

General Notes (All Projects)

1. The Contractor shall provide all labor, equipment and materials to complete the work in accordance with the City of Winlock Public Works Standards (referred to as "City Standards"), City of Winlock Standard Details (referred to as "Standard Details"), the most recent copy of the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge and Municipal Construction (referred to as the "Standard Specifications") and WSDOT Standard Plans (referred to as "Standard Plans").
2. A pre-construction meeting shall be held with the City of Winlock at least three business days prior to the start of construction.
3. The Contractor shall be responsible for all traffic control in accordance with MUTCD. Prior to disruption of any traffic, traffic control plans must be prepared and submitted to the city for approval. No work shall commence until all approved traffic control plans are in place.
4. All vertical and/or horizontal alignment, shall be staked by an engineering or surveying firm capable of performing such work and directed by a surveyor licensed to perform such work in the State of Washington. City of Winlock datum shall be used for all vertical control.
5. Call the Utilities Underground Location Center at 1-800-424-5555 a minimum of two (2) business days prior to any excavations.
6. The Contractor shall comply with all other permits and requirements of the City of Winlock and/or other governing authorities or agencies. If construction is to take place in the County right-of-way, the Contractor shall notify the County and obtain all the required approvals and permits.
7. It shall be the responsibility of the Contractor to maintain a copy of the approved construction plans on-site at all times bearing the signature of the City Public Works Superintendent.
8. Any changes to the design shall first be reviewed and approved by the developer's project engineer, the City of Winlock and the Public Works Superintendent prior to implementation.
9. The Contractor shall notify the City five (5) business days prior to a utility shutdown. A City representative must be present for any utility shutdown. The City, at its discretion, may re-schedule shutdown. When shut downs require "field verification" of underground conditions, connection points will be exposed by the Contractor and work requirements shall be verified by the Contractor and the City two (2) business days prior to the shutdown. Customers involved with or affected by shutdowns will be notified by the Contractor at least forty-eight (48) hours in advance. Shutdowns will not be permitted on Fridays, weekends, or holidays without written authorization from the City.
10. Prior to backfill, all buried pipe and appurtenances shall be inspected and approved by a representative of the City. It is the contractor's responsibility to notify the City in advance of all required inspections. Any pipe or appurtenance backfilled prior to inspection shall be re-excavated by the Contractor for inspection at no cost to the city. The Contractor shall retain responsibility to repair all deficiencies and failures revealed during all required testing for acceptance and throughout the duration of the warranty.
11. Temporary erosion/water pollution measures shall be in accordance with the City of Winlock Stormwater Management Plan and Section 1-07.15 of the Standard Specifications.
12. Any project disturbing one acre or more shall have an approved Dept. of Ecology Storm Water Permit.



General Notes (Street Construction)

1. Compaction of subgrade, rock and asphalt shall be in accordance with the Standard Specifications.
2. Testing and sampling frequencies are described in the City Standards.
3. The City will oversee the installation of street name and regulatory signs at the Property Owner's expense. All street name and regulatory signs will be submitted to the City for approval prior to the start of construction.
4. Sidewalk forms and subgrade inspection by the City is required before pouring concrete. Twenty-four hours (one work day) advance notice is required for form inspection.



General Notes (Street Light Construction)

1. Washington State electrical permits and inspections are required for all street lighting installations within the City. The Contractor is responsible for obtaining said permits prior to any type of actual construction.
2. A clearly marked service disconnect will be provided for every lighting circuit. The location and installation of the disconnect will conform to *National Electrical Code (NEC)* and these *Standards*. The photo controls window will face north unless otherwise directed by the City. The service disconnect will not be mounted on the luminaire pole. The service disconnect will be of a type equal to a Milbank CP3B-11115 AALSP2 service, 120/240 VAC, 1 3W, Caltrans Type 3B with contactors, photo controls and test switch. All service disconnects will be used to fullest capacity, i.e., maximum number of luminaires per circuit.
3. All lighting wire will be copper with a minimum size of #8. All wire will be suitable for wet locations. All wire will be installed in schedule 80 PVC conduit with a minimum diameter of 1 ¼ inches. A bushing or bell-end will be used at the end of a conduit that terminates at a junction box or luminaire pole. Conductor identification will be an integral part of the insulation of the conductors throughout the system i.e., color-coded wire. Equipment grounding conductor will be #8 copper. All splices or taps will be made by approved methods utilizing epoxy kits rated at 600 volts, minimum (i.e., 3-M 82-A2). All splices will be made with pressure type connectors (wire nuts will not be allowed). Direct burial wire will not be allowed. All other installation will conform to *NEC*, *WSDOT/APWA*, and *MUTCD* standards.
4. Each luminaire pole will have an in-line, fused, water tight electrical disconnect located at the base of the pole. Access to these fused disconnects will be through the hand-hole on the pole. The hand-hole will be facing away from on-coming traffic. Additional conductor length will be left inside the pole and pull or junction box equal to a loop having a diameter of one foot. Load side of in-line fuse to luminaire head will be cable and pole bracket wire, 2 conductor, 19-strand copper #10 and will be supported at the end of the luminaire arm by an approved means. Fuse size, disconnect installation and grounding in pole will conform to *NEC* standards.
5. Approved pull boxes or junction boxes will be installed when conduit runs are more than 200 feet. In addition, a pull box or junction box will be located within 10 feet of each luminaire pole and at every road crossing. Boxes will be clearly and indelibly marked as lighting boxes by the legend, "L.T." or "LIGHTING". See *WSDOT Standard Plan J-11a*.
6. Cement concrete bases will follow *WSDOT Standard Plan J-1b, Sheet 1, Foundation Detail*. Conduit will extend between three (3) and six (6) inches above the concrete base.
7. All streetlights will include a recessed 120V weatherproof GFI receptacle that meets all applicable guidelines and standards. The receptacle will be located thirteen (13) feet above the base of the pole. All receptacles will be on a dedicated circuit separate from the lighting circuit.



General Notes (Storm Drain Construction)

1. Storm drain pipe shall meet the following requirements:
 - a. Plain concrete pipe conforming to the requirements of AASHTO M 86, Class 2.
 - b. Reinforced concrete pipe conforming to the requirements of AASHTO M 170.
 - c. PVC pipe conforming to ASTM D 3034 SDR 35 or ASTM F794 or ASTM F679 Type 1 with joints and gaskets conforming to ASTM D 3212 and ASTM F 477.
 - d. Ductile iron pipe conforming to the requirements of AWWA C 151, thickness class as shown on the plans.
 - e. High-density polyethylene smooth interior pipe conforming to AASHTO M252 types or AASHTO M294 type S, with a gasketed bell and spigot joints.
 - f. Aluminized steel helical or spiral rib pipe in diameters of thirty (30) inches or greater, with a Manning's value of 0.020 or less.
2. Special structures, oil/water separators and outlet controls shall be installed per plans and manufacturers recommendations.
3. All storm lines and catch basins shall be high-velocity cleaned and pressure tested prior to paving. Hydrant flushing of the lines is not an acceptable cleaning method. Testing of the storm main shall include television inspection at the Contractor's expense. Testing will take place after all underground utilities are installed and compaction of the roadway subgrade is completed.
4. Fill material will not be allowed in any open channel used for storm conveyance without written approval from the City Engineer.
5. Contractors and/or property owners are required to channel water with a berm or a pipe when installing or repairing a driveway. Stormwater must be diverted to city storm mains when possible.



General Notes (Erosion Control)

1. Erosion control measures shall be installed and approved by the City prior to the beginning of construction.
2. Erosion control measures are not limited to items as shown on Plans or on Standard Details. The Contractor is responsible for the installation and maintenance of all erosion control measures. Contractor shall implement measures to prevent migration of silt and/or polluted runoff to off-site properties.
3. The Contractor will make regular surveillance of all erosion control measures. The Contractor will make all necessary repairs, modifications, and additions, as necessary to ensure the proper operation of the erosion control measures. The Contractor shall employ more frequent inspections of erosion control measures should site or weather conditions dictate.
4. All disturbed areas will be seeded or sodded upon completion of work. During the wet season, November through March, all disturbed soils will be stabilized within forty-eight (48) hours after land disturbance activities have ceased. Erosion control stabilization measures will include, but are not limited to, installation of straw matting, jute matting, straw mulch and/or wood chips, and covering the affected area and spoil piles with plastic sheeting. The Contractor will be responsible to ensure that complete coverage of the disturbed areas is provided and that growth of vegetation is established. Seed and sod applications will be conducted in accordance with the timelines noted in the most recent edition of the *WSDOT Standard Specifications*.
5. The Contractor will check all seeded or sodded areas regularly to ensure that the vegetative cover is being adequately established. Areas will be repaired, reseeded, and fertilized as required.
6. Tracking of soil off-site will not be allowed. If any soil is tracked beyond the limits of the site, it will be removed before the end of that working day. To prevent additional tracking, vehicle tires must be swept or washed prior to leaving the project site.
7. No more than 500 linear feet (LF) of trench on a down-slope of more than five (5) percent will be opened at one time.
8. Excavated material will be placed on the uphill side of trenches.
9. Excavated material will not be placed in established drainage ditches, under any circumstances.
10. Contractor shall establish a sediment trap for all trench dewatering operations.



General Notes (Water Main Construction)

1. All workmanship and materials shall be in accordance with the applicable provisions of the City Standards, American Water Works Association (AWWA) Standards and ANSI/NSF Standard 60 or 61.
2. All water mains shall be PVC AWWA C900, pressure class 150 or ductile iron cement mortar lined thickness Class 50 or Class 52.
3. Gate valves shall be resilient wedge, non-rising stem with O-rings seals. Valve ends shall be mechanical joint or ANSI flanges. Valves shall conform to AWWA C509 or C515. Valves shall be Mueller, M & H, Kennedy, Clow R/W or American Flow Control Series 2500. valves and all valves installed directly to and connected to a portion of the active water system are to be operated by city employees only.
4. All pipes and services shall be installed with continuous tracer tape placed twelve to eighteen inches under the proposed finished subgrade. The tracer tape shall be of plastic non-biodegradable, metal core, or backing marked "water". In addition to tracer tape, toning wire shall be installed over all pipe and services. Toning wire shall be UL listed, type UF, 12 gauge solid coated (blue) copper wire, taped to the top of the pipe and laid loose enough to prevent stretching and damage before being brought up and tied off at the valve operating nut or valve box. The wire shall be configured so that the wire is easily accessible from the ground surface. Two feet of slack shall be provided to allow for connection to the locator. Toning wire shall be tested prior to acceptance of the pipe system.
5. All water mains shall be chlorinated and tested in conformance with the Standard Specifications. New lines shall not be connected to the system until all required tests have been passed. Fire hydrants shall be bagged and the connecting gate valves left closed until the project has received final acceptance



General Notes (Sanitary Sewer Main Construction)

1. Gravity sewer mains shall be PVC pipe conforming to ASTM P 3034 SDR 35, ASTM F 794, or ASTM F 679 Type 1 with joints and gaskets conforming to ASTM 3212 and ASTM F 477.
2. Side sewer services shall be PVC, ASTM D 3034 SDR 35 with flexible gasket joints. Side sewer connections shall be made by a saddle tap to an main or a sanitary tee from a new main connected above the springline of the pipe.
3. All pipe and services shall be installed with continuous tracer tape placed 18 to 24 inches under the proposed finished subgrade. The marker shall be of plastic non-biodegradable, metal core or backing marked "SEWER". If visibility cannot be maintained between structures along the straight alignment of a sewer, toning wire shall be installed above the sewer line at a depth no greater than 48 inches. Force mains and laterals and services shall be installed with toning wire taped to the top of the pipe. Toning wire shall be UL listed, type UF, twelve (12) gauge coated (green) copper. The wire shall be laid loosely enough to prevent stretching and damage.
4. All lines shall be high velocity cleaned, televised, and subjected to a low pressure air test per the Standard Specifications after all underground utilities are installed and compaction of the roadway subgrade is completed, but prior to paving. Hydrant flushing of lines is not an acceptable cleaning method. Testing shall be at the expense of the Contractor and conducted in the presence of a city representative. A copy of the video shall be submitted to the City of Winlock. Acceptance of the line shall be made after the tape has been reviewed and approved by the City of Winlock. A test of all manholes in accordance with these Standards is also required.



General Notes (Grinder Pump System Construction)

1. All Grinder Pump mains may be Class 200, ASTM D2241, SDR 21 with rubber gasket joints or HDPE type III category 5, class C grade P34 ASTM D1 248-81, SDR11 pipe with butt fused joint. Gaskets will comply with ASTM D 1869. Grinder pump mains will have a minimum thirty-six (36) inches of cover to top of pipe.
2. Service pipe shall be minimum 1-1/4 inch diameter, Schedule 40 PVC water pipe or HDPE SDR11 pipe with butt fusion, electrofusion or compression fittings, solvent welded connection located at 90 degrees to the mainline, when possible. Solvent cements and primer for joining PVC pipe and fittings will comply with ASTM D 2564 and shall be used as recommended by the pipe and fitting manufacturers. Services will have a minimum twenty-four (24) inches of cover over the top of the pipe.
3. Grinder Pump mains and services shall be installed with continuous tracer tape. Marker tape shall be placed 18 to 24 inches under the proposed finished subgrade. The marker tape shall be of plastic non-biodegradable, metal core or backing marked "SEWER".
4. All Grinder Pump pressure mains shall be hydrostatically tested according to the methods for hydrostatic testing in accordance with the "Inspection, Tests and Safety Considerations" document by the Plastic Pipes Institute (PPI).
5. All buried power for Grinder Pump systems shall be installed according to all current and applicable electrical codes and shall be installed with continuous tracer tape installed twelve (12) inches above the buried power. The marker shall be plastic non-biodegradable metal core backing marked "POWER."

