

STATE OF NEW HAMPSHIRE INTER-DEPARTMENT COMMUNICATION

DATE: October 30, 2023

FROM: Joshua Brown
Wetlands Program Analyst

AT (OFFICE): Department of
Transportation

SUBJECT Shoreland Permit-by-Notification
Auburn, 44167

Bureau of
Environment

TO Calvin Deissner, Shoreland Permitting
New Hampshire Wetlands Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Forwarded herewith is the application package prepared by NH DOT Bureau of Highway Design for the subject Shoreland Permit-by-Notification. The project will replace a 41' long 5' diameter corrugated metal pipe culvert in poor condition carrying a unnamed stream under NH Route 121 in the Town of Auburn, NH with a 9'X5' box culvert. No net change in impervious area is proposed. Incidental works includes resetting the guardrail, pavement restoration, and grading to match the stream channel through the culvert. A wetlands standard dredge and fill application for this project was submitted to NHDES on October 18th, 2023.

This project was reviewed at the Natural Resource Agency Coordination Meeting on June 21, 2023. A copy of the minutes has been included with this application package. A copy of this application and plans can be accessed on the Departments website via the following link: <https://www.dot.nh.gov/projects-plans-and-programs/programs/environmental-management-system/project-management-section-0>

Erosion Control Plans contained within this application should be considered final in accordance with Env-Wt 527.05(a).

The lead people to contact for this project are Kirk Mudgett, Bureau of Highway Design (271-1598 or Kirk.O.Mudgett@dot.nh.gov) or Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment (271-3226 or Andrew.O'Sullivan@dot.nh.gov).

A payment voucher has been processed for this application (Voucher #734490) in the amount of \$400.00.

If and when this application meets with the approval of the Bureau, please send the permit directly to Andrew O'Sullivan, Wetlands Program Manager, Bureau of Environment.

JRB;

cc:

BOE Original
Town of Auburn (4 copies via certified mail)
Marika Labash, NH Division of Historic Resources (Cultural Review Within)

Mike Dionne & Kevin Newton, NH Fish & Game (via electronic notification)
Kevin Nyhan, BOE (via electronic notification)

S:\Environment\PROJECTS\AUBURN\44167\Wetlands\Shoreland Application\WETAPP - Coverletter.doc



SHORELAND PERMIT BY NOTIFICATION (PBN) NOTIFICATION FORM

Water Division/Land Resources Management
Shoreland Program
[Check the Status of your PBN](#)



RSA/Rule: RSA 483-B/Env-Wq 1400

Administrative Use Only	Administrative Use Only	<input type="checkbox"/> PBN Accepted, Expires:	
		<input type="checkbox"/> PBN Rejected	Reviewer's Initials:
		File No.:	Admin's Initials:
		Check No.:	Amount:

This form requests authorization to excavate, fill, or construct new structures within the protected shoreland, which is 250 feet landward of the reference line of public waters, as regulated under RSA 483-B. Refer to the cover sheet to determine your eligibility to use this form in lieu of the standard Shoreland Permit Application. **Please note:** Notification packages missing required components will be rejected and the fee will not be returned.

SECTION 1 - PROPERTY OWNER (RSA 483-B:5-b; Env-Wq 1406.17)			
LAST NAME, FIRST NAME, M.I.: NH Dept. of Transportation			
MAILING ADDRESS: PO Box 483	TOWN/ CITY: Concord	STATE: NH	ZIP CODE: 03303
PHONE: 603-271-1598	EMAIL: kirk.o.mudget.dot.nh.gov		
SECTION 2 - PROJECT LOCATION (RSA 483-B:5-b; Env-Wq 1406.17)			
ADDRESS: NH121	TOWN/ CITY: Auburn	STATE: NH	ZIP CODE: 03032
WATERBODY NAME: Massabesic Lake	TAX MAP/ LOT: Map: 23 (Within State ROW)		
SECTION 3 - CONTRACTOR OR AGENT (Env-Wq 1406.17)			
LAST NAME, FIRST NAME, M.I.: N/A			
MAILING ADDRESS:	TOWN/ CITY:	STATE:	ZIP CODE:
PHONE:	EMAIL:		
SECTION 4 - PROJECT DESCRIPTION (Env-Wq 1406.17)			
Provide a brief description of the proposed project including square footage of impacts and dimensions of new structures.			
The project will replace a 41' long 5' diameter corrugated metal pipe culvert in poor condition carrying a unnamed stream under NH Route 121 in the Town of Auburn with a 9'X5' box culvert. No net change in impervious area is proposed. Incidental works includes resetting the guardrail, pavement restoration, and grading to match the stream channel through the culvert.			
TOTAL SQUARE FEET OF IMPACT: 10,665 TOTAL SQUARE FEET OF NET CHANGE IN IMPERVIOUS AREA: 0			
Total impact area is determined by the sum of all areas disturbed by excavation, fill, and construction. Examples include, but are not limited to: constructing new driveways, constructing new structures, removing or replacing structure foundations, grading, and installing a new septic system or well.			

