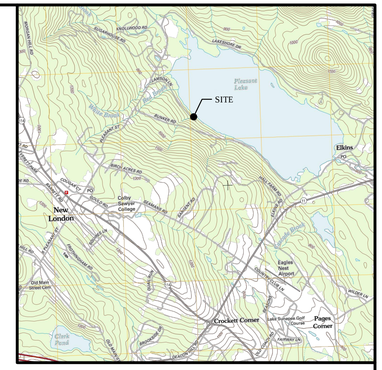
PRE TREE COUNT SUMMARY

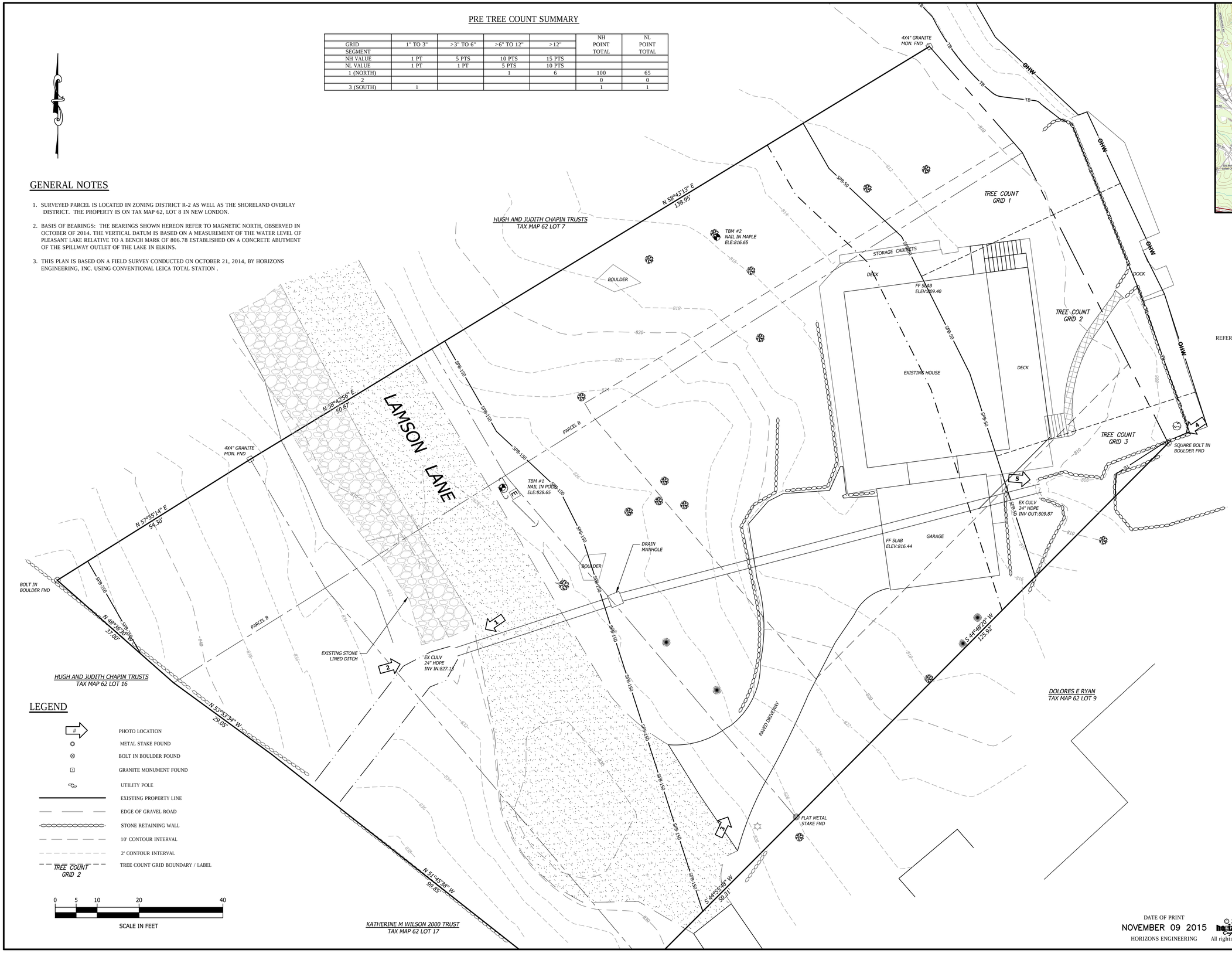
GRID	1" TO 3"	>3" TO 6"	>6" TO 12"	>12"	NH POINT TOTAL	NL POINT TOTAL
SEGMENT						
NH VALUE	1 PT	5 PTS	10 PTS	15 PTS		
NL VALUE	1 PT	1 PT	5 PTS	10 PTS		
1 (NORTH)			1	6	100	65
2					0	0
3 (SOUTH)	1				1	1

GENERAL NOTES

1. SURVEYED PARCEL IS LOCATED IN ZONING DISTRICT R-2 AS WELL AS THE SHORELAND OVERLAY DISTRICT. THE PROPERTY IS ON TAX MAP 62, LOT 8 IN NEW LONDON.
2. BASIS OF BEARINGS: THE BEARINGS SHOWN HEREON REFER TO MAGNETIC NORTH, OBSERVED IN OCTOBER OF 2014. THE VERTICAL DATUM IS BASED ON A MEASUREMENT OF THE WATER LEVEL OF PLEASANT LAKE RELATIVE TO A BENCH MARK OF 806.78 ESTABLISHED ON A CONCRETE ABUTMENT OF THE SPILLWAY OUTLET OF THE LAKE IN ELKINS.
3. THIS PLAN IS BASED ON A FIELD SURVEY CONDUCTED ON OCTOBER 21, 2014, BY HORIZONS ENGINEERING, INC. USING CONVENTIONAL LEICA TOTAL STATION .



LOCUS MAP



LEGEND

- PHOTO LOCATION
- METAL STAKE FOUND
- BOLT IN BOULDER FOUND
- GRANITE MONUMENT FOUND
- UTILITY POLE
- EXISTING PROPERTY LINE
- EDGE OF GRAVEL ROAD
- STONE RETAINING WALL
- 10' CONTOUR INTERVAL
- 2' CONTOUR INTERVAL
- TREE COUNT GRID BOUNDARY / LABEL (TREE COUNT GRID 2)

0 5 10 20 40

SCALE IN FEET

DATE OF PRINT
NOVEMBER 09 2015
HORIZONS ENGINEERING

horizons Engineering Inc.
Littleton NH • New London NH • Newport VT
603-444-4111 603-877-0116 802-334-6434

TIM & CINDY CARLSON

293 LAMSON LANE PERMITTING

NEW LONDON, NH

EXISTING CONDITIONS PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: NOV 2015	PROJECT #: 14819
ENGIN'D BY: -	DRAWN BY: EJP
CHECK'D BY: SHJ	ARCHIVE #: H-___

SHEET 1 OF 3

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LEGEND

- METAL STAKE FOUND
- BOLT IN BOULDER FOUND
- GRANITE MONUMENT FOUND
- UTILITY POLE
- EXISTING PROPERTY LINE
- EDGE OF GRAVEL ROAD
- STONE RETAINING WALL
- 10' CONTOUR INTERVAL
- 2' CONTOUR INTERVAL
- FLOATING TURBIDITY BARRIER
- OHW — ORDINARY HIGH WATER - REFERENCE LINE
- TB — TOP OF BANK
- SPB-50 — 50' SHORELAND PROTECTION BUFFER
- SPB-150 — 150' SHORELAND PROTECTION BUFFER
- SPB-250 — 250' SHORELAND PROTECTION BUFFER
- 60" SHORELAND PROTECTION BUFFER
- TREE COUNT GRID BOUNDARY / LABEL

TREE COUNT GRID 2

POST TREE COUNT SUMMARY

GRID	1" TO 3"	>3" TO 6"	>6" TO 12"	>12"	NH POINT TOTAL	NL POINT TOTAL
SEGMENT						
NH VALUE	1 PT	5 PTS	10 PTS	15 PTS	MIN. 50	
NL VALUE	1 PT	1 PT	5 PTS	10 PTS		MIN. 50
1 (NORTH)			1	4	70	45
2					0	0
3 (SOUTH)	1				1	1

PLEASANT LAKE
REFERENCE SURFACE ELEVATION (OHW) = 803.8
(SEE NOTE 2, SHEET 1)

TURBIDITY CURTAIN (SEE DETAIL)
SEE STREAM OUTLET DETAIL
CONSTRUCT NATURAL STREAM SIMULATION (SEE DETAIL)
16" MAPLE
20" BEECH
20" BEECH
10" BEECH
30" MAPLE
TOP OF BANK
SILT FENCE (SEE DETAIL)
30' SETBACK
TREE COUNT GRID 1
TREE COUNT GRID 2
TREE COUNT GRID 3
60' BUFFER
DECK
HOUSE
FF ELEV = 524.00
GARAGE
FF ELEV = 524.00
ROCKERY WALL TOP=523.80 (SEE DETAIL)
30" HDPE CULVERT INV = 816.10
30" HDPE CULVERT INV IN = 823.30 INV OUT = 816.10 LENGTH = 69' (SEE DRAINAGE TRENCH DETAIL)
PROPOSED EDGE OF DRIVEWAY
REMOVE ±100' OF CONCRETE PIPE WITH HDPE SLEEVE; BACKFILL WITH SUITABLE NATIVE MATERIAL AND COMPACT IN 12 INCH LIFTS
UTILITY POLE AND GUY WIRES TO BE REMOVED
PROPOSED UTILITY POLE (SPECIFICATIONS BY OTHERS)
24" HDPE INV IN: 827.13 INV OUT: 826.75± LENGTH: 38.5'
REMOVE CONCRETE MANHOLE & REMOVE ±5' OF PIPE
INSTALL 60" DRAINAGE MANHOLE RIM: 827.80 24" HDPE INV IN: 826.75 30" HDPE INV, OUT: 823.30 ± (SEE NOTE 2) (SEE DRAIN MANHOLE DETAIL)
REMOVE ASPHALT PAVEMENT DRIVEWAY
25' SETBACK
20' SETBACK
RIGHT-OF-WAY
RIGHT-OF-WAY

HUGH AND JUDITH CHAPIN TRUSTS
TAX MAP 62 LOT 7

N 58°43'13" E 138.95'
N 57°55'14" E 54.30'
N 58°42'56" E 50.67'
N 48°36'30" W 37.00'
N 53°35'34" W 29.05'
N 51°45'39" W 99.85'
S 44°48'20" W 125.92'
S 44°55'49" W 50.31'

HUGH AND JUDITH CHAPIN TRUSTS
TAX MAP 62 LOT 16

KATHERINE M WILSON 2000 TRUST
TAX MAP 62 LOT 17

DOLORES E RYAN
TAX MAP 62 LOT 9

0 5 10 20 40
SCALE IN FEET

GENERAL NOTES

1. THE INTENT OF THIS PLAN IS TO DEPICT CULVERT ALTERATION AND STREAM RESTORATION FOR WETLANDS PERMITTING. FINAL HOUSE FOOTPRINT AND DRIVEWAY LAYOUT DESIGN HAVE NOT BEEN COMPLETED. FINAL PLANS DEPICTING GRADING AND CONSTRUCTION DETAILS FOR THE REST OF THE SITE WILL BE PREPARED FOR NHDES SUBSURFACE AND NHDES SHORELAND PERMIT APPLICATIONS FOLLOWING WETLANDS APPROVAL.
2. THE 24" CULVERT OUTLET INTO THE EXISTING MANHOLE WAS NOT DETERMINED DUE TO A CRACKED CONCRETE COVER ON THE MANHOLE. CONTRACTOR SHALL DETERMINE ACTUAL INVERT ELEVATION OF THE EXISTING 24" CULVERT TO FABRICATE THE PROPOSED MANHOLE.

DATE OF PRINT
NOVEMBER 09 2015
HORIZONS ENGINEERING

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603-444-4111 603-877-0116 802-334-6434

TIM & CINDY CARLSON
293 LAMSON LANE PERMITTING

NEW LONDON, NH

STREAM RESTORATION PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

STATE OF NEW HAMPSHIRE — WILLIAM T. DAVIS No. 11918 LICENSED PROFESSIONAL ENGINEER

DATE:	PROJECT #:
NOV 2015	14819
ENGIN'D BY:	DRAWN BY:
WTD	WTD
CHECK'D BY:	ARCHIVE #:
SHJ	H-___

SHEET 2 OF 3

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EROSION CONTROL GENERAL NOTES

A. KEEP SITE MODIFICATION TO A MINIMUM
1. CONSIDER FITTING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.
2. EXPOSE AREAS OF BARE SOIL TO EROSIVE ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
3. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
4. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.
5. AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.

B. MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES
1. STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED FROM EROSION.
2. PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.

C. PROTECT AREA AFTER CONSTRUCTION.
1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
2. MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.
3. MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED.
4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.
5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, GRADED AREAS ARE TO BE STABILIZED WITH NORTH AMERICAN GREEN DS150 MATTING OR EQUAL.

COLD WEATHER SITE STABILIZATION REQUIREMENTS

TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:

1. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO ONE ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
3. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.
5. INSTALLATION OF EROSION CONTROL BLANKETS SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
6. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
7. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
8. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2.

CONSTRUCTION SEQUENCE

1. PREPARE AN EROSION CONTROL PLAN IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS.
3. INSTALL SILT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSIONS CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
4. GRUB SITE WITHIN GRADING LIMITS.
5. STRIP AND STOCKPILE TOPSOIL AND INSTALL ADDITIONAL EROSION CONTROL MEASURES AS NEEDED.
6. PROCEED WITH DEMOLITION WORK, LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM LENGTH OF TIME THAT A WORK UNIT MAY BE LEFT UNSTABILIZED IS 30 DAYS.
7. CONSTRUCT PROPOSED STREAM CHANNEL PRIOR TO DEMOLITION OF EXISTING CULVERT.
8. BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 14 DAYS OF ACHIEVING FINISHED GRADE.

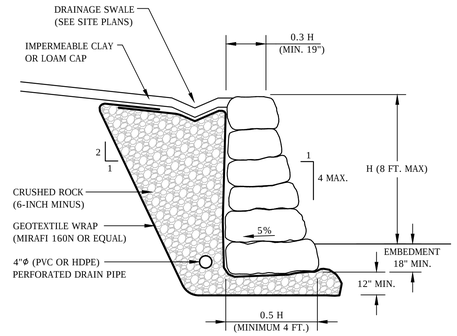
   AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
   D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
9. INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.5 INCHES OF PRECIPITATION. MAINTAIN SILT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
10. PAVE DRIVEWAY AND/OR PARKING AREAS.
11. PLACE TOPSOIL, SEED AND MULCH.
12. COMPLETE ALL REMAINING PERMANENT EROSION CONTROL STRUCTURES.
13. MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.

