



# MOUNT VERNON ROAD (CR 34/14) SIDEWALK DESIGN STUDY

PUTNAM COUNTY, WEST VIRGINIA



STATE PROJECT  
U340-34/14-0.00 00

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**FINAL REPORT**

PRESENTED TO:  
WEST VIRGINIA DEPARTMENT  
OF TRANSPORTATION,  
DIVISION OF HIGHWAYS

**TABLE OF CONTENTS**

Project Location ..... 1  
 Introduction ..... 1  
 Project Summary..... 2  
 Existing Typical Section ..... 3  
 Proposed Typical Sections ..... 3  
 Existing Bridge Data ..... 3  
 Geotechnical Overview ..... 3  
 Environmental Overview ..... 4  
 Permitting Overview ..... 5  
 Hydraulics Overview ..... 5  
 Temporary Traffic Control ..... 5  
 Alternate Descriptions ..... 6  
 No-Build Alternate ..... 6  
 Alternate 1 ..... 6  
 Alternate 1A ..... 6  
 Alternate 2 ..... 6  
 Alternate 2A ..... 8  
 Alternate 3 ..... 8  
 Alternate 4 ..... 9  
 Alternates 5 and 6 ..... 10  
 Traffic Analysis ..... 13  
 Background Traffic Information..... 13  
 Traffic Projections ..... 13  
 Existing Traffic Conditions..... 13  
 Design Year 2035 Projected Conditions..... 15  
 Pedestrian Crossings on Mount Vernon Road..... 16  
 Pedestrian Safety Issues ..... 16  
 Accident Analysis and Proposed Safety Improvements ..... 17  
 Alignment..... 17  
 Accident Data ..... 17  
 Accident Analysis ..... 17  
 Intersection Sight Distance ..... 18  
 Suggested Safety Countermeasures ..... 18  
 Preferred Build Alternate..... 19

Evaluation Matrix..... 20  
 Design Criteria Summary ..... 22  
 Cost Estimates..... 25  
 Acquisition Tables ..... 29  
 Flood Insurance Rate Map ..... 34  
 National Wetlands Inventory Map ..... 36  
 9/4/15 Design Report Field Review Meeting Minutes ..... 38  
 1/28/16 Design Report Office Review Meeting Minutes ..... 41  
 Appendix 1 Design Study Drawings ..... 44

**FIGURES**

Figure 1: Vicinity Map ..... 1  
 Figure 2: Looking South on Mount Vernon Road (East Side of Project)..... 2  
 Figure 3: Looking North on Mount Vernon Road (West Side of Project) ..... 3  
 Figure 4: Mount Vernon Baptist Church Addition (Looking West)..... 4  
 Figure 5: Mount Vernon Baptist Church Cemetery (Looking West)..... 5  
 Figure 6: Existing 24” HDPE West of the Mount Vernon Baptist Church (Looking South)..... 5  
 Figure 7: Looking West on Mount Vernon Road at the Cemetery ..... 7  
 Figure 8: Looking West on Mount Vernon Road Showing Typical Utility Conflicts..... 8  
 Figure 9: Looking West on Christopher Street in White Pines Subdivision ..... 11  
 Figure 10: Looking South on Derek Drive in White Pines Subdivision..... 11  
 Figure 11: Looking West along the White Pines Off-Street Alignment Corridor..... 11  
 Figure 12: Looking East at Animal Hospital Entrance with the Cemetery on the Right in the Distance ..... 11  
 Figure 13: Mount Vernon Baptist Church..... 12  
 Figure 14: Typical Access and Utility Locations ..... 12  
 Figure 15: Proximity to I-64 at Controlled Access Fence at Mount Vernon Road “Horseshoe” ..... 12  
 Figure 16: Looking eastward from west end of Westbury Drive..... 12  
 Figure 17: Existing Year Volumes and Analysis ..... 14  
 Figure 18: Looking Southward from WV 34 at Scott Lane (No Pedestrian Signal Equipment) ..... 15  
 Figure 19: Looking Westward on WV 34 at Mount Vernon Road at Pedestrian Countdown Equipment .... 15  
 Figure 20: Design Year Volumes and Analysis.....16

**TABLES**

Table 1: Level of Service Thresholds ..... 13  
Table 2: Accident Data ..... 17  
Table 3: Accident Rate ..... 18

**ACRONYMS**

- AASHTO** - American Association of State Highway and Transportation Officials
- ADA** – Americans with Disabilities Act
- ADT** – Average Daily Traffic
- DD** – Design Directive, West Virginia Department of Transportation Division of Highways
- LRFD** - Load and Resistance Factor Design
- NHS** – National Highway System
- PAR** – Pedestrian Access Route
- PCP** – Pedestrian Circulation Path
- PROWAG** – Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way
- ROW** – Right-of-Way
- RRR** – Resurfacing, Restoration, and Rehabilitation Projects
- WVDOH** – West Virginia Division of Highways

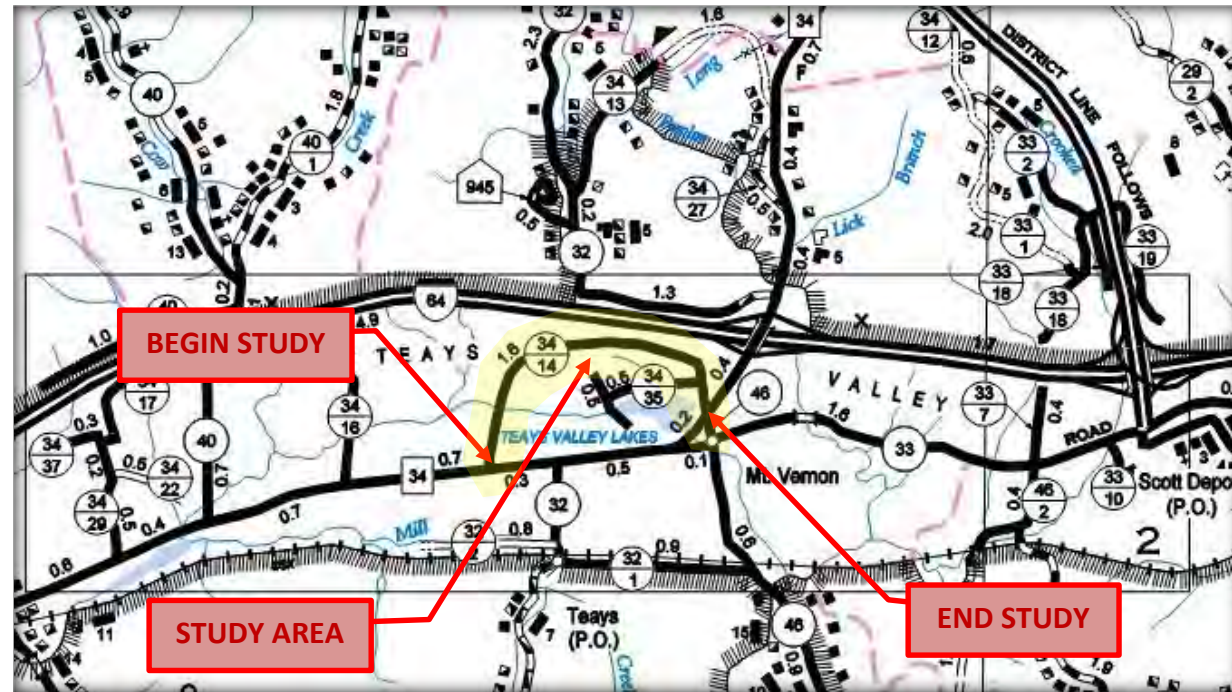


Figure 1: Vicinity Map

## Project Location

Mount Vernon Road (CR 34/14) is located in the unincorporated community of Mount Vernon. The unincorporated community is centered on the intersection of Teays Valley Road (WV 34) and Mount Vernon/Popular Fork Road (CR 46). This Design Study begins at the western intersection of WV 34 and CR 34/14 then follows CR 34/14 to the eastern intersection of WV 34 and CR 34/14. The project area has a mixed land use. The area consists of high density housing, single family housing, medical facilities (CAMC Teays Valley Hospital), commercial facilities, a cemetery, and places of worship.

Mount Vernon Road is signed with a 25 mph speed limit.

## Introduction

The purpose of this Design Study for the West Virginia Division of Highways (WVDOH) is to determine what sidewalk alternates are viable given the traffic volumes, right-of-way constraints, utility conflicts, community impacts, and traffic/pedestrian safety concerns that exist within the project area. The Design Study includes a No-Build Alternate and Eight (8) build alternates.

Alternates 1, 1A, and 5 place the sidewalk on the right side of CR 34/14 (Mount Vernon Road). Alternates 2, 2A, and 6 place the sidewalk on the left side of CR 34/14. Alternate 3 places the sidewalk on alternating sides of Mount Vernon Road to best fit the existing terrain and roadway geometry while providing maximum safety for pedestrians and avoiding potential above ground utility conflicts. Alternate 4 proposes a pedestrian path away from Mount Vernon Road right-of-way and into privately developed subdivisions. This alternate will require research into providing permanent lighting, wayfinding signage, additional maintenance provisions, right-of-way requirements, and security for pedestrians. A concern for this alternate is that the WVDOH may need to acquire right-of-way or permanent easements within the existing subdivision property boundaries to allow construction, future maintenance, and public access to the proposed sidewalk. The WVDOH could be responsible for maintaining the acquired areas.

In addition, the study will contain the following items:

1. A study of pedestrian crosswalk locations for Alternate 3;
2. A conceptual maintenance of traffic plan;
3. A traffic analysis for roadway safety improvement locations;
4. A geotechnical overview of the project area provided by the WVDOH;
5. Mooring curves (see locations in Appendix 1);
6. An environmental overview of the project area.

A construction cost analysis, right-of-way acquisition estimate, and utility relocation estimate are contained within this report for each alternate that was fully developed. All proposed alternates were designed to meet the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way published by the United States Access Board (dated July 26, 2011; also known as PROWAG). Any scenarios not meeting PROWAG situations were deferred to the 2010 ADA Standards adopted by the US Department of Justice and US Department of Transportation. Right-of-way costs were determined based on a 5' offset from the edge of construction limits and up to a 10' offset for temporary construction easements as necessary. The limits noted in the plans are preliminary for this study and not intended for right-of-way and easement purchase. Final right-of-way limits should be further developed and current limits displayed in Appendix 1 Design Study Drawings adjusted as necessary prior to purchase.

Figure 2 shows an example of the infrastructure and property access points along the existing Mount Vernon Road corridor. Utilities, roadway signage, and private mailboxes are commonplace throughout the entire project area. Coordination with the United States Postal Service will be necessary for mailbox relocations for Alternates 1, 1A, 3, and 4.



**Figure 2: Looking South on Mount Vernon Road (East Side of Project)**

## Project Summary

The Mount Vernon Road Sidewalk Design Study includes developing feasible alternates for new pedestrian accommodations. Design features were based upon Mount Vernon Road having a 25 mph design speed. Additionally, all signing and pavement markings within the project should be updated to conform to the current WVDOH Design Directives and the Manual on Uniform Traffic Control Devices. Guardrail location, if required, will be determined in the final design phase.

Eight (8) alternates were developed for this design study. Please refer to Appendix 1 for the design study drawings.

- **Alternate 1** proposes a WVDOH Type I or Type IV (at entrances) Combination Curb and Gutter with a 5' wide concrete sidewalk on the right side of Mount Vernon Road.
- **Alternate 1A** proposes a WVDOH Type I or Type IV (at entrances) Plain Concrete Curb with a 2' wide bituminous shoulder and a 5' wide concrete sidewalk on the right side of Mount Vernon Road.
- **Alternate 2** proposes a WVDOH Type I or Type IV (at entrances) Combination Curb and Gutter with a 5' wide concrete sidewalk on the left side of Mount Vernon Road.

- **Alternate 2A** proposes a WVDOH Type I or Type IV (at entrances) Plain Concrete Curb with a 2' wide bituminous shoulder and a 5' wide concrete sidewalk on the left side of Mount Vernon Road.
- **Alternate 3** proposes pedestrian facilities on alternating sides of Mount Vernon Road. Midblock crossings are proposed to switch pedestrians from opposite sides of the road. WVDOH Type I and Type IV (at entrances) Combination Concrete Curb and Gutter are considered for this alternate. The advantage of this proposal is to try to optimize the best possible alignments from Alternates 1/1A and 2/2A into a combined alternate.
- **Alternate 4** studies the feasibility of using a pedestrian access route that does not entirely follow the alignment of Mount Vernon Road. Alternate 4 is a partial off-alignment alternate and requires property acquisition, wayfinding signage, and pedestrian lighting.
- **Alternate 5** is similar to Alternates 1 and 1A. It proposes a 5' wide bituminous pedestrian access route on the right side of Mount Vernon Road. The pedestrian path will match the grade and cross slope of Mount Vernon Road and be separated from the driving lane by the painted barrier line and rumble strips.
- **Alternate 6** is similar to Alternates 2 and 2A. It proposes a 5' wide bituminous pedestrian access route on the left side of Mount Vernon Road. The pedestrian path will match the grade and cross slope of Mount Vernon Road and be separated from the driving lane by the painted barrier line and rumble strips.

Alternate 1A and Alternate 2A follow the same alignments and are the same width as Alternate 1 and Alternate 2, respectively. Alternates 1A and 2A were primarily developed for construction cost evaluation between using a 2' wide concrete gutter or a 2' wide bituminous shoulder.

Alternate 5 and 6 were deemed not feasible after a site visit held with the WVDOH Engineering Division Project Manager and WVDOH ADA Coordinator on July 16, 2015. Minutes from this meeting are included in this study. The project team decided that Alternates 5 and 6 did not provide adequate pedestrian and vehicular separation. Alternates 5 and 6 will not be further developed.

Pedestrian midblock crossing locations for Alternate 3 were located during the July 16, 2015 site visit. Midblock crossings were located such that adequate site distance was available to motorists to allow for a pedestrian to cross the existing roadway without conflict.

Alternate 4 will connect to either Alternate 1, 2, or 3. The intent of Alternate 4 is to lessen impacts to the Mount Vernon Baptist Church and the cemetery located across the road from the church. An additional location where the sidewalk may not follow Mount Vernon Road is where the controlled access fence along the eastbound side of Interstate 64 is close to Mount Vernon Road. This may cause the potential sidewalk to encroach upon the controlled right-of-way access fence of I-64.

A preferred alternate is not identified in this report but will be determined by the West Virginia Division of Highways upon final environmental review, public input at a future public meeting, and final estimated cost evaluations.

### Existing Typical Section

The existing roadway typical section of Mount Vernon Road consists of two (2) 9-foot wide travel lanes that have been recently resurfaced. The existing shoulders consist of small graded grass shoulders with varying slopes. The surrounding area of Mount Vernon Road has seen years of increased development without much control over the roadway drainage. Most of the roadway drainage sheet flows onto adjacent properties. In other areas, minor ditches store roadway drainage and exit the right-of-way via drainage inlets and/or small channels. There are also some areas that exhibit ponding as the drainage has no place to exit the existing right-of-way.



Figure 3: Looking North on Mount Vernon Road (West Side of Project)

### Proposed Typical Sections

Each of the studied alternates added a 2' shoulder to the existing roadway on the side of the road in which the proposed sidewalk will be constructed. A WVDOH Type I (or Type IV at entrances) Plain Concrete Curb or a Combination Curb and Gutter Section is to be placed with a 5' wide typical sidewalk behind the curb. Alternates 1 and 2 use a Type I Combination Curb and Gutter (2' widening includes the gutter) while Alternates 1A and 2A use a Type I Plain Concrete Curb with a 2' asphalt paved shoulder. Alternates 3 and 4, for the purposes of this study, use a WVDOH Type I Combination Curb and Gutter. A cost for the alternate asphalt shoulder with Plain Concrete Curb (Alternates 1A and 2A) is shown for comparison purposes in this report. Where the proposed pedestrian access route alignment deviates from the Mount Vernon Road alignment and goes off of WVDOH right-of-way, no curbing is proposed.

### Existing Bridge Data

No bridges exist within the project limits.

### Geotechnical Overview

An engineering geologist from the WVDOH Engineering Division Geotechnical Unit visited the site and performed limited research of readily available information for potential problems within the area. Based on a review of the WVDOH internal databases no subsurface data for this immediate project area is readily available, but abundant information is available for the new US 35 / I-64 Interchange that is located approximately 2 miles east of Mount Vernon Road.

Based on the West Virginia Geologic Economic Survey web page, this project is located in the Appalachian Plateau Physiographic Province. The province is characterized by relatively level strata that were deeply eroded after the last stage of mountain building during the Appalachian Orogeny. Strata exposed at the surface in the vicinity of the project area are Pennsylvanian aged rock from the Monongahela Group. This Group consists of non-marine cyclic sequences of sandstone, siltstone, red and gray shale, limestone, and coal. It contains the Uniontown and Pittsburgh Formations and extends from the top of the Waynesburg coal to the base of the Pittsburgh coal.

The Mount Vernon Road Sidewalk alternates are all located within the Teays Valley area, which is a broad valley formed by an ancient river system that drained the area before it was modified by damming of glacial ice and subsequent formation of a glacial lake approximately 2 million years ago. The glacial lake was responsible for depositing thick, fine grained lakebed sediments, which are prevalent throughout the Teays Valley area. These lakebed sediments, generally termed the Minford silt, exhibit high plasticity, low soil strength, and are known to heave when they experience high moisture contents. Therefore, the WVDOH anticipates the project area to be underlain by significant thickness of lakebed soils. Although the Teays River likely deposited abundant granular, alluvial soils, these soils are generally not present within the overburden profile in the project area.

Based on the West Virginia Geological and Economic Survey (WVGES) online mapping, there is no evidence of coal mining in the project area. According to the WVDEP Oil and Gas Well Information Mapping web page, there is one active oil and gas well that belongs to Teavee Oil and Gas, Inc. and is located within a residential neighborhood approximately 0.2 miles west of the intersection of Mount Vernon Road and Cedar Drive. Although it is doubtful the well is actually located as shown on the WVDEP website, the well should pose no construction related issues regardless of its actual location in the vicinity of the project.

Based on the overview provided by the WVDOH, no unusual or significant geotechnical problems were observed that would negatively impact these sidewalk alternates as planned. Unusual mining, geologic, or geotechnical hazards within the project area are also not anticipated. The most significant issue that will require careful planning is the effect the high plasticity soils will have on proposed sidewalks and any retaining structures that are required. For planning purposes, the WVDOH recommend all slopes within soil be excavated and all fill be placed no steeper than 3H: 1V.

## Environmental Overview

Two crucial impacts for this project are located approximately 1.4 miles eastward along Mount Vernon Road from the western terminus of the project. These are the Mount Vernon Baptist Church and the Mount Vernon Baptist Church Cemetery. The church and the cemetery are divided by Mount Vernon Road as shown in Figure 4. According to the church website, the church was founded on July 1, 1843 by two local groups of Baptists from neighboring churches. The original gathering hall was located on a nearby knoll in a remodeled sheep barn made of logs. The barn was later rebuilt in 1859 at the original location. The current location of the church was constructed in 1909. A two-story addition to the church, which encroaches on the WVDOH right-of-way, appears to have been constructed in 1956 according to the website information. That addition can be seen in Figure 4 just adjacent to the roadway where the original portion (darker brick far right of photo) is the 1909 original structure.

Figure 5 shows the proximity of the Mount Vernon Baptist Church Cemetery's graves to the roadway. Some of these graves also appear to encroach the WVDOH right-of-way at this location as they are just feet off of the edge of existing pavement. Plots dating back to the late 19<sup>th</sup> and early 20<sup>th</sup> centuries are present in the cemetery.

FEMA Flood Insurance Rate Maps (provided in this design report) were reviewed to determine any potential impacts to the 100 year floodplain in the area. No floodplains or floodways are located within the project limits; therefore, no impacts are anticipated. No wetland areas were apparent in the project limits during the conducted field visits. The National Wetlands Inventory Mapper was also reviewed and no potential impacts were apparent. A review of the National Register of Historic Places showed no properties or landmarks of historic significance in the project area.

A cultural resources investigation will be developed under a separate contact. A Categorical Exclusion (CE) is anticipated.



**Figure 4: Mount Vernon Baptist Church Addition (Looking West)**



**Figure 5: Mount Vernon Baptist Church Cemetery (Looking West)**

### Permitting Overview

This project will require completion of a Site Registration Application (SRA) form with the West Virginia Department of Environmental Protection for a Construction Storm Water National Pollutant Discharge Elimination System (NPDES) General Permit. It is estimated that the construction of this project will disturb approximately 5 acres of land per each of the alternates studied. All water draining from this project will drain to Hurricane Creek which is listed on the 2014 WVDEP Section 303(d) List of Impaired Waters.

### Hydraulics Overview

The project area is not located within a 100 year floodplain and therefore does not have any direct impacts as a result of the construction. Much of the existing roadway drainage sheet flows off of the shoulder into adjacent properties while other areas are collected and carried by inefficient roadside ditches and small storm sewer systems and culverts. The project drainage area is divided into two tributary areas which drain to Hurricane Creek and ultimately the Kanawha and Ohio Rivers, respectively. The largest culvert crossing on the project is an existing 36" CMP which drains an adjacent private pond structure. The pond outlet is controlled with a weir structure prior to entering the 36" CMP. The next largest crossing is a 24" HDPE recently replaced near the animal hospital shown in Figure 6.

Additional 18" CMP crossings are located in various locations throughout the project. A high level calculation of the inlet and storm sewer design was conducted for the purposes of this study; however, a more detailed review will be necessary during the design phase of this project.

Construction of proposed Alternates 2, 3, and 6 will require extension of the 24" structure shown in Figure 6. The structure size is not anticipated to increase as a result of the sidewalk construction. All alternates will be modified to avoid or limit impacts to the 36" CMP located at the private pond (Station 114+45) along Mount Vernon Road.



**Figure 6: Existing 24" HDPE West of the Mount Vernon Baptist Church (Looking South)**

### Temporary Traffic Control

This section addresses the necessary traffic control in order to complete construction of the sidewalk. All traffic control is to be in accordance with the West Virginia Division of Highways, Standard Specifications, Roads and Bridges, Adopted 2010, as amended by the Supplemental Specifications, Current Edition. The WVDOH Manual on Temporary Traffic Control (2006 Edition) was utilized to determine necessary traffic measures for the construction of the sidewalk alternates previously discussed.

Traffic control setups should be phased in small workable sections as the sidewalk construction progresses through the described project. Traffic control devices and work zones will limit the existing roadway width in construction areas. Phasing will allow for areas not under construction to maintain existing traffic flows and patterns. Two to three phases of MOT should be adequate to meet this need.

A Case B1 setup or modified Case B1 should be considered for this project. Case B1 may be utilized during construction hours. During overnight hours, the channelizing devices should be moved to the edge of pavement to allow for two-way traffic when flaggers are not present. All lead-in signs should be equipped with Type B Warning Lights to warn drivers of the construction zones and appropriate speeds for those work zones. Increased driver expectancy will reduce potential for accidents within the work zone. As sidewalk construction progresses, care should be taken to end constructed sidewalks flush with driveways or streets to allow for disabled pedestrian users of newly constructed sidewalk to exit the Pedestrian Access Route (PAR) safely.

## Alternate Descriptions

### No-Build Alternate

For the purposes of the design study, a no-build alternate has been included. The no-build alternate leaves the road in its existing condition and does not provide an additional, PROWAG and ADA compliant area for pedestrians in the roadway right-of-way. The existing roadway has recently been resurfaced improving traction and safety for motorists. In addition, maintenance costs of vehicles will be reduced by this improvement. According to research conducted by TRIP, a national transportation research group, driving on rough roads costs the average West Virginia motorist \$333 annually in extra vehicle operating costs—a total of \$400 million statewide annually. Additional vehicle operating costs result from driving on rough roads and include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear. As a result of the no-build alternate, potential impacts to the Mount Vernon Baptist Church and Cemetery will be avoided. The no-build alternate will be retained as a baseline comparison to all other alternates.

### Alternate 1

Alternates 1 and 2 were developed as a simple consideration of one side versus the other to determine the direct costs and impacts of each option. Alternate 1 considers a sidewalk along the right side of Mount Vernon Road beginning at the western intersection of WV 34 and CR 34/14 and proceeding toward the

eastern intersection of the two roadways. The alternate leaves the existing roadway cross section as it exists (two (2) 9'-wide lanes) while adding a WVDOH Type I or Type IV Combination Curb and Gutter Section and a 5' concrete sidewalk to the right side of the roadway. A 2' level grass berm is proposed behind the sidewalk with varying slopes at 3:1 (Max.) to tie in to adjacent property. Temporary construction easements are required for this alternate to be constructed. Permanent right-of-way takes were determined to allow for post-construction maintenance of the facility.

Two main concerns of this alternate are the existing private pond outfall and embankment near station 114+45 (the Mallard Crossing Subdivision) and the Mount Vernon Baptist Church Cemetery. Other issues that need addressed include steep driveway tie-ins and construction limits that exceed the limits of the existing right-of-way that impact residents' property. Many of the property impacts can be lessened by the use of retaining structures to maintain the existing condition of the residents' yards minus a few feet for the sidewalk addition. Some of the retaining structures may require the use of handrail for fall protection. Utility impacts will also need to be addressed in all alternates – mainly in the form of electric pole relocations.

This alternate was deemed not feasible at the September 4, 2015 Design Report Field Review Meeting due to environmental constraints in the vicinity of the Mount Vernon Cemetery. As a result, CDM Smith did not further study this alternate or Alternate 1A.

### Alternate 1A

Alternate 1A duplicates Alternate 1 with the exception of the curbing utilized along the roadway. Rather than proposing a WVDOH Type I Combination Curb and Gutter, this alternate proposes a 2'-wide asphalt paved shoulder off of the edge of existing roadway with a WVDOH Type I or Type IV Plain Concrete Curb. At this point, the remaining typical follows Alternate 1 – a 5'-wide concrete sidewalk with 2'-wide grassed berm and 3:1 (Max.) cut and fill slopes. This alternate was evaluated strictly to analyze the cost variance in the use of the concrete curb and gutter section versus the use of the asphalt gutter with concrete curb section.

### Alternate 2

Alternate 2 follows the exact typical of Alternate 1 with the exception that the curb, gutter, concrete sidewalk, and grassed berm are located on the left side of the road proceeding from the western intersection of WV 34 and CR 34/14 to the eastern intersection of the two roadways.

While this alternate avoids the Mallard Crossing Subdivision Pond and Mount Vernon Baptist Church Cemetery, it still has utility impacts to overcome and may require an ADA Exceptions Justification Report to be filed for the location near the Mount Vernon Baptist Church addition.

As previously discussed, the church addition was constructed on WVDOH right-of-way sometime around 1956 and has a limiting dimension of 4' from the roadway edge of pavement to the face of the building at the most extreme point. Due to this limiting dimension, the proposed typical section of Alternate 2 cannot fit within the physical constraints provided. Solutions for this are the following:

1. Relocation of the church addition was not considered a feasible option for construction of the sidewalk.
2. A shift of the roadway at this point to gain the necessary width to fit the typical section was also considered. This shift, however, would require an additional 3'-7 3/8" to fit the sidewalk typical section at this point. A shift of the roadway at this point would force the roadway into the Mount Vernon Baptist Church Cemetery opposite of the church addition. As previously mentioned, the graves in this cemetery are extremely close to the roadway and avoidance of them should be priority. This option was not further considered due to this fact.
3. Another solution considered was to transition the Type I Combination Curb and Gutter to a Type I Plain Concrete Curb along the portion of roadway adjacent to the church addition. The length of the plain concrete curb will not include a 2'-wide gutter but will instead abut to the edge of the existing roadway. The roadway at this location happens to be at a high point in the vertical alignment and should see no drainage or spread issues without the gutter. The sidewalk width will transition down as necessary to avoid impacts to the church. This transition will begin from the 5' typical width and transition down to 36" behind the curb (leaving 4 5/8" off of the face of the church wall) at the most extreme point, then transition back to 5' after passing the constrained area near the church addition.

Construction of this option will require an ADA Exceptions Justification Report since the sidewalk width will be less than 4' minimum as required by PROWAG R302.3. The 36" width does, however, meet the minimum requirement of 36" set forth by the 2010 ADA Standards for Accessible Design (Section 403.5.1) as adopted by the US Department of Justice and US Department of Transportation. This could further be dropped down to 32" wide for 24" maximum to further avoid the church as per the exception noted in Section 403.5.1 of the 2010 ADA Standards for Accessible Design.



**Figure 7: Looking West on Mount Vernon Road at the Cemetery**

4. Another consideration follows the premise of Solution 3. This solution, however, will meet PROWAG R302.3 by providing a minimum width of 4' for the Pedestrian Access Route (PAR). This solution will utilize the same curbing as identified in the previous solution. The transition from a 5' sidewalk down to a 4' sidewalk at the most extreme point will still occur. The difference is in the pour of the sidewalk and curb. The curb and sidewalk can be poured monolithically with the trowel line removed from the curb so that the 4' minimum width exclusive of curb (PROWAG R302.3) can be maintained throughout the constrained area. After passing the constrained area the sidewalk and curb can be transitioned back to a 5' sidewalk with Type I Combination Curb and Gutter.

The 4' minimum width can be maintained through the constrained area and transitioned back to a 5' wide sidewalk for a distance less than 200' as required by PROWAG R302.4. Since this solution meets all PROWAG criteria for PAR, it will not require an ADA Exceptions Justification Report.

5. A final solution could be a combination of both Solutions 3 and 4. The variance here is the monolithically poured curb (trowel line removed) and sidewalk will be transitioned at maximum allowable (or flatter) grades to make the PAR flush with the adjacent roadway. This not only provides a 4' minimum PAR at the extreme point but also allows disabled users to use a portion of the adjacent roadway, if necessary, as part of their pedestrian circular path (PCP). A potential negative of this solution is the possibility of freezing on the sidewalk during the winter months. Though the sidewalk would be sloped toward the roadway, there is potential that water could enter the PAR and freeze with this solution. This option would meet all criteria set forth by PROWAG and will not require an ADA Exceptions Justification Report.

Any of the last 3 solutions could be used for Alternate 2. Other solutions may be available but these were the best available solutions determined during this design study. Alternate 2 will also require right-of-way takes and temporary construction easements on private property in order to construct the sidewalk per the developed typical sections.



**Figure 8: Looking West on Mount Vernon Road Showing Typical Utility Conflicts**

### Alternate 2A

Alternate 2A duplicates Alternate 2 with the exception of the curbing utilized along the roadway. In place of the WVDOH Type I Combination Curb and Gutter is a 2'-wide asphalt paved shoulder off of the edge of existing roadway with a WVDOH Type I Plain Concrete Curb. At this point, the remaining typical follows Alternate 2 with a 5'-wide concrete sidewalk with 2'-wide grassed berm and 3:1 (Max.) fill slopes. This alternate was evaluated strictly to analyze the cost variance in the use of the concrete curb and gutter section versus the use of the asphalt gutter with concrete curb section similar to Alternate 1A.

### Alternate 3

Alternate 3 was developed to take the best locations of Alternates 1/1A and 2/2A and combine them for an optimized project. While this alternate may optimize cost and minimize impacts, it also reduces pedestrian safety to a certain degree. This is due to the fact that midblock pedestrian crossings will be necessary to achieve full connectivity of the PAR from the western terminus of the project to the eastern terminus of the project midblock. Pedestrian crossings can be unsafe because they form points of conflict with pedestrian and vehicular traffic.

Typically crossings are placed at signal, stop sign, or yield-controlled intersections as best as possible to reduce the potential for conflicts. In the case of CR 34/14, this cannot be achieved in the existing condition except at the project termini. Between those points, no existing signal, stop, or yield-controlled intersections exist on the route and thus a midblock crossing must be used. Best practices have been used at the proposed midblock crossings to maximize safety crossings for this study. First of all, no crosswalk markings will be proposed at the crossing to make the pedestrian more aware of the roadway and not create the false sense of security sometimes felt by pedestrians at marked crosswalks. A September 2005 FHWA Report concluded that adding marked crosswalks alone without traffic-calming treatments, signals (when warranted), or other substantial improvements is not expected to reduce pedestrian crashes. Also, crossings will be located such that adequate site distance for motorists and pedestrians is provided.

PROWAG R306.2 recommends a pedestrian walking speed of 3.5 fps be used when considering signal phase timing for a signaled crossing. Applying this same principle and considering a crossing distance of 18' (two 9'-wide lanes) along with an average assumed vehicle speed of 35 mph (vehicles appeared to be exceeding 25 mph designated speed limit during field review), CDM Smith determined a sight distance of 264' minimum in a single direction would be adequate to attempt to avoid pedestrian-vehicle conflicts. 250' is the recommended stopping sight distance as per the AASHTO Green Book.

Crosswalks were located such that the eye height of the pedestrian is located at 6" (used as a conservative value) above the proposed surface while the driver's eye of the vehicle was located at 3.5' off of the existing roadway grade. Applying these guidelines along with the best locations from the previous alternates for minimizing cost and impacts, CDM Smith determined 3 crossings would be necessary to achieve the goals of this alternate and of the project. The crossing locations are shown in Appendix 1.

#### **Alternate 4**

For the purposes of this study, Alternate 4 follows the concept of Alternate 3 with the exception of two off-right-of-way alignments of the PAR. Alternate 4 could be used in conjunction with any of the proposed alternates shown in this study; however, for a cost analysis it was used in conjunction with Alternate 3. The main purposes of the off-right-of-way alternate alignments is to avoid the potential impacts to the Mount Vernon Baptist Church and Cemetery by utilizing the White Pines Subdivision streets and to avoid the interstate controlled access fence or costly wall construction near the Westbury Subdivision. The proposed alignment within White Pines will follow along the existing streets of Derek Drive and Christopher Drive just off of CR 34/14. The alignment then veers from Christopher Drive through a field (potentially along a natural gas line utility right of way) directly toward Mount Vernon Road beyond the impact areas to be avoided.

The portion of the alignment in the field off of Christopher Drive in White Pines will require some form of low street lighting for pedestrian safety and visibility at night which has been considered in this design study for cost and feasibility purposes. This portion has also been proposed to be up to 8' wide with two 2' berms to either side of the path. The reasoning behind this is to provide access for emergency vehicles post-construction and to help facilitate construction. At the Westbury Subdivision, an alternate alignment was proposed to follow Westbury Drive directly through the "horseshoe" turn formed by Mount Vernon Road.

PROWAG Guidelines will apply to all sidewalk located along the subdivision streets. The 2010 ADA Standards for Accessible Design will apply to the sidewalk off of the street alignment. All of the alignment outside of the Mount Vernon Road (and WVDOH) right-of-way will require right-of-way takes in order to allow for future maintenance of the sidewalk. Right-of-way may need to be obtained for the entire street of Derek Drive, Christopher Drive, and Westbury Drive to allow for equipment for construction and future maintenance to access the sidewalk. Several impacts to residential property will occur within the White Pines Subdivision in order to make this alternate a reality. As shown in Figure 9, the front yards and driveways of the Christopher Street residences are small. Average distance from edge of street to face of dwelling appears to be 35' to 40'.

Addition of the sidewalk will reduce this distance by another 5' if not more to avoid existing underground utilities. Each home in the subdivision has a brick post mailbox that will require relocation no matter which side of the street the sidewalk is located. In addition, there are several underground utilities lining both sides of the street including water, sewer, and power. High Voltage Electric Lines and towers are also located within the subdivision though it appears there is enough space behind the curbs to avoid the towers. Landscaping is well established by the residents on both sides of the street. Derek Street (Figure 10) provides more space for locating a sidewalk than Christopher Street but still includes most of the obstacles described on Christopher Street.

The existing field off of Christopher Drive appears to be owned by one landowner. Four (4) properties adjacent to that owner's property will not be impacted as a result of the path construction. Figure 11 shows a photograph of the anticipated corridor. The challenge of the field is to maintain a 5% maximum grade to meet 2010 ADA Standards for Accessible Design requirements while being careful to avoid and minimize impacts to existing utilities along this path and minimizing right-of-way needs. In order to meet the requirements, level 5'x5' landing spaces would be provided at 30' (Max.) intervals where necessary until an acceptable grade could be met.

Though the proposal of the White Pines alternate route is intended to avoid the church and cemetery, a portion of the sidewalk will remain proposed up to the apartments prior to and after the church and cemetery to provide accessibility to individuals living in the dwellings at those locations.

The Westbury Subdivision alternate route was chosen to avoid the steep slopes on the inside of the Mount Vernon Road "horseshoe" turn and to also avoid potential impacts to the Interstate 64 controlled access fence. The left side of Westbury Drive as shown in Figure 16 provides an attractive location for a sidewalk. Visually it appears that the utility impacts will be minimal if any. Also there will be minimal right-of-way takes in residents' yards and no brick mailbox relocations as discussed in White Pines. As a result of this option, the WVDOH may have to purchase right of way for Westbury Drive and the sidewalk for construction and future maintenance of the facility.

Alternate 4 was discussed at the September 4, 2015 Design Report Field Review. The WVDOH was uncertain of the right-of-way requirements and the WVDOH environmental section representatives were concerned with land disturbance for Alternate 4. Alternate 4 was thus eliminated from design consideration and not further developed.

## **Alternates 5 and 6**

Alternates 5 and 6 were developed in an attempt to eliminate the need for curb or curb and gutter along the roadway. Eliminating the curb helps to maintain existing drainage patterns along Mount Vernon Road by allowing sheet flow off of the existing pavement and onto adjacent properties similar to existing conditions. Alternate 5 proposes widening the existing roadway by 5' off of the existing edge of pavement to the right side of CR 34/14 similar to Alternates 1 and 1A.

Alternate 6 proposes widening the existing roadway by 5' off of the existing edge of pavement to the left side of the roadway similar to Alternates 2 and 2A. Each of these alternates were deemed inadequate by the WVDOH Engineering Division Project Manager and WVDOH ADA Coordinator during a field meeting held on a July 16, 2015 due to the lack of separation of pedestrians and vehicular traffic. Alternates 5 and Alternate 6 were thus eliminated from design consideration and not further developed.



Figure 9: Looking West on Christopher Street in White Pines Subdivision



Figure 11: Looking West along the White Pines Off-Street Alignment Corridor



Figure 10: Looking South on Derek Drive in White Pines Subdivision



Figure 12: Looking East at Animal Hospital Entrance with the Cemetery on the Right in the Distance



**Figure 13: Mount Vernon Baptist Church**



**Figure 15: Proximity to I-64 at Controlled Access Fence at Mount Vernon Road "Horseshoe"**



**Figure 14: Typical Access and Utility Locations**  
(Mallard Crossing Subdivision Pond on left behind pines)



**Figure 16: Looking eastward from west end of Westbury Drive**

## Traffic Analysis

### Background Traffic Information

The WVDOH indicated that Mount Vernon Road has a 2015 Annual Average Daily Traffic (AADT) volume of 2,710 vehicles per day (VPD) and a projected 2035 AADT of 3,650 VPD. Hence, a total 20-year increase of 35 percent is anticipated, which results in an annual increase of 1.75 percent per year from 2015 through 2035. The pavement design traffic values supplied by the WVDOH are a 65/35 peak hour directional distribution, a K-factor of 17 percent, and 5 percent trucks.

All three signalized intersections were analyzed using Synchro 9.0 software, which follows the 2010 Highway Capacity Manual (HCM) methodology. The following table provides the Level of Service (LOS) delay thresholds from the 2010 HCM:

LOS CRITERIA FOR SIGNALIZED INTERSECTIONS	
LOS	Control Delay Per Vehicle (s/veh)
A	0-10
B	>10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

**Table 1: Level of Service Thresholds**

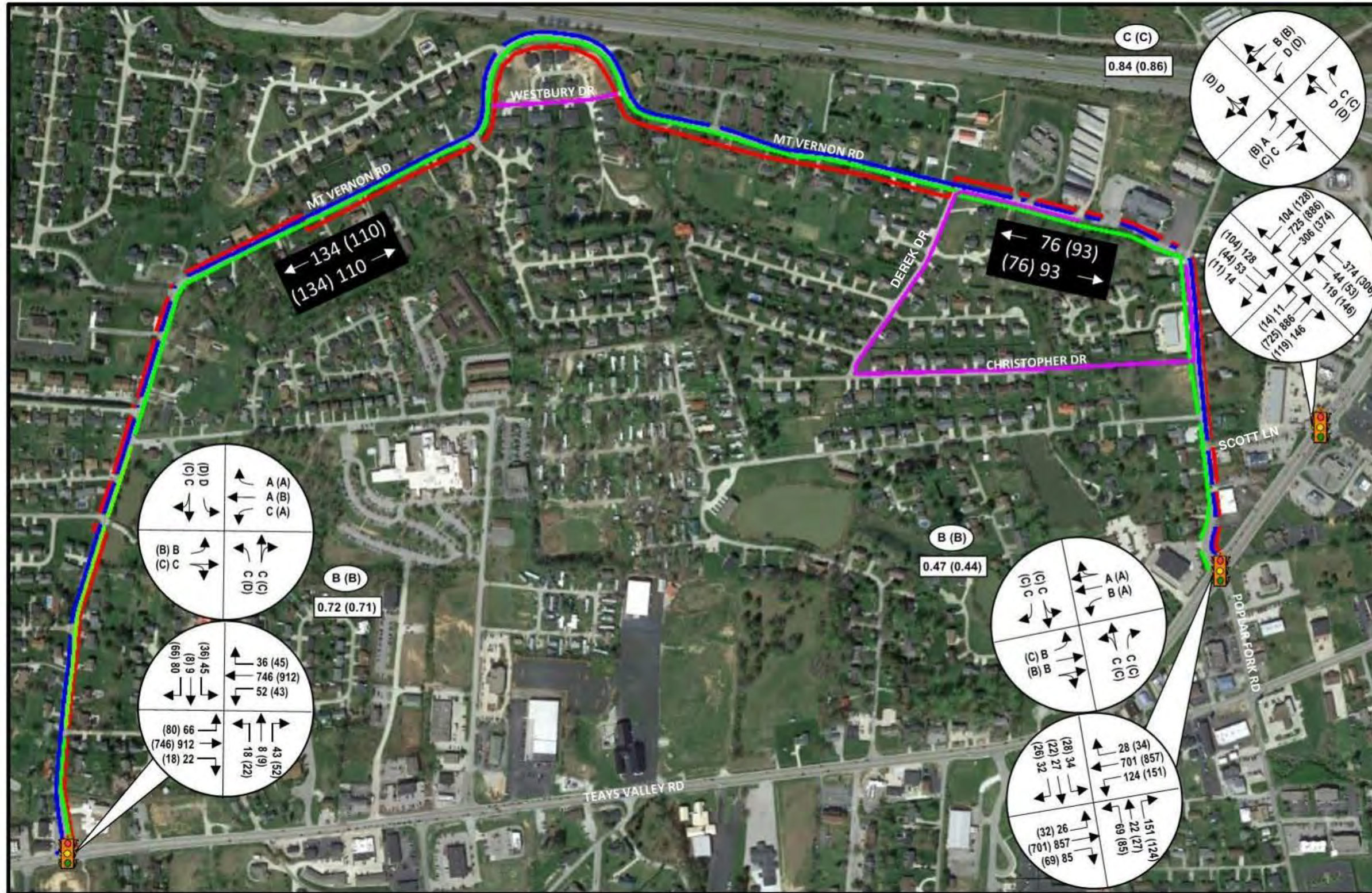
### Traffic Projections

This study included detailed traffic analysis at three intersections: Teays Valley Road (WV 34) at Mount Vernon Road (Western Project Terminus), WV 34 at Mount Vernon Road (Eastern Project Terminus)/Poplar Fork Road, and WV 34 at Scott Lane/Great Teays Boulevard. At each of these intersections, morning and afternoon peak hour turning movement counts were estimated from the daily quadrant 2015 and 2035 turns provided by the WVDOH. Going from the daily quadrant turns to the peak hour turning movement volumes involved applying a directional distribution factor (D) of 55/45 and a percent traffic occurring during the peak hour (K) of 0.09. Note that the factors used for the traffic study were slightly different from those used in the pavement design.

### Existing Traffic Conditions

Figure 17 depicts the existing morning and afternoon peak hour conditions at the three study area intersections. All three intersections operate at an overall LOS C or better in the AM and PM peak hours. Both the west and east Mount Vernon Road intersections with WV 34 operate at an overall LOS B and have volume-capacity (V/C) ratios below 0.75. At the intersection of WV 34 and Scott Lane/Great Teays Boulevard, LOC C conditions exist in the AM and PM peak hours. The V/C ratios at this intersection are 0.84 and 0.86 in the AM and PM peak hours, respectively. At this intersection, WV 34 has protected-permitted left turn phases and the side streets (Scott Lane/Great Teays Boulevard) operate as split phases.

Directional peak hour segment traffic volumes on Mount Vernon Road were estimated from the turning movement counts/quadrant turns on either end of Mount Vernon Road. Those peak hour segment volumes are also shown in Figure 17. There are approximately 170 vehicles per hour (VPH) traveling on Mount Vernon Road near the east end and 240 VPH on the west end.



**EXISTING YEAR  
 VOLUMES & ANALYSIS**

**Mt. Vernon Rd.  
 Sidewalk Design Study**



**LEGEND**

- Traffic Movement
- Lane Geometry
- XX (XX)** AM (PM) Peak Volume
- X (X)** AM (PM) Movement LOS
- (X (X))** Overall LOS
- x.xx(x.xx)** v/c Ratio
- Signalized Intersection
- (XX) XX** Hourly Volume
- Alternate 1/1A
- Alternate 2/2A
- Alternate 3
- Alternate 4

**Figure 17**

The intersection of WV 34 and Mount Vernon Road (Figure 19) on the western project terminus has painted zebra crosswalks across all four legs of the intersection. Sidewalks are provided on both sides of WV 34 but they are stubbed out at Mount Vernon Road. The proposed sidewalk on Mount Vernon Road will tie into the existing stubbed out sidewalk on WV 34. Walk/Don't Walk equipment is provided on all corners of this intersection and appears to be operational.

At the eastern project terminus of WV 34 and Mount Vernon Road, Walk/Don't Walk equipment is provided crossing WV 34 on the south side of the intersection; however, the push buttons do not appear to be functional. There is pedestrian push button sign on the northeastern corner but the button is missing from the signal pole. Painted zebra crosswalks exist on all 4 legs of the intersection.

The intersection of WV 34 and Scott Lane/Great Teays Boulevard has painted zebra crosswalks on all four legs of the intersection and sidewalks on WV 34 stubbed on the west and east legs. Walk/Don't Walk equipment is provided on 3 of the 4 legs of the intersection with equipment lacking on the western leg (Scott Lane). None of the push buttons appear to be functional on this equipment. Figure 18 shows the lack of pedestrian equipment crossing Scott Lane.



**Figure 19: Looking Westward on WV 34 at Mount Vernon Road at Pedestrian Countdown Equipment**



**Figure 18: Looking Southward from WV 34 at Scott Lane (No Pedestrian Signal Equipment)**

### Design Year 2035 Projected Conditions

The 35 percent growth rate was applied to all study area intersection movements and the Synchro analysis repeated for year 2035 conditions. A summary of the projected 2035 conditions is shown in Figure 20. The intersection of WV 34 and Mount Vernon Road (west) operate at LOS C in the AM and PM peak hours with a V/C ratio of 0.92 and 0.90, respectively. At the eastern end of Mount Vernon Road, its signalized intersection with WV 34 will operate at LOS B in both peak periods and the V/C ratio is 0.73 in the AM peak hour and 0.70 in the PM peak hour. The intersection of WV 34 and Scott Lane/Great Teays Boulevard operate at LOS E in both peak periods with volumes exceeding capacity by 13 percent in the morning peak hour and 9 percent in the afternoon peak hour. The Scott Lane approach will operate at LOS F as will the southbound left turn on WV 34 and westbound left turn on Great Teays Boulevard. Several left and right turn lanes could be added to mitigate the delays but right-of-way acquisition would significantly impact adjacent properties.

### DESIGN YEAR VOLUMES & ANALYSIS

#### Mt. Vernon Rd. Sidewalk Design Study



#### LEGEND

- Traffic Movement
- Lane Geometry
- XX (XX)** AM (PM) Peak Volume
- X (X)** AM (PM) Movement LOS
- (X (X))** Overall LOS
- x.xx(x.xx)** v/c Ratio
- Signalized Intersection
- (XX) XX** Hourly Volume
- Alternate 1/1A
- Alternate 2/2A
- Alternate 3
- Alternate 4

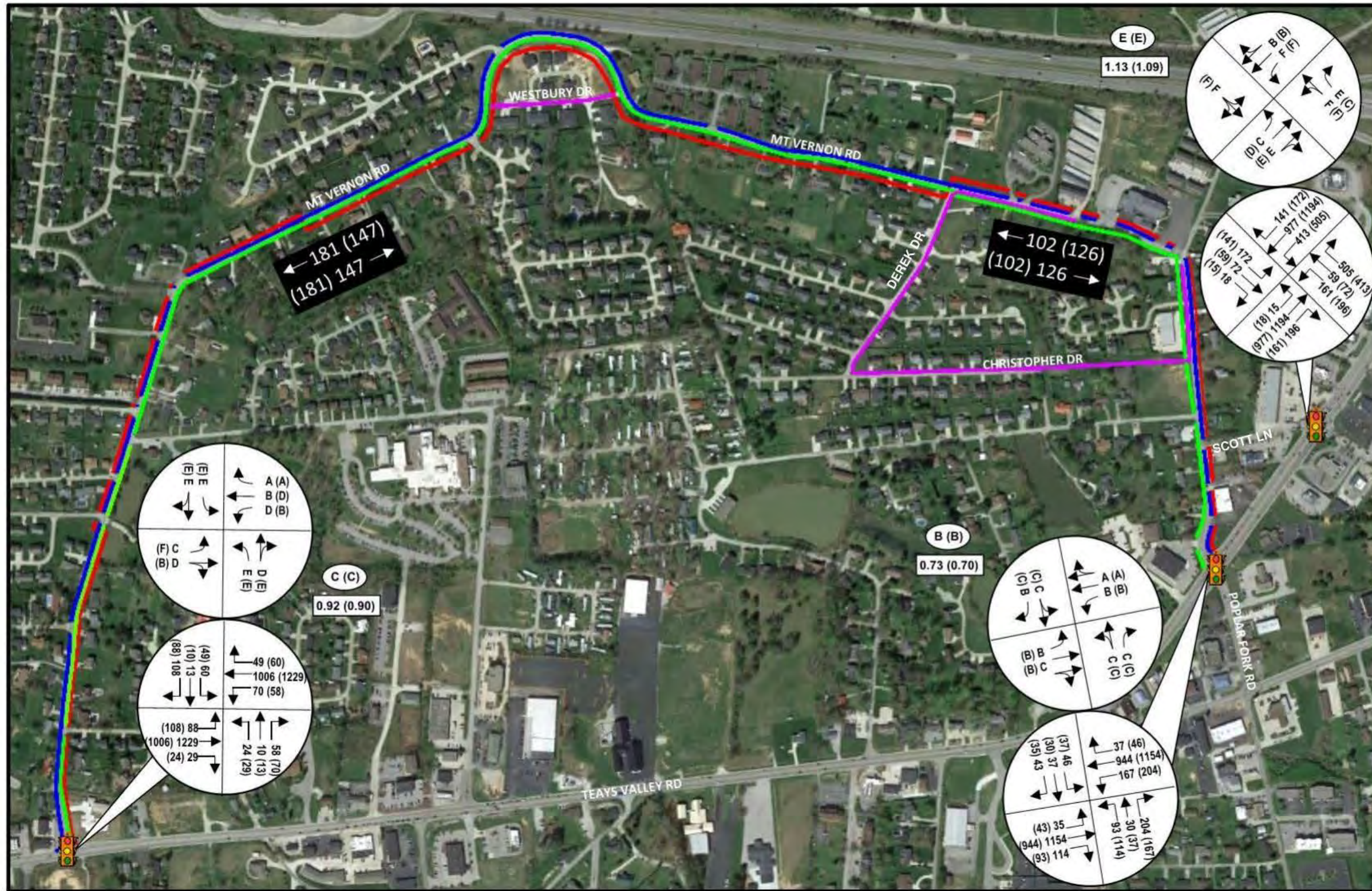


Figure 20

## Accident Analysis and Proposed Safety Improvements

### Typical Section

Mount Vernon Road is a two-lane roadway with a rural typical section (open drainage) located in a residential area. The paved roadway width is 18 feet consisting of two 9-foot wide travel lanes, and narrow grassed shoulders 2 feet wide or less. The speed limit along the roadway is 25 mph.

### Alignment

The roadway begins at a signalized Intersection with WV 34 and makes a loop, which ties back into a second signalized intersection with WV 34 approximately 1 mile to the east. The first ½ mile of the alignment is relatively tangent up to a sharp horizontal curve located at the Wedgewood Drive intersection. Beginning at the Candlewyck Drive intersection, the project meanders with reverse and compound curves to Red Deer Drive. Heading on to the east, the horizontal alignment is tangent, but the vertical alignment travels through an area of rolling terrain, which results in a series of closely spaced sag and crest vertical curves. Just east of the Mount Vernon Baptist Church there is another sharp horizontal curve with a large area of driveway and an intersection with Mount Vernon Lane. Continuing after the curve, there is mostly tangent alignment back to WV-34.

### Accident Data

Accident Data was collected for a 3-year period from 1/1/2012 until 12/31/2014. This data is based upon law enforcement reported accidents and is summarized in Table 2. The accident location mileposts appear to be coded at the same location in the midpoint of the Mount Vernon Road alignment. The exact location of each accident cannot be determined from the data. There were 22 accidents reported, 13 were single vehicle, and 9 involved two vehicles. A total of 4 injuries were reported. Three injuries in single vehicle accidents and a single injury in a two vehicle crash. All of the injuries were minor and classified as Type C, which is defined as; no visible injury, but complaint of pain or momentary unconsciousness.

All but two of the single vehicle accidents occurred at night or during the low-light conditions at dusk or dawn. These accidents appear to be the run-off-road type. Wet or snowy conditions occurred during five of the accidents. Two of the single vehicle accidents occurred during snowy conditions and were reported on the same night within an hour of each other. There was field evidence of several crashes occurring in the curve west of the Mount Vernon Baptist Church, based upon crash debris being found and damage to the guardrail. The accidents involving two vehicles included two sideswipes and one head-on. The remaining accidents were reported as intersection related with one occurring at Scott Lane.

Milepost	Date	Time	Type-C Injuries	Intersecting Street	Vehicles Involved	Collision Type	Light Condition	Road Surface Condition
0.87	1/14/2012	2300	0		1	Single Vehicle Crash	Dark - Not Lighted	Wet
0.87	2/11/2012	154	1		1	Single Vehicle Crash	Dark - Not Lighted	Wet
1.74	3/22/2012	1842	1		1	Single Vehicle Crash	Daylight	Dry
0.87	6/24/2012	310	0		1	Single Vehicle Crash	Dark - Not Lighted	Dry
0.87	7/19/2012	1629	0		2	Sideswipe, Opposite Direction	Daylight	Wet
0.87	7/26/2012	2039	0	MOUNT VERNON DRIVE	1	Single Vehicle Crash	Dusk	Dry
0.87	10/18/2012	1749	0		2	Head-On	Daylight	Wet
0.01	12/11/2012	725	0	RT. 34	2	Rear End	Dawn	Wet
0.87	10/22/2013	2215	0		1	Single Vehicle Crash	Dark - Lighted	Dry
0.87	11/22/2013	1518	0		2	Angle (Front to Side) Opp. Direction	Daylight	Wet
0.87	12/13/2013	1638	0	WV ST RT 34	2	Rear End	Daylight	Dry
0.87	1/2/2014	2313	0		1	Single Vehicle Crash	Dark - Not Lighted	Snow
0.87	1/2/2014	2230	0		1	Single Vehicle Crash	Dark - Not Lighted	Snow
0.87	1/16/2014	729	0		2	Rear-to-Side	Dawn	Dry
0.87	5/13/2014	600	0		1	Single Vehicle Crash	Dawn	Dry
0.87	6/29/2014	2337	0		1	Single Vehicle Crash	Dark - Not Lighted	Wet
0.87	8/29/2014	1605	1	SCOTT LANE	2	Angle - Direction Not Specified	Daylight	Dry
0.87	9/29/2014	2109	0		2	Right Angle	Dark - Not Lighted	Dry
0.87	10/15/2014	1556	0		2	Sideswipe, Opposite Direction	Daylight	Dry
0.87	11/27/2014	1925	0		1	Single Vehicle Crash	Dark - Not Lighted	Dry
0.87	12/22/2014	1804	0		1	Single Vehicle Crash	Dark - Lighted	Dry
0.87	12/27/2014	1020	1		1	Single Vehicle Crash	Daylight	Dry

Table 2: Accident Data

### Accident Analysis

The accident rate based on vehicles-miles of travel was calculated for Mount Vernon Road. Table 3 shows the calculated accident rate R(section) and a comparison with the statewide average for rural roadways. The accident rate is expressed as the number of accidents per 100 million vehicle-miles of travel. The accident rate on this project was calculated to be 423.6, which is more than twice as high as the statewide average of 206 for roadways of a similar type. Several factors likely contribute to this higher rate. Mount Vernon Road is not a typical rural roadway, because it is located in a suburban area, which developed around it. The roadway has not been upgraded to accommodate the increased traffic volumes.

The AADT of 2,710 vehicles per day is not particularly high for a two-lane highway. However, when combined with the 9-foot wide lanes and narrow to non-existent shoulders, there is a likely correlation between the run-off-road accident rate and the cross-section geometry. The severity of the crashes is relatively low, with no fatalities or severe injuries. The 25 mph speed limit combined with low design speed geometry, which includes the sharp curves and rolling vertical alignment serves to keep speeds low along the alignment. Although, during the field review, several motorists were observed exceeding this 25 mph speed limit. An excess of speed in conjunction with the low speed geometry, likely contributes to the higher accident rate. One other area of concern occurs at Scott Lane, which is a cut-through between Mount Vernon Road and Great Teays Boulevard. During the field review there were wheel tracks in the grass, which was evidence of cars leaving the pavement to negotiate the intersection. One accident was identified at this location.

Route Name	County	Start	Stop	Milepost (Start)	Milepost (Stop)	Distance (miles)	Number of Accidents	Time Period (yrs.)	Volume (AADT)	R(section)	Versus Average (%)
CR 34-14	Putnam	WV 34 West Intersection	WV 34 East Intersection	0.00	1.75	1.75	22	3.0	2,710	423.6	205.7

**Table 3: Accident Rate**

### Intersection Sight Distance

The intersection sight distance was checked at several intersections along Mount Vernon Road. There were two locations where the sight distance was less than the AASHTO recommendations for a 25 mph design speed. These occurred at Wedgewood Drive and Mount Vernon Circle. Both intersections are 3-legged, which means there are three cases which apply:

1. Case B1 - 280 feet (7.5 seconds) left turn from stop.
2. Case B2 - 240 feet (6.5 seconds) right turn from stop.
3. Case F - 205 feet (5.5 seconds) left turn from the major road.

At the Wedgewood drive intersection, the sight distance measured for Cases B1 and B2 was measured at approximately 100 feet. Sight Distance was timed in the field at 4-1/2 to 5 seconds, which is less than desirable for both cases. Because of the geometry and the location of an embankment along the east side of the roadway, the sight distance for Case F is further limited. The field reconnaissance timed the sight distance at 3 seconds.

The Mount Vernon Circle intersection is located in the area with the rolling vertical alignment. This intersection is located approximately 50 feet from the peak of a crest vertical curve. Traffic negotiating this intersection and looking to the east towards the vertical curve have approximately 3 seconds to complete the Case B1 or B2 maneuver. Fortunately, Mount Vernon Circle has a second intersection located to the east, which has better sight distance and a low volume of traffic based upon the 9 residences located within the circle.

### Suggested Safety Countermeasures

The number of run-off-road, sideswipe, and head-on accidents, which total 16 accidents over the 3 year period could be attributed to the 9-foot wide lane widths with no shoulders in combination with the AADT. The severity of the accidents is likely limited by the slower design speed characteristics of the roadway geometry. Several options to mitigate are listed below:

### Long Term Improvements

1. Widen the travel lanes to 11 feet. According to the FHWA's Prediction of Expected Safety Performance of Rural Two-Lane T, there is a marginal accident modification factor (AMF) improvement for widening to 10-foot wide lanes. (1.5 to 1.3), but a significant improvement in AMF going to 11-foot lanes (1.5 to 1.05). The scope of this project is limited to providing a sidewalk, but perhaps a future roadway improvement project could be funded to implement a roadway widening project.
2. The existing horizontal curve geometry currently does not meet current AASHTO design guidelines in 4 locations along existing Mount Vernon Road. These locations are near the Woods and Irons Subdivision, the Candlewyck Subdivision, the Mount Vernon Baptist Church, and near the intersection with WV 34 on the eastern side of Mount Vernon Road. The last curve may be considered adequate as it is located near a signalized intersection (stop condition) and therefore has a minimum required horizontal curve less than that required for the 25 mph design speed of Mount Vernon Road.
3. Reconstruct Mount Vernon Road in the vicinity of the Wedgewood Intersection. The curve would be reconstructed to a larger radius, and the vertical alignment revised to meet a 25 mph design speed.

4. Reconstruct the Scott Lane intersection rather than providing curve mooning (a short term improvement) to provide larger turn radii. This would include the control radius and edge of traveled way radii.
5. Modify the Mount Vernon Circle intersection either by closing the intersection and provide a cul-de-sac, or reconstruct the vertical alignment to provide improved sight distance.

#### Short Term Improvements

1. Provide curve mooning on three of the existing inadequate curves per the 2010 WVDOH Typical Sections and Related Details. This includes all of the curves listed in item 2 of the above Long Term Improvements with the exception of the curve at the WV 34 intersection. In essence, mooning slightly widens the curve to allow for additional maneuverability of a vehicle through the curve. Mooning was proposed to the inside of each inadequate curve unless the proposed sidewalk was on the inside for the proposed alternate. In that case, the roadway would be widened 2' with the proposed gutter section. Mooning was also proposed at the intersection of Scott Lane with Mount Vernon Road. A field review of this location suggested that several vehicle drop offs had occurred when making the tight turn onto Mount Vernon Road from Scott Lane.
2. In addition to curve mooning, CDM Smith suggests the addition of advance warning signage for each of the inadequate curves. These include but are not limited to curve warning and speed limit signs with beacon lights, chevrons, etc. These types of warning signs have already been installed by the WVDOH in June 2015 (according to sign installation stamps) at the Woods and Irons Subdivision though 1-2 additional chevrons may be beneficial for this area. Installation of chevrons may be limited due to site constraints (i.e. driveways/streets); however, installation of a minimum of 2-3 signs at each location appears possible which could improve curve delineation at the inadequate locations.
3. Increase local law enforcement to control speeds.
4. Trim trees and shrubs within the R/W to increase visibility.

#### Preferred Build Alternate

Alternate 3 is recommended as the preferred build alternate. This alternate utilizes sidewalk and combination curb and gutter, which provides a visible separation between the travel lanes and curb while also adding 2 feet of width to the travel way. Alternate 3 places the sidewalk on alternating sides of Mount Vernon Road to best fit the existing terrain and roadway geometry while providing maximum safety for pedestrians and avoiding above ground potential utility conflicts. This alternate incorporates the most desirable features of the other alternates with a similar cost. The most significant drawback is the three midblock crossings, which could reduce pedestrian safety. However, these drawbacks can be somewhat mitigated with proper traffic control, such as advance signing and prominent pavement markings. While safety may be slightly reduced at the crossing locations, overall pedestrian safety may be increased for the entire roadway with the addition of the sidewalk.

# Evaluation Matrix

Mount Vernon Road Sidewalk Alternate Evaluation/Cost Matrix - Office Review							
Impact Category	No-Build Alternate	Alternate No. 1 (DISCONTINUED)	Alternate No. 1A (DISCONTINUED)	Alternate No. 2	Alternate No. 2A	Alternate No. 3 <b>PREFERRED</b>	Alternate No. 4 (DISCONTINUED)
<b>Engineering</b>							
Length of Existing Mount Vernon Road	Feet	9,252	9,252	9,252	9,252	9,252	9,252
	Miles	1.75	1.75	1.75	1.75	1.75	1.75
Existing Roadway Configuration	2-Lane Undivided Roadway with 9' Existing Lanes	2-Lane Undivided Roadway with 9' Existing Lanes	2-Lane Undivided Roadway with 9' Existing Lanes	2-Lane Undivided Roadway with 9' Existing Lanes	2-Lane Undivided Roadway with 9' Existing Lanes	2-Lane Undivided Roadway with 9' Existing Lanes	2-Lane Undivided Roadway with 9' Existing Lanes
Horizontal Geometry (Existing Min. Radius) (Design Min. Radius)	72' 154'	72' 154'	72' 154'	72' 154'	72' 154'	72' 154'	72' 154'
Proposed 5' Sidewalk Location	None Proposed. Existing condition will be maintained.	Right Side of Mount Vernon Road Only with 6" combination curb and gutter.	Right Side of Mount Vernon Road Only with 6" concrete curb and 2' bituminous shoulder.	Left Side of Mount Vernon Road Only with 6" combination curb and gutter.	Left Side of Mount Vernon Road Only with 6" concrete curb 2' bituminous shoulder.	Alternating Sides of Mount Vernon Road to Best Fit Existing Geometry and Physical Features. Midblock Crossing Utilized for connectivity.	Alternating Sides of Mount Vernon Road to Best Fit Existing Geometry and Physical Features. Midblock Crossing Utilized for connectivity. Off ROW alignment used for a portion of path to avoid conflict points.
Roadway Improvement Locations	None	Curve Mooning left at Stations 141+37 and 187+00	Curve Mooning left at Stations 141+37 and 187+00	Curve Mooning right at Stations 126+27 and 178+74	Curve Mooning right at Stations 126+27 and 178+74	Curve Mooning left at Station 141+37 and right at Stations 126+27 and 178+74	None
<b>Financial / Costs</b>							
****Estimated Right of Way Acquisition Costs	\$0	\$1,000,000	\$1,000,000	\$881,000	\$881,000	\$950,000	++
****Estimated Utility Relocation Cost	\$0	\$385,000	\$385,000	\$230,000	\$230,000	\$295,000	++
Estimated Construction Cost	\$0	\$2,589,604	\$2,646,244	\$2,578,285	\$2,632,842	\$2,547,176	\$3,733,452
Estimated Total Project Cost	\$0	\$3,974,604	\$4,031,244	\$3,689,285	\$3,743,842	\$3,792,176	\$5,733,452
<b>Traffic Operations</b>							
Number of Local Roadways Severed	None	None	None	None	None	None	None
Safety Constraints / Impacts	No increased safety for pedestrians since no pedestrian facilities will be constructed.	Increased safety for pedestrians with addition of a pedestrian circulation path and pedestrian access route alongside the roadway. Currently no pedestrian access route exists. Peds are using the roadway to walk. Use of curb alongside the roadway may also cause traffic calming on the roadway.	Increased safety for pedestrians with addition of a pedestrian circulation path and pedestrian access route alongside the roadway. Currently no pedestrian access route exists. Peds are using the roadway to walk. Use of curb alongside the roadway may also cause traffic calming on the roadway.	Increased safety for pedestrians with addition of a pedestrian circulation path and pedestrian access route alongside the roadway. Currently no pedestrian access route exists. Peds are using the roadway to walk. Use of curb alongside the roadway may also cause traffic calming on the roadway.	Increased safety for pedestrians with addition of a pedestrian circulation path and pedestrian access route alongside the roadway. Currently no pedestrian access route exists. Peds are using the roadway to walk. Use of curb alongside the roadway may also cause traffic calming on the roadway.	Increased safety similar to Alternates 1, 1A, 2, and 2A. Only variance is that the 3 proposed midblock crossing will create pedestrian/vehicle conflict points leading to a slight decrease in safety.	Similar safety of Alternate 5. Off-right-of-way alignments will increase safety due to their location on lower speed subdivision streets and away from higher speed Mount Vernon Road. Only potential decrease in safety is portion of roadway outside of subdivision (in field). This field will be proposed to be lighted for increased safety.
<b>Human Environment</b>							
***Number of Properties Impacted (Permanent / Temporary)	0 / 0	65 / 72	65 / 72	67 / 66	67 / 66	74 / 80	80+ / 80+
Historic Resource Impacts	None	TBD	TBD	TBD	TBD	TBD	TBD
Cemetery Impacts	None	Mount Vernon Baptist Church Cemetery	Mount Vernon Baptist Church Cemetery	TBD	TBD	TBD	TBD
Industrial Facilities Impacts (e.g. Chemical Plant)	None	TBD	TBD	TBD	TBD	TBD	TBD
Commercial Facilities Impacts (e.g. Businesses)	None	Property Acquisition will be necessary	Property Acquisition will be necessary	Property Acquisition will be necessary	Property Acquisition will be necessary	Property Acquisition will be necessary	Property Acquisition will be necessary
Residential Displacement (# houses)	None	No displacements but property Acquisition will be necessary	No displacements but property Acquisition will be necessary	No displacements but property Acquisition will be necessary	No displacements but property Acquisition will be necessary	No displacements but property Acquisition will be necessary	No displacements but property Acquisition will be necessary
Potential Land Development	None	TBD	TBD	TBD	TBD	TBD	TBD
<b>Physical Impacts</b>							
Potential Hazard Waste Site(s)	None	TBD	TBD	TBD	TBD	TBD	TBD
Major (Public) Utility Conflicts / Impacts	None	Electric, Telephone, TV Pole Relocations. Water Meter Relocations. Potential Gas Meter Relocations	Electric, Telephone, TV Pole Relocations. Water Meter Relocations. Potential Gas Meter Relocations	Electric, Telephone, TV Pole Relocations. Water Meter Relocations. Potential Gas Meter Relocations	Electric, Telephone, TV Pole Relocations. Water Meter Relocations. Potential Gas Meter Relocations	Electric, Telephone, TV Pole Relocations. Water Meter Relocations. Potential Gas Meter Relocations	Electric, Telephone, TV Pole Relocations. Water Meter Relocations. Potential Gas Meter Relocations
Major (Private) Utility Conflicts / Impacts	None	Cable Television	Cable Television	Cable Television	Cable Television	Cable Television	Cable Television
Potential Stream Impacts	None	TBD	TBD	TBD	TBD	TBD	TBD

\*\*ALTERNATE 4 WAS DEEMED ENVIRONMENTALLY AND ECONOMICALLY UNFEASIBLE. ESTIMATES FOR THIS ALTERNATE WERE NOT FURTHER DEVELOPED.  
 \*\*\*NO STRUCTURES TAKEN IN ANY ALTERNATE  
 \*\*\*\*PROVIDED BY THE WVDOT AND BASED ON PRELIMINARY CONSTRUCTION PLANS BY CDM SMITH  
 DENOTES ALTERNATES THAT WERE DISCONTINUED AFTER THE DESIGN REPORT FIELD REVIEW MEETING HELD SEPTEMBER 4, 2015.

# Design Criteria Summary

#### County Route 34/14 - Mount Vernon Road

- Functional Classification – Local Road
- Type of Terrain – Mountainous
- 2015 ADT = 2,710
- 2035 ADT = 3,650

#### Design Speed (DD-601 Local Road)

- The minimum design speed shall be the existing posted speed limit.
- The project posted speed limit is 25 mph.

#### Horizontal Curvature (DD-601 Local Road)

- $e_{max} = 8\%$  for Local Roads – Table 3-10b and Page 5-3 (AASHTO GDHS 2011)
- Minimum Radius of Curvature for 25 mph Design Speed = 154'

#### Vertical Geometry (DD-601 Local Road)

- Stopping Sight Distance = 155 – Table 5-3 (AASHTO GDHS 2011)
- Crest Vertical Curve  $K = 12$  – Table 5-3 (AASHTO GDHS 2011)
- Sag Vertical Curve  $K = 26$  – Table 5-3 (AASHTO GDHS 2011)
- Minimum Curve Length = 3 x Design Speed (75')
- Maximum Grade = 15% - Table 5-2 (AASHTO GDHS 2011)

#### Typical Section (DD-601 Local Road)

- Lane Widths (ADT>2000) = 11' minimum, existing lane width appears to be 9'
- Shoulder Width = 8' minimum, minimal to no existing shoulders apparent
- Travel Lane Cross-Slope = 1.5-2%
- Shoulder Cross Slope = 4%
- Maximum Allowable Breakover (Outside Shoulder) = 4% (High-Side Superelevation)
- Clear Zone Distance (1500<ADT<6000,  $DS \leq 40$ ) = 12' without curb and gutter
- Clear Zone Distance = 1.5' behind the face of curb and object. 3.0' desirable
- Roadside (Foreslope) = 1V:3H Maximum Slope
- Roadside (Ditch) Width = As Required
- Roadside (Backslope) = 1V:3H Maximum Slope

#### Design Vehicle

- Mount Vernon Road = SU-30 (Single-Unit Truck)

#### Control of Access

- None

#### Pedestrian Access Route Design - Per PROWAG R302

- Continuous Clear Width:
  - 4' minimum, exclusive of the curb width.
  - Curb width included in dimension if a monolithic pour of curb and sidewalk is considered for design and no troweled curb line is put in place.
  - 5' continuous clear width is desirable.
- *Passing Spaces*: Where the continuous clear width of the PAR is less than 5', a 5' x 5' minimum passing space will be provided at a maximum of 200' intervals.
- *Grade*:
  - Inside street or highway ROW  $\leq$  general grade of established for the adjacent street or highway.
  - Outside street or highway ROW  $\leq 5\%$ .
  - Pedestrian Street Crossings within the PAR  $\leq 5\%$ .
- *Cross Slope*:
  - 5% maximum at pedestrian street crossings without yield or stop control
  - Equal to the street or highway grade at midblock pedestrian street crossings
  - 2% maximum at all other locations
- *Surfaces*: The surface of the PAR and elements and spaces that connect to the PAR shall be firm, stable, and slip resistant.
- *Vertical Alignment*:
  - Vertical alignment of the PAR will be generally planar and smooth for easy rollability
  - All grade breaks will be flush
- *Vertical Surface Discontinuities*:
  - Vertical surface discontinuities within the PAR will be eliminated at all possible locations
  - If necessary, a  $\frac{1}{4}$ " maximum vertical discontinuity will be maintained
  - A  $\frac{1}{2}$ " absolute maximum will be used if necessary and will have beveled edges sloped at no greater than 50% across the entire discontinuity

- *Horizontal Openings:* Horizontal openings in gratings and joints located within the PAR will be limited to ½" maximum in opening dimension in all locations. Anywhere that an existing grate within the PAR cannot be relocated, the grate openings will have the long dimension of the opening placed perpendicular to the direction of pedestrian travel and will have openings limited to ½" maximum.

#### **Curb Ramp Design – Per PROWAG R304**

- All Curb Ramps will be provided in accordance with WVDOH Standard Detail PVT 7 (Revised 10/22/13) where applicable. In some instances where the standard details do not apply, ramps will be special designed to meet the requirements of PROWAG R304.
- *Perpendicular Curb Ramps:*
  - *Turning Space* – A minimum 4' x 4' space will be provided at the top of the curb ramp and may overlap other turning spaces. Where constrained at the back of sidewalk, the turning space will be 4' x 5' minimum (5' in the direction of the ramp run).
  - *Running Slope* – 5% < Running Slope < 8.33% (or 12:1 Maximum). Maximum length of ramp shall be 15.0' total at necessary slope to meet sidewalk grade. The running slope of the turning space shall be 2% maximum.
  - *Flared Sides* – Where a PCP crosses the curb ramp, flared sides shall be sloped at 10% maximum measured parallel to the curb line. The flared sides are part of the PCP but not part of the PAR.
- *Parallel Curb Ramps:*
  - *Turning Space* – A minimum 4' x 4' space will be provided at the bottom of the curb ramp and may overlap other turning spaces and clear spaces. If constrained on 2 or more sides, the turning space will be a minimum of 4' x 5' with the 5' dimension in the direction of the pedestrian street crossing.
  - *Running Slope* – Must be in-line with the direction of sidewalk travel and shall be 5% minimum and 8.33% (or 12:1) maximum but shall not exceed a length of 15.0' minimum

(at grade necessary to tie in to adjacent sidewalk). The running slope of the turning space shall be 2% maximum.

#### **Detectable Warning Surfaces**

- All dimensions shall comply with R305 of PROWAG and WVDOH Standard Detail PVT 7 (Revised 10/22/13).

#### **Design Exceptions**

- ADA Exceptions Justification Report – Sidewalk width at Mount Vernon Baptist Church ROW encroachment
- Lane width for CR 34/14 (Mount Vernon Road). Existing Lane width is approximately (2) 9' Lanes. Design directives call for 11' minimum for a roadway of this type. Existing lane widths will be maintained. In no locations will width be constricted to less than existing condition. Each alternate will propose 2' widening of the roadway for a drainage gutter on the side of the road containing the proposed sidewalk.
- Existing horizontal curves on CR 34/14 not meeting current design criteria. No changes to horizontal geometry are proposed for this study.
  - Curve Numbers EH-15, EH-25, EH-44, EH-52 (4 total)
- Existing vertical curves on CR 34/14 not meeting current design criteria. No changes to vertical geometry are proposed for this study.
  - Curve Numbers EV-1, EV-14, EV-21 through EV-23, No. EV-28, EV-29, EV-44 through EV-50, EV-52, EV-55 through EV-57 (17 total)
- Existing shoulder width is variable to non-existent throughout the project. Design directives call for an 8' shoulder width minimum for a roadway of this type which cannot be met in most if not all locations without further right-of-way purchase.

# Cost Estimates

DISCONTINUED - ALTERNATE 1 - MOUNT VERNON ROAD SIDEWALK - FINAL					
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>ROADWAY</b>					
201-ITEMS	CLEARING AND GRUBBING (APPROX. 2 ACRES)	1	LS	\$ 8,000	\$ 8,000
204-ITEMS	MOBILIZATION	1	LS	\$ 50,000	\$ 50,000
207-ITEMS	UNCLASSIFIED EXCAVATION	529	CY	\$ 15.00	\$ 7,935
207-ITEMS	UNCLASSIFIED BORROW EXCAVATION	3,806	CY	\$ 20.00	\$ 76,120
207-ITEMS	SUBGRADE	0	CY	\$ 52	\$ -
307-ITEMS	AGGREGATE BASE COURSE	0	CY	\$ 90	\$ -
401 AND 402-ITEMS	MARSHALL BASE AND WEARING COURSES (TOTAL 8" THICKNESS)	0	TN	\$ 105	\$ -
401 AND 402-ITEMS	PROPERTY ACCESS (25' LENGTH X 12' WIDTH)	50	EA	\$ 3,000	\$ 150,000
401 AND 402-ITEMS	LOCAL ROADS (25' LENGTH X 20' LENGTH)	0	EA	\$ 6,000	\$ -
604-ITEMS	MAJOR DRAINAGE (PIPES > 36")	1	LS	\$ 427,000	\$ 427,000
604-ITEMS	MINOR DRAINAGE (PIPES < 36")	1	LS	\$ 50,000	\$ 50,000
605-ITEMS	DRAINAGE INLETS (PAVEMENT INLETS)	65	EA	\$ 2,200	\$ 143,000
605-ITEMS	DRAINAGE INLETS	0	EA	\$ 2,700	\$ -
606-ITEMS	UNDERDRAIN & PIPE INSTALLATION	0	FT	\$ 15	\$ -
607-ITEMS	TYPE 1 GUARDRAIL	0	FT	\$ 18	\$ -
607-ITEMS	BUFFER END SECTION	0	EA	\$ 50	\$ -
607-ITEMS	FLARED END TERMINAL	0	EA	\$ 1,600	\$ -
607-ITEMS	TANGENT END TERMINAL	0	EA	\$ 1,700	\$ -
609-ITEMS	CONCRETE SIDEWALK*	4,732	SY	\$ 55	\$ 260,260
609-ITEMS	BED COURSE MATERIAL	488	CY	\$ 106	\$ 51,728
609-ITEMS	CURB RAMP WITH DETECTIBLE WARNING DEVICES	22	EA	\$ 1,000	\$ 22,000
610-ITEMS	COMBINATION CURB AND GUTTER	8,741	LF	\$ 60	\$ 524,460
610-ITEMS	CONCRETE CURB	0	LF	\$ 50	\$ -
633-ITEMS	DUMPED ROCK GUTTER (INCLUDES PIPE OUTLETS)	1	LS	\$ 10,000	\$ 10,000
636-ITEMS	MAINTENANCE OF TRAFFIC	1	LS	\$ 300,000	\$ 300,000
637-ITEMS	WATER FOR DUST PALLIATIVE	10	MGAL	\$ 40	\$ 400
638-ITEMS	PROJECT, RIGHT-OF-WAY, SURVEY MARKERS	1	LS	\$ 5,000	\$ 5,000
639-ITEMS	CONSTRUCTION LAYOUT STAKES	1	LS	\$ 10,000	\$ 10,000
640-ITEMS	FIELD OFFICE AND STORAGE BUILDING	1	LS	\$ 10,000	\$ 10,000
642-ITEMS	TEMPORARY PROJECT WATER POLLUTION CONTROL (APPROX. 5 ACRES)	1	LS	\$ 5,000	\$ 5,000
652-ITEMS	SEEDING AND MULCHING (APPROX. 5 ACRES)	1	LS	\$ 10,000	\$ 10,000
655-ITEMS	MATTING	1	LS	\$ 5,000	\$ 5,000
660-ITEMS	TRAFFIC SIGNALS	0	EA	\$ 150,000	\$ -
660-ITEMS	PEDESTRIAN CROSSING DEVICES (CROSSWALKS)	10	EA	\$ 1,000	\$ 10,000
<b>SIGNING &amp; PAVEMENT MARKINGS</b>					
657-ITEMS	ROADSIDE MOUNTED SIGN SUPPORTS	1	LS	\$ 10,000	\$ 10,000
661-ITEMS	TRAFFIC SIGNS AND DELINEATORS	1	LS	\$ 10,000	\$ 10,000
663-ITEMS	MISCELLANEOUS PAVEMENT MARKINGS	7	MI	\$ 300	\$ 2,100
<b>STRUCTURES</b>					
626-ITEMS	RETAINING WALL AND PEDESTRIAN BARRIER NO ARCH. TREATMENT	0	SF	\$ 100	\$ -
<b>ESTIMATED CONSTRUCTION COST</b>					
CONSTRUCTION SUBTOTAL					\$ 2,158,003
20% E&C					431,601
<b>ESTIMATED CONSTRUCTION</b>					<b>2,589,604</b>
<b>UTILITIES AND RIGHT OF WAY ACQUISITION</b>					
UTILITIES (Water, Sewer, Telephone, Electric, and Gas)					\$ 385,000
RIGHT OF WAY (RW) ACQUISITION					\$ 1,000,000
<b>ESTIMATED UTILITIES AND RW</b>					<b>\$ 1,385,000</b>
<b>PROJECT TOTAL</b>					<b>\$ 3,974,604</b>

\*Cost of driveway ramps is incidental to the cost of concrete sidewalk quantity

DISCONTINUED - ALTERNATE 1A - MOUNT VERNON ROAD SIDEWALK - FINAL					
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>ROADWAY</b>					
201-ITEMS	CLEARING AND GRUBBING (APPROX. 2 ACRES)	1	LS	\$ 8,000	\$ 8,000
204-ITEMS	MOBILIZATION	1	LS	\$ 50,000	\$ 50,000
207-ITEMS	UNCLASSIFIED EXCAVATION	529	CY	\$ 15.00	\$ 7,935
207-ITEMS	UNCLASSIFIED BORROW EXCAVATION	3,806	CY	\$ 20.00	\$ 76,120
207-ITEMS	SUBGRADE	315	CY	\$ 52	\$ 16,380
307-ITEMS	AGGREGATE BASE COURSE	315	CY	\$ 90	\$ 28,350
401 AND 402-ITEMS	MARSHALL BASE AND WEARING COURSES (TOTAL 8" THICKNESS)	856	TN	\$ 105	\$ 89,880
401 AND 402-ITEMS	PROPERTY ACCESS (25' LENGTH X 12' WIDTH)	50	EA	\$ 3,000	\$ 150,000
401 AND 402-ITEMS	LOCAL ROADS (25' LENGTH X 20' LENGTH)	0	EA	\$ 6,000	\$ -
604-ITEMS	MAJOR DRAINAGE (PIPES > 36")	1	LS	\$ 427,000	\$ 427,000
604-ITEMS	MINOR DRAINAGE (PIPES < 36")	1	LS	\$ 50,000	\$ 50,000
605-ITEMS	DRAINAGE INLETS (PAVEMENT INLETS)	65	EA	\$ 2,200	\$ 143,000
605-ITEMS	DRAINAGE INLETS	0	EA	\$ 2,700	\$ -
606-ITEMS	UNDERDRAIN & PIPE INSTALLATION	0	FT	\$ 15	\$ -
607-ITEMS	TYPE 1 GUARDRAIL	0	FT	\$ 18	\$ -
607-ITEMS	BUFFER END SECTION	0	EA	\$ 50	\$ -
607-ITEMS	FLARED END TERMINAL	0	EA	\$ 1,600	\$ -
607-ITEMS	TANGENT END TERMINAL	0	EA	\$ 1,700	\$ -
609-ITEMS	CONCRETE SIDEWALK*	4,732	SY	\$ 55	\$ 260,260
609-ITEMS	BED COURSE MATERIAL	488	CY	\$ 106	\$ 51,728
609-ITEMS	CURB RAMP WITH DETECTIBLE WARNING DEVICES	22	EA	\$ 1,000	\$ 22,000
610-ITEMS	COMBINATION CURB AND GUTTER	0	LF	\$ 60	\$ -
610-ITEMS	CONCRETE CURB	8,741	LF	\$ 50	\$ 437,050
633-ITEMS	DUMPED ROCK GUTTER (INCLUDES PIPE OUTLETS)	1	LS	\$ 10,000	\$ 10,000
636-ITEMS	MAINTENANCE OF TRAFFIC	1	LS	\$ 300,000	\$ 300,000
637-ITEMS	WATER FOR DUST PALLIATIVE	10	MGAL	\$ 40	\$ 400
638-ITEMS	PROJECT, RIGHT-OF-WAY, SURVEY MARKERS	1	LS	\$ 5,000	\$ 5,000
639-ITEMS	CONSTRUCTION LAYOUT STAKES	1	LS	\$ 10,000	\$ 10,000
640-ITEMS	FIELD OFFICE AND STORAGE BUILDING	1	LS	\$ 10,000	\$ 10,000
642-ITEMS	TEMPORARY PROJECT WATER POLLUTION CONTROL (APPROX. 5 ACRES)	1	LS	\$ 5,000	\$ 5,000
652-ITEMS	SEEDING AND MULCHING (APPROX. 5 ACRES)	1	LS	\$ 10,000	\$ 10,000
655-ITEMS	MATTING	1	LS	\$ 5,000	\$ 5,000
660-ITEMS	TRAFFIC SIGNALS	0	EA	\$ 150,000	\$ -
660-ITEMS	PEDESTRIAN CROSSING DEVICES (CROSSWALKS)	10	EA	\$ 1,000	\$ 10,000
<b>SIGNING &amp; PAVEMENT MARKINGS</b>					
657-ITEMS	ROADSIDE MOUNTED SIGN SUPPORTS	1	LS	\$ 10,000	\$ 10,000
661-ITEMS	TRAFFIC SIGNS AND DELINEATORS	1	LS	\$ 10,000	\$ 10,000
663-ITEMS	MISCELLANEOUS PAVEMENT MARKINGS	7	MI	\$ 300	\$ 2,100
<b>STRUCTURES</b>					
626-ITEMS	RETAINING WALL AND PEDESTRIAN BARRIER (150'L X 8'H) NO ARCH. TREATMENT	0	SF	\$ 100	\$ -
<b>ESTIMATED CONSTRUCTION COST</b>					
CONSTRUCTION SUBTOTAL					\$ 2,205,203
20% E&C					441,041
<b>ESTIMATED CONSTRUCTION</b>					<b>2,646,244</b>
<b>UTILITIES AND RIGHT OF WAY ACQUISITION</b>					
UTILITIES (Water, Sewer, Telephone, Electric, and Gas)					\$ 385,000
RIGHT OF WAY (RW) ACQUISITION					\$ 1,000,000
<b>ESTIMATED UTILITIES AND RW</b>					<b>\$ 1,385,000</b>
<b>PROJECT TOTAL</b>					<b>\$ 4,031,244</b>

\*Cost of driveway ramps is incidental to the cost of concrete sidewalk quantity

ALTERNATE 2 - MOUNT VERNON ROAD SIDEWALK - FINAL					
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>ROADWAY</b>					
201-ITEMS	CLEARING AND GRUBBING (APPROX. 2 ACRES)	1	LS	\$ 8,000	\$ 8,000
204-ITEMS	MOBILIZATION	1	LS	\$ 50,000	\$ 50,000
207-ITEMS	UNCLASSIFIED EXCAVATION	865	CY	\$ 15.00	\$ 12,975
207-ITEMS	UNCLASSIFIED BORROW EXCAVATION	1,970	CY	\$ 20.00	\$ 39,400
207-ITEMS	SUBGRADE	0	CY	\$ 52	\$ -
307-ITEMS	AGGREGATE BASE COURSE	0	CY	\$ 90	\$ -
401 AND 402-ITEMS	MARSHALL BASE AND WEARING COURSES (TOTAL 8" THICKNESS)	0	TN	\$ 105	\$ -
401 AND 402-ITEMS	PROPERTY ACCESS (25' LENGTH X 12' WIDTH)	47	EA	\$ 3,000	\$ 141,000
401 AND 402-ITEMS	LOCAL ROADS (25' LENGTH X 20' LENGTH)	0	EA	\$ 6,000	\$ -
605-ITEMS	MAJOR DRAINAGE( PIPES> 36")	1	LS	\$ 427,000	\$ 427,000
605-ITEMS	MINOR DRAINAGE (PIPES < 36")	1	LS	\$ 50,000	\$ 50,000
606-ITEMS	DRAINAGE INLETS (PAVEMENT INLETS)	57	EA	\$ 2,200	\$ 125,400
607-ITEMS	DRAINAGE INLETS	0	EA	\$ 2,700	\$ -
607-ITEMS	UNDERDRAIN & PIPE INSTALLATION	0	FT	\$ 15	\$ -
607-ITEMS	TYPE 1 GUARDRAIL	0	FT	\$ 18	\$ -
607-ITEMS	BUFFER END SECTION	0	EA	\$ 50	\$ -
609-ITEMS	FLARED END TERMINAL	0	EA	\$ 1,600	\$ -
609-ITEMS	TANGENT END TERMINAL	0	EA	\$ 1,700	\$ -
609-ITEMS	CONCRETE SIDEWALK*	4,010	SY	\$ 55	\$ 220,550
610-ITEMS	BED COURSE MATERIAL	411	CY	\$ 106	\$ 43,566
610-ITEMS	CURB RAMP WITH DETECTIBLE WARNING DEVICES	35	EA	\$ 1,000	\$ 35,000
633-ITEMS	COMBINATION CURB AND GUTTER	7,903	LF	\$ 60	\$ 474,180
610-ITEMS	CONCRETE CURB	100	LF	\$ 50	\$ 5,000
633-ITEMS	DUMPED ROCK GUTTER (INCLUDES PIPE OUTLETS)	1	LS	\$ 10,000	\$ 10,000
636-ITEMS	MAINTENANCE OF TRAFFIC	1	LS	\$ 300,000	\$ 300,000
637-ITEMS	WATER FOR DUST PALLIATIVE	10	MGAL	\$ 40	\$ 400
638-ITEMS	PROJECT, RIGHT-OF-WAY, SURVEY MARKERS	1	LS	\$ 5,000	\$ 5,000
639-ITEMS	CONSTRUCTION LAYOUT STAKES	1	LS	\$ 10,000	\$ 10,000
640-ITEMS	FIELD OFFICE AND STORAGE BUILDING	1	LS	\$ 10,000	\$ 10,000
642-ITEMS	TEMPORARY PROJECT WATER POLLUTION CONTROL (APPROX. 5 ACRES)	1	LS	\$ 5,000	\$ 5,000
652-ITEMS	SEEDING AND MULCHING (APPROX. 5 ACRES)	1	LS	\$ 10,000	\$ 10,000
655-ITEMS	MATTING	1	LS	\$ 5,000	\$ 5,000
660-ITEMS	TRAFFIC SIGNALS	0	EA	\$ 150,000	\$ -
660-ITEMS	PEDESTRIAN CROSSING DEVICES (CROSSWALKS)	19	EA	\$ 1,000	\$ 19,000
<b>SIGNING &amp; PAVEMENT MARKINGS</b>					
657-ITEMS	ROADSIDE MOUNTED SIGN SUPPORTS	1	LS	\$ 10,000	\$ 10,000
661-ITEMS	TRAFFIC SIGNS AND DELINEATORS	1	LS	\$ 10,000	\$ 10,000
663-ITEMS	MISCELLANEOUS PAVEMENT MARKINGS	7	MI	\$ 300	\$ 2,100
<b>STRUCTURES</b>					
626-ITEMS	RETAINING WALL AND PEDESTRIAN BARRIER (150'L X 8'H)	1,200	SF	\$ 100	\$ 120,000
<b>ESTIMATED CONSTRUCTION COST</b>					
CONSTRUCTION SUBTOTAL					\$ 2,148,571
20% E&C					429,714
<b>ESTIMATED CONSTRUCTION</b>					<b>2,578,285</b>
<b>UTILITIES AND RIGHT OF WAY ACQUISITION</b>					
UTILITIES (Water, Sewer, Telephone, Electric, and Gas)					\$ 230,000
RIGHT OF WAY (RW) ACQUISITION					\$ 881,000
<b>ESTIMATED UTILITIES AND RW</b>					<b>\$ 1,111,000</b>
<b>PROJECT TOTAL</b>					<b>\$ 3,689,285</b>

\*Cost of driveway ramps is incidental to the cost of concrete sidewalk quantity

ALTERNATE 2A - MOUNT VERNON ROAD SIDEWALK - FINAL					
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>ROADWAY</b>					
201-ITEMS	CLEARING AND GRUBBING (APPROX. 2 ACRES)	1	LS	\$ 8,000	\$ 8,000
204-ITEMS	MOBILIZATION	1	LS	\$ 50,000	\$ 50,000
207-ITEMS	UNCLASSIFIED EXCAVATION	865	CY	\$ 15.00	\$ 12,975
207-ITEMS	UNCLASSIFIED BORROW EXCAVATION	1,970	CY	\$ 20.00	\$ 39,400
207-ITEMS	SUBGRADE	297	CY	\$ 52	\$ 15,444
307-ITEMS	AGGREGATE BASE COURSE	297	CY	\$ 90	\$ 26,730
401 AND 402-ITEMS	MARSHALL BASE AND WEARING COURSES (TOTAL 8" THICKNESS)	784	TN	\$ 105	\$ 82,320
401 AND 402-ITEMS	PROPERTY ACCESS (25' LENGTH X 12' WIDTH)	47	EA	\$ 3,000	\$ 141,000
401 AND 402-ITEMS	LOCAL ROADS (25' LENGTH X 20' LENGTH)	0	EA	\$ 6,000	\$ -
605-ITEMS	MAJOR DRAINAGE( PIPES> 36")	1	LS	\$ 427,000	\$ 427,000
605-ITEMS	MINOR DRAINAGE (PIPES < 36")	1	LS	\$ 50,000	\$ 50,000
606-ITEMS	DRAINAGE INLETS (PAVEMENT INLETS)	57	EA	\$ 2,200	\$ 125,400
607-ITEMS	DRAINAGE INLETS	0	EA	\$ 2,700	\$ -
607-ITEMS	UNDERDRAIN & PIPE INSTALLATION	0	FT	\$ 15	\$ -
607-ITEMS	TYPE 1 GUARDRAIL	0	FT	\$ 18	\$ -
607-ITEMS	BUFFER END SECTION	0	EA	\$ 50	\$ -
609-ITEMS	FLARED END TERMINAL	0	EA	\$ 1,600	\$ -
609-ITEMS	TANGENT END TERMINAL	0	EA	\$ 1,700	\$ -
609-ITEMS	CONCRETE SIDEWALK*	4,010	SY	\$ 55	\$ 220,550
610-ITEMS	BED COURSE MATERIAL	411	CY	\$ 106	\$ 43,566
610-ITEMS	CURB RAMP WITH DETECTIBLE WARNING DEVICES	35	EA	\$ 1,000	\$ 35,000
633-ITEMS	COMBINATION CURB AND GUTTER	0	LF	\$ 60	\$ -
610-ITEMS	CONCRETE CURB	8,003	LF	\$ 50	\$ 400,150
633-ITEMS	DUMPED ROCK GUTTER (INCLUDES PIPE OUTLETS)	1	LS	\$ 10,000	\$ 10,000
636-ITEMS	MAINTENANCE OF TRAFFIC	1	LS	\$ 300,000	\$ 300,000
637-ITEMS	WATER FOR DUST PALLIATIVE	10	MGAL	\$ 40	\$ 400
638-ITEMS	PROJECT, RIGHT-OF-WAY, SURVEY MARKERS	1	LS	\$ 5,000	\$ 5,000
639-ITEMS	CONSTRUCTION LAYOUT STAKES	1	LS	\$ 10,000	\$ 10,000
640-ITEMS	FIELD OFFICE AND STORAGE BUILDING	1	LS	\$ 10,000	\$ 10,000
642-ITEMS	TEMPORARY PROJECT WATER POLLUTION CONTROL (APPROX. 5 ACRES)	1	LS	\$ 5,000	\$ 5,000
652-ITEMS	SEEDING AND MULCHING (APPROX. 5 ACRES)	1	LS	\$ 10,000	\$ 10,000
655-ITEMS	MATTING	1	LS	\$ 5,000	\$ 5,000
660-ITEMS	TRAFFIC SIGNALS	0	EA	\$ 150,000	\$ -
660-ITEMS	PEDESTRIAN CROSSING DEVICES (CROSSWALKS)	19	EA	\$ 1,000	\$ 19,000
<b>SIGNING &amp; PAVEMENT MARKINGS</b>					
657-ITEMS	ROADSIDE MOUNTED SIGN SUPPORTS	1	LS	\$ 10,000	\$ 10,000
661-ITEMS	TRAFFIC SIGNS AND DELINEATORS	1	LS	\$ 10,000	\$ 10,000
663-ITEMS	MISCELLANEOUS PAVEMENT MARKINGS	7	MI	\$ 300	\$ 2,100
<b>STRUCTURES</b>					
626-ITEMS	RETAINING WALL AND PEDESTRIAN BARRIER (150'L X 8'H)	1,200	SF	\$ 100	\$ 120,000
<b>ESTIMATED CONSTRUCTION COST</b>					
CONSTRUCTION SUBTOTAL					\$ 2,194,035
20% E&C					438,807
<b>ESTIMATED CONSTRUCTION</b>					<b>2,632,842</b>
<b>UTILITIES AND RIGHT OF WAY ACQUISITION</b>					
UTILITIES (Water, Sewer, Telephone, Electric, and Gas)					\$ 230,000
RIGHT OF WAY (RW) ACQUISITION					\$ 881,000
<b>ESTIMATED UTILITIES AND RW</b>					<b>\$ 1,111,000</b>
<b>PROJECT TOTAL</b>					<b>\$ 3,743,842</b>

\*Cost of driveway ramps is incidental to the cost of concrete sidewalk quantity

ALTERNATE 3 (PREFERRED) - MOUNT VERNON ROAD SIDEWALK - FINAL					
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>ROADWAY</b>					
201-ITEMS	CLEARING AND GRUBBING (APPROX. 2 ACRES)	1	LS	\$ 8,000	\$ 8,000
204-ITEMS	MOBILIZATION	1	LS	\$ 50,000	\$ 50,000
207-ITEMS	UNCLASSIFIED EXCAVATION	459	CY	\$ 15.00	\$ 6,885
207-ITEMS	UNCLASSIFIED BORROW EXCAVATION	4,114	CY	\$ 20.00	\$ 82,280
207-ITEMS	SUBGRADE	0	CY	\$ 52	\$ -
307-ITEMS	AGGREGATE BASE COURSE	0	CY	\$ 90	\$ -
401 AND 402-ITEMS	MARSHALL BASE AND WEARING COURSES (TOTAL 8" THICKNESS)	0	TN	\$ 105	\$ -
401 AND 402-ITEMS	PROPERTY ACCESS (25' LENGTH X 12' WIDTH)	42	EA	\$ 3,000	\$ 126,000
401 AND 402-ITEMS	LOCAL ROADS (25' LENGTH X 20' LENGTH)	0	EA	\$ 6,000	\$ -
605-ITEMS	MAJOR DRAINAGE (PIPES > 36")	1	LS	\$ 427,000	\$ 427,000
605-ITEMS	MINOR DRAINAGE (PIPES < 36")	1	LS	\$ 50,000	\$ 50,000
606-ITEMS	DRAINAGE INLETS (PAVEMENT INLETS)	59	EA	\$ 2,200	\$ 129,800
607-ITEMS	DRAINAGE INLETS	0	EA	\$ 2,700	\$ -
607-ITEMS	UNDERDRAIN & PIPE INSTALLATION	0	FT	\$ 15	\$ -
607-ITEMS	TYPE 1 GUARDRAIL	0	FT	\$ 18	\$ -
607-ITEMS	BUFFER END SECTION	0	EA	\$ 50	\$ -
609-ITEMS	FLARED END TERMINAL	0	EA	\$ 1,600	\$ -
609-ITEMS	TANGENT END TERMINAL	0	EA	\$ 1,700	\$ -
609-ITEMS	CONCRETE SIDEWALK*	4,388	SY	\$ 55	\$ 241,340
610-ITEMS	BED COURSE MATERIAL	457	CY	\$ 106	\$ 48,442
610-ITEMS	CURB RAMP WITH DETECTIBLE WARNING DEVICES	42	EA	\$ 1,000	\$ 42,000
633-ITEMS	COMBINATION CURB AND GUTTER	8,490	LF	\$ 60	\$ 509,400
610-ITEMS	CONCRETE CURB	100	LF	\$ 50	\$ 5,000
633-ITEMS	DUMPED ROCK GUTTER (INCLUDES PIPE OUTLETS)	1	LS	\$ 10,000	\$ 10,000
636-ITEMS	MAINTENANCE OF TRAFFIC	1	LS	\$ 300,000	\$ 300,000
637-ITEMS	WATER FOR DUST PALLIATIVE	10	M GAL	\$ 40	\$ 400
638-ITEMS	PROJECT, RIGHT-OF-WAY, SURVEY MARKERS	1	LS	\$ 5,000	\$ 5,000
639-ITEMS	CONSTRUCTION LAYOUT STAKES	1	LS	\$ 10,000	\$ 10,000
640-ITEMS	FIELD OFFICE AND STORAGE BUILDING	1	LS	\$ 10,000	\$ 10,000
642-ITEMS	TEMPORARY PROJECT WATER POLLUTION CONTROL (APPROX. 5 ACRES)	1	LS	\$ 5,000	\$ 5,000
652-ITEMS	SEEDING AND MULCHING (APPROX. 5 ACRES)	1	LS	\$ 10,000	\$ 10,000
655-ITEMS	MATTING	1	LS	\$ 5,000	\$ 5,000
660-ITEMS	TRAFFIC SIGNALS	0	EA	\$ 150,000	\$ -
660-ITEMS	PEDESTRIAN CROSSING DEVICES (CROSSWALKS)	19	EA	\$ 1,000	\$ 19,000
<b>SIGNING &amp; PAVEMENT MARKINGS</b>					
657-ITEMS	ROADSIDE MOUNTED SIGN SUPPORTS	1	LS	\$ 10,000	\$ 10,000
661-ITEMS	TRAFFIC SIGNS AND DELINEATORS	1	LS	\$ 10,000	\$ 10,000
663-ITEMS	MISCELLANEOUS PAVEMENT MARKINGS	7	MI	\$ 300	\$ 2,100
<b>STRUCTURES</b>					
626-ITEMS	RETAINING WALL	0	SF	\$ 80	\$ -
<b>ESTIMATED CONSTRUCTION COST</b>					
CONSTRUCTION SUBTOTAL					\$ 2,122,647
20% E&C					424,529
<b>ESTIMATED CONSTRUCTION</b>					<b>2,547,176</b>
<b>UTILITIES AND RIGHT OF WAY ACQUISITION</b>					
UTILITIES (Water, Sewer, Telephone, Electric, and Gas)					\$ 295,000
RIGHT OF WAY (RW) ACQUISITION					\$ 950,000
<b>ESTIMATED UTILITIES AND RW</b>					<b>\$ 1,245,000</b>
<b>PROJECT TOTAL</b>					<b>\$ 3,792,176</b>

\*Cost of driveway ramps is incidental to the cost of concrete sidewalk quantity

DISCONTINUED - ALTERNATE 4 - MOUNT VERNON ROAD SIDEWALK - FINAL					
ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>ROADWAY</b>					
201-ITEMS	CLEARING AND GRUBBING (APPROX. 5 ACRES)	1	LS	\$ 100,000	\$ 100,000
204-ITEMS	MOBILIZATION	1	LS	\$ 100,000	\$ 100,000
207-ITEMS	UNCLASSIFIED EXCAVATION	500	CY	\$ 15.00	\$ 7,500
207-ITEMS	UNCLASSIFIED BORROW EXCAVATION	5,000	CY	\$ 20.00	\$ 100,000
207-ITEMS	SUBGRADE	0	CY	\$ 52	\$ -
307-ITEMS	AGGREGATE BASE COURSE	0	CY	\$ 90	\$ -
401 AND 402-ITEMS	MARSHALL BASE AND WEARING COURSES (TOTAL 8" THICKNESS)	0	TN	\$ 105	\$ -
401 AND 402-ITEMS	PROPERTY ACCESS (25' LENGTH X 12' WIDTH)	80	EA	\$ 3,000	\$ 240,000
401 AND 402-ITEMS	LOCAL ROADS (25' LENGTH X 20' LENGTH)	5	EA	\$ 6,000	\$ 30,000
605-ITEMS	MAJOR DRAINAGE (PIPES > 36")	1	LS	\$ 600,000	\$ 600,000
605-ITEMS	MINOR DRAINAGE (PIPES < 36")	1	LS	\$ 100,000	\$ 100,000
606-ITEMS	DRAINAGE INLETS (PAVEMENT INLETS)	80	EA	\$ 2,200	\$ 176,000
607-ITEMS	DRAINAGE INLETS	0	EA	\$ 2,700	\$ -
607-ITEMS	UNDERDRAIN & PIPE INSTALLATION	0	FT	\$ 15	\$ -
607-ITEMS	TYPE 1 GUARDRAIL	0	FT	\$ 18	\$ -
607-ITEMS	BUFFER END SECTION	0	EA	\$ 50	\$ -
609-ITEMS	FLARED END TERMINAL	0	EA	\$ 1,600	\$ -
609-ITEMS	TANGENT END TERMINAL	0	EA	\$ 1,700	\$ -
609-ITEMS	CONCRETE SIDEWALK*	6,200	SY	\$ 55	\$ 341,000
610-ITEMS	BED COURSE MATERIAL	645	CY	\$ 106	\$ 68,370
610-ITEMS	CURB RAMP WITH DETECTIBLE WARNING DEVICES	44	EA	\$ 1,000	\$ 44,000
633-ITEMS	COMBINATION CURB AND GUTTER	7,636	LF	\$ 60	\$ 458,160
610-ITEMS	CONCRETE CURB	0	LF	\$ 50	\$ -
633-ITEMS	DUMPED ROCK GUTTER (INCLUDES PIPE OUTLETS)	1	LS	\$ 10,000	\$ 10,000
636-ITEMS	MAINTENANCE OF TRAFFIC	1	LS	\$ 300,000	\$ 300,000
637-ITEMS	WATER FOR DUST PALLIATIVE	12	M GAL	\$ 40	\$ 480
638-ITEMS	PROJECT, RIGHT-OF-WAY, SURVEY MARKERS	1	LS	\$ 30,000	\$ 30,000
639-ITEMS	CONSTRUCTION LAYOUT STAKES	1	LS	\$ 20,000	\$ 20,000
640-ITEMS	FIELD OFFICE AND STORAGE BUILDING	1	LS	\$ 10,000	\$ 10,000
642-ITEMS	TEMPORARY PROJECT WATER POLLUTION CONTROL (APPROX. 5 ACRES)	1	LS	\$ 10,000	\$ 10,000
652-ITEMS	SEEDING AND MULCHING (APPROX. 5 ACRES)	1	LS	\$ 40,000	\$ 40,000
655-ITEMS	MATTING	1	LS	\$ 5,000	\$ 5,000
660-ITEMS	TRAFFIC SIGNALS	0	EA	\$ 150,000	\$ -
660-ITEMS	PEDESTRIAN CROSSING DEVICES (CROSSWALKS)	18	EA	\$ 1,000	\$ 18,000
<b>SIGNING &amp; PAVEMENT MARKINGS</b>					
659-ITEMS	ROADSIDE MOUNTED SIGN SUPPORTS	1	LS	\$ 50,000	\$ 50,000
657-ITEMS	LIGHTING FOR OFF ALIGNMENT SECTION	1	LS	\$ 200,000	\$ 200,000
661-ITEMS	TRAFFIC SIGNS AND DELINEATORS	1	LS	\$ 50,000	\$ 50,000
663-ITEMS	MISCELLANEOUS PAVEMENT MARKINGS	9	MI	\$ 300	\$ 2,700
<b>STRUCTURES</b>					
626-ITEMS	RETAINING WALL	0	SF	\$ 80	\$ -
<b>ESTIMATED CONSTRUCTION COST</b>					
CONSTRUCTION SUBTOTAL					\$ 3,111,210
20% E&C					622,242
<b>ESTIMATED CONSTRUCTION</b>					<b>3,733,452</b>
<b>UTILITIES AND RIGHT OF WAY ACQUISITION</b>					
NOT DEVELOPED BY WVDOT UTILITIES (Water, Sewer, Telephone, Electric, and Gas)					\$ -
NOT DEVELOPED BY WVDOT RIGHT OF WAY (RW) ACQUISITION					\$ -
<b>ESTIMATED UTILITIES AND RW</b>					<b>\$ -</b>
<b>PROJECT TOTAL</b>					<b>\$ 3,733,452</b>

\*Cost of driveway ramps is incidental to the cost of concrete sidewalk quantity

# Acquisition Tables

PROPERTY LINES SHOWN ON THE DESIGN STUDY DRAWINGS WERE OBTAINED FROM PUTNAM COUNTY TAX MAPS AND ARE SUBJECT TO CHANGE

ACQUISITION TABLE - INCLUDES TEMPORARY CONSTRUCTION EASEMENTS (TCE)

ASSIGNED PARCEL NUMBER	PROPERTY OWNER	TAX MAP LOT NUMBER	PARCEL TOTALS		DISCONTINUED ALT 1 & 1A (RW)		DISCONTINUED ALT 1 & 1A (TCE & TSRE)		ALT 2 & 2A (RW)		ALT 2 & 2A (TCE)		ALT 3 (RW) PREFERRED		ALT 3 (TCE) PREFERRED	
			AREA	AREA	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC
			SF	AC												
1	BALL JUDITH K	40.1	15,246	0.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	ARTS & THOUGHTS LLC	46	40,946	0.94	0	0.00	222	0.01	0	0.00	0	0.00	0	0.00	222	0.01
3	SPRADLING TIMHOTY & P DAWN	41	14,375	0.33	0	0.00	0	0.00	347	0.01	1,016	0.02	0	0.00	0	0.00
4	SHIV HOTELS LLC	40	186,437	4.28	0	0.00	0	0.00	179	0.00	164	0.00	0	0.00	0	0.00
5	MATTHEWS ROBERT L JR ET UX	45.1	13,068	0.30	1,180	0.03	759	0.02	0	0.00	0	0.00	1,165	0.03	774	0.02
6	SPRADLING TIMHOTY & P DAWN	139	49,223	1.13	0	0.00	0	0.00	3,185	0.07	1,075	0.02	0	0.00	0	0.00
7	MATTHEWS ROBERT L JR	45.3	20,909	0.48	1,448	0.03	1,064	0.02	0	0.00	0	0.00	1,588	0.04	1,019	0.02
8	PITZER DOUGLAS C ET UX	45.4	8,712	0.20	1,193	0.03	546	0.01	0	0.00	0	0.00	1,230	0.03	529	0.01
9	STONE CYNTHIA L JACKSON	142	14,810	0.34	0	0.00	0	0.00	1,331	0.03	748	0.02	0	0.00	0	0.00
10	HAMPTON CROSSING HOMEOWNERS ASSOCIATION INC	45.2	6,534	0.15	565	0.01	245	0.01	0	0.00	0	0.00	565	0.01	245	0.01
11	DUFFY JASON M	44.3	20,473	0.47	752	0.02	1,007	0.02	0	0.00	0	0.00	752	0.02	1,007	0.02
12	WILLIS JEFFERY V ET AL	42.2	16,553	0.38	0	0.00	0	0.00	1,637	0.04	983	0.02	0	0.00	0	0.00
13	RINER SEAN PATRICK	140	17,424	0.40	0	0.00	0	0.00	1,483	0.03	1,256	0.03	0	0.00	0	0.00
14	CHAFIN RICHARD B ET UX	44.5	24,829	0.57	891	0.02	1,130	0.03	0	0.00	0	0.00	891	0.02	1,130	0.03
15	HARRAH ALLEN L	79	5,227	0.12	0	0.00	0	0.00	175	0.00	156	0.00	0	0.00	0	0.00
16	DAENG MAY	44	33,541	0.77	1,742	0.04	1,438	0.03	0	0.00	0	0.00	1,742	0.04	1,438	0.03
17	SCARLATO ARGATHA L	2	12,632	0.29	0	0.00	0	0.00	2,395	0.05	1,523	0.03	0	0.00	0	0.00
18	HULETT ROBERT L ET UX	44.4	20,038	0.46	1,341	0.03	850	0.02	0	0.00	0	0.00	1,341	0.03	850	0.02
19	COUNTRY VILLAS OWNERS MAINT-ENANCE ASSOC	3	108,900	2.50	0	0.00	0	0.00	659	0.02	354	0.01	0	0.00	0	0.00
20	CARROLL KEITH D	44.2	20,909	0.48	1,475	0.03	922	0.02	0	0.00	0	0.00	1,475	0.03	922	0.02
21	BUDINGER JULIE M	43	17,860	0.41	0	0.00	0	0.00	983	0.02	1,493	0.03	0	0.00	0	0.00
22	JACKSON SHERRY BARKER	125	19,602	0.45	0	0.00	0	0.00	2,947	0.07	1,536	0.04	0	0.00	0	0.00
23	A&M PROPERTIES & INVESTMENT LLC ET AL	44.1	46,609	1.07	1,857	0.04	1,983	0.05	0	0.00	0	0.00	1,857	0.04	1,983	0.05
24	FINLEY PINES LLC	111	12,632	0.29	0	0.00	0	0.00	2,093	0.05	1,705	0.04	918	0.02	785	0.02
25	SMALLRIDGE ENTERPRISES INC	55.1	60,113	1.38	16,52	0.38	3,778	0.09	0	0.00	0	0.00	1,357	0.03	594	0.01
26	JR GAYLOR	13	33,977	0.78	0	0.00	0	0.00	494	0.01	358	0.01	820	0.02	725	0.02
27	VANDEVENDER DORIS CAROL	7	23,958	0.55	0	0.00	0	0.00	1,222	0.03	1,464	0.03	1,222	0.03	1,464	0.03
28	CHEYENNE VALLEY HOMEOWNERS	1	111,078	2.55	0	0.00	0	0.00	708	0.02	823	0.02	382	0.01	456	0.01
29	NESSERLOTTE TIARA M ET CON	32	13,068	0.30	0	0.00	0	0.00	1,019	0.02	1,745	0.04	1,019	0.02	1,745	0.04
30	SEVILLE INVESTMENT COMPANY	21	217,800	5.00	1,200	0.03	1,588	0.04	0	0.00	0	0.00	0	0.00	0	0.00
31	GIBSON DAVID W ET UX	73	10,890	0.25	0	0.00	0	0.00	597	0.01	704	0.02	597	0.01	704	0.02
32	NOT USED	0	NA	NA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
33	KNIGHT WANDA LEE	3	30,928	0.71	1,393	0.03	1,972	0.05	0	0.00	0	0.00	0	0.00	0	0.00
34	NEW MAURY LIMITED PARTNERSHIP	15.2	192,535	4.42	0	0.00	0	0.00	1,527	0.04	1,581	0.04	1,527	0.04	1,581	0.04
35	YATES BRANDON M	4	34,848	0.80	666	0.02	1,000	0.02	0	0.00	0	0.00	0	0.00	0	0.00
36	QUALLS EDWARD A	5	34,848	0.80	517	0.01	1,000	0.02	0	0.00	0	0.00	0	0.00	0	0.00
37	LESLIE LUMBER COMPANY	43	24,829	0.57	0	0.00	0	0.00	1,363	0.03	1,419	0.03	1,363	0.03	1,419	0.03
38	BAYWOOD DRIVE	-	NA	NA	0	0.00	0	0.00	611	0.01	307	0.01	611	0.01	307	0.01
39	MONK FRIEDEL	6	35,719	0.82	330	0.01	999	0.02	0	0.00	0	0.00	0	0.00	0	0.00
40	JOHNSON DENISE L	7	32,234	0.74	469	0.01	1,004	0.02	0	0.00	0	0.00	0	0.00	0	0.00
41	WASKIEWICZ MARK & JOANNE	45	18,295	0.42	0	0.00	0	0.00	1,905	0.04	1,133	0.03	1,905	0.04	1,133	0.03
42	WOODS & IRONS HOMEOWNERS ASSOCIATION INC	135	518,364	11.90	0	0.00	0	0.00	882	0.02	345	0.01	882	0.02	345	0.01
43	JOHNSON DENISE L	8	19,166	0.44	392	0.01	1,689	0.04	253	0.01	0	0.00	253	0.01	0	0.00
44	MANGUS WILLIAM C ET UX	180	50,965	1.17	0	0.00	0	0.00	627	0.01	791	0.02	627	0.01	791	0.02
45	CRUSAN DONALD E ET UX	22	3,049	0.07	0	0.00	0	0.00	886	0.02	673	0.02	886	0.02	673	0.02

**ACQUISITION TABLE - INCLUDES TEMPORARY CONSTRUCTION EASEMENTS (TCE)**

ASSIGNED PARCEL NUMBER	PROPERTY OWNER	TAX MAP LOT NUMBER	PARCEL TOTALS		DISCONTINUED ALT 1 & 1A (RW)		DISCONTINUED ALT 1 & 1A (TCE & TSRE)		ALT 2 & 2A (RW)		ALT 2 & 2A (TCE)		ALT 3 (RW) PREFERRED		ALT 3 (TCE) PREFERRED	
			AREA	AREA	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC
			SF	AC												
46	WILLIAM BOGGESS D ET UX	9	32,670	0.75	640	0.01	1,020	0.02	0	0.00	0	0.00	0	0.00	0	0.00
47	CRUSAN DONALD E ET UX	23	12,632	0.29	0	0.00	0	0.00	1,902	0.04	246	0.01	1,902	0.04	246	0.01
48	CARR FRAZIER GLEN	24	14,810	0.34	0	0.00	0	0.00	1,657	0.04	262	0.01	1,657	0.04	262	0.01
49	WILLIAM BOGGESS D ET UX	10	40,075	0.92	756	0.02	1,005	0.02	0	0.00	0	0.00	0	0.00	0	0.00
50	FOSTER GERALD L ET UX	25	14,810	0.34	0	0.00	0	0.00	979	0.02	1,019	0.02	980	0.02	1,019	0.02
51	HIVELY MARK W	11	40,075	0.92	1,429	0.03	1,004	0.02	0	0.00	0	0.00	0	0.00	0	0.00
52	BILLUPS ALMA I	26	14,810	0.34	0	0.00	0	0.00	811	0.02	1,005	0.02	811	0.02	1,005	0.02
53	SANDRA MCCALLISTER E ET CON	12	40,075	0.92	1,139	0.03	1,004	0.02	0	0.00	0	0.00	0	0.00	0	0.00
54	STEVENS RANDALL C ET UX	27	14,810	0.34	0	0.00	0	0.00	891	0.02	1,000	0.02	891	0.02	1,000	0.02
55	THOMPSON THELMA W	13	39,640	0.91	836	0.02	1,019	0.02	0	0.00	0	0.00	0	0.00	0	0.00
56	GUNTER JUDITH A ET AL	28	14,810	0.34	0	0.00	0	0.00	1,079	0.02	1,003	0.02	280	0.01	279	0.01
57	LANE GLEN M & VALERIE K	14	80,150	1.84	3,153	0.07	2,004	0.05	0	0.00	0	0.00	3,180	0.07	1,995	0.05
58	CLEEK MONA G ET AL	29	14,810	0.34	0	0.00	0	0.00	925	0.02	1,006	0.02	0	0.00	0	0.00
59	FLEMING JENNIFER L	30	14,810	0.34	0	0.00	0	0.00	547	0.01	1,000	0.02	0	0.00	0	0.00
60	ESTEP MYRA FAYE ET CON	16	40,075	0.92	2,549	0.06	1,034	0.02	0	0.00	0	0.00	2,616	0.06	1,012	0.02
61	HOMER DRIVE	21	NA	NA	580	0.01	254	0.01	0	0.00	0	0.00	590	0.01	253	0.01
62	LEGG CHARLES E ET UX	17	20,038	0.46	1,337	0.03	1,010	0.02	0	0.00	0	0.00	1,337	0.03	1,010	0.02
63	CRIMMEL JASON T ET UX	31	14,810	0.34	0	0.00	0	0.00	602	0.01	1,001	0.02	0	0.00	0	0.00
64	GOFF DOUGLAS A ET UX	32	14,810	0.34	0	0.00	0	0.00	887	0.02	1,002	0.02	0	0.00	0	0.00
65	NAUMAN JAMES JR ET UX	18.1	40,075	0.92	1,875	0.04	1,917	0.04	0	0.00	0	0.00	1,875	0.04	1,917	0.04
66	HUBER ANTHONY L & AMBER D	33	14,810	0.34	0	0.00	0	0.00	2,196	0.05	772	0.02	0	0.00	0	0.00
67	ESCH JUNE L	34	14,810	0.34	0	0.00	0	0.00	1,632	0.04	1,070	0.02	0	0.00	0	0.00
68	ESCH JUNE L	20	29,621	0.68	1,126	0.03	1,062	0.02	0	0.00	0	0.00	1,126	0.03	1,062	0.02
69	CLAY RONALD ET AL	35	14,810	0.34	0	0.00	0	0.00	1,757	0.04	1,003	0.02	0	0.00	0	0.00
70	FEMIA KAY	61	23,087	0.53	511	0.01	1,090	0.03	0	0.00	0	0.00	511	0.01	1,090	0.03
71	BENNETT JOHN E ET AL	5	10,890	0.25	0	0.00	61	0.00	0	0.00	0	0.00	0	0.00	61	0.00
72	CANDLEWYCK PLACE HOMEOWNERS ASSOC INC	25	91,040	2.09	844	0.02	770	0.02	0	0.00	0	0.00	844	0.02	770	0.02
73	BLEVINS VERONIQUE & JACK T	17	10,454	0.24	0	0.00	101	0.00	0	0.00	0	0.00	0	0.00	101	0.00
74	CAUDLE JOYCE A	62	10,019	0.23	1,448	0.03	980	0.02	0	0.00	0	0.00	1,448	0.03	980	0.02
75	JAMES MARK J	36	22,216	0.51	1,456	0.03	1,383	0.03	2,571	0.06	2,292	0.05	1,456	0.03	1,383	0.03
76	GUNNOE RANDY A & MARGARET A	73	10,454	0.24	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
77	G&L LAND DEVELOPMENT	115	101,930	2.34	0	0.00	0	0.00	0	0.00	987	0.02	0	0.00	0	0.00
78	MURRAY ARTHUR ET UX	72	9,148	0.21	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
79	ROBERTS ROLAND R ET UX	66	8,276	0.19	0	0.00	527	0.01	0	0.00	0	0.00	0	0.00	527	0.01
80	WESTFALL DAVID & CAROL J	68	6,970	0.16	371	0.01	559	0.01	0	0.00	0	0.00	371	0.01	559	0.01
81	MILES KIMBERLY L	67	6,534	0.15	345	0.01	488	0.01	0	0.00	0	0.00	354	0.01	479	0.01
82	WEEKLEY JAMES L & JOY L	69	6,970	0.16	0	0.00	800	0.02	0	0.00	0	0.00	0	0.00	1,660	0.04
83	DAVIS DENNIS R ET UX	71	7,405	0.17	0	0.00	618	0.01	0	0.00	0	0.00	0	0.00	618	0.01
84	NOT USED	0	NA	NA	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
85	JOHNSON LARRY H ET UX	49.11	9,148	0.21	0	0.00	0	0.00	792	0.02	1,015	0.02	0	0.00	0	0.00
86	VINEYARD CAROLYN SUE	70	7,405	0.17	0	0.00	243	0.01	0	0.00	0	0.00	0	0.00	243	0.01
87	GARY LEE COOPER ET UX	49.14	13,068	0.30	0	0.00	0	0.00	1,719	0.04	1,854	0.04	0	0.00	0	0.00
88	DESIGN DEVELOPMENT INC.	53	122,404	2.81	0	0.00	649	0.01	0	0.00	0	0.00	0	0.00	649	0.01
89	TAYLOR JERRY R	60	8,712	0.20	533	0.01	770	0.02	0	0.00	0	0.00	533	0.01	770	0.02
90	COSCO JOHN C ET UX	59	9,583	0.22	79	0.00	293	0.01	0	0.00	0	0.00	79	0.00	293	0.01

ACQUISITION TABLE - INCLUDES TEMPORARY CONSTRUCTION EASEMENTS (TCE)

ASSIGNED PARCEL NUMBER	PROPERTY OWNER	TAX MAP LOT NUMBER	PARCEL TOTALS		DISCONTINUED ALT 1 & 1A (RW)		DISCONTINUED ALT 1 & 1A (TCE & TSRE)		ALT 2 & 2A (RW)		ALT 2 & 2A (TCE)		ALT 3 (RW) PREFERRED		ALT 3 (TCE) PREFERRED	
			AREA	AREA	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC
			SF	AC												
91	HATFIELD ROBERT MICHAEL	47	43,996	1.01	3,375	0.08	2,367	0.05	0	0.00	0	0.00	3,375	0.08	2,367	0.05
92	KONIGSBERG RED DEER LLC	49	209,088	4.80	0	0.00	0	0.00	4,352	0.10	5,616	0.13	0	0.00	0	0.00
93	HATFIELD R MICHAEL ET AL	48.4	34,848	0.80	1,439	0.03	959	0.02	0	0.00	0	0.00	1,439	0.03	959	0.02
94	STEWART FAMILY REVOCABLE TRUST	48.6	32,670	0.75	1,299	0.03	905	0.02	0	0.00	0	0.00	1,299	0.03	905	0.02
95	HENCHEY RUSSELL S	48.5	32,234	0.74	1,536	0.04	899	0.02	0	0.00	0	0.00	1,536	0.04	899	0.02
96	HENCHEY RUSSELL S	48.3	32,234	0.74	1,753	0.04	902	0.02	0	0.00	0	0.00	1,753	0.04	902	0.02
97	WATSON PHYLLIS W	49.12	90,169	2.07	0	0.00	0	0.00	556	0.01	2,067	0.05	0	0.00	0	0.00
98	LEVY BOBBIE S	48.2	34,412	0.79	1,686	0.04	960	0.02	0	0.00	0	0.00	1,686	0.04	960	0.02
99	GUNTER WANDA J	48.1	33,541	0.77	1,451	0.03	879	0.02	0	0.00	0	0.00	1,451	0.03	879	0.02
100	PRIVATE RW	NA	NA	NA	0	0.00	0	0.00	191	0.00	137	0.00	0	0.00	0	0.00
101	ROSS WILLIAM ALLEN	48	68,825	1.58	1,998	0.05	1,734	0.04	0	0.00	0	0.00	1,998	0.05	1,734	0.04
102	ROOKSTOOL ALBERT W	49.5	19,166	0.44	0	0.00	0	0.00	1,993	0.05	1,101	0.03	0	0.00	0	0.00
103	HATCHER MARLENE C	49.4	22,216	0.51	0	0.00	0	0.00	2,028	0.05	1,110	0.03	0	0.00	0	0.00
104	TREADWAY KYLE W & MALISSA ANN	48.7	53,143	1.22	1,500	0.03	1,562	0.04	0	0.00	0	0.00	1,500	0.03	1,562	0.04
105	HEDGE ISABELLE B	49.3	22,216	0.51	0	0.00	0	0.00	1,687	0.04	1,108	0.03	0	0.00	0	0.00
106	BERRY JAMES E ET UX	51.1	14,375	0.33	781	0.02	1,000	0.02	0	0.00	0	0.00	781	0.02	1,000	0.02
107	CHAMBERS CONNIE L	49.2	22,216	0.51	0	0.00	0	0.00	1,527	0.04	1,102	0.03	0	0.00	0	0.00
108	COLL CHARLES R & SUZETTE D	51.2	13,939	0.32	768	0.02	910	0.02	0	0.00	0	0.00	768	0.02	910	0.02
109	GOOD BRENDA ET AL	49.1	19,166	0.44	0	0.00	0	0.00	1,187	0.03	1,106	0.03	0	0.00	0	0.00
110	DILLON DUSTIN J & JAMES D	51	15,246	0.35	809	0.02	1,319	0.03	0	0.00	0	0.00	809	0.02	1,319	0.03
111	GUFFEY OIL & GAS ROYALTIES LLC	50	8,712	0.20	0	0.00	0	0.00	221	0.01	236	0.01	0	0.00	0	0.00
112	WHITE PINE SUBDIVISION HOME-OWNERS ASSOC	85	190,357	4.37	298	0.01	465	0.01	0	0.00	0	0.00	0	0.00	0	0.00
113	WILSON TRUDY J	52	29,621	0.68	0	0.00	0	0.00	2,607	0.06	2,333	0.05	2,607	0.06	2,333	0.05
114	PAGE WILLIAM J AND LAURA L	126	38,333	0.88	1,468	0.03	2,449	0.06	0	0.00	0	0.00	0	0.00	0	0.00
115	SETTE PROPERTIES LLC	54.2	137,214	3.15	0	0.00	0	0.00	2,522	0.06	2,871	0.07	2,522	0.06	2,871	0.07
116	MT VERNON BAPTIST CHURCH CEMETERY	67	217,800	5.00	8,313	0.19	6,450	0.15	0	0.00	0	0.00	0	0.00	0	0.00
117	C H F PROPERTIES	54	85,813	1.97	0	0.00	0	0.00	1,924	0.04	1,891	0.04	1,924	0.04	1,891	0.04
118	MT VERNON BAPTIST CHURCH	54.1	130,680	3.00	0	0.00	0	0.00	3,547	0.08	3,440	0.08	3,547	0.08	3,440	0.08
119	WILLIAMS JOHN R ET UX	68.4	6,970	0.16	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
120	JOHN AND LINDA HOMEBUILDERS INC	68.3	9,148	0.21	1,078	0.02	1,415	0.03	358	0.01	0	0.00	358	0.01	0	0.00
121	PRIVATE RW	NA	NA	NA	0	0.00	0	0.00	246	0.01	431	0.01	246	0.01	431	0.01
122	LINKFIELD LEE HAROLD	85.1	11,326	0.26	0	0.00	0	0.00	227	0.01	586	0.01	227	0.01	586	0.01
123	WADDELL MOZELL E	75.1	22,651	0.52	0	0.00	0	0.00	1,238	0.03	1,089	0.03	1,238	0.03	1,089	0.03
124	BIRD LARRY R ET UX	68.2	16,988	0.39	797	0.02	1,005	0.02	0	0.00	0	0.00	0	0.00	0	0.00
125	LITCHFIELD HOMEOWNERS ASSC INC	82	52,272	1.20	362	0.01	429	0.01	0	0.00	0	0.00	0	0.00	0	0.00
126	DOAK JUANITA	75	20,909	0.48	0	0.00	0	0.00	843	0.02	1,053	0.02	843	0.02	1,053	0.02
127	JOHN & LINDA HOMEBUILDERS INC	59	32,234	0.74	3,438	0.08	1,961	0.05	0	0.00	0	0.00	0	0.00	0	0.00
128	HOLSOPPLE DALE V ET UX	74	43,560	1.00	0	0.00	0	0.00	1,583	0.04	2,061	0.05	1,583	0.04	2,061	0.05
129	WHEELER EUGENE ET AL	72	25,265	0.58	0	0.00	0	0.00	1,167	0.03	1,077	0.02	1,167	0.03	1,077	0.02
130	JOHN GAIT DEVELOPMENT GROUP	71	74,488	1.71	3,296	0.08	2,747	0.06	0	0.00	0	0.00	0	0.00	0	0.00
131	WHEELER JULIA E	72.1	18,295	0.42	0	0.00	0	0.00	791	0.02	801	0.02	791	0.02	801	0.02
132	MARINA DRIVE PRIVATE RW	NA	NA	NA	501	0.01	383	0.01	0	0.00	0	0.00	0	0.00	0	0.00
133	WILLIAMS JOHN R	11	37,897	0.87	0	0.00	0	0.00	1,551	0.04	1,660	0.04	1,551	0.04	1,660	0.04
134	MCKNIGHT GEORGE R JR ET AL	55	20,473	0.47	1,271	0.03	530	0.01	0	0.00	0	0.00	0	0.00	0	0.00
135	ALLIED FOOD INDUSTRIES INC	10.1	47,480	1.09	880	0.02	0	0.00	513	0.01	410	0.01	2,497	0.06	410	0.01

**ACQUISITION TABLE - INCLUDES TEMPORARY CONSTRUCTION EASEMENTS (TCE)**

ASSIGNED PARCEL NUMBER	PROPERTY OWNER	TAX MAP LOT NUMBER	PARCEL TOTALS		DISCONTINUED ALT 1 & 1A (RW)		DISCONTINUED ALT 1 & 1A (TCE & TSRE)		ALT 2 & 2A (RW)		ALT 2 & 2A (TCE)		ALT 3 (RW) PREFERRED		ALT 3 (TCE) PREFERRED	
			AREA	AREA	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC	SF	AC
			SF	AC												
136	BIAS M EVANGELINE	56	20,038	0.46	1,197	0.03	997	0.02	0	0.00	0	0.00	0	0.00	0	0.00
137	RUNYAN TIMOTHY ET UX	10	15,682	0.36	0	0.00	0	0.00	1,226	0.03	1,301	0.03	1,226	0.03	1,301	0.03
138	DUFFER NANCY CAROLYN	57	30,056	0.69	1,332	0.03	1,004	0.02	0	0.00	0	0.00	0	0.00	0	0.00
139	RIVER PLACE LLC	9.1	16,553	0.38	0	0.00	0	0.00	297	0.01	274	0.01	297	0.01	274	0.01
140	DUTY CHERYLE HARRIS	58	20,038	0.46	1,062	0.02	1,027	0.02	0	0.00	0	0.00	0	0.00	0	0.00
141	CDI PROPERTIES LLC	9	28,750	0.66	0	0.00	0	0.00	461	0.01	560	0.01	461	0.01	560	0.01
142	CRAWFORD PAUL L ET UX	59	16,988	0.39	785	0.02	1,055	0.02	0	0.00	0	0.00	0	0.00	0	0.00
143	MMO BUSINESS TRUST	87.11	43,996	1.01	814	0.02	291	0.01	0	0.00	0	0.00	0	0.00	0	0.00
<b>TOTAL</b>			<b>5,586,999</b>	<b>128.26</b>	<b>100,233</b>	<b>2.30</b>	<b>81,465</b>	<b>1.83</b>	<b>85,298</b>	<b>1.97</b>	<b>76,310</b>	<b>1.75</b>	<b>91,296</b>	<b>2.11</b>	<b>80,318</b>	<b>1.85</b>

# Flood Insurance Rate Map



Mount Vernon Road  
 Alternate 4 Off-Right-of-Way Alignments

**LEGEND**

- SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
 The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
- ZONE A** No Base Flood Elevations determined.
  - ZONE AE** Base Flood Elevations determined.
  - ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
  - ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
  - ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
  - ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
  - ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
  - ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.
- FLOODWAY AREAS IN ZONE AE**  
 The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
- OTHER FLOOD AREAS**
- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
  - OTHER AREAS**
  - ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
  - ZONE D** Areas in which flood hazards are undetermined, but possible.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**
- OTHERWISE PROTECTED AREAS (OPAs)**
- CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.
- 1% Annual Chance Floodplain Boundary
  - 0.2% Annual Chance Floodplain Boundary
  - Floodway boundary
  - Zone D boundary
  - CBRS and OPA boundary
  - Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
  - Base Flood Elevation line and value: elevation in feet\*
  - Base Flood Elevation value where uniform within zone: elevation in feet\*
- \*Referenced to the National Geodetical Vertical Datum of 1929
- A** **A** Cross section line
  - 23** **23** Transect line
  - 45° 02' 00", 93° 02' 12" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
  - 3100000 FT SDOO-foot ticks: West Virginia State Plane South Zone (FIPS Zone 4702), Lambert Conformal Conic projection
  - 1000-meter Universal Transverse Mercator grid values, zone 17N
  - DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)
  - M1.5 River Mile
- MAP REPOSITORIES**  
 Refer to Map Repositories list on Map Index
- EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
 February 2, 2012
- EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**

**PANEL 0230D**

FIRM

**FLOOD INSURANCE RATE MAP  
 PUTNAM COUNTY,  
 WEST VIRGINIA  
 AND INCORPORATED AREAS**

**PANEL 230 OF 350**  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

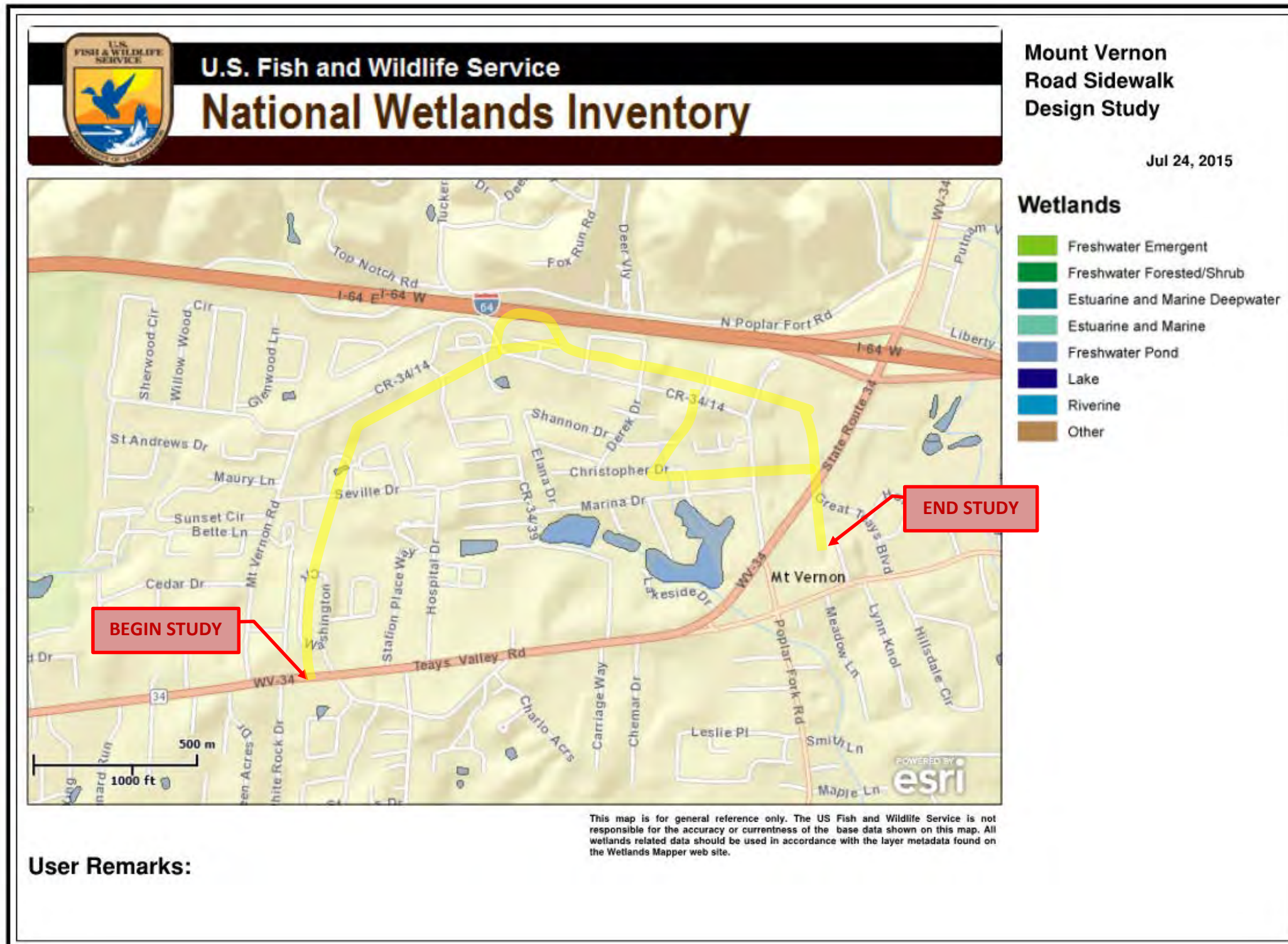
COMMUNITY	NUMBER	PANEL	SUFFIX
PUTNAM COUNTY	540164	0230	D

MAP NUMBER  
54079C0230D

**EFFECTIVE DATE  
 FEBRUARY 2, 2012**

Federal Emergency Management Agency

# National Wetlands Inventory Map



# **9/4/15 Design Report Field Review Meeting Minutes**



### MINUTES OF MEETING

**Date of Review:** September 4, 2015

**To:** Mr. Chris Francis, WVDOH Project Manager

**Project Number:** State Project: U340-34/14-0.00 00  
Federal Project: N/A

**Description:** Mount Vernon Road Sidewalk Design Study

**Participants:**

Chris Francis, WVDOH	Larry Clegg, CDM Smith
Rachel Crawford, WVDOH	Joe Crittenden, CDM Smith
Ray Patrick, WVDOH	Kevin Cole, CDM Smith
Bob Barclay, WVDOH	Dustin Nelson, CDM Smith
Jen Williamson, WVDOH	
Meghan Howard, WVDOH	
Travis Knighton, WVDOH	
Anthony Carvillano, WVDOH	

The purpose of this meeting was to discuss the Field Review Submission of the Mount Vernon Road Sidewalk Design Study. The submission was provided to the WVDOH Engineering Division on August 10, 2015 and included a preliminary report and design study plans. The meeting was held at the project site beginning at the location of the Mount Vernon Baptist Church and Cemetery. Listed below are the comments that were documented during the course of the review meeting and those provided to CDM Smith on redline markups from the WVDOH Project Manager.

#### Field Review Redline Comments provided by WVDOH Project Manager:

1. Comment: Page 8 (Now page 9) of Design Report – Question was raised about the eye height of pedestrian used at 6" off of the proposed surface. WVDOH Project Manager thought this may have been intended to be 6' instead of 6". A 6" eye height was used in calculating the minimum sight distance for pedestrian crosswalk locations.  
**Response: Conservative eye height (6" above the surface) will continue to be used to calculate the sight distance required at the pedestrian crossing locations.**
2. Comment: Page 15 of Design Report – 2015/2035 ADT's were left unpopulated at the time of Field Review Submission. CDM Smith now has the traffic data available to populate these fields.  
**Response: The fields are now populated with the WVDOH supplied data.**

2015-09-04\_Mt Vernon Sidewalk Study\_FR\_Comments\_Response.docx

Mount Vernon Road Sidewalk Design Study  
September 4, 2015  
Page 2

3. Comment: Plan Sheet 1 – Revise Type of Construction to: Sidewalk, Pave, Pavement Markings and Signing. Add Design Designation information.

**Response: The items were added to the Title Sheet as requested.**

4. Comment: Plan Sheet 6 – Note 4: Remove reference to "concrete" for temporary barrier. Other alternatives are available for use in these areas.

**Response: The revision was made.**

5. Comment: Plan Sheet 6 – Temporary Traffic Control Typical Section: Provide dimension details on typical. Question was raised about availability of two-way traffic during construction or one-way traffic with flaggers due to width constraints.

**Response: It is anticipated that the project will be constructed using flaggers. Dimensions were added to the Temporary Traffic Control Typical Section.**

6. Comment: Plan Sheet 12: Alternates 1/1A and 2/2A are reversed in the legend. Please correct.

**Response: The Legend was corrected.**

7. Comment: Call out all ramp types on each plan sheet per WVDOH Standard Detail PVT7. Any special ramp types require special details. Quantify types of ramps separately.

**Response: The revision was made.**

8. Comment: Provide symbology at driveways to depict a sloped surface/transition for upcoming public meeting to display that a lower curb will be used at all driveway entrances.

**Response: Lines have been added to the plan sheets to define driveway crossings.**

9. Comment: Plan Sheets 44 & 45: Provide curb cuts and flush entrance access for local road. (This comment was not discussed at field review meeting. CDM Smith assumes this is the intent of the comment since this entrance provides access to more than one dwelling and serves as a street.)

**Response: Curb cuts are being shown for driveways and local roads.**

10. Comment: Plan Sheet 47: Question was raised on the necessity of 'pedestrian refuge' at Mount Vernon Baptist Church parking lot. WVDOH stated that the refuge was not necessary to meet PROWAG/ADA requirements. The client/consultant team decided it may be optional.

**Response: The pedestrian "refuge area" is labeled as optional.**

2015-09-04\_Mt Vernon Sidewalk Study\_FR\_Comments\_Response.docx

Mount Vernon Road Sidewalk Design Study  
September 4, 2015  
Page 3

**Field Review Comments discussed at Meeting:**

11. Comment: WVDOH would like to see TCE limits reduced to approximately half of what is presently shown in the plans.

**Response: The TCE limits were reduced from 20' to 10' outside of the proposed right-of-way.**

12. Comment: Scott Lane intersection with Mount Vernon Road was discussed for safety purposes. The team is awaiting accident data from WVDOH to confirm any incidents/issues at this location. Potential widening of existing curb returns was discussed as an improvement for turning movements. A recommendation may be made in report and supported by accident data.

**Response: A revised radius return was added to the non-sidewalk alternative.**

13. Comment: WVDOH Project Manager was concerned with the need for retaining wall on Alternate 1/1A on west side of project area. Ensure cost of retaining structure is included in cost estimate.

**Response: A retaining wall was added for cost comparison.**

14. Comment: WVDOH would like to see curve widening studied at sharp horizontal curves in the project. In particular, these are at Mount Vernon Baptist Church and the Woods and Irons Subdivision. Reduced speed signage was recommended in these areas along with tree removal for safety purposes.

**Response: Widening/mooning of the mentioned curves was added to the plans.**

15. Comment: WVDOH decided Alternate 1/1A will no longer be studied due to potential impacts to Mount Vernon Baptist Church Cemetery. WVDOH Environmental stated that if chosen, constant monitoring of construction in the area would be necessary and there may be potential for unmarked graves near the construction site.

**Response: Agreed. CDM Smith will not further study this alternate.**

16. Comment: Alternate 4 ROW needs are still uncertain at this point (Would DOH be required to purchase ROW for entire road or enter agreement with HOA for access to construct and maintain sidewalk?). WVDOH Environmental stated that land disturbance may be an issue for that alternative.

**Response: CDM Smith will not further study this alternate unless otherwise directed by WVDOH.**

17. Comment: Question was raised as to whether all access to WVDOH ROW should be required to conform the MUTCD signing standards. WVDOH stated that Traffic Engineering Division will most likely require all accesses to WVDOH ROW be required to

2015-09-04\_Mt Vernon Sidewalk Study\_FR\_Comments\_Response.docx

Mount Vernon Road Sidewalk Design Study  
September 4, 2015  
Page 4

conform to signing standards. Address signing and quantities separately from sidewalk study.

**Response: CDM Smith will add cost to update all signing to MUTCD standards.**

18. Comment: Minimize the amount of TCE acquisition shown for the alternatives. WVDOH recommended reducing by half. Update the detail on the typical section sheet depicting RW and TCE acquisition limits.

**Response: The TCE limits were revised from 20' beyond the right-of-way to 10' beyond the right-of-way.**

19. WVDOH provided Geotechnical write up on 8-31-15 (after the Field Review meeting). A major impact in this write up was the requirement for 3:1 maximum cut/fill slopes.

**Response: CDM Smith revised slopes accordingly and updated ROW/TCE limits as necessary.**

**Other Meeting Notes:**

- WVDOH Project Manager stated that Public Meeting would not be scheduled until after the Office Review Submission of this project.
- Potential phasing of the project if the project went to construction in the future was brought up but not further discussed for this phase of the study.
- Scott Lane was determined to be a stub of CR 34/40 (Great Teays Boulevard). District 1 Maintenance Engineer stated that right-of-way for that road was 40' total (20' off C/L) and extended from signal to first stop sign between TCBY and Burger King.

cc: File

2015-09-04\_Mt Vernon Sidewalk Study\_FR\_Comments\_Response.docx

# **1/28/16 Design Report Office Review Meeting Minutes**



### MINUTES OF MEETING

**Date of Review:** January 28, 2016

**To:** Mr. Chris Francis, WVDOH Project Manager

**Project Number:** State Project: U340-34/14-0.00 00  
Federal Project: N/A

**Description:** Mount Vernon Road Sidewalk Design Study

**Participants:** Chris Francis, WVDOT  
Brad Fallecker, WVDOT  
Mark White, WVDOT  
Luke O'Neal, WVDOT  
Jen Williamson, WVDOT  
Anthony Carvillano, WVDOT  
Larry Clegg, CDM Smith  
Joe Crittenden, CDM Smith  
Dustin Nelson, CDM Smith

The purpose of this meeting was to discuss the Office Review Submission of the Mount Vernon Road Sidewalk Design Study. The submission was provided to the WVDOH Engineering Division on December 22, 2015 and included a preliminary report and design study plans with PFR comments addressed. The meeting was held in the Upper Conference Room at the WVDOH Engineering Division's Smith Street office. Listed below is a summary of the discussion aside from the official comments that was documented during the course of the review meeting.

1. Comment: Correct erroneous lines to upper right of property matrix.  
**Response: Lines were removed.**
2. WVDOH must pay water utility any costs for relocating – private utility. Apparent reason for high cost of Alternate 3. DOH to verify if Putnam PSD impacts will be necessary. Sidewalk could likely be built over the line and adjust utility appurtenances as necessary.  
**Response: Awaiting further guidance from WVDOH on utility cost.**
3. WVDOH Environmental:
  - a. Comment: Questioned if trees would be removed because of the project.  
**Response: Yes. Removal will be necessary at some locations. The tree removal locations will be within either the Present or Proposed Right of Way limits.**

Comment\_Response Comment\_Response 2016\_02\_16\_Mt Vernon Sidewalk Design Study Meeting Minutes\_OR.docx

Mount Vernon Road Sidewalk Design Study  
January 28, 2015  
Page 2

- b. Comment: Mentioned history and archeology was not complete due to getting contract in place with consultant.  
**Response: Awaiting further information and guidance from WVDOH. Will incorporate data ASAP.**
- c. Comment: SHPO approval most likely required for this project. 30 days minimum turnaround.  
**Response: The Consultant will provide any additional information, if necessary, for SHPO approval.**
- d. Comment: One public meeting will be required with a Preferred Alternate presented at the meeting as well as other studied alternates.  
**Response: The Consultant will submit a Final Report in preparation for public meeting. The Consultant will coordinate with WVDOH and supply appropriate boards for meeting.**
4. Comment: Do not display discontinued alternates on the presentation boards at the public meeting but have information on hand in case public brings it up at the meeting so we show that it was studied but discontinued for various reasons.  
**Response: If requested, the Consultant will provide additional copies of Final Report for the WVDOH's use.**
5. WVDOH will be reviewing right of way and utility costs to make certain the costs are solid for Alternate 3. Public may question why Alternate 3 cost was higher though we were promoting this alternate to try and avoid utilities and other costly obstacles.  
**Response: Awaiting further information from WVDOH. Will incorporate any changes as necessary.**
6. WVDOH will follow up on accident data request for the project. (Received from WVDOH on 1/28/16 after PFR meeting).  
**Response: Received data 1/28/16. Data has been reviewed and a write up prepared in the final report for the accident analysis.**

Comment\_Response Comment\_Response 2016\_02\_16\_Mt Vernon Sidewalk Design Study Meeting Minutes\_OR.docx

Mount Vernon Road Sidewalk Design Study  
January 28, 2015  
Page 3

7. Per direction from the WVDOH, the consultant will remove July site visit notes out of design study as these were not part of an official milestone review. This meeting removed Alternates 5 and 6 (shoulder widening from the study) as mentioned on Page 2 of the report. As per direction from the WVDOH at the 2/3/16 progress meeting, the consultant will also remove the typical sections for these Alternates shown on plan sheet 4 (entire sheet will be removed).

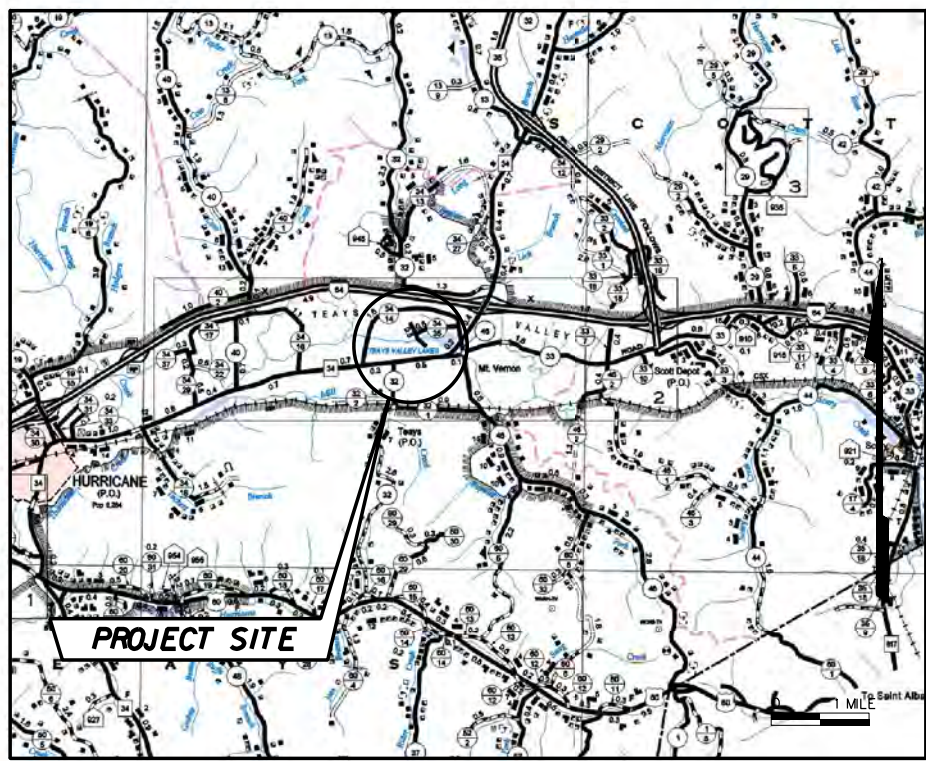
**Response: Site visit notes removed from report. Typical sections removed from plans but mention of Alternates remains in the report with explanation of why it was not further studied due to pedestrian/vehicle separation safety concerns.**

cc: File

Comment\_Response Comment\_Response 2016\_02\_16\_Mt Vernon Sidewalk Design Study Meeting Minutes\_OR.docx

# **Appendix 1**

## **Design Study Drawings**

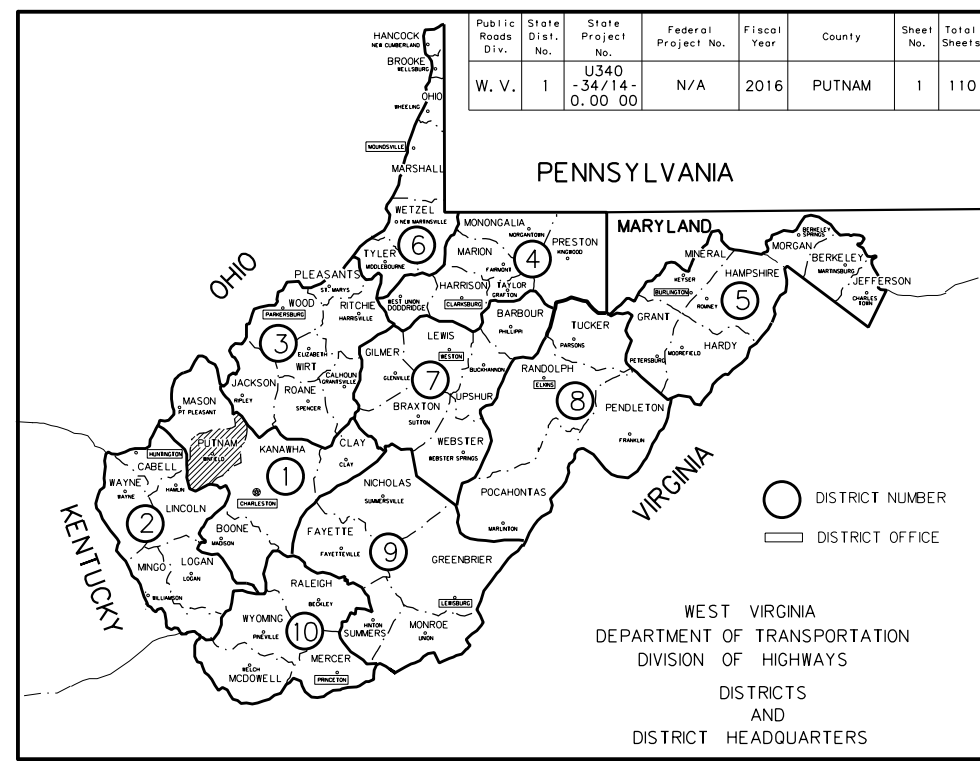


# WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DESIGN STUDY OF STATE HIGHWAY

FEDERAL PROJECT NO. N/A  
STATE PROJECT NO. U340-34/14-0.00 00  
CR 34/14  
SCOTT - TEAYS VALLEY DISTRICT  
PUTNAM COUNTY

## MOUNT VERNON ROAD SIDEWALK

Station	Station	f. t.	mile(s)
Roadway 100+00.00	to 192+51.60	= 9251.60	= 1.75
Total Project Length *		= 9251.60	= 1.75

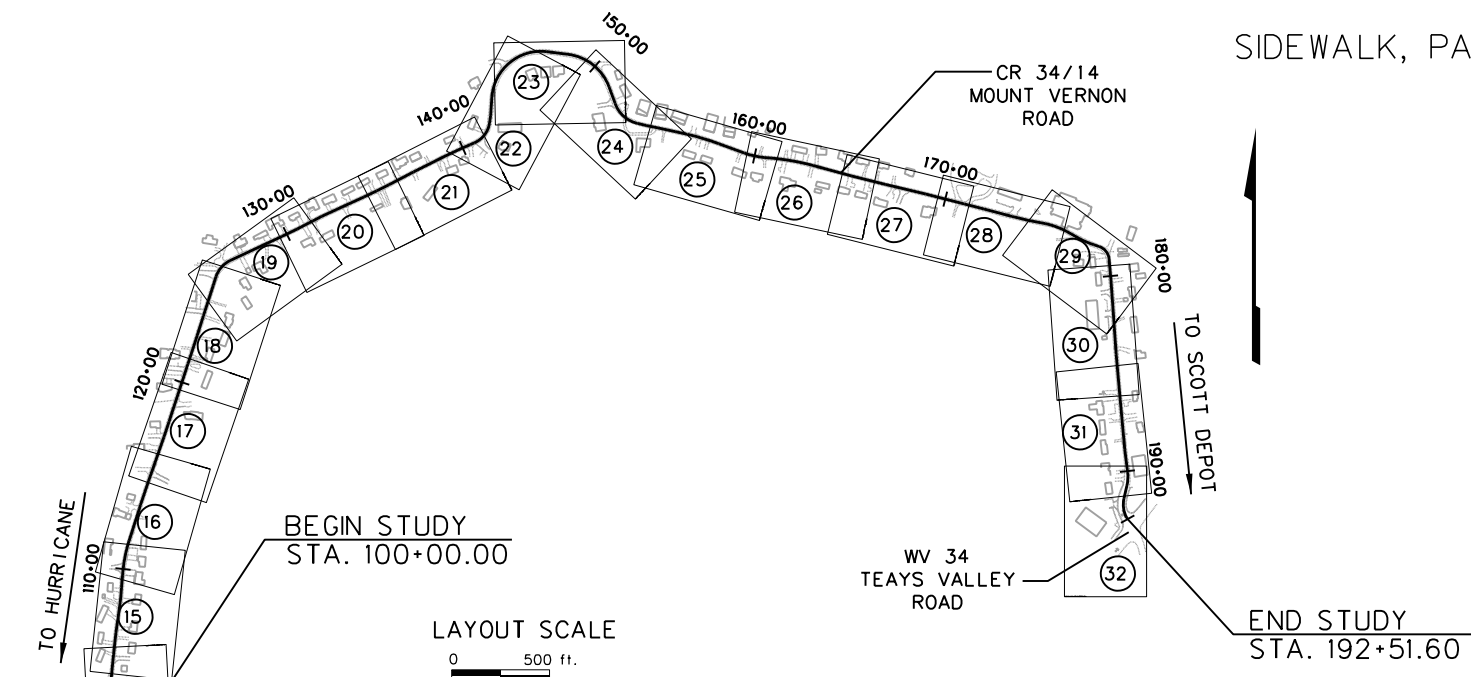


### TYPE OF CONSTRUCTION

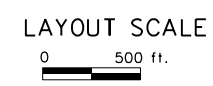
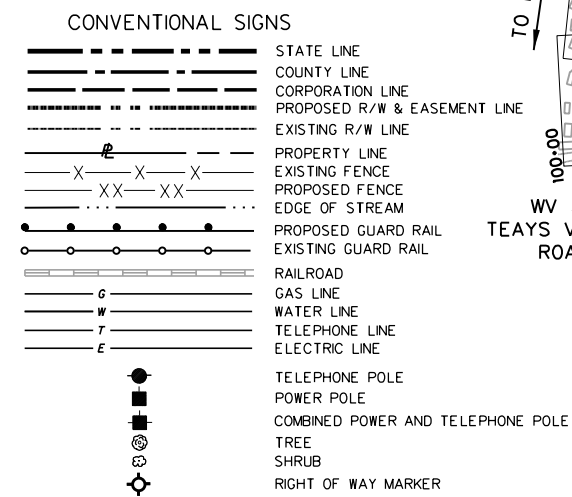
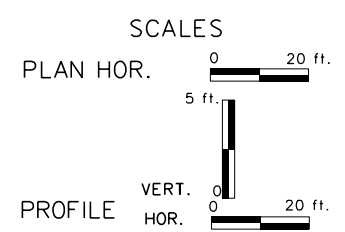
DESIGN STUDY

SIDEWALK, PAVE, PAVEMENT MARKINGS, AND SIGNING

- UTILITIES**
- AMERICAN ELECTRIC POWER COMPANY
  - LUMOS NETWORKS (PRIVATE)
  - FRONTIER COMMUNICATIONS
  - UNION OIL & GAS INC
  - SUDDENLINK COMMUNICATIONS (PRIVATE)
  - MOUNTAINEER GAS COMPANY
  - PUTNAM PUBLIC SERVICE DISTRICT



FINAL REPORT  
FEBRUARY 22, 2016



INDEX TO SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2-3	TYPICAL SECTIONS
4-5	TRAFFIC SKETCH MAP
6	EXISTING HORIZONTAL CURVE DATA
7	TEMPORARY TRAFFIC CONTROL
8 - 12	SPECIAL DETAILS
13	PROJECT OVERVIEW SHEET
14 - 32	ALTERNATE 1/1A PLAN & PROFILE SHEETS
33 - 51	ALTERNATE 2/2A PLAN & PROFILE SHEETS
52 - 70	ALTERNATE 3 PLAN & PROFILE SHEETS
71	ALTERNATE 4 SIDEPATH PLAN SHEET
72 - 84	CROSS SECTIONS ALTERNATE 1/1A
85 - 97	CROSS SECTIONS ALTERNATE 2/2A
98 - 110	CROSS SECTIONS ALTERNATE 3

○ SHEET NUMBERS AND PROJECT LENGTH ARE FOR ALTERNATE 1 / 1A

REVISION NUMBER	SHEET NUMBER	REVISIONS	DATE	BY



RECOMMENDED: \_\_\_\_\_ PROJECT MANAGER

RECOMMENDED FOR APPROVAL: \_\_\_\_\_ STATE HIGHWAY ENGINEER

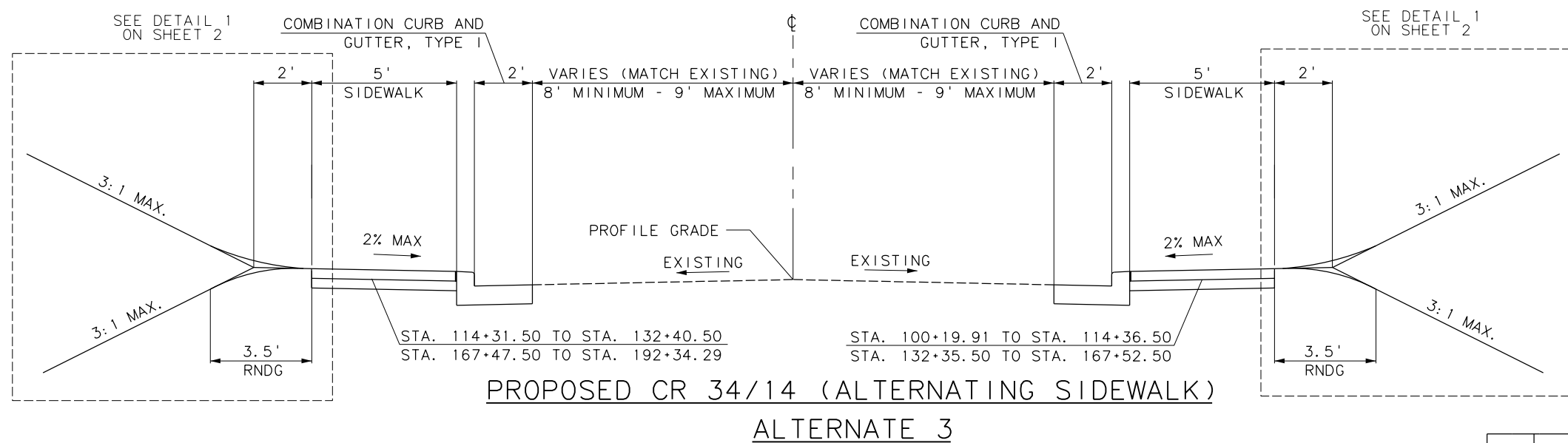
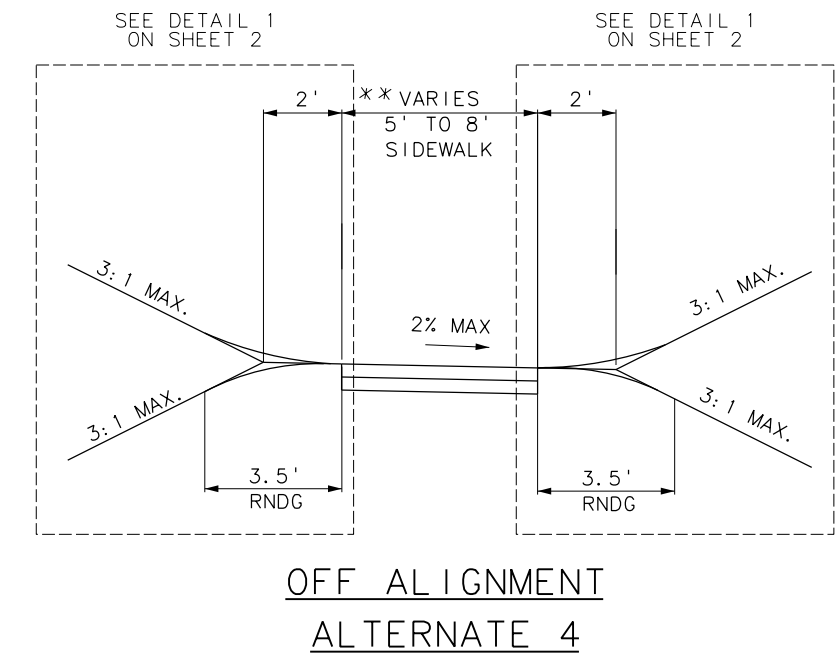
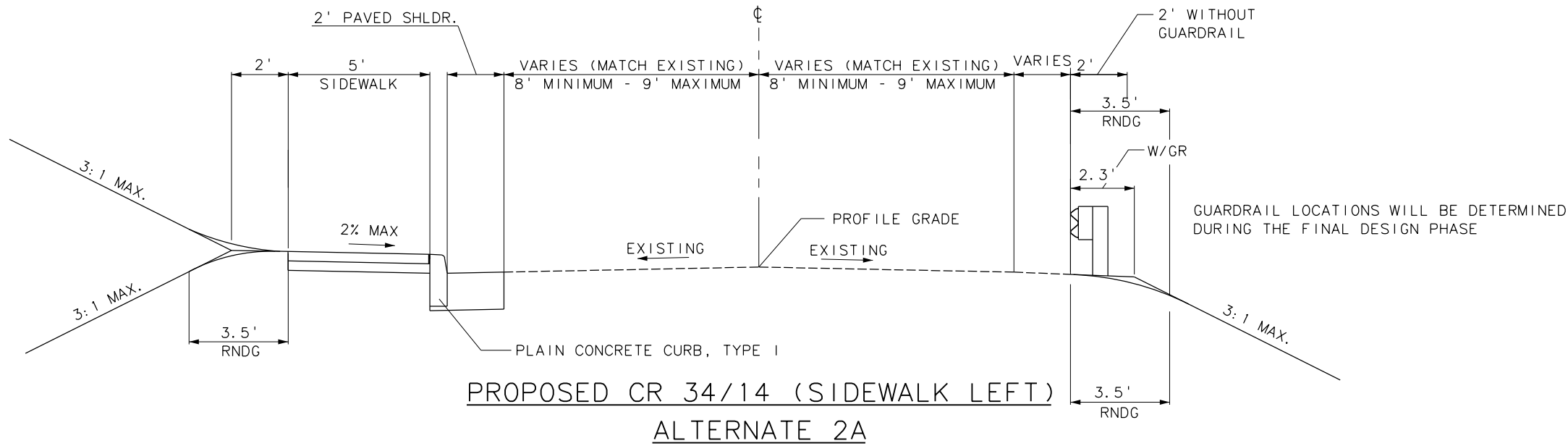
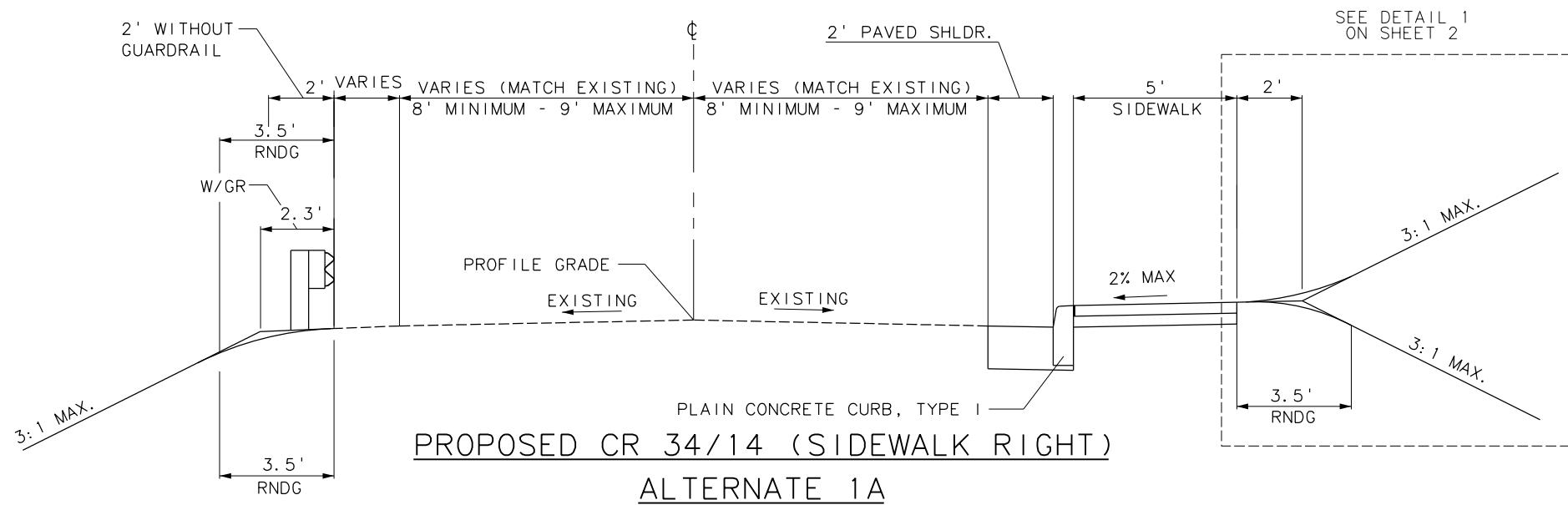
APPROVED: \_\_\_\_\_ COMMISSIONER OF HIGHWAYS

I HEREBY CERTIFY THAT THIS IS A CORRECT COPY OF THE PLANS OF PROJECT U340-34/14-0.00 00, N/A

EXECUTIVE SECRETARY  
DAY OF \_\_\_\_\_, 20\_\_



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	3	110



\*\* ADDITIONAL WIDTH ALLOWS FOR CONSTRUCTION ACCESS AND EMERGENCY RESPONDERS WHEN ALIGNMENT IS NOT ADJACENT TO AN EXISTING ROAD

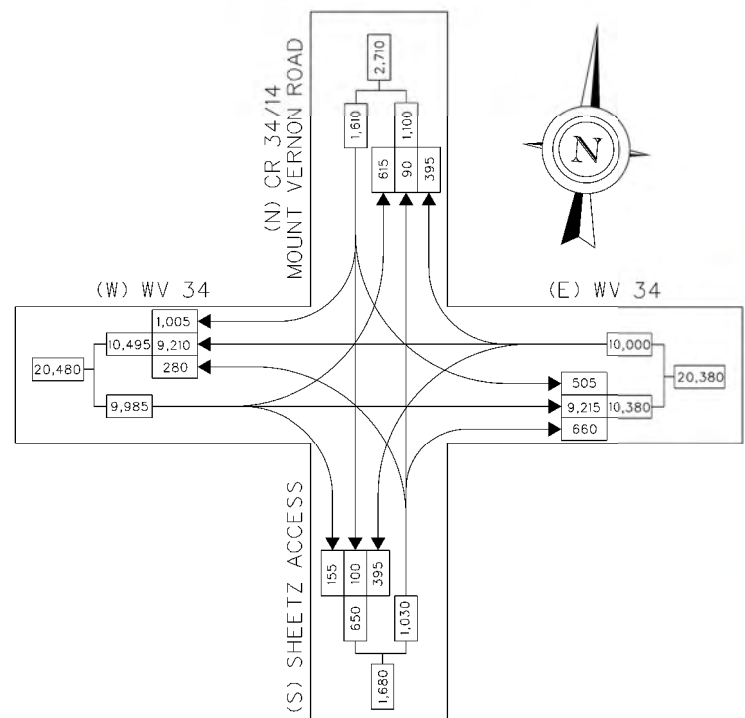
ALTERNATE 3 SIDEWALK WILL ALTERNATE SIDES OF ROADWAY. CROSSINGS WILL BE SITUATED AT LOCATIONS AS INDICATED ON PLANS. WHERE SIDEWALK IS NOT CONSTRUCTED TO ONE SIDE, EXISTING ROADWAY EDGE OF PAVEMENT WILL BE MAINTAINED.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

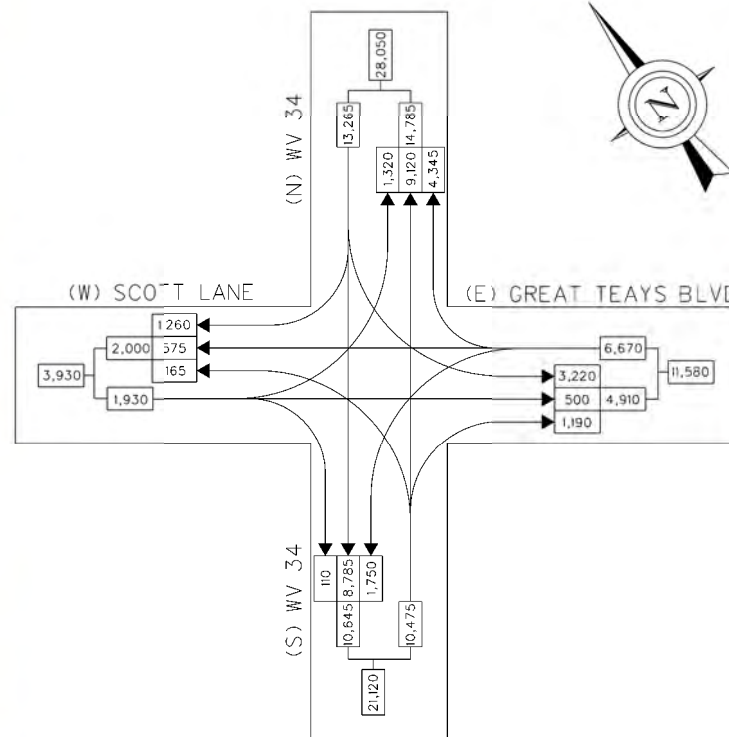
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TYPICAL SECTION**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	4	110

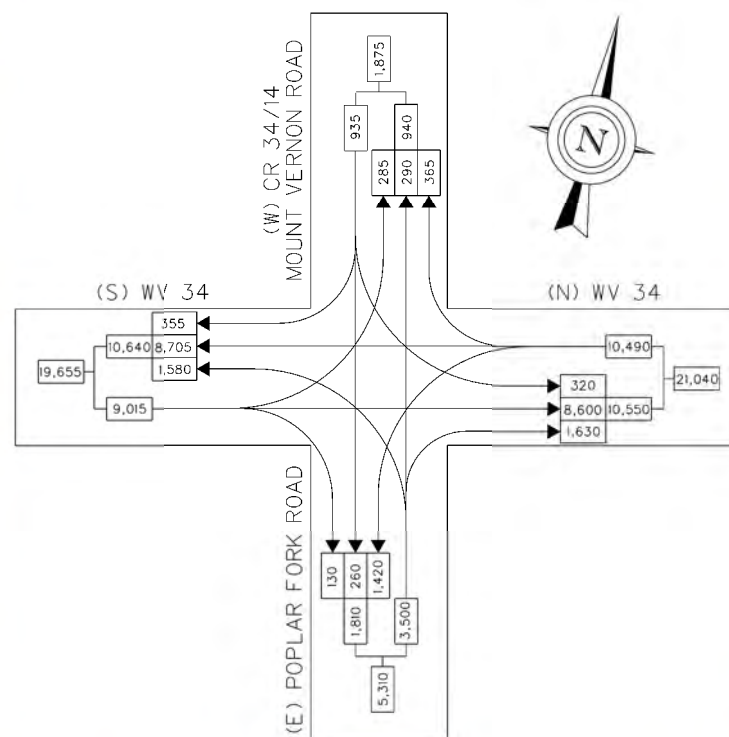
### ADT 2015



### ADT 2015



### ADT 2015

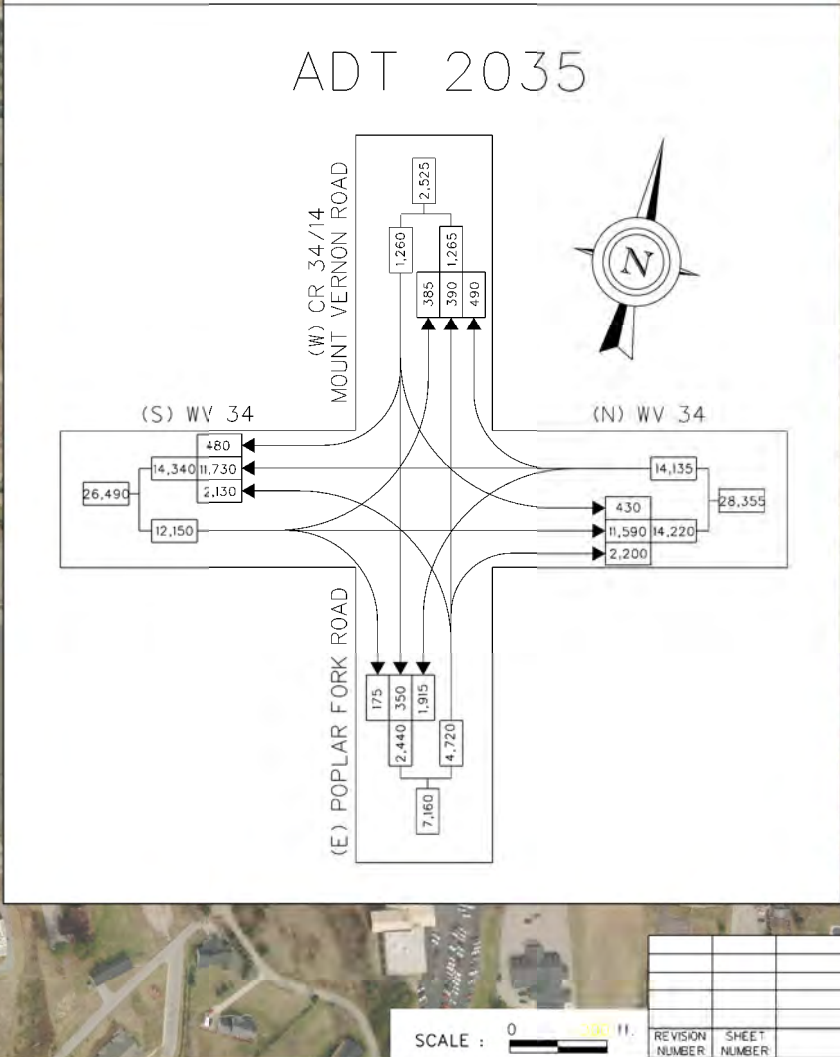
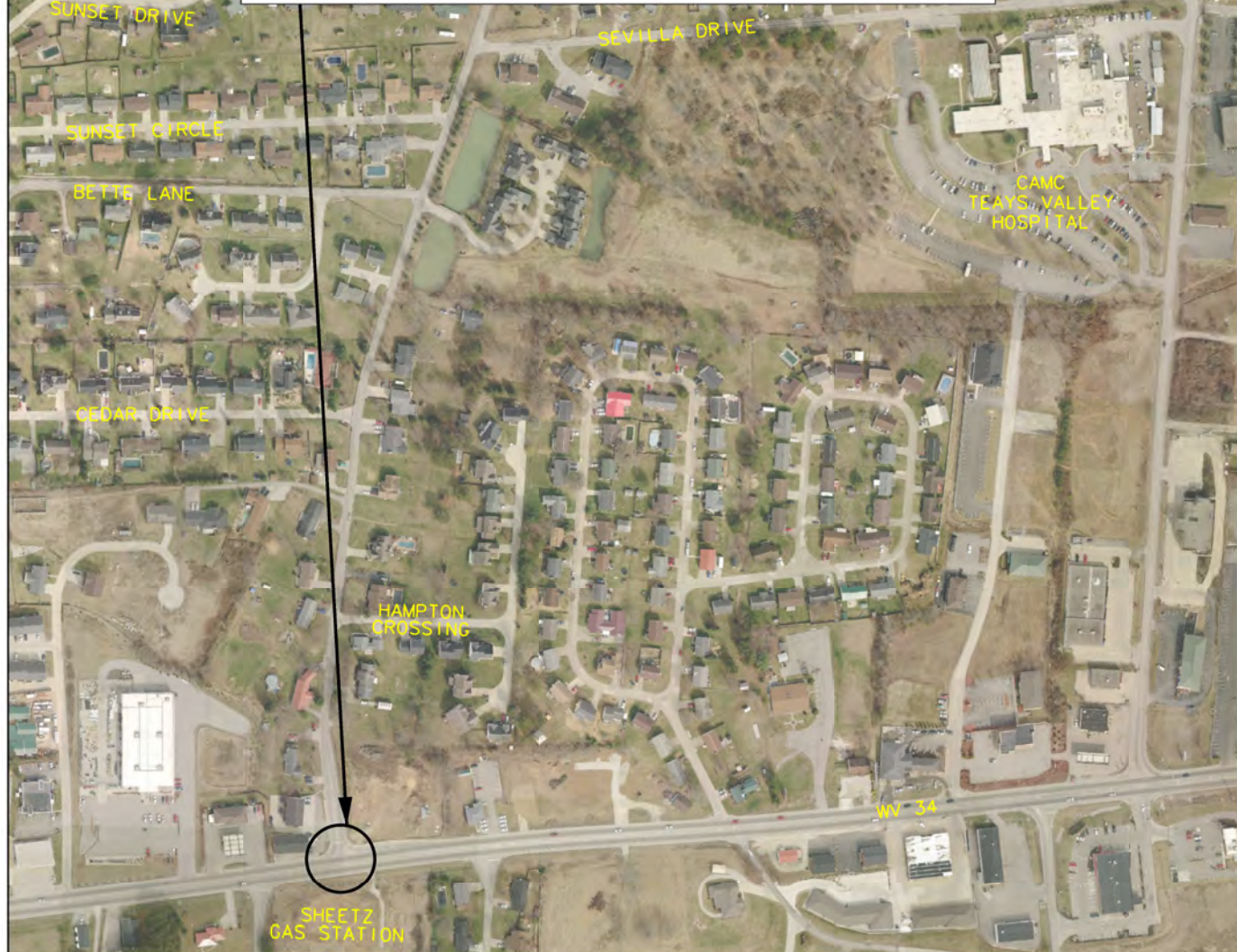
