## Appendix A: Topographic Survey







## Appendix B: June 2019 Open House

## BOLTON <br> Project Overview

## $\frac{\text { City of }}{\text { MEDFORD }}$

## Project Purpose

Reconstruct Main Street (CSAH 45) between 5th Ave SE to 2nd Ave NW to:

- improve pavement condition
- replace utilities \& drainage structures
- address traffic safety and mobility needs
- consider intersection control changes
- identify opportunities for downtown beautification


## Project Timeline

This project is planned for construction in 2021, but there is significant planning and coordination necessary to achieve this goal:

## Define WHAT to Build



## Project Area



## Define HOW to Build BUILD

## 2020

Early Spring Feasibility Report with final project scope, cost participation, and proposed assessments
 Prepare Construction Plans

January to March Conduct bidding process \& select contractor

## 2021-2022

## April 2021 - July 2022

Construct corridor improvements!

## Why Replace the Watermain?

The existing watermain consists of 4 -inch and 6 -inch diameter and was installed in 1951. It is constructed of Cast Iron (CIP) material.

## 1 Materials

Cast Iron (CIP) material:

- has a 50-70 year lifespan
- is more brittle and prone to breaks
- is more susceptible to corrosion

For these reasons, many cities require the replacement CIP as part of reconstruction projects.

Materials used more commonly today include ductile iron pipe (DIP) and polyvinyl chloride (PVC). These products flex better with soil movement.

## 2 Depth

Watermain should be burried at a minimum depth of 7.5feet in this area.

The exact existing watermain depth is unknown with recent location attemts showing depths of 6- to 8-feet and excavation unearthing watermain at as little as 5 - to 6 -feet below the surface.

## 3 Fire Flow Potential

4-inch watermain cannot achieve fire flows adequate for current standards. 4-inch diameter pipes are no longer permitted by state standards.

Replacing the 6 - and 4 -inch watermains with a single large-diameter main will achieve suppicient flow standards over a large area of the community.



## Examples from other communities:



Pedestrian Access Zone Features

- Sidewalk
- Simple /Clear Pavement Design
- Accessibility to Storefronts

Possible Amenity Zone Features

- Landscaping (Trees/Planters)
- Decorative Pavement
- Lighting
- Seating
- Wayfinding Signage
- Banners/Hanging Baskets
- Artwork

Possible Travel Zone Features

- Vehicular travel lanes
- On-street bike lane

What streetscape elements are important to Medford?


BOLTON

Roadway Lighting


Concrete Pavement Patterns


Intersection Bump-Outs



Traditional


Modern


Post Industrial


Potential Intersection Control Improvements - Main St \& Central Ave

Main Street (CSAH 45) Reconstruction Project

Mini Roundabout Concept


What is a Mini Roundabout?
Yield controlled intersection with smaller footprint than traditional roundabouts (RAB) and traversable central islands to handle large vehicles.

How is this different from the roundabouts at Interstate 35?
A mini roundabout will be smaller than those currently at the Central Ave and I-35 interchange. The center island in a mini RAB is paved and traversable rather than planted.

Why Consider a Mini-Roundabout

- Better accommodates pedestrian crossings - reduces crossing distance \& higher yield rate (83\% yield rate over 7-20\% yield rate at typical crosswalk)
- Efficiently handles all traffic operations
- Fits nearly within existing footprint
- Improves intersection sight lines
- Defines business district


Main Street (CSAH 45) Reconstruction Project
June 19, 2019 Open House Meeting Summary

## PURPOSE

The purpose of the public open house was to share information on the 2021 Main Street (CSAH 45) Reconstruction Project and gather input on potential Downtown beautification street improvements with the project.

## MEETING PROMOTION \& ATTENDANCE

The Open House was advertised in the local newspaper and postcards were mailed to properties adjacent to the study corridor.

## Attendance:

| City of Medford | Andy Welti |
| :--- | :--- |
| Steele County | Greg Ilkka, Paul Sponholz |
| Elected Officials | Mayor Lois M Nelson, Councilmembers Chad Dempsey, |
|  | Chad Langeslag, Marie Sexton \& Grace Bartlett |
| Bolton \& Menk | Joe Duncan, Madeline Dahlheimer |

40 community members signed into the Open House.

## VENUE \& FORMAT

| DATE \& TIME | VENUE | Format |
| :---: | :---: | :---: |
| June 19,2019 <br> $5: 00-7: 00 ~ p m$ | Medford School Cafeteria | Open House Format - no formal presentation |

## PRESENTED MATERIALS

| Board Station |
| :--- |
| Project Purpose, Project Area, Timeline |
| Utility Improvements |
| Streetscape Considerations; Streetscape Components; Base Streetscape Elements; Enhanced <br> Streetscape Elements; Streetscape Styles |
| Intersection Control Change Option |
| Other Issues/Comments on Aerial Map |

## INPUT SUMMARY

## Survey Results:

30 surveys were submitted at the Open House.

- Lighting, banners/flag poles, and street trees were identified as the top 3 streetscape priorities.
- Responses for "Other":
- Flower planters along business district
- Parking
- Pedestrian crossing
- Just installed new bulbs on main.
- Decorative pavement was identified as the lowest priority streetscape element.
- Traditional was identified as the preferred streetscape style.
- Write in comment: Survey, Question Two, Other: Need more info on location.
- $87 \%$ of total responses (31) could not support a mini-roundabout at the intersection of Main St and Central Ave.
- Write in comment: As long as the center is not raised.
- Opinions were split $50 / 50$ as to whether to include a sidewalk/trail along S Main St.



## Main Street (CSAH 45) Reconstruction Project

June 19, 2019 Open House Meeting Summary

## Written Comments on Survey Card:

- Not in favor of intersection bumpouts. Keep costs down. No need for expensive aesthetics. Low/no maintenance.
- No bump out corners please. I like the looks of Post Industrial but don't think it works in Medford.
- Stay in budget people! Roundabout would be more time and money.
- Make sure sidewalk lighting/trees are decorative.
- Loss of parking downtown concern for current business. Concern with roundabout and pedestrian crossing. Too many kids cross at this location.
- No roundabout - will limit business use. Need more parking, not less.
- Keep 4-way stop.
- No roundabout. No sidewalk. I would like to see cost kept to a minimum to support other city projects.
- Keep manholes out of drive lanes. Leave existing curb and gutter.
- Roundabout at Central \& Main not necessary. If sidewalk added on west side of Main - shift Main St. East a couple feet to offset lost yard on west.
- Totally against roundabout. My home will have no parking. Traffic does not stop. Hard to get out of driveway (pedestrians) now with stop signs.
- There won't be room for 50ft truck trailers and large farm equipment with a roundabout.
- Whose stupid idea was the roundabout?
- The roundabout is completely unnecessary for Medford \& may bring more harm than good.
- With the large truck traffic in town, I feel it would be safer with a traditional stop \& go intersection.
- Need parking for the business section of Main Street.
- How does this accommodate pedestrian crossing? People don't stop.
- My child will not be allowed to go to pool as would have to cross the roundabout where traffic is not mandated with a stop sign to stop.
- Roundabouts don't work for truck traffic.
- Concrete, not blacktop.
- Does a roundabout cut into people's yards? Is there room for this?


## Issues/Opportunities Identified on Aerial Map:

- Frontage question for Anhorn's interior lots.
- No extension of sidewalk needed! No sidewalk.
- Depth of watermain - is there insurance money available from the original designer to defer cost?
- Keep center turn lane in CBD.
- Extend sidewalk through the end of this construction.
- Anhorn's - concern with number and width of curb cuts.
- No roundabout at Central and Main
- Can water service lines go all the way in to the house vs stopping at CS near property line?
- Can left turns be removed to allow more parking?
- No room for big trucks!
- Need more parking! Remove center turn lane to create room for more parking.
- Maintain or increase parking. Do not remove any.
- No room for big trucks!!
- Who maintains the "amenity" zone?
- Lack of parking? Pushing businesses out of town?
- Maintain parking for business - nice street lights (decorative), handicapped accessible, decorative sidewalk with trees.
- SB traffic sight distance to post office.
- Pavers in front of post office - will sidewalks be replaced?
- Keep manholes out of wheel paths.
- High foot/bike traffic crossing (school/park/pool) keep 4-way stop at Central and Main.
- Could CR 12 from Main to the school be routed to be more direct? Maybe connect at $2^{\text {nd }}$ Ave to Main Street?


## Verbal Comments:

## Appendix C: Roadway Alternatives Considered South of $2^{\text {nd }}$ Avenue SW

LEGEND

| THROUGH LANES |
| :--- |
| PARKING |
| TURN LANE |
| B618 CURB \& GUTTER |






## Appendix D: Tree Impacts $-5^{\text {th }}$ Ave SE to $2^{\text {nd }}$ Ave SW Improvements (Alternative 4)



## Services Provided:

Civil \& Municipal Engineering \& Planning
Water \& Wastewater Engineering
Transportation Planning \& Engineering
Aviation Services
Water Resources Engineering
Planning \& Urban Design
Land Surveying
Geographic Information System
Project Funding \& Financing
Bolton-Menk.com

