ORDINANCE NO. 1261

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, AMENDING CHAPTER 12.04 OF THE BONNEY LAKE MUNICIPAL CODE AND ORDINANCE NOS. 589, 589B, 798, AND 949, RELATING TO PUBLIC WORKS DESIGN STANDARDS.

WHEREAS, the City of Bonney Lake have revised Development Policies and Public Works Design Standards; and

WHEREAS, the City wishes to incorporate those revised policies and standards into the Bonney Lake Municipal Code;

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON DO ORDAIN AS FOLLOWS:

Section 1. BLMC section 12.04.010 and Ordinance Nos. 589, 589B, 798, and 949 are hereby amended as follows:


There are adopted the following documents as standards for new construction of public works projects within the city:

A. 2006 Standard Specifications for Road, Bridge and Municipal Construction, published by the Washington State Department of Transportation and the American Public Works Association, Washington State Chapter, and any subsequent revisions; and


Section 2. The City clerk shall sign and file with the adopting ordinance a copy of the documents referenced herein and shall also file and maintain in the city clerk’s office one copy of each of the adopted laws in the form in which they were adopted for use and examination by the public.

Section 3. This ordinance shall take effect and be in force thirty (30) days after its passage, subject to approval and publication as required by law.

PASSED by the City Council and approved by the Mayor this 13th day of November, 2007.
ATTEST:

Harwood T. Edvalson, CMC
City Clerk

APPROVED AS TO FORM:

James J. Dionne, City Attorney

Passed: 11/13/07
Valid: 11/13/07
Published: 11/15/07
Effective Date: 12/13/07
COMMUNITY DEVELOPMENT COMMITTEE

DATE: November 5, 2007

ORIGINATOR: Dan Grigsby        TITLE: Public Works Director

The Public Works Department has made several minor changes and added several standards to the current 2005 Public Works Standards (summary of changes attached). The PW Department would like to update the 2005 Public Works Standards to 2007 Public Works Standards with these minor changes.

ORDINANCE/RESOLUTION: D07-226

REQUEST OR RECOMMENDATION BY ORIGINATOR:

ISSUE AND DOCUMENTS HAVE BEEN REVIEWED AND APPROVED BY THE FINANCE DIRECTOR _____________
CITY ATTORNEY _____________

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<th>Required Expenditure</th>
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COMMITTEE ACTION: RECOMMEND APPROVAL TO COUNCIL

DATE                           APPROVED                        DISAPPROVED
James Rackley, Chairman        11-05-07                        _____________
Mark Hamilton                   11-05-07                        _____________
David Bowen                     11-05-07                        _____________

COMMITTEE COMMENTS:_____________

COMMITTEE’S RECOMMENDATION TO FORWARD TO:
CITY CLERK
CITY ATTORNEY

Please schedule for City Council Meeting date of: November 13, 2007
Consent Agenda: □ Yes   ☒ No
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<th>Detail Name</th>
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<th>Description</th>
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<p>| Major Arterial | 6/17/2005 | 7/14/2006 | Changed sidewalk width to 10’ min |
| Minor Arterial | 6/17/2005 | 7/14/2006 | Added 5’ bike lane and changed to 70’ r-o-w |
| Collector Street | 6/17/2005 | 7/14/2006 | Added 5’ bike lane |
| Local Access Street Section | 6/17/2005 | - | - |
| Cul-De-Sac | 6/17/2005 | - | - |
| Trench Pavement Restoration | 6/17/2005 | 7/14/2006 | Added Note 4. Minimum pavement removal will be to centerline |
| Poured In Place Monument | 6/17/2005 | - | - |
| Cement Concrete Sidewalk | 6/17/2005 | 9/28/2006 | Removed leader and expansion joints at 15’ o.c. note |
| Cement Concrete Driveway | 6/17/2005 | 5/8/2006 | Modified format for clarity |
| Concrete Curb And Gutter | 6/17/2005 | - | - |</p>
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<th>Prev. Date</th>
<th>Rev. Date</th>
<th>Description</th>
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<td>Barricade</td>
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<td>26ET-12 Pole With Tenon</td>
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<td>Trash Rack</td>
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<td>7/26/07</td>
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<td>SD9</td>
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# 2005 Development Policies and Public Works Design Standards
## Modification Summary Sheet (11-7-2006 to 10-31-2007)

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<td>12/7/2006</td>
<td>Specified solid ductile iron lids in traffic areas and ductile iron flip reader lids in non-traffic areas</td>
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<td>Road Approach</td>
<td>6/17/2005</td>
<td>6/17/2007</td>
<td>Added expansion joint at r-o-w line; Changed Note 10. culvert ends to a 3:1 taper; Created new double road approach page</td>
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NOTES:

1. SIGN SHALL BE ALUMINUM, 0.080 " THICK.

2. FONT STYLE SHALL BE ARIAL BOLD.

3. THE CITY'S OFFICIAL COLORS AND LETTERING SHALL BE USED FOR THE BONNEY LAKE LOGO.

4. ALL OTHER LETTERS, NUMBERS, AND BORDER SHALL BE INTERSTATE GREEN ON A WHITE BACKGROUND.

TRAFFIC AREA:
SOLID DUCTILE IRON LID

NON-TRAFFIC AREA:
DUCTILE IRON FLIP READER LID

PART NUMBER

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</table>

NOTES:

1. METER BOXES SHALL BE MID-STATES PLASTICS (PRODUCT NUMBER AS SPECIFIED ABOVE) OR APPROVED EQUAL AND H-20 RATED WITH A DUCTILE IRON TOUCH READ LID.
CONCRETE THRUST RESTRAINT WITH TIE RODS:
- 8" - (4) @ 3/4" DIA
- 6" - (4) @ 5/8" DIA
- 4" - (2) @ 5/8" DIA

CD

#4 @ 12" OC EW WITHIN BLOCK

8"x3" PRV STATION SHOWN. CITY ENGINEER SHALL SIZE STATIONS.

