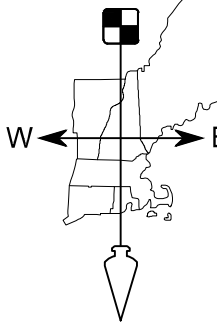


| LEGEND | |
|-----------|-------------------|
| EXISTING | DESCRIPTION |
| $D.H.[f]$ | DRILL HOLE FOUND |
| | PROPERTY LINE |
| | RIGHT OF WAY |
| | EDGE OF WATER |
| | TOP OF BANK |
| | WETLAND LINE |
| | EDGE OF GRAVEL |
| | EDGE OF PAVEMENT |
| | SIGN |
| | ASH TREE |
| | OAK TREE |
| | MAPLE TREE |
| | BIRCH TREE |
| | PINE TREE |
| | TREE LINE |
| | STONE WALL |
| | RETAINING WALL |
| | MINOR CONTOUR |
| | MAJOR CONTOUR |
| | ROUND CATCH BASIN |
| | DRAIN LINE |
| | UTILITY POLE |
| | OVERHEAD WIRE |
| | FIRE HYDRANT |
| | PAVEMENT |

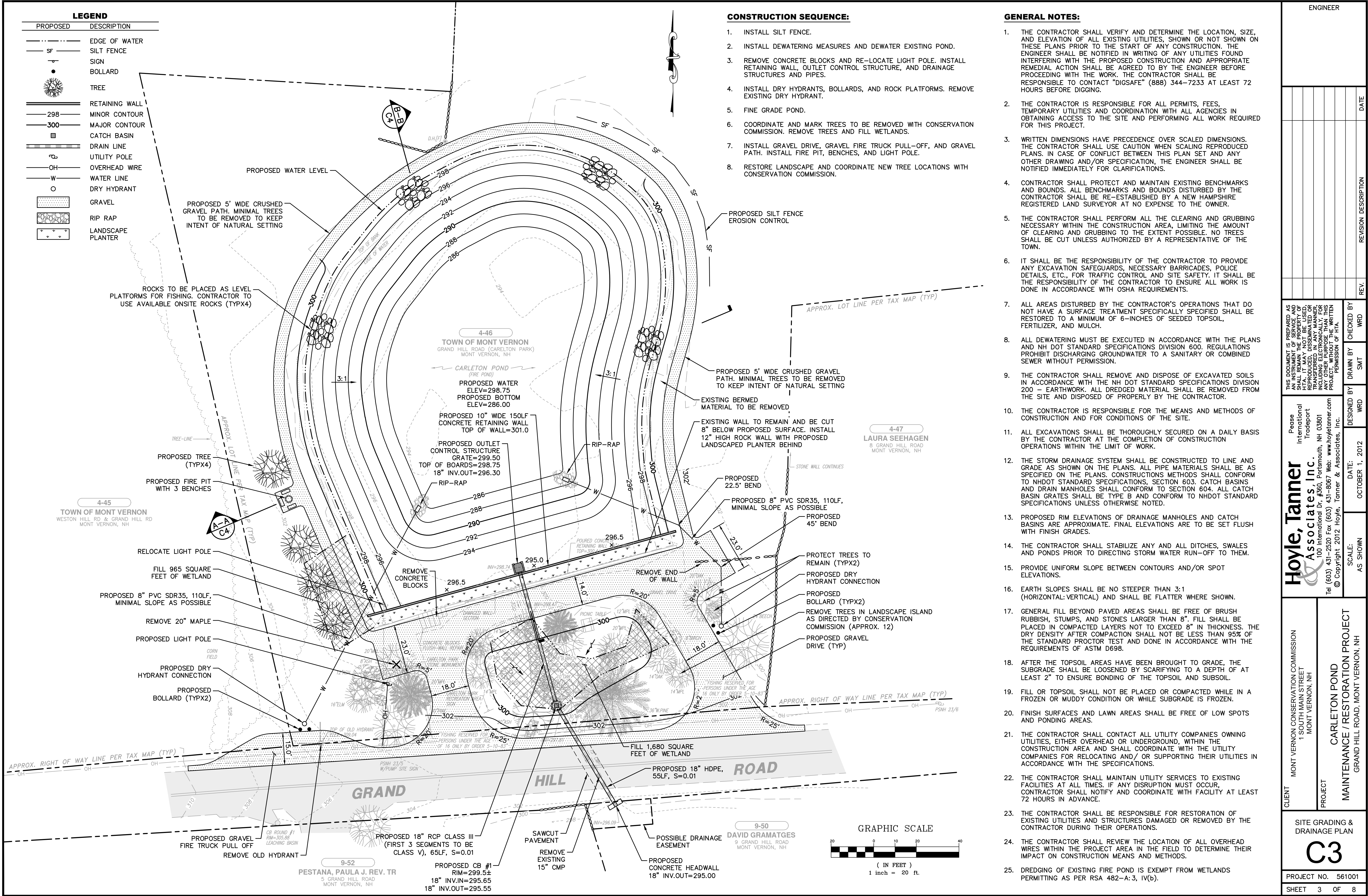
PROJECT SURVEYOR:

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs



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EROSION CONTROL NOTES:

A. GENERAL NOTES

1. DURING CONSTRUCTION, AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND (5 ACRES MAXIMUM) SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO A MAXIMUM OF 72 HOURS BEFORE APPLYING TEMPORARY OR PERMANENT EROSION CONTROL MEASURES. CONFINED PERIOD OF DISTURBED AND UNSTABILIZED SOILS TO A MAXIMUM OF FORTY-FIVE DAYS. ALL DITCHES AND SWALES ARE REQUIRED TO BE STABILIZED PRIOR TO DIRECT RECEIPT OF ANY FLOW.
2. INSTALL SILT FENCE WHERE SHOWN PRIOR TO CONSTRUCTION START. INSTALL AROUND ALL EXISTING DRAINAGE STRUCTURES ADJACENT TO PROJECT. DO NOT REMOVE SILT BARRIERS UNTIL DISTURBED AREAS ARE FULLY COVERED WITH TURF OR OTHER APPLICABLE SURFACE MATERIAL. ALL PONDS ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO ANY OTHER DRAINAGE SYSTEM WORK, INCLUDING DITCH AND SWALE EXCAVATION.
3. EROSION AND SEDIMENT CONTROL PRACTICES INCLUDE THE USE OF THE FOLLOWING SILT FENCE BARRIERS, PERMANENT DETENTION/SEDIMENTATION POND BASIN, GRASS AND/OR ROCK LINED SWALES, DIVERSIONS WITH LEVEL SPREADERS. ALL EROSION CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS CONTAINED IN THE "NH STORMWATER MANUAL", VOLUME 3, DECEMBER 2008.
4. SEE PLANS FOR ADDITIONAL EROSION CONTROL MEASURES WHICH MAY BE REQUIRED.
5. CONSTRUCTION AREA SHALL BE CONSIDERED STABLE IF:

- a. AREAS TO RECEIVE PAVEMENT, COMPACTED BASE COURSE GRAVELS HAVE BEEN INSTALLED
- b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- c. CUT AND FILL SLOPE HAVE A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP OR EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