shoreland@des.nh.gov or (603) 271-2147

NHDES Shoreland Program, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

www.des.nh.gov

SECTION 5 - PBN CRITERIA (RSA 483-B:5-b; Env-Wq 1406.05)	
Check one of the following project type criteria.	
<input type="checkbox"/>	1. This project impacts less than 1,500 square feet in total, with a net increase in impervious area, if any, of no more than 900 square feet. <i>PBN Impact Limit: 1,500 square feet/ Fee: \$400.</i>
<input type="checkbox"/>	2. This project is proposed for the purpose of stormwater management improvements, erosion control, or environmental restoration or enhancement. <i>PBN Impact Limit: None/ Fee: \$200.</i>
<input checked="" type="checkbox"/>	3. The project is for the maintenance, repair, and improvement of public utilities, public roads, and public access facilities. <i>PBN Impact Limit: None/ Fee: \$400.</i>
<input type="checkbox"/>	4. The project consists of geotechnical borings, test wells, drinking water wells or is a site remediation project and meets the requirements of Env-Wq 1406.05. <i>PBN Impact Limit: None / Fee: \$400.</i>
SECTION 6 - FEE (RSA 483-B:5-b; Env-Wq 1406.16)	
Consult Section 5 to determine fee. Make checks and money orders payable to "Treasurer - State of NH". Undated checks cannot be accepted. TOTAL FEE: \$400	
SECTION 7 - PHOTOS (RSA 483-B:5-b; Env-Wq 1406.16)	
<input checked="" type="checkbox"/>	Dated photographs of each area proposed to be impacted are required for all projects.
SECTION 8 - PLAN REQUIREMENTS (RSA 483-B:5-b; Env-Wq 1406.16)	
Check YES or NO to all statements, and review the applicable plan requirements. If your plans do not include the information that is required, your notification will be rejected.	
<input checked="" type="checkbox"/> YES	Required for all projects: A clear and detailed plan of work depicting, at a minimum, all impact areas, the reference line , and property lines. Plans that are not to scale must show all relevant dimensions and distances from the reference line and dimensions.
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	This project proposes an increase in impervious (i.e. non-permeable) area. Plans must include the dimensions and locations of all existing and proposed impervious surfaces on the lot that are within 250 feet of the reference line. Decks are typically considered impervious.
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	< 20% This project proposes an increase in impervious area, and the total post-construction impervious area on the lot within 250 feet of the reference line will not exceed 20%.
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20 – 30% This project proposes an increase in impervious area such that the total impervious area of the lot within 250 feet of the reference line will be greater than 20% but less than 30%. Plans must include a stormwater management system that will infiltrate increased stormwater runoff from development per RSA 483-B:9, V(g)(2) and in accordance with Env-Wq 1500 .
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	> 30% This project proposes an increase in impervious area such that the total impervious area on the lot within 250 feet of the reference line will be greater than 30%. Plans must include a stormwater management system designed and certified by a professional engineer to account for all new development, and plans must demonstrate how the vegetation point score is met per RSA 483-B:9, V(g)(1,3) .
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	This project proposes impacts within 50 feet of the reference line. Plans and photos must show each area of the waterfront buffer that will be impacted, including groundcover, and calculate the tree and sapling point scores in accordance with the Vegetation Management Fact Sheet .
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	This project proposes impacts between 50 and 150 feet of the reference line. Plans must depict the 25% area of the woodland buffer to be designated and maintained as natural woodland. See the Vegetation Management Fact Sheet .

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<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<p>This project proposes to install or expand an accessory structure, such as a patio or shed, within 50 feet of the reference line. All plans <i>must</i> demonstrate that the height, size, and setback limitations for accessory structures will be met. These limitations are described within the Accessory Structure Fact Sheet.</p> <p>The shoreland frontage on this lot is: <input type="text"/> linear feet. <input checked="" type="checkbox"/> N/A – There is no direct frontage on this lot.</p>
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<p>This project proposes a pervious (i.e. permeable) surface technology. Plans must include the location and type of the surface and a cross-section depicting the construction method, materials, and specifications as to how this surface will be maintained as a pervious technology. The notification must also include a maintenance plan describing how the surfaces will be maintained pervious.</p>

SECTION 9 - CONDITIONS (Env-Wq 1406.20; RSA 483-B:9, V, (d))

Initial each of the required conditions below.

- Kirk Mudgett* 1. Erosion and siltation control measures shall: be installed prior to the start of work; be maintained throughout the project; and remain in place until all disturbed surfaces are stabilized.
- Kirk Mudgett* 2. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
- Kirk Mudgett* 3. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.
- Kirk Mudgett* 4. Any fill used shall be clean sand, gravel, rock, or other suitable material.
- Kirk Mudgett* 5. For any project where mechanized equipment will be used, orange construction fence shall: be installed prior to the start of work at the limits of the temporary impact area as shown on the plans approved as part of a permit or accepted as part of the permit by notification; be maintained throughout the project; and remain in place until all mechanized equipment has been removed from the site.

SECTION 10 - CERTIFICATIONS (Env-Wq 1406.18)

Initial each of the required certifications below.

- Kirk Mudgett* 1. The property owner shall sign the notification form below.
- Kirk Mudgett* 2. The signature(s) shall constitute certification that: the information provided is true, complete, and not misleading to the knowledge and belief of the signer; the signer understands that any permit by notification obtained based on false, incomplete, or misleading information is not valid; the project as proposed complies with the [minimum standards](#) established in RSA 483-B:9, V and will be constructed in strict accordance with the proposal; the signer accepts the responsibility for understanding and maintaining compliance with RSA 483-B and these rules; the signer understands that an accepted shoreland permit by notification shall not exempt the work proposed from other state, local, or federal approvals; the signer understands that incomplete notifications shall be rejected and the notification fee shall not be returned; and the signer is subject to the applicable penalties in RSA 641, *Falsification In Official Matters*.
- Kirk Mudgett* 3. The signature of the property owner certifies that the property owner has authorized the agent to act on the property owner's behalf for purposes of the notification. (Not Applicable)

SECTION 11 - REQUIRED SIGNATURE (RSA 483-B:5-b; Env-Wq 1406.18)

SIGNATURE (OWNER): <input type="text"/>	PRINT NAME LEGIBLY: <input type="text"/>	DATE: <input type="text"/>
SIGNATURE (AGENT, IF APPLICABLE): <i>Kirk Mudgett</i>	PRINT NAME LEGIBLY: N/A Kirk Mudgett	DATE: N/A 10/25/23

