G 100 - Control Data Sheet (Per O.R.S. 209.250 2013 ed.)

209.250 (6) (a)

SURVEYOR'S OFFICE

C.C.R. NO. 22

FILING DATE 1/12/2016

FILE SIZE 8½x11

City of Corvallis *209.250 (6) (f)*
Public Works Department
Engineering Division
1245 NE Third Street
P.O. Box 1083
Corvallis, Oregon 97339-1083

DATE: 12-9-2015 *209.250 (6) (e)*

LOCATION: S.W. ¼ of the S.W. ¼ of Section 24, Township: 11 South, Range: 5 West, W.M., Benton County, Oregon. *209.250 (6) (b)*

DESCRIPTION: Set 1 inch copper disc with punch mark. Marked "City of Corvallis", and set in joint of concrete street curb. The disc is located on the north end of the curb return, at the northwest corner of the intersection of NE Belvue St. and NE Walnut Blvd. (see attached exhibit map G100). *209.250 (6) (g)*

NARRATIVE: The purpose of this survey was to collect 4+ hours of GNSS data. Baseline data collection methodology was selected in order to establish point pair baselines for processing by OPUS Projects at a later date. This copper disc was set for one of those baseline points. This location was chosen for reasonable satellite visibility, and access within the public right of way for ease of future use. Trimble R10 antenna/receiver units were used on both points. The unit for this occupation used a Seco fixed 2 meter tripod. These units were used to collect the static field data in the Trimble Navigation TO2 file format. This data was then converted to RINEX ver. 2.11 files using "convertTo RINEX" ver. 2.2.5.0 by Trimble Navigation Limited for data submission to the N.G.S. as a GPS only OPUS static session. The data was submitted a minimum of 14 days after collection in order to use the IGS precise satellite ephemeris. The following data reflects the N.G.S. GPS only static session results. 90% of the ambiguities were fixed, and 96% of the observations were used for the monument set with an overall RMS of 0.015 (M) per the OPUS data report. The full OPUS data report for this occupation session includes the CORS stations used for this solution, and their NSRS (ITRF) framework accuracy, and is available, on request. *209.250 (6) (h)*

Abbreviations:

GNSS - Denotes Global Navigation Satellite System
GPS - Denotes Global Positioning System
N.G.S. - National Geodetic Survey
RINEX - "Receiver INdependent Exchange" format
IGS - International GPS Service
CORS - Continuously Operating Reference Station
NSRS - National Spatial Reference System
ITRF - International Terrestrial Reference Frame

STATE PLANE COORDINATES – NAD 83 - International Foot SPC (3601 OR North zone)

Northing (Y) [feet]	350021.440
Easting (X) [feet]	7486192.818
Convergence [degrees]	-1.94941786
Point Scale	0.99994467
Combined Factor	0.99993745

One International Foot = 0.3048 meters exactly
Per Oregon Revised Statutes 2013, Chapter 93.312,
Defined in Oregon Administrative Rules Department
of Transportation, Highway Division, Division 5,
Sections, 734-005-0010 (2), and 734-005-0015 (2) (a)

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

SEE ATTACHMENTS: EXHIBIT MAP - Page 2 of 2 - G 100 *209.250 (6) (a)*

EXHIBIT MAP

SITUATE IN THE S.W. 1/4 OF S.W. 1/4 OF SEC. 24,
TOWNSHIP 11 SOUTH, RANGE 5 WEST, W.M.
BENTON COUNTY, OREGON.

SURVEYOR'S OFFICE

C.C.R. FILE NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2" X 11"

OREGON STATE PLANE COORDINATE SYSTEM
OF 1983 - NORTH ZONE (3601)

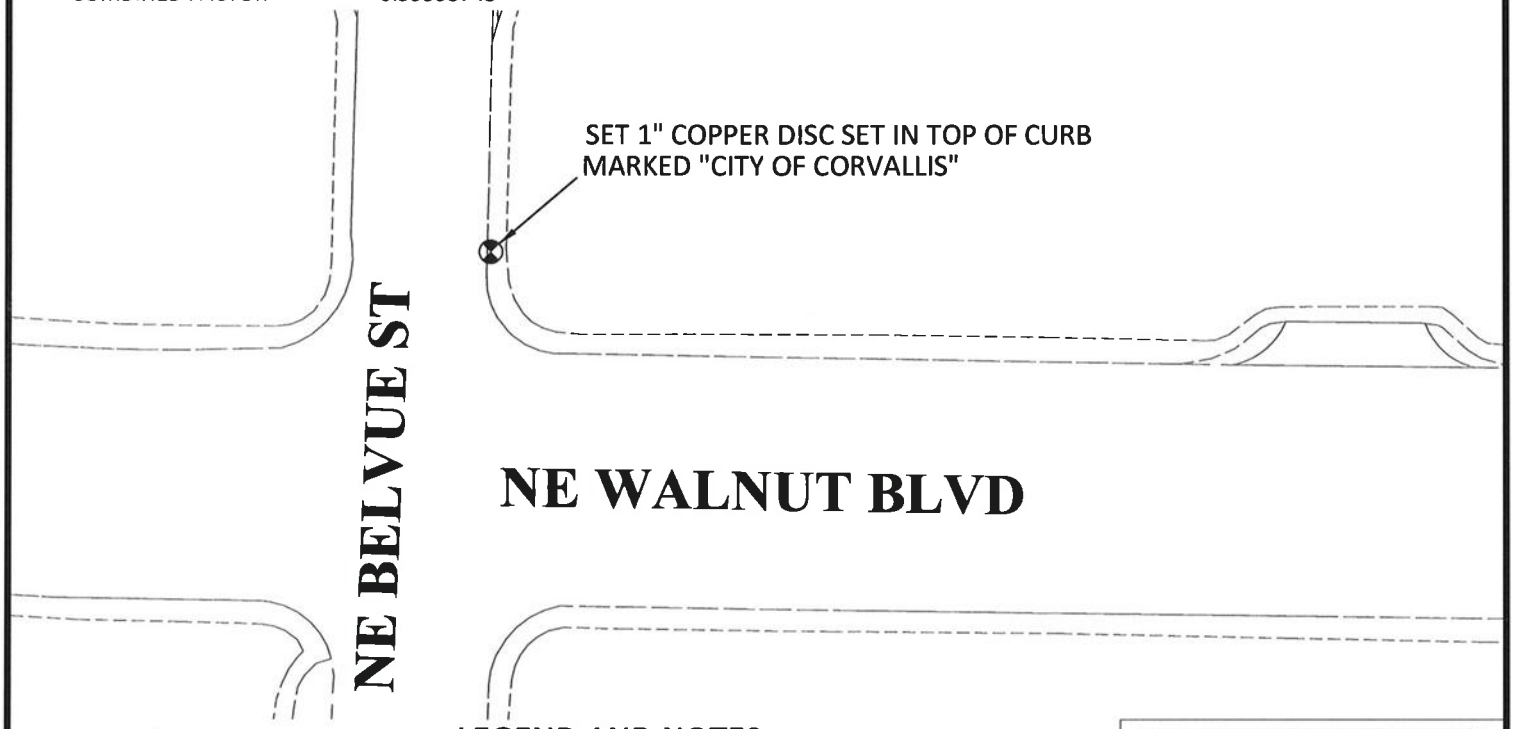
NORTHING (Y) 350021.440 (IF)
EASTING (X) 7486192.818 (IF)

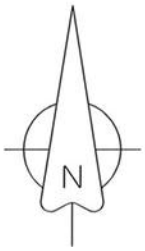
NAD 83 (2011) (EPOCH: 2010)

LATTITUDE: 44° 35' 36.02171" NORTH
LONGITUDE: 123° 14' 55.71723" WEST
CONVERGENCE [DEGREES] -1.94941786
POINT SCALE ---------- 0.99994467
COMBINED FACTOR --------- 0.99993745

NAVD88 ELEVATION AND GEOID SEPARATION
IGS08 (EPOCH:2015.7036)(COMPUTED USING GEOID12B)

	NAVD 88	GEOID 12B
ELLLIPSOIDAL HEIGHT (EL):	150.997 (US FT)	= 46.024(M)
ORTHOMETRIC ELEVATION:	225.449 (US FT)	= 68.717(M)
GEOIDAL SEPARATION :	-74.452 (US FT)	= -22.693(M)





NORTH
SCALE: AS NOTED

LEGEND AND NOTES:

⊗ — DENOTES, SET 1" COPPER DISC MARKED "CITY OF CORVALLIS",WITH PUNCH MARK IN CAP.

NAVD — DENOTES NORTH AMERICAN VERTICAL DATUM
NAD — DENOTES NORTH AMERICAN DATUM
(IF) — DENOTES INTERNATIONAL FEET
(M) — DENOTES METER

ONE INTERNATIONAL FOOT = 0.3048 METERS EXACTLY PER OREGON REVISED STATUTES 2013, CHAPTER 93.312 DEFINED IN OREGON ADMINSTRATIVE RULES, DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, DIVISION 5, SECTIONS, 734-005-0010 (2), 734-005-0015 (2) (a)

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

PAGE	2 OF 2
DRAWN	CRB
CHECKED	
DATE	12-9-2015
SCALE:	1"=50'

G 100
CITY OF CORVALLIS
MONUMENT SKETCH

CORVALLIS
ENHANCING COMMUNITY LIVABILITY
Survey Office

G 101 - Control Data Sheet (Per O.R.S. 209.250 2013 ed.)

209.250 (6) (a)

SURVEYOR'S OFFICE

C.C.R. NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2 X 11

City of Corvallis *209.250 (6) (f)*

Public Works Department
Engineering Division
1245 NE Third Street
P.O. Box 1083
Corvallis, Oregon 97339-1083

DATE: 12-9-2015 *209.250 (6) (e)*

LOCATION: S.W. ¼ of the S.E. ¼ of Section 24, Township: 11 South, Range: 5 West, W.M., Benton County, Oregon. *209.250 (6) (b)*

DESCRIPTION: Set 1 inch copper disc with punch mark. Marked "City of Corvallis", and set in joint line of concrete street panels. The disc is located on the centerline of Jasper St. approximately 25 feet north of the centerline of Conser St. (see attached exhibit map G101). *209.250 (6) (g)*

NARRATIVE: The purpose of this survey was to collect 4+ hours of GNSS data. Baseline data collection methodology was selected in order to establish point pair baselines for processing by OPUS Projects at a later date. This copper disc was set for one of those baseline points. This location was chosen for reasonable satellite visibility, and access within the public right of way for ease of future use. Trimble R10 antenna/receiver units were used on both points. The unit for this occupation used a Crain Tri Max tripod. These units were used to collect the static field data in the Trimble Navigation TO2 file format. This data was then converted to RINEX ver. 2.11 files using "convertTo RINEX" ver. 2.2.5.0 by Trimble Navigation Limited for data submission to the N.G.S. as a GPS only OPUS static session. The data was submitted a minimum of 14 days after collection in order to use the IGS precise satellite ephemeris. The following data reflects the N.G.S. GPS only static session results. 98% of the ambiguities were fixed, and 96% of the observations were used for the monument set with an overall RMS of 0.015 (M) per the OPUS data report. The full OPUS data report for this occupation session includes the CORS stations used for this solution, and their NSRS (ITRF) framework accuracy, and is available, on request. *209.250 (6) (h)*