B. VEGETATIVE MEASURES

1. TOPSOIL STOCKPILING: TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE ON CRITICAL AREAS AND ALL OTHER AREAS TO BE SEED. THE STOCKPILE WILL NOT BE COMPACTED AND SHALL BE STABILIZED AGAINST EROSION WITH TEMPORARY SEEDING.
2. TEMPORARY SEEDING:
- a. BEDDING – REMOVE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT 3" TO PREPARE SEED BED AND MIX THE FERTILIZER INTO THE SOIL.
- b. FERTILIZER – FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING TILLED INTO THE SOIL. A 10–10–10 MIX OF FERTILIZER SHOULD BE APPLIED AT A RATE OF 300 POUNDS PER ACRE (OR 7 POUNDS PER 1,000 S.F.).
- c. SEED MIXTURE – USE ANY OF THE FOLLOWING IN UPLAND AREAS:
- d. SEEDING RATE:
- | SPECIES | ACRE | 1,000 S.F. | PER ACRE RATES | DEPTH |
|------------------|----------|------------|----------------|---------|
| WINTER RYE | 112 LBS. | 2.5 LBS. | 8/15–9/5 | 1 IN. |
| OATS | 80 LBS. | 2.0 LBS. | SPRING–5/15 | 1 IN. |
| ANNUAL RYE GRASS | 40 LBS. | 1.0 LBS. | 4/15–9/15 | 0.25IN. |
- W/MULCH
- e. MULCHING – WHERE IT IS IMPRACTICAL TO INCORPORATE FERTILIZER AND SEED INTO MOIST SOIL, THE SEEDING AREA SHALL BE MULCHED TO FACILITATE GERMINATION. MULCH IN THE FORM OF STRAW SHOULD BE APPLIED AT A RATE OF 70 TO 90 LBS. PER 1,000 S.F.
3. PERMANENT SEEDING:
- f. BEDDING – STONES LARGER THAN 4". TRASH, ROOTS, AND OTHER DEBRIS THAT WILL INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
- g. FERTILIZER – LIME AND FERTILIZER SHOULD BE APPLIED EVENLY OVER THE AREA PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
- | | |
|------------------------|-------------------------|
| AGRICULTURAL LIMESTONE | 100 LBS. PER 1,000 S.F. |
| 10–20–20 FERTILIZER | 12 LBS. PER 1,000 S.F. |
- h. SEEDING MIXTURE (RECOMMENDED)

SLOPE WORK

| SPECIES | PER ACRE | PER 1,000 S.F. | USE |
|---------------------|----------|----------------|----------------|
| CROWN VETCH | 15 | 0.34 | ALL SLOPE WORK |
| PERENNIAL RYE GRASS | 30 | 0.69 | |
| CREeping RED FESCUE | 35 | 0.80 | |
| RED TOP | 5 | 0.11 | |
| ALSIKE CLOVER | 5 | 0.11 | |
| BIRD'SFOOT TREFOIL | 5 | 0.11 | |
| TOTAL | 95 | 2.18 | |

TREATMENT SWALES

| SPECIES | PER ACRE | PER 1,000 S.F. | USE |
|-----------------|----------|----------------|------------------|
| TALL FESCUE | 35 | 0.80 | TREATMENT SWALES |
| SWITCH GRASS | 35 | 0.80 | |
| JAPANESE MILLET | 90 | 2.00 | |
| TOTAL | 160 | 3.60 | |

- i. MULCHING – MULCH SHOULD BE USED ON HIGHLY ERODIBLE SOILS, ON CRITICALLY ERODING AREAS, AND ON AREAS WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT.

| TYPE | RATE PER 1,000 S.F. | USE AND COMMENTS |
|--------------------------|------------------------------------|---|
| STRAW | 70 TO 90 LBS. | MUST BE DRY AND FREE FROM MOLD. MAY BE USED WITH PLANTINGS |
| WOOD CHIPS OR BARK MULCH | 460 TO 920 LBS. | USED MOSTLY WITH TREES AND SHRUB PLANTINGS |
| JUTE AND FIBROUS MATTING | AS PER MANUFACTURER SPECIFICATIONS | USED IN SLOPE AREAS, WATER COURSES AND OTHER AREAS |
| CRUSHED STONE | | SPREAD MORE ¼" TO 1½" DIA THAN ½" THICK. EFFECTIVE IN CONTROLLING WIND AND WATER EROSION. |

- j. SODDING – SODDING IS DONE WHERE IT IS DESIRABLE TO RAPIDLY ESTABLISH COVER ON A DISTURBED AREA. SODDING AN AREA MAY BE SUBSTITUTED FOR PERMANENT SEEDING PROCEDURES ANYWHERE ON SITE. BED PREPARATION, FERTILIZING, AND PLACEMENT OF SOD SHALL BE PERFORMED ACCORDING TO THE S.C.S. HANDBOOK.

C. STRUCTURAL MEASURES

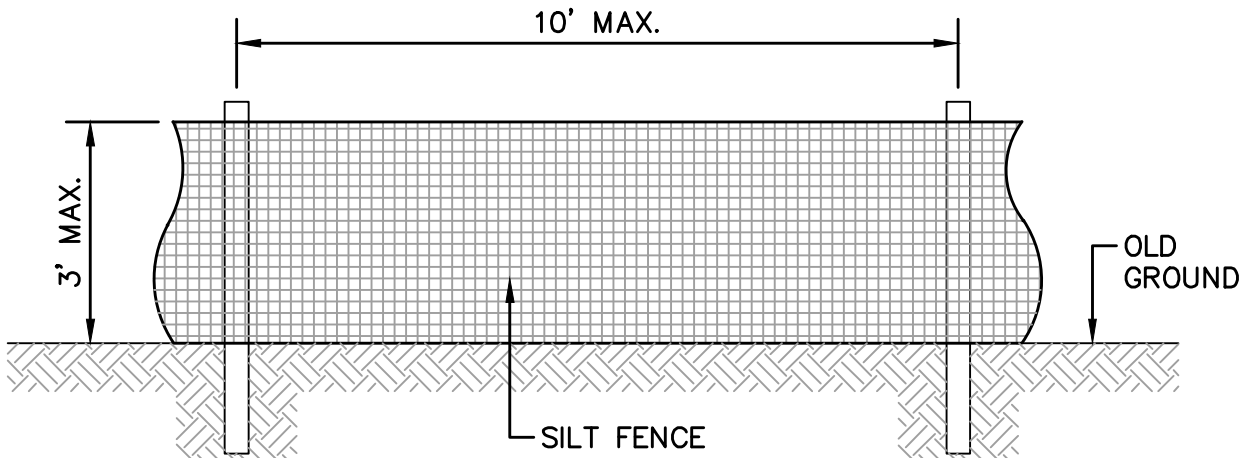
1. STRAW BALE BARRIERS/SILT SCREEN FENCES: STRAW BALE BARRIERS AND/OR SILT SCREEN FENCES ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY TO INTERCEPT AND FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF, OR AS SEDIMENT TRAPS IN SMALL SWALES. STRAW BALES HAVE A USEFUL LIFE OF 3 MONTHS WHEN WET, AND THEREFORE, MUST BE INSPECTED AND REPAIRED OR REPLACED PERIODICALLY. SILT SCREEN FENCES WILL FUNCTION 6 MONTHS OR LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS (SEE DETAILS FOR ADDITIONAL INFORMATION).
2. SWALES: TEMPORARY AND/OR PERMANENT SWALES ARE TO BE INSTALLED AS SHOWN ON THE PLAN. SWALES ARE USED TO CONVERT SHEET FLOW TO CHANNEL FLOW AND CONVEY THE RUNOFF TO A PERMANENT CHANNEL, STORM DRAIN, OR DETENTION/SEDIMENT STRUCTURE. SWALES ARE INTENDED TO INTERCEPT RUNOFF AND DIVERT IT FROM AN EXPOSED NEWLY SEEDS SLOPE TOWARD AN ACCEPTABLE OUTLET OR TO REDUCE THE VELOCITY OF RUNOFF FLOWING DOWN FROM A DRAINAGE AREA.
3. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED OF 1.5 INCH STONE ACROSS THE FULL WIDTH OF THE VEHICLE INGRESS EGRESS AREA. THE STONE PAD SHOULD BE AT LEAST 50 FEET LONG, 25 FEET WIDE AND AT LEAST 6 INCHES THICK. ADDITIONAL STONE MAY HAVE TO BE ADDED PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE PAD.
4. CATCH BASIN SEDIMENT FILTER: STONE CATCH BASIN SEDIMENT FILTERS ARE TO BE INSTALLED IN THE AREAS SHOWN ON THE PLAN. THEY ARE INTENDED PRIMARILY FILTER SMALL VOLUMES OF "SHEET FLOWING" RUNOFF. CATCH BASIN SEDIMENT FILTERS SHALL BE CONSTRUCTED OF FILTER FABRIC BEING INSTALLED OVER INLET GRATE, AND 3/4" WASHED CRUSHED STONE, 12 INCHES THICK. CATCH BASIN SEDIMENT FILTERS WILL LAST LONGER IF KEPT FREE OF SEDIMENT ACCUMULATIONS (SEE DETAILS FOR ADDITIONAL INFORMATION).

