



-- EASEMENTS*

 $\label{eq:minimum} \textbf{MINIMUM DWELLING UNIT AREA IN RURAL, RESIDENTIAL, AND AGRICULTURAL ZONE = 90,000 \text{ S.F.}$

PROPOSED LOTS = 13 UNITS

-- STEEP SLOPES OVER 20%

AREAS REMOVED FOR

REMAINING! AND

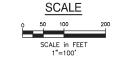
ZONING SUMMARY:

ZONE - RURAL, RESIDENTIAL, AND AGRICULTURAL, RESOURCE PROTECTION AND AQUIFER PROTECTION OVERLAY

APPLICABLE SPACE AND BULK REGULATIONS PRINCIPAL STRUCTURE: FRÖNT SETBACK SIDE SETBACK REAR SETBACK OPEN SPACE OPEN SPACE NOT WETLANDS

GENERAL NOTES:

- 2. CONTOURS ARE FROM GIS.
- EACH LOT WILL BE LIMITED TO 20,000 SQUARE FEET OF DEVELOPED AREA (LAWN INCLUDED)
- 3-INCHES IN DIAMETER. ANY STREAM CROSSING WILL SPAN THE WIDTH OF THE STREAM BED BY A MINIMUM OF 3' ON EITHER SIDE OF THE STREAM.
- 5. NO DUG WELLS ARE PERMITTED ON ANY PART OF THE PROPERTY.
- 6. THERE IS A 100' SETBACK FROM ALL STREAMS ON THE PROPERTY.
- 7. ALL RESIDENTIAL STRUCTURES SHALL HAVE SPRINKLERS IN ACCORDANCE WITH THE MOST RECENT STATE FIRE CODES.
- ANY STONE WALLS MOVED DURING THE CONSTRUCTION OF THE ROAD OR RESIDENTIAL LOTS WILL NEED TO BE RELOCATED ON SITE.
- 9. OPEN SPACE SHALL REMAIN VEGETATED.
- 10. FURTHER SUBDIVISION OF THE OPEN SPACE AND ITS USE FOR THAN NONCOMMERCIAL RECREATION, AGRICULTURE, OR CONSERVATION PURPOSES, EXCEPT FOR EASEMENTS FOR UNDERGROUND UTLIFIES, SHALL BE PROHIBITED, STRUCTURES AND BULDINGS ACCESSORY TO NON-COMMERCIAL RECREATIONAL OR CONSERVATION USES MAY BE ERECTED ON COMMON LAND ONLY WITH PLANNING SOARD REVIEW AND APPROVAL.
- 11. ALL DEDICATED OPEN SPACE SHALL NOT BE USED FOR FUTURE BUILDING LOTS.
- 2. DURING STREET CONSTRUCTION, THE ENTIRE RIGHT OF WAY SHALL NOT BE CLEARED UNLESS CLEARING IS INCESSARY FOR UTILITIES, DRAINAGE OR OTHER UNFRASTRUCTIONE NECESSATES BEYOND THE CLEAR ZONE, FOLLOWING STREET CONSTRUCTION, THE DEVELOPER OR CONTRACTOR SHALL CONDUCT A THOROUGH CLEANLY OF STUMPS AND OTHER DEBRIS RROM THE ENTIRE RIGHT OF BWY CREATED DURING THE STREET CONSTRUCTION PROCESS, IF ON-SITE DISPOSAL OF THE STUMPS AND DEBRIS STEET SHALL ES INCICATED ON THE PLAN AND BE SUITABLY COVERED WITH FLIL AND TOPSOIL, LIMED, FERTILIZED, AND SEEDED,
- FORESTED BUFFERS WILL BE MARKED IN THE CENTER OF EACH LIMIT AND PINNED AT THE CONNERS. THE BUFFER MARKINGS WILL COMPLY WITH THE CURRENT MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARDS SET FORTH IN THEIR STORMMATER BMP MANUAL.
- 14. ALL DRIVEWAYS WILL HAVE A 15" HDPE CULVERT CENTERED IN THE DRAINAGE SWALE
- TRAIL SYSYEM WILL BE COMPLETED PRIOR TO ANY CERTIFICATE OF OCCUPANCY PERMITS BEING ISSUES.



