

FOR PERMIT

BULL HILL WIND PROJECT

BLUE SKY EAST, LLC

T16 MD, HANCOCK COUNTY, MAINE

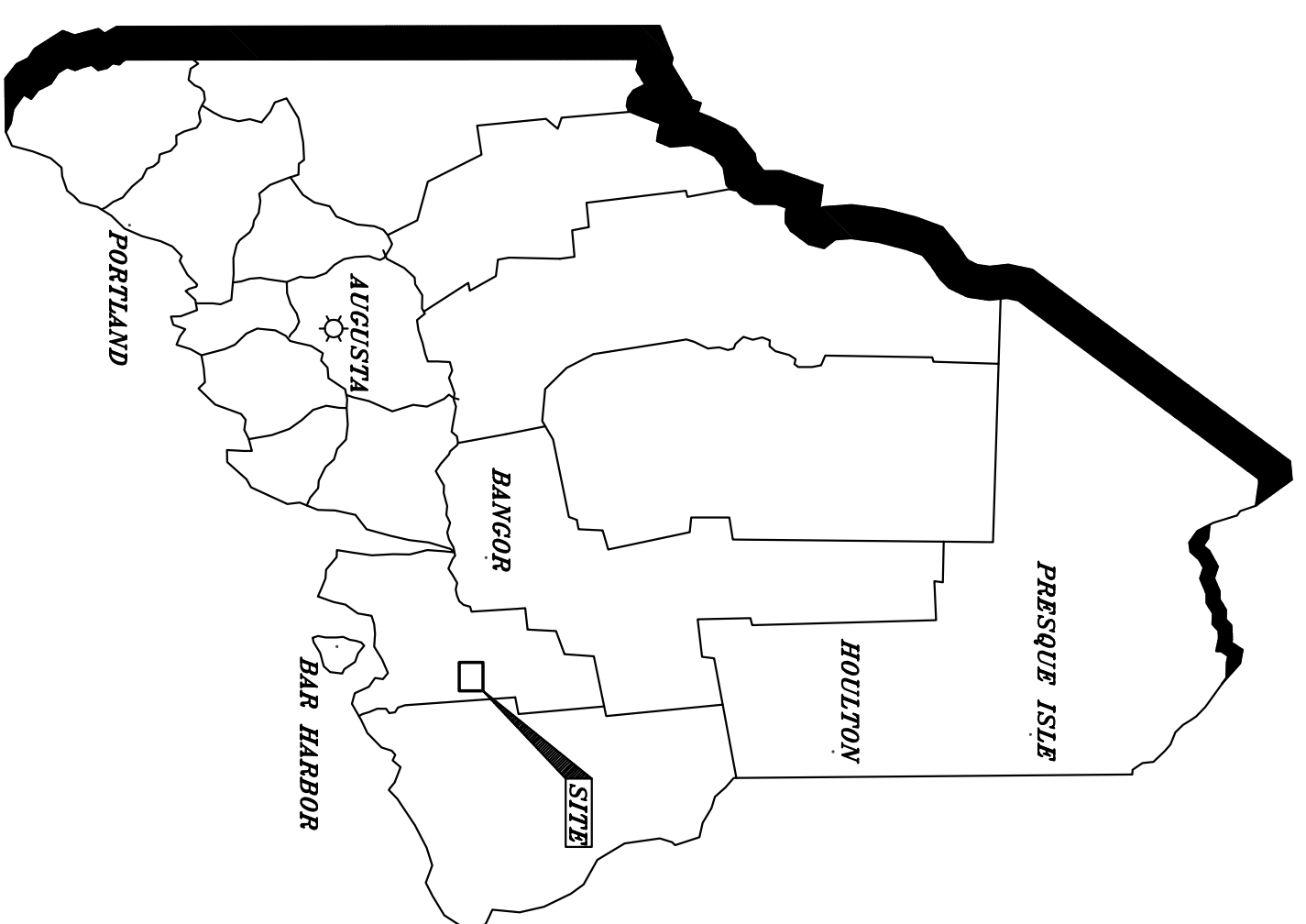
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NOVEMBER 24, 2010

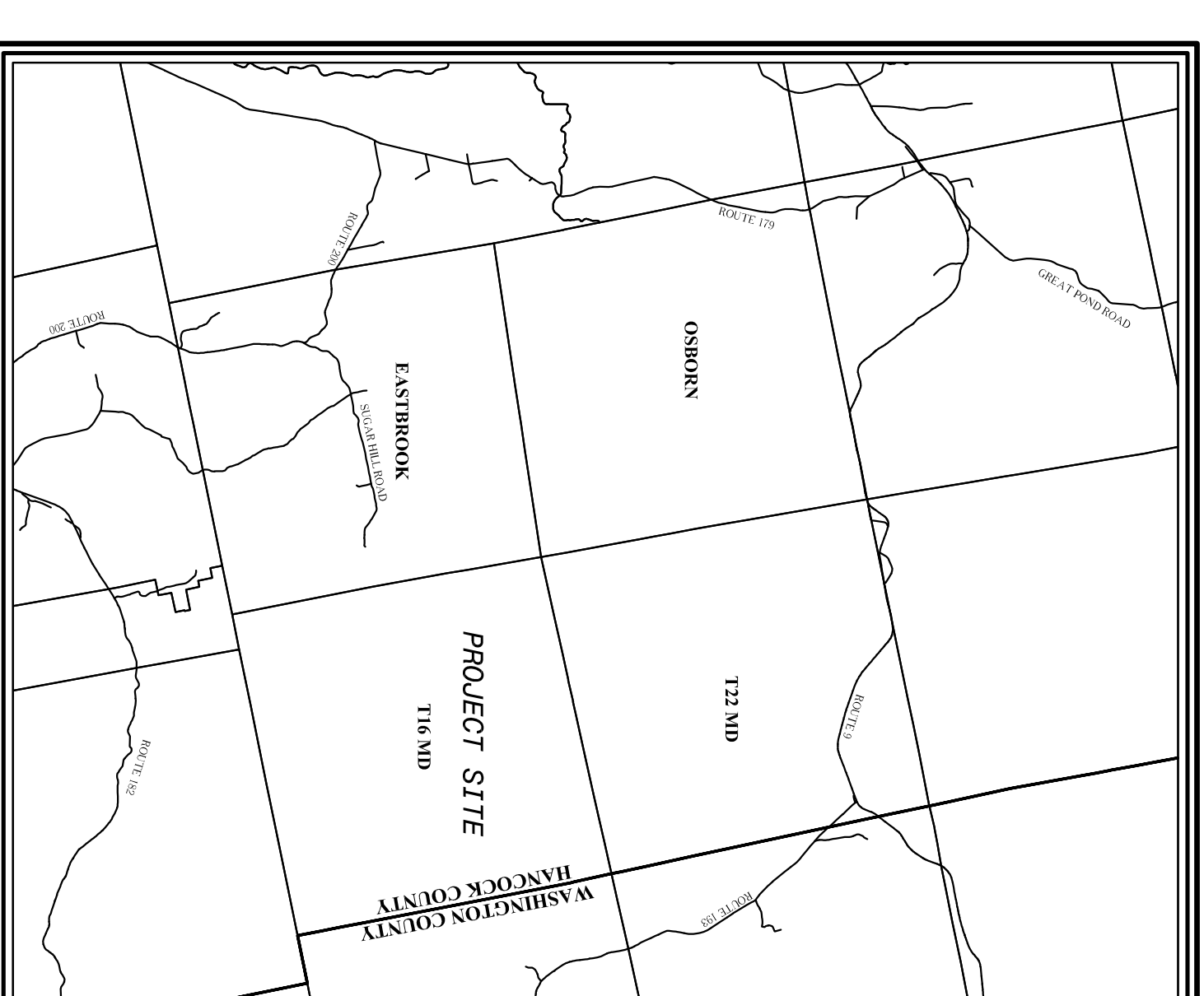
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DESIGN TEAM:



LOCUS MAP

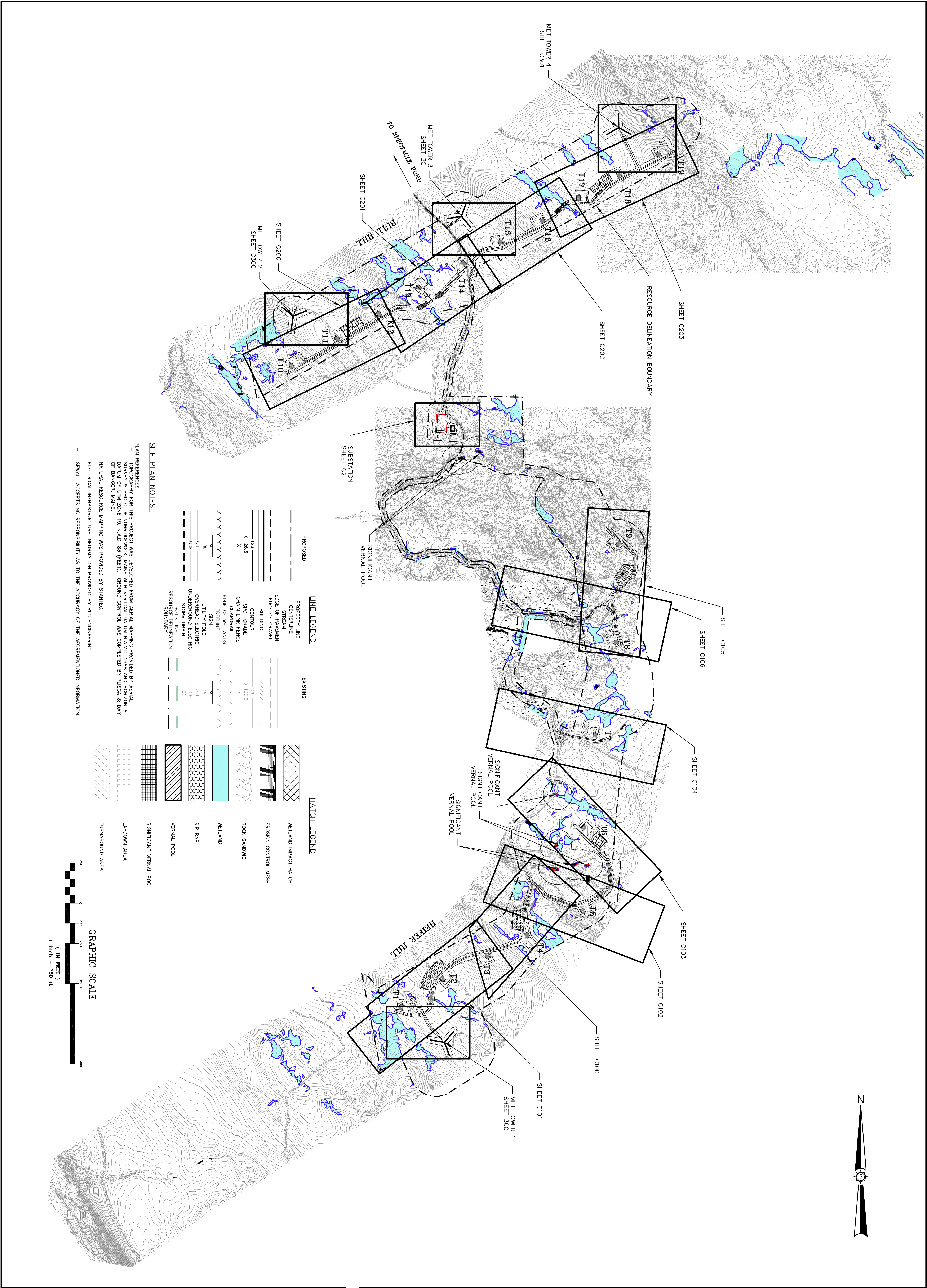


VICINITY MAP



JAMES W. SEWALL COMPANY / Since 1880
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LINE LEGEND

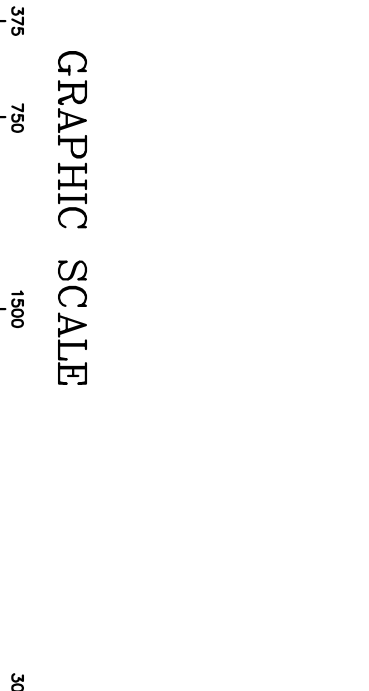
PROPOSED	EXISTING
PROPERTY LINE	PROPERTY LINE
CENTERLINE	CENTERLINE
STREAM	STREAM
EDGE OF PAVEMENT	EDGE OF PAVEMENT
EDGE OF GRAVEL	EDGE OF GRAVEL
BUILDING	BUILDING
CONTOUR	CONTOUR
SPOT ELEVATION	SPOT ELEVATION
CHAIN LINK FENCE	CHAIN LINK FENCE
QUARRRAIL	QUARRRAIL
EDGE OF WETLANDS	EDGE OF WETLANDS
TREELINE	TREELINE
UTILITY POLE	UTILITY POLE
OVERHEAD ELECTRIC	OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
STORM DRAIN	STORM DRAIN
RESOURCE DELINEATION	RESOURCE DELINEATION
BOUNDARY	BOUNDARY

HATCH LEGEND

	WETLAND IMPACT HATCH
	EROSION CONTROL MESH
	ROCK SANDWICH
	WETLAND
	RIP RAP
	VERNAL POOL
	SIGNIFICANT VERNAL POOL
	TURNAROUND AREA

SITE PLAN NOTES:

PLAN REFERENCES:
 - AERIAL PHOTOGRAPHY FOR THIS PROJECT WAS DERIVED FROM AERIAL MAPPING PROVIDED BY AERIAL SURVEY PHOTO OF NORBERG/ROCKWELL, MAINE WITH VERTICAL DATUM N.A.D. 83 (1985) AND HORIZONTAL DATUM OF UTM ZONE 19, N.A.D. 83 (FEET). GROUND CONTROL WAS COMPLETED BY PLUSGA & DAY OF BANOR, MAINE.
 - NATURAL RESOURCE MAPPING WAS PROVIDED BY STANTEC.
 - ELECTRICAL INFRASTRUCTURE INFORMATION PROVIDED BY RLC ENGINEERING.
 - SEWALL ACCEPTS NO RESPONSIBILITY AS TO THE ACCURACY OF THE ABOVE-MENTIONED INFORMATION.



PERMIT SHEET NO. C-1	Project No. 74490E Engineer SEWALL JAMES W. SEWALL COMPANY / Since 1880 SEWALL.COM 800 648 4202	State of Maine JOHN M. THERIAULT No. 9087 LICENSED PROFESSIONAL ENGINEER 11/25/11	BULL HILL WIND PROJECT Project Location T16MD Drawing Description SHEET INDEX	Designed By JMT Date 11/24/10 Scale 1"=750' Drawn By JLD Checked BCH	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Rev. #</th> <th>Drawn By</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MT</td> <td>REVISED PER LURC COMMENTS DATED 01/18/11</td> <td>1/25/11</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Rev. #	Drawn By	Description	Date	1	MT	REVISED PER LURC COMMENTS DATED 01/18/11	1/25/11								
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GENERAL NOTES & CONSTRUCTION SPECIFICATIONS

- FINAL STABILIZATION WILL BE DONE WITHIN 7 DAYS OF FINAL GRADING OR WITHIN 30 DAYS OF INITIAL SOIL DISTURBANCE.
- EVERY WEEK AND AFTER PRECIPITATION PRODUCING THE EQUIVALENT OF ONE-HALF INCH OF RAINFALL, THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF SEDIMENT FROM SILT FENCES IF SOIL ACCUMULATES TO A DEPTH OF 18 INCHES FROM THE TOP OF THE FENCE OR TO EXCESS ACCUMULATED SEDIMENT FROM DRAINAGE BASINS (IF APPLICABLE).
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH MAINE EROSION & SEDIMENT CONTROL BEST MANAGEMENT PRACTICES, BY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MEASURES, INCLUDING MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL.
- SEE DETAILS FOR SLOPE STABILIZATION OPTIONS.

CONSTRUCTION SEQUENCE & PHASING NOTES

- INSTALL EROSION CONTROL MEASURES PRIOR TO SOIL DISTURBANCE.
- FLAG & MARK CLEARING LIMITS OF ACCESS ROADS, CRANE PATHS, & COLLECTION LINES, WITH THE OTHER CONSTRUCTION AREAS TO FOLLOW.
- STUMPS TO BE REMOVED FROM LOCATIONS WHERE STRUCTURES (i.e., TURBINES, SUBSTATION, O&M BUILDING, STORMWATER MANAGEMENT SYSTEMS) ARE TO BE INSTALLED/CONSTRUCTED. STUMPS TO BE GROUND ON-SITE BY THE ROAD CONTRACTOR & USED AS AN ESC MEASURE.
- LOW GROWING VEGETATION TO REMAIN, WHERE FEASIBLE TO PROVIDE SOIL STABILITY.
- EXISTING TOP-SOIL IN AREAS OF ROAD SHOULDERS, TURBINE CLEARINGS AND LAY DOWN AREAS.
- MULTIPLE LAYERS OF PROTECTION INCLUDING SILT FENCE AND EROSION CONTROL MIX BERM SHALL BE INSTALLED AROUND TOP-SOIL STOCKPILE TO PROTECT DOWN STREAM RESOURCES. CONTRACTOR SHALL INSTALL ALL CONTROL MEASURES AS DIRECTED BY ENGINEER AT STOCKPILE LOCATIONS.

CLEARING OF VEGETATION AND STOCKPILING OF TOPSOIL

- 24-FT WIDE ACCESS ROADS & 36-FT WIDE CRANE PATHS TO BE CONSTRUCTED AS DEPICTED HEREIN.
- SURVEY CREWS TO STAKE THE ROADWAY CLEARING LIMITS BOUNDARIES & CENTERLINE TO GUIDE OPERATORS. PROVIDE ADDITIONAL STAKING & MARKING AT LOCATIONS WHERE STORMWATER CONTROL MEASURES WILL BE INSTALLED AS NECESSARY.
- MINOR GRADE AND HORIZONTAL ADJUSTMENTS MAY BE NECESSARY, DEPENDING ON FIELD CONDITIONS. ALL ADJUSTMENTS TO BE APPROVED BY ENGINEER.
- CONSTRUCTION OF ACCESS ROADS, CRANE PATHS, & LAY DOWN/STAGING AREAS WILL OCCUR IN PHASES, MINIMIZING AREAS OF EXPOSED SOIL AT ANY ONE TIME (EXCLUSIVE OF ANY OTHER EXPOSED SOIL AREAS WITHIN THE DESIGNATED LIMITS OF DISTURBANCE).

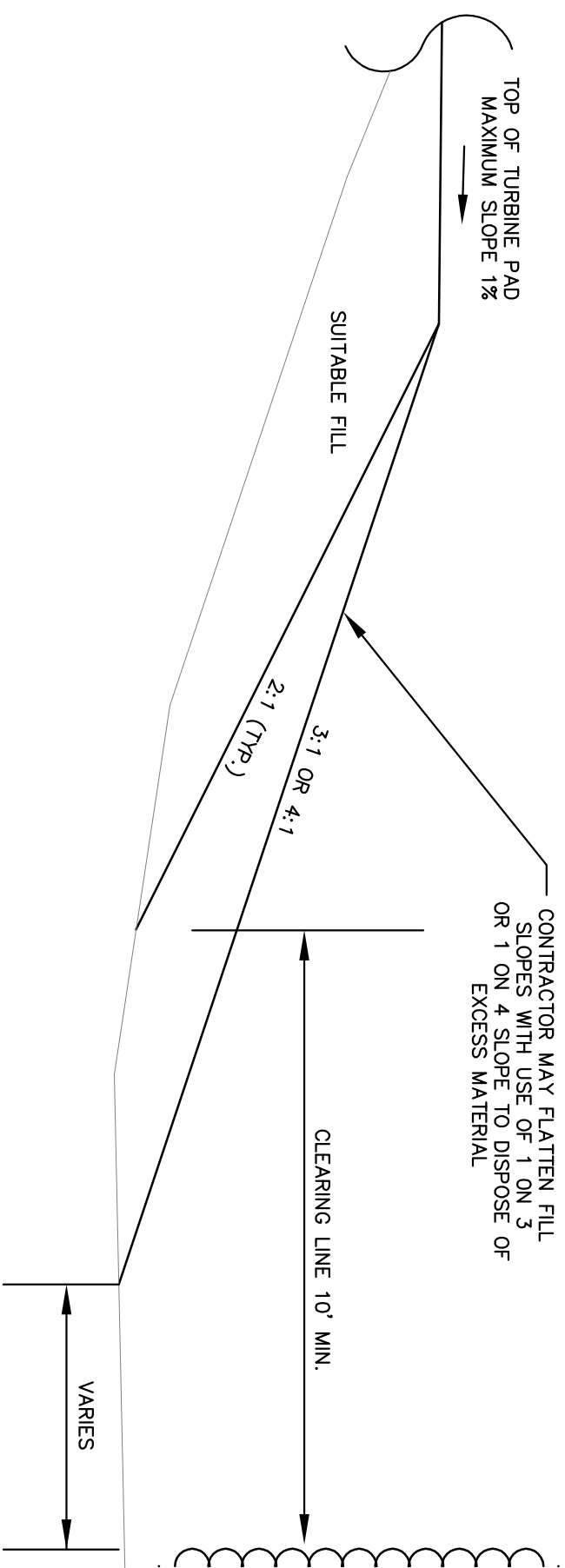
CONSTRUCTION OF PERMANENT STORMWATER MANAGEMENT SYSTEMS

- GRADING TO BE CONDUCTED IN ACCORDANCE WITH PERMITTED PERMANENT STORMWATER MANAGEMENT DESIGN.
- ONCE FINAL GRADES ARE ACHIEVED, EXPOSED SOIL SURROUNDING THE STORMWATER MANAGEMENT STRUCTURES TO BE PERMANENTLY STABILIZED.
- CONSTRUCTION OF CRANE PADS
- AFTER THE SUBGRADE IS ESTABLISHED, CRANE PAD TO BE CONSTRUCTED WITH CRUSHED AGGREGATE TO A MINIMUM OF 12 INCHES. AS NECESSARY, ADJUSTMENTS TO BE APPROVED BY ENGINEER.
- GRANE PADS TO REMAIN IN PLACE FOR FUTURE MAINTENANCE & OPERATION.
- ALL EXPOSED SOIL SURROUNDING CRANE PADS & TURBINE FOUNDATIONS TO BE STABILIZED.

CLEAN-UP & FINAL STABILIZATION

- UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL WORK AREAS TO BE CLEARED OF CONSTRUCTION DEBRIS & OTHER MATERIALS.
- PERFORM CLEAN-UP REQUIREMENTS TO INCLUDE: REMOVAL OF ALL TEMPORARY WORK TRAILERS, CONSTRUCTION & INSTALLATION, ROUGH GRADING & STABILIZATION OF EMBANKMENTS MADE FOR CONSTRUCTION PURPOSES; FILLING OF ANY EXCAVATIONS, & REPAIRING RUTS IN ACCESS ROADS.
- FINAL STABILIZATION OF ALL AREAS OF DISTURBED SOIL, WHERE FINAL GRADE HAS BEEN ACHIEVED, INVOLVE RESEEDING OF STOCKPILED TOPSOIL MATERIAL & SEEDING, MULCHING WITH WOODWASTE MULCH OR APPLICATION OF OTHER APPROVED STABILIZATION METHODS. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE PROJECTS PERMITS.

