# NOT FOR CONSTRUCTI

# PROPOSED SUBDIVISION/SITE PLAN "HIDDEN MEADOW" TAMARIND LANE EXETER, NH TAX MAP 96, LOT 15

# CIVIL ENGINEERS:





# LAND SURVEYORS:

DAVID W. VINCENT, LLS
LAND SURVEYING SERVICES
PO BOX 1622
DOVER, NH 03821
1-603-664-5786

# WETLAND / SOIL CONSULTANT:

GOVE ENVIRONMENTAL SERVICES INC.

8 CONTINENTAL DRIVE,

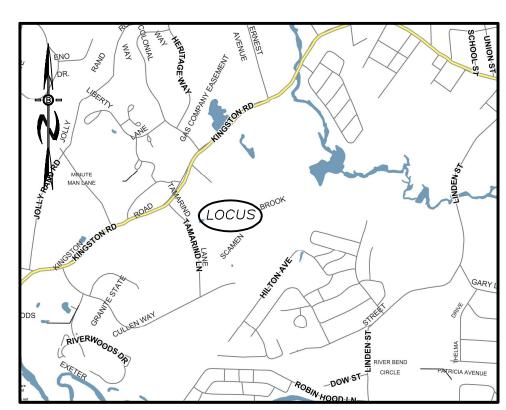
BLDG 2 UNIT H

EXETER, NH 03833

1-603-778-0644



# LOCATION MAP



EXETER N.H.

# PLAN SET LEGEND

5/8" REBAR	•	PROPOSED LIGHT POLE	••
DRILL HOLE	•	PROPOSED WALL LIGHT	占
CONC. BOUND	⊡	PROPOSED PARKING COUN	$\mathbf{T}$ $(\overline{3})$
UTILITY POLE	ල ර	OVERHEAD ELEC. LINE	
DRAIN MANHOLE	©		OHW
SEWER MANHOLE	<b>S</b>	FENCING	x
EXISTING LIGHT POLE	ф	DRAINAGE LINE	D
EXISTING CATCH BASIN		SEWER LINE	s
PROPOSED CATCH BASIN	<b>=</b>	GAS LINE	G
WATER GATE	wv 	WATER LINE	
WATER SHUT OFF	450	STONE WALL	<del>-</del>
HYDRANT		TREE LINE	>>>>> .
PINES, ETC.	**	ABUT. PROPERTY LINES	
MAPLES, ETC.	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	EXIST. PROPERTY LINES	
EXIST. SPOT GRADE	96×69	BUILDING SETBACK LINES	
PROP. SPOT GRADE		EXIST. CONTOUR	<u> </u>
DOUBLE POST SIGN	_0_0	PROP. CONTOUR	
SINGLE POST SIGN	<del>- o -</del>	SOIL LINES	

INDEX

TITLE SHEET LOT LINE ADJUSTMENT PLAN 1 OF 1 SUBDIVISION BOUNDARY PLANS EXISTING CONDITION PLANS SUBDIVISION SITE PLANS HIGHWAY ACCESS PLAN 11 - 12PLAN & PROFILES DRAINAGE BASIN PLAN LANDSCAPE PLAN CONSTRUCTION DETAIL PLANS 15 - 18EROSION & SEDIMENT 19 CONTROL DETAILS CONVENTIONAL YIELD 1 OF 1

