

Spokane Traffic Calming Master Plan

District:	3
Neighborhood:	West Central
Project Extent:	Summit Boulevard, Broadway Avenue, Boone Avenue, Maxwell/Mission Avenue
	Estimate: \$744,000

Problem Statement: Residents of the West Central neighborhood raised concerns over speeding on Summit Boulevard (1.11 miles), Broadway Avenue (1.28 miles), Boone Avenue (1.45 miles), and Maxwell/Mission Avenue (1.35 miles) within the neighborhood (from western terminals to Monroe Street). These are the primary roadways in the neighborhood. Within the study area, Summit Boulevard is classified as an urban minor arterial between Broadway Avenue and Cochran Street with a posted speed limit of 30 miles per hour. The roadway provides two lanes with on-street parking and a multiuse path along the bluff. Broadway Avenue and Boone Avenue are classified as urban major collectors west of Ash Street and urban minor arterials east of Ash Street, all with a posted speed limit of 30 miles per hour. Broadway Avenue provides two lanes with on-street parking west of Chestnut Street and an additional two-way-left-turn lane east of Chestnut Street. Boone Avenue provides two lanes with on-street parking west of Maple Street and four lanes east of Maple Street. Maxwell Avenue is classified as an urban local access street west of Belt Street with speed limit of 25 miles per hour, a minor arterial between Belt Street and Maple Street with a 20 mile per hour speed zone along the Cannon Park frontage and speed limit of 30 miles per hour east of Oak Street, and a major arterial to Monroe Street with speed limit of 30 miles per hour. Maxwell Avenue west of Madison Street and Mission Avenue provides two lanes with on-street parking. Maxwell Avenue east of Madison Street provides four lanes.

Pending Grant Applications

The following improvement projects have pending funding through grants:

- Restripe of Pettet Drive and Maxwell Avenue from West Central Community Center to Walnut. Includes bike lanes, crosswalk improvements. Pathway through the park from Pettet/Belt to the community center.

Traffic Analysis

The following tables show 2022 daily traffic volumes and 85th percentile speeds on the study corridors. The highest daily volume on Summit Boulevard was 511 vehicles north of Webb Place. The highest 85th percentile speed was 32 miles per hour, indicating minor speeding conditions.

2022 Daily Traffic and 85th Percentile Speeds on Summit Boulevard

Direction	# Lanes	2022 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
North of Webb Place				
NB	1	253	31	
SB	1	258	32	
Both Dir.	2	511	31	30

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North of Broadway Avenue				
NB	1	159	30	
SB	1	127	29	
Both Dir.	2	286	30	30

^a Traffic data collected in March 2022.

The highest daily volume on Broadway Avenue was 4,177 vehicles west of Adams Street. The 85th percentile speed ranged from 34 to 39 miles per hour. This indicates a moderate to significant speeding condition along the study corridor.

2022 Daily Traffic and 85th Percentile Speeds on Broadway Avenue

Direction	# Lanes	2022 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
West of Nettleton Street				
EB	1	533	36	
WB	1	585	34	
Both Dir.	2	1,118	35	30
West of Adams Street				
EB	1	2,630	35	
WB	1	1,547	39	
Both Dir.	3	4,177	36	30

^a Traffic data collected in March 2022.

The highest daily volume on Boone Avenue was estimated to be 9,666 vehicles west of Adams Street on the four-lane section. The 85th percentile speeds ranged from 33 to 34 miles per hour, indicating minor speeding condition (4 mph greater than the posted speed limit).

2022 Daily Estimated Traffic and 85th Percentile Speeds on Boone Avenue

Direction	# Lanes	2022 Estimated Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
West of Nettelson Street				
EB	1	1,966		
WB	1	1,908		
Both Dir.	2	3,874	33	30
West of Oak Street				
EB	1	2,875		
WB	1	2,679		
Both Dir.	2	5,553	33	30
West of Adams Street				
EB	2	5,545		
WB	2	4,121		
Both Dir.	4	9,666	34	30

^a Traffic data collected in May 2017. Traffic volumes were grown at a 1.0% annual growth rate, to estimate 2022 traffic conditions.

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The highest daily volume on Maxwell Avenue was 4,355 vehicles east of Elm Street. The highest 85th percentile speed compared to the posted speed was 35 miles per hour occurred on Maxwell Avenue east of Elm Street which indicates a speeding concern (5 mph greater than the posted speed limit). The 85th percentile speed on Mission Avenue was 28 mile per hour, lower than the posted speed limit.

2022 Daily Traffic and 85th Percentile Speeds on Maxwell/Mission Avenue

Direction	# Lanes	2022 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
Mission Avenue West of Holliston Road				
EB	1	984	28	
WB	1	606	27	
Both Dir.	2	1,590	28	30
Maxwell Avenue East of Elm Street				
EB	1	2,177	35	
WB	1	2,178	35	
Both Dir.	2	4,355	35	30

^a Traffic data collected in March 2022.

The following tables show the severity and types of crashes occurring on Summit Boulevard, Broadway Avenue, Boone Avenue, and Maxwell/Mission Avenue (excluding intersection crashes at the east and west ends). As shown in the table below, there were a total of 6 crashes, including 2 injury crashes, with all related to moving vehicles and stationary objects or vehicle.

Crashes on Summit Boulevard (2017 to 2021)

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Possible Injury	Property Damage Only	
Stationary Object or Car	-	-	-	2	4	6
Total	0	0	0	2	4	6

As shown in the table below, there were a total of 39 crashes on Broadway Avenue, including 14 injury crashes. Collisions related to moving vehicles and stationary objects or vehicles were the most common crash type (representing 51% of all crashes).

Crashes on Broadway Avenue (2017 to 2021)

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Possible Injury	Property Damage Only	
Rear End	-	-	1	1	1	3
Angle	-	-	2	5	3	10
Turning	-	-	-	1	1	2
Sideswipe	-	-	-	-	1	1
Stationary Object or Car	-	-	2	1	17	20
From Same Direction	-	-	-	-	2	2
Pedestrian/Bike	-	-	1	-	-	1
Total	0	0	6	8	25	39

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As shown in the table below, there were a total of 66 crashes on Boone Avenue, including 23 injury crashes. Angle collisions were the most common crash type (representing 42% of all crashes).

Crashes on Boone Avenue (2017 to 2021)

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Possible Injury	Property Damage Only	
Rear End	-	-	-	2	10	12
Angle	-	-	2	11	15	28
Turning	-	-	-	1	6	7
Sideswipe	-	-	-	-	1	1
Stationary Object or Car	-	-	1	2	8	11
From Same Direction	-	-	-	1	2	3
Pedestrian/Bike	-	1	-	2	1	4
Total	0	1	3	19	43	66

As shown in the table below, there were a total of 82 crashes on Maxwell/Mission Avenue, including 35 injury crashes. Angle collisions were the most common crash type (representing 41% of all crashes).

Crashes on Maxwell/Mission Avenue (2017 to 2021)

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Possible Injury	Property Damage Only	
Rear End	-	-	1	6	4	11
Angle	-	1	6	8	19	34
Turning	-	-	-	2	7	9
Stationary Object or Car	-	-	-	1	15	16
From Same Direction	-	-	-	-	2	2
Pedestrian/Bike	-	5	3	2	-	10
Total	0	6	10	19	47	82

Recommended Solution:

The Chestnut Street and Elm Street Neighborhood Greenway Assessment proposed various crossing improvements at the Broadway Avenue/Chestnut Street, Broadway Avenue/Elm Street, Boone Avenue/Chestnut Street and Boone Avenue/Elm Street intersections to support a north-south greenway through the West Central neighborhood. These treatments were recommended to manage vehicle speeds on Broadway Avenue and Boone Avenue and providing comfortable crossings for pedestrians and cyclists.

Based on available data, speeding appears to be an issue along the study section of Broadway Avenue and Maxwell Avenue. Maxwell/Mission Avenue has an increased crash rate, with several bicycle and pedestrian crashes included. The crashes were dispersed along the corridor without a clear safety deficiency at a specific unsignalized intersection. Boone Avenue has a high crash rate with a significant amount of angle crashes and quite a few pedestrian and bike crashes with major injuries. The crashes

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were dispersed along the corridor without a clear safety deficiency at a specific unsignalized intersection. An overall corridor treatment is recommended to improve lower speeds. The Chestnut Street and Elm Street Neighborhood Greenway Assessment already recommended greenway crossing improvements on Boone Avenue at Chestnut Street and Elm Street. There is a potential issue with active on-street parking on Boone Avenue near intersections that reduces driver visibility and contributes to angle crashes. The addition of curb extensions on Boone Avenue at Nettleton Street and Lindeke Street would move the stop bar closer to an intersection and increase driver visibility and potentially reduce angle crashes.

The addition of a raised center median on Boone Avenue at select intersections was considered to eliminate left turning conflicts, however this would change travel patterns on local streets within the neighborhood.




Recommended improvements at the Broadway Avenue/Cedar Street intersection are included in a separate West Central neighborhood project.

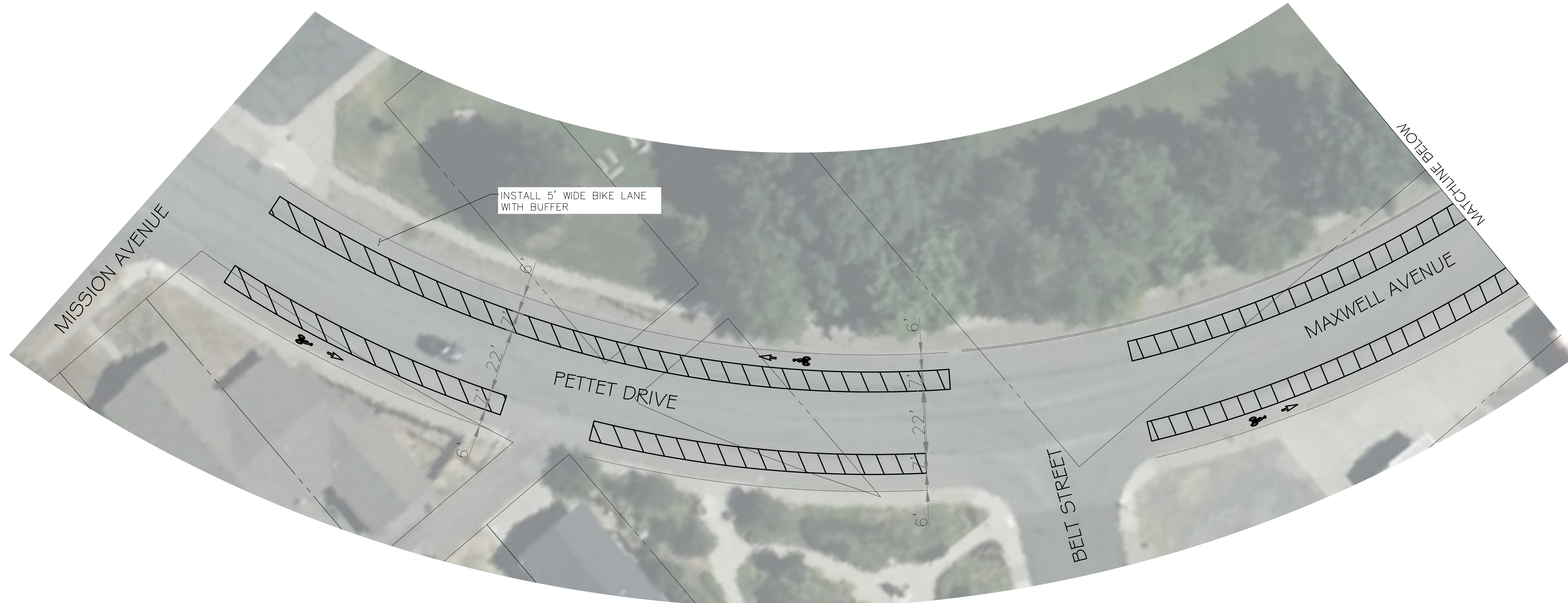
The installation of curb extensions is recommended on Maxwell Avenue at Elm Street at the existing marked crossing on the west leg of the intersection to narrow the roadway and provide a safer crossing for the adjacent park and aquatic center.

Maxwell Avenue is a two-lane facility west of Elm Street with no on-street parking allowed. The travel lanes are approximately 23 feet wide, much wider than needed which likely encourages speeding. The installation of bike lanes should be considered to connect to the existing bike lanes on Pettet Drive to the west.

The speed limit on Maxwell Avenue-Pettet Drive reduces to 20 miles per hour in front of Cannon Park and the West Central Community Center. It is recommended that a speed feedback sign be added westbound on Maxwell Avenue (east of Elm Street) to alert drivers to the reduced speed limit.

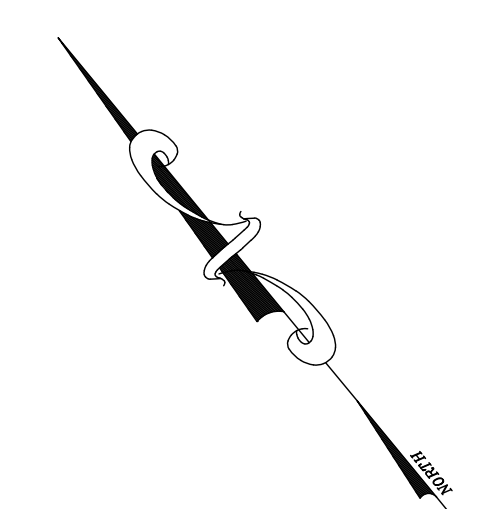
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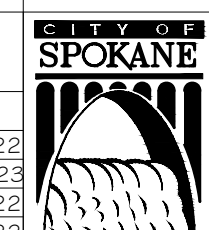
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-  EXISTING CURB
-  BIKE LANE MARKING

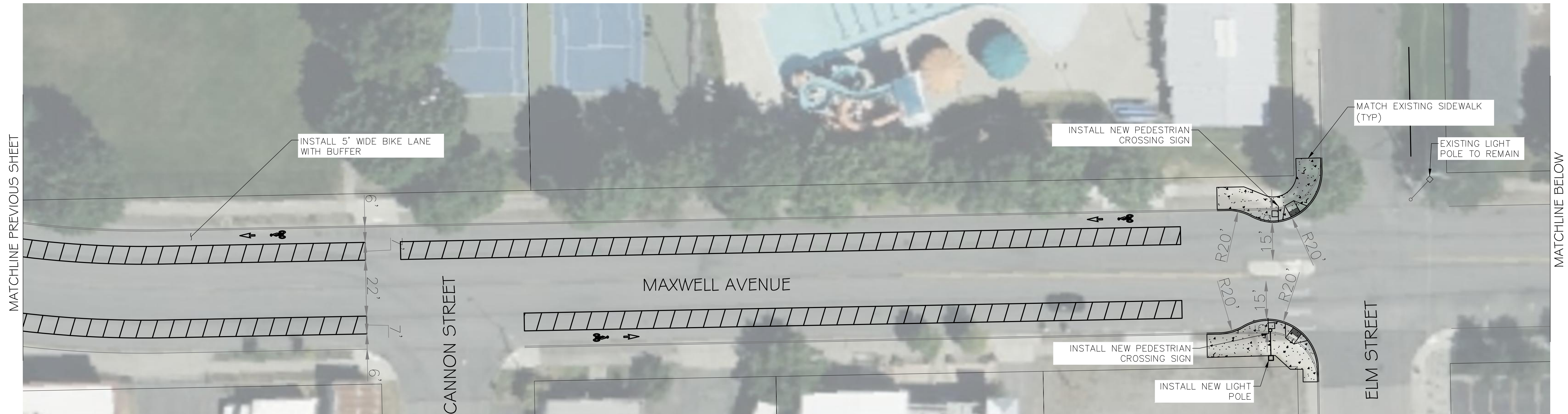


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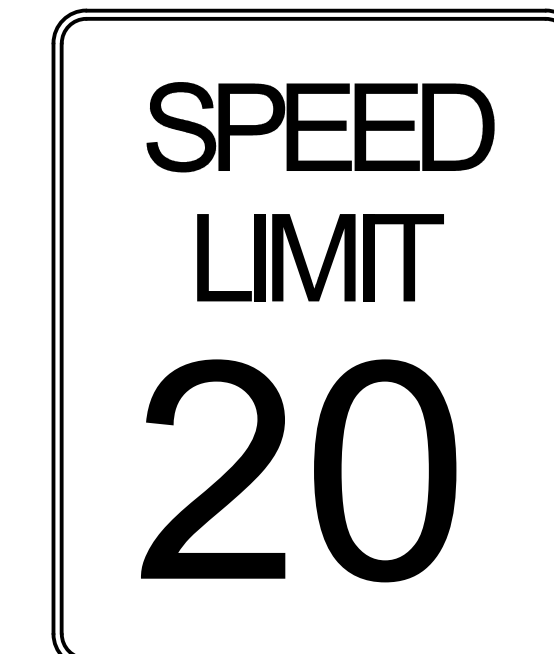


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- PROPERTY LINE
 - EXISTING CURB
 - INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-102B
 - INSTALL NEW CURB PER COS STD PLAN F-106B
 - PROPOSED SIGN
 - BIKE LANE MARKING
 - INSTALL CURB RAMP PER COS STD PLAN F-105

R02-01



PROPOSED SIGNAGE

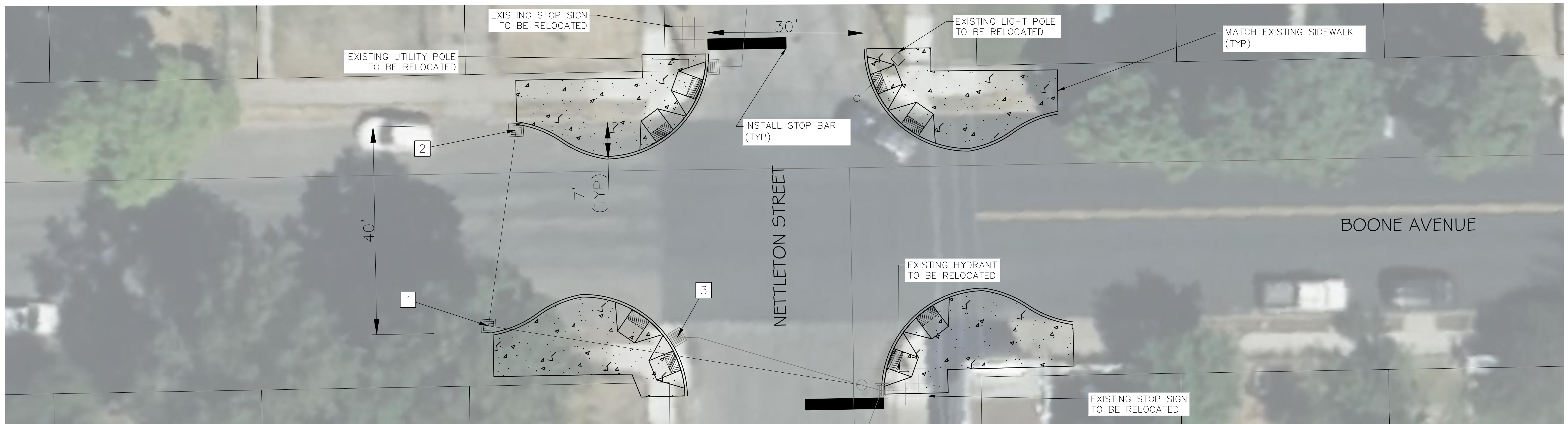
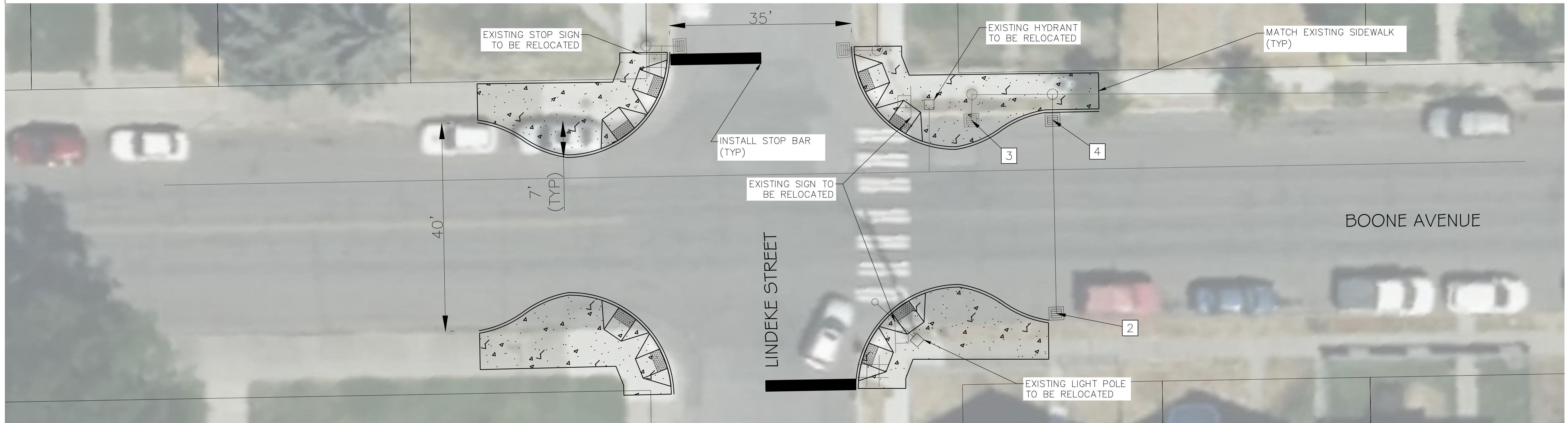


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	PROPERTY LINE		INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-102B
	EXISTING CURB		INSTALL NEW CURB PER COS STD PLAN F-106B
	EXISTING CONCRETE SIDEWALK		INSTALL CURB RAMP PER COS STD PLAN F-105

CONSTRUCTION NOTES

- 1 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO EXISTING MANHOLE WHERE SHOWN.
- 2 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW CATCH BASIN TYPE 1 WHERE SHOWN.
- 3 REMOVE EXISTING INLET. PLUG AND ABANDON EXISTING PIPE.
- 4 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW MANHOLE WHERE SHOWN.

**PRELIMINARY
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Spokane Traffic Calming Master Plan

District: 3
Neighborhood: Western Central
Project Extent: Broadway Avenue Intersections at Chestnut Street and Elm Street
 Estimate: \$686,000

Problem Statement: Residents of the Western Central neighborhood raised concerns over pedestrian crossing safety at the Broadway Avenue intersections at Chestnut Street and Elm Street. Broadway Avenue within the study area is classified as a collector with speed limit of 30 miles per hour. The roadway contains two lanes with two-way-left-turn lane and on-street parking. Both Chestnut Street and Elm Street are classified as local streets with a posted speed limit of 25 miles per hour. As shown in the figure below, there is a striped crosswalk at the Broadway Avenue/Chestnut Street intersection and Dutch Jake’s Park is located on the southwest corner.



Broadway Avenue Intersections at Chestnut Street (Left) and Elm Street (Right)

Traffic Analysis

The table below shows daily traffic volumes and 85th percentile vehicle speeds on Broadway Avenue west of Elm Street. There are about 1,919 vehicles per day with a 85th percentile speed of 33 miles per hour, indicating no significant speeding.

2022 Daily Traffic and 85th Percentile Speeds on Broadway Avenue

Direction	# Lanes	2022 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
West of Elm Street				
EB	1	870	33	
WB	1	1,049	32	
Both Dir.	2	1,919	33	30

^a Traffic data collected in November 2022.

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The table below shows the severity and types of crashes occurring at the Broadway Avenue study intersections from 2017 through 2021. There were four total crashes, one rear-end collision at Chestnut Street and three angle collisions at Elm Street. The data does not indicate there is a concern at the study intersections.

Crashes at Broadway Avenue Study Intersections (2017 to 2021)

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Possible Injury	Property Damage Only	
Chestnut Street/Broadway Avenue						
Rear End	-	-	-	1	-	1
Elm Street/Broadway Avenue						
Angle	-	-	1	-	2	3

The need for enhanced pedestrian crossing treatments across Broadway Avenue was analyzed based on the National Cooperative Highway Research Program (NCHRP) Report 562.¹ This report uses four main criteria to identify appropriate crossing treatment: peak hour pedestrian volumes, conflicting vehicle volumes, conflicting vehicle speed, and crossing distance/number of travel lanes to be crossed. Based on the findings, marked crosswalks at both intersections are the preferred treatment if there are 20 or more pedestrian crossings during the peak hour. Although pedestrian data is not available, it is assumed the 20 or more pedestrian crossing threshold is met due to the surrounding urban neighborhood and commercial destinations on Broadway Avenue.

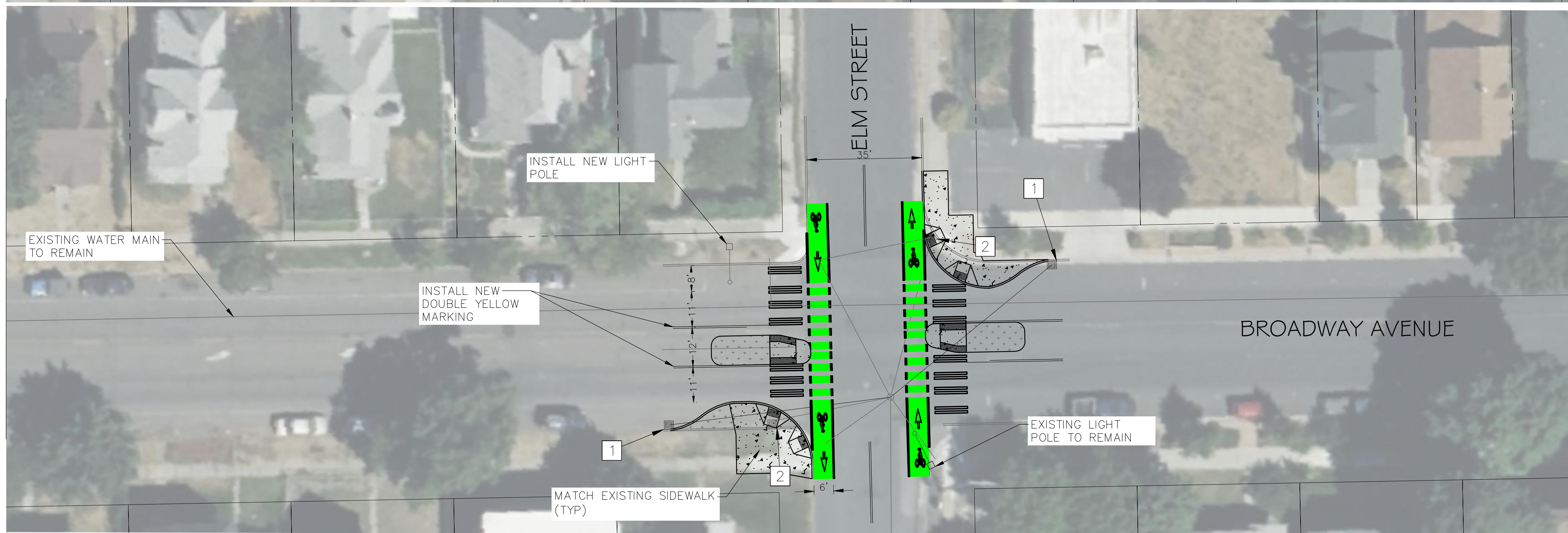
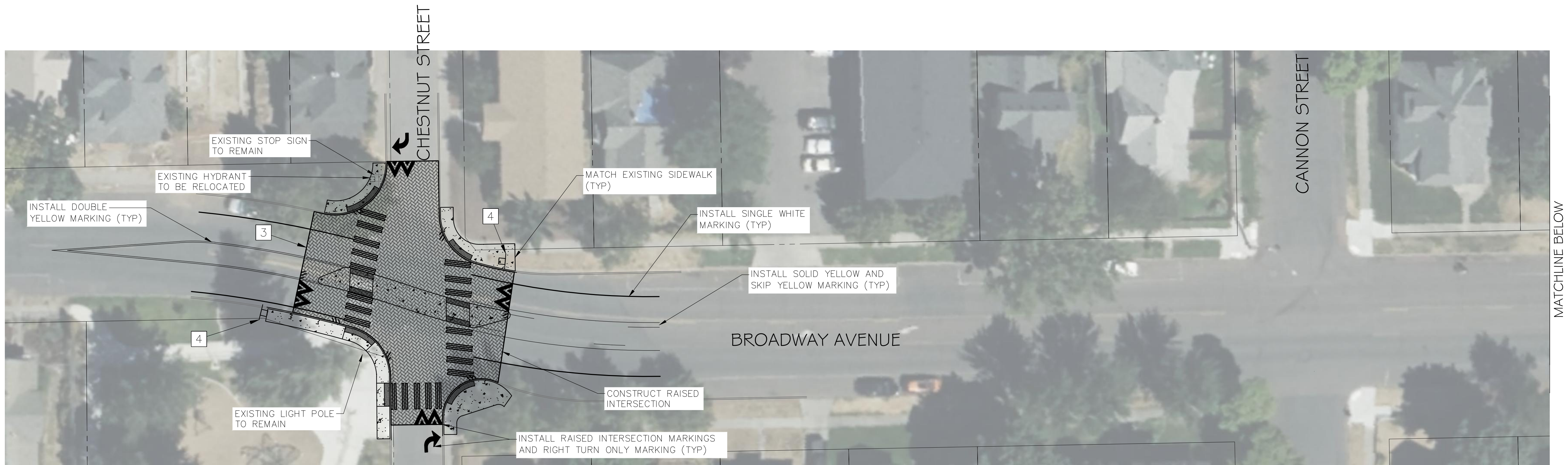
Recommended Solution:

The existing marked crosswalk on Broadway Avenue at Chestnut Street appears to be newly constructed with new striping and ramps at each corner. The installation of curb extensions should be considered to narrow the crossing distance for pedestrians and reduce vehicle speeds. Curb extensions are expected to decrease the 85th percentile speed by 3 miles per hour.²

At the Broadway Avenue/Elm Street intersection, the installation of a marked crosswalk with a protected median and curb extensions is recommended on the west side of the intersection.

¹ NCHRP Report 562: *Improving Pedestrian Safety and Unsignalized Crossings*. National Cooperative Highway Research Program, 2006. <https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf>

² Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed. Federal Highway Administration. July 2014.



CONSTRUCTION NOTES

- 1. INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO EXISTING MANHOLE WHERE SHOWN.
- 2. REMOVE EXISTING INLET AND PLUG AND ABANDON EXISTING PIPE.
- 3. ADJUST INLETS AND MANHOLES AS NEEDED DUE TO RAISED INTERSECTION.
- 4. INSTALL "NO LEFT TURN" SIGN R03-02 WITH "EXCEPT BIKES" SIGN R37-BP.

MATCHLINE ABOVE

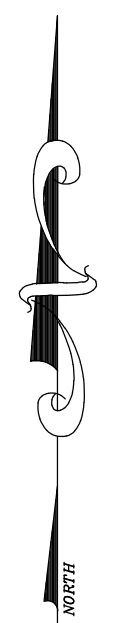
MATCHLINE BELOW

LEGEND

	PROPERTY LINE		INSTALL LANDSCAPING STRIP
	EXISTING CURB		INSTALL CROSSWALK PER COS STD PLAN G-6 I
	EXISTING CONCRETE SIDEWALK		PROPOSED PEDESTRIAN CROSSING SIGN
	EXISTING INLET		INSTALL CURB RAMP PER COS STD PLAN F-1 05
	INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-1 02B		
	INSTALL NEW CURB PER COS STD PLAN F-1 06B		

NOTE:

- 1. SEE BROADWAY AVENUE CONCEPT DESIGN FROM SPOKANE COUNTY COURTHOUSE TO MAPLE STREET FOR ADDITIONAL CURB EXTENSION



**PRELIMINARY
NOT FOR CONSTRUCTION**

4
4 of 6

<table border="0"> <tr> <td>DATE</td> <td>BY</td> <td>PROJ.</td> <td>DESCRIPTION</td> <td>DATE</td> <td>BY</td> <td>PROJ.</td> <td>F.P.N.</td> <td>U.S.N.</td> <td>FROM</td> <td>TO</td> <td>COUNCIL ACCEPT DATE</td> </tr> <tr> <td colspan="11" style="text-align: center;">REVISIONS</td> </tr> <tr> <td colspan="11" style="text-align: center;">AS BUILT</td> </tr> </table>										DATE	BY	PROJ.	DESCRIPTION	DATE	BY	PROJ.	F.P.N.	U.S.N.	FROM	TO	COUNCIL ACCEPT DATE	REVISIONS											AS BUILT											<table border="0"> <tr> <td colspan="10">NAVD88 DATUM</td> <td colspan="2">AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)</td> </tr> <tr> <td colspan="12">BENCHMARK LOCATION: None Given</td> </tr> <tr> <td colspan="12">CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007</td> </tr> <tr> <td colspan="12">CITY OF SPOKANE</td> </tr> <tr> <td colspan="12">CITY OF SPOKANE, WASHINGTON</td> </tr> <tr> <td colspan="12">DEPARTMENT OF ENGINEERING SERVICES</td> </tr> <tr> <td colspan="12">808 WEST SPOKANE FALLS BLVD.</td> </tr> <tr> <td colspan="12">SPOKANE, WASHINGTON 99201-3343</td> </tr> <tr> <td colspan="12">(509) 625-6300</td> </tr> </table>										NAVD88 DATUM										AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)		BENCHMARK LOCATION: None Given												CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007												CITY OF SPOKANE												CITY OF SPOKANE, WASHINGTON												DEPARTMENT OF ENGINEERING SERVICES												808 WEST SPOKANE FALLS BLVD.												SPOKANE, WASHINGTON 99201-3343												(509) 625-6300												<table border="1"> <tr> <td>PROJECT NAME:</td> <td>SPOKANE TRAFFIC CALMING MASTER PLAN</td> </tr> <tr> <td>SEGMENT LIMITS:</td> <td>BROADWAY AVENUE</td> </tr> <tr> <td>TYPE OF IMPROVEMENT:</td> <td>TRAFFIC</td> </tr> <tr> <td>CITY PROJECT NUMBER:</td> <td></td> </tr> <tr> <td>CITY PLAN NUMBER:</td> <td></td> </tr> <tr> <td>PROJECT LIMITS:</td> <td>CHESTNUT STREET AND ELM STREET</td> </tr> <tr> <td>EPN:</td> <td>TRAFFIC DESIGN</td> </tr> </table>		PROJECT NAME:	SPOKANE TRAFFIC CALMING MASTER PLAN	SEGMENT LIMITS:	BROADWAY AVENUE	TYPE OF IMPROVEMENT:	TRAFFIC	CITY PROJECT NUMBER:		CITY PLAN NUMBER:		PROJECT LIMITS:	CHESTNUT STREET AND ELM STREET	EPN:	TRAFFIC DESIGN
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Spokane Traffic Calming Master Plan

District:	3
Neighborhood:	West Central
Project Extent:	Broadway Avenue from Spokane County Courthouse to Maple Street
	Estimate: \$459,000

Problem Statement: Residents of the West Central neighborhood raised concerns about the pedestrian network on Broadway Avenue from Spokane County Courthouse to Maple Street (0.26 miles) and where crossing enhancements are needed. Broadway Avenue within the study area is classified as minor arterial with a speed limit of 30 miles per hour. The roadway provides on-street parking, four lanes and a two-way-left-turn lane. The sidewalk network in the study corridor is predominately complete but is not consistent, with the mix of curb tight, separated, and narrow sidewalks.

Traffic Analysis

The daily volume on Broadway Avenue was 4,177 vehicles west of Adams Street. The 85th percentile speed ranged from 34 to 39 miles per hour. This indicates a moderate to significant speeding condition along the study corridor.

2022 Daily Traffic and 85th Percentile Speeds on Broadway Avenue

Direction	# Lanes	2022 Daily Traffic (Vehicles per day) ^a	85 th Percentile Speed (mph)	Posted Speed (mph)
West of Adams Street				
EB	1	2,630	35	
WB	1	1,547	39	
Both Dir.	3	4,177	36	30

^a Traffic data collected in March 2022.

The table below shows the severity and types of crashes occurring on Broadway Avenue from Spokane Courthouse to Maple Street over the last five years (excluding intersection crashes at the east and west ends). There was a total of 10 crashes, with 6 injury crashes. Angle crashes were the most common, representing 40 percent of all crashes. One crash was related to pedestrian and caused minor injury.

Crashes on Northwest Boulevard, between Cochran Street and Monroe Street (2017 to 2021)

Crash Type	Crash Severity					Total
	Fatal	Major Injury	Minor Injury	Possible Injury	Property Damage Only	
Angle	-	-	-	3	1	4
Turning	-	-	-	1	1	2
Stationary Object or Car	-	-	1	-	2	3
Pedestrian/Bike	-	-	1	-	-	1
Total	0	0	2	4	4	10

Spokane Traffic Calming Master Plan

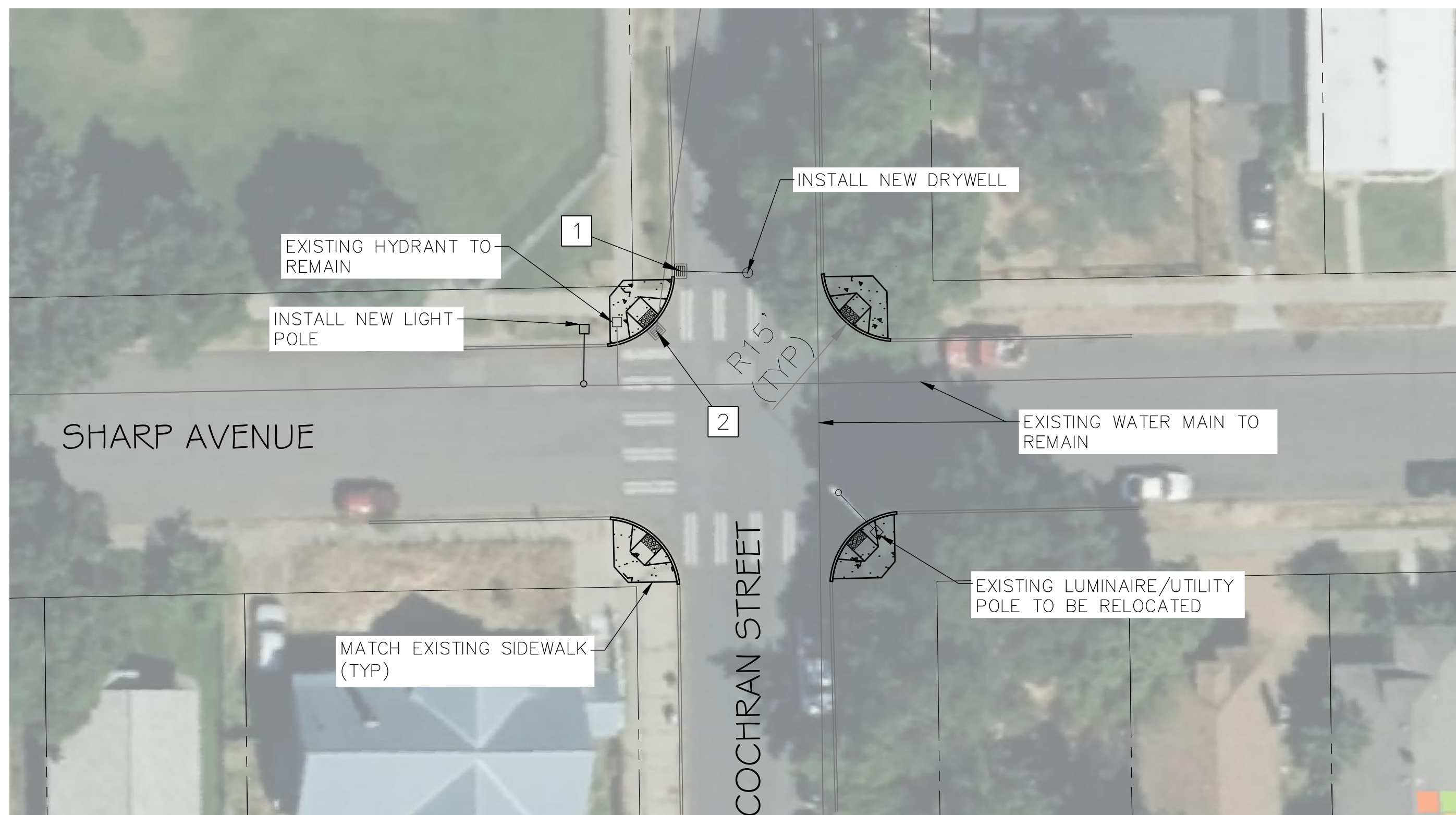
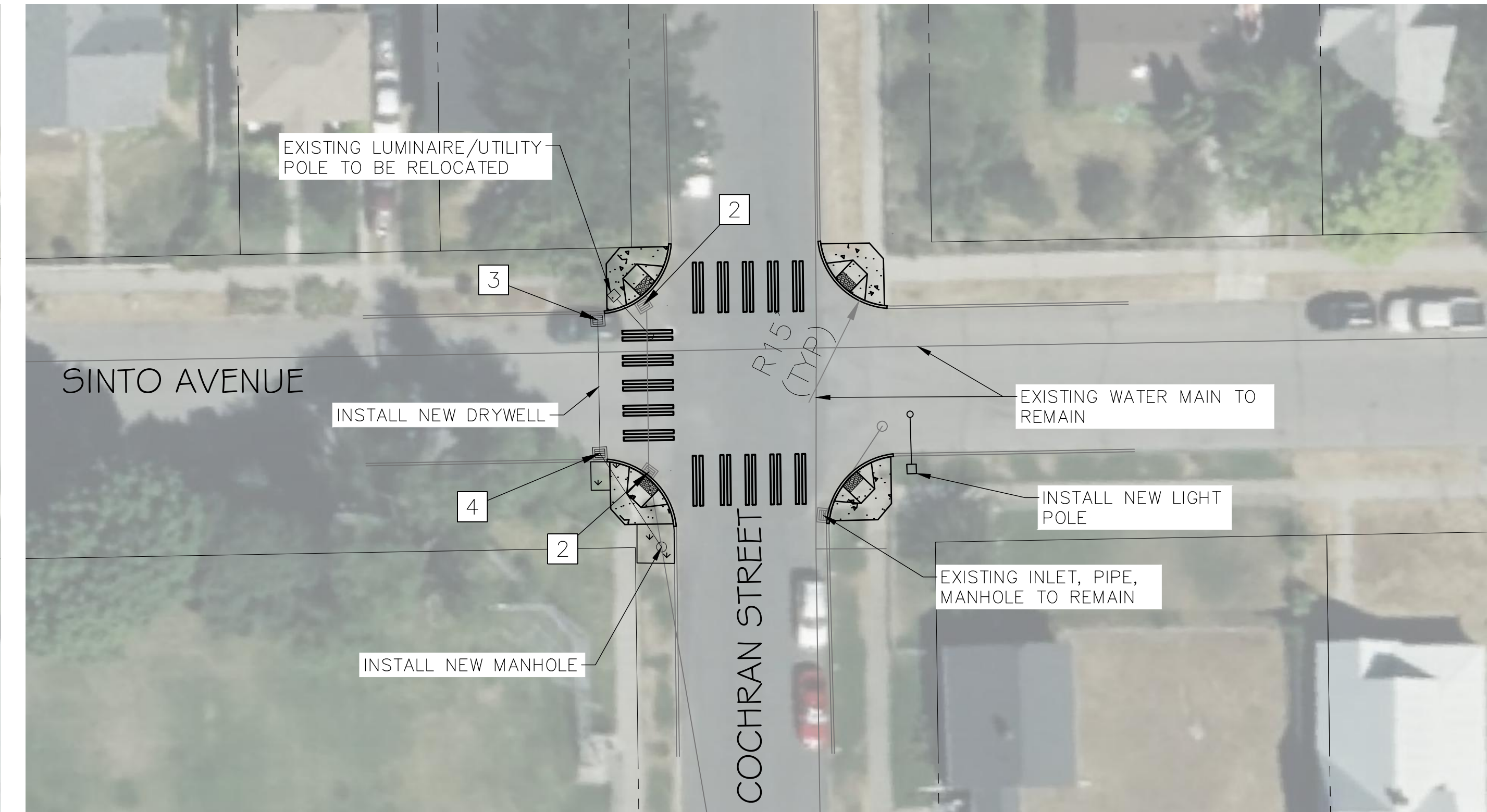
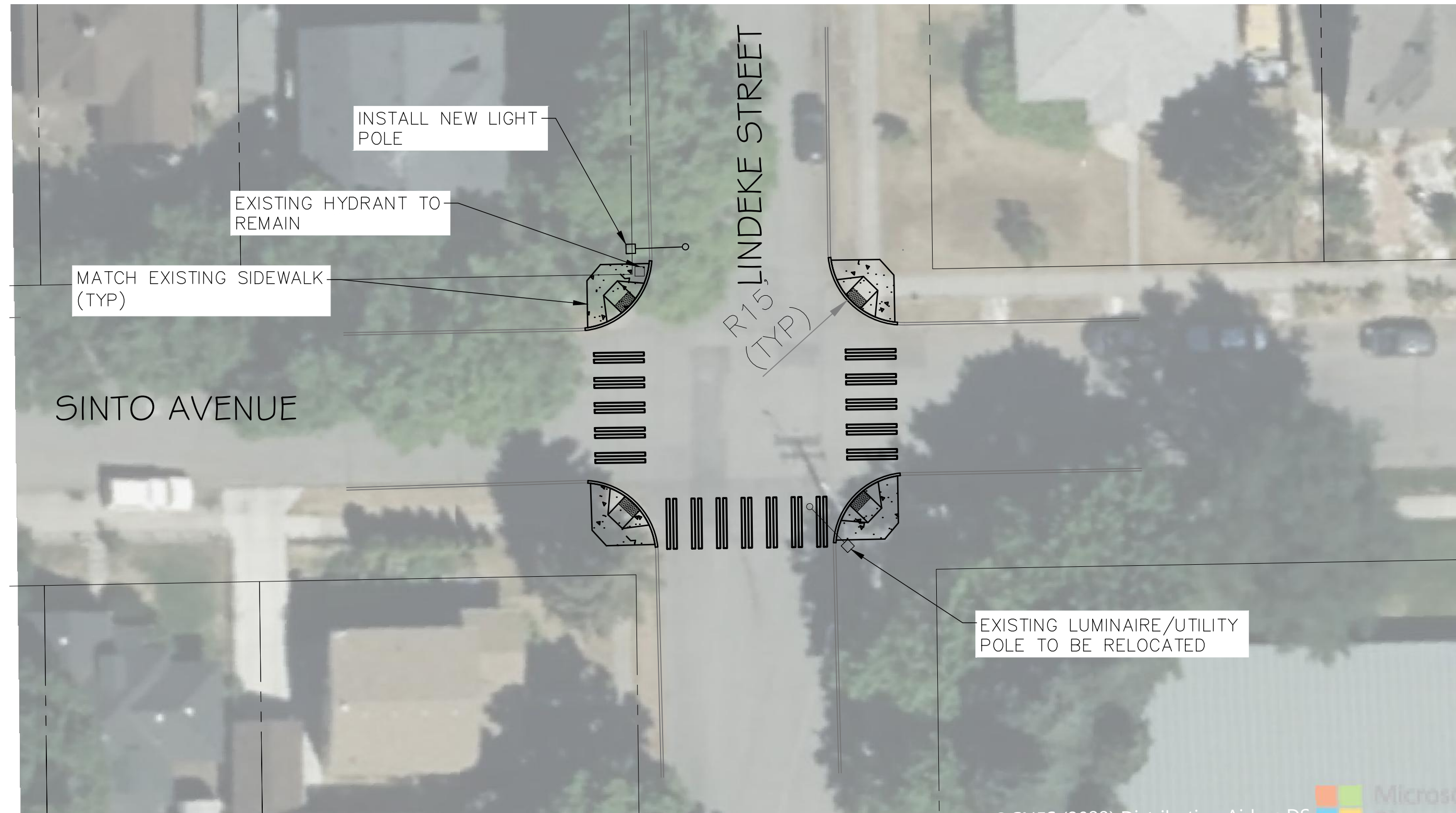
The need for enhanced pedestrian crossing treatments was analyzed based on NCHRP Report 562. Based on the findings, marked crosswalks are the preferred treatment if there are 20 or more pedestrian crossings during the peak hour. Although pedestrian data is not available, it is assumed the 20 or more pedestrian crossing threshold is met do the surrounding urban neighborhood and commercial destinations on Broadway Avenue.

Recommended Solution:

The installation of curb extensions and marked pedestrian crossings is recommended on Broadway Avenue at Cedar Street (both east and west crossings) to narrow the roadway and provide a safer crossing for the adjacent transit stops. Curb extensions are expected to decrease the 85th percentile speed by 3 miles per hour.¹ Cedar Street was selected due to its location two blocks west of the Broadway Avenue/Jefferson Street signal and three blocks east of the Ash Street signal. Cedar Street also connects the residential area to the north to Kendall Yards and the Centennial Trail to the south.

¹ Engineering Speed Management Countermeasures: A Desktop Reference of Potential Effectiveness in Reducing Speed. Federal Highway Administration. July 2014.

District 3, West Central: Holmes Elementary
 Estimate: \$298,000

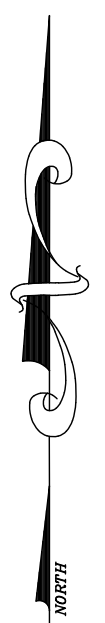


LEGEND

	PROPERTY LINE		INSTALL LANDSCAPING STRIP
	EXISTING CURB		INSTALL CROSSWALK PER COS STD PLAN G-G1
	EXISTING CONCRETE SIDEWALK		INSTALL CURB RAMP PER COS STD PLAN F-105
	EXISTING INLET		
	INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-102B		
	INSTALL NEW CURB PER COS STD PLAN F-106B		

CONSTRUCTION NOTES

- 1 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW DRYWELL WHERE SHOWN.
- 2 REMOVE EXISTING INLET. PLUG AND ABANDON EXISTING PIPE.
- 3 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW CATCH BASIN WHERE SHOWN.
- 4 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW MANHOLE WHERE SHOWN.



PRELIMINARY
NOT FOR CONSTRUCTION

NAVD88 = (OLD CBM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)									
BENCHMARK LOCATION: None Given									
NAVD88 ELEV: None Given									
CBM NO: None Given									
BAR IS ONE INCH ON ORIGINAL DRAWING. HORIZONTAL PLANS/PROFILE: 1" = 20' VERTICAL PROFILE ONLY: N/A									
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. SCALE:									
CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007									
CITY OF SPOKANE, WASHINGTON DEPARTMENT OF ENGINEERING SERVICES									
808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300									
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SEGMENT LIMITS: HOLMES ELEMENTARY									
PROJECT LIMITS: WEST CENTRAL NEIGHBORHOOD									
TYPE OF IMPROVEMENT: TRAFFIC									
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