Grange Engineering LLC 241 Rowe Station Road

New Gloucester, ME 04260

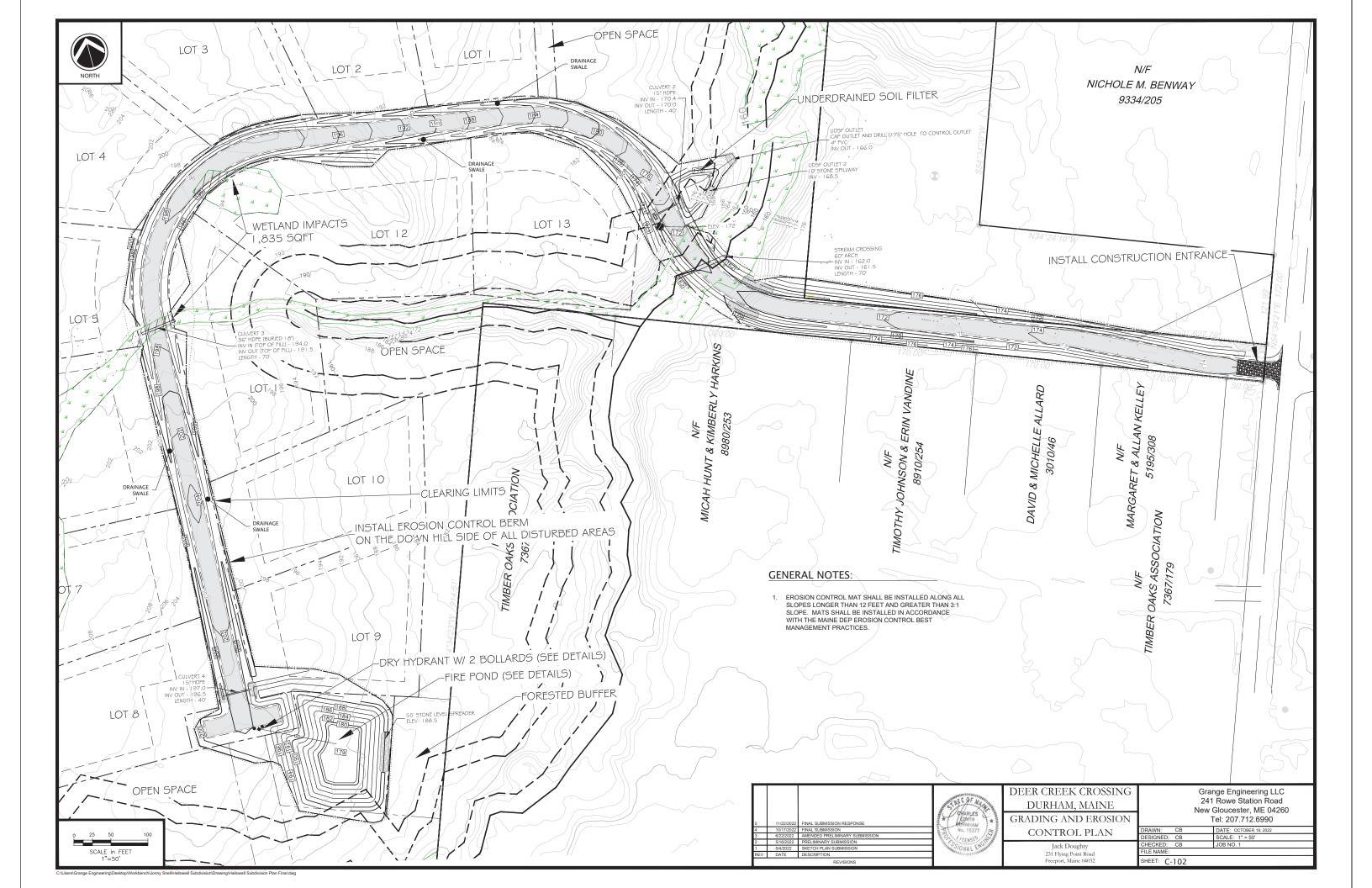
DEER CREEK CROSSING MAP 7 LOT 32A OVERALL SITE LAYOUT PLAN

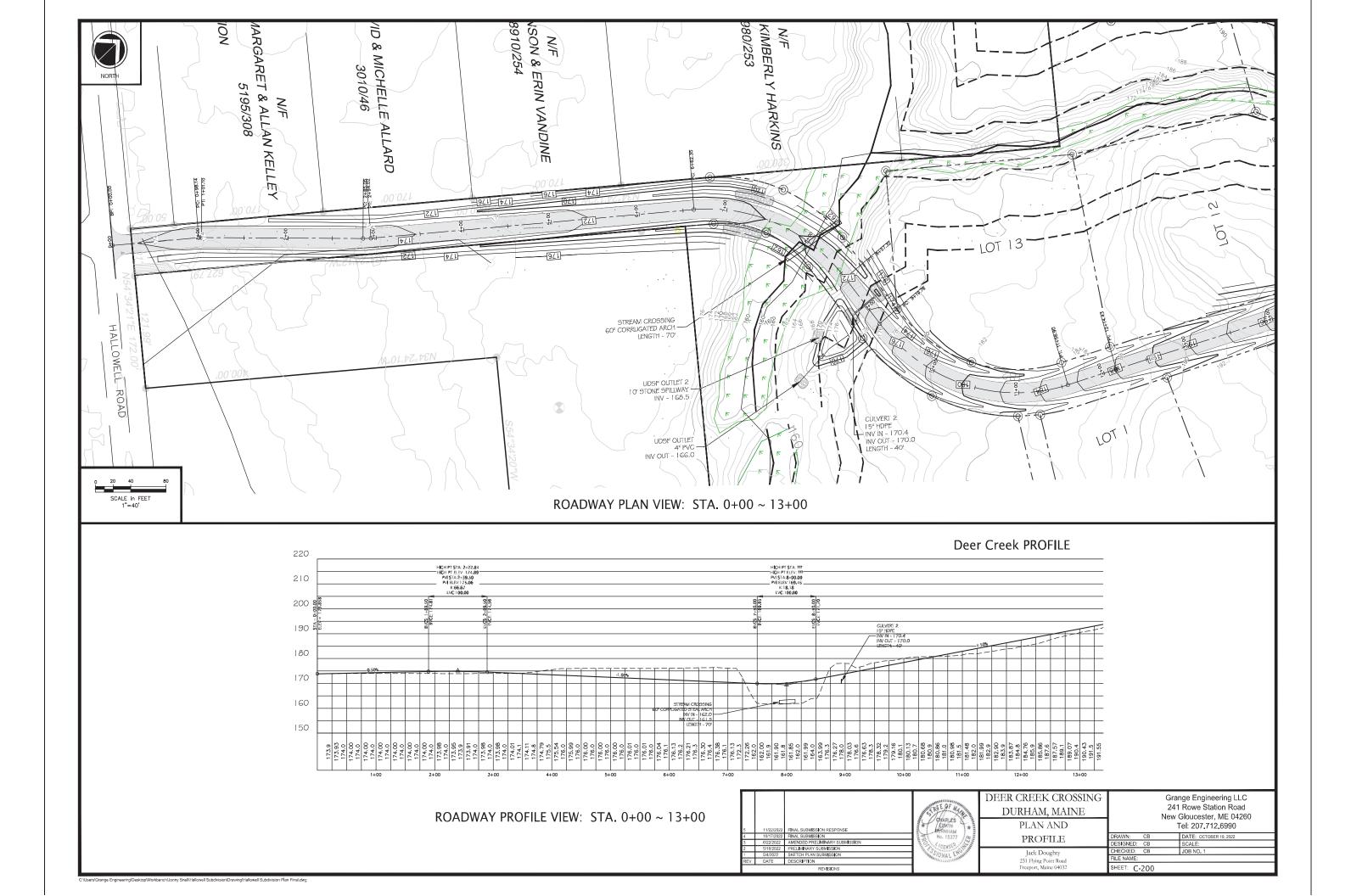
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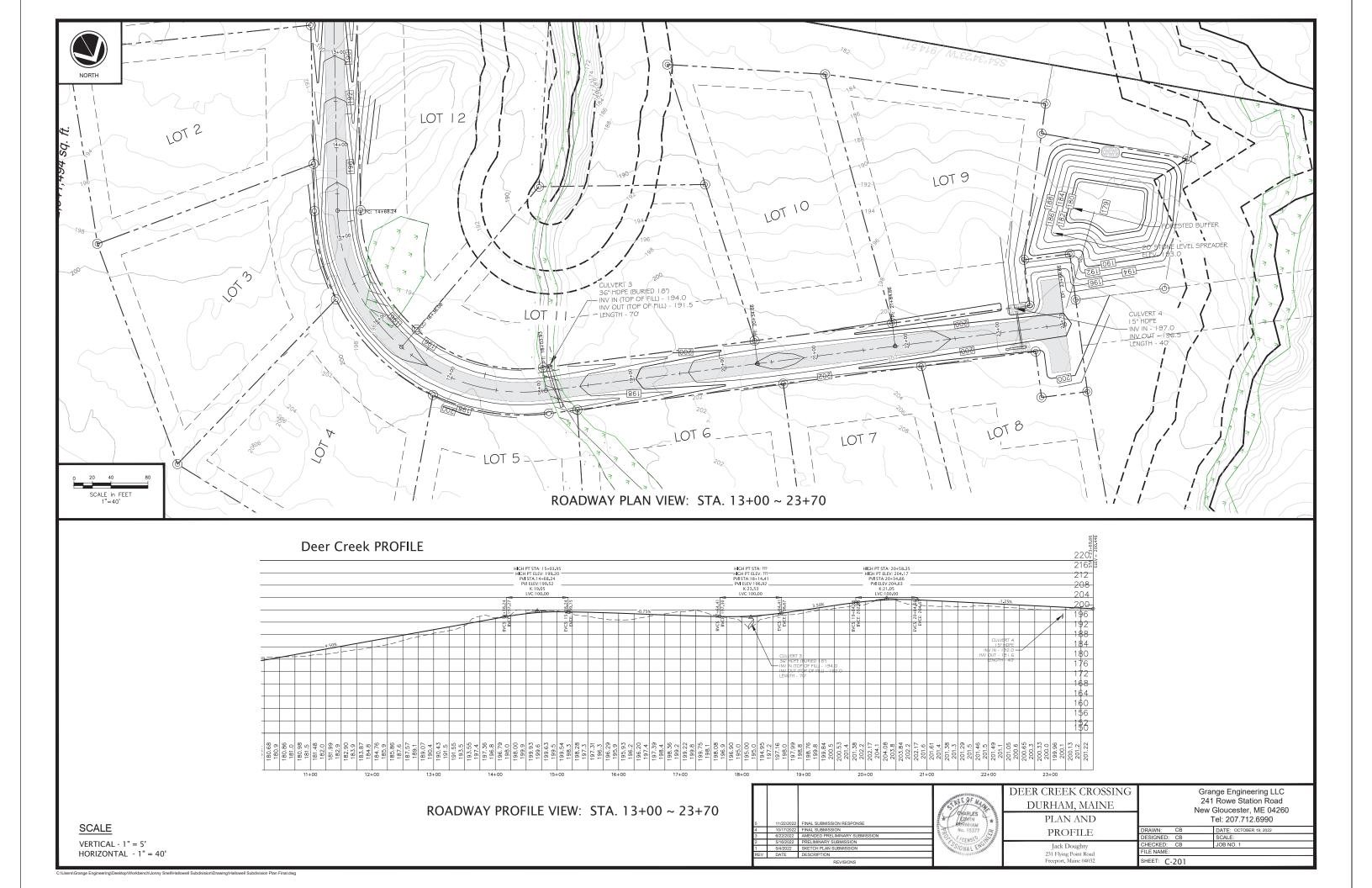
Jack Doughty 231 Flying Point Road Freeport, Maine 04032

Tel: 207.712.6990 DATE: OCTOBER 19, 2022 FILE NAME: SHEET: C-101









A. SOIL EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY FROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCES. SILITATION FENCE, EROSION CONTROL MIX, STONE CHECK DAMS, HAY BALE BARRIERS, CATCH BASIN SEDIMENT COLLECTION BAGS, EROSION CONTROL BLANKET, AND TEMPORARY SE AND MULCHING AS REQUIRED. PERMANENT DEVICES INCLUDE THE USE OF RIP RAP AT EXPOSED STORM DRAIN AN) CULVERT INLETS AND OUTLETS, AND PERMANENT VEGETATION.

- 1. IT IS ANTICIPATED THAT CONSTRUCTION MAY BEGIN AS SOON AS POSSIBLE FOLLOWING RECEIPT OF NECESSARY PERMITS.
- 2. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION & SEDIMENT CONTROL BMPS. -MANUAL FOR DESIGNERS AND ENGINEERS (2016), OR AS CURRENTLY REVISED OR U.S. ENVIRONMENTAL PROTECTION AGENCY PUBLICATION 8327R-82-006 (SEPTEMBER, 1992) STORM WATER MANAGEMENT FOR CONSTRUCTION, CHAPTER 3, WHICHEVER IS MCRE STRINGENT.
- 3. ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERSONNEL AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES,
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/ REPLACEMENT/ MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE \$TABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF ACCEPTABLE PERMANENT \$TABILIZATION FOR VARIOUS COVER TYPES
- FOR SECDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
- b. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF
- © FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILZATION ACCORDING TO THE APPROVED APPLICATION &
- d. FOR AREAS STABILIZED WITH RIP RAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RP RAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIP RA*. STONE MUST BE SIZED APPROPRIATELY.
- e. PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
- f. FOR OPEN CHANNELS, PERMANENT STARILIZATION MEANS THE CHANNEL IS STARILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT WITH NITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE UNING, UNDERCUTTING OF THE BANKS, OR DOWN CUTTING OF THE CHANNEL

B. EROSION AND SEDIMENTATION CONTROL MEASURES

- 1. PRIOFI TO THE REGINNING OF CONSTRUCTION THE TEMPORARY SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNERS REPRESENTATIVE, OR ENGINEERS BLIT FENCE SHALL BE INSTALLED ALONG THE DOWNGRADIENT SIDE OF CONSTRUCTION WORK AREAS, WITH LOCATIONS BEIN ADJUSTED ALONG WITH THE CONSTRUCTION PHASING AREAS. THE CONTRACTOR MAY USE EROSION MIX IN PLACEOF SINGLE SILT FENCE BARRIER. IN AREAS WHERE THE GRADE IS STEEPER THAN 8% SILT FENCE AND EROSION CONTROL MIX SHOULD BE USED.
- 2. THE SILT FENCE SHALL BE INSTALLED PER THE DETAIL PROVIDED IN THE PLAN SET AND INSPECTED IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST WEEKLY IN THE ABSENCE OF ISOINFICANT RAINFALL. ANY REQUIRED REPAIRS WILL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE SILT BARRIERS. THIS SEDIMENT WILL BE SPREAD AND STABILIZED IN AREAS OF THE SITE NOT SUBJECT TO ECOSION. THE CONTRACTOR UPSTREAM SIDE OF THE SILT BARRIERS. THIS SEDIMENT WIL, BE SPREAD AND STABILIZED IN AREAS OF THE SITE NOT SUBJECT TO EROSION. THE CONTRACTOR SHALL BREEPAIRS MINEDIATELY IF THERE ARE ANY SIGNS OF EROSIONS OF SEDIMENTATION BELOW THE FENCELINE. IF SUCH RESOLOIS IN SOBSERVED, THE CONTRACTOR SHALL TAKE PROACTIVE ACTION TO 10 IDENTIFY THE CAUSE OF THE EROSION AND TAKE ACTION TO AVID IT SE RECOCURRENCE. PROPER PLACEMENT OF STAKES AND KEVING THE BOTTOM OF THE FARRIC NOT HIS EROUND IN SCRITCHAL TO THE FENCES EFFECTIVENESS. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE. THE BARRIER SIGNLE BE REPLACED WITH A STONE CHECK DAM AND MEASURES TAKEN TO AVID THE CONCENTRATION OF FLOWS NOT INTENDED TO BE DIRECTED TO THE SILT FENCE. SILT FENCE SHALL BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION.
- 3. TEMPORARY SEDIMENT SUMPS WILL PROVIDE SEDIMENTATION CONTROL FOR STORMWATER RUNOFF FROM DISTURBED AREAS DURING CONSTRUCTION UNTIL STABLIZATION HAS BEEN ACHIEVED.
- 4. A COISTRUCTION ENTRANCE WILL BE CONSTRUCTED AT ALL ACCESS POINTS ONTO THE SITE TO PREVENT TRACKING OF SOIL ONTO ADJACENT LOCAL ROADS AND STREETS
- 5. SILT LOGS MAY BE INSTALLED IN LIEU OF STONE CHECK DAWS PROVIDED THE DEVICES ARE WELL ANCHORED, AND IF PRIOR APPROVAL IS RECEIVED FROM THE PROJECT ENGINEER
- 6. SILTSACKS™ WILL BE UTILIZED IN CATCH BASINS IN OR NEAR WORK AREAS AT RISK FROM RECEIVING TRANSPORTED SEDIMENT
- 7. ALL CATCH BASINS AND FIELD INLETS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED DURING CONSTRUCTION.
- 8. REMCVAL OF SOD, TREES, BUSHES AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT. 9. GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPCSED OF IN AN APPROVED MANNER
- 10. ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STO(KPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE WILL RESULT. IF A STOCKPILE IS NECESSARY, THE SIDE SLOPES OF THE TOPSOIL STOCKPILE WILL NOT EXCEED 2-1. TOPSOIL STOCKPILES WILL BE TEMPORABILY SECRED WITH AROOSTOCK PRE, ANNIOT OR PERENNIAL RYE GRASS WITHIN 7 DAYS OF FORMATION, OR TEMPORARILY SECRED WITH AROOSTOCK PRE, ANNIOT DE PRENNIAL RYE GRASS WITHIN 7 DAYS OF
- 11. TEMPORARY DIVERSION BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY TO PREVENT OFF-SITE DRAINAGE FROM ENTERING THE WORK
- 12. TEMPORARY STABILIZATION SHALL BE CONSTRUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, PRIOR TCANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN LASTING MORE THAN ONE DAY. TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-FRODABLE COVER.
- 13. TEMPORARY SEEDING SPECIFICATIONS: WHERE SEEDBED HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS. LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED, APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB, PER 1,000 SQUARE FEET) AND 10-10-10 (N-P205-K20) FERTILIZE AT A RATE OF 600 LBS PER ACRE (13.8 LB. PER 1,000 SQUARE FEET), UNIFORMLY APPLY SEED AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRES, AND ANCHOR AS NECESSARY. RECOMMENDED TEMPORARY SEEDING DATES AND APPLICATION RATES ARE AS

AROOSTOOK RYE: RECOMMENDED SEEDING DATES: 8/15 -10/1

APPLICATION RATE: 112 LBS/ACRE

ANNUAL RYE GRASS: RECOMMENDED SEEDING DATES: 4/1 - 7/1

PERENNIAL RYE GRASS: RECOMMENDED SEEDING DATES: 8/15 - 9/15

- APPLICATION RATE: 40 LBS/ACRE
- PERMANENT SEEDING SPECIFICATION. IF A LANDSCAPE PLAY HAS BEEN PREPARED FOR THE PROJECT, SOIL PREPARATION AND SEED SPECIFICATIONS OF THAT PLAN SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING SECONDETED BETWEEN APPLAY SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING BE COMPLETED BETWEEN APPLAY SHALL SUPERSEDE THESE APPLAY SHALL SUPERSEDE THESE SEEDING BE COMPLETED BETWEEN APPLAY SHALL SUPERSEDE THE SEEDING BE COMPLETED BETWEEN APPLAY SHALL SHALL SHALL SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 15HALL BE SEEDED WITH AROOSTOCK RYE OR MILCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1
- a. APPLY TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES. MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 6 INCHES.
- b. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND GRANULAR, COMMERCIAL-GRADE, 10-10-10 (N-P205-K20) FERTILIZER AT A RATE OF 800 LBS PER ACRE (18.4 LBS PER1,000
- c. UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRES, AND
- d. THE SEED MIXTURE FOR LAWN AND FILTRATION BASIN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BYWEIGHT AS FOLLOWS

30% CREEPING RED FESCUE

50% KENTUCKY BLUEGRASS

20% ITALIAN/PERENNIAL RYE GRASS NOTE: SEED MIXTURE SHALL CONSIST OF AT LEAST TWO VARIETIES OF EACH TYPE OF GRASS. WHEN USED IN A FILTER BASIN, STORMWATER SHALL NOT BE DIRECTED TO THE BASIN UNTIL THE GRASS IS ESTABLISHED.

15. MULCH ALL AREAS SEEDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE.

- 1. DITCH LININGS, STONE CHECK DAMS, AND RIP RAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF CULVER
- 2. RIP RAP REQUIRED AT CULVERTS AND STORM DRAIN INLETS AND OUTLETS SHALL CONSIST OF FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF
- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 15%. IN THE 3ASE OF DITCHES NOT OTHERWISE PROTECTED, AND
 ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (E.G. WETLANDS AND WATER BODIES). EROSION CONTROL BLANKET SHALL BE
 INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 4. TEMPORARY CONTROL MEASURES, SLCH AS SILT FENCE, SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED

C. SPECIAL MEASURES FOR SUMMER CONSTRUCTION

- DURING DRY SUMMER CONDITIONS, THE CONTRACTOR SHALL:
- IMPLEMENT A PROGRAM TO APPLY DUST CONTROL MEASURES ON A DAILY BASIS EXCEPT THOSE DAYS WHERE PRECIPITATION IS SUFFICIENT TO SUPPRESS DUST FORMATION. THIS PROGRAM SHALL EXTEND TO AND INCLUDE SWEEPING OF ADJACENT STRETS.
- 2 SPRAY ANY MULCHES WITH WATER AFTER ANCHORING TO DAMPEN THE SOIL AND ENCOURAGE EARLY GROWTH, SPRAYING MAY BE REQUIFED SEVERAL TIMES. TEMPORARY SEED MAY BE REQUIRED UNTIL THE LATE SUMMER SEEDING SEASON
- 3. COVER STOCKPILES OF FINE-GRAINED MATERIALS, OR EXCAVATED SOILS WHICH ARE SUSCEPTIBLE TO EROSION TO PROTECT FROM THE INTENSE, SHORT-DURATION STORMS WHICH ARE MORE PREVALENT IN THE SUMMER MONTHS.
- 4. TAKE ADDITIONAL STEPS NEEDED, INCLUDING WATERING, OR COVERING EXCAVATED MATERALS TO CONTROL FUGITIVE DUST EMISSIONS TO MINIMZE R IN VISIBILITY AND THE AIRBORNE DISBURSEMENT OF FINE-GRAINED SOILS. THIS IS PARTICULARLY IMPORTANT GIVEN THE POTENTIAL PRESENCE OF SOIL CONTAINMANTS, AND THEIR PROXIMITY ALONG THE ADJACENT STREETS AND PROPERTIES.
- 5. THESE MEASURES MAY ALSO BE REQUIRED IN THE SPRING AND FALL DURING THE DRIER PERIODS OF THESE SEASONS

D. WINTER CONDITIONS

- 1. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1ST THROUGH APRIL 15TH. IF AREAS WITHIN THE IT MEASURES OUTLINED ABOVE BY NOVEMBER TECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS. NO MORE THAN ONE ACRE OF THE STE MAY BE WITHOUT STABILIZATION AT ONE TIME
- 2. SILT FENCE: IN LIEU OF PROVIDING THE 4" X 4" TRENCH, FOR FROZEN GROUND, STONY SOIL, THE PRESENCE OF LARGE ROOTS, OR OTHER FROHIBITIVE ONS, THE BOTTOM 8" TO 12" OF THE FABRIC MAY BE LAID ON EXISTING GRADE AND BACK FILLED WITH STONE ANCHORING MATERIAL, AS SHOWN ON THE DRAWINGS.
- 3. HAY MULCH SHALL BE APPLIED AT TWIZE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
- AF 1EK NOVEMBER 151 UK I IHE FIRST BILLING FRUST FUR I IHE REGION AND BEFUNE SNOW FALL, ALL EXPOSED AND DISTURBED AREAS NOTTO UNDERGO FURTHER DISTURBANCE ARE TO HAVE DORMANT SEEDING. THE DORMANT SEEDING METHOD: PREPARE THE SEEDBED LIME AND FERTILIZE, APPLY THE SELECTED PERMANENT SEED MIXTURE AT DOUBLE THE REGULAR SEEDING ARTE, AND MULCH AND ANDIOR DORMANT SEEDING SIED TO BE AND-ORDED TEXTREMELY WELL IANT SEEDING REQUIRES INSPECTION AND RESEEDING AS NEEDED IN THE SPRING. ALL AREAS WHERE COVER IS INADEQUATE MUST BE IMMEDIATELY RESEEDED AND MULCHED AS SOON AS POSSIBLE
- 5. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1ST, OR WILL 3E WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BEDOR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 6. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.

- 1. SPILL PREVENTION, CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON-SITE, INCLUDING STORAGE ACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORM WATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND
- 2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS ANDOTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE PRINKING TO AN INFLINATION AREA. AN INFLITANT AREA 'IN INFLITANT AREA' IS ANY AREA OF THE SITE THAT BY DESIGN OR AS ARESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFLITANTES INTO THE SOIL DIKES, BERNS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TC ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
- 3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
- 4. DEBRIS AND OTHER MATERIAL. LITTEF, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER, MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE
- 5. COMPLY WITH ALL LOCAL AND STATE REGULATIONS FOR THE REMOVAL AND DISPOSAL OF CONSTRUCTION DEBRIS AND WASTE.
- 6. TRENCH OR FOUNDATION DE-WATERING. THE COLLECTED WATER REMOVED FROM THE PONJED AREA. EITHER THROUGH GRAVITY OR PUMPING. MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED AREAS THAT ARE SPECIFICALLY DESIGNATED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFER DAM SEDIMENTATION EASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE.
- NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORWATER DISCHARGES. WHERE ALLOWED NON-STORWATER DISCHARGES WHERE ALLOWED NON-STORWATER DISCHARGES. WHERE ALLOWED NON-STORWATER COMPONENTIS OF THE DISCHARGE.

 NON-STORMWATER COMPONENTIS OF THE DISCHARGE.

- 1. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORM WATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORM WATER CONTROL MEASJRES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AND BEFORE AND AFTER A STORM EVENT, PRID'R TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORM WATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERSON DISTURED COMPANION DOCUMENTS, MIST CONDUCT THE INSPECTION. THIS PERSON NUST BE IDENTIFIED IN THE INSPECTION LOG, IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE MODIFIED OF IFADDITIONAL BMPS ARE NECESSARY. IMPLEMENTATION MUST BE COMPLETED WITHIN TO ALLENDARD MAYS AND FROM THE AND STANDARD MAY SHOW STANDARD AND AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST SE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- 2. AN INSPECTION AND MAINTENANCE LCG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING HE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES.
- 3. INSPECTION OF THE PROJECT WORK SITE SHALL INCLUDE:
- a. IDENTIFICATION OF PROPER EROSION CONTROL MEASURE INSTALLATION IN ACCORDANCE WITH THE EROSION CONTROL DETAIL SHEET.
- b. DETERMINE WHETHER EACH EROSION CONTROL MEASURE IS PROPERLY OPERATING, IF NOT, IDENTIFY DAMAGE TO THE CONTROL DEVICE AND DETERMINE REMEDIAL MEASURES.
- c. IDENTIFY AREAS WHICH APPEAR VULNERABLE TO EROSION AND DETERMINE ADDITIONAL EROSION CONTROL MEASURES WHICH SHOULD BE USED TO
- d. INSPECT AREAS OF RECENT SEEDING TO DETERMINE PERCENT CATCH OF GRASS. A MINIMUM CATCH DF 90 PERCENT IS REQUIRED PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
- 4. IF INSPECTION OF THE SITE INDICATES A CHANGE SHOULD BE MADE TO THE EROSION CONTROL PLAN, TO EITHER IMPROVE EFFECTIVENESS OR CORRECT A SITE-SPECIFIC DEFICIENCY, THE INSPECTOR SHALL IMMEDIATELY IMPLEMENT THE CORRECT/I/E MEASURE AND NOTIFY THE OWNER OF THE CHANGE.
- 5. ALL CERTIFICATIONS, INSPECTION FORMS, AND WRITTEN REPORTS PREPARED BY THE INSPECTOR(S) SHALL BE FILED WITH THE OWNER, AND THE PERMIT FILL AINED ON THE PROJECT SITE. ALL WRITTEN CERTIFICATIONS, INSPECTION FORMS, ANDWRITTEN REPORTS MUST BE FILED WITHIN ONE (1) WEEK OF THE INSPECTION DATE.
- 6. THE PERMITTEE SHALL RETAIN COPIES OF THE ESC PLAN AND ANY FORMS, SUBMISSIONS, REPORTS, OR OTHER MATERIALS REQUIRED BY THE GENERAL PERMIT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
- 7. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR COMPLYING WITH THE EROSION/SEDIMENT CONTROL REPORT, INCLUDING CONTROL OF FUGITIVE DUST, AND SHALL BE RESPONSIBLE FOR ANY MONETARY PENALTIES RESULTING FROM FAILURE TO COMPLY WITH THESE STANDARDS.

C. CONSTRUCTION SCHEDULE & SEQUENCE

(TIMELINES ARE APPROXIMATE AND WILL BE DEPENDENT ON WEATHER AND SITE CONDITIONS).

