LEVENS AND ELLENDALE INTERSECTION IMPROVEMENTS

Location: Dallas, OR

EXISTING CONDITIONS

- Stop-Controlled Intersection
- Zero Bicycle Facilities
- Heavy Truck Route
- Proximity to School and Retirement Home
- High Queuing Times in Peak hour
- Lack of Existing Water Quality Treatment

Project Scope:

Intersection Improvements
- Intersection Geometry
- Bike/Ped Facilities
- Traffic Controls

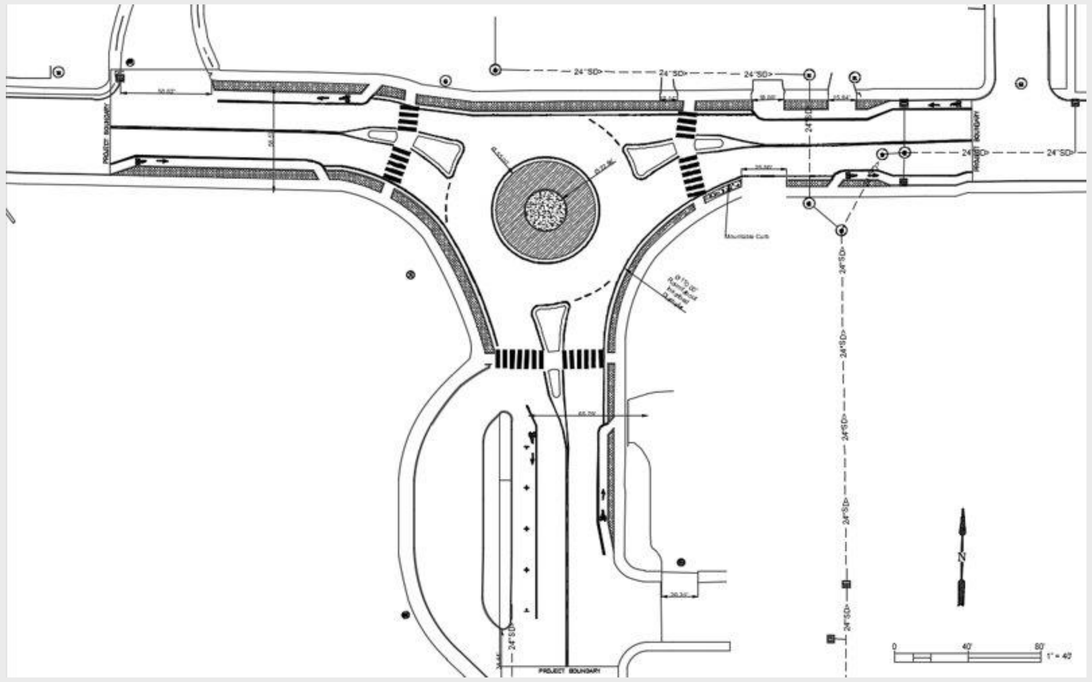
Storm Water Design
- Water Quality
- Pipe Connections

Oregon State University

TRANSPORTATION

For this project, the transportation team designed a roundabout with improved pedestrian and bike facilities.

FINAL PROPOSED SITE LAYOUT



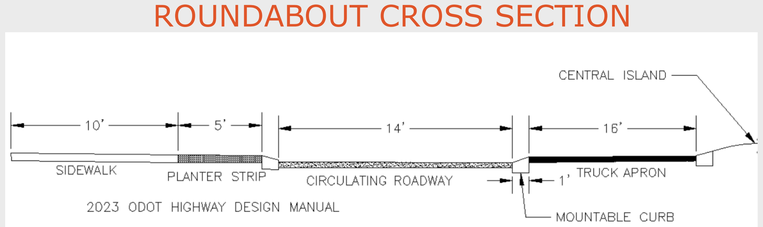
Major Design Components:

- ✓ Inscribed Diameter 110 ft
- ✓ Truck Apron Diameter 55 ft
- ✓ Center Island Diameter 22.85 ft
- ✓ Splitter Islands With Pedestrian Cross Walk
- ✓ 5 ft Bike Lanes with Ramps onto Sidewalk at Roundabout Entrances.
- ✓ Mountable Curb at SE Corner of Roundabout for Truck Accessibility

Benefits of a Roundabout:

- ✓ Lower Maintenance Costs
- ✓ Vehicle and Pedestrian Safety: Less Conflict Points and Severe Crashes
- ✓ Alleviates Queuing
- ✓ Lower Speeds
- ✓ Consistent Traffic Flow

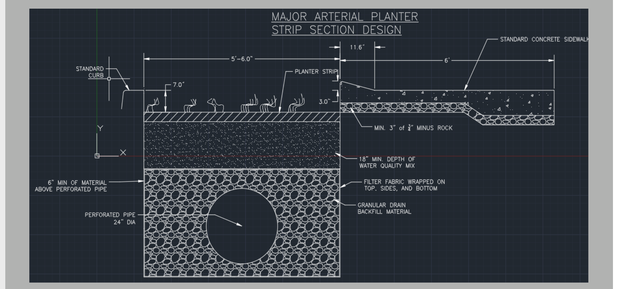
ROUNDABOUT CROSS SECTION



WATER RESOURCES

For this project, the water resources team designed a planter strip to alleviate the water runoff from the road.

PLANTER STRIP DETAIL



Pros and Cons of Planter Strips

Pros:
- Easily Expandable
- Compact
- Water Retention
- Water Quality
- Aesthetically Pleasing

Cons:
- Moderately Expensive
- Requires More Upkeep

24" Perforated Pipe Added Underneath to Accommodate Sheet Flow

CATCH BASIN DETAIL