Contract Plans

For Construction of:

SR290 MP 8.40 TO MP 8.75

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SPOKANE COUNTY

F.A. PROJECT NO. STPUL 0027(020)
F.A. PROJECT NO. 69A36525420110RASWA
F.A. PROJECT NO. 69A36524420020RLDWA

JUNE 2025

City of Spokane Valley

INDEX

INDEX (CONTINUED)

PLAN REFERENCE NO.

SHEET OF SHEETS

NOTE: ALL SHEET REFERENCES, FIRST NOS. OF STRUCTURE CODE DESIGNATIONS AND MATCH LINE SHEET REFERENCES, ETC., THROUGHOUT THE PLANS, REFER TO THE ENTRY IN THE PLAN REFERENCE NUMBER BOX.

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DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH

JOB NUMBER

CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

INDEX

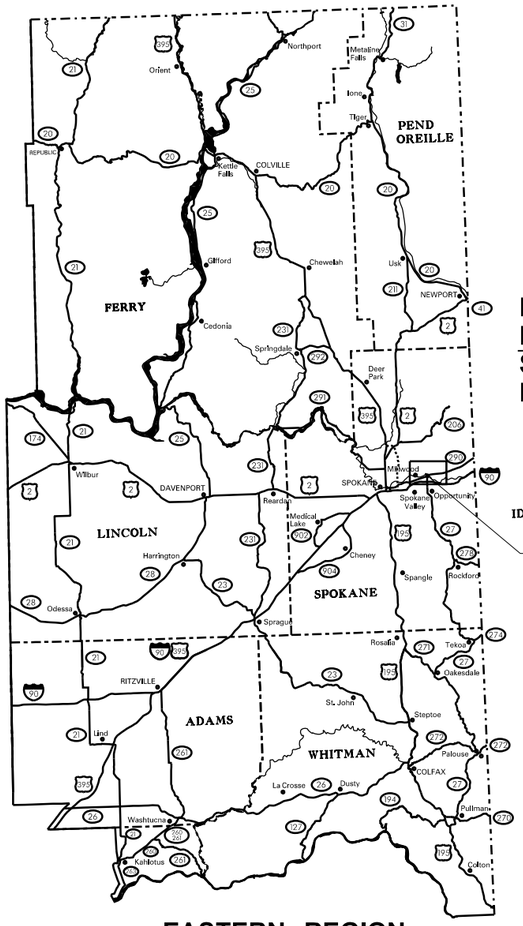
Plot 1

PLAN REF NO
IN1

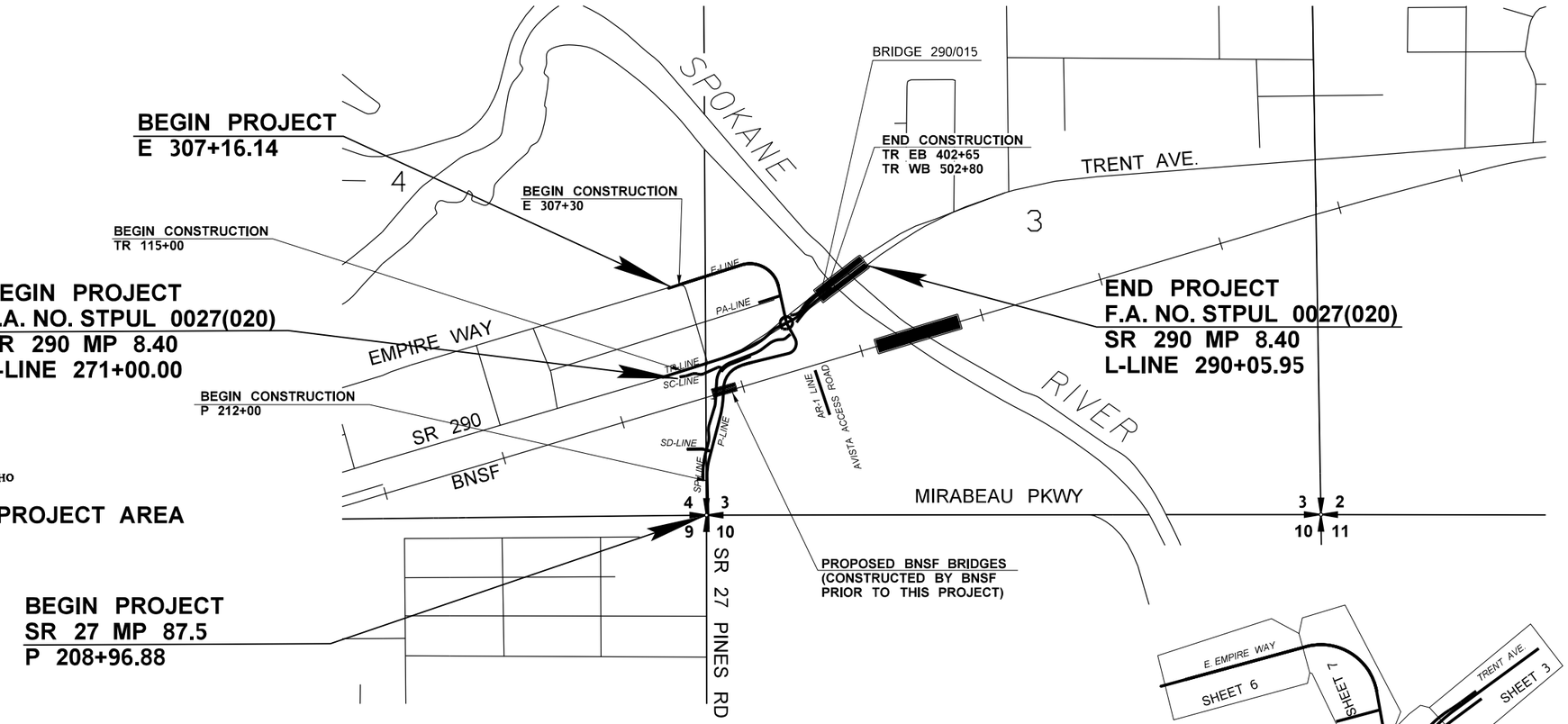
SHEET 2 OF 218 SHEETS

T.25N. R.45E. W.M.

SPOKANE VALLEY



EASTERN REGION



VICINITY MAP

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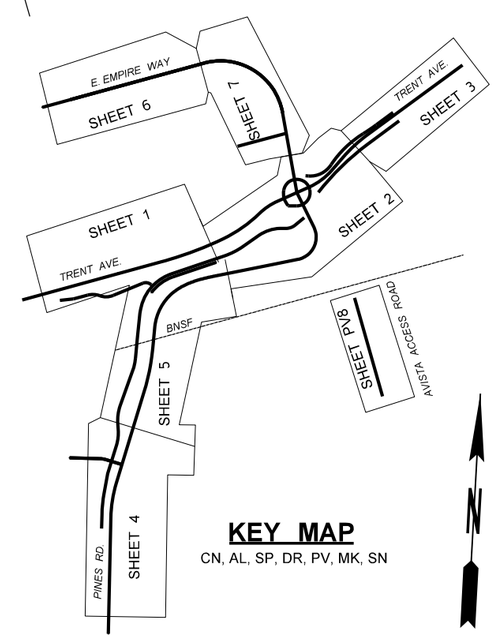

KEY MAP

CN, AL, SP, DR, PV, MK, SN

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BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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HDR

SR290/SR27

PINES RD BNSF GRADE SEPARATION

SPOKANE COUNTY - MP 8.43

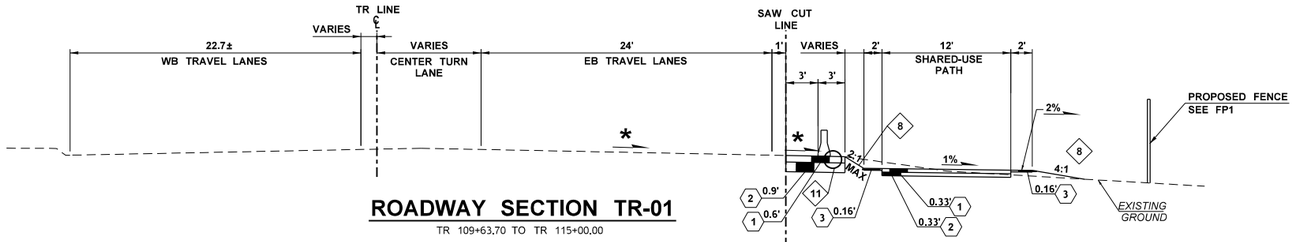
VICINITY MAP

Plot 1

PLAN REF NO

VM1

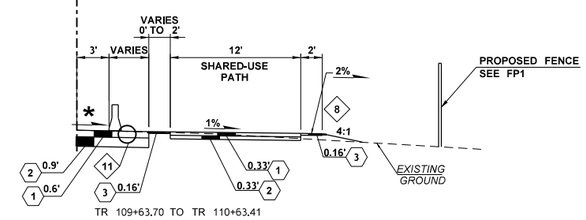
SHEET 3 OF 218 SHEETS



ROADWAY SECTION TR-01

TR 109+63.70 TO TR 115+00.00

* MATCH EXISTING ROADWAY CROSS SLOPE



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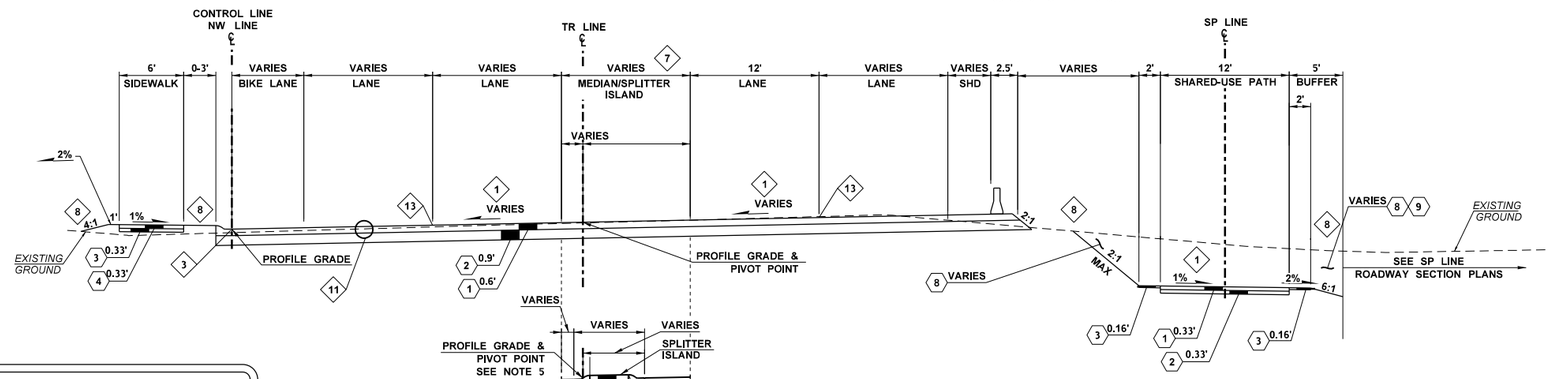
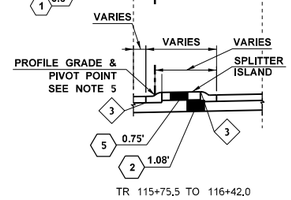
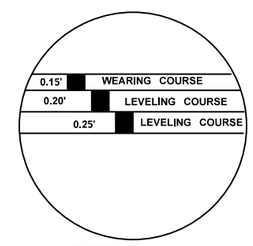




TR 115+75.5 TO 116+42.0

ROADWAY SECTION TR-02

TR 115+00.0 TO 116+42.0



DETAIL A

CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
3. ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
7. FOR ISLAND DETAILS, SEE PAVING DETAILS AND SPLITTER ISLAND DETAILS
8. FOR RESTORATION DETAILS AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
11. SEE DETAIL A THIS SHEET
13. APPLY JOINT ADHESIVE FOR BITUMINOUS PAVEMENT.

LEGEND

1. HMA CL. ⅛ IN. PG 64H-28
2. CRUSHED SURFACING BASE COURSE
3. CRUSHED SURFACING TOP COURSE
4. CEMENT CONC. SIDEWALK
5. TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6. TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7. NOT USED
8. ROADWAY EXCAVATION INCL. HAUL
9. EMBANKMENT COMPACTION

NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.

NOT TO SCALE

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REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

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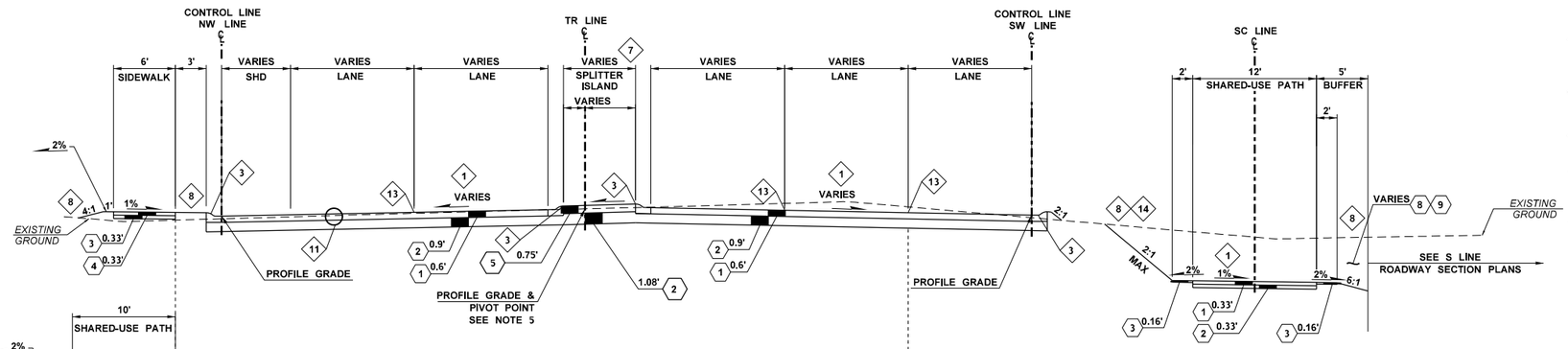
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO
RS1
SHEET 4 OF 218 SHEETS

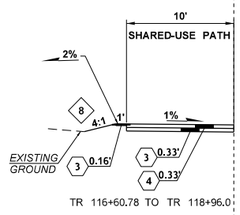
CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
3. ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
7. FOR ISLAND DETAILS, SEE PAVING DETAILS AND SPLITTER ISLAND DETAILS
8. FOR RESTORATION DETAILS AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
11. SEE DETAIL A THIS SHEET
13. APPLY JOINT ADHESIVE FOR BITUMINOUS PAVEMENT.
14. CLASS B CUT SLOPE TREATMENT. SEE STANDARD PLAN A-20.10-00.

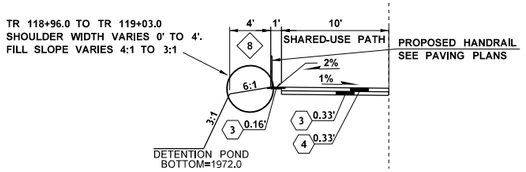


ROADWAY SECTION TR-03

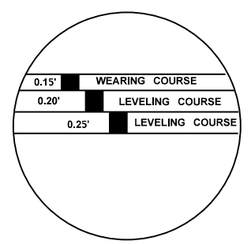
TR 116+42.0 TO 119+28.0



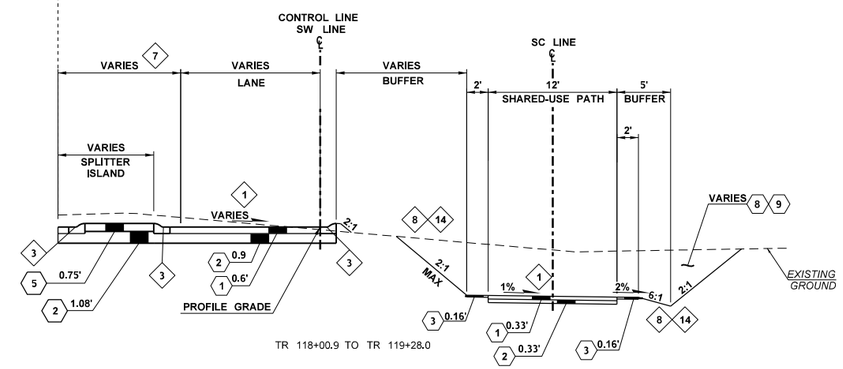
TR 116+60.78 TO TR 118+96.0



TR 118+96.0 TO TR 119+28.0



DETAIL A



TR 118+00.9 TO TR 119+28.0

LEGEND

1. HMA CL. ⅛ IN. PG 64H-28
2. CRUSHED SURFACING BASE COURSE
3. CRUSHED SURFACING TOP COURSE
4. CEMENT CONC. SIDEWALK
5. TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6. TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7. NOT USED
8. ROADWAY EXCAVATION INCL. HAUL
9. EMBANKMENT COMPACTION

NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.

NOT TO SCALE

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CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN STATE OF WASHINGTON 23013867 REGISTERED PROFESSIONAL ENGINEER

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HDR

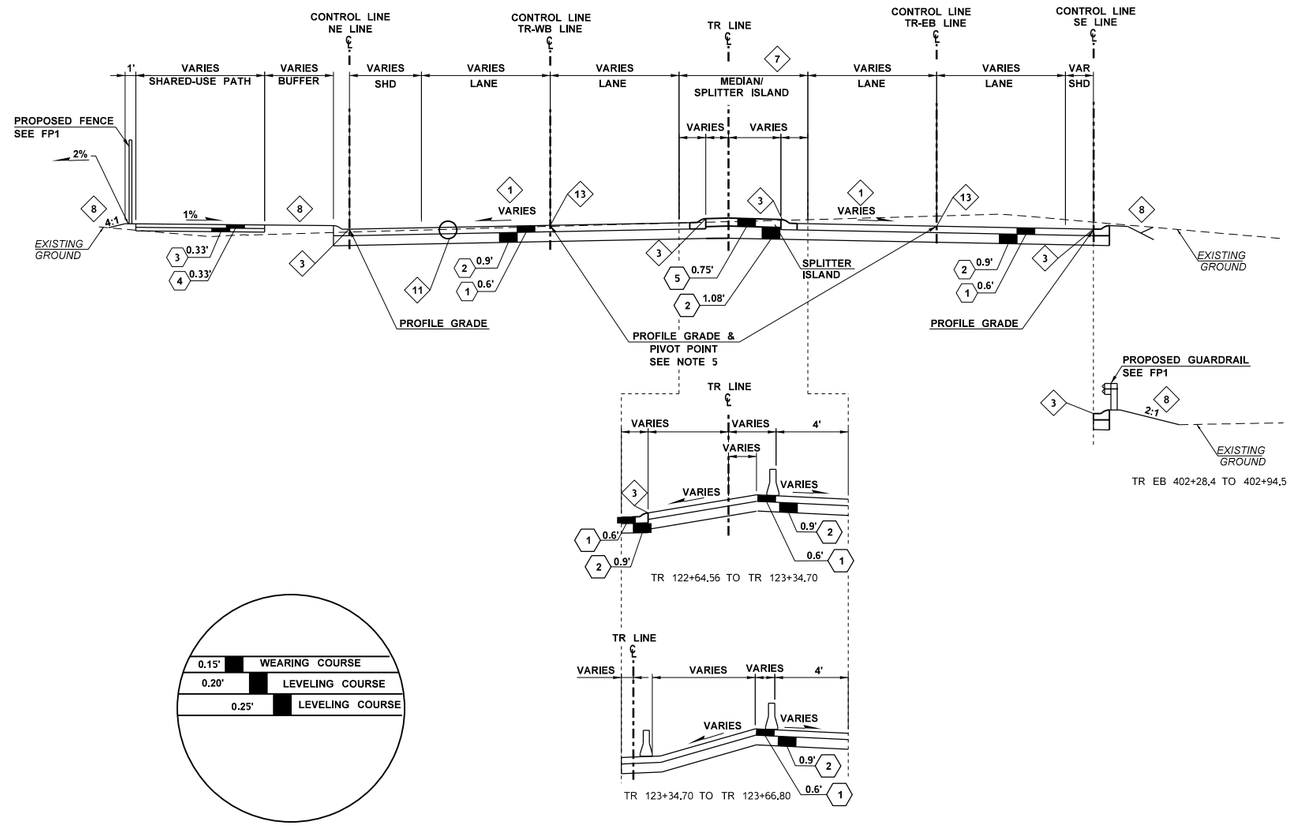
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO
RS2
SHEET 5 OF 218 SHEETS

LEGEND

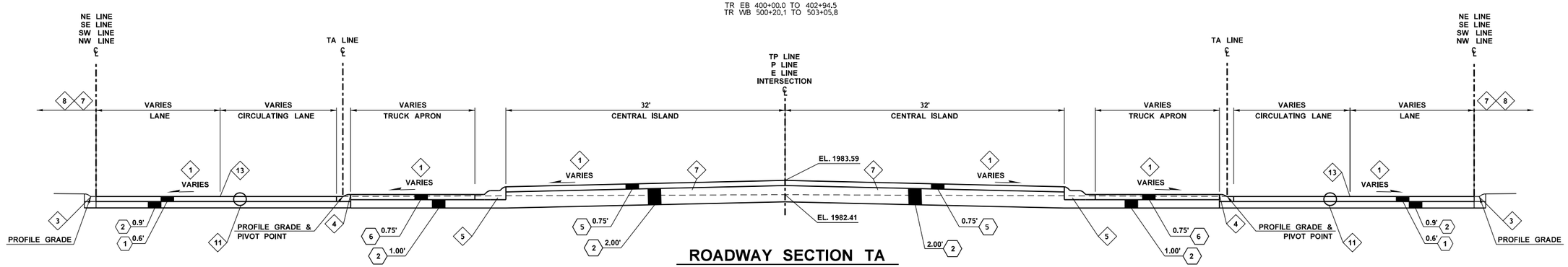
1	HMA CL. ⅛ IN. PG 64H-28
2	CRUSHED SURFACING BASE COURSE
3	CRUSHED SURFACING TOP COURSE
4	CEMENT CONC. SIDEWALK
5	TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6	TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7	NOT USED
8	ROADWAY EXCAVATION INCL. HAUL
9	EMBANKMENT COMPACTION



ROADWAY SECTION TR-04

TR EB 400+00.0 TO 402+94.5
TR WB 500+20.1 TO 503+05.8

DETAIL A



ROADWAY SECTION TA

TA 10+00.0 TO 13+36.0

NOT TO SCALE

CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
3. ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
4. ROUNDABOUT TRUCK APRON CEM. CONC. CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
5. ROUNDABOUT CENTRAL ISLAND CEM. CONC. CURB, SEE STANDARD PLAN F-10.18-04
7. FOR ISLAND DETAILS, SEE PAVING DETAILS AND SPLITTER ISLAND DETAILS
8. FOR RESTORATION DETAILS AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
11. SEE DETAIL A THIS SHEET
13. APPLY JOINT ADHESIVE FOR BITUMINOUS PAVEMENT.

NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.

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BRANT JOSEPH KIRKMAN · STATE OF WASHINGTON · 23013867 · REGISTERED PROFESSIONAL ENGINEER

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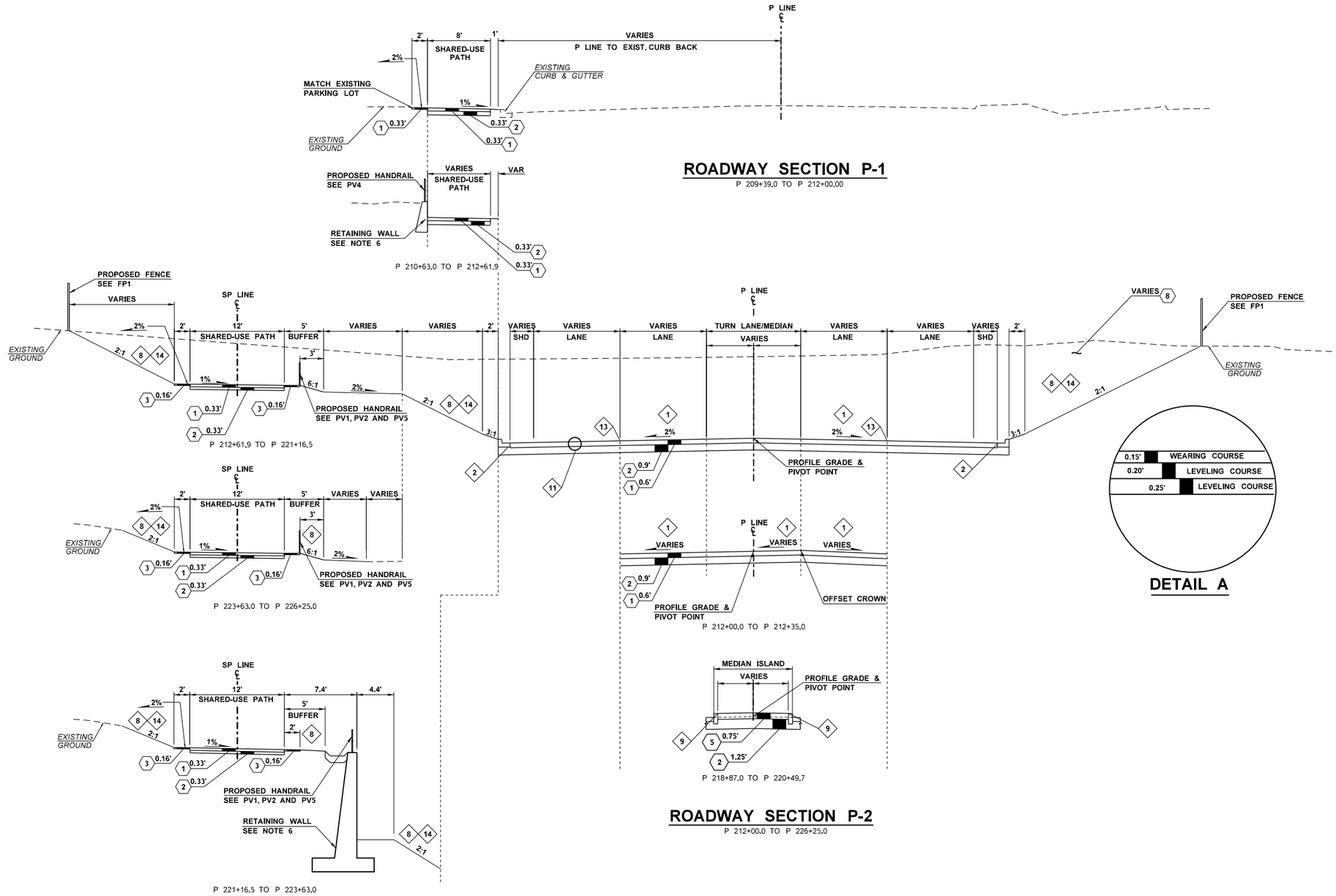
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO
RS3
SHEET 6 OF 218 SHEETS



ROADWAY SECTION P-1

P 209+39.0 TO P 212+00.00

ROADWAY SECTION P-2

P 212+00.0 TO P 226+25.0

DETAIL A

CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
2. CEMENT CONC. TRAFFIC CURB AND GUTTER (SEE STANDARD PLAN F-10.12.04)
8. FOR RESTORATION DETAILS AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
9. CEMENT CONC. TRAFFIC CURB (SEE STANDARD PLAN F-10.12-04)
11. SEE DETAIL A THIS SHEET
13. APPLY JOINT ADHESIVE FOR BITUMINOUS PAVEMENT.
14. CLASS B CUT SLOPE TREATMENT. SEE STANDARD PLAN A-20.10-00.

NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.

LEGEND

1	HMA CL. ⅛ IN. PG 64H-28
2	CRUSHED SURFACING BASE COURSE
3	CRUSHED SURFACING TOP COURSE
4	CEMENT CONC. SIDEWALK
5	TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6	TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7	NOT USED
8	ROADWAY EXCAVATION INCL. HAUL
9	EMBANKMENT COMPACTION

NOT TO SCALE

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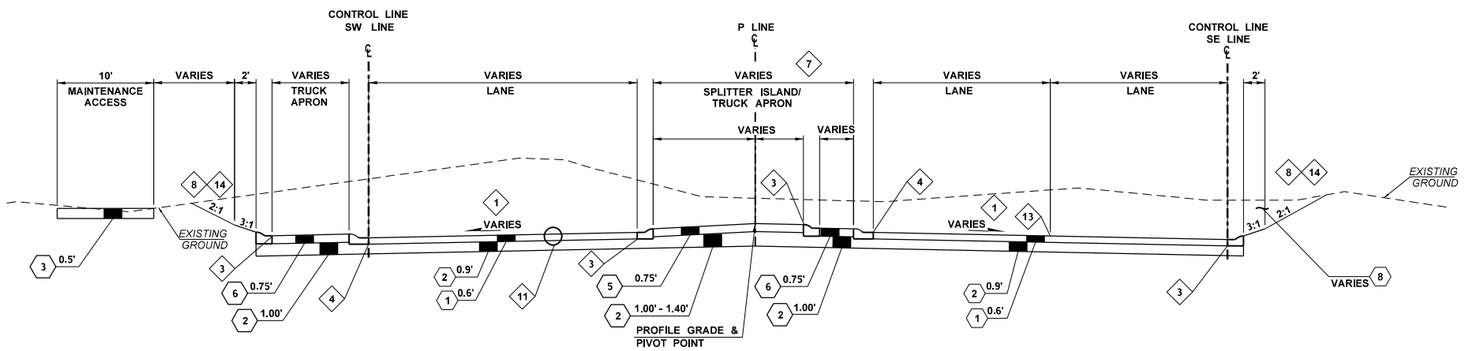
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO RS4
SHEET 7 OF 218 SHEETS

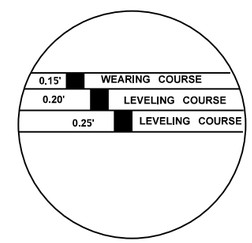
CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
3. ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
4. ROUNDABOUT TRUCK APRON CEM. CONC. CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
7. FOR ISLAND DETAILS, SEE PAVING DETAILS AND SPLITTER ISLAND DETAILS
8. FOR RESTORATION DETAILS AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
11. SEE DETAIL A THIS SHEET
13. APPLY JOINT ADHESIVE FOR BITUMINOUS PAVEMENT.
14. CLASS B CUT SLOPE TREATMENT. SEE STANDARD PLAN A-20.10-00.



ROADWAY SECTION P-3

P 226+25.00 TO P 228+83.08



DETAIL A

LEGEND

1. HMA CL. ⅙ IN. PG 64H-28
2. CRUSHED SURFACING BASE COURSE
3. CRUSHED SURFACING TOP COURSE
4. CEMENT CONC. SIDEWALK
5. TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6. TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7. NOT USED
8. ROADWAY EXCAVATION INCL. HAUL
9. EMBANKMENT COMPACTION

NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.

NOT TO SCALE

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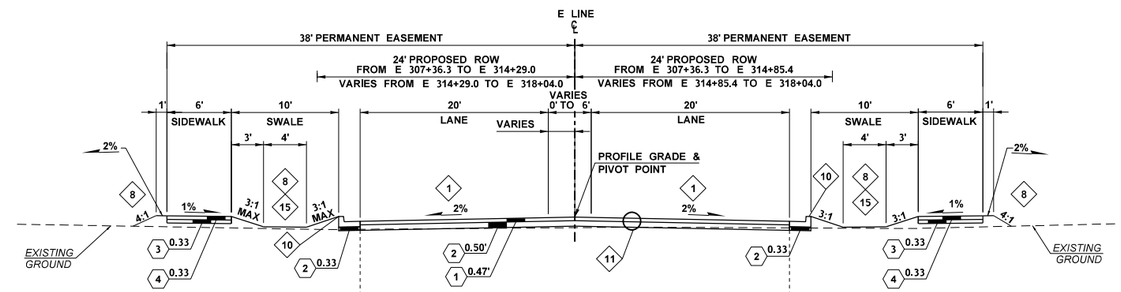
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO RS5
SHEET 8 OF 218 SHEETS

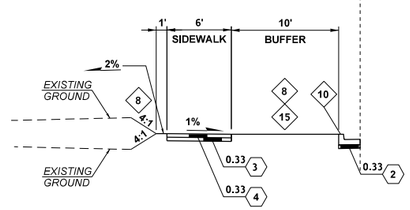
CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
3. ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
8. FOR RESTORATION AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
10. CEMENT CONC. TRAFFIC CURB AND GUTTER (COSV CURB AND GUTTER TYPE B SEE SPOKANE VALLEY PLAN R-102)
11. SEE DETAIL A THIS SHEET
15. FOR ROADSIDE SWALE DETAILS SEE DETAIL DRD2

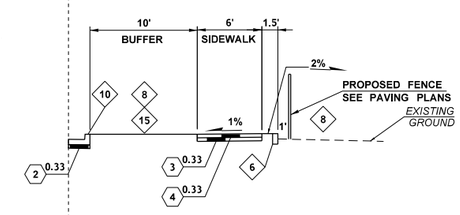


ROADWAY SECTION E-1

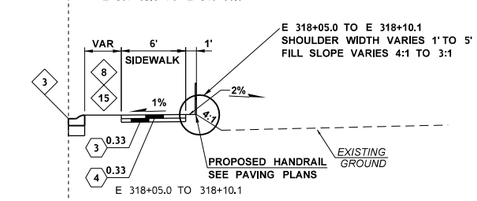
E 307+59.8 TO E 318+71.0



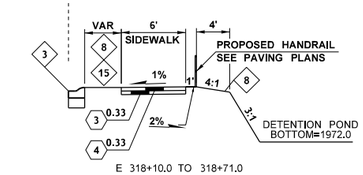
E 307+59.8 TO E 308+56.2
E 309+76.2 TO E 312+69.5



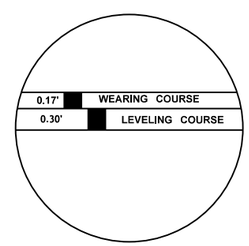
E 307+59.8 TO E 310+00.0



E 318+05.0 TO 318+10.1



E 318+10.0 TO 318+71.0



DETAIL A

LEGEND

1. HMA CL. ⅙ IN. PG 64H-28
2. CRUSHED SURFACING BASE COURSE
3. CRUSHED SURFACING TOP COURSE
4. CEMENT CONC. SIDEWALK
5. TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6. TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7. NOT USED
8. ROADWAY EXCAVATION INCL. HAUL
9. EMBANKMENT COMPACTION

NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.

NOT TO SCALE

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TIME	10:22:48 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley
HDR

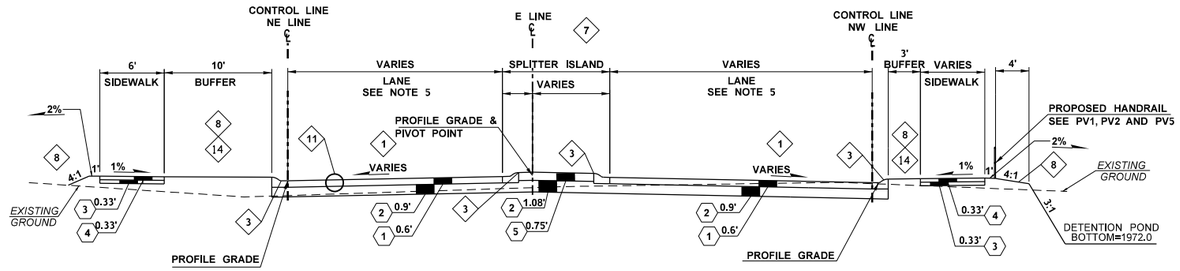
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO RS6
SHEET 9 OF 218 SHEETS

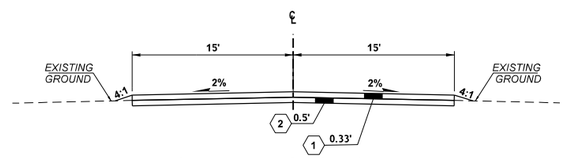
LEGEND

1	HMA CL. ⅛ IN. PG 64H-28
2	CRUSHED SURFACING BASE COURSE
3	CRUSHED SURFACING TOP COURSE
4	CEMENT CONC. SIDEWALK
5	TEXTURED AND PIGMENTED CEMENT CONC. TRAFFIC ISLAND
6	TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON
7	NOT USED
8	ROADWAY EXCAVATION INCL. HAUL
9	EMBANKMENT COMPACTION



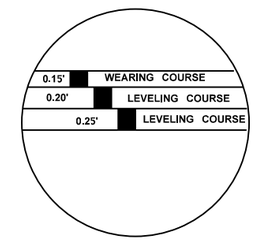
ROADWAY SECTION E-2

E 318+76.0 TO E 319+16.5



ROADWAY SECTION AR-1

AR 10+22.0 TO AR 13+93.16
SEE PV8 FOR PLAN AND PROFILE



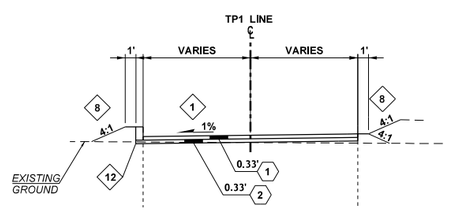
DETAIL A

CONSTRUCTION NOTES:

1. SEE RP PLANS FOR SUPER ELEVATION AND VERTICAL CONTROL ALIGNMENTS. SEE AL PLANS FOR HORIZONTAL CONTROL ALIGNMENTS.
3. ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER, SEE STANDARD PLAN F-10.18-04
7. FOR ISLAND DETAILS, SEE PAVING DETAILS AND SPLITTER ISLAND DETAILS
8. FOR RESTORATION DETAILS AND BUFFER TREATMENT, SEE ROADSIDE RESTORATION PLANS
11. SEE DETAIL A THIS SHEET
12. CEMENT CONC. TRAFFIC CURB (CURB TYPE A, SPOKANE VALLEY PLAN R-102)
14. CLASS B CUT SLOPE TREATMENT. SEE STANDARD PLAN A-20.10-00.

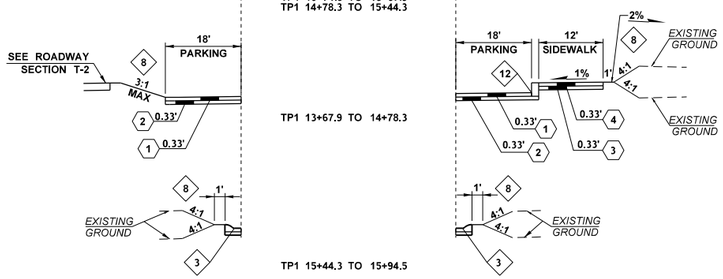
NOTES:

1. ALL PAVING DEPTHS ARE COMPACTED DEPTHS.
2. ROUNDABOUT CURBS AND TRUCK APRON SHALL BE CLASS 4000 CONCRETE.
3. FOR TRIMMING AND CLEANUP SEE WSDOT STD. SPECIFICATION 2-11.
4. SEE PAVING PLAN FOR VARYING LANE WIDTHS.
5. SEE PAVING DETAILS FOR SPLITTER ISLAND SLOPE/TRANSITIONS.
6. SEE ST PLANS FOR RETAINING WALL DETAILS.
7. FILL SLOPE MATCHES TO SHARED USED PATH, 2:1 MAX.



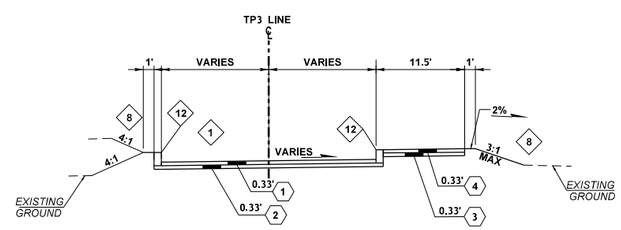
ROADWAY SECTION TP-1

TP1 10+74.8 TO 13+67.9
TP1 14+78.3 TO 15+44.3



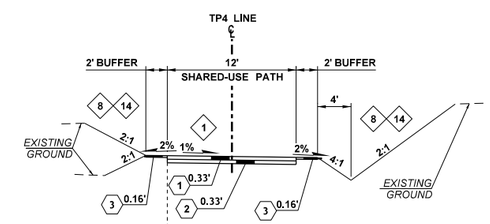
TP1 13+67.9 TO 14+78.3

TP1 15+44.3 TO 15+94.5



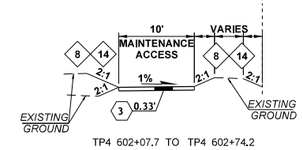
ROADWAY SECTION TP-3

TP3 50+19.0 TO TP3 52+33.8



ROADWAY SECTION TP-4

TP4 600+06.3 TO TP4 605+90.0



TP4 602+07.7 TO TP4 602+74.2

NOT TO SCALE

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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
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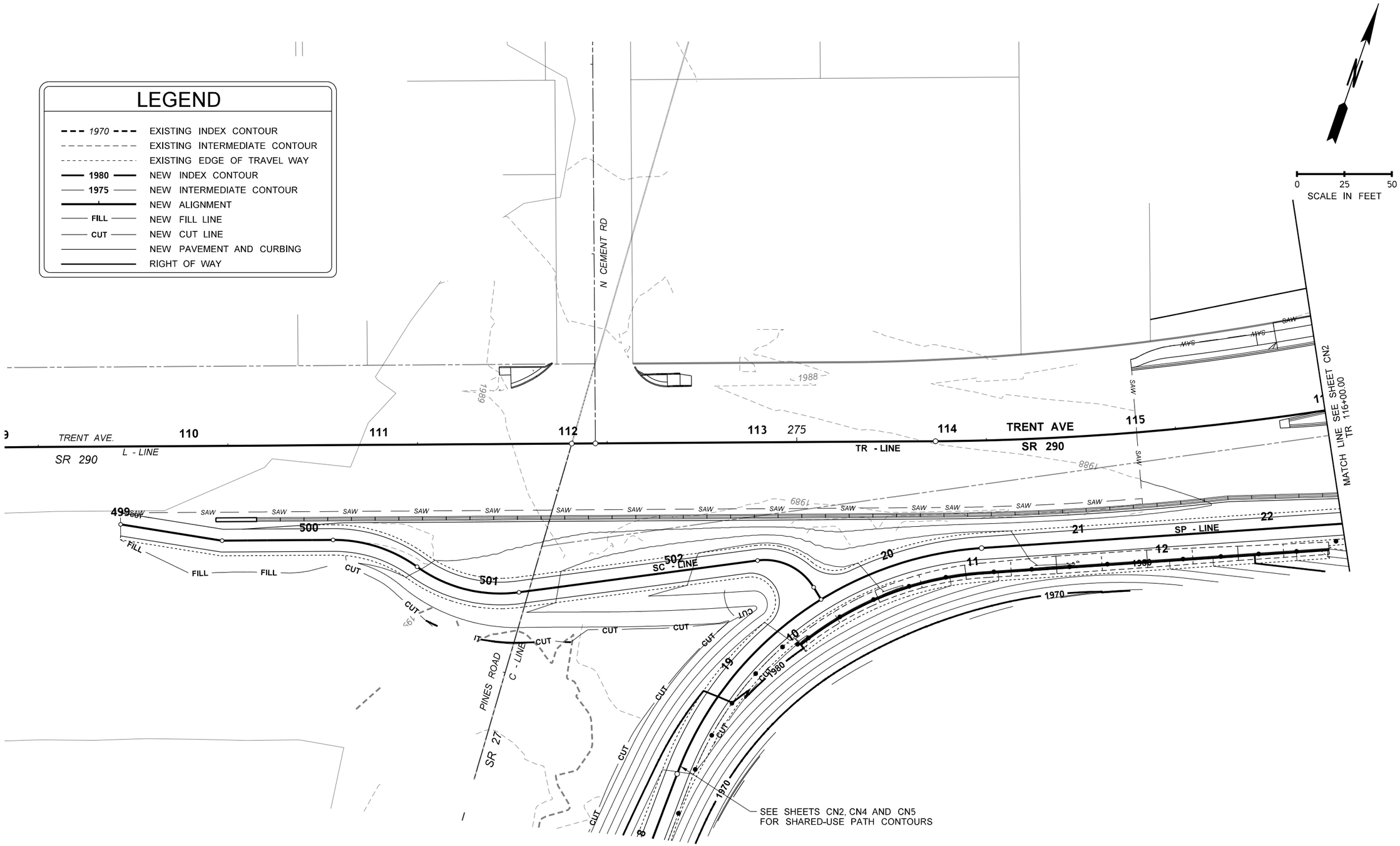
CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY SECTION PLAN

Plot 1
PLAN REF NO RS7
SHEET 10 OF 218 SHEETS



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PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

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City of Spokane Valley

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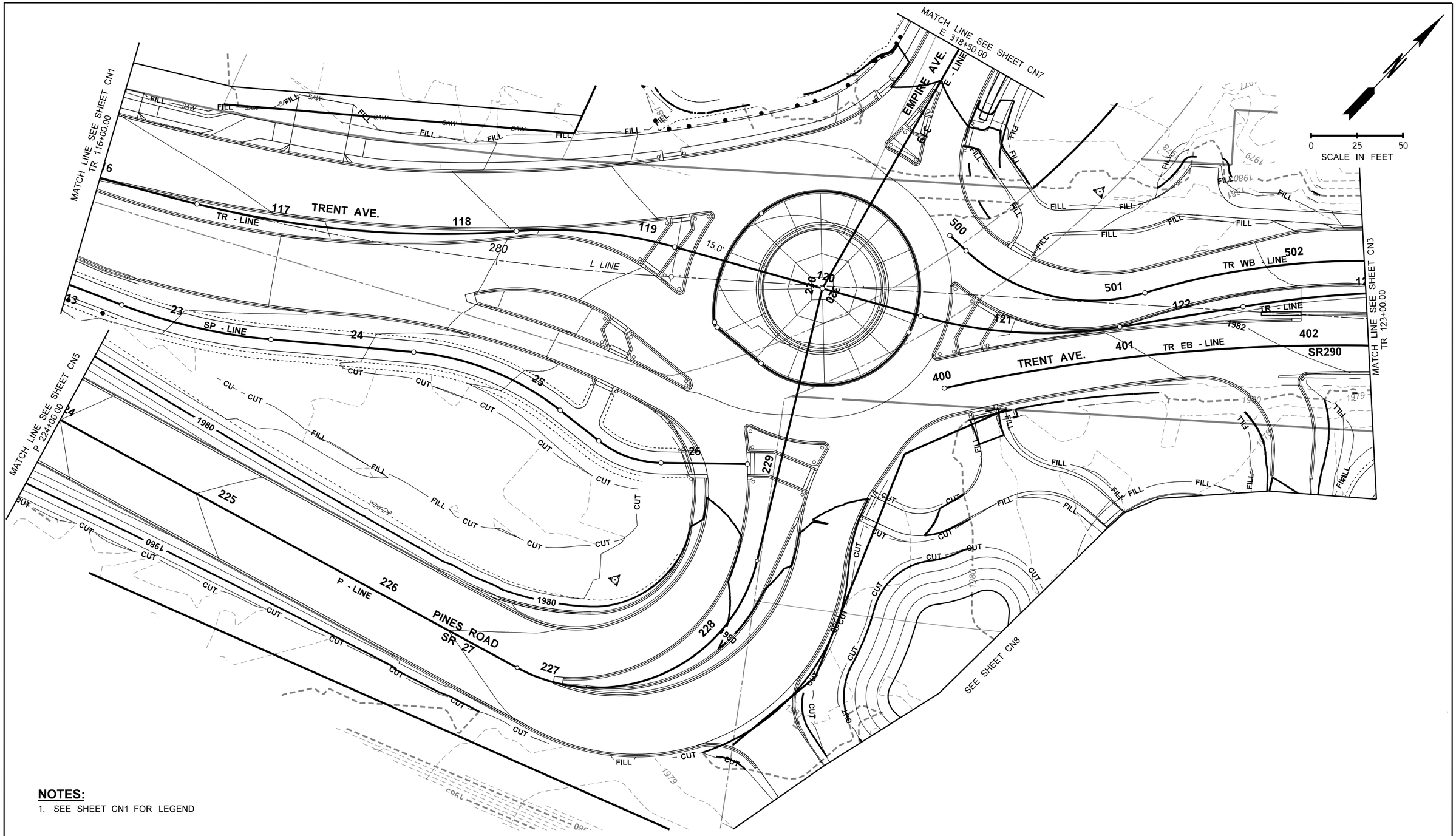
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1
PLAN REF NO
CN1
SHEET 11 OF 218 SHEETS



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ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
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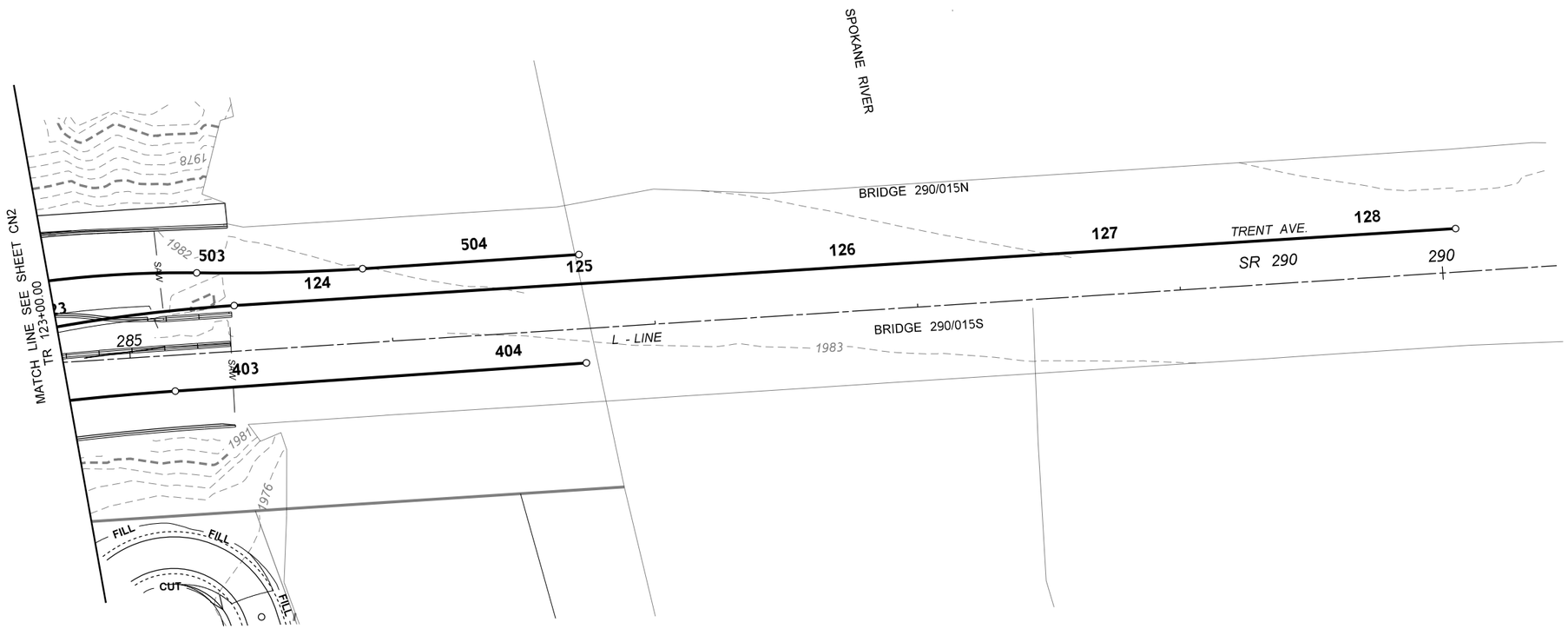
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1

PLAN REF NO
CN2

SHEET 12 OF 218 SHEETS



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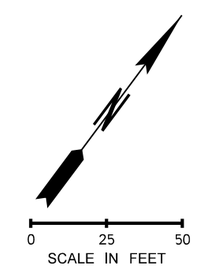
1. SEE SHEET CN1 FOR LEGEND



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PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
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DATE
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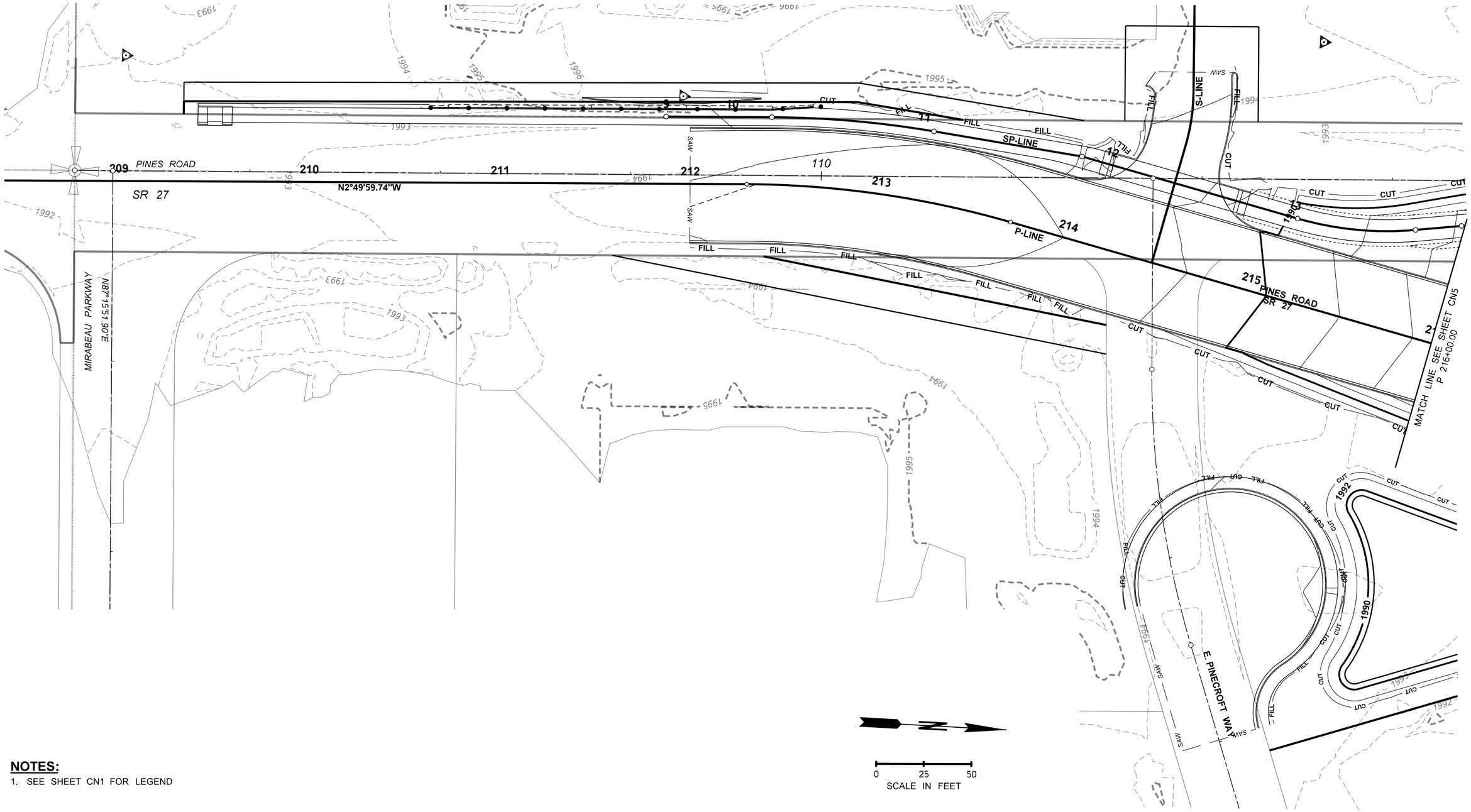
CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1
PLAN REF NO
CN3
SHEET 13 OF 218 SHEETS



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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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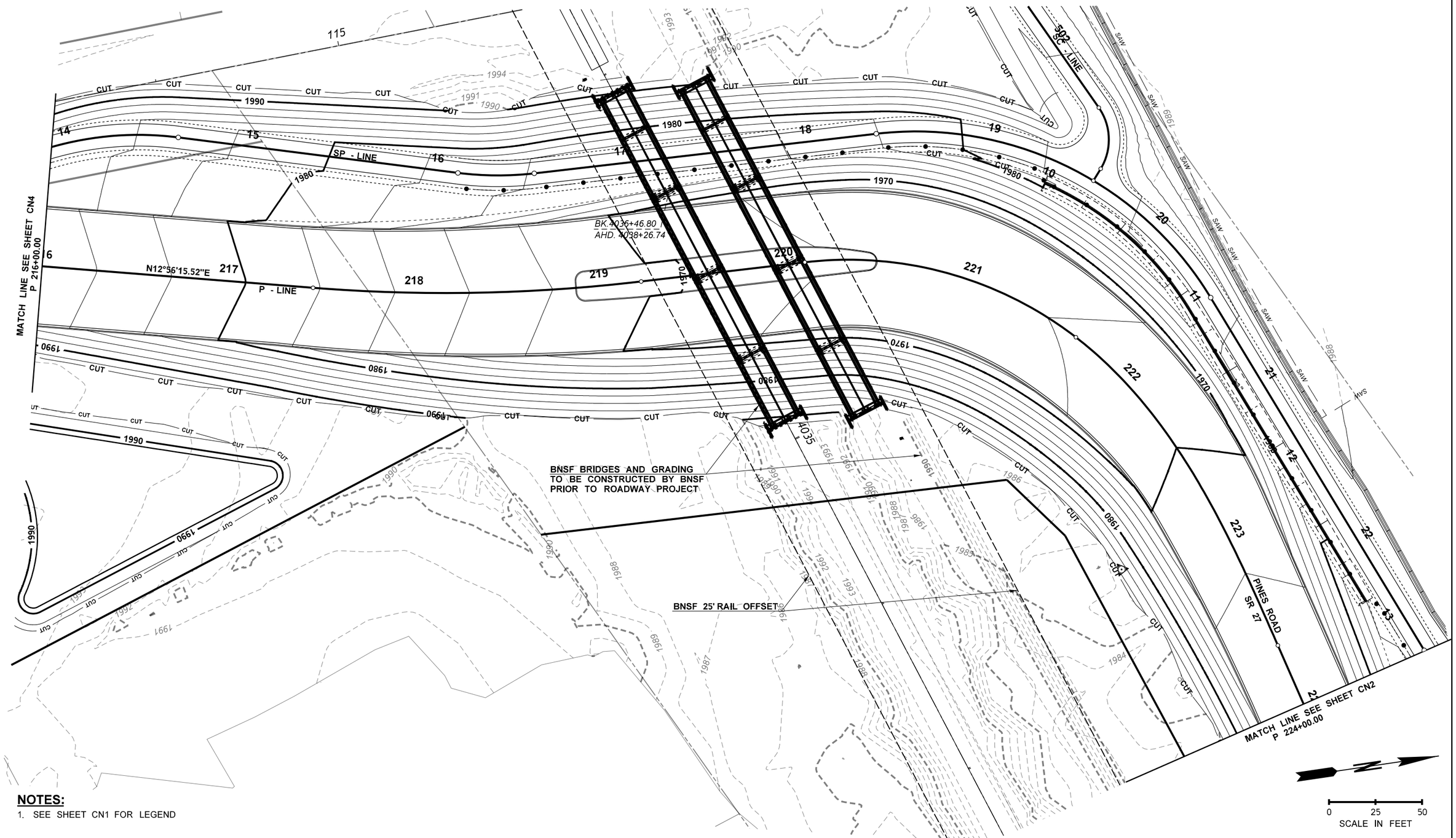
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1

PLAN REF NO
CN4

SHEET 14 OF 218 SHEETS



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PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

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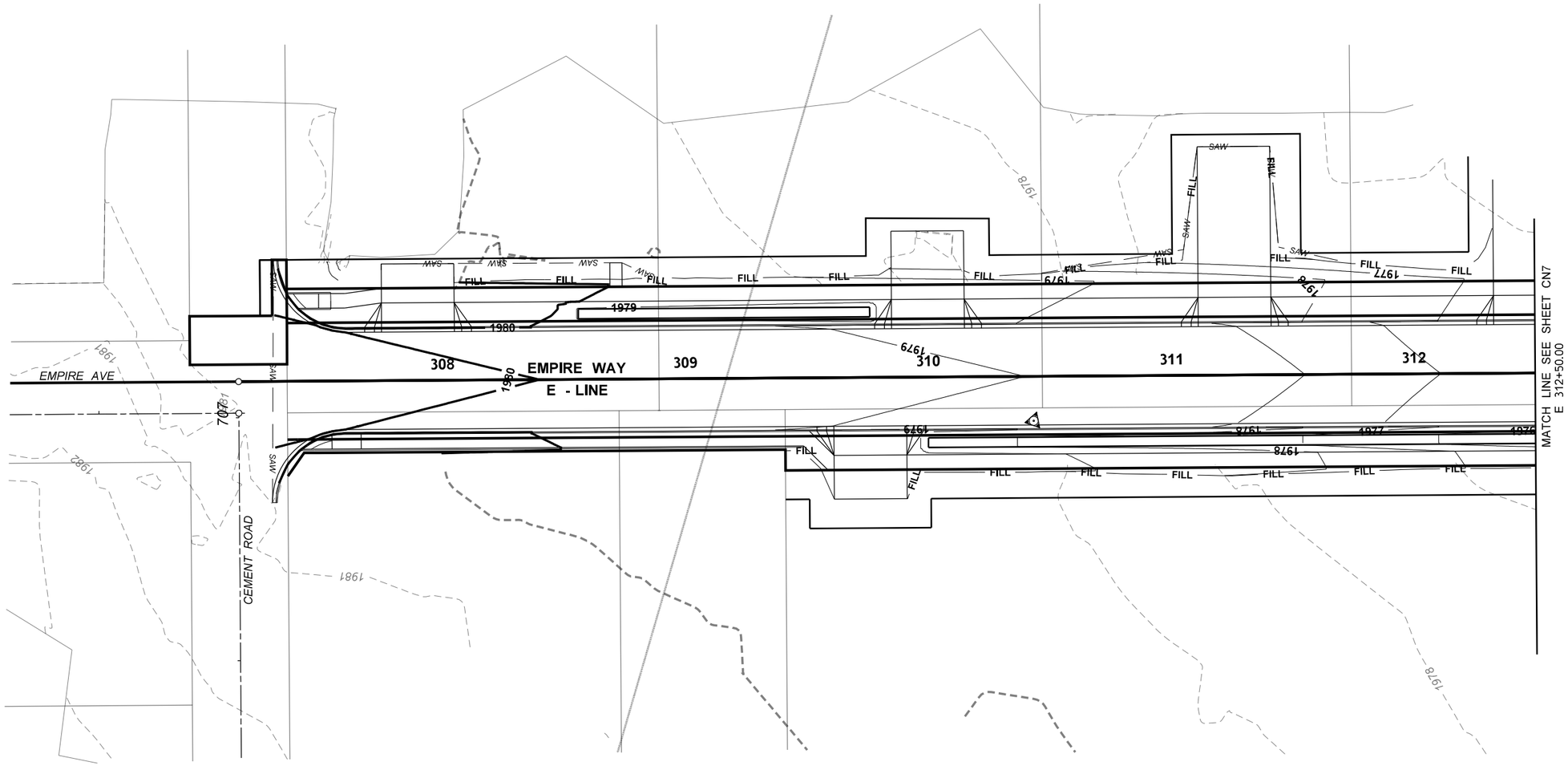
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

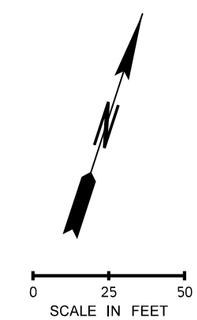
CONTOUR GRADING PLAN

Plot 1

PLAN REF NO
CN5

SHEET 15 OF 218 SHEETS





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PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN STATE OF WASHINGTON 23013867 REGISTERED PROFESSIONAL ENGINEER

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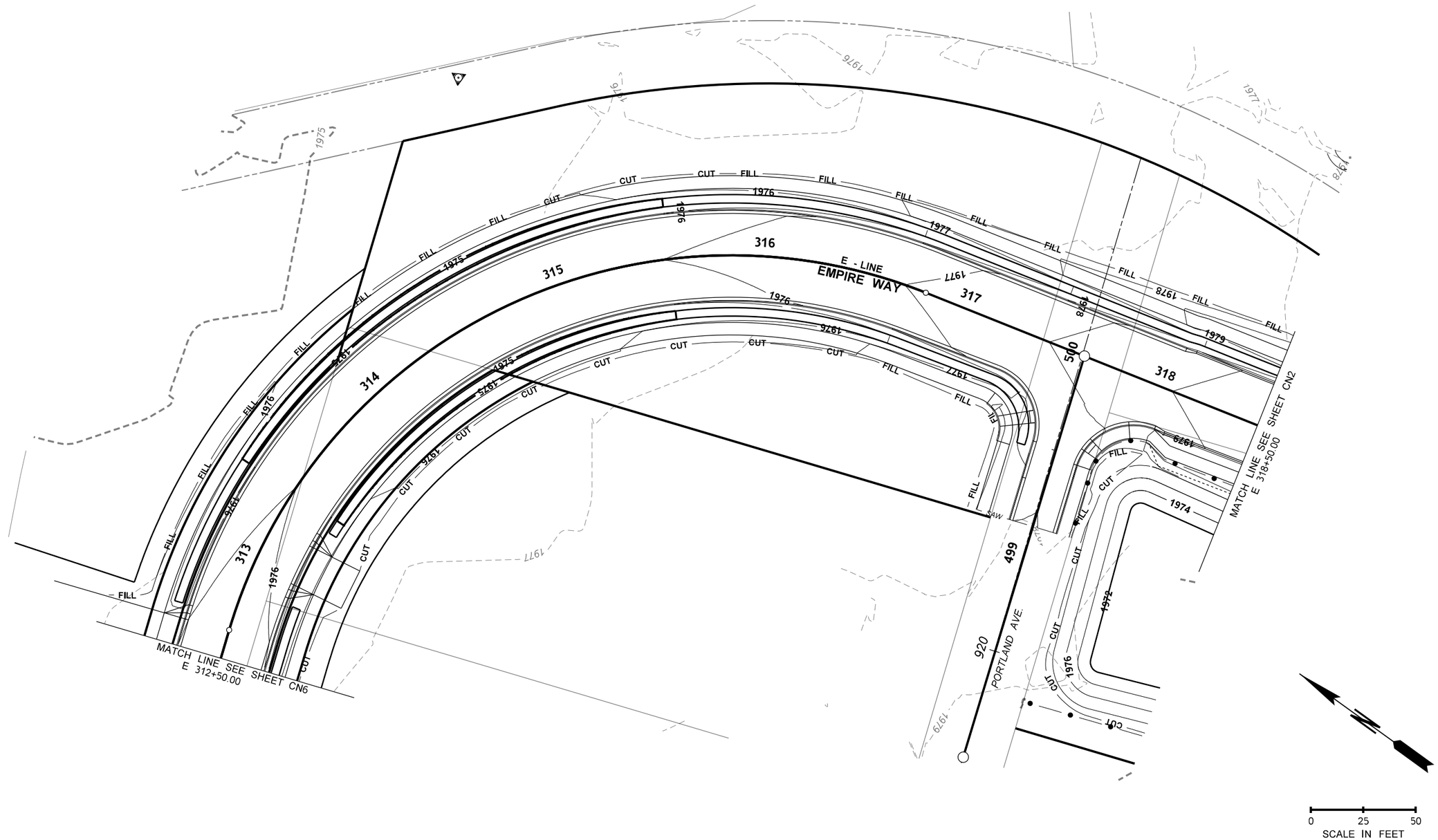
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1
PLAN REF NO
CN6
SHEET 16 OF 218 SHEETS



NOTES:

1. SEE SHEET CN1 FOR LEGEND

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ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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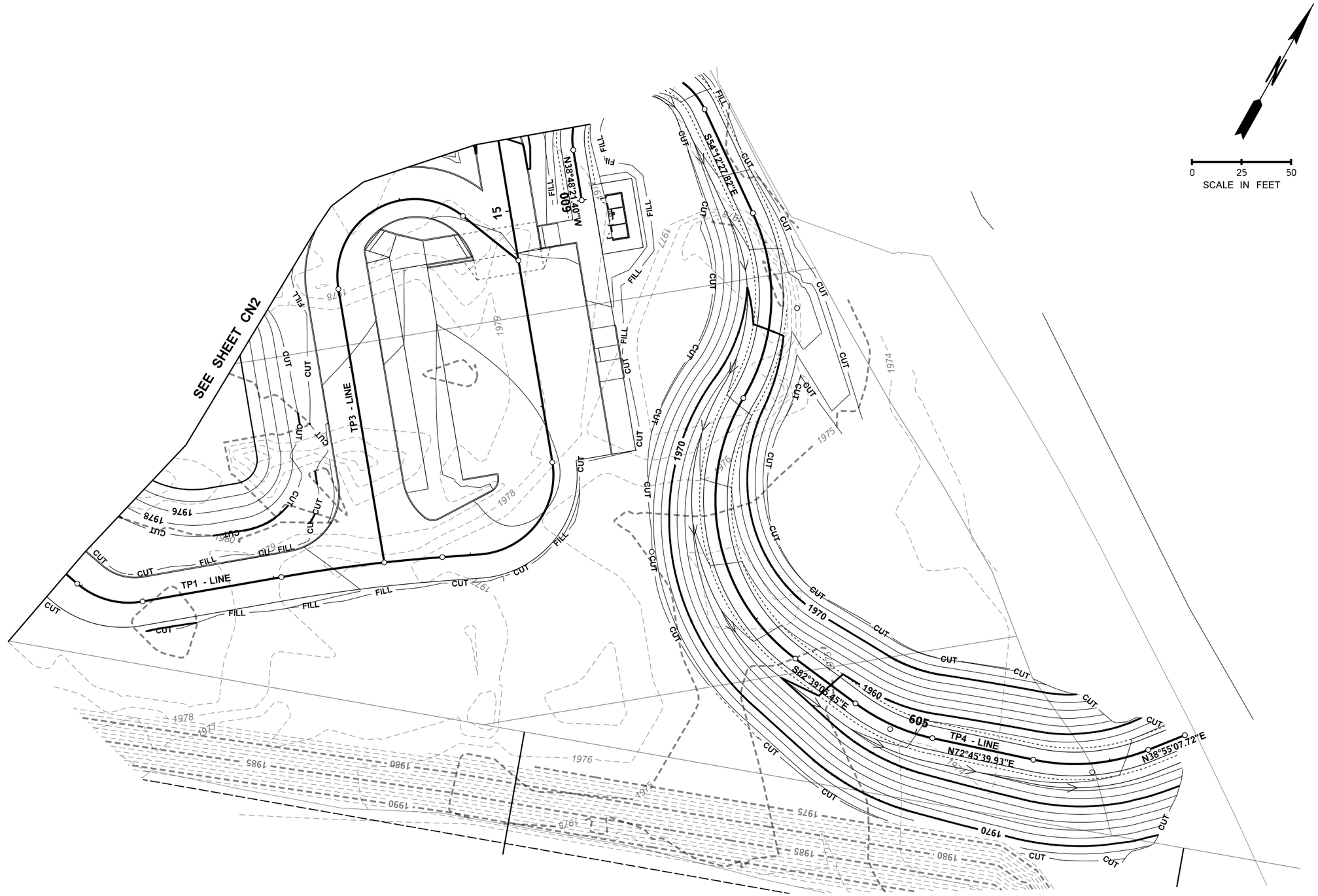
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1

PLAN REF NO
CN7

SHEET 17 OF 218 SHEETS



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CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

CONTOUR GRADING PLAN

Plot 1
PLAN REF NO
CN8
SHEET 18 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY

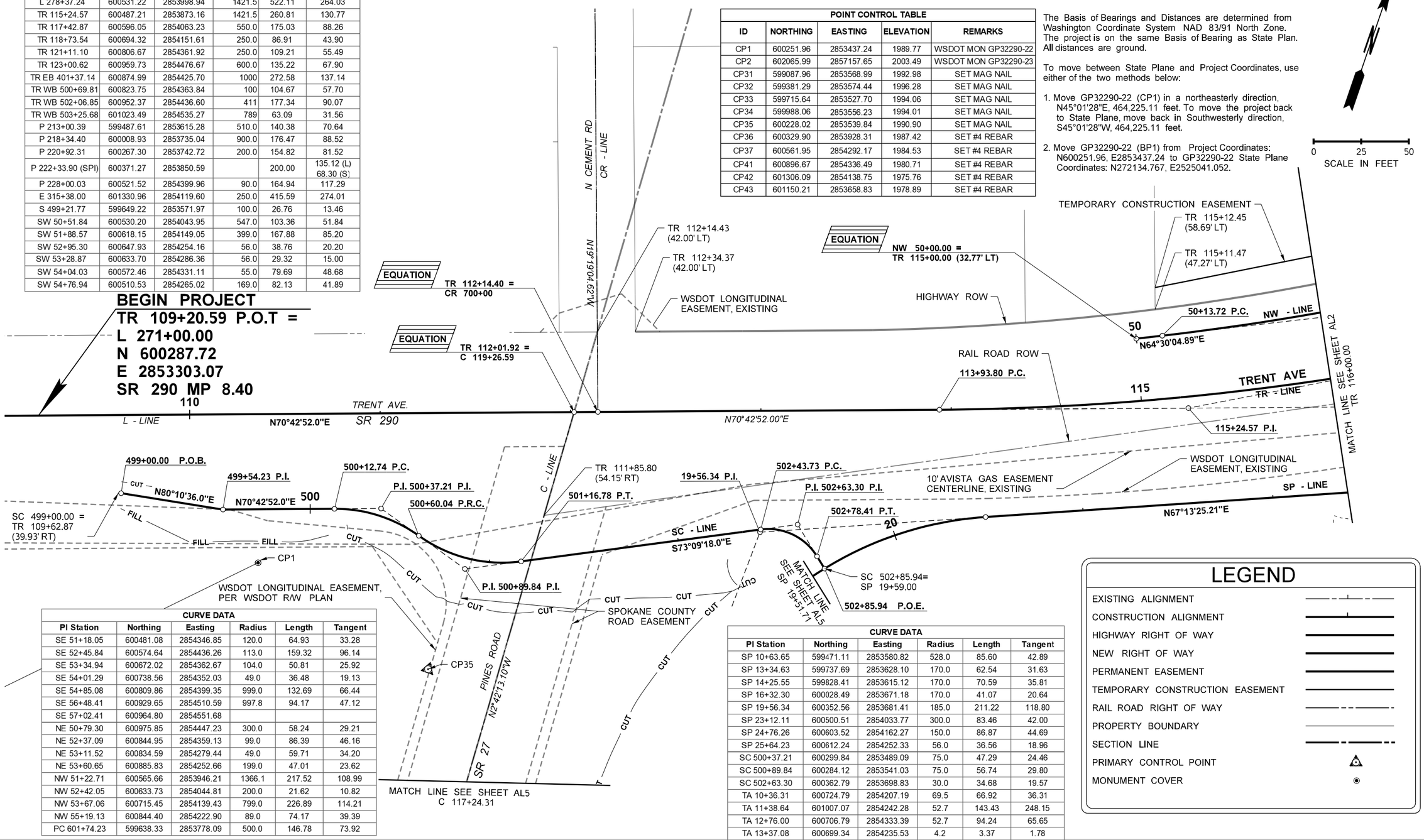
CURVE DATA					
PI Station	Northing	Easting	Radius	Length	Tangent
L 278+37.24	600531.22	2853998.94	1421.5	522.11	264.03
TR 115+24.57	600487.21	2853873.16	1421.5	260.81	130.77
TR 117+42.87	600596.05	2854063.23	550.0	175.03	88.26
TR 118+73.54	600694.32	2854151.61	250.0	86.91	43.90
TR 121+11.10	600806.67	2854361.92	250.0	109.21	55.49
TR 123+00.62	600959.73	2854476.67	600.0	135.22	67.90
TR EB 401+37.14	600874.99	2854425.70	1000	272.58	137.14
TR WB 500+69.81	600823.75	2854363.84	100	104.67	57.70
TR WB 502+06.85	600952.37	2854436.60	411	177.34	90.07
TR WB 503+25.68	601023.49	2854535.27	789	63.09	31.56
P 213+00.39	599487.61	2853615.28	510.0	140.38	70.64
P 218+34.40	600008.93	2853735.04	900.0	176.47	88.52
P 220+92.31	600267.30	2853742.72	200.0	154.82	81.52
P 222+33.90 (SPI)	600371.27	2853850.59		200.00	135.12 (L) 68.30 (S)
P 228+00.03	600521.52	2854399.96	90.0	164.94	117.29
E 315+38.00	601330.96	2854119.60	250.0	415.59	274.01
S 499+21.77	599649.22	2853571.97	100.0	26.76	13.46
SW 50+51.84	600530.20	2854043.95	547.0	103.36	51.84
SW 51+88.57	600618.15	2854149.05	399.0	167.88	85.20
SW 52+95.30	600647.93	2854254.16	56.0	38.76	20.20
SW 53+28.87	600633.70	2854286.36	56.0	29.32	15.00
SW 54+04.03	600572.46	2854331.11	55.0	79.69	48.68
SW 54+76.94	600510.53	2854265.02	169.0	82.13	41.89

POINT CONTROL TABLE				
ID	NORTHING	EASTING	ELEVATION	REMARKS
CP1	600251.96	2853437.24	1989.77	WSDOT MON GP32290-22
CP2	602065.99	2857157.65	2003.49	WSDOT MON GP32290-23
CP31	599087.96	2853568.99	1992.98	SET MAG NAIL
CP32	599381.29	2853574.44	1996.28	SET MAG NAIL
CP33	599715.64	2853527.70	1994.06	SET MAG NAIL
CP34	599988.06	2853556.23	1994.01	SET MAG NAIL
CP35	600228.02	2853539.84	1990.90	SET MAG NAIL
CP36	600329.90	2853928.31	1987.42	SET #4 REBAR
CP37	600561.95	2854292.17	1984.53	SET #4 REBAR
CP41	600896.67	2854336.49	1980.71	SET #4 REBAR
CP42	601306.09	2854138.75	1975.76	SET #4 REBAR
CP43	601150.21	2853658.83	1978.89	SET #4 REBAR

The Basis of Bearings and Distances are determined from Washington Coordinate System NAD 83/91 North Zone. The project is on the same Basis of Bearing as State Plan. All distances are ground.

To move between State Plane and Project Coordinates, use either of the two methods below:

1. Move GP32290-22 (CP1) in a northeasterly direction, N45°01'28"E, 464,225.11 feet. To move the project back to State Plane, move back in Southwesterly direction, S45°01'28"W, 464,225.11 feet.
2. Move GP32290-22 (BP1) from Project Coordinates: N600251.96, E2853437.24 to GP32290-22 State Plane Coordinates: N272134.767, E2525041.052.



CURVE DATA					
PI Station	Northing	Easting	Radius	Length	Tangent
SE 51+18.05	600481.08	2854346.85	120.0	64.93	33.28
SE 52+45.84	600574.64	2854436.26	113.0	159.32	96.14
SE 53+34.94	600672.02	2854362.67	104.0	50.81	25.92
SE 54+01.29	600738.56	2854352.03	49.0	36.48	19.13
SE 54+85.08	600809.86	2854399.35	999.0	132.69	66.44
SE 56+48.41	600929.65	2854510.59	997.8	94.17	47.12
SE 57+02.41	600964.80	2854551.68			
NE 50+79.30	600975.85	2854447.23	300.0	58.24	29.21
NE 52+37.09	600844.95	2854359.13	99.0	86.39	46.16
NE 53+11.52	600834.59	2854279.44	49.0	59.71	34.20
NE 53+60.65	600885.83	2854252.66	199.0	47.01	23.62
NW 51+22.71	600565.66	2853946.21	1366.1	217.52	108.99
NW 52+42.05	600633.73	2854044.81	200.0	21.62	10.82
NW 53+67.06	600715.45	2854139.43	799.0	226.89	114.21
NW 55+19.13	600844.40	2854222.90	89.0	74.17	39.39
PC 601+74.23	599638.33	2853778.09	500.0	146.78	73.92

CURVE DATA					
PI Station	Northing	Easting	Radius	Length	Tangent
SP 10+63.65	599471.11	2853580.82	528.0	85.60	42.89
SP 13+34.63	599737.69	2853628.10	170.0	62.54	31.63
SP 14+25.55	599828.41	2853615.12	170.0	70.59	35.81
SP 16+32.30	600028.49	2853671.18	170.0	41.07	20.64
SP 19+56.34	600352.56	2853681.41	185.0	211.22	118.80
SP 23+12.11	600500.51	2854033.77	300.0	83.46	42.00
SP 24+76.26	600603.52	2854162.27	150.0	86.87	44.69
SP 25+64.23	600612.24	2854252.33	56.0	36.56	18.96
SC 500+37.21	600299.84	2853489.09	75.0	47.29	24.46
SC 500+89.84	600284.12	2853541.03	75.0	56.74	29.80
SC 502+63.30	600362.79	2853698.83	30.0	34.68	19.57
TA 10+36.31	600724.79	2854207.19	69.5	66.92	36.31
TA 11+38.64	601007.07	2854242.28	52.7	143.43	248.15
TA 12+76.00	600706.79	2854333.39	52.7	94.24	65.65
TA 13+37.08	600699.34	2854235.53	4.2	3.37	1.78

LEGEND

- EXISTING ALIGNMENT
- CONSTRUCTION ALIGNMENT
- HIGHWAY RIGHT OF WAY
- NEW RIGHT OF WAY
- PERMANENT EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- RAIL ROAD RIGHT OF WAY
- PROPERTY BOUNDARY
- SECTION LINE
- PRIMARY CONTROL POINT
- MONUMENT COVER

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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

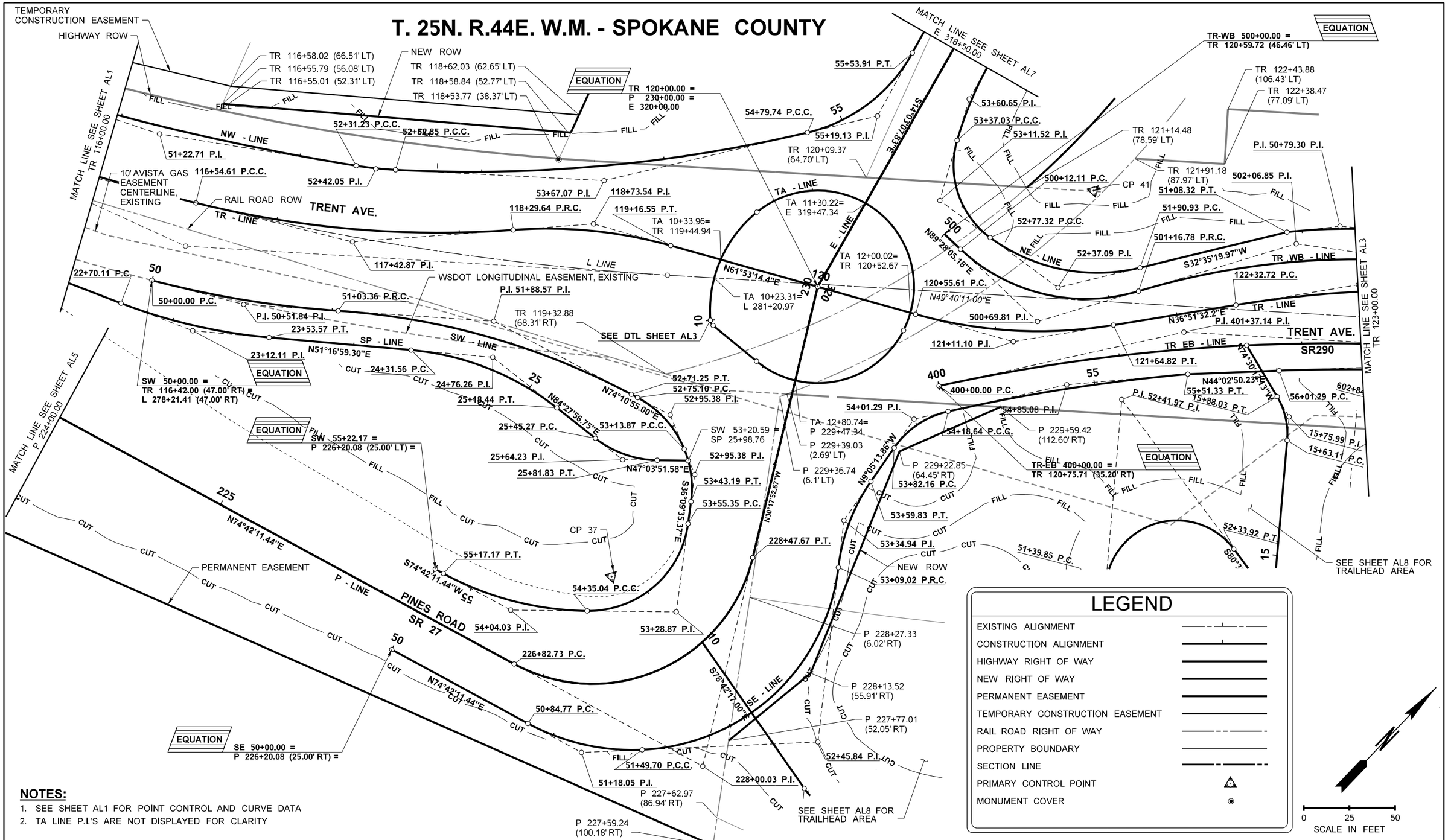
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL1
SHEET 19 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY



NOTES:

1. SEE SHEET AL1 FOR POINT CONTROL AND CURVE DATA
2. TA LINE P.I.'S ARE NOT DISPLAYED FOR CLARITY

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DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

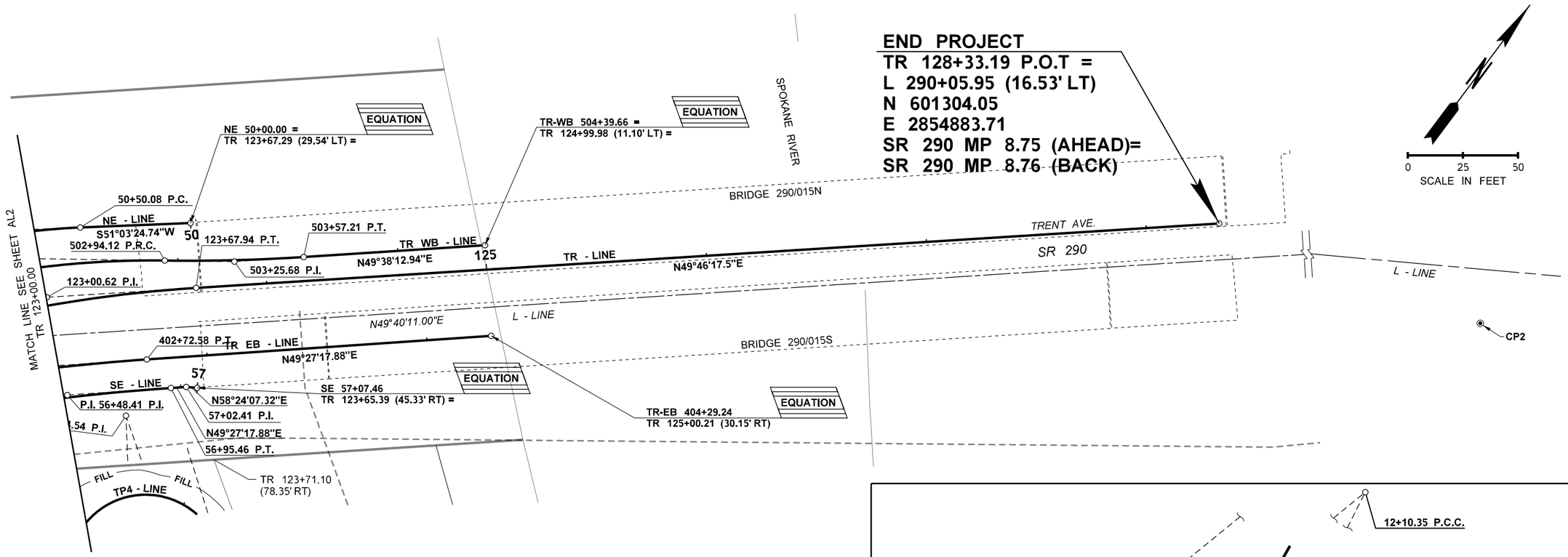
City of Spokane Valley
HDR

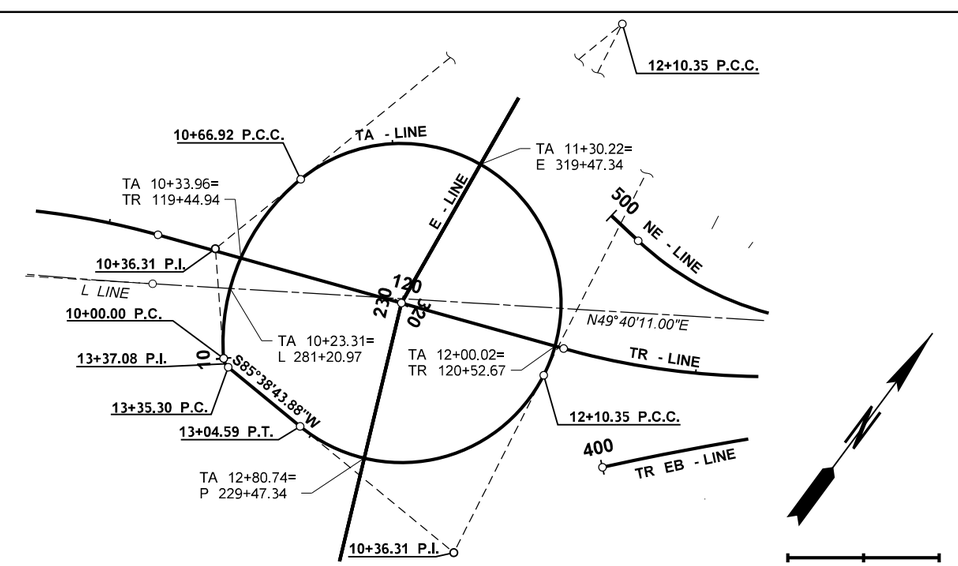
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL2
SHEET 20 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY





RAB TRUCK APRON DETAIL

LEGEND

EXISTING ALIGNMENT	
CONSTRUCTION ALIGNMENT	
HIGHWAY RIGHT OF WAY	
NEW RIGHT OF WAY	
PERMANENT EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
RAIL ROAD RIGHT OF WAY	
PROPERTY BOUNDARY	
SECTION LINE	
PRIMARY CONTROL POINT	
MONUMENT COVER	

NOTES:

1. SEE SHEET AL1 FOR POINT CONTROL AND CURVE DATA

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DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

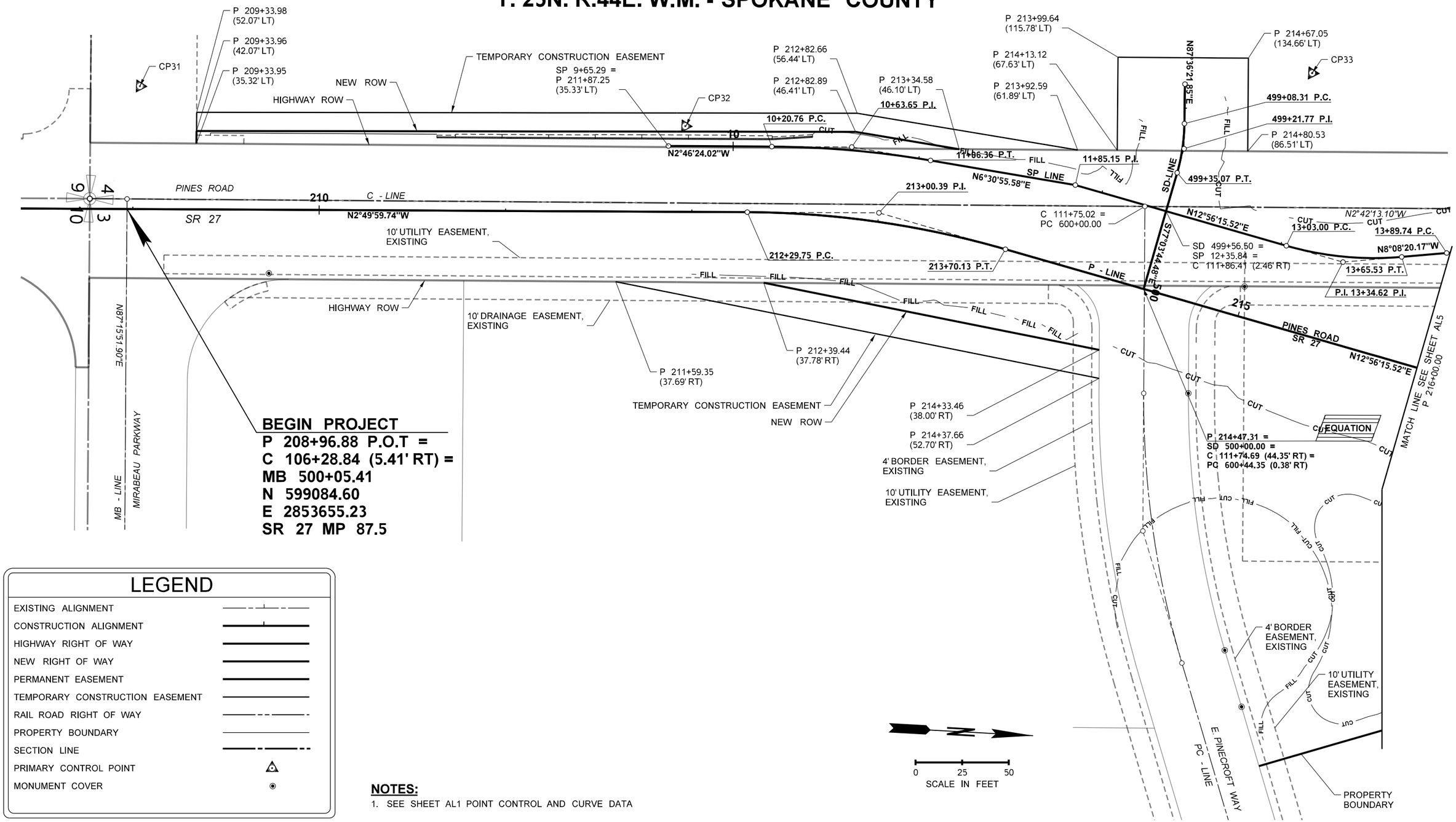
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL3
SHEET 21 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY



LEGEND

- EXISTING ALIGNMENT
- CONSTRUCTION ALIGNMENT
- HIGHWAY RIGHT OF WAY
- NEW RIGHT OF WAY
- PERMANENT EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- RAIL ROAD RIGHT OF WAY
- PROPERTY BOUNDARY
- SECTION LINE
- PRIMARY CONTROL POINT
- MONUMENT COVER

NOTES:

1. SEE SHEET AL1 POINT CONTROL AND CURVE DATA

FILE NAME	c:\pwworking\west01\d2172350\PINES_PS_AL_004.dgn
TIME	10:31:15 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

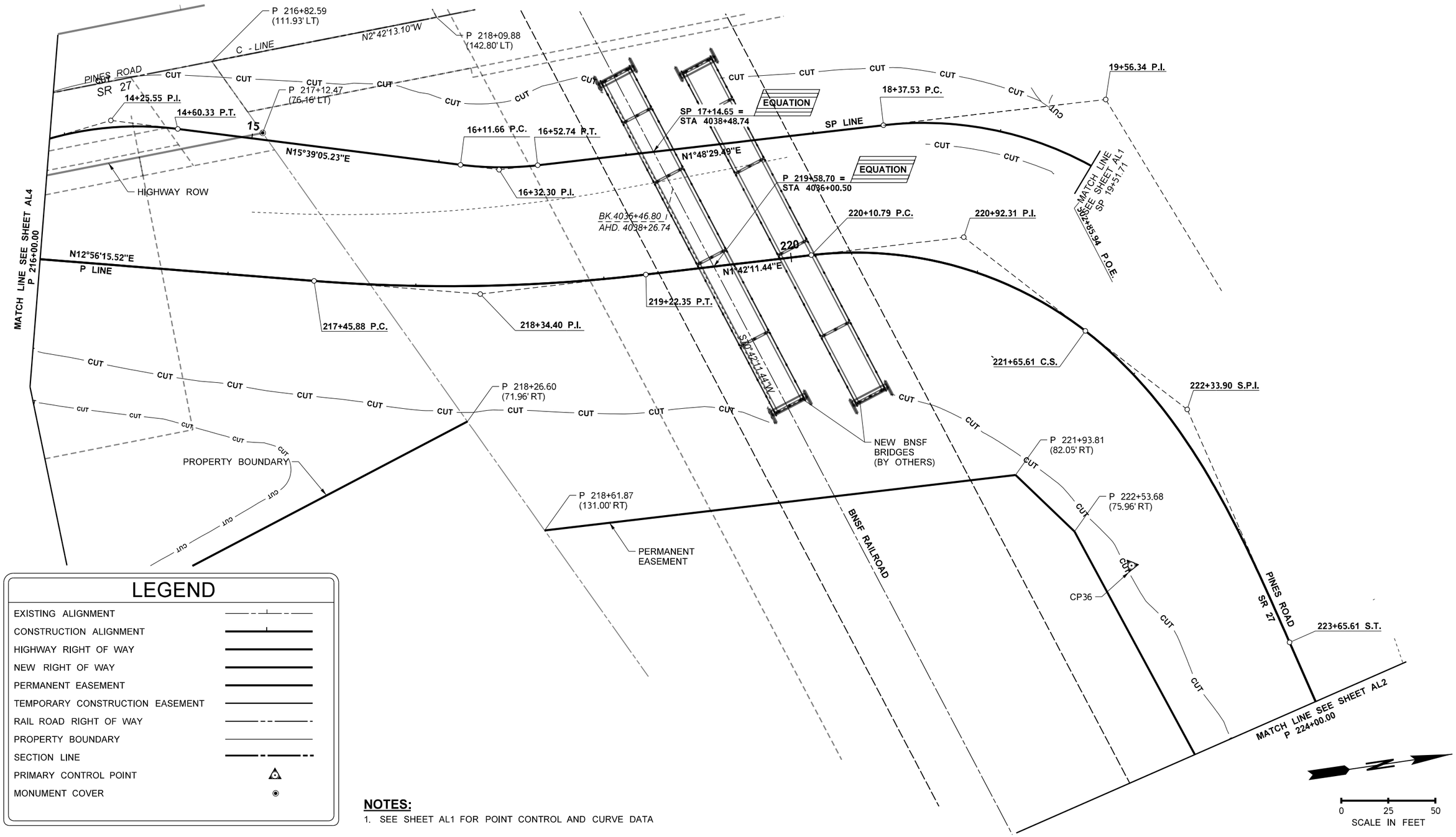
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL4
SHEET 22 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY



LEGEND

EXISTING ALIGNMENT	
CONSTRUCTION ALIGNMENT	
HIGHWAY RIGHT OF WAY	
NEW RIGHT OF WAY	
PERMANENT EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
RAIL ROAD RIGHT OF WAY	
PROPERTY BOUNDARY	
SECTION LINE	
PRIMARY CONTROL POINT	
MONUMENT COVER	

NOTES:

1. SEE SHEET AL1 FOR POINT CONTROL AND CURVE DATA

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TIME	10:31:50 AM
DATE	5/29/2025
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DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | JOB NUMBER | CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA
LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

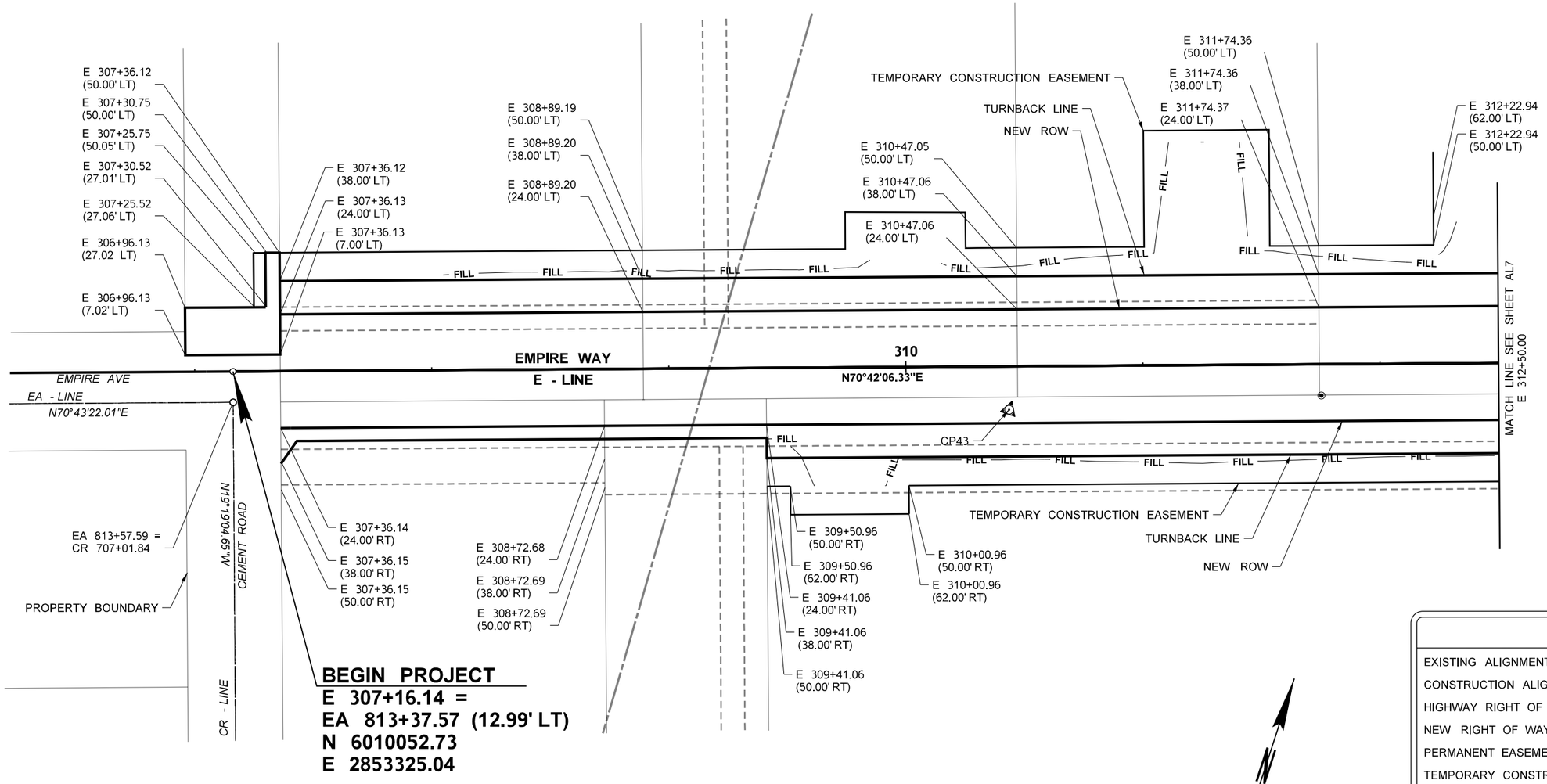
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL5
SHEET 23 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY



LEGEND

EXISTING ALIGNMENT	
CONSTRUCTION ALIGNMENT	
HIGHWAY RIGHT OF WAY	
NEW RIGHT OF WAY	
PERMANENT EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
RAIL ROAD RIGHT OF WAY	
PROPERTY BOUNDARY	
SECTION LINE	
PRIMARY CONTROL POINT	
MONUMENT COVER	

NOTES:

1. SEE SHEET AL1 FOR POINT CONTROL AND CURVE DATA

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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

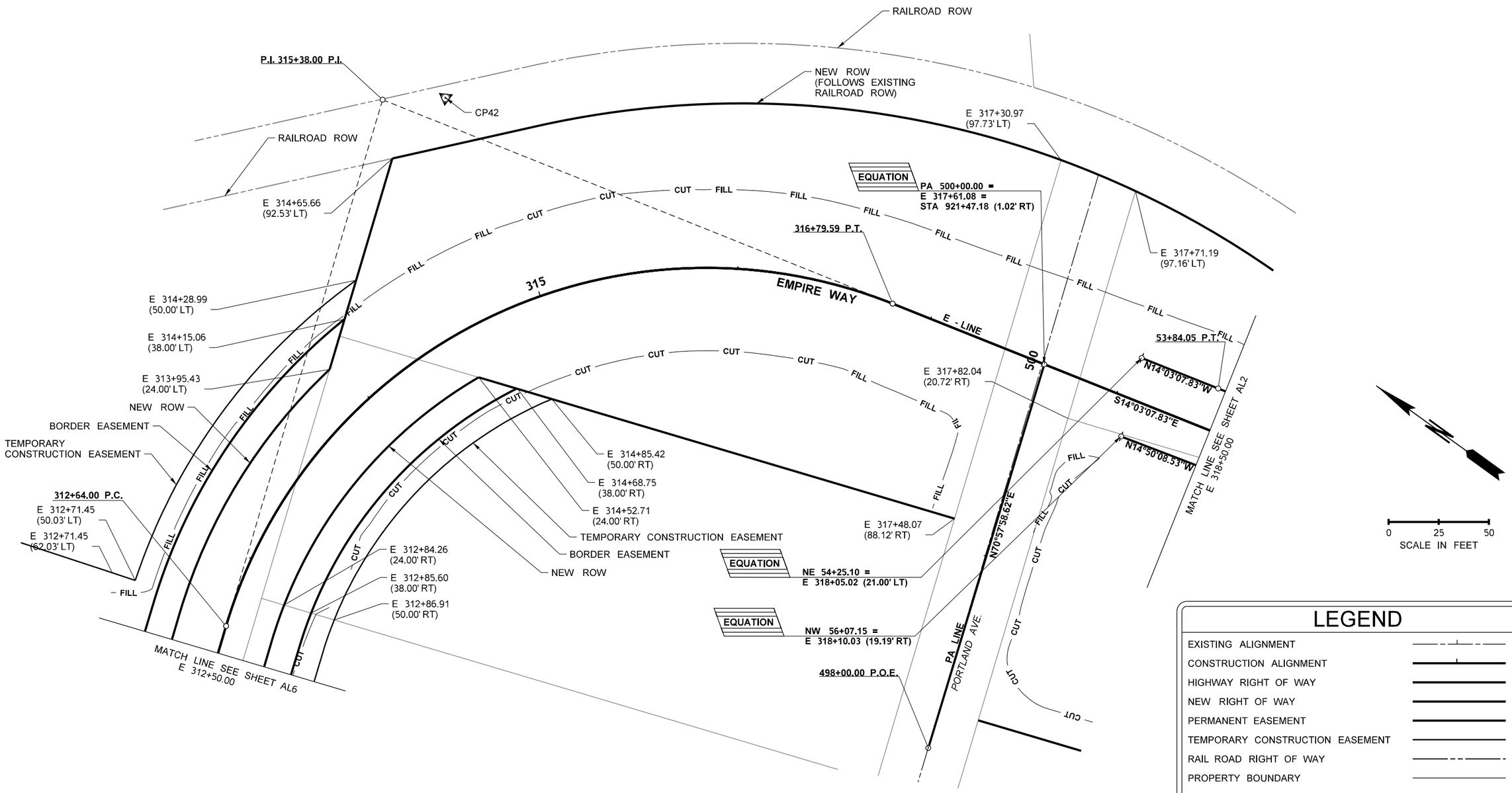
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL6
SHEET 24 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY



LEGEND

EXISTING ALIGNMENT	
CONSTRUCTION ALIGNMENT	
HIGHWAY RIGHT OF WAY	
NEW RIGHT OF WAY	
PERMANENT EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
RAIL ROAD RIGHT OF WAY	
PROPERTY BOUNDARY	
SECTION LINE	
PRIMARY CONTROL POINT	
MONUMENT COVER	

NOTES:

1. SEE SHEET AL1 FOR POINT CONTROL AND CURVE DATA

FILE NAME	c:\pwworking\west01\d2172350\PINES_PS_AL_007.dgn
TIME	10:32:32 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
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DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

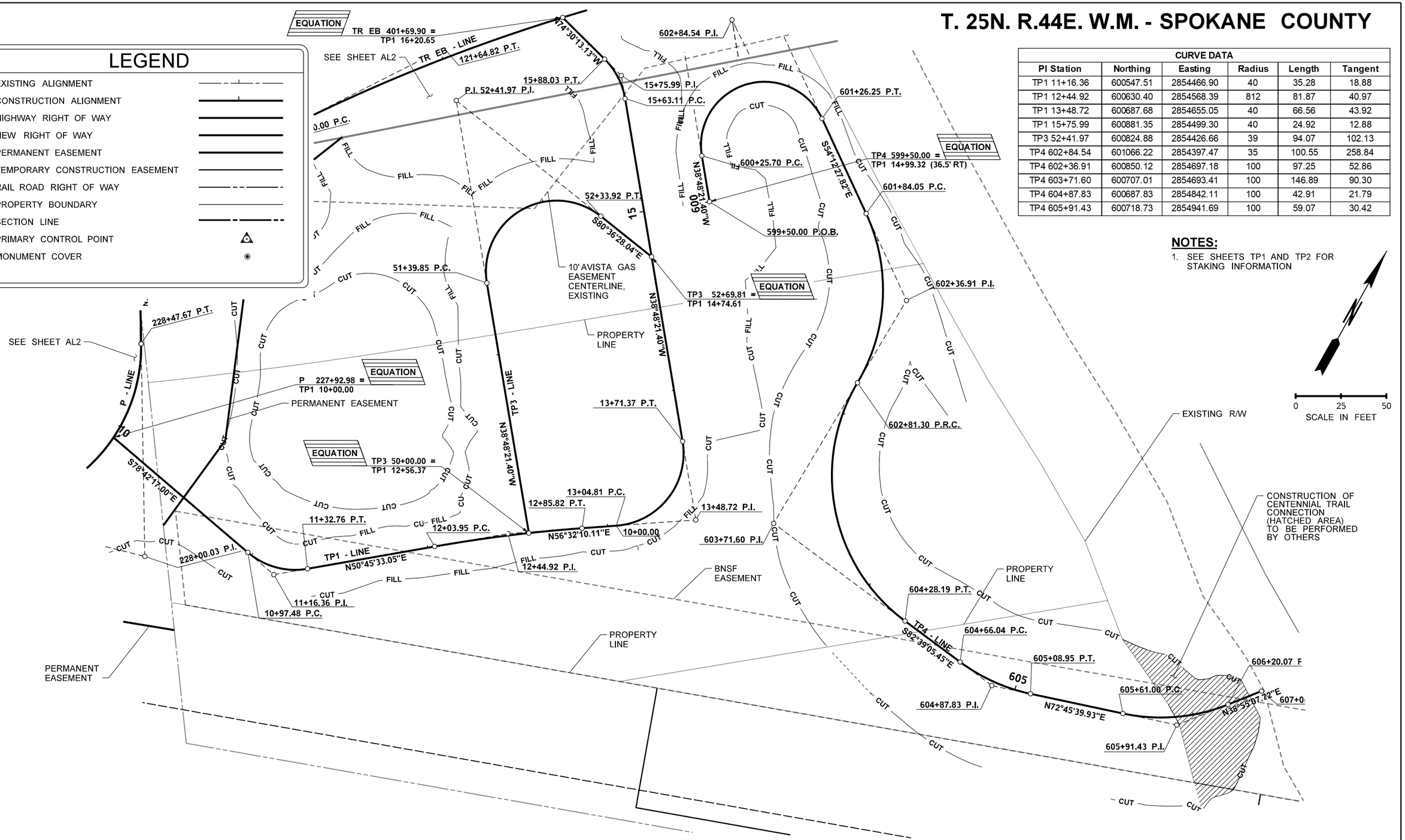
ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL7
SHEET 25 OF 218 SHEETS

T. 25N. R.44E. W.M. - SPOKANE COUNTY

LEGEND

- EXISTING ALIGNMENT
- CONSTRUCTION ALIGNMENT
- HIGHWAY RIGHT OF WAY
- NEW RIGHT OF WAY
- PERMANENT EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- RAIL ROAD RIGHT OF WAY
- PROPERTY BOUNDARY
- SECTION LINE
- PRIMARY CONTROL POINT
- MONUMENT COVER



CURVE DATA					
PI Station	Northing	Easting	Radius	Length	Tangent
TP1 11+16.36	600547.51	2854466.90	40	35.28	18.88
TP1 12+44.92	600630.40	2854568.39	812	81.87	40.97
TP1 13+48.72	600687.68	2854655.05	40	66.56	43.92
TP1 15+75.99	600881.35	2854499.30	40	24.92	12.88
TP3 52+41.97	600824.88	2854426.66	39	94.07	102.13
TP4 602+84.54	601066.22	2854397.47	35	100.55	258.84
TP4 602+36.91	600850.12	2854697.18	100	97.25	52.86
TP4 603+71.60	600707.01	2854693.41	100	146.89	90.30
TP4 604+87.83	600687.83	2854842.11	100	42.91	21.79
TP4 605+91.43	600718.73	2854941.69	100	59.07	30.42

NOTES:

1. SEE SHEETS TP1 AND TP2 FOR STAKING INFORMATION

FILE NAME	c:\pwworking\west01\d2172350\PINES_PS_AL_008.dgn
TIME	2:09:08 PM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN STATE OF WASHINGTON 23013867 REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
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City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ALIGNMENT AND RIGHT OF WAY PLAN

Plot 1
PLAN REF NO
AL8
SHEET 26 OF 218 SHEETS

QUANTITY TABULATION - SITE PREPARATION AND TESC

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	REMOVING MANHOLE	REMOVE CEMENT CONCRETE SIDEWALK/DRIVEWAY APPROACH		REMOVE CEMENT CONCRETE CURB AND GUTTER	REMOVE CEMENT CONCRETE CURB	REMOVE ASPHALT PAVEMENT		REMOVE CEMENT CONCRETE MEDIAN CURB AND ISLAND	REMOVING GUARDRAIL	REMOVING GUARDRAIL ANCHOR	REMOVING GUIDE POST		REMOVING PAINT LINE	REMOVING PAINTED TRAFFIC MARKING	REMOVING PAINTED CROSSWALK LINE	SEE GENERAL NOTES
		EACH	S.Y.		L.F.	L.F.	S.Y.		S.Y.	L.F.	EACH	EACH		L.F.	EACH	S.F.	
SP1-1	TR LINE														2		9
SP1-2	TR LINE														2		9
SP1-3	TR 109+41.84 (49.4' RT) TO C 116+25.16 (36.4' LT)																1,4
SP1-4	C 117+76.34 (31.5' LT) TO TR 110+93.09 (57.1' RT)		60			114											10
SP1-5	C 117+96.26 (23.0' RT) TO TR112+59.63 (39.2' RT)		77			311											10
SP1-6	TR 111+14.50 (0' RT) TO 115+00.00 (0')													1551			9
SP1-7	C LINE						2335		58								
SP1-8	TR LINE															88	9
SP1-9	C 118+69.57 (22.9' RT)																
SP1-10	TR 111+61.77 (23.2' LT)																2,4
SP1-11	TR 114+99.88 (38.6' LT) TO E 307+29.47 (55.4' RT)																1,4
SP1-12	TR 114+21.75 (29.5' LT)																2,4
SP1-13	TR 114+37.81 (49.0' RT) TO TR 115+34.41 (51.0' RT)																4,5
SP1-14	TR 111+71.14 (32.4' LT) TO TR 112+56.50 (32.8' LT)		37														
SP2-1	TR 117+37.68 (34.3' LT)																2,4
SP2-2	TR 119+23.40 (90.6' LT) TO TR 119+90.73 (167.8' LT)																7
SP2-3	TR 119+44.05 (97.2' LT) TO TR 119+65.48 (92.8')	4															
SP2-4	TR 120+65.80 (65.7' LT)																
SP2-5	TR 121+72.46 (40.8' RT)																2,4
SP2-6	TR 121+97.29 (35.4' RT)																2,4
SP2-7	TR 121+59.16 (71.3' LT) TO 123+67.16 (39.0' LT)									208	3						
SP2-8	TR 121+85.65 (37.4' RT) TO TR 123+64.60 (45.2' RT)									171	1						
SP2-9	TR 122+36.33 (4.8' LT) TO TR 123+65.14 (15.6' RT)									254	1	3					9
SP2-10	TR 121+93.87 (66.3' LT) TO 122+08.62 (84.1' LT)																
SP2-11	TR 119+94.93 (91.9' LT) TO TR 119+89.30 (168.0' LT)					88											10
SP2-12	TR 115+00.00 (38.6' LT) TO TR 118+59.52 (28.2' LT)						599										
SP2-13	TR 114+99.94 (1.4' RT) TO TR 123+66.79 (2.4' RT)						7719										
SP2-14	TR 115+00.00 (34.0' LT) TO TR 121+15.97 (70.7' LT)		1333														
SP2-15	TR 119+08.69 (98.2' LT) TO TR 119+55.82 (89.5' LT)																8
SP2-16	TR 114+99.90 (33.5' LT) TO TR 121+15.95 (70.2' LT)					600											10
SP2-17	TR 121+57.81 (66.6' LT) TO TR 123+66.82 (29.6' LT)					219											10
SP2-18	TR 121+97.02 (36.3' RT) TO TR 123+60.93 (45.51' RT)					155											10
SP2-19	TR 121+58.54 (69.2' LT) TO TR 123+66.91 (35.1' LT)		151														
SP3-1	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)																2,4
SP3-2	TR 123+59.59 (31.4' LT)																2,4
SP3-3	TR 123+40.83 (2.7' RT) TO TR 124+17.5 (10.9' LT)													200			9
SP3-4	TR 122+32.00 (77.7' LT) TO TR 123+67.16 (39.0' LT)																1,4
SP3-5	TP4 606+27.58 (51.5' LT) TO TR 123+64.01 (49.7' RT)																1,4
	SHEET TOTAL	4	1658			1487	10653		58	633	5	3		1751	4	88	

GENERAL NOTES:

1. SEE WSDOT STANDARD PLAN I-30.17-01 FOR SILT FENCE.
2. SEE WSDOT STANDARD PLAN I-40.20-00 FOR STORM DRAIN INLET PROTECTION.
3. REMOVE EXISTING CONDUIT; SEE SPECIAL PROVISIONS AND SHEET ST2 FOR REMOVAL DETAILS.
4. INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LS ITEM. QUANTITIES PROVIDED FOR REFERENCE ONLY.
5. SEE STD. PLAN I-80.10-02 STABILIZED CONSTUCTION ENTRANCE.
6. SEE STD. PLAN I-10.10-01 HIGH VISIBILITY FENCE.
7. SEE STD. PLAN H-70.10-02 MAILBOX SUPPORT TYPE 1
8. DEMOLISH EXISTING BUILDING AND CLEAR PARCEL. SEE SPECIAL PROVISIONS FOR REMOVAL DETAILS.
9. INCLUDED IN REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS A LS ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.
10. INCLUDED IN REMOVE CEMENT CONCRETE CURB ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGION ADM.		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - SITE PREPARATION AND TESC

QTSP 1

SHEET 27 OF 218 SHEETS

QUANTITY TABULATION - SITE PREPARATION AND TESC

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	REMOVE FENCE	INLET PROTECTION	SILT FENCE		MAILBOX SUPPORT TYPE 1	REMOVAL OF COMMERCIAL STRUCTURE	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	REMOVING DRAINAGE STRUCTURE		HIGH VISIBILITY FENCE	STABILIZED CONSTRUCTION ENTRANCE	REMOVE EXISTING WATERLINE				SEE GENERAL NOTES
		L.F.	EACH	L.F.		EACH	L.S.	L.S.	EACH		L.F.	S.Y.	L.F.				
SP1-1	TR LINE																9
SP1-2	TR LINE																9
SP1-3	TR 109+41.84 (49.4' RT) TO C 116+25.16 (36.4' LT)			382													1,4
SP1-4	C 117+76.34 (31.5' LT) TO TR 110+93.09 (57.1' RT)																10
SP1-5	C 117+96.26 (23.0' RT) TO TR112+59.63 (39.2' RT)																10
SP1-6	TR 111+14.50 (0' RT) TO 115+00.00 (0')																9
SP1-7	C LINE																
SP1-8	TR LINE																9
SP1-9	C 118+69.57 (22.9' RT)								1								
SP1-10	TR 111+61.77 (23.2' LT)		1														2,4
SP1-11	TR 114+99.88 (38.6' LT) TO E 307+29.47 (55.4' RT)			1338													1,4
SP1-12	TR 114+21.75 (29.5' LT)		1														2,4
SP1-13	TR 114+37.81 (49.0' RT) TO TR 115+34.41 (51.0' RT)											167					4,5
SP1-14	TR 111+71.14 (32.4' LT) TO TR 112+56.50 (32.8' LT)																
SP2-1	TR 117+37.68 (34.3' LT)		1														2,4
SP2-2	TR 119+23.40 (90.6' LT) TO TR 119+90.73 (167.8' LT)					1											7
SP2-3	TR 119+44.05 (97.2' LT) TO TR 119+65.48 (92.8')																
SP2-4	TR 120+65.80 (65.7' LT)								1								
SP2-5	TR 121+72.46 (40.8' RT)		1														2,4
SP2-6	TR 121+97.29 (35.4' RT)		1														2,4
SP2-7	TR 121+59.16 (71.3' LT) TO 123+67.16 (39.0' LT)																
SP2-8	TR 121+85.65 (37.4' RT) TO TR 123+64.60 (45.2' RT)																
SP2-9	TR 122+36.33 (4.8' LT) TO TR 123+65.14 (15.6' RT)																9
SP2-10	TR 121+93.87 (66.3' LT) TO 122+08.62 (84.1' LT)	23															
SP2-11	TR 119+94.93 (91.9' LT) TO TR 119+89.30 (168.0' LT)																10
SP2-12	TR 115+00.00 (38.6' LT) TO TR 118+59.52 (28.2' LT)																
SP2-13	TR 114+99.94 (1.4' RT) TO TR 123+66.79 (2.4' RT)																
SP2-14	TR 115+00.00 (34.0' LT) TO TR 121+15.97 (70.7' LT)																
SP2-15	TR 119+08.69 (98.2' LT) TO TR 119+55.82 (89.5' LT)						1										8
SP2-16	TR 114+99.90 (33.5' LT) TO TR 121+15.95 (70.2' LT)																10
SP2-17	TR 121+57.81 (66.6' LT) TO TR 123+66.82 (29.6' LT)																10
SP2-18	TR 121+97.02 (36.3' RT) TO TR 123+60.93 (45.51' RT)																10
SP2-19	TR 121+58.54 (69.2' LT) TO TR 123+66.91 (35.1' LT)																
SP3-1	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)		1														2,4
SP3-2	TR 123+59.59 (31.4' LT)		1														2,4
SP3-3	TR 123+40.83 (2.7' RT) TO TR 124+17.5 (10.9' LT)																9
SP3-4	TR 122+32.00 (77.7' LT) TO TR 123+67.16 (39.0' LT)			154													1,4
SP3-5	TP4 606+27.58 (51.5' LT) TO TR 123+64.01 (49.7' RT)			540													1,4
	SHEET TOTAL	23	7	2414		1	1		2			167					

GENERAL NOTES:

1. SEE WSDOT STANDARD PLAN I-30.17-01 FOR SILT FENCE.
2. SEE WSDOT STANDARD PLAN I-40.20-00 FOR STORM DRAIN INLET PROTECTION.
3. REMOVE EXISTING CONDUIT; SEE SPECIAL PROVISIONS AND SHEET ST2 FOR REMOVAL DETAILS.
4. INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LS ITEM. QUANTITIES PROVIDED FOR REFERENCE ONLY.
5. SEE STD. PLAN I-80.10-02 STABILIZED CONSTUCTION ENTRANCE.
6. SEE STD. PLAN I-10.10-01 HIGH VISIBILITY FENCE.
7. SEE STD. PLAN H-70.10-02 MAILBOX SUPPORT TYPE 1
8. DEMOLISH EXISTING BUILDING AND CLEAR PARCEL. SEE SPECIAL PROVISIONS FOR REMOVAL DETAILS.
9. INCLUDED IN REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS A LS ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.
10. INCLUDED IN REMOVE CEMENT CONCRETE CURB ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGION ADM.		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - SITE PREPARATION AND TESC

QTSP 2

SHEET 28 OF 218 SHEETS

QUANTITY TABULATION - SITE PREPARATION AND TESC

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	REMOVING MANHOLE	REMOVE CEMENT CONCRETE SIDEWALK/DRIVEWAY APPROACH		REMOVE CEMENT CONCRETE CURB AND GUTTER	REMOVE CEMENT CONCRETE CURB	REMOVE ASPHALT PAVEMENT		REMOVE CEMENT CONCRETE MEDIAN CURB AND ISLAND	REMOVING GUARDRAIL	REMOVING GUARDRAIL ANCHOR	REMOVING GUIDE POST		REMOVING PAINT LINE	REMOVING PAINTED TRAFFIC MARKING	REMOVING PAINTED CROSSWALK LINE	SEE GENERAL NOTES
		EACH	S.Y.		L.F.	L.F.	S.Y.		S.Y.	L.F.	EACH	EACH		L.F.	EACH	S.F.	
SP4-1	P 209+20.94 (28.5' LT)																2,4
SP4-2	P 209+22.87 (47.5' LT) TO P 214+27.77 (72.5' LT)																1,4
SP4-3	P 209+41.36 (30.1' LT) TO P 214+29.23 (67.3' LT)		294														
SP4-4	P 211+36.75 (28.4' LT)																2,4
SP4-5	P 210+58.96 (47.5' RT)																2,4
SP4-6	P 215+76.62 (107.6' LT)																
SP4-7	P 212+39.44 (37.8' RT) TO P 215+39.24 (253.7' RT)																1,4
SP4-8	P 215+82.64 (37.2' RT)					22											10
SP4-9	P 215+38.45 (18.2' LT)																
SP4-10	P 214+45.59 (6.0' LT) TO P 214+61.21 (48.0' RT)								51								
SP4-11	P 212+00.00 (27.7' LT) TO C				590												10
SP4-12	P 212+00.00 (29.8' RT) TO P 214+89.73 (175.7' RT)		264		481												10
SP4-13	P 215+25.72 (30.5' LT) TO P 215+51.88 (66.0' RT)																4,5
SP4-14	P 210+70.79 (34.8' LT) TO P 212+98.65 (39.5' LT)					233											10
SP4-15	P 212+00 (22.5' RT) TO P 216+68.65 (133.7' LT)																
SP4-16	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)					95											
SP5-1	P 220+45.85 (127.6' RT) TO TR 125+30.16 (437.0' RT)																1,4
SP5-2	P 214+52.29 (79.53' LT) TO C 115+97.56 (31.4' LT)																1,4
SP5-3	C 111+99.75 (27.8' LT) TO C 115+97.57 (28.5' LT)		237														
SP5-4	C 111+99.77 (73.0' RT) TO C 116+18.76 (33.2' RT)		296		581												10
SP5-5	C 115+21.92 (25.4' LT) TO C 115+98.26 (25.5' LT)					76											10
SP5-6	C 115+29.97 (24.0' RT) TO C 115+98.63 (22.8' RT)					69											10
SP5-7	C 116+31.48 (25.6' LT) TO C 117+45.49 (25.6' LT)					114											10
SP5-8	C 16+52.46 (22.6' RT) TO C 117+59.15 (22.6' RT)					107											10
SP5-9	P 212+00.00 (0.0' LT) TO C 116+18.86 (0.0' LT)						5642										
SP5-10	P 215+67.42 (220.3' RT) TO P 219+84.46 (128.7' RT)																1,4
SP5-11	P 221+54.96 (88.2' LT) TO P 223+61.40 (65.8' LT)																3
SP6-1	E 308+76.85 (11.1' LT)																7
SP6-2	E 311+36.70 (12.2' LT)																2
SP6-3	E 308+74.37 (52.9' LT) TO E 310+48.50 (49.8' LT)																
SP6-4	E 307+47.35 (32.11' RT) TO E 314+26.06 (49.9' LT)																
SP6-5	E 307+57.86 (40.5' LT) TO E 307+85.07 (39.0' LT)		23														
SP6-6	E 307+30.26 (1.5' LT) TO E 311+86.39 (6.81' LT)						1708										
SP6-7	E 311+41.28 (94.0' LT) TO E 312+33.04 (110' LT)																1,4,6
SP6-8	E 310+14.96 (60.1' LT) TO E 311+11.42 (94.0' LT)																1,4,6
SP6-9	E 308+74.28 (49.9' LT) TO E 309+85.12 (60.1' LT)																1,4,6
SP6-10	E 307+30.66 (32.0' LT) TO E 308+50.87 (50.0' LT)																1,4,6
SP6-11	E 307+29.47 (55.4' RT) TO E 309+61.06 (50.0' RT)																1,4
SP6-12	E 309+40.85 (38.0' RT) TO E 309+61.06 (50.0' RT)																4,6
	SHEET TOTAL		1114		1652	716	7350		51								

GENERAL NOTES:

1. SEE WSDOT STANDARD PLAN I-30.17-01 FOR SILT FENCE.
2. SEE WSDOT STANDARD PLAN I-40.20-00 FOR STORM DRAIN INLET PROTECTION.
3. REMOVE EXISTING CONDUIT; SEE SPECIAL PROVISIONS AND SHEET ST2 FOR REMOVAL DETAILS.
4. INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LS ITEM. QUANTITIES PROVIDED FOR REFERENCE ONLY.
5. SEE STD. PLAN I-80.10-02 STABILIZED CONSTUCTION ENTRANCE.
6. SEE STD. PLAN I-10.10-01 HIGH VISIBILITY FENCE.
7. SEE STD. PLAN H-70.10-02 MAILBOX SUPPORT TYPE 1
8. DEMOLISH EXISTING BUILDING AND CLEAR PARCEL. SEE SPECIAL PROVISIONS FOR REMOVAL DETAILS.
9. INCLUDED IN REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS A LS ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.
10. INCLUDED IN REMOVE CEMENT CONCRETE CURB ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGION ADM.						
		DATE	DATE	REVISION	BY	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - SITE PREPARATION AND TESC

QTSP 3

SHEET 29 OF 218 SHEETS

QUANTITY TABULATION - SITE PREPARATION AND TESC

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	REMOVE FENCE	INLET PROTECTION	SILT FENCE		MAILBOX SUPPORT TYPE 1	REMOVAL OF COMMERCIAL STRUCTURE	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	REMOVING DRAINAGE STRUCTURE		HIGH VISIBILITY FENCE	STABILIZED CONSTRUCTION ENTRANCE	REMOVE EXISTING WATERLINE				SEE GENERAL NOTES
		L.F.	EACH	L.F.		EACH	L.S.	L.S.	EACH		L.F.	S.Y.	L.F.				
SP4-1	P 209+20.94 (28.5' LT)		1														2,4
SP4-2	P 209+22.87 (47.5' LT) TO P 214+27.77 (72.5' LT)			526													1,4
SP4-3	P 209+41.36 (30.1' LT) TO P 214+29.23 (67.3' LT)																
SP4-4	P 211+36.75 (28.4' LT)		1														2,4
SP4-5	P 210+58.96 (47.5' RT)		1														2,4
SP4-6	P 215+76.62 (107.6' LT)								1								
SP4-7	P 212+39.44 (37.8' RT) TO P 215+39.24 (253.7' RT)			427													1,4
SP4-8	P 215+82.64 (37.2' RT)																10
SP4-9	P 215+38.45 (18.2' LT)								1								
SP4-10	P 214+45.59 (6.0' LT) TO P 214+61.21 (48.0' RT)																
SP4-11	P 212+00.00 (27.7' LT) TO C																10
SP4-12	P 212+00.00 (29.8' RT) TO P 214+89.73 (175.7' RT)																10
SP4-13	P 215+25.72 (30.5' LT) TO P 215+51.88 (66.0' RT)											250					4,5
SP4-14	P 210+70.79 (34.8' LT) TO P 212+98.65 (39.5' LT)																10
SP4-15	P 212+00 (22.5' RT) TO P 216+68.65 (133.7' LT)												530				
SP4-16	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)																
SP5-1	P 220+45.85 (127.6' RT) TO TR 125+30.16 (437.0' RT)			1460													1,4
SP5-2	P 214+52.29 (79.53' LT) TO C 115+97.56 (31.4' LT)			397													1,4
SP5-3	C 111+99.75 (27.8' LT) TO C 115+97.57 (28.5' LT)																
SP5-4	C 111+99.77 (73.0' RT) TO C 116+18.76 (33.2' RT)																10
SP5-5	C 115+21.92 (25.4' LT) TO C 115+98.26 (25.5' LT)																10
SP5-6	C 115+29.97 (24.0' RT) TO C 115+98.63 (22.8' RT)																10
SP5-7	C 116+31.48 (25.6' LT) TO C 117+45.49 (25.6' LT)																10
SP5-8	C 16+52.46 (22.6' RT) TO C 117+59.15 (22.6' RT)																10
SP5-9	P 212+00.00 (0.0' LT) TO C 116+18.86 (0.0' LT)																
SP5-10	P 215+67.42 (220.3' RT) TO P 219+84.46 (128.7' RT)			509													1,4
SP5-11	P 221+54.96 (88.2' LT) TO P 223+61.40 (65.8' LT)							1									3
SP6-1	E 308+76.85 (11.1' LT)					1											7
SP6-2	E 311+36.70 (12.2' LT)								1								2
SP6-3	E 308+74.37 (52.9' LT) TO E 310+48.50 (49.8' LT)	229															
SP6-4	E 307+47.35 (32.11' RT) TO E 314+26.06 (49.9' LT)	753															
SP6-5	E 307+57.86 (40.5' LT) TO E 307+85.07 (39.0' LT)																
SP6-6	E 307+30.26 (1.5' LT) TO E 311+86.39 (6.81' LT)																
SP6-7	E 311+41.28 (94.0' LT) TO E 312+33.04 (110' LT)			176							92						1,4,6
SP6-8	E 310+14.96 (60.1' LT) TO E 311+11.42 (94.0' LT)			136							96						1,4,6
SP6-9	E 308+74.28 (49.9' LT) TO E 309+85.12 (60.1' LT)			115							111						1,4,6
SP6-10	E 307+30.66 (32.0' LT) TO E 308+50.87 (50.0' LT)			138							120						1,4,6
SP6-11	E 307+29.47 (55.4' RT) TO E 309+61.06 (50.0' RT)			234													1,4
SP6-12	E 309+40.85 (38.0' RT) TO E 309+61.06 (50.0' RT)										24						4,6
	SHEET TOTAL	982	3	4118		1		1	3		443	250	530				

GENERAL NOTES:

1. SEE WSDOT STANDARD PLAN I-30.17-01 FOR SILT FENCE.
2. SEE WSDOT STANDARD PLAN I-40.20-00 FOR STORM DRAIN INLET PROTECTION.
3. REMOVE EXISTING CONDUIT; SEE SPECIAL PROVISIONS AND SHEET ST2 FOR REMOVAL DETAILS.
4. INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LS ITEM. QUANTITIES PROVIDED FOR REFERENCE ONLY.
5. SEE STD. PLAN I-80.10-02 STABILIZED CONSTUCTION ENTRANCE.
6. SEE STD. PLAN I-10.10-01 HIGH VISIBILITY FENCE.
7. SEE STD. PLAN H-70.10-02 MAILBOX SUPPORT TYPE 1
8. DEMOLISH EXISTING BUILDING AND CLEAR PARCEL. SEE SPECIAL PROVISIONS FOR REMOVAL DETAILS.
9. INCLUDED IN REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS A LS ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.
10. INCLUDED IN REMOVE CEMENT CONCRETE CURB ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGION ADM.		DATE	DATE	REVISION	BY	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - SITE PREPARATION AND TESC

QTSP 4

SHEET 30 OF 218 SHEETS

QUANTITY TABULATION - SITE PREPARATION AND TESC

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	REMOVING MANHOLE	REMOVE CEMENT CONCRETE SIDEWALK/DRIVEWAY APPROACH		REMOVE CEMENT CONCRETE CURB AND GUTTER	REMOVE CEMENT CONCRETE CURB	REMOVE ASPHALT PAVEMENT		REMOVE CEMENT CONCRETE MEDIAN CURB AND ISLAND	REMOVING GUARDRAIL	REMOVING GUARDRAIL ANCHOR	REMOVING GUIDE POST		REMOVING PAINT LINE	REMOVING PAINTED TRAFFIC MARKING	REMOVING PAINTED CROSSWALK LINE	SEE GENERAL NOTES
		EACH	S.Y.		L.F.	L.F.	S.Y.		S.Y.	L.F.	EACH	EACH		L.F.	EACH	S.F.	
SP6-13	E 309+91.06 (50.0' RT) TO E 312+64.00 (38.0' RT)																4,6
SP6-14	E 308+24.15 (50.0' LT) TO E 308+52.98 (47.7' LT)					31											10
SP7-1	E 312+62.67 (110.0' LT) TO TR 122+18.16 (80.8' LT)																4
SP7-2	E 312+62.92 (49.9' LT) TO E 314+28.99 (50.0' RT)																4,6
SP7-3	E 317+59.39 (12.9' LT) TO E 317+68.32 (86.7' RT)																4,5
SP7-4	E 318+34.64 (81.6' RT) TO E 318+30.88 (28.4' RT)		114														
PV8-1	AR-1 10+20.00 (22.0' LT) TO AR-1 10+20.00 (22.0' RT)					44											10
TCD1-1	TR 114+37.67 (39.1' RT) TO TR 123+65.58 (47.9' RT)						3011										
	NEW INLETS BY TYPE:																
	CATCH BASIN TYPE 1																2,4
	GRATE INLET TYPE 2																2,4
	PRECAST CONCRETE DRYWELL																2,4
	CATCH BASIN TYPE 2 48" DIAMETER																2,4
	CATCH BASIN TYPE 1L																2,4
	CURB INLET TYPE 1																2,4
	CURB INLET TYPE 2																2,4
	SHEET TOTAL		114			75	3011										
	PROJECT TOTAL	4	2886		1652	2278	21014		109	633	5	3		1751	4	88	

GENERAL NOTES:

1. SEE WSDOT STANDARD PLAN I-30.17-01 FOR SILT FENCE.
2. SEE WSDOT STANDARD PLAN I-40.20-00 FOR STORM DRAIN INLET PROTECTION.
3. REMOVE EXISTING CONDUIT; SEE SPECIAL PROVISIONS AND SHEET ST2 FOR REMOVAL DETAILS.
4. INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LS ITEM. QUANTITIES PROVIDED FOR REFERENCE ONLY.
5. SEE STD. PLAN I-80.10-02 STABILIZED CONSTUCTION ENTRANCE.
6. SEE STD. PLAN I-10.10-01 HIGH VISIBILITY FENCE.
7. SEE STD. PLAN H-70.10-02 MAILBOX SUPPORT TYPE 1
8. DEMOLISH EXISTING BUILDING AND CLEAR PARCEL. SEE SPECIAL PROVISIONS FOR REMOVAL DETAILS.
9. INCLUDED IN REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS A LS ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.
10. INCLUDED IN REMOVE CEMENT CONCRETE CURB ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGION ADM.		**DATE**	**DATE**	**REVISION**	**BY**	

REGION NO.	STATE
10	WASH

JOB NUMBER

CONTRACT NO.

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - SITE PREPARATION AND TESC

QTSP 5

SHEET 31 **OF** 218 **SHEETS**

QUANTITY TABULATION - SITE PREPARATION AND TESC

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	REMOVE FENCE	INLET PROTECTION	SILT FENCE		MAILBOX SUPPORT TYPE 1	REMOVAL OF COMMERCIAL STRUCTURE	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	REMOVING DRAINAGE STRUCTURE		HIGH VISIBILITY FENCE	STABILIZED CONSTRUCTION ENTRANCE	REMOVE EXISTING WATERLINE				SEE GENERAL NOTES
		L.F.	EACH	L.F.		EACH	L.S.	L.S.	EACH		L.F.	S.Y.	L.F.				
SP6-13	E 309+91.06 (50.0' RT) TO E 312+64.00 (38.0' RT)										279						4,6
SP6-14	E 308+24.15 (50.0' LT) TO E 308+52.98 (47.7' LT)																10
SP7-1	E 312+62.67 (110.0' LT) TO TR 122+18.16 (80.8' LT)			908													4
SP7-2	E 312+62.92 (49.9' LT) TO E 314+28.99 (50.0' RT)										199						4,6
SP7-3	E 317+59.39 (12.9' LT) TO E 317+68.32 (86.7' RT)											285					4,5
SP7-4	E 318+34.64 (81.6' RT) TO E 318+30.88 (28.4' RT)																
PV8-1	AR-1 10+20.00 (22.0' LT) TO AR-1 10+20.00 (22.0' RT)																10
TCD1-1	TR 114+37.67 (39.1' RT) TO TR 123+65.58 (47.9' RT)																
	NEW INLETS BY TYPE:																
	CATCH BASIN TYPE 1		39														2,4
	GRATE INLET TYPE 2		7														2,4
	PRECAST CONCRETE DRYWELL		9														2,4
	CATCH BASIN TYPE 2 48" DIAMETER		4														2,4
	CATCH BASIN TYPE 1L		3														2,4
	CURB INLET TYPE 1		24														2,4
	CURB INLET TYPE 2		3														2,4
	SHEET TOTAL		89	908							478	285					
	PROJECT TOTAL	1005	99	7440		2	1	1	5		921	702	530				

GENERAL NOTES:

1. SEE WSDOT STANDARD PLAN I-30.17-01 FOR SILT FENCE.
2. SEE WSDOT STANDARD PLAN I-40.20-00 FOR STORM DRAIN INLET PROTECTION.
3. REMOVE EXISTING CONDUIT; SEE SPECIAL PROVISIONS AND SHEET ST2 FOR REMOVAL DETAILS.
4. INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LS ITEM. QUANTITIES PROVIDED FOR REFERENCE ONLY.
5. SEE STD. PLAN I-80.10-02 STABILIZED CONSTUCTION ENTRANCE.
6. SEE STD. PLAN I-10.10-01 HIGH VISIBILITY FENCE.
7. SEE STD. PLAN H-70.10-02 MAILBOX SUPPORT TYPE 1
8. DEMOLISH EXISTING BUILDING AND CLEAR PARCEL. SEE SPECIAL PROVISIONS FOR REMOVAL DETAILS.
9. INCLUDED IN REMOVAL OF STRUCTURES AND OBSTRUCTIONS AS A LS ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.
10. INCLUDED IN REMOVE CEMENT CONCRETE CURB ITEM. QUANTITY PROVIDED FOR REFERENCE ONLY.

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGION ADM.					
		DATE	**DATE**	**REVISION**	**BY**

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

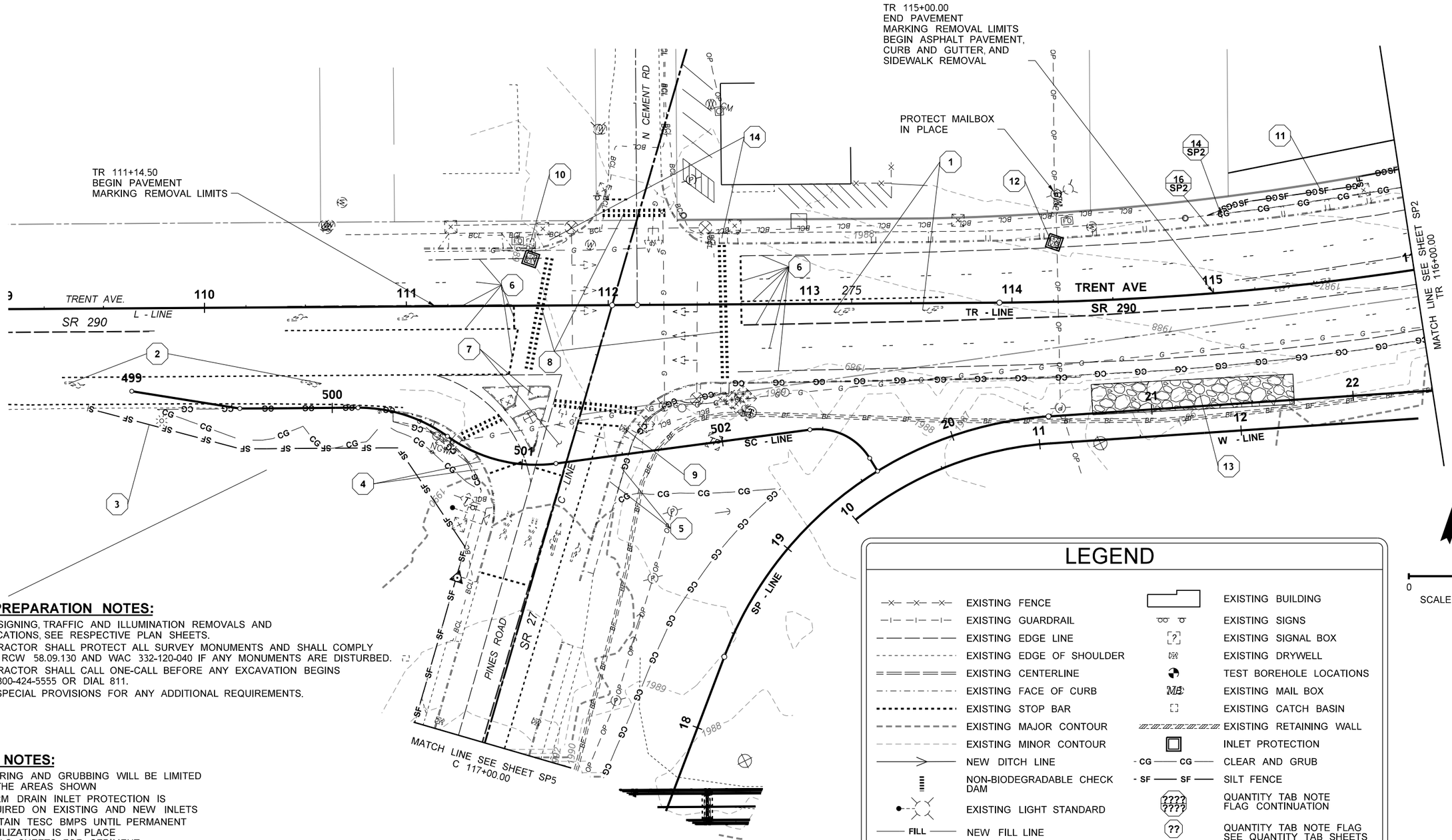
CONTRACT NO.

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - SITE PREPARATION AND TESC

QTSP 6

SHEET 32 **OF** 218 **SHEETS**



SITE PREPARATION NOTES:

1. FOR SIGNING, TRAFFIC AND ILLUMINATION REMOVALS AND RELOCATIONS, SEE RESPECTIVE PLAN SHEETS.
2. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS AND SHALL COMPLY WITH RCW 58.09.130 AND WAC 332-120-040 IF ANY MONUMENTS ARE DISTURBED.
3. CONTRACTOR SHALL CALL ONE-CALL BEFORE ANY EXCAVATION BEGINS AT 1-800-424-5555 OR DIAL 811.
4. SEE SPECIAL PROVISIONS FOR ANY ADDITIONAL REQUIREMENTS.

TESC NOTES:

1. CLEARING AND GRUBBING WILL BE LIMITED TO THE AREAS SHOWN
2. STORM DRAIN INLET PROTECTION IS REQUIRED ON EXISTING AND NEW INLETS
3. MAINTAIN TESC BMPS UNTIL PERMANENT STABILIZATION IS IN PLACE
4. SEE LS SHEETS FOR SEDIMENT WATTLE LOCATIONS.
5. NON-BIODEGRADABLE CHECK DAMS ARE INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION LUMP SUM ITEM

LEGEND

EXISTING FENCE	EXISTING BUILDING
EXISTING GUARDRAIL	EXISTING SIGNS
EXISTING EDGE LINE	EXISTING SIGNAL BOX
EXISTING EDGE OF SHOULDER	EXISTING DRYWELL
EXISTING CENTERLINE	TEST BOREHOLE LOCATIONS
EXISTING FACE OF CURB	EXISTING MAIL BOX
EXISTING STOP BAR	EXISTING CATCH BASIN
EXISTING MAJOR CONTOUR	EXISTING RETAINING WALL
EXISTING MINOR CONTOUR	INLET PROTECTION
NEW DITCH LINE	CLEAR AND GRUB
NON-BIODEGRADABLE CHECK DAM	SILT FENCE
EXISTING LIGHT STANDARD	QUANTITY TAB NOTE FLAG CONTINUATION
FILL — NEW FILL LINE	QUANTITY TAB NOTE FLAG SEE QUANTITY TAB SHEETS FOR ADDITIONAL INFORMATION
CUT — NEW CUT LINE	

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TIME	10:33:18 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH

JOB NUMBER

CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

LOCATION NO.

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

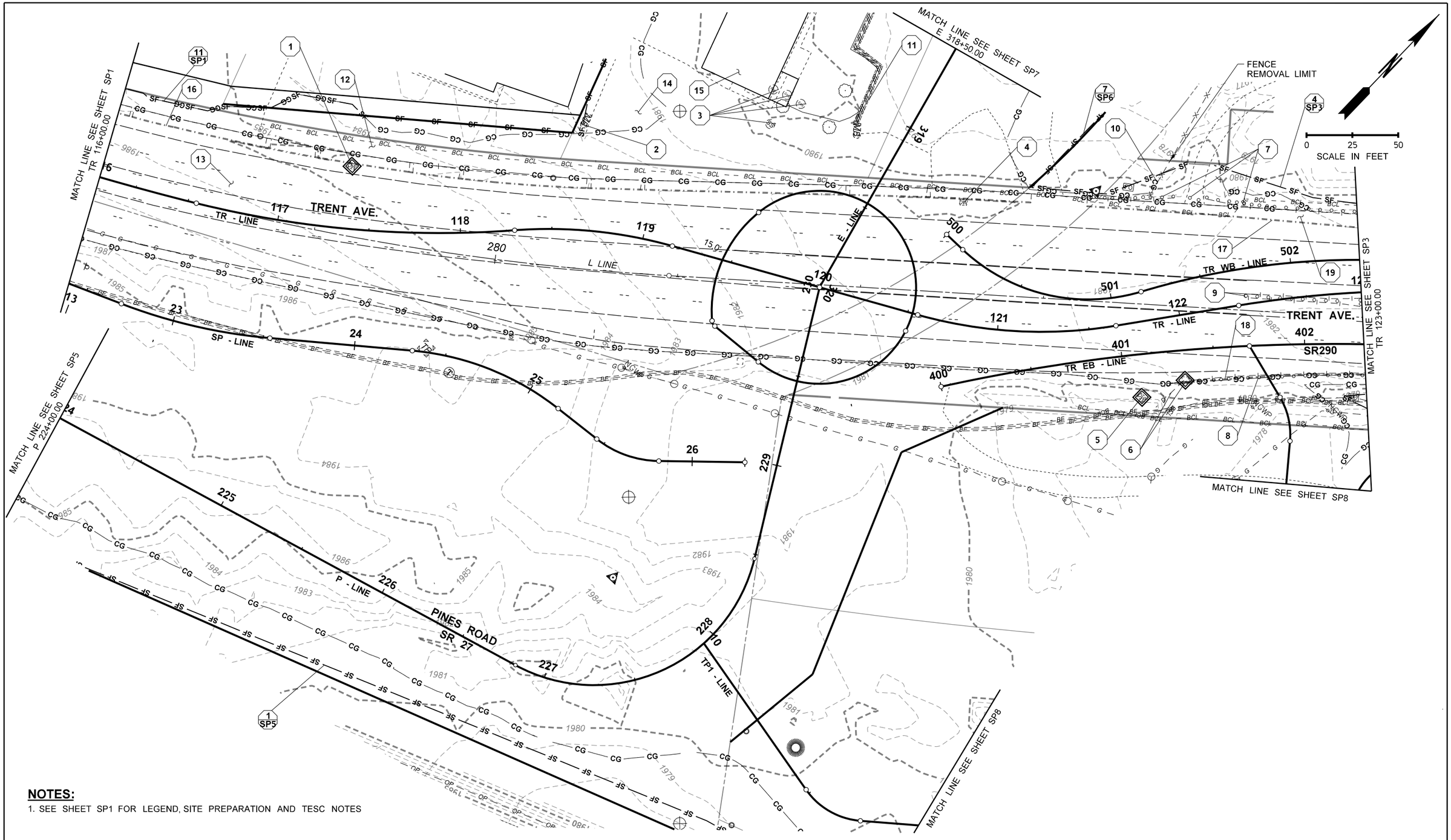
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP1
SHEET 33 OF 218 SHEETS



NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DATE	5/29/2025						
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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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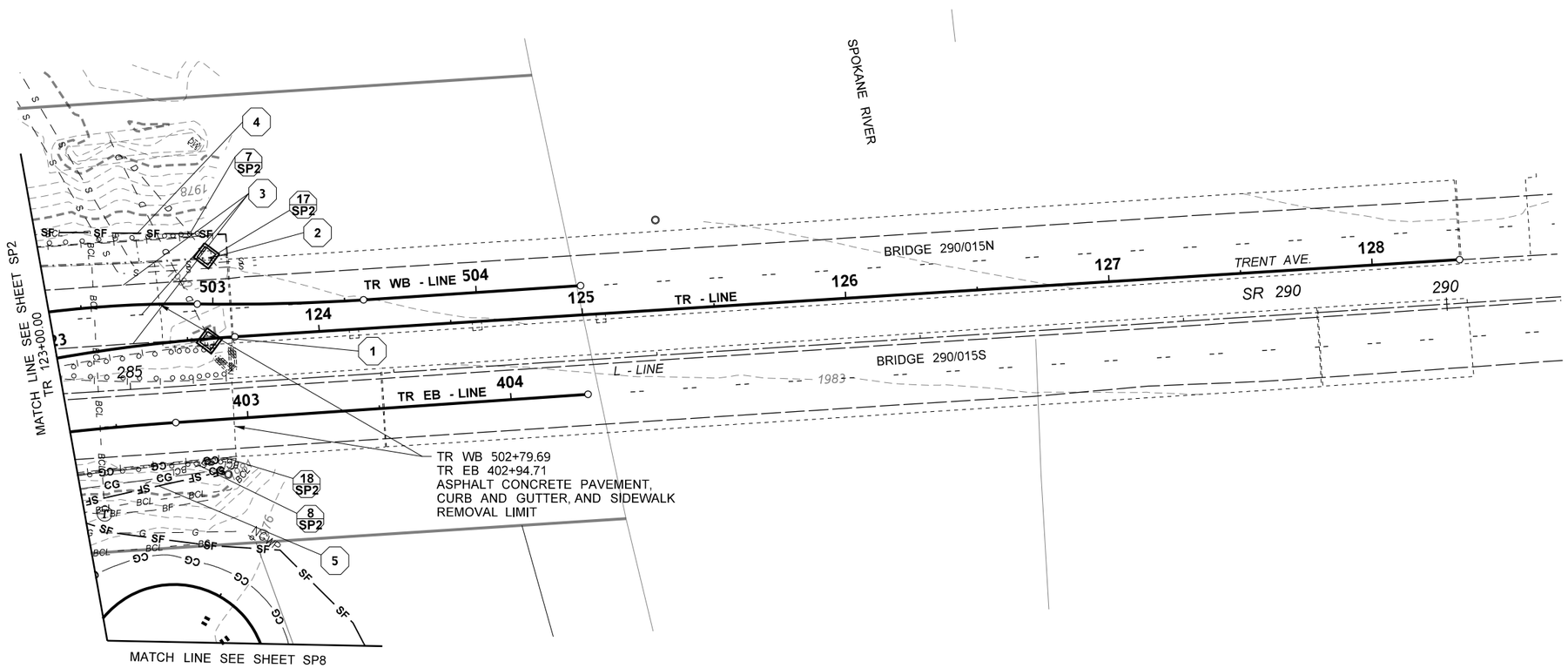
City of Spokane Valley

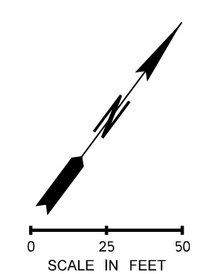
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP2
SHEET 34 OF 218 SHEETS





NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
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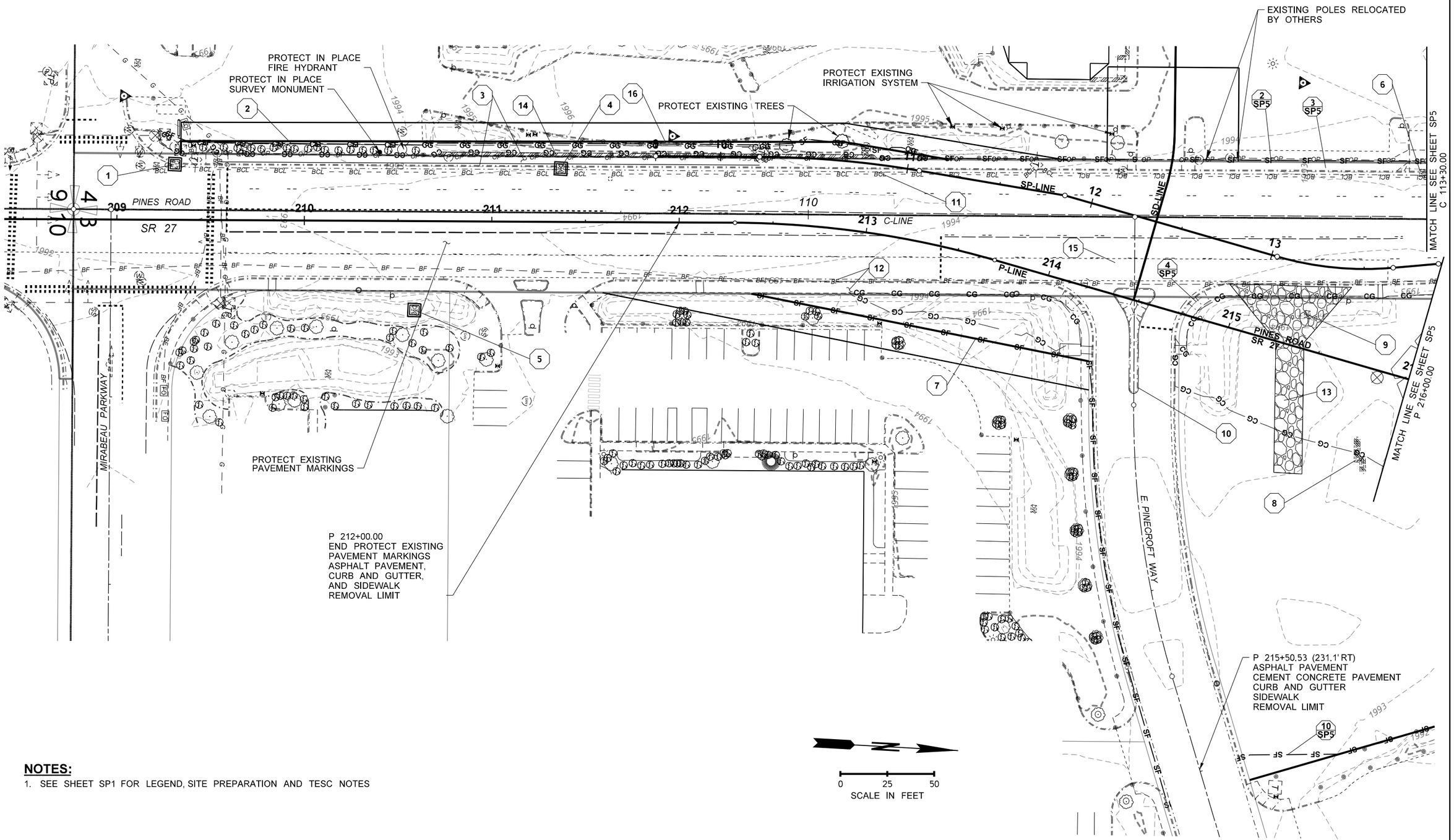
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP3
SHEET 35 OF 218 SHEETS



NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DATE	5/29/2025				10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
PLOTTED BY	EMCGUIRE				JOB NUMBER		
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

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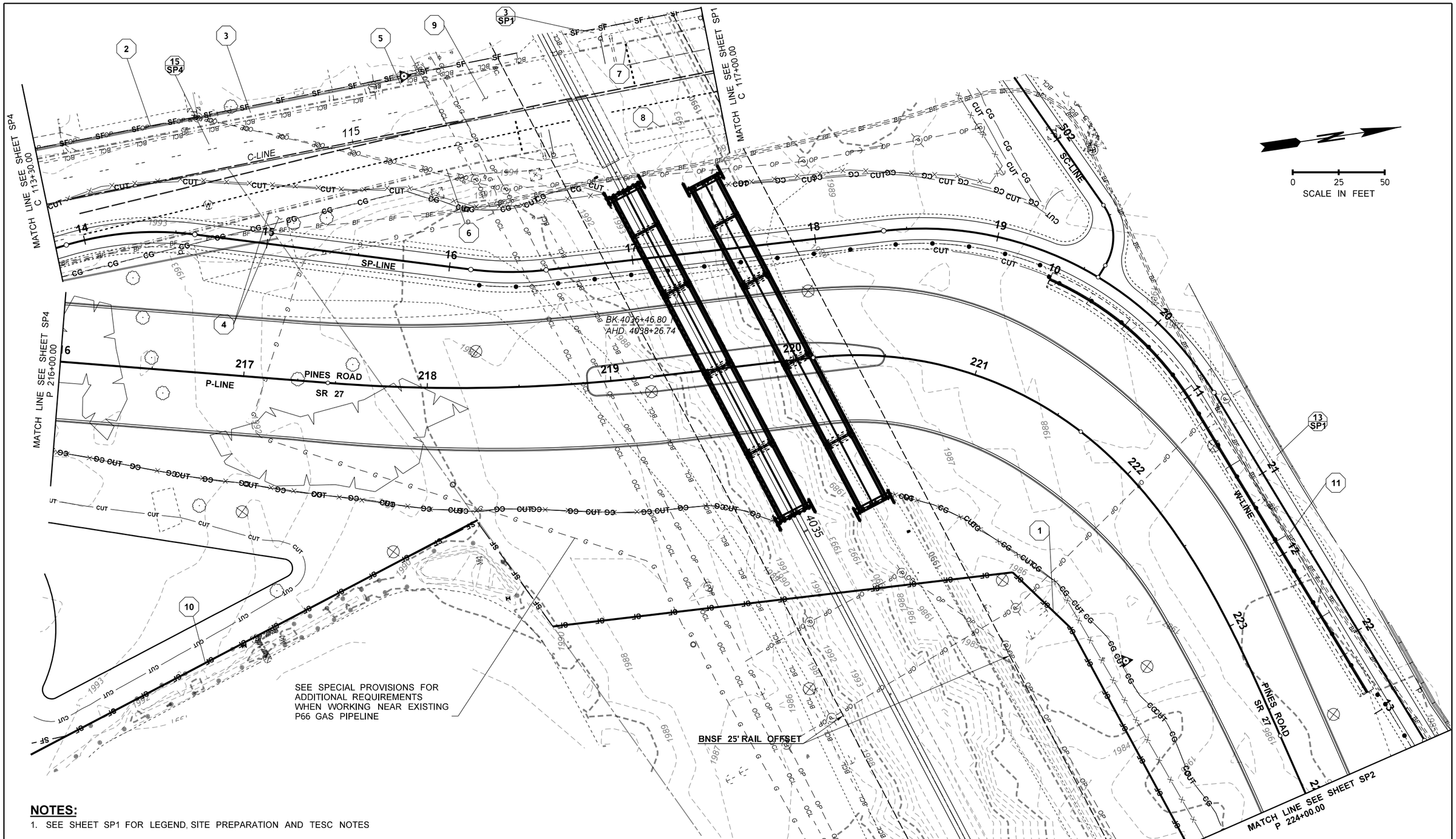
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP4
SHEET 36 OF 218 SHEETS



NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
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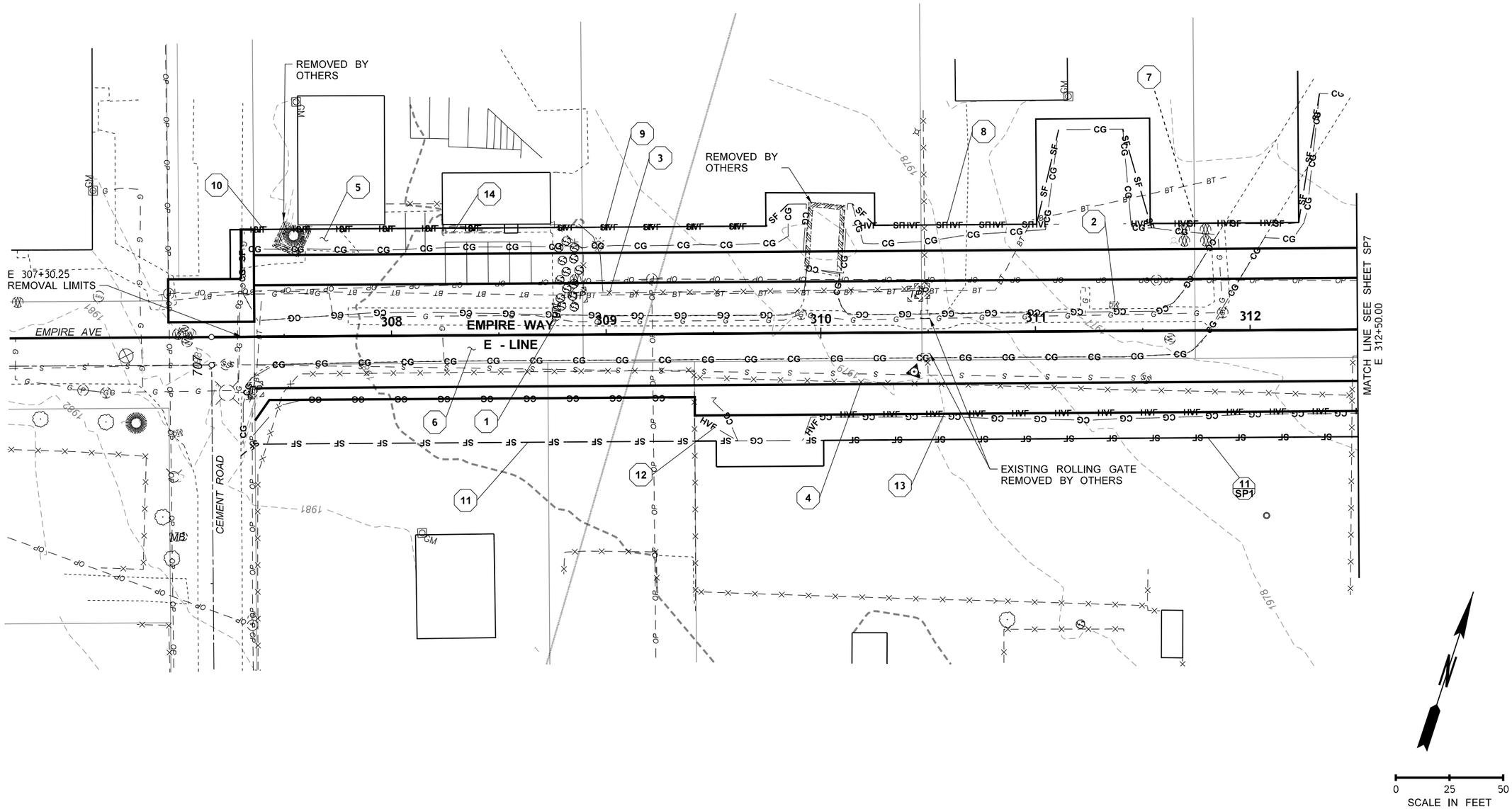
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP5
SHEET 37 OF 218 SHEETS



NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DATE	5/29/2025						
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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

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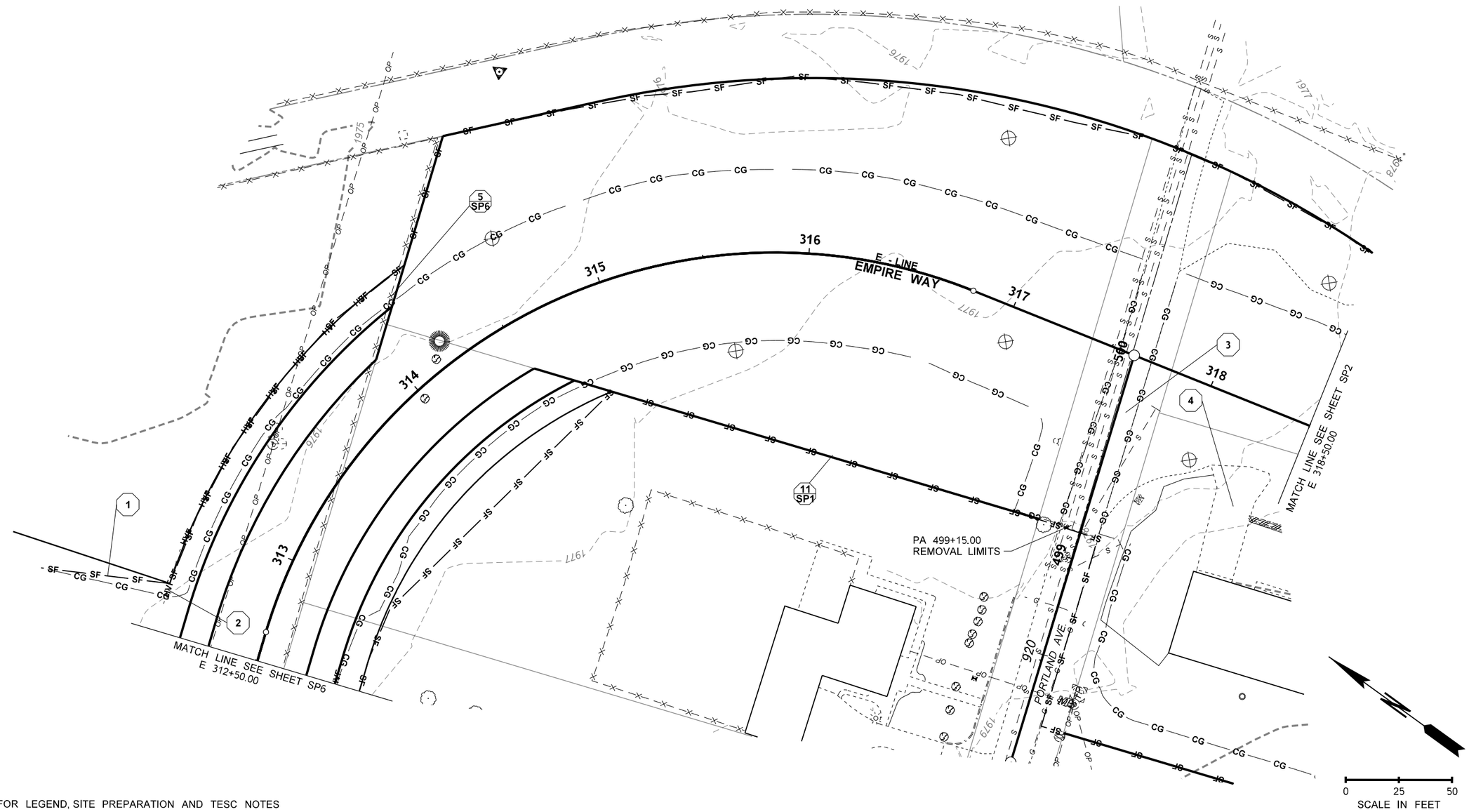
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP6
SHEET 38 OF 218 SHEETS



NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

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City of Spokane Valley
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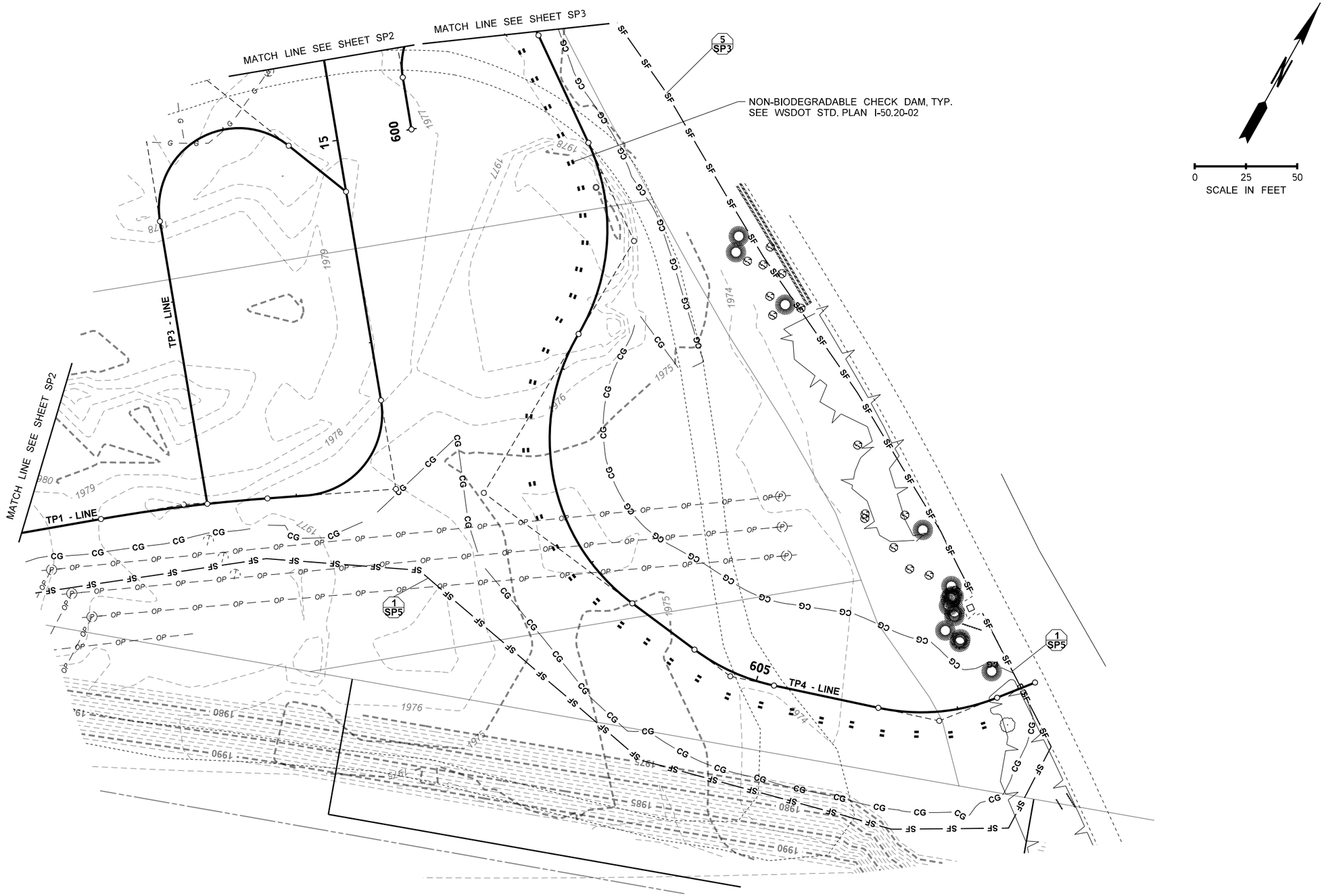
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP7
SHEET 39 OF 218 SHEETS



NOTES:

1. SEE SHEET SP1 FOR LEGEND, SITE PREPARATION AND TESC NOTES

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DESIGNED BY	B KIRKMAN			
ENTERED BY	E MCGUIRE			
CHECKED BY	J FREY			
PROJ. ENGR.	S MARSHALL			
REGIONAL ADM.		REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

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DATE
P.E. STAMP BOX

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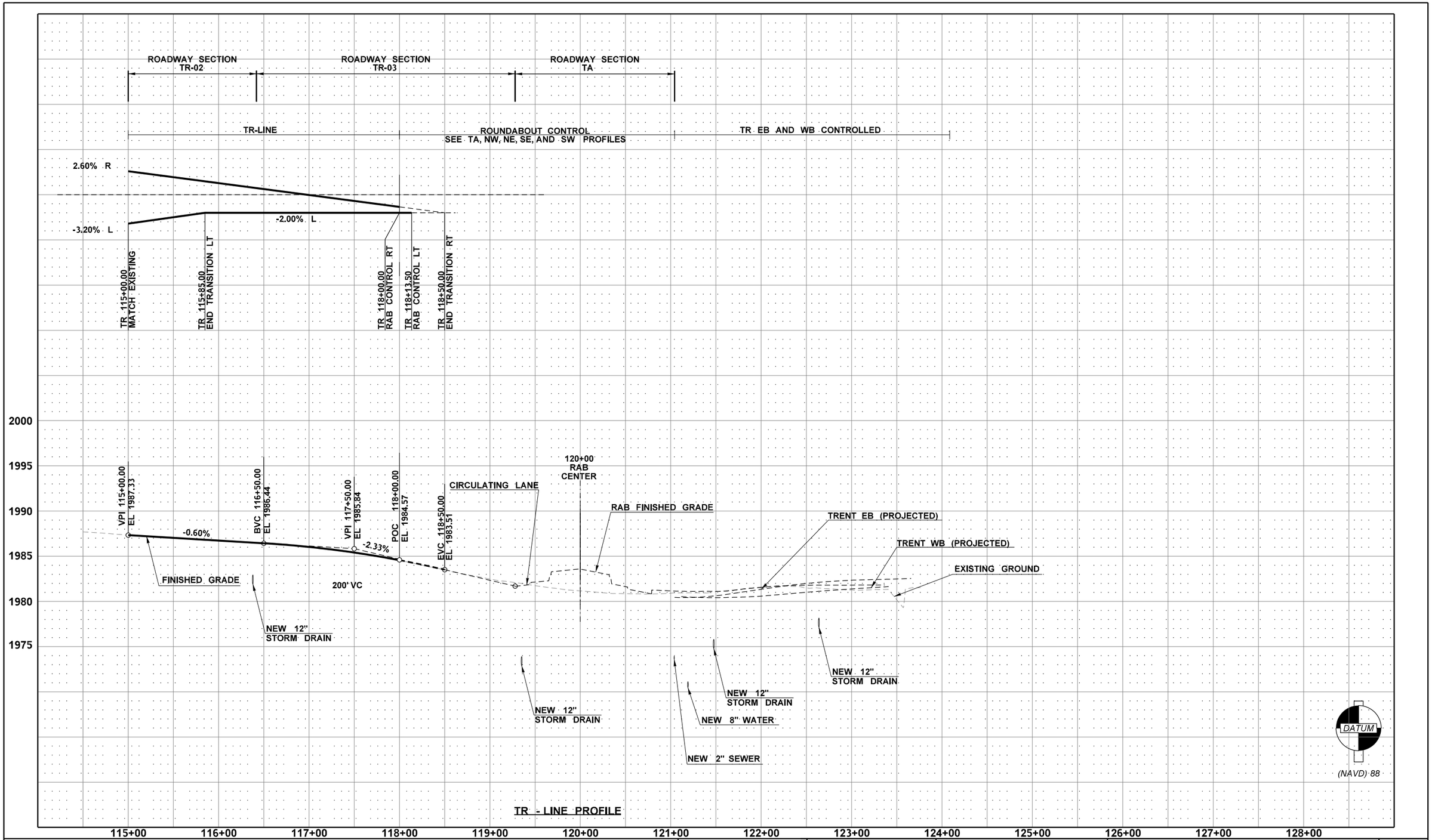
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SITE PREPARATION AND TESC PLAN

Plot 1
PLAN REF NO
SP8
SHEET 40 OF 218 SHEETS



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DATE	5/29/2025				
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DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGIONAL ADM.		REVISION	DATE	BY	

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

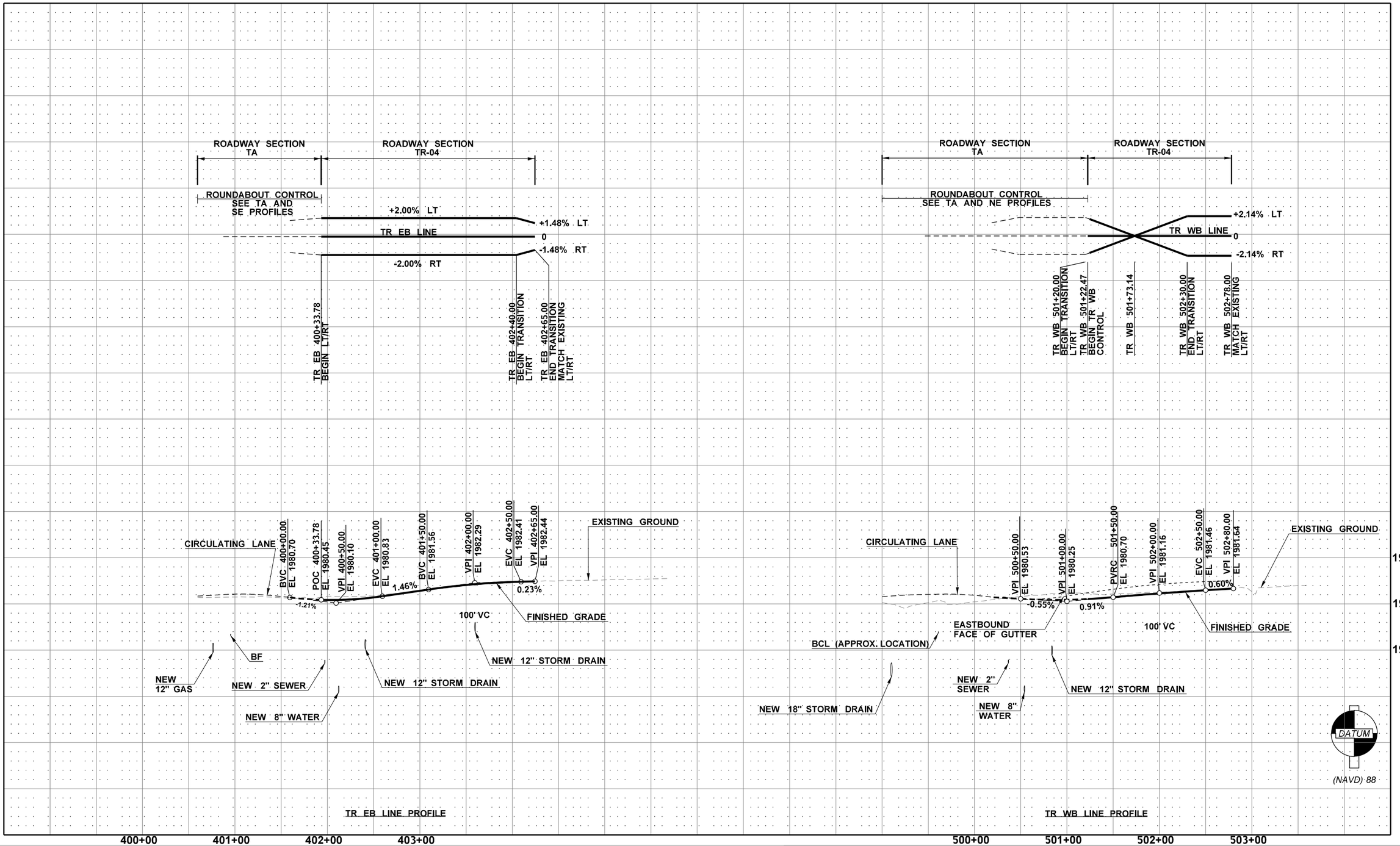
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP1

SHEET 41 OF 218 SHEETS



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PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

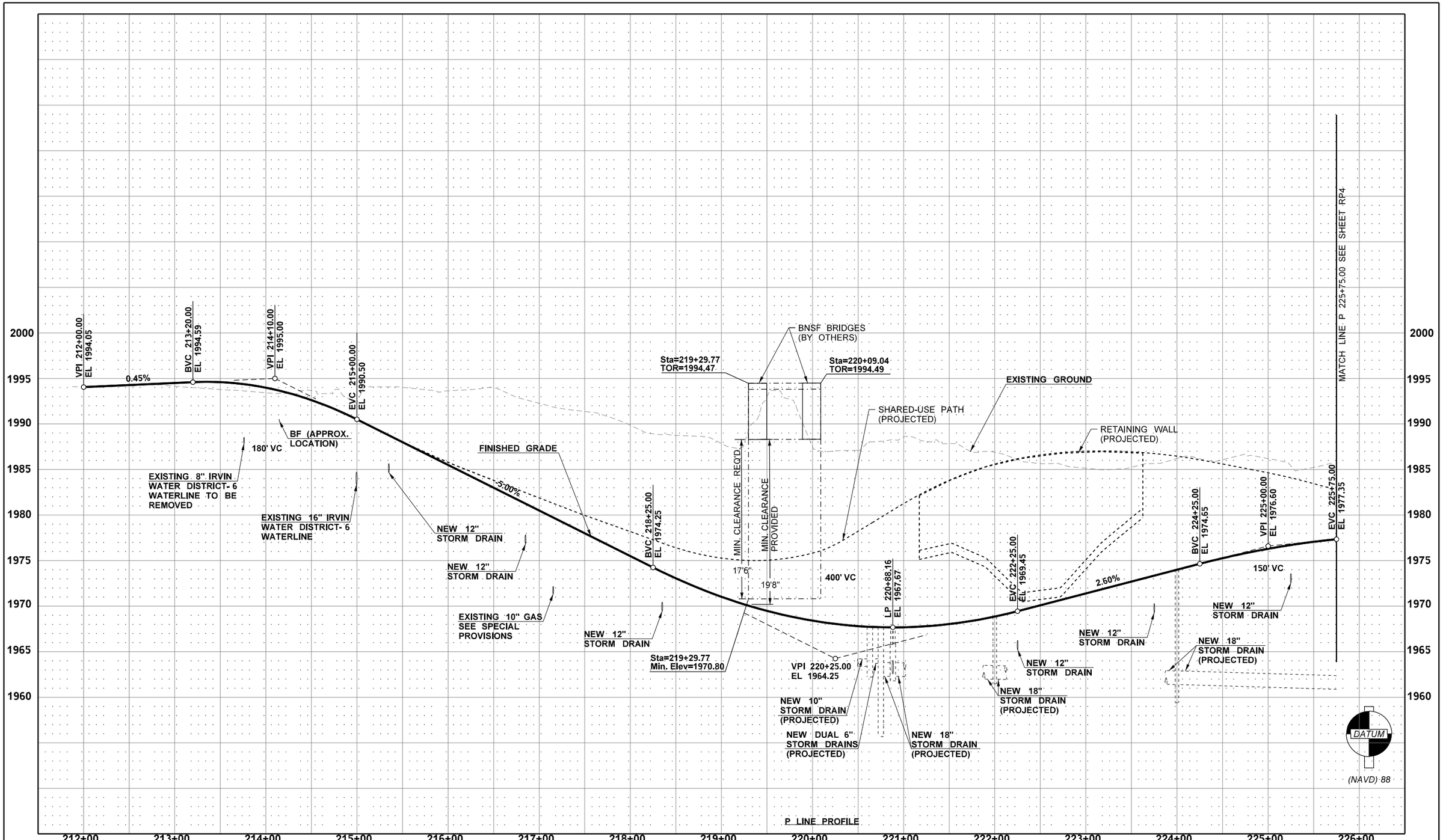
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP2

SHEET 42 OF 218 SHEETS



P LINE PROFILE

FILE NAME	c:\pwworking\west01\d2172368\PINES_PS_PR_RD_003.dgn
TIME	10:36:37 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

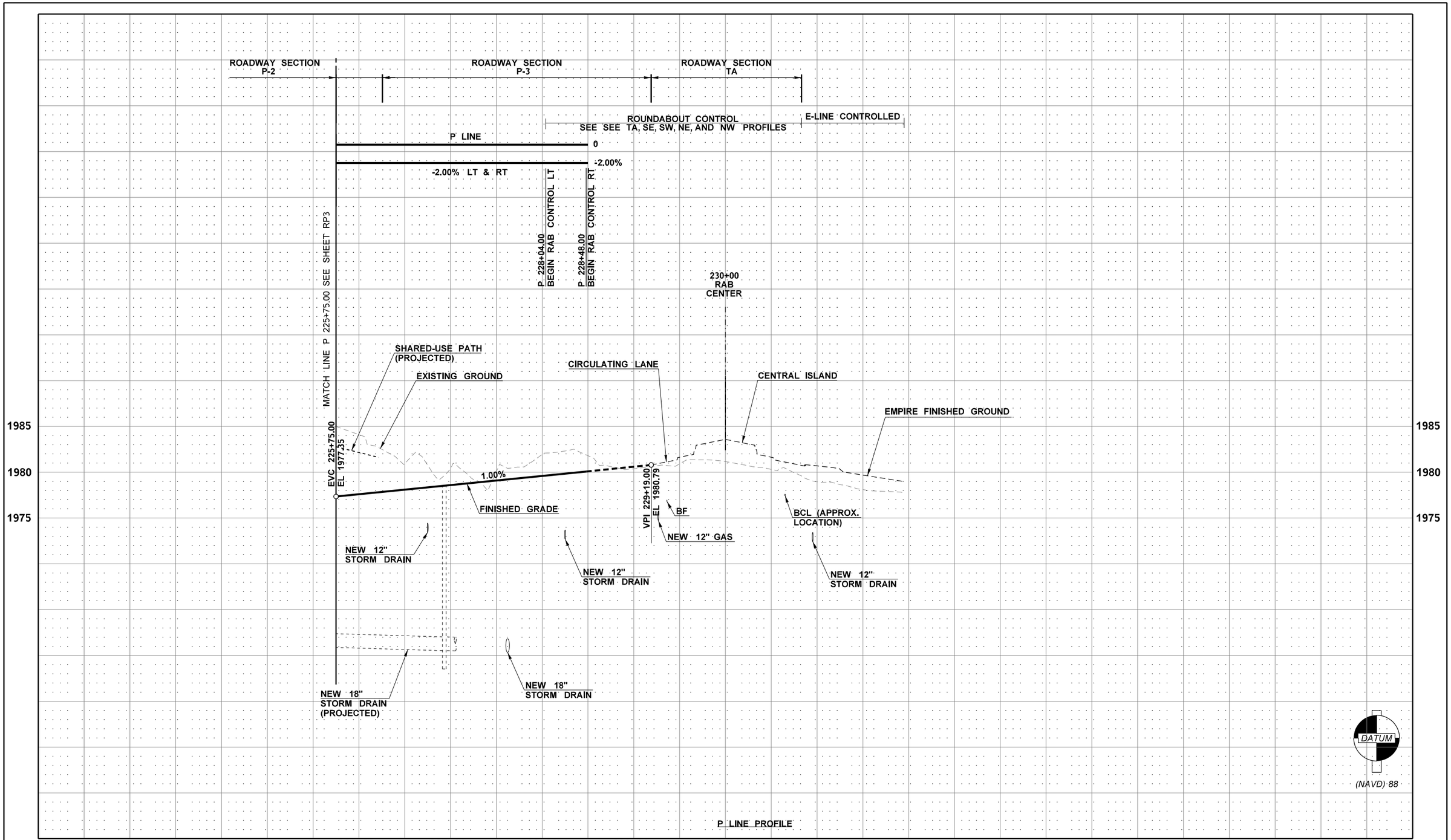
CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP3

SHEET 43 OF 218 SHEETS



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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

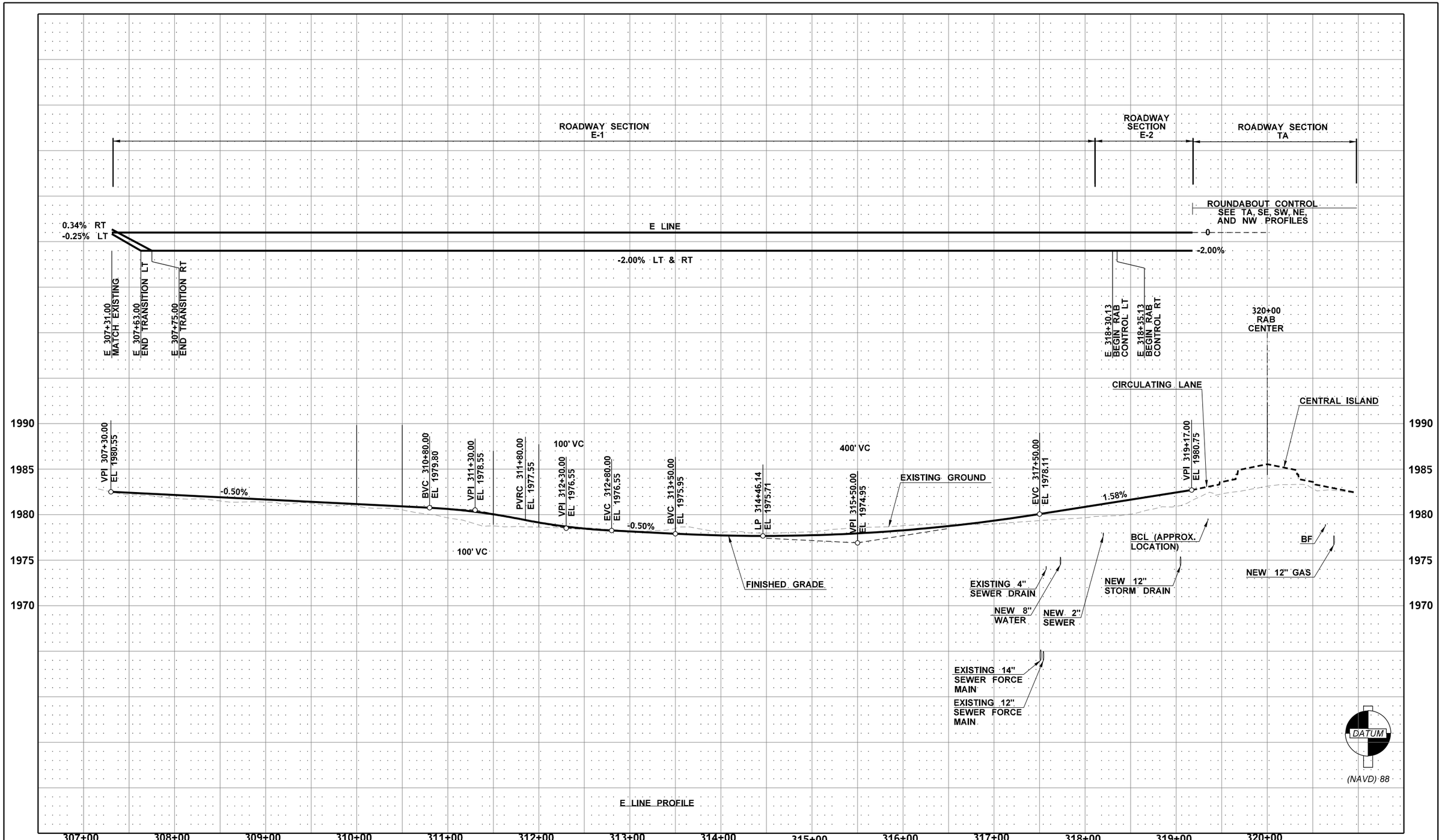
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP4

SHEET 44 OF 218 SHEETS



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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

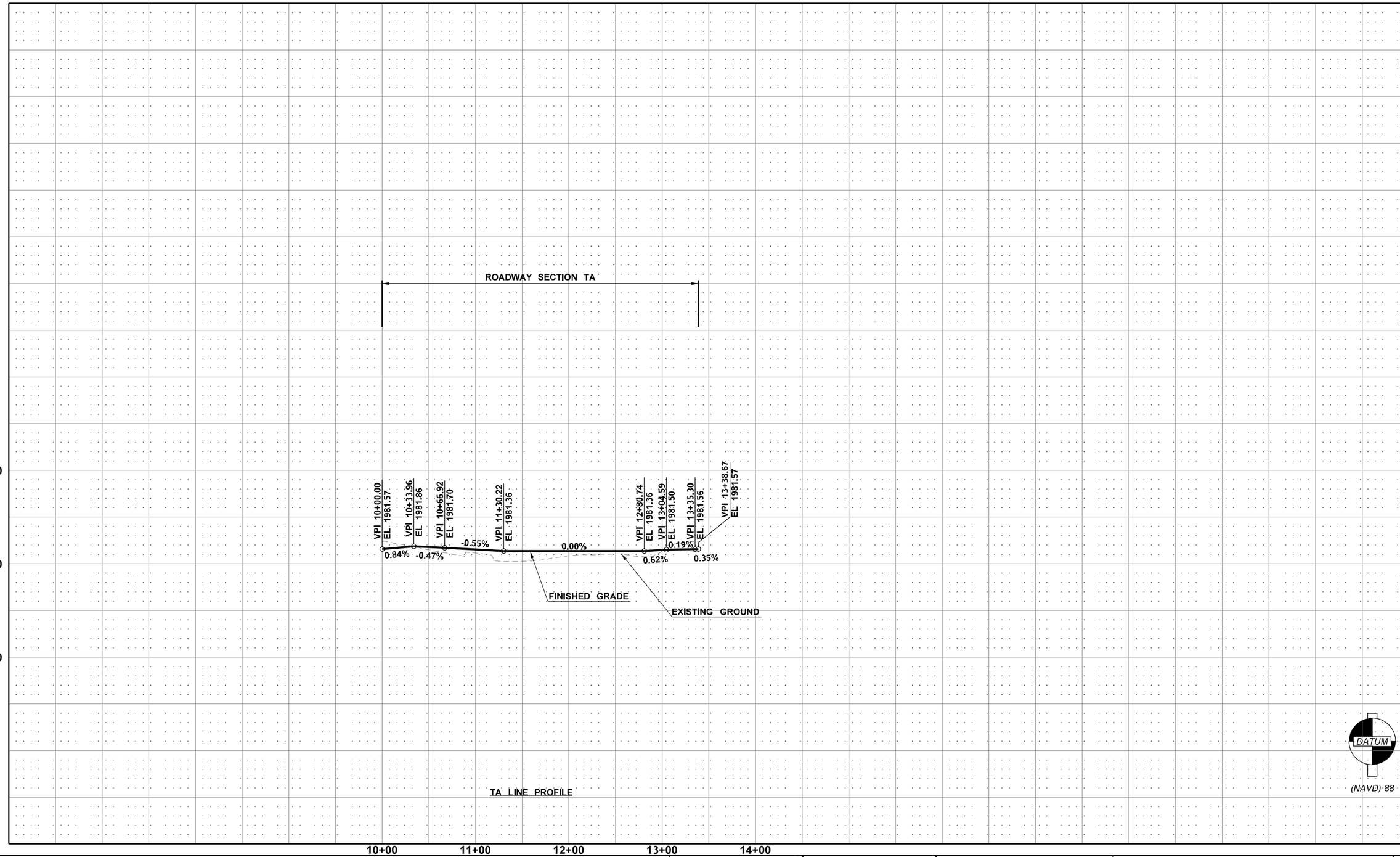
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP5

SHEET 45 OF 218 SHEETS



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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

P.E. STAMP BOX

City of Spokane Valley

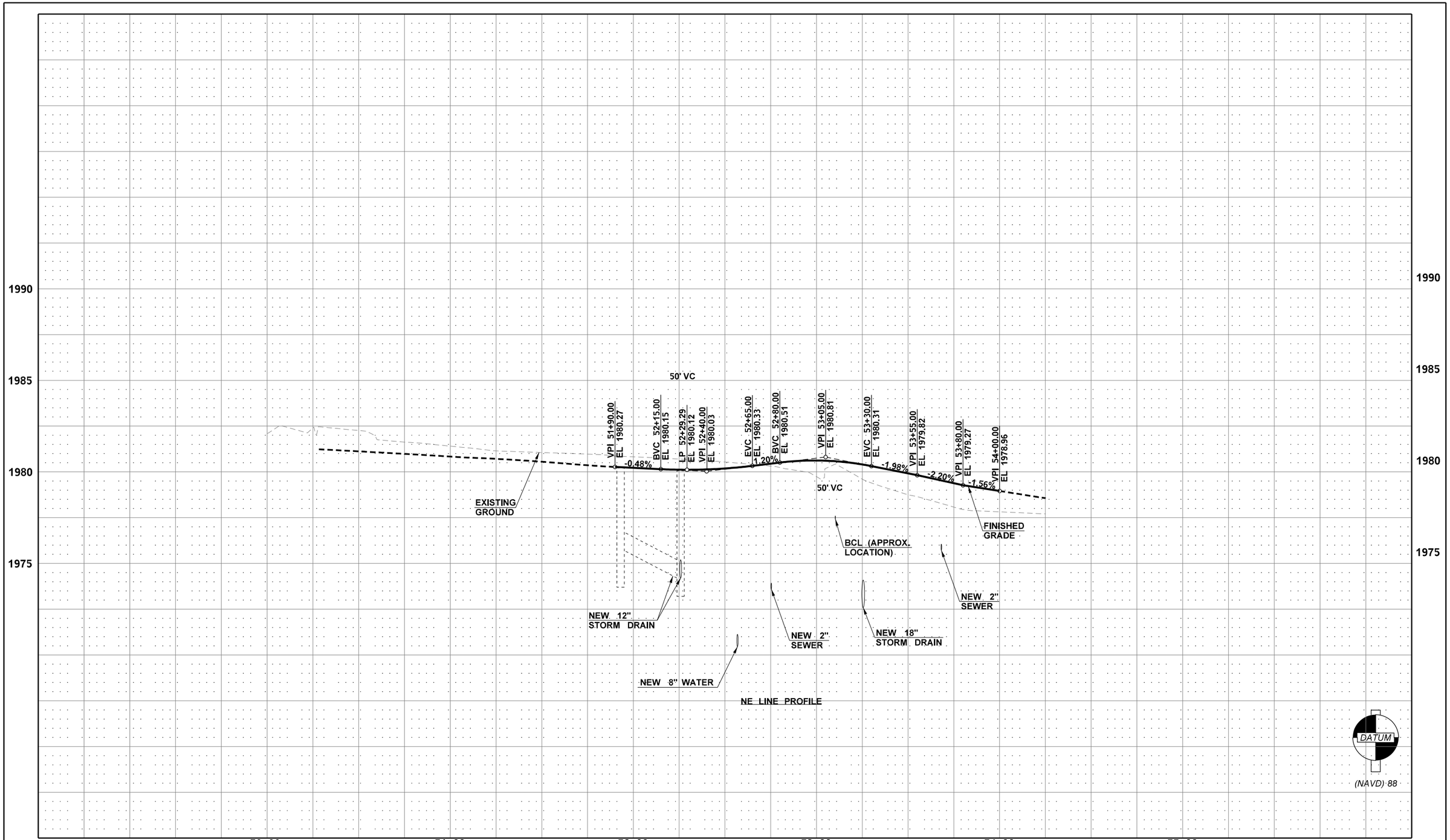
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP6

SHEET 46 OF 218 SHEETS



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TIME	10:37:25 AM					
DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
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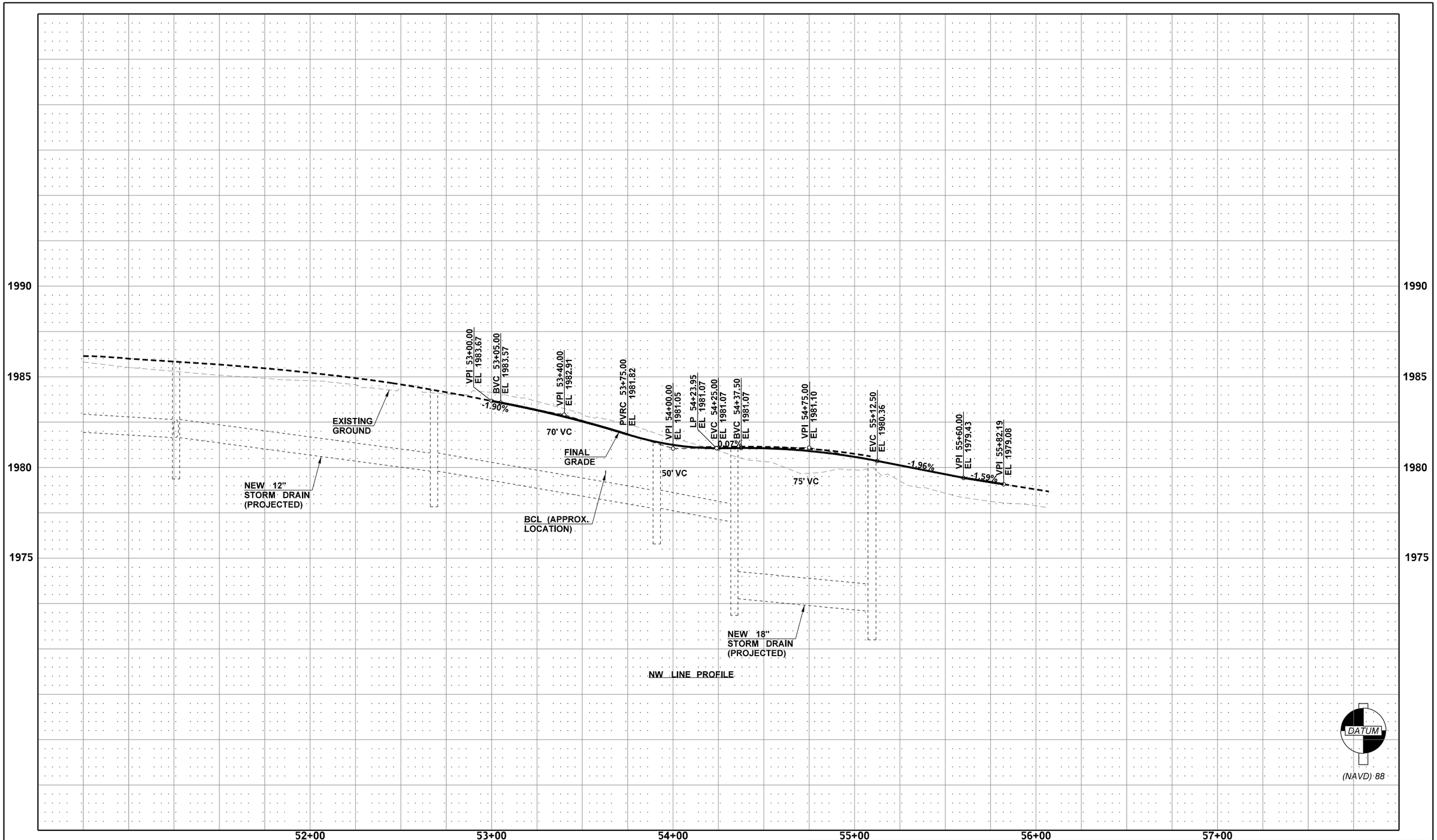
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP7

SHEET 47 OF 218 SHEETS



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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

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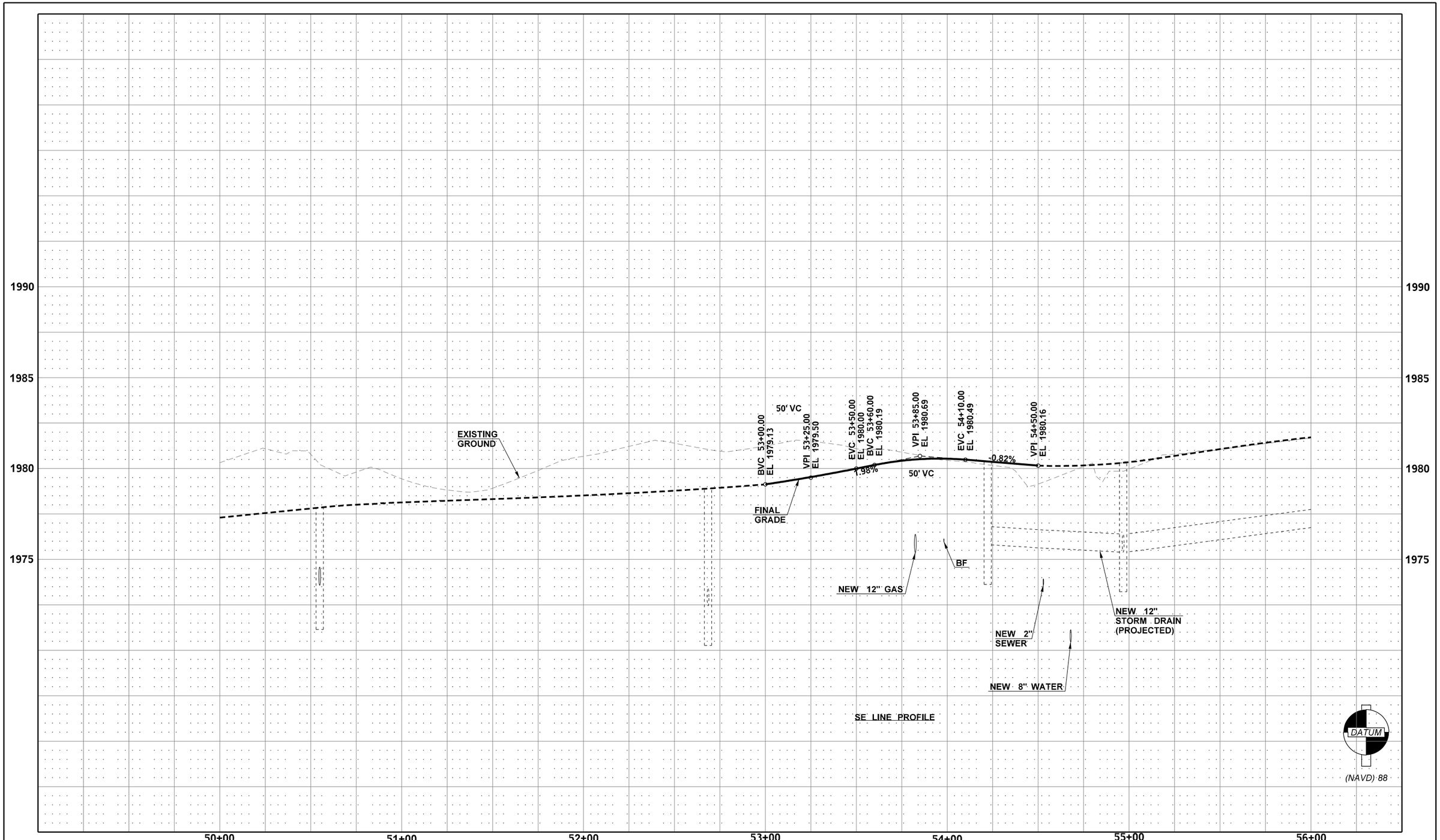
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP8

SHEET 48 OF 218 SHEETS



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TIME	10:37:47 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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City of Spokane Valley

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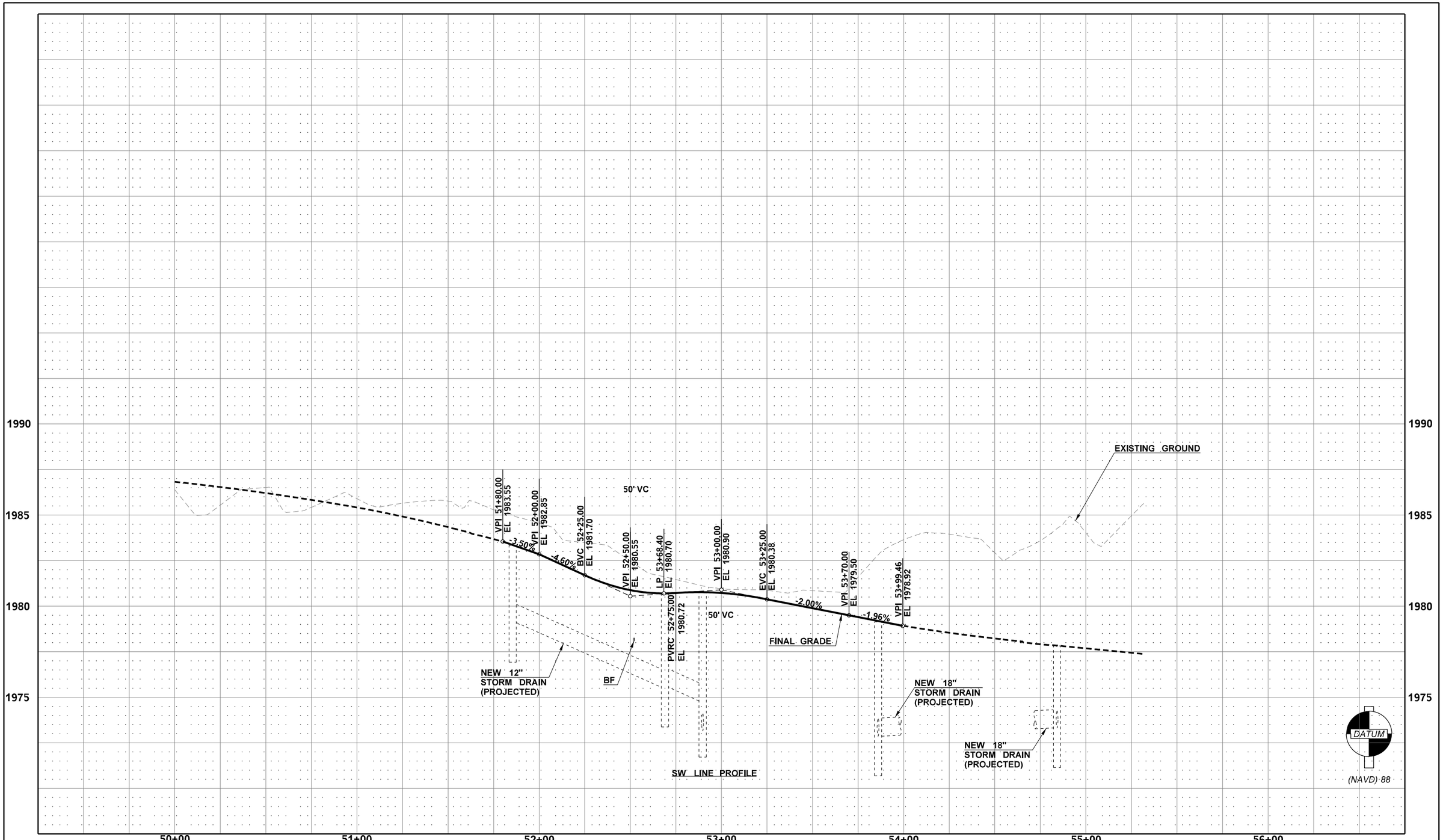
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP9

SHEET 49 OF 218 SHEETS



FILE NAME	c:\pwworking\west01\d2172368\PINES_PS_PR_RD_010.dgn
TIME	10:37:58 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
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CITY OF Spokane Valley
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PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADWAY PROFILE

PLAN REF. NO.
RP10

SHEET 50 OF 218 SHEETS

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GRATE INLET TYPE 2	CATCH BASIN TYPE 1	CATCH BASIN TYPE 1L	CATCH BASIN TYPE 2 48 IN. DIAM		PRECAST CONCRETE DRYWELL TYPE A	MODIFIED PRECAST CONCRETE DRYWELL TYPE B	QUARRY SPALLS	TESTING STORM SEWER PIPE		PVC PRESSURE PIPE 10 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	SCHEDULE B STORM SEWER PIPE 18 IN. DIAM.		SEE GENERAL NOTES
		EACH	EACH	EACH	EACH		EACH	EACH	C.Y.	L.F.		L.F.	L.F.	L.F.	L.F.		
DR1-1	TR 115+30.00 (34.2'LT) TO TR 116+29.18 (36.7' LT)		1							97			97				3,4
DR2-1	TR 116+40.00 (8.2' RT) TO TR 116+29.16 (36.7' LT)		1							46			46				3,4
DR2-2	TR 116+29.18 (35.8' LT) TO TR 117+80.00 (34.4'LT)		1							142			142				3,4
DR2-3	TR 117+80.00 (34.4'LT) TO TR 118+95.30 (42.9' LT)		1							123			123				3,4
DR2-4	TR 118+95.30 (42.9' LT) TO TR 119+30.63 (59.3'LT)		1							43			43				3,4
DR2-5	TR 119+30.63 (59.3'LT) TO TR 119+38.60 (65.0' RT)			1						125			125				3,4
DR2-6	TR 119+38.62 (65.0'RT) TO TR 119+35.54 (88.9'RT)		1							23			23				3,4
DR2-7	TR 119+35.54 (88.9'RT) TO TR 119+14.81 (83.7'RT)		1							21			21				3,4
DR2-8	TR 119+14.81 (83.7'RT) TO TR 118+12.00 (57.9'RT)		1							83			83				3,4
DR2-9	E 319+05.60 (29.3' RT) TO E 318+75.32 (58.7'RT)			1						44				44			3,4,7
DR2-10	TR EB 400+05.64 (15.4'RT) TO TR EB 400+46.58 (15.2' RT)		1							40			40				3,4
DR2-11	TR EB 400+46.58 (15.1'RT) TO TR EB 400+81.20 (14.9'RT)		1							34			34				3,4
DR2-12	TR EB 400+81.20 (14.9'RT) TO TR EB 402+03.09 (15.1'RT)		1							120			120				3,4
DR2-13	TR EB 402+03.09 (15.1'RT) TO TR EB 402+54.36 (14.6'RT)		2							51			51				3,4
DR2-14	TR WB 500+81.77 (15.5' LT) TO TR EB 400+81.20 (14.9' RT)	1								62			62				1,2,10
DR2-15	TR WB 501+19.19 (12.9'LT) TO TR WB 500+81.77 (15.5'LT)		1							33			33				3,4
DR2-16	TR WB 500+81.77 (15.5'LT) TO TR WB 500+61.95 (43.7'LT)				1					33			33				4, 14
DR2-17	TR WB 500+61.95 (43.7'LT) TO E 319+05.60 (29.3' RT)									124			124				
DR2-18	TR WB 500+61.95 (43.7'LT) TO TR WB 502+78.18 (30.7'LT)									206			206				
DR2-19	P 224+00.00 (0.0'RT) TO P 226+93.15 (0.0'RT)									294					294		11
DR2-20	P 226+93.15 (0.0'RT) TO P 228+32.75 (122.4' RT)									229					229		11
DR2-21	P 226+75.00 (25.8' RT) TO P 226+75.00 (26.6' LT)		1							51			51				3,4
DR2-22	P 226+75.00 (26.6' LT) TO P 228+25.30 (35.7' LT)		1							91			91				3,4
DR2-23	P 228+25.30 (35.7' LT) TO P 228+25.02 (49.5' RT)		1							84			84				3,4
DR2-24	P 225+25.00 (26.0' RT)) TO P 223+75.05 (26.2' RT)		1							150			150				3,4
DR2-25	P 225+25.00 (26.0' LT) TO P 225+25.00 (26.0' RT)		1							50			50				3,4
DR2-26	TR 119+30.63 (59.3'LT) TO E 319+05.59 (29.4'RT)									75				75			
DR2-27	TR 118+78.90 (41.6'RT) TO TR 119+38.62 (65.0' RT)		1							58			58				3,4
DR2-28	TR WB 502+00.00 (12.8'RT) TO TR EB 402+03.09 (15.1'RT)		1							48			48				3,4
DR2-29	TR 118+12.00 (57.9' RT)		1														3,4
DR3-1	TR WB 502+78.18 (30.7'LT) TO TR WB 502+83.98 (35.8'LT)				1					8			8				4,14
DR3-2	TR WB 502+83.98 (35.8'LT)				1												4,14
DR4-1	P 215+35.00 (32.0'LT) TO P 215+35.00 (32.0'RT)		1							62			62				3,4
DR4-2	P 215+35.00 (32.0'RT) TO P 216+85.00 (32.0'RT)		1							150			150				3,4
DR4-3	P 215+81.03 (140.4' RT)																6
DR4-4	P 216+10.00 (107.6' RT)						1										9
DR4-5	P 212+90.97 (31.1' RT)																5
DR4-6	P 215+97.97 (136.04' RT)								3								8
	SHEET TOTAL	1	24	2	3		1		3	2800			2158	119	523		

GENERAL NOTES:

1. SEE STD PLAN B-35.40.00, GRATE INLET TYPE 2.
2. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE.
3. SEE STD PLAN B-5.20-03 FOR CATCH BASIN TYPE 1 AND B-5.40-02 FOR CATCH BASIN TYPE 1L. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE OR CENTER OF STRUCTURE IF NOTED ON PROFILE.
4. SEE STD PLAN B-30.10-03 FOR RECTANGULAR FRAME AND B-30.30-03 FOR VANED GRATE.
5. SEE CURB INLET TYPE 1 DETAIL 1 ON SHEET DRD2. STATION & OFFSET IS ON LIP OF GUTTER AT CENTER OF CURB CUT.
6. SEE CURB INLET TYPE 2 DETAIL 1 ON SHEET DRD3. CENTER INLET AT CONCRETE SIDEWALK.
7. SEE STD PLAN B-70.20-00, BEVELED END SECTIONS.
8. SEE DETAIL 3 ON DRD1 FOR PIPE DISCHARGE / QUARRY SPALL DETAIL.
9. SEE CITY OF SPOKANE VALLEY STD. PLAN S-101 FOR DRYWELL DETAILS, TYPE 'A'.
10. SEE STD PLAN B-40-20-00, WELDED GRATES FOR GRATE INLET, TYPE "B".
11. SEE STD PLAN B-15.20-01 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE. INCLUDE LOCKING CIRCULAR FRAME (RING) AND COVER; SEE STD. PLAN B-30.70-04.
12. SEE OVERFLOW VAULT DETAIL ON SHEET DRD4.
13. PACKAGED STORMWATER PUMP STATION; SEE SPECIAL PROVISIONS.
14. SEE STD PLAN B-10.20-02, CATCH BASIN TYPE 2 48 IN. DIAM. STRUCTURE STATIONING IS AT THE CENTER OF STRUCTURE.
15. MODIFY COSV STD. PLAN S-101 TYPE 'B' AS FOLLOWS: 200 CY MINIMUM GRAVEL BACKFILL WITH 8 FT DIAMETER BOTTOM DIMENSION, 11 FT HIGH, AND 1.5:1 SIDE SLOPES. USE SOLID COVER PER COSV STDH. PLAN S-104.
16. SEE STD PLAN B-15.60-02 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE.

DESIGNED BY	B KIRKMAN					REGION NO.	STATE	FED. AID PROJ. NO.
ENTERED BY	E MCGUIRE					10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
CHECKED BY	J FREY					JOB NUMBER		
PROJ. ENGR.	S MARSHALL							
REGION ADM.						CONTRACT NO.		
		DATE	DATE	REVISION	BY			

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - DRAINAGE

SND 1

SHEET 51 OF 218 SHEETS

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	MANHOLE 48 IN. DIAM. TYPE 1	MANHOLE 48 IN. DIAM. TYPE 3	PACKAGED STORMWATER PUMP STATION		4'x6' OVERFLOW VAULT	CURB INLET TYPE 1	CURB INLET TYPE 2									SEE GENERAL NOTES
			EACH	L.S.		EACH	EACH	EACH									
DR1-1	TR 115+30.00 (34.2'LT) TO TR 116+29.18 (36.7' LT)																3,4
DR2-1	TR 116+40.00 (8.2' RT) TO TR 116+29.16 (36.7' LT)																3,4
DR2-2	TR 116+29.18 (35.8' LT) TO TR 117+80.00 (34.4'LT)																3,4
DR2-3	TR 117+80.00 (34.4'LT) TO TR 118+95.30 (42.9' LT)																3,4
DR2-4	TR 118+95.30 (42.9' LT) TO TR 119+30.63 (59.3'LT)																3,4
DR2-5	TR 119+30.63 (59.3'LT) TO TR 119+38.60 (65.0' RT)																3,4
DR2-6	TR 119+38.62 (65.0'RT) TO TR 119+35.54 (88.9'RT)																3,4
DR2-7	TR 119+35.54 (88.9'RT) TO TR 119+14.81 (83.7'RT)																3,4
DR2-8	TR 119+14.81 (83.7'RT) TO TR 118+12.00 (57.9'RT)																3,4
DR2-9	E 319+05.60 (29.3' RT) TO E 318+75.32 (58.7'RT)																3,4,7
DR2-10	TR EB 400+05.64 (15.4'RT) TO TR EB 400+46.58 (15.2' RT)																3,4
DR2-11	TR EB 400+46.58 (15.1'RT) TO TR EB 400+81.20 (14.9'RT)																3,4
DR2-12	TR EB 400+81.20 (14.9'RT) TO TR EB 402+03.09 (15.1'RT)																3,4
DR2-13	TR EB 402+03.09 (15.1'RT) TO TR EB 402+54.36 (14.6'RT)																3,4
DR2-14	TR WB 500+81.77 (15.5' LT) TO TR EB 400+81.20 (14.9' RT)																1,2,10
DR2-15	TR WB 501+19.19 (12.9'LT) TO TR WB 500+81.77 (15.5'LT)																3,4
DR2-16	TR WB 500+81.77 (15.5'LT) TO TR WB 500+61.95 (43.7'LT)																4, 14
DR2-17	TR WB 500+61.95 (43.7'LT) TO E 319+05.60 (29.3' RT)																
DR2-18	TR WB 500+61.95 (43.7'LT) TO TR WB 502+78.18 (30.7'LT)																
DR2-19	P 224+00.00 (0.0'RT) TO P 226+93.15 (0.0'RT)	1															11
DR2-20	P 226+93.15 (0.0'RT) TO P 228+32.75 (122.4' RT)	1															11
DR2-21	P 226+75.00 (25.8' RT) TO P 226+75.00 (26.6' LT)																3,4
DR2-22	P 226+75.00 (26.6' LT) TO P 228+25.30 (35.7' LT)																3,4
DR2-23	P 228+25.30 (35.7' LT) TO P 228+25.02 (49.5' RT)																3,4
DR2-24	P 225+25.00 (26.0' RT)) TO P 223+75.05 (26.2' RT)																3,4
DR2-25	P 225+25.00 (26.0' LT) TO P 225+25.00 (26.0' RT)																3,4
DR2-26	TR 119+30.63 (59.3'LT) TO E 319+05.59 (29.4'RT)																
DR2-27	TR 118+78.90 (41.6'RT) TO TR 119+38.62 (65.0' RT)																3,4
DR2-28	TR WB 502+00.00 (12.8'RT) TO TR EB 402+03.09 (15.1'RT)																3,4
DR2-29	TR 118+12.00 (57.9' RT)																3,4
DR3-1	TR WB 502+78.18 (30.7'LT) TO TR WB 502+83.98 (35.8'LT)																4,14
DR3-2	TR WB 502+83.98 (35.8'LT)																4,14
DR4-1	P 215+35.00 (32.0'LT) TO P 215+35.00 (32.0'RT)																3,4
DR4-2	P 215+35.00 (32.0'RT) TO P 216+85.00 (32.0'RT)																3,4
DR4-3	P 215+81.03 (140.4' RT)							1									6
DR4-4	P 216+10.00 (107.6' RT)																9
DR4-5	P 212+90.97 (31.1' RT)						1										5
DR4-6	P 215+97.97 (136.04' RT)																8
	SHEET TOTAL	2					1	1									

GENERAL NOTES:

1. SEE STD PLAN B-35.40.00, GRATE INLET TYPE 2.
2. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE.
3. SEE STD PLAN B-5.20-03 FOR CATCH BASIN TYPE 1 AND B-5.40-02 FOR CATCH BASIN TYPE 1L. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE OR CENTER OF STRUCTURE IF NOTED ON PROFILE.
4. SEE STD PLAN B-30.10-03 FOR RECTANGULAR FRAME AND B-30.30-03 FOR VANED GRATE.
5. SEE CURB INLET TYPE 1 DETAIL 1 ON SHEET DRD2. STATION & OFFSET IS TO LIP OF GUTTER AT CENTER OF CURB CUT.
6. SEE CURB INLET TYPE 2 DETAIL 1 ON SHEET DRD3. CENTER INLET AT CONCRETE SIDEWALK.
7. SEE STD PLAN B-70.20-00, BEVELED END SECTIONS.
8. SEE DETAIL 3 ON DRD1 FOR PIPE DISCHARGE / QUARRY SPALL DETAIL.
9. SEE CITY OF SPOKANE VALLEY STD. PLAN S-101 FOR DRYWELL DETAILS, TYPE 'A'.
10. SEE STD PLAN B-40-20-00, WELDED GRATES FOR GRATE INLET, TYPE "B".
11. SEE STD PLAN B-15.20-01 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE. INCLUDE LOCKING CIRCULAR FRAME (RING) AND COVER; SEE STD. PLAN B-30.70-04.
12. SEE OVERFLOW VAULT DETAIL ON SHEET DRD4.
13. SEE PACKAGED STORMWATER PUMP STATION DETAIL.
14. SEE STD PLAN B-10.20-02, CATCH BASIN TYPE 2 48 IN. DIAM. STRUCTURE STATIONING IS AT THE CENTER OF STRUCTURE.
15. MODIFY COSV STD. PLAN S-101 TYPE 'B' AS FOLLOWS: 200 CY MINIMUM GRAVEL BACKFILL WITH 8 FT DIAMETER BOTTOM DIMENSION, 11 FT HIGH, AND 1.5:1 SIDE SLOPES. USE SOLID COVER PER COSV STD. PLAN S-104.
16. SEE STD PLAN B-15.60-02 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE.

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGION ADM.		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - DRAINAGE

SND 2

SHEET 52 OF 218 SHEETS

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GRATE INLET TYPE 2	CATCH BASIN TYPE 1	CATCH BASIN TYPE 1L	CATCH BASIN TYPE 2 48 IN. DIAM		PRECAST CONCRETE DRYWELL TYPE A	MODIFIED PRECAST CONCRETE DRYWELL TYPE B	QUARRY SPALLS	TESTING STORM SEWER PIPE		PVC PRESSURE PIPE 10 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	SCHEDULE B STORM SEWER PIPE 18 IN. DIAM.		SEE GENERAL NOTES
		EACH	EACH	EACH	EACH		EACH	EACH	C.Y.	L.F.		L.F.	L.F.	L.F.	L.F.		
DR5-1	P 216+85.00 (32.0'RT) TO P 218+34.04 (34.0'RT)		1							153			153				3,4
DR5-2	P 216+85.00 (32.0'LT) TO P 216+85.00 (32.0'RT)		1							62			62				3,4
DR5-3	P 218+34.95 (34.0'RT) TO P 219+85.00 (36.5'RT)		1							153			153				3,4
DR5-4	218+34.92 (35.0'LT) TO P 218+34.96 (34.0'RT)		1							67			67				3,4
DR5-5	P 219+85.00 (36.5'RT) TO P 220+51.77 (36.2'RT)		1							59			59				3,4
DR5-6	P 220+51.77 (36.2'RT) TO P 220+63.98 (36.3' RT)			1						10				10			3,4
DR5-7	P 220+63.98 (36.3' RT) TO P 220+88.15 (36.6'RT)	1								20				20			1,2,10
DR5-8	P 220+88.15 (36.6'RT) TO P 220+88.20 (0.0'RT)	1								35				35			1,2,10
DR5-9	P 221+13.92 (36.7'RT) TO P 220+88.15 (36.6'RT)	1								21				21			1,2,10
DR5-10	P 220+88.20 (0.0'RT) TO P 220+74.94 (0.1' RT)									13				13			12
DR5-11	P 220+74.94 (0.1' RT) TO P 220+62.96 (1.3'RT)									12			12				
DR5-12	P220+62.96 (1.3' RT) TO P 216+68.45 (72.3' RT)									404		404					13
DR5-13	P 222+00.00 (0.0'RT) TO P 224+00.00 (0.0'RT)									199				199			16
DR5-14	P 222+25.26 (32.2'RT) TO P 221+13.92 (36.7'RT)		1							92			92				3,4
DR5-15	P 223+75.05 (26.2'RT) TO P 222+25.26 (32.2'RT)		1							142			142				3,4
DR5-16	P 223+75.00 (26.0'LT) TO P 223+75.05 (26.2'RT)		1							50			50				3,4
DR5-17	P 222+25.00 (29.9'LT) TO P 222+25.27 (32.2'RT)		1							60			60				3,4
DR5-18	P 221+05.57 (35.4' LT) TO P 220+88.24 (36.4'LT)	1								20				20			1,2,10
DR5-19	P 220+88.24 (36.4'LT) TO P 220+88.18 (0.0'LT)	1								35				35			1,2,10
DR5-20	P 220+67.69 (37.1' LT) TO P 220+88.24 (36.4'LT)	1								24				24			1,2,10
DR5-21	P 219+18.04 (37.4' LT) TO P 220+28.91 (37.0' LT)		1							114			114				3,4
DR5-22	P 219+17.98 (53.3' LT) TO P 219+18.04 (37.4' LT)		1							17			17				3,4
DR5-23	P 220+88.18 (0.0' RT) TO P 220+00.00 (0.0' LT)									111				111			
DR5-24	P 216+68.45 (72.3' RT) TO P 216+66.69 (91.6' RT)				1					19				19			4,7,14
DR5-25	P 220+65.74 (60.6' LT) TO P 220+67.69 (37.1' LT)		1							25			25				3,4
DR5-26	P 216+66.63 (94.6' RT)								8								8
DR5-27	P 216+20.46 (144.3' RT)						1										9
DR5-28	P 220+28.91 (37.0' LT) TO P 220+67.69 (37.1' LT)		1							46				46			3,4
DR5-29	P 221+14.99 (49.26' LT)								7								8
DR6-1	E 309+55.36 (26.5'LT)						1										9
DR6-2	E 308+66.17 (21.5'LT)																5
DR6-3	E 310+23.00 (21.5'RT)																5
DR6-4	E 309+66.17 (21.5' LT)																5
DR6-5	E 311+23.00 (21.5' RT)																5
DR6-6	E 312+23.00 (21.5'RT)																5
DR7-1	E 314+50.76 (21.5' LT)																5
DR7-2	E 315+00.07 (27.0' RT)						1										9
DR7-3	E 315+00.00 (27.0' LT)						1										9
DR7-4	E 313+23.00 (21.5 'LT)																5
	SHEET TOTAL	6	13	1	1		4		15	1963		404	1006	553			

GENERAL NOTES:

1. SEE STD PLAN B-35.40.00, GRATE INLET TYPE 2.
2. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE.
3. SEE STD PLAN B-5.20-03 FOR CATCH BASIN TYPE 1 AND B-5.40-02 FOR CATCH BASIN TYPE 1L. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE OR CENTER OF STRUCTURE IF NOTED ON PROFILE.
4. SEE STD PLAN B-30.10-03 FOR RECTANGULAR FRAME AND B-30.30-03 FOR VANED GRATE.
5. SEE CURB INLET TYPE 1 DETAIL 1 ON SHEET DRD2. STATION & OFFSET IS TO LIP OF GUTTER AT CENTER OF CURB CUT.
6. SEE CURB INLET TYPE 2 DETAIL 1 ON SHEET DRD3. CENTER INLET AT CONCRETE SIDEWALK.
7. SEE STD PLAN B-70.20-00, BEVELED END SECTIONS.
8. SEE DETAIL 3 ON DRD1 FOR PIPE DISCHARGE / QUARRY SPALL DETAIL.
9. SEE CITY OF SPOKANE VALLEY STD. PLAN S-101 FOR DRYWELL DETAILS, TYPE 'A'.
10. SEE STD PLAN B-40-20-00, WELDED GRATES FOR GRATE INLET, TYPE "B".
11. SEE STD PLAN B-15.20-01 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE. INCLUDE LOCKING CIRCULAR FRAME (RING) AND COVER; SEE STD. PLAN B-30.70-04.
12. SEE OVERFLOW VAULT DETAIL ON SHEET DRD4.
13. SEE PACKAGED STORMWATER PUMP STATION DETAIL.
14. SEE STD PLAN B-10.20-02, CATCH BASIN TYPE 2 48 IN. DIAM. STRUCTURE STATIONING IS AT THE CENTER OF STRUCTURE.
15. MODIFY COSV STD. PLAN S-101 TYPE 'B' AS FOLLOWS: 200 CY MINIMUM GRAVEL BACKFILL WITH 8 FT DIAMETER BOTTOM DIMENSION, 11 FT HIGH, AND 1.5:1 SIDE SLOPES. USE SOLID COVER PER COSV STD. PLAN S-104.
16. SEE STD PLAN B-15.60-02 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE.

DESIGNED BY	B KIRKMAN					REGION NO.	STATE	FED. AID PROJ. NO.
ENTERED BY	E MCGUIRE					10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
CHECKED BY	J FREY					JOB NUMBER		
PROJ. ENGR.	S MARSHALL							
REGION ADM.						CONTRACT NO.		
		DATE	DATE	REVISION	BY			

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - DRAINAGE

SND 3

SHEET 53 OF 218 SHEETS

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	MANHOLE 48 IN. DIAM. TYPE 1	MANHOLE 48 IN. DIAM. TYPE 3	PACKAGED STORMWATER PUMP STATION		4'x6' OVERFLOW VAULT	CURB INLET TYPE 1	CURB INLET TYPE 2									SEE GENERAL NOTES
			EACH	L.S.		EACH	EACH	EACH									
DR5-1	P 216+85.00 (32.0'RT) TO P 218+34.04 (34.0'RT)																3,4
DR5-2	P 216+85.00 (32.0'LT) TO P 216+85.00 (32.0'RT)																3,4
DR5-3	P 218+34.95 (34.0'RT) TO P 219+85.00 (36.5'RT)																3,4
DR5-4	218+34.92 (35.0'LT) TO P 218+34.96 (34.0'RT)																3,4
DR5-5	P 219+85.00 (36.5'RT) TO P 220+51.77 (36.2'RT)																3,4
DR5-6	P 220+51.77 (36.2'RT) TO P 220+63.98 (36.3' RT)																3,4
DR5-7	P 220+63.98 (36.3' RT) TO P 220+88.15 (36.6'RT)																1,2,10
DR5-8	P 220+88.15 (36.6'RT) TO P 220+88.20 (0.0'RT)																1,2,10
DR5-9	P 221+13.92 (36.7'RT) TO P 220+88.15 (36.6'RT)																1,2,10
DR5-10	P 220+88.20 (0.0'RT) TO P 220+74.94 (0.1' RT)					1											12
DR5-11	P 220+74.94 (0.1' RT) TO P 220+62.96 (1.3'RT)																
DR5-12	P220+62.96 (1.3' RT) TO P 216+68.45 (72.3' RT)			1													13
DR5-13	P 222+00.00 (0.0'RT) TO P 224+00.00 (0.0'RT)		1														16
DR5-14	P 222+25.26 (32.2'RT) TO P 221+13.92 (36.7'RT)																3,4
DR5-15	P 223+75.05 (26.2'RT) TO P 222+25.26 (32.2'RT)																3,4
DR5-16	P 223+75.00 (26.0'LT) TO P 223+75.05 (26.2'RT)																3,4
DR5-17	P 222+25.00 (29.9'LT) TO P 222+25.27 (32.2'RT)																3,4
DR5-18	P 221+05.57 (35.4' LT) TO P 220+88.24 (36.4'LT)																1,2,10
DR5-19	P 220+88.24 (36.4'LT) TO P 220+88.18 (0.0'LT)																1,2,10
DR5-20	P 220+67.69 (37.1' LT) TO P 220+88.24 (36.4'LT)																1,2,10
DR5-21	P 219+18.04 (37.4' LT) TO P 220+28.91 (37.0' LT)																3,4
DR5-22	P 219+17.98 (53.3' LT) TO P 219+18.04 (37.4' LT)																3,4
DR5-23	P 220+88.18 (0.0' RT) TO P 220+00.00 (0.0' LT)																
DR5-24	P 216+68.45 (72.3' RT) TO P 216+66.69 (91.6' RT)																4,7,14
DR5-25	P 220+65.74 (60.6' LT) TO P 220+67.69 (37.1' LT)																3,4
DR5-26	P 216+66.63 (94.6' RT)																8
DR5-27	P 216+20.46 (144.3' RT)																9
DR5-28	P 220+28.91 (37.0' LT) TO P 220+67.69 (37.1' LT)																3,4
DR5-29	P 221+14.99 (49.26' LT)																8
DR6-1	E 309+55.36 (26.5'LT)																9
DR6-2	E 308+66.17 (21.5'LT)						1										5
DR6-3	E 310+23.00 (21.5'RT)						1										5
DR6-4	E 309+66.17 (21.5' LT)						1										5
DR6-5	E 311+23.00 (21.5' RT)						1										5
DR6-6	E 312+23.00 (21.5'RT)						1										5
DR7-1	E 314+50.76 (21.5' LT)						1										5
DR7-2	E 315+00.07 (27.0' RT)																9
DR7-3	E 315+00.00 (27.0' LT)																9
DR7-4	E 313+23.00 (21.5 'LT)						1										5
	SHEET TOTAL		1	1		1	7										

GENERAL NOTES:

1. SEE STD PLAN B-35.40.00, GRATE INLET TYPE 2.
2. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE.
3. SEE STD PLAN B-5.20-03 FOR CATCH BASIN TYPE 1 AND B-5.40-02 FOR CATCH BASIN TYPE 1L. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE OR CENTER OF STRUCTURE IF NOTED ON PROFILE.
4. SEE STD PLAN B-30.10-03 FOR RECTANGULAR FRAME AND B-30.30-03 FOR VANED GRATE.
5. SEE CURB INLET TYPE 1 DETAIL 1 ON SHEET DRD2. STATION & OFFSET IS TO LIP OF GUTTER AT CENTER OF CURB CUT.
6. SEE CURB INLET TYPE 2 DETAIL 1 ON SHEET DRD3. CENTER INLET AT CONCRETE SIDEWALK.
7. SEE STD PLAN B-70.20-00, BEVELED END SECTIONS.
8. SEE DETAIL 3 ON DRD1 FOR PIPE DISCHARGE / QUARRY SPALL DETAIL.
9. SEE CITY OF SPOKANE VALLEY STD. PLAN S-101 FOR DRYWELL DETAILS, TYPE 'A'.
10. SEE STD PLAN B-40-20-00, WELDED GRATES FOR GRATE INLET, TYPE "B".
11. SEE STD PLAN B-15.20-01 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE. INCLUDE LOCKING CIRCULAR FRAME (RING) AND COVER; SEE STD. PLAN B-30.70-04.
12. SEE OVERFLOW VAULT DETAIL ON SHEET DRD4.
13. SEE PACKAGED STORMWATER PUMP STATION DETAIL.
14. SEE STD PLAN B-10.20-02, CATCH BASIN TYPE 2 48 IN. DIAM. STRUCTURE STATIONING IS AT THE CENTER OF STRUCTURE.
15. MODIFY COSV STD. PLAN S-101 TYPE 'B' AS FOLLOWS: 200 CY MINIMUM GRAVEL BACKFILL WITH 8 FT DIAMETER BOTTOM DIMENSION, 11 FT HIGH, AND 1.5:1 SIDE SLOPES. USE SOLID COVER PER COSV STD. PLAN S-104.
16. SEE STD PLAN B-15.60-02 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE.

						REGION NO.	STATE	FED. AID PROJ. NO.
DESIGNED BY	B KIRKMAN					10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
ENTERED BY	E MCGUIRE					JOB NUMBER		
CHECKED BY	J FREY							
PROJ. ENGR.	S MARSHALL					CONTRACT NO.		
REGION ADM.		DATE	DATE	REVISION	BY			

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - DRAINAGE

SND 4

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GRATE INLET TYPE 2	CATCH BASIN TYPE 1	CATCH BASIN TYPE 1L	CATCH BASIN TYPE 2 48 IN. DIAM		PRECAST CONCRETE DRYWELL TYPE A	MODIFIED PRECAST CONCRETE DRYWELL TYPE B	QUARRY SPALLS	TESTING STORM SEWER PIPE		PVC PRESSURE PIPE 10 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	SCHEDULE B STORM SEWER PIPE 18 IN. DIAM.		SEE GENERAL NOTES
		EACH	EACH	EACH	EACH		EACH	EACH	C.Y.	L.F.		L.F.	L.F.	L.F.	L.F.		
DR7-5	E 313+38.81 (21.5' RT)																5
DR7-6	E 314+45.24 (21.5' LT)																5
DR7-7	E 314+44.73 (21.5'RT)																5
DR7-8	E 315+48.00 (21.5'LT)																5
DR7-9	E 315+48.00 (21.5'RT)																5
DR7-10	E 316+48.00 (21.5'LT)																5
DR7-11	E 316+48.00 (21.5'RT)																5
DR7-12	E 317+48.00 (21.5'LT)																5
DR7-13	E 318+48.00 (21.8'LT)																5
DR7-14	E 317+53.21 (44.1'RT)																5
DR7-15	E 317+77.35 (54.2'RT)																6
DR7-16	E 318+00.73 (20.2'RT)																6
DR7-17	E 314+51.28 (21.5' RT)																5
DR7-18	E 318+70.55 (64.8' RT)								6								8
DR7-19	E 318+36.44 (118.8' RT)						1										9
DR7-20	E 318+79.91 (117.0' RT)						1										9
DR7-21	E 314+56.29 (21.5' LT)																5
DR7-22	E 314+57.85 (21.5' RT)																5
DR7-23	E 312+62.96 (27.0' RT)						1										9
DR7-24	E 317+84.20 (58.0' RT) TO E 318+05.13 (26.3' RT)								31								8
DR8-1	P 228+32.75 (122.4' RT)							1									15
DR8-2	P 228+46.14 (125.3' RT)						1										9
DR8-3	P 228+28.37 (252.6' RT) TO P 228+28.33 (156.1' RT)		1							97			97				3,4,7
DR8-4	P 228+25.02 (49.5' RT) TO P 228+31.70 (91.03' RT)		1							44			44				3,4,7
DR8-5	P 228+26.28 (233.9' RT)																5
DR8-6	P 228+31.55 (273.1' RT)																5
DR8-7	P 228+13.25 (183.1' RT)																5
DR8-8	P 228+32.42 (97.2' RT)								3								8
DR8-9	P 228+28.32 (145.4' RT)								3								8
	SHEET TOTAL		2				4	1	43	141			141				
	PROJECT TOTAL	7	39	3	4		9	1	61	4904		404	3305	672	523		

GENERAL NOTES:

1. SEE STD PLAN B-35.40.00, GRATE INLET TYPE 2.
2. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE.
3. SEE STD PLAN B-5.20-03 FOR CATCH BASIN TYPE 1 AND B-5.40-02 FOR CATCH BASIN TYPE 1L. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE OR CENTER OF STRUCTURE IF NOTED ON PROFILE.
4. SEE STD PLAN B-30.10-03 FOR RECTANGULAR FRAME AND B-30.30-03 FOR VANED GRATE.
5. SEE CURB INLET TYPE 1 DETAIL 1 ON SHEET DRD2. STATION & OFFSET IS TO LIP OF GUTTER AT CENTER OF CURB CUT.
6. SEE CURB INLET TYPE 2 DETAIL 1 ON SHEET DRD3. CENTER INLET AT CONCRETE SIDEWALK.
7. SEE STD PLAN B-70.20-00, BEVELED END SECTIONS.
8. SEE DETAIL 3 ON DRD1 FOR PIPE DISCHARGE / QUARRY SPALL DETAIL.
9. SEE CITY OF SPOKANE VALLEY STD. PLAN S-101 FOR DRYWELL DETAILS, TYPE 'A'.
10. SEE STD PLAN B-40-20-00, WELDED GRATES FOR GRATE INLET, TYPE "B".
11. SEE STD PLAN B-15.20-01 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE. INCLUDE LOCKING CIRCULAR FRAME (RING) AND COVER; SEE STD. PLAN B-30.70-04.
12. SEE OVERFLOW VAULT DETAIL ON SHEET DRD4.
13. SEE PACKAGED STORMWATER PUMP STATION DETAIL.
14. SEE STD PLAN B-10.20-02, CATCH BASIN TYPE 2 48 IN. DIAM. STRUCTURE STATIONING IS AT THE CENTER OF STRUCTURE.
15. MODIFY COSV STD. PLAN S-101 TYPE 'B' AS FOLLOWS: 200 CY MINIMUM GRAVEL BACKFILL WITH 8 FT DIAMETER BOTTOM DIMENSION, 11 FT HIGH, AND 1.5:1 SIDE SLOPES. USE SOLID COVER PER COSV STD. PLAN S-104.
16. SEE STD PLAN B-15.60-02 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE.

DESIGNED BY	B KIRKMAN					REGION NO.	STATE	FED. AID PROJ. NO.
ENTERED BY	E MCGUIRE					10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
CHECKED BY	J FREY					JOB NUMBER		
PROJ. ENGR.	S MARSHALL							
REGION ADM.						CONTRACT NO.		
		DATE	DATE	REVISION	BY			

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - DRAINAGE

SND 5

SHEET 55 OF 218 SHEETS

STRUCTURE NOTES - DRAINAGE

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	MANHOLE 48 IN. DIAM. TYPE 1	MANHOLE 48 IN. DIAM. TYPE 3	PACKAGED STORMWATER PUMP STATION		4'x6' OVERFLOW VAULT	CURB INLET TYPE 1	CURB INLET TYPE 2									SEE GENERAL NOTES
			EACH	L.S.		EACH	EACH	EACH									
DR7-5	E 313+38.81 (21.5' RT)						1										5
DR7-6	E 314+45.24 (21.5' LT)						1										5
DR7-7	E 314+44.73 (21.5'RT)						1										5
DR7-8	E 315+48.00 (21.5'LT)						1										5
DR7-9	E 315+48.00 (21.5'RT)						1										5
DR7-10	E 316+48.00 (21.5'LT)						1										5
DR7-11	E 316+48.00 (21.5'RT)						1										5
DR7-12	E 317+48.00 (21.5'LT)						1										5
DR7-13	E 318+48.00 (21.8'LT)						1										5
DR7-14	E 317+53.21 (44.1'RT)						1										5
DR7-15	E 317+77.35 (54.2'RT)							1									6
DR7-16	E 318+00.73 (20.2'RT)							1									6
DR7-17	E 314+51.28 (21.5' RT)						1										5
DR7-18	E 318+70.55 (64.8' RT)																8
DR7-19	E 318+36.44 (118.8' RT)																9
DR7-20	E 318+79.91 (117.0' RT)																9
DR7-21	E 314+56.29 (21.5' LT)						1										5
DR7-22	E 314+57.85 (21.5' RT)						1										5
DR7-23	E 312+62.96 (27.0' RT)																9
DR7-24	E 317+84.20 (58.0' RT) TO E 318+05.13 (26.3' RT)																8
DR8-1	P 228+32.75 (122.4' RT)																15
DR8-2	P 228+46.14 (125.3' RT)																9
DR8-3	P 228+28.37 (252.6' RT) TO P 228+28.33 (156.1' RT)																3,4,7
DR8-4	P 228+25.02 (49.5' RT) TO P 228+31.70 (91.03' RT)																3,4,7
DR8-5	P 228+26.28 (233.9' RT)						1										5
DR8-6	P 228+31.55 (273.1' RT)						1										5
DR8-7	P 228+13.25 (183.1' RT)						1										5
DR8-8	P 228+32.42 (97.2' RT)																8
DR8-9	P 228+28.32 (145.4' RT)																8
	SHEET TOTAL						16	2									
	PROJECT TOTAL	2	1	1		1	24	3									

GENERAL NOTES:

1. SEE STD PLAN B-35.40.00, GRATE INLET TYPE 2.
2. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE.
3. SEE STD PLAN B-5.20-03 FOR CATCH BASIN TYPE 1 AND B-5.40-02 FOR CATCH BASIN TYPE 1L. STRUCTURE STATIONING AND OFFSET IS ON THE FACE OF CURB LINE AT THE CENTER OF THE GRATE OR CENTER OF STRUCTURE IF NOTED ON PROFILE.
4. SEE STD PLAN B-30.10-03 FOR RECTANGULAR FRAME AND B-30.30-03 FOR VANED GRATE.
5. SEE CURB INLET TYPE 1 DETAIL 1 ON SHEET DRD2. STATION & OFFSET IS TO LIP OF GUTTER AT CENTER OF CURB CUT.
6. SEE CURB INLET TYPE 2 DETAIL 1 ON SHEET DRD3. CENTER INLET AT CONCRETE SIDEWALK.
7. SEE STD PLAN B-70.20-00, BEVELED END SECTIONS.
8. SEE DETAIL 3 ON DRD1 FOR PIPE DISCHARGE / QUARRY SPALL DETAIL.
9. SEE CITY OF SPOKANE VALLEY STD. PLAN S-101 FOR DRYWELL DETAILS, TYPE 'A'.
10. SEE STD PLAN B-40-20-00, WELDED GRATES FOR GRATE INLET, TYPE "B".
11. SEE STD PLAN B-15.20-01 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE. INCLUDE LOCKING CIRCULAR FRAME (RING) AND COVER; SEE STD. PLAN B-30.70-04.
12. SEE OVERFLOW VAULT DETAIL ON SHEET DRD4.
13. SEE PACKAGED STORMWATER PUMP STATION DETAIL.
14. SEE STD PLAN B-10.20-02, CATCH BASIN TYPE 2 48 IN. DIAM. STRUCTURE STATIONING IS AT THE CENTER OF STRUCTURE.
15. MODIFY COSV STD. PLAN S-101 TYPE 'B' AS FOLLOWS: 200 CY MINIMUM GRAVEL BACKFILL WITH 8 FT DIAMETER BOTTOM DIMENSION, 11 FT HIGH, AND 1.5:1 SIDE SLOPES. USE SOLID COVER PER COSV STD. PLAN S-104.
16. SEE STD PLAN B-15.60-02 FOR MANHOLE. STRUCTURE STATIONING AND OFFSET IS AT THE CENTER OF THE STRUCTURE.

DESIGNED BY	B KIRKMAN					REGION NO.	STATE
ENTERED BY	E MCGUIRE					10	WASH
CHECKED BY	J FREY					JOB NUMBER	
PROJ. ENGR.	S MARSHALL						
REGION ADM.						CONTRACT NO.	
		DATE	DATE	REVISION	BY		

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

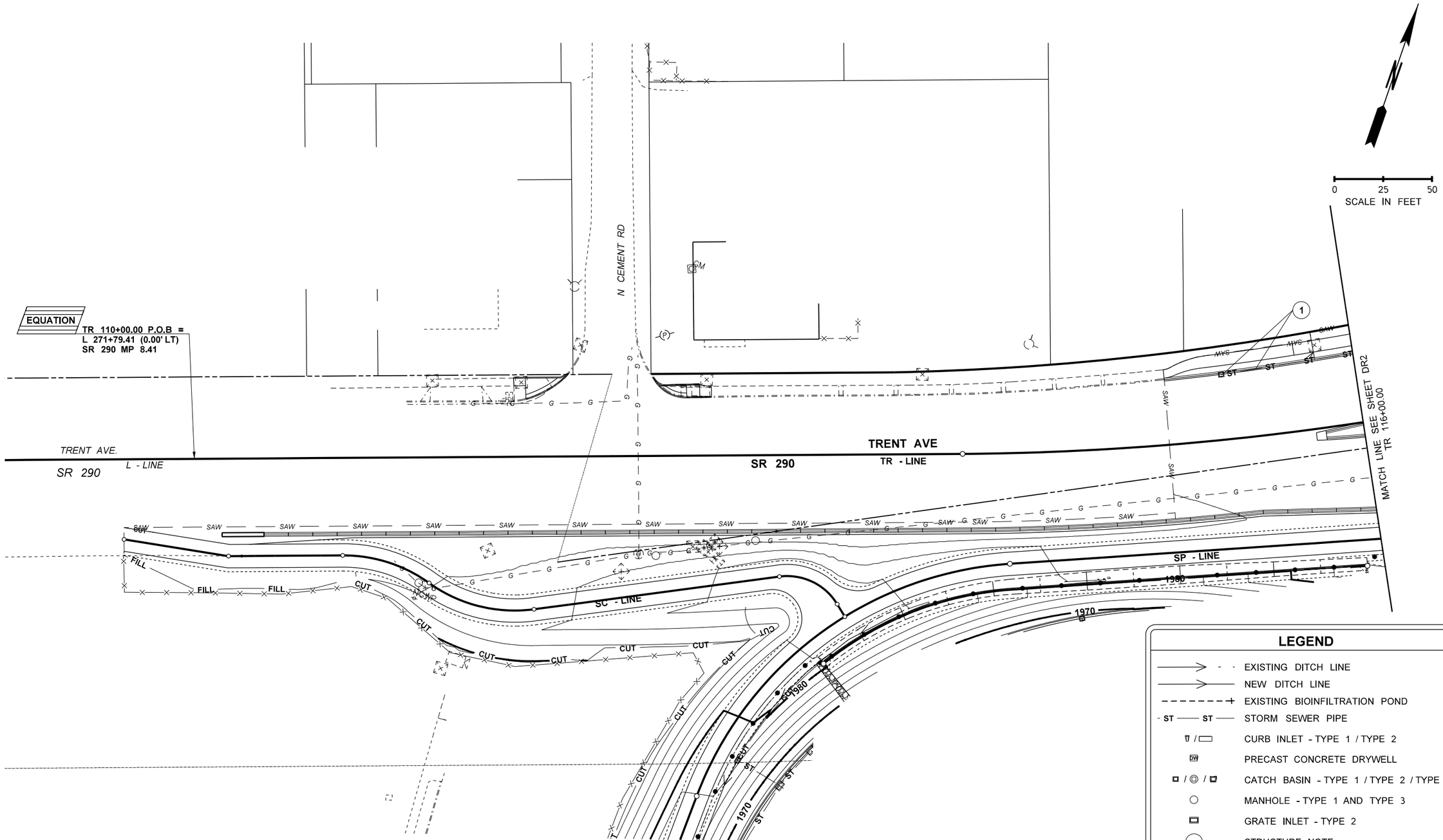
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - DRAINAGE

SND 6

SHEET 56 OF 218 SHEETS



LEGEND

- EXISTING DITCH LINE
- NEW DITCH LINE
- EXISTING BIOINFILTRATION POND
- STORM SEWER PIPE
- CURB INLET - TYPE 1 / TYPE 2
- PRECAST CONCRETE DRYWELL
- CATCH BASIN - TYPE 1 / TYPE 2 / TYPE 1L
- MANHOLE - TYPE 1 AND TYPE 3
- GRATE INLET - TYPE 2
- STRUCTURE NOTE
- STRUCTURE CONTINUE NOTE

NOTES:

1. SEE RW SHEETS FOR ROW LINE LEGEND

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_001.dgn						
TIME	10:38:20 AM						
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

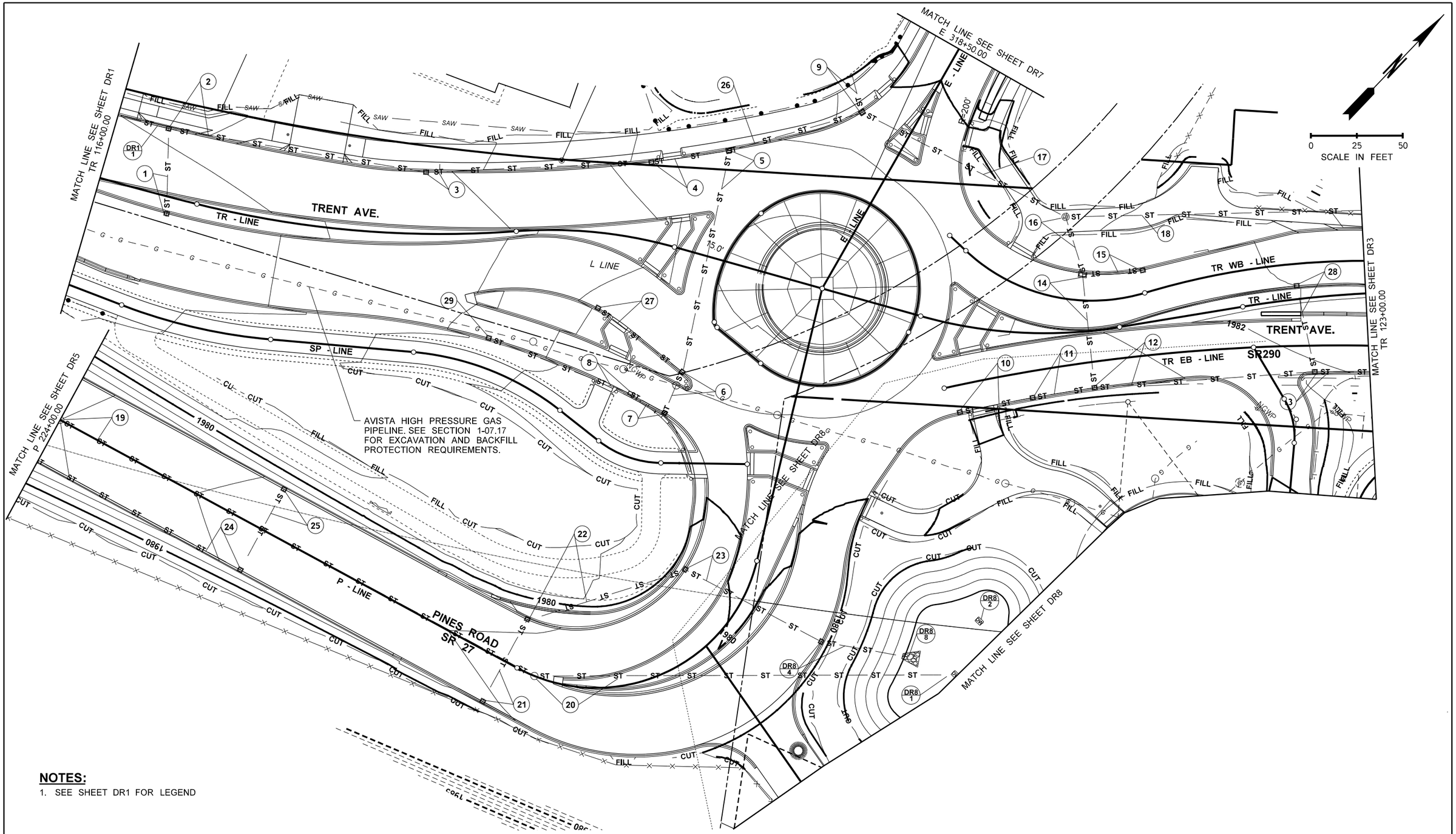
DATE
P.E. STAMP BOX

CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN

Plot 1
PLAN REF NO
DR1
SHEET 57 OF 218 SHEETS



NOTES:

1. SEE SHEET DR1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_002.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	10:38:39 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

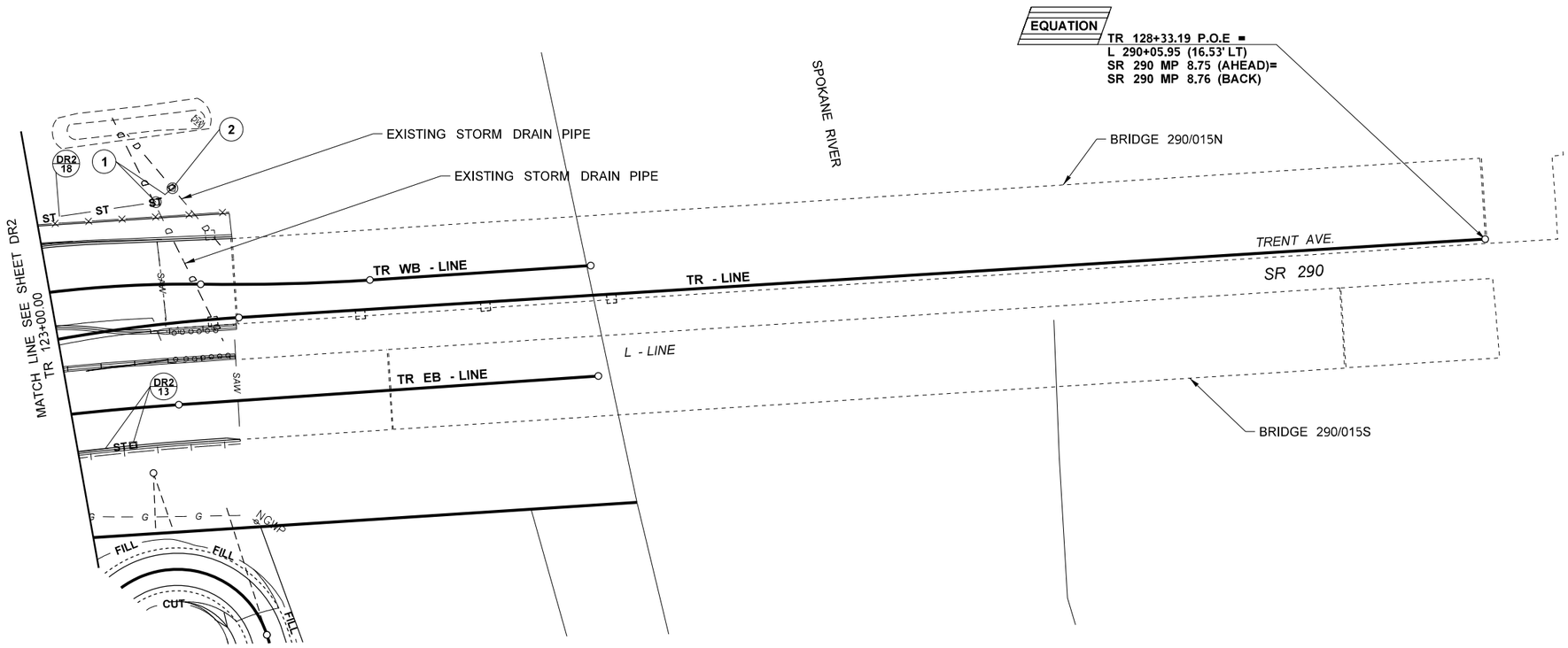
DATE
P.E. STAMP BOX

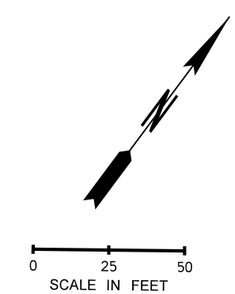
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN

Plot 1
PLAN REF NO
DR2
SHEET 58 OF 218 SHEETS





NOTES:

1. SEE SHEET DR1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_003.dgn						
TIME	3:14:00 PM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN				JOB NUMBER		
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
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DATE
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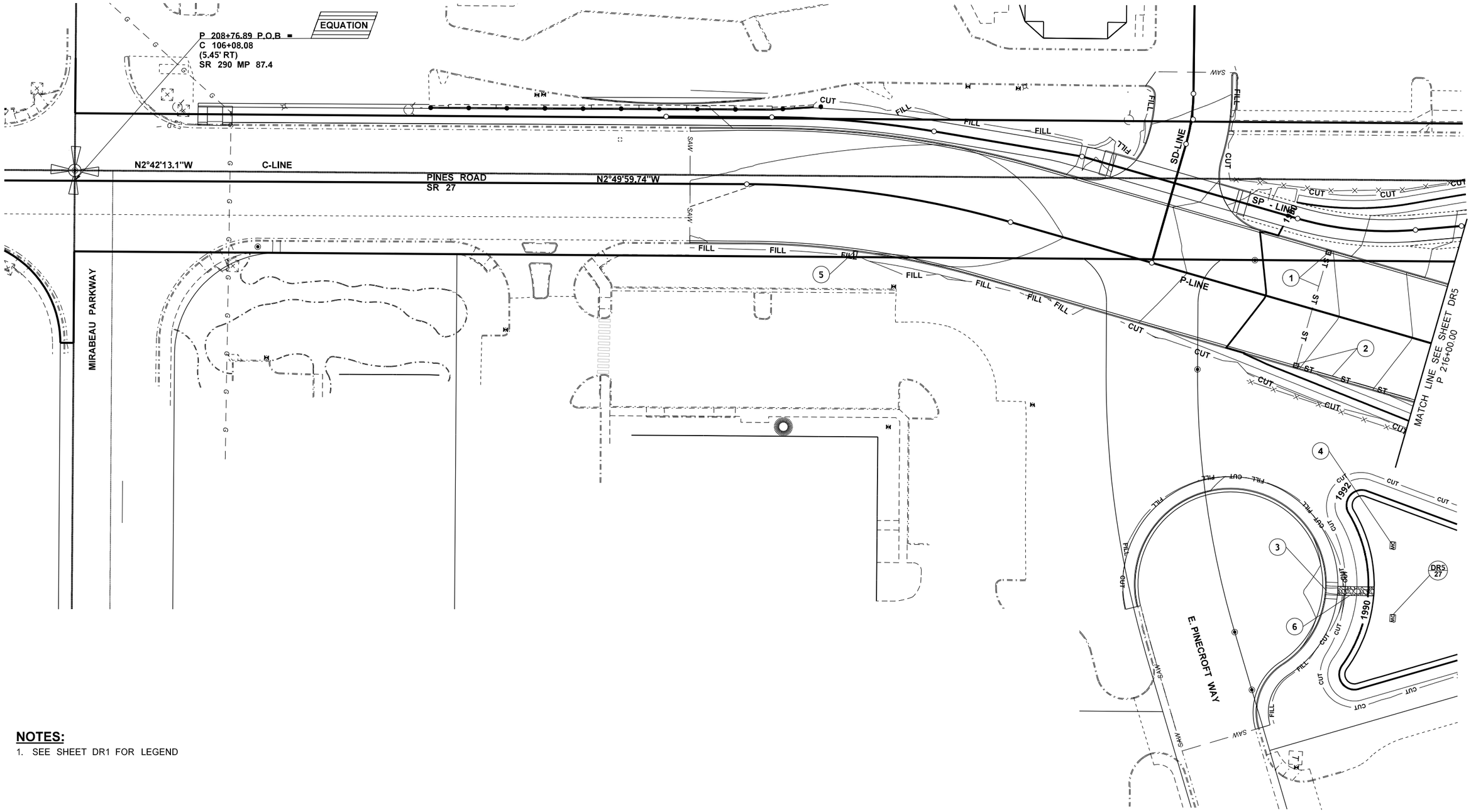
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN

Plot 1
PLAN REF NO
DR3
SHEET 59 OF 218 SHEETS



NOTES:

1. SEE SHEET DR1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_004.dgn						
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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

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City of Spokane Valley

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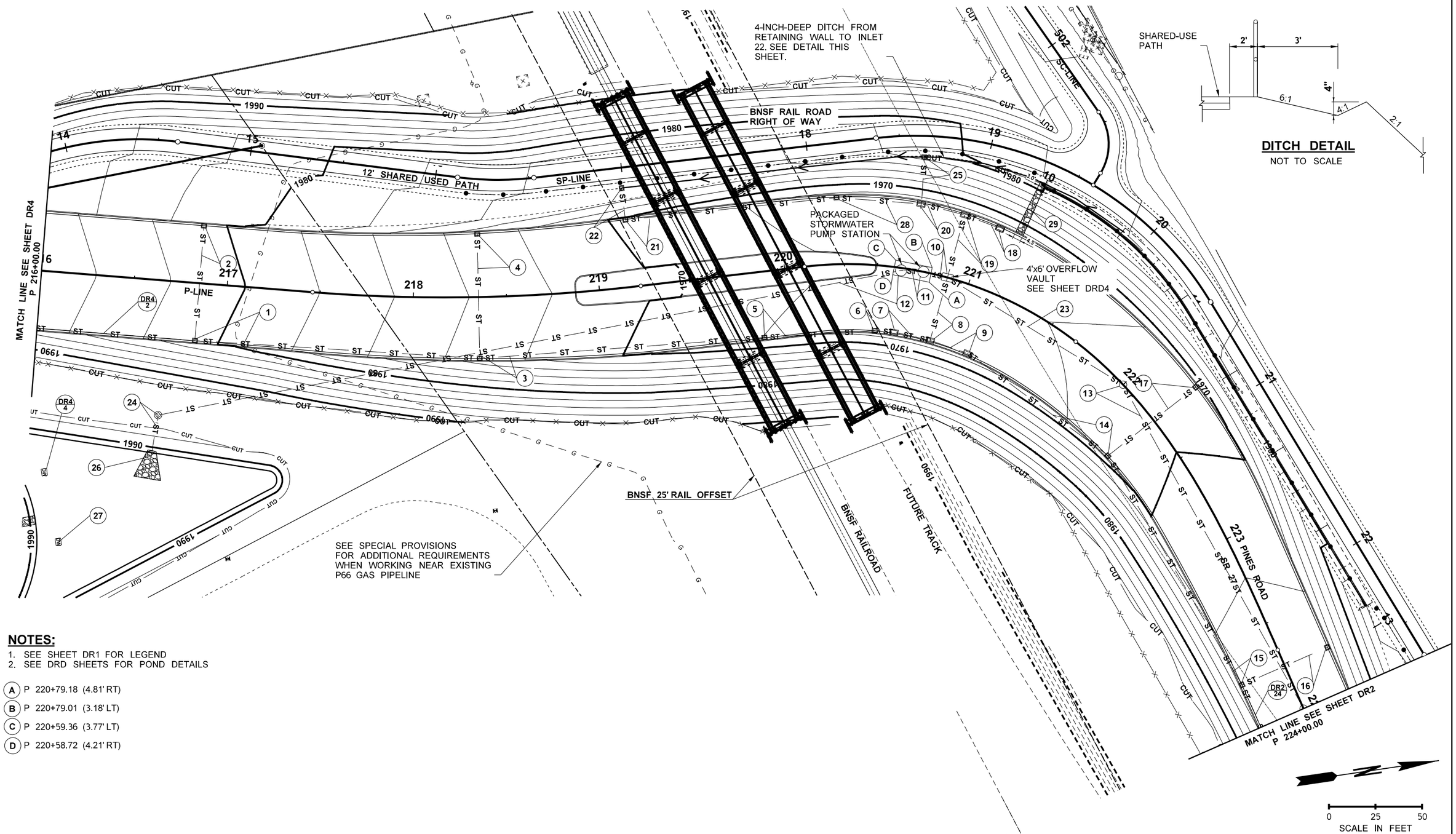
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN

Plot 1

PLAN REF NO
DR4

SHEET 60 OF 218 SHEETS



NOTES:

1. SEE SHEET DR1 FOR LEGEND
2. SEE DRD SHEETS FOR POND DETAILS

(A) P 220+79.18 (4.81' RT)

(B) P 220+79.01 (3.18' LT)

(C) P 220+59.36 (3.77' LT)

(D) P 220+58.72 (4.21' RT)

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_005.dgn						
TIME	10:39:41 AM						
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

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CITY OF Spokane Valley

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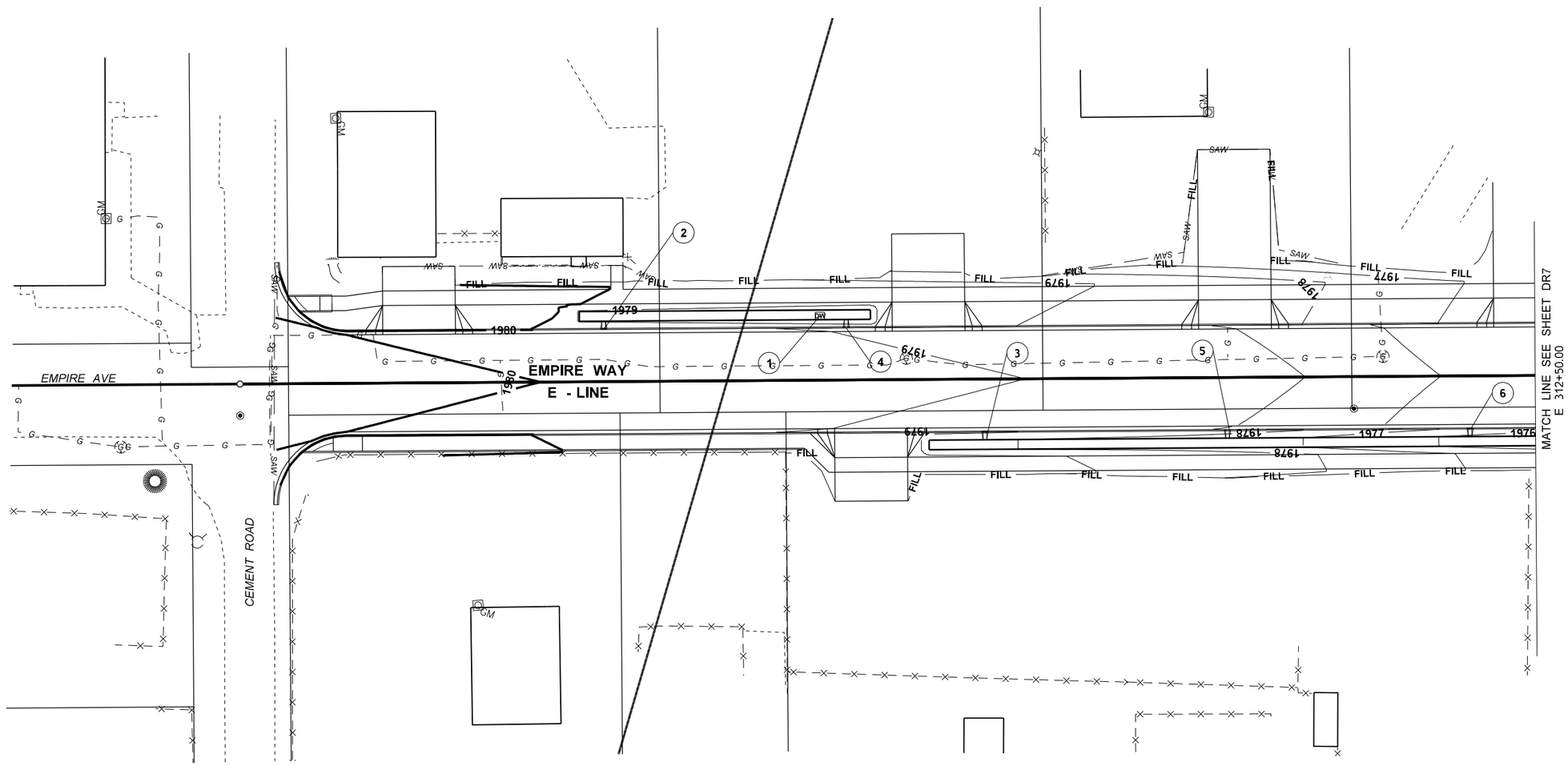
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

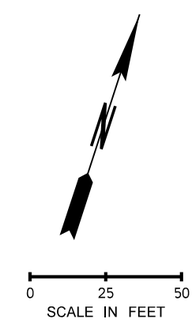
DRAINAGE PLAN

Plot 1

PLAN REF NO
DR5

SHEET 61 OF 218 SHEETS





NOTES:

1. SEE SHEET DR1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_006.dgn					
TIME	10:40:00 AM					
DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

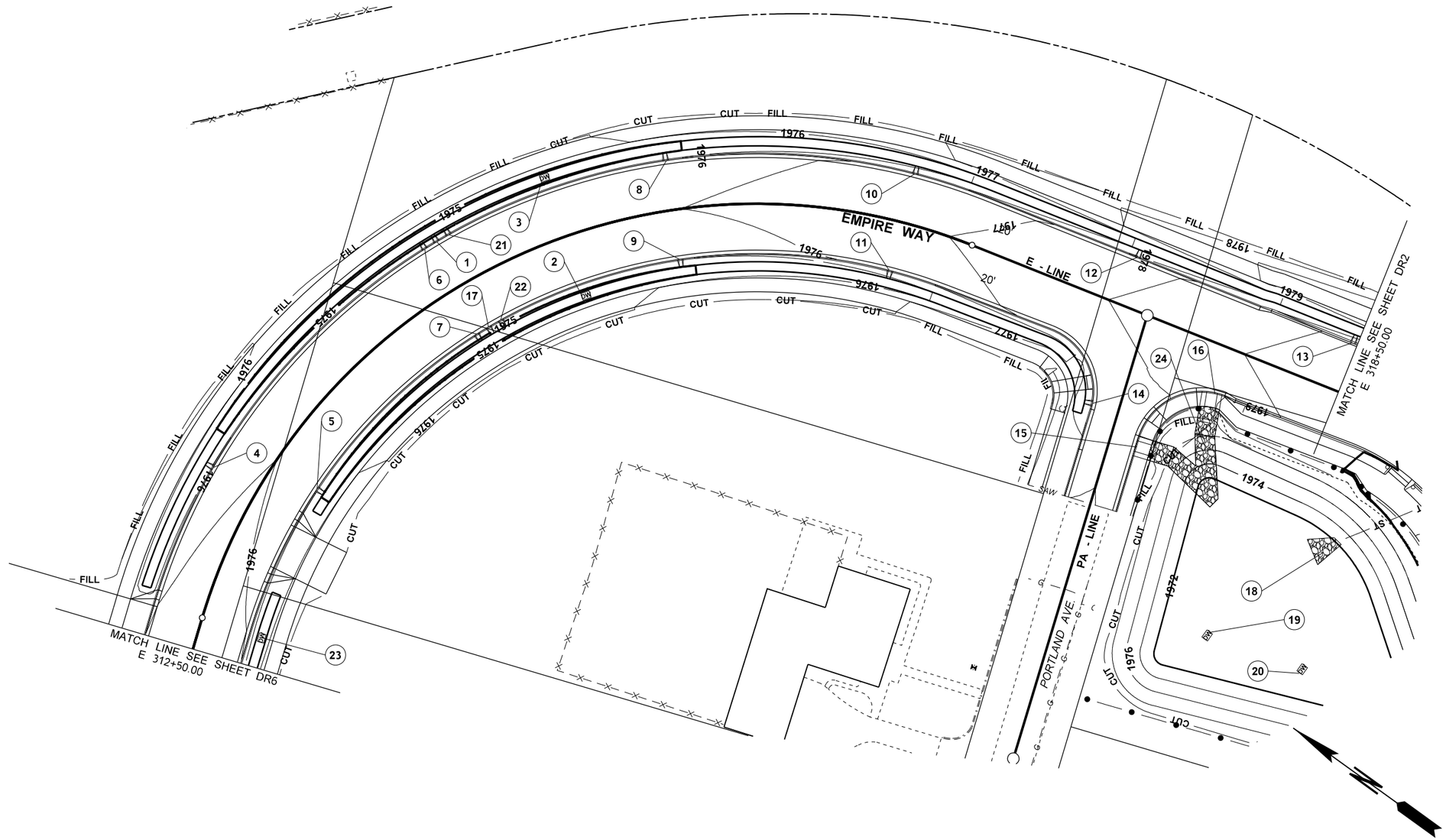
DATE
P.E. STAMP BOX

CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN

Plot 1
PLAN REF NO
DR6
SHEET 62 OF 218 SHEETS



NOTES:

1. SEE SHEET DR1 FOR LEGEND
2. SEE DRD SHEETS FOR POND DETAILS

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_007.dgn						
TIME	10:40:21 AM						
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
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DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

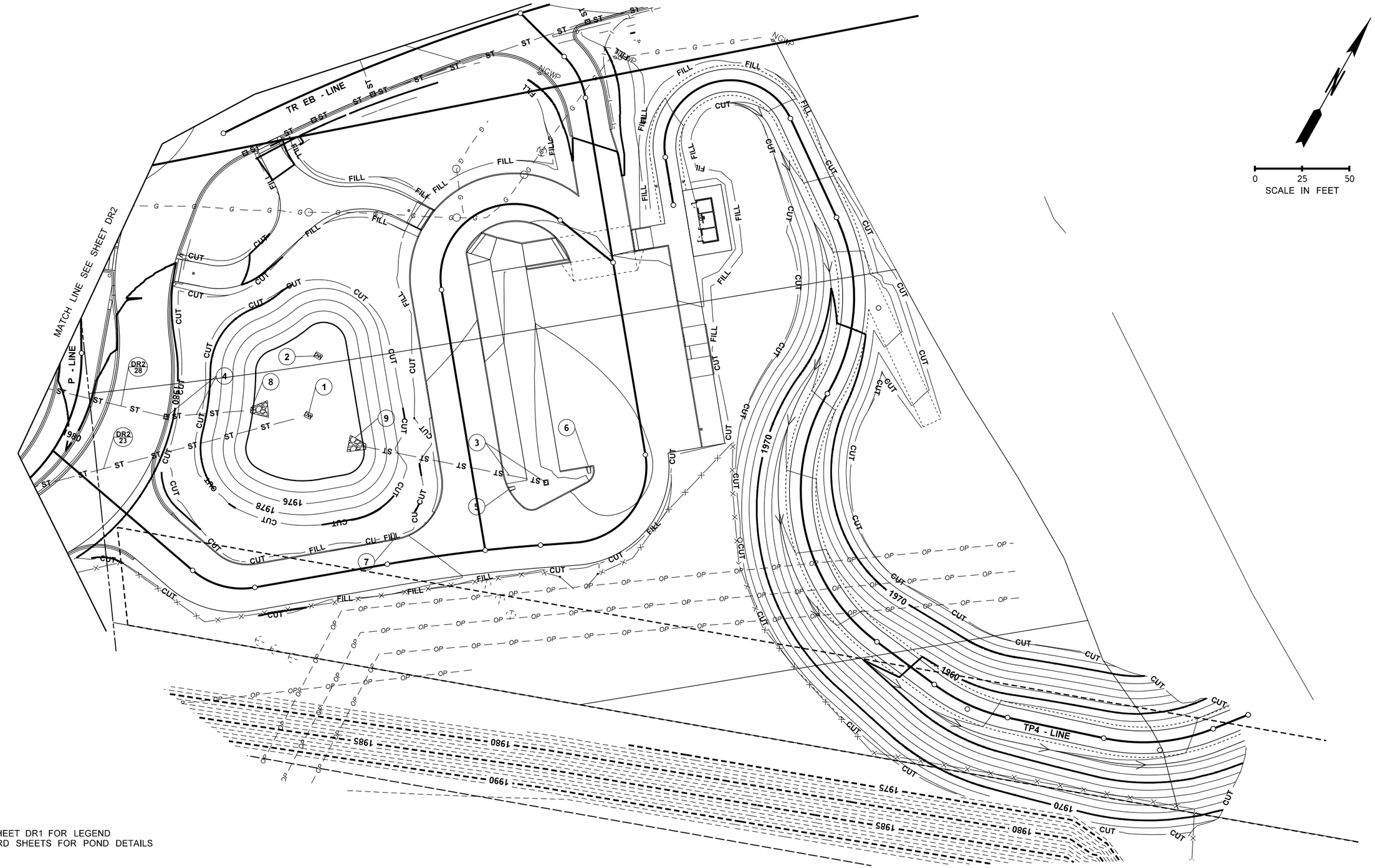
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN

Plot 1

PLAN REF NO
DR7

SHEET 63 OF 218 SHEETS



NOTES:

1. SEE SHEET DR1 FOR LEGEND
2. SEE DRD SHEETS FOR POND DETAILS

FILE NAME	c:\pwworking\west01\d2172353\PINES_PS_DR_008.dgn								Plot 1
TIME	3:16:10 PM				REGION NO.	STATE	FED.AID PROJ.NO.		PLAN REF NO
DATE	5/29/2025				10	WASH	STPUL 0027(020)		DR8
PLOTTED BY	EMCGUIRE				JOB NUMBER		69A36525420110RASWA		SHEET
DESIGNED BY	B KIRKMAN						69A36524420020RLDWA		64
ENTERED BY	E MCGUIRE								OF
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.		218
PROJ. ENGR.	S MARSHALL								SHEETS
REGIONAL ADM.		REVISION	DATE	BY					

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

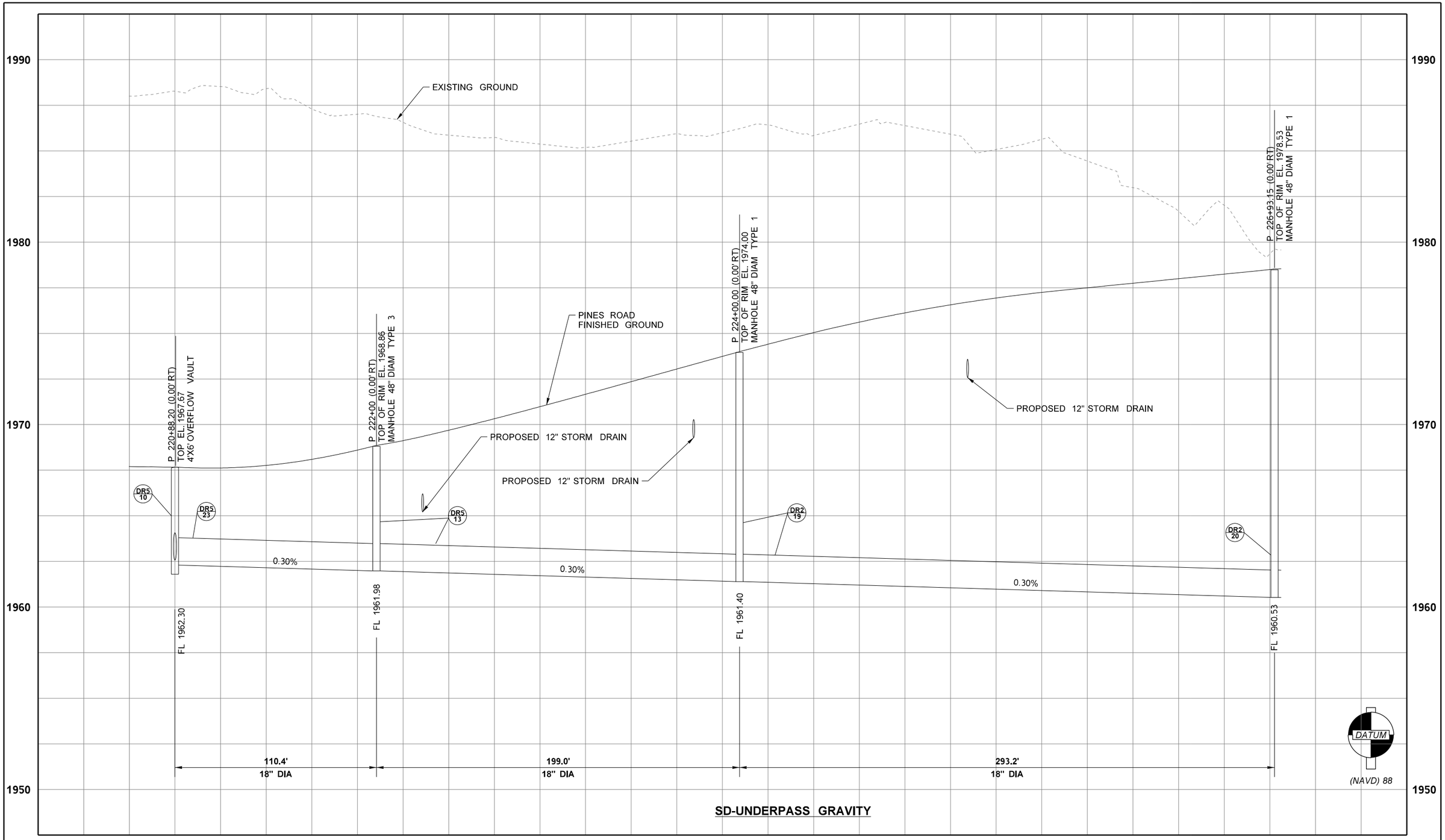
DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PLAN



SD-UNDERPASS GRAVITY

FILE NAME	c:\pwworking\west01\d2433065\PINES_PS_DR_PR_001.dgn
TIME	10:40:55 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

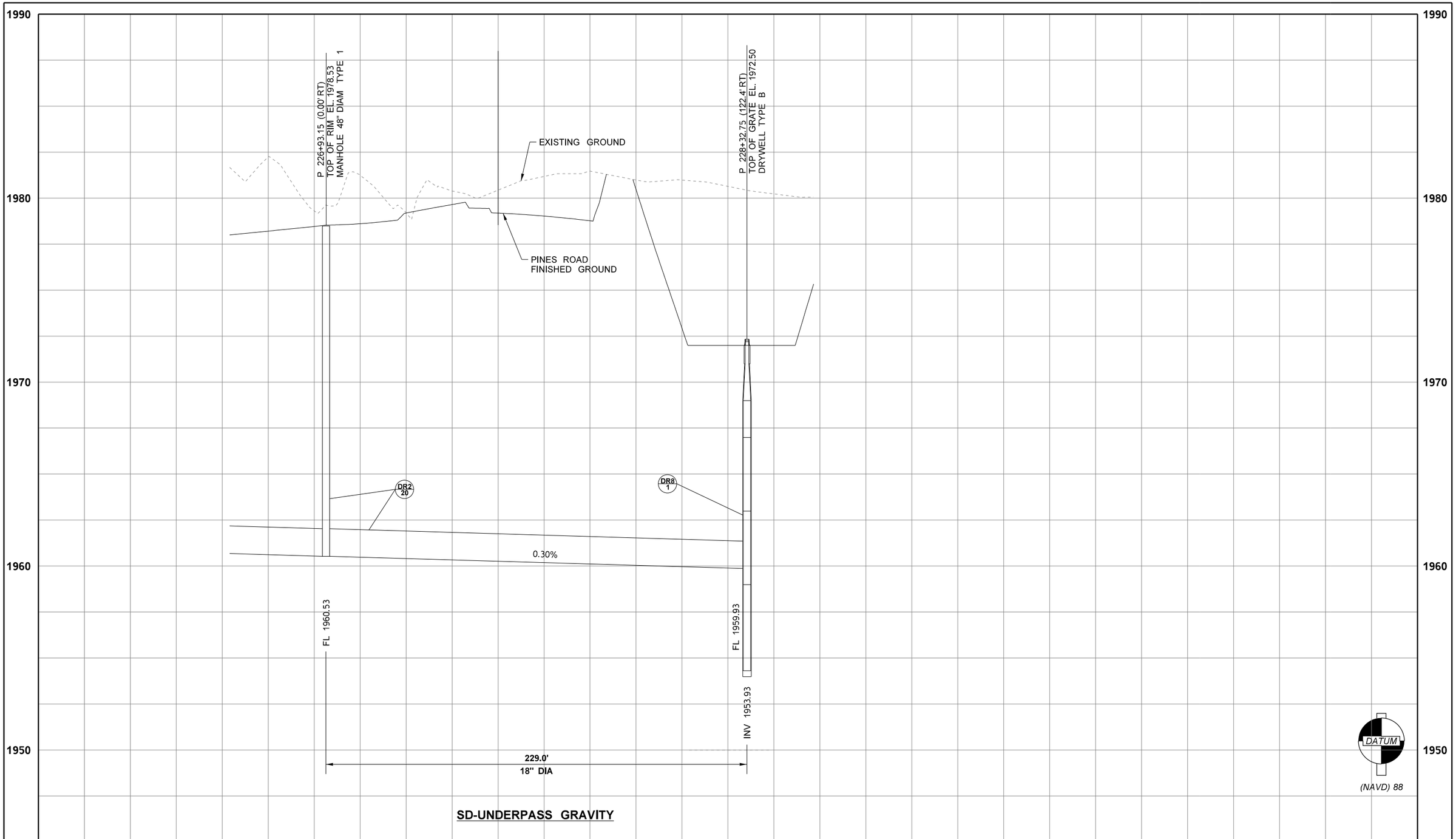
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP1

SHEET 65 OF 218 SHEETS



SD-UNDERPASS GRAVITY

FILE NAME	c:\pwworking\west01\d2433065\PINES_PS_DR_PR_002.dgn			
TIME	10:41:05 AM			
DATE	5/29/2025			
PLOTTED BY	EMCGUIRE			
DESIGNED BY	B KIRKMAN			
ENTERED BY	E MCGUIRE			
CHECKED BY	J FREY			
PROJ. ENGR.	S MARSHALL			
REGIONAL ADM.		REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

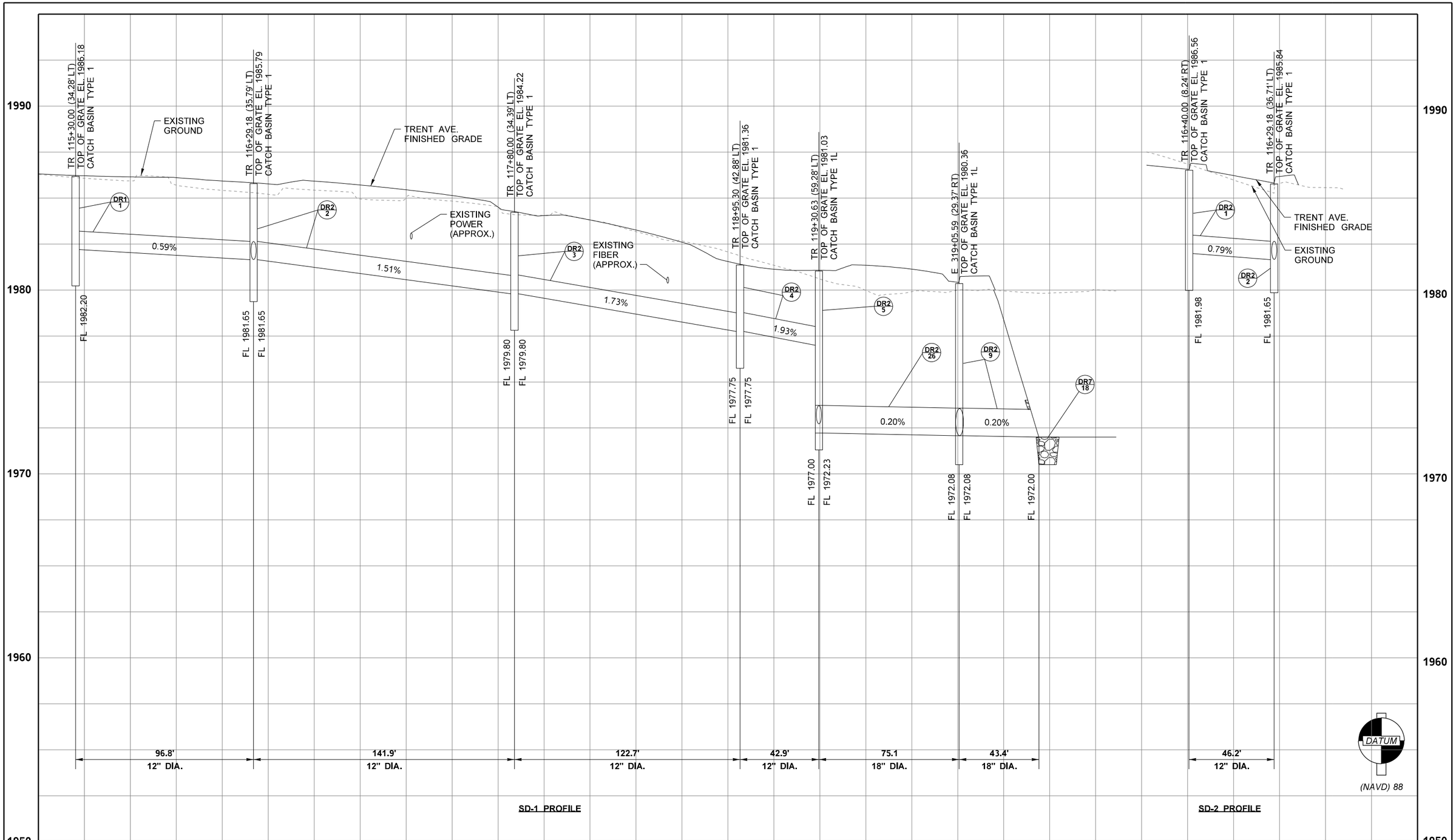
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP2

SHEET 66 OF 218 SHEETS



FILE NAME	c:\pwworking\west01\d2433065\PINES_PS_DR_PR_003.dgn
TIME	10:41:16 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

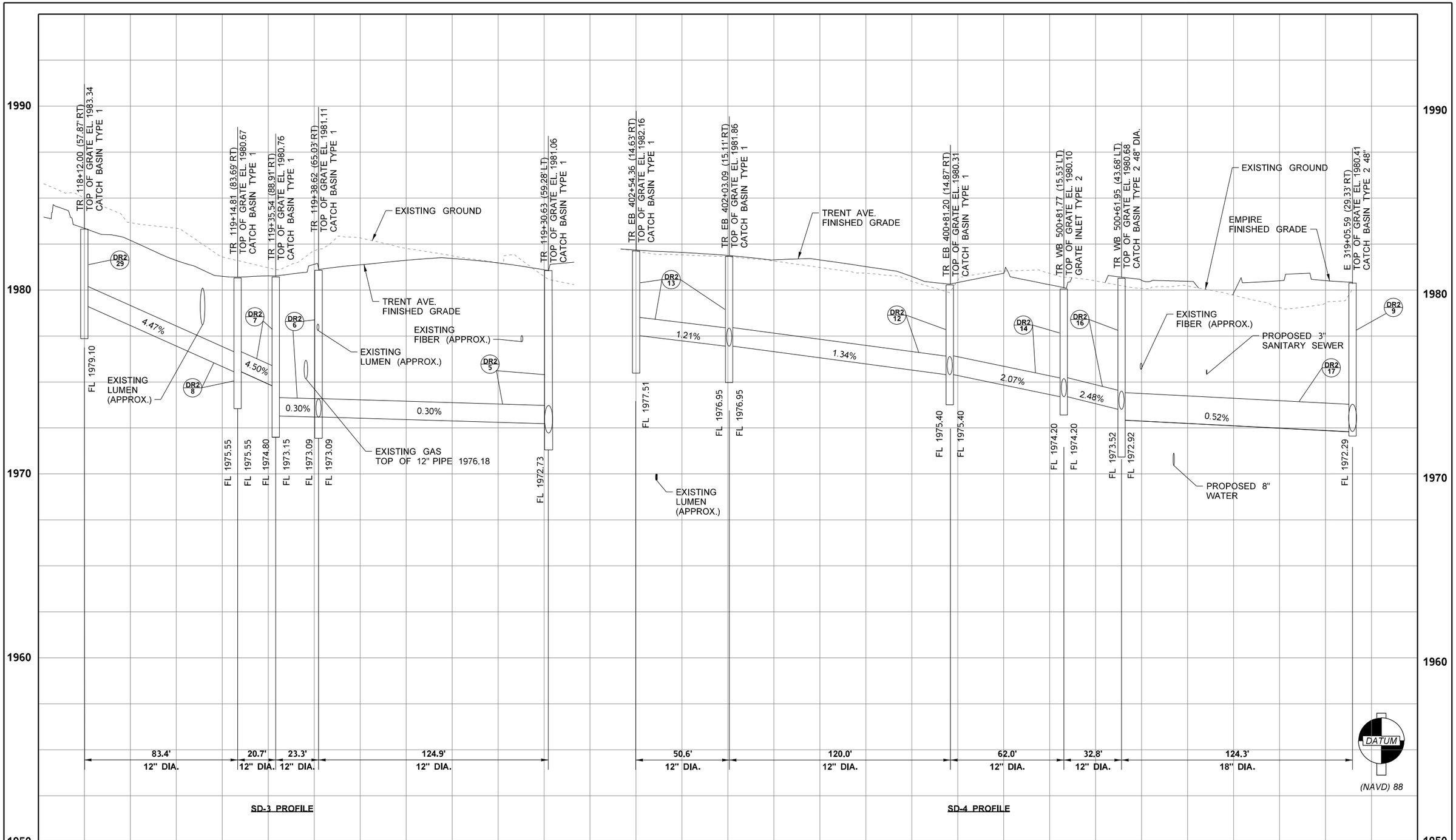
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP3

SHEET 67 OF 218 SHEETS



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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
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City of Spokane Valley

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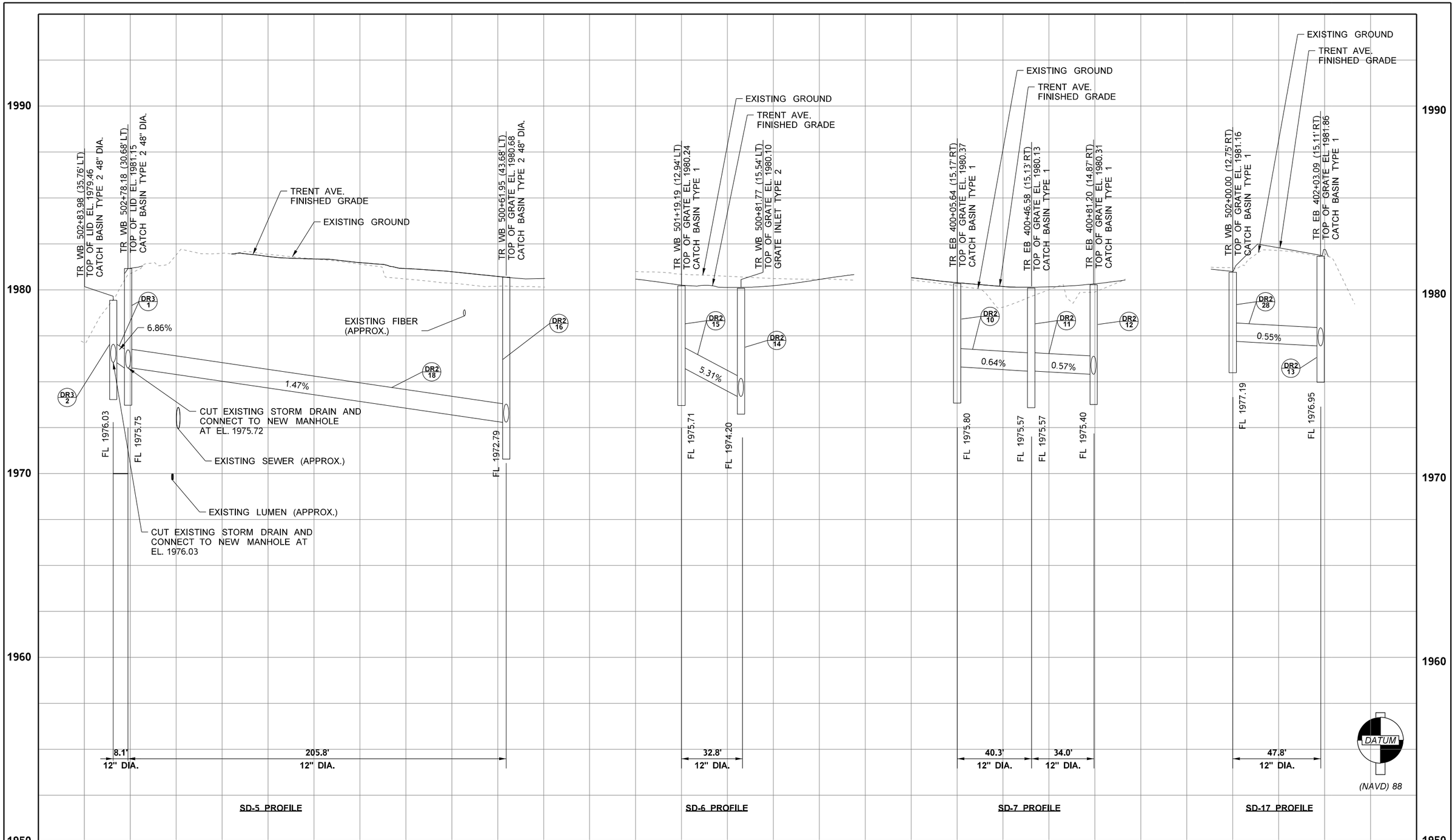
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP4

SHEET
68
OF
218
SHEETS



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DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
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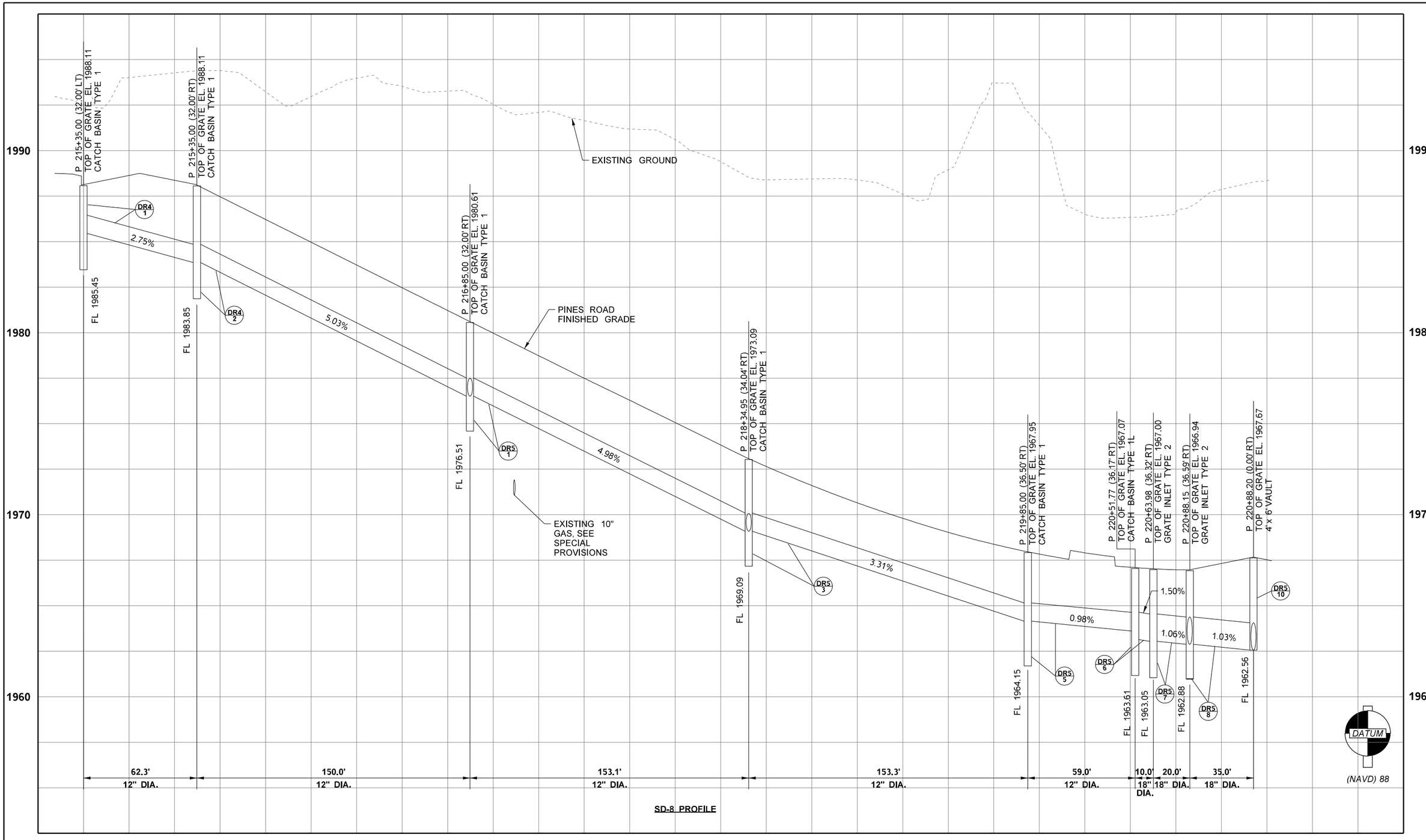
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP5

SHEET 69 OF 218 SHEETS



SD-8 PROFILE

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CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRYANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
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CITY OF Spokane Valley
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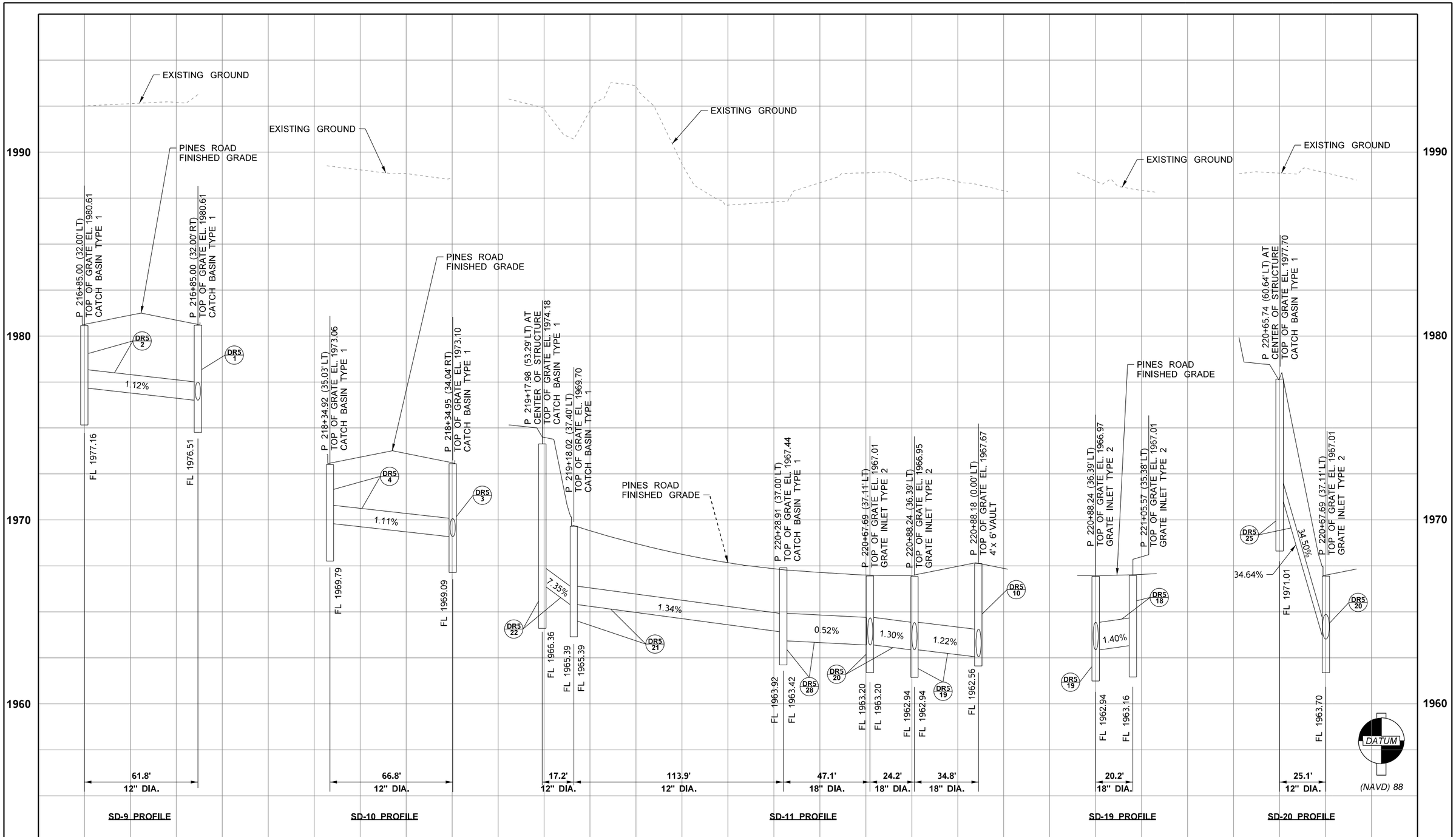
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP6

SHEET 70 OF 218 SHEETS



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CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
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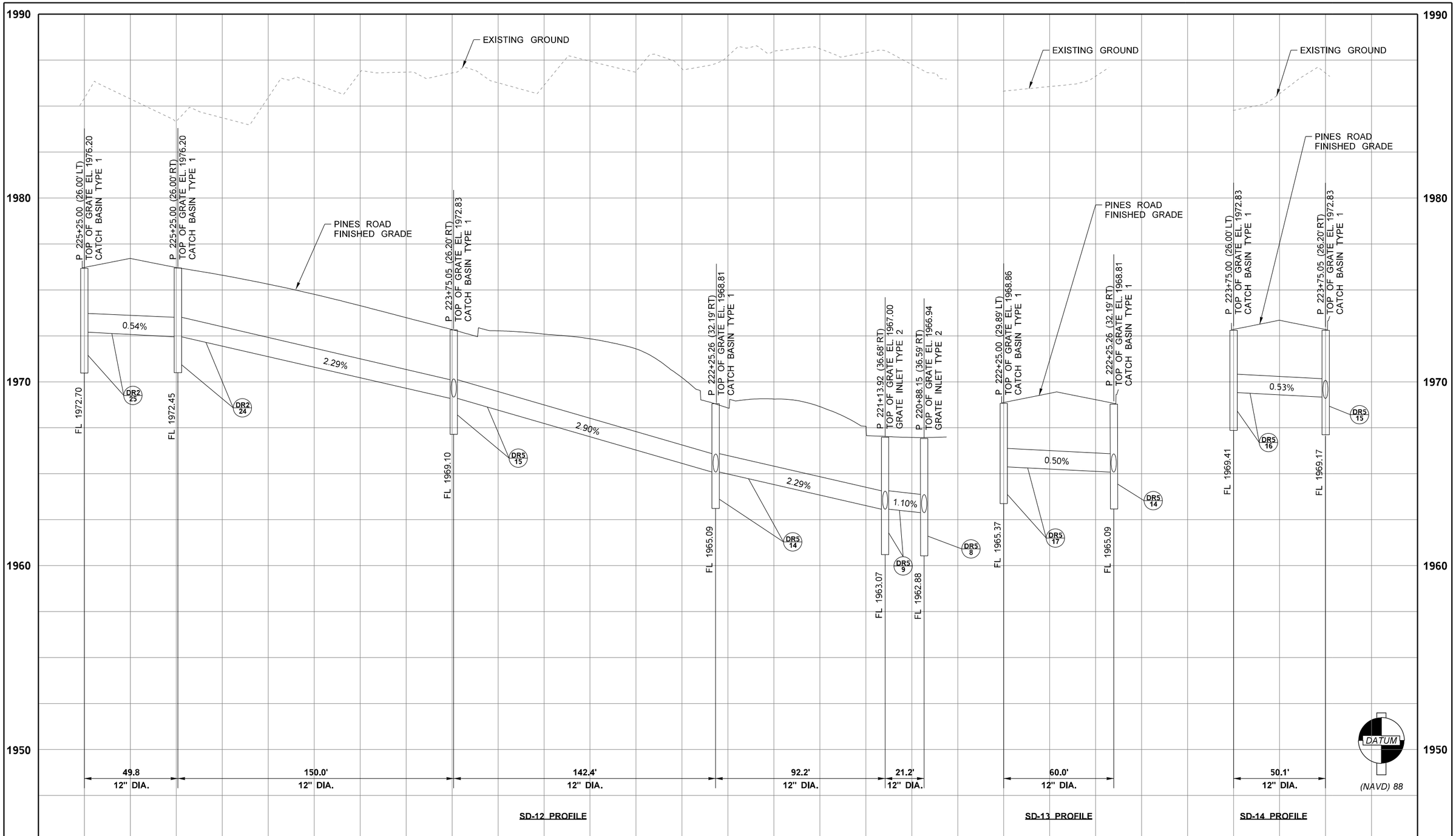
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP7

SHEET 71 OF 218 SHEETS



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DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
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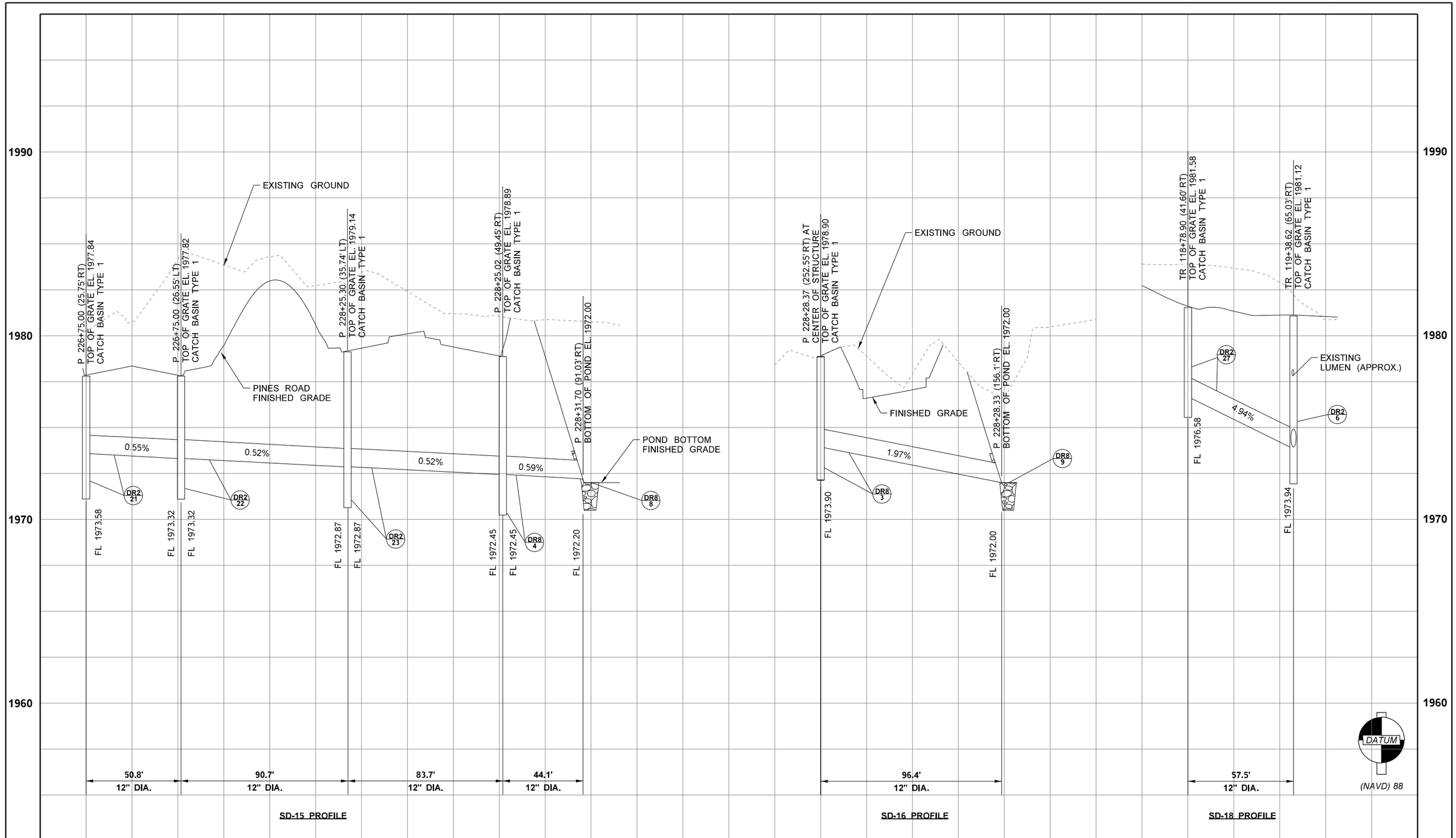
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP8

SHEET 72 OF 218 SHEETS



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ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
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CITY OF Spokane Valley

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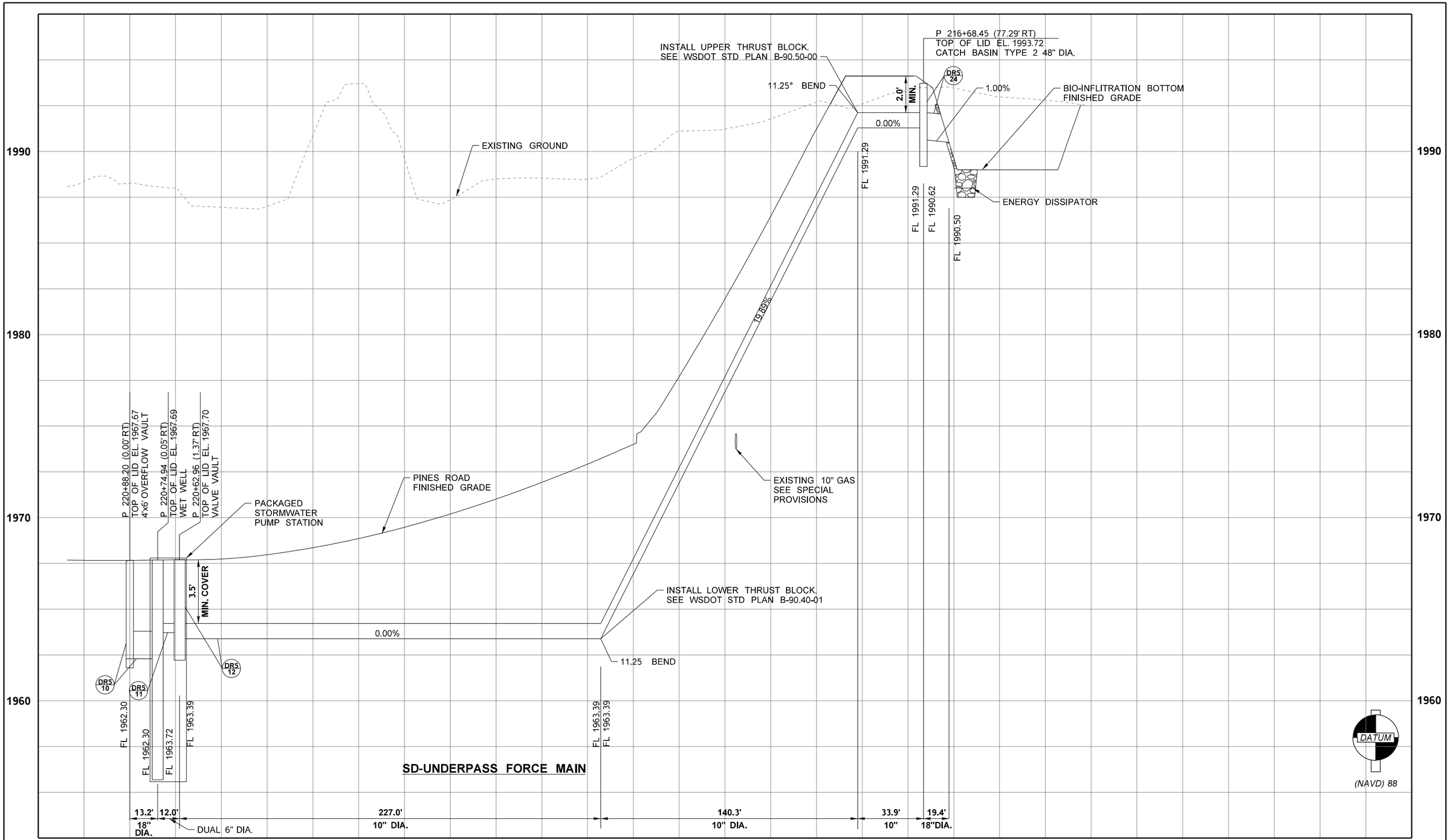
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP9

SHEET 73 OF 218 SHEETS



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CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

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CITY OF Spokane Valley

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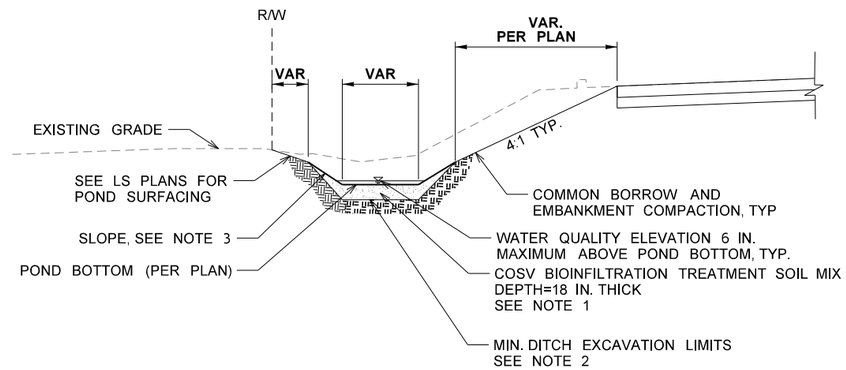
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE PROFILE

PLAN REF. NO.
DRP10

SHEET 74 OF 218 SHEETS

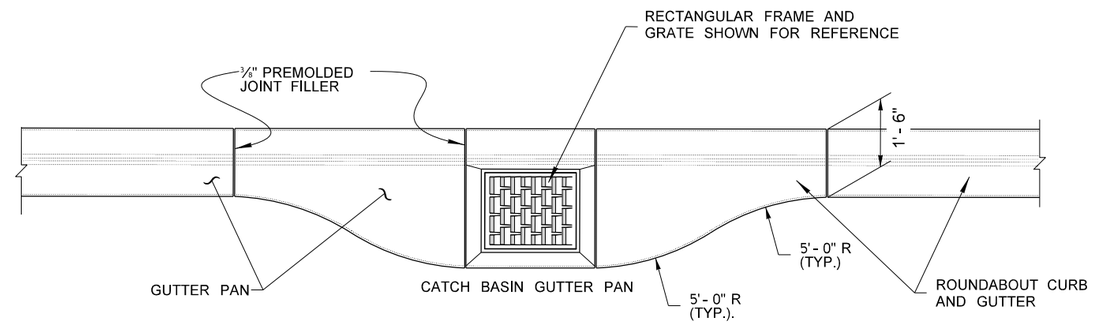


GENERAL NOTES

1. SEE SPECIAL PROVISIONS FOR TREATMENT SOIL REQUIREMENTS
2. EXCAVATION QUANTITIES TO THE BOTTOM OF TREATMENT SOIL ARE INCLUDED IN DRAINAGE POND EXCAVATION INCL. HAUL, SEE PROFILES, UNLESS OTHERWISE NOTED ON POND DETAIL SHEET
3. MAXIMUM POND SIDE SLOPE 3:1. SEE DRAINAGE DETAILS SHEETS AND TYPICAL SECTIONS FOR DESIGN SLOPE
4. DITCH EXCAVATION SHALL EXTEND INTO NATIVE SAND AND GRAVEL WITH MINIMAL FINES (<12% PASSING NO. 200 SIEVE). IF SILTY MATERIAL IS ENCOUNTERED, ADDITIONAL OVEREXCAVATION MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER.

1 - TYPICAL BIOINFILTRATION POND SECTION

NOT TO SCALE

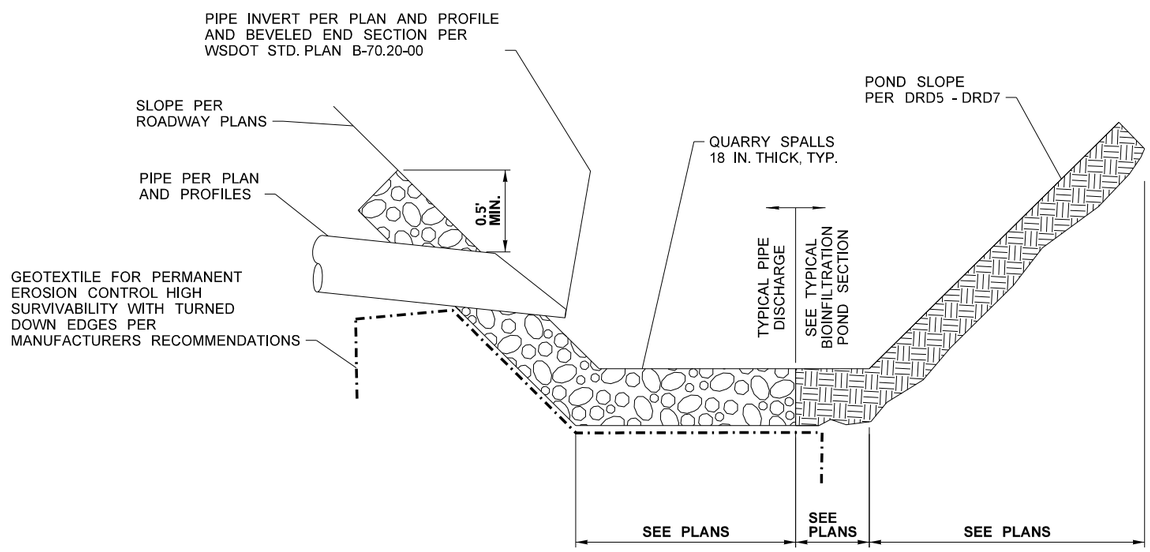


NOTES:

1. GRATE SHALL BE PLACED IN FLOWLINE
2. TYPICAL INSTALLATION FOR ALL INLET GRATES WHERE CURB IS PRESENT.
3. DETAIL ADAPTED FROM STD. PLAN F-10.16-00, MODIFIED FOR ROLLED ROUNDABOUT CURB.

4 - DRAINAGE INLET PLACEMENT AND GUTTER DETAIL

NOT TO SCALE



3 - PIPE DISCHARGE / QUARRY SPALL DETAIL

NOT TO SCALE

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TIME	10:43:21 AM				10	WASH	STPUL 0027(020)
DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
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City of Spokane Valley
HDR

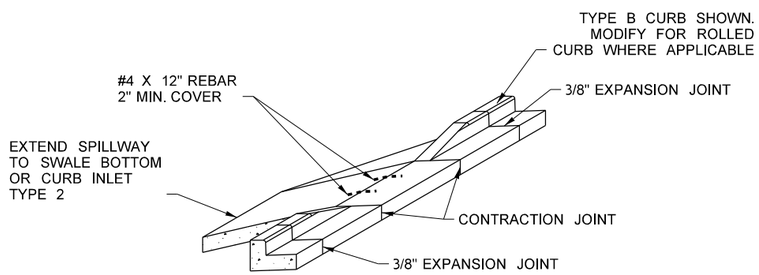
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE DETAILS

Plot 1
PLAN REF NO
DRD1
SHEET 75 OF 218 SHEETS

GENERAL NOTES:

1. CURB INLET SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 (AASHTO M 199) & ASTM C-890 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE PROJECT SPECIAL PROVISIONS.
2. TOP SURFACE TO BE BROOM FINISHED.
3. ALL EXTERNAL EDGES NOT LABELED SHALL BE TROWELLED WITH ¼" RADIUS EDGER.
4. DETAIL ADAPTED FROM CITY OF SPOKANE VALLEY STANDARD PLAN NO. S-110.



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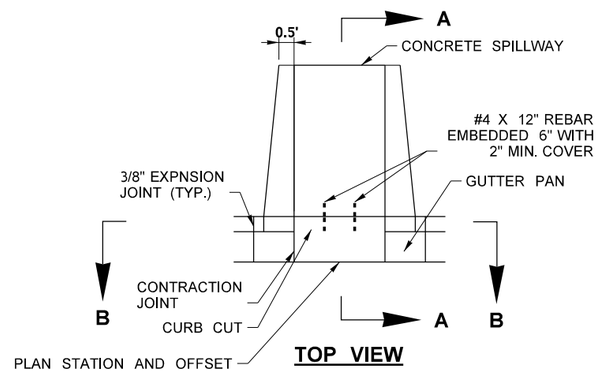
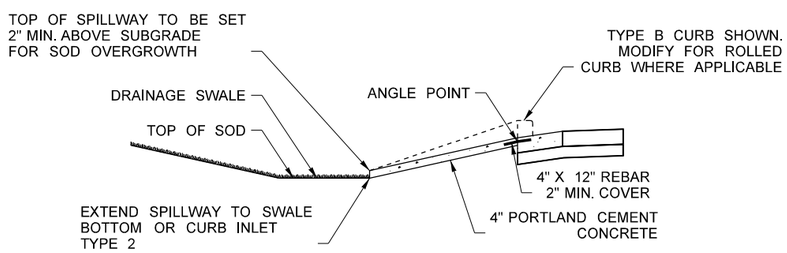
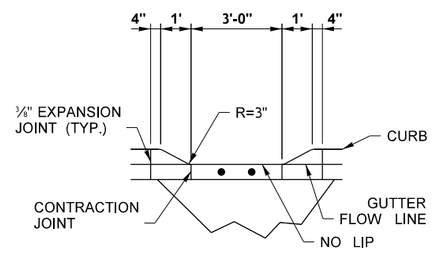


TOP VIEW



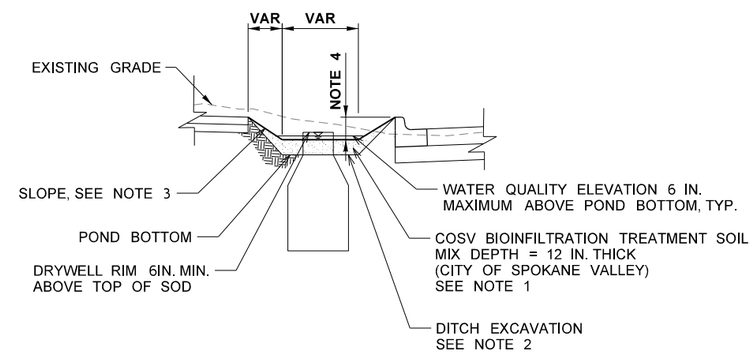
SECTION A-A



SECTION B-B

1 - CURB INLET TYPE 1

NOT TO SCALE



NOTES:

1. SEE SPECIAL PROVISIONS SECTION 9-14.2(1) FOR TREATMENT SOIL REQUIREMENTS
2. EXCAVATION QUANTITIES INCLUDED IN ROADWAY EXCAVATION
3. MAXIMUM SLOPE 3:1. SEE TYPICAL SECTIONS FOR DESIGN SLOPE
4. DRYWELL RIM MUST BE MINIMUM 3" BELOW GUTTER FLOW LINE

2 - TYPICAL CITY BIOINFILTRATION POND (ROADSIDE SWALE) SECTION

NOT TO SCALE

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DATE	5/29/2025						
PLOTTED BY	EMCGUIRE				JOB NUMBER		
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

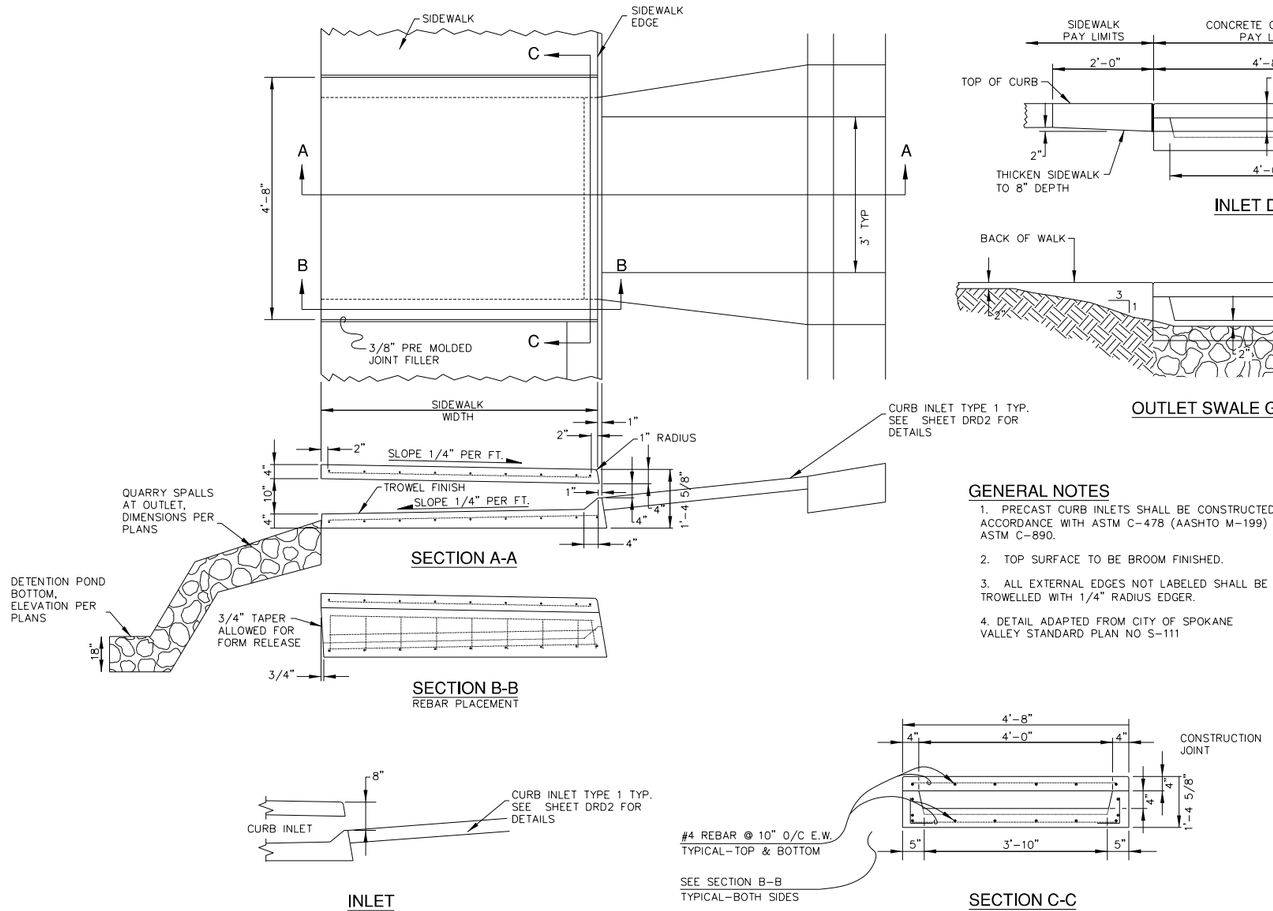
City of Spokane Valley

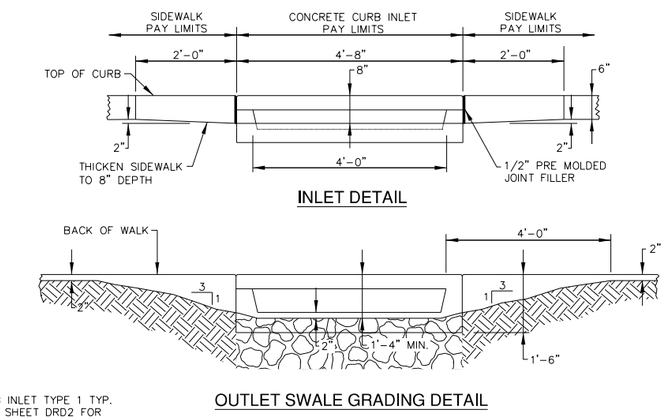
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE DETAILS

Plot 1
PLAN REF NO
DRD2
SHEET 76 OF 218 SHEETS





GENERAL NOTES

1. PRECAST CURB INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-478 (AASHTO M-199) & ASTM C-890.
2. TOP SURFACE TO BE BROOM FINISHED.
3. ALL EXTERNAL EDGES NOT LABELED SHALL BE TROWELLED WITH 1/4" RADIUS EDGER.
4. DETAIL ADAPTED FROM CITY OF SPOKANE VALLEY STANDARD PLAN NO S-111

1 -

CURB INLET TYPE 2

NOT TO SCALE

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DATE	5/29/2025				10	WASH	STPUL 0027(020)
PLOTTED BY	EMCGUIRE				JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

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DATE
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City of Spokane Valley

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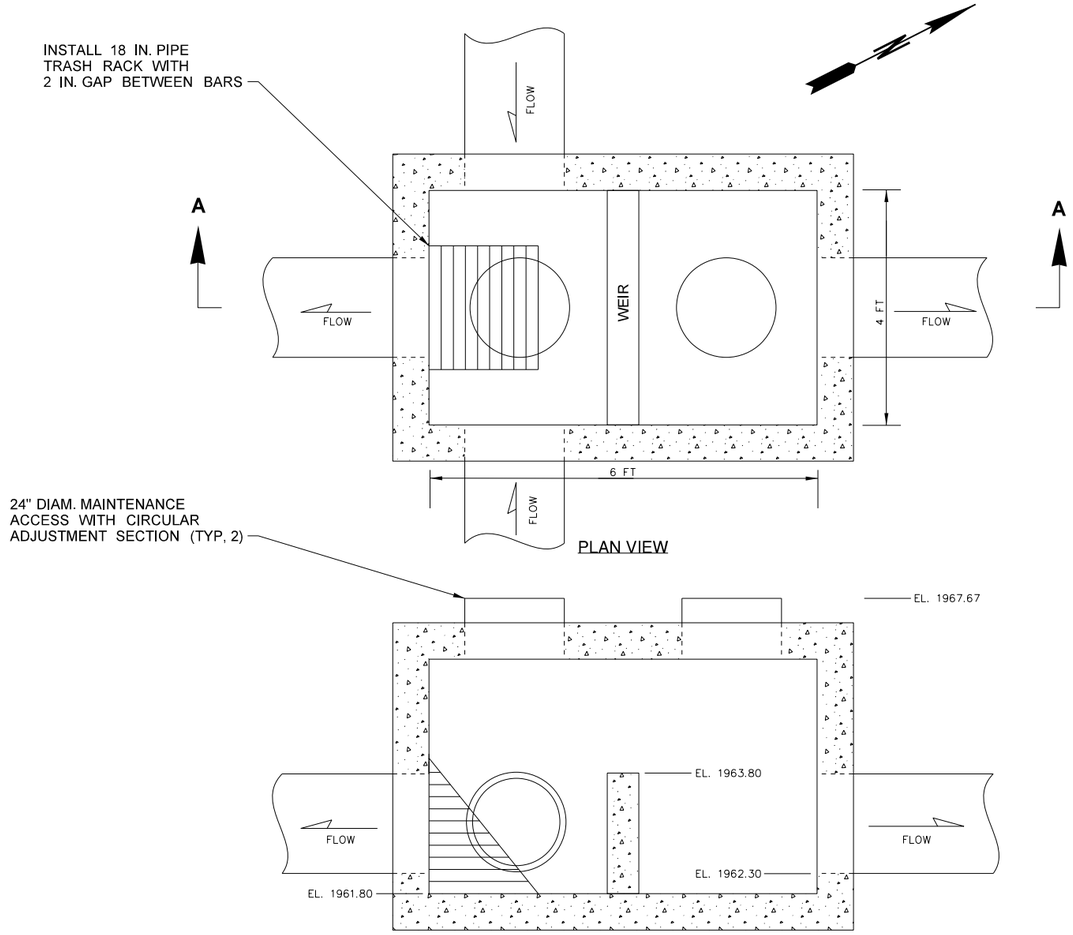
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE DETAILS

Plot 1
PLAN REF NO
DRD3
SHEET 77 OF 218 SHEETS



1 - 4'X6' OVERFLOW VAULT

NOT TO SCALE

NOTES:

1. PRECAST STRUCTURE SHALL BE DESIGNED AND SEALED BY LICENSED PROFESSIONAL ENGINEER.

FILE NAME	c:\pwworking\west01\d2442334\PINES_PS_DRD_004.dg.dgn				REGION NO.	STATE	FED.AID PROJ.NO.
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DATE	6/2/2025				JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

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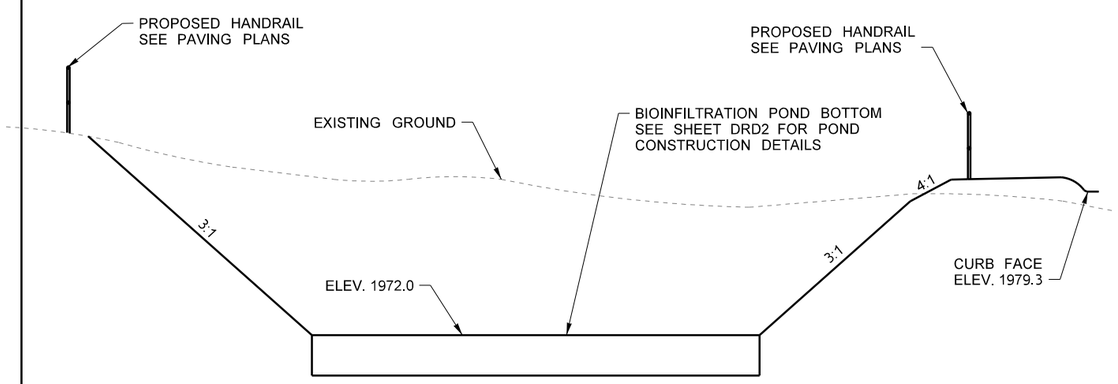
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

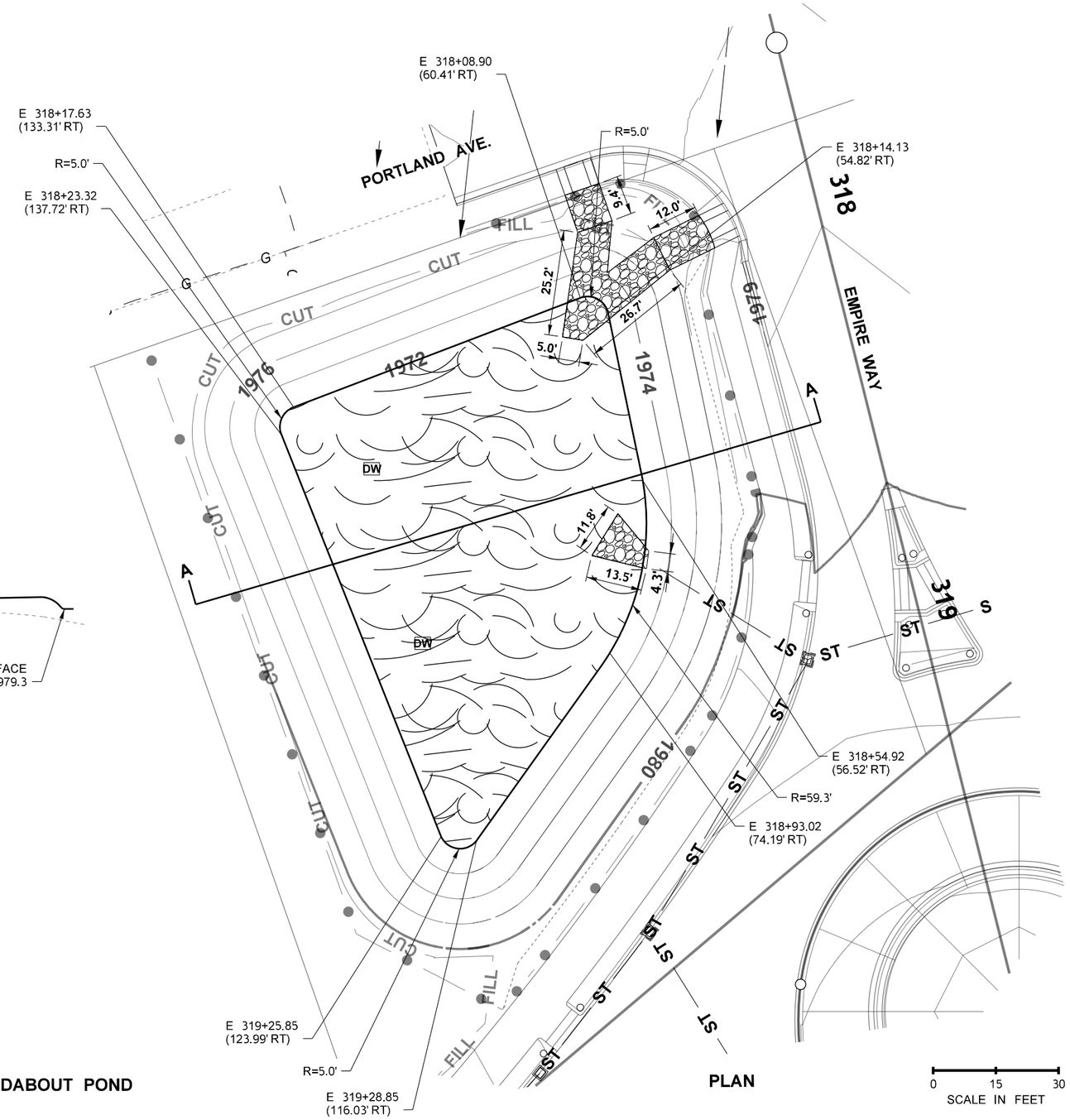
DRAINAGE DETAILS

Plot 1
PLAN REF NO
DRD4
SHEET 78 OF 218 SHEETS



SECTION A-A

NOT TO SCALE



ROUNDABOUT POND

PLAN

FILE NAME	c:\pwworking\west01\d2442334\PINES_PS_DRD_005.dgn					
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DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

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CITY OF Spokane Valley

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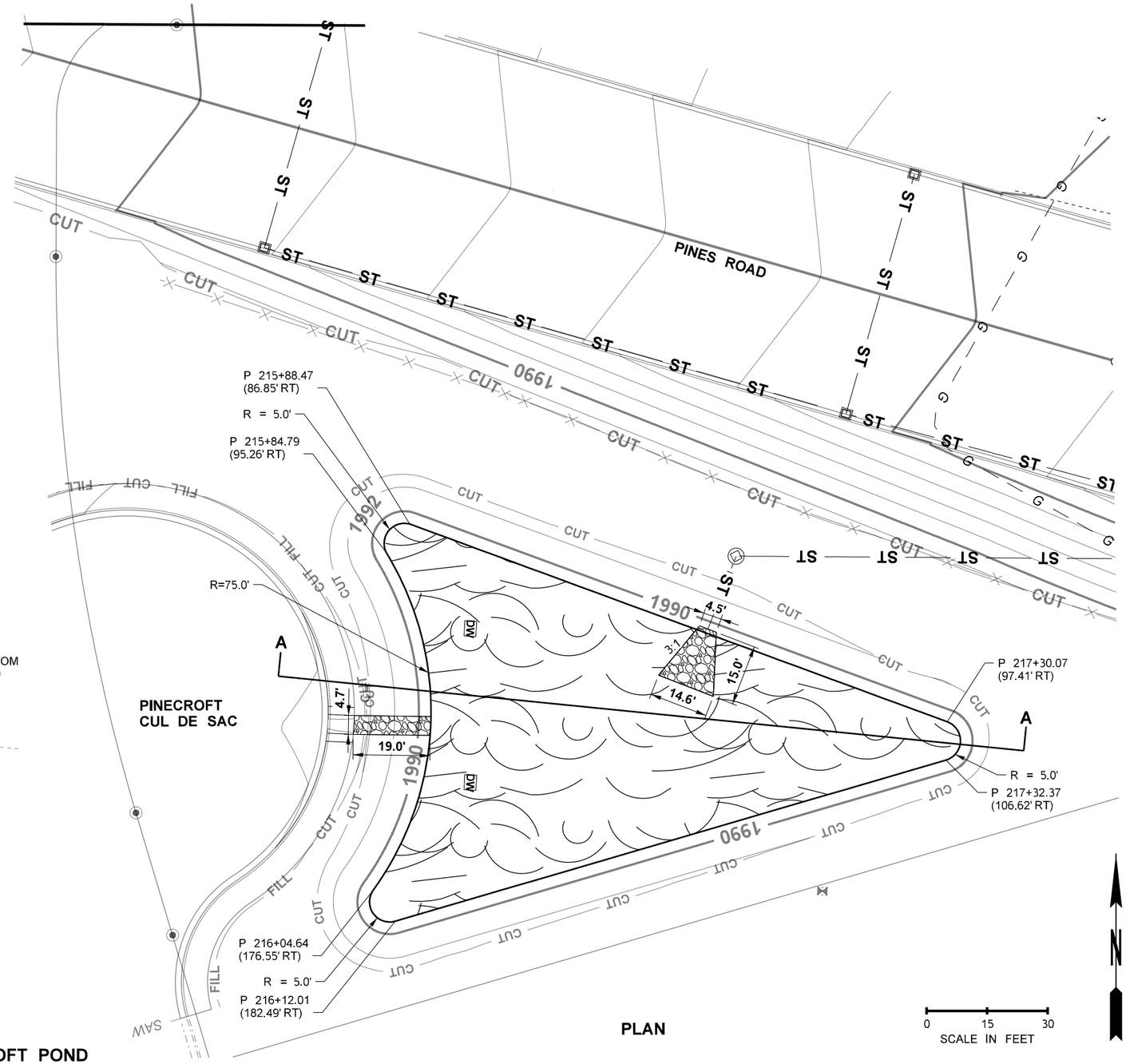
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE DETAILS

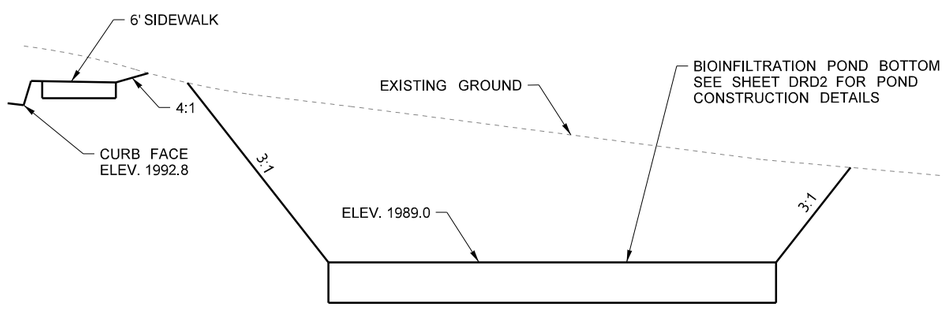
Plot 1

PLAN REF NO
DRD5

SHEET 79 OF 218 SHEETS



PLAN



SECTION A-A

NOT TO SCALE

PINECROFT POND

FILE NAME	c:\pwworking\west01\d2442334\PINES_PS_DRD_006.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	3:42:37 PM				JOB NUMBER		
DATE	6/2/2025				CONTRACT NO.		LOCATION NO.
PLOTTED BY	BKIRKMAN						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

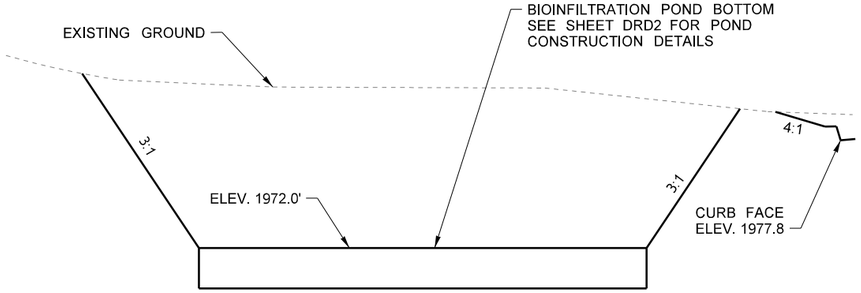
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

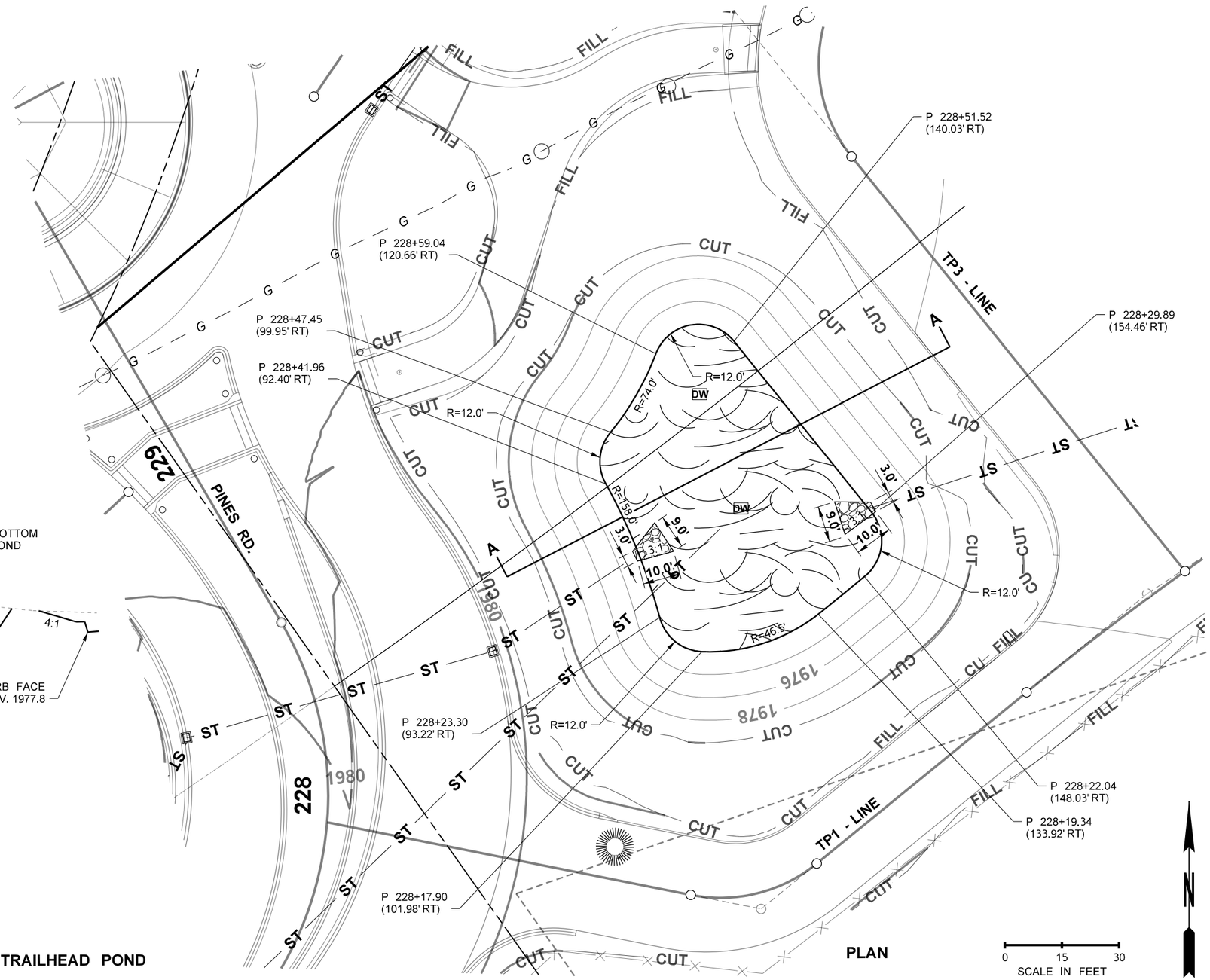
DRAINAGE DETAILS

Plot 1
PLAN REF NO
DRD6
SHEET 80 OF 218 SHEETS



SECTION A-A

NOT TO SCALE



TRAILHEAD POND

PLAN

FILE NAME	c:\pwworking\west01\d2442334\PINES_PS_DRD_007.dgn				REGION NO.	STATE	FED.AID PROJ.NO.
TIME	10:44:56 AM				10	WASH	STPUL 0027(020)
DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA
DESIGNED BY	B KIRKMAN				CONTRACT NO.		LOCATION NO.
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRAINAGE DETAILS

Plot 1

PLAN REF NO
DRD7

SHEET 81 OF 218 SHEETS

STRUCTURE NOTES - UTILITY

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	HYDRANT ASSEMBLY	PVC PIPE FOR WATER MAIN 8 IN. DIAM.	STEEL CASING 12 IN. DIAM.	SERVICE CONNECTION 2 IN. DIAM.		PVC SANITARY SEWER PIPE 4 IN. DIAM.	SCHEDULE 80 PVC SANITARY SEWER PIPE 3 IN. DIAM.	PRESSURE SEWER CLEANOUT	PVC SANITARY SEWER PIPE 6 IN. DIAM		RESTROOM SEWAGE PACKAGE PUMP STATION	DUCTILE IRON 8 IN. DIAM. CASING	TESTING SEWER PIPE	ADJUST MANHOLE		SEE GENERAL NOTES
		EACH	L.F.	L.F.	EACH		L.F.	L.F.	EACH	L.F.		L.S.	L.F.	L.F.	EACH		
UT1-1	E 317+71.50 (20.3' LT) TO E 317+70.88 (29.5' LT)		21														4,5
UT1-2	E 317+70.88 (29.5' LT) TO E 318+47.46 (29.7' LT)		77														4,5
UT1-3	E 318+47.46 (29.7' LT) TO P 229+00.92 (154.7' RT)		251														4,5
UT1-4	P 229+00.92 (154.7' RT) TO P 228+98.36 (160.6' RT)		6														4,5
UT1-5	P 228+98.36 (160.6' RT) TO P 228+98.45 (246.2' RT)		83														4,5
UT1-6	TR 318+84.81 (56.5' LT) TO TR 320+86.49 (150.3' RT)			192													3
UT1-7	P 228+98.43 (226.1' RT)				1												6,8
UT1-8	P 228+98.45 (237.5' RT)				1												6,8
UT1-9	P 320+95.37 (246.1' RT)	1															1,2,7
UT2-1	TR 120+34.69 (218.3' LT) TO TR 120+68.22 (107.6' LT)						115		1					115			12
UT2-2	TR 120+68.22 (107.6' LT) TO TR 120+88.57 (62.1' LT)							48	1					48			12
UT2-3	TR 121+11.18 (47.1' RT) TO TR 121+68.27 (147.4' RT)							153	1					153			12
UT2-4	TR 122+90.88 (182.1' RT) TO TR 122+98.72 (160.5' RT)							22				1		22			12,13
UT2-5	TR WB 500+11.75 (28.0' LT) TO TR EB 400+21.57 (24.4' RT)												101				11
UT2-6	TR 120+88.57 (62.1' LT) TO TR 121+11.20 (47.1' RT)							111	1					111			12
UT2-7	TR 121+68.27 (147.4' RT) TO TR 122+90.88 (182.1' RT)							114						114			
UT3-1	E 309+72.38 (32.7' RT) TO E 309+72.29 (37.0' RT)									5				5			10
UT3-2	E 311+62.77 (39.7' RT) TO E 311+64.42 (42.2' RT)									3				3			10
UT3-3	E 311+85.67 (8.5' RT) TO E 312+97.50 (40.4' LT)									126				126			10
UT3-4	E 311+44.81 (31.6' LT) TO E 311+45.06 (43.1' LT)									12				12			10
UT3-5	E 309+68.40 (14.4' LT) TO E 309+69.02 (43.0' LT)									29				29			10
UT3-6	E 311+51.26 (22.1' RT)														1		9
UT3-7	E 311+62.59 (3.8' RT)																
UT3-8	E 311+63.77 (11.3' LT)																
UT3-9	E 309+90.83 (7.8' LT)																
UT3-10	311+87.28 (8.3' LT)																
UT3-11	311+79.55 (47.1' LT)																
UT3-12	E 311+69.55 (47.1' LT)																
UT3-13	308+85.94 (25.6' LT)																
UT4-1a	TR 121+59.10 (245.8' RT)																14
UT4-1b	TR 121+76.80 (154.4' RT)																14
UT4-1c	TR 122+95.12 (148.7' RT)																14
UT4-2	TR 122+38.00 (263.6' RT)																15
	SHEET TOTAL	1	438	192	2		115	448	4	175		1	101	738	1		
	PROJECT TOTAL	1	438	192	2		115	448	4	175		1	101	738	1		

GENERAL NOTES:

1. SEE COSV STANDARD PLAN NO. U-101 FOR UTILITY LOCATION STANDARDS.
2. SEE COSV STANDARD PLAN NO. U-102 FOR FIRE DEPARTMENT HYDRANT REQUIREMENTS.
3. SEE UT5 FOR STEEL CASING DETAIL.
4. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 101 TYPICAL WATER MAIN TRENCH.
5. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 102 THRUST RETRAINT, BOLT SEQUENCE, AND TORQUE.
6. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 202 AND NO. 302 FOR 2" SERVICE CONNECTION, SERVICE PIPE, AND METER ASSEMBLY.
7. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 103 FOR FIRE HYDRANT ASSEMBLY.
8. SERVICE CONNECTION 2 INCH DIAMETER SHALL INCLUDE SERVICE PIPE EXTENDING FROM METER TO RESTROOM FACILITY.
9. REMOVE AND ROTATE ECCENTRIC PRECAST CONE SO MANHOLE COVER IS NOT IN CURBLINE. ADJUST RING AND COVER TO FINISHED GRADE. REMOVE AND RECONSTRUCT LADDER INSIDE MANHOLE.
10. CONTRACTOR TO VERIFY EXISTING SEWER STUBS LOCATION AND EXTEND THEM AT 1% TO MATCH EXISTING SLOPE
11. SEE SPOKANE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT STANDARD PLAN U-24
12. SEE SPOKANE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT STANDARD PLAN U-18 PRESSURE SIDE SEWER STUB CONNECTION TO GRAVITY SEWER
13. REFER TO SPECIAL PROVISIONS.
14. INDIVIDUAL LOCATIONS AND TOTAL NUMBER OF CAMERAS SPECIFIED HERE. ALL ARE INCLUDED IN LUMP SUM BID ITEM.
15. SEE EL5 FOR EV CHARGING SYSTEM DETAIL.

DESIGNED BY	B KIRKMAN					REGION NO.	STATE
ENTERED BY	E MCGUIRE					10	WASH
CHECKED BY	J FREY					**JOB NUMBER**	
PROJ. ENGR.	S MARSHALL						
REGION ADM.						**CONTRACT NO.**	
		DATE	**DATE**	**REVISION**	**BY**		

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - UTILITY

SNUT 1

SHEET 82 **OF** 218 **SHEETS**

STRUCTURE NOTES - UTILITY

NOTE:
THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE.

THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	EV CHARGING SYSTEM	TRAILHEAD CCTV SYSTEM		ADJUST EXISTING WATER VALVE	ADJUST GAS VALVE	ADJUST METER BOX										SEE GENERAL NOTES
		L.S.	L.S.		EACH	EACH	EACH										
UT1-1	E 317+71.50 (20.3' LT) TO E 317+70.88 (29.5' LT)																4,5
UT1-2	E 317+70.88 (29.5' LT) TO E 318+47.46 (29.7' LT)																4,5
UT1-3	E 318+47.46 (29.7' LT) TO P 229+00.92 (154.7' RT)																4,5
UT1-4	P 229+00.92 (154.7' RT) TO P 228+98.36 (160.6' RT)																4,5
UT1-5	P 228+98.36 (160.6' RT) TO P 228+98.45 (246.2' RT)																4,5
UT1-6	TR 318+84.81 (56.5' LT) TO TR 320+86.49 (150.3' RT)																3
UT1-7	P 228+98.43 (226.1' RT)																6,8
UT1-8	P 228+98.45 (237.5' RT)																6,8
UT1-9	P 320+95.37 (246.1' RT)																1,2,7
UT2-1	TR 120+34.69 (218.3' LT) TO TR 120+68.22 (107.6' LT)																12
UT2-2	TR 120+68.22 (107.6' LT) TO TR 120+88.57 (62.1' LT)																12
UT2-3	TR 121+11.18 (47.1' RT) TO TR 121+68.27 (147.4' RT)																12
UT2-4	TR 122+90.88 (182.1' RT) TO TR 122+98.72 (160.5' RT)																12,13
UT2-5	TR WB 500+11.75 (28.0' LT) TO TR EB 400+21.57 (24.4' RT)																11
UT2-6	TR 120+88.57 (62.1' LT) TO TR 121+11.20 (47.1' RT)																12
UT2-7	TR 121+68.27 (147.4' RT) TO TR 122+90.88 (182.1' RT)																
UT3-1	E 309+72.38 (32.7' RT) TO E 309+72.29 (37.0' RT)																10
UT3-2	E 311+62.77 (39.7' RT) TO E 311+64.42 (42.2' RT)																10
UT3-3	E 311+85.67 (8.5' RT) TO E 312+97.50 (40.4' LT)																10
UT3-4	E 311+44.81 (31.6' LT) TO E 311+45.06 (43.1' LT)																10
UT3-5	E 309+68.40 (14.4' LT) TO E 309+69.02 (43.0' LT)																10
UT3-6	E 311+51.26 (22.1' RT)																9
UT3-7	E 311+62.59 (3.8' RT)				1												
UT3-8	E 311+63.77 (11.3' LT)				1												
UT3-9	E 309+90.83 (7.8' LT)					1											
UT3-10	311+87.28 (8.3' LT)					1											
UT3-11	311+79.55 (47.1' LT)						1										
UT3-12	E 311+69.55 (47.1' LT)						1										
UT3-13	308+85.94 (25.6' LT)						1										
UT4-1a	TR 121+59.10 (245.8' RT)		1														14
UT4-1b	TR 121+76.80 (154.4' RT)		1														14
UT4-1c	TR 122+95.12 (148.7' RT)		1														14
UT4-2	TR 122+38.00 (263.6' RT)	1															15
	SHEET TOTAL	1	3		2	2	3										
	PROJECT TOTAL	1	3		2	2	3										

GENERAL NOTES:

1. SEE COSV STANDARD PLAN NO. U-101 FOR UTILITY LOCATION STANDARDS.
2. SEE COSV STANDARD PLAN NO. U-102 FOR FIRE DEPARTMENT HYDRANT REQUIREMENTS.
3. SEE UT5 FOR STEEL CASING DETAIL.
4. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 101 TYPICAL WATER MAIN TRENCH.
5. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 102 THRUST RETRAINT, BOLT SEQUENCE, AND TORQUE.
6. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 202 AND NO. 302 FOR 2" SERVICE CONNECTION, SERVICE PIPE, AND METER ASSEMBLY.
7. SEE IRVIN WATER DISTRICT NO. 6 DETAIL DRAWING NO. 103 FOR FIRE HYDRANT ASSEMBLY.
8. SERVICE CONNECTION 2 INCH DIAMETER SHALL INCLUDE SERVICE PIPE EXTENDING FROM METER TO RESTROOM FACILITY.
9. REMOVE AND ROTATE ECCENTRIC PRECAST CONE SO MANHOLE COVER IS NOT IN CURBLINE. ADJUST RING AND COVER TO FINISHED GRADE. REMOVE AND RECONSTRUCT LADDER INSIDE MANHOLE.
10. CONTRACTOR TO VERIFY EXISTING SEWER STUBS LOCATION AND EXTEND THEM AT 1% TO MATCH EXISTING SLOPE
11. SEE SPOKANE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT STANDARD PLAN U-24
12. SEE SPOKANE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT STANDARD PLAN U-18 PRESSURE SIDE SEWER STUB CONNECTION TO GRAVITY SEWER
13. REFER TO SPECIAL PROVISIONS.
14. INDIVIDUAL LOCATIONS AND TOTAL NUMBER OF CAMERAS SPECIFIED HERE. ALL ARE INCLUDED IN LUMP SUM BID ITEM.
15. SEE EL5 FOR EV CHARGING SYSTEM DETAIL.

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S MARSHALL				
REGION ADM.					
		DATE	**DATE**	**REVISION**	**BY**

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

STRUCTURE NOTES - UTILITY

SNUT 2

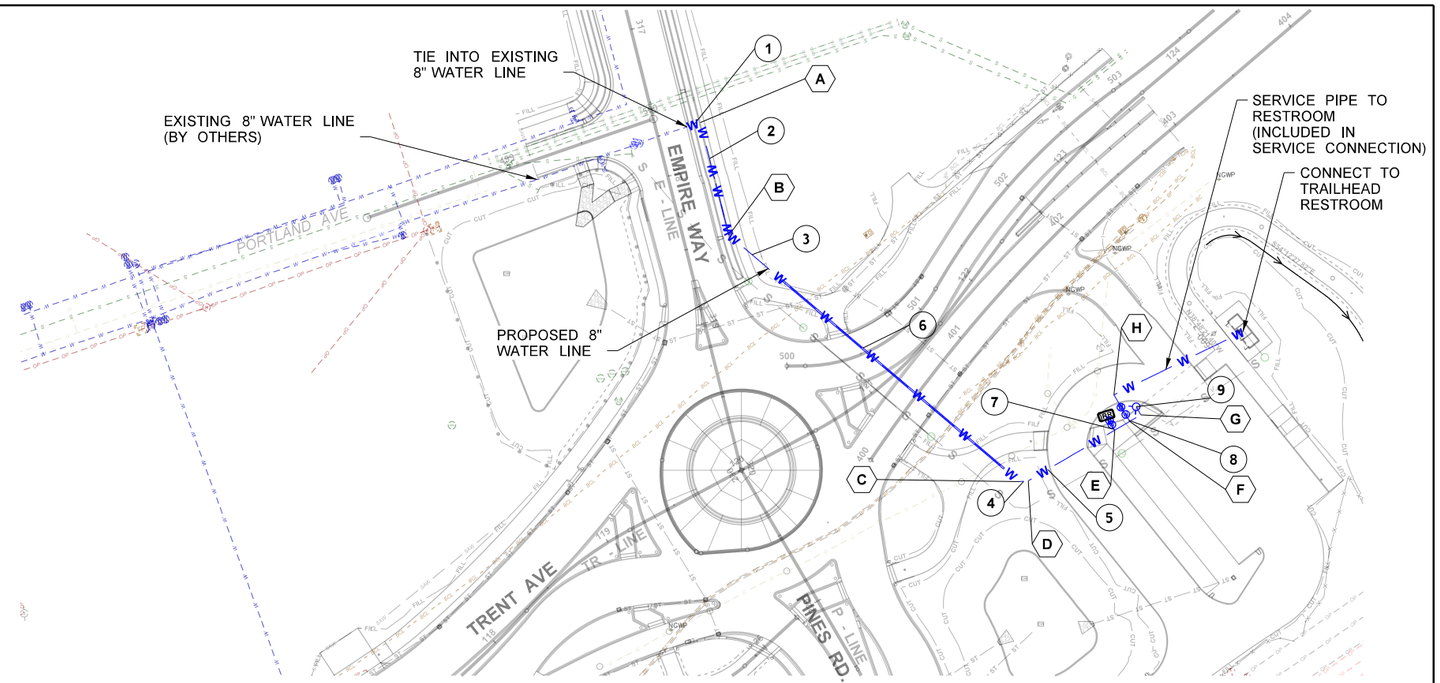
SHEET 83 **OF** 218 **SHEETS**

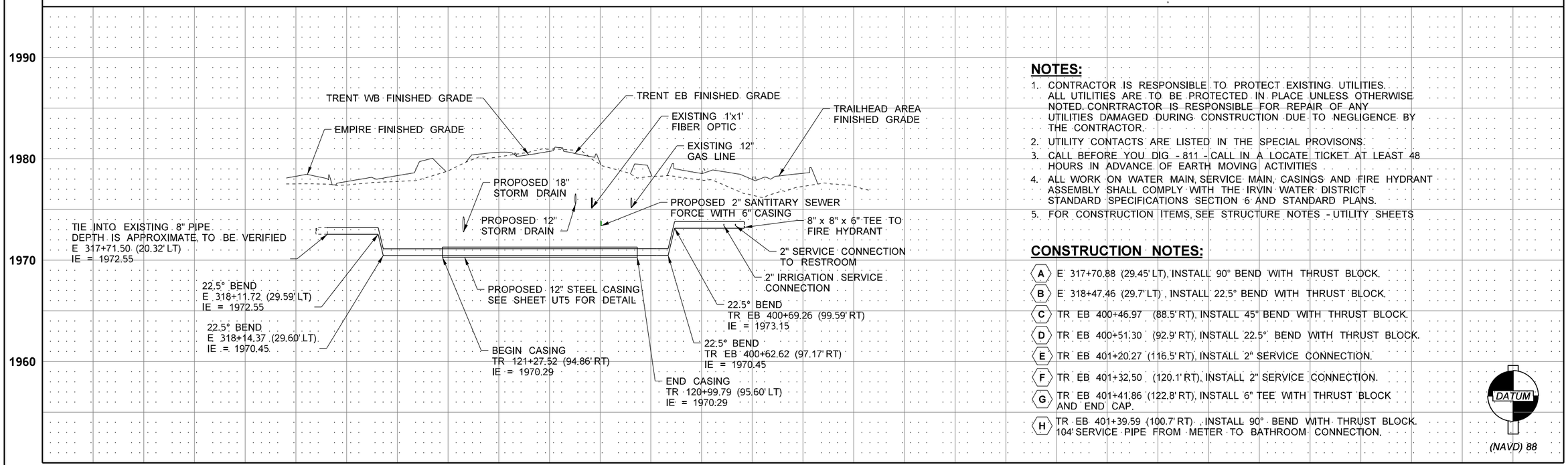
LEGEND

RIGHT OF WAY BOUNDARY	EXISTING AVISTA GAS LINE
EXISTING AVISTA OVERHEAD POWER	EXISTING PHILLIPS 66 PETROLEUM PIPELINE
EXISTING AVISTA BURIED POWER	EXISTING GAS METER
EXISTING POWER POLE	EXISTING GAS VALVE
EXISTING DOWN GUY ANCHOR	EXISTING IRVIN WATER DISTRICT - 6 WATER LINE
EXISTING ELECTRICAL BOX	EXISTING WATER VALVE
EXISTING POWER BOX	EXISTING WATER METER
EXISTING OVERHEAD TELECOM	EXISTING FIRE HYDRANT
EXISTING UNDERGROUND TELECOM	EXISTING SPOKANE COUNTY SEWER LINE
EXISTING UNDERGROUND FIBER OPTIC	EXISTING SEWER MANHOLE
EXISTING TELEPHONE PEDESTAL	EXISTING SEWER CLEANOUT
EXISTING TELEPHONE BOX	PROPOSED SEWER CLEANOUT
PROPOSED WATER LINE	EXISTING SEWER STUB
PROPOSED SEWER LINE	PROPOSED WATER VALVE
ELECTRICAL SERVICE CABINET	PROPOSED WATER METER
TYPE 2 JUNCTION BOX	PROPOSED FIRE HYDRANT
CCTV CAMERA	PROPOSED IRRIGATION SYSTEM
STRUCTURE TAB NOTE	PROPOSED SEWER STUB
	CONSTRUCTION NOTE
	PROPOSED FLUSHING CONNECTION

N

0 50 100
SCALE IN FEET





NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROTECT EXISTING UTILITIES. ALL UTILITIES ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED. CONRTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY UTILITIES DAMAGED DURING CONSTRUCTION DUE TO NEGLIGENCE BY THE CONTRACTOR.
2. UTILITY CONTACTS ARE LISTED IN THE SPECIAL PROVISONS.
3. CALL BEFORE YOU DIG - 811 - CALL IN A LOCATE TICKET AT LEAST 48 HOURS IN ADVANCE OF EARTH MOVING ACTIVITIES
4. ALL WORK ON WATER MAIN, SERVICE MAIN, CASINGS AND FIRE HYDRANT ASSEMBLY SHALL COMPLY WITH THE IRVIN WATER DISTRICT STANDARD SPECIFICATIONS SECTION 6 AND STANDARD PLANS.
5. FOR CONSTRUCTION ITEMS, SEE STRUCTURE NOTES - UTILITY SHEETS

CONSTRUCTION NOTES:

- (A) E 317+70.88 (29.45' LT), INSTALL 90° BEND WITH THRUST BLOCK.
- (B) E 318+47.46 (29.7' LT) , INSTALL 22.5° BEND WITH THRUST BLOCK.
- (C) TR EB 400+46.97 (88.5' RT), INSTALL 45° BEND WITH THRUST BLOCK.
- (D) TR EB 400+51.30 (92.9' RT), INSTALL 22.5° BEND WITH THRUST BLOCK.
- (E) TR EB 401+20.27 (116.5' RT), INSTALL 2" SERVICE CONNECTION.
- (F) TR EB 401+32.50 (120.1' RT), INSTALL 2" SERVICE CONNECTION.
- (G) TR EB 401+41.86 (122.8' RT), INSTALL 6" TEE WITH THRUST BLOCK AND END CAP.
- (H) TR EB 401+39.59 (100.7' RT) , INSTALL 90° BEND WITH THRUST BLOCK. 104' SERVICE PIPE FROM METER TO BATHROOM CONNECTION.

DATUM
(NAVD) 88

FILE NAME	c:\pwworking\west01\d2431240\PINES_PS_UT_WA_001.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	10:45:24 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

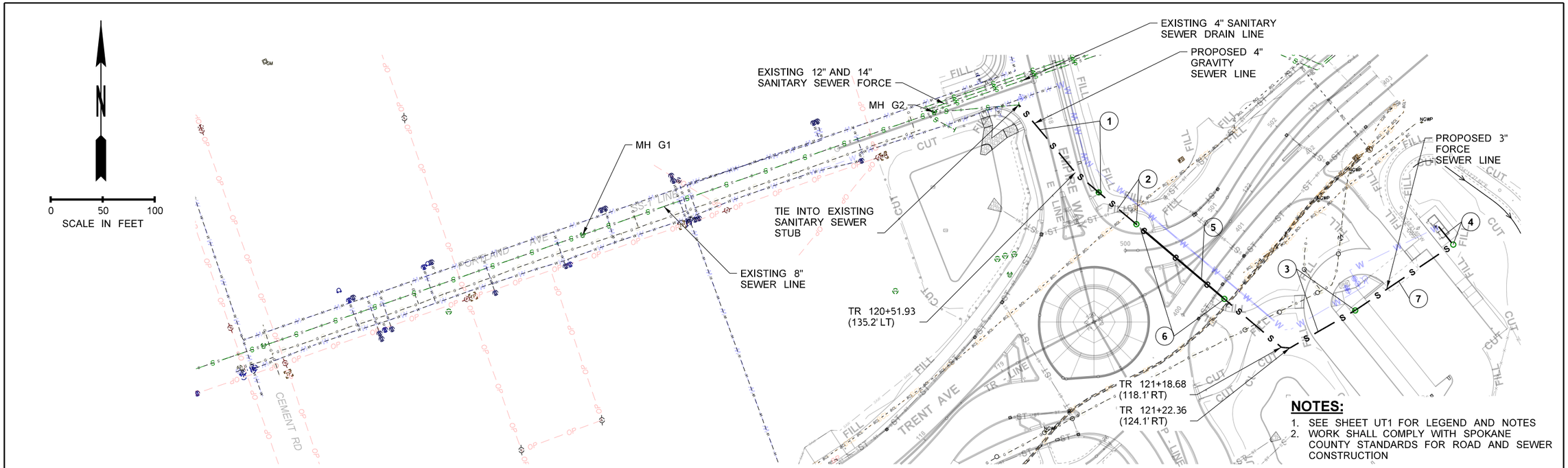
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

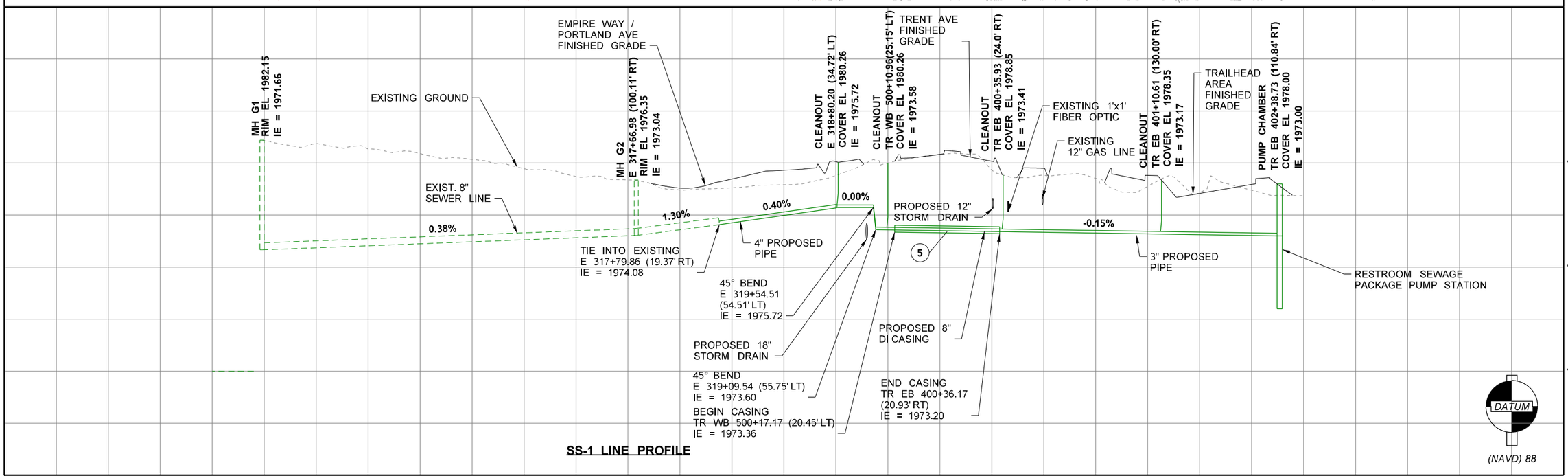
UTILITY PLAN

Plot 1
PLAN REF NO UT1
SHEET 84 OF 218 SHEETS



NOTES:

1. SEE SHEET UT1 FOR LEGEND AND NOTES
2. WORK SHALL COMPLY WITH SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION



SS-1 LINE PROFILE

FILE NAME	c:\pwworking\west01\d2431240\PINES_PS_UT_SS_001.dgn						
TIME	10:45:50 AM						
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

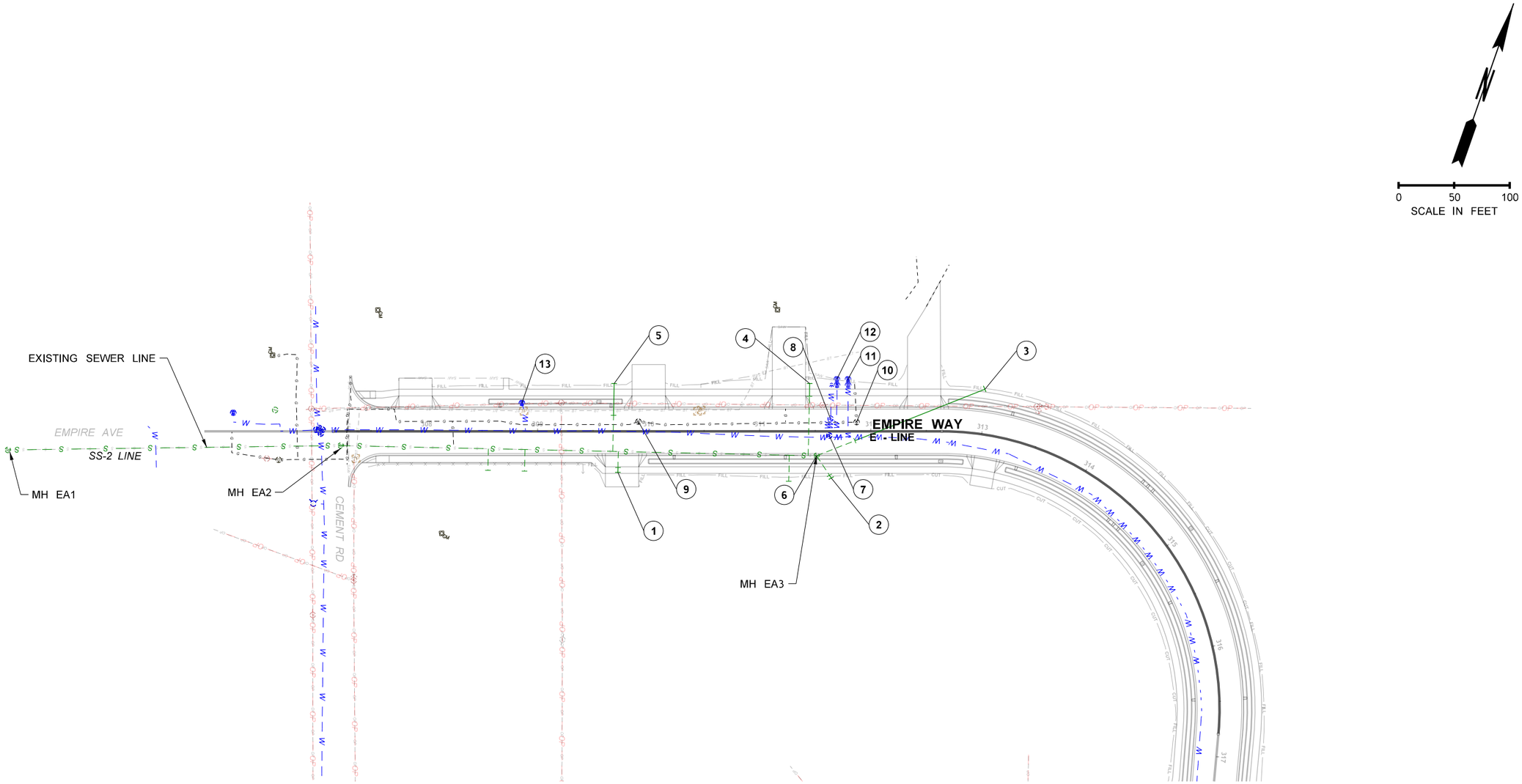
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

UTILITY PLAN

Plot 1
PLAN REF NO
UT2
SHEET 85 OF 218 SHEETS



NOTES:

1. SEE SHEET UT1 FOR LEGEND AND NOTES
2. WORK SHALL COMPLY WITH SPOKANE COUNTY STANDARDS FOR ROAD AND SEWER CONSTRUCTION

FILE NAME	c:\pwworking\west01\d2431240\PINES_PS_UT_SS_002.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	10:46:16 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
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DATE
P.E. STAMP BOX

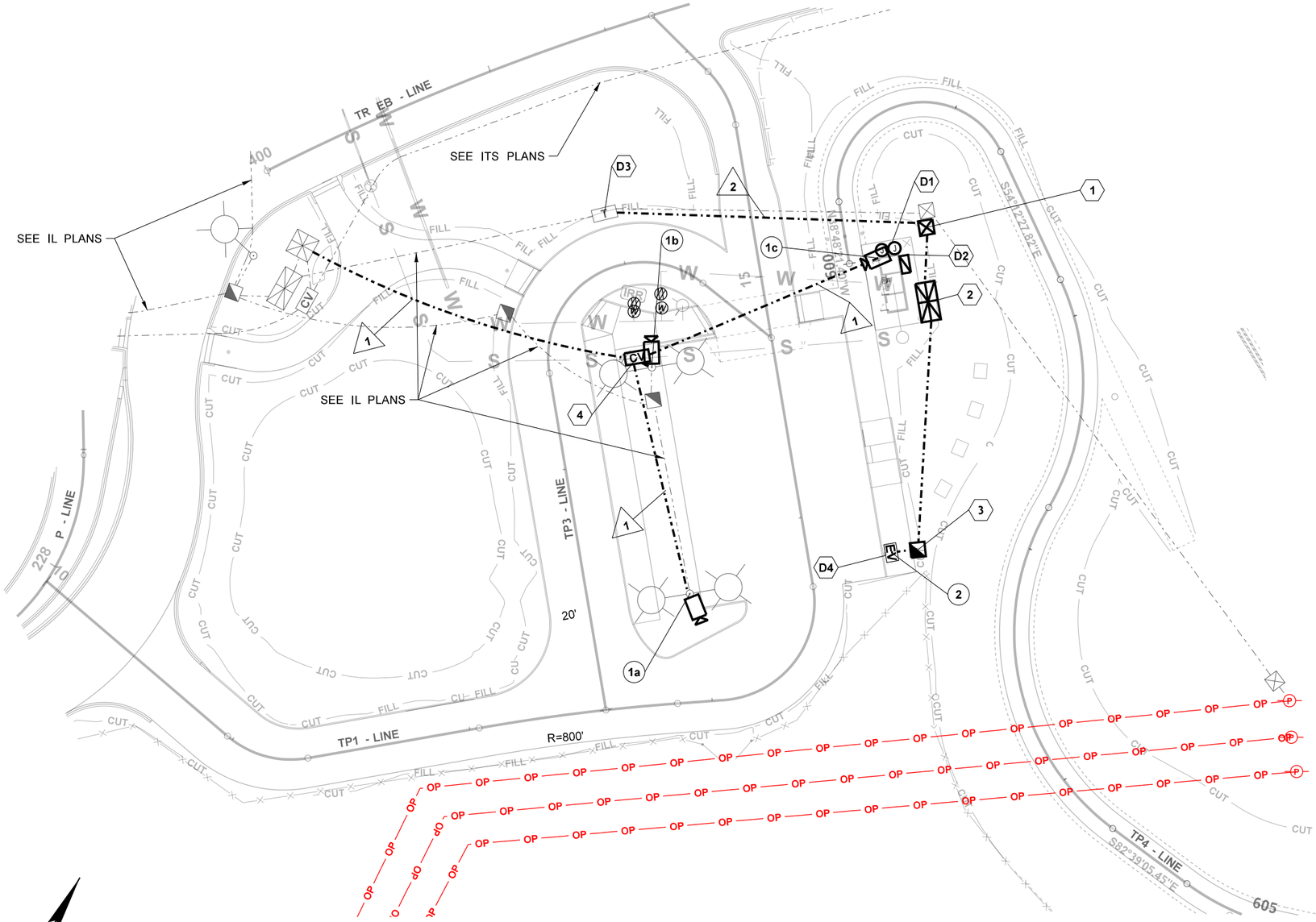
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

UTILITY PLAN

Plot 1
PLAN REF NO
UT3
SHEET 86 OF 218 SHEETS



NOTES:

1. MOUNT CCTV CAMERAS #1 AND #2 ON PROPOSED LIGHT POLES. SEE IL5 FOR LIGHT POLE LOCATIONS.
2. MOUNT CCTV CAMERA #3 ON RESTROOM EAVE.
3. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
4. ITS CONDUIT UNDER ROADWAY SHALL BE SCHEDULE 80 PVC, ALL OTHER ITS CONDUIT SHALL BE SCHEDULE 40 PVC. ITS CONDUITS SHALL BE 4" DIAMETER WITH INNERDUCT UNLESS SPECIFIED OTHERWISE. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS. ALL PROPOSED SPARE CONDUITS SHALL INCLUDE A TRACER WIRE AND A MULE TAPE.
5. SEE ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
6. ALL UNDERGROUND CONDUIT TRENCH INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE TO WSDOT STD PLAN J-5.50.
7. CONTRACTOR TO FIELD COORDINATE FINAL ROUTING OF ALL CONDUIT TRENCH INSTALLATIONS UNDER PATHWAYS OR ROADWAYS. ALL CONDUIT TRENCHES UNDER PATHWAYS AND ROADWAYS SHALL BE ENCASED IN CONCRETE RATED FOR THE EXPECTED LOAD. CONTRACTOR MUST PROVIDE CUTTING AND PATCHING AS WELL AS FULL RESTORATION OF EXISTING PATHWAY OR ROADWAY.

CONSTRUCTION NOTES:

1. TR 123+24.75 (142.3' RT), PROVIDE NEW JUNCTION BOX TYPE 1. SEE WSDOT STD PLAN J-40.10-04.
2. TR 123+16.36 (160.9' RT), PROVIDE MODIFIED TYPE B SERVICE CABINET, EV CHARGER SUBMETER, AND EQUIPMENT PEDESTAL. CONTRACTOR TO PROVIDE ELECTRICAL PEDESTAL IN ACCORDANCE WITH WSDOT STD. PLAN J-10.10-04 AND SHEET EL2 DETAILS 1 AND 2. REFER TO SHEET 2 OF THE STD PLAN FOR STRUT MOUNT STRUCTURE.
3. TR 122+56.86 (266.7' RT), PROVIDE NEW JUNCTION BOX TYPE 2. SEE WSDOT STD PLAN J-40.10-04.
4. TR 121+72.91 (148.4' RT), PROVIDE NEW PULL BOX. SEE WSDOT STD. PLAN J-90.10.

D1. PROVIDE NEW EXPLOSION PROOF JUNCTION BOXES MOUNTED TO THE WALL OF THE RESTROOM. SEE EL3 DETAIL 1.

D2. PROVIDE NEW CONTROL CP-1 PANEL MOUNTED TO THE WALL OF RESTROOM. SEE EL3 DETAIL 2.

D3. PROVIDE POWER CONNECTION FOR NEW SERVICE CABINET ON THIS SHEET. NEW PAD MOUNTED TRANSFORMER TO BE INSTALLED BY OTHERS.

D4. PROVIDE NEW NON-NETWORKING DUAL PORT EV CHARGER SEE EL5 FOR EV CHARGER DETAILS.

WIRING SCHEDULE

NO.	CONDUIT SIZE	INNERDUCT	CONDUCTORS/ CABLES	COMMENTS
1	4"	A	1-48 SMFO	VIDEO/DATA DISTRIBUTION
		B	1-Cat6 POE	VIDEO/DATA/POWER
		C	EMPTY	SPARE
		D	EMPTY	SPARE
2	SEE SHEET EL1 ONE-LINES FOR CONDUIT/WIRE SIZES AND QUANTITIES.			

LEGEND

EXISTING	NEW	
CV	CV	FIBER OPTIC PULL BOX
		PTZ CAMERA
		ITS CONDUIT
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		ELECTRICAL SERVICE CABINET

0 25 50
SCALE IN FEET

FILE NAME	c:\pwworking\west01\d2431240\PINES_PS_UT_TRAILHEAD.dgn
TIME	2:10:24 PM
DATE	6/3/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO. | LOCATION NO.

TERRI M. STULL, STATE OF WASHINGTON, 31416, REGISTERED PROFESSIONAL ENGINEER
06/05/2025
DATE
P.E. STAMP BOX

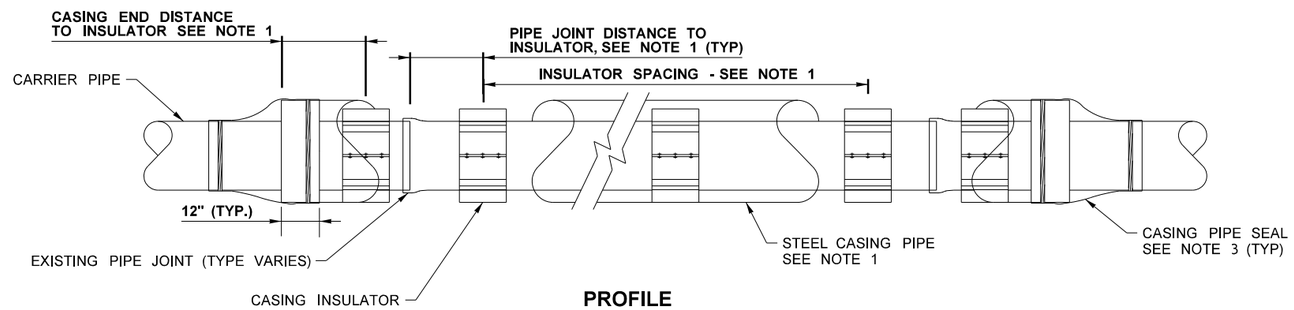
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

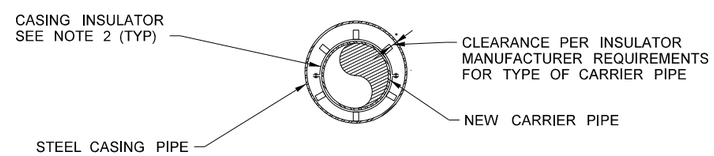
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

UTILITY PLAN

Plot 1
PLAN REF NO UT4
SHEET 87 OF 218 SHEETS



PROFILE



SECTION

NOTES:

1. STEEL CASING SHALL BE IN CONFORMANCE WITH ASTM A1097 AND WELDED AT JOINTS TO PREVENT LEAKS. SEE SPECIAL PROVISIONS SECTION 7-09 FOR ADDITIONAL INFORMATION.
2. CASING INSULATORS SHALL BE PRE-FABRICATED. INSULATORS SHALL BE SPACED AND POSITIONED PER THE MANUFACTURERS REQUIREMENTS. THE INSULATOR RUNNERS SHALL BE POSITIONED PER THE MANUFACTURES REQUIREMENTS. INSULATOR RUNNER HEIGHT SHALL EXTEND BEYOND THE O.D. OF THE CARRIER PIPE BELL OR JOINT AND MINIMUM OF 1 INCH. MINIMUM CLEARANCE BETWEEN THE RUNNERS AT THE CROWN OF THE CARRIER PIPE AND THE INSIDE CROWN OF THE CASING PIPE SHALL BE 1" TO 2" INCHES.
3. SYNTHETIC RUBBER CASING SEALS SHALL BE USED AT BOTH ENDS OF THE CASING PIPE. THE CASING SEAL SHALL BE SECURED TO BOTH THE CASING PIPE AND THE CARRIER PIPE WITH STAINLESS STEEL BANDS. CASING SEALS SHALL BE "PULL ON" OR "WRAP AROUND" TYPE.
4. CARRIER PIPE SHALL BE INSTALLED PER THE MANUFACTURES REQUIREMENTS AND 7-09 PROVISIONS. PRIOR TO SEALING ENDS OF CASING PIPE, CARRIER PIPE SHALL BE PRESSURE TESTED PER WSDOT REQUIREMENTS.

STEEL CASING DETAIL

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TIME	10:46:50 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

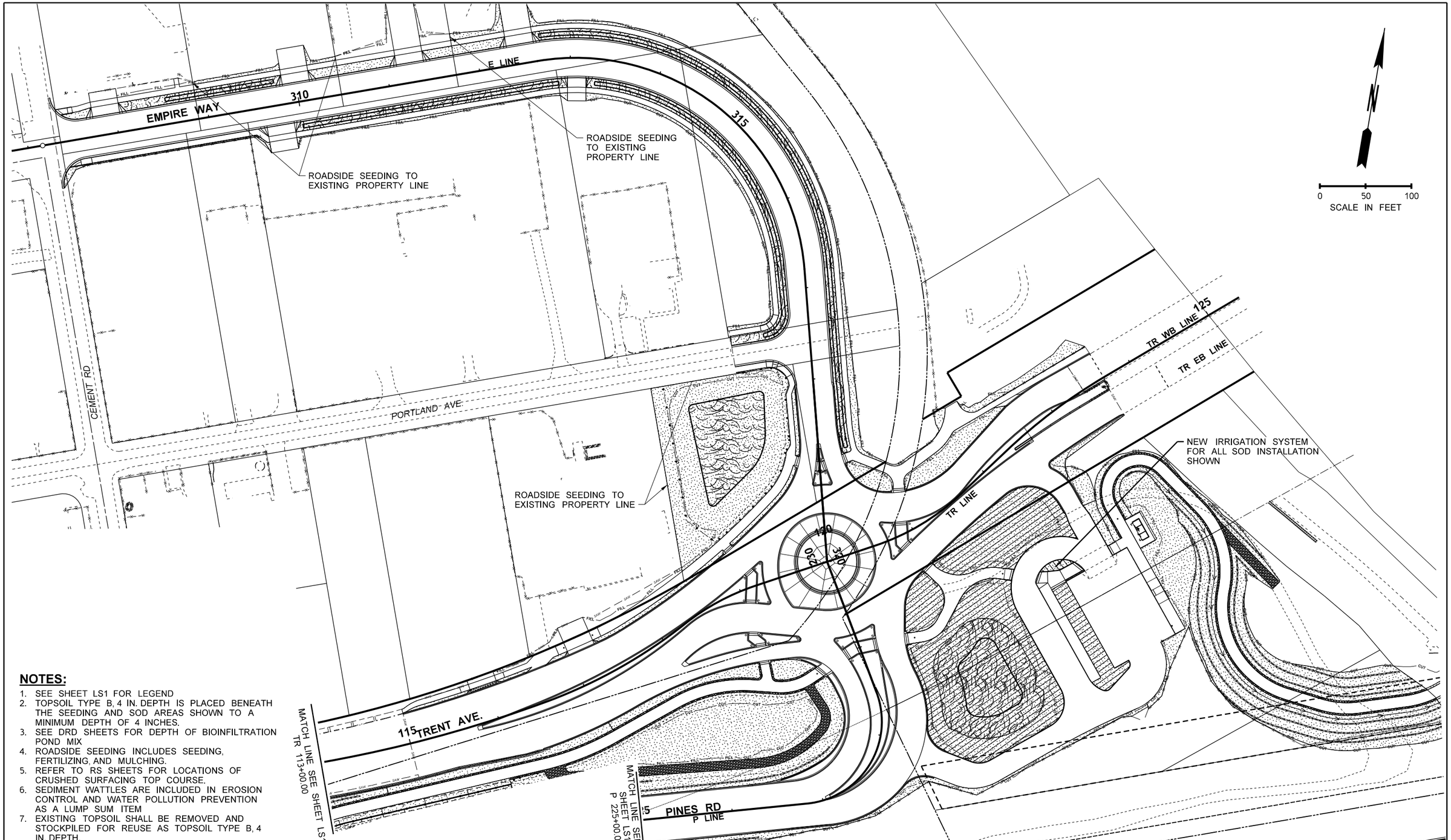
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

UTILITY PLAN

Plot 1
PLAN REF NO UT5
SHEET 88 OF 218 SHEETS



NOTES:

1. SEE SHEET LS1 FOR LEGEND
2. TOPSOIL TYPE B, 4 IN. DEPTH IS PLACED BENEATH THE SEEDING AND SOD AREAS SHOWN TO A MINIMUM DEPTH OF 4 INCHES.
3. SEE DRD SHEETS FOR DEPTH OF BIOINFILTRATION POND MIX
4. ROADSIDE SEEDING INCLUDES SEEDING, FERTILIZING, AND MULCHING.
5. REFER TO RS SHEETS FOR LOCATIONS OF CRUSHED SURFACING TOP COURSE.
6. SEDIMENT WATTLES ARE INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LUMP SUM ITEM
7. EXISTING TOPSOIL SHALL BE REMOVED AND STOCKPILED FOR REUSE AS TOPSOIL TYPE B, 4 IN. DEPTH.

FILE NAME	c:\pwworking\west01\d2430806\PINES_PS_LS_002.dgn
TIME	10:47:13 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

CITY OF Spokane Valley

HDR

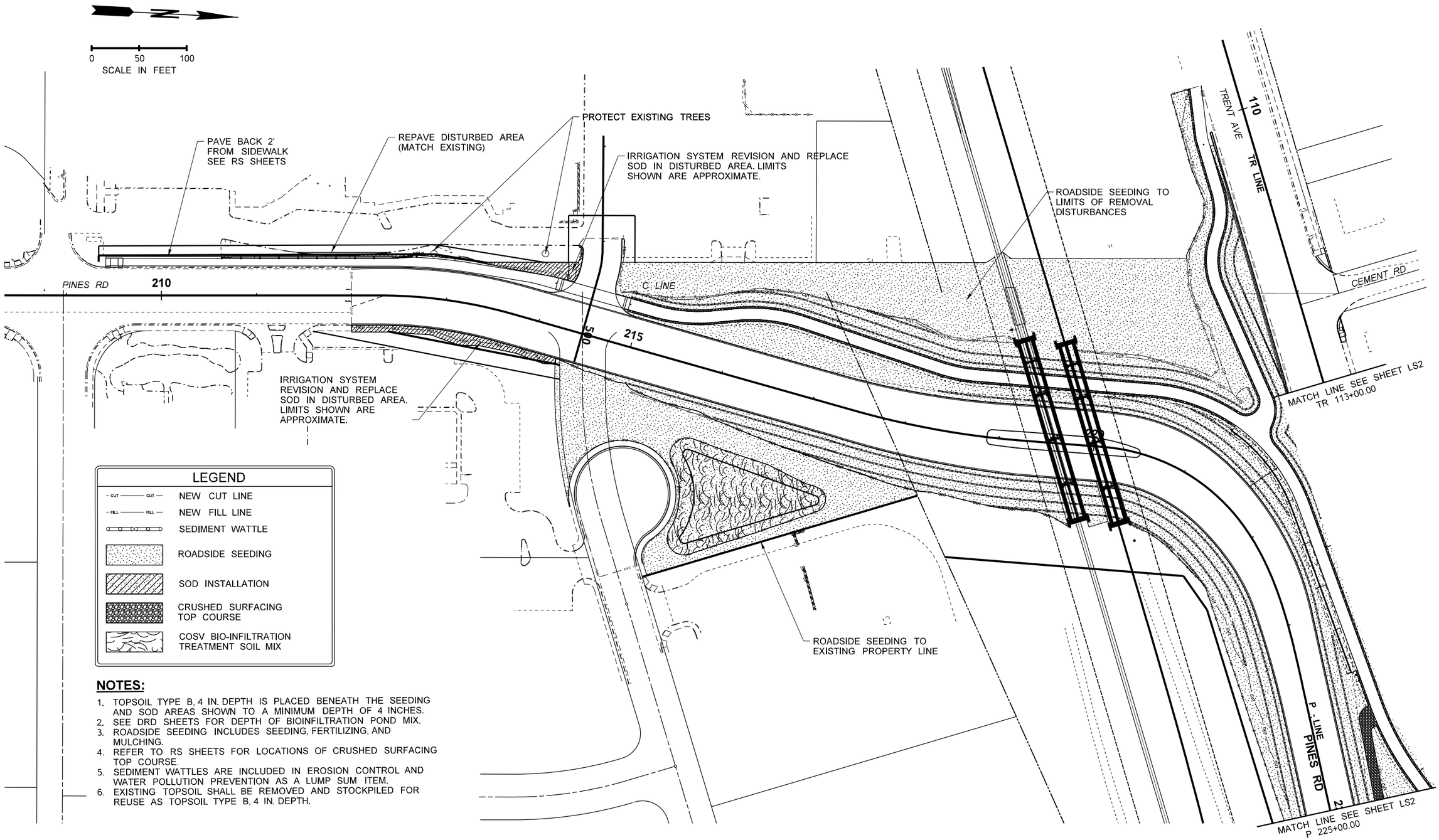
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADSIDE RESTORATION PLAN

Plot 1

PLAN REF NO
LS2

SHEET 89 OF 218 SHEETS



LEGEND

- NEW CUT LINE
- NEW FILL LINE
- SEDIMENT WATTLE
- ROADSIDE SEEDING
- SOD INSTALLATION
- CRUSHED SURFACING TOP COURSE
- COSV BIO-INFILTRATION TREATMENT SOIL MIX

NOTES:

1. TOPSOIL TYPE B, 4 IN. DEPTH IS PLACED BENEATH THE SEEDING AND SOD AREAS SHOWN TO A MINIMUM DEPTH OF 4 INCHES.
2. SEE DRD SHEETS FOR DEPTH OF BIOINFILTRATION POND MIX.
3. ROADSIDE SEEDING INCLUDES SEEDING, FERTILIZING, AND MULCHING.
4. REFER TO RS SHEETS FOR LOCATIONS OF CRUSHED SURFACING TOP COURSE.
5. SEDIMENT WATTLES ARE INCLUDED IN EROSION CONTROL AND WATER POLLUTION PREVENTION AS A LUMP SUM ITEM.
6. EXISTING TOPSOIL SHALL BE REMOVED AND STOCKPILED FOR REUSE AS TOPSOIL TYPE B, 4 IN. DEPTH.

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TIME	10:47:35 AM			
DATE	5/29/2025			
PLOTTED BY	EMCGUIRE			
DESIGNED BY	B KIRKMAN			
ENTERED BY	E MCGUIRE			
CHECKED BY	J FREY			
PROJ. ENGR.	S MARSHALL			
REGIONAL ADM.		REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

GREGORY JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ROADSIDE RESTORATION PLAN

Plot 1
PLAN REF NO
LS1
SHEET 90 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	TEXTURED AND PIGMENTED CEMENT CONCRETE TRUCK APRON	TEXTURED AND PIGEMENTED CEMENT CONCRETE TRAFFIC ISLAND	ROUNDABOUT SPLITTER ISLAND NOSING CURB		ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER	CEMENT CONC TRAFFIC CURB	COSV CURB AND GUTTER TYPE B		ROUNDABOUT TRUCK APRON CEM. CONC. CURB AND GUTTER	ROUNDABOUT CENTRAL ISLAND CEMENT CONCRETE CURB	CEMENT CONC. PEDESTRIAN CURB		COSV CURB TYPE A			SEE GENERAL NOTES
		S.Y.	S.Y.	EACH		L.F.	L.F.	L.F.		L.F.	L.F.	L.F.		L.F.			
PV1-1	TR 110+13.97 (38.0' RT) TO TR 116+35.12 (49.7' RT)																20
PV1-2	TR 115+00.00 (33.5' LT) TO E 318+10.00 (19.9' RT)					525											2
PV1-3	TR 110+23.97 (50.0' RT)																18
PV1-4	TR 111+63.91 (40.8' LT) TO TR 111+92.13 (42.4' LT)											27					6,8,11
PV1-5	TR 112+35.26 (40.1' LT) TO TR 112+65.29 (29.8' LT)											22					6,8,11
PV1-6	TR 109+93.39 (49.1' RT) TO SP 17+72.38 (34.1 LT)																10
PV1-7	TR 110+13.97 (39.0' RT) TO TR 110+35.47 (39.0' RT)																
PV2-1	TR 116+35.18 (47.7' RT) TO TR 119+21.36 (85.7' RT)					272											2
PV2-2	TR 116+93.83 (38.2' LT) TO TR 117+36.84 (36.4' LT)																17,23
PV2-3	TR EB 401+99.15 (72.5' RT) TO TR EB 402+94.53 (14.4' RT)					156											2
PV2-4	TR EB 402+01.83 (72.7' RT TO TR EB 402+94.52 (16.2' RT)																9
PV2-5	TR WB 501+82.24 (33.0' LT) TO TR WB 503+04.70 (27.0' LT)																10
PV2-6	P 226+20.00 (25.0' RT) TO TR EB 401+77.76 (70.2' RT)					628											2
PV2-7	TR 115+74.56 (36.1' LT) TO TR 116+15.77 (37.1' LT)																17,23
PV2-8	TR 116+97.22 (47.1' LT) TO TR 117+34.42 (45.6' LT)																18
PV2-9	TP3 51+68.43 (27.16' LT)																18
PV2-10	P 228+88.99 (60.0' RT)																16
PV2-11	P 228+89.52 (53.4' LT)																18
PV2-12	E 317+87.38 (83.0' RT) TO PA 498+33.77 (19.8' RT)																14
PV2-13	TR 122+42.1' RT) TO TR 122+63.66 (8.1' RT)																
PV3-1	TR 123+66.80 (3.3' RT) AND TR 123+65.54 (14.4' RT)																
PV4-1	P 212+00.00 (30.9' RT) TO P 226+25.03 (25.8' RT)							1379									3
PV4-2	P 212+00.00 (28.7' LT) TO P 213+97.22 (32.0' LT)							206									3
PV4-3	P 214+97.28 (32.0' LT) TO P226+25.03 (25.8' LT)							1164									3
PV4-4	P 214+90.59 (175.2' RT) TO P 215+68.27 (219.8' RT)							256									3
PV4-5	P 209+41.35 (29.6' LT) TO P 209+59.35 (29.5' LT)											18					6,8,11
PV4-6	P 214+24.49 (49.5' LT) TO P 214+14.54 (37.5' LT)																6,8
PV4-7	P 214+70.01 (49.5' LT) TO P 214+79.97 (37.5' LT)																6,8
PV4-8	P 210+57.98 (39.3' LT) TO P 212+66.54 (42.4' LT)																14
PV4-9	P 214+06.65 (43.5' LT)																18
PV4-10	P 214+87.85 (43.5' LT)																18
PV4-11	P 215+71.64 (217.6' RT) TO P 214+87.11 (179.2' RT)																7
PV4-12	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)													95			
PV5-1	P 218+23.24 (57.5'LT) to P 224+00.54 (63.9'LT)																14
PV5-2	P 214+75.45 (53.7' LT) TO P 219+07.39 (101.7' LT)																10
PV5-3	P 215+12.26 (45.6' RT) TO P 219+80.09 (86.2' RT)																10
PV5-4	P 220+63.96 (73.8' RT) TO TP1 12+94.80 (17.5' RT)																10
	SHEET TOTAL					1581		3005				67		95			

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S. MARSHALL					
REGION ADM.						
		DATE	**DATE**	**REVISION**	**BY**	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 1

SHEET 91 **OF** 218 **SHEETS**

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	BEAM GUARDRAIL TRANSITION SECTION TYPE 23	BEAM GUARDRAIL ANCHOR TYPE 11	BEAM GUARDRAIL TYPE 31		PEDESTRIAN HANDRAIL	BOLLARD TYPE 1	BOLLARD TYPE 2	CEMENT CONC. SIDEWALK		HIGH VOLUME CONCRETE APPROACH	CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3	TYPE II CONCRETE APPROACH SEPARATED SIDEWALK		CEMENT CONC. CURB RAMP TYPE BIKE RAMP	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	EACH	EACH	S.Y.		S.Y.	S.Y.	S.Y.		EACH	EACH	
PV1-1	TR 110+13.97 (38.0' RT) TO TR 116+35.12 (49.7' RT)																20
PV1-2	TR 115+00.00 (33.5' LT) TO E 318+10.00 (19.9' RT)																2
PV1-3	TR 110+23.97 (50.0' RT)						1										18
PV1-4	TR 111+63.91 (40.8' LT) TO TR 111+92.13 (42.4' LT)															1	6,8,11
PV1-5	TR 112+35.26 (40.1' LT) TO TR 112+65.29 (29.8' LT)															1	6,8,11
PV1-6	TR 109+93.39 (49.1' RT) TO SP 17+72.38 (34.1 LT)																10
PV1-7	TR 110+13.97 (39.0' RT) TO TR 110+35.47 (39.0' RT)																
PV2-1	TR 116+35.18 (47.7' RT) TO TR 119+21.36 (85.7' RT)																2
PV2-2	TR 116+93.83 (38.2' LT) TO TR 117+36.84 (36.4' LT)											49					17,23
PV2-3	TR EB 401+99.15 (72.5' RT) TO TR EB 402+94.53 (14.4' RT)																2
PV2-4	TR EB 402+01.83 (72.7' RT TO TR EB 402+94.52 (16.2' RT)	1	1	71													9
PV2-5	TR WB 501+82.24 (33.0' LT) TO TR WB 503+04.70 (27.0' LT)																10
PV2-6	P 226+20.00 (25.0' RT) TO TR EB 401+77.76 (70.2' RT)																2
PV2-7	TR 115+74.56 (36.1' LT) TO TR 116+15.77 (37.1' LT)											32					17,23
PV2-8	TR 116+97.22 (47.1' LT) TO TR 117+34.42 (45.6' LT)						2										18
PV2-9	TP3 51+68.43 (27.16' LT)						1										18
PV2-10	P 228+88.99 (60.0' RT)							1									16
PV2-11	P 228+89.52 (53.4' LT)						1										18
PV2-12	E 317+87.38 (83.0' RT) TO PA 498+33.77 (19.8' RT)					458											14
PV2-13	TR 122+42.1' RT) TO TR 122+63.66 (8.1' RT)																
PV3-1	TR 123+66.80 (3.3' RT) AND TR 123+65.54 (14.4' RT)																
PV4-1	P 212+00.00 (30.9' RT) TO P 226+25.03 (25.8' RT)																3
PV4-2	P 212+00.00 (28.7' LT) TO P 213+97.22 (32.0' LT)																3
PV4-3	P 214+97.28 (32.0' LT) TO P226+25.03 (25.8' LT)																3
PV4-4	P 214+90.59 (175.2' RT) TO P 215+68.27 (219.8' RT)																3
PV4-5	P 209+41.35 (29.6' LT) TO P 209+59.35 (29.5' LT)															1	6,8,11
PV4-6	P 214+24.49 (49.5' LT) TO P 214+14.54 (37.5' LT)															1	6,8
PV4-7	P 214+70.01 (49.5' LT) TO P 214+79.97 (37.5' LT)															1	6,8
PV4-8	P 210+57.98 (39.3' LT) TO P 212+66.54 (42.4' LT)					212											14
PV4-9	P 214+06.65 (43.5' LT)						1										18
PV4-10	P 214+87.85 (43.5' LT)						1										18
PV4-11	P 215+71.64 (217.6' RT) TO P 214+87.11 (179.2' RT)								179								7
PV4-12	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)																
PV5-1	P 218+23.24 (57.5'LT) to P 224+00.54 (63.9'LT)					653											14
PV5-2	P 214+75.45 (53.7' LT) TO P 219+07.39 (101.7' LT)																10
PV5-3	P 215+12.26 (45.6' RT) TO P 219+80.09 (86.2' RT)																10
PV5-4	P 220+63.96 (73.8' RT) TO TP1 12+94.80 (17.5' RT)																10
	SHEET TOTAL	1	1	71		1323	7	1	179			81				5	

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S. MARSHALL				
REGION ADM.					
		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 2

SHEET 92 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	CEMENT CONC. CURB RAMP TYPE PARALLEL	DETECTABLE WARNING SURFACE		COATED CHAINLINK FENCE TYPE 3	COATED END, GATE, CORNER, AND PULL POST FOR CHAIN LINK FENCE	DOUBLE 20 FT. COATED CHAIN LINK GATE		TRAILHEAD APPURTENANCES	PREFABRICATED RESTROOM		PRECAST CONC. BARRIER TYPE F ANCHORED	PERMANENT IMPACT ATTENUATOR	BEAM GUARDRAIL TRANSITION SECTION TYPE B CONNECTION			SEE GENERAL NOTES
		EACH	S.F.		L.F.	EACH	EACH		L.S.	L.S.		L.F.	EACH	EACH			
PV1-1	TR 110+13.97 (38.0' RT) TO TR 116+35.12 (49.7' RT)											380					20
PV1-2	TR 115+00.00 (33.5' LT) TO E 318+10.00 (19.9' RT)																2
PV1-3	TR 110+23.97 (50.0' RT)																18
PV1-4	TR 111+63.91 (40.8' LT) TO TR 111+92.13 (42.4' LT)																6,8,11
PV1-5	TR 112+35.26 (40.1' LT) TO TR 112+65.29 (29.8' LT)																6,8,11
PV1-6	TR 109+93.39 (49.1' RT) TO SP 17+72.38 (34.1 LT)				463	10											10
PV1-7	TR 110+13.97 (39.0' RT) TO TR 110+35.47 (39.0' RT)												1				
PV2-1	TR 116+35.18 (47.7' RT) TO TR 119+21.36 (85.7' RT)																2
PV2-2	TR 116+93.83 (38.2' LT) TO TR 117+36.84 (36.4' LT)																17,23
PV2-3	TR EB 401+99.15 (72.5' RT) TO TR EB 402+94.53 (14.4' RT)																2
PV2-4	TR EB 402+01.83 (72.7' RT TO TR EB 402+94.52 (16.2' RT)																9
PV2-5	TR WB 501+82.24 (33.0' LT) TO TR WB 503+04.70 (27.0' LT)				130	2											10
PV2-6	P 226+20.00 (25.0' RT) TO TR EB 401+77.76 (70.2' RT)																2
PV2-7	TR 115+74.56 (36.1' LT) TO TR 116+15.77 (37.1' LT)																17,23
PV2-8	TR 116+97.22 (47.1' LT) TO TR 117+34.42 (45.6' LT)																18
PV2-9	TP3 51+68.43 (27.16' LT)																18
PV2-10	P 228+88.99 (60.0' RT)																16
PV2-11	P 228+89.52 (53.4' LT)																18
PV2-12	E 317+87.38 (83.0' RT) TO PA 498+33.77 (19.8' RT)																14
PV2-13	TR 122+42.1' RT) TO TR 122+63.66 (8.1' RT)												1				
PV3-1	TR 123+66.80 (3.3' RT) AND TR 123+65.54 (14.4' RT)													2			
PV4-1	P 212+00.00 (30.9' RT) TO P 226+25.03 (25.8' RT)																3
PV4-2	P 212+00.00 (28.7' LT) TO P 213+97.22 (32.0' LT)																3
PV4-3	P 214+97.28 (32.0' LT) TO P226+25.03 (25.8' LT)																3
PV4-4	P 214+90.59 (175.2' RT) TO P 215+68.27 (219.8' RT)																3
PV4-5	P 209+41.35 (29.6' LT) TO P 209+59.35 (29.5' LT)																6,8,11
PV4-6	P 214+24.49 (49.5' LT) TO P 214+14.54 (37.5' LT)																6,8
PV4-7	P 214+70.01 (49.5' LT) TO P 214+79.97 (37.5' LT)																6,8
PV4-8	P 210+57.98 (39.3' LT) TO P 212+66.54 (42.4' LT)																14
PV4-9	P 214+06.65 (43.5' LT)																18
PV4-10	P 214+87.85 (43.5' LT)																18
PV4-11	P 215+71.64 (217.6' RT) TO P 214+87.11 (179.2' RT)																7
PV4-12	P 211+43.24 (45.3') TO P 212+36.00 (45.3' LT)																
PV5-1	P 218+23.24 (57.5'LT) to P 224+00.54 (63.9'LT)																14
PV5-2	P 214+75.45 (53.7' LT) TO P 219+07.39 (101.7' LT)				423	6											10
PV5-3	P 215+12.26 (45.6' RT) TO P 219+80.09 (86.2' RT)				485	4											10
PV5-4	P 220+63.96 (73.8' RT) TO TP1 12+94.80 (17.5' RT)				936	5											10
	SHEET TOTAL				2437	27						380	2	2			

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S. MARSHALL						
REGION ADM.							
		DATE	DATE	REVISION	BY		

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 3

SHEET 93 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	TEXTURED AND PIGMENTED CEMENT CONCRETE TRUCK APRON	TEXTURED AND PIGEMENTED CEMENT CONCRETE TRAFFIC ISLAND	ROUNDABOUT SPLITTER ISLAND NOSING CURB		ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER	CEMENT CONC TRAFFIC CURB	COSV CURB AND GUTTER TYPE B		ROUNDABOUT TRUCK APRON CEM. CONC. CURB AND GUTTER	ROUNDABOUT CENTRAL ISLAND CEMENT CONCRETE CURB	CEMENT CONC. PEDESTRIAN CURB		COSV CURB TYPE A			SEE GENERAL NOTES
		S.Y.	S.Y.	EACH		L.F.	L.F.	L.F.		L.F.	L.F.	L.F.		L.F.			
PV5-5	P 220+17.39 (3.4' LT) P 220+17.63 (3.8' RT)																
PV5-6	P 220+11.24 (3.3' LT) TO P 220+11.26 (3.9' RT)																
PV6-1	E 307+30.75 (50.0' LT) TO E 318+10.00 (21.0' LT)							954									3
PV6-2	E 307+31.25 (49.9' RT) TO PA 499+15.00 (11.5' LT)							978									3
PV6-3	E 307+37.11 (35.0' LT)											31					6,8,11
PV6-4	E 307+41.23 (29.0' RT)											24					6,8,11
PV6-5	E 307+68.18 (20.0' LT) TO E 308+12.12 (19.94' LT)																19,23
PV6-6	E 307+66.43 (28.0' RT) TO E 309+48.58 (28.5' RT)											182					10
PV6-7	E 307+54.26 (30.0' LT) TO E 312+33.04 (32.0' LT)																7
PV6-8	E 307+66.43 (22.0' RT) TO E 312+95.72 (32.0' RT)																7
PV6-9	E 309+54.11 (20.0' RT) TO E 309+98.12 (20.0' RT)																19,23
PV6-10	E 309+91.06 (32.0' RT) TO PA 499+15.00 (22.0' LT)																7
PV6-11	E 312+26.10 (20.0' LT) TO E 312+69.60 (20.0' LT)																19,23
PV6-12	E 311+04.47 (20.0' LT) TO E 311+48.42 (20.0' LT)																19,23
PV6-13	E 309+61.06 (20.0' RT) TO E 309+91.06 (50.0' RT)																19,23
PV7-1	E 312+62.99 (32.0' LT) TO TR 123+67.32 (31.0' LT)																7
PV7-2	PA 499+15.00 (11.5' RT) TO E 318+10.04 (19.9' RT)							85									3
PV7-3	TR WB 503+05.83 (17.9' LT) TO E 318+10.00 (21.8' LT)					396											2
PV7-4	E 312+88.71 (20.0' RT) TO E 313+25.68 (20.0' RT)																19,23
PV7-5	E 317+75.47 (49.8' RT) TO E 317+92.35 (21.3' RT)											26					6,8,11
PV7-6	E 317+43.56 (52.4' RT) TO E 317+27.96 (32.1' RT)											20					6,8,11
PV8-1	AR-1 10+20.00 (22.0' LT) TO AR-1 10+20.00 (22.0' RT)																19,23
PVD3-1	TR 119+44.09 (0.0') TO TR 120+53.50 (0.0')	512	357							339	219						1,4
PVD6-1	TR 118+84.29 (79.1' RT) TO TR 118+99.57 (82.0' RT)											8					6,8,11
PVD6-2	P 228+98.61 (45.4' LT) TO P 228+87.0 (37.2' LT)											22					6,8,11
PVD9-1	TR 114+99.96 (34.3' LT) TO PA 499+15.00 (12.0' RT)																7
PVD9-2	TR 116+43.97 (36.3' LT) TO TR 116+68.3' (36.8' LT)																21
PVD9-3	TR 119+00.83 (44.3' LT) TO TR 119+09.12 (48.8' LT)											12					6,8,11
PVD9-4	E 318+93.54 (23.3' RT) TO E 318+82.82 (21.1' RT)											12					6,8,11
PVD9-5	P 228+84.32 (48.5' RT) TO P 228+96.7' RT)											12					6,8,11
PVD9-6	P 228+83.89 (54.3' RT) TO TR EB 400+81.34 (75.9' RT)																7
PVD9-7	E 318+84.36 (25.5' LT) TO E 318+94.86 (27.9' LT)											13					6,8,11
PVD9-8	TR WB 500+31.35 (16.4' LT) TO TR WB 500+47.67 (16.4' LT)											13					6,8,11
PVD9-9	TR 122+67.31 (35.7' LT) TO TR 122+87.44 (35.2' LT)																21
PVD9-10	TR 120+89.80 (45.3' RT) TO TR 120+99.92 (40.6' RT)											12					6,8,11
	SHEET TOTAL	512	357			396		2017		339	219	387					

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S. MARSHALL					
REGION ADM.						
		DATE	DATE	REVISION	BY	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 4

SHEET 94 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
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THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	BEAM GUARDRAIL TRANSITION SECTION TYPE 23	BEAM GUARDRAIL ANCHOR TYPE 11	BEAM GUARDRAIL TYPE 31		PEDESTRIAN HANDRAIL	BOLLARD TYPE 1	BOLLARD TYPE 2	CEMENT CONC. SIDEWALK		HIGH VOLUME CONCRETE APPROACH	CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3	TYPE II CONCRETE APPROACH SEPARATED SIDEWALK		CEMENT CONC. CURB RAMP TYPE BIKE RAMP	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	EACH	EACH	S.Y.		S.Y.	S.Y.	S.Y.		EACH	EACH	
PV5-5	P 220+17.39 (3.4' LT) P 220+17.63 (3.8' RT)							3									
PV5-6	P 220+11.24 (3.3' LT) TO P 220+11.26 (3.9' RT)							2									
PV6-1	E 307+30.75 (50.0' LT) TO E 318+10.00 (21.0' LT)																3
PV6-2	E 307+31.25 (49.9' RT) TO PA 499+15.00 (11.5' LT)																3
PV6-3	E 307+37.11 (35.0' LT)															1	6,8,11
PV6-4	E 307+41.23 (29.0' RT)															1	6,8,11
PV6-5	E 307+68.18 (20.0' LT) TO E 308+12.12 (19.94' LT)												104				19,23
PV6-6	E 307+66.43 (28.0' RT) TO E 309+48.58 (28.5' RT)																10
PV6-7	E 307+54.26 (30.0' LT) TO E 312+33.04 (32.0' LT)								265								7
PV6-8	E 307+66.43 (22.0' RT) TO E 312+95.72 (32.0' RT)								133								7
PV6-9	E 309+54.11 (20.0' RT) TO E 309+98.12 (20.0' RT)												111				19,23
PV6-10	E 309+91.06 (32.0' RT) TO PA 499+15.00 (22.0' LT)								484								7
PV6-11	E 312+26.10 (20.0' LT) TO E 312+69.60 (20.0' LT)												144				19,23
PV6-12	E 311+04.47 (20.0' LT) TO E 311+48.42 (20.0' LT)												111				19,23
PV6-13	E 309+61.06 (20.0' RT) TO E 309+91.06 (50.0' RT)												111				19,23
PV7-1	E 312+62.99 (32.0' LT) TO TR 123+67.32 (31.0' LT)								813								7
PV7-2	PA 499+15.00 (11.5' RT) TO E 318+10.04 (19.9' RT)																3
PV7-3	TR WB 503+05.83 (17.9' LT) TO E 318+10.00 (21.8' LT)																2
PV7-4	E 312+88.71 (20.0' RT) TO E 313+25.68 (20.0' RT)												71				19,23
PV7-5	E 317+75.47 (49.8' RT) TO E 317+92.35 (21.3' RT)																6,8,11
PV7-6	E 317+43.56 (52.4' RT) TO E 317+27.96 (32.1' RT)																6,8,11
PV8-1	AR-1 10+20.00 (22.0' LT) TO AR-1 10+20.00 (22.0' RT)												51				19,23
PVD3-1	TR 119+44.09 (0.0') TO TR 120+53.50 (0.0')																1,4
PVD6-1	TR 118+84.29 (79.1' RT) TO TR 118+99.57 (82.0' RT)															1	6,8,11
PVD6-2	P 228+98.61 (45.4' LT) TO P 228+87.0 (37.2' LT)															1	6,8,11
PVD9-1	TR 114+99.96 (34.3' LT) TO PA 499+15.00 (12.0' RT)								561								7
PVD9-2	TR 116+43.97 (36.3' LT) TO TR 116+68.3' (36.8' LT)														1		21
PVD9-3	TR 119+00.83 (44.3' LT) TO TR 119+09.12 (48.8' LT)																6,8,11
PVD9-4	E 318+93.54 (23.3' RT) TO E 318+82.82 (21.1' RT)																6,8,11
PVD9-5	P 228+84.32 (48.5' RT) TO P 228+96.7' RT)															1	6,8,11
PVD9-6	P 228+83.89 (54.3' RT) TO TR EB 400+81.34 (75.9' RT)								264								7
PVD9-7	E 318+84.36 (25.5' LT) TO E 318+94.86 (27.9' LT)															1	6,8,11
PVD9-8	TR WB 500+31.35 (16.4' LT) TO TR WB 500+47.67 (16.4' LT)															1	6,8,11
PVD9-9															1		21
PVD9-10																1	6,8,11
	SHEET TOTAL							5	2520				703		2	8	

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN					REGION NO.	STATE	FED. AID PROJ. NO.
ENTERED BY	E MCGUIRE					10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
CHECKED BY	J FREY					JOB NUMBER		
PROJ. ENGR.	S. MARSHALL							
REGION ADM.						CONTRACT NO.		
		DATE	DATE	REVISION	BY			

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 5

SHEET 95 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	CEMENT CONC. CURB RAMP TYPE PARALLEL	DETECTABLE WARNING SURFACE		COATED CHAINLINK FENCE TYPE 3	COATED END, GATE, CORNER, AND PULL POST FOR CHAIN LINK FENCE	DOUBLE 20 FT. COATED CHAIN LINK GATE		TRAILHEAD APPURTENANCES	PREFABRICATED RESTROOM		PRECAST CONC. BARRIER TYPE F ANCHORED	PERMANENT IMPACT ATTENUATOR	BEAM GUARDRAIL TRANSITION SECTION TYPE B CONNECTION			SEE GENERAL NOTES
		EACH	S.F.		L.F.	EACH	EACH		L.S.	L.S.		L.F.	EACH	EACH			
PV5-5	P 220+17.39 (3.4' LT) P 220+17.63 (3.8' RT)																
PV5-6	P 220+11.24 (3.3' LT) TO P 220+11.26 (3.9' RT)																
PV6-1	E 307+30.75 (50.0' LT) TO E 318+10.00 (21.0' LT)																3
PV6-2	E 307+31.25 (49.9' RT) TO PA 499+15.00 (11.5' LT)																3
PV6-3	E 307+37.11 (35.0' LT)																6,8,11
PV6-4	E 307+41.23 (29.0' RT)																6,8,11
PV6-5	E 307+68.18 (20.0' LT) TO E 308+12.12 (19.94' LT)																19,23
PV6-6	E 307+66.43 (28.0' RT) TO E 309+48.58 (28.5' RT)																10
PV6-7	E 307+54.26 (30.0' LT) TO E 312+33.04 (32.0' LT)																7
PV6-8	E 307+66.43 (22.0' RT) TO E 312+95.72 (32.0' RT)																7
PV6-9	E 309+54.11 (20.0' RT) TO E 309+98.12 (20.0' RT)																19,23
PV6-10	E 309+91.06 (32.0' RT) TO PA 499+15.00 (22.0' LT)																7
PV6-11	E 312+26.10 (20.0' LT) TO E 312+69.60 (20.0' LT)																19,23
PV6-12	E 311+04.47 (20.0' LT) TO E 311+48.42 (20.0' LT)																19,23
PV6-13	E 309+61.06 (20.0' RT) TO E 309+91.06 (50.0' RT)																19,23
PV7-1	E 312+62.99 (32.0' LT) TO TR 123+67.32 (31.0' LT)																7
PV7-2	PA 499+15.00 (11.5' RT) TO E 318+10.04 (19.9' RT)																3
PV7-3	TR WB 503+05.83 (17.9' LT) TO E 318+10.00 (21.8' LT)																2
PV7-4	E 312+88.71 (20.0' RT) TO E 313+25.68 (20.0' RT)																19,23
PV7-5	E 317+75.47 (49.8' RT) TO E 317+92.35 (21.3' RT)	1															6,8,11
PV7-6	E 317+43.56 (52.4' RT) TO E 317+27.96 (32.1' RT)	1															6,8,11
PV8-1	AR-1 10+20.00 (22.0' LT) TO AR-1 10+20.00 (22.0' RT)																19,23
PVD3-1	TR 119+44.09 (0.0') TO TR 120+53.50 (0.0')																1,4
PVD6-1	TR 118+84.29 (79.1' RT) TO TR 118+99.57 (82.0' RT)																6,8,11
PVD6-2	P 228+98.61 (45.4' LT) TO P 228+87.0 (37.2' LT)																6,8,11
PVD9-1	TR 114+99.96 (34.3' LT) TO PA 499+15.00 (12.0' RT)																7
PVD9-2	TR 116+43.97 (36.3' LT) TO TR 116+68.3' (36.8' LT)																21
PVD9-3	TR 119+00.83 (44.3' LT) TO TR 119+09.12 (48.8' LT)	1															6,8,11
PVD9-4	E 318+93.54 (23.3' RT) TO E 318+82.82 (21.1' RT)	1															6,8,11
PVD9-5	P 228+84.32 (48.5' RT) TO P 228+96.7' RT)																6,8,11
PVD9-6	P 228+83.89 (54.3' RT) TO TR EB 400+81.34 (75.9' RT)																7
PVD9-7	E 318+84.36 (25.5' LT) TO E 318+94.86 (27.9' LT)																6,8,11
PVD9-8	TR WB 500+31.35 (16.4' LT) TO TR WB 500+47.67 (16.4' LT)																6,8,11
PVD9-9	TR 122+67.31 (35.7' LT) TO TR 122+87.44 (35.2' LT)																21
PVD9-10	TR 120+89.80 (45.3' RT) TO TR 120+99.92 (40.6' RT)																6,8,11
	SHEET TOTAL	4															

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN				
ENTERED BY	E MCGUIRE				
CHECKED BY	J FREY				
PROJ. ENGR.	S. MARSHALL				
REGION ADM.					
		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 6

SHEET 96 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ↓ \ UNIT OF MEASURE →	TEXTURED AND PIGMENTED CEMENT CONCRETE TRUCK APRON	TEXTURED AND PIGEMENTED CEMENT CONCRETE TRAFFIC ISLAND	ROUNDABOUT SPLITTER ISLAND NOSING CURB		ROUNDABOUT CEMENT CONCRETE CURB AND GUTTER	CEMENT CONC TRAFFIC CURB	COSV CURB AND GUTTER TYPE B		ROUNDABOUT TRUCK APRON CEM. CONC. CURB AND GUTTER	ROUNDABOUT CENTRAL ISLAND CEMENT CONCRETE CURB	CEMENT CONC. PEDESTRIAN CURB		COSV CURB TYPE A			SEE GENERAL NOTES
		S.Y.	S.Y.	EACH		L.F.	L.F.	L.F.		L.F.	L.F.	L.F.		L.F.			
DW1-1	SD 499+15.23 (23.29' LT) TO SD 499+50.50 (39.5' LT)													98			22
DW1-2	SD 499+04.32 (25.0' RT) TO SD 499+50.50 (39.7' RT)													61			22
DW1-3	P 214+79.97 (37.5' LT) TO P 214+97.28 (32.0' LT)													25			22
DW1-4	P 213+97.22 (32.0' LT) TO P 214+14.54 (37.5' LT)													25			22
DW1-5	P 213+97.22 (31.0' LT) TO P 214+97.28 (31.0' LT)																12,23
TP1-1	P 228+36.70 (333.2' RT) TO P 229+31.57 (350.1' RT)																
TP1-2	P 229+00.21 (329.9' RT) TO P 229+23.61 (333.2' RT)																
TP1-3	TP4 600+11.33 (0.0' LT)																18
TP1-4	TP1 14+71.00 (42.5' RT) TO TP1 15+05.65 (42.5' RT)																7
TP1-5	TP1 12+94.80 (17.5' RT) TO TP1 13+11.75 (18.4' RT)																15
TP1-6	TP4 600+11.33 (7.2' LT) TO TP4 600+11.33 (7.2' RT)																16
TP1-7	TP3 51+64.95 (16.5' RT) TO TP3 51+73.46 (16.5' LT)											20					6,8,11
TP1-8	TP3 51+65.33 (10.8' RT) TO TP3 51+82.00 (10.0' RT)											9					6,8,11
TP1-9	TP1 14+81.34 (23.2' LT) TO TP1 14+87.34 (25.1' LT)											28					6,8,11
TP1-10	TP1 14+81.34 (12.5' RT) TO TP1 14+87.34 (12.5' RT)											22					6,8,11
TP1-11	TP1 14+07.34 (30.5' RT) TO TP1 14+34.34 (30.5' RT)											27					6,8,11
TP1-12	TP3 50+32.84 (17.1' RT) TO TP3 52+40.34 (9.4' LT)																7
TP1-13	TP1 13+70.78 (30.0' RT) TO TP1 15+05.65 (30.5' RT)																7
TP1-14	TP1 13+11.75 (18.4' RT) TO TP4 605+92.92 (113.8' RT)																10
TP1-15	TP1 10+69.81 (15.8' LT) TO TP1 15+44.34 (10.0' LT)													438			22
TP1-16	TP1 13+70.78 (30.0' RT) TO TP1 15+44.34 (10.0' RT)													192			22
TP1-17	TP1 12+98.93 (38.4' LT) TO TP1 14+78.34 (46.0' LT)													304			22
TP1-18	TP1 13+79.78 (31.4' RT)																16
SI1-1	TR 115+75.48 (5.9' RT) TO TR 119+32.78 (20.2' LT)		326	1		799											2,5,6,7
SI1-2	TR 118+00.95 (33.2' RT) TO TR 119+45.94 (69.4' RT)		143	1		274											2,5,6,7
SI2-1	TR 120+67.70 (19.0' LT) TO TR EB 402+94.87 (15.3' LT)		200			535											2,5,6,7
SI2-2	E 319+16.76 (6.5' RT) TO E 318+70.96 (1.7' RT)		29	1		98											2,5,6,7
SI2-3	P 218+87.00 (2.5' RT) TO P 220+45.62 (5.6' RT)		280				344										13
SI3-1	P 226+25.03 (25.8' LT) TO P 229+17.39 (81.9' LT)	84				185				243							1,2,6
SI3-2	P 227+09.13 (0.5' RT) TO P 228+83.08 (17.5' RT)	76	363	1		492				191							1,2,5,6,7
	SHEET TOTAL	160	1341	4		2383	344			434		106		1143			
	PROJECT TOTAL	672	1698	4		4360	344	5022		773	219	560		1238			

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S. MARSHALL					
REGION ADM.						
		DATE	**DATE**	**REVISION**	**BY**	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 7

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	BEAM GUARDRAIL TRANSITION SECTION TYPE 23	BEAM GUARDRAIL ANCHOR TYPE 11	BEAM GUARDRAIL TYPE 31		PEDESTRIAN HANDRAIL	BOLLARD TYPE 1	BOLLARD TYPE 2	CEMENT CONC. SIDEWALK		HIGH VOLUME CONCRETE APPROACH	CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3	TYPE II CONCRETE APPROACH SEPARATED SIDEWALK		CEMENT CONC. CURB RAMP TYPE BIKE RAMP	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	EACH	EACH	S.Y.		S.Y.	S.Y.	S.Y.		EACH	EACH	
DW1-1																	22
DW1-2																	22
DW1-3																	22
DW1-4																	22
DW1-5											381						12,23
TP1-1																	
TP1-2	P 229+00.21 (329.9' RT) TO P 229+23.61 (333.2' RT)																
TP1-3	TP4 600+11.33 (0.0' LT)						1										18
TP1-4	TP1 14+71.00 (42.5' RT) TO TP1 15+05.65 (42.5' RT)								40								7
TP1-5	TP1 12+94.80 (17.5' RT) TO TP1 13+11.75 (18.4' RT)																15
TP1-6	TP4 600+11.33 (7.2' LT) TO TP4 600+11.33 (7.2' RT)							2									16
TP1-7	TP3 51+64.95 (16.5' RT) TO TP3 51+73.46 (16.5' LT)															1	6,8,11
TP1-8	TP3 51+65.33 (10.8' RT) TO TP3 51+82.00 (10.0' RT)															1	6,8,11
TP1-9	TP1 14+81.34 (23.2' LT) TO TP1 14+87.34 (25.1' LT)															1	6,8,11
TP1-10	TP1 14+81.34 (12.5' RT) TO TP1 14+87.34 (12.5' RT)															1	6,8,11
TP1-11	TP1 14+07.34 (30.5' RT) TO TP1 14+34.34 (30.5' RT)																6,8,11
TP1-12	TP3 50+32.84 (17.1' RT) TO TP3 52+40.34 (9.4' LT)								202								7
TP1-13	TP1 13+70.78 (30.0' RT) TO TP1 15+05.65 (30.5' RT)								168								7
TP1-14	TP1 13+11.75 (18.4' RT) TO TP4 605+92.92 (113.8' RT)																10
TP1-15	TP1 10+69.81 (15.8' LT) TO TP1 15+44.34 (10.0' LT)																22
TP1-16	TP1 13+70.78 (30.0' RT) TO TP1 15+44.34 (10.0' RT)																22
TP1-17	TP1 12+98.93 (38.4' LT) TO TP1 14+78.34 (46.0' LT)																22
TP1-18	TP1 13+79.78 (31.4' RT)							1									16
SI1-1	TR 115+75.48 (5.9' RT) TO TR 119+32.78 (20.2' LT)								41								2,5,6,7
SI1-2	TR 118+00.95 (33.2' RT) TO TR 119+45.94 (69.4' RT)								22								2,5,6,7
SI2-1	TR 120+67.70 (19.0' LT) TO TR EB 402+94.87 (15.3' LT)								40								2,5,6,7
SI2-2	E 319+16.76 (6.5' RT) TO E 318+70.96 (1.7' RT)								13								2,5,6,7
SI2-3	P 218+87.00 (2.5' RT) TO P 220+45.62 (5.6' RT)																13
SI3-1	P 226+25.03 (25.8' LT) TO P 229+17.39 (81.9' LT)																1,2,6
SI3-2	P 227+09.13 (0.5' RT) TO P 228+83.08 (17.5' RT)								50								1,2,5,6,7
	SHEET TOTAL						1	3	576		381					4	
	PROJECT TOTAL	1	1	71		1323	8	9	3275		381	81	703		2	17	

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S. MARSHALL					
REGION ADM.						
		DATE	DATE	REVISION	BY	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 8

SHEET 98 OF 218 SHEETS

QUANTITY TABULATION - PAVING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	CEMENT CONC. CURB RAMP TYPE PARALLEL	DETECTABLE WARNING SURFACE		COATED CHAINLINK FENCE TYPE 3	COATED END, GATE, CORNER, AND PULL POST FOR CHAIN LINK FENCE	DOUBLE 20 FT. COATED CHAIN LINK GATE		TRAILHEAD APPURTENANCES	PREFABRICATED RESTROOM		PRECAST CONC. BARRIER TYPE F ANCHORED	PERMANENT IMPACT ATTENUATOR	BEAM GUARDRAIL TRANSITION SECTION TYPE B CONNECTION			SEE GENERAL NOTES
		EACH	S.F.		L.F.	EACH	EACH		L.S.	L.S.		L.F.	EACH	EACH			
DW1-1	SD 499+15.23 (23.29' LT) TO SD 499+50.50 (39.5' LT)																22
DW1-2	SD 499+04.32 (25.0' RT) TO SD 499+50.50 (39.7' RT)																22
DW1-3	P 214+79.97 (37.5' LT) TO P 214+97.28 (32.0' LT)																22
DW1-4	P 213+97.22 (32.0' LT) TO P 214+14.54 (37.5' LT)																22
DW1-5	P 213+97.22 (31.0' LT) TO P 214+97.28 (31.0' LT)																12,23
TP1-1	P 228+36.70 (333.2' RT) TO P 229+31.57 (350.1' RT)								1								
TP1-2	P 229+00.21 (329.9' RT) TO P 229+23.61 (333.2' RT)									1							
TP1-3	TP4 600+11.33 (0.0' LT)																18
TP1-4	TP1 14+71.00 (42.5' RT) TO TP1 15+05.65 (42.5' RT)																7
TP1-5	TP1 12+94.80 (17.5' RT) TO TP1 13+11.75 (18.4' RT)					2	1										15
TP1-6	TP4 600+11.33 (7.2' LT) TO TP4 600+11.33 (7.2' RT)																16
TP1-7	TP3 51+64.95 (16.5' RT) TO TP3 51+73.46 (16.5' LT)																6,8,11
TP1-8	TP3 51+65.33 (10.8' RT) TO TP3 51+82.00 (10.0' RT)																6,8,11
TP1-9	TP1 14+81.34 (23.2' LT) TO TP1 14+87.34 (25.1' LT)																6,8,11
TP1-10	TP1 14+81.34 (12.5' RT) TO TP1 14+87.34 (12.5' RT)																6,8,11
TP1-11	TP1 14+07.34 (30.5' RT) TO TP1 14+34.34 (30.5' RT)	1															6,8,11
TP1-12	TP3 50+32.84 (17.1' RT) TO TP3 52+40.34 (9.4' LT)																7
TP1-13	TP1 13+70.78 (30.0' RT) TO TP1 15+05.65 (30.5' RT)																7
TP1-14	TP1 13+11.75 (18.4' RT) TO TP4 605+92.92 (113.8' RT)				549	7											10
TP1-15	TP1 10+69.81 (15.8' LT) TO TP1 15+44.34 (10.0' LT)																22
TP1-16	TP1 13+70.78 (30.0' RT) TO TP1 15+44.34 (10.0' RT)																22
TP1-17	TP1 12+98.93 (38.4' LT) TO TP1 14+78.34 (46.0' LT)																22
TP1-18	TP1 13+79.78 (31.4' RT)																16
SI1-1	TR 115+75.48 (5.9' RT) TO TR 119+32.78 (20.2' LT)		40														2,5,6,7
SI1-2	TR 118+00.95 (33.2' RT) TO TR 119+45.94 (69.4' RT)		40														2,5,6,7
SI2-1	TR 120+67.70 (19.0' LT) TO TR EB 402+94.87 (15.3' LT)		48									151					2,5,6,7
SI2-2	E 319+16.76 (6.5' RT) TO E 318+70.96 (1.7' RT)		40														2,5,6,7
SI2-3	P 218+87.00 (2.5' RT) TO P 220+45.62 (5.6' RT)																13
SI3-1	P 226+25.03 (25.8' LT) TO P 229+17.39 (81.9' LT)																1,2,6
SI3-2	P 227+09.13 (0.5' RT) TO P 228+83.08 (17.5' RT)		48														1,2,5,6,7
	SHEET TOTAL	1	216		549	9	1		1	1		151					
	PROJECT TOTAL	5	216		2986	36	1		1	1		531	2	2			

GENERAL NOTES:

1. SEE STD PLAN F-10.18-03 CURB 1
2. SEE STD PLAN F-10.18-03 CURB 2
3. SEE COSV STD. PLAN R-102 CURBING, TYPE B
4. SEE STD PLAN F-10.18-03 CURB 3
5. SEE PVD1 FOR SPLITTER ISLAND NOSING CURB DETAIL
6. SEE STD. PLAN F-45.10-02 DETECTABLE WARNING SURFACE
7. SEE STD. PLAN F-30.10-04 CEMENT CONCRETE SIDEWALK
8. SEE STD. PLANS F-40.12-03 AND F-40.16-03 FOR CURB RAMPS DETAIL
9. SEE STD. PLANS C-20.10-09 BEAM GUARDRAIL TYPE 31, C-25.26-05 TRANSITION TYPE 23, C-23.70-01 ANCHOR TYPE 11
10. SEE STD. PLAN L-20.10-03 CHAIN LINK FENCE TYPE 3
11. SEE STD. PLAN F-10.12-04 CEMENT CONC. PEDESTRIAN CURB
12. SEE COSV STANDARD PLAN R-115 HIGH VOLUME CONCRETE APPROACH
13. SEE STD. PLAN F-10.12-03 CEMENT CONC. TRAFFIC CURB DETAIL
14. SEE ST PLANS FOR HANDRAIL DETAILS
15. SEE STD. PLAN L-30.10-02 CHAIN LINK GATE
16. SEE STD. PLAN H-60.20-01 BOLLARD TYPE 2
17. SEE STD. PLAN F-80.10-04 CEMENT CONCRETE DRIVEWAY ENTRANCE TYPE 3
18. SEE STD. PLAN H-60.10-01 BOLLARD TYPE 1
19. SEE COSV STANDARD PLAN R-111 TYPE II CONCRETE APROACH SEPARATED SIDEWALK
20. SEE STD. PLAN C-60.10-04 CONCRETE BARRIER TYPE F (PRECAST)
21. SEE SHEET PVD2 FOR BIKE RAMP DETAILS.
22. SEE COSV STANDARD PLAN R-102 CURBING, TYPE A
23. INCLUDED IN CEMENT CONCRETE DRIVEWAY ITEM

DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S. MARSHALL					
REGION ADM.						
		DATE	DATE	REVISION	BY	

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

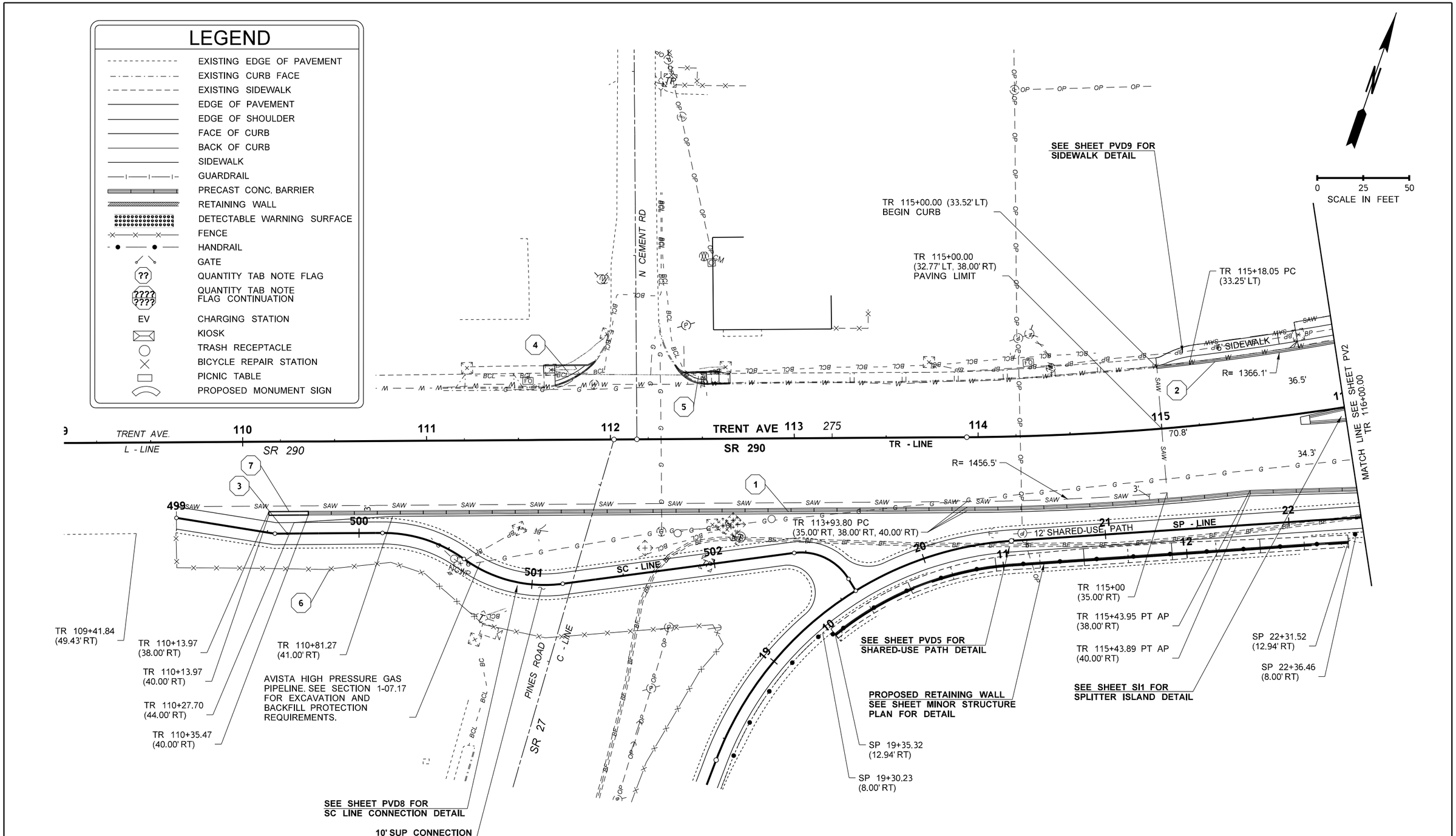
CONTRACT NO.

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVING

QTPV 9

SHEET 99 OF 218 SHEETS



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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

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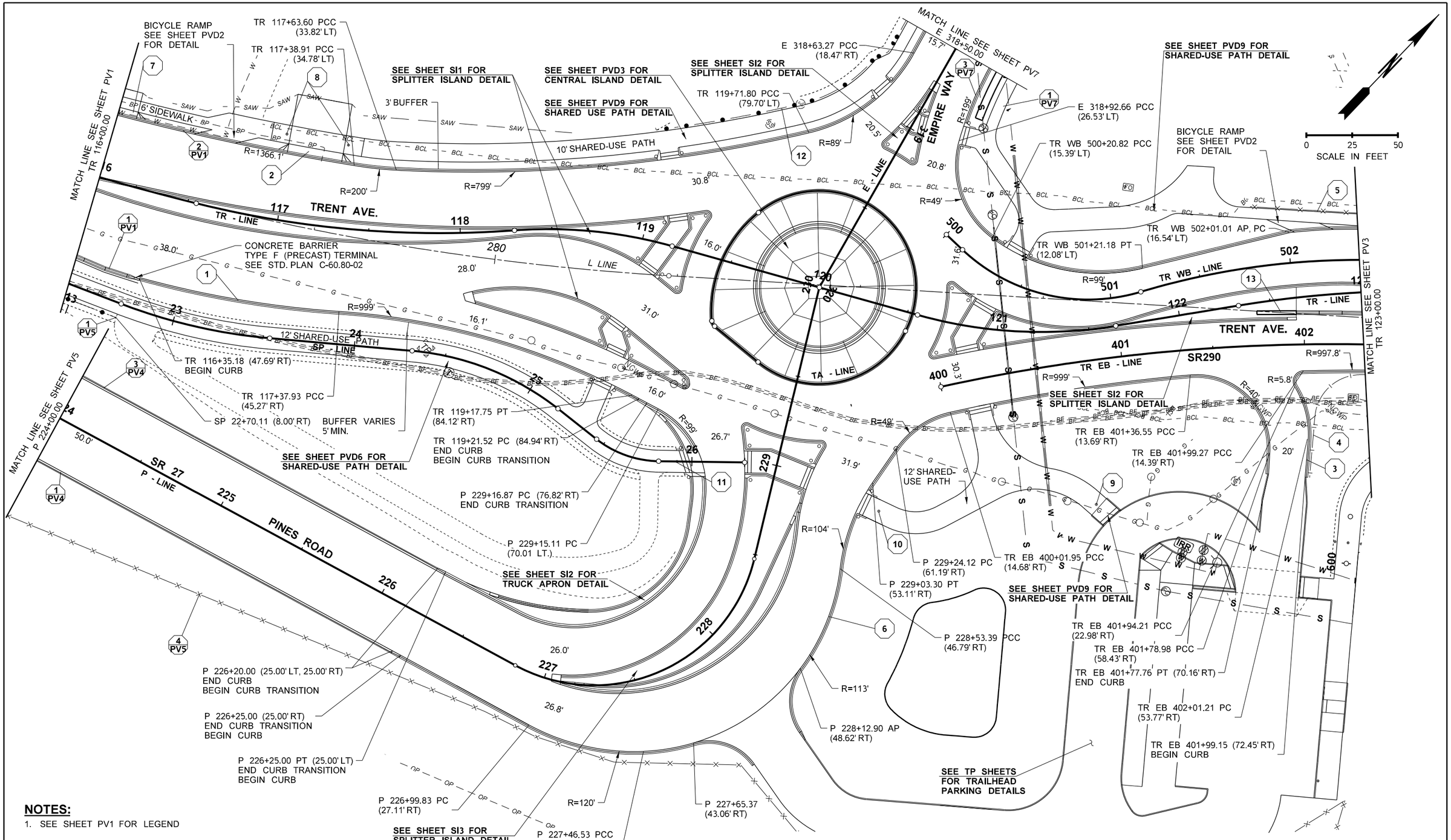
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1
PLAN REF NO
PV1
SHEET 100 OF 218 SHEETS



NOTES:

1. SEE SHEET PV1 FOR LEGEND

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DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
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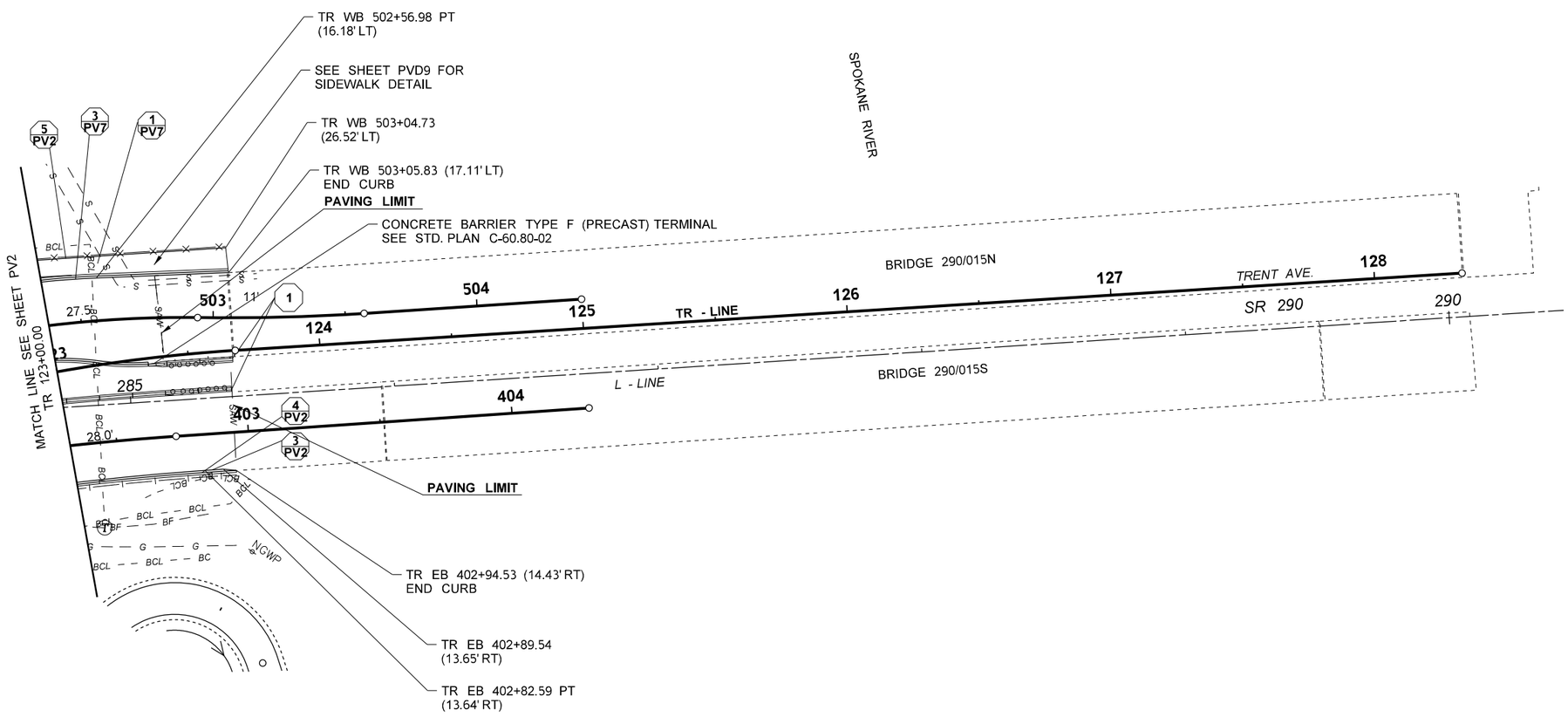
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1
PLAN REF NO
PV2
SHEET 101 OF 218 SHEETS



NOTES:

1. SEE SHEET PV1 FOR LEGEND

0 25 50
SCALE IN FEET

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ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE
10	WASH

JOB NUMBER

CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
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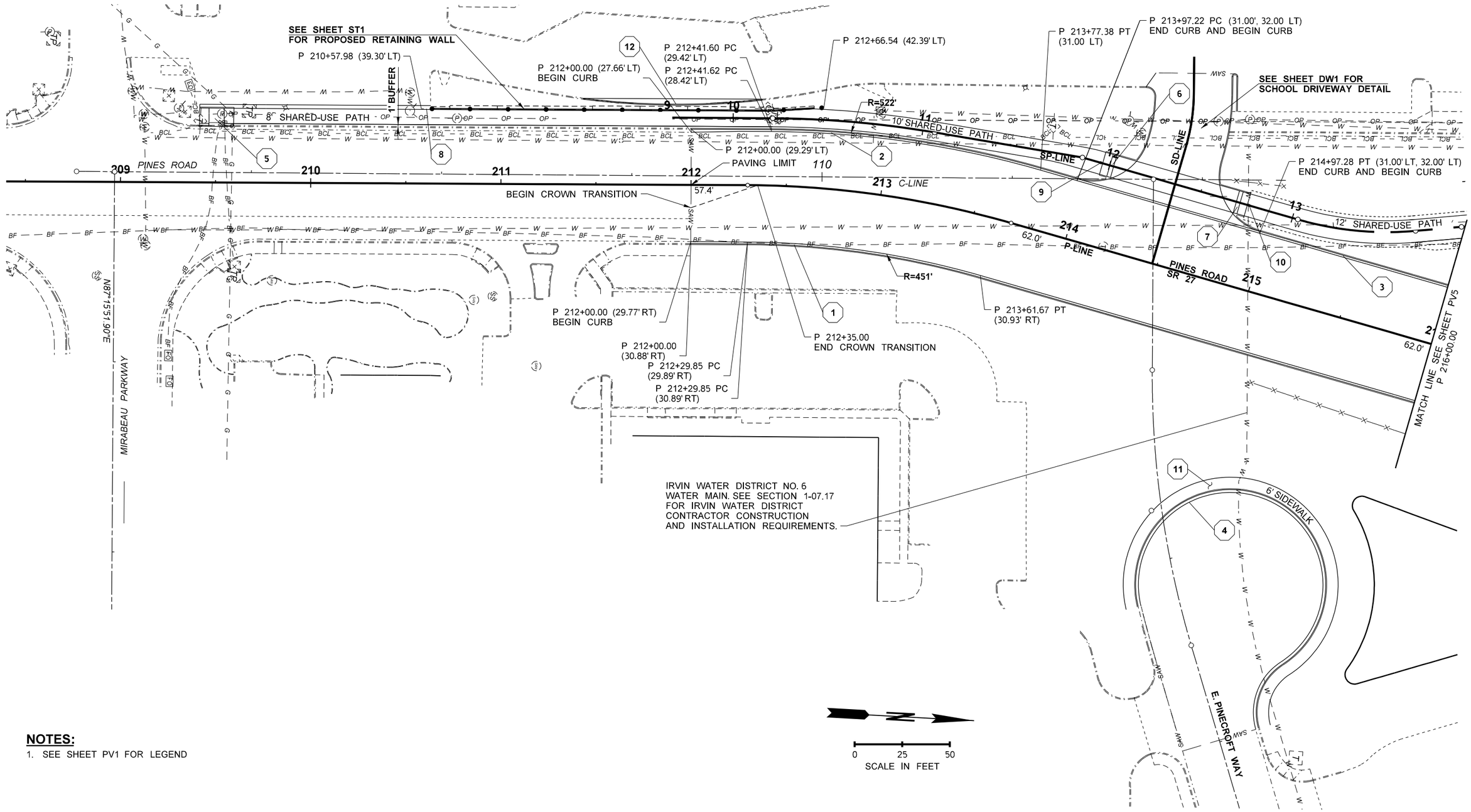
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1

PLAN REF NO
PV3

SHEET
102
OF
218
SHEETS



NOTES:

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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER
06/02/2025
DATE
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DATE
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City of Spokane Valley
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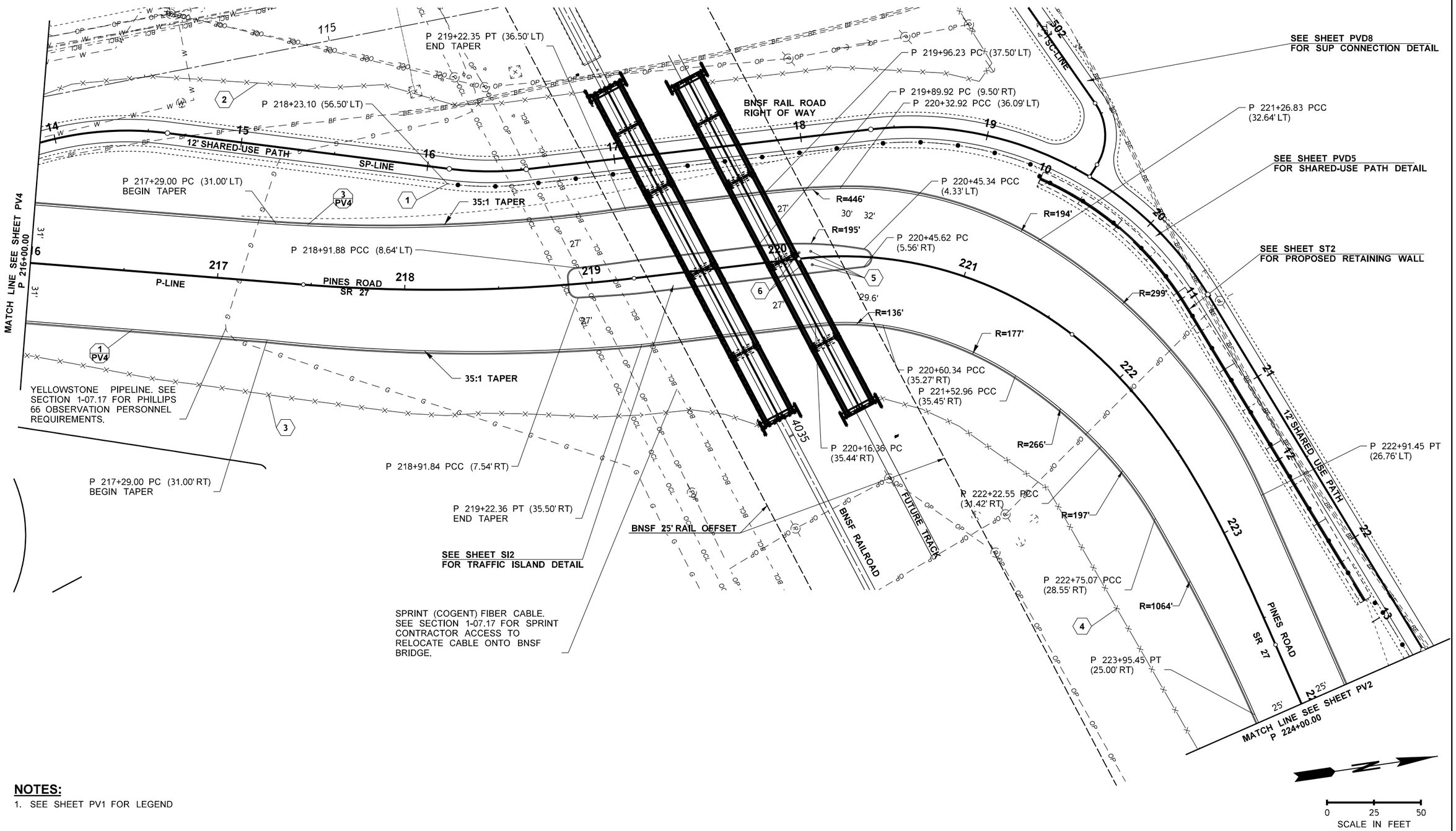
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1
PLAN REF NO
PV4
SHEET 103 OF 218 SHEETS



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1. SEE SHEET PV1 FOR LEGEND

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ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

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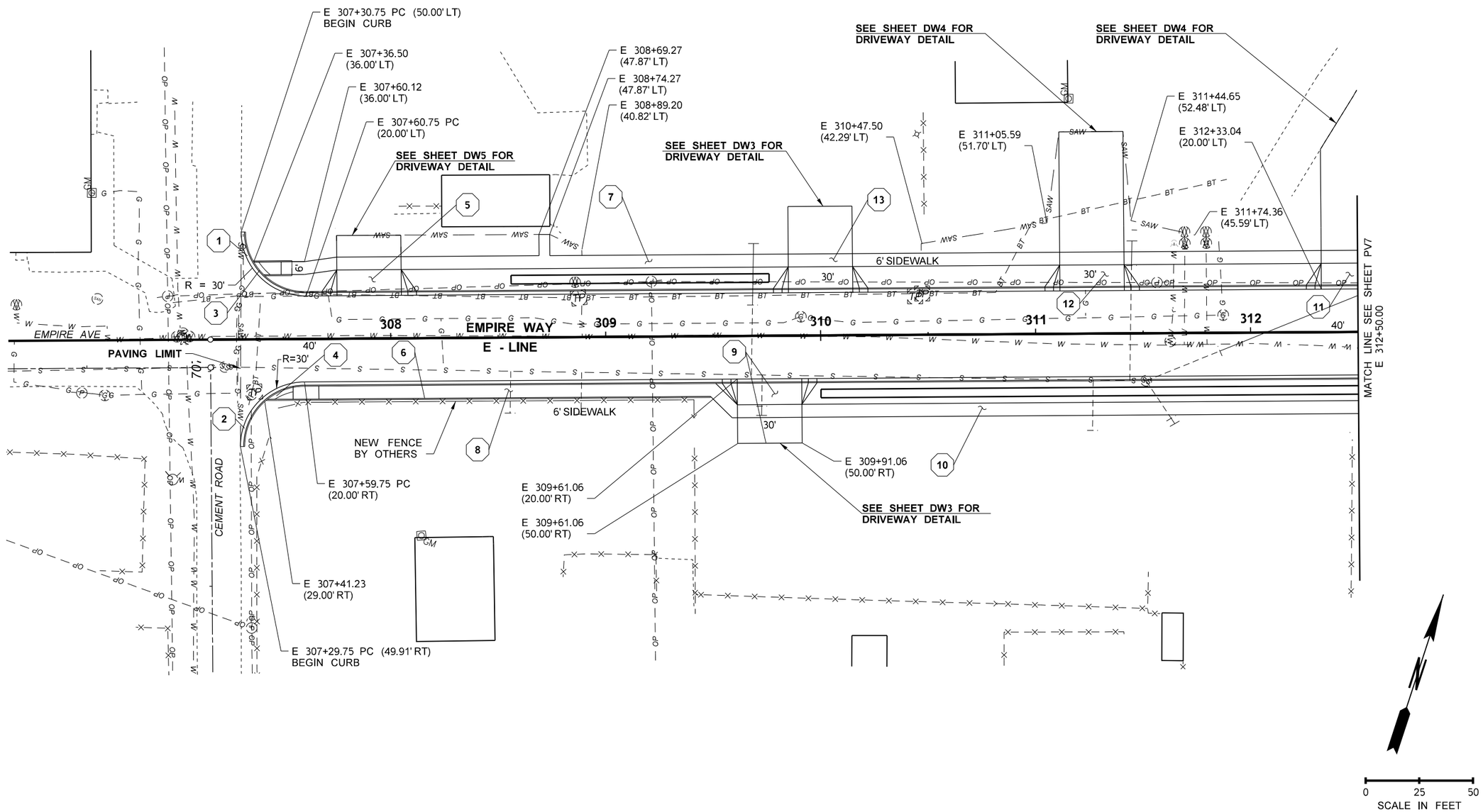
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1
PLAN REF NO
PV5
SHEET 104 OF 218 SHEETS



NOTES:

SEE SHEET PV1 FOR LEGEND

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DATE	5/29/2025				JOB NUMBER	69A36525420110RASWA	
PLOTTED BY	EMCGUIRE					69A36524420020RLDWA	
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.	LOCATION NO.	
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
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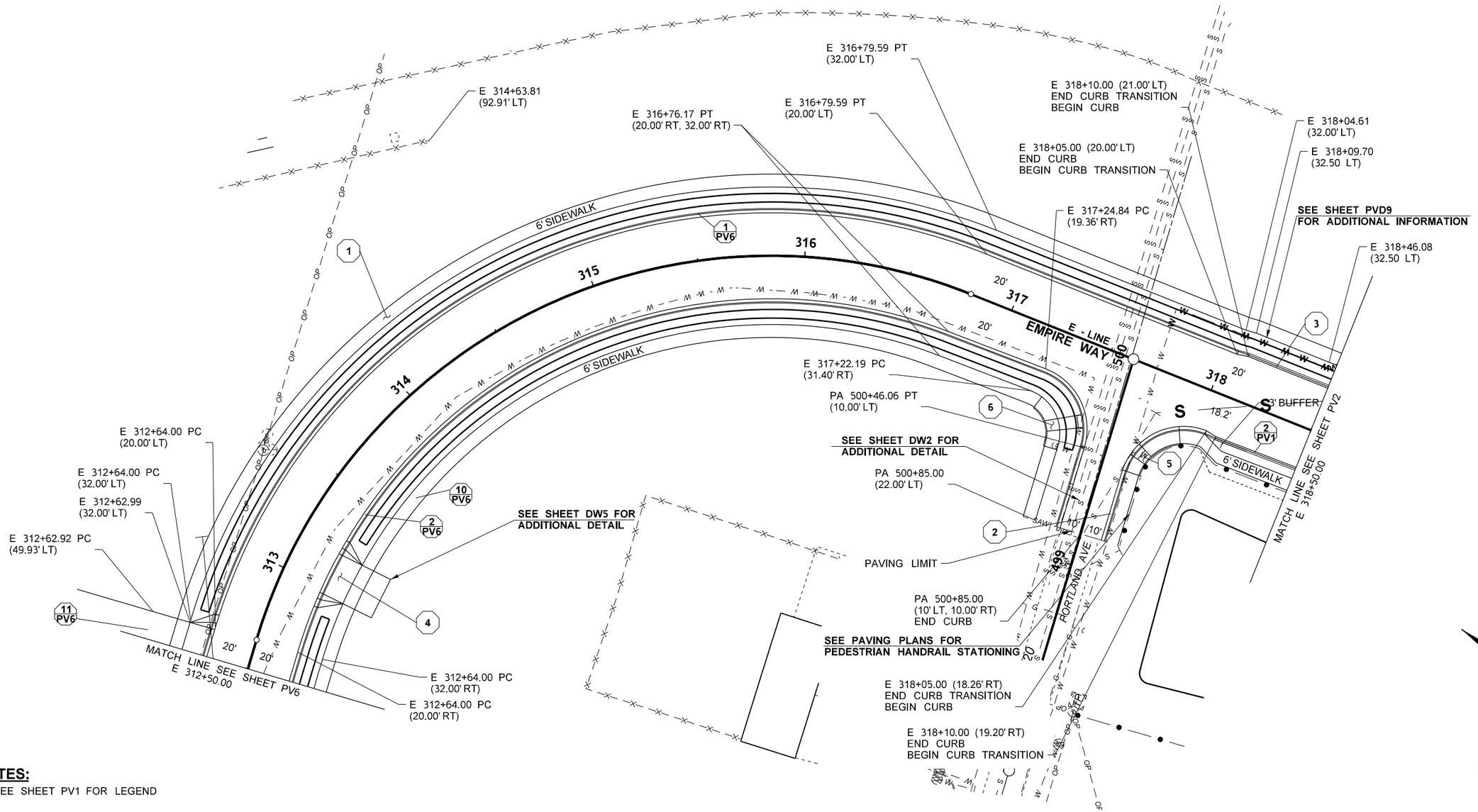
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1
PLAN REF NO
PV6
SHEET 105 OF 218 SHEETS



NOTES:

1. SEE SHEET PV1 FOR LEGEND

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DATE	5/29/2025						
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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
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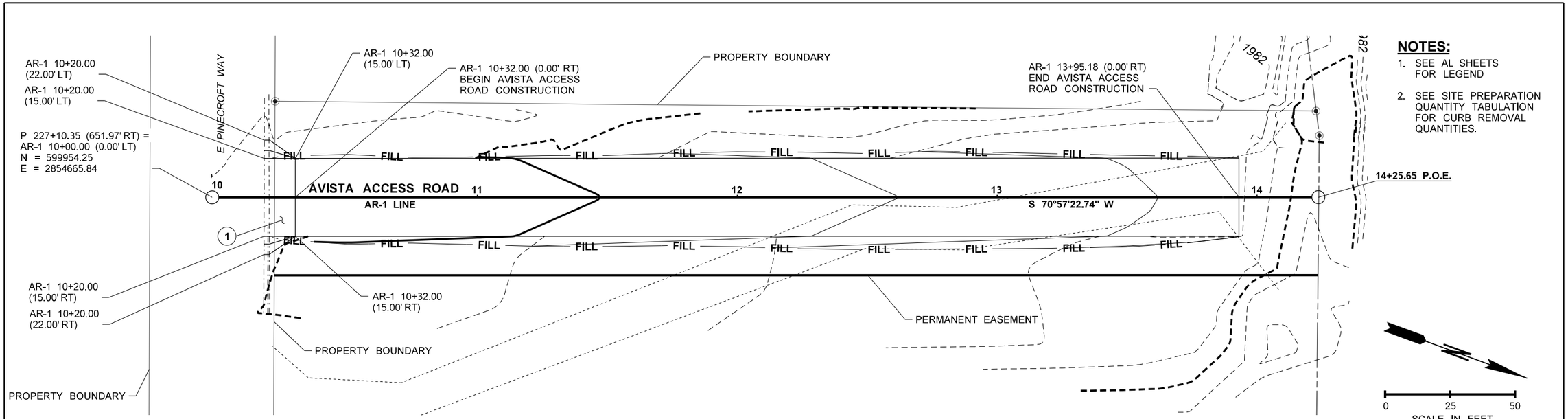
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1
PLAN REF NO PV7
SHEET 106 OF 218 SHEETS



NOTES:

1. SEE AL SHEETS FOR LEGEND
2. SEE SITE PREPARATION QUANTITY TABULATION FOR CURB REMOVAL QUANTITIES.

AR-1 PROFILE

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DATE	6/4/2025						
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ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/05/2025
DATE
P.E. STAMP BOX

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P.E. STAMP BOX

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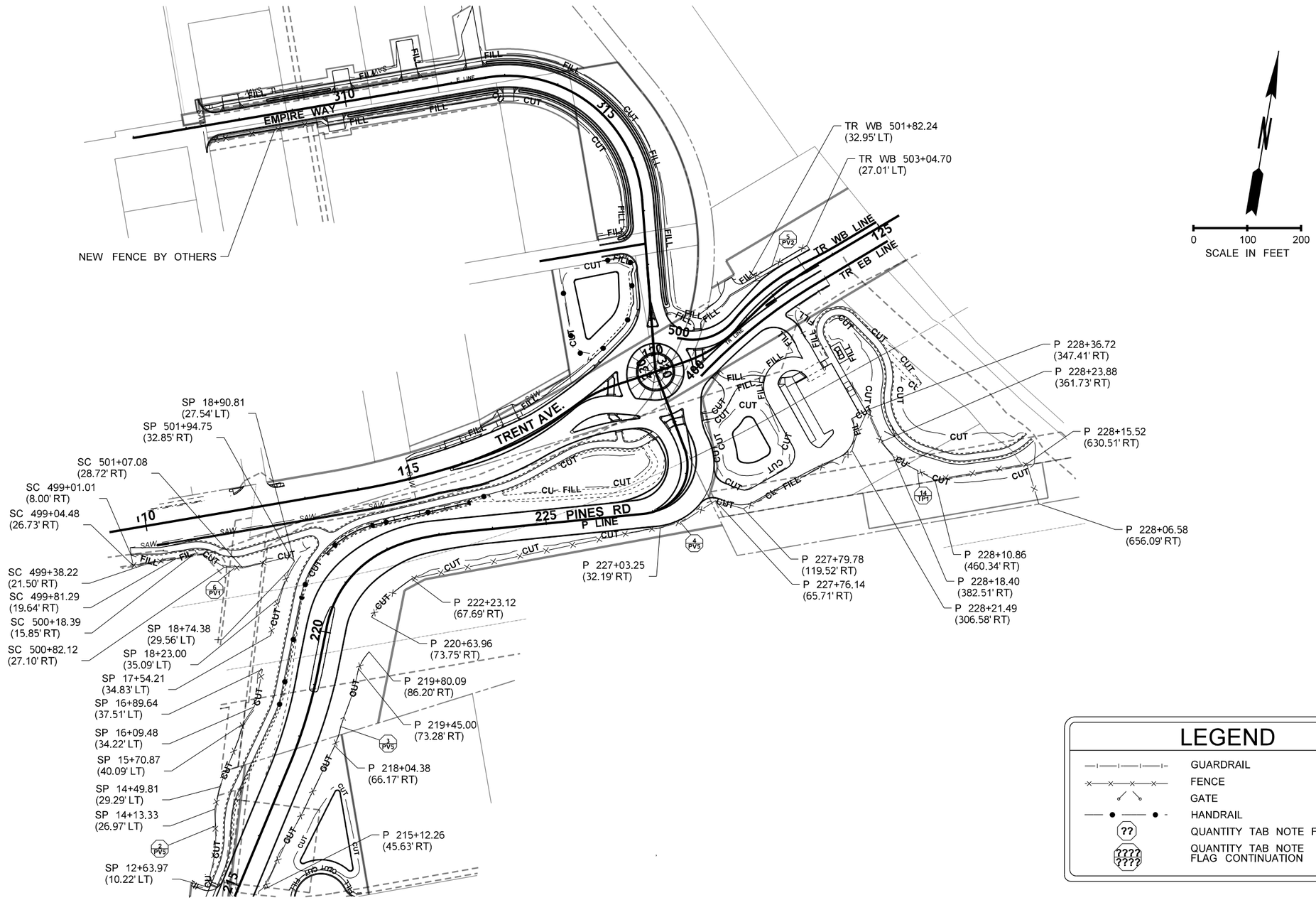
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING PLAN

Plot 1

PLAN REF NO
PV8

SHEET
107
OF
218
SHEETS



LEGEND

—I—I—I—I—	GUARDRAIL
—x—x—x—x—	FENCE
	GATE
—●—●—	HANDRAIL
??	QUANTITY TAB NOTE FLAG
???? ????	QUANTITY TAB NOTE FLAG CONTINUATION

NOTES:

1. SEE ST SHEETS FOR HANDRAIL DETAILS

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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER
06/02/2025
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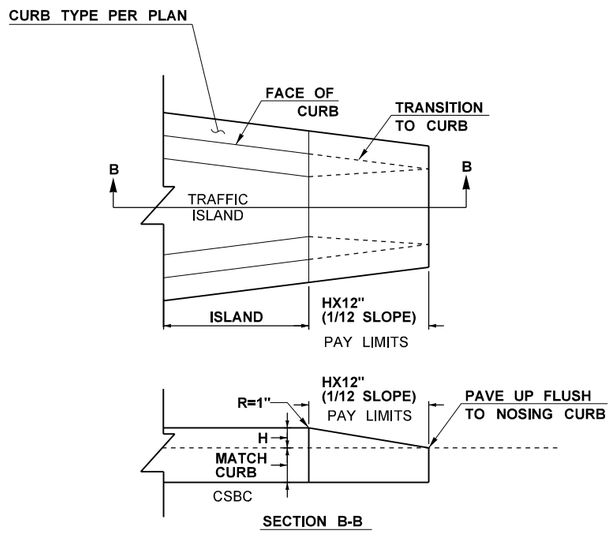
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

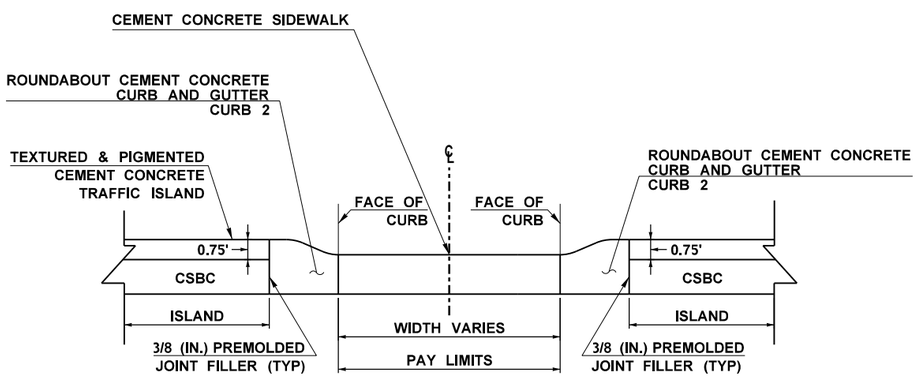
FENCING PLAN

Plot 1
PLAN REF NO
FP1
SHEET 108 OF 218 SHEETS



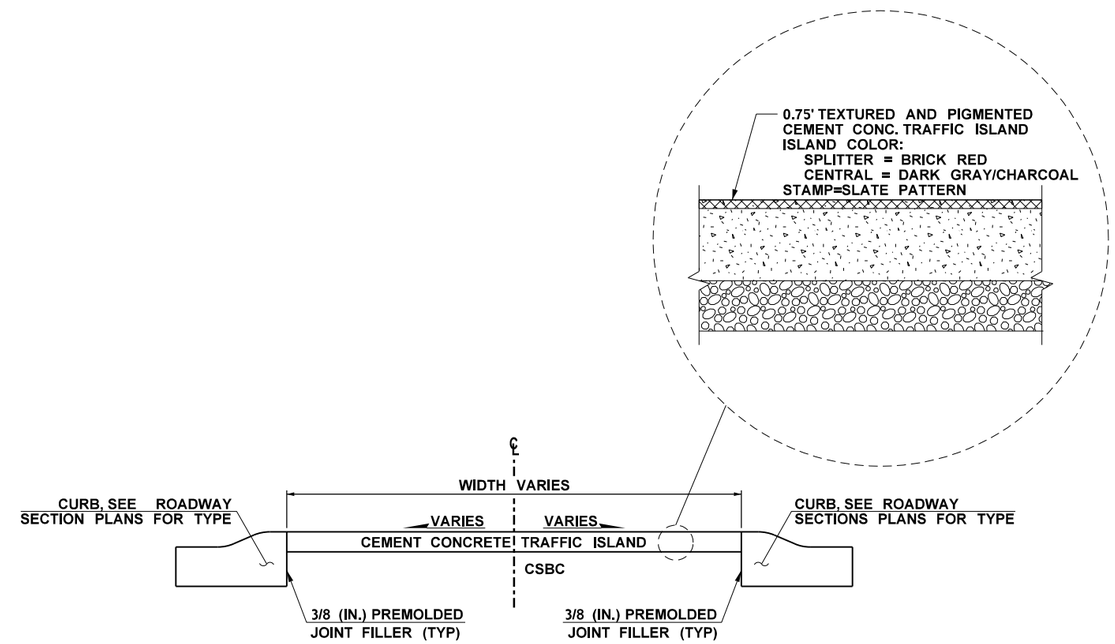
CEMENT CONC. ROUNDABOUT SPLITTER ISLAND NOSE DETAIL (TYP)

NOT TO SCALE



SPLITTER ISLAND CROSSWALK SECTION

SECTION APPLIES TO ALL SPLITTER ISLAND CROSSWALKS



TRAFFIC ISLAND SECTION

SECTION APPLIES TO ALL SPLITTER AND CENTRAL ISLANDS

FILE NAME	c:\pwworking\west01\d2172371\PINES_PS_PVD_001.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
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DESIGNED BY	B KIRKMAN				JOB NUMBER		
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
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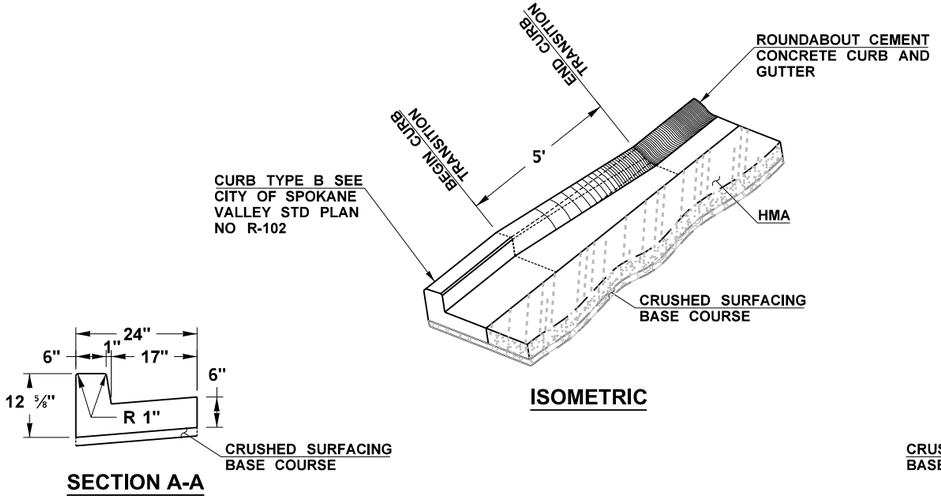
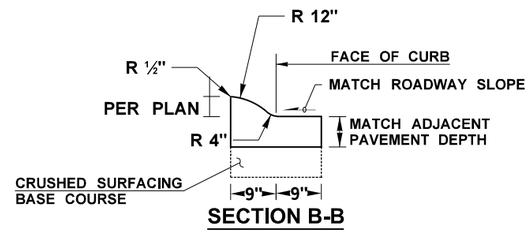
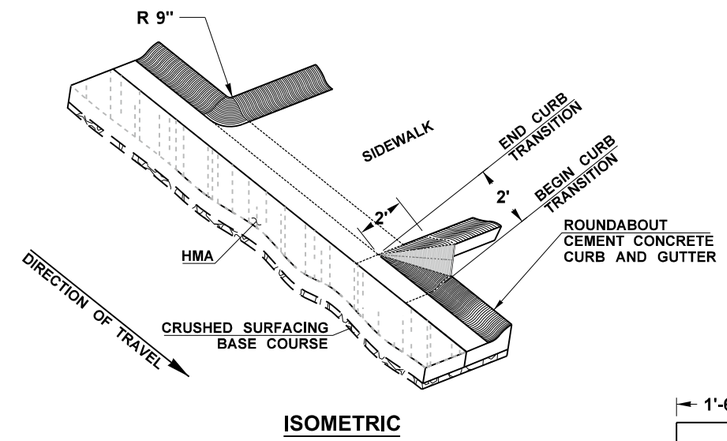
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

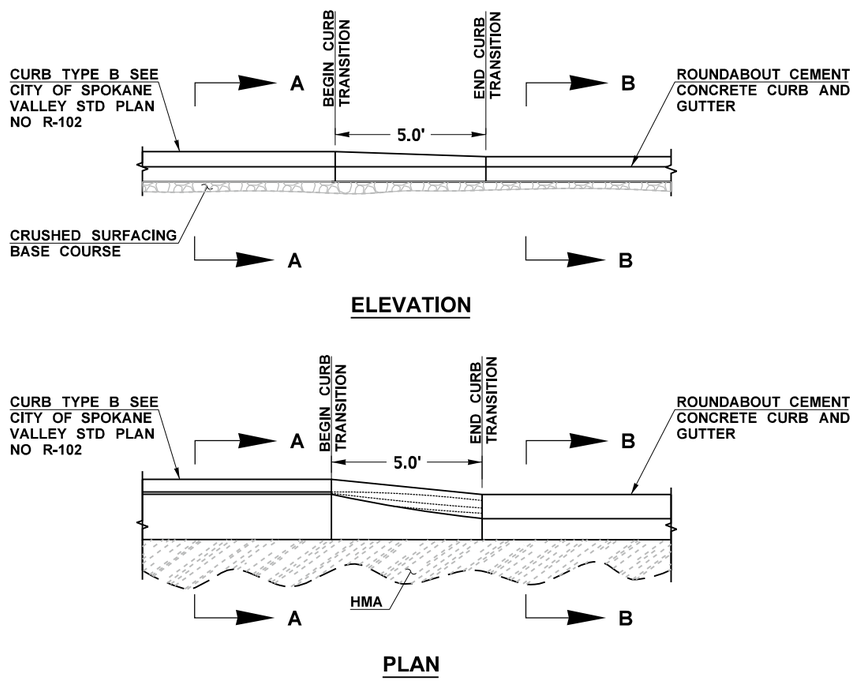
PAVING DETAILS

Plot 1
PLAN REF NO
PVD1
SHEET 109 OF 218 SHEETS



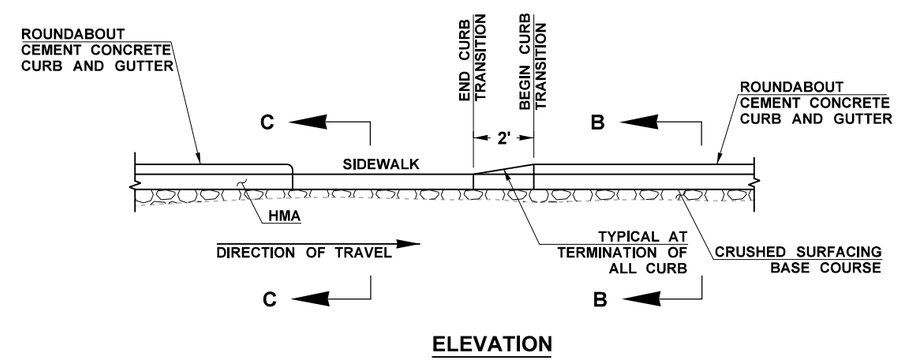






TYPE B TO ROLLED CURB TRANSITION DETAIL

NOT TO SCALE



ROLLED CURB TO FLUSH CURB TRANSITION DETAIL

NOT TO SCALE

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DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
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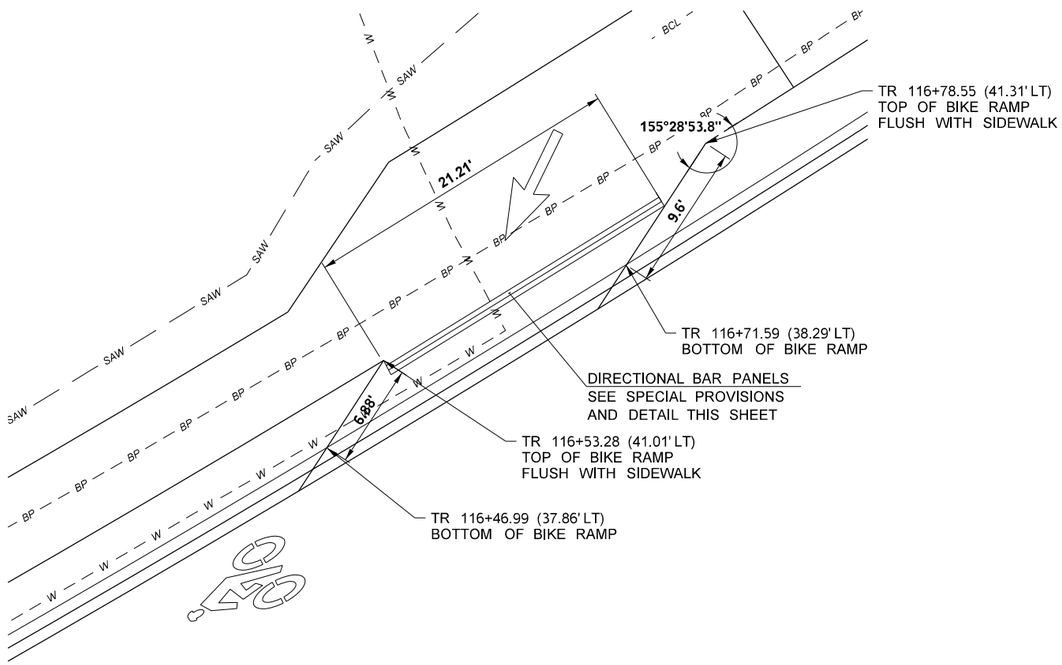
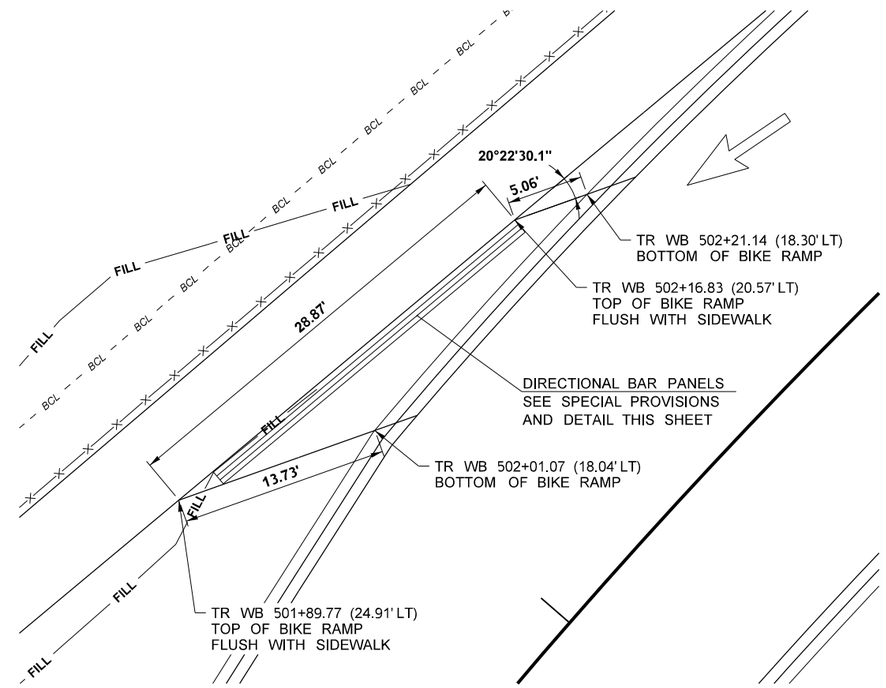
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING DETAILS

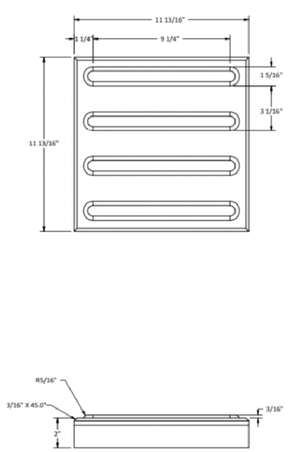
Plot 1
PLAN REF NO
PVD2
SHEET 110 OF 218 SHEETS

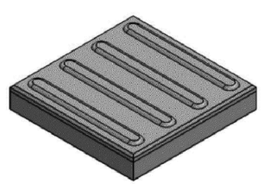


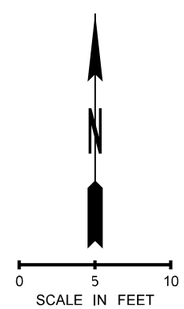
BIKE RAMP DETAIL - TRENT



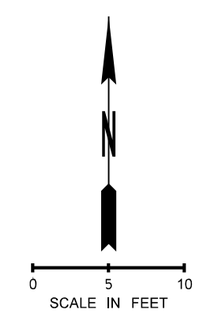
BIKE RAMP DETAIL - TRENT







DIRECTIONAL BAR PANELS DETAIL



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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

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City of Spokane Valley
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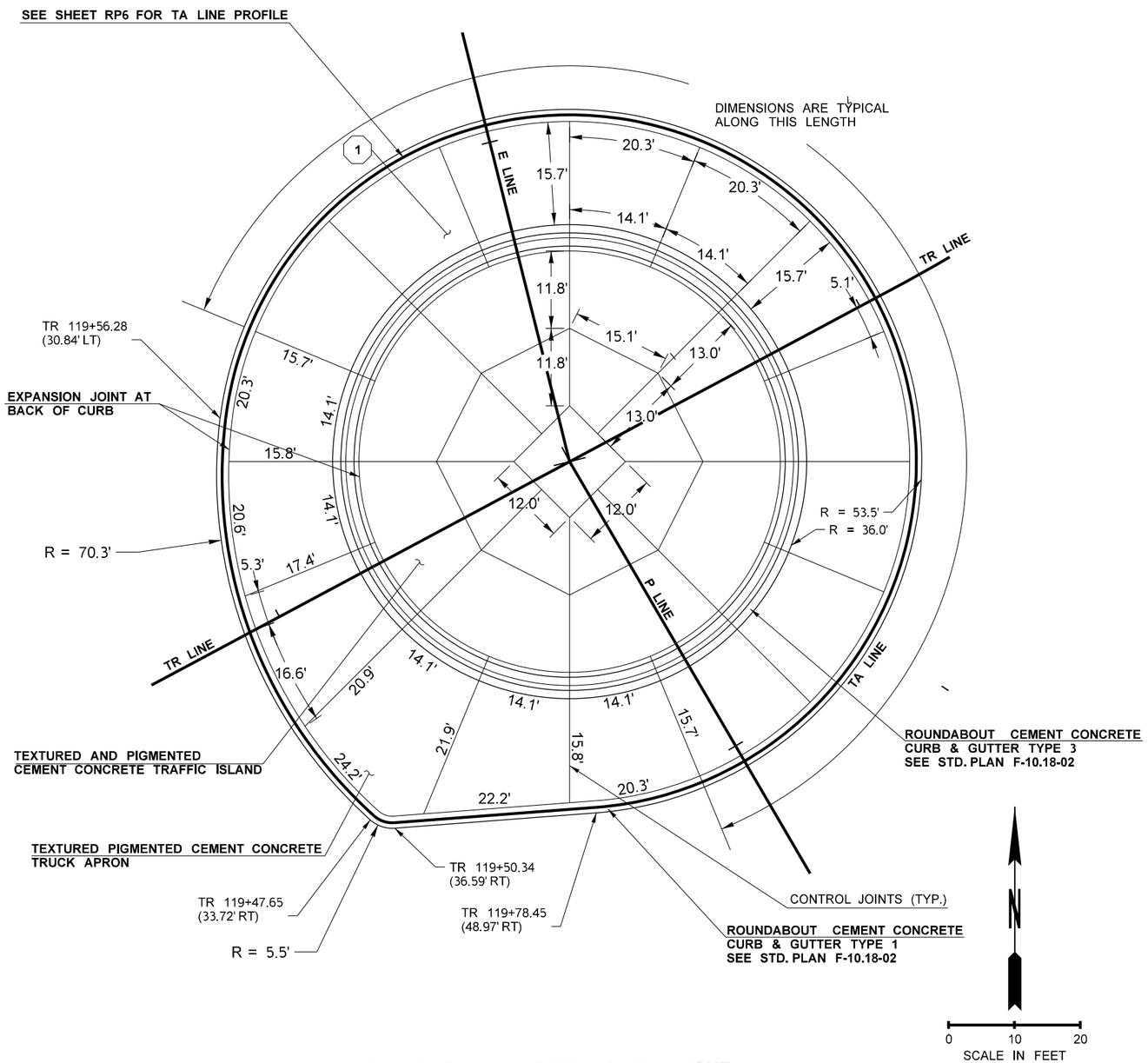
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING DETAILS

Plot 1
PLAN REF NO PVD3
SHEET 111 OF 218 SHEETS



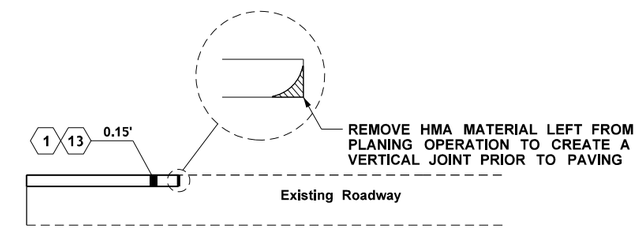
TRUCK APRON CONCRETE JOINT LAYOUT

LEGEND

1 HMA CL. ⅛ IN. PG 64V-28

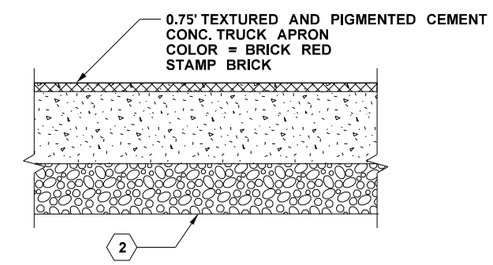
2 CRUSHED SURFACING BASE COURSE

13 PLANING BITUMINOUS PAVEMENT



BUTT JOINT DETAIL

TYPICAL OF TRANSVERSE JOINTS FOR ALL AREAS OF GRIND/INLAY JOINING EXISTING PAVEMENT



TEXTURED AND PIGMENTED CEMENT CONC. TRUCK APRON DETAIL

NOT TO SCALE

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DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

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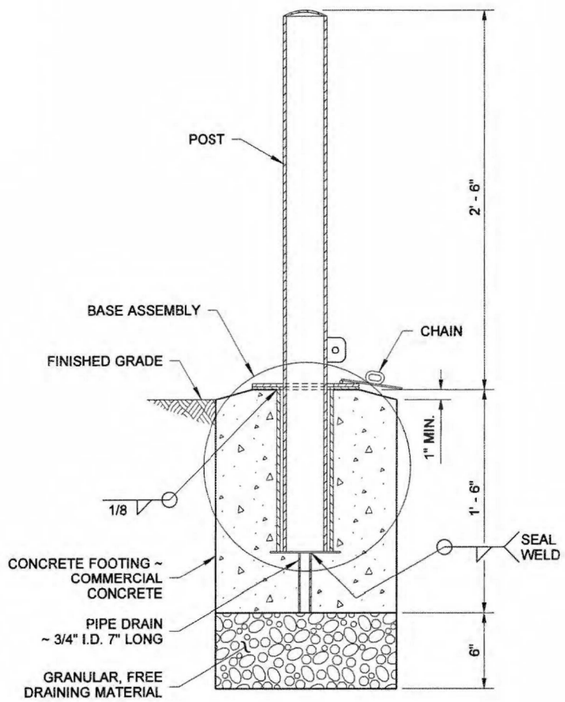
PAVING DETAILS

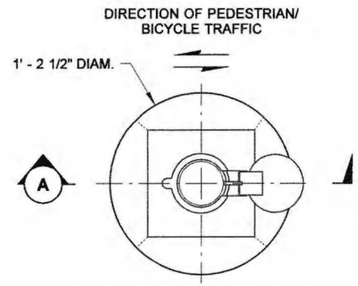
Plot 1

PLAN REF NO
PVD4

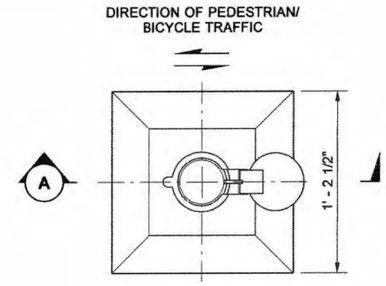
SHEET 112 OF 218 SHEETS



SECTION (A)



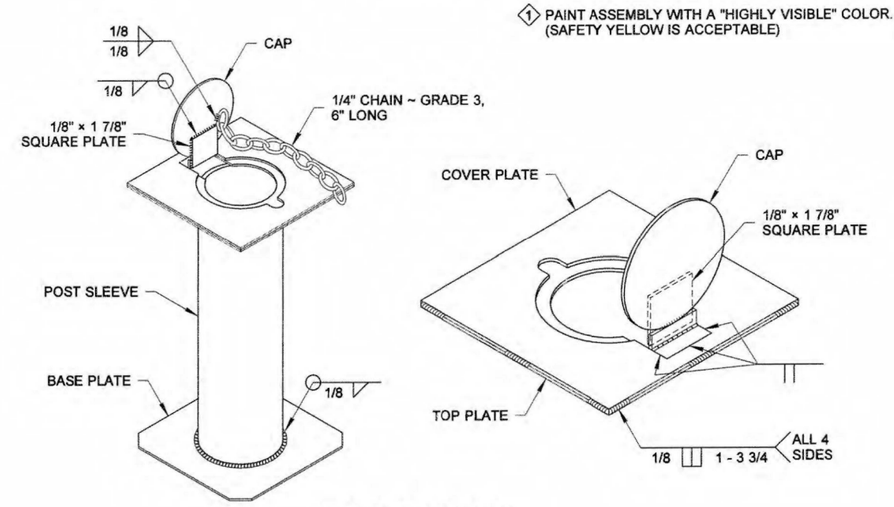
ROUND FOOTING



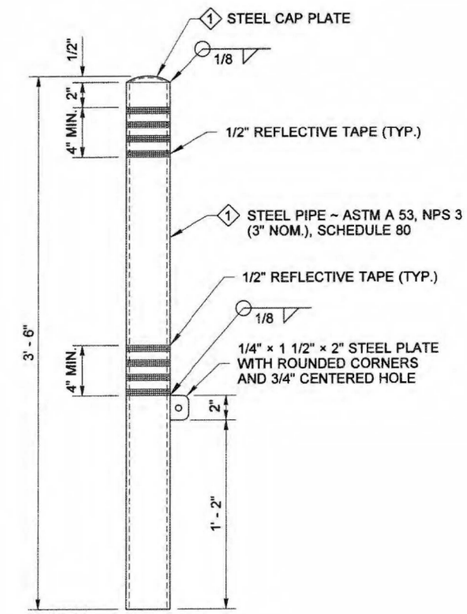
SQUARE FOOTING

PLAN VIEW

(1) PAINT ASSEMBLY WITH A "HIGHLY VISIBLE" COLOR. (SAFETY YELLOW IS ACCEPTABLE)



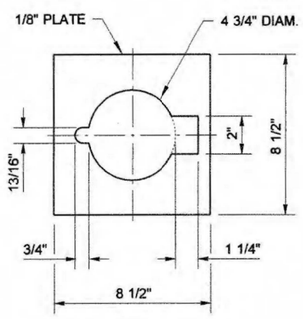
(1) BASE ASSEMBLY



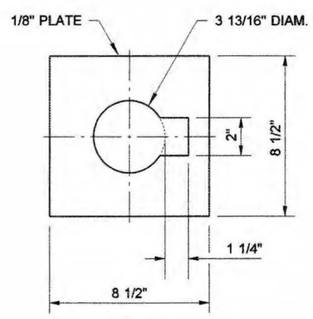
POST

NOTE

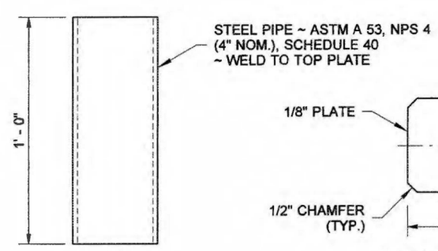
This bollard does not have an effective breakaway design feature and cannot be installed within the Design Clear Zone.



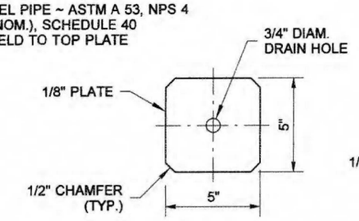
COVER PLATE



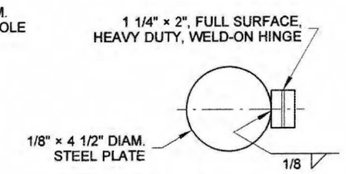
TOP PLATE



POST SLEEVE



BASE PLATE



CAP AND HINGE

BOLLARD TYPE 1

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DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
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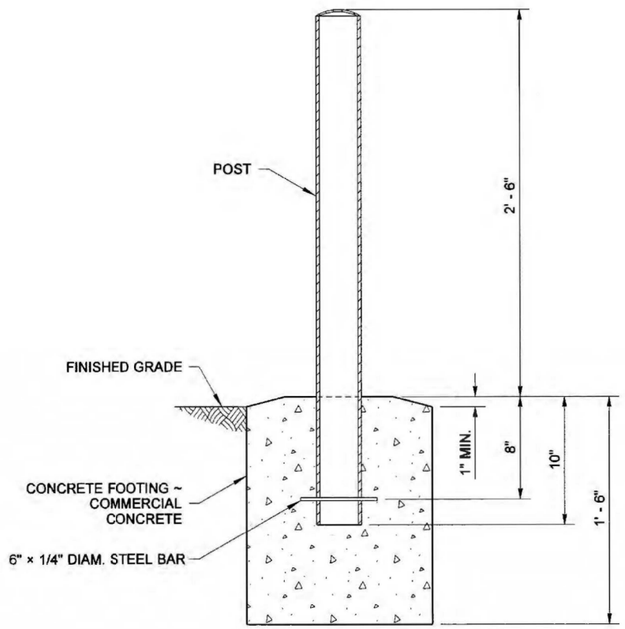
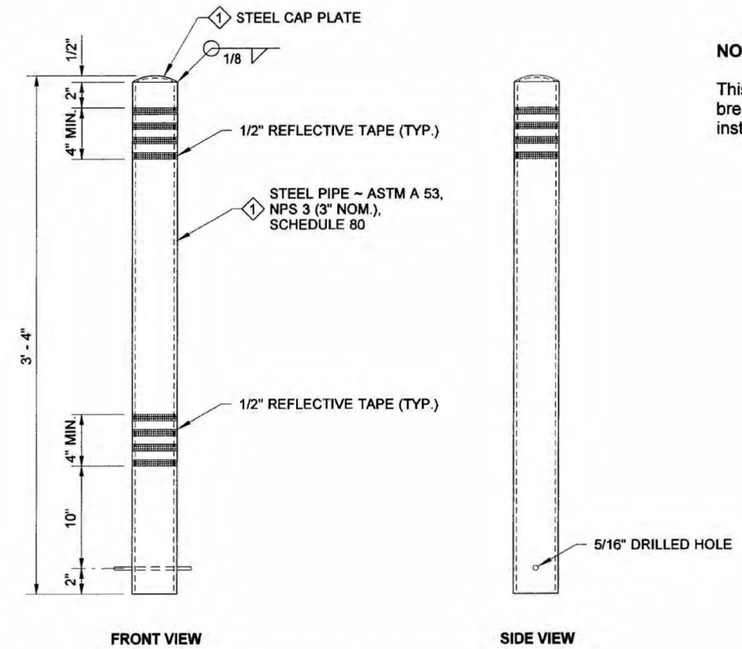
SPOKANE COUNTY - MP 8.43

PAVING DETAILS

Plot 1
PLAN REF NO
PVD5
SHEET 113 OF 218 SHEETS



SECTION (A)

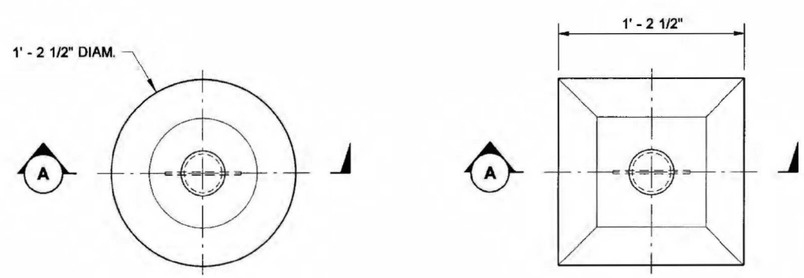


1 PAINT ASSEMBLY WITH A "HIGHLY VISIBLE" COLOR. (SAFETY YELLOW IS ACCEPTABLE)

POST

NOTE

This bollard does not have an effective breakaway design feature and cannot be installed within the Design Clear Zone.



ROUND FOOTING

SQUARE FOOTING

PLAN VIEW

BOLLARD TYPE 2

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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
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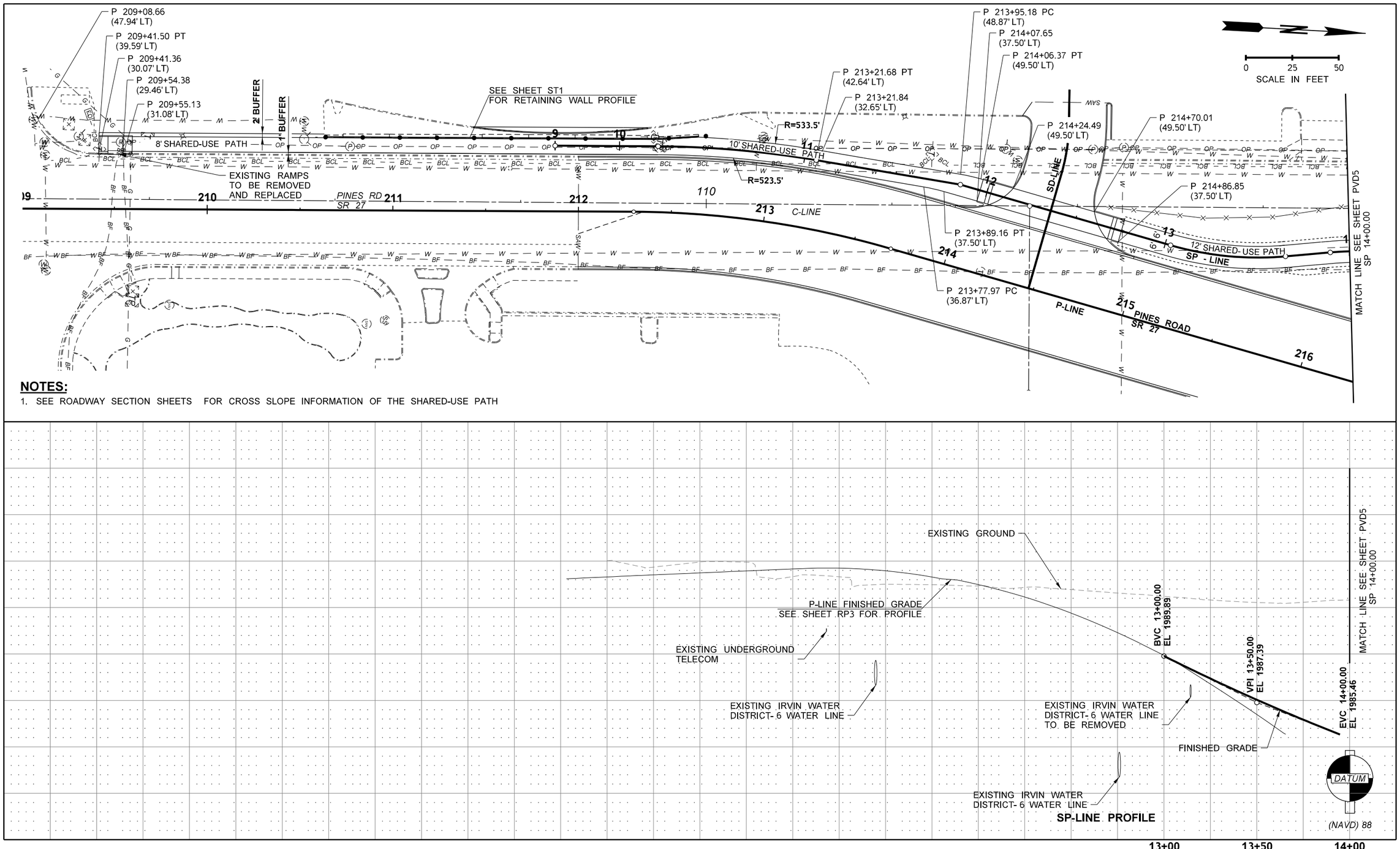
SPOKANE COUNTY - MP 8.43

PAVING DETAILS

Plot 1
PLAN REF NO
PVD6
SHEET 114 OF 218 SHEETS



NOTES:

1. SEE ROADWAY SECTION SHEETS FOR CROSS SLOPE INFORMATION OF THE SHARED-USE PATH

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TIME	10:52:25 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
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06/02/2025
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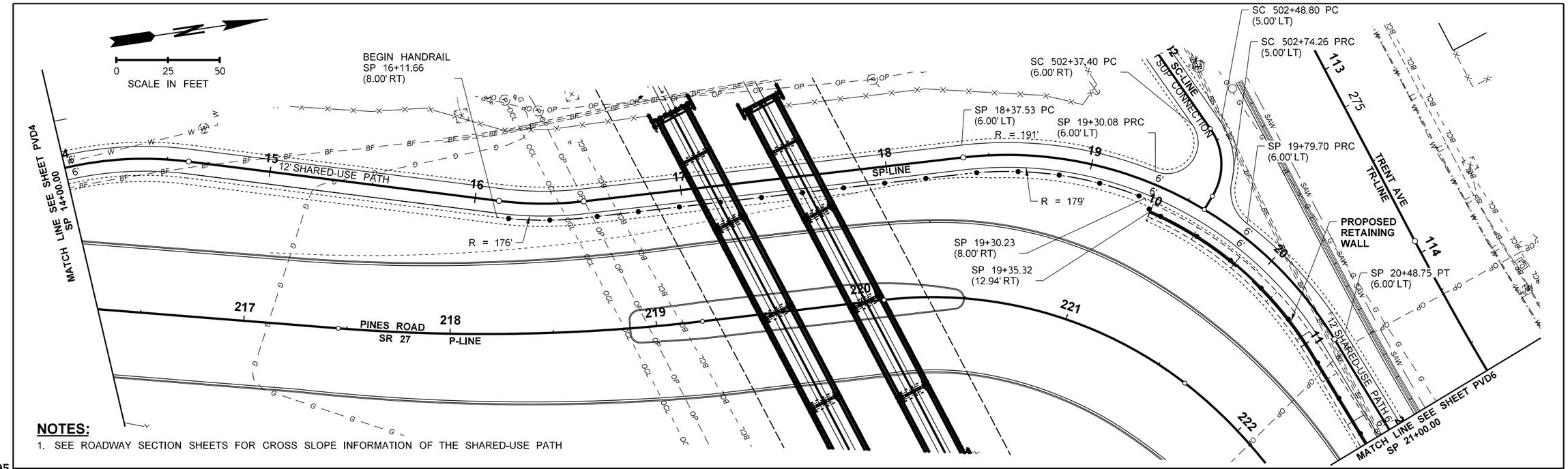
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

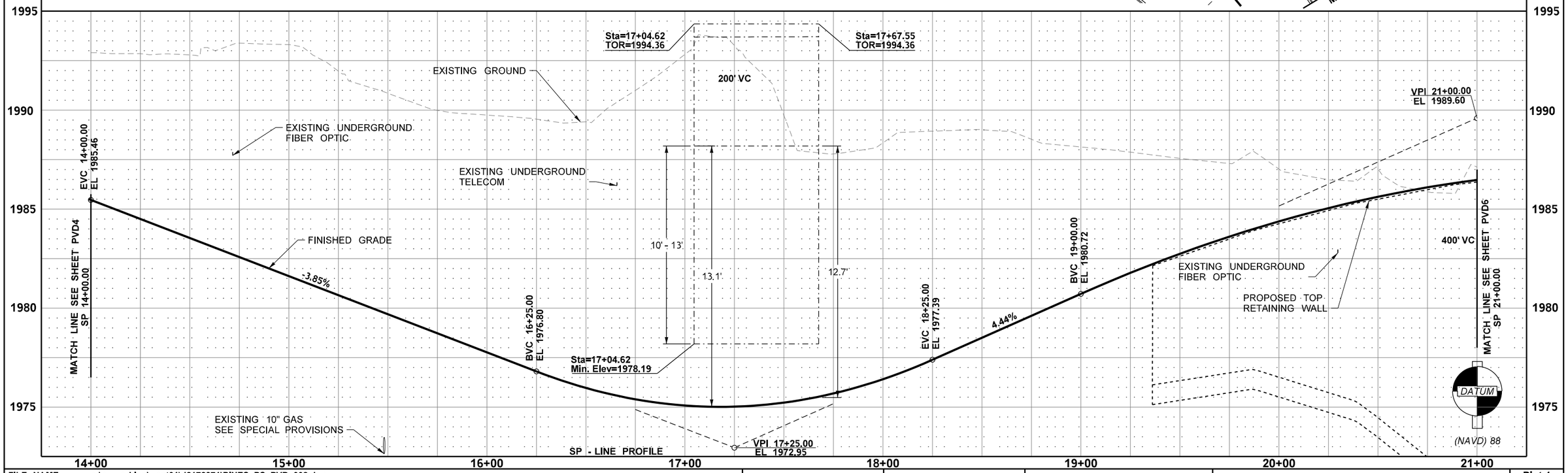
PAVING DETAILS

Plot 1
PLAN REF NO
PVD7
SHEET 115 OF 218 SHEETS



NOTES:

1. SEE ROADWAY SECTION SHEETS FOR CROSS SLOPE INFORMATION OF THE SHARED-USE PATH



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DATE	5/29/2025
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DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
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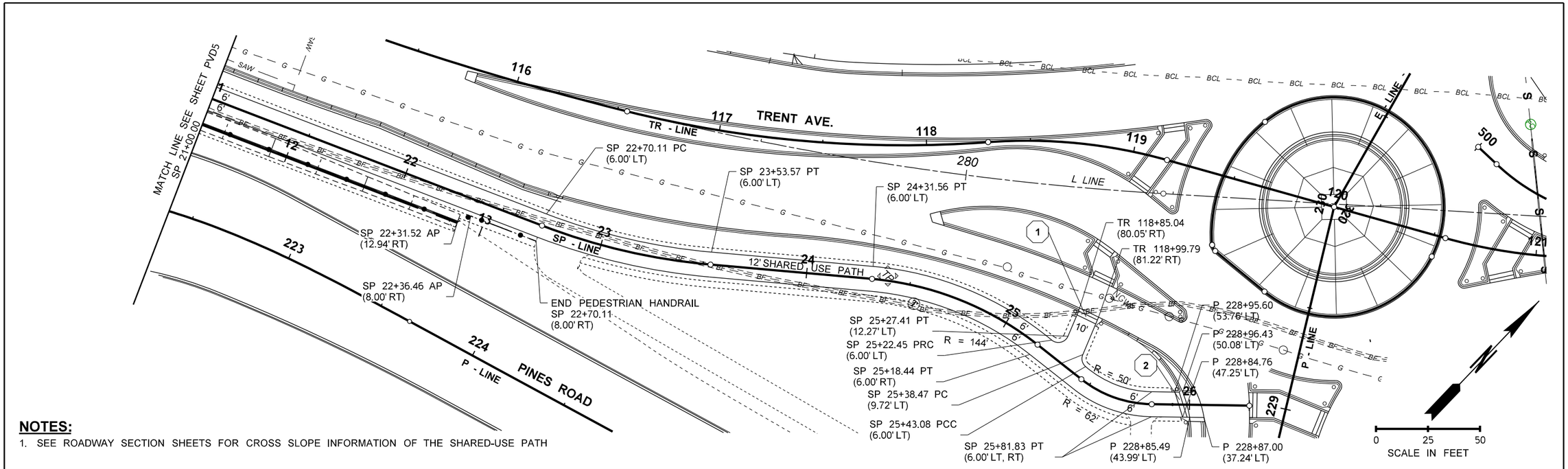
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

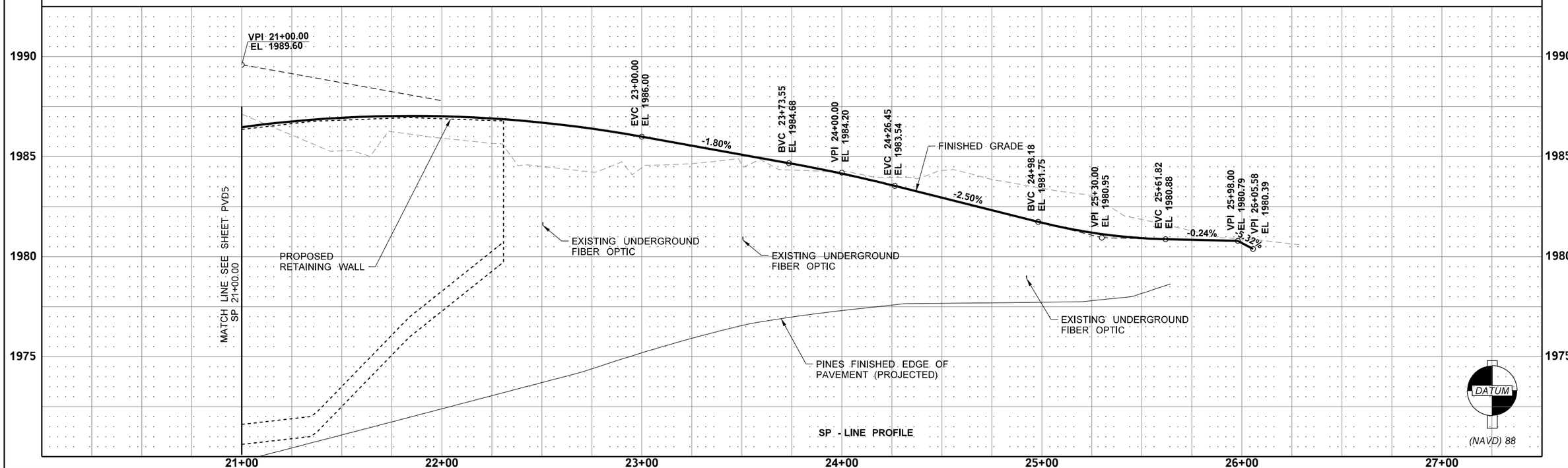
PAVING DETAILS

Plot 1
PLAN REF NO
PVD8
SHEET 116 OF 218 SHEETS



NOTES:

1. SEE ROADWAY SECTION SHEETS FOR CROSS SLOPE INFORMATION OF THE SHARED-USE PATH



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CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

GRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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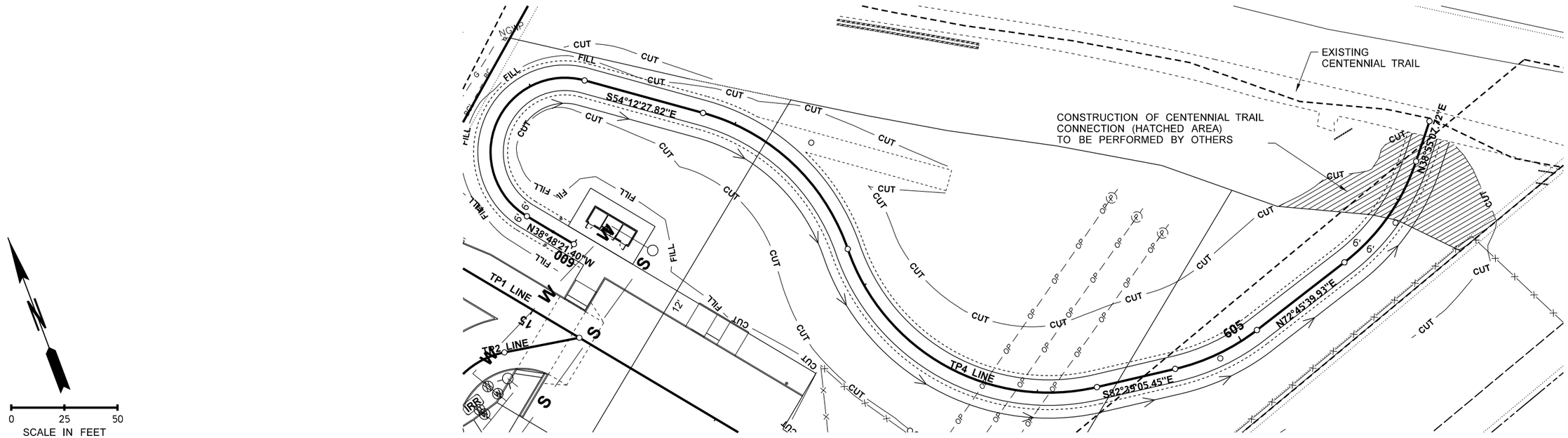
SPOKANE COUNTY - MP 8.43

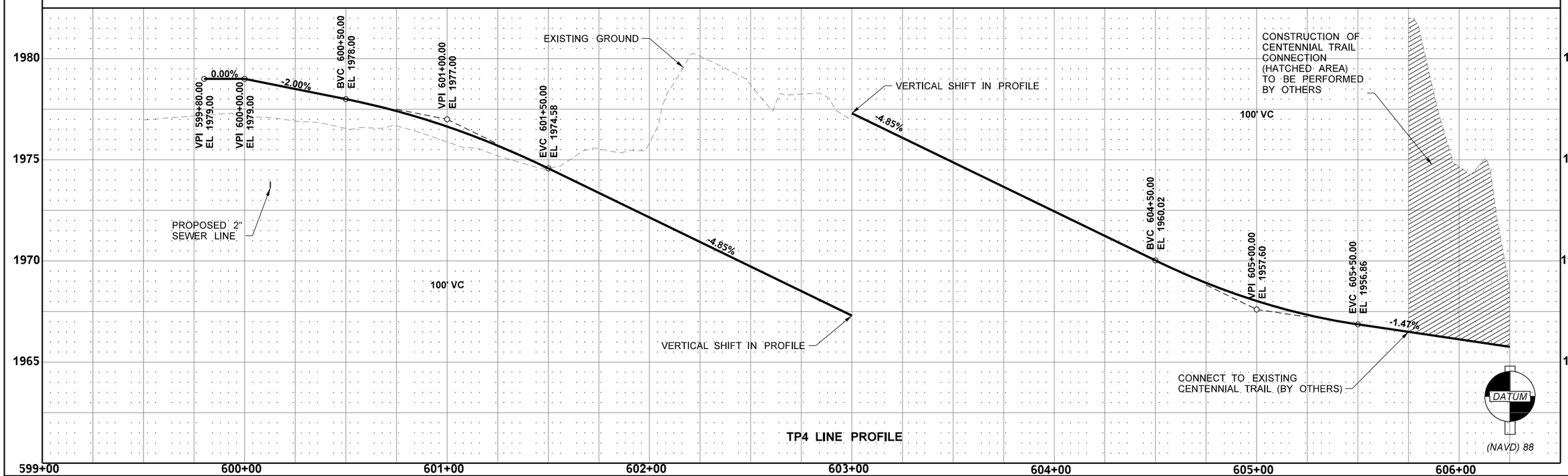
PAVING DETAILS

Plot 1

PLAN REF NO
PVD9

SHEET 117 OF 218 SHEETS





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ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

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STATE OF WASHINGTON
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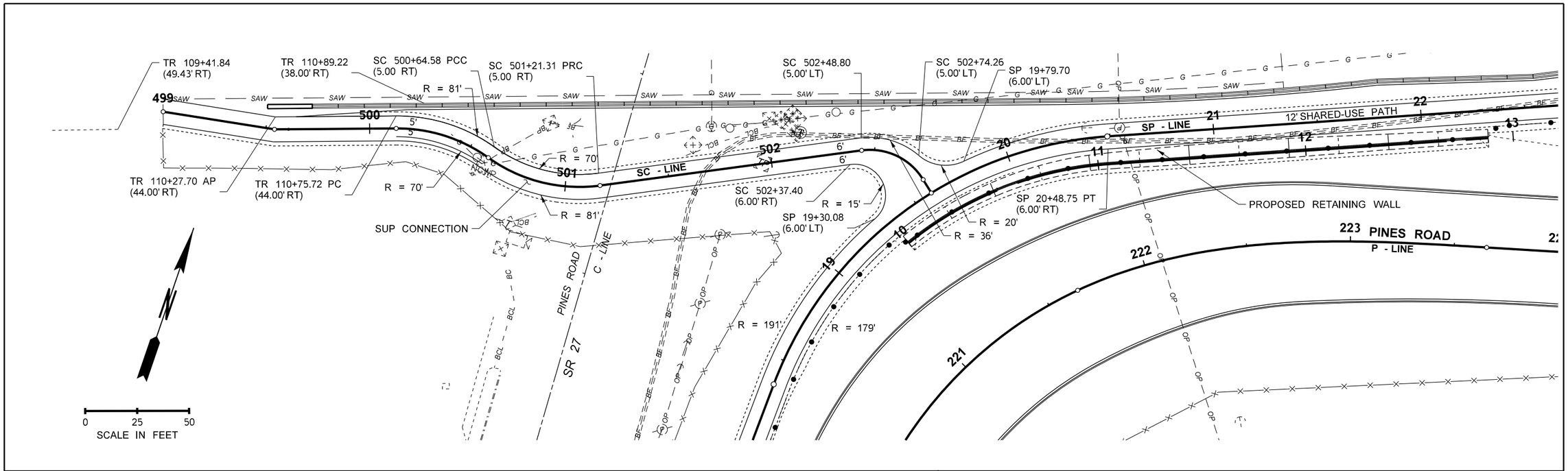
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

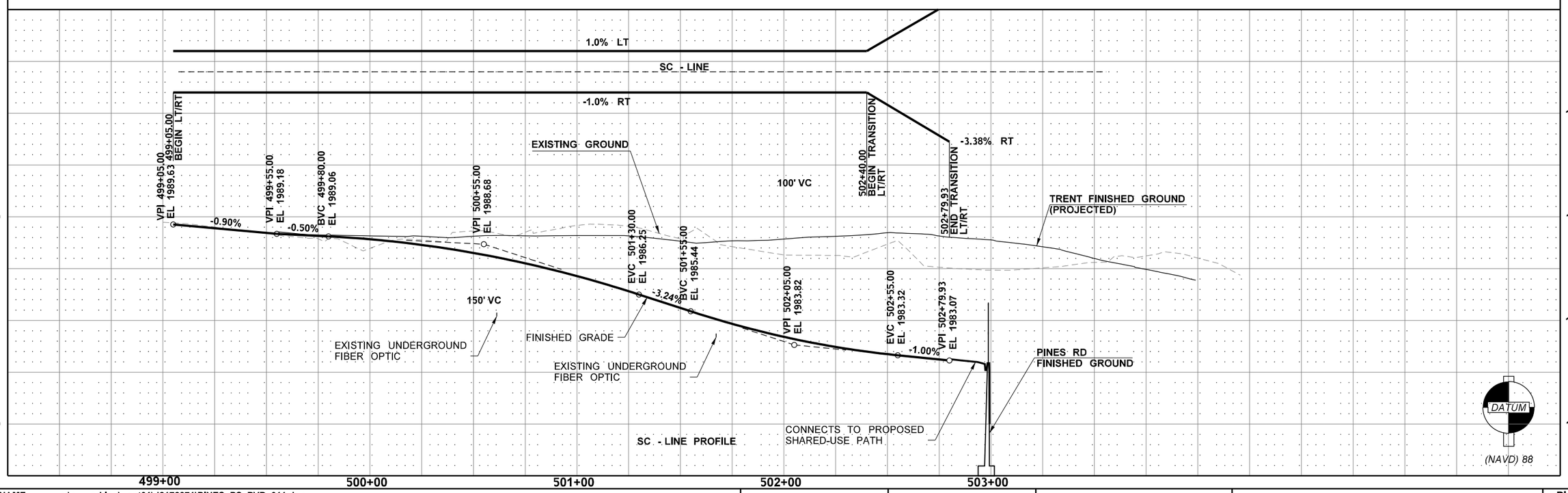
PAVING DETAILS

Plot 1

PLAN REF NO
PVD10

SHEET 118 OF 218 SHEETS





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DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
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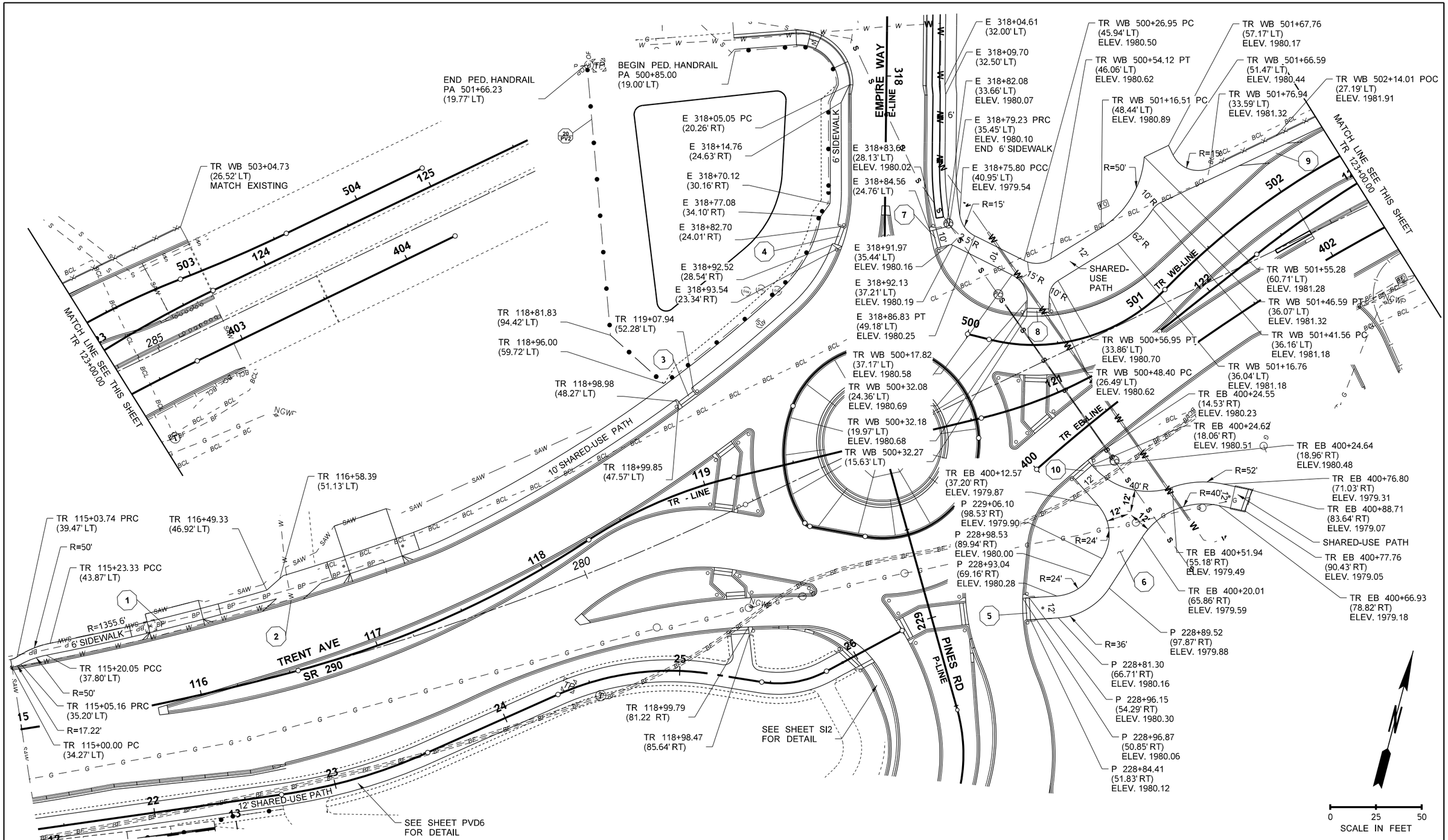
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING DETAILS

Plot 1
PLAN REF NO
PVD11
SHEET 119 OF 218 SHEETS



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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
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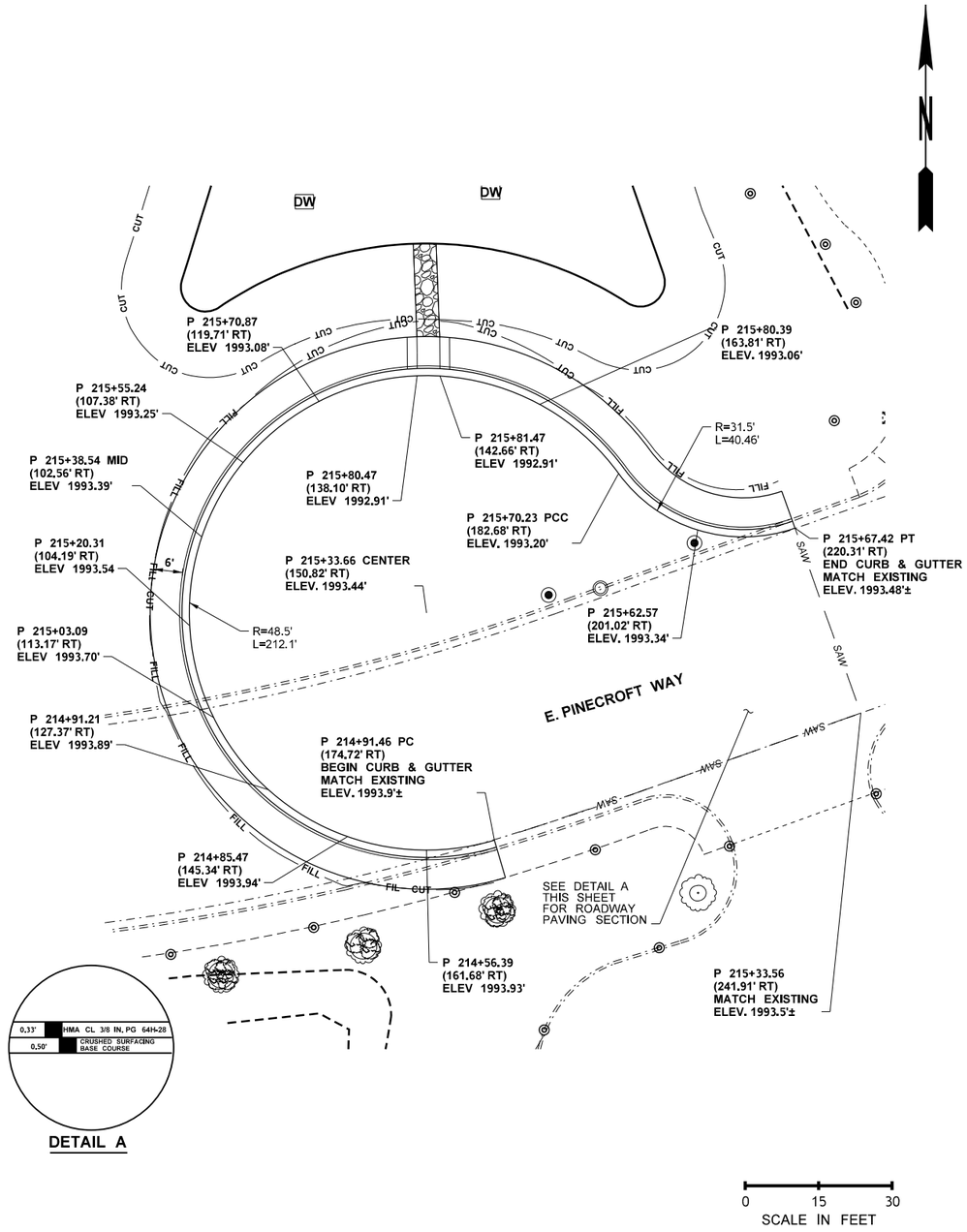
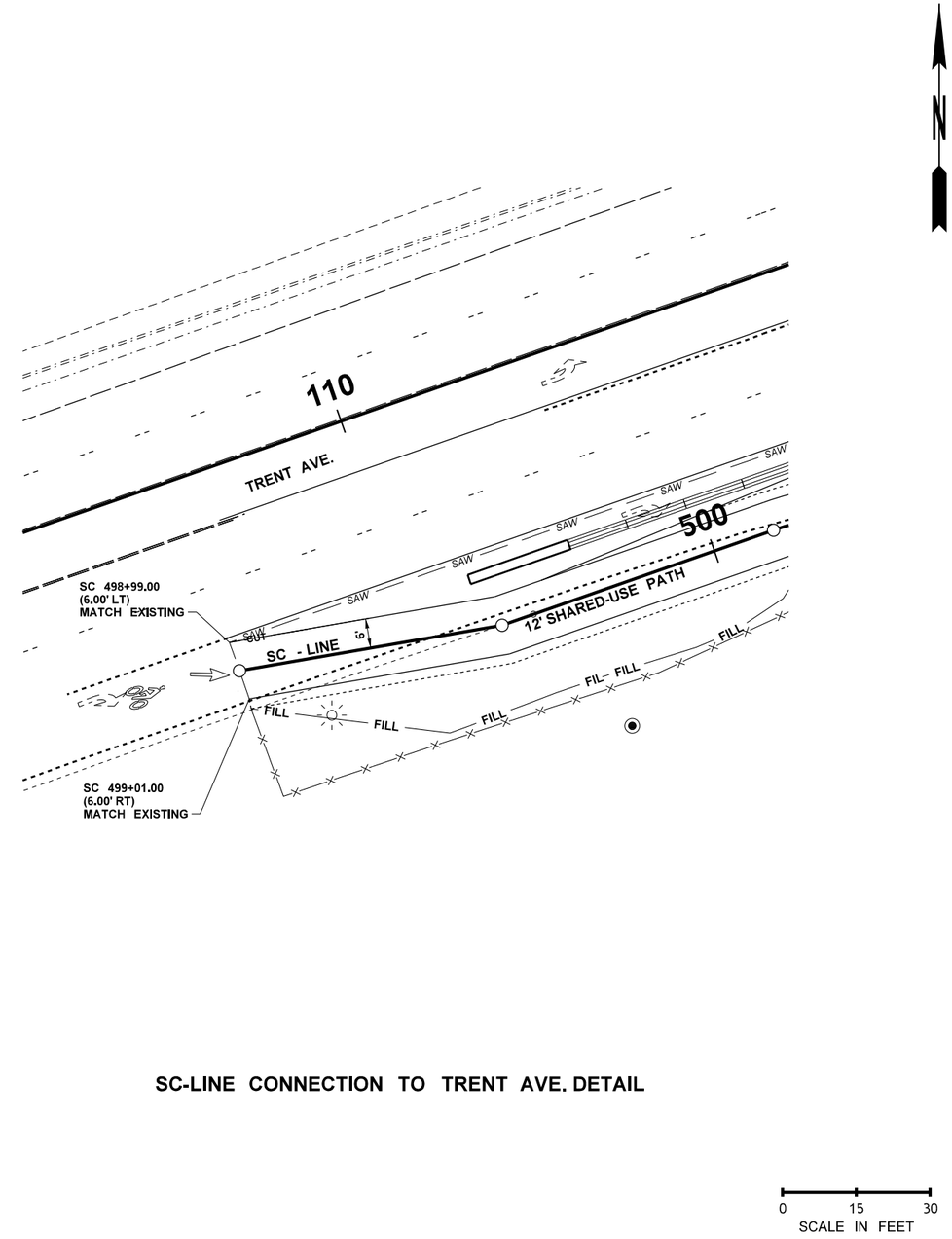
PAVING DETAILS

Plot 1
PLAN REF NO
PVD12
SHEET 120 OF 218 SHEETS





SC-LINE CONNECTION TO TRENT AVE. DETAIL

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DESIGNED BY	B KIRKMAN						69A36524420020RLDWA
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

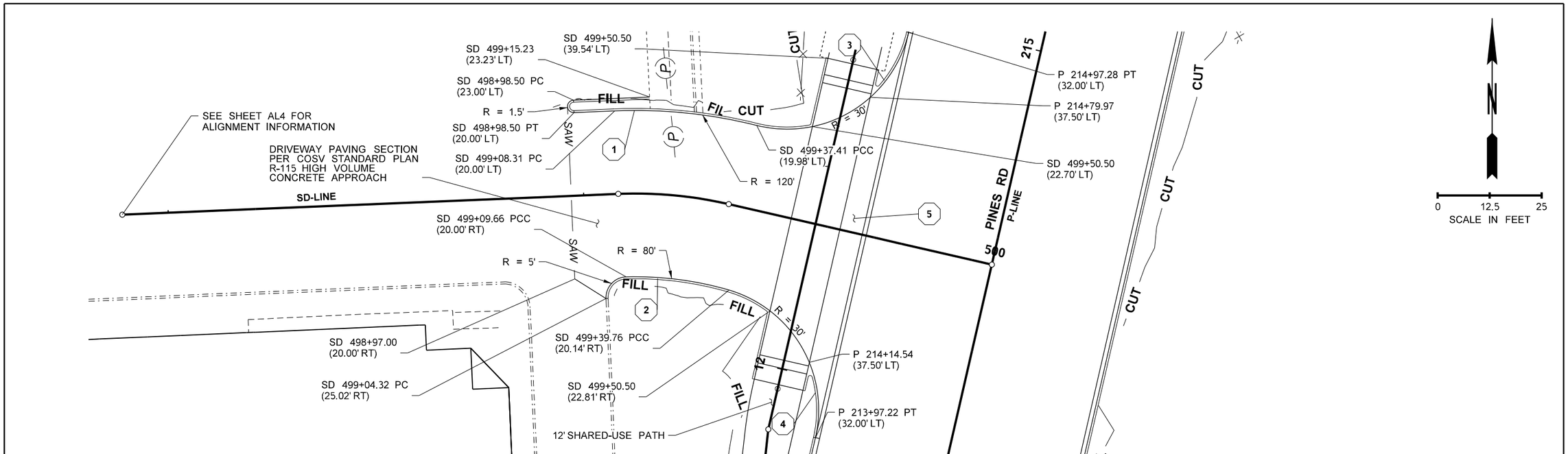
City of Spokane Valley

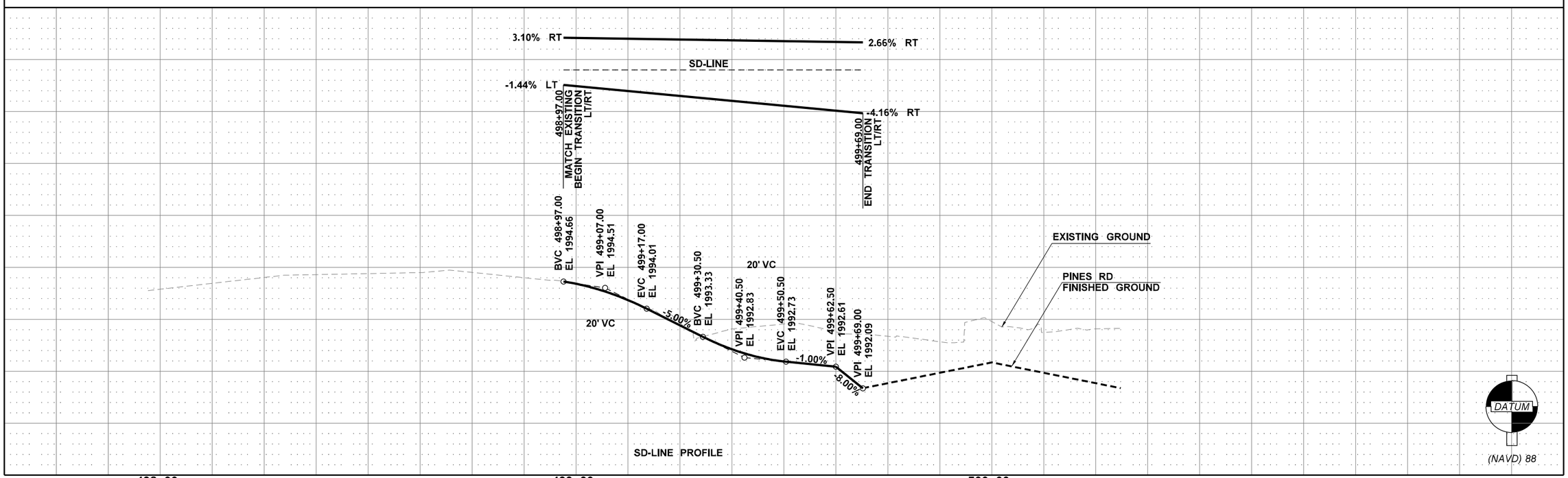
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVING DETAILS

Plot 1
PLAN REF NO
PVD13
SHEET
121
OF
218
SHEETS





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ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

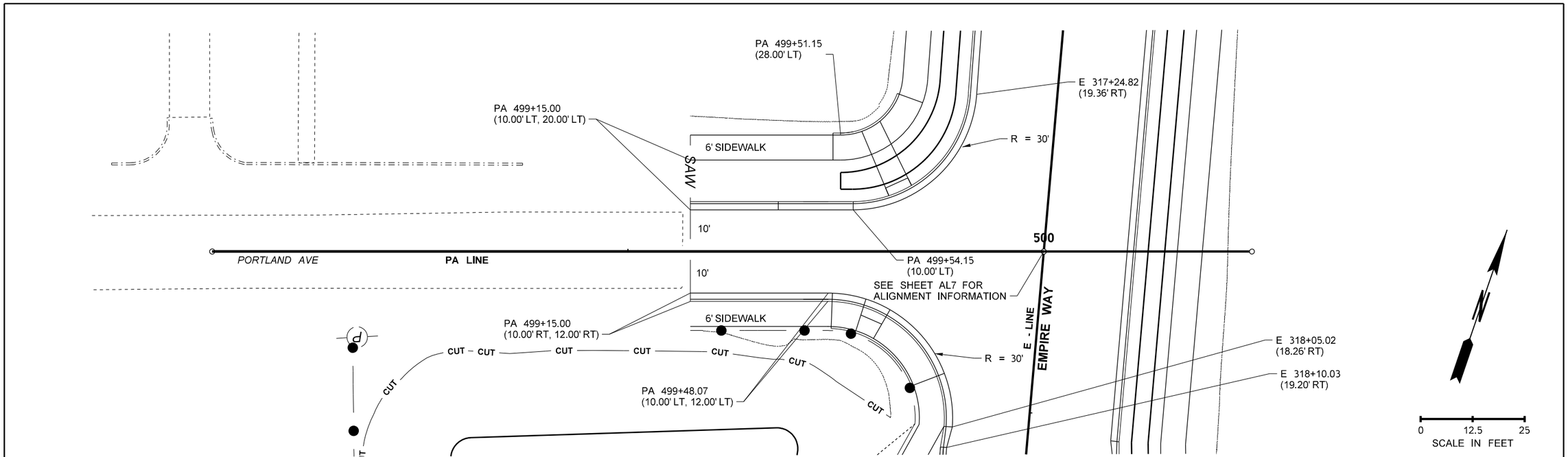
City of Spokane Valley

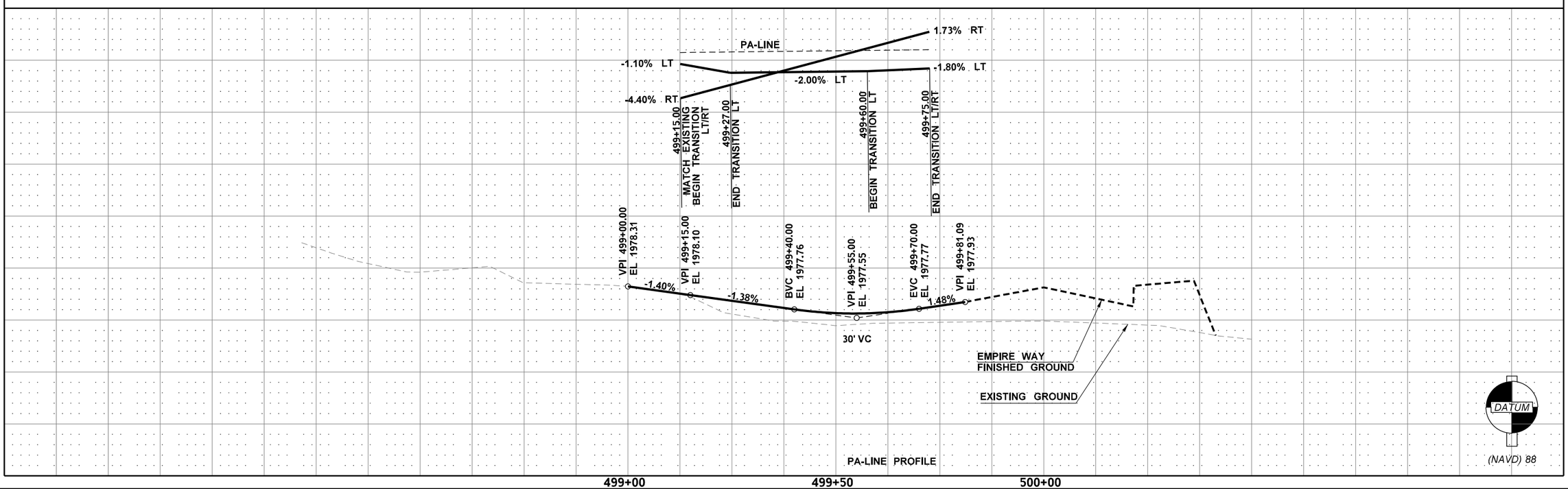
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

DRIVEWAY PLAN

Plot 1
PLAN REF NO
DW1
SHEET
122
OF
218
SHEETS





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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

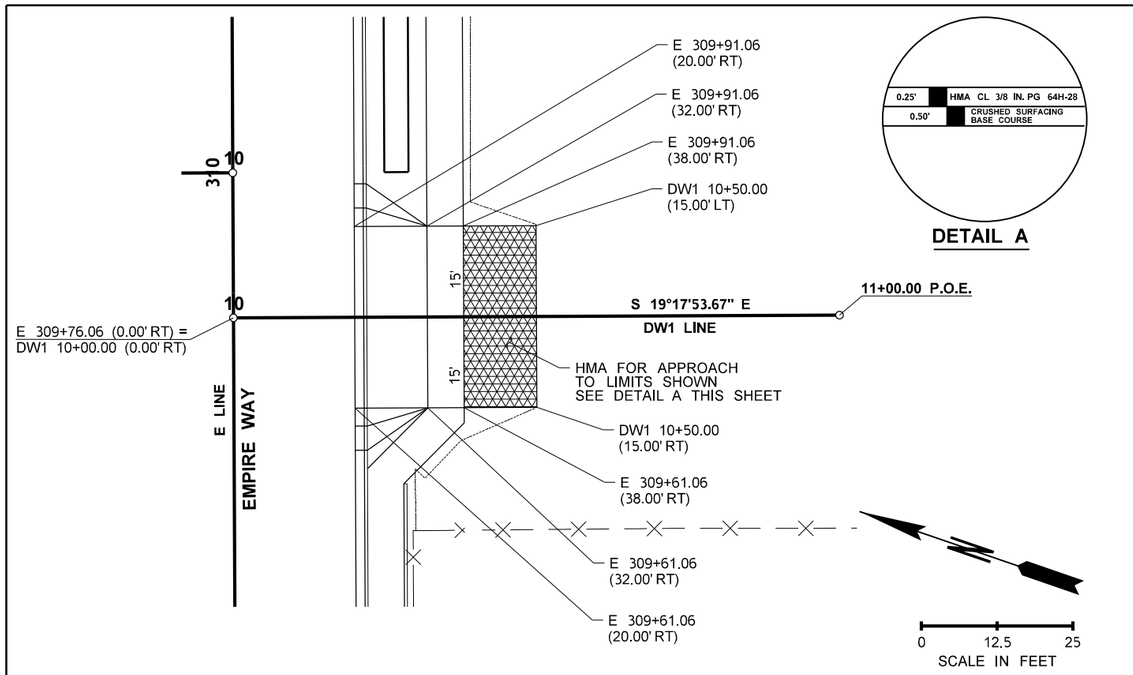
City of Spokane Valley

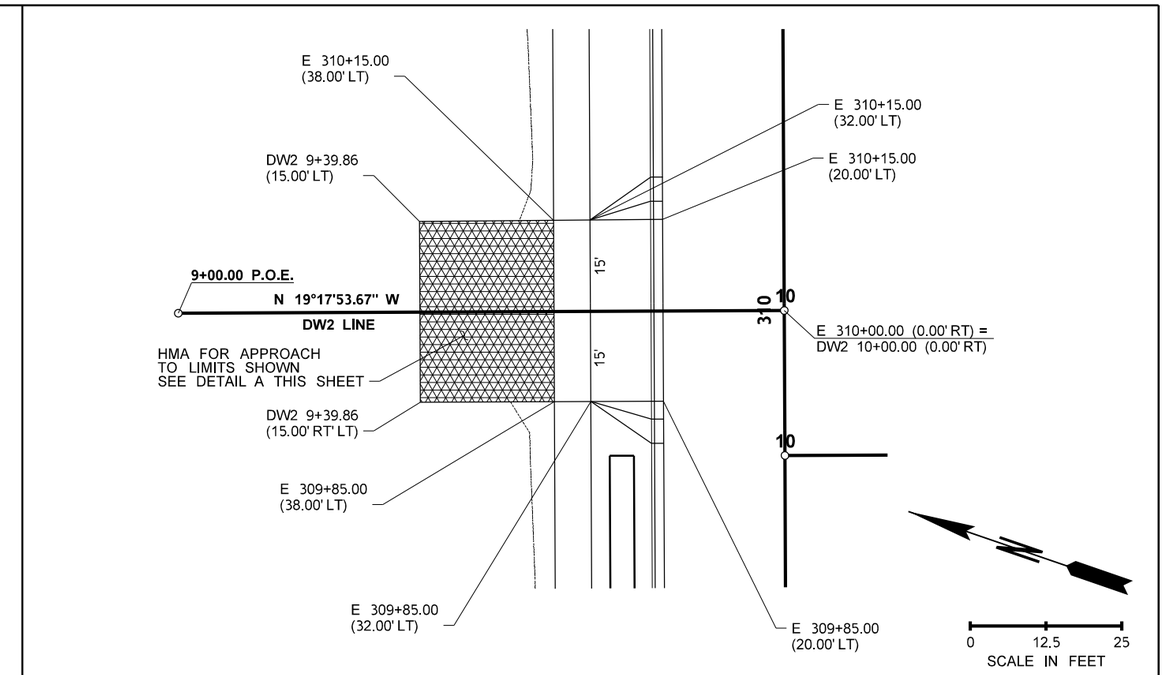
HDR

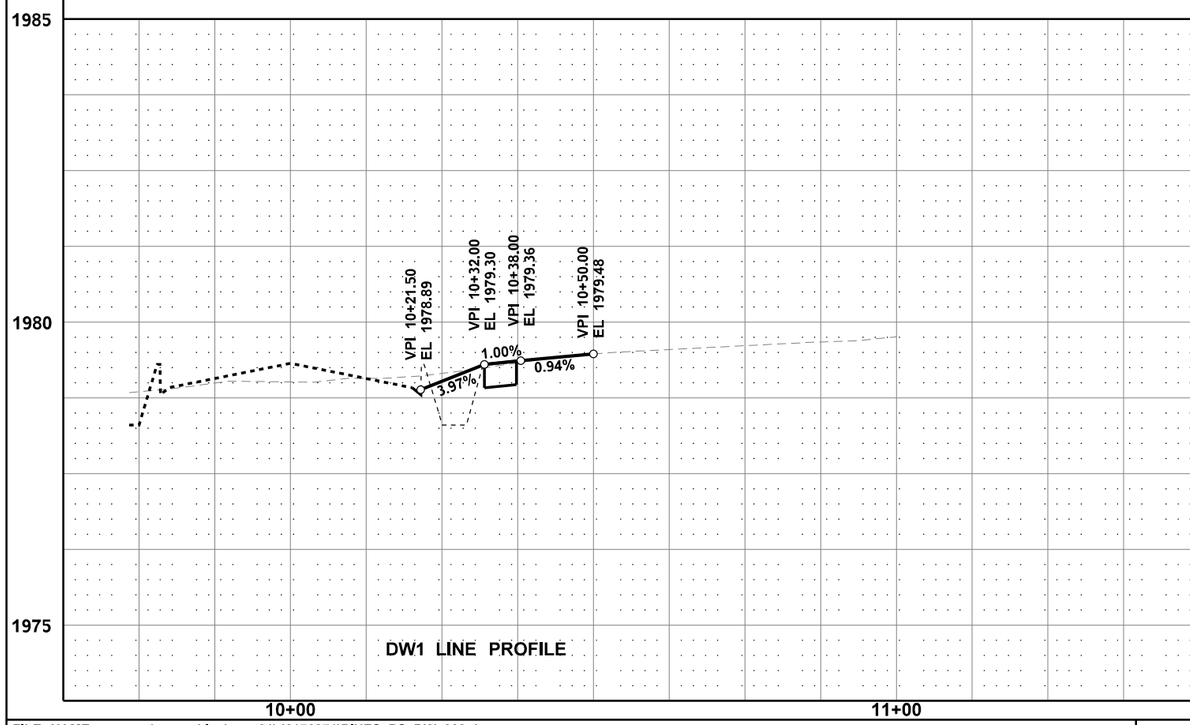
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

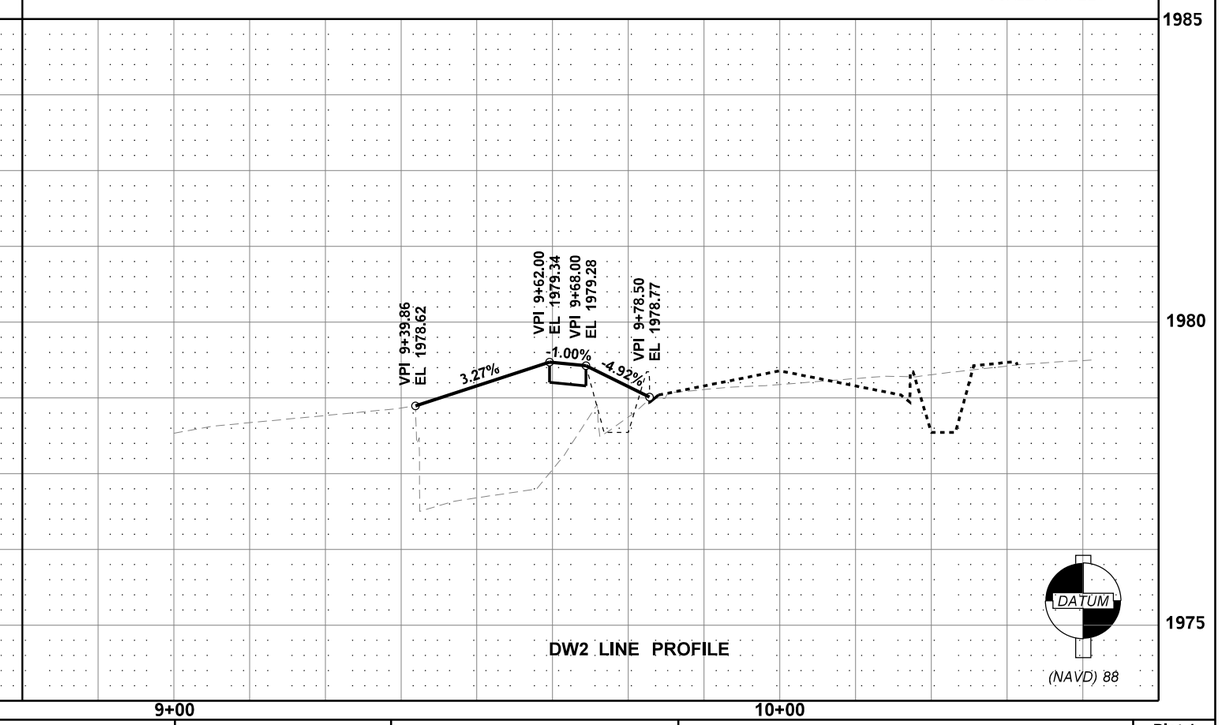
DRIVEWAY PLAN

Plot 1
PLAN REF NO
DW2
SHEET 123 OF 218 SHEETS









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CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

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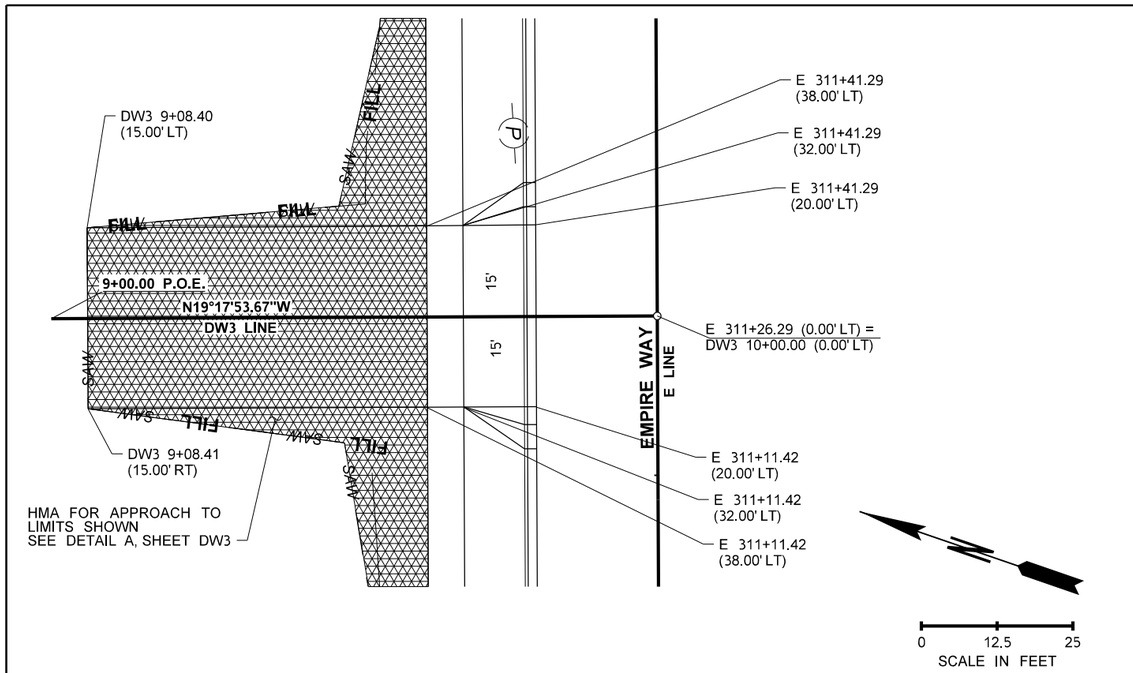
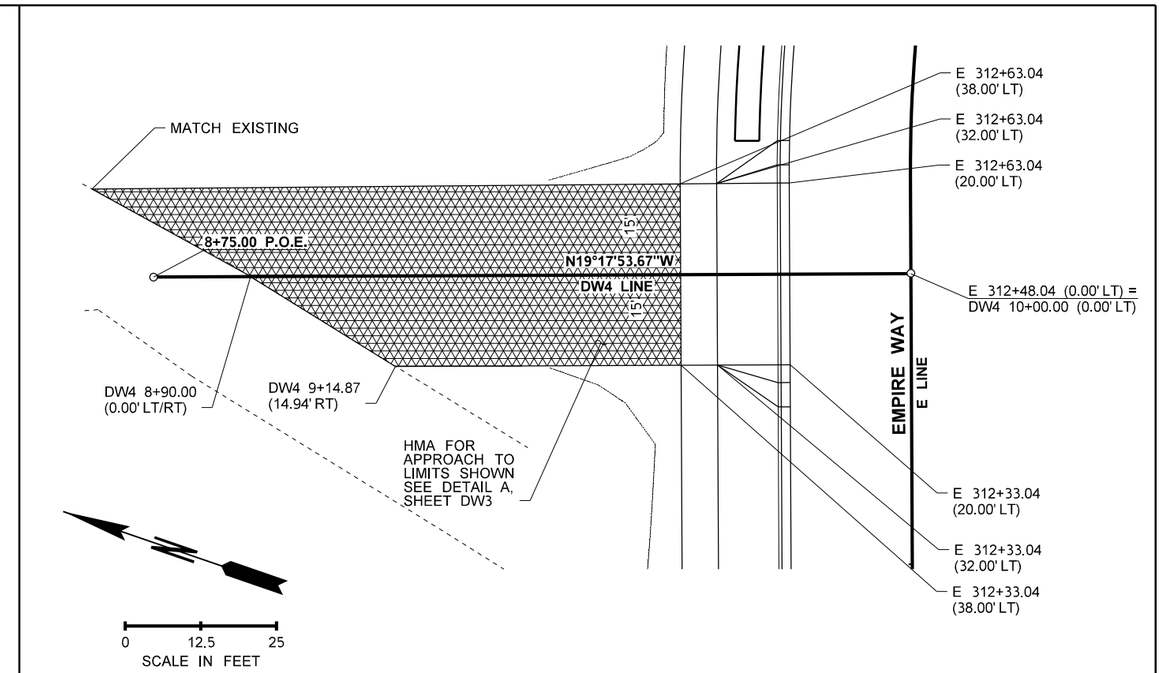
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

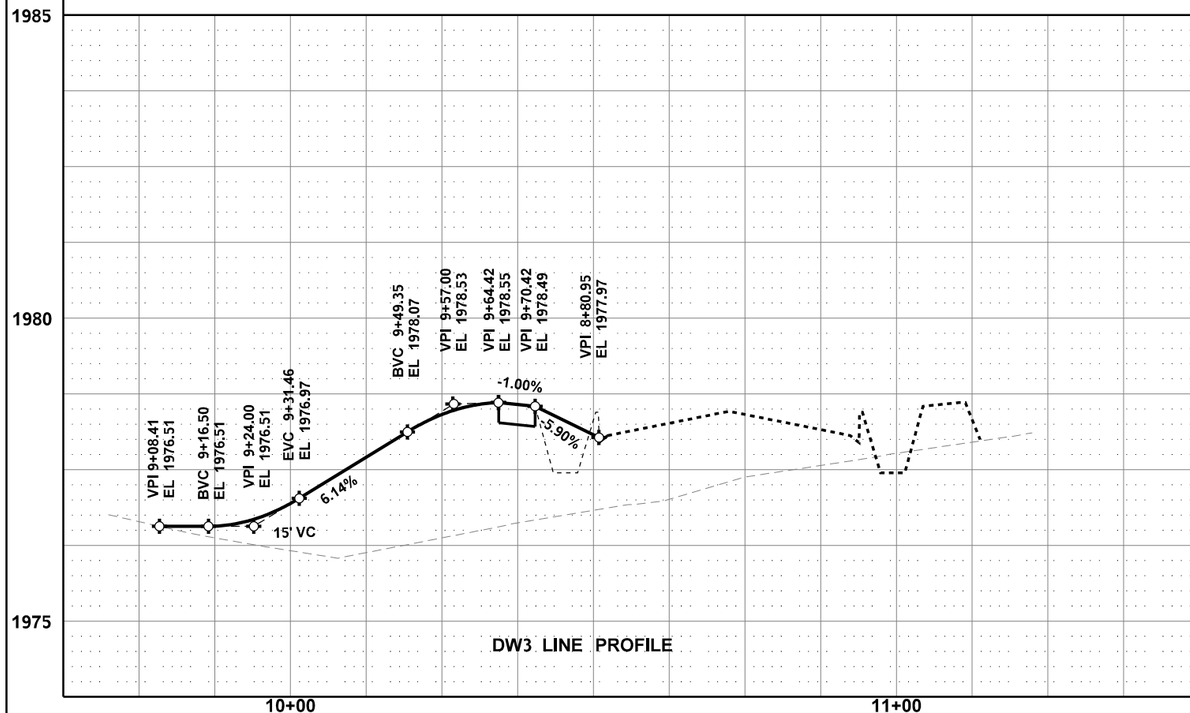
DRIVEWAY PLAN

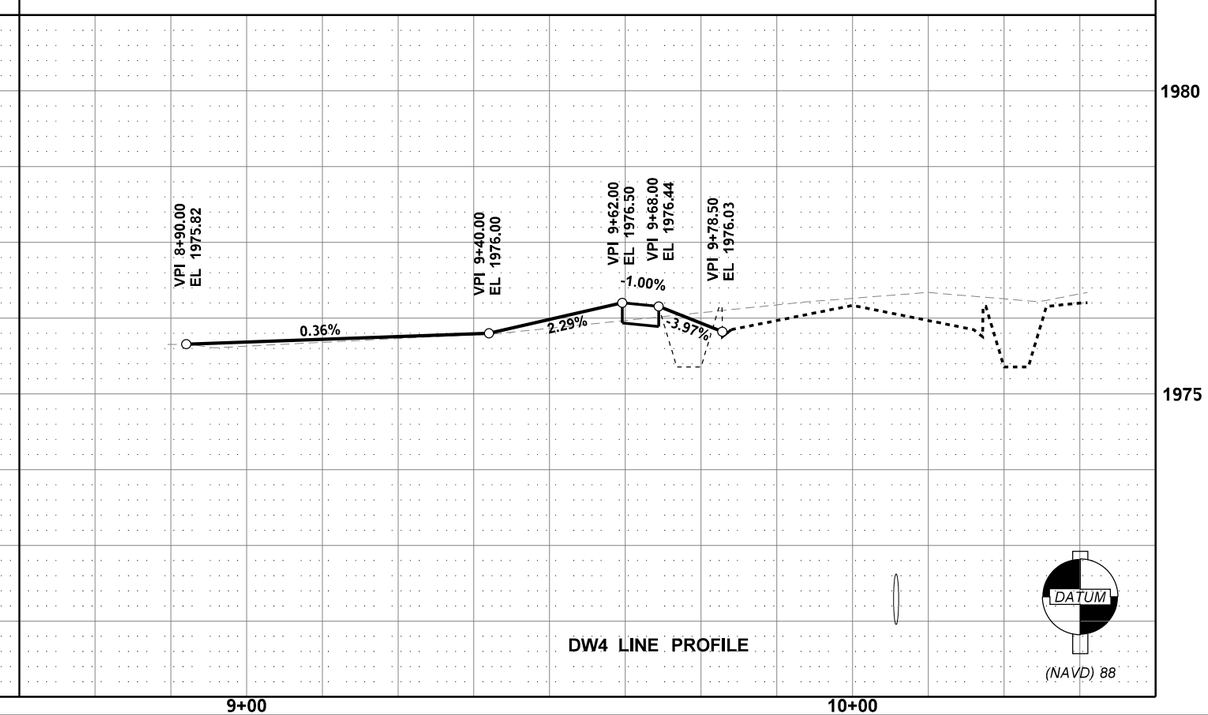
Plot 1
PLAN REF NO
DW3

SHEET 124 OF 218 SHEETS









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CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

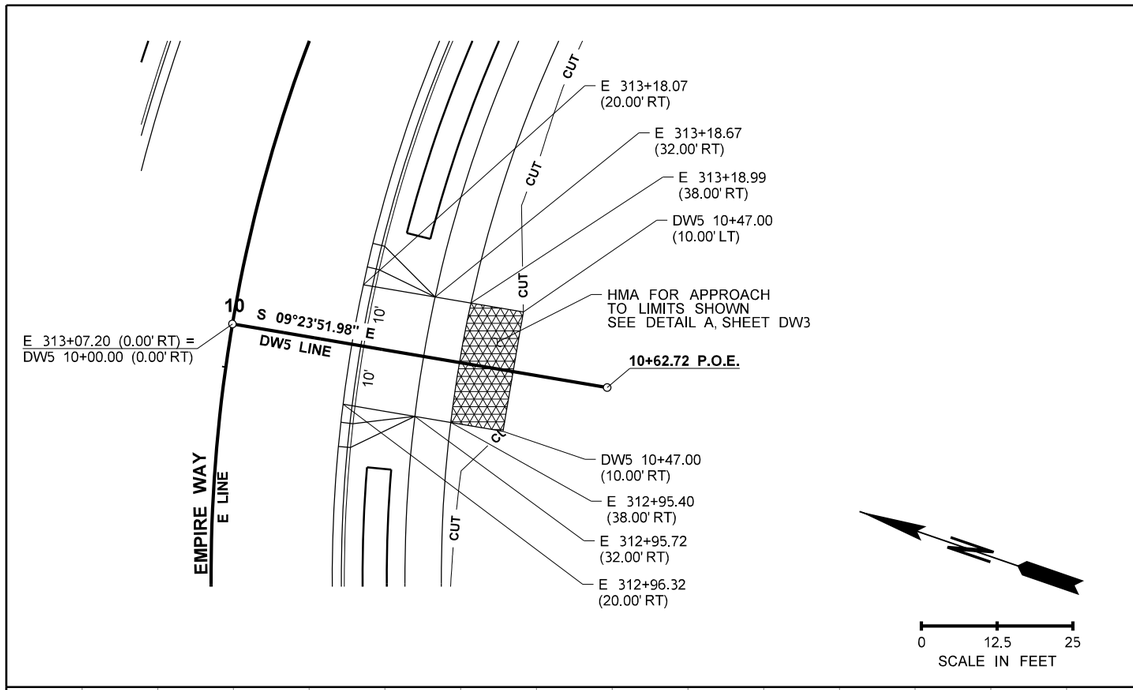
HDR

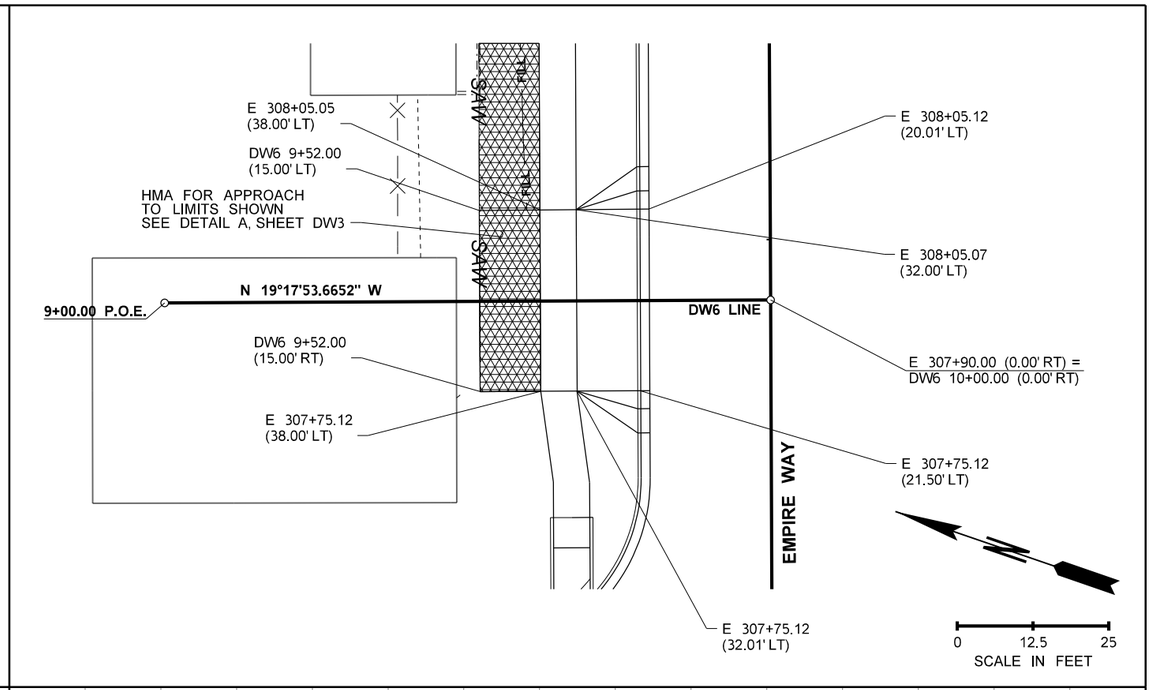
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

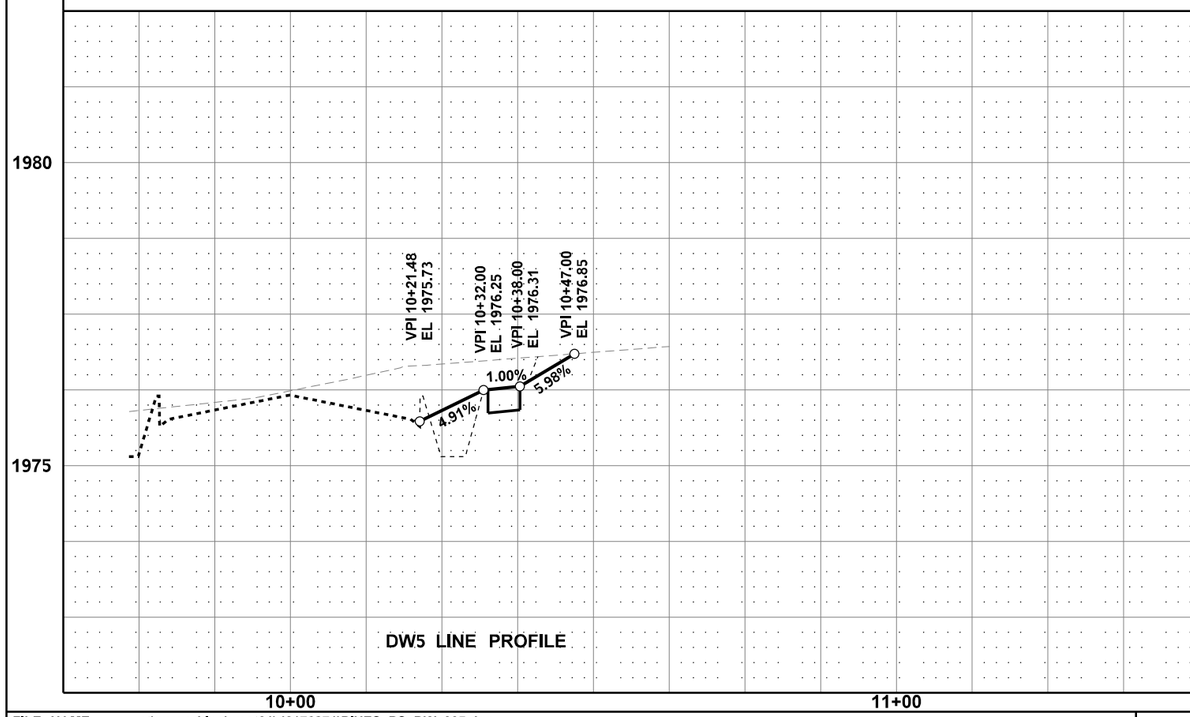
DRIVEWAY PLAN

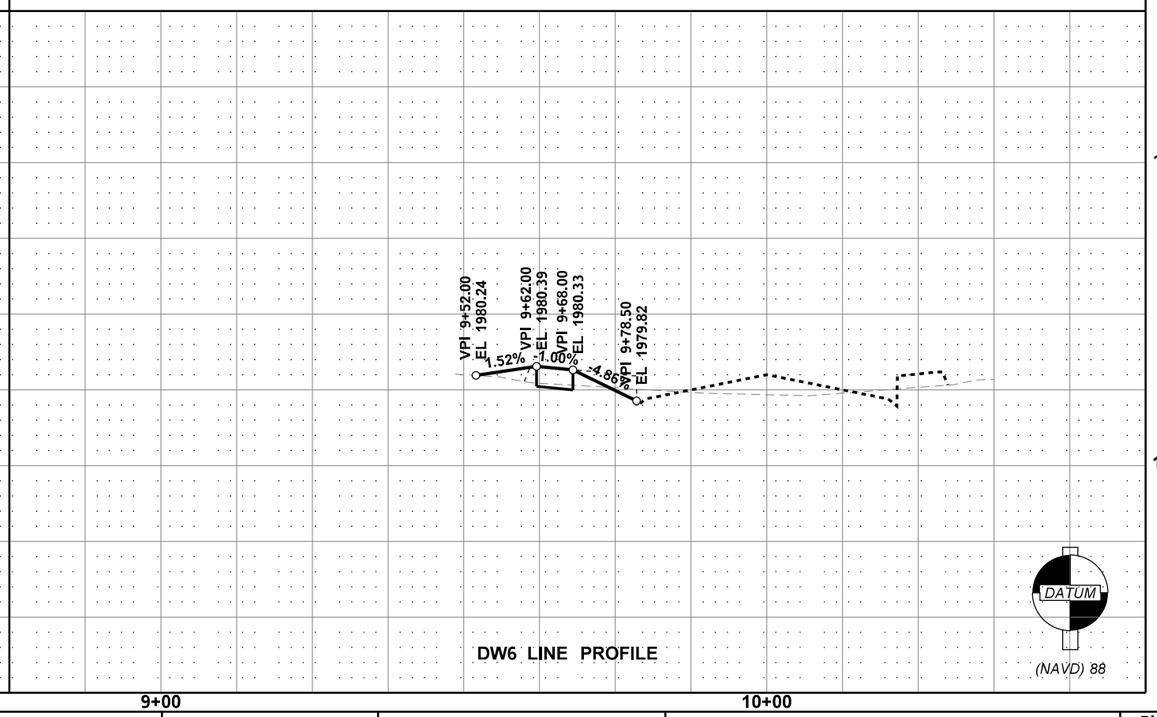
Plot 1
PLAN REF NO
DW4

SHEET
125
OF
218
SHEETS









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CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

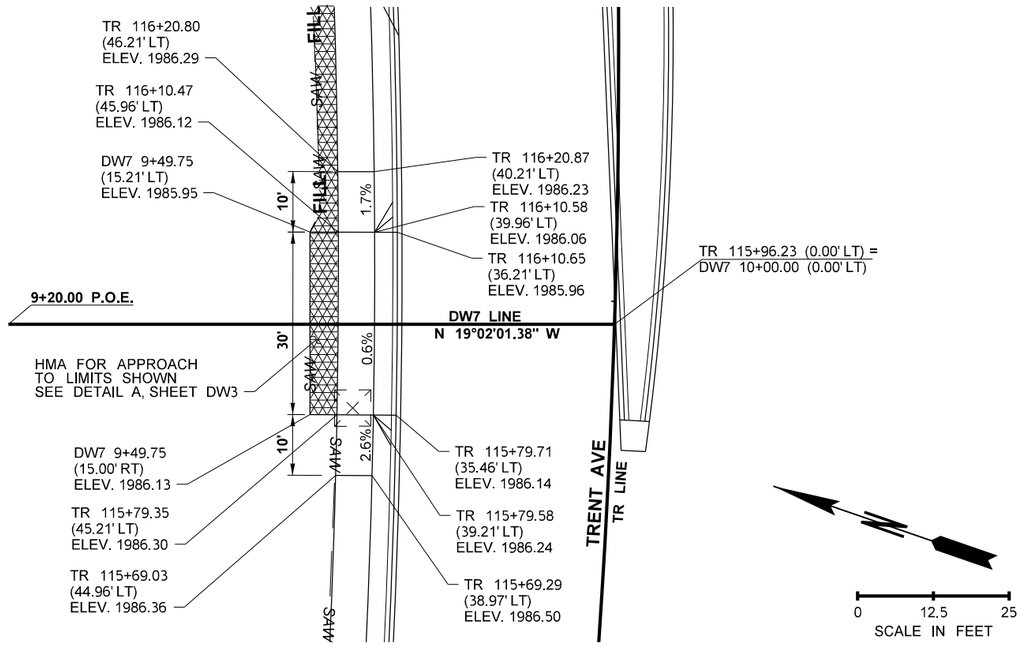
HDR

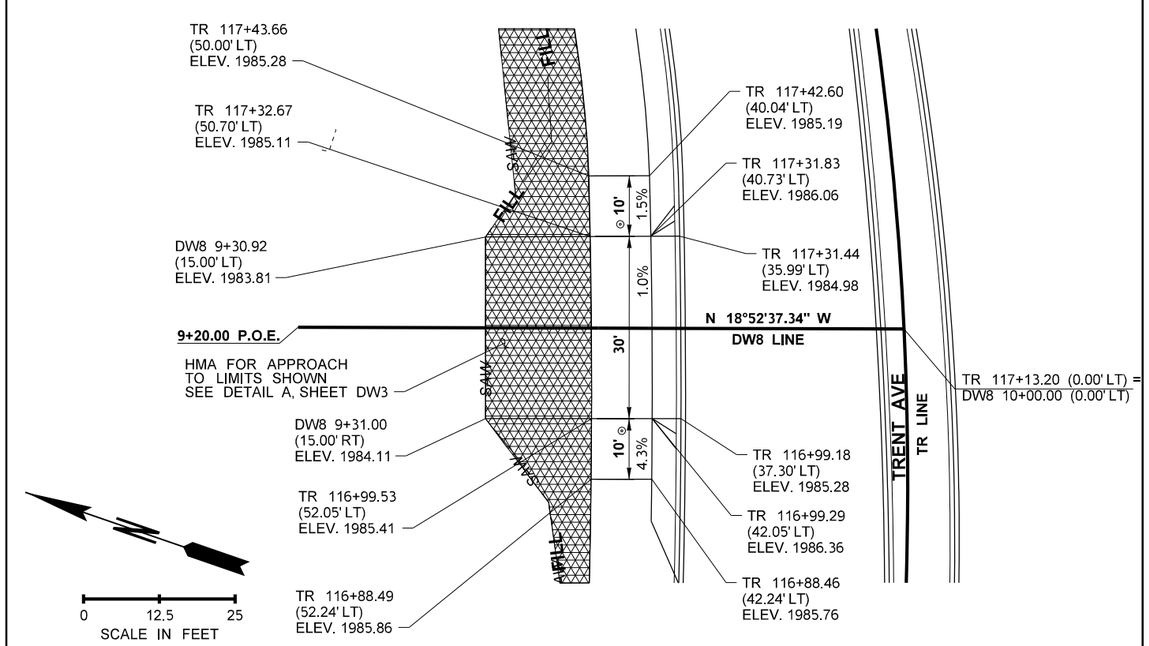
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

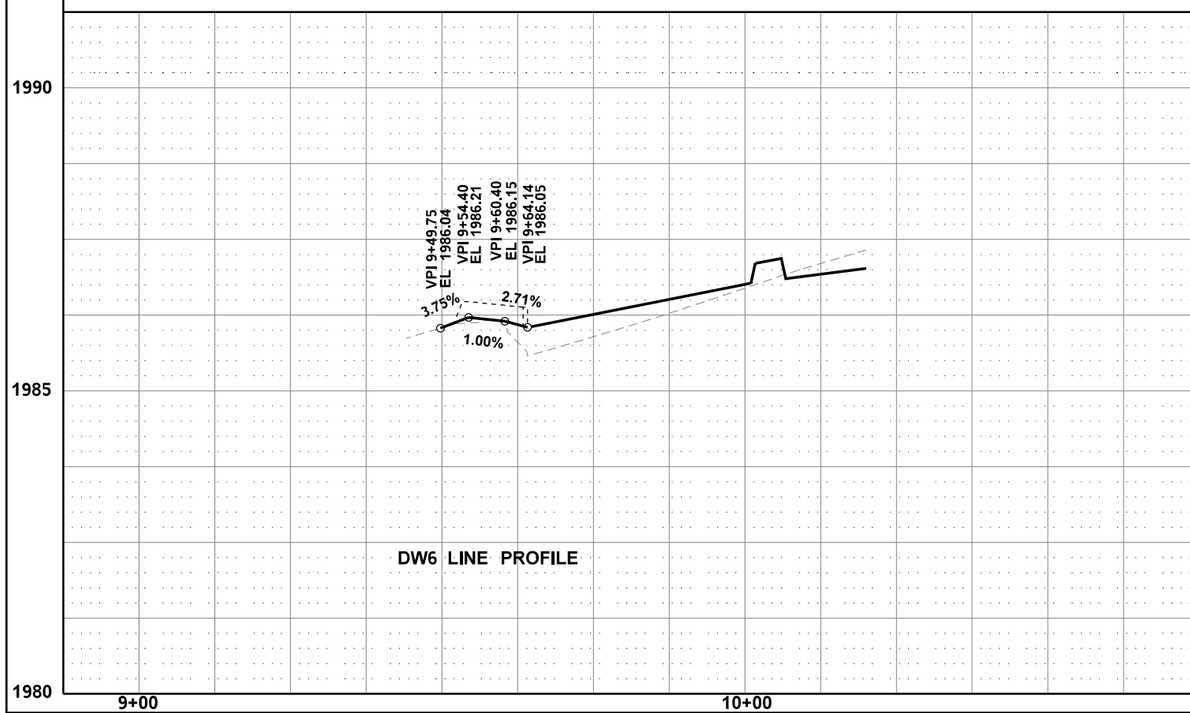
DRIVEWAY PLAN

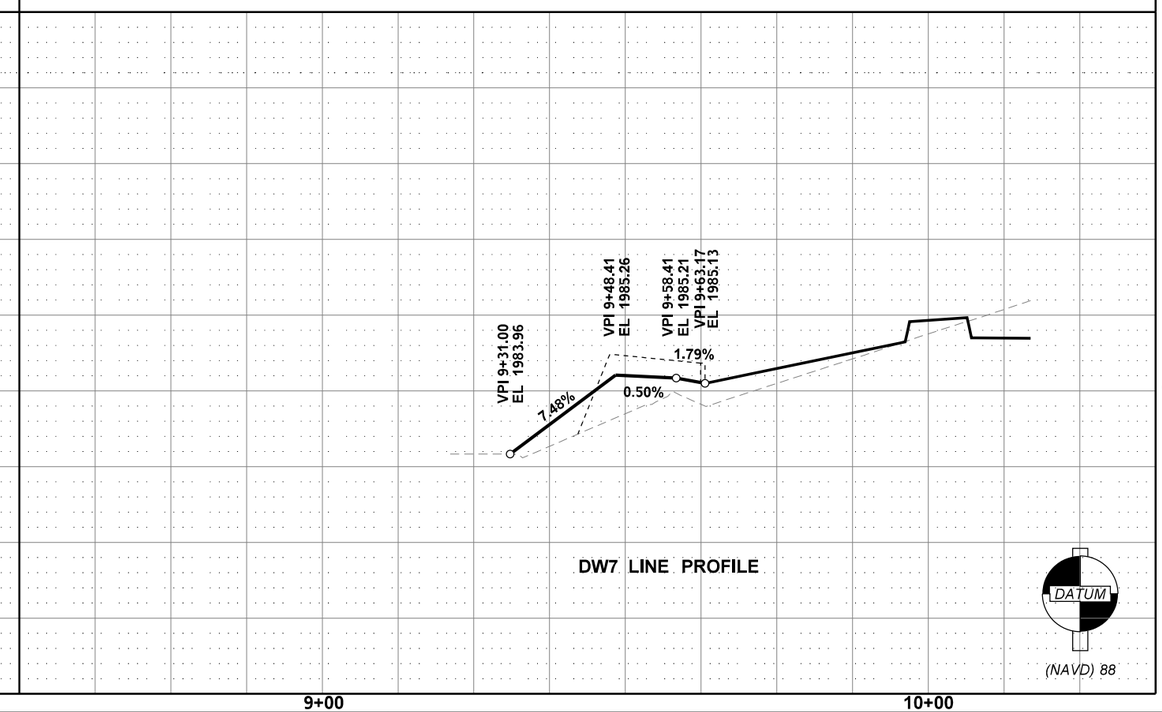
Plot 1
PLAN REF NO
DW5

SHEET 126 OF 218 SHEETS









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ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

CITY OF Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

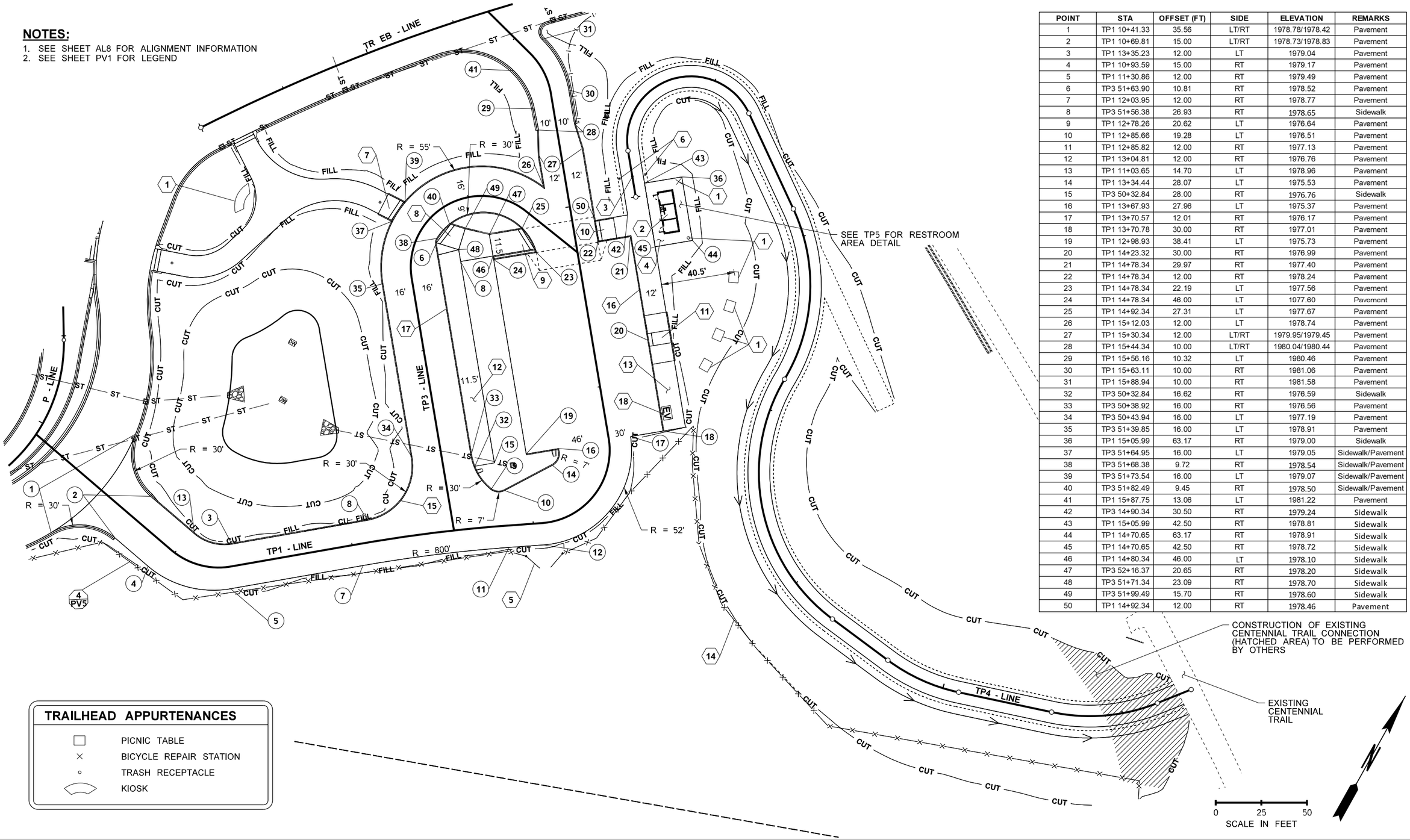
DRIVEWAY PLAN

Plot 1
PLAN REF NO
DW6

SHEET
127
OF
218
SHEETS

NOTES:

1. SEE SHEET AL8 FOR ALIGNMENT INFORMATION
2. SEE SHEET PV1 FOR LEGEND



POINT	STA	OFFSET (FT)	SIDE	ELEVATION	REMARKS
1	TP1 10+41.33	35.56	LT/RT	1978.78/1978.42	Pavement
2	TP1 10+69.81	15.00	LT/RT	1978.73/1978.83	Pavement
3	TP1 13+35.23	12.00	LT	1979.04	Pavement
4	TP1 10+93.59	15.00	RT	1979.17	Pavement
5	TP1 11+30.86	12.00	RT	1979.49	Pavement
6	TP3 51+63.90	10.81	RT	1978.52	Pavement
7	TP1 12+03.95	12.00	RT	1978.77	Pavement
8	TP3 51+56.38	26.93	RT	1978.65	Sidewalk
9	TP1 12+78.26	20.62	LT	1976.64	Pavement
10	TP1 12+85.66	19.28	LT	1976.51	Pavement
11	TP1 12+85.82	12.00	RT	1977.13	Pavement
12	TP1 13+04.81	12.00	RT	1976.76	Pavement
13	TP1 11+03.65	14.70	LT	1978.96	Pavement
14	TP1 13+34.44	28.07	LT	1975.53	Pavement
15	TP3 50+32.84	28.00	RT	1976.76	Sidewalk
16	TP1 13+67.93	27.96	LT	1975.37	Pavement
17	TP1 13+70.57	12.01	RT	1976.17	Pavement
18	TP1 13+70.78	30.00	RT	1977.01	Pavement
19	TP1 12+98.93	38.41	LT	1975.73	Pavement
20	TP1 14+23.32	30.00	RT	1976.99	Pavement
21	TP1 14+78.34	29.97	RT	1977.40	Pavement
22	TP1 14+78.34	12.00	RT	1978.24	Pavement
23	TP1 14+78.34	22.19	LT	1977.56	Pavement
24	TP1 14+78.34	46.00	LT	1977.60	Pavement
25	TP1 14+92.34	27.31	LT	1977.67	Pavement
26	TP1 15+12.03	12.00	LT	1978.74	Pavement
27	TP1 15+30.34	12.00	LT/RT	1979.95/1979.45	Pavement
28	TP1 15+44.34	10.00	LT/RT	1980.04/1980.44	Pavement
29	TP1 15+56.16	10.32	LT	1980.46	Pavement
30	TP1 15+63.11	10.00	RT	1981.06	Pavement
31	TP1 15+88.94	10.00	RT	1981.58	Pavement
32	TP3 50+32.84	16.62	RT	1976.59	Sidewalk
33	TP3 50+38.92	16.00	RT	1976.56	Pavement
34	TP3 50+43.94	16.00	LT	1977.19	Pavement
35	TP3 51+39.85	16.00	LT	1978.91	Pavement
36	TP1 15+05.99	63.17	RT	1979.00	Sidewalk
37	TP3 51+64.95	16.00	LT	1979.05	Sidewalk/Pavement
38	TP3 51+68.38	9.72	RT	1978.54	Sidewalk/Pavement
39	TP3 51+73.54	16.00	LT	1979.07	Sidewalk/Pavement
40	TP3 51+82.49	9.45	RT	1978.50	Sidewalk/Pavement
41	TP1 15+87.75	13.06	LT	1981.22	Pavement
42	TP3 14+90.34	30.50	RT	1979.24	Sidewalk
43	TP1 15+05.99	42.50	RT	1978.81	Sidewalk
44	TP1 14+70.65	63.17	RT	1978.91	Sidewalk
45	TP1 14+70.65	42.50	RT	1978.72	Sidewalk
46	TP1 14+80.34	46.00	LT	1978.10	Sidewalk
47	TP3 52+16.37	20.65	RT	1978.20	Sidewalk
48	TP3 51+71.34	23.09	RT	1978.70	Sidewalk
49	TP3 51+99.49	15.70	RT	1978.60	Sidewalk
50	TP1 14+92.34	12.00	RT	1978.46	Pavement

TRAILHEAD APPURTENANCES

- PICNIC TABLE
- BICYCLE REPAIR STATION
- TRASH RECEPTACLE
- KIOSK

FILE NAME	c:\pwworking\west01\d2477892\PINES_PS_TP_001.dgn
TIME	10:57:36 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | JOB NUMBER | CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

LOCATION NO.

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

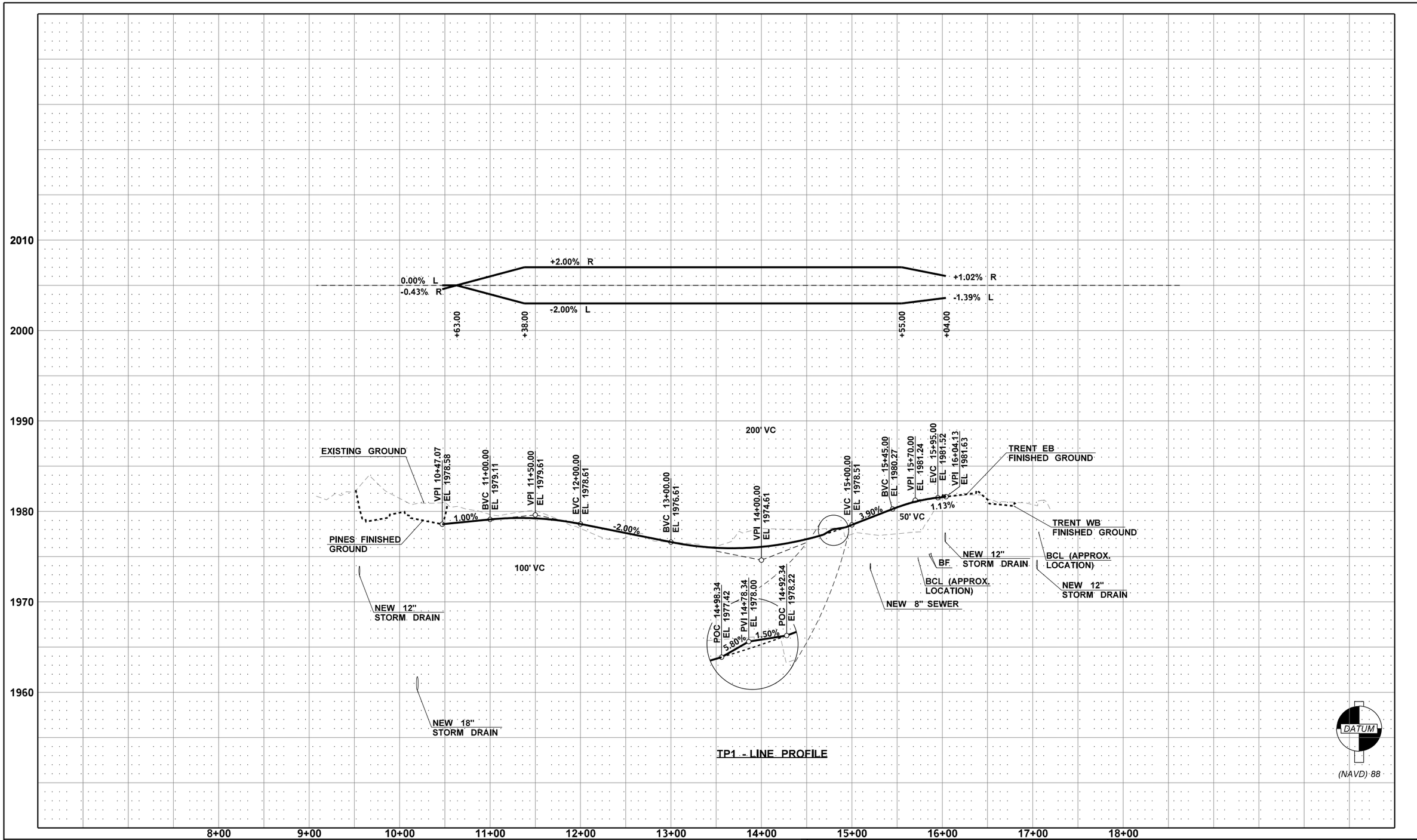
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAILHEAD PARKING PLAN

Plot 1
PLAN REF NO TP1
SHEET 128 OF 218 SHEETS



TP1 - LINE PROFILE

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TIME	10:57:49 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

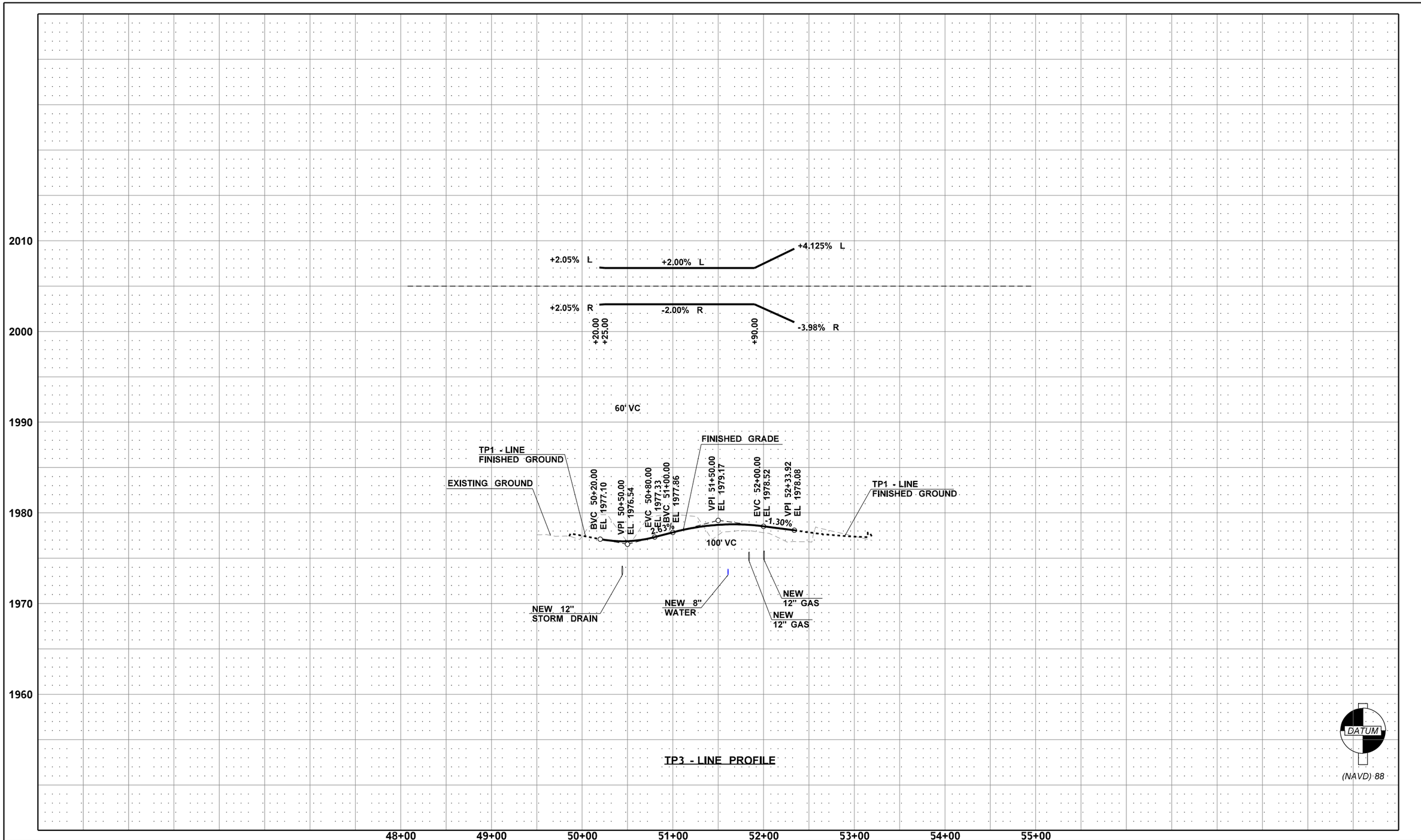
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAILHEAD PARKING PLAN

PLAN REF. NO.
TP2

SHEET 129 OF 218 SHEETS



TP3 - LINE PROFILE

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DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA		SPOKANE COUNTY - MP 8.43
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA		
DESIGNED BY	B KIRKMAN								
ENTERED BY	E MCGUIRE								
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.		TRAILHEAD PARKING PLAN
PROJ. ENGR.	S MARSHALL								
REGIONAL ADM.		REVISION	DATE	BY					

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

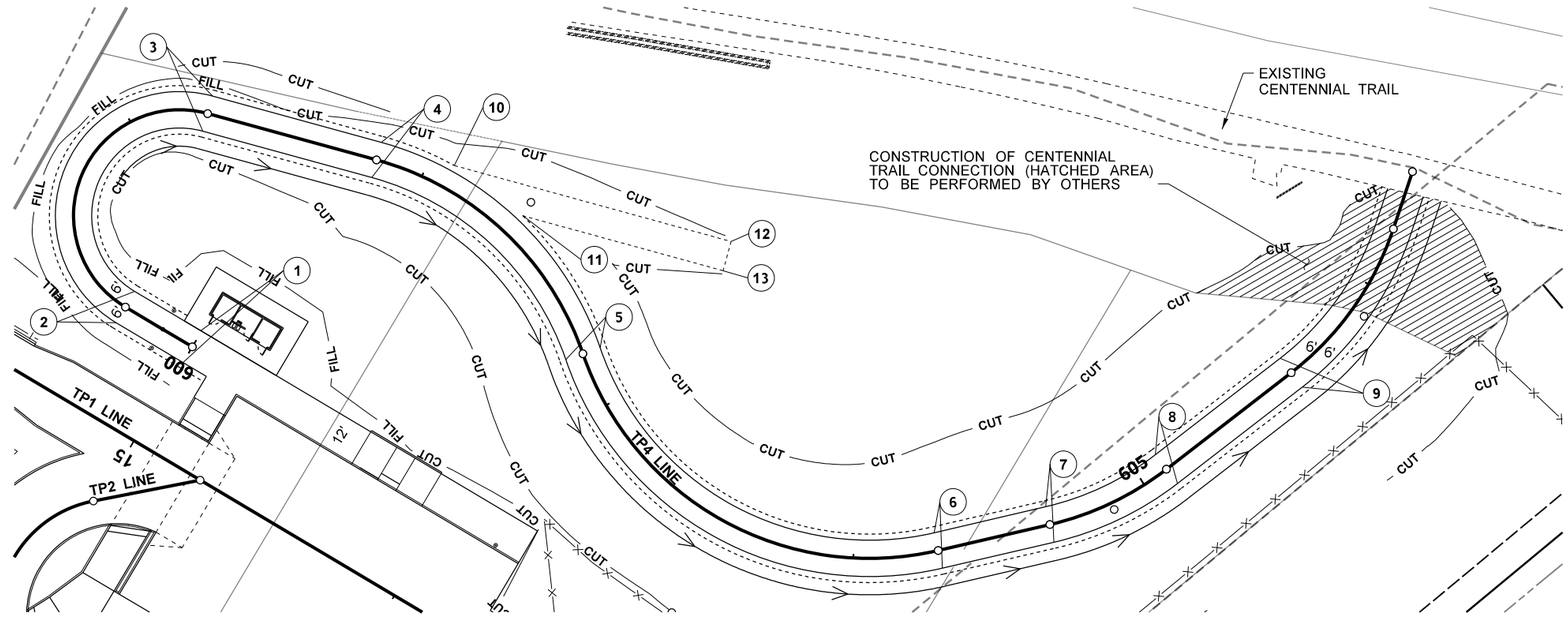
City of Spokane Valley

HDR

PLAN REF. NO.
TP3

SHEET
130
OF
218
SHEETS

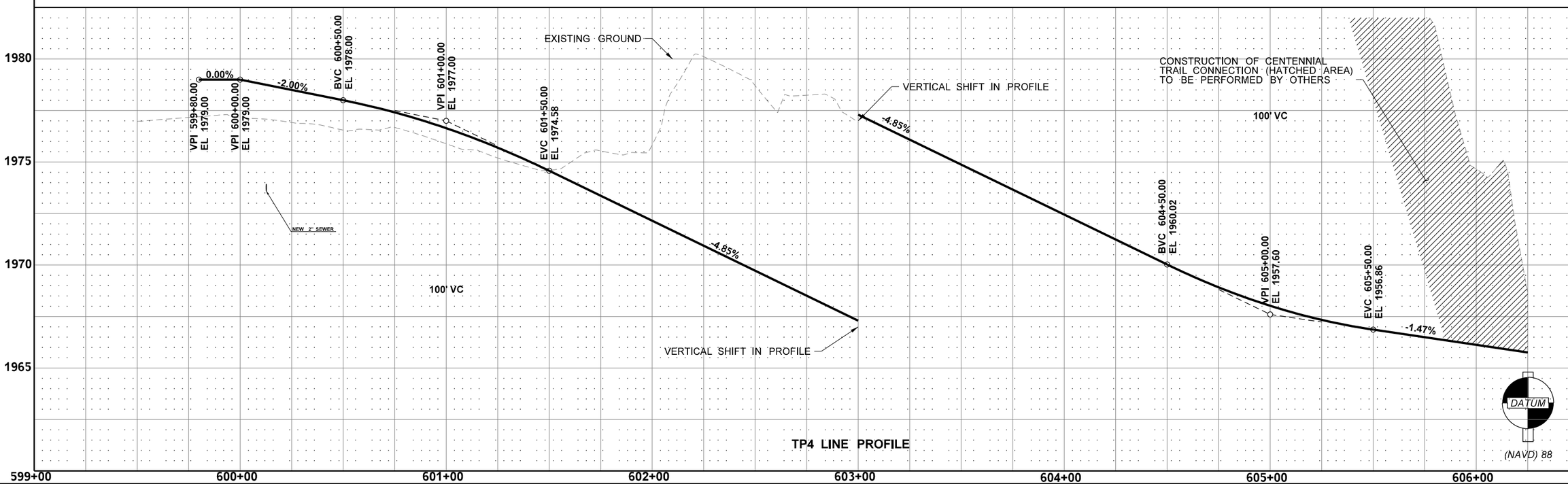
POINT	STA	OFFSET (FT)	SIDE	ELEVATION
1	TP4 600+00.00	6.00	LT/RT	1979.06/1978.94
2	TP4 600+25.70	6.00	LT/RT	1978.55/1978.43
3	TP4 601+26.25	6.00	LT/RT	1975.71/1975.59
4	TP4 601+84.05	6.00	LT/RT	1972.98/1972.86
5	TP4 602+81.30	6.00	LT/RT	1968.27/1968.15
6	TP4 604+28.19	6.00	LT/RT	1961.14/1961.02
7	TP4 604+66.04	6.00	LT/RT	1959.35/1959.23
8	TP4 605+08.95	6.00	LT/RT	1957.81/1957.69
9	TP4 605+61.00	6.00	LT/RT	1956.76/1956.64
10	TP4 602+07.68	8.00	LT	1971.86
11	TP4 602+33.62	8.00	LT	1970.73
12	TP4 602+69.25	59.45	LT	1974.95
13	TP4 602+74.17	53.05	LT	1974.75



0 25 50
SCALE IN FEET

NOTES:

1. SEE SHEET AL8 FOR ALIGNMENT INFORMATION



TP4 LINE PROFILE

FILE NAME	c:\pwworking\west01\d2477892\PINES_PS_TP_004.dgn
TIME	9:07:50 AM
DATE	5/30/2025
PLOTTED BY	BKIRKMAN
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

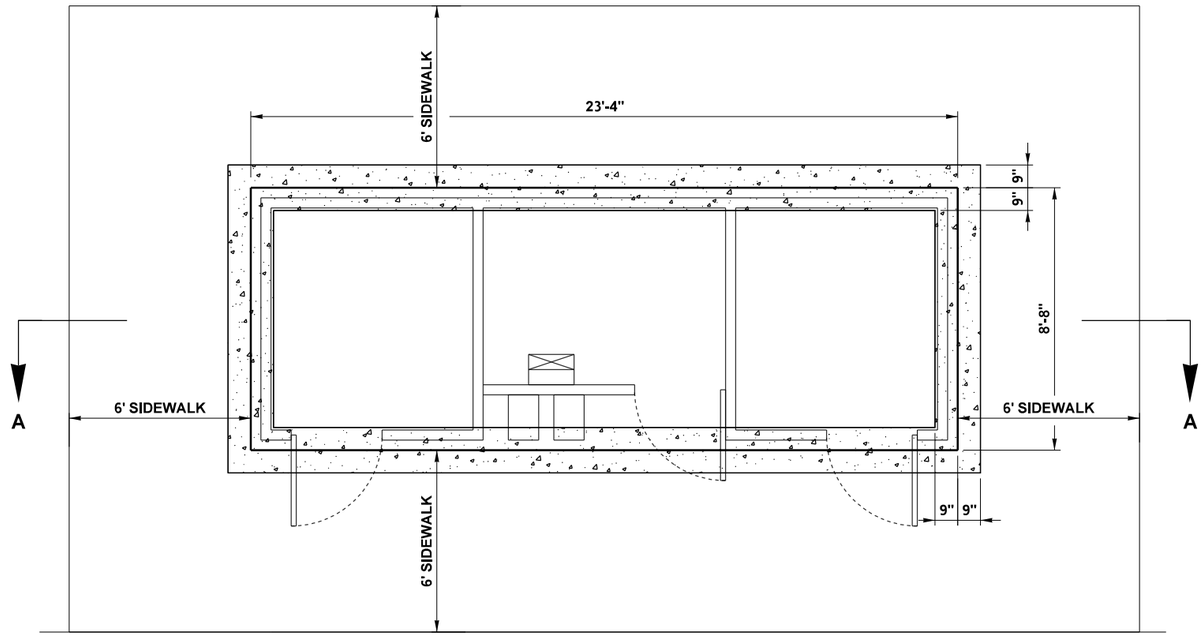
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAILHEAD PARKING PLAN

Plot 1
PLAN REF NO
TP4
SHEET 131 OF 218 SHEETS

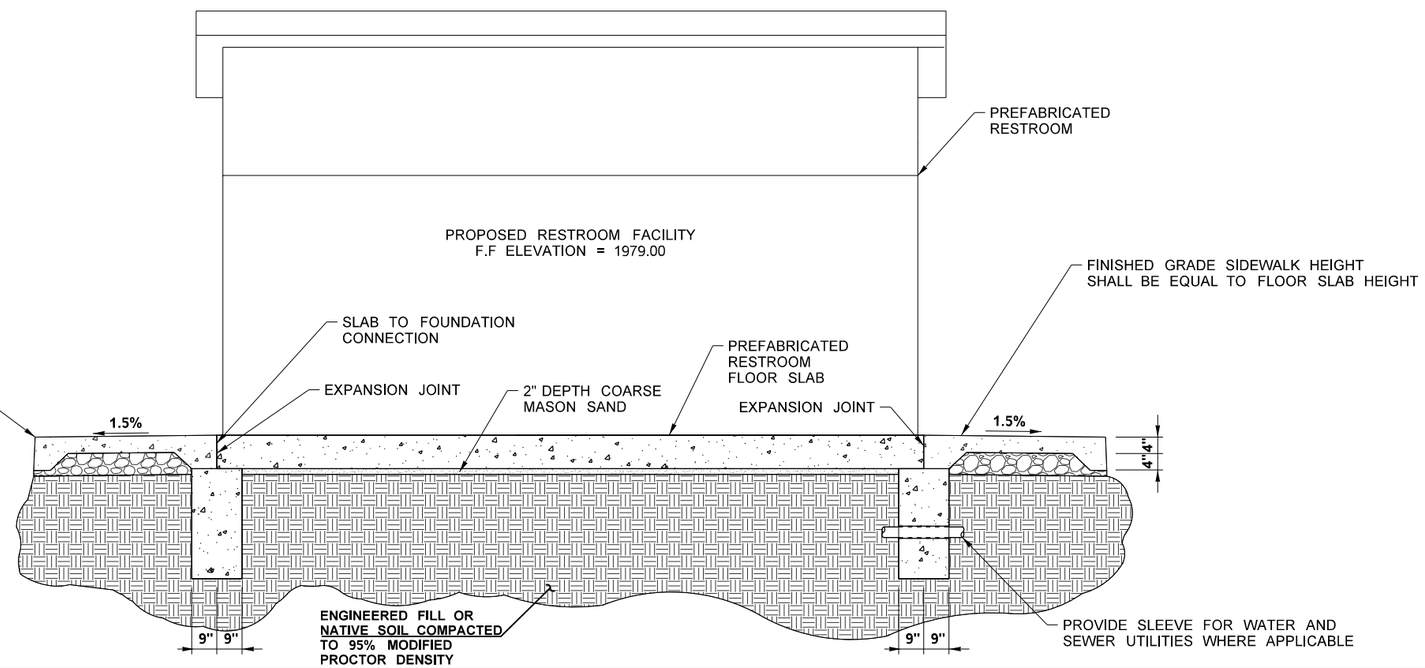
RESTROOM FOUNDATION

NOT TO SCALE



RESTROOM SECTION A-A

NOT TO SCALE



NOTES:

1. PROVIDE POSITIVE DRAINAGE AWAY FROM RESTROOM FACILITY. MAXIMUM SLOPE = 1.5% AND MINIMUM SLOPE = 0.5%
2. DIMENSIONS SHOWN ARE FOR PREFERRED MODEL AND MANUFACTURER. ACTUAL DIMENSIONS MAY VARY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
3. SEE SPECIFICATIONS FOR DETAILS OF PREFERRED MODEL AND MANUFACTURER

FILE NAME	c:\pwworking\west01\d2477892\PINES_PS_TP_005.dgn			
TIME	10:58:38 AM			
DATE	5/29/2025			
PLOTTED BY	EMCGUIRE			
DESIGNED BY	B KIRKMAN			
ENTERED BY	E MCGUIRE			
CHECKED BY	J FREY			
PROJ. ENGR.	S MARSHALL			
REGIONAL ADM.		REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAILHEAD PARKING PLAN

Plot 1

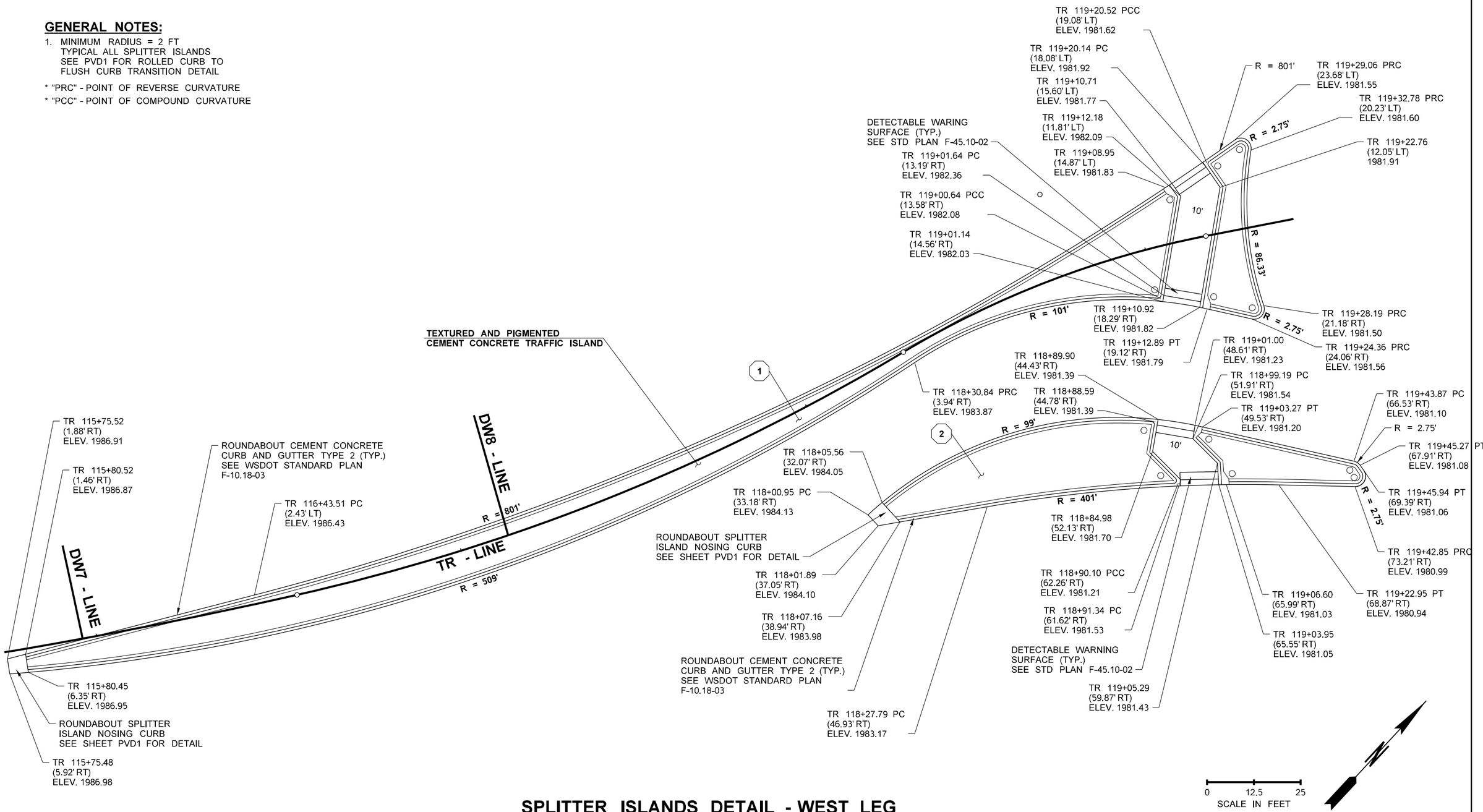
PLAN REF NO
TP5

SHEET 132 OF 218 SHEETS

GENERAL NOTES:

1. MINIMUM RADIUS = 2 FT
   TYPICAL ALL SPLITTER ISLANDS
   SEE PVD1 FOR ROLLED CURB TO
   FLUSH CURB TRANSITION DETAIL

* "PRC" - POINT OF REVERSE CURVATURE
* "PCC" - POINT OF COMPOUND CURVATURE



SPLITTER ISLANDS DETAIL - WEST LEG

FILE NAME	c:\pwworking\west01\d2172371\PINES_PS_SI_001.dgn						
TIME	10:58:56 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE				JOB NUMBER		
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

CITY OF Spokane Valley
HDR

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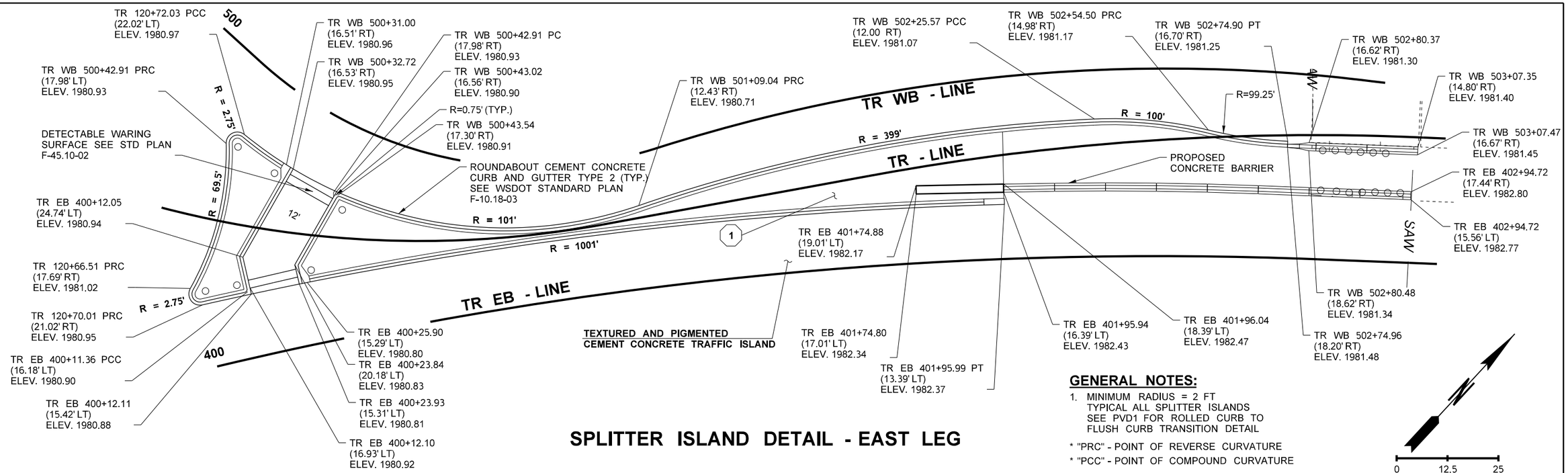
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SPLITTER ISLAND DETAIL

Plot 1
PLAN REF NO
SI1
SHEET 133 OF 218 SHEETS



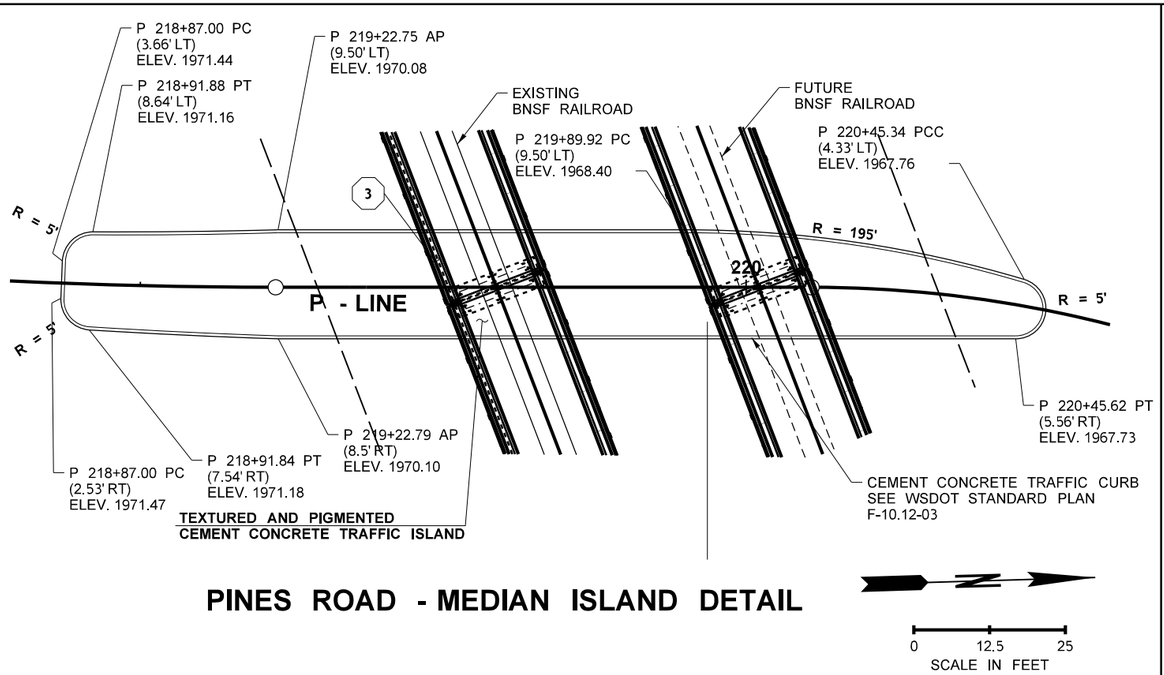
SPLITTER ISLAND DETAIL - EAST LEG

GENERAL NOTES:

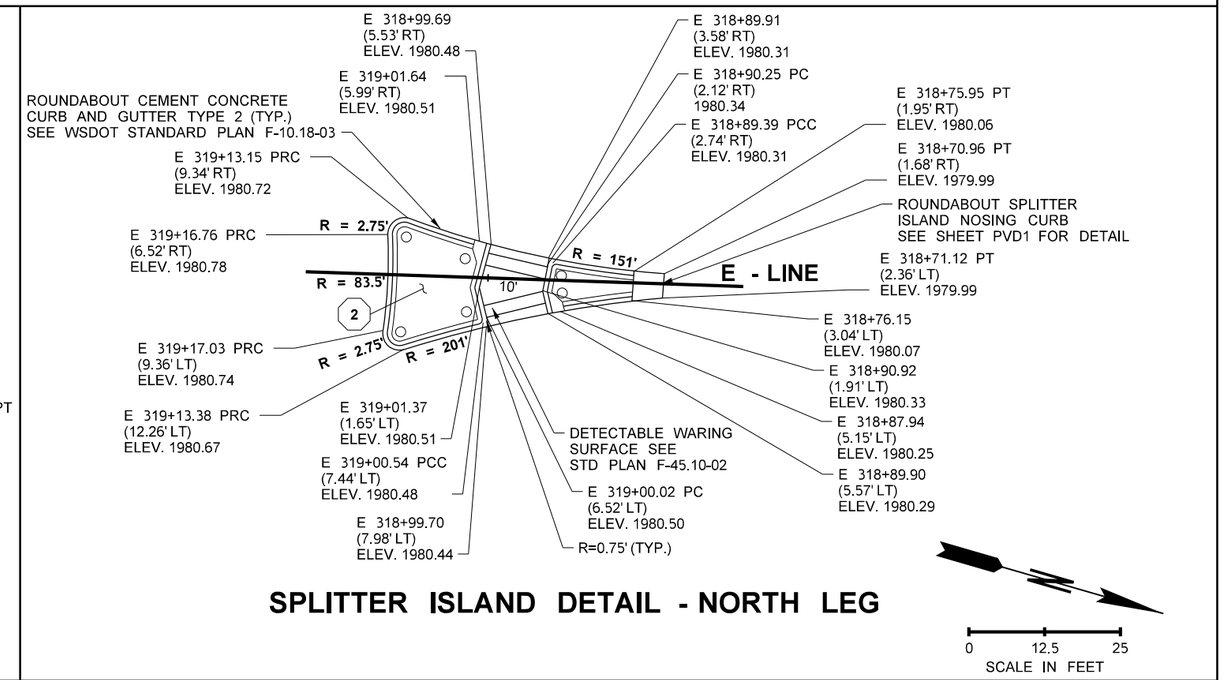
1. MINIMUM RADIUS = 2 FT
   TYPICAL ALL SPLITTER ISLANDS
   SEE PVD1 FOR ROLLED CURB TO
   FLUSH CURB TRANSITION DETAIL

* "PRC" - POINT OF REVERSE CURVATURE

* "PCC" - POINT OF COMPOUND CURVATURE



PINES ROAD - MEDIAN ISLAND DETAIL



SPLITTER ISLAND DETAIL - NORTH LEG

FILE NAME	c:\pwworking\west01\d2172371\PINES_PS_SI_002.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	10:59:25 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

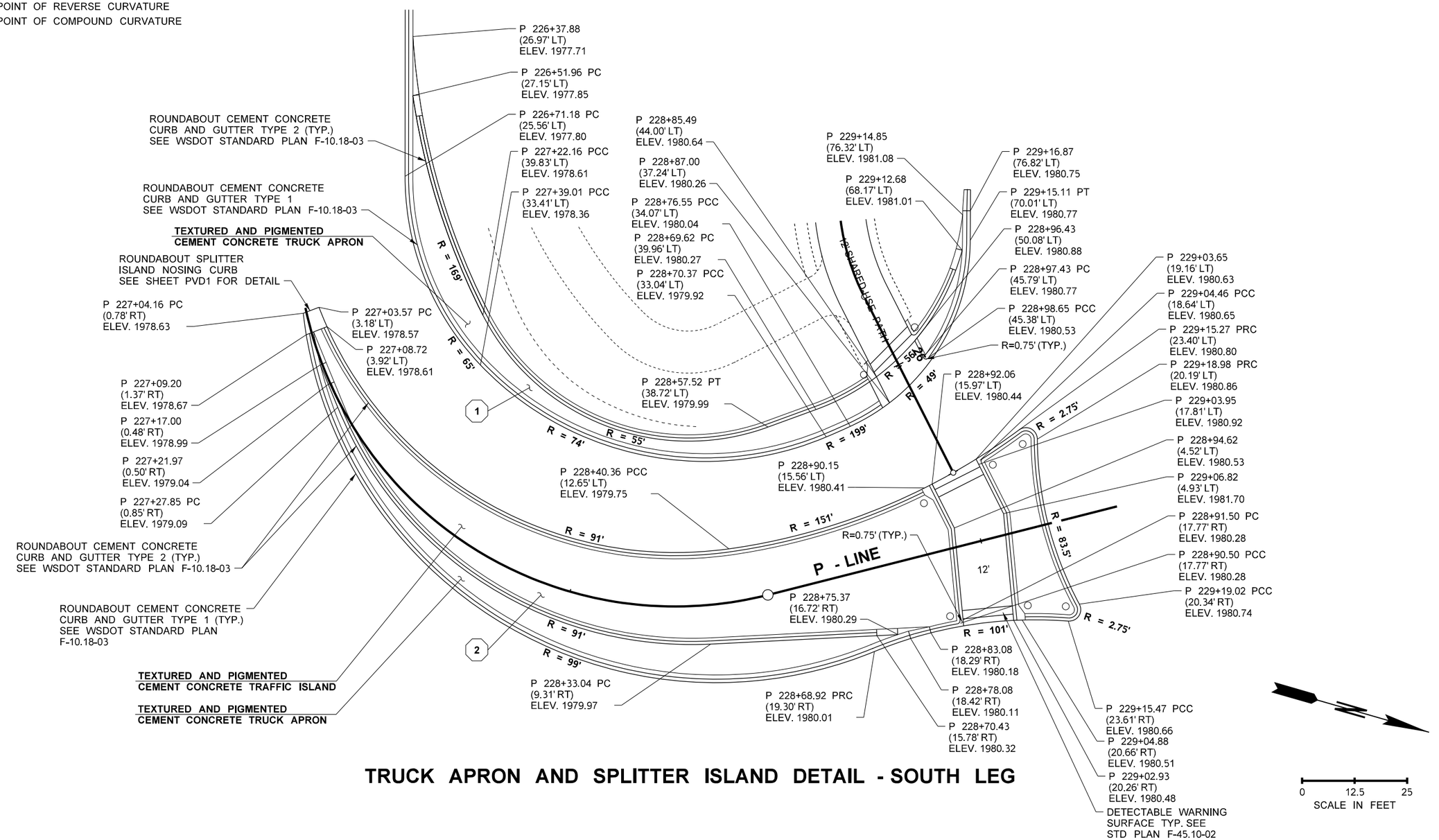
SPLITTER ISLAND DETAIL

Plot 1
PLAN REF NO
SI2
SHEET 134 OF 218 SHEETS

GENERAL NOTES:

1. MINIMUM RADIUS = 2 FT
   TYPICAL ALL SPLITTER ISLANDS
   SEE PVD1 FOR ROLLED CURB TO
   FLUSH CURB TRANSITION DETAIL

* "PRC" - POINT OF REVERSE CURVATURE
* "PCC" - POINT OF COMPOUND CURVATURE



TRUCK APRON AND SPLITTER ISLAND DETAIL - SOUTH LEG

FILE NAME	c:\pwworking\west01\d2172371\PINES_PS_SI_003.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	10:59:48 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SPLITTER ISLAND DETAIL

Plot 1
PLAN REF NO SI3
SHEET 135 OF 218 SHEETS

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	FLEXIBLE GUIDEPOST - TUBULAR	FLEXIBLE GUIDEPOST - FLAT	PLASTIC LINE		GROOVED PLASTIC LINE	GROOVED PLASTIC WIDE LANE LINE	PLASTIC TRAFFIC ARROW	GROOVED PLASTIC WIDE DOTTED CIRCULATING LANE LINE		GROOVED PLASTIC BICYCLE LANE SYMBOL	GROOVED PLASTIC CROSSHATCH MARKING	GROOVED PLASTIC CROSSWALK LINE	GROOVED PLASTIC WIDE DOTTED ENTRY LINE		GROOVED PLASTIC WIDE DOTTED EXTENSION LINE	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	L.F.	EACH	L.F.		EACH	L.F.	S.F.	L.F.		L.F.	
PM1-1	TR 111+14.50 (23.0' LT) TO TR 111+64.39 (24.10' LT)			50													1,19
PM1-2	TR 111+14.50 (11.8' LT) TO TR 115+00.00 (14.0' LT)			292													9,19
PM1-3	TR 112+58.96 (2.0' LT) TO TR 114+74.05 (2.0' LT)			215													8,19
PM1-4	TR 112+59.13 (10.0' RT) TO TR 114+74.05 (10.0' RT)			215													8,19
PM1-5	TR 111+14.50 (22.8' RT) TO TR 115+00 (22.0' RT)			387													9,19
PM1-6	TR 111+14.50 (34.3' RT) TO TR 115+00.00 (34.0' RT)			388													1,19
PM1-7	TR 112+59.11 (26.0' LT) TO TR 115+00.00 (26.0' LT)			239													1,19
PM1-8	TR 114+74.04 (10.0' RT) TO TR 115+00.00 (10.0' RT)			26													3,19
PM1-9	TR 114+74.05 (2.0' LT) TO TR 115+00 (2.0' LT)			26													3,19
PM1-10	TR 115+00.00 (34.0' RT) TO P 212+25.00 (28.3' LT)					2130											1,19
PM1-11	TR 115+00.00 (22.0' RT) TO TR 115+44.09 (22.0' RT)					45											9,19
PM1-12	TR 115+00.00 (10.0' RT) TO TR 115+67.37 (10.0' RT)					68											3,19
PM1-13	TR 115+00.00 (2.0' LT) TO TR 115+67.39 (2.0' LT)					67											3,19
PM1-14	TR 115+00.00(14.0' LT) TO TR 119+05.15 (30.2' LT)					406											9,19
PM1-15	TR 112+59.11 (26.0' LT) TO E 318+05.02					615											1,19
PM1-16	TR 115+43.95 (34.0' RT) TO TR 116+42.01 (34.0' RT)															101	7, 17,19
PM1-17	TR 115+44.09 (22.0' RT) TO TR 119+36.34 (46.8' RT)						397										4,17,19
PM1-18	TR 115+67.37 (10.0' RT) TO TR 119+30.36 (27.8' RT)					367											2,19
PM1-19	TR 115+67.39 (2.0' LT) TO 119+37.53 (28.7' LT)					376											2,19
PM1-20	TR 113+21.65 (3.7' RT) TO 113+37.65 (3.8' RT)																13,27
PM1-21	TR 109+70.00 (1.2' LT) TO 111+66.98 (0.8' LT)			197													3,19
PM1-22	TR 109+70.00 (11.3' RT) TO TR 111+66.90 (10.7' RT)			197													15,19
PM1-23	TR 109+48.25 (39.1' RT)										1						25
PM2-1	TR 116+42.01 (34.0' RT) TO TR 117+45.19 (32.1' RT)					109											4,17,19
PM2-2	TR 116+51.74 (28.4' RT)																10,20
PM2-3	TR 116+52.35 (42.4' RT)																11,20
PM2-4	TR 117+45.19 (32.1' RT) TO 119+49.94 (75.8' RT)					196											1,19
PM2-5	E 319+18.44 (12.3' RT) TO E 319+18.95 (15.4' LT)					28											1,19
PM2-6	TR 118+23.91 (11.56' RT)																13,17
PM2-7	TR 118+21.39 (25.4' RT)																10,20
PM2-8	TR 118+94.93 (72.0' RT)												60				18
PM2-9	TR 118+99.06 (30.5' RT)												100				18
PM2-10	TR 119+09.80 (33.0' LT)												100				18
PM2-11	P 226+73.43 (17.1' RT)																11,20
PM2-12	TR 119+37.53 (28.7' LT) TO TR 119+30.36' (27.8' RT)					58											19,21
PM2-13	TR 119+30.36 (27.8' RT) TO TR 119+45.59 (66.2' RT)													41			6,17
PM2-14	P 226+80.11 (6.4' RT)																13,17
PM2-15	TR 116+65.12 (43.8' RT)							1									26
PM2-16	TR 119+45.59 (66.2' RT) TO TR 119+49.94 (75.8' RT)					11											1,17
PM2-17	TR 119+49.43 (38.1' RT) TO TR 119+72.40 (62.7' RT)								36								5,17
	SHEET TOTAL			2232		4476	397	1	36		1		260	41		101	

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23.FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN				
ENTERED BY	E. MCGUIRE				
CHECKED BY	J. FREY				
PROJ. ENGR.	S. MARSHALL				
REGION ADM.		**DATE**	**DATE**	**REVISION**	**BY**

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 1

SHEET 136 **OF** 218 **SHEETS**

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GROOVED PLASTIC TRAFFIC ARROW	ADA SYMBOL		PLASTIC CROSSHATCH MARKING	PLASTIC TRAFFIC LETTER	GROOVED PLASTIC YIELD LINE SYMBOL										SEE GENERAL NOTES
		EACH	EACH		L.F.	EACH	EACH										
PM1-1	TR 111+14.50 (23.0' LT) TO TR 111+64.39 (24.10' LT)																1,19
PM1-2	TR 111+14.50 (11.8' LT) TO TR 115+00.00 (14.0' LT)																9,19
PM1-3	TR 109+70.00 (1.7' LT) TO TR 114+74.05 (2.0' LT)																8,19
PM1-4	TR 109+70.00 (11.3' RT) TO TR 114+74.05 (10.0' RT)																8,19
PM1-5	TR 111+14.50 (22.8' RT) TO TR 115+00 (22.0' RT)																9,19
PM1-6	TR 111+14.50 (34.3' RT) TO TR 115+00.00 (34.0' RT)																1,19
PM1-7	TR 112+59.11 (26.0' LT) TO TR 115+00.00 (26.0' LT)																1,19
PM1-8	TR 114+74.04 (10.0' RT) TO TR 115+00.00 (10.0' RT)																3,19
PM1-9	TR 114+74.05 (2.0' LT) TO TR 115+00 (2.0' LT)																3,19
PM1-10	TR 115+00.00 (34.0' RT) TO P 212+25.00 (28.3' LT)																1,19
PM1-11	TR 115+00.00 (22.0' RT) TO TR 115+44.09 (22.0' RT)																9,19
PM1-12	TR 115+00.00 (10.0' RT) TO TR 115+67.37 (10.0' RT)																3,19
PM1-13	TR 115+00.00 (2.0' LT) TO TR 115+67.39 (2.0' LT)																3,19
PM1-14	TR 115+00.00(14.0' LT) TO TR 119+05.15 (30.2' LT)																9,19
PM1-15	TR 112+59.11 (26.0' LT) TO E 318+05.02 (18.3' RT)																1,19
PM1-16	TR 115+43.95 (34.0' RT) TO TR 116+42.01 (34.0' RT)																7, 17,19
PM1-17	TR 115+44.09 (22.0' RT) TO TR 119+36.34 (46.8' RT)																4,17,19
PM1-18	TR 115+67.37 (10.0' RT) TO TR 119+30.36 (27.8' RT)																2,19
PM1-19	TR 115+67.39 (2.0' LT) TO 119+37.53 (28.7' LT)																2,19
PM1-20	TR 113+21.65 (3.7' RT) TO 113+37.65 (3.8' RT)	1															13,27
PM1-21	TR 109+70.00 (1.2' LT) TO 111+66.98 (0.8' LT)																3,19
PM1-22	TR 109+70.00 (11.3' RT) TO TR 111+66.90 (10.7' RT)																15,19
PM1-23	TR 109+48.25 (39.1' RT)																25
PM2-1	TR 116+42.01 (34.0' RT) TO TR 117+45.19 (32.1' RT)																4,17,19
PM2-2	TR 116+51.74 (28.4' RT)	1															10,20
PM2-3	TR 116+52.35 (42.4' RT)	1															11,20
PM2-4	TR 117+45.19 (32.1' RT) TO 119+49.94 (75.8' RT)																1,19
PM2-5	E 319+18.44 (12.3' RT) TO E 319+18.95 (15.4' LT)																1,19
PM2-6	TR 118+23.91 (11.56' RT)	1															13,17
PM2-7	TR 118+21.39 (25.4' RT)	1															10,20
PM2-8	TR 118+94.93 (72.0' RT)																18
PM2-9	TR 118+99.06 (30.5' RT)																18
PM2-10	TR 119+09.80 (33.0' LT)																18
PM2-11	P 226+73.43 (17.1' RT)	1															11,20
PM2-12	TR 119+37.53 (28.7' LT) TO TR 119+30.36' (27.8' RT)																19,21
PM2-13	TR 119+30.36 (27.8' RT) TO TR 119+45.59 (66.2' RT)																6,17
PM2-14	P 226+80.11 (6.4' RT)	1															13,17
PM2-15	TR 116+65.12 (43.8' RT)																26
PM2-16	TR 119+45.59 (66.2' RT) TO TR 119+49.94 (75.8' RT)																1,17
PM2-17	TR 119+49.43 (38.1' RT) TO TR 119+72.40 (62.7' RT)																5,17
	SHEET TOTAL	7															

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23. FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN					REGION NO.	STATE
ENTERED BY	E. MCGUIRE					10	WASH
CHECKED BY	J. FREY					JOB NUMBER	
PROJ. ENGR.	S. MARSHALL						
REGION ADM.						CONTRACT NO.	
		DATE	DATE	REVISION	BY		

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 2

SHEET 137 OF 218 SHEETS

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	FLEXIBLE GUIDEPOST - TUBULAR	FLEXIBLE GUIDEPOST - FLAT	PLASTIC LINE		GROOVED PLASTIC LINE	GROOVED PLASTIC WIDE LANE LINE	PLASTIC TRAFFIC ARROW	GROOVED PLASTIC WIDE DOTTED CIRCULATING LANE LINE		GROOVED PLASTIC BICYCLE LANE SYMBOL	GROOVED PLASTIC CROSSHATCH MARKING	GROOVED PLASTIC CROSSWALK LINE	GROOVED PLASTIC WIDE DOTTED ENTRY LINE		GROOVED PLASTIC WIDE DOTTED EXTENSION LINE	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	L.F.	EACH	L.F.		EACH	L.F.	S.F.	L.F.		L.F.	
PM2-18	TR 119+49.94 (75.8' RT) TO P 228+87.34 (36.3' LT)													42			6,17
PM2-19	TR 119+61.18 (72.8' LT) TO E 319+18.44 (12.3' RT)													48			6,17
PM2-20	TR 119+13.81 (34.1' LT) TO TR 119+97.18 (68.4' LT)								92								5,17
PM2-21	TR 119+72.40 (62.7' RT) TO TR 120+36.63 (57.9' RT)					67											4,19
PM2-22	P 229+22.26 (27.6' LT) TO P 229+22.10 (27.2' RT)					56											19,21
PM2-23	TR 119+94.48 (62.0' RT)																13,20
PM2-24	TR 119+87.04 (75.0' RT)																10,20
PM2-25	P 229+22.10 (27.2' RT) TO TR 120+81.77 (47.1' RT)													65			6,17
PM2-26	TR 120+14.43 (59.6' LT)																13,20
PM2-27	TR 120+22.26 (71.9' LT)																10,20
PM2-28	TR 120+36.63 (57.9' RT) TO TR 120+85.64 (30.7' RT)								60								5,17
PM2-29	TR 120+37.63 (57.2' LT) TO TR 120+63.56 (27.5' LT)								39								5,17
PM2-30	TR 116+33.28 (32.6' LT)										1						25
PM2-31	TR 120+62.03 (7.3' RT)																13,20
PM2-32	TR 120+59.72 (46.5' LT) TO TR 123+54.80 (13.4' LT)						284										4,19
PM2-33	TR 120+62.85 (25.8' RT) TO TR 120+63.56 (27.5' LT)					55											17,19,21
PM2-34	TR 120+62.85 (25.8' RT) TO TR 123+65.54 (19.4' RT)					307											2,19
PM2-35	TR 120+63.56 (27.5' LT) TO E 319+01.55 (28.5' LT)													60			6,17
PM2-36	TR 120+63.56 (27.5' LT) TO TR 124+17.44 (0.0' RT)					356											2,19
PM2-37	TR 121+95.58 (21.5' LT)																14,20
PM2-38	TR 119+38.24 (11.2' LT)																11,20
PM2-39	TR 120+90.76 (28.5' RT)												120				18
PM2-40	TR 120+99.70 (28.5' LT)												120				18
PM2-41	TR 121+96.20 (12.9' LT)																13,17
PM2-42	P 226+58.00 (11.0' RT) TO P 229+31.68 (47.0' RT)						316										4,17,19
PM2-43	P 226+68.89 (0.0' RT) TO P 229+22.10 (27.2' RT)					274											2
PM2-44	P 226+68.89 (0.0' LT) TO P 229+22.26(27.6' LT)					238											2
PM2-45	P 228+67.38 (38.9' RT)																11,20
PM2-46	P 228+72.89 (28.0' RT)																13,17
PM2-47	P 228+93.96 (34.6' RT)												120				18
PM2-48	P 228+94.36 (32.1' LT)												120				18
PM2-49	E 318+91.75 (13.4' RT)												60				18
PM2-50	E 318+92.24 (15.8' LT)												60				18
PM2-51	TR 119+97.18 (68.4' LT) TO TR 120+37.63 (57.2' LT)						43										17,21
PM2-52	TR 118+17.42 (51.3' RT)																11,20
PM2-53	TR 120+96.06 (26.7' RT) TO TR 123+65.57 (30.9' LT)					271											9,19
PM2-54	P 228+37.31 (39.8' RT)																29
PM2-55	P 227+95.89 (38.7' RT)																11,20
PM2-56	P 227+63.47 (33.2' RT)																29
PM2-57	TR 117+31.95 (26.4' RT)																29
PM2-58	TR 117+32.37 (38.4' RT)																29
	SHEET TOTAL					1624	643		191		1		600	215			

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23.FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN				
ENTERED BY	E. MCGUIRE				
CHECKED BY	J. FREY				
PROJ. ENGR.	S. MARSHALL				
REGION ADM.		DATE	DATE	REVISION	BY

REGION NO.	STATE
10	WASH

JOB NUMBER

CONTRACT NO.

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 3

SHEET 138 OF 218 SHEETS

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GROOVED PLASTIC TRAFFIC ARROW	ADA SYMBOL		PLASTIC CROSSHATCH MARKING	PLASTIC TRAFFIC LETTER	GROOVED PLASTIC YIELD LINE SYMBOL										SEE GENERAL NOTES
		EACH	EACH		L.F.	EACH	EACH										
PM2-18	TR 119+49.94 (75.8' RT) TO P 228+87.34 (36.3' LT)																6,17
PM2-19	TR 119+61.18 (72.8' LT) TO E 319+18.44 (12.3' RT)																6,17
PM2-20	TR 119+13.81 (34.1' LT) TO TR 119+97.18 (68.4' LT)																17,24
PM2-21	TR 119+72.40 (62.7' RT) TO TR 120+36.63 (57.9' RT)																4,19
PM2-22	P 229+22.26 (27.6' LT) TO P 229+22.10 (27.2' RT)																19,21
PM2-23	TR 119+94.48 (62.0' RT)	1															13,20
PM2-24	TR 119+87.04 (75.0' RT)	1															10,20
PM2-25	P 229+22.10 (27.2' RT) TO TR 120+81.77 (47.1' RT)																6,17
PM2-26	TR 120+14.43 (59.6' LT)	1															13,20
PM2-27	TR 120+22.26 (71.9' LT)	1															10,20
PM2-28	TR 120+36.63 (57.9' RT) TO TR 120+85.64 (30.7' RT)																17,19,24
PM2-29	TR 120+37.63 (57.2' LT) TO TR 120+63.56 (27.5' LT)																5,17
PM2-30	TR 116+33.28 (32.6' LT)																25
PM2-31	TR 120+62.03 (7.3' RT)	1															13,20
PM2-32	TR 120+59.72 (46.5' LT) TO TR 123+54.80 (13.4' LT)																4,19
PM2-33	TR 120+62.85 (25.8' RT) TO TR 120+63.56 (27.5' LT)																17,19,21
PM2-34	TR 120+62.85 (25.8' RT) TO TR 123+65.54 (19.4' RT)																2,19
PM2-35	TR 120+63.56 (27.5' LT) TO E 319+01.55 (28.5' LT)																6,17
PM2-36	TR 120+63.56 (27.5' LT) TO TR 124+17.44 (0.0' RT)																2,19
PM2-37	TR 121+95.58 (21.5' LT)	1															14,20
PM2-38	TR 119+38.24 (11.2' LT)	1															11,20
PM2-39	TR 120+90.76 (28.5' RT)																18
PM2-40	TR 120+99.70 (28.5' LT)																18
PM2-41	TR 121+96.20 (12.9' LT)	1															13,17
PM2-42	P 226+58.00 (11.0' RT) TO P 229+24.48 (60.3' RT)																4,17,19
PM2-43	P 226+68.89 (0.0' RT) TO P 229+22.10 (27.2' RT)																2
PM2-44	P 226+68.89 (0.0' LT) TO P 229+22.26(27.6' LT)																2
PM2-45	P 228+62.39 (39.2' RT)	1															11,20
PM2-46	P 228+65.66 (28.0' RT)	1															13,17
PM2-47	P 228+93.96 (34.6' RT)																18
PM2-48	P 228+94.36 (32.1' LT)																18
PM2-49	E 318+91.75 (13.4' RT)																18
PM2-50	E 318+92.24 (15.8' LT)																18
PM2-51	TR 119+97.18 (68.4' LT) TO TR 120+37.63 (57.2' LT)																17,21
PM2-52	TR 118+17.42 (51.3' RT)	1															11,20
PM2-53	TR 120+96.06 (26.7' RT) TO TR 123+65.57 (30.9' LT)																9,19
PM2-54	P 228+37.31 (39.8' RT)					4											29
PM2-55	P 227+95.89 (38.7' RT)	1															11,20
PM2-56	P 227+63.47 (33.2' RT)					4											29
PM2-57	TR 117+31.95 (26.4' RT)					4											29
PM2-58	TR 117+32.37 (38.4' RT)					4											29
	SHEET TOTAL	12				16											

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23. FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN					REGION NO.	STATE
ENTERED BY	E. MCGUIRE					10	WASH
CHECKED BY	J. FREY					JOB NUMBER	
PROJ. ENGR.	S. MARSHALL						
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City of Spokane Valley
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SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 4

SHEET 139 OF 218 SHEETS

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	FLEXIBLE GUIDEPOST - TUBULAR	FLEXIBLE GUIDEPOST - FLAT	PLASTIC LINE		GROOVED PLASTIC LINE	GROOVED PLASTIC WIDE LANE LINE	PLASTIC TRAFFIC ARROW	GROOVED PLASTIC WIDE DOTTED CIRCULATING LANE LINE		GROOVED PLASTIC BICYCLE LANE SYMBOL	GROOVED PLASTIC CROSSHATCH MARKING	GROOVED PLASTIC CROSSWALK LINE	GROOVED PLASTIC WIDE DOTTED ENTRY LINE		GROOVED PLASTIC WIDE DOTTED EXTENSION LINE	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	L.F.	EACH	L.F.		EACH	L.F.	S.F.	L.F.		L.F.	
PM2-59	TR 116+51.82 (16.3' RT)																13,17
PM2-60	TR 120+49.53 (66.5' RT) TO TR 120+61.41 (71.7' RT)																32
PM2-61	TR 120+63.86 (28.0' LT) TO TR 120+72.42 (40.4' LT)																32
PM2-62	TR 120+61.54 (46.3' LT) TO TR 120+73.55 (57.2' LT)																32
PM2-63	TR 120+07.90 (82.1' LT) TO TR 119+94.14 (95.2' LT)																32
PM2-64	TR 119+30.36 (27.8' RT) TO TR 119+24.53 (41.0' RT)																32
PM2-65	TR 119+36.34 (46.83' RT) TO TR 119+31.11 (58.7' RT)																32
PM2-66	TR 119+49.94 (75.8' RT) TO TR 119+43.95 (89.0' RT)																32
PM2-67	TR 120+30.15 (76.8' RT) TO TR 120+43.83 (81.5' RT)																32
PM3-1	TR 123+16.92 (30.4' LT)										1						25
PM3-2	TR 123+48.37 (18.6' LT)																14,20
PM3-3	TR 123+48.42 (7.8' LT)																13,17
PM3-4	TR 123+54.65 (13.4' LT) TO TR 124+17.41 (10.9' LT)					64											9,19
PM3-5	TR 123+01.66 (6.6' LT) TO TR 123+86.74 (2.2' RT)											29					16,19
PM4-1	P 212+00 (17.7'RT) TO P 218+87 (20.4' RT)					692											15,19
PM4-2	P 212+00 (17.0' LT) TO P 218+87 (21.5' LT)					689											15,19
PM4-3	P212+00 (6.0' RT) TO P 214+40 (6.0' LT)					244											3,19
PM4-4	SD 499+29.48 (1.4' RT)																12,20
PM4-5	P212+29.85 (29.9' RT) TO 218+87.00 (31.4' RT)					654											1,19
PM4-6	P 213+40 (6.0' RT) TO 214+40 (6.0' RT)						100										4,19
PM4-7	P 213+52.63 (1.5' LT)																12,20
PM4-8	P 214+19.01 (1.5' LT)																12,20
PM4-9	P 214+86.00 (6.0' LT) TO P 218+91.84 (9.5' RT)					405											3,19
PM4-10	P 214+86.00 (6.0'LT) TO P 218+91.84 (10.6' LT)					400											3,19
PM4-11	P LINE											186					
PM4-12	SD 498+78.01 (18.0' LT) TO SD 499+50.50 (18.0'RT)					290											15,19
PM4-13	SD 499+28.12 (12.7' RT)																11,20
PM5-1	P 218+87.00 (31.0' RT) TO TR 123+65.60 (42.3' RT)					1375											1,19
PM5-2	P 218+87.00 (20.4' RT) TO P 226+58.00 (11.0' RT)					750											9,19
PM5-3	P LINE											72					
PM5-4	P 223+48.45 (0.0' LT) TO P 226+69.00 (0.0' LT)					321											3,19
PM5-5	P 218+87.00 (21.5' LT) TO P 226+64.00 (11.0' LT)					800											9,19
PM5-6	P 218+91.84 (9.5' RT) TO P 220+45.28 (8.9' RT)					152											2,19
PM5-7	P 218+91.84 (10.6' LT) TO P 220+45.28 (7.5' LT)					155											2,19
PM5-8	P 220+45.28 (8.9' RT) TO P 223+48.45(0.0' LT)					298											3,19
PM5-9	P 220+45.28 (7.5' LT) TO P 223+48.45(0.0' LT)					307											3,19
PM6-1	E 307+39.05 (0.0'LT) TO E 318+04.02 (0.0'LT)			1065													3,19
	SHEET TOTAL			1065		7596	100				1	287					

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23.FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN				
ENTERED BY	E. MCGUIRE				
CHECKED BY	J. FREY				
PROJ. ENGR.	S. MARSHALL				
REGION ADM.		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 5

SHEET 140 OF 218 SHEETS

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GROOVED PLASTIC TRAFFIC ARROW	ADA SYMBOL		PLASTIC CROSSHATCH MARKING	PLASTIC TRAFFIC LETTER	GROOVED PLASTIC YIELD LINE SYMBOL										SEE GENERAL NOTES
		EACH	EACH		L.F.	EACH	EACH										
PM2-59	TR 116+51.82 (16.3' RT)	1															13,17
PM2-60	TR 120+49.53 (66.5' RT) TO TR 120+61.41 (71.7' RT)						5										32
PM2-61	TR 120+63.86 (28.0' LT) TO TR 120+72.42 (40.4' LT)						5										32
PM2-62	TR 120+61.54 (46.3' LT) TO TR 120+73.55 (57.2' LT)						5										32
PM2-63	TR 120+07.90 (82.1' LT) TO TR 119+94.14 (95.2' LT)						6										32
PM2-64	TR 119+30.36 (27.8' RT) TO TR 119+24.53 (41.0' RT)						5										32
PM2-65	TR 119+36.34 (46.83' RT) TO TR 119+31.11 (58.7' RT)						5										32
PM2-66	TR 119+49.94 (75.8' RT) TO TR 119+43.95 (89.0' RT)						5										32
PM2-67	TR 120+30.15 (76.8' RT) TO TR 120+43.83 (81.5' RT)						5										32
PM3-1	TR 123+16.92 (30.4' LT)																25
PM3-2	TR 123+48.37 (18.6' LT)	1															14,20
PM3-3	TR 123+48.42 (7.8' LT)	1															13,17
PM3-4	TR 123+54.65 (13.4' LT) TO TR 124+17.41 (10.9' LT)																9,19
PM3-5	TR 123+01.66 (6.6' LT) TO TR 123+86.74 (2.2' RT)																16,19
PM4-1	P 212+00 (17.7'RT) TO P 218+87 (20.4' RT)																15,19
PM4-2	P 212+00 (17.0' LT) TO P 218+87 (21.5' LT)																15,19
PM4-3	P212+00 (6.0' RT) TO P 214+40 (6.0' LT)																3,19
PM4-4	SD 499+29.48 (1.4' RT)	1															12,20
PM4-5	P212+29.85 (29.9' RT) TO 218+87.00 (31.4' RT)																1,19
PM4-6	P 213+40 (6.0' RT) TO 214+40 (6.0' RT)																4,19
PM4-7	P 213+52.63 (1.5' LT)	1															12,20
PM4-8	P 214+19.01 (1.5' LT)	1															12,20
PM4-9	P 214+86.00 (6.0' LT) TO P 218+91.84 (9.5' RT)																3,19
PM4-10	P 214+86.00 (6.0'LT) TO P 218+91.84 (10.6' LT)																3,19
PM4-11	P LINE																
PM4-12	SD 498+78.01 (18.0' LT) TO SD 499+50.50 (18.0'RT)																15,19
PM4-13	SD 499+28.12 (12.7' RT)	1															11,20
PM5-1	P 218+87.00 (31.0' RT) TO TR 123+65.60 (42.3' RT)																1,19
PM5-2	P 218+87.00 (20.4' RT) TO P 226+58.00 (11.0' RT)																9,19
PM5-3	P LINE																
PM5-4	P 223+48.45 (0.0' LT) TO P 226+69.00 (0.0' LT)																3,19
PM5-5	P 218+87.00 (21.5' LT) TO P 226+64.00 (11.0' LT)																9,19
PM5-6	P 218+91.84 (9.5' RT) TO P 220+45.28 (8.9' RT)																2,19
PM5-7	P 218+91.84 (10.6' LT) TO P 220+45.28 (7.5' LT)																2,19
PM5-8	P 220+45.28 (8.9' RT) TO P 223+48.45(0.0' LT)																3,19
PM5-9	P 220+45.28 (7.5' LT) TO P 223+48.45(0.0' LT)																3,19
PM6-1	E 307+39.05 (0.0'LT) TO E 318+04.02 (0.0'LT)																3,19
	SHEET TOTAL	7					41										

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23. FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN					REGION NO.	STATE
ENTERED BY	E. MCGUIRE					10	WASH
CHECKED BY	J. FREY					**JOB NUMBER**	
PROJ. ENGR.	S. MARSHALL						
REGION ADM.						**CONTRACT NO.**	
		DATE	**DATE**	**REVISION**	**BY**		

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 6

SHEET 141 **OF** 218 **SHEETS**

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	FLEXIBLE GUIDEPOST - TUBULAR	FLEXIBLE GUIDEPOST - FLAT	PLASTIC LINE		GROOVED PLASTIC LINE	GROOVED PLASTIC WIDE LANE LINE	PLASTIC TRAFFIC ARROW	GROOVED PLASTIC WIDE DOTTED CIRCULATING LANE LINE		GROOVED PLASTIC BICYCLE LANE SYMBOL	GROOVED PLASTIC CROSSHATCH MARKING	GROOVED PLASTIC CROSSWALK LINE	GROOVED PLASTIC WIDE DOTTED ENTRY LINE		GROOVED PLASTIC WIDE DOTTED EXTENSION LINE	SEE GENERAL NOTES
		EACH	EACH	L.F.		L.F.	L.F.	EACH	L.F.		EACH	L.F.	S.F.	L.F.		L.F.	
PM7-1	E 319+18.44 (12.3' LT) TO E 318+04.02 (0.0'RT)					104											16,19
PM7-2	E 319+18.95 (15.4' LT) TO E 318+04.02 (0.0'RT)					107											16,19
PM7-3	E 318+05.02 (20.0' LT) TO TR 123+85.98 (22.5' LT)					421											1,19
PM8-1	TR EB 400+94.35 (98.5' RT)												96				
PM8-2	TR EB 401+70.23(128.9' RT)												144				
PM8-3	TP1 14+11.84 (13.6' RT)																
PM8-4	TP1 13+79.34 (12.0' RT) TO TP1 14+69.34 (12.0' RT)			289													22,23
PM8-5	TP1 13+79.34 (28.0' LT) TO TP1 14+69.34 (28.0'LT)			198													22,23
PM8-6	TP1 14+20.84 (12.0' RT) TO TP1 14+20.84 (30.0' RT)																22,23
PM8-7	TP3 50+32.84 (4.0' RT) TO TP3 51+28.84 (4.0' RT)			132													
	TR-LINE	28	36														30,31
	P-LINE	10	22														30,31
	E-LINE	10	6														30,31
	SHEET TOTAL	48	64	619		632							240				
	PROJECT TOTAL	48	64	3916		14328	1140	1	227		3	287	1100	256		101	

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23.FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00.
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN				
ENTERED BY	E. MCGUIRE				
CHECKED BY	J. FREY				
PROJ. ENGR.	S. MARSHALL				
REGION ADM.					
		DATE	DATE	REVISION	BY

REGION NO.	STATE	FED. AID PROJ. NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO.

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

QUANTITY TABULATION - PAVEMENT MARKING

QTMK 7

SHEET 142 OF 218 SHEETS

QUANTITY TABULATION - PAVEMENT MARKING

NOTE:
THE FIRST NUMBER OF THE "CODE" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE CONSTRUCTION FEATURE.

THE SECOND NUMBER REFERS TO THE CONSTRUCTION FEATURE FOUND ON THAT SHEET.

CODE	LOCATION ➢ \ UNIT OF MEASURE ➢	GROOVED PLASTIC TRAFFIC ARROW	ADA SYMBOL		PLASTIC CROSSHATCH MARKING	PLASTIC TRAFFIC LETTER	GROOVED PLASTIC YIELD LINE SYMBOL									SEE GENERAL NOTES
		EACH	EACH		L.F.	EACH	EACH									
PM7-1	E 319+18.44 (12.3' LT) TO E 318+04.02 (0.0'RT)															16,19
PM7-2	E 319+18.95 (15.4' LT) TO E 318+04.02 (0.0'RT)															16,19
PM7-3	E 318+05.02 (20.0' LT) TO TR 123+85.98 (22.5' LT)															1,19
PM8-1	TR EB 400+94.35 (98.5' RT)															
PM8-2	TR EB 401+70.23(128.9' RT)															
PM8-3	TP1 14+11.84 (13.6' RT)		1													
PM8-4	TP1 13+79.34 (12.0' RT) TO TP1 14+69.34 (12.0' RT)															22,23
PM8-5	TP1 13+79.34 (28.0' LT) TO TP1 14+69.34 (28.0'LT)															22,23
PM8-6	TP1 14+20.84 (12.0' RT) TO TP1 14+20.84 (30.0' RT)				84											22,23
PM8-7	TP3 50+32.84 (4.0' RT) TO TP3 51+28.84 (4.0' RT)															
	TR-LINE															30,31
	P-LINE															30,31
	E-LINE															30,31
	SHEET TOTAL		1		84											
	PROJECT TOTAL	26	1		84	16	41									

GENERAL NOTES:

NOTE: SEE PLANS AND SPECIAL PROVISIONS SECTION 8-22 FOR GROOVED INSTALLATION AT ROUNDABOUTS.

1. EDGE LINE-WHITE
2. EDGE LINE-YELLOW
3. DOUBLE YELLOW-CENTERLINE
4. WIDE LANE LINE-WHITE
5. WIDE DOTTED CIRCULATING LANE LINE-WHITE
6. WIDE DOTTED ENTRY LINE-WHITE
7. DOTTED EXTENSION LINE-WHITE
8. TWO-WAY LEFT-TURN CENTERLINE
9. SKIP CENTERLINE-WHITE
10. TYPE 1S (STRAIGHT) TRAFFIC ARROW
11. TYPE 2SR (RIGHT) TRAFFIC ARROW
12. TYPE 2SL (LEFT) TRAFFIC ARROW
13. TYPE 3SL (LEFT) TRAFFIC ARROW
14. TYPE 3SR (RIGHT) TRAFFIC ARROW
15. LANE LINE - WHITE
16. LANE LINE - YELLOW
17. SEE STD PLAN M12.10-03 ROUNDABOUT PAVEMENT MARKINGS
18. SEE STD PLAN M15.10.01 CROSSWALK LAYOUT
19. SEE STD PLAN M20.10-04 LONGITUDINAL MARKING PATTERNS
20. SEE STD PLAN M24.40-02 SYMBOL MARKINGS
21. WIDE EDGE LINE- WHITE
22. SEE STD PLANS M-40.10-03 AND M40.40-00 TUBULAR MARKERS
23. FLEXIBLE GUIDE POSTS SHALL BE BROWN
24. STRONG LANE LINE- WHITE
25. SEE STD PLAN M-9.50-02 BICYCLE LANE SYMBOL
26. SEE STD PLAN M-9.50-02 BIKE LANE ARROW DETAIL
27. SEE STD PLAN M-3.40-04 TWO WAY LEFT TURN AND MEDIAN CHANNELIZATION
28. SEE STD. PLAN M-24.60-04 ACCESS PARKING SPACE SYMBOL
29. SEE STD. PLAN M-80.30.00 TRAFFIC LETTERS AND NUMERALS
30. TUBULAR MARKERS. SEE STD PLAN M-40.10-04 AND M40.40-00.
31. FLEXIBLE GUIDE POSTS SHALL BE BROWN.
32. SEE STD. PLAN M-24.60-04 SYMBOL MARKINGS MISCELLANEOUS.

DESIGNED BY	B. KIRKMAN					REGION NO.	STATE
ENTERED BY	E. MCGUIRE					10	WASH
CHECKED BY	J. FREY					JOB NUMBER	
PROJ. ENGR.	S. MARSHALL						
REGION ADM.						CONTRACT NO.	
		DATE	DATE	REVISION	BY		

FED. AID PROJ. NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

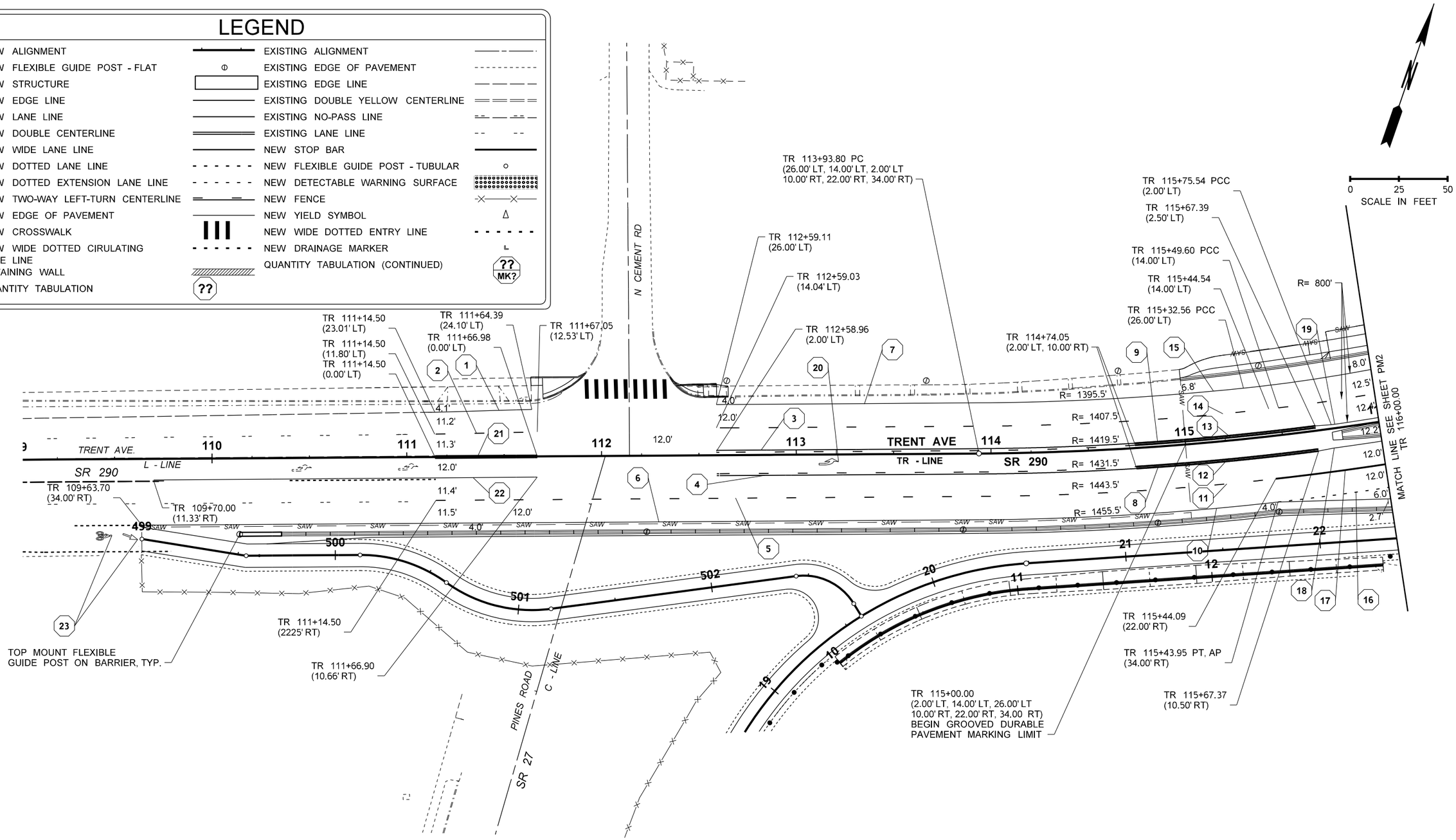
QUANTITY TABULATION - PAVEMENT MARKING

QTMK 8

SHEET 143 OF 218 SHEETS

LEGEND

NEW ALIGNMENT	EXISTING ALIGNMENT
NEW FLEXIBLE GUIDE POST - FLAT	EXISTING EDGE OF PAVEMENT
NEW STRUCTURE	EXISTING EDGE LINE
NEW EDGE LINE	EXISTING DOUBLE YELLOW CENTERLINE
NEW LANE LINE	EXISTING NO-PASS LINE
NEW DOUBLE CENTERLINE	EXISTING LANE LINE
NEW WIDE LANE LINE	NEW STOP BAR
NEW DOTTED LANE LINE	NEW FLEXIBLE GUIDE POST - TUBULAR
NEW DOTTED EXTENSION LANE LINE	NEW DETECTABLE WARNING SURFACE
NEW TWO-WAY LEFT-TURN CENTERLINE	NEW FENCE
NEW EDGE OF PAVEMENT	NEW YIELD SYMBOL
NEW CROSSWALK	NEW WIDE DOTTED ENTRY LINE
NEW WIDE DOTTED CIRULATING LANE LINE	NEW DRAINAGE MARKER
RETAINING WALL	QUANTITY TABULATION (CONTINUED)
QUANTITY TABULATION	



FILE NAME	c:\pwworking\west01\d2172373\PINES_PS_MK_001.dgn
TIME	11:00:11 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

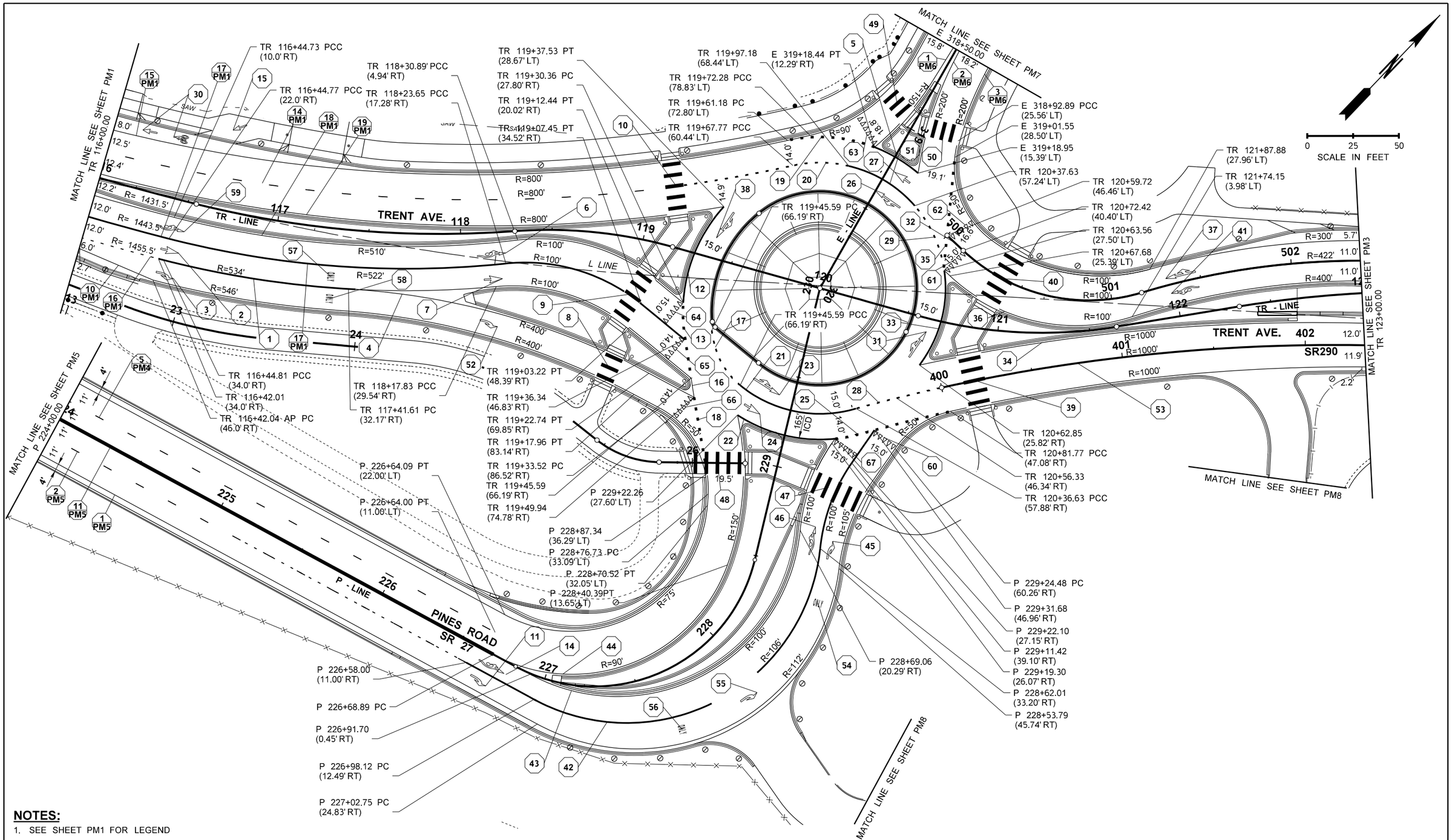
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLAN

Plot 1
PLAN REF NO
PM1
SHEET 144 OF 218 SHEETS



NOTES:

1. SEE SHEET PM1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172373\PINES_PS_MK_002.dgn				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
TIME	11:00:41 AM				JOB NUMBER		
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

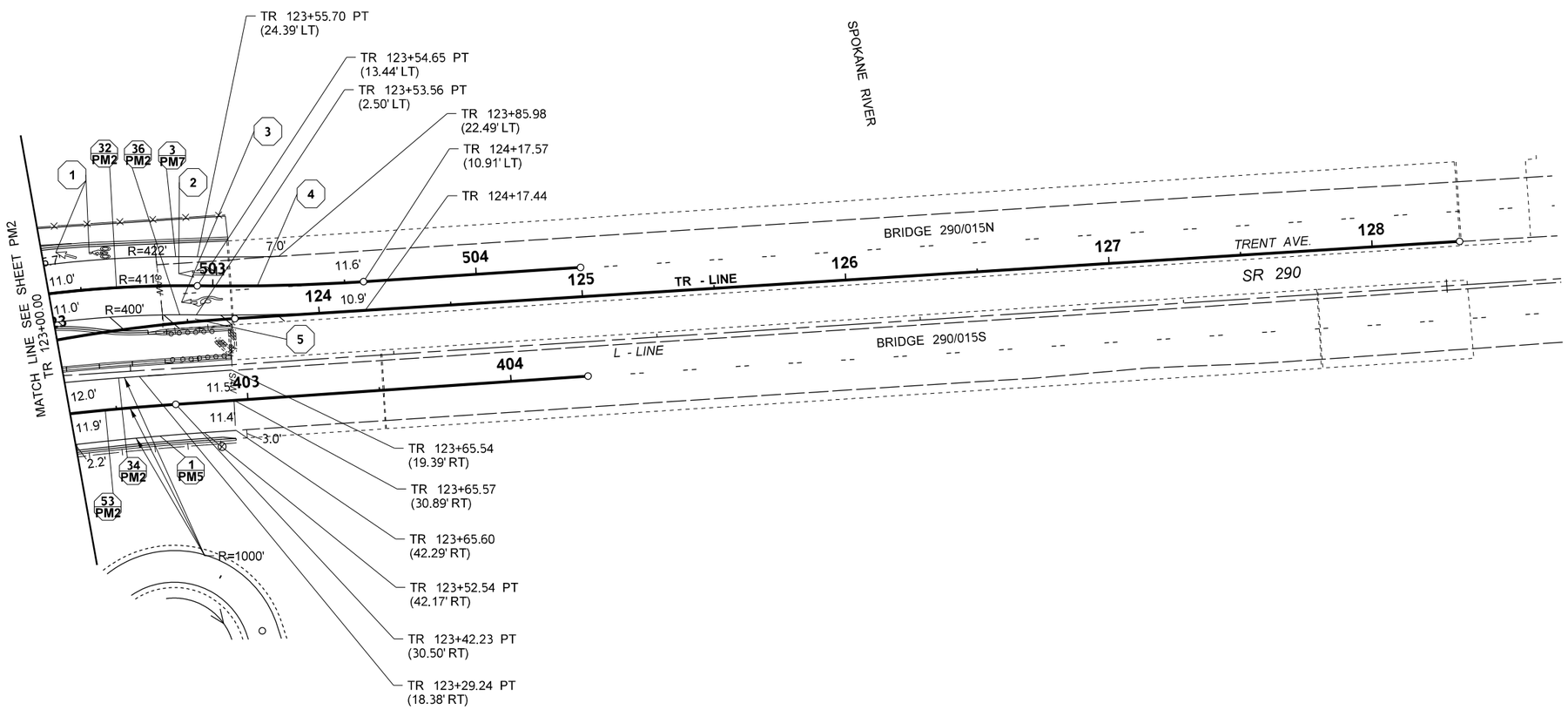
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

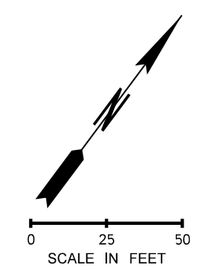
PAVEMENT MARKING PLAN

Plot 1
PLAN REF NO PM2
SHEET 145 OF 218 SHEETS



NOTES:

1. SEE SHEET PM1 FOR LEGEND



FILE NAME	c:\pwworking\west01\d2172373\PINES_PS_MK_003.dgn				REGION NO.	STATE	FED.AID PROJ.NO.
TIME	11:01:05 AM				10	WASH	STPUL 0027(020)
DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

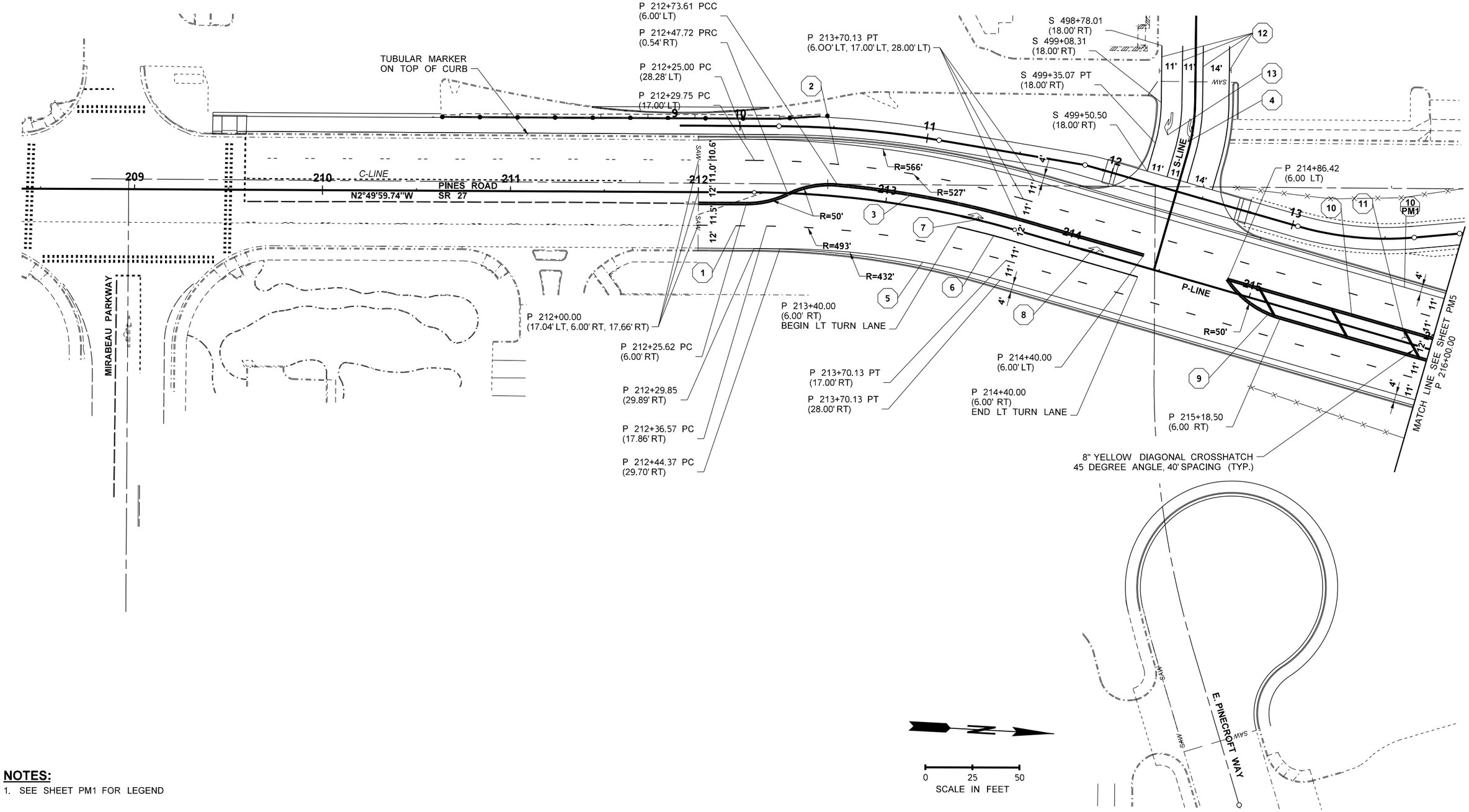
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLAN

Plot 1
PLAN REF NO
PM3
SHEET 146 OF 218 SHEETS



NOTES:

1. SEE SHEET PM1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172373\PINES_PS_MK_004.dgn				REGION NO.	STATE	FED.AID PROJ.NO.
TIME	11:01:27 AM				10	WASH	STPUL 0027(020)
DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

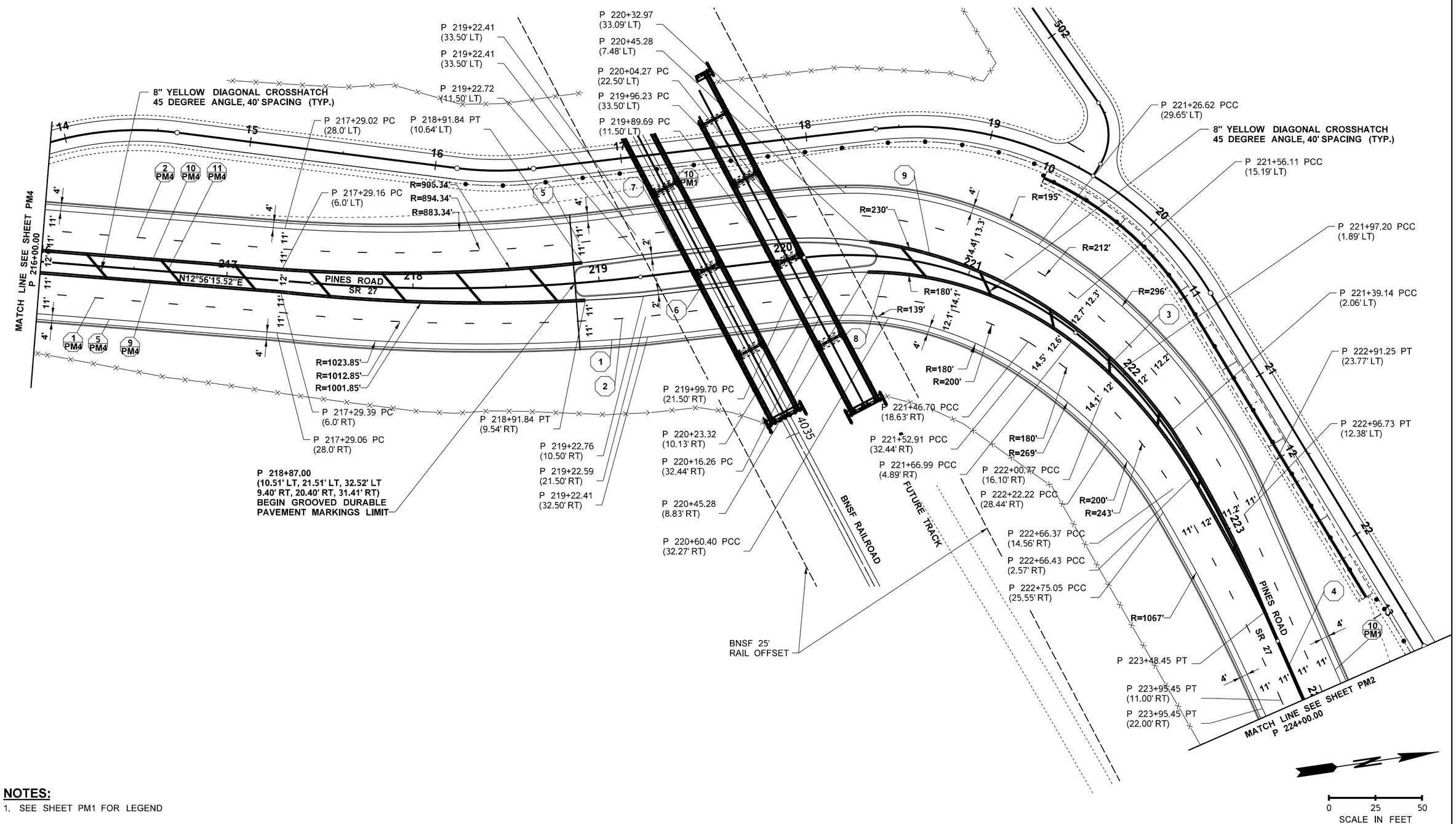
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLAN

Plot 1

PLAN REF NO
PM4

SHEET 147 OF 218 SHEETS



NOTES:

1. SEE SHEET PM1 FOR LEGEND

FILE NAME	c:\pwworking\west01\d2172373\PINES_PS_MK_005.dgn						
TIME	11:01:47 AM						
DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

P.E. STAMP BOX

City of Spokane Valley

HDR

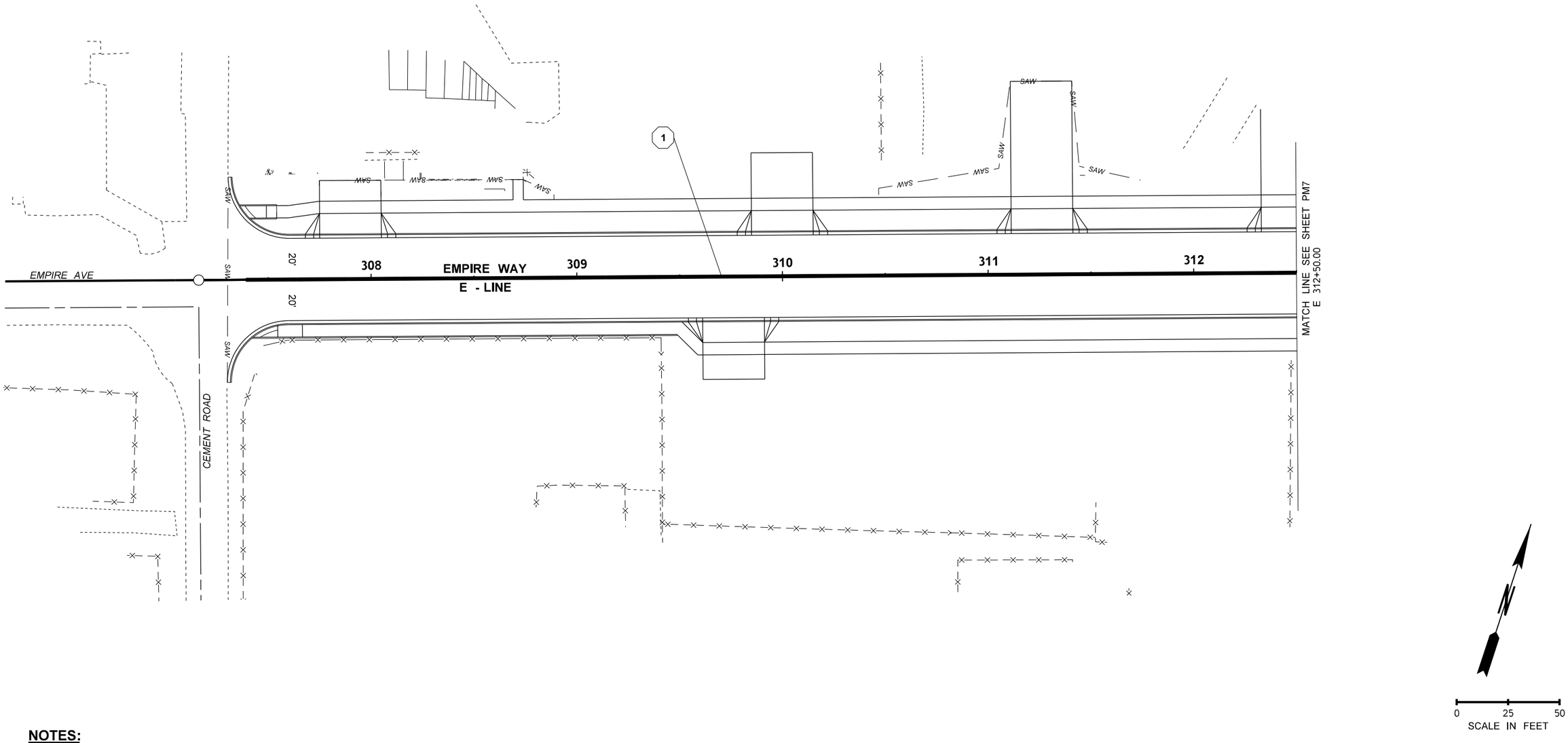
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLANS

Plot 1

PLAN REF NO
PM5

SHEET 148 OF 218 SHEETS



NOTES:

1. SEE SHEET PM1 FOR LEGEND

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DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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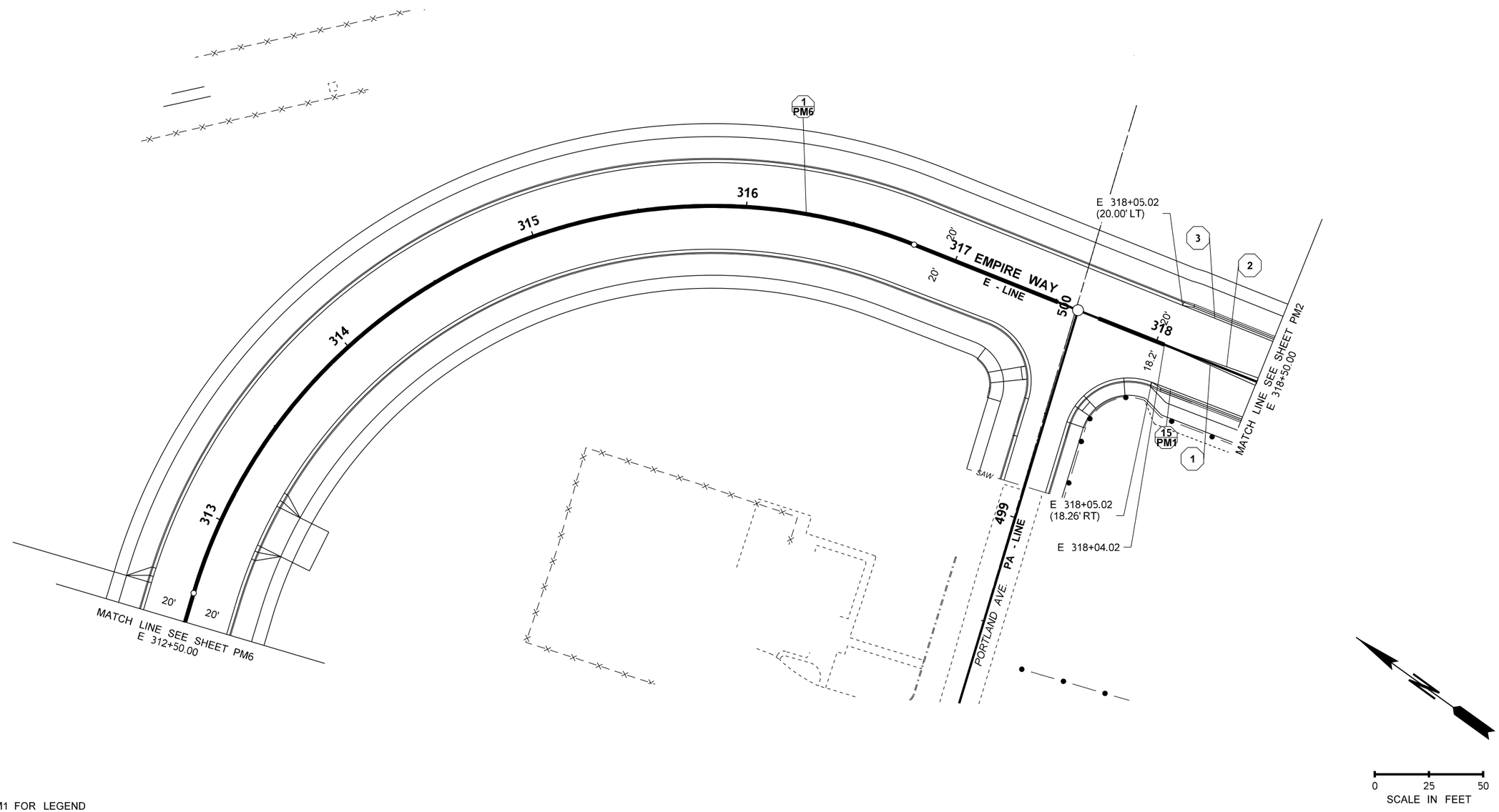
P.E. STAMP BOX

CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLAN

Plot 1
PLAN REF NO
PM6
SHEET 149 OF 218 SHEETS



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1. SEE SHEET PM1 FOR LEGEND

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DATE	5/29/2025						
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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

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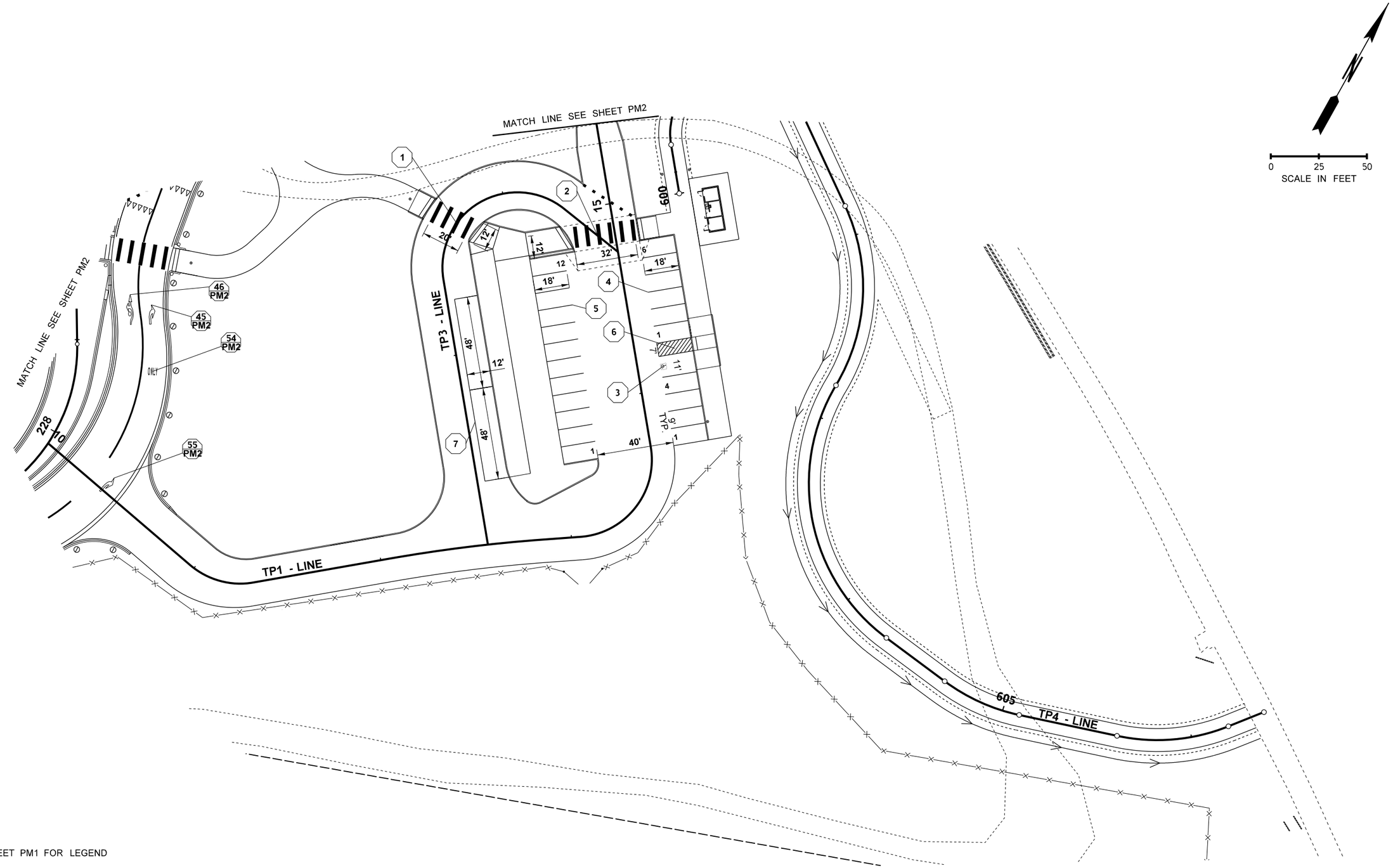
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLAN

Plot 1

PLAN REF NO
PM7

SHEET 150 OF 218 SHEETS



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ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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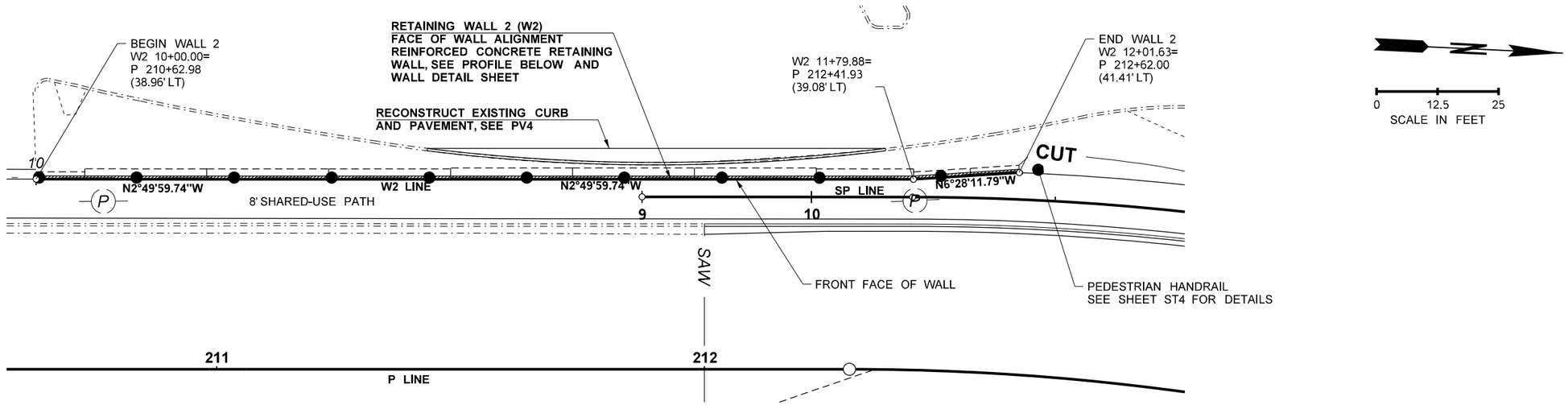
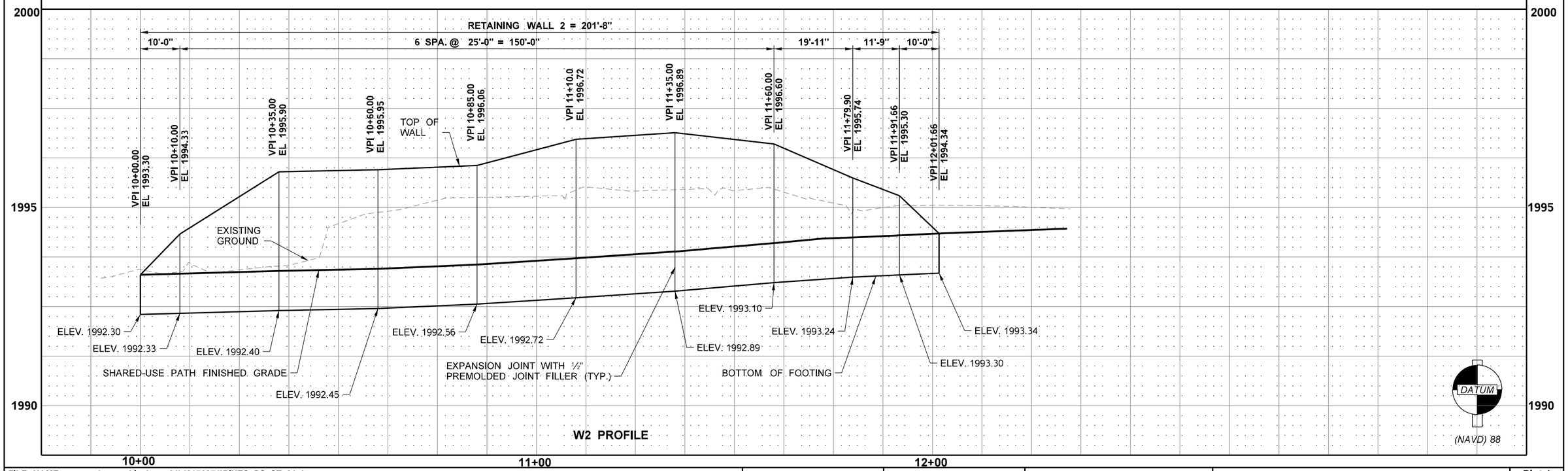
CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

PAVEMENT MARKING PLAN

Plot 1
PLAN REF NO
PM8
SHEET 151 OF 218 SHEETS





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CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

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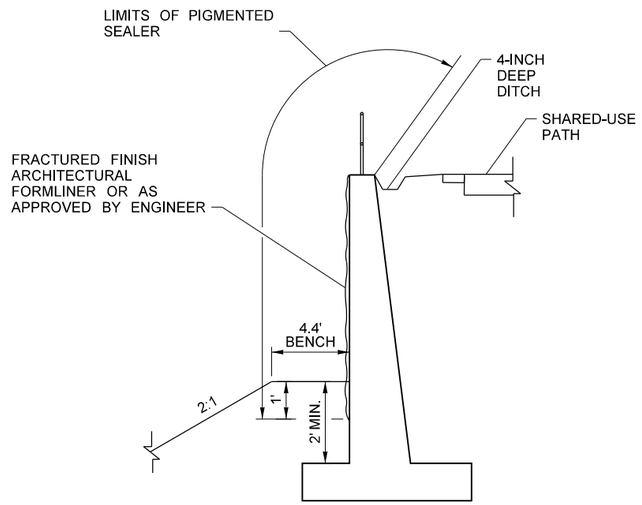
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

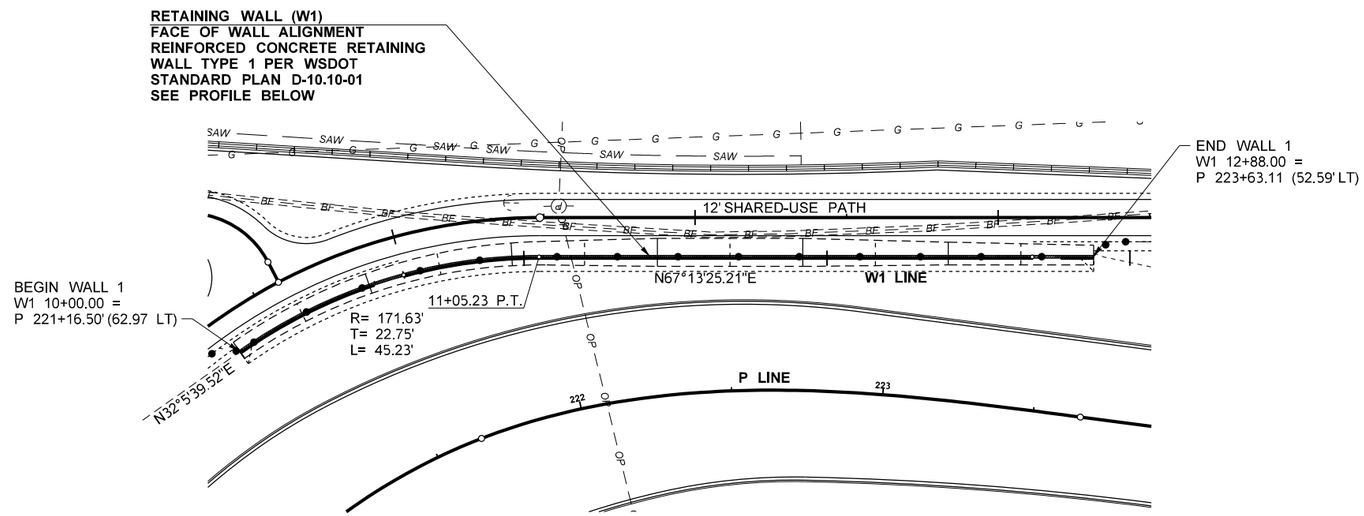
MINOR STRUCTURE PLAN

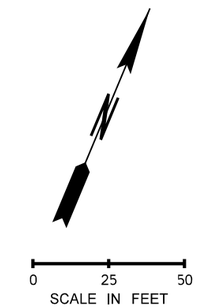
Plot 1
PLAN REF NO
ST1
SHEET 152 OF 218 SHEETS

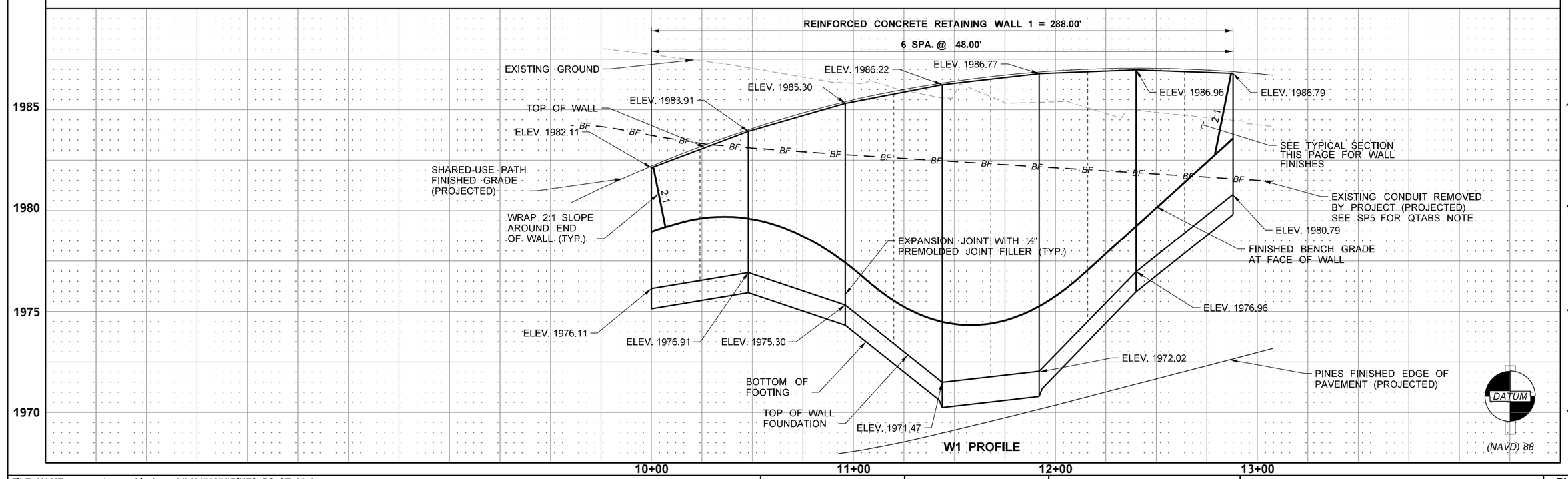


TYPICAL SECTION WALL 1

NOT TO SCALE







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DATE	5/29/2025			JOB NUMBER		69A36525420110RASWA
PLOTTED BY	EMCGUIRE					69A36524420020RLDWA
DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY			CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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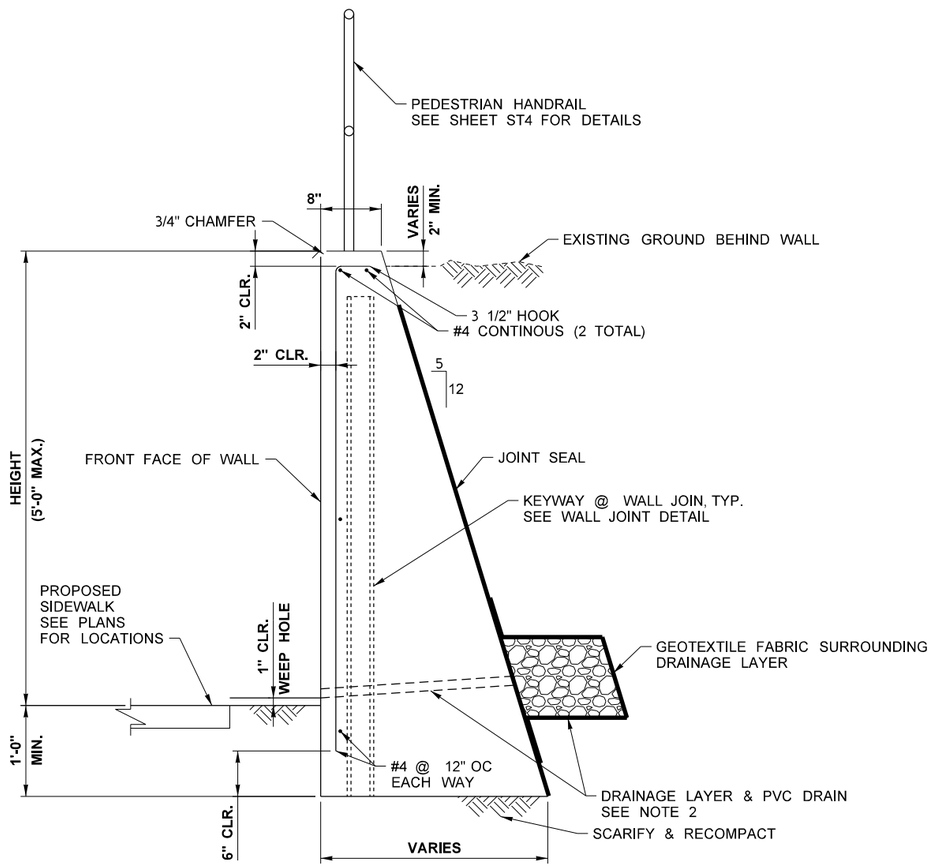
City of Spokane Valley

HDR

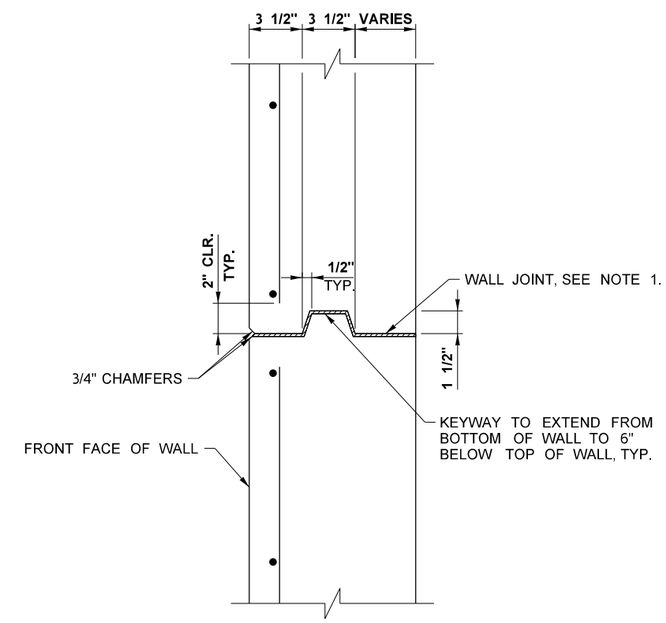
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

MINOR STRUCTURE PLAN

Plot 1
PLAN REF NO
ST2
SHEET 153 OF 218 SHEETS



TYPICAL WALL SECTION - RETAINING WALL 2
N.T.S.



KEYWAY & WALL JOINT DETAIL - RETAINING WALL 2
N.T.S.

Estimated Quantities for C-I-P Wall		
Height (ft)	Per linear foot of wall	
	Class NS Concrete (CY)	Reinf. Steel (lb.)
1	0.08	3
2	0.14	4
3	0.22	5
4	0.32	6
5	0.43	7

NOTES:

1. WALL JOINTS SHALL BE EQUALLY SPACED AND SHALL NOT EXCEED 30' ON CENTER, UNLESS NOTED OTHERWISE. PROVIDE PREFORMED PLASTIC BOND BREAKER IN JOINTS, TYPICAL.
2. PROVIDE A CONTINUOUS 1'x1' CRUSHED ROCK OR CLEAN GRAVEL DRAIN FOR WALL HEIGHTS GREATER THAN 2'. PROVIDE 2" PVC DRAIN PIPE (SCH. 40) AT 10' MAXIMUM SPACING (WHEN DRAINAGE LAYER IS REQUIRED). LOCATE OUTERMOST EDGE OF DRAIN PIPE A MINIMUM OF 2' FROM WALL JOINTS.

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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO. | LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
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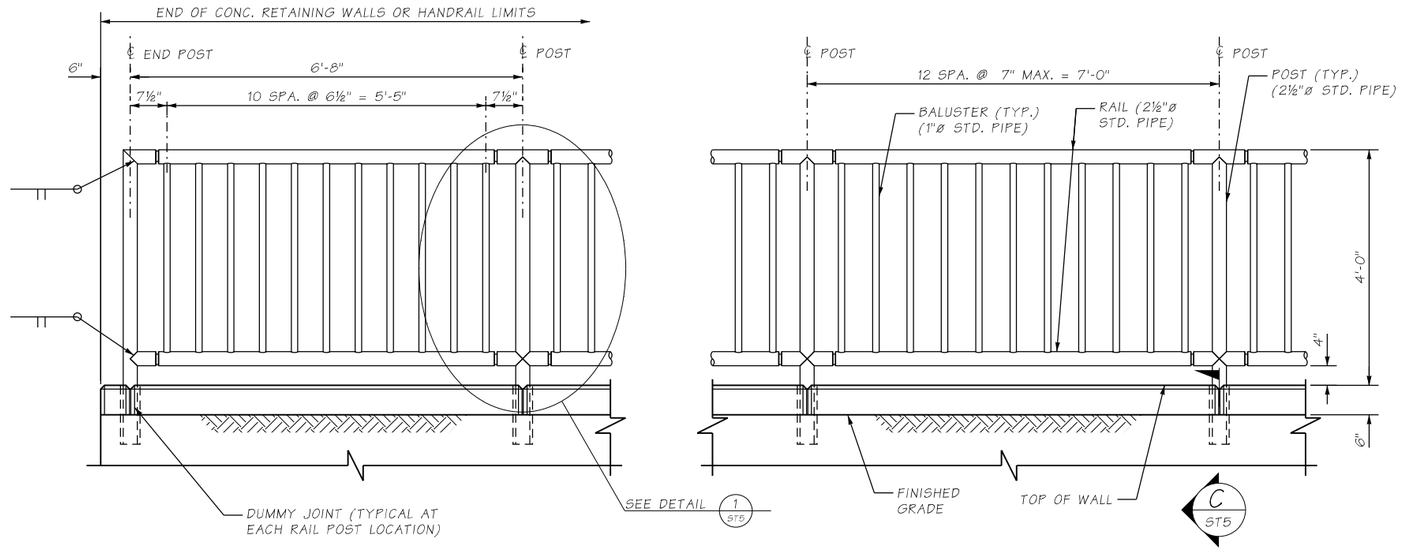
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

MINOR STRUCTURE DETAILS

Plot 1
PLAN REF NO ST3
SHEET 154 OF 218 SHEETS



ELEVATION

BALUSTERS NORMAL TO GRADE.
TOP & BOTTOM RAILS PARALLEL TO GRADE.

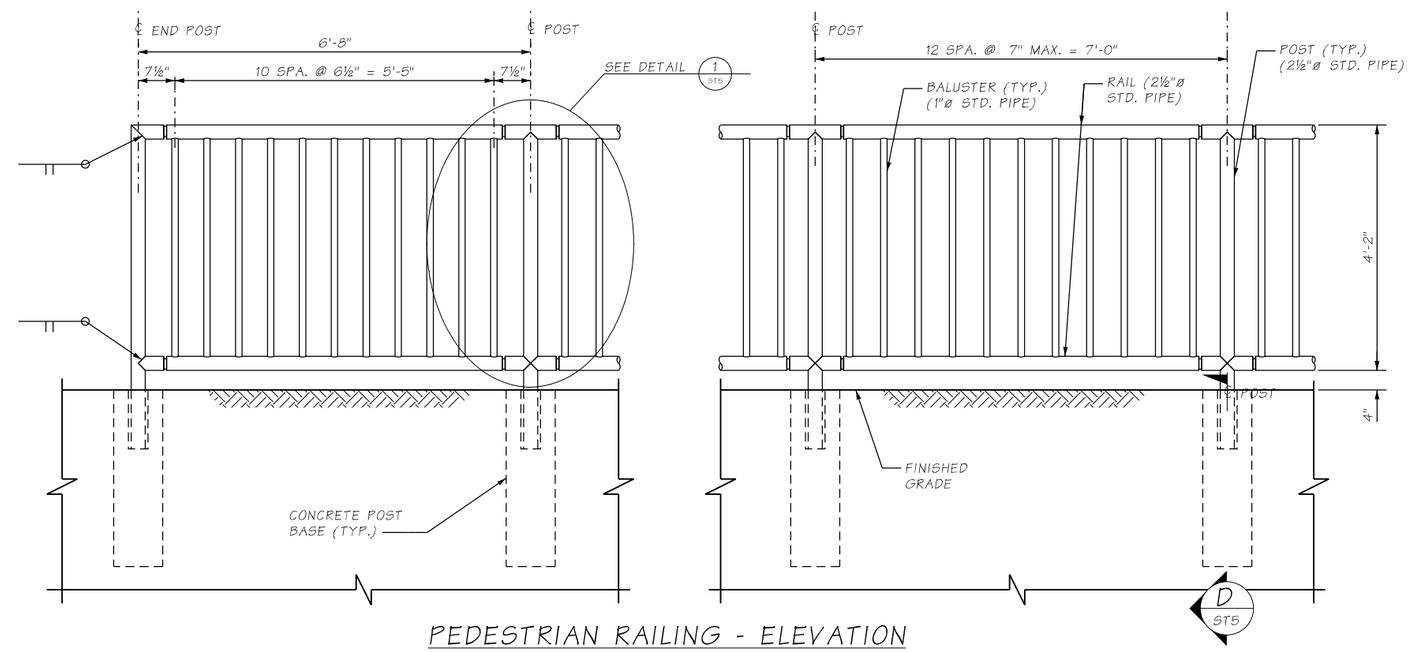
NOTES

1. PIPE RAILING AND PIPE RAILING SPLICES SHALL BE BENT TO THE HORIZONTAL CURVE WHERE THE RADIUS OF CURVATURE IS LESS THAN 200'. THESE ITEMS MAY BE HEATED TO NOT MORE THAN 400°F FOR A PERIOD NOT TO EXCEED 30 MINUTES TO FACILITATE FORMING OR BENDING TO HORIZONTAL CURVATURE.
2. SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED AS A TYPE 2 WORKING DRAWING SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION AND INCLUDING AN ERECTION DIAGRAM. MATERIAL SPECIFICATIONS SHALL BE PROVIDED IN THE SHOP DRAWINGS FOR ALL COMPONENTS.
3. CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.
4. WELDING OF ALUMINUM SHALL CONFORM TO STD. SPEC. SECTION 9-28.14(3).
5. ALL ALUMINUM PARTS SHALL BE GIVEN A *(CLEAR OR BRONZE) ANODIC COATING OF AT LEAST 0.0006" THICK AND SEALED TO MEET THE REQUIREMENTS OF ASTM B 580 WITH A UNIFORM FINISH.
6. PIPE RAILING, PIPE BALUSTERS AND PIPE RAILING SPLICES SHALL BE ADEQUATELY WRAPPED TO INSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.

MAT'L	PART	MATERIAL SPECIFICATION
ALUMINUM	RAILS & BALUSTERS	ASTM B221-6005-T5, 6005A-T5 OR ASTM B241-6061-T6
	STRIP	ASTM B221-6005-T5
STEEL	ANCHOR BOLTS, NUTS & WASHERS	STANDARD SPECIFICATION SECTION 9-06.5(4) GR. 36 (GALVANIZE IN ACCORDANCE WITH AASHTO SPECIFICATION M 232)
	DRIVE PINS	ASTM A276 OR A240 TYPE 302 STAINLESS STEEL

PEDESTRIAN HANDRAIL DETAIL 1 OF 2

NOT TO SCALE



PEDESTRIAN RAILING - ELEVATION

BALUSTERS NORMAL TO GRADE.
TOP & BOTTOM RAILS PARALLEL TO GRADE.

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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
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City of Spokane Valley
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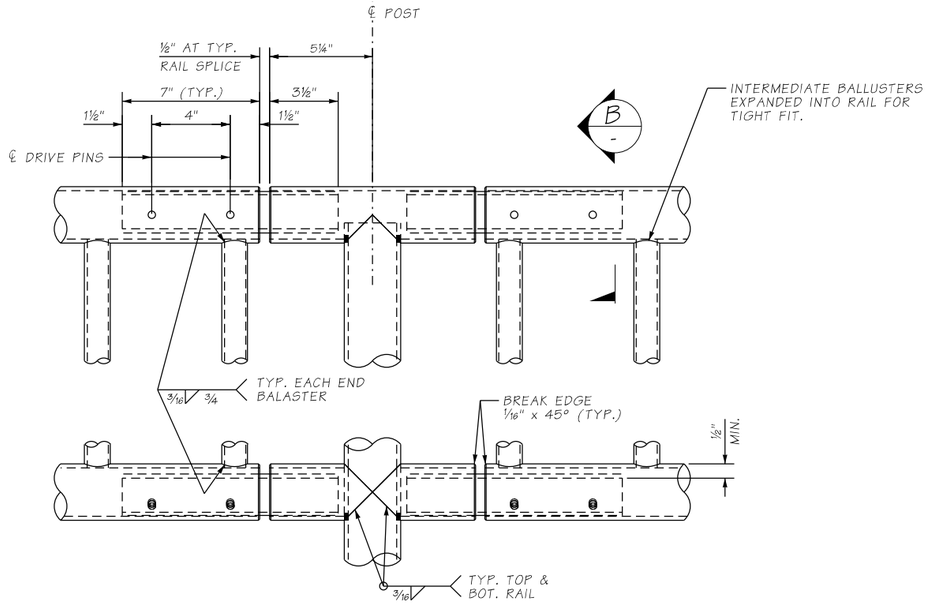
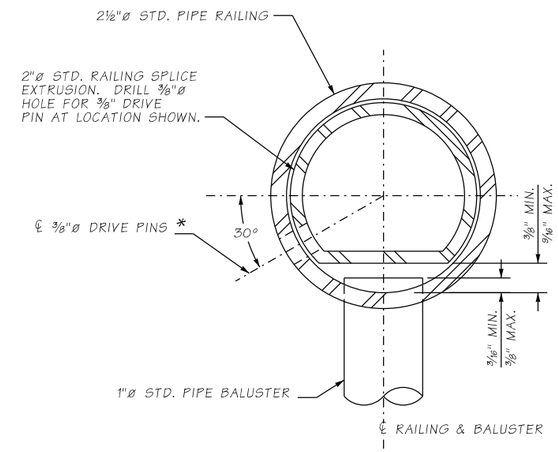
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

MINOR STRUCTURE DETAILS

Plot 1
PLAN REF NO
ST4
SHEET 155 OF 218 SHEETS

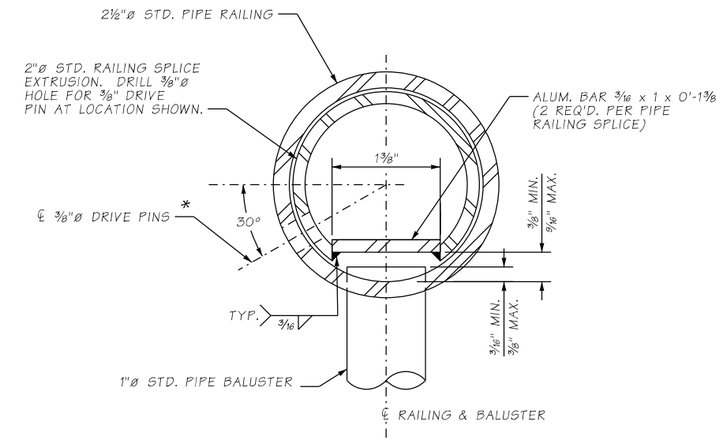


DETAIL 1 / ST4



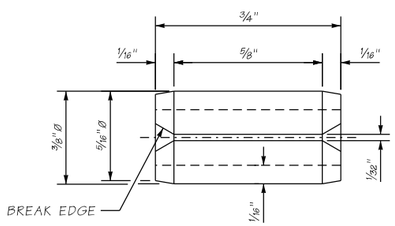
SECTION B / - OPTION #1

*LOCATE ON OPPOSITE SIDE OF TRAFFIC. DRIVE PINS SHALL BE DRIVEN FLUSH WITH THE OUTSIDE FACE OF THE RAILING.



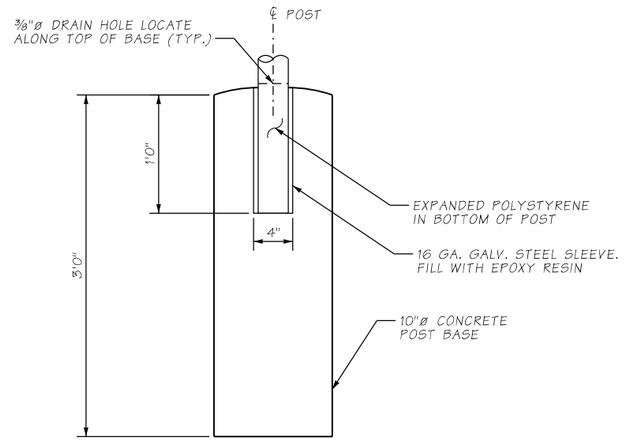
SECTION B / - OPTION #2

*LOCATE ON OPPOSITE SIDE OF TRAFFIC. DRIVE PINS SHALL BE DRIVEN FLUSH WITH THE OUTSIDE FACE OF THE RAILING.

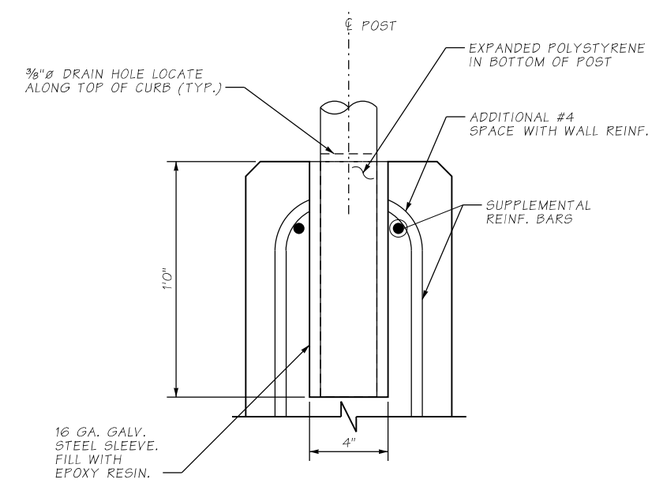


DRIVE PIN DETAIL

SLOTTED TYPE SPRING PIN (ANSI B18.8.2)



SECTION D / ST4



SECTION C / ST4

PEDESTRIAN HANDRAIL DETAIL 2 OF 2

NOT TO SCALE

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DATE	5/29/2025				10	WASH	STPUL 0027(020)
PLOTTED BY	EMCGUIRE				JOB NUMBER		69A36525420110RASWA
DESIGNED BY	B KIRKMAN						69A36524420020RLDWA
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

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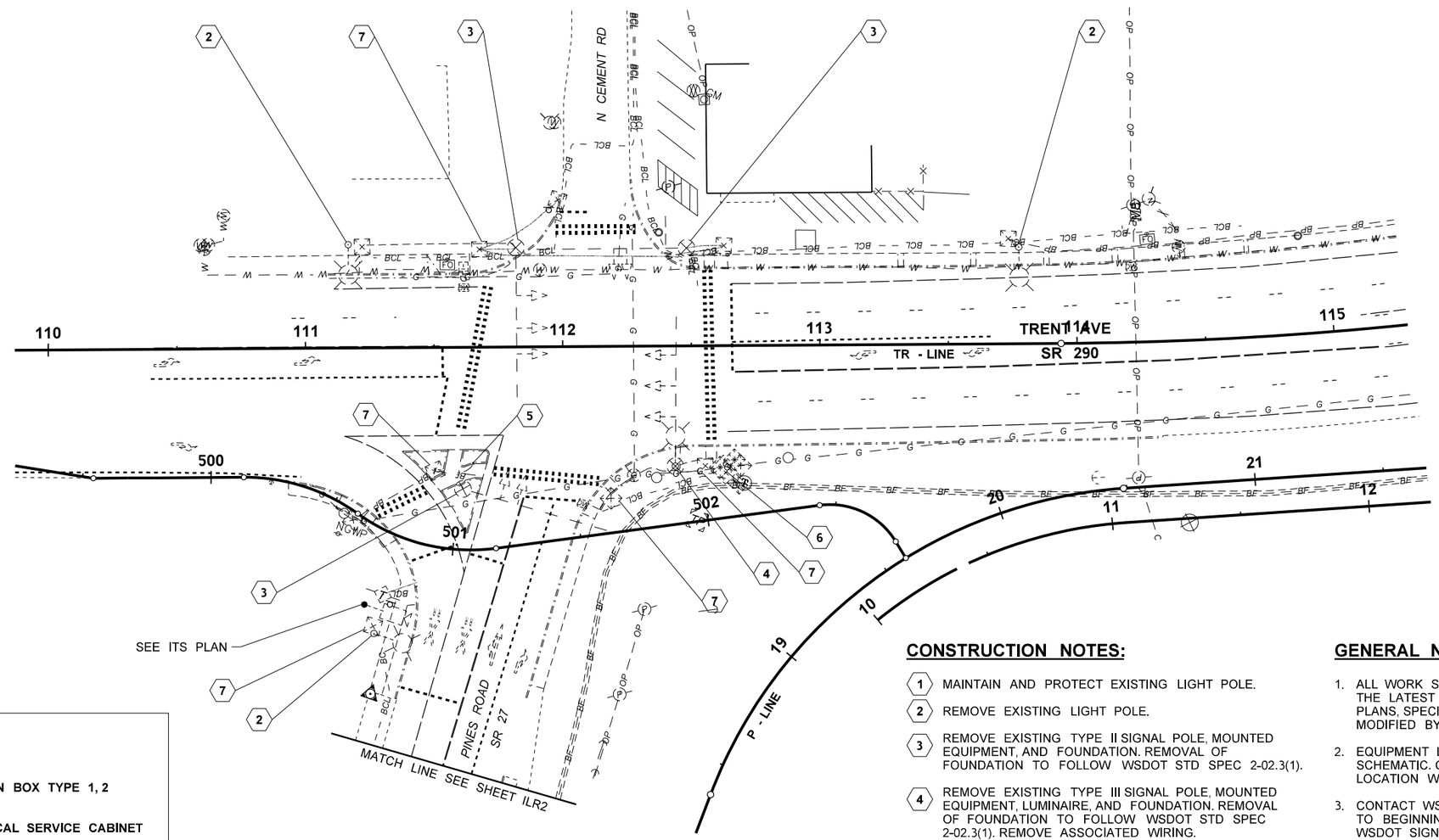
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

MINOR STRUCTURE DETAILS

Plot 1
PLAN REF NO
ST5
SHEET 156 OF 218 SHEETS



LEGEND

EXISTING

- JUNCTION BOX TYPE 1, 2
- ELECTRICAL SERVICE CABINET
- LIGHT POLE
- SIGNAL POLE
- LIGHTING CONDUIT
- CONSTRUCTION NOTE

CONSTRUCTION NOTES:

1. MAINTAIN AND PROTECT EXISTING LIGHT POLE.
2. REMOVE EXISTING LIGHT POLE.
3. REMOVE EXISTING TYPE II SIGNAL POLE, MOUNTED EQUIPMENT, AND FOUNDATION. REMOVAL OF FOUNDATION TO FOLLOW WSDOT STD SPEC 2-02.3(1).
4. REMOVE EXISTING TYPE III SIGNAL POLE, MOUNTED EQUIPMENT, LUMINAIRE, AND FOUNDATION. REMOVAL OF FOUNDATION TO FOLLOW WSDOT STD SPEC 2-02.3(1). REMOVE ASSOCIATED WIRING.
5. REMOVE EXISTING TYPE PPB PEDESTRIAN PUSH BUTTON POST.
6. REMOVE EXISTING SIGNAL CONTROLLER CABINET AND ASSOCIATED APPURTENANCES, CONDUITS, AND CONDUCTORS. MAINTAIN AND PROTECT EXISTING SERVICE CABINET.
7. REMOVE EXISTING JUNCTION BOX, ASSOCIATED CONDUITS, AND CONDUCTORS. ALL EMPTY CONDUIT TO BE REMOVED UNLESS OTHERWISE NOTED ON PLANS. BACKFILL AND COMPACT TO FINISHED GRADE.

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF THE WSDOT STANDARD PLANS, SPECIFICATIONS, AND NEC, EXCEPT AS MODIFIED BY CONTRACT PLANS AND PROVISIONS.
2. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL STAKE AND VERIFY LOCATION WITH ENGINEER PRIOR TO REMOVAL.
3. CONTACT WSDOT SIGNAL SHOP 72 HOURS PRIOR TO BEGINNING ANY WORK ON THE SYSTEM. WSDOT SIGNAL SHOP: (509) 570-2780
4. EXISTING DETECTION LOOPS TO BE REMOVED AND DISPOSED OF AS PART OF ROADWAY EXCAVATION.
5. TRAFFIC SIGNAL ELEMENTS SHALL NOT BE REMOVED UNTIL ROUNDABOUT AT PINES ROAD AND TRENT AVENUE IS OPERATIONAL. SEE TRAFFIC CONTROL PLANS.

FILE NAME	c:\pwworking\west01\d2403836\PINES_PS_ILR_001.dgn						
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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	J PI						
ENTERED BY	J PI						
CHECKED BY	M KUNDURU				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION REMOVAL PLAN

Plot 1

PLAN REF NO
ILR1

SHEET 157 OF 218 SHEETS

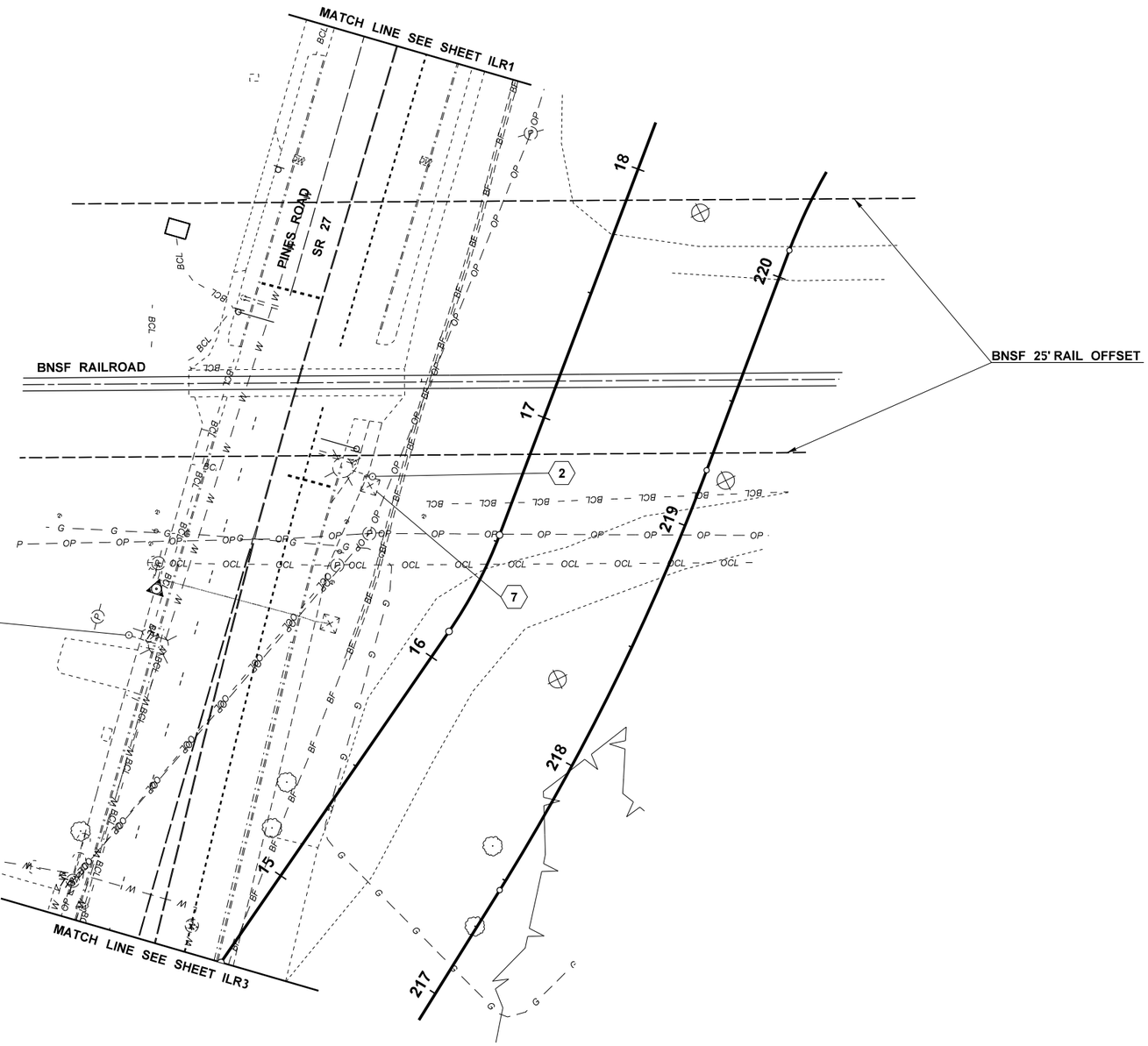
GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF THE WSDOT STANDARD PLANS, SPECIFICATIONS, AND NEC, EXCEPT AS MODIFIED BY CONTRACT PLANS AND PROVISIONS.
2. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL STAKE AND VERIFY LOCATION WITH ENGINEER PRIOR TO REMOVAL.
3. CONTACT WSDOT SIGNAL SHOP 72 HOURS PRIOR TO BEGINNING ANY WORK ON THE SYSTEM. WSDOT SIGNAL SHOP: (509) 570-2780
4. EXISTING DETECTION LOOPS TO BE REMOVED AND DISPOSED OF AS PART OF ROADWAY EXCAVATION.

CONSTRUCTION NOTES:

(2) REMOVE EXISTING LIGHT POLE AND ASSOCIATED WIRING.

(7) REMOVE EXISTING JUNCTION BOX, ASSOCIATED CONDUITS, AND CONDUCTORS. ALL EMPTY CONDUIT TO BE REMOVED UNLESS OTHERWISE NOTED ON PLANS. BACKFILL AND COMPACT TO FINISHED GRADE.



LEGEND

EXISTING

- JUNCTION BOX TYPE 1, 2
- ELECTRICAL SERVICE CABINET
- LIGHT POLE
- SIGNAL POLE
- LIGHTING CONDUIT
- (?) CONSTRUCTION NOTE

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DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	M KUNDURU
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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City of Spokane Valley

HDR

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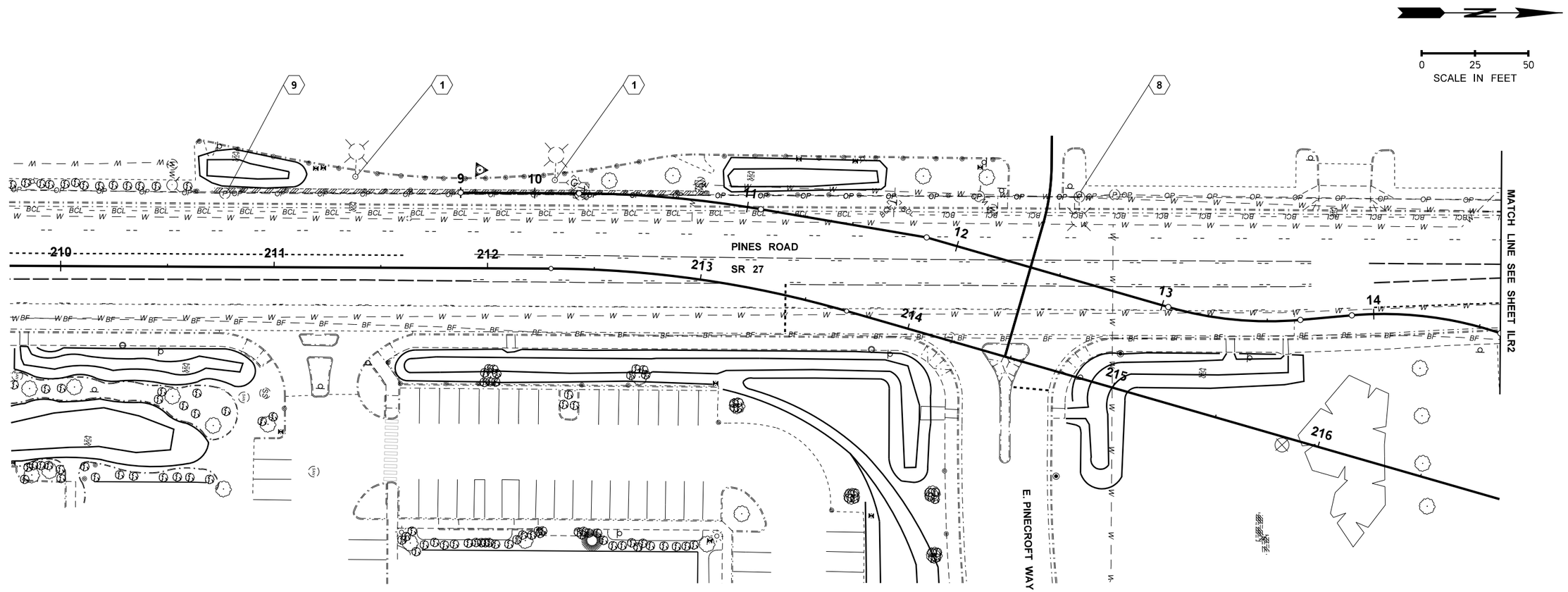
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION REMOVAL PLAN

Plot 1
PLAN REF NO
ILR2
SHEET 158 OF 218 SHEETS



LEGEND

EXISTING

- JUNCTION BOX TYPE 1, 2
- ELECTRICAL SERVICE CABINET
- LIGHT POLE
- SIGNAL POLE
- LIGHTING CONDUIT
- (?) CONSTRUCTION NOTE

CONSTRUCTION NOTES:

(1) MAINTAIN AND PROTECT EXISTING LIGHT POLE.

(8) EXISTING WOOD POLE AND LUMINAIRE REMOVED AND RELOCATED BY OTHERS.

(9) MAINTAIN AND PROTECT EXISTING LUMINAIRE ON UTILITY POLE.

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF THE WSDOT STANDARD PLANS, SPECIFICATIONS, AND NEC, EXCEPT AS MODIFIED BY CONTRACT PLANS AND PROVISIONS.
2. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL STAKE AND VERIFY LOCATION WITH ENGINEER PRIOR TO REMOVAL.
3. CONTACT WSDOT SIGNAL SHOP 72 HOURS PRIOR TO BEGINNING ANY WORK ON THE SYSTEM.
   [NAME]/SIGNAL SHOP SUPERVISOR.
   CELL (XXX) XXX-XXXX
   OFFICE (XXX) XXX-XXXX
4. EXISTING DETECTION LOOPS TO BE REMOVED AND DISPOSED OF AS PART OF ROADWAY EXCAVATION.

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PROJ. ENGR.	S MARSHALL
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CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 51943 — REGISTERED PROFESSIONAL ENGINEER

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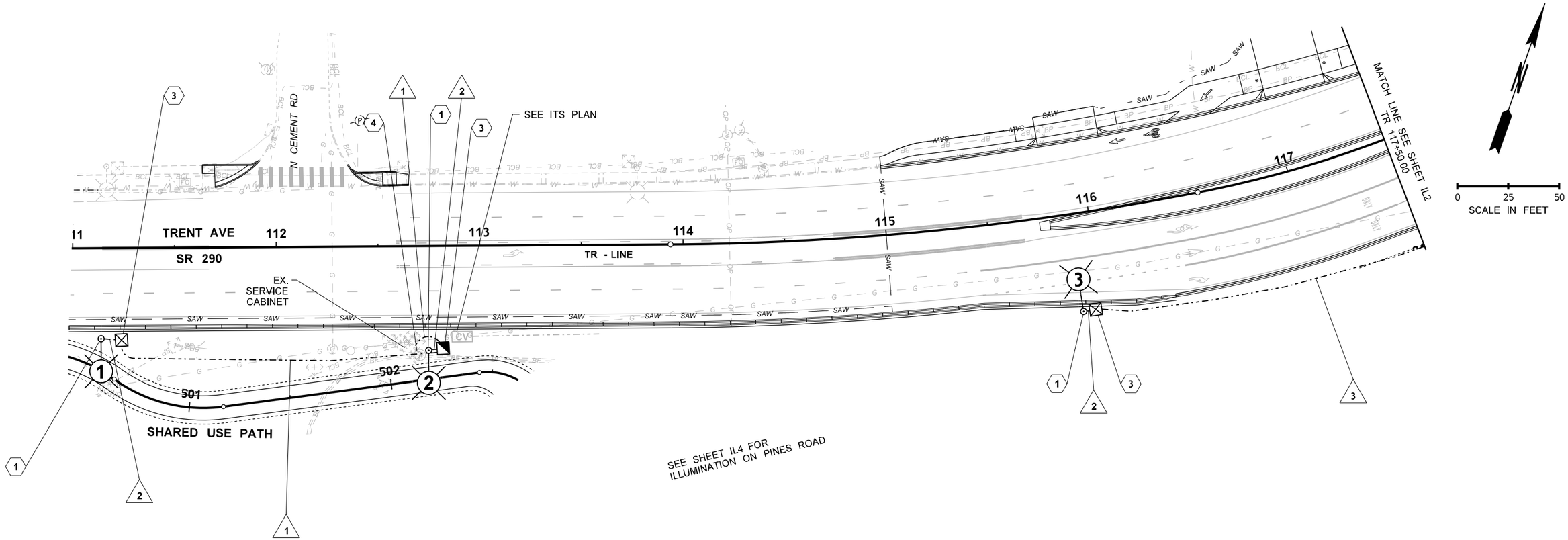
SPOKANE COUNTY - MP 8.43

ILLUMINATION REMOVALS PLAN

Plot 1
PLAN REF NO
ILR3
SHEET 159 OF 218 SHEETS



CONSTRUCTION NOTES:

1. CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL SINGLE-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.
3. INSTALL NEW JUNCTION BOX. SEE WSDOT STD PLAN J-40.10 OR J-40.30.
4. CONNECT NEW CONDUIT TO EXISTING SERVICE CABINET. ESTABLISH SERVICE FOR LUMINAIRES 1 AND 2.

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		ELECTRICAL SERVICE CABINET
		LIGHT POLE
		LIGHTING CONDUIT
		CONSTRUCTION NOTE
		WIRE NOTE

GENERAL NOTES:

1. CONTACT WSDOT SIGNAL SHOP 72 HOURS PRIOR TO BEGINNING ANY WORK ON THE SYSTEM.
2. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
3. UNLESS OTHERWISE SPECIFIED, ALL PROPOSED LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
4. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
5. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM IS BEING REMOVED.
6. SEE ITS PLAN FOR PROPOSED ITS DESIGN.

WIRING SCHEDULE

NO.	CONDUIT SIZE	CONDUCTORS	CIRCUIT	COMMENTS
1	2"	2-#8 (ILL.), 1-#8 (GRD.)	EX.	
2	1"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/D	
3	2"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/C/D	

LUMINAIRE SCHEDULE

LUMINAIRE NUMBER	CIRCUIT	LOCATION		TYPE - DISTRIBUTION - WATTAGE	MAST ARM	MOUNTING HEIGHT	BASE TYPE	COMMENTS
		STATION	OFFSET					
1	EX	TR 111+13.7	44.5' RT	LED - TYPE III - 105W	16'	40'	FIXED	
2	EX	TR 112+74.6	51.2' RT	LED - TYPE III - 105W	16'	40'	FIXED	
3	A	TR 115+90.6	48.3' RT	LED - TYPE III - 105W	16'	40'	FIXED	

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PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER | CONTRACT NO. | LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025 DATE

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DATE

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City of Spokane Valley

HDR

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PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION PLAN

Plot 1

PLAN REF NO IL1

SHEET 160 OF 218 SHEETS

GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. UNLESS OTHERWISE SPECIFIED, ALL PROPOSED LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
3. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE USE RATED.
4. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM IS BEING REMOVED.
5. SEE ITS PLAN FOR PROPOSED ITS DESIGN.

CONSTRUCTION NOTES:

(1) CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL SINGLE-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.

(2) CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL DUAL-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.

(3) INSTALL NEW JUNCTION BOX. SEE WSDOT STD PLAN J-40.10 OR J-40.30.

(6) INSTALL NEW MODIFIED TYPE B SERVICE CABINET AND FOUNDATION. SEE WSDOT STD PLAN J-10.20.

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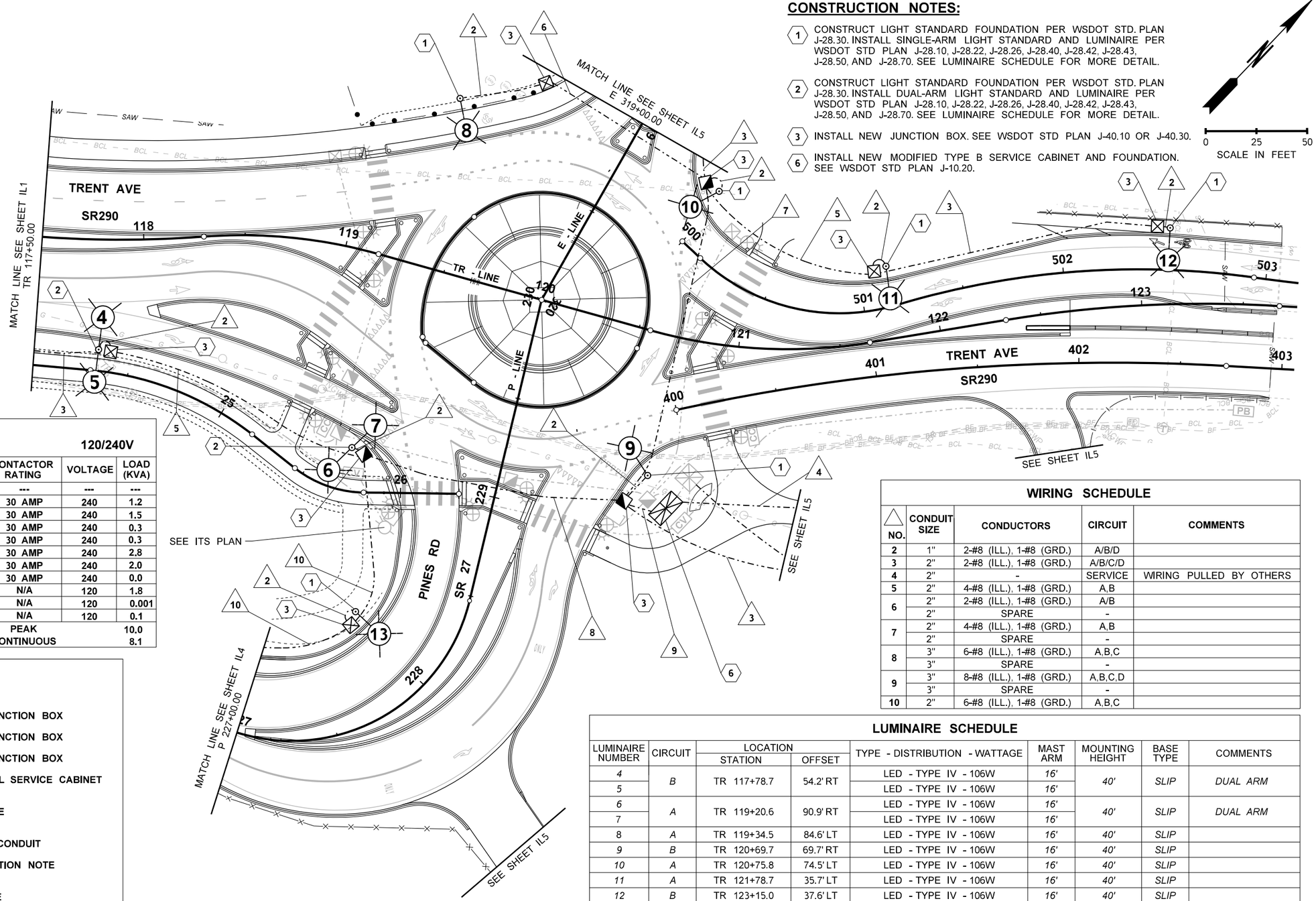
SCALE IN FEET



BREAKER SCHEDULE MODIFIED TYPE B SERVICE				120/240V	
CIRCUIT	DESCRIPTION	BREAKER RATING	CONTACTOR RATING	VOLTAGE	LOAD (KVA)
---	MAIN	200 AMP	---	---	---
A	ILL. TRENT	20 AMP	30 AMP	240	1.2
B	ILL. PINES	20 AMP	30 AMP	240	1.5
C	ILL. UNDERDECK	20 AMP	30 AMP	240	0.3
D	ILL. PARKING	20 AMP	30 AMP	240	0.3
E	ITS	20 AMP	30 AMP	240	2.8
F	RRFB	20 AMP	30 AMP	240	2.0
G	SPARE	20 AMP	30 AMP	240	0.0
	GFCI	20 AMP	N/A	120	1.8
	PHOTOCELL	15 AMP	N/A	120	0.001
	HEATER	15 AMP	N/A	120	0.1
BUSSWORK SHALL BE RATED AT 250 AMP MINIMUM			PEAK		10.0
			CONTINUOUS		8.1

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		TYPE 8 JUNCTION BOX
		ELECTRICAL SERVICE CABINET
	?	LIGHT POLE
		LIGHTING CONDUIT
?		CONSTRUCTION NOTE
?		WIRE NOTE

WIRING SCHEDULE

NO.	CONDUIT SIZE	CONDUCTORS	CIRCUIT	COMMENTS
2	1"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/D	
3	2"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/C/D	
4	2"	-	SERVICE	WIRING PULLED BY OTHERS
5	2"	4-#8 (ILL.), 1-#8 (GRD.)	A,B	
6	2"	2-#8 (ILL.), 1-#8 (GRD.)	A/B	
	2"	SPARE	-	
7	2"	4-#8 (ILL.), 1-#8 (GRD.)	A,B	
	2"	SPARE	-	
8	3"	6-#8 (ILL.), 1-#8 (GRD.)	A,B,C	
	3"	SPARE	-	
9	3"	8-#8 (ILL.), 1-#8 (GRD.)	A,B,C,D	
	3"	SPARE	-	
10	2"	6-#8 (ILL.), 1-#8 (GRD.)	A,B,C	

LUMINAIRE SCHEDULE

LUMINAIRE NUMBER	CIRCUIT	LOCATION STATION	LOCATION OFFSET	TYPE - DISTRIBUTION - WATTAGE	MAST ARM	MOUNTING HEIGHT	BASE TYPE	COMMENTS
4	B	TR 117+78.7	54.2' RT	LED - TYPE IV - 106W	16'	40'	SLIP	DUAL ARM
5				LED - TYPE IV - 106W	16'			
6	A	TR 119+20.6	90.9' RT	LED - TYPE IV - 106W	16'	40'	SLIP	DUAL ARM
7				LED - TYPE IV - 106W	16'			
8	A	TR 119+34.5	84.6' LT	LED - TYPE IV - 106W	16'	40'	SLIP	
9	B	TR 120+69.7	69.7' RT	LED - TYPE IV - 106W	16'	40'	SLIP	
10	A	TR 120+75.8	74.5' LT	LED - TYPE IV - 106W	16'	40'	SLIP	
11	A	TR 121+78.7	35.7' LT	LED - TYPE IV - 106W	16'	40'	SLIP	
12	B	TR 123+15.0	37.6' LT	LED - TYPE IV - 106W	16'	40'	SLIP	
13	B	P 228+05.9	49.0' LT	LED - TYPE IV - 106W	16'	40'	SLIP	

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PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | JOB NUMBER | CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA
LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER
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City of Spokane Valley
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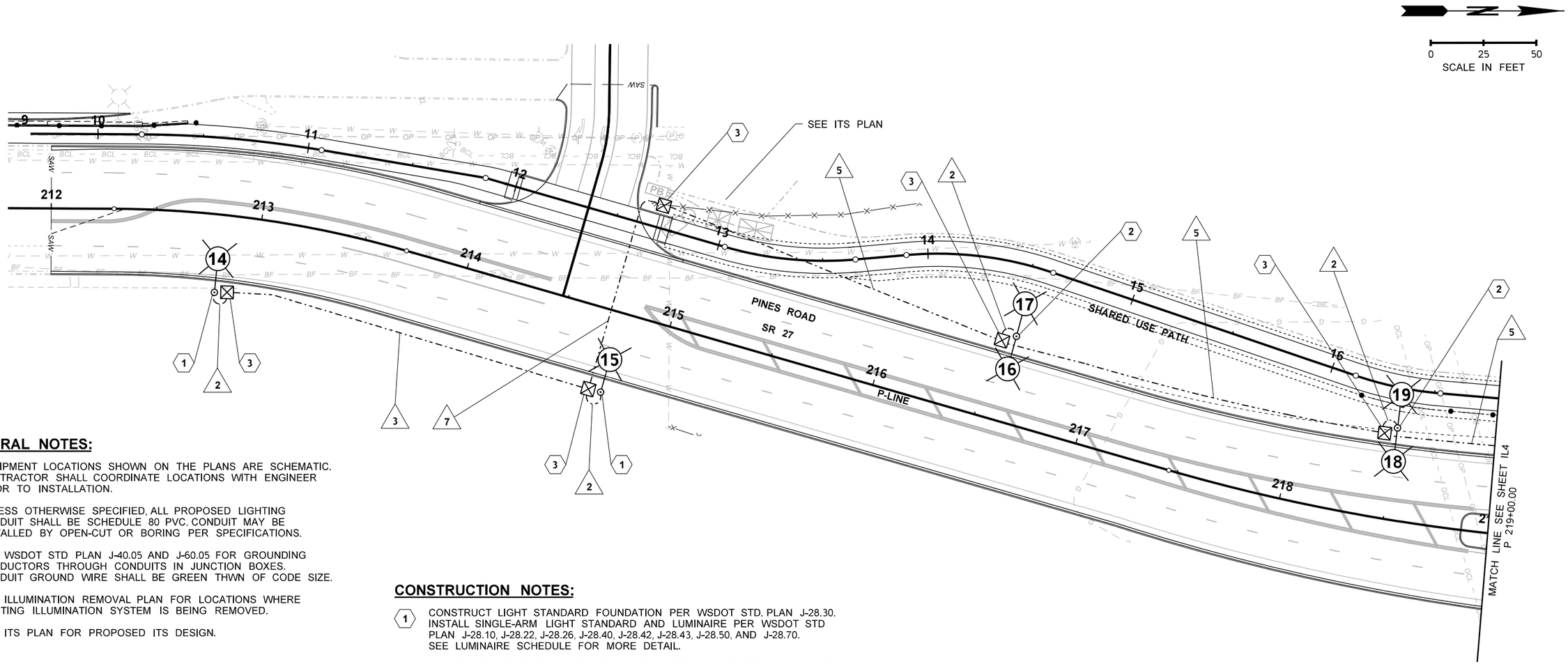
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION PLAN

Plot 1
PLAN REF NO IL2
SHEET 161 OF 218 SHEETS



GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. UNLESS OTHERWISE SPECIFIED, ALL PROPOSED LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
3. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
4. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM IS BEING REMOVED.
5. SEE ITS PLAN FOR PROPOSED ITS DESIGN.

CONSTRUCTION NOTES:

(1) CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL SINGLE-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.

(2) CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL DUAL-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.

(3) INSTALL NEW JUNCTION BOX. SEE WSDOT STD PLAN J-40.10 OR J-40.30.

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		ELECTRICAL SERVICE CABINET
	?	LIGHT POLE
		LIGHTING CONDUIT
?		CONSTRUCTION NOTE
?		WIRE NOTE

LUMINAIRE SCHEDULE

LUMINAIRE NUMBER	CIRCUIT	LOCATION STATION	LOCATION OFFSET	TYPE - DISTRIBUTION - WATTAGE	MAST ARM	MOUNTING HEIGHT	BASE TYPE	COMMENTS
14	B	P 212+81.3	37.0' RT	LED - TYPE III - 105W	16'	40'	SLIP	
15	A	P 214+77.0	38.9' RT	LED - TYPE III - 105W	16'	40'	SLIP	
16	B	P 216+58.9	41.0' LT	LED - TYPE III - 105W	16'	40'	SLIP	DUAL ARM
17				LED - TYPE III - 105W	16'			
18	A	P 218+49.7	43.6' LT	LED - TYPE III - 105W	16'	40'	SLIP	DUAL ARM
19				LED - TYPE III - 105W	16'			

WIRING SCHEDULE

NO.	CONDUIT SIZE	CONDUCTORS	CIRCUIT	COMMENTS
2	1"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/D	
3	2"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/C/D	
5	2"	4-#8 (ILL.), 1-#8 (GRD.)	A,B	
7	2"	4-#8 (ILL.), 1-#8 (GRD.)	A,B	
	2"	SPARE	-	

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PROJ. ENGR.	S MARSHALL				
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REGION NO.	STATE	FED.AID PROJ.NO.
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JOB NUMBER		69A36525420110RASWA
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JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

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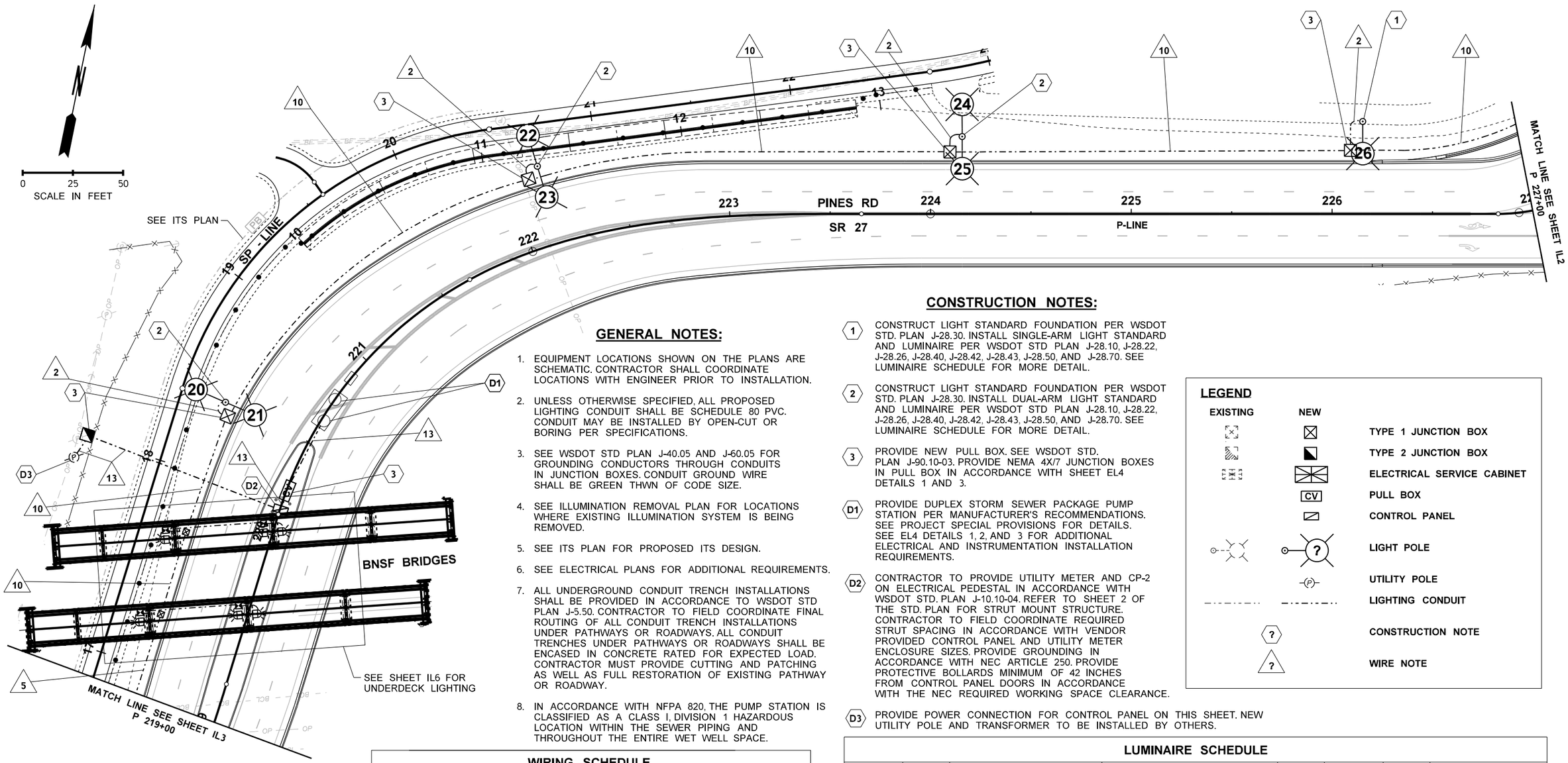
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION PLAN

Plot 1
PLAN REF NO IL3
SHEET 162 OF 218 SHEETS



GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. UNLESS OTHERWISE SPECIFIED, ALL PROPOSED LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
3. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
4. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM IS BEING REMOVED.
5. SEE ITS PLAN FOR PROPOSED ITS DESIGN.
6. SEE ELECTRICAL PLANS FOR ADDITIONAL REQUIREMENTS.
7. ALL UNDERGROUND CONDUIT TRENCH INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE TO WSDOT STD PLAN J-5.50. CONTRACTOR TO FIELD COORDINATE FINAL ROUTING OF ALL CONDUIT TRENCH INSTALLATIONS UNDER PATHWAYS OR ROADWAYS. ALL CONDUIT TRENCHES UNDER PATHWAYS OR ROADWAYS SHALL BE ENCASED IN CONCRETE RATED FOR EXPECTED LOAD. CONTRACTOR MUST PROVIDE CUTTING AND PATCHING AS WELL AS FULL RESTORATION OF EXISTING PATHWAY OR ROADWAY.
8. IN ACCORDANCE WITH NFPA 820, THE PUMP STATION IS CLASSIFIED AS A CLASS I, DIVISION 1 HAZARDOUS LOCATION WITHIN THE SEWER PIPING AND THROUGHOUT THE ENTIRE WET WELL SPACE.

CONSTRUCTION NOTES:

(1) CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL SINGLE-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.

(2) CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL DUAL-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.

(3) PROVIDE NEW PULL BOX. SEE WSDOT STD. PLAN J-90.10-03. PROVIDE NEMA 4X/7 JUNCTION BOXES IN PULL BOX IN ACCORDANCE WITH SHEET EL4 DETAILS 1 AND 3.

(D1) PROVIDE DUPLEX STORM SEWER PACKAGE PUMP STATION PER MANUFACTURER'S RECOMMENDATIONS. SEE PROJECT SPECIAL PROVISIONS FOR DETAILS. SEE EL4 DETAILS 1, 2, AND 3 FOR ADDITIONAL ELECTRICAL AND INSTRUMENTATION INSTALLATION REQUIREMENTS.

(D2) CONTRACTOR TO PROVIDE UTILITY METER AND CP-2 ON ELECTRICAL PEDESTAL IN ACCORDANCE WITH WSDOT STD. PLAN J-10.10-04. REFER TO SHEET 2 OF THE STD. PLAN FOR STRUT MOUNT STRUCTURE. CONTRACTOR TO FIELD COORDINATE REQUIRED STRUT SPACING IN ACCORDANCE WITH VENDOR PROVIDED CONTROL PANEL AND UTILITY METER ENCLOSURE SIZES. PROVIDE GROUNDING IN ACCORDANCE WITH NEC ARTICLE 250. PROVIDE PROTECTIVE BOLLARDS MINIMUM OF 42 INCHES FROM CONTROL PANEL DOORS IN ACCORDANCE WITH THE NEC REQUIRED WORKING SPACE CLEARANCE.

(D3) PROVIDE POWER CONNECTION FOR CONTROL PANEL ON THIS SHEET. NEW UTILITY POLE AND TRANSFORMER TO BE INSTALLED BY OTHERS.

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		ELECTRICAL SERVICE CABINET
	CV	PULL BOX
		CONTROL PANEL
	?	LIGHT POLE
	(P)	UTILITY POLE
		LIGHTING CONDUIT
	?	CONSTRUCTION NOTE
	?	WIRE NOTE

WIRING SCHEDULE

△ NO.	CONDUIT SIZE	CONDUCTORS	CIRCUIT	COMMENTS
2	1"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/D	
5	2"	4-#8 (ILL.), 1-#8 (GRD.)	A,B	
10	2"	6-#8 (ILL.), 1-#8 (GRD.)	A,B,C	
13	SEE SHEET EL1 ONE-LINES FOR CONDUIT/WIRE SIZES AND QUANTITIES.			

* SERVICE CONDUCTORS TO BE PROVIDED BY CONTRACTOR AND INSTALLED BY UTILITY AGENCY.

LUMINAIRE SCHEDULE

LUMINAIRE NUMBER	CIRCUIT	LOCATION STATION	LOCATION OFFSET	TYPE - DISTRIBUTION - WATTAGE	MAST ARM	MOUNTING HEIGHT	BASE TYPE	COMMENTS
20	B	P 220+48.2	45.8' LT	LED - TYPE III - 105W	16'	40'	SLIP	DUAL ARM
21				LED - TYPE III - 105W	16'			
22	A	P 222+14.0	39.7' LT	LED - TYPE III - 105W	16'	40'	SLIP	DUAL ARM
23				LED - TYPE III - 105W	16'			
24	B	P 224+15.8	38.5' LT	LED - TYPE III - 105W	16'	40'	SLIP	DUAL ARM
25				LED - TYPE III - 105W	16'			
26	A	P 226+15.3	46.0' LT	LED - TYPE III - 105W	16'	40'	SLIP	

FILE NAME	c:\pwworking\west01\d2317771\PINES_PS_IL_004.dgn
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ENTERED BY	J PI
CHECKED BY	M KUNDURU
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
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CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER
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TERRY M. STULL — STATE OF WASHINGTON — 31416 — REGISTERED PROFESSIONAL ENGINEER
06/05/2025
DATE
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CITY OF Spokane Valley
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SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION PLAN

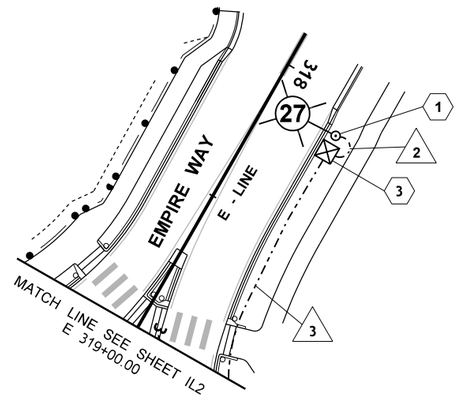
Plot 1
PLAN REF NO
IL4
SHEET 163 OF 218 SHEETS

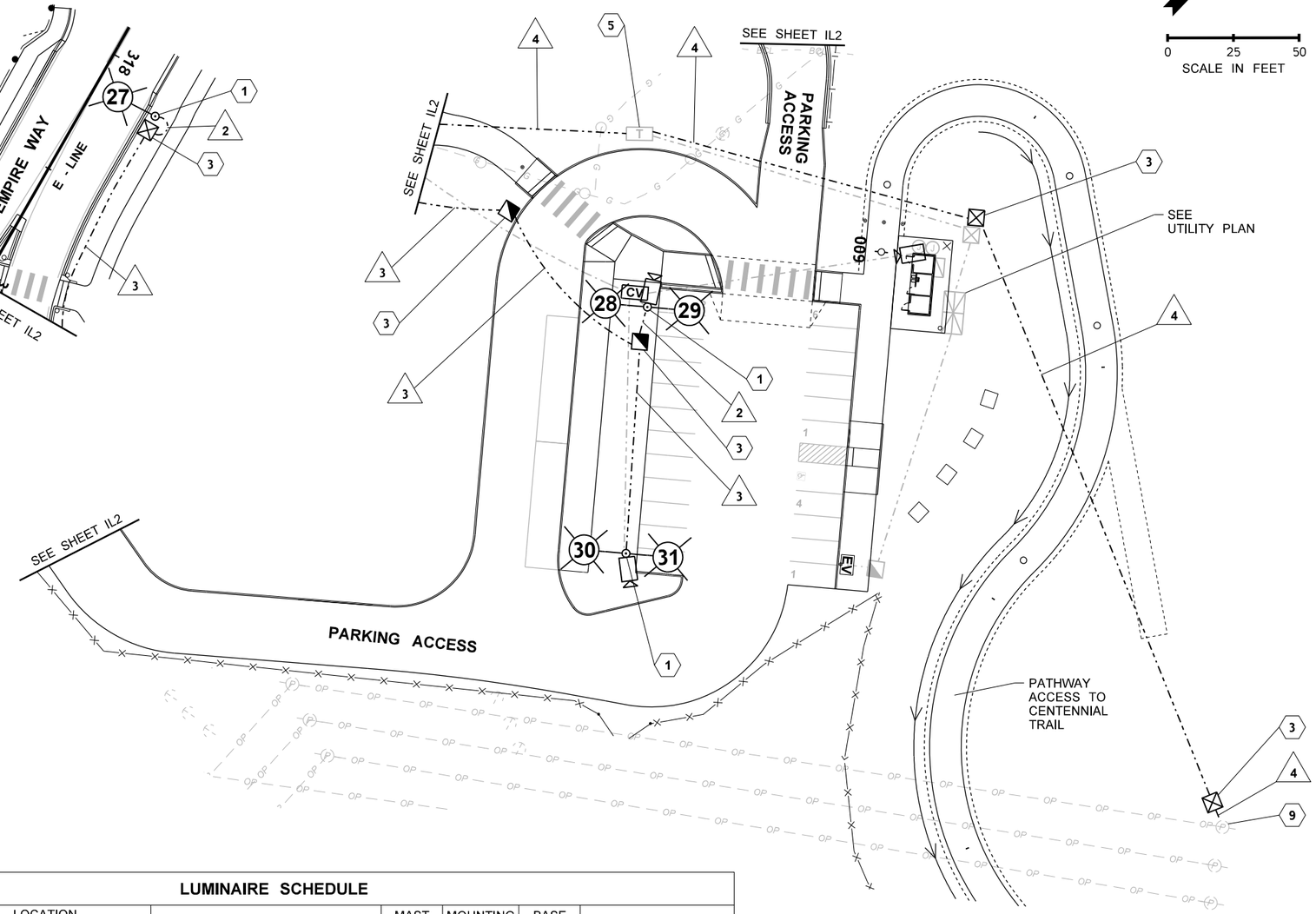
GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. UNLESS OTHERWISE SPECIFIED, ALL PROPOSED LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
3. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
4. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM IS BEING REMOVED.
5. SEE ITS PLAN FOR PROPOSED ITS DESIGN.

CONSTRUCTION NOTES:

1. CONSTRUCT LIGHT STANDARD FOUNDATION PER WSDOT STD. PLAN J-28.30. INSTALL SINGLE-ARM LIGHT STANDARD AND LUMINAIRE PER WSDOT STD PLAN J-28.10, J-28.22, J-28.26, J-28.40, J-28.42, J-28.43, J-28.50, AND J-28.70. SEE LUMINAIRE SCHEDULE FOR MORE DETAIL.
3. INSTALL NEW JUNCTION BOX. SEE WSDOT STD PLAN J-40.10 OR J-40.30.
5. NEW PAD MOUNT TRANSFORMER TO BE INSTALLED BY AVISTA. CONTRACTOR TO COORDINATE WITH AVISTA FOR POWER CONNECTION.
9. RUN CONDUIT UP TO UTILITY POLE, SWEEP UP AND COVER END OF CONDUIT NEAR BASE OF POLE. COORDINATE WITH AVISTA FOR DETAILS.





WIRING SCHEDULE

NO.	CONDUIT SIZE	CONDUCTORS	CIRCUIT	COMMENTS
2	1"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/D	
3	2"	2-#8 (ILL.), 1-#8 (GRD.)	A/B/C/D	
4	2"	-	SERVICE	WIRING PULLED BY OTHERS

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		ELECTRICAL SERVICE CABINET
		CONTROL PANEL
	?	LIGHT POLE
		LIGHTING CONDUIT
?		CONSTRUCTION NOTE
?		WIRE NOTE

LUMINAIRE SCHEDULE

LUMINAIRE NUMBER	CIRCUIT	LOCATION STATION	LOCATION OFFSET	TYPE - DISTRIBUTION - WATTAGE	MAST ARM	MOUNTING HEIGHT	BASE TYPE	COMMENTS
27	B	E 318+12.7	25.4' LT	LED - TYPE III - 105W	16'	40'	SLIP	
28	D	TR 121+76.8	154.6' RT	LED - TYPE IV - 106W	16'	30'	FIXED	
29				LED - TYPE IV - 106W	16'	30'	FIXED	
30	D	TR 122+59.1	245.8' RT	LED - TYPE IV - 106W	16'	30'	FIXED	
31				LED - TYPE IV - 106W	16'	30'	FIXED	

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DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	M KUNDURU
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH

JOB NUMBER

CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

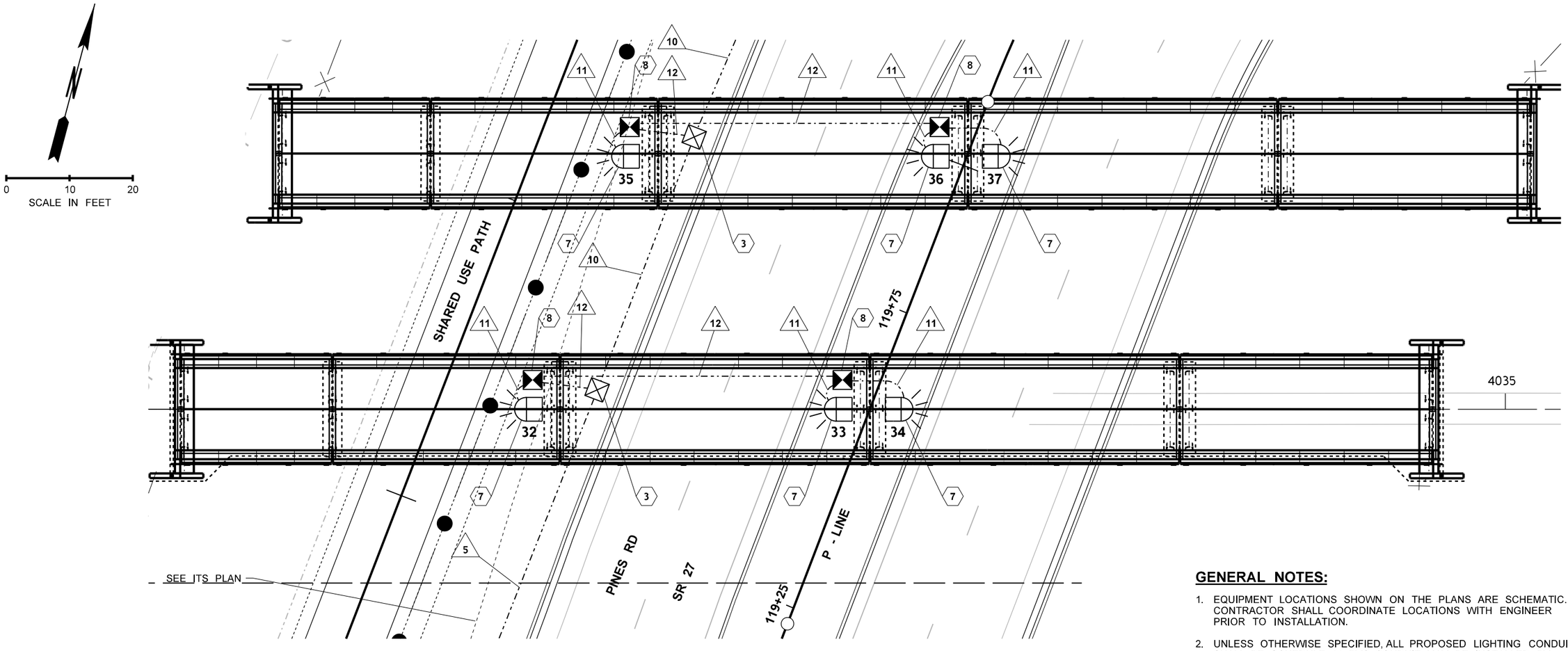
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION PLAN

Plot 1

PLAN REF NO
IL5

SHEET 164 OF 218 SHEETS



GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. UNLESS OTHERWISE SPECIFIED, ALL PROPOSED LIGHTING CONDUIT SHALL BE SCHEDULE 80 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
3. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
4. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM IS BEING REMOVED.
5. SEE ITS PLAN FOR PROPOSED ITS DESIGN.

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		NEMA 4X JUNCTION BOX
	?	UNDERDECK LUMINAIRE
		LIGHTING CONDUIT
	?	CONSTRUCTION NOTE
	?	WIRE NOTE

CONSTRUCTION NOTES:

3. INSTALL NEW JUNCTION BOX. SEE WSDOT STD PLAN J-40.10 OR J-40.30.
7. INSTALL NEW UNDERDECK LUMINAIRE, SURFACE-MOUNTED ON TOP OF BRIDGE WALL. SEE LUMINAIRE SCHEDULE. CONTRACTOR TO FIELD-VERIFY TILT ANGLE WITH ENGINEER.
8. INSTALL NEW NEMA 4X SURFACE-MOUNT JUNCTION BOX, 12"x10"x8". SEE WSDOT STD PLAN J-40.39.

LUMINAIRE SCHEDULE

LUMINAIRE NUMBER	CIRCUIT	LOCATION		TYPE - DISTRIBUTION - WATTAGE	MAST ARM	MOUNTING HEIGHT	BASE TYPE	COMMENTS
		STATION	OFFSET					
32	C	P 119+40.1	48.4' LT	LED - TYPE IV - 34W	-	16'	-	BRIDGE WALL MOUNT
33	C	P 119+57.7	2.6' LT	LED - TYPE IV - 34W	-	16'	-	BRIDGE WALL MOUNT
34	C	P 119+59.6	2.3' RT	LED - TYPE IV - 34W	-	16'	-	BRIDGE WALL MOUNT
35	C	P 119+83.0	48.4' LT	LED - TYPE IV - 34W	-	16'	-	BRIDGE WALL MOUNT
36	C	P 220+00.5	2.6' LT	LED - TYPE IV - 34W	-	16'	-	BRIDGE WALL MOUNT
37	C	P 220+02.4	2.3' RT	LED - TYPE IV - 34W	-	16'	-	BRIDGE WALL MOUNT

WIRING SCHEDULE

NO.	CONDUIT SIZE	CONDUCTORS	CIRCUIT	COMMENTS
5	2"	4-#8 (ILL.), 1-#8 (GRD.)	A,B	UNDERGROUND
10	2"	6-#8 (ILL.), 1-#8 (GRD.)	A,B,C	UNDERGROUND
11	1" RMC	2-#8 (ILL.), 1-#8 (GRD.)	C	SURFACE MOUNT
12	2" RMC	2-#8 (ILL.), 1-#8 (GRD.)	C	SURFACE MOUNT

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PLOTTED BY	EMCGUIRE
DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	M KUNDURU
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO. | LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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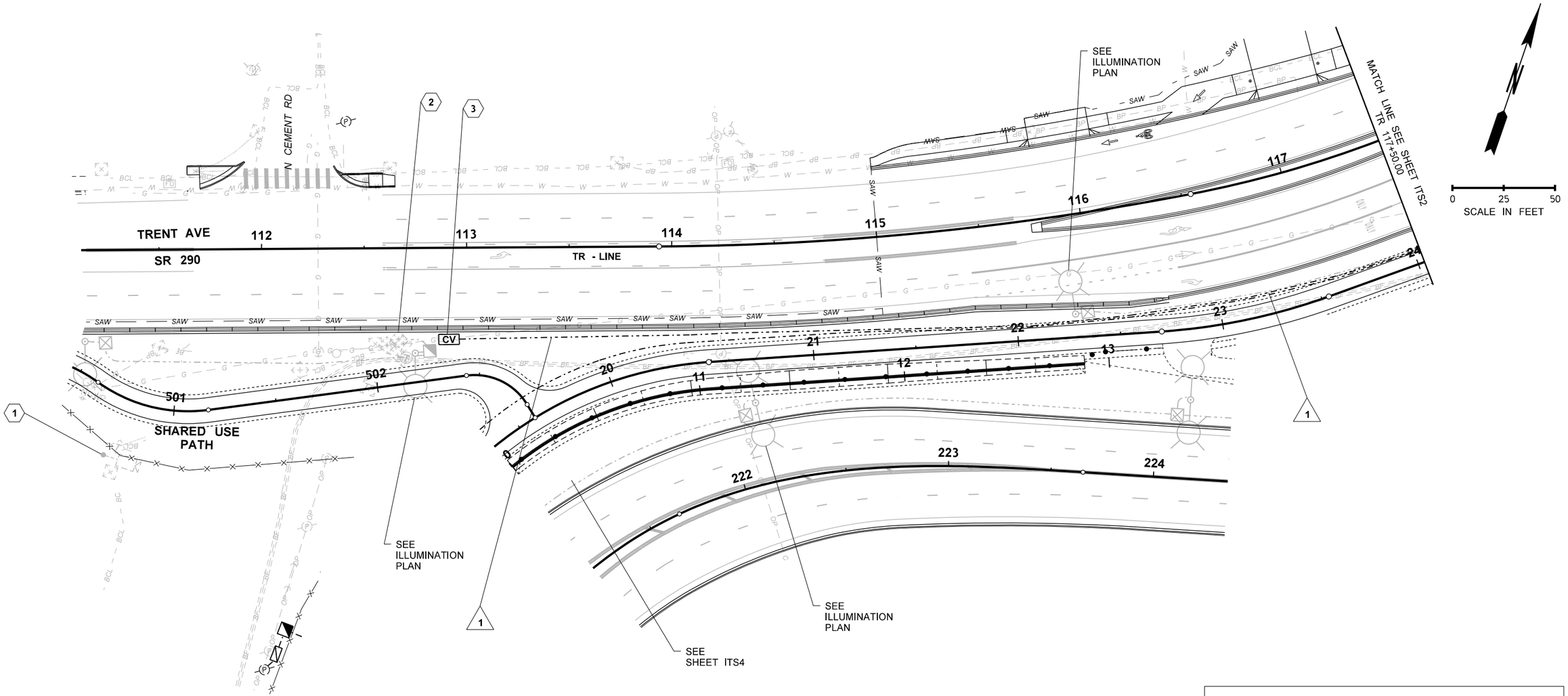
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ILLUMINATION PLAN

Plot 1
PLAN REF NO IL6
SHEET 165 OF 218 SHEETS



GENERAL NOTES:

1. CONTACT WSDOT SIGNAL SHOP 72 HOURS PRIOR TO BEGINNING ANY WORK ON THE SYSTEM.
2. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
3. ITS CONDUIT UNDER ROADWAY SHALL BE SCHEDULE 80 PVC, ALL OTHER ITS CONDUIT SHALL BE SCHEDULE 40 PVC. ITS CONDUITS SHALL BE 4" DIAMETER WITH INNERDUCT UNLESS SPECIFIED OTHERWISE. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS. ALL PROPOSED SPARE CONDUITS SHALL INCLUDE A TRACER WIRE AND A MULE TAPE.
4. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM AND SIGNAL SYSTEM IS BEING REMOVED.
5. SEE ILLUMINATION PLAN FOR PROPOSED ILLUMINATION SYSTEM.

CONSTRUCTION NOTES:

(1) REMOVE AND SALVAGE EXISTING PTZ CAMERA. REMOVE AND RELOCATE EXISTING CAMERA POLE. SEE SHEET ITS2 FOR NEW LOCATION. FIELD LOCATE AND REMOVE ASSOCIATED PULL BOX AND WIRING. ABANDON ASSOCIATED UNDERGROUND CONDUITS.

(2) REMOVE AND SALVAGE EXISTING ITS CABINET AFTER THE NEW CABINET HAS BEEN INSTALLED AND CONNECTED TO THE NETWORK. SEE SHEET ITS2 FOR NEW CABINET LOCATION. ABANDON ASSOCIATED UNDERGROUND CONDUITS.

(3) FIELD LOCATE EXISTING ITS VAULT. REPLACE WITH NEW VAULT. SEE WSDOT STD PLAN J-90.20.

WIRING SCHEDULE

NO.	CONDUIT SIZE	INNERDUCT	CONDUCTORS/ CABLES	COMMENTS
1	4"	A	EMPTY	SPARE
		B	EMPTY	SPARE
		C	EMPTY	SPARE
		D	EMPTY	SPARE

LEGEND

EXISTING	NEW	
		ITS CABINET
CV	CV	FIBER OPTIC CABLE PULL BOX
		METAL POLE WITH ARM
		PTZ CAMERA
		ITS CONDUIT
?		CONSTRUCTION NOTE
?		WIRE NOTE

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DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER
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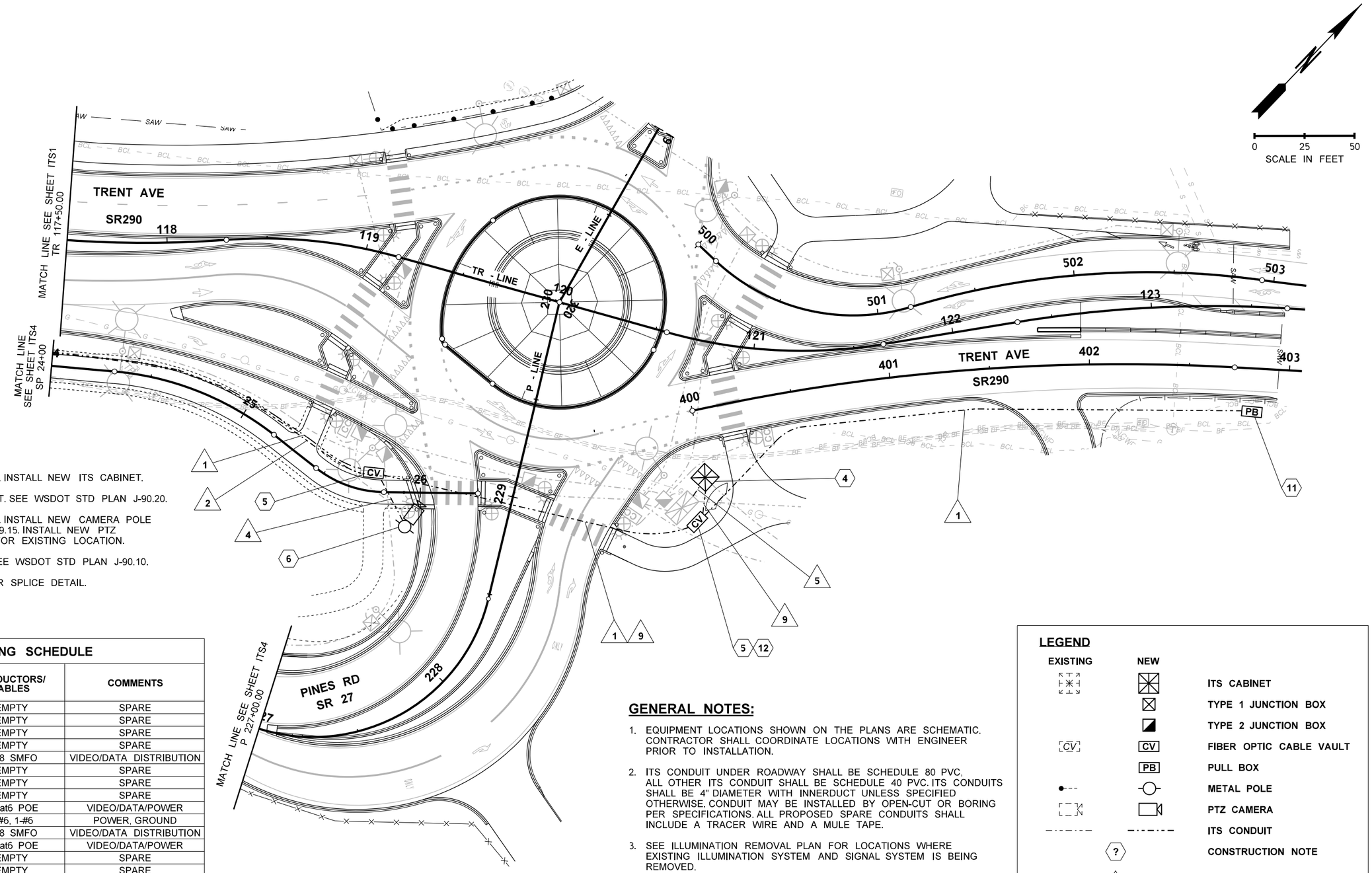
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ITS PLAN

Plot 1
PLAN REF NO
ITS1
SHEET 166 OF 218 SHEETS



CONSTRUCTION NOTES:

- (4) INSTALL NEW FOUNDATION. INSTALL NEW ITS CABINET.
- (5) INSTALL NEW CABLE VAULT. SEE WSDOT STD PLAN J-90.20.
- (6) INSTALL NEW FOUNDATION. INSTALL NEW CAMERA POLE PER WSDOT STD PLAN J-29.15. INSTALL NEW PTZ CAMERA. SEE SHEET ITS1 FOR EXISTING LOCATION.
- (11) INSTALL NEW PULL BOX. SEE WSDOT STD PLAN J-90.10.
- (12) SEE SHEET ITS5 FOR FIBER SPLICE DETAIL.

WIRING SCHEDULE

NO.	CONDUIT SIZE	INNERDUCT	CONDUCTORS/ CABLES	COMMENTS
1	4"	A	EMPTY	SPARE
		B	EMPTY	SPARE
		C	EMPTY	SPARE
		D	EMPTY	SPARE
2	4"	A	1-48 SMFO	VIDEO/DATA DISTRIBUTION
		B	EMPTY	SPARE
		C	EMPTY	SPARE
		D	EMPTY	SPARE
4	2"	-	1-Cat6 POE	VIDEO/DATA/POWER
5	2"	-	2-#6, 1-#6	POWER, GROUND
9	4"	A	1-48 SMFO	VIDEO/DATA DISTRIBUTION
		B	1-Cat6 POE	VIDEO/DATA/POWER
		C	EMPTY	SPARE
		D	EMPTY	SPARE

GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. ITS CONDUIT UNDER ROADWAY SHALL BE SCHEDULE 80 PVC, ALL OTHER ITS CONDUIT SHALL BE SCHEDULE 40 PVC. ITS CONDUITS SHALL BE 4" DIAMETER WITH INNERDUCT UNLESS SPECIFIED OTHERWISE. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS. ALL PROPOSED SPARE CONDUITS SHALL INCLUDE A TRACER WIRE AND A MULE TAPE.
3. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM AND SIGNAL SYSTEM IS BEING REMOVED.
4. SEE ILLUMINATION PLAN FOR PROPOSED ILLUMINATION SYSTEM.

LEGEND

EXISTING	NEW	
		ITS CABINET
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
CV	CV	FIBER OPTIC CABLE VAULT
	PB	PULL BOX
		METAL POLE
		PTZ CAMERA
		ITS CONDUIT
?		CONSTRUCTION NOTE
?		WIRE NOTE

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PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

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STPUL 0027(020)
69A36525420110RASWA
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STATE OF WASHINGTON JAKE S. PI 54943 REGISTERED PROFESSIONAL ENGINEER
06/02/2025
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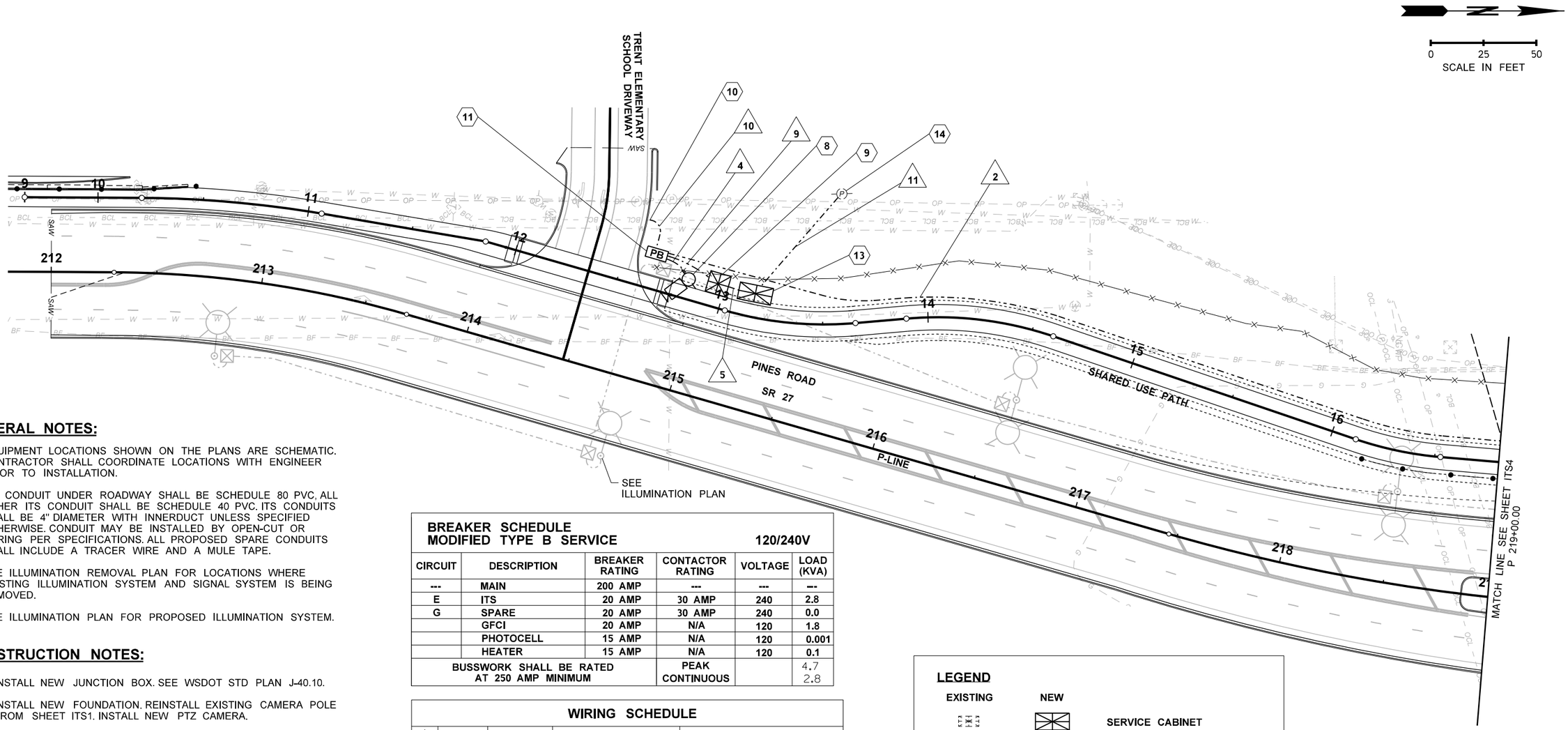
CITY OF Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ITS PLAN

Plot 1
PLAN REF NO
ITS2
SHEET 167 OF 218 SHEETS



GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. ITS CONDUIT UNDER ROADWAY SHALL BE SCHEDULE 80 PVC, ALL OTHER ITS CONDUIT SHALL BE SCHEDULE 40 PVC. ITS CONDUITS SHALL BE 4" DIAMETER WITH INNERDUCT UNLESS SPECIFIED OTHERWISE. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS. ALL PROPOSED SPARE CONDUITS SHALL INCLUDE A TRACER WIRE AND A MULE TAPE.
3. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM AND SIGNAL SYSTEM IS BEING REMOVED.
4. SEE ILLUMINATION PLAN FOR PROPOSED ILLUMINATION SYSTEM.

CONSTRUCTION NOTES:

7. INSTALL NEW JUNCTION BOX. SEE WSDOT STD PLAN J-40.10.
8. INSTALL NEW FOUNDATION. REINSTALL EXISTING CAMERA POLE FROM SHEET ITS1. INSTALL NEW PTZ CAMERA.
9. INSTALL NEW FOUNDATION. INSTALL NEW ITS CABINET. SEE WSDOT STD PLAN J-81.10.
10. FIELD LOCATE AND INTERCEPT EXISTING FIBER CONDUIT.EXTEND NEW CONDUIT TO NEW PROPOSED CABLE VAULT. MATCH CONDUIT SIZE WITH EXISTING CONDUIT. PULL EXISTING FIBER CABLE FROM NORTH OF THE INTERCEPT POINT AND ROUTE TO NEW CABLE VAULT. SPLICE WITH NEW CABLE.
11. INSTALL NEW PULL BOX. SEE WSDOT STD PLAN J-90.10.
13. INSTALL NEW MODIFIED TYPE B SERVICE CABINET AND FOUNDATION. SEE WSDOT STD PLAN J-10.20.
14. RUN CONDUIT UP TO UTILITY POLE, SWEEP UP AND COVER END OF CONDUIT NEAR BASE OF POLE. COORDINATE WITH AVISTA FOR DETAILS.

BREAKER SCHEDULE
MODIFIED TYPE B SERVICE — **120/240V**

CIRCUIT	DESCRIPTION	BREAKER RATING	CONTACTOR RATING	VOLTAGE	LOAD (KVA)
---	MAIN	200 AMP	---	---	---
E	ITS	20 AMP	30 AMP	240	2.8
G	SPARE	20 AMP	30 AMP	240	0.0
	GFCI	20 AMP	N/A	120	1.8
	PHOTOCELL	15 AMP	N/A	120	0.001
	HEATER	15 AMP	N/A	120	0.1
BUSSWORK SHALL BE RATED AT 250 AMP MINIMUM			PEAK CONTINUOUS		4.7 2.8

WIRING SCHEDULE

NO.	CONDUIT SIZE	INNERDUCT	CONDUCTORS/ CABLES	COMMENTS
2	4"	A	1-48SMFO	VIDEO/DATA DISTRIBUTION
		B	EMPTY	SPARE
		C	EMPTY	SPARE
		D	EMPTY	SPARE
4	2"	-	1-Cat6 POE	VIDEO/DATA/POWER
5	2"	-	2-#6, 1-#6	POWER, GROUND
9	4"	A	1-48SMFO	VIDEO/DATA DISTRIBUTION
		B	1-Cat6 POE	VIDEO/DATA/POWER
		C	EMPTY	SPARE
		D	EMPTY	SPARE
10	*	-	EX	
11	2"	-	-	WIRING PULLED BY OTHERS

* MATCH CONDUIT SIZE WITH EXISTING.

LEGEND

EXISTING	NEW	
		SERVICE CABINET
		TYPE 1 JUNCTION BOX
		ITS CABINET
	PB	PULL BOX
		METAL POLE
		PTZ CAMERA
		ITS CONDUIT
	?	CONSTRUCTION NOTE
	?	WIRE NOTE

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CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
JOB NUMBER		
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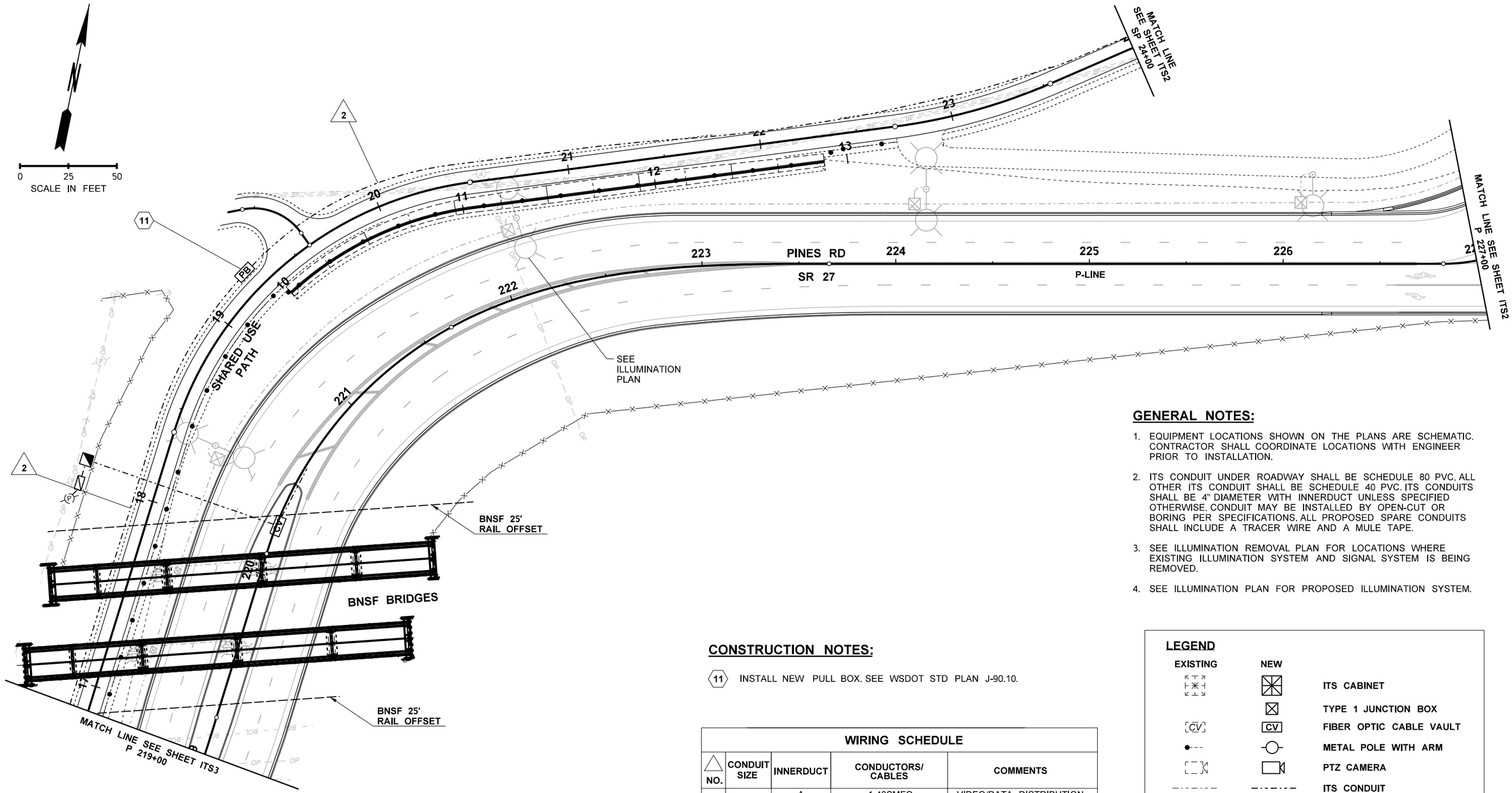
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ITS PLAN

Plot 1
PLAN REF NO
ITS3
SHEET 168 OF 218 SHEETS



GENERAL NOTES:

1. EQUIPMENT LOCATIONS SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. ITS CONDUIT UNDER ROADWAY SHALL BE SCHEDULE 80 PVC, ALL OTHER ITS CONDUIT SHALL BE SCHEDULE 40 PVC. ITS CONDUITS SHALL BE 4" DIAMETER WITH INNERDUCT UNLESS SPECIFIED OTHERWISE. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS. ALL PROPOSED SPARE CONDUITS SHALL INCLUDE A TRACER WIRE AND A MULE TAPE.
3. SEE ILLUMINATION REMOVAL PLAN FOR LOCATIONS WHERE EXISTING ILLUMINATION SYSTEM AND SIGNAL SYSTEM IS BEING REMOVED.
4. SEE ILLUMINATION PLAN FOR PROPOSED ILLUMINATION SYSTEM.

CONSTRUCTION NOTES:

11 INSTALL NEW PULL BOX. SEE WSDOT STD PLAN J-90.10.

WIRING SCHEDULE

NO.	CONDUIT SIZE	INNERDUCT	CONDUCTORS/ CABLES	COMMENTS
2	4"	A	1-48SMFO	VIDEO/DATA DISTRIBUTION
		B	EMPTY	SPARE
		C	EMPTY	SPARE
		D	EMPTY	SPARE

LEGEND

EXISTING	NEW	
		ITS CABINET
		TYPE 1 JUNCTION BOX
CV	CV	FIBER OPTIC CABLE VAULT
		METAL POLE WITH ARM
		PTZ CAMERA
		ITS CONDUIT
	?	CONSTRUCTION NOTE
	?	WIRE NOTE

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DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER | CONTRACT NO. | LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 84943 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

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City of Spokane Valley
HDR

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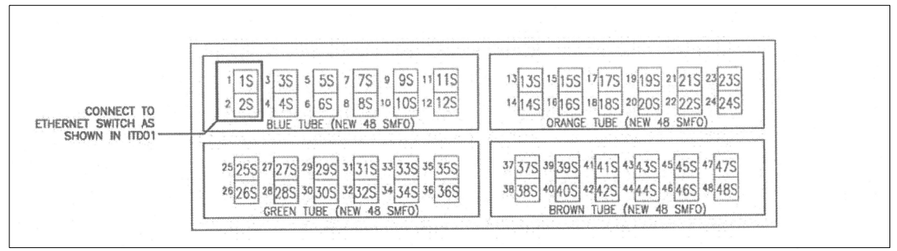
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ITS PLAN

Plot 1
PLAN REF NO
ITS4
SHEET 169 OF 218 SHEETS



ITS CABINET

N PINES RD AND E TRENT AVE
N PINES RD AND TRENT ELEMENTARY SCHOOL ENTRACE

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DESIGNED BY	J PI						
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CHECKED BY	Z WANG				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

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City of Spokane Valley
HDR

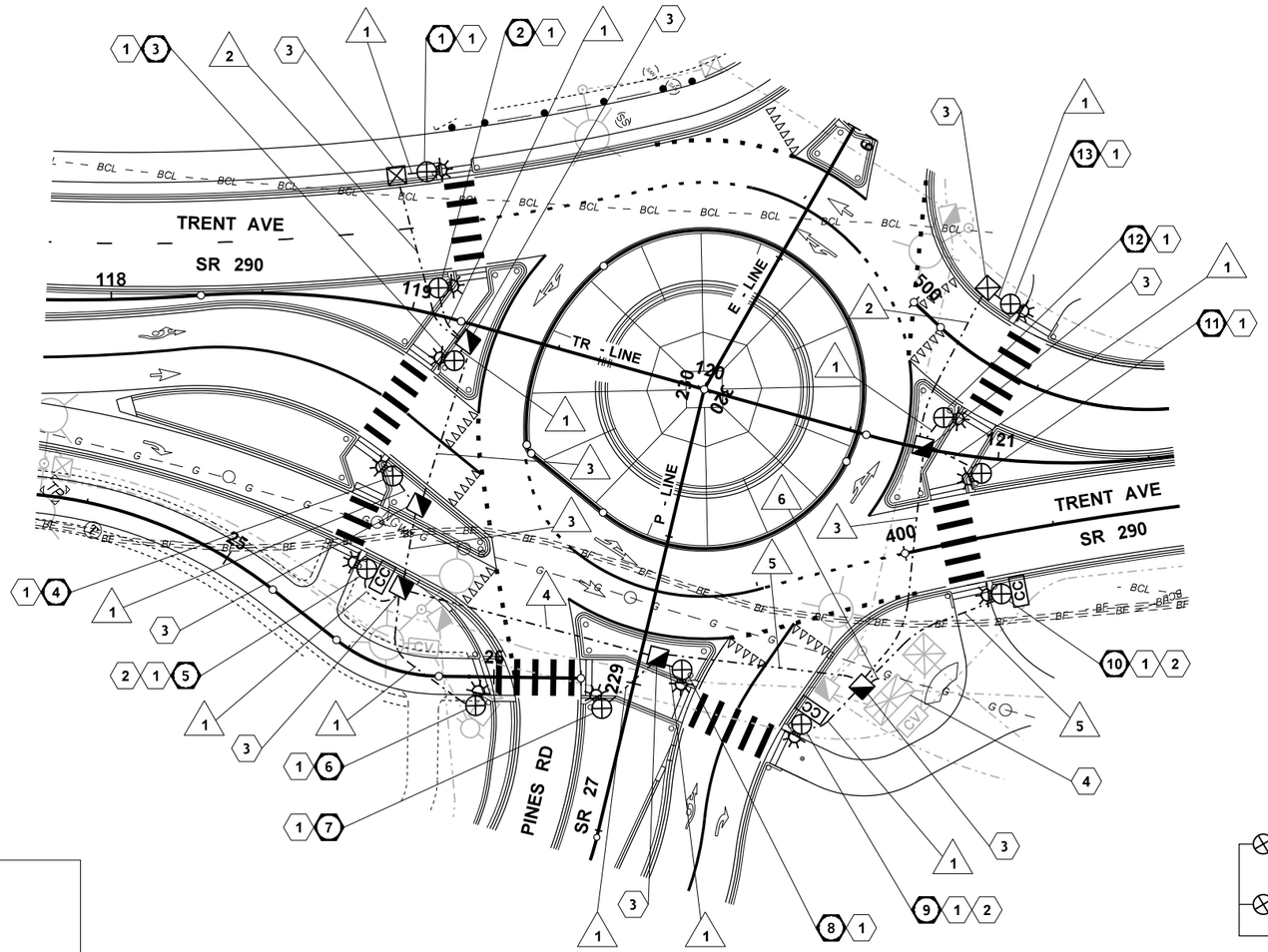
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

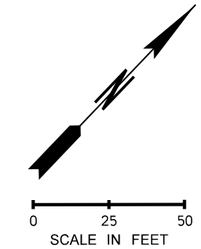
ITS DETAIL

Plot 1
PLAN REF NO
ITSD1
SHEET 170 OF 218 SHEETS

GENERAL NOTES:

1. PROPOSED EQUIPMENT LOCATIONS AND ORIENTATION SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
3. ALL PROPOSED CONDUITS CROSSING ROADWAYS SHALL BE SCH 80 PVC. ALL OTHER PROPOSED CONDUITS SHALL BE SCH 40 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
4. POLE LOCATIONS SHALL BE POTHOLED AND STAKED IN THE FIELD PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
5. SEE SHEET IL1 AND IL2 FOR PROPOSED ILLUMINATION SYSTEM.
6. SEE SHEET ITS2 FOR PROPOSED ITS SYSTEM.





WIRING SCHEDULE

#	CONDUIT SIZE	WIRING CTRL 4-#14	WIRING PWR 2-#12	WIRING GND 1-#8	COMMENTS
1	2"	1		1	
2	2"	1		1	
	2"				SPARE
3	2"	2		1	
	2"				SPARE
4	2"	1	1	1	
	2"				SPARE
5	2"	2	1	1	
	2"				SPARE
6	2"		1	1	

POLE & PUSHBUTTON SCHEDULE

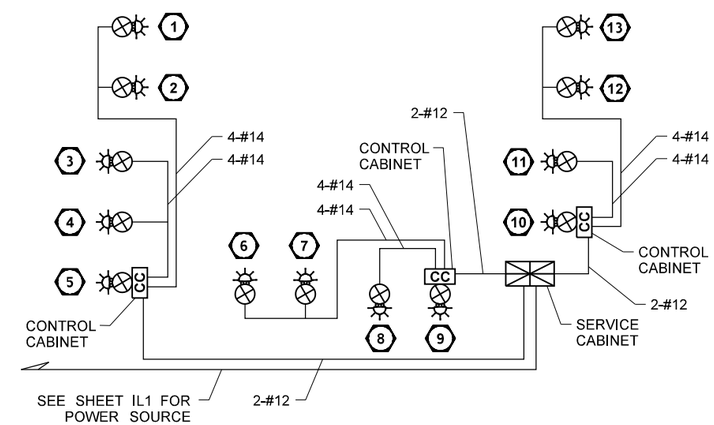
#	LOCATION STATION	LOCATION OFFSET	POLE TYPE	BASE TYPE	PUSHBUTTON FACING	ARROW DIRECTION
1	TR 118+96.0	45.5' LT	FB	SLIP	NE	LT
2	TR 119+06.7	8.8' LT	FB	SLIP	NE	RT
3	TR 119+17.9	13.2' RT	FB	SLIP	W	RT
4	TR 119+06.3	55.2' RT	FB	SLIP	W	LT/RT
5	TR 119+04.4	87.1' RT	FB	SLIP	W	LT
6	TR 119+55.5	121.1' RT	FB	SLIP	NW	LT
7	TR 119+95.9	110.8' RT	FB	SLIP	NW	RT
8	TR 120+17.8	91.3' RT	FB	SLIP	S	RT
9	TR 120+59.4	98.0' RT	FB	SLIP	S	LT
10	TR 121+04.6	44.2' RT	FB	SLIP	SW	LT
11	TR 120+95.1	5.2' RT	FB	SLIP	SW	RT
12	TR 120+79.8	11.3' LT	FB	SLIP	E	RT
13	TR 120+98.9	51.5' LT	FB	SLIP	E	LT

LEGEND

EXISTING	NEW	
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		ELECTRICAL SERVICE CABINET (SEE IL SHEETS)
		SIGNAL STANDARD TYPE FB
		RRFB ASSEMBLY WITH APS PUSHBUTTON
	CC	CONTROL CABINET ENCLOSURE
		CONDUIT
?		CONSTRUCTION NOTE
?		WIRE NOTE

CONSTRUCTION NOTES:

1. INSTALL TYPE FB SIGNAL STANDARD AND FOUNDATION PER WSDOT STD PLAN J-21.10 AND J-21.16. SEE POLE SCHEDULE ON THIS SHEET. SIGNAL STANDARD SHALL BE PLACED ADJACENT TO THE SIDEWALK. INSTALL RECTANGULAR RAPID FLASHING BEACON (RRFB) ASSEMBLY PER DETAIL ON SHEET TS2. RRFB ASSEMBLY SHALL BE ORIENTED TOWARDS ONCOMING VEHICLE TRAFFIC. INSTALL ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSHBUTTON. PUSHBUTTON SHALL BE FACING THE SIDEWALK AND WITHIN 10 INCHES FROM FACE OF CURB. INSTALL PUSHBUTTON EXTENSION BRACKET AS NEEDED.
2. INSTALL RRFB CONTROL CABINET ENCLOSURE ON SIGNAL STANDARD. SEE DETAIL ON SHEET TS2.
3. INSTALL JUNCTION BOX. SEE WSDOT STD PLAN J-40.10.
4. SEE ILLUMINATION PLAN FOR PROPOSED SERVICE CABINET AND POWER SOURCE.



RRFB WIRING DIAGRAM

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TIME	11:09:11 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

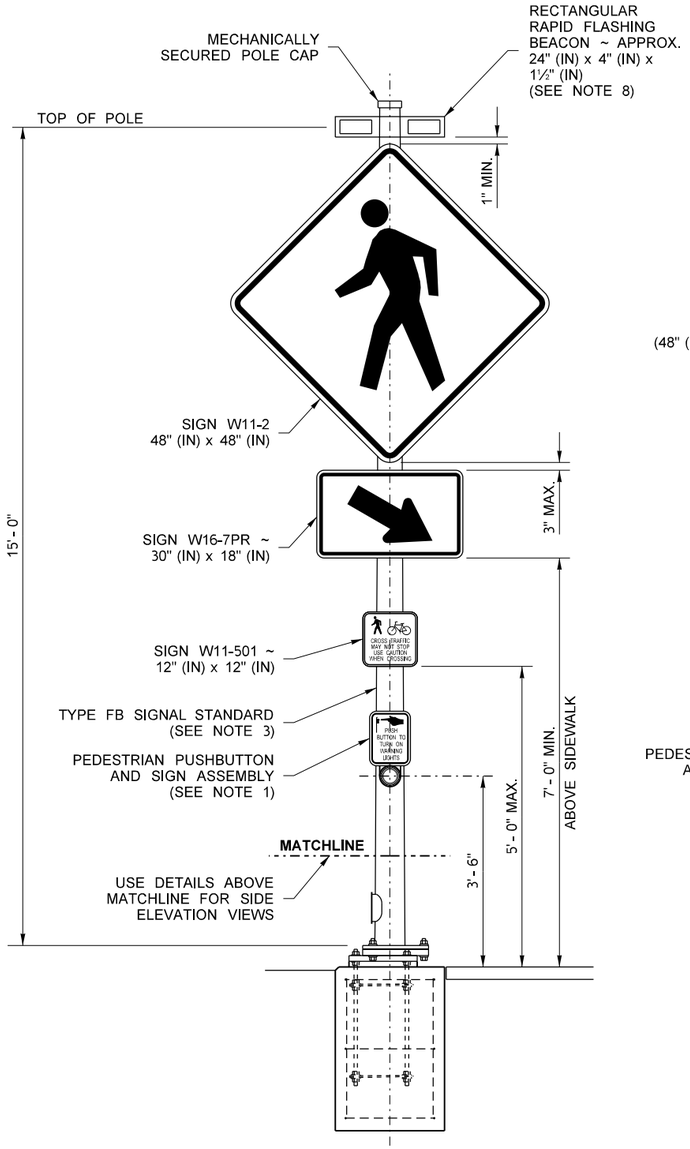
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

RRFB PLAN

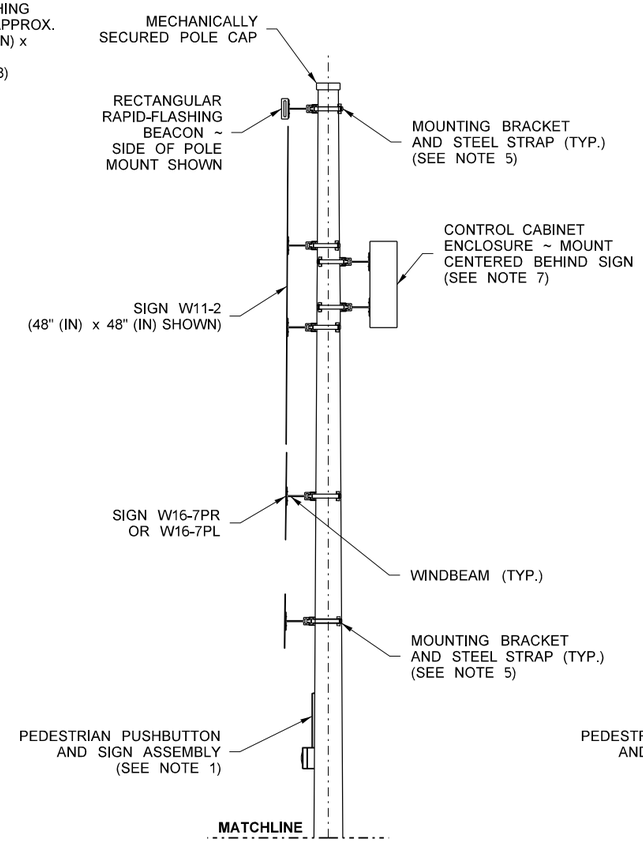
Plot 1
PLAN REF NO
TS1
SHEET 171 OF 218 SHEETS



FRONT ELEVATION VIEW

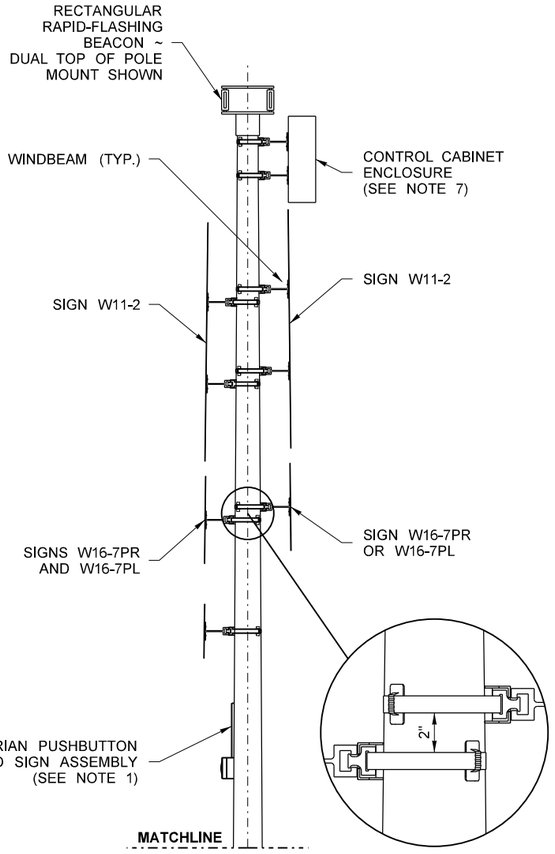
RAPID-FLASHING BEACON

SLIP BASE AND CONCRETE SQUARE FOUNDATION SHOWN (SEE NOTES 2 & 4)



SIDE ELEVATION VIEW

UNI-DIRECTIONAL CONFIGURATION DETAILS



SIDE ELEVATION VIEW

BI-DIRECTIONAL CONFIGURATION DETAILS

W11-501
(12" x 12")

PEDESTRIAN SYMBOL HEIGHT - 4" (IN)
BICYCLE SYMBOL HEIGHT - 3" (IN)
LETTERS - 1" C
LEGEND - BLACK
BACKGROUND - YELLOW

NOTES

1. PEDESTRIAN PUSHBUTTON AND SIGN ASSEMBLY - MAY BE SEPARATE PARTS. USE 9" (IN) X 12" (IN) R10-25 SIGN IN ACCORDANCE WITH 2009 MUTCD. SIGN MAY INCLUDE INTEGRATED WARNING LIGHTS.
2. SEE STANDARD PLAN J-21.10 FOR SIGNAL STANDARD FOUNDATION WITH SLIP BASE DETAILS.
3. SEE STANDARD PLAN J-21.16 FOR SIGNAL STANDARD DETAILS NOT SHOWN.
4. SEE STANDARD PLAN J-21.17, DETAIL C FOR WIRING DETAILS NOT SHOWN.
5. SEE STANDARD PLAN G-30.10 FOR SIGN INSTALLATION ON SIGNAL STANDARD DETAILS.
6. TERMINATE RRFB CONNECTIONS PER MANUFACTURER'S RECOMMENDATION.
7. CONTROL CABINET ENCLOSURE SHALL BE SIZED BY THE RFB MANUFACTURER. THE CONTROL CABINET SHALL BE MANUFACTURED PER TERMINAL CABINET REQUIREMENTS OF STANDARD SPECIFICATION SECTION 9-29.25.
8. RRFB DISPLAYS SHALL BE LED TYPE MEETING THE INTENSITY REQUIREMENTS OF SAE J595 FOR CLASS 1 YELLOW, BUT SHALL NOT EXCEED 1000 CANDELAS DURING DAYLIGHT AND 500 CANDELAS AFTER DARK.

RECTANGULAR RAPID FLASHING BEACON (RRFB)

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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	J PI						
ENTERED BY	J PI						
CHECKED BY	Z WANG				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

JAKE S. PI — STATE OF WASHINGTON — 51943 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

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City of Spokane Valley
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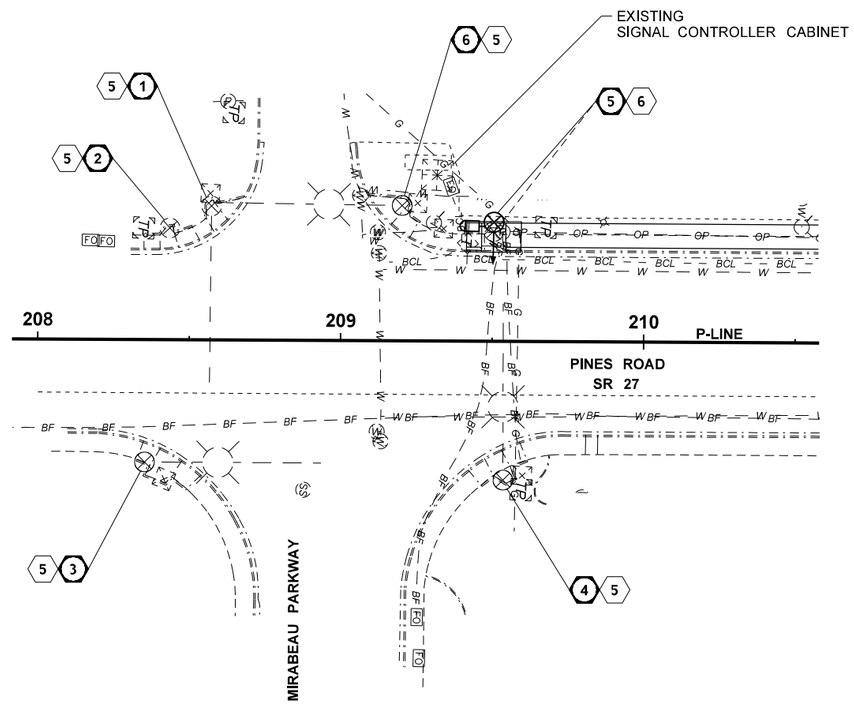
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

RRFB DETAILS

Plot 1
PLAN REF NO TS2
SHEET 172 OF 218 SHEETS

GENERAL NOTES:

1. PROPOSED EQUIPMENT LOCATIONS AND ORIENTATION SHOWN ON THE PLANS ARE SCHEMATIC. CONTRACTOR SHALL COORDINATE LOCATIONS WITH ENGINEER PRIOR TO INSTALLATION.
2. SEE WSDOT STD PLAN J-40.05 AND J-60.05 FOR GROUNDING CONDUCTORS THROUGH CONDUITS IN JUNCTION BOXES. CONDUIT GROUND WIRE SHALL BE GREEN THWN OF CODE SIZE.
3. ALL PROPOSED CONDUITS CROSSING ROADWAYS SHALL BE SCH 80 PVC. ALL OTHER PROPOSED CONDUITS SHALL BE SCH 40 PVC. CONDUIT MAY BE INSTALLED BY OPEN-CUT OR BORING PER SPECIFICATIONS.
4. POLE LOCATIONS SHALL BE POTHOLED AND STAKED IN THE FIELD PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.



LEGEND

EXISTING	NEW	
		SIGNAL CONTROLLER CABINET
		SIGNAL STANDARD TYPE PS
		SIGNAL STANDARD TYPE II
		SIGNAL STANDARD TYPE III
		PEDESTRIAN SIGNAL HEAD
		PEDESTRIAN PUSH BUTTON
		CONDUIT
		CONSTRUCTION NOTE
		WIRE NOTE

CONSTRUCTION NOTES:

5 MAINTAIN EXISTING SIGNAL STANDARD.

6 INSTALL NEW CURB FOUNDATION PER WSDOT STD PLAN J-20.15. REMOVE EXISTING TYPE PS SIGNAL STANDARD AND RELOCATE TO NEW FOUNDATION. DISCONNECT EXISTING WIRING, PULL BACK TO ADCACENT JUNCTION BOX, ADJUST CONDUIT ROUTING TO NEW LOCATION, AND RE-PULL EXISTING WIRING.

POLE & PUSHBUTTON SCHEDULE

#	LOCATION STATION	LOCATION OFFSET	POLE TYPE	BASE TYPE	PUSHBUTTON FACING	ARROW DIRECTION
1	EX	EX	II	EX	EX	EX
2	EX	EX	PS	EX	EX	EX
3	EX	EX	III	EX	EX	EX
4	EX	EX	III	EX	EX	EX
5	P 209+50.5	39.3' LT	PS	FIXED	SOUTH	RIGHT
6	EX	EX	III	EX	EX	EX

0 25 50
SCALE IN FEET

FILE NAME	c:\pwworking\west01\d2941035\PINES_PS_TS_003.dgn
TIME	11:09:45 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO. | LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER
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City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNAL PLAN

Plot 1
PLAN REF NO TS3
SHEET 173 OF 218 SHEETS

SIGN REMOVAL SPECIFICATIONS

SIGN NO.	STATION/OFFSET	SIGN CODE	SIGN DESCRIPTION	SIGN SIZE X (IN)	SIGN SIZE Y (IN)	POST MATERIAL	POST SIZE (TRADE SIZE)	NUMBER OF POSTS	REMARKS
R1-1	TR 105+37, RT	W10-3R	SIDEROAD RAILROAD SIGN RIGHT	36	36	WOOD	4X6	1	
R1-2	TR 107+22, RT	D1-501	PINES RD/(SR 27) SOUTH (ARROW 90)	60	48	WOOD	4X6	1	
R1-3	TR 109+97, LT	R2-1	SPEED LIMIT 50 MPH	36	48	WOOD	4X6	1	
R1-4	TR 111+95, LT	R10-6	STOP HERE ON RED	24	36	WOOD	4X6	1	
R1-5	TR 114+85, LT	D1-701SP	PINES RD/(SR 27) SOUTH (ARROW 270)	60	48	WOOD	4X6	2	
R1-6	TR 111+32, RT	W10-1	RR CROSSING	36	36	WOOD	4X6	1	APPROXIMATELY 100' SOUTH ON EXISTING SR 27 ALIGNMENT
R1-7	TR 111+07, RT	R2-1	SPEED LIMIT 35 MPH	30	36	WOOD	4X6	1	APPROXIMATELY 210' SOUTH ON EXISTING SR 27 ALIGNMENT
R2-1	TR 116+07, RT	R2-1	SPEED LIMIT 50 MPH	36	48	WOOD	4X6	1	
R3-1	TR 132+60, LT	D1-501	PINES RD/(SR 27) SOUTH NEXT LEFT	60	48	WOOD	4X6	1	
R4-1	P 210+47, RT	D1-501	(SR 290) JCT/TRENT AVE 1/4 MILE	60	54	WOOD	4X6	1	
R4-2	P 213+95, LT	W10-1	RR CROSSING	36	36	WOOD	4X6	1	
R4-3	P 214+47, LT	R5-1	DO NOT ENTER	EX	EX	STEEL	EX	1	
R4-4	P 214+84, LT	D3-101	PINECROFT WAY/12300	36/18	9/6	STEEL	U-CHANNEL	1	
		D3-101	PINES/3400	24/18	9/6				
		R1-1	STOP	30	30				
		R3-5	RIGHT TURN ONLY	30	36				
R4-5	P 215+58, LT	S5-2	END SCHOOL SPEED LIMIT	24	30	WOOD	4X6	1	
R4-6	P 215+45, LT	S5-101	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	48	72	WOOD	4X6	1	
R5-1	P 216+60, LT	R3-8 (MOD)	LANE CONTROL	30	30	WOOD	4X6	1	
R6-1	E 307+40, RT	W14-1	DEAD END	EX	EX	STEEL	EX	1	
R6-2	E 307+33, RT	W1-1	LEFT TURN ARROW	EX	EX	STEEL	EX	1	
		W13-1P	SPEED REDUCTION - 15 MPH	EX	EX				
R6-3	E 307+34, RT	D3-101	CEMENT	EX	EX	STEEL	EX	1	
		D3-101	EMPIRE	EX	EX				
		W1-6L	LEFT ARROW	EX	EX				
		W1-6R	RIGHT ARROW	EX	EX				

SIGN RELOCATION SPECIFICATIONS

SIGN NO.	PROPOSED STATION/OFFSET	SIGN CODE	SIGN DESCRIPTION	SIGN SIZE X (IN)	SIGN SIZE Y (IN)	LETTER SIZE OR CODE	SIGN SHEETING TYPE	POST MATERIAL	POST SIZE (TRADE SIZE)	BASE TYPE	POST LENGTH (FEET) H1	H2	H3	H4	CLEARANCE V	W	REMARKS
RL4-1	P 214+24, LT	R1-1	STOP	EX	EX	EX	EX	STEEL	2.5" SQUARE W/2.25" INSERT	SB-1,2,3	10				7	27.5	SLIP BASE

SIGNING GENERAL NOTES:

1. STATIONING, POST LENGTHS, "W" VALUES SHOWN ARE APPROXIMATE. FINAL VALUES SHALL BE DETERMINED IN THE FIELD PRIOR TO FABRICATION.
2. FOR STRUCTURE AND MOUNTING DETAILS, SEE WSDOT STANDARD PLAN SECTION G.
3. FOR SIGN CODE REFERENCES AND STANDARD SIGN LAYOUT, SEE WSDOT SIGN FABRICATION MANUAL.
4. SIGNS 36" OR LARGER REQUIRE SIGN BRACING PER WSDOT STD PLAN G-50.10.

SIGNING CONSTRUCTION NOTES:

1. ALL CEMENT CONCRETE FOUNDATIONS AND SIGN SUPPORTS SHALL BE REMOVED, UNLESS OTHERWISE NOTED.
2. IN ACCORDANCE WITH STANDARD SPECIFICATION 8-21.3(4). FILL AND COMPACT VOIDS IN ACCORDANCE WITH STANDARD SPECIFICATION 2-09.3(1)E.

SIGN INSTALLATION SPECIFICATIONS

SIGN NO.	STATION/OFFSET	SIGN CODE	SIGN DESCRIPTION	SIGN SIZE X (IN)	SIGN SIZE Y (IN)	LETTER SIZE OR CODE	SIGN SHEETING TYPE	POST MATERIAL	POST SIZE (TRADE SIZE)	BASE TYPE	POST LENGTH H1	POST LENGTH H2	POST LENGTH H3	POST LENGTH H4	CLEARANCE V	CLEARANCE W	REMARKS
1-1	TR 110+07.1, RT	R5-3	NO MOTOR VEHICLES	24	24	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	13.5				5	4.3	SLIP BASE
		D11-11	BICYCLES DIRECTIONAL	18	18	STANDARD	IV										
		D11-12	PEDESTRIAN SIGN	18	18	STANDARD	IV										
		M6-2P	DIRECTIONAL ARROW 45 DEGREES	12	9	STANDARD	IV										
1-2	TR 111+16.4, RT	W2-6	ROUNDABOUT	36	36	STANDARD	IV	LIGHT POLE	-	-	-				7	-	MOUNT ON LIGHT POLE
		W13-1	20 MPH	24	24	STANDARD	IV										
1-3	TR 111+94.7, LT	R1-1	STOP	36	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10.0				7	8.0	SLIP BASE
1-4	502+32.3, RT	W2-4	T-SYMBOL	18	18	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	6.2				5	3.1	
1-5	9+15.9, RT	W2-2	SIDE ROAD	18	18	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	6.2				5	3.1	
1-6	TR 113+39.5, RT	D1-5	ROUNDABOUT DESTINATION	114	78	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-1,2,3	13.5	15			7	10.9	DUAL POST, SLIP BASE
1-7	10+00.0, LT	W2-2	SIDE ROAD	18	18	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	6.2				5	3.1	
1-8	TR 114+62.6, RT	W2-6P (MOD)	ROUNDABOUT CAUTION SIGN	48	48	SEE SHT SD2	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	11	SLIP BASE
1-9	TR 115+96.6, RT	R4-7	KEEP RIGHT	36	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	9.5				7	6.0	SLIP BASE
1-10	TR 115+93.5, RT	R3-8 (MOD)	LANE CONTROL	72	48	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-2	11	13			7	4	DUAL POST
1-11	TR 115+99.1, LT	R2-1	SPEED LIMIT - 50 MPH	36	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	3.3	SLIP BASE
1-12	TR 100+10.0 RT	D1-501	(SR 27) SOUTH/PINES RD NEXT RIGHT	72	54	SEE SHT SD2	IV	STEEL	3.0" SQUARE	SB-1,2,3	11				7	4.5	DUAL POST, SLIP BASE
1-13	TR 112+06.1, RT	W1-7	TWO DIRECTION LARGE ARROW	48	24	STANDARD	IX OR XI	STEEL	2.5" SQUARE	ST-4	9				7	12	
1-14	TR 114+17.6, LT	D3-2	CEMENT ROAD	48	30	SEE SHT SD1	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	13.5	SLIP BASE
		D3-2	3600N	42	12	SEE SHT SD1											
1-15	TR 108+00, RT	D3-2	CEMENT ROAD	48	30	SEE SHT SD1	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	13.5	SLIP BASE
		D3-2	3600N	42	12	SEE SHT SD1	IV										
1-16	TR 109+00, RT	R9-22	BICYCLES MUST EXIT	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	9.5				7	13	SLIP BASE
2-1	TR 117+49.8, LT	M1-701	WEST (SR 290)	24	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	3.0	SLIP BASE
2-2	TR 118+08.4, RT	W12-1	DOUBLE ARROW	36	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11.3				7	5.6	SLIP BASE
2-3	TR 119+23.3, RT	R1-2	YIELD	48	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10.5				7	4	SLIP BASE
2-4	TR 119+27.8, RT	R1-2	YIELD	48	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10.5				7	4	SLIP BASE
2-5	TR 119+25.7, LT	D1-1e	DEPARTURE GUIDE - SPOKANE	60	42	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-1,2,3	11				7	4.5	SLIP BASE
2-6	TR 119+32.5, RT	R1-2	YIELD	48	48	STANDARD	IV	LIGHT POLE	-	-	10.5				7		MOUNT ON LIGHT POLE
2-7	TR 120+70.6, RT	D1-1e	DEPARTURE GUIDE - RATHDRUM	60	42	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-1,2,3	10.5				7	4.5	SLIP BASE
2-8	TR 120+73.0, LT	R1-2	YIELD	48	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	4	SLIP BASE
2-9	TR 120+74.7, LT	R1-2	YIELD	48	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	4	SLIP BASE
2-10	TR 121+47.8, RT	R6-1L	ONE WAY (LEFT)	36	12	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	8				7	2	
2-11	TR 121+79.0, RT	M1-701	EAST (SR 290)	24	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10				7	3	SLIP BASE
2-12	TR 122+20.9, RT	R5-1	DO NOT ENTER	30	30	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	10.5				7	3.3	
		R3-501	MANDATORY MOVEMENT LANE CONTROL	30	36	STANDARD	IV										
2-13	TR 122+48.5, RT	R7-801	RESERVED PARKING HANDICAP	12	18	SEE SHT SD2	IV	STEEL	2.5" SQUARE	ST-4	8.5				7	2	
2-14	TR 122+56.1, RT	R6-1R	ONE WAY (RIGHT)	36	12	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	8				7	2	
2-15	P 224+02.5, RT	D1-5	ROUNDABOUT DESTINATION	114	72	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-1,2,3	13	15			7	7.9	DUAL POST
2-16	P 225+00.0 LT	M1-701	SOUTH (SR 27)	24	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10				7	7	
2-17	P 225+20, RT	W2-6P (MOD)	ROUNDABOUT CAUTION SIGN	48	48	SEE SHT SD2	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	11	SLIP BASE
2-18	P 226+58.0, RT	R3-8 (MOD)	LANE CONTROL	48	48	SEE SHT SD1	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	8	
		R5-1a	WRONG WAY	36	24	STANDARD	IV										
2-19	P 227+12.7, LT	R4-7	KEEP RIGHT	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	9.5				7	4.8	SLIP BASE
2-20	P 227+24.5, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
2-21	P 227+26.0, RT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	
2-22	P 227+69.7, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
2-23	P 227+57.3, RT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	
2-24	P 228+04.1, RT	R6-1R	ONE WAY (RIGHT)	36	12	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	8				7	12.5	SLIP BASE
2-25	P 226+06.9, LT	W1-1aL	SPEED ADVISORY TURN LEFT (25)	36	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-2	11.5				7	7.1	SLIP BASE

SIGNING GENERAL NOTES:

1. STATIONING, POST LENGTHS, "W" VALUES SHOWN ARE APPROXIMATE. FINAL VALUES SHALL BE DETERMINED IN THE FIELD PRIOR TO FABRICATION.
2. FOR STRUCTURE AND MOUNTING DETAILS, SEE WSDOT STANDARD PLAN SECTION G.
3. FOR SIGN CODE REFERENCES AND STANDARD SIGN LAYOUT, SEE WSDOT SIGN FABRICATION MANUAL.
4. SIGNS 36" OR LARGER REQUIRE SIGN BRACING PER WSDOT STD PLAN G-50.10.

SIGNING CONSTRUCTION NOTES:

1. ALL CEMENT CONCRETE FOUNDATIONS AND SIGN SUPPORTS SHALL BE REMOVED, UNLESS OTHERWISE NOTED.
2. IN ACCORDANCE WITH STANDARD SPECIFICATION 8-21.3(4). FILL AND COMPACT VOIDS IN ACCORDANCE WITH STANDARD SPECIFICATION 2-09.3(1)E.

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PLOTTED BY	EMCGUIRE
DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGN INSTALLATION SPECIFICATIONS

Plot 1
PLAN REF NO
SS2

SHEET 175 OF 218 SHEETS

SIGN INSTALLATION SPECIFICATIONS

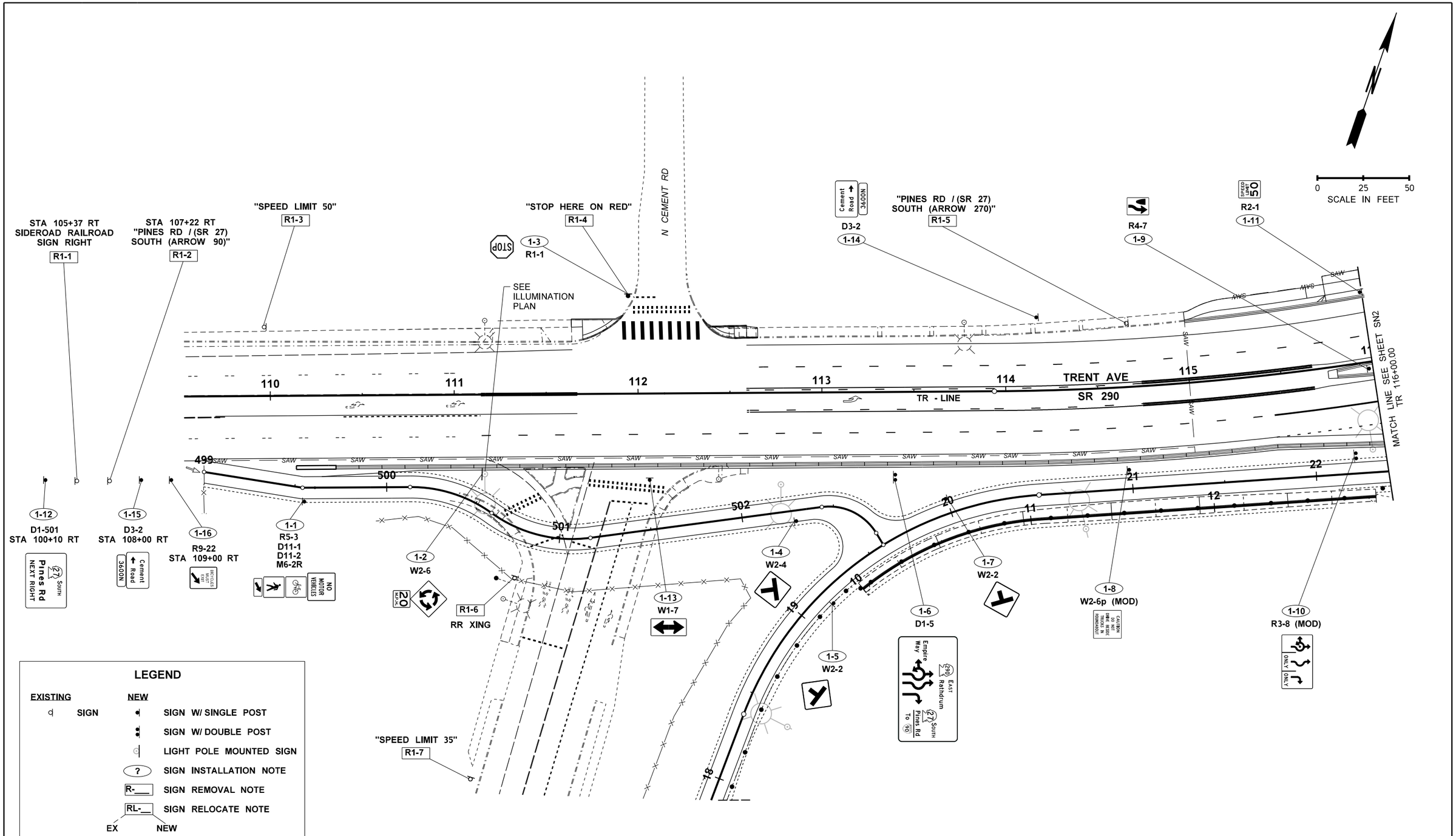
SIGN NO.	STATION/OFFSET	SIGN CODE	SIGN DESCRIPTION	SIGN SIZE X (IN)	SIGN SIZE Y (IN)	LETTER SIZE OR CODE	SIGN SHEETING TYPE	POST MATERIAL	POST SIZE (TRADE SIZE)	BASE TYPE	POST LENGTH H1	POST LENGTH H2	POST LENGTH H3	POST LENGTH H4	CLEARANCE V	CLEARANCE W	REMARKS
2-26	P 228+15.9, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
2-27	P 228+09.2, RT	R1-1	STOP	30	30	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	10.5				7	13.1	
		R3-5R	MANDATORY MOVEMENT LANE CONTROL	30	36	STANDARD	IV										
2-28	P 228+18.9, RT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	6.5				4	4.8	
2-29	P 229+12.0, LT	D1-1e	DEPARTURE GUIDE - SR 27 SOUTH	60	42	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-1,2,3	10.5				7	6.3	SLIP BASE
2-30	P 229+13.9, RT	R1-2	YIELD	48	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10.5				7	5.8	SLIP BASE
2-31	P 229+28.9, RT	R1-2	YIELD	48	48	STANDARD	IV	LIGHT POLE	-	-	-				7	-	MOUNT ON LIGHT POLE
2-32	TR 120+33.8 RT	R6-4a	ROUNDABOUT CHEVRONS	48	24	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6				4	4	SLIP BASE
2-33	TR 119+52.1 RT	R6-4a	ROUNDABOUT CHEVRONS	48	24	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6				4	4	SLIP BASE
2-34	TR 120+39.5 LT	R6-4a	ROUNDABOUT CHEVRONS	48	24	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6				4	4	SLIP BASE
2-35	TR 119+97.0 LT	R6-4a	ROUNDABOUT CHEVRONS	48	24	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6				4	4	SLIP BASE
2-36	E 319+13.2, LT	D3-2	EMPIRE WAY	42	24	SEE SHT SD1	IV	STEEL	2.5" SQUARE	SB-1,2,3	9				7	4.8	SLIP BASE
2-37	E 319+08.5, RT	R1-2	YIELD	48	48	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	10.5				7	5.8	SLIP BASE
2-38	TR 122+55.8, LT	R4-11 (MOD)	BIKE USE PATHWAY	30	30	SEE SHT SD2	IV	STEEL	2.5" SQUARE	SB-1,2,3	10.5				7	5	
		M6-2R	DIRECTIONAL ARROW 45 DEGREES	12	9	STANDARD	IV										
3-1	TR 123+21.4, RT	R2-1	SPEED LIMIT 50 MPH	24	30	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	9.5				7	9	
3-2	TR 123+64.3, LT	R3-8 (MOD)	LANE CONTROL	48	48	SEE SHT SD1	IV	STEEL	2.5" SQUARE	ST-4	11				7	19.5	
3-3	TR 124+60.0, LT	W2-6P (MOD)	ROUNDABOUT CAUTION	48	48	SEE SHT SD2	IV	STEEL	2.5" SQUARE	SB-1,2,3	11				7	14	SLIP BASE
3-4	TR 132+20.0, LT	D1-5	ROUNDABOUT DESTINATION	114	78	SEE SHT SD1	IV	STEEL	3.0" SQUARE	SB-2	14	15			7	18	DUAL POST
3-5	TR 134+25.0, LT	W2-6	ROUNDABOUT	36	36	STANDARD	IX OR XI	STEEL	2.5" SQUARE	ST-4	8.5				7	18	
		W13-1	20 MPH	24	24	STANDARD	IV										
3-6	TR 123+20.5, RT	R5-3	NO MOTOR VEHICLES	24	24	STANDARD	IV	LIGHT POLE	-	-	-				7	-	MOUNT ON LIGHT POLE
4-1	P 209+57.4, RT	R9-11	SIDEWALK CLOSED AHEAD	24	18	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	8				7	9.4	
4-2	P 212+00.6, RT	R9-9	SIDEWALK CLOSED	24	12	STANDARD	IV	STEEL	2.5" SQUARE	ST-4	8				7	4.3	
4-3	P 216+29.9, RT	W14-1	DEAD END	30	30	STANDARD	IX OR XI	STEEL	U CHANNEL	-	10.5				7	13.5	LOCATE INSIDE LANDSCPE BUFFER
4-4	P 215+45, RT	S5-2	END SCHOOL SPEED LIMIT	24	30	STANDARD	IV	STEEL	U CHANNEL	-	9.5				7	6.0	SLIP BASE
4-5	P 215+58, LT	S5-101	SCHOOL SPEED LIMIT 20 WHEN CHILDREN ARE PRESENT	48	72	STANDARD	IV	STEEL	2.5" SQUARE W/2.25" INSERT	SB-1,2,3	13				7	7	SLIP BASE
4-6	P 214+97, LT	OM4-1	TYPE 4 OBJECT MARKER	18	18	STANDARD	IV	STEEL	U CHANNEL	SB-1,2,3					4	10	SLIP BASE
4-7	P 215+25, LT	OM4-1	TYPE 4 OBJECT MARKER	18	18	STANDARD	IV	STEEL	U CHANNEL	SB-1,2,3					4	10	SLIP BASE
4-8	P 215+54, LT	OM4-1	TYPE 4 OBJECT MARKER	18	18	STANDARD	IV	STEEL	U CHANNEL	SB-1,2,3					4	10	SLIP BASE
5-1	P 216+68.7, RT	D1-501	SR 207 JUNCTION TRENT AVE 1/4 MILE	60	42	SEE SHT SD2	IV	STEEL	3.0" SQUARE	ST-4	11				7	8.5	
5-2	P 218+52.2, LT	R2-1	SPEED LIMIT 35 MPH	30	30	STANDARD	IV	LIGHT POLE	-	-	-				7	-	MOUNT ON LIGHT POLE
5-3	P 218+19.1, RT	W1-3R	RIGHT REVERSE TURN ARROW	30	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11.3				7	8.2	SLIP BASE
		W13-1P	ADVISORY SPEED LIMIT - 25 MPH	18	18	STANDARD	IV										
5-4	P 220+04.3, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-5	P 220+71.5, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-6	P 220+74.0, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-7	P 221+40.2, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-8	P 221+42.6, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-9	P 222+11.8, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-10	P 222+14.7, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-11	P 222+87.5, LT	W1-8	CHEVRON ALIGNMENT ARROW	24	30	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	6.5				4	4.8	SLIP BASE
5-12	P 222+98.1, RT	W2-6	ROUNDABOUT	36	36	STANDARD	IV	STEEL	2.5" SQUARE	SB-1,2,3	11.3				7	8.2	SLIP BASE
		W13-1	20 MPH	24	24	STANDARD	IV										
6-1	E 307+52.2, LT	D3-101	EMPIRE WAY	42	8	SEE SHT SD2	IV	STEEL	U CHANNEL	ST-4	11.1				7	5	
		D3-101	CEMENT RD	36	8	SEE SHT SD2	IV										
		R1-1	STOP	30	30	STANDARD	IV										
6-2	E 309+00.0, RT	R2-1	SPEED LIMIT 25 MPH	24	30	STANDARD	IV	STEEL	U CHANNEL	ST-4	9.5				7	4.5	
7-1	E 317+00.3, RT	W2-6	ROUNDABOUT	36	36	STANDARD	IX OR XI	STEEL	U CHANNEL	ST-4	11.3				7	5.5	
		W13-1	20 MPH	24	24	STANDARD	IV										
7-2	E 317+63.9, LT	W1-7	TWO DIRECTION LARGE ARROW	48	24	STANDARD	IX OR XI	STEEL	U CHANNEL	ST-4	8	8			7	3.5	
7-3	E 317+85.9, RT	D3-101	PORTLAND AVE	42	8	SEE SHT SD2	IV	STEEL	U CHANNEL	ST-4	11.1				7	11.8	
		D3-101	EMPIRE WAY	42	8	SEE SHT SD2	IV										
		R1-1	STOP	30	30	STANDARD	IV										
7-4	E 318+11.1, LT	R2-1	SPEED LIMIT 25 MPH	24	30	STANDARD	IV	LIGHT POLE	-	-	-				7	-	MOUNT ON LIGHT POLE

SIGNING GENERAL NOTES:

1. STATIONING, POST LENGTHS, "W" VALUES SHOWN ARE APPROXIMATE. FINAL VALUES SHALL BE DETERMINED IN THE FIELD PRIOR TO FABRICATION.
2. FOR STRUCTURE AND MOUNTING DETAILS, SEE WSDOT STANDARD PLAN SECTION G.
3. FOR SIGN CODE REFERENCES AND STANDARD SIGN LAYOUT, SEE WSDOT SIGN FABRICATION MANUAL.
4. SIGNS 36" OR LARGER REQUIRE SIGN BRACING PER WSDOT STD PLAN G-50.10.

SIGNING CONSTRUCTION NOTES:

1. ALL CEMENT CONCRETE FOUNDATIONS AND SIGN SUPPORTS SHALL BE REMOVED, UNLESS OTHERWISE NOTED.
2. IN ACCORDANCE WITH STANDARD SPECIFICATION 8-21.3(4). FILL AND COMPACT VOIDS IN ACCORDANCE WITH STANDARD SPECIFICATION 2-09.3(1)E.



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DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

STATE OF WASHINGTON
JAKE S. PI
54943
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

CITY OF Spokane Valley

HDR

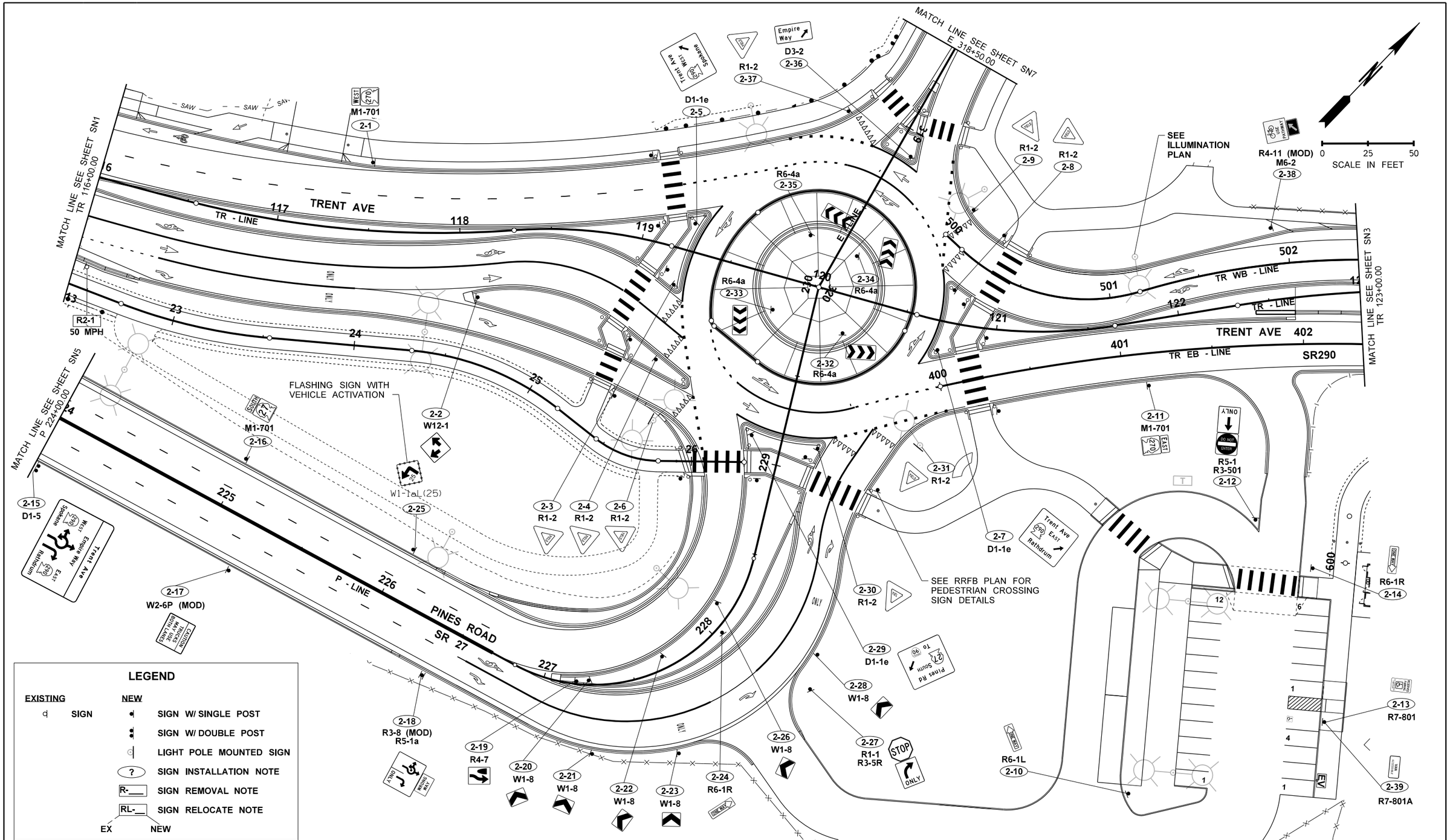
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

Plot 1

PLAN REF NO
SN1

SHEET 177 OF 218 SHEETS



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CHECKED BY	Z WANG						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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City of Spokane Valley

HDR

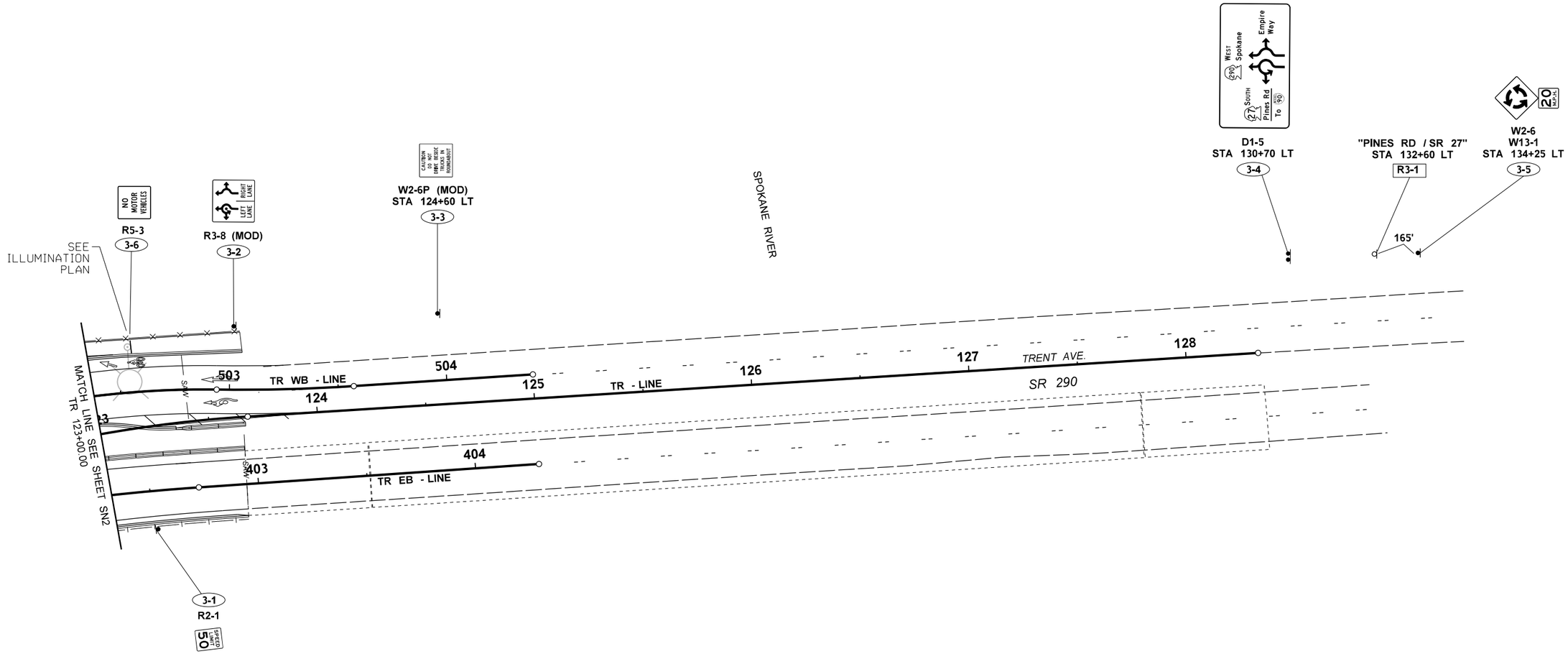
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

Plot 1

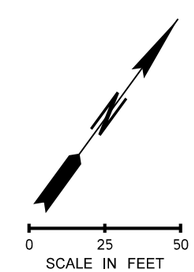
PLAN REF NO
SN2

SHEET 178 OF 218 SHEETS



LEGEND

EXISTING		NEW	
	SIGN		SIGN W/ SINGLE POST
			SIGN W/ DOUBLE POST
			LIGHT POLE MOUNTED SIGN
		?	SIGN INSTALLATION NOTE
		R-___	SIGN REMOVAL NOTE
		RL-__ (EX / NEW)	SIGN RELOCATE NOTE



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ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

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City of Spokane Valley

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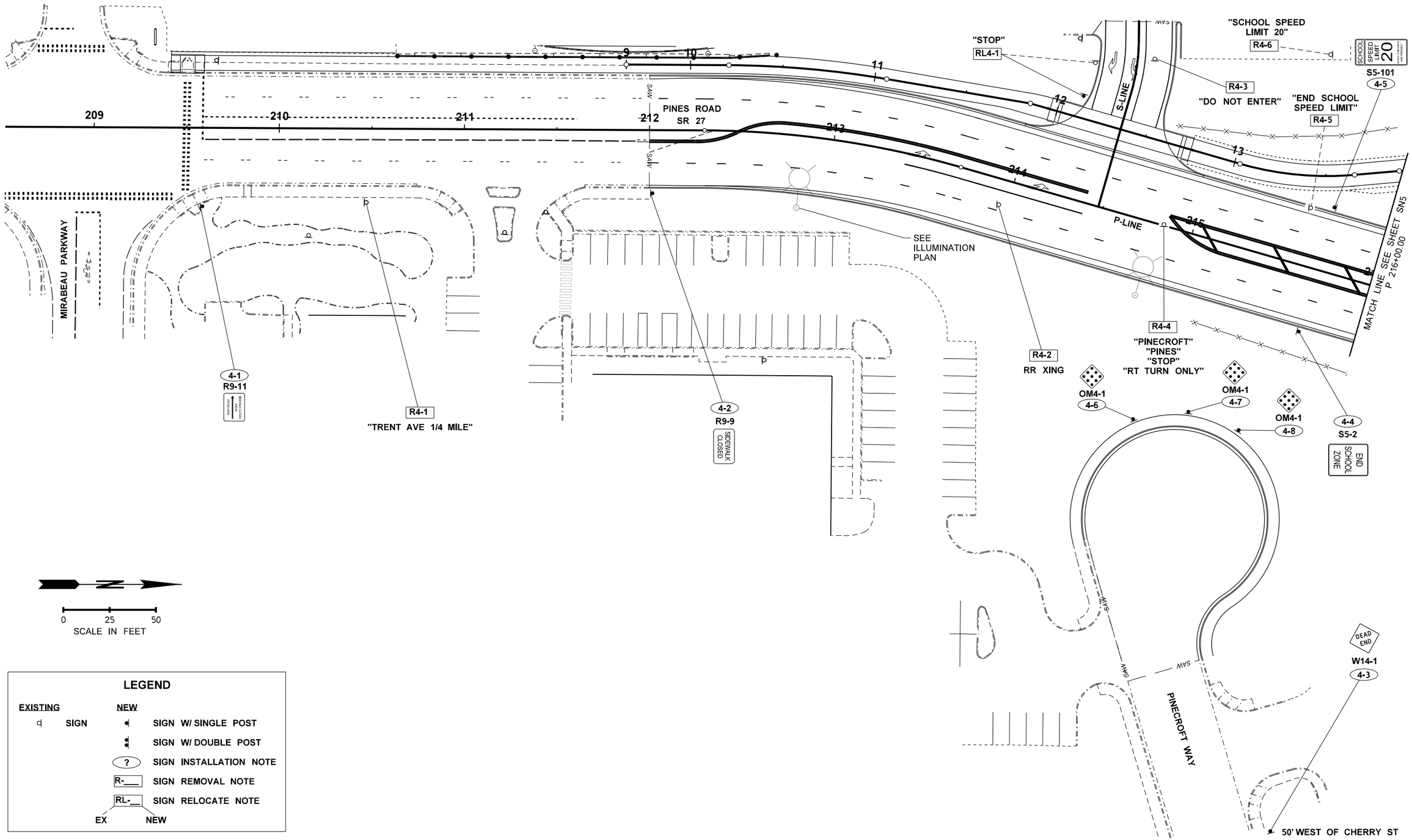
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

Plot 1

PLAN REF NO
SN3

SHEET 179 OF 218 SHEETS



LEGEND

EXISTING		NEW	
	SIGN		SIGN W/ SINGLE POST
			SIGN W/ DOUBLE POST
		?	SIGN INSTALLATION NOTE
		R-___	SIGN REMOVAL NOTE
		RL-__ (EX / NEW)	SIGN RELOCATE NOTE

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DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

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DATE
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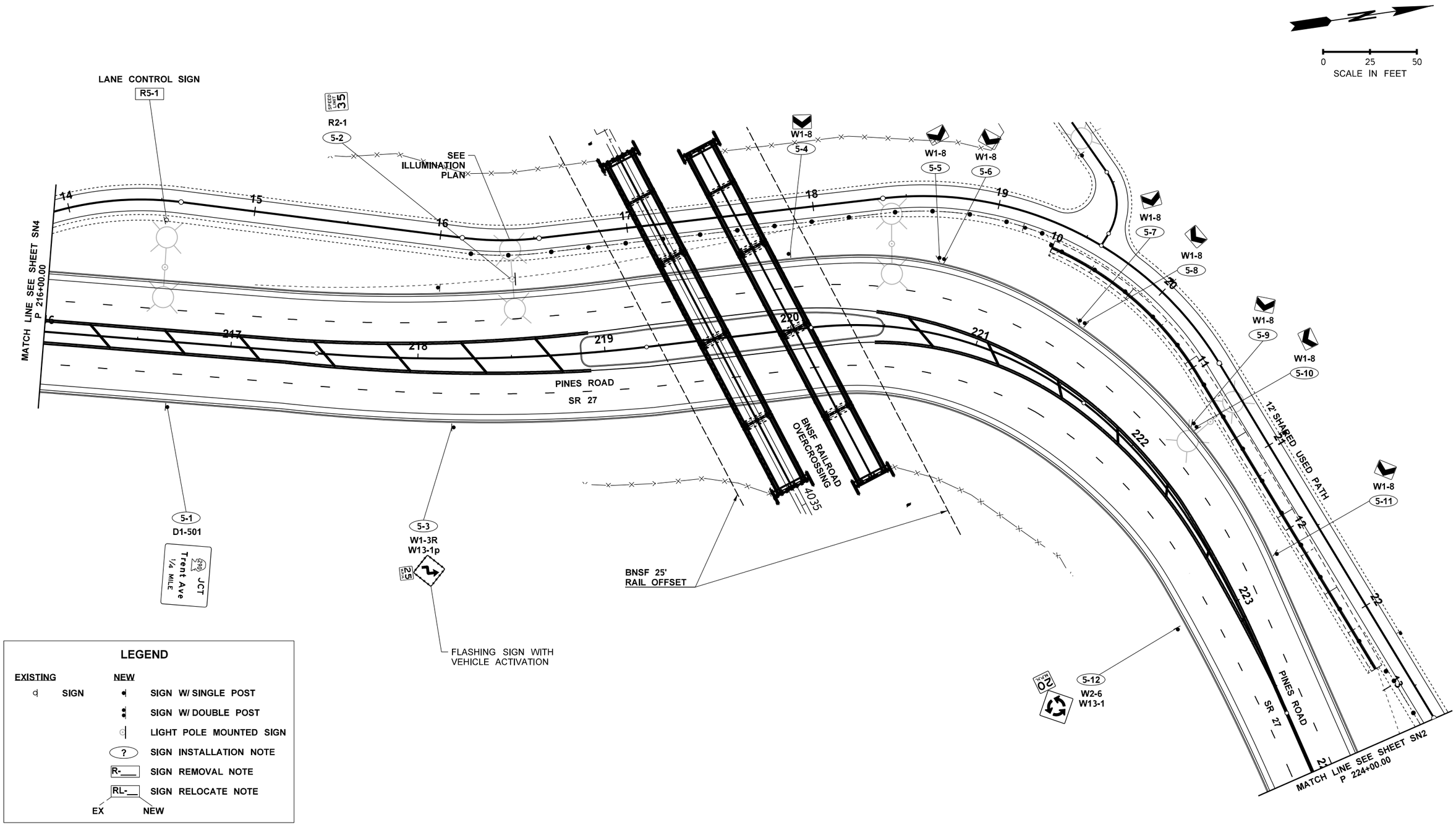
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

Plot 1
PLAN REF NO
SN4
SHEET 180 OF 218 SHEETS



LEGEND

EXISTING	NEW	
SIGN		SIGN W/ SINGLE POST
		SIGN W/ DOUBLE POST
		LIGHT POLE MOUNTED SIGN
	?	SIGN INSTALLATION NOTE
	R-___	SIGN REMOVAL NOTE
	RL-__ (EX / NEW)	SIGN RELOCATE NOTE

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PLOTTED BY	EMCGUIRE
DESIGNED BY	J PI
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 54943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

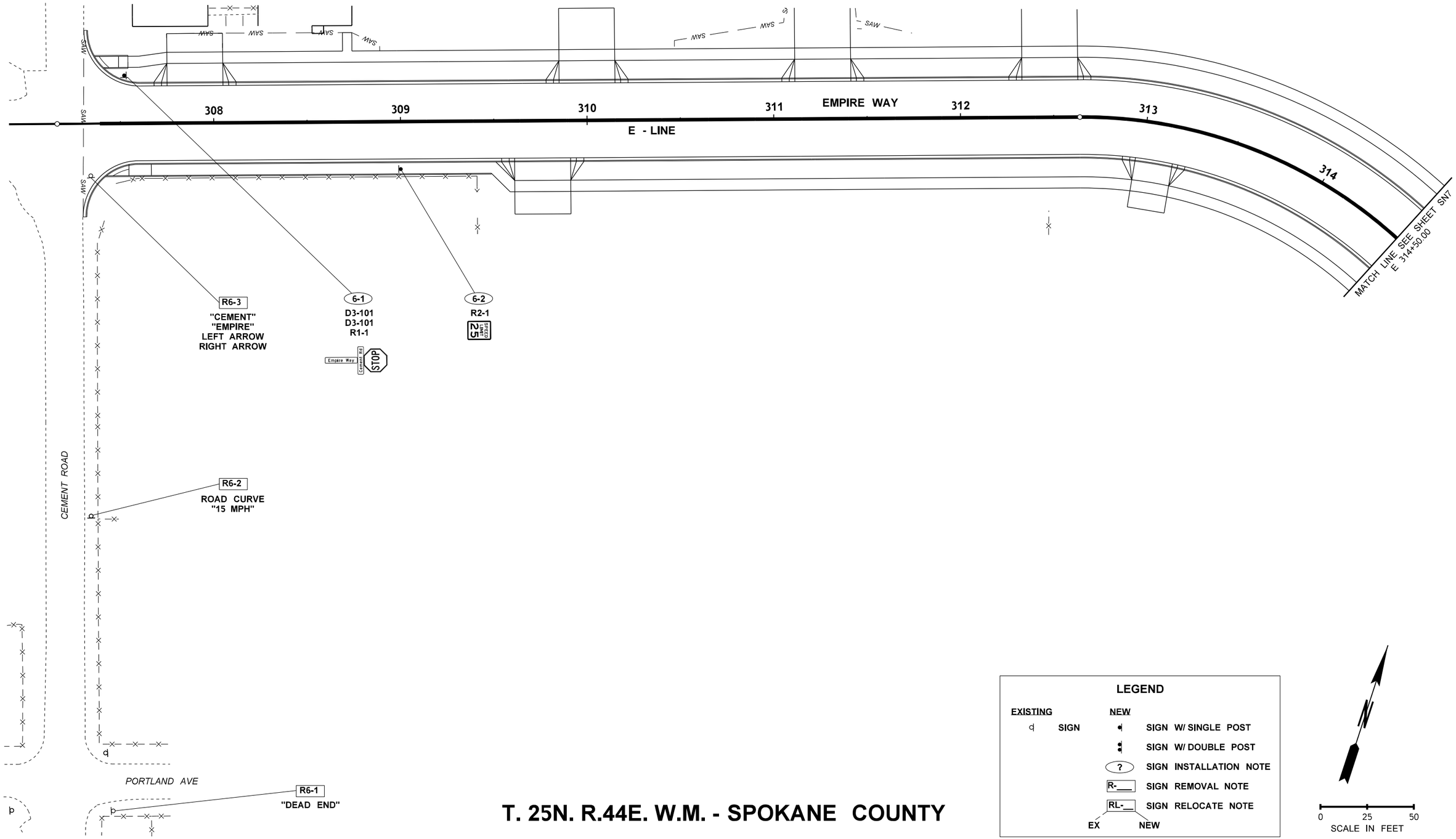
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

Plot 1
PLAN REF NO
SN5
SHEET 181 OF 218 SHEETS



T. 25N. R.44E. W.M. - SPOKANE COUNTY

LEGEND

EXISTING		NEW	
	SIGN		SIGN W/ SINGLE POST
			SIGN W/ DOUBLE POST
		?	SIGN INSTALLATION NOTE
		R-___	SIGN REMOVAL NOTE
		RL-__ (EX / NEW)	SIGN RELOCATE NOTE

0 25 50
SCALE IN FEET

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DESIGNED BY	J PI					
ENTERED BY	J PI					
CHECKED BY	Z WANG					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI — STATE OF WASHINGTON — 51943 — REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
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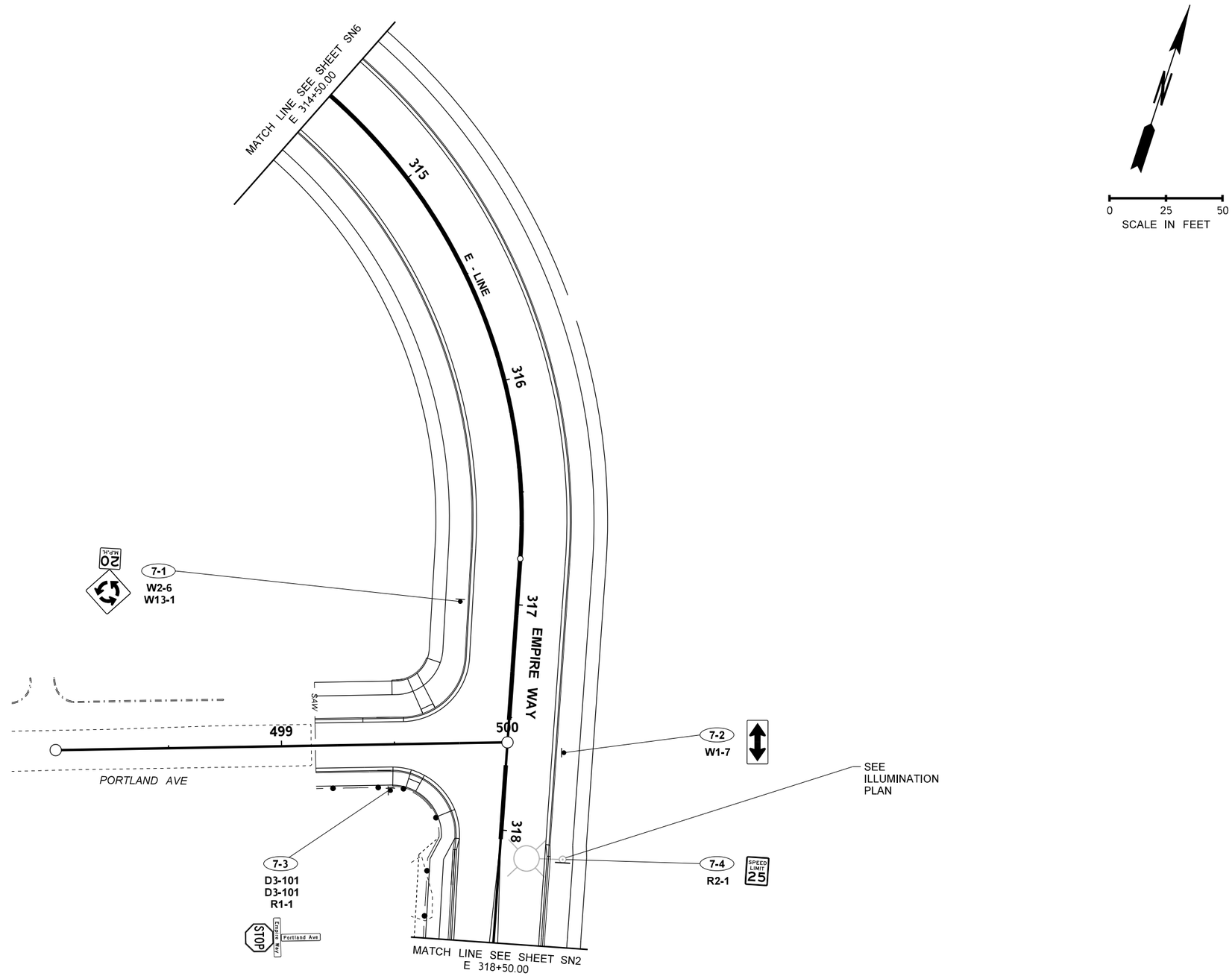
City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

Plot 1
PLAN REF NO
SN6
SHEET 182 OF 218 SHEETS



LEGEND

EXISTING	NEW	
SIGN		SIGN W/ SINGLE POST
		SIGN W/ DOUBLE POST
		LIGHT POLE MOUNTED SIGN
	?	SIGN INSTALLATION NOTE
	R-___	SIGN REMOVAL NOTE
	RL-__ (EX / NEW)	SIGN RELOCATE NOTE

FILE NAME	c:\pwworking\west01\d2409841\PINES_PS_SN_007.dgn
TIME	11:13:05 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B PARKMAN
ENTERED BY	J PI
CHECKED BY	Z WANG
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

STATE OF WASHINGTON JAKE S. PI 54943 REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

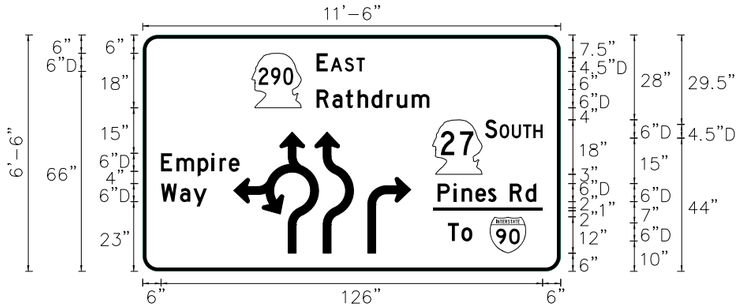
CITY OF Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING PLAN

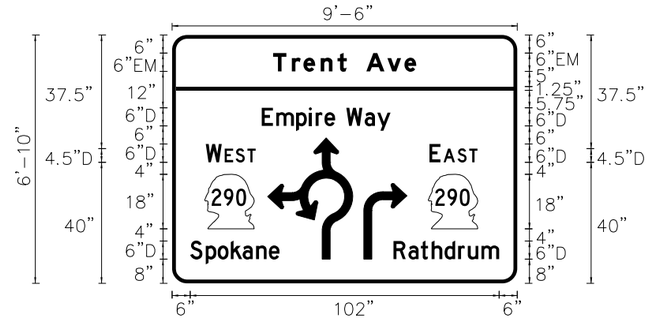
Plot 1
PLAN REF NO
SN7
SHEET 183 OF 218 SHEETS



BORDER
R=5"
TH=1.25"

1-6 TR 113+39.5 RT

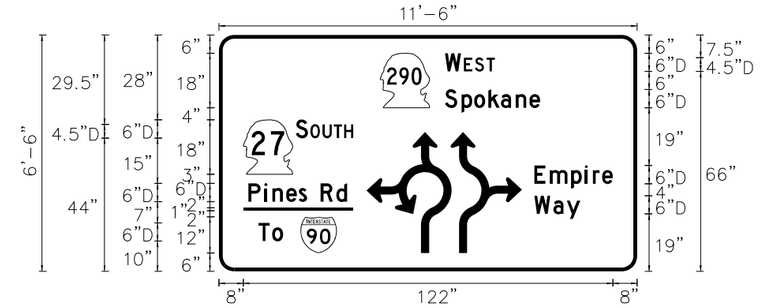
D1-5
WHITE ON GREEN



BORDER
R=5"
TH=1.25"

2-15 P 225+0.0 RT

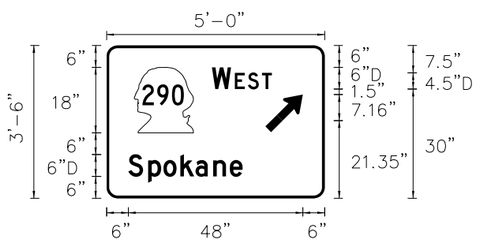
D1-5
WHITE ON GREEN



BORDER
R=5"
TH=1.25"

3-4 TR 129+50 LT

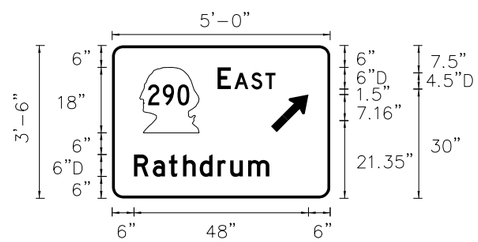
D1-5
WHITE ON GREEN



BORDER
R=3"
TH=0.75"

2-5 TR 119+28.9 LT

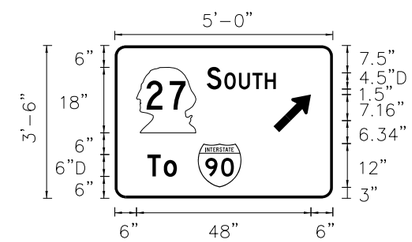
D1-1e
WHITE ON GREEN



BORDER
R=3"
TH=0.75"

2-7 TR 120+70.6 RT

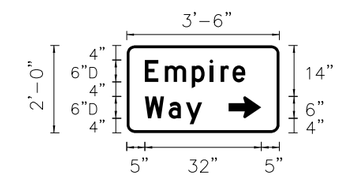
D1-1e
WHITE ON GREEN



BORDER
R=3"
TH=0.75"

2-29 P 229+12.0 LT

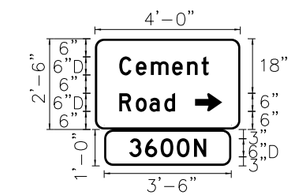
D1-1e
WHITE ON GREEN



BORDER
R=2.25"
TH=0.75"

2-36 E 319+13.2 LT

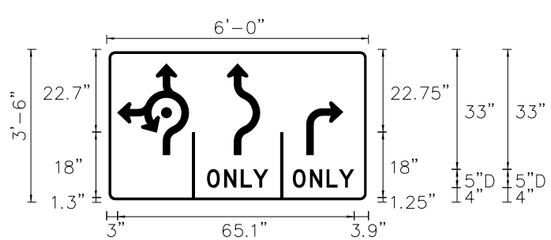
D3-2
WHITE ON GREEN



BORDER
R=3"
TH=0.75"

1-14 TR 114+17.6 LT

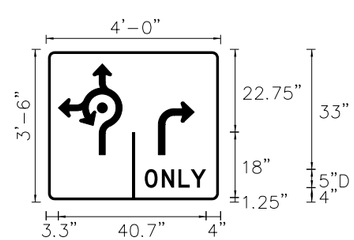
D3-2
WHITE ON GREEN



BORDER
R=1.88"
TH=0.75"
IN=0.5"

1-10 TR 115+93.5 RT

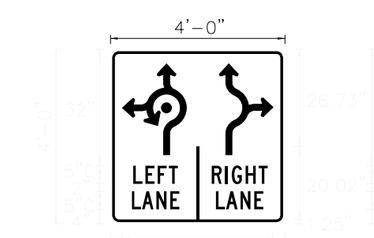
R3-8 (MOD)
BLACK ON WHITE



BORDER
R=1.88"
TH=0.75"
IN=0.5"

2-18 P 226+58.0 RT

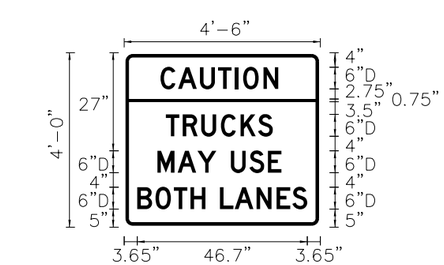
R3-8 (MOD)
BLACK ON WHITE



BORDER
R=1.88"
TH=0.75"
IN=0.5"

3-2 TR 123+64.3 LT

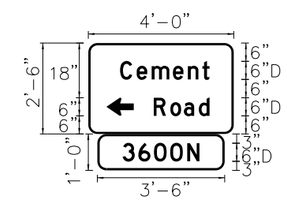
R3-8 (MOD)
BLACK ON WHITE



BORDER
R=1.88"
TH=0.75"
IN=0.5"

2-17 P 225+20.0 RT

W2-6P (MOD)
BLACK ON YELLOW



BORDER
R=3"
TH=0.75"

1-15 TR 108+00 RT

D3-2
WHITE ON GREEN

FILE NAME	c:\pwworking\west01\d2409841\PINES_PS_SD_001.dgn					
TIME	11:13:16 AM					
DATE	5/29/2025					
PLOTTED BY	EMCGUIRE					
DESIGNED BY	J PI					
ENTERED BY	E MCGUIRE					
CHECKED BY	Z WANG					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

JAKE S. PI
STATE OF WASHINGTON
54943
REGISTERED
PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

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City of Spokane Valley

HDR

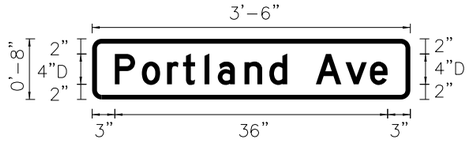
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

SIGNING DETAILS

Plot 1

PLAN REF NO
SD1

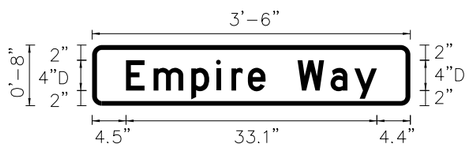
SHEET 184 OF 218 SHEETS



BORDER
R=1.25"
TH=0.63"

7-3 E 317+85.9 RT

D3-101
WHITE ON GREEN

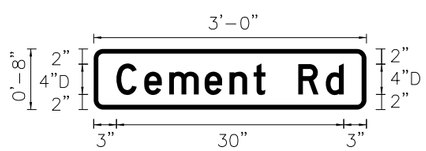


BORDER
R=1.25"
TH=0.63"

7-3 E 317+85.9 RT

6-1 E 307+52.2 LT

D3-101
WHITE ON GREEN



BORDER
R=1.25"
TH=0.63"

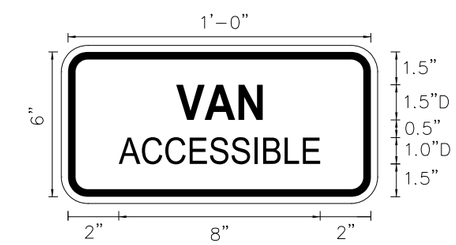
6-1 E 307+52.2 LT

D3-101
WHITE ON GREEN

BORDER
R=1"
TH=0.25"
IN=0.13"

2-13 TR 122+48.5 RT

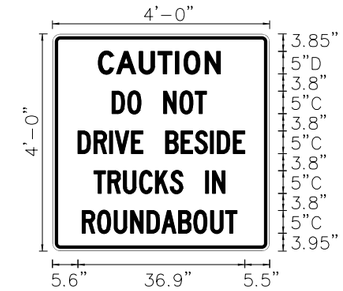
R7-801
BLACK ON WHITE
WHITE ON BLUE



BORDER
R=1.5"
TH=0.25"
IN=0.13"

2-39 TR 122+48.5 RT

R7-801A
BLACK ON WHITE
WHITE ON BLUE

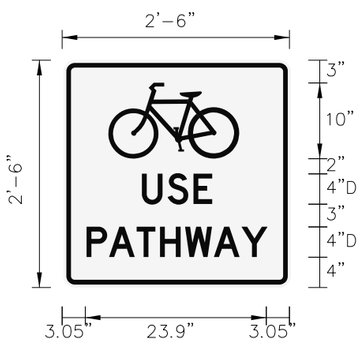


BORDER
R=1.25"
TH=0.75"
IN=0.5"

3-3 TR 124+60.0 LT

1-8 TR 113+62.6 RT

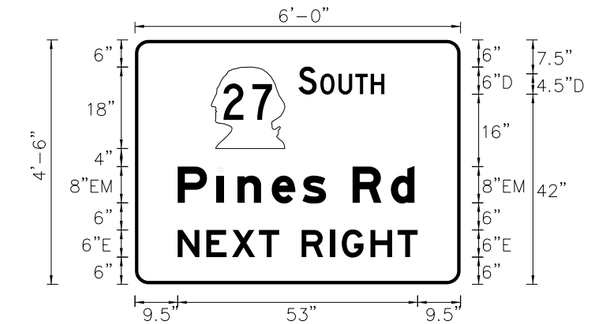
W2-6P (MOD)
BLACK ON YELLOW



BORDER
R=1.13"
TH=0.63"
IN=0.38"

2-38 TR 122+55.8 LT

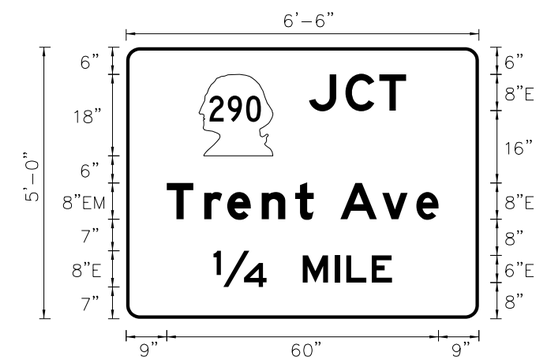
R4-11 (MOD)
BLACK ON WHITE



BORDER
R=3"
TH=0.75"

1-12 TR 100+10 RT

D1-501
WHITE ON GREEN



BORDER
R=3"
TH=0.75"

5-1 P 216+68.7 RT

D1-501
WHITE ON GREEN

FILE NAME	c:\pwworking\west01\d2409841\PINES_PS_SD_002.dgn						
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DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	J PI						
ENTERED BY	J PI						
CHECKED BY	Z WANG				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

JAKE S. PI — STATE OF WASHINGTON — 84943 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE

P.E. STAMP BOX

DATE

P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

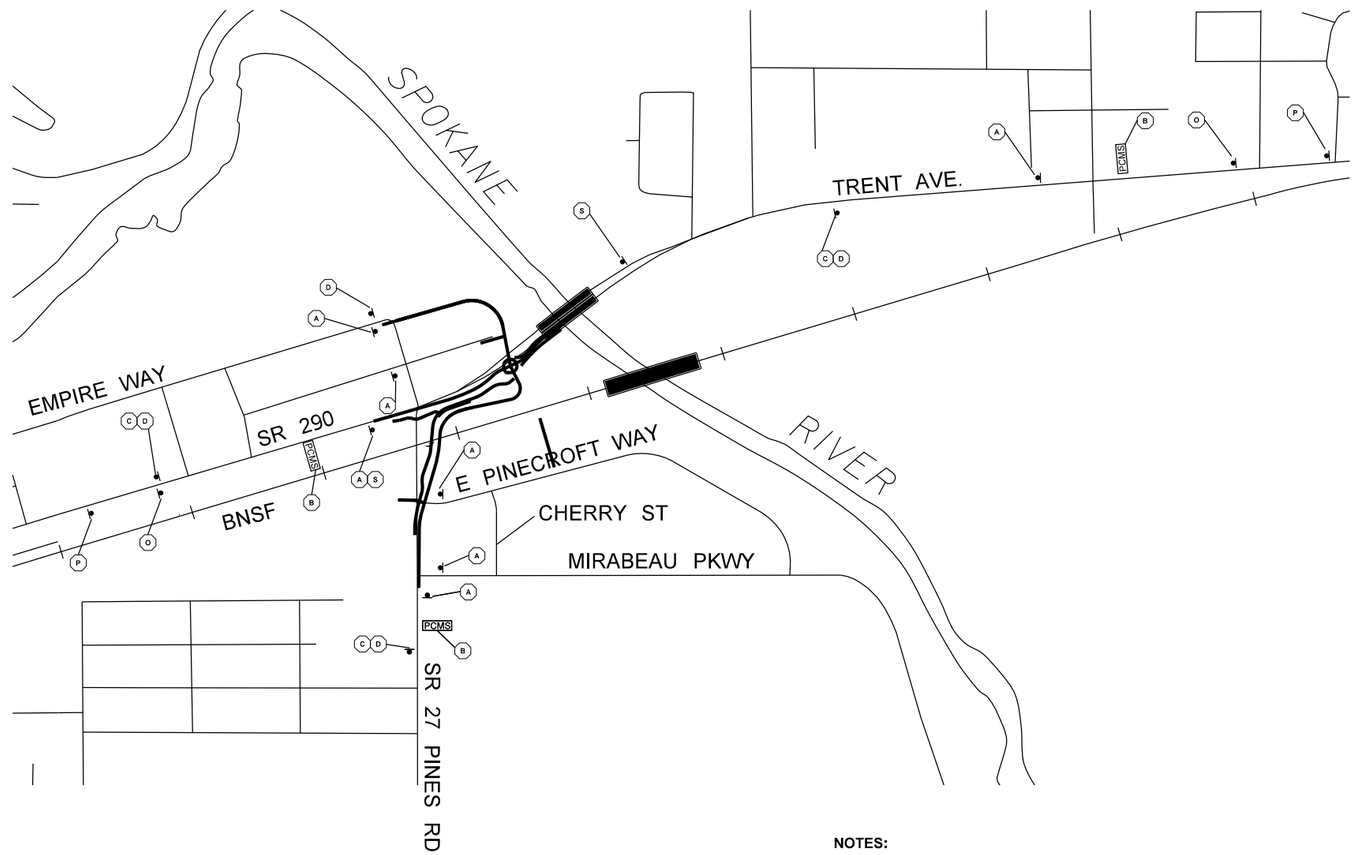
SIGNING DETAILS

Plot 1

PLAN REF NO
SD2

SHEET 185 OF 218 SHEETS

NOT TO SCALE



LEGEND

PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
◄	CLASS A SIGN
#	SIGN LOCATION & DESIGNATION

SIGN SPACING (X)

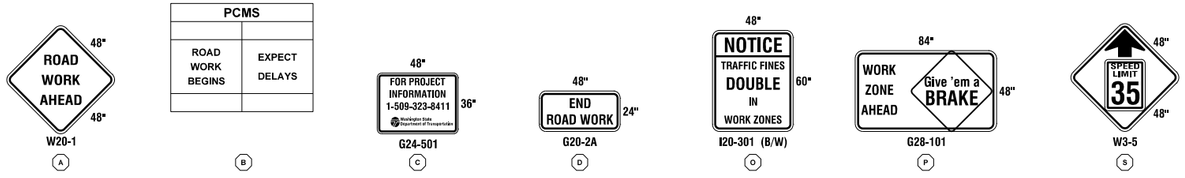
CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50/70	40	80
35/45	30	60
25/30	20	40

MINIMUM LANE CLOSURE TAPER LENGTH = L (feet)										
LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	-	-	-
11	115	165	225	295	495	550	605	660	-	-
12	125	180	245	320	540	600	660	720	780	840

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)										
SHOULDER WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
8'	40	40	60	90	120	130	150	160	170	190
10'	40	60	90	90	150	170	190	200	220	240
USE A MINIMUM 3 DEVICES TAPER FOR SHOULDER LESS THEN 8'.										

NOTES:

1. ALL SIGNS ARE CLASS A, UNLESS OTHERWISE NOTED.
2. ALL SIGNS ARE BLACK ON ORANGE, UNLESS OTHERWISE NOTED.
3. PLAN TO BE USED IN CONJUNCTION WITH PHASE SPECIFIC TRAFFIC CONTROL PLANS SHOWN ON SHEETS TC2 - TC13. SIGN LOCATION AND SPACING TO BE ADJUSTED AS NECESSARY TO PREVENT SIGN CLUTTER.
4. CONTRACTOR TO SUBMIT A TYPE 1 WORKING DRAWING TEMPORARY TRAFFIC CONTROL PLAN FOR REMOVAL OF EXISTING SIGNAL STRUCTURE AT PINES AND TRENT. CONTRACTOR SHALL SUBMIT TO THE CITY AND WSDOT FOR REVIEW AND APPROVAL 10 DAYS IN ADVANCE IMPLEMENTATION. CREATION OF THE TRAFFIC CONTROL PLAN AND REVISIONS IS CONSIDERED INCIDENTAL TO OTHER BID ITEMS.



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TIME	11:13:46 AM				10	WASH	STPUL 0027(020)		PLAN REF NO
DATE	5/29/2025				JOB NUMBER		69A36525420110RASWA		TC1
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA		SHEET
DESIGNED BY	B KIRKMAN								186
ENTERED BY	E MCGUIRE								OF
CHECKED BY	J FREY								218
PROJ. ENGR.	S MARSHALL								SHEETS
REGIONAL ADM.		REVISION	DATE	BY	CONTRACT NO.		LOCATION NO.		

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

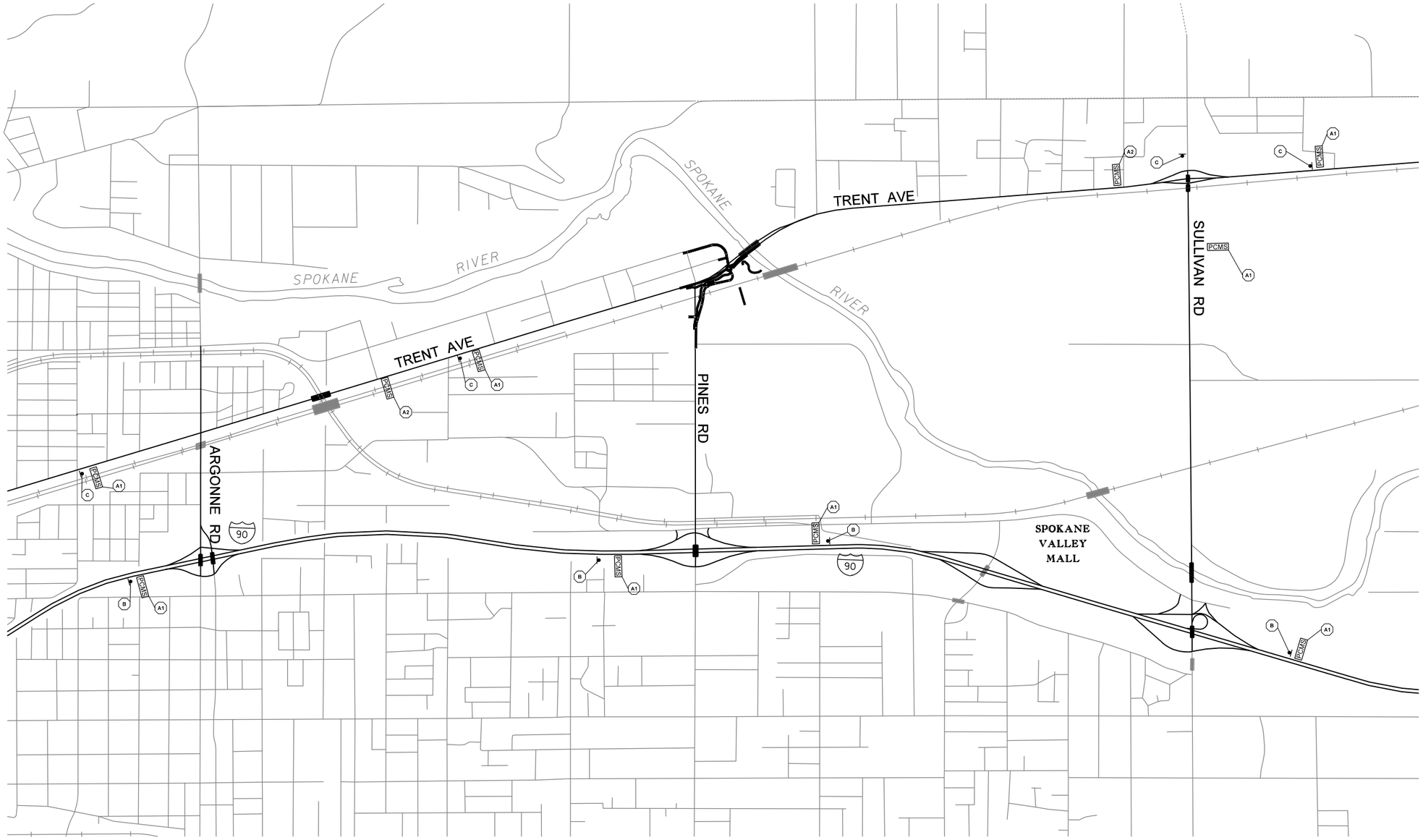
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

NOT TO SCALE



PCMS	
PHASE 1	PHASE 2
ROAD WORK AHEAD	HVY VEH USE ALT ROUTE
2.0 SEC	2.0 SEC

PCMS TO BE PLACED 2 WEEKS PRIOR TO CONSTRUCTION AND REMOVED AFTER WORK BEGINS

A1

PCMS	
PHASE 1	PHASE 2
RIGHT LANE CLOSURE	1 MILE AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE APPROXIMATELY 1 MILE IN ADVANCE OF LANE CLOSURE SIGNING

A2

120"

TRENT AVE
RESTRICTED AT
PINES ROAD.
THRU TRAFIC
USE ALT. ROUTE

90"

CUSTOM

B

120"

ROAD WORK
AT SR-27/PINES

THRU TRAFFIC
USE ALT. ROUTE

90"

CUSTOM

C

LEGEND

- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- CLASS A SIGN
- # — SIGN LOCATION & DESIGNATION

NOTES:

1. ALL SIGNS ARE CLASS A, UNLESS OTHERWISE NOTED.
2. ALL SIGNS ARE BLACK ON ORANGE, UNLESS OTHERWISE NOTED.
3. PLAN TO BE USED IN CONJUNCTION WITH PHASE SPECIFIC TRAFFIC CONTROL PLANS SHOWN ON SHEETS TC2 - TC13. SIGN LOCATION AND SPACING TO BE ADJUSTED AS NECESSARY TO PREVENT SIGN CLUTTER.

FILE NAME	c:\pwworking\west01\d2430814\PINES_PS_TC_002.dgn
TIME	11:14:00 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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CITY OF Spokane Valley

HDR

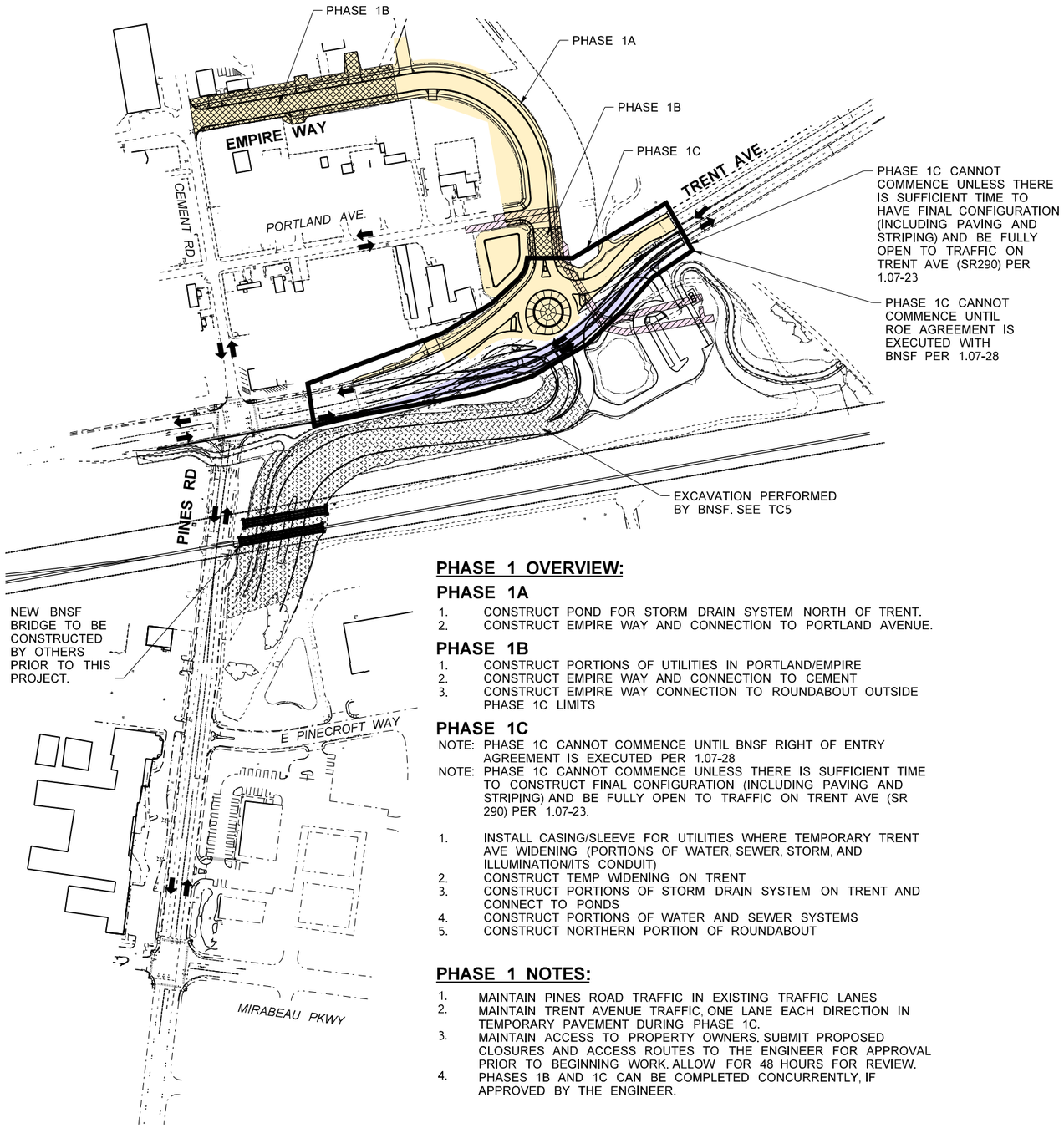
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

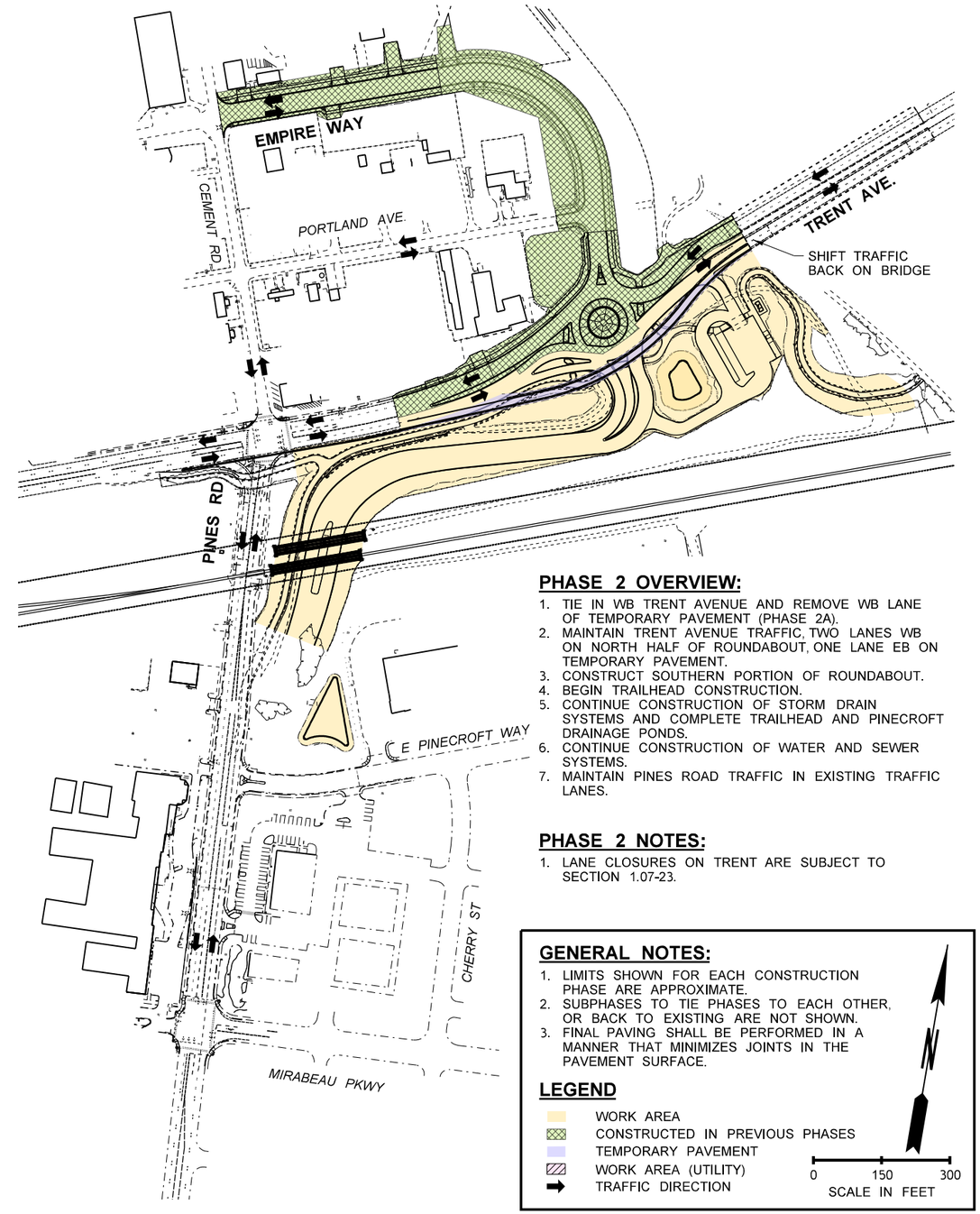
TRAFFIC CONTROL PLAN

Plot 1

PLAN REF NO
TC2

SHEET 187 OF 218 SHEETS





PHASE 1 OVERVIEW:

PHASE 1A

1. CONSTRUCT POND FOR STORM DRAIN SYSTEM NORTH OF TRENT.
2. CONSTRUCT EMPIRE WAY AND CONNECTION TO PORTLAND AVENUE.

PHASE 1B

1. CONSTRUCT PORTIONS OF UTILITIES IN PORTLAND/EMPIRE
2. CONSTRUCT EMPIRE WAY AND CONNECTION TO CEMENT
3. CONSTRUCT EMPIRE WAY CONNECTION TO ROUNDABOUT OUTSIDE PHASE 1C LIMITS

PHASE 1C

NOTE: PHASE 1C CANNOT COMMENCE UNTIL BNSF RIGHT OF ENTRY AGREEMENT IS EXECUTED PER 1.07-28

NOTE: PHASE 1C CANNOT COMMENCE UNLESS THERE IS SUFFICIENT TIME TO CONSTRUCT FINAL CONFIGURATION (INCLUDING PAVING AND STRIPING) AND BE FULLY OPEN TO TRAFFIC ON TRENT AVE (SR 290) PER 1.07-23.

1. INSTALL CASING/SLEEVE FOR UTILITIES WHERE TEMPORARY TRENT AVE WIDENING (PORTIONS OF WATER, SEWER, STORM, AND ILLUMINATION/ITS CONDUIT)
2. CONSTRUCT TEMP WIDENING ON TRENT
3. CONSTRUCT PORTIONS OF STORM DRAIN SYSTEM ON TRENT AND CONNECT TO PONDS
4. CONSTRUCT PORTIONS OF WATER AND SEWER SYSTEMS
5. CONSTRUCT NORTHERN PORTION OF ROUNDABOUT

PHASE 1 NOTES:

1. MAINTAIN PINES ROAD TRAFFIC IN EXISTING TRAFFIC LANES
2. MAINTAIN TRENT AVENUE TRAFFIC, ONE LANE EACH DIRECTION IN TEMPORARY PAVEMENT DURING PHASE 1C.
3. MAINTAIN ACCESS TO PROPERTY OWNERS. SUBMIT PROPOSED CLOSURES AND ACCESS ROUTES TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK. ALLOW FOR 48 HOURS FOR REVIEW.
4. PHASES 1B AND 1C CAN BE COMPLETED CONCURRENTLY, IF APPROVED BY THE ENGINEER.

PHASE 2 OVERVIEW:

1. TIE IN WB TRENT AVENUE AND REMOVE WB LANE OF TEMPORARY PAVEMENT (PHASE 2A).
2. MAINTAIN TRENT AVENUE TRAFFIC, TWO LANES WB ON NORTH HALF OF ROUNDABOUT, ONE LANE EB ON TEMPORARY PAVEMENT.
3. CONSTRUCT SOUTHERN PORTION OF ROUNDABOUT.
4. BEGIN TRAILHEAD CONSTRUCTION.
5. CONTINUE CONSTRUCTION OF STORM DRAIN SYSTEMS AND COMPLETE TRAILHEAD AND PINECROFT DRAINAGE PONDS.
6. CONTINUE CONSTRUCTION OF WATER AND SEWER SYSTEMS.
7. MAINTAIN PINES ROAD TRAFFIC IN EXISTING TRAFFIC LANES.

PHASE 2 NOTES:

1. LANE CLOSURES ON TRENT ARE SUBJECT TO SECTION 1.07-23.

GENERAL NOTES:

1. LIMITS SHOWN FOR EACH CONSTRUCTION PHASE ARE APPROXIMATE.
2. SUBPHASES TO TIE PHASES TO EACH OTHER, OR BACK TO EXISTING ARE NOT SHOWN.
3. FINAL PAVING SHALL BE PERFORMED IN A MANNER THAT MINIMIZES JOINTS IN THE PAVEMENT SURFACE.

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TEMPORARY PAVEMENT
- WORK AREA (UTILITY)
- TRAFFIC DIRECTION

N

0 150 300
SCALE IN FEET

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DATE	6/5/2025						
PLOTTED BY	EMCGUIRE				JOB NUMBER		
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/05/2025
DATE
P.E. STAMP BOX

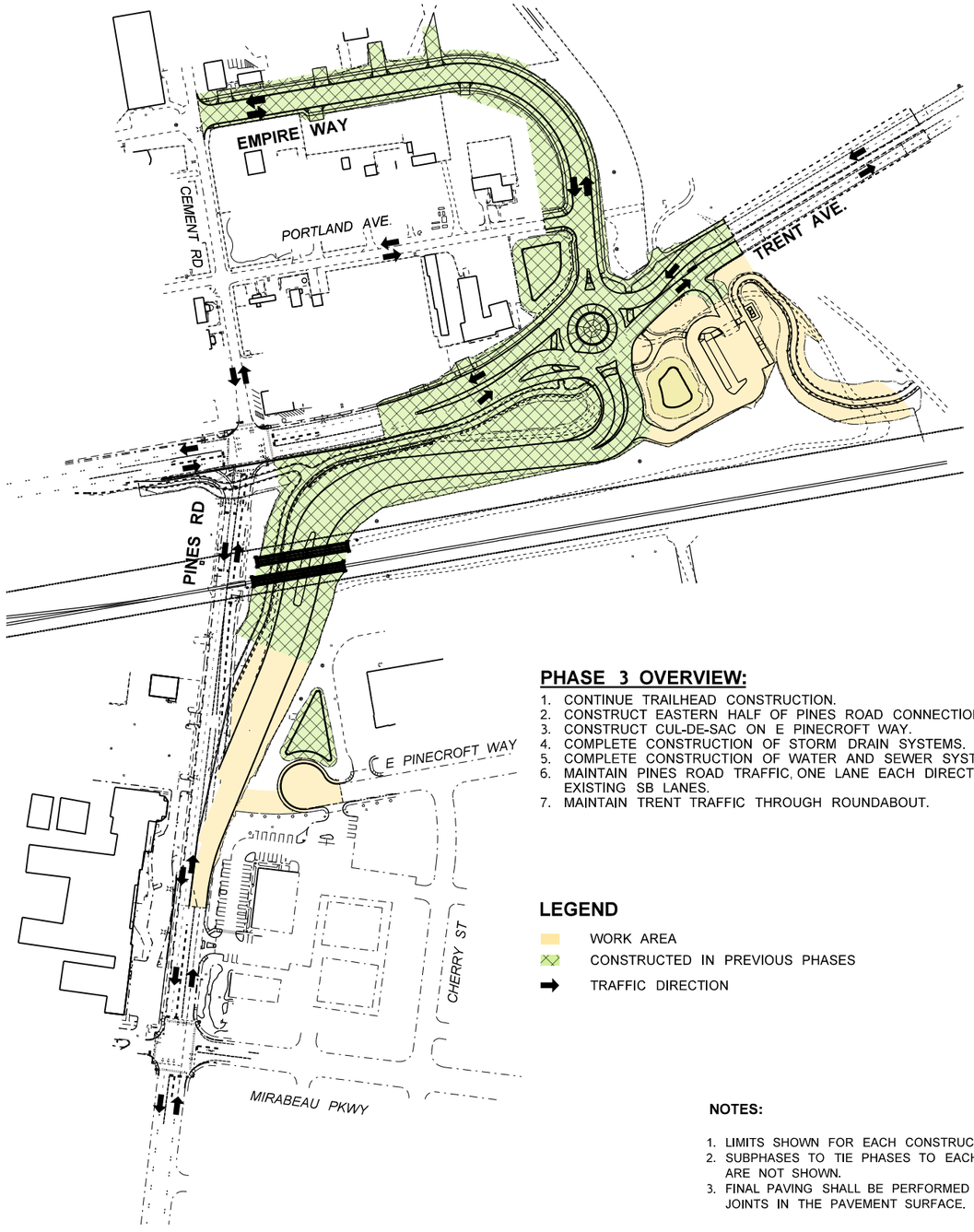
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN - OVERVIEW

Plot 1
PLAN REF NO TC3
SHEET 188 OF 218 SHEETS

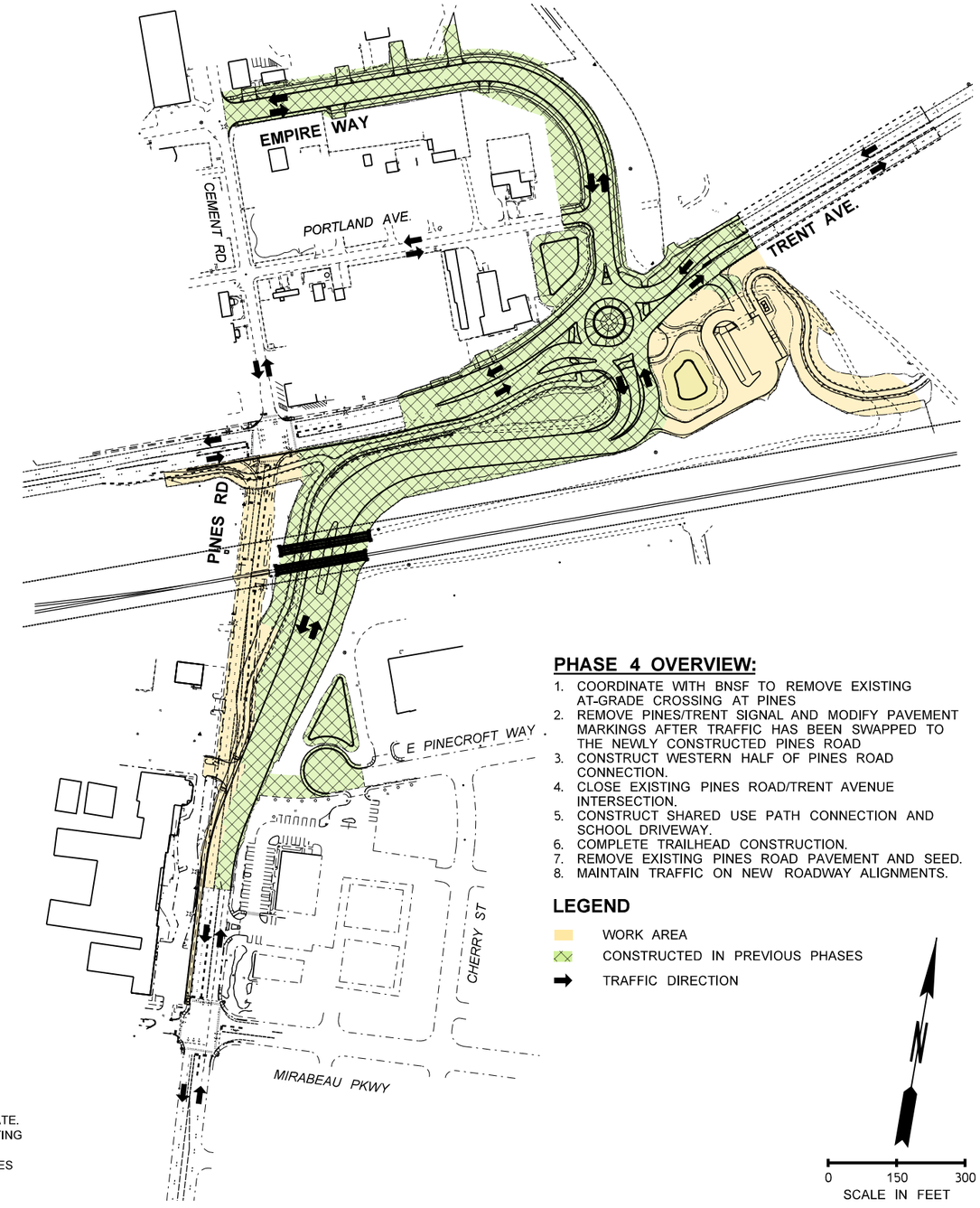


PHASE 3 OVERVIEW:

1. CONTINUE TRAILHEAD CONSTRUCTION.
2. CONSTRUCT EASTERN HALF OF PINES ROAD CONNECTION.
3. CONSTRUCT CUL-DE-SAC ON E PINECROFT WAY.
4. COMPLETE CONSTRUCTION OF STORM DRAIN SYSTEMS.
5. COMPLETE CONSTRUCTION OF WATER AND SEWER SYSTEMS.
6. MAINTAIN PINES ROAD TRAFFIC, ONE LANE EACH DIRECTION ON EXISTING SB LANES.
7. MAINTAIN TRENT TRAFFIC THROUGH ROUNDABOUT.

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TRAFFIC DIRECTION



PHASE 4 OVERVIEW:

1. COORDINATE WITH BNSF TO REMOVE EXISTING AT-GRADE CROSSING AT PINES
2. REMOVE PINES/TRENT SIGNAL AND MODIFY PAVEMENT MARKINGS AFTER TRAFFIC HAS BEEN SWAPPED TO THE NEWLY CONSTRUCTED PINES ROAD
3. CONSTRUCT WESTERN HALF OF PINES ROAD CONNECTION.
4. CLOSE EXISTING PINES ROAD/TRENT AVENUE INTERSECTION.
5. CONSTRUCT SHARED USE PATH CONNECTION AND SCHOOL DRIVEWAY.
6. COMPLETE TRAILHEAD CONSTRUCTION.
7. REMOVE EXISTING PINES ROAD PAVEMENT AND SEED.
8. MAINTAIN TRAFFIC ON NEW ROADWAY ALIGNMENTS.

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TRAFFIC DIRECTION

N

0 150 300
SCALE IN FEET

NOTES:

1. LIMITS SHOWN FOR EACH CONSTRUCTION PHASE ARE APPROXIMATE.
2. SUBPHASES TO TIE PHASES TO EACH OTHER, OR BACK TO EXISTING ARE NOT SHOWN.
3. FINAL PAVING SHALL BE PERFORMED IN A MANNER THAT MINIMIZES JOINTS IN THE PAVEMENT SURFACE.

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DATE	5/29/2025						
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

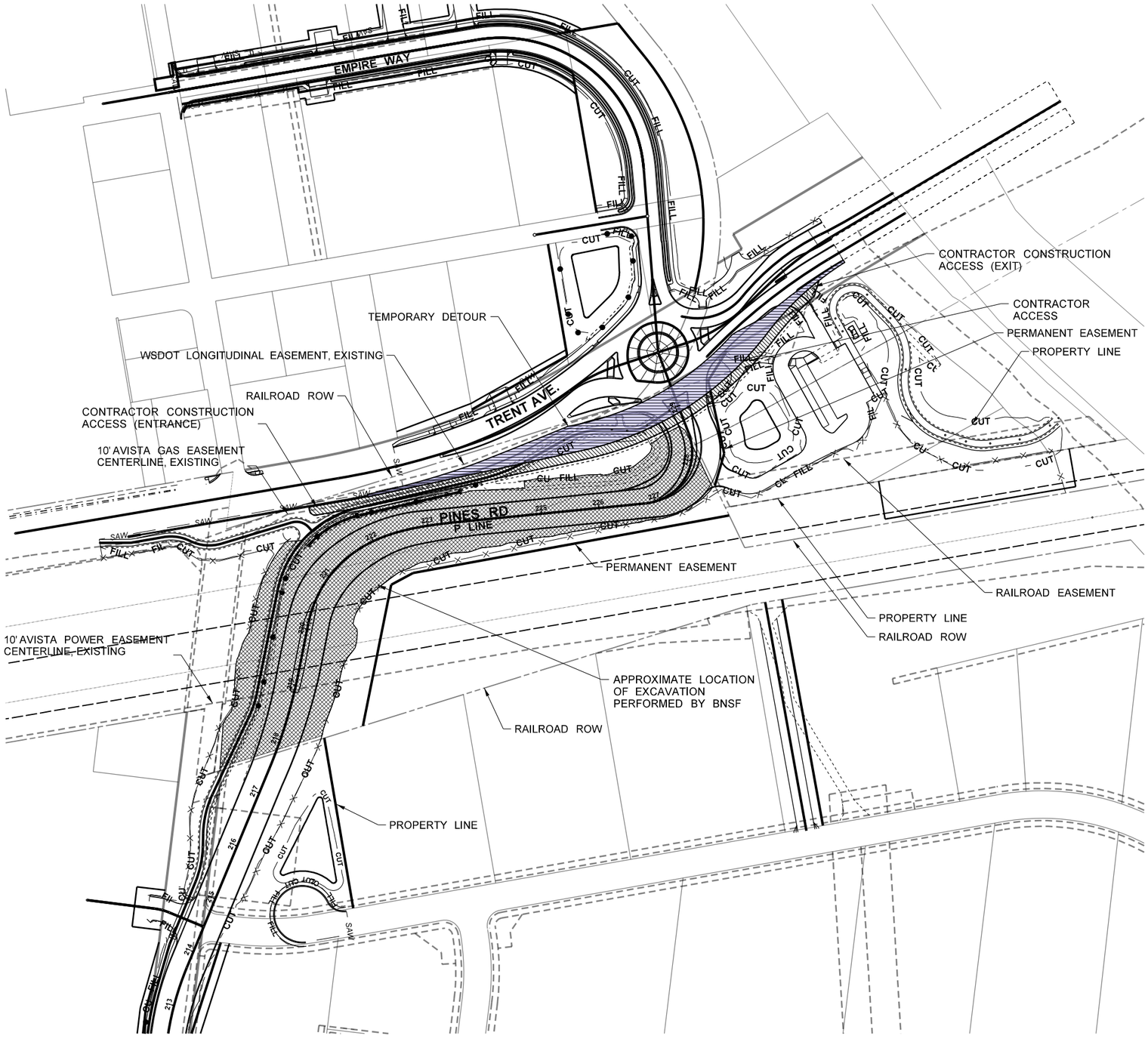
DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN - OVERVIEW

Plot 1
PLAN REF NO
TC4
SHEET 189 OF 218 SHEETS



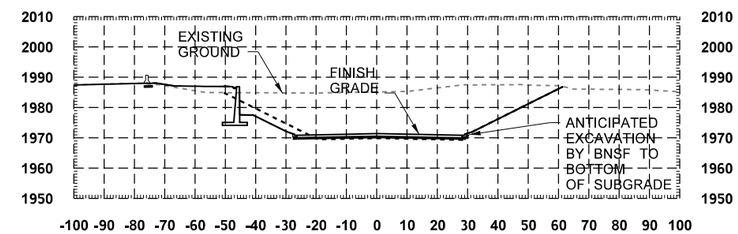
LEGEND

- TEMPORARY DETOUR
- CONTRACTOR ACCESS
- EXCAVATION PERFORMED BY BNSF

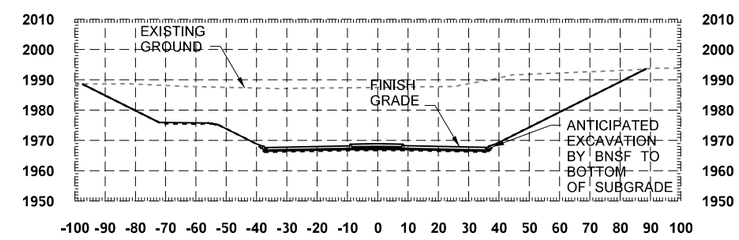
N

0 100 200
SCALE IN FEET

P-LINE SAMPLE CROSS-SECTIONS (FOR INFORMATION ONLY)



223+00



220+00

NOTES:

1. CROSS SECTIONS ARE FOR INFORMATION ONLY.
2. CONTRACTOR TO VERIFY LIMITS OF EXCAVATION PERFORMED BY BNSF PRIOR TO PERFORMING REMAINING EXCAVATION ACTIVITIES.
3. EXCAVATION PERFORMED BY BNSF WILL OCCUR CONCURRENTLY TO THIS CONTRACT.
4. CONTRACTOR WILL NOT HAVE ACCESS TO THE AREA TO BE EXCAVATED BY BNSF UNTIL APRIL 2026, UNLESS OTHERWISE APPROVED IN WRITING BY BNSF AND THE CITY OF SPOKANE VALLEY.

FILE NAME	c:\pwworking\west01\d2430814\PINES_PS_TC_005.dgn				REGION NO.	STATE	FED.AID PROJ.NO.
TIME	1:05:10 PM				10	WASH	STPUL 0027(020)
DATE	6/3/2025				JOB NUMBER		69A36525420110RASWA
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE				CONTRACT NO.		LOCATION NO.
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER
06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

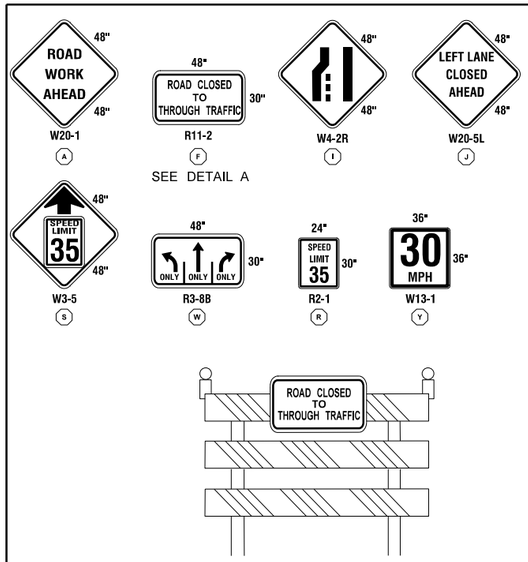
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN - OVERVIEW

Plot 1
PLAN REF NO
TC5
SHEET 190 OF 218 SHEETS

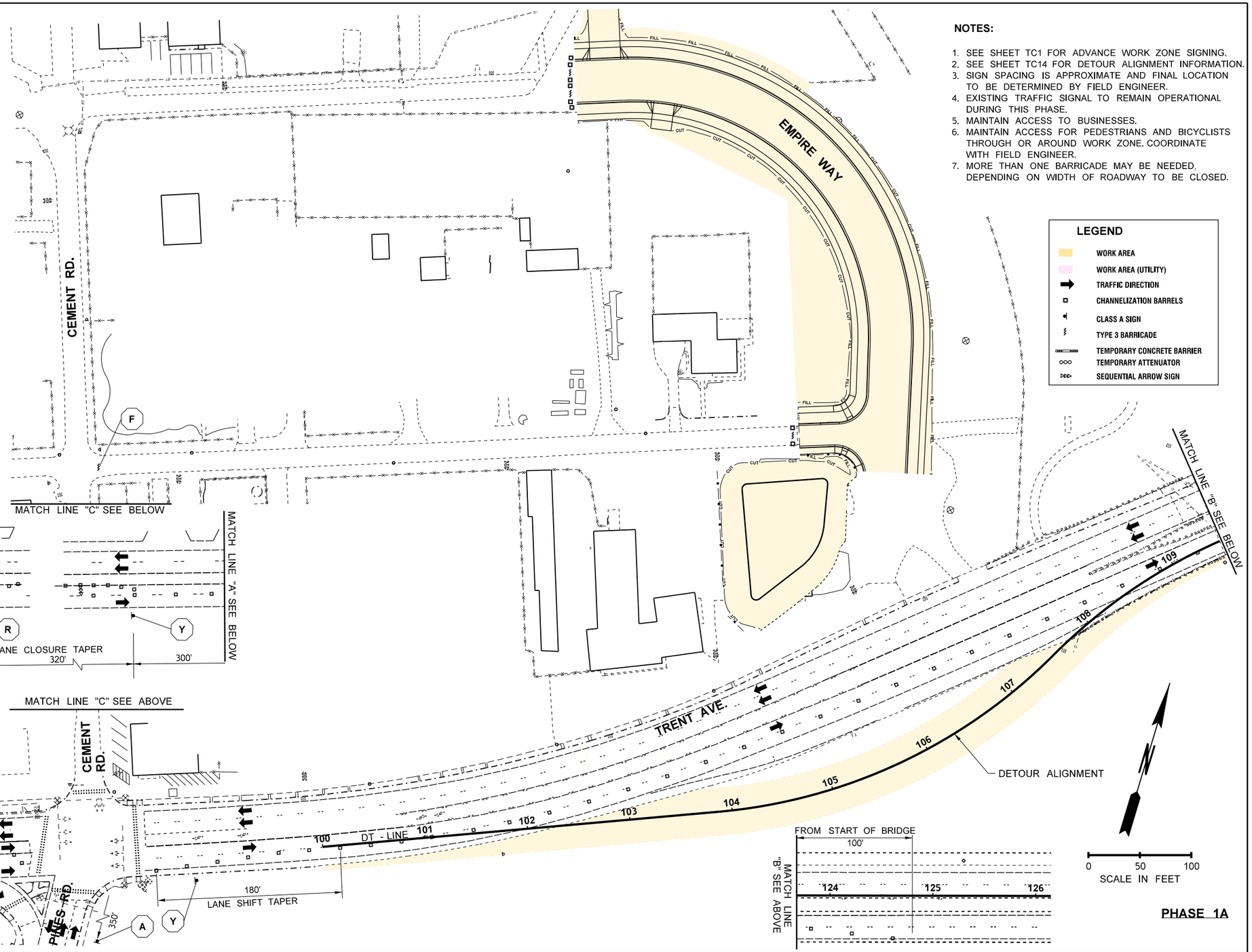


TYPE III BARRICADE

DETAIL A

NOTES:

1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SEE SHEET TC14 FOR DETOUR ALIGNMENT INFORMATION.
3. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
4. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
5. MAINTAIN ACCESS TO BUSINESSES.
6. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
7. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.



PHASE 1A

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TIME	11:15:24 AM				JOB NUMBER		
DATE	5/29/2025				CONTRACT NO.		LOCATION NO.
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC6
SHEET 191 OF 218 SHEETS

NOTES:

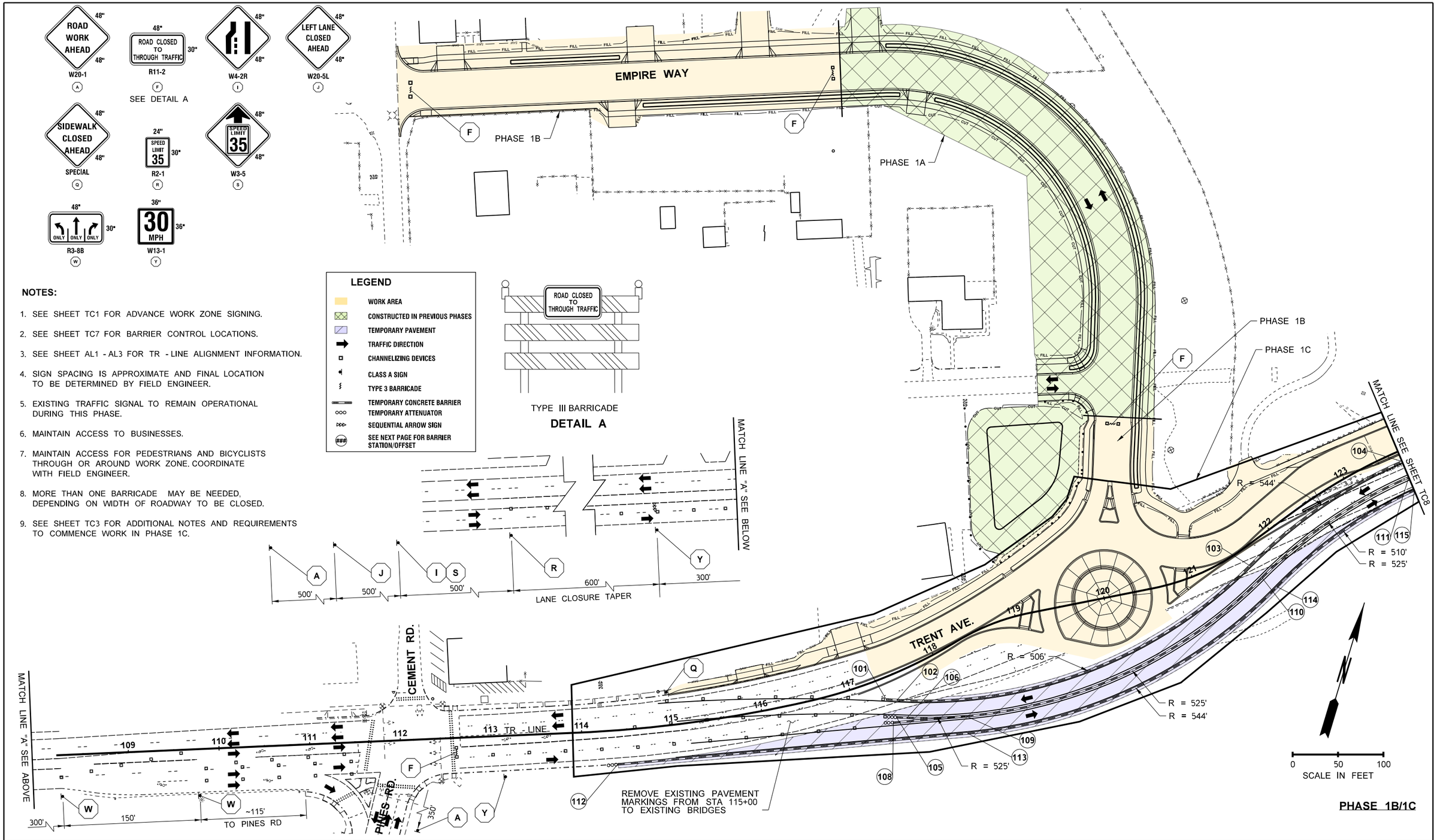
1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SEE SHEET TC7 FOR BARRIER CONTROL LOCATIONS.
3. SEE SHEET AL1 - AL3 FOR TR - LINE ALIGNMENT INFORMATION.
4. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
5. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
6. MAINTAIN ACCESS TO BUSINESSES.
7. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
8. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.
9. SEE SHEET TC3 FOR ADDITIONAL NOTES AND REQUIREMENTS TO COMMENCE WORK IN PHASE 1C.

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TEMPORARY PAVEMENT
- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN
- ### SEE NEXT PAGE FOR BARRIER STATION/OFFSET

TYPE III BARRICADE

DETAIL A



PHASE 1B/1C

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DATE	6/5/2025				JOB NUMBER		69A36525420110RASWA
PLOTTED BY	EMCGUIRE						69A36524420020RLDWA
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/05/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

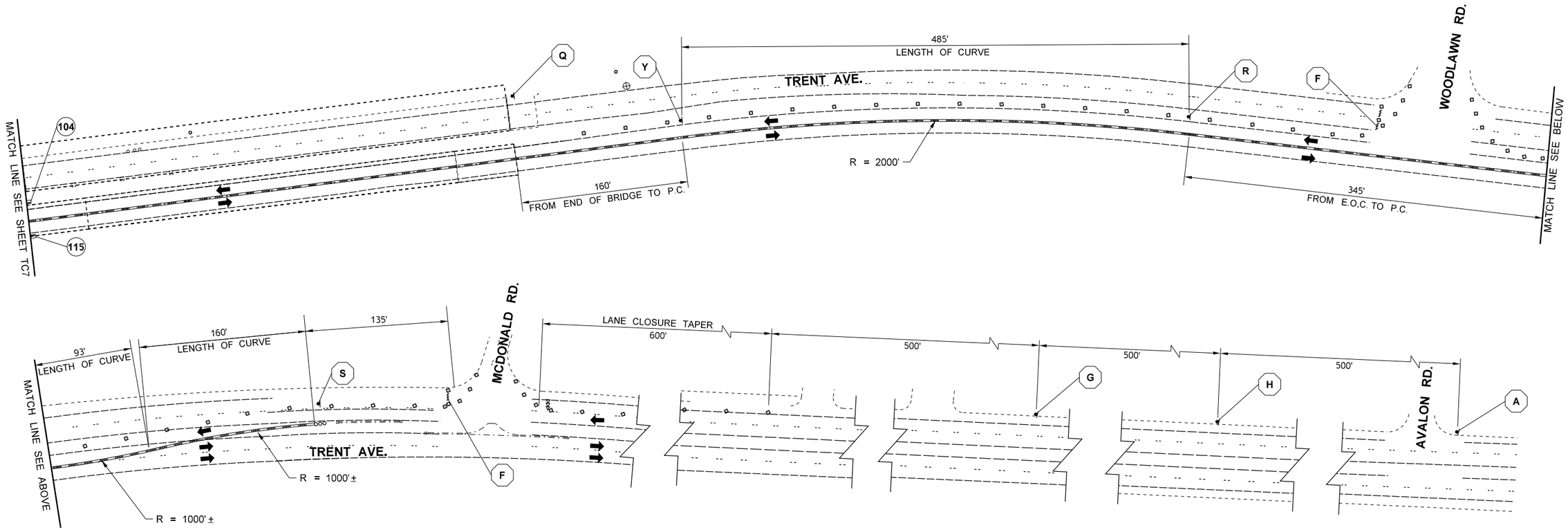
SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

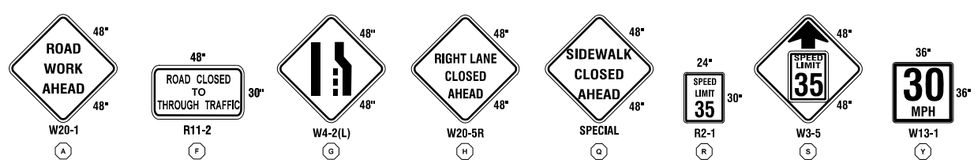
TRAFFIC CONTROL PLAN

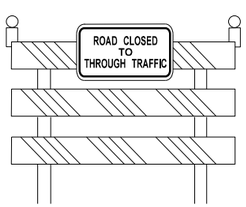
Plot 1

PLAN REF NO
TC7

SHEET 192 OF 218 SHEETS







TYPE III BARRICADE

DETAIL A

NOTES:

1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
3. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
4. MAINTAIN ACCESS TO BUSINESSES.
5. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
6. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.
7. SEE SHEET TC3 FOR ADDITIONAL NOTES AND REQUIREMENTS TO COMMENCE WORK IN PHASE 1C.

LEGEND

- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN

TEMPORARY CONCRETE BARRIER (PHASE 1B/2A)

POINT	STATION	OFFSET
101	TR 117+33.63	23.20' RT
102	TR 117+43.96	28.24' RT
103	TR 121+59.63	19.43' RT
104	TR 123+70.89	11.90' RT
105	TR 117+36.77	45.80' RT
106	TR 117+46.39	49.95' RT
107	-	-
108	TR 117+31.84	18.53' RT
109	TR 118+00.08	76.99' RT
110	TR 121+62.49	38.16' RT
111	TR 123+65.57	30.89' RT
112	TR 114+36.98	37.55' RT
113	TR 117+93.72	94.51' RT
114	TR 121+69.65	56.19' RT
115**	TR 123+71.34	46.30' RT

**CONNECT TEMPORARY CONCRETE BARRIER TO EXISTING BRIDGE RAILING WITH GUARDRAIL TRANSITION CONNECTION.

0 50 100
SCALE IN FEET

PHASE 1B/1C

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TIME	10:06:35 AM
DATE	6/5/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE
10	WASH

JOB NUMBER

CONTRACT NO.

FED.AID PROJ.NO.
STPUL 0027(020)
69A36525420110RASWA
69A36524420020RLDWA

LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED
PROFESSIONAL ENGINEER

06/05/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC8
SHEET 193 OF 218 SHEETS

NOTES:

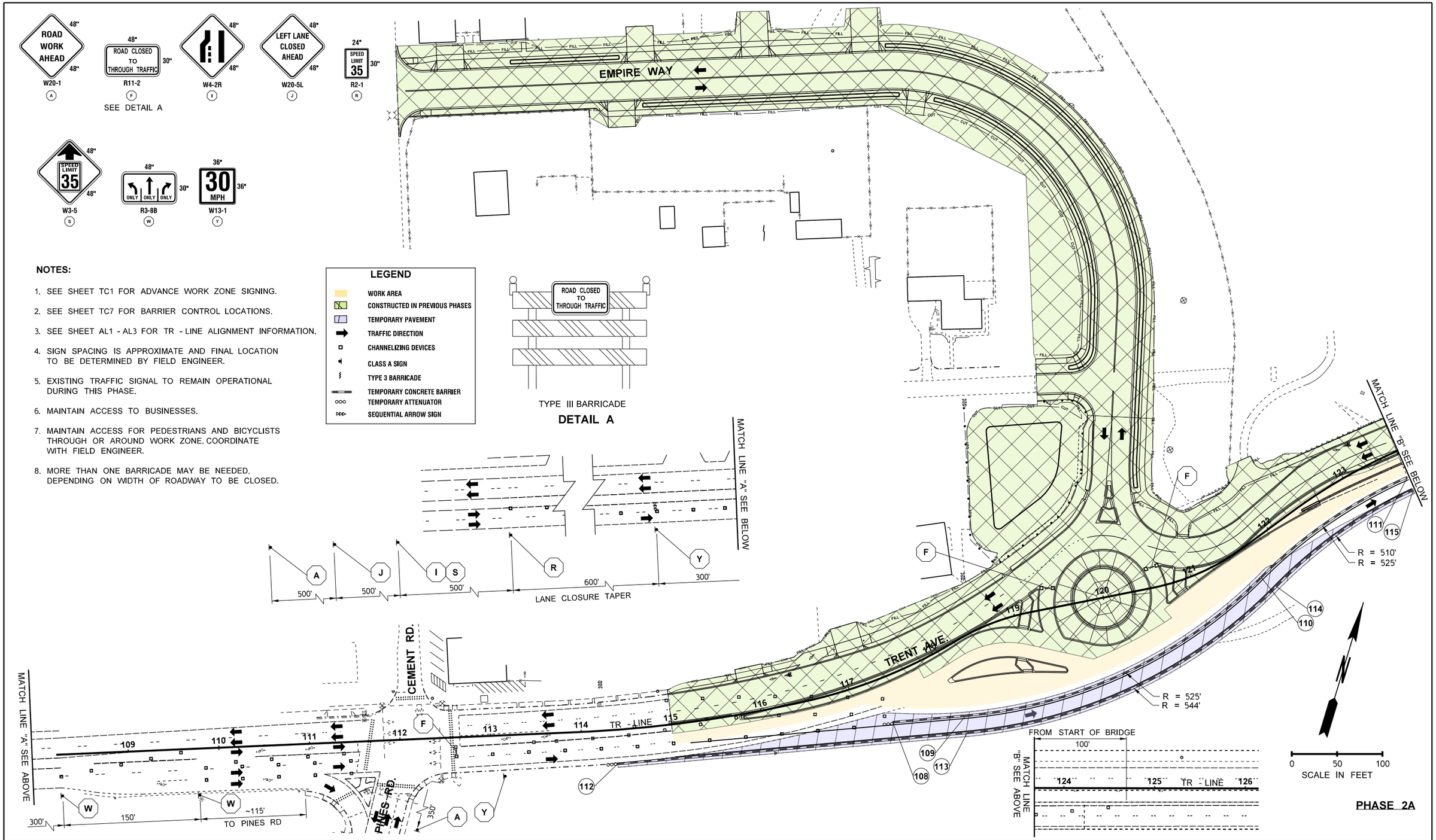
1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SEE SHEET TC7 FOR BARRIER CONTROL LOCATIONS.
3. SEE SHEET AL1 - AL3 FOR TR - LINE ALIGNMENT INFORMATION.
4. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
5. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
6. MAINTAIN ACCESS TO BUSINESSES.
7. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
8. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TEMPORARY PAVEMENT
- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN

TYPE III BARRICADE

DETAIL A



PHASE 2A

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DATE	5/29/2025				CONTRACT NO.		LOCATION NO.
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY						
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

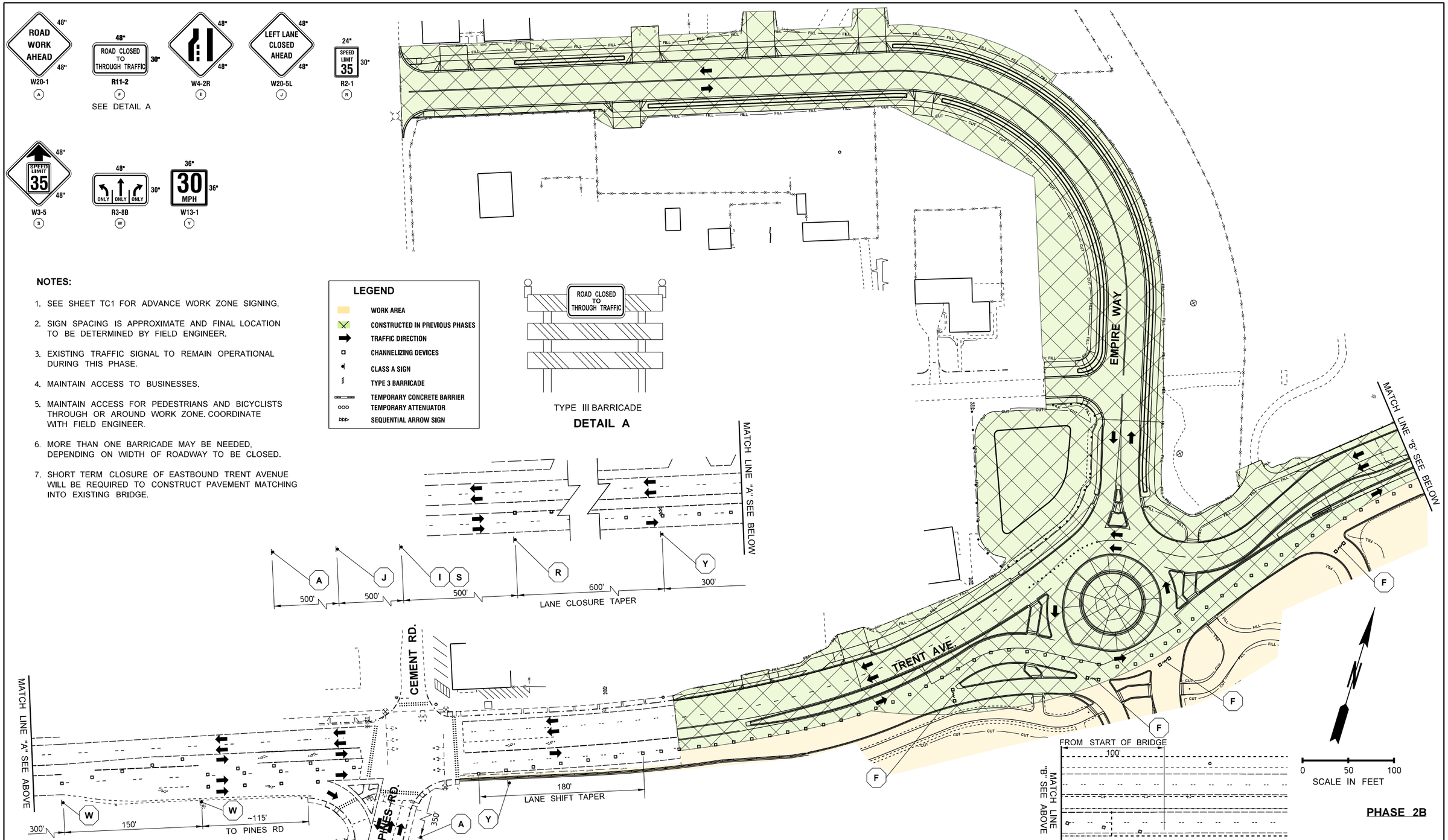
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC9
SHEET 194 OF 218 SHEETS



NOTES:

1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
3. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
4. MAINTAIN ACCESS TO BUSINESSES.
5. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
6. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.
7. SHORT TERM CLOSURE OF EASTBOUND TRENT AVENUE WILL BE REQUIRED TO CONSTRUCT PAVEMENT MATCHING INTO EXISTING BRIDGE.

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN

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TIME	11:16:33 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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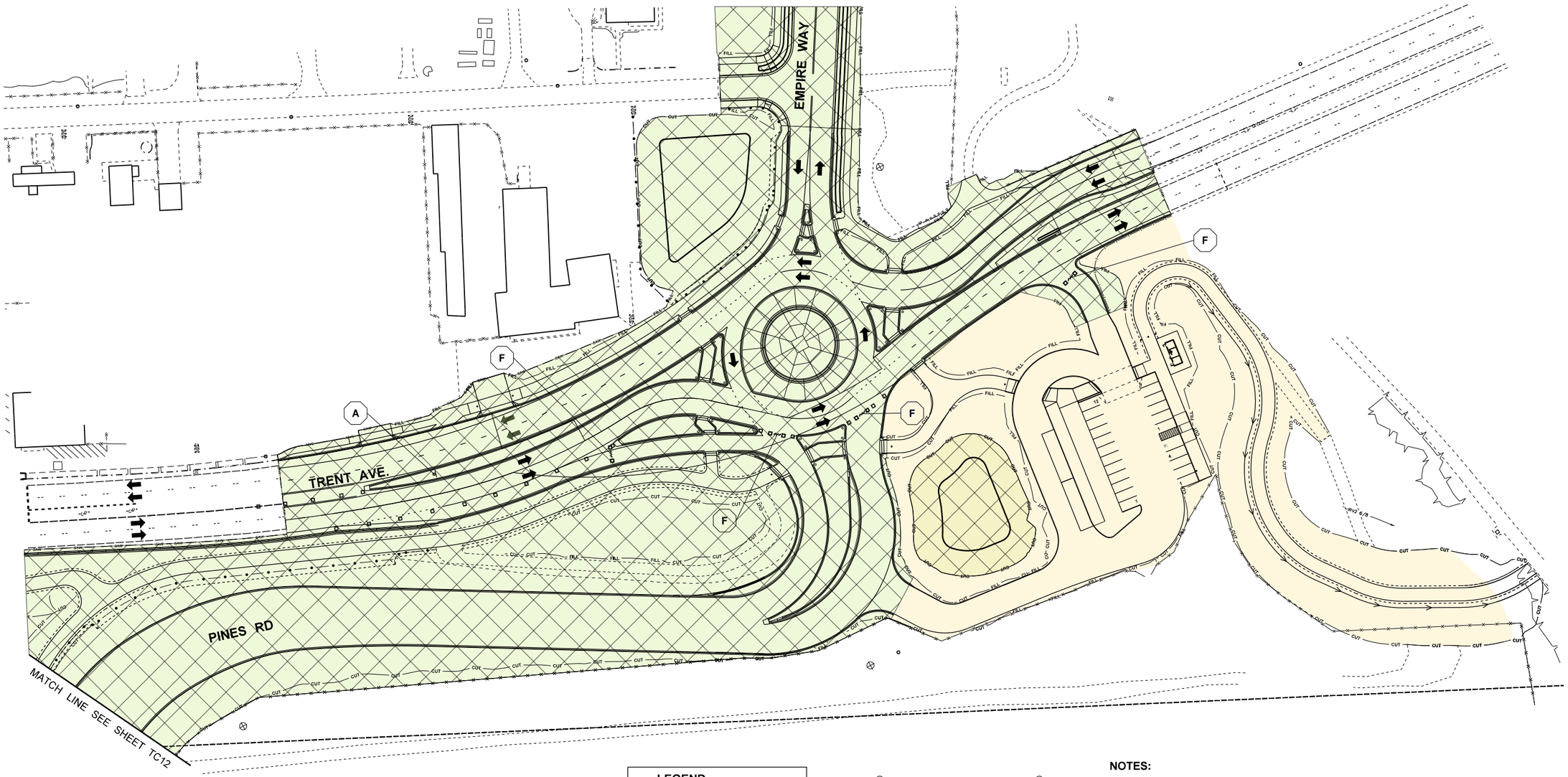
City of Spokane Valley

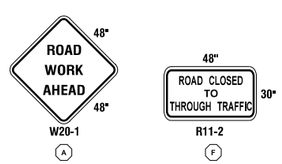
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC10
SHEET 195 OF 218 SHEETS

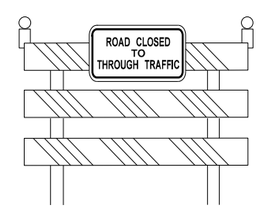




SEE DETAIL A

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN



TYPE III BARRICADE

DETAIL A

NOTES:

1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
3. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
4. MAINTAIN ACCESS TO BUSINESSES.
5. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
6. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.

N

0 50 100
SCALE IN FEET

PHASE 3

FILE NAME	c:\pwworking\west01\d2430814\PINES_PS_TC_011.dgn						
TIME	11:16:48 AM				REGION NO. 10	STATE WASH	FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
DATE	5/29/2025				JOB NUMBER		
PLOTTED BY	EMCGUIRE						
DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

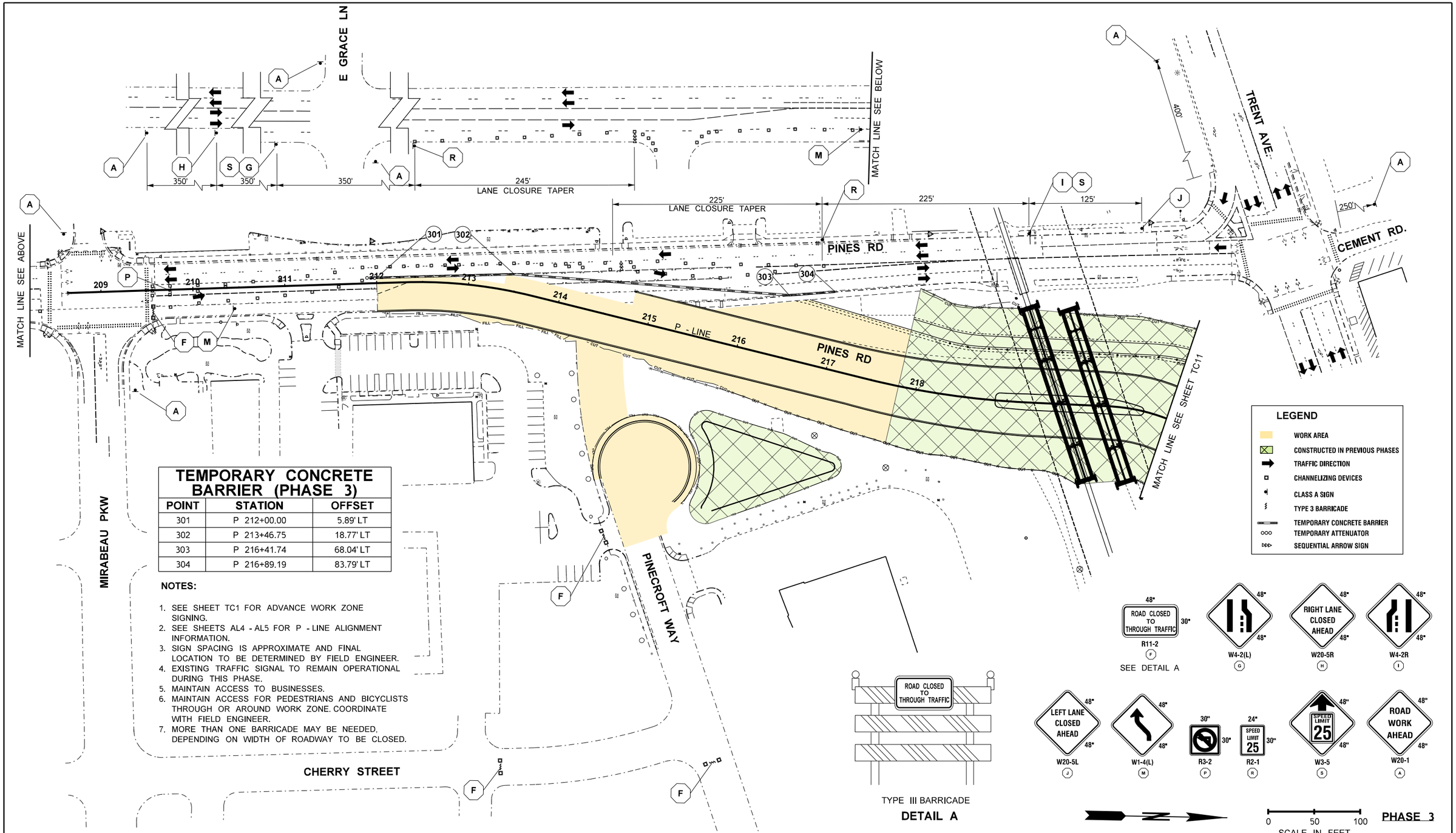
City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC11
SHEET 196 OF 218 SHEETS



LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN

TEMPORARY CONCRETE BARRIER (PHASE 3)

POINT	STATION	OFFSET
301	P 212+00.00	5.89' LT
302	P 213+46.75	18.77' LT
303	P 216+41.74	68.04' LT
304	P 216+89.19	83.79' LT

NOTES:

1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SEE SHEETS AL4 - AL5 FOR P - LINE ALIGNMENT INFORMATION.
3. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
4. EXISTING TRAFFIC SIGNAL TO REMAIN OPERATIONAL DURING THIS PHASE.
5. MAINTAIN ACCESS TO BUSINESSES.
6. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
7. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.

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PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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City of Spokane Valley

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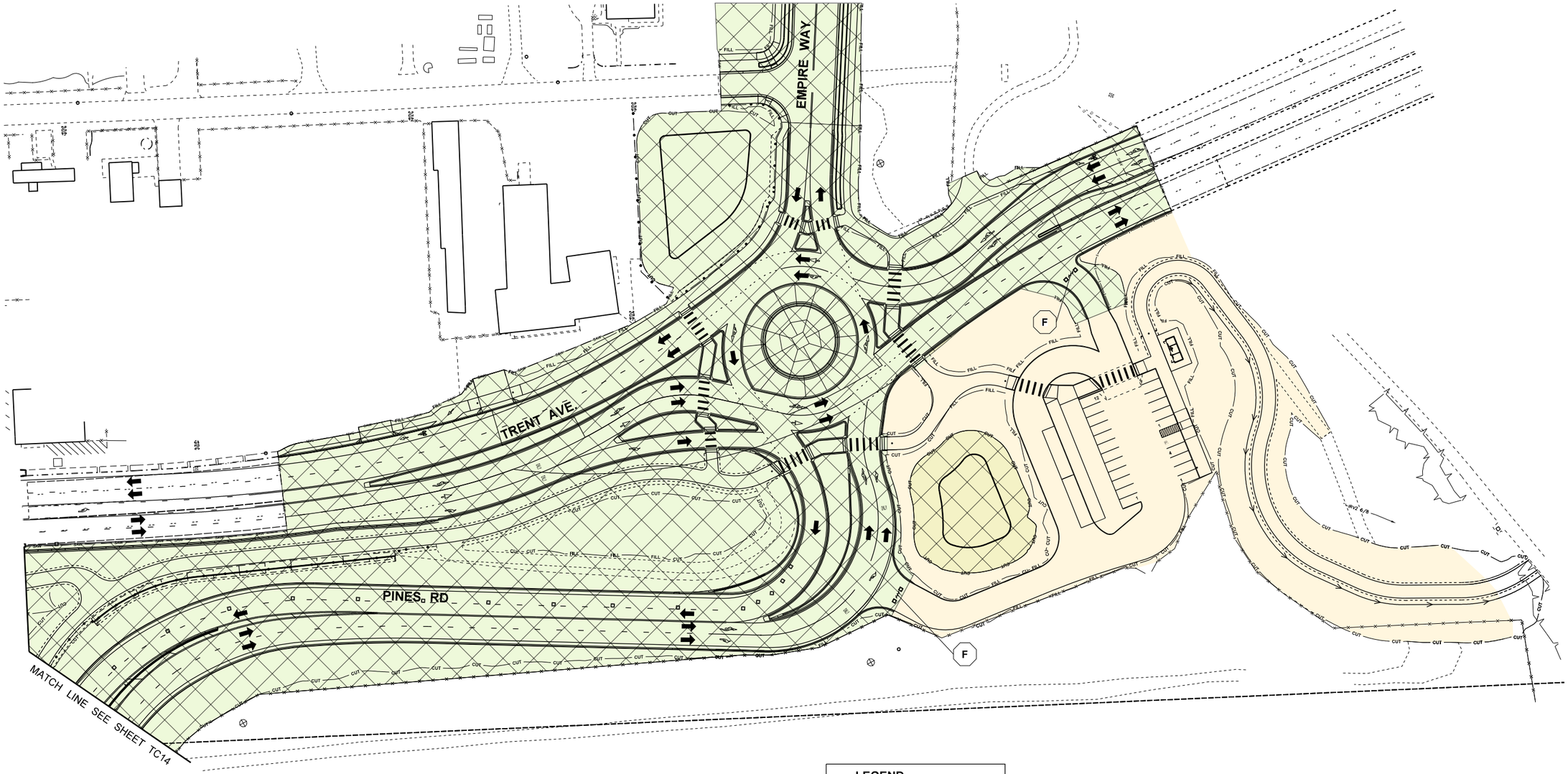
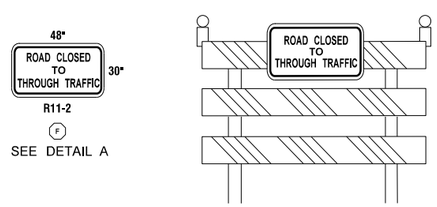
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC12
SHEET 197 OF 218 SHEETS





TYPE III BARRICADE

DETAIL A

LEGEND

- WORK AREA
- CONSTRUCTED IN PREVIOUS PHASES
- TRAFFIC DIRECTION
- CHANNELIZING DEVICES
- CLASS A SIGN
- TYPE 3 BARRICADE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY ATTENUATOR
- SEQUENTIAL ARROW SIGN

NOTES:

1. SEE SHEET TC1 FOR ADVANCE WORK ZONE SIGNING.
2. SIGN SPACING IS APPROXIMATE AND FINAL LOCATION TO BE DETERMINED BY FIELD ENGINEER.
3. MAINTAIN ACCESS FOR PEDESTRIANS AND BICYCLISTS THROUGH OR AROUND WORK ZONE. COORDINATE WITH FIELD ENGINEER.
4. MORE THAN ONE BARRICADE MAY BE NEEDED, DEPENDING ON WIDTH OF ROADWAY TO BE CLOSED.

0 50 100
SCALE IN FEET

PHASE 4

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DESIGNED BY	B KIRKMAN						
ENTERED BY	E MCGUIRE						
CHECKED BY	J FREY				CONTRACT NO.		LOCATION NO.
PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

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06/02/2025
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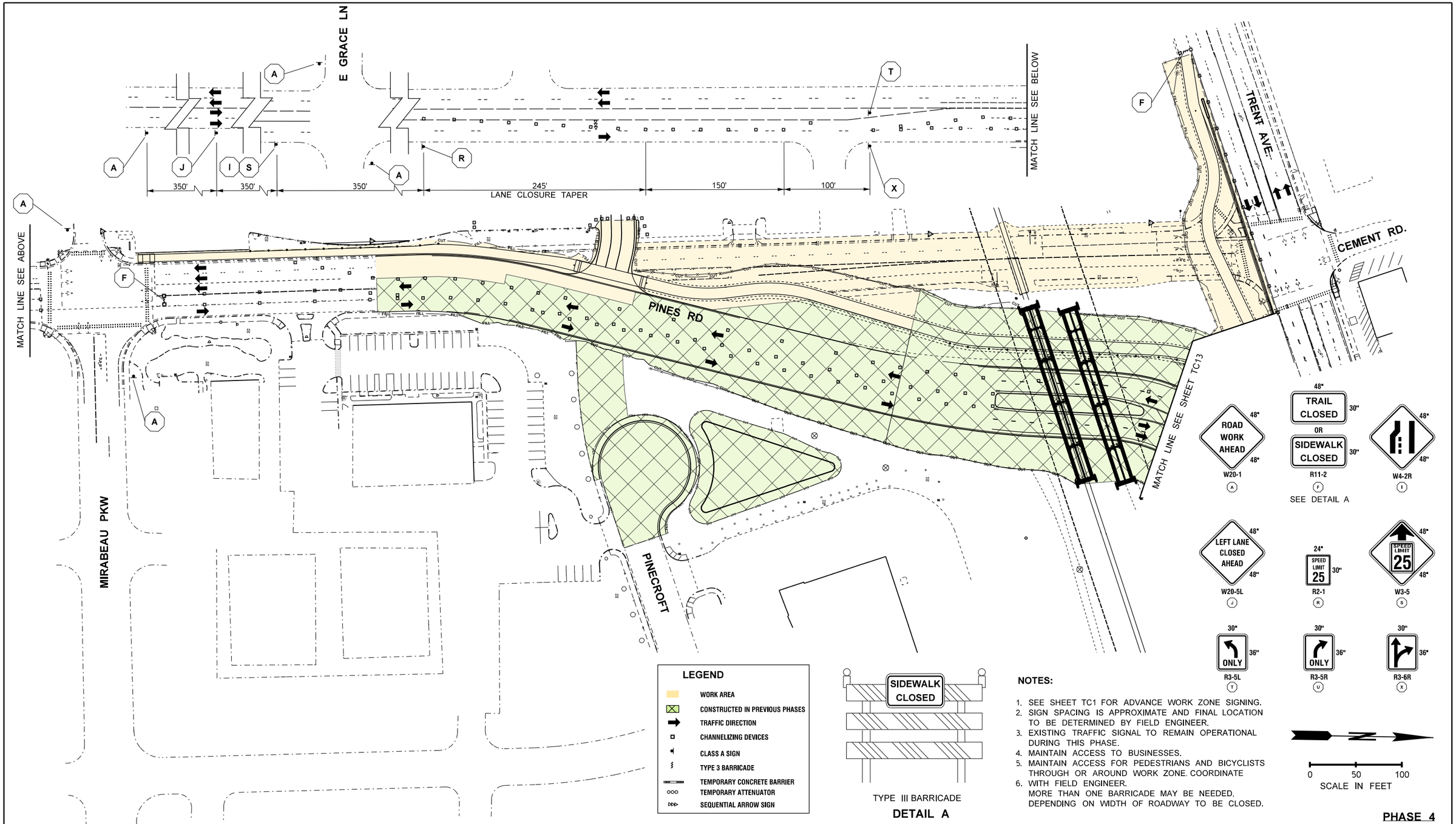
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO TC13
SHEET 198 OF 218 SHEETS



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DESIGNED BY	B KIRKMAN					
ENTERED BY	E MCGUIRE					
CHECKED BY	J FREY					
PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN — STATE OF WASHINGTON — 23013867 — REGISTERED PROFESSIONAL ENGINEER

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SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL PLAN

Plot 1
PLAN REF NO
TC14
SHEET 199 OF 218 SHEETS

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R

HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R

NO SPECIFIED DISTANCE REQUIRED

SIGN SPACING = X (1)

RURAL ROADS	45 / 55 MPH	500'±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350'±
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25 / 30 MPH	200'± (2)
URBAN STREETS	25 MPH OR LESS	100'± (2)

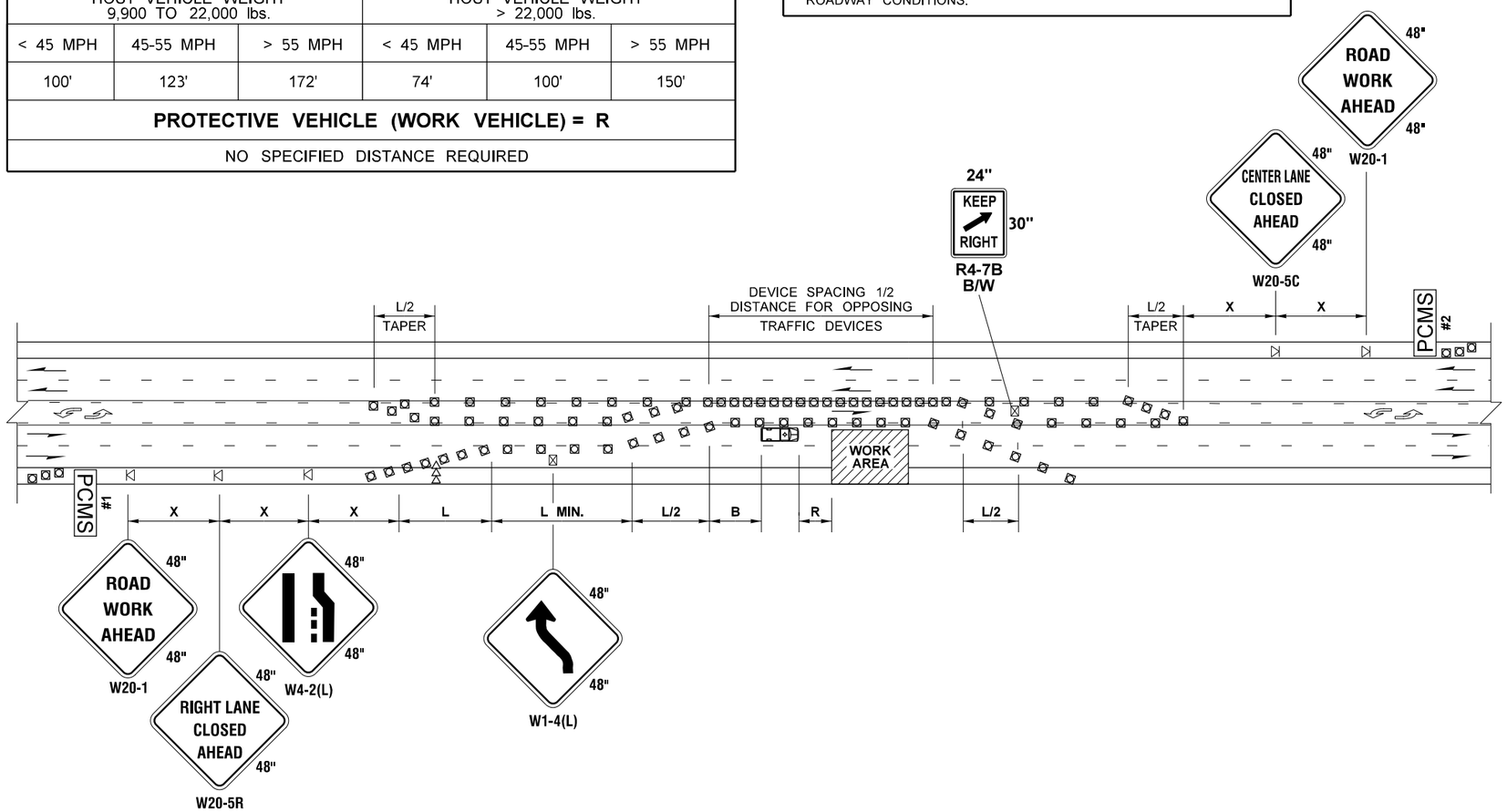
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM TAPER LENGTH = L (feet)

LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	-	-	-	-
11	115	165	225	295	495	550	-	-	-	-
12	125	180	245	320	540	600	-	-	-	-

CHANNELIZATION DEVICE SPACING (feet)

MPH	TAPER	TANGENT
50	40	80
35/45	30	60
25/30	20	40



PCMS #1	
1	2
RIGHT LANE CLOSURE	1 MILE AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.

PCMS #2	
1	2
CENTER LANE CLOSED	NNO LEFT TURNING
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.

LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

NOTES

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
3. FOR POSTED SPEED LIMITS OF 30 MPH OR LESS, USE SIGN W1-3 IN LIEU OF SIGN W1-4.
4. ALL SIGNS ARE BLACK ON ORANGE UNSLESS OTHERWISE DESIGNATED.

RIGHT LANE CLOSURE WITH SHIFT - 5 LANE ROADWAY

NOT TO SCALE

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TIME	11:18:02 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION | DATE | BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
JOB NUMBER		
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
06/02/2025
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P.E. STAMP BOX

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City of Spokane Valley
HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL TYPICAL PLAN

Plot 1
PLAN REF NO
TCP1
SHEET 200 OF 218 SHEETS

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R

HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

PROTECTIVE VEHICLE (WORK VEHICLE) = R

NO SPECIFIED DISTANCE REQUIRED

SIGN SPACING = X (1)

RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

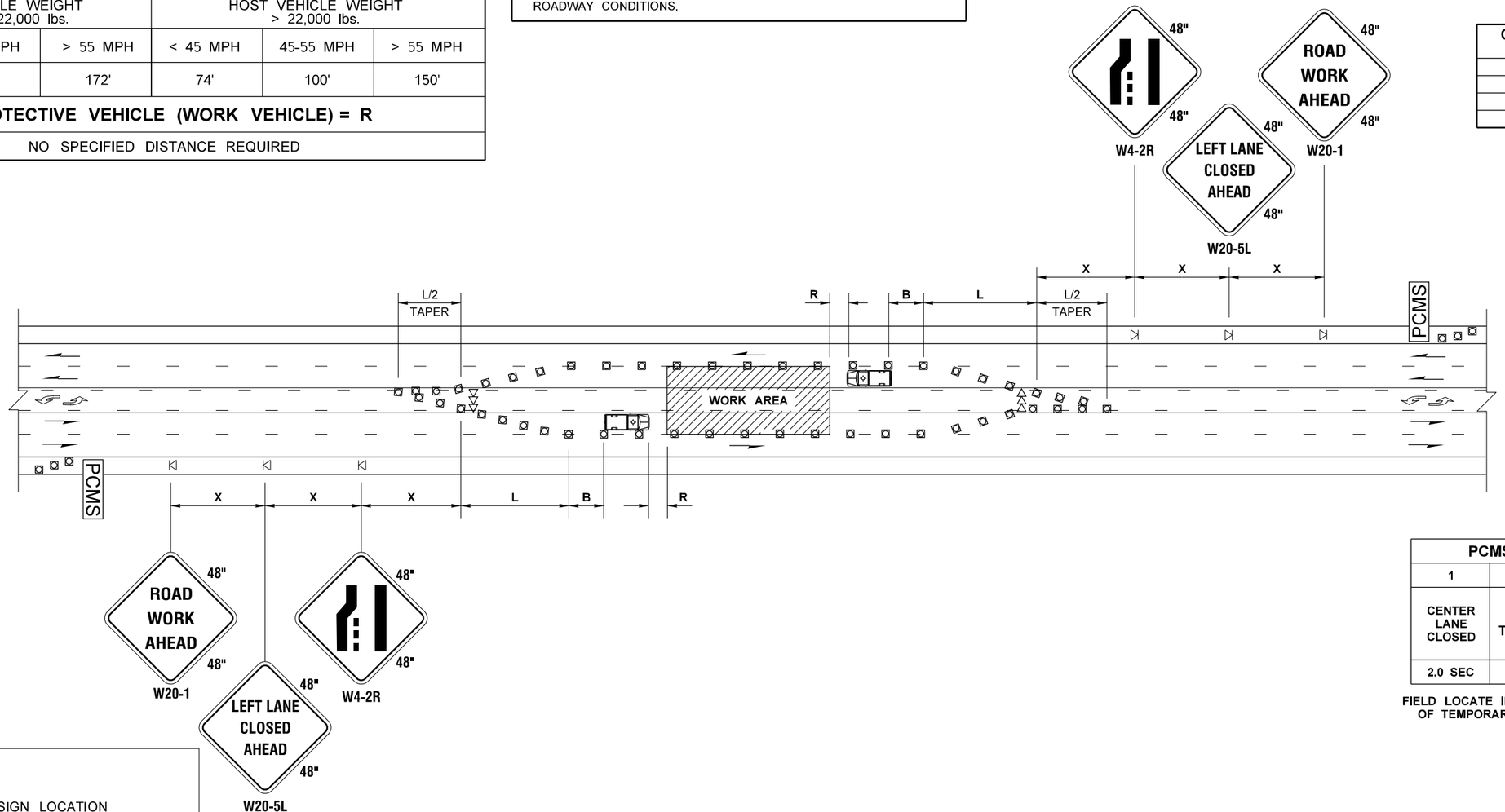
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

MINIMUM TAPER LENGTH = L (feet)

LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	-	-	-	-
11	115	165	225	295	495	550	-	-	-	-
12	125	180	245	320	540	600	-	-	-	-

CHANNELIZATION DEVICE SPACING (feet)

MPH	TAPER	TANGENT
50	40	80
35/45	30	60
25/30	20	40



PCMS	
1	2
CENTER LANE CLOSED	NNO LEFT TURNING
2.0 SEC	2.0 SEC

FIELD LOCATE IN ADVANCE OF TEMPORARY SIGNS.

LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

LEFT LANE AND CENTER TURN LANE CLOSURE - 5 LANE ROADWAY

NOT TO SCALE

NOTES

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
2. ALL SIGNS ARE BLACK ON ORANGE.

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REVISION | DATE | BY

REGION NO. 10 | STATE WASH | FED.AID PROJ.NO. STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA

JOB NUMBER

CONTRACT NO. | LOCATION NO.

BRENT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER
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PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL TYPICAL PLAN

Plot 1
PLAN REF NO TCP2
SHEET 201 OF 218 SHEETS

CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50/70	40	80
35/45	30	60
25/30	20	40

MINIMUM TAPER LENGTH = L (feet)

LANE WIDTH (feet)	Posted Speed (mph)									
	25	30	35	40	45	50	55	60	65	70
10	105	150	205	270	450	500	550	-	-	-
11	115	165	225	295	495	550	605	660	-	-
12	125	180	245	320	540	600	660	720	-	-

BUFFER DATA

LONGITUDINAL BUFFER SPACE = B

SPEED (MPH)	25	30	35	40	45	50	55	60	65	70
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730

TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R

HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs.			HOST VEHICLE WEIGHT > 22,000 lbs.		
< 45 MPH	45-55 MPH	> 55 MPH	< 45 MPH	45-55 MPH	> 55 MPH
100'	123'	172'	74'	100'	150'

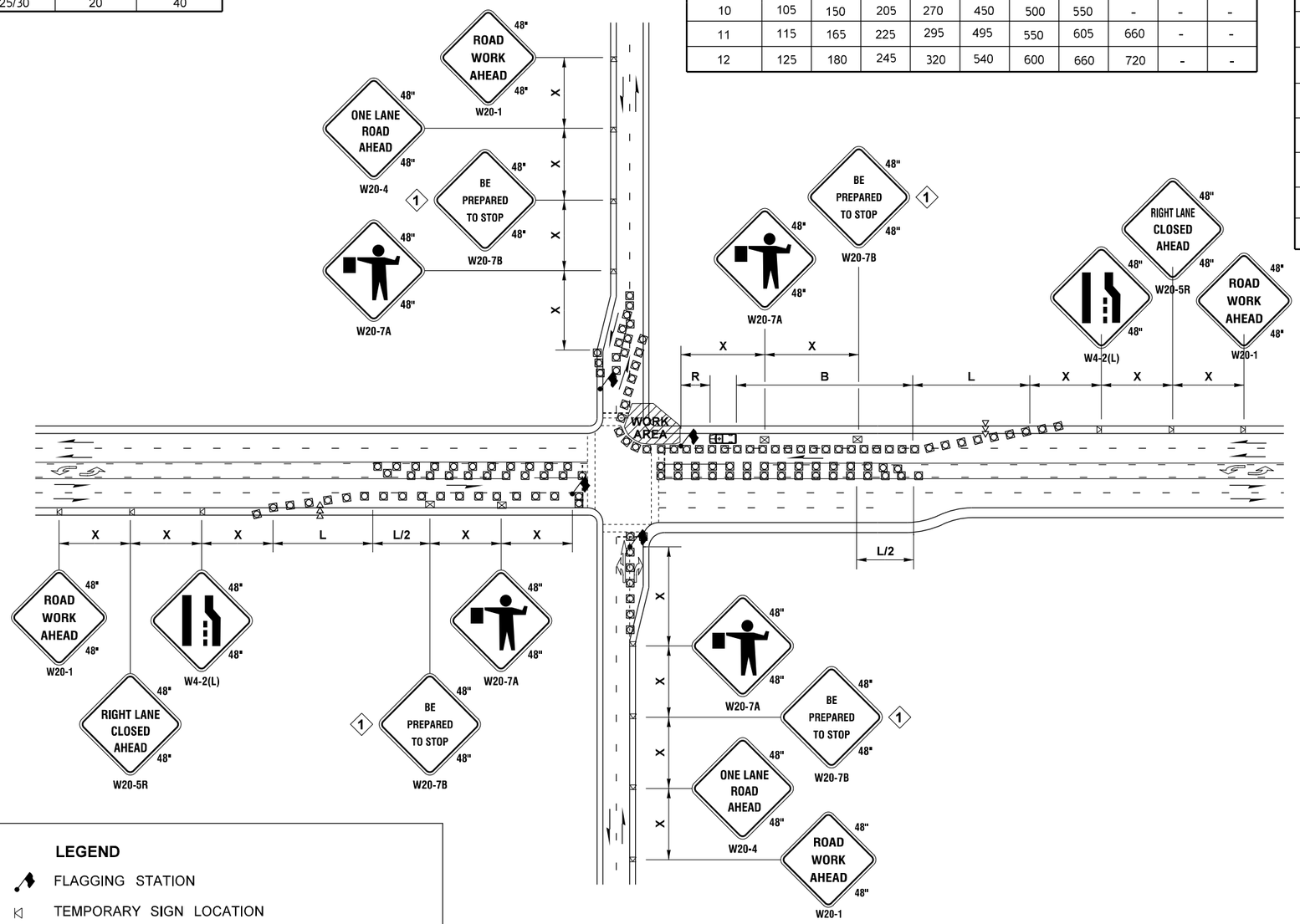
PROTECTIVE VEHICLE (WORK VEHICLE) = R

NO SPECIFIED DISTANCE REQUIRED

SIGN SPACING = X (1)

RURAL HIGHWAYS	60 / 65 MPH	800' ±
RURAL ROADS	45 / 55 MPH	500' ±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350' ±
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25 / 30 MPH	200' ± (2)
URBAN STREETS	25 MPH OR LESS	100' ± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



1 OPTIONAL IF 40 MPH OR LESS

LEGEND

- FLAGGING STATION
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- SEQUENTIAL ARROW SIGN
- PROTECTIVE VEHICLE - RECOMMENDED
- TEMPORARY SIGN LOCATION (5' MOUNTING HEIGHT)

NOTES

1. RECOMMEND EXTENDING DEVICE TAPER (L/3) ACROSS SHOULDER.
2. IF A SIGNAL IS PRESENT, IT SHALL BE SET TO "RED FLASH MODE" OR TURNED OFF DURING FLAGGING OPERATIONS.
3. MAINTAIN A MINIMUM OF ONE ACCESS POINT FOR EACH BUSINESS WITHIN WORK AREA LIMITS.
4. ALL SIGNS ARE BLACK ON ORANGE.

INTERSECTION LANE CLOSURE - FIVE LANE ROADWAY

NOT TO SCALE

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REGIONAL ADM.	

REVISION	DATE	BY

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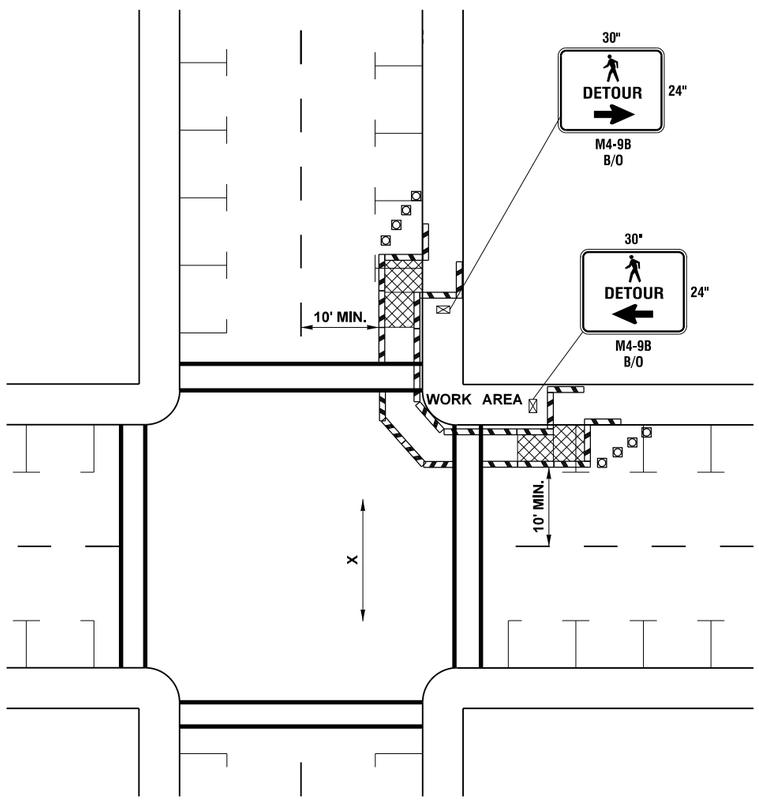
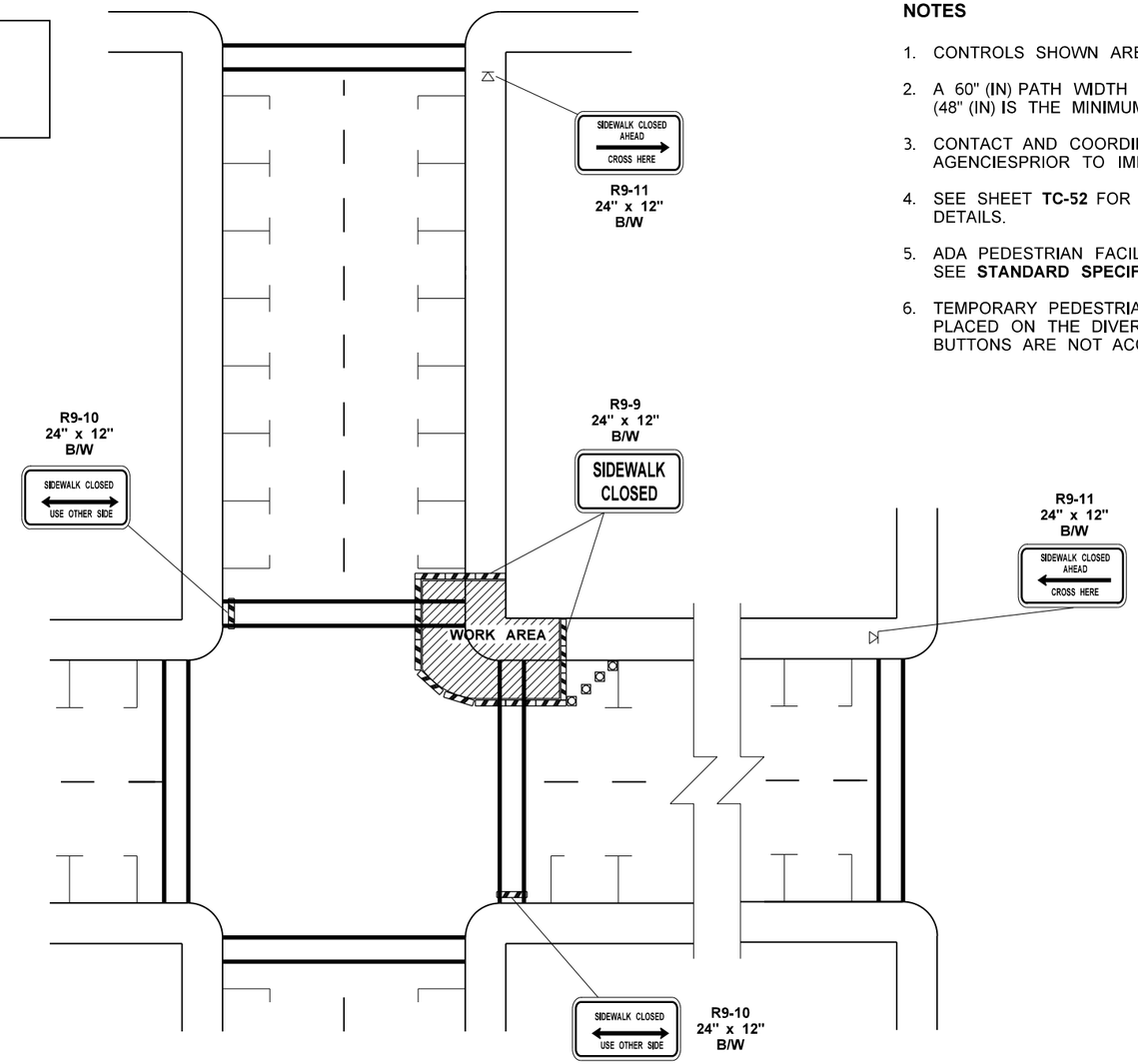
TRAFFIC CONTROL TYPICAL PLAN

Plot 1
PLAN REF NO
TCP3
SHEET 202 OF 218 SHEETS

NO PARKING	R8-3 24" x 30" R/W	INSTALL ON TYPE 2 BARRICADES THROUGHOUT THE WORK AREA 24 HOURS PRIOR TO IMPLEMENTING TRAFFIC CONTROL. PRIOR NOTIFICATION OF LOCAL LAW ENFORCEMENT REQUIRED.



SIDEWALK DIVERSION



SIDEWALK DETOUR

NOTES

1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
2. A 60" (IN) PATH WIDTH SHOULD BE MAINTAINED (48" (IN) IS THE MINIMUM).
3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIESPRIOR TO IMPLEMENTING ANY CLOSURES.
4. SEE SHEET **TC-52** FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
5. ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED. SEE **STANDARD SPECIFICATION 1-10.2(1)B.**
6. TEMPORARY PEDESTRIAN PUSH BUTTONS SHALL BE PLACED ON THE DIVERTED PATH WHEN EXISTING BUTTONS ARE NOT ACCESSIBLE TO PEDESTRIANS.

LEGEND

- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PEDESTRIAN CHANNELIZING DEVICES
- TEMPORARY PEDESTRIAN RAMP FOR SIDEWALKS

INTERSECTION PEDESTRIAN TRAFFIC CONTROL

NOT TO SCALE

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DATE	5/29/2025
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DESIGNED BY	B KIRKMAN
ENTERED BY	E MCGUIRE
CHECKED BY	J FREY
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020) 69A36525420110RASWA 69A36524420020RLDWA
JOB NUMBER		
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PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL TYPICAL PLAN

Plot 1
PLAN REF NO
TCP4
SHEET 203 OF 218 SHEETS

mPCMS	
1	2
RIGHT LANE CLOSURE	1 MILE AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE 1± MILE PRIOR TO CLOSURE TAPER PER STD. SPEC. 1-10.3(3)C.

OR

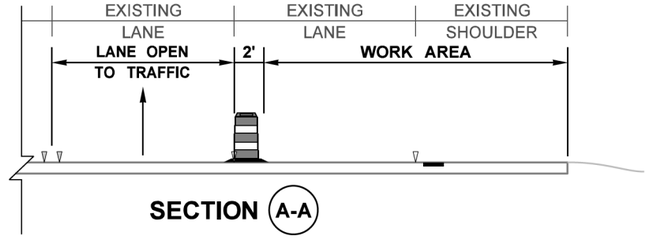
mPCMS - ALT 1		
1	2	3
RIGHT LANE CLOSURE	WATCH FOR SLOW TRAFFIC	NEXT # MILES
1.5 SEC	1.5 SEC	1.5 SEC

USE IF TRAFFIC BACKUPS EXPECTED, BUT NOT VERIFIED HOURLY BY TCS.

mPCMS		
1	2	3
RIGHT LANE CLOSURE	SLOW TRAFFIC AHEAD	NEXT # MILES
1.5 SEC	1.5 SEC	1.5 SEC

ONLY USED IF TCS VERIFIES HOURLY THAT TRAFFIC BACKUPS ARE PRESENT.

FIELD LOCATE 1± MILE PRIOR TO CLOSURE TAPER OR UPSTREAM OF EXPECTED MAXIMUM TRAFFIC QUEUE PER STD. SPEC. 1-10.3(3)C.



RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-65 MPH	800'±
RURAL ROADS	45-55 MPH	500'±

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT LESS THAN 22,000 lbs.		HOST VEHICLE WEIGHT 22,000+ lbs.	
45-55 MPH	60+ MPH	45-55 MPH	60+ MPH
123'	172'	100'	150'

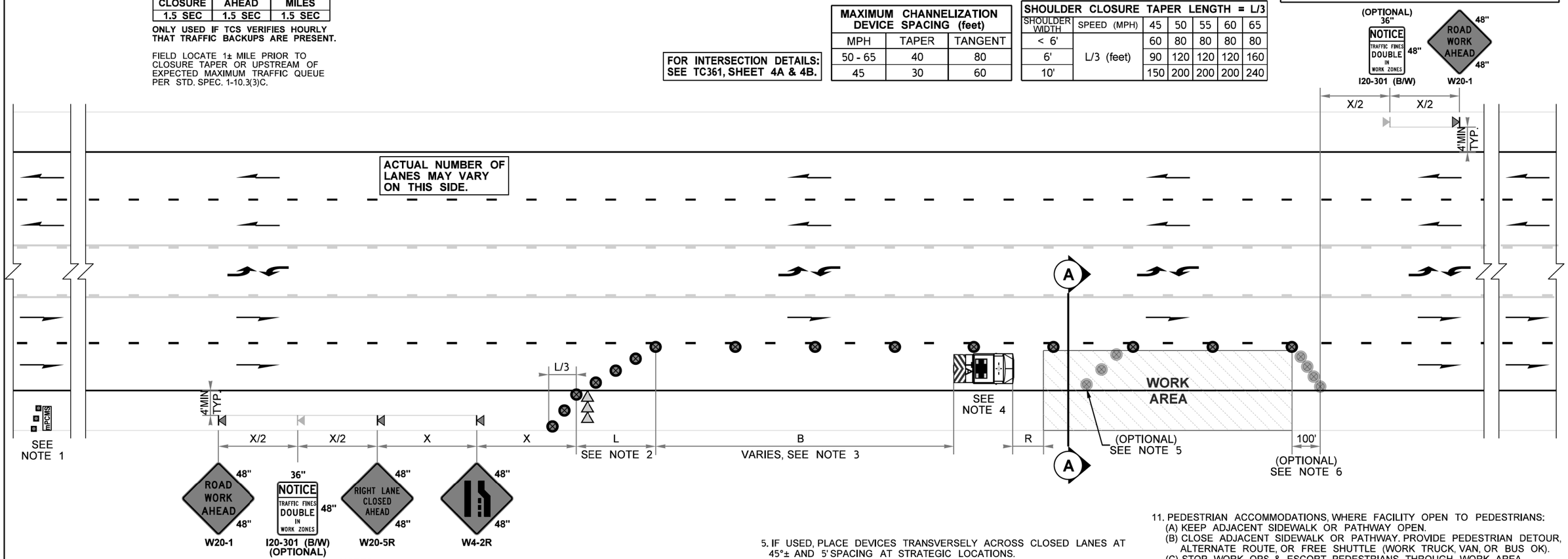
LANE CLOSURE TAPER LENGTH = L						
LANE WIDTH	SPEED (MPH)	45	50	55	60	65
12'	L (feet)	540	600	680	720	800
Avoid reducing lane closure length on 45+ mph roadways.						

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	45	50	55	60	65
B (feet)	360	425	495	570	645
Buffer space may be adjusted (±) based on field conditions.					

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50 - 65	40	80
45	30	60

FOR INTERSECTION DETAILS: SEE TC361, SHEET 4A & 4B.

SHOULDER CLOSURE TAPER LENGTH = L/3						
SHOULDER WIDTH	SPEED (MPH)	45	50	55	60	65
< 6'	L/3 (feet)	60	80	80	80	80
6'		90	120	120	120	160
10'		150	200	200	200	240



LEGEND:

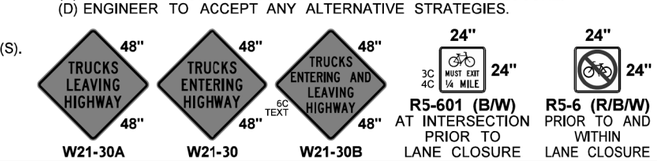
- TEMPORARY SIGN LOCATION (1' MIN HEIGHT)
- TEMPORARY SIGN LOCATION (5' MIN HEIGHT)
- TRAFFIC SAFETY DRUM
- CHANNELIZING DEVICE (SEE NOTE 7)
- SEQUENTIAL ARROW SIGN
- TRANSPORTABLE ATTENUATOR (TL-3)
- mini PORTABLE CHANGEABLE MESSAGE SIGN (PCMS OK, SEE NOTE 1)

NOTES:

1. FULL-SIZE PCMS (11' x 6' DISPLAY) MAY BE USED IN LIEU OF mPCMS. PCMS MESSAGES MAY BE MODIFIED.
2. IF FEASIBLE, AVOID PLACING LANE CLOSURE TAPER WITHIN OR IMMEDIATELY FOLLOWING HORIZONTAL AND VERTICAL CREST CURVES.
3. DISTANCE INCREASES AS WORK AREA MOVES DOWNSTREAM.
4. RED/WHITE OR BLACK/YELLOW CHEVRON PATTERN OK. ADDITIONAL TRANSPORTABLE ATTENUATORS MAY BE ADDED BEHIND EACH WORK CREW.
5. IF USED, PLACE DEVICES TRANSVERSELY ACROSS CLOSED LANES AT 45°± AND 5' SPACING AT STRATEGIC LOCATIONS.
6. IF USED, DOWNSTREAM TAPER DEVICE SPACING IS 20'.
7. 36" TRAFFIC CONES, 42" TALL CHANNELIZING DEVICES, OR TRAFFIC SAFETY DRUMS ALSO OK.
8. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
9. PLAN IS APPLICABLE TO LANE CLOSURES OF 7 DAYS OR LESS.
10. ADD W21-30 SERIES SIGNS (48"x48", 5' HEIGHT) 500'± PRIOR TO FREQUENT CONSTRUCTION VEHICLE INGRESS/EGRESS INTO OPEN LANE(S).
11. PEDESTRIAN ACCOMMODATIONS, WHERE FACILITY OPEN TO PEDESTRIANS:
    (A) KEEP ADJACENT SIDEWALK OR PATHWAY OPEN.
    (B) CLOSE ADJACENT SIDEWALK OR PATHWAY. PROVIDE PEDESTRIAN DETOUR, ALTERNATE ROUTE, OR FREE SHUTTLE (WORK TRUCK, VAN, OR BUS OK).
    (C) STOP WORK OPS. & ESCORT PEDESTRIANS THROUGH WORK AREA.
    (D) ENGINEER TO ACCEPT ANY ALTERNATIVE STRATEGIES.
12. BICYCLIST ACCOMMODATIONS, WHERE FACILITY OPEN TO BICYCLES:
    (A) BICYCLES PROHIBITED VIA R5-601 & R5-6 SIGNS. PROVIDE SIGNED DETOUR OR ALTERNATIVE ROUTE.
    (B) BICYCLES PROHIBITED VIA R5-6 SIGN(S). PROVIDE FREE SHUTTLE (WORK TRUCK, VAN, OR BUS OK) + CONTACT INFORMATION/PHONE BOX/LABORER.
    (C) STOP WORK OPS & ESCORT BICYCLISTS THROUGH CLOSURE.
    (D) ENGINEER TO ACCEPT ANY ALTERNATIVE STRATEGIES.

SINGLE RIGHT LANE CLOSURE
(45+ MPH MULTILANE HIGHWAYS WITH 2-WAY LEFT TURN LANE)

NOT TO SCALE



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PROJ. ENGR.	S MARSHALL			
REGIONAL ADM.		REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRANT JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
P.E. STAMP BOX

City of Spokane Valley

HDR

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

TRAFFIC CONTROL TYPICAL PLAN

Plot 1
PLAN REF NO
TCP5
SHEET 204 OF 218 SHEETS

NOTES:

13. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC361, SHEET 3A OR 3B.

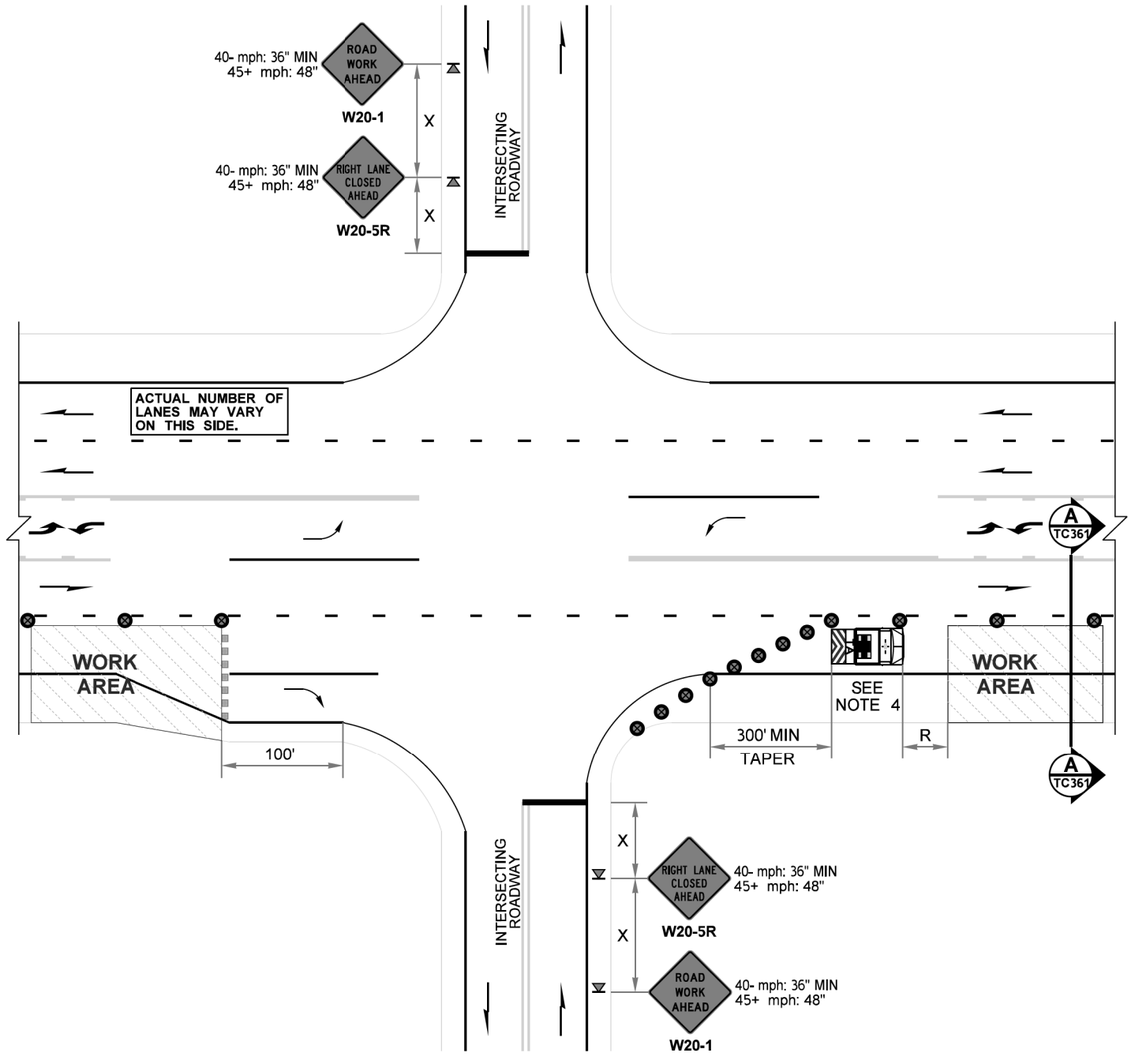
14. SEE DETOUR PLAN FOR ADDITIONAL ROAD CLOSURE DETOUR SIGNAGE.

2-WAY LEFT TURN LANE CLOSURE TAPER LENGTH = L/2						
LANE WIDTH	SPEED (MPH)	45	50	55	60	65
10'	L/2 (feet)	240	280	280	320	360
12'		280	320	360	360	400
14'		320	360	400	440	480
Lane shift length may be adjusted based on field conditions.						

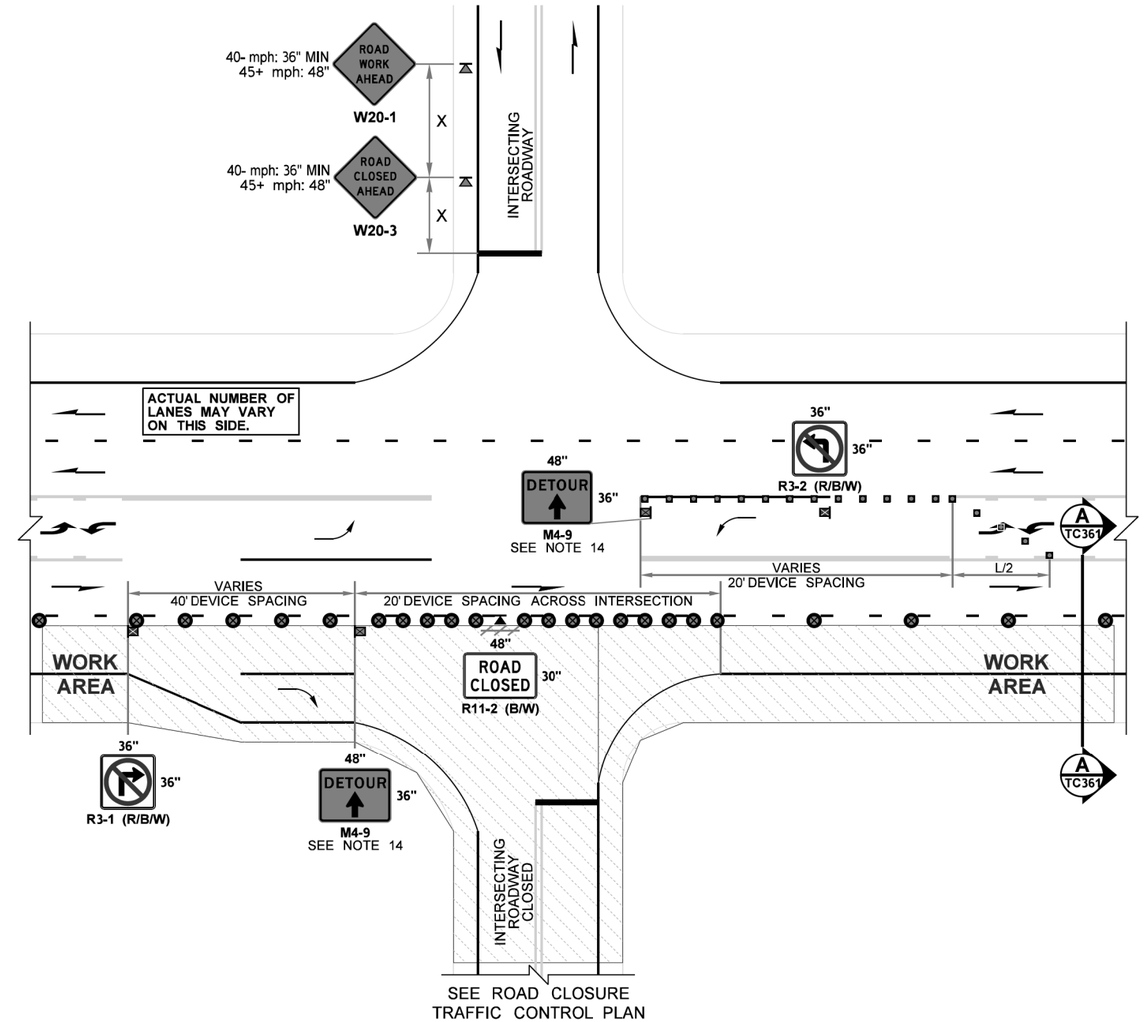
RECOMMENDED SIGN SPACING = X (1)		
RURAL HIGHWAYS	60-65 MPH	800'±
RURAL ROADS	45-55 MPH	500'±
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350'±
RURAL ROADS & URBAN ARTERIALS RESIDENTAL & BUSINESS DISTRICTS	25-30 MPH	200'± (2)
URBAN STREETS	25 MPH OR LESS	100'± (2)

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS.

(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.



AT-GRADE INTERSECTION (WITH TURN LANES): KEPT OPEN



AT-GRADE INTERSECTION (WITH TURN LANES): PARTIAL CLOSURE

MULTILANE HIGHWAYS WITH 2-WAY LEFT TURN LANE: SINGLE RIGHT LANE CLOSURE (45+ MPH, MAINTAIN EXISTING SPEED LIMIT)

NOT TO SCALE

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PROJ. ENGR.	S MARSHALL					
REGIONAL ADM.		REVISION	DATE	BY		

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

GREGORY JOSEPH KIRKMAN, STATE OF WASHINGTON, 23013867, REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

DATE
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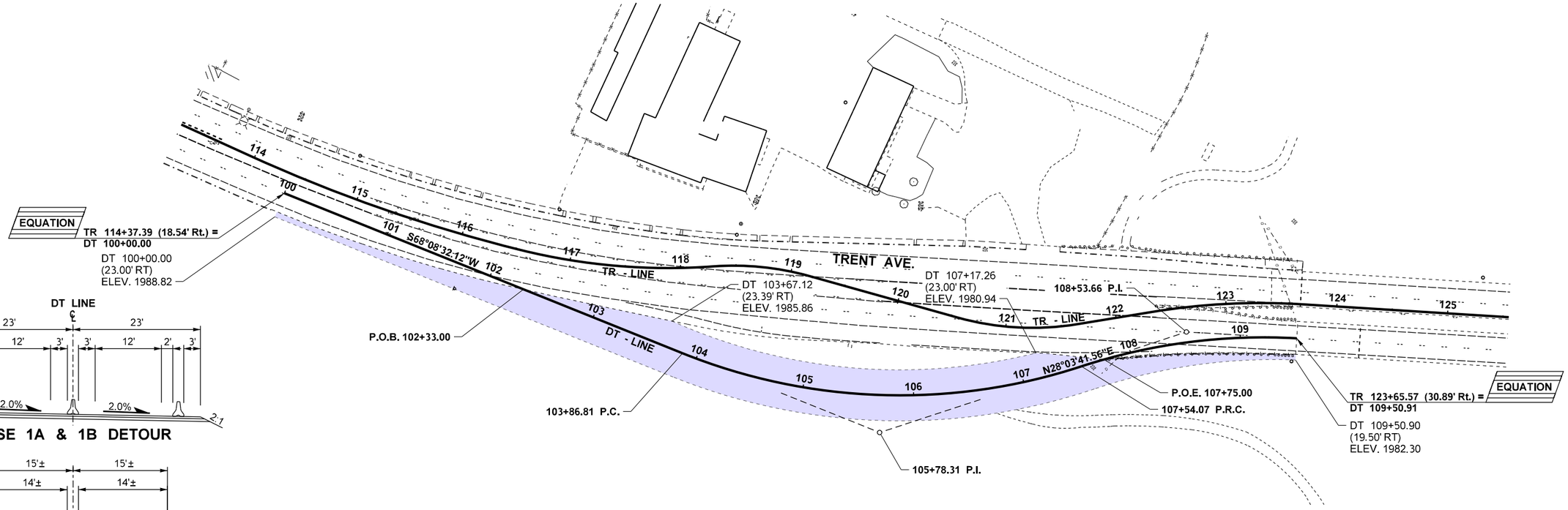
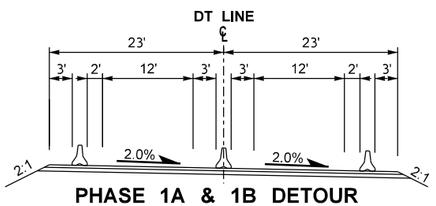
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

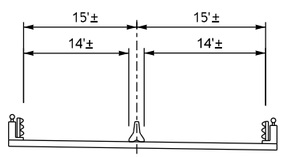
TRAFFIC CONTROL TYPICAL PLAN

Plot 1
PLAN REF NO
TCP6
SHEET 205 OF 218 SHEETS

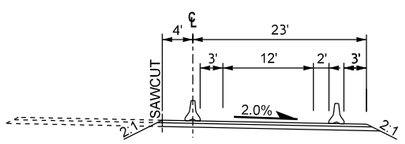




PHASE 1A & 1B DETOUR



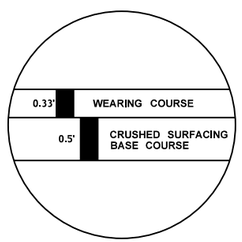
PHASE 1A & 1B ON EXIST. BRIDGE



PHASE 2A DETOUR

TYPICAL SECTIONS

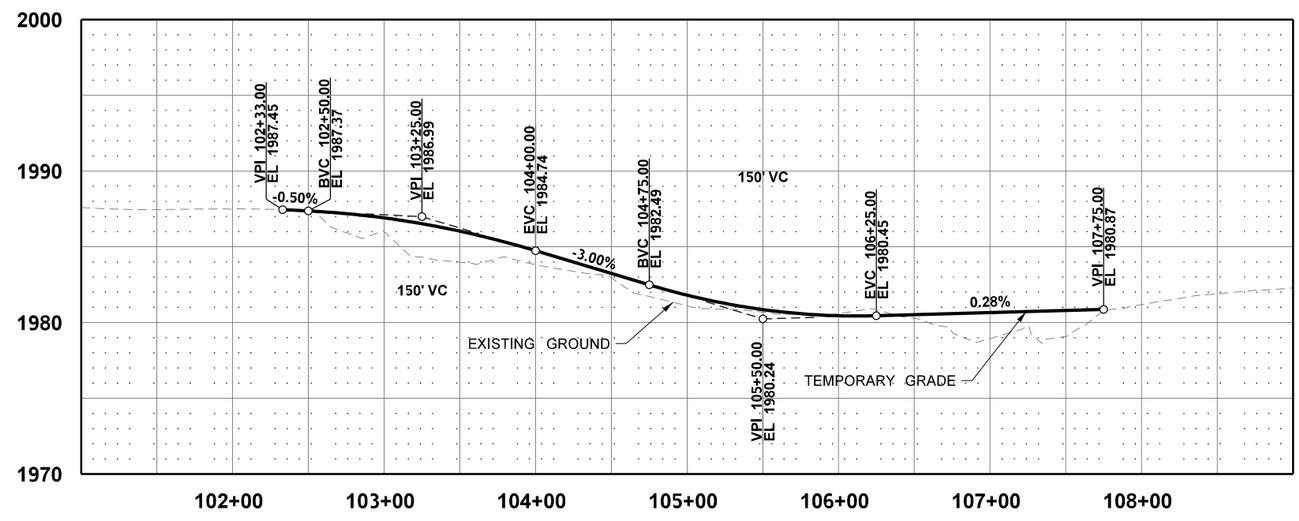
NOT TO SCALE



DETAIL A

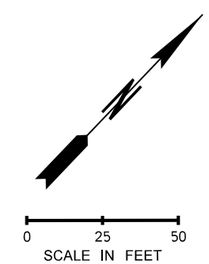
NOT TO SCALE

CURVE DATA					
PI Station	Northing	Easting	Radius	Length	Tangent
DT 105+78.31	600657.05	2854334.03	525.0	367.26	191.50
DT 108+53.66	600913.92	2854470.97	525.0	196.83	99.59



NOTES:

1. SEE SHEETS AL1-AL3 FOR TR - LINE ALIGNMENT INFORMATION.
2. SEE QUANTITY TABULATION - SITE PREPARATION FOR PAVEMENT REMOVAL QUANTITY.
3. TEMPORARY PAVEMENT PAID UNDER ITEM HMA CL ⅛ IN. PG 64H-28 TEMPORARY PAVEMENT.



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REGIONAL ADM.		REVISION	DATE	BY			

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
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		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

BRENT JOSEPH KIRKMAN
STATE OF WASHINGTON
23013867
REGISTERED PROFESSIONAL ENGINEER

06/02/2025
DATE
P.E. STAMP BOX

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CITY OF Spokane Valley
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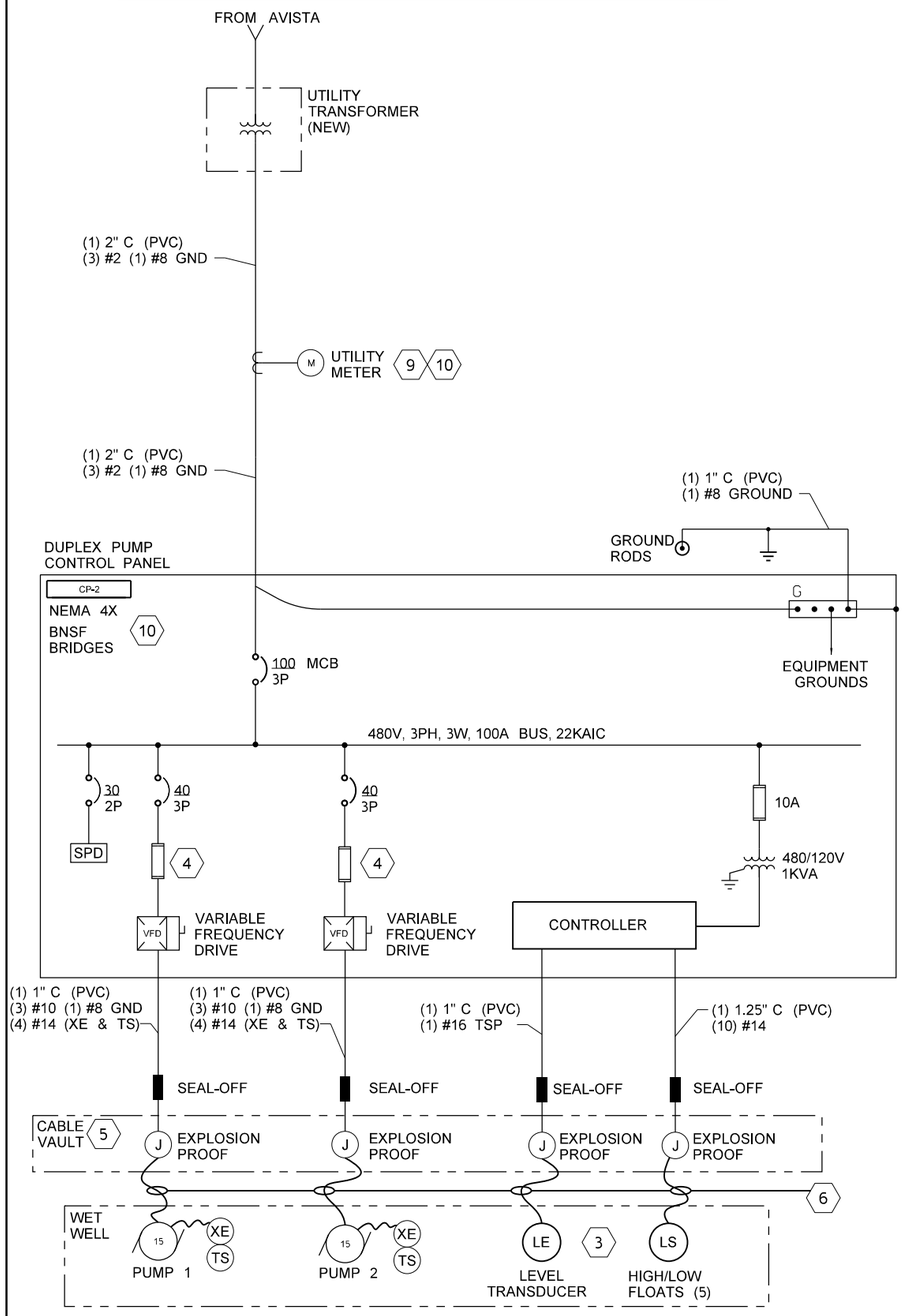
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

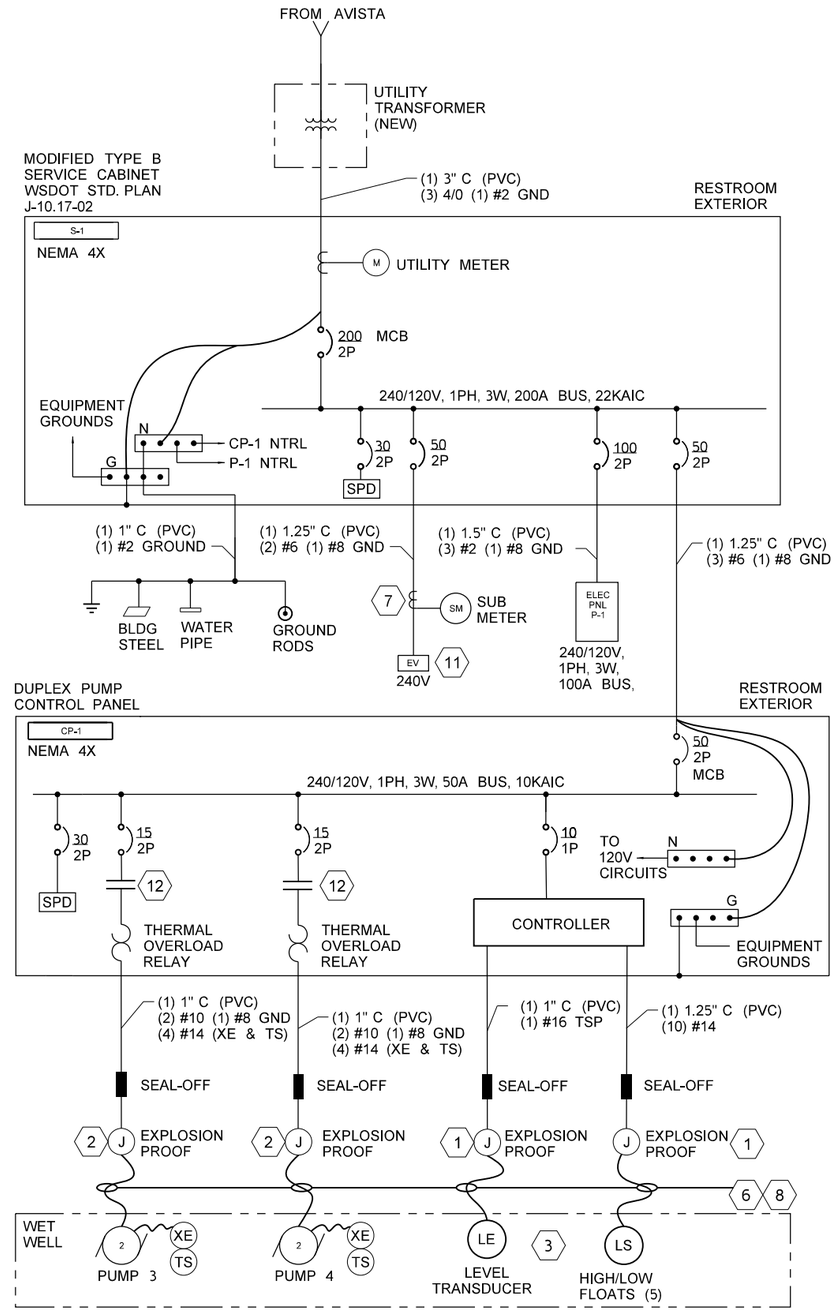
TEMPORARY PAVEMENT PLAN

Plot 1
PLAN REF NO
TPD1
SHEET
206
OF
218
SHEETS

BNSF BRIDGES STORMWATER PUMP STATION ONE-LINE



TRAILHEAD RESTROOM ONE-LINE



GENERAL NOTES:

1. REFER TO ILLUMINATION PLAN SHEET IL4 FOR BNSF BRIDGES STORMWATER PUMP STATION ELECTRICAL LOCATIONS.
2. REFER TO UTILITY PLAN SHEET UT4 FOR TRAILHEAD RESTROOM ELECTRICAL LOCATIONS.
3. PANELBOARD P-1 IS LOCATED IN RESTROOM INTERIOR AND SHALL BE PROVIDED BY RESTROOM MANUFACTURER.
4. CONTROL PANELS CP-1 AND CP-2 SHALL BE PROVIDED AS PART OF INDIVIDUAL PUMP SYSTEM PACKAGES. THE ELECTRICAL ONE-LINE DOES NOT INCLUDE ALL REQUIRED CONTROL PANEL COMPONENTS, REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL CONTROL PANEL REQUIREMENTS AND COMPONENTS.
5. CONTROL PANEL CP-2 SHALL BE SERVICE ENTRANCE RATED. CONTRACTOR SHALL NOT PROVIDE NEUTRAL CONDUCTOR TO CP-2.
6. CONTROL PANELS CP1 AND CP2 SHALL BE LOCATED OUTSIDE OF CLASS 1 DIVISION 1 AND DIVISION 2 HAZARDOUS AREAS. IN ACCORDANCE WITH NFPA 820, THE PUMP STATIONS ARE CLASSIFIED AS CLASS I, DIVISION 1 HAZARDOUS AREAS WITHIN THE SEWER PIPING AND THROUGHOUT THE ENTIRE WET WELL SPACE. CONTROL WIRING FROM HAZARDOUS AREAS TO THE CONTROL PANEL SHALL BE PROVIDED WITH INTRINISIC SAFETY BARRIERS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
7. CONTROL PANELS CP1 AND CP2 SHALL EACH BE EQUIPPED WITH AN INDIVIDUAL REMOTE TELEMETRY UNIT (RTU) FOR REMOTE MONITORING AND ALARMING. RTUS SHALL BE SJE RHOMBUS PANELLINK AND SHALL INCLUDE BOTH THE HARDWARE UNITS AND ACCESS TO THE ASSOCIATED CLOUD-BASED SOFTWARE PLATFORM FOR CENTRALIZED PUMP STATION MANAGEMENT. THE SYSTEM SHALL SUPPORT REMOTE INDICATION OF PUMP STATUS, ALARMS, AND LEVEL CONDITIONS THROUGH A UNIFIED WEB INTERFACE WITH A DASHBOARD TYPE VISUALIZATION PLATFORM.

KEY NOTES:

1. INSTRUMENTATION JUNCTION BOX, SEE DETAIL 3 SHEET EL3.
2. MOTOR JUNCTION BOX, SEE DETAIL 3 SHEET EL3.
3. PROVIDE NEW LEVEL INSTRUMENTATION IN WET WELL AS SHOWN IN DETAIL 2 SHEET EL4.
4. SIZE FUSE IN ACCORDANCE TO VARIABLE FREQUENCY DRIVE MANUFACTURER RECOMMENDATIONS.
5. CABLE VAULT WITH NEMA 4X/7 JUNCTION BOXES FOR PUMP POWER AND LEVEL INSTRUMENTATION SIGNALS SEE DETAILS 1, 2, AND 3 SHEET EL4.
6. MANUFACTURER PROVIDED CABLING. PUMP MANUFACTERS SHALL PROVIDE POWER CABLES WITH INTEGRAL LEAK DETECTION AND OVERTEMPERATURE SWITCH CONDUCTORS.
7. PROVIDE CURRENT TRANSFORMER AND WIRING TO EV CHARGER SUBMETER PER SPECIFIC MANUFACTURER REQUIREMENTS.
8. PROVIDE PENETRATION INTO WET WELL IN ACCORDANCE TO DETAIL 3 SHEET EL3.
9. CONTRACTOR TO COORDINATE WITH AVISTA TO PROVIDE UTILITY METER. UTILITY METER MUST BE PROVIDED ON THE CONTROL PANEL EQUIPMENT PEDESTAL IN A NEMA 4X ENCLOSURE.
10. CONTRACTOR TO PROVIDE UTILITY METER AND CONTROL PANEL (CP-2) ON ELECTRICAL PEDESTAL IN ACCORDANCE WITH WSDOT STD. PLAN J-10.10-04. REFER TO SHEET 2 OF THE STD. PLAN FOR STRUT MOUNT STRUCTURE. CONTRACTOR TO FIELD COORDINATE REQUIRED STRUT SPACING IN ACCORDANCE WITH VENDOR PROVIDED CONTROL PANEL AND UTILITY METER ENCLOSURE SIZES. PROVIDE GROUNDING IN ACCORDANCE WITH NEC ARTICLE 250.
11. EV CHARGER BASIS OF DESIGN IS CLIPPERCREEK HCS-D50P DUAL EV CHARGER. IF A DIFFERENT EV CHARGER IS PROCURED, THE CONTRACTOR MUST PROVIDE CODE COMPLIANT ELECTRICAL CONNECTIONS AND SUBMIT FOR VERIFICATION TO THE ENGINEER.
12. FULL-VOLTAGE NON-REVERSING MOTOR STARTER, NEMA 0

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DESIGNED BY	M HERZOG					
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PROJ. ENGR.	S MARSHALL					
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REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA
		69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX — DATE

P.E. STAMP BOX — 06/05/2025 DATE

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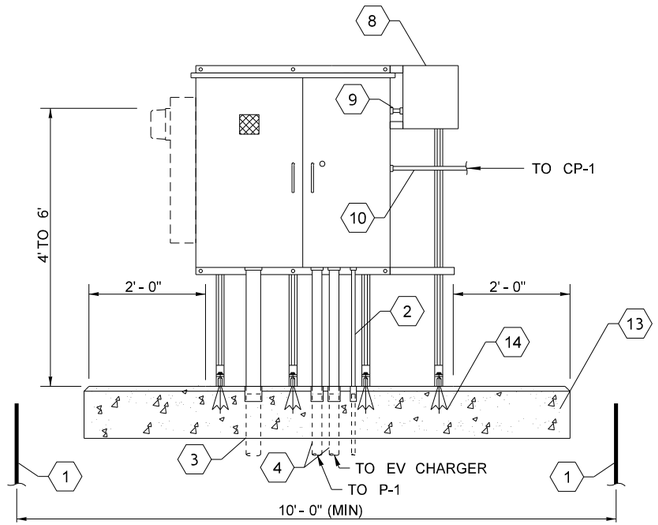
SPOKANE COUNTY - MP 8.43

ELECTRICAL ONE-LINES

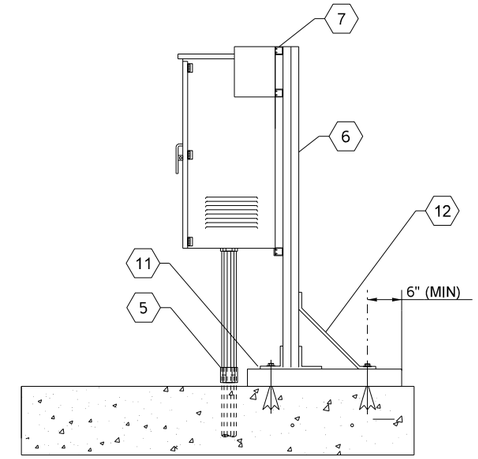
Plot 1
PLAN REF NO
EL1
SHEET 207 OF 218 SHEETS



TRAILHEAD RESTROOM ELECTRICAL PEDESTAL FRONT ELEVATION

1 UT4

NTS



TRAILHEAD RESTROOM ELECTRICAL PEDESTAL SIDE ELEVATION

2 UT4

NTS

GENERAL NOTES:

1. PROVIDE CABINET ORIENTATION, CONDUIT LAYOUT, AND FOUNDATION IN ACCORDANCE TO WSHDOT STD PLAN J-10.10-04. REFER TO SHEET 2 OF THE STD. PLAN FOR STRUT MOUNT STRUCTURE. ALL REINFORCING STEEL SHALL BE EMBEDDED 2" (IN.) BELOW THE SURFACE OF CONCRETE.
2. PROVIDE GROUNDING IN ACCORDANCE WITH NEC ARTICLE 250. SEE STANDARD PLAN J-60.05 FOR ADDITIONAL DETAILS.

KEY NOTES

1. GROUND ROD & GROUND ELECTRODE BOX
2. GROUNDING ELECTRODE CONDUCTOR CONDUIT.
3. UTILITY ENTRANCE CONDUIT. CONDUITS SHALL TERMINATE IN THE UTILITY SECTION OF THE SERVICE CABINET.
4. CONDUITS TO FIELD EQUIPMENT. CONDUITS SHALL TERMINATE IN THE CUSTOMER SECTION OF THE SERVICE CABINET.
5. CONDUIT COUPLERS
6. VERTICAL SUPPORT STEEL CHANNEL
7. HORIZONTAL SUPPORT STEEL CHANNEL
8. STAINLESS STEEL NEMA 4X LOCKABLE SUBMETER ENCLOSURE MOUNTED ON THE INDICATED HORIZONTAL STEEL CHANNELS.
9. SUBMETER CONDUIT.
10. DUPLEX PUMP CONTROL PANEL CONDUIT.
11. 90°ANGLE FITTING.
12. ANGULAR FITTING, TYPICAL.
13. EQUIPMENT PAD OR STRUCTURAL SLAB.
14. ADHESIVE ANCHORS, TYPICAL.

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PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX — DATE

TERRY M. STILL — STATE OF WASHINGTON — 31416 — REGISTERED PROFESSIONAL ENGINEER

06/05/2025

P.E. STAMP BOX — DATE

City of Spokane Valley

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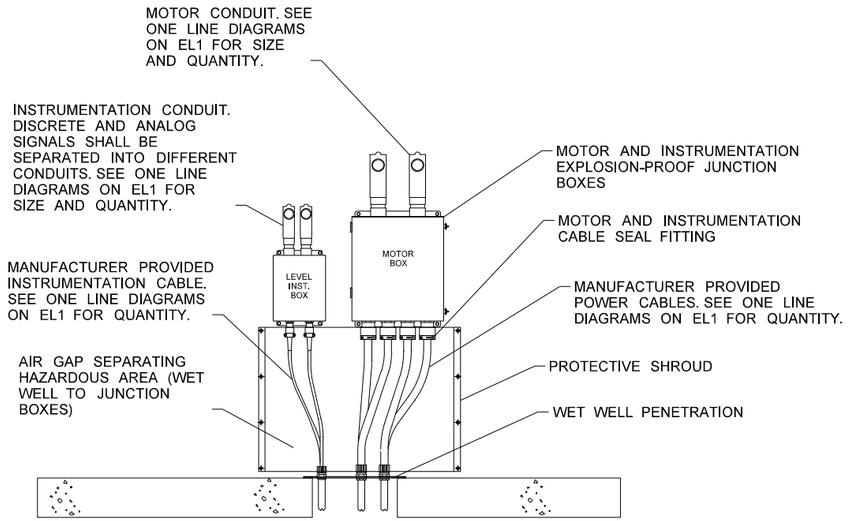
SPOKANE COUNTY - MP 8.43

ELECTRICAL DETAILS 1

Plot 1

PLAN REF NO EL2

SHEET 208 OF 218 SHEETS

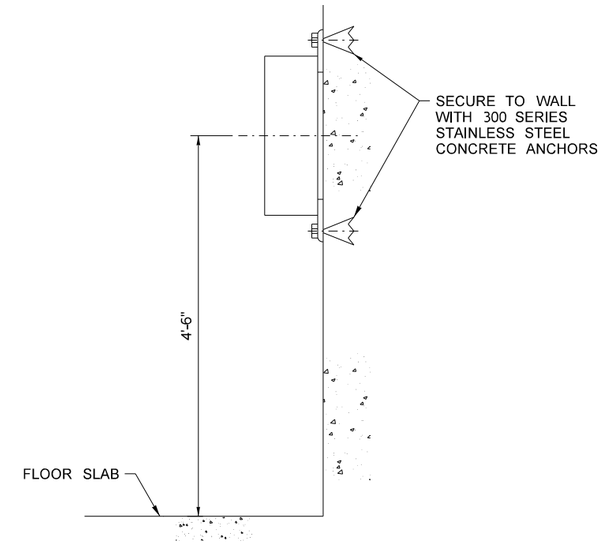


NOTES:

1. SEE EL3 DETAIL 4 FOR WALL MOUNTING INSTALLATION DETAILS.

1 / EL1 INSTRUMENTATION AND MOTOR JUNCTION BOX DETAIL

NTS



2 / EL1 WALL-MOUNTED JUNCTION BOX AND CONTROL PANEL INSTALLATION

NTS

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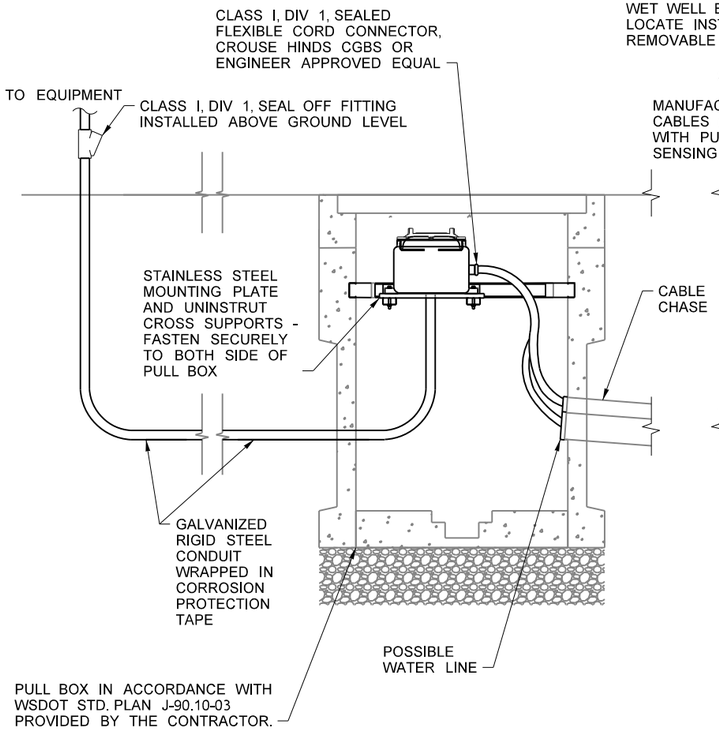
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ELECTRICAL DETAILS 2

Plot 1

PLAN REF NO EL3

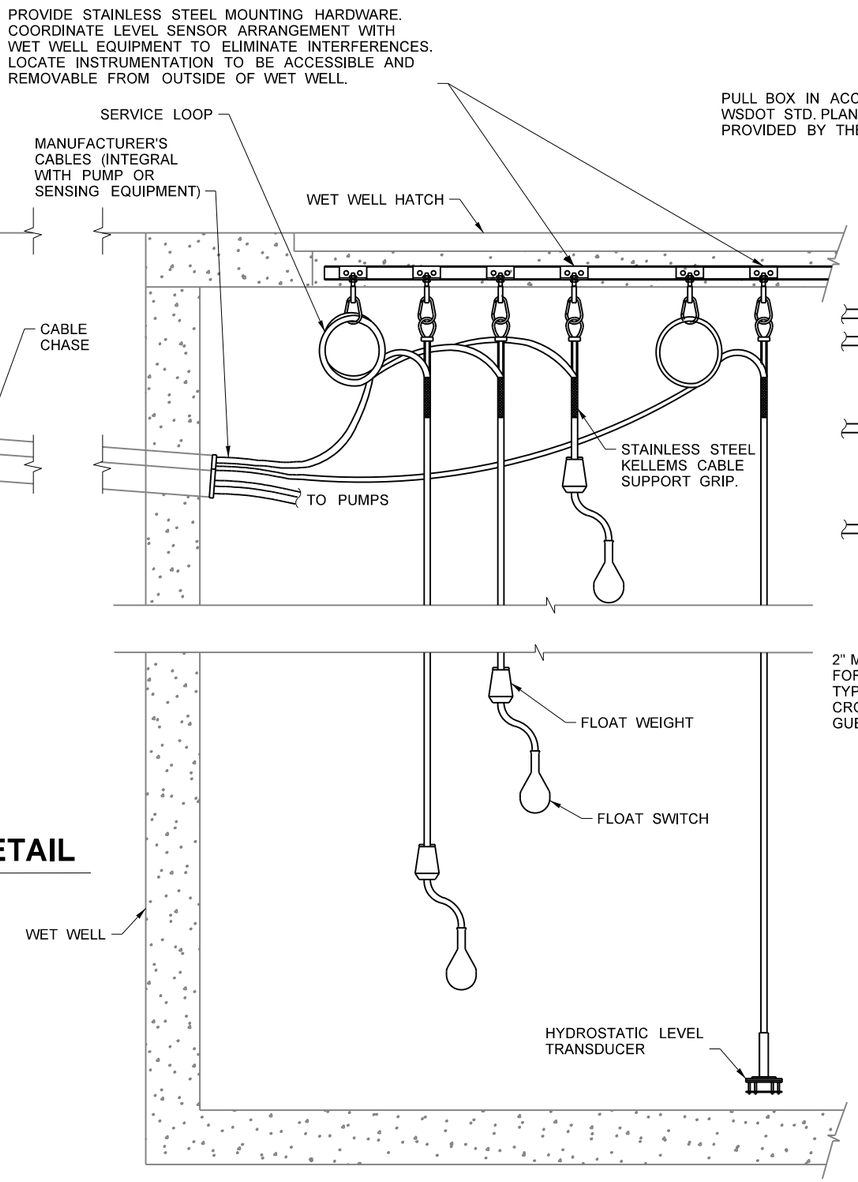
SHEET 209 OF 218 SHEETS



TYPICAL CABLE VAULT SIDE VIEW DETAIL

1 / EL1

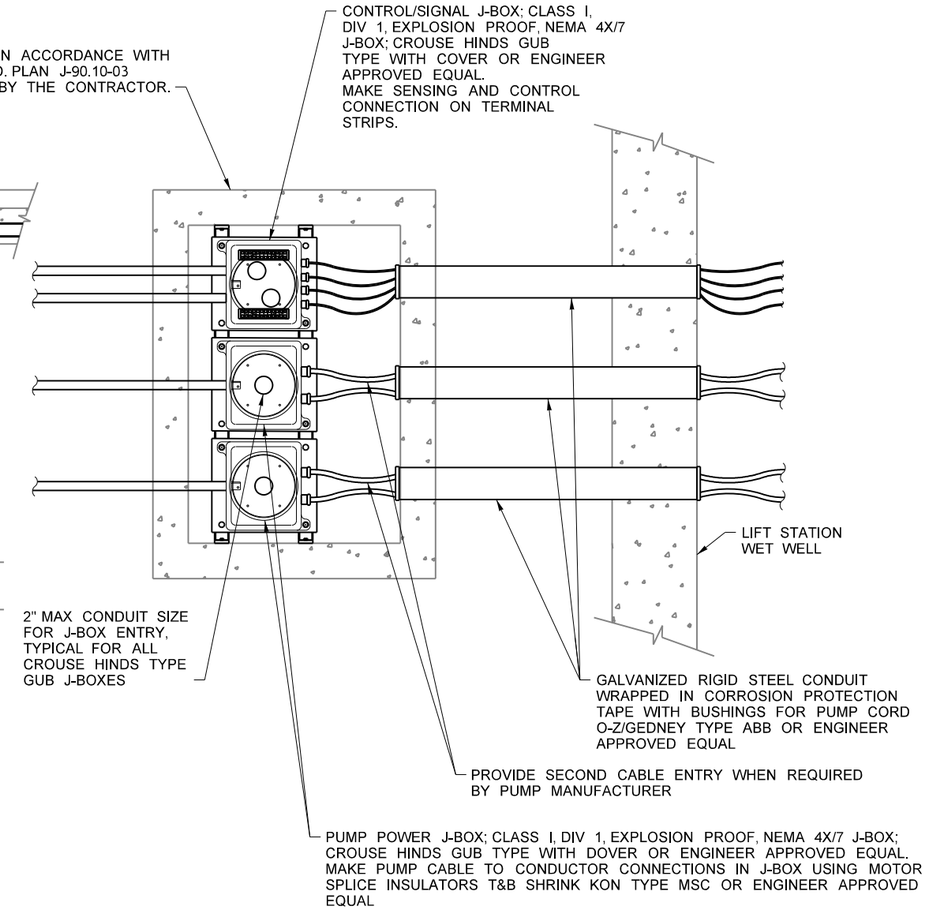
NTS



FLOAT SWITCH AND LEVEL TRANSDUCER TYPICAL MOUNTING DETAIL

2 / EL1

NTS



TYPICAL CABLE VAULT TOP VIEW DETAIL

3 / EL1

NTS

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PROJ. ENGR.	S MARSHALL						
REGIONAL ADM.		REVISION	DATE	BY			

P.E. STAMP BOX — DATE

TERRY M. STULC, STATE OF WASHINGTON, 31416, REGISTERED PROFESSIONAL ENGINEER — 06/05/2025 — DATE — P.E. STAMP BOX

City of Spokane Valley — HDR

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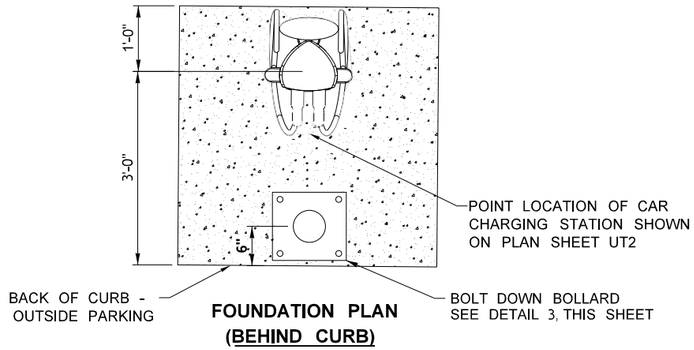
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ELECTRICAL DETAILS 3

Plot 1
PLAN REF NO EL4
SHEET 210 OF 218 SHEETS

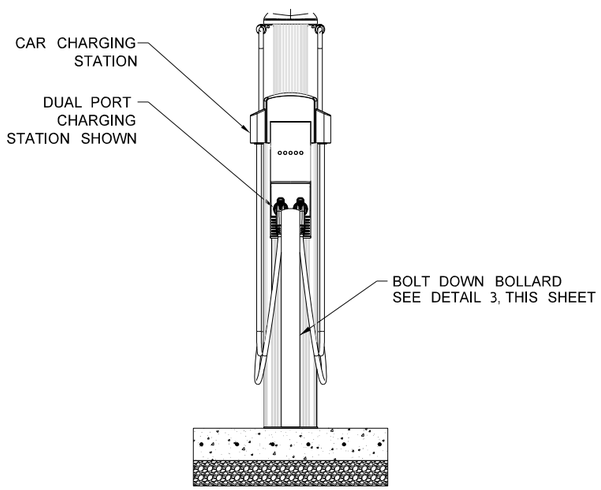


FOUNDATION PLAN (BEHIND CURB)

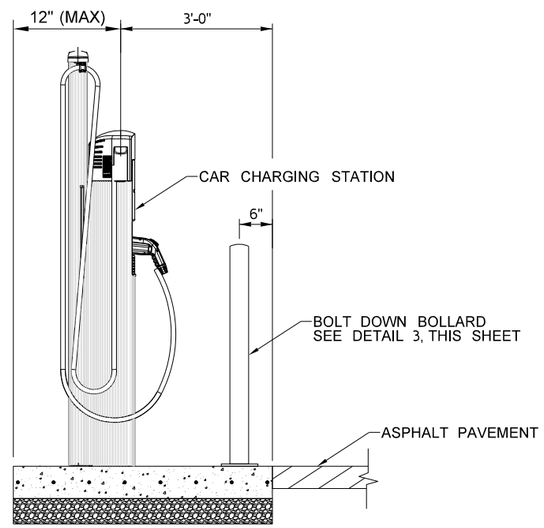
NOTE:
1. REFER TO CIVIL PLANS FOR CONCRETE REQUIREMENTS.

1 UT4 ELECTRIC VEHICLE CHARGING SYSTEM FOUNDATION DETAIL

NTS



FRONT ELEVATION (OUTSIDE PARKING)

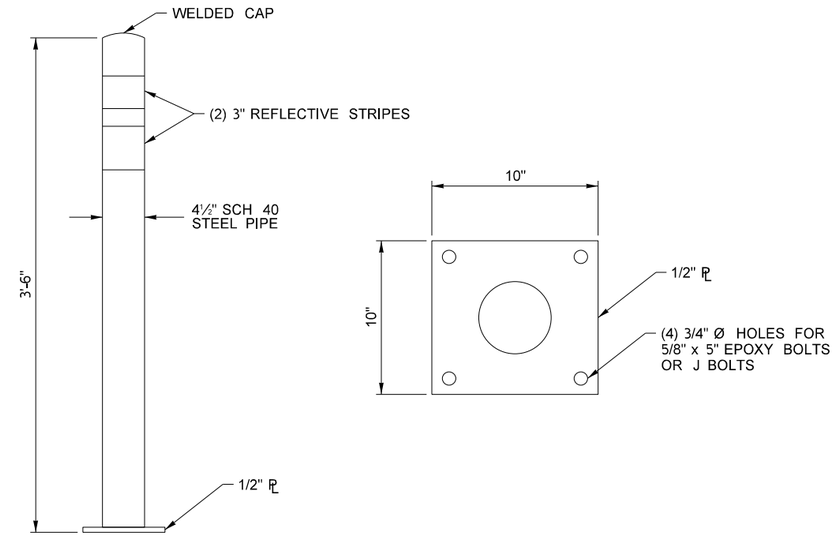


SIDE ELEVATION (OUTSIDE PARKING)

NOTE:
FASTEN CHARGING STATION TO CONCRETE BASE PAD OR FLOOR PER MANUFACTURER REQUIREMENTS.

2 UT4 ELECTRIC VEHICLE CHARGING SYSTEM INSTALLATION DETAIL

NTS



3 UT4 BOLT DOWN BOLLARD*

NTS | *PAID FOR AS TYPE 2 BOLLARD

FILE NAME	c:\pwworking\west01\d3127952\PINES_PS_EL_005.dgn
TIME	11:20:18 AM
DATE	5/29/2025
PLOTTED BY	EMCGUIRE
DESIGNED BY	M HERZOG
ENTERED BY	M HERZOG
CHECKED BY	A WINTER
PROJ. ENGR.	S MARSHALL
REGIONAL ADM.	

REVISION	DATE	BY

REGION NO.	STATE	FED.AID PROJ.NO.
10	WASH	STPUL 0027(020)
JOB NUMBER		69A36525420110RASWA 69A36524420020RLDWA
CONTRACT NO.		LOCATION NO.

P.E. STAMP BOX — DATE

P.E. STAMP BOX — DATE 06/05/2025

SR290/SR27
PINES RD BNSF GRADE SEPARATION
SPOKANE COUNTY - MP 8.43

ELECTRICAL DETAILS 4

Plot 1
PLAN REF NO EL5
SHEET 211 OF 218 SHEETS

GENERAL NOTES:

1. P-1 SHALL BE PROVIDED BY RESTROOM MANUFACTURER. PANEL SCHEDULE BASED OFF MANUFACTURER'S INFORMATION AT TIME OF DESIGN. SEE MANUFACTURER'S DOCUMENTATION FOR FINAL PANEL SCHEDULE. ALL CONNECTED LOADS ARE PROVIDED AND CONNECTED TO P-1 BY THE MANUFACTURER.

TYPE B MODIFIED SERVICE CABINET: S-1

LOCATION: RESTROOM EXTERIOR **VOLTS:** 240/120 **A.I.C. RATING:** 22KA
SUPPLY FROM: XFMR **PHASE:** 1 **MAINS TYPE:** MCB
MOUNTING: SURFACE **WIRE:** 3+GND **MAINS RATING:** 200A
ENCLOSURE: NEMA 4X **INTEGRAL SPD:** YES **SERVICE ENTRANCE LABEL:** YES

CKT		CONNECTED LOAD (VA)				OCP			OCP		CONNECTED LOAD (VA)					CKT
NO.	DESCRIPTION	LTS	REC	MECH	MISC	AMPS	P		AMPS	P	LTS	REC	MECH	MISC	DESCRIPTION	NO.
1	EV CHARGER				3,840	50	2	A	100	2	200		2,880	3,840	ELEC PNL P-1	2
3					3,840			B			400	540	2,880	3,840		4
5	DUPLEX PUMP			2,760	960	50	2	A	30	2					SPD	6
7	CTRL PNL CP-1			2,760				B								8
9	SPARE					20	1	A	20	1					SPARE	10
11	SPARE					20	1	B	20	1					SPARE	12

LOAD SUMMARY

	LTS	REC	MECH	MISC	SPARE	TOTAL				PHASE BALANCE	
CONNECTED LOAD (KVA)	0.6	0.5	11.3	16.3	---	28.7		240	LINE-TO-LINE VOLTS	PHASE A (KVA)	14
DEMAND FACTOR	1.25	NEC	1.00	1.00	20%	---		120	CONNECTED AMPS	PHASE B (KVA)	14
DESIGN LOAD (KVA)	0.8	0.5	11.3	16.3	5.7	34.6		144	DESIGN AMPS		

BRANCH PANEL: P-1

LOCATION: STORAGE ROOM **VOLTS:** 240/120 **A.I.C. RATING:** 10KA
SUPPLY FROM: SERVICE S-1 **PHASE:** 1 **MAINS TYPE:** MCB
MOUNTING: SURFACE **WIRE:** 3+GND **MAINS RATING:** 100A
ENCLOSURE: NEMA 3R **INTEGRAL SPD:** YES **SERVICE ENTRANCE LABEL:** NO

CKT		CONNECTED LOAD (VA)				OCP			OCP		CONNECTED LOAD (VA)					CKT
NO.	DESCRIPTION	LTS	REC	MECH	MISC	AMPS	P		AMPS	P	LTS	REC	MECH	MISC	DESCRIPTION	NO.
1	SPARE					20	1	A	20	1					SPARE	2
3	STORAGE LIGHTS	200				20	1	B	20	1				1,920	HAND DRYER	4
5	WATER HEATER			2,880		30	2	A	20	1				1,920	HAND DRYER	6
7				2,880				B	20	1				1,920	FILL STATION	8
9	LIGHTS	200				20	1	A	20	1				1,920	FILL STATION	10
11	SPARE					30	2	B	20	1	200				OUTDOOR LIGHTS	12
13								A	20	1					SPARE	14
15	SPARE					40	2	B	20	1		540			RECEPTACLES	16
17								A	20	1					SPARE	18
19	SPARE					20	1	B	20	1					SPARE	20

LOAD SUMMARY

	LTS	REC	MECH	MISC	SPARE	TOTAL				PHASE BALANCE	
CONNECTED LOAD (KVA)	0.6	0.5	5.8	7.7	---	14.6		240	LINE-TO-LINE VOLTS	PHASE A (KVA)	7
DEMAND FACTOR	1.25	NEC	1.00	1.00	20%	---		61	CONNECTED AMPS	PHASE B (KVA)	8
DESIGN LOAD (KVA)	0.8	0.5	5.8	7.7	2.9	17.6		74	DESIGN AMPS		

GENERAL NOTES:

1. THE NEW STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2021 EDITION OF THE AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (A.R.E.M.A.) MANUAL FOR RAILWAY ENGINEERING, CHAPTER 8 - CONCRETE STRUCTURES AND FOUNDATIONS, CHAPTER 9 - SEISMIC DESIGN, AND CHAPTER 15 - STEEL STRUCTURES.

2. DESIGN LOADING: COOPER E80 WITH DIESEL IMPACT.

3. NEW CONSTRUCTION SHOWN IN HEAVY LINES.

4. ALL WORK REQUIREMENTS SHOWN ON THESE DRAWINGS AND NOT OTHERWISE DETAILED SHALL BE ACCOMPLISHED AS SPECIFIED IN THE BNSF STANDARDS AND THE MOST CURRENT A.R.E.M.A. MANUAL FOR RAILWAY ENGINEERING. IN THE EVENT OF CONFLICTS BETWEEN THE SPECIFICATIONS, THE MORE RESTRICTIVE SHALL APPLY.

5. BRIDGE STATIONING AND ELEVATIONS BASED ON AECOM / BNSF OTIS ORCHARDS SURVEY.

BENCHMARK CONTROL POINT #3
WSDOT MON GP32290-22
NORTHING: 272134.65
EASTING: 2525040.29
ML1 STA. 4040+25.33
OFFSET: 211.15 RT (EX. MAIN 1)
ELEV: 1989.77

6. ALL UTILITES AND BNSF UNDERGROUND CABLING (IF APPLICABLE) SHALL BE LOCATED AND PROTECTED FROM DAMAGE. UPON REQUEST, UNDERGROUND UTILITIES WILL BE LOCATED AND FLAGGED BY THE UTILITIES. EXCAVATION IN THE AREA OF UNDERGROUND UTITLIES SHALL NOT BEGIN UNTIL ALL SUCH UTILITIES HAVE BEEN LOCATED AND IDENTIFIED, AND THEN ONLY WITH EXTREME CARE TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY FACILITY. CONSTRUCTION EFFORTS SHALL BE COORDINATED WITH ALL OTHER LOCAL UTILITY COMPANIES PERTINENT TO THE PROSECUTION OF WORK. CONTRACTOR SHALL NOTIFY UTILITY LOCATORS (811) 48 HOURS PRIOR TO PLANNED WORK.

7. AREAS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING.

8. BNSF STANDARD CONSTRUCTION SPECIFICATIONS SHALL BE USED FOR THIS PROJECT.

REFERENCE:

1. BNSF STANDARD BRIDGE & COMPONENT PLANS ISSUED MARCH 1, 2021.

2. BNSF OTIS ORCHARDS TO IRVIN DOUBLE TRACK PROJECT BID PLAN SET BY AECOM DATED 2/12/2020.

3. CITY OF SPOKANE VALLEY PINES ROAD BNSF GRADE SEPARATION PROJECT PLAN SET BY HDR DATED 08/08/2023.

4. GEOTECHNICAL ENGINEERING EVALUATION REPORT BY GEOENGINEERS DATED 09/19/2023.

DIVISION OF RESPONSIBILITY:

RAILROAD - PREVIOUSLY COMPLETED
1. BUILD BRIDGE FOR EXISTING MAIN 1.
2. BUILD BRIDGE FOR PROPOSED MAIN 2.
3. INITIAL ROUGH ROADWAY EXCAVATION TO LIMITS SHOWN IN BNSF BRIDGE PLANS AND INSTALLATION OF BENT BRACING.

CITY - THIS PLAN SET
1. FINISH EXCAVATION AT EACH BENT.
2. INSTALL C.I.P. CONCRETE ENCASEMENT ON BENTS.

COORDINATION WITH RAILROAD

1. THE CONTRACTOR SHALL CLOSELY COORDINATE BRIDGE WORK AND CONSTRUCTION ACTIVITIES WITH RAILROAD ON RAILROAD RIGHT-OF-WAY.

2. THE CONTRACTOR SHALL MEET BNSF SAFETY, INSURANCE AND TRACK WORKER PROTECTION REQUIREMENTS IN ACCORDANCE WITH THE SPECIFICATIONS.

3. CONTRACTOR SHALL PROVIDE THE RAILROAD WITH A DETAILED CONSTRUCTION PLAN DEFINING THE ACTIVITY, SCHEDULE, AND PROCEDURE FOR EACH ASPECT OF THE WORK.

4. CONSTRUCTION SHALL NOT BEGIN UNTIL THE CONSTRUCTION PLAN HAS BEEN APPROVED BY THE RAILROAD.

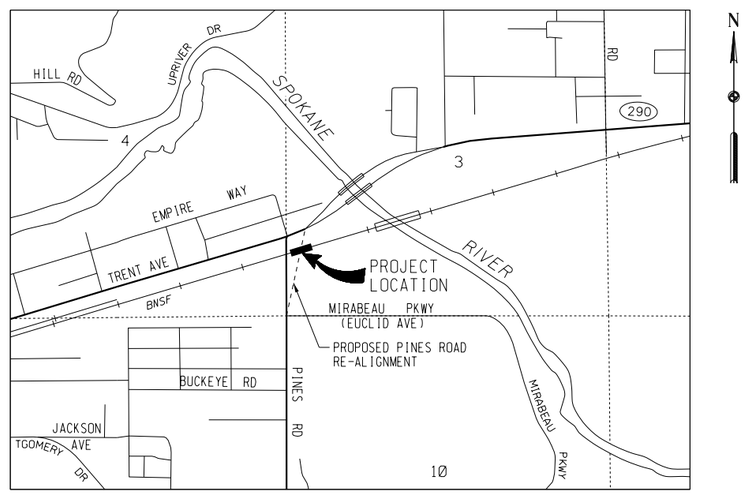
5. COORDINATE A SLOW ORDER ON THE BRIDGE SUBJECT TO RAILROAD LIVE LOAD. FOR THE FIRST 24 HOURS AFTER CONCRETE PLACED AROUND EACH BENT.

BNSF RAILROAD CONTACT

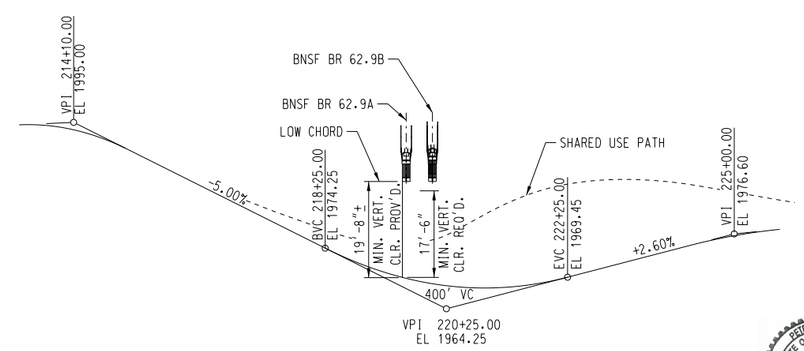
NEED FROM BNSF

LIST OF DRAWINGS - BR. 62.9A & B

	PLAN NO.	TITLE
BNSF FORCES	0045-0062.900-001	GENERAL NOTES AND INFORMATION (BNSF)
	0045-0062.900-002	GENERAL LAYOUT
	0045-0062.900-003	TYPICAL SECTION - DOUBLE BENT
	0045-0062.900-004	TYPICAL SECTION - SINGLE BENT
	0045-0062.900-005	TYPICAL SECTION - ABUTMENT
	0045-0062.900-006	FOUNDATION PLAN
	0045-0062.900-007	BORING LOGS
	0045-0062.900-008	MISCELLANEOUS DETAILS
	0045-0062.900-009	SPECIAL PRECAST CONCRETE ABUTMENT CAP (SHEET 1 OF 2)
	0045-0062.900-010	SPECIAL PRECAST CONCRETE ABUTMENT CAP (SHEET 2 OF 2)
	0045-0062.900-011	SHEET LEFT BLANK INTENTIONALLY
	0045-0062.900-012	SHEET LEFT BLANK INTENTIONALLY
	0045-0062.900-013	SPECIAL WINGWALL DETAILS
	0045-0062.900-014	SPECIAL PRECAST CONCRETE DOUBLE BENT CAP
	0045-0062.900-015	SPECIAL 42"x23'-10" DOUBLE CELL BOX BEAM (SHEET 1 OF 2)
	0045-0062.900-016	SPECIAL 42"x23'-10" DOUBLE CELL BOX BEAM (SHEET 2 OF 2)
	0045-0062.900-017	MODIFICATIONS TO 42" DOUBLE CELL BOX BEAMS (SHEET 1 OF 2)
	0045-0062.900-018	MODIFICATIONS TO 42" DOUBLE CELL BOX BEAMS (SHEET 2 OF 2)
	0045-0062.900-019	WATERPROOFING LAYOUT AND DETAILS
	0045-0062.900-020	SHEET LEFT BLANK INTENTIONALLY
	0045-0062.900-021	SHEET LEFT BLANK INTENTIONALLY
	0045-0062.900-022	MISCELLANEOUS STEEL DETAILS
	0045-0062.900-023	BNSF BILL OF MATERIAL AND IMPACT PROTECTION DEVICE DETAILS
CITY CONTRACTOR (THIS SET)	0045-0062.900-024	GENERAL NOTES AND INFORMATION (CITY)
	0045-0062.900-025	GENERAL LAYOUT
	0045-0062.900-026	TYPICAL SECTION - DOUBLE BENT
	0045-0062.900-027	TYPICAL SECTION - SINGLE BENT
	0045-0062.900-028	BENT ENCASEMENT DETAILS - BENTS 2 THRU 4 (DOUBLE)
	0045-0062.900-029	BENT ENCASEMENT DETAILS - BENT 5 (SINGLE)



VICINITY MAP
NO SCALE
IN THE CITY OF SPOKANE VALLEY, WASHINGTON



PINES ROAD PROFILE
NO SCALE
LOOKING RALROAD WEST
REFER TO CITY OF SPOKANE VALLEY PINES ROAD BNSF GRADE SEPARATION PLAN SET FOR DETAILS.

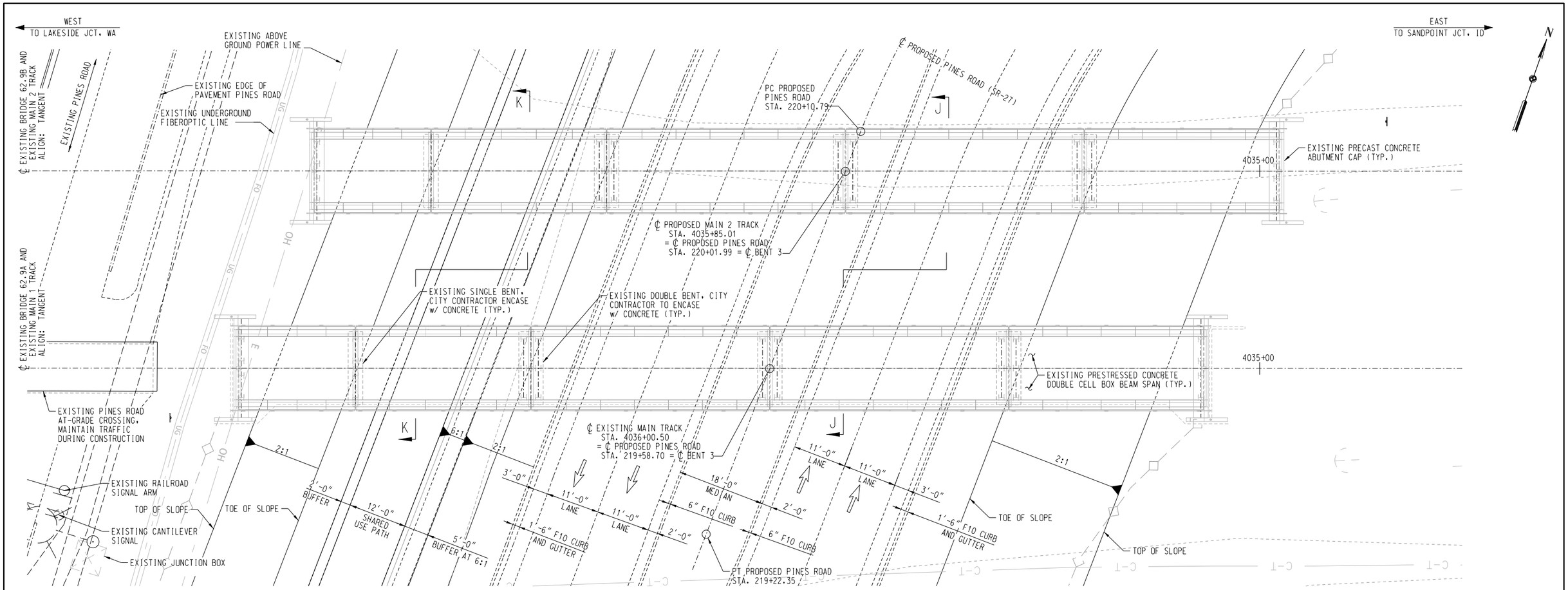
PETER GRAFF STATE OF WASHINGTON 44526 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/26/2026
(Professional Engineer)

FINAL PLANS

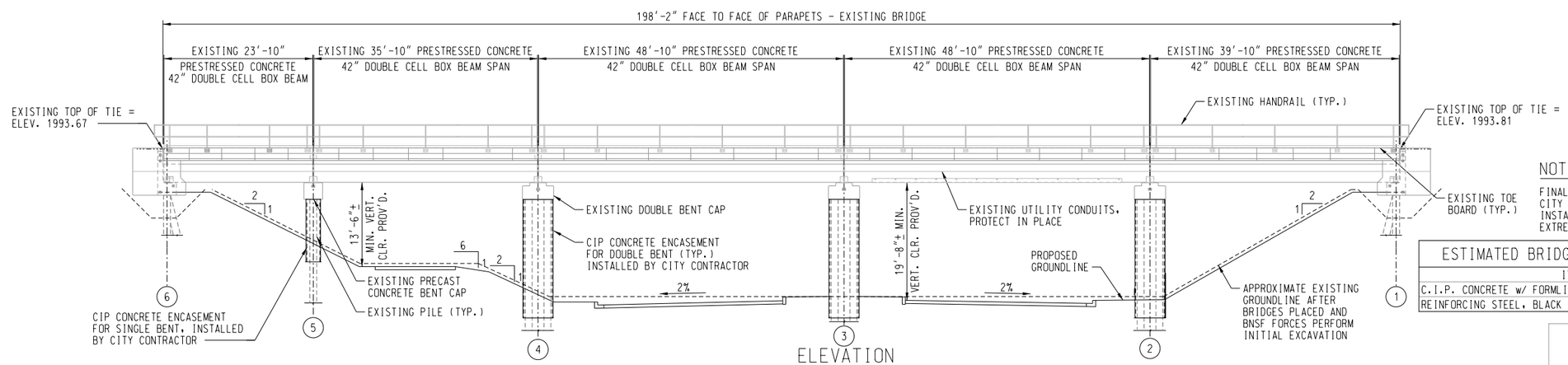
LAT: 47°41'21"N LONG: 117°14'20"W	DES: CSS	BNSF RAILWAY	LAKESIDE JCT. WA TO SANDPOINT JCT. ID
DOT # XXXXXXX	DRAWN: AEP	BRIDGE ENGINEERING KANSAS CITY, KS	BRIDGE NUMBER 62.9A & B
CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WA.	CHECK: PJG		OVER PINES ROAD
STREET NAME: PINES ROAD	DATE: JAN. 2025	APPROVED:	GENERAL NOTES AND INFORMATION (CITY)
STATE CONTRACT NO.: XX-XXXX	PLAN: XXX	ASST. DIRECTOR STRUCTURES DESIGN	PLAN NO: 0045-0062.900-024
FED. AID. PROJECT NO.: XXXXX-XXXXX(XXX)	LINE SEG: 0045		213 OF 218

File Location: $FILEL$

Date Printed: 1/27/2025 Time Printed: 1:57:57 PM



PLAN



ELEVATION

EXISTING MAIN 1 BRIDGE SHOWN, OTHER BRIDGE SIMILAR. CROSS BRACING NOT SHOWN FOR CLARITY.

PETER GRACE, STATE OF WASHINGTON, 44534, REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/16/2026
(Professional Engineer)

NOTE:

FINAL CONDITION SHOWN WITH FULL ROADWAY EXCAVATION. CITY CONTRACTOR TO FINISH ROADWAY EXCAVATION AND INSTALL CIP CONCRETE ENCASEMENT ON BENTS, TAKING EXTREME CARE TO NOT DAMAGE ANY PART OF THE STRUCTURE.

ESTIMATED BRIDGE QUANTITIES - CITY CONTRACTOR

ITEM	QUANTITY	UNITS
C.I.P. CONCRETE w/ FORMLINER (4,000 PSI)	369.8	C.Y.
REINFORCING STEEL, BLACK (ASTM A615 GR 60)	14,520	LB.

ATTENTION !

CITY CONTRACTOR TO VERIFY THE LOCATION, RELOCATION, ABANDONMENT, AND/OR TEMPORARY SUPPORT OF ALL UTILITIES AFFECTED BY THE CONSTRUCTION. CITY CONTRACTOR SHALL INFORM UTILITY COMPANIES, AGENCIES, AND/OR AUTHORITIES OF ALL PLANNED WORK IN THE AREA CONTAINING UTILITIES. CITY CONTRACTOR SHALL NOTIFY ONE-CALL LOCATORS 48 HOURS PRIOR TO PLANNED WORK (1-800-424-5555). CITY CONTRACTOR IS PLACED ON NOTICE THAT FIBER OPTIC, COMMUNICATIONS, CONTROL SYSTEMS, AND OTHER TYPES OF CABLES MAY BE BURIED ON RAILROAD PROPERTY. BEFORE BEGINNING WORK, CITY CONTRACTOR SHALL ALSO TELEPHONE RAILROAD'S COMMUNICATIONS NETWORK CONTROL CENTER AT 1-800-533-2891.

HDR

CITY OF Spokane Valley®

LAT: 47°41'21"N LONG: 117°14'20"W	DES: CSS
DOT # XXXXXXX	DRAWN: AEP
CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WA.	CHECK: PJG
STREET NAME: PINES ROAD	DATE: JAN. 2025
STATE CONTRACT NO.: XX-XXXX	PLAN: XXX
FED. AID. PROJECT NO.: XXXXX-XXXXX(XXX)	LINE SEG: 0045

BNSF® RAILWAY
BRIDGE ENGINEERING KANSAS CITY, KS

APPROVED:
ASST. DIRECTOR STRUCTURES DESIGN

FINAL PLANS

LAKESIDE JCT. WA TO SANDPOINT JCT. ID

BRIDGE NUMBER 62.9A & B

OVER PINES ROAD

GENERAL LAYOUT

PLAN NO: 0045-0062.900-025

File Location: $FILES

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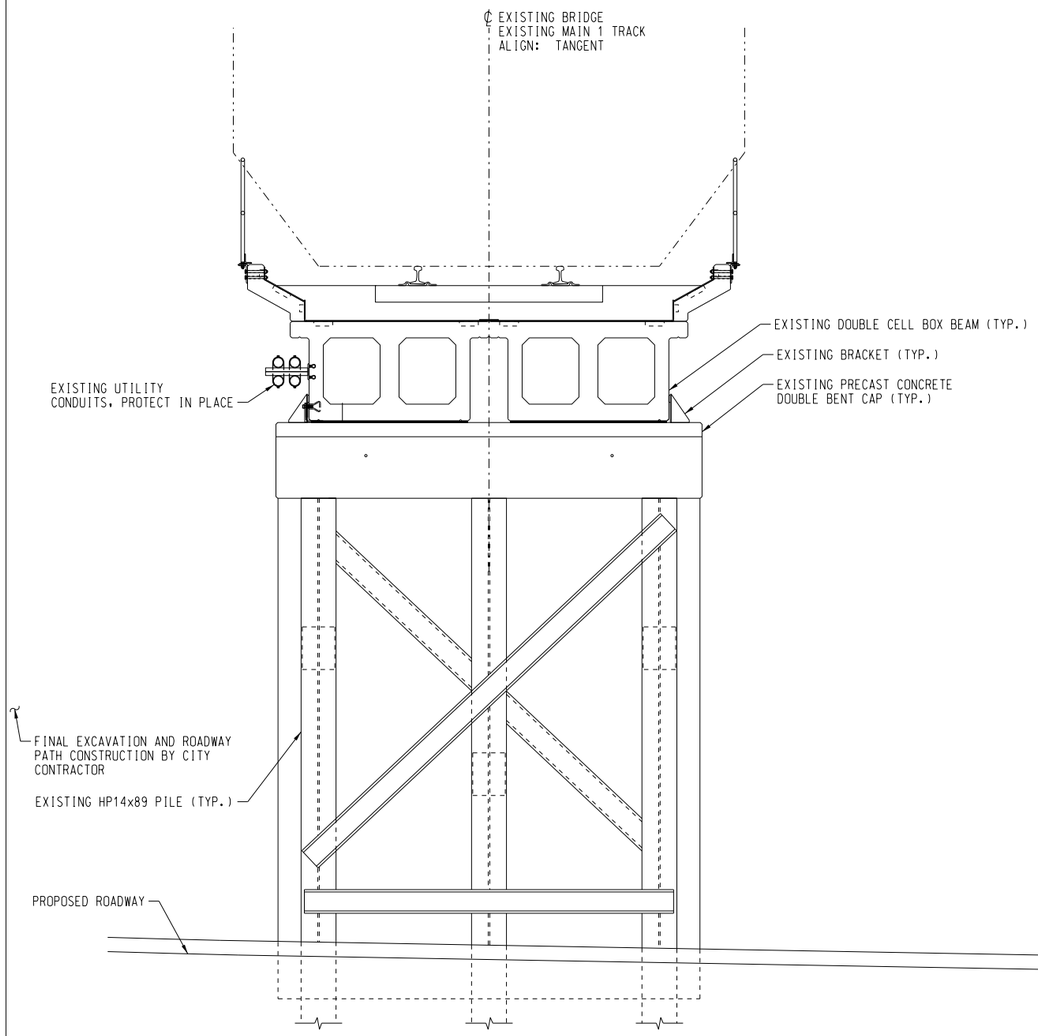
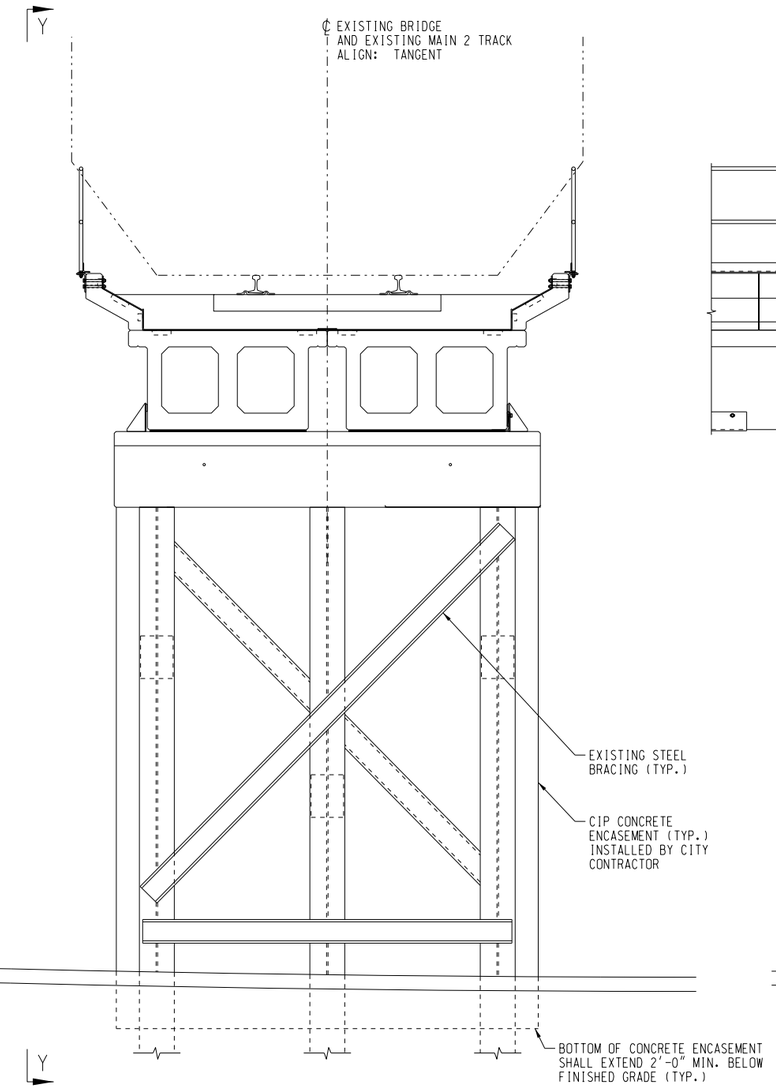
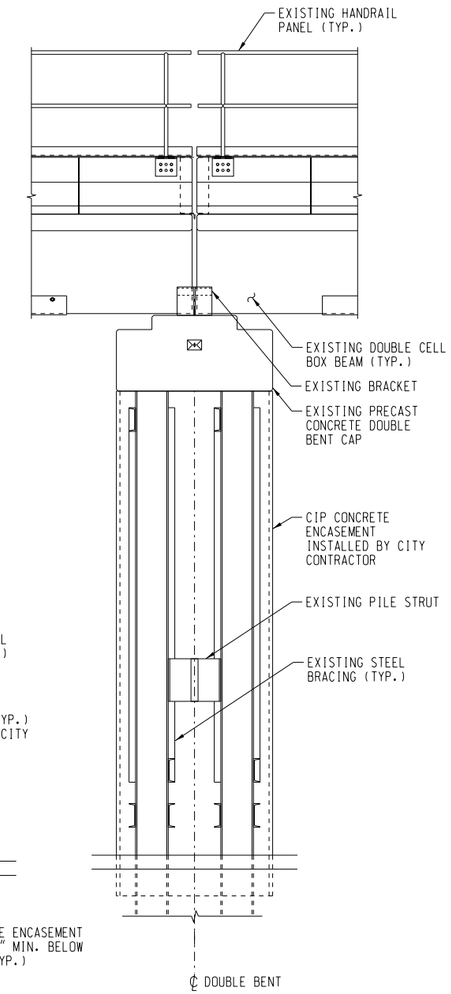


SECTION J-J

SEE SHEET 24 FOR LOCATION OF SECTION J-J





VIEW Y-Y

PETER GRAFF
STATE OF WASHINGTON
44024
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/16/2026
(Professional Engineer)

FINAL PLANS

HDR	CITY OF Spokane Valley	LAT: 47°41'21"N LONG: 117°14'20"W	DES: CSS	BNSF RAILWAY
		DOT # XXXXXXX	DRAWN: AEP	BRIDGE ENGINEERING KANSAS CITY, KS
		CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WA.	CHECK: PJG	APPROVED:
		STREET NAME: PINES ROAD	DATE: JAN. 2025	ASST. DIRECTOR STRUCTURES DESIGN
		STATE CONTRACT NO.: XX-XXXX	PLAN: XXX	
		FED. AID. PROJECT NO.: XXXXX-XXXXX(XXX)	LINE SEG: 0045	

LAKESIDE JCT. WA TO SANDPOINT JCT. ID

BRIDGE NUMBER 62.9A & B

OVER PINES ROAD

TYPICAL SECTION - DOUBLE BENT

PLAN NO: 0045-0062.900-026

File Location: SFILES

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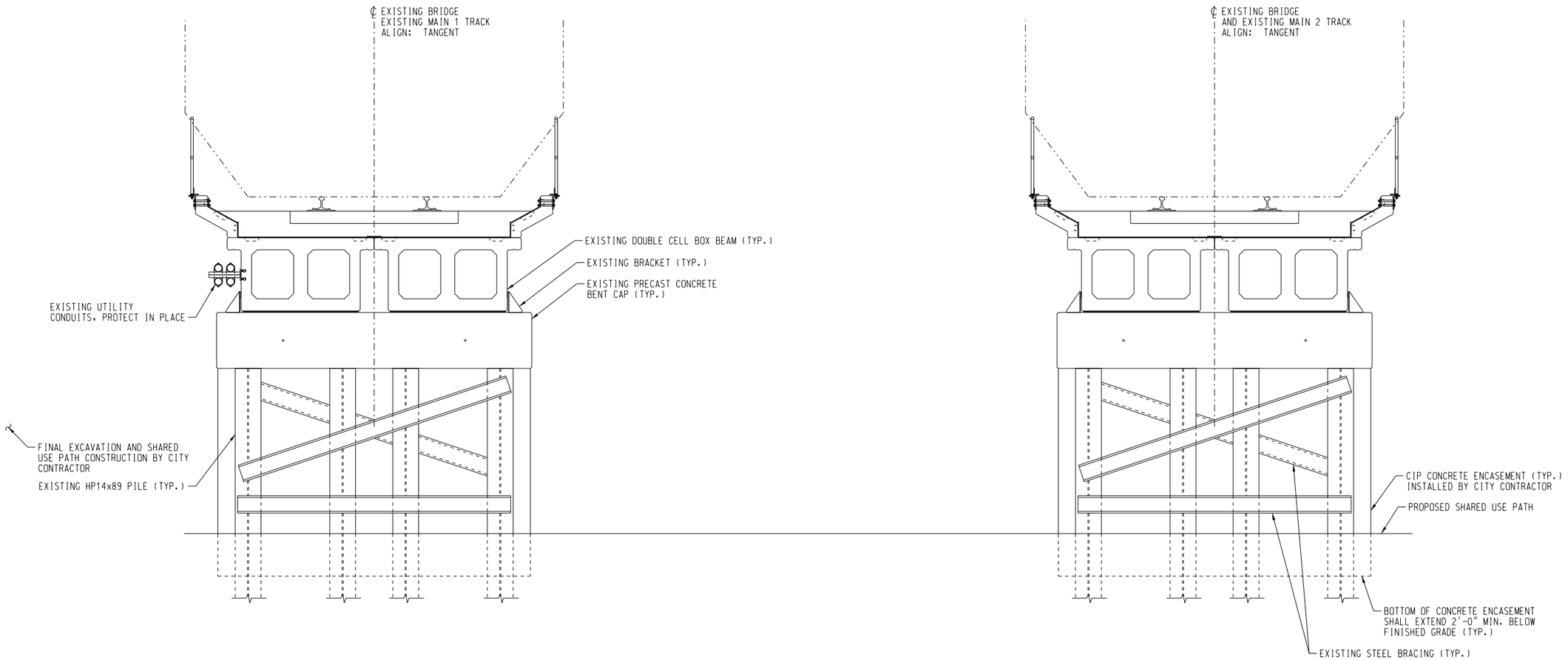

SECTION K-K

SEE SHEET 25 FOR LOCATION OF SECTION K-K

PETER GRAFF
STATE OF WASHINGTON
44534
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/24/2026
(Professional Engineer)

FINAL PLANS

LAT: 47°41'21"N LONG: 117°14'20"W	DES: CSS	BNSF RAILWAY	LAKESIDE JCT. WA TO SANDPOINT JCT. ID
DOT # XXXXXXX	DRAWN: AEP	BRIDGE ENGINEERING KANSAS CITY, KS	BRIDGE NUMBER 62.9A & B
CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WA.	CHECK: PJG		OVER PINES ROAD
STREET NAME: PINES ROAD	DATE: JAN. 2025		TYPICAL SECTION - SINGLE BENT
STATE CONTRACT NO.: XX-XXXX	PLAN: XXX	APPROVED:	
FED. AID. PROJECT NO.: XXXXX-XXXXX(XXX)	LINE SEG: 0045	ASST. DIRECTOR STRUCTURES DESIGN	PLAN NO: 0045-0062.900-027

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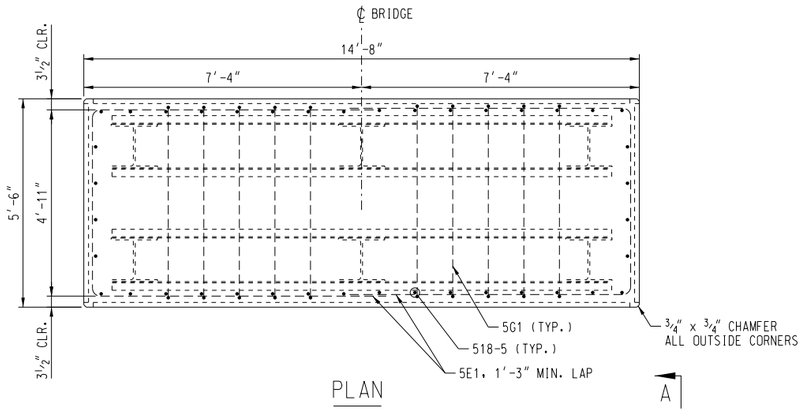
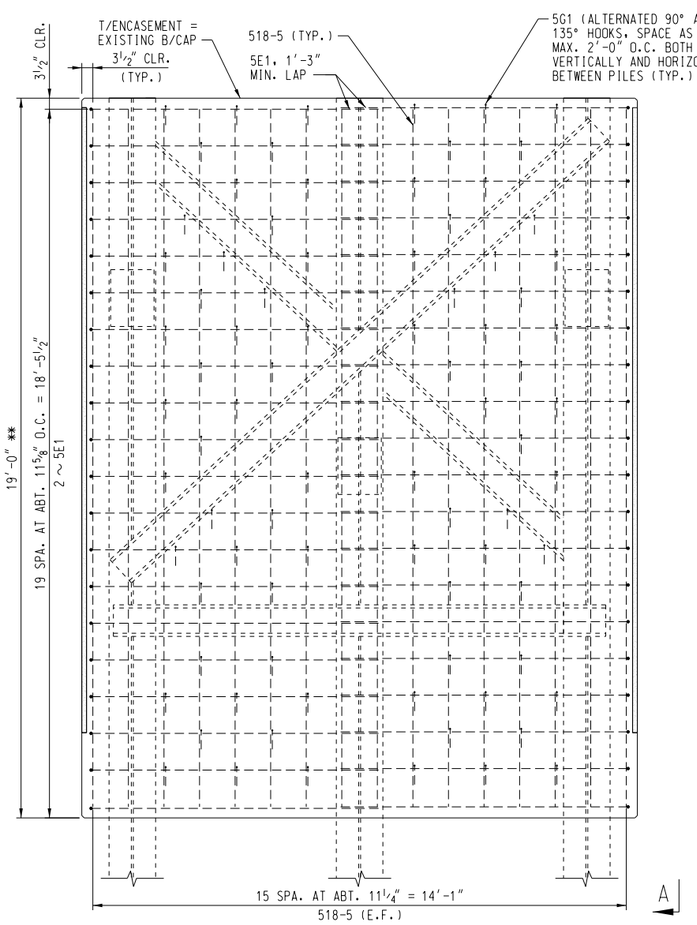
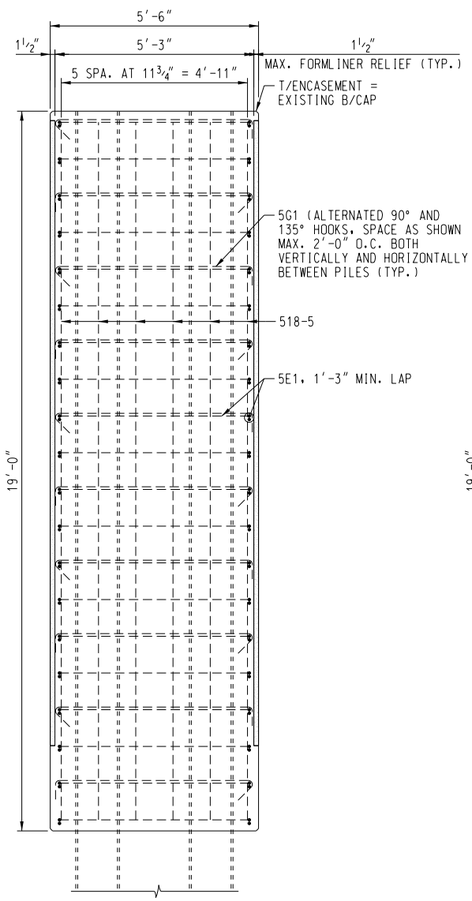


PLAN



ELEVATION

VOLUME = 56.8 CU. YDS. (EACH), REINFORCING STEEL = 2,130 LBS. (EACH)
EXISTING CAP NOT SHOWN FOR CLARITY.
** NOTE: CONTRACTOR SHALL FIELD VERIFY
DIMENSIONS AND ADJUST FOR ACTUAL CONDITIONS.



VIEW A-A

C.I.P. CONCRETE NOTES

FORMLINER SHALL EXTEND DOWN TO 3" ABOVE FINISHED GROUNDLINE.

ALL EXPOSED EDGES OF CONCRETE MEMBERS SHALL BE CHAMFERED ¾ INCH.

ALL MATERIAL AND WORKMANSHIP SHALL BE PER THE CURRENT BNSF STANDARD SPECIFICATIONS.

THE ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE SHALL BE NOT LESS THAN 4000 p.s.i. IN 28 DAYS. CONCRETE FORMS SHALL NOT BE REMOVED BEFORE THE CONCRETE REACHES A STRENGTH OF 2500 p.s.i. HIGH EARLY STRENGTH CONCRETE SHALL BE USED.

MILD STEEL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF THE CURRENT A.S.T.M. DESIGNATION A615 OR A706, GRADE 60.

FABRICATION OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH CHAPTER 7 OF THE CURRENT C.R.S.I. MANUAL OF STANDARD PRACTICE.

STEEL REINFORCEMENT MAY BE MOVED SLIGHTLY TO MISS EMBEDDED ITEMS.

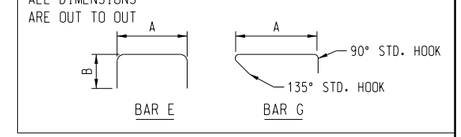
DUE TO PILE PLACEMENT, ADJUST DIMENSIONS TO MAINTAIN RECTANGULAR SHAPE AND CLEARANCE FROM PILE AND REINFORCING STEEL, IN NO CASE SHALL SIZE BE LESS THAN SHOWN.

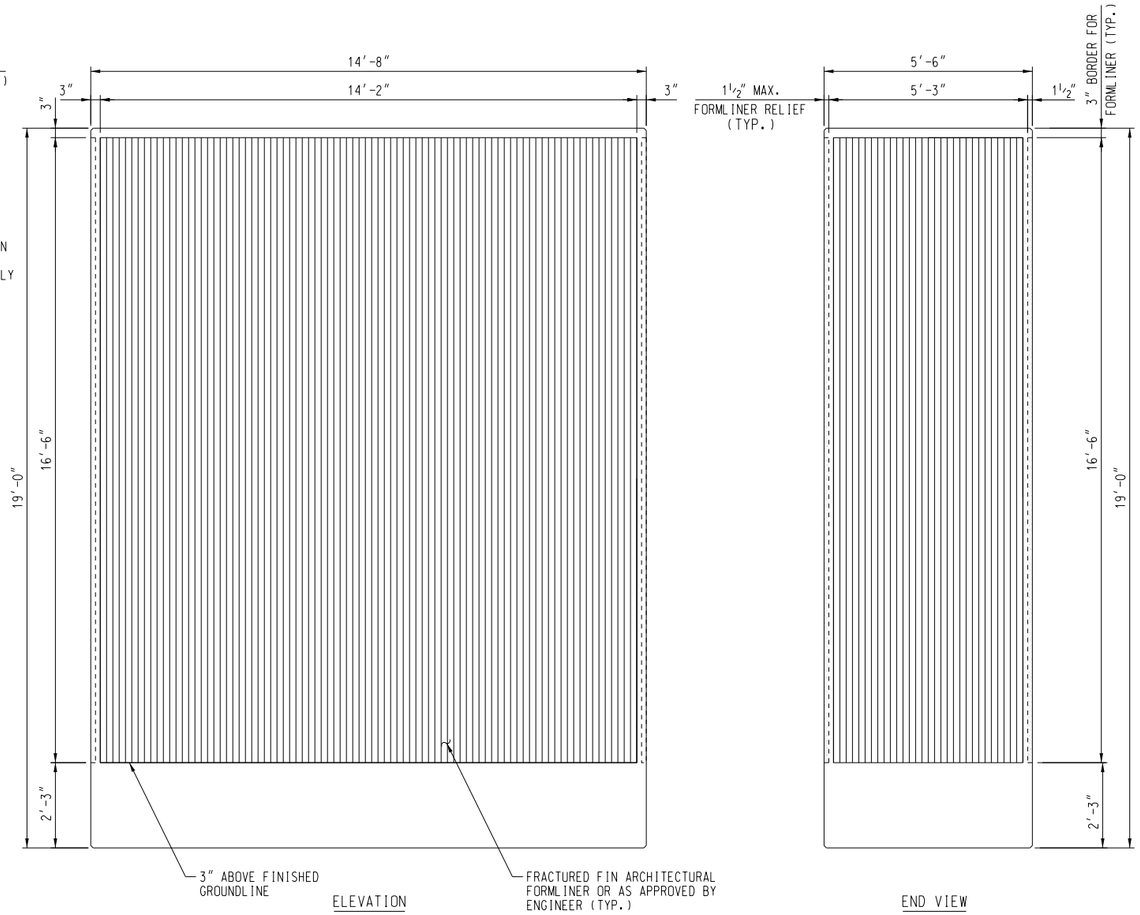
REINFORCING STEEL REQUIRED FOR DOUBLE BENT ENCASEMENT (EACH)

QTY.	MARK	SIZE	TYPE	A	B	LENGTH
40	5E1	5	E	4'-11"	7'-9"	20'-5"
82	5G1	5	G	4'-11"	-	5'-11"
40	518-5	5	STR.	-	-	18'-5"

BENDING DETAILS

ALL DIMENSIONS ARE OUT TO OUT





ELEVATION

END VIEW

LIMITS OF ARCHITECTURAL FORMLINER

EXISTING CAP NOT SOWN FOR CLARITY.

FINAL PLANS

LAKESIDE JCT. WA TO SANDPOINT JCT. ID

BRIDGE NUMBER 62.9A & B

OVER PINES ROAD

BENT ENCASEMENT DETAILS - BENTS 2 THRU 4 (DOUBLE)

PETER GRAHAM STATE OF WASHINGTON 44526 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/19/2026
(Professional Engineer)

HDR

CITY OF Spokane Valley

LAT: 47°41'21"N LONG: 117°14'20"W	DES: CSS
DOT # XXXXXXX	DRAWN: AEP
CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WA.	CHECK: PJG
STREET NAME: PINES ROAD	DATE: JAN. 2025
STATE CONTRACT NO.: XX-XXXX	PLAN: XXX
FED. AID. PROJECT NO.: XXXXX-XXXXX(XXX)	LINE SEG: 0045

BNSF RAILWAY

BRIDGE ENGINEERING KANSAS CITY, KS

APPROVED:

ASST. DIRECTOR STRUCTURES DESIGN

PLAN NO: 0045-0062.900-028

File Location: $FILEL$

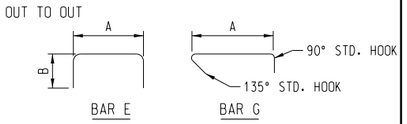
Date Printed: 1/27/2025 Time Printed: 2:13:37 PM

REINFORCING STEEL REQUIRED FOR SINGLE BENT ENCASEMENT (EACH)

QTY.	MARK	SIZE	TYPE	A	B	LENGTH
22	5E2	5	E	2′-1″	7′-9″	17′-7″
40	5G2	5	G	2′-1″	–	3′-1″
34	509-5	5	STR.	–	–	9′-5″

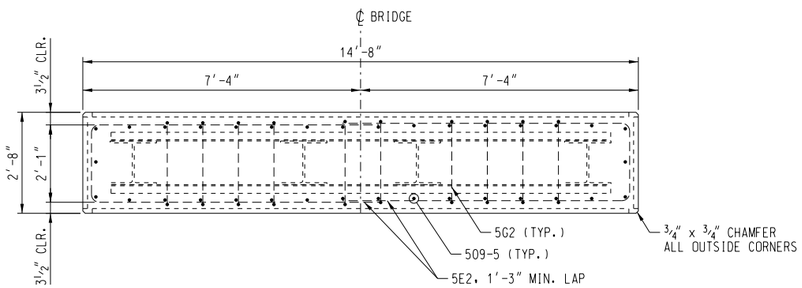
BENDING DETAILS

ALL DIMENSIONS ARE OUT TO OUT

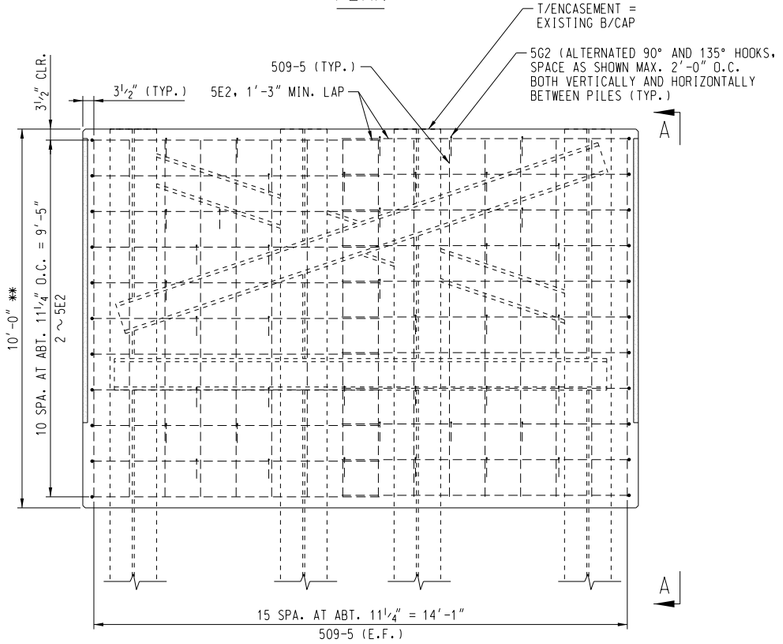


NOTE

SEE SHEET 28 FOR C.I.P. CONCRETE NOTES.

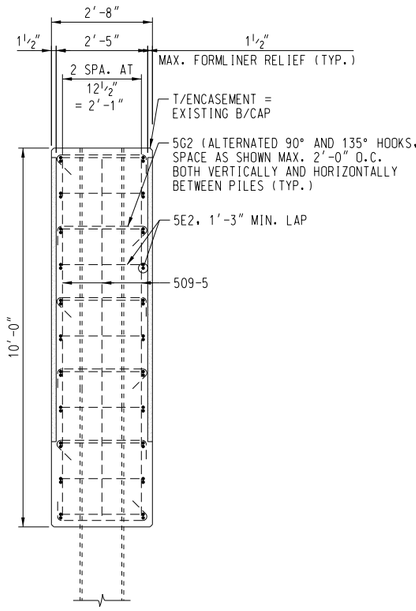


PLAN

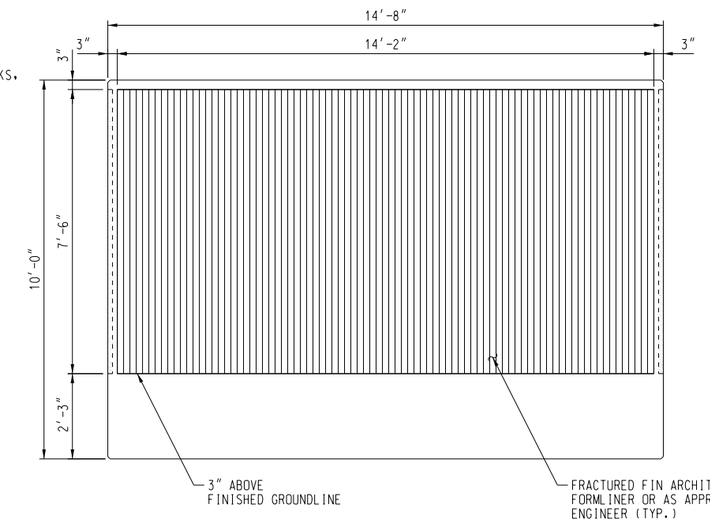


ELEVATION

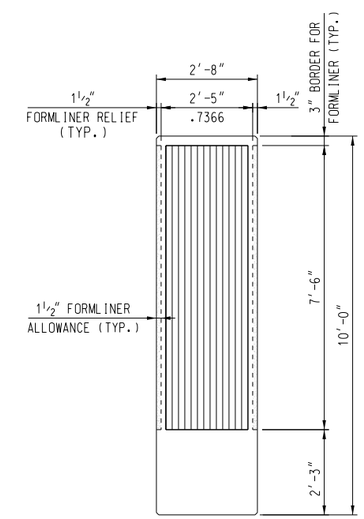
VOLUME = 14.5 CU. YDS. (EACH), REINFORCING STEEL = 870 LBS. (EACH)
EXISTING CAP NOT SHOWN FOR CLARITY.
** NOTE: CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND ADJUST FOR ACTUAL CONDITIONS.



VIEW A-A



ELEVATION



END VIEW

LIMITS OF ARCHITECTURAL FORMLINER

EXISTING CAP NOT SHOWN FOR CLARITY.

FINAL PLANS

LAT: 47°41′21″N LONG: 117°14′20″W	DES: CSS	BNSF RAILWAY	LAKESIDE JCT. WA TO SANDPOINT JCT. ID
DOT # XXXXXXX	DRAWN: AEP		BRIDGE NUMBER 62.9A & B
CITY OF SPOKANE VALLEY, SPOKANE COUNTY, WA.	CHECK: PJG	BRIDGE ENGINEERING KANSAS CITY, KS	OVER PINES ROAD
STREET NAME: PINES ROAD	DATE: JAN. 2025		BENT ENCASEMENT DETAILS – BENT 5 (SINGLE)
STATE CONTRACT NO.: XX-XXXX	PLAN: XXX	APPROVED:	PLAN NO: 0045-0062.900-029
FED. AID. PROJECT NO.: XXXXX-XXXXX(XXX)	LINE SEG: 0045	ASST. DIRECTOR STRUCTURES DESIGN	218 OF 218

PETER GRAGE STATE OF WASHINGTON 44524 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 11/26/2026 (Professional Engineer)

HDR

CITY OF Spokane Valley

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