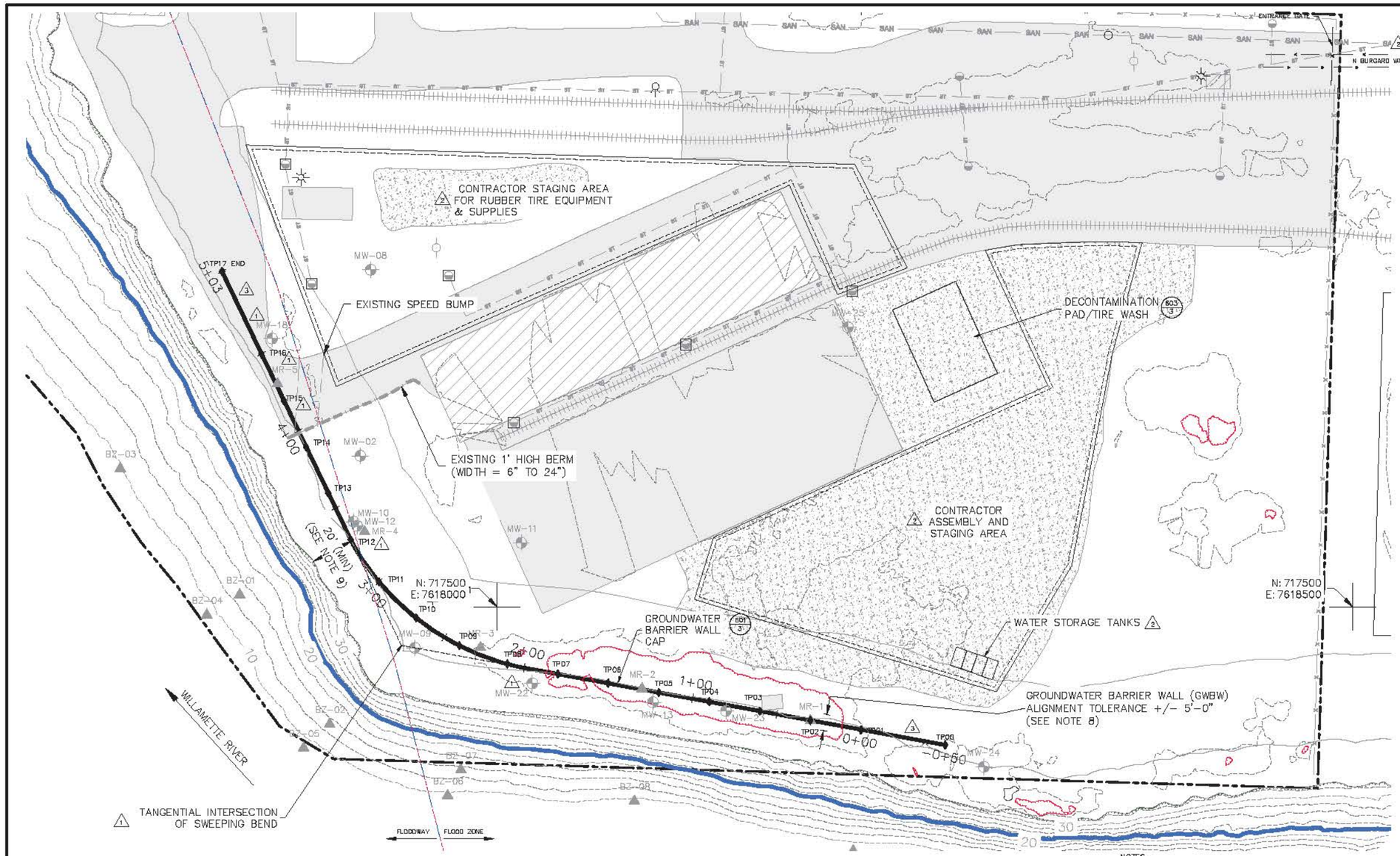

N

0 30 60

SCALE (IN FEET)

LEGEND:

- RECOVERY WELL
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- STORM WATER CATCH BASIN
- UTILITY/ELECTICAL POLE
- LIGHT POLE
- FIRE HYDRANT
- SANITARY SEWER MANHOLE
- TP04 GWBW TURNING POINT (STATION)
- ST — ST APPROXIMATE STORM SEWER LOCATION
- GROUNDWATER BARRIER WALL
- APPROXIMATE PROPERTY BOUNDARY
- INDEX CONTOUR – 10 FOOT INTERVAL
- INTERMEDIATE CONTOUR – 2 FOOT INTERVAL
- ORDINARY HIGH WATER
- TOP OF BANK (APPROXIMATE 30 FT)
- RAILROAD TRACK
- SAN SANITARY SEWER
- CONCRETE CURB
- U/E OVERHEAD UTILITY
- FEMA FLOOD ZONE (APPROXIMATE 32.5 FT)
- FEMA FLOODWAY
- EXISTING FENCE
- SITE INGRESS/EGRESS
- PAVED AREA
- GRAVEL AREA
- GREENWAY BUFFER
- INDUSTRIAL ACTIVITY SETBACK
- EXISTING ONSITE STRUCTURE
- OUTSIDE FLOOD HAZARD AREA (AREAS ABOVE 32.65 FT ELEVATION)

MONITORING WELL ABANDONMENT SCHEDULE

WELL ID	WELL SIZE	WELL DEPTH
MW-9	2-INCH	27 FEET
MW-10	2-INCH	53 FEET
MW-12	2-INCH	28 FEET
MW-13	2-INCH	28 FEET
MW-18	2-INCH	27 FEET
MW-22	2-INCH	28 FEET
MW23	2-INCH	28 FEET

GROUNDWATER BARRIER WALL TURNING POINTS

POINT NUMBER	GWBW STATION	NORTHING-Y	EASTING-X
TP00	−0+50	717419.20960700	7618261.91683800
TP01	0+00	717428.05287522	7618212.65804295
TP02	0+30	717433.56185176	7618183.07756316
TP03	0+60	717439.00479445	7618153.52981631
TP04	0+90	717444.46855638	7618124.03155694
TP05	1+20	717449.86980158	7618094.52213440
TP06	1+50	717455.27890155	7618064.92207832
TP07	1+80	717460.67241520	7618035.50261611
TP08	2+10	717466.56045891	7618006.04020779
TP09	2+40	717477.30951754	7617978.03203508
TP10	2+70	717493.46981202	7617952.70715500
TP11	3+00	717514.49755669	7617931.06343621
TP12	3+30	717539.29495425	7617914.43674374
TP13	3+60	717566.35037137	7617901.39672273
TP14	3+90	717593.41137992	7617888.38520966
TP15	4+20	717620.40005167	7617875.34615536
TP16	4+50	717647.65036702	7617862.34616181
TP17 END	5+03	717695.92540500	7617839.25575800

NOTES:

1. IF ANY UTILITY IS DETERMINED TO CONFLICT WITH THE WORK, THE CONTRACTOR SHALL COORDINATE WITH PORTLAND GENERAL ELECTRIC TO DISCONNECT OR REMOVE ELECTRIC LINES, IF REQUIRED TO CONSTRUCT THE GROUNDWATER BARRIER WALL.

2. THE CONTRACTOR SHALL CONTROL AND MANAGE SPOILS DURING GROUNDWATER BARRIER WALL CONSTRUCTION SUCH THAT MATERIALS ARE PREVENTED FROM ENTERING THE WILLAMETTE RIVER AND ANY ON-SITE STORM DRAINS OR SURFACE WATER FEATURES. ALL SOILS SHALL BE MANAGED ON THE UPLAND SIDE OF THE GWBW (NORTH AND EAST SIDES)

3. THE GROUNDWATER BARRIER WALL SHALL EXTEND TO 35 FEET BELOW GROUND SURFACE (BGS). THE ANTICIPATED GROUNDWATER BARRIER WALL PROFILE IS PRESENTED ON SHEET 5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING STABLE CONDITIONS OF THE GWBW AND TRENCH AT ALL TIMES THROUGHOUT THE PROJECT.

4. THE DEPICTED LOCATION OF THE UTILITIES IS APPROXIMATE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION. NO KNOWN UTILITIES INTERSECT THE GROUNDWATER BARRIER WALL ALIGNMENT. HOWEVER, IF ANY UTILITIES ARE ENCOUNTERED ALONG THE ALIGNMENT DURING THE CONSTRUCTION, THEN IT SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER. CONTRACTOR SHALL BE PREPARED TO ADDRESS THESE UTILITIES IF ENCOUNTERED. CONTRACTOR SHALL BE PREPARED TO CUT, CAP OR CONCRETE PLUG THE UTILITIES IF ENCOUNTERED ALONG THE WALL ALIGNMENT, IF ANY ENCOUNTERED UTILITIES ARE INACTIVE.

5. THE DESIGNATED GROUNDWATER MONITORING WELLS SHALL BE ABANDONED BY A LICENSED WELL DRILLER IN ACCORDANCE WITH OREGON DEPARTMENT OF WATER RESOURCES REQUIREMENTS PRIOR TO CONSTRUCTION OF THE GROUNDWATER BARRIER WALL IF THERE IS A POTENTIAL FOR DAMAGING THE DESIGNATED MONITORING WELLS FROM CONSTRUCTION ACTIVITIES. AS WELL ABANDONMENT SCHEDULE INDICATED IN THE THIS ON SHEET, IT IS ANTICIPATED THAT 7 MONITORING WELLS ARE REQUIRED FOR ABANDONMENT. OTHER MONITORING WELLS TO REMAIN WITHIN THE LIMIT OF DISTURBANCE SHALL BE VISUALLY IDENTIFIED WITH FLAGGING AND PHYSICALLY PROTECTED WITH BARRICADE.

6. THE GROUND SURFACE SHALL BE RESTORED TO EXISTING ELEVATIONS AND THE SITE STABILIZED FOLLOWING COMPLETION OF GROUNDWATER BARRIER WALL CONSTRUCTION ACTIVITIES. STABILIZATION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION AND DRAWING NO. 4 (ESC PLAN).

7. IN AREAS WHERE ASPHALT OR CONCRETE PAVEMENT EXISTS IN THE LOCATION OF THE GROUNDWATER BARRIER WALL, THE CONTRACTOR SHALL REMOVE THE SECTION OF PAVEMENT, AS NECESSARY, TO CONSTRUCT THE WALL. THE PAVEMENT SHALL BE SAWCUT, OR OTHERWISE APPROVED BY THE ENGINEER ACHIEVE A NEAT AND UNIFORM SECTION FOR REMOVAL.

8. THE GWBW ALIGNMENT INCLUDES A SWEEPING BEND BETWEEN STATIONS 2+10 AND 3+00 TO ALLOW FOR CONTINUOUS CONSTRUCTION (WITHOUT WITHDRAWING AND REPOSITIONING). THE BASE BID SCOPE OF WORK INCLUDES CONSTRUCTION OF THE WALL ALONG THE SWEEPING BEND. THIS BEND INCORPORATES A TURNING RADIUS OF APPROXIMATELY 125 FEET. THE CONTRACTOR MAY PROVIDE AN ALTERNATE ALIGNMENT THAT INCLUDES THE WALL LOCATION AT, OR CLOSE TO, THE TANGENTIAL INTERSECTION OF THE SWEEPING BEND. ANY MODIFICATION TO THE ALIGNMENT SHALL BE PROVIDED IN A WORK PLAN, INCLUDING METHODOLOGY, FOR REVIEW AND ACCEPTANCE BY THE ENGINEER.

9. THE CONSTRUCTED GROUNDWATER BARRIER WALL ALIGNMENT SHALL VARY NO MORE THAN 5 FEET LATERALLY FROM THE ALIGNMENT DEPICTED HEREIN. HOWEVER, IN ANY CASE THE OUTBOARD EDGE OF THE SLURRY WALL SHALL BE LOCATED A MINIMUM OF 20 FEET UP-GRADIENT (I.E., INLAND) FROM THE TOP OF THE RIVER BANK.

10. THE CONTRACTOR MAY LOCATE THE STAGING AREA IN AN ALTERNATIVE LOCATION, AS APPROVED BY THE ENGINEER.

REV.	DATE	DESCRIPTION	BY	CHK
3	10/15/15	INCREASED WALL LENGTH 50' ON EACH SIDE	GML	AK
2	8/17/15	UPDATED STORM SEWER AND STAGING AREA PER DEQ/EPA COMMENTS	RMK	AK
1	7/27/15	UPDATED TPs AND NOTES	RMK	AK

DRAWN BY RMK CADD Review FGB CHECKED BY AK-ANN

ERM

Environmental Resources Management

REGISTERED PROFESSIONAL ENGINEER 78496PE OREGON DECEMBER 31, 2016 BRENDAN ANDREW ROBINSON

EXP. 12/31/2016

GROUNDWATER SOURCE CONTROL MEASURE

GROUNDWATER BARRIER WALL

SOUTHERN PREMIERE EDIBLE OILS SITE

PORTLAND, OREGON

WORK AREA PLAN

SCALE	PROJECT NUMBER	SHEET	REV.
AS NOTED	0283866	3	2
DATE 08/25/2015			