





**STORM DRAIN GENERAL NOTES**

- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- BEFORE ANY CONSTRUCTION MAY OCCUR, THE CONTRACTOR SHALL HAVE PLANS WHICH HAVE BEEN SIGNED AND APPROVED BY THE CITY OF KIRKLAND PUBLIC WORKS DEPARTMENT, OBTAINED ALL CITY, COUNTY, STATE, FEDERAL, AND OTHER REQUIRED PERMITS, AND HAVE POSTED ALL REQUIRED BARRIERS.
- ALL STORM DRAINAGE IMPROVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF KIRKLAND PUBLIC WORKS PRE-APPROVED PLANS AND POLICES AND THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, PREPARED BY WSDOT AND THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA).
- ANY DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL. ALL CHANGES SHALL BE SUBMITTED TO THE CITY.
- A COPY OF THE APPROVED STORM WATER PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SIMILARLY STABILIZED TO THE SATISFACTION OF THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS FOR THE PREVENTION OF ON-SITE EROSION AFTER THE COMPLETION OF CONSTRUCTION.
- MINIMUM COVER OVER STORM DRAINAGE PIPES IN ROW OR VEHICULAR PATH SHALL BE 18 INCHES, UNLESS OTHER DESIGN IS APPROVED.
- STEEL PIPE SHALL HAVE ASPHALT TREATMENT #1 OR BETTER INSIDE AND OUTSIDE.
- ALL CATCH BASINS SHALL BE TYPE I UNLESS OTHERWISE NOTED. CATCH BASINS WITH A DEPTH OF OVER FIVE FEET (5') TO THE PIPE INVERT SHALL BE A TYPE II CATCH BASIN. TYPE II CATCH BASINS EXCEEDING FIVE FEET (5') IN DEPTH SHALL HAVE A STANDARD LADDER INSTALLED.
- ALL STORM DRAINAGE MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE STAKED FOR LINE AND GRADE PRIOR TO STARTING CONSTRUCTION.
- ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT (1') AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4"-4" ROCK/40%-70% PASSING, 2"-4" ROCK/30%-40% PASSING, 2"-MINUS ROCK/10%-20% PASSING.
- ALL PIPE, MANHOLES, CATCH BASINS, AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH THE CURRENT STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (WSDOT). THIS SHALL INCLUDE NECESSARY LEVELING OF THE TRENCH BOTTOM OR THE TOP OF THE FOUNDATION MATERIAL AS WELL AS PLACEMENT AND COMPACTION OF MATERIAL TO UNIFORM GRADE SO THAT THE ENTIRE LENGTH OF THE PIPE WILL BE SUPPORTED ON A UNIFORM DENSE UNYIELDING BASE. IF THE NATIVE MATERIAL IN THE BOTTOM OF THE TRENCH MEETS THE REQUIREMENTS FOR "GRAVEL BACKFILL FOR PIPE BEDDING," THE FIRST LIFT OF PIPE BEDDING MAY BE OMITTED PROVIDED THE MATERIAL IN THE BOTTOM OF THE TRENCH IS LOOSENEED, REGRADED, AND COMPACTED TO FORM A DENSE UNYIELDING BASE. ALL PIPE BEDDING SHALL BE APWA CLASS B, TYPE I, OR BETTER. PIPE SHALL NOT BE INSTALLED ON SOD, FROZEN EARTH, LARGE BOULDERS, OR ROCK. PIPE BEDDING FOR FLEXIBLE PIPES SHALL BE PEA GRAVEL TO THE SPRINGLINE OF THE PIPE.
- CONSTRUCTION OF DEWATERING (GROUNDWATER) SYSTEMS SHALL BE IN ACCORDANCE WITH THE APWA STANDARD SPECIFICATIONS.
- ISSUANCE OF A BUILDING OR LAND SURFACE MODIFICATION PERMIT BY THE CITY OF KIRKLAND DOES NOT RELIEVE THE OWNER OF THE CONTINUING LEGAL OBLIGATION AND/OR LIABILITY CONNECTED WITH STORM SURFACE WATER DISPOSITION. FURTHER, THE CITY OF KIRKLAND DOES NOT ACCEPT ANY OBLIGATION FOR THE PROPER FUNCTIONING AND MAINTENANCE OF THE SYSTEM DURING OR FOLLOWING CONSTRUCTION EXCEPT AS OUTLINED IN THE CITY OF KIRKLAND PUBLIC WORKS STANDARDS.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, CONFINED SPACE PROTECTION, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE WORK COVERED BY THE CONTRACT. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE A TRAFFIC CONTROL PLAN APPROVED BY THE CITY OF KIRKLAND. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS, TRAFFIC CONTROL, AND THE MANUAL OF UTILITY TRAFFIC CONTROL DEVICES (MUTCD) SHALL APPLY.
- NO FINAL CUT OR FILL SLOPE SHALL EXCEED SLOPES OF TWO (2) HORIZONTAL TO ONE (1) VERTICAL UNLESS STABILIZED BY ROCKERY OR BY A STRUCTURAL RETAINING WALL.
- ALL MANHOLE LADDERS SHALL BE FIRMLY ATTACHED AND EXTEND TO WITHIN 1' OF THE BOTTOM OF THE STRUCTURE.
- APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UTILITY LOCATIONS WHETHER OR NOT THESE UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE TO ANY UTILITY. IF CONFLICTS WITH EXISTING UTILITIES ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION INSPECTOR AND ANY CHANGES REQUIRED SHALL BE APPROVED BY THE DEVELOPMENT ENGINEER PRIOR TO COMMENCEMENT OF RELATED CONSTRUCTION ON THE PROJECT.
- THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS, WIDTHS, THICKNESSES, AND ELEVATIONS OF ALL EXISTING PAVEMENTS AND STRUCTURES THAT ARE TO INTERFACE WITH NEW WORK. PROVIDE ALL TRIMMING, CUTTING, SAW CUTTING, GRADING, LEVELING, SLOPING, COATING, AND OTHER WORK, INCLUDING MATERIALS AS NECESSARY, TO CAUSE THE INTERFACE WITH EXISTING WORKS TO BE PROPER, ACCEPTABLE TO THE ENGINEER AND THE CITY OF KIRKLAND, COMPLETE IN PLACE AND READY TO USE.
- ALL INLET, MANHOLE, AND CATCH BASIN FRAMES AND GRATES SHALL NOT BE ADJUSTED TO GRADE UNTIL IMMEDIATELY PRIOR TO FINAL PAVING. ALL CATCH BASIN GRATES SHALL BE SET 0.10" BELOW PAVEMENT LEVEL.
- OPEN CUT ROAD CROSSINGS FOR UTILITY TRENCHES ON EXISTING TRAVELED ROADWAY SHALL BE BACKFILLED ONLY WITH 5/8" MINUS CRUSHED ROCK AND MECHANICALLY COMPACTED (UNLESS OTHERWISE APPROVED BY THE CITY). FOR STREETS CLASSIFIED AS ARTERIALS OR COLLECTORS, BACKFILL FOR CROSSINGS SHALL BE CIP. CUTS INTO THE EXISTING ASPHALT SHALL BE HEAT LINE CUT WITH SAW OR JACKHAMMER IN A CONTINUOUS LINE. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. A PERMANENT HOT MIX PATCH SHALL BE PLACED WITHIN 30 DAYS AND SHALL BE A MINIMUM OF 1" THICKER THAN THE ORIGINAL ASPHALT WITH A MINIMUM THICKNESS OF 2". SEE STANDARD 0.02.
- ALL DAMAGES INCURRED TO PUBLIC AND/OR PRIVATE PROPERTY BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPAIRED TO THE SATISFACTION OF THE CITY CONSTRUCTION INSPECTOR BEFORE PROJECT APPROVAL AND/OR THE RELEASE OF THE PROJECT'S PERFORMANCE BOND.
- GROUT ALL SEAMS AND OPENINGS IN ALL INLETS, CATCH BASINS, AND MANHOLES.
- WHEN WIDENING AN EXISTING ROADWAY WHERE AN EXISTING TYPE I CATCH BASIN WILL REMAIN IN THE TRAVEL LANE, THE EXISTING FRAME AND COVER SHALL BE REPLACED WITH A ROUNDED, LOOKING FRAME AND COVER.
- FOR OTHER THAN SINGLE-FAMILY DWELLINGS, ALL EXPOSED OR READILY EXPOSED INDOOR STORM DRAINAGE PIPING/PLUMBING SHALL BE LABELED WITH THE WORDS "STORM DRAIN" WITH MINIMUM 2 INCH HIGH LETTERS.

**WATER GENERAL NOTES:**

- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- ALL WATER MAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CURRENT APWA, WSDOT, AND APWA STANDARD SPECIFICATIONS, AS AMENDED BY THE CITY OF KIRKLAND. ALL MATERIAL UTILIZED SHALL BE NEW, NO PARTS SHALL BE REUSED. ANY PART REMOVED FROM THE SYSTEM FOR ANY REASON MAY NOT BE REUSED AND SHALL BE REPLACED WITH NEW PART. (E.G. A ROMAC WITH A BAD GASKET MUST BE REPLACED WITH AN ENTIRELY NEW ROMAC ASSEMBLY).
- THE WATER MAIN SHALL BE CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANS/APWA C151/A21.51-86 OR THE MOST RECENT REVISION. THE PIPE SHALL BE 1/16" CEMENT LINED AND SEALED IN ACCORDANCE WITH ANS/APWA C104/A21.4-90. THE CAST IRON OR DUCTILE IRON PIPE FITTINGS SHALL BE CLASS 250 AS PER ANS/APWA C110/A21.10-82. PIPE BEDDING SHALL BE COMPACTED TO 95 PERCENT OF ITS MAXIMUM DENSITY OPTIMUM MOISTURE CONTENT. THE MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" AND A MAXIMUM COVER OF 60". ANY DEVIATIONS FROM THIS MUST BE APPROVED BY THE CITY OF KIRKLAND PRIOR TO CONSTRUCTION.
- CONCRETE BLOCKING FOR WATER MAINS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH APWA AND CITY OF KIRKLAND SPECIFICATIONS AND SHALL BE INSTALLED AT ALL VERTICAL AND HORIZONTAL BENDS AND FITTINGS. PRIOR TO BLOCKING, THE FITTINGS SHALL BE WRAPPED WITH WSDOTEN.
- ALL CONNECTIONS TO EXISTING MAINS AND ALL TESTING AND DISINFECTION SHALL BE PERFORMED UNDER THE SUPERVISION OF THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS INSPECTOR.
- APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE LOCATIONS SHOWN AND FOR DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN SO AS TO AVOID DAMAGE OR DISTURBANCE. THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
- ALL CONTRACTORS WORKING WITH AC PIPE MUST BE STATE-CERTIFIED. THE CONTRACTOR SHALL PROVIDE ALL PROTECTIVE EQUIPMENT (COVERALS, GLOVES, BOOTS, HEAD COVERING, GOGGLES, RESPIRATORS, ETC.) TO CREWS WORKING WITH ASBESTOS CEMENT PIPE IN ORDER TO ASSURE THE WORKER'S EXPOSURE TO ASBESTOS MATERIAL IS AT OR BELOW THE LIMITS PRESCRIBED IN WAC 296-62-07705.
- AN APPROVED COPY OF THE WATER PLAN MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- A 5' MINIMUM HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER FACILITIES AND UNDERGROUND POWER AND TELEPHONE FACILITIES, UNLESS OTHERWISE APPROVED BY THE CITY OF KIRKLAND.
- FOR WATER MAIN AND SEWER MAIN SEPARATION REQUIREMENTS, SEE ITEM VII.C OF THE SANITARY SEWER - DESIGN CRITERIA SECTION AND DETAIL W.01.
- PRESSURE AND PURITY TESTING SHALL BE DONE IN THE PRESENCE OF, AND UNDER THE SUPERVISION OF, A CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS INSPECTOR. THE CONTRACTOR SHALL PROVIDE ALL PLUGS AND TEMPORARY BLOWOUT ASSEMBLIES FOR PRESSURE TESTING AND DISINFECTION PRIOR TO FINAL CONNECTION. NO CONNECTION SHALL BE MADE BETWEEN THE NEW MAIN AND THE EXISTING MAINS UNTIL THE NEW PIPING HAS BEEN DISINFECTED, FLUSHED, AND PASSED BOTH PRESSURE AND PURITY TESTING. TEMPORARY PLUGS AND BLOWING SHALL BE INSTALLED AT THE POINTS OF CONNECTION TO THE EXISTING SYSTEM. FOR CONSTRUCTION OF NEW WATER MAIN, THE SERVICES, HYDRANTS ETC. WILL BE TESTED WITH THE MAIN. PRESSURE TESTING WILL REQUIRE A MINIMUM OF 200 PSI FOR 15 MINUTES WITH NO PRESSURE DROP. UPON SATISFACTORY COMPLETION OF THE PRESSURE TEST, THE LINE SHALL BE DISINFECTED, FLUSHED, AND THEN A SAMPLE SHALL BE TAKEN FOR PURITY TESTING BY THE PUBLIC WORKS INSPECTOR.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY OF KIRKLAND INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL WATER MAIN CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING AS-BUILT DRAWINGS OF ALL CONSTRUCTION NOT INSTALLED ACCORDING TO THE APPROVED PLANS. (THIS DOES NOT GIVE APPROVAL FOR AS-BUILT CONSTRUCTION.)
- THE CONTRACTOR SHALL CONTACT THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS FIVE (5) DAYS PRIOR TO ANY WORK REQUIRING THE SHUTDOWN OF EXISTING WATER MAINS. THE CONTRACTOR IS REQUIRED TO GIVE TWO (2) WORKING DAYS NOTICE TO ALL CUSTOMERS AFFECTED BY A WATER MAIN SHUTDOWN (NOTICES AND MAPS FOR THE SHUTDOWN WILL BE PROVIDED BY THE WATER DIVISION). SHUTDOWNS SHALL BE SCHEDULED FOR MONDAYS, TUESDAYS, WEDNESDAYS, AND THURSDAYS BETWEEN 8 AM AND 2 PM. SHUTDOWNS AFFECTING INSTITUTIONS SHALL BE SCHEDULED AT NIGHT. ONLY WATER DIVISION PERSONNEL OR A DESIGNATE OF THE WATER DIVISION MANAGER MAY OPERATE VALVES AND/OR HYDRANTS BLOW-OFFS, ETC., FOR FILLS, SHUT DOWNS, FLUSHING, OR RECHARGING OF WATER LINES. TWO (2) WORKING DAYS NOTICE TO THE WATER DIVISION IS REQUIRED TO SCHEDULE FILLS.
- THERE SHALL BE NO WATER MAIN CONSTRUCTION ON A SATURDAY, SUNDAY, OR HOLIDAYS OBSERVED BY THE CITY OF KIRKLAND.
- SHOULD THE WATER MAIN WORK NECESSITATE THE CLOSING OF CERTAIN GATE VALVES WITHIN THE EXISTING SYSTEM, THE CITY OF KIRKLAND MAINTENANCE DEPARTMENT SHALL BE RESPONSIBLE FOR THE OPERATION OF SUCH VALVES.
- THE FIRE FLOW SYSTEM SHALL BE INSTALLED, TESTED, AND APPROVED PRIOR TO ABOVE-GROUND COMBUSTIBLE CONSTRUCTION.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
- MEGA-LUGS (OR SIMILAR PRODUCT) SHALL BE REQUIRED ON ALL FITTINGS AND VALVES FOR TIE-INS, OR BUILD-OUTS FOR TIEINS PRIOR TO A FINAL CONNECTION TO THE EXISTING WATER MAIN. APPROPRIATE CONCRETE BLOCKING IS ALSO REQUIRED IN ADDITION TO MEGA-LUGS.
- FOR THE DURATION OF ANY WATER MAIN INSTALLATION PROJECT, ALL EXISTING AND NEWLY INSTALLED VALVE CANS ARE TO REMAIN ACCESSIBLE TO WATER DIVISION PERSONNEL.
- WHEN IT BECOMES NECESSARY TO RE-PLUMB THE CUSTOMER'S SIDE OF AN EXISTING WATER METER AS THE RESULT OF THE RELOCATION OF THE EXISTING SERVICE OR TO COMPLY WITH OTHER CITY OF KIRKLAND PUBLIC WORKS SPECIFICATIONS, THE CUSTOMER'S SIDE SHALL BE RECONNECTED WITH THE APPROPRIATE PLUMBING MATERIALS (AND RELATED FITTINGS) SUCH AS BRASS, COPPER, POLYETHYLENE WITH A 200 P.S.I. RATING, OR PVC. ALL PARTS, PIPE, AND/OR FITTINGS SHALL BE NEW FROM THE BACK SIDE OF THE METER TO THE CONNECTION POINT OF THE CUSTOMER'S SERVICE.
- NO TIE-IN WILL BE ALLOWED INTO THE EXISTING TAILPIECE ON THE CUSTOMER'S SIDE OF THE METER. IF THE EXISTING METER DOES NOT HAVE A CHECK VALVE INSTALLED ON THE BACK SIDE OF THE METER (CUSTOMER'S SIDE) A CHECK VALVE CANNOT BE INSTALLED WHEN DOING THE TIE-IN.
- IF A FITTING, EITHER DURING INSTALLATION OR AFTER, IS FOUND TO BE DEFECTIVE IN ANY WAY AS DETERMINED BY THE CITY, THE CONTRACTOR SHALL REPLACE THE ENTIRE FITTING AND NOT JUST THE DEFECTIVE COMPONENT.
- BEGINNING JANUARY 1, 2014, ALL PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND PLUMBING FIXTURES USED "LEAD FREE" FOR POTABLE WATER, MUST HAVE A MAXIMUM LEAD CONTENT NOT TO EXCEED 0.25% PER STANDARDS AS DEFINED IN SECTION 9 OF NSF/ANSI STANDARD 61.

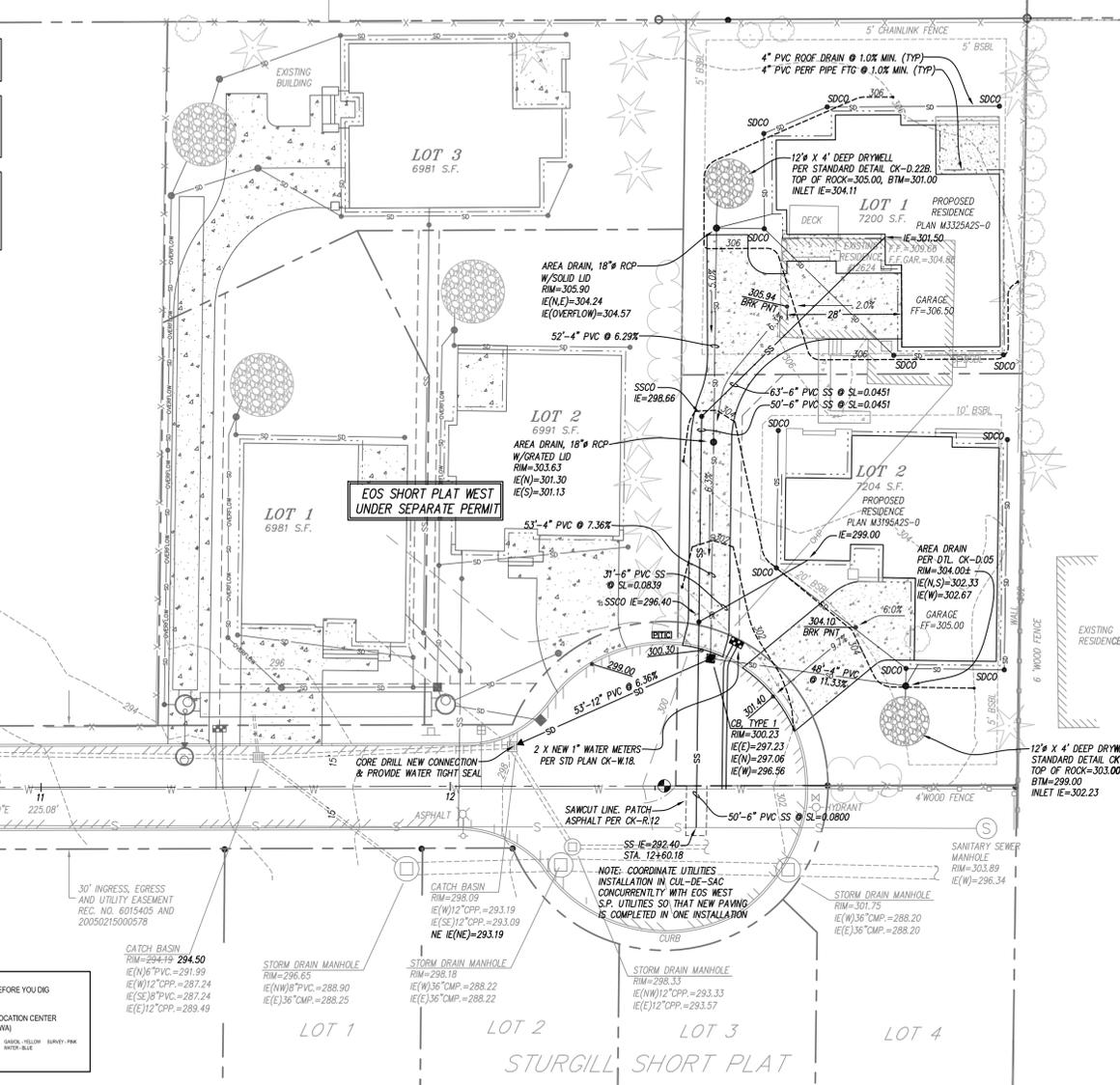
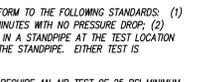
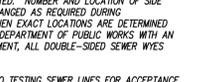
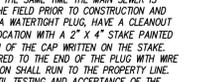
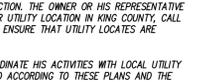
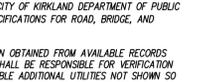
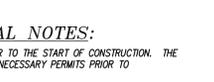
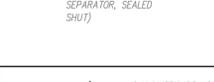
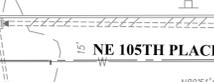
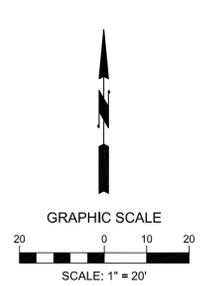
**SANITARY SEWER GENERAL NOTES:**

- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS AND CURRENT WSDOT/APWA STANDARDS AND SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION.
- APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE LOCATIONS SHOWN AND FOR DISCOVERY OF POSSIBLE ADDITIONAL UTILITIES NOT SHOWN SO AS TO AVOID DAMAGE OR DISTURBANCE. THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS ACTIVITIES WITH LOCAL UTILITY COMPANIES TO ENSURE THAT ALL UTILITIES ARE INSTALLED ACCORDING TO THESE PLANS AND THE REQUIREMENTS OF THE INDIVIDUAL UTILITY COMPANIES.
- ALL MANHOLES SHALL CONFORM TO WSDOT/APWA STANDARDS. EXCEPTING CONES WITH MANUFACTURER-APPROVED GASKETS AND 1/2" POLYPROPYLENE-ENCAPSULATED SAFETY STEPS AND LADDERS. ALL MANHOLES SHALL HAVE CAST IRON RINGS AND DUCTILE IRON COVERS. LIDS SHALL HAVE 2" RAISED LETTERS MARKED "SEWER." ALL CLEANSOUTS SHALL HAVE CAST IRON RINGS AND COVERS MARKED "CO" THAT ARE IN PAVED AREAS.
- ALL SIDE SEWERS SHALL BE TESTED FOR ACCEPTANCE AT THE SAME TIME THE MAIN SEWER IS TESTED. SIDE SEWER LOCATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION AND BACKFILLING. ALL SIDE SEWERS SHALL BE CAPPED WITH A WATER-TIGHT PLUG, HAVE A CLEANSOUT AND TEST TEST INSTALLED, AND SHALL BE MARKED FOR LOCATION WITH A 2" X 4" STAKE PAINTED WHITE, MARKED SEWER, WITH 3" EXPOSED, AND THE DEPTH OF THE CAP WRITTEN ON THE STAKE. SEE STANDARD DETAIL S.18. THE STAKE SHALL BE SECURED TO THE END OF THE PLUG WITH WIRE A MINIMUM OF 16 GAUGE. INITIAL SIDE SEWER INSTALLATION SHALL RUN TO THE PROPERTY LINE. THE REMAINING SIDE SEWER SHALL NOT BE INSTALLED UNTIL TESTING AND ACCEPTANCE OF THE SEWER TRUNK LINE BY THE CITY OF KIRKLAND IS COMPLETED. NUMBER AND LOCATION OF SIDE SEWERS SHOWN ARE APPROXIMATE ONLY AND MAY BE CHANGED AS REQUIRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER WHEN EXACT LOCATIONS ARE DETERMINED AND PROVIDE THE ENGINEER AND THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS WITH AN AS-BUILT. IF APPROVED BY THE PUBLIC WORKS DEPARTMENT, ALL DOUBLE-SIDED SEWER WYES MUST BE AT THE PROPERTY LINE.
- ALL MAIN-LINE TRENCHES SHALL BE COMPACTED PRIOR TO TESTING SEWER LINES FOR ACCEPTANCE.
- PRESSURE TESTING OF GRAVITY SEWER MAINS SHALL CONFORM TO THE FOLLOWING STANDARDS: (1) AIR TESTING WILL REQUIRE A MINIMUM OF 4 PSI FOR 15 MINUTES WITH NO PRESSURE DROP; (2) WATER TESTING WILL REQUIRE A MINIMUM OF 10' OF HEAD IN A STANDPIPE AT THE TEST LOCATION FOR 15 MINUTES WITH NO DROP IN THE WATER LEVEL IN THE STANDPIPE. EITHER TEST IS ACCEPTABLE.
- PRESSURE TESTING OF FORCE MAINS AND LATERALS WILL REQUIRE AN AIR TEST OF 25 PSI MINIMUM FOR 15 MINUTES WITH NO PRESSURE DROP.

PRIOR TO CONSTRUCTION OF ANY NEW STRUCTURES, A SEPARATE BUILDING PERMIT IS REQUIRED.

NO EXCAVATION OR FILL IS AUTHORIZED TO ENCRUCH UPON A NEIGHBORING PROPERTY WITHOUT EXPLICIT AUTHORIZATION BY THE ADJACENT PROPERTY OWNER.

ANY CAST-IN-PLACE RETAINING WALL FEET OR GREATER, MEASURED FROM TOP OF WALL TO TOE, OR ANY RETAINING WALL THAT HAS A SURCHARGE ON IT, SHALL HAVE A SEPARATE BUILDING PERMIT.



**GRADING QUANTITIES**

CUT: 10 CY  
 FILL: 154 CY

GRADING QUANTITIES ARE ROUGH CALCULATIONS THAT DO NOT TAKE INTO ACCOUNT SHRINKAGE OR SWELLAGE.

**U.S.P.S. MAILBOX APPROVAL**

U.S.P.S. POSTMASTER DATE

DEVELOPER TO COORDINATE WITH POSTMASTER THE LOCATION OF PROPOSED NEW MAILBOXES



**LITCHFIELD ENGINEERING**

12840 81ST AVENUE NE  
 Kirkland, WA 98034  
 Tel: (425) 821-3038 Fax: (425) 821-9739

DATE: 6-08-15  
 SUBMITTED TO CLIENT

NOTES: SUBMITTED TO CLIENT

**SITE IMPROVEMENT PLAN**

**EOS SHORT PLAT - EAST**

**12626 NE 105TH PL, KIRKLAND WA 98033**

MERT HOMES  
 805 KIRKLAND AVE., STE. 100  
 KIRKLAND, WA, 98033

PROJECT REF: \_\_\_\_\_

THESE PLANS ARE APPROVED FOR CONFORMANCE WITH THE CITY OF KIRKLAND'S ENGINEERING REQUIREMENTS.

APPROVED BY: \_\_\_\_\_

DATE APPROVED: \_\_\_\_\_



