTION	BY

APPROVED BY THE TOWN OF WARNER NH PLANNING BOARD	
_____ CHAIRPERSON / VICE CHAIRPERSON	_____ DATE

CONSULTANTS:

Licensed Land Surveyor
J.E. Belanger Land Surveying, PLLC.
61 Old Hopkinton Road
Dunbarton, NH 03046
Phone: (603) 774-3601

Certified Soil Scientist
Ferwerta Mapping, LLC
43 Bartlett Hill Road,
Deering, NH, 03244

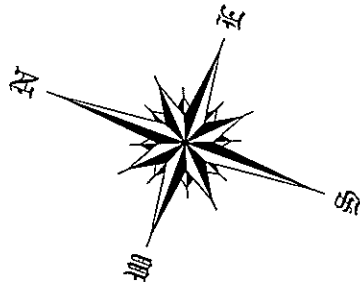
Owner / Applicant:
Sydney Elizabeth Boyer
Kearsarge Mountain Road
Warner, NH 03278

JUNE 28, 2023



DESIGN ENGINEER:
Rokeh Consulting, LLC
89 KING ROAD, CHICHESTER, NH
PH: 603-387-8688

RESERVED FOR REGISTRY USE

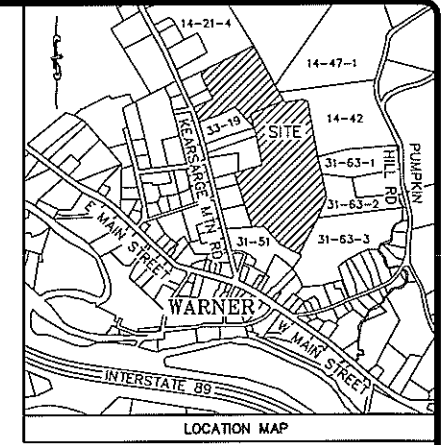


PLAN REFERENCES:

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- SUBDIVISION PLAT LAND OF ALAN D. & MARGARET K. LORD, MAP 31 LOT 46, SCALE: 1"=40', DATED JUNE 22, 2002, PREPARED BY TODD LAND CONSULTANTS AND BEING RECORDED IN THE MCRD PLAN #15593.
- BOUNDARY SURVEY, TAX MAP 31 LOT 51, WARNER ELEMENTARY SCHOOL, SCHOOL STREET, WARNER, NH, DATED AUGUST 1, 2001, SCALE: 1"=40', PREPARED BY PAUL M. DARTSHIRE ASSOC. AND BEING RECORDED IN THE MCRD PLAN #15516.
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- SURVEY FOR FREDERIC L. & SUSAN L. O'CONNOR, WEST SIDE OF PUMPKIN HILL ROAD, WARNER, NH, DATED 11/20/1980, SCALE: 1" = 80', PREPARED BY BRISTOL, SWEET & ASSOCIATES, INC. AND BEING RECORDED IN MCRD PLAN #8013.

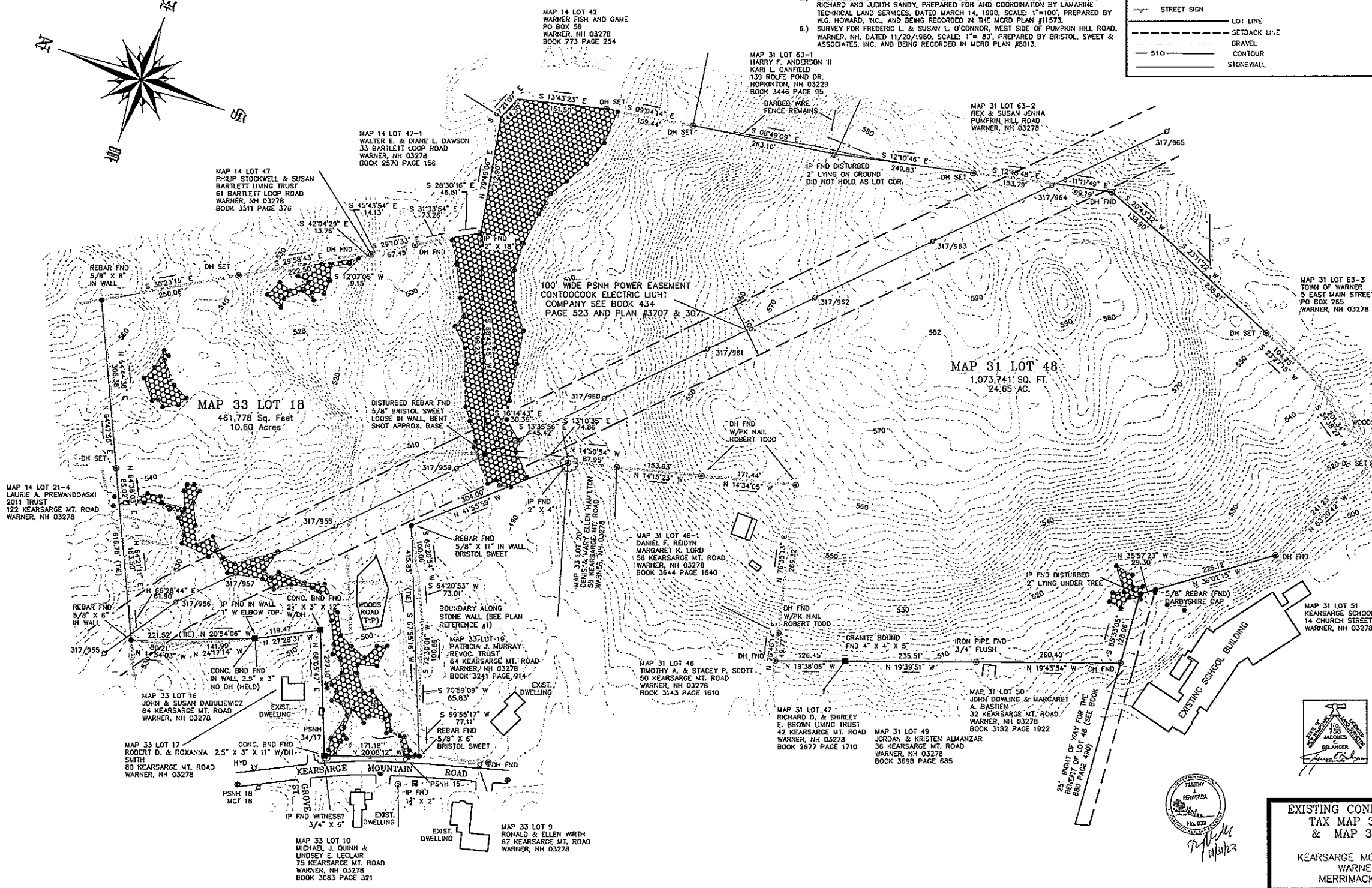
LEGEND

- GRANITE BOUND TO BE SET
- GRANITE BOUND FOUND
- IRON PIPE/PIH
- DRILL HOLE
- TEST PIT
- WELL
- UTILITY POLE
- STREET SIGN
- SEWER MANHOLE
- STORMWATER MANHOLE
- HYDRANT
- DRAIN PIPE
- LOT LINE
- SETBACK LINE
- GRAVEL
- CONTOUR
- STONEWALL



NOTES:

- SURVEY BY TOTAL STATION WAS MADE BY THIS COMPANY BETWEEN FEBRUARY 9-11, 2022 WITH AN ERROR OF CLOSURE OF LESS THAN 1:10,000.
- BEARINGS ARE BASED ON NH STATE GRID COORDINATES.
- VERTICAL DATUM IS BASED ON NGVD 88.
- THESE TRACTS ARE LOCATED IN THE MEDIUM DENSITY RESIDENTIAL DISTRICT AND ARE SUBJECT TO THE TO THE FOLLOWING TOWN OF WARNER ZONING REGULATIONS:
MINOR SUBDIVISION:
MINIMUM BUILDABLE AREA = 2 ACRES (LOTS WITHOUT TOWN SEWER)
MINIMUM LOT FRONTAGE = 200' (LOTS WITHOUT TOWN SEWER)
MINIMUM BUILDABLE AREA = 40,000 SQ. FT. (LOTS WITH TOWN SEWER)
MINIMUM LOT FRONTAGE = 120' (LOTS WITH TOWN SEWER)
ALL STRUCTURE SETBACKS = 25' FOR AN ABUTTERS PROPERTY LINE
40' FROM EDGE OF PUBLIC ROW
MAJOR SUBDIVISION:
LOTS CREATED BY MAJOR SUBDIVISION SHALL BE SUBJECT TO THE REQUIREMENTS OF ARTICLE XIV, "OPEN SPACE DEVELOPMENT".
- OWNER OF RECORD:
MAP 31 LOT 48 AND MAP 33 LOT 18
SYDNEY ELIZABETH BOYER
KEARSARGE MOUNTAIN ROAD
WARNER, NH 03278
BOOK 3678 PAGE 356
- THIS LAND IS NOT LOCATED IN A FLOOD ZONE PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 33013C0287E HAVING AN EFFECTIVE DATE OF APRIL 19, 2010.

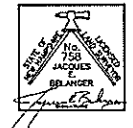


CERTIFICATIONS

I HEREBY CERTIFY THAT THIS MAP HAS BEEN MADE UNDER MY SUPERVISION.
2-22-22
DATE
J. BELANGER
LICENSED LAND SURVEYOR

I HEREBY CERTIFY THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY & HAS A MAXIMUM ERROR OF CLOSURE OF 1:10,000 ON ALL PROPERTY LINES IN & BORDERING THE SUBJECT PROPERTY.
2-22-22
DATE
J. BELANGER
LICENSED LAND SURVEYOR

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE & THAT THE LINES OF STREETS & WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED & THAT NO NEW WAYS ARE SHOWN.
2-22-22
DATE
J. BELANGER
LICENSED LAND SURVEYOR



EXISTING CONDITIONS PLAN
TAX MAP 31 LOT 48
& MAP 33 LOT 18

OWNER OF RECORD:
SYDNEY ELIZABETH BOYER

KEARSARGE MOUNTAIN ROAD
WARNER, NH
MERRIMACK COUNTY

KEARSARGE MOUNTAIN ROAD
WARNER, NEW HAMPSHIRE
MERRIMACK COUNTY

J.E. BELANGER LAND SURVEYING PLLC
LICENSED LAND SURVEYOR
61 OLD HOPKINTON ROAD, DUNBARTON, NH 03046

* BOUNDARY SURVEYS
* SUBDIVISIONS
* LAND PLANNING
* SEPTIC DESIGN

PLAN DATE: FEBRUARY 22, 2022
SCALE: 1" = 100'
PROJECT NO.: 222297
SHEET 1 OF 1

TEL (603) 774-3601

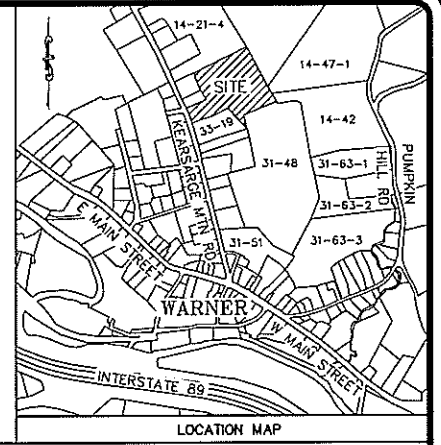
NO.	REVISION	DATE

GRAPHIC SCALE
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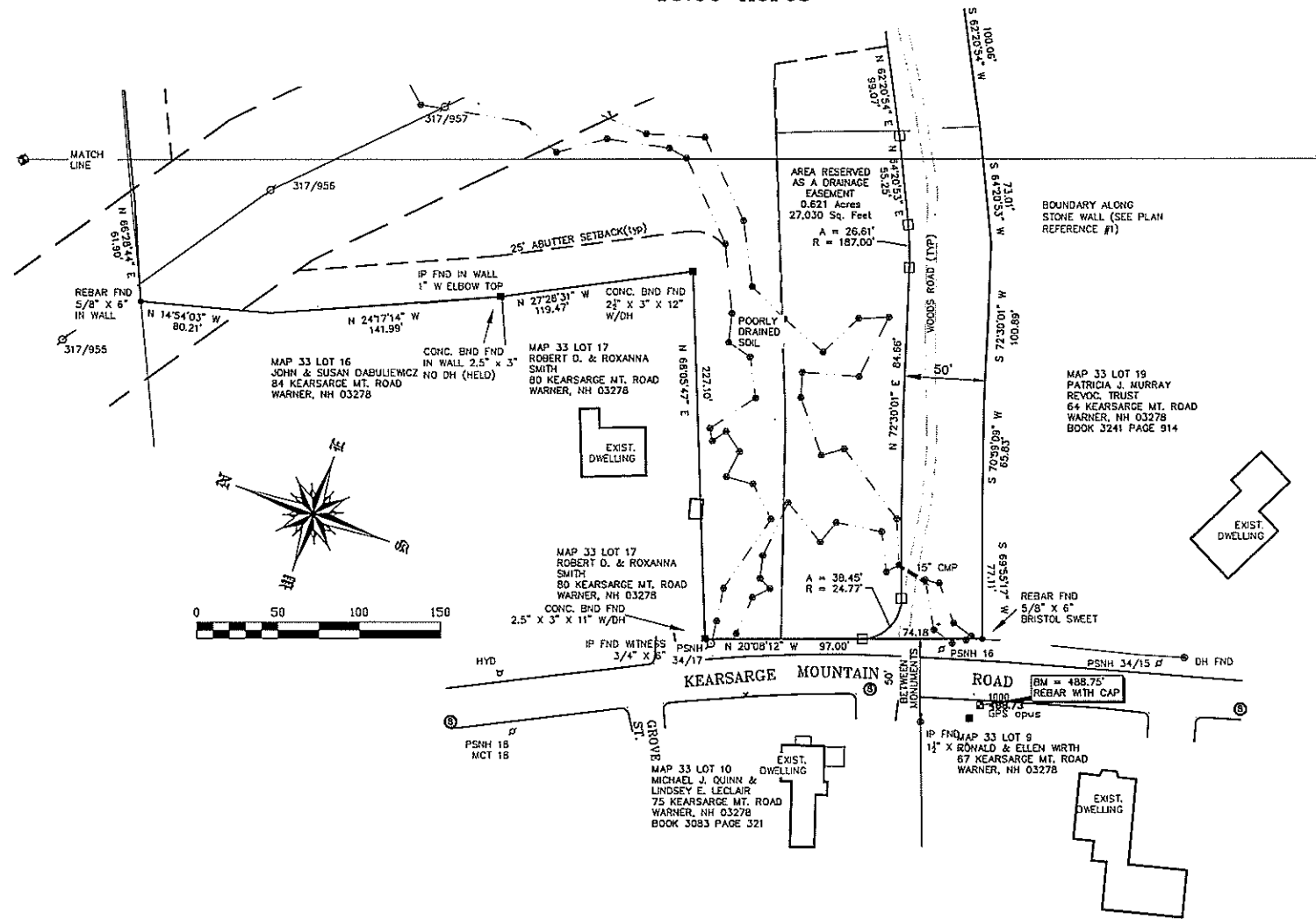
RESERVED FOR REGISTRY USE

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- SURVEY FOR FREDERIC L. & SUSAN L. O'CONNOR, WEST SIDE OF PUMPKIN HILL ROAD, WARNER, NH, DATED 11/20/1980, SCALE: 1" = 80', PREPARED BY BRISTOL, SWEET & ASSOCIATES, INC. AND BEING RECORDED IN MCRD PLAN #8013.



MAP 33 LOT 18
461,778 Sq. Feet
10.60 Acres



LEGEND

■ CONCRETE/GRANITE BOUND	□ MAIL BOX	— LOT LINE
○ IRON PIPE/PIN	▽ WATER CONTROL VALVE	- - - SETBACK LINE
● DRILL HOLE	⊗ GAS CONTROL VALVE	— SOIL LINE
■ RE-BAR/STEEL PIN	⊙ PROPOSED GRANITE BOUND	- - - TREE LINE
⊕ TEST PIT	□ PROPOSED REBAR WITH CAP	- - - EDGE OF GRAVEL
⊙ WELL	○ HYDRANT	- - - 510 CONTOUR
⊕ UTILITY POLE		- - - STONEWALL
⊕ STREET SIGN		- - - DRAIN PIPE
⊕ DRAIN INLET		
⊕ SEWER MANHOLE		
⊕ STORMWATER MANHOLE		

- NOTES:**
- SURVEY BY TOTAL STATION WAS MADE BY THIS COMPANY BETWEEN FEBRUARY 9-11, 2022 WITH AN ERROR OF CLOSURE OF LESS THAN 1:10,000.
 - BEARINGS ARE BASED ON NH STATE GRID COORDINATES.
 - VERTICAL DATUM IS BASED ON NGVD 88.
 - THESE TRACTS ARE LOCATED IN THE MEDIUM DENSITY RESIDENTIAL DISTRICT AND ARE SUBJECT TO THE TO THE FOLLOWING TOWN OF WARNER ZONING REGULATIONS.
MINOR SUBDIVISION:
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40' FROM EDGE OF PUBLIC ROW
MAJOR SUBDIVISION:
LOTS CREATED BY MAJOR SUBDIVISION SHALL BE SUBJECT TO THE REQUIREMENTS OF ARTICLE XIV, "OPEN SPACE DEVELOPMENT".
- 5.) OWNER OF RECORD:
MAP 33 LOT 18
SYDNEY ELIZABETH BOYER
KEARSARGE MOUNTAIN ROAD
WARNER, NH 03278
BOOK 3678 PAGE 358
- 6.) THIS LAND IS NOT LOCATED IN A FLOOD ZONE PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 33013C0287E HAVING AN EFFECTIVE DATE OF APRIL 19, 2010.

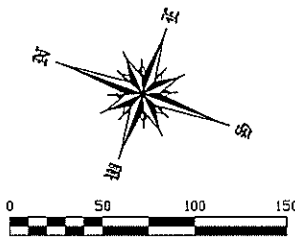
CERTIFICATION:
APRIL 5, 2024
I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY

TIMOTHY FERWERDA, CERTIFIED WETLAND SCIENTIST #39, OF FERWERDA MAPPING LLC, OF DEERING NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION IN FEBRUARY 25, 2022 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL; NORTH CENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

<p>MAJOR SUBDIVISION PLAN TAX MAP 33 LOT 18 KEARSARGE MOUNTAIN ROAD MERRIMACK COUNTY WARNER NH</p>	<p>OWNER OF RECORD: SYDNEY ELIZABETH BOYER KEARSARGE MOUNTAIN ROAD WARNER NH 03278</p>
<p>J.E. BELANGER LAND SURVEYING PLLC LICENSED LAND SURVEYOR 61 OLD HOPKINTON ROAD, DUNBARTON, NH 03046</p> <p>* BOUNDARY SURVEYS * SUBDIVISIONS * LAND PLANNING * SEPTIC DESIGN</p> <p>PLAN DATE: SEPTEMBER 18, 2023 SCALE: 1" = 50' PROJECT NO.: 222297 SHEET SUB1 OF SUB2 ROKHEE SHEET 3 OF 16</p>	

MAP 33 ROAD	LOT	AREA ACRES	EASEMENT AREA	FRONTAGE
	18	4.058	1.740	602.65'
	18.1	2.350	0.004	187.36'
	18.2	1.495		136.65'
	18.3	1.681	0.423	344.86'

RESERVED FOR REGISTRY USE



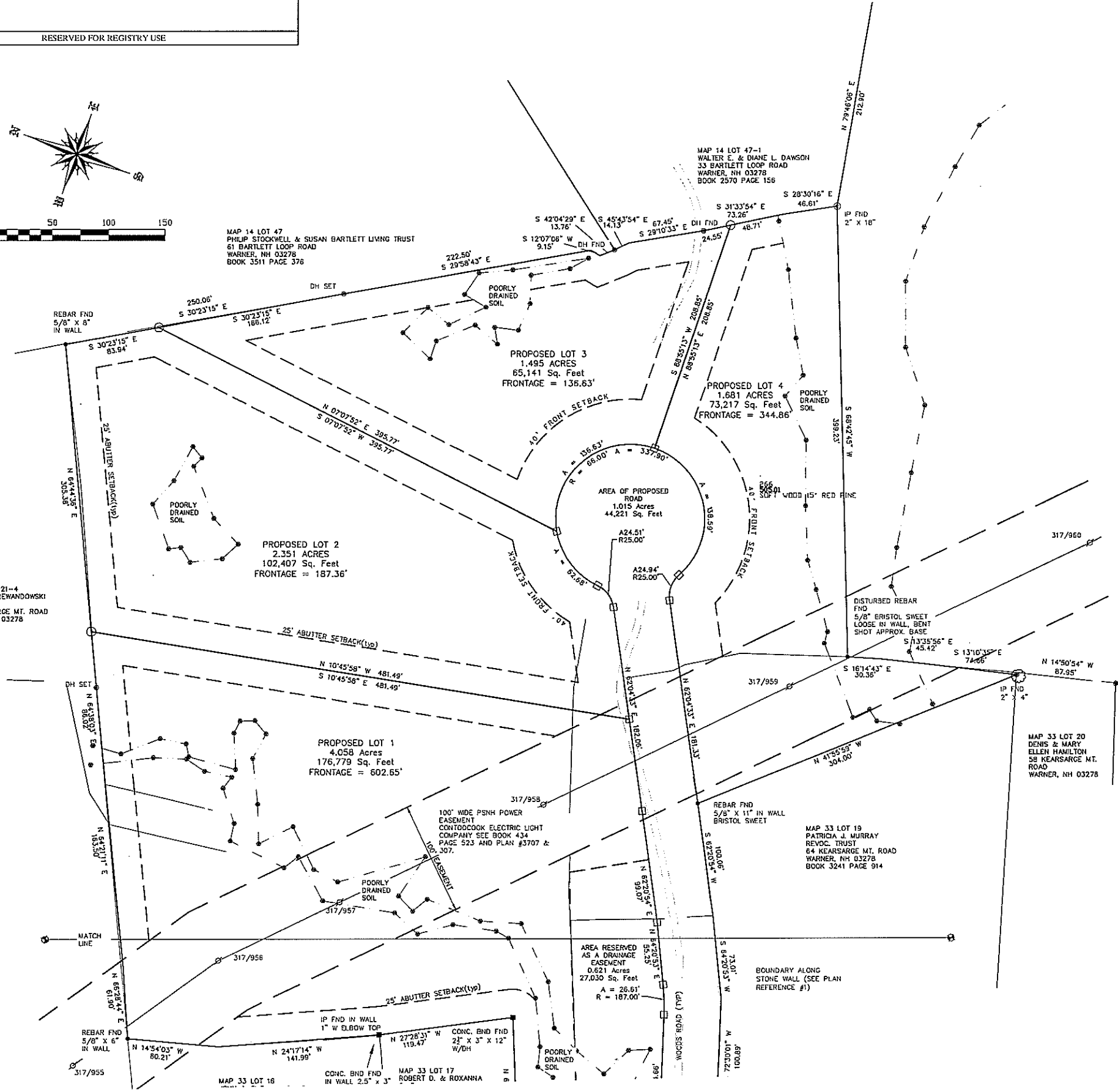
MAP 14 LOT 21-4
LAURIE A. PREWANDOWSKI
2011 TRUST
122 KEARSARGE MT. ROAD
WARNER, NH 03278

MAP 14 LOT 47
PHILIP STOCKWELL & SUSAN BARTLETT LIVING TRUST
61 BARTLETT LOOP ROAD
WARNER, NH 03278
BOOK 3511 PAGE 376

MAP 14 LOT 47-1
WALTER E. & DIANE L. DAWSON
33 BARTLETT LOOP ROAD
WARNER, NH 03278
BOOK 2570 PAGE 156

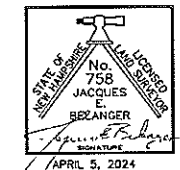
MAP 33 LOT 20
DENIS & MARY
ELLEN HAMILTON
58 KEARSARGE MT. ROAD
WARNER, NH 03278

MAP 33 LOT 19
PATRICIA J. MURRAY
REVOC. TRUST
64 KEARSARGE MT. ROAD
WARNER, NH 03278
BOOK 3241 PAGE 914



TIMOTHY FERWERDA, CERTIFIED WETLAND SCIENTIST #39, OF FERWERDA MAPPING LLC, OF DEERING NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION IN FEBRUARY 25, 2022 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL; NORTH CENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

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Timothy J. Ferwerda
10/21/23

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<p>MAJOR SUBDIVISION PLAN TAX MAP 33 LOT 18 KEARSARGE MOUNTAIN ROAD MERRIMACK COUNTY WARNER NH</p>	<p>OWNER OF RECORD: SYDNEY ELIZABETH BOYER KEARSARGE MOUNTAIN ROAD WARNER NH 03278</p>
<p>J.E. BELANGER LAND SURVEYING PLLC LICENSED LAND SURVEYOR 61 OLD HOPKINTON ROAD, DUNBARTON, NH 03046</p>	
<p>* BOUNDARY SURVEYS * SUBDIVISIONS * LAND PLANNING * SEPTIC DESIGN</p>	<p>PLAN DATE: SEPTEMBER 18, 2023 SCALE: 1" = 50' PROJECT NO.: 222297 SHEET SUB1 OF SUB2 ROKHE SHEET 4 OF 16</p>

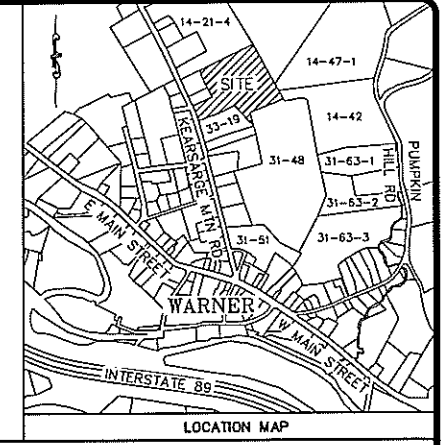


TEL (603) 774-3801

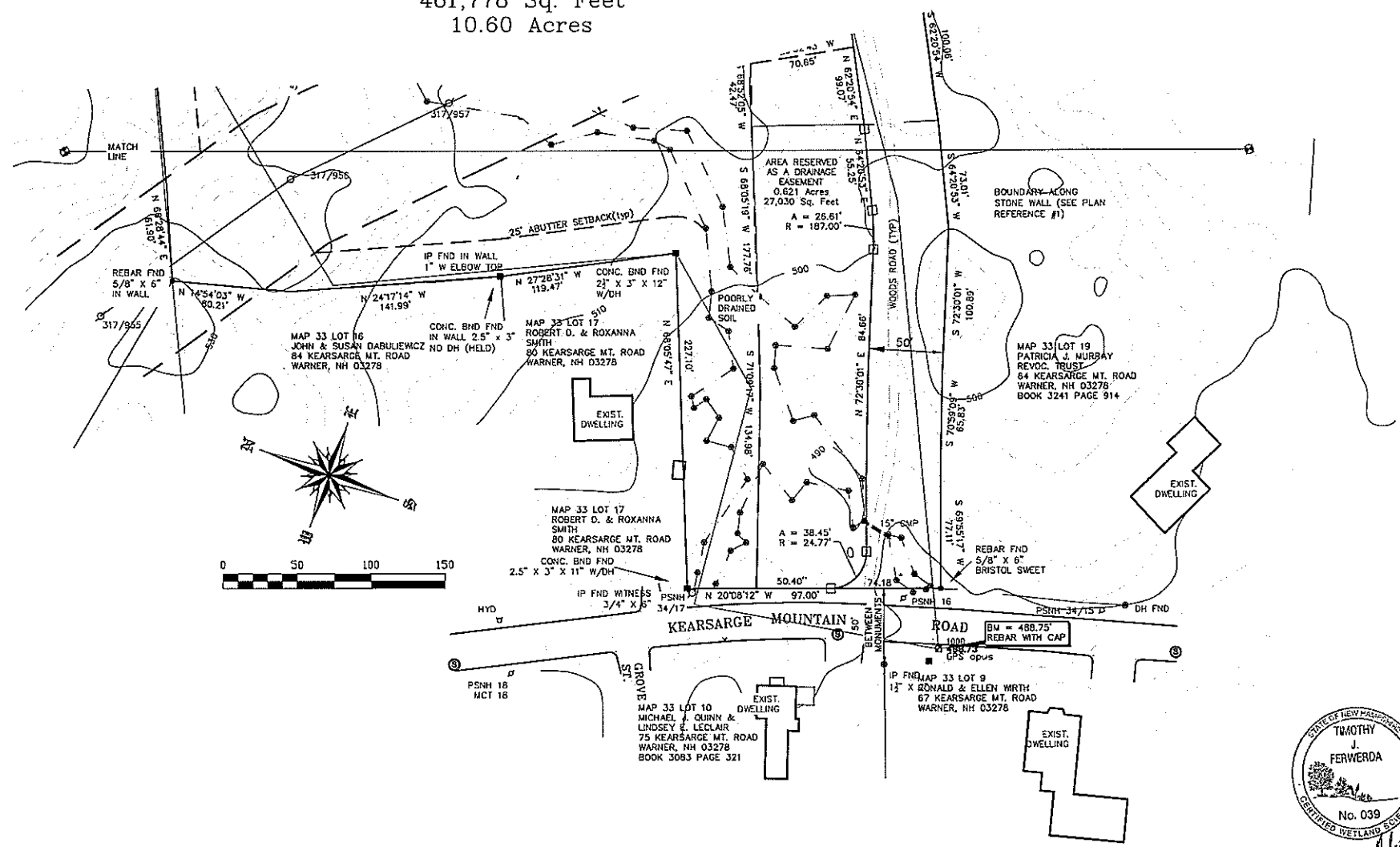
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MAP 33 LOT 18
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10.60 Acres

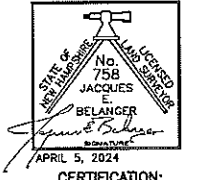


LEGEND

- CONCRETE/GRANITE BOUND
- IRON PIPE/PIN
- ⊙ DRILL HOLE
- RE-BAR/STEEL PIN
- ⊕ TEST PIT
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- ⊙ GAS CONTROL VALVE
- ⊙ PROPOSED GRANITE BOUND
- ⊙ PROPOSED REBAR WITH CAP
- LOT LINE
- - - SETBACK LINE
- · - · - SOIL LINE
- · - · - TREE LINE
- · - · - EDGE OF GRAVEL
- · - · - 510 CONTOUR
- · - · - STONEWALL
- · - · - DRAIN PIPE

NOTES:

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SYDNEY ELIZABETH BOYER
KEARSARGE MOUNTAIN ROAD
WARNER, NH 03278
BOOK 3678 PAGE 356
- THIS LAND IS NOT LOCATED IN A FLOOD ZONE PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 3301300287E HAVING AN EFFECTIVE DATE OF APRIL 15, 2010.



CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY



TIMOTHY FERWERDA, CERTIFIED WETLAND SCIENTIST #39, OF FERWERDA MAPPING LLC, OF DEERING NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION IN FEBRUARY 25, 2022 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL; NORTH CENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

MAJOR SUBDIVISION PLAN
TAX MAP 33 LOT 18
KEARSARGE MOUNTAIN ROAD
MERRIMACK COUNTY
WARNER NH

OWNER OF RECORD:
SYDNEY ELIZABETH BOYER
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WARNER NH 03278

J.E. BELANGER LAND SURVEYING PLLC
LICENSED LAND SURVEYOR
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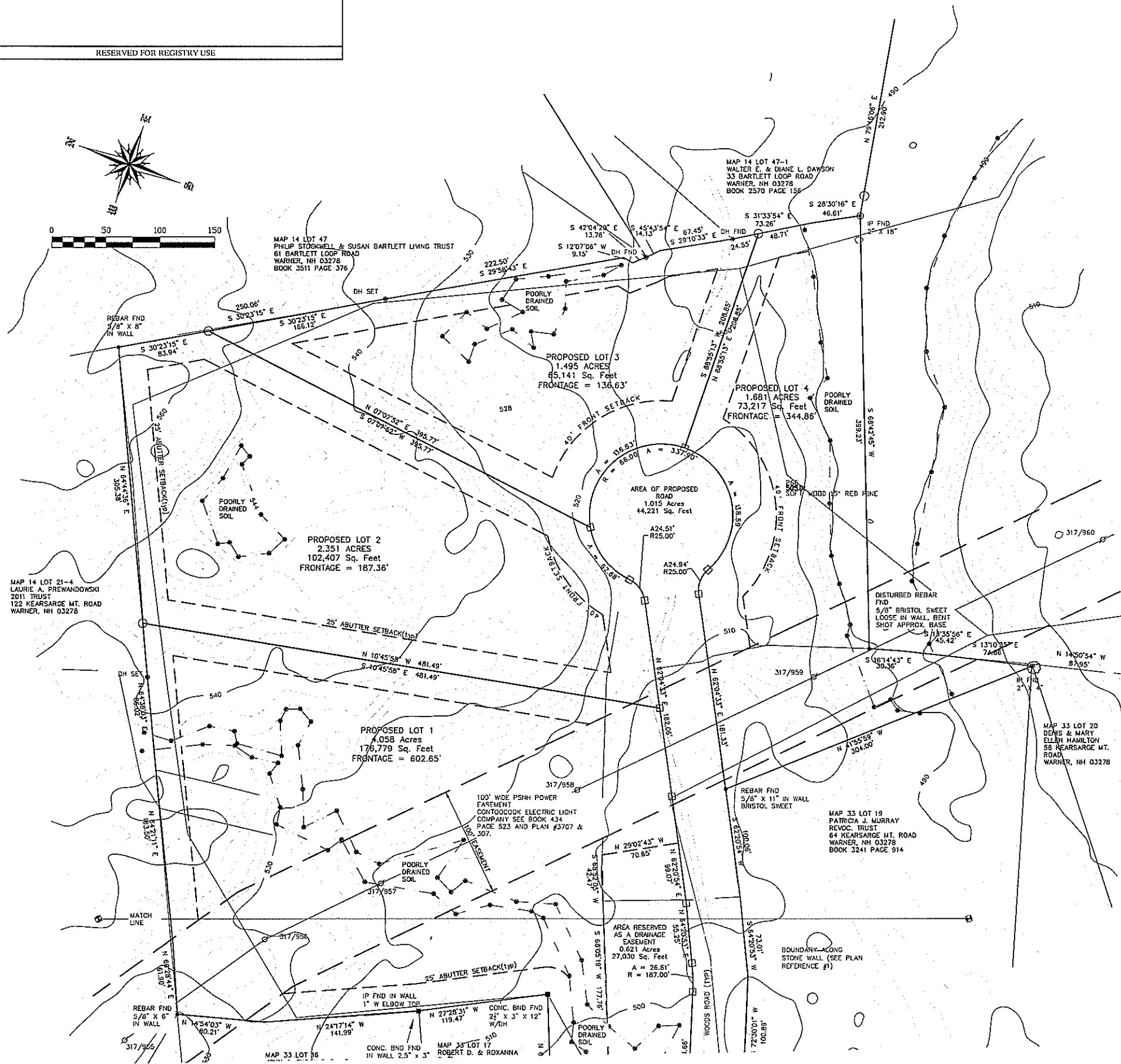
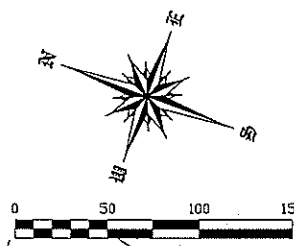


TEL (603) 774-3601

PLAN DATE: SEPTEMBER 18, 2023
SCALE: 1" = 50'
PROJECT NO.: 222297
SHEET SUB1 OF SUB2
ROKHE SHEET 5 OF 16

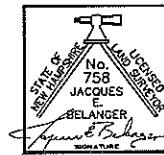
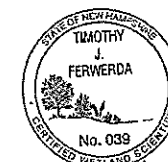
MAP 33 ROAD	LOT	AREA ACRES	EASEMENT AREA	FRONTAGE
	18	1.015		
	18.1	4.058	1.740	602.65'
	18.2	2.350	0.004	187.36'
	18.2	1.495		136.65'
	18.3	1.681	0.423	344.85'

RESERVED FOR REGISTRY USE



TIMOTHY FERWERDA, CERTIFIED WETLAND SCIENTIST #39, OF FERWERDA MAPPING LLC, OF DEERING NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION IN FEBRUARY 25, 2022 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL; NORTH CENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

MAP 33 ROAD	LOT	AREA ACRES	EASEMENT AREA	FRONTAGE
	18	1.015	1.740	602.65'
	18.1	4.058	0.004	187.36'
	18.2	2.350		136.65'
	18.3	1.495	0.423	344.86'



CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY

MAJOR SUBDIVISION PLAN
TAX MAP 33 LOT 18
KEARSAGE MOUNTAIN ROAD
MERRIMACK COUNTY
WARNER NH

OWNER OF RECORD:
SYDNEY ELIZABETH BOYER
KEARSAGE MOUNTAIN ROAD
WARNER NH 03278

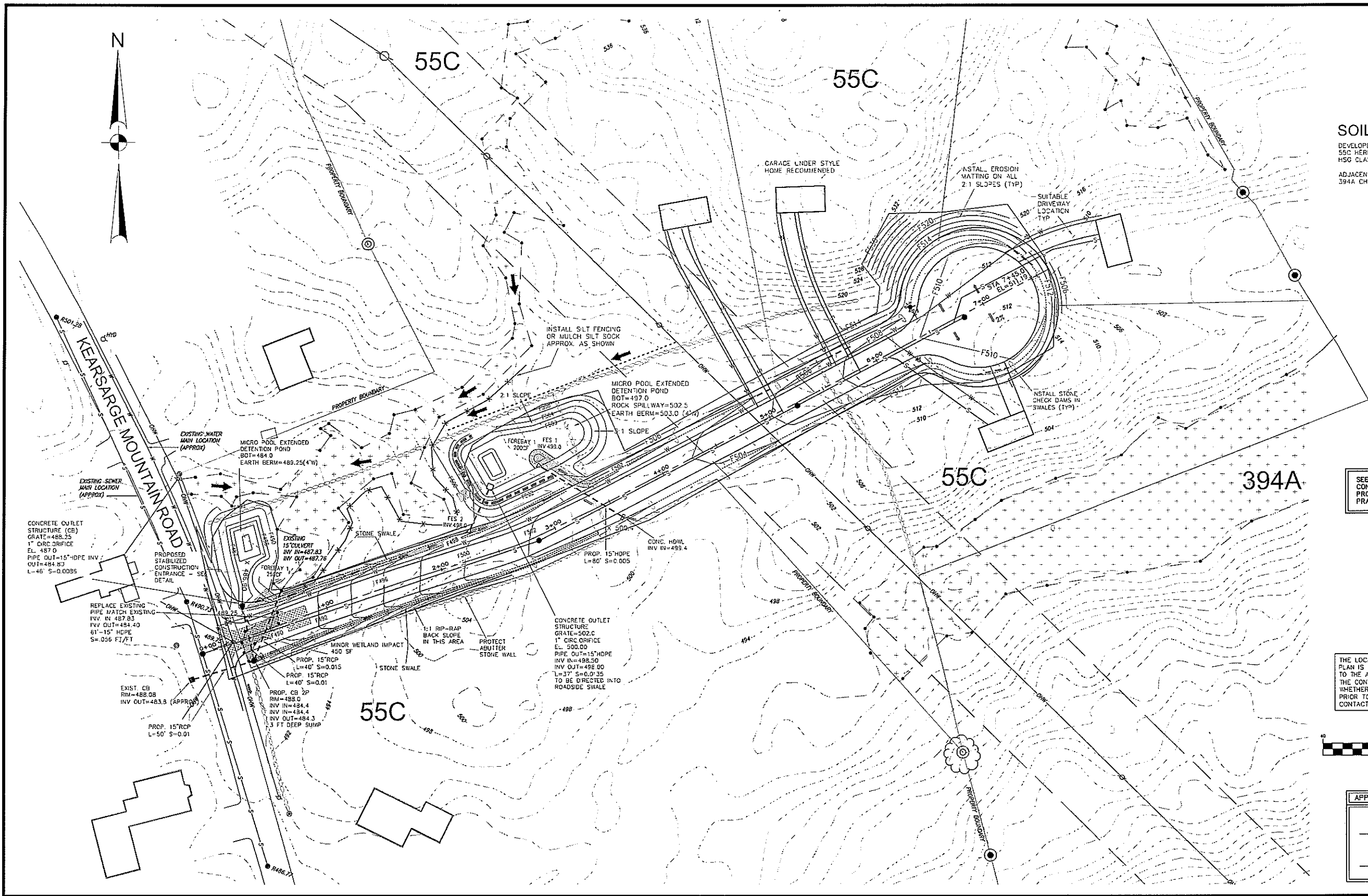
J.E. BELANGER LAND SURVEYING PLLC
LICENSED LAND SURVEYOR
81 OLD HOPKINTON ROAD, DUNBARTON, NH 03046

- * BOUNDARY SURVEYS
- * SUBDIVISIONS
- * LAND PLANNING
- * SEPTIC DESIGN

PLAN DATE: SEPTEMBER 18, 2023
SCALE: 1" = 50'
PROJECT NO.: 222297
SHEET 0202 OF 0202
ROKEH SHEET 6 OF 16



TEL (603) 774-3601



SOIL TYPES:
 DEVELOPED AREA
 55C HERMON SANDY LOAM - 8-15% SLOPES, VERY STONY, HSG CLASS A
 ADJACENT AREA (NO CONSTRUCTION IS WITHIN THIS AREA)
 394A CHOCORUA MUCKY PEAT - HSG CLASS A

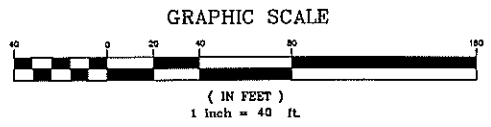


SEE DETAIL SHEETS FOR NOTES ABOUT CONSTRUCTION SEQUENCE, AND PROCEDURES FOR PROPER CONSTRUCTION AND EROSION CONTROL PRACTICES.



CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. THE ENGINEERS MAKE NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ANY UTILITIES WHETHER THEY BE ABOVE OR BELOW GROUND. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-800-DIG-SAFE.



APPROVED BY THE WARNER NH PLANNING BOARD
 CHAIRPERSON / VICE CHAIRPERSON
 DATE

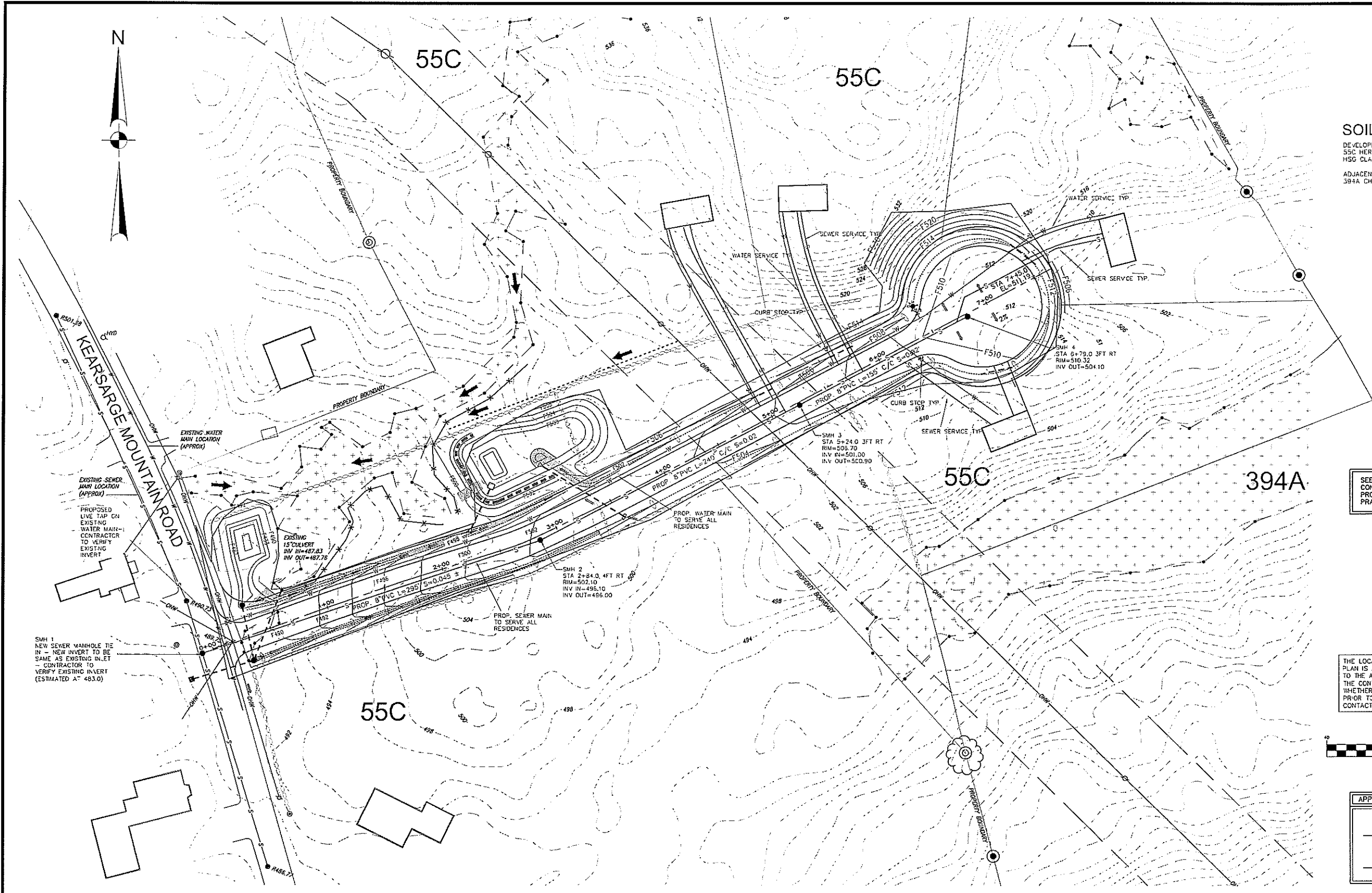
Owner / Applicant:
 Sydney Elizabeth Boyer
 Kearsarge Mountain Road
 Warner, NH 03278

