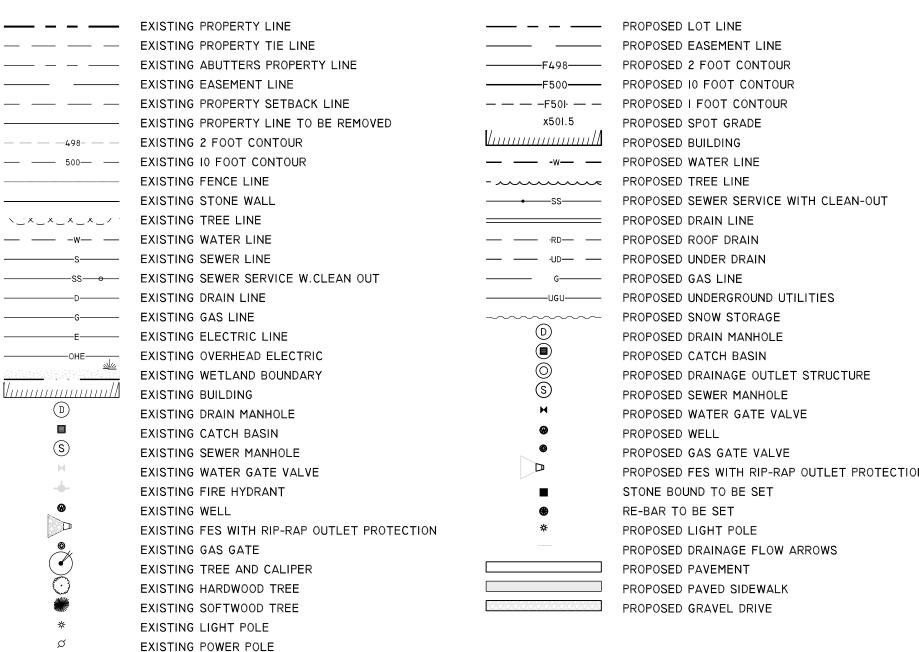
PROPOSED SUBDIVISION FOR 9 ALVIRNE DRIVE TAYBRE DRIVE SUBDIVISION

SYMBOLS LEGEND

EXISTING SYMBOLS

PROPOSED SYMBOLS



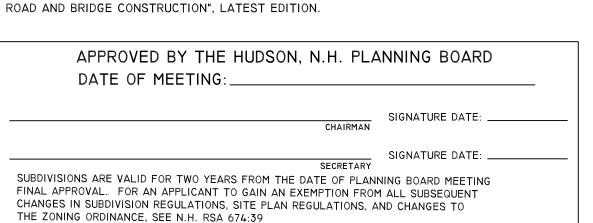
PROPOSED FES WITH RIP-RAP OUTLET PROTECTION

EROSION CONTROL LAYERS

PROPOSED HAY BAIL / SILT FENCE PROPOSED SLOPE PROTECTION BLANKET PROPOSED CHANNEL PROTECTION BLANKET PROPOSED TEMPORARY CHECK DAMN PROPOSED CONSTRUCTION ENTRANCE PROPOSED SILT SAK

REVISION CLOUD

ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE TOWN OF HUDSON REGULATIONS AND THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR



TEMPORARY BENCH MARK (TBM)

TEST PIT LOCATION (TP)

SURVEY TRAVERSE MARKER

STONE BOUND FOUND (SBF)

IRON ROD FOUND (IRF)

IRON PIPE FOUND (IPF)

RE-BAR FOUND (RBF)

DRILL HOLE FOUND (DHF)

RAILROAD TIE FOUND (RRTF)

PHOTO NUMBER AND DIRECTION

SURVEY TRAVERSE LINE

MONUMENTS

PHOTO PLAN



CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC MAKES 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 I-888-DIG-SAFE

TAX MAP 138 LOTS 82-88 9 ALVIRNE DRIVE HUDSON, NH 03051

VICINITY *|"=1000'*

PROFESSIONAL CONSULTANTS LIST

ENGINEER: HESS ENGINEERING & CONSTRUCTION CONSULTANTS ASHLAND, NEW HAMPSHIRE 03217 PH:(603) 968-5664

SURVEYOR: JOHN YULE, LLS SURVEY SERVICES P.O. BOX 201

MILFORD, NEW HAMPSHIRE 03055 PH: (603) 296-5961

SOIL SCIENTIST: POWELL ASSET MAPPING, LLC

234 CRYSTAL LAKE ROAD GILMANTON IRON WORKS, NEW HAMPSHIRE 03837 PH: (603) 264-0136 C. W. S.

INITIAL PLAN SET SUBMISSION DATE

APRIL 24TH, 2025

LATEST REVISION DATE: SEPTEMBER 18, 2025

01.	6/09/25	PER TOWN REVISIONS	IAD
02.	7/02/25	PER NHDES AOT REVISIONS	IAD
03.	8/20/25	PER TOWN ENG DEPT REVISIONS	IAD
NO.	DATE	DESCRIPTION	BY
	02.	02. 7/02/25 03. 8/20/25	02. 7/02/25 PER NHDES AOT REVISIONS 03. 8/20/25 PER TOWN ENG DEPT REVISIONS

LIST OF DRAWINGS

<u>DWG</u>	SHT NO.	DESCRIPTION
C-I	I OF 22	COVER SHEET
E-I	2 OF 22	EXISTING CONDITIONS PLAN
SUB-I	3 OF 22	SUBDIVISION OVERVIEW PLAN
SUB-2	4 OF 22	SUBDIVISION PLAN
SUB-3	5 OF 22	SUBDIVISION PLAN
SP-I	6 OF 22	SITE PLAN
GD-I	7 OF 22	PROPOSED GRADING AND DRAINAGE PLAN
PRO-I	8 OF 22	PROPOSED PROFILE PLAN
XS-I	9 OF 22	PROPOSED CROSS SECTIONS PLAN
U-I	10 OF 22	PROPOSED UTILITY PLAN
ESC-I	II OF 22	EROSION & SEDIMENT CONTROL PLAN
FT-I	12 OF 22	FIRETRUCK TURNING PLAN
SD-I	13 OF 22	SIGHT DISTANCE PLAN
SD-2	14 OF 22	SIGHT DISTANCE PLAN
SD-3	15 OF 22	SIGHT DISTANCE PLAN
D-I	16 OF 22	CONSTRUCTION DETAILS
D-2	17 OF 22	EROSION CONTROL DETAILS
D-3	18 OF 22	EROSION CONTROL NOTES
D-4	19 OF 22	DRAINAGE DETAILS
D-5	20 OF 22	BASIN DETAILS
D-6	21 OF 22	WATER DETAILS
D-7	22 OF 22	NH FISH & GAME NOTES

(I) BLANDING'S TURTLE (STATE ENDANGERED), EASTERN BOX TURTLE (STATE ENDANGERED), EASTERN HOGNOSE SNAKE (STATE ENDANGERED), AND SPOTTED TURTLE (STATE THREATENED) OCCUR WITHIN THE VICINITY OF THE PROJECT AREA. ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHALL BE MADE AWARE OF THE (2) RARE SPECIES INFORMATION (E.G. IDENTIFICATION, OBSERVATION [OBS] AND REPORTING OF OBS, WHEN TO CONTACT NHFG IMMEDIATELY AND NHFG CONTACT INFO) SHALL BE

COMMUNICATED DURING MORNING TAILGATE MEETINGS PRIOR TO WORK COMMENCEMENT DURING THE CONSTRUCTION PHASE OF THE PROJECT. SEE SHEET D-7. (3) OBS. OF EASTERN HOGNOSE SNAKE SHALL BE REPORTED IMMEDIATELY TO NHFG WILDLIFE BIOLOGIST MELISSA WINTERS AND BRENDAN CLIFFORD (GROUP TEXT) - SEE SHEET D-7 FOR SPECIES FLYER AND CONTACT INFO.

(4) TURTLES MAY BE ATTRACTED TO DISTURBED GROUND DURING THE NESTING SEASON (5/15 - 6/30). TURTLE NESTS ARE PROTECTED BY NH LAWS. IF A NEST IS OBS. OR SUSPECTED, OPERATORS SHALL CONTACT JOSH MEGYESY AT NHFG IMMEDIATELY. SEE SPECIES FLYERS ON SHEET D-7.

A. NEST/SUSPECTED NEST SHALL BE MARKED USING ROPE/CONE BUFFER AND AVOIDED; INFORM ALL PERSONNEL ONSITE. B. SITE ACTIVITIES SHALL NOT OCCUR IN THE AREA SURROUNDING THE NEST/SUSPECTED NEST UNTIL FURTHER GUIDANCE IS PROVIDED BY NHFG.

(5) FOR PROJECT ACTIVITIES OCCURING BETWEEN 4/15 AND 10/15, INSTALLATION OF A WILDLIFE EXCLUSIONARY BARRIER (E.G. SILT FENCE) AS SHOWN ON SHEET D-7 SHALL BE INSTALLED FOLLOWING THE PROCEDURES FOUND ON SHEET D-7. THIS INCLUDES THE WILDLIFE RAMP DETAIL AND THE WILDLIFE BARRIER WITH GATE DETAIL. NHFG SHALL BE INFORMED ONCE EXCLUSIONARY BARRIER HAS BEEN INSTALLED. SEE SHEET D-7 FOR INSPECTION AND MAINTENANCE REQUIREMENTS. SEE REQUIRED INSPECTION LOG ON SHEET

(6) SEARCHES AND SWEEPS FOR THE IDENTIFIED TURTLES SHALL BE CONDUCTED BY A QUALIFIED BIOLOGIST BETWEEN 4/15 AND 10/15 IMMEDIATELY BEFORE THE START OF WORK AND MOVEMENT OF EQUIPMENT INCLUDING IN THE AREA ENCLOSED BY THE WILDLIFE EXCLUSIONARY BARRIER TO MINIMIZE CHANCES OF ANIMALS ENTERING SITE BETWEEN SWEEPS/WORK, SEE SHEET D-7 FOR DETAILS REGARDING SWEEPS AND QUALIFIED WILDLIFE BIOLOGIST.

(7)NHFG PREFERS NO SUMPS; GRATES ARE TO HAVE OPENINGS NO LARGER THAN 2" x 2". SEE SHEET D-4. (8) NATIVE SEED MIXTURE SHALL BE APPLIED TO ALL AREAS AFFECTED BY CONSTRUCTION. SEED MIXTURE SHALL NOT CONTAIN INVASIVE SPECIES SUCH AS BIRD'S-FOOT REFOIL.

(9) IF HYDROSEEDING IS DEEMED NECESSARY, MIX SHALL NOT CONTAIN MICROPLASTICS AND DYES SHALL BE WATER-SOLUBLE AND ECO-FRIENDLY. NO HYDROSEEDING WITHIN 75' OF WETLANDS. (10) AVOID/MINIMIZE FERTILIZER USE IN UPLAND AREAS OR TRANSITION ZONES. IF FERTILIZERS ARE NECESSARY, USE ORGANIC VS. SYNTHETIC OPTIONS. IF SYNTHETIC IS USED

THEY SHALL BE CONTROLLED-RELEASED/SLOW-RELEASED AND AT LOW-STRENGTH. SEE SHEET D3. (II) ALL MANUFACTURED ESC PRODUCTS (EXCEPT TURF REINFORCEMENT MATS) USED SHALL NOT CONTAIN PLASTIC, OR MULTIFILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8". SEE SHEET D-2.

(12) ALL OBS. OF THREATENED OR ENDANGERED SPECIES ON THE PROJECT SITE SHALL BE REPORTED IMMEDIATELY TO NHFG NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT (603) 271-2461 AND EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV, WITH THE EMAIL SUBJECT LINE CONTAINING THE NHB LETTER ASSIGNED NUMBER, PROJECT NAME, AND TERM WILDLIFE SPECIES OBSERVATION. PHOTOGRAPHS OF OBS. SPECIES AND NEARBY ELEVEMTNS OF HABITAT/LAND DISTURBANCES SHALL BE PROVIDED TO NHFG IN DIGITAL FORMAT USING THE EMAIL LISTED ABOVE, IF POSSIBLE.

(13) IF THREATENED OR ENDANGERED SPECIES IS OBS. ON SITE DURING DURATION OF PERMIT, THE SPECIES SHALL NOT BE DISTURBED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHFG AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHFG.

A. SITE OPERATORS SHALL BE ALLOWED TO RELOCATE WILDLIFE ENCOUNTERED IF DISCOVERED WITHIN THE ACTIVE WORK ZONE IF IN DIRECT HARM FROM PROJECT ACTIVITIES. B. WILDLIFE SHALL BE RELOCATED IN CLOSE PROXIMITY TO CAPTURE LOCATION BUT OUTSIDE WORK ZONE AND IN DIRECTION IT WAS HEADED.

C. NHFG SHALL BE CONTACTED IMMEDIATELY IF THIS ACTION OCCURS.

(I4) NHFG, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

PREPARED BY:

ASHLAND, NH 03217 TEL: (603) 968-5664

*SEE SHEET D-7 FOR ALL NHFG NOTES

OWNER/APPLICANT:

M.R. LACASSE HOMES, LLC 9 SCENIC LANE HUDSON, NH 03051 BOOK 9756 PAGE 6, HCRD

AGENCY APPROVALS

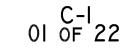
EPA NPDES II : _____ TBD

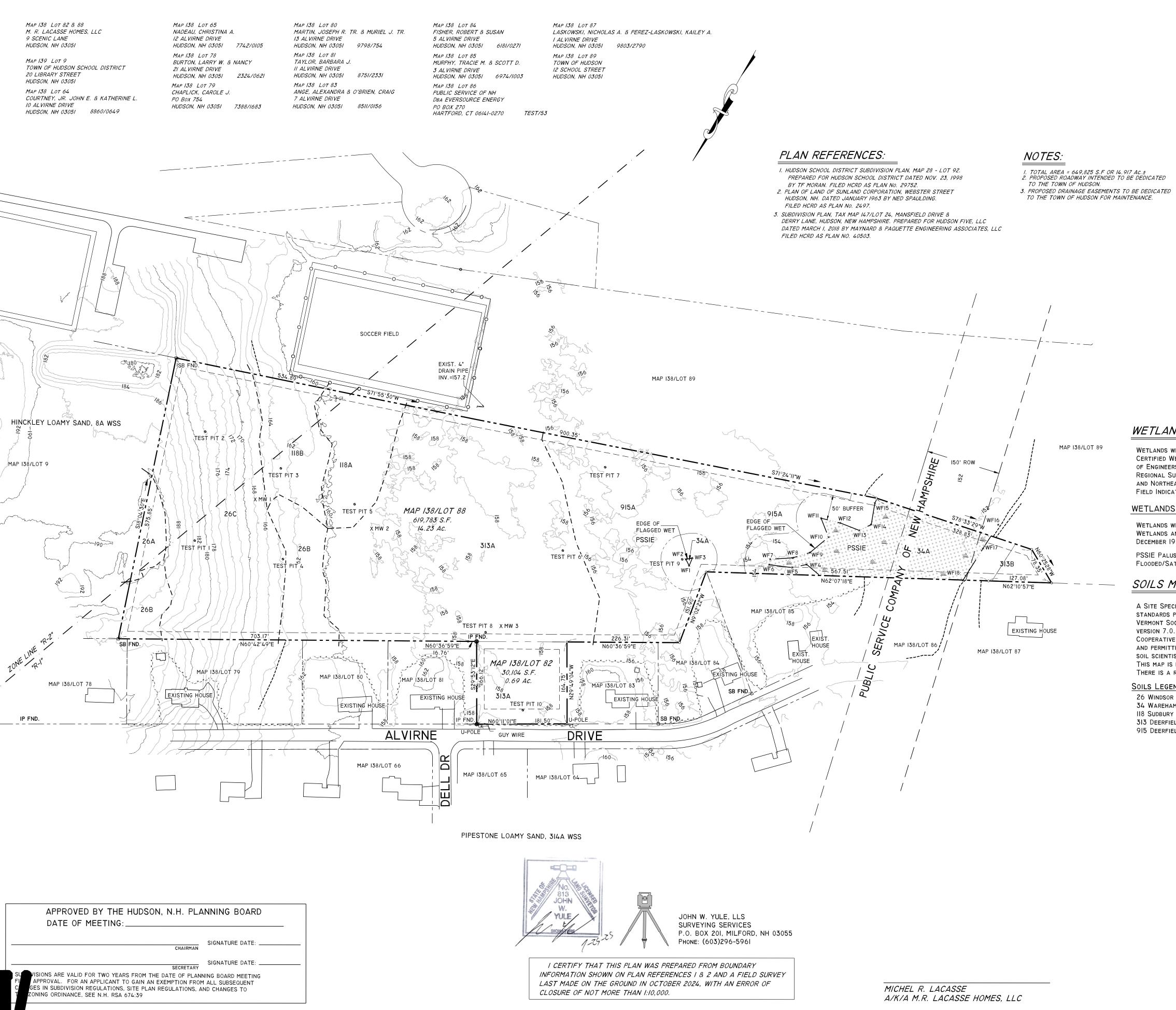
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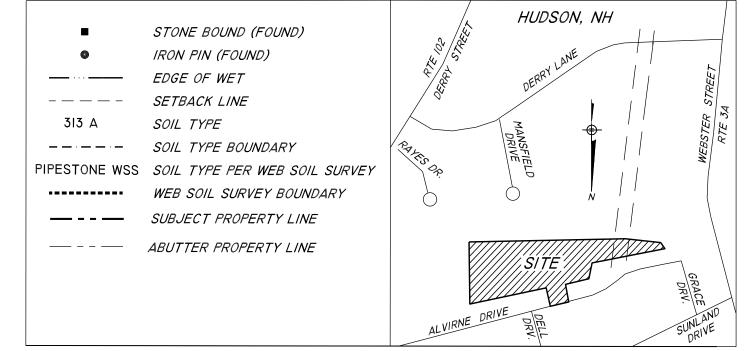
HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC 63 WEST STREET - P.O. BOX 991 WWW.HESSENGINEERINGLLC.COM WILLIAM











LEGEND

V/C/N/TY

GENERAL NOTES:

MIN. YARD SETBACKS: FRONT: 30 FT SIDE: 15 FT REAR: 15 FT

MIN. LOT FRONTAGE: I20 FT

6. N.F.I.P. F.I.R.M. COMMUNITY PANEL 330092 0005B INDICATES THAT THE SITE IS

NOT LOCATED WITHIN THE 100 YEAR FLOOD PLAIN.

7. WEB SOIL SURVEY WAS ONLY USED FOR IDENTIFYING SOIL OUTSIDE OF

7. WEB SOIL SURVEY WAS ONLY USED FOR IDENTIFYING SOIL OUTSIDE OF CSS CWS LUKE POWELL'S SITE SPECIFIC SOILS MAPPING REPORT.

8. SOILS MAPPED BY CSS CWS LUKE POWELL, ASSISTED BY IAN DESMARAIS. SEE CERTIFICATION BELOW.
9. WETLANDS MAPPED BY CHRISTOPHER HUYLER AND CWS LUKE POWELL. SEE CERTIFICATION BELOW.

WETLAND CERTIFICATION:

WETLANDS WERE DELINEATED ON SEPTEMBER 17, 2024 BY CHRISTOPHER HUYLER AND LUKE POWELL, CERTIFIED WETLAND SCIENTIST #50, ACCORDING TO THE STANDARDS PUBLISHED IN THE US ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL CORPS (TECHNICAL REPORT Y-87-I) ALONG WITH THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VERSION 2.0, JANUARY 2012). HYDRIC SOILS WERE DETERMINED UTILIZING FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND (VERSION 4, JUNE 2020).



WETLANDS CLASSIFICATION:

WETLANDS WERE CLASSIFIED ACCORDING TO THE STANDARDS PUBLISHED IN CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES, BY LEWIS COWARDIN ET. AL., DECEMBER 1979, FWS/OBSS-79/31 US FISH & WILDLIFE SERVICE.

PSSIE PALUSTRINE, SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY

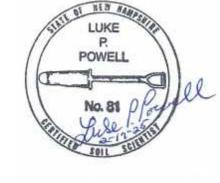
FLOODED/SATURATED WETLAND.

SOILS MAPPING CERTIFICATION:

A SITE SPECIFIC SOIL SURVEY WAS COMPLETED SEPTEMBER 16 - 17, 2024 ACCORDING TO THE STANDARDS PUBLISHED IN SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND SPECIAL PUBLICATION NO. 3, VERSION 7.0. THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED TO SUPPORT ENGINEERING AND PERMITTING FOR PROPOSED RESIDENTIAL DEVELOPMENT. IT WAS PRODUCED BY A NH CERTIFIED SOIL SCIENTIST (LUKE POWELL CSS NO. 81) ASSISTED BY IAN DESMARAIS.

THIS MAP IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE.

THERE IS A REPORT THAT ACCOMPANIES THIS MAP.



 SOILS LEGEND
 SLOPE PHASES

 26 WINDSOR
 A 0 - 3 %

 34 WAREHAM
 B 3 - 8 %

 II8 SUDBURY
 C 8 - I5 %

 3I3 DEERFIELD
 D I5 - 25 %

 9I5 DEERFIELD VARIANT (SWPD)
 E 25 - 50 %

 F 50 %+

EXISTING CONDITIONS PLAN

TAX MAP 138 LOT 82/88 9 ALVIRNE DRIVE, HUDSON, NH 03051

PREPARED FOR:
M. R. LACASSE HOMES, LLC
9 SCENIC LANE
HUDSON, NH 03051
BOOK 9756 PAGE 6

PREPARED BY:

HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC

63 WEST STREET - P.O. BOX 991 ASHLAND, NH 03217 TEL: (603) 968-5664 www.hessengineeringllc.com DRAWN BY:
IAN A. DESMARAIS
REVIEWED BY:
LUKE POWELL, CSS, CWS

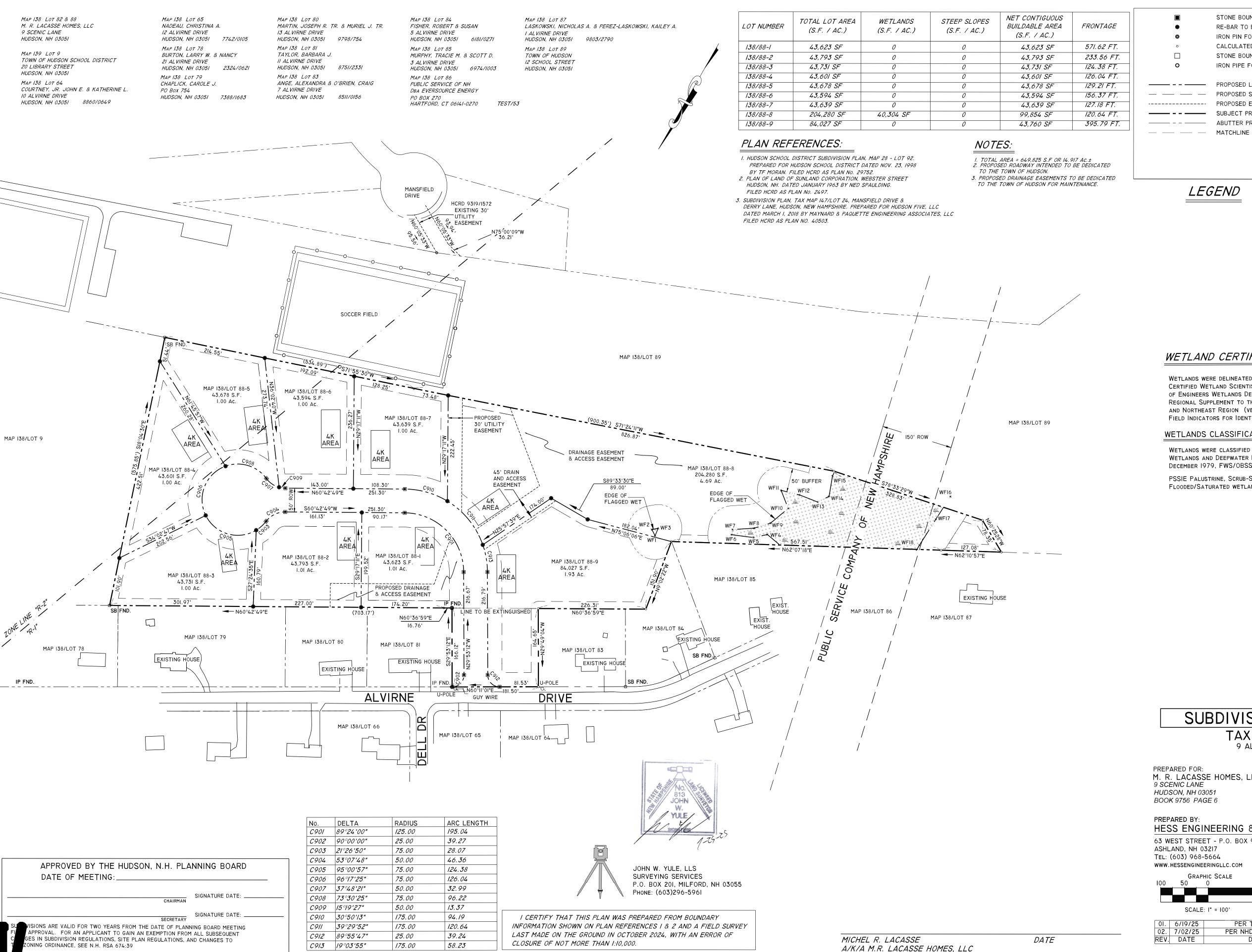


GRAPHIC SCALE
100 50 0 100

SCALE: I" = 100'

01.6/09/25PER TOWN REVISIONSIAD02.7/02/25PER NHDES AOT REVISIONSIADREV.DATEDESCRIPTIONBY

DATE: 4/24/25 JOB NO: 24009



HUDSON, NH STONE BOUND TO BE SET RE-BAR TO BE SET IRON PIN FOUND CALCULATED POINT STONE BOUND FOUND IRON PIPE FOUND ----- PROPOSED LOT LINE PROPOSED SEPTIC SETBACKS PROPOSED EASEMENT LINE SUBJECT PROPERTY LINE ——— – – ABUTTER PROPERTY LINE

LEGEND

VICINITY

WETLAND CERTIFICATION:

WETLANDS WERE DELINEATED ON SEPTEMBER 17, 2024 BY CHRISTOPHER HUYLER AND LUKE POWELL, CERTIFIED WETLAND SCIENTIST #50, ACCORDING TO THE STANDARDS PUBLISHED IN THE US ARMY CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL CORPS (TECHNICAL REPORT Y-87-I) ALONG WITH THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION (VERSION 2.0, JANUARY 2012). HYDRIC SOILS WERE DETERMINED UTILIZING FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND (VERSION 4, JUNE 2020).

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PSSIE PALUSTRINE, SCRUB-SHRUB, BROAD-LEAVED DECIDUOUS, SEASONALLY FLOODED/SATURATED WETLAND.



SUBDIVISION OVER VIEW PLAN

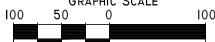
TAX MAP 138 LOT 82/88 9 ALVIRNE DRIVE, TOWN, NH 03051

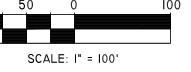
PREPARED FOR: M. R. LACASSE HOMES, LLC 9 SCENIC LANE HUDSON, NH 03051 BOOK 9756 PAGE 6

PREPARED BY:

HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC

63 WEST STREET - P.O. BOX 991 ASHLAND, NH 03217 TEL: (603) 968-5664 WWW.HESSENGINEERINGLLC.COM

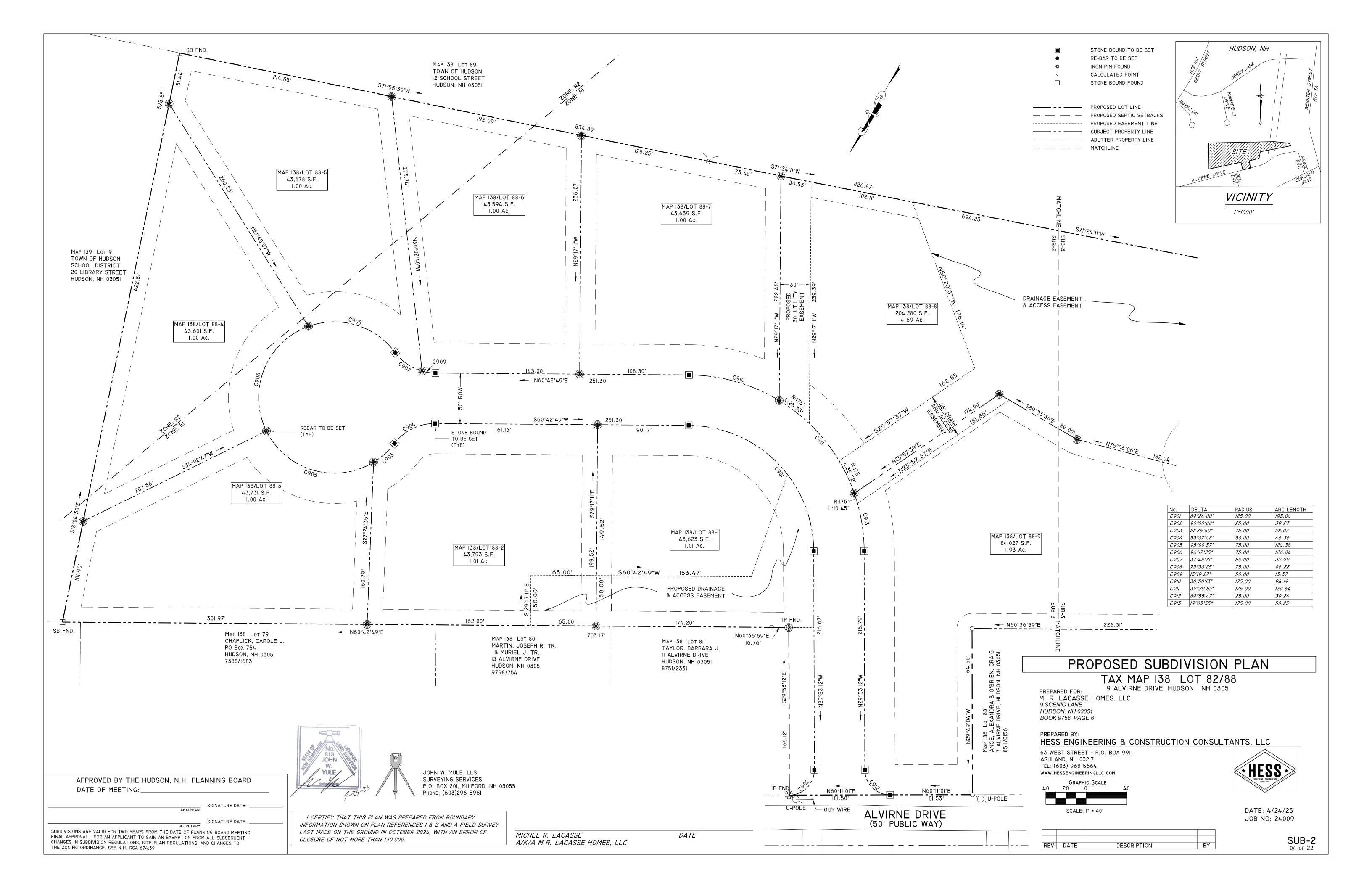


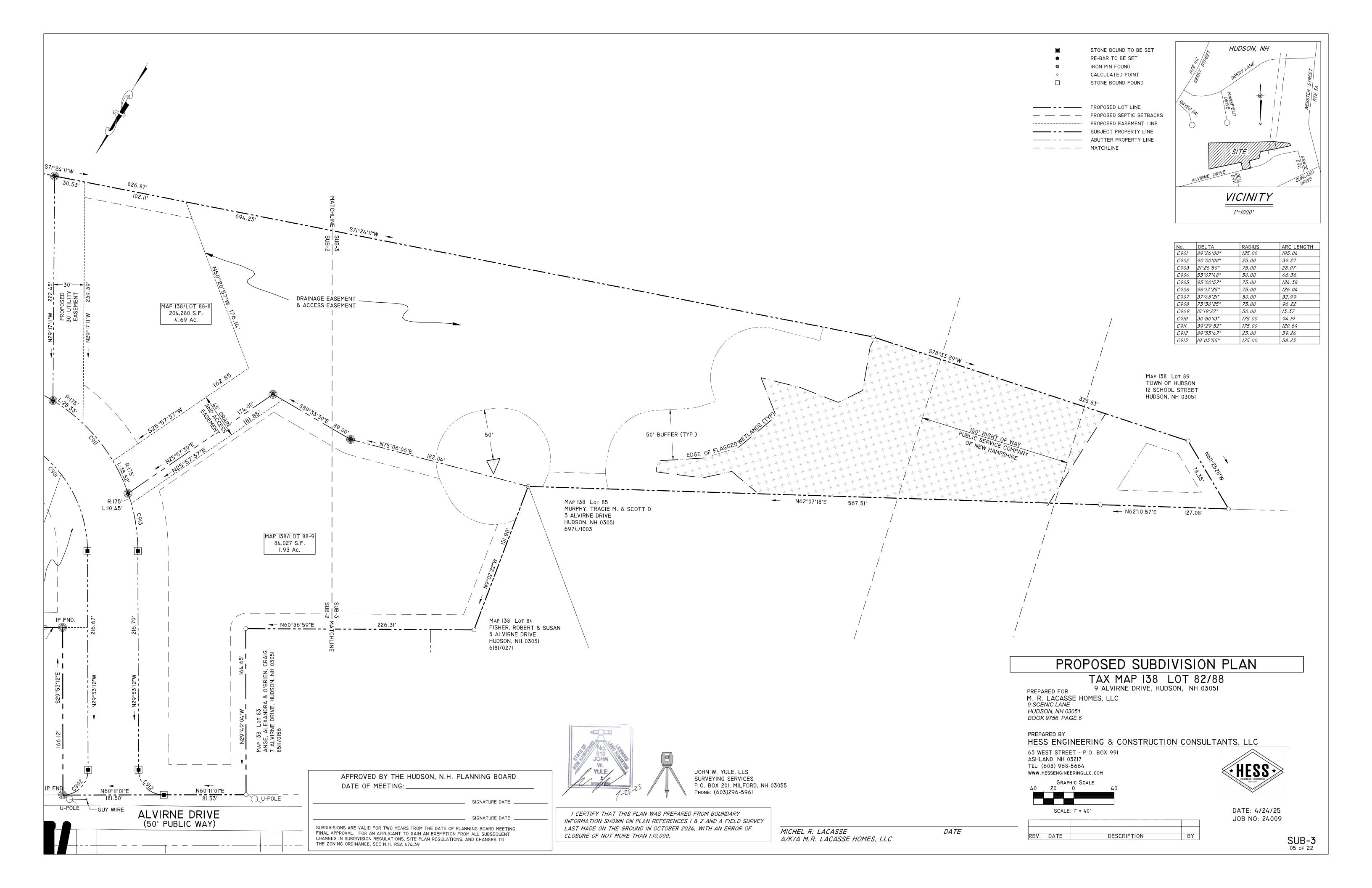


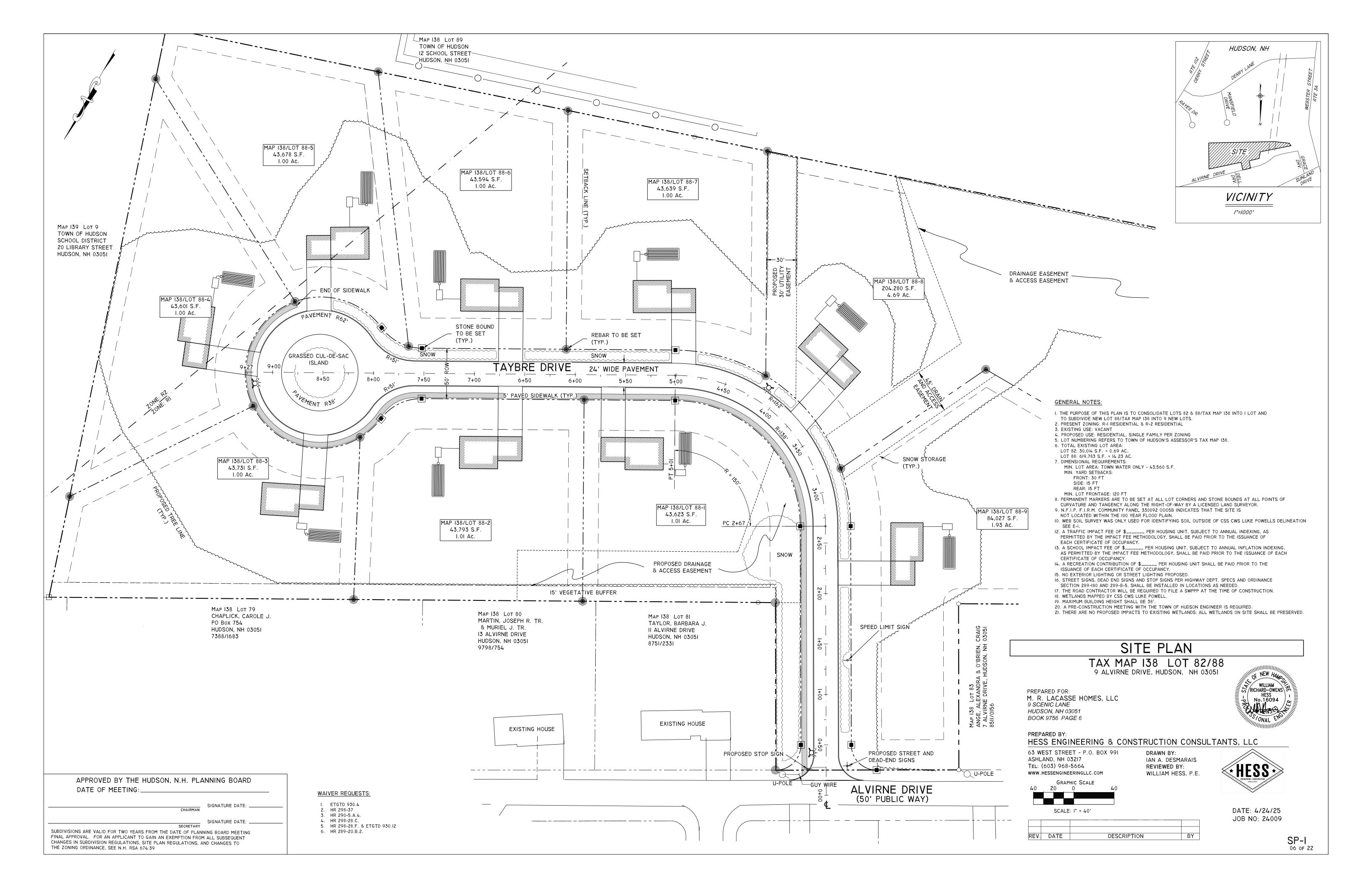
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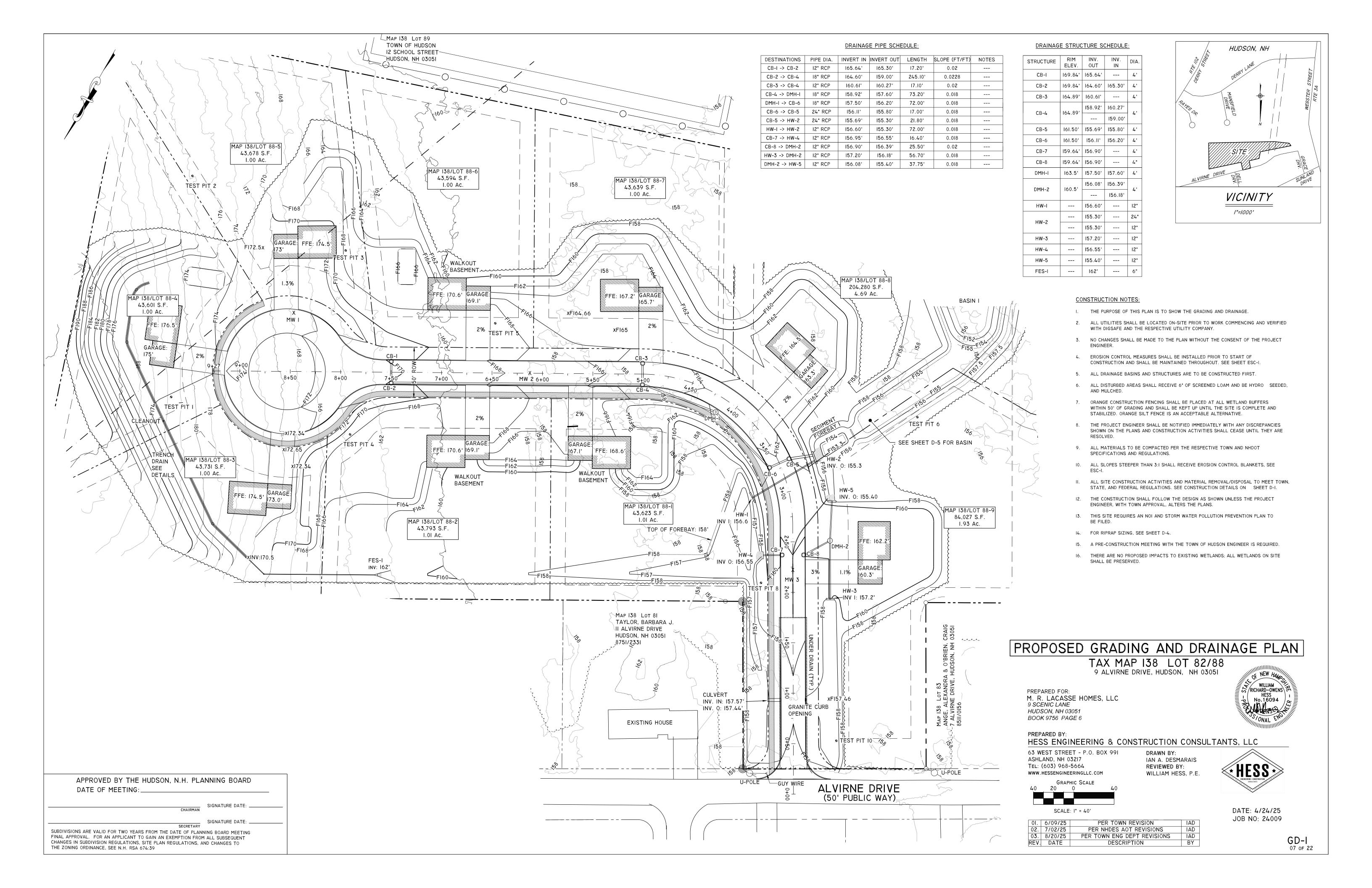
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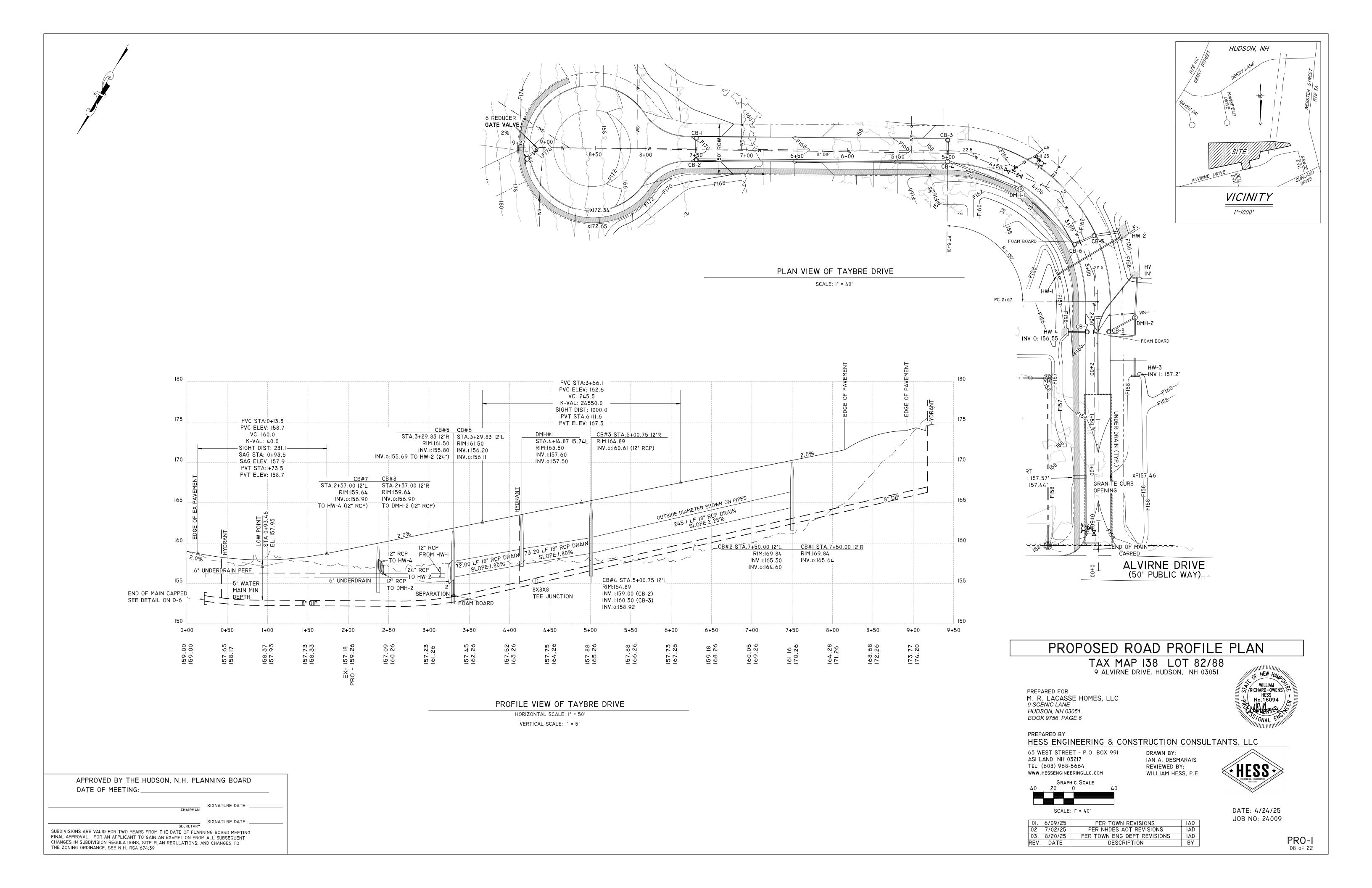
01. 6/19/25 PER TOWN REVISIONS 02. 7/02/25 PER NHDES AOT REVISIONS REV. DATE DESCRIPTION

