



# DESIGN STUDY REPORT UPDATE MEMO

**FINAL**

April 2024

MOA Project #19-08

## LOIS DRIVE RECONSTRUCTION BENSON BOULEVARD TO 32ND AVENUE



*Prepared for:*



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## I. Introduction

The Municipality of Anchorage Project Management and Engineering (MOA PM&E) contracted with CRW Engineering Group, Inc (CRW) to provide professional services to develop and evaluate alternatives to upgrade Lois Drive (from Benson Boulevard to W. 32<sup>nd</sup> Avenue) and W. 32<sup>nd</sup> Avenue (from Lois Drive to Minnesota Drive). A Design Study Report (DSR) was published and approved by the Planning and Zoning Commission (PZC) on April 5, 2021. After further deliberations, MOA has separated the proposed improvements into two projects: Lois Drive will remain an MOA project while upgrading W. 32<sup>nd</sup> Avenue (including the intersection of W. 32<sup>nd</sup> Avenue and Lois Drive) has transitioned to an Anchorage Metropolitan Area Transportation Solutions (AMATS) Transportation Improvement Program funded project. A meeting was held with PM&E and the Traffic Department to discuss the proposed changes from the original project on April 2, 2024 which resulted in further recommended changes, including striping, traffic calming, and cross-section revisions. The purpose of the Memorandum is to summarize the changes to the approved DSR, updated project limits, Public Involvement (PI) efforts to date, future PI efforts, and provide conclusions and recommendations for the new project area.

## I. Updated Project Limits

As noted above, the project limits now only include Lois Drive from Benson Boulevard to W. 32<sup>nd</sup> Avenue. W. 32<sup>nd</sup> Avenue, including the intersection of Lois Drive and W. 32<sup>nd</sup> Avenue, have been removed from the project. The new project limits are shown in FIGURE 1. All other aspects of the projects, except as noted below, remain as outlined in the DSR.

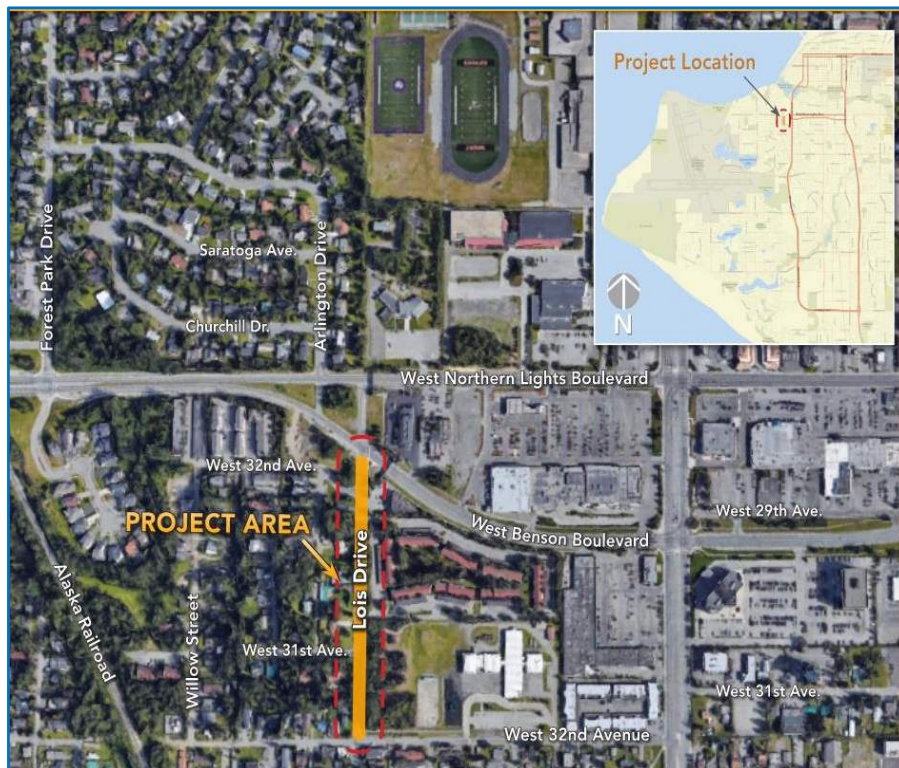


Figure 1 - Project Location and Vicinity Map

## II. Updated Recommended Improvements

### A. Preferred Roadway Typical Cross Section

The Lois Drive preferred roadway typical cross-section includes minor changes from the preferred cross section from the approved, Final DSR. Based on recommendations from the traffic department the lane width will be reduced from 11 feet to 10 feet. The 1-foot reduction in lane width on each side will be reallocated to the vegetative buffers (0.5 feet each) and the sidewalk on the west side of the roadway will increase from 5-feet- to 6-feet. The cross-section revisions result in increased snow storage and pedestrian safety. If feasible, the pathway on the east side of the roadway will meander further from the roadway in select locations. The updated preferred roadway typical section is shown below in [FIGURE 2.](#)

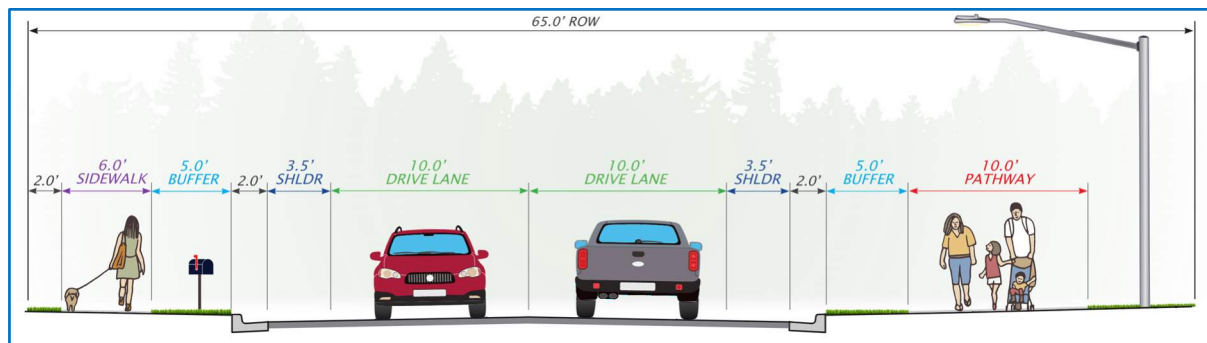


Figure 2 – Preferred Roadway Typical Section

### B. Traffic Calming

Due to high south-bound vehicle speeds observed in a June 2021 speed study, the Traffic Department requested that traffic calming measures be investigated as part of the project. Traffic Calming features such as speed cushions or radar speed signs will be explored during design.

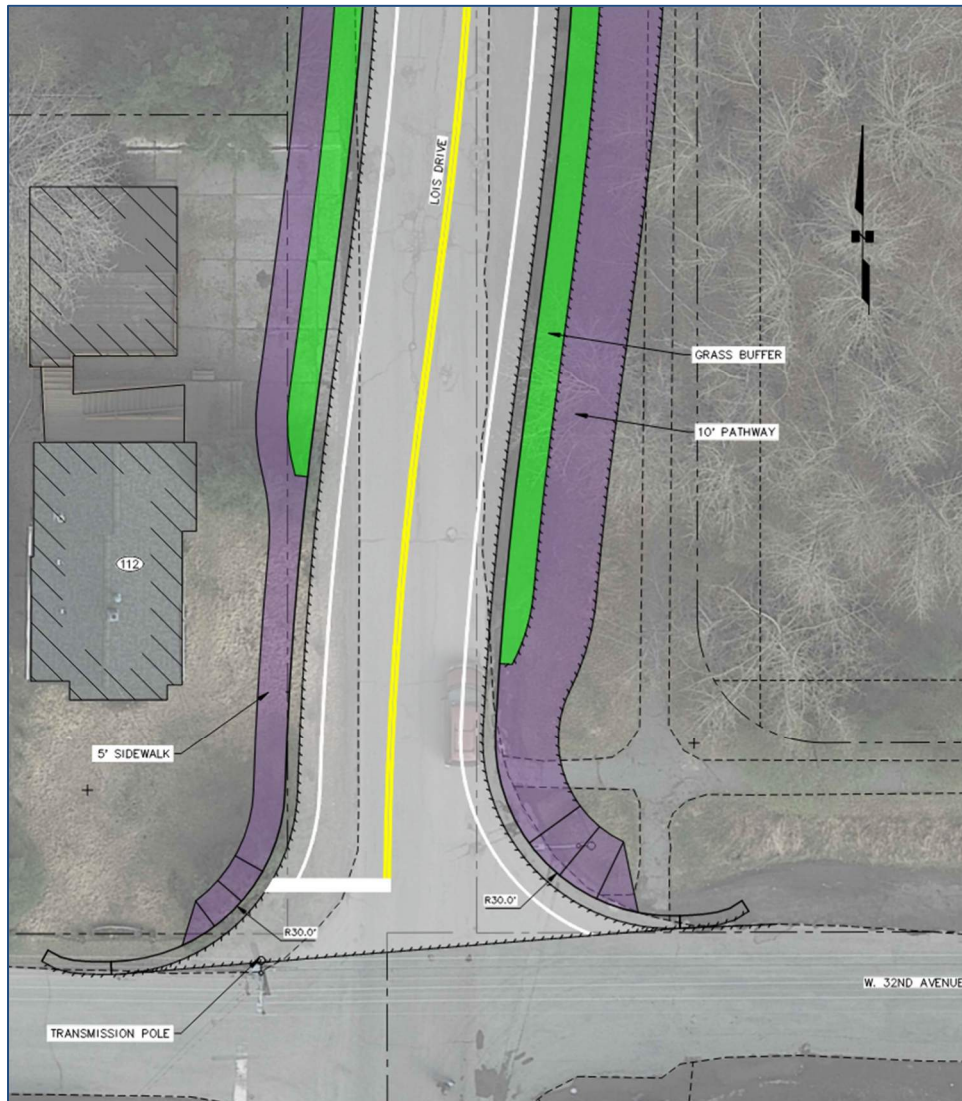
### C. Striping

The Traffic Department requested to remove shoulder striping from the project. The proposed shoulder striping presented in the Final DSR did not seem beneficial to the project to serve as an effective bike lane, it is too narrow and is discontinuous. Removing the shoulder striping will also reduce maintenance efforts and costs after the project is constructed. Centerline striping will remain, as the road will benefit from centerline markings to guide vehicles at the intersections. Pedestrian crosswalk and stop bar markings will also remain.

### D. Intersection Alternatives

Reconstructing the intersection of Lois Drive and W. 32<sup>nd</sup> Avenue is no longer part of the new scope of work and is outside of the new project limits. To transition from the proposed typical cross-section to the existing intersection, four conceptual alternatives were investigated and are shown on the subsequent pages. These alternatives analyze interim measures to connect the Lois Drive improvements with existing conditions. It is assumed that the W. 32<sup>nd</sup> Avenue project will fully reconstruct this intersection and any temporary, non-standard improvements will be brought into full compliance.

**Intersection Transition Alternative 1 (see FIGURE 3):**



*Figure 3 – Intersection Alternative 1*

- Pros:
  - Centerline transitions to match existing centerline south of W. 32<sup>nd</sup> Avenue
  - MOA Design Criteria Manual (DCM) compliant 30-foot curb return radii
  - 11-foot lanes with 3.5-foot shoulders for the entirety
- Cons:
  - Most impacts to Parcel 112
  - Requires relocation of Chugach Electric (CEA) high voltage transmission utility pole on the west side of the intersection



**Intersection Transition Alternative 2** (Preferred Alternative, see FIGURE 4):

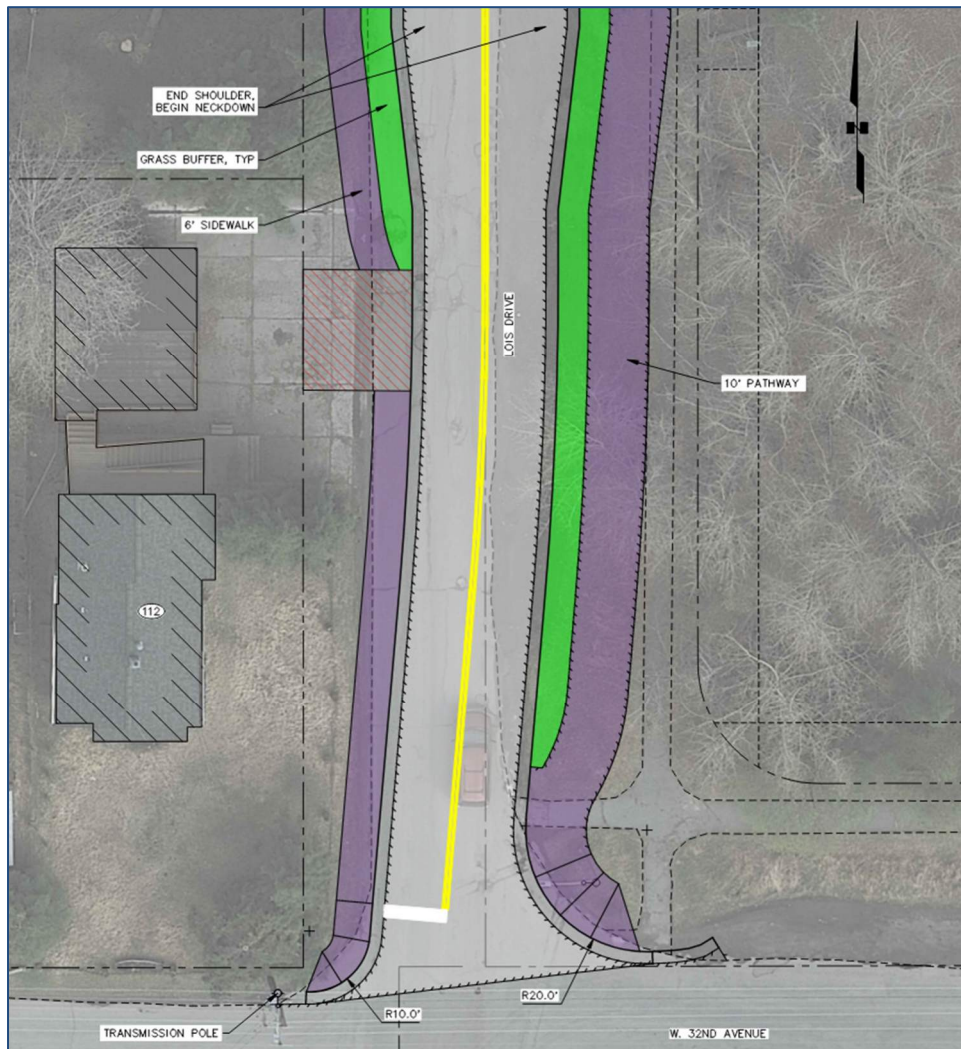


Figure 4 – Intersection Alternative 2

- Pros:
  - No impact on Parcel 112
  - Large transition curve to shift roadway west
  - Avoids impacts to transmission pole
- Cons:
  - Intersects W. 32<sup>nd</sup> Avenue at an 85-degree angle and 5 feet offset to the east
  - West side radius is only 10 feet. The west side return radius is reduced to 10 feet to avoid impacts to the transmission pole
  - The 3.5-foot shoulder terminates north of the point of curvature (PC) of the transition curve