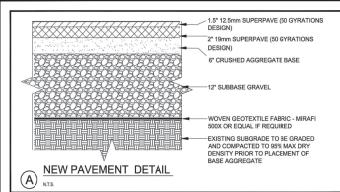
- I. PRE-CONSTRUCTION CONFERENCE: PRIOR TO ANY CONSTRUCTION AT THE SITE, REPRESENTATIVES OF THE CONTRACTOR, THE ARCHITECT, THE OWNER, AND THE SITE DESIGN ENGINEER SHALL MEET TO DISCUSS THE SCHEDULING OF THE SITE CONSTRUCTION AND THE DESIGNATION OF THE RESPONSIBLE PARTIES FOR IMPLEMENTING THE PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING THE MEETING. PRIOR TO THE MEETING, THE CONTRACTOR WILL PREPARE A DETAILED SCHEDULE AND A MARKED-UP SITE PLAN INDICATING AREAS AND COMPONENTS OF THE WORK, AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL CONDUCT A MEETING WITH EMPLOYEES AND SUB-CONTRACTORS TO REVIEW THE EROSION CONTROL PLAN, THE CONSTRUCTION TESTINGUES WHICH WILL BE EMPLOYED TO MIPLEMENT THE PLAN AND PROVIDE A LIFE OF TETENDESS AND ITEMS DISCUSSED AT THE MEETING TO THE CWINER. THREE COPIES OF THE SCHEDULE, THE CONTRACTOR'S MEETING MINUTES, AND MARKED-UP SITE PLAN SHALL BE PROVIDED TO THE OWNER.
- 2. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE REQUIRED TO INSURE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES IS
 - a. INSTALL SAFETY AND CONSTRUCTION FENCE TO SECURE THE SITE FOR DEMOLITION.
 - b. INSTALL ALL PERIMETER SILTATION FENCE AND EROSION CONTROL BARRIERS. PARTICULAR ATTENTION SHALL BE PAID TO AREAS UPSTREAM OF PROTECTED NATURAL FESOURCES. SIGNS SHALL BE ERECTED PERIODICALLY ALONG THESE PERIMETER DARRIERS INDICATING THAT THE DUWNSTREAM AREAS ARE UPF LINITS TO ALL CONSTRUCTION ACTIVITIES.
 - c. INSTALL CONSTRUCTION ENTRANCES.
- d. MAINTAIN EXISTING PAVED AREAS FOR LAYDOWN AND ACCESS DURING INITIAL CONSTRUCTION ACTIVITIES.
- e. CCNSTRUCT ACTIVITIES ON THE SITE TO OPTIMIZE THE HANDLING OF MATERIALS AND RESTRICT THE DENUDED AREAS TO THE TIME STIPULATED
- f. CCNSTRUCT STABILIZED PADS FOR FOUNDATION AND BUILDING CONSTRUCTION
- g. MAINTAIN STABILIZED SITE ACCESS AND WORKING AREAS DURING BUILDING CONSTRUCTIO
- h INSTALL STORWATER BMP'S
- I. REMOVE EXISTING PAVEMENT AND INSTALL NEW PAVEMENT BASE GRAVEL MATERIALS TO RAISE THE SITE TO THE DESIGN SUBGRADE ELEVATION.
- j. INSTALL BINDER PAVEMENT.
- k LANDSCAPE (LOAM AND SEED).
- I. INSTALL SURFACE PAVEMENTS.
- m. INSTALL STRIPING, SIGNAGE, AND MISCELLANEOUS SITE IMPROVEMENTS.
- n. REVIEW AND PUNCH THE SITE.
- o. REMOVE ANY TEMPORARY EROSION CONTROL MEASURES.
- 3. THE CONTRACTOR MUST MAINTAIN AN ACCURATE SET OF RECORD DRAWINGS INDICATING THE DATE WHEN AN AREA IS FIRST DENUDED, THE DATE OF TEMPORARY STABILIZATION, AND THE DATE OF FIRML STABILIZATION. ON OCTOBER 1 OF ANY CALENDAR YEAR, THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN FOR STABILIZATION THE WINTER AND A DESCRIPTION OF WHAT ACTIVITIES ARE PLANNED DURING THE WINTER.

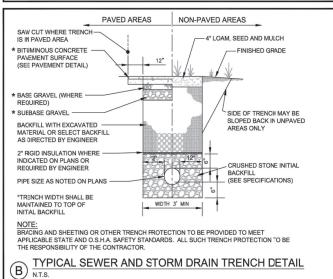
FINAL SUBMISSION RESPONSE

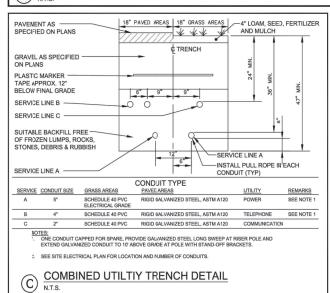
DEER CREEK CROSSING DURHAM, MAINE EROSION CONTROL NOTES

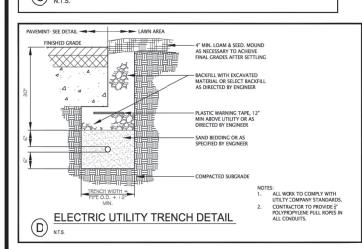
Grange Engineering LLC 241 Rowe Station Road New Gloucester, ME 04260 Tel: 207.712.6990 DATE: OCTOBER 19, 2022

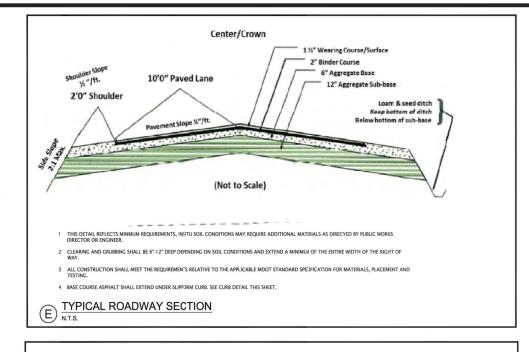
RAWN: DESIGNED: CB JOB NO. 231 Flying Point Road Freeport, Maine 04032 HEET: C-300

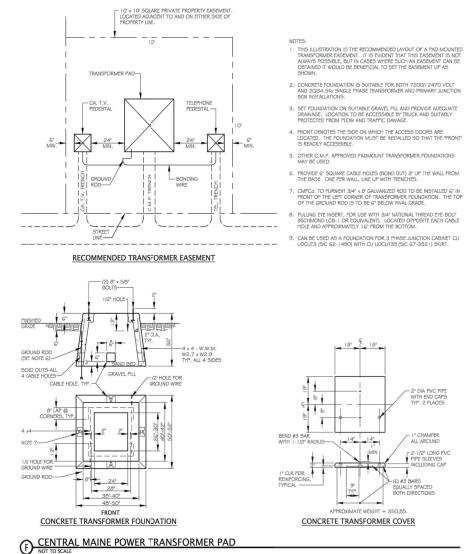




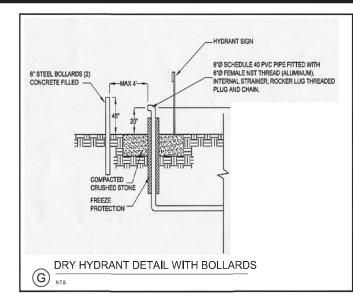








VIIIAO OLI



DRY HYDRANT NOTES:

THE DRY HYDRANT WILL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN STANDARDS AND ALL CONNECTIONS AND
MATERIALS WILL BE APPROVED BY THE FIRE CHIEF PRIOR TO INSTALLATION

AGGREGATE BASE

Sieve Designation	% By Weight Passing Square Mesh Sieves
2-inch	100%
1/2 inch	45-70%
1/4 inch	30-55%
No. 40	0-30%
No. 200	0-7%

*Aggregate for the base shall contain no particles of rock exceeding four (4") inches in any dimension.

AGGREGATE SUBBASE

Sieve Designation	% By Weight Passing Square Mesh Sieves
6-inch	100%
1/4 inch	25-70%
No. 40	0-30%
No. 200	0-7%

Gravel base shall be compacted over the full width and length of road bed including shoulders to a minimum of ninety-five (95%) percent of proctor density in accordance with American Society for Testing Materials Standard, ASTM D1556 and D1557.

DEE

Jack Doughty

231 Flying Point Road Freeport, Maine 04032

SUBMITTED FOR FINAL PLAN **REVIEW**

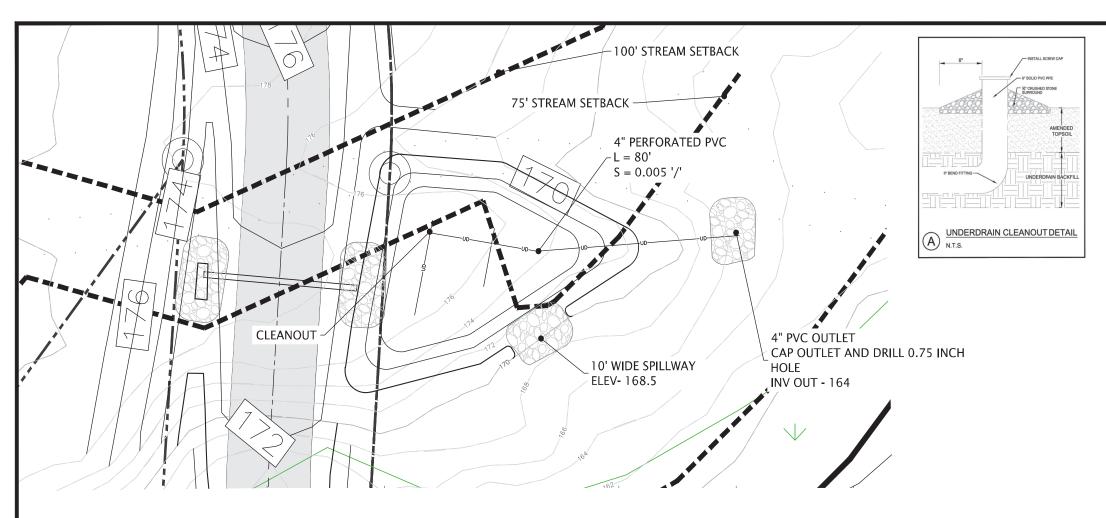
5	11/22/2022	FINAL SUBMISSION RESPONSE
4	10/17/2022	FINAL SUBMISSION
3	6/22/2022	AMENDED PRELIMINARY SUBMISSION
2	5/16/2022	PRELIMINARY SUBMISSION
1	5/4/2022	SKETCH PLAN SUBMISSION
REV	DATE	DESCRIPTION
REVISIONS		

PROMINITION OF PROMIN	OHARLE:	
PROMINE.	No. 1537	NG MENTINE

ER CREEK CROSSING			Grange Engineering LLC
DURHAM, MAINE			241 Rowe Station Road
CIVIL DETAILS		N	ew Gloucester, ME 04260 Tel: 207.712.6990
2	DRAWN:	CB	DATE: OCTOBER 19, 2022
4	DESIGNED:	CB	SCALE:

SHEET: C-302

we Station Road cester, ME 04260 207.712.6990 JOB NO. 2 FILE NAME:



EMERGENCY SPILLWAY NOTES

- 1. 12" OF 6" D50 WILL BE PLACED ALONG THE EXTENTS OF THE SPILLWAY.
- A NON-WOVEN GEOTEXTILE FABRIC WILL BE INSTALLED 2' BEYOND THE RIPRAP AND KEYED IN UNDER 6" OF LOAM AND SEED.
- 3. RIPRAP WILL EXTEND 5 FEET DOWN GRADIENT BEYOND THE TOP OF THE SPILLWAY.

UNDERDRAINED SOIL FILTER NOTES:

- UNDERDRAINED FILTER BASINS CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGITATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAYEMINT OR OTHER STRUCTURE. 90% NEGETATION COVER, OR OTHER PERMANENT STABILIZATION IS OUR UNLESS THE PRIORF FROM THE CONTRIBUTING DRAINAGE AREAS IS DIVERTED ACQUING THE LITER LITER SOIL MAIL LITER, HITER SOIL AND INCORPORATION FROM THE LITER. HITER SOIL AND INCORPORATION FROM THE LITER FILTER SOIL AND INDIVIDENCE MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 90% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFES OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.

 ONSTRUCTION OVERSIGHT: INSPECTION BY A FROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM.

 A FITER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED,

 A FITER THE FRAILANGE LAYER IS CONSTRUCTED AND PRIORT OT THE INSTALLATION OF THE FILTER MEDIA.

 A FITER THE FILTER MEDIA HAS BEEN INSTALLED AND SELEDED, BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.

 A FITER ONE YEAR TO INSPECT HEALTHOP THE VEGETATION AND MAKE CORRECTIONS, AND

 ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

- TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:

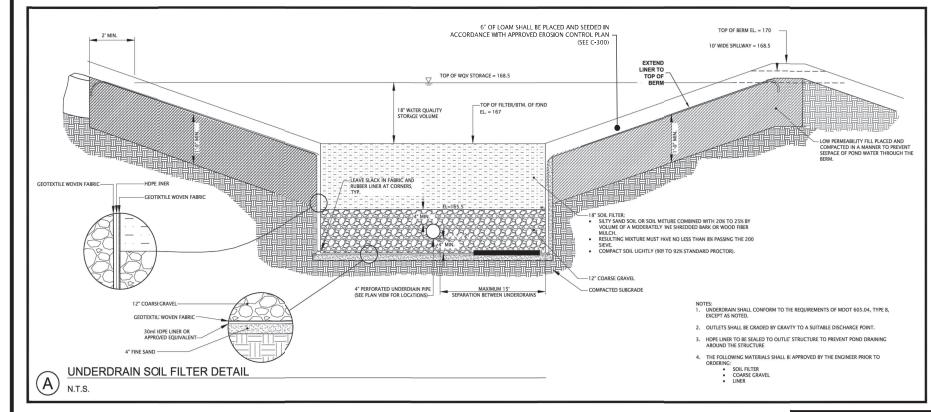
 SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE IESTING LABORATORY.

 PERFORMA SIZE VALANJES IS CONFORMING TO SEN ON THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE IESTING LABORATORY.

 PERFORMA SIZE VALANJES IS CONFORMING TO SEN ON THE SIZE OF SIZE SIZE AND THE SIZE OF SIZE OF SIZE AND THE SIZE OF SIZE
- AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
 PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OFMAXIMUM DRY DENSITY BASED ON ASTM D698.
- DEWATERING: A DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE THE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSON AND OFFSITE SEDIMENTATION OR WITHIN A RESOURCE. PLEASE FOLLOW THE DETAILS OF SUCH A PLAN.
- BASIC STANDARDS EROSION CONTROL MEASURES: MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL, PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO DE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MAY BE REPARAGE MINEDIATELY DURING CONSTRUCTION AND INDEED TO BE MEMBER. THAT AND EVEN THE EROSION AND SEDIMENT STRUCTION AND MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MINITAINED FOR THE EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE. THE MANE EROSION AND SEDIMENT CONTROL AND SEDIMENT CONTROL AND MAINTENANCE. THE MANE EROSION AND SEDIMENT CONTROL AND SEDIMENT SOIL AND WATER CONSERVATION DISTRICT AND THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS BEEN CHANGED TO THE "MAINE EROSION AND SEDIMENT CONTROL BIPS" PUBLISHED BY THE MAINE DEP IN 2003. ALL REFERENCES SERVINGED TO THE MAINE DEP IN AND AND SEDIMENT CONTROL BIPS" PUBLISHED BY THE MAINE DEP IN 2003. ALL REFERENCES SERVINGED TO THE MAINE DEP IN AND AND SEDIMENT CONTROL BIPS."

CONSTRUCTION OVERSIGHT REQUIRED:

THE APPLICANT WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER OR THIRD PARTY INSPECTOR TO INSPECT THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES. F NECESSARY. THE INSPECTING SHEEPERT THE POINTS CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABLIZED, THE INSPECTING SHORIER WILL NOTIFY PORTH THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AS WELL AS THE TOWN OF ARRIDGE. IN WRITING WITHIN 30 DAYS TO STATE THAT THEPOND HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA OR SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPICIFIED IN THE PLANS AND USED ON SITE.