GENERAL NOTES - ROCKERY WALL

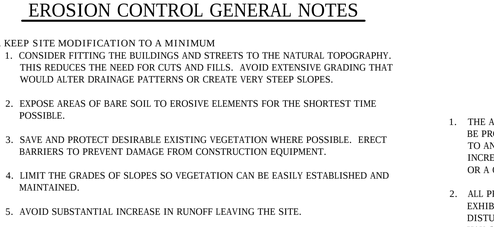
1. THE WALL DETAIL(S) DEPICTED ON THESE PLANS ARE CONCEPTUAL. SITE SPECIFIC DESIGN SHOULD BE COMPLETED BY A GEOTECHNICAL ENGINEER BASED ON SITE SPECIFIC SOIL AND GROUNDWATER CONDITIONS AT THE WALL LOCATIONS.
2. WALL CONSTRUCTION AND INSPECTION SHOULD BE COMPLETED IN ACCORDANCE WITH ROCKERY DESIGN AND CONSTRUCTION GUIDELINES, FHWA-CFL/TD-06-006, NOVEMBER 2006.
3. EXCAVATIONS SHALL BE EXTENDED TO AT LEAST 2.5 FEET BELOW FINISH GRADE TO ALLOW FOR WALL EMBEDMENT AND LEVELING COURSE. THE BASE OF THE EXCAVATION SHALL BE INCLINED BACK AWAY FROM THE FACE OF THE ROCKERY, AT 5 PERCENT.
4. ROCKS SHOULD BE PLACED IN ROWS SUCH THAT BASE ROCKS CONSIST OF LARGEST DIAMETER AND WEIGHT ROCKS AND EACH SUCCEEDING ROW CONSISTS OF SMALLER DIAMETER ROCKS. BASE ROCKS SHALL BE EQUAL TO ABOUT ½ THE WALL HEIGHT AND NOT LESS THAN 4 FEET IN DIAMETER. CAP ROCKS SHALL BE EQUAL TO ABOUT 1/3 THE WALL HEIGHT AND NOT LESS THAN 19 INCHES IN DIAMETER.
5. ROCKS SHALL BE HARD, ANGULAR AND DURABLE. THEY MUST BE ABLE TO RESIST PHYSICAL, CLIMATIC, AND CHEMICAL DECOMPOSITION. ROCKS SHOULD BE ROUGHLY RECTANGULAR, TABULAR OR CUBIC IN SHAPE. ROUNDED COBBLES OR BOULDERS MUST NOT BE USED.
6. ROCKS SHOULD BE PLACED WITH LONGEST DIMENSION PERPENDICULAR TO ROCKERY FACE. THE ROCKS SHOULD BE PLACED SUCH THAT THEY SLOPE DOWNWARD AT LEAST 5 PERCENT TOWARDS THE BACK OF THE ROCKERY.
7. THE ROCKERY FACE BATTER SHOULD BE 4V:1H OR FLATTER.
   - o EACH ROCK SHOULD BEAR ON AT LEAST TWO OTHER ROCKS.
   - o EACH ROCK SHOULD HAVE AT LEAST THREE BEARING POINTS – TWO IN FRONT AND ONE IN BACK.
   - o THE FRONT-MOST BEARING POINTS FOR EACH ROCK SHOULD BEWITHIN 150MM (6IN) OF THE AVERAGE FACE OF THE ROCKERY.
   - o THE REAR OF THE ROCKS SHOULD BE ALIGNED ALONG AN IMAGINARY VERTICAL PLANE. IF ROCKS LARGER THAN THE MINIMUM SPECIFIED BASE WIDTH (B) ARE USED, THEY CAN EXTEND BEYOND THIS IMAGINARY PLANE PROVIDED THEY DO NOT INTERFERE WITH ROCKERY DRAINAGE OR REINFORCED ZONE.
8. THERE SHOULD BE NO VERTICAL COLUMNS OF ROCK OR CONTINUOUS VERTICAL JOINTS BETWEEN MULTIPLE ROWS OF ROCKS.
9. ROCK WIDTH SHALL BE LARGE ENOUGH TO EXTEND FROM THE FRONT FACE TO THE BACK OF THE ROCKERY AT EACH LEVEL.
10. PLACE BASE, FACING AND CAP ROCKS SO THAT THEIR HEIGHT DIMENSION IS NOT GREATER THAN THEIR WIDTH. THE LONGEST DIMENSION OF THE BASE, FACING, AND CAP ROCKS IS PERPENDICULAR TO FACE OF ROCKERY.
11. VOIDS BETWEEN ROCKS SHOULD BE AVOIDED AS MUCH AS POSSIBLE. HOWEVER, IN AREAS WHERE VOIDS EXIST, THE VOIDS SHALL BE CHINKED. CHINK ROCKS SHOULD CONSIST OF SPALLS FROM THE PARENT (FACING) ROCK. CHINK ROCKS SHOULD NOT BE MOVABLE BY HAND AND SHOULD BE GROUTED IN PLACE WHERE APPROPRIATE. CHINKING ROCKS SHOULD NOT BE USED AS A MEANS OF SUPPORT FOR OVERLYING FACING ROCKS.
12. CAP ROCKS ARE THE TOP ROW OF FACING ROCKS FOR ROCKERIES. CAP ROCKS ARE TYPICALLY SMALLER AND FLATTER THAN THE OTHER FACING ROCKS USED IN THE ROCKERY. CAP ROCKS SHALL HAVE A WEIGHT OF AT LEAST 200 POUNDS. CAP ROCKS SHOULD NOT BE MOVABLE BY HAND. REGARDLESS OF SIZE, CAP ROCKS SHALL BE GROUTED IN PLACE TO REDUCE THE POTENTIAL FOR DISLODGING.
13. CRUSHED ROCK SHOULD CONSIST OF CRUSHED, WASHED, HARD, DURABLE ROCK MEETING THE FOLLOWING GRADATION REQUIREMENTS:

CRUSHED ROCK	
SIEVE SIZE	PERCENT FINER BY WEIGHT
150MM (6IN)	100
100MM (4 IN)	0.0 - 25
19.0MM (3/4 IN)	0.0 – 15
4.75MM (NO. 4)	0.0 – 5.0
75MM (NO. 200)	0.0 – 2.0

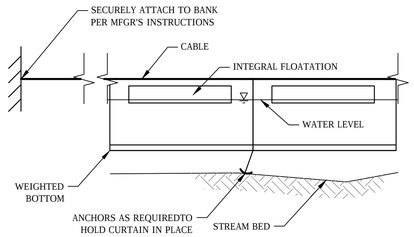
14. WHERE LOOSE, SOFT, OR OTHERWISE UNSUITABLE FOUNDATION SOIL CONDITIONS ARE ENCOUNTERED, CONTACT THE ENGINEER FOR SUPPLEMENTAL RECOMMENDATIONS.
15. DISCHARGE OUTLET PIPES TO A PROTECTED OUTLET OR OTHER PERMANENET DRAINAGE STRUCTURE AT LOW POINTS IN THE ROCKERY. DRAIN OUTLETS SHOULD NOT EMPTY INTO STORM DRAINS THAT ARE DESIGNED TO BACK-UP DURING HEAVY FLOWS.
16. STABILITY OF TEMPORARY CUT SLOPES IS THE RESPONSIBILITY OF THE CONTRACTOR.
17. DO NOT CONSTRUCT ROCKERIES OR SLOPES EXCEEDING THE HEIGHTS SHOWN ON THE PLAN.



ROCKERY WALL DETAIL
NOT TO SCALE

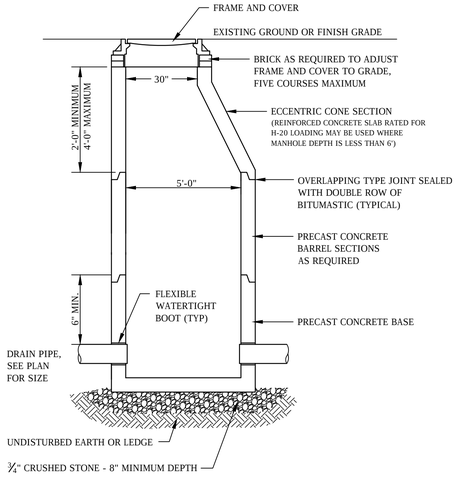


STREAM CHANNEL SIMULATION
NOT TO SCALE



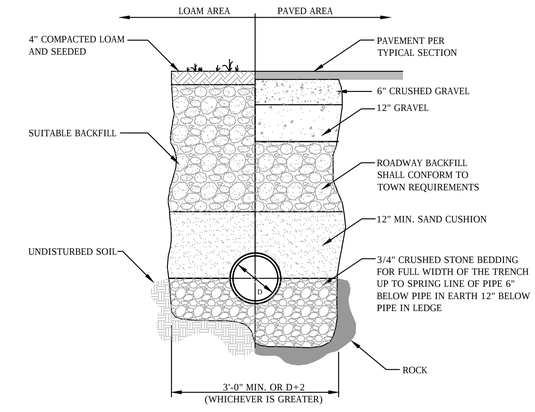
NOTES:
1. FLOATING TURBIDITY BARRIER SHALL BE TYPE I FLOATING TURBIDITY BARRIER AS MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL.
2. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3. TURBIDITY BARRIER SHALL BE DEPLOYED DURING ACTIVITIES WHICH HAVE THE POTENTIAL TO CAUSE TURBIDITY. BARRIER SHALL BE TEMPORARILY REMOVED WHEN SIGNIFICANT ICE OR FLOATING DEBRIS IS EXPECTED AND NO WORK IS TAKING PLACE.

FLOATING TURBIDITY BARRIER DETAIL
NOT TO SCALE



NOTE:
CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO CONFIRM ADEQUATE DIAMETER AND INVERTS.