**Intersection Transition Alternative 3** (see FIGURE 5):

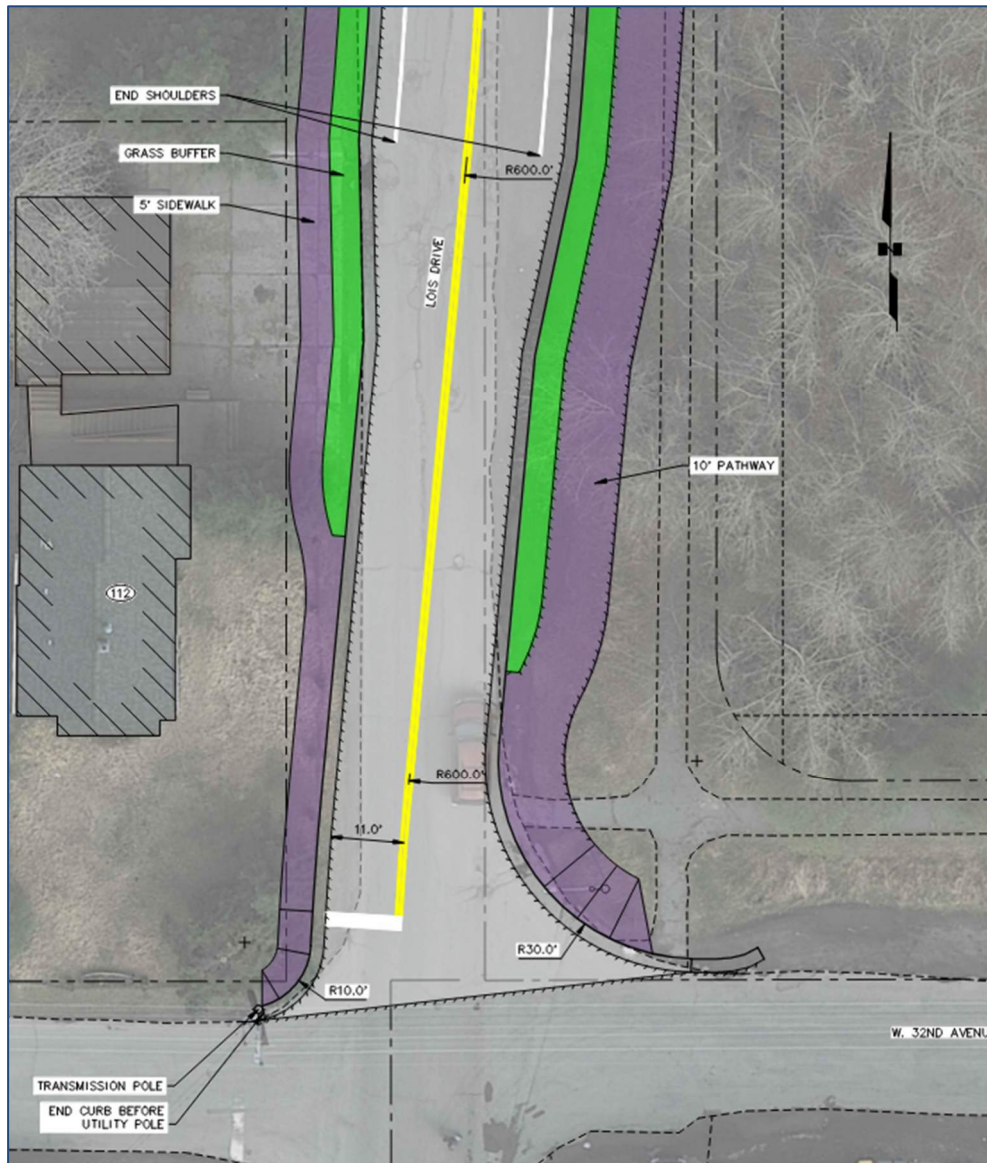
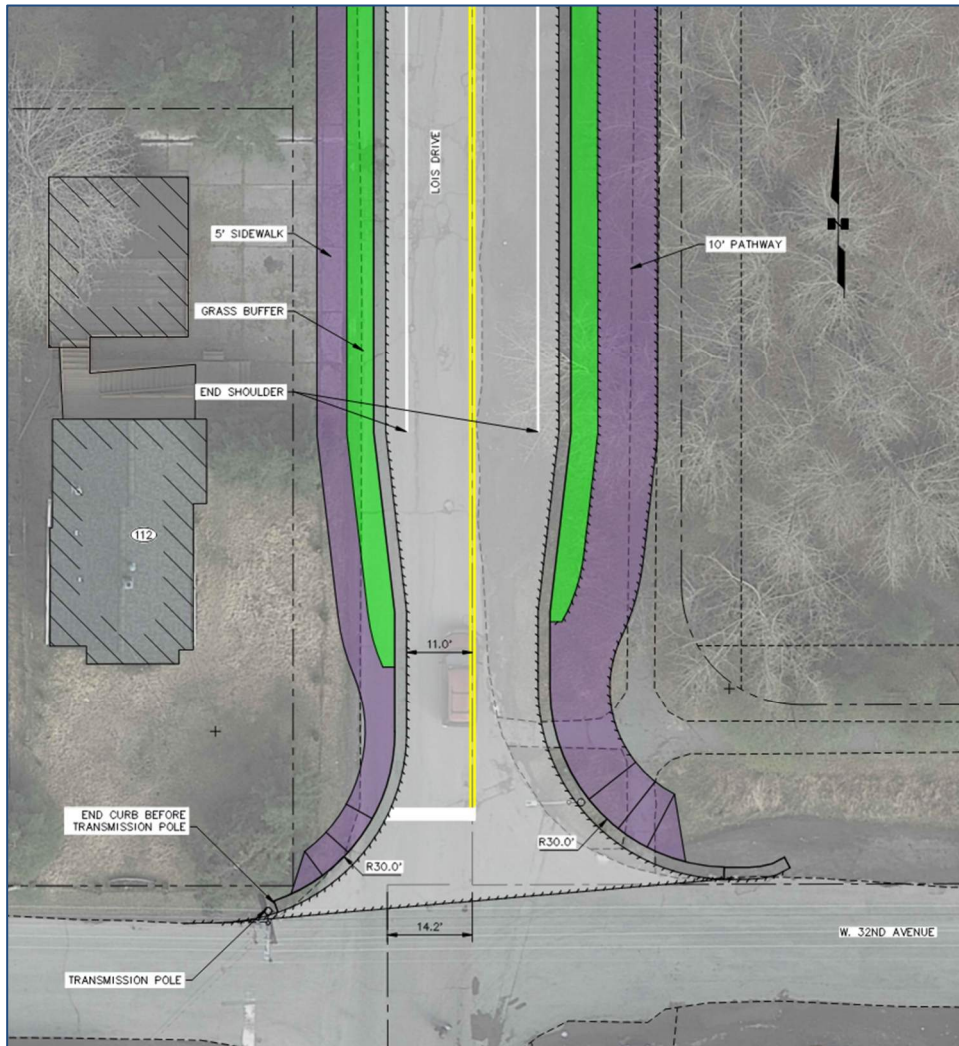


Figure 5 – Intersection Alternative 3

- Pros:
  - Avoids impacts to the transmission pole
  - Minimal impacts to Parcel 112
  - Reverse curve with 600-foot radii to intersection W. 32<sup>nd</sup> Avenue at a 90-degree angle
  - DCM compliant east side curb return radius of 30 feet
- Cons:
  - West side curb return radius is only 10 feet

**Intersection Transition Alternative 4 (see FIGURE 6):**



*Figure 6 – Intersection Alternative 4*

- Pros:
  - Lois Drive is centered within the Right-of-Way (ROW)
  - DCM compliant 30-foot curb return radii
  - No impacts to Parcel 112
  - Avoids impacts to the transmission pole
- Cons:
  - Lanes are offset from the southern leg of the intersection by 14 feet
  - The 3.5-foot shoulders terminate before the intersection to keep improvements within ROW



## E. Preferred Intersection Alternative

A meeting was held with CRW, PM&E and the Traffic Department to discuss the interim intersection transition alternatives. After weighing the pros and cons, all parties agreed that Intersection Alternative 2 move forward as the preferred alternative. Intersection Alternative 2 avoids relocation of Chugach Electric (CEA) high voltage transmission pole and eliminates the need for ROW acquisition while providing a safe transition to the existing intersection. Due to the skewed roadway alignment and half-lane shift required for this alternative, the Traffic Department requested that the intersection remain as an all-way stop intersection. Curb radii are smaller than MOA Design Criteria Standards, however this results in a safer pedestrian crossing, reducing the distance to cross the intersection.

