

PO BOX 23
523 PROVINCE ROAD
STRAFFORD, NH 03815
603-664-2579
CHIEF SCOTT WHITEHOUSE

TFMORAN, INC.
170 COMMERCE WAY, SUITE 102
PORTSMOUTH, NH 03801
603-431-2222

FILE	47516.00	DR	JJM	FB	-	C-00
		CK	JCC	CADFILE	47516-00_COVER	

1. THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN
DETAILED FOR CONSTRUCTION OR BIDDING.
2. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED
PROFESSIONAL ENGINEER, TFMORAN, INC. ASSUMES NO LIABILITY AS A
RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS
EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
3. ALL IMPROVEMENTS SHOWN ON THE PLAN AND PROFILE SHEETS SHALL BE
CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE
PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES
SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF
THE TOWN OF STRAFFORD, NH.
4. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND
STANDARDS OF THE TOWN OF STRAFFORD, AND SHALL BE BUILT IN A
WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND
SPECIFICATIONS. ALL WORK TO CONFORM TO TOWN OF STRAFFORD
STANDARD SPECIFICATIONS. ALL WORK WITHIN THE RIGHT-OF-WAY OF THE
TOWN AND/OR STATE SHALL COMPLY WITH APPLICABLE STANDARDS.
COORDINATE ALL WORK WITHIN THE RIGHT-OF-WAY WITH APPROPRIATE
TOWN, COUNTY, AND/OR STATE AGENCY.
5. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN
ACCORDANCE WITH APPLICABLE SECTIONS OF ENV-WO 1500. THE SITE
CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF CONSTRUCTION
OF EACH STORMWATER FACILITY TO COORDINATE REQUIRED INSPECTIONS.
THE CONTRACTOR SHALL TAKE PROGRESS PHOTOS DURING CONSTRUCTION
OF ALL STORMWATER DRAINAGE COMPONENTS AND SEND TO THE
ENGINEER.
6. SEE EXISTING CONDITIONS PLAN FOR THE HORIZONTAL AND VERTICAL
DATUM.
7. SEE SUBDIVISION PLAN FOR BENCHMARK INFORMATION. VERIFY TBM
ELEVATIONS PRIOR TO CONSTRUCTION.
8. CONTACT EASEMENT OWNERS PRIOR TO COMMENCING ANY WORK WITHIN
THE EASEMENTS.
9. PRIOR TO COMMENCING ANY SITE WORK, ALL LIMITS OF WORK SHALL BE
CLEARLY MARKED IN THE FIELD.
10. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS,
NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO
BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
11. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN
ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY
THE ENGINEER OF RECORD.
12. TEMPORARY FENCING SHALL BE PROVIDED AND COVERED WITH A FABRIC
MATERIAL TO CONTROL DUST MITIGATION.
13. ALL DEMOLITION SHALL INSURE MINIMUM INTERFERENCE WITH ROADS,
STREETS, WALKWAYS, AND ANY OTHER ADJACENT OPERATING FACILITIES.
PRIOR WRITTEN PERMISSION FROM THE OWNER/DEVELOPER AND LOCAL
PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO
ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY.
CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND
CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
14. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND
DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR
CLARIFICATION.
15. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS,
THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE
AFFECTED WORK.
16. CONTRACTOR'S GENERAL RESPONSIBILITIES:
 - A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL,
STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND
STANDARDS AND CONDITIONS ON ALL PROJECT-SPECIFIC PERMITS AND
APPROVALS AS LISTED ON THE COVER SHEET TO THESE PLANS OR
OTHERWISE REQUIRED.

- NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR EXISTING FEATURES.
- C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
- E. TAKE APPROPRIATE MEASURES TO REDUCE, TO THE FULLEST EXTENT POSSIBLE, NOISE, DUST, AND UNSIGHTLY DEBRIS. CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT BETWEEN THE HOURS OF 7:00 AM AND 10:00 PM, MONDAY THROUGH FRIDAY IN ACCORDANCE WITH THE APPLICABLE MUNICIPAL ORDINANCES AND REGULATIONS OF THE TOWN OF STRAFFORD, NEW HAMPSHIRE.
- F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
- G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
- H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
- I. PROTECT NEW AND EXISTING BURIED UTILITIES DURING INSTALLATION OF ALL SITE ELEMENTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMOR, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES. THE PERFORMANCE OF THE WORK, THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN SCALED REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
- L. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
- M. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING DOCUMENTATION TO OWNER AND ENGINEER:
- 1) IF ANY UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS WERE INSTALLED, FOR EACH SUCH SYSTEM:
- A) REPRESENTATIVE PHOTOGRAPHS OF THE SYSTEM AFTER COMPLETION BUT PRIOR TO BACKFILLING; AND
- B) A LETTER SIGNED BY A QUALIFIED ENGINEER WHO OBSERVED THE SYSTEM PRIOR TO BACKFILLING, THAT THE SYSTEM CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
2. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
3. THE CONTRACTOR SHALL PROVIDE A GRAVEL ROAD SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS, AND LOADING AREAS.
4. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
5. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. GRATE BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CHAT BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
6. NO FILL SHALL BE PLACED IN ANY WETLAND AREA, EXCEPT AS SPECIFIED BY A WETLAND PERMIT.
7. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
8. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
9. DENSITY REQUIREMENTS:

MINIMUM DENSITY*	LOCATION
95%	BELOW PAVED OR CONCRETE AREAS
95%	TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL
90%	BELOW LOAM AND SEED AREAS

*ALL PERCENTAGE OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM D-6938.

1. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
2. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
6. THE ISDS (SEPTIC SYSTEM) SHALL RECEIVE ISDS APPROVAL FROM NHDES SUBSURFACE SYSTEMS BUREAU. PRIOR TO CONSTRUCTION AND PRIOR TO OPERATION OF THE ISDS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CONSTRUCTION APPROVAL AND APPROVAL TO OPERATE FROM NHDES SUBSYSTEMS BUREAU, AND ANY OTHER STATE AND LOCAL PERMITS AND APPROVALS.
7. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
8. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	PRIVATE
SEWER	PRIVATE
WATER	WELL
GAS	NOT AVAILABLE
ELECTRIC	EVERSOURCE
TELEPHONE	TDS TELECOM
CABLE	TDS TELECOM, CONSOLIDATED

GENERAL					
ABAN	ABANDON	EXIST	EXISTING	NTS	NOT TO SCALE
AC	ACRES	FES	FLARED END SECTION	PERF	PERFORATED
AD	ABSOLUTE DIFFERENCE	FFE	FINISHED FLOOR ELEVATION	PROP	PROPOSED
ADJ	ADJUST	FND	FOUNDATION	PVC	POINT OF VERTICAL CURVE
APPROX	APPROXIMATE	HP	HIGH POINT	PVI	POINT OF VERTICAL INTERSECTION
BK/PF	BOOK & PAGE	INV	INVERT ELEVATION	PVT	POINT OF VERTICAL TANGENCY
BLDG	BUILDING	IT	INFILTRATION TEST	R	RADIUS
BMP	BEST MANAGEMENT PRACTICE	K	RATE OR CURVATURE	ROW	RIGHT OF WAY
BS	BOTTOM OF SLOPE	L	LENGTH	S	SLOPE
BW	BOTTOM OF WALL	LF	LINEAR FEET	SF	SQUARE FEET
CONC	CONCRETE	LSA	LANDSCAPE AREA	STA	STATION
COORD	COORDINATE	MAX	MAXIMUM	TBM	TEMPORARY BENCHMARK
DIA	DIAMETER	MIN	MINIMUM	TP	TEST PIT
EL	ELEVATION	N/F	NOW OR FORMERLY	TY	TYPICAL
EP	EDGE OF PAVEMENT	NHFG	NEW HAMPSHIRE FISH & GAME	UG	UNDERGROUND

UTILITIES	
CB	CATCH BASIN
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COND	CONDUIT
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
F&G	FRAME AND COVER
F&G	FRAME AND GATE
FS	FLARED END SECTION
GT	GREASE TRAP
HDE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HY	HYDRANT
LP	LIQUID POLE
OCS	OUTLET CONTROL STRUCTURE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
RO	ROOF DRAIN
SMH	SEWER MANHOLE
SD	SEDIMENT OIL SEPARATOR
TSV	TAPPING SLEEVE, VALVE, AND BOX
UP	UTILITY POLE

This plan is not effective unless signed by a duly authorized officer of TFMoran, Inc.

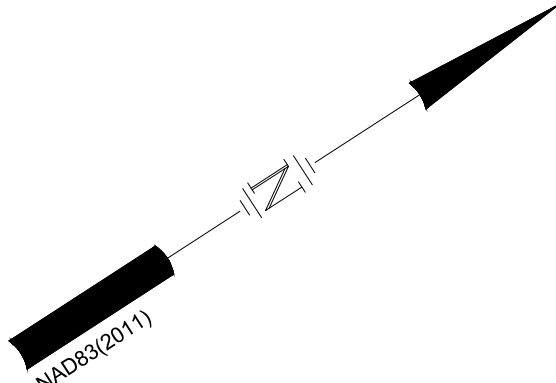
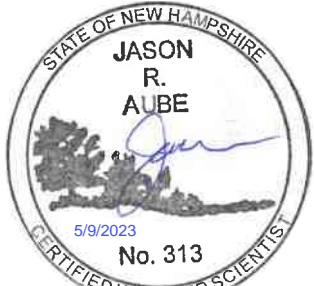


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MAY 9, 2023

F E E	47516.00	DR	JJM	FB	-	C-01
		CK	JCC	CADFILE	47516-00_NOTES & LEGEND	

TEST PIT, PERC AND SOIL DATA			
TEST PIT # <u>1</u> . DATE: <u>12/22/2022</u>		PERC TEST <u>18</u> MIN/INCH @ <u>24"</u>	
TEST PIT # <u>2</u> . DATE: <u>12/22/2022</u>		PERC TEST <u>18</u> MIN/INCH @ <u>24"</u>	
TEST PIT # <u>1</u>		TEST PIT # <u>2</u>	
0-6" 10YR 3/4 Fine Sandy Loam Granular, Loose/Friable		0-7" 10YR 3/4 Fine Sandy Loam Granular, Loose/Friable	
6-37" 10YR 4/4 Fine Sandy Loam Granular, Friable		7-26" 10YR 4/4 Fine Sandy Loam Granular, Friable	
37-56" 2.5Y 4/5 Fine Sandy Loam Friable/Firm, Blocky		26-49" 2.5Y 4/4 Fine Sandy Loam Friable/Firm, Blocky	
* BOTH PITS LOCATED IN FARM FIELD			
#1. SHWT: <u>37"</u> OWT: <u>N/A</u> ROOTS: <u>12"</u> REFUSAL: <u>N/A</u>		#2. SHWT: <u>26"</u> OWT: <u>N/A</u> ROOTS: <u>16"</u> REFUSAL: <u>49"</u>	
NOTE: TEST PITS EVALUATED BY RICHARD S. BACON, D-1399			
SOIL TYPE: <u>Paxton, 3-8% slopes</u> ID: <u>PdB</u>			
SOURCE: <u>NRCS - Web Soil Survey</u>			
VERIFIED BY: _____			

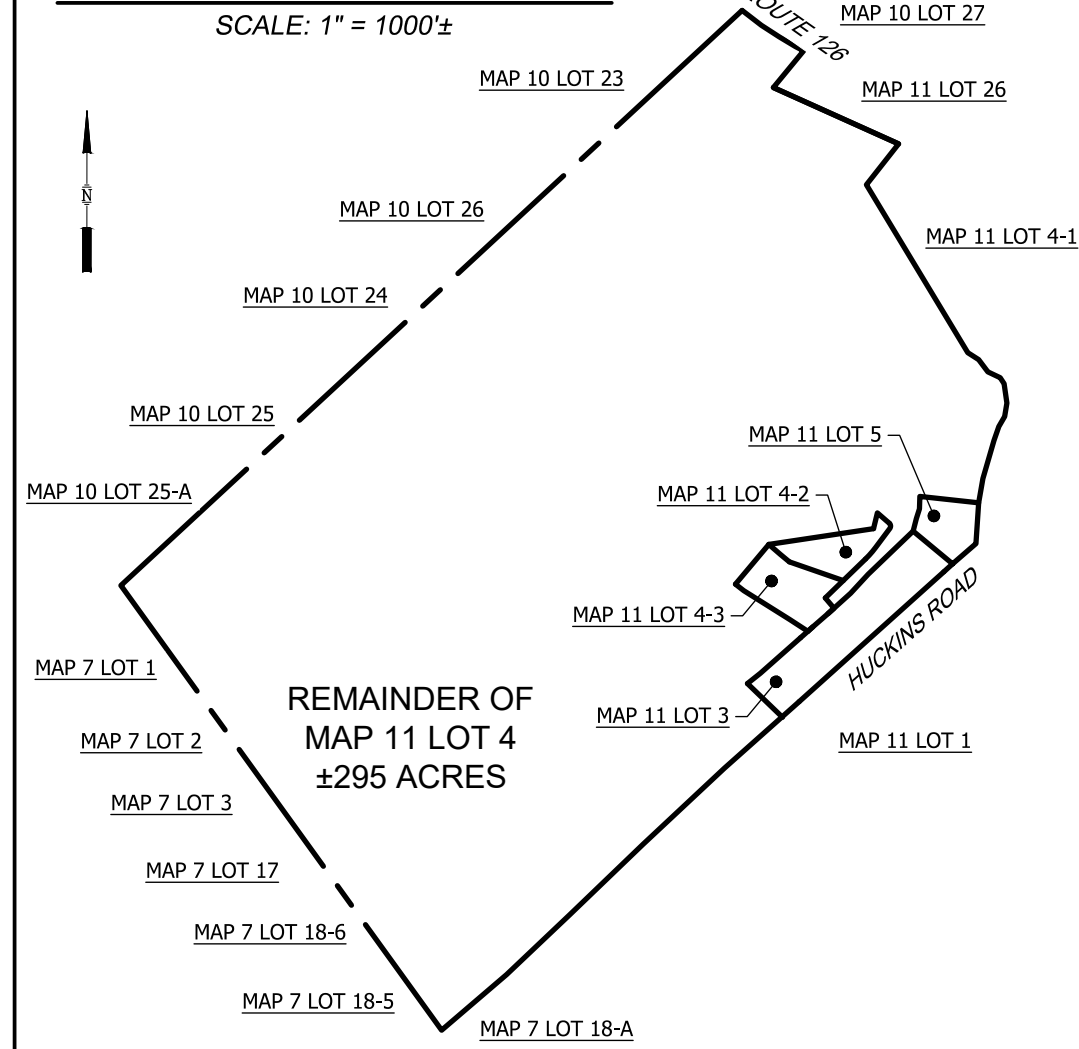


PLAN REFERENCES:

- "LIMITED SUBDIVISION LESTER D. HUCKINS AND BERTHA L. HUCKINS, STRAFFORD, N.H." DATED MAY 1978 BY FREDERICK E. DREW ASSOCIATES, SCRD PLAN #17C-75.
- "SUBDIVISION PLAN BERTHA L. HUCKINS REVOCABLE TRUST TAX MAP 11 LOT 4 PROPERTY OF BERTHA L. HUCKINS REVOCABLE TRUST 22 HILLSIDE DRIVE COUNTY OF STRAFFORD STRAFFORD NEW HAMPSHIRE" BY MSC. INC., DATED NOVEMBER 25, 2008, WITH REVISION 5, DATED 5/12/09, SCRD PLAN #DR97-033.
- "AS BUILT PLAN BERTHA L. HUCKINS REVOCABLE TRUST TAX MAP 11 LOT 4 PROPERTY OF BERTHA L. HUCKINS REVOCABLE TRUST 22 HILLSIDE DRIVE COUNTY OF STRAFFORD STRAFFORD NEW HAMPSHIRE" BY MSC. INC., DATED MAY 6, 2009. PLAN IS NOT RECORDED.

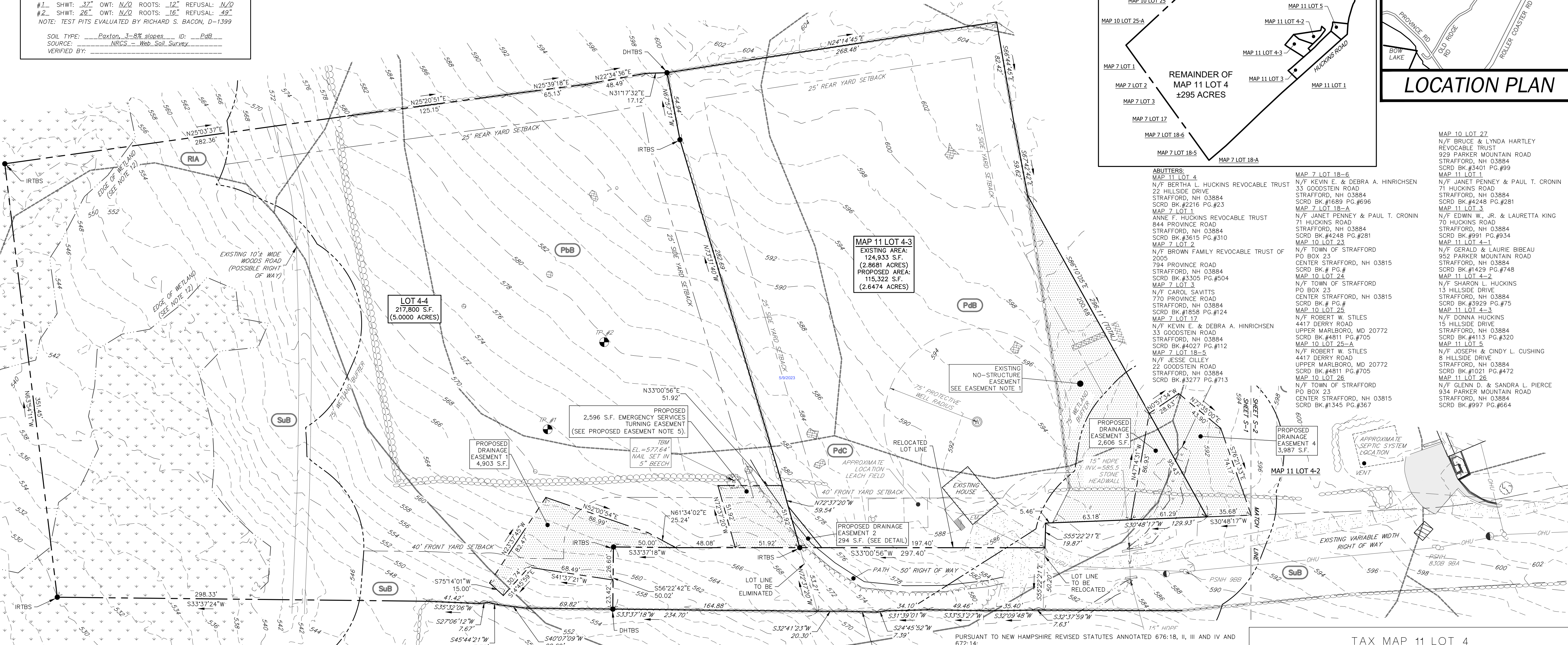
OVERALL BOUNDARY INSET

SCALE: 1" = 1000'±



LOCATION PLAN

MAP 10 LOT 27
N/F BRUCE & LYNDA HARTLEY
REVOCABLE TRUST
929 PARKER MOUNTAIN ROAD
STRAFFORD, NH 03884
SCRD BK.#3401 PG.#99
MAP 11 LOT 1
N/F JANET PENNEY & PAUL T. CRONIN
71 HUCKINS ROAD
STRAFFORD, NH 03884
SCRD BK.#3401 PG.#99
MAP 11 LOT 3
N/F EDWIN W., JR. & LAURETTA KING
70 HUCKINS ROAD
STRAFFORD, NH 03884
SCRD BK.#3401 PG.#99
MAP 11 LOT 4-1
N/F GERALD & LAURIE BIBEAU
852 PARKER MOUNTAIN ROAD
STRAFFORD, NH 03884
SCRD BK.#1429 PG.#748
MAP 11 LOT 4-2
N/F SHARON L. HUCKINS
13 HILLSIDE DRIVE
STRAFFORD, NH 03884
SCRD BK.#3929 PG.#75
MAP 11 LOT 4-3
N/F DONNA HUCKINS
15 HILLSIDE DRIVE
STRAFFORD, NH 03884
SCRD BK.#4113 PG.#320
MAP 11 LOT 5
N/F JOSEPH & CINDY L. CUSHING
8 HILLSIDE DRIVE
STRAFFORD, NH 03884
SCRD BK.#1021 PG.#472
MAP 11 LOT 26
N/F GLENN D. & SANDRA L. PIERCE
934 PARKER MOUNTAIN ROAD
STRAFFORD, NH 03884
SCRD BK.#997 PG.#664



NOTES:

- THE PARCEL IS LOCATED IN THE AGRICULTURAL-RESIDENTIAL DISTRICT.
 - THE PARCEL IS AS SHOWN ON THE TOWN OF STRAFFORD ASSESSOR'S MAP 11 AS LOT 4.
 - THE PARCEL IS LOCATED IN FLOOD ZONE X (AREA OF MINIMAL FLOOD HAZARD), AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FLOOD INSURANCE RATE MAP (FIRM) STRAFFORD COUNTY, NEW HAMPSHIRE, MAP NUMBER 33017C01700, EFFECTIVE DATE 5/17/2021.
 - DIMENSIONAL REQUIREMENTS:**
MINIMUM LOT SIZE: 2 ACRES - DEVELOPABLE LAND
MINIMUM FRONTAGE: 200'
MINIMUM SETBACKS:
FRONT: 40'
SIDE: 25'
REAR: 25'
 - OWNER OF RECORD:
MAP 11 LOT 4:
BERTHA L. HUCKINS REVOCABLE TRUST
22 HILLSIDE DRIVE
STRAFFORD, NH 03884
SCRD BK.#2216 PG.#23
- PER THE CODE OF THE TOWN OF STRAFFORD ZONING SECTION 1.4.
"X", AND NOT NEARER THAN FIFTY FEET FROM ANY STRUCTURES ON AN ABUTTER'S PROPERTY..."
6. PARCEL AREA:
MAP 11 LOT 4:
EXISTING AREA = ±300 ACRES
PROPOSED AREA = ±295 ACRES
7. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
8. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE 1 - 5 ACRE LOT FROM THE PARENT TRACT AND DEPICT ITS EXISTING FEATURES.
9. FIELD SURVEY COMPLETED BY TCE ON MARCH 1, 2023 USING A LIECA TS16 AND CARLSON RT4 DATA COLLECTOR.
10. HORIZONTAL DATUM IS NAD83 (2011) PER STATIC GPS OBSERVATIONS.
11. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE STRAFFORD COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
12. THE WETLANDS DEPICTED ON THIS PLAN WERE DELINEATED ON FEBRUARY 21, 2023 BY JASON R. AUBE CWS #313. THESE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (JANUARY 1987) AND THE REGIONAL SUPPLEMENT TO THE U.S. CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0 (JANUARY 2012). THE PRESENCE OF DOMINANT HYDROPHYTIC VEGETATION WAS DETERMINED USING THE NORTHCENTRAL AND NORTHEAST 2016 REGIONAL WETLAND PLANT LIST, VERSION 3.3, 2016, PUBLISHED BY THE ARMY CORPS OF ENGINEERS. HYDRIC SOILS WERE DETERMINED USING THE NH HYDRIC SOILS TECHNICAL COMMITTEE'S "FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND", VERSION 4, 2017, PUBLISHED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.
- (SEE SHEET S-2 FOR ADDITIONAL NOTES, DRAINAGE EASEMENTS AND LEGEND).



LICENSED LAND SURVEYOR

MAY 9, 2023
DATE

REV.	DATE	DESCRIPTION	DR	CK

TAX MAP 11 LOT 4
LOT LINE ADJUSTMENT AND SUBDIVISION PLAN
HUCKINS REVOCABLE TRUST
22 HILLSIDE DRIVE
STRAFFORD, NEW HAMPSHIRE
COUNTY OF STRAFFORD
OWNED BY
BERTHA L. HUCKINS REVOCABLE TRUST

SCALE: 1" = 40' (22x34)
1" = 80' (11x17)

MAY 9, 2023

Seacoast Division



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47516.00	DR	MVP	FB	589	SEE MARGIN	S-1
	CK	JCC	CADFILE			

TOWN OF STRAFFORD PLANNING BOARD

CHAIRPERSON

DATE



CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

NOTES CONTINUED:

13. THE PURPOSE OF THE LOT LINE ADJUSTMENT IS TO ALLOW FOR A CONTINUATION OF THE PRIVATE ROAD WHICH WILL PROVIDE ACCESS TO PROPOSED LOT 4-4.
(SEE PRIVATE DRIVE LENGTH TABLE).
14. SEE SHEET S-1 FOR ADDITIONAL NOTES, AND TEST PIT DATA.

EASEMENT NOTES:

1. MAP 11 LOT 4-3 IS SUBJECT TO A NO-STRUCTURE EASEMENT FOR THE BENEFIT OF MAP 11 LOT 4-2. (SEE SCRD BK. 4113 PG. 320).
2. MAP 11 LOT 4-3 IS SUBJECT TO AN EASEMENT FOR THE BENEFIT OF LOT 1 (MAP 11 LOT 4-2) TO ERECT A FENCE, TO PLANT TREES AND SHRUBS AND TO MAINTAIN AND TO USE SAID TRIANGULAR PORTION OF LOT 2 (MAP 11 LOT 4-3).
3. MAP 11 LOT 4-3 HAS THE BENEFIT OF AND IS SUBJECT TO A 50' DRIVEWAY EASEMENT, WITH CERTAIN RESERVATIONS, AS DEPICTED ON PLAN REFERENCE 2 AND APPROXIMATELY HEREON. (SEE SCRD BK. 4113 PG. 320 AND PLAN REFERENCE 2).
4. THE PROPOSED LOT DEPICTED HEREON AS LOT 4-4 SHALL HAVE THE BENEFIT OF THE RIGHT OF WAY AS DEPICTED HEREON AND AS EXTENDED AND IMPROVED, AND SHALL BE SUBJECT TO THE RESERVATIONS AS REFERENCED IN EASEMENT NOTE 2, ABOVE.
5. LOT 4-4 IS SUBJECT TO AN EMERGENCY SERVICES TURNING EASEMENT TO BENEFIT THE TOWN OF STRAFFORD.
6. MAP 11 LOTS 4-2, 4-3 AND LOT 4-4 SHALL BE SUBJECT TO DRAINAGE EASEMENTS AS DEPICTED HEREON.

LEGEND:

MAP 137 LOT 11
BK. PG.
EM
EP
INV.
IRTB
DHTBS
N/F
SCRD
S.F.
TBM
Sub

ASSESSORS MAP / LOT NUMBER
BOOK/PAGE
ELECTRIC METER
EDGE OF PAVEMENT
INVERT
IRON ROD TO BE SET
DRILL HOLE TO BE SET
NOW OR FORMERLY
STRAFFORD COUNTY
REGISTRY OF DEEDS
SQUARE FEET
TEMPORARY BENCHMARK

SOIL SYMBOL
MONUMENT TO BE SET
GUY POLE
GUY WIRE
UTILITY POLE
CONIFEROUS TREE
DECIDUOUS TREE
WELL

OHU OVERHEAD UTILITIES
UGU UNDERGROUND UTILITIES
STOCKADE FENCE
BOUNDARY LINE
PROPOSED BOUNDARY LINE
SETBACK LINE
TREE LINE
DRAIN LINE
EXISTING CONTOUR
STONEWALL
EDGE OF WETLAND
WETLAND SETBACK
NRCS SOILS LINE

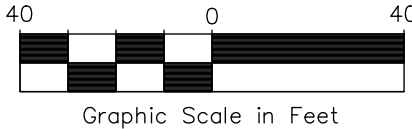
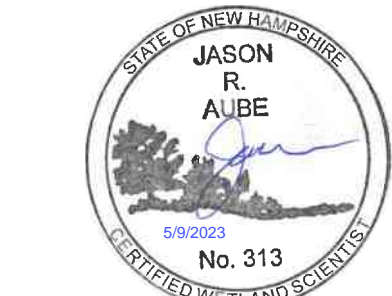
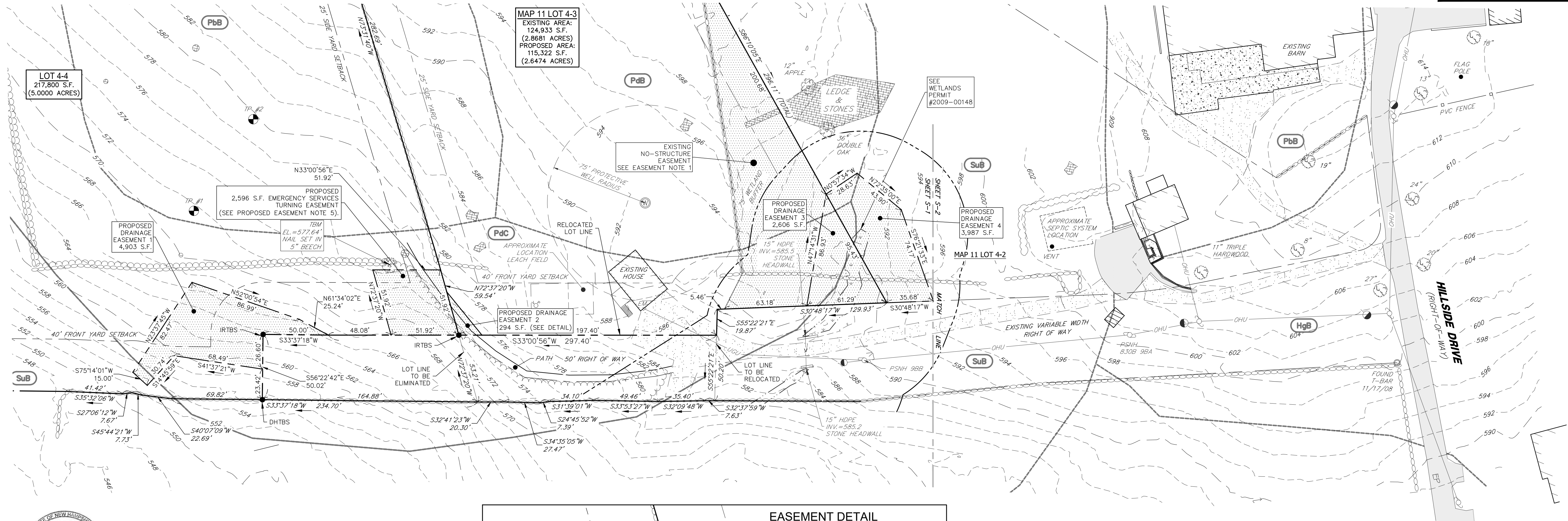
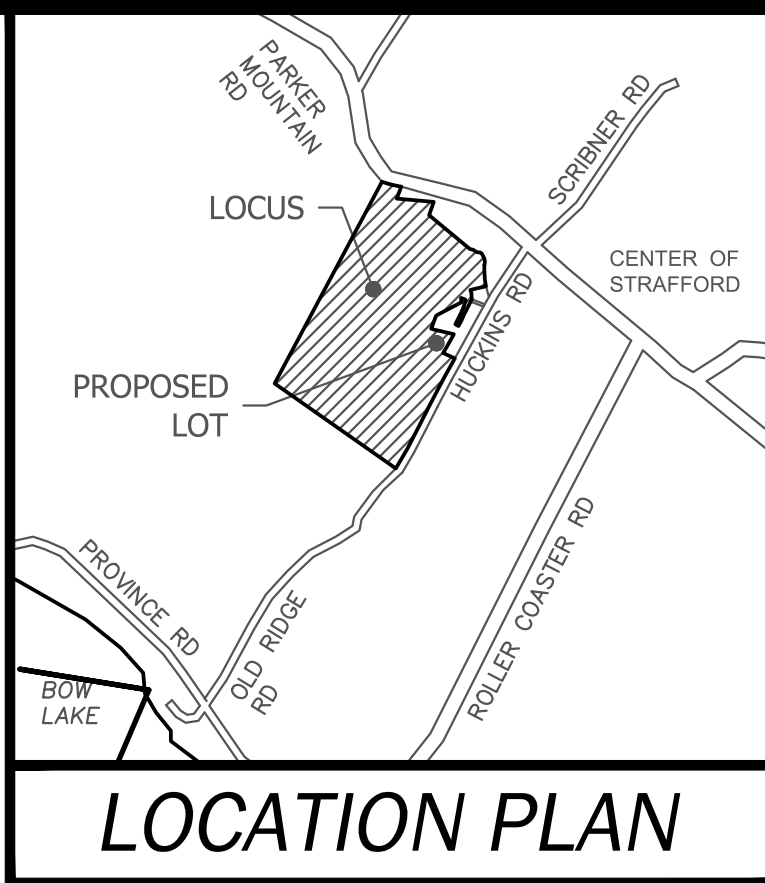
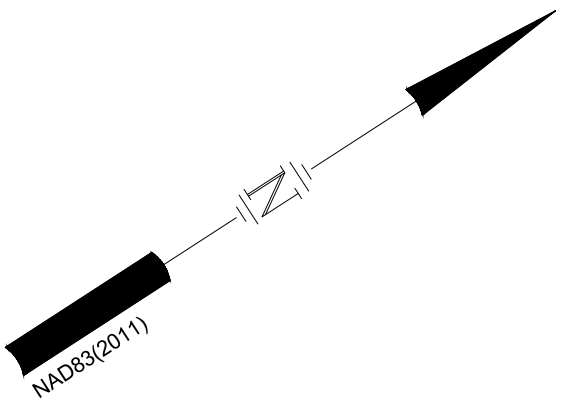
CONCRETE
GRAVEL
EASEMENT
EXPOSED LEDGE
PAVEMENT
WETLANDS

SOIL LEGEND
(PER USDA NRCS WEB SOIL SURVEY)

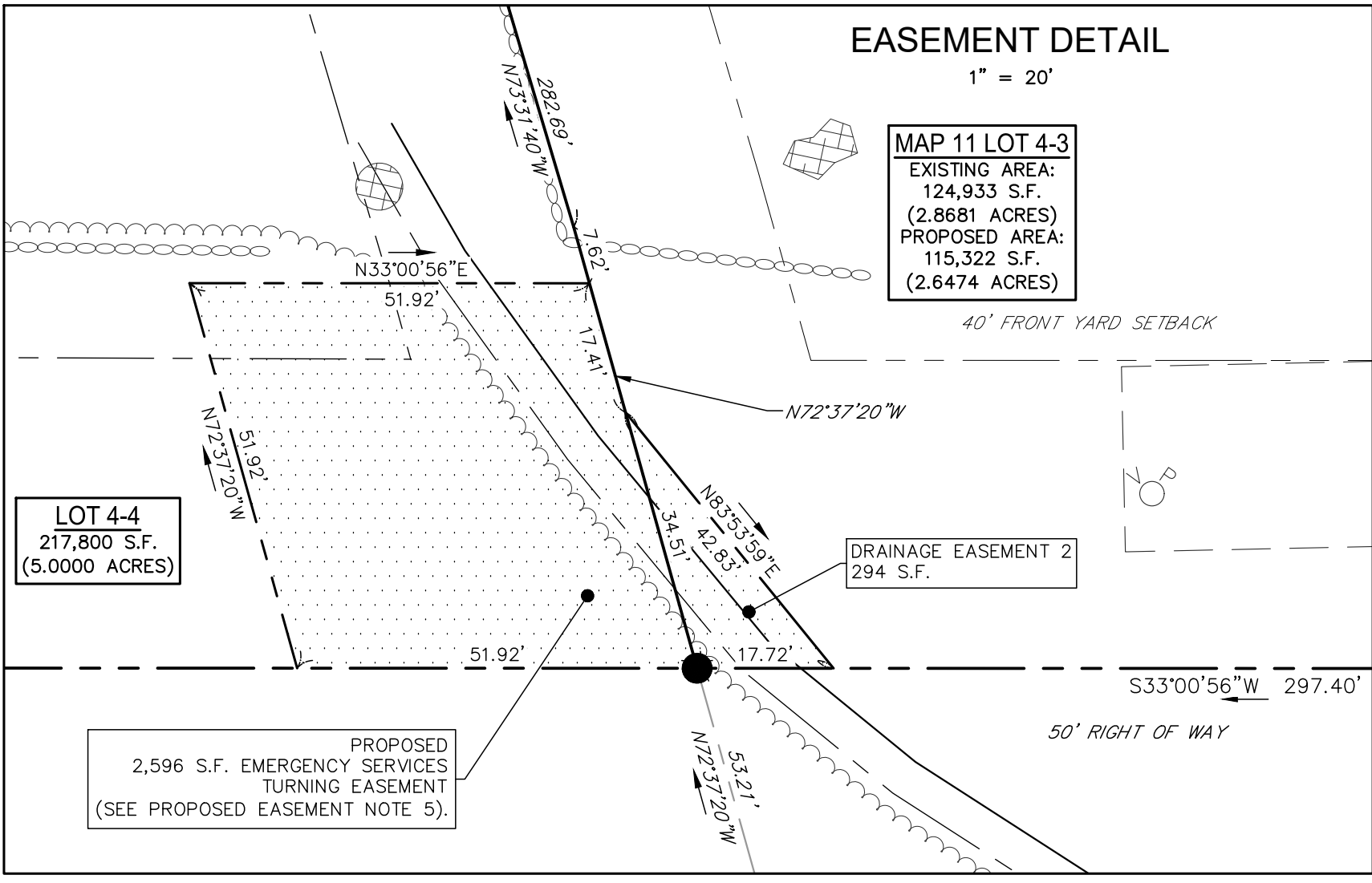
SYMBOL	DESCRIPTION	HYDROLOGIC SOIL GROUP	DRAINAGE CLASS
HgB	HOLLIS-GLOUCESTER VERY ROCKY FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES	D	WELL
HgC	HOLLIS-GLOUCESTER VERY ROCKY FINE SANDY LOAMS, 8 TO 15 PERCENT SLOPE	D	WELL
PbB	PAXTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES	C	WELL
PdB	PAXTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES, VERY STONY	C	WELL
PdC	PAXTON FINE SANDY LOAM, 8 TO 15 PERCENT SLOPES, VERY STONY	C	WELL
SuB	SUTTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY	B/D	MODERATELY WELL
RIA	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES, VERY STONY	D	POORLY DRAINED

SOIL PHASE LEGEND
(PERCENT)

A	B	C	D	E	F
0-3	3-8	8-15	15-25	25-50	50+



PRIVATE DRIVE LENGTH TABLE	
EXISTING LENGTH	521'±
PROPOSED LENGTH TO DEAD END	811'±
PROPOSED LENGTH TO CENTERLINE/CENTERLINE HAMMERHEAD EASEMENT	737'±



PURSUANT TO NEW HAMPSHIRE REVISED STATUTES ANNOTATED 676:18, II, III AND IV AND 672:14:

I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN MARCH, 2023. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.



LICENSED LAND SURVEYOR

MAY 9, 2023
DATE

REV.	DATE	DESCRIPTION	DR	CK

TAX MAP 11 LOT 4
LOT LINE ADJUSTMENT AND SUBDIVISION PLAN
HUCKINS REVOCABLE TRUST
22 HILLSIDE DRIVE
STRAFFORD, NEW HAMPSHIRE
COUNTY OF STRAFFORD
OWNED BY
BERTHA L. HUCKINS REVOCABLE TRUST

SCALE: 1" = 40' (22x34)
1" = 80' (11x17)

MAY 9, 2023

Seacoast Division



Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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Portsmouth, NH 03801
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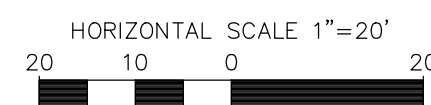
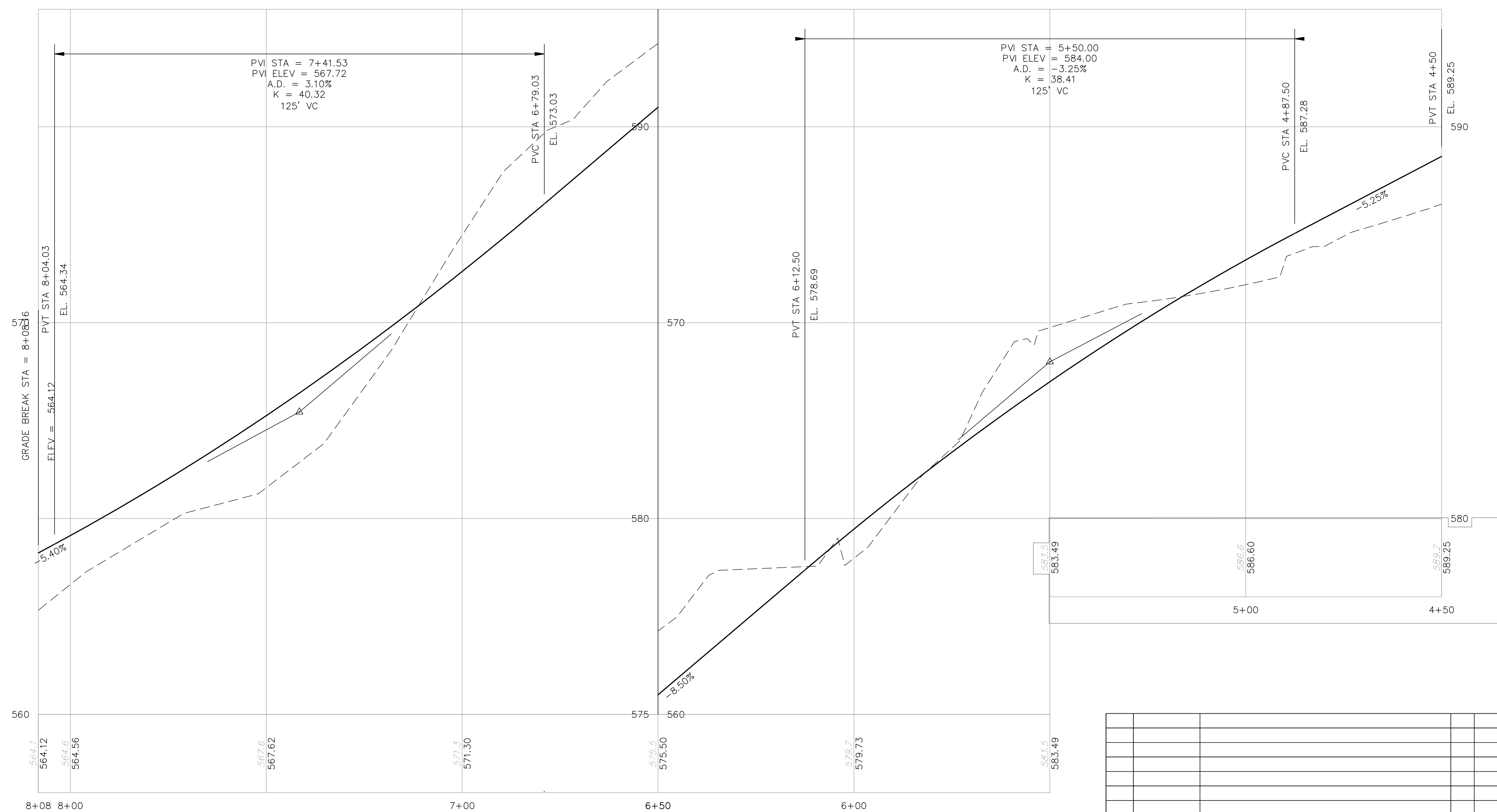
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CK JCC CADFILE SEE MARGIN		

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TOWN OF STRAFFORD PLANNING BOARD

CHAIRPERSON

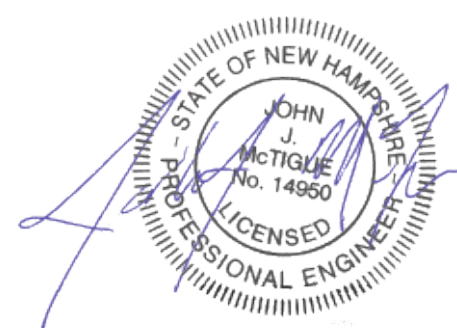
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SUBDIVISION PLANS

TAX MAP 11 LOT 4

PLAN AND PROFILE

**HUCKINS REVOCABLE TRUST SUBDIVISION
22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE**

OWNED BY

BERTHA L. HUCKINS REVOCABLE TRUST

PREPARED FOR

BERTHA L. HUCKINS REVOCABLE TRUST
1"=40' (11"X17")

SCALE: 1"=20' (22"X34")

MAY 9, 2023


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- Structural Engineers
- Traffic Engineers
- Land Surveyors
- Landscape Architects
- Scientists

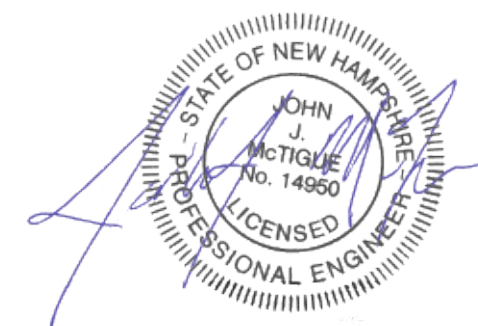
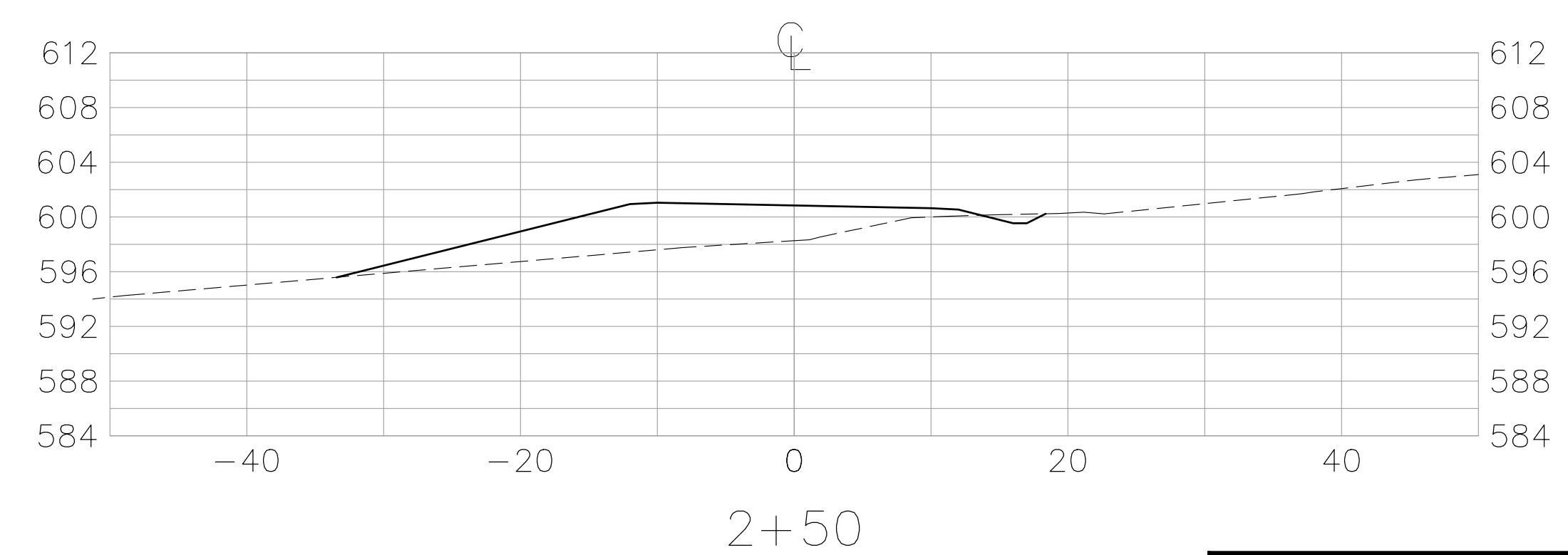
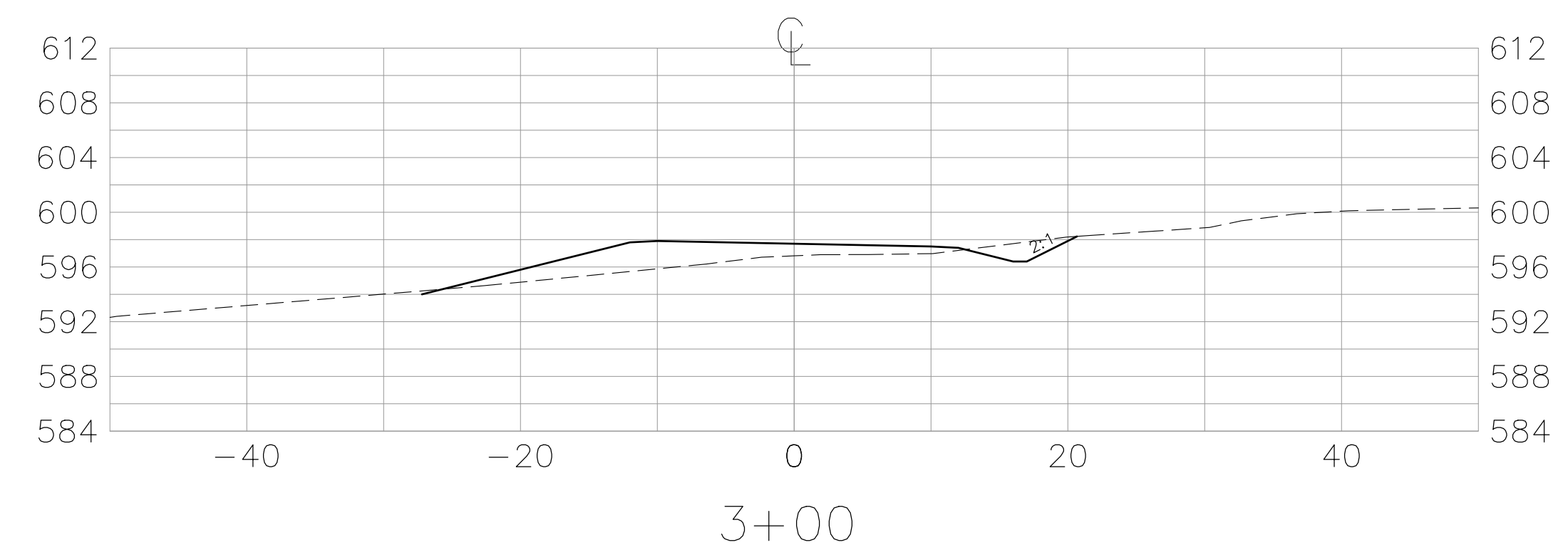
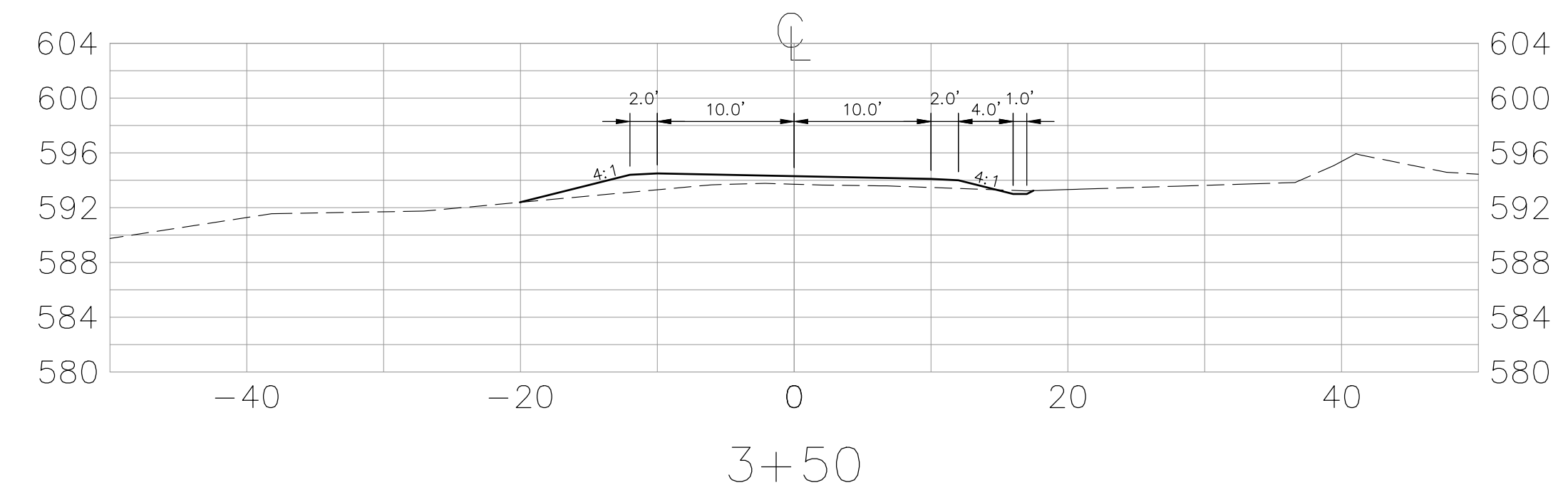
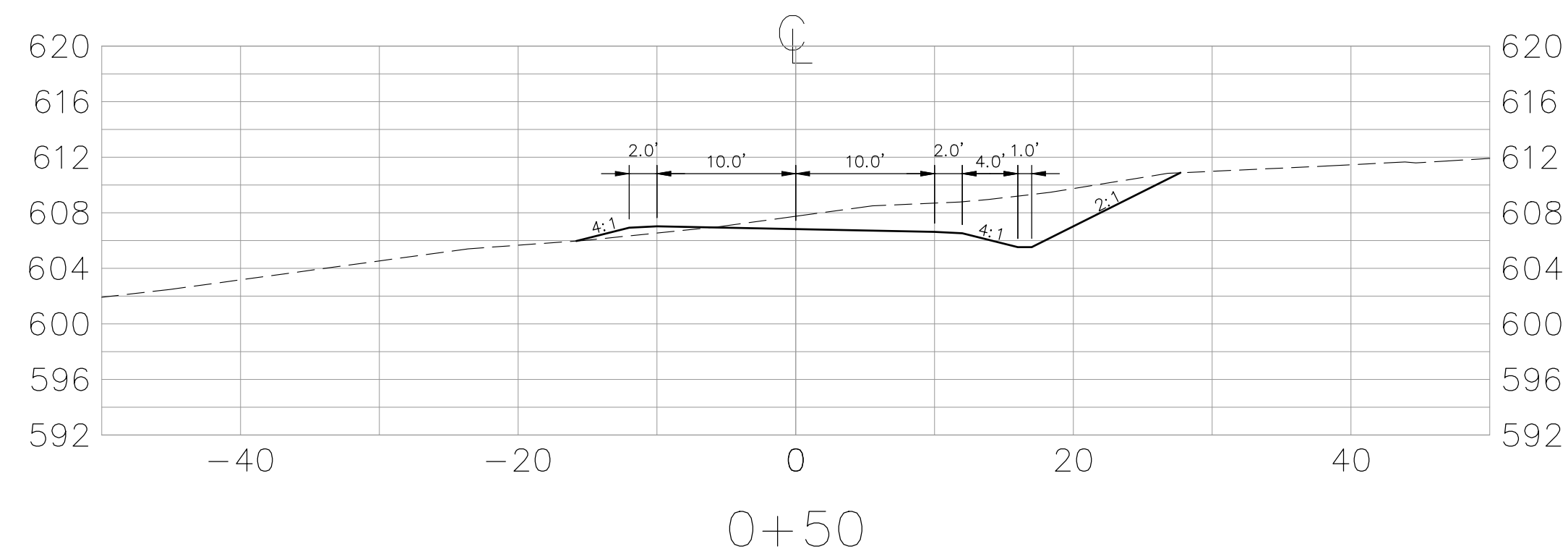
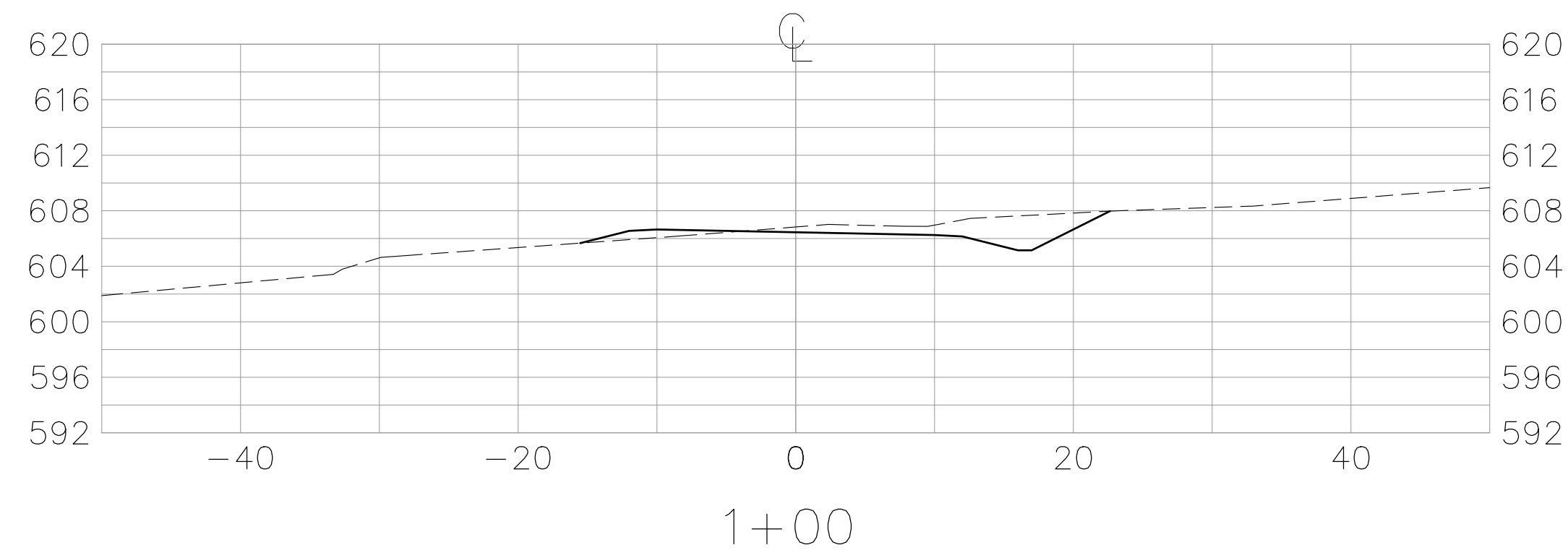
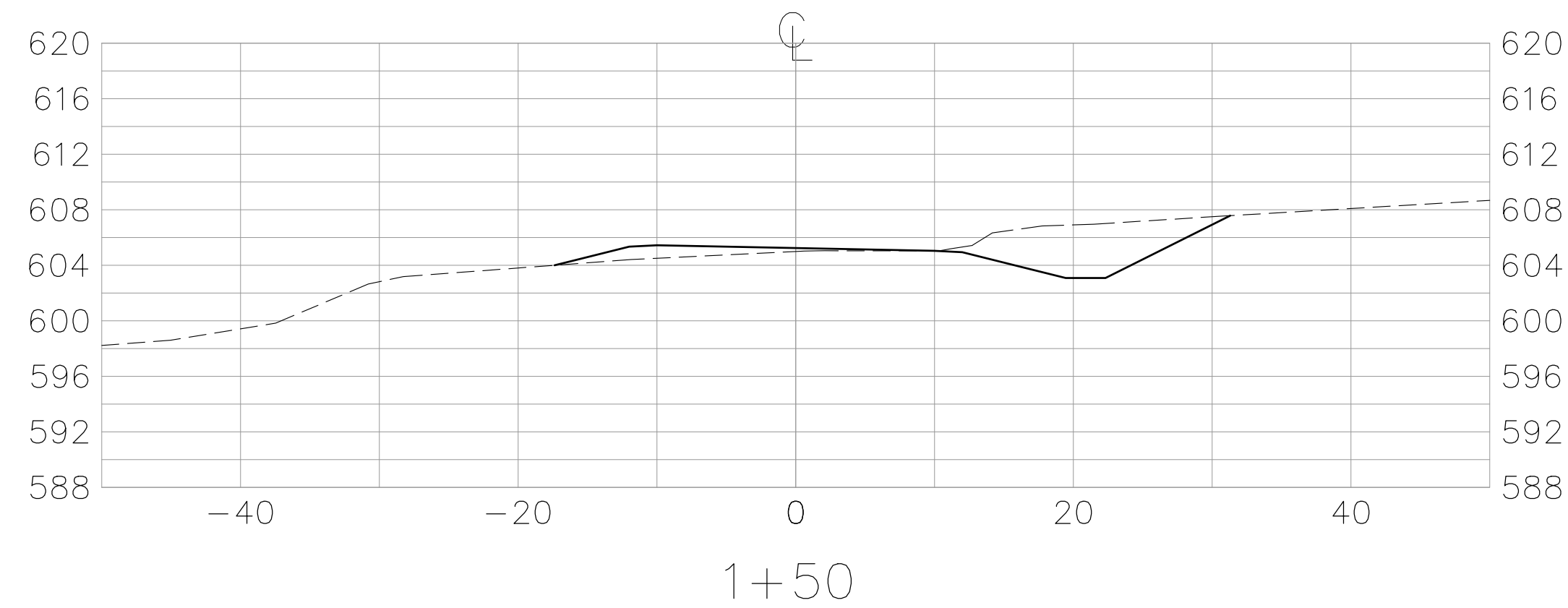
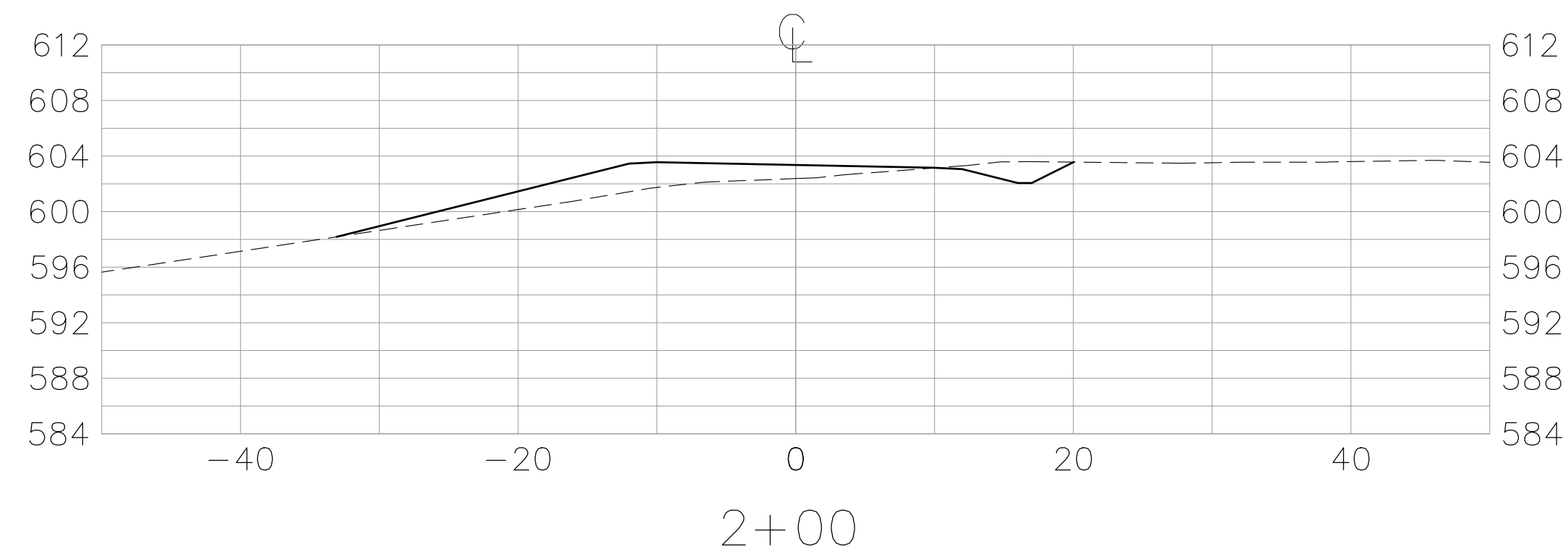
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SUBDIVISION PLANS

TAX MAP 11 LOT 4

CROSS SECTION

**HUCKINS REVOCABLE TRUST SUBDIVISION
22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE**

OWNED BY

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PREPARED FOR

BERTHA L. HUCKINS REVOCABLE TRUST

1"=20' (11"x17")

SCALE: 1"=10' (22"x34")

MAY 9, 2023

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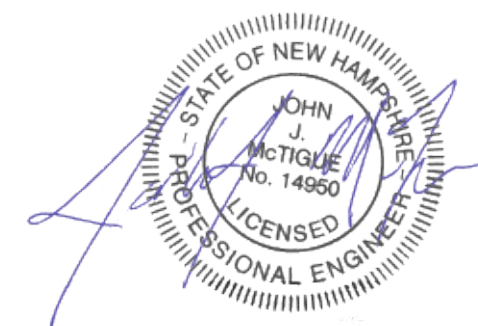
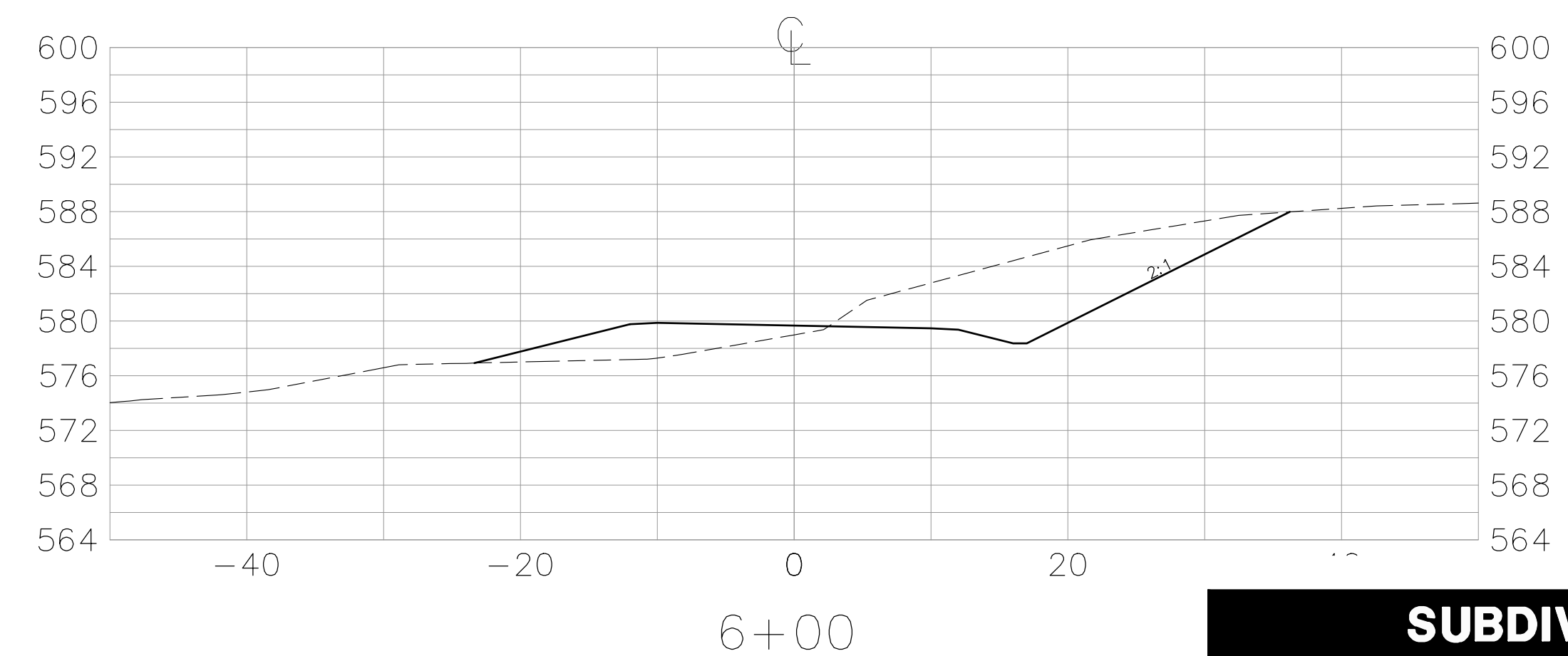
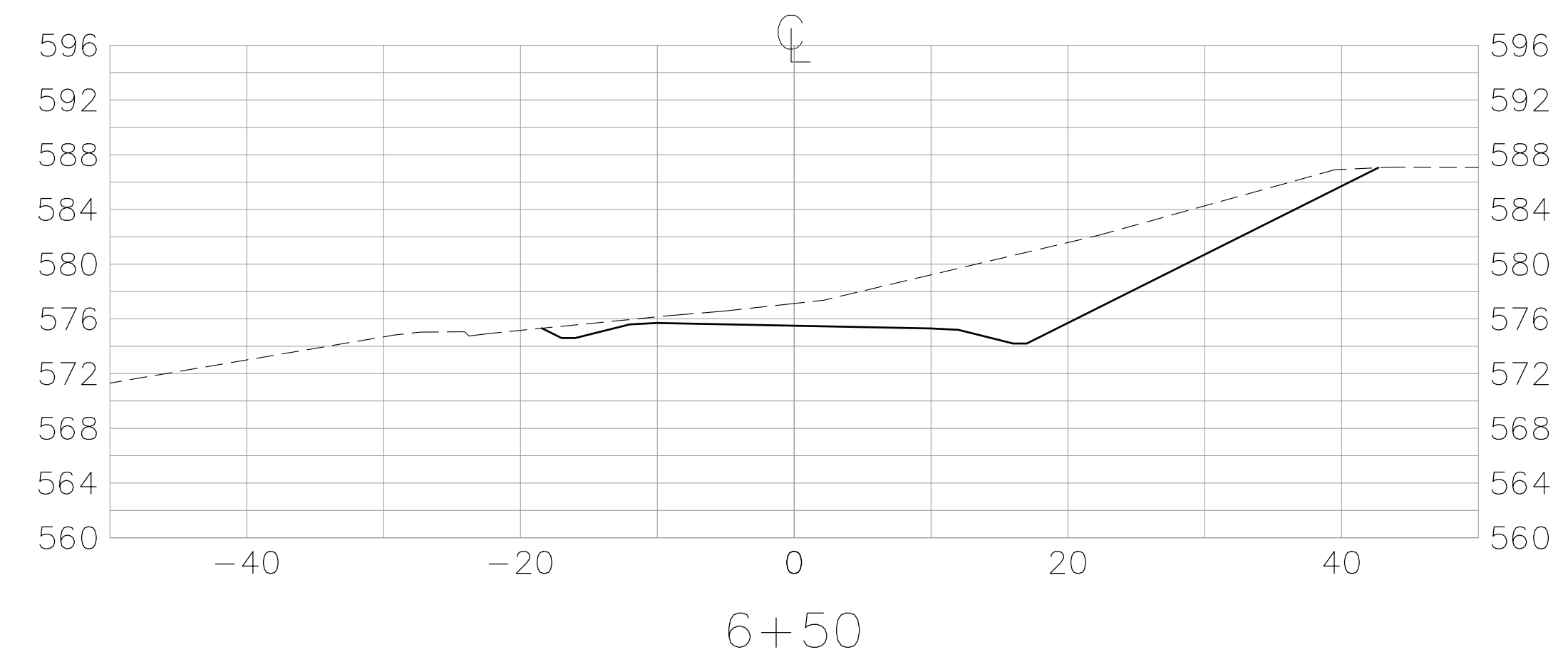
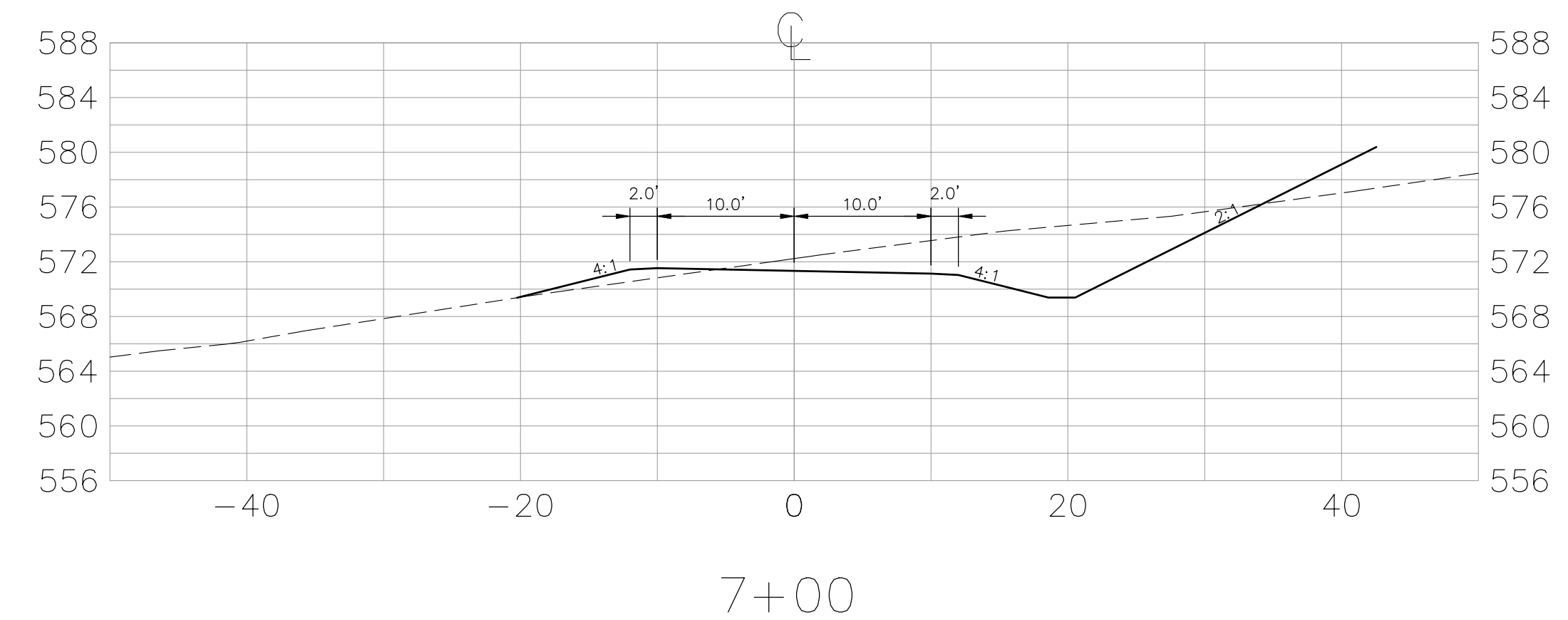
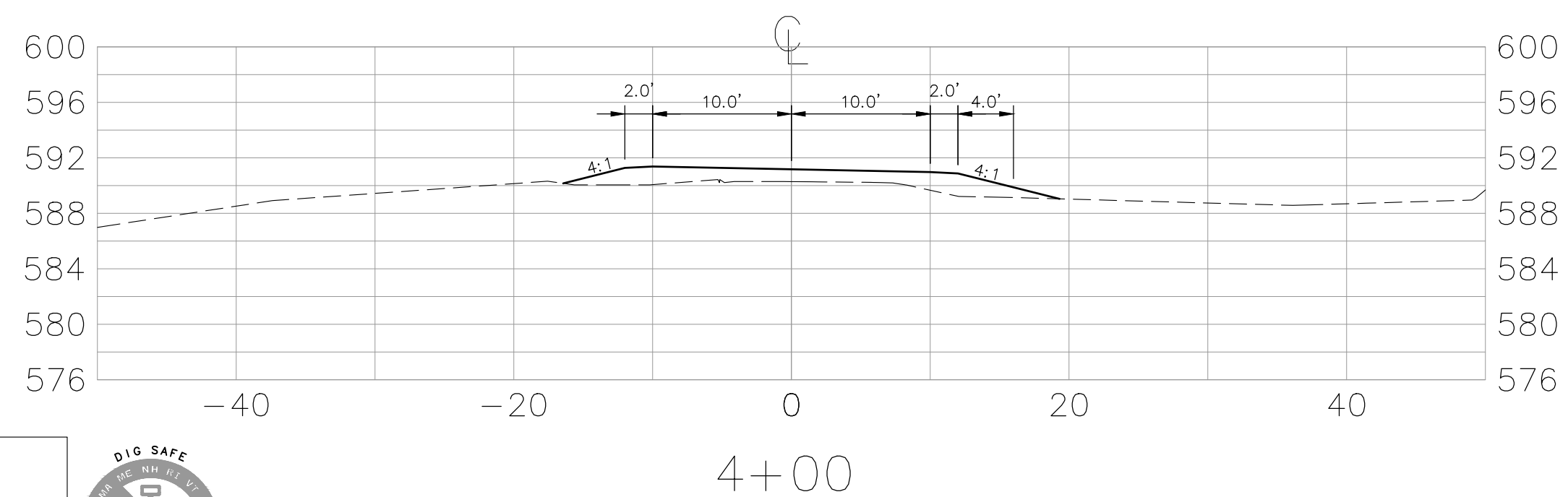
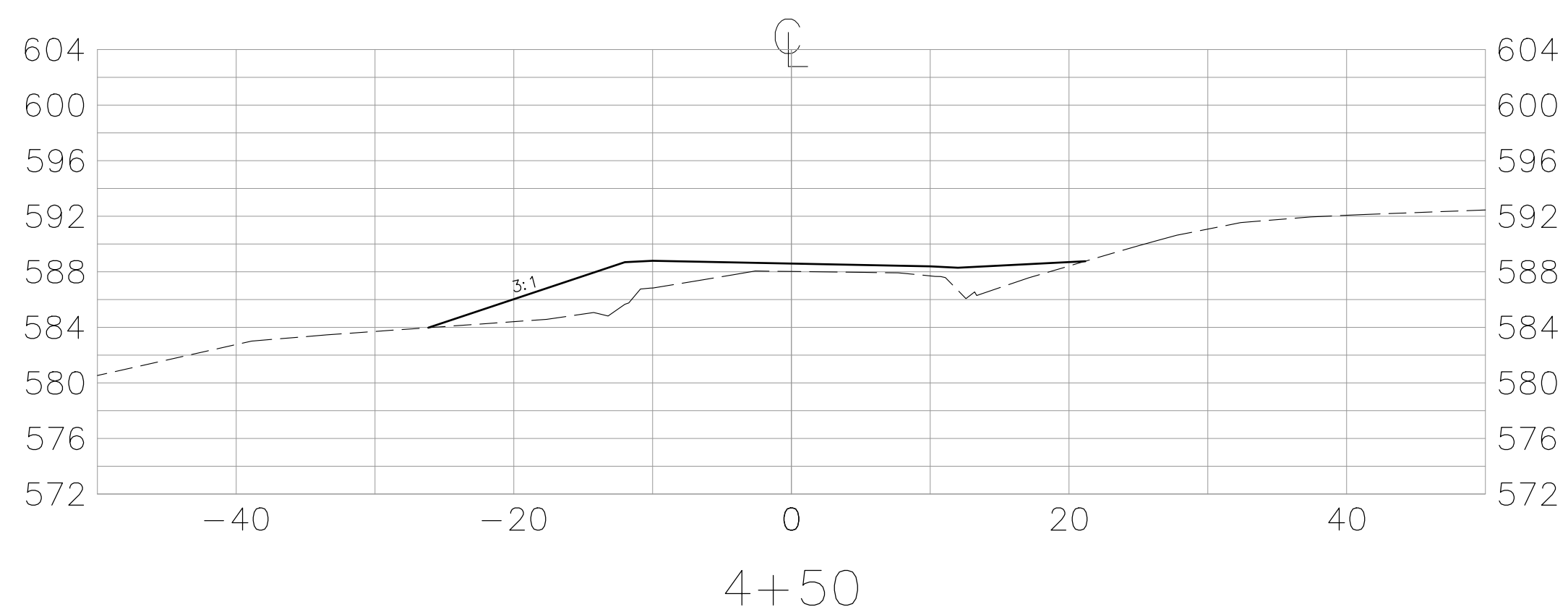
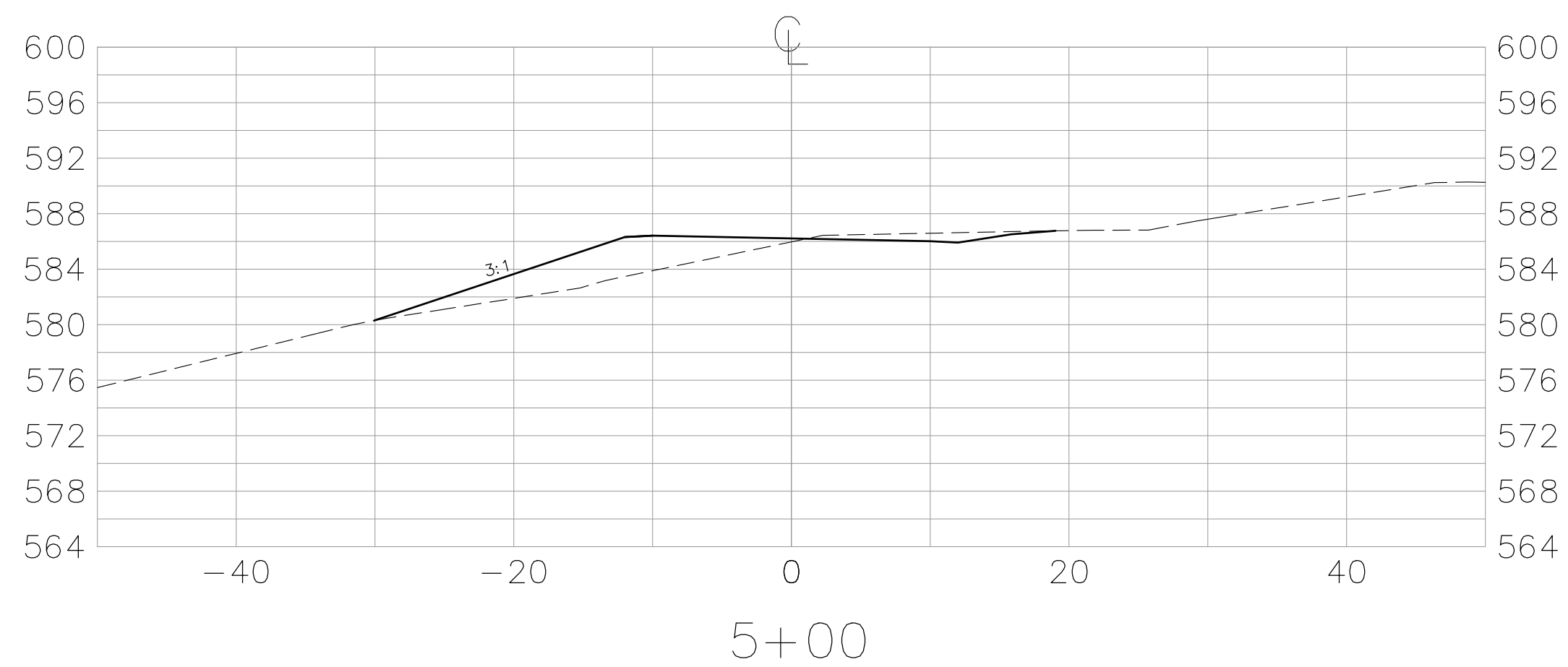
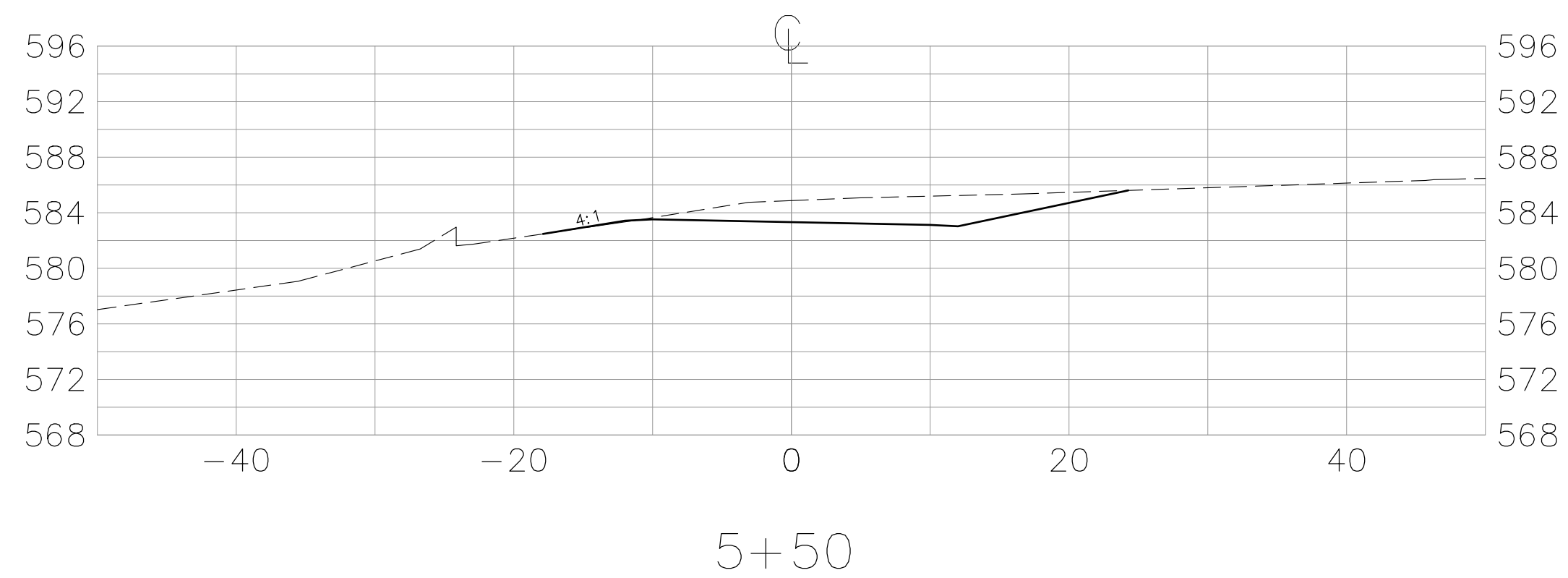
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SUBDIVISION PLANS

TAX MAP 11 LOT 4

CROSS SECTION

**HUCKINS REVOCABLE TRUST SUBDIVISION
22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE**

OWNED BY

BERTHA L. HUCKINS REVOCABLE TRUST

PREPARED FOR

BERTHA L. HUCKINS REVOCABLE TRUST

1"=20' (11"x17")

SCALE: 1"=10' (22"x34")

MAY 9, 2023

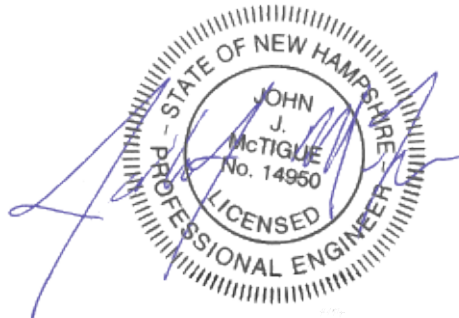
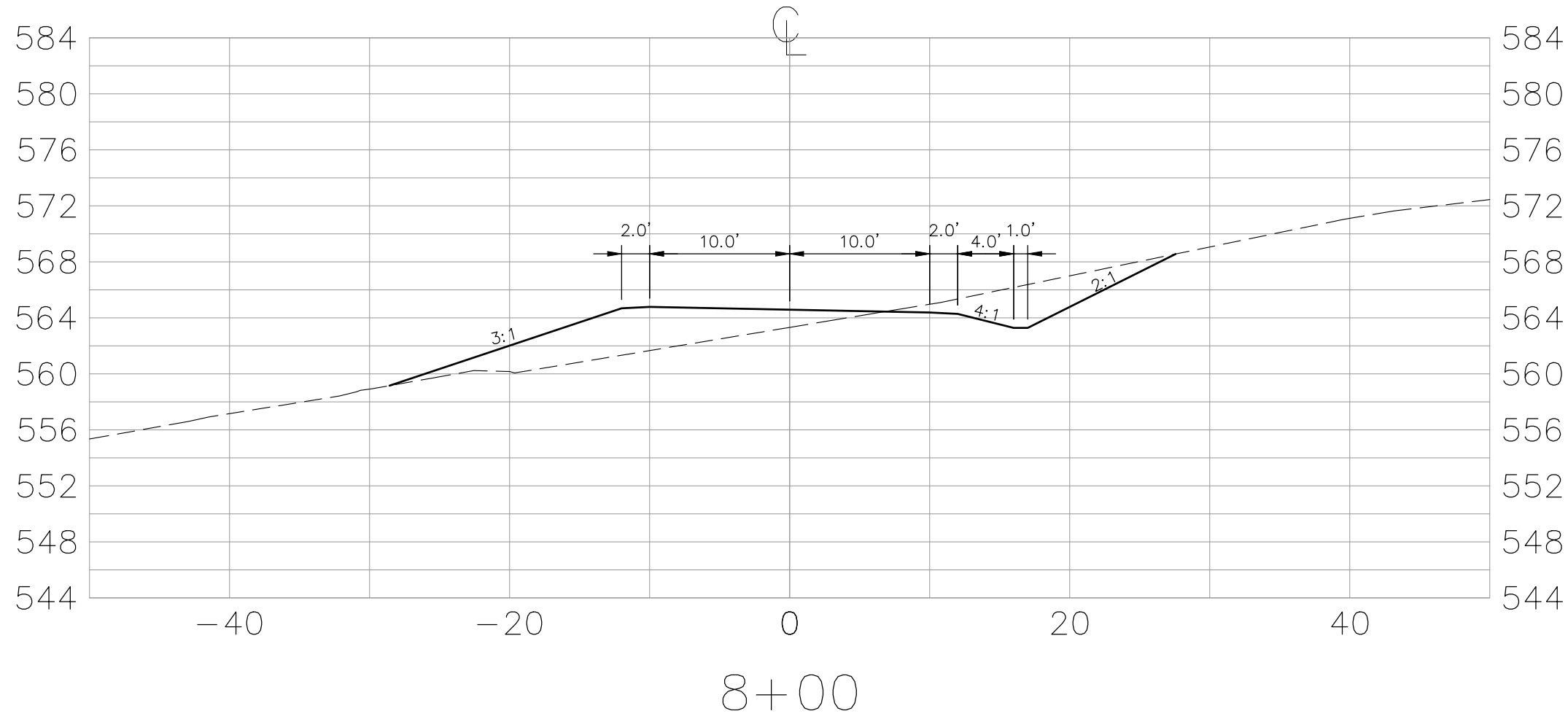
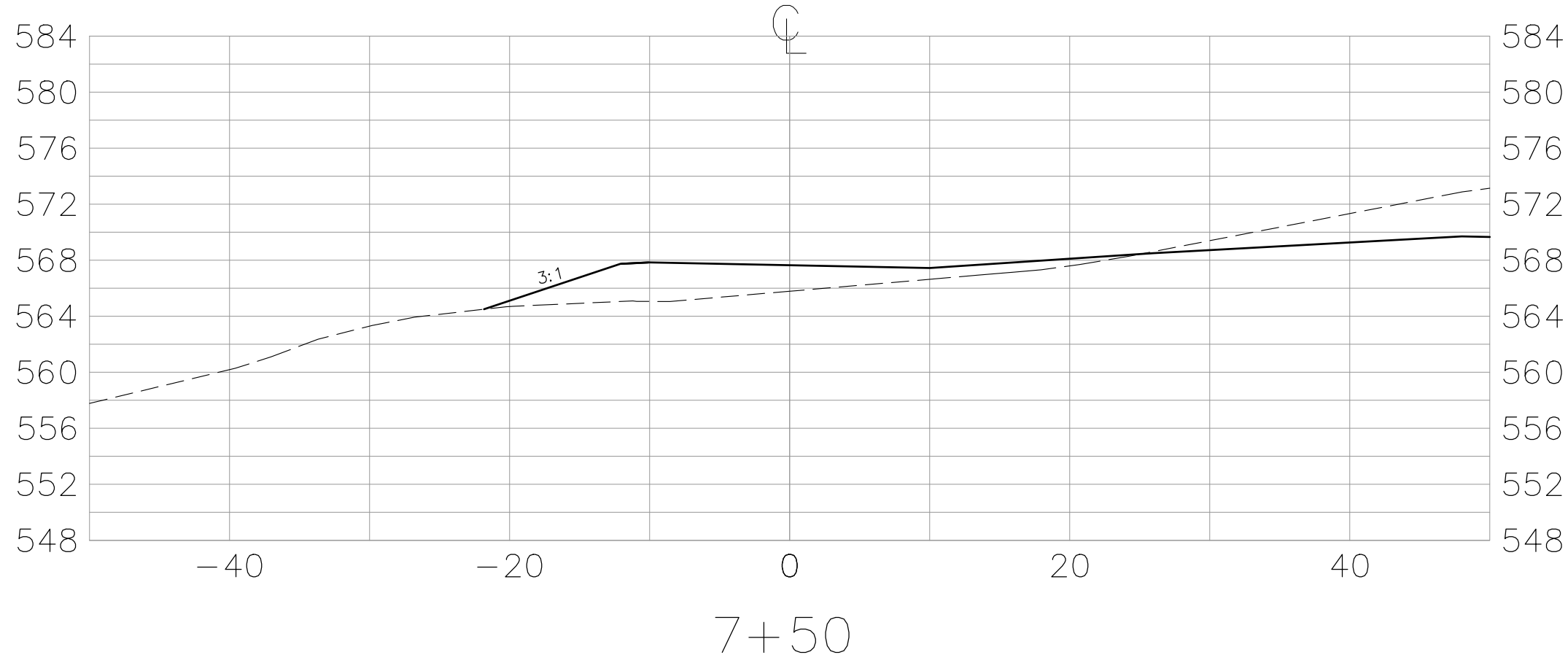
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CONTACT DGS SAFE 72 BUSINESS
HOURS PRIOR TO CONSTRUCTION

SUBDIVISION PLANS

TAX MAP 11 LOT 4

CROSS SECTION

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SOIL CHARACTERISTICS

THE MAJORITY OF THE SOILS (74% OF THE SOIL ANALYZED) ARE PAXTON FINE SANDY LOAM AND PAXTON FINE SANDY LOAM. VERY STONY WITH A HYDROLOGIC SOIL GROUP RATING OF C. THE NEXT MAJOR SOIL GROUP (22%) IS A SUTTON FINE SANDY LOAM WITH A HSG RATING OF B-D. THE REMAINDER OF THE SOIL (4%) IS HOLLIS-GLOUSTER VERY ROCKY FINE SANDY LOAMS.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 58,300 SQUARE FEET (1.345 ACRES). CONSTRUCTION SHALL BE PHASED TO LIMIT DISTURBED AREAS TO LESS THAN 5 ACRES.

CRITICAL NOTE: THIS DRAWING IS PROVIDED FOR GENERAL GUIDANCE. ALL SPECIAL EROSION CONTROL MEASURES MUST BE EXECUTED IN ACCORDANCE WITH APPLICABLE CURRENT STATE AND LOCAL REGULATIONS, APPROVED SWPPP, AND PERMIT REQUIREMENTS.

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL PERIMETER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, AND TEMPORARY EROSION CONTROL MEASURES PER APPROVED SITE DEVELOPMENT PLANS, PERMITS, OR SWPPP IF REQUIRED, PRIOR TO EARTH MOVING OPERATIONS.
2. INSTALL STORMWATER TREATMENT PONDS AND SWALES BEFORE ROUGH GRADING THE SITE.
3. INSTALL STORMWATER TREATMENT PONDS AND SWALES BEFORE GRADING THE SITE.
4. COMPLETE MAJOR GRADING OF SITE, INCLUDING PRIVATE ROAD.
5. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, SILT BARRIERS, AND SEDIMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.
6. CONSULT APPLICABLE REGULATIONS, PERMITS, CONDITIONS, AND APPROVED SWPPP FOR CONDITIONS RELATED TO NOTICE OF TERMINATION, IF REQUIRED.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN TWENTY ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS. ALL STORM DRAIN INLETS SHALL BE PROVIDED WITH BARRIER FILTERS. STONE RIPRAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PIPES WHERE EROSION VELOCITIES ARE ENCOUNTERED.

OFF SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

INSTALLATION, MAINTENANCE, AND INSPECTION OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.

1. STABILIZATION OF ALL SWALES, DITCHES, AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDED AT ONE TIME. (5 AC MAX)
3. ALL CONTROL MEASURES WILL BE INSPECTED IN ACCORDANCE WITH APPLICABLE REGULATIONS, PERMITS, AND CONDITIONS AND AT LEAST EVERY 7 DAYS OR EVERY 14 DAYS AND AFTER A 0.25 INCHES RAIN EVENT OR GREATER.
4. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
5. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT BARRIER WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE BARRIER.
6. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
7. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.
8. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
9. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

B. FILTERS / BARRIERS

1. SILT SOCKS
 - A. KNOTTED MESH NETTING MATERIAL SHALL BE DELIVERED TO SITE IN A 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" MATERIAL, FILLED WITH COMPOST CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	TEST	REQUIREMENTS
PH	TMECC 04.11-A	5.0 TO 8.0
PARTICLE SIZE	TMECC 02.02-B	2" SIEVE AND MIN. 60% GREATER THAN THE 3/8" SIEVE
MOISTURE CONTENT		STND TESTING < 60%

MATERIAL SHALL BE RELATIVELY FREE OF INERT OR FOREIGN MAN-MADE MATERIALS
MATERIAL SHALL BE WEED FREE AND DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, FREE FROM ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH.
 - B. SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK SHALL BE REMOVED ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE SILT SOCK.
 - C. SILT BARRIER SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.
2. SEQUENCE OF INSTALLATION

SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

3. MAINTENANCE

- A. SILT BARRIERS SHALL BE INSPECTED WEEKLY AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
- B. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
- C. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD (1/3) THE HEIGHT OF THE BARRIER.
- D. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFIRM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

C. MULCHING

1. TIMING

IN ORDER FOR MULCH TO BE EFFECTIVE, IT MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO (2) TYPES OF STANDARDS WHICH SHALL BE USED TO ASSURE THIS:

- A. APPLY MULCH PRIOR TO ANY STORM EVENT.

THIS IS APPLICABLE WHEN WORKING WITHIN 100' OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

- B. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD.

THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY ON AN AREA, WHERE THE LENGTH OF TIME VARIES WITH SITE CONDITIONS. PROFESSIONAL JUDGMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.

2. GUIDELINES FOR WINTER MULCH APPLICATION.

WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH.

3. MAINTENANCE

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.

D. VEGETATIVE PRACTICE

1. AFTER ROUGH GRADING OF THE SUBGRADE HAS BEEN COMPLETED AND APPROVED, THE SUB GRADE SURFACE SHALL BE SCARIFIED TO A DEPTH OF 4". THEN, FURNISH AND INSTALL A LAYER OF LOAM PROVIDING A ROLLED THICKNESS AS SPECIFIED IN THESE PLANS. ANY DEPRESSIONS WHICH MAY OCCUR DURING ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM, REGRADED AND REROLLED UNTIL THE SURFACE IS TRUE TO THE FINISHED LINES AND GRADES. ALL LOAM NECESSARY TO COMPLETE THE WORK UNDER THIS SECTION SHALL BE SUPPLIED BY THE SITE SUBCONTRACTOR.
2. ALL LARGE STIFF CLOUDS, LUMPS, BRUSH, ROOTS, DEBRIS, GLASS, STUMPS, LITTER, AND OTHER FOREIGN MATERIAL, AS WELL AS STONES OVER 1" IN DIAMETER, SHALL BE REMOVED FROM THE LOAM AND DISPOSED OF OFF SITE. THE LOAM SHALL BE RAKED SMOOTH AND EVEN.
3. THE LOAM SHALL BE PREPARED TO RECEIVE SEED BY REMOVING STONES, FOREIGN OBJECTS AND GRADING TO ELIMINATE WATER POCKETS AND IRREGULARITIES PRIOR TO PLACING SEED. FINISH GRADING SHALL RESULT IN STRAIGHT UNIFORM GRADES AND SMOOTH, EVEN SURFACES WITHOUT IRREGULARITIES TO LOW POINTS.
4. SHAPE THE AREAS TO THE LINES AND GRADES REQUIRED. THE SITE SUBCONTRACTOR'S ATTENTION IS DIRECTED TO THE SCHEDULING OF LOAMING AND SEEDING OF GRADED AREAS TO PERMIT SUFFICIENT TIME FOR THE STABILIZATION OF THESE AREAS. IT SHALL BE THE SITE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AREAS DURING THE CONSTRUCTION PERIOD AND REGRADE, LOAM AND RESEED ANY DAMAGED AREAS.
5. ALL AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENT, OR MULCH SHALL BE LOAMED AND SEEDED.
6. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
7. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.
8. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4 1/2 POUNDS AND 5 1/2 POUNDS PER INCH OF WIDTH.
9. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4" AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.
10. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH THAT BLOWS OR WASHES AWAY SHALL BE REPLACED IMMEDIATELY AND ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.
12. THE SITE SUBCONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED, INCLUDING CUTTING, AS SPECIFIED HEREIN AFTER UNDER MAINTENANCE AND PROTECTION.
13. UNLESS OTHERWISE APPROVED, SEEDING SHALL BE DONE DURING THE APPROXIMATE PERIODS OF EARLY SPRING TO SEPTEMBER 30. WHEN SOIL CONDITIONS AND WEATHER ARE SUITABLE FOR SUCH WORK. IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. FOR TEMPORARY PLANTINGS AFTER SEPTEMBER 30, TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:
 - A. FOLLOW ABOVE SLOPE, LOAM DEPTH AND GRADING REQUIREMENTS.
 - B. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 500 POUNDS PER ACRE.MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

WINTER RYE (FALL SEEDING)	2.5 LBS/1,000 SF
OATS (SPRING SEEDING)	2.0 LBS/1,000 SF
MULCH	1.5 TONS/ACRE

E. WINTER CONSTRUCTION SEQUENCE

1. ALL PROPOSED POST-DEVELOPMENT LANDSCAPED 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 3:1 AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT 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 EVENT.
2. 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 WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.

FOR SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT, THEN LOT DISTURBANCE, OTHER THAN THAT 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.

WASTE DISPOSAL

1. WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION

1. MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

- A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
- B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
- E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

HAZARDOUS PRODUCTS:
THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

- A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
- C. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

2. PRODUCT SPECIFICATION PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

PETROLEUM PRODUCTS:
ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS:
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:
CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA DESIGNATED ON SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- D. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- E. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
- F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT RECURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
- G. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ADJUTING AREAS.

SUBDIVISION PLANS

TAX MAP 11 LOT 4

EROSION CONTROL NOTES

HUCKINS REVOCABLE TRUST SUBDIVISION

22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE

OWNED BY

BERTHA L. HUCKINS REVOCABLE TRUST

PREPARED FOR

BERTHA L. HUCKINS REVOCABLE TRUST

SCALE: NTS

MAY 9, 2023

Seacoast Division



Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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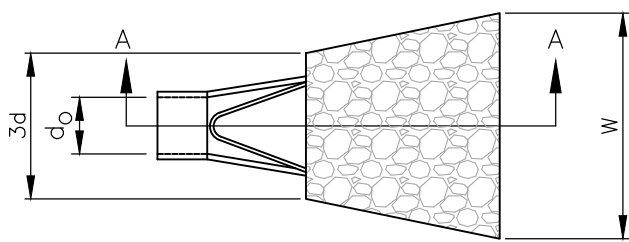
THE OUTLET PROTECTION SHOULD BE CHECKED AT
LEAST ANNUALLY AND AFTER EVERY MAJOR STORM.
IF THE RIP RAP HAS BEEN DISPLACED,
UNDERMINED OR DAMAGED, IT SHOULD BE
CHECKED TO SEE THAT EROSION IS NOT
OCCURRING. THE DOWNSTREAM CHANNEL SHOULD
BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS
FALLEN TREES, DEBRIS, AND SEDIMENT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

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.

2. THE ROCK OR GRAVEL USED FOR FILTER OR RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTECHNICAL FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED FABRIC 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".
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 STONE SIZES.
5. ADD ANIMAL SCREEN TO FLARED END SECTION OUTLET.



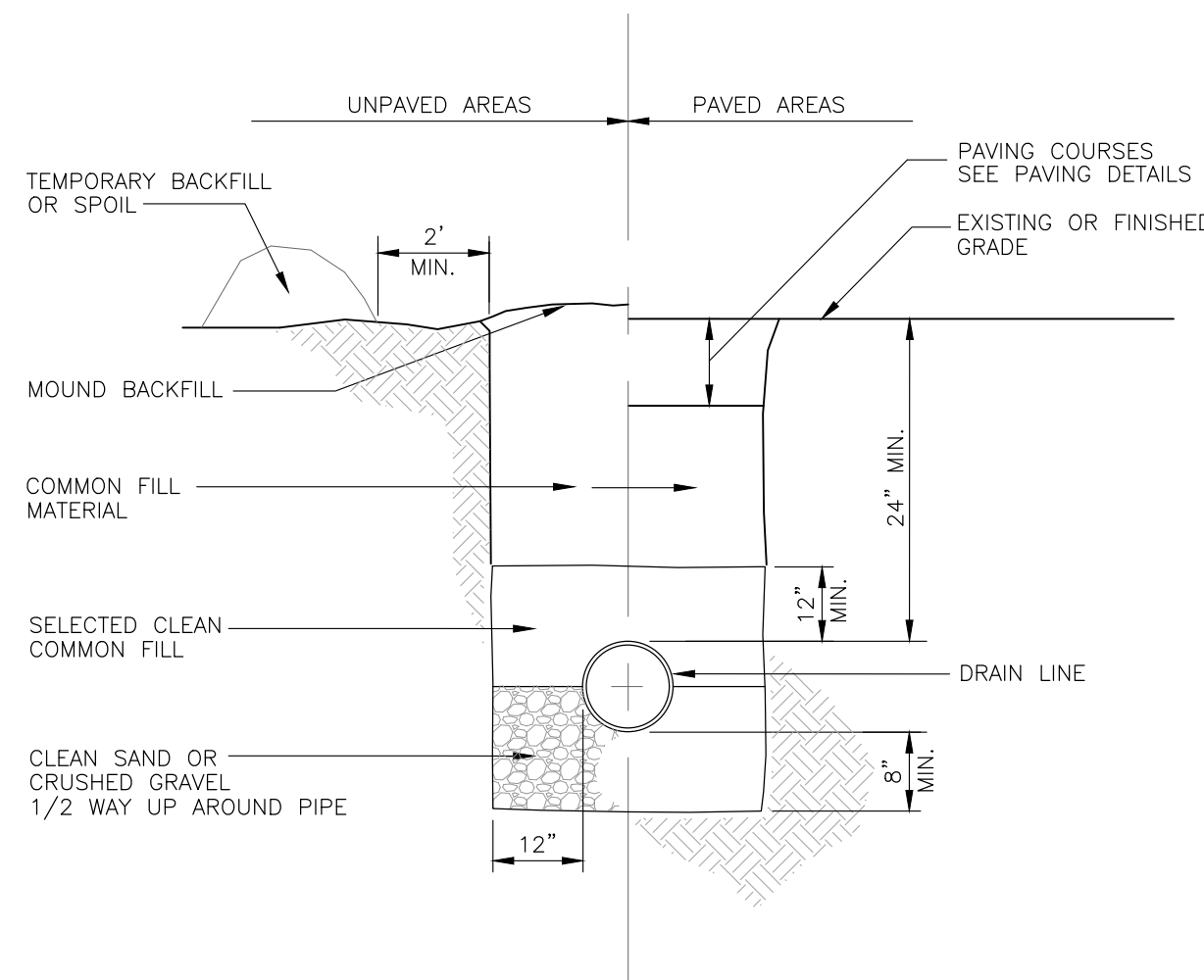
SECTION A-A



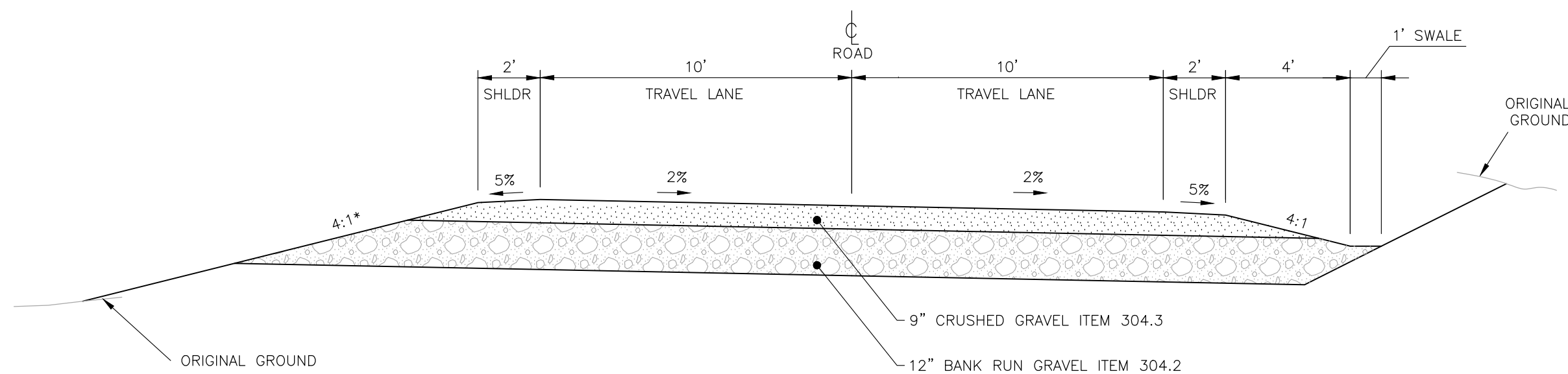
LOCATION	FES-01	FES-02	FES-03	FES-04
d50 STONE SIZE:	6"	6"	6"	6"
LENGTH OF APRON (L):	10.0'	22.5'	10.0'	22.0'
WIDTH OF APRON (W):	7.0'	14.5'	4.5'	12.5'
DEPTH OF RIP RAP (T):	9"	9"	9"	9"

<u>% OF WEIGHT SMALLER THAN THE GIVEN SIZE</u>	<u>SIZE OF STONE (INCHES)</u>
100	9.00 TO 12.00
85	7.80 TO 10.80
50	6.00 TO 9.00
15	1.80 TO 3.00

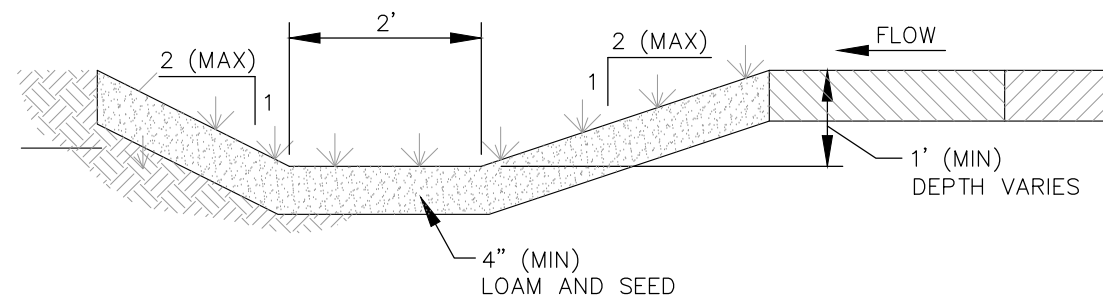
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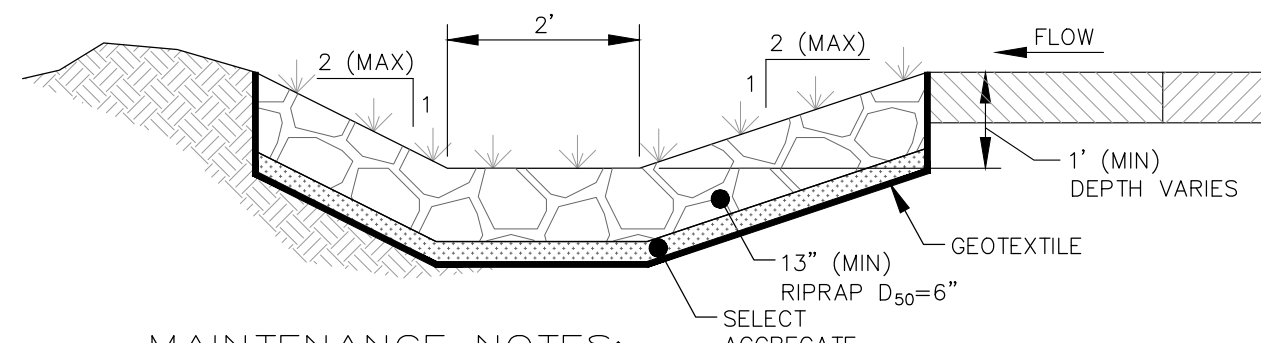
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1. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE FILTERING EFFECT.

2. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.
3. THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE.
4. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.
5. SLOPE TO BE FULLY STABILIZED BEFORE DIRECTING STORM FLOWS ONTO IT.

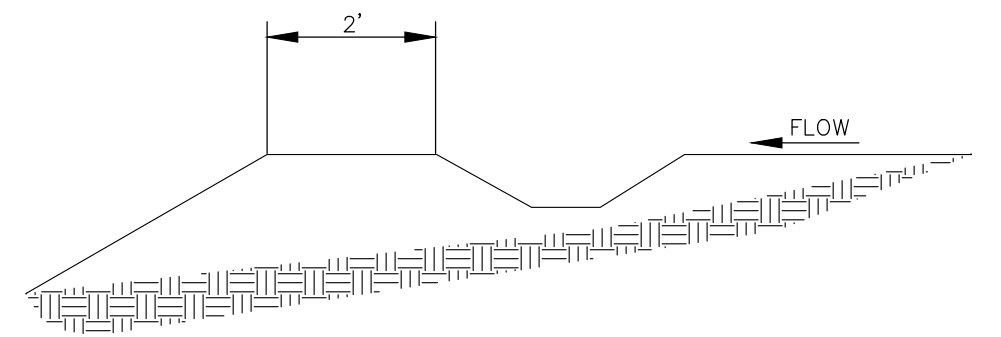
FOR STORMWATER RUNOFF



1. RIPRAP LINED SWALE SHOULD BE CHECKED ANNUALLY.
2. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY.
3. THE SWALE SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS
4. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE.

RIPRAP GRADATION		
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE FROM TO	
100%	9 INCHES	12 INCHES
85%	7.8 INCHES	9.2 INCHES
50%	5.7 INCHES	6.9 INCHES
15%	3.7 INCHES	5.2 INCHES

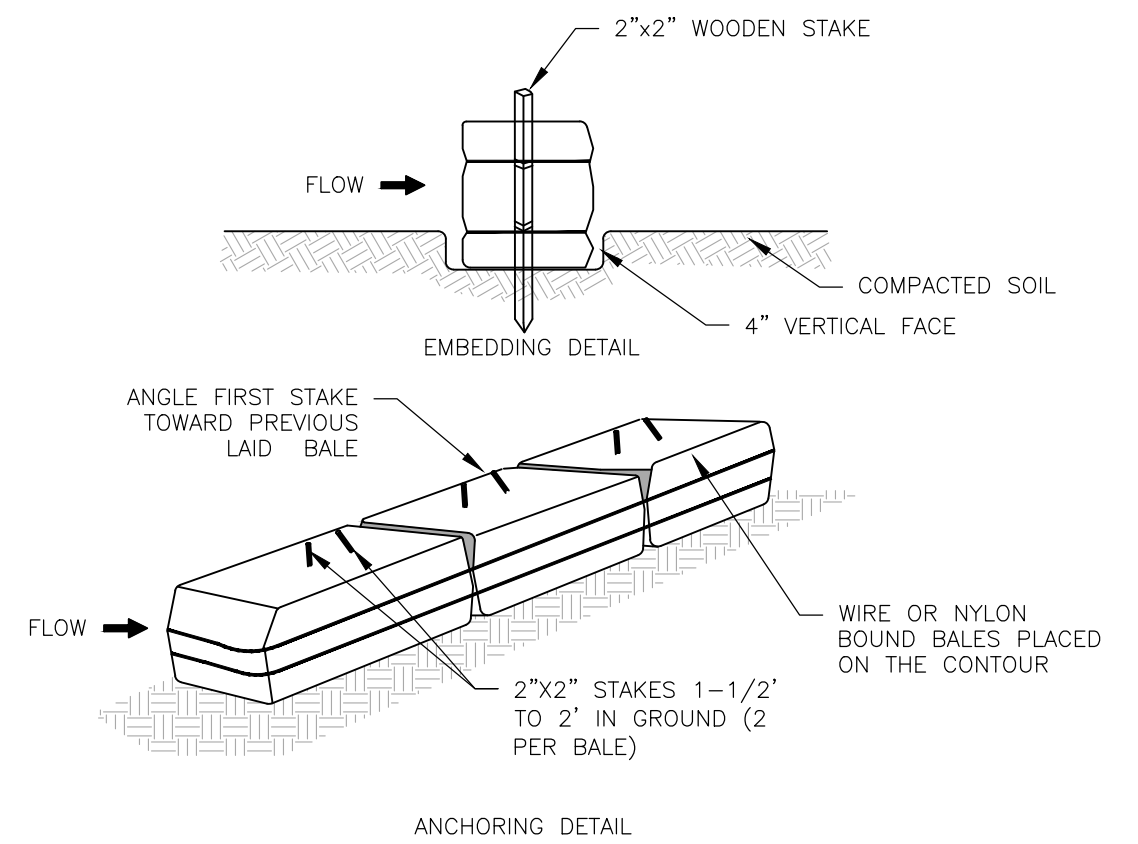
FOR STORMWATER RUNOFF



1. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCRoACHMENT OF WEEDS AND WOODY VEGETATION.
2. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE GRASS BECOMING A MAJOR WEED AND A SOLUTION.
3. THE BERM SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE BERM.
4. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND RE-VEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.
5. SLOPE TO BE FULLY STABILIZED BEFORE DIRECTING STORM FLOWS TO IT.

FOR STORMWATER RUNOFF

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1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

TAX MAP 11 LOT 4


**HUCKINS REVOCABLE TRUST SUBDIVISION
22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE**

OWNED BY
BERTHA L. HUCKINS REVOCABLE TRUST
 PREPARED FOR
BERTHA L. HUCKINS REVOCABLE TRUST

SCALE: NTS

MAY 9, 2023

Seacoast Division



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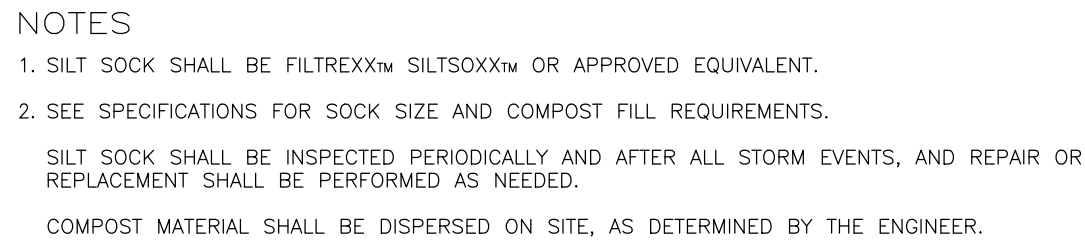
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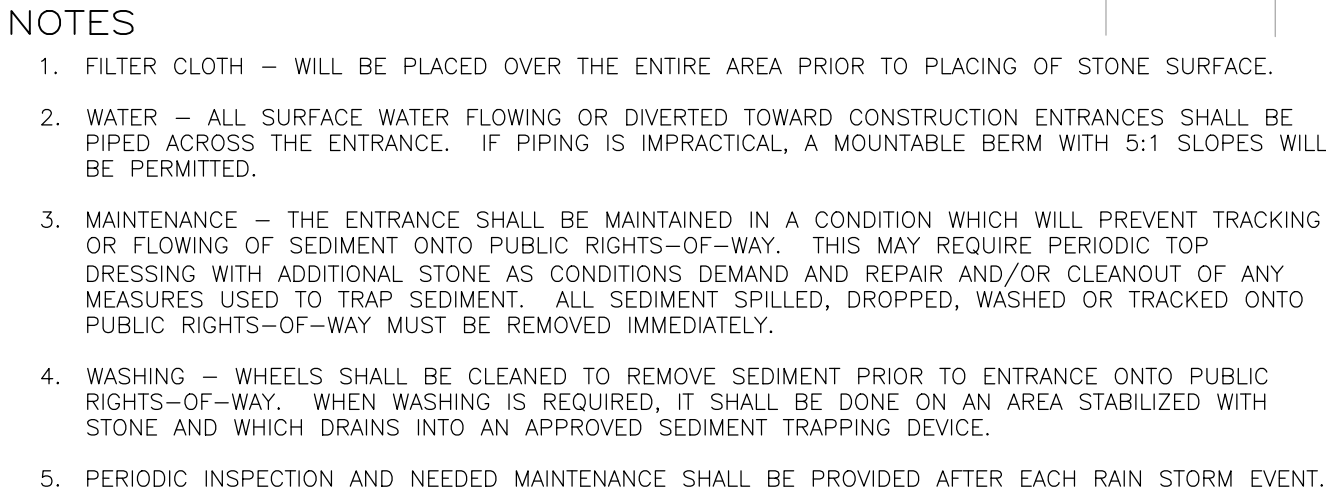
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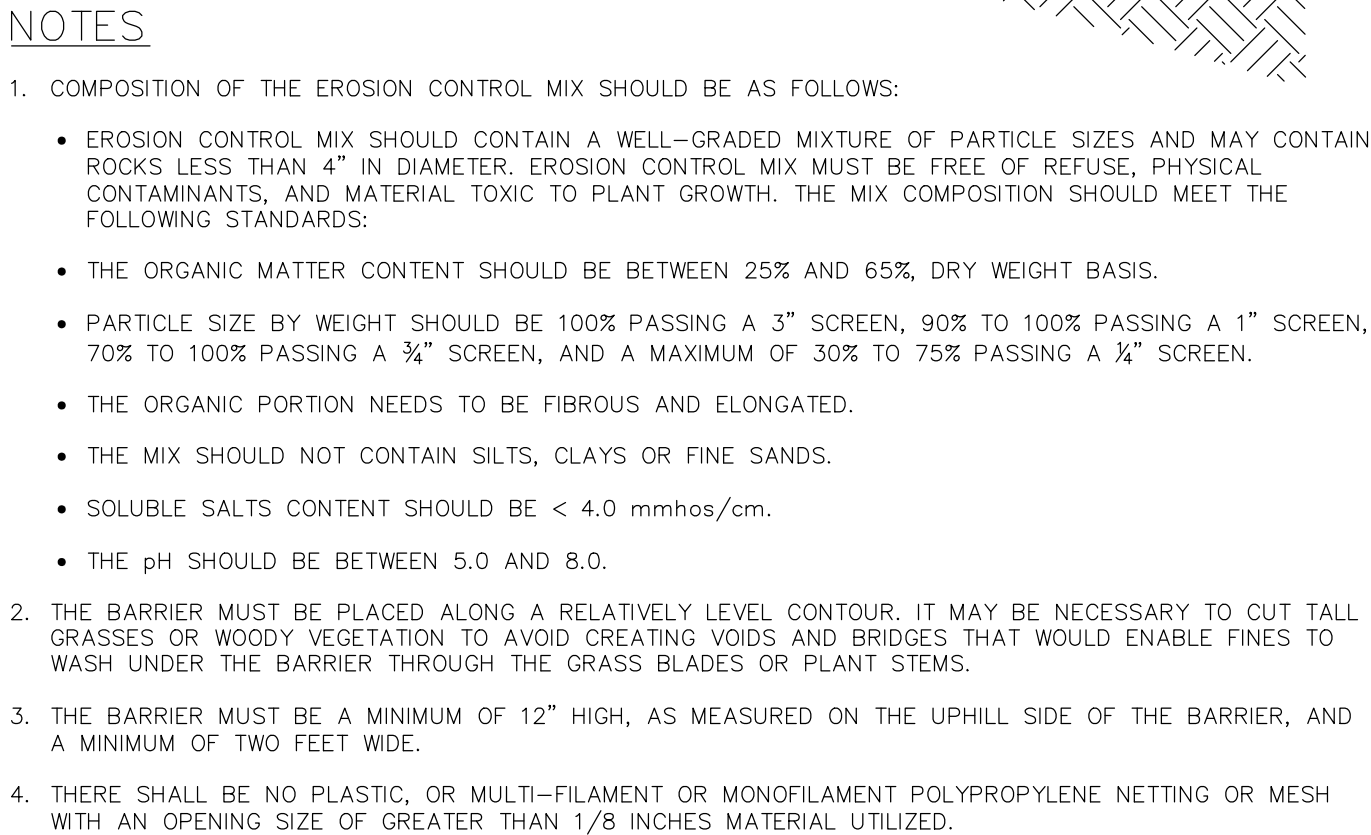


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IN SWALE

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NOTES:

1. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
2. INSPECTION SHOULD OCCUR FOLLOWING ANY RAIN EVENT $> \frac{1}{2}$ ".
3. EMPTY THE SEDIMENT BAG PER MANUFACTURER'S SPECIFICATIONS.
4. REMOVED CAKED ON SILT FROM SEDIMENT BAG AND FLUSH WITH MEDIUM SPRAY WITH OPTIMAL FILTRATION.
5. REPLACE BAG IF TORN OR PUNCTURED TO $> \frac{1}{2}$ " DIAMETER ON LOWER HALF OF BAG.

ALL PRODUCTS MANUFACTURED BY INLET &
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1. BEGIN AT THE TOP BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
5. BLANKET SHALL BE NORTH AMERICAN GREEN SC-150 OR APPROVED EQUAL.
6. 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.

FOR EROSION CONTROL

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TAX MAP 11 LOT 4

DETAILS

HUCKINS REVOCABLE TRUST SUBDIVISION
22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE

OWNED BY
BERTHA L. HUCKINS REVOCABLE TRUST
PREPARED FOR
BERTHA L. HUCKINS REVOCABLE TRUST

SCALE: NTS

MAY 9, 2023

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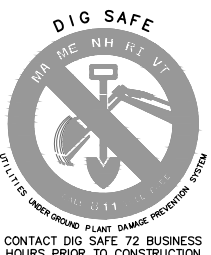
- Civil Engineers
- Structural Engineers
- Traffic Engineers
- Land Surveyors
- Landscape Architects
- Scientists

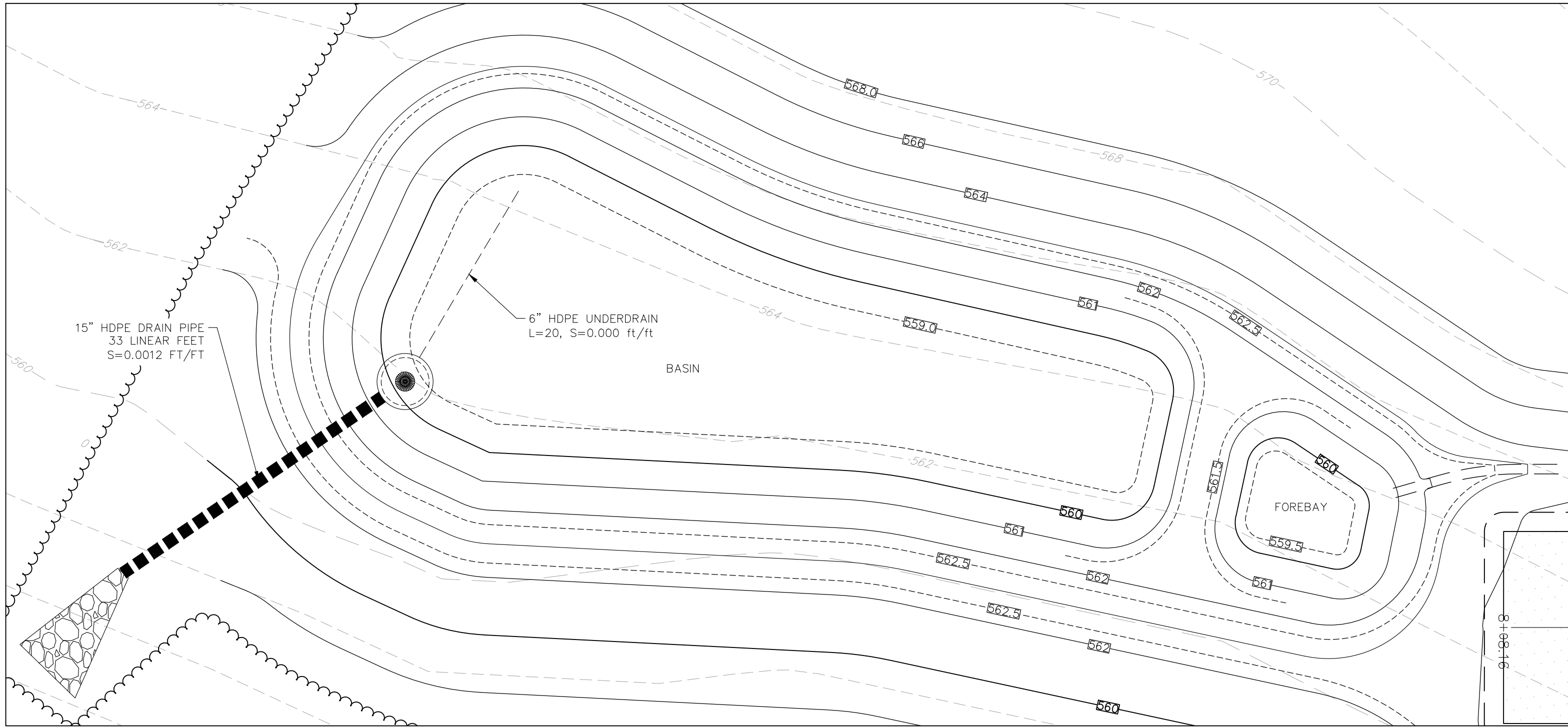
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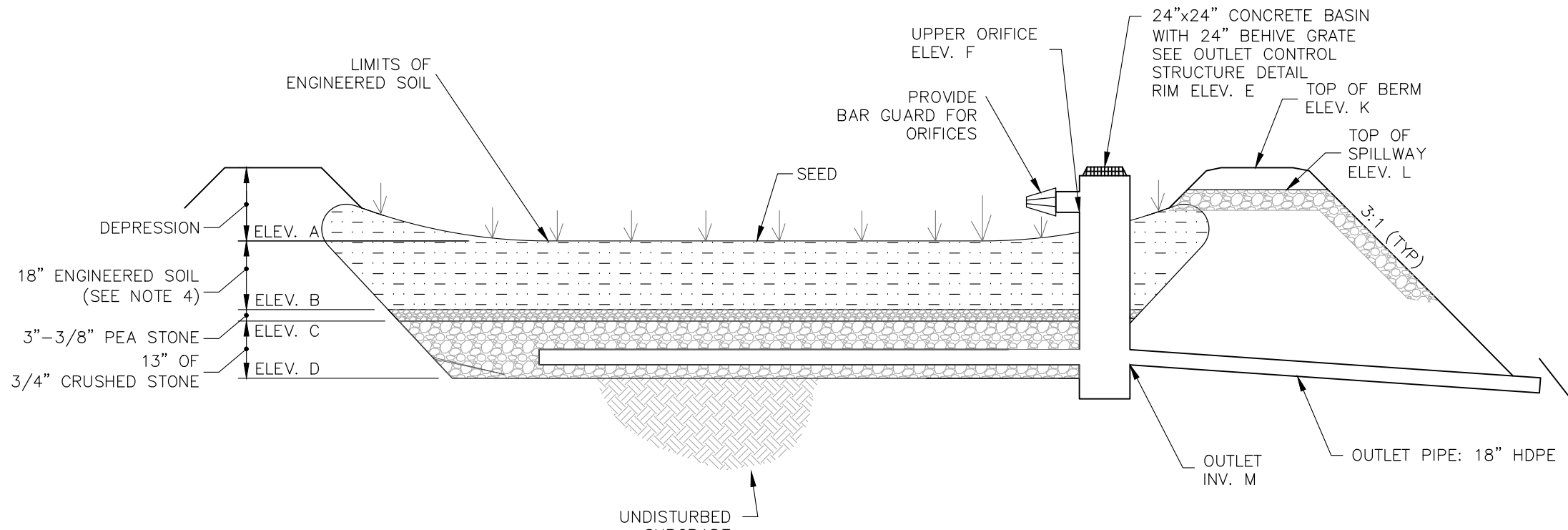
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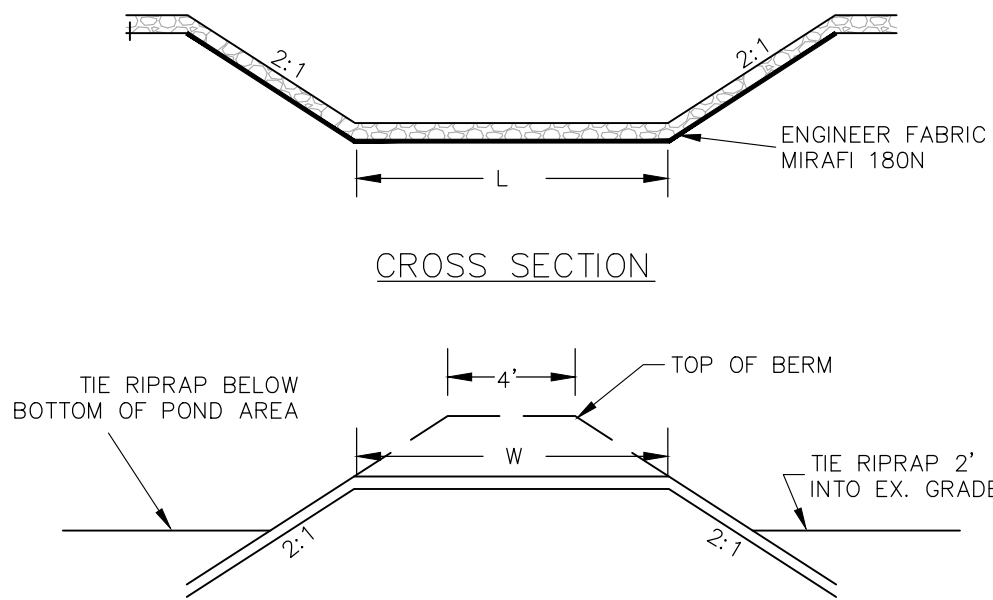


PLAN VIEW - BIORETENTION AREA #1
NOT TO SCALE

BIORETENTION AREA ELEVATION TABLE		
INV.	DESCRIPTION	BIORETENTION AREA WITH ISR ELEV.
A	BOT. BASIN	559.00
B	BOT. FLTR MEDIA	557.50
C	BOT. OF 3" PEA STONE	557.25
D	BOT. OF CRUSHED STONE	556.17
E	GRATE	563.50
F	NOT USED	NA
J	U.D. INVERT	556.50
K	TOP OF BERM	562.75
L	EMERGENCY SILLWAY	562.25
M	OUTLET PIPE INVERT	556.50
N	END OF PIPE INVERT	556.10



BIORETENTION AREA
NOT TO SCALE



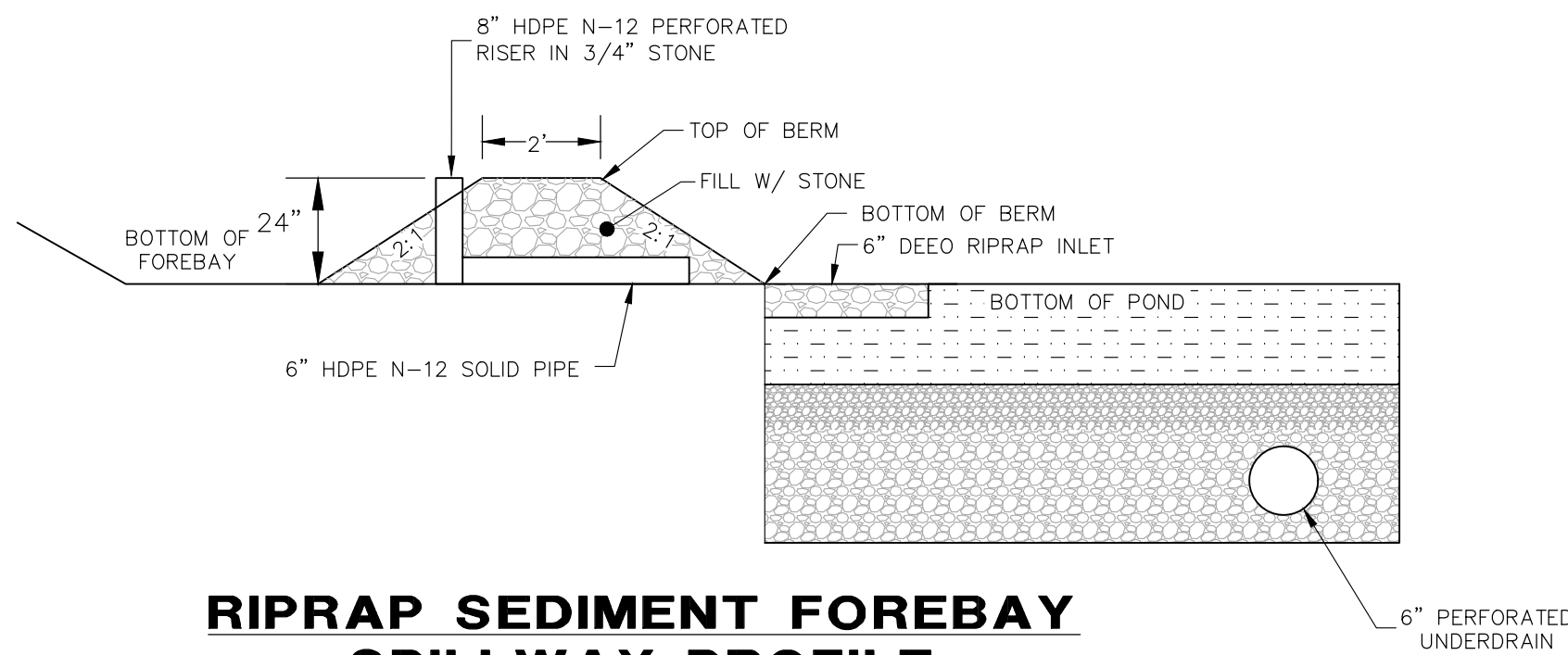
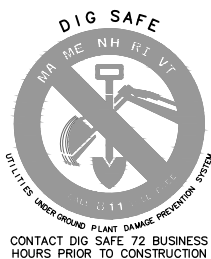
BMP'S	L	W
BIORETENTION AREA #1	5'	10'
BIORETENTION AREA #2	5'	10'
BIORETENTION AREA #3	12'	28'

EMERGENCY SPILLWAY PROFILE

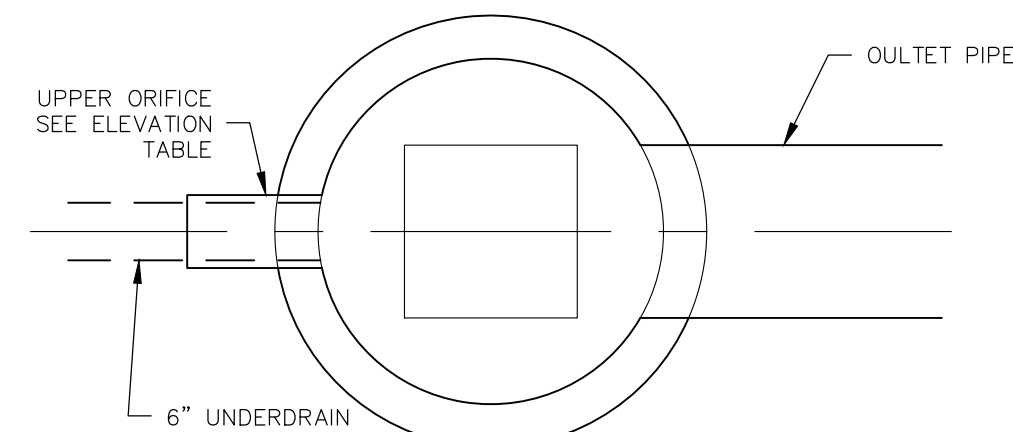
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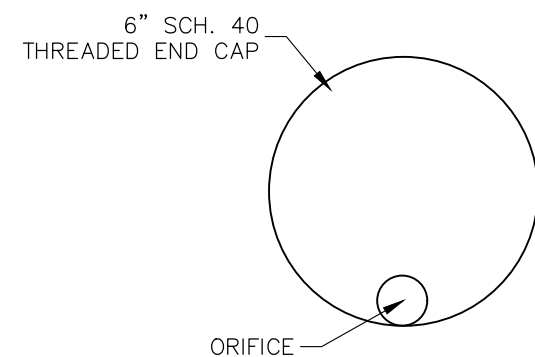
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RIPRAP SEDIMENT FOREBAY
SPILLWAY PROFILE
FOR BIORETENTION AREA
NOT TO SCALE



TOP VIEW - OUTLET CONTROL STRUCTURE
FOR BIORETENTION AREAS WITH ISR
NOT TO SCALE



CAP W/ CONTROL ORIFICE
NOT TO SCALE

COMPONENT MATERIAL	% OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	% BY WEIGHT PASSING STANDARD SIEVE
BIORETENTION FILTER MEDIA OPTION A			
ASTM C-33 CONCRETE SAND	50-55		
LOAMY SAND TOPSOIL WITH FINES AS INDICATED	20-30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH FINES AS INDICATED	20-30	200	<5

3/8" WASHED CRUSHED STONE*		3/4" WASHED CRUSHED STONE*	
SIEVE SIZE	% PASSING BY WIGHT	SIEVE SIZE	% PASSING BY WIGHT
1/2"	100	1"	100
3/8"	95-100	3/4"	90-100
#4	22-55	1/2"	15-55
		#10	0-5
*EQUIVALENT TO STANDARD WASHED STONE-SECTION 702 OF NHDOT STANDARD SPECIFICATIONS		*EQUIVALENT TO STANDARD WASHED STONE-SECTION 702 OF NHDOT STANDARD SPECIFICATIONS	

HYBRID BIORETENTION AREA MIX:

THE GRASS THAT IS PLANTED WITHIN A BIO-FILTRATION SYSTEM WITHIN THE BIO-MEDIA MUST CONSIST OF A COMBINATION OF WARM SEASON GRASS SEED AND COLD SEASON GRASS SEED IN ORDER FOR THE GRASS TO START GROWING FOR STABILIZATION AND CONTINUE GROWING IN THE SANDY WELL-DRAINED ENVIRONMENT. PLANTING SPECIFICATION WILL MEET REQUIREMENTS AS OUTLINED IN "VEGETATION NEW HAMPSHIRE SAND AND GRAVEL PITS" MIX 1 (WARM SEASON GRASSES) (15 LBS/AC) AND INCLUDE ANNUAL AND PERENNIAL RYE GRASS SEED (15 LBS/AC); THE NEW ENGLAND NATIVE WARM SEASON GRASS MIX (23 LBS/AC) BY NEW ENGLAND WETLAND PLANTS, INC.; RAIN GARDEN MIX 180 (15 LBS/AC & 15 LBS/AC OF RYE)/RAIN GARDEN GRASS MIX 180 (20 LBS/AC & 10 LBS/AC OF RYE) BY ERNST CONSERVATION SEEDS, OR APPROVED EQUAL.

