State Highway 60 & CR13/Colorado Boulevard Ultimate Intersection

Work Session May 1, 2023







Consultant Presenters

Johnny Olson, PE JWO – Project Principal John Sabo, PE

Benesch – Senior Project Manager

Matt Salek, PE Benesch – Project Manager

Johnstown Staff

Matt LeCerf

Town Manager

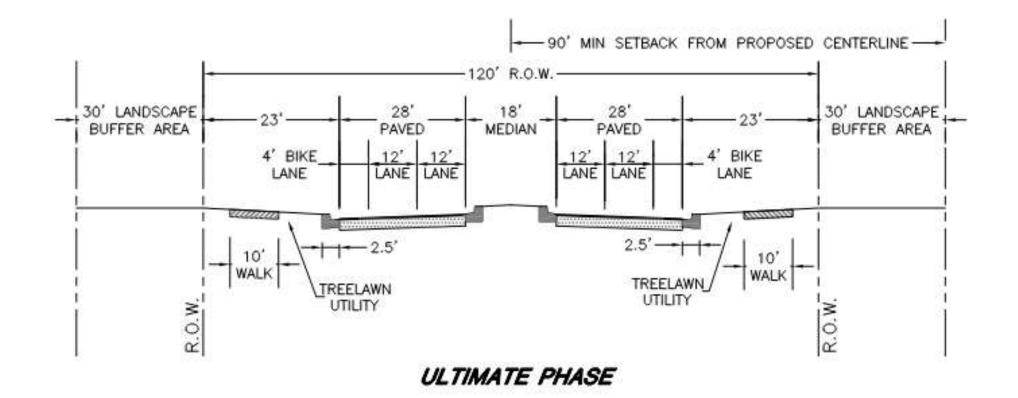


Ultimate Design Overview

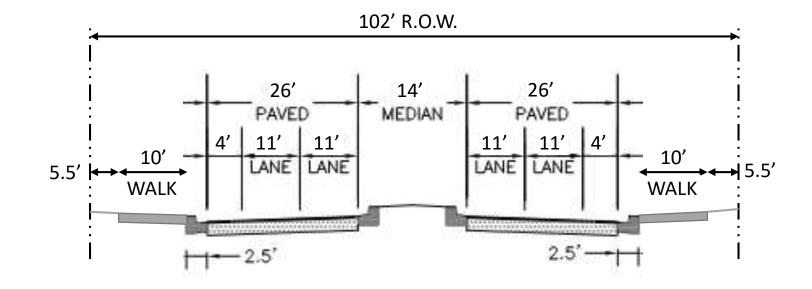
- New traffic signal at SH 60 and CR13/Colorado Boulevard
- Johnstown knew the CR13/Colorado Boulevard would need expansion
- Options for CR13/Colorado Boulevard with lane configuration so future development would know the needs
- Interim design to add left turns on CR13/Colorado Boulevard and new signal in ultimate configuration



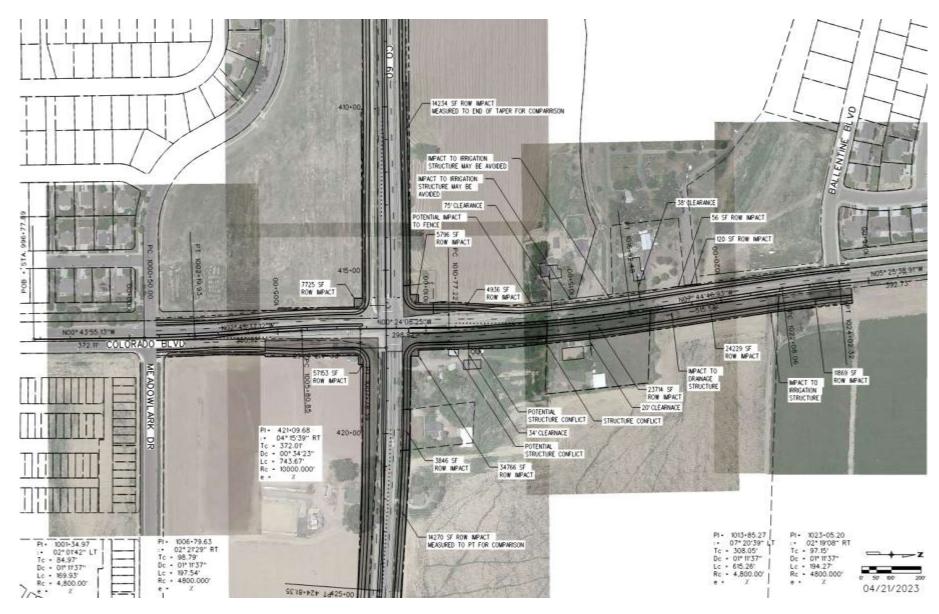
Johnstown Standard Street Section



Narrowed Street Section to Reduce Impacts



Option 1 – Alignment Centered at Intersection



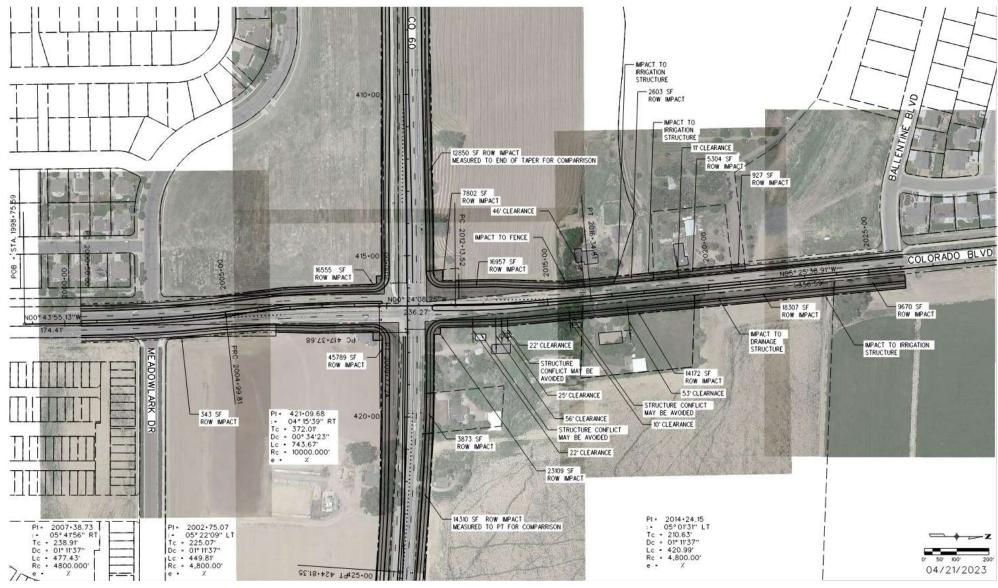
Pros:

- 1. Keeps Alignment in about same location
- 2. Hold Towns Design Standards
- 3. Less Impact to South West Property

Cons

- 1. Buys ROW from West and East Side
- 2. More ROW from South East Corner
- 3. Only 20 Feet from house in North East corner

Option 2 – Shifted West



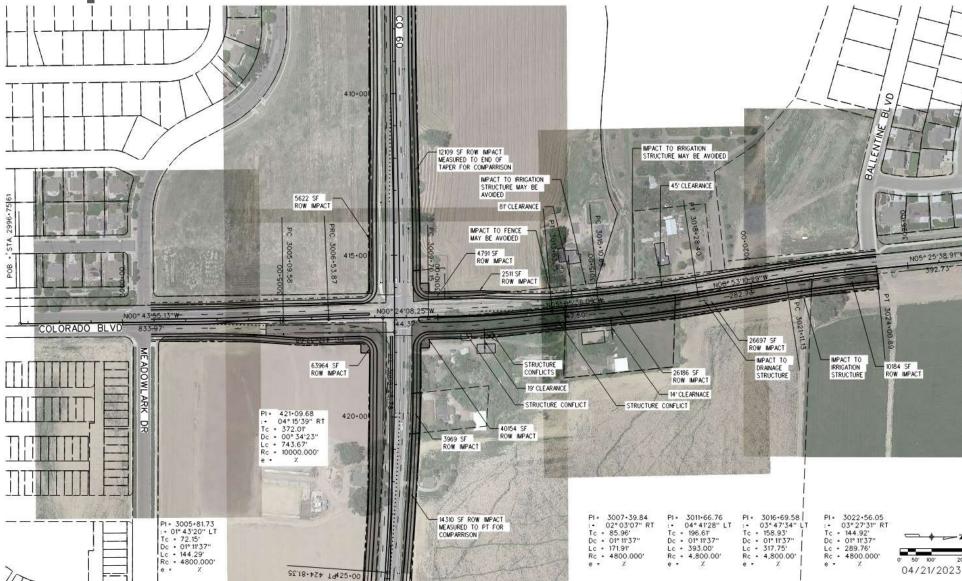
Pros:

- 1. Alignment moves to the west
- 2. Hold Towns Design Standards
- 3. Lest impacts to east properties
- 4. 53 feet from House in North East Quadrant (about 33 feet farther away)

Cons:

- 1. Buys ROW from West and East
- 2. More ROW from West corners
- 46 feet clearance from house in North west (about 29 feet Closer)

Option 3 – Shifted East



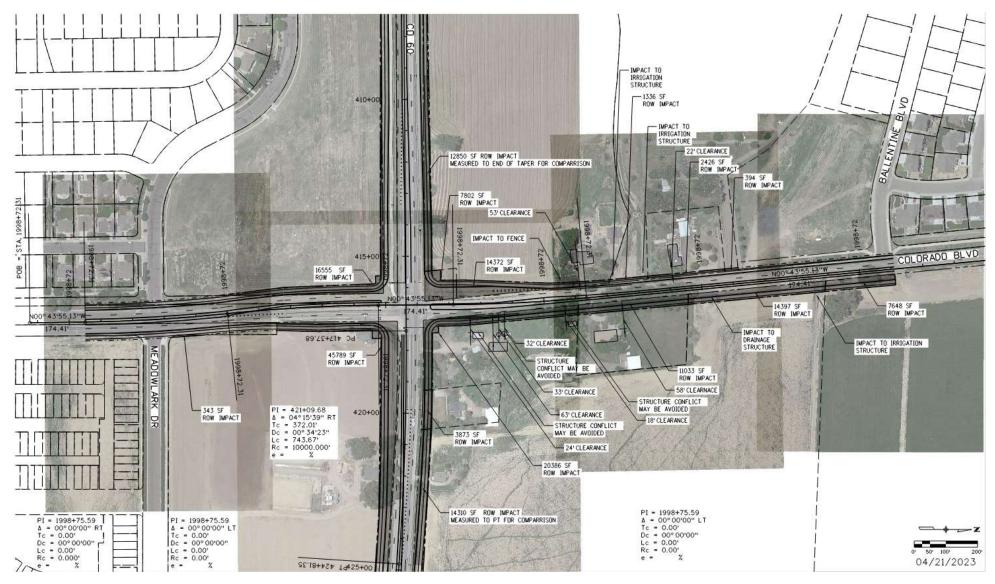
Pros:

- 1. Alignment moves to the East with less impacts to the West Properties
- 2. Hold Towns Design Standards
- 3. 81 feet from House in North West Quadrant
- 4. Less Acquisition of west properties.
- 5. Helps with Irrigation Design
- 6. No curvature on CR13 Colo Blvd. south of intersection

Cons:

- 1. More ROW from East Corners
- 2. 14 feet clearance from house in North east House
- 3. More impacts to structures on East Side

Option 2 – Shifted West with Narrowed Lanes



Pros:

- 1. Less impacts to East and West Properties
- 2. 58 feet from House in North East Quadrant
- 3. 53 Feet from House in North West Quadrant

Cons:

- 1. More ROW from West corners
- 2. Reduce Town Streets Standards
- 3. Loose buffer between the sidewalk and roadway

Option Scoring

| ALTERNATIVE | | ROW IMPACT | | | BUILDING CLEARANCE | | | UTILITY IMPACT | | | RESULTING SCORE | | | |
|----------------------------|-------------------|------------|-----------|--------|--------------------|-----------|-------|----------------|--------|-------|-------------------------|-----------|---------|-------|
| | | PARCEL | AREA (SF) | SCORE | BUILDING | CLEARANCE | SCORE | FACILITY | IMPACT | SCORE | ROW | CLEARANCE | UTILITY | TOTAL |
| 1 CENTERED ALIGNMENT | North West Corner | Parcel 01 | | | Garage | 11 | 5 | Irrigation 1 | No | | 25.142 | | 5 | 363 |
| | | Parcel 02 | 120 | 0.12 | N. House | | 38 | Irrigation 2 | No | | | 43 | | |
| | | Parcel 03 | 56 | 0.06 | S. House | 75 | 0 | OHE | Yes | 5 | | | | |
| | | Parcel 04 | | | Fence | | | | | | | | | |
| | | Parcel 05 | 4936 | 4.94 | | | | | | | | | | |
| | | Parcel 06 | 5796 | 5.80 | | | | | | | | | | |
| | | Parcel 07 | 14234 | 14.23 | | | | | | | | | | |
| | North East Corner | Parcel 01 | 11869 | 11.87 | House | 20 | 50 | Irrigation | Yes | 10 | 112.694 | 92 | 20 | |
| | | Parcel 02 | 24229 | 24.23 | N. Shed | 0 | 10 | Drainage | Yes | 10 | | | | |
| | | Parcel 03 | 23714 | 23.71 | N. Silo | 0 | 10 | | | | | | | |
| | | Parcel 04 | 34766 | 34.77 | S. Silo | 0 | 10 | | | | | | | |
| | | Parcel 05 | 3846 | 3.85 | Barn | 34 | 2 | | | | | | | |
| | | Parcel 06 | 14270 | 14.27 | S. Shed | 0 | 10 | | | | | | | |
| | South West Corner | Parcel 01 | 7725 | 7.73 | | | | | | | - 7.725 0 - 57.153 0 | 0 | 0 | |
| | | Parcel 02 | | | | | | | | | | | | |
| | South East Corner | Parcel 01 | 57153 | 57.15 | | | | | | | | 0 | 0 | |
| | | Parcel 02 | | | | | | | | | | 0 | | |
| | North West Corner | Parcel 01 | | | Garage | 0 | 10 | Irrigation 1 | Yes | 10 | 46.443 | 80 | 25 | 340 |
| 2 WEST SHIFT | | Parcel 02 | 927 | 0.927 | N. House | 11 | 50 | Irrigation 2 | Yes | 10 | | | | |
| | | Parcel 03 | 5304 | 5.304 | S. House | 46 | 10 | OHE | Yes | 5 | | | | |
| | | Parcel 04 | 2603 | 2.603 | Fence | 0 | 10 | | | | | | | |
| | | Parcel 05 | 16957 | 16.957 | | | | | | | | | | |
| | | Parcel 06 | 7802 | 7.80 | | | | | | | | | | |
| | | Parcel 07 | 12850 | 12.85 | | | | | | | | | | |
| | North East Corner | Parcel 01 | 9670 | 9.67 | House | 53 | 10 | Irrigation | Yes | 10 | 83.441 22 46.132 0 | 22 | 20 | |
| | | Parcel 02 | 18307 | 18.307 | N. Shed | 10 | 5 | Drainage | Yes | 10 | | | | |
| | | Parcel 03 | 14172 | 14.172 | N. Silo | 22 | 2 | | | | | | | |
| | | Parcel 04 | 23109 | 23.109 | S. Silo | 25 | 2 | | | | | | | |
| | | Parcel 05 | 3873 | 3.873 | Barn | 56 | 1 | | | | | | | |
| | | Parcel 06 | 14310 | 14.31 | S. Shed | 22 | 2 | | | | | | | |
| | South West Corner | Parcel 01 | 45789 | 45.789 | | | | | | | | 0 | 0 | |
| | | Parcel 02 | 343 | 0.343 | | | | | | | 10/102 | TOTAL U | 2 | |
| | South East Corner | Parcel 01 | 16,555 | 16.555 | | | | | | | 16.555 0 | 0 | 0 | |
| | | Parcel 02 | | | | | | | | | | Ŭ | | |

Option Scoring

| ALTERNATIVE | | ROW IMPACT | | | BUILDING CLEARANCE | | | UTILITY IMPACT | | | RESULTING SCORE | | | |
|------------------------------------|-------------------|------------|-----------|--------|--------------------|-----------|-------|----------------|--------|-------|----------------------|-----------|---------|-------|
| | | PARCEL | AREA (SF) | SCORE | BUILDING | CLEARANCE | SCORE | FACILITY | IMPACT | SCORE | ROW | CLEARANCE | UTILITY | TOTAL |
| 2B WEST SHIFT WITH 11' LANES | North West Corner | Parcel 01 | | | Garage | 0 | 10 | Irrigation 1 | Yes | 10 | 39.18 | 50 | 25 | 290 |
| | | Parcel 02 | 394 | 0.394 | N. House | 22 | 20 | Irrigation 2 | Yes | 10 | | | | |
| | | Parcel 03 | 2426 | 2.426 | S. House | 53 | 10 | OHE | Yes | 5 | | | | |
| | | Parcel 04 | 1336 | 1.336 | Fence | 0 | 10 | | | | | | | |
| | | Parcel 05 | 14372 | 14.372 | | | | | | | | | | |
| | | Parcel 06 | 7802 | 7.80 | | | | | | | | | | |
| | | Parcel 07 | 12850 | 12.85 | | | | | | | | | | |
| | North East Corner | Parcel 01 | 7648 | 7.648 | House | 58 | 10 | Irrigation | Yes | 10 | 71.647 | 21 | 20 | |
| | | Parcel 02 | 14397 | 14.397 | N. Shed | 18 | 5 | Drainage | Yes | 10 | | | | |
| | | Parcel 03 | 11033 | 11.033 | N. Silo | 32 | 2 | | | | | | | |
| | | Parcel 04 | 20386 | 20.386 | S. Silo | 33 | 2 | | | | | | | |
| | | Parcel 05 | 3873 | 3.873 | Barn | 63 | 0 | | | | | | | |
| | | Parcel 06 | 14310 | 14.31 | S. Shed | 24 | 2 | | | | | | | |
| | South West Corner | Parcel 01 | 45789 | 45.789 | | | | | | | 46.132 0 16.555 0 | 0 | 0 | |
| | | Parcel 02 | 343 | 0.343 | | | | | | | | | | |
| | South East Corner | Parcel 01 | 16,555 | 16.555 | | | | | | | | | 0 | |
| | | Parcel 02 | | | | | | | | | | 0 | | |
| | North West Corner | Parcel 01 | | | Garage | 17 | 5 | Irrigation 1 | No | | 19.411 | 15 | 0 | 341 |
| | | Parcel 02 | | | N. House | 45 | 10 | Irrigation 2 | No | | | | | |
| | | Parcel 03 | | | S. House | 81 | 0 | OHE | No | | | | | |
| 3 EAST SHIFT | | Parcel 04 | | | Fence | | | | | | | | | |
| | | Parcel 05 | 2511 | 2.511 | | | | | | | | | | |
| | | Parcel 06 | 4791 | 4.79 | | | | | | | | | | |
| | | Parcel 07 | 12109 | 12.11 | | | | | | | | | | |
| | North East Corner | Parcel 01 | 10184 | 10.184 | House | 14 | 50 | Irrigation | Yes | 10 | 121.5 95 63.964 0 | 95 | 20 | |
| | | Parcel 02 | 26697 | 26.697 | N. Shed | 0 | 10 | Drainage | Yes | 10 | | | | |
| | | Parcel 03 | 26186 | 26.186 | N. Silo | 0 | 10 | | | | | | | |
| | | Parcel 04 | 40154 | 40.154 | S. Silo | 0 | 10 | | | | | | | |
| | | Parcel 05 | 3969 | 3.969 | Barn | 19 | 5 | | | | | | | |
| | | Parcel 06 | 14310 | 14.31 | S. Shed | 0 | 10 | | | | | | | |
| | South West Corner | Parcel 01 | 63964 | 63.964 | | | | | | | | 0 | 0 | |
| | | Parcel 02 | | | | | | | | | | 0 | | |
| | South East Corner | Parcel 01 | 5,622 | 5.622 | | | | | | | 5.622 0 | 0 | 0 | |
| | | Parcel 02 | | | | | | | | | | U | | |

Results / Recommendation

- West Shift with Narrowed Lanes scores best
- West Shift scores second best
- Both result in the road laying in between existing houses and do not have right-of-way Acquisition that include buildings
- West Shift with Narrowed Lanes has larger offsets to houses and is the preferred option
- Accept an option as the selected alignment going forward
- Use selected alignment for right-of-way and development planning