1) TYPICAL CONSTRUCTION NOTES



4) TURBINE PAD FILL SLOPES

WINTER CONSTRUCTION NOTES

- THE WINTER CONSTRUCTION PERIOD SHALL BE FROM NOVEMBER 1 THROUGH APRIL 15.
- WHERE FEASIBLE, A MINIMUM 25-FT BUFFER SHALL BE MAINTAINED BETWEEN MAINTENANCE PERIMETER CONTROLS AND ROADS TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
- WIRES REINFORCED SILT FENCE SHALL BE UTILIZED IN ALL AREAS (SEE DETAIL).
- DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF VEGETATION (MIN. 75% MATURE).
- ACCEPTABLE OVER-WINTER STABILIZATION SHALL CONSIST OF SLOTTING (MIN. 75% MATURE), MULCHING, EROSION CONTROL MATS, GRASS OR GRAVEL ROAD BASE.
- EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT REQUIRE EARLY DISTURBANCE (e.g., CONSTRUCTION FENCE AND SILT FENCE) SHALL BE INSTALLED PRIOR TO THE CONTROL MIX BERMS. DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS.
- FROM NOVEMBER 1 TO APRIL 15, MULCH SHALL BE INSTALLED AT DOUBLE THE NORMAL RATE OF MULCHING.
- PRIOR TO STABILIZATION, ICE AND SNOW SHALL BE REMOVED TO LESS THAN 1-IN.
- IF VEHICLE TRAFFIC IS ANTICIPATED AROUND STRUCTURES UNDER CONSTRUCTION, THE AREA SHALL BE STABILIZED WITH STONE.
- EXCAVATED FROZEN SOILS SHALL BE ENGULFED WITH EROSION CONTROL MIX BERMS AS NECESSARY.
- EXCAVATION OF SOILS IN SHALLOW GROUNDWATER AREAS SHALL BE MINIMIZED IF AT ALL POSSIBLE DURING WINTER, AND LIMITED TO ONLY THOSE AREAS THAT CAN BE STABILIZED DURING THE SAME DAY.
- TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A WEATHER EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
 - IF NO REPAIRATION IS FORECAST WITHIN 24 HOURS AND WORK WILL RESUME IN THE SAME DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS BUILDING FOUNDATIONS AND OPEN UTILITY TRENCHES.
 - THE ENGINEER MAY MAKE NECESSARY ADJUSTMENTS TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN AND ASSOCIATED EROSION PREVENTION AND SEDIMENT CONTROL MEASURES (e.g., CONSTRUCTION FENCE AND SILT FENCE) TO ACCOMMODATE ANTICIPATED SNOW STORAGE AREAS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ASSOCIATED STRUCTURES.
- AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCE IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION, SHALL BE MULCHED OR ANCHORED WITH PLASTIC NETTING OR NATURAL RESOURCE CROSSINGS SHALL BE PROTECTED A MINIMUM OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.
- STOCKPILES OF SOIL SHALL BE MULCHED FOR OVER-WINTER PROTECTION, WITH HAY OR STRAW AT THE NORMAL RATE OR WITH A 4-INCH LAYER OF EROSION CONTROL MIX.
- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE WINTER CONSTRUCTION PERIOD. CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED, FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING. THE CONTRACTOR SHALL IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES OR BARE SPOTS.
- WINTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH REGULATORY PERMIT. PERMIT REQUIREMENTS SHALL SUPERSEDE ANY DISCREPANCY IN ABOVE LISTED NOTES.

NOTES:

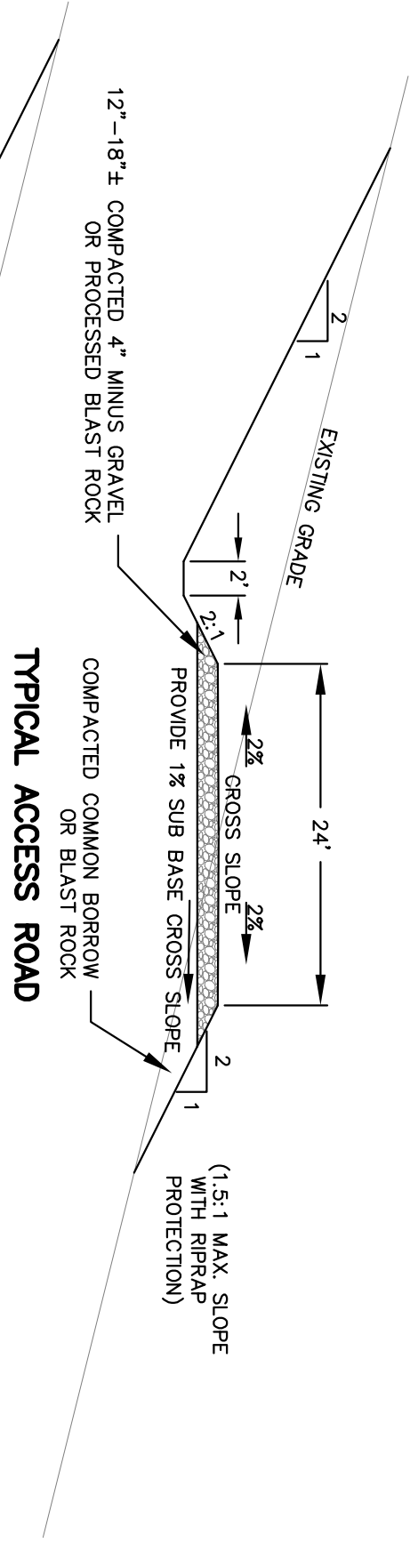
- ANY DISTURBED AREAS TO BE LEFT IN ROUGH GRADED FORM FOR MORE THAN 30 DAYS BUT LESS THAN 90 DAYS SHALL BE SEED AND MULCH. SEEDING SHALL BE PERMANENT SEEDING EXCEPT OTHERWISE STABILIZED.
- APPLICATION RATES AND MATERIALS USED SHALL BE THE SAME AS FOR PERMANENT SEEDING EXCEPT SEED MIXTURE SHALL BE ANNUAL REPAIRS.
- PERMANENT SEEDING NOTES
- DURING PERIODS FROM APRIL 15 TO OCTOBER 1, AREAS DISTURBED SHALL BE PERMANENTLY SEED, WITH CONSERVATION SEED MIX (A MIXTURE OF CREEPING RED FESCUE, REDTOP, TALL FESCUE, CLOVER AND ANNUAL RYE), AT A RATE OF 1.0 LB./1,000 SF.
- DORMANT SEEDING NOTES
- DURING PERIODS FROM OCTOBER 1 TO NOVEMBER 15, AREAS DISTURBED SHALL BE DORMANT SEEDED WITH WINTER RYE, 5 LB./1,000 SF. DURING PERIODS BETWEEN NOVEMBER 15 AND APRIL 15, DISTURBED AREAS SHALL BE MULCHED AND IF NECESSARY, STABILIZED WITH EROSION CONTROL MESH. SPECIFIC MAINTENANCE DISTURBANCE
- IF THERE IS ANY REQUIRED REPAIRS IMMEDIATELY, REPLACE W/ TEMPORARY CRANE PAD OR SILT FENCE. IF THERE IS UNDERCUTTING AT CENTER OR EDGES, OR IF LARGE VOLUMES OF WATER ARE IMPOUNDED, REPLACE DECOMPOSED OR INEFFECTIVE FABRIC MEMBRANE SILT FENCE WITH RIBBON OR STRIP SLOTTED, DEPOSITED BEHIND IN CONFORM W/ EXISTING GRADE. PREPARED AND STABILIZED. CULVERTS - CULVERTS SHOULD BE CHECKED MONTHLY FOR ACCUMULATION OF DEBRIS. IF NEEDED, REPAIRS SHOULD BE MADE IMMEDIATELY. A REMOVAL AND REPAIR LOG SHOULD BE MAINTAINED TO DOCUMENT COMPLIANCE WITH THE SUGGESTED SCHEDULE.

DEWATERING

- CONTRACTOR SHALL BE AWARE THAT A HIGH WATER TABLE EXISTS AT SEVERAL TURBINE PAD LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY DEWATERING EXCAVATIONS DURING CONSTRUCTION.
- CONTRACTOR SHALL DISPOSE OF PUMPED WATER IN APPROPRIATE MANNER TO AVOID CONCENTRATED TONS FROM THE USE OF SETTLEMENT TONS OR SEDIMENT FROM DEWATERING ACTIVITIES. PUMPED WATER WILL BE DIRECTED AWAY FROM REFINERY AND THE SEDIMENT CONTROL SYSTEMS SHALL BE APPROVED BY THE ENGINEER AND HING PARTY IN EACH LOCATION.
- ELEVATIONS OF TURBINE FOUNDATIONS ARE BASED ON AERIAL SURVEY. FINAL ELEVATIONS OF FOUNDATIONS ARE BASED IN FIELD TO ASSUMED ACTUAL TERRAIN CONDITIONS AND REDUCE IMPACTS.

TURBINE FOUNDATIONS

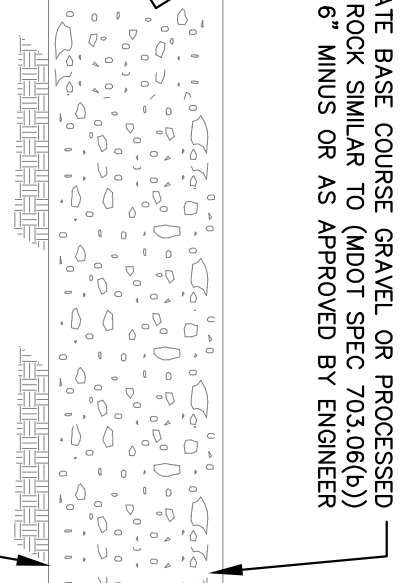
1) TYPICAL CONSTRUCTION NOTES



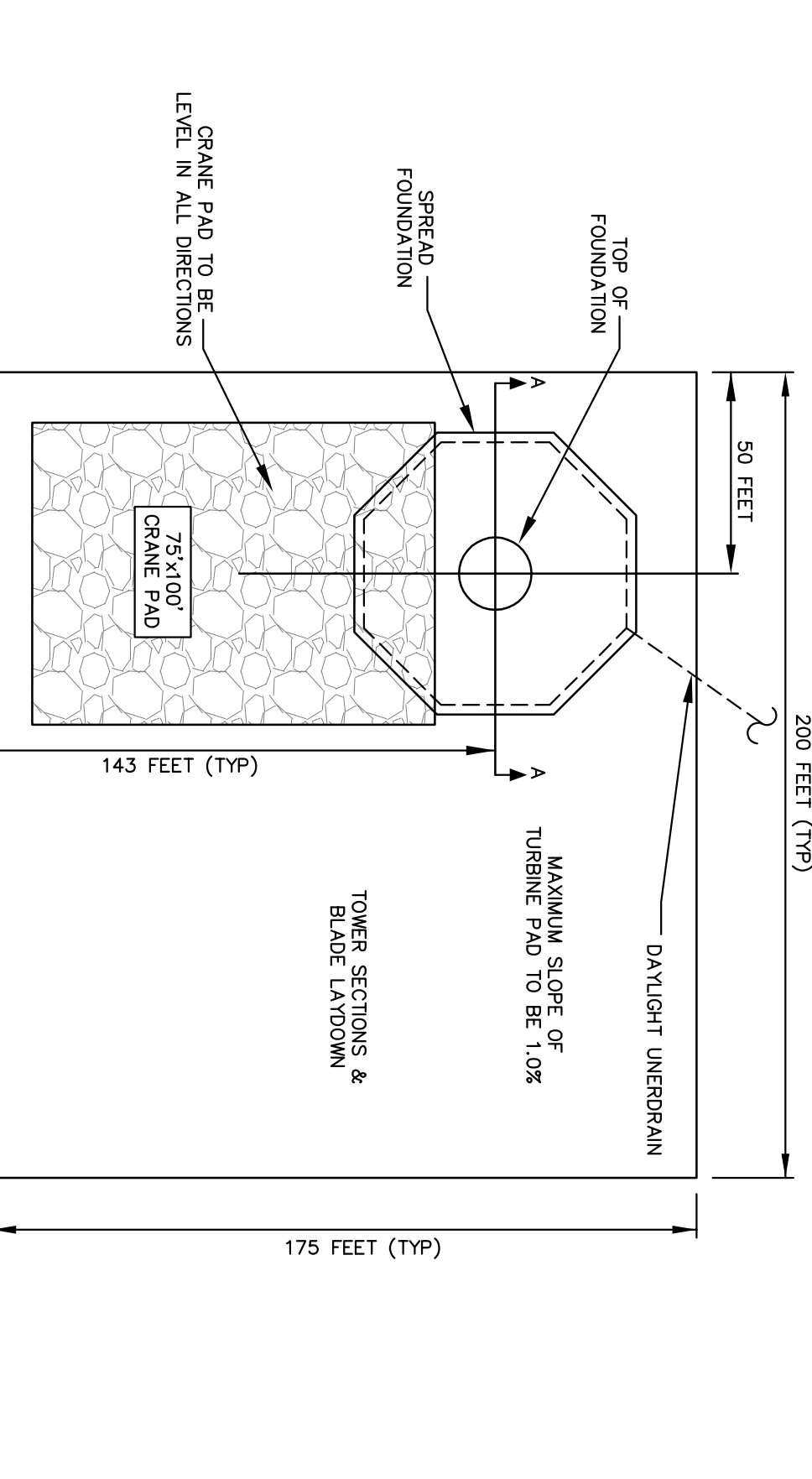
2) TYPICAL ROAD DETAILS

- EXISTING GROUND SHALL BE GRABBED WITHIN FOOTPRINT OF ROAD IN FILL SECTIONS. HOWEVER, WHEN EMBANKMENT FILL IS REQUIRED, THE ROAD SHALL BE CONSTRUCTED TO NOT INTERCEPT GROUND WATER TABLE. DITCH DEPTH SHALL BE 24" MEASURED FROM ROADWAY, EXCEPT AS APPROVED BY THE ENGINEER. DITCHES SHALL BE STONE LINED WHEN THE LONGITUDINAL SLOPES OF THE DITCH EXCEEDS 8%.
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3) TYPICAL GRAVEL CRANE PAD SECTION

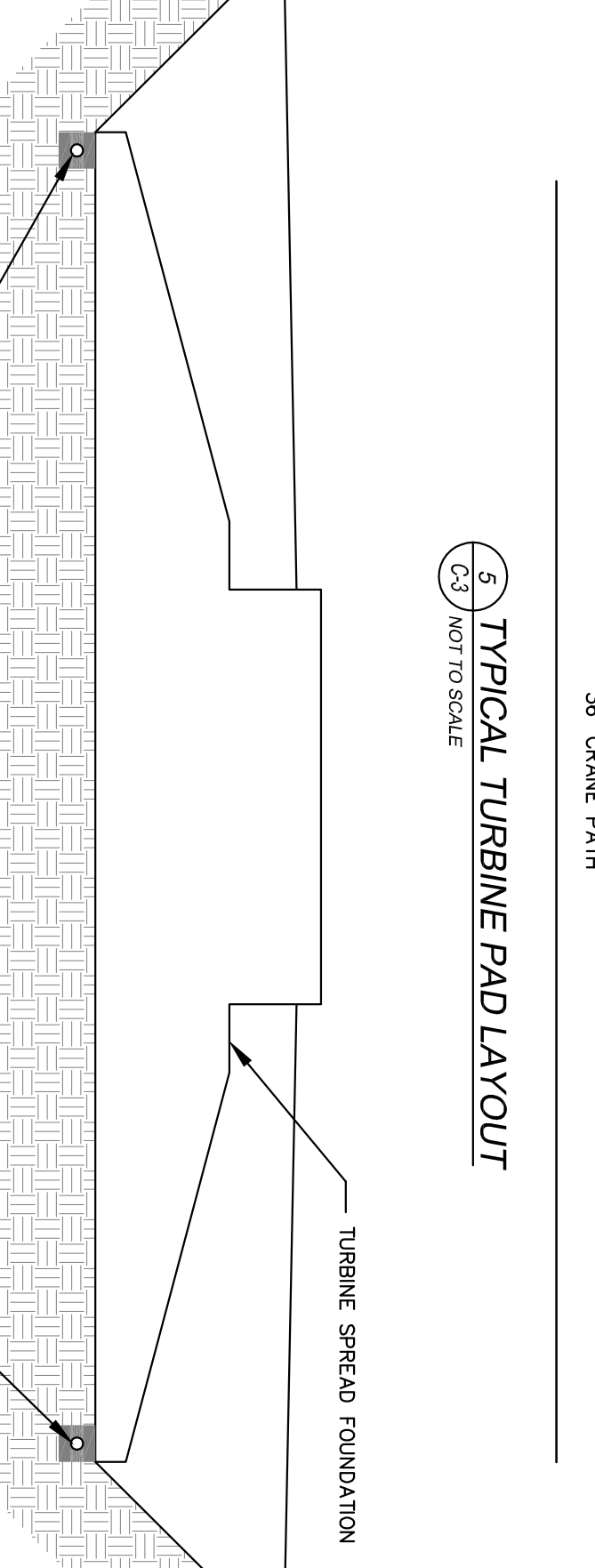


5) TYPICAL TURBINE PAD LAYOUT

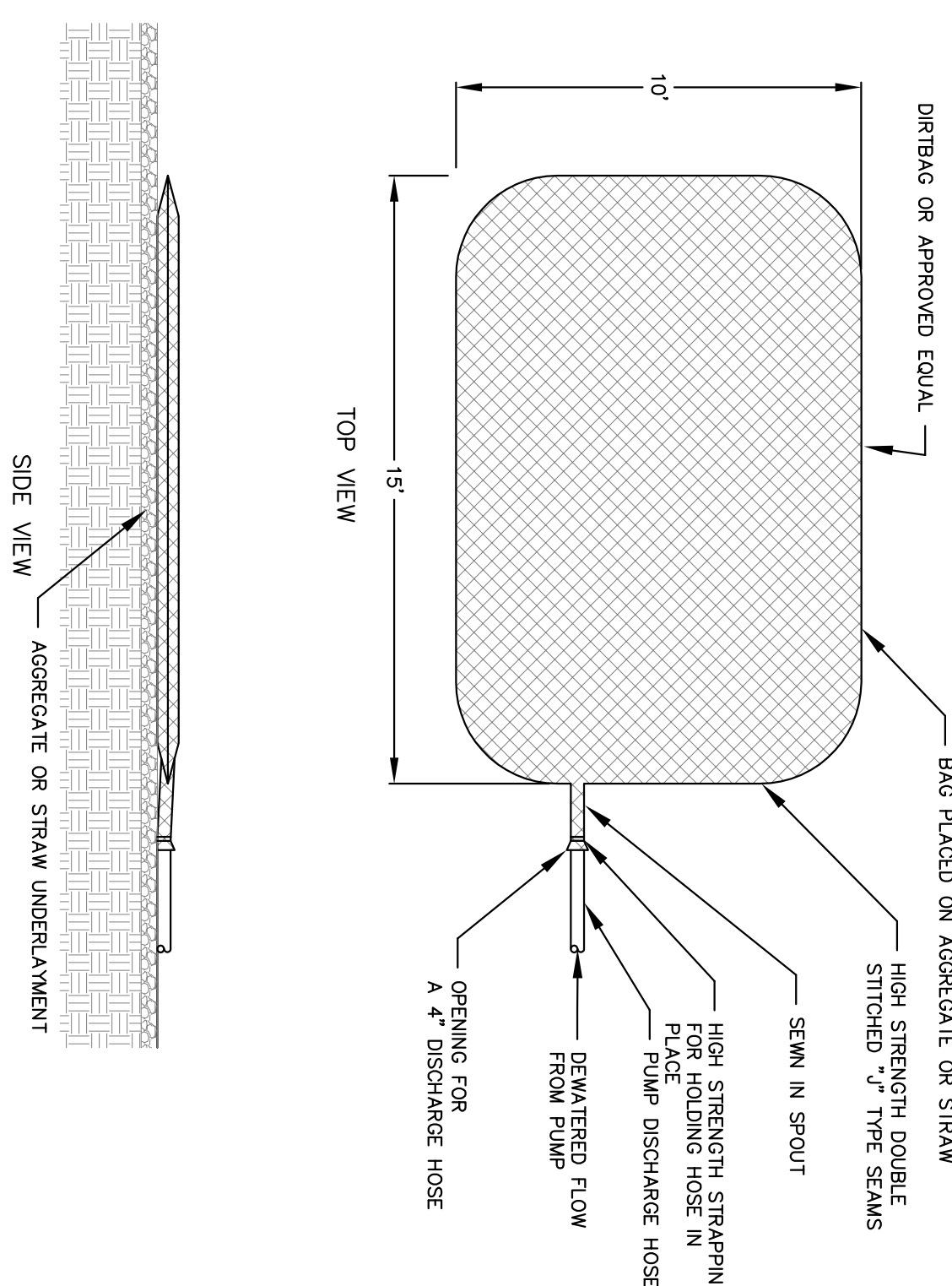


5) TYPICAL TURBINE PAD LAYOUT

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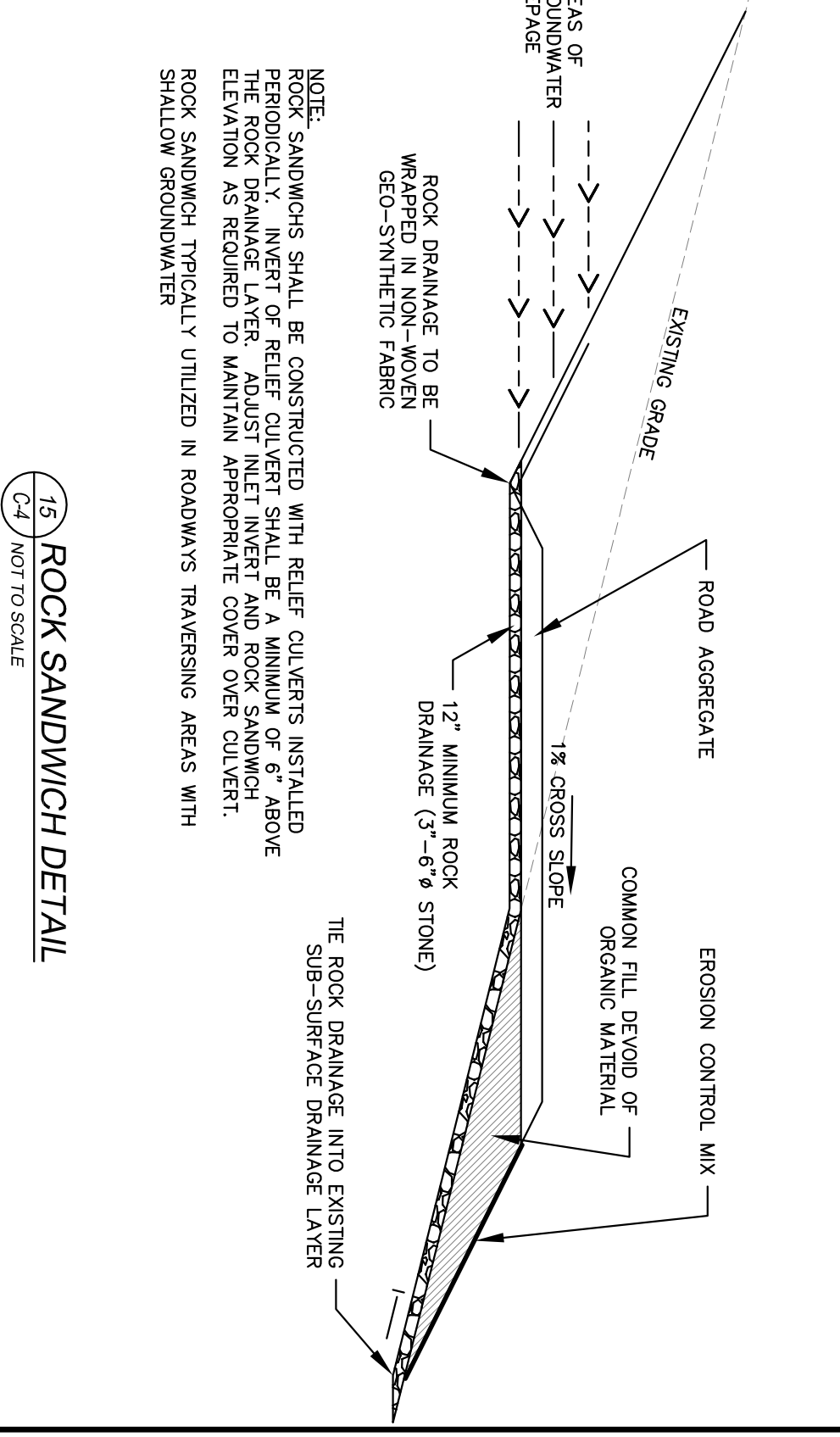
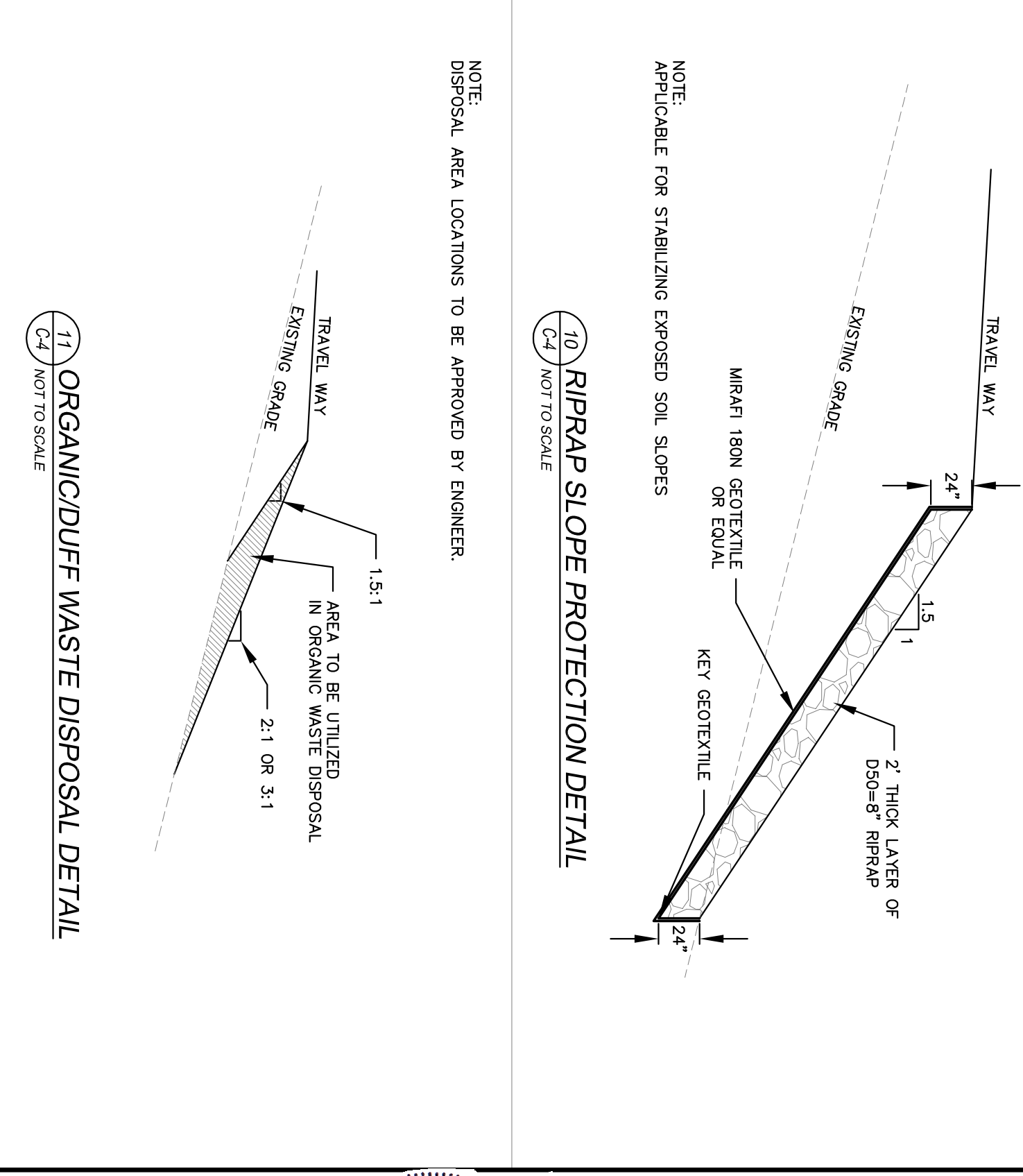
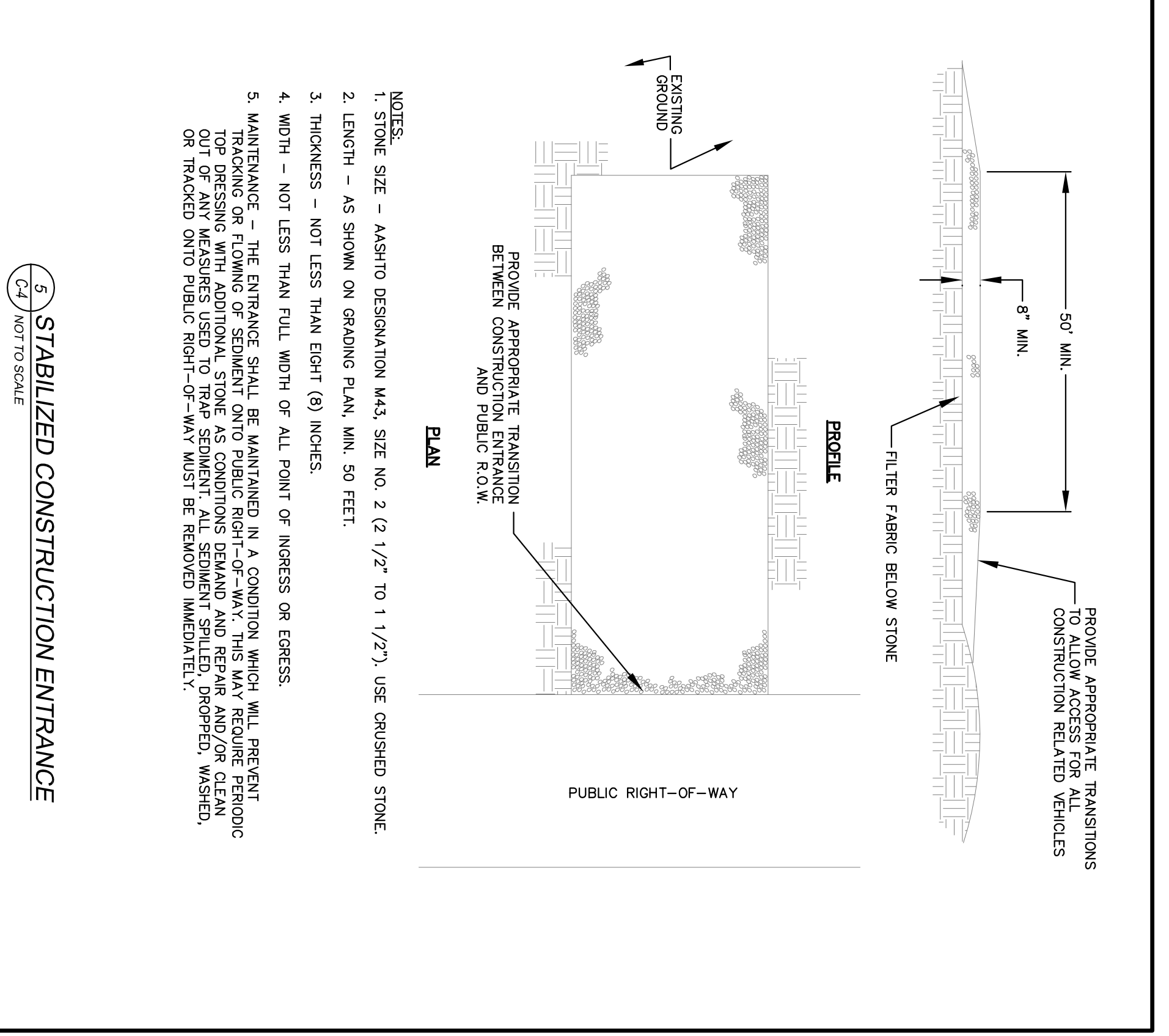
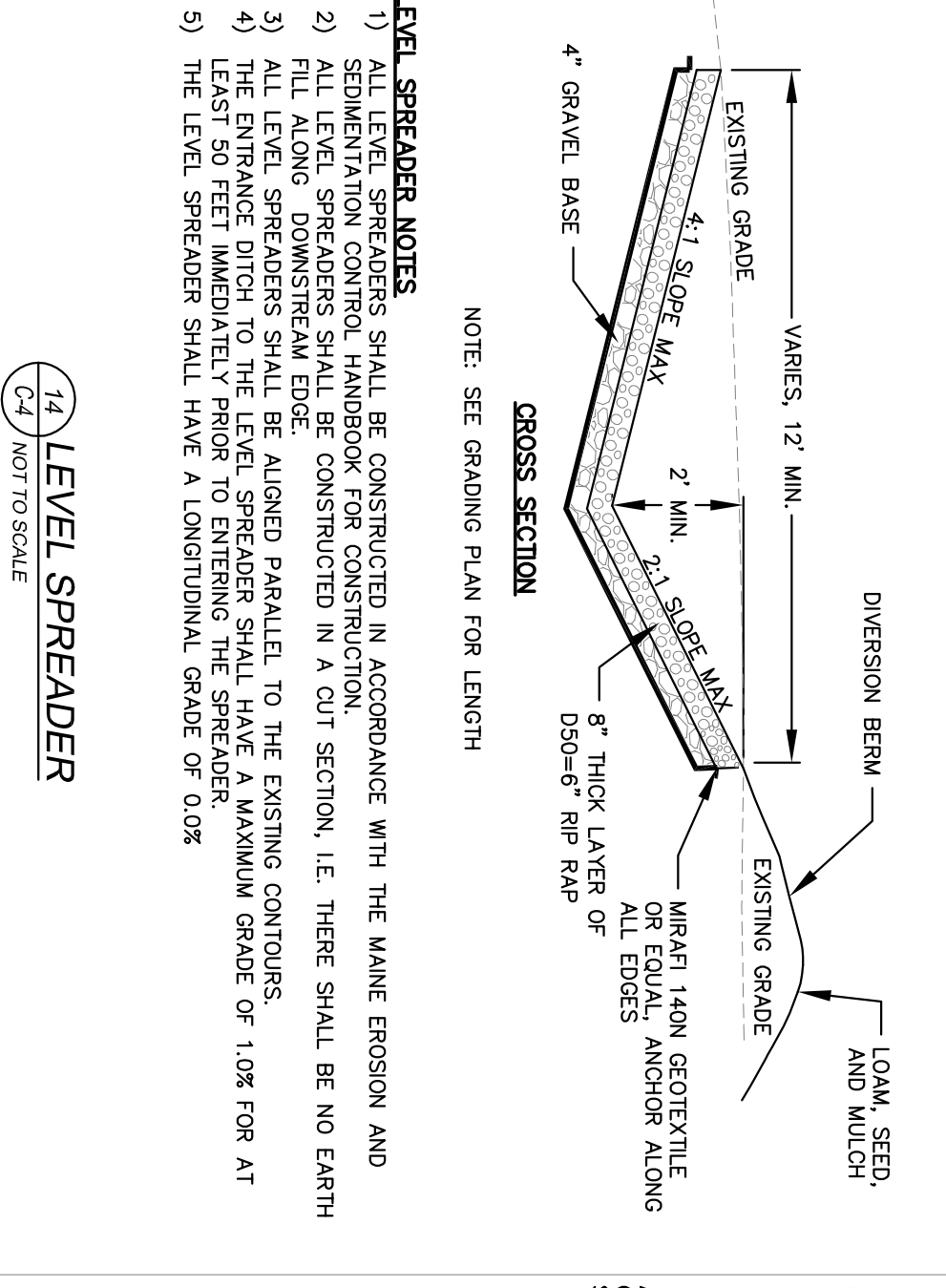
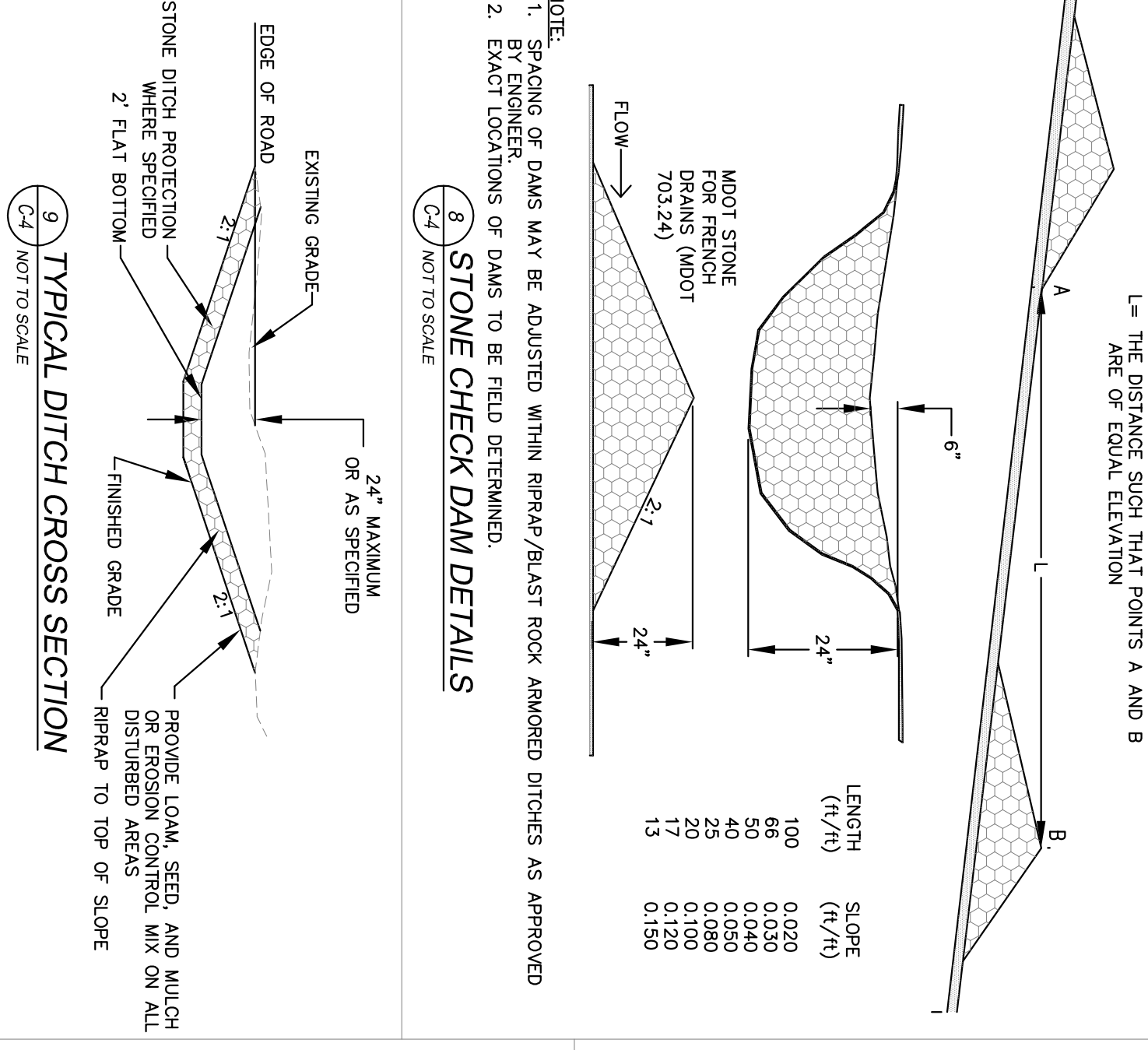
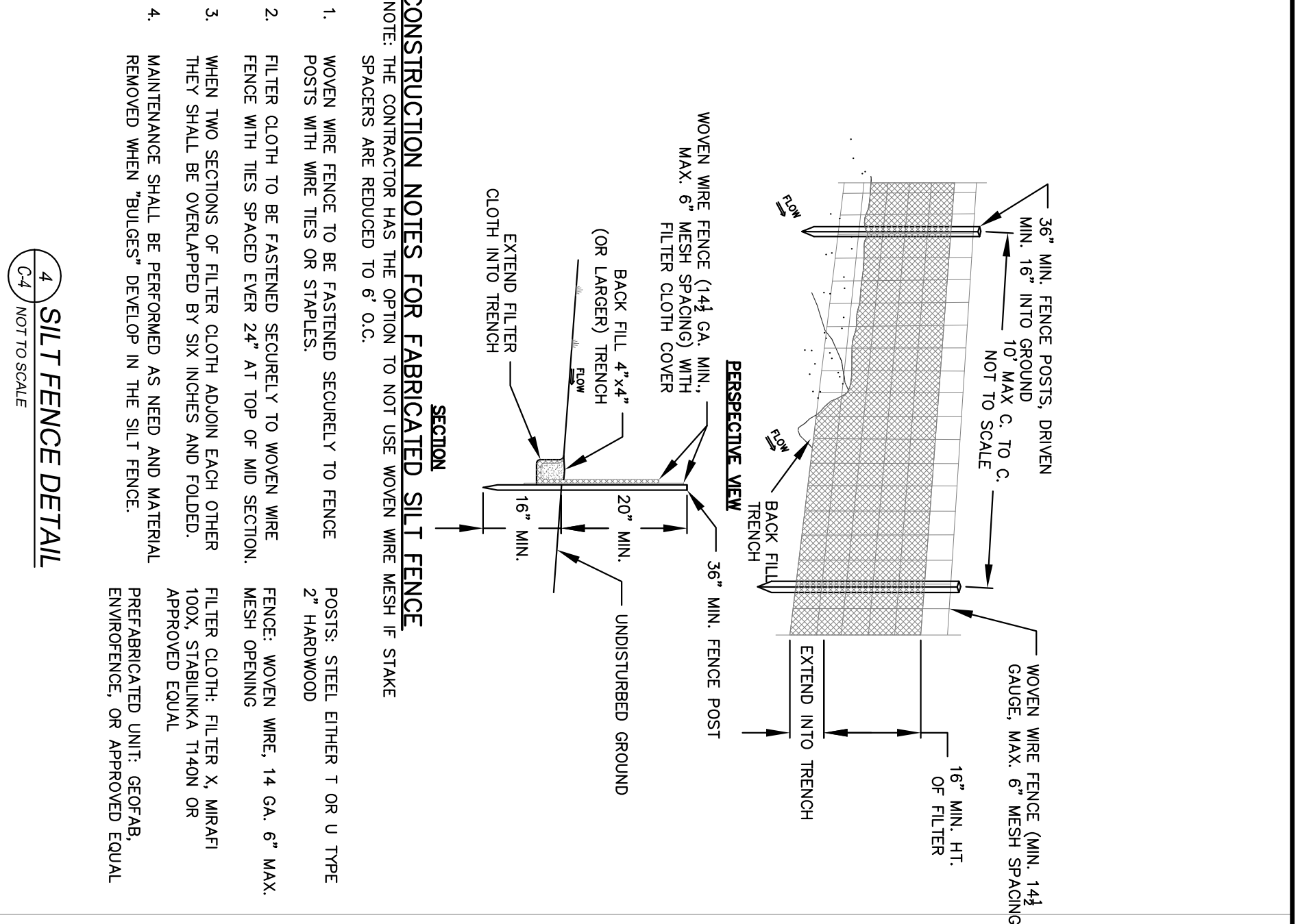
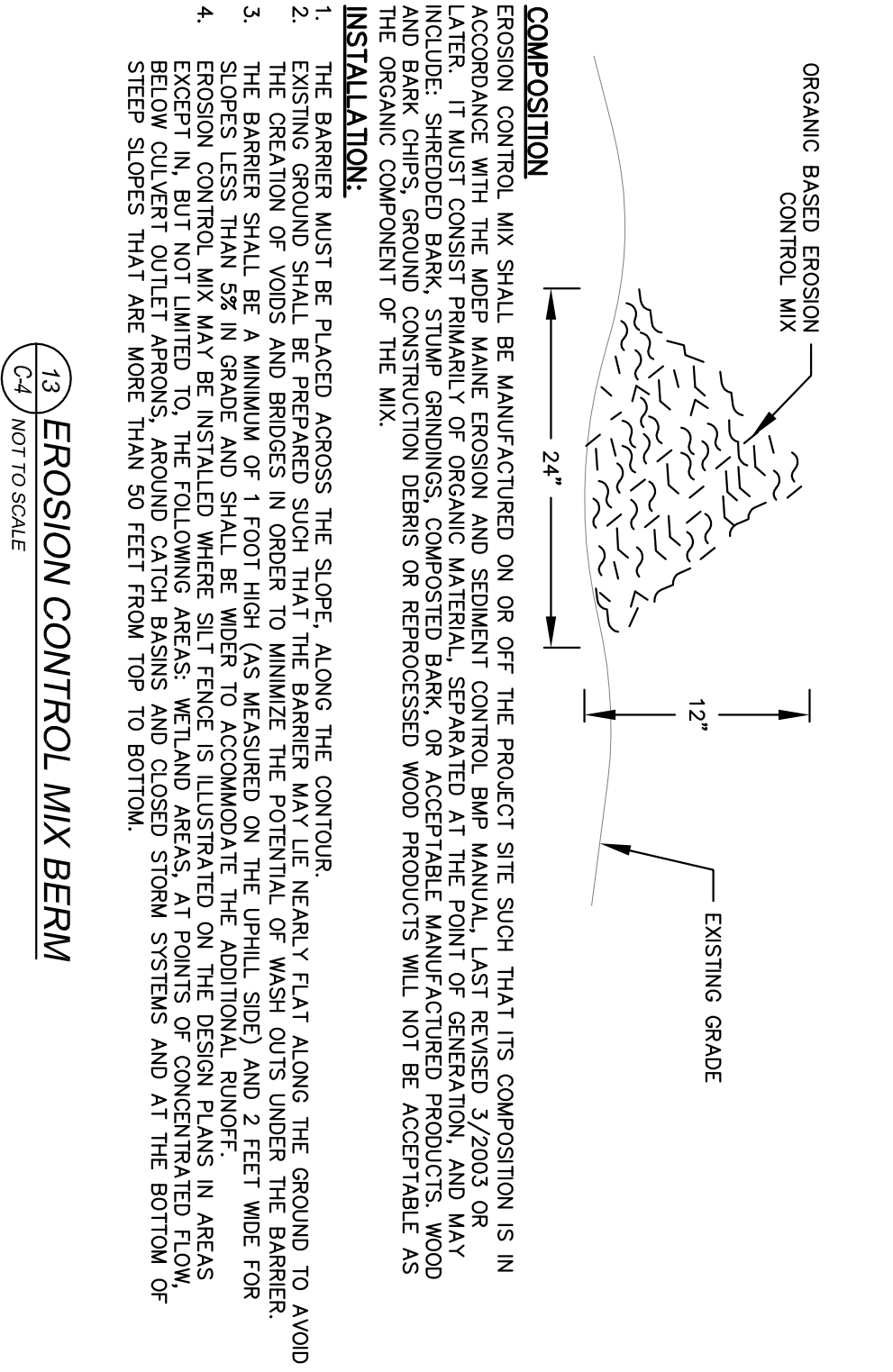
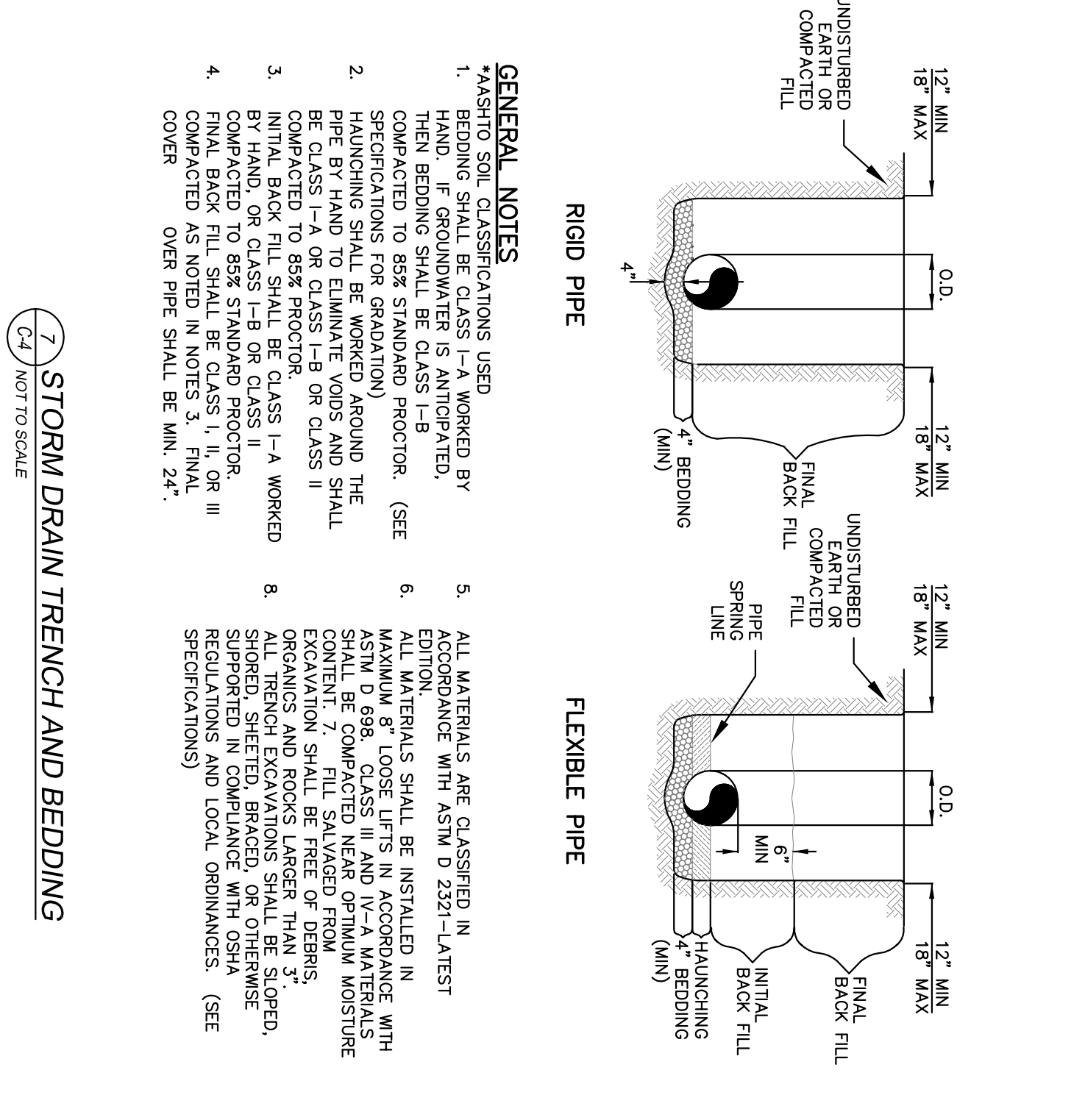
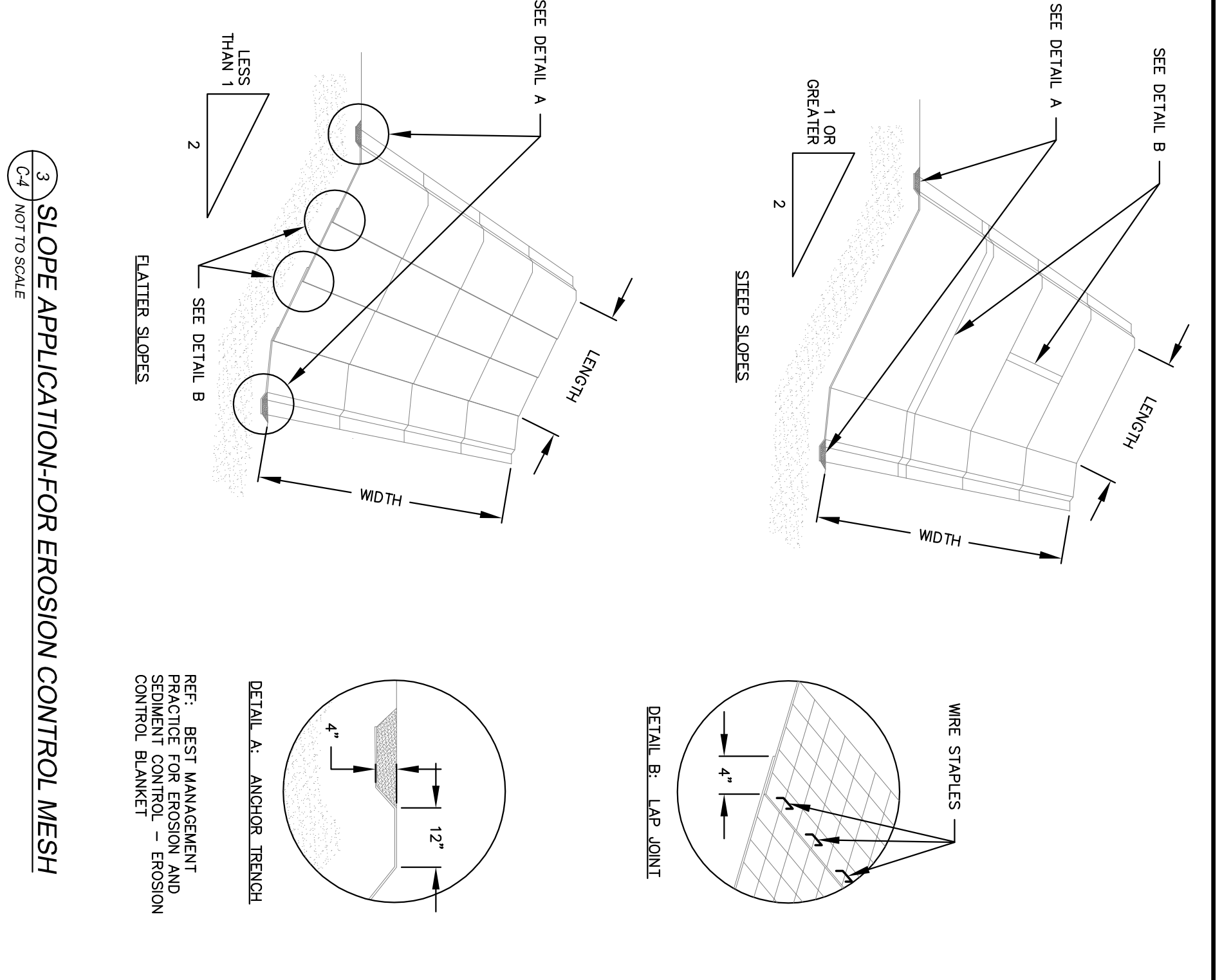
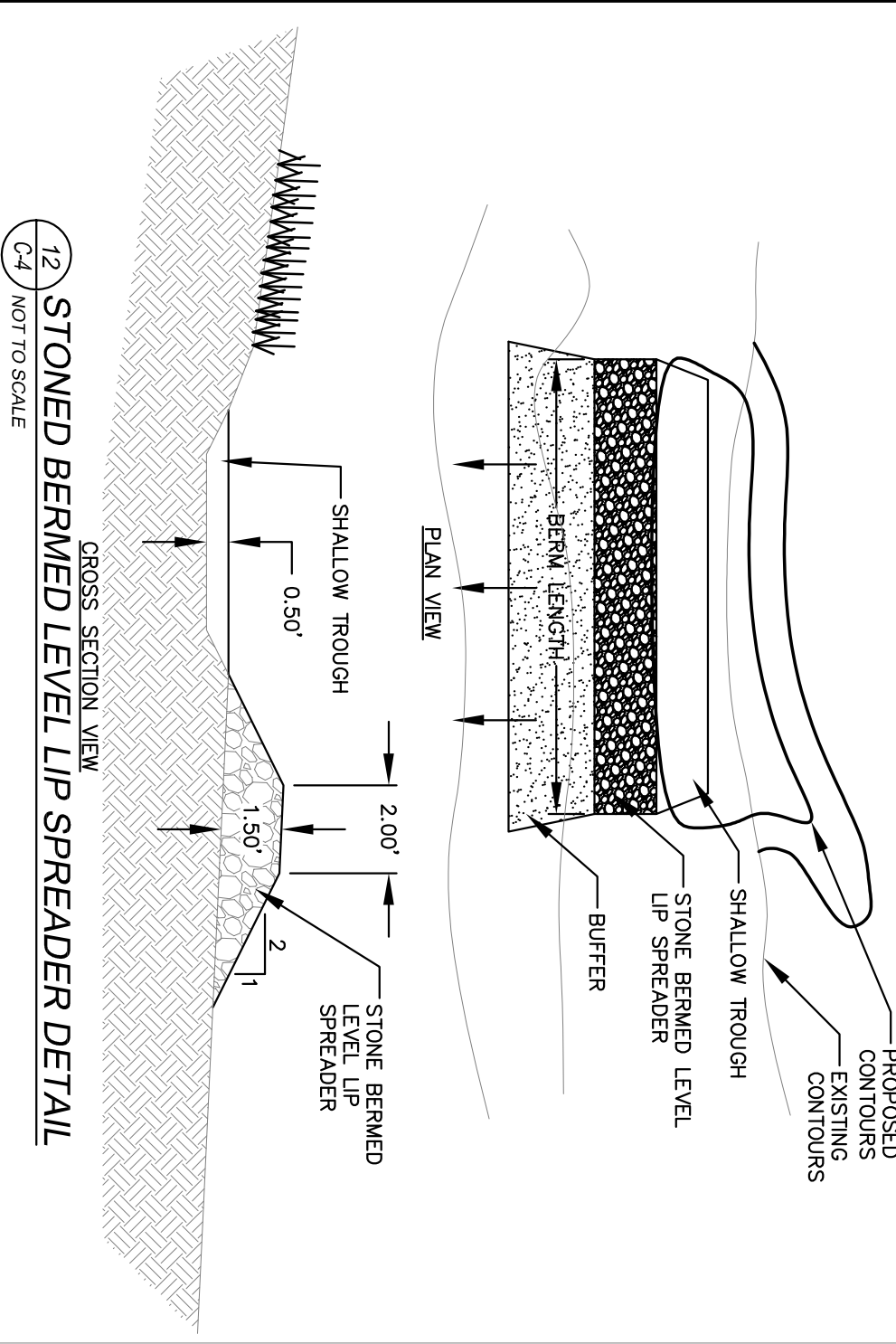
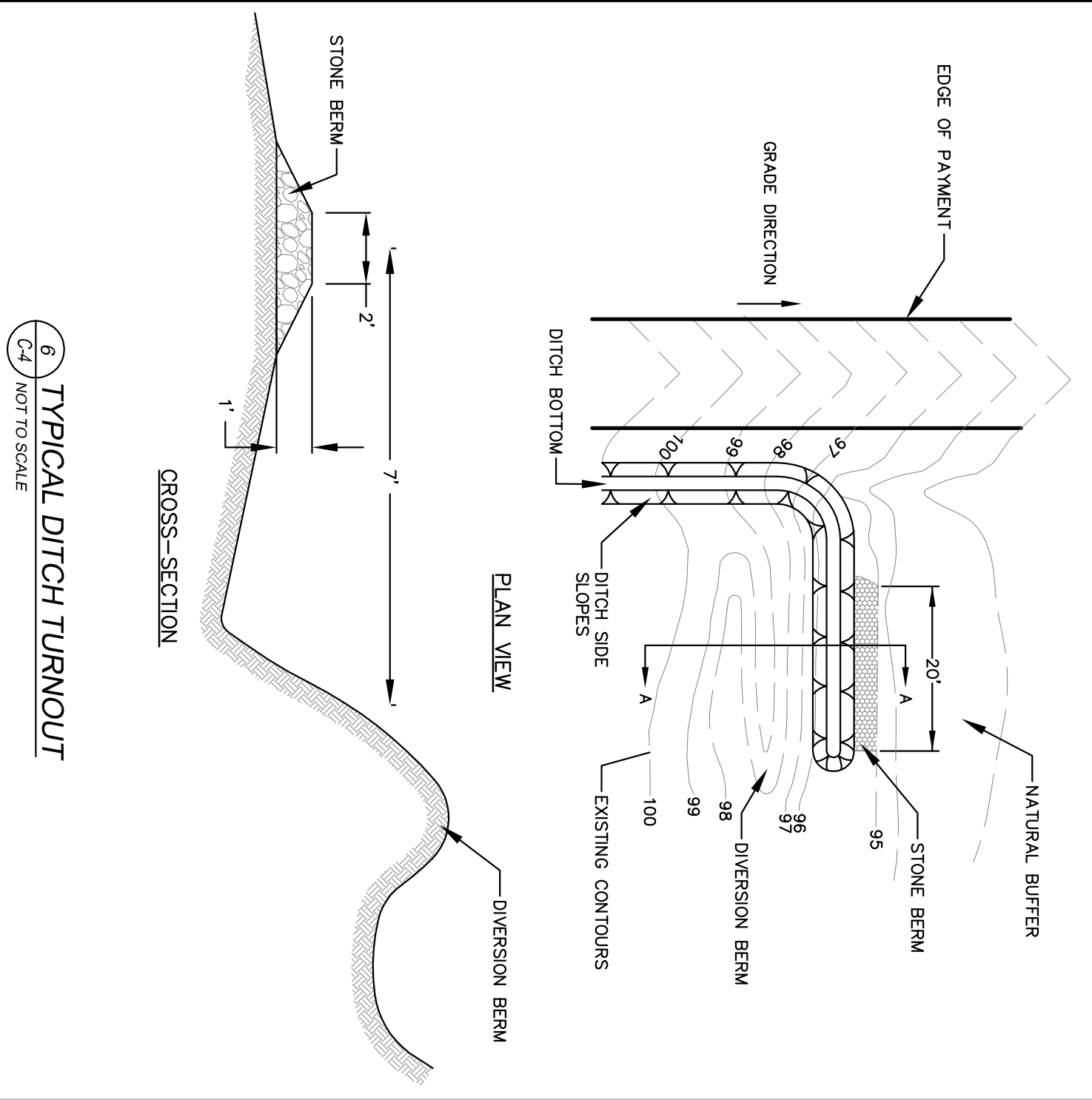
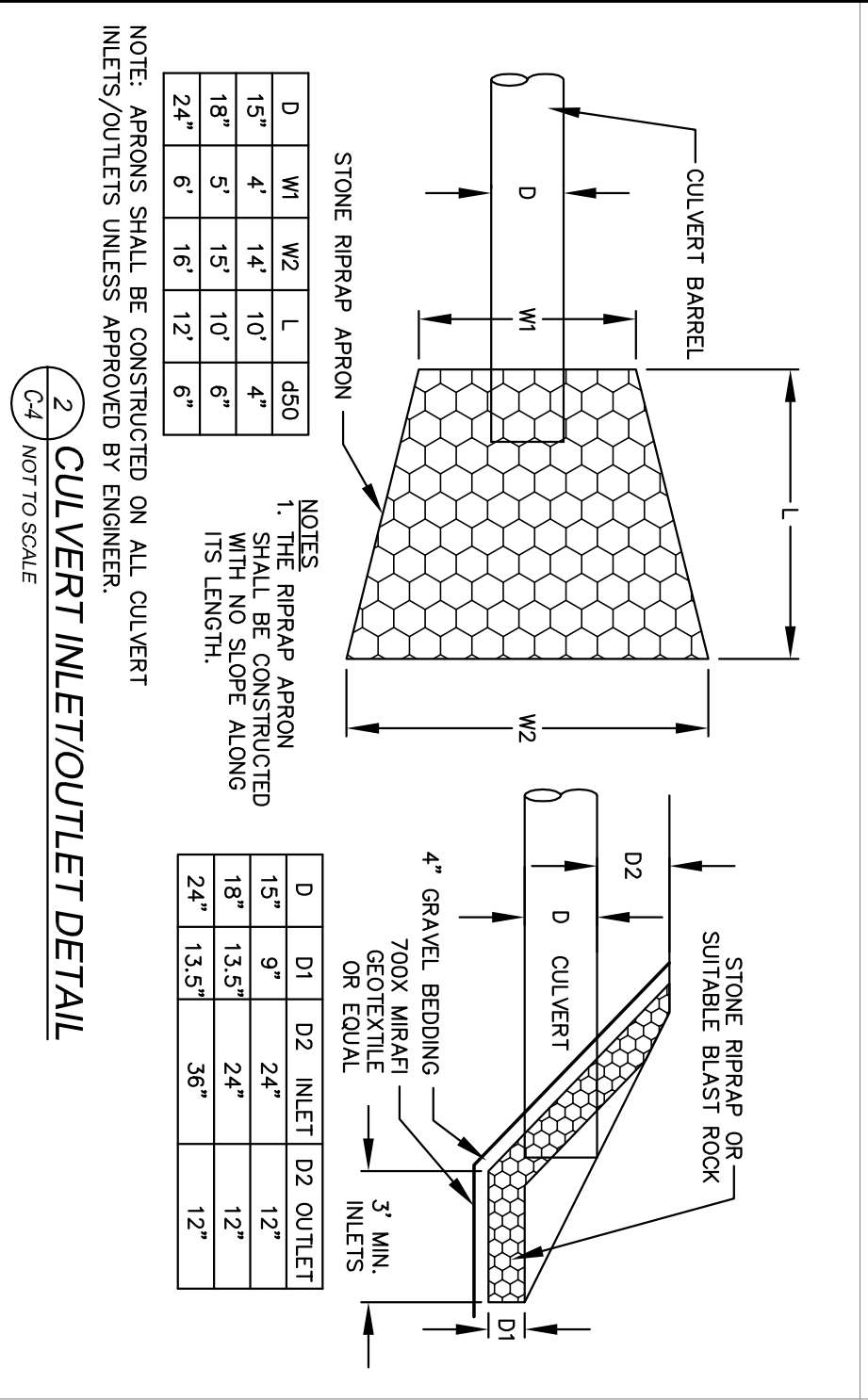
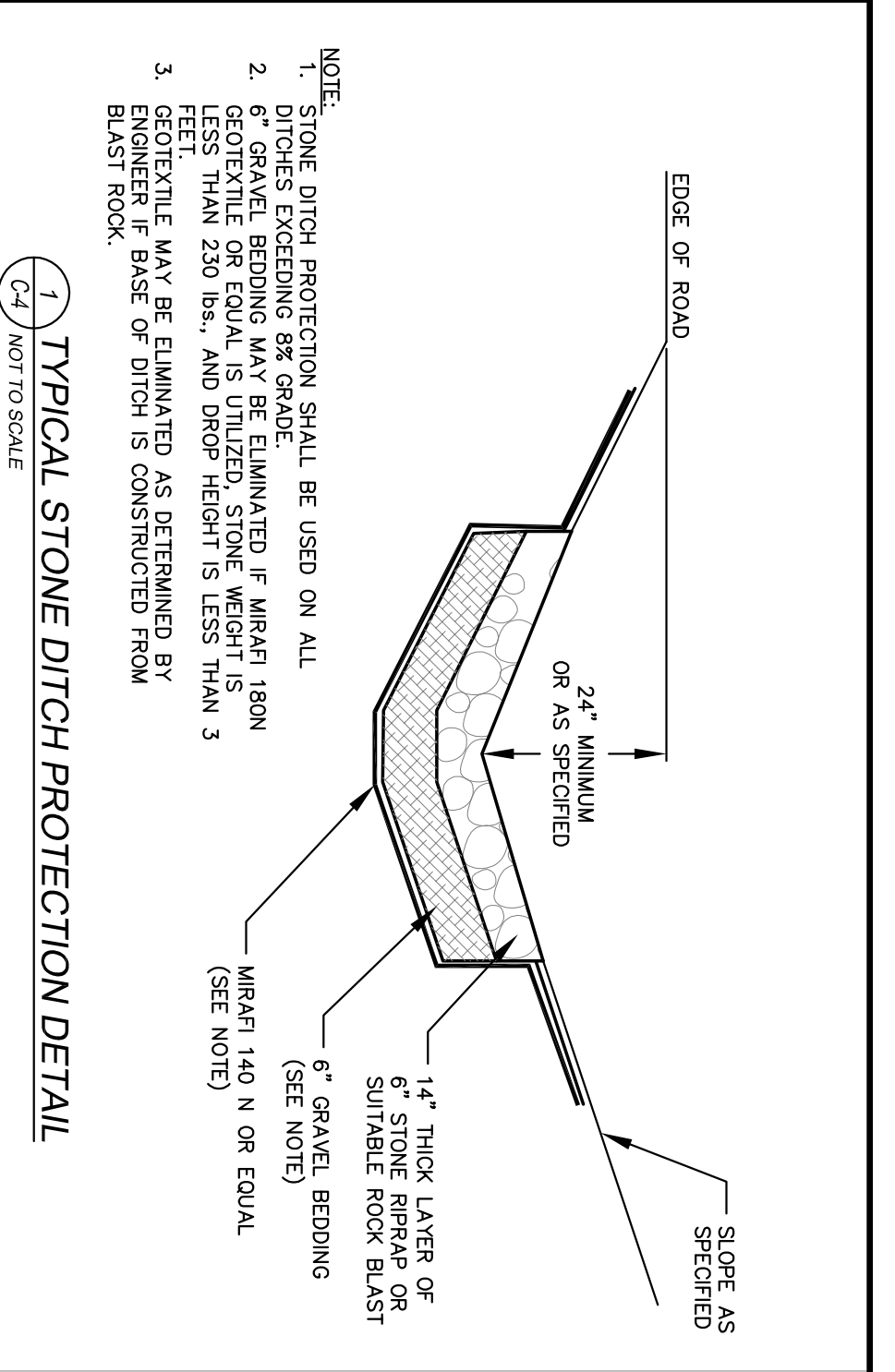
6) TURBINE PAD REVEGETATION POST CONSTRUCTION



7) DIRTBAG PUMPED SILT CONTROL SYSTEM

- CONTRACTOR SHALL PROVIDE APPROPRIATE SIZED DEWATERING CONTROL DEVICES TO ACCOMMODATE DEWATERING ACTIVITIES.
- SEDIMENT CONTROL DEVICES SHALL BE REPLACED WHEN FULL. SEDIMENT CAN BE DISPOSED OFF IN NON STRUCTURAL FILL AREAS OUTSIDE OF RESOURCE PROTECTION ZONES.

<p>Project No. 74490E</p> <p>Engineer SEWALL</p> <p>JAMES W. SEWALL COMPANY / Since 1880</p> <p>800 648 4202</p>	<p>STATE OF MAINE</p> <p>JOHN M. THERIAULT</p> <p>PROFESSIONAL ENGINEER</p> <p>11/25/11</p>	<p>BULL HILL WIND PROJECT</p> <p>Project Location: T16 MD, HANCOCK COUNTY</p>		<p>Designed By: JMT</p> <p>Drawn By: JLD</p> <p>Date: 11/24/10</p> <p>Scale: NOT TO SCALE</p>	<p>Rev. # 1</p> <p>MT</p> <p>REVISÉ PER LURC COMMENTS DATED 01/18/11</p>	<p>Date: 1/25/11</p>
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Engineer: **SEWALL**
JAMES W. SEWALL COMPANY / Since 1880
SEWALL.COM 800 648 4202

AN INTEGRATED TEAM OF GEOSPATIAL, ENGINEERING, SURVEYING AND NATURAL RESOURCE CONSULTANTS

State of Maryland Seal: JOHN M. THERIAULT, Licensed Professional Engineer, No. 9887, 1/25/11

Sheet No. **C-4**

PERMIT