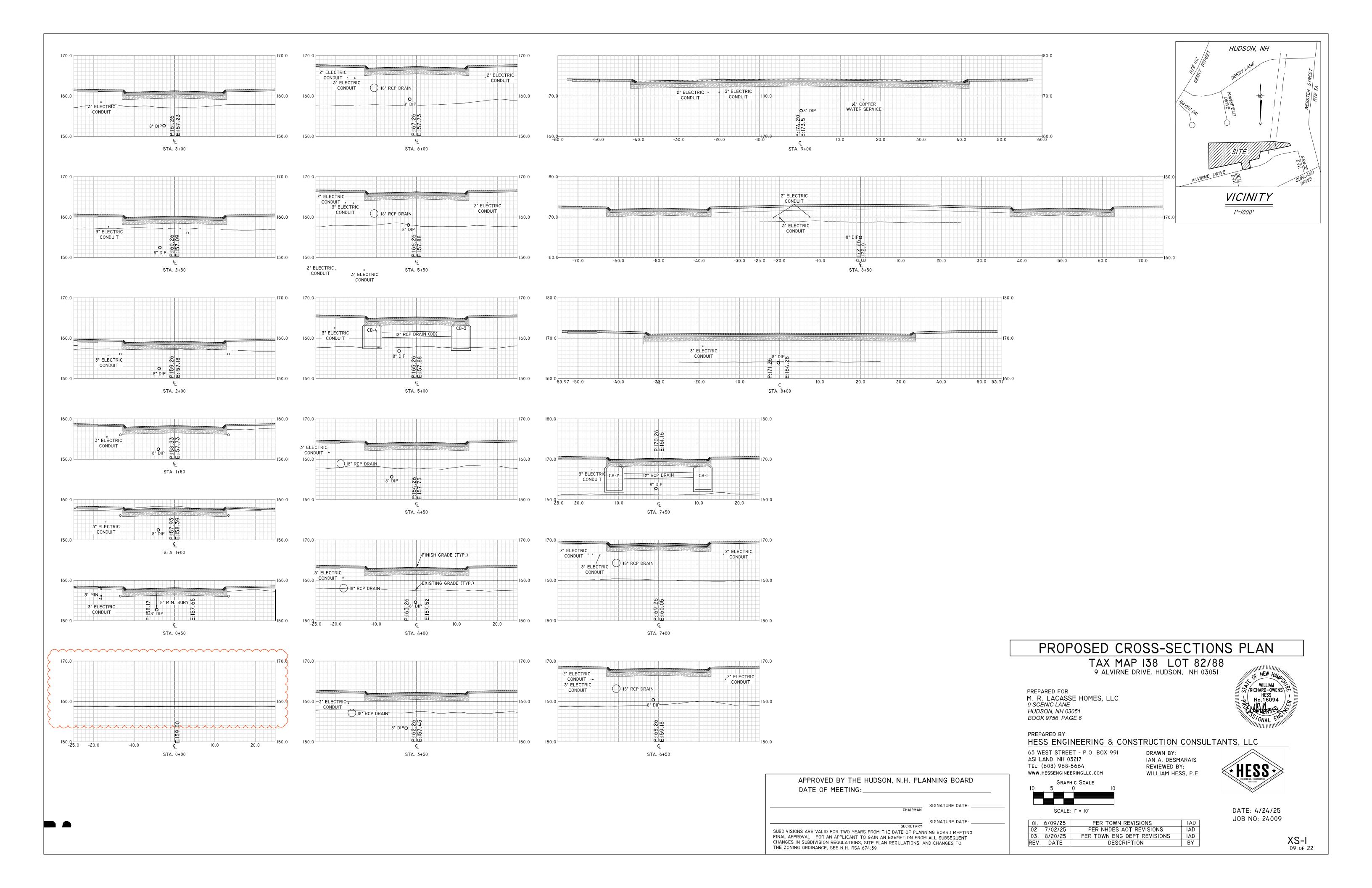


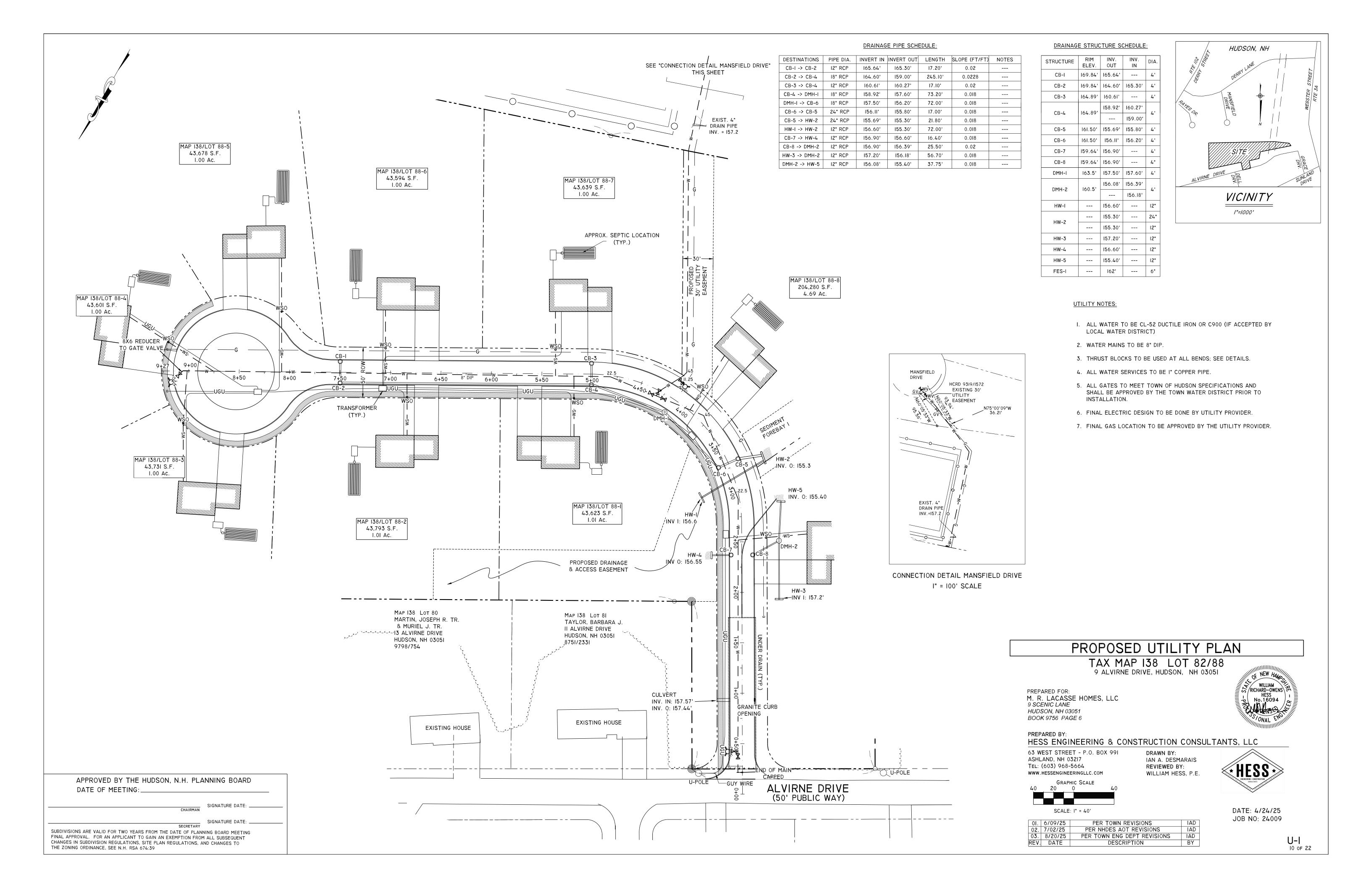


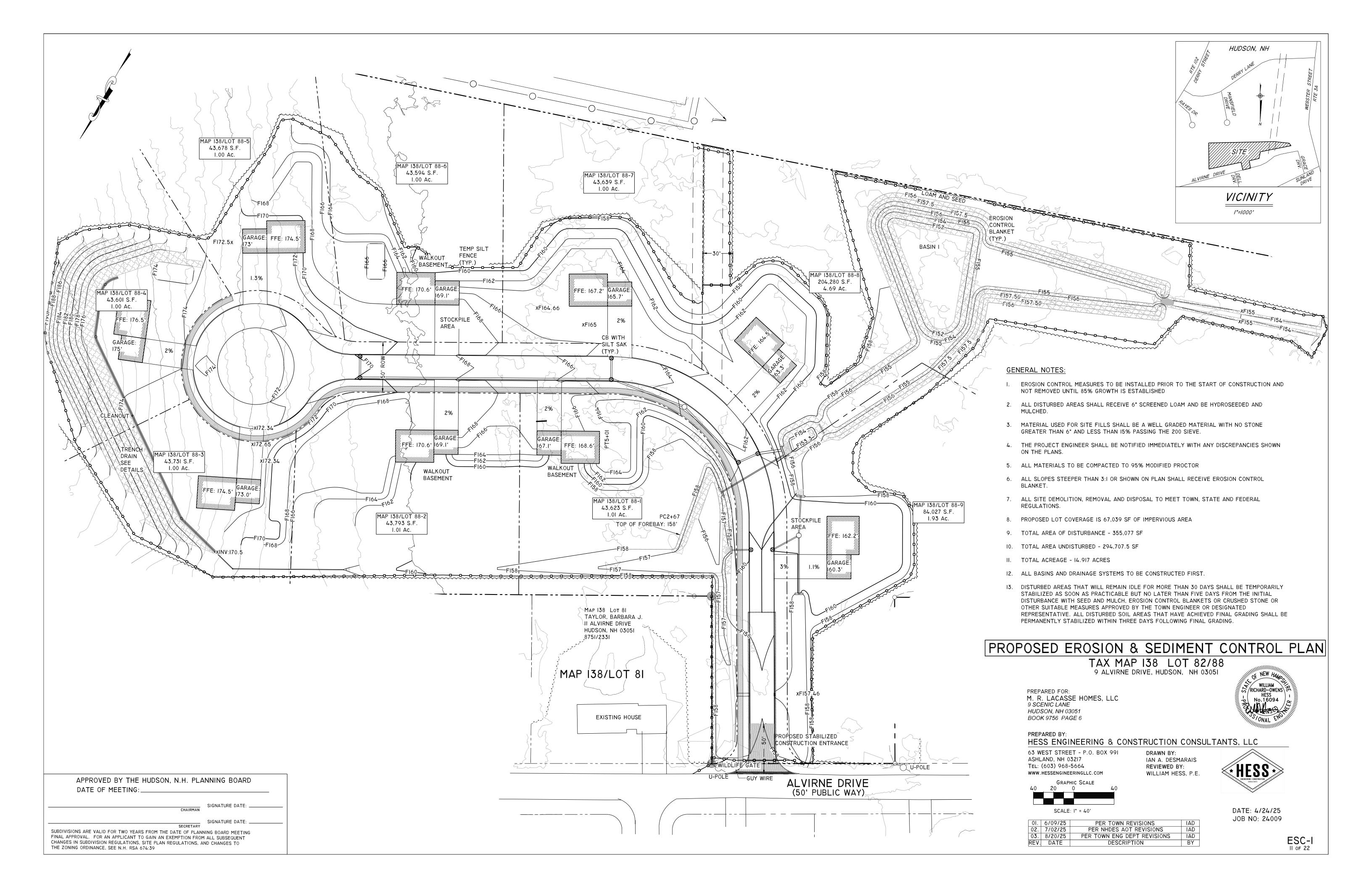


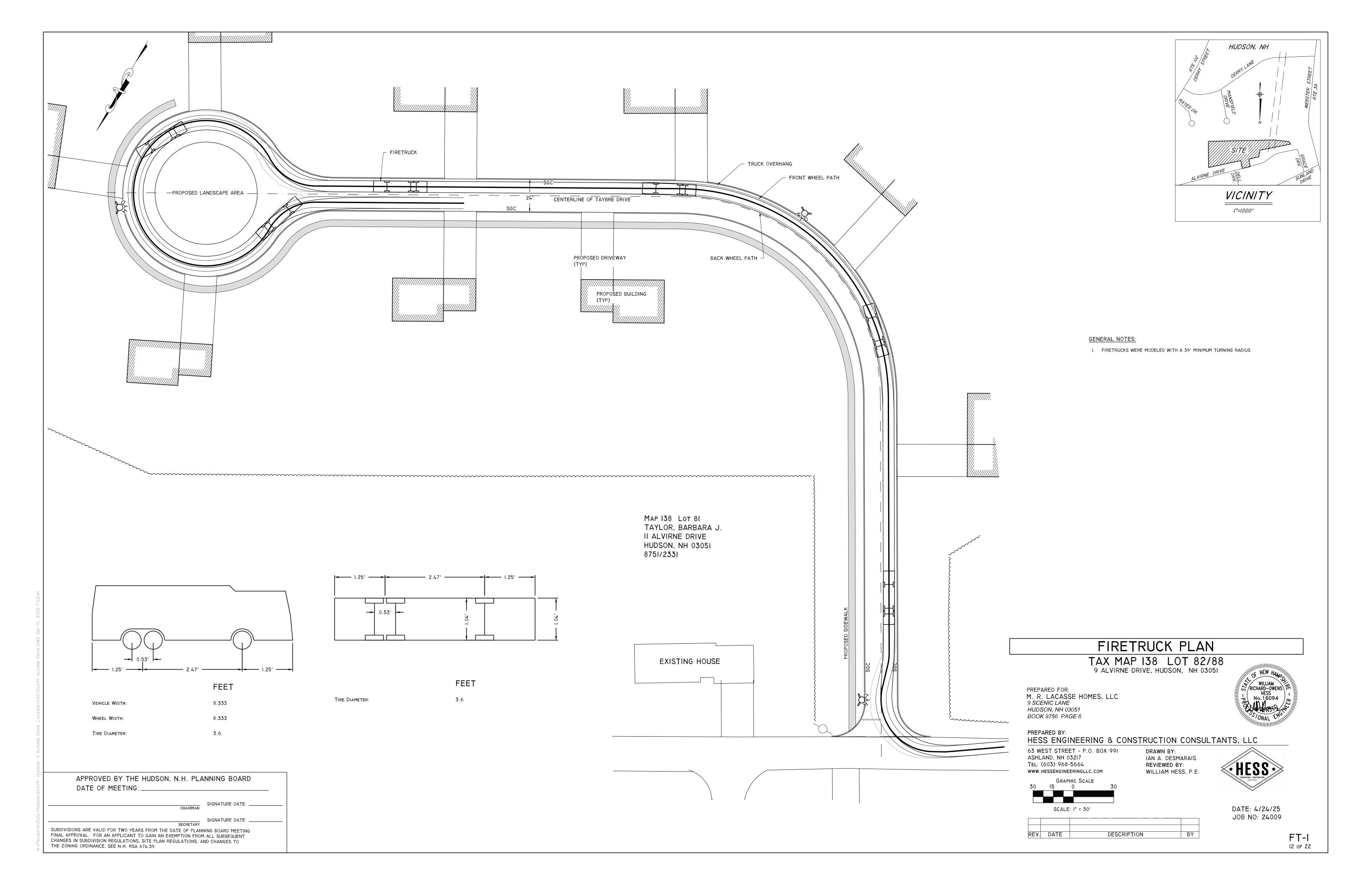


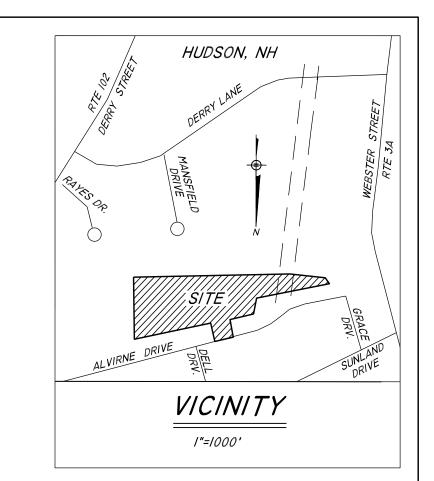


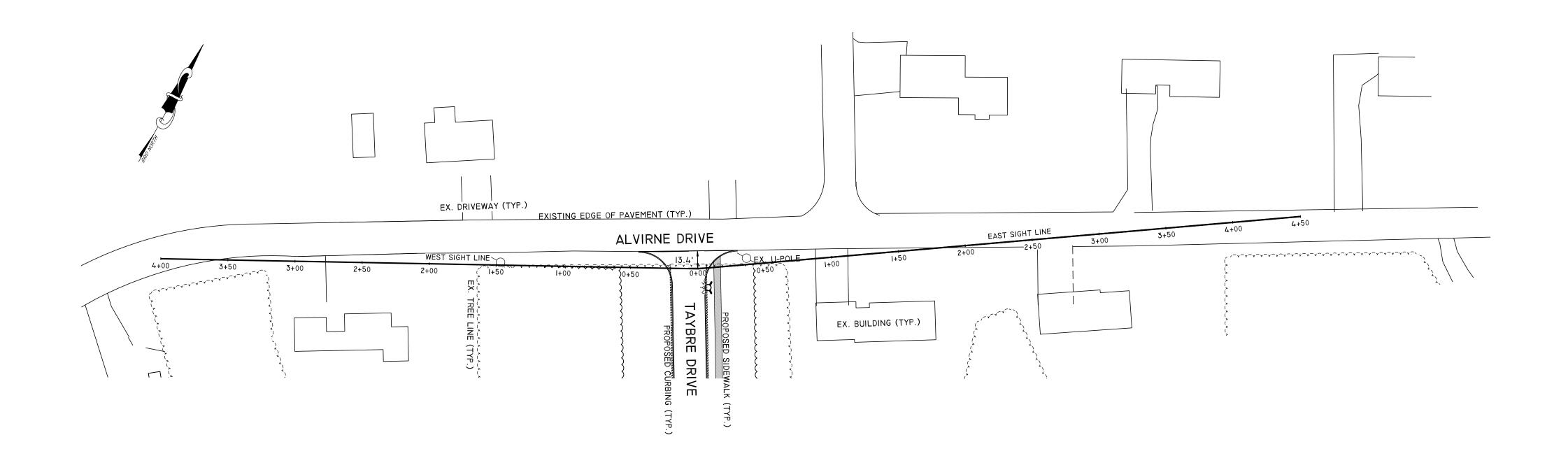






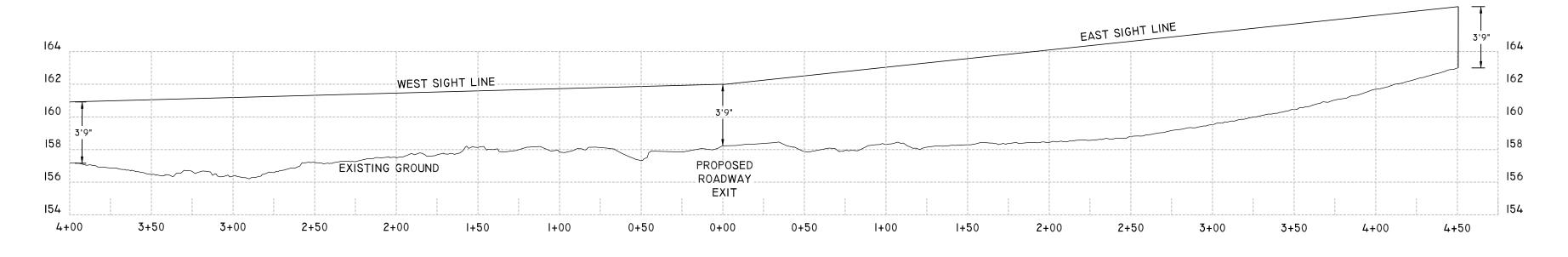






PLAN VIEW OF TAYBRE DRIVE

SCALE: I" = 50'



SSD WEST REVISED LINE HORIZONTAL SCALE50

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
DATE OF MEETING:

CHAIRMAN

SIGNATURE DATE:

SECRETARY

SUBDIVISIONS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING
FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT
CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS, AND CHANGES TO
THE ZONING ORDINANCE, SEE N.H. RSA 674:39

PROFILE VIEW OF TAYBRE DRIVE

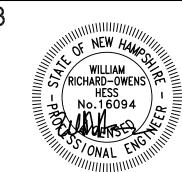
HORIZONTAL SCALE: I" = 50'

VERTICAL SCALE: I" = 5'

PROPOSED SIGHT DISTANCE PLAN

TAX MAP 138 LOT 82/88 9 ALVIRNE DRIVE, HUDSON, NH 03051

PREPARED FOR:
M. R. LACASSE HOMES, LLC
9 SCENIC LANE
HUDSON, NH 03051
BOOK 9756 PAGE 6



PREPARED BY:
HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC

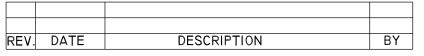
63 WEST STREET - P.O. BOX 991 ASHLAND, NH 03217 TEL: (603) 968-5664 www.hessengineeringllc.com DRAWN BY:
IAN A. DESMARAIS
REVIEWED BY:
WILLIAM HESS, P.E.



