

CONTROL NARRATIVE

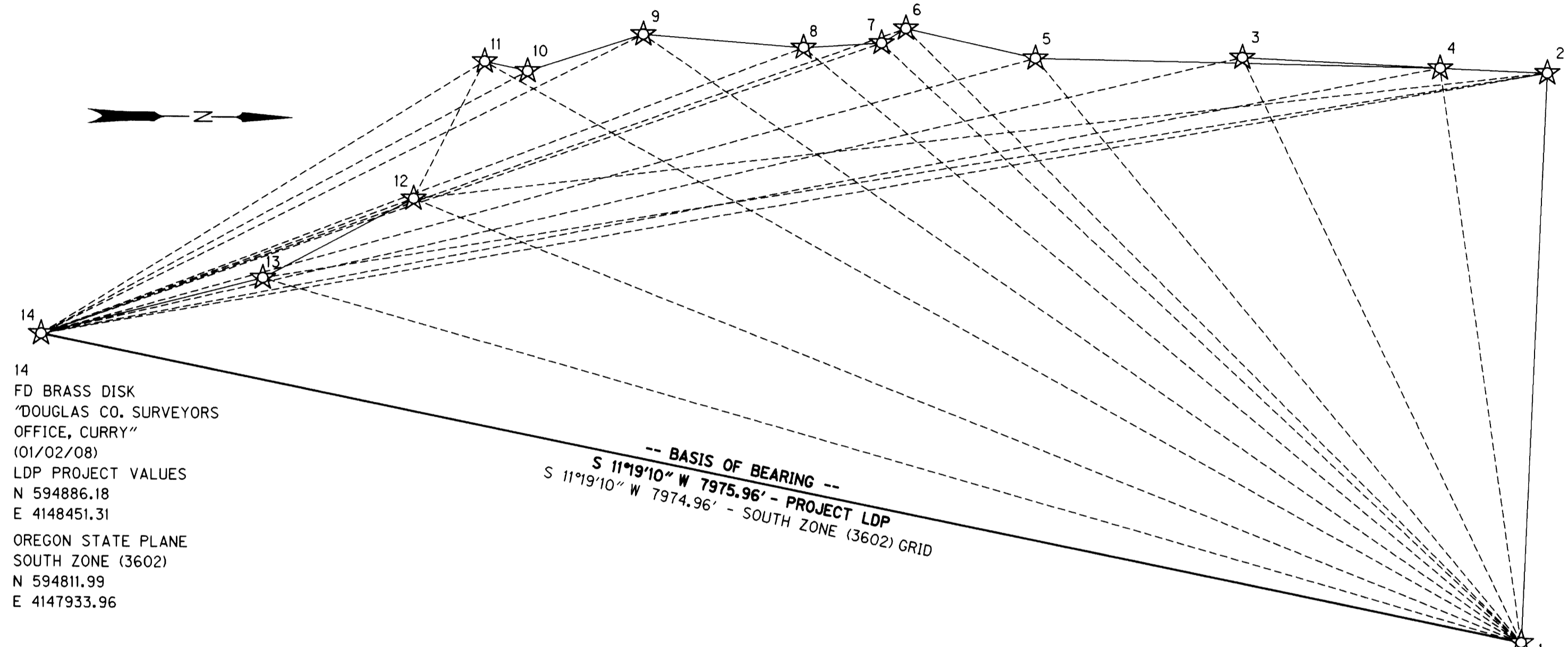
PROJECT: NORTH UMPQUA RIVER BROWN'S BRIDGE
 LOCATION: DOUGLAS COUNTY
 ODOT KEY NUMBER: 15467
 P.A. NUMBER: 25313
 OBEC PROJECT: 0019-0084.18
 SURVEY DATUM:
 HORIZONTAL - NAD83(CORS 93) EPOCH 2002 (INTERNATIONAL FEET)
 VERTICAL - NGVD 29 (US SURVEY FEET)

SW 1/4 SEC 34 T26S R6W WM
 NW 1/4 SEC 34 T26S R6W WM
 E 1/4 SEC 33 T26S R6W WM
 SE 1/4 SEC 28 T26S R6W WM
 NW 1/4 SEC 27 T26S R6W WM
 NE 1/4 SEC 28 T26S R6W WM

FILED
 Date: 3-12-2008 By: JC
 This survey consists of:
 Map: CO-206 & 31A
 Narrative:
 Corner Rpt: 10 Pgs
 DOUGLAS COUNTY
 SURVEYOR

GPS HORIZONTAL CONTROL SURVEY

THE PRIMARY HORIZONTAL CONTROL WAS BROUGHT INTO THE PROJECT BY USING AN OPUS-RS SOLUTION FOR CORS STATIONS "DDSN, CABL, CORV, PTSG, YBHB, P376, MDMT & REDM", THEREBY ESTABLISHING POSITIONS ON POINTS 1 AND 14. A SUBSEQUENT STATIC GPS SURVEY WAS PERFORMED TO ESTABLISH POSITIONS FOR POINTS 2 THROUGH 13. THE COORDINATE SYSTEM WAS HELD AT OREGON STATE PLANE - SOUTH ZONE (3602), UNTIL ALL GPS CONTROL SURVEYING AND ADJUSTMENTS WERE COMPLETE. THEN ALL POINTS WERE MOVED TO GROUND (LOCAL DATUM PLANE COORDINATE SYSTEM). TO CONVERT THE PROJECT LDP COORDINATES TO THE OREGON STATE PLANE COORDINATE SYSTEM - SOUTH ZONE NAD 83(CORS96) EPOCH 2002, MULTIPLY THE COORDINATE VALUES BY A COMBINED FACTOR OF 0.99987529.



14
 FD BRASS DISK
 "DOUGLAS CO. SURVEYORS
 OFFICE, CURRY"
 (01/02/08)
 LDP PROJECT VALUES
 N 594886.18
 E 4148451.31
 OREGON STATE PLANE
 SOUTH ZONE (3602)
 N 594811.99
 E 4147933.96

1
 FD BRASS DISK
 "DOUGLAS CO. SURVEYORS
 OFFICE, NU 4 1972"
 (01/02/08)
 LDP PROJECT VALUES
 N 602706.99
 E 4150016.84
 OREGON STATE PLANE
 SOUTH ZONE (3602)
 N 602631.82
 E 4149499.29

1.96 SIGMA (95%) CONFIDENCE LEVEL LIMITS

POINT NO	SEMI MAJOR	SEMI MINOR	ORIENTATION*
1	0.00 INT FT	0.00 INT FT	00°00'00.0"
2	0.01 INT FT	0.01 INT FT	78°39'15.5"
3	0.01 INT FT	0.01 INT FT	83°06'23.5"
4	0.01 INT FT	0.01 INT FT	81°00'50.4"
5	0.01 INT FT	0.01 INT FT	79°01'43.9"
6	0.01 INT FT	0.01 INT FT	78°34'28.3"
7	0.01 INT FT	0.01 INT FT	87°07'22.1"
8	0.01 INT FT	0.01 INT FT	73°21'45.5"
9	0.01 INT FT	0.01 INT FT	89°40'19.2"
10	0.01 INT FT	0.01 INT FT	87°51'54.5"
11	0.01 INT FT	0.01 INT FT	72°20'24.7"
12	0.01 INT FT	0.01 INT FT	80°08'04.1"
13	0.01 INT FT	0.01 INT FT	73°30'39.6"
14	0.00 INT FT	0.00 INT FT	00°00'00.0"

OPUS-RS NOTES

OREGON STATE PLANE SOUTH ZONE (3602) COORDINATE VALUES WERE DERIVED ON CONTROL POINT NUMBERS 1 AND 14 USING AN NGS OPUS-RS SOLUTION WITH THE FOLLOWING CORS STATIONS BEING HELD: DDSN, CABL, CORV, PTSG, YBHB, P376, MDMT, & REDM

CONTROL NETWORK SCHEMATIC & BASIS OF BEARING

NOT TO SCALE

LEGEND

- ☆ FOUND GPS STATION USED FOR NETWORK CONTROL
- ☆-☆ LINES OF OBSERVATION (NOT INTERVISIBLE)
- ☆-☆ LINES OF OBSERVATION (INTERVISIBLE)

*** NORTH AZIMUTH**

FIXED POINTS NOT SUBJECT TO LEAST SQUARES ADJUSTMENT OR CONFIDENCE LEVEL ANALYSIS: POINTS 1, 14

NETWORK POINT COORDINATE TABLE

PT. ID.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
1	602706.99	4150016.84	01-02-08	FD 2-1/2" BRASS CAP IN CONCRETE, UP 0.6', "DOUGLAS CO. SURVEYORS OFFICE, NU 4 1972"
2	602823.34	4147015.06	01-02-08	FD 3-1/2" BRASS CAP IN CONCRETE, FLUSH, "DOUGLAS CO. SURVEYORS OFFICE, NU 3, 1972"
3	601213.34	4146947.73	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
4	602257.89	4146994.48	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
5	600122.14	4146960.42	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
6	599437.82	4146807.93	01-02-08	FD MAGNAIL, FLUSH IN ASPHALT
7	599309.83	4146885.78	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
8	598898.92	4146913.64	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
9	598052.36	4146849.63	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
10	597443.81	4147047.57	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
11	597216.63	4146998.45	01-02-08	FD MAGNAIL, FLUSH IN ASPHALT
12	596846.84	4147724.33	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
13	596053.44	4148148.17	01-02-08	FD SPIKE WITH CENTER PUNCH, FLUSH IN ASPHALT
14	594886.18	4148451.31	01-02-08	FD 2-1/2" BRASS CAP IN CONCRETE, EXP 0.3', "DOUGLAS CO. SURVEYORS OFFICE, CURRY"

FD = FOUND

ENGLISH

REGISTERED PROFESSIONAL LAND SURVEYOR

LOGAN MILES

JULY 12, 2005

RENEWAL DATE: DEC. 31, 2008

OBEC CONSULTING ENGINEERS
 Corporate Office: 920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089, 541-683-6090
 2235 MISSION STREET SE, SUITE 100 SALEM, OREGON 97302-1296, 503-589-4100
 1335 POPLAR DRIVE MEDFORD, OREGON 97504-5207, 541-774-5590
 5005 SW MEADOWS ROAD, SUITE 120 LAKE OSWEGO, OREGON 97035, 503-620-6103

OREGON DEPARTMENT OF TRANSPORTATION

HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY
 NORTH UMPQUA RIVER BROWNS BRIDGE
 GARDEN VALLEY RD.
 DOUGLAS COUNTY

ODOT REGION 3
 3500 NW STEWART PARKWAY
 ROSEBURG, OR. 97470

JANUARY, 2008
 NO SCALE
 SHEET 3 OF 10

DESIGNED: LOGAN MILES
 DRAWN: DAVID JOHN
 CHK'D: ANDY AUSLAND

FILE NAME: 15467RET.dgn
 PROJ. NO. 0019-0084.18

RD6CNTRL