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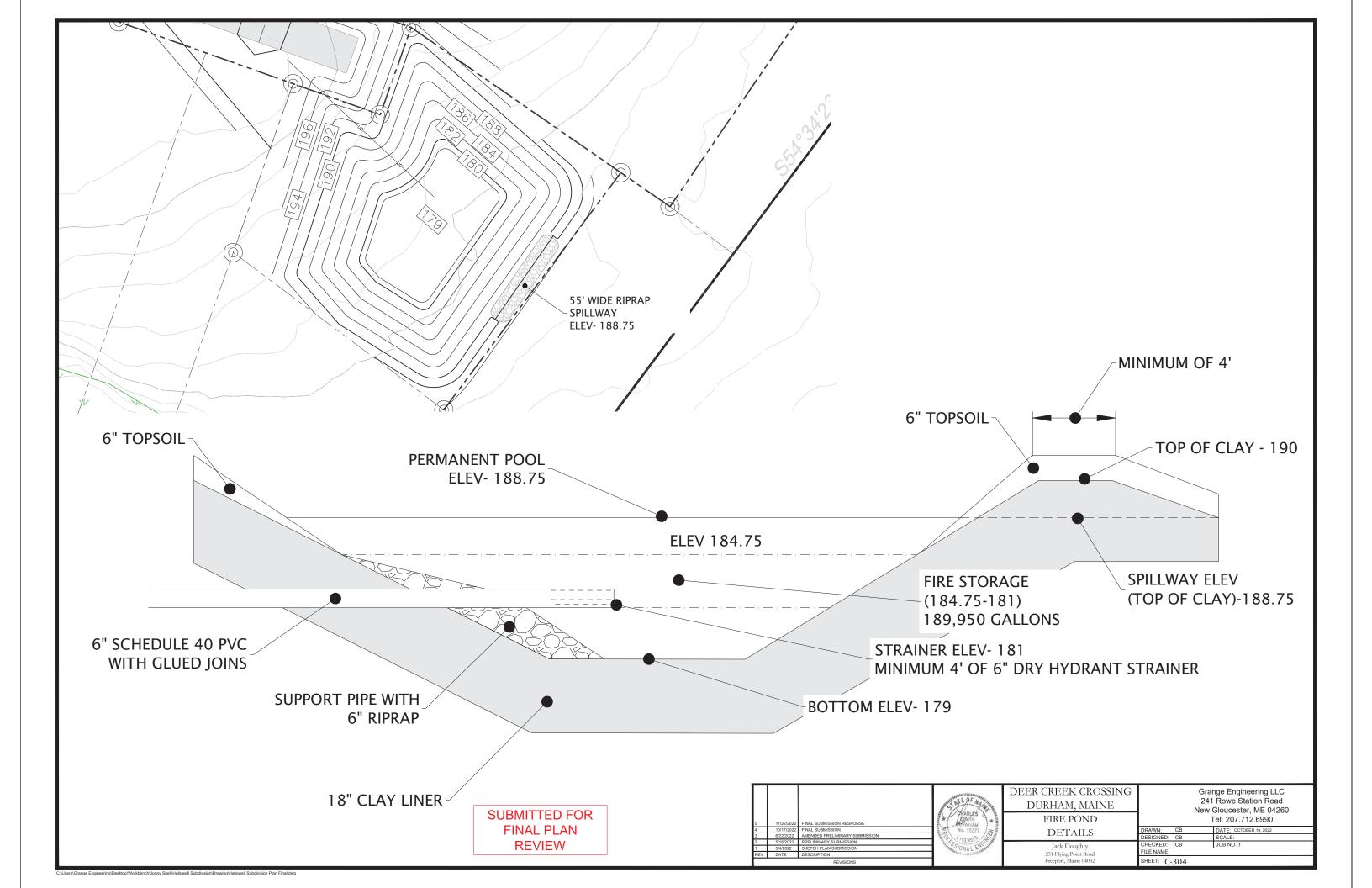


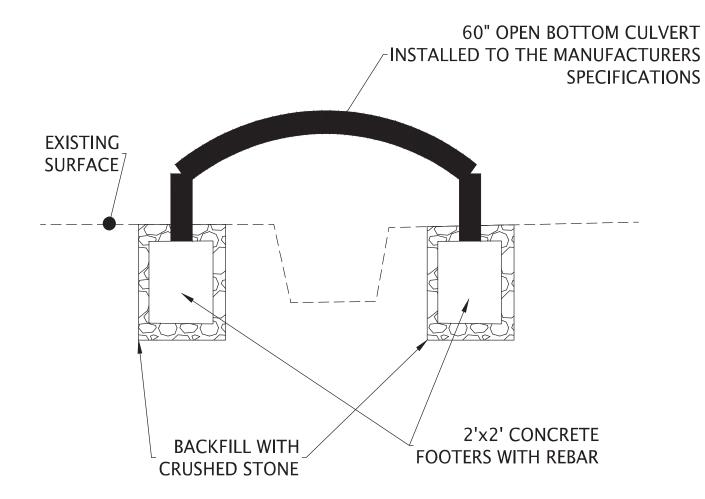
DEER CREEK CROSSING DURHAM, MAINE			Grange Engineering LLC 241 Rowe Station Road New Gloucester, ME 04260
CIVIL DETAILS			Tel: 207.712.6990
3	DRAWN:	CB	DATE: OCTOBER 19, 2022

DESIGNED: CE

Jack Doughty 231 Flying Point Road Freeport, Maine 0403:

FILE NAME: SHEET: C-303





- Span streams or size culverts or pipe arches such that they are wider than bankfull width (BFW). Spans are strongly preferred as they avoid or minimize disruption to the streambed, and avoid entire streambed reconstruction and maintenance inside the culvert or pipe arch (see 4, 5 & 7 below), which may be difficult in smaller structures. Footings and abutments for spans and scour protection should be landward of 1.2 times BFW. The width of culverts and arches at bankfull elevation should be ≥1.2 times BFW.
- 2. Embed pipe arch below the grade of the streambed. This is not required when ledge/bedrock prevents embedment, in which case spans are required. The following depths are recommended to prevent streambed washout, and ensure compliance and long-term success:
- a. ≥ 2 feet for box culverts and pipe arches,
- 3. Match the culvert gradient (slope) with the stream channel profile.
- 4. Construct crossings with a natural bottom substrate within the structure matching the characteristics of the substrate in the natural stream channel and the banks (mobility, slope, stability, confinement, grain and rock size) at the time of construction and over time as the structure has had the opportunity to pass substantial high flow events.
- 5. Construct crossings with appropriate bed forms and streambed characteristics so that water depths and velocities are comparable to those found in the natural channel at a variety of flows at the time of construction and over time. In order to provide appropriate water depths and

For the purposes of this GP, spans are bridges, three-sided box culverts, open-bottom culverts or arche that span the stream with footings landward of BFW. The use of bridge piers or similar supports does no prevent a structure from being considered as a span.

- 6. Banks on each side of the stream inside the crossing matching the horizontal profile of the existing stream and banks outside the crossing are recommended. This will allow terrestrial passage for wildlife and prevent flow from being focused to one side and scouring the bed, especially against the structure's sidewall which may undermine the footings in the case of To prevent failure, all constructed banks should have a height to width ratio of no greater than 1:1.5 (vertical:horizontal) unless the stream is naturally incised. Tie these banks into the up and downstream banks and configure them to be stable during expected high flows
- 7. All

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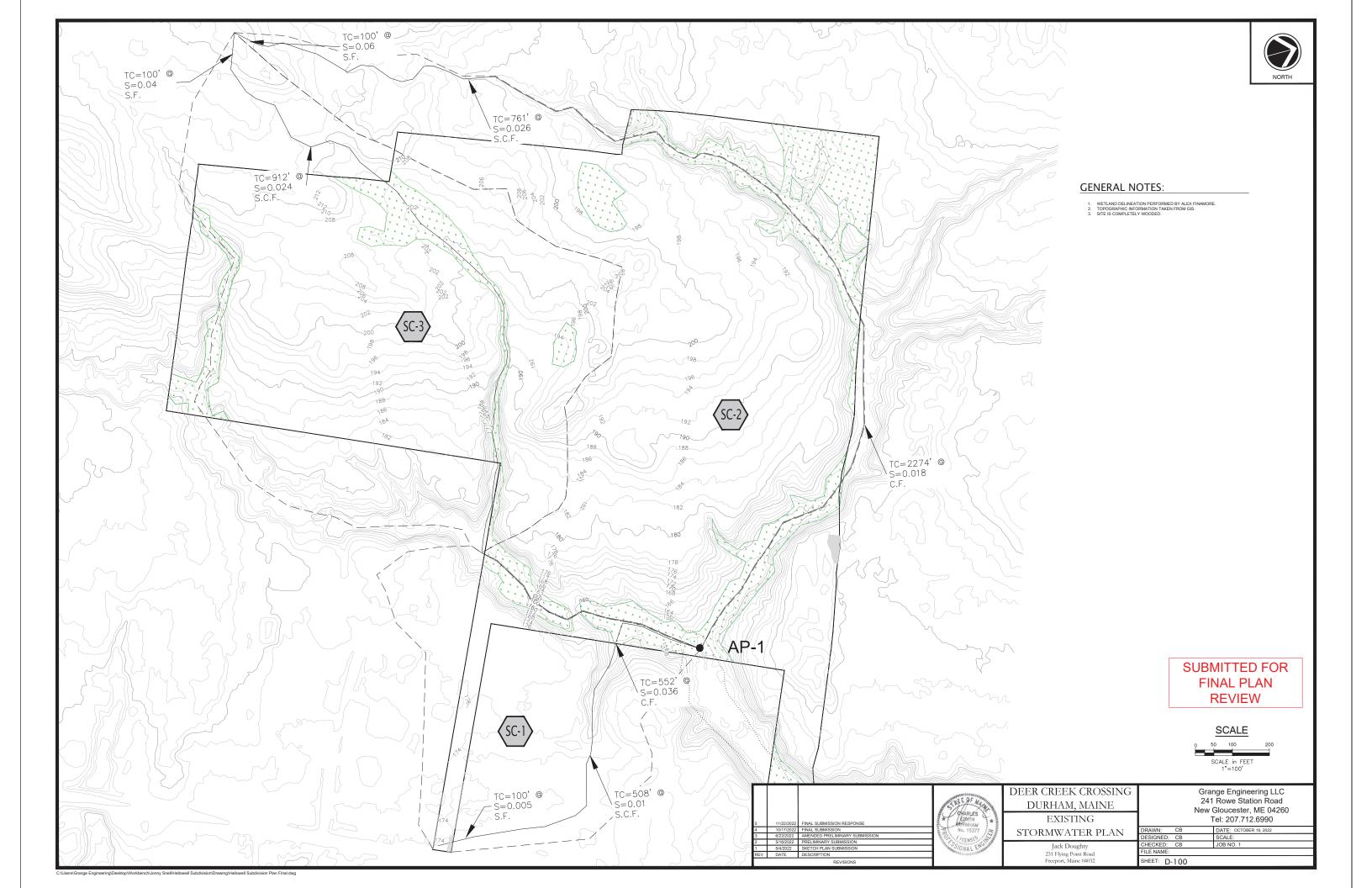
DEER CREEK CROSSING DURHAM, MAINE STREAM CROSSING **DETAILS**

