Bridge Construction/Railroad Coordination

Topics:
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- MDOT Office of Rail
- Michigan Railroad Network
- State of Michigan Owned Railroad Corridors
- Railroad Code
- Structure Agreements
- Railroad Coordination
  - Development
  - Construction
  - Inspection
- Questions and Answers
MDOT Office of Rail

- Established in 2011
- Overall responsibility for rail-related activities at MDOT
- Serves as a resource for local agencies, consultants, and other third parties on rail-related matters
- 33 employees

Website: https://www.michigan.gov/mdot/0,4616,7-151-22444--,00.html
**Michigan Railroad Network**

- Part of a multi-modal transportation system
- Diverse mix of facilities in both public & private ownership
- 3,600 miles of track
- 26 operators (4 of the 7 Class I Railroads)
- Carries 21% of state’s freight tonnage
- 800,000 passengers
State of Michigan Owned Railroad Corridors

- 665 miles of rail line
- Operated by 5 railroads under contract with MDOT and provide the only rail access to businesses in certain areas of the state
- Over 80 shippers
- 15,000 carloads
- Provides access to national network for companies with limited transportation options
MDOT acquired 135 miles between Kalamazoo and Dearborn in December 2012 from Norfolk Southern Railway (NSR).

The accelerated rail program will enhance this segment of the corridor for accelerated speeds up to 110 mph for passenger service.

Amtrak operates and maintain the line; NSR provides freight service.
State of Michigan Owned Railroad Corridors

Freight Service Corridors

- 530 miles across the lower peninsula

- Operated by:
  - Great Lakes Central Railroad
    - 338 miles
  - Lake State Railway
    - 105 miles
  - Huron & Eastern Railway
    - 45 miles
  - Indiana Northeastern Railroad
    - 42 miles
Railroad Code

- A consolidation of laws relating to railroads
- Section 319: Very important!
- All highway/railroad separation structures are required to have a bridge agreement

Website:
Structure Agreements

- Written agreement required by law
- Between all affected railroads and the road authority
- Defines:
  - Roles
  - Responsibilities
  - Access
  - Cost share
  - Approved property rights
  - Etc.
- Agreement in full force and affect for the life of structure
Railroad Coordination

How to Be Successful During Development

• Contact Office of Rail and the railroad early and often.

• Define design criteria early. Railroad standards vary by company.

• Get permit to enter, even for surveys. Assume minimum 30 working days.

• Do not put railroad projects in special programs.

• Make sure you have correct special provisions in your construction contract. Office of Rail can provide upon request.

• Allow adequate time in your development schedule.
How to Be Successful During Development

- MDOT Standard Railroad Coordination Durations:

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Duration (Working Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruction</td>
<td>480</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>260 - 480</td>
</tr>
<tr>
<td>Widening</td>
<td>260</td>
</tr>
<tr>
<td>Capital Preventive Maintenance</td>
<td>170</td>
</tr>
</tbody>
</table>

- Plan accordingly
Railroad Coordination

How to Be Successful During Construction

• Budget accordingly. Railroad flagging, inspection and protection.

• Bundle work activities on railroad properties. Minimize time and footprint within the railroad property.

• Permits are needed for anybody within railroad right-of-way.

• Talk with the railroads. Define project needs early.

• Manage and mitigate impacts to railroad operations.
How to Be Successful During Construction

- MDOT Average Railroad Pay Items Rage:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad, Protection</td>
<td>$2,000 - $100,000</td>
</tr>
<tr>
<td>Railroad Flagging and Inspection</td>
<td>$1,000 - $1,500/Working Day</td>
</tr>
</tbody>
</table>

*Note: Railroad Flagging and Inspection cost is assuming 8 hours, no OT/weekend*

- Budget accordingly!
Railroad Coordination

How to Be Successful During Inspection

• Contact Office of Rail and railroad early and often.

• Review the associated bridge agreement. Typically defines access procedures.

• Get permit to enter, even for inspections. Assume minimum 30 working days.

• Railroad property is dangerous, and access is highly regulated by the Federal Railroad Administration (FRA). Do not take the risk!

• FRA can assess fines to both company and individuals.
Railroad Coordination

How to Be Successful During Inspection

• Don’t put yourself in a dangerous situation
Recent “Success” Stories So Far

• City of Ann Arbor – Allen Creek Berm Opening under Amtrak

Railroad Coordination Timeline

• Office of Rail Engagement – June 2013
• Amtrak Engagement – January 2017
• Railroad Permit Issued – February 2018
• Railroad Design Agreement Executed – July 2017
• Preliminary Railroad Plan Submittal – October 2017
• Railroad Issued Letter of No Exception – May 2018
• Bridge Agreement Executed – February 2019
• Anticipated Letting – May 2019

335 Working Days
Railroad Coordination
Railroad Coordination

View 6

Allen Creek Trail
Ann Arbor, Michigan
Railroad Coordination

Recent “Success” Stories So Far

- University Region – I-94 modernization over JAIL RR, NSR

Railroad Coordination Timeline

- Office of Rail Engagement – June 2013
- Railroad Engagement – June 2016
- Railroad PE Force Account Executed – April 2017
- Preliminary Railroad Plan Submittal – July 2017
- Bridge Agreement Executed – May 2018
- Let – June 2018
- Under Construction

216 Working Days
Railroad Coordination
Railroad Coordination
Questions?

Annual Michigan Rail Conference
• Location: Lansing, MI
• Time: August 7-9, 2019
  ▪ For further details: http://www.rail.mtu.edu/MRC2019

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