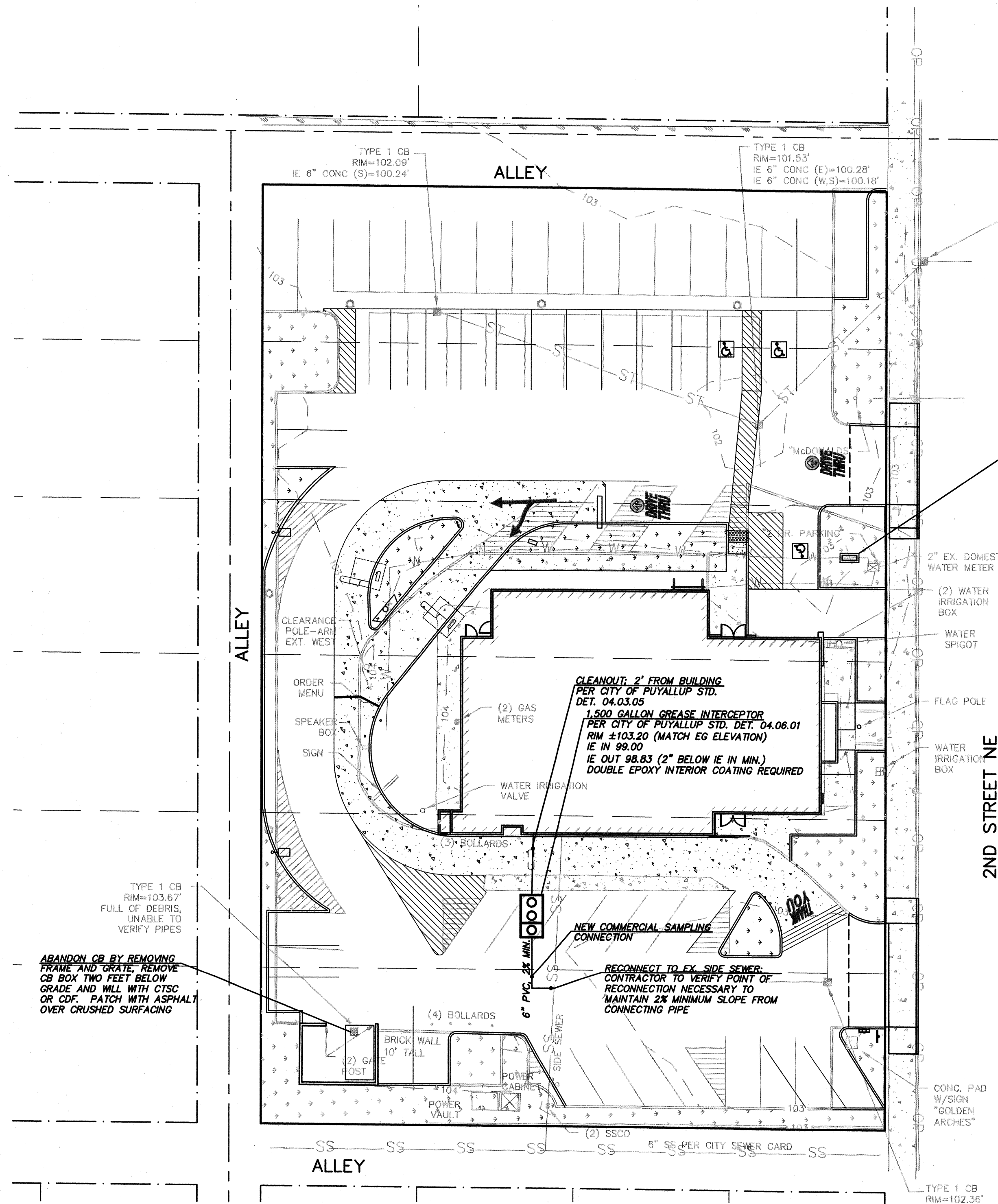


SECTION 27, TOWNSHIP 20 N, RANGE 4 E, W.M.