DOUBLE 4'x6' CLEAR OPENING H2O-RATED ALUMINUM ACCESS HATCH EQUAL TO LW HATCH TORSION SPRING ASSISTED DOORS WITH RECESSED LOCK HASP, OR SUBMIT ALTERNATE VAULT TOP AND HATCHES TO CITY FOR APPROVAL. (SEE NEXT SHEET FOR SCHEDULE.)

PRECAST CONCRETE VAULT RATED FOR MIN H2O LOAD EQUAL TO UTILITY VAULT. SEE SIZING TABLE. SUBMIT FOR CITY APPROVAL.

#4 @ 12" OC EW WITHIN BLOCK

8"x3" PRV STATION PLAN

DRAIN, SEE NOTES ON SHT 3

8"x3" PRV STATION PROFILE

1 DI PIPE, LENGTH TO FIT
2 DI REDUCER (MJxMJ)
3 DI SPOOL WITH COLLAR (FLxPE) LTF
4 DI REDUCING CROSS (FLxFx4"x4"FL) w/1" TAP ON TOP
5 RS GATE VALVE (FLxFL) w/HAND WHEEL
6 PRESSURE REDUCING VALVE (FLxFL) EQUAL TO CLA-VAL 900-01ABCS OR CITY APPROVED EQUAL, EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES.
7 FCA w/SHACKLE RESTRAINT
8 DI PIPE (FLxPE) APPROX. 12" LENGTH
9 STRAINER (FLxF) EQUAL TO WATTS 77F-D-FDA, EPOXY LINED AND BRASS BALL VALVE FOR BLOW OUT
10 ADJUSTABLE SADDLE PIPE SUPPORT, RISER PIPE, AND BASE EQUAL TO GRINNELL FIGURE 264. ALSO PROVIDE (1) UNDER BYPASS LINE.
11 RS GATE VALVE (FLxF) W/HAND WHEEL
12 PRESSURE RELIEF VALVE (FLxF) EQUAL TO CLA-VAL 50G-01, EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES
13 FCA
14 HYDROMATIC PUMP GC SYSTEMS MODEL #996633-51-2 W/FLOAT SWITCH (IF REQUIRED, SEE NOTES ON W-19b)
15 1" PVC SCH-40 PUMP DISCHARGE PIPE SECURED TO VAULT WALL
16 4" RS GATE VALVE (FL) W/HAND WHEEL
17 4" DI 90° BEND (FL)
18 4"x3" DI REDUCER
19 3" DI PIPE (FL) 36" LENGTH
20 PRESSURE REDUCING VALVE (FLxFL) EQUAL TO CLA-VAL, 90G-01ABCS. EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES.
21 FCA
22 4" DI PIPE (FLxPE) LTF
23 STRAINER (FL) EQUAL TO WATTS 77F-D-FDA AND BRONZE BALL VALVE FOR BLOW OUT
24 PRESSURE GAUGE AND AIR VALVE, SEE W-19b
25 PRESSURE GAUGE, SEE W-19b

DEPTH AS NECESSARY TO INSURE THAT PIPE DOES NOT PASS THROUGH VAULT JOINT. VERTICAL 45° BENDS W/BLOCKING MAY BE REQUIRED.

SEAL WITH NON-SHRINK GROUT, TYPICAL OF ALL VAULT PENETRATIONS

6" DEPTH OF COMPACTED 3/4" MINUS CRUSHED ROCK

GALV STEEL OR ALUMINUM BOLT-ON LADDER
CONTINUE LADDER ON BOTTOM OF HATCH (NOT SHOWN)

DI PIPE, LENGTH TO FIT
DI REDUCER (MJxMJ)
DI SPOOL WITH COLLAR (FLxPE) LTF
DI REDUCING CROSS (FLxFx4"x4"FL) w/1" TAP ON TOP
RS GATE VALVE (FLxFL) w/HAND WHEEL
PRESSURE REDUCING VALVE (FLxFL) EQUAL TO CLA-VAL 900-01ABCS OR CITY APPROVED EQUAL, EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES.
FCA
STRAINER (FLxF) EQUAL TO WATTS 77F-D-FDA, EPOXY LINED AND BRASS BALL VALVE FOR BLOW OUT
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1" PVC SCH-40 PUMP DISCHARGE PIPE SECURED TO VAULT WALL
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4" DI 90° BEND (FL)
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PRESSURE REDUCING VALVE (FLxFL) EQUAL TO CLA-VAL, 90G-01ABCS. EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES.
FCA
4" DI PIPE (FLxPE) LTF
STRAINER (FL) EQUAL TO WATTS 77F-D-FDA AND BRONZE BALL VALVE FOR BLOW OUT
PRESSURE GAUGE AND AIR VALVE, SEE W-19b
PRESSURE GAUGE, SEE W-19b

City of BONNEY LAKE
WATER SYSTEM STANDARD DETAIL

City Engineer
Date
June 17, 2005

W18
PRESSURE REDUCING STATION

Sheet 1 of 3
PRESSURE RELIEF PIPING (IF REQ'D BY THE CITY) TO BE SIZED FOR EACH PROJECT, PROVIDE 2" WEEP HOLE IN BOTTOM OF PIPE.

VAULT

6"x2" OR 4"x2" PRV STATION

VAULT

ISOLATION VALVE

OFFLINE PRV STATION CONFIGURATION

1. 2" BRASS BALL VALVE (THREADED)
2. 2" BRASS 90° BEND (THREADED)
3. 2" BRASS TEE (THREADED)
4. 2" HOSE BIB
5. 2" BRASS UNION
6. PRESSURE REDUCING VALVE (THREADED) EQUAL TO CLA-VAL, 90G-OIABS, EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES AND STAINLESS STEEL TRIM.

USE THREADED BRASS NIPPLES (NOT CALLED OUT) ON BYPASS AND PRESSURE RELIEF PIPING. USE CLOSE NIPPLES WHEREVER POSSIBLE.

PRESSURE REDUCING VALVE (THREADED) EQUAL TO CLA-VAL, 90G-OIABS, EPOXY LINING, VALVE POSITION INDICATOR, POLY PILOT LINES AND STAINLESS STEEL TRIM.

USE THREADED BRASS NIPPLES (NOT CALLED OUT) ON BYPASS AND PRESSURE RELIEF PIPING. USE CLOSE NIPPLES WHEREVER POSSIBLE.

PRESSURE GAUGE w/4½" FACE, OVERALL ACCURACY ± ¾% OF FULL SCALE. RANGE 0–200 psi OR AS OTHERWISE APPROVED BY CITY. ¾" BRASS BUSHING w/ ⅞" RAY OI08 SNUBBER OR ⅞" BRASS BUSHING (IF NEEDED) TO HYDROMATIC PUMP

1″ TAP ON TEE 1½″ BRASS BUSHING

GUAGE & AIR VALVE

NOTE, BRASS NIPPLES NOT CALLED OUT, PROVIDE AS NECESSARY.

1. SEE SHT 3 FOR ADDITIONAL STATION INFORMATION.
2. PREP ALL SURFACES PER PAINT MANUFACTURER'S INSTRUCTIONS PRIOR TO APPLICATION. REMOVE ALL DIRT, GREASE, SCALE AND RUST. FACTORY COATINGS SHALL BE ROUGHENED TO PROVIDE ADEQUATE PROFILE FOR TOP COATS.
3. COAT INTERIOR WALLS, DI PIPE, FITTINGS AND STEEL FASTENERS WITH POLYMIDE EPOXY PAINT, 2 COATS AT 5 DRY MILS EACH. COLORS: OFF WHITE FOR WALLS, LIGHT BLUE FOR PIPE. PIPE SHALL BE EMPTY DURING COATING.
4. COAT VAULT EXTERIOR WITH 20 MIL COAL TAR EPOXY.
5. PROVIDE VAULT DRAINAGE EITHER BY:
   a) 4″ SCH 40 PVC DRAIN TO DAYLIGHT OR STORM SYSTEM, or
   b) GC SYSTEMS HYDROMATIC (WATER-POWERED) PUMP MODEL #996633-51-2.
6. ALL BALL VALVES AND CURB STOP SHALL BE FULL-PORT.
7. ALL FASTENERS SHALL BE STAINLESS STEEL.

12″ 8″ 3″ Sized 712-LA L W PRODUCTS "HD-2C"
10″ 8″ 3″ for 712-LA L W PRODUCTS "HD-2C"
8″ 6″ 2″ each 612-LA L W PRODUCTS "HD-2C"
6″ 4″ 2″ Project 612-LA L W PRODUCTS "HD-2C"

1. SEE SHT 3 FOR ADDITIONAL STATION INFORMATION.
2. PREP ALL SURFACES PER PAINT MANUFACTURER'S INSTRUCTIONS PRIOR TO APPLICATION. REMOVE ALL DIRT, GREASE, SCALE AND RUST. FACTORY COATINGS SHALL BE ROUGHENED TO PROVIDE ADEQUATE PROFILE FOR TOP COATS.
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7. ALL FASTENERS SHALL BE STAINLESS STEEL.
NOTES

1. PIPING SHALL BE SIZED AND LOCATED BY THE CITY FOR EACH INDIVIDUAL PROJECT. CONVEYANCE MAY BE REQUIRED FROM DISCHARGE LOCATION TO APPROVED DOWNSTREAM SYSTEM.

2. DI PIPING SHALL BE CLASS 52 CEMENT LINED DUCTILE IRON.

3. PAINT ALL EXPOSED PIPING AND FITTINGS ABOVE GRADE RUSTOLEUM SAFETY YELLOW. BASE No. 288-14, COLOR CODE AX-6732, T-4432, OR PER CITY ENGINEER.

VAULT HATCH

CONCRETE FLOOR

1/2" DIA. ANCHOR BOLT, STAINLESS STEEL WITH 3-1/2" MIN. EMBEDMENT (TYP)

1/2" DIA. Rungs BETWEEN STRINGERS AT LESS THAN OR EQUAL TO 12" O.C., ALL STEPS MUST BE EQUAL HEIGHT, INCLUDING TOP AND BOTTOM STEPS (TYP)

4" x 2" RECTANGULAR TUBING (TYP OF 2)

8" x 3" L x 2" W x 1/2" FB BEND AS SHOWN (TYP OF 2)

2" x 2" SQUARE TUBING CONTINUOUS STRINGERS (TYP)

4" x 1/2" FB L-SHAPE, 3" x 3" (TYP OF 4), WITH 1/2" DIA. STAINLESS STEEL ANCHOR BOLTS WITH 3-1/2" MIN. EMBEDMENT (TYP OF 2)

4" x 1/2" FB L-SHAPE, 3" x 3", 18" (TYP OF 4)

CONCRETE WALL

6" MIN.

4" x 2" RECTANGULAR TUBING (TYP OF 4)

SLOPE TOWARD VAULT

SLOPE TOWARD BEND

FROM PRESSURE REDUCING STATION

DI PIPE

CONCRETE THRUST BLOCK PER CITY STANDARDS

FLIKE SPOOL, LENGTH TO FIT

CONCRETE WAll

6" MIN.

PLAN

VAULT HATCH

6" MIN.

4" x 2" RECTANGULAR TUBING (TYP OF 2)

ELEVATION

继续梯子在 vault hatch 底部

清理由必要，梯子继续到 vault hatch 底部，10" Max.

CONCRETE FLOOR

1/2" DIA. ANCHOR BOLT, STAINLESS STEEL WITH 3-1/2" MIN. EMBEDMENT (TYP)

1/2" DIA. Rungs BETWEEN STRINGERS AT LESS THAN OR EQUAL TO 12" O.C., ALL STEPS MUST BE EQUAL HEIGHT, INCLUDING TOP AND BOTTOM STEPS (TYP)

CONCRETE FLOOR

ELEVATION

VAULT HATCH

6" MIN.

4" x 2" RECTANGULAR TUBING (TYP OF 4)

SLOPE TOWARD VAULT

SLOPE TOWARD BEND

FROM PRESSURE REDUCING STATION

DI PIPE

CONCRETE THRUST BLOCK PER CITY STANDARDS

FLIKE SPOOL, LENGTH TO FIT

CONCRETE WAll

6" MIN.

PLAN

VAULT HATCH

6" MIN.

4" x 2" RECTANGULAR TUBING (TYP OF 2)

SLOPE TOWARD VAULT

SLOPE TOWARD BEND

FROM PRESSURE REDUCING STATION

DI PIPE

CONCRETE THRUST BLOCK PER CITY STANDARDS

FLIKE SPOOL, LENGTH TO FIT

CONCRETE WAll

6" MIN.

PLAN

VAULT HATCH

6" MIN.

4" x 2" RECTANGULAR TUBING (TYP OF 4)
GROUT ALL SIDES

SLOT BOTH SIDES

24" DIA. LOCKING FRAME AND COVER AIR AND GAS TIGHT - 3 PLACES, 2 PLACES 600 - 950 GALLONS (LOCATE AS SHOWN, ON CENTERLINE)

DIM "A"

INSTALLED SURFACE CLEAN-OUT

PRE-CAST BAFFLE, 4" THICK

CONTRACTOR TO ADJUST TO GRADE

INSPECTION TEE TYP

FLEXIBLE COUPLING

INLET

OUTLET

WATER DEPTH

DIM "E"

SECTION A

GALLON CAPACITY 600 750 950 1000 1250 1500 1750 2000 2500 3000 4000 5000 6000

DIM "A" 7'-0" 7'-0" 9'-0" 9'-0" 11'-2" 12'-8" 12'-8" 12'-8" 15'-7" 15'-7" 19'-11" 19'-11"

DIM "B" 4'-8" 4'-8" 5'-0" 5'-0" 5'-8" 6'-8" 6'-8" 6'-8" 9'-7" 9'-7" 9'-11" 9'-11"

DIM "C" 7'-0" 7'-0" 7'-2" 7'-2" 7'-2" 8'-0" 8'-0" 8'-0" 8'-0" 8'-0" 8'-0"

DIM "D" 3'-6" 4'-3" 5'-3" 4'-2" 5'-2" 4'-4" 4'-7" 5'-6" 6'-0" 6'-3" 6'-2" 7'-2"

WATER DEPTH 3'-2" 3'-11" 3'-11" 3'-10" 4'-10" 4'-0" 4'-7" 3'-10" 4'-9" 5'-3" 5'-0" 4'-9"

GREAT ENGINEER

GREAT INTERCEPTOR

SANITARY SEWER STANDARD DETAIL

PAGE 1 of 2
EXTERIOR GREASE INTERCEPTOR NOTES:

1. LOCATE STRUCTURE ADJACENT TO DRIVE FOR ACCESS BY MAINTENANCE VEHICLE AND A MINIMUM OF 5- FEET FROM ANY BUILDING FOUNDATION.

2. FILL WITH CLEAN WATER PRIOR TO START UP OF SYSTEM.

3. INTERCEPTOR AND APPURTENANCES TO CLEANOUT SHALL BE MAINTAINED BY PRIVATE OWNER AND AN ANNUAL MAINTENANCE REPORT SHALL BE SUBMITTED TO THE CITY OF BONNEY LAKE.

4. CONNECTIONS TO VAULT WALLS WITH PVC PIPE SHALL BE MADE USING KOR-N-SEAL BOOT OR EQUAL. SEAL ALL PIPE CONNECTIONS WITH NON-SHRINK GROUT.

5. 6" PVC SHALL BE USED THROUGHOUT. TYPE OF PIPE PER CITY OF BONNEY LAKE STANDARDS.

6. TOP OF "TEES" TO BE KEPT OPEN.

7. A BALLCENTRIC VALVE SHALL BE LOCATED IN THE DISCHARGE PIPING, A MAXIMUM OF 3 FEET FROM THE GREASE INTERCEPTOR UPSTREAM OF THE CLEANOUT. THIS VALVE SHALL BE CLOSED WHEN CLEANING OR SERVICING THE DEVICE.

8. GRAY WATER ONLY. BLACK WATER SHALL BE CARRIED BY SEPARATE SIDE SEWER. A CLEAN-OUT SHALL BE INSTALLED DOWNSTREAM OF BALLCENTRIC VALVE PER DETAIL SS10.

9. THE PLANS SHALL ILLUSTRATE PROPERTY BOUNDARIES, PIPING/DRAINAGE DETAILS AND CONNECTIONS TO THE SANITARY SEWER. DETAIL AND ELEVATION DRAWINGS OF THE GREASE INTERCEPTOR SHALL INCLUDE UPC APPENDIX ‘H’ DESIGN CALCULATIONS TO SHOW CAPACITY, DETENTION TIME AND REMOVAL EFFICIENCIES.

   NO. OF MEALS/PEAK HOUR X WASTE FLOW RATE X RETENTION TIME X STORAGE FACTOR = CAPACITY IN GALLONS

10. EFFLUENT FROM GREASE INTERCEPTORS SHALL NOT EXCEED 100 mg/I FAT, OIL AND GREASE DISCHARGED TO THE SANITARY SEWER.

11. GREASE INTERCEPTORS INSTALLED IN PAVED AREAS SHALL COMPLY WITH H-20 LOADING.

12. PLUMBING/PIPING SHALL BE CONSTRUCTED TO ESTABLISH "PARALLEL FLOW" (90 TO THE TANK BAFFLE) THROUGH THE GREASE INTERCEPTOR. NO RADIUS, BEND OR ELBOW SHALL BE ALLOWED IN THE INLET PIPE, FOR A MINIMUM OF 10 FEET OR 20 PIPE DIAMETERS, WHICHERVER IS GREATER, UPSTREAM OF THE INTERCEPTOR.

13. VENTING OF THE INTERCEPTOR SHALL BE IN ACCORDANCE WITH THE CURRENT UNIFORM PLUMBING CODE.

14. FINAL INSPECTION IS REQUIRED BY THE CITY OF BONNEY LAKE PRIOR TO CONNECTION TO THE SANITARY SEWER.

15. CONCRETE: 28 DAY COMpressive STRENGTH $f_c = 4500$ psi

16. REBAR: ASTM A-615 GRADE 60

17. MESH: ASTM A-185 GRADE 65

18. DESIGN: ACI-318-83 BUILDING CODE ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES"
1. All sign assemblies shall use a Telespar post or approved equal.

2. Street signs shall be placed with 8'-6" vertical clearance and attached to post with Zumar Style # 812 brackets with a 12" blade holder or approved equal.

3. Signs shall be placed 12" from back of sidewalk in locations where concrete curb and gutter are without a vegetation strip.

4. Non street signs shall be fastened to post with 3/8" galvanized rivets with washers.
1. ALL SHEETING SHALL BE TYPE IV MICRO PRISMATIC RETROREFLECTIVE ELEMENT MATERIAL PER WSDOT 9-28.12., SIMILAR TO AVERY T-6500 SERIES OR APPROVED EQUAL.

2. ALL STREET NAMES AND BLOCK NUMBERS SHALL BE ARIAL BOLD FONT AND WHITE IN COLOR.

3. SHEETING COLOR SHALL BE AS FOLLOWS:
   - GREEN = PUBLIC STREETS
   - BLUE = PRIVATE STREETS
   - BROWN = HISTORICAL STREETS

4. STREET NAME SUFFIX SHALL BE CENTERED OVER BLOCK NUMBER AND DIRECTION DESIGNATION.

5. LOGO BACKGROUND AND BORDER COLOR SHALL BE WHITE IN COLOR.

6. "Inc. 1949" SHALL BE 1" BOLD CENTURY SCHOOLBOOK FONT AND BLUE IN COLOR.

7. "BONNEY" SHALL BE 1" ARIAL BOLD FONT AND BLUE IN COLOR.

8. "Lake" SHALL BE THE OFFICIAL BONNEY LAKE LAKE LETTERING AND BLUE IN COLOR.
VARIATION FROM THESE LOCATIONS MUST BE BY WRITTEN APPROVAL FROM THE CITY ENGINEER.

NOTES:

a. A STOP SIGN AND DEAD END (W14-1) OR NO OUTLET MAY BE MOUNTED ON SAME POST.

b. STREET NAME SIGNS AND NO OUTLET SIGN (W14-2) MUST BE MOUNTED ON A SEPARATE POST(S).

c. W14-1 AND W14-2 SHALL BE 30"x30" IN SIZE.

**CASE 1**

(NO CURB & GUTTER)

**SIGN LATERAL PLACEMENT**

1. ALL MATERIAL & WORKMANSHIP SHALL CONFORM TO THE LATEST WSDOT STANDARD PLANS AND SPECIFICATIONS, EXCEPT AS MODIFIED BY THESE DETAILS.

2. ALL CLEARING WITHIN CITY RIGHT OF WAY TO MAKE THE SIGN VISIBLE IS THE RESPONSIBILITY OF THE APPLICANT.

3. A RIGHT-OF-WAY PERMIT FROM THE CITY IS REQUIRED BEFORE WORK COMMENCES.

4. THE STOP SIGN SHALL BE VISIBLE FROM A DISTANCE OF AT LEAST 200 FT BACK ON THE APPROACHING ROADWAY WHEN POSTED SPEED IS 25 MPH, 250 FT WHEN POSTED SPEED IS 30 MPH AND 325 FT WHEN POSTED SPEED IS 35 MPH.

5. SIGN MATERIAL SHALL BE ALUMINUM 5052-H38 OR 6061-T6 ALLOY TREATED WITH ALODINE 1200 CONVERSION COATING. THICKNESS SHALL BE 0.080".

6. REFLECTIVE SHEETING FOR STOP AND YIELD SIGNS SHALL BE TYPE IX MICROPRISMATIC RETROREFLECTIVE ELEMENT MATERIAL.

7. LETTERING, LAYOUT, SHAPE AND COLORING SHALL MEET SPECIFIED REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION AS ADOPTED BY WSDOT).

8. IF A YIELD SIGN IS REQUIRED, THE SIGN SHALL MEET ALL ABOVE REQUIREMENTS AND BE 36" X 36" X 36" IN SIZE. SEE PAGE 1 FOR POLE MATERIAL AND INSTALLATION.
FOR CEMENT CONCRETE, 3/8" EXPANSION JOINT ENTIRE WIDTH AT RIGHT-OF-WAY LINE

MATCH EXISTING DITCH FLOW LINE

EDGE OF EXISTING PAVEMENT

SAWCUT EXISTING PAVEMENT (MIN. 2' OFF EX. EDGE OR AS DIRECTED BY THE CITY)

CITY STREET

PAVED AREA OF APPROACH

MAXIMUM GRADES

SAWCUT EX. PAVEMENT

3" ASPHALT CONCRETE CL. B COMPACTED DEPTH OR MATCH EXISTING (AS DIRECTED BY THE CITY)

3" MIN. CRUSHED SURFACING BASE COURSE OR AS DIRECTED BY THE CITY

PRIVATE DRIVEWAY

FIRM AND UNYIELDING SUB-GRADE

NOTE 1

PROFILE VIEW

VERTICAL CURVES NOT TO EXCEED A 3.25' CREST OR 2' SAG IN A 10' CHORD

SECTION VIEW

1 ROW Line Expansion Joint 02/14/06

Rev No. Revisions Date

Approved June 17, 2005

City Engineer Date

STREET STANDARD DETAIL

City of BONNEY LAKE

Dwg No. S11

ROAD APPROACH

PAGE 1 of 3
FOR CEMENT CONCRETE,
6"X6" STEEL MESH IN
ROAD APPROACH AND
3/8" EXPANSION JOINT
ENTIRE WIDTH AT
RIGHT-OF-WAY LINE

MATCH EXISTING
DITCH FLOW LINE

EDGE OF EXISTING
PAVEMENT

SAWCUT EXISTING
PAVEMENT (MIN. 2'
OFF EX. EDGE OR AS
DIRECTED BY THE
CITY)

RESTORE EXISTING PAVEMENT WITH
3" MIN. CL. B A.C.P. OVER 6"
CSBC OR MATCH EXISTING
PAVEMENT SECTION, WHICHER IS
GREATER. CLEAN AND TACK
EDGES WITH SEALER CSS1 AND
SEAL JOINTS WITH HOT ASPHALT
CEMENT AR4000W.

SAWCUT EX. PAVEMENT
3" ASPHALT CONCRETE
CL. B COMPACTED
DEPTH OR MATCH
EXISTING (AS DIRECTED
BY THE CITY)

3" MIN. CRUSHED SURFACING
BASE COURSE OR AS
DIRECTED BY THE CITY

MAXIMUM GRADES

VERTICAL CURVES NOT TO EXCEED
A 3.25' CREST OR 2' SAG IN A 10'
CHORD

PRIVATE DRIVeway

FIRM AND UNYIELDING
SUB-GRADE

PLAN VIEW
RESIDENTIAL ROAD APPROACH

<table>
<thead>
<tr>
<th>DESIGN ELEMENT</th>
<th>MAJOR ROAD APPROACH</th>
<th>MINOR ROAD APPROACH</th>
<th>RES. ROAD APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN. APPROACH RADIUS</td>
<td>AS APPROVED</td>
<td>25'</td>
<td>10'</td>
</tr>
<tr>
<td>MIN. APPROACH WIDTH</td>
<td>24 FEET (15 FEET FOR ONE WAY)</td>
<td>24'</td>
<td>15'</td>
</tr>
<tr>
<td>MAX. APPROACH WIDTH</td>
<td>30'</td>
<td>30'</td>
<td>25'</td>
</tr>
</tbody>
</table>

NOTES:

1. CULVERT PIPE SHALL BE CONCRETE OR SMOOTH WALL HDPE WITH LOCKING JOINTS AND H20 TRAFFIC RATING. PIPE WITH LESS THAN 12" OF COVER SHALL BE DUCTILE IRON PIPE CLASS 50 OR CONCRETE CLASS V.

2. STORMWATER RUNOFF FROM THE PUBLIC RIGHT OF WAY SHALL NOT BE PERMITTED TO DRAIN ONTO PRIVATE PROPERTY. CATCH BASINS OR OTHER DRAINAGE DEVICES MUST BE USED TO INTERCEPT AND DIVERT THIS WATER.

3. EXISTING DITCH SECTIONS AND/OR CULVERTS SHALL BE MAINTAINED. SUB-STANDARD DITCH SECTIONS OR CULVERTS SHALL BE REPLACED AS DIRECTED BY THE CITY.

4. FOLLOW ADDITIONAL INSTRUCTIONS AS DIRECTED BY THE OPERATIONS AND MAINTENANCE SUPERVISOR AS STATED ON THE APPROVED PERMIT.

5. IF SIDE SEWER CLEANOUT RISER IS IN THE TRAVELLED AREA OF THE ROAD APPROACH, IT MUST HAVE A TRAFFIC ENCLOSURE.

6. THE CITY INSPECTOR SHALL INSPECT FORMS AND/OR SUB-GRADE PRIOR TO PAVING.

7. CULVERT SHALL BE SET AS DETERMINED BY THE CITY.

8. CRUSHED ROCK SHALL BE USED TO FILL AND SUPPORT THE EDGES OF THE DRIVEWAY AND ALL EXCESS CONCRETE SHALL BE REMOVED FROM THE RIGHT-OF-WAY.

9. CULVERT SHALL BE 12" MINIMUM DIAMETER.

10. CULVERT ENDS SHALL BE CUT TO A 3:1 INCLINED TAPER.
PRIVATE DEVELOPMENT

FIRE HYDRANT/FDC LOCATION/ACCESS
APPROVED

BY _________________
CITY OF BONNEY LAKE
FIRE MARSHAL

DATE ________________

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 City Engineer.