## III. Public Involvement (PI)

### Public Involvement Efforts to Date

As a reminder (and as discussed in the approved DSR), a summary of PI efforts to date is outlined below.

- Concept Report
  - Submitted draft Concept Report to PM&E February 10, 2020 for review and comment
  - Submitted final Concept Report to PZC March 2, 2020
- Design Study Report
  - Draft DSR
    - i. Posted to website for review & comment by agencies – October 13, 2020
  - Final DSR
    - i. Final submittal – Passed and approved by PZC April 5, 2021 and adopted by PZC May 3, 2021 (Case # 2021-0031)
- General Public Involvement efforts to date:
  - Project website (<http://lois-32ndupgrades.com/>) with interactive map – launched November 1, 2019
  - Spenard Community Council presentation – November 6, 2019
  - Open House #1
    - i. Post card announcing public open house – October 30, 2019
    - ii. Email announcement of open house – November 4, 2019
    - iii. Open House #1 at Aquarian Charter School – November 13, 2019
    - iv. Email thanking stakeholders for attending Open House #1 – December 3, 2019
  - Business Stakeholder Meeting
    - i. Business Stakeholder Meeting handbill delivered to businesses in the project area – November 11 & 12, 2019
    - ii. Business Stakeholder Meeting at Aquarian Charter School – November 14, 2019
  - Agency Stakeholder Meeting – November 14, 2019



- Open House #2
  - i. Post card announcing public open house – August 4, 2020
  - ii. Website updated – August 5, 2020
  - iii. Email announcement of Open House #2 – August 5, 2020
  - iv. Email reminder of Open House #2 – August 24, 2020
  - v. Email thanking stakeholders for attending Virtual Open House #2 – August 31, 2020

#### Future Public Involvement

Below is a list of the planned public involvement for the forthcoming design phase:

- Update and verify the mailing list boundary.
- Mail notices and announcements to stakeholders at regular intervals throughout the project.
- Update project webpage and fact sheet at regular intervals.
- Public meetings
  - Community Council presentations
    - i. It is anticipated that there will be two Community Council meetings, one for the update of the DSR and one for the design phase.
  - Public open house meetings
    - i. Hold a public stakeholder open house meeting to keep stakeholders informed about the project and gather public input.
- Urban Design Commission meeting for approval of the 65% design.
- Additional and individual public stakeholder coordination as required.

## **IV. Conclusion**

Due to a change in funding sources, W. 32<sup>nd</sup> Avenue and the intersection of Lois Drive and W. 32<sup>nd</sup> Avenue have been removed from the scope of work. The project area has been updated to only include Lois Drive from Benson Boulevard to W. 32<sup>nd</sup> Avenue.

The Lois Drive preferred roadway typical cross-section will consist of two, 10-foot travel lanes with 3.5-foot wide shoulders and barrier (Type 1) curb and gutter. A 10-foot wide paved pathway is proposed on the east side of the roadway and a 6-foot wide concrete sidewalk is proposed on the west side of the roadway. The non-motorized facilities would be detached from the back of the curb by 5-feet. Roadway markings will include centerline, stop-bars, and pedestrian crosswalk markings. CRW will investigate traffic calming measures such as speed cushions and radar speed signs during design.

Intersection Transition Alternative 2 has been identified as the preferred option. The Lois Drive centerline will intersect 32<sup>nd</sup> Avenue at an 85-degree angle and 5 feet offset to the east. The 3.5-foot shoulders will terminate north of Parcel 112 and the roadway will neckdown to stay within the MOA ROW. The west curb return radius will be 10-feet and the east curb return radius will be 20-feet.