### REQUIRED PERMITS

EPA NOI APPROVAL NUMBER: PENDING

NHDES AOT PERMIT NUMBER: PENDING

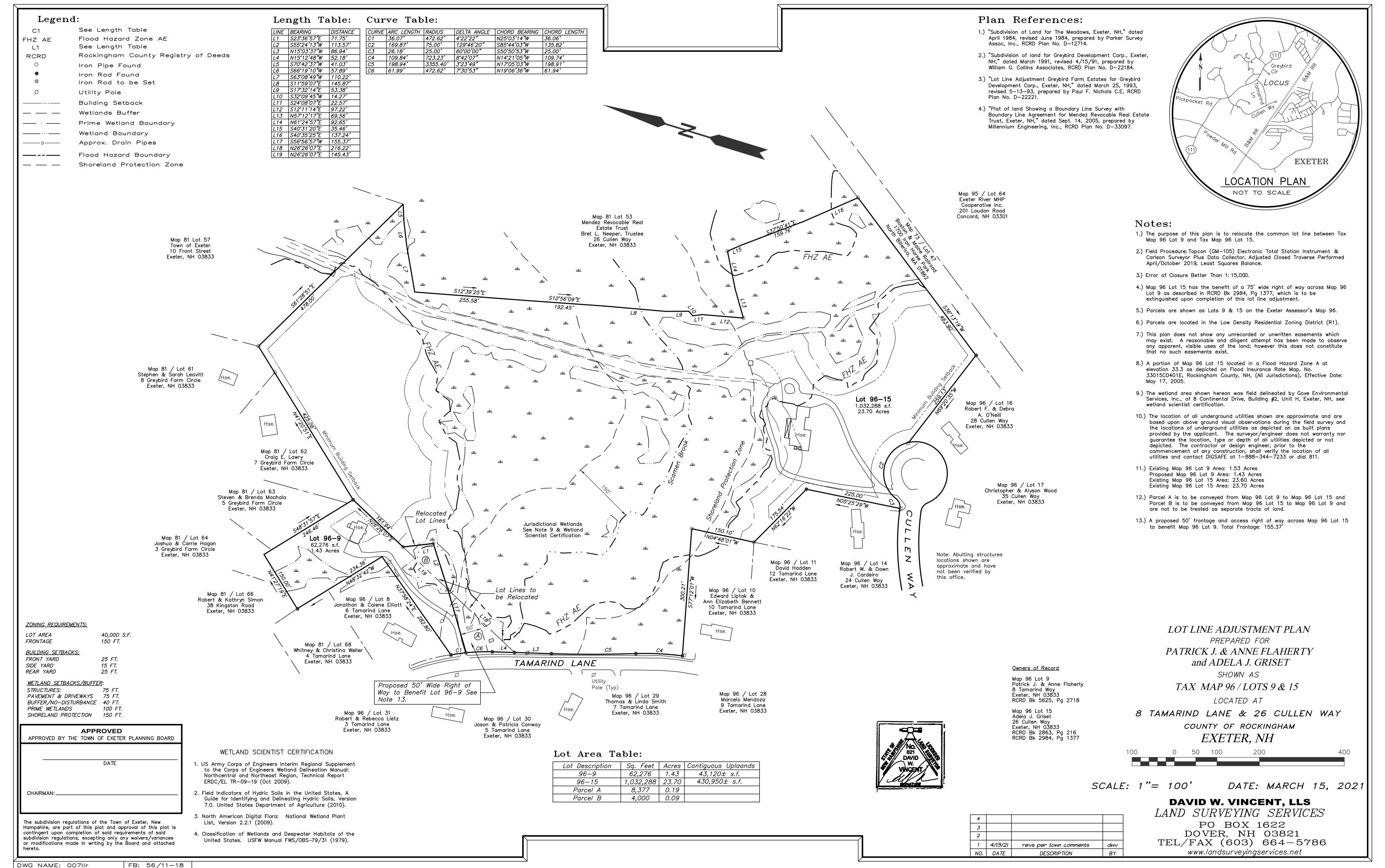
NHDES WWEB SEWER EXTENSION PERMIT NUMBER: PENDING

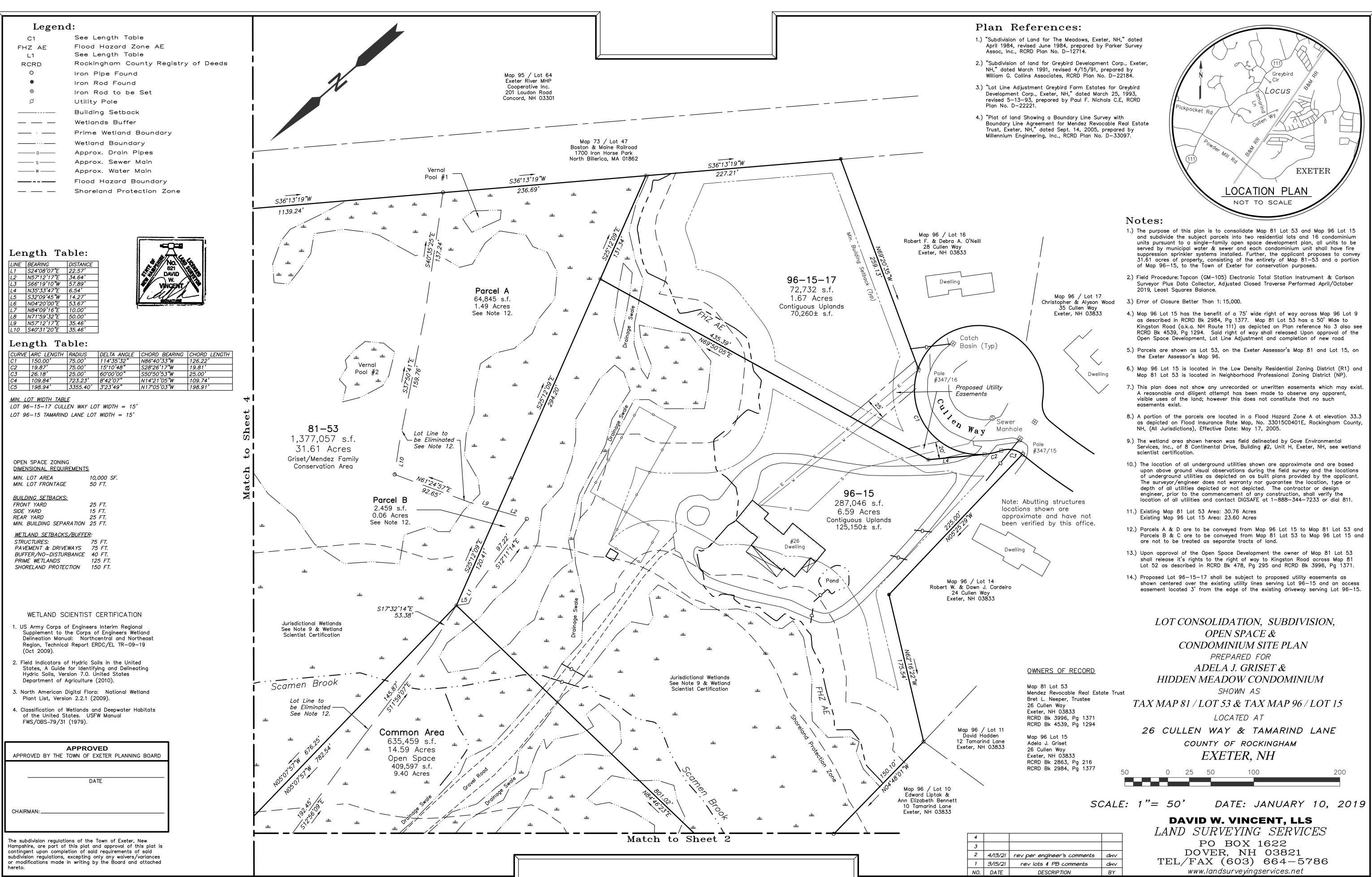
NHDES WETLANDS BUREAU DREDGE & FILL PERMIT NUMBER: PENDING

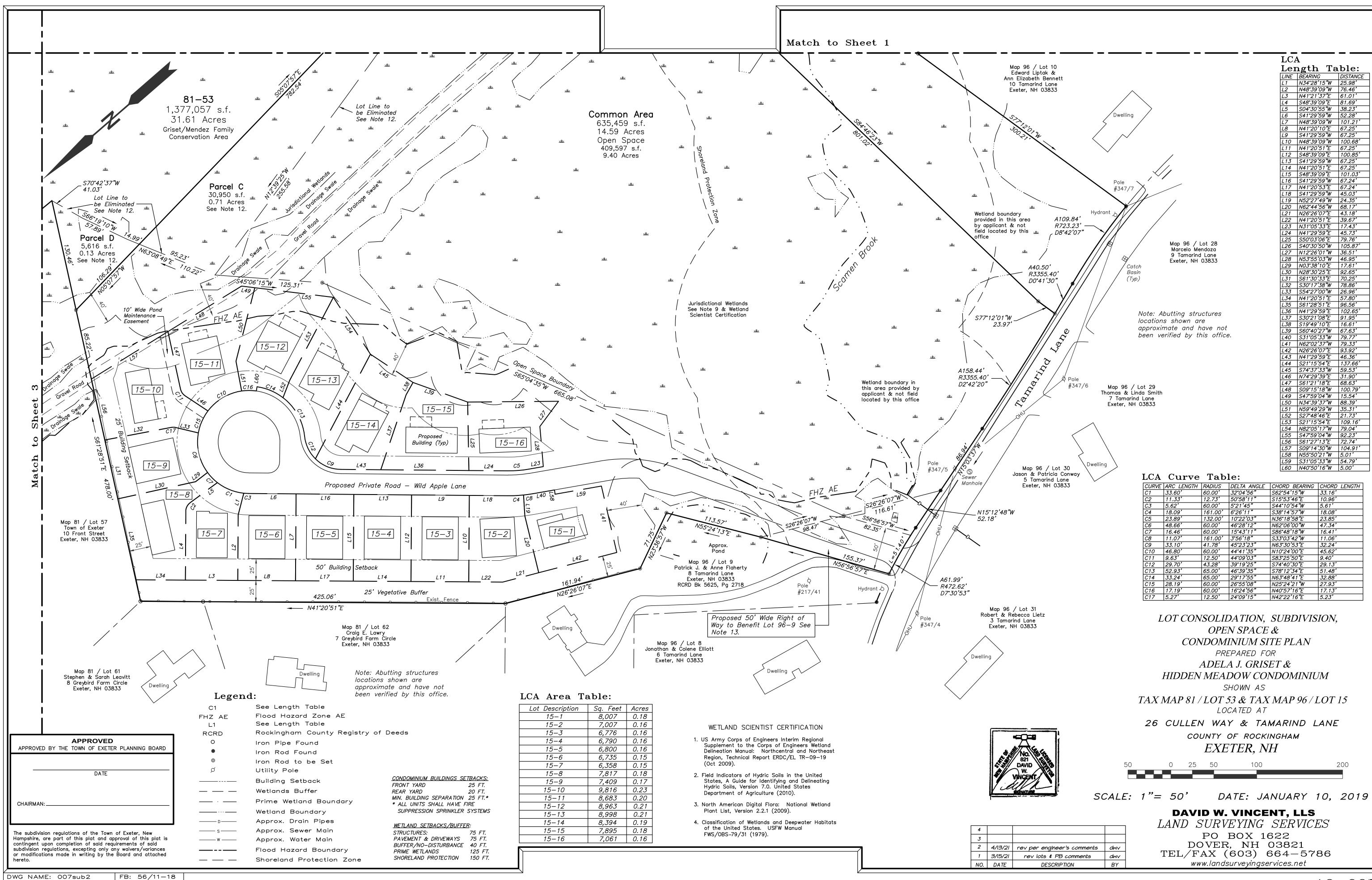
### PB CASE # 20-2

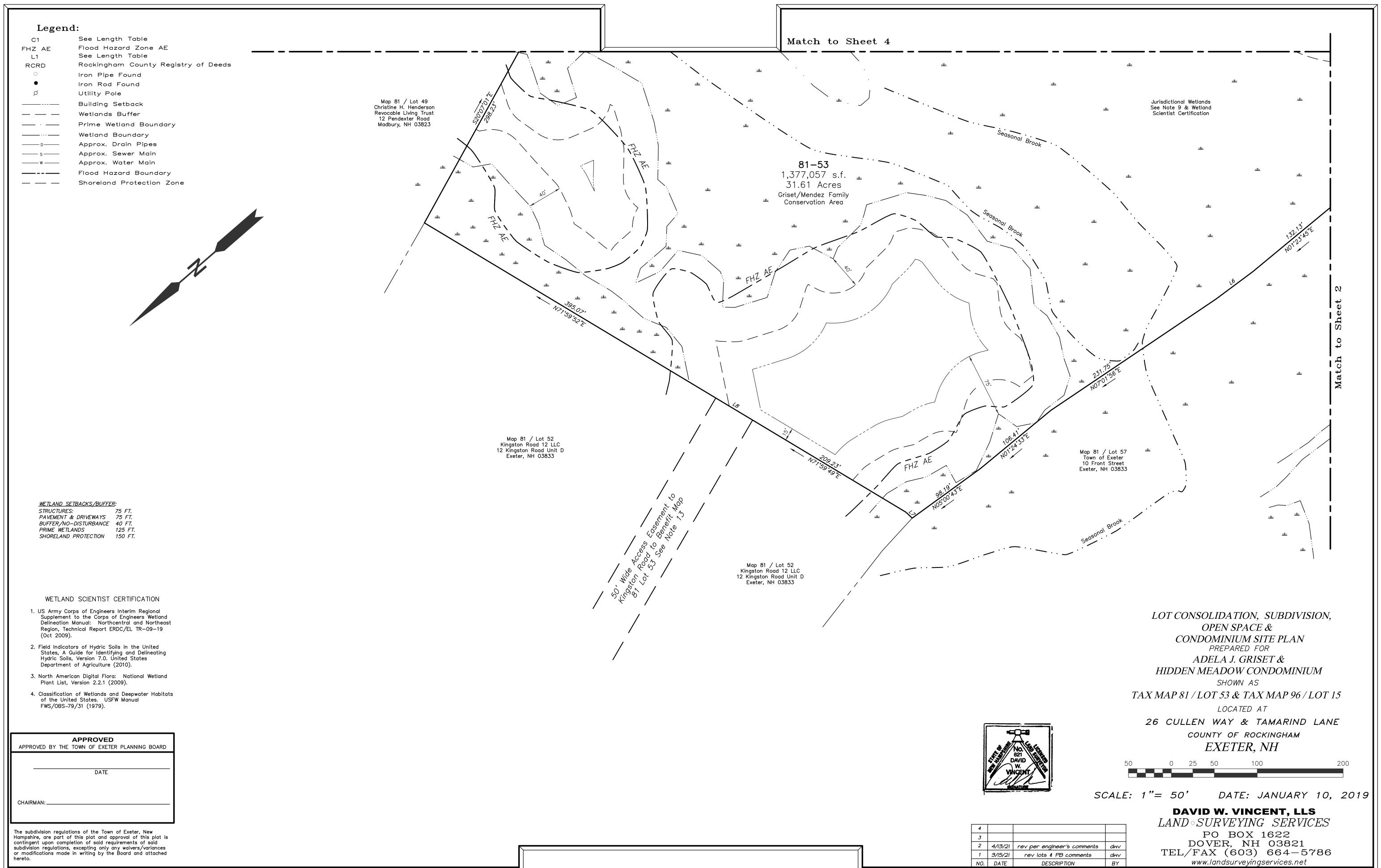
REVISIONS:	DATE:
REVISED PER TRC & ENGINEERING REVIEW	4/12/21
REVISED PER APPROVED YIELD & TRC	3/15/21

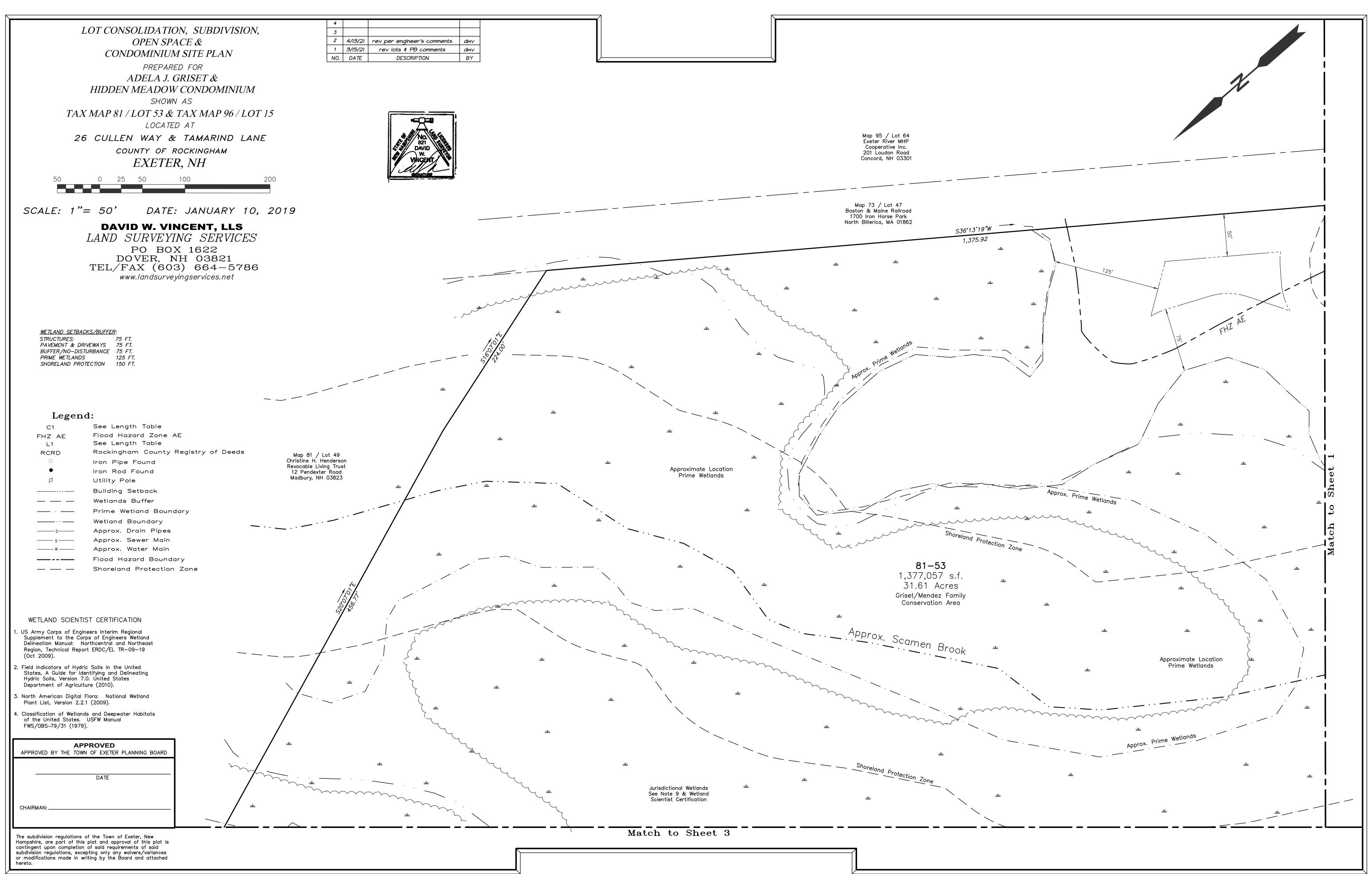
NH-1154.1 PROPOSED SITE PLAN ISSUED JAN. 2020