D. MAINTENANCE

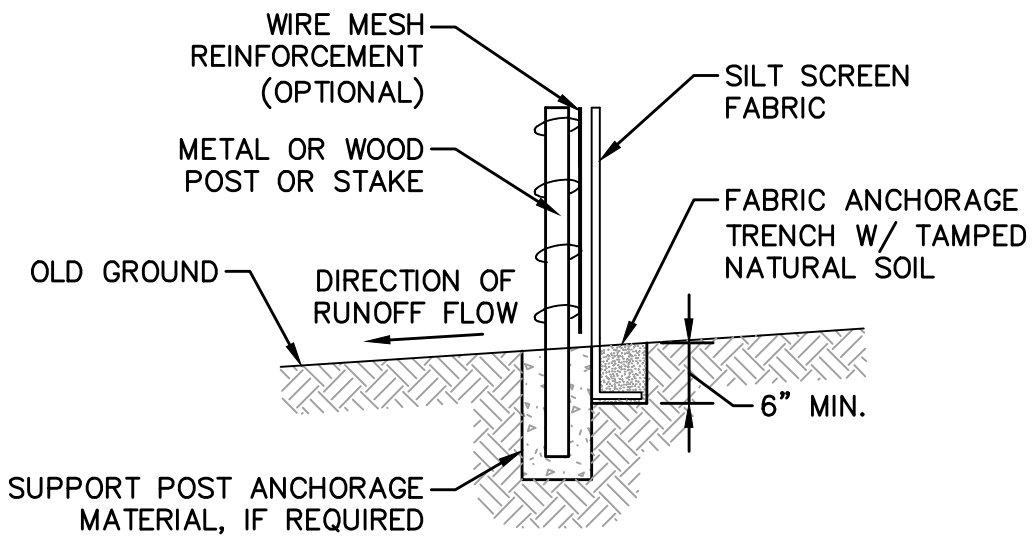
1. DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED:
- a. SEEDING AREAS WILL BE FERTILIZED AND WILL BE SEEDING AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.
- b. ADDITIONAL STONE MAY HAVE TO BE ADDED TO THE CONSTRUCTION ENTRANCE, ROCK LINED SWALES, ETC., PERIODICALLY TO MAINTAIN THE PROPER FUNCTIONING OF THE EROSION CONTROL STRUCTURE.
- c. ALL DIVERSION CHANNELS AND SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
- d. ALL SILT SCREEN FENCES WILL BE CHECKED WEEKLY. NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER.
- e. EROSION CONTROL MEASURES TO BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL.

E. WINTER CONSTRUCTION

1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
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 TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL.



ELEVATION



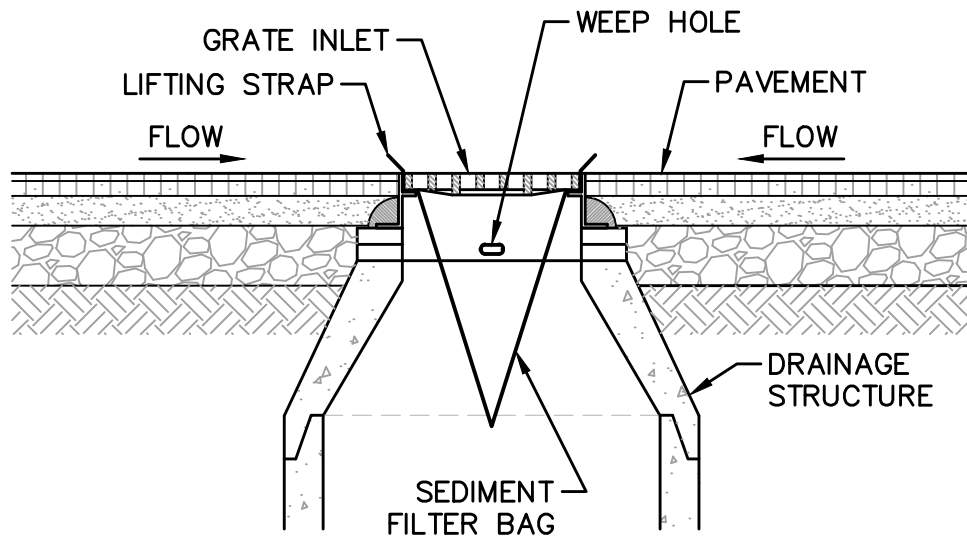
END VIEW

SILT FENCE NOTES:

1. SPACING OF FENCE POSTS NOT TO EXCEED 10–0".
2. SILT FENCE SHALL BE INSTALLED BEFORE ANY EARTH REMOVAL OR EXCAVATION TAKES PLACE.
3. FILTER FABRIC TO BE FASTENED SECURELY TO POSTS WITH WIRE TIES OR STAPLES AT TOP, MIDPOINT AND BOTTOM.
4. OVERLAP BY 6". FOLD AND STAPLE ADJOINING SECTIONS OF FILTER FABRIC.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND THE MATERIAL REMOVED WHEN "BULGES" DEVELOP. DO NOT DEPOSIT THE MATERIAL NEAR WETLANDS OR WATERCOURSES.
6. FILTER FABRIC SHALL BE ENTRENCHED 6" MINIMUM BELOW EXISTING OR FINISHED GRADE.

1 SILT FENCE DETAIL

C5 SCALE: NONE

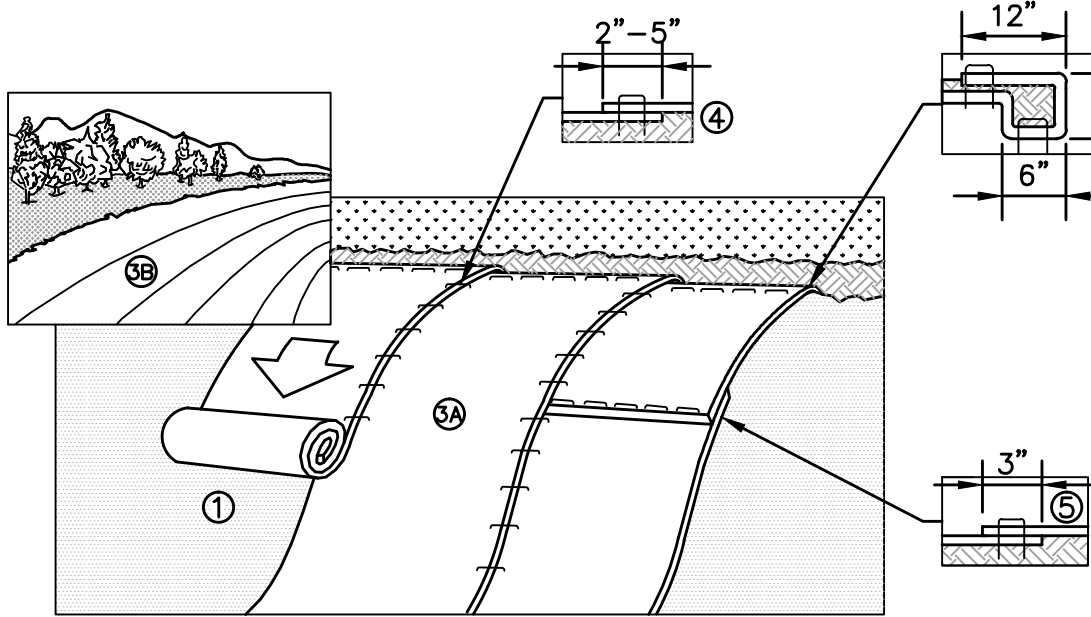


INLET PROTECTION NOTES:

1. REMOVE DRAINAGE INLET GRATE AND PLACE SEDIMENT FILTER BAG AROUND THE FRAME, REPLACE GRATE AND SEDIMENT FILTER BAG IN POSITION OR FOLLOW MANUFACTURER'S RECOMMENDATIONS. LIFTING STRAPS SHALL BE EXPOSED AND READY FOR MAINTENANCE PROCEDURES.
2. INSPECT SEDIMENT FILTER BAG WEEKLY AND AFTER EVERY RAINFALL EVENT.
3. REPLACE, CLEAN OR REMOVE SEDIMENT FILTER BAG AS DIRECTED.