shoreland@des.nh.gov or (603) 271-2147

NHDES Shoreland Program, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

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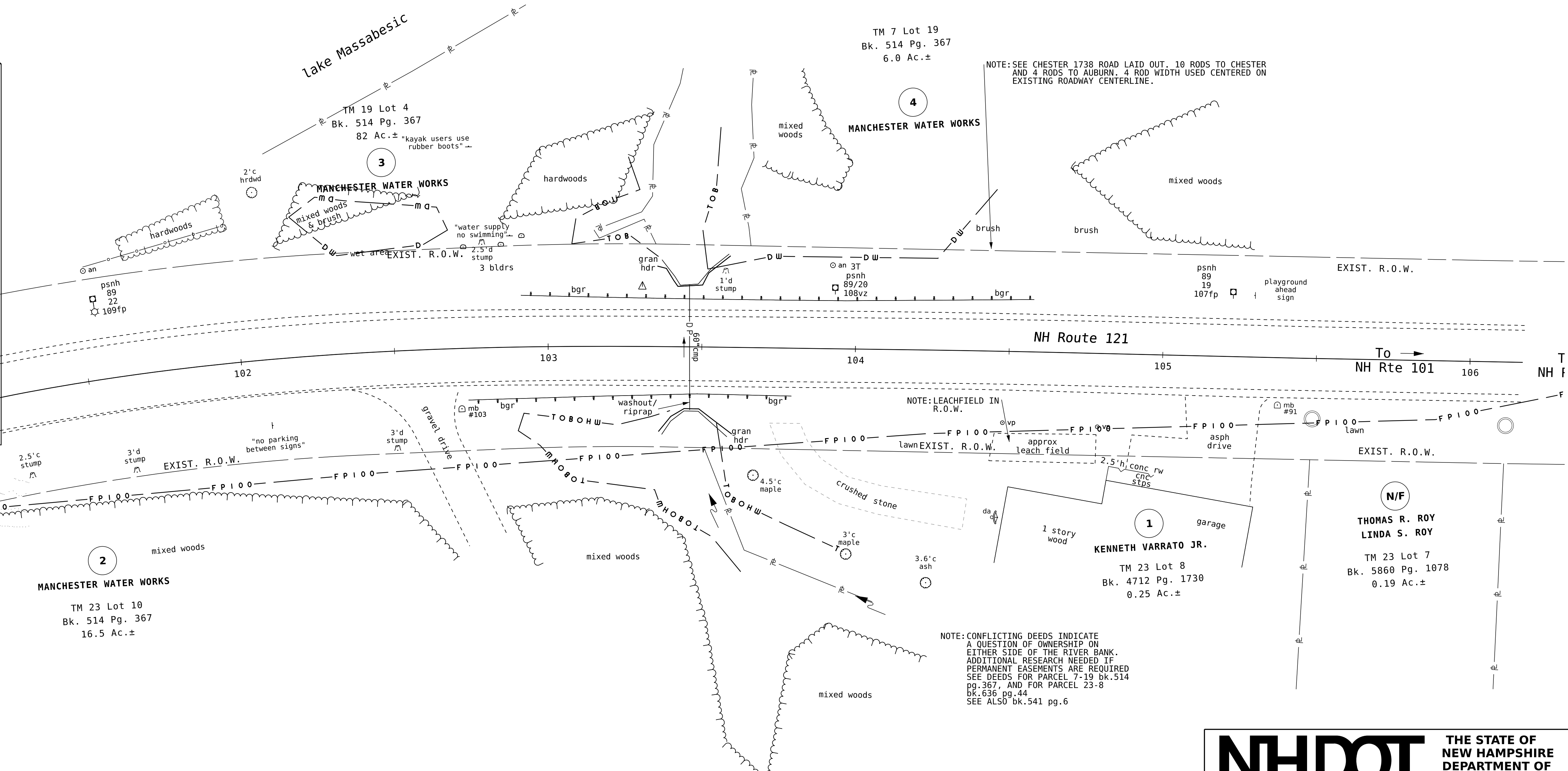
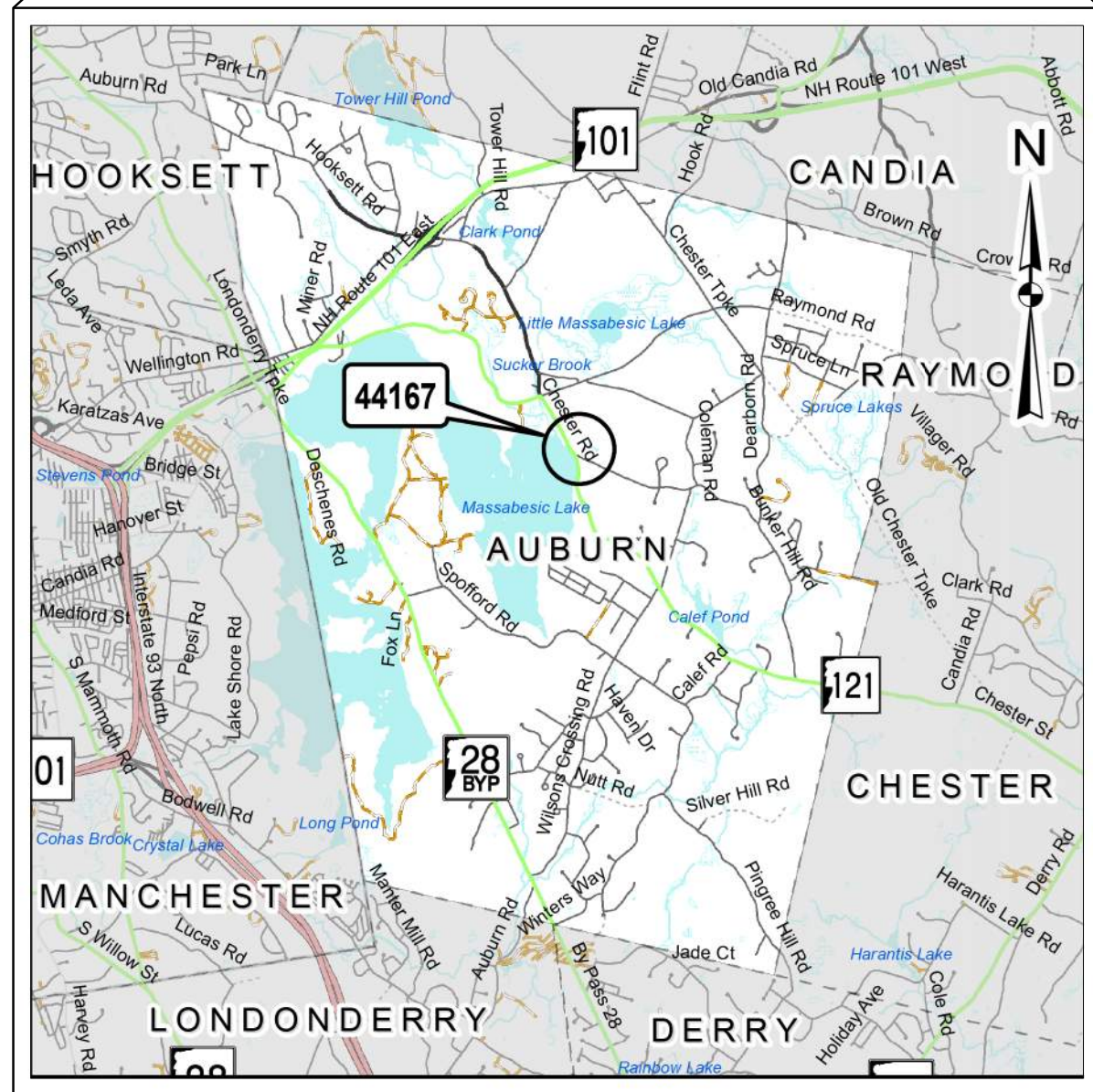
**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION**

SHORELAND PLANS

FEDERAL AID PROJECT

**FEDERAL PROJECT NO. X-A00(339)
N.H. PROJECT NO. 44167**

DESIGN DATA		
AVERAGE DAILY TRAFFIC 20	22	5,100
AVERAGE DAILY TRAFFIC 20	TBD	TBD
PERCENT OF TRUCKS		UNKNOWN
DESIGN SPEED		40 MPH
LENGTH OF PROJECT		45 LF (CULVERT)