GRADING DRAINAGE AND EROSION CONTROL PLAN
 TAX MAP 33 LOT 18
 Kearsarge Mountain Road
 Warner, New Hampshire

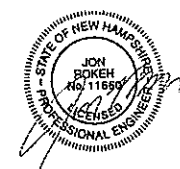
REVISIONS			
DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
 89 KING ROAD, CHICHESTER, NH
 PH: 603-387-8688

SCALE: 1"=40'
 DATE: JUNE 28, 2023
 DR. BY: JR CK. BY: JR
 JOB NO. _____
 SHEET NO. 7 OF 16



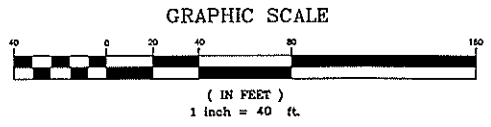
SOIL TYPES:
 DEVELOPED AREA:
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 HSG CLASS A
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APPROVED BY THE WARNER NH PLANNING BOARD

CHAIRPERSON / VICE CHAIRPERSON _____

DATE _____

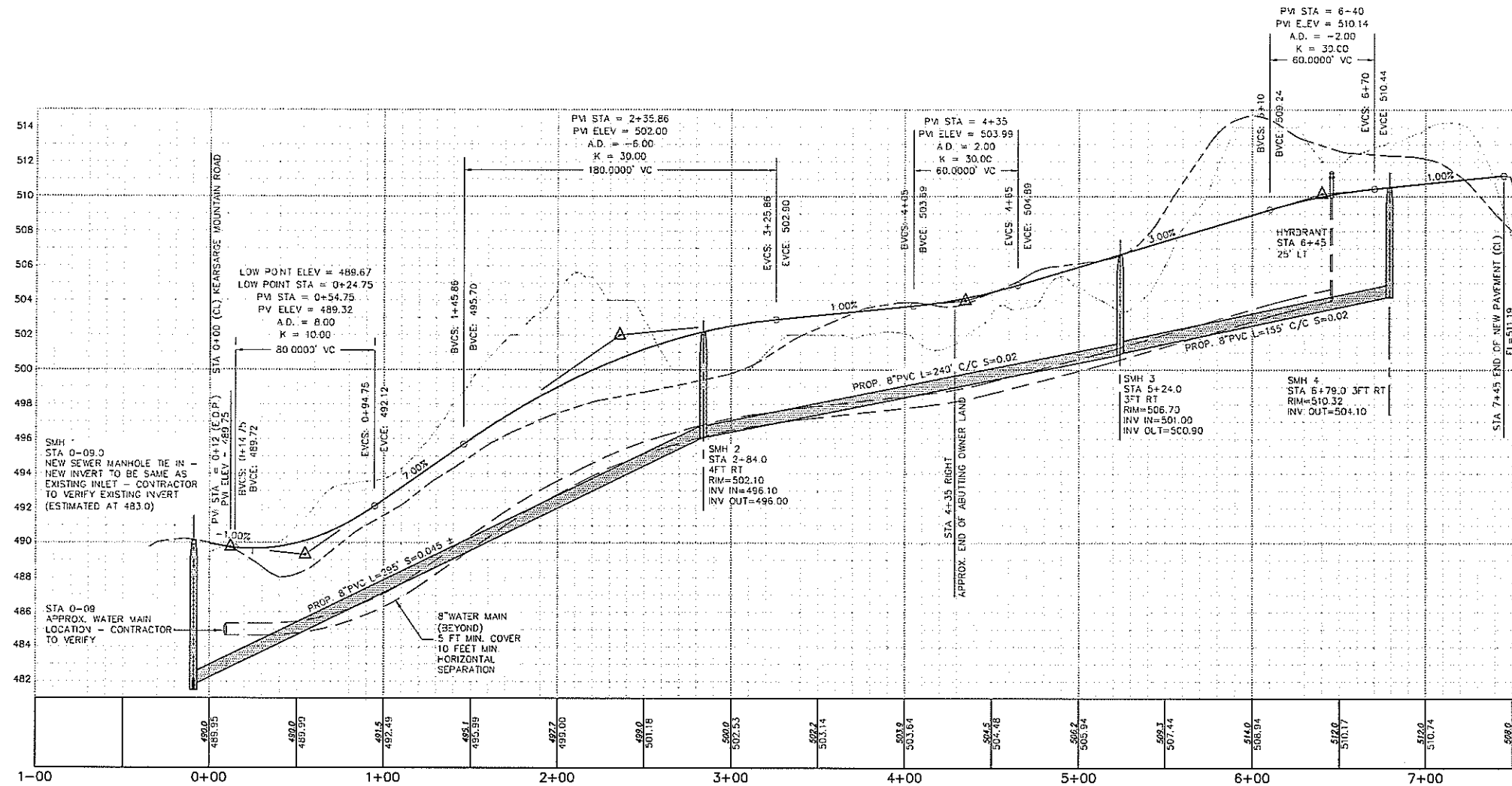
Owner / Applicant:
 Sydney Elizabeth Boyer
 Kearsarge Mountain Road
 Warner, NH 03278

GRADING DRAINAGE AND EROSION CONTROL PLAN
 TAX MAP 33 LOT 18
 Kearsarge Mountain Road
 Warner, New Hampshire

REVISIONS			
DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
 89 KING ROAD, CHICHESTER, NH
 PH: 603-387-8688

SCALE: 1"=40'
 DATE: JUNE 28, 2023
 DR. BY: JR CK. BY: JR
 JOB NO. _____
 SHEET NO. 8 OF 16



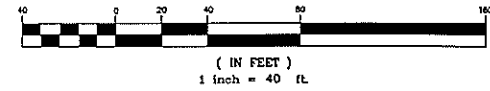
SEE DETAIL SHEETS FOR NOTES ABOUT CONSTRUCTION SEQUENCE, AND PROCEDURES FOR PROPER CONSTRUCTION AND EROSION CONTROL PRACTICES.



CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

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GRAPHIC SCALE



APPROVED BY THE WARNER NH PLANNING BOARD

CHAIRPERSON / VICE CHAIRPERSON _____

DATE _____

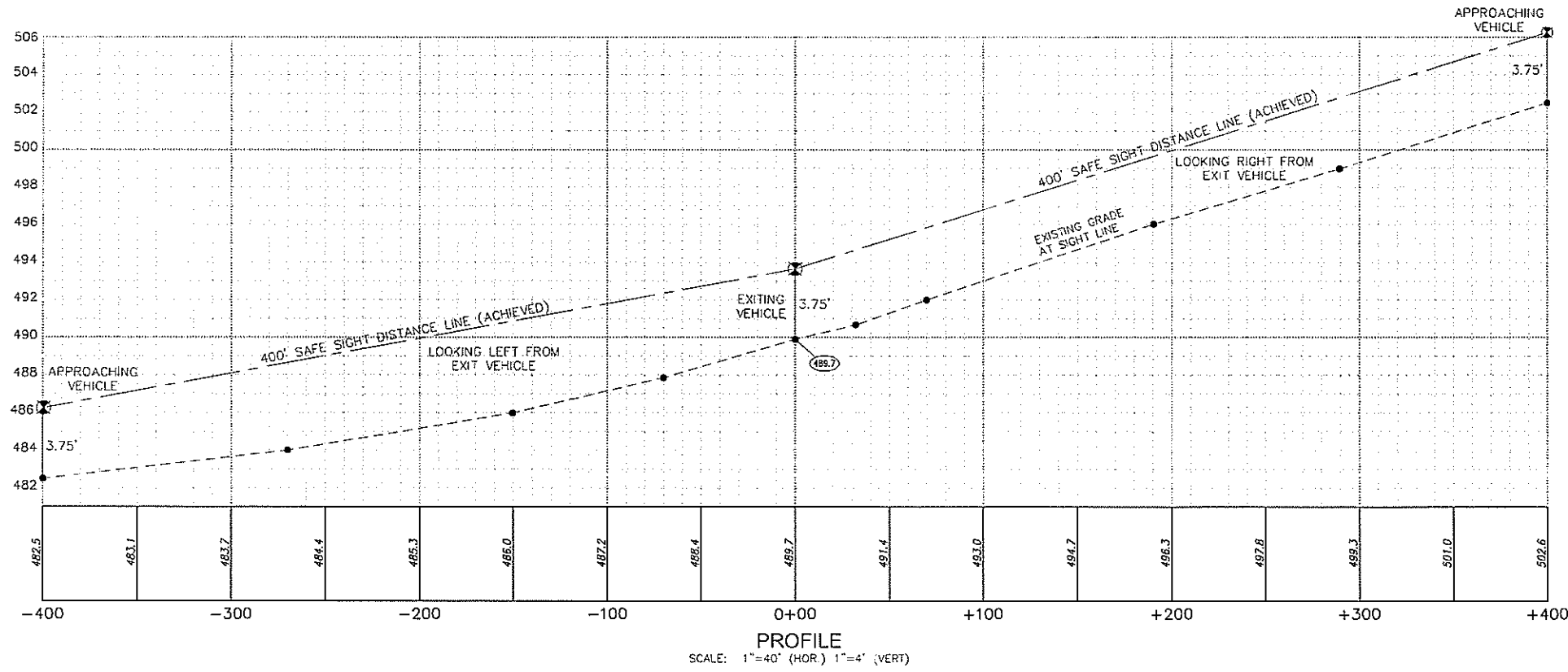
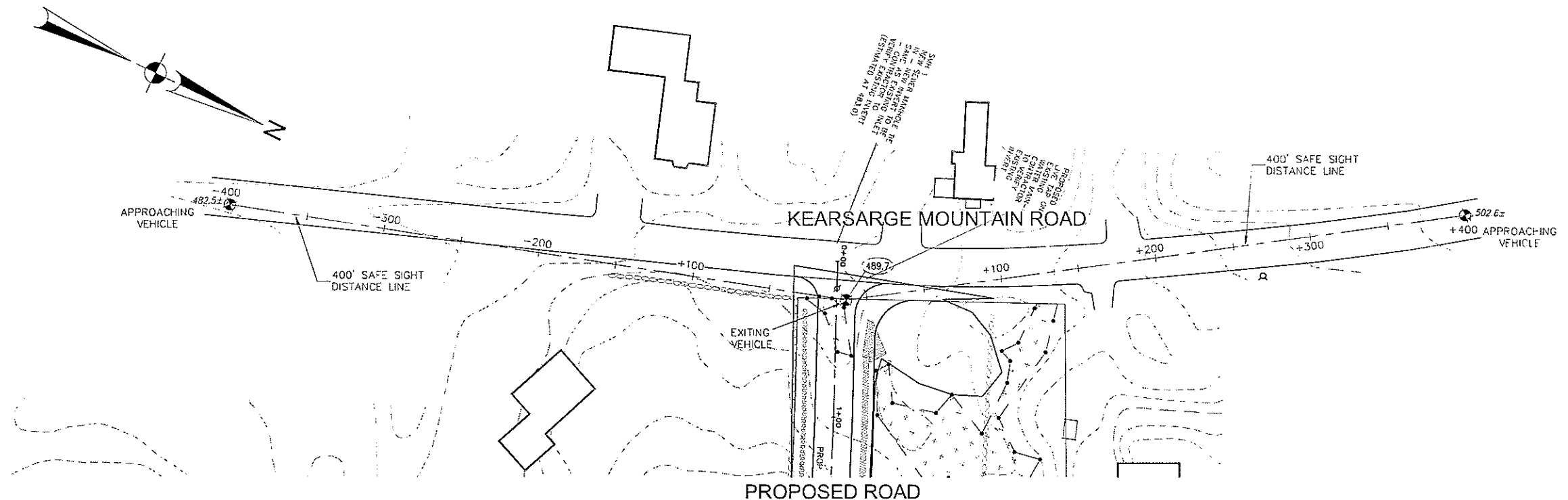
Owner / Applicant:
 Sydney Elizabeth Boyer
 Kearsarge Mountain Road
 Warner, NH 03278

ROADWAY PROFILE
 TAX MAP 33 LOT 18
 Kearsarge Mountain Road
 Warner, New Hampshire

REVISIONS			
DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
 89 KING ROAD, CHICHESTER, NH
 PH: 603-387-8688

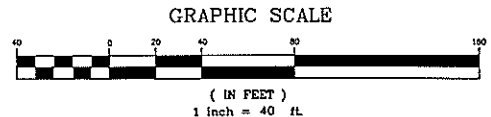
SCALE: 1"=40'(H) 4'(V)
 DATE: JUNE 28, 2023
 DR. BY: JR CK. BY: JR
 JOB NO. _____
 SHEET NO. 9 OF 16



SEE DETAIL SHEETS FOR NOTES ABOUT CONSTRUCTION SEQUENCE, AND PROCEDURES FOR PROPER CONSTRUCTION AND EROSION CONTROL PRACTICES.



CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION
 THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. THE ENGINEERS MAKE NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ANY UTILITIES WHETHER THEY BE ABOVE OR BELOW GROUND. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-800-DIG-SAFE.



APPROVED BY THE WARNER NH PLANNING BOARD

CHAIRPERSON / VICE CHAIRPERSON _____

DATE _____

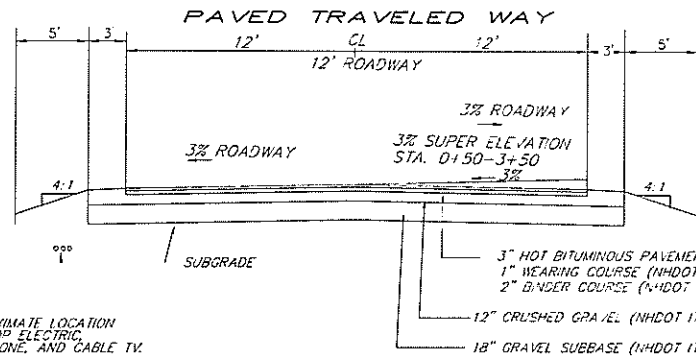
Owner / Applicant:
 Sydney Elizabeth Boyer
 Kearsarge Mountain Road
 Warner, NH 03278

SIGHT DISTANCE PLAN AND PROFILE
 TAX MAP 33 LOT 18
 Kearsarge Mountain Road
 Warner, New Hampshire

REVISIONS			
DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
 89 KING ROAD, CHICHESTER, NH
 PH: 603-387-8688

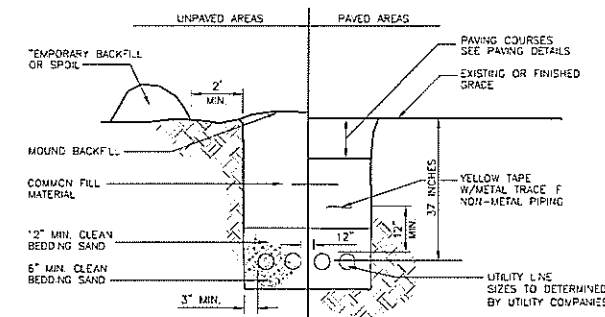
SCALE: 1"=40'
 DATE: JUNE 28, 2023
 DR. BY: JR CK. BY: JR
 JOB NO. _____
 SHEET NO. 10 OF 16



APPROXIMATE LOCATION OF PROP. ELECTRIC, TELEPHONE, AND CABLE TV.

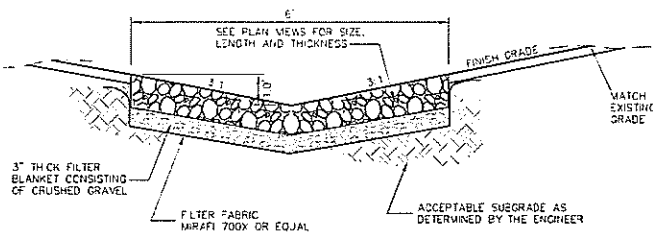
- NOTES:**
- ALL ROADWAY CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE LATEST N.H.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2010 INCLUDING SUBSEQUENT AMENDMENTS AND EDITIONS.
 - PROVIDE 4" (MIN.) COMPACTED LOAM AND SEED ON ALL SIDE SLOPES AND DRAINAGE SWALES UNLESS OTHERWISE NOTED.
 - ALL LEDGE AND ROCK SHALL BE REMOVED TO 6" BELOW SUBGRADE.

TYPICAL ROADWAY SECTION
(NOT TO SCALE)



NOTE: EXACT INSTALLATION AND MATERIALS OF UNDERGROUND UTILITIES SHALL BE PER SERVICE COMPANY SPECIFICATIONS

UTILITY TRENCH DETAIL
NOT TO SCALE



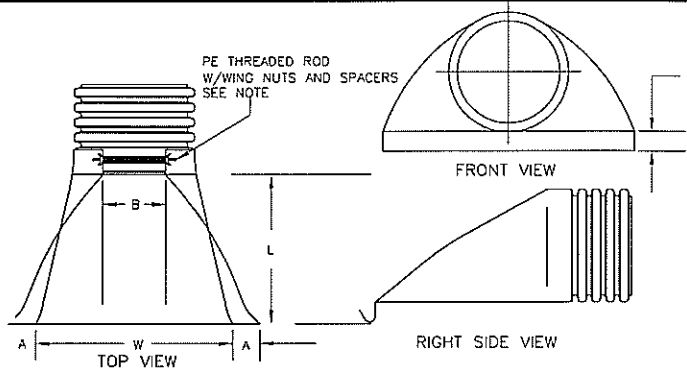
RIP-RAP GRADATION

STONE SIZE	D ₅₀ = 0"	D ₁₀₀ = 9"	D ₅₀ = 12"	D ₅₀ = 18"	D ₅₀ = 24"
2"	0-15%	0%	-	-	-
4"	20-35%	10-20%	0-10%	-	-
6"	35-50%	25-35%	10-25%	0-10%	-
8"	50-55%	30-50%	20-30%	10-20%	0-10%
10"	60-80%	40-60%	30-40%	15-30%	5-15%
12"	75-100%	-	-	-	-
15"	-	70-100%	45-60%	25-40%	20-30%

GRAVEL FILTER GRADATION

SEVE. SIZE	% PASSING BY HEIGHT
3/8"	100
3"	85-100
1 1/2"	60-80
3/4"	40-70
1/2"	20-50
NO. 4	10-40
NO. 200	0-8

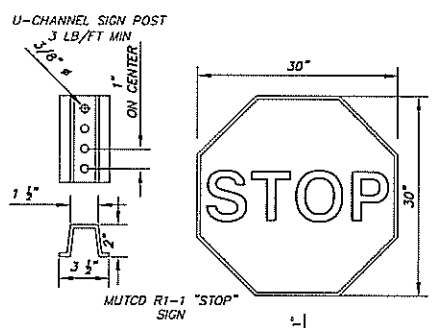
RIP RAP SWALE
NOT TO SCALE



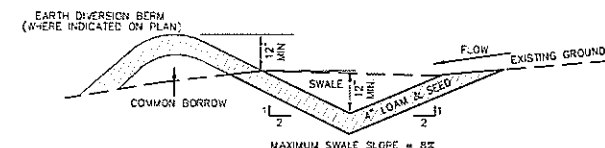
NOTE: PE THREADED ROD W/WING NUTS PROVIDED FOR END SECTIONS - 24", 30" & 36" END SECTIONS REQUIRE TWO (2) THREADED RODS FOR ASSEMBLY.

PART #	PIPE SIZE	A	B (MAX)	H	-
121CNP	12 IN	6.50 IN	10.00 IN	6.50 IN	25.00 IN
151CNP	15 IN	6.50 IN	10.00 IN	6.50 IN	25.00 IN
181CNP	18 IN	7.50 IN	15.00 IN	6.50 IN	32.00 IN
241CNP	24 IN	7.50 IN	18.00 IN	6.50 IN	36.00 IN
301SNP	30 IN	7.50 IN	12.00 IN	6.60 IN	58.00 IN
361SNP	36 IN	7.50 IN	25.00 IN	6.60 IN	58.00 IN

ADS
ADVANCED DRAINAGE SYSTEMS, INC.
HDPE FLARED END SECTION

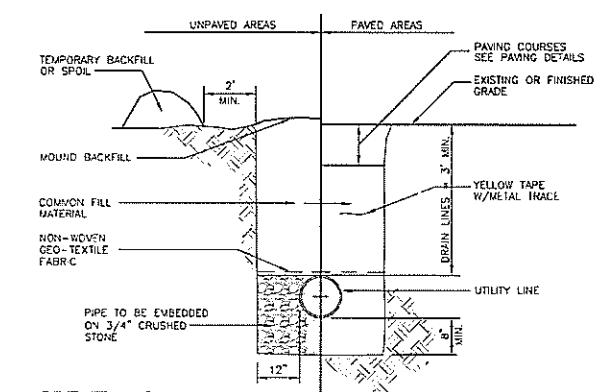


SITE SIGNAGE DETAIL
NOT TO SCALE

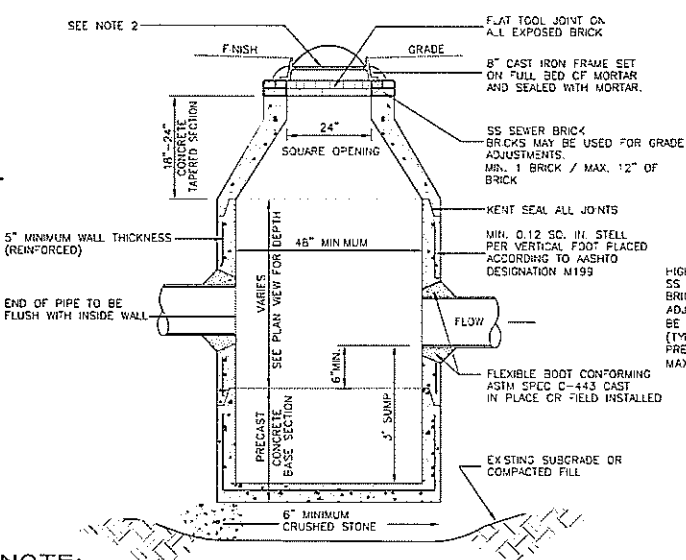


- CONSTRUCTION NOTES**
- THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS AND OTHER OBJECTIONABLE MATERIAL. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY DO NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTION OF THE WATERWAY.
 - THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
 - EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT HEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
 - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR DESIGN AND INSTALLATION.
 - THE WATERWAY SHALL BE STABILIZED USING THE APPROPRIATE "BEST MANAGEMENT PRACTICES" FOR VEGETATIVE MEASURES.

GRASS LINED SWALE
NOT TO SCALE

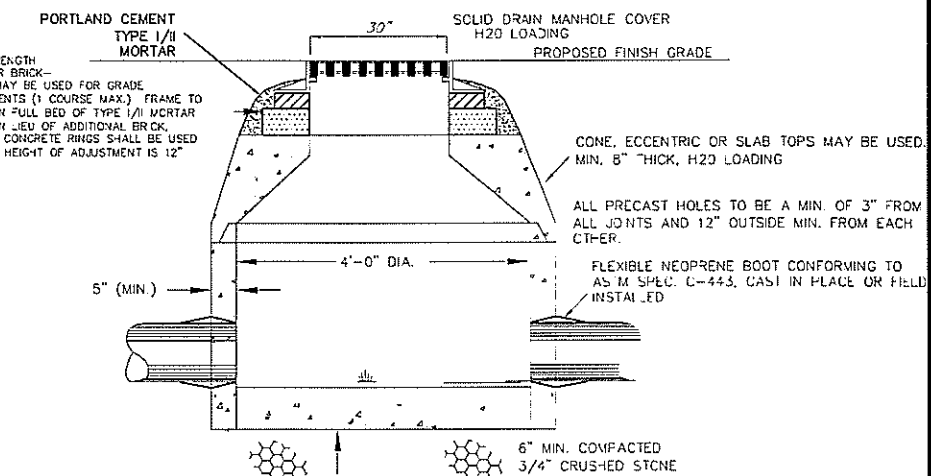


TRENCH FOR DRAIN LINES
NOT TO SCALE

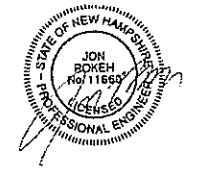


- NOTE:**
- ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478. CATCH BASIN STRUCTURE SHALL BE CAPABLE OF AASHTO H-20 LOADING WITHOUT FAILURE.
 - USE MHDOT TYPE B ALT-1 IN PAVED AREAS, DITCH GRATES IN SWALES.
 - POLYETHYLENE INSERT LINERS ARE TO BE INSTALLED ON ALL NEW CATCH BASINS.

CATCH BASIN DETAIL
SINGLE PIPE SYSTEM
NOT TO SCALE



DRAIN MANHOLE
NOT TO SCALE



Owner / Applicant:
Sydney Elizabeth Boyer
Kearsarge Mountain Road
Warner, NH 03278

CONSTRUCTION DETAILS
TAX MAP 33 LOT 18
Kearsarge Mountain Road
Warner, New Hampshire

REVISIONS

DATE	DESCRIPTION	DWN BY	CK BY

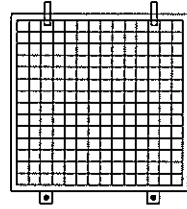
Rokeh Consulting, LLC
89 KING ROAD, CHICHESTER, NH
PH: 603-387-8688

SCALE: AS NOTED
DATE: JUNE 28, 2023
DR. BY: JR CK. BY: JR
JOB NO. _____
SHEET NO. 11 OF 16

CONSTRUCTION SPECIFICATIONS

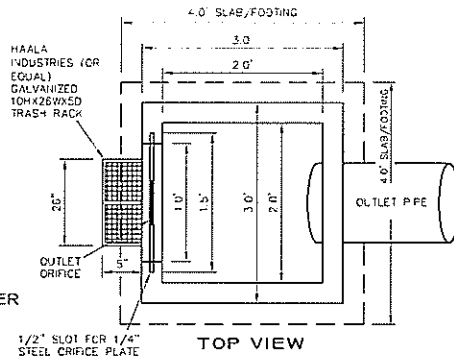
- STRUCTURE SHALL BE PRECAST OR FORMED IN PLACE CONCRETE WITH 6" THICK WALLS
- BASE SLAB SHALL BE A MINIMUM OF 6" PRECAST OR FORMED IN PLACE CONCRETE WITH KEYWAYS
- ALL SECTIONS AND PIPE JOINTS SHALL BE SEALED WITH MORTAR
- ALL PARTS AND GRATES FOR OUTLET STRUCTURES SHALL BE STAINLESS STEEL, AND/OR HOT DIPPED GALVANIZED COATED
- SEE GRADING PLAN VIEWS FOR SPECIFIC ELEVATIONS OF BOTTOM OF DETENTION BASIN, GRATE ELEVATION, OUTLET CRIGES AND PIPE SIZES

HAALA INDUSTRIES GALVANIZED STEEL GRATE MC30X33 (OR EQUAL)

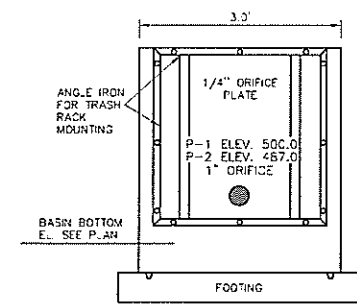


OUTLET STRUCTURE COVER

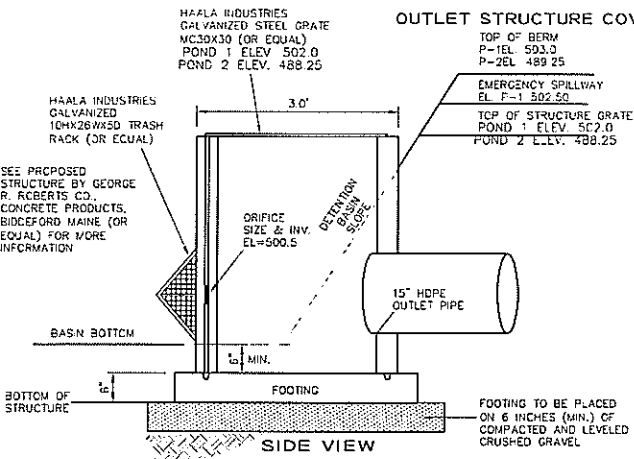
TOP OF BERM P-1 EL. 503.0 P-2 EL. 489.25
EMERGENCY SPILLWAY EL. P-1 502.50
TOP OF STRUCTURE GRATE POND 1 ELEV. 502.0 POND 2 ELEV. 488.25



TOP VIEW



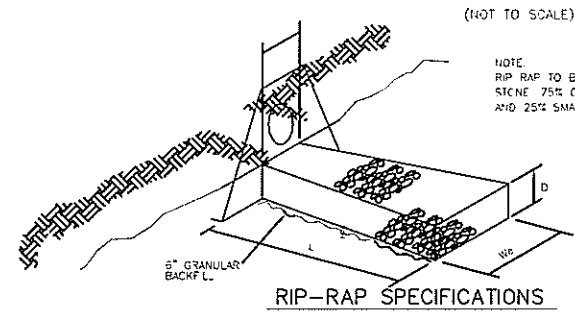
FRONT VIEW



SIDE VIEW

BASIN OUTLET STRUCTURE

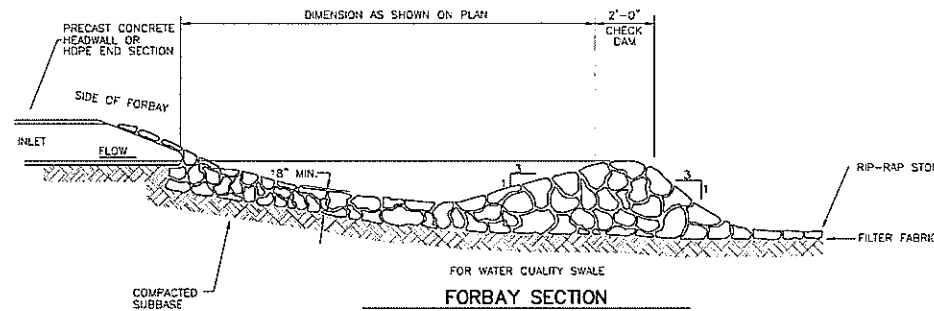
NOT TO SCALE



RIP-RAP SPECIFICATIONS

NOT TO SCALE

DESCRIPTION	LENGTH L	INVERT WIDTH W _i	END WIDTH W _e	STONE FILL	DEPTH OF STONE - D
FES 1	10'	3.75'	11'	5"	1.5'
FES 2	9'	3.75'	10'	6"	1.5'



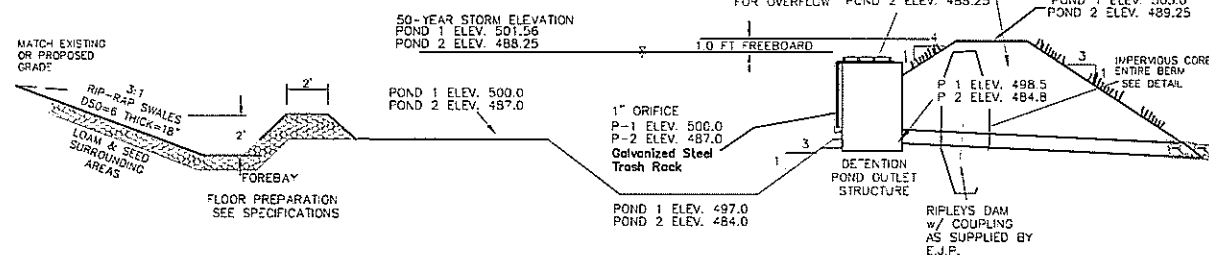
FORBAY SECTION

NOT TO SCALE

FORBAY	REQUIRED FORBAY	PROPOSED FORBAY VOLUME CF	ROCK DAM	STONE
1	1830CF	2000CF	2'	6" STONE FILL
1	2770CF	2500CF	2'	6" STONE FILL

TYPICAL EMERGENCY SPILLWAY DETAIL

NOT TO SCALE



SAFETY

- PONDS THAT ARE EASILY ACCESSIBLE IN POPULATED AREAS SHOULD INCORPORATE ALL POSSIBLE SAFETY PRECAUTIONS. DUE TO ONLY TEMPORARY WATER LEVELS IN THESE BASINS, FENCING IS NOT NECESSARY.