DRAIN MANHOLE DETAIL
NOT TO SCALE

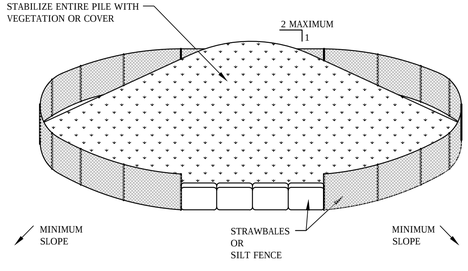


TYPICAL DRAINAGE TRENCH DETAIL
NOT TO SCALE

STONE SPECIFICATIONS FOR STREAM RESTORATION

STONE FOR STONE FILL SHALL BE AN APPROVED COMBINATION OF QUARRY STONE, ROUNDED STONE OR BROKEN ROCK OF A HARD, SOUND, AND DURABLE QUALITY. THE STONES AND SPALLS SHALL BE SO GRADED AS TO PRODUCE A DENSE FILL WITH A MINIMUM OF VOIDS.

1. STREAM RESTORATION STONE SHALL BE IRREGULAR IN SHAPE WITH AT LEAST 75% OF THE MASS HAVING A MINIMUM DIMENSION OF 8-INCHES. STONE SIZE SHOULD VARY FROM A MINIMUM OF 6 INCHES TO 24 INCHES. STONE SHALL BE A COMBINATION OF ROUNDED AND ANGULAR STONE. STONE SHALL MATCH THE STONE FOUND IN THE STREAM CHANNEL UPSTREAM FROM THE LAMSON LANE CULVERT TO THE GREATEST EXTENT POSSIBLE. CONTRACTOR MAY USE EXISTING STONE AND BOULDERS ON SITE INCLUDING RETAINING WALL STONE. LARGE STONE VOIDS SHOULD BE FILLED WITH SPALLS. STONE SHALL BE PLACE 18" THICK. STONES LARGER THAN 18" ARE INTENDED TO PROJECT INTO CHANNEL SECTION. THE INTENT IS TO MIMIC THE UPSTREAM CHANNEL
2. SPALLS FOR FILLING VOIDS SHALL CONSIST OF A MIXTURE OF STONES OR ROCK FRAGMENTS AND PARTICLES WITH 95 TO 100% PASSING THE 3-INCH SIEVE AND 25 TO 70% PASSING THE NO. 4 SIEVE.



SOIL STOCKPILING IS TO BE USED WHERE TOPSOIL IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS.

TEMPORARY STOCKPILE STABILIZATION MEASURES INCLUDE VEGETATIVE COVERS, MULCH, NON-VEGETATIVE COVERS, AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND REQUIRED PERIOD OF USE.

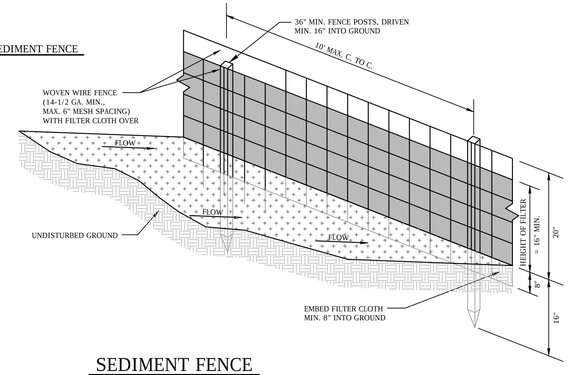
INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES AND THEN STABILIZED WITH VEGETATION OR COVERED.

SOIL STOCKPILING DETAIL
NOT TO SCALE

CONSTRUCTION NOTES FOR SEDIMENT FENCE

1. WOVEN WIRE FENCE, IF REQUIRED, TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR 50% OF ITS STORAGE IS USED.



SEDIMENT FENCE
NO SCALE

DATE OF PRINT
NOVEMBER 09 2015
HORIZONS ENGINEERING

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Littleton NH • New London NH • Newport VT
603-444-4111 603-877-0116 802-334-6434

TIM & CINDY CARLSON
293 LAMSON LANE PERMITTING

NEW LONDON, NH

DETAILS

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

STATE OF NEW HAMPSHIRE – WILLIAM T. DAVIS No. 11918 LICENSED PROFESSIONAL ENGINEER

DATE: NOV 2015	PROJECT #: 14819
ENGIN'D BY: WTD	DRAWN BY: WTD
CHECK'D BY: SHJ	ARCHIVE #: H-___

SHEET 3 OF 3

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