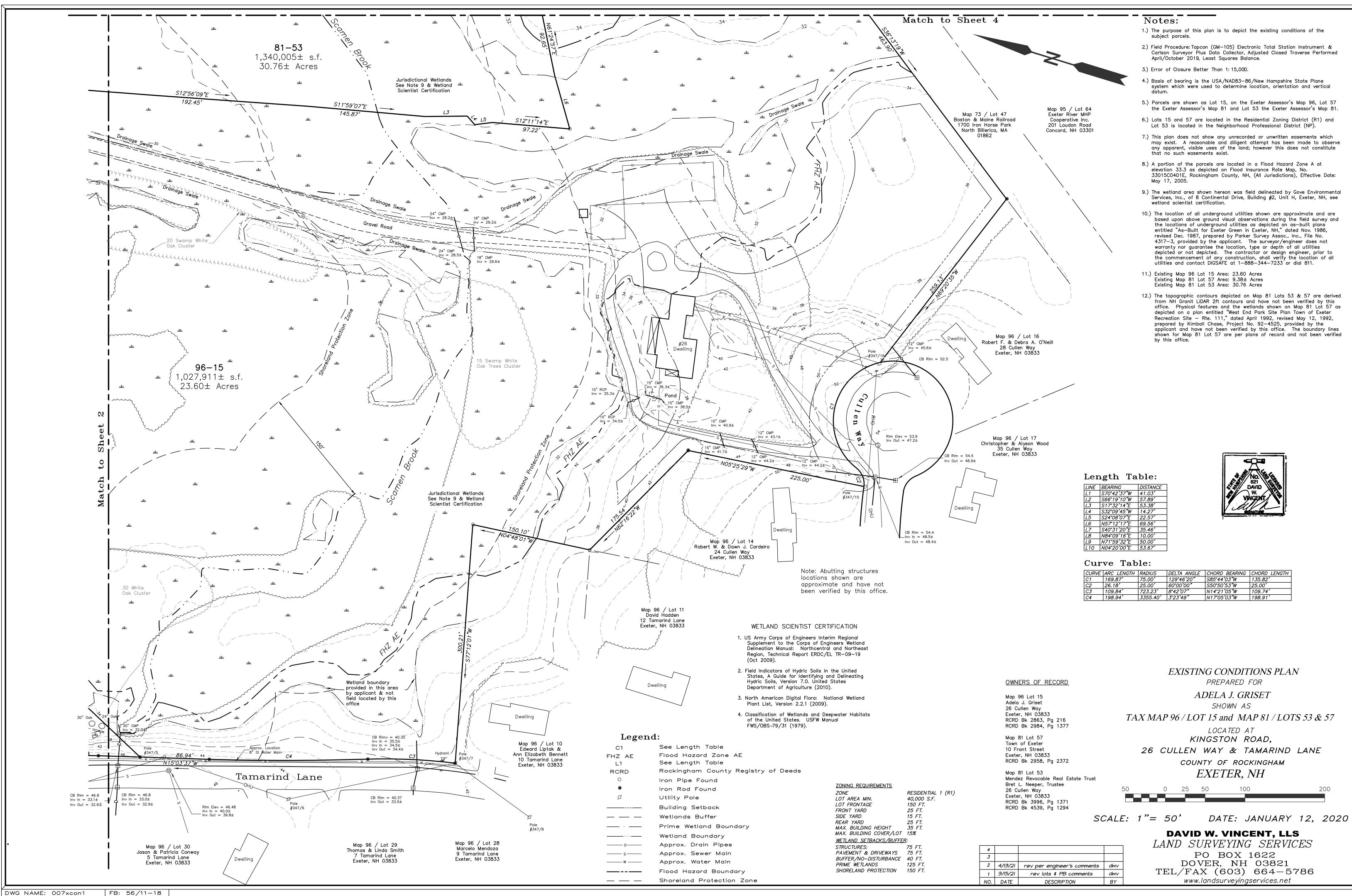


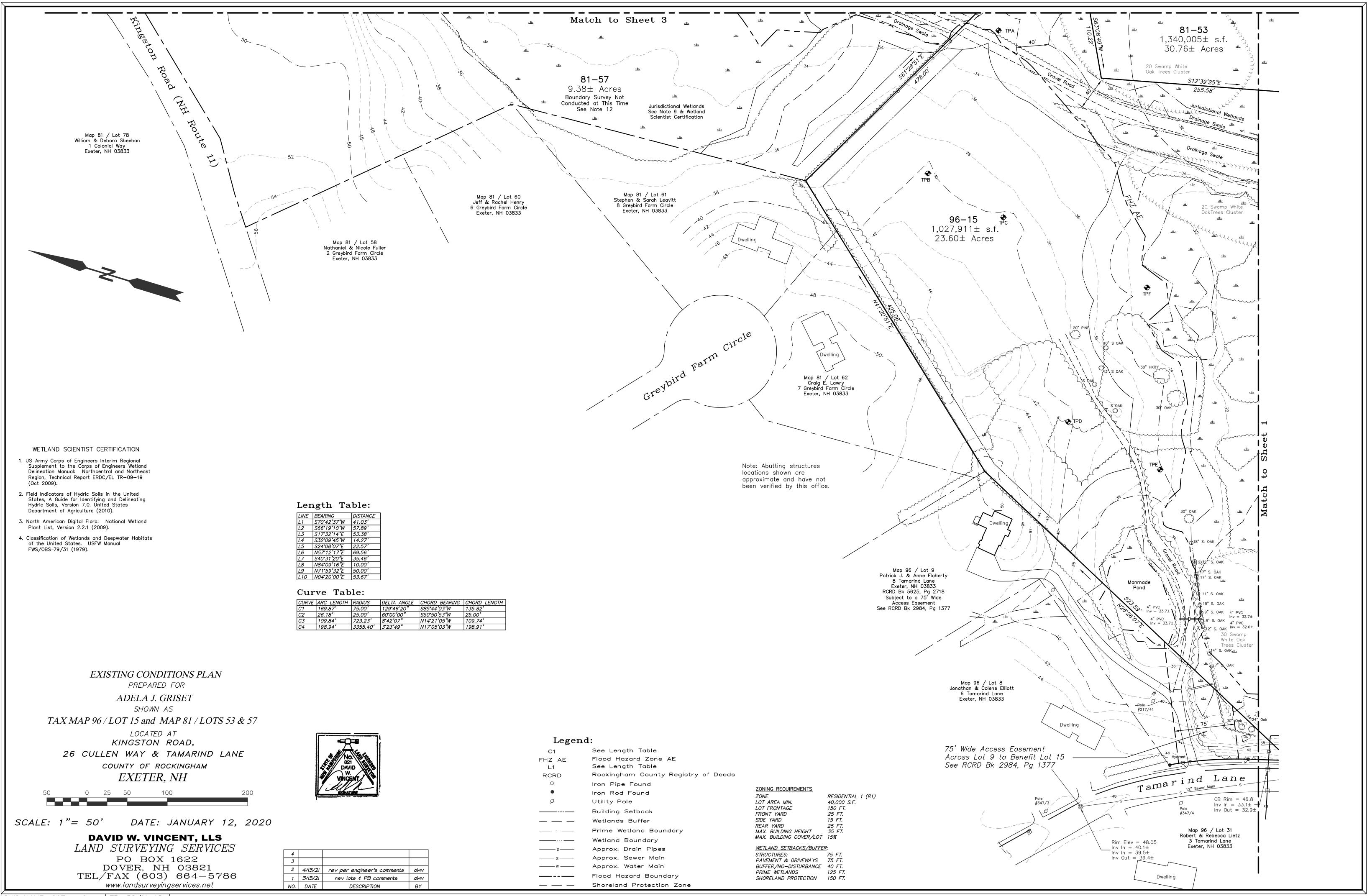


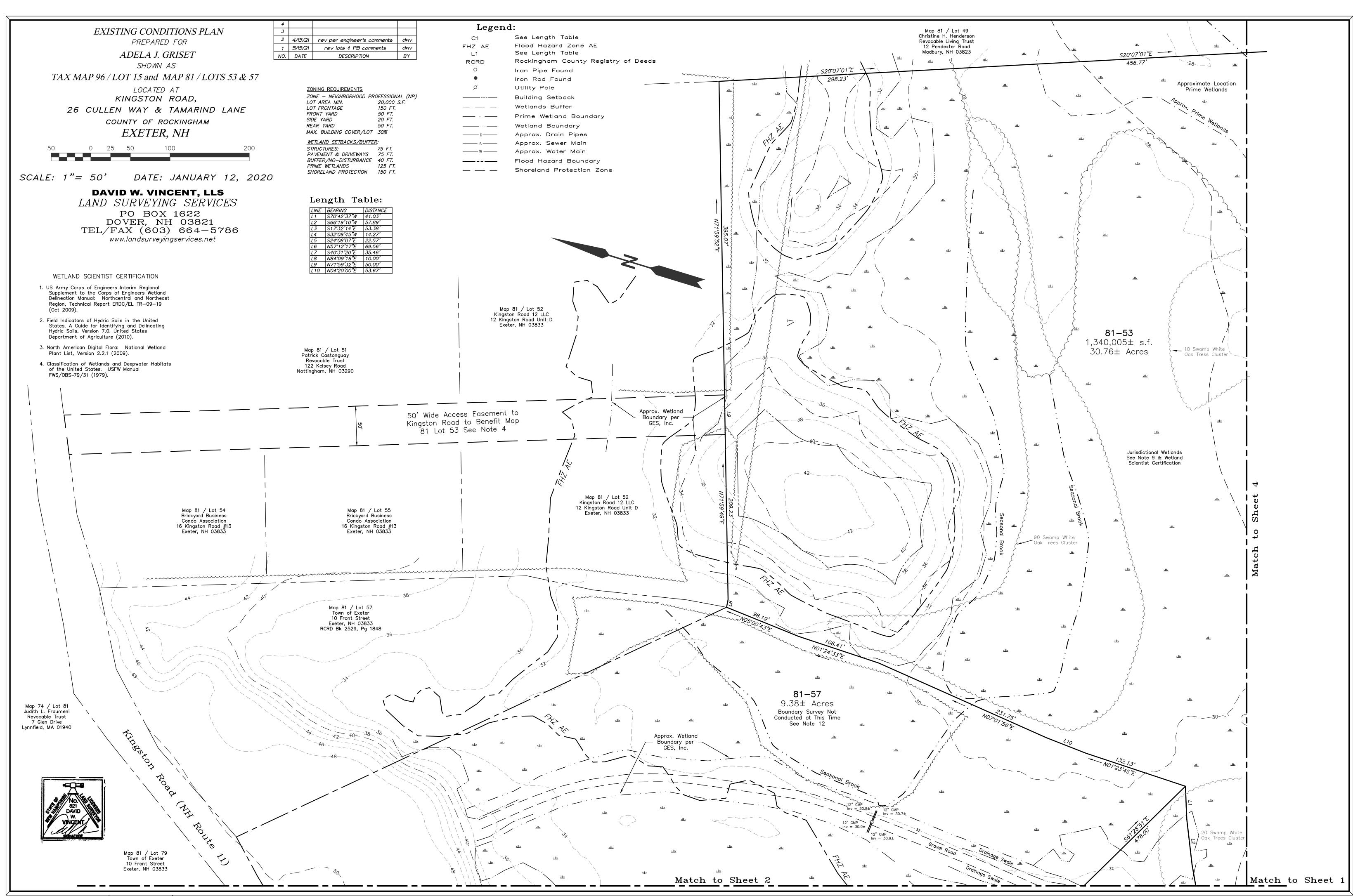


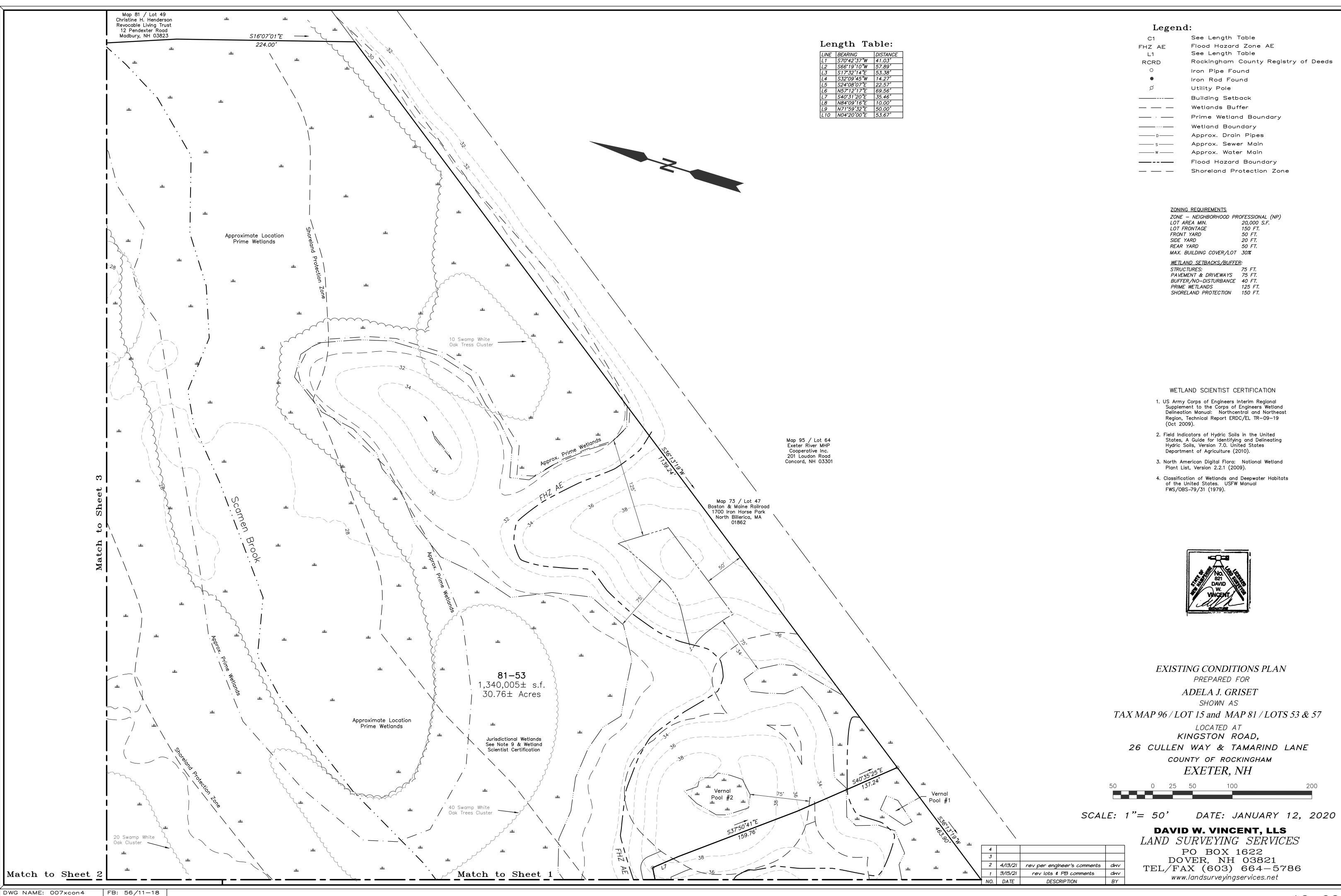


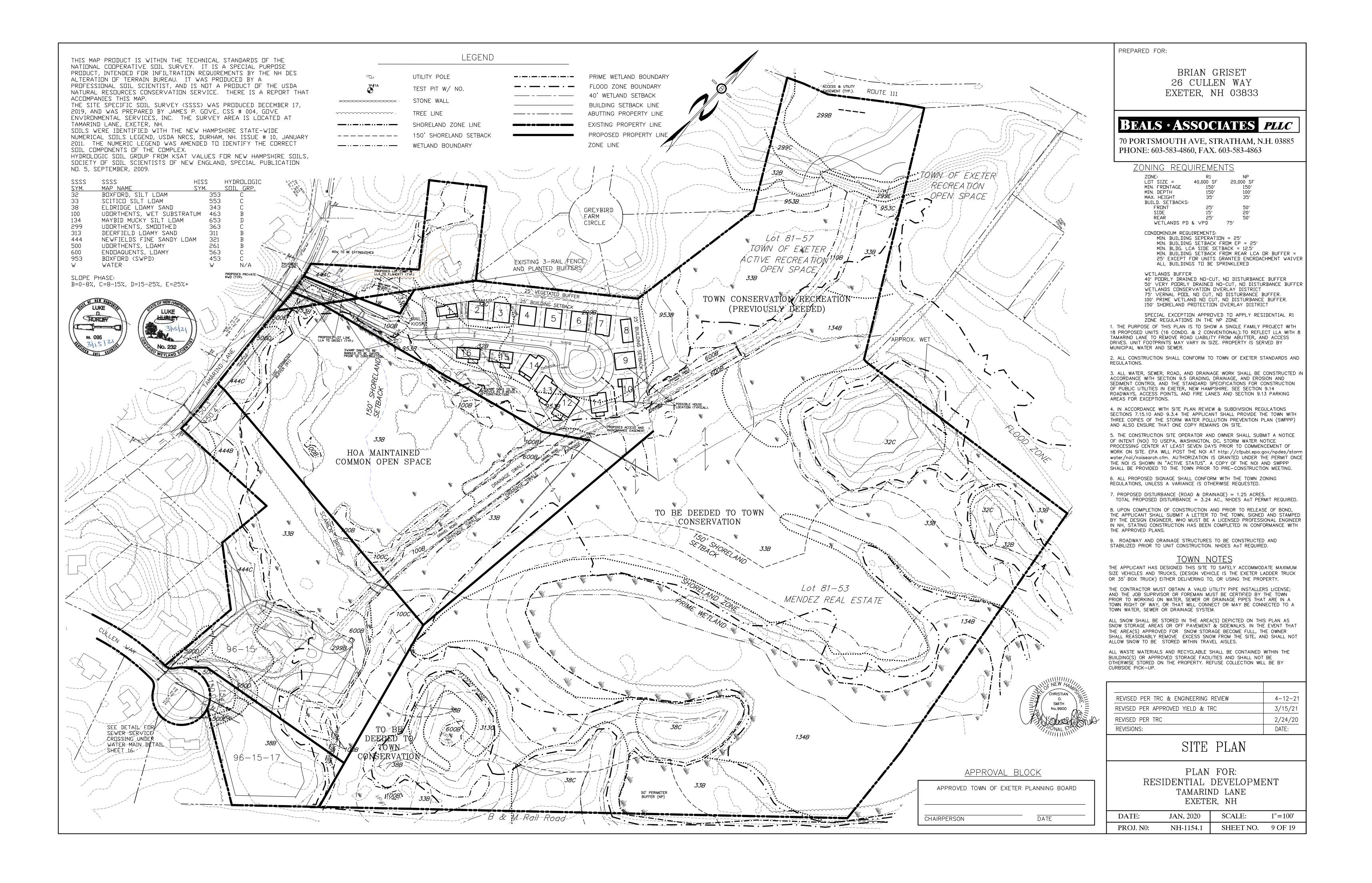


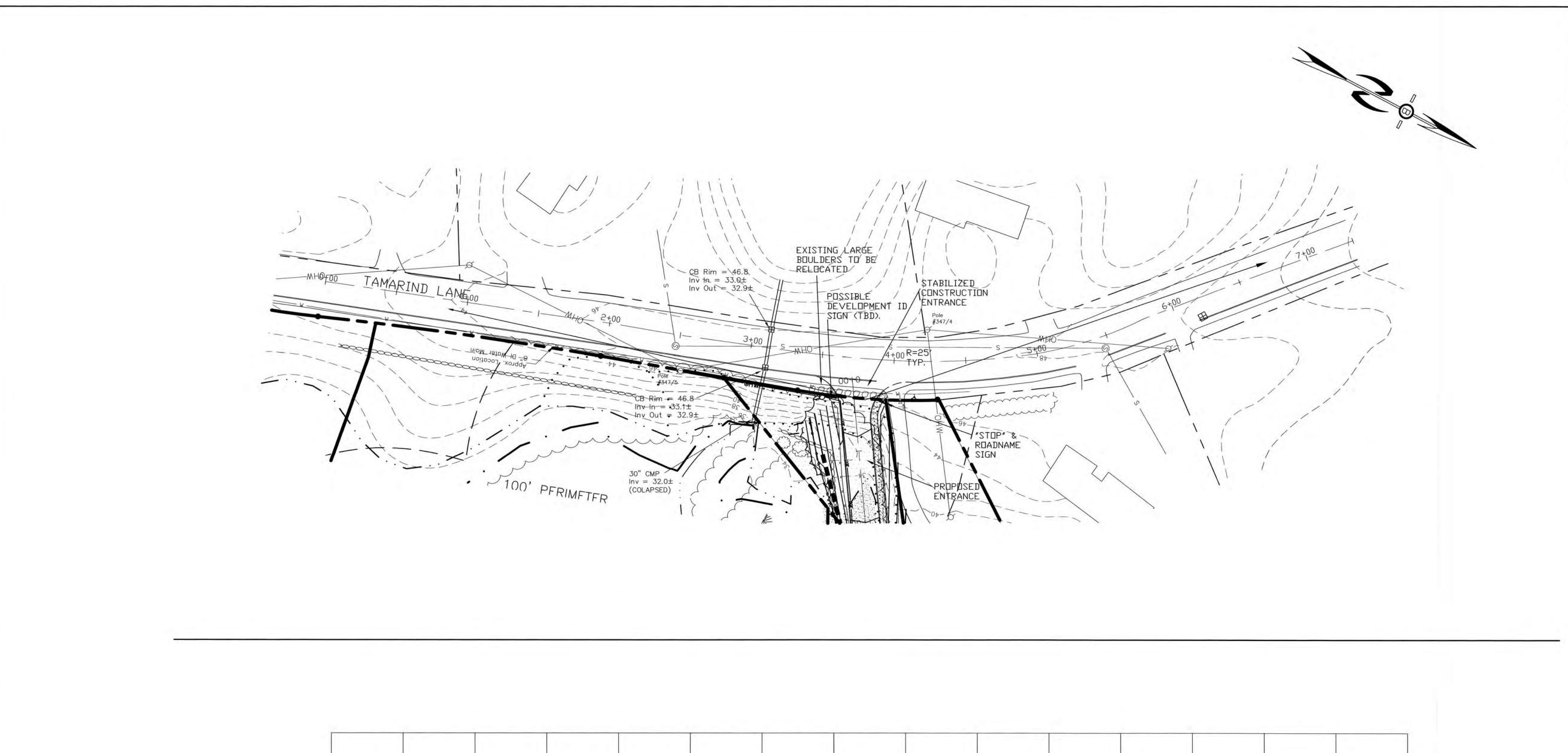












3+00

4+00

2+00

300'+ SIGHT DISTANCE

1+00

PREPARED FOR:

BRIAN GRISET 26 CULLEN WAY EXETER, NH 03833

# BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



3.75′

7+00

300'+ SIGHT DISTANCE

5+00

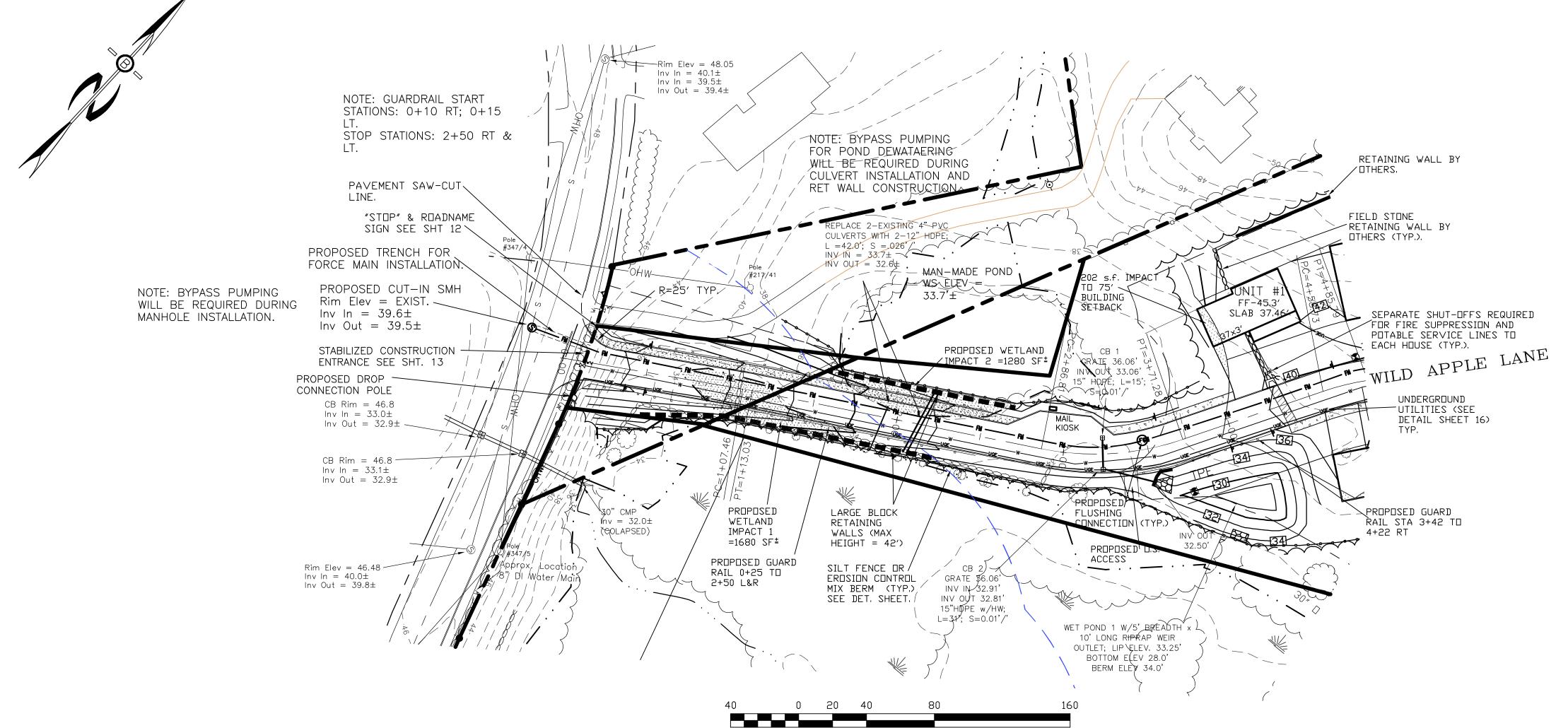
6+00

PROFILE SCALES:

HORIZONTAL: 1"=40'	VERTICAL:	1"=4'
REVISED PER TRC:		3-11-21
REVISIONS:		DATE:

# HIGHWAY ACCESS PLAN-H1

DATE:	JAN. 2020	SCALE:	1'' = 40'
PROJ. N0:	NH-1154.1	SHEET NO.	10 OF 19



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### UTILITY NOTES

- 1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS,
- 2. THE CONTRACTOR SHALL PROVIDE NOTICE TO ALL COMPANIES AND LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- 3. THE SPECIFICATIONS FOR PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY CO. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES FOR PROPER UTILITY CROSSING REQUIREMENTS
- 4. PRIOR TO THE PRE-CONSTRUCTION MEETING UGE&T PLANS FROM THE UTILITY COMPANIES NEED TO BE REDRAWN ON THIS SHEET. ADDITIONALLY THE CONTRACTOR NEEDS TO HAVE A COMPLETED SWPPP. A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- 5. ALL CONSTRUCTION SHALL CONFORM TO EXETER STANDARDS AND REGULATIONS, UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR (OSHA) RULES AND REGULATIONS.
- 6. BUILDINGS ARE TO BE SERVICED BY UNDERGROUND UTILITIES.
- 7. THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS (IF REQUIRED) IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS.
- 8. SEWER AND WATER INFRASTRUCTURE ON PRIVATE PROPERTY SHALL REMAIN PRIVATE, HOWEVER, THE TOWN RESERVES THE RIGHT TO ENTER THE PROPERTY IN ORDER TO INSPECT, REPAIR AND/OR TERMINATE INDIVIDUAL SEWER OR WATER SERVICES (AT OWNER'S EXPENSE). THIS RIGHT IS TO BE CONVEYED TO THE TOWN IN THE SITE'S DECLARATION OF CONDOMINIUM DOCUMENTS, AND IN ALL INDIVIDUAL DEEDS.
- 9. AN AS-BUILT PLAN IS TO BE PREPARED AND SUBMITTED TO DEPARTMENT OF PUBLIC WORKS IN DIGITAL AND MYLAR FORMATS.
- 10. THE CONTRACTOR IS RESPONSIBLE FOR PAYMENT OF ALL CONNECTION FEES.
- 11. FOR WATER MAIN AND SEWER LINE CROSSINGS REFER TO THE DETAIL ON SHEET 16 FOR MINIMUM VERTICAL AND HORIZONTAL SEPARATION.
- 12. ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY CAP AND WITNESS AT END.
- 13. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES AND MECHANICAL JOINTS.
- 14. CONTRACTOR SHALL MINIMIZE DISRUPTIONS TO EXISTING WATER SERVICES AND ALL REQUIREMENTS OF EXETER WATER DEPARTMENT SHALL BE FOLLOWED REGARDING NOTIFICATION OF INTERRUPTION OF SERVICE (48 HOURS PRIOR - WRITTEN NOTICE OF DISRUPTION TO BE PROVIDED TO EACH AFFECTED USER BY HAND DELIVERY). TEE INSTALLATION MAY NEED TO BE CONDUCTED AT NIGHT AS DIRECTED BY EXETER WATER
- 15. WATER VALVES ARE TO BE OPERATED ONLY BY MUNICIPAL STAFF.

2+15 PROPOSED 6"
DUCTILE WATER

CROSS SECTION HORIZONTAL: 1"=10' VERTICAL: 1"=5'

MAIN PER TRC RECOMMENDATION

### DRAINAGE NOTES

2-12" HDPE; L =42.0'; S =.026'/'  $INV IN = 33.7' \pm$ INV OUT  $= 32.6'\pm$ 

-20

1. ALL DRAINAGE STRUCTURES AND SWALES WILL BE BUILT AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.

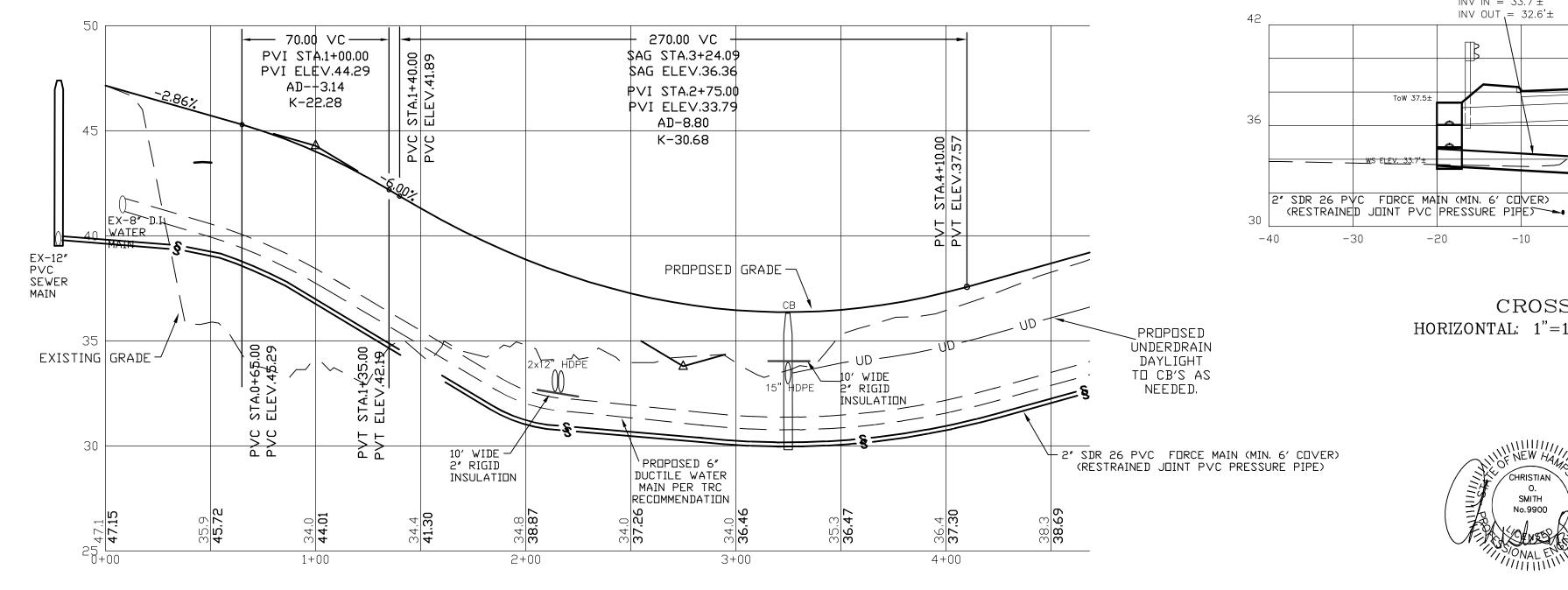
\$|| PROPOS∉D UGU SEE

DETAIL SHEET #16

10' WIDE 2" RIGID

20 INSULATION30

2. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.



PROFILE SCALES: HORIZONTAL: 1"=40' VERTICAL: 1"=4'

REVISED PER TRC & ENGINEERING REVIEW	4-12-21
REVISED PER TRC & YIELD PLAN APPROVAL	3-15-21
REVISIONS:	DATE:

# PLAN AND PROFILE

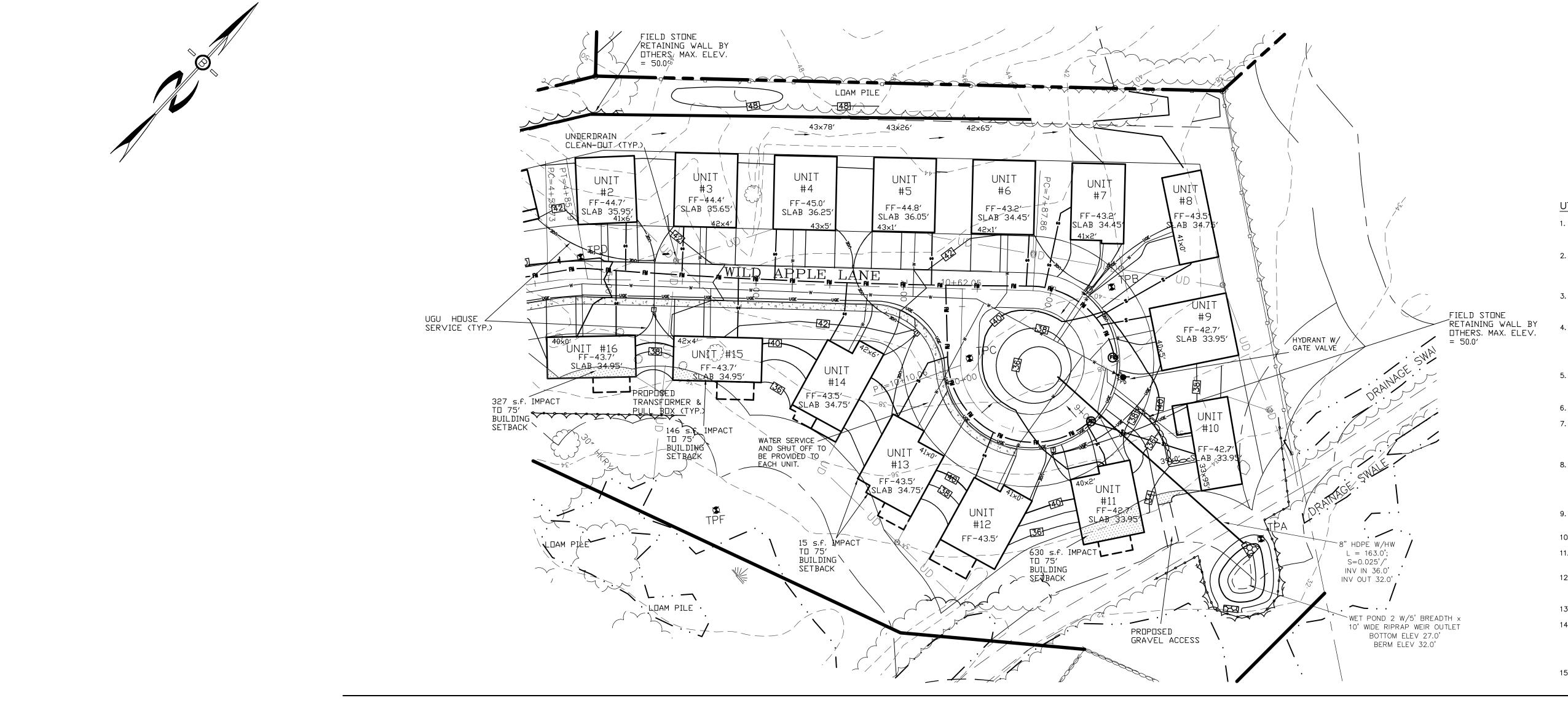
PLAN FOR: RESIDENTIAL DEVELOPMENT TAMARIND LANE EXETER, NH

DATE:	JAN. 2020	SCALE:	1'' = 40'
PROJ. N0:	NH-1154.1	SHEET NO.	11 OF 19



UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM FIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. NEITHER BEALS ASSOCIATES, NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION

WORK BY CALLING 1-888-DIG-SAFE (1-888-344-7233). AND EXETER DPW (603) 773-6157



— 150.00 ∨C — CREST STA.6+42.31

CREST ELEV.42.78

PVI ELEV.43.59

PVI STA.6+25.00

AD--4.55

K-32.97

PROPOSED 6"
DUCTILE WATER
MAIN PER TRC

6+00

EXISTING GRADE -

RECOMMENDATION 2" SDR 26 PVC FORCE MAIN (MIN. 6' COVER) —
(RESTRAINED JOINT PVC PRESSURE PIPE)

PROPOSED GRADE -

5+00

PROPOSED
UNDERDRAIN—/
DAYLIGHT
TO CB'S

\$AG STA.8+84.23

\$AG ELEV.39.57

₱VI STA.8+75.00

PVI ELEV.39.21

AD-2.95

K-33.85

PROPOSED
UNDERDRAIN
DAYLIGHT
TO CDS

10+00

PREPARED FOR:

BRIAN GRISET 26 CULLEN WAY EXETER, NH 03833

# BEALS · ASSOCIATES PLLC

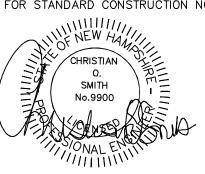
70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863

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- 15. WATER VALVES ARE TO BE OPERATED ONLY BY MUNICIPAL STAFF.

### DRAINAGE NOTES

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- 2. SEE DETAIL SHEETS FOR STANDARD CONSTRUCTION NOTES AND DETAILS.



PROFILE SCALES:
HORIZONTAL: 1"=40' VERTICAL:

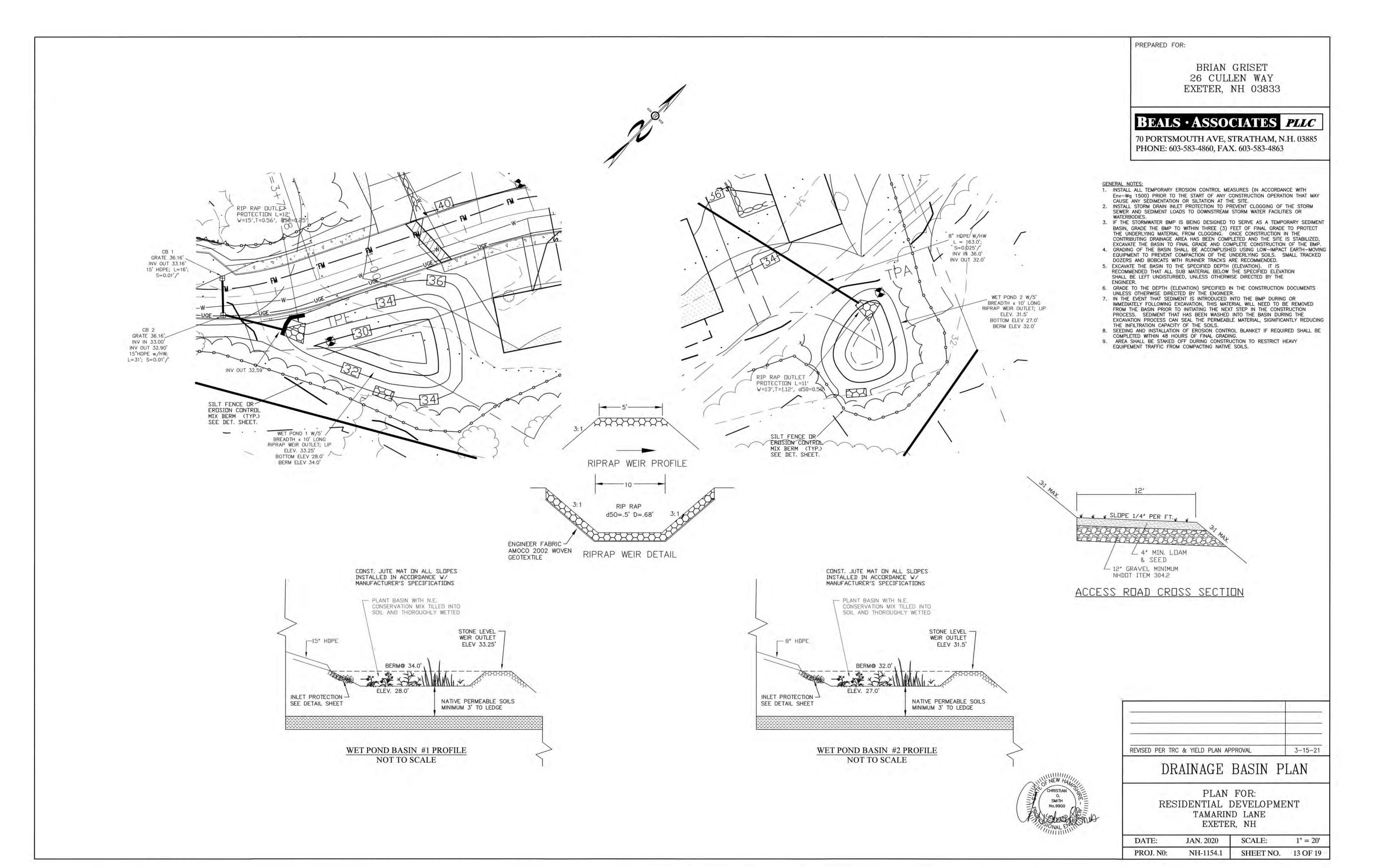
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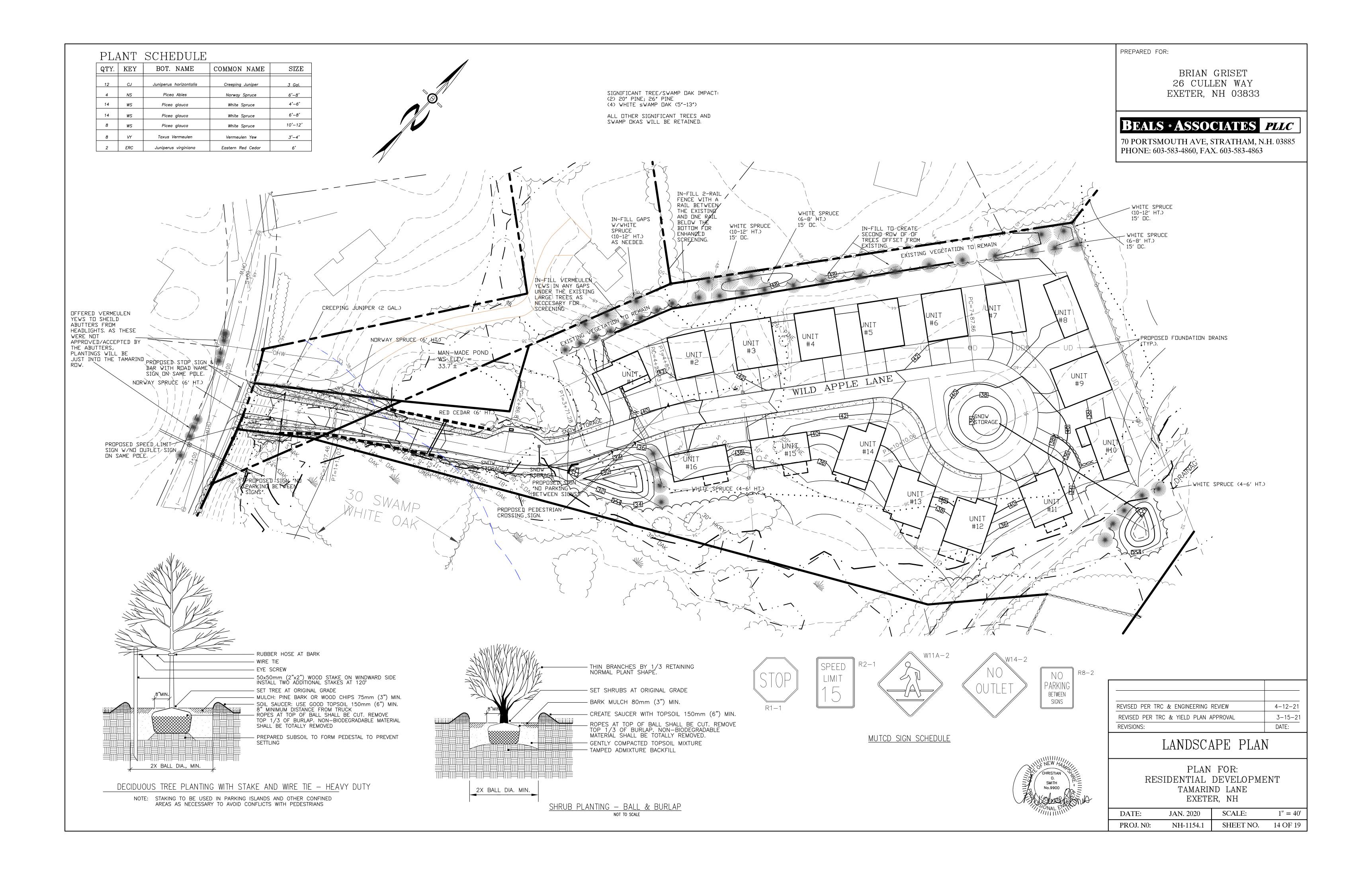
1"=4'

REVISED PER TRC & ENGINEERING REVIEW	4-12-21
REVISED PER TRC & YIELD PLAN APPROVAL	3-15-21
REVISIONS:	DATE:

# PLAN AND PROFILE

DATE:	JAN. 2020	SCALE:	1'' = 40'
PROJ. N0:	NH-1154.1	SHEET NO.	12 OF 19





### STREET SIGN DETAIL

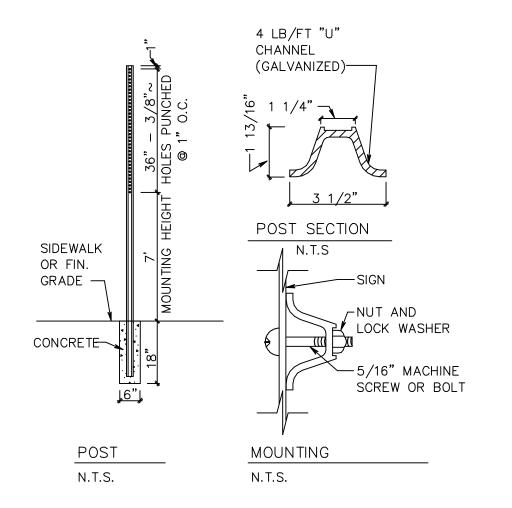
MUTC	D TR	AFF	IC C	CONTROL	SCHE	DULE
SIGN NUMBER	SIGN		F SIGN HEIGHT	DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT
R1-1	STOP	30"	30"	WHITE ON RED	CHANNEL	7'-0"
R2-1	SPEED LIMIT 20	18"	24"	BLACK ON WHITE	CHANNEL	7'-0"
W14-2	NO	24"	24"	BLACK ON YELLOW	CHANNEL	7'-0"

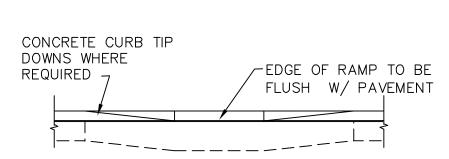
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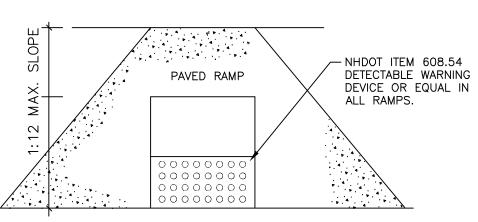
BRIAN GRISET 26 CULLEN WAY EXETER, NH 03833

# BEALS · ASSOCIATES PULC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863







1:10 MAX. SLOPE 36" A.D.A. MIN. 1:10 MAX. SLOPE (60" RECOMMENDED)

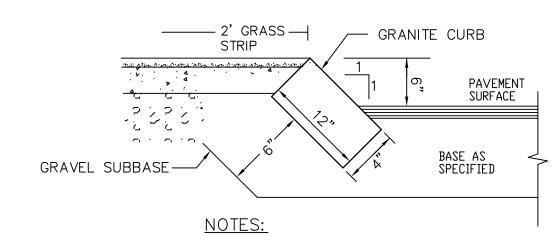
> SIDEWALK RAMP DETAIL NOT TO SCALE

	_
EVISED PER TRC & ENGINEERING REVIEW	4-12-21
EVISED PER TRC & YIELD PLAN APPROVAL	3-15-21
REVISIONS:	DATE:

# CONSTRUCTION DETAILS

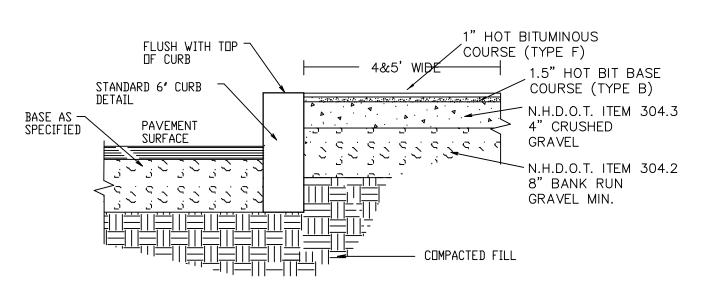
PLAN FOR: RESIDENTIAL DEVELOPMENT TAMARIND LANE EXETER, NH

DATE:	JAN. 2020	SCALE:	NTS
PROJ. N0:	NH-1154.1	SHEET NO.	15 OF 19



1. EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE. 2. JOINTS BETWEEN STONES SHALL BE MORTARED. 3. SALVAGE GRANITE CURBS ON-SITE AND RESET TO THE EXTENT POSSIBLE.

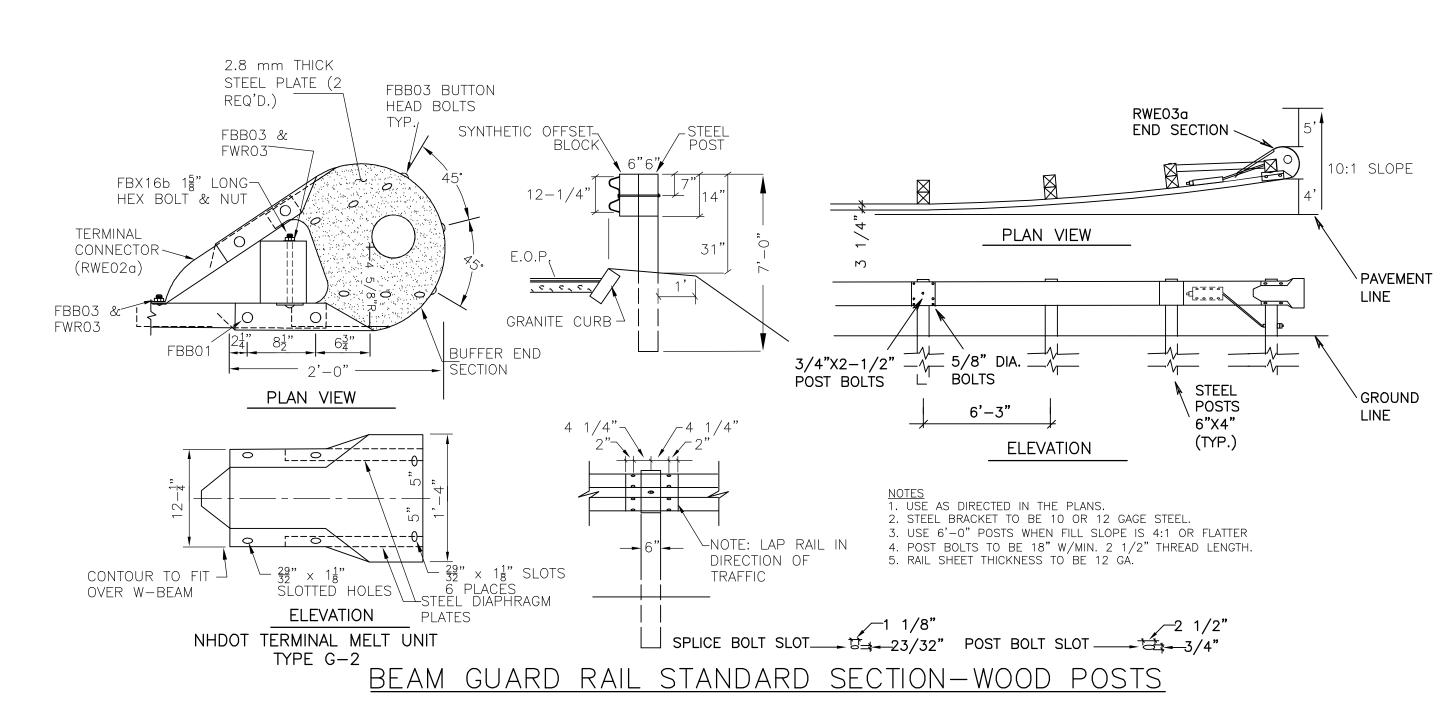
GRANITE SLOPE CURB DETAIL NOT TO SCALE

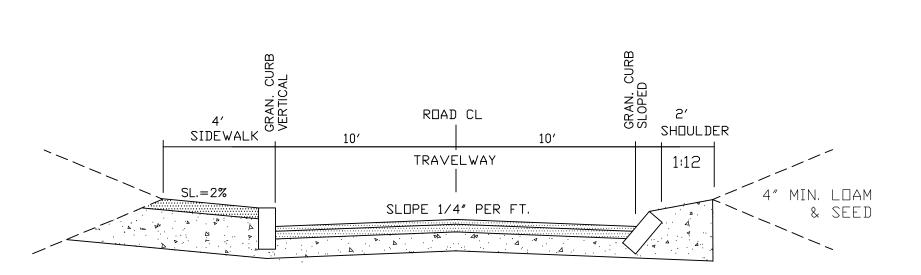


# VERT. GRANITE CURB/BIT. SIDEWALK DETAIL

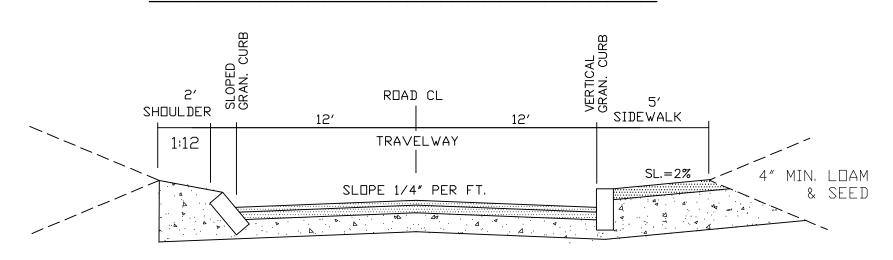
NOT TO SCALE

NOTE: GRAVEL SPECIFICATIONS FOR SIDEWALK ARE THE SAME FOR THE GRAVEL ACCESS PATHS.

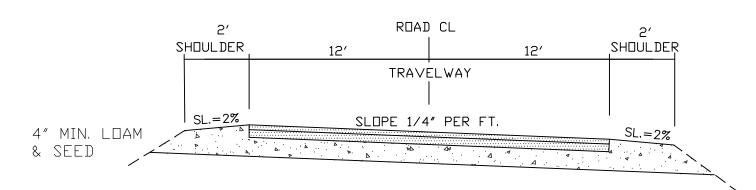




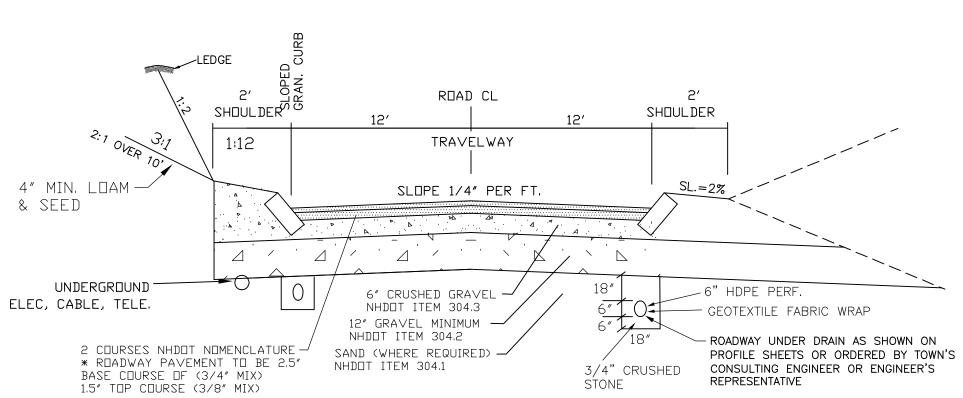
### TYPICAL CROSS SECTION 0+00-3+2P5



TYPICAL CROSS SECTION 3+50-7+25



## TYPICAL CROSS SECTION 7+25-10+50

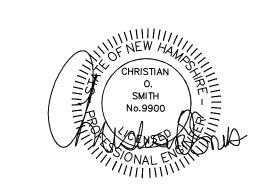


ALL MATERIALS TO BE INSPECTED AND APPROVED BY TOWN ENGINEER AND MEET NHDOT STANDARDS.