PUBLIC DEVELOPMENT

APPROVED

BY _________________
CITY ENGINEER, PE

DATE ________________

Plans meet current Development Policies and Public Works Design Standards.

SATISFACTORY TO

PUBLIC WORKS DIRECTOR, PE

DATE ________________

Plans satisfy all functional requirements for this public facility and do so in a cost effective manner.

1 Added Public Dev Block 7/7/07

City of
BONNEY
Lake

M5
APPROVAL BLOCK

Dwg No:

Revisions Date

Approved.

City Engineer Date

MISCELLANEOUS STANDARD DETAIL
3/4" DIAM. SMOOTH BARS W/ENDS WELDED TO BAR FRAME

PLAN VIEW

3/4" Ø GALV STEEL BAR

(2) 1/4"x3" GALV STEEL STRIPS

(4) 1/4"x2"x8" GALV STEEL STRIPS. BEND AND WELD TO FRAME. SPACE UNIFORMLY

DRILL THROUGH CONC. & THRU-BOLT WITH 1/2" GALV STEEL HEX BOLTS

NOTES:
1. WELD AT ALL JOINTS.
2. SHOP DRAWINGS REQUIRED.
NOTES:

1. ALL UNDERGROUND PROCESS PIPE AND FITTINGS SHALL BE DUCTILE IRON WITH RESTRAINED JOINTS. UNDERGROUND VALVES SHALL BE RESTRAINED JOINT WITH CAST IRON VALVE BOXES PER CITY REQUIREMENTS. EXPOSED PIPING SHALL BE GROOVED END WITH FLANGED VALVES.

2. PIG LAUNCH SHALL ALSO BE SUITABLE FOR TEMPORARY BYPASS PUMP CONNECTION BY CITY.

October 22, 2007

City Engineer

Date

City of Bonney Lake

SS20

PIG LAUNCH

Sanitary Sewer Standard Detail
NOTES:
1. LIFT STATION SITE LAYOUT SHOWN IS THE MINIMUM REQUIREMENT PER THE CITY OF BONNEY LAKE ACTUAL LAYOUT MAY VARY DEPENDING ON LIFT STATION SIZE AND ACTUAL SITE CONFIGURATION.
2. REFER TO CITY OF BONNEY LAKE PUBLIC WORKS DESIGN STANDARDS SECTION 512 - "SANITARY SEWER STANDARDS" FOR ADDITIONAL REQUIREMENTS NOT SHOWN.
3. SEE STANDARD DETAIL SS30 FOR CONTROL BUILDING AND UNDERGROUND PIPING LAYOUT.
4. ALL ACCESS HATCHES IN ASPHALT SURFACING SHALL BE FLUSH TO GRASS. ALL ACCESS HATCHES SHALL BE SUITABLE FOR R-20 WHEEL LOADING.
5. WATER SERVICE PIPING SHALL PER CITY OF BONNEY LAKE PUBLIC WORKS DESIGN STANDARDS SECTION 410 - "WATER SYSTEM STANDARDS".
6. ALL IMPERVIOUS SURFACES SHALL BE SLOPED TO DRAIN AWAY FROM EQUIPMENT, BUILDING, VAULTS AND WET WELL.
7. PROPERTY LINE SETBACKS NOT SHOWN. SEE ZONING REQUIREMENTS.
8. STORMWATER MITIGATION NOT SHOWN.

City of Bonney Lake

CONCEPTUAL LIFT STATION SITE PLAN

City of Bonney Lake

Date: October 22, 2007

SS18

SANITARY SEWER STANDARD DETAIL
NOTES:

1. Lift Station buildings and piping layout shown are the minimum requirements per the City of Bonney Lake. Actual layout may vary depending on lift station size and site configuration.

2. Lift station arrangement shown is for a 3 pump configuration. For a 2 pump configuration modify process piping per standard detail 5519.

3. Refer to City of Bonney Lake Public Works Design Standards, Section 519 - "Sanitary Sewer Standards" and Standard details SS16 and SS19 for additional requirements not shown.

4. Provide restrained flexible couplings at all pipe penetrations thru concrete structures and buildings to allow for differential settlement.

5. Pumps and wet well piping arrangement shall be in accordance with the Hydraulic Institute Standards and shall meet the requirements of the pump manufacturer.

6. All underground process pipe and fittings shall be electric iron with restrained joints. Underdrain valves shall be restrained joint with cast iron valve bodies per city requirements. Exposed piping shall be flanged or grooved end with flanged valves.

7. All domestic waste, vent and potable water piping shall be installed per uniform plumbing code (latest edition). Plumbing piping shown is for reference only. Actual plumbing layout may vary.

8. Below grade water piping shall be installed per City of Bonney Lake Public Works Design Standards Section 319 - "Water System Standards." Above grade water piping to be copper type L with soldered fittings. Above grade water valves shall be forged brass ball valves with soldered ends.

9. Building and vault waste and vent pipe and fittings shall be schedule 40 PVC with flange. Waste and vent pipes shall be equipped with deep seal traps and trapdoors.

10. HVAC system shall be designed per city design standards and shall meet the requirements of the Uniform Mechanical Code and constructed and installed per Smacna (Sheet Metal and Air Conditioning Contractors National Association) guidelines.

11. Reduced pressure backflow preventer shall be per Department of Health requirements. Install minimum 18" from floor and 6" minimum from wall. Maintain 12" minimum working clearance in front of backflow preventer.

12. Wet well flush pipe to be terminated 12" above bottom of wet well with a 45° fitting directed parallel to wet well wall.