3 INLET PROTECTION DETAIL

C5 SCALE: NONE

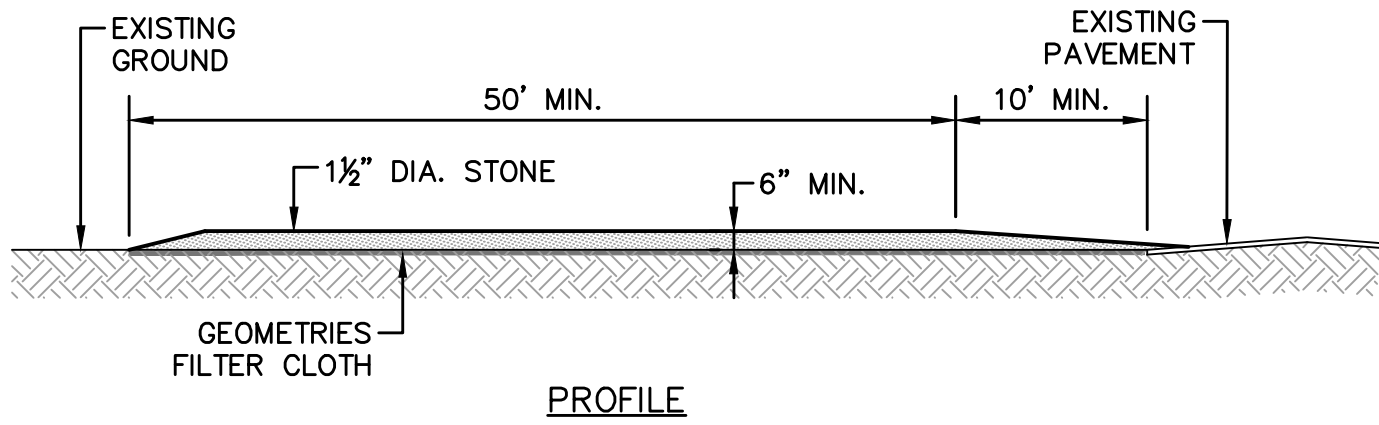


SLOPE PROTECTION INSTALLATION NOTES:

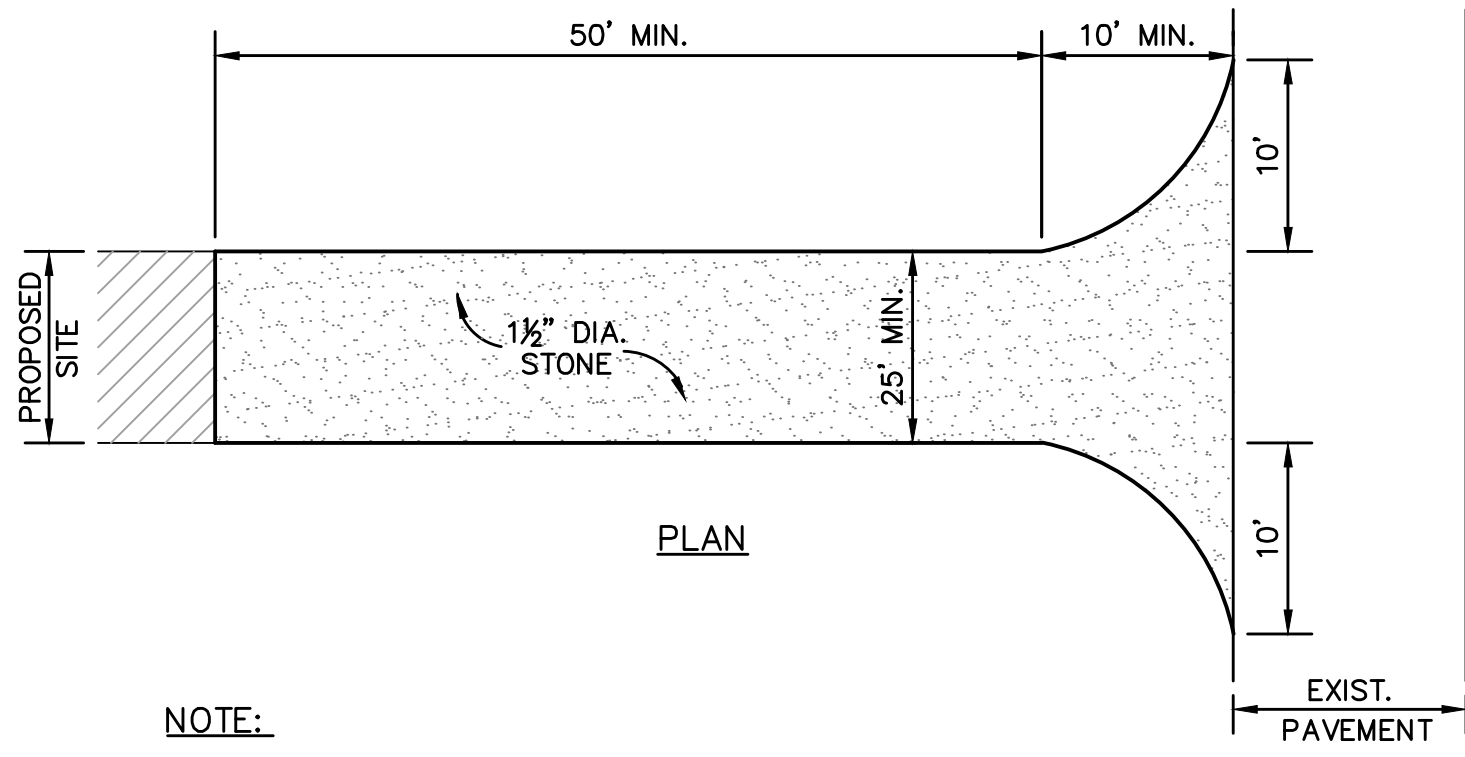
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL–0–SEED DO NOT SEED PREPARED AREA. CELL–0–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"–5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"APART ACROSS ENTIRE BLANKET WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
7. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

2 SLOPE PROTECTION EROSION CONTROL MATTING DETAIL

C5 SCALE: NONE



PROFILE



PLAN

NOTE:

TO BE CONSTRUCTED AT STAGING OR STOCKPILE AREAS AS REQUIRED.

4 STABILIZED CONSTRUCTION ENTRY DETAIL

C5 SCALE: NONE

ENGINEER

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PROJECT CARLETON POND
MAINTENANCE / RESTORATION PROJECT
GRAND HILL ROAD, MONT VERNON, NH

CONSTRUCTION DETAILS 1
C5
PROJECT NO. 561001
SHEET 5 OF 8



CORNER FRUSTRUM

The diagram shows a rectangular block with a corner frustrum removed. The frustrum is a cylindrical shape with a conical top. The height of the frustrum is labeled 'H'. The radius of the frustrum is labeled 'R'. The distance from the corner of the block to the center of the frustrum is labeled 'L2'. The distance from the corner of the block to the edge of the frustrum is labeled 'L1'. The formulas for L1 and L2 are given as:

$$L1 = \frac{L - D}{2} \quad L2 = \frac{L + D}{2}$$

PLAN OF 'L' HEADWALL



1. ALL WATER LINES ARE TO HAVE A MINIMUM OF 5 FEET COVER TO TOP OF PIPE.



PAVEMENT REPAIR NOTES:

1. MATERIALS SHOULD BE REPLACED IN-KIND, WITH MINIMUM THICKNESS AS SHOWN.
2. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REQUIREMENTS.
3. ROADWAY CONSTRUCTION SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS.
4. NOT FOR WINTER CONSTRUCTION.