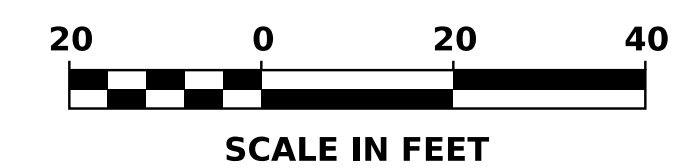


DRAWN BY: GRR
 CHECKED BY: XX
 DATE: XX
 DATE: XX

INDEX OF SHEETS

1	FRONT SHEET
2-3	STANDARD SYMBOLS SHEETS
4	SHORELAND IMPACT PLANS

TOWN OF AUBURN
 COUNTY OF ROCKINGHAM
 SCALE: 1" = 20'



FOR CONSTRUCTION AND ALIGNMENT DETAILS - SEE CONSTRUCTION PLANS

NH DOT

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

NH ROUTE 121
CULVERT REPLACEMENT
SHORELAND IMPACT PLANS

DRAWING NAME	FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
44167-FSC-shoreland	44167	44167	1	4

GENERAL

EDGE OF PAVEMENT TRAVELED WAY	PROPOSED ROADWAY	existing roadway	(pavement removed outside slope lines)
DRIVEWAYS		(label surface type)	
BUILDINGS		(label house or type of building)	(building to be removed)
FOUNDATION		(label type)	
LEACH FIELD		leach field	
BRIDGE CROSSINGS	STREAM	OVERPASS	
STEPS AND WALK		(label type)	
INTERMITTENT WATER COURSE			
SHORE LINE	river/stream	pond (label name of water body)	
POTENTIAL WET AREA SYMBOL			
BRUSH OR WOODS LINE			
TREES (PLANS)	(deciduous)	(coniferous)	(stump)
TREE OR STUMP (CROSS-SECTIONS)		(show station, circumference in feet & type)	
HEDGE		(label type)	
MONITORING WELL		mon	
WELL			
FLAG POLE		fp	

ORIGINAL GROUND (TYPICALS)	
ROCK OUTCROP	
ROCK LINE (TYPICALS & SECTIONS ONLY)	existing PROPOSED
GUARDRAIL (label type)	bgr cgr
JERSEY BARRIER	
CURB (LABEL TYPE)	
STONE WALL	
RETAINING WALL (LABEL TYPE)	(points toward retained ground)
FENCE (LABEL TYPE)	
SIGNS	(single post) (double post)
GAS PUMP	gp
FUEL TANK (ABOVE GROUND)	ft (label size & type)
STORAGE TANK FILLER CAP	fc
SEPTIC TANK	S
GRAVE	gr
MAILBOX	mb
VENT PIPE	vp
SATELLITE DISH ANTENNA	da
PHONE	ph
GROUND LIGHT/LAMP POST	gl lp
BORING LOCATION	
TEST PIT	
INTERSTATE NUMBERED HIGHWAY	95
UNITED STATES NUMBERED HIGHWAY	3
STATE NUMBERED HIGHWAY	102

SHORELAND - WETLAND

WETLAND DESIGNATION AND TYPE	2 PUB2E
DELINEATED WETLAND	DW
ORDINARY HIGH WATER	OHW
TOP OF BANK	T O B
TOP OF BANK & ORDINARY HIGH WATER	T O B O H W
NORMAL HIGH WATER	N H W
WIDTH AT BANK FULL	W B F
PRIME WETLAND	P W E T
PRIME WETLAND 100' BUFFER	P W E T 100
NON-JURISDICTIONAL DRAINAGE AREA	N J D A
COWARDIN DISTINCTION LINE	C D L
TIDAL BUFFER ZONE	T B Z
DEVELOPED TIDAL BUFFER ZONE	D T B Z
HIGHEST OBSERVABLE TIDE LINE	H O T L
MEAN HIGH WATER	M H W
MEAN LOW WATER	M L W
VERNAL POOL	V P
SPECIAL AQUATIC SITE	S A S
REFERENCE LINE	R E F
WATER FRONT BUFFER	W B 50
NATURAL WOODLAND BUFFER	N W B 150
PROTECTED SHORELAND	P S 250
INVASIVE SPECIES LABEL	I.S. I I
INVASIVE SPECIES	I N V

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY	F P 500
100 YEAR FLOODPLAIN BOUNDARY	F P 100
FLOODWAY	F W

ENGINEERING

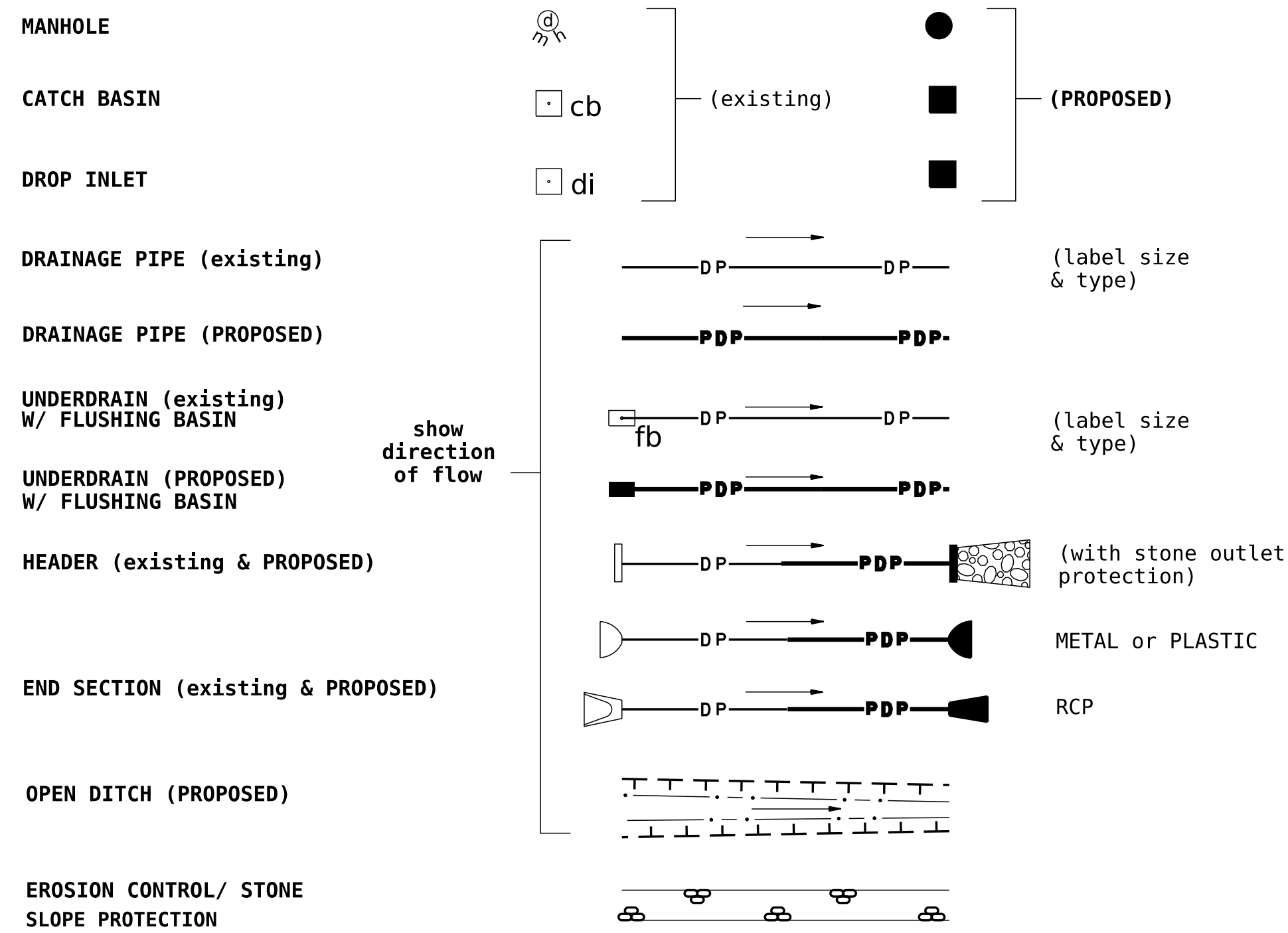
CONSTRUCTION BASELINE	30 31 32
PC, PT, POT (ON CONST BASELINE)	
PI (IN CONSTRUCTION BASELINES)	
INTERSECTION OR EQUATION OF TWO LINES	
ORIGINAL GROUND LINE (PROFILES AND CROSS-SECTIONS)	
PROFILE GRADE LINE (PROFILES AND CROSS-SECTIONS)	
CLEARING LINE	SLOPE LINE CLEARING LINE
SLOPE LINE	
SLOPE LINE (FILL)	
SLOPE LINE (CUT)	
PROFILES AND CROSS SECTIONS:	
ORIGINAL GROUND ELEVATION (LEFT)	72.5
FINISHED GRADE ELEVATION (RIGHT)	79.14

STATE OF NEW HAMPSHIRE
AUBURN
DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN

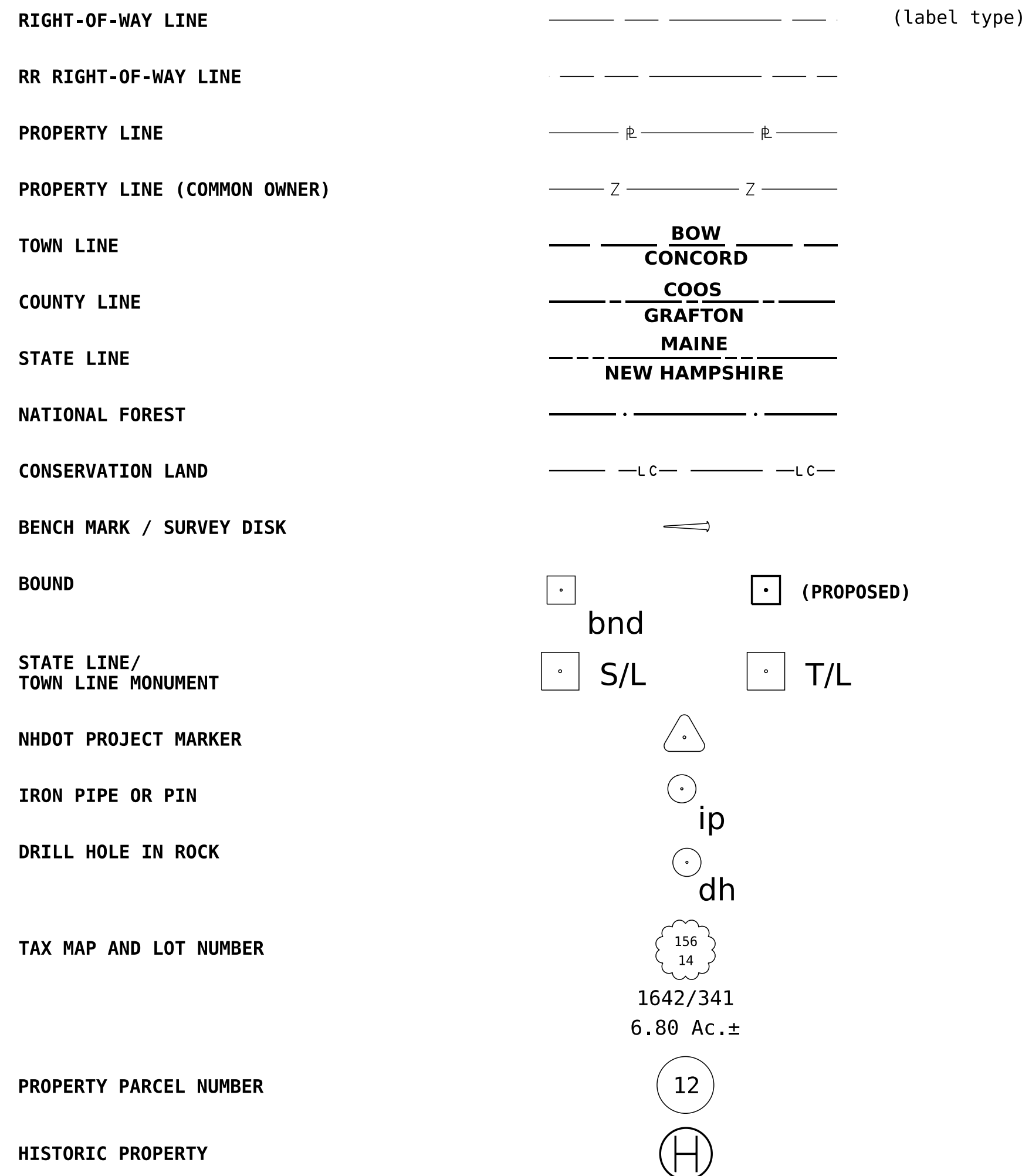
STANDARD SYMBOLS

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
02-25-2022	2, 3 44167stdsyml-2-ce	44167	2	4