13. Wall mounted stainless steel utility sink with faucet. Wall mounted stainless steel water heater below utility sink.

14. Locate influent sensors on opposite half of wet well from pump discharge pipes.

15. City of Bonney Lake reserves the right to require a ticket from NW in building depending on location of lift station.

City of Bonney Lake
Sanitary Sewer Standard Detail

Conceptual Lift Station Building Floor Plan

Approved: October 22, 2007
City Engineer
Date
SS19

CONCEPTUAL LIFT STATION
BUILDING FLOOR PLAN

Sanitary Sewer Standard Detail
1. See SSI for legend and abbreviations.
2. All equipment numbers and instrument loop numbers have a prefix number that is assigned by the city of Bonney Lake to the pump station. For example, where XX is the prefix.

INTERLOCK NOTES:
1. PUMP STATION ALARM WHEN PUMP IS RUNNING AND CHECK VALVE IS CLOSED FOR MORE THAN 10 SECONDS.

1-2 PUMP CONTROLS-SUMP WITH PUMPS OPERATING IN LEAD-LAG. HS-43 SELECTS EITHER "ALT", "123", "312", "231"... WHEN "ALT" IS SELECTED, LEAD, LAG AND STANDBY PUMPS ARE SWITCHED EACH PUMP CYCLE. NORMALLY STANDBY PUMP DOES NOT OPERATE.

1-3 PUMP STATION COMMON TROUBLE ALARM. TURNS ON OUTSIDE STROBE LIGHT FOR ALL PUMP STATION ALARMS INCLUDING INTRUSION.

1-4 INTRUSION SIREN SOUNDS 30 SECONDS AFTER BUILDING DOORS OR VAULT HATCHES ARE OPENED. HS-43 DISABLES HORN ONLY.

NOTES:

- 3 PUMP SS LIFT STATION
- 4 PUMP SS LIFT STATION
- 5 PUMP SS LIFT STATION
- 6 PUMP SS LIFT STATION

City of Bonney Lake
Sanitary Sewer Standard Detail

3 Pump SS Lift Station Schematic

City of Bonney Lake

City of Bonney Lake
Sanitary Sewer Standard Detail

3 Pump SS Lift Station Schematic

Approved: October 31, 2007
City Engineer

SS16

City of Bonney Lake
Sanitary Sewer Standard Detail

3 Pump SS Lift Station Schematic

City of Bonney Lake

City of Bonney Lake
Sanitary Sewer Standard Detail

3 Pump SS Lift Station Schematic

Approved: October 31, 2007
City Engineer
City of Bonney Lake, Washington
Council Agenda Bill (C.A.B.) Approval Form

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<th>Department/Staff Contact:</th>
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<tr>
<td>Public Works / John Woodcock</td>
<td>November 13, 2007</td>
<td>AB07-226</td>
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<tr>
<th>Ordinance Number:</th>
<th>Resolution Number:</th>
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<td>D07-226</td>
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**BUDGET INFORMATION**

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**Explantion:**

**Agenda Subject:**

**Administrative Recommendation:**
Approve the amendments to the 2007 Public Works Standards.

**Background Summary:**
The Public Works Department has made several minor changes and added several standards to the current 2005 Public Works Standards (summary of changes attached). The PW Department would like to update the 2005 Public Works Standards to 2007 Public Works Standards with these minor changes.

<table>
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<th>Council Committee Dates:</th>
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<tr>
<td>Finance Committee:</td>
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<td>Public Safety Committee:</td>
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<td>Community Development &amp; Planning Committee: 11/5/07</td>
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<td>Council Workshop:</td>
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**Council Action:**
Council Call for Hearing: Council Hearings Date:
Council Referred Back to: Workshop: Committee
Council Tabled Until: Council Meeting Dates: 11/13/07

**Signatures:**
Date City Attorney reviewed
ADOPTED ORDINANCES

Ordinance 1259 [D07-220] - An Ordinance Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Setting The Amount Of The Annual Ad Valorem Tax Levy Necessary For The Fiscal Year 2008 For The Purposes Set Forth. (Adopted November 13, 2007 and effective five days after the date of publication.)

Ordinance 1260 - An Ordinance Of The City Of Bonney Lake, Washington, Relating To The Waterworks Utility Of The City Including The Sewerage System As A Part Thereof; Providing For The Issuance Of $4,570,000 Water And Sewer Revenue Refunding Bonds, 2007, To Provide Funds To Refund, On A Current Basis, The City’s Outstanding Water And Sewer Revenue Refunding Bonds, 1998, And Advance Refund And Defease The City’s Outstanding Water And Sewer Revenue Bonds, 1999 Maturing On And After September 1, 2010; Fixing The Date, Denominations, Terms, Redemption And Registration Privileges, Maturities, Interest Rates And Covenants Of Such Bonds; Providing For The Disposition Of The Sale Proceeds Of Such Bonds; Providing For Bond Insurance; And Providing For The Sale And Delivery Of Such Bonds To Martin Nelson & Co., Inc., Seattle, Washington.. (Adopted November 13, 2007 and effective five days after the date of publication.)

Ordinance 1261 [D07-226] - An Ordinance Of The City Of Bonney Lake, Pierce County, Washington, Authorizing The Acquisition Of Property By Purchase Or Condemnation.. (Adopted June 12, 2007 and effective thirty days after the date of adoption.)

The full text of the ordinances, summarized in this notice and adopted by the Bonney Lake City Council as indicated, are available at City Hall, 19306 Bonney Lake Boulevard, PO BOX 7380, Bonney Lake, WA, 98391, or will be mailed upon request.

-- Harwood T. Edvalson, City Clerk