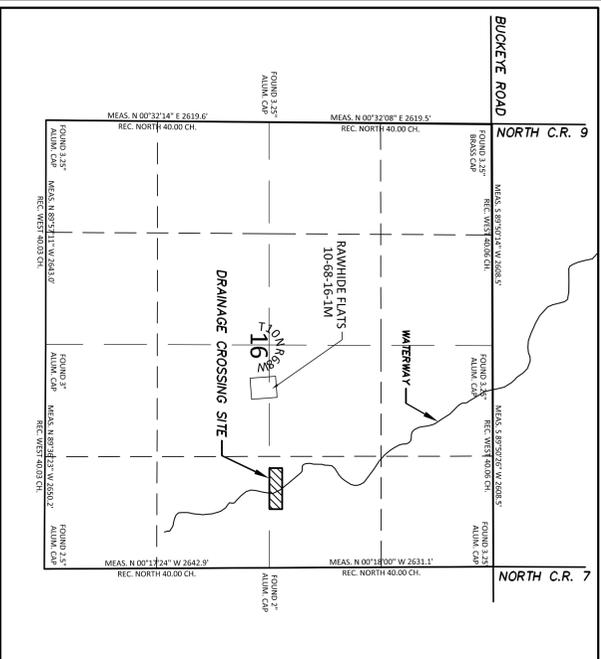
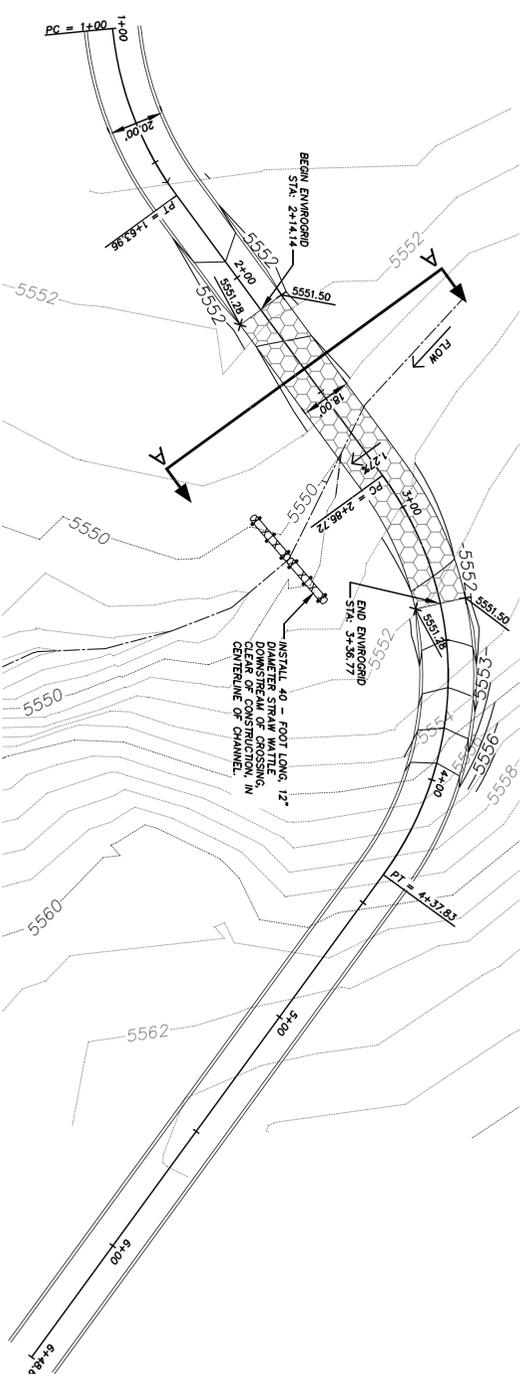


MARATHON OIL CO.  
 RAWHIDE FLATS 10-68-16-1M  
 ACCESS ROAD DRAINAGE CROSSING  
 SECTION 16, TOWNSHIP 10 NORTH, RANGE 68 WEST,  
 LARIMER COUNTY, COLORADO



LOW WATER CROSSING PLAN & PROFILE



- Excavate and shape the subgrade soil to the elevations, grades and dimensions as shown on the drawings.
- Install pit run in crossing in 6" - 8" lifts with adequate compaction equipment. If excess pumping of the pit run occurs in the subgrade, additional pit run may be required to achieve the elevation shown on the plan for the 1.5 - foot depth of the pit run. Pit run shall be proof rolled for adequate compaction.
- Unroll 8 oz. non-woven geotextile fabric over finish graded pit run. Overlap adjacent panels by 18 - inches minimum.
- Determine where the first section of EnviroGrid® cellular confinement is to be placed and put straight stakes or J-Hooks (rebar bent like a candy-cane) at the four corners.
- Stretch a section beyond its intended length and then allow it to relax back. Place the section over the embedded stakes or J-Hooks. Additional stakes or J-Hooks may be needed along the perimeter in order to get full expansion of each cell. In situations where it is not practical to use or J-Hooks (over rocky soil, etc.) a stretcher frame may be needed. Adjacent sections of cellular confinement are installed in a similar fashion and butted or stapled together to achieve continuous coverage.
- Fill in the first rows of cellular confinement with a front-end loader or dump truck and push the fill into the cells using shovels or a bulldozer blade. A "ramp" of fill material immediately adjacent to the EnviroGrid® will likely be necessary to allow equipment to climb onto the EnviroGrid®. Continue until all cells are filled. Never allow any equipment to drive over unfilled cellular confinement. Always overfill the cells slightly to allow for consolidation and compaction. **Note: Stone Infill shall consist of 1 1/2 - inch median stone size.**
- You are now ready to compact the EnviroGrid® cellular confinement system. The most common method of compacting is through multiple passes by the tracked equipment used to spread infill. A vibrating roller and/or water may be required to achieve the specified level of compaction.
- 4:1 catch slopes up and downstream of EnviroGrid® shall be graded, compacted and match into top of EnviroGrid®. Refer to section A-A.
- Once the cellular confinement is filled and the system is compacted, the EnviroGrid® base is ready to withstand heavy traffic loads.
- Reseed disturbed areas adjacent to EnviroGrid® crossing with drought tolerant seed mix.



Geotextile Product Description Sheet  
**SKAPS GT-180**  
 8 oz Nonwoven Geotextile

SKAPS GT-180 is a needle-punched nonwoven geotextile made of 100% polypropylene staple fibers, which are formed into a random network for dimensional stability. SKAPS GT-180 meets ultimate deformation, color, biological degradation, naturally encountered basins and acids. Polypropylene is stable within a pH range of 2 to 13. SKAPS GT-180 conforms to the physical property values listed below.

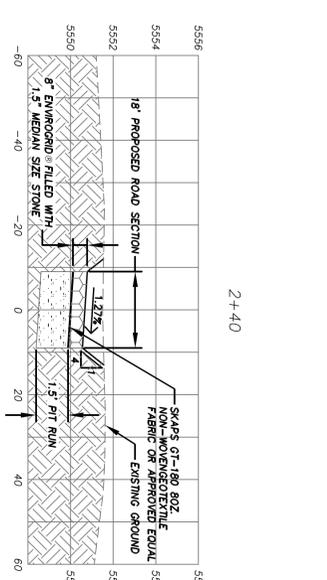
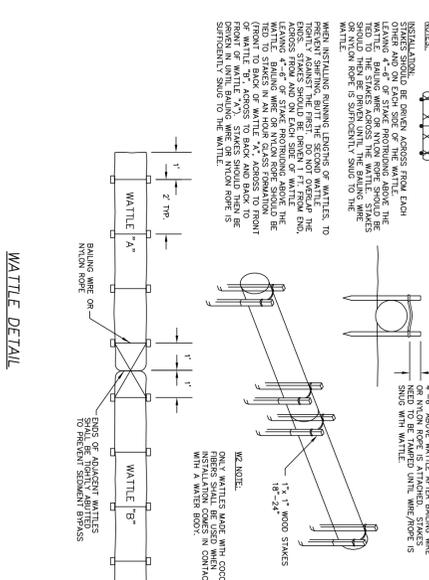
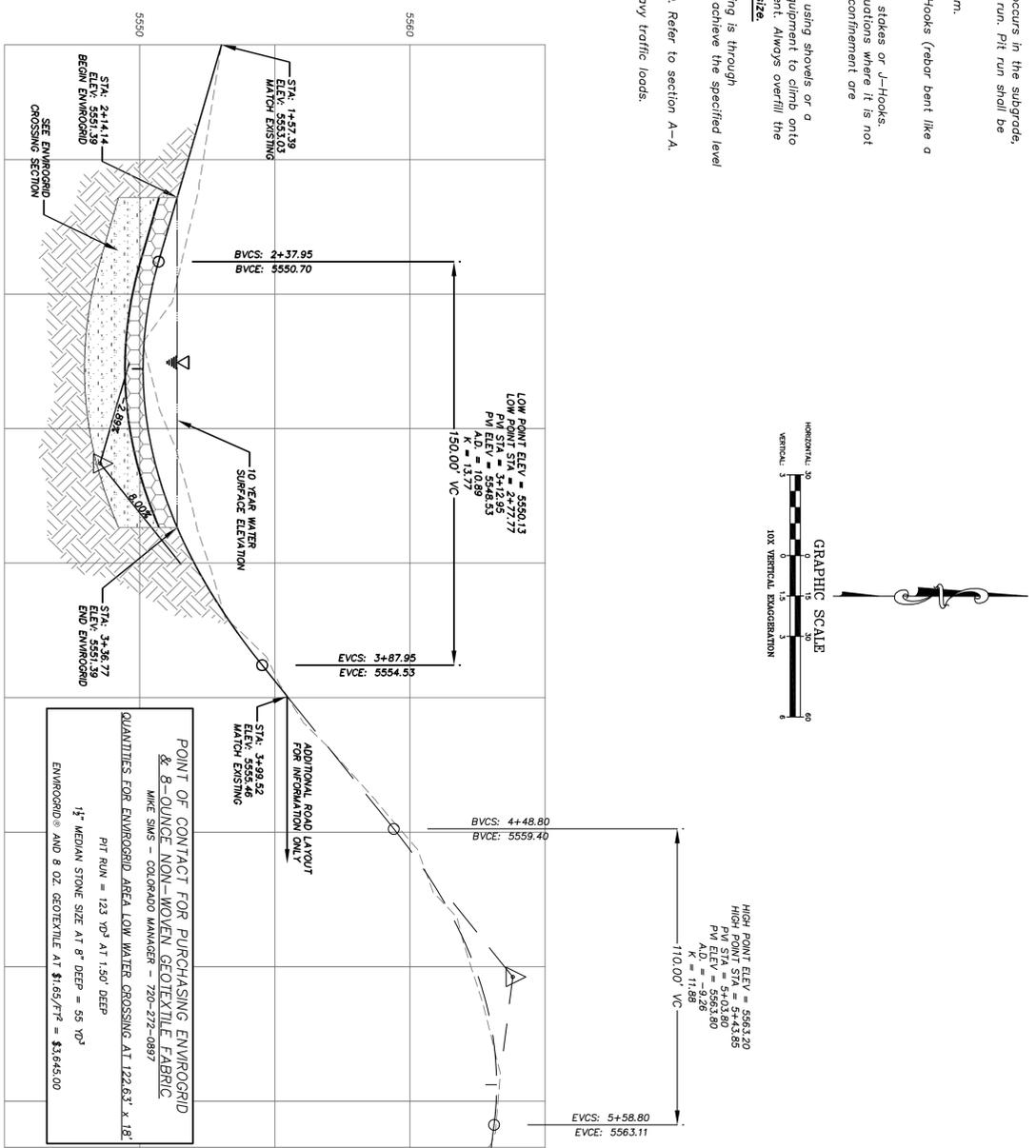
PROPERTY	TEST METHOD	UNIT	M.A.R.V. (Minimum Acceptable Value)
Weight (Typical)	ASTM D 5851	oz/29 (g/3m)	8.0 (2.71)
Grid Tenacity	ASTM D 4833	lbs (kN)	200 (211)
Grid Elongation	ASTM D 4833	%	30
Triaxial Tear Strength	ASTM D 4833	lbs (kN)	55 (2.70)
Puncture Resistance	ASTM D 4833	lbs (kN)	130 (5.78)
Mullen Burst Strength	ASTM D 3786	psi (kPa)	400 (276)
Permeability	ASTM D 4491	1/sec	1.4
Water Row	ASTM D 4491	gpm/ft (liters/m)	90 (3.57)
AOS	ASTM D 4751	US Sieve (mm)	80 (3.00)
UV Resistance	ASTM D 4355	%/Yrs	70/500

At the time of manufacturing, handling, storage, and shipping may change these properties.

PACKAGING	
Roll Dimensions (W x L) -	22.3 x 350 x 15.3 x 300
Square Yards Per Roll	500
Estimated Roll Weight - lbs	250

This information is provided for reference purposes only and is not intended as a warranty or guarantee. SKAPS assumes no liability in connection with the use of this information.

SKAPS Industries, 316 S. Redwood Dr., Piedmont, GA 30087, Phone (770) 983-3440, Fax (770) 983-3488, Email info@skaps.com  
 Made in U.S.A.



LEGEND

- 5549 MINOR EXISTING CONTOUR
- 5550 MAJOR EXISTING CONTOUR
- 5549 MINOR PROPOSED CONTOUR
- 5550 MAJOR PROPOSED CONTOUR
- 5550 EGA 20 SERIES ENVIROGRID

**Marathon Oil Company**  
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 DATE: 03/20/11 JOB NO.: 20110001 SHEET: 1 OF 1  
 REVISIONS: