The Lewistown Narrows
"The Narrows...a History of Transportation"
The history of transportation in the Narrows is a compelling story that begins with early man and the Juniata River. This natural gap between the Shade Mountain and Blue Mountain is strategically important to travel, development, and the economy of the region. Indian paths, wagon trails, canals, highways, and turnpikes have evolved over time moving people and goods throughout central Pennsylvania. The highway improvement project is one more chapter in this story.
Project Region
Project Scope

- Located East of Lewistown along the Juniata River, Mifflin and Juniata Counties.
- Entire project is 10.3 miles long and includes three construction sections – A09 (6.6 miles) A10 (2.5 miles) and A11 (1.2 miles).
Project Area
Typical Sections

- The highway was designed as a 4-lane, limited access facility with two 12-foot lanes in each direction, 10-foot outside shoulders and a median that varies from 11’6” to 20’.
Two interchanges were reconstructed as part of the project.
The Lewistown Interchange was reconfigured to accommodate the relocation of S.R. 22 North of the Borough.
SR 22- A11

Location:
  • Lewistown, Pennsylvania

General Contractor:
  • Dick Corporation

Owner:
  • Pennsylvania Department of Transportation

Contract Value:
  • $17,737,977
The Arch Rock Interchange, Juniata County is a full access interchange.

The upgrade of the Arch Rock interchange and the restoration of 2 miles of existing pavement is part of a separate construction section (Sec A10). Construction was completed in Fall 2003.
SR 22- A10

Location:
  • Arch Rock, Pennsylvania

General Contractor:
  • Glenn O. Hawbaker Inc.

Owner:
  • Pennsylvania Department of Transportation

Contract Value:
  • $12,648,629
The Narrows portion extends 6.65 miles between the Lewistown and Arch Rock interchanges.

The project includes construction of a 4-lane limited access highway and environmental enhancements.
Aerial of Existing Roadway
SR 22- A09

Location:

• Lewistown, Pennsylvania

General Contractor:

• Walsh Construction Company

Owner:

• Pennsylvania Department of Transportation

Contract Value:

• $104,360,592
One of the significant design challenges involved the geotechnical investigations and analyses. To determine subsurface conditions, over 40,000 L.F. core drilling was done along with seismic and ground penetrating radar investigations.
Global stability became an issue that required months of analyses and review by experts from federal and state government, as well as independent consultants.

To assure the required factor of safety, a special wall design was developed. The wall incorporates drilled piles that protrude into competent rock layers.
Talus Rock Slope
Talus Rock Slope
Logging and Clearing
Typical Wall Section
River wall Construction
River wall Construction
Excavation at East End
Environmental Enhancements
Environmental Enhancements

2.1 Acre Wetland Replacement Site

PA Canal Park
  Picnic areas
  Interpretive Center
  Stabilized section of the PA Canal

Juniata River Access Area
  Paved parking lot
  One boat launch
  Fishing access area for the physically challenged
Wetland Construction
Wetland Construction
NOTES:
1. SEE SIGNING, PAVEMENT MARKING AND DELINEATION PLAN FOR LINE STRIPING AND STANDARD ROADWAY SIGNS IN THE CANAL PARK AREA.
2. FOR DRAINAGE, PAVING AND GUIDE RAIL SEE ROADWAY PLANS.
3. FOR BRIDGE SEE S-23878 PLANS.

LEGEND
- BOLLARD AND CHAIN
- NEW SIGN
- INFORMATIONAL KIOSK
- PICNIC TABLE
- BENCH AND TRASH RECEPTACLE
- WARNING SIGN, SEE SHEET 5
- INFORMATIONAL SIGN, SEE SHEET 6
- WHITE SPRUCE

CANAL PARK LAYOUT

SCALE: 1" = 30 FEET

FISH & BOAT ACCESS/CANAL PARK/TOWPATH TRAIL PLAN
Canal Lockkeepers House
Repairs at Canal Lockkeepers House
Former canal system lock
ITS devices that will be installed:

- Dynamic Message Signs (DMS)
- Video Monitoring
- Highway Advisory Radio System (HAR)
- Weather Station
- Flashing Warning Devices
- High Water Monitor
Aerial of Temporary Highway Bridge
Temporary Bridge over Macedonia Run
Aerial of Mountain Excavation and Waste Site
73 Acre Waste Site
Crushing 1,000,000 Tons
Blasting 1,200,000 CYD
Filling The Holes for the Next Blast
Mountain Excavation-1,800,000 CY of Excavation
Hitachi 1200 Excavator & Volvo 40 Ton Hauler
Haul Road Construction
Causeway Construction
Causeway
ABI Micropile Drill
ABI Micropile Drill
ABI Micropile Drill
IMT Micropile Drill
IMT Micropile Drill
Questions?