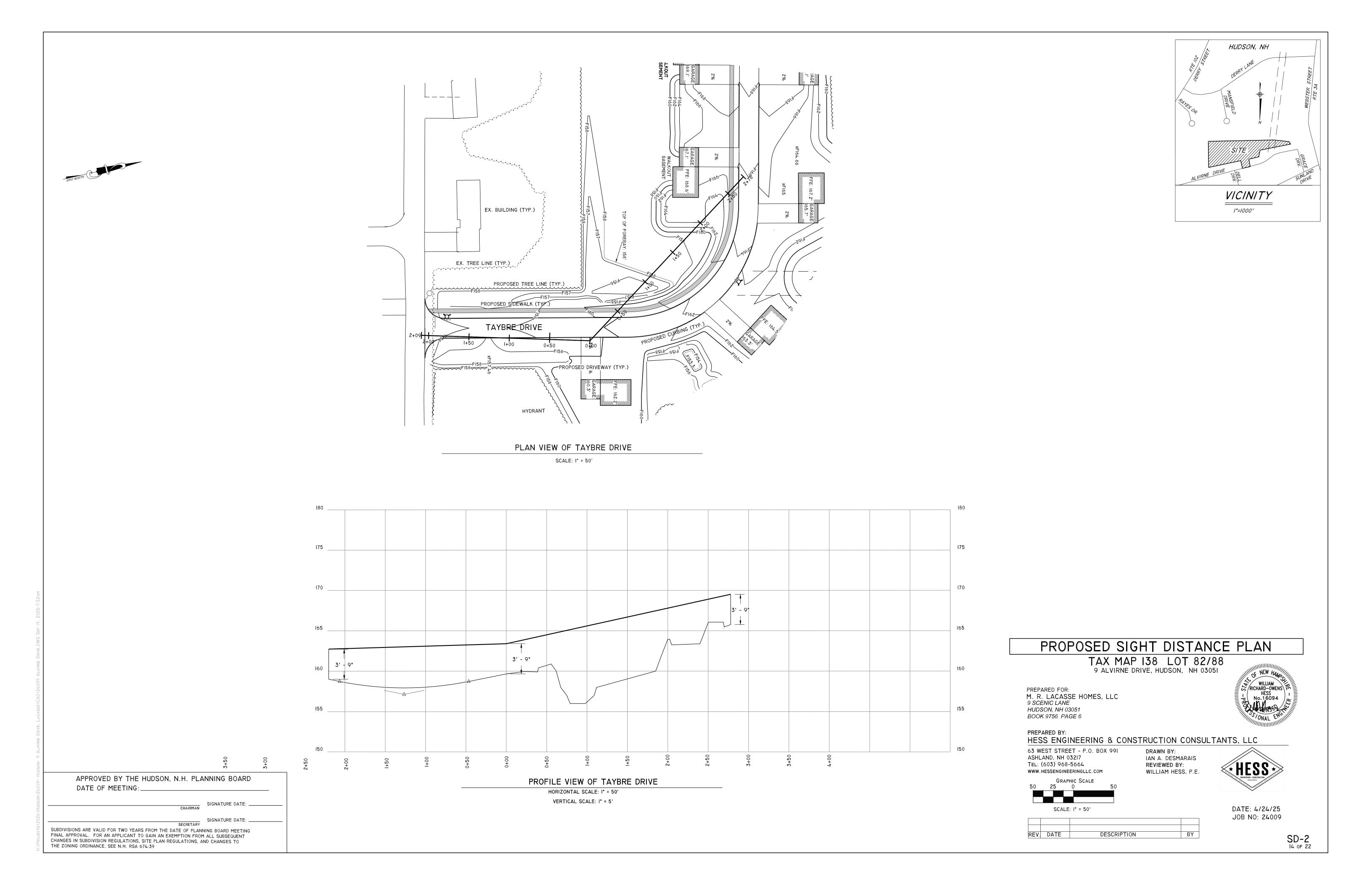
GRAPHIC SCALE
50 25 0 50

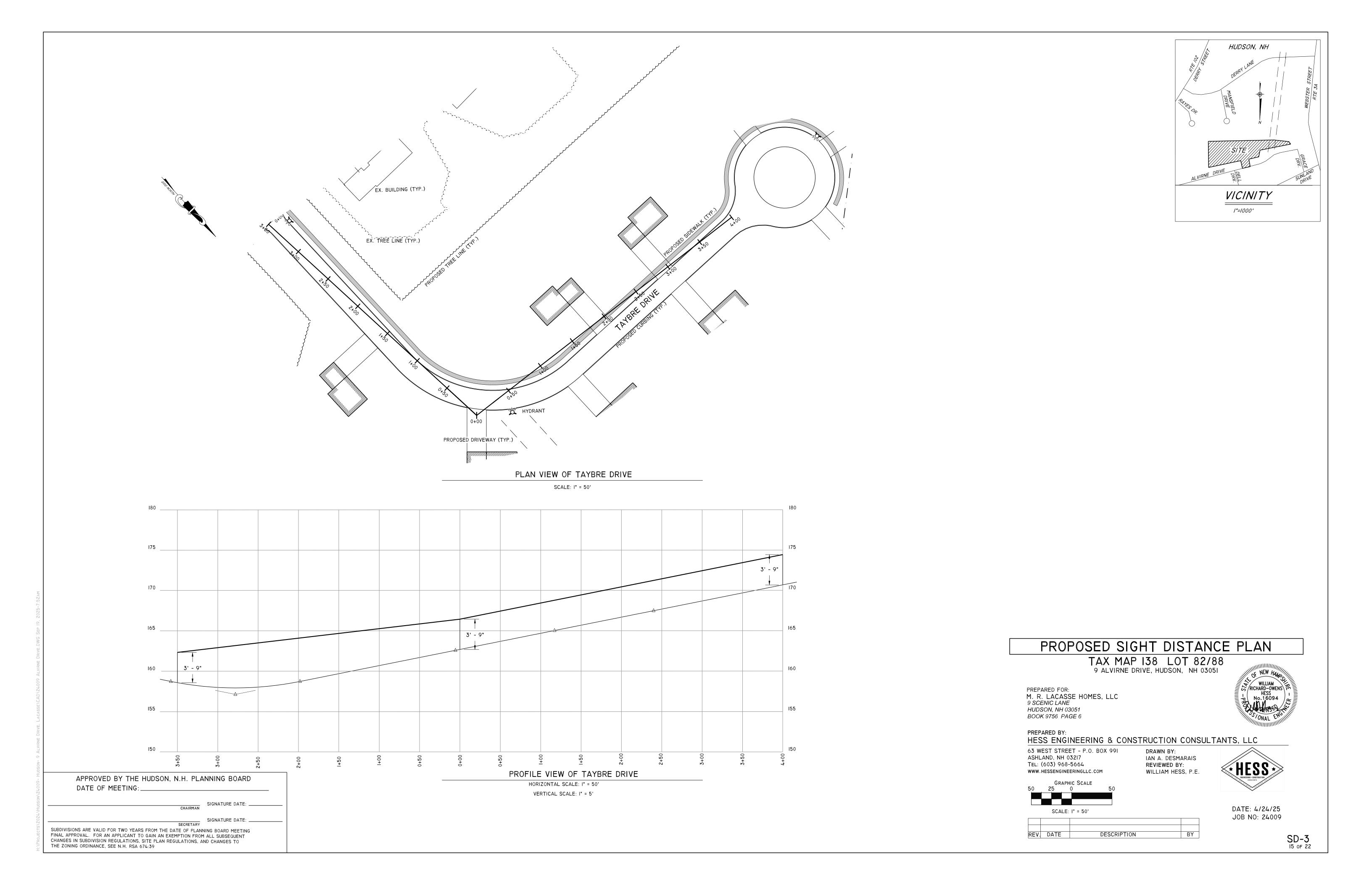
SCALE: I" = 50'

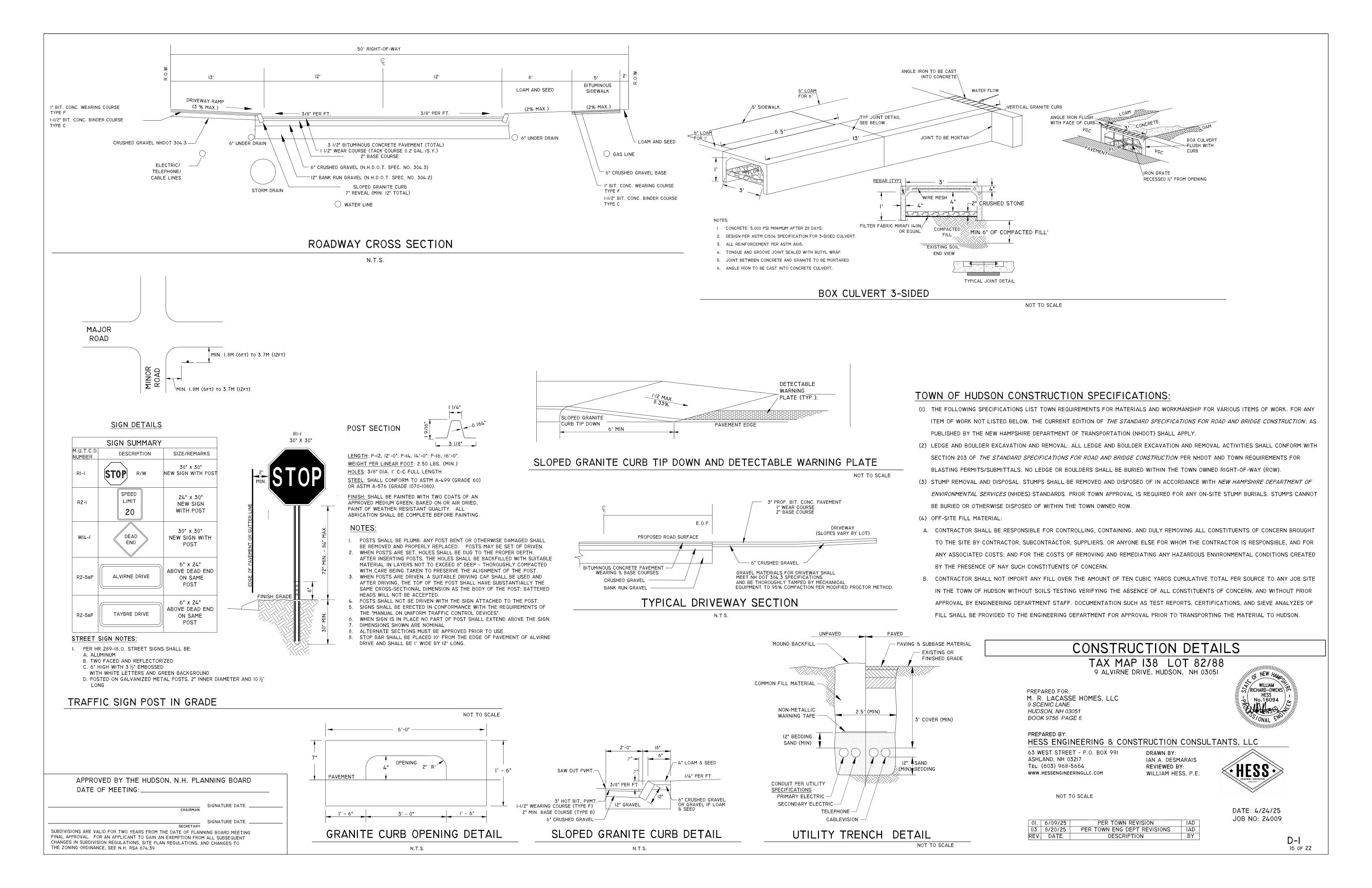
DATE: 4/24/25 JOB NO: 24009

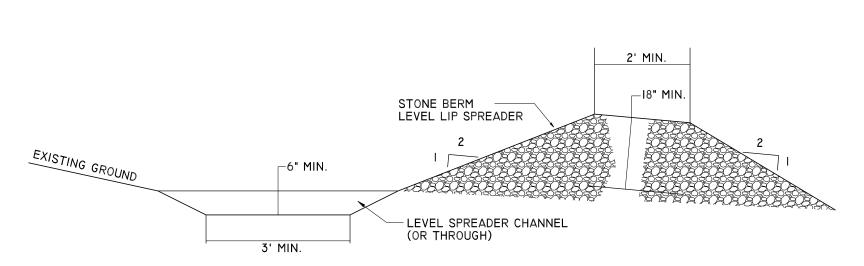












CROSS SECTION

PERCENT	SIEVE REQUIRED
100%	12"
84%-100%	6"
68%-84%	3"
42%-55%	"
8%-12%	NUMBER 4 SIEVE

- I. CONSTRUCT THE LEVEL SPREADER LIP ON A ZERO PERCENT GRADE TO INSURE UNIFORM
- 2. LEVEL SPREADER SHALL BE CONSTRUCTED ON UNDISTURBED SOIL, NOT ON FILL.
- 3. THE FLOW FROM THE LEVEL SPREADER SHALL OUTLET ONTO STABILIZED AREAS. WATER SHOULD NOT BE ALLOWED TO RE-CONCENTRATE BELOW THE SPREADER.
- 4. PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED.

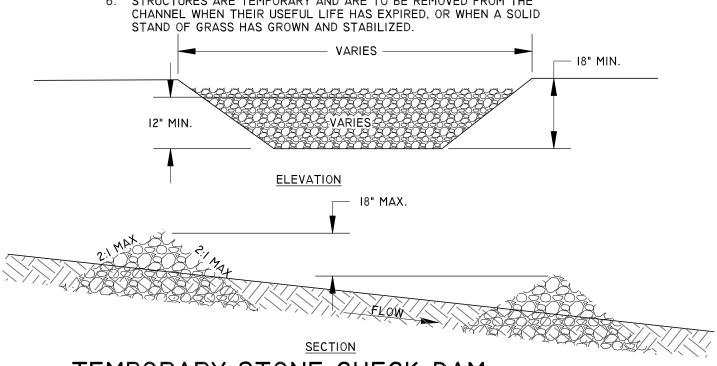
MAINTENANCE

THE LEVEL SPREADER SHOULD BE CHECKED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE LIP HAS BEEN DAMAGED AND TO DETERMINE THAT THE MAJOR DESIGN CONDITIONS HAVE NOT CHANGED. ANY DETRIMENTAL SEDIMENT ACCUMULATION SHOULD BE REMOVED. IF RILLING HAS TAKEN PLACE ON THE LIP, THEN THE DAMAGE SHOULD BE REPAIRED AND RE-VEGETATED. THE VEGETATION SHOULD BE MOWED ON OCCASION TO CONTROL WEEDS AND THE ENCROACHMENT OF WOODY VEGETATION. CLIPPINGS SHOULD BE REMOVED AND DISPOSED OF OUTSIDE THE SPREADER AREA AND AWAY FROM THE OUTLET AREA. FERTILIZATION SHOULD BE DONE AS NECESSARY TO KEEP THE VEGETATION HEALTHY AND DENSE.

LEVEL SPREADER

NOT TO SCALE

- . 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 HAY 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. HAY OR STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2"x2" STAKES DRIVEN THROUGHOUT THE BALES AT LEAST 18 INCHES INTO THE
- 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



TEMPORARY STONE CHECK DAM

NOTES:

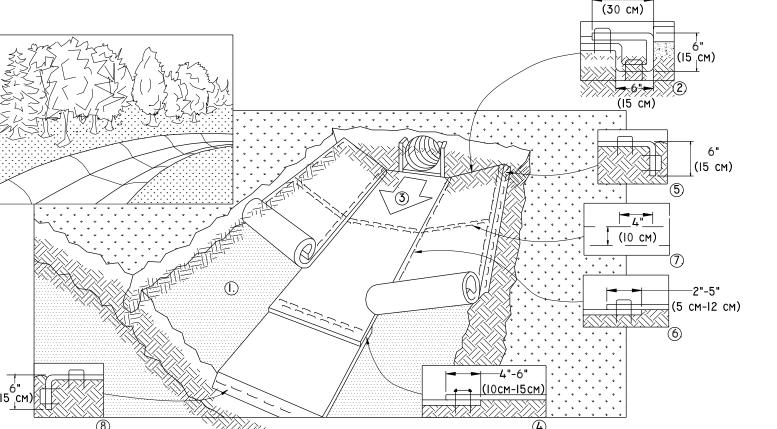
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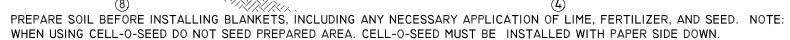
- I. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE.
- 2. THE MAXIMUM CONTRIBUTING AREA TO SINGLE TRAP SHALL BE LESS THAN 5 ACRES.
- 4. TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.
- 5. TRAP SHALL DISCHARGE TO A STABILIZED AREA.
- 8. SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.

SEDIMENT TRAP DETAIL

STABILIZED.

