Thurston County Standard Stormwater Notes

1. A preconstruction meeting shall be held prior to the start of land disturbing activity, construction or staking of the site. The preconstruction meeting shall include staff from stormwater, water and sewer utilities if applicable.

2. All workmanship and materials shall be in accordance with the Thurston County Drainage Design and Erosion Control Manual, other County standards and the most current copy of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction (WSDOT/APWA) in that order.

3. Construction SWPPP consistent with the requirements set forth in Vol II in the DDECM and includes all 13 elements or as required in the Construction Stormwater General Permit. BMPs selected for implementation are to be approved by Ecology and are to conform to the current Stormwater Management Manual for Western Washington.

3. A Construction Stormwater Pollution Prevention Plan (SWPPP) and a copy of the approved stormwater plans shall be onsite at all times when construction is in progress. Whenever inspection and/or monitoring reveals that the BMPs are inadequate, due to discharge, track out, or potential to discharge, BMPs or design changes shall be implemented as soon as possible.

   If deficiencies are identified the following actions shall be taken by the county. It shall be at the discretion of the inspector which action will be taken based on the severity or history of the site.
   A. 1st action taken is a verbal warning to the foreman or person overseeing the site.
   B. 2nd action taken is a written inspection with actions to be taken signed by the foreman or person overseeing the site.
   C. 3rd action taken if corrective actions are not taken, completed or issues continue to be found will be a written notice and a Stop Work Order shall be posted.

4. Seasonal Work Limitations – From October 1 through April 30, clearing, grading, and other soil disturbing activities will not be permitted unless it is shown to the satisfaction of the County that silt-laden runoff will be prevented from leaving the site through a combination of the following:
   - Site conditions including existing vegetative coverage, slope, soil type, and proximity to receiving waters; and
   - Limitations on activities and the extent of disturbed areas; and
   - Proposed erosion and sediment control measures

   The County may expand or restrict the seasonal limitation on site disturbance based on site inspections, local weather conditions, or other information.
   - If, during the course of any construction activity or soil disturbance during the seasonal limitation period, silt-laden runoff leaving the construction site causes a violation of the surface water quality standard; or
   - If clearing and grading limits or erosion and sediment control measures shown in the approved plan are not maintained, the County may take enforcement action, including but

not limited to a notice of violation, administrative order, fine/penalty, stop-work order, or correction notice.

5. Exposed soils shall not be left exposed and unworked for more than 2 days between (October 1 – April 30) or 7 days between (May1 – Sept. 30).

6. Assure that concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout is performed offsite or in designated concrete washout areas only. Do not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Do not dump excess concrete on site, except in designated concrete washout areas. Refer to the Drainage Design and Erosion Control Manual or Stormwater Management Manual for Western Washington for BMP's. Concrete spillage or concrete discharge to stormwater facilities is an illicit discharge.

7. Applicant shall comply with all other permits and other requirements of the governing authority or agency.

8. All storm mains and retention/detention areas shall be staked for grade and alignment by an engineering or survey firm licensed to perform such work.

9. Storm drain pipe materials shall be as specified in the Drainage Design and Erosion Control Manual. Pipe size, slope, cover, etc., shall be as specified in Volume III of the Drainage Design and Erosion Control Manual.

10. The storm drainage system shall be constructed according to approved plans on file with the jurisdiction. Any material deviation from the approved plans will require written approval from the jurisdiction.

11. Special structures, oil/water separators, and outlet controls shall be installed per plans and manufacturer's recommendations.

12. Washington law requires that the rules adopted by Washington Utilities and Transportation Commission be followed. Those rules are set forth in RCW 19.122 and requires anyone performing any type of digging to call at least two business days before digging. Dial 811 or 1-800-424-5555 or visit www.callbeforeyoudig.org .

13. All surveying and staking shall be performed by an engineering or surveying firm capable of performing such work. The engineer or surveyor directing such work shall be licensed by the State of Washington.

14. The minimum staking of storm sewer systems shall be as follows:
    A. Stake location of all catch basins/manholes and other fixtures for grade and alignment.
    B. Stake location, size, and depth of retention/detention facility.
    C. Stake finished grade of all stormwater features, including but not limited to catch basin/manhole rim elevations, overflow structures, weirs, and invert elevations of all pipes in catch basins, manholes, and those pipes that daylight.

15. Final elevations, locations, slopes, grades, roadway alignments, etc. shall be based on a field survey conducted by a licensed professional surveyor and shall be stamped by the surveyor as a record of the final constructed location and elevation of facilities shown.

16. A continuous toning wire shall be buried the entire length of all stormwater pipe and be located and attached to the top of the pipe not located directly under paved roadways. The toning wire shall be 12 gauge insulated green toning wire. The toning wire shall end in catchbasins, manholes, other structures, and be placed in a organized manner on a stainless steel concrete wedge anchor and/or hook within six (6) inches of lid or grate or end of pipe if no structures present i.e., cross culvert with a minimum of five (5) foot coil of wire so it will not fall off and can be accessed without entering the structure. The toning wire shall be tested for continuity prior to acceptance. All splices will be made with Copperhead SnakeBite connectors or 3M DBR moisture displacement connectors splice kits designed for in-ground use.

17. Underground warning tape shall be placed approximately twelve (12") above the top of pipe indicating stormwater pipe.

18. All culverts shall be a minimum of twelve (12") diameter and of sufficient length to provide a minimum 3:1 slope from the edge of the driveway or roadway to the bottom of the ditch. The culvert shall extend one foot outside the driveway or roadway radius before the bevel to allow for riprap armoring to prevent sloughing of the base/crushed rock into the ditch. Culverts shall have beveled ends to match the side slope. Ductile iron pipe shall be cut short to allow for transition to PVC or PE beveled pipe ends that are exposed in open conveyance system.

19. The storm drainage system shall be constructed according to accepted plans on file with the County. Any material deviation from the plans will require written acceptance from the Drainage Manual Administrator or designee.

20. Catchbasin grates shall be directional grates where grade or slope is greater than or equal to 1%.

21. A copy of the accepted storm water plans must be on the job site whenever construction is in progress.

22. All building downspouts on commercial sites shall be connected to the storm drainage system, unless otherwise accepted by the County.

23. It shall be the sole responsibility of the contractor to obtain street use and other related or required permits prior to any construction activity in the County right-of-way. It shall also be the responsibility of the contractor to obtain all required permits prior to any construction.

24. All new storm drain pipelines shall be Closed-circuit television (CCTV) inspected and Air Pressure Tested (APT) by the developer, contractor or applicant after all underground utilities are installed and compaction of the roadway subgrade is complete. **Required**

Pre-Notification: The Contractor shall notify the County Storm and Surface Water Utility at 360-867-2099 at least 3 Working Days in advance of the first television inspection.

25. Thermo-plastic drainage markings are required for all structures in the roadway. Please contact the Storm and Surface Water Utility at 360-867-2099 for marking standards.

26. The Project Engineer shall inspect drainage and erosion control facilities periodically during construction. The Project Engineer shall provide, at a minimum, inspection certification for the drainage and erosion control facilities following any storm event with precipitation equal to or exceeding 2 inches in a 24-hour period. Failure to submit certification to the County within 24 hours following such an event may result in a stop work order being placed on the project.

27. All castings or structures not in pavement areas, and not in the roadway right-of-way of a paved road, shall be set six inches (6") above finished grade. They shall have a cast iron frame and cover grouted to just under the top of the frame and a concrete pad extending out 2 feet in all directions.

28. All disturbed areas shall meet post construction soil requirements and be seeded and mulched or similarly stabilized to the satisfaction of Thurston County. For sites where grass has been planted through hydroseeding, final will not occur until the grass has been thoroughly established (90% establishment), unless otherwise approved by the County.

29. No trees or shrubs may be planted within 25 feet of inlet or outlet pipes or manmade drainage structures such as spillways or flow spreaders. Species with roots that seek water, such as willow or poplar, shall be avoided within 50 feet of pipes or manmade structures.

30. TCC 18.16.020 Bonding of drainage improvements shall not be allowed and facilities will be constructed and complete prior to final.