# PUYALLUP McDONALD'S

## UTILITY PLAN



### CITY OF PUYALLUP WATER SYSTEM NOTES:

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT CENTER TO BE ATTENDED BY ALL MAJOR CONTRACTORS, REPRESENTATIVES OF INVOLVED UTILITIES, AND THE CITY OF PUYALLUP. CONTACT THE ENGINEERING DIVISION TO SCHEDULE THE MEETING (253-841-5587). THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN SET OF PLANS AT THE MEETING.
2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS"), OR AS DIRECTED BY FRUITLAND MUTUAL WATER COMPANY, VALLEY WATER OR TACOMA CITY WATER WHEN SERVED BY ONE OF THOSE PURVEYORS.
4. A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
5. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE CITY ENGINEER, AND THE FRUITLAND MUTUAL WATER, VALLEY WATER OR TACOMA CITY WATER WHEN SERVED BY ONE OF THOSE PURVEYOR, PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
6. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
7. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
8. BIOLOGICAL TEST SAMPLES WILL BE TAKEN BY THE CITY (OR FRUITLAND WATER, VALLEY WATER OR TACOMA CITY WATER WHEN SERVED BY ONE OF THOSE PURVEYOR) AND PAID FOR BY THE CONTRACTOR.
9. WATER MAINS SHALL HAVE A MINIMUM COVER OF 42 INCHES IN IMPROVED RIGHT-OF-WAY AND A MINIMUM OF 48 INCHES IN UNIMPROVED RIGHT-OF-WAY AND EASEMENTS.
10. PIPE FOR WATER MAINS SHALL BE DUCTILE IRON CONFORMING TO SECTION 7-09 OF THE STANDARD SPECIFICATIONS AND AS OF JULY 1, 1993, SHALL BE THICKNESS CLASS 52 OR GREATER, WITH TYTON OR APPROVED EQUAL JOINTS. PIPE SHALL BE CEMENT LINED IN ACCORDANCE WITH A.S.A. SPECIFICATION A 21.4-1984.
11. CONNECTIONS TO EXISTING WATER MAINS SHALL BE MADE BY A CITY APPROVED CONTRACTOR. THE TAPPING SLEEVE SHALL BE EPOXY COATED OR DUCTILE IRON. STAINLESS SLEEVES SHALL ONLY BE USED ON AC PIPE. THE CITY (OR FRUITLAND WATER, VALLEY WATER OR TACOMA CITY WATER WHEN SERVED BY ONE OF THOSE PURVEYOR) SHALL APPROVE THE TIME AND LOCATION FOR THESE CONNECTIONS.
12. ALL WATER MAINS AND APPURTENANCES SHALL BE HYDROSTATICALLY TESTED AT 200 PSI IN ACCORDANCE WITH CITY STANDARD DETAIL 03.01.01.
13. FIRE HYDRANTS SHALL BE INSTALLED CONFORMING TO CITY STANDARD DETAIL 03.05.01.
14. VALVE MARKER POSTS SHALL BE INSTALLED WHERE VALVE BOXES ARE HIDDEN FROM VIEW OR IN UNPAVED AREAS. THE INSTALLATION SHALL CONFORM TO CITY STANDARD DETAIL 03.01.02.
15. RESILIENT SEATED WEDGE GATE VALVES SHALL BE USED FOR 8-INCH MAINS AND SMALLER. BUTTERFLY VALVES SHALL BE USED FOR MAINS GREATER THAN 8 INCHES.
16. PIPE FITTING FOR WATER MAINS SHALL BE DUCTILE IRON AND SHALL BE MECHANICAL JOINT CONFORMING TO AWWA SPECIFICATION C111-72.
17. WATER MAIN PIPE AND SERVICE CONNECTIONS SHALL BE 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.
18. WHERE A WATER MAIN CROSSES NORTHWEST PIPELINE GASMAIN, THE WATER LINE SHALL BE CASED WITH PVC PIPE A MINIMUM OF 10 FEET BEYOND EACH SIDE OF THE GAS LINE EASEMENT. CONTACT NORTHWEST PIPELINE BEFORE THE CROSSING IS MADE.
19. TRENCHING, BEDDING, AND BACKFILL FOR WATER MAINS SHALL BE IN ACCORDANCE WITH CITY STANDARD DETAIL 06.01.01.
20. ALL COMMERCIAL DEVELOPMENTS, IRRIGATION SYSTEMS, AND MULTI-FAMILY WATER SERVICE CONNECTIONS SHALL BE PROTECTED BY A DOUBLE CHECK VALVE ASSEMBLY OR A REDUCED PRESSURE BACKFLOW ASSEMBLY AS DIRECTED BY THE CITY (OR FRUITLAND MUTUAL WATER COMPANY, VALLEY WATER OR TACOMA CITY WATER WHEN SERVED BY ONE OF THOSE PURVEYORS) CONFORMING TO CITY STANDARD DETAILS.

### CITY OF PUYALLUP SANITARY SEWER NOTES:

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS. REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF, CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5588. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
2. AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
3. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
4. A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
5. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE ENGINEERING SERVICES STAFF PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
6. THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
7. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
8. MINIMUM GRADE ON ALL 4 INCH RESIDENTIAL SIDE SEWERS SHALL BE 2 PERCENT AND 6 INCH COMMERCIAL SIDE SEWERS SHALL BE 1 PERCENT. MAXIMUM SHALL BE 8 PERCENT. ALL SIDE SEWERS SHALL BE 6 INCHES WITHIN CITY RIGHT-OF-WAY.
9. SIDE SEWERS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD NOS. 04.03.01, 04.03.02, 04.03.03 AND 04.03.04. SIDE SEWER INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT (WISHA).
10. ALL SEWER PIPE SHALL BE PVC SEWER PIPE CONFORMING TO ASTM D-3034, SDR35 FOR PIPE SIZES 15-INCH AND SMALLER AND ASTM F699 FOR PIPE SIZES 18- TO 27-INCH, OR DUCTILE IRON PIPE CLASS 51 OR GREATER, UNLESS OTHERWISE NOTED. TRENCHING, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH CITY STANDARD NO. 06.01.01. MINIMUM COVER ON PVC PIPE SHALL BE 3.0 FEET MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
11. SANITARY SEWER MANHOLE FRAMES AND COVERS SHALL CONFORM TO CITY STANDARD NOS. 06.01.02 AND 06.01.03. COVERS SHALL BE MARKED "SEWER" WITH 2-INCH RAISED LETTERS. MINIMUM WEIGHT OF THE FRAME SHALL BE 210 POUNDS. MINIMUM WEIGHT OF THE COVER SHALL BE 150 POUNDS.
12. SANITARY SEWER MANHOLES SHALL CONFORM TO CITY STANDARD NOS. 04.01.01, 04.01.02, 04.01.03 AND 04.01.04. ALL MANHOLES SHALL BE CHANNIELED FOR FUTURE LINES AS SPECIFIED ON THESE PLANS. MANHOLE STEPS AND LADDER SHALL CONFORM TO STANDARD NO. 06.01.04.
13. SANITARY SEWER PIPE AND SIDE SEWERS SHALL BE 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.
14. NO SIDE SEWERS SHALL BE CONNECTED TO ANY HOUSE OR BUILDING UNTIL ALL MANHOLES ARE ADJUSTED TO THE FINISHED GRADE OF THE COMPLETED ASPHALT ROADWAY AND THE ASPHALT PATCH AND SEAL AROUND THE RING ARE ACCEPTED.
15. ALL PUBLIC SANITARY SEWER MAINS SHALL BE VIDEO INSPECTED PRIOR TO ACCEPTANCE BY THE CITY OF PUYALLUP WATER COLLECTION DIVISION.
16. AFTER ALL OTHER UTILITIES ARE INSTALLED AND PRIOR TO ASPHALT WORK, ALL SANITARY PIPES SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH SECTION 7-17 OF THE "STANDARD SPECIFICATIONS". PRODUCTS USED TO SEAL THE INSIDE OF THE PIPE ARE NOT TO BE USED TO OBTAIN THE AIR TEST.
17. FOR COMMERCIAL DEVELOPMENTS IN WHICH SOURCES OF GREASE AND/OR OILS MAY BE INTRODUCED TO THE CITY SANITARY SEWER SYSTEM, A CITY APPROVED GREASE INTERCEPTOR SHALL BE INSTALLED DOWNSTREAM FROM THE SOURCE.
18. ALL SANITARY SEWER MAINS SHALL BE MANDRELLED.

