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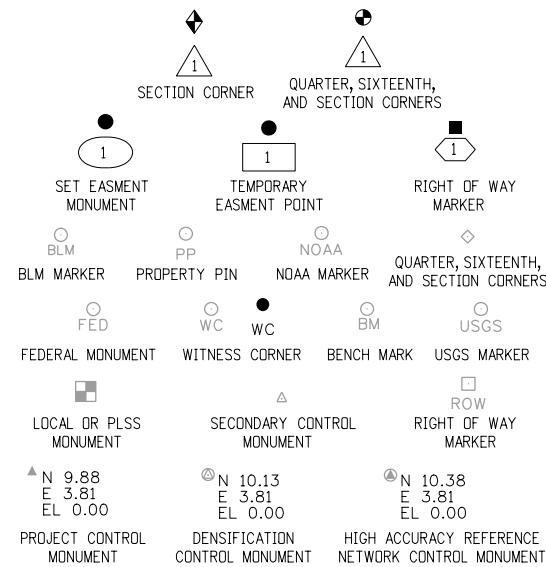
Project Control Diagram			
Title Sheet			
Project Number: STA 0503-085			
Project Location: US 50 WB			
Railroad Bridge to top of hill west of Pueblo Blvd			
Project Code:	Last Mod. Date:	Subset	Sheet No.
20344	06-15-15	3.01 of 3.05	3.01

DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

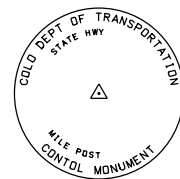
PROJECT CONTROL DIAGRAM

U.S. Highway 50 MP 309.70 to 313.15
Sections 7, 8, 9, 16, 15 & 14
Township 20 South, Range 65 West
of the 6th Principal Meridian
County of Pueblo

SHEET NO.	INDEX OF SHEETS
3.01	(1) Title Sheet
3.02	(1) Coordinate Tables
3.03-3.05	(3) Plan Sheets
	(5) Total Sheets



Note: For a complete listing of symbolology used within this set of plans, please refer to the M-100-1 Standard Symbols of the Colorado Department of Transportation M&S Standards Publication dated July 2006. Existing features are shown as screened weight (gray scale). Proposed or new features are shown as full weight without screening.

