

Town of Pomfret, Connecticut

Public Informational Meeting:

Design of Road Crossing Structures for the Air Line State Park Trail

State Project No. 111-124



February 8, 2018

TODAY'S TOPICS:

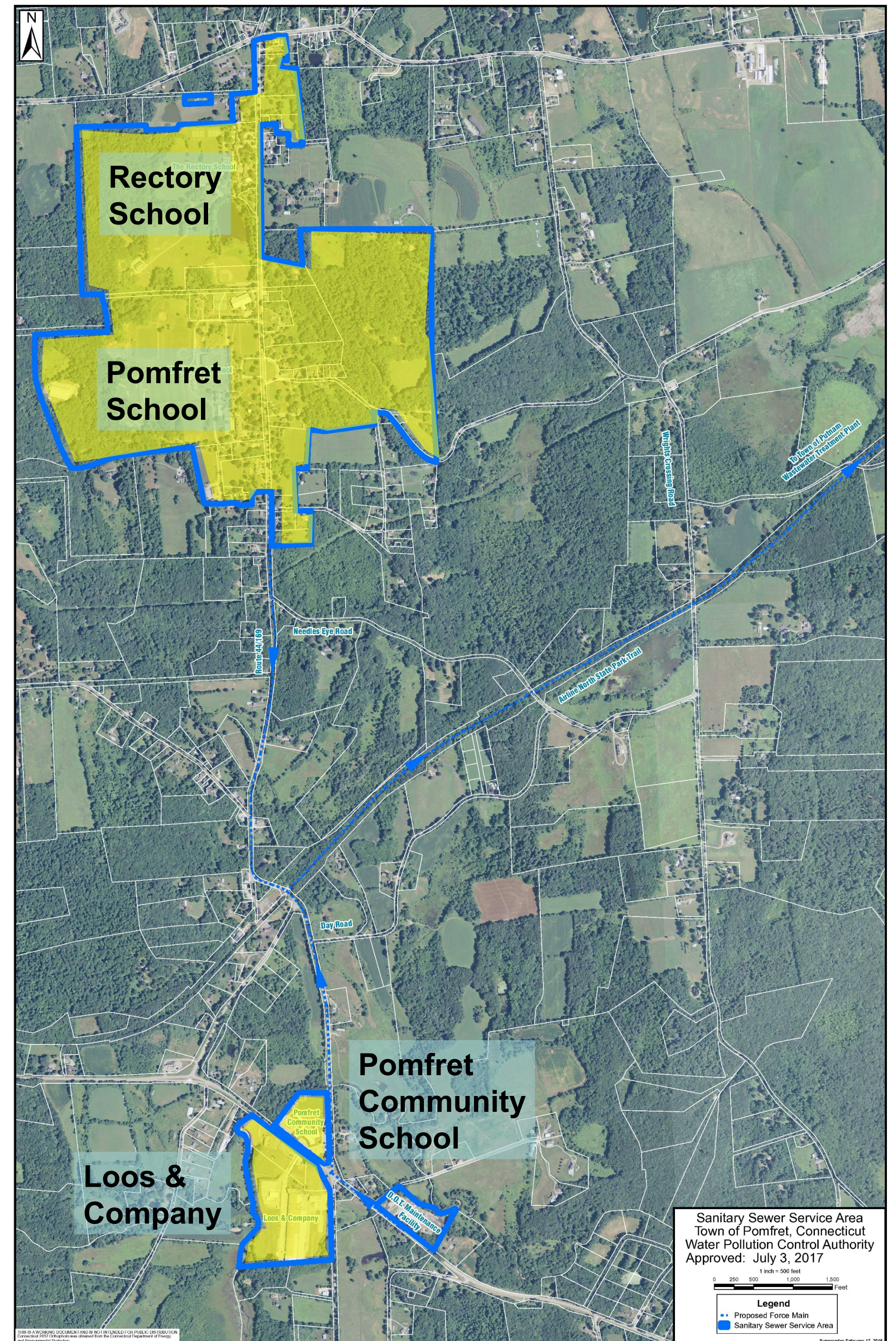
History & Need
Crossing Locations
Concept Configurations
Costs & Schedule
Questions



History & Need

Sanitary Sewer Service Needs:

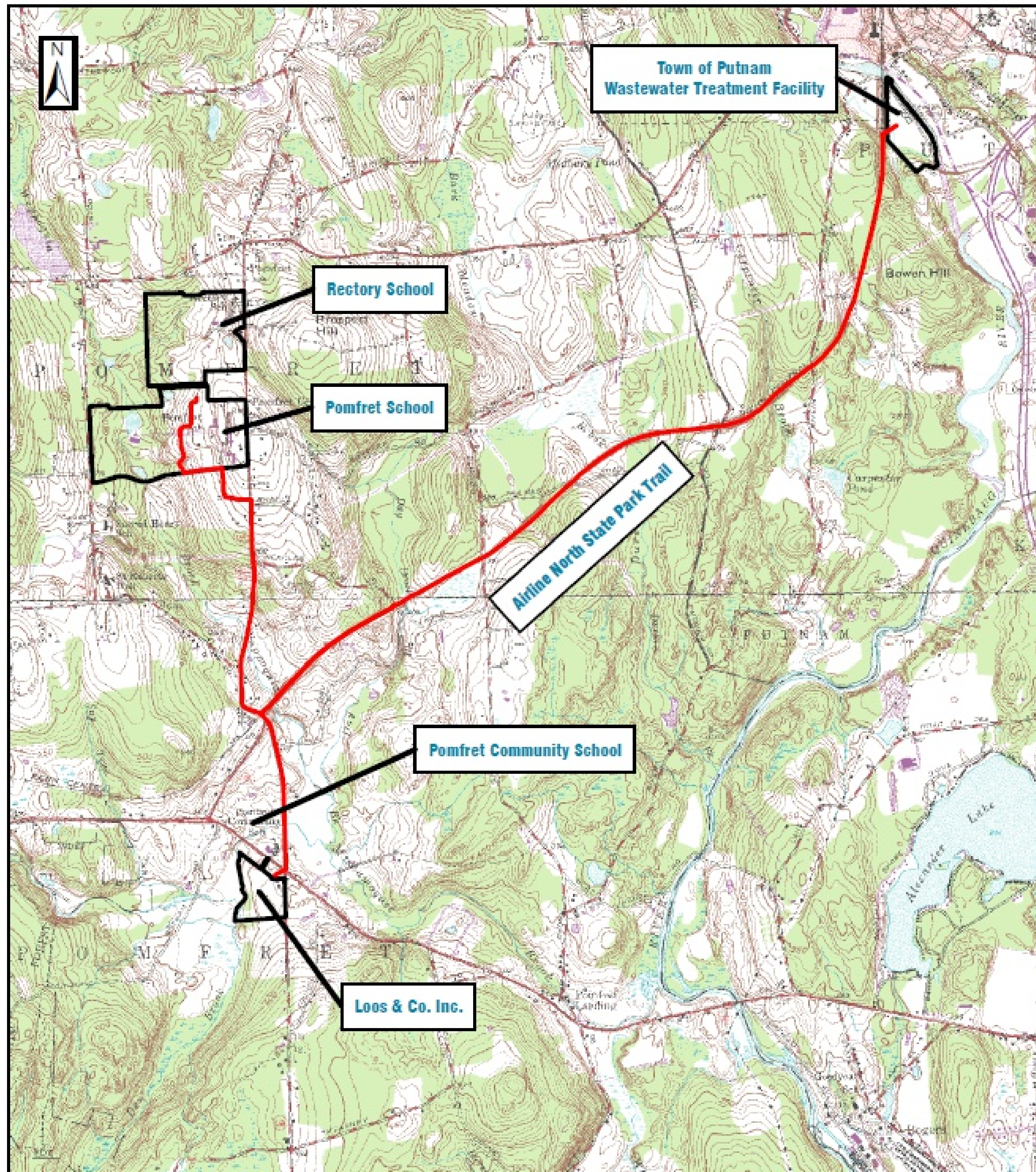
- New CTDEEP Regulations
- Failing Treatment Facilities
- Need for Increased Capacity
- Established Sewer Service Area
- USDA Funded Design/Construction



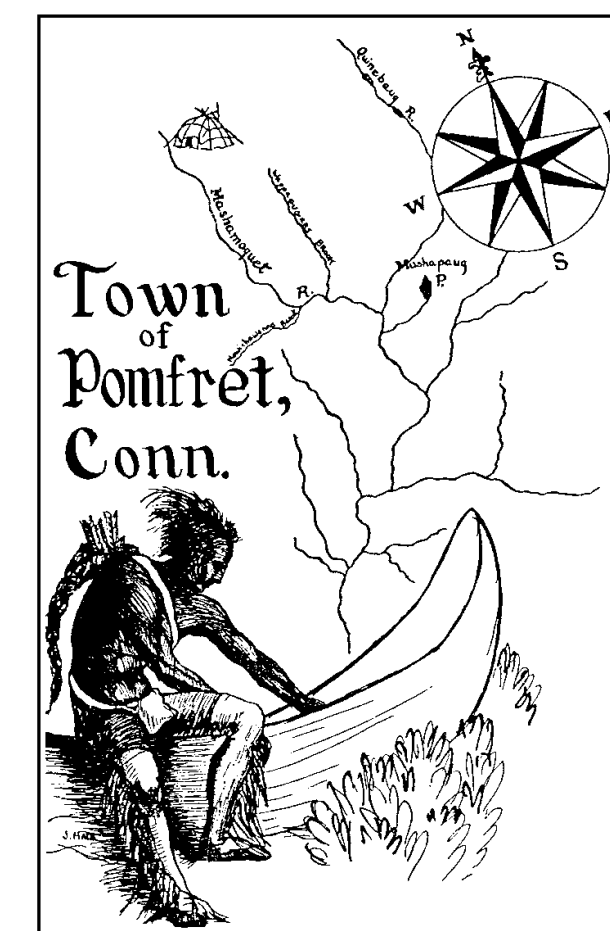


Sanitary Sewer Construction Approach:

**Connect to Putnam
POTW via Air Line
State Park Trail**



OPTION #3C - CONNECTION TO PUTNAM POTW VIA AIRLINE NORTH STATE PARK TRAIL

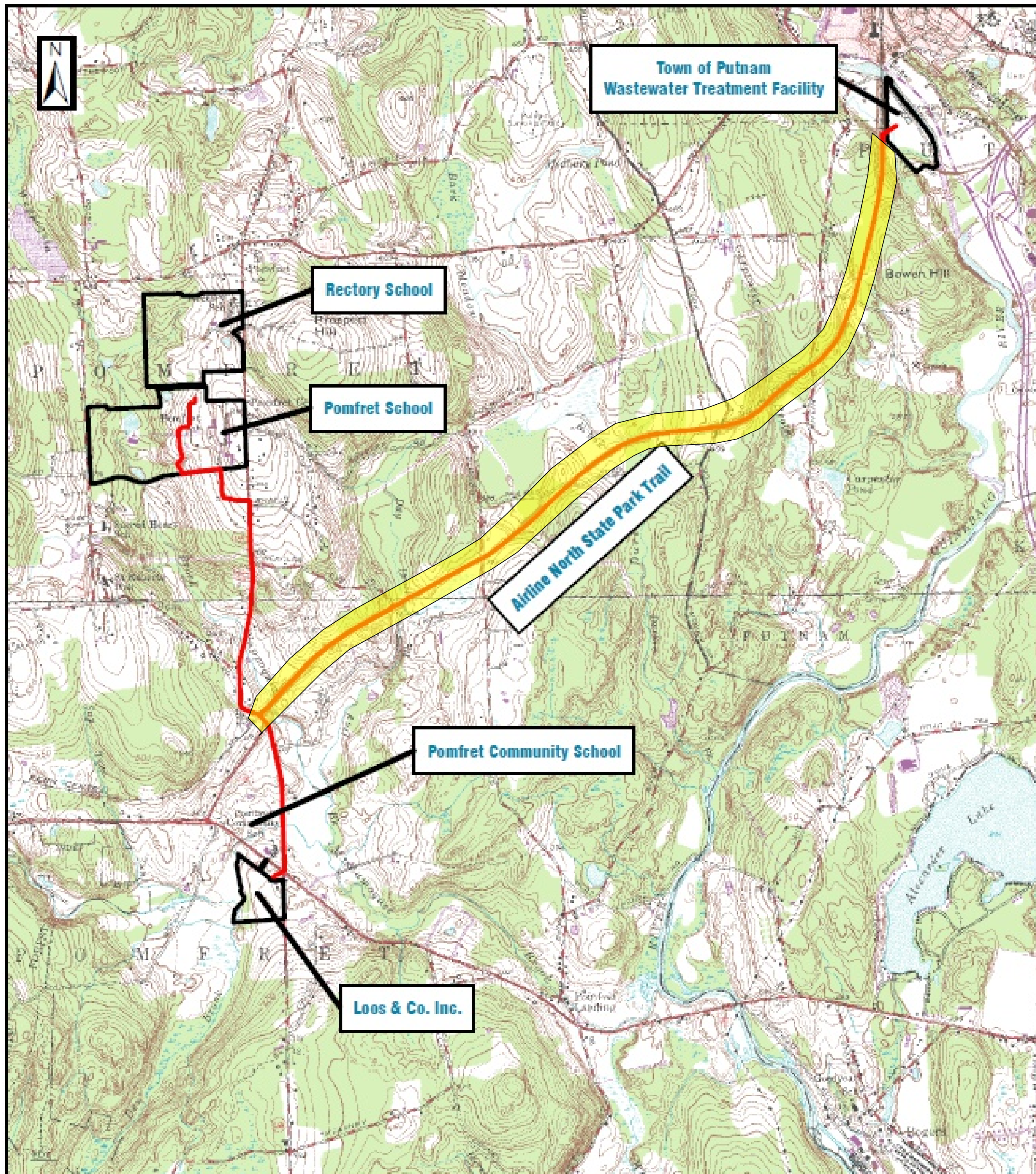




Connecticut DEEP OPPORTUNITY:

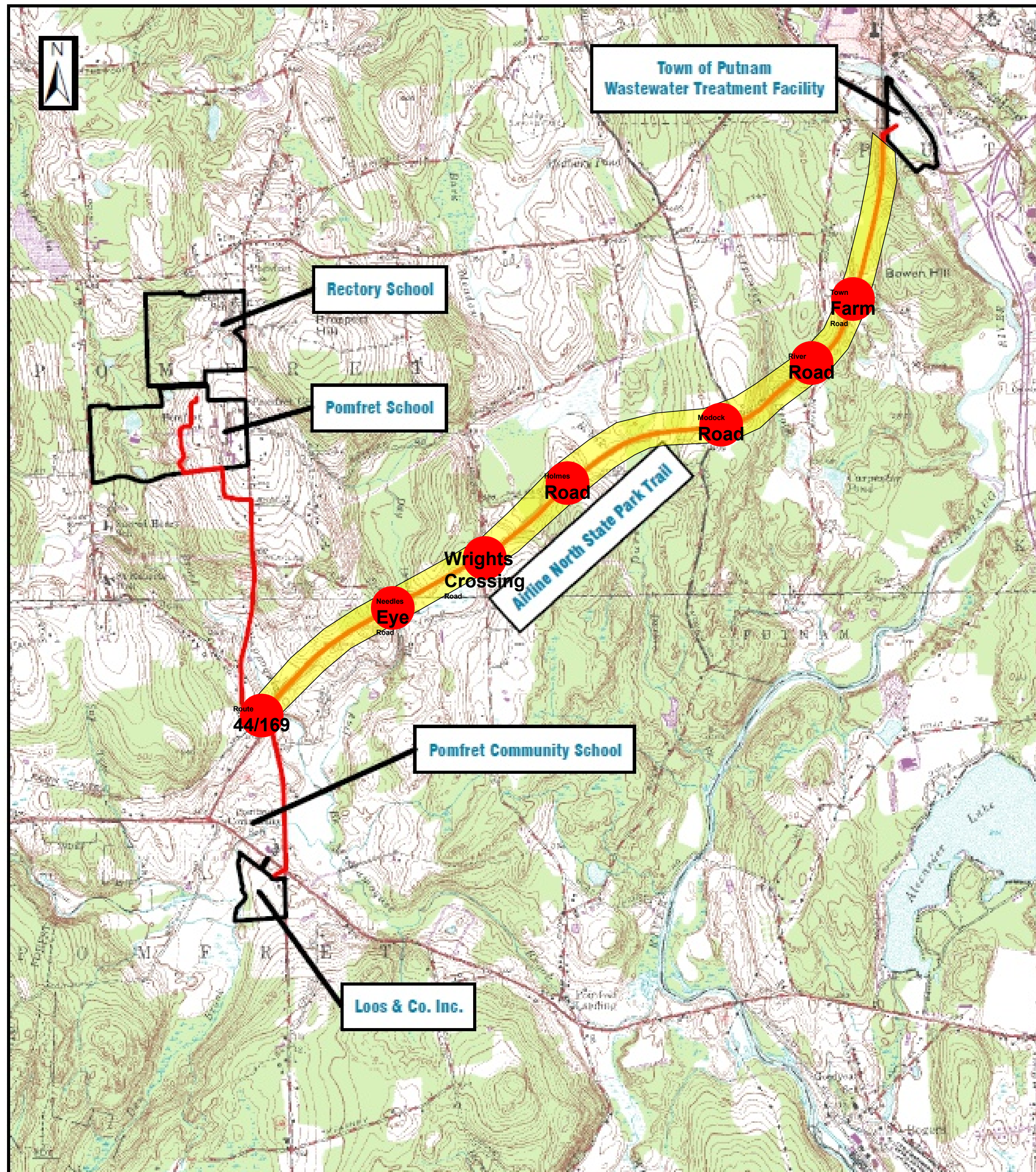
**Develop the
Air Line State Park Trail**

**Pomfret Street
To
Putnam**



OPTION #3C - CONNECTION TO PUTNAM POTW VIA AIRLINE NORTH STATE PARK TRAIL



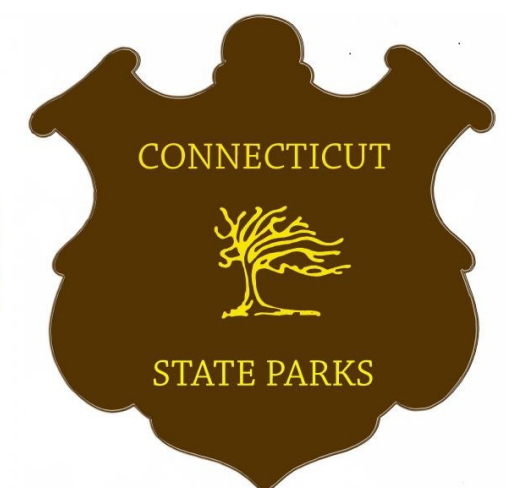


OPTION #3C - CONNECTION TO PUTNAM POTW VIA AIRLINE NORTH STATE PARK TRAIL

Connecticut DEEP CHALLENGE:

Create SAFE Intersections with Existing Roadways

- Town Farm Road
- River Road
- Modock Road
- Holmes Road
- Wrights Crossing Road
- Needles Eye Road
- Route 44/169





Town Farm Road



- **At-Grade Intersection with Trail**
- **No Structure Required**
- **Crosswalk & Pedestrian Safety**





River Road



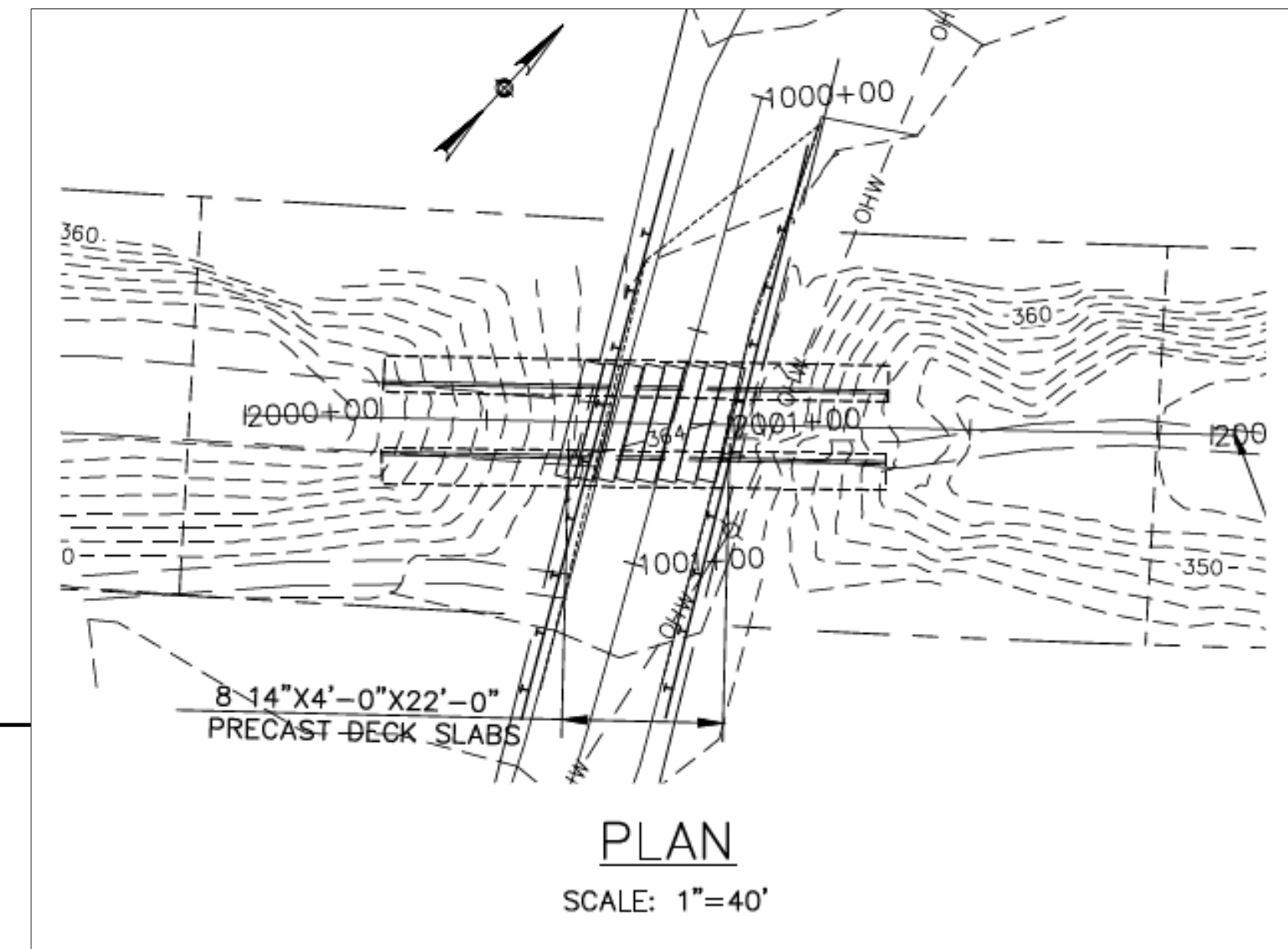
- **Trail Passes Below Roadway**
- **Bridge to Carry Road Across Trail**



River Road

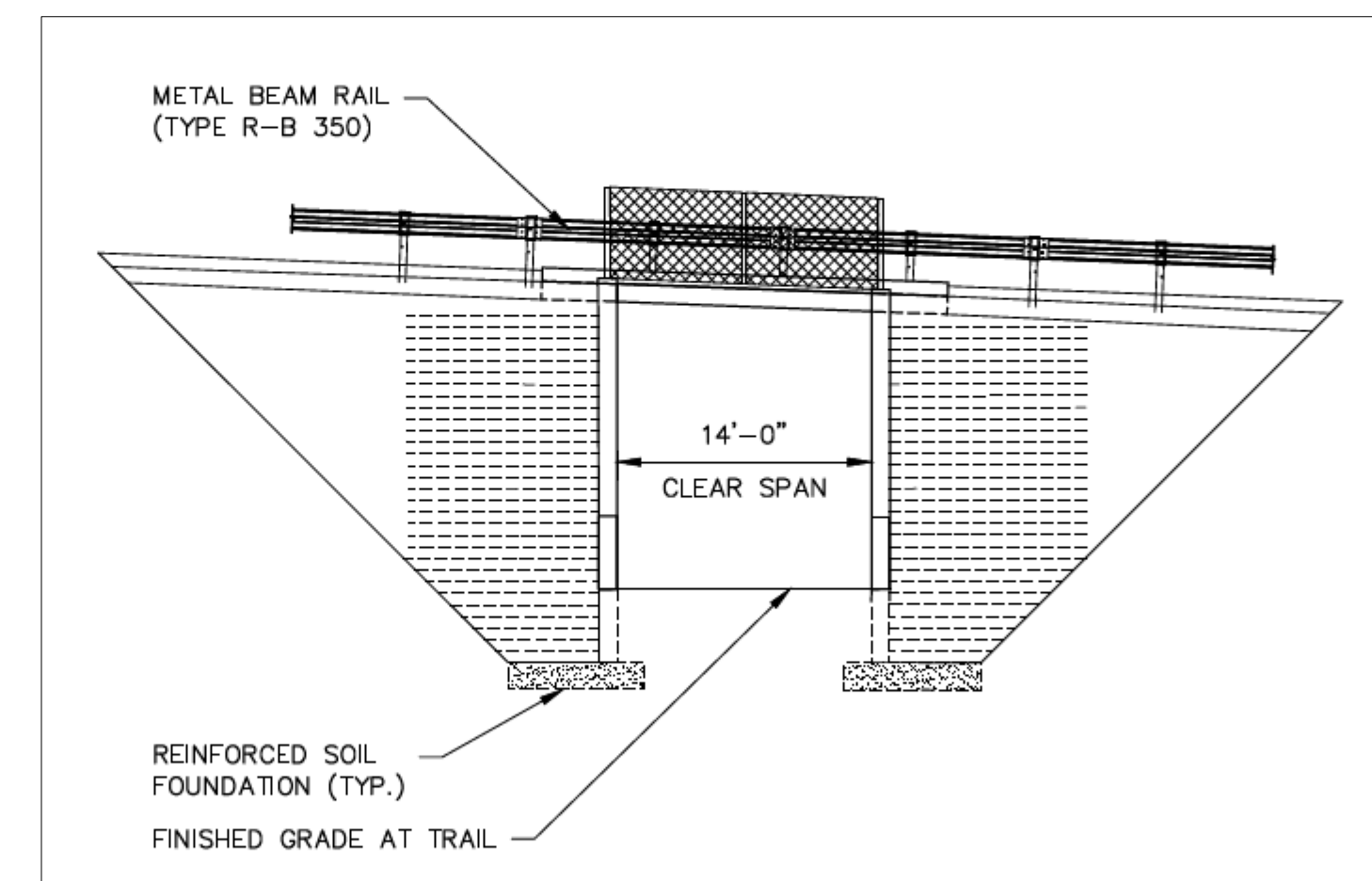


- Trail Passes Below Roadway
- Bridge to Carry Road Across Trail



TYPE STUDY
PRELIMINARY COST ESTIMATE
ALTERNATE 3 - PRECAST CONCRETE DECK SLABS
AIRLINE NORTH TRAIL CROSSING PROJECT
RIVER ROAD CROSSING
POMFRET, CT

NO.	ITEM	UNIT	QUANTITY	PRICE	AMOUNT
1	0202000 EARTH EXCAVATION	C.Y.	390	\$20.00	\$7,800.00
2	0203001 STRUCTURE EXCAVATION (EARTH COMPLETE)	C.Y.	3150	\$30.00	\$94,500.00
3	0406171 HMA S0.375	TON	55	\$110.00	\$6,050.00
4	0406172 HMA S0.5	TON	35	\$90.00	\$3,150.00
5	0601201 CLASS "F" CONCRETE	C.Y.	4	\$1,250.00	\$5,000.00
6	060*** PRECAST CONCRETE DECK SLABS (14" x 14" x 22')	L.F.	176	\$280.00	\$49,280.00
7	0602006 DEFORMED STEEL BARS - EPOXY COATED	LBS.	900	\$3.00	\$2,700.00
8	0712021A GRS-IBS ABUTMENT AND WALL	S.F.	4400	\$85.00	\$374,000.00
9	0910170 METAL BEAM RAIL (TYPE R-B 350)	L.F.	100	\$22.00	\$2,200.00
10	0911923 R-B END ANCHORAGE TYPE I	EA.	2	\$1,175.00	\$2,350.00
11	0911924 R-B END ANCHORAGE TYPE II	EA.	2	\$1,170.00	\$2,340.00
12	0913013 5' POLYVINYL CHLORIDE CHAIN LINK FENCE	L.F.	182	\$70.00	\$12,740.00
				SUBTOTAL	\$562,110.00
				E. MINOR ITEMS/CONTINGENCY COSTS @ 20%	\$112,422.00
				ADDITIONAL CONTINGENCY @ 10%	\$56,211.00
				TOTAL ESTIMATED CONSTRUCTION COST	\$730,743.00





Modock Road



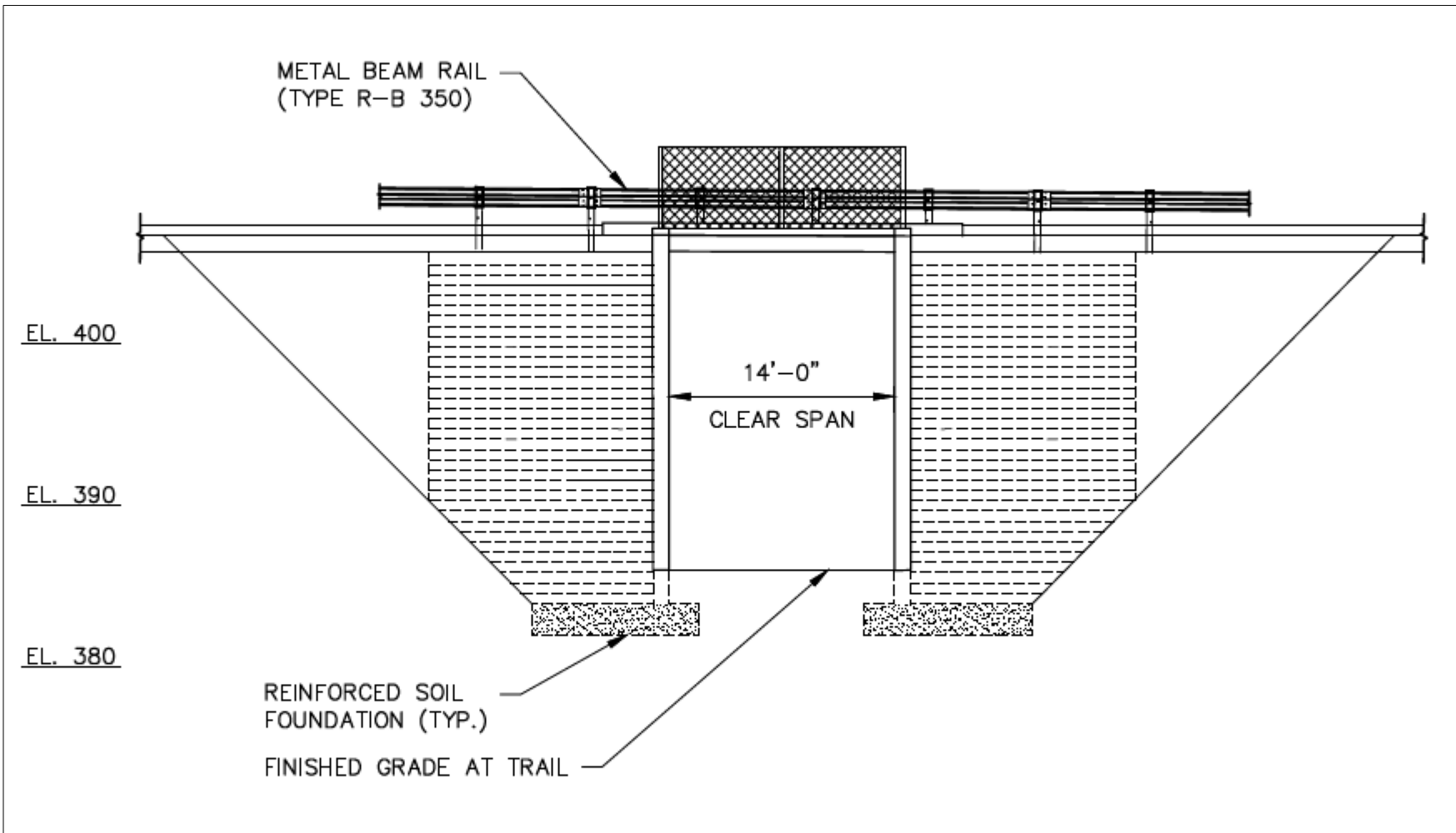
- **Trail Passes Below Roadway**
- **Bridge to Carry Road Across Trail**



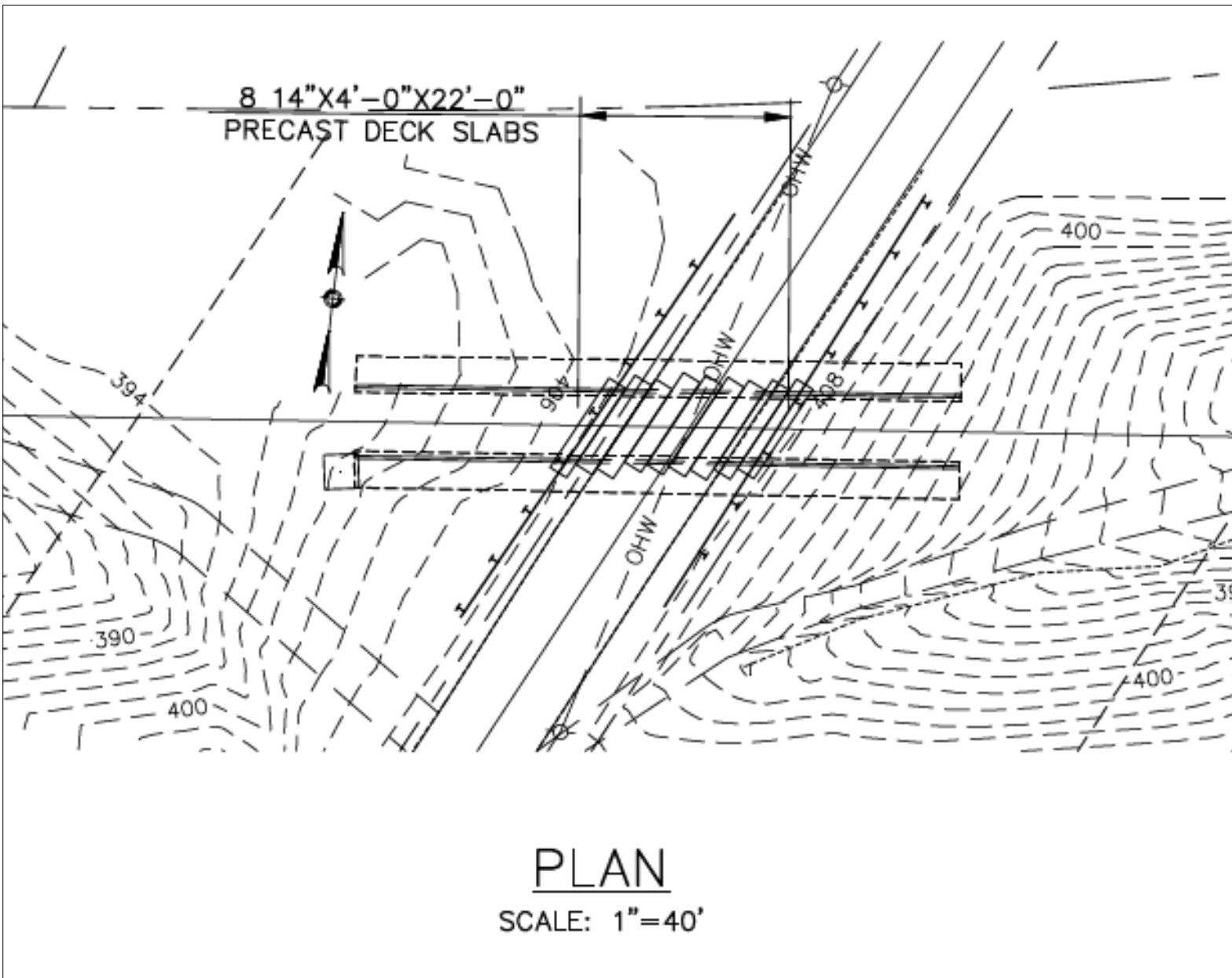
Modock Road



- Trail Passes Below Roadway
- Bridge to Carry Road Across Trail



TYPE STUDY PRELIMINARY COST ESTIMATE ALTERNATE 3 - PRECAST CONCRETE DECK SLABS AIRLINE NORTH TRAIL CROSSING PROJECT MODOCK ROAD CROSSING POMFRET, CT					
NO.	ITEM	UNIT	QUANTITY	PRICE	AMOUNT
1	0202000 EARTH EXCAVATION	C.Y.	800	\$20.00	\$16,000.00
2	0203001 STRUCTURE EXCAVATION (EARTH COMPLETE)	C.Y.	5200	\$30.00	\$156,000.00
3	0406171 HMA S0.375	TON	40	\$110.00	\$4,400.00
4	0406172 HMA S0.5	TON	65	\$90.00	\$5,850.00
5	0601201 CLASS "F" CONCRETE	C.Y.	3	\$1,250.00	\$3,750.00
6	0601**** PRECAST CONCRETE DECK SLABS	L.F.	176	\$280.00	\$49,280.00
7	0602006 DEFORMED STEEL BARS - EPOXY COATED	LBS.	675	\$3.00	\$2,025.00
8	0712021A GRS-IBS ABUTMENT AND WALL	S.F.	5875	\$85.00	\$499,375.00
9	0910170 METAL BEAM RAIL (TYPE R-B 350)	L.F.	100	\$22.00	\$2,200.00
10	0911923 R-B END ANCHORAGE TYPE I	EA.	2	\$1,175.00	\$2,350.00
11	0911924 R-B END ANCHORAGE TYPE II	EA.	2	\$1,170.00	\$2,340.00
12	0913013 5' POLYVINYL CHLORIDE CHAIN LINK FENCE	L.F.	152	\$70.00	\$10,640.00
				SUBTOTAL	\$754,210.00
				E. MINOR ITEMS/CONTINGENCY COSTS @ 20%	\$150,842.00
				ADDITIONAL CONTINGENCY @ 10%	\$75,421.00
				TOTAL ESTIMATED CONSTRUCTION COST	\$980,473.00





Holmes Road



- **Trail Passes Below Roadway**
- **Bridge to Carry Road Across Trail**



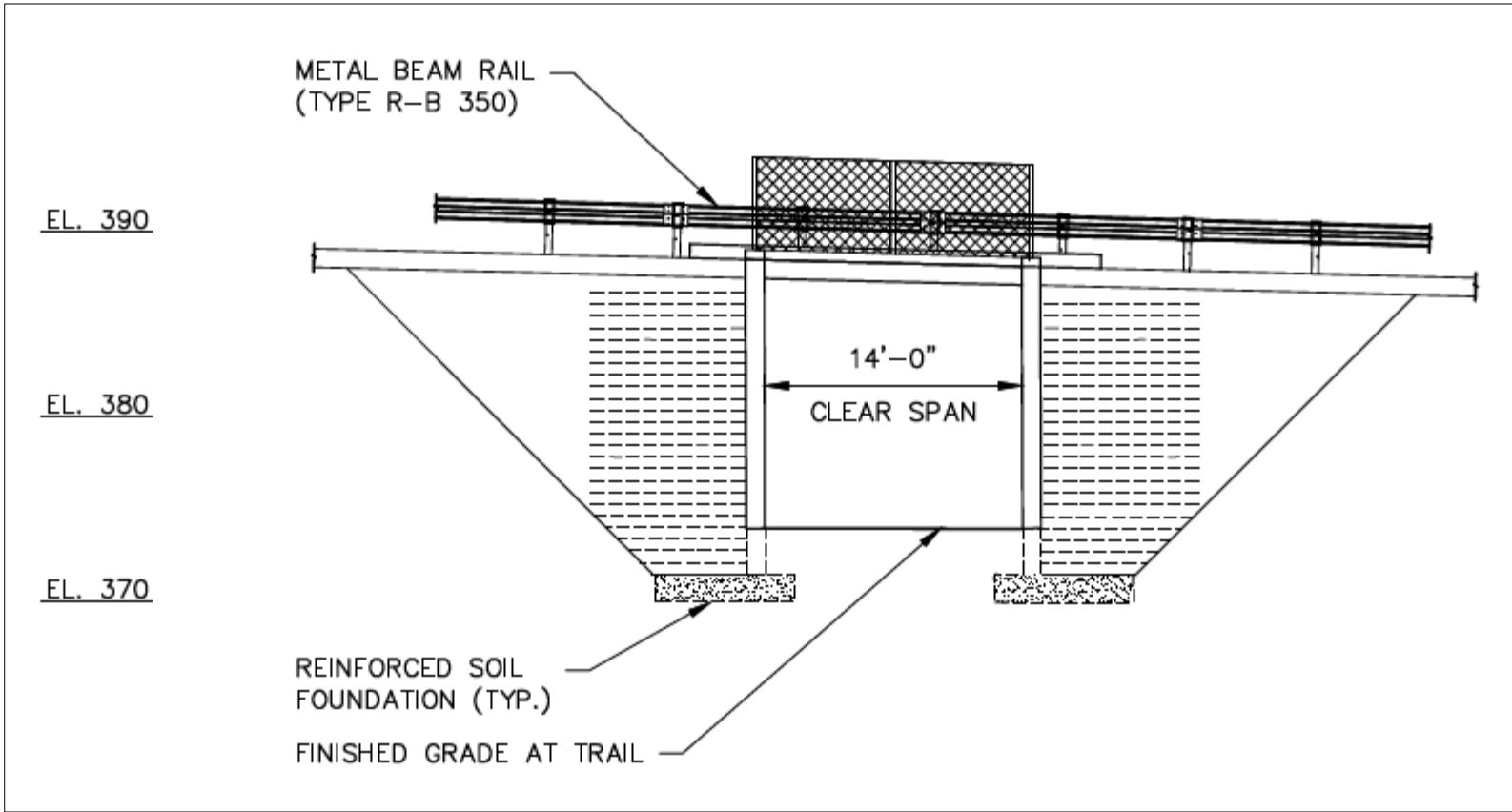
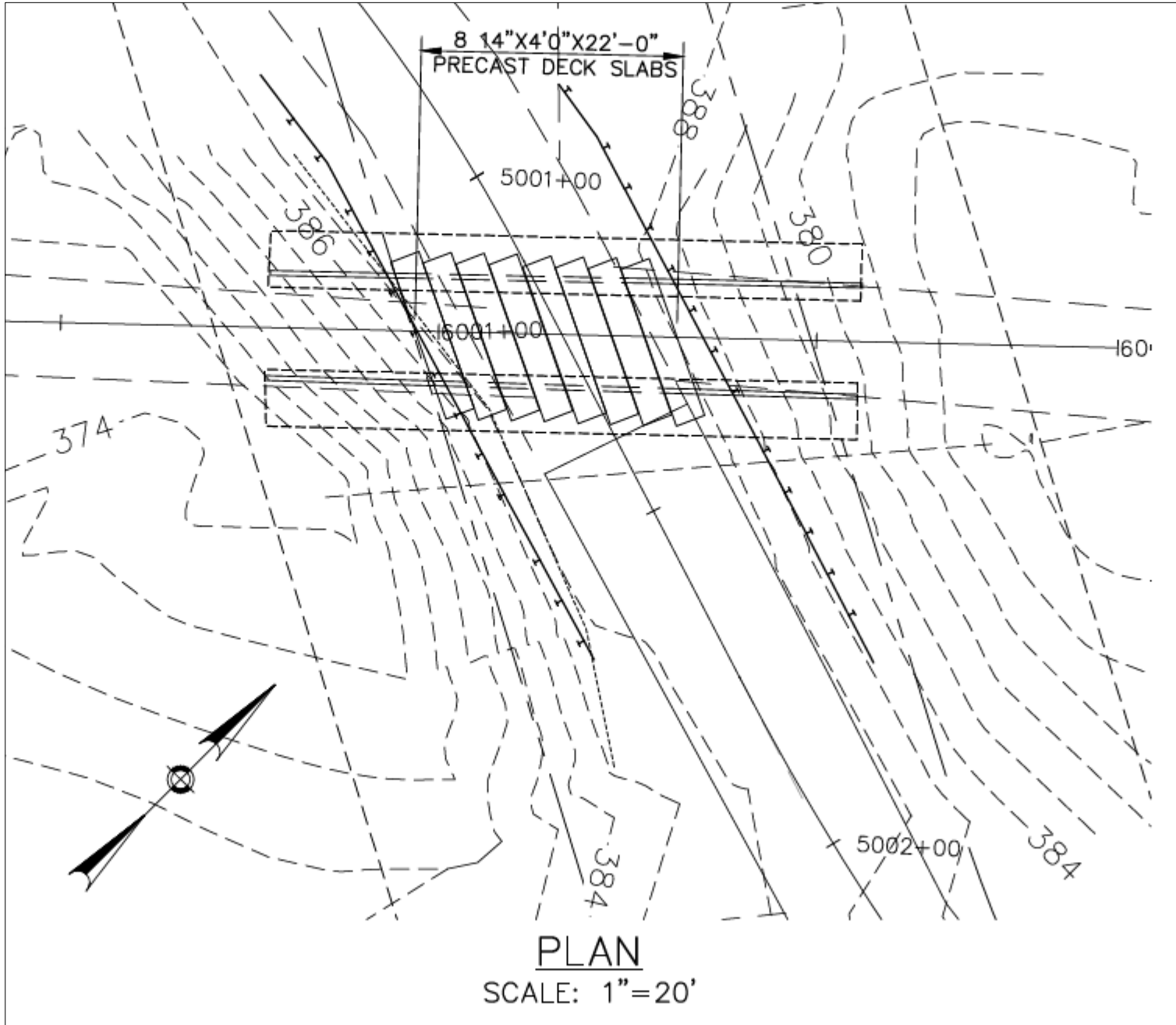
Holmes Road



- Trail Passes Below Roadway
- Bridge to Carry Road Across Trail

TYPE STUDY
PRELIMINARY COST ESTIMATE
ALTERNATE 3 - PRECAST CONCRETE DECK SLABS
AIRLINE NORTH TRAIL CROSSING PROJECT
HOLMES ROAD CROSSING
POMFRET, CT

NO.	ITEM		UNIT	QUANTITY	PRICE	AMOUNT
1	0202000	EARTH EXCAVATION	C.Y.	230	\$20.00	\$4,600.00
2	0203001	STRUCTURE EXCAVATION (EARTH COMPLETE)	C.Y.	1750	\$30.00	\$52,500.00
3	0406171	HMA S0.375	TON	40	\$110.00	\$4,400.00
4	0406172	HMA S0.5	TON	60	\$90.00	\$5,400.00
5	0601201	CLASS "F" CONCRETE	C.Y.	3	\$1,250.00	\$3,750.00
6	060***	PRECAST CONCRETE DECK SLABS (14" x 14" x 22')	L.F.	176	\$280.00	\$49,280.00
7	0602006	DEFORMED STEEL BARS - EPOXY COATED	LBS.	675	\$3.00	\$2,025.00
8	0712021A	GRS-IBS ABUTMENT AND WALL	S.F.	2765	\$80.00	\$221,200.00
9	0910170	METAL BEAM RAIL (TYPE R-B 350)	L.F.	100	\$22.00	\$2,200.00
10	0911923	R-B END ANCHORAGE TYPE I	EA.	2	\$1,175.00	\$2,350.00
11	0911924	R-B END ANCHORAGE TYPE II	EA.	2	\$1,170.00	\$2,340.00
12	0913013	5' POLYVINYL CHLORIDE CHAIN LINK FENCE	L.F.	142	\$70.00	\$9,940.00
					SUBTOTAL	\$359,985.00
<u>E. MINOR ITEMS/CONTINGENCY COSTS @</u>			20%			
<u>ADDITIONAL CONTINGENCY @</u>			10%			
TOTAL ESTIMATED CONSTRUCTION COST						\$467,980.50





Wrights Crossing Road



- **At-Grade Intersection with Trail**
- **No Structure Required**





Needles Eye Road



- **Trail Elevated Above Roadway**
- **Existing Stone Abutment at West**
- **No Abutment at East**

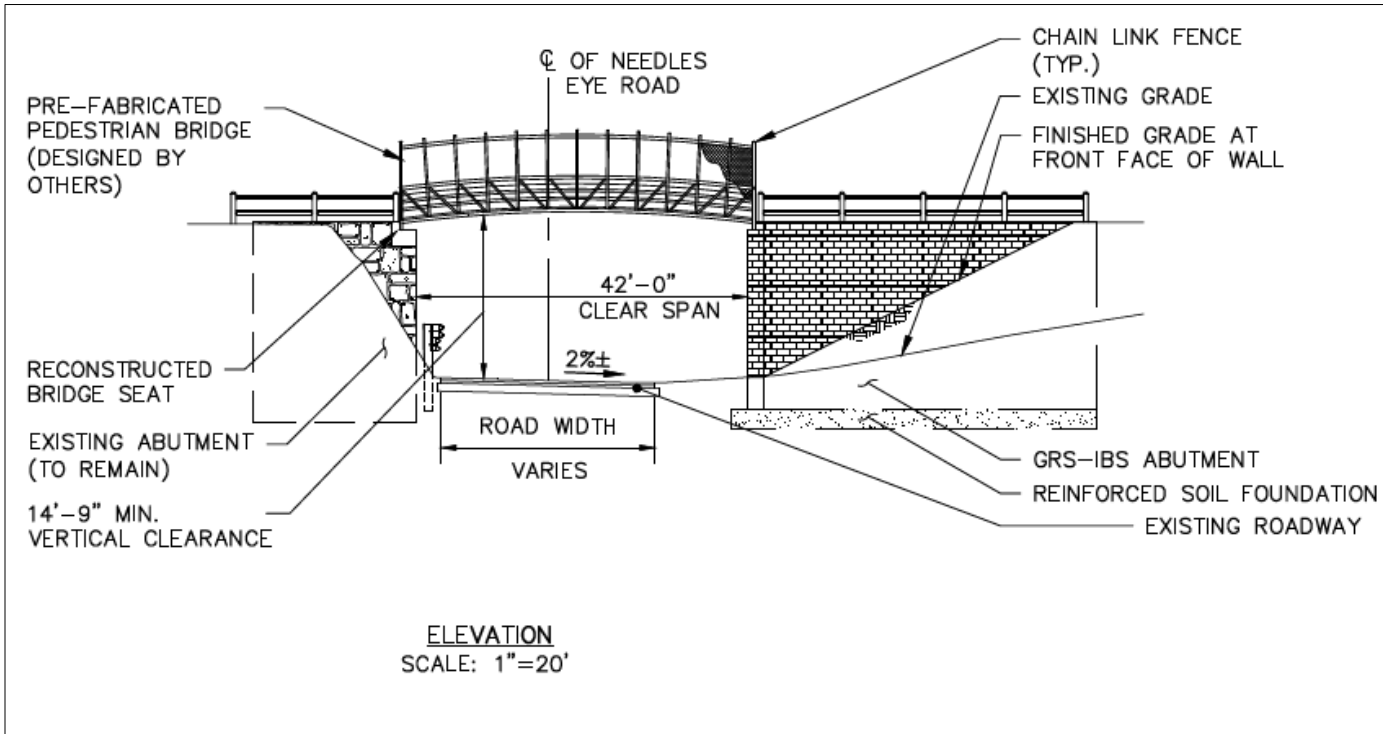




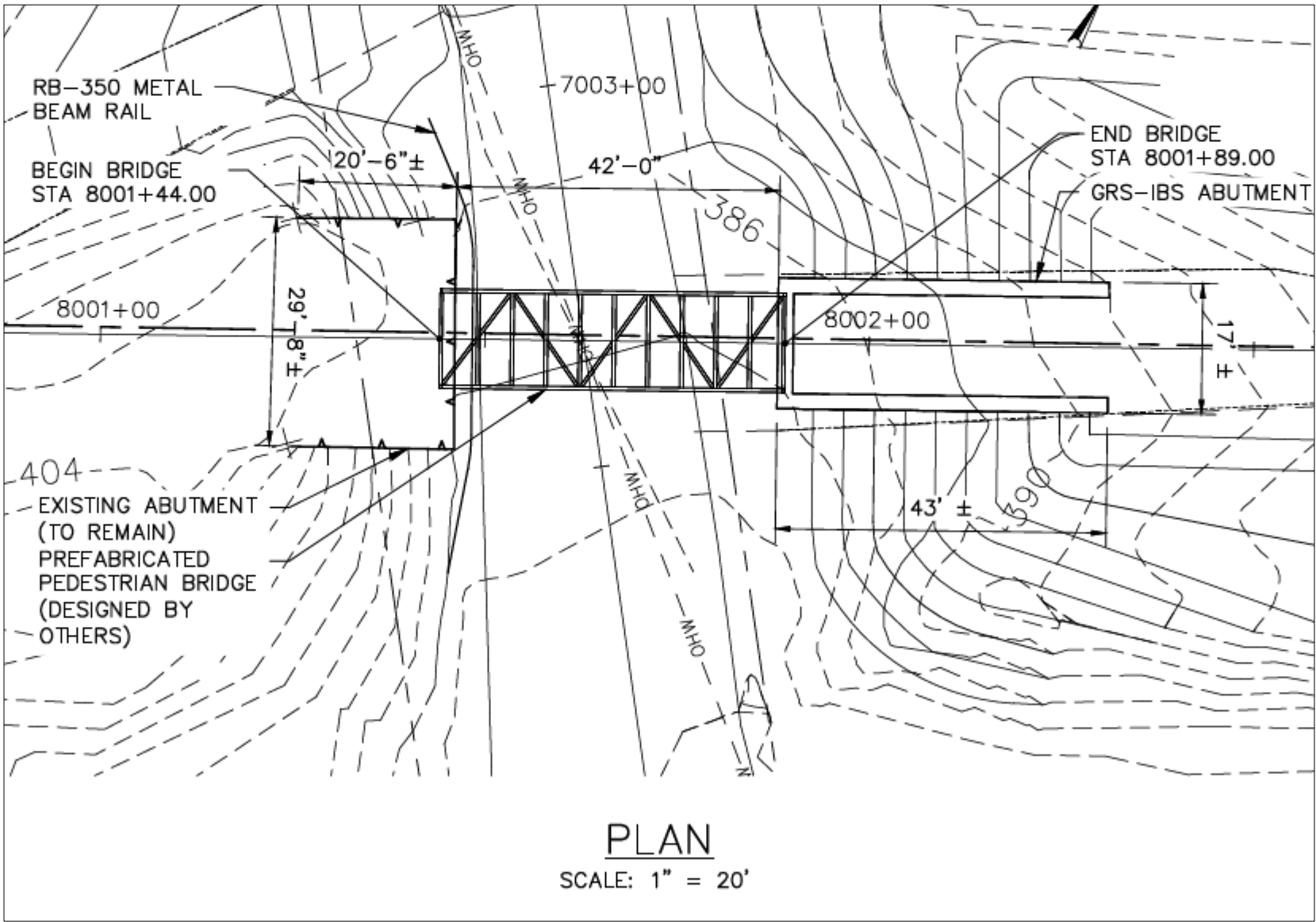
Needles Eye Road



- Trail Elevated Above Roadway
- Existing Stone Abutment at West
- No Abutment at East



TYPE STUDY PRELIMINARY COST ESTIMATE ALTERNATE 1 - PREFABRICATED BRIDGE WITH GRS - IBS ABUTMENT AIRLINE NORTH TRAIL CROSSING PROJECT NEEDLES EYE ROAD CROSSING POMFRET, CT						
NO.	ITEM		UNIT	QUANTITY	PRICE	AMOUNT
1	0203001	STRUCTURE EXCAVATION (EARTH COMPLETE)	C.Y.	725	\$30.00	\$21,750.00
2	0207001	BORROW	C.Y.	25	\$35.00	\$875.00
3	0601000	CLASS "A" CONCRETE	C.Y.	10	\$720.00	\$7,200.00
4	0602000	DEFORMED STEEL BARS	LBS.	1250	\$2.00	\$2,500.00
5	0712021A	GRS-IBS ABUTMENT AND WALL	S.F.	2424	\$80.00	\$193,920.00
6	0906203	SPLIT RAIL FENCE	L.F.	128	\$20.00	\$2,560.00
7	0910170	METAL BEAM RAIL (TYPE R-B 350)	L.F.	50	\$22.00	\$1,100.00
8	0911924	R-B END ANCHORAGE - TYPE II	EA.	2	\$1,170.00	\$2,340.00
9	0913003	6' POLYVINYL CHLORIDE CHAIN LINK FENCE	L.F.	84	\$20.00	\$1,680.00
10	0974001	REMOVAL OF EXISTING MASONRY	C.Y.	10	\$215.00	\$2,150.00
11	xxxxxx	PREFABRICATED BRIDGE	L.S.	1	\$130,000.00	\$130,000.00
					SUBTOTAL	\$366,075.00
<u>E. MINOR ITEMS/CONTINGENCY COSTS @</u>			20%			\$73,215.00
<u>ADDITIONAL CONTINGENCY @</u>			10%			\$36,607.50
TOTAL ESTIMATED CONSTRUCTION COST						\$475,897.50





Route 44 / 169



VIEW LOOKING WEST



VIEW LOOKING EAST

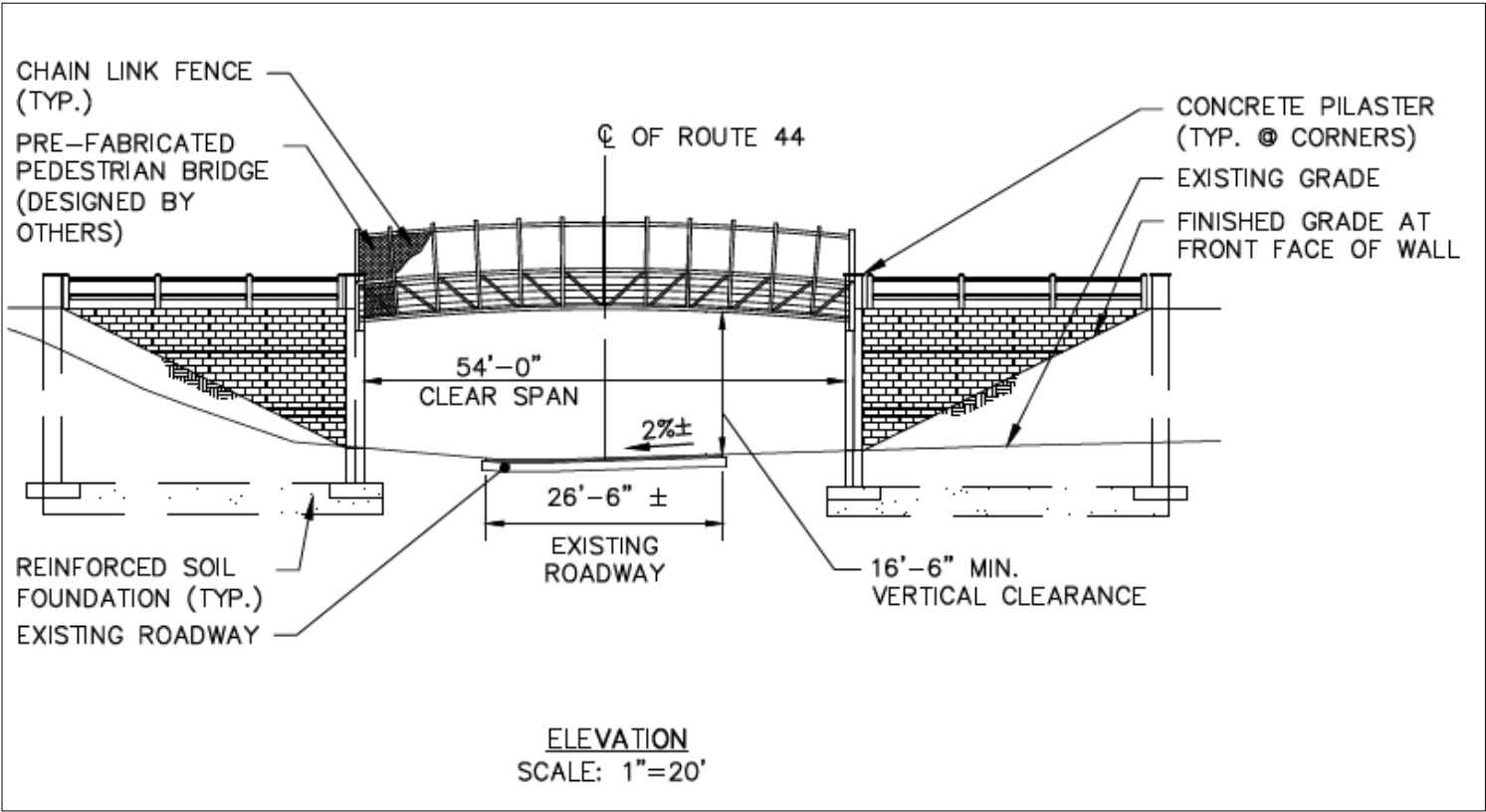
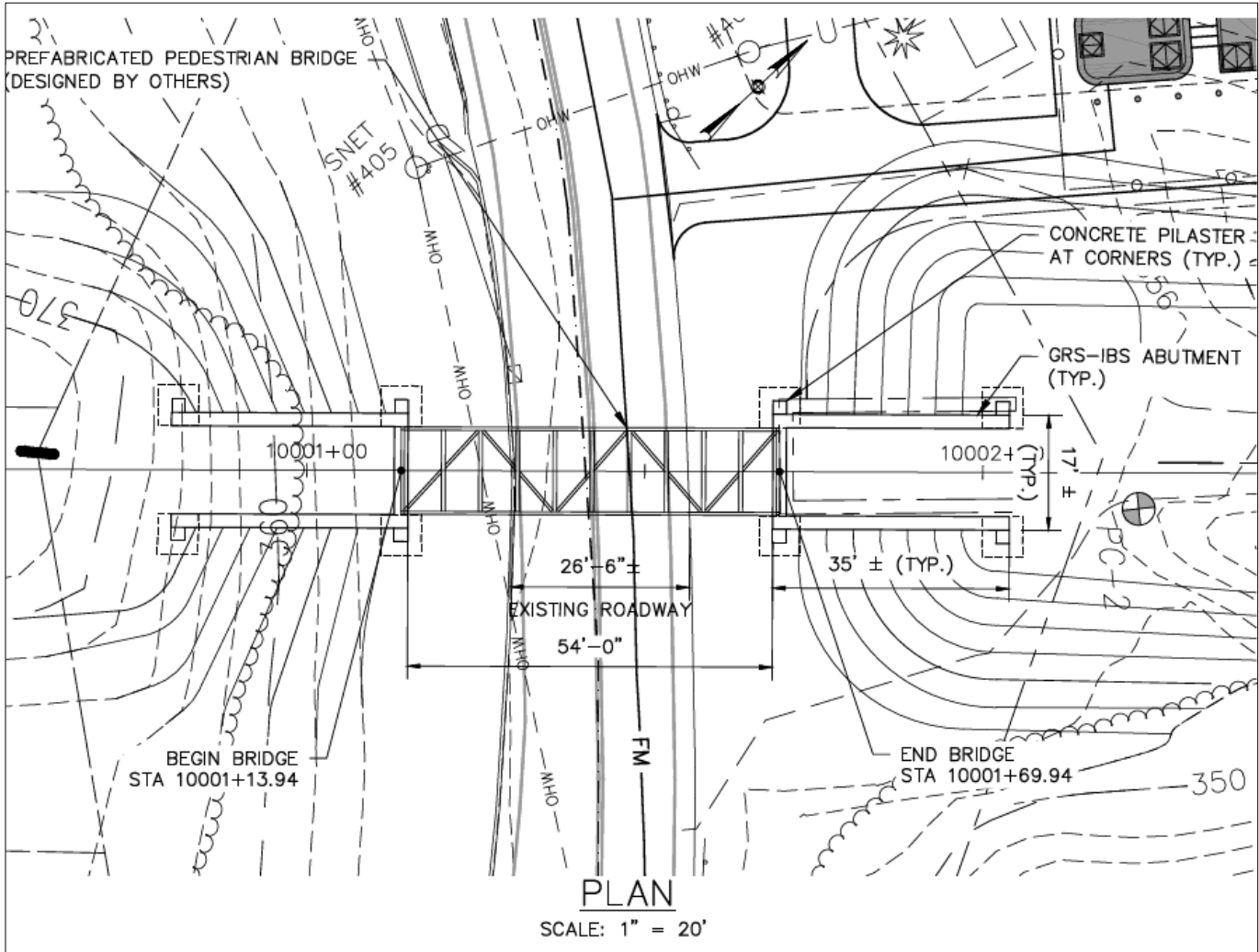
- **Trail Elevated Above Roadway**
- **Major Roadway / State Highway**



Route 44 / 169



- Trail Elevated Above Roadway
- Major Roadway / State Highway



TYPE STUDY PRELIMINARY COST ESTIMATE ALTERNATE 1 - PREFABRICATED BRIDGE WITH GRS-IBS ABUTMENTS AIRLINE NORTH TRAIL CROSSING PROJECT ROUTE 44 CROSSING POMFRET, CT						
NO.	ITEM		UNIT	QUANTITY	PRICE	AMOUNT
1	0203001	STRUCTURE EXCAVATION (EARTH COMPLETE)	C.Y.	725	\$30.00	\$21,750.00
2	0207001	BORROW	C.Y.	85	\$35.00	\$2,975.00
3	0712021A	GRS-IBS ABUTMENT AND WALL	S.F.	3400	\$80.00	\$272,000.00
4	0906203	SPLIT RAIL FENCE	L.F.	140	\$20.00	\$2,800.00
5	0913003	6' POLYVINYL CHLORIDE CHAIN LINK FENCE	L.F.	104	\$20.00	\$2,080.00
6	xxxxxx	PREFABRICATED BRIDGE	L.S.	1	\$140,000.00	\$140,000.00
					SUBTOTAL	\$441,605.00
			E. MINOR ITEMS/CONTINGENCY COSTS @	20%		\$88,321.00
			ADDITIONAL CONTINGENCY @	10%		\$44,160.50
TOTAL ESTIMATED CONSTRUCTION COST						\$574,086.50



Route 44 / 169



BIRD'S EYE VIEW



Route 44 / 169



VIEW FROM TRAILSIDE



Route 44 / 169



DRIVER'S EYE VIEW



Structure Aesthetics

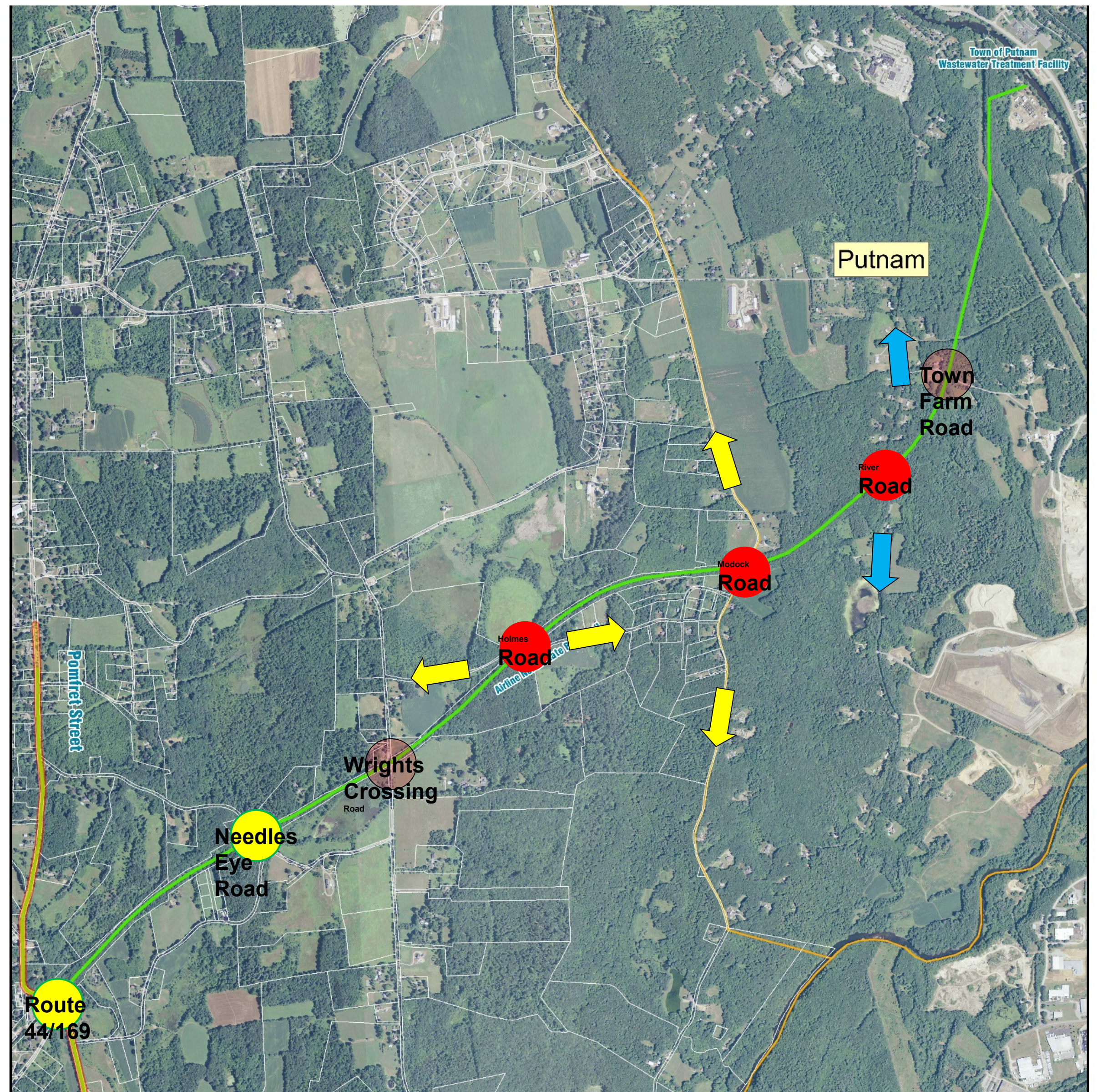




Construction Impacts

Construction Impacts:

- Pomfret, Needles Eye
 - Minor Impacts
- Holmes, Modock
 - Detour 1 → (Common)
- River
 - Detour 2 →
- Wrights, Town Farm
 - Minimal





Structure Costs Summary

Structure	Location	Type / Trail Crossing	Opinion of Cost
1	Town Farm Road	At-Grade	\$15,000
2	River Road	Bridge / Trail Under	\$731,000
3	Modock Road	Bridge / Trail Under	\$981,000
4	Holmes Road	Bridge / Trail Under	\$468,000
5	Wrights Crossing Road	At-Grade	\$15,000
6	Needles Eye Road	Bridge / Trail Over	\$476,000
7	Route 44/169	Bridge / Trail Over	\$574,000
TOTAL:			\$3,260,000



Funding Program

FUNDING SOURCES (FFY 2016-2020):

- Fixing America's Surface Transportation Act (FAST Act)
- Surface Transportation Block Grant (STBG) Program
- Transportation Alternatives Program (TAP)
- \$500,000 Minimum Funding Allocation
- Competitive Selection Process
- Solicitation through Councils of Governments
- Eligibility based on "***Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users.***"



PROJECT ALLOCATION:

80% Federal: \$2,719,766

20% Match (CT DOT): \$ 543,953

TOTAL AVAILABLE: \$3,263,719



Summary & Wrap Up

QUESTIONS?