

GREY SPRINGS AND WILLOW BUTTE PIPELINES AS BUILT FOR WATER FROM GREY SPRINGS AND SHEEPCAMP SPRING

THIS MAP WAS DRAWN USING DATA COLLECTED FROM SURVEYS, GPS DATA AND OBSERVATIONS. GPS DATA WAS COLLECTED USING A TRIMBLE PRO-RS GPS UNIT. SOME SECTION CORNERS WERE SURVEYED AT THE TIME OF THE PIPELINE DESIGN. BACKGROUND DATA WAS DIGITIZED FROM U.S.G.S QUAD MAPS.

DESCRIPTION

APPLICATION S-06558
 THE GREY SPRINGS PIPELINE IS SITUATED WITHIN THESE U.S.G.S. 7 1/2" QUADS: POLE CANYON, OREG., TROUT CREEK CANYON, OREG., AND RED LOOKOUT BUTTE, OREG.
 THE GREY SPRINGS PIPELINE IS SITUATED WITHIN HARNEY COUNTY, THE POINT OF DIVISION, GREY SPRINGS, IS LOCATED WITHIN THE SW1/4SE1/4, SECTION 20, T.39S., R.38E., W.M. A DISTANCE OF 281.96 FEET NORTH AND 509.34 FEET EAST OF THE SOUTH 1/4 OF SAID SECTION 20.

THE GREY SPRINGS PIPELINE AND SPUR LINES ARE SITUATED THE FOLLOWING QUARTERS: TOWNSHIP 39 SOUTH, RANGE 36 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 18: SE1/4SW1/4, GOVT. LOT 3, NE1/4SW1/4, GOVT. LOT 2, GOVT. LOT 1;
 SECTION 19: NE1/4SE1/4, SE1/4NE1/4, SW1/4NE1/4, SE1/4NW1/4, NE1/4NW1/4;
 SECTION 20: SW1/4SE1/4, NW1/4SE1/4, W1/2SW1/4;

TOWNSHIP 39 SOUTH, RANGE 37 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 2: GOVT. LOT 3, SW1/4NW1/4, NW1/4SW1/4;
 SECTION 3: NE1/4SE1/4, SE1/4NE1/4, SW1/4SE1/4, E1/2SW1/4, S1/2SW1/4, GOVT. LOT 4;
 SECTION 4: GOVT. LOT 1, GOVT. LOT 2, GOVT. LOT 3, GOVT. LOT 4;
 SECTION 5: GOVT. LOT 1;
 SECTION 6: GOVT. LOT 2, GOVT. LOT 2, SE1/4NW1/4, SW1/4NW1/4, NW1/4SW1/4;
 SECTION 10: SW1/4NE1/4, NE1/4NE1/4, NW1/4NE1/4;
 SECTION 11: S1/2SE1/4, SW1/4, SW1/4NW1/4;
 SECTION 12: SE1/4SE1/4, S1/2SW1/4;
 SECTION 13: W1/2N1/2;

TOWNSHIP 39 SOUTH, RANGE 37 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 31: SE1/4SE1/4, SW1/4SE1/4, NW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, SW1/4NW1/4, NW1/4NW1/4;
 SECTION 32: SE1/4SE1/4, SW1/4SE1/4, SE1/4SW1/4, NE1/4SW1/4, NE1/4SE1/4, NE1/4SW1/4;
 SECTION 33: SE1/4SE1/4, SW1/4SE1/4, NW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, SW1/4NW1/4, NW1/4NW1/4, NE1/4SE1/4, NE1/4SW1/4, NE1/4SW1/4, SE1/4NW1/4, SE1/4NW1/4;
 SECTION 34: W1/2NW1/4, NW1/4SW1/4, NE1/4SW1/4, SE1/4SW1/4;
 SECTION 35: NE1/4NW1/4, NW1/4NE1/4, SW1/4NE1/4, NE1/4SW1/4, NE1/4SE1/4, NE1/4SW1/4;
 SECTION 36: NE1/4NE1/4;

TOWNSHIP 39 SOUTH, RANGE 36 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 1: NE1/4SE1/4, SE1/4NE1/4, SW1/4NE1/4, GOVT. LOT 2, GOVT. LOT 3;
 SECTION 2: SE1/4SE1/4, SW1/4SE1/4, SE1/4SW1/4, NE1/4SW1/4, NE1/4SE1/4, NE1/4SW1/4;

TOWNSHIP 39 SOUTH, RANGE 36 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 13: SW1/4SW1/4;
 SECTION 24: W1/2NW1/4, NW1/4SW1/4, NE1/4SW1/4, SE1/4SW1/4;
 SECTION 25: NE1/4NW1/4, NW1/4NE1/4, SW1/4NE1/4, NW1/4SE1/4, NE1/4SE1/4, NE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4;
 SECTION 26: SE1/4SE1/4;
 SECTION 35: NE1/4NE1/4;

TOWNSHIP 39 SOUTH, RANGE 37 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 31: SE1/4SE1/4, SW1/4SE1/4, NW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, SW1/4NW1/4, NW1/4NW1/4;
 SECTION 32: SE1/4SE1/4, SW1/4SE1/4, SE1/4SW1/4, NE1/4SW1/4, NE1/4SE1/4, NE1/4SW1/4;
 SECTION 33: SE1/4SE1/4, SW1/4SE1/4, NW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, SW1/4NW1/4, NW1/4NW1/4, NE1/4SE1/4, NE1/4SW1/4, NE1/4SW1/4, SE1/4NW1/4, SE1/4NW1/4;
 SECTION 34: W1/2NW1/4, NW1/4SW1/4, NE1/4SW1/4, SE1/4SW1/4;
 SECTION 35: NE1/4NW1/4, NW1/4NE1/4, SW1/4NE1/4, NE1/4SW1/4, NE1/4SE1/4, NE1/4SW1/4;
 SECTION 36: NE1/4NE1/4;

DESCRIPTION

APPLICATION S-71805
 THE WILLOW BUTTE PIPELINE IS SITUATED WITHIN THESE U.S.G.S. 7 1/2" QUADS: POLE CANYON, OREG., LITTLE WHITEHORSE CREEK, OREG., AND RED MOUNTAIN, OREG.
 THE WILLOW BUTTE PIPELINE IS SITUATED WITHIN MALHEUR AND HARNEY COUNTIES. THE POINTS OF DIVISION ARE SHEEPCAMP SPRING IN THE NE1/4SE1/4, SECTION 18, TOWNSHIP 39 SOUTH, RANGE 38 EAST, W.M. 2816 FEET NORTH AND 400 FEET WEST FROM THE NORTHEAST CORNER OF SAID SECTION 18, AND GREY SPRINGS IN THE SW1/4SE1/4, SECTION 20, TOWNSHIP 39 SOUTH, RANGE 38 EAST, W.M. 282 FEET NORTH AND 509 FEET EAST FROM THE SOUTH 1/4 OF SAID SECTION 20.

WILLOW BUTTE RESERVOIR IS LOCATED 3014.27 FEET NORTH AND 1073.09 FEET WEST OF THE SOUTHWEST CORNER OF SECTION 18, T.39S., R.38E., W.M. WITHIN THE SE1/4NW1/4 OF SAID SECTION 18.
 WILLOW BUTTE PIPELINE, MAINLINE, BYPASS AND SPURS ARE IN THE FOLLOWING QUARTERS:
 TOWNSHIP 39 SOUTH, RANGE 38 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 5: SW1/4SW1/4;
 SECTION 6: SE1/4SE1/4, NE1/4SE1/4, SW1/4NE1/4, GOVT. LOT 2;
 SECTION 7: SE1/4SE1/4, SW1/4SE1/4, SW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, NW1/4NW1/4;
 SECTION 10: SW1/4SW1/4, SE1/4SW1/4, NW1/4SE1/4, NE1/4SE1/4, SE1/4NE1/4;
 SECTION 17: SW1/4NW1/4, NE1/4NW1/4, NE1/4NW1/4, NW1/4NE1/4, NE1/4NE1/4;
 SECTION 18: NE1/4SW1/4, SE1/4SW1/4, NE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4;
 SECTION 19: NE1/4SE1/4, SE1/4NE1/4, SW1/4NE1/4, SE1/4NW1/4, NE1/4NW1/4;
 SECTION 20: SW1/4SE1/4, NW1/4SE1/4, W1/2SW1/4;

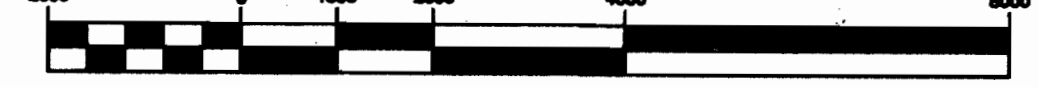
TOWNSHIP 39 SOUTH, RANGE 38 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 5: SW1/4SW1/4;
 SECTION 6: SE1/4SE1/4, NE1/4SE1/4, SW1/4NE1/4, GOVT. LOT 2;
 SECTION 7: SE1/4SE1/4, SW1/4SE1/4, SW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, NW1/4NW1/4;
 SECTION 10: SW1/4SW1/4, SE1/4SW1/4, NW1/4SE1/4, NE1/4SE1/4, SE1/4NE1/4;
 SECTION 17: SW1/4NW1/4, NE1/4NW1/4, NE1/4NW1/4, NW1/4NE1/4, NE1/4NE1/4;
 SECTION 18: NE1/4SW1/4, SE1/4SW1/4, NE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4;
 SECTION 19: NE1/4SE1/4, SE1/4NE1/4, SW1/4NE1/4, SE1/4NW1/4, NE1/4NW1/4;
 SECTION 20: SW1/4SE1/4, NW1/4SE1/4, W1/2SW1/4;

TOWNSHIP 39 SOUTH, RANGE 38 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 5: SW1/4SW1/4;
 SECTION 6: SE1/4SE1/4, NE1/4SE1/4, SW1/4NE1/4, GOVT. LOT 2;
 SECTION 7: SE1/4SE1/4, SW1/4SE1/4, SW1/4SE1/4, NE1/4SW1/4, SE1/4NW1/4, NW1/4NW1/4;
 SECTION 10: SW1/4SW1/4, SE1/4SW1/4, NW1/4SE1/4, NE1/4SE1/4, SE1/4NE1/4;
 SECTION 17: SW1/4NW1/4, NE1/4NW1/4, NE1/4NW1/4, NW1/4NE1/4, NE1/4NE1/4;
 SECTION 18: NE1/4SW1/4, SE1/4SW1/4, NE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4, SE1/4SW1/4;
 SECTION 19: NE1/4SE1/4, SE1/4NE1/4, SW1/4NE1/4, SE1/4NW1/4, NE1/4NW1/4;
 SECTION 20: SW1/4SE1/4, NW1/4SE1/4, W1/2SW1/4;

TOWNSHIP 39 SOUTH, RANGE 37 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 18: SE1/4SW1/4, NE1/4SW1/4, NW1/4SW1/4, NE1/4SE1/4, NE1/4SW1/4;
 SECTION 19: NE1/4SE1/4, SE1/4NE1/4, SW1/4NE1/4, GOVT. LOT 4;
 SECTION 30: GOVT. LOT 2, GOVT. LOT 3, GOVT. LOT 4;
 SECTION 31: SW1/4SE1/4, SE1/4SW1/4, NE1/4SW1/4, SE1/4NW1/4, NE1/4NW1/4, GOVT. LOT 1;

TOWNSHIP 39 SOUTH, RANGE 37 EAST, WILLAMETTE BASE & MERIDIAN:
 SECTION 24: SE1/4SE1/4, NE1/4SE1/4, SE1/4NE1/4;
 SECTION 25: SE1/4NE1/4, NE1/4NE1/4;

GRAPHIC SCALE



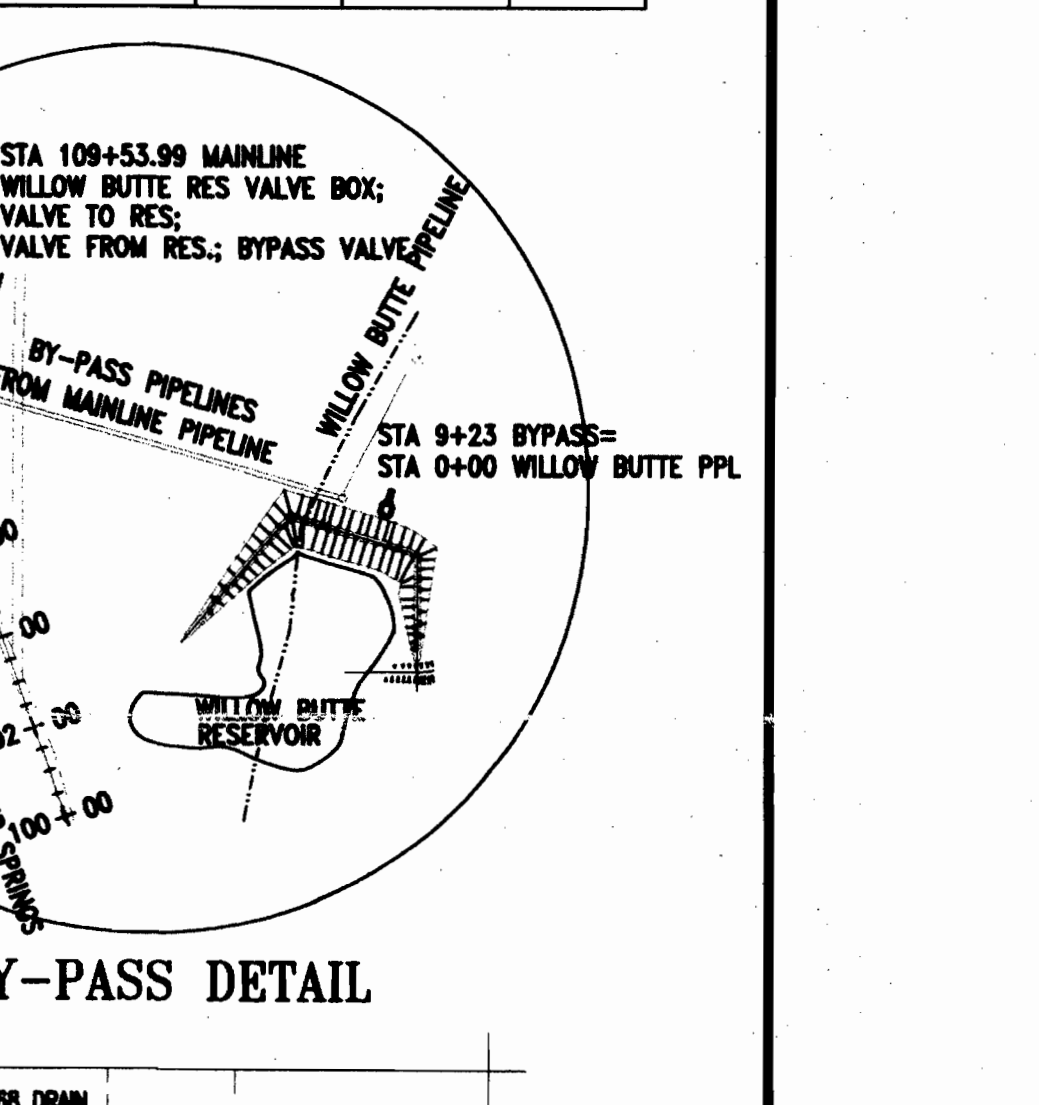
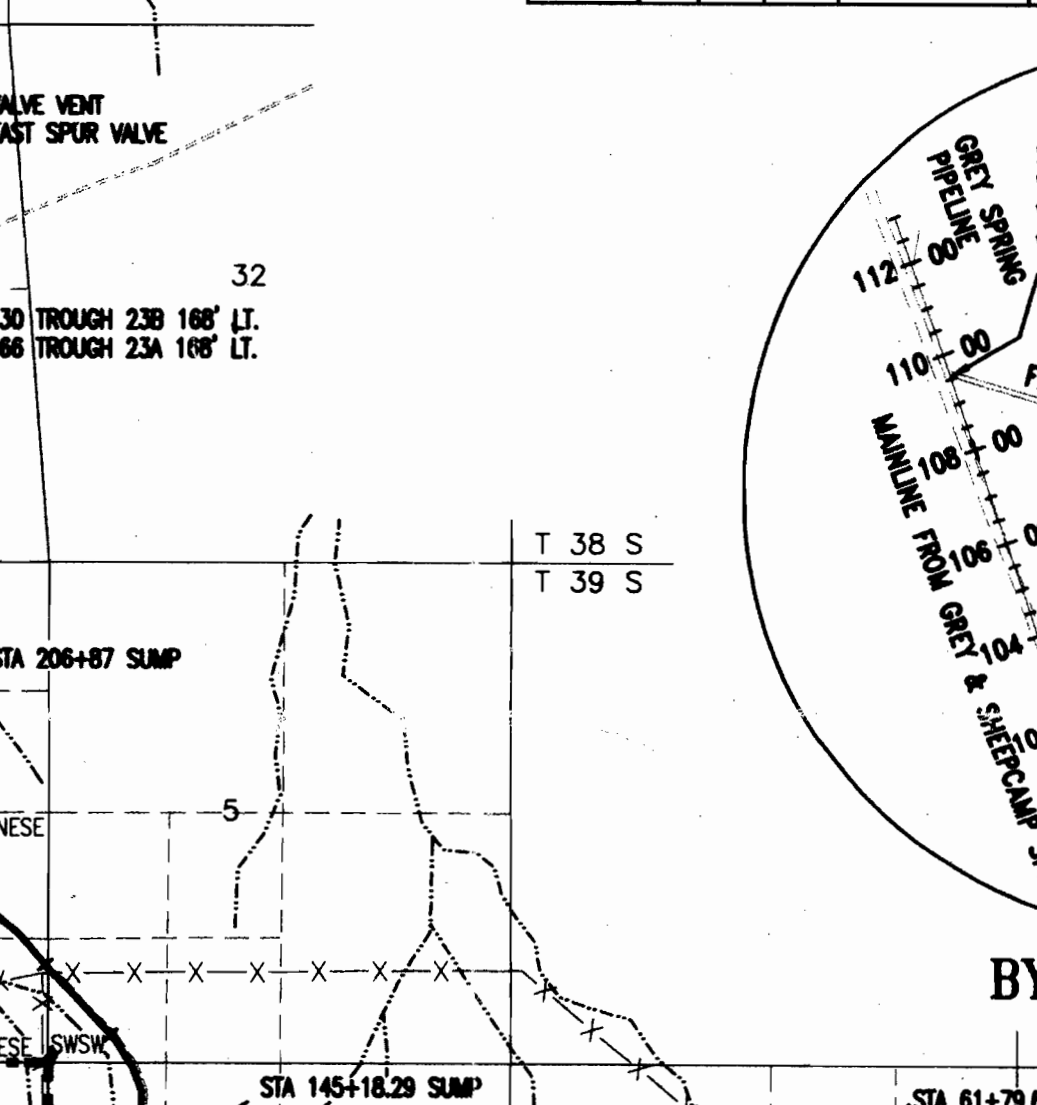
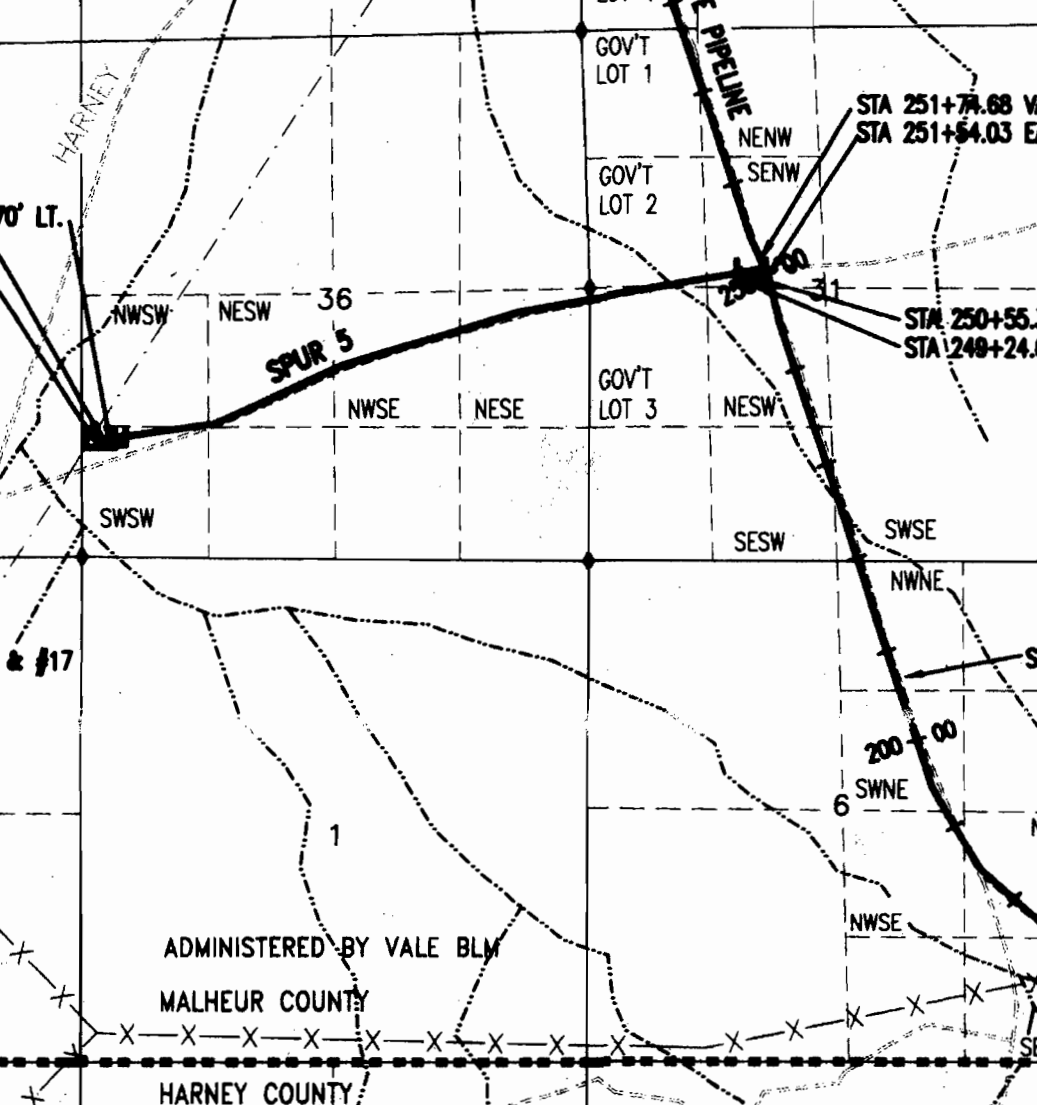
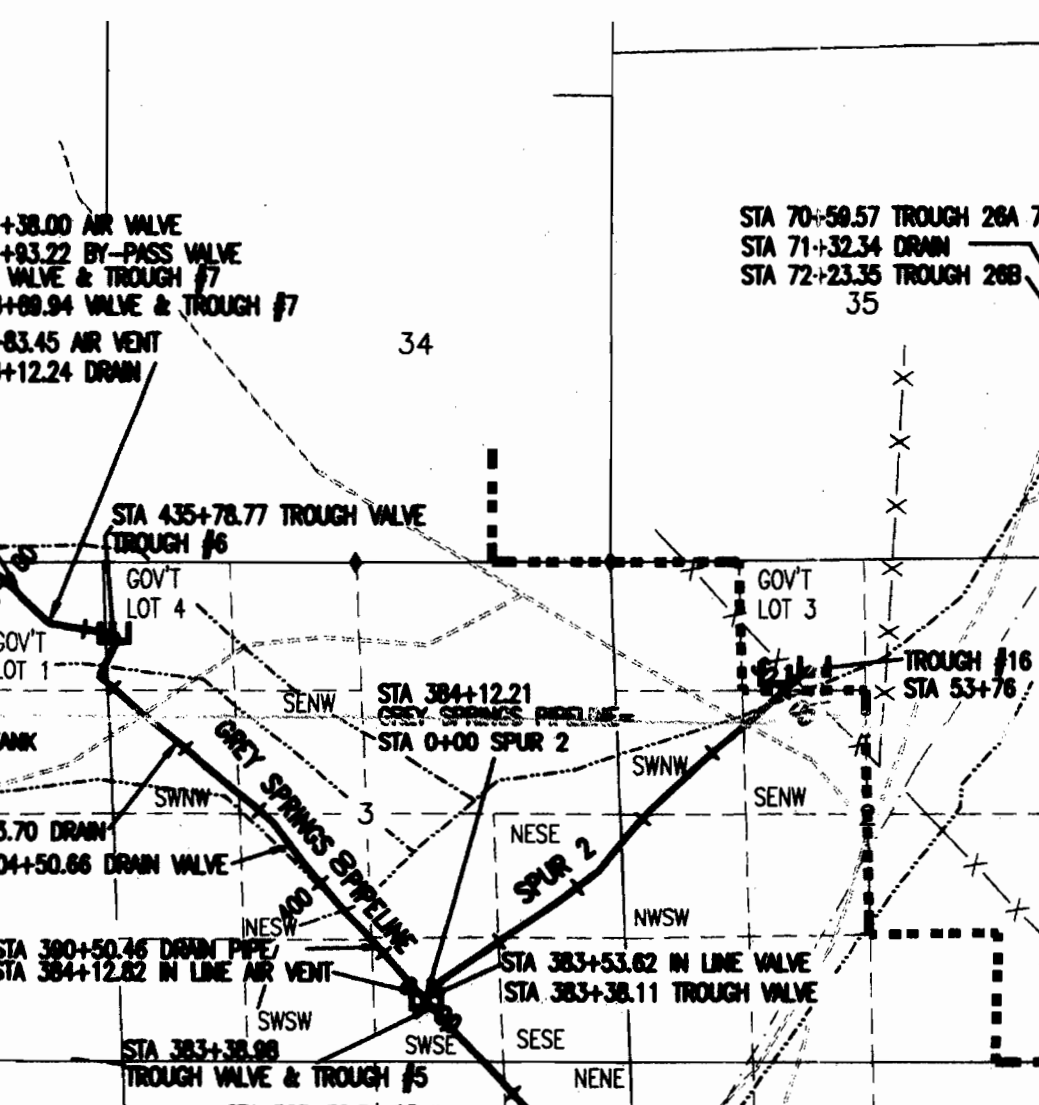
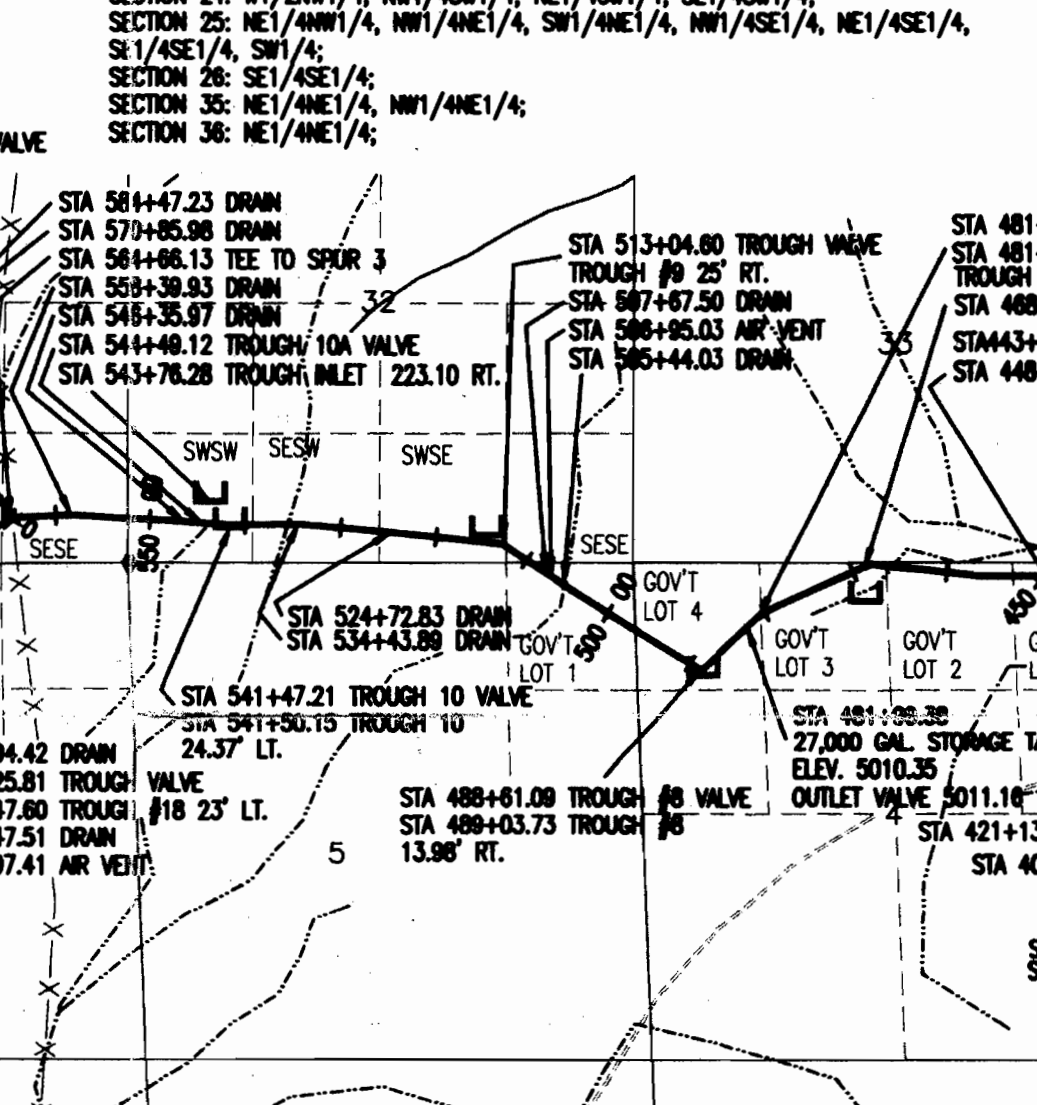
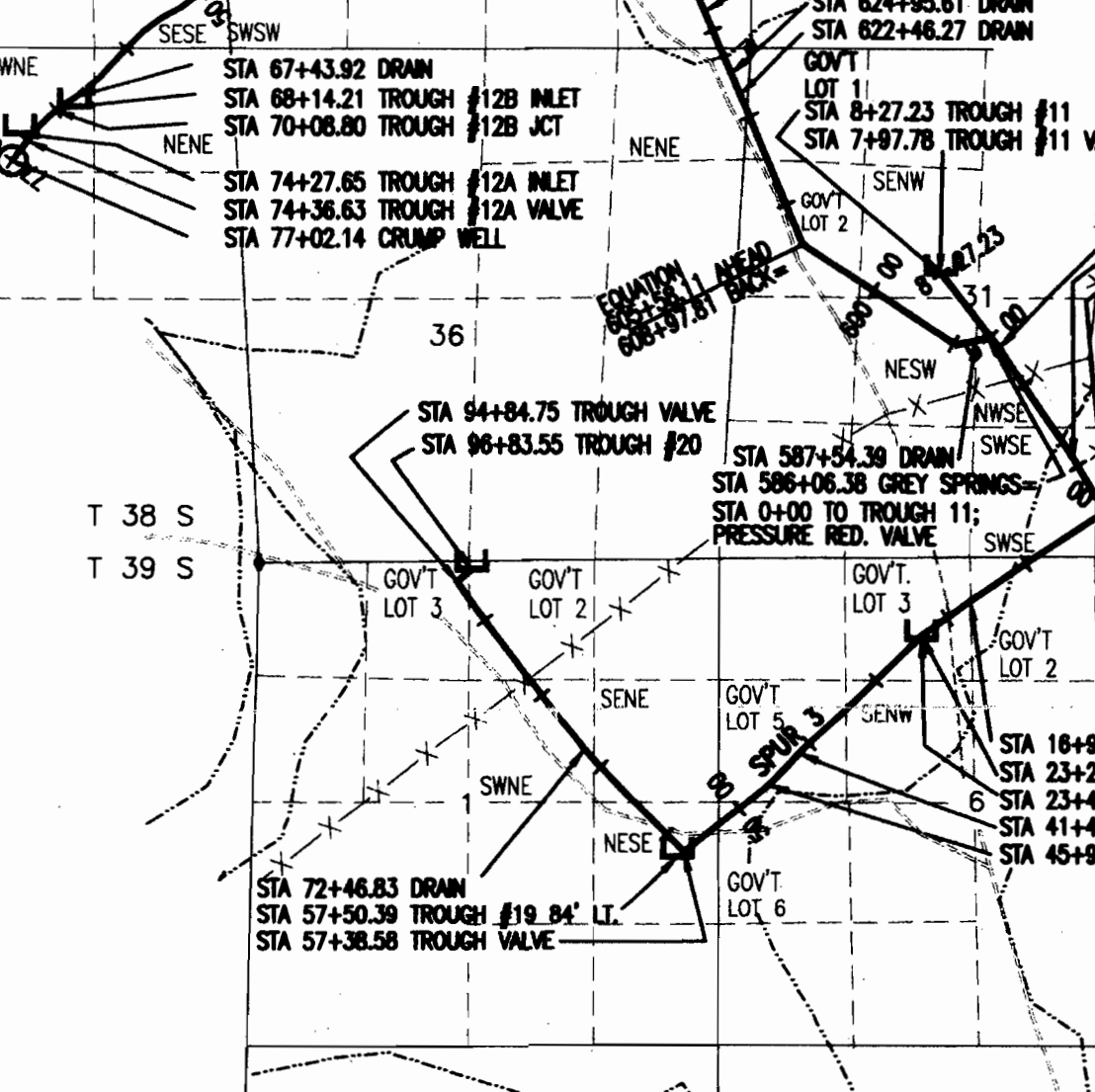
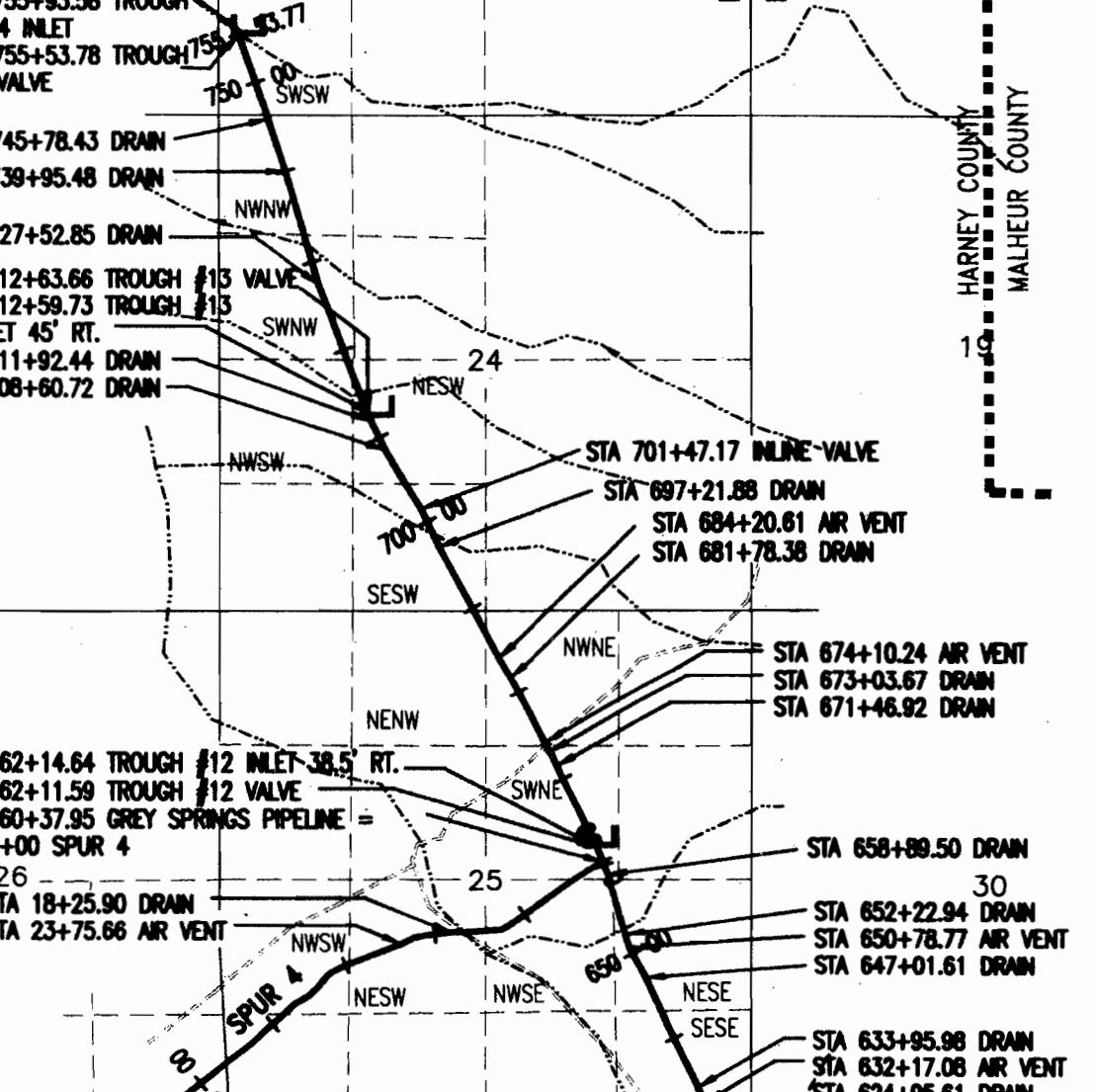
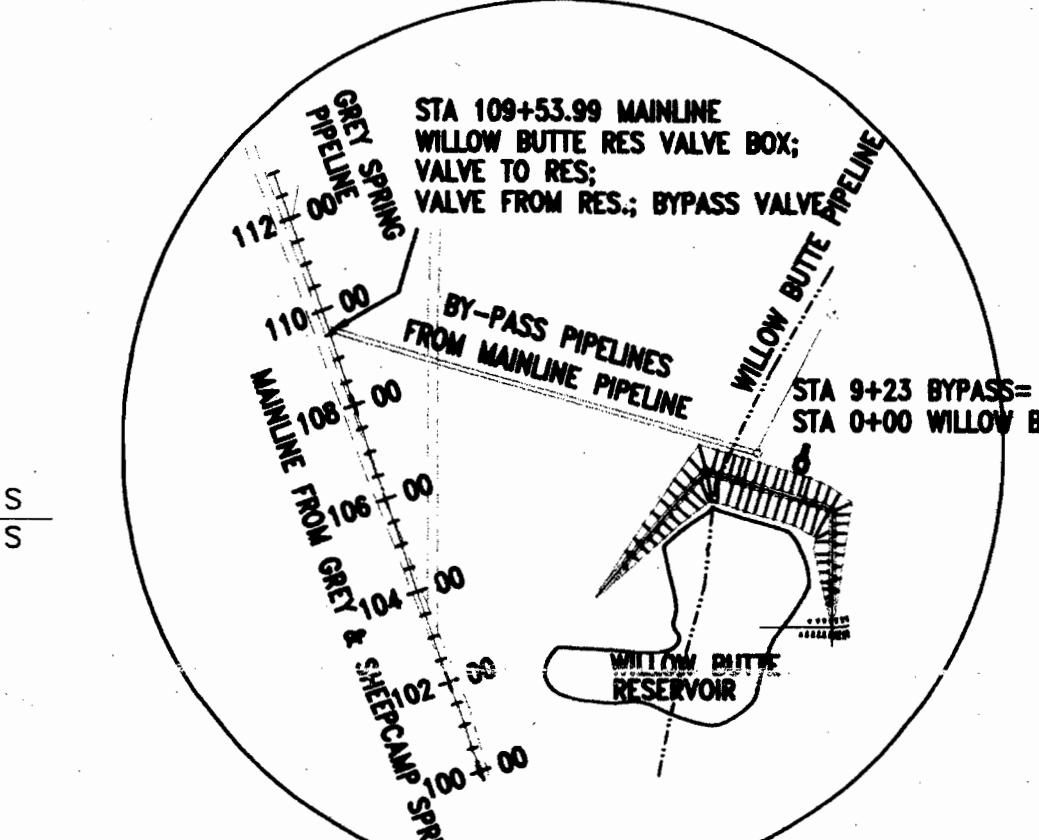
(IN FEET)
 1 inch = 2000 ft.

LEGEND

- SECTION LINE
- QTR SECTION LINE
- ROAD
- PIPELINE
- DRAINAGE
- POWER LINE
- TROUGH
- FOUND SECTION CORNER
- RESERVOIR
- SPRING
- COUNTY LINE
- PRIVATE PROPERTY

SECTION CORNERS

CORNER	SEC.	TSPH	RANGE	LATITUDE	LONGITUDE	NORTHING	EASTING	DESC.
N1/4	25	T39S	R38E	42°15'07.82192"	118°28'11.13704"	220261.618	2550963.518	MOUND
NW COR	1	T39S	R38E	42°13'23.44492"	118°19'49.20615"	210431.406	2567663.293	STONE
NW COR	3	T39S	R37E	42°13'23.10844"	118°28'45.68300"	209600.807	2556338.740	ALUM CAP
NE COR	3	T39S	R37E	42°13'23.70608"	118°29'59.77550"	210310.898	2562351.183	ALUM CAP
N1/4	3	T39S	R37E	42°13'23.80789"	118°21'34.98986"	210233.004	2579702.880	STONE
NE COR	6	T39S	R37E	42°13'23.89890"	118°28'11.13912"	209908.150	2568503.577	STONE
SE COR	7	T39S	R37E	42°11'37.17500"	118°24'25.07351"	199142.873	2567181.891	ALUM CAP
NW COR	25	T39S	R37E	42°15'08.85085"	118°19'49.18622"	221093.279	2567388.462	ALUM CAP
SE COR	6	T39S	R38E	42°12'31.08804"	118°17'30.05989"	205401.983	2598269.445	STONE
S 1/4	20	T39S	R38E	42°08'53.80001"	118°16'55.67108"	189548.688	2801274.910	STONE
NE COR	19	T39S	R38E	42°16'01.29592"	118°17'34.60128"	226685.369	2597366.962	ALUM CAP
W 1/4	19	T39S	R38E	42°15'34.58686"	118°18'38.68138"	223535.885	2582821.089	ALUM CAP
NW COR	31	T39S	R38E	42°14'18.18918"	118°18'59.83734"	215989.766	2592734.079	STONE
W 1/4	31	T39S	R38E	42°13'49.86234"	118°18'38.85442"	213237.676	2592895.193	STONE



PLACE OF USE

APP. S-06558 PERMIT 65100 (GREY SPRINGS PIPELINE)

TROUGH #	PIPELINE	DIAMETER	MATERIAL	LENGTH	CAPACITY
TROUGH #1	GREY SPRING PIT (AKA GREEN SPRING) RESERVOIR; SW1/4 SE1/4, SEC. 20, T.39S., R.38E., W.M. STA 2+24.76 12' RT. MAIN LINE	4.2"	W10.41X1.47 JET TROUGH	850 GAL.	
TROUGH #2	WILLOW BUTTE (66-5781) RESERVOIR; SE1/4 SW1/4, SEC. 18, T.39S., W.M. STA 1+48.80 20' RT. WILLOW BUTTE PIPELINE	3.6"	W14.1X1.37D	480 GAL.	
TROUGH #3	GREY SPRINGS PIPELINE	5.6"	W10.1X2.67 JET TROUGH	1450 GAL.	
TROUGH #4	GREY SPRINGS PIPELINE	4.2"	W12.1X2.2D JET TROUGH	1100 GAL.	
TROUGH #5	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #6	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #7	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #8	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #9	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #10	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #11	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #12	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #13	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #14	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #15	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #16	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #17	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #18	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #19	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	
TROUGH #20	GREY SPRINGS PIPELINE	3.6"	W14.1X1.2D	450 GAL.	

APP. S-71805 PERMIT 65161 (WILLOW BUTTE PIPELINE)

TROUGH #	PIPELINE	DIAMETER	MATERIAL	LENGTH	CAPACITY
TROUGH #1	WILLOW BUTTE PIPELINE	4.2"	W10.41X1.47 JET TROUGH	850 GAL.	
TROUGH #2	WILLOW BUTTE PIPELINE	3.6"	W14.1X1.37D	480 GAL.	
TROUGH #22A	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #22B	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #23	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #24A	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #24B	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #25A	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #25B	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #26A	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	
TROUGH #26B	WILLOW BUTTE PIPELINE	6.5"	W13.5X2.0D	1300 GAL.	

LINE STATIONING

APP. S-06558 PERMIT 65100 (GREY SPRINGS)

MAN LINE STA 0+00 TO STA 100+53.99 = 2.08 MILES
 GREY SPRINGS PIPELINE STA 100+53.99 TO STA 755+93.50 = 10.50 MILES
 SPUR 1 STA 0+00 (GREY SPRINGS PIPELINE STA 133+42.29) TO STA 16+26 = 0.31 MILE
 SPUR 2 STA 0+00 (GREY SPRINGS PIPELINE STA 384+12.21) TO STA 53+72 = 1.02 MILES
 SPUR 3 STA 0+00 (GREY SPRINGS PIPELINE STA 564+88.13) TO STA 86+83.55 = 1.83 MILES
 SPUR 4 STA 0+00 (GREY SPRINGS PIPELINE STA 680+37.95) TO STA 77+02.14 = 0.85 MILES
 TROUGH #11 LINE STA 0+00 (GREY SPRINGS PIPELINE STA) TO STA 8+27.23 = 0.15 MILE

APP. S-71805 PERMIT 65161 (WILLOW BUTTE)

MAN LINE STA 0+00 TO STA 100+53.99 = 2.08 MILES
 SHEEPCAMP SPRING (MAINLINE STA 50+00) TO STA 100+53.99 (MAINLINE) = 50.00 MILES
 WILLOW BUTTE BY-PASS LINE STA 0+00 (STA 100+53.99 MAINLINE) TO STA 9+23 (0+00 WILLOW BUTTE PIPELINE) 0.18 MILE
 WILLOW BUTTE PIPELINE 0+00 TO STA 419+21.82 = 7.94 MILES
 EAST SPUR STA 0+00 (WILLOW BUTTE PIPELINE STA 88+42.4) TO STA 81+70.38 = 1.55 MILES
 WEST SPUR STA 0+00 (WILLOW BUTTE PIPELINE STA 251+54.03) TO STA 72+23.35 = 1.37 MILES

DIVERSION LOCATIONS

WILLOW BUTTE RESERVOIR LOCATED 3014.27 FEET NORTH AND 1073.09 FEET WEST OF SE CORNER SEC. 18, T.39S., R.38E., W.M.

GREY SPRINGS LOCATED 281.96 FEET NORTH AND 509.34 FEET EAST OF S 1/4 SECTION CORNER, SEC. 20, T.39S., R.38E., W.M.

SHEEPCAMP SPRING LOCATED 2815.53 FEET SOUTH AND 809.49 FEET WEST OF NE CORNER SEC. 19, T.39S., R.38E., W.M.

REV. NO.	DESCRIPTION	DATE	APPROVED
	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT		
	VALE DISTRICT		OREGON
	GREY SPRINGS PIPELINE AND WILLOW BUTTE PIPELINE PLAN		
DESIGNED			
REVIEWED	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DRAWN: CG	SCALE: 1"=2000'		
DATE: 03/04/02	SHEET: 1 OF 1		
DRAWING NO. OR-030-01010	PPL-002-001		

SOFTDESK INFORMATION DDATITE TO ACCESS
 GEODESY INFORMATION DDATITE TO ACCESS
 SURVEY INFORMATION DDATITE TO ACCESS
 PLOT INFORMATION DDATITE TO ACCESS
 DRAWING INFORMATION DDRAWILL-PPL.DWG X-REF: NA

APP # 66558, PER # 53160
 APP # 71805, PER # 53161