

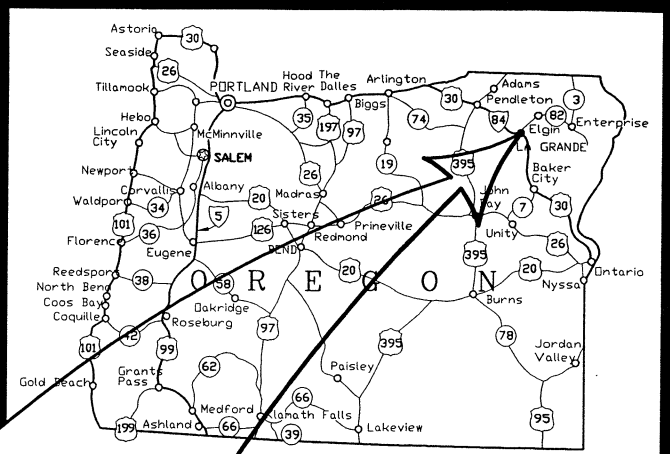
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# GRANDE RONDE MODEL WATERSHED

## ELMER LEVEE REMOVAL

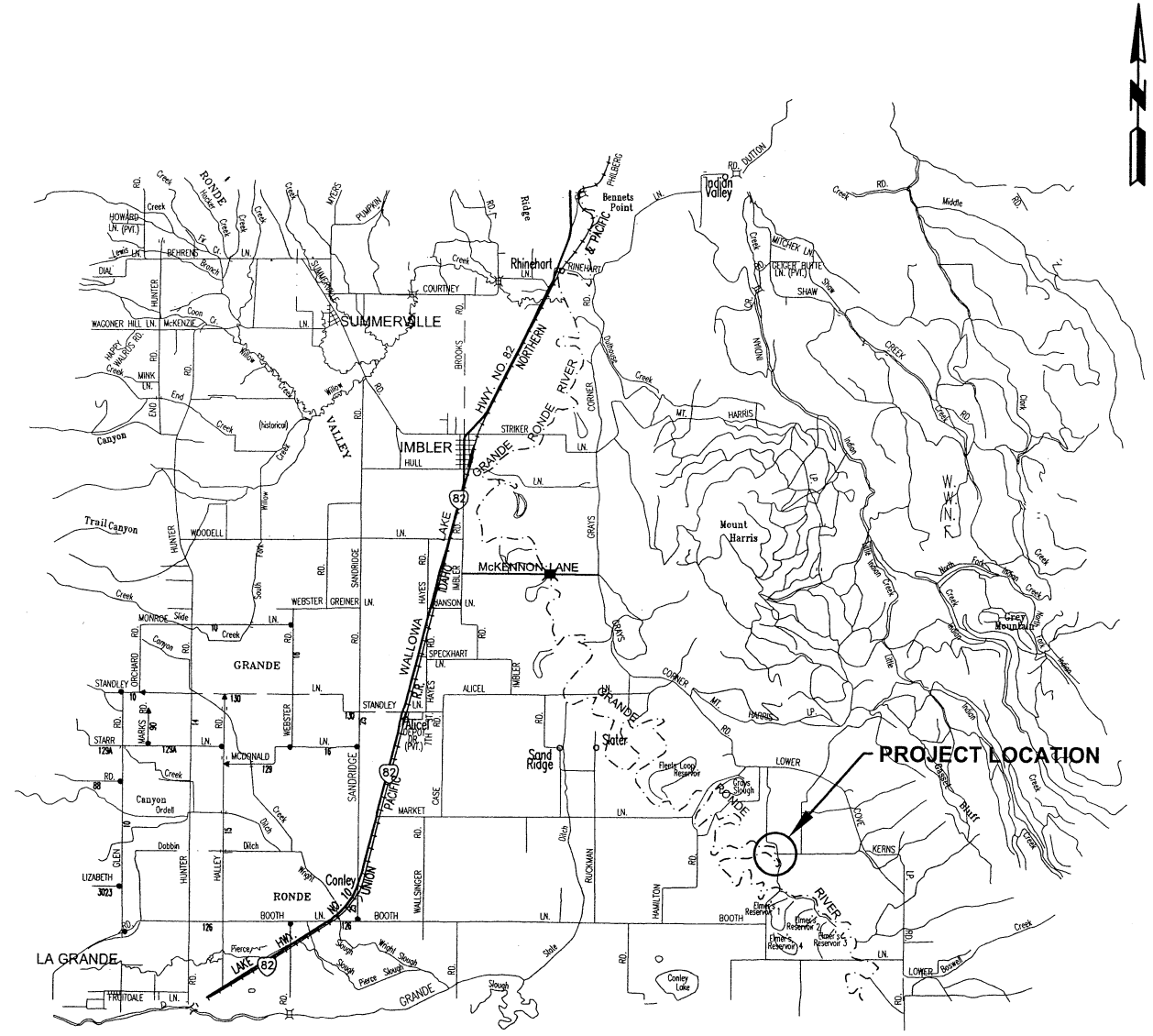
### 2010

### UNION COUNTY, OREGON



#### INDEX

- COVER
- 1 SITE PLAN AND PROFILE
- 2 DETAILS



The Grande Ronde Model Watershed has reviewed these drawings and approved them for construction to fulfill the intended project objectives.

\_\_\_\_\_ Date

#### VICINITY MAP



**GRANDE RONDE**  
MODEL WATERSHED

#### GRANDE RONDE MODEL WATERSHED

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JEFF OVESON

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**PRELIMINARY**

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& associates, inc.  
engineering • surveying • natural resources  
1901 N. FIR STREET, LA GRANDE, OR 97850  
PH: (541) 963-8309 FAX: (541) 963-5456

0 5.0 CWAS  
1 4.0 CWAS  
2 3.0 CWAS  
3 2.0 CWAS  
4 0.50 CWAS  
5 1.0 BMEA  
6 1.5 BMEA  
7 0.5 BMEA

NOTES:

1. REMOVE AND STOCKPILE TOPSOIL FOR LATER RE-APPLICATION ON NEW LEVEE AND DISTURBED AREAS AS NECESSARY.
2. CONTRACTOR SHALL REMOVE EXISTING LEVEE MATERIAL AND PLACE AS FILL FOR NEW LEVEE. ADDITIONAL FILL MAY BE BORROWED, AS NECESSARY, FROM AREAS UNDER EXISTING LEVEE TO HIGH WATER ELEVATION.
3. SEED MIX FOR ALL AREAS DISTURBED DURING CONSTRUCTION SHALL APPROXIMATE EXISTING NATIVE VEGETATION AND CONTAIN AT LEAST THE PERCENTAGE OF PORE LIVE SEED FOR THE FOLLOWING: BLUE BUNCH WHEAT GRASS 29%, IDAHO FESCUE 3%, BASIN WILD RYE 3%, BIG BLUEGRASS 3%.
4. OBSERVE FALL PERMITTING REQUIREMENTS.
5. CONSTRUCTION TO TAKE PLACE BETWEEN SEPTEMBER 2 AND MARCH 30.

COMPLETE GRUBBING AS NECESSARY AND REMOVE ROOT MASS UNDER AREA OF NEW LEVEE CONSTRUCTION.

CONSTRUCT A 6' WIDE BERM ON BOTH SIDES OF EXISTING DITCH TO ELEVATION 2689 AT APPROXIMATE TOP OF EXISTING DITCH BANK FROM NEW LEVEE TO EXISTING FENCE LINE

INSTALL GEOTEXTILE FABRIC UNDER 4" DEPTH OF SURFACE ROCK THE FULL WIDTH OF ROADWAY EXTENDING 20' ON EACH SIDE OF CULVERT CROSSING.

TAPER OUT NEW DITCH BERM INTO EXISTING GROUND

INSTALL A 15'x15' BED OF 4" ANGULAR RIP RAP 8" DEEP AT BOTH UP AND DOWN STREAM ENDS OF CULVERT OPENINGS (TYP).

EXISTING APPLE TREE TO REMAIN UNDISTURBED

INSTALL GEOTEXTILE FABRIC UNDER 4" DEPTH OF SURFACE ROCK THE FULL WIDTH OF ROADWAY EXTENDING 20' ON EACH SIDE OF CULVERT CROSSING.

TOP OF EXISTING LEVEE

REMOVE EXISTING LEVEE DOWN TO APPROXIMATE NATURAL GROUND ELEVATION. SEED WITH APPROVED MIX. SEE NOTES THIS SHEET.

PROVIDE PLANTINGS IN HABITAT AREAS TO APPROXIMATE EXISTING VEGETATION, HAWTHORN'S, THRUSHES, COTTONWOODS, AND GRASS THICKETS.

USE EXISTING ROAD CROSSING FOR TEMPORARY DETOUR THEN REMOVE EXISTING 36" CULVERT WHEN NEW CROSSING IS COMPLETE.

CONSTRUCT NEW LEVEE INTO EXISTING

EXISTING ROADWAY AND LEVEE TO REMAIN

PLANT LEGEND

TREES:



PACIFIC WILLOW (*SALIX LUCIDA* SPP. *LASIANDRA*): CENTER OF 1 GROUP OF 15 PLANTS SPACED 4 FEET APART IN THREE ROWS.



COTTONWOOD (*POPULUS BALSAMIFERA*): CENTER 1 GROUP OF PLANTS SPACED 8 FEET APART. PLANT APPROXIMATELY 1 FOOT ABOVE THE ORDINARY HIGH WATER LINE.

SHRUBS:



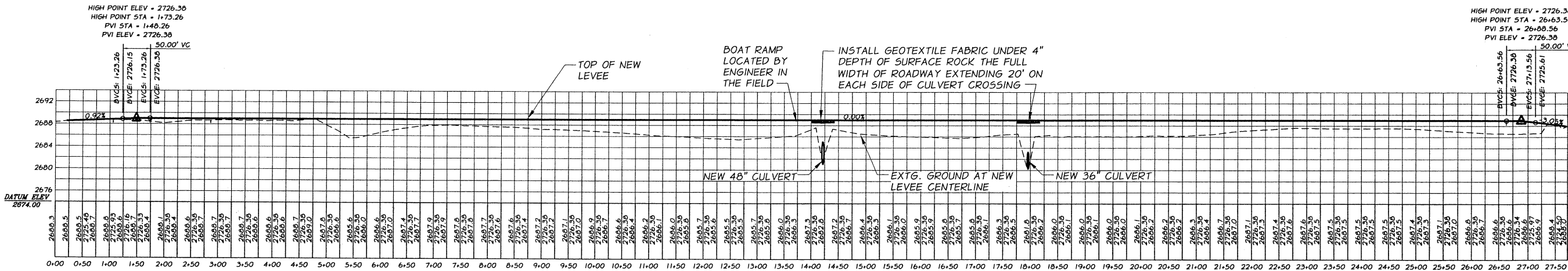
GEYER'S WILLOW (*SALIX GEYERIANA*): CENTER OF 1 GROUP OF 15 PLANTS SPACED 4 FEET APART IN THREE ROWS.



RED OSIER DOGWOOD (*CORNUS SERICEA SERICEA*): CENTER OF 1 GROUP OF 5 PLANTS SPACED 3 FEET APART. PLANT JUST ABOVE THE ORDINARY HIGH WATER LINE.



ROSE (*ROSA GYMNOCARPA*): CENTER OF 1 GROUP OF 3 PLANTS SPACED 3 FEET APART. PLANT APPROXIMATELY 4 FEET ABOVE THE ORDINARY HIGH WATER LINE.



EXCAVATION LEGEND



REMOVE EXISTING LEVEE MATERIAL DOWN TO HIGH WATER ELEVATION. STOCKPILE TOPSOIL. REAPPLY STOCKPILED TOPSOIL OVER SURFACE. SEED WITH APPROVED MIX. SEE NOTES THIS SHEET (TYP).



REMOVE EXISTING LEVEE DOWN TO APPROXIMATE NATURAL GROUND ELEVATION. SEED WITH APPROVED MIX. SEE NOTES THIS SHEET.



CLEAR EXISTING CHANNEL. SEE CHANNEL DETAIL, SHEET 2.

REVISION	BY	DATE	HORIZ. SCALE 1"=100'	VERT. SCALE 1"=10'
DESIGNED BY C. WHITAKER	XREFS: ??		JOB NUMBER 81-19	DATE 2010
DRAWN BY A. STEFFEN			ACAD FILE: Elmer Design.dwg	
REVIEWED BY B. MOORE			COPYRIGHT 2010 BY ANDERSON-PERRY & ASSOC., INC.	

THIS DRAWING HAS BEEN REDUCED 50%.  
ADJUST SCALE ACCORDINGLY.  
BARSCALE SHOWN IS ACCURATE.

PRELIMINARY

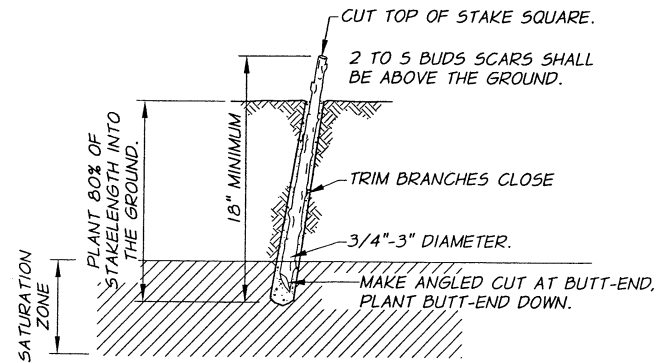
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GRANDE RONDE MODEL WATERSHED  
ELMER LEVEE REMOVAL

SITE PLAN

SHEET

1

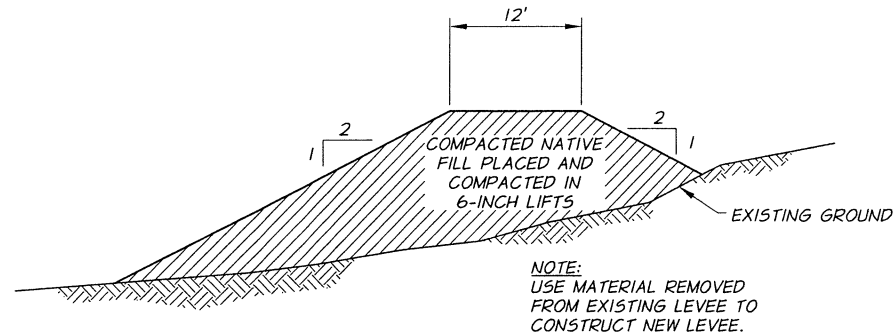


**NOTES:**

1. HARVEST AND PLANT STAKES DURING THE DORMANT SEASON.
2. USE HEALTHY, STRAIGHT AND LIVE WOOD AT LEAST 1 YEAR OLD.
3. MAKE CLEAN CUTS AND DO NOT DAMAGE STAKES OR SPLIT ENDS DURING INSTALLATION. USE A PILOT BAR IN FIRM SOILS.
4. SOAK CUTTINGS FOR 24 HOURS (MIN.) PRIOR TO INSTALLATION.
5. TAMP THE SOIL AROUND THE STAKE.
6. EXTEND STAKES IN TO WATER SATURATION ZONE.

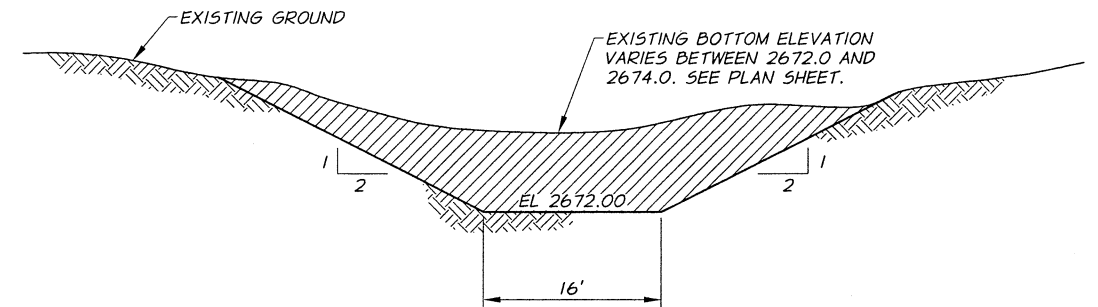
**PLANTING DETAIL**

N.T.S.



**TYPICAL LEVEE SECTION**

N.T.S.



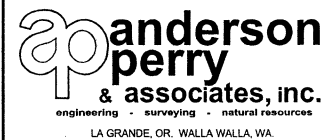
**CHANEL DETAIL**

N.T.S.

DESIGNED BY	E. ARNTZ	DATE	2010
DRAWN BY	B. MOORE	DATE	2010
REVIEWED BY		DATE	
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**GRANDE ROND MODEL WATERSHED  
ELMER LEVEE REMOVAL**

**DETAILS**

**SHEET**

**2**