MAINTENANCE

- MAINTENANCE IS NECESSARY IF THE BASIN IS TO CONTINUE TO FUNCTION AS DESIGNED. THE LANDOWNER MUST BE AWARE OF THE REQUIREMENTS FOR A PROPERLY OPERATIONAL BASIN AND A PLAN BE DEVELOPED FOR REGULAR SCHEDULED MAINTENANCE.
- THE EMBANKMENT SHOULD BE INSPECTED TO DETERMINE IF RODENT BURROWS, WEI AREAS OR EROSION OF THE FILL IS TAKING PLACE.
- THE VEGETATION SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS DETERMINED BY SOIL TESTS. TREES AND SHRUBS SHOULD BE KEPT OFF THE EMBANKMENT AND EMERGENCY SPILLWAY AREAS.
- PIPE INLETS AND SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED. IF PIPES ARE COATED, THE COATING SHOULD BE CHECKED AND REPAIRED AS NECESSARY.
- PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE, THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLET.
- SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACHED THE PREDETERMINED DESIGN ELEVATION, THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.

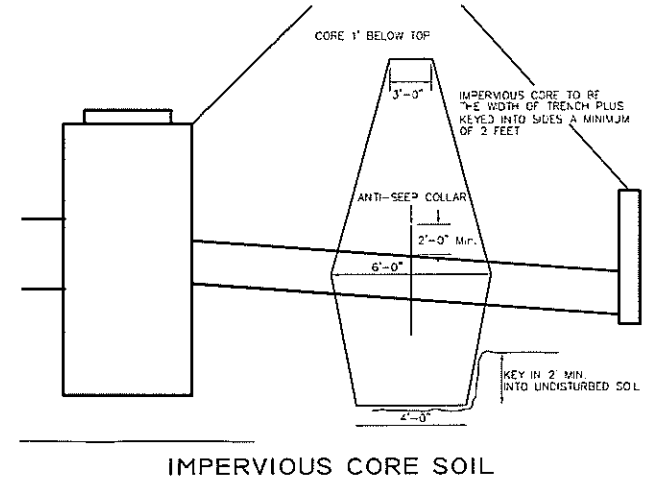
INFILTRATION BASIN NOTES:

- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUIHOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION BASIN.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
- AFTER THE INFILTRATION SYSTEM AREA IS EXCAVATED TO THE BOTTOM OF THE FILTER MEDIA, THE FLOOR SHOULD BE DEEPLY FILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG, THEN APPLY THE FILTER MEDIA.
- VEGETATION WITHIN THE BASIN 18 INCHES ABOVE THE FILTER MEDIA ELEVATION ON THE SIDE SLOPES SHOULD BE ESTABLISHED IMMEDIATELY.
- DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

DETENTION BASIN DETAIL

SECTION

NOT TO SCALE

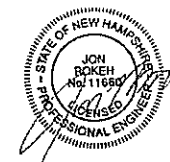


IMPERVIOUS CORE SOIL

- IMPERVIOUS CORE AND POND LINER SOIL SAMPLES AND SIEVE ANALYSIS TO BE SUBMITTED FOR APPROVAL PRIOR TO CONSTRUCTION. IMPERVIOUS SOILS TO MEET THE FOLLOWING CRITERIA:
SOIL SHALL HAVE NO ORGANIC MATTER OR FROZEN MATERIAL AND NO STONES LARGER THAN 2/3 OF THE MAXIMUM LIFT SIDE. STONES AROUND ANY STRUCTURES AND/OR CONDUITS SHALL NOT EXCEED 3 INCHES. FILL MATERIAL SHALL HAVE THE FOLLOWING GRADATION:

SIEVE SIZE	% PASSING
#4	95 - 100
#40	60 - 90
#100	40 - 60
#200	25 - 45

- THE CONTRACTOR SHALL USE CARE NOT TO OVER EXCAVATE AND DISTURB THE EXISTING SOIL AT THE BERM AND OUTLET PIPE AREAS.
- IMPERVIOUS CORE SHALL BE INSTALLED WITHIN THE LIMITS SHOWN ALONG THE BERM AREA AND SHALL BE PLACED IN LIFTS NOT EXCEEDING 9" AND COMPACTED TO A MINIMUM 95% OF THE WET WEIGHT AS DETERMINED BY MODIFIED TESTING (ASTM 1557)
- AT THE IMPERVIOUS DAM AREA, THE DAM SHALL BE KEVED INTO TO BOTTOM AND SIDES OF THE TRENCH A MINIMUM OF 2". THE IMPERVIOUS SOIL SHALL BE PLACED IN LIFTS NOT EXCEEDING 9" AND COMPACTED TO A MINIMUM 95% OF THE WET WEIGHT AS DETERMINED BY MODIFIED TESTING (ASTM 1557)



NEW ENGLAND WETLAND PLANTS, INC.

NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION PONDS AND MUST SITES

PLANT SPECIES	PERCENTAGE	REMARKS
ELYMUS RIPARIUS	RIVERBANK WILD RYE	FACW
SCHIZACHYRIUM SCOPARUM	LITTLE BLUESTEM	FACU
FESTUCA RUBRA	RED FESCUE	FACU
ANDROPOGON GERARDII	BIG BLUESTEM	FAC
PANICUM VIRGATUM	SWITCH GRASS	FAC
VERBONIA NOVAE-ANGLIAE	NEW YORK IRONWEED	FACW+
AGROSTIS PERENNANS	UPLAND BENTGRASS	FACU
BIDENS FRONDOSA	BEGGAR TICKS	FACW
EUPATORIUM MACULATUM (EUTROCHIUM MACULATUM)	SPOTTED JOE PYE WEED	ORL
EUPATORIUM PERfoliatum	BIGWEED	FACW
ASTER NOVAE-ANGLIAE (SYMPHYOTRICHUM NOVAE-ANGLIAE)	NEW ENGLAND ASTER	FACW
SCIRPUS CYPERIUS	WOOD GRASS	FACW
JUNCUS EFFUSUS	SOFT RUSH	FACW-

MICRO POOL PONDS SEED MIX

NOT TO SCALE

Owner / Applicant:
Sydney Elizabeth Boyer
Kearsarge Mountain Road
Warner, NH 03278

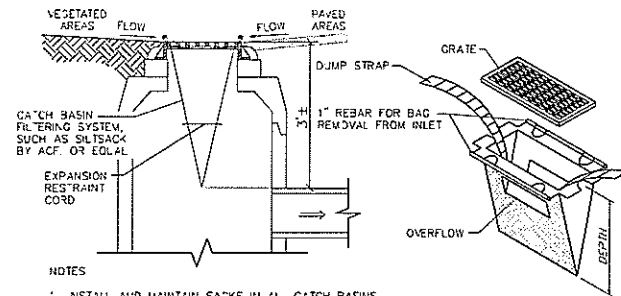
CONSTRUCTION DETAILS
TAX MAP 33 LOT 18
Kearsarge Mountain Road
Warner, New Hampshire

REVISIONS

DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
89 KING ROAD, CHICHESTER, NH
PH: 603-387-8688

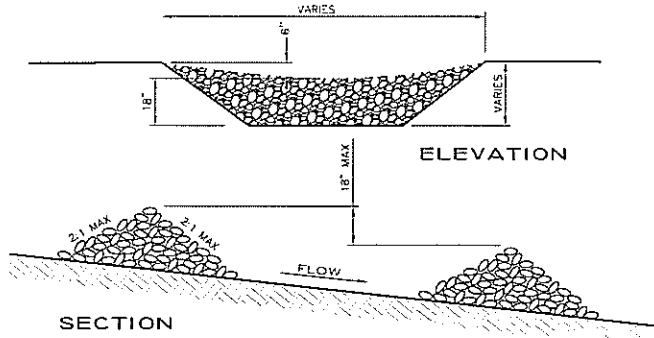
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DATE: JUNE 28, 2023
DR. BY: JR CK. BY: JR
JOB NO. _____
SHEET NO. 12 OF 16



NOTES

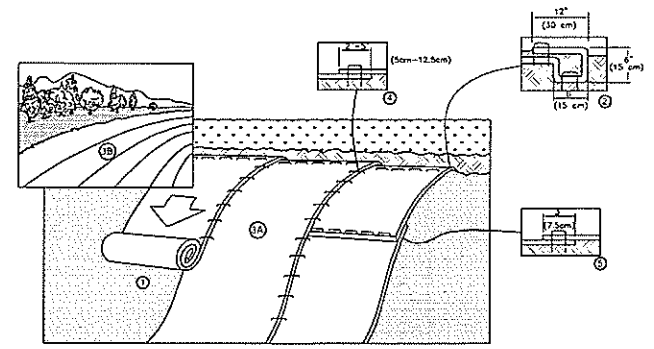
1. INSTALL AND MAINTAIN SACKS IN ALL CATCH BASINS.
2. TO INSTALL SACK, REMOVE CATCH-BASIN GRATE AND PLACE SACK IN OPENING. HOLD OUT APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME FOR THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
3. THE SACK SHOULD BE INSPECTED AFTER EVERY STORM, OR ONCE EVERY TWO WEEKS, WHICHEVER OCCURS FIRST.
4. THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SACK SHOULD BE EMPTIED. EMPTY THE SACK AWAY FROM THE CATCH BASIN TO PREVENT SEDIMENT FROM RE-ENTERING THE CATCH BASIN EMPTY THE SACK PER THE MANUFACTURER'S RECOMMENDATIONS.
5. REPLACE THE SACK IN THE CATCH BASIN AFTER THE SACK HAS BEEN EMPTIED. ONCE CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED BY PAVING OR A HEALTHY VEGETATIVE COVER, REMOVE THE SACK FROM THE CATCH BASINS.

"SILT-SAK" SEDIMENT CONTROL
FOR DRAINAGE STRUCTURES NOT TO SCALE



- NOTE**
1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
 2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION WILL BE MINIMIZED.
 3. WHEN STRAW BALES ARE USED, THEY ARE TO BE EMBEDDED INTO THE SOIL 4 INCHES. WHEN TIMBERS ARE TO BE USED, THE TIMBER SHALL EXTEND AT LEAST 18 INCHES INTO THE SOIL.
 4. STRAW OR STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2"x2" STAKES DRIVEN THROUGHOUT THE BALES AT LEAST 18 INCHES INTO THE SOIL.
 5. SEEDING, FERTILIZING AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE BMP.
 6. STRUCTURES ARE TEMPORARY AND ARE TO BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS EXPIRED, WHEN A SOLID STAND OF GRASS HAS GROWN AND STABILIZED.

STONE CHECK DAM
NOT TO SCALE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIQUID FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

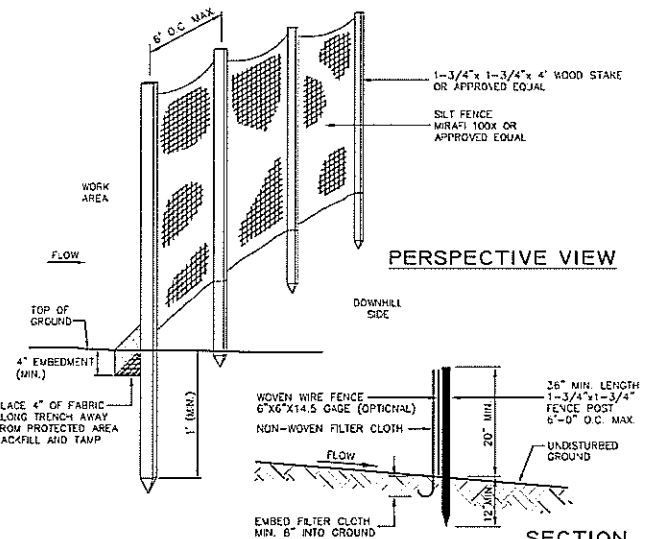
NOTE:
ON LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
USA 1-800-772-2040 CANADA 1-800-448-2040
www.northgreen.com



- NOTE:**
- 1) THIS PRACTICE SHALL BE USED FOR ALL ROADWAY AND DRIVEWAY SLOPES STEEPER THAN 3:1 WITH A VERTICAL GRADE HIGHER THAN 3 FEET.
 - 2) "NORTH AMERICAN GREEN" SCS150BN OR EQUAL.

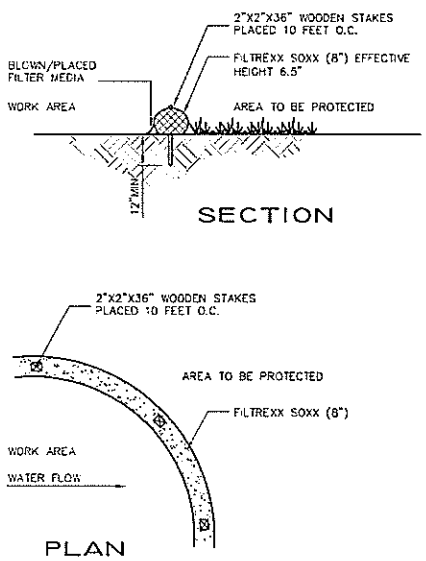
SLOPE STABILIZATION
FOR EROSION CONTROL NOT TO SCALE



NOTE:
A MULCH SILT SOX TUBE METHOD MAY BE SUBSTITUTED FOR SILT FENCE IN AREAS IF DESIRED. CONSULT WITH MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION METHODS.

- MAINTENANCE**
1. SILT FENCES ARE TO BE INSPECTED IMMEDIATELY AFTER EVERY RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
 2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
 3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF OF THE BARRIER.
 4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

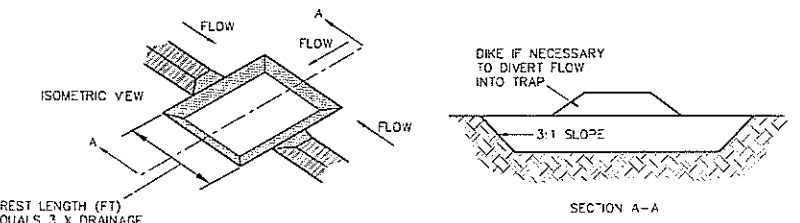
SILT FENCE DETAIL
NOT TO SCALE



- NOTE**
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
 2. FILTER MEDIA TO MEET APPLICATION REQUIREMENTS.
 3. COMPOST MATERIAL TO BE DISPERSED ON-SITE, AS DETERMINED BY THE ENGINEER.
 4. MAXIMUM SLOPE LENGTH ABOVE THE FILTREXX SOXX IS 200 FEET FOR A 10% SLOPE, 140 FEET FOR A 15% SLOPE, 100 FEET FOR A 20% SLOPE, 80 FEET FOR A 25% SLOPE.
 5. CONTRACTOR IS TO BE FILTREXX CERTIFIED AS DETERMINED BY MANUFACTURER.
 6. STAKES SHALL BE INSTALLED THROUGHOUT THE MIDDLE OF THE SOXX ON 10 FOOT CENTERS.
 7. SEDIMENT CONTROL SHOULD BE PLACED NEAR PARALLEL TO THE BASE OF THE SLOPE AS SHOWN ON THE PLANS.
 8. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE SOXX, FILLING THE SEAM BETWEEN THE SOIL AND THE DEVICE.
 9. IF THE "FILTREXX SOXX" IS TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, IT MAY BE SEED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.

- MAINTENANCE**
1. THE CONTRACTOR SHALL MAINTAIN THE SEDIMENT CONTROL IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
 2. IF DAMAGED, IT SHALL BE REPAIRED OR A SECTION REPLACED IF BEYOND REPAIR.
 3. THE CONTRACTOR SHALL REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF THE SEDIMENT CONTROL WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE CONTROL OR 3.25 INCHES (FOR AN 8 INCH SOXX THE EFFECTIVE HEIGHT IS 6.5 INCHES).
 4. SEDIMENT CONTROL SHALL BE MAINTAINED UNTIL THE DISTURBED AREA ABOVE THE DEVICE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED IN THAT AREA.
 5. THE FILTER MEDIA MAY BE DISPERSED ON SITE ONCE THE AREA HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED IN THAT AREA.

'FILTREXX' SEDIMENT CONTROL DETAIL ("SOXX")
NOT TO SCALE



CREST LENGTH (FT) EQUALS 3 X DRAINAGE AREA (ACRES)

ANY TEMPORARY SEDIMENT TRAP SHALL BE IN ACCORDANCE WITH NHDES ENV-WQ 1506.10 REQUIREMENTS

TEMPORARY SEDIMENTATION TRAP DETAIL
NOT TO SCALE



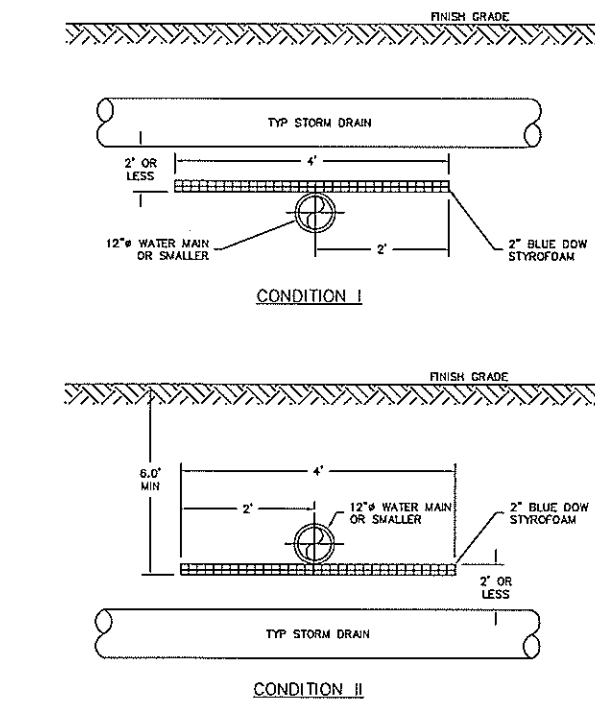
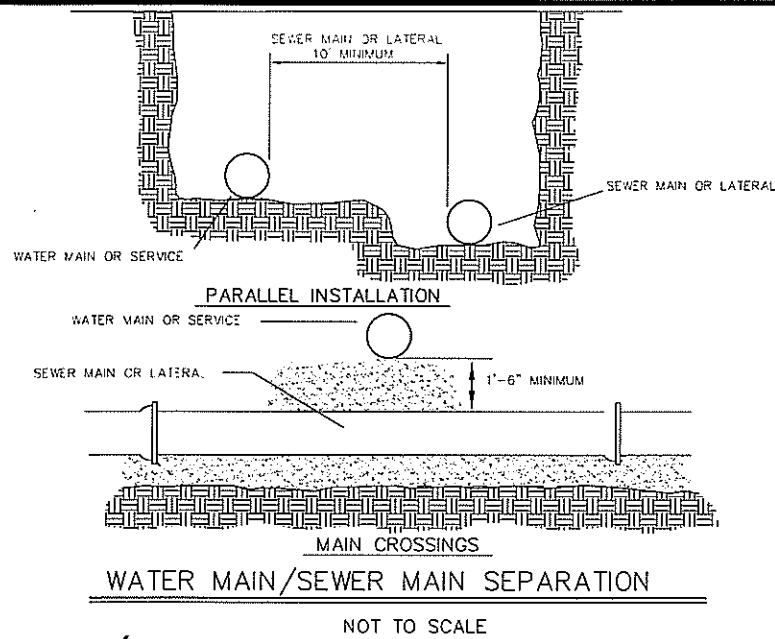
Owner / Applicant:
Sydney Elizabeth Boyer
Kearsarge Mountain Road
Warner, NH 03278

CONSTRUCTION DETAILS
TAX MAP 33 LOT 18
Kearsarge Mountain Road
Warner, New Hampshire

REVISIONS			
DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
89 KING ROAD, CHICHESTER, NH
PH: 603-387-8688

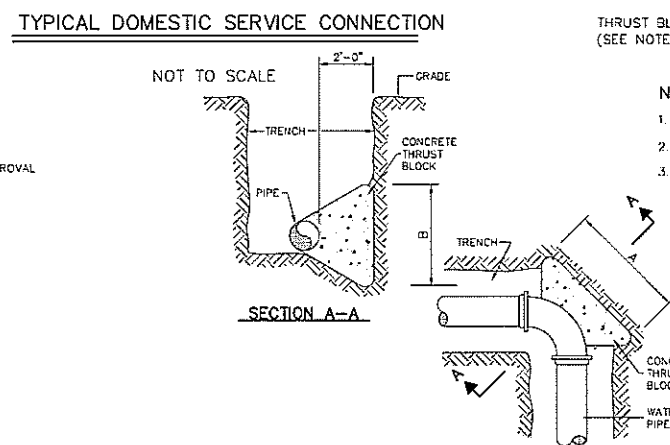
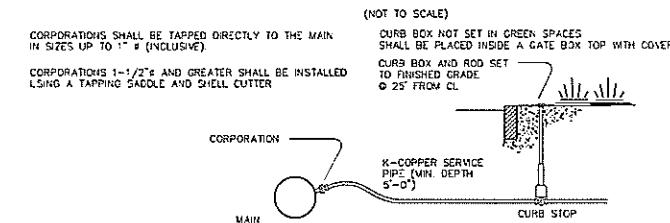
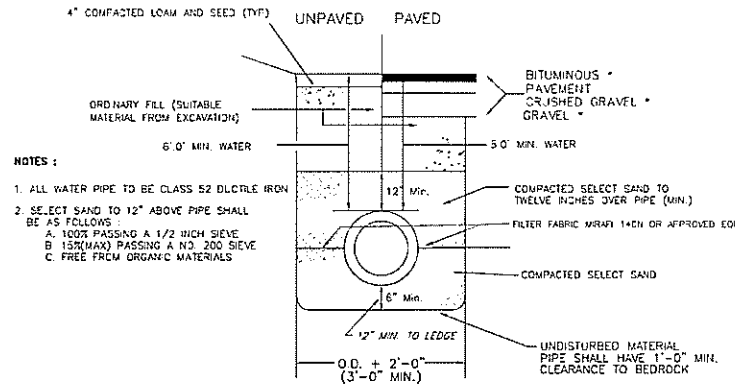
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DATE: JUNE 28, 2023
DR. BY: JR CK. BY: JR
JOB NO. _____
SHEET NO. 13 OF 16



- NOTES:**
- LOCAL WATER WORKS RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
 - THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
 - ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

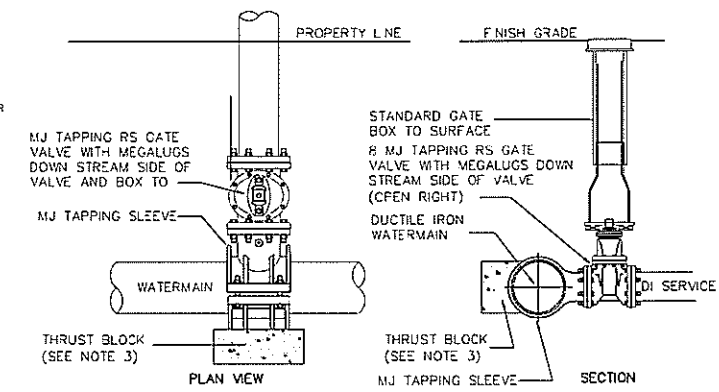
STORM DRAIN / WATER MAIN INTERSECTING RUNS - ELEV. VIEW (A-18)

(NOT TO SCALE)

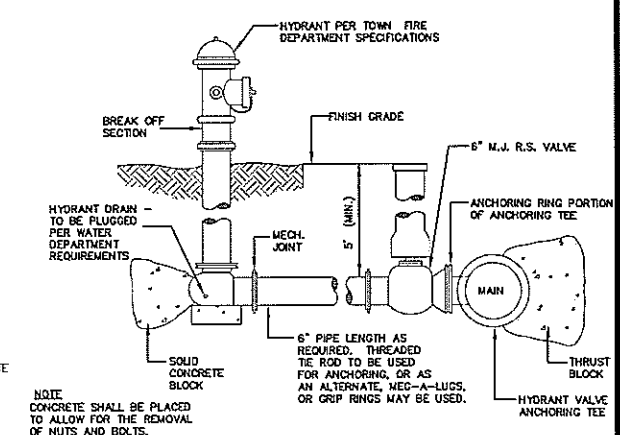


GENERAL NOTES

- ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE CITY OF LACONIA REGULATIONS, AND ALL ROAD AND DRAINAGE STRUCTURES SHALL MEET NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDT), STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1993, (AND ALL SUBSEQUENT AMENDMENTS) DRAINAGE DESIGN IS BASED ON THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" AUGUST 1992, WHICH IS AVAILABLE FROM THE ROCKINGHAM COUNTY CONSERVATION DISTRICT OFFICE.
- BACKFILL OF TRENCHES SHALL BE IN 6" LIFTS, COMPACTED TO 95% MAX. DRY DENSITY UNDER ALL PAVED AND SHOULDER AREAS AND 92% MAX. DRY DENSITY UNDER OTHER ALL AREAS IN ACCORDANCE WITH NH DOT-STANDARD SPECIFICATIONS-SECTION 304.
- THE CONTRACTOR SHALL BE AWARE OF HIS RESPONSIBILITY TO CONTACT "DIG SAFE" AT 1-1 SO. BEDFORD STREET, BURLINGTON, VA (1-800-225-4877) AT LEAST 72 WORKING HOURS PRIOR TO THE START OF ANY EXCAVATION.
- ALL WORK ADJACENT TO A STREET SHALL BE PERFORMED IN ACCORDANCE WITH THE STREET OPENING REQUIREMENTS OF THE CITY OF LACONIA.
- ALL CULVERTS, DRAINAGE STRUCTURES, WATER LINE, SEWER, AND ROAD CONSTRUCTION SHALL BE SUBJECT TO PARTIAL AND FINAL INSPECTION PRIOR TO ACCEPTANCE BY THE CITY OF LACONIA. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING INSPECTION BY THE TOWN ENGINEER.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 4" TOPSOIL AND SEED OVER ALL DISTURBED UNPAVED AREAS UNLESS OTHERWISE SPECIFIED.



- NOTE:**
- ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO D.P.W. TECHNICAL SPECIFICATIONS.
 - ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 - M.J. 2"x2"x4" PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH D.P.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.



REFERENCE: "STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWERAGE AND WASTE WATER TREATMENT FACILITIES", DEPT OF ENVIRONMENTAL SERVICES.



Owner / Applicant:
 Sydney Elizabeth Boyer
 Kearsarge Mountain Road
 Warner, NH 03278

WATER SYSTEM CONSTRUCTION DETAILS
 TAX MAP 33 LOT 18
 Kearsarge Mountain Road
 Warner, New Hampshire

REVISIONS			
DATE	DESCRIPTION	OWN BY	CK BY

Rokeh Consulting, LLC
 89 KING ROAD, CHICHESTER, NH
 PH: 603-387-8688

SCALE: AS NOTED
 DATE: JUNE 28, 2023
 DR. BY: JR CK. BY: JR
 JOB NO. _____
 SHEET NO. 15 OF 16

- THE MANHOLE VACUUM TEST SHALL BE IN ACCORDANCE WITH ASTM C1244 AND CONFORM TO THE FOLLOWING:
 - THE INITIAL VACUUM GALGE TEST PRESSURE SHALL BE 10 INCHES HG. AND
 - THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH HG PRESSURE DROP TO 9 INCHES HG SHALL BE:
 - NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH.
 - NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP, AND
 - NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
- THE MANHOLE SHALL BE REPAIRED AND RE-TESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED ABOVE.
- FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE. MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE SIX INCHES.

PIPE AND JOINT MATERIALS

- PLASTIC PIPE:**
 - PVC SEWER PIPE AND FITTINGS SHALL CONFORM TO ASTM D2412 (SDR 35 MINIMUM) WITH CDS OF SHIPPING AND STORAGE ON SITE SHALL BE SUCH AS TO AVOID INJURY TO THE PIPE. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
 - ALL FITTINGS SHALL BE INJECTION MOLDED FITTINGS. FABRICATED FITTINGS ARE NOT ALLOWED EXCEPT AS PERMITTED BY THE TOWN ENGINEER.
 - JOINTS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212. MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION SHALL BE FOLLOWED. SOLVENT CEMENT JOINTS SHALL NOT BE PERMITTED.
- DUCTILE IRON PIPE:**

DUCTILE IRON PIPE SHALL CONFORM TO AWWA C151/A21.50 & A21.51. PIPE SHALL HAVE EITHER THE RUBBER-RING TYPE, PUSH-ON JOINT, OR STANDARD MECHANICAL JOINT.
- FORCE MAIN:**

HDPE FORCE MAIN SEWER PIPE SHALL CONFORM WITH ASTM D3035. PVC FORCE MAIN PIPE SHALL CONFORM WITH ASTM D2241 OR ASTM D1785. FORCE MAIN CLEANOUT VALVES AND FITTINGS SHALL BE INSTALLED IN MANHOLES MEETING THE REQUIREMENTS OF ENR-WQ 704.12 TO 704.17.

GRAVITY SEWER P.F.E. TESTING PER ENR-WQ 704.06

- ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
- LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH A ASTM F1417 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR", OR B JV-BELL PVC PIPE ASSOCIATION UN-6-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE".
- ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER, AND TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR USE.
- ALL PLASTIC SEWER PIPE SHALL VISUALLY INSPECTED AND DEFLECTION TESTED NO LESS THAN 33 DAYS NOR MORE THAN 90 DAYS FOLLOWING THE INSTALLATION.
- THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF AVERAGE INSIDE DIAMETER, A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER. DEFLECTION TESTING PIPE DEFLECTION, THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.

FORCE MAIN

FORCE MAINS SHALL BE TESTED IN ACCORDANCE WITH SECTION 5 OF AWWA C603 "INSTALLATION OF CAST IRON WATER MAINS AND THEIR APPURTENANCES", STANDARD IN EFFECT WHEN THE TEST IS CONDUCTED, AT A PRESSURE EQUAL TO THE GREATER OF 210 PERCENT OF THE DESIGN OPERATING TOTAL DYNAMIC HEAD OR AT LEAST 100 PSI.

SEWER MANHOLE NOTES:

- IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE REQUIREMENTS AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT IN ANY APPROVED MANHOLE. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE, A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES. MANHOLE STRUCTURES SHALL HAVE A LIFE IN EXCESS OF 25 YRS.
- PRECAST CONCRETE MANHOLES SHALL CONFORM WITH ASTM C478 PER ENR-WQ 704.13 (A)(3) BARRELS AND CONE SECTIONS SHALL BE REINFORCED CONCRETE PER ENR-WQ 704.12(d). PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDUBLY MARKED ON THE SIDE WALL. BASE SECTIONS SHALL BE MONOLITHIC TO A POINT AT LEAST 6" ABOVE THE CROWN OF INCOMING PIPE PER ENR-WQ 704.12(e).
- ALL SEWERS, MANHOLES AND FORCE MAINS SHALL BE TESTED FOR WATER TIGHTNESS BY USE OF EITHER WATER OR LOW PRESSURE AIR TESTS. LOW PRESSURE AIR TESTS SHALL CONFORM TO ASTM C828. SERVICES TO BE TESTED AT SAME TIME AS MAINS PRIOR TO BUILDING CONNECTION.
- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LARGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY, INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING ALL BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32. CLAY OR SHALE FOR GRADE SS HAND BRICK. BRICK MASONRY SHALL CONFORM WITH ASTM C32 PER ENR-WQ 704.13 (A)(9) MORTAR SHALL CONFORM WITH ENR-WQ 704.13 (C). UNDERLAYMENT OF MANHOLE INVERT AND SHELF SHALL BE BRICK MASONRY PER ENR-WQ 704.12(k).
- BEDDING: SCREENED CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33:

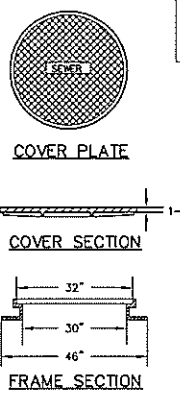
100% PASSING 1 INCH SCREEN	0-10% PASSING #1 SIEVE
90% PASSING 3/4 INCH SCREEN	0-5% PASSING #8 SIEVE
20-55% PASSING 3/8 INCH SCREEN	0% PASSING #200 SIEVE

 WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR 1.5 INCH CRUSHED STONE SHALL BE USED.
- FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM MANHOLE JOINTS:

RCP OR PIPE - ALL SIZES - WITHIN 48"
PVC GREATER THAN 15" - WITHIN 60"
- SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF OVERLAPPING TYPE, WHICH SHALL DEPEND FOR WATER TIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
- PIPE TO MANHOLE JOINTS SHALL BE ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND OPENING SURFACES; CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS; ELASTOMERIC SEALING RING CAST IN MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING AND NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
- FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY APPROVED BITUMASTIC SEALANTS.

RAM - NEK
KENT SEAL NO. 2 DOUBLE ROLL.

 ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.
- MORTAR SHALL CONFORM WITH ENR-WQ 704.13 MORTAR SHALL BE TYPE 1/1 PORTLAND CEMENT.
- UNLESS OTHERWISE NOTED ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST.
- STEPS ARE NOT ALLOWED.

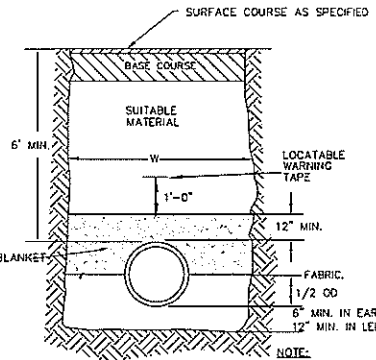


REFERENCE: "STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWAGE AND WASTE WATER TREATMENT FACILITIES", DEPT OF ENVIRONMENTAL SERVICES, ENR-WQ-702

SEWER MANHOLE COVER NOTES:

- CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.
- CASTINGS SHALL BE EQUAL TO CLASS 30, CONFORMING TO ASTM A48.
- WHERE MANHOLE TOPS ARE TO BE FLOODED BY WATER THEY WILL HAVE A WATER TIGHT COVER.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCH CLEAR OPENING, A 3 INCH (MINIMUM HEIGHT) WORD "SEWER" FOR SEWERS OR "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER. MANHOLE COVERS SHALL HAVE NON-PENETRATION PICK HOLES.
- FRAMES AND COVERS SHALL BE NEENAH MODEL R-1975 OR APPROVED EQUAL.
- CASTINGS SHALL CONFORM WITH ASTM A48/48M PER ENR-WQ 704.13 (A)(9).

SEWER MANHOLE COVER NOT TO SCALE



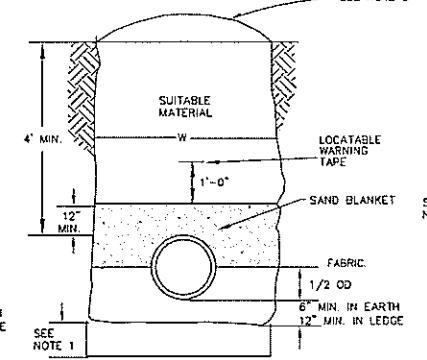
FOR CONSTRUCTION IN ROADS, ROAD SHOULDER & WALK-WAYS

SEWER TRENCH NOTES:

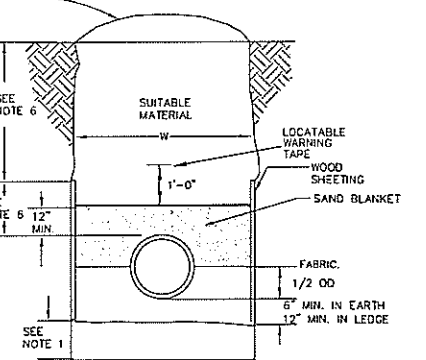
- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. SEE ALSO NOTE 7.

BEDDING PER ENR-WQ704.11(a) SAND FILL FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33-03 STONE SIZE NO. 67.	100% PASSING 1 INCH SCREEN
90-100% PASSING 3/4 INCH SCREEN	3/4 INCH SCREEN
20-55% PASSING 3/8 INCH SCREEN	# 4 SIEVE
0-10% PASSING # 4 SIEVE	# 8 SIEVE
0-5% PASSING # 8 SIEVE	# 16 SIEVE
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRABBED CRUSHED STONE 1/2 INCH TO 1-1/2 INCH SHALL BE USED.	# 50 SIEVE
- SAND BLANKET: ENR-WQ704.11(b) SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM STANDARD SPECIFICATIONS FOR CONCRETE (FINE) AGGREGATES, DESIGNATION C33 AS FOLLOWS:

100% PASSING 3/8 INCH SCREEN	3/8 INCH SCREEN
95-100% PASSING # 4 SIEVE	# 4 SIEVE
60-100% PASSING # 8 SIEVE	# 8 SIEVE
50-85% PASSING # 16 SIEVE	# 16 SIEVE
10-30% PASSING # 50 SIEVE	# 50 SIEVE
FINENESS MODULUS	2.3-3.1
- FILTER FABRIC MIRAFI 140N OR APPROVED EQUAL SHALL BE INSTALLED ABOVE PIPE BETWEEN THE SAND AND STONE LAYER.



CROSS COUNTRY EARTH CONSTRUCTION

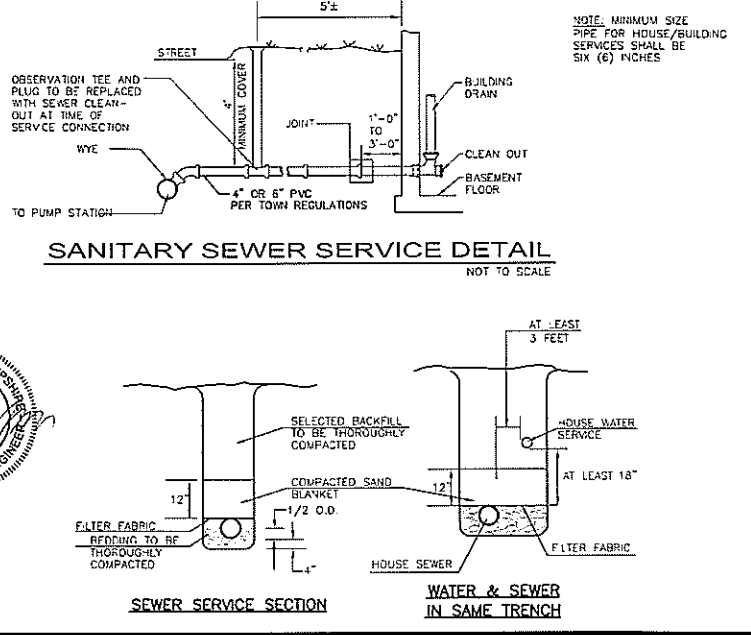
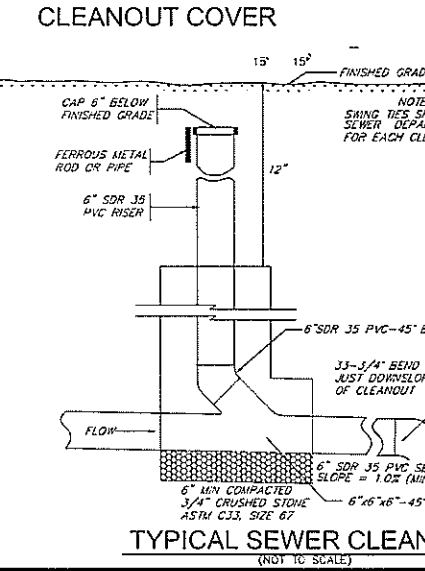
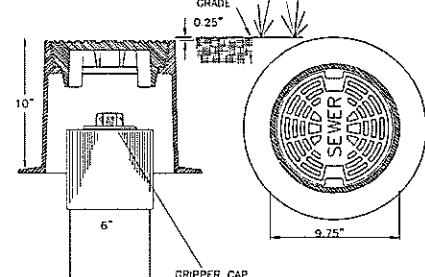
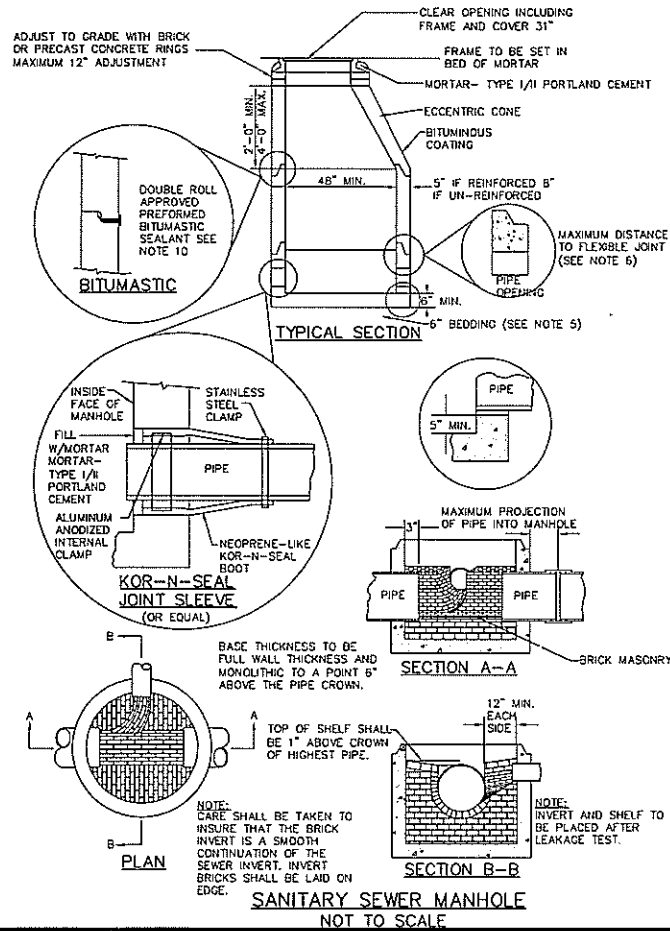


CROSS COUNTRY EARTH CONSTRUCTION WITH SHEETING

TYPICAL SANITARY SEWER TRENCH DETAIL NOT TO SCALE

- SUITABLE MATERIAL: TRENCH BACKFILL MATERIAL SHALL CONFORM WITH ENR-WQ 704.11 (b). IN ROADS, ROAD SHOULDERS, WALK-WAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT IN A STABLE CONDITION.
- IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHICH NECESSARY WILL BE PRESERVED.
- FOR EXCAVATION IN LEDGE, EXCAVATION SHALL EXTEND AT LEAST 12" BELOW THE BOTTOM OF THE SEWER PIPE PER ENR-WQ 704.11 (c).
- BASE COURSE, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS.
- WOOD SHEETING, IF REQUIRED, WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

- W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE TO 1 FT. SEPARATION BETWEEN WATER AND SEWER. HOWEVER, SHOULD CONSTRUCTION REVEAL OR EXPOSE A WATERLINE (MAIN OR SERVICE) RUNNING APPROXIMATELY PARALLEL AND LESS THAN 10 FT. HORIZONTALLY FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICABLE TO RELOCATE THE SEWER, THE FOLLOWING METHODS OF PROTECTION MUST BE EMPLOYED.
 - SEWER PIPE SHALL BE CLASS S2 DUCTILE IRON PIPE.
 - JOINTS SHALL BE PRESSURE TESTED WITH ZERO LEAKAGE AT 25 POUNDS PER SQUARE INCH FOR GRAVITY SEWERS, AND 1-1/2 TIMES WORKING PRESSURE FOR FORCE MAINS.
- WHERE WATERLINES AND SEWER LINES CROSS THEY SHALL CROSS AS PERPENDICULAR AS POSSIBLE AND THE WATER MAIN SHALL CROSS AT LEAST 18" INCHES ABOVE THE SEWER. FURTHER, THE SEWER JOINTS SHALL BE LOCATED AT LEAST 9 FEET HORIZONTALLY FROM THE WATERMAIN. SEWER JOINTS SHALL BE PRESSURE TESTED WITH ZERO LEAKAGE AT 25 POUNDS PER SQUARE INCH FOR GRAVITY SEWERS, AND AT 1-1/2 TIMES WORKING PRESSURE FOR FORCE MAINS.
- ALL SEWERS AT 8 PERCENT OR GREATER SLOPE SHALL HAVE TRENCH DAWS INSTALLED.
- UNLESS OTHERWISE NOTED ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST.



REVISIONS			
DATE	DESCRIPTION	DWN BY	CK BY

Rokeh Consulting, LLC
 89 KING ROAD, CHICHESTER, NH
 PH: 603-387-8688

SCALE: AS NOTED
 DATE: JUNE 28, 2023
 DR. BY: JR CK. BY: JR
 JOB NO. _____
 SHEET NO. 16 OF 16

Owner / Applicant:
 Sydney Elizabeth Boyer
 Kearsarge Mountain Road
 Warner, NH 03278

SEWER SYSTEM CONSTRUCTION DETAILS
 TAX MAP 33 LOT 18
 Kearsarge Mountain Road
 Warner, New Hampshire