CONCRETE HEADWALL DETAILS

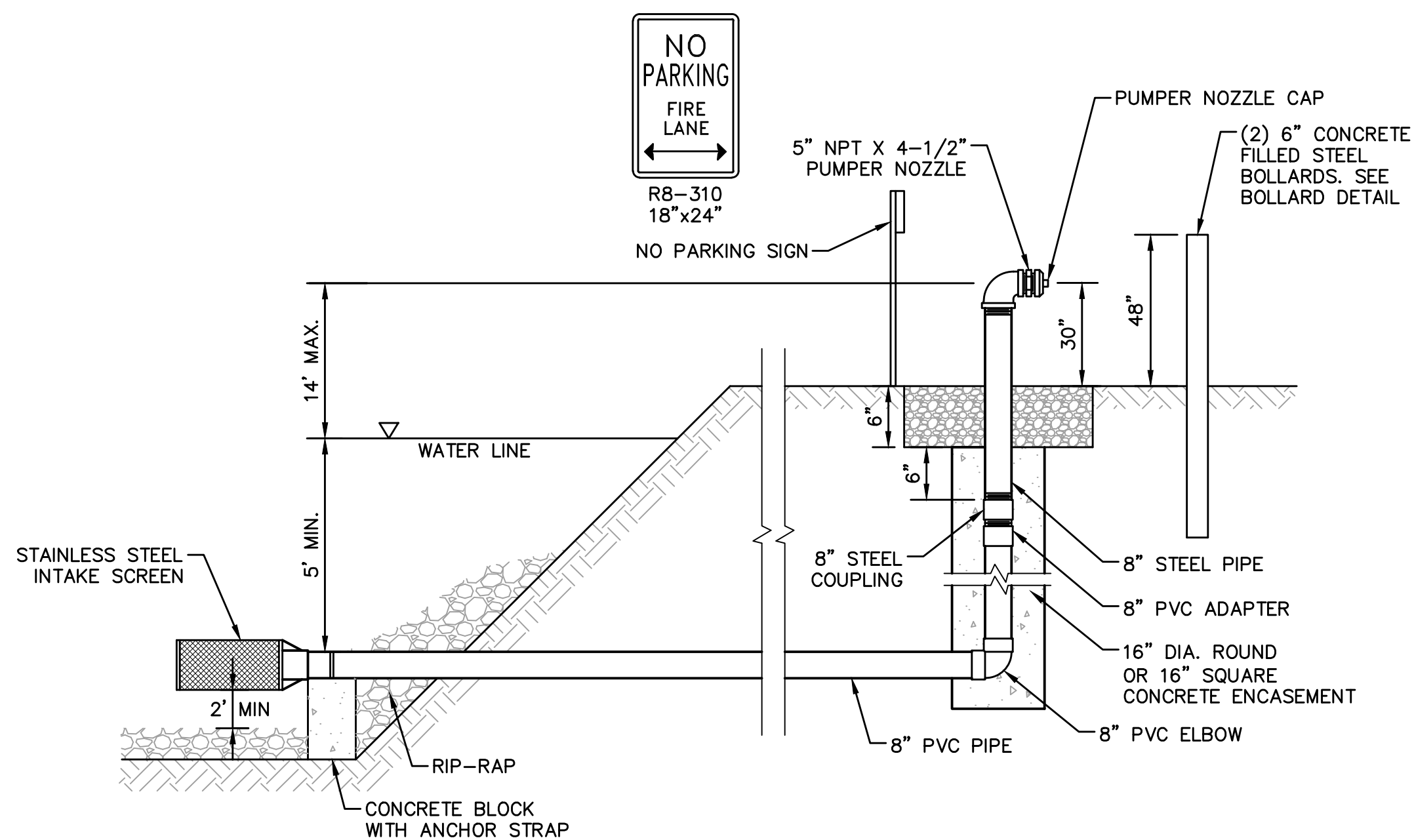
SCALE: NONE

WATER TRENCH DETAIL FOR DRY HYDRANT

SCALE: NONE

PAVEMENT REPAIR DETAILS

SCALE: NONE

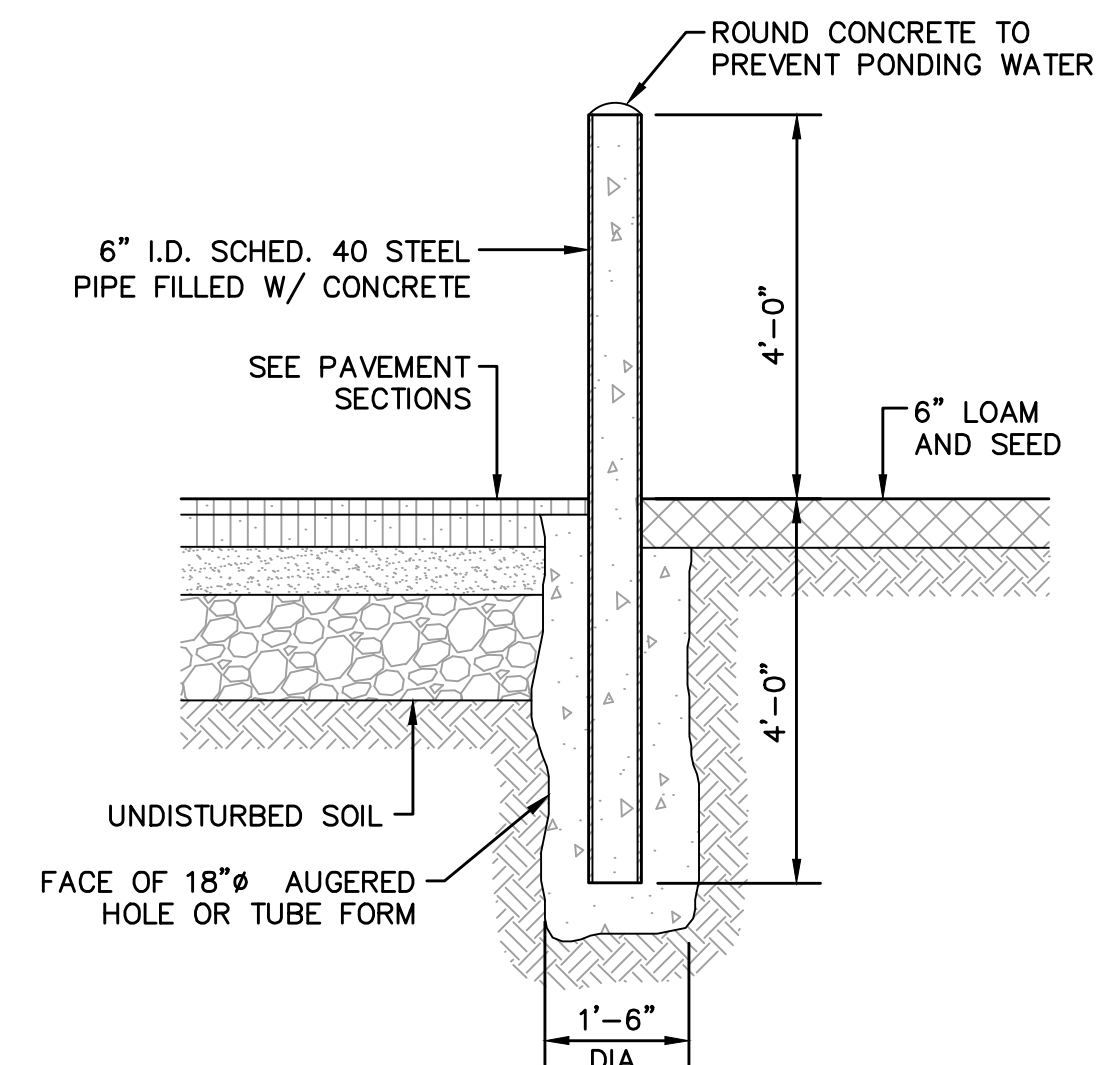


DRY HYDRANT CONNECTION DETAIL

SCALE: NONE

DRY HYDRANT NOTES:

1. ALL PIPING MATERIAL SHALL BE NON-CORROSIVE PIPE AND FITTINGS.
2. ALL PIPE SHALL BE A MINIMUM OF 8" DIAMETER (NOMINAL).
3. ALL PVC PIPING SHALL BE SCHEDULE 40 (MIN.)
4. ALL ABOVE GRADE PORTIONS OF THE HYDRANT SHALL BE PAINTED RED.
5. NO MORE THAN TWO 90 DEGREE ELBOWS SHALL BE USED IN THE HYDRANT SYSTEM.
6. THE HYDRANT SHALL BE LOCATED AT LEAST 10 FEET FROM THE ROADWAY. THE AREA BETWEEN THE ROADWAY SURFACE AND THE DRY HYDRANT SHALL BE CONSTRUCTED TO PROVIDE ALL WEATHER ACCESS TO THE HYDRANT AREA.
7. TWO 6" DIAMETER STEEL CONCRETE FILLED BOLLARDS SHALL BE SET ADJACENT TO HYDRANT.
8. THE VERTICAL LIFT DISTANCE BETWEEN THE INTAKE SCREEN AND THE PUMPER CONNECTION SHALL NOT EXCEED 14 FEET.
9. ALL HORIZONTAL PIPING SHALL HAVE A MINIMUM OF 5 FEET OF GROUND COVER, COMPACTED AND FREE OF VOIDS.
10. A CONCRETE THRUST BLOCK SHALL BE CONSTRUCTED AT THE ELBOW.
11. CONCRETE BLOCKS SHALL ALSO BE CONSTRUCTED AT THE SUPPORTING LEGS UNDER THE SECTION OF PIPE UNSUPPORTED IN THE WATER.
12. THE STAINLESS STEEL INTAKE SCREEN SHALL BE A MINIMUM OF TWO FEET FROM THE BOTTOM OF THE WATER SOURCE AND SHALL HAVE A MINIMUM OF TWO FEET OF WATER ABOVE THE INTAKE SCREEN AT ALL TIMES OF THE YEAR.
13. THE DESIGN OF THE INTAKE SCREEN SHALL BE APPROVED BY THE FIRE CHIEF PRIOR TO CONSTRUCTION. THE STRAINER SHALL HAVE A MINIMUM FLOW CAPACITY OF 1000 GPM.
14. THE CONTRACTOR SHALL BE REQUIRED TO GIVE THE DEPARTMENT OF PUBLIC WORKS AND THE FIRE DEPARTMENT A 48 HOUR NOTICE PRIOR TO ANY FIRE HYDRANT / POND CONSTRUCTION OR TESTING.
15. THE HYDRANT AND POND SHALL BE INSPECTED AND TESTED BY THE MONT VERNON FIRE CHIEF PRIOR TO ACCEPTANCE.



BOLLARD NOTES:

1. BOLLARDS SHALL BE LOCATED TO PROTECT THE DRY HYDRANT CONNECTIONS.
2. FINISHED BOLLARDS SHALL BE PAINTED RED.

STEEL PIPE BOLLARD DETAIL

SCALE: NONE

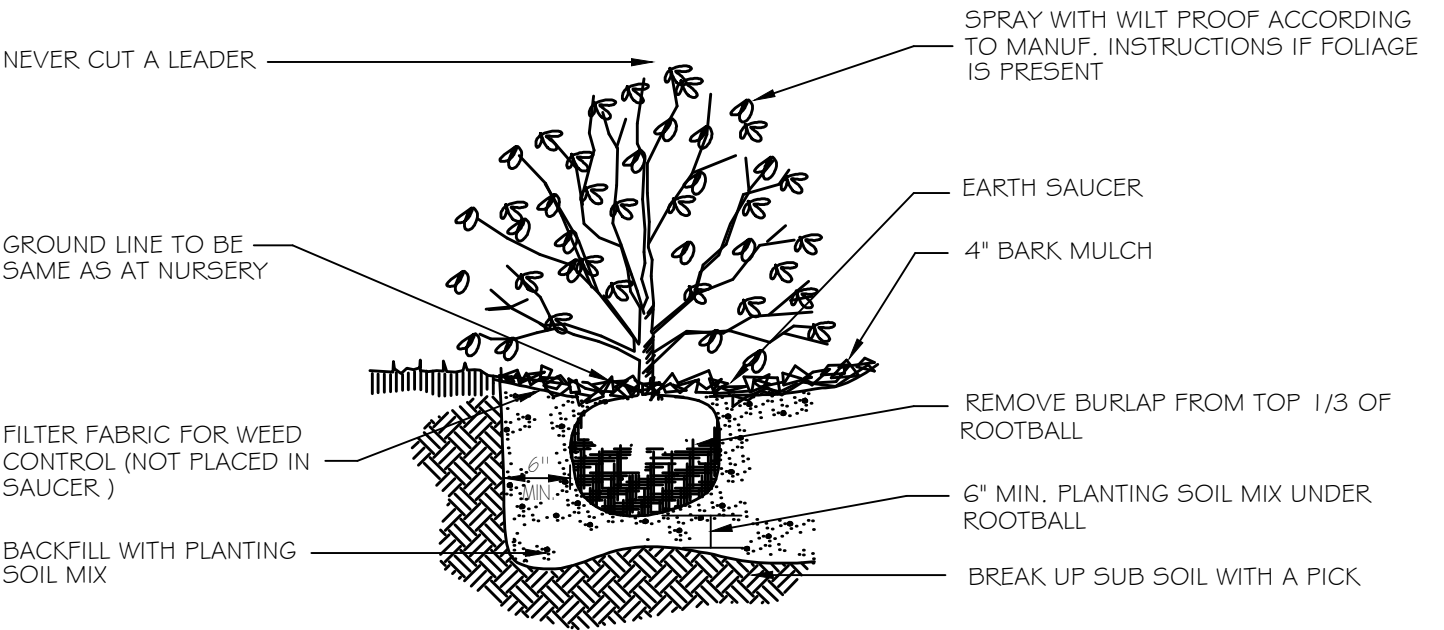
LANDSCAPING NOTES:

- LANDSCAPING TO BE COORDINATED WITH THE CONSERVATION COMMISSION. CONTRACTOR TO PROVIDE AND INSTALL 10 TREES (3" CALIPER MIN.) AT LOCATIONS DIRECTED BY CONSERVATION COMMISSION.
- WHEREVER POSSIBLE EXISTING TREES SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. DISTURBED SIDE SLOPES SHALL BE ALLOWED TO NATURALLY VEGETATE TO SUSTAIN EXISTING WILDLIFE AND PLANT LIFE.
- THE PROPOSED TREES SHALL BE A MIN. 3" CALIPER .
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED WITH A MINIMUM OF 4" SUITABLE LOAM, EXCEPT UNDER THE MULCH BEDS. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.
- PLANTS SHALL NOT BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA OF THE PLANTING.
- ALL TREES SHALL BE BALLED AND BURLAPPED UNLESS OTHERWISE NOTED.
- ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE THE TOWN OF MONT VERNON.
- WHERE APPLICABLE THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT. LAYOUT TO BE APPROVED BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS; WELL DEVELOPED BRANCHES; DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
- CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE YEAR FROM THE DATE OF ACCEPTANCE FOR TREES AND SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
- INSOFAR AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD WILL BE REJECTED.
- QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI 260 (REV. 1996) "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- ALL PLANTS SHALL BE PLANTED IN AMENDED TOP SOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. PLANTING MIX TO BE AS SHOWN ON PLANTING DETAILS. LARGE PLANTING AREAS TO INCORPORATE FERTILIZER AND SOIL CONDITIONERS AS STATED IN PLANTING SPECIFICATIONS.
- PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY.
- PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPRAYED WITH "WILT-PRUF" OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
- NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SIDEWALKS.
- SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT.
- ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES AS A RESULT OF CONSTRUCTION OPERATIONS. ALL EXISTING TREES SHALL BE FERTILIZED WITH A REGULAR GARDEN FERTILIZER (5-10-5) UPON COMPLETION OF WORK. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR TO ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH SHARP TOOLS AND FILLED AROUND WITH TOPSOIL. COMPLETELY SATURATE THESE AREAS WITH WATER. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR IS TO PROTECT ALL EXISTING TREES TO REMAIN BY ERECTING TREE PROTECTION FENCE AT THE DRIP LINE. THIS WILL ENSURE NO COMPACTION OF THE ROOT MASS.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 4" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH.
- NEW PLANTING AREAS, TREES AND SOD SHALL BE ADEQUATELY IRRIGATED OR WATERED TO ESTABLISH THE PROPOSED PLANTS AND LAWN.

1
CB

DECIDUOUS TREE PLANTING DETAIL

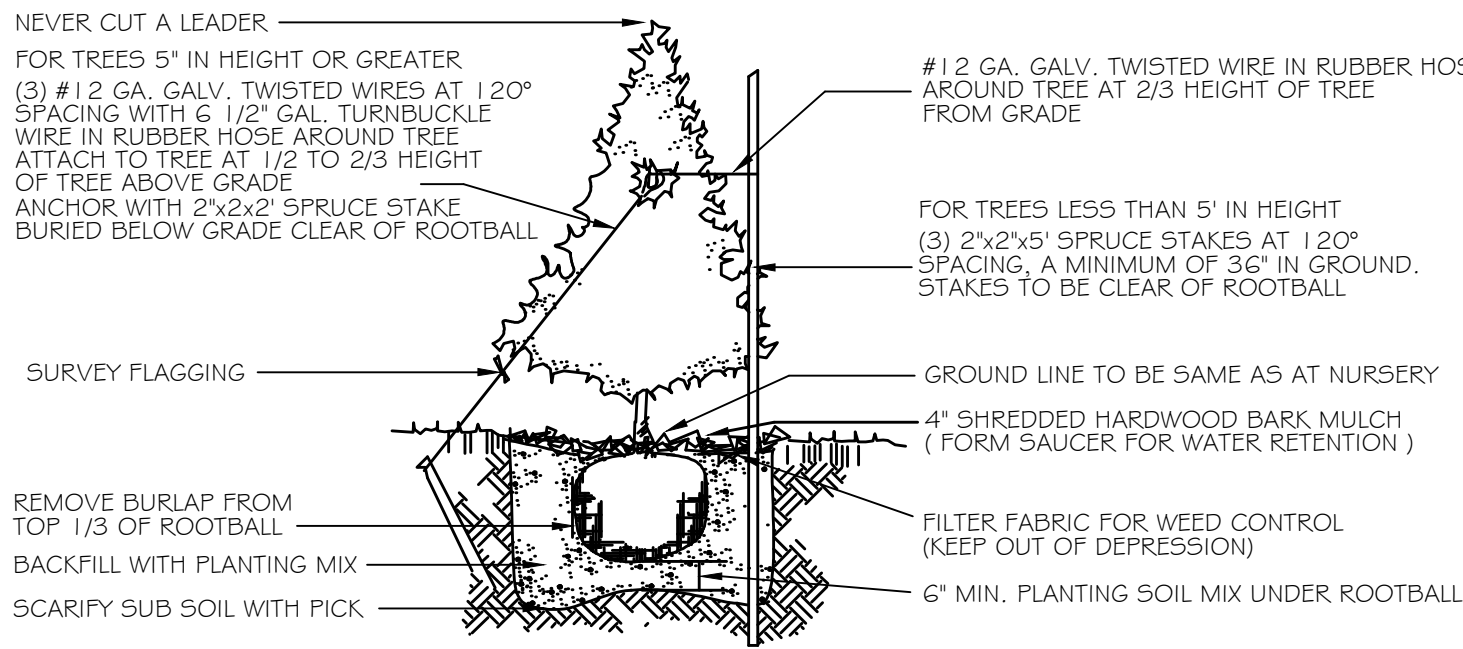
SCALE: NONE



2
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SHRUB PLANTING DETAIL

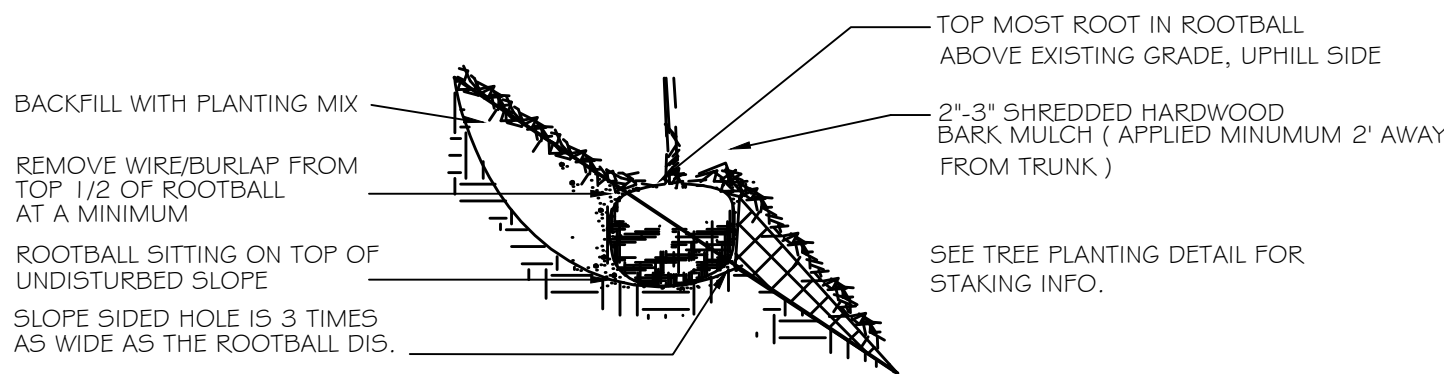
SCALE: NONE



3
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EVERGREEN PLANTING DETAIL

SCALE: NONE



4
CB

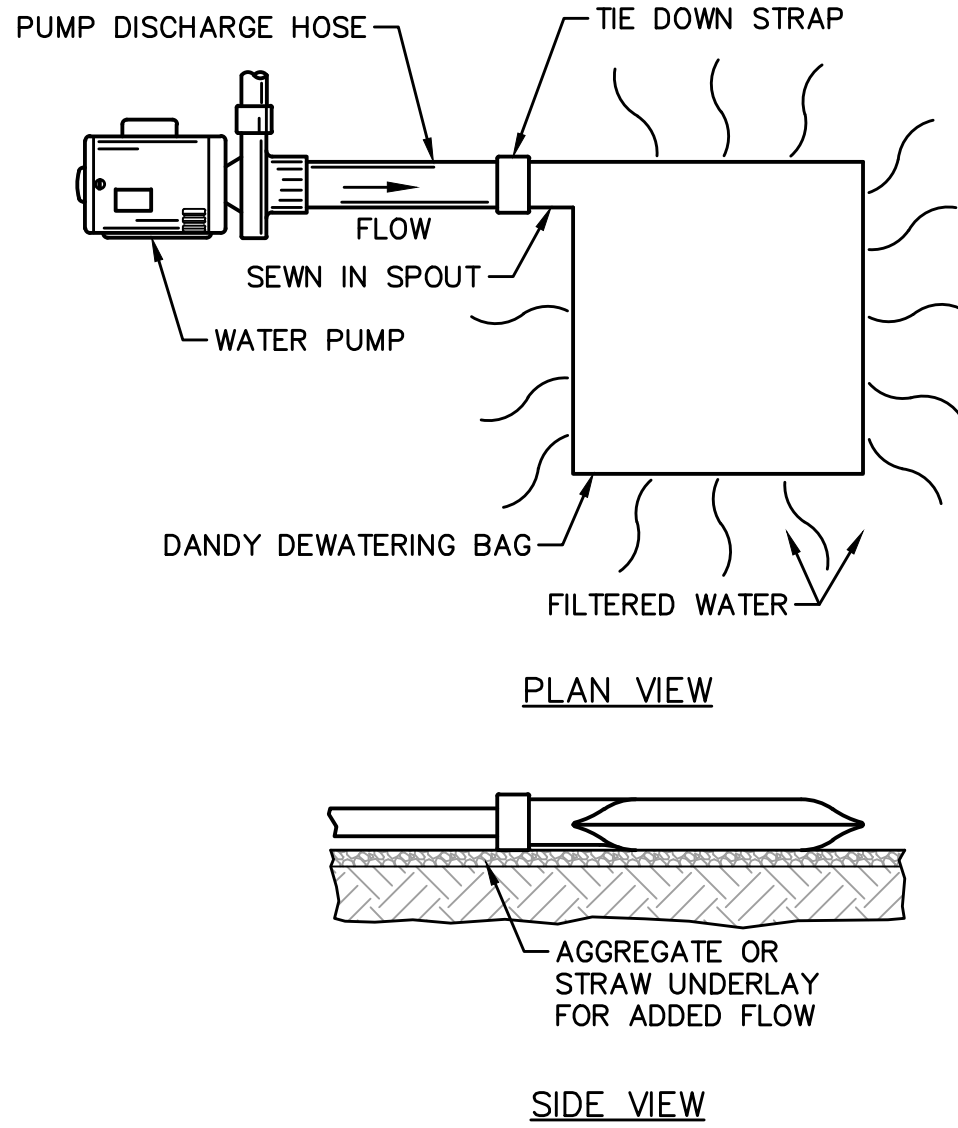
SLOPE PLANTING DETAIL

SCALE: NONE

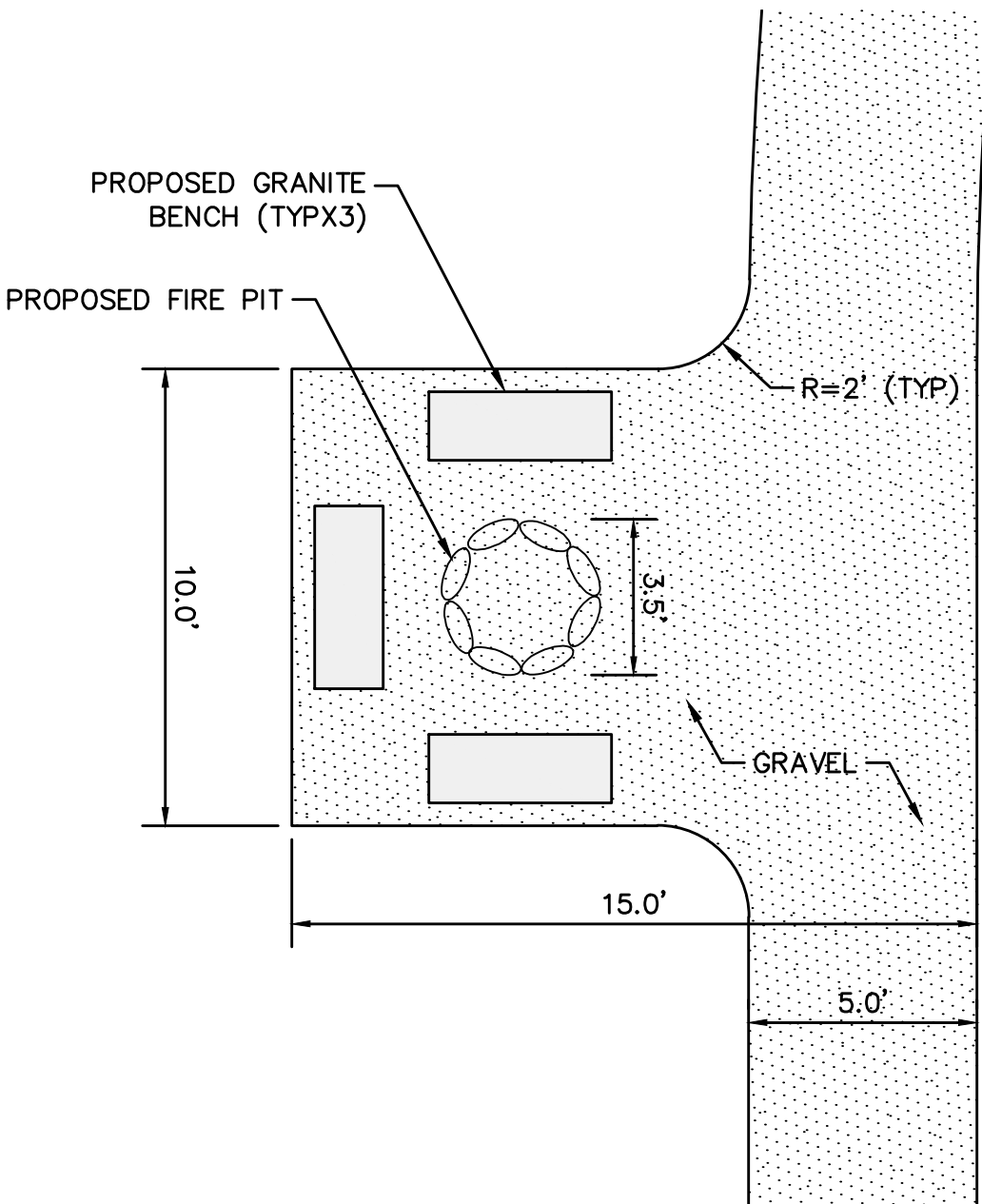
5
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DANDY DEWATERING BAG DETAIL

SCALE: NONE



| MECHANICAL PROPERTY | TEST METHOD | UNITS | MARV |
|-------------------------|-------------|----------------------|-----------------------|
| GRAB TENSILE STRENGTH | ASTM D4632 | KN (LBS) | 0.9 (205) X 0.9 (205) |
| GRAB TENSILE ELONGATION | ASTM D4632 | % | 50 X 50 |
| PUNCTURE STRENGTH | ASTM D4833 | KN (LBS) | 0.58 (130) |
| MULLEN BURST STRENGTH | ASTM D3786 | KPA (PSI) | 2618 (380) |
| TRAPEZOID TEAR STRENGTH | ASTM D4533 | KN (LBS) | 0.36 (80) X 0.36 (80) |
| UV RESISTANCE | ASTM D4355 | % | 70 |
| APPARENT OPENING SIZE | ASTM D4751 | MM (US STD SIEVE) | 0.180 (80) |
| FLOW RATE | ASTM D4491 | 1/MIN/M (GAL/MIN/FT) | 3866 (95) |
| PERMITTIVITY | ASTM D4491 | KN (LBS) | 1.2 |



FIRE PIT NOTES:

- COORDINATE FINAL FIRE PIT AREA DESIGN AND LAYOUT WITH THE TOWN.
- GRANITE BENCHES SHALL BE CHOSEN BY THE TOWN.
- SEE DRAWING C3 FOR FIRE PIT LOCATION.

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FIRE PIT AREA DETAIL

SCALE: 1" = 4'

ENGINEER

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MONT VERNON, NH

PROJECT
CARLETON POND
MAINTENANCE / RESTORATION PROJECT
GRAND HILL ROAD, MONT VERNON, NH

CONSTRUCTION
DETAILS 4

C8

PROJECT NO. 561001

SHEET 8 OF 8