





Subject Stakeholder Advisory Committee Meeting #4

Project Name Tribal Trail Connector EA

**Location** Teton County Commission Chambers

Jackson, WY

**Date/Time** 25 July 2019 – 10:00 am – 4:00 pm

Participants Dave Schuler – Stakeholder

Dave Schofield – Stakeholder

Ralph Haberfeld – Stakeholder (attended morning session) Grant Galloway (Sitting in for Jeff Daugherty) - Stakeholder

Lisa Carpenter – Stakeholder Tom Holland – Stakeholder Frank Lane – Stakeholder Alex Muromcew – Stakeholder

Carrie Geraci – Stakeholder (attended afternoon session)

Scott Pierson – Stakeholder Darren Brugmann - START Director

Amy Ramage – Teton County Heather Overholser – Teton County Jazmine Watson – Teton County

Nick Hines – WYDOT

Meg Mordahl – WYDOT

Bob Hammond – WYDOT

Carolyn Moore – WYDOT

Keith Compton – WYDOT

Kevin Stogsdill – WYDOT

Darin Kaufman – WYDOT

Randy Bomar - Morrison Maierle

Tim Brugger – Morrison Maierle

Jim Clarke – Jacobs Whitney Wimer – Jacobs

On Phone

Mike Halpin – (Sitting in for Ralph Haberfeld)

Steve Lowham - Morrison Maierle

**Attachments** A – Alternative Figures

B – Travel Time Figures

C - Draft Final Level 1 Screening Matrix

Copies to Attendees

Keith Compton/WYDOT Ted Wells/WYDOT



# **Meeting Purpose**

To walk through the Level 1 Evaluation Matrix with the Stakeholders for each of the Tribal Trail Connector design alternatives.

Notes below reflect the meeting discussion except for italicized text, which is updated information based on the meeting discussion.

## Notes

- 1 Tribal Trails stakeholder meetings are open to the public:
  - · Meeting will be streamed live.
  - Meetings are intended to provide information to the stakeholder committee to generate discussion and get feedback. Public comments are not accepted during the meeting.
  - Public can provide comment via the Tribal Trail Connector website (http://www.tribaltrailconnector.com/).

# 2 Agenda

Changed the order of items 6 and 7. Review of the Traffic Model will occur after lunch. The Level 1 evaluation will continue after the Traffic discussion.

# 3 Review of Stakeholder Roles

- Review of Project Charter Process. Information displayed on two boards can be viewed on the project website.
- Reviewed where the Project is in the <u>Tribal Trail Project Process</u>. Project is still in the "Identify Project Alternatives" Phases. Today the project is moving into the "Evaluate Alternatives" Phase. Evaluating alternatives using the Level 1 Screening Criteria.

## 4 Public Outreach

- Overview of the 63 scoping public comments received during the official public scoping comment period from May 30, 2019 to June 24, 2019.
- Highlights include:
  - Environmental Assessment vs. Environment Impact Study
    - Concerns have been expressed that an EIS needs to be done instead of an EA
      - EA will be conducted first, which will determine if an EIS is required
  - o Bike/Ped
    - It was suggested that the bike path should be farther away from the road with a clear division between the road and the community pathway
  - Residential Area
    - Concerns about residential safety
  - Safety Concerns
    - This will be evaluated in Level 2 screening and address both human and wildlife safety concerns. All the written public comments are on the website. Contact information has been redacted.
- Public scoping meeting summary will be added to the website.
- Reminder, public comments will be accepted throughout the project process. However, after a
  public meeting, there will be a defined time frame so we can provide a summary of public
  comments associated with that meeting.
- Website updates are ongoing.
- Teton County is continuing to collaborate and meet with different HOAs to present project information and collect comments

# 5 Wetland Field Work Update

- Jacobs completed the wetland delineation field work the week of July 19, 2019.
- Results of the wetland delineation were displayed. Please refer to Attachment A Figure I-NDN of the Alternatives Figures. Results include:
  - o Fen wetland
    - A fen is unique type of wetland characterized by deep organic soils, peat, and neutral soil pH. Wetland hydrology is primarily from ground water.
  - PEMA/PEMC wetland Palustrine Emergent wetland

Action

Add materials to website. Complete Stakeholder Advisory Committee — Information Boards

Add public meeting summary to website. Complete – Public Scoping Meeting Summary Report

Add materials to website. Complete Stakeholder Advisory Committee – Information Boards



Action

# **Notes**

- PEM wetlands are comprised primarily of herbaceous plants. The "A" and "C" indicate the different water regimes that can be present within the wetlands.
- PSSA wetland Palustrine Scrub Shrub wetland
  - PSS wetlands are comprised of at least 20% woody wetland shrubs, such as willows.
     The "A" indicates the different water regime that can be present within the wetland.

# 6 North Alternative Review

At the July 15, 2019, stakeholder meeting eight alternatives were presented for the north intersection with Hwy 22. One new alternative have been added based on feedback received during the July 15 stakeholder meeting. Five new alternatives have been added based on feedback received during the July 25 stakeholder meeting. Below is a summary of each alternative that was evaluated in Level 1. Refer to Attachment A – Alternative Figures.

- I-N1 Intersection of Tribal Trail Road with Hwy 22 will have an underpass and access ramps.
   Indian Springs traffic is directed to Tribal Trail Road by removing the Indian Springs access to Hwy 22. Coyote Canyon access will be changed to a right on/right off for Coyote Canyon.
   Traffic from Coyote Canyon heading into Jackson would use the underpass and use the Indian Spring access road to get to Tribal Trail Road.
- I-N2 This option does not connect Indian Springs to Tribal Trail road. Instead, both Coyote Canyon and Indian Springs existing access points are converted to right on/right off. An underpass connecting Coyote Canyon and Indian Springs will allow traffic to access Hwy 22.
- I-N3 NEW alternative based on feedback from the 07/15/2019 stakeholder meeting. Coyote
  Canyon/Indian Springs existing access to Hwy 22 is closed. Coyote Canyon traffic is directed
  along a frontage road on the north side of Hwy 22 to the Tribal Trail Road access point. Indian
  Springs traffic uses the road on the south side of Hwy 22 and connects to Tribal Trail Road.
- I-N4 Same as IN3 but it eliminates Indian Springs access to Hwy 22 and Tribal Trail Road.
   Their access will be to the south via W. Boyles Hill road.
- I-N5 The existing intersection is converted to right on/right off with an underpass allowing traffic to access both sides of the Hwy 22. Tribal Trail traffic is directed to Indian Springs Road to access Hwy 22.
- I-N6 Same layout as IN1 but the access to Hwy 22 is via a roundabout instead of an intersection.
- I-N7 Keeps access at existing Coyote Canyon/Indian Springs, but access point is changed to an interchange. All access would become right on/right off so traffic will need an underpass. This also creates a new interchange at Tribal Trail Road. This would create two intersections approximately 1200 linear feet (LF) apart.
- I-N8 All access to Hwy 22 is directed to one intersection approximately midway between the
  two areas. Coyote Canyon traffic is directed along a frontage road on the north side of Hwy 22
  to the Tribal Trail Road access point. Indian Springs and Tribal Trail Road would use a frontage
  road adjacent to Hwy 22 to access Hwy 22.
- I-N9 NEW alternative based on feedback from the 07/25/2019 stakeholder meeting. Coyote Canyon/Indian Springs existing access to Hwy 22 is closed. An underpass is built to connect Coyote Canyon and Indian Springs. To access Hwy 22 traffic would use a frontage road on the north side of Hwy 22 to the Tribal Trail access point.
- I-N10 NEW alternative based on feedback from 07/25/2019 stakeholder meeting. Tribal Trail
  Road has a one-way only underpass for westbound traffic to access Hwy 22. Eastbound traffic
  has an at grade right on/off at Tribal Trail Road. Westbound Hwy 22 traffic has a left-hand turn
  lane to access Tribal Trail Road. Coyote Canyon Road and Indian Springs Drive would remain
  the same.
- I-N11 NEW alternative based on feedback from 07/25/2019 stakeholder meeting. Tribal Trail Road would have an at-grade signalized intersection with Hwy 22.
- I-N12 NEW alternative based on feedback from 07/25/2019 stakeholder meeting. The
  connector road was moved to the North off the platted easement to avoid the fen wetland.
- I-N13 NEW alternative based on feedback from 07/25/2019 stakeholder meeting. The
  alternative is similar to I-N12. The approach to Indian Springs Drive is shifted to avoid impacting
  a historical site and fen wetland.
- I-NDN NEW At the 07/25/2019 stakeholder meeting this was figure N9. The figure number has been updated. The figure shows the existing conditions, parcel boundaries, easements and delineated wetlands.

# 7 North Alternative Q&A

Q - General. Are cost estimates available for the alternatives?

Add materials to website. Complete Stakeholder Advisory Committee –

**Information Boards** 

Morrison Maierle to develop additional access options related



- A Not at this time.
- Q General. Will the gate on Indian Springs be moved?
  - A Project team hasn't looked at specifics yet. Design elements are still conceptual.
- Q General. We will need pathway locations to determine if these options meet the criteria. When will details about the pathways be available?
  - A Alternatives that move forward into level 2 will have more details but the overall design will still be conceptual. Locations and types of crossing will be developed more fully for the alternatives carried forward for detailed study in the EA, then continued to be refined as part of the design process.
- Q General. Could the underpasses also serve as a wildlife crossing?
  - A –Wildlife has been known to use underpasses in locations with light vehicle traffic. This underpass might have too much traffic.
- Q General. Could a wildlife overpass be built to the west?
  - A There is separate project looking into building a wildlife overpass.
- Q General. What is the cost difference between a wildlife overpass verses wildlife underpass?
  - A It depends but wildlife overpasses typically are more costly because they are essentially vegetated bridges whereas an underpass is similar to a large culvert.
- Q Related to N1. If the plat says the Indian Springs access has to follow the existing easement, is that the only option?
  - A The County is looking into what, if any, deviations can be made from the existing plated easement
- C Related to N6. Two lane roundabouts are hard for the 40-foot START buses to maneuver. The buses are also low with minimal clearance. School buses are moving to a lower clearance as well.
  - $R-\mbox{Two}$  lane round abouts are designed with a gentle sloping middle island that's designed to be driven over by buses and semi-trucks.
- Q Related to N6. Would WYDOT consider right only from Indian Springs? If so then the underpass could be eliminated.
  - A The current access permit states only one access point. The spacing between major intersections is a minimum of 2,600 feet for anything with more than one resident.
- Q Related to N8. Could stop lights be used instead of a grade separated intersection?
  - A Yes, this could be an at grade crossing. Most of the design options could be at grade crossings, if WYDOT would allow signals on HWY 22. This will depend on how traffic signals operate and accommodate existing and future traffic.

# 8 South Alternative Options

Three alternatives were presented for the South intersection with Boyles Hill Road. Below is a summary of each alternative. Refer to Attachment A – Alternative Figures.

- IS1 Intersection becomes a 4-way stop.
- IS2 Stop signs are replaced with a roundabout.
- IS3 NEW alternative based on feedback from the 07/25/2019 stakeholder meeting. Shift
  roadway alignment to create a visual cue that a stop sign is approaching. Currently the
  roadway alignment is straight, people miss the stop sign because they aren't looking for it.
- IDN No Build Alternative represents the existing conditions.

# 9 South Alternative Q&A

- Q General. What is the difference in traffic movements between a roundabout and 4-way stop?
  - A In the correct situation roundabouts allow for free-flowing traffic.
- Q General. What is the wrong situation for a roundabout?
  - A Roundabouts often don't function well with high traffic volumes. In higher traffic volumes they need to be bigger.
- Q General. Would the traffic model be utilized to see the connectivity between other intersection before choosing between a roundabout or 4-way stop?
  - A Yes.
  - A The traffic model uses the 40-foot bus as one of the design vehicles.
- Q Related to IS1. How does the pathway work with the bike path?

#### Action

to N6 – roundabout. Complete.



A – The exact placement has not been determined. Typically, the crossing is offset from the roundabout, so the pedestrians can see when a car is exiting the roundabout. Some roundabouts can also be designed with raised median for pedestrians to pause on.

Action

# 10 Other Alternatives

Two roadway alignment alternatives were presented for the Tribal Trail Road. Below is a summary of each alternative. Refer to Attachment A – Alternative Figures.

- ON1 Shows a typical roadway alignment. The roadway is centered within the ROW from Cherokee Lane to roadway terminus.
- ON2 Shows a roadway alignment with chicanes, gentle curves that shift the roadway from side to side within the alignment. Chicanes act as a traffic calming measure.

Four traffic calming ideas were presented. For simplicity they are all shown on one figure. The traffic calming ideas can be placed anywhere within the project area. Locations of the traffic calming measures shown are only examples—not true placement locations—and will be considered later in the process

 OS1 – Traffic calming ideas including center island narrowing, neighborhood traffic circles, roundabouts, speed tables. These are shown for visual only and intentionally not shown in specific areas.

A project vicinity map was included in the meeting materials

• O-ALL – Project vicinity map. Refer to Attachment A – Alternative Figures.

Five Typical section alternatives were presented for the Tribal Trail Road. Below is a summary of each alternative. Refer to Attachment A – Alternative Figures.

- Existing Conditions shows the existing conditions of Tribal Trail Road. Option would keep the
  existing dimensions along the Tribal Connector road.
- Existing Conditions Add Curbs similar to option 1 but curbs are added to the cross-section.
- Alternative 1 shows bike lanes on both sides of the roadway, a 9-foot center island area. The
  center islands can be the full length of the project, or short stretches. The islands can also be
  converted into turn lanes at existing intersections. This option also shows a 10-foot walking
  pathway. Roadway widths have been narrowed to 11 foot to match the roadways going south.
- Alternative 2 switches the pathway to the west side. The pathway will tie into the existing pathway south of the project
- Alternative 3 moves the roadway to the west side, eliminates the bike lanes, and shows a large buffer for the pathway.
- Alternative 4 similar to Alternative 3 except the pathway is buffered on both sides.

# 11 Comments on Other Alternatives

- School and START busses are not in favor of some of the traffic calming options such as dips
  and speed tables. They damage the underside of the low clearance vehicles.
- EMS doesn't like speed tables and dips either.

# 12 Alternative Evaluation Memo and Level 1 Matrix

Review of screening criteria outlined in the Alternative Evaluation memo. The travel demand model, as well as the traffic micro-simulation model, both will be used to help screen the alternatives in Level 2.

<u>Question to the group</u>. Is the group comfortable with the definition of irresolvable environmental impacts?

- A Group asked for further explanation.
- A Jim Clarke provided the example of an alternative from which a Section 404 wetland permit could not be obtained later in the process. If the project is unpermittable, it would meet that definition.
- A Group indicated they felt comfortable moving forward after the definition was explained.

<u>Question to the group</u>. Does the group agree to eliminate the exorbitant cost criteria from Level 1 screening?

A – Group came to the consensus that it was too early in the process to screen for this as comparative cost estimates are not yet prepared.

Question to the group. Is the group comfortable screening alternatives with the modified Level 1 criteria?

Jacobs to revise Alternative Evaluation Memo and Level 1 screening matrix.



Action the modified Level

A –The majority of the group agreed the alternatives could be screened with the modified Level 1 screening criteria.

Stakeholder suggested that a Level 2 criteria be added that addresses cost-benefit of alternatives.

# 13 Visioning Exercise

Brain storming activity. Stakeholders were asked to engage in an exercise where they envision what the project would look like after completion in a future year. They were asked to consider amenities and project features that they would like to see if the project is approved to move forward by the Commissioners.

#### Ideas included:

- Benches along the pathway
- Incorporate public art into design elements
  - o Artist designed projects i.e. benches, murals, mosaics, wayfinding
  - Visual traffic calming features
- Shelter/Shade structures along pathway
  - o Highlight view points
  - Interpretive plaques
- Water bottle filling station
- Pocket parks, possible locations include:
  - Next to creek
  - Northwest side of Hwy 22
  - Native plant garden along pathway
- Safe pathway crossings
- Interpretive plaques with historical and educational information about the area
- Wildlife crossing
- Bridge enhancement
  - Traffic calming features
  - o Color and texture
  - Stamped concrete
- Trash cans
- Mutt mitts
- Rest rooms
- Keep the rural/historic character of the area
- Noise reduction
- Bike racks at bus stops, if the bus stops along the Tribal Trail Connector
- Central area of roundabout
  - o Visually permeable
  - Keep with historic character
  - Plants that wildlife won't eat
- Avoid design elements that would result in the loss of unobstructed the views from pathway
- · Temporary installations like an artist designed wayfinder

Stakeholders suggested doing neighborhood outreach and workshops to see what the local users would like to see

• Could do a low-cost test

# 14 Traffic Model Presentation

Cambridge Systematics provided a presentation to discuss the results of the traffic model.

- Traffic Model 101
  - o A model is a tool that provides a way to organize assumptions
  - o A model is not a true picture but a pixilated picture
  - Traffic counts vary from day to day, week to week
  - o Travel model represents an average weekday in the summer, winter, or off-peak season
  - o Data goes through a validation process
- Forecast Year Data and Assumptions
  - Model assumes everyone takes the fastest route
  - o How are trips determined? Based largely on population and employment data sets.
- Model Application for Tribal Trail Road Extension

- Cambridge to share validation results.
   Complete. Results are in the Teton County
   Travel Demand Model Technical Report
- 2. Add presentation materials to website. Complete <u>Traffic</u> <u>Presentation</u>



- Tribal Trail extension is modeled as a collector street with a speed limit of 35 mph
- o The model included a valley wide approach
- o Highlighted the change in traffic from 2016 to 2040
- Model results were explained with different scenarios for Tribal Trail

# Next Steps

- Additional data collection more traffic counts
  - Currently collecting traffic counts
  - Additional counts will occur in the Fall/Winter
- Simulation Mode
- Additional Information from the County

#### Travel Time Survey

- County staff performed Travel Time Survey to assess the extent that 'so-called' through traffic from points south would use the Tribal Trail Connector. Refer to Attachment B – Travel Time Figures.
  - Taking the southern part of South Park Loop to Tribal Trail was 3 min slower than taking Highway 89 through the Y intersection to Tribal Trail
- o County created a figure to highlight the Vehicle Miles Traveled (VMT)
  - Showing travel distance from the Cottonwood area, refer to Attachment B Travel Time Figures.

# 15 Traffic Discussion

- Some stakeholders expressed doubt about the volume of people coming from South Park Loop Road. They believe the number is higher.
- There was discussion about behavioral trips vs. fastest route
  - Model assumes everyone will take the fastest route
  - Stakeholders would like to see a 50/50 split between fastest route and taking Tribal Trail Connector
  - Stakeholders requested clarification on the how much school traffic is expected to use Tribal Trail Connector.
    - A The model currently shows Tribal Trail Connector would be used by people traveling to and from schools.
  - o Stakeholders would like to see the difference between VMT and travel time.
- Q Will the traffic model numbers reflect changes caused by the different alternatives? Could speed, traffic calming measures be incorporated into the model as well?
  - A Yes, the different variables can be tested in the simulation model.

# 16 Level 1 Alternative Screening

Group agreed to evaluate at-grade intersection with WYO 22 for each north alternative that also had grade separated interchange with WYO 22. Each of these alternatives would have either a or b options for grade-separated or at-grade crossings, respectively.) No figures were provided for at-grade crossing.

Each alternative was evaluated against the Purpose and Need with stakeholders providing input on Yes or No responses. The group gave two different conditional "yes" responses to the criteria: 'Provide improved multi-modal connections'.

- Without additional design information pathways cannot determine if the crossings are safe for bike/ped movements.
  - Condition added to the Level 1 screening matrix "Will need to be designed safety to accommodate bike/ped movements."
- Three design alternatives are more challenging for low clearance buses.
  - Condition added to the Level 1 screening matrix "Will need to be designed safety to accommodate bike/ped movements and low-clearance buses."

Fatal flaw screening identified three questions that need further research to answer:

- Can a U.S. Army Corps of Engineers Clean Water Act 404 permit be received if the fen wetland is impacted? Need to consider both direct and indirect impacts.
- Need to determine if the existing easement platted for the access road between Indian Springs and the Tribal Trail Connector could legally be used by non-residents of Indian Springs (i.e. traffic from Tribal Trail)? It's unclear if that would include Coyote Canyon users.

Action

- 1. Cambridge to consider stochastic modeling scenarios to address concerns about behavioral response to backed up Hwy 22.
- 2. Cambridge to refine analysis with microsimulation.

- 1. Jacobs to investigate difficulty with getting a Clean Water Act 404 permit if the fen wetland experiences direct or indirect impacts.
- 2. County to investigate the possibility for Coyote Canyon users to us Indian Springs easement.
- 3. County to investigate ability to restrict large vehicle traffic and way finding apps.
- 4. WYDOT to determine if two access points are allowable within the project area.



 Will WYDOT allow two access points on Hwy 22? Indian Springs current access point and one at Tribal Trail?

The completed Draft Level 1 Screening Matrix can be found in Attachment C. Alternatives that carry forward from Level 1 will undergo Level 2 screening. The results of the Level 2 will determine the build alternative(s) to be evaluated in detail in the EA along with the No-Build Alternatives.

# 17 Next Steps

- All alternatives will be on the website and public comments will continue to be used through the
  project process. Comments can be submitted at:
  - o http://www.tribaltrailconnector.com
  - o <u>TribalTrailConnector@gmail.com</u>
- Next meeting date was not established. The project team needs to further research and resolve
  the questions raised during the fatal flaw screening as part of the project development process.
- Stakeholders will be provided opportunity to comment on the Level 1 Matrix once the
  outstanding questions have been addressed.
- Stakeholder workshop to walk the remaining alternatives through the Level 2 Screening matrix.
- Public Meeting to present the results of the Level 1 and draft results of Level 2 screening.
- Level 2 Screening matrix will be finalized after the public has had an opportunity to comment on the Alternatives.

## Action

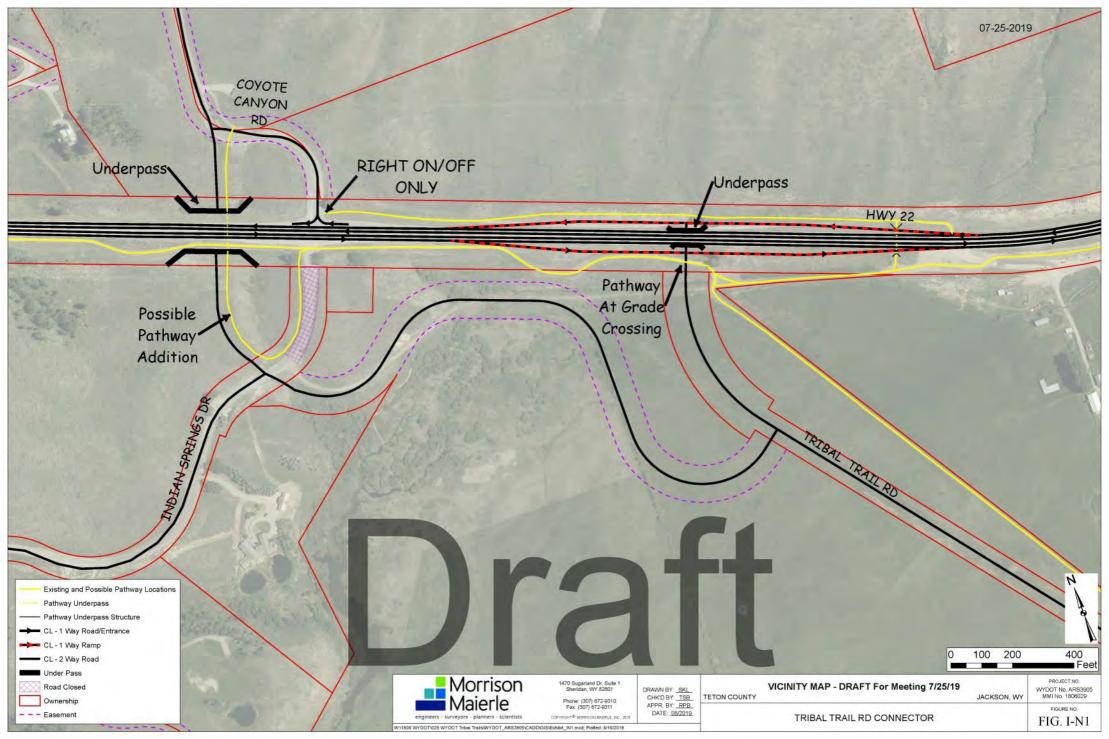
- 5. Morrison Maierle to determine if the Indian Springs/Tribal Trail Connector can be relocated to avoid impacting the Fen.
- 1. Schedule stakeholder meeting #5 – Finalize Level 1 Screening Matrix. Date to be determined.
- 2. Schedule stakeholder workshop #6 – Level 2 Screening Matrix. Date to be determined.

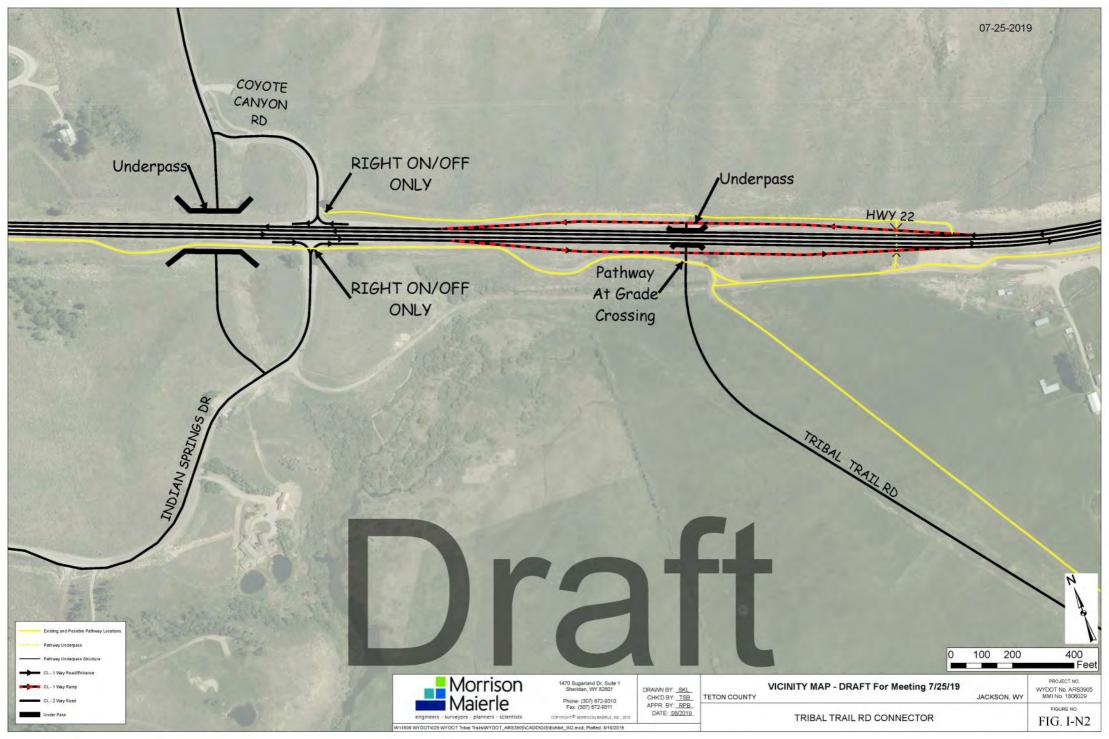
Attachment A Alternative Figures

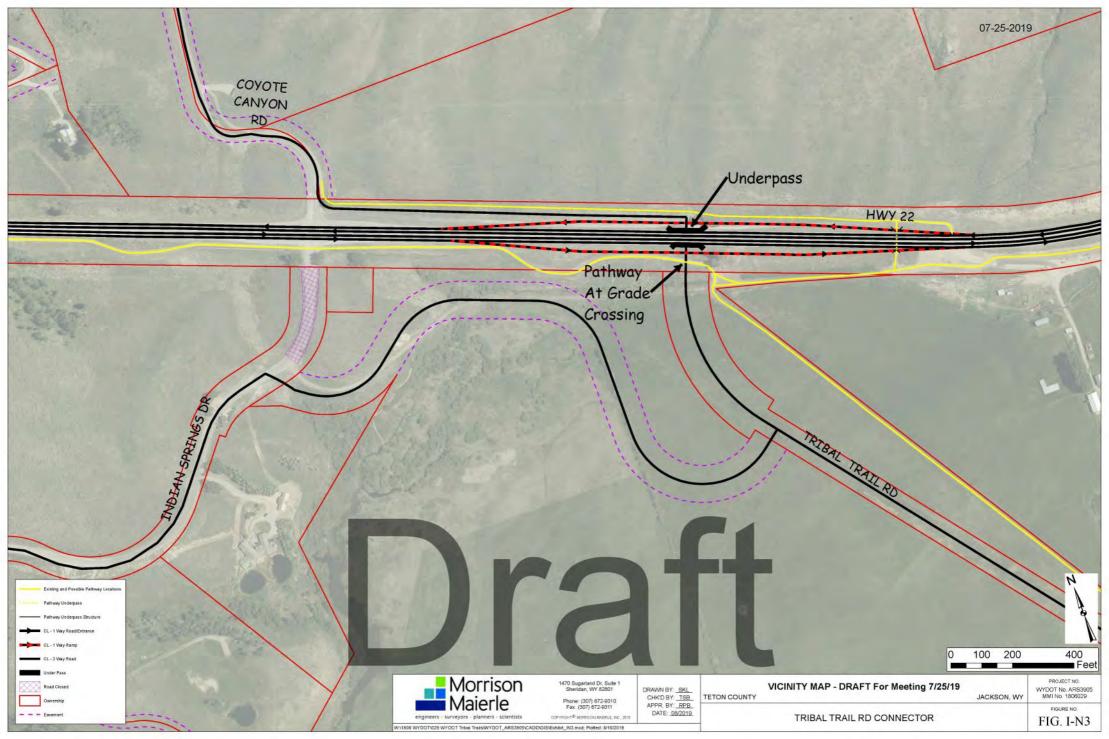
Attachment B Travel Time Figures

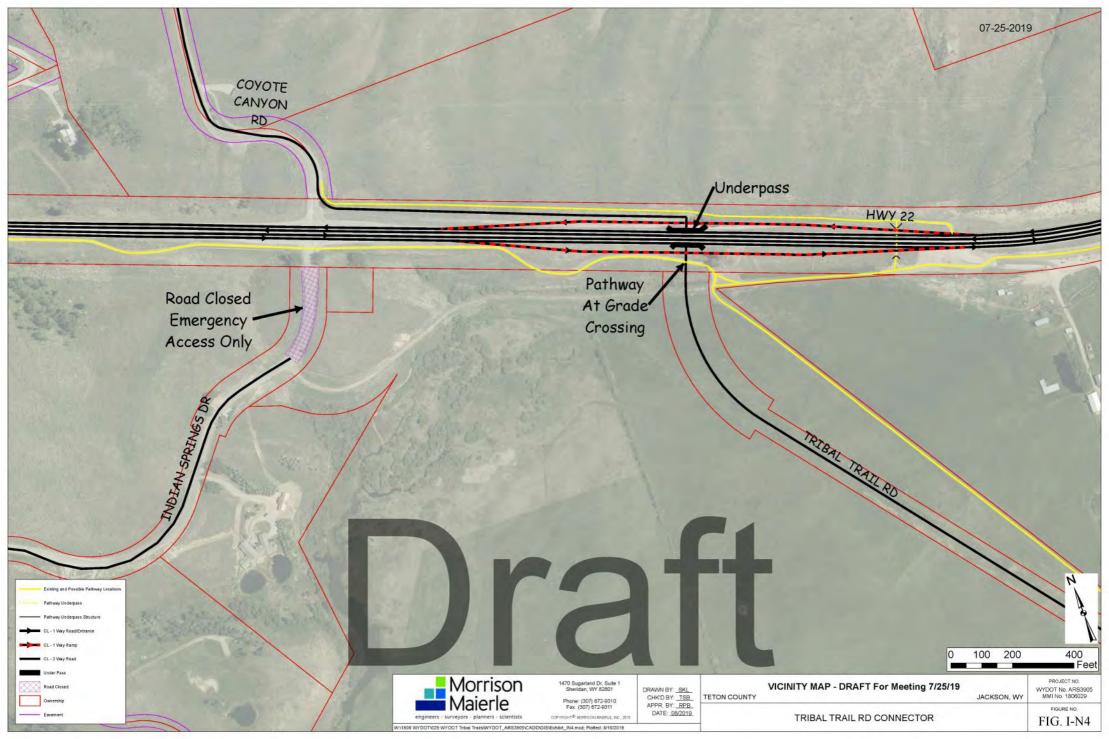
Attachment C Completed Level 1 Evaluation Matrix

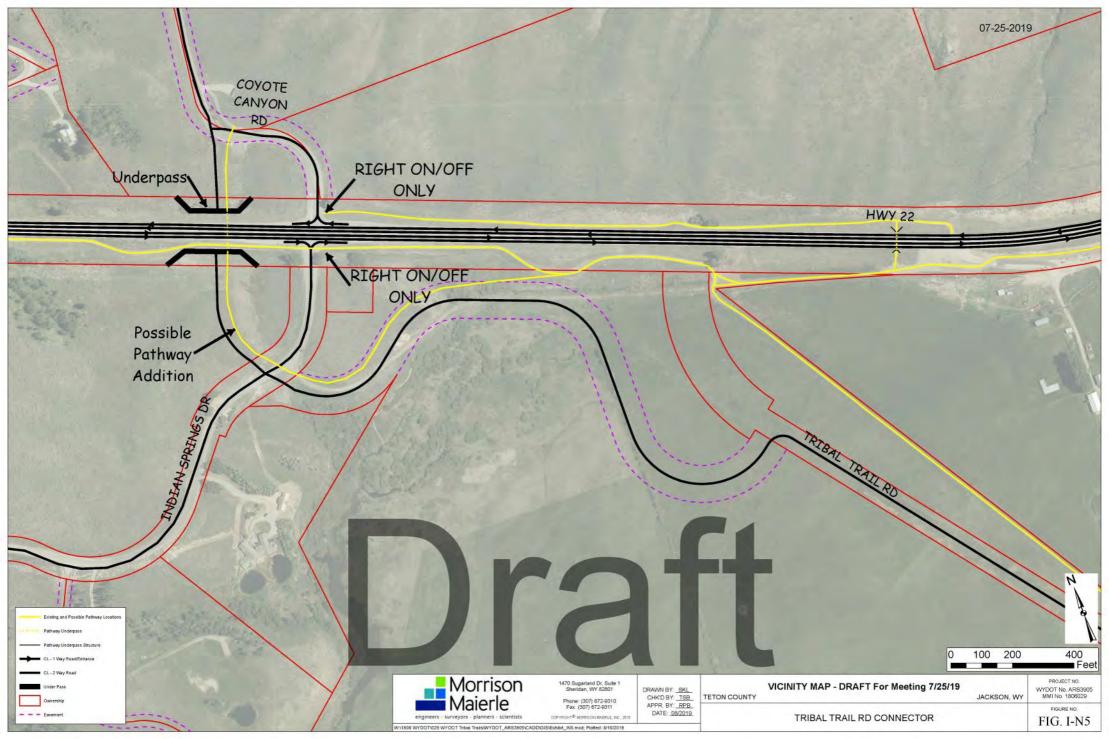
Attachment A Alternative Figures

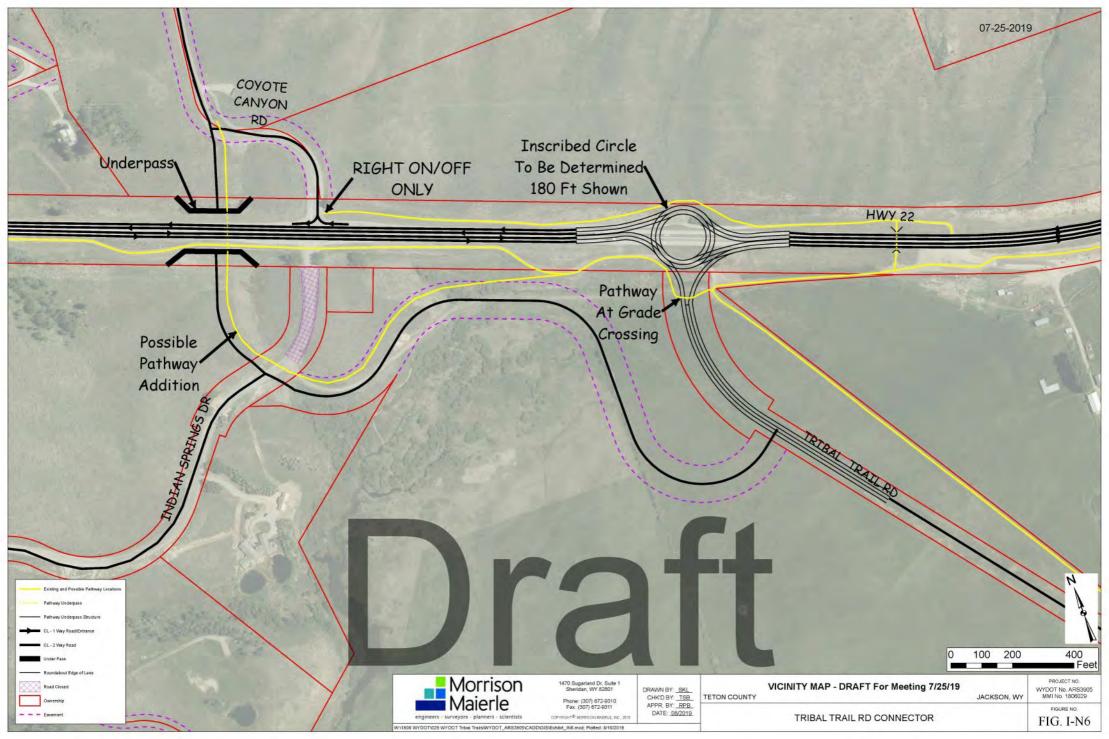


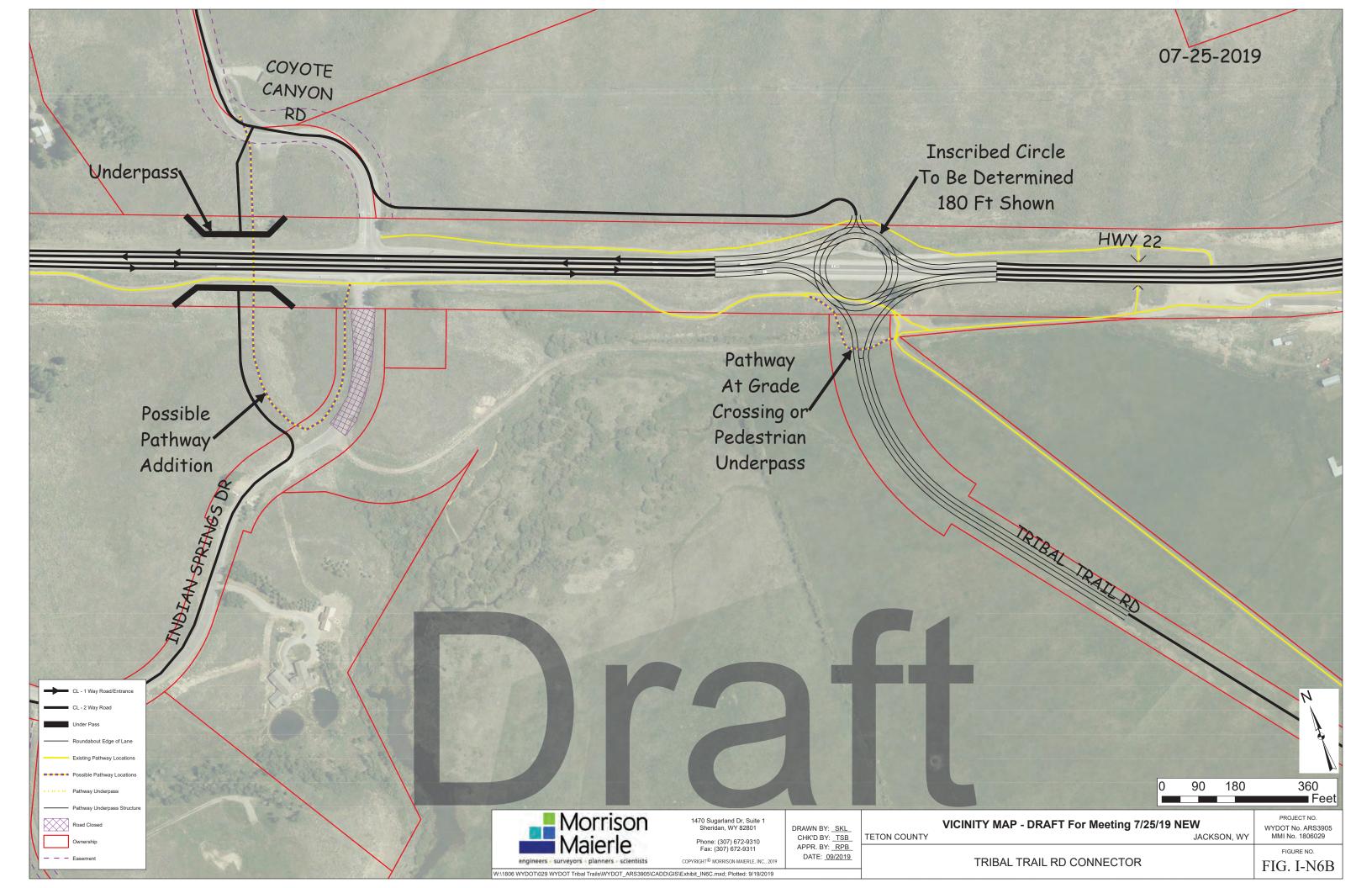


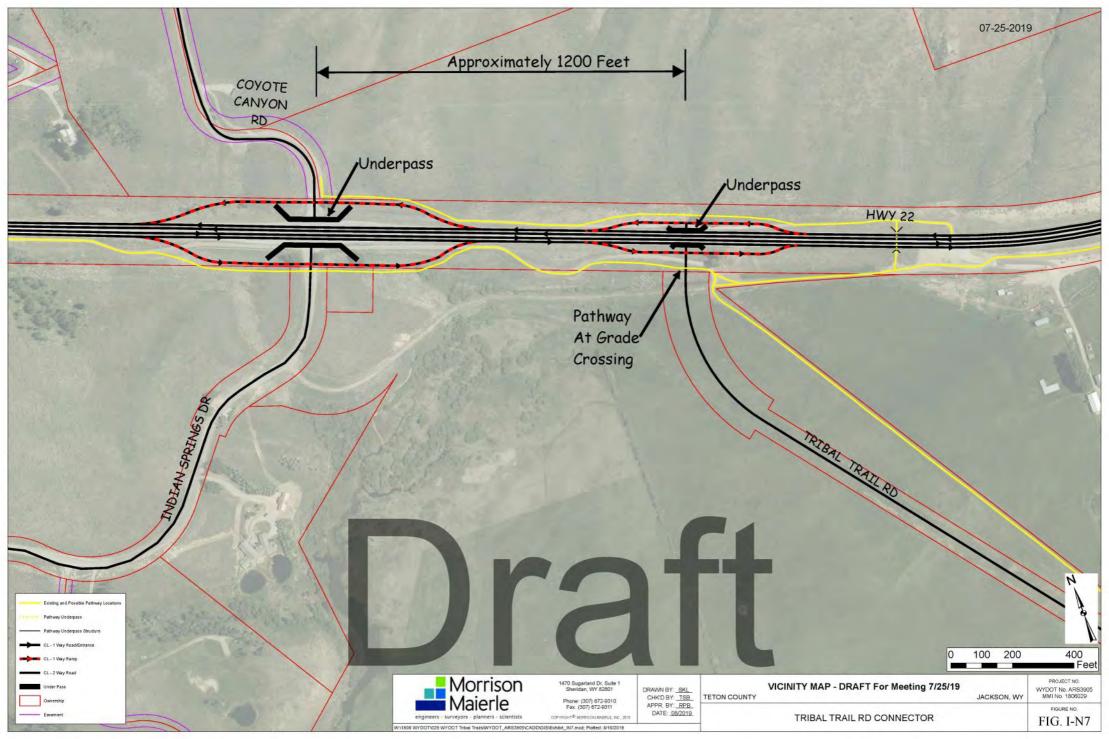


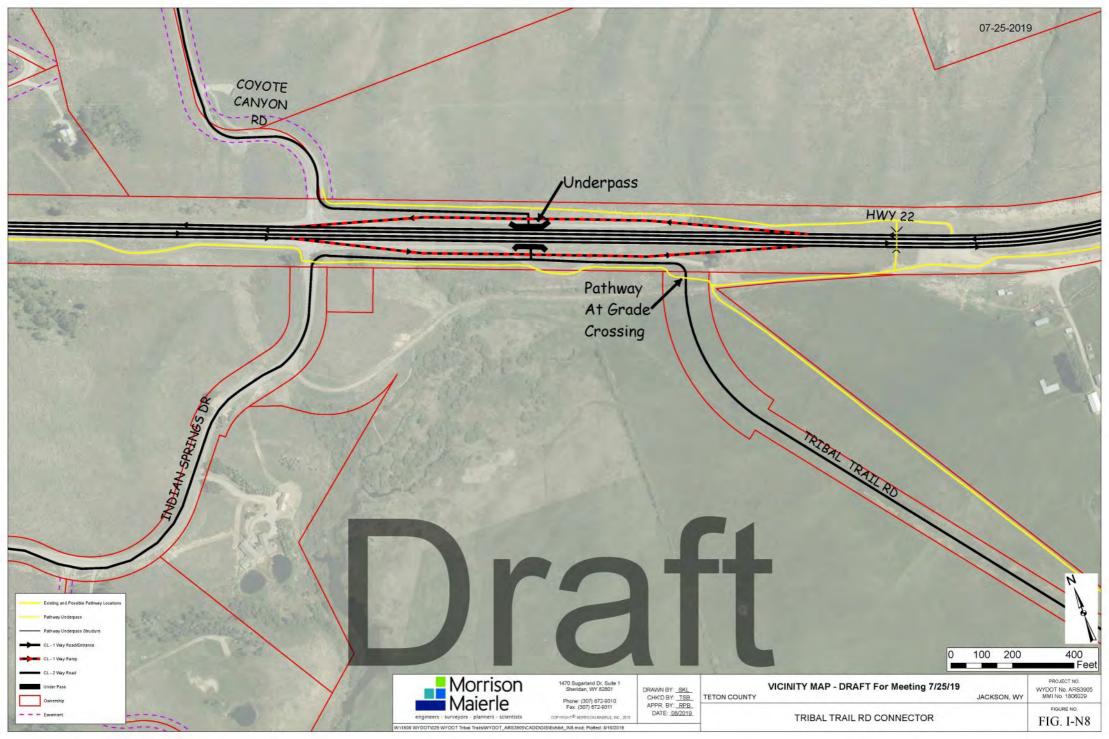


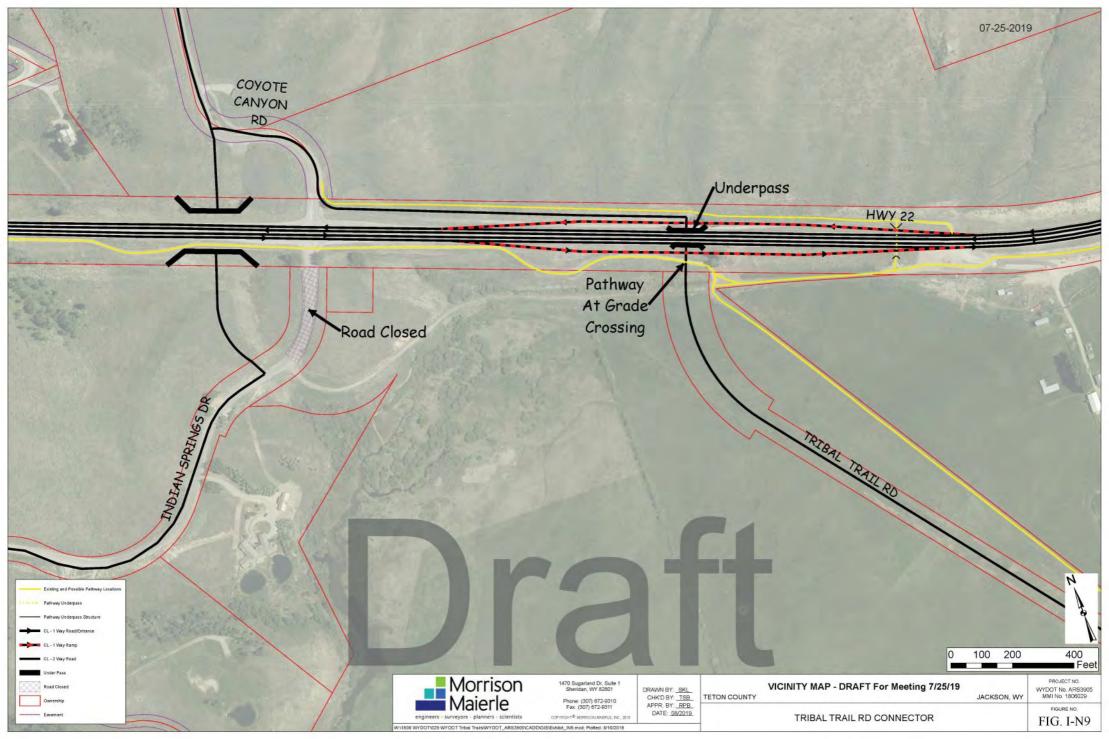


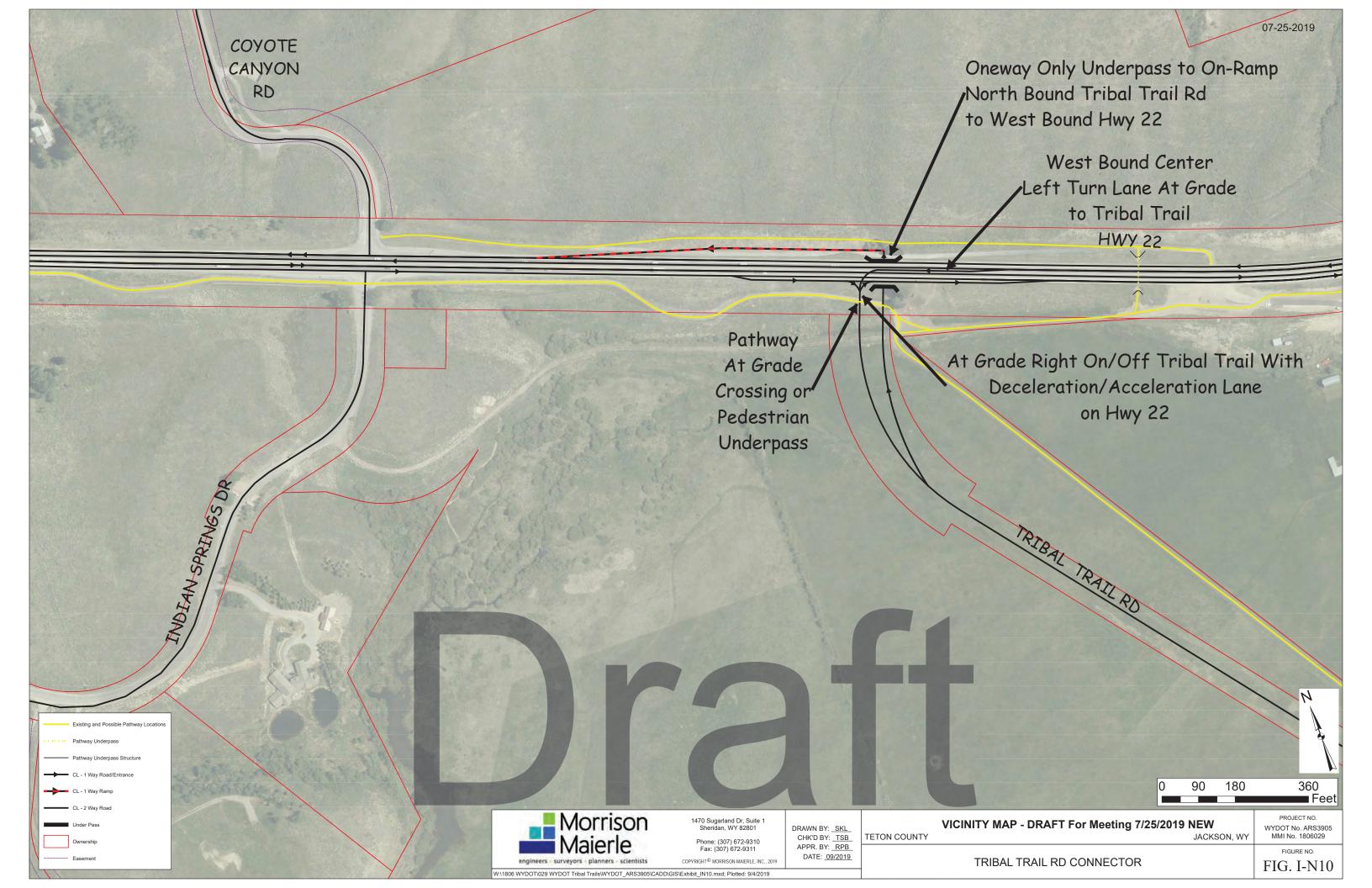


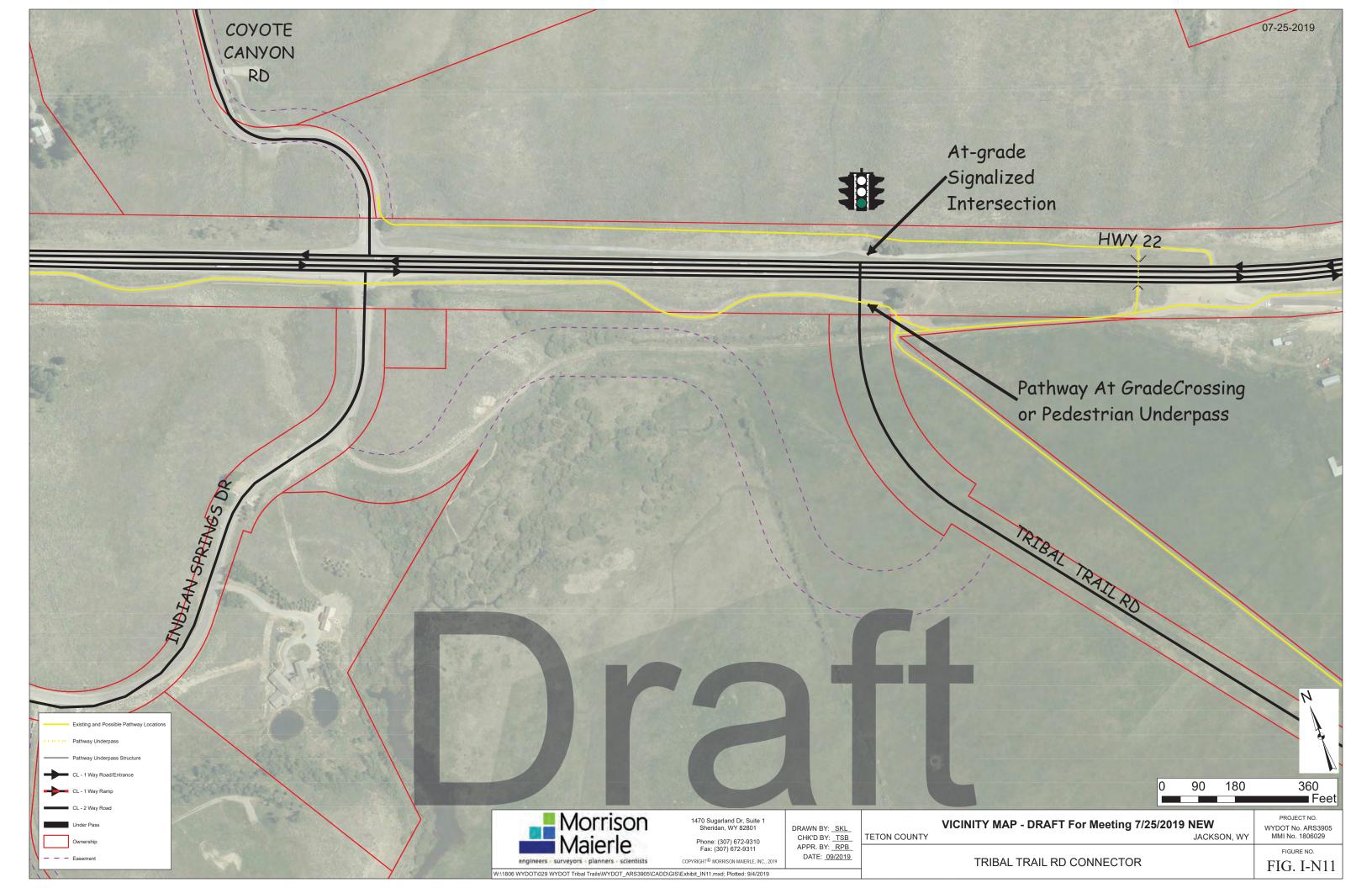


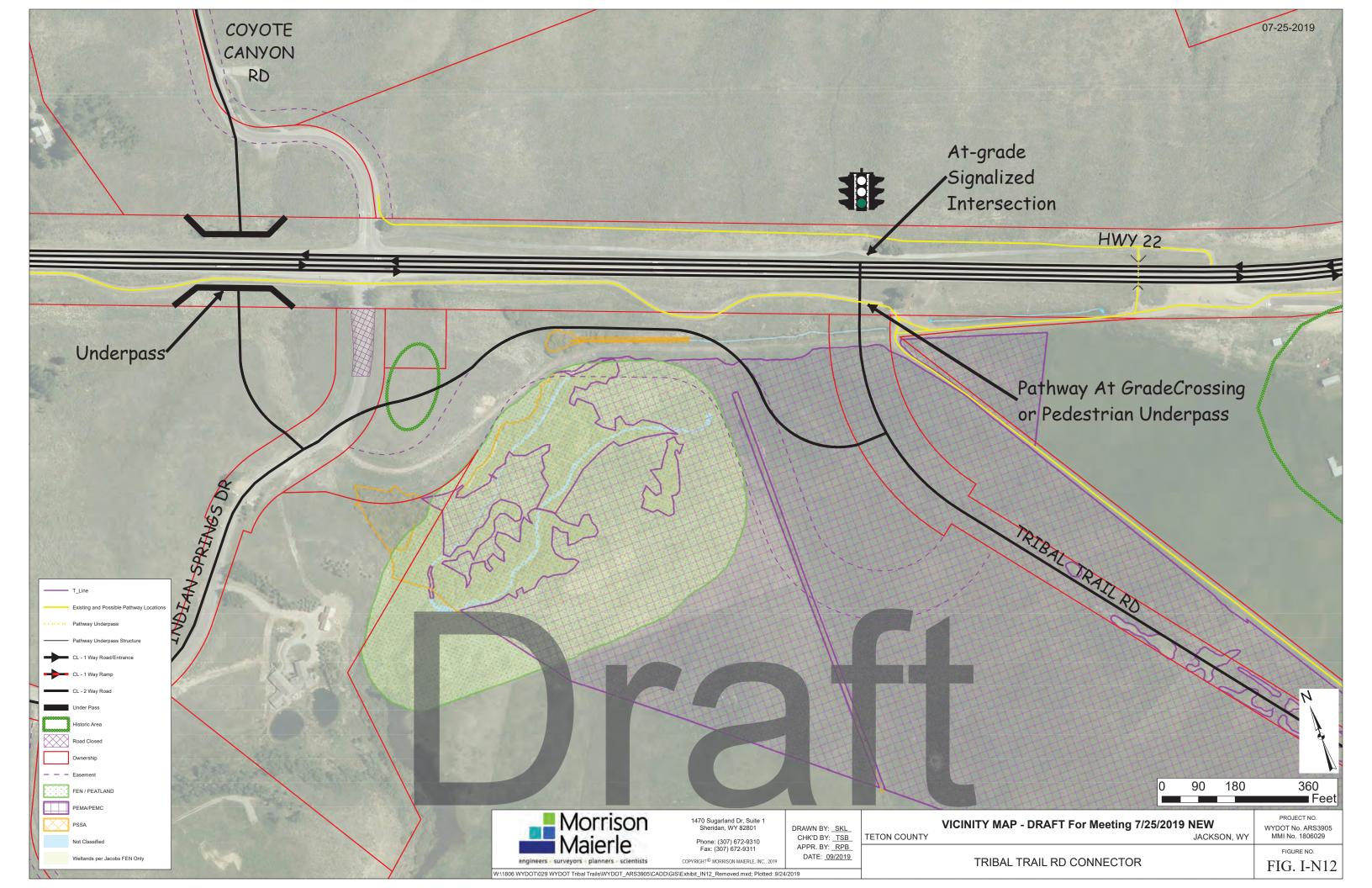


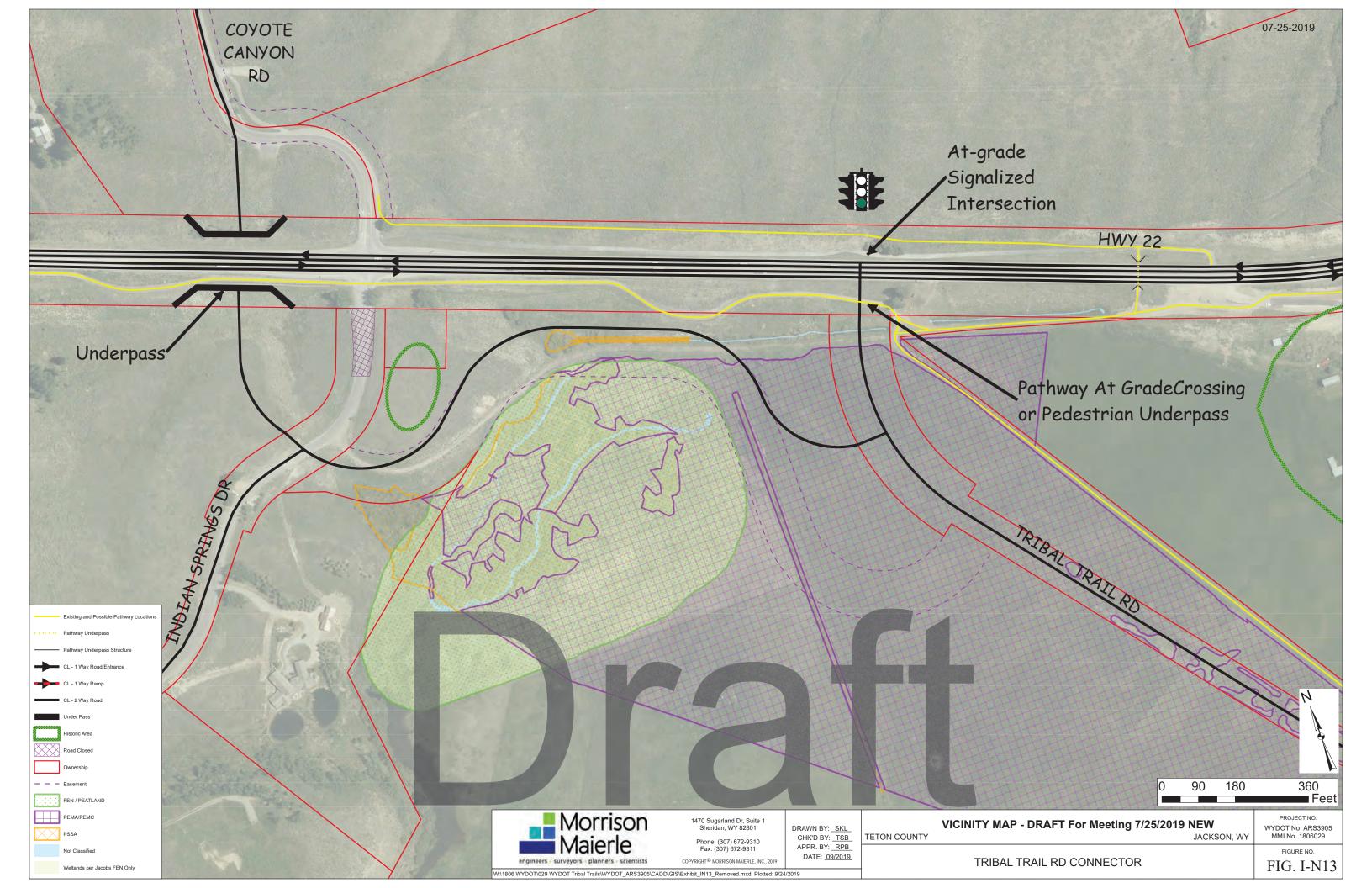


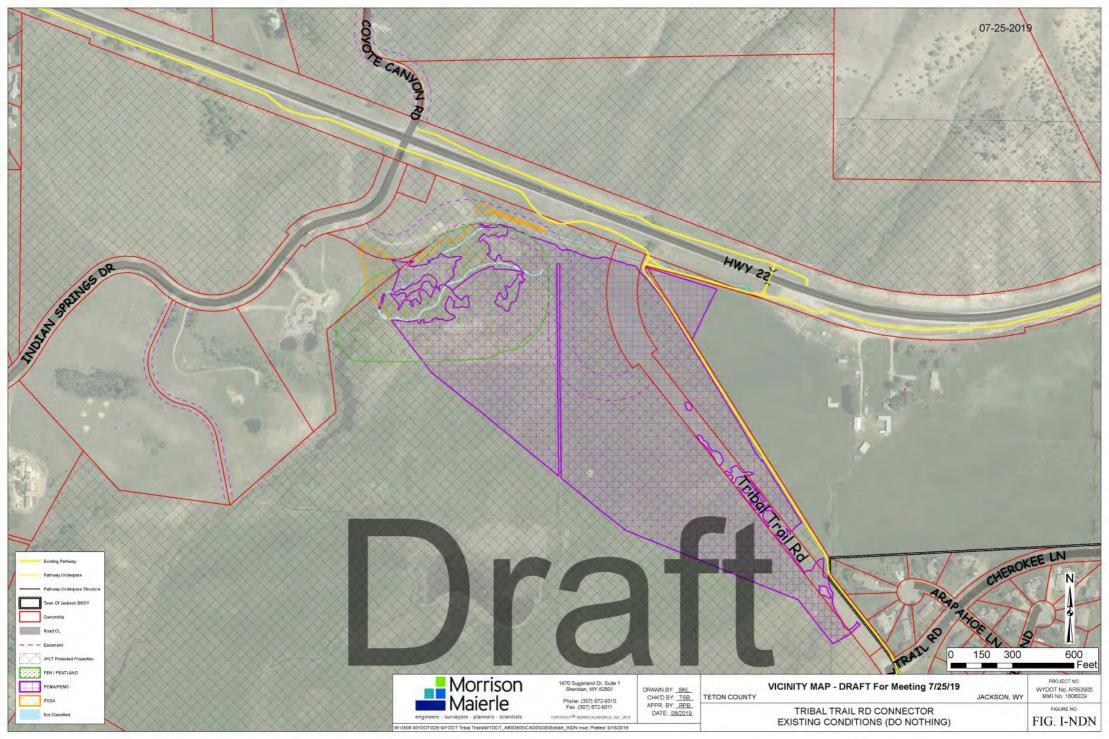


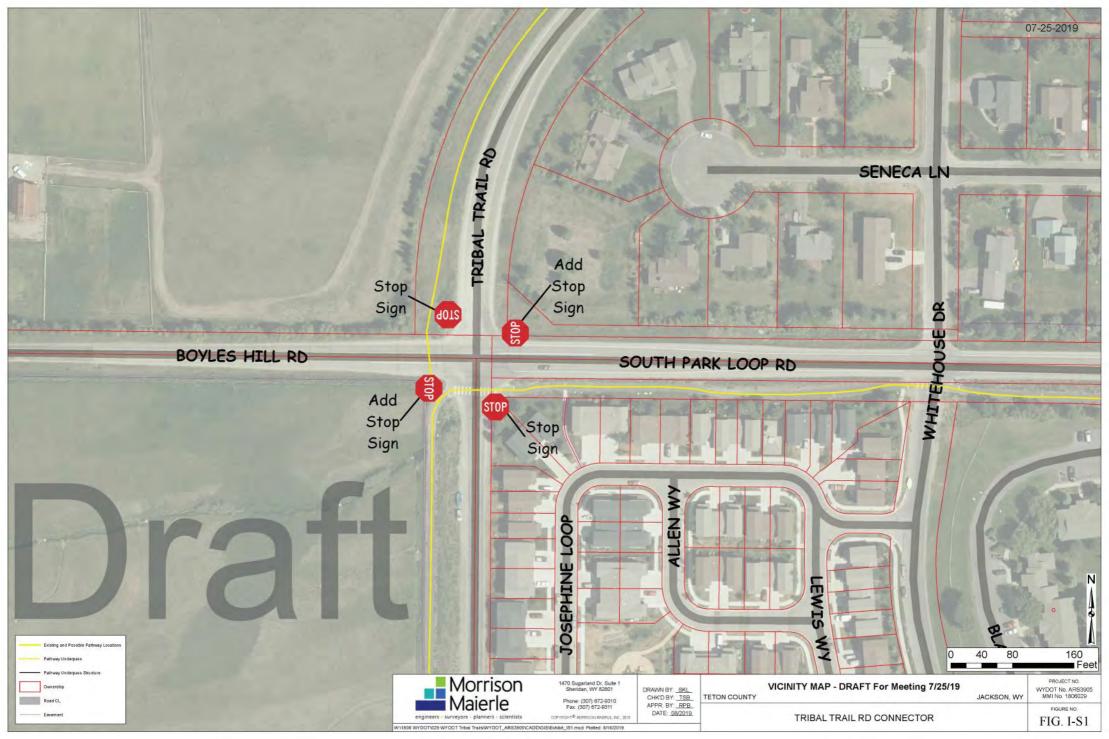


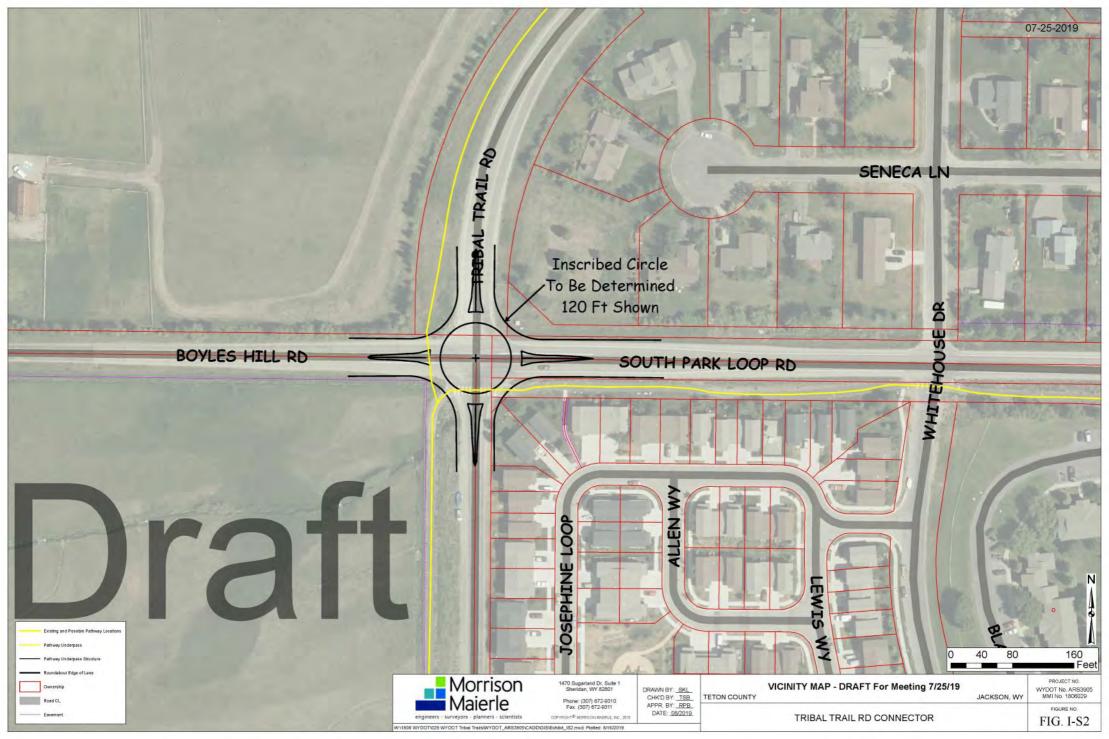


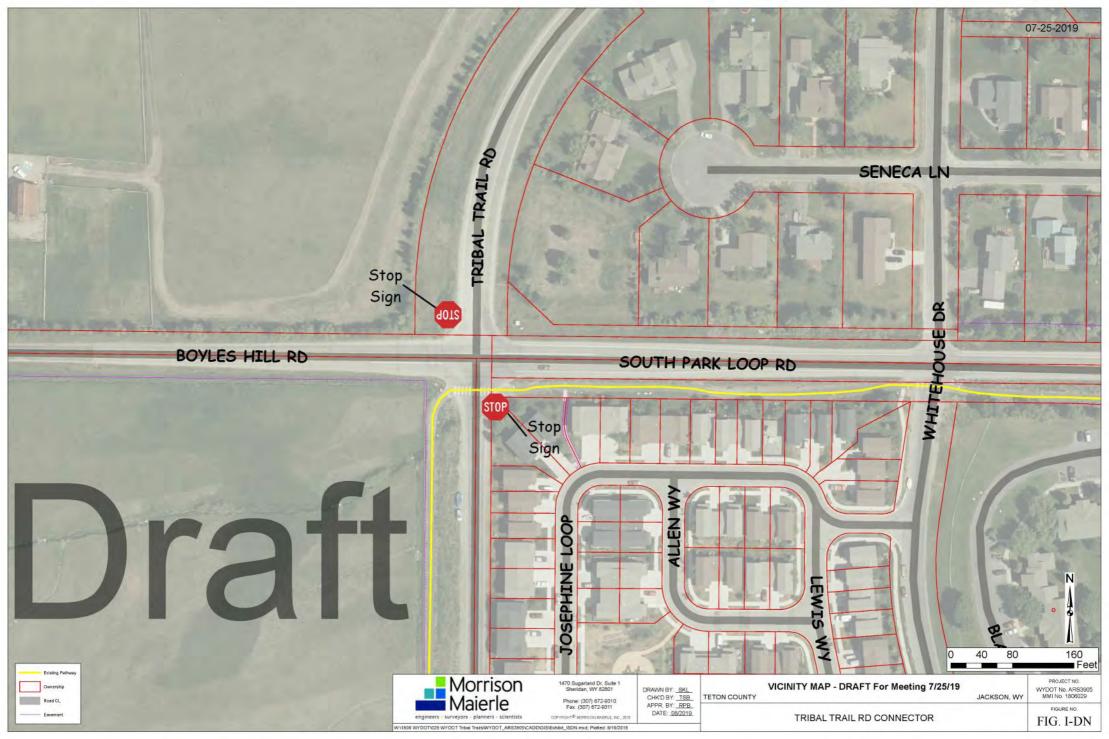


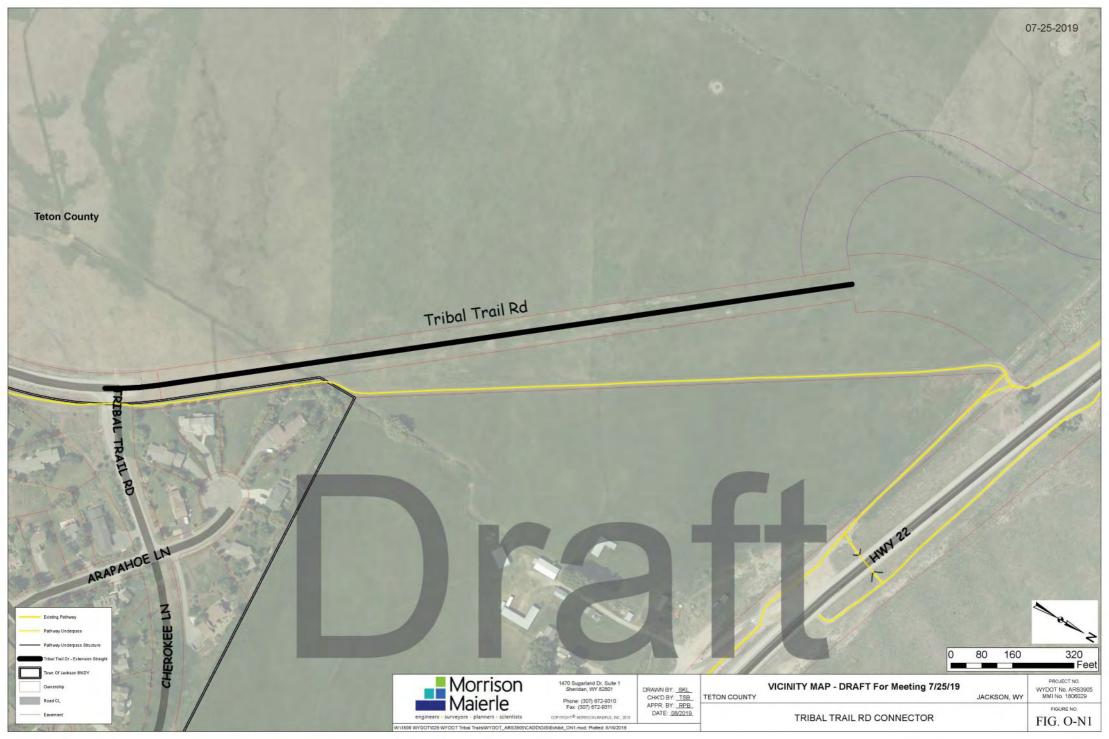


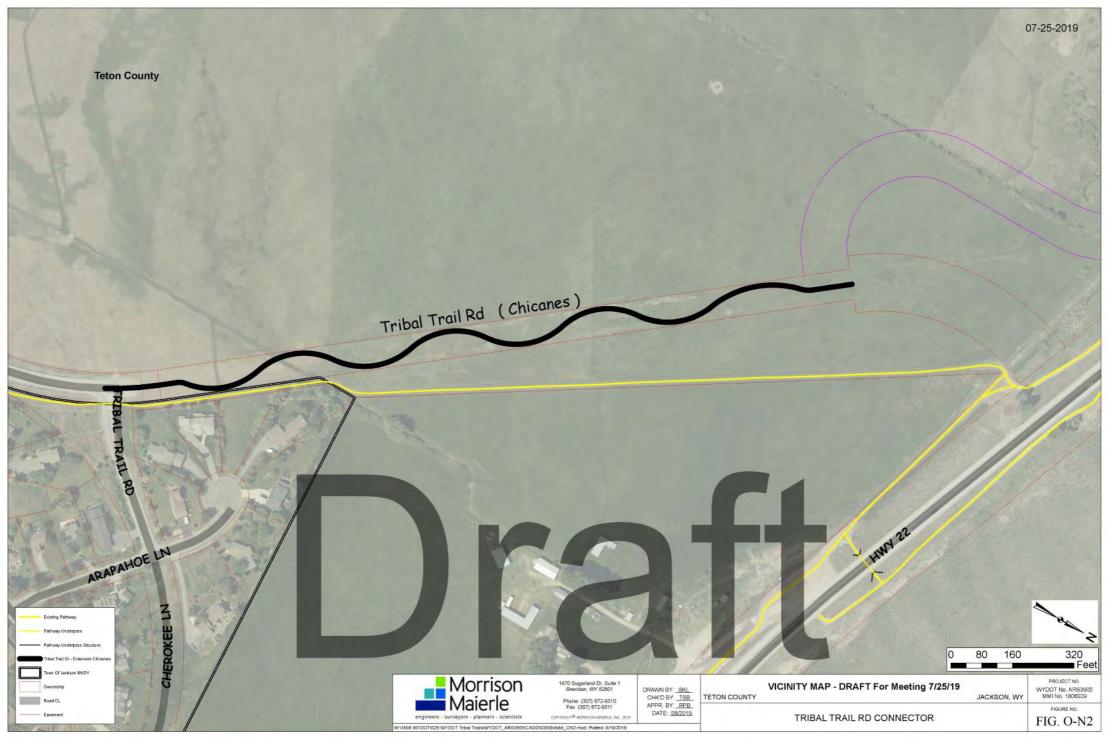


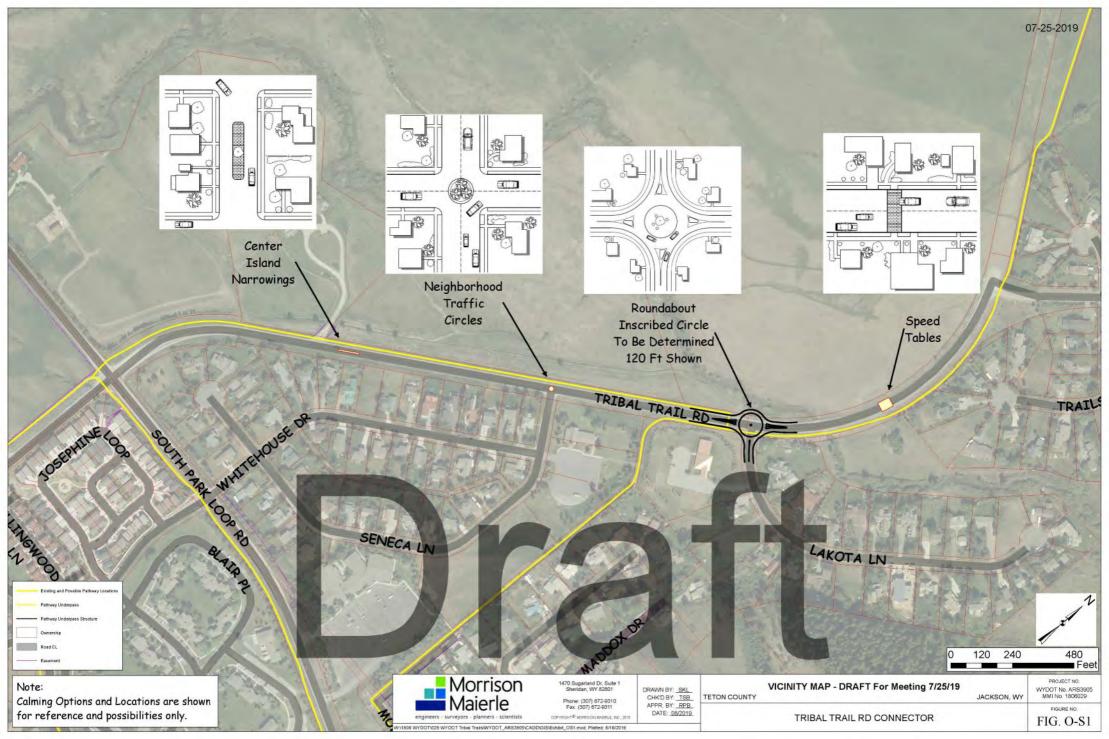




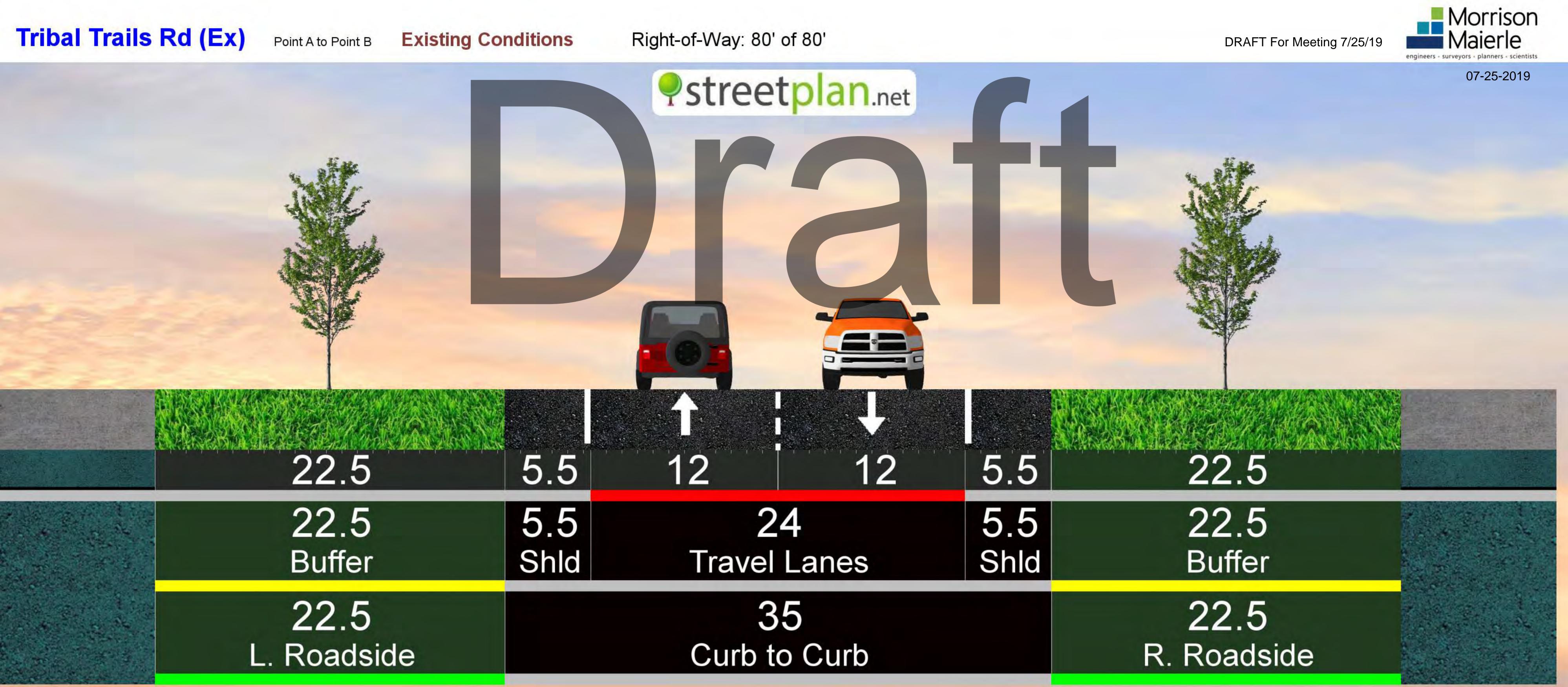




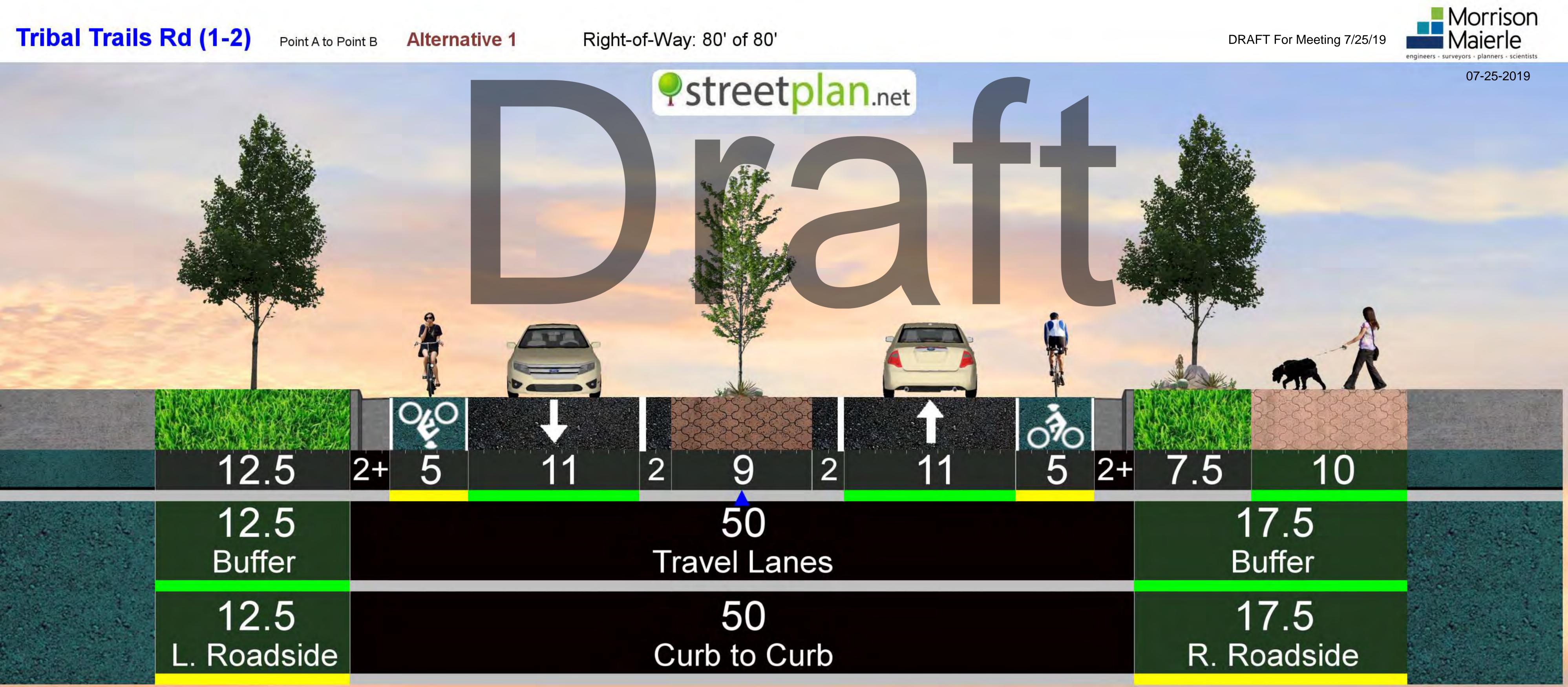












Attachment B Travel Time Figures

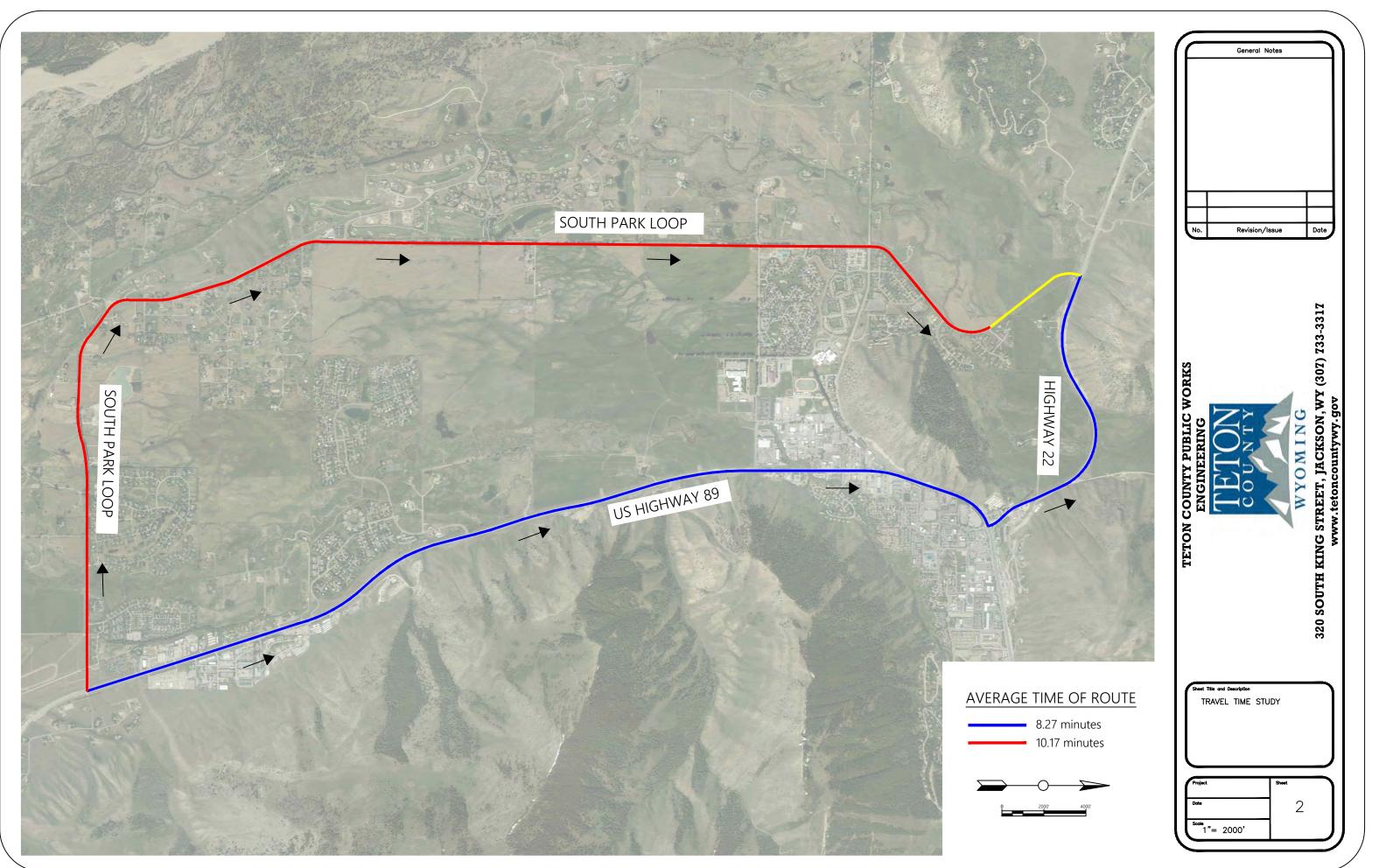


Exhibit Travel Time Study.dwg

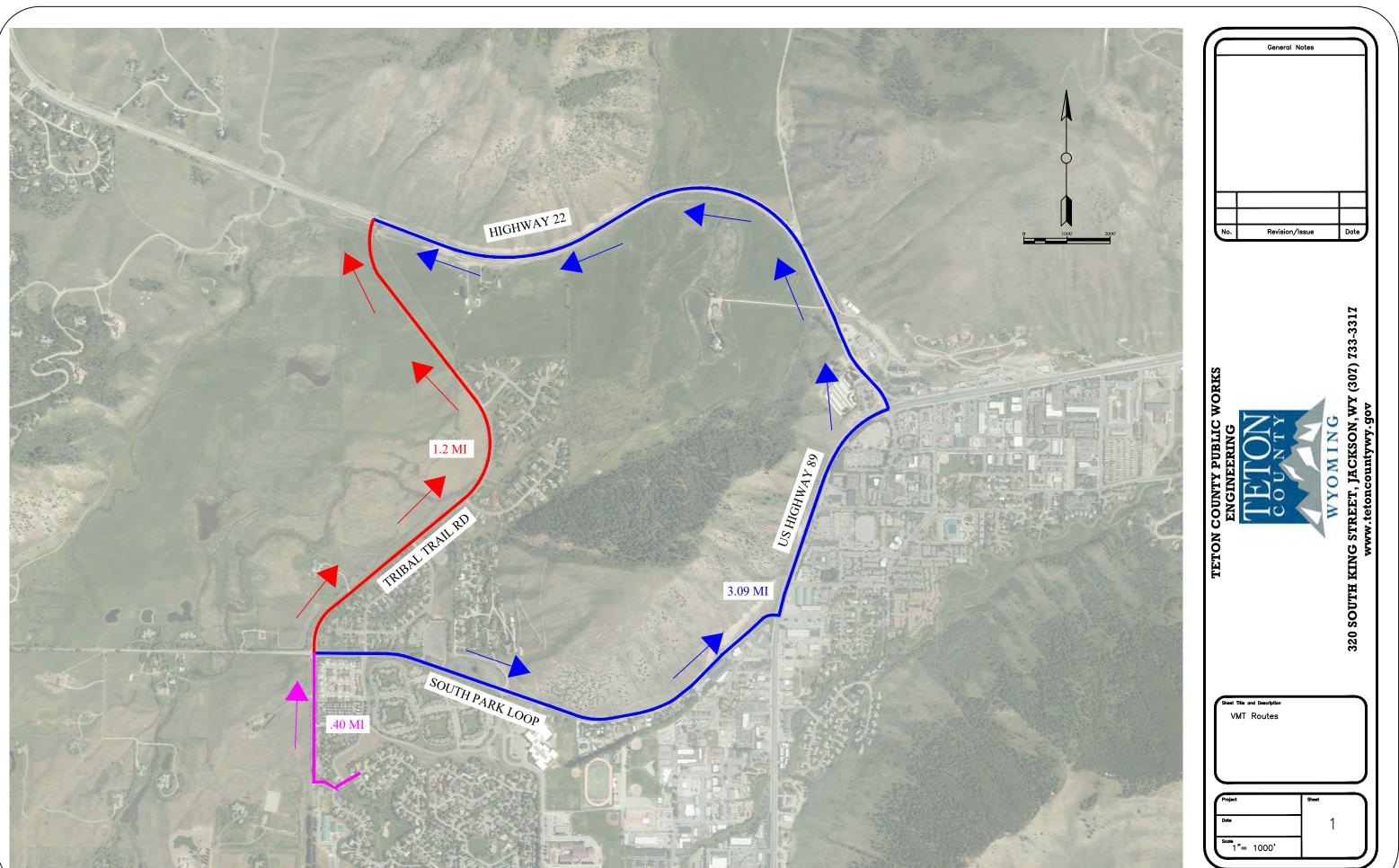


Exhibit VMT.dwg

Attachment C Completed Level 1 Evaluation Matrix



# Level 1 Alternative Evaluation Screening Matrix

			Purpose and Need Screening					Fatal Flaw		
		Description of Alternative	Provide travel redundancy (more than one independent way in or out of an area)?	Reduce vehicle miles of travel (VMT) associated with circuitous routing of traffic?	Reduce local trips through the Y intersection?	Improve emergency response?	Provide improved multi-modal connections?	Does the alternative have irresolvable environmental impacts?	Is the alternative not constructible due to physical or legal constraints?	Results
	No Build	Existing conditions	No	No	No	No	No	No	No	Carry Forward
Roadway Alignments	O-N1	Roadway centered within right-of-way.	Yes	Yes	Yes	Yes	Yes	No	No	Carry Forward
Roadway Alignments	O-N2	Roadway with chicanes.	Yes	Yes	Yes	Yes	Yes	No	No	Carry Forward
	I-N1a	Tribal Trail Road, access to Hwy 22, is via an interchange. The connector road follows the platted easement. Indian Springs Drive access to Hwy 22 is closed. Coyote Canyon Road, access to Hwy 22, is converted to right on/off. Eastbound traffic from Coyote Canyon Road uses the connector road via an underpass.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No (Conditional <sup>5</sup> )	Eliminated
	I-N1b <sup>1</sup>	Tribal Trail Road has an at-grade crossing on Hwy 22. All other design elements are the same as I-N1a.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No (Conditional <sup>5</sup> )	Eliminated
ions	I-N2a	Tribal Trail Road, access to Hwy 22, is via an interchange. Coyote Canyon Road and Indian Springs Drive access to Hwy 22 is converted to right on/off. Eastbound traffic from Coyote Canyon Road uses an underpass to access Hwy 22.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No <sup>6</sup>	Carry Forward
on Opt	I-N2b <sup>1</sup>	Tribal Trail Road has an at-grade crossing on Hwy 22. All other design elements are the same as I-N2a.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No <sup>6</sup>	Carry Forward
North Intersection Options	I-N3a	Coyote Canyon Road and Indian Springs Drive existing accesses to Hwy 22 are closed. Coyote Canyon Road traffic uses a frontage road on the north side of Hwy 22 to access the Tribal Trail Road interchange. Indian Springs traffic uses the platted connector to Tribal Trail Road.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No	Eliminated
N	I-N3b <sup>1</sup>	Coyote Canyon Road and Tribal Trail Road share an at-grade crossing on Hwy 22. All other design elements are the same as I-N3a.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No	Eliminated
	I-N4a	Coyote Canyon Road and Indian Springs Drive existing accesses to Hwy 22 are closed. Coyote Canyon Road traffic uses a frontage road on the north side of Hwy 22 to access the Tribal Trail Road interchange. Indian Springs Drive access is to the south via W. Boyles Hill Road.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No	Carry Forward
	I-N4b <sup>1</sup>	Coyote Canyon Road and Tribal Trail Road share an at-grade crossing on Hwy 22. All other design elements are the same as I-N4a.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No	Carry Forward

7/25/2019 Stakeholder Meeting Summary Notes - Attachment C



# Level 1 Alternative Evaluation Screening Matrix

			Fatal Flaw						
	Description of Alternative	Provide travel redundancy (more than one independent way in or out of an area)?	Reduce vehicle miles of travel (VMT) associated with circuitous routing of traffic?	Reduce local trips through the Y intersection?	Improve emergency response?	Provide improved multi-modal connections?	Does the alternative have irresolvable environmental impacts?	Is the alternative not constructible due to physical or legal constraints?	Results
I-N5	Coyote Canyon Road and Indian Springs Drive existing accesses are right on/right off with an underpass allowing traffic to access both sides of the Hwy 22. Tribal Trail Road traffic is directed to Indian Springs Road via the platted connector to access Hwy 22.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No (Conditional <sup>5</sup> )	Eliminated
I-N6a	Tribal Trail Road accesses Hwy 22 with a two-lane roundabout. Coyote Canyon Road, access to Hwy 22, is converted to right on/off. Eastbound traffic from Coyote Canyon Road uses an underpass to access Hwy 22 via the connector road. Indian Springs Drive access to Hwy 22 is closed.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>3</sup> )	Yes <sup>4</sup>	No (Conditional <sup>5</sup> )	Eliminated
I-N6b <sup>1</sup>	Tribal Trail Road accesses Hwy 22 with a two-lane roundabout. Indian Springs Drive access to Hwy 22 is closed. Indian Springs Drive uses an underpass to access the Coyote Canyon Road frontage on the north side of Hwy 22 to the roundabout.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>3</sup> )	No	No	Carry Forward
I-N7	Coyote Canyon Road and Indian Springs Drive existing accesses to Hwy 22 are converted to an interchange. Tribal Trail Road, access to Hwy 22, is also be an interchange.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>3</sup> )	No	No <sup>6</sup>	Carry Forward
I-N8	All access to Hwy 22 is via a central interchange. Coyote Canyon traffic uses a frontage road on the north side of Hwy 22 to access the highway. Indian Springs and Tribal Trail Road use a frontage road adjacent to the south side of the highway that does not follow the platted easement to access Hwy 22.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>3</sup> )	No	No	Carry Forward
I-N9a <sup>1</sup>	Coyote Canyon Road and Indian Springs Drive existing accesses to Hwy 22 are closed. An underpass is built to connect Coyote Canyon Road and Indian Springs Drive. Traffic uses a frontage road on the north side of the highway to access the Tribal Trail Road Hwy 22 interchange.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No	Carry Forward
I-N9b <sup>1</sup>	Access to Hwy 22 is an at-grade crossing. All other design elements are the same as I-N9a.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No	Carry Forward
I-N10 <sup>1</sup>	Tribal Trail Road has a one-way only underpass for westbound traffic to access Hwy 22. Eastbound traffic has an at grade right on/off at Tribal Trail Road. Westbound Hwy 22 traffic has a left-hand turn lane to access Tribal Trail Road. Coyote Canyon Road and Indian Springs Drive would remain the same.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No	Carry Forward
I-N11 <sup>1</sup>	Tribal Trail Road has signal intersection on HWY 22. Coyote Canyon Road and Indian Springs Drive would remain the same.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	No	No	Carry Forward

7/25/2019 Stakeholder Meeting Summary Notes - Attachment C



# Level 1 Alternative Evaluation Screening Matrix

				Fatal Flaw						
		Description of Alternative	Provide travel redundancy (more than one independent way in or out of an area)?	Reduce vehicle miles of travel (VMT) associated with circuitous routing of traffic?	Reduce local trips through the Y intersection?	Improve emergency response?	Provide improved multi-modal connections?	Does the alternative have irresolvable environmental impacts?	Is the alternative not constructible due to physical or legal constraints?	Results
ection Options	I-N12 <sup>1</sup>	Tribal Trail Road, access to Hwy 22, is an at-grade signalized intersection. Coyote Canyon Road and Indian Springs Drive existing accesses to Hwy 22 are closed. Coyote Canyon Road accesses the connector road via an underpass. The connector road is North of the platted easement with the tie-in to Indian Springs Drive bisecting the hill located to the East of the current Hwy 22 access.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No (Conditional <sup>5</sup> )	Eliminated
North Intersection	I-N13 <sup>1</sup>	Tribal Trail Road, access to Hwy 22, is an at-grade signalized intersection. Coyote Canyon Road and Indian Springs Drive existing accesses to Hwy 22 are closed. Coyote Canyon Road uses the connector road via an underpass. The connector road is North of the platted easement but maintains the platted tie-in with Indian Springs Drive.	Yes	Yes	Yes	Yes	Yes (Conditional <sup>2</sup> )	Yes <sup>4</sup>	No (Conditional⁵)	Eliminated
5	I-S1	Four way stop signs	Yes	Yes	Yes	Yes	Yes	No	No	Carry Forward
Interse Options	I-S2	Roundabout	Yes	Yes	Yes	Yes (If Built for EMS)	Yes (Conditional <sup>3</sup> )	No	No	Carry Forward
South	I-S3 <sup>1</sup>	Roadway alignment of Boyles Hill Road is shifted, as a visual cue that a stop sign is ahead.	Yes	Yes	Yes	Yes	Yes	No	No	Carry Forward

# **Footnotes**

- 1 Figures were not presented of the at-grade intersection alternatives at the 07/25/2019 Stakeholder meeting. Group opted to evaluate the at-grade alternatives. Group also suggest two additional alternatives to be evaluated.
- 2 Will need to be designed to accommodate bike/ped movements.
- 3 Will need to be designed to accommodate bike/ped movements and low-clearance buses.
- 4 Direct and indirect impacts to fen wetland.
- 5 Uncertainty if existing easement can be used by Tribal Trail traffic. (Easement was platted for Indian Springs traffic to access Tribal Trail Connector).
- 6 Will need to confirm access point spacing with WYDOT.

# **General Notes**

No Build Alternative will be carried forward into Level 2.