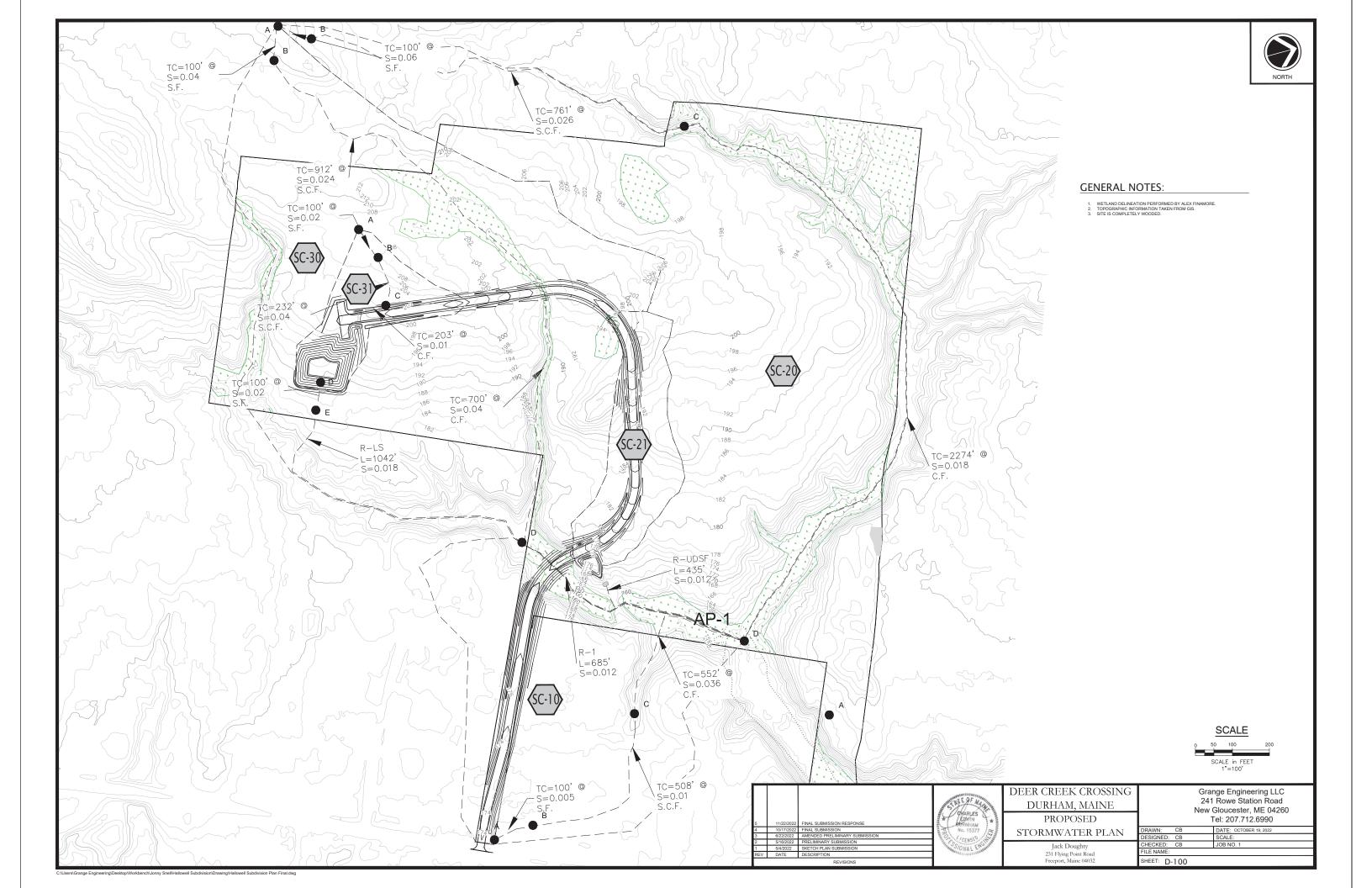
New Gloucester, ME 04260 Tel: 207.712.6990 DATE: OCTOBER 19, 2022

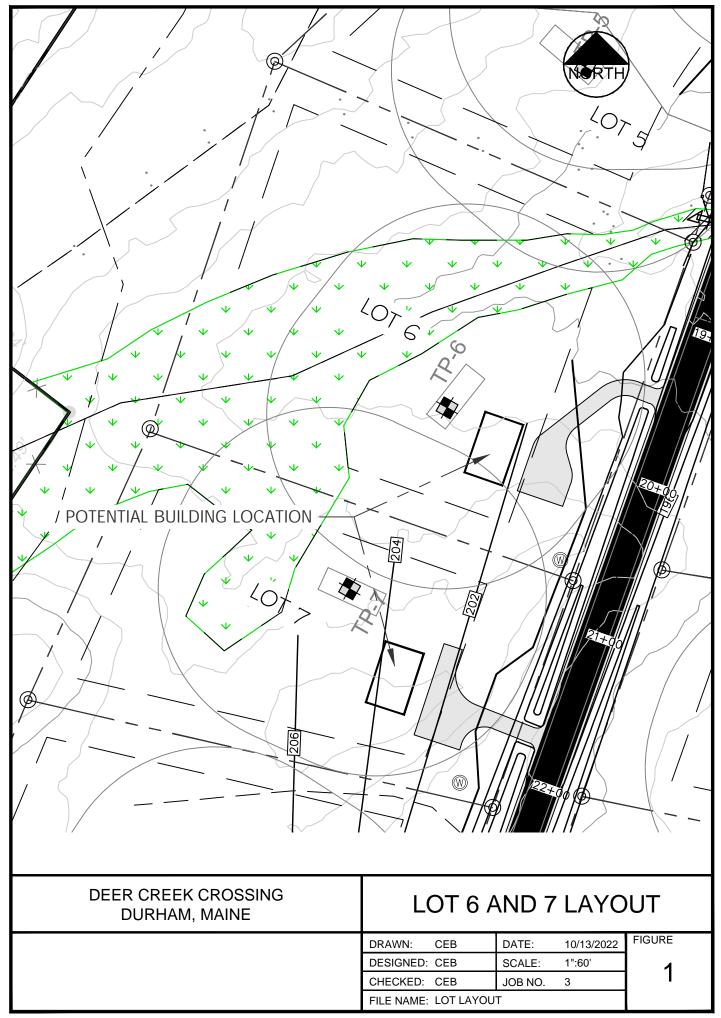
Jack Doughty 231 Flying Point Road Freeport, Maine 04032

SHEET: C-305

Grange Engineering LLC 241 Rowe Station Road







The SIMPLE Erosion and Sediment Control Plan

Use this simple ESC plan for small sites (houselots)

S = Stabilize disturbed soils before moving on!

Install sediment barriers before construction!

M = Mulch daily!

P = Protect natural buffers!

L = Limit the area of soil disturbance!

Evaluate and repair all erosion controls and sediment measures!

