

## WATER MAIN CONSTRUCTION NOTES

- 1. Prior to any construction activity, the Developer shall arrange a pre-construction conference with the Mukilteo Water District. The Developer and proposed on-site supervisors shall attend.
- 2. All work and materials shall be in accordance with the latest revision, including addenda and updates, of the Mukilteo Water District Developer Standards. Contractor to have Mukilteo Water District Standards on job site.
- 3. An approved and District signed copy of these Plans must be on the job site whenever construction is in progress.
- 4. All water system improvements shall be constructed in accordance with these approved Plans. Any deviation from the Plans will require approval from the
- owner, engineer, District and appropriate public agencies. 5. Notify the District 72 hours (3 working days) prior to beginning construction and for any restarts of work.
- 6. The District shall be notified three working days prior to the time the Developer would like to connect to existing mains or for installation of tapping tees. The connection shall be done in accordance with District requirements. Developer shall not operate any District valves; these will be operated by Water
- 7. For aid in utility location, call 1-800-424-5555, a minimum of 48 hours (2 working days) prior to beginning of construction. Existing utilities, whether shown or not, shall be located prior to construction, so as to avoid damage or disturbance, and the Developer shall assume all responsibility and costs connected therewith to protect, maintain and repair, where necessary.
- 8. Water line construction within the proposed development shall not commence until the street has been brought to sub-grade, meeting Mukilteo Water
- 9. Water main shall be field staked prior to construction, with 25' stakes on curves. Lot corner stakes shall also be in place prior to construction.
- 10. Pipe shall be ductile iron, AWWA Class 52 thickness, with rubber gaskets, push-on type, or mechanical joint, meeting AWWA Specifications. Fittings shall be AWWA, cement lined, ductile iron, and either mechanical joint or flanged, as indicated herein.
- 11. Unless otherwise specified valves 12" and smaller shall be ductile iron resilient seated gate valves: Acceptable valves are Mueller, Clow, M&H, U.S. Pipe and American Flow Control, Series 2500. Valves larger than 12" shall be ductile iron butterfly valves; Acceptable valves are Pratt Groundhog, Dresser 450
- 12. All water works fittings and bolted assemblies shall be completely covered with visqueen plastic, 4 mil. The end of the plastic shall be taped to secure them to the pipe.
- 13. Hydrants shall be Mueller Centurion A-423, Clow Medallion, or Dresser Reliant 929 meeting AWWA Specifications. Hydrants shall be furnished with threaded outlets, meeting fire district/department standards. Both thrust blocking and mega lugs restraints are required on each hydrant installation. \* Hydrants within the City of Mukilteo fire service area and Fire District #1 shall be equipped with 4-inch Storz adapters; all other hydrants shall utilize a 5-inch Storz adapter. All hydrants shall have a 4 1/2" NST threads on pumper port.
- 14. Provide thrust blocking and/or restrained joints at all fittings and bends and up-thrust fittings, in accordance with District standards, conditions and
- 15. All new connections to the existing water system shall be in strict conformance with the appropriate subsections of the specifications of the District. No connection shall be made between the new main and the existing mains until the new piping has been flushed, disinfected, tested and received satisfactory bacteriological test results.
- 16. Individual water services to the property line shall be 1" diameter minimum size and be installed with 36" minimum cover.
- 17. BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED ON ALL RESIDENTIAL FIRE SPRINKLER SYSTEMS AND LOCATED IMMEDIATELY BEHIND THE WATER METER ON THE PROPERTY SIDE.
- 18. All commercial, multi-family, industrial and irrigation services shall include a DOH approved backflow prevention assembly located on the property side of the water meter. Alternate locations may be acceptable upon approval by Mukilteo Water District. Structures requiring fire sprinkler system shall have at least one backflow prevention assembly per each structure, protecting the potable water system from the fire system. The backflow prevention assembly shall be located in a flood proof vault or service box, depending on size, outside the structure in a location approved by the Mukilteo Water District.
- 19. Where road grades are established, provide a minimum of 48" cover over 12" or larger water mains, and provide a minimum of 42" cover over 8" mains; or additional depth as required to miss other utilities.
- 20. Water mains constructed within easements or private roads shall be installed with polyethylene encasement, restrained joints and with a 5'-0" minimum cover. During backfill operations, furnish and install 3" wide metallic marker tape with 3 feet of cover over water main.
- 21. Minimum radius for 12" and smaller pipelines constructed on curves (4 degree deflection per joint) is 258 feet. 22. Compaction: All trench backfill and roadway embankment shall be compacted to 95 % of modified proctor dry maximum density in accordance with
- ASTM D1557, except the top 6" in paved areas, which shall be 100 %. 23. Construction inspection will be done by Mukilteo Water District and/or their designated engineer. No new utility facilities will be accepted by the District
- if proper inspections have not been completed.
- 24. The water main construction phase will not be considered complete until the installation is acceptable to the District including a satisfactory hydrostatic pressure test, a satisfactory disinfection test, satisfactory flow of service lines, and completion of all items on the inspector's punch list.
- 25. Water service is available only after transfer of ownership to the District and after payment of all current applicable fees.

HOGE MAL EXPIRES: MAY 6, 2005 S.W.

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Civil Engineering and Planning Consultants

PROJECT NO.: **03002** 

DRAWN BY: JGC ISSUE DATE: **02-28-03** 

SHEET REV.: **09-30-04** 

MUKILTEO WATER DISTRICT WATER PROFILE

03002WA02.DWG

Mukilteo Water District Mukilteo Water District Extention No. Gray & Osborne No.

Project must be completed within one (1) year from the date of approval. In the event that the project developer fails to do so, the project will be subject to reapplication, additional plan review and revision, due to any changes in District standards or requirements occurring prior to completion. Water service is available only after payment of all current fees.