Abbreviations:

GNSS - Denotes Global Navigation Satellite System
GPS - Denotes Global Positioning System
N.G.S. - National Geodetic Survey
RINEX - "Receiver INdependent Exchange" format
IGS - International GPS Service
CORS - Continuously Operating Reference Station
NSRS - National Spatial Reference System
ITRF - International Terrestrial Reference Frame

STATE PLANE COORDINATES – NAD 83 - International Foot SPC (3601 OR North zone)

Northing (Y) [feet]	349888.323
Easting (X) [feet]	7488490.951
Convergence [degrees]	-1.94315255
Point Scale	0.99994469
Combined Factor	0.99993786

One International Foot = 0.3048 meters exactly
Per Oregon Revised Statutes 2013, Chapter 93.312,
Defined in Oregon Administrative Rules Department
of Transportation, Highway Division, Division 5,
Sections, 734-005-0010 (2), and 734-005-0015 (2) (a)

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

SEE ATTACHMENTS: EXHIBIT MAP - Page 2 of 2 - G 101 *209.250 (6) (a)*

EXHIBIT MAP

SITUATE IN THE S.W. 1/4 OF S.E. 1/4 OF SEC. 24, TOWNSHIP 11 SOUTH, RANGE 5 WEST, W.M. BENTON COUNTY, OREGON.

SURVEYOR'S OFFICE

C.C.R. FILE NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2" X 11"

OREGON STATE PLANE COORDINATE SYSTEM OF 1983 - NORTH ZONE (3601)

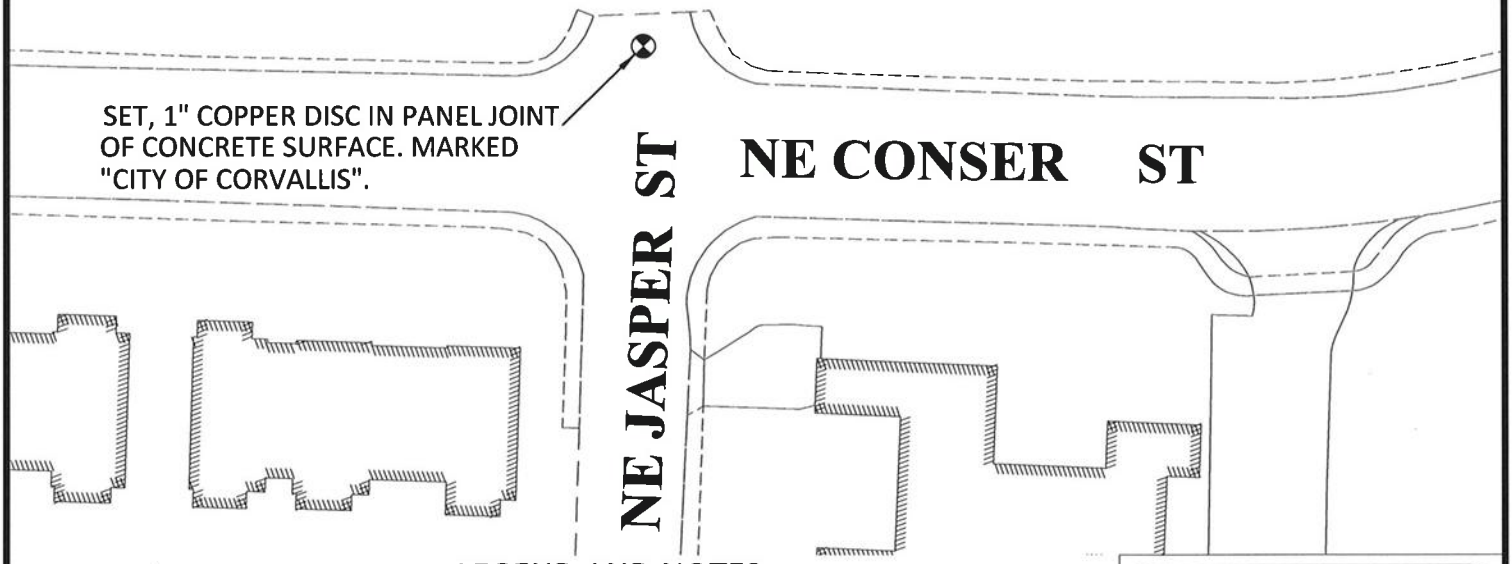
NORTHING (Y) 349888.323 (IF)
EASTING (X) 7488490.951 (IF)

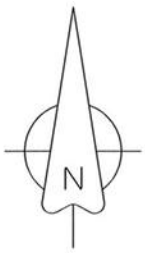
NAD 83 (2011) (EPOCH: 2010)

LATTITUDE: 44° 35' 35.47870" NORTH
LONGITUDE: 123° 14' 23.91300" WEST
CONVERGENCE [DEGREES] -1.94315255
POINT SCALE ---------- 0.99994469
COMBINED FACTOR --------- 0.99993786

NAVD88 ELEVATION AND GEOID SEPARATION IGS08 (EPOCH:2015.7036)(COMPUTED USING GEOID12B)

	NAVD 88	GEOID 12B
ELLLIPSOIDAL HEIGHT (EL):	142.900 (US FT)	= 43.556(M)
ORTHOMETRIC ELEVATION:	217.438 (US FT)	= 66.275(M)
GEOIDAL SEPARATION :	-74.538 (US FT)	= -22.719(M)





NORTH
SCALE: AS NOTED

LEGEND AND NOTES:

⊗ — DENOTES SET 1" COPPER DISC MARKED "CITY OF CORVALLIS",WITH PUNCH MARK IN CAP.

NAVD — DENOTES NORTH AMERICAN VERTICAL DATUM
NAD — DENOTES NORTH AMERICAN DATUM
(IF) — DENOTES INTERNATIONAL FEET
(M) — DENOTES METER

ONE INTERNATIONAL FOOT = 0.3048 METERS EXACTLY PER OREGON REVISED STATUTES 2013, CHAPTER 93.312 DEFINED IN OREGON ADMINSTRATIVE RULES, DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, DIVISION 5, SECTIONS, 734-005-0010 (2), 734-005-0015 (2) (a)

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

PAGE	2 OF 2
DRAWN	CRB
CHECKED	
DATE	12-9-2015
SCALE:	1"=50'

G 101
CITY OF CORVALLIS MONUMENT SKETCH

CORVALLIS
ENHANCING COMMUNITY LIVABILITY
Survey Office

G 103 - Control Data Sheet (Per O.R.S. 209.250 2013 ed.)

209.250 (6) (a)

SURVEYORS OFFICE

C.C.R. NO. 22

FILING DATE 1/12/2016

FILE SIZE 8½x11

City of Corvallis *209.250 (6) (f)*

Public Works Department
Engineering Division
1245 NE Third Street
P.O. Box 1083
Corvallis, Oregon 97339-1083

DATE: 12-9-2015 *209.250 (6) (e)*

LOCATION: N.W. ¼ of the N.W. ¼ of Section 2, Township: 12 South, Range: 5 West, W.M., Benton County, Oregon. *209.250 (6) (b)*

DESCRIPTION: Set 5/8"X30" iron rod, with aluminum cap marked with "City of Corvallis". Set west of the westerly curb of 7th street in gravel rise between railroad tracks. The site is located in the northwest corner of the intersections of SW 7th St., and SW Western Ave. (see attached exhibit map G103). *209.250 (6) (g)*

NARRATIVE: The purpose of this survey was to collect 4+ hours of GNSS data. Baseline data collection methodology was selected in order to establish point pair baselines for processing by OPUS Projects at a later date. This Iron rod and aluminum cap, were set as one of those baseline points. This location was chosen for reasonable satellite visibility, and access within the public right of way for ease of future use. Trimble R10 antenna/receiver units were used on both points. The unit for this occupation used a Seco fixed 2 meter tripod. These units were used to collect the static field data in the Trimble Navigation TO2 file format. This data was then converted to RINEX ver. 2.11 files using "convertTo RINEX" ver. 2.2.5.0 by Trimble Navigation Limited for data submission to the N.G.S. as a GPS only OPUS static session. The data was submitted a minimum of 14 days after collection in order to use the IGS precise satellite ephemeris. The following data reflects the N.G.S. GPS only static session results. 91% of the ambiguities were fixed, and 97% of the observations were used for the monument set with an overall RMS of 0.014 (M) per the OPUS data report. The full OPUS data report for this occupation session includes the CORS stations used for this solution, and their NSRS (ITRF) framework accuracy, and is available, on request. *209.250 (6) (h)*

Abbreviations:

GNSS - Denotes Global Navigation Satellite System
GPS - Denotes Global Positioning System
N.G.S. - National Geodetic Survey
RINEX - "Receiver INdependent Exchange" format
IGS - International GPS Service
CORS - Continuously Operating Reference Station
NSRS - National Spatial Reference System
ITRF - International Terrestrial Reference Frame

STATE PLANE COORDINATES – NAD 83 - International Foot SPC (3601 OR North zone)

Northing (Y) [feet]	338269.656
Easting (X) [feet]	7480853.041
Convergence [degrees]	-1.96285091
Point Scale	0.99995051
Combined Factor	0.99994296

One International Foot = 0.3048 meters exactly
Per Oregon Revised Statutes 2013, Chapter 93.312,
Defined in Oregon Administrative Rules Department
of Transportation, Highway Division, Division 5,
Sections, 734-005-0010 (2), and 734-005-0015 (2) (a)

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

SEE ATTACHMENTS: EXHIBIT MAP - Page 2 of 2 - G 103 *209.250 (6) (a)*

EXHIBIT MAP

SITUATE IN THE N.W. 1/4 OF N.W. 1/4 OF SEC. 2, TOWNSHIP 12 SOUTH, RANGE 5 WEST, W.M. BENTON COUNTY, OREGON.

SURVEYOR'S OFFICE

C.C.R. FILE NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2" X 11"

OREGON STATE PLANE COORDINATE SYSTEM OF 1983 - NORTH ZONE (3601)

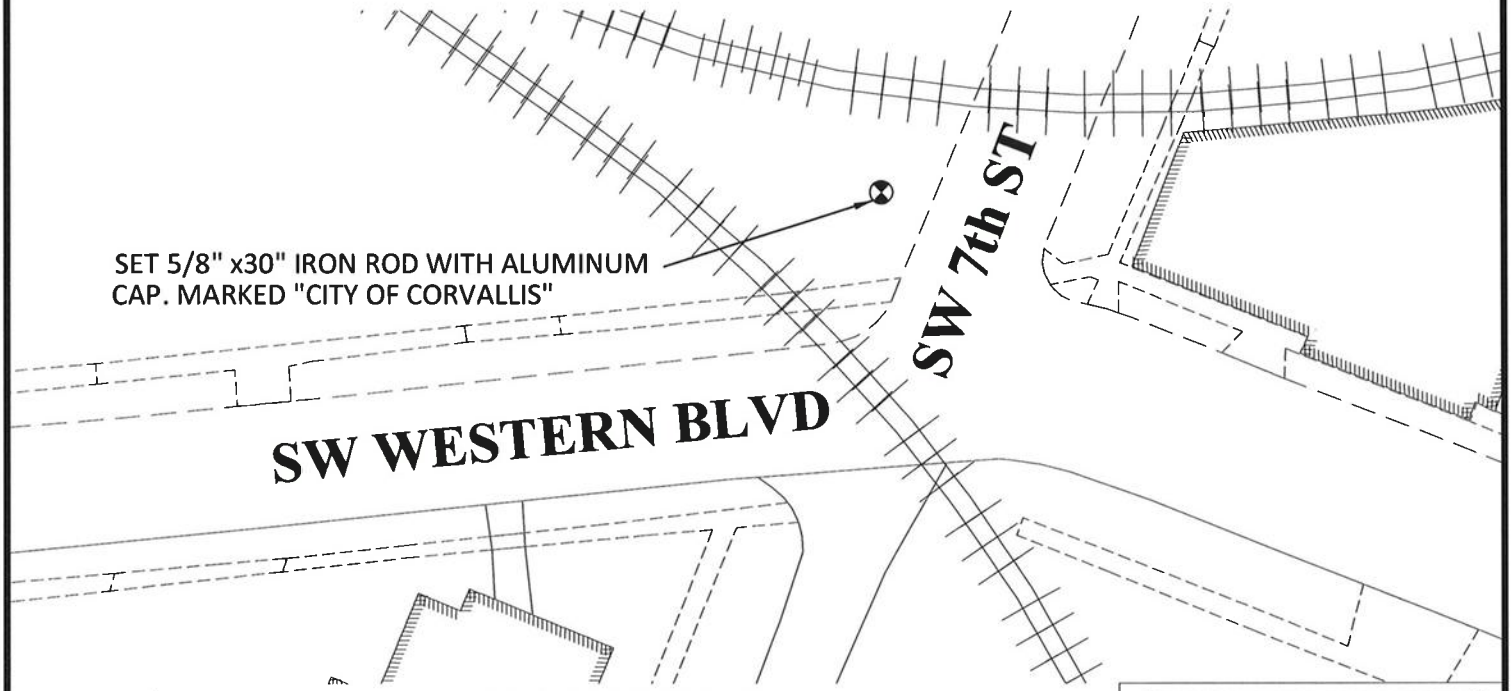
NORTHING (Y) 338269.656 (IF)
EASTING (X) 7480853.041 (IF)

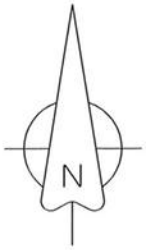
NAD 83 (2011) (EPOCH: 2010)

LATTITUDE: 44° 33' 38.24133" NORTH
LONGITUDE: 123° 16' 03.90668" WEST
CONVERGENCE [DEGREES] -1.96285091
POINT SCALE ---------- 0.99995051
COMBINED FACTOR --------- 0.99994296

NAVD88 ELEVATION AND GEOID SEPARATION IGS08 (EPOCH:2015.7036)(COMPUTED USING GEOID12B)

	NAVD 88	GEOID 12B
ELLLIPSOIDAL HEIGHT (EL):	158.008 (US FT)	= 48.161(M)
ORTHOMETRIC ELEVATION:	232.484 (US FT)	= 70.861(M)
GEOIDAL SEPARATION :	-74.475 (US FT)	= -22.700(M)





NORTH
SCALE: AS NOTED

LEGEND AND NOTES:

- DENOTES SET 5/8"X30" IRON ROD WITH AN ALUMINUM CAP MARKED "CITY OF CORVALLIS".

NAVD — DENOTES NORTH AMERICAN VERTICAL DATUM
NAD — DENOTES NORTH AMERICAN DATUM
(IF) — DENOTES INTERNATIONAL FEET
(M) — DENOTES METER

ONE INTERNATIONAL FOOT = 0.3048 METERS EXACTLY PER OREGON REVISED STATUTES 2013, CHAPTER 93.312 DEFINED IN OREGON ADMINSTRATIVE RULES, DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, DIVISION 5, SECTIONS, 734-005-0010 (2), 734-005-0015 (2) (a)

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

PAGE	2 OF 2
DRAWN	CRB
CHECKED	
DATE	12-9-2015
SCALE:	1"=50'

G 103
CITY OF CORVALLIS MONUMENT SKETCH

CORVALLIS
ENHANCING COMMUNITY LIVABILITY
Survey Office

G 109 RESET - Control Data Sheet (Per O.R.S. 209.250 2013 ed.)

209.250 (6) (a)

SURVEYOR'S OFFICE

C.C.R. NO. 22

FILING DATE 1/12/2016

FILE SIZE 8½x11

City of Corvallis *209.250 (6) (f)*
Public Works Department
Engineering Division
1245 NE Third Street
P.O. Box 1083
Corvallis, Oregon 97339-1083

DATE: 12-9-2015 *209.250 (6) (e)*

LOCATION: N.E. ¼ of the S.W. ¼ of Section 26, Township: 11 South, Range: 5 West, W.M., Benton County, Oregon. *209.250 (6) (b)*

DESCRIPTION: Set 1 inch copper disc with punch mark. Marked "City of Corvallis", and set in joint of concrete street curb. The disc is located on the north end of the curb return, just north of a catch basin, at the northwest corner of the intersection of NW Garfield St. and NW Highland Dr. (see attached exhibit map G 109 RESET). *209.250 (6) (g)*

NARRATIVE: The purpose of this survey was to collect 4+ hours of GNSS data. Baseline data collection methodology was selected in order to establish point pair baselines for processing by OPUS Projects at a later date. This copper disc was set for one of those baseline points. This location was chosen for reasonable satellite visibility, and access within the public right of way for ease of future use. Trimble R10 antenna/receiver units were used on both points. The unit for this occupation used a Crain Tri Max tripod. These units were used to collect the static field data in the Trimble Navigation TO2 file format. This data was then converted to RINEX ver. 2.11 files using "convertTo RINEX" ver. 2.2.5.0 by Trimble Navigation Limited for data submission to the N.G.S. as a GPS only OPUS static session. The data was submitted a minimum of 14 days after collection in order to use the IGS precise satellite ephemeris. The following data reflects the N.G.S. GPS only static session results. 91% of the ambiguities were fixed, and 96% of the observations were used for the monument set with an overall RMS of 0.015 (M) per the OPUS data report. The full OPUS data report for this occupation session includes the CORS stations used for this solution, and their NSRS (ITRF) framework accuracy, and is available, on request. *209.250 (6) (h)*

Abbreviations:

GNSS - Denotes Global Navigation Satellite System
GPS - Denotes Global Positioning System
N.G.S. - National Geodetic Survey
RINEX - "Receiver INdependent Exchange" format
IGS - International GPS Service
CORS - Continuously Operating Reference Station
NSRS - National Spatial Reference System
ITRF - International Terrestrial Reference Frame

STATE PLANE COORDINATES – NAD 83 - International Foot SPC (3601 OR North zone)

Northing (Y) [feet]	346466.903
Easting (X) [feet]	7482468.533
Convergence [degrees]	-1.95922037
Point Scale	0.99994644
Combined Factor	0.99993899

One International Foot = 0.3048 meters exactly
Per Oregon Revised Statutes 2013, Chapter 93.312,
Defined in Oregon Administrative Rules Department
of Transportation, Highway Division, Division 5,
Sections, 734-005-0010 (2), and 734-005-0015 (2) (a)

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

SEE ATTACHMENTS: EXHIBIT MAP - Page 2 of 2 - G 109 RESET *209.250 (6) (a)*

EXHIBIT MAP

SITUATE IN THE N.E. 1/4 OF S.W. 1/4 OF SEC. 26, TOWNSHIP 11 SOUTH, RANGE 5 WEST, W.M. BENTON COUNTY, OREGON.

SURVEYOR'S OFFICE

C.C.R. FILE NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2" X 11"

OREGON STATE PLANE COORDINATE SYSTEM OF 1983 - NORTH ZONE (3601)

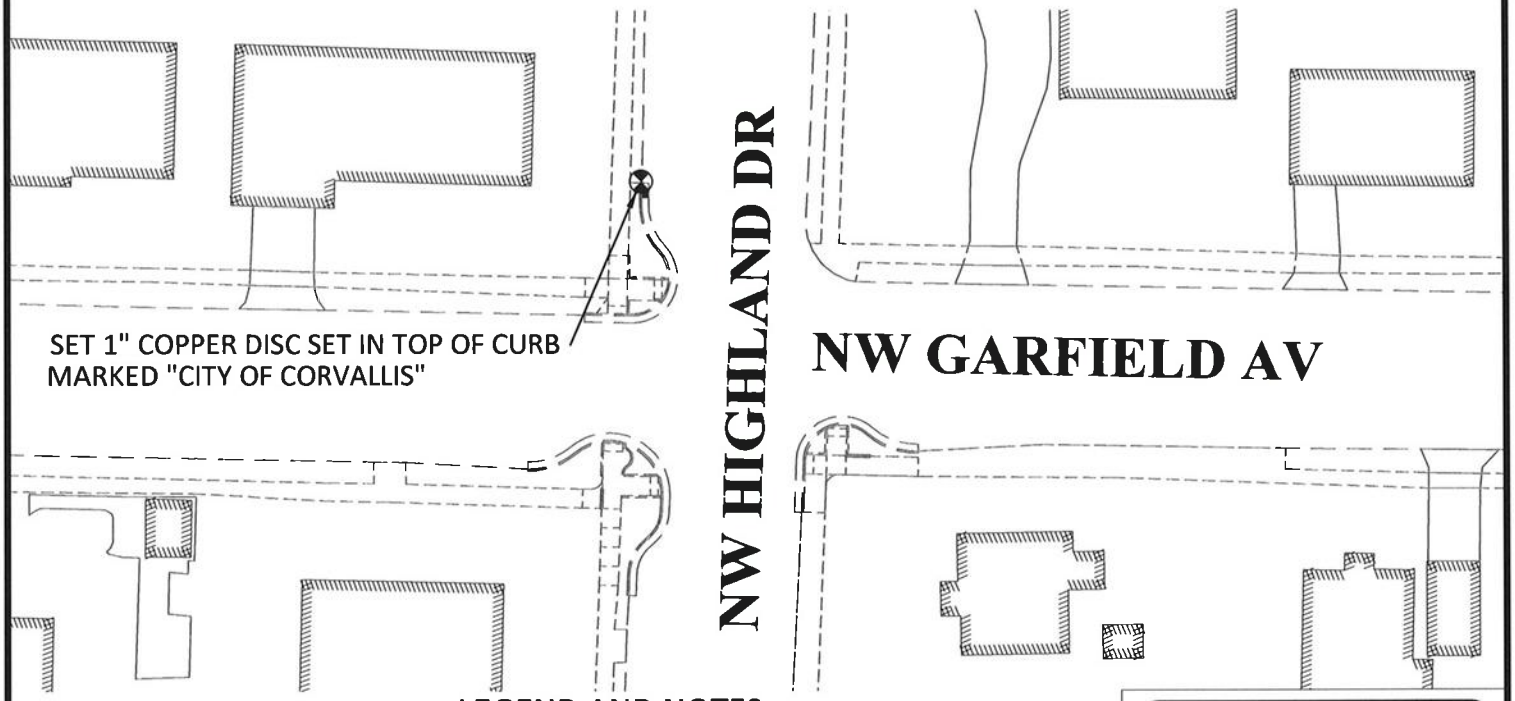
NORTHING (Y) 346466.903 (IF)
EASTING (X) 7482468.533 (IF)

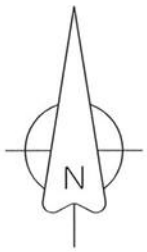
NAD 83 (2011) (EPOCH: 2010)

LATTITUDE: 44° 35' 35.47870" NORTH
LONGITUDE: 123° 14' 23.91300" WEST
CONVERGENCE [DEGREES] -1.95922037
POINT SCALE ---------- 0.99994644
COMBINED FACTOR --------- 0.99993899

NAVD88 ELEVATION AND GEOID SEPARATION IGS08 (EPOCH:2015.7036)(COMPUTED USING GEOID12B)

	NAVD 88	GEOID 12B
ELLLIPSOIDAL HEIGHT (EL):	155.978 (US FT)	= 47.542(M)
ORTHOMETRIC ELEVATION:	230.367 (US FT)	= 70.216(M)
GEOIDAL SEPARATION :	-74.390 (US FT)	= -22.674(M)





NORTH
SCALE: AS NOTED

LEGEND AND NOTES:

⊗ — DENOTES SET 1" COPPER DISC MARKED "CITY OF CORVALLIS",WITH PUNCH MARK IN CAP.

NAVD — DENOTES NORTH AMERICAN VERTICAL DATUM
NAD — DENOTES NORTH AMERICAN DATUM
(IF) — DENOTES INTERNATIONAL FEET
(M) — DENOTES METER

ONE INTERNATIONAL FOOT = 0.3048 METERS EXACTLY PER OREGON REVISED STATUTES 2013, CHAPTER 93.312 DEFINED IN OREGON ADMINSTRATIVE RULES, DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, DIVISION 5, SECTIONS, 734-005-0010 (2), 734-005-0015 (2) (a)

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

PAGE	2 OF 2
DRAWN	CRB
CHECKED	
DATE	12-9-2015
SCALE:	1"=50'

G 109 RESET CITY OF CORVALLIS MONUMENT SKETCH

CORVALLIS
ENHANCING COMMUNITY LIVABILITY
Survey Office

G 310 RESET - Control Data Sheet (Per O.R.S. 209.250 2013 ed.)

209.250 (6) (a)

SURVEYORS OFFICE

C.C.R. NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2 x 11

City of Corvallis *209.250 (6) (f)*
Public Works Department
Engineering Division
1245 NE Third Street
P.O. Box 1083
Corvallis, Oregon 97339-1083

DATE: 12-9-2015 *209.250 (6) (e)*

LOCATION: S.W. ¼ of the S.W. ¼ of Section 9, Township: 12 South, Range: 5 West, W.M., Benton County, Oregon. *209.250 (6) (b)*

DESCRIPTION: Set 5/8"X30" iron rod, with aluminum cap marked with "City of Corvallis", and set 1 foot northerly of concrete base of disturbed benchmark. The iron rod and aluminum cap were set in the right of way west of the gravel shoulder, south of the intersection of SW 53rd St. and SW Plymouth Dr. (see attached exhibit map G310 RESET). *209.250 (6) (g)*

NARRATIVE: The purpose of this survey was to collect 4+ hours of GNSS data. Baseline data collection methodology was selected in order to establish point pair baselines for processing by OPUS Projects at a later date. This Iron rod and aluminum cap, were set as one of those baseline points. This location was chosen for reasonable satellite visibility, and access within the public right of way for ease of future use. Trimble R10 antenna/receiver units were used on both points. The unit for this occupation used a Seco fixed 2 meter tripod. These units were used to collect the static field data in the Trimble Navigation TO2 file format. This data was then converted to RINEX ver. 2.11 files using "convertTo RINEX" ver. 2.2.5.0 by Trimble Navigation Limited for data submission to the N.G.S. as a GPS only OPUS static session. The data was submitted a minimum of 14 days after collection in order to use the IGS precise satellite ephemeris. The following data reflects the N.G.S. GPS only static session results. 88% of the ambiguities were fixed, and 95% of the observations were used for the monument set with an overall RMS of 0.015 (M) per the OPUS data report. The full OPUS data report for this occupation session includes the CORS stations used for this solution, and their NSRS (ITRF) framework accuracy, and is available, on request. *209.250 (6) (h)*

Abbreviations:

GNSS - Denotes Global Navigation Satellite System
GPS - Denotes Global Positioning System
N.G.S. - National Geodetic Survey
RINEX - "Receiver INdependent Exchange" format
IGS - International GPS Service
CORS - Continuously Operating Reference Station
NSRS - National Spatial Reference System
ITRF - International Terrestrial Reference Frame

STATE PLANE COORDINATES – NAD 83 - International Foot SPC (3601 OR North zone)

Northing (Y) [feet]	330454.259
Easting (X) [feet]	7469068.514
Convergence [degrees]	-1.99415648
Point Scale	0.99995473
Combined Factor	0.99994498

One International Foot = 0.3048 meters exactly
Per Oregon Revised Statutes 2013, Chapter 93.312,
Defined in Oregon Administrative Rules Department
of Transportation, Highway Division, Division 5,
Sections, 734-005-0010 (2), and 734-005-0015 (2) (a)

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 9, 2002
CLAY R. BROOKS
58556LS

RENEWS: 12/31/2017

SEE ATTACHMENTS: EXHIBIT MAP - Page 2 of 2 - G 310 RESET *209.250 (6) (a)*

EXHIBIT MAP

SITUATE IN THE S.W. 1/4 OF S.W. 1/4 OF SEC. 9, TOWNSHIP 12 SOUTH, RANGE 5 WEST, W.M. BENTON COUNTY, OREGON.