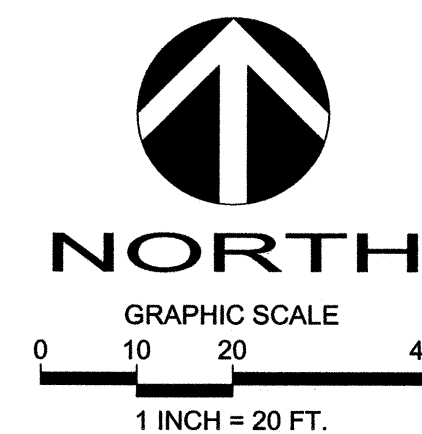
### ENGINEER'S UTILITY NOTES:

1. CONTRACTOR TO CONFIRM THAT NO DCVA EXISTS ON DOMESTIC WATER LINE. IF ONE IS FOUND, IT MUST BE REMOVED PRIOR TO INSTALLATION OF NEW RPBs.
2. TRASH ENCLOSURE TO BE COVERED AND PAVED AREA TO THE NORTH SHALL BE GRADED SUCH THAT STORM WATER RUNOFF DOES NOT ENTER THE ENCLOSED AREA.
3. EXISTING DRAIN WITHIN TRASH ENCLOSURE AREA TO REMAIN BUT CONNECTION TO STORM MAIN TO BE ABANDONED AND REPLACED WITH CONNECTION TO SANITARY SEWER SYSTEM AS SHOWN.
4. THE NEW STANDING METAL ROOF SHALL BE COATED WITH AN INERT NON-LEACHABLE MATERIAL (E.G. BAKED ENAMEL COATING) TO PREVENT CONTAMINATION OF ROOF RUNOFF.

### GREASE INTERCEPTOR SIZING:

#### SIZING CALCULATIONS

SIZING IS PER THE 2009 UNIFORM PLUMBING CODE, SECTION 1014.3.6.1, TABLE 10-3. IT IS BASED ON NUMBER OF DRAINAGE FIXTURE UNITS (DFUs). MAXIMUM DFUs IS 30 PER AER ENGINEERS, INC. PER TABLE 10-3, REQUIRED GREASE INTERCEPTOR IS 1,000 GALLONS. PROPOSED GREASE INTERCEPTOR IS 1,500 GALLONS.

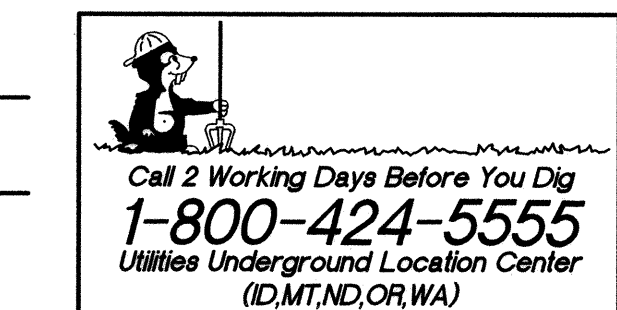


#### VERTICAL DATUM:

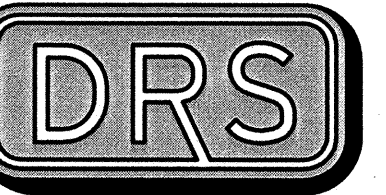
ASSUMED

#### HORIZONTAL DATUM:

ASSUMED



APPROVED	BY <i>Daniel M. Ho</i>
CITY OF PUYALLUP	ENGINEERING SERVICES
DATE	9.25.2012
NOTE: THIS APPROVAL IS VOID AFTER 1 YEAR FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE ENGINEERING SERVICES MANAGER.	



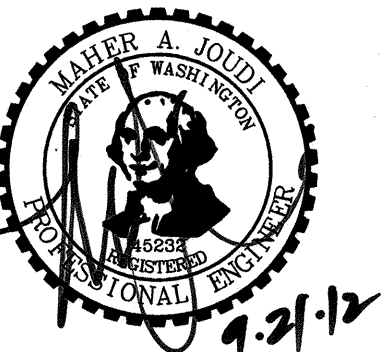
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ENGINEERS PLANNERS SURVEYORS  
10604 NE 38th PL, #232 KIRKLAND, WA 98033  
O 425.827.3063 F 425.827.2423

PUYALLUP McDONALD'S

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PUYALLUP, WASHINGTON

FREIHEIT & HO  
ARCHITECTS, INC., P.S.

5209 LK. WA. BLVD. NE, SUITE 200  
KIRKLAND, WA 98033  
(425) 827-2100



APR

MAJ

REVISION

CITY COMMENTS

DATE

09.07.12

DRAFTED BY: MAJ  
DESIGNED BY: MAJ  
PROJECT ENGINEER: MAJ  
DATE: 07.26.12  
PROJECT NO.: 12052

DRAWING: C1.1  
SHEET: 2 OF 4