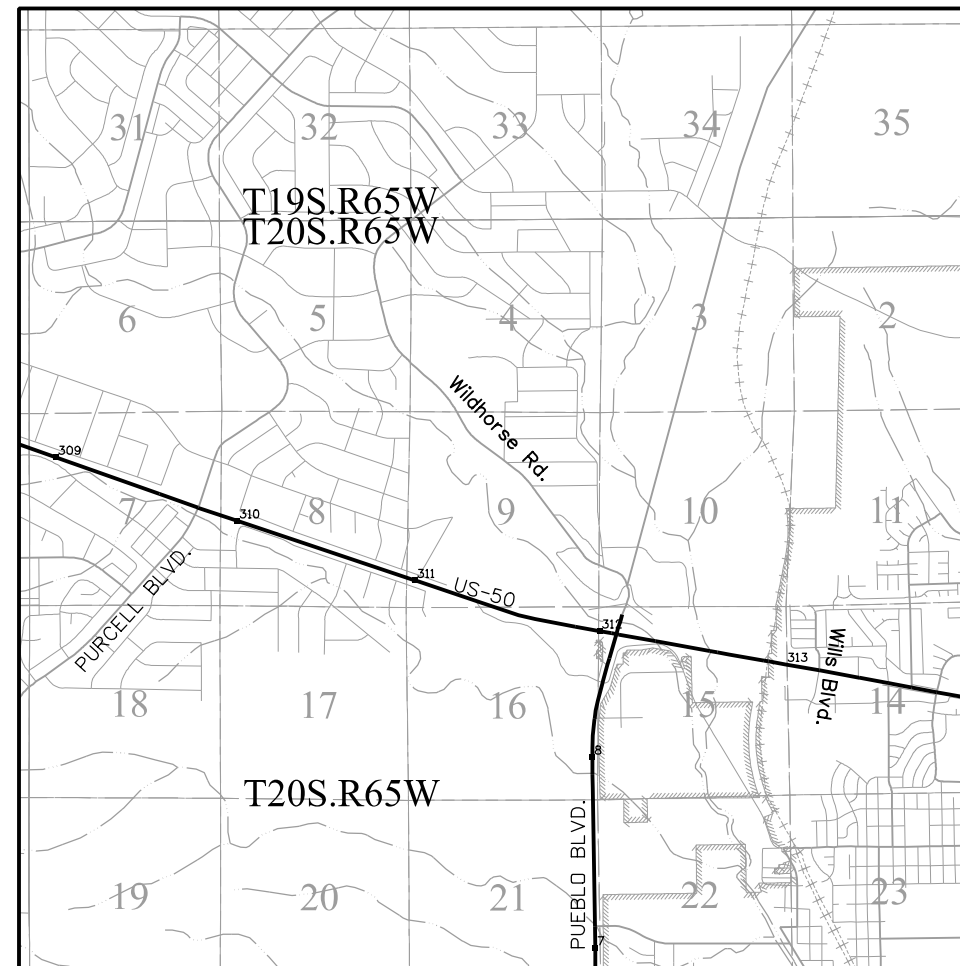


Typical Control Monument Cap
Not to Scale

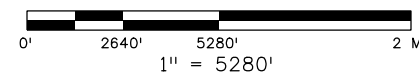
▲ CM-MP - Control Point Monuments set by CDOT. They are CDOT Type 2 monuments, a 3 3/4" dia. aluminum control monument cap (as shown) on a 3' x 3/4" dia. aluminum security rod on a 3' x 3/4" dia. smooth aluminum rod.

General Notes:

1. This Project Control Diagram is not a boundary survey of the adjoining property and is prepared for the Colorado Department of Transportation purposes only.
2. This plan set is subject to change and may not be the most current set. It is the user's responsibility to verify with CDOT that this set is the most current. The information contained on the attached drawing is not valid unless this copy bears an original signature of the Professional Land Surveyor hereon named.
3. Refer to the M-629-1 Survey Monuments of the Standard Plans dated July, 2006 found in The Colorado Department of Transportation, M & S Standards for typical survey monument descriptions.



PROJECT LOCATION MAP



This Project Control was established as part of a larger control network under Project Number NH C020-027, Project Code 16379.

Basis of Bearings: Bearings used in the calculations of coordinates are based on a grid bearing of N82°50'43"E from CM-MP 3118 to CM 3121. Both monuments are CDOT Type II, marked appropriately for their milepost location and control position. This survey data was obtained from a larger Global Positioning System (GPS) survey observed in July and August of 2012. This survey is based on the Colorado High Accuracy Reference Network (CHARN).

Basis of Elevations: Project elevations are based on multiple NGS First Order benchmarks using NAVD 88, Geoid 12A elevations.

COORDINATE DATUM: Project coordinates are modified Colorado State Plane South 0503 Zone NAD '83/(2011) coordinates. The combined elevation/scale factor used to modify the coordinates from state plane to project coordinates is 0.9997446793. The resulting project coordinates are truncated by 1,000,000sf in the Northing and 3,000,000sf in the Easting after converting from state plane coordinates to project coordinates. The CHARN is based on the NAD '83(2011) datum.

Project Coordinates Northing US Survey Feet = $\{[(\text{State Plane Coordinate Northing}(m) / 0.9997446793) * (3937\text{ft}/1200\text{m})] - 1,000,000\text{ft}\}$.

Project Coordinates Easting US Survey Feet = $\{[(\text{State Plane Coordinate Easting}(m) / 0.9997446793) * (3937\text{ft}/1200\text{m})] - 3,000,000\text{ft}\}$.

NOTICE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SURVEYOR STATEMENT (PROJECT CONTROL DIAGRAM)

I, Dennis Pirtle, a professional land surveyor licensed in the State of Colorado, do hereby state to the Colorado Department of Transportation this Project Control Diagram was prepared and the field survey it represents was performed under my responsible charge and, based upon my knowledge, information and belief is in accordance with applicable standards of practice defined by Colorado Department of Transportation publications. This statement is not a guaranty or warranty, either expressed or implied.

PLS No. 33651



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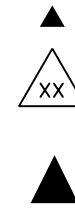
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Project Control Diagram			
Coordinate Tables			
Project Number: STA 0503-085			
Project Location: US 50 WB			
Railroad Bridge to top of hill west of Pueblo Blvd			
Project Code:	Last Mod. Date	Subset	Sheet No.
20344	05-26-15	3.02 of 3.05	3.02



CHARN GEODETIC COORDINATE SUMMARY TABLE

Point No.	Geodetic Coordinates NAD-83(2011) (CHARN)		Elip Height (NAVD88) (m)	Ortho Height (m)	Mapping Angle	Grid Scale Factor	NAD 83(2011) Zone Colorado South 0503		Description
	Latitude(N)	Longitude(W)					SP Northing(m)	SP Easting(m)	
W 430	N38°18'06.19491"	W104°39'46.57528"	1451.561	1470.585	0°30'48"	0.999978626	486597.583	987618.290	Deep Rod in Mon. Box
Y 430	N38°19'08.88073"	W104°41'05.69842"	1489.000	1507.910	0°30'00"	0.999981150	488513.324	985679.038	Deep Rod in Mon. Box
Z 430	N38°19'27.64878"	W104°42'05.74322"	1499.831	1518.660	0°29'23"	0.999981924	489079.390	984215.578	Deep Rod in Mon. Box



GEODETIC COORDINATE TABLE

Point No.	Geodetic Coordinates NAD-83(XX) (CHARN)		Elip Height (NAVD88) (m)	Ortho Height (m)	Mapping Angle	Grid Scale Factor	NAD 83(2011) Zone Colorado South 0503		Description
	Latitude(N)	Longitude(W)					SP Northing(m)	SP Easting(m)	
3097	N38°19'25.60105"	W104°42'06.85919"	1498.569	1517.397	0°29'22"	0.999981839	489016.022	984189.011	CDOT CM TYPE II @ MP 30.97
3098	N38°19'25.23628"	W104°41'58.20968"	1498.842	1517.680	0°29'28"	0.999981824	489006.573	984399.195	CDOT CM TYPE II @ MP 30.98
3101	N38°19'18.81336"	W104°41'41.61134"	1494.308	1513.170	0°29'38"	0.999981559	488812.004	984804.058	CDOT CM TYPE II @ MP 31.01
3104	N38°19'15.63213"	W104°41'22.62108"	1491.899	1510.785	0°29'49"	0.999981428	488717.908	985266.173	CDOT CM TYPE II @ MP 31.04
3111	N38°19'03.65009"	W104°40'46.48254"	1483.559	1502.494	0°30'12"	0.999980936	488356.138	986147.216	CDOT CM TYPE II @ MP 31.11
3114	N38°18'59.03594"	W104°40'22.46748"	1476.985	1495.951	0°30'26"	0.999980748	488219.017	986731.822	CDOT CM TYPE II @ MP 31.14
3118	N38°18'52.22343"	W104°39'59.37529"	1468.919	1487.914	0°30'41"	0.999980471	488013.959	987294.636	CDOT CM TYPE II @ MP 31.18
3121	N38°18'55.05783"	W104°39'28.47544"	1453.766	1472.796	0°30'59"	0.999980586	488108.082	988044.464	CDOT CM TYPE II @ MP 31.21
3127	N38°18'45.02472"	W104°38'56.79586"	1441.834	1460.900	0°31'19"	0.999980179	487805.714	988816.829	CDOT CM TYPE II @ MP 31.27
3128	N38°18'42.32115"	W104°38'47.95915"	1445.380	1464.456	0°31'24"	0.999980070	487724.316	989032.257	CDOT CM TYPE II @ MP 31.28
200	N38°18'35.03387"	W104°37'59.58218"	1469.674	1488.798	0°31'54"	0.999979776	487510.455	990209.551	Lead and Tack in Mon. Box



PROJECT COORDINATE TABLE

Point No.	Project Coordinates		Elev(ft) (NAVD88)	Description
	Northing(ft)	Easting(ft)		
3097	604789.80	229784.75	4978.33	CDOT CM TYPE II @ MP 30.97
3098	604758.79	230474.50	4979.26	CDOT CM TYPE II @ MP 30.98
3101	604120.28	231803.13	4964.46	CDOT CM TYPE II @ MP 31.01
3104	603811.49	233319.64	4956.63	CDOT CM TYPE II @ MP 31.04
3111	602624.28	236210.93	4929.43	CDOT CM TYPE II @ MP 31.11
3114	602174.30	238129.42	4907.97	CDOT CM TYPE II @ MP 31.14
3118	601501.36	239976.38	4881.60	CDOT CM TYPE II @ MP 31.18
3121	601810.24	242437.07	4832.00	CDOT CM TYPE II @ MP 31.21
3127	600817.97	244971.72	4792.97	CDOT CM TYPE II @ MP 31.27
3128	600550.85	245678.68	4804.64	CDOT CM TYPE II @ MP 31.28
W 430	596853.28	241038.51	4824.74	Deep Rod in Mon. Box
Y 430	603140.11	234674.52	4947.20	Deep Rod in Mon. Box
Z 430	604997.75	229871.93	4982.47	Deep Rod in Mon. Box
200	599849.03	249542.18	4884.50	Lead and Tack in Mon. Box



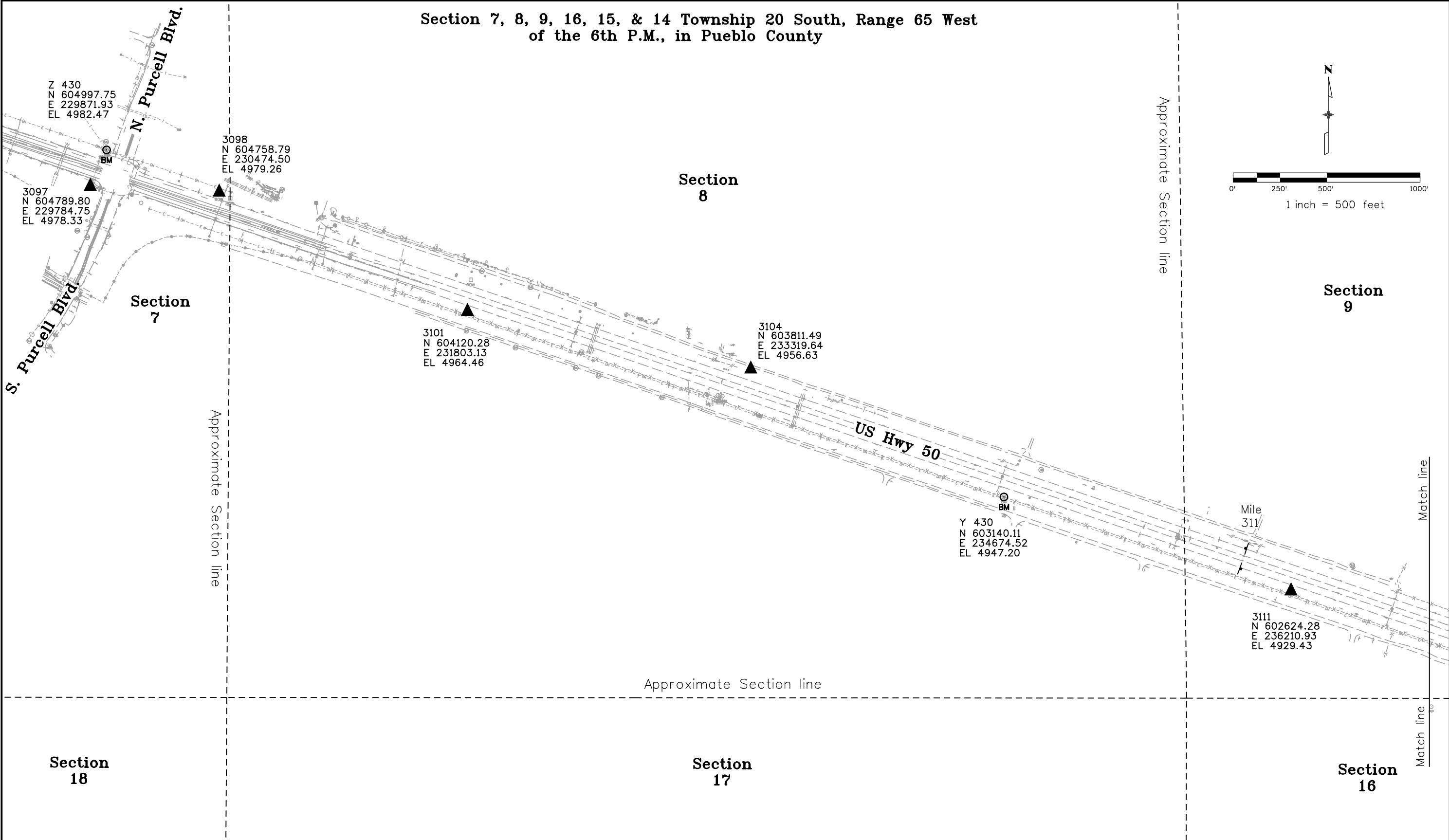
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Project Control Diagram			
Plan Sheet			
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Project Location: US 50 WB			
Railroad Bridge to top of hill west of Pueblo Blvd			
Project Code:	Last Mod. Date	Subset	Sheet No.
20344	06-15-15	3.03 of 3.05	3.03

Section 7, 8, 9, 16, 15, & 14 Township 20 South, Range 65 West
of the 6th P.M., in Pueblo County



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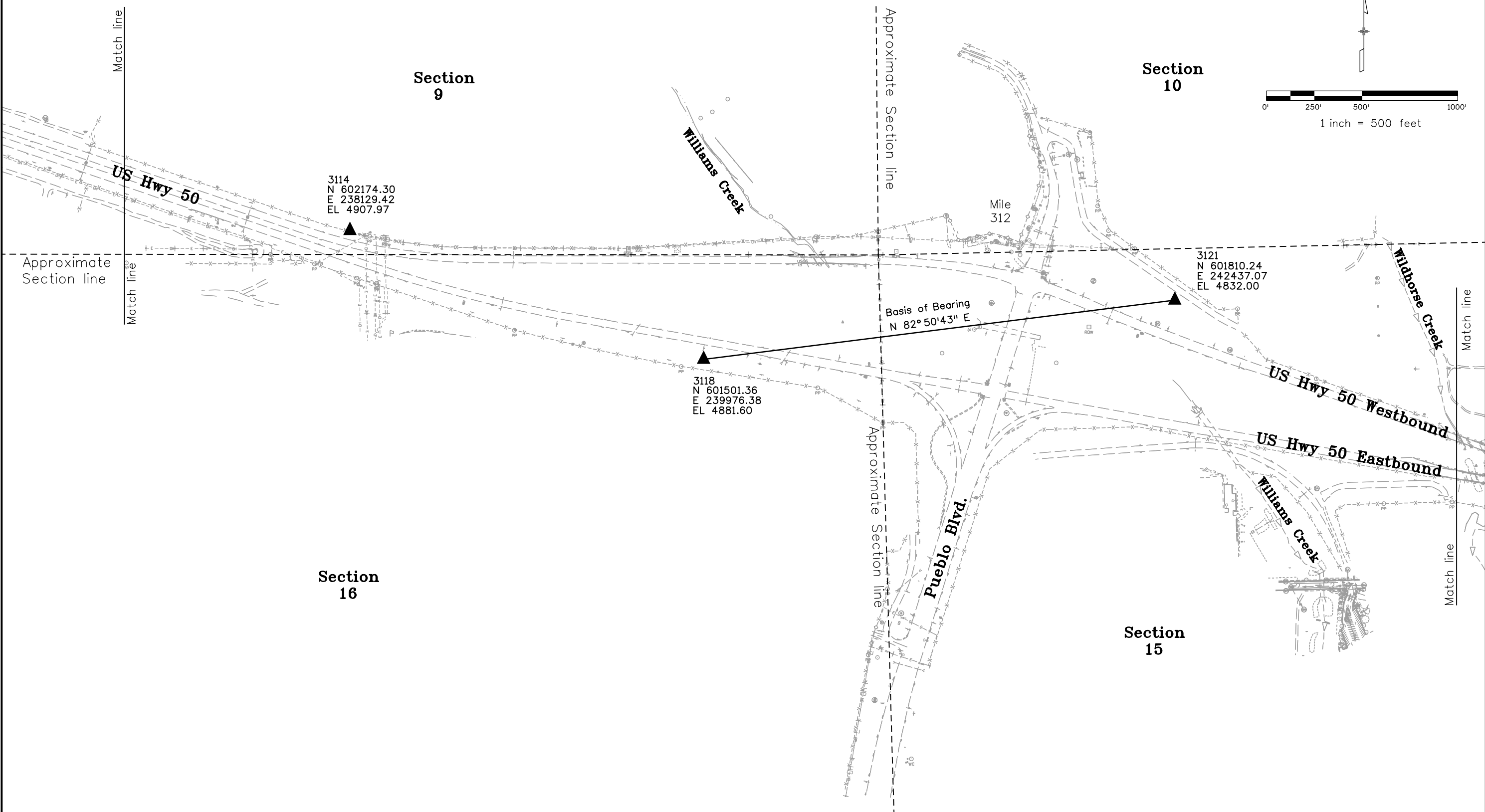
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Project Code:	Last Mod. Date	Subset	Sheet No.
20344	06-15-15	3.04 of 3.05	3.04

