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4661-0001 GRA03.dwg

PROJECT NAME

BOMBAZEE BROOK STREAM CROSSING WINDING HILL ROAD NORRIDGEWOCK, MAINE

CLIENT:

TOWN OF NORRIDGEWOCK 16 PERKINS STREET NORRIDGEWOCK, MAINE

SHEET TITLE:

TOPOGRAPHIC SITE PLAN, PROFILE, & SECTION

SHEET NO:

C-101

EROSION AND SEDIMENTATION CONTROL NOTES

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF SEDIMENT BARRIER, EROSION CONTROL MIX, STONE CHECK DAMS, HAY BALE BARRIERS, CATCH BASIN INLET BARRIERS, CATCH BASIN SEDIMENT COLLECTION BAGS, EROSION CONTROL BLANKET, AND TEMPORARY SEEDING AND MULCHING AS REQUIRED. PERMANENT DEVICES INCLUDE THE USE OF RIPRAP AT EXPOSED STORM DRAIN AND CULVERT INLETS AND OUTLETS, RIPRAP SLOPES, AND PERMANENT VEGETATION.

- 1. IT IS ANTICIPATED THAT CONSTRUCTION WILL BEGIN IN THE SUMMER OF 2023 FOLLOWING RECEIPT OF NECESSARY PERMITS.
- 2. THE PROJECT SHALL CONFORM TO THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERFORMANCE STANDARDS FOR EXCAVATIONS FOR CLAY, TOPSOIL, OR SILT IN ACCORDANCE WITH STATE EROSION CONTROL LAW 38 MRSA 420-C.
- 3. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES (BMP) PUBLISHED BY THE DEP, LATEST
- ANY CONTRACTOR EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEP PERSONNEL, AND/OR MUNICIPAL OFFICIALS SHALL BE
- THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING DURING CONSTRUCTION FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF ACCEPTABLE PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:
- FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS 90% COVERAGE OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE
- FOR SODDED AREAS. PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
- FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH MULCH. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE BMP APPLICATION RATES AND LIMITATIONS.
- FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED
- e. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
- f. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST 3" IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN CUTTING OF

B. EROSION AND SEDIMENTATION CONTROL MEASURES

THE CHANNEL

- REMOVAL OF SOD, TREES, BUSHES, AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT.
- GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN APPROVED MANNER.
- ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STOCKPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFFSITE 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 TEMPORARILY SEEDED WITH AROOSTOOK RYE, ANNUAL OR PERENNIAL RYE GRASS (DEPENDING ON DATE SEEDED) WITHIN 7 DAYS OF FORMATION, OR TEMPORARILY MULCHED IF SEEDING CANNOT BE DONE WITHIN THE RECOMMENDED SEEDING DATES.
- TEMPORARY DIVERSION BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY.
- TEMPORARY STABILIZATION SHALL BE CONDUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS. PRIOR TO ANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN LASTING MORE THAN ONE DAY. TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-ERODIBLE COVER. AREAS WITHIN 75 FEET OF WETLANDS SHALL BE TEMPORARILY
- APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY
- TEMPORARY SEEDING SPECIFICATIONS: WHERE THE SEED BED HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 4" BEFORE APPLYING SEED. UNIFORMLY APPLY SEED AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
- RECOMMENDED TEMPORARY SEEDING DATES AND APPLICATION RATES ARE AS FOLLOWS:
- AROOSTOOK RYE: RECOMMENDED SEEDING DATES: 8/15 10/1 APPLICATION RATE: 112 LBS./ACRE

ANNUAL RYE GRASS: RECOMMENDED SEEDING DATES: 4/1 - 7/1 APPLICATION RATE: 40 LBS./ACRE

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

APPLICATION RATE: 40 LBS./ACRE

- IF THE AREA WILL REMAIN UNWORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO STABILIZATION USING VEGETATION THROUGH PLANTING, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH OR RIP RAP. IF USING VEGETATION FOR STABILIZATION. SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS, AMEND AREAS OF DISTURBED SUBSOIL WITH TOP SOIL OR OTHER ORGANIC AMENDMENTS, PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS, AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC. AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT.
- PERMANENT SEEDING SPECIFICATION: IF A LANDSCAPE PLAN HAS BEEN PREPARED FOR THE PROJECT, SOIL PREPARATION AND SEEDING SPECIFICATIONS OF THAT PLAN SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING SPECIFICATIONS. IT IS RECOMMENDED THAT PERMANENT SEEDING BE COMPLETED BETWEEN APRIL 1 AND AUGUST 15 OF EACH YEAR. LATE SEASON SEEDING MAY BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDED WITH AROOSTOOK RYE OR MULCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1.
- APPLY TOPSOIL TO A MINIMUM DEPTH OF 6". MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 6".
- UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
- THE SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:

30% KENTUCKY BLUEGRASS 60% PERENNIAL RYE GRASS

THE SEED MIXTURE FOR WET AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:

50% REED CANARY GRASS 25% RED TOP 15% CREEPING RED FESCUE 10% PERENNIAL RYE GRASS

- 10. MULCH ALL AREAS SEEDED SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH.
- 11. DITCH LININGS, STONE CHECK DAMS, AND RIPRAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF CULVERT.
- RIPRAP REQUIRED AT CULVERTS AND STORM DRAIN INLETS AND OUTLETS SHALL CONSIST OF FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. STONES SHALL WEIGH FROM 10 LBS TO 200 LBS AND 50% OF THE STONES BY VOLUME SHALL EXCEED A UNIT WEIGHT OF APPROXIMATELY 50 LBS.
- 13. EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1, IN THE BASE 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 MANUFACTURER'S
- 14. TEMPORARY CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT

C. HOUSEKEEPING

- SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
- GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND THER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY, AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENTS DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE
- 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
- DEBRIS AND OTHER MATERIAL: LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS XPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- TRENCH OR FOUNDATION DEWATERING: TRENCH DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. THE COLLECTED WATER REMOVED FROM THE PONDED AREA MUST BE FILTERED THROUGH A DIRT BAG, HAYBALE CORRAL, OR OTHER SILTATION BASIN PRIOR TO DISCHARGE.

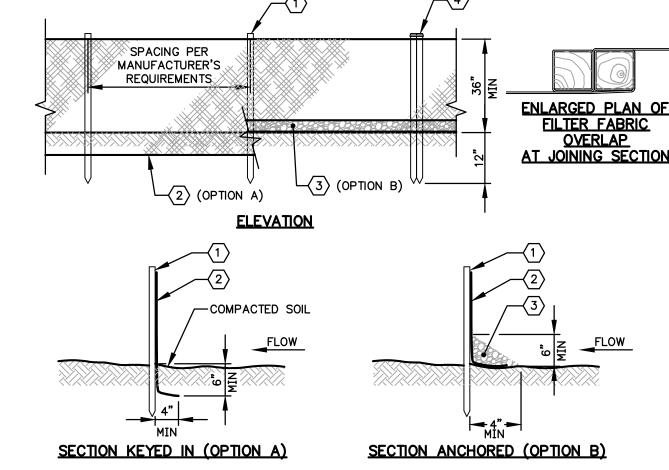
INSPECTION AND MAINTENANCE

- INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORMWATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION. AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER STORM EVENTS AND PRIOR TO COMPLETION OF PERMANENT STABILIZATION, A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT AND ANY DEP OR MUNICIPAL COMPANION DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPS THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.

WINTER CONSTRUCTION EROSION AND SEDIMENTATION CONTROL NOTES

THE WINTER CONSTRUCTION PERIOD TYPICALLY BEGINS IN EARLY NOVEMBER AND ENDS IN APRIL. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER. OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO B PROTECTED WITH OVER-WINTER STABILIZATION. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS TO OCCUF DURING THE FOLLOWING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AN AREA SHALL BE CONSIDERED DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN THE ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED, AND MULCHED. A COVER OF EROSION CONTROL MIX IS THE PREFERRED TEMPORARY MULCH DURING WINTER CONDITIONS.

