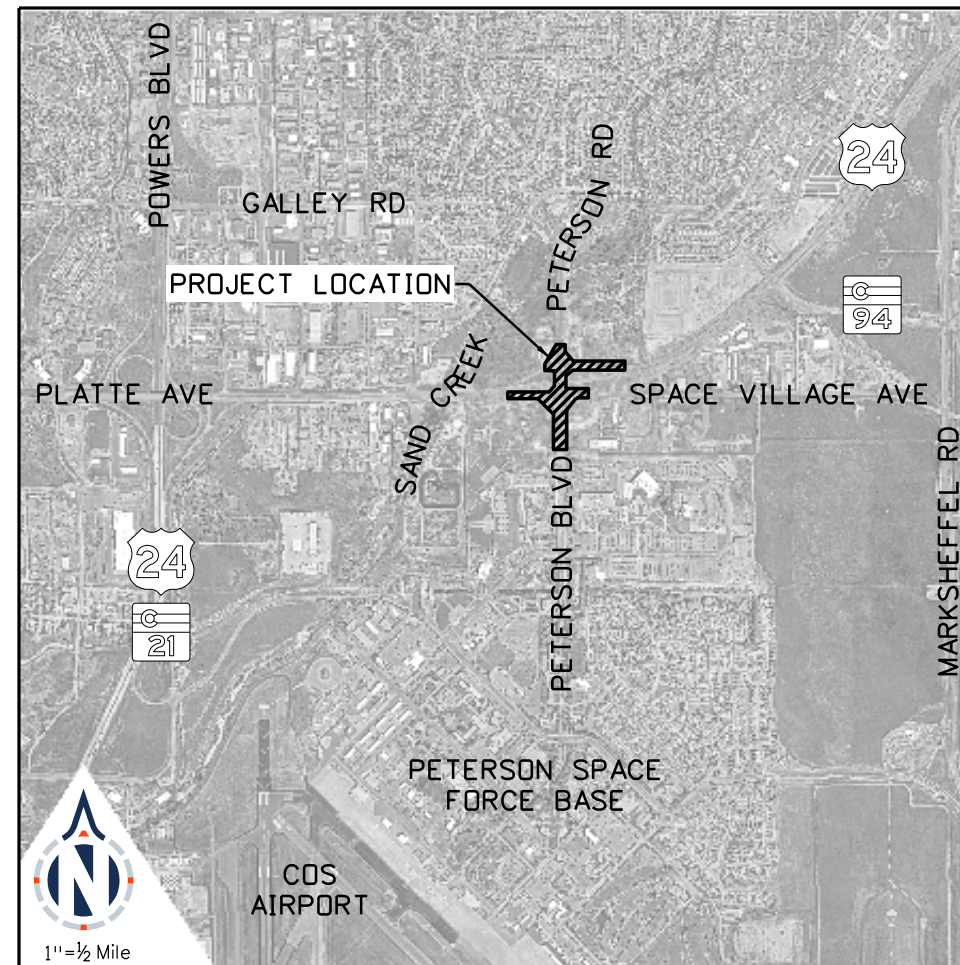




# CITY OF COLORADO SPRINGS PUBLIC WORKS DEPARTMENT

PRELIMINARY (30%) PLANS OF PROPOSED  
**US HIGHWAY 24 & PETERSON BLVD/RD ROUNDABOUTS**  
DECEMBER 20, 2023



25 N Spruce Street, Suite 310  
Colorado Springs, CO 80905  
Tel: 719-299-5077, basisp.com

SIGNATURE  
BLOCK

## INDEX OF SHEETS

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3	General Notes
4	Summary of Approximate Quantities
5	Tabulation of Quantities
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118 to 126	Cross Section
127 to 130	Roadway Fastest Path Plan
131 to 135	Roadway Sight Distance Plan
136 to 154	Roadway Swept Path Plan
	Survey Control
	City of COS Std Dwgs 6B, D24, TR1
	CDDOT Std Dwgs M-412-1, S-627-1

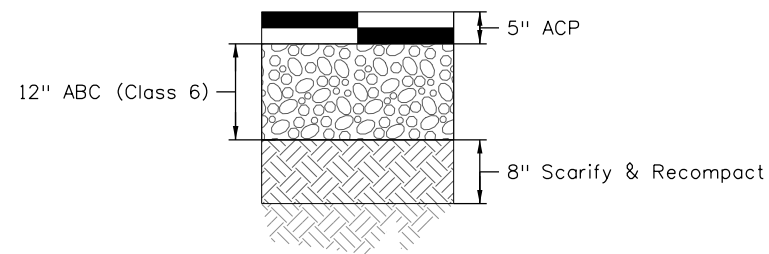


## DESIGN CRITERIA

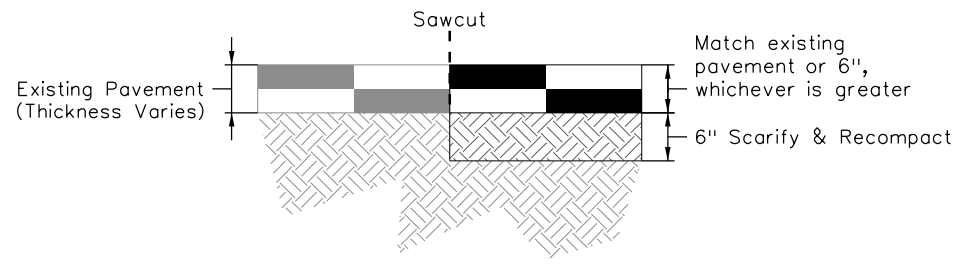
CRITERIA	UNITS	Roundabout	
		South	North
Approximate Inscribed Diameter	LF	180	160
Desirable Fastest Path	R1 - Entry Path	MPH	25 to 30
	R2 - Circulating Path	MPH	15 to 25
	R3 - Exit Path	MPH	SSD for Xwalk
	R4 - Left Turn Path	MPH	10 to 20
	R5 - Right Turn Path	MPH	15 to 20
Design Vehicle, Side-by-Side, w/in Lanes		SU-30	
Design Vehicle, on Pavement		WB-67	

Key Roundabout Design Sources:  
- Geometric Design: Nat'l Cooperative Highway Research Program (NCHRP) Report 672, Roundabouts: An Informational Guide 2nd Ed.  
- Fastest Path Methodology: Wisconsin Department of Transportation, Facilities Development Manual, Chapter 11, Section 26, November 15, 2022

CRITERIA	UNITS	US24	Peterson		Space Village Ave
			Blvd	Rd	
Posted Speed (Existing)	MPH	55	30/15	30	45
Posted Speed (Proposed)	MPH	55	30/15	30	45
Design Speed	MPH	55	30	30	45
Traffic AADT (Existing)	VPD	41,800	15,200	9,100	4,700
Traffic AADT (Year 2026)	VPD	49,000	21,400	10,800	6,100
Traffic AADT (Year 2045)	VPD	74,100	26,200	17,700	12,800
Traffic % Trucks	%	N/A	3	3	3
Functional Classification (City)	N/A	N/A	Minor Arterial		

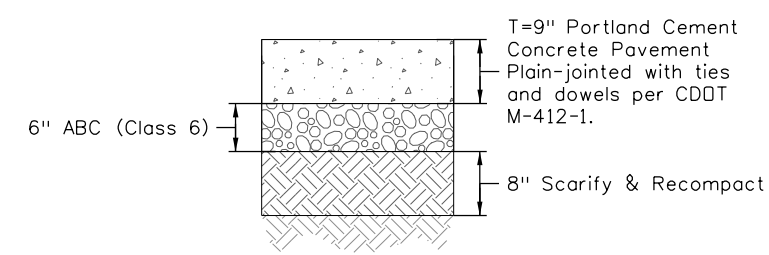


**PAVEMENT SECTION DETAIL**  
ACP Full Depth

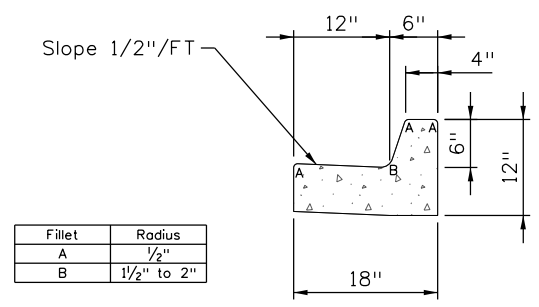


**PAVEMENT SECTION DETAIL**  
ACP Patching

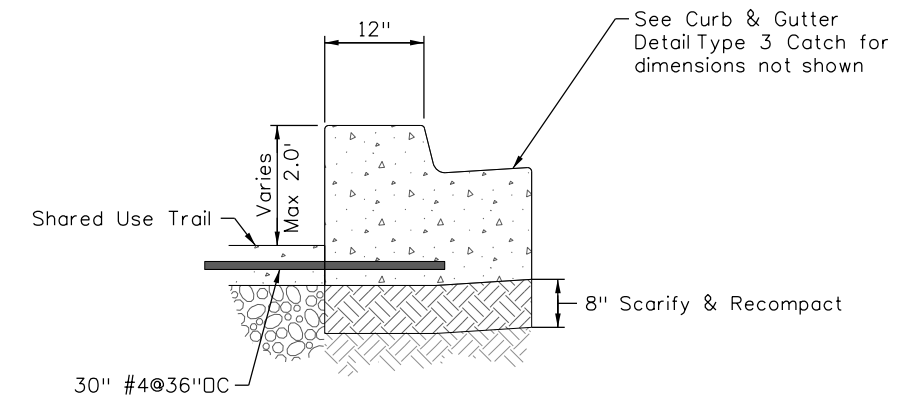
Reference City detail for RAB (and other) C&G?



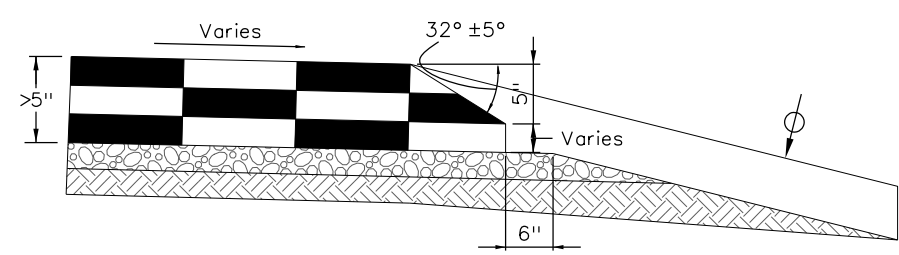
**PAVEMENT SECTION DETAIL**  
Concrete Pavement



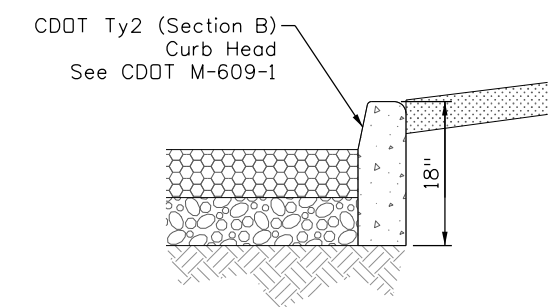
**CURB AND GUTTER DETAIL**  
Type 3 Catch



**CURB AND GUTTER (SPECIAL) DETAIL**



**PAVEMENT DETAIL**  
ACP Safety Edge



**CURB HEAD DETAIL**

**LEGEND**

- PCMP
- Roundabout Apron
- Concrete
- ACP (Proposed)
- ABC
- ACP (Existing)
- Topsoil

Keith Given 12/20/2023 9:25:39 AM V:\900 Work\905 Basefiles\24PETE\_SHT\_RDWY\_TYP\_Typical Sections\_101.dgn SHT\_DET\_1\_Section Details

**BASIS PARTNERS** Basis Partners  
25 N Spruce Street, Suite 310  
Colorado Springs, CO 80905  
Tel: 719-299-5077, basisp.com

Detailer: KAG Print Date: 12/20/2023  
Designer: STV Horiz. Scale: NTS  
Reviewer: STV Vert. Scale: NTS



Sheet Revisions		
Date	Comments	Init

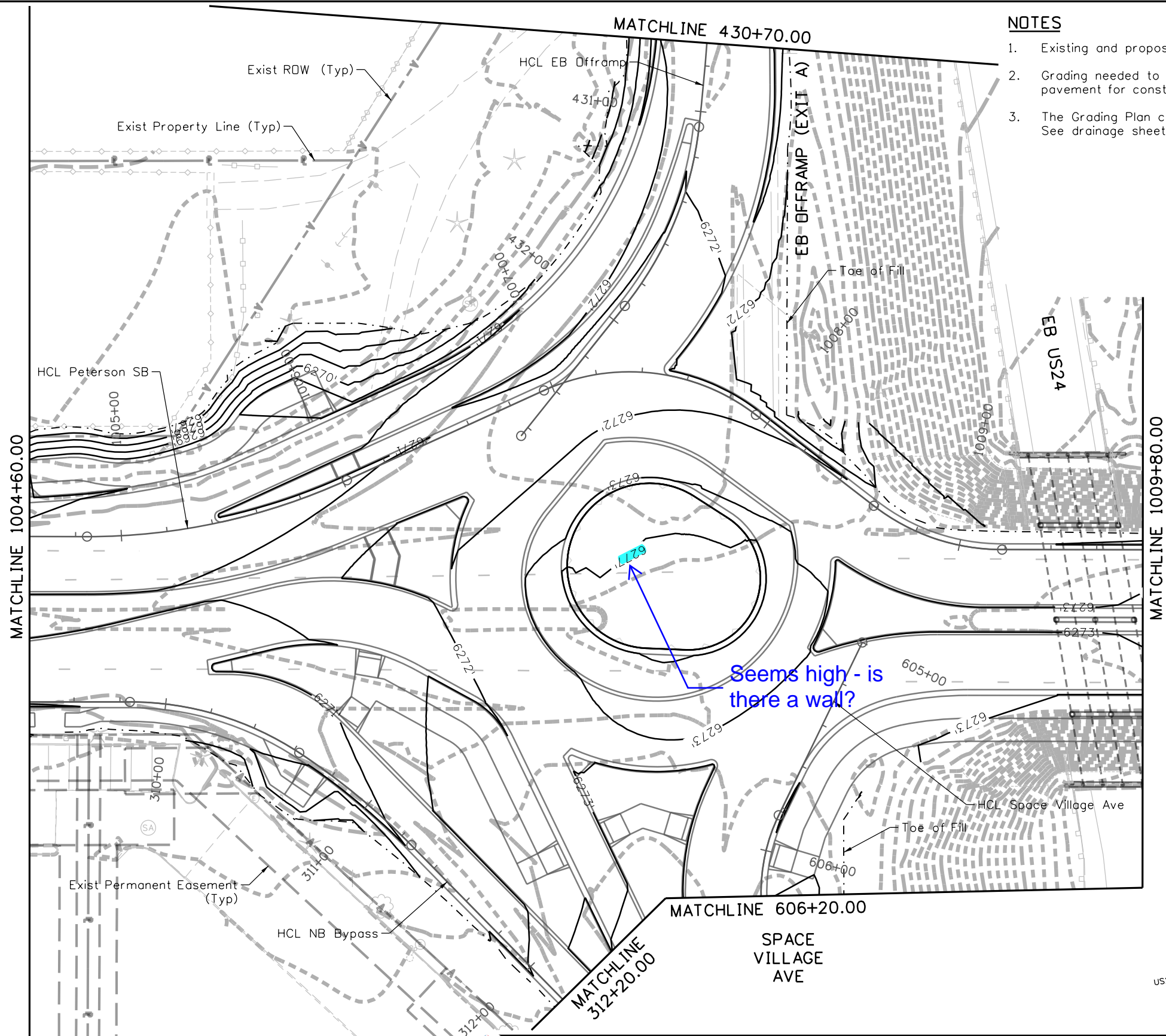
US Highway 24 & Peterson Blvd/Rd Roundabouts	
TYPICAL SECTION DETAIL	Typical 6 of 6
	Sheet Number 11



Know what's below.  
Call before you dig.

### NOTES

- Existing and proposed contours are shown at 1' intervals.
- Grading needed to accommodate detours and temporary pavement for construction phasing is not shown.
- The Grading Plan currently reflects only roadway improvements. See drainage sheets for proposed drainage information.

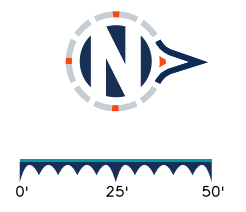
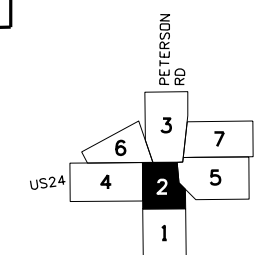


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PETERSON BLVD

PETERSON RD

Seems high - is there a wall?



### Sheet Revisions

Date	Comments	Init

### US Highway 24 & Peterson Blvd/Rd Roundabouts

### GRADING PLAN SOUTH ROUNDABOUT

Grading 2 of 7  
Sheet Number 58

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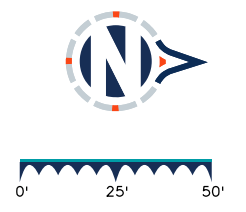
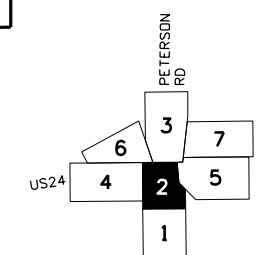
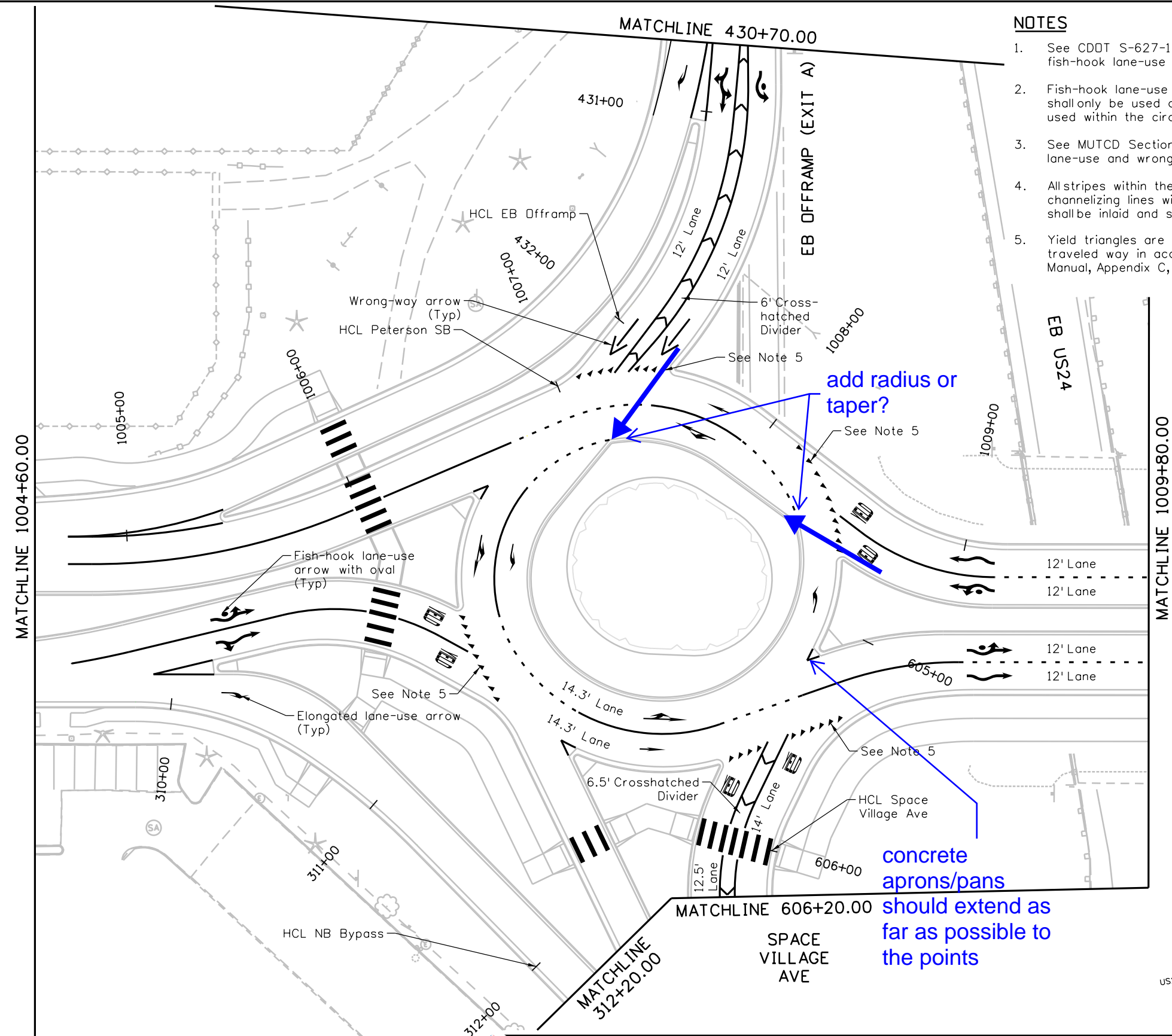
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Designer: STV Horiz. Scale: 1"=50'  
Reviewer: STV Vert. Scale: N/A



30% PRELIMINARY - NOT FOR CONSTRUCTION

**NOTES**

1. See CDDT S-627-1 for detailed illustrations and dimensions of fish-hook lane-use arrow and oval pavement markings.
2. Fish-hook lane-use arrow pavement markings and left turn ovals shall only be used on roundabout approaches and shall not be used within the circulatory roadway of a roundabout.
3. See MUTCD Section 3B.20 for more information on elongated lane-use and wrong-way arrow pavement markings.
4. All stripes within the circulatory roadway shall be inlaid. All solid channelizing lines within the circulatory roadway and approaches shall be inlaid and supplemented with rumble strips.
5. Yield triangles are shown along the edge of the circulatory traveled way in accordance with the City of COS Traffic Criteria Manual, Appendix C, Section 3.



**Sheet Revisions**

Date	Comments	Init

**US Highway 24 & Peterson Blvd/Rd Roundabouts**

**STRIPING PLAN  
SOUTH ROUNDABOUT**

Striping	2 of 7
Sheet Number	97

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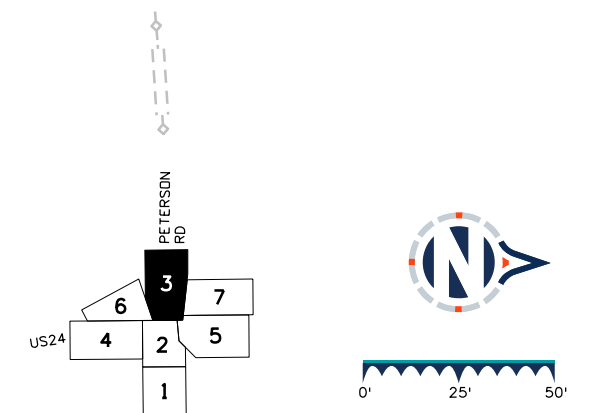
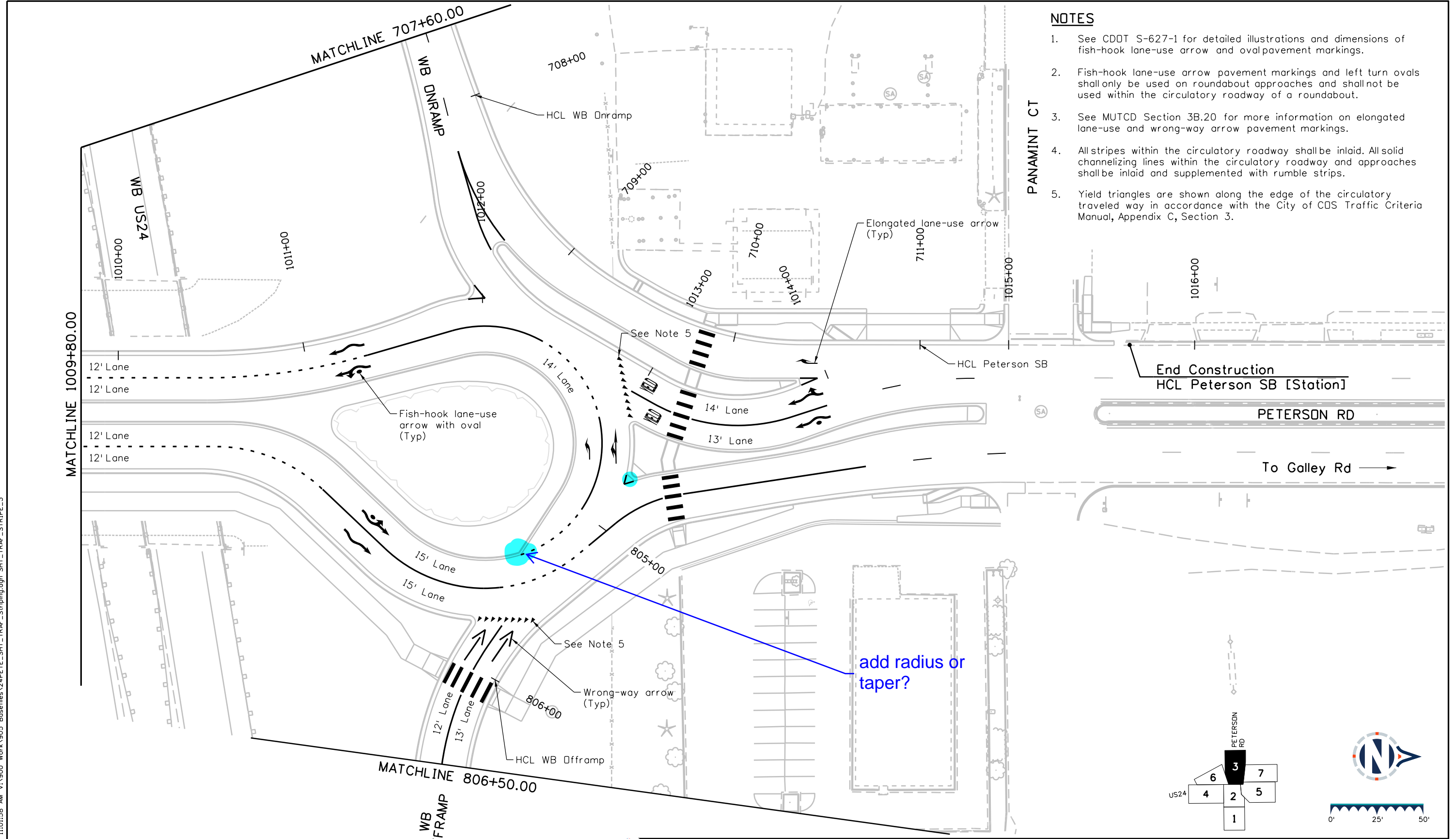
Detailer: STV	Print Date: 12/20/2023
Designer: STV	Horiz. Scale: 1"=50'
Reviewer: GB	Vert. Scale: N/A



**NOTES**

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PANAMINT CT



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**BASIS PARTNERS**  
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 Colorado Springs, CO 80905  
 Tel: 719-299-5077, basisp.com

Detailer: STV    Print Date: 12/20/2023  
 Designer: STV    Horiz. Scale: 1"=50'  
 Reviewer: GB    Vert. Scale: N/A



Sheet Revisions		
Date	Comments	Init

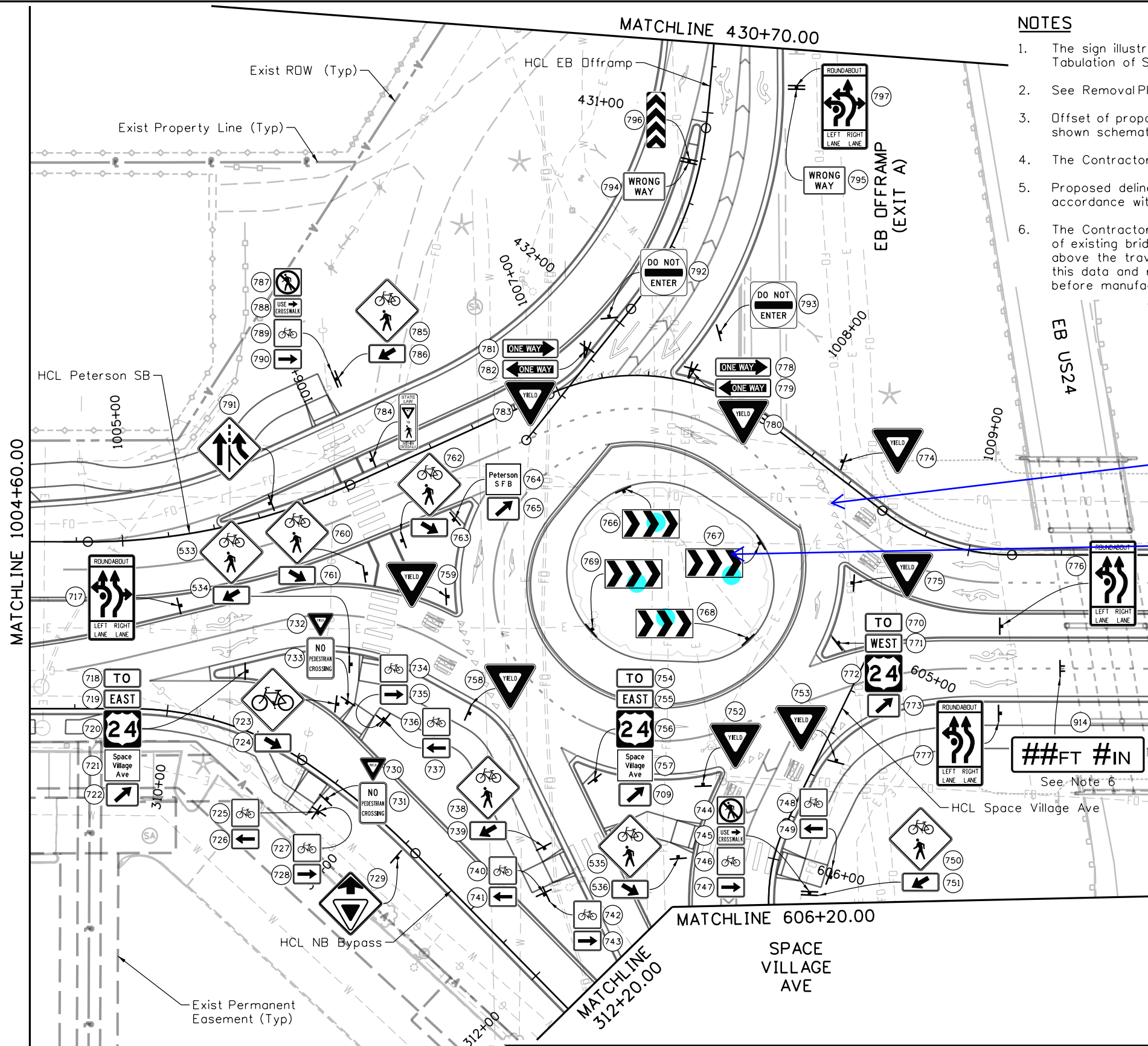
US Highway 24 & Peterson Blvd/Rd Roundabouts

**STRIPING PLAN NORTH ROUNDABOUT**

Striping	3 of 7
Sheet Number	98



Know what's below.  
Call before you dig.



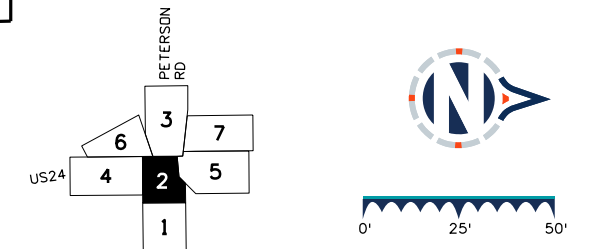
**NOTES**

1. The sign illustrations on this sheet are not to scale. See the Tabulation of Signing for sign panel dimensions.
2. See Removal Plan for private and commercial signs.
3. Offset of proposed sign posts from edge of pavement or curb is shown schematically. See standard dwgs for actual offset.
4. The Contractor shall deliver all removed sign panels to the City.
5. Proposed delineators are not shown but shall be installed new in accordance with CDOT S-612-1.
6. The Contractor shall survey the top of finished pavement and bottom of existing bridge to determine the actual minimum vertical clearance above the traveled way and gutter pans. The Contractor shall submit this data and recommended clearance for approval of the Engineer before manufacturing or installing the sign panel. Paint over the existing painted clearance to the satisfaction of the Engineer.
7. Yield sign panels on the right side of a roundabout approach shall be perpendicular to the curb. Yield sign panels on the left side of a roundabout approach shall be perpendicular to approaching traffic at least 100' away.

See MUTCD re wide dots and chevron markings  
check MUTCD guidance - no more R6-4 signs

**LEGEND**

- (#) Existing Sign Panel ID #
- (#) Proposed Sign Panel ID #
- Existing Ground Sign Assembly
- Existing Overhead Sign Assembly
- Proposed Ground Sign Assembly
- Proposed Overhead Sign Assembly



**Sheet Revisions**

Date	Comments	Init

**US Highway 24 & Peterson Blvd/Rd Roundabouts**

**SIGNING PLAN  
PROPOSED SIGNS  
SOUTH ROUNDABOUT**

Signing 2B of 7  
Sheet Number 105

Keith Given 12/20/2023 10:59:43 AM V:\900 Work\905 Basefiles\24PETE\_SHT\_TRAF\_Signing\_Proposed.dgn SHT\_TRAF\_SIGN\_PR\_2

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Detailer: STV Print Date: 12/20/2023  
Designer: STV Horiz. Scale: 1"=50'  
Reviewer: GB Vert. Scale: N/A



30% PRELIMINARY - NOT FOR CONSTRUCTION

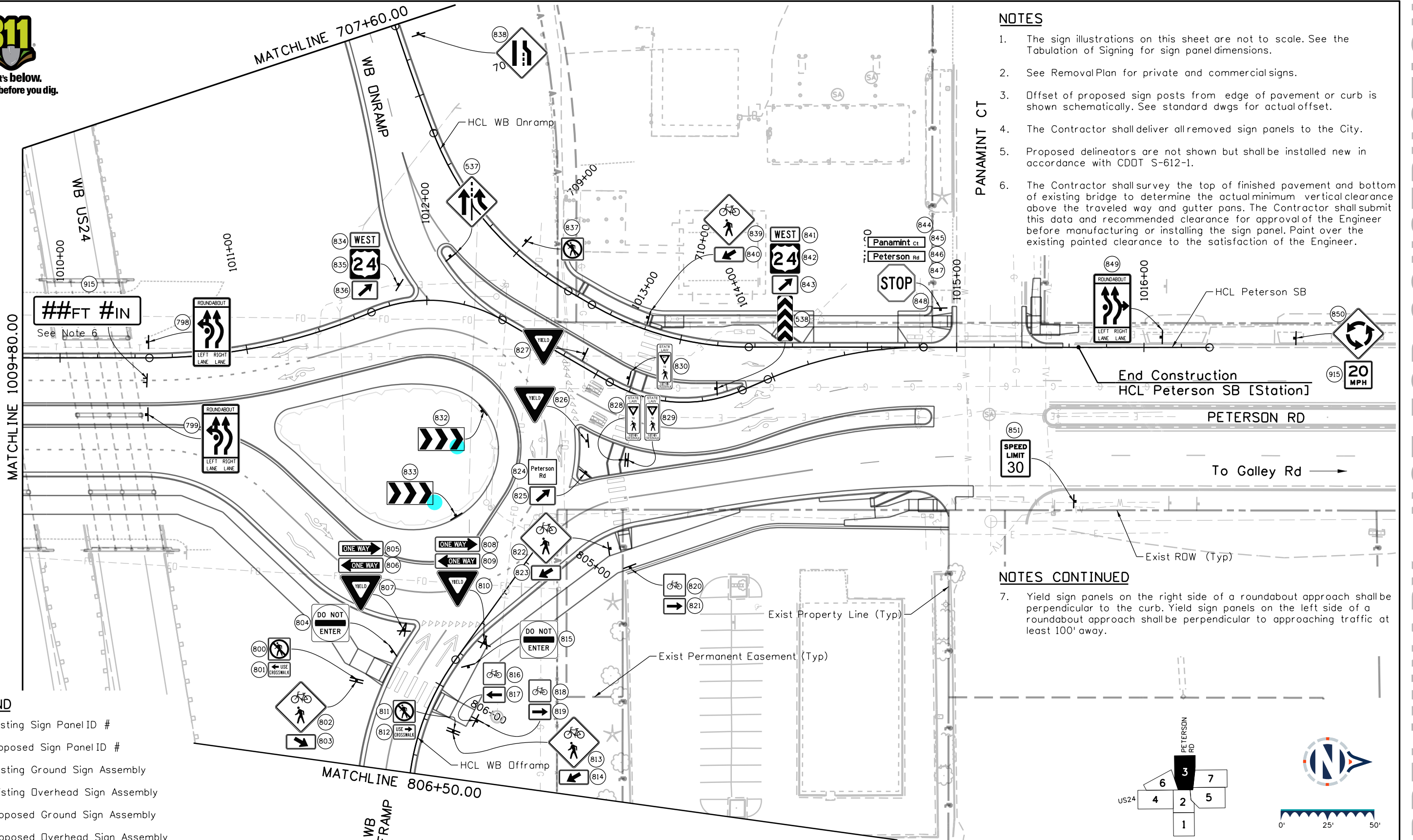


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PANAMINT CT

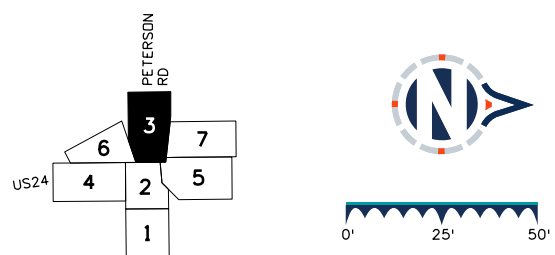


**NOTES CONTINUED**

7. Yield sign panels on the right side of a roundabout approach shall be perpendicular to the curb. Yield sign panels on the left side of a roundabout approach shall be perpendicular to approaching traffic at least 100' away.

**LEGEND**

- (#) Existing Sign Panel ID #
- (#) Proposed Sign Panel ID #
- Existing Ground Sign Assembly
- Existing Overhead Sign Assembly
- Proposed Ground Sign Assembly
- Proposed Overhead Sign Assembly



Keith Given 12/20/2023 11:00:20 AM V:\900 Work\905 Basefiles\24PETE\_SHT\_TRAFF\_Signing\_Proposed.dgn SHT\_TRAFF\_SIGN\_PR\_3

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Detailer: STV Print Date: 12/20/2023  
Designer: STV Horiz. Scale: 1"=50'  
Reviewer: GB Vert. Scale: N/A



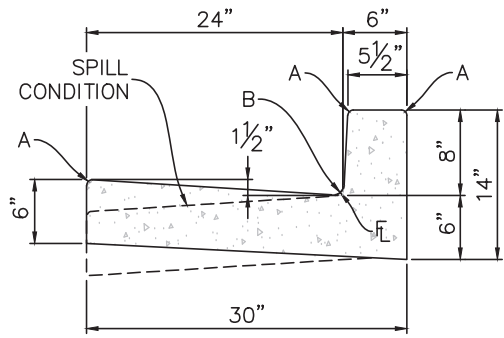
Sheet Revisions		
Date	Comments	Init

**US Highway 24 & Peterson Blvd/Rd Roundabouts**

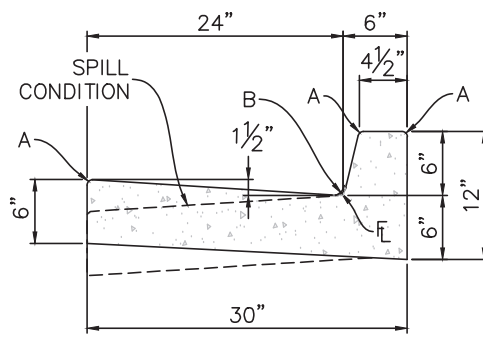
**SIGNING PLAN  
PROPOSED SIGNS  
NORTH ROUNDABOUT**

Signing 3B of 7  
Sheet Number 107

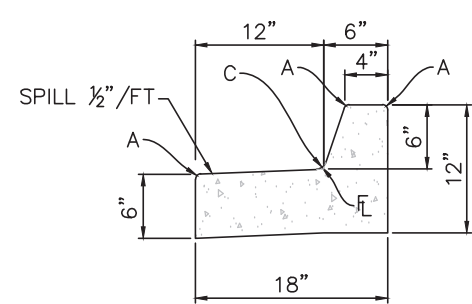
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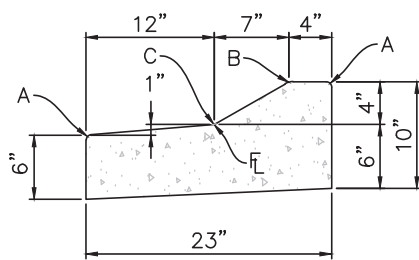
**TYPE 1**  
**8" VERTICAL**



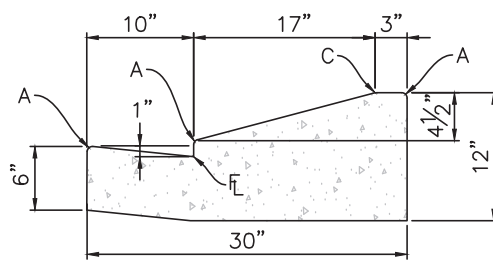
**TYPE 2**  
**6" VERTICAL**



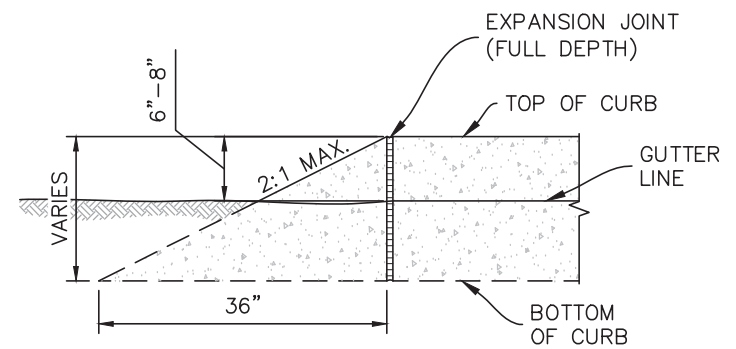
**TYPE 3**  
**STANDARD MEDIAN**



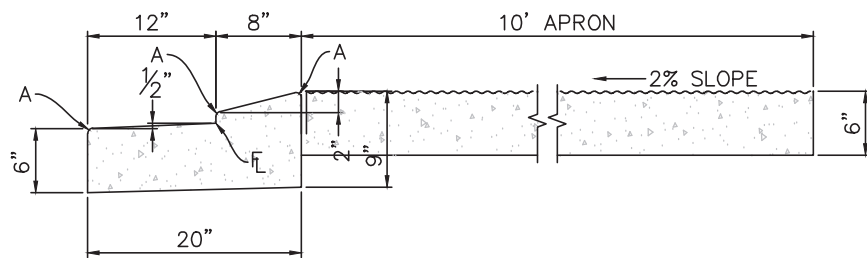
**TYPE 4**  
**MOUNTABLE**



**TYPE 5**  
**RESIDENTIAL CURB & GUTTER ONLY**



**CURB ENDING**



**ROUNDBOUNT APRON**

NOTE:  
TYPE 1 AND 2 SPILL GUTTER MUST BE APPROVED BY CITY ENGINEERING.  
TYPE 5 IS CARRY CURB ONLY.

RADII LEGEND	
A	1/4" - 1/2"
B	1 1/2"
C	1 1/2" - 2"

	<b>CURB &amp; GUTTER DETAILS</b>	
	APPROVED: <i>Gayle Sturdivant</i> CITY ENGINEER	
	ISSUED: 2/26/20	REVISED: