

SECTION 4 - TYPICAL GENERAL CONSTRUCTION NOTES (May 2022)

The following notes shall be used when they are applicable to the project. Additional notes shall be added by the design engineer or as required by the City Engineer to address specific concerns for each project.

1. All materials and workmanship shall be in accordance with the latest revision of the City of West Richland Special Provision, City of West Richland Standard Details and the current edition of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction.
2. The placement of fill material on lots exceeding 24-inch shall be placed and compacted in accordance with the latest version of the International Building Code (IBC). The developer shall be responsible for hiring an independent materials testing company to complete and document compaction tests and a licensed professional engineer to certify that the fill placed on lots is buildable meeting the latest version of the IBC. A copy of this certification shall be provided to the City Engineer and City Building Official.
3. First order of work on-site shall be installation of erosion control BMP's, silt fence and construction entrance.
4. Contractor shall submit a Soil Destabilization Notification on the Benton County Clean Air Authority website and provide the City with a copy of the registration notification.
5. NO work on this project shall commence until a written Notice to Proceed (NTP) has been issued by the City of West Richland. Notice to Proceed will not be issued until General Construction Notes 3, and 4 have been completed. Contractor may begin removal of woody material prior to NTP but no clearing of ground cover or earthwork is allowed until NTP has been issued.
6. Contractor shall clear and grub all vegetation, sage brush and woody materials from entire site including lots unless otherwise approved by City Engineer. All material shall be removed from site and disposed of at an authorized facility. No wood or vegetation shall be buried onsite.
7. All materials shall be in new condition when brought to the job site. Dates stamped on the material shall be clearly visible for inspection by the City. Any waterline pipe over 2 years (24 months) old, or appearing sun-bleached or damaged, will be rejected and shall be removed from the job site immediately.
8. All traffic control devices shall be in accordance with the latest "Manual on Uniform Traffic Control Devices for Streets and Highways."
9. The Contractor and all subcontractors shall be licensed by the State of Washington and bonded to do work in the public right-of-way and have a current City of West Richland business license.
10. The Contractor shall be responsible for any and all construction deficiencies for a period of one year from the date of acceptance by the City of West Richland. On private developments, Developer/Contractor is to provide City with a maintenance bond in the amount of 5% of the total project cost.
11. The contractor shall be required to call 811 a minimum of two business days prior to commencing any excavation activities to determine field locations of all underground utilities.
12. Any changes or modifications to the project plans shall first be approved by the City Public Works Director or his/her representative.
13. Water mains shall cross over the top of sewer mains with a minimum separation of 18". Any crossing with a vertical separation of less than 18-inch or any crossing in which the water main crosses below the sewer main shall be in accordance with Washington State Department of Ecology Standards.
14. The locations of all existing underground utilities as shown on these plans are approximate only. The Contractor shall determine the exact locations of all existing utilities before commencing work and agrees to be fully responsible for any and all damages which might be associated with the failure to exactly locate and preserve any and all underground utilities.
15. The face of curb shall be stamped at all utility crossings, main lines and service lines as follows:

"S" - Sanitary Sewer	"I" - Irrigation	"E" - Electrical	"W" -
Water	"C" - Conduits	"G" - Gas	

Gutter pan shall receive stamp if face of curb has been depressed at crossing location or stamp is removed during driveway cut process.
16. All sanitary water mains shall have min. 42" cover.
17. Fire hydrants and street lights shall be located 7-feet behind face of curb to center of equipment where the sidewalk is adjacent to the curb, 3-feet to from face of curb when separated sidewalk, and 7-feet behind edge of asphalt where no curb and gutter is present unless otherwise noted on the plans. Hydrants, nor lights shall, be placed right at property corners, rather shifted to accommodate any placement of property pins.
18. The Contractor shall coordinate location and construction of power, natural gas, telephone and TV cable lines and services with utilities.
19. Contractor to furnish trench and vault excavation and backfill for all utilities. Contractor shall coordinate conduit requirements and schedule the work with each individual utility. Direct bury conduit under streets shall be schedule 80.
20. Contractor to adjust new and existing valve boxes to grade after paving. Contractor is required to replace existing valve boxes not meeting current standard.
21. All tracer wire must be 12 gauge solid copper 600 volt with UF insulator 0.06" nominal thickness minimum and blue in color for water and green for sewer. Wire must be tested and approved by the City prior to sub-grade approval.
22. Sewer service lines shall be no steeper than 45" and no flatter than 2.0%. Minimum depth at curb line is 5-feet. Service lines to be constructed at 2.0% slope where noted on the plans.
23. City to furnish and install permanent street signs. Developer to reimburse City for materials and labor costs prior to final plat approval.
24. Locations of private utilities, as shown on the plans, are suggested locations and may be schematic. Contractor to coordinate field locations with utility.
25. Where necessary to avoid water and storm drain conflicts, Contractor shall construct water lines deeper. Maintain min. 12-inch vertical separation.
26. At minimum, a 20'X40' rip-rap pad shall be constructed at the site. If debris cannot be controlled, the length of construction entrance may be required to be increased or a wheel wash may be required.
27. Where new sanitary sewer or storm drain lines are to be connected to existing manholes or pipes, the Contractor shall dig and verify elevations of existing lines and notify the City Engineer should grades need to be revised.
28. Contractor to allow City Engineer and design engineer to inspect each storm drain drywell excavation to evaluate soils and make adjustments if necessary.
29. Developer to purchase and install mail box cluster units (CBU) per West Richland Post Office standards. Coordinate with Joe Spry at 967-0400. Developer to install 10 LF of sidewalk in front of CBU. CBU's can not be installed right at property corner as it conflicts with property pins. Contractor to install unit to one side of the pin or other as shown in the plans or directed by City Engineer.
30. After satisfactory health samples, water lines shall be tested at 150 PSI for one hour, no loss. The contractor is responsible to control all flushed water.
31. All fire hydrants are to be restrained from hydrant to tee. Pipe shall be 6-inch ductile iron.
32. Sewer manhole sections shall have rubber "A-Lock" gaskets and shall be grouted and trowled to a smooth finish. All pipe inlets and outlets shall be grouted.
33. Sewer lines shall be air tested per current WSDOT Standard Specifications. Storm sewer lines in excess of 100-LF shall also be air tested.
34. When connecting to existing sewer facilities, downstream pipe shall be sealed off until upstream construction is finished, tested, cleaned, and accepted. All construction debris and water shall be removed prior to opening downstream pipe.

35. It will be the responsibility of the Contractor to flush and clean all sewer and storm mains prior to television inspection.
36. Contractor shall television inspect all sewer main lines. Storm sewer lines shall have television inspection for runs in excess of 100-LF. A ball or equivalent device shall be attached to the camera to show any "belly" in the line which may exceed 3/4-inch in depth. Inspection shall be recorded on DVD and viewable thru a Windows Media Player. Video must be submitted to City Engineer for approval.
37. All disturbed areas to be hydroseeded with tackifier with dry land seed mix.
38. Contractor must have all utilities within roadway installed and accepted, and a verbal approval from City Inspector prior to any placement of roadway rock.
39. All catch basins shall have an ADS 90° bend with tapered end for oil/water separation. Storm sewer pipe shall be stubbed into catch basins 2-inches and a 3/8-inch diam. stainless steel lag screws 1-1/2-inch long with 1/2-inch Hex Head shall be used to anchor ADS 90 to storm pipe.
40. Roadway Staking
-Subgrade and Base Course: Residential streets, subgrade and base course are to be blue-topped on centerline and curb line. 40' and wider streets shall also include quarter crown stakes.
-Top Course: For all streets, top course to be red-topped on centerline and quarter crown.
41. All construction surveying must be done by a licensed surveyor.
42. All roadway paving on City streets up to 36-foot wide curb-to-curb shall be paved with two pulls placing pavement joint along roadway centerline. City Engineer shall give pre-approval to proposed pavement joints when City streets are wider than 36-foot curb-to-curb.
43. At locations where irrigation and storm pipe cross a domestic watermain, the length of irrigation/storm pipe shall be centered at the point of crossing so that the joints will be equidistant and as far as possible from the watermain. The irrigation/storm pipe shall be the longest standard length available from the manufacture. On irrigation pipe only, the nearest joint on either side of the crossing shall be restrained.
44. All ductile iron for the following items shall be domestic products made in the USA: pipe fittings, bolts, accessory kits, valve boxes, rings and covers, lids, grates, and monument frame and covers.
45. All wetted materials, including rubbers, plastics, adhesives, lubricants, etc. shall meet NSF Standard 61 Lead Leach limit of allowable lead at 5 ppb maximum. Products must be stamped No Lead (NL) or submittals provided to the City Engineer indicating the products meet the no lead requirements.
46. Pedestrian ramps must meet current ADA guidelines unless a Maximum Extents Feasible report has been submitted and approved by City Engineer. Curb ramp running slopes shall not exceed 8.33% at any location across the curb ramp. Curb ramp lengths must be extended to satisfy the minimum slope of 8.33%. The curb ramp maximum running slope shall not require the ramp length to exceed 15 feet to avoid chasing the slope indefinitely. When extending curb ramp lengths, both ramp lengths shall match in length for that specific ramp.
47. City reserves the right to change any items on approved plans until the project has been accepted.
48. Materials shall be from pre-approved City Materials List. Any substitutions or approved equal materials shall be submitted to City Engineer.

COMPACTION STANDARDS

ACP- 91% maximum density AASHTO T209
Crushed Rock Top Course- 95% AASHTO T180
Crushed Rock Base Course- 95% AASHTO T180
Road Sub Grade- 95% AASHTO T180 or 98% AASHTO T99

STREET LIGHTING NOTES

1. All new lights shall be wired for 240V.
2. Street lighting system to be furnished and installed in conformance with the City of West Richland Special Provisions and Standard Details.
3. The Benton R.E.A. will make approval of the power source in all situations. It is the Contractor's full responsibility to verify the luminaires ordered are compatible with the power voltage that is available.
4. Contractor shall not connect additional or new light circuits without Benton R.E.A. approval. All connections shall be done in coordination of Benton R.E.A.
5. All disconnects must be lockable in the on and off positions.
6. As-built street light layout and light wire diagram must be submitted to the City Engineer for field verification prior to being incorporated in final project mylar. Final approval of lighting system will not be granted until field verification of the as-built information is approved by the City Engineer.
7. Any discrepancies or clarifications shall be discussed and approved with the City Engineer prior to ordering or installation of street light infrastructure.
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