

RECOVERY MAP SHEET
 E 1/2 SEC 12, T. 2 N. R. 7 E., WM
 N 1/2 SEC 7, T. 2 N. R. 8 E., WM

Hood River County Surveyor's Office
 Survey No. CS 2007 051
 Filed MAY 1, 2007
 By Rachael Thurston

CONTROL NARRATIVE

PROJECT: BUNDLE 208 - CASCADE LOCKS
 LOCATION: HOOD RIVER COUNTY
 THURSTON PROJECT:
 SURVEY COORDINATES: LOCAL DATUM PLANE (LDP)
 HORIZONTAL - NAD83(CONUS) (INTERNATIONAL FEET)
 VERTICAL - NAVD88 (INTERNATIONAL FEET)

THE PURPOSE OF THIS SURVEY IS TO ESTABLISH HORIZONTAL AND VERTICAL CONTROL FOR TOPOGRAPHIC MAPPING OF INTERSTATE 84 FROM MILE POST 44.44 TO MILE POST 45.66.

FIELD OBSERVATIONS WERE TAKEN ON SEPTEMBER 14, 2006 AND SEPTEMBER 18, 2006 UTILIZING 2 TRIMBLE 4800 DUAL GPS RECEIVERS. DATA WAS COLLECTED AT 5 SECOND EPOCHS FOR A MINIMUM OF 15 MINUTES AT EACH CONTROL STATION. STATIC SESSIONS WERE PERFORMED ON POINTS 11 AND 13.

ALL FIELD DATA WAS PROCESSED USING TRIMBLE GEOMATICS OFFICE 1.60. THE HORIZONTAL DATUM IS NAD 1983 (CONUS) WITH POINTS 11, 12, AND 13 CONSTRAINING CONTROL FOR THE HORIZONTAL NETWORK. THESE POINTS, KNOWN AS "CRH-5", "CRH-6", AND "P44" RESPECTIVELY, HAVE COORDINATES PUBLISHED ON HOOD RIVER COUNTY SURVEY 2000-037.

A TRIMBLE DINI 22 DIGITAL LEVEL WAS USED TO RUN LEVELS FROM NATIONAL GEODETIC SURVEY BENCHMARK "E 719 1987" TO NETWORK POINTS 3, 5, 7, AND 8. ELEVATIONS ON THESE WERE HELD IN THE VERTICAL ADJUSTMENT ALONG WITH PUBLISHED DATA ON "CRH-5", "CRH-6", AND "P44" TO PRODUCE ELEVATIONS ON THE REMAINING POINTS. THE VERTICAL DATUM IS NAVD 88.

THE RESULTS PRODUCED LATITUDE, LONGITUDE AND STATE PLANE - NORTH ZONE COORDINATES. STATE PLANE - NORTH ZONE COORDINATES WERE CONVERTED TO LOCAL DATUM PLANE BY DIVIDING EACH COORDINATE BY A COMBINED FACTOR OF 0.99999856. TO CONVERT THE PROJECT LDP COORDINATES BACK TO OREGON STATE PLANE - NORTH ZONE COORDINATES MULTIPLY BY THE COMBINED FACTOR.

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ALIGNMENT NARRATIVE

THE ALIGNMENT OF INTERSTATE 84 WAS DEVELOPED BY HOLDING THE LOCATION OF POINTS 208, 216, AND 217 FOR STATION AND OFFSET PER HOOD RIVER COUNTY SURVEY NUMBER 88057. BASED ON THESE THREE POINTS THE ALIGNMENT WAS DEVELOPED PER STATE HIGHWAY ROW DRAWING NUMBERS 8B-7-6 AND 6B-35-5.

Job No. 06-1484
 ODOT KEY NO. 14030
 9 Mar 2007

I, Rachael E. Thurston, state that this survey was prepared using Hewlett-Packard Product # 51640A on Milano JPC4M2 polyester film.

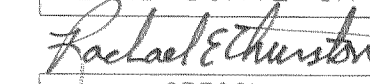
 OREGON DEPARTMENT OF TRANSPORTATION

THURSTON & ASSOCIATES, INC.
 415 N. STATE ST., SUITE 120 LAKE OSWEGO, OR 97034
 503 697 0757

RECOVERY AND NETWORK MAP
 CASCADE LOCKS #06-1484

INTERSTATE 84
 MP 44.5 TO 45.5
 HOOD RIVER, OREGON

Design Team Leader - Rachael Thurston
 Designed By - Michael
 Drafted By - Bob Habbe

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR

 OREGON
 JULY 25, 1990
 RACHAEL E. THURSTON
 2435

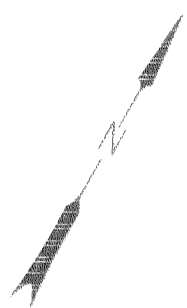
DATE OF RENEWAL 30 JUNE 08

SURVEY CONTROL PLAN

SHEET
 NO.
 1 OF 5

5-1-07

CS 2007 051-1



SHEET LAYOUT
 E 1/2 SEC 12, T. 2 N. R. 7 E., WM
 N 1/2 SEC 7, T. 2 N. R. 8 E., WM
 SCALE: N.T.S.

Hood River County Surveyor's Office
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 Filed **MAY 1, 2007**
 By *Rachael Thurston*

SHEET 3

SHEET 4



Job No. 06-1484
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LEGEND	
	ROW
	ALIGNMENT

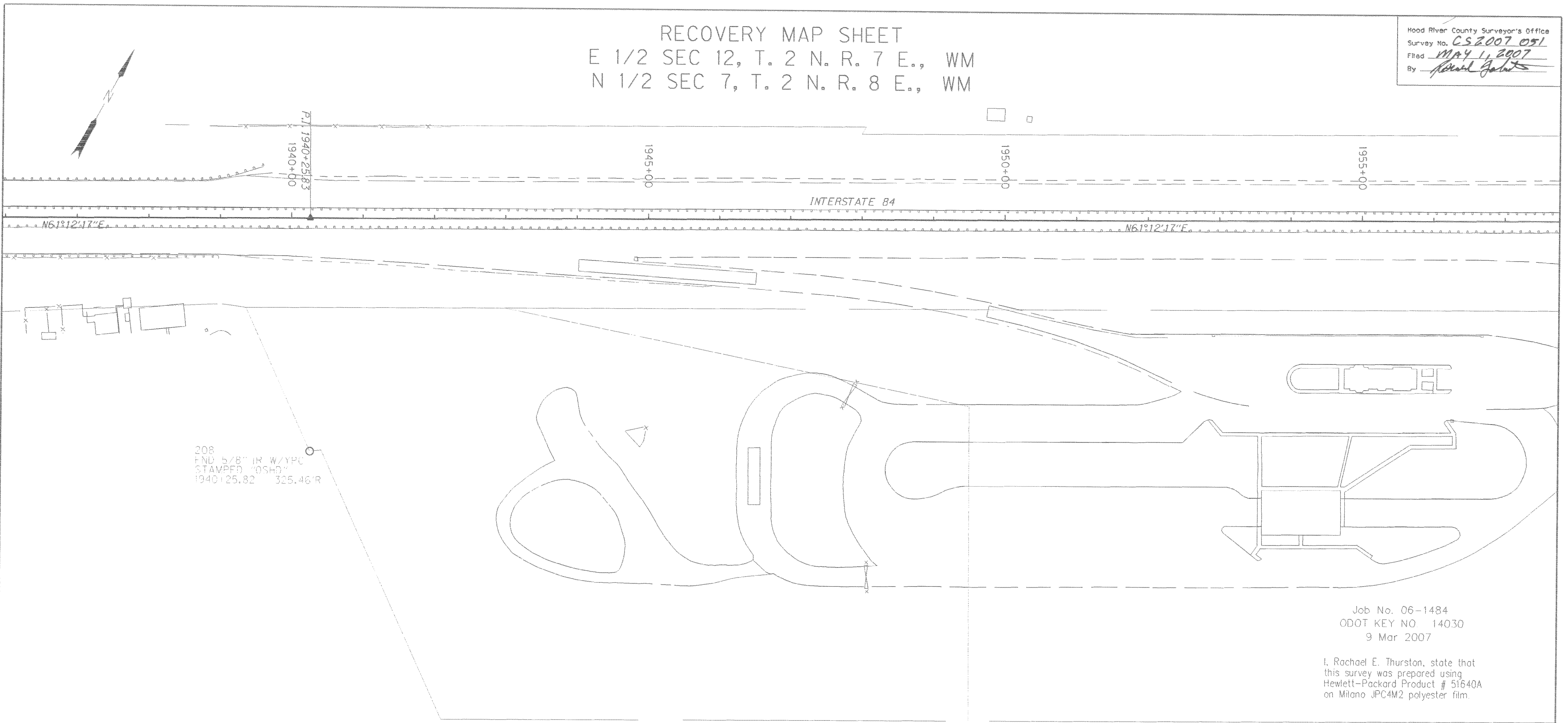
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 OREGON
 JULY 25, 1990
 RACHAEL E. THURSTON
 2435
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OREGON DEPARTMENT OF TRANSPORTATION	
THURSTON & ASSOCIATES, INC. 415 N. STATE ST., SUITE 120 LAKE OSWEGO, OR 97034 503 697 0757	
RECOVERY AND NETWORK MAP CASCADE LOCKS #06-1484 INTERSTATE 84 MP 44.5 TO 45.5 HOOD RIVER, OREGON	
Design Team Leader - Rachael Thurston Designed By - Michael Drafted By - Bob Hable	
SURVEY CONTROL PLAN	SHEET NO. 2 OF 5

CS 2007 051-2

RECOVERY MAP SHEET
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 N 1/2 SEC 7, T. 2 N. R. 8 E., WM

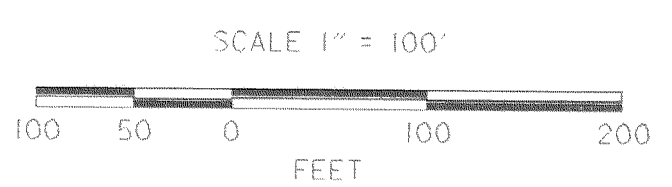
Hood River County Surveyor's Office
 Survey No. CS 2007 051
 Filed MAY 11, 2007
 By Edward Galatz



208
 END 5/8" IR W/ YPC
 STAMPED "OSHD"
 1940+25.82 325.46/R

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FOUND MONUMENTS COORDINATE TABLE

RPC = RED PLASTIC CAP
 YPC = YELLOW PLASTIC CAP

PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
208	73291.84	7848548.01	11/13/2006	FOUND 5/8" IR WITH YPC STAMPED "OSHD"

LEGEND	
★	SET GPS POINT
○	MONUMENT
●	SET MONUMENT
- - - -	EDGE OF GRAVEL
— — — —	EDGE OF ASPHALT
— — — —	ROW
— — — —	ALIGNMENT
— — — —	FENCE

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**RECOVERY AND NETWORK MAP
 CASCADE LOCKS #06-1484**
 INTERSTATE 84
 MP 44.5 TO 45.5
 HOOD RIVER, OREGON

Design Team Leader - Rachael Thurston
 Designed By - Michael
 Drafted By - Bob Hable

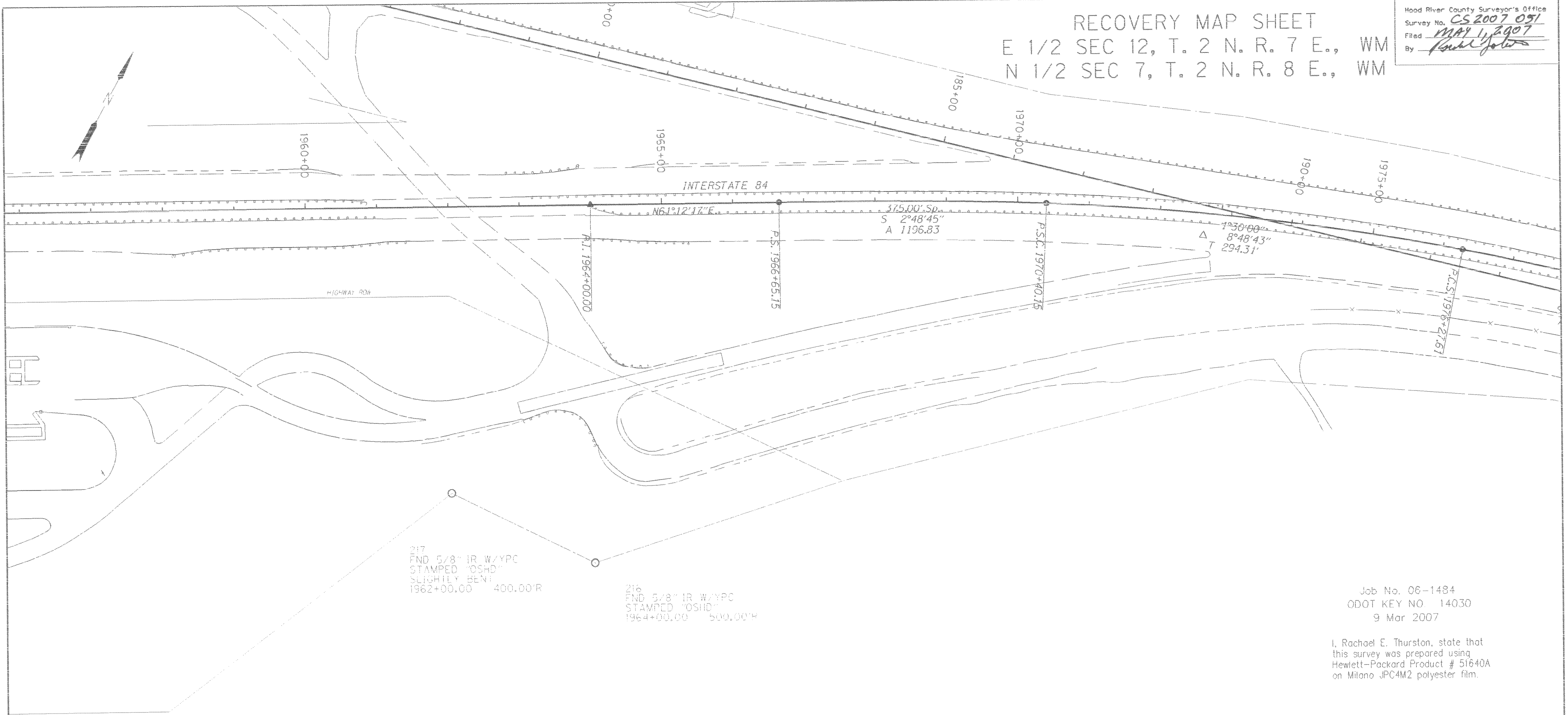
SURVEY CONTROL PLAN

SHEET NO. **3 OF 5**

CS 2007 051_3

RECOVERY MAP SHEET
 E 1/2 SEC 12, T. 2 N. R. 7 E., WM
 N 1/2 SEC 7, T. 2 N. R. 8 E., WM

Hood River County Surveyor's Office
 Survey No. CS 2007 051
 Filed MAY 11 2007
 By Rachael Thurston

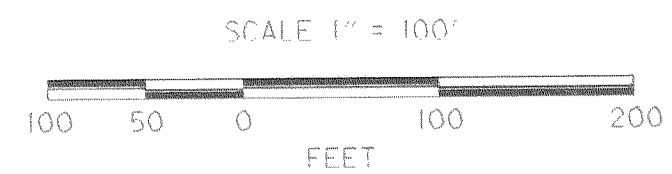


217
 FND 5/8" IR W/YPC
 STAMPED "OSHD"
 SLIGHTLY BENT
 1962+00.00 400.00'R

216
 FND 5/8" IR W/YPC
 STAMPED "OSHD"
 1964+00.00 500.00'R

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FOUND MONUMENTS COORDINATE TABLE

PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
217	733923.78	7850489.33	3/9/2007	FOUND 5/8" IR WITH YPC STAMPED "OSHD" SLIGHTLY BENT
216	733932.48	7850712.69	3/9/2007	FOUND 5/8" IR WITH YPC STAMPED "OSHD"

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LEGEND

★	SET GPS POINT
○	MONUMENT
●	SET MONUMENT
- - - -	EDGE OF GRAVEL
— — — —	EDGE OF ASPHALT
— — — —	ROW
— — — —	ALIGNMENT
— — — —	FENCE

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**RECOVERY AND NETWORK MAP
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INTERSTATE 84
 MP 44.5 TO 45.5
 HOOD RIVER, OREGON

Design Team Leader - Rachael Thurston
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SURVEY CONTROL PLAN

SHEET NO.
4 OF 5

CS 2007 051-4

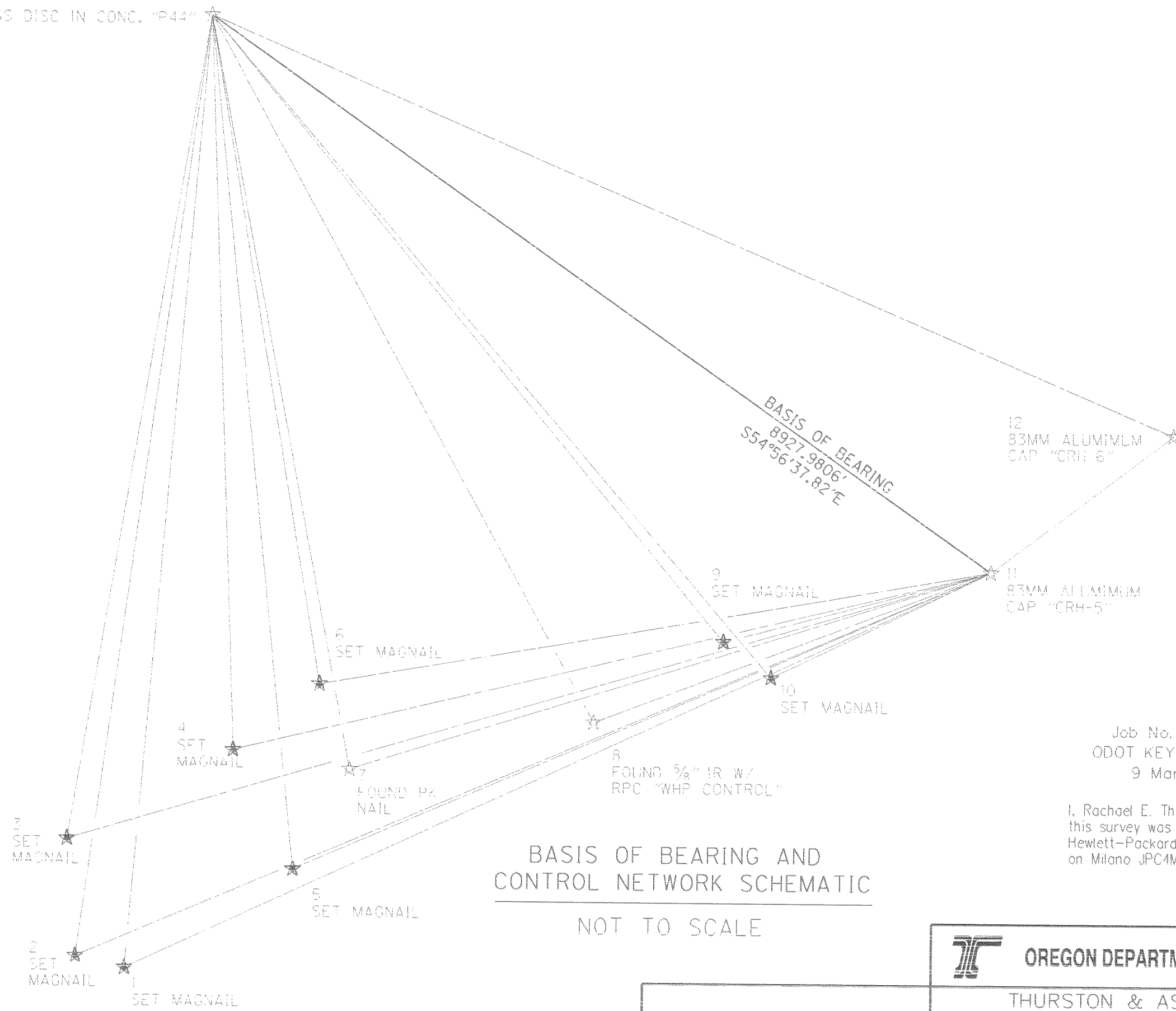
CONTROL NETWORK
 E 1/2 SEC 12, T. 2 N. R. 7 E., WM
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SCALE: N.T.S.

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13
 102MM BRASS DISC IN CONC. "P44"



LEGEND	
▲	SET NETWORK POINT
☆	FOUND GPS STATION
★	SET GPS STATION
⊙	FOUND MONUMENT USED AS NETWORK POINT
—▲—	LINES OF OBSERVATION
—	BASIS OF BEARING

NETWORK POINT COORDINATE TABLE

PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
1	732618.971	7848042.884	10/23/2006	SET MAGNAIL
2	732725.3141	7847582.866	10/23/2006	SET MAGNAIL
3	733821.0157	7847495.159	10/23/2006	SET MAGNAIL
4	734656.4229	7849041.45	10/23/2006	SET MAGNAIL
5	735552.4443	7849611.062	10/23/2006	SET MAGNAIL
6	735278.8388	7849847.571	10/23/2006	SET MAGNAIL
7	734486.2977	7850134.044	10/23/2006	FOUND PK NAIL
8	734942.4343	7852403.239	10/23/2006	FOUND 5/8" IR W/ RPC "WHP CONTROL"
9	735702.4584	7853604.944	10/23/2006	SET MAGNAIL
10	735371.8689	7854050.978	10/23/2006	SET MAGNAIL
11	736360.3224	7856091.323	10/23/2006	83mm ALUMINUM CAP "CRH-5"
12	737641.2232	7857781.787	10/23/2006	83mm ALUMINUM CAP "CRH-6"
13	741488.3527	7848782.994	10/23/2006	102mm BRASS DISC IN CONC. "P44"

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BASIS OF BEARING AND CONTROL NETWORK SCHEMATIC
 NOT TO SCALE

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 Designed By - Michael Page
 Drafted By - Bob Hable

SURVEY CONTROL PLAN

SHEET NO.
5 OF 5

CS 2007 051-5