

Contractor Responsible for Erosion / Sediment Control

It is the intent of this temporary erosion and sediment control plan that storm water runoff be controlled at all times to prevent soil erosion and to maintain water quality. Any and all measures necessary to do so shall be employed by the contractor.

Regardless of site, weather, soil or other conditions, the contractor shall be fully responsible for ensuring that erosion does not occur on the site and that polluted or silt-laden runoff does not leave the site or enter into any creek, stream, wetland or water body on the site.

2. Beyond the minimum requirements shown on this plan, the contractor shall be responsible for selecting and implementing appropriate methods, "best management practices" (bmps), for storm water treatment and control that meet the requirements of the State and locat

The contractor shall report all water quality concerns and activities to the project engineer. the event that the installed water quality control measures are ineffective at controlling erosion and sediment, the contractor shall immediately report to and consult with the project engineer to find an appropriate remedy. All construction activities, with the exception of erosion and sediment control measures, shall cease until such time as the water quality is

4. The contractor shall be responsible for monitoring weather forecasts and anticipating storm activity and shall schedule all project activities in anticipation of the weather.

All supplies and materials necessary for implementing BMPs shall be stored on site and sha be immediately available for use. Such supplies and materials shall include, but not be limited to, straw bales or other mulching material, silt fencing and stakes, filter fabric, etc.

During and after runoff producing storm events, contractor shall monitor all erosion control measures and shall prioritize implementation and maintenance of erosion and sediment control measures above all others.

Geotechnical Engineers TESC Notes

(Refer to Geotechnical Investigation Report, dated Oct. 5th, 2014 by AGE for additional information)

The intent of the erosion control plan is to decrease erosion and off-site migration of soils. Typical measures used to decrease off-site migration include use of hay bales and rock coverings or check dams; holding the soil in place by establishing a vegetation cover as soon as practical; and by directing surface water flow away from areas disturbed by construction activities.

We anticipate that a portion of the property will be disturbed during construction of the proposed new turf; however, the disturbed area will have significant vegetation surrounding the area and the disturbed area will be covered with imported crushed rock as soon as practical after the subgrade is exposed so the risk of off-site transport of soil particles is low.

Surface water runoff from upslope of the disturbed area should be directed away from the construction area. Surface water flow on the exposed soil should move as sheet flow rather than concentrated flow.

Runoff from the disturbed portion of the site may contain some soil material. To further reduce the risk of sediment leaving the site during periods of wet weather (typically winter and spring months), small settling basins can be installed at the start of the wet season below the site at the discharge end of graded areas, ditches and swale areas. Straw bales should be staked along the downhill edge of the settling basin. Water can be discharged from the settling basin using 4-in.-diameter flex pipe. The settling basins should

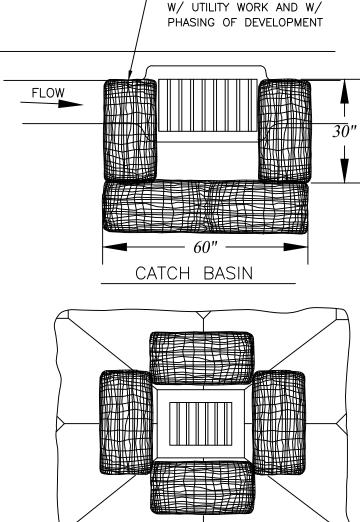
be installed no later than September 30.

Straw bales or silt fencing should be installed along the downhill edge (south and west sides) of the proposed construction. The silt fence should be embedded at least 4 in. into the ground and should be staked in place. The straw bales should be placed end-to-end and staked in place to prevent separation between the bales. The silt fence and straw bales should be placed to direct surface water runoff from the site towards the settlement basins.

During construction and prior to establishment of the site landscaping, the erosion control measures must be monitored and may require periodic maintenance. Maintenance may include removal of sediment from upslope of the straw bales or silt fence, removal of sediment from the settlement basins, and the placement of additional straw bales or sediment fence. The amount of required maintenance of the erosion control measures will decrease significantly as the landscaping becomes established.

The responsible person for the erosion control should evaluate the erosion control measures periodically during construction, including on about September 30 and after storm events. The intent of the evaluation would be to determine if additional measures need to be installed and if maintenance of the system needs to be completed.

- MAY BE USED SHORT TERM



AREA DRAIN

- TYPES. BIO-FILTER BAGS SHOULD BE
- STAKED WHERE APPLICABLE USING (2) 1"x2"WOODEN STAKES OR APPROVED EQUAL PER BAG.

ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL

WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

Typical Detail - Type 4 Inlet Protection

1. Hold a pre-construction meeting of project construction personnel that includes the inspector to discuss erosion and sediment control measures and construction limits.

2. All inspections must be made in accordance with DEQ 1200-C permit requirements.

4. Retain a copy of the ESCP and all revisions on site and make it available on request to DEQ, Agent, or the local municipality. During inactive periods of greater than seven (7) consecutive calendar days, retain the ESCP at the construction site or at another location.

5. All permit registrants must implement the ESCP. Failure to implement any of the control measures or practices described in the ESCP is a violation of the permit.

6. The ESCP measures shown on this plan are minimum requirements for anticipated site conditions. During the construction period, upgrade these measures as needed to comply with all applicable local, state, and federal erosion and sediment control regulations.

7. Submission of all ESCP revisions is not required. Submittal of the ESCP revisions is only under specific conditions. Submit all necessary revision to DEQ or Agent

erosion

9. Identify, mark, and protect (by fencing off or other means) critical riparian areas and vegetation including important trees and associated rooting zones, and vegetation areas to be preserved. Identify vegetative buffer zones between the site and sensitive areas (e.g., wetlands), and other areas to be preserved, especially in perimeter areas.

10. Preserve existing vegetation when practical and re-vegetate open areas. Re-vegetate open areas when practicable before and after grading or construction. Identify the type of vegetative seed mix used.

11. Erosion and sediment control measures including perimeter sediment control must be in place before vegetation is disturbed and must remain in place and be maintained, repaired, and promptly implemented following procedures established for the duration of construction, including protection for active storm drain inlets and catch basins and appropriate non-stormwater pollution controls.

for all roadways including gravel roadways.

construction operations.

18. Implement the following BMPs when applicable: written spill prevention and response procedures, employee training on spill prevention and proper disposal procedures, spill kits in all vehicles, regular maintenanceschedule for vehicles and machinery, material delivery and storage controls, training and signage, and covered storage areas for waste and supplies.

20. The application rate of fertilizers used to reestablish vegetation must follow manufacturer's recommendations to minimize nutrient releases to surface waters. Exercise caution when using time-release fertilizers within any waterway riparian zone.

21. If a stormwater treatment system (for example, electro-coagulation, flocculation, filtration, etc.) for sediment or other pollutant removal is employed, submit an operation and maintenance plan (including system schematic, location of system, location of inlet, location of discharge, discharge dispersion device design, and a sampling plan and frequency) before operating the treatment system. Obtain plan approval before operating the treatment system. Operate and maintain the treatment system according to manufacturer's specifications.

22. Temporarily stabilize soils at the end of the shift before holidays and weekends, if needed. The registrant is responsible for ensuring that soils are stable during rain events at all times of the year.

23. At the end of each workday soil stockpiles must be stabilized or covered, or other BMPs must be implemented to prevent discharges to surface waters or conveyance systems leading to surface waters.

25. Sediment fence: remove trapped sediment before it reaches one third of the above ground fence height and before fence removal.

before BMP removal.

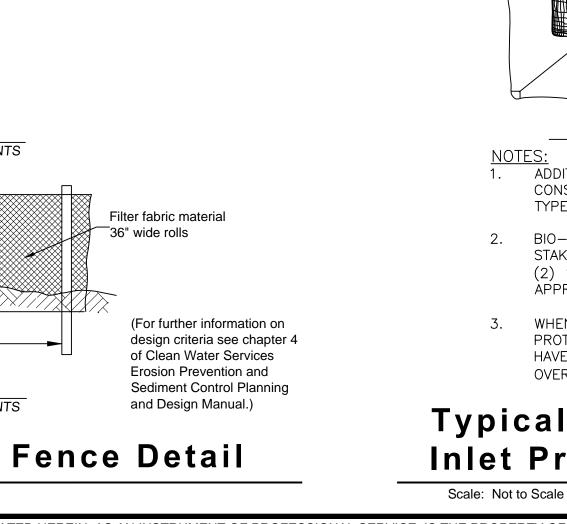
27. Catch basins: clean before retention capacity has been reduced by fifty percent. Sediment basins and sediment traps: remove trapped sediments before design capacity has been reduced by fifty percent and at completion of project.

28. Within 24 hours, significant sediment that has left the construction site, must be remediated. Investigate the cause of the sediment release and implement steps to prevent a recurrence of the discharge within the same 24 hours. Any in-stream clean up of sediment shall be performed according to the Oregon Division of State Lands required timeframe.

29. The intentional washing of sediment into storm sewers or drainage ways must not occur. Vacuuming or dry sweeping and material pickup must be used to cleanup released sediments.

portion of the site

32. Provide permanent erosion control measures on all exposed areas. Do not remove temporary sediment control practices until permanent vegetation or other cover of exposed areas is established. However, do remove all temporary erosion control measures as exposed areas become stabilized, unless doing so conflicts with local requirements. Properly dispose of construction materials and waste, including sediment retained by temporary BMPs.



Angle filter fabric fence to assure soil is trapped

Notes:

finished grade.

1. Bury bottom of filter fabric 6" vertically below

3. Posts to be installed on uphill side of slope

4. Compact both sides of filter fabric trench.

2. 2"x 2" fir, pine or steel fence posts.

PLAN VIEW

Erosion & Sedimentation Control Notes:

3. Inspection logs must be kept in accordance with DEQ's 1200-C permit requirements

8. Phase clearing and grading to the maximum extent practical to prevent exposed inactive areas from becoming a source of

12. Establish concrete truck and other concrete equipment washout areas before beginning concrete work.

13. Apply temporary and/or permanent soil stabilization measures immediately on all disturbed areas as grading progresses and

14. Establish material and waste storage areas, and other non-stormwater controls.

15. Prevent tracking of sediment onto public or private roads using BMPs such as: graveled (or paved) exits and parking areas, gravel all unpaved roads located onsite, or use an exit tire wash. These BMPs must be in place prior to land-disturbing activities.

16. When trucking saturated soils from the site, either use water-tight trucks or drain loads on site.

17. Use BMPs to prevent or minimize stormwater exposure to pollutants from spills; vehicle and equipment fueling, maintenance, and storage; other cleaning and maintenance activities; and waste handling activities. These pollutants include fuel, hydraulic fluid, and other oils from vehicles and machinery, as well as debris, leftover paints, solvents, and glues from

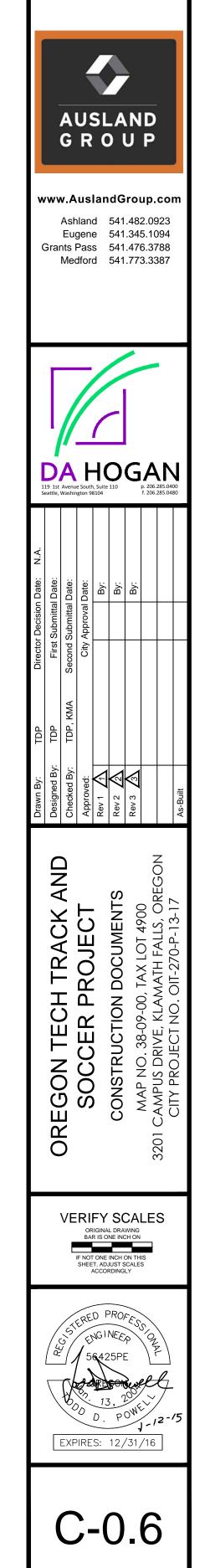
19. Use water, soil-binding agent or other dust control technique as needed to avoid wind-blown soil.

24. Construction activities must avoid or minimize excavation and creation of bare ground during wet weather.

26. Other sediment barriers (such as biobags): remove sediment before it reaches two inches depth above ground height. and

30. The entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding, or other method should all construction activities cease for 30 days or more.

31. Provide temporary stabilization for that portion of the site where construction activities cease for 14 days or more with a covering of blown straw and a tackifier, loose straw, or an adequate covering of compost mulch until work resumes on that



AUSLAND PROJECT NO: 14-0708

TESC DETAILS