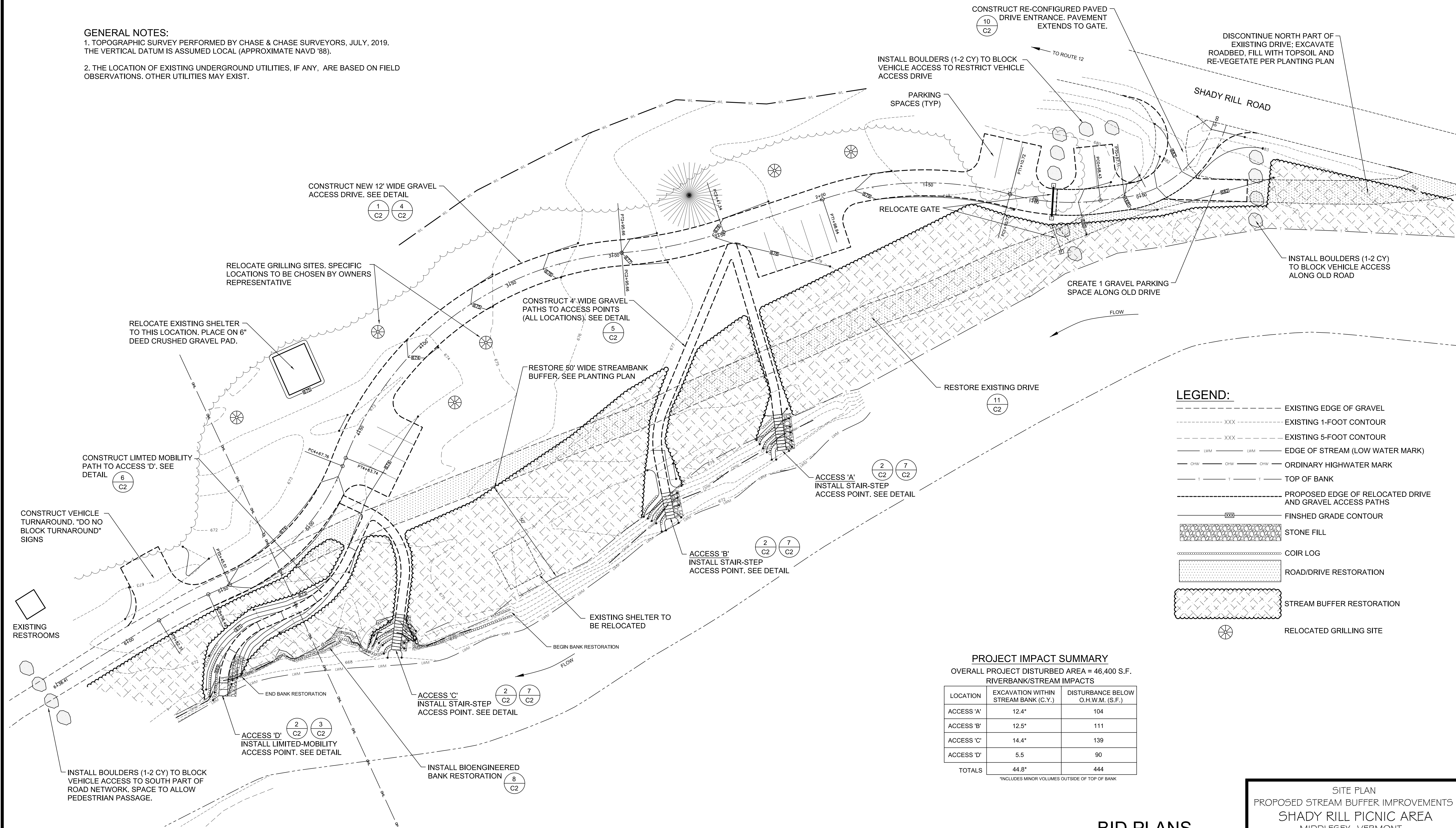


GENERAL NOTES:

1. TOPOGRAPHIC SURVEY PERFORMED BY CHASE & CHASE SURVEYORS, JULY, 2019. THE VERTICAL DATUM IS ASSUMED LOCAL (APPROXIMATE NAVD '88).
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES, IF ANY, ARE BASED ON FIELD OBSERVATIONS. OTHER UTILITIES MAY EXIST.



LEGEND:

- EXISTING EDGE OF GRAVEL
- XXX --- EXISTING 1-FOOT CONTOUR
- XXX --- EXISTING 5-FOOT CONTOUR
- LWM --- LWM --- EDGE OF STREAM (LOW WATER MARK)
- OHW --- OHW --- ORDINARY HIGHWATER MARK
- T --- T --- TOP OF BANK
- PROPOSED EDGE OF RELOCATED DRIVE AND GRAVEL ACCESS PATHS
- FINISHED GRADE CONTOUR
- STONE FILL
- COIR LOG
- ROAD/DRIVE RESTORATION
- STREAM BUFFER RESTORATION
- RELOCATED GRILLING SITE

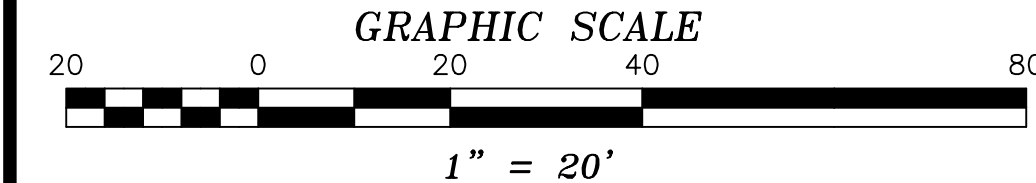
PROJECT IMPACT SUMMARY

OVERALL PROJECT DISTURBED AREA = 46,400 S.F.

RIVERBANK/STREAM IMPACTS

LOCATION	EXCAVATION WITHIN STREAM BANK (C.Y.)	DISTURBANCE BELOW O.H.W.M. (S.F.)
ACCESS 'A'	12.4"	104
ACCESS 'B'	12.5"	111
ACCESS 'C'	14.4"	139
ACCESS 'D'	5.5	90
TOTALS	44.8"	444

*INCLUDES MINOR VOLUMES OUTSIDE OF TOP OF BANK

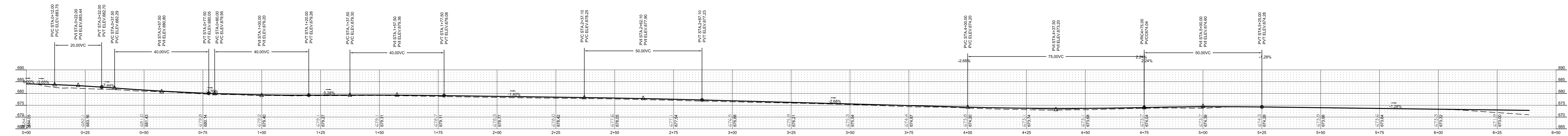


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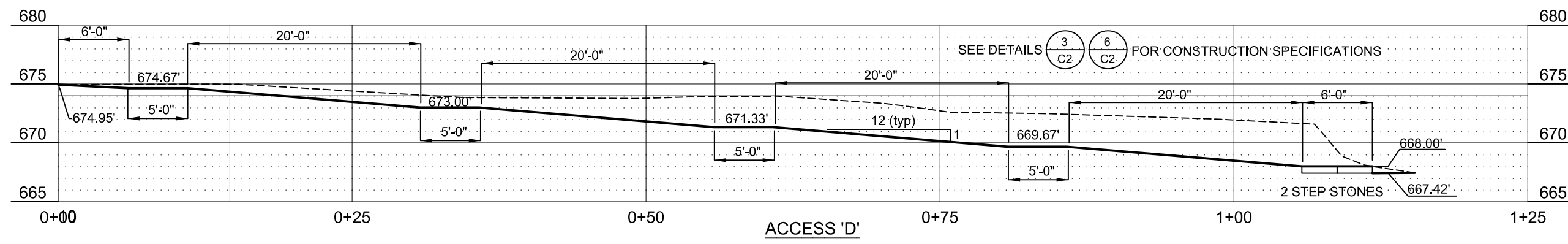
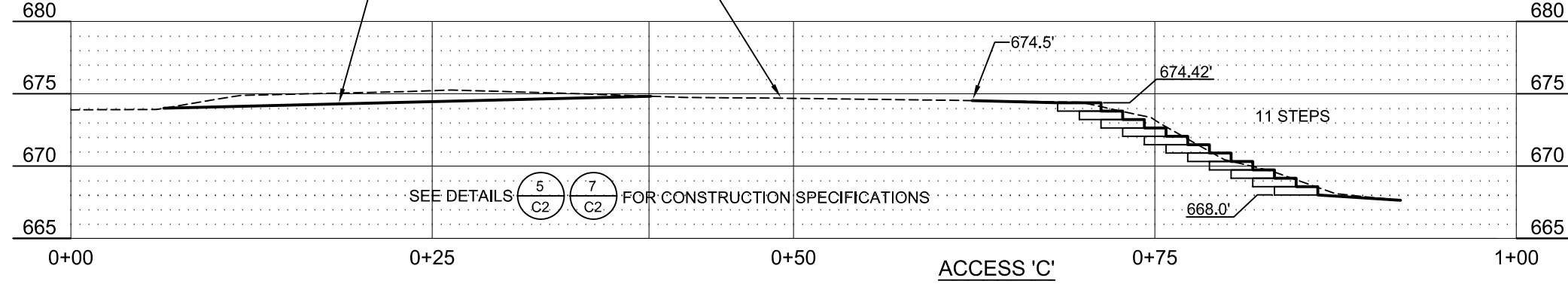
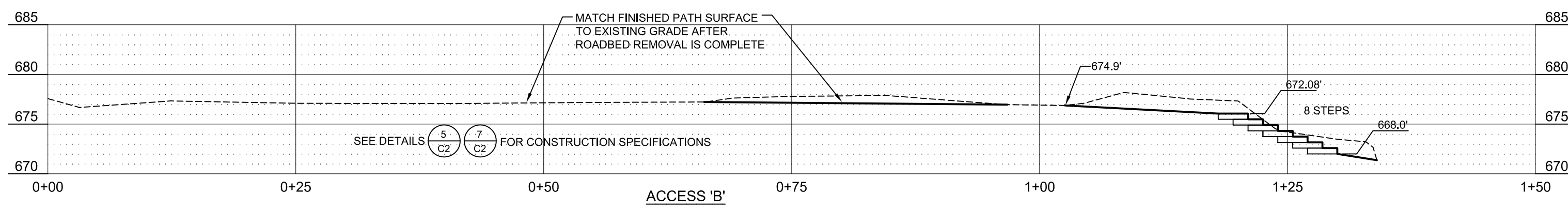
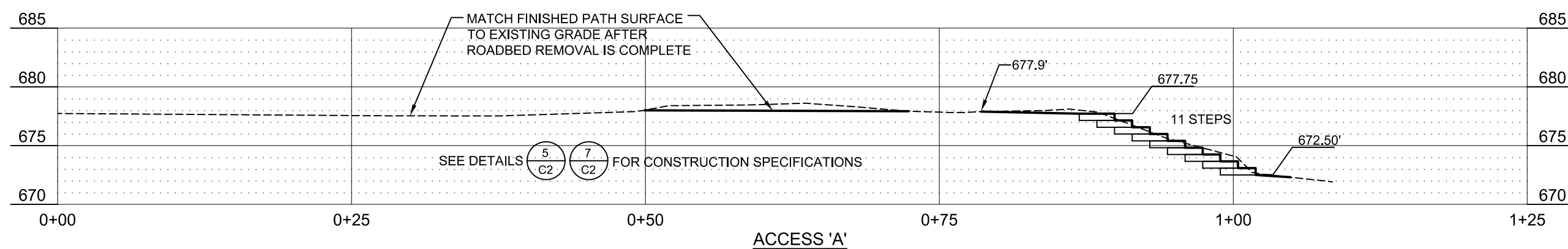
SITE PLAN
PROPOSED STREAM BUFFER IMPROVEMENTS
SHADY RILL PICNIC AREA
MIDDLESEX, VERMONT

SCALE: 1" = 20' | DATE: 8/7/19 | PROJ.# 2017-003 | DWG.# 003A
DRAWN BY: KJ | CHECKED BY: AT | FB/PG. EFB | SHEET C1

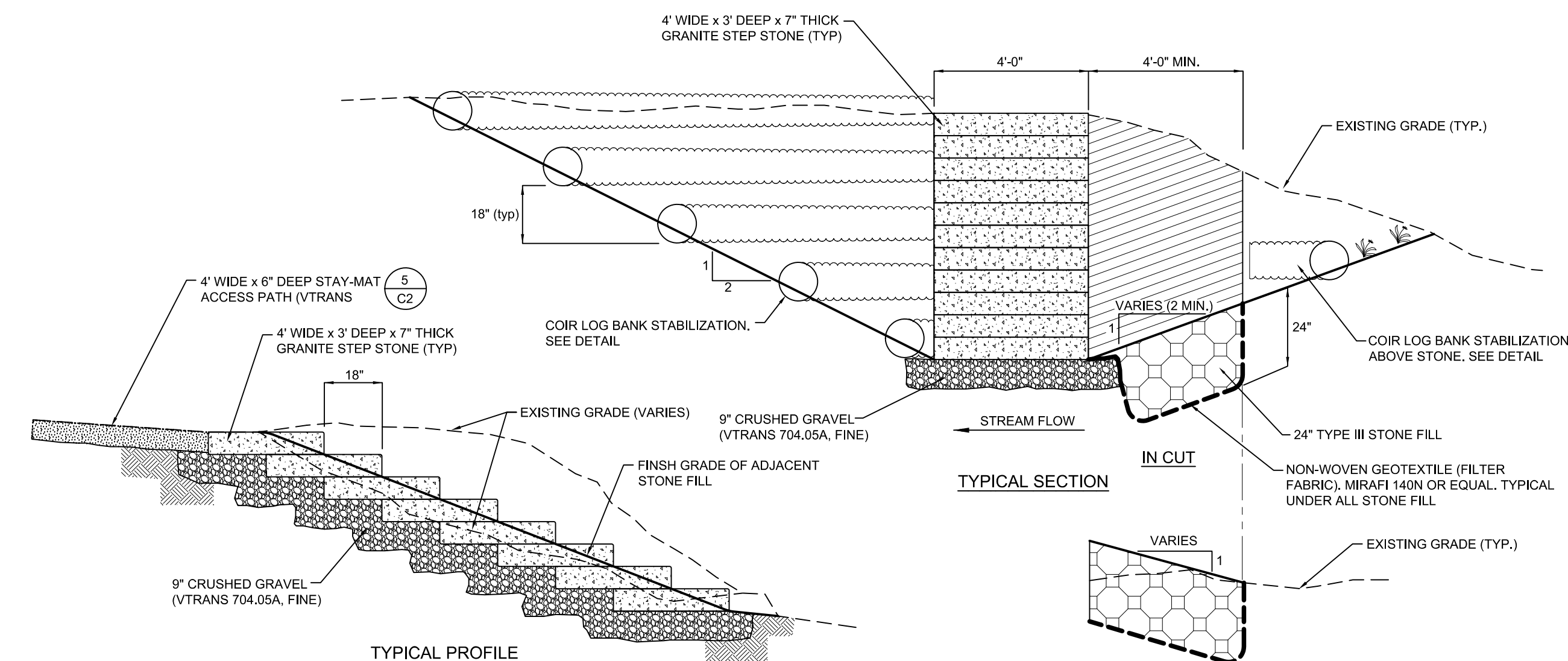
WATERSHED
CONSULTING ASSOCIATES, LLC
PO BOX 4413, BURLINGTON, VT (802)497-2367



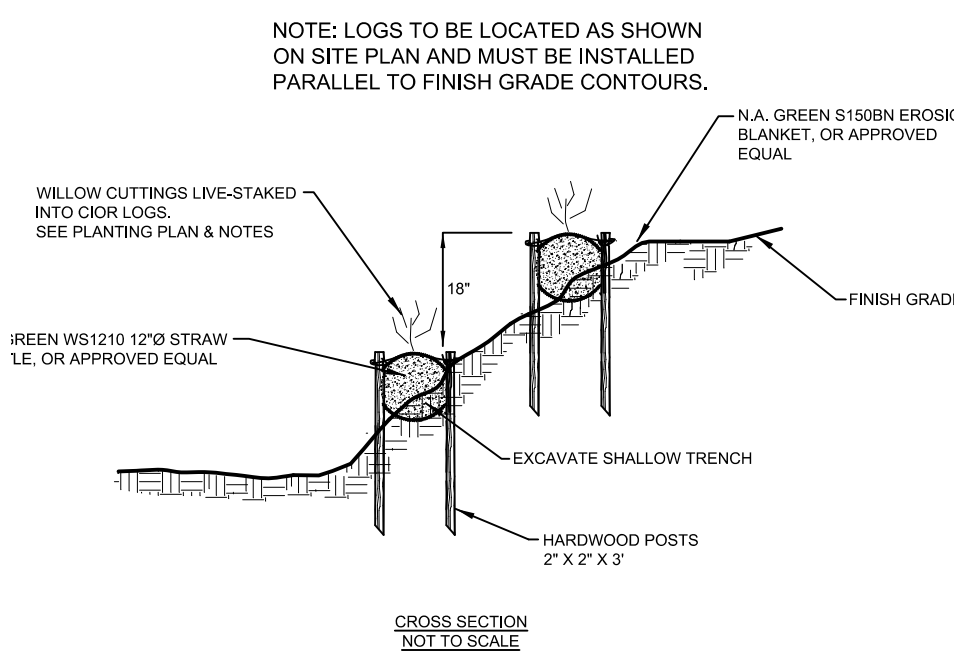
PROPOSED ACCESS ROAD PROFILE
SCALE: 1" = 20' (h & v)



PROPOSED ACCESS PATH PROFILES
SCALE: 1" = 10' (h & v)



DETAIL - STAIR-STEP RIVER ACCESS
NOT TO SCALE

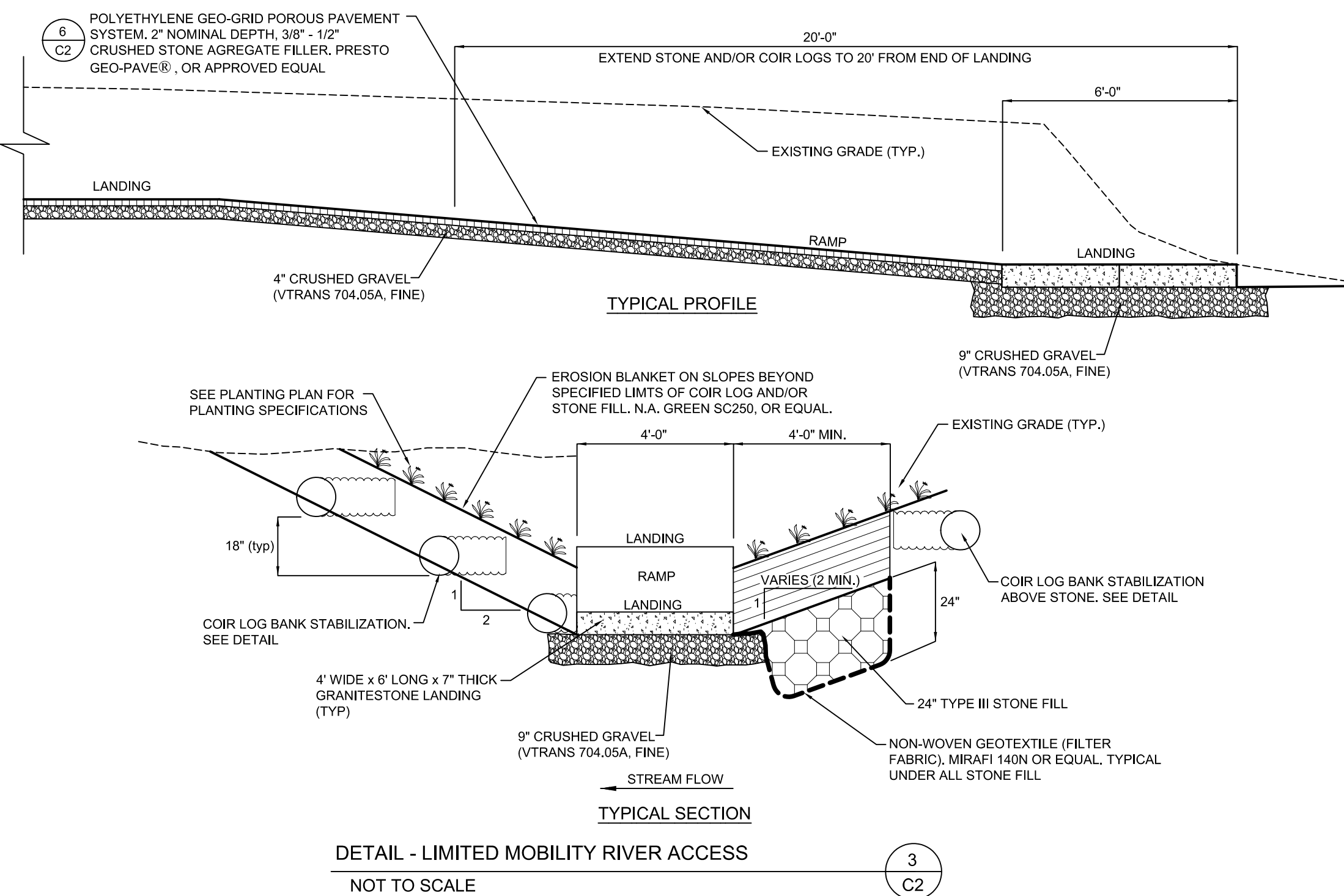
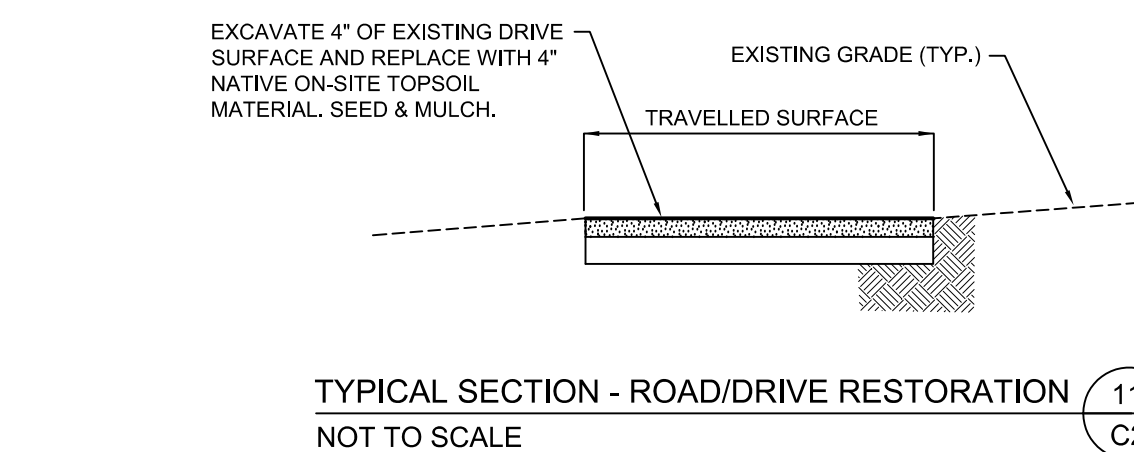
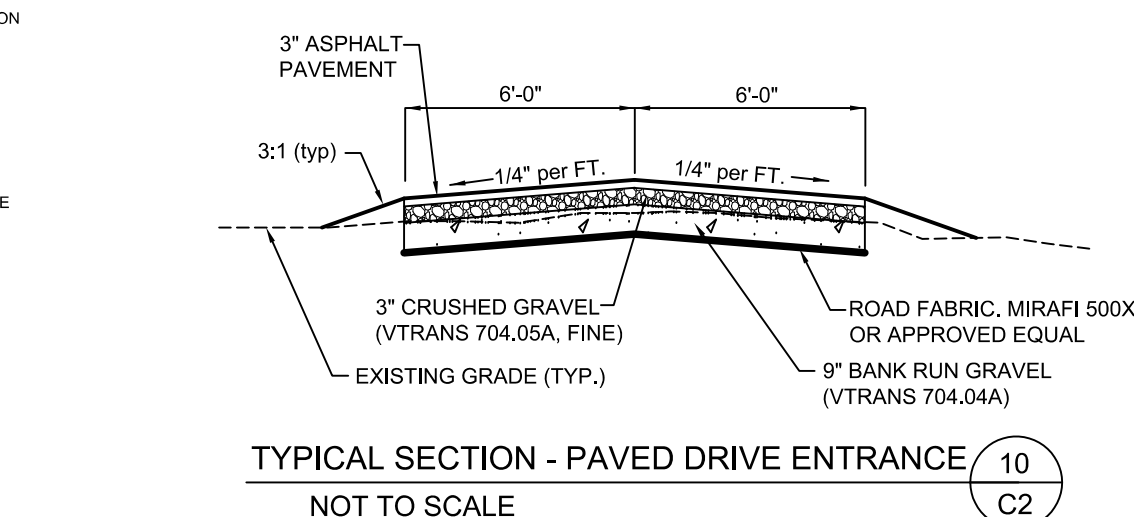


CONSTRUCTION SPECIFICATIONS

1. EXCAVATE A SHALLOW TRENCH AT THE TOE OF SLOPE TO SLIGHTLY BELOW BASEFLOW.
2. PLACE THE ROLL IN THE TRENCH AND ANCHOR WITH 2" x 2" POSTS PLACED ON BOTH SIDES OF THE ROLL AND SPACED LATERALLY ON 2' TO 4' CENTERS. TRIM THE TOP OF THE POSTS EVEN WITH THE EDGE OF THE ROLL. IF NECESSARY, NOTCH THE POSTS AND TIE TOGETHER, ACROSS THE ROLL, WITH 9 GAUGE GALVANIZED WIRE OR 1/2" DIAMETER BRAIDED NYLON ROPE.
3. PLACE SOIL EXCAVATED FROM THE TRENCH BEHIND THE ROLL AND HAND TAMP. PLANT WILLOW CUTTINGS IN LOG AS SPECIFIED. SEE PLANTING NOTE 3.

DETAIL - COIR LOG BANK STABILIZATION
NOT TO SCALE

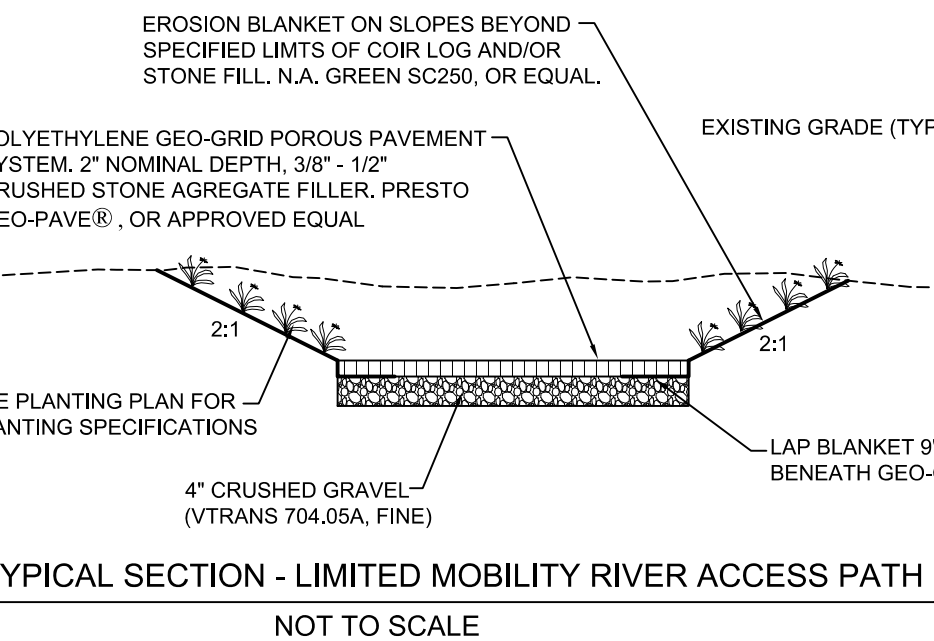
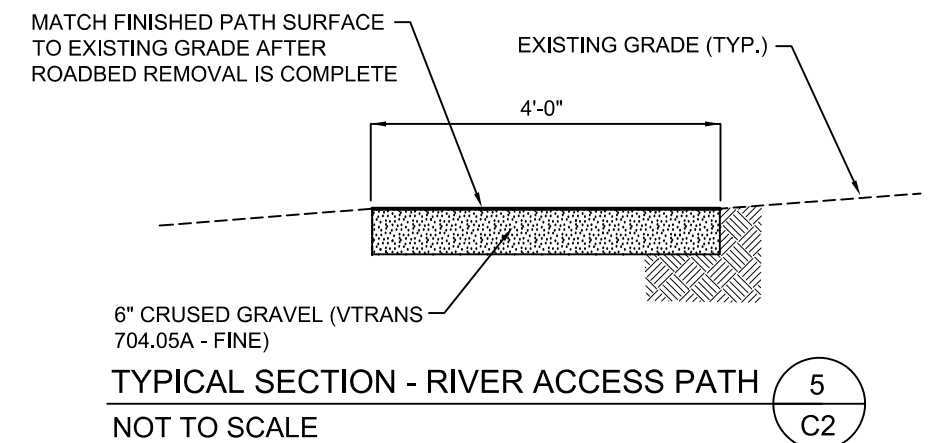
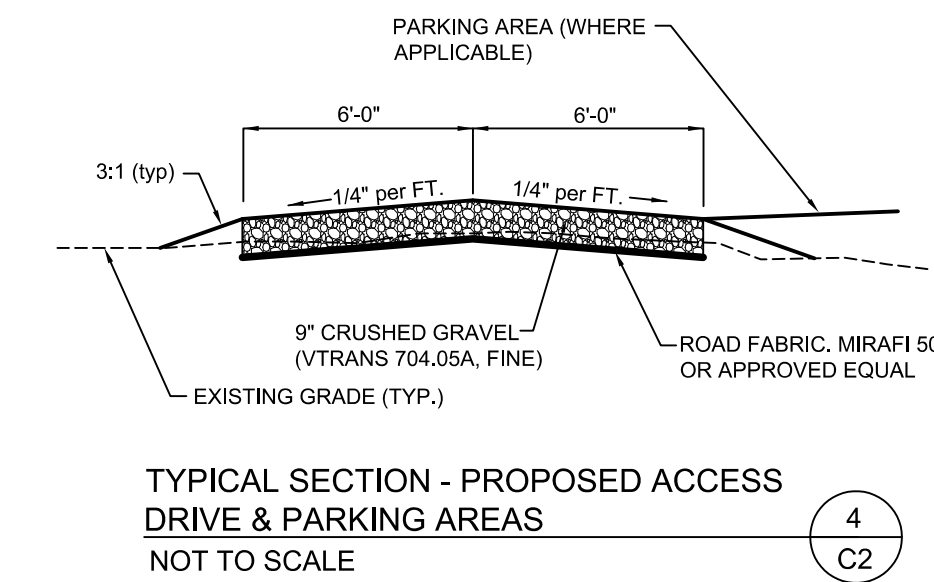
DETAIL - STONE DEFINITION
NOT TO SCALE



STONE FILL: STONE FILL SHALL BE APPROVED, HARD, BLASTED ANGULAR ROCK. THE LEAST DIMENSION OF THE STONE SHALL BE NO LESS THAN 1/3 OF THE LONGEST DIMENSION. THE STONE SHALL BE REASONABLY WELL GRADED SO AS TO FORM A COMPACT MASS WHEN IN PLACE.

(a) TYPE I: THE LONGEST DIMENSION SHALL VARY FROM 1-INCH TO 12-INCHES, AND AT LEAST 50% OF THE VOLUME SHALL HAVE A LEAST DIMENSION OF 4-INCHES.

(b) TYPE II: THE LONGEST DIMENSION SHALL VARY FROM 2-INCHES TO 36-INCHES, AND AT LEAST 50% OF THE VOLUME SHALL HAVE A LEAST DIMENSION OF 12-INCHES.

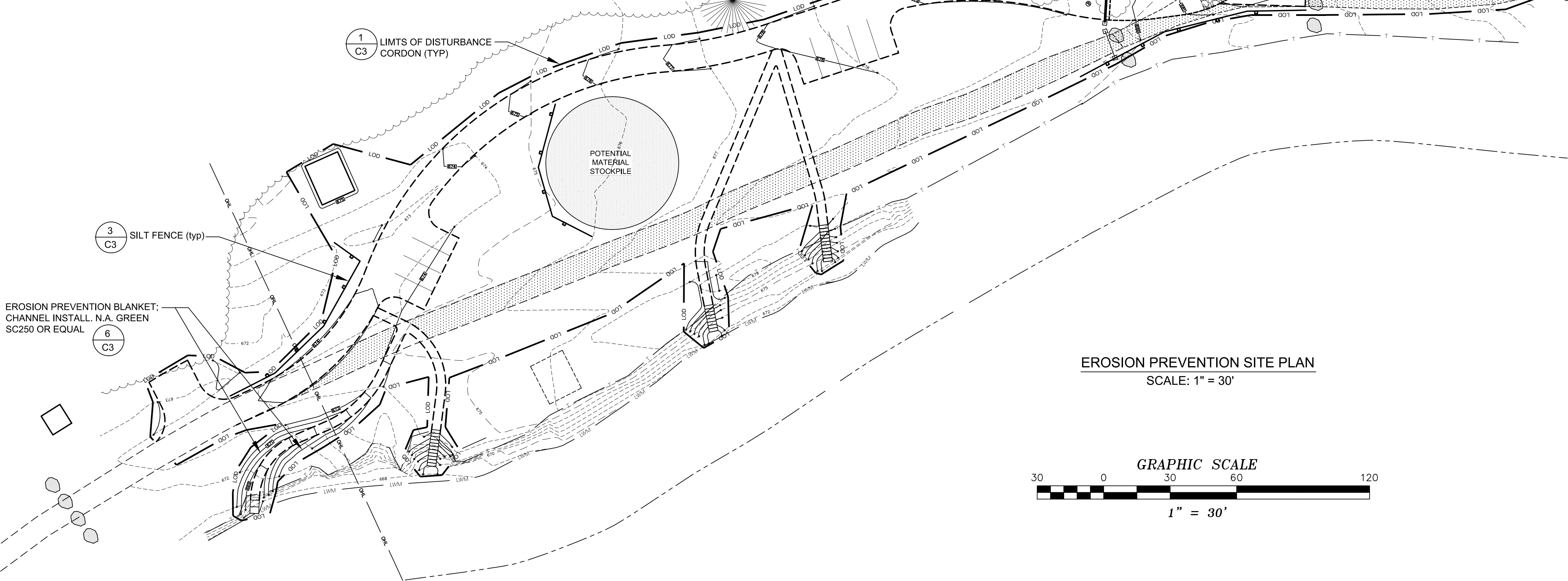


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LEGEND:

EROSION PREVENTION MEASURES
--- L.O.D. --- L.O.D. --- LIMITS OF DISTURBANCE CORDON
--- S.I.L.T. FENCE



EROSION PREVENTION SITE PLAN

SCALE: 1" = 30'

GRAPHIC SCALE

30 0 30 60 120

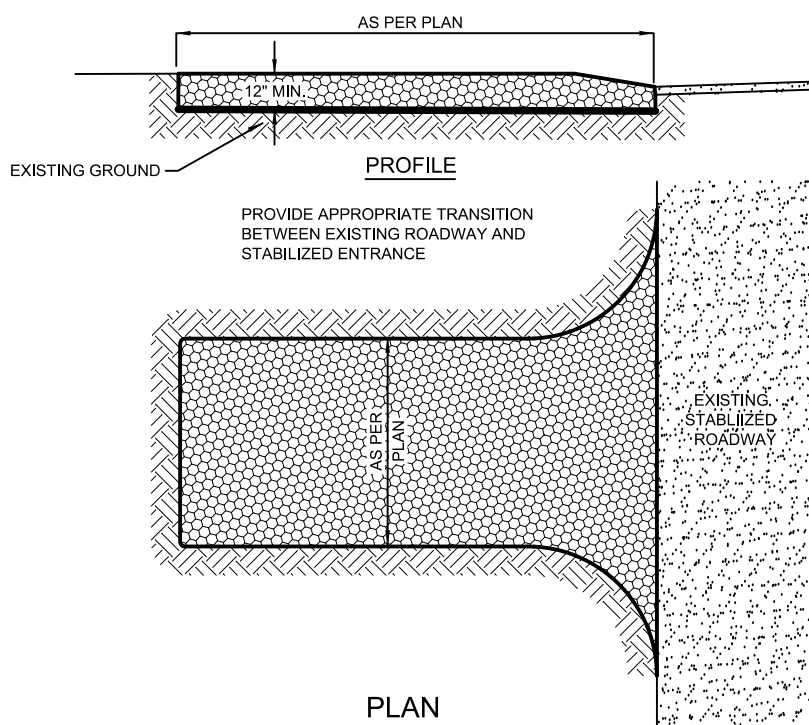
1" = 30'

CONSTRUCTION SPECIFICATIONS

1. LIMIT OF DISTURBANCE CORDON SHALL BE 3-FOOT HIGH ORANGE "CONSTRUCTION" SAFETY FENCE OR APPROVED EQUIVALENT, AND SHALL BE LOCATED AS SHOWN ON THE APPLICABLE PHASE PLAN.
2. SAID FENCE SHALL BE SUPPORTED BY STEEL 'U' OR 'T' TYPE POSTS PLACED AT MAXIMUM 16-FOOT INTERVALS.
3. FENCE SHALL BE WIRE OR "ZIP" TIED TO THE SUPPORT POSTS.
4. THE FENCE SHALL BE MAINTAINED IN A WORKMAN LIKE MANNER, AND SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION IS ACHIEVED.

DETAIL - LIMITS OF DISTURBANCE CORDON

NOT TO SCALE

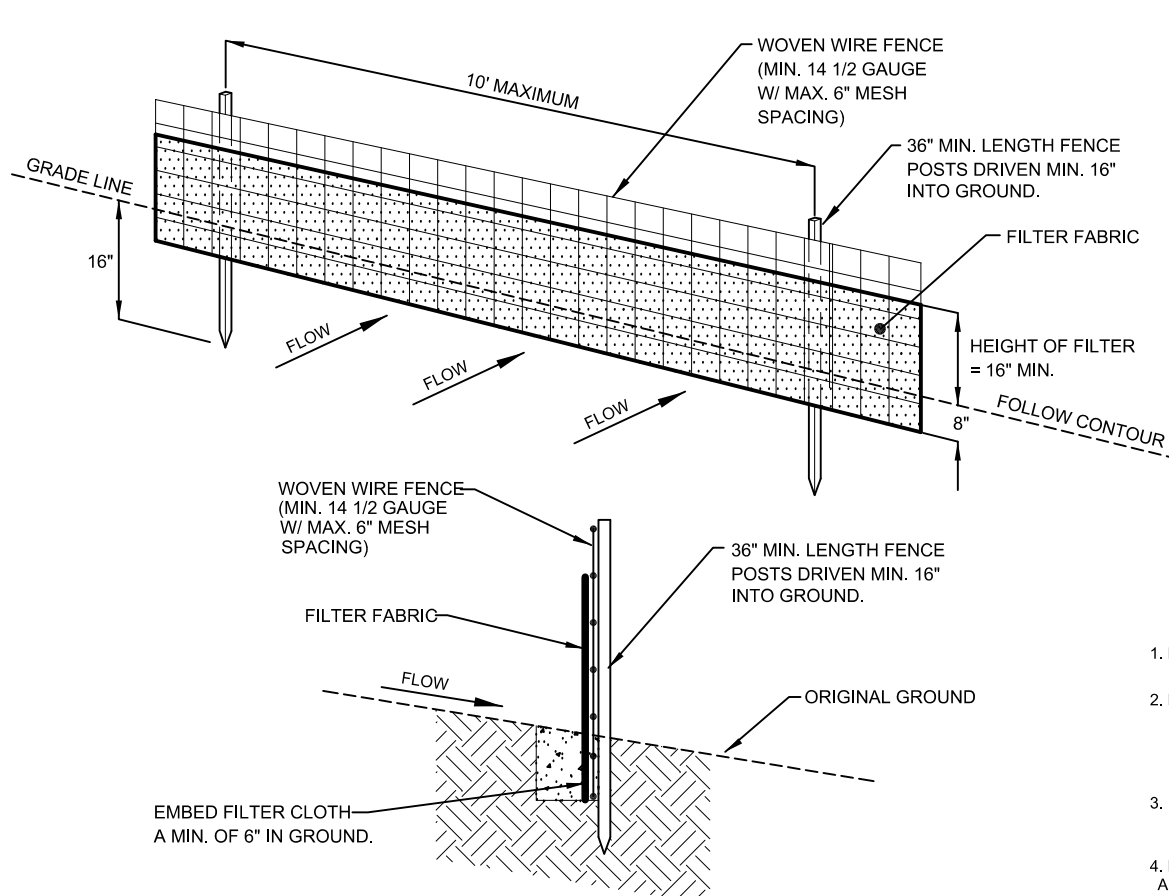


- NOTES:
1. STONE SHALL BE 1.5 TO 4 INCHES WITH A MINIMUM THICKNESS OF 12 INCHES.
 2. LENGTH, WIDTH AND RETURN RADIUS SHALL BE AS SHOWN ON THE APPLICABLE CONSTRUCTION STABILIZATION PLAN.
 3. MAINTAINANCE OF ENTRANCE WILL BE NECESSARY TO PREVENT TRACKING OF SEDIMENT OFF SITE. THIS MAY INCLUDE ADDING STONE, AND/OR REMOVING AND REPLACING STONE.
 4. THE EMPLOYMENT OF APPROVED ALTERNATIVE METHODS OF REMOVING SEDIMENT FROM VEHICLE PRIOR TO EXITING SITE IS ENCOURAGED TO MINIMIZE REQUIRED MAINTAINANCE OF STABILIZED ENTRANCE.

DETAIL - STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

NOTE: THE MATERIALS SHOWN IN THIS DETAIL APPLY TO SITE-BUILT SILT FENCE ONLY. PRE-FABRICATED SILT FENCE IS ACCEPTABLE WHEN INSTALLED IN THE MANNER SPECIFIED.



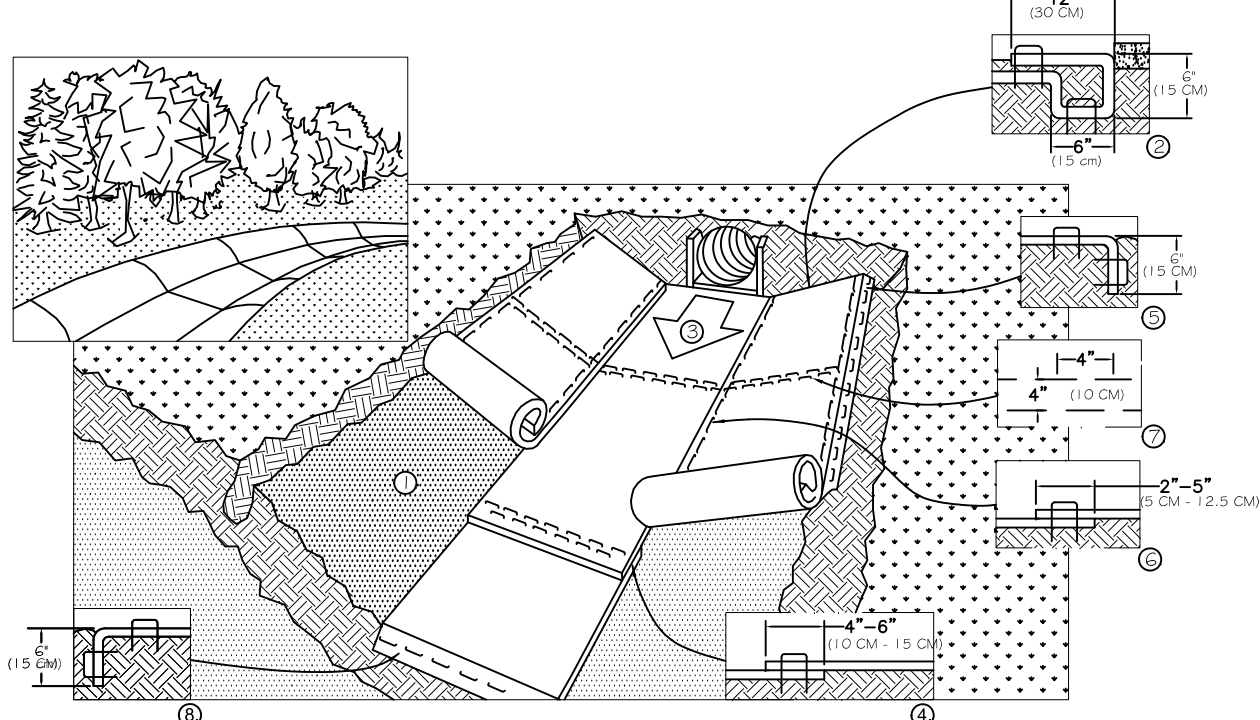
CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

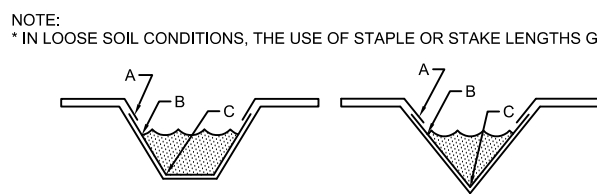
DETAIL - SILT FENCE

NOT TO SCALE

NOTE: LAP SIDE SLOPE FABRIC BENEATH THE GEO-GRID AT ACCESS 'D'.



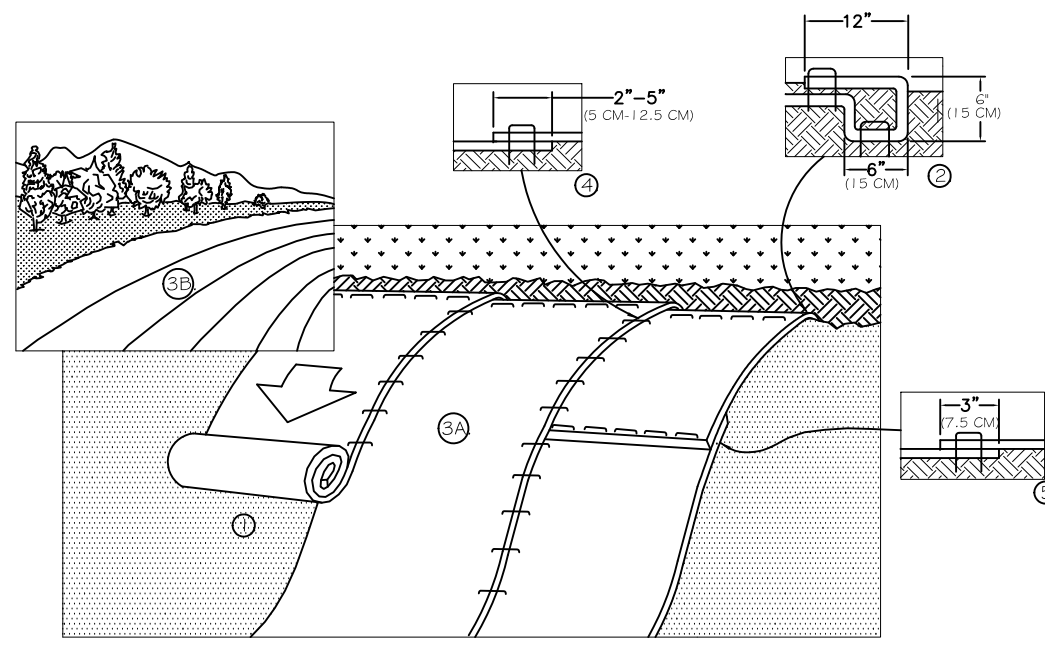
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 8" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UPSLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE BLANKET.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. 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 THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" - 6" (10 CM - 15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 8" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) (DEPENDING ON BLANKET TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 45 FOOT (9 M - 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 8" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



DETAIL - EROSION CONTROL BLANKET - CHANNEL INSTALL

NOT TO SCALE

NOTE: WHERE SLOPES DO NOT EXCEED 3H:1V, MULCH MAY BE APPLIED IN LIEU OF EROSION PREVENTION BLANKET



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND 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 A 6" (15 CM) DEEP X 8" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UPSLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) 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 THE 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" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

DETAIL - EROSION CONTROL BLANKET - SLOPE INSTALL

NOT TO SCALE

EROSION PREVENTION AND SEDIMENT CONTROL CONSTRUCTION NOTES:

TOTAL PROJECT DISTURBED AREA IS 46, 400 SQ.FT. THEREFORE A CONSTRUCTION GENERAL PERMIT IS REQUIRED. OWNER AND CONTRACTOR MUST SEEK PERMIT COVERAGE FROM THE VERMONT DEPARTMENT OF NATURAL RESOURCES. THE PROJECT SHALL EXECUTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE STATE OF VERMONT "LOW-RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL" (2006). THE EROSION PREVENTION MEASURES SHOWN HEREON REPRESENT THE MINIMUM NECESSARY TO MAINTAIN COMPLAINE WITH SAID HANDBOOK. ADDITIONAL MEASURES AS DICTATED BY THE WORKPLAN AND/OR WEATHER EVENTS MAY BE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SEDIMENT FROM LEAVING THE SITE.

1. ALL AREAS MUST HAVE TEMPORARY OR PERMANENT STABILIZATION WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END EACH WORK DAY.

3. ALL EROSION CONTROL MEASURES MUST BE INSPECTED AT A FREQUENCY OF EVERY 7 DAYS OR WITHIN 24 HOURS OF A PRECIPITATION EVENT CAUSING RUNOFF TO LEAVE CONSTRUCTION SITE, AND REPLACED OR REPAIRED AS NECESSARY.

4. A MAXIMUM OF 46,400 SQ. MAY BE DISTURBED FOR THIS PROJECT.

WINTER SEASON CONSTRUCTION NOTES

(OCTOBER 15th - APRIL 15th)

ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IMPLEMENTED DURING THE WINTER CONSTRUCTION SEASON IF EARTH DISTURBANCE IS PLANNED DURING THIS TIME. CONTRACTOR/LANDOWNER SHALL READ AND UNDERSTAND THE FOLLOWING ITEMS:

1. NON-VEGETATIVE PROTECTION MUST BE INSTALLED AFTER SEPTEMBER 15TH TO BARE SOILS INCLUDING EROSION CONTROL BLANKETS AND/OR HEAVY MULCH LAYER.
2. APPLY A MINIMUM OF 3 INCHES OF MULCH WITH AN 80-90% GROUND COVER. MULCH SHALL BE TRACKED OR STABILIZED WITH NETTING IN OPEN AREAS VURNERABLE TO WIND.
3. PROVIDE ENLARGED ACCESS POINTS TO THE SITE. STABILIZED TO PROVIDE FOR SNOW STOCKPILING.
4. LIMITS OF DISTURBANCE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
5. CLEARED SNOW SHALL BE STOCKPILED DOWNSLOPE OF ALL AREAS OF DISTURBANCE AND OUT OF STORMWATER TREATMENT STRUCTURES.
6. A MINIMUM 25 FOOT BUFFER SHALL BE MAINTAINED ON PERIMETER CONTROLS SUCH AS SILT FENCE.
7. IN AREAS OF DISTURBANCE THAT DRAIN TO A WATERBODY WITHIN 100 FEET, TWO ROWS OF SILT FENCE MUST BE INSTALLED ALONG THE CONTOUR.
8. DRAINAGE STRUCTURES MUST BE KEPT FREE AND CLEAR OF SNOW AND ICE DAMS.
9. SILT FENCE AND OTHER PRACTICES MUST BE INSTALLED AHEAD OF FROZEN GROUND.
10. DISTURBED SOILS MUST BE STABILIZED AT THE END OF EACH WORK DAY. UNLESS NO PRECIPITATION IS FORECAST WITHIN 24 HOURS AND WORK WILL RESUME WITHIN 24 HOURS IN THE SAME DISTURBED AREA. IN AREAS THAT COLLECT AND RETAIN RUNOFF SUCH AS HOUSE FOUNDATIONS AND UTILITY TRENCHES DAILY STABILIZATION IS NOT REQUIRED.
11. PRIOR TO STABILIZATION SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1 INCH THICKNESS.
12. USE STONE TO STABILIZE AREAS SUCH AS THE PERIMETER OF BUILDINGS UNDER CONSTRUCTION OR WHERE CONSTRUCTION VEHICULAR TRAFFIC IS ANTICIPATED. STONE PATHS SHALL BE 10-20 FEET WIDE TO ACCOMMODATE VEHICULAR TRAFFIC.

EROSION PREVENTION AND SEDIMENT CONTROL STABILIZATION NOTES:

IF ANY INFORMATION IN THIS SCHEDULE CONFLICTS WITH THAT PROVIDED ON THE PLANTING PLAN, THE PLANTING PLAN SHALL CONTROL.

1. MULCH SHALL BE APPLIED TO ALL DISTURBED AREAS AT 2 TONS PER ACRE. MULCH SHALL CONSIST OF AIR-DRIED HAY OR STRAW FREE OF SEEDS AND COARSE MATERIALS.
2. TOPSOIL PILES SHALL BE MULCHED AND RINGED WITH SILT FENCE.
3. DISTURBED SOILS TO BE STABILIZED AS FOLLOWS:

CHANNEL SLOPE	LINING
1% TO 5%	NORTH AMERICAN GREEN S150
> 5%	STONE RIP RAP OR NORTH AMERICAN GREEN SC250
4. LIME MAY BE APPLIED TO ACHIEVE SOIL PH OF 6.5 FOR AREAS TO BE SEEDED.
5. APPLY COMMERCIAL FERTILIZER AT 1.0 LBS/1,000SQ. FT. OF N20, P5 AND K20, IF REQUIRED.
6. LIME AND FERTILIZER SHALL BE MIXED THOROUGHLY INTO THE SEEDED DURING SOIL PREPARATION.
7. GRASSED CHANNELS SHALL HAVE A MIN. OF 4" OF TOPSOIL PRIOR TO SEEDING.
8. DISTURBED SOILS SHALL BE SEEDED ACCORDING TO THE FOLLOWING TABLE:

SEEDING RATES FOR TEMPORARY STABILIZATION:			
APRIL 15 - SEPT. 15: RYEGRASS (ANNUAL OR PERENNIAL: 20 LBS/ACRE)			
SEPT. 15 - APRIL 15: WINTER RYE (120 LBS/ACRE)			
SEEDING RATES FOR FINAL STABILIZATION:			
CHOOSE FROM:	VARIETY	LBS./ACRE	LBS./1000 SQ. FT.
BIRDSFOOT TREFOIL	EMPIRE/PARDEE	5*	0.1
OR			
COMMON WHITE CLOVER	COMMON	8	0.2
PLUS			
TALL FESCUE	KY-31/REBEL	10	0.25
PLUS			
REDTOP	COMMON	2	0.05
OR			
RYEGRASS (PERENNIAL)	PENNFINE/LINN	5	0.1
* - MIX 2.5 LBS. EACH OF EMPIRE AND PARDEE OR 2.5 LBS. OF BIRDSFOOT AND 2.5 LBS. WHITE CLOVER PER ACRE.			

EROSION CONTROL PLAN & DETAILS PROPOSED STREAM BUFFER IMPROVEMENTS SHADY RILL PICNIC AREA MIDDLESEX, VERMONT

SCALE: AS NOTED DATE: 8/7/19 PROJ.# 2017-003 DWG.# 003B
DRAWN BY: KJL CHECKED BY: AT /FB/PG. EFB SHEET C2



PO BOX 4413, BURLINGTON, VT (802)497-2367

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