NOTES

- WHEN CONTRACTOR EXCAVATES BIORETENTION AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
- SOIL BIORETENTION FILTER MEDIA SHALL BE AS SHOWN ABOVE. "BIO-MEDIA" MEANS BIORETENTION FILTER MEDIA.
- DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF WATER FROM EXCAVATION) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF INFILTRATION COMPONENTS OF THE SYSTEM.
- WHERE BIORETENTION AREA BOTTOM IS UNLINED, IT TO BE ROTOTILLED PRIOR TO INSTALLING PEA GRAVEL OR COARSE SAND.
- A PROFESSIONAL ENGINEER SHALL BE PRESENT DURING THE CONSTRUCTION OF THE RAIN GARDENS TO ENSURE THAT ALL OF THE CRITERIA ARE MET AND THAT A REPORT BE SUBMITTED TO NHDES WHEN CONSTRUCTION OF THE BIORETENTION AREAS ARE COMPLETED.

MAINTENANCE REQUIREMENTS

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 25-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS A WARRANTED SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
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DESIGN REFERENCES:

- UNH STORMWATER CENTER
- NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 2, DECEMBER 2008 AS AMENDED.

BIORETENTION AREA NOTES

SUBDIVISION PLANS

TAX MAP 11 LOT 4

DETAILS

HUCKINS REVOCABLE TRUST SUBDIVISION
22 HILLSIDE DRIVE - STRAFFORD, NEW HAMPSHIRE

OWNED BY

BERTHA L. HUCKINS REVOCABLE TRUST

PREPARED FOR

BERTHA L. HUCKINS REVOCABLE TRUST

SCALE: NTS

MAY 9, 2023

Seacoast Division

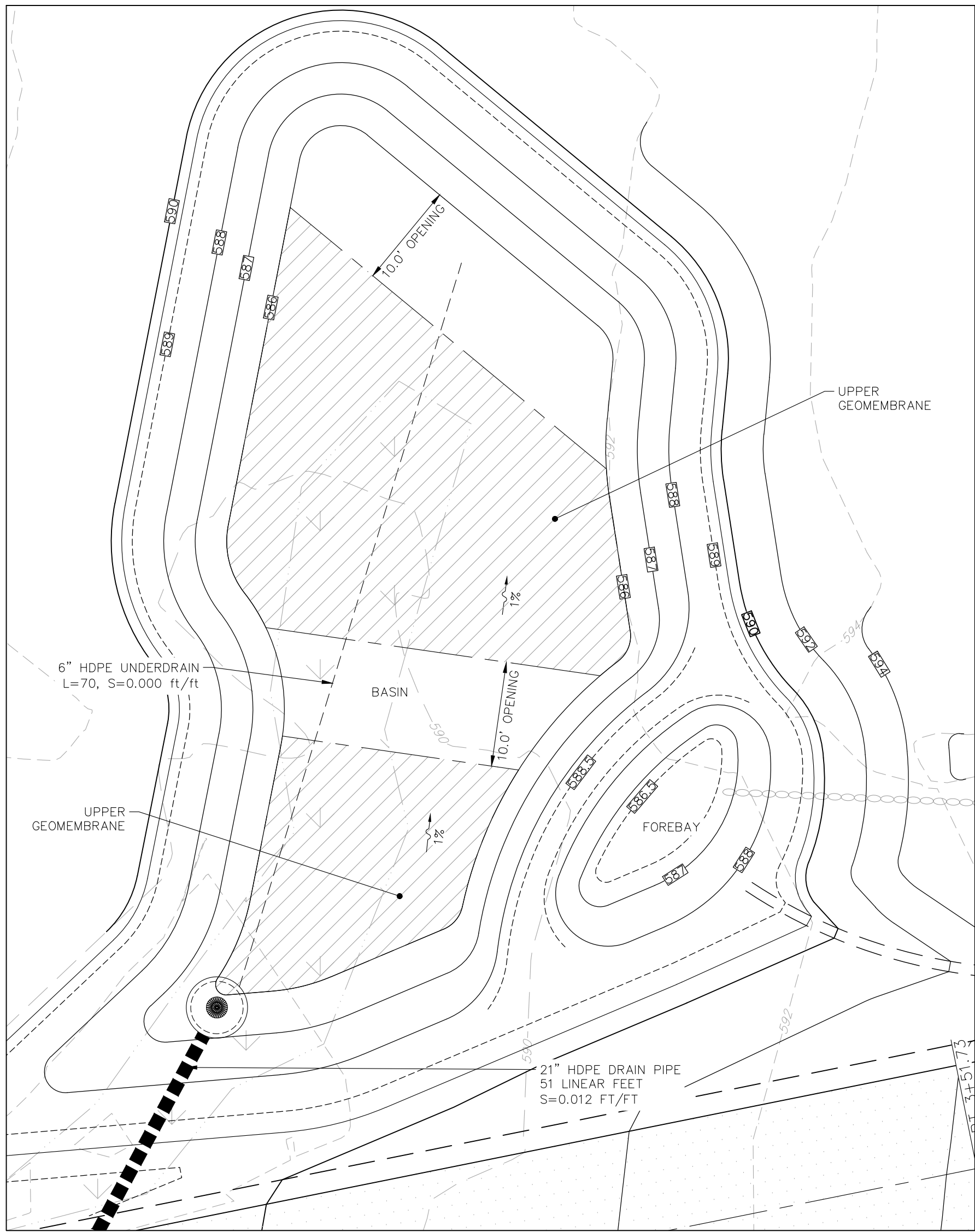


Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

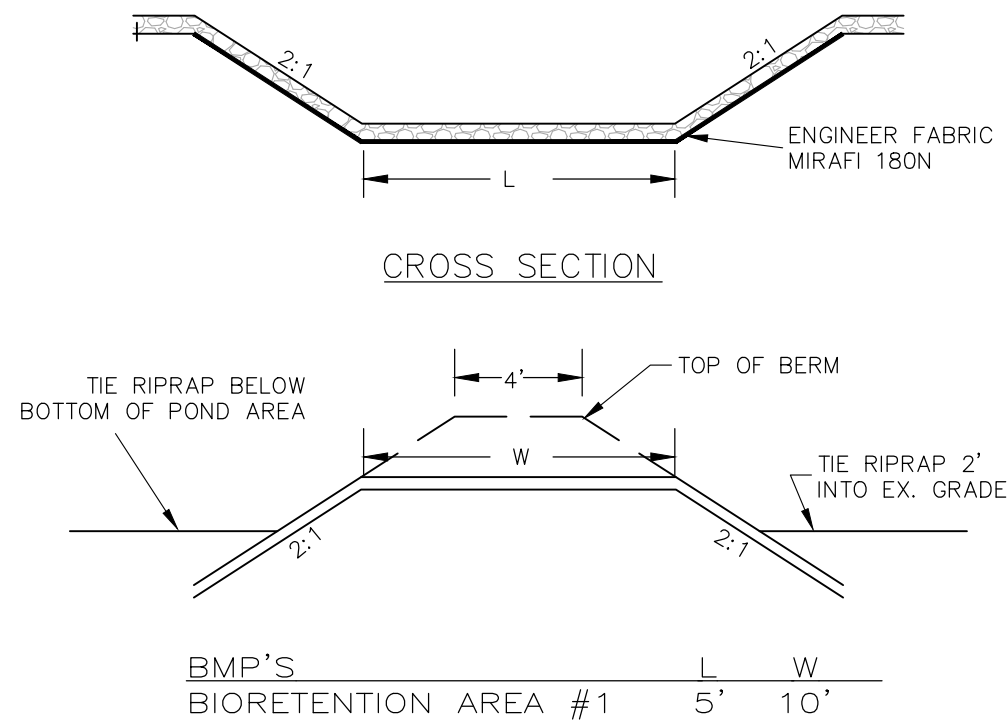
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Portsmouth, NH 03801
Phone (603) 431-2222
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www.tfmoran.com

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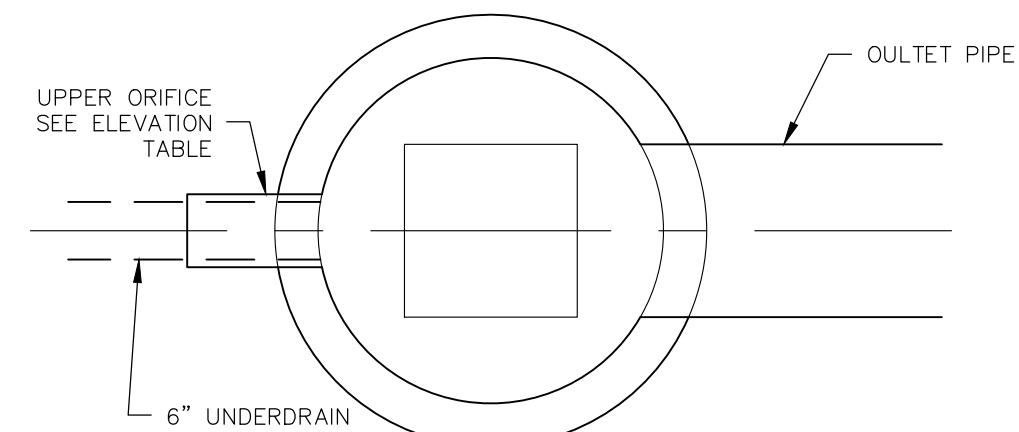


PLAN VIEW - BIORETENTION AREA #2 WITH ISR
NOT TO SCALE

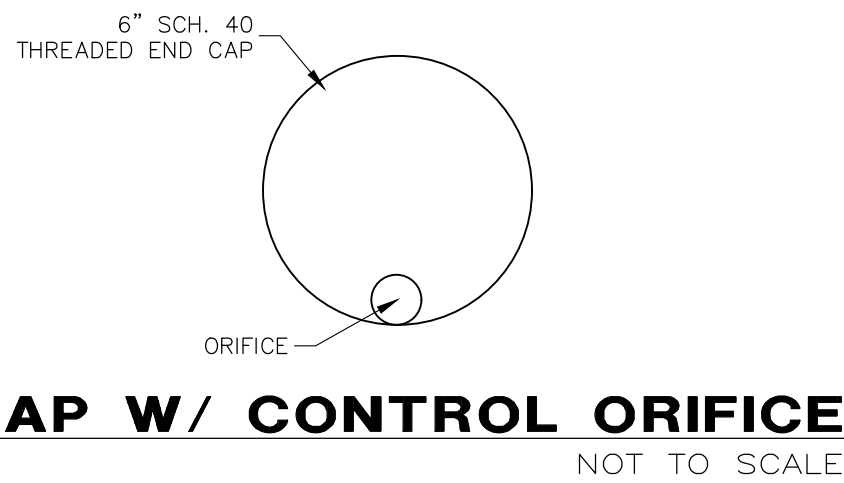


EMERGENCY SPILLWAY PROFILE
NOT TO SCALE

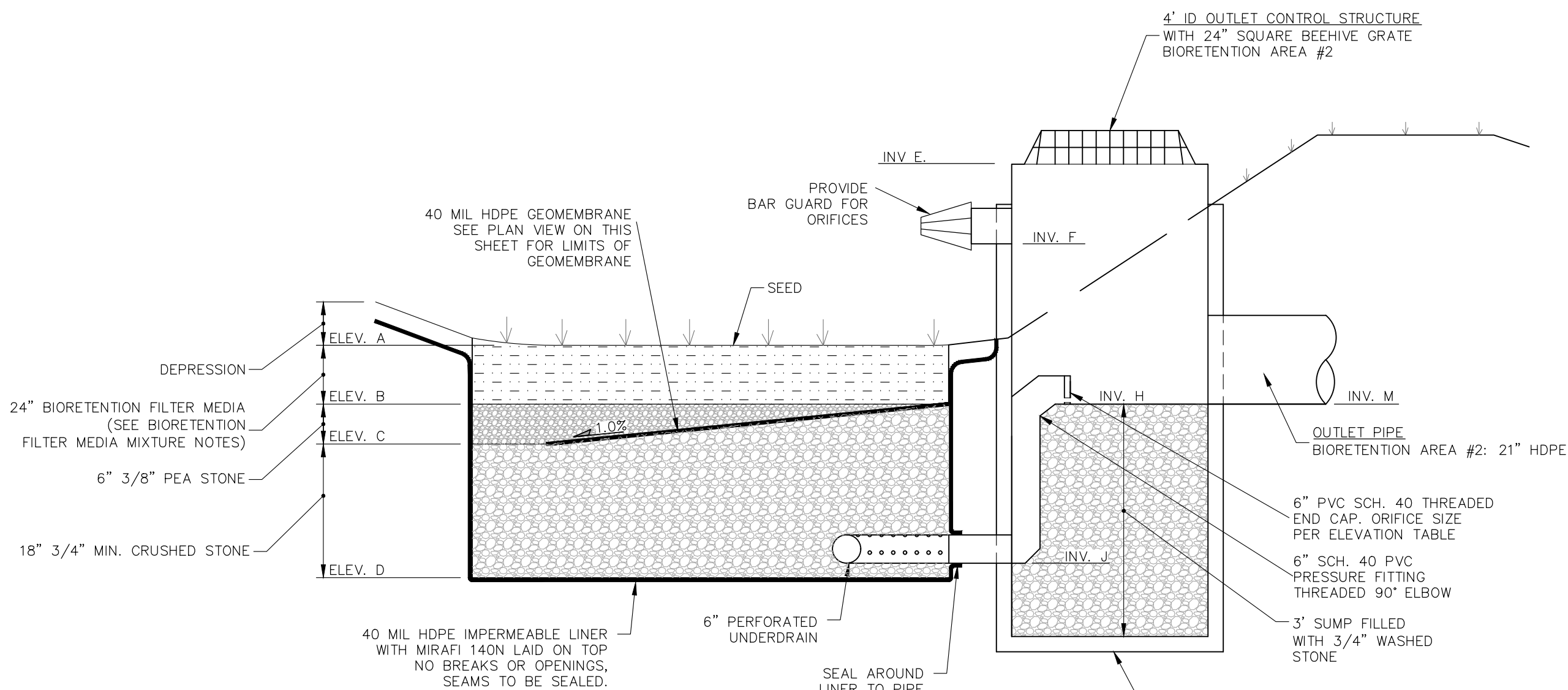
BIORETENTION AREA ELEVATION TABLE		
INV.	DESCRIPTION	BIORETENTION AREA WITH ISR
		ELEV.
A	BOT. BASIN	586.00
B	BOT. FILTER MEDIA	584.50
C	BOT. OF 3" PEA STONE	548.00
D	BOT. OF CRUSHED STONE	583.17
E	GRATE	583.30
F	UPPER ORIFICE	NA
G	NOT USED	NA
H	U.D. ORIFICE	584.50 (1.5" ORIFICE)
J	U.D. INVERT	583.50
K	TOP OF BERM	589.50
L	EMERGENCY SILLWAY	589.00
M	OUTLET PIPE INVERT	584.50
N	END OF PIPE INVERT	583.75



TOP VIEW - OUTLET CONTROL STRUCTURE
FOR BIORETENTION AREAS WITH ISR
NOT TO SCALE

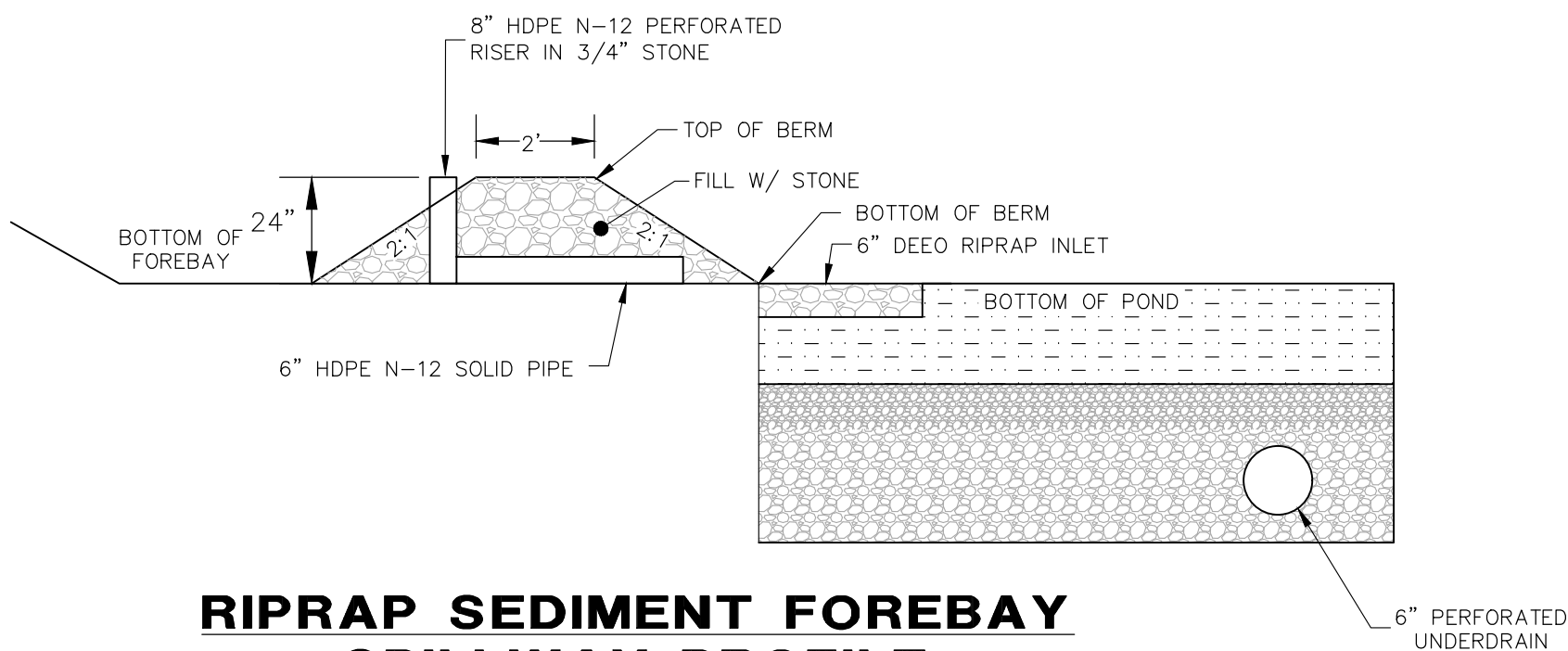


CAP W/ CONTROL ORIFICE
NOT TO SCALE



BIORETENTION AREA (WITH ISR)
NOT TO SCALE

LINER NOTES
ACCEPTABLE OPTIONS INCLUDE:
A. 6-12" IN CLAY SOIL (MINIMUM 15% PASSING #200 SIEVE AND A
MAXIMUM PERMEABILITY OF 1X10⁻⁹ CM/S)
* A 40 MIL PVC LINER WITH SAND BEDDING AND NON-WOVEN GEOTEXTILE



RIPRAP SEDIMENT FOREBAY
SPILLWAY PROFILE
FOR BIORETENTION AREA
NOT TO SCALE

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SCALE: NTS

MAY 9, 2023

Seacoast Division

TFM

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

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