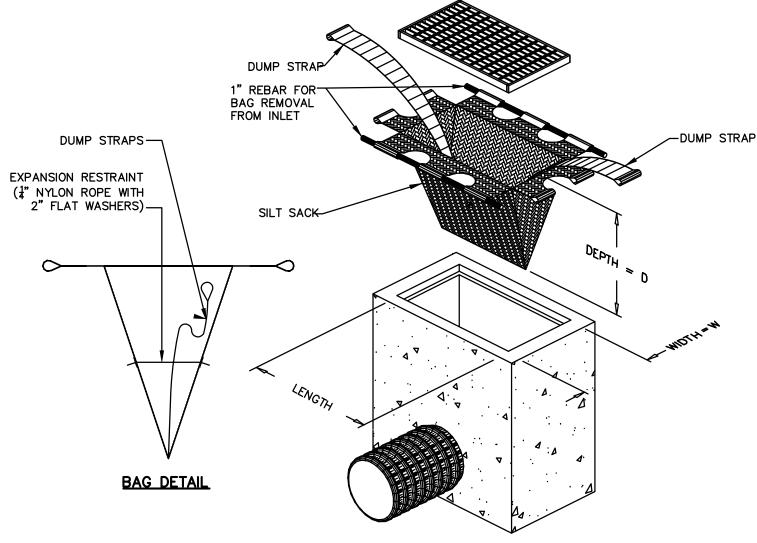
- NATURAL RESOURCE PROTECTION; ANY AREAS WITHIN 75 FEET FROM ANY REGULATED NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER. DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (FOR EXAMPLE, SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY REGULATED NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE REGULATED NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.
- SEDIMENT BARRIERS: DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.
- MULCHING: ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE (TWICE THE NORMAL ACCEPTED RATE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED AT A MINIMUM THICKNESS OF 4". MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. SNOW MUST BE REMOVED DOWN TO A ONE-INCH DEPTH PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERTY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACKING, OR WOOD CELLULOSE FIBER, THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.
- SOIL STOCKPILING: STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A 4" LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STACKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED WITHIN 100 FEET FROM ANY REGULATED NATURAL RESOURCE.
- SEEDING: BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED AND FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND MULCHED. IF DORMANT SEEDING IS USED, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS PER 1,000 SF. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75%) IN THE SPRING SHALL BE REVEGETATED.
- OVER-WINTER STABILIZATION OF DITCHES AND CHANNELS: ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED BY NOVEMBER 1. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A GRASS-LINED DITCH OR CHANNEL IS NOT STABILIZED BY SEPTEMBER 1, THEN EITHER A SOD LINING SHALL BE INSTALLED PRIOR TO OCTOBER 1 OR THE DITCH MUST BE LINED WITH STONE RIPRAP BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE PRIOR TO NOVEMBER 1.
- OVER-WINTER STABILIZATION OF DISTURBED SLOPES: ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. ALL AREAS HAVING A GRADE STEEPER THAN 8% SHALL BE CONSIDERED A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN THE SLOPE SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS BY OCTOBER 1, SOD BY OCTOBER 1, EROSION CONTROL MIX BY NOVEMBER 1. OR STONE RIPRAP BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.
- OVER-WINTER STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% MUST BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN THE AREA SHALL EITHER BE STABILIZED WITH TEMPORARY VEGETATION BY OCTOBER 1, SOD BY OCTOBER 1, OR MULCH BY NOVEMBER 15. SEE APPLICABLE SECTIONS UNDER EROSION AND SEDIMENTATION CONTROL NOTES FOR PROPER INSTALLATION METHODS.
- MAINTENANCE: MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM, OR PERIOD OF THAWING AND RUNOFF THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85% OF AREAS VEGETATED WITH VIGOROUS GROWTH.



1.25"X1.25" OAK STAKES EMBEDDED A MINIMUM OF 12" INTO THE GROUND.

- 2. FILTER FABRIC TO BE SEDIMENTATION CONTROL FABRIC MIRAFI 100X OR EQUIVALENT.
- 1" CRUSHED STONE ANCHORING MATERIAL.
- OVERLAP AT JOINING SECTION AS SHOWN. A COUPLER CAN BE AN ACCEPTABLE DEVICE USED TO TIE THE OAK STAKES TOGETHER.
- INSTALLATION/PLACEMENT OF THE PERIMETER SILT FENCE SHALL BE IN ACCORDANCE WITH MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES AND SOIL EROSION & SEDIMENT CONTROL PLAN.

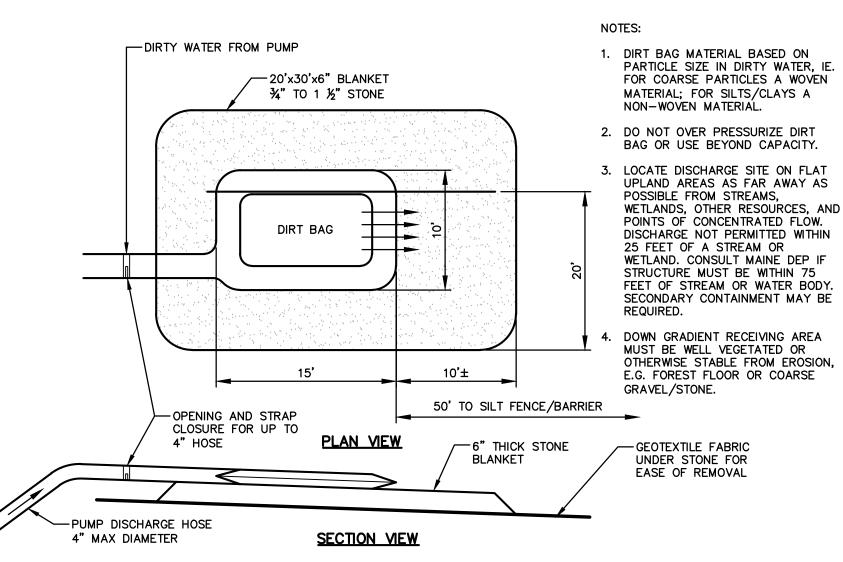
SILT FENCE



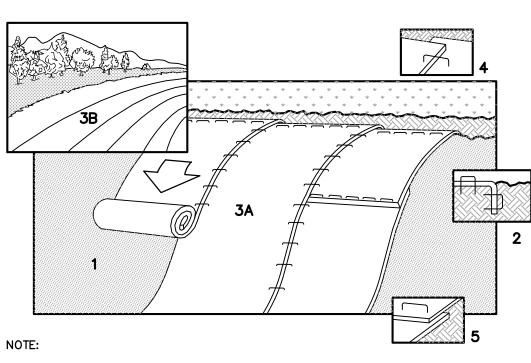
MAINTENANCE SCHEDULE:

- 1. EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT.
- 2. IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.
- 3. THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

SILTSACK DETAIL



PUMPED DISCHARGE SEDIMENT <u>CONTROL DEVICE ("DIRT BAG")</u>

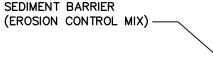


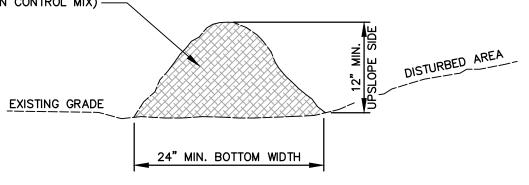
REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS. BLANKET TO BE A BIODEGRADABLE DOUBLE NET STRAW MAT.

INSTALATION STEPS:

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"
- 5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

EROSION CONTROL BLANKET (SLOPE INSTALLATION)





IN ORDER FOR EROSION CONTROL MIX TO BE USED IN LIEU OF SILT FENCE IT MUST MEET

- 1. THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 50 AND 100%, DRY WEIGHT BASIS.
- 2. PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%, MAXIMUM OF 85%, PASSING A 0.75" SCREEN.
- 3. THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- 4. LARGE PORTIONS OF SILTS, CLAYS, OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- 5. SOLUBLE SALTS CONTENT SHALL BE <4.0 mmhos/cm.
- 6. THE pH SHOULD FALL BETWEEN 5.0 AND 8.0.
- 7. THE EROSION CONTROL MIX SHALL CONTAIN A WELL GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH.
- 8. PLACE BARRIER ALONG A RELATIVELY FLAT CONTOUR. CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES WHERE FINES CAN WASH UNDER THE BARRIER THROUGH GRASS BLADES AND BRANCHES.
- 9. PLACEMENT OF BARRIER SHOULD BE: - AT TOE OF THE SLOPE.
- ON FROZEN GROUND, BEDROCK, OR ROOTED FORESTED AREAS. - AT THE EDGE OF GRAVEL AND AREAS UNDER CONSTRUCTION.
- 10. BARRIER SHALL NOT BE USED ADJACENT TO WETLANDS.
- 11. REMOVE SEDIMENT DEPOSITS WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- 12. WHEN BARRIER IS DECOMPOSED, CLOGGED WITH SEDIMENT, ERODED, OR INEFFECTIVE, IT MUST BE REPLACED OR REPAIRED. THE BARRIER SHOULD BE RESHAPED AS NECESSARY.

EROSION CONTROL MIX BERM

2" TO 3" ø CRUSHED STONE MIN 6" THICK— DIVERSION RIDGE

- 1. USE 2" TO 3" Ø CRUSHED STONE OR ACCEPTABLE ON-SITE MATERIAL.
- 2. GEOTEXTILE FILTER (MIRAFI 600X OR APPROVED EQUIVALENT) SHALL BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE.

<u>PLAN</u>

- 3. LENGTH 50' MINIMUM.
- 4. THICKNESS NOT LESS THAN 6".

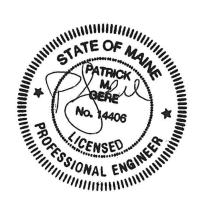
REMOVED IMMEDIATELY.

- 5. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY INGRESS OR EGRESS.
- MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC REPAIR AND TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE
- 7. WHEN COMPLETE, CONTRACTOR TO REMOVE STONE AND GRADE SUBBASE TO MATCH EXISTING OR PROPOSED GRADES. FINAL TREATMENT AS SHOWN ON PLANS OR OTHERWISE DIRECTED.

STABILIZED CONSTRUCTION ENTRANCE



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REV.	DATE	REVISION DESCRIPTION

DESIGNED BY DRAWN BY: PMG CHECKED BY: PJC DATE: 2/27/2023 FILE NAME: 4661-0001 GRA03.dwg

PROJECT NAME

BOMBAZEE BROOK STREAM CROSSING WINDING HILL ROAD NORRIDGEWOCK, MAINE

CLIENT:

TOWN OF NORRIDGEWOCK **16 PERKINS STREET** NORRIDGEWOCK, MAINE

SHEET TITLE:

EROSION & SEDIMENTATION CONTROL NOTES & **DETAILS**

SHEET NO:

C-501

1 inch = 20 ft.

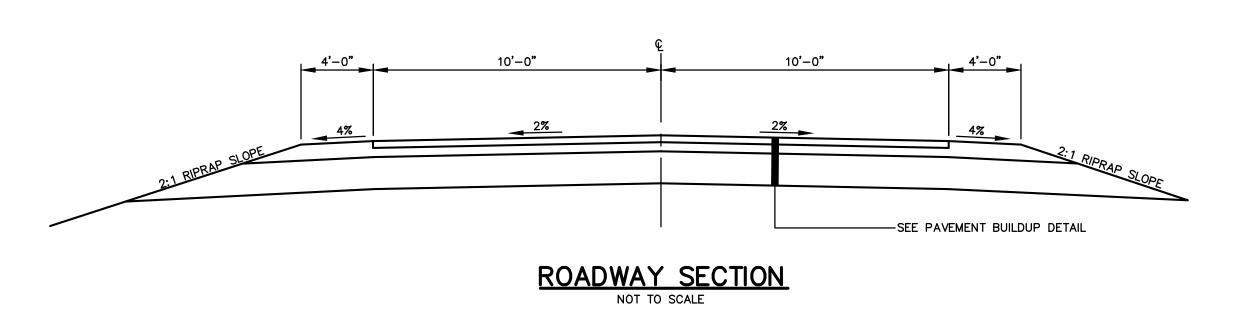
SANDBAG

SANBAG COFFERDAM

IMPERVIOUS

WORK AREA

SHEETING —

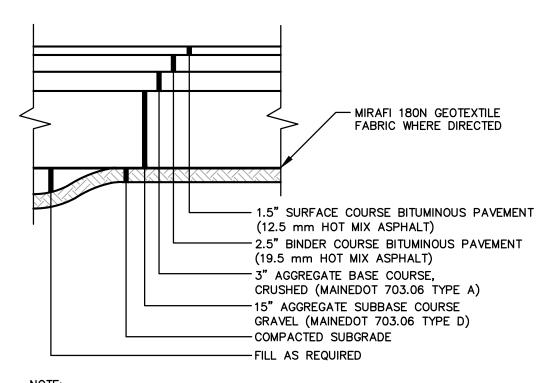


NOTE: CONSTRUCTION REQUIREMENTS FOR THE BITUMINOUS TACK COAT SHALL BE IN ACCORDANCE WITH MAINE DOT SECTIONS 409.01 THROUGH 409.07. - SAWCUT EXISTING PAVEMENT GRIND AND REMOVE PAVEMENT AT LEAST 12" FROM JOINT APPLY TACK COAT SURFACE PAVEMENT ____ EXISTING PAVEMENT BASE PAVEMENT TACK COAT JOINTS BETWEEN EXISTING AND PROPOSED PAVEMENT

BUTT JOINT DETAIL

NOT TO SCALE

SAWCUT EDGE

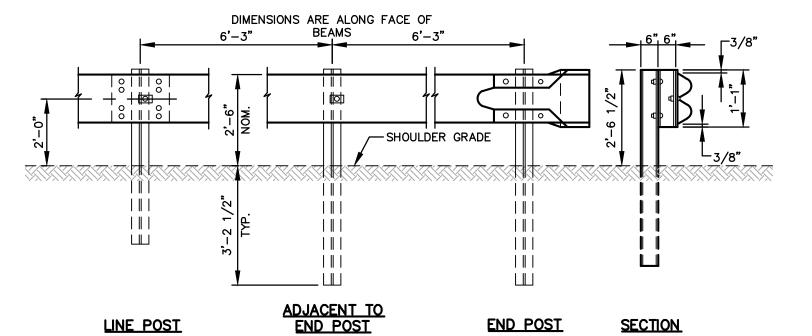


CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISIONS SECTION 401 AND 403, AS PER THE STATE OF MAINE, DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES" LATEST REVISION.

> PAVEMENT BUILDUP NOT TO SCALE

DEWATERING PLAN NOTES:

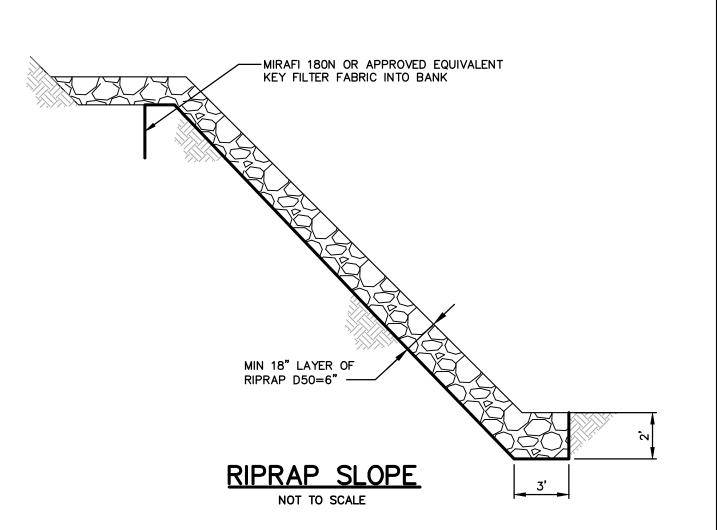
- ESTABLISH COFFERDAMS A SHORT DISTANCE UPSTREAM AND DOWNSTREAM OF THE ENDS OF THE NEW CULVERT. ON SMALL STREAMS, SEVERAL LAYERS OF SAND BAGS ARE GENERALLY SUFFICIENT. AT LARGER SITES, SEVERAL OPTIONS ARE AVAILABLE INCLUDING: COMMERCIAL SIZE SANDBAGS (3'x3'x3'), SHEET PILE OR PLATES SET INTO THE SUBSTRATE, OR CONCRETE WASTE BLOCKS. IN EACH CASE, INCORPORATE A SHEET OF PLASTIC ON THE UPSTREAM SIDE OF THE COFFERDAM TO REDUCE LEAKAGE. THE DOWNSTREAM COFFERDAM GENERALLY CONSISTS OF A FEW SMALLER SANDBAGS TO CONTAIN DIRTY WATER OR PREVENT DOWNSTREAM WATER FROM BACK-FLUSHING INTO THE CONSTRUCTION SITE.
- 2. INTAKE FOR THE CLEAN WATER HOSE IS PLACED UPSTREAM OF THE COFFERDAM. PLACE A BLOCK NET UPSTREAM OF THE INTAKE HOSE TO REDUCE THE RISK OF LETHAL ENTRAINMENT FOR FISH AND AMPHIBIANS. PLACE IN A POOL, ON A ROCK, OR IN A 5 GALLON BUCKET TO PREVENT EROSION.
- 3. IF TRAFFIC IS TO BE MAINTAINED ON THE ROAD, A TEMPORARY PIPE OR CULVERT MAY BE PLACED ACROSS THE ROAD TO ROUTE THE DISCHARGE HOSE AROUND THE CONSTRUCTION SITE AND ALLOW CONSTRUCTION TRAFFIC TO MOVE IN AND OUT OF THE SITE WITHOUT AFFECTING THE HOSE.
- 4. DIVERSION WATER SHOULD REENTER THE STREAM IMMEDIATELY DOWNSTREAM OF THE COFFERDAM TO MINIMIZE THE AMOUNT OF STREAM CHANNEL THAT IS DEWATERED. THE DISCHARGE SHOULD BE PLACED ON A ROCK OR WITH GEOTEXTILE FABRIC UNDER IT TO PREVENT SCOUR WITHIN THE STREAM.
- 5. THE CONSTANT FORCE ASSOCIATED WITH PUMPING WATER WILL CAUSE THE DISCHARGE HOSES TO "MIGRATE" OVER TIME. TO PREVENT THIS, THE END OF THE HOSE AND THE GEOTEXTILE APRON SHOULD BE SECURELY TIED TO AN ANCHOR (TREE OR OTHER) TO PREVENT
- 6. ASSIGN SOMEONE TO ROUTINELY CHECK THE PUMPS AND HOSES TO ENSURE THAT NO PROBLEMS DEVELOP DUE TO PUMPING OR DISCHARGE. DO NOT LEAVE UNATTENDED FOR ANY 24-HOUR PERIOD AND REMOVE ALL DEBRIS (ROCKS, STICKS, ETC) DAILY.
- 7. SECONDARY CONTAINMENT OF FUEL SPILLS AT THE PUMP IS REQUIRED IN ATLANTIC SALMON WATERSHEDS AND RECOMMENDED AT ALL SITES. A KIDDIE POOL WORKS WELL FOR 3 AND 4 INCH PUMPS.
- 8. AT THE END OF CONSTRUCTION, REMOVE ALL STREAM DEWATERING DEVICES. STABILIZE AND RESTORE ALL AREAS.



NOTES:

1. INTERMEDIATE POST SPACING SHALL BE 6'-3" UNLESS OTHERWISE SHOWN. 2. POST AND OFFSET BRACKETS SHALL BE 4"x 6" I-BEAM 8.5 OR 9.0 LBS. PER FOOT. LENGTH OF 5'-9" ATTACHED WITH 5/8" DIA. BOLTS WITH HEX NUTS. 3. ALL HOLES IN BEAM TO BE SHOP-PUNCHED PRIOR TO GALVANIZING.

- 4. RAIL PANELS AND END SECTIONS TO BE 12 GAUGE STEEL. 5. BACK-UP PLATE TO BE PLACED BEHIND RAIL ELEMENTS AT INTERMEDIATE STEEL POSTS (NON-SPLICE POSTS).
- 6. ALL PARTS SHALL CONFORM TO CURRENT MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. 7. WHEN GUARDRAIL IS CONSTRUCTED AT UP TO FOUR FEET FROM THE EDGE OF PAVEMENT, THE GUARDRAIL WILL BE SET FROM THE GRADE AT THE FACE OF
- 8. END SECTIONS TO BE IN ACCORDANCE WITH CURRENT MAINE DEPARTMENT OF TRANSPORTATION STANDARDS.
- 9. GUARDRAIL SET ON A RADIUS OF 150 FEET OR LESS TO BE CIRCULAR.



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DETAILS

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C-502