NOT TO SCALE





- 2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (I5CM) DEEP X 6" (I5CM) 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 CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. 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. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" (10CM-15CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (IOCM) APART AND 4" (IOCM) ON CENTER TO SECURE BLANKETS.
- 5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6" (15CM) DEEP X 6" (15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5CM-I2.5CM) (DEPENDING ON BLANKET TYPE) AND STAPLED. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN TM WITH THE COLORED SEAM STITCH ON THE BLANKET BEING OVERLAPPED.
- 7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30'-40' (9M-I2M) INTERVALS. USE
- A DOUBLE ROW OF STAPLES STAGGERED 4" (IOCM) APART AND 4" (IOCM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6" (I5CM) DEEP X 6" (I5CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- CRITICAL POINTS A. OVERLAPS AND SEAMS PROJECTED WATER LINE CHANNEL BOTTOM/SIDE SLOPE VERTICES

CHANNEL INSTALLATION

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725 USA I-800-772-2040 CANADA I-800-448-2040

FOR EROSION CONTROL

- ** HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- ** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL

UTILIZED.

NOT TO SCALE

WORK AREA

FLOW

TOP OF GROUND

4" EMBEDMENT

PLACE 4" OF FABRIC-

BACKFILL AND TAMP

ALONG TRENCH AWAY

FROM PROTECTED AREA

MAINTENANCE

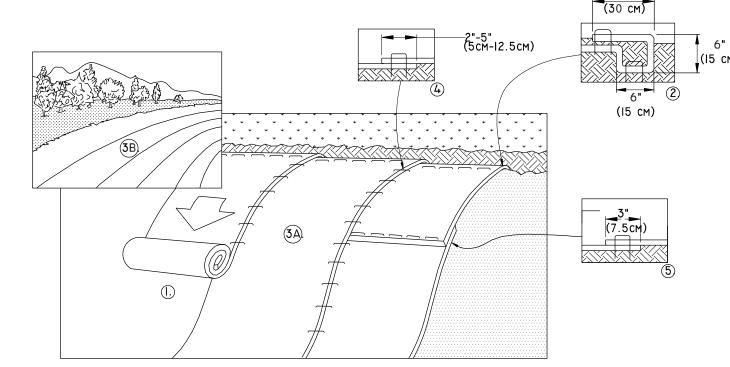
SHALL BE MADE IMMEDIATELY

AND VEGETATED.

SILT FENCE DETAIL

(MIN.)

NORTH AMERICAN GREEN



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE:
- WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN. 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 I2" (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-I2.5CM) 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.
- 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

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (I5CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

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14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725 USA I-800-772-2040 CANADA I-800-448-2040

FOR 2:1 SLOPES OVER 20' HIGH USE TEMPORARY BLANKET SI50 FOR 2:1 SLOPES LESS THAN 20' HIGH USE TEMPORARY BLANKET S75

THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN I INCHES MATERIAL UTILIZED.

SLOPE INSTALLATION

I-3/4"x I-3/4"x 4' WOOD STAKE

OR APPROVED EQUAL

SILT FENCE

DOWNHILL

6"X6"XI4.5 GAGE (OPTIONAL)

NON-WOVEN FILTER CLOTH-

EMBED FILTER CLOTH MIN. 8" INTO GROUND

I. SILT FENCES ARE TO BE INSPECTED IMMEDIATELY AFTER EVERY RAINFALL AND AT

DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED

DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF OF

BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY

4. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS

2. IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE

3. SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE

LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED

MIRAFI 100X OR

APPROVED EQUAL

PERSPECTIVE VIEW

NOT TO SCALE FOR EROSION CONTROL

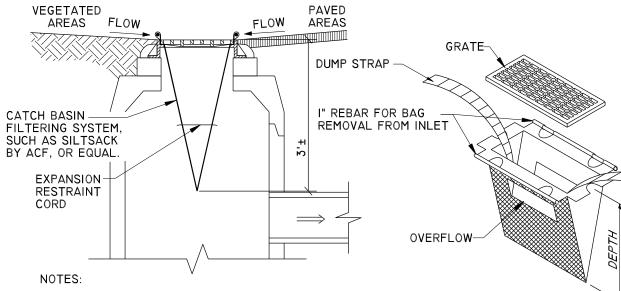
36" MIN. LENGTH

- I-3/4"xI-3/4"

FENCE POST

6'-0" O.C. MAX.

UNDISTURBED



- I. INSTALL AND MAINTAIN SACKS IN ALL CATCH BASINS.
- 2. TO INSTALL SACK, REMOVE CATCH BASIN GRATE AND PLACE SACK IN OPENING. HOLD OUT APPROXIMATELY 6 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, WHICH EVER 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 MANUFACTURES 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.

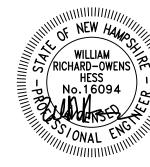
"SILT-SAK" SEDIMENT CONTROL

NOT TO SCALE

EROSION CONTROL DETAILS

TAX MAP 138 LOT 82/88 9 ALVIRNE DRIVE, HUDSON, NH 03051

PREPARED FOR: M. R. LACASSE HOMES, LLC 9 SCENIC LANE HUDSON, NH 03051 BOOK 9756 PAGE 6



PREPARED BY: HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC

63 WEST STREET - P.O. BOX 991 ASHLAND, NH 03217 TEL: (603) 968-5664 WWW.HESSENGINEERINGLLC.COM

IAN A. DESMARAIS REVIEWED BY: WILLIAM HESS, P.E.

DRAWN BY:



NOT TO SCALE

01. 6/09/25 PER TOWN REVISIONS REV. DATE DESCRIPTION

DATE: 4/24/25 JOB NO: 24009

> D-2 17 of 22

APPROVED BY THE HUDSON, N.H. PLANNING BOARD DATE OF MEETING: SIGNATURE DATE: SUBDIVISIONS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT

CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS, AND CHANGES TO

THE ZONING ORDINANCE, SEE N.H. RSA 674:39

⊸—FLOW FLOW — 1 1 1 1 1 1 1 1 _ + + + + \ DIKE, IF NECESSARY, WEIR OR EMBANKMENT TO DIVERT FLOW INTO IF USING STONE OUTLET PLAN VIEW OR PIPE OUTLET. PERFORATED RISER IF USING PIPE OUTLET EXCAVATION FOR REQUIRED STORAGE **SECTION** 3:I MAX. SLOPE

SIDE SLOPES TO BE

3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.

6. TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED. 7. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

GENERAL NOTES:

- I. PROJECT ENGINEER: HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC., PO BOX 99I, ASHLAND, NH 032I7 PROJECT SURVEYOR: JOHN YULE, LSS SURVEY SERVICES, PO BOX 20I, MILFORD, NH 03055 PROJECT WETLAND AND SOILS SCIENTIST: LUKE POWELL: POWELL ASSET MAPPING, GILMANTON IRON WORKS, NH, 03837.
- 2. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN REGULATIONS AND THE LATEST EDITION OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.
- 3. IF, DURING CONSTRUCTION IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE CONTRACTOR, DEVELOPER OR OWNER ARE RESPONSIBLE TO DOCUMENT THE APPARENT DEFICIENCIES AND NOTIFY THE DESIGN ENGINEER PRIOR TO CONTINUING CONSTRUCTION ACTIVITIES. THE DESIGN ENGINEER, IN COOPERATION WITH THE CONTRACTOR, DEVELOPER OR OWNER WILL RESOLVE THE APPARENT DEFICIENCIES TO MEET APPLICABLE TOWN REGULATIONS.
- 4. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED, THE CONTRACTOR, DEVELOPER OR OWNER SHALL BE REQUIRED TO INSTALL ADDITIONAL EROSION PROTECTION MEASURES.
- 5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO VERIFY THE LOCATION OF ALL UTILITIES OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR. (DIG SAFE NUMBER PROVIDED ON SHEET I)
- 6. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AT ALL TIMES.
- 7. NO EXCAVATED AREA SHALL BE LEFT UNATTENDED AND SHALL BE THOROUGHLY SECURED ON A DAILY BASIS.

CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AS SHOWN AND DETAILED IN THIS PLAN SET.

8. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENT AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

CONSTRUCTION SEQUENCE:

CUT AND CLEAR TREES WITHIN LIMIT OF WORK (PROPOSED TREELINE), UNLESS OTHERWISE NOTED. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERLY DISPOSED OF, PREFERABLY OFF SITE.

3. CONSTRUCT TEMPORARY (SILT FENCE, SILT-SAKS, SEDIMENT TRAPS, ETC.) AND PERMANENT EROSION CONTROL FACILITIES (DETENTION BASINS, TREATMENT SWALES, GRASS SWALES AND STONE LINED RIP-RAP SWALES) PRIOR TO ANY EARTH MOVING OPERATION.

- 4. ALL SWALES AND DITCH LINES SHALL BE PROTECTED FROM EROSION. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING
- 5. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE (BEFORE ROUGH GRADING THE SITE).
- 6. ALL STORM DRAINAGE SYSTEMS SUCH AS DETENTION/RETENTION BASINS, TREATMENT SWALES AND LEVEL SPREADERS SHALL BE PROTECTED FROM EROSION. ALL STORM DRAINAGE SYSTEMS SHALL BE STABILIZED PRIOR TO DIRECTING FLOW INTO THEM.
- 7. NO CATCH BASIN FRAME AND GRATE SHALL BE INSTALLED PRIOR TO PAVING (IF APPLICABLE). ALL DRAINAGE STRUCTURES ARE TO BE "PLATED" AND CUT OUT FOLLOWING PAVING OPERATIONS, ONLY IF ALL DOWNSTREAM DRAINAGE ELEMENTS ARE STABLE, INCLUDING, BUT NOT LIMITED TO OUTLET PROTECTION, ALL SLOPE GRADING, VEGETATED OR RIPRAP SWALES, DETENTION BASIN AND TREATMENT SWALES.
- 8. IF FRAME AND GRATES ARE INSTALLED, SPECIFIC SOIL EROSION MEASURES MUST BE INSTALLED SUCH AS GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER OR BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER.
- 9. CONSTRUCT TEMPORARY CULVERTS, DIVERSION DITCHES/SWALES OR BERMS AS REQUIRED TO MINIMIZE THE EROSIVE EFFECTS OF STORMWATER RUNOFF DURING ALL CONSTRUCTION ACTIVITIES. TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC.) MUST BE USED AS NECESSARY UNTIL AREAS STABILIZED.
- 10. COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND DEBRIS SHALL BE PROPERLY DISPOSED OF, PREFERABLY OFF SITE.
- II. ALL MATERIAL SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED IN UPLANDS AREAS. ALL STOCKPILES SHALL BE SEEDED WITH WINTER RYE AND IF NECESSARY, SURROUNDED WITH SILT FENCE, AND/OR STRAW BALES, IN ORDER TO PREVENT OR CONTAIN SOIL EROSION.
- 12. ALL MATERIAL SUITABLE FOR FILL OR SELECT MATERIAL SHALL BE STOCKPILED IN UPLANDS AREAS. ALL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE, AND/OR STRAW BALES, IN ORDER TO CONTAIN SOIL EROSION.
- 13. REMOVE ALL IMPROPER ROADWAY/SITE FOUNDATION MATERIAL WITHIN 18" OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL ACCEPTABLE TO THE STATE/TOWN SPECIFICATIONS. ALL SUITABLE FILL MATERIAL SHALL BE COMPACTED TO AT LEAST 95% OF THE DRY WEIGHT AS DETERMINED BY MODIFIED PROCTOR TESTING (ASTM D-1556) REQUIREMENTS.
- 14. CONSTRUCT ALL UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO DRAIN, DATA, CABLE AND POWER.
- 15. ROUGH GRADE ROADWAY/SITE WITHIN LIMIT OF WORK AND COMMENCE CONSTRUCTION OF ROADWAY
- 16. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 17. COMPLETE ROADWAY SLOPE GRADING/EMBANKMENT CONSTRUCTION. ALL SLOPES SHALL BE STABILIZED AND SEEDED IMMEDIATELY AFTER GRADING. THE CONTRACTOR SHALL STABILIZE SLOPES WITH APPROPRIATE SEEDING PROGRAM OR JUTE MAT, WHEREVER SPECIFIED. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 18. APPLY TOPSOIL TO ROADWAY SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIAL SCREENED AS TO BE FREE OF ROOTS, BRANCHES, STONES, AND OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM COMPACTED THICKNESS OF 4 INCHES. UPON COMPLETION OF TOPSOILING, FINISHED SECTIONS ARE TO BE LIMED, SEEDED, AND MULCHED. THE CONTRACTOR SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
- 19. PERFORM FINAL PAVING OPERATIONS (IF APPLICABLE), INSTALL GUARDRAIL (IF APPLICABLE) AS SHOWN ON THE APPROVED PLANS.
- 20. MAINTAIN, REPAIR, AND REPLACE TEMPORARY EROSION CONTROL MEASURES AS NECESSARY FOR A MINIMUM PERIOD OF 12 MONTHS FOLLOWING SUBSTANTIAL COMPLETION.
- 21. AFTER STABILIZATION (12 MONTHLY FOLLOWING SUBSTANTIAL COMPLETION), REMOVE AND PROPERLY DISPOSE OF TEMPORARY EROSION CONTROL MEASURES, PREFERABLY OFF SITE.
- 22. FOLLOWING SUBSTANTIAL COMPLETION OF ALL ROADWAY ACTIVITIES AND ONCE STABLE CONDITIONS ARE ACHIEVED, CAREFULLY AND REGULARLY MONITOR CONSTRUCTION ACTIVITIES ON ALL INDIVIDUAL LOTS TO INSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF ROADWAY EMBANKMENTS, STORMWATER SYSTEMS AND UTILITIES.
- 23. LOT DISTURBANCE OTHER THAN SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

WINTER CONSTRUCTION NOTES

- A. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:I, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- C. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF BASE COURSE GRAVELS PER NHDOT ITEM 304.1, 304.2, OR 304.3

APPROVED BY THE HUDSON, N.H. PLANNING BOARD
DATE OF MEETING:

CHAIRMAN

SIGNATURE DATE:

SECRETARY

SUBDIVISIONS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING
FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT
CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS, AND CHANGES TO
THE ZONING ORDINANCE, SEE N.H. RSA 674:39

SEEDING SPECIFICATIONS

MIXTURE POUNDS/ACRE POUNDS/I,000 SF
TALL FESCUE 20 0.45
CREEPING RED FESCUE 20 0.20
REDTOP 8 0.20
TOTAL 48

- I. 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 FOUR 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 FOUR INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- 2. 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 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 0.09 LBS. PER SQ. FT. NITROGEN (N): 50 LBS. PER ACRE OR I.I LBS. PER 1000 SQ. FT.
 - PHOSPHATE (P2O5): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.
 - POTASH (K2O): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 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 0.25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
- C. REFER TO TABLE 7-35 OF "STORMWATER MANAGEMENT AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE", FOR APPROPRIATE SEED MIXTURES AND TABLE 7-36 FOR RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT TREFOIL, AND FLATPEA), MUST BE INOCULATED WITH THEIR SPECIFIC INNOCULANT.
- 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 I.
- MULCH
 A. STRAW, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
- B. MULCH WILL BE HELD IN PLACE USING TECHNIQUES FROM THE "BEST MANAGEMENT PRACTICE FOR MULCHING", AS SHOWN IN, "STORMWATER MANAGEMENT AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE".
- 4. MAINTENANCE TO ESTABLISH A STAND
- B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

TEMPORARY SEEDING RATES:

- FOR FALL SEEDING (SEED FROM AUGUST 15 SEPTEMBER 5 FOR BEST COVER): WINTER RYE: 2.5 LBS PER 1,000 SF SEED TO A DEPTH OF I INCH
- FOR SPRING SEEDING (SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION)
- OATS: 2 LBS PER 1,000 SF (SEED TO A DEPTH OF 1 INCH)
- ALTERNATIVE:

PERENNIAL RYEGRASS: 0.7 LBS PER 1,000 SF (SEED BETWEEN APRIL I AND JUNE I AND/OR BETWEEN AUGUST 15 AND SEPTEMBER 15)
MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON (SEED TO A DEPTH OF 0.5 INCHES)

A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.

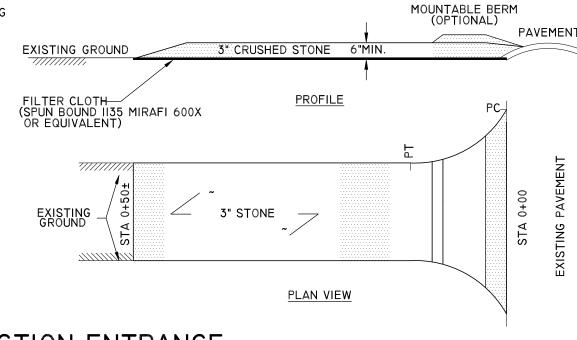
THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.

