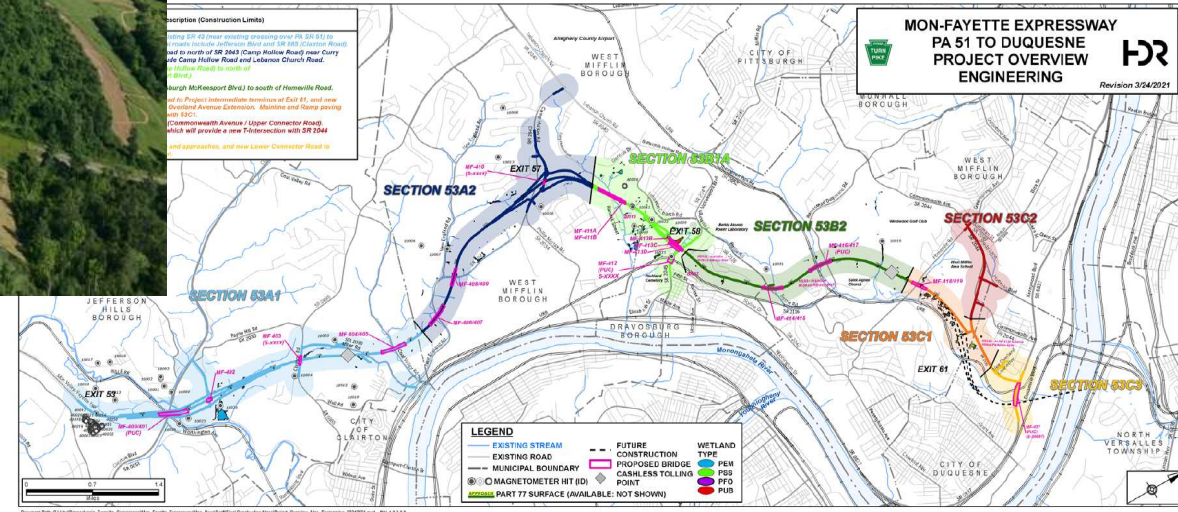


Southern Beltway (PTC 576) Mon Fayette Expressway (Toll 43)






April 26, 2022







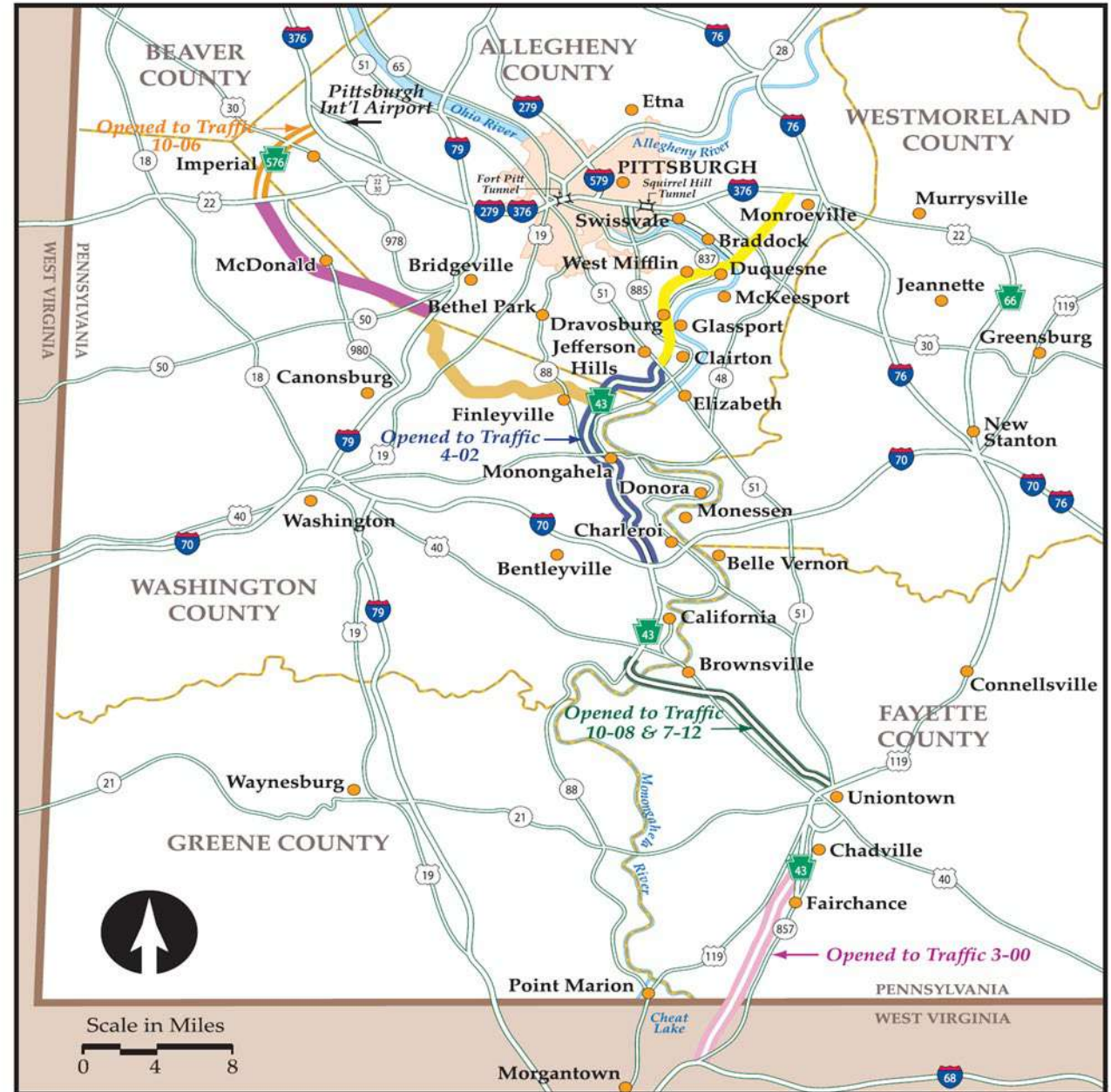
Matthew R. Burd, P.E.
Interchange/Special Projects Manager
Pennsylvania Turnpike Commission

Southern Beltway

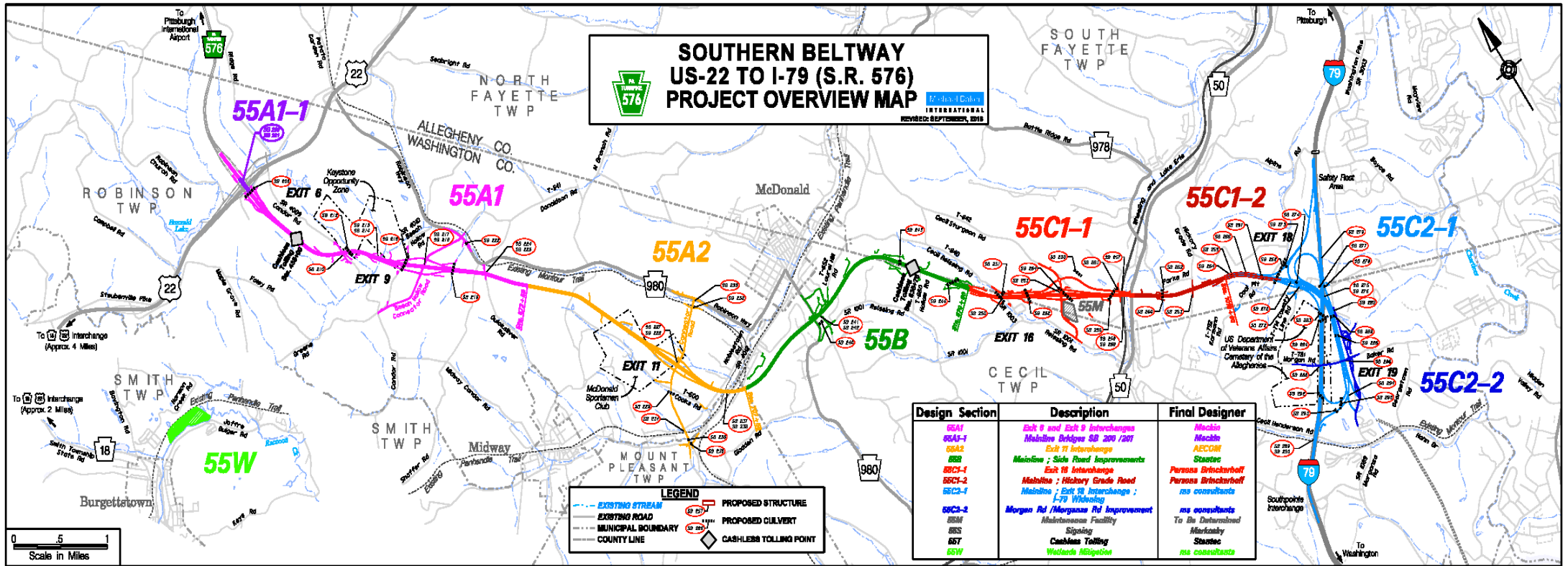
-  I-376 to US 22 (10/2006)
-  US 22 to I-79 (10/2021)
-  I-79 to Mon/Fayette

Mon/Fayette EXP

-  I-68 to Route 43 (3/2000)
-  Uniontown to Brownsville (7/12)
-  I-70 to PA -51 (4/2002)
-  PA-51 to Pittsburgh



Southern Beltway Overview



13-Mile Expansion – 16 Construction Contracts
 6 Mainline Sections – Including the Interchange to I-79
 1 Early Action Bridge Section
 New Maintenance Facility

By the Numbers

- Begin Design – Fall 2007, ROD – September 2008
- Final Design began in 2014
- Design Cost - \$92M
- R/W Cost - \$112M
- Utility Cost - \$44M
- 13 miles of mainline, 5 new interchanges, cashless tolling (2 open road tolling locations and 1 additional constructed on the existing Findlay Connector)
- 8 pairs of mainline bridges, 4 bridges on I-79, 7 local bridges
- Construction value - \$716M.
- Construction started January 2014
- Opened October 15, 2021, with restrictions at I-79
- 70 mph speed limit
- 25M+ CY of Excavation
- 40 Miles of Pipe
- 128 football fields of pavement

Opening

- Partial opening, October 15, 2021
 - EB Southern Beltway to I-79 South
 - NB I-79 to WB Southern Beltway
- Currently 4 of 8 ramps are open
- June 24, 2022 is the completion date. Major construction will be completed



Turnpike Team at the Ribbon Cutting
October 14, 2021

Construction Photos

Section 55A1-1

Dual Bridges over US-22, Completed March 2015

Mosites Construction Company, \$14.3M



**Mainline Section 55A1
Completed June 2019
Independence Excavating, Inc., \$97.4M**







Mainline Section 55A2
Completed June 2021
Trumbull Corporation, \$116.5M



Mainline Section 55B
Completed December 2019
Fay, \$101.9M





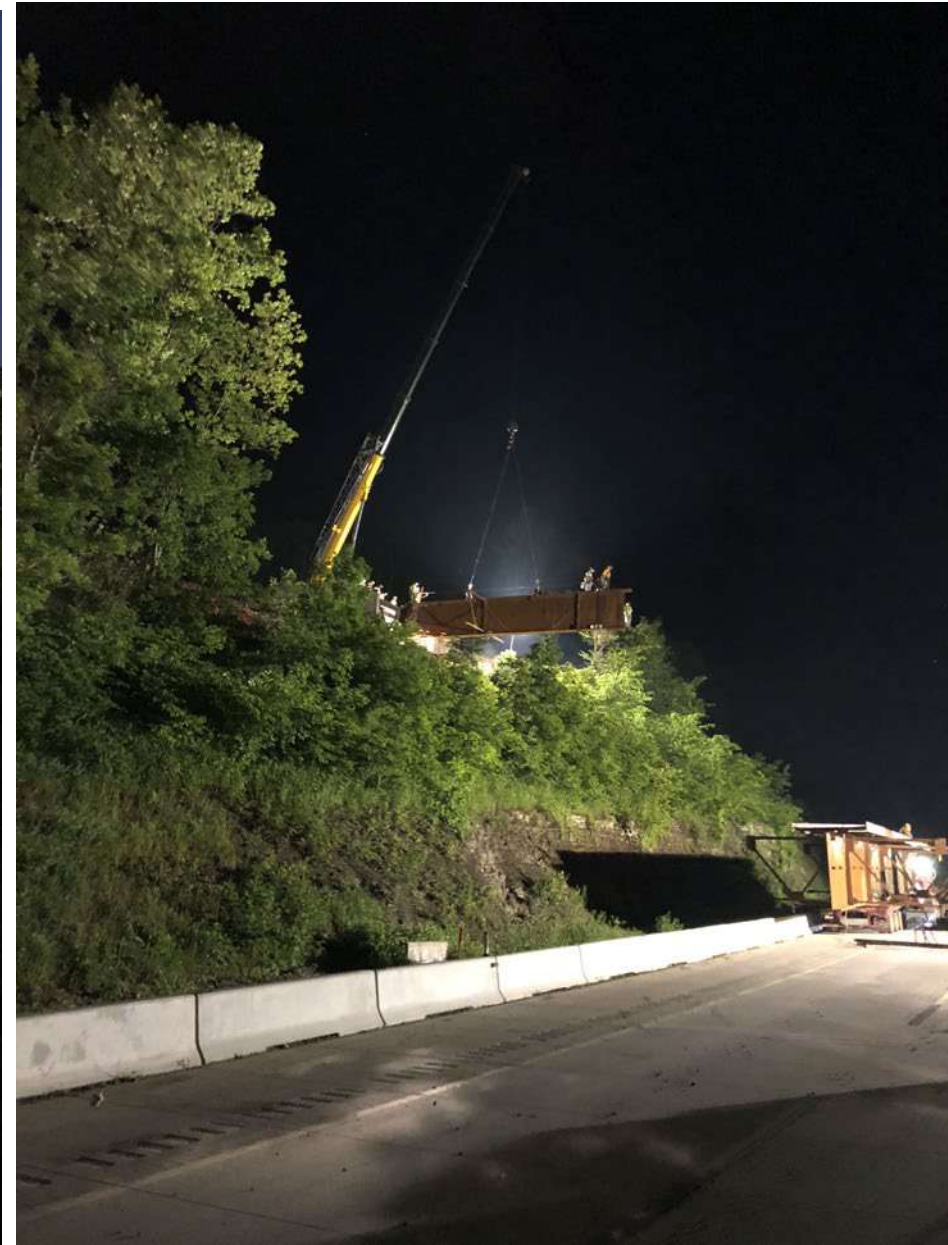
**Section 55T
Open Road Tolling Gantries and Buildings
Completed December 2019
Allison Park Contractors, Inc., \$4.4M**



**Mainline Section 55C1-1
Completed November 2020
Beaver Excavating Company, \$97.4M**







**Nello Construction
Wayne Crouse, Inc.
Schultheis Electric
McKamish, Inc.**

**Section 55M
Completed July 2021
\$23.7 M**



Mainline Section 55C1-2
Completed May 2020
Trumbull Corporation, \$36.8M



Section 55C2-2
Completed July 2020
Independence Excavating, \$22.7M



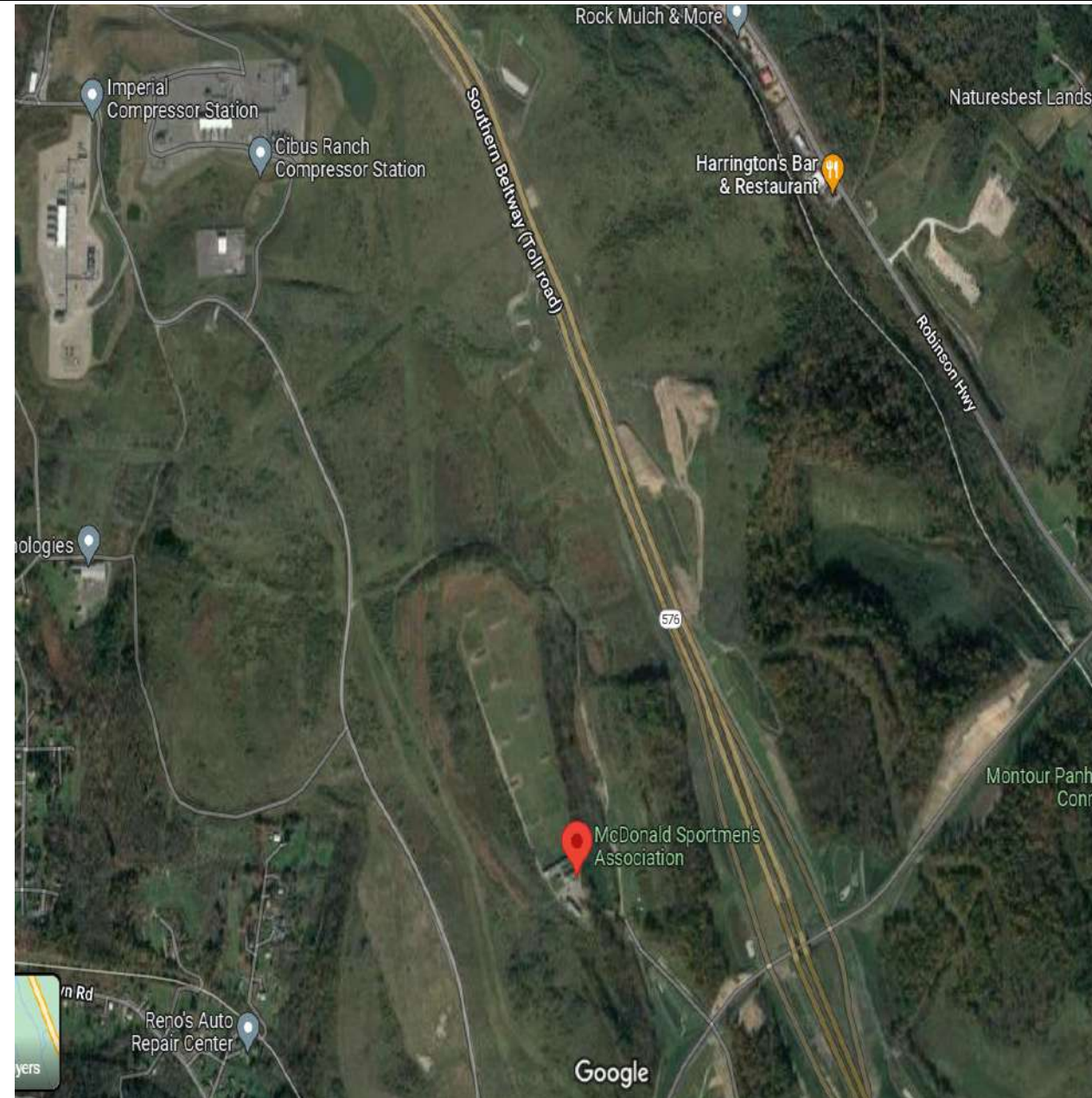
Mainline Section 55C2-1
Completion June 24, 2022
Walsh Construction Co., \$181.3M





Design Challenges

- Usual – Permitting, Right of Way, Utilities
- Coordination with the National Cemetery of the Alleghenies
 - Adjacent to I-79
- Delay to A2 Bid due to Trans Canada Pipeline
- Coordination with the McDonald Sportsman Association
- I-79 “Hole in the Wall”



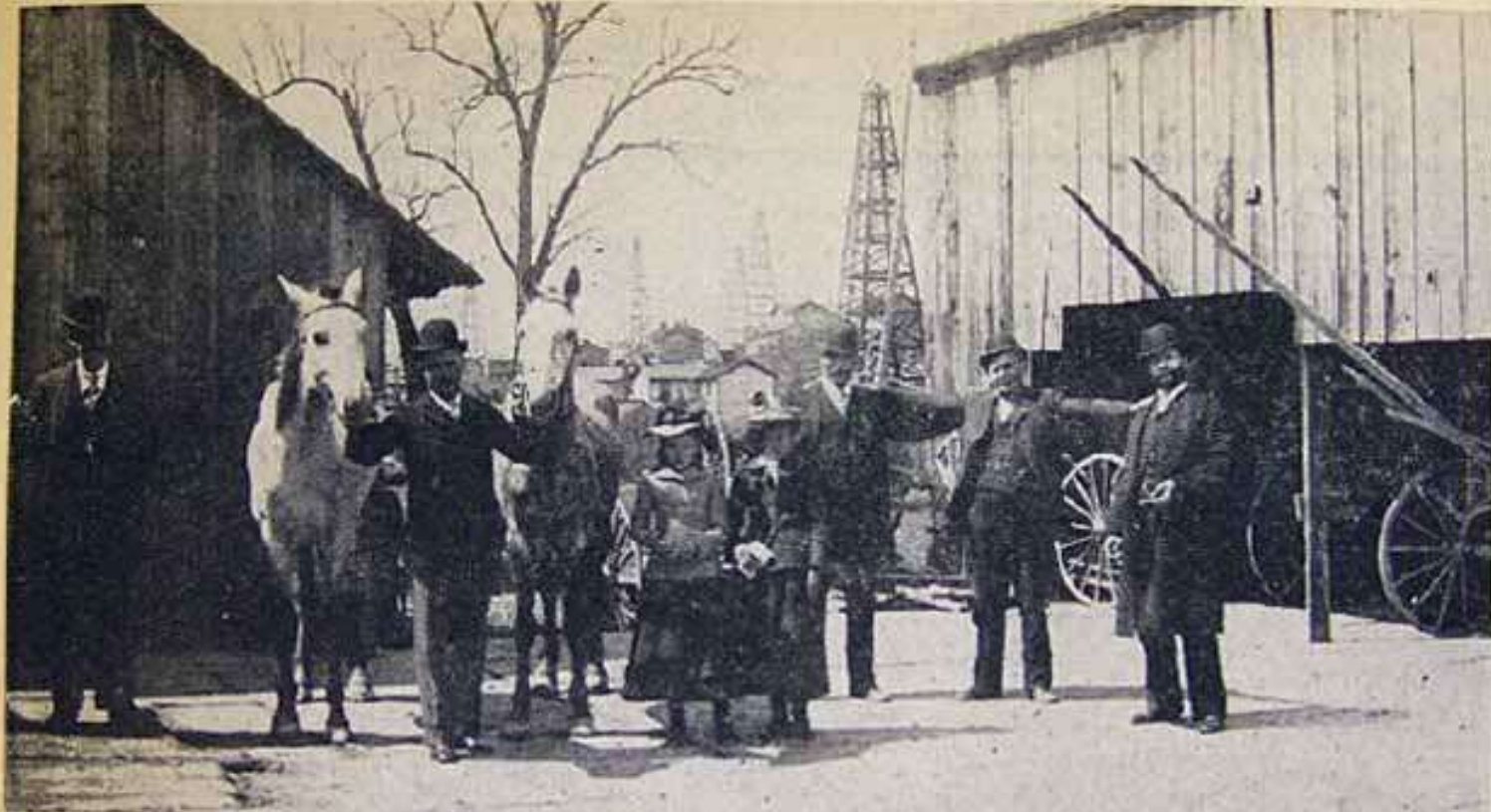


Construction Challenges

- Oil and Gas Wells
- Pickle Liquor Sludge
- Flooding During Construction



McDonald in the Days of the Oil Excitement



The above picture will give younger folk some idea of what McDonald looked like during the oil excitement. Derricks may be seen in the background and the large number seen in that small area gives evidence of the great number which dotted the terrain hereabouts. The individuals in the picture are unknown with the exception of the late August Valentour, who is shown at the extreme right.



Oil/Gas Summary

- Plugged 28 wells, 26 were abandoned or orphaned
- Average cost of \$299,000
- Duration ranged from 2 weeks to 3 months to plug
- Depths ranged from 600' to 4400'
- DEP has a program to plug wells, typically do 1 to 3 a year
- PTC collaborated with US Dept of Energy National Energy Technology Laboratory and US Aerial Video to locate wells using a drone mounted Magnetometer. Located most wells which aren't readily visible on the surface

Pickle Liquor Sludge

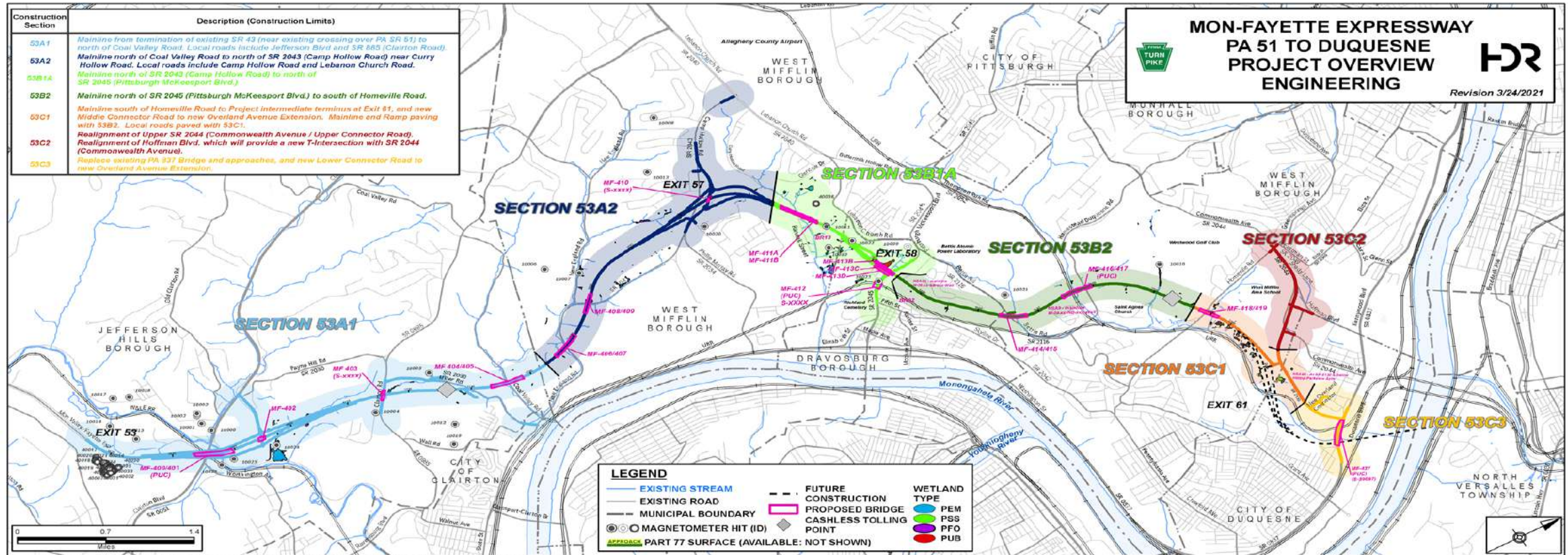
- Byproduct of steel production
- Mixed with Lime and placed in strip mines
- Smells bad once uncovered
- Originally agreed to encapsulate on site
- Reclassified to Regulated Fill
- Was hauled to certified landfill - \$3.7M cost



Flooding

- McDonald Borough/Cecil Township
- Several events in 2018 and 2019 (Record rainfall)
- Sequence of SWM and E&S during mind grouting caused the issue
- Additional project underway to address any future concerns

Mon Fayette Expressway – Route 51 to Pittsburgh



Southern Section

- Total Cost - \$2.1 Billion
- Final Design On-Going for Southern Section
- Route 51 to Duquesne - \$905 Million, 8 Miles ends near Kennywood
- Construction to begin in 2022 Early Action DMS Contract
- First mainline section to begin construction in 2023
- 8 Construction Sections
- PM's – Mohammad Mohammad and Brian Mostek
- Northern Section Currently on Hold

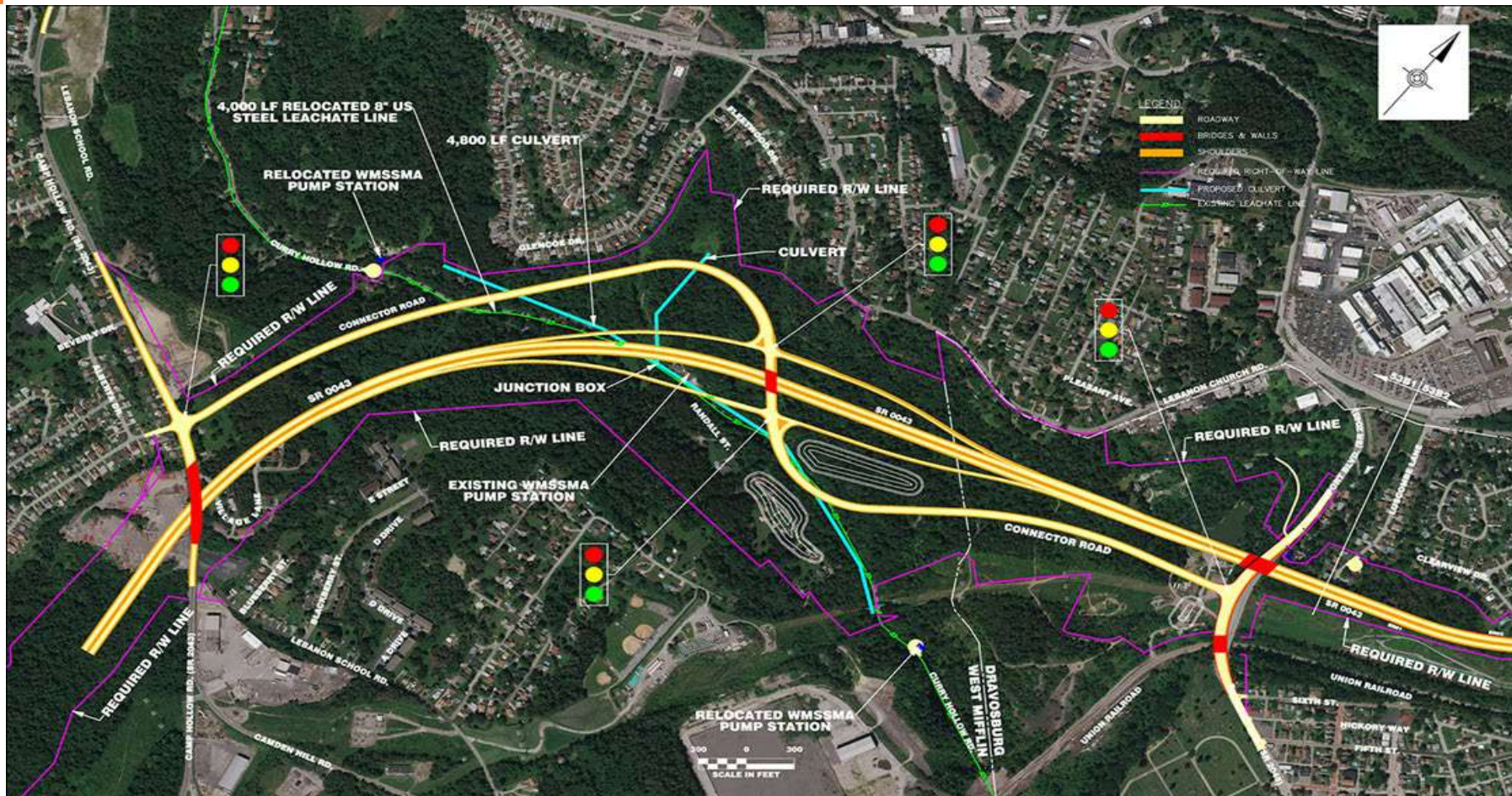
Design Issues

- **Right of Way**
 - Currently 270 Total Claims
 - 217 Clear, 41 in Negotiation
- **Utilities**
 - Cost is \$82M, down significantly from original of \$127 M
 - Duquesne Light Tower Relocations, Approx. 27 Total
 - Under construction now, moving along well aside from R/W hold ups
 - Several high-pressure gas lines, some utilities slow to respond
- **Permitting**
 - A1 Permit taking longer than hoped
 - All other permits addressing issues based on A1 comments, hoping that moves the process along quicker

Design Issues

- Redesign of Section 53B1 Interchange
 - Originally interchange was at a connector road
 - Major constructability issues
- Interchange moved to Camp Hollow Road, Partial Interchange at Pittsburgh McKeesport Blvd.
 - Dual roundabouts on Camp Hollow Road
- Construction around Sandy Lake

Original Design



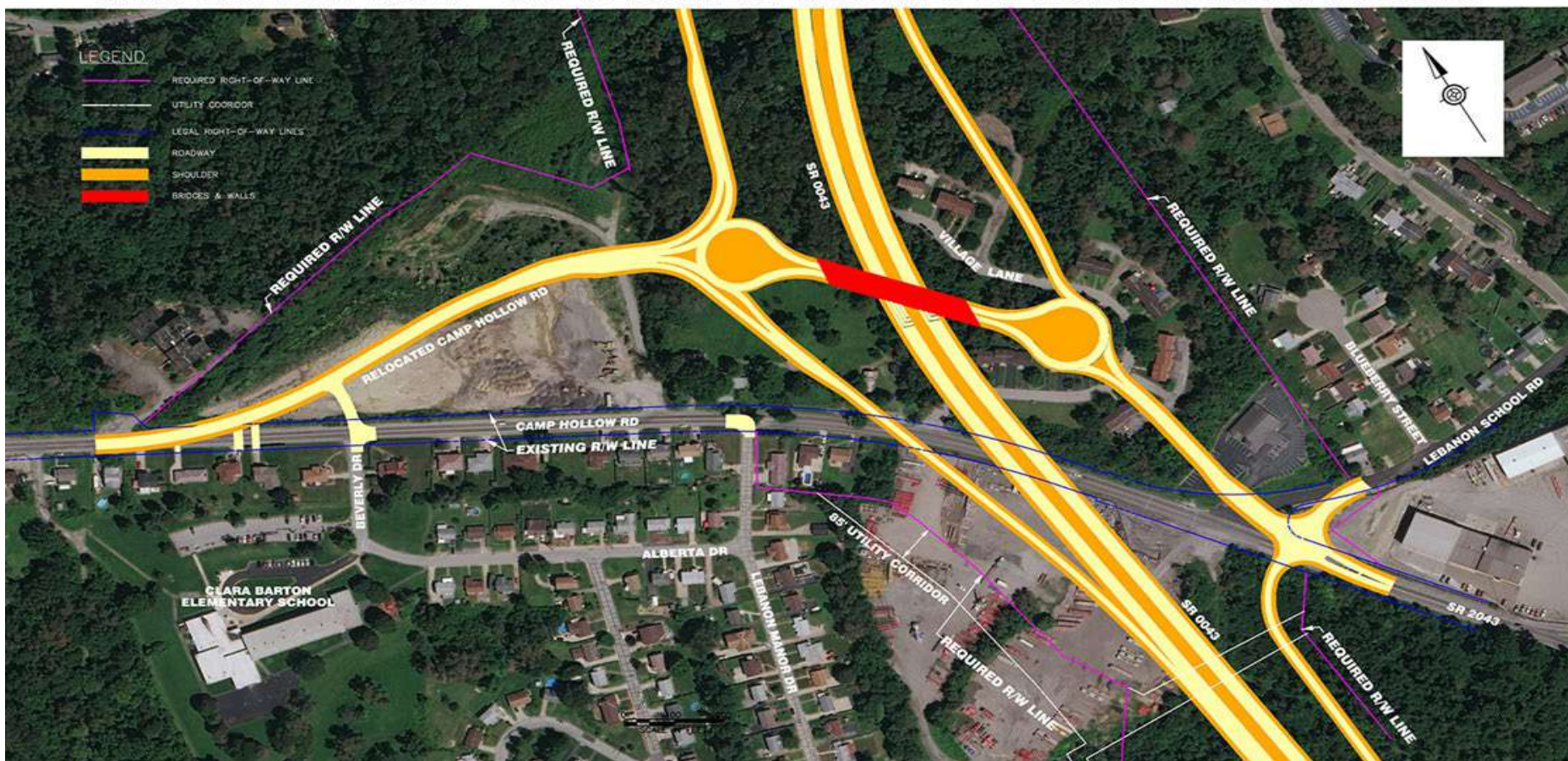
- US Steel Leachate Line
- 4000 Ft Box Culvert under 100 Ft fill
- Sanitary sewer pump station
- Coal issues

Revised Design



Dual Roundabouts

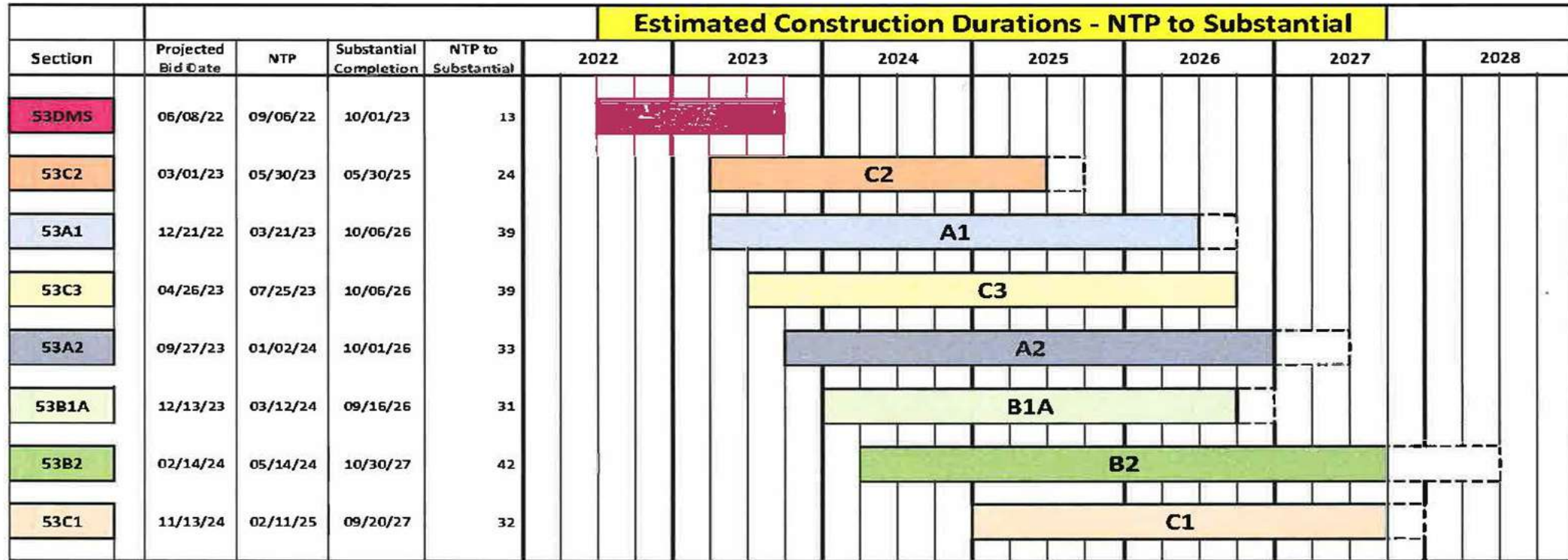
CAMP HOLLOW ROAD - OFF ALIGNMENT MODIFIED DIAMOND W/ ROUNDABOUTS



Schedule

MFE 51 to 837 - Southern Sections

03/10/22



NOTES:

 Additional time for Pond Conversion