TOWN MAY REQUIRE UNDERDRAIN OR ADDITIONAL DRAINAGE TO INCLUDE OVER EXCAVATION OF UNSUITABLE MATERIALS AND INSTALLATION OF

GEDTEXTILE FABRIC. SEE ADDITIONAL NOTES ON DETAIL SHEETS.

TYPICAL CROSS SECTION



1) IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS. HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY BY THE COMMISSION FOR THE INTENDED SERVICE SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING, MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING. 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.

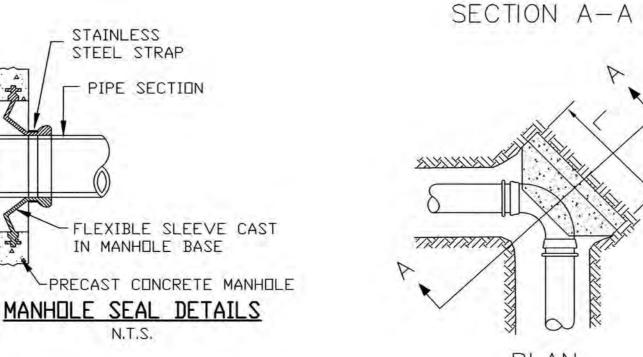
- 2) BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED.
- 3) PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478
- 4) LEAKAGE TEST:
- A) ALL NEW SEWERS, MANHOLES AND FORCE MAINS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF EITHER WATER OR LOW-PRESSURE AIR TESTS.
- (B) LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH THE FOLLOWING TESTING STANDARDS IN EFFECT AT THE TIME THE TEST IS
  - (1) ASTM F1417 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR", AVAILABLE AS NOTED IN APPENDIX D; OR (2) UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE", AVAILABLE AS NOTED IN APPENDIX
- (C) ALL NEW GRAVITY SEWERS SHALL BE: (1) CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY NTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER (2) TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO
- (D) ALL PLASTIC SEWER PIPE SHALL BE VISUALLY INSPECTED AND DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90
- DAYS FOLLOWING INSTALLATION. (E) 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 SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.
  - ENV-WQ 704.17 MANHOLES: TESTING. (A) MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN

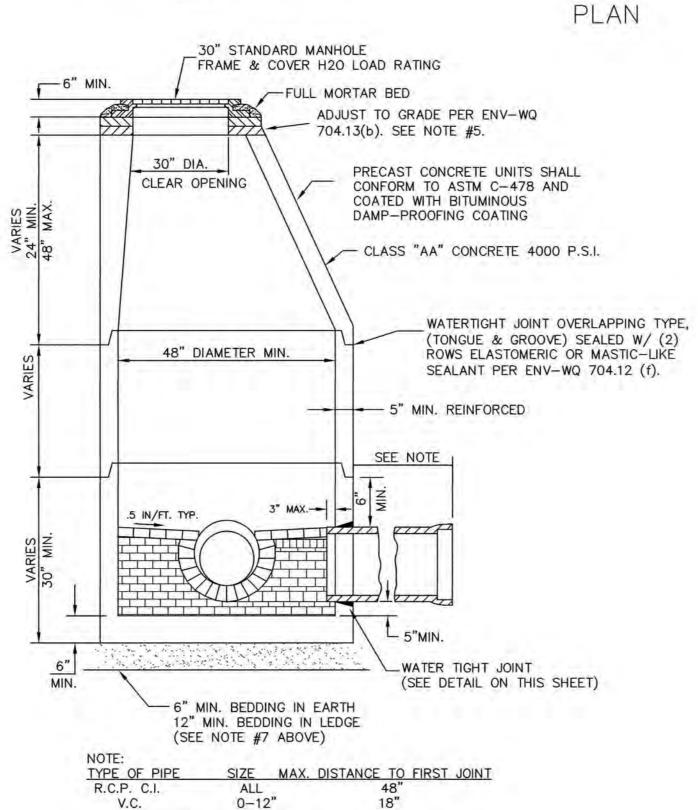
ACCORDANCE WITH THE ASTM C1244 STANDARD IN EFFECT WHEN THE TESTING IS PERFORMED, AVAILABLE AS NOTED IN APPENDIX D. A MANHOLE MAY BE BACKFILLED PRIOR TO PERFORMING A VACUUM TEST, BUT IF THE MANHOLE FAILS THE VACUUM TEST, BACKFILL SHALL BE REMOVED SO REPAIRS TO THE MANHOLE CAN BE MADE FROM THE OUTSIDE OF THE MANHOLE PRIOR TO RETESTING.

- (B) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING: (1) THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES HG; AND
- (2) THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH HG PRESSURE DROP TO 9 INCHES HG SHALL BE: A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET
- DEEP IN DEPTH; B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND
- C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP; (C) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD
- TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B), ABOVE. (D) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETED.
- (E) IMMEDIATELY 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.
- 5) 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 LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE THROUGH CHANNEL UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
- (B) MATERIALS OF CONSTRUCTION FOR MANHOLE GRADE ADJUSTMENT SHALL BE AS FOLLOWS:
  - (1) GRADE ADJUSTMENT RINGS SHALL BE CONSTRUCTED WITH EITHER GRADE SS HARD BRICK THAT HAS BEEN CERTIFIED BY ITS MANUFACTURER AS MEETING THE ASTM C32 STANDARD IN EFFECT AT THE TIME THE BRICK WAS MANUFACTURED OR REINFORCED CONCRETE MEETING THE REQUIREMENTS OF THIS SECTION; (2) GRADE ADJUSTMENT RINGS SHALL:
  - A. BE SIZED TO THE OPENING OF THE MANHOLE; AND B. NOT OBSTRUCT THE ACCESS TO THE MANHOLE.
- (C) MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:
- (1) MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION; (2) PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE AS SHOWN IN TABLE 704-4:
- (3) CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C150/C150M STANDARD IN EFFECT AT THE TIME THE CEMENT WAS MANUFACTURED; (4) HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM C207 STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED; (5) SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM C33 STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".

- 6) FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN EQUAL TO CLASS 30 AND CERTIFIED BY THEIR MANUFACTORURER AS COMPLYING WITH ASTM A48 AND PROVIDE A 30 INCH DIA, CLEAR OPENING. THE WORD "SEWER" OR DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS.
- BEDDING: MINIMUM 12" SAND BLANKET. (SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSES A 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE) AND REMAINING FILL AS SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C-33 STONE SIZE No. 67
- 100% PASSING 1 INCH SCREEN 90-100% PASSING 3/4 INCH SCREEN 20-50% PASSING 3/8 INCH SCREEN 0-10% PASSING No. 4 SIEVE 0-5% No. 8 SIEVE PASSING
- WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 3/4 INCH TO 1-1/2 INCH SHALL BE USED.
- 8) FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES: P.V.C. PIPE - ALL SIZES - 48"
- 9) CONTRACTOR SHALL PLACE 2" WIDE METAL WIRE IMPREGNATED GREEN PLASTIC WARNING TAPE OVER ENTIRE LENGTH OF ALL GRAVITY SEWERS.
- 10) STEPS INSIDE THE MANHOLE ARE PROHIBITED; AN ENERGY DISSIPATOR

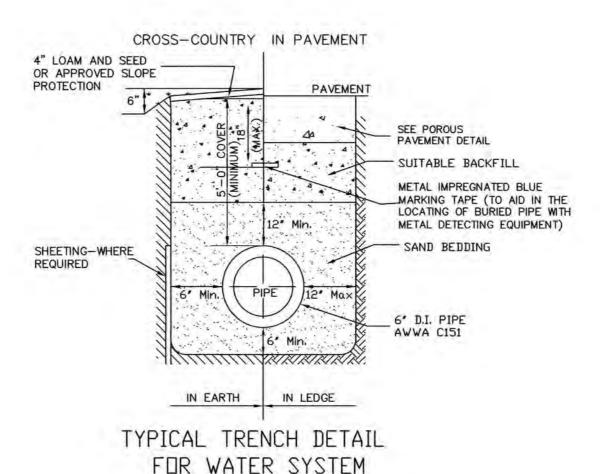




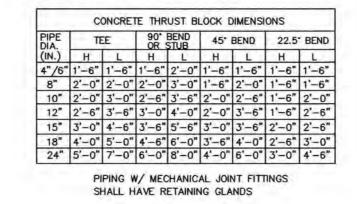


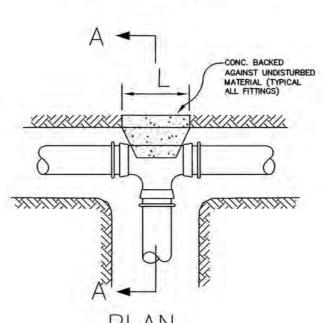
> 12"

SEWER MANHOLE NOT TO SCALE



### FOR WATER SYSTEM



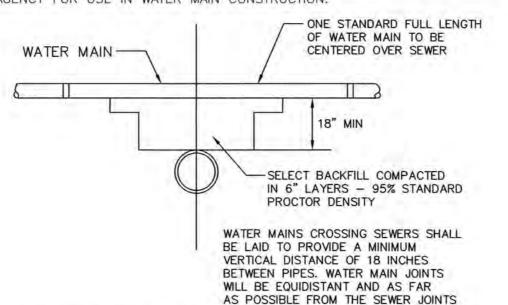


# THRUST BLOCK DETAILS

SEPARATION NOTES: SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES (460 MM) BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS EITHER ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND

WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST A. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE, AND SHALL BE PRESSURE TESTED AT 150 PSI (1034 KPA) TO ASSURE

WATERTIGHTNESS. B. EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET (3 M) ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION.



WATER/SEWER MAIN CROSSING



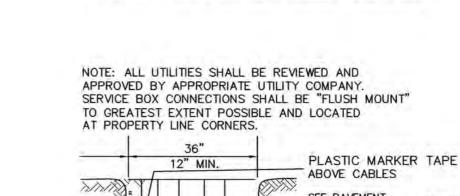
2. ALL FITTINGS SHALL BE MEGALUG OR APPROVED EQUAL. 3. HYDRANTS SHALL BE YELLOW

OR AS REQUIRED

SECTION B-B

FLANGE -VALVE BOX W/ BASE HYDRANT DRAIN (TO BE PLUGGED) VALVE 1. USE A VALVE ANCHORING TEE ON 4 - 3/4" Ø TIE RODS WITH "MEGA LUGS" (TYP) ALL HYDRANT BRANCHES. MUELLER CENTURION HYDRANT A-223 (OR EQUAL) ALL PIPE FITTINGS OPEN LEFT TO BE D.I. CLASS 350 EXETER WATER COMMISSION SPECS.

# HYDRANT INSTALLATION DETAIL



WATER MAIN TAPPING SLEEVE DETAIL SERVICE BOX CONNECTIONS SHALL BE "FLUSH MOUNT"

L CONSTRUCT CHANNEL

PREPARED FOR:

VALVE

TEST PLUG -

EXISTING WATERMAIN ---

BRIAN GRISET

26 CULLEN WAY

EXETER, NH 03833

VALVE CAP TO BE SET FLUSH

W/FINISH ROAD GRADE

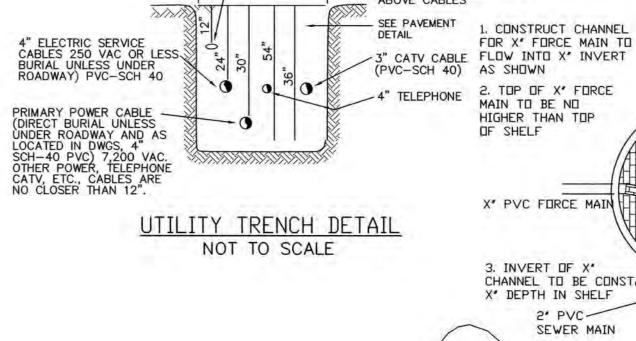
VALVE BOX W/ BASE

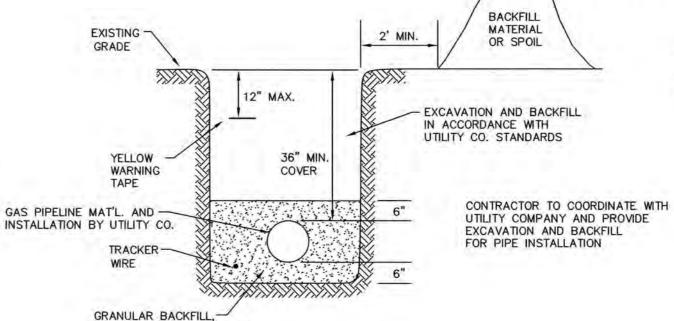
SECTION VIEW

EXISTING SEWER MANHOLE

STAINLESS STEEL TAPPING SLEEVE W/8" OUTLET FLANGE

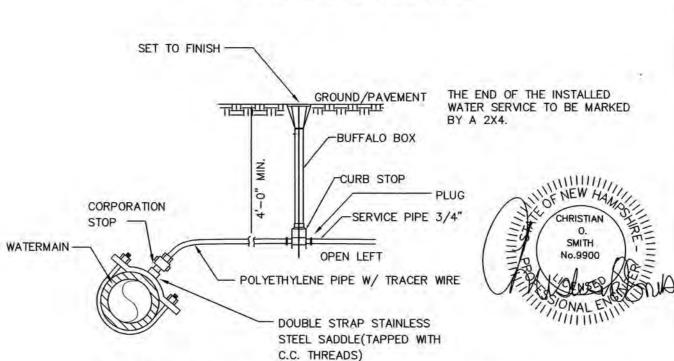
OR APPROVED EQUAL



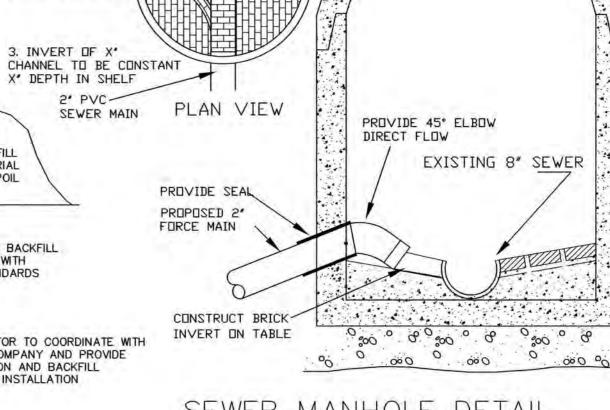


GAS TRENCH DETAIL

SAND NHDOT 209.3 OR AS SPECIFIED BY UTILITY CO.



TYPICAL WATER SERVICE CONNECTION

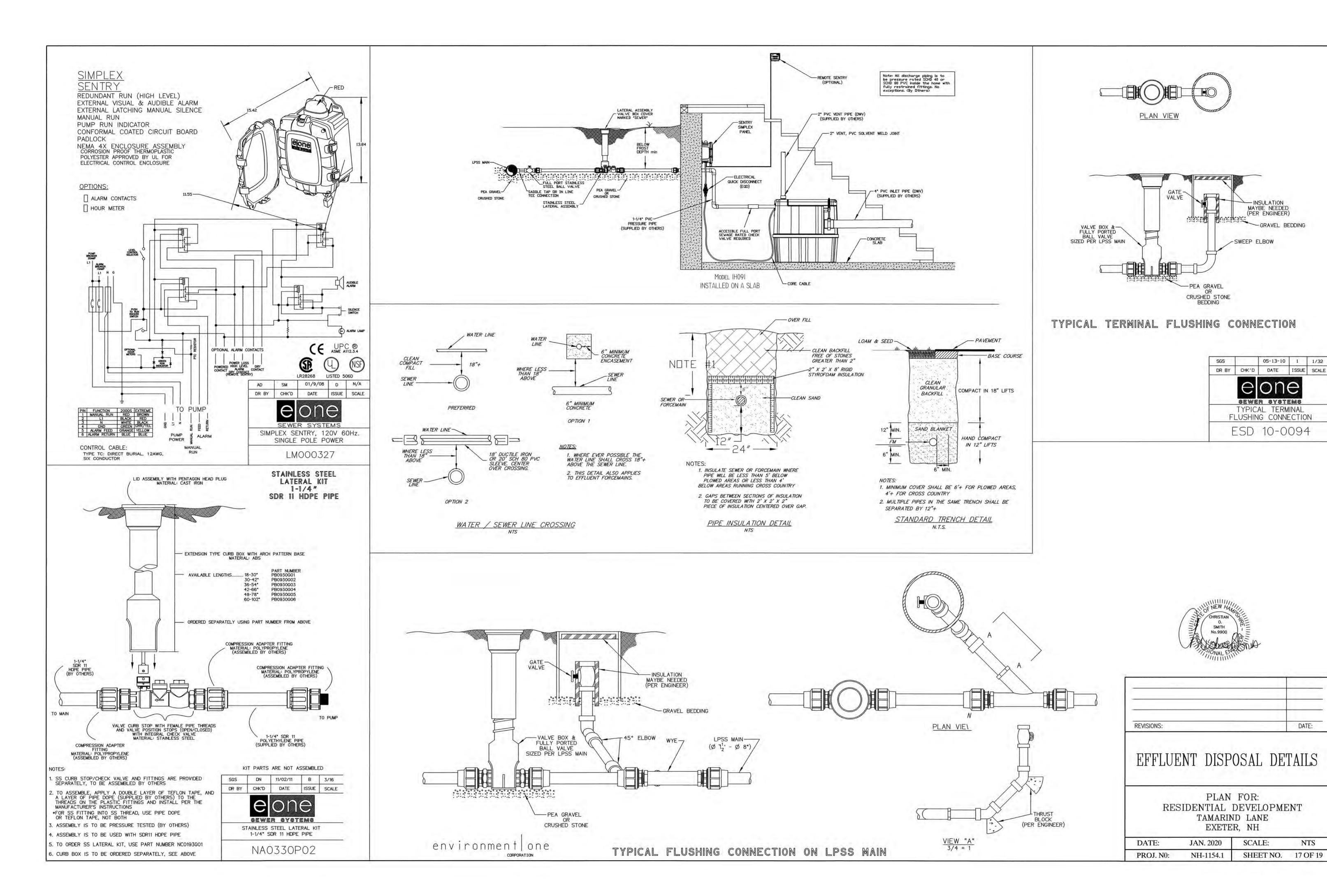


SEWER MANHOLE DETAIL FOR CONSTRUCTION OF FORCE MAIN INTO AN EXISTING MANHOLE

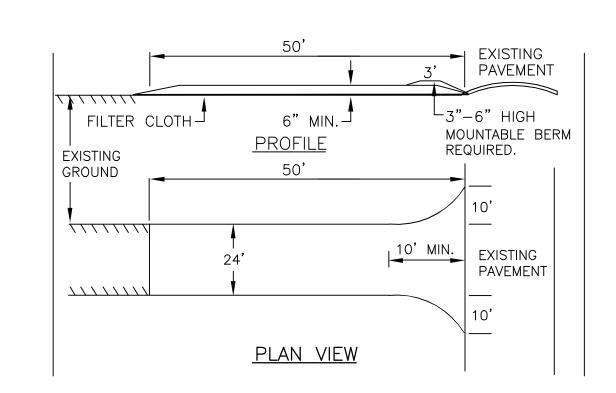
REVISED PER TRC & YIELD PLAN APPROVAL	3-15-21
REVISIONS:	DATE:

# UTILITY DETAILS

DATE:	JAN. 2020	SCALE:	NTS	1
PROJ. N0:	NH-1154.1	SHEET NO.	16 OF 19	



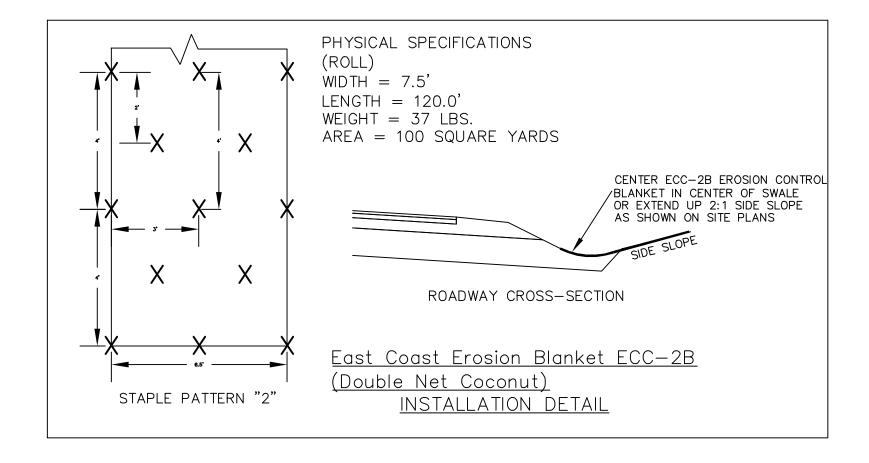
NTS

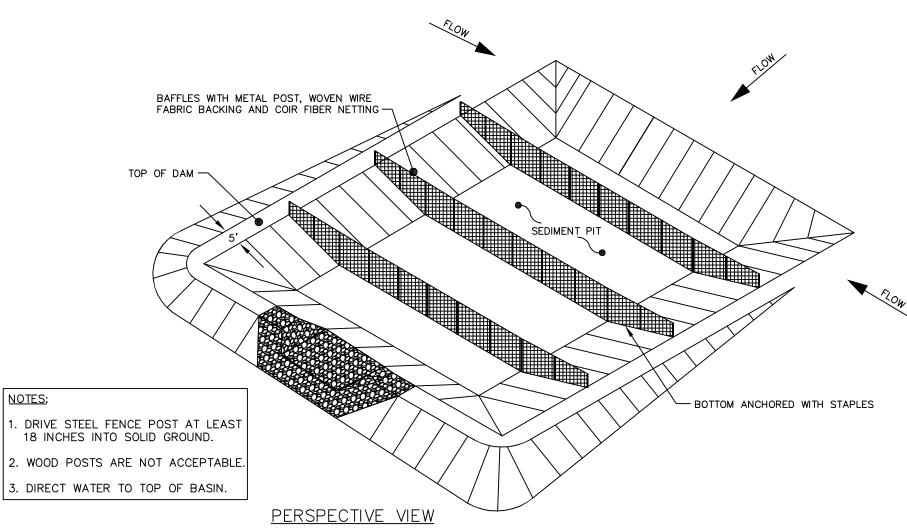


1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT. 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY. 3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES. 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER. 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT. 6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE. 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF

SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED

### STABILIZED CONSTRUCTION ENTRANCE





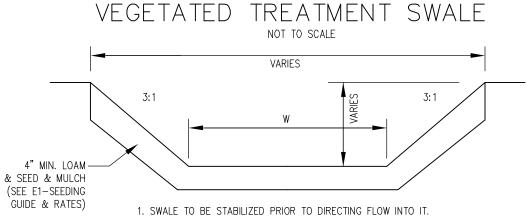
TEMPORARY SEDIMENT BASIN

PREPARED FOR:

BRIAN GRISET 26 CULLEN WAY EXETER, NH 03833

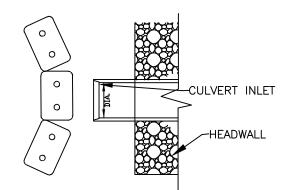
# BEALS · ASSOCIATES PLLC

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



### MAINTENANCE

DURING THE INITIAL ESTABLISHMENT PERIOD, FLOW SHOULD BE DIVERTED OUT OF THE CHANNEL IF AT ALL POSSIBLE TO ALLOW FOR A GOOD STAND OF GRASS. IF THIS IS NOT POSSIBLE USE MATTING. IN ANY CASE DURING THE ESTABLISHMENT PERIOD, THE CHANNEL SHOULD BE CHECKED PERIODICALLY TO DETERMINE IF THE GRASS IS STILL IN GOOD CONDITION AND IN PLACE. THE VEGETATION SHOULD BE FERTILIZED ON AN "AS-NEEDED" BASIS. THE CHANNEL SHOULD BE MOWED FREQUENTLY ENOUGH TO KEEP THE VEGETATION VIGOROUS AND TO CONTROL THE ENCROACHMENT OF WEEDS AND WOODY VEGETATION.
AFTER THE VEGETATION HAS BECOME ESTABLISHED, THE CHANNEL SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO SEE IF DAMAGE HAS OCCURRED. ANY DAMAGED AREAS SHOULD BE REPAIRED AND RE-VEGETATED IMMEDIATELY.



INLET PROTECTION NORMAL USE AT CULVERT INLETS NOT TO SCALE CONSTRUCTION SPECIFICATIONS

FOR STRAW OR HAY BALE BARRIERS

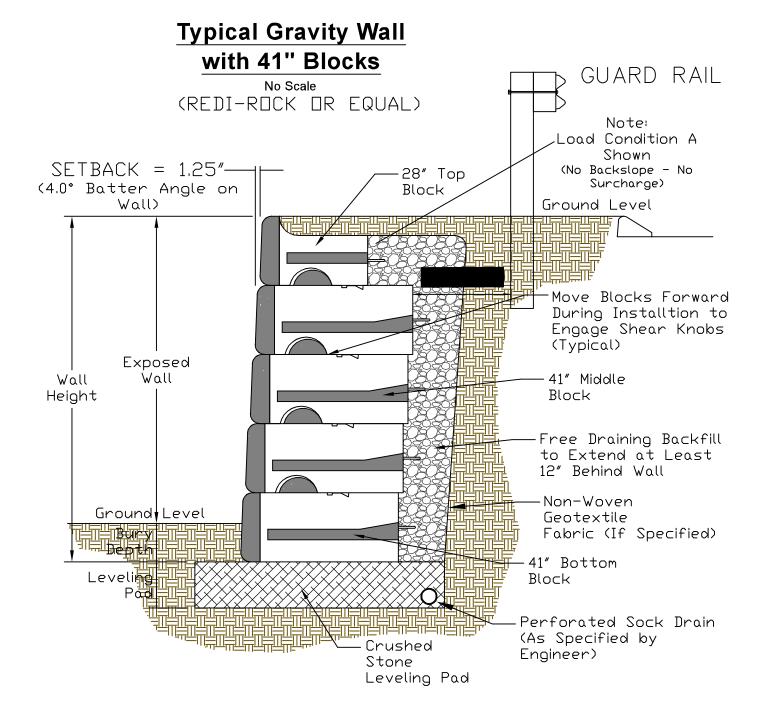
- STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
- 2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- 3. WHEN HAY BALES ARE USED, THE BALES SHALL BE EMBEDDED AT LEAST 4 INCHES INTO THE SOIL. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18 INCHES INTO THE SOIL.
- 4. HAY OR STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AND AT LEAST 18 INCHES INTO THE SOIL.
- 5. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE VEGETATIVE BMP. 6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

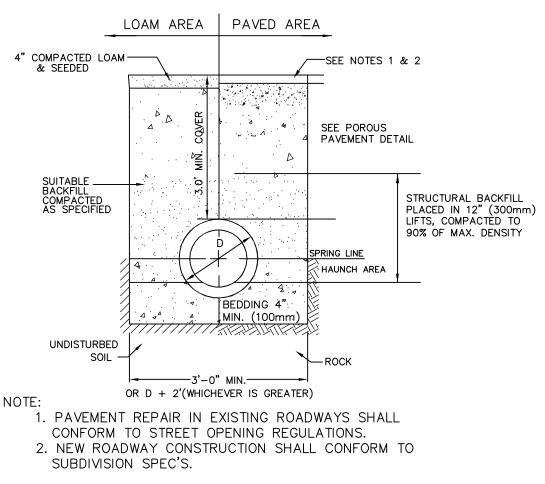
REVISED PER TRC & ENGINEERING REVIEW	4-12-21
REVISED PER TRC & YIELD PLAN APPROVAL	3-15-21
REVISIONS:	DATE:

# CONSTRUCTION DETAILS

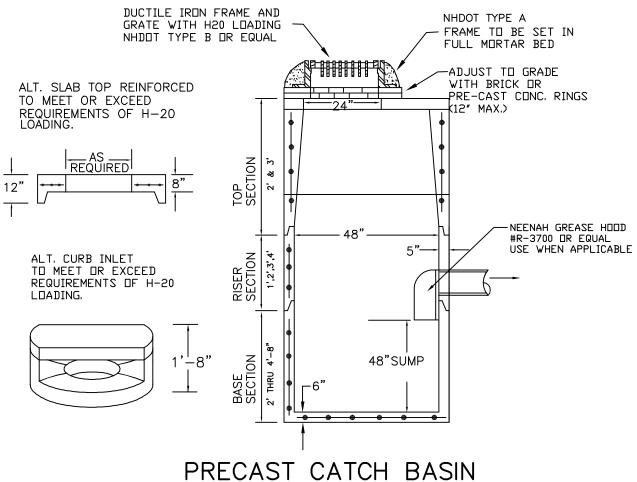
PLAN FOR: RESIDENTIAL DEVELOPMENT TAMARIND LANE EXETER, NH

DATE:	JAN. 2020	SCALE:	NTS
PROJ. N0:	NH-1154.1	SHEET NO.	18 OF 19





TYPICAL DRAINAGE TRENCH DETAIL NOT TO SCALE



NOT TO SCALE

SMITH No.9900

### PIPE DUTLET PROTECTION

TABLE 7-24-F	RECOMMENDED F	RIP RAP GR	ADATION	RANGES
d50 SIZE=	0.25	FEET	3	INCHES
% OF WEIGHT THAN THE GIV	SMALLER /EN d50 SIZE	SIZE DF FROM	STONE	(NCHES)
100%		5		6
85%		4		5
50%		3		5
15%		1		2

TABLE 7-24REC	OMMENDED	RIP RAP	GRA	ADATION	RANGES
d50 SIZE=	0.50	FEET		6	INCHES
% OF WEIGHT SMA THAN THE GIVEN		SIZE FROM	DF	STONE	(INCHES)
100%		9			12
85%		8			11
50%		6			9
15%		2			3

### TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BE EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED\*.

2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR DIRECTED BY THE ENGINEER ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS. 3. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF

SEED PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET. 4. SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.5" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.

5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.

6. AREAS MUST BE SEEDED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL \* AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED

- -In areas that will not be paved, "stable means that:
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
  - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

-In areas to be paved, 'stable' means that base course gravels meeting the requirements of NHDOT Standard for Road and Bridge Construction, 2016, Item 304.2 have been installed.

- 7. THE FOLLOWING SHALL BE ADHERED TO THROUGHOUT THE CONSTRUCTION PROCESS
- -Perimeter controls must be installed prior to earth moving operations. -Stormwater treatment ponds and drainage swales must be installed before rough grading the site.
- -Runoff must be directed to temporary practices until stormwater BMPs are stabilized. -Basins, ditches and swales must be stabilized prior to directing runoff to them.
- -Roadways and parking areas must be stabilized within 72 hours of achieving finished grade.
- -Cut and fill slopes must be stabilized within 72 hours of achieving finished grade.
- -All areas of unstabilized soil must be stabilized as soon as practicable but no later than 45 days after

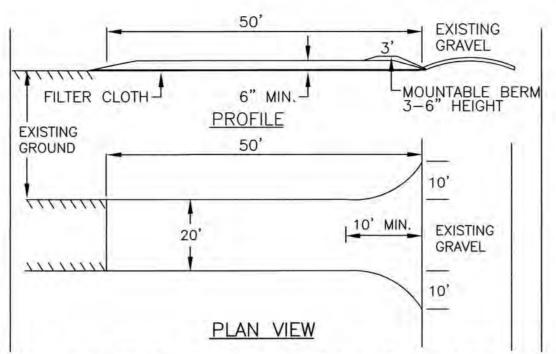
-Erosion control practices must be inspected at least weekly and after every rain event of 0.5 inch or

### CONSTRUCTION SPECIFICATIONS

- 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 AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- 3. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL. 4. STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES
- AND AT LEAST 18 INCHES IN TO THE SOIL
- 5. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP.
- STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED. 7. THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABATE AND CONTROL THE EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING.
- 8. THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION, TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW RSA 430:53 AND NH CODE ADMINISTRATIVE RULES AGR 3800. THE PROJECT SHALL MEET ALL REQUIREMENTS AND THE INTENT OF . RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES
- 9. IN THE EVENT THAT GREATER THAN ONE ACRE OF CONTIGUOUS DISTURBANCE OCCURS, THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FOURTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE, EPA WILL POST THE NOI AT
- http://cfpubl.epa.gov/npdes/stormwater/noi/noisearch.cfm. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

### CONSTRUCTION SEQUENCE

- 1. CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.
- 2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.
- 3. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS.
- 4. EXCAVATE AND STOCKPILE TOPSOIL /LOAM. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- 5. CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED. 6. CONSTRUCT THE ROADWAY AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72-HOURS OF ACHIEVING FINISH GRADE AS APPLICABLE. 7. INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS
- SHALL STABILIZED IMMEDIATELY AFTER GRADING. 8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.
- 9. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC. TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY.
- 10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION 11. COMPLETE PERMANENT SEEDING AND LANDSCAPING
- 12. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVEGETATE ALL DISTURBED AREAS.
- 13. ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM. 14. FINISH PAVING ALL ROADWAYS.
- 15. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE CRUSHED STONE COURSE TO DESIGN ELEVATION/REQUIRED COMPACTION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.



 STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE MIN. 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.

2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50-FEET (3"-6" MOUNTABLE BERM REQUIRED), EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD

- 3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES. 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER.
- 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

### STABILIZED CONSTRUCTION ENTRANCE

### WINTER MAINTENANCE

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION BY OCTOBER 15TH SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

3. PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

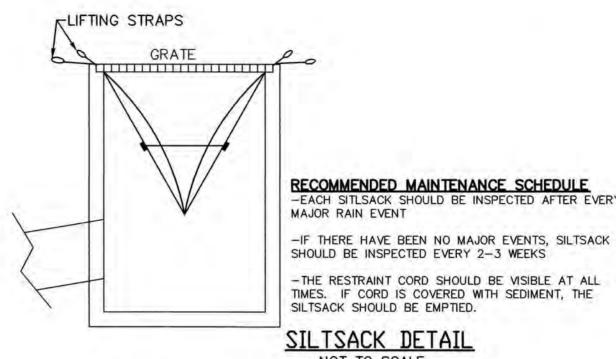
4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.

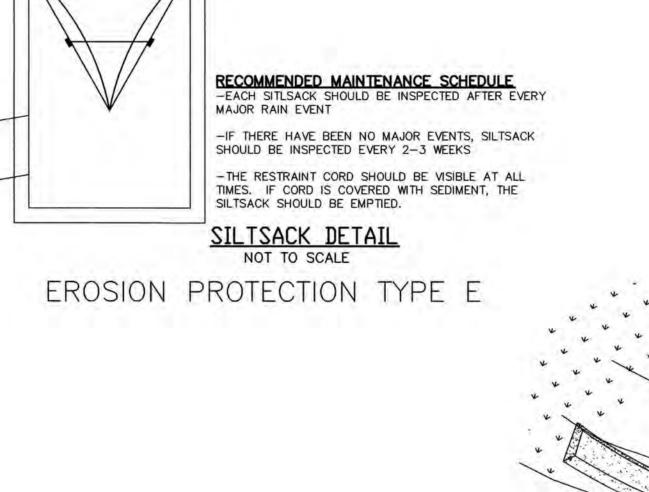
### SEEDING SPECIFICATIONS

- 1. GRADING AND SHAPING
- A. SLOPES SHALL NOT BE STEEPER THAN 2:1;3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- 2. SEEDBED PREPARATION
- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
- B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- 3. ESTABLISHING A STAND
- A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
- AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS PER 1,000 SQ. FT... NITROGEN(N), 50 LBS PER ACRE OR 1. 1 LBS PER 1,000 SQ.FT.
- PHOSPHATE(P205), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.
- POTASH(K20), 100 LBS PER ACRE OR 2. 2 LBS PER 1,000 SQ.FT.
- (NOTE: THIS IS THE EQUIVALENT OF 500 LBS PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS PER ACRE OF 5-10-10.)
- B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE, METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL
- OR LESS. BY CULTIPACKING OR RAKING. C. REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET)
- WITH THEIR SPECIFIC INOCULANT. D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

FOR RATES OF SEEDING. ALL LEGUMES (CROWN VETCH, BIRDS FOOT TREFOIL, AND FLAT PEA) MUST BE INOCULATED

- 4. MULCH
- A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
- B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 SQ. FT.
- 5. MAINTENANCE TO ESTABLISH A STAND
- A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.





AREA OF EMBANKMENT CONSTRUCTION OR ANY DISTURBED AREA TO BE STABILIZED (UPHILL) 2' MIN. -HEIGHT WOVEN WIRE FENCE W\
- PROPEX-SILT STOP SEDIMENT CONTROL FABRIC OR APPROVED EQUAL SILT FENCE

CONSTRUCTION SPECIFICATIONS 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES AND FILTER CLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP MID AND BOTTOM SECTIONS AND BE EMBEDDED INTO GROUND A MINIMUM OF 8". 2. THE FENCE POSTS SHALL BE A MINIMUM 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A MINIMUM OF 16" INTO THE GROUND.

3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED BY SIX INCHES, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY-PASSING.

4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND PROPERLY DISPOSED OF. 5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE. 6. SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND RE-VEGETATED

### MAINTENANCE

SAND AND GRAVEL PITS.

1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH 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 THE HEIGHT OF THE

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.

### SEEDING GUIDE

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW	A B	FAIR POOR	GOOD	GOOD FAIR	FAIR FAIR
AND DISPOSAL	Č	POOR	GOOD	EXCELLENT	GOOD
AREAS	D E	FAIR FAIR	FAIR EXCELLENT	GOOD EXCELLENT	EXCELLENT POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER	A	GOOD	GOOD EXCELLENT	GOOD EXCELLENT	FAIR FAIR
CHANNELS WITH FLOWING WATER.	D	GOOD	EXCELLENT	EXCELLENT	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND	A B	GOOD GOOD GOOD	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT	FAIR POOR FAIR
LOW INTENSITY USE RECREATION SITES.	D	FAIR	GOOD	GOOD	EXCELLEN
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	F G	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	2/ 2/

NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR DATS AT A RATE OF 2.5 LBS, PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCT. 15, IF PERMANENT SEEDING NOT YET COMPLETE.

POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREA AND ATHLETIC FIELDS.

1/ REFER TO SEEDING MIXTURES AND RATES IN TABLE 7-36.

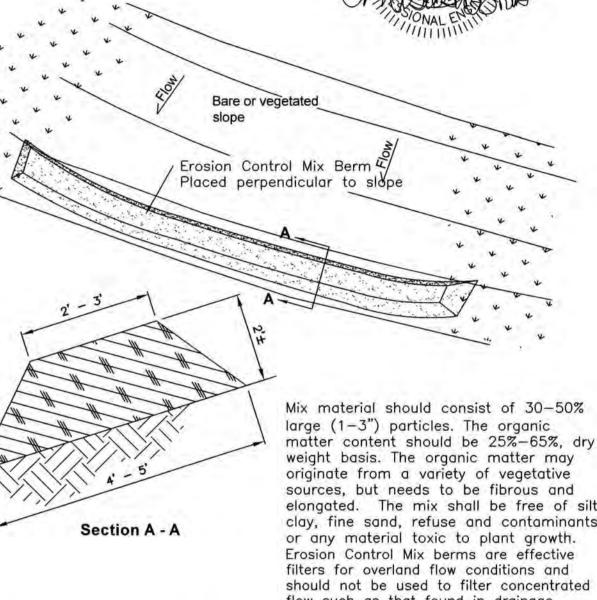
PREPARED FOR:

BRIAN GRISET 26 CULLEN WAY EXETER, NH 03833

# BEALS · ASSOCIATES PLLC

No.9900

70 PORTSMOUTH AVE, STRATHAM, N.H. 03885 PHONE: 603-583-4860, FAX. 603-583-4863



Erosion Control Mix berms are effective filters for overland flow conditions and should not be used to filter concentrated flow such as that found in drainage ditchs, streams, etc.

Erosion Control Mix Berm

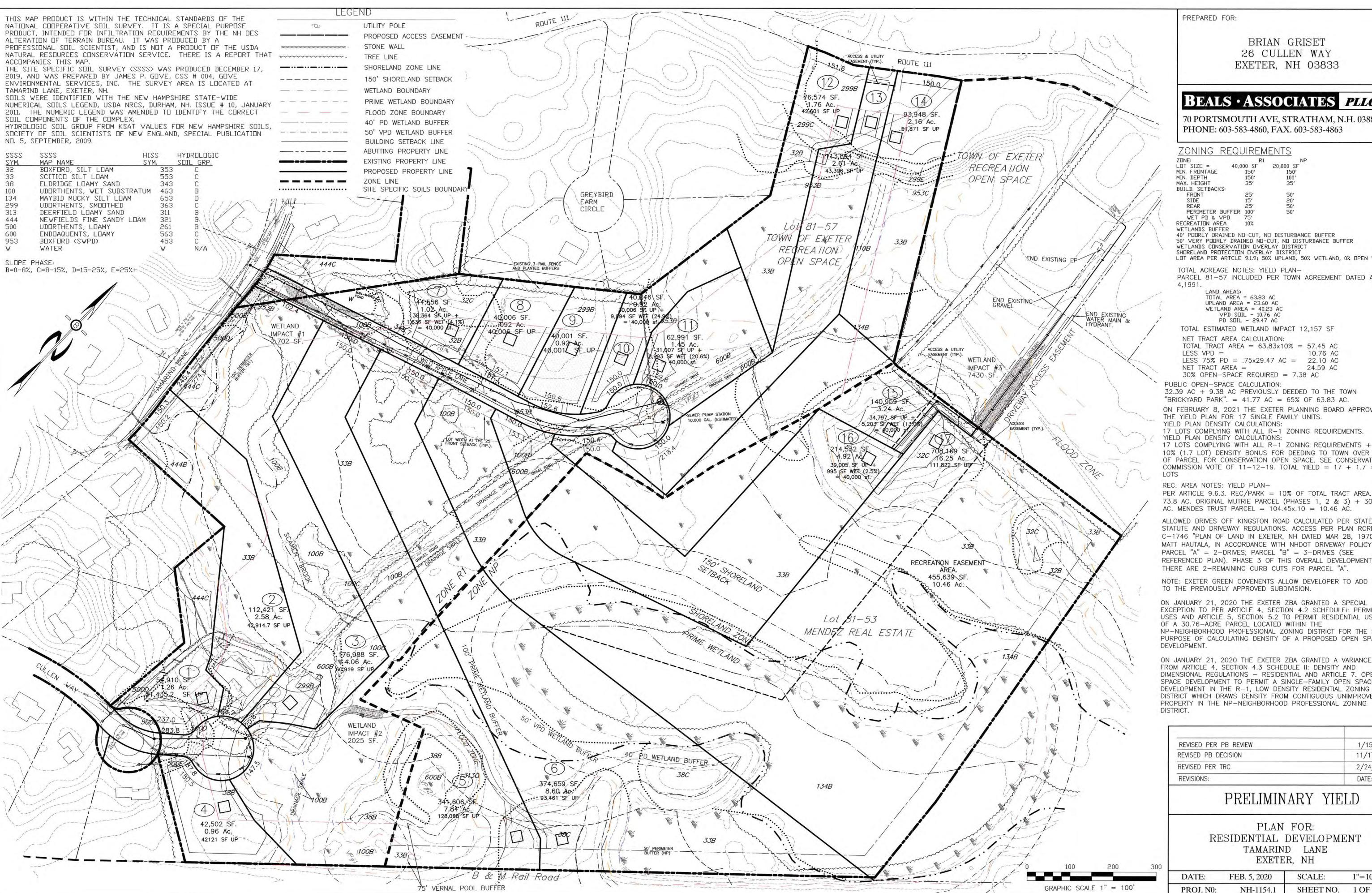
CEEDING DATES

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 Sq. F
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR	15 10 15	0.35 0.25 0.35
FLAT PEA	30	0.75
TOTAL	40 OR 55	0.95 OR 1.35
C. TALL FESCUE CREEPING RED FESCUE BIRDS FOOT TREFOIL TOTAL	20 20 8 48	0.45 0.45 <u>0.20</u> 1.10
D. TALL FESCUE	20	0.45
FLAT PEA	30	0.75
TOTAL	50	1.20
E. CREEPING RED FESCUE 1/	50	1.15
KENTUCKY BLUEGRASS 1/	50	1.15
TOTAL	100	2.30
F. TALL FESCUE 1	150	3.60

REVISED PER TRC & YIELD PLAN APPROVAL	3-15-21
REVISIONS:	DATE:

EROSION CONTROL DETAILS

DATE:	JAN. 2020	SCALE:	NTS
PROJ. N0:	NH-1154.1	SHEET NO.	19 OF 19



BRIAN GRISET 26 CULLEN WAY EXETER, NH 03833

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70 PORTSMOUTH AVE, STRATHAM, N.H. 03885

LOT AREA PER ARTCLE 9.1.9; 50% UPLAND, 50% WETLAND, 0% OPEN WATER.

PARCEL 81-57 INCLUDED PER TOWN AGREEMENT DATED AUG.

TOTAL ESTIMATED WETLAND IMPACT 12,157 SF

TOTAL TRACT AREA =  $63.83 \times 10\% = 57.45$  AC 10.76 AC LESS 75% PD =  $.75 \times 29.47$  AC = 22.10 AC 24.59 AC

32.39 AC + 9.38 AC PREVIOUSLY DEEDED TO THE TOWN "BRICKYARD PARK". = 41.77 AC = 65% OF 63.83 AC.

ON FEBRUARY 8, 2021 THE EXETER PLANNING BOARD APPROVED THE YIELD PLAN FOR 17 SINGLE FAMILY UNITS.

17 LOTS COMPLYING WITH ALL R-1 ZONING REQUIREMENTS +

10% (1.7 LOT) DENSITY BONUS FOR DEEDING TO TOWN OVER 50% OF PARCEL FOR CONSERVATION OPEN SPACE. SEE CONSERVATION COMMISSION VOTE OF 11-12-19. TOTAL YIELD = 17 + 1.7 = 18

73.8 AC. ORIGINAL MUTRIE PARCEL (PHASES 1, 2 & 3) + 30.76 AC. MENDES TRUST PARCEL = 104.45x.10 = 10.46 AC.

ALLOWED DRIVES OFF KINGSTON ROAD CALCULATED PER STATE STATUTE AND DRIVEWAY REGULATIONS. ACCESS PER PLAN RCRD: C-1746 "PLAN OF LAND IN EXETER, NH DATED MAR 28, 1970 BY MATT HAUTALA, IN ACCORDANCE WITH NHDOT DRIVEWAY POLICY #8, PARCEL "A" = 2-DRIVES; PARCEL "B" = 3-DRIVES (SEE REFERENCED PLAN). PHASE 3 OF THIS OVERALL DEVELOPMENT,

NOTE: EXETER GREEN COVENENTS ALLOW DEVELOPER TO ADD LOTS

ON JANUARY 21, 2020 THE EXETER ZBA GRANTED A SPECIAL EXCEPTION TO PER ARTICLE 4, SECTION 4.2 SCHEDULEI: PERMITTED USES AND ARTICLE 5, SECTION 5.2 TO PERMIT RESIDENTIAL USE OF A 30.76-ACRE PARCEL LOCATED WITHIN THE NP-NEIGHBORHOOD PROFESSIONAL ZONING DISTRICT FOR THE SOLE PURPOSE OF CALCULATING DENSITY OF A PROPOSED OPEN SPACE

ON JANUARY 21, 2020 THE EXETER ZBA GRANTED A VARIANCE FROM ARTICLE 4, SECTION 4.3 SCHEDULE II: DENSITY AND DIMENSIONAL REGULATIONS - RESIDENTIAL AND ARTICLE 7. OPEN SPACE DEVELOPMENT TO PERMIT A SINGLE-FAMILY OPEN SPACE DEVELOPMENT IN THE R-1, LOW DENSITY RESIDENTIAL ZONING DISTRICT WHICH DRAWS DENSITY FROM CONTIGUOUS UNIMPROVED PROPERTY IN THE NP-NEIGHBORHOOD PROFESSIONAL ZONING

REVISED PER PB REVIEW	1/15/21
REVISED PB DECISION	11/17/20
REVISED PER TRC	2/24/20
REVISIONS:	DATE:

# PRELIMINARY YIELD

PLAN FOR: RESIDENTIAL DEVELOPMENT TAMARIND LANE

Ι	DATE:	FEB. 5, 2020	SCALE:	1"=100'
P	ROJ. N0:	NH-1154.1	SHEET NO.	1 OF 1