



DUNBAR DIP IMPROVEMENT PROJECT

Public Meeting #1

SEPTEMBER 29, 2026



INTRODUCTIONS



Pennsylvania
Department of Transportation



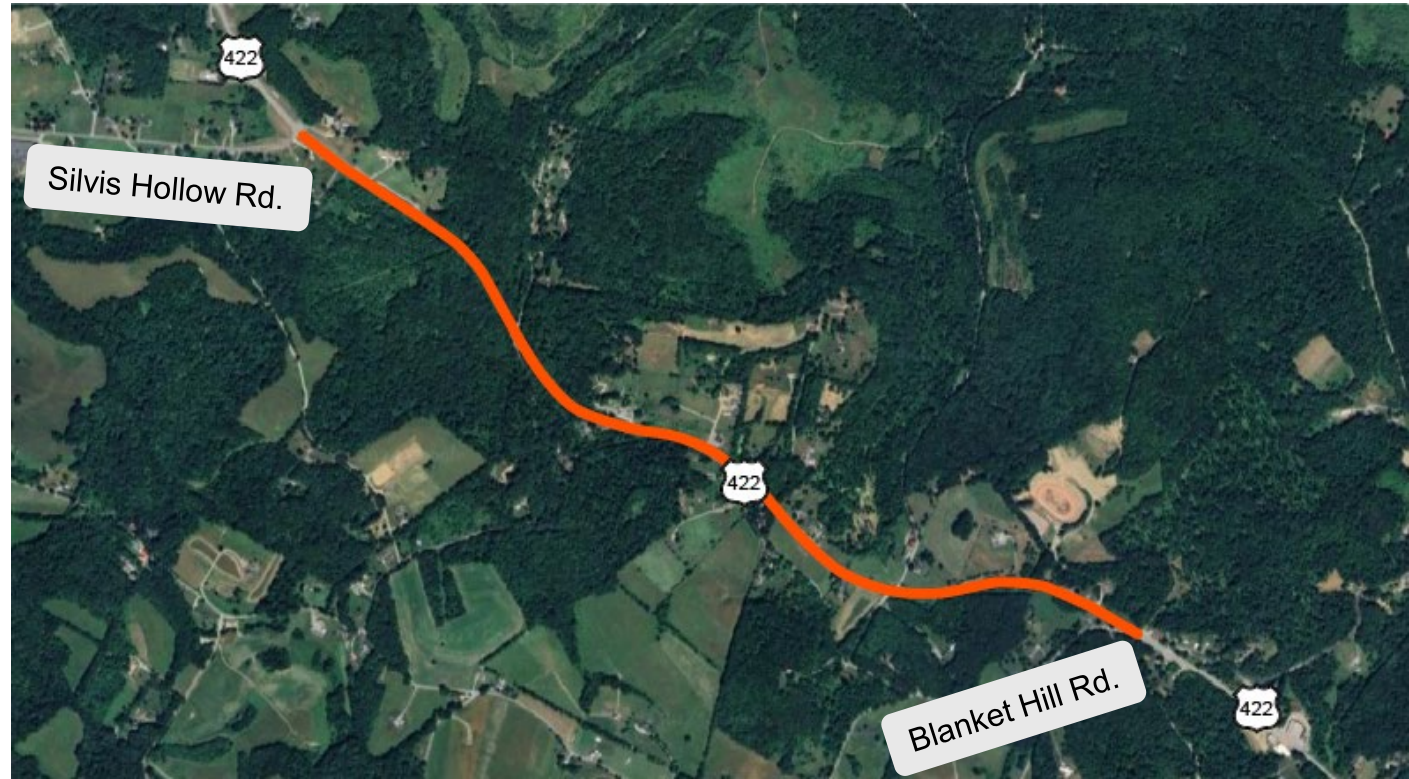
U.S. Department of Transportation
**Federal Highway
Administration**



PROJECT OVERVIEW

Dunbar Dip Project

- Located in Kittanning Township, Armstrong County
 - Two miles between Route 2012 (Silvis Hollow Rd.) and Route 2007 (Blanket Hill Rd.)
- Current Phase: Environmental Background & Alternatives Analysis



What We Heard



Improve Regional connections to Pittsburgh



Enhance Safety throughout the Route 422 Corridor



Eliminate trucks getting stuck on Blanket Hill during winter storms forcing lane closures



Reduce traffic delays



Minimize property impacts



Project Purpose

- The purpose of this project is to address the geometric deficiencies of Route 422 within the study area and thereby improve the roadway to provide reliable connectivity for travelers, commuters, commercial users, emergency services, and local residents.



Project Needs

Facility Deficiencies

- Existing vertical curves and sight distances of Route 422 and intersections with Rinker Hollow Road and Green Tree Road, Simpson Church Road and Cornish Road, and Blanket Hill Road do not meet current minimum design criteria for rural arterial roads.
- The maximum allowable vertical grade for this type of roadway is 4%. Many grades in the project study area are well over that at approximately 9%.
- Existing shoulders are roughly 4'-0" wide, less than current 8'-0" standards
- According to stakeholders, Route 422 is difficult to maintain in winter and occasionally causes the temporary closure of Route 422.



PURPOSE & NEED

Project Needs

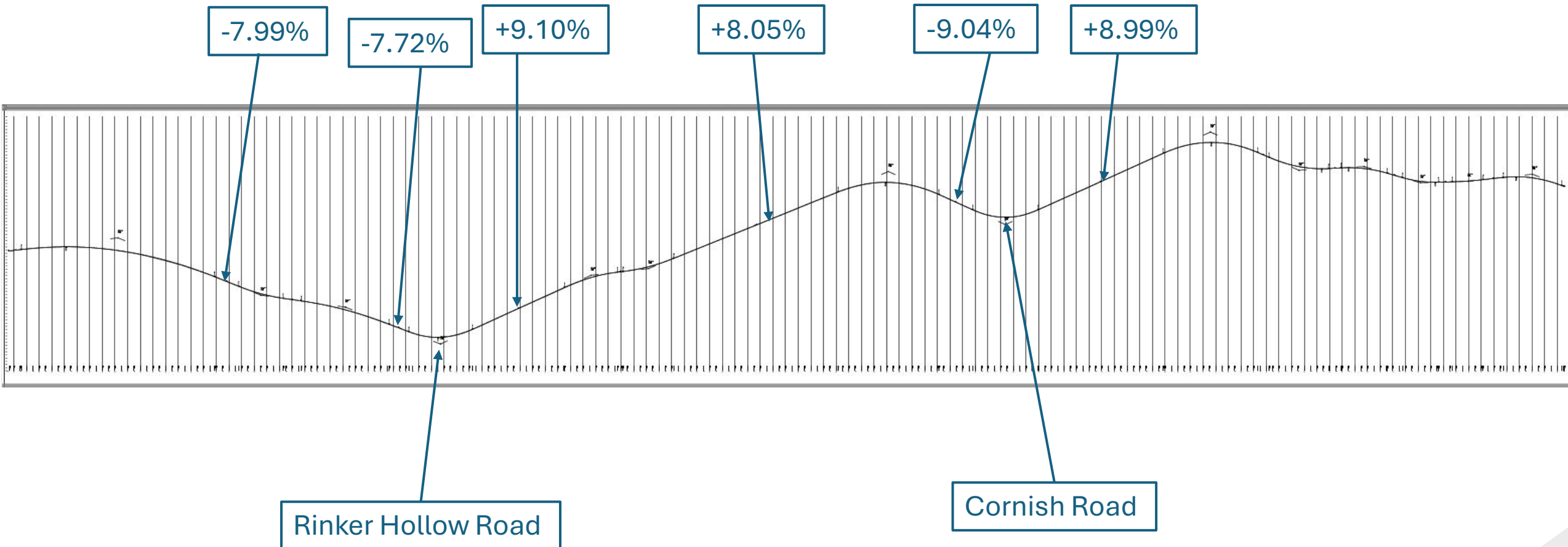
System Linkage and Mobility

- Route 422 is a critical arterial for east/west travel in Armstrong & Indiana Counties.

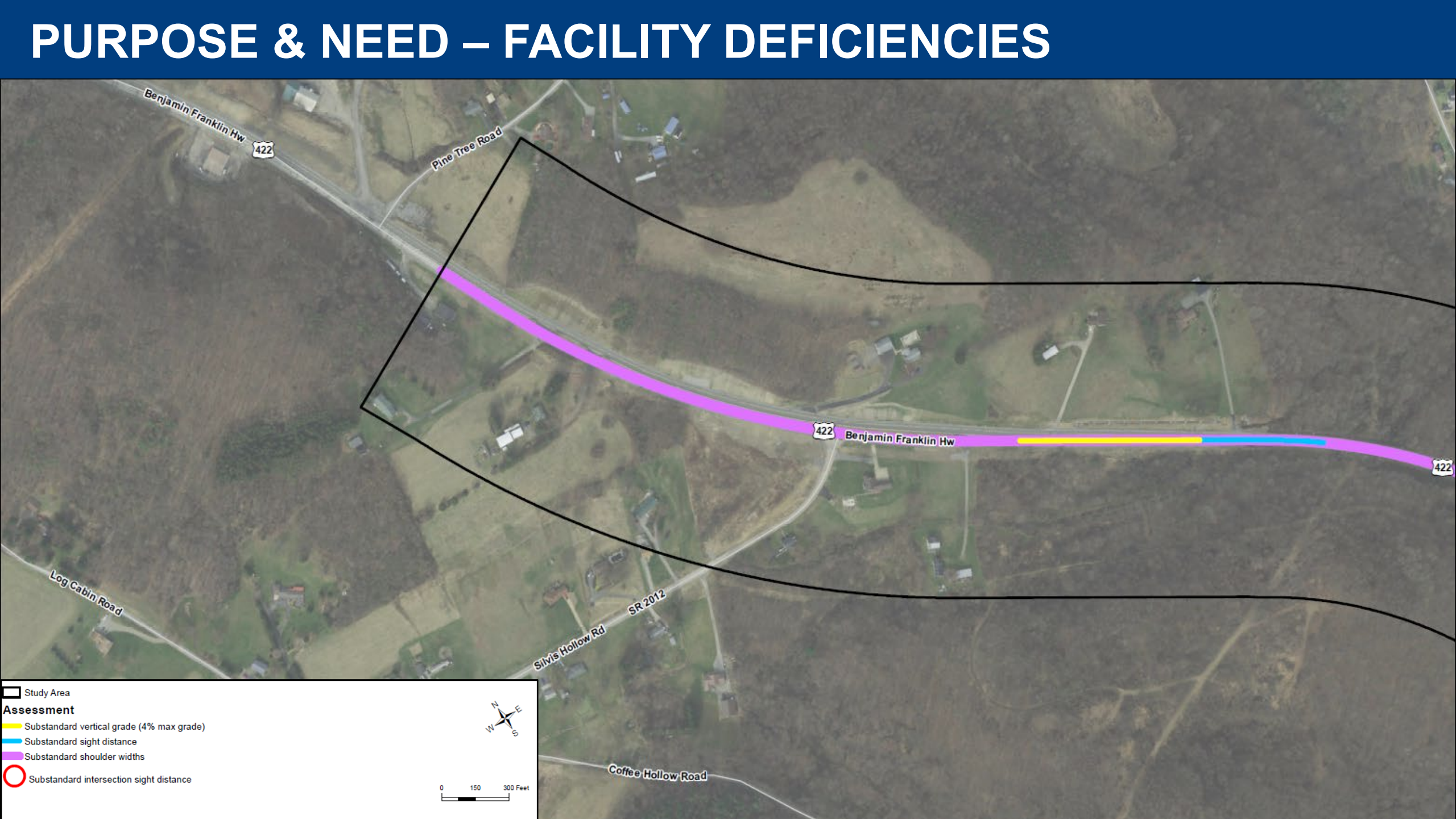


PURPOSE & NEED – FACILITY DEFICIENCIES

Existing Vertical Alignment/Profile



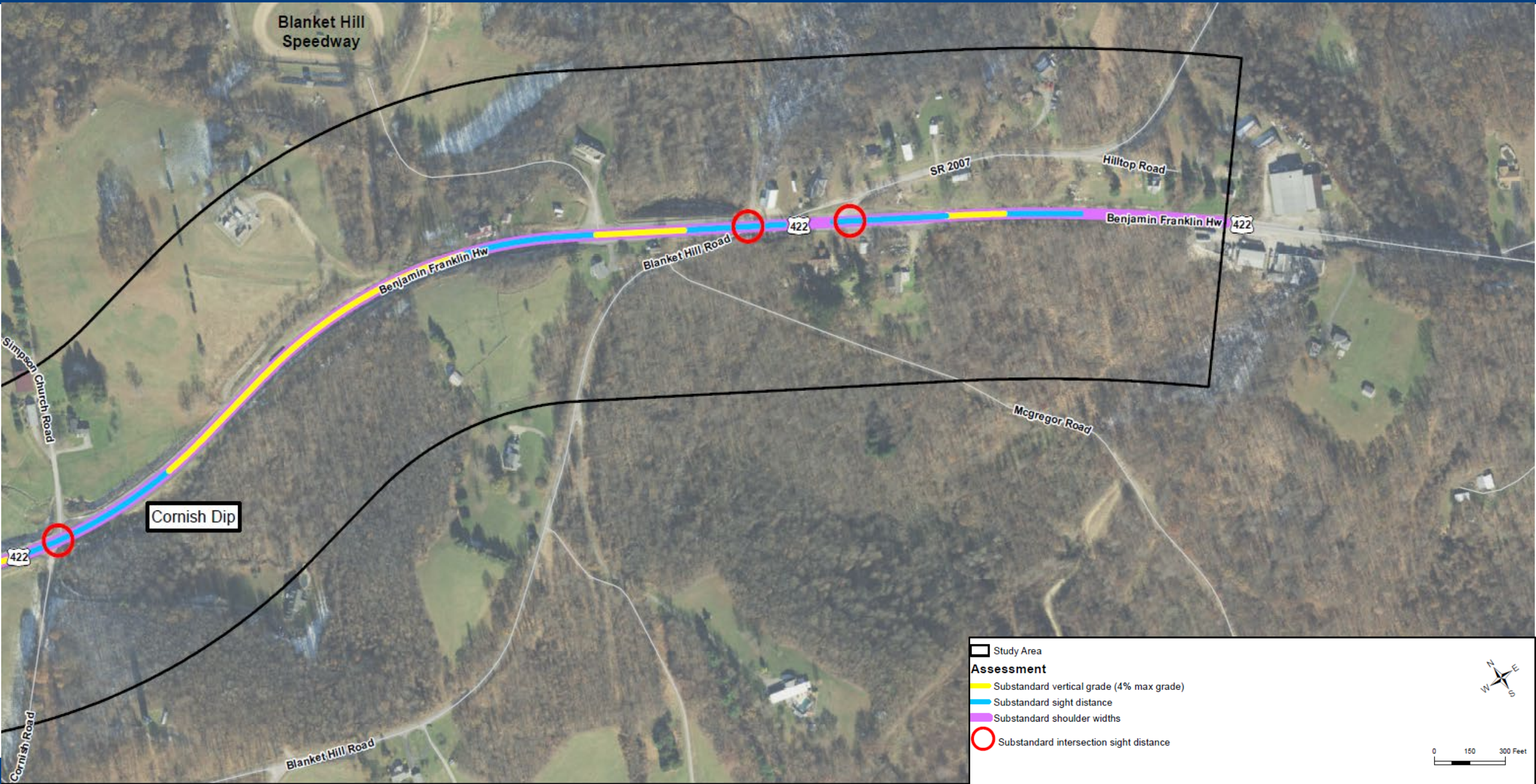
PURPOSE & NEED – FACILITY DEFICIENCIES



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PURPOSE & NEED – FACILITY DEFICIENCIES



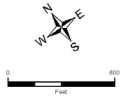
ENVIRONMENTAL BACKGROUND



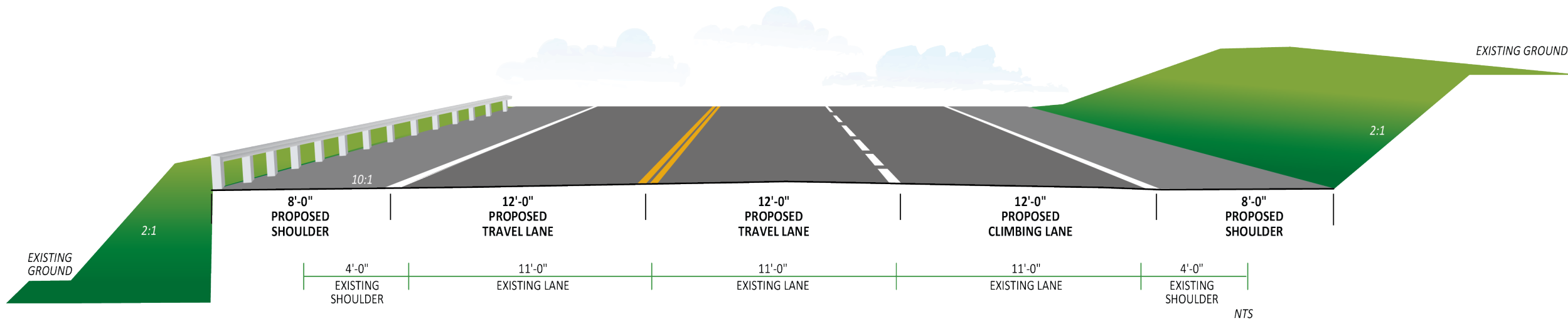
Preliminary Environmental Features

Dunbar Dip
Kittanning Township
Armstrong County, Pennsylvania
Source: ERI Streaming Aerial

- Delineated Streams
- Delineated Wetlands
- Chapter 93 Streams
- Potential Farmland
- NMI Wetlands
- FEMA Zone A
- PA DEP Oil and Gas Wells
- Previously recorded above-ground resource that has not yet been evaluated



Proposed Typical Section



ALTERNATIVES

LEGEND

- | | |
|---|---------------|
|  | ALTERNATIVE A |
|  | ALTERNATIVE B |
|  | ALTERNATIVE C |

DUNBAR DIP IMPROVEMENT PROJECT
SR 422, SECTION 19D
CONCEPTS FOR SAC MEETING #1
OCTOBER 29, 2024

NOT TO SCALE

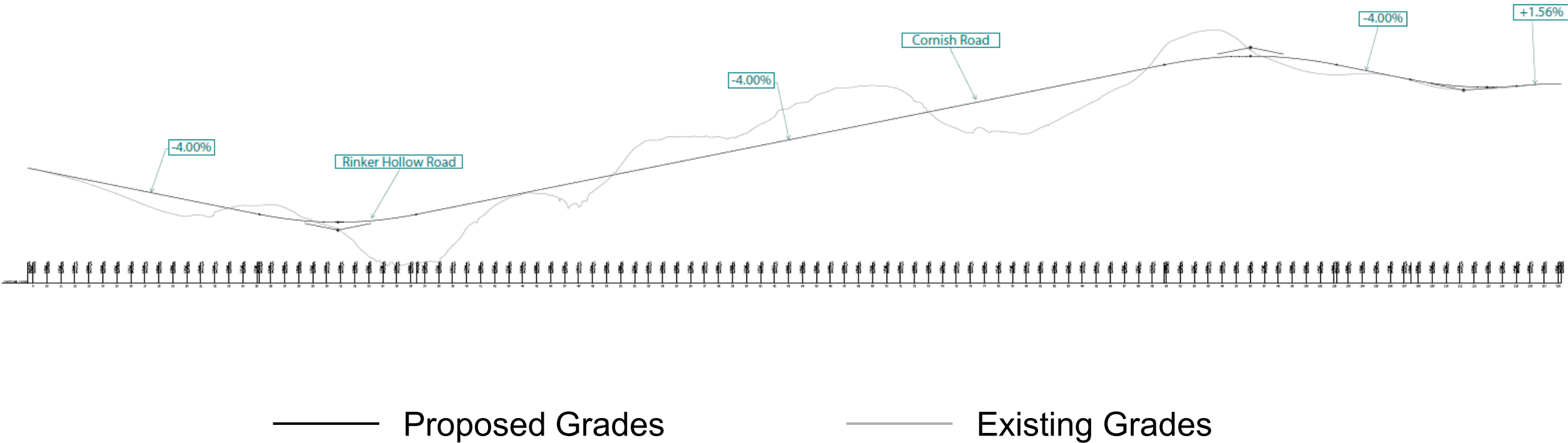


Refined Alternative A



REFINED ALTERNATIVES

Refined Alternative A Vertical Alignment/Profile



REFINED ALTERNATIVES

Refined Alternative A Highlights

- Closest alternative to existing Route 422
- Can construct while maintaining traffic on existing Route 422
- Reconfigured local roads and driveway access points
- Remove existing Route 422 where not needed for property access
- Most impactful to utilities and streams
- Least impactful to farmland



REFINED ALTERNATIVES

Refined Alternative A Highlights

- Right and left turn lanes added
- Truck climbing lane limits determined
- Converts Cornish Road to right-in, right-out
- Relocates Simpson Church Road intersection 2000' to the west
- Moves Blanket Hill Road (Route 2007) to the east

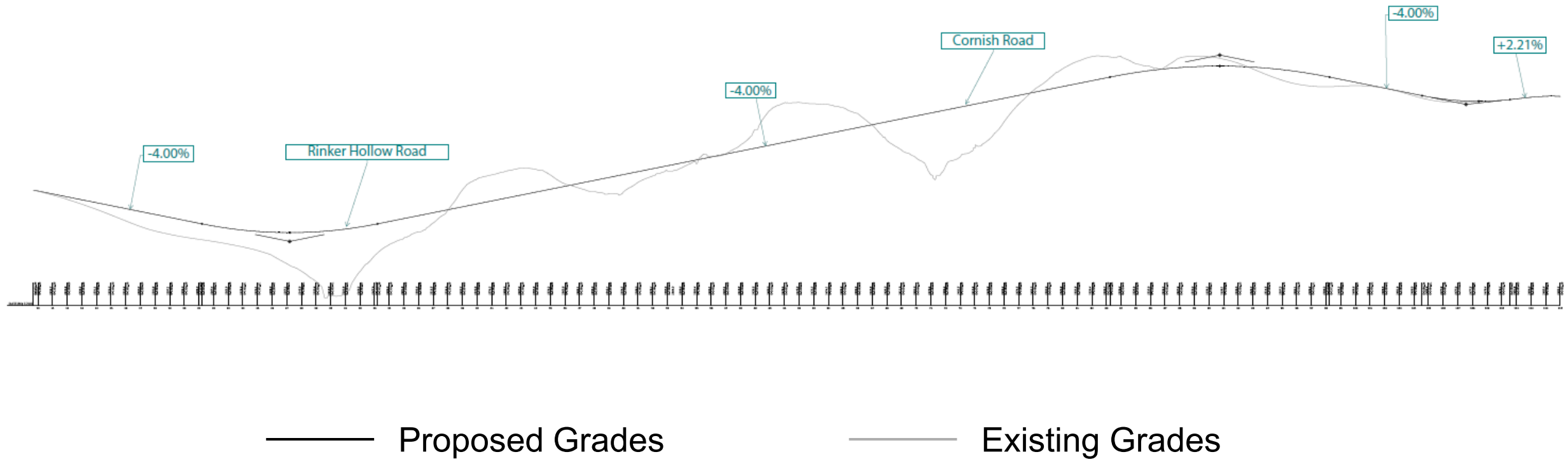


Refined Alternative B



REFINED ALTERNATIVES

Refined Alternative B Vertical Alignment/Profile



REFINED ALTERNATIVES

Refined Alternative B Highlights

- Stays completely north of existing Route 422
- Long bridge over Rinker Hollow Road, adjacent stream/wetlands
- Rinker Hollow Road, Green Tree Road use existing Route 422 to connect with proposed alternative
- Some longer sections of existing Route 422 remain where needed for property access
- Splits some properties



REFINED ALTERNATIVES

Refined Alternative B Highlights

- Most impactful to wetlands and farmland
- Least impactful to streams
- Right and left turn lanes added
- Truck climbing lane limits determined
- Converts Cornish/Simpson Church Roads to right-in, right-out
- Moves Blanket Hill Road (Route 2007) to the east



REFINED ALTERNATIVES

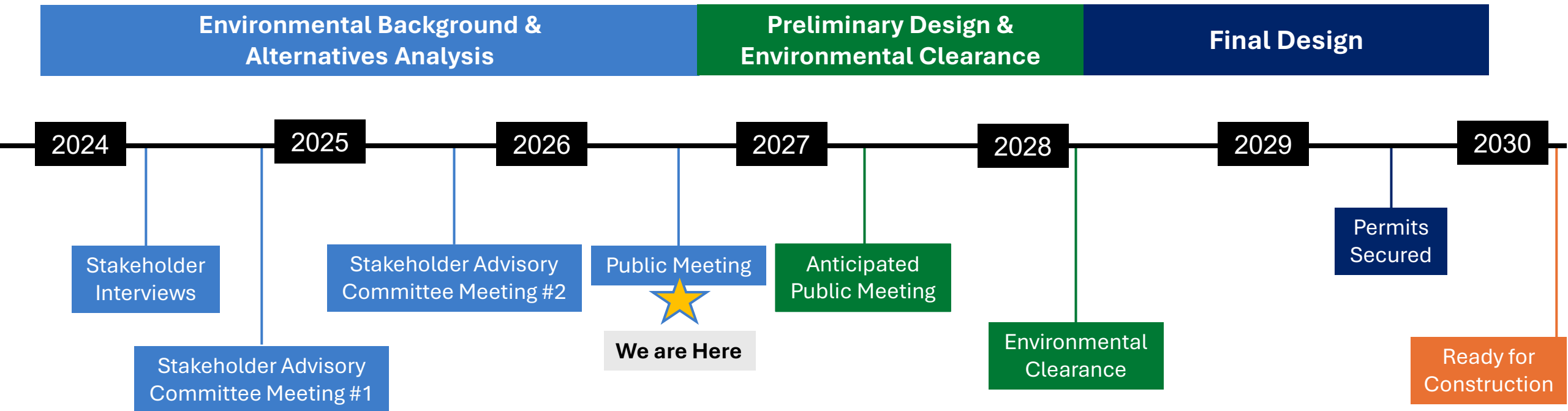
Refined Alternatives Comparison Matrix

ALTERNATIVE			No Build	ALT A (Online Alignment)	ALT B (Northern Alignment)
RIGHT-OF-WAY	No. of Properties Impacted	Residential	0	40	35
		Commercial	0	4	4
	No. of Displacements	Residential	0	9	10
		Commercial	0	1	1
	Required Right-of-Way (Acres)		0.0	39	34
UTILITY	Total Conceptual Impact Length		0	32,200'	31,600'
ENVIRONMENTAL	Wetland Impacts (Acres)		0	0.5	1.3
	Perennial & Intermittent Stream Loss (Linear Ft.)		0	4,500	3,000
	Gas/Oil Wells (Number)		0	3	3
	Potential Farmland Impact (Acres)		0	4.3	6.9
	Impaired Economic Viability of Farm Operations		0	0	2
FUTURE MAINTENANCE	Township Economic Burden of Existing Route 422 (Linear Ft.)		0	2,700'	3,600'
	Bridge Deck Area (Square Ft.)		0	0	20,000



NEXT STEPS

Tentative Schedule



CONTACT

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OPEN DISCUSSION