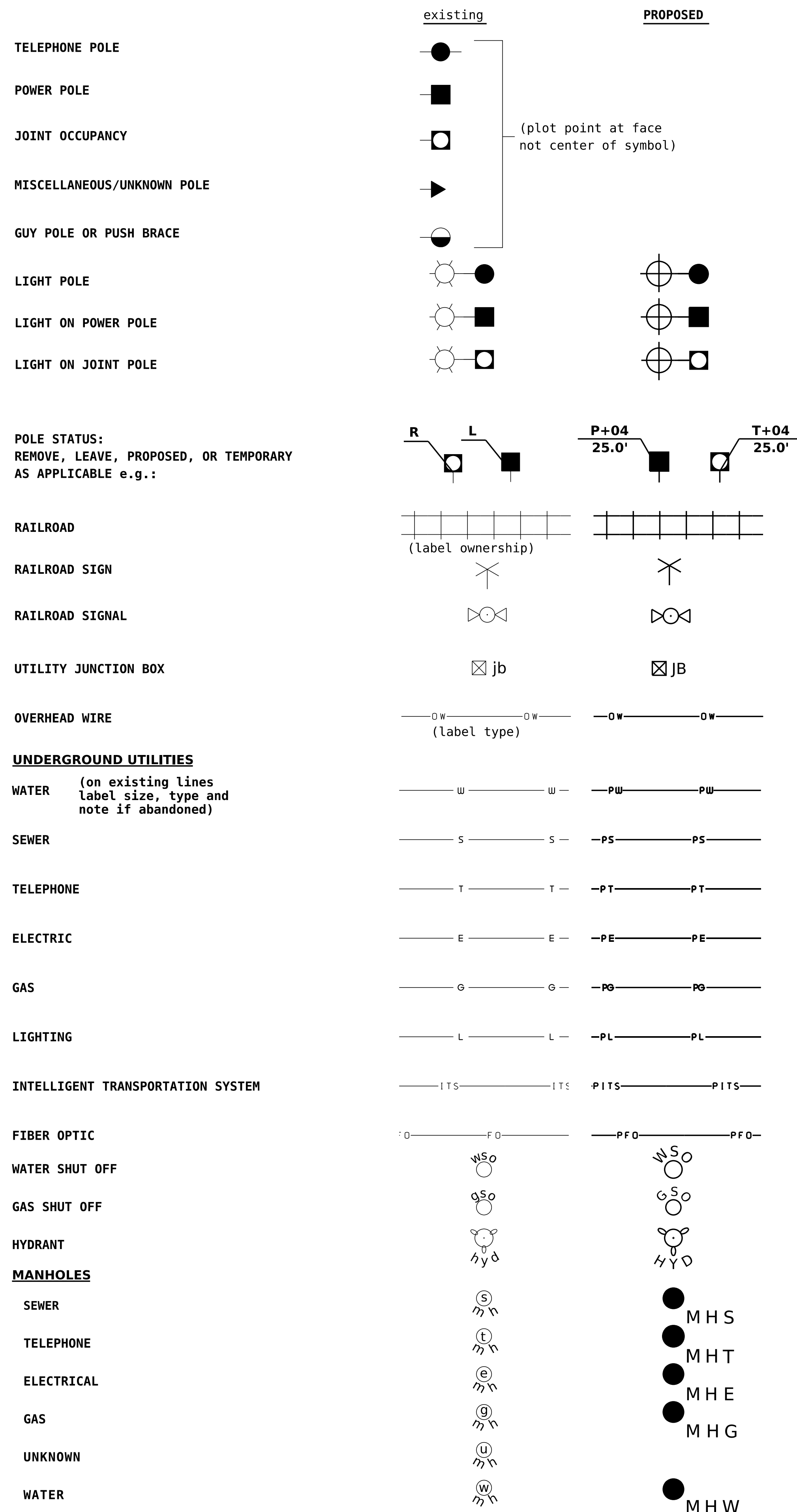
DRAINAGE



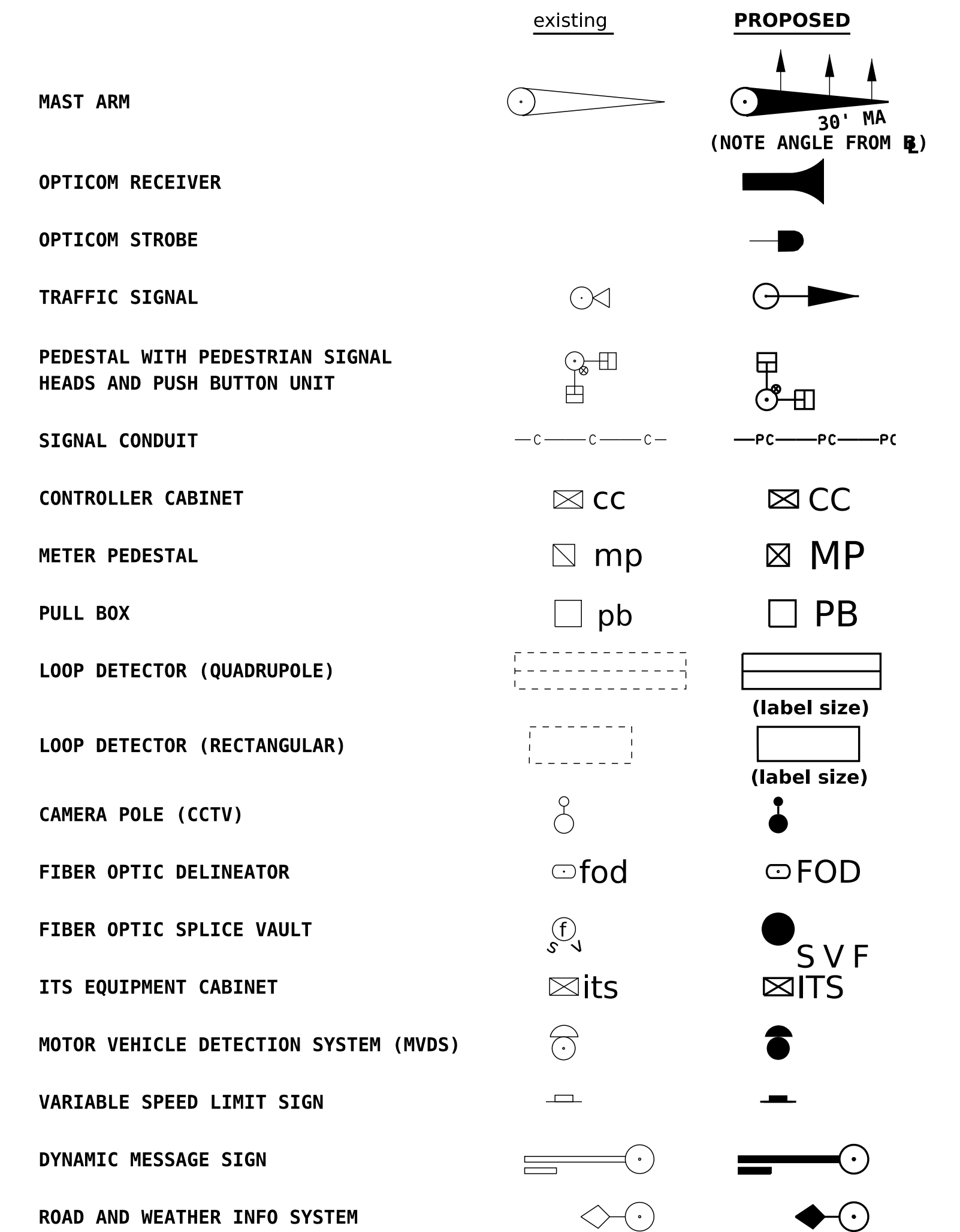
BOUNDARIES / RIGHT-OF-WAY



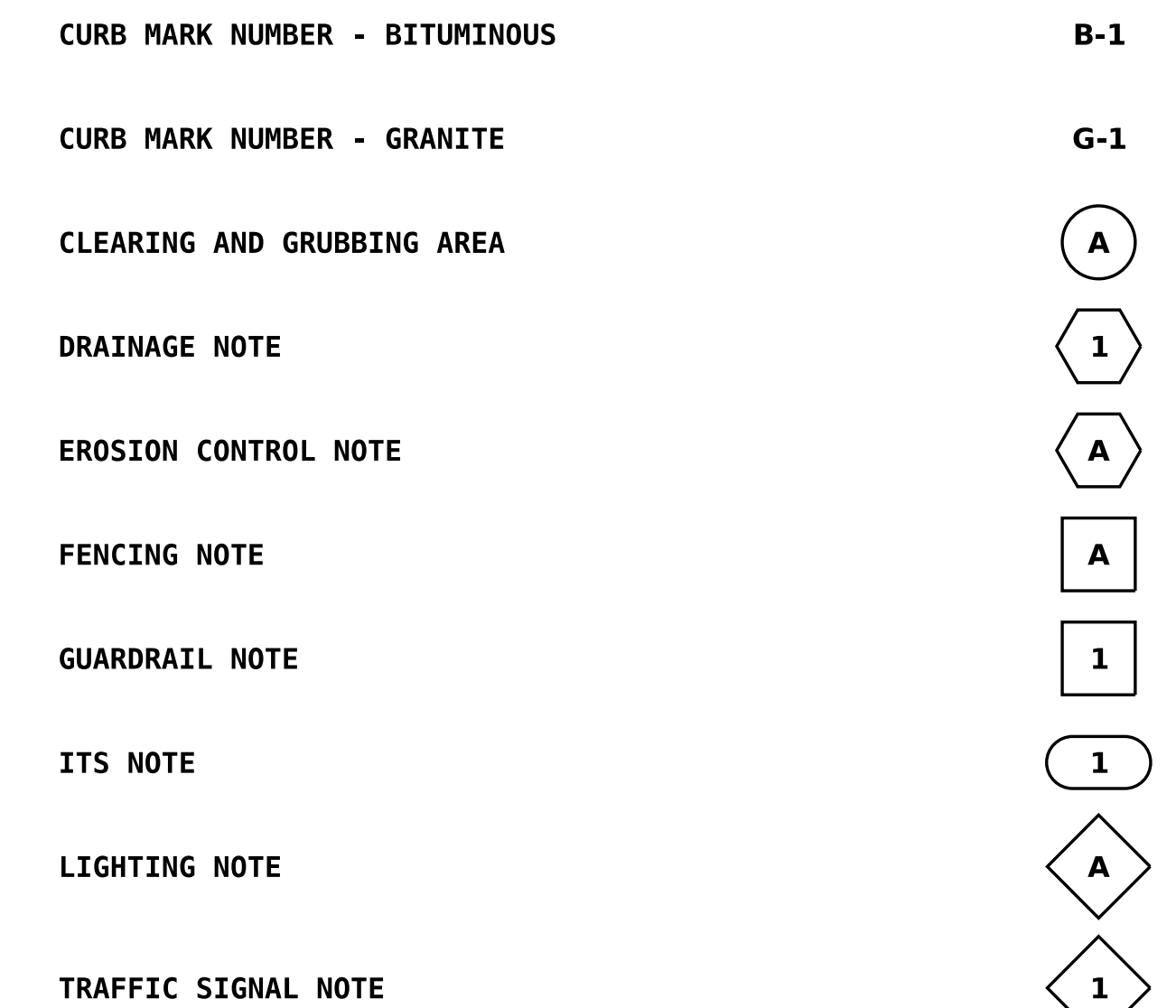
UTILITIES



TRAFFIC SIGNALS / ITS



CONSTRUCTION NOTES



STATE OF NEW HAMPSHIRE				
AUBURN				
DEPARTMENT OF TRANSPORTATION		BUREAU OF HIGHWAY DESIGN		
STANDARD SYMBOLS				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
02-25-2022	2, 3 44167stdsyml-2-ce	44167	3	4

REVISIONS AFTER PROPOSAL

STATION

STATION

DATE

NUMBER

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DESCRIPTION

DESCRIPTION

DESCRIPTION

DESCRIPTION

DESCRIPTION

DESCRIPTION

DESCRIPTION

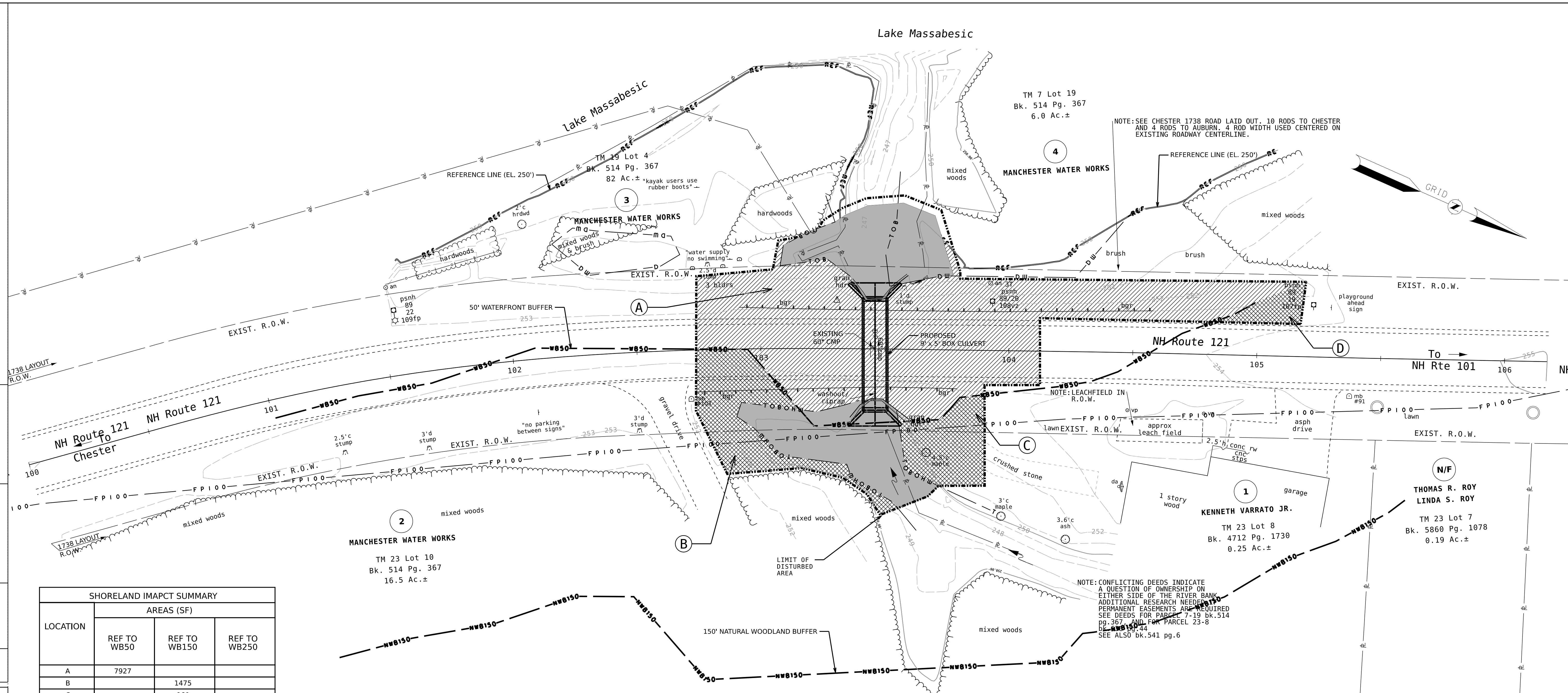
DESCRIPTION

DESCRIPTION

DESCRIPTION

DESCRIPTION

DESCRIPTION



SHORELAND IMPACT SUMMARY			
LOCATION	AREAS (SF)		
	REF TO WB50	REF TO WB150	REF TO WB250
A	7927		
B		1475	
C		960	
D		303	

TOTAL REF TO WB50 = 7,927 SF
 TOTAL WB50 TO WB150 = 2,738 SF
 TOTAL WB150 TO WB250 = 0 SF
 TOTAL IMPACTS 10,665 SF

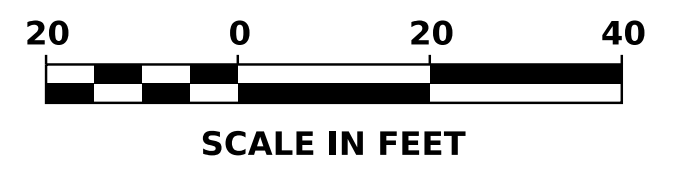
LEGEND

TYPE OF SHORELAND IMPACT	SHADING/HATCHING
REF TO WB50	
WB50 TO NWB150	
NWB150 TO PS250	
WETLANDS JURISDICTION IMPACT	

- NOTES:
- THE 250' WATERFRONT BUFFER IS BEYOND THE LIMITS OF SURVEY. NO IMPACTS PROPOSED BETWEEN 150' AND 250' WATERFRONT BUFFERS.
 - THE REFERENCE LINE IS EL. 250, EQUAL TO THE TOP OF THE FLASHBOARDS AT THE MASSABESIC LAKE DAM. THE REFERENCE LINE PER THE NHDES CONSOLIDATED LIST OF WATER BODIES IS EL. 249.
 - THE PROPOSED SHORELAND IMPACTS ARE TEMPORARY. 607 SQUARE FEET OF PERMANENT IMPACT IS WITHIN THE WETLANDS IMPACT AREAS.
 - WETLANDS JURISDICTIONAL IMPACT AREAS TOTAL 3266 SF (607 SF PERMANENT / 2659 SF TEMPORARY) AND ARE BEING PERMITTED VIA THE WETLAND PERMIT FOR THIS PROJECT.
 - THERE IS NO INCREASE IN IMPERVIOUS AREA DUE TO THE PROJECT.
 - THERE IS NO TREE CUTTING PROPOSED AS PART OF THE PROJECT.

SCOPE OF WORK

STA 103+46:
 REPLACE EXISTING 60" DIA. 41' LONG CMP CULVERT WITH 9' SPAN X 5' RISE (4' CLEAR HEIGHT) X 45' LONG PRECAST CONCRETE BOX CULVERT EMBEDDED 1' BELOW STREAMBED. CONSTRUCT CONCRETE HEADWALLS AT BOTH ENDS ANGLED AT 45 DEGREES TOWARDS THE BANK.



STATE OF NEW HAMPSHIRE			
AUBURN			
DEPARTMENT OF TRANSPORTATION		BUREAU OF HIGHWAY DESIGN	
SHORELAND IMPACT PLAN			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
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Auburn, 44167



Photo 1: *Culvert Outlet (3/24/23) J. Commerford*



Photo 2: *Culvert Outlet from Massabesic Lake (4/7/23) R. Thomson*

Auburn, 44167



Photo 3: *Looking towards Massabesic Lake from Culvert (4/7/23) R. Thomson*



Photo 4: *Looking towards Massabesic Lake from shore (3/24/23) J. Commerford*

Auburn, 44167



Photo 5: *Culvert Inlet (3/24/23) J. Commerford*



Photo 6: *Looking at the Culvert Inlet from Upstream (4/7/23) R. Thomson*

Auburn, 44167



Photo 7: From Culvert inlet looking upstream towards right bank (4/7/23) R. Thomson



Photo 8: Upstream channel from Culvert (4/7/23) R. Thomson

Auburn, 44167



Photo 9: *Looking Downstream towards the Culvert (4/7/23) R. Thomson*



Photo 10: *Looking North along Roadway (date unknown) Google Streetview*

Auburn, 44167



Photo 11: *Looking South along Roadway (date unknown) Google Streetview*