- 10-10-10 FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER AREA PRIOR TO BE INCORPORATED INTO THE SOIL AT A MINIMUM OF 7 LBS PER 1,000 SF
- TOP SOIL: 4" MINIMUM APPROVED TOPSOIL

STRAW MULCH - 2 BALES PER 1,000 SF (APPLY BINDER OF NETTING AS NEEDED)

NOTES:

- I. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE A MINIMUM OF 3 INCH CRUSHED STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
- 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL BE NOT LESS THAN 75 FEET, EXCEPT WHEN A 3 INCH TO 6 INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE. THE OPTIONAL MOUNTABLE BERM SHALL REDUCE THE REQUIRED LENGTH FROM 75 FEET TO 50 FEET.
- 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 RESIDENTIAL 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:I SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED
- 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 AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE
- 8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING



STABILIZED CONSTRUCTION ENTRANCE

FOR EROSION CONTROL

NOT TO SCALE

EPA: NPDES GENERAL NOTES

- I. THE PROPOSED LAND DISTURBANCE IS APPROXIMATELY 355,077 SF., THEREFORE, ACCORDING TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PHASE II CONSTRUCTION GENERAL PERMIT (CGP) SECTION I.I, THIS PROJECT IS REQUIRED TO COMPLY WITH THE REGULATORY CRITERIA AND INTENT OF THE NPDES PHASE II PROGRAM, LATEST EDITION.
- 2. THE OWNER AND CONTRACTOR ARE REQUIRED TO PREPARE, MAINTAIN AND HAVE ON FILE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
- 3. THE OWNER AND CONTRACTOR ARE REQUIRED TO PREPARE, SUBMIT, POST ON SITE AND HAVE ON FILE A NOTICE OF INTENT (NOI). CONSTRUCTION MAY NOT COMMENCE UNTIL 14 DAYS AFTER EPA HAS REVIEWED/APPROVED THE PROJECT NOI, WHICH GRANTS COVERAGE UNDER THE CGP (NHRI00000).
- 4. THE CONTRACTOR/OWNER IS RESPONSIBLE TO POST THE NOI ON SITE IN A HIGHLY VISIBLE POSITION, PROTECTED FROM THE WEATHER.
- 5. THE OWNER AND CONTRACTOR ARE REQUIRED TO INSTALL, INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES AS DESCRIBED ON THE APPROVED PLANS AND SWPPP INCLUDING INSPECTION LOGS.
- 6. THE OWNER OR CONTRACTOR MAY CONTACT THE NORTHEAST EPA REGIONAL COORDINATOR FOR RESOLUTION TO ANY NPDES, CGP, SWPPP, NOI OR NOTE QUESTIONS, CONCERNS OR CLARIFICATION:

EPA REGIONAL REPRESENTATIVE: MS. THELMA MURPHY (OR CURRENT REPRESENTATIVE)

US EPA, REGION 01/0FFICE OF ECOSYSTEM PROTECTION

I CONGRESS STREET, SUITE II00

BOSTON, MA 02II4-2023

PHONE: (617) 918-1615

- 7. THE PROPOSED PROJECT WILL REQUIRE STATE (NHDES) ALTERATION OF TERRAIN PERMIT, SINCE THE ANTICIPATED LAND DISTURBANCE IS MORE THAN 100,000 SF, ACCORDING TO ENV-WS 415.
- 8. THE PROPOSED PROJECT WILL REQUIRE A STATE (NHDES) DREDGE AND FILL PERMIT, SINCE THE PROJECT HAS WETLAND DISTURBANCES, ACCORDING TO WT 302.04.

EROSION CONTROL NOTES

ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS (EPA, NHDES AND TOWN REGULATIONS). THE GENERAL NOTES AND DETAILS CONTAINED IN THIS PLAN SERVE AS A GUIDE ONLY.

- I. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS. INSTALLATION OF STRAWBALE BARRIERS AND SILTATION FENCES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY SPECIFIC AREA. PREFABRICATED SILTATION FENCES AND STRAWBALE BARRIERS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- 2. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL ROADWAYS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE. CUT AND FILL SLOPES SHALL BE LOAMED & SEEDED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE. TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE INSTALLED WITHIN 45 DAYS OF INITIAL CONSTRUCTION.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- A BASE COURSE CRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAY
- 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 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED, OR
- D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

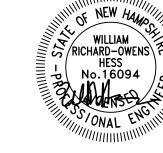
TIME LIMIT: ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

- 4. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM INSTALLED WITH NOT LESS THAN I.I POUNDS OF SEED MIX PER 1,000 SQ. FT. SEE SEEDING SPECIFICATIONS ON THIS SHEET.
- 5. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
- 6. STRAW MULCH OR JUTE MATTING SHALL BE USED IF/WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 7. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS AREA NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST IS TO SEPTEMBER IS. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
- 8. TO CONTROL DUST DURING CONSTRUCTION, WATER DISTRIBUTION SHALL BE USED.
- 9. LIMIT THE LENGTH OF EXPOSURE OF UNSTABILIZED SOIL TO 45 DAYS OR LESS
- 10. EROSION CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER 0.5" OF RAINFALL.
- II. TEMPORARY WATER DIVERSION (SEDIMENT BASINS, SWALES, ETC.) MUST BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.

EROSION CONTROL NOTES

TAX MAP 138 LOT 82/88 9 ALVIRNE DRIVE, HUDSON, NH 03051

PREPARED FOR:
M. R. LACASSE HOMES, LLC
9 SCENIC LANE
HUDSON, NH 03051
BOOK 9756 PAGE 6



PREPARED BY:
HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC

63 WEST STREET - P.O. BOX 991 ASHLAND, NH 03217 TEL: (603) 968-5664 WWW.HESSENGINEERINGLLC.COM DRAWN BY: IAN A. DESMARAIS REVIEWED BY: WILLIAM HESS, P.E.

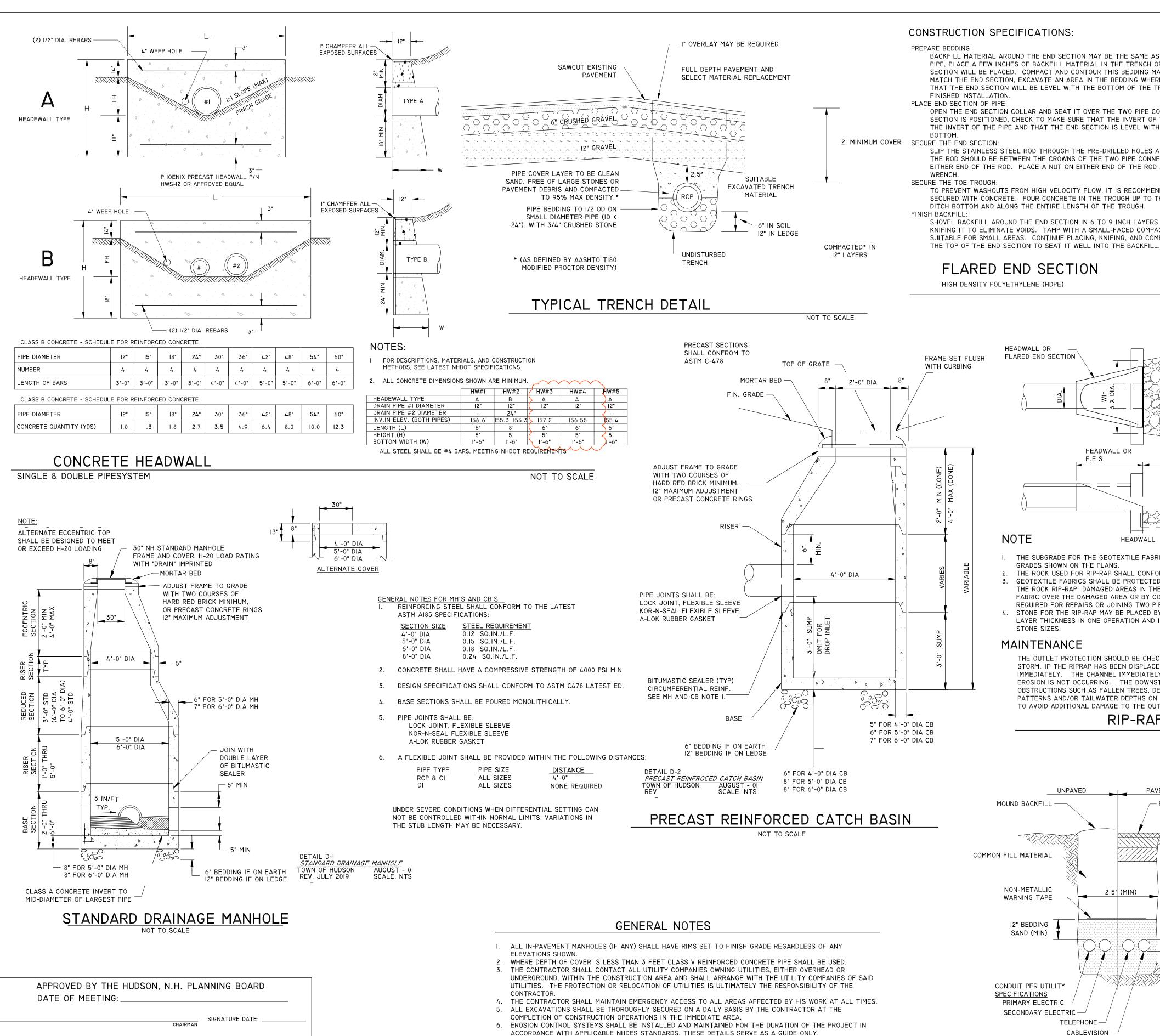


NOT TO SCALE

02. 7/02/25 PER NHDES AOT REVISIONS IAD
REV. DATE DESCRIPTION BY

DATE: 4/24/25 JOB NO: 24009

> D-3 18 of 22



SUBDIVISIONS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING

FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT

CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS, AND CHANGES TO

THE ZONING ORDINANCE, SEE N.H. RSA 674:39

REFER TO THE TOWN STANDARD DETAILS, LATEST REVISION, FOR ADDITIONAL INFORMATION AND CRITERIA.

9. ALL DRAINAGE PIPE SHALL BE RCP (REINFORCED CONCRETE PIPE) UNLESS NOTED OTHERWISE

ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

8. ALL DEMOLITION DEBRIS, INCLUDING STUMPS, TIMBER AND ALL BUILDING DEMOLITION SHALL BE DISPOSED OF IN

BACKFILL MATERIAL AROUND THE END SECTION MAY BE THE SAME AS THE MATERIAL AROUND THE PIPE, PLACE A FEW INCHES OF BACKFILL MATERIAL IN THE TRENCH OR DITCH WHERE THE END SECTION WILL BE PLACED. COMPACT AND CONTOUR THIS BEDDING MATERIAL TO GENERALLY MATCH THE END SECTION, EXCAVATE AN AREA IN THE BEDDING WHERE TOE TROUGH WILL SEAT SO THAT THE END SECTION WILL BE LEVEL WITH THE BOTTOM OF THE TRENCH OR DITCH IN THE

OPEN THE END SECTION COLLAR AND SEAT IT OVER THE TWO PIPE CONNECTIONS. ONCE THE END SECTION IS POSITIONED, CHECK TO MAKE SURE THAT THE INVERT OF THE END SECTION MATCHES THE INVERT OF THE PIPE AND THAT THE END SECTION IS LEVEL WITH THE TRENCH OR DITCH

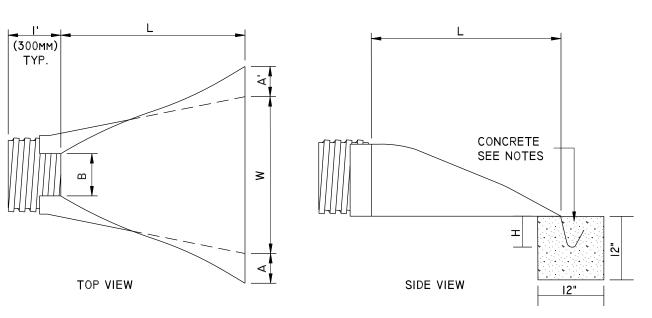
SLIP THE STAINLESS STEEL ROD THROUGH THE PRE-DRILLED HOLES AT THE TOP OF THE COLLAR. THE ROD SHOULD BE BETWEEN THE CROWNS OF THE TWO PIPE CONNECTIONS. PLACE A WASHER ON EITHER END OF THE ROD. PLACE A NUT ON EITHER END OF THE ROD AND TIGHTEN WITH A

TO PREVENT WASHOUTS FROM HIGH VELOCITY FLOW, IT IS RECOMMENDED THAT THE TROUGH BE SECURED WITH CONCRETE. POUR CONCRETE IN THE TROUGH UP TO THE LEVEL OF THE TRENCH OR

SHOVEL BACKFILL AROUND THE END SECTION IN 6 TO 9 INCH LAYERS EQUALLY ON BOTH SIDES, KNIFING IT TO ELIMINATE VOIDS. TAMP WITH A SMALL-FACED COMPACTOR OR OTHER EQUIPMENT SUITABLE FOR SMALL AREAS. CONTINUE PLACING, KNIFING, AND COMPACTING BACKFILL LAYERS TO

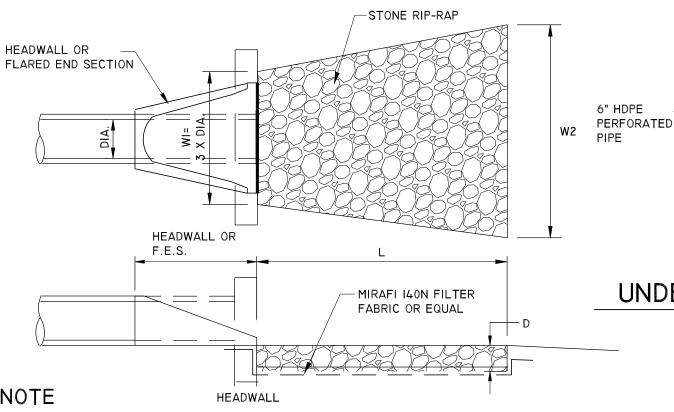
FLARED END SECTION

HIGH DENSITY POLYETHYLENE (HDPE)



		DIMENS	SIONS, INCHE	S (MM)		
PIPE DIAMETER	PART NO.	A, ±1 (25)	B MAX	H, ±I (25)	L, ±1/2 (13)	W, ±2 (50)
12", 15" (300,375)	1210 NP	6.5 (165)	10 (254)	6.5 (165)	25 (635)	29 (736)
18" (450)	1810 NP	7.5 (190)	15 (380)	6.5 (168)	32 (812)	35 (890)
24" (600)	2410 NP	7.5 (190)	18 (450)	6.5 (165)	36 (900)	45 (1140)
30" (750)	3010 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)
36" (900)	3610 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)

NOT TO SCALE



ANTICIPATED UNDERDRAIN LOCATION BEGIN DRAIN OFFSET CONNECT TO DRAIN LENGTH STA 2+75 | II' RT | CB #I0 STA 2+63.96-I0' RT | II LF STA 2+75 | II' RT | CB #9 STA 2+63.96-I0' LT | II LF STA 2+50 | II' RT | HW #I STA 0+46-21.65' RT | 204 LF STA 2+50 | II' RT | FES #2 STA 0+44.38-27.44 LT06 LF LOCATION CAN BE REDUCED OR EXPANDED IN THE FIELD SUBJECT TO FIELD CONDITIONS DETERMINED BY THE ENGINEER. GEOTEXTILE FABRIC **ENCASING 3/4" STONE** -3/4" STONE

UNDERDRAIN DETAIL

NOT TO SCALE

- THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP-RAP SHALL BE PREPARED TO THE LINES AND
- GRADES SHOWN ON THE PLANS. THE ROCK USED FOR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- 4. $\,$ STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE

MAINTENANCE

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS AND SEDIMENT THAT COULD CHANGE THE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

RIP-RAP OUTLET PROTECTION APRON

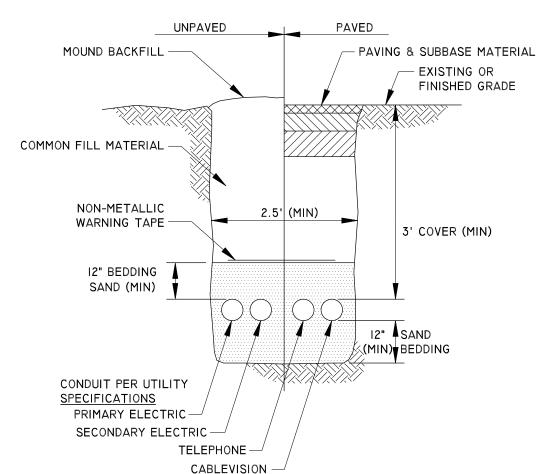
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LOCATION	L	WI	W2	D	STONE SIZE
FES-I	10'	1.5'	6'	6"	3"
HW-2	17'	6'	19'	24"	3"
HW-3	8'	3'	9'	12"	3"
HW-5	<u> </u>	_ & '_	٧'٧	<u> </u>	\ <u>\</u> \&"\\

* STONE SIZE SHOWN ON THE PLANS AS CLASS A, B, OR C STONE FILL SHALL CONFORM WITH THE REQUIREMENTS OF SECTION 585 OF THE NHDOT STANDARD SPECIFICATIONS.

FIFTY PERCENT BY WEIGHT OF THE RIPRAP MIXTURE SHALL BE SMALLER THAN THE MEDIAN SIZED STONE DESIGNATED AS D50. THE LARGEST STONE IN THE MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.

NOT TO SCALE

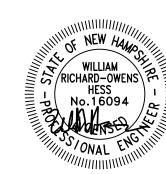


UTILITY TRENCH DETAIL

DRAINAGE DETAILS

TAX MAP 138 LOT 82/88 9 ALVIRNE DRIVE, HUDSON, NH 03051

PREPARED FOR: M. R. LACASSE HOMES, LLC 9 SCENIC LANE HUDSON, NH 03051 **BOOK 9756 PAGE 6**



PREPARED BY: HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC

63 WEST STREET - P.O. BOX 991 ASHLAND, NH 03217 TEL: (603) 968-5664 WWW.HESSENGINEERINGLLC.COM DRAWN BY: IAN A. DESMARAIS REVIEWED BY: WILLIAM HESS, P.E.



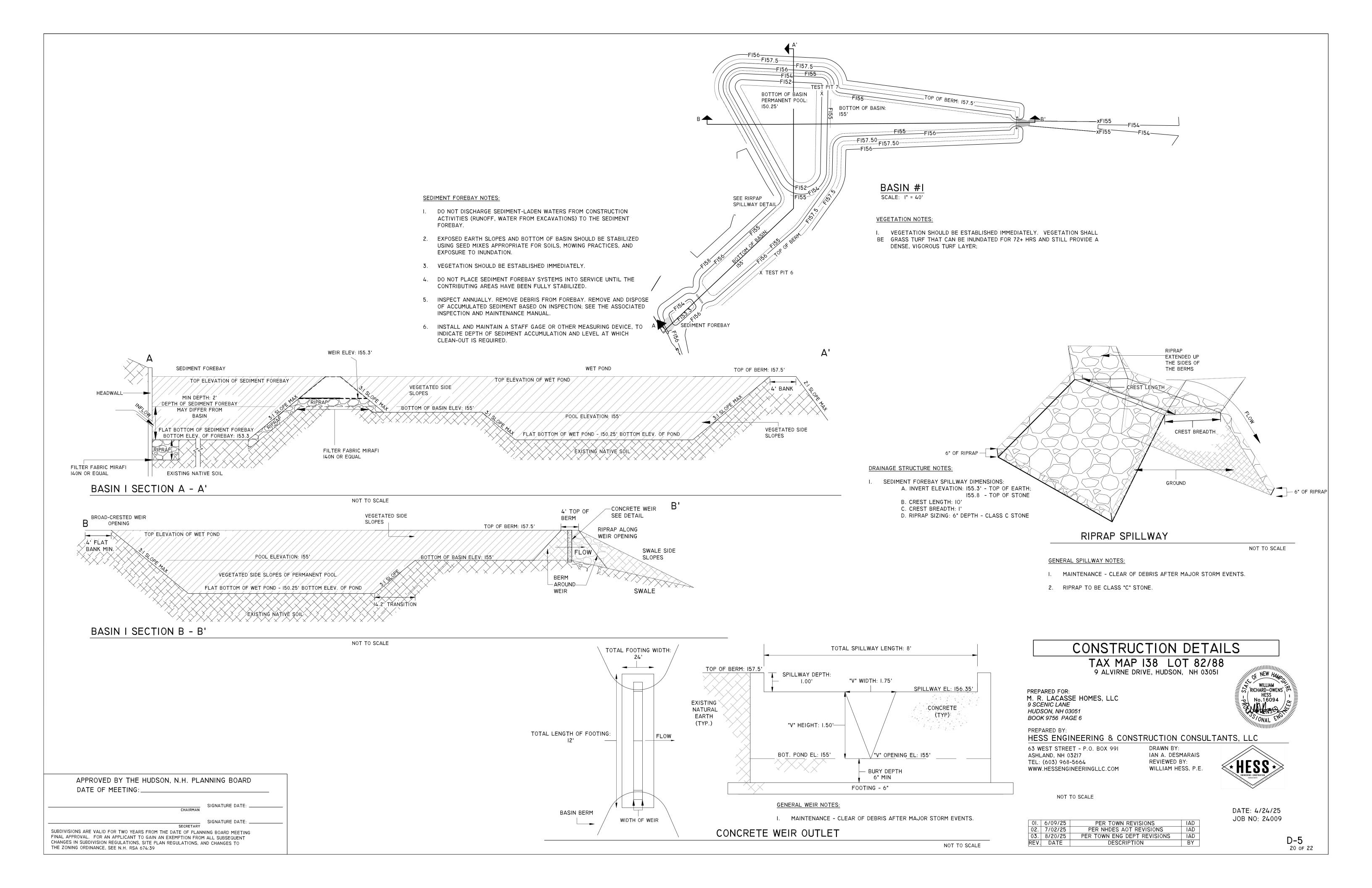
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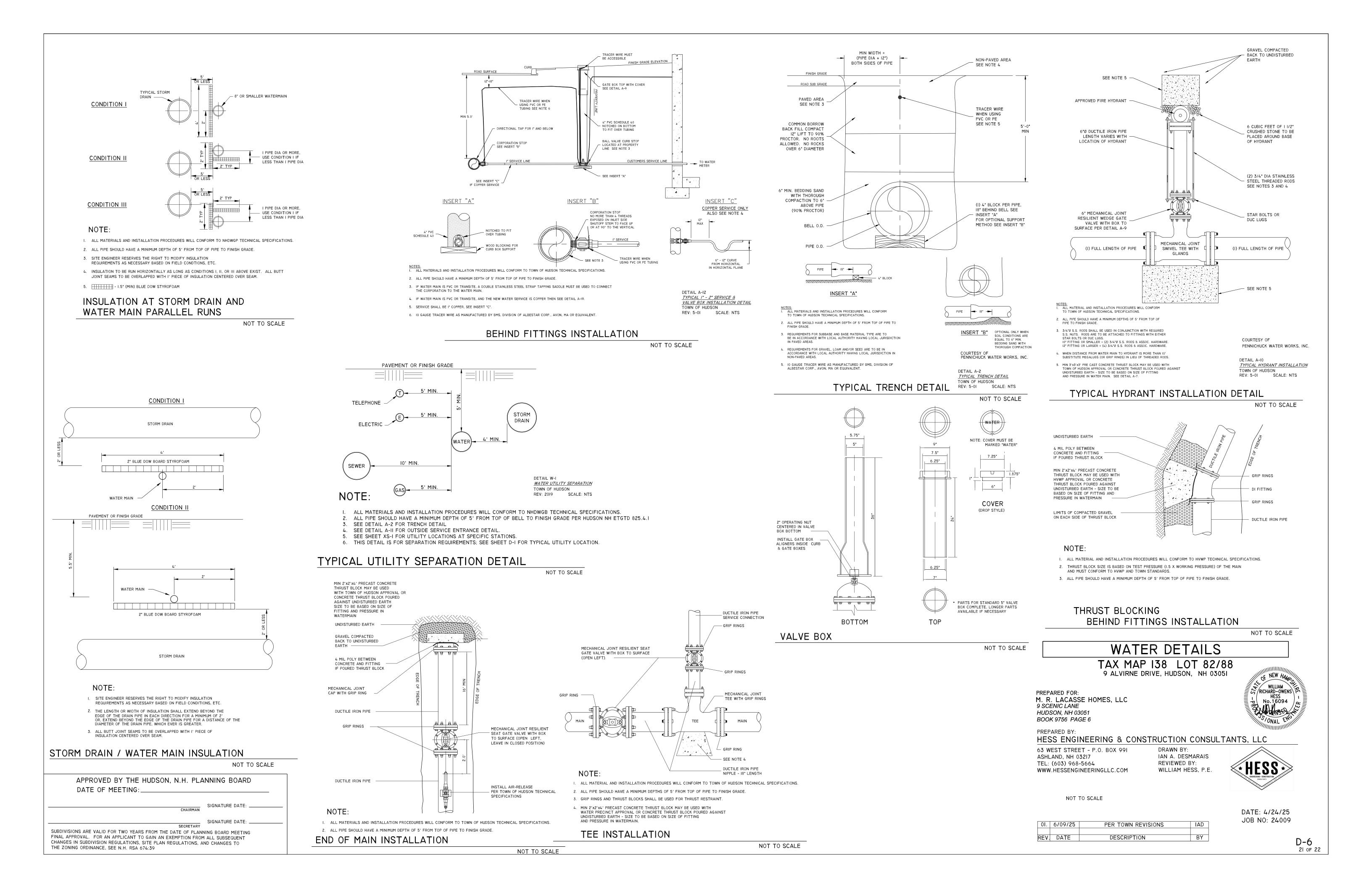
DATE: 4/24/25 JOB NO: 24009

01. 6/09/25 PER TOWN REVISIONS PER NHDES AOT REVISIONS 02. 7/02/25 PER TOWN ENG DEPT REVISIONS 03. 8/20/25 IAD REV. DATE DESCRIPTION

D-4

19 of 22







NEW HAMPSHIRE STATE ENDANGERED

BLANDING'S TURTLE



EASTERN BOX TURTLE

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division

This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

PLYWOOD

(4° O.C.)

at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and

NEW HAMPSHIRE

STATE ENDANGERED

NEW HAMPSHIRE

STATE THREATENED

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division

at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and

SPOTTED TURTLE

Specific Information:

yellow spots.

October 15.

Adults are 3 – 5 inches long

extensively over land.

Shell is black or brown, fairly flat, and with

Turtles are frequently concealed by leaves

and undergrowth and may not be easily

Turtles are most active from April 15 –

During nesting season (May 15 – July 15)

turtles are attracted to disturbed ground.

Uses variety of wetlands and moves

NHFG NOTES A QUALIFIED BIOLOGIST SHALL BE DEFINED AS AN INDIVIDUAL WHO HAS EXPERIENCE AND KNOWLEDGE OF RARE TURTLE AND SENSITIVE AND RARE AMPHIBIAN SPECIES THAT MAY BE FOUND IN THESE AREAS. THE CREDENTIALS OF THE INDIVIDUAL SHALL BE PROVIDED TO NHFG NO LESS THAN 30 DAYS IN ADVANCE OF CONDUCTING SITE ACTIVITIES AND MUST RECEIVE NHFG APPROVAL IN ORDER TO CONDUCT THE SITE ACTIVITIES AS REQUESTED BY NHFG.

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and exact locations are strongly encouraged.



Specific Information:

- Adults are 7 9 inches long.
- Shell is highly domed with light speckles.
- Distinct yellow throat and chin. Uses variety of wetlands and moves
- extensively over land.
- Turtles are frequently concealed by leaves and undergrowth and may not be easily
- Turtles are most active from April 15 October 15.
- During nesting season (May 15 July 15) turtles are attracted to disturbed ground.



Specific Information:

- Adults are 4.5 7 inches long.
- Highly domed shell. Variable color patterning from dark brown to black shell with irregular yellow or orange markings.
- Primarily terrestrial using forests, fields, shrub lands, and wetland edges.
- Hibernates on land by digging down in soil.
- Frequently concealed by leaves and undergrowth and may not be easily visible.
- Turtles are most active from April 15 October 15.
- During nesting season (May 15 July 15) turtles are attracted to disturbed ground.



OFFSITE AREA

MOUNT EVENLY ACCROSS

GROUND SURFACE

exact locations are strongly encouraged.





PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

EASTERN HOGNOSE SNAKE

(New Hampshire state endangered species)

Egg laying occurs June 1 - July 15th, Young emerge in August - Septembe



Identifying traits

- Upturned snout
- Adults are 2-3 ft. long
- May play dead if they feel threatened.

Habitat Use

Can be found in a variety of habitats throughout the season



Immediately report sightings to NH Fish & Game

Melissa Winters (603-479-1129) or Brendan Clifford (603-944-0885)

Please report promptly, noting specific location and date. Photographs strongly encouraged.



State Laws Pertaining to this Species RSA 212-A:7, FIS 804.05, Fis 1401.03 (a)

- Black, gray or patterned appearance
- May spread neck out or hiss
- Rarely bite display is a defense strategy



NOTE:

1° MIN. —

2"X4" WOODEN SUPPORTS

DIAGONAL SUPPORTS

CONSTRUCTION ACCESS ROAD

PLYWOOD

WEIGH DOWN WITH

SAND BAGS OR SIMILAR

AS NECESSARY

- THE PLYWOOD BARRIER SHALL REMAIN IN PLACE ANY TIME THE ENTRANCE IS NOT ACTIVELY IN USE, EVEN DURING THE WORK DAY.
- 2. EACH SECTION OF PLYWOOD BARRIER SHALL OVERLAP THE ADJACENT SECTION TO ENSURE THAT ALL OPENINGS ARE BLOCKED. COMPLETELY.

WILDLIFE EXCLUSIONARY BARRIER, AS SHOWN IN THE FIGURE LABELED "WILDLIFE EXCLUSIONARY BARRIER, SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE PRIOR TO 4/I5 AND MAINTAINED BETWEEN 4/I5-I0/I5 THROUGHOUT THE LIFE OF THE ACTIVE PROJECT/CONSTRUCTION ACTIVITIES.

- WILDLIFE EXCLUSIONARY BARRIER SHALL BE BURIED TO A DEPTH OF NO LESS THAN 6-8" AND EXTEND NO LESS THAN 18" ABOVE EXISTING GRADE.
- OF THE WORK ZONE. BARRIER SHALL BE INSPECTED DAILY FOR DEFECTS/WILDLIFE PRIOR TO SITE CONSTRUCTION
- AND REPORTED TO NHFG WITHIN 24 HRS OF DISCOVERY SITE OPERATOR SHALL MAINTAIN LOG OF ALL INSPECTIONS WHICH INCLUDES DATE/TIME/OBS/DEFECTS/REPAIRS/COORDINATION EFFORTS/PHOTOGRAPHS DURING THE LIFE OF THE PERMIT OR UNTIL PROJECT COMPLETION, WHICHEVER OCCURS FIRST. LOGS SHALL BE MADE AVAILABLE IMMEDIATELY TO
- EXCLUSIONARY BARRIER INSTALLATION HAS BEEN COMPLETED.

- 2. ENSURE WILDLIFE GATE REMAINS CLOSED AT END OF
- WILDLIFE EXCLUSIONARY BARRIER SHALL BE INSTALLED WITH THE WOOD STAKES EXPOSED ON THE INTERIOR SIDE
- ACTIVITIES, DEFECTS SHALL BE IMMEDIATELY REPAIRED
- NHFG AND NHDES UPON WRITTEN REQUEST. NHFG SHALL BE INFORMED IN WRITING WHEN WILDLIFE

APPROVED BY THE HUDSON, N.H. PLANNING BOARD

SUBDIVISIONS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING

FINAL APPROVAL. FOR AN APPLICANT TO GAIN AN EXEMPTION FROM ALL SUBSEQUENT CHANGES IN SUBDIVISION REGULATIONS, SITE PLAN REGULATIONS, AND CHANGES TO

SIGNATURE DATE: _

DATE OF MEETING:

THE ZONING ORDINANCE, SEE N.H. RSA 674:39

MULCH FILTER MATERIAL SAND . GRAVEL

WILDLIFE RAMP DETAIL TRENCH WITH GRAVEL

WILDLIFE RAMP NOTES

THE WORK-ZONE SIDE OF THE WILDLIFE EXCLUSIONARY BARRIER. THE RAMPS SHALL BE CONSTRUCTED OUT OF NATIVE MATERIAL (SAND/SOIL) FROM THE SITE AND SHALL BE AT A MIN. 3' WIDE. ADDITIONAL TALL STAKES SHALL BE INSTALLED IN THE LOCATION OF THESE TAMPS TO HELP SUPPORT THE SILT FENCING AS NEEDED. MATERIALS SUCH AS HAY OR MULCH MAY BE USED TO OFFSET WEIGHT AS LONG AS MATERIALS DO NO ASSIST ANIMALS IN ENTERING WORK ZONE. WILDLIFE RAMPS SHALL BE INSTALLED AT LEAST EVERY 75' ALONG THE WILDLIFE EXCLUSIONARY BARRIER AND SHALL ONLY BE INSTALLED ON SIDES OF THE FENCE THAT DO NOT BORDER

ROADS. SEE DETAIL BELOW.

WILDLIFE ESCAPE MOUNDS ("RAMPS") SHALL BE INSTALLED ON THE INTERIOR OF THE WILDLIFE EXCLUSIONARY BARRIER ALLOWING FOR POTENTIALLY ENTRAPPED WILDLIFE TO ESCAPE FROM THE PROJECT AREA. RAMPS SHALL BE CONSTRUCTED ON

PONDING HT.

- HAYBALE

NH FISH AND GAME NOTES TAX MAP 138 LOT 82/88

9 ALVIRNE DRIVE, HUDSON, NH 0305I

PREPARED FOR: M. R. LACASSE HOMES, LLC 9 SCENIC LANE HUDSON, NH 03051 **BOOK 9756 PAGE 6**



HESS ENGINEERING & CONSTRUCTION CONSULTANTS, LLC 63 WEST STREET - P.O. BOX 991

ASHLAND, NH 03217 TEL: (603) 968-5664 WWW.HESSENGINEERINGLLC.COM

PREPARED BY:

DRAWN BY: IAN A. DESMARAIS REVIEWED BY: WILLIAM HESS, P.E.



NOT TO SCALE

DESCRIPTION

DATE: 4/24/25 JOB NO: 24009

D-7 22 of 22