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Colorado Department of Transportation



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Region 2

TTA

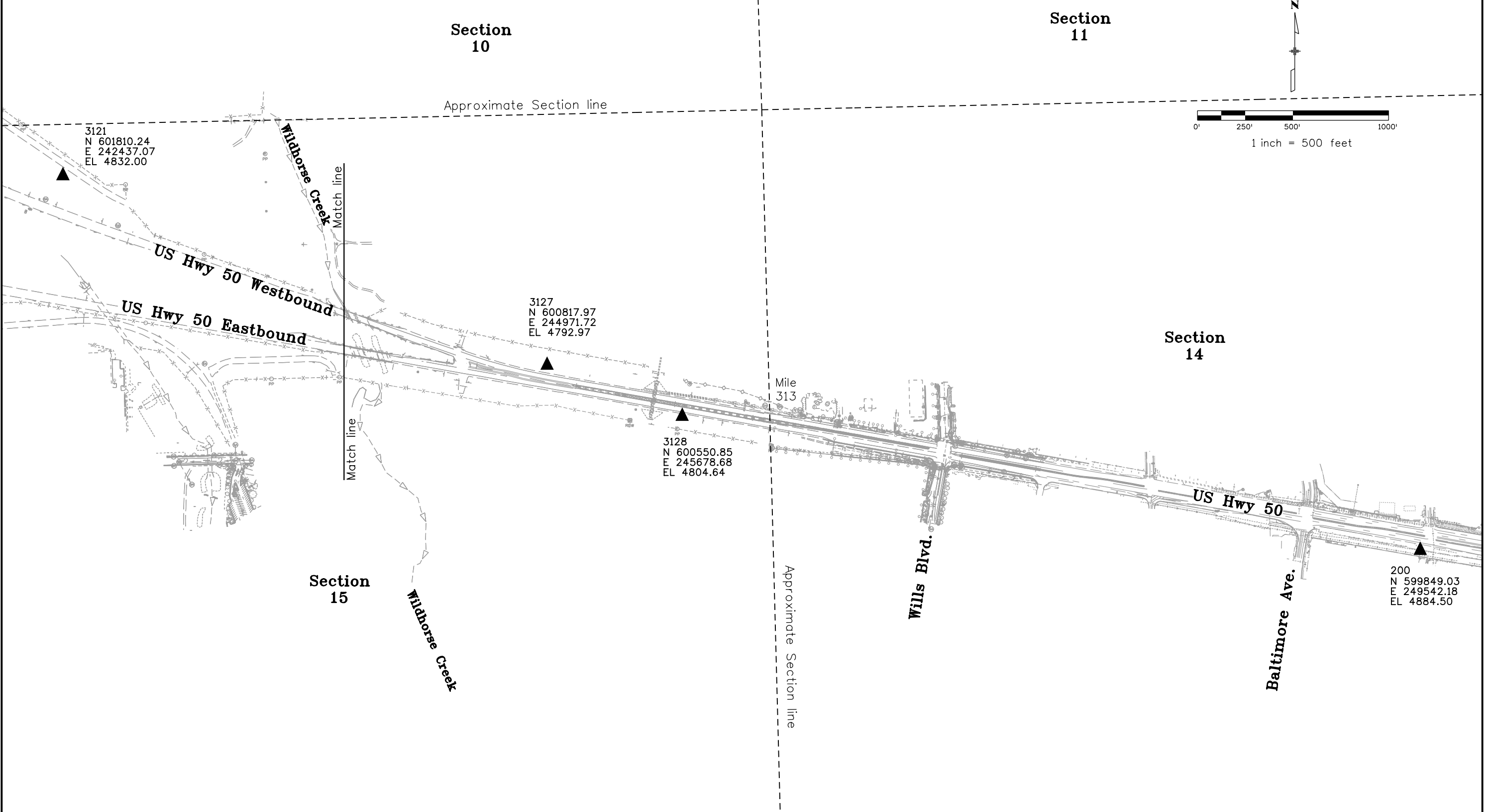
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