US-OR-32-8 METRO: MULTNOMAH CHANNEL & SMITH BYBEE WATER CONTROL STRUCTURES **FACILITY IMPROVEMENTS UNLIMITED**

SMITH BYBEE SITE



SHEET INDEX

- 1 COVER SHEET LOCATION AND VICINITY MAPS, SHEET INDEX
- **2 DRAWING INFORMATION**
- 3 SITE ACCESS MULTNOMAH CHANNEL
- **4 SOUTH SITE EXISTING INFORMATION**
- 5 SOUTH SITE EXISTING CULVERTS
- 6 SOUTH SITE MODIFICATIONS TRASHRACK, PLATFORM & RAILINGS
- 7 SOUTH SITE MODIFICATIONS PLATFORM, RAILINGS, LOCKRODS & STOPLOGS
- 8 NORTH SITE EXISTING INFORMATION
- 9 NORTH SITE EXISTING CULVERT DETAILS
- **10 NORTH SITE MODIFICATIONS TRASHRACKS, PLATFORMS & RAILINGS**
- 11 NORTH SITE MODIFICATIONS FISH PASSAGE STOP LOGS
- 12 SITE ACCESS SMITH-BYBEE
- 13 SMITH-BYBEE MODIFICATIONS SITE PLAN
- 14 SMITH-BYBEE MODIFICATIONS STRUCTURE PLAN VIEW
- 15 SMITH-BYBEE MODIFICATIONS STRUCTURE ELEVATION VIEW
- 16 SMITH-BYREE EXISTING INFORMATION
- 17 SMITH-BYBEE MODIFICATIONS GATES, PLATFORM, RAILINGS, LOCKRODS & STOPLOGS 18 SMITH-BYBEE MODIFICATIONS PLATFORM, RAILINGS, LOCKRODS & STOPLOGS

VICINITY MAP



- INCIDENTAL TO PERFORMANCE OF WORK ITEMS.)
- 1. GATE MODIFICATIONS OR REPLACEMENT.
- 2. ALUMINUM STOP LOGS.
- 3. WORK PLATFORMS AND SUPPORTS.
- 4. SWIVEL TRASH RACKS.
- 5. RAILINGS & LOCK ROD SYSTEMS.
- 6. FISH LADDER MODIFICATIONS.
- 7. DEBRIS BOOM AND ANCHORAGE.

	REVISIONS		
REV. NO.	DESCRIPTION	DATE	APPROVE
A			
A			
A			
A			
A			

Unauthorized Changes & Uses

MULTNOMAH CHANNEL

NORTH & SOUTH SITES

DUCKS

17700 S. E. MILL PLAIN BLVD. SUITE 100

VANCOUVER, WA. 98683 PH. (360) 885-2011

30

The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes must be in writing and must be approved by the preparer of these plans.

GENERAL NOTES:

- 1. Ducks Unlimited makes no representations as to the existence or nonexistence of utilities. It is the responsibility of the contractor to comply with the provisions of all applicable utility notification regulations. The contractor will be liable for any damage to utilities caused by construction activities
- 2. The engineer does not represent that the location of utilities shown on the plans are exact or complete. It shall be the responsibility of the contractor to determine the presence of, actual locations of and make provisions for all watercourses and utilities. The contractor shall verify location, depth and height. Their verification shall be coordinated by the contractor with the appropriate utility company.
- 3. The contractor shall exercise extreme caution when working in the vicinity of overhead power lines. Verify location in the field and protect in place.
- 4. The contractor shall comply with all local and state requirements relative to the notificatciton of the applicable unerground service alert.
- 5. At least 2 working days prior to beginning any digging or excavation work, the contractor shall notify underground service alert
- 6. In accordance with generally accepted construction practices, the contractor will be solely and completely responsible for the conditions of the job site including safety of all persons and property during performance of the work. The contractor shall ensure that all work is performed in accordance with occupational safety laws, including the design and construction of proper shoring of trenches. The duties of the project engineer do not include review of the adequacy of the contractor's safety in, on, or near the job site.
- 7. It is the responsibility of the contractor to be knowledgeable about the project specifications and permits. All work shall be completed in compliance with the contract documents. The contractor shall have copies of the most current approved plans, specifications and permit conditions on site during all work operations
- 8. The project site and adjacent areas contain sensitive habitat areas for protected wildlife, and may include endangered species. The contractor shall protect wildlife and water quality, and minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- 9. Should it appear that the work to be done, or any matter relative thereto, is not sufficiently detailed or explained on these plans or in the specifications, the contractor shall contact the construction manager for such further explanations as may be necessary.
- 10. Should the contractor find any discrepancies between the conditions existing in the field and the information shown on the drawings, he shall notify the construction manager before proceeding with construction.

SURVEY POINT DESCRIPTORS

CTBM

СТВТ	Bench Mark (temporary)
CTCP	Survey Control Point (permanent)
CTCT	Survey Control Point (temporary)
DIFL	Ditch Flowline
DIGB	Ditch Grade Break
DITO	Ditch Toe
DITP	Ditch Top
ELBX	Electric, Box or Pullbox
ELGY	Electric, Guy Wire
ELPP	Electric, Power Pole
ELSN	Electric, Warning Sign
ELTR	Electric, Transformer
ELTW	Electric, Tower
ELVT	Electric, Vault
FNAP	Fence Angle Point
FNCR	Fence Corner
FNGT	Fence Gate
FNLN	Fence Line
IRCO	Irrigation Concrete Pad
IRCP	Irrigation Control Panel
IRPI	Irrigation Pipe Invert
IRPM	Irrigation Pump
IRPT	Irrigation Pipe Top
IRVL	Irrigation Valve
IRWL	Irrigation Well
LVCL	Levee Centerline
LVGB	Levee Grade Break
LVTO	Levee Toe of Slope
LVTP	Levee Top of Slope
RDCL	Road, Centerline
RDED	Road, Edge of Dirt Road
RDEG	Road, Edge of Gravel Road
RDEP	Road, Edge of Paved Road
RDG8	Road Grade Break

Bench Mark (permanent)

ABBREVIATIONS

-	
AB	Accrecate Base
AC	Acre
APPROX	Approximate
BM	Benchmark
CAP	Corrugated Aluminum Pipe
CC	Center to Center
CF	Cubic Foot
CFS	Cubic Foot Per Second
CL	Centerline
CMP	Corrugated Metal Pipe
CMPA	Corrugated Metal Arch Pipe
CONC	Concrete
СР	Control Point
CY	Cubic Yard
DEMO	Demotish
DIA	Diameter
Dp	Pipe Diameter
Dr	Riser Diameter
DU	Ducks Unlimited, Inc.
D/S	Downstream
E	East
EG	Existing Ground
EL	Elevation
EX, EXIST	Existing
FRG	Final Rough Grade
FG	Finished Grade
FL	Flowline
FT	Foot, Feet
FTG	Fitting, Footing
GA	Gauge
GB	Grade Break
Н	Height
HDPE	High-Density Polyethylene
ID	Inside Diameter
IE	Invert Elevation
IN	Inch, Inches
INV	Invert
IPS	Iron Pipe Size
L	
LBF	Pounds-Force
LF	
MAINT	Maintenance
MAX	Maximum
MIN	Minimum

RDSH	Road Shoulder
RDSN	Road Sign
RDTO	Road, Toe of Slope
RDTP	Road, Top of Slope
SDMH	Storm Drain, Manhole
SDPI	Storm Drain, Pipe Invert
SDPT	Storm Drain, Pipe Top
SSMH	Sanitary Sewer, Manhole
SWFL	Swale Flowline
SWGB	Swale Grade Break
SWTO	Swale Toe
SWIP	Swale Top
TFBL	Topo Feature, Building
TFBR	Topo Feature, Brush
TFCO	Topo Feature, Concrete (pad, slab, etc.)
TFFL	Topo Feature, Flowline
TFGB	Topo Feature, Grade Break
TFGS	Topo Feature, Ground Shot
TFRK	Topo Feature, Rock Or Rocky Area Boundary
TFTL	Topo Feature, Tree line
TFTO	Topo Feature, Grade Break at Toe
TFTP	Topo Feature, Grade Break at Top
TETR	Topo Feature, Tree
WAEW	Edge of Water
WAHW	High Water Mark
WAUW	Under Water Ground Shot
WAWS	Water Surface
WCFL	Water Control Structure, Flowline/Invert at Structure
WCFR	Water Control Structure, Frame Top
WCHW	Water Control Structure, Headwail
WCPI	Water Control Structure, Pipe Invert at Outlet
WCPT	Water Control Structure, Pipe Top at Outlet
WCST	Water Control Structure, Top of Structure
wcww	Water Control Structure, Wing Wall
	-

New North Not In Contract Not To Scale On Center Outside Diameter Pressure Irrigation Pipe Power Pole Pounds per Square Inch Polyvinyl Chloride Quantity Right Reinforced Concrete Box Road Reference Dimension Required Right Of Way South Schedule Stainless Steel

Standard Dimension Ratio

To Be Determined by Engineer

Temporary Benchmark

Underground Service Alert

Water Control Structure

Water Surface Elevation

Slope, Horizontal:Vertical

Welded Wire Fabric

Water Surface

Width, West (where applicable)

Square Feet

Specifications

Square Yard

Top Elevation

Temporary

Top of Levee

Top of Berm

Typical

Valve

With

Upstream

Sheet

Special

Station

Standard

(N)

N

NIC NTS

OC

OD

PIP

PP

PSI

PVC

OTY R

RCB

REF

REQD

ROW

S

SCH

SS

SDR

SHT

SPECS

SF

SP

SY

STA

STD

TBD

TBM ΤE

TEMP

TOL

тов

TYP

USA U/S

VLV

WCS

ws

WSEL

WWF

X:1

w W/

RD

Sheet Where Section is Shown

Detail Number

SEE SECTION

Section Letter



√5



Unauthorized Changes & Uses
The engineer preparing these plans will not be
responsible for, or liable for, unauthorized changes to or
uses of these plans. All changes must be in writing and
must be approved by the preparer of these plans.
uses of these plans. All changes must be in writing and must be approved by the preparer of these plans.



Utility Notification Center

MISC Miscellaneous

	REVISIONS		1
REV. NO.	DESCRIPTION	DATE	APPROV
_ <u>&</u>			-
A			
A			
A			

LEGEND & STANDARD SYMBOLS







Unauthorized Changes & Uses The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes must be in writing and must be approved by the preparer of these plans.









_	0	PROJECT NO. US-OR-32-8	DATE: 3/9/17	DESIGNED BY:	GW
ED		METRO: MULTNO	MAH CHANNEL	DRAWN BY:	DMC
-		SOUTH	SITE	SURVEYED BY:	
	DUCKS	EXISTING INF	ORMATION	CHECKED BY:	
	UNLIMITED	EXISTING CULVE	RT DETAILS	SHEET NO. 5 of	18









	UNLIMITED	EXISTING CULVERT	SHEET NO. 9 of 18
		NORTH SITE EXISTING INFORMATION	CHECKED BY:
			SURVEYED BY:
ED	A	METRO: MULTNOMAH CHANNEL	DRAWN BY: DMC
	A	PROJECT NO. US-OR-32-8 DATE: 3/9/17	DESIGNED BY: GW







Unauthorized Changes & Uses The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes must be in writing and must be approved by the preparer of these plans.







	METRO, SMITH BIBEE	SURVEYED BY
DUCKS	MODIFICATIONS	CHECKED BY:
UNLIMITED	SITE PLAN DEBRIS BOOM, GATES, PLATFORM, RAILINGS & FISH LADDER	SHEET NO. 13 of 18



must be approved by the preparer of these plans.

DUCKS PLAN FISH LADDER, TRASH RACK, UNLIMITED PLATFORM, RAILINGS, LOCKRODS & GATES 14 OF 18