SURVEYOR'S OFFICE

C.C.R. FILE NO. 22

FILING DATE 1/12/2016

FILE SIZE 8 1/2" X 11"

OREGON STATE PLANE COORDINATE SYSTEM OF 1983 - NORTH ZONE (3601)

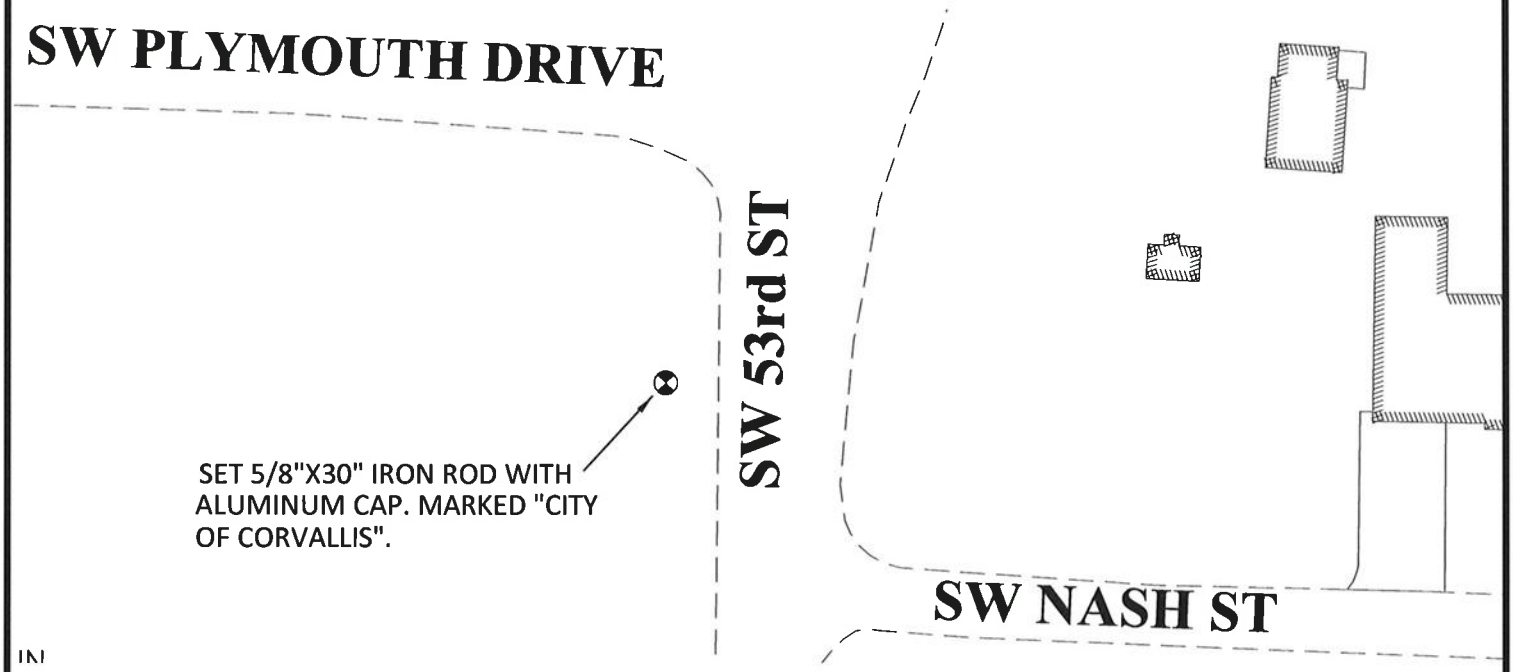
NORTHING (Y) 330454.259 (IF)
EASTING (X) 7469068.514 (IF)

NAD 83 (2011) (EPOCH: 2010)

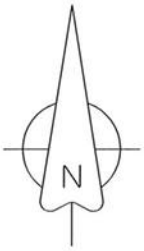
LATTITUDE: 44° 32' 17.10607" NORTH
LONGITUDE: 123° 18' 42.88439" WEST
CONVERGENCE [DEGREES] -1.99415648
POINT SCALE ---------- 0.99995473
COMBINED FACTOR --------- 0.99994498

NAVD88 ELEVATION AND GEOID SEPARATION IGS08 (EPOCH:2015.7036)(COMPUTED USING GEOID12B)

	NAVD 88	GEOID 12B
ELLLIPSOIDAL HEIGHT (EL):	203.989 (US FT)	= 62.176(M)
ORTHOMETRIC ELEVATION:	278.235 (US FT)	= 84.806(M)
GEOIDAL SEPARATION :	-74.245 (US FT)	= -22.630(M)



IN



NORTH
SCALE: AS NOTED

LEGEND AND NOTES:

⊗ — DENOTES 5/8"X30" IRON ROD WITH ALUMINUM CAP, MARKED "CITY OF CORVALLIS".

NAVD — DENOTES NORTH AMERICAN VERTICAL DATUM

NAD — DENOTES NORTH AMERICAN DATUM

(IF) — DENOTES INTERNATIONAL FEET

(M) — DENOTES METER

ONE INTERNATIONAL FOOT = 0.3048 METERS EXACTLY PER OREGON REVISED STATUTES 2013, CHAPTER 93.312 DEFINED IN OREGON ADMINSTRATIVE RULES, DEPARTMENT OF TRANSPORTATION, HIGHWAY DIVISION, DIVISION 5, SECTIONS, 734-005-0010 (2), 734-005-0015 (2) (a)

REGISTERED PROFESSIONAL LAND SURVEYOR

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58556LS

RENEWS: 12/31/2017

PAGE	2 OF 2
DRAWN	CRB
CHECKED	
DATE	12-9-2015
SCALE:	1"=50'

G 310 RESET CITY OF CORVALLIS MONUMENT SKETCH

CORVALLIS
ENHANCING COMMUNITY LIVABILITY
Survey Office