

Typical Site Map for well pad and access road. Implementation schedule through construction phases.

* Please refer to the field wide SWMP for details.

Once the construction begins, a Site Plan will be developed for each site to reflect actual conditions of the location. The Site plan will be revised through construction phases.

- 1 Proposed area of disturbance is equivalent to areas of cut and fill.
- 2 Proposed construction site boundary.
- 3 NS 4* Limiting the area of vegetation disturbance. Undisturbed natural vegetation shall be preserved outside of the boundary of disturbance, reducing sediment and erosion problems.
- 4 NS 9* NS 11* During the clearing operation a Brush Barrier, SC 9* shall be placed down gradient of the disturbance, intercepting and retaining sediment from disturbed areas.
- 5 S 4* Construct a Clean Water Diversion Ditch, Alt 1* above the cut slope, prevents upland watershed from entering the disturbed area.
- 6 The outfall for this project begins at the top of the Clean water Diversion Ditch. The size of the ditch is proportional to the length of the cut slope.
- 7 S 4* A temporary dirt berm, EC 8* shall be placed above the access road out slope until road base/gravel can be applied, minimizing erosion.
- 8 S 1* Depending on soil content, disturbed areas may be left in a roughened condition, EC 12* grading techniques, to facilitate plant establishment and minimize soil erosion.
- 9 S 17* Topsoil will be stockpiled on the outer limits of the site surrounded with a dirt berm, EC 8*, controlling sediment transport. NS 12* Seeding, EC 1* with or without a mulch tackifier, EC 3* will be completed during reclamation season.
- 10 S 18* A dirt berm, EC 8* shall be placed around the production pit, preventing run off from entering the pit.
- 11 The brush barrier shall be replaced with a dirt berm, EC 8* during final grade of the well pad and access road.
- 12 S 4* Construct a dirt berm, EC 8* on well pad out slope to direct run off to a desired location. Hard armor, S 6* may be used for erosion control where run off exits the location. At that point the outfalls will be recorded on the site plan.
- 13 NS 3* The pipeline shall be completed in small increments to limit the time of disturbed soil exposure to the elements.
- 14 NS 12* The cut/fill slopes of the well pad and clean water diversion shall be seeded, EC 1* and may have erosion control blankets installed, EC 5* or mulch tackifier, EC 3*, used to control erosion and promote the establishment of vegetation.
- 15 S 11* & S 6* Once the pipeline has been installed along the access road a bar ditch will be established on the cut side of the access road using culverts with inlet/outlet protection. Rip-rap shall be placed inside bell holes for stabilization. Rip-rap shall be used on culvert outlets to dissipate energy, trap sediment and prevent scouring.
- 16 S 21* Access road/well pad shall be stabilized with road base/gravel upon completion of surface equipment/pipeline installation, used to reduce erosion and control off site tracking.
- 17 The cut / fill slopes of the access road shall be seeded, EC 1* and may have Mulch Tackifier applied, EC 3*, used to control erosion and promote the establishment of vegetation.

Construction Phases	Clearing				Utility installation								
	①	②	③	④	⑬								
	Construction				Final Stabilization								
	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰
Final grade	⑪	⑫											

