SHEET INDEX

- CONTROL AND SURVEY NARRATIVES, CONTROL DIAGRAM, AND BASIS OF BEARING
- SURVEY
- RECOVERED MONUMENT TABLE AND REFERENCE LIST

NARRATIVE

THE PURPOSE OF THIS SURVEY IS TO RESOLVE THE FIELD LOCATION OF THE RIGHT OF WAY CENTERLINE AND THE RIGHT OF WAY MARGINS FOR PORTIONS OF MAIN STREET AND FIRST STREET IN JACKSONVILLE, OREGON. THIS SURVEY WAS MADE AT THE REQUEST OF THE CITY OF JACKSONVILLE AND THE OREGON DEPARTMENT OF TRANSPORTATION FOR A ROADWAY IMPROVEMENT PROJECT.

THIS SURVEY MEETS THE REQUIREMENTS FOR A RECOVERY SURVEY AS OUTLINED IN THE OREGON REVISED STATUTES CHAPTER 209.155. PERPETUATION OF THE LOCATIONS WAS ACCOMPLISHED BY TYING THE FOUND MONUMENTS OF RECORD TO THE PROJECT CONTROL NETWORK

THIS SURVEY WAS PERFORMED DURING SEPTEMBER, OCTOBER, AND NOVEMBER OF 2011. THE SURVEY EQUIPMENT USED CONSISTED OF ONE TRIMBLE R8 GPS RECEIVER, ONE TRIMBLE S6 ROBOTIC TOTAL STATION, ONE TRIMBLE TSC2 CONTROLLER RUNNING SURVEY CONTROLLER VERSION 12.22 SOFTWARE, AND ONE TRIMBLE TSC3 CONTROLLER RUNNING TRIMBLE ACCESS VERSION 2011.10.

MAIN STREET - "M" LINE

THE CENTERLINE OF MAIN STREET BETWEEN OREGON STREET AND HIGHWAY 238 WAS RESOLVED BY HOLDING THE TWO FOUND CENTERLINE MONUMENTS TIED AS POINT NUMBERS 1000 AND 1003 AS SHOWN HEREON. THE RIGHT-OF-WAY MARGINS WERE THEN OFFSET PARALLEL WITH SAID CENTERLINE THE RECORD DISTANCE OF 25.00'. "M" LINE STATIONING IS PROJECT SPECIFIC.

FIRST STREET - "F" LINE

THE CENTERLINE OF FIRST STREET BETWEEN MAIN STREET AND FIR STREET WAS RESOLVED BY HOLDING THE TWO FOUND CENTERLINE MONUMENTS TIED AS POINT NUMBERS 1000 AND 1008 AS SHOWN HEREON. THE RIGHT-OF-WAY MARGINS WERE THEN OFFSET PARALLEL WITH SAID CENTERLINE THE RECORD DISTANCE OF 25.00 FEET AND 30.00 FEET AS SHOWN HEREON. "F" LINE STATIONING IS PROJECT SPECIFIC.

CONTROL NARRATIVE

SURVEY DATUM:

PROJECT: FIRST ST. & MAIN ST. SIDEWALK AND STREET SCAPE: JACKSONVILLE, OR LOCATION: JACKSON COUNTY ODOT KEY NUMBER: 16808 OBEC PROJECT: 019-100.08

HORIZONTAL - NAD 83(CORS 96) EPOCH 2002 (INTERNATIONAL FEET)

VERTICAL - NAVD 88 (INTERNATIONAL FEET)

HORIZONTAL CONTROL SURVEY

THE PRIMARY HORIZONTAL CONTROL WAS BROUGHT INTO THE PROJECT BY USING AN OPUS-RS SOLUTION FROM CORS STATIONS 'DDSN, DCSO, ORK6, PTSG, CABL, TRND, P170, P349, P341" TO ESTABLISH POSITIONS ON POINTS 1 AND 2. THE LOCAL DATUM PLANE (LDP) COORDINATES FOR CONTROL POINTS 1 AND 2 WERE CALCULATED BY APPLYING THE MEAN COMBINED SCALE FACTOR TO THE OREGON STATE PLANE COORDINATE SYSTEM - SOUTH ZONE NAD 83(CORS96) EPOCH 2002 COORDINATES OF CONTROL POINTS 1 AND 2. A SUBSEQUENT LEAST SQUARES ADJUSTED CONVENTIONAL TRAVERSE WAS THEN RUN TO ESTABLISH LDP COORDINATES FOR CONTROL POINT NUMBERS 3, 4, AND 5. 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 0.99992882. THE BASIS OF BEARING FOR THIS SURVEY IS BASED ON A STRAIGHT LINE BETWEEN CONTROL POINTS 1 AND 2.

CONTROL POINTS FOR THIS SURVEY WERE NOT SET ON AND DO NOT REPRÉSENT PROPERTY LINES OR RIGHT-OF-WAY LINES AND ARE INTENDED FOR USE SOLELY BY THE CITY OF JACKSONVILLE, THE OREGON DEPARTMENT OF TRANSPORTATION (ODOT), AND OBEC CONSULTING ENGINEERS IN SUPPORT OF FUTURE PROJECTS. IT IS NOT THE INTENT OF THE CITY OF JACKSONVILLE, ODOT, OR OBEC CONSULTING ENGINEERS TO PERPETUATE THESE CONTROL POINTS AS MONUMENTS.

CONTROL POINT COORDINATE TABLE *CONVERGENCE ANGLE AT POINT NO. 1 = -1°41'20"

PT	LDP	LDP		:
ΙD	NORTHING	EASTING	DATE	DESCRIPTION
1	245790.57	4253905.11	9-7-11	SET 1" COPPER DISK STAMPED "OBEC"
2	245346.71	4253411.36	9-7-11	SET MAGNAIL AND WASHER STAMPED "OBEC CONTROL"
3	246026.56	4253659.44	9-7-11	SET 1" COPPER DISK STAMPED "OBEC"
4	245765.64	4253426.55	9-7-11	SET MAGNAIL AND WASHER STAMPED "OBEC CONTROL"
5	245553.74	4253175.51	9-7-11	SET MAGNAIL AND WASHER STAMPED "OBEC CONTROL"

NW 1/4 SEC 32 T37S R2W WM

RESIDUALS FOR DISTANCES

BET	WEEN	DISTANCE**	DISTANCE RESIDUAL
1	3	340.65′	0.006′
3	4	349.74′	0.013′
4	5	328.51′	0.011′
5	2	313.82′	0.005′

** CALCULATED HORIZONTAL GRID DISTANCES IN FEET DERIVED FROM THE MEASURED SLOPE GRID DISTANCES

RESIDUALS FOR ANGLES

BACKSIGHT STATION	OCCUPIED STATION	FORESIGHT STATION	RESIDUAL
2	1	3	-0°00′08.6″
1	3	4	0°00′05.5″
3	4	5	0°00′02.8″
4	5	2	0°00′03.0″
5	2	1	-0°00′10.8″

1.96 SIGMA (95%) CONFIDENCE LEVEL LIMITS

POINT NO	SEMI MAJOR	SEMI MINOR	ORIENTATION*
3	0.02 INT FT	0.02 INT FT	72.3°
4	0.02 INT FT	0.02 INT FT	32.7°
5	0.02 INT FT	0.02 INT FT	13.0°

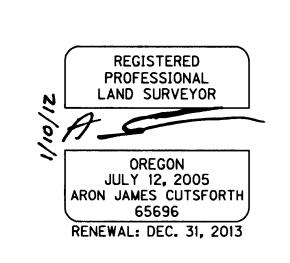
* NORTH AZIMUTH

FIXED POINTS NOT SUBJECT TO LEAST SQUARES ADJUSTMENT OR CONFIDENCE LEVEL ANALYSIS: POINTS 1 AND 2

LEGEND SET GPS CONTROL POINT SET NETWORK POINT LINES OF OBSERVATION EDGE OF PAVEMENT

OPUS-RS NOTES

OREGON STATE PLANE SOUTH ZONE (3602) COORDINATE VALUES WERE DERIVED ON CONTROL POINT NUMBERS 1 AND 2 USING AN NGS OPUS-RS SOLUTION WITH THE FOLLOWING CORS STATIONS BEING HELD: DDSN. DCSO. ORK6, PTSG, CABL, TRND, P170, P349, P341



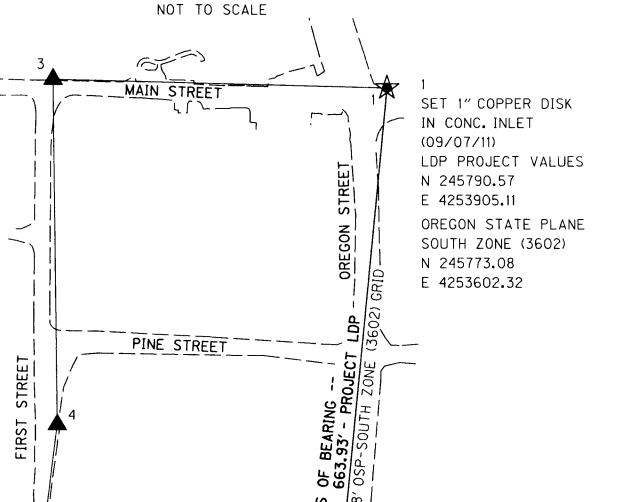
GROUP MANAGER

J. COLTON

APPROVED BY:

* RECEIVED * DATE 1-12-12BY 66 This survey consists of: _**3_**_ sheet(s) Map .**Q**. page(s) Narrative JACKSON COUNTY SURVEYOR

CONTROL NETWORK SCHEMATIC & BASIS OF BEARING



SET MAGNAIL & WASHER "OBEC CONTROL" (09/07/11) LDP PROJECT VALUES N 245346.71 E 4253411.36

OREGON STATE PLANE SOUTH ZONE (3602) N 245329.25 E 4253108.60

FILE NAME: 16808ret.dan

Corporate Office: 920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089, 541-683-6090 OBEC CONSULTING ENGINEERS 2235 MISSION STREET SE. SUITE 100 SALEM. OREGON 97302-1295. 503-589-4100 831 O'HARE PARKWAY MEDFORD, OREGON 97504-4005, 541-774-5590 www.abec.com 5005 SW MEADOWS ROAD, SUITE 120 LAKE OSWEGO, OREGON 97035, 503-620-6103

CITY OF JACKSONVILLE PUBLIC WORKS OREGON DEPARTMENT OF TRANSPORTATION

HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY FIRST ST. & MAIN ST. SIDEWALK AND STREETSCAPE JACKSON COUNTY

CHK'D: J. COLTON

ODOT REGION 3 100 ANTELOPE ROAD WHITE CITY, OR 97503

OBEC | DESIGNED: A. CUTSFORTH

DRAWN: E. BLAKE

FIR STREET

KEY NO. 16808

NO SCALE SHEET 1 OF 3 PROJ. NO. 019-100.08

JANUARY, 2012

21002

* * RECEIVED * *

DATE /-/2-/2Y

This survey consists of:

_____ sheet(s) Map

____ page(s) Narrative

JACKSON COUNTY

SURVEYOR

<u>REFERENCES</u>

- 1. COUNTY SURVEY NO. 20184
- 2. COUNTY SURVEY NO. 20767
- 3. THE PLAT OF THE ORIGINAL TOWN OF JACKSONVILLE, OREGON
- 4. COUNTY SURVEY NO. 17499
- 5. COUNTY SURVEY NO. 14967
- 6. COUNTY SURVEY NO. 16186
- 7. COUNTY SURVEY NO. 10743
- 8. COUNTY SURVEY NO. 16223
- 9. COUNTY SURVEY NO. 12382
- 10. COUNTY SURVEY NO. 2836
- 11. COUNTY SURVEY NO. 11528
- 12. COUNTY SURVEY NO. 2749
- 13. COUNTY SURVEY NO. 2449
- 14. JACKSON COUNTY SURVEYOR'S CORNER RECORDS
- 15. INSTRUMENT NO. 95-22336, OFFICIAL RECORDS OF JACKSON COUNTY, OREGON

FD = FOUND

OPC = ORANGE PLASTIC CAP
YPC = YELLOW PLASTIC CAP

CS = COUNTY SURVEY

I.D. = INSIDE DIAMETER J.C.S.C.R. = JACKSON COUNTY SURVEYOR'S CORNER RECORDS

RECOVERED MONUMENT LIST

*ALL FOUND MONUMENTS ARE IN GOOD CONDITION UNLESS NOTED OTHERWISE

	NORTHING	LDP EASTING	STATION	OFFSET	DATE	DESCRIPTION & REFERENCE DOCUMENTS
1000	246018.99	4253656.54	"F" 0+00	0.00′	10/7/2011	FD 3/4" IRON ROD, DOWN 0.6', PER CS 2836
		4253474.89	"F" 2+55.08	0.11' LT		FD 5/8" IRON ROD, DOWN 0.7', PER CS 16186
		4253422.10	"F" 3+44.90	15.94′ LT		FD RAILROAD SPIKE, FLUSH, NO RECORD FOUND
	245787.79		"M" 0+00	0.00′		FD RAILROAD SPIKE, DOWN 0.2', PER CS 2836
		4253912.79	N/A	N/A	10/7/2011	FD TACK IN LEAD PLUG WITH BRASS WASHER STAMPED "LS 1656", FLUSH, PER CS 11528
	245824.43		N/A	N/A	10/7/2011	FD TACK IN LEAD PLUG WITH BRASS WASHER STAMPED "LS 1656". FLUSH. PER CS 11528
	245840.40		"M" 0+49.22	25.01′ RT	10/7/2011	FD 5/8" IRON ROD W/OPC STAMPED "NEATHAMER SURVEYING". FLUSH. PER CS 20184
	245837.56		"M" 0+94.53	25.01′ LT	10/7/2011	FD 5/8" IRON ROD W/YPC STAMPED "L. J. FRIAR & ASSOC.", FLUSH, PER CS 16186
		4253186.06	"F" 6+60.63	0.00′	10/17/2011	FD 5/8" IRON ROD, DOWN 0.7'. PER CS 14967
	245597.71		"F" 6+30.58	30.03′ RT	11/3/2011	FD 5/8" IRON ROD W/2" ALUM. CAP STAMPED "JACKSON COUNTY SURVEYOR", FLUSH, PER CS 20767
	245590.48		"F" 5+80.01	29.97' LT	11/3/2011	FD 5/8" IRON ROD W/YPC STAMPED "L. J. FRIAR & ASSOC.". UP 0.1'. PER CS 14967
	245553.53		"F" 6+32.45	30.17′ RT	11/3/2011	FD 5/8" IRON ROD, DOWN 0.4', NO RECORD FOUND
	245627.90		"F" 5+26.59	30.09′ RT	11/3/2011	FD 5/8" IRON ROD, UNDER ROCK PILE, PER CS 2749
	245670.41		"F" 4+65.16	30.95′ LT	11/3/2011	FD 3/4" IRON ROD, UNDER ROCK PILE, PER CS 2749
	245769.08		"F" 3+86.37	29.93′ RT	11/3/2011	FD 5/8" IRON ROD W/2" ALUM. CAP STAMPED "JACKSON COUNTY SURVEYOR", FLUSH, PER CS 20767
	246031.08		"M" 2+80.13	62.34′ RT	11/3/2011	FD 5/8" IRON ROD W/OPC STAMPED "NEATHAMER SURVEYING". DOWN 0.5'. PFR CS 20184
	246016.01		"M" 2+46.15	75.36' RT	[11/3/2011]	FD 5/8" IRON ROD W/YPC, CAP IS ILLEGIBLE. DOWN 0.1'. PFR CS 16223
	246013.03		"M" 2+49.58	67.63′ RT	11/3/2011	FD 5/8" IRON ROD W/OPC STAMPED "NEATHAMER SURVEYING", DOWN 0.1', PER CS 20184
	245991.03		"M" 2+60.71	25.00' RT	[11/3/2011]	FD 5/8" IRON ROD W/OPC STAMPED "NEATHAMER SURVEYING". DOWN 0.2'. PFR CS 20184
	245982.21		"M" 2+37.43	36.06' RT	11/3/2011	FD 5/8" IRON ROD W/YPC STAMPED "L. J. FRIAR & ASSOC.". FLUSH, PER CS 16223
		4253791.63	"M" 1+57.46	24.95′ RT	11/3/2011	FD 5/8" IRON ROD W/YPC STAMPED "JACKSON C.S.". FLUSH. PER CS 12382
		4253717.75	"M" 2+67.52	29.69' RT	11/4/2011	FD 5/8" IRON ROD W/OPC STAMPED "NEATHAMER SURVEYING", DOWN 0.2', PER CS 20184
		4253807.73	<u>"M" 1+71.46</u>	61.35 RT	11/4/2011	FD 5/8" IRON ROD W/YPC STAMPED "L. J. FRIAR & ASSOC.". DOWN 0.5', PER CS 16223
	245925.70		"F" 1+62.39	29.07,7 RT	11/4/2011	FD 3/4" I.D. IRON PIPE, DOWN 0.8', NO RECORD FOUND
		4253758.18	"M" 1+54.48	24.95′ LT	11/4/2011	FD 5/8" IRON ROD W/YPC STAMPED "L. J. FRIAR & ASSOC.", FLUSH, PER CS 16186
	245791.64		"M" 0+30.01	24.97' LT	11/4/2011	FD TACK & WASHER IN LEAD PLUG, FLUSH, PER CS 20184
	245980.06		"M" 2+94.59	25.01' LT	11/10/2011	FD 5/8" IRON ROD W/OPC STAMPED "NEATHAMER SURVEYING", FLUSH, PER CS 20184
	245774.41		0+00.00	19.061 LT	11/10/2011	FD 3/4" IRON ROD, DOWN 0.8', PER CS 2449
1028	246622.50	4252624.83	N/A	N/A	11/10/2011	FD 2-1/2" BRASS CAP STAMPED "JACKSON COUNTY SURVEYOR T37S R2W 30 29 31 32 1999
1000	0.45.00 : 5.5					UNLAWFUL TO DISTURB", FLUSH, PER J.C.S.C.R.
1029	245604.80	4253179.40	"F" 6+30.57	39.97′ RT	11/10/2011	FD 5/8" IRON ROD, FLUSH, PER CS 10743

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 12, 2005
ARON JAMES CUTSFORTH
65696
RENEWAL: DEC. 31, 2013

FILE NAME: 16808ret.dgn



Carporate Office: 920 COUNTRY CLUB ROAD, SUITE 100B EUGENE, OREGON 97401-6089, 541-683-6090 2235 MISSION STREET SE, SUITE 100 SALEM, OREGON 97302-1295, 503-589-4100 831 O'HARE PARKWAY MEDFORD, OREGON 97504-4005, 541-774-5590 5005 SM MEADOWS ROAD, SUITE 120 LAKE OSWEGO, OREGON 97035, 503-620-6103

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HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT SURVEY
FIRST ST. & MAIN ST. SIDEWALK AND STREETSCAPE
JACKSON COUNTY

ODOT REGION 3 100 ANTELOPE ROAD WHITE CITY, OR 97503

KEY NO. 16808

JANUARY, 2012 NO SCALE SHEET 3 OF 3

DESIGNED: A. CUTSFORTH PROJ. NO. 019-100.08

DRAWN: E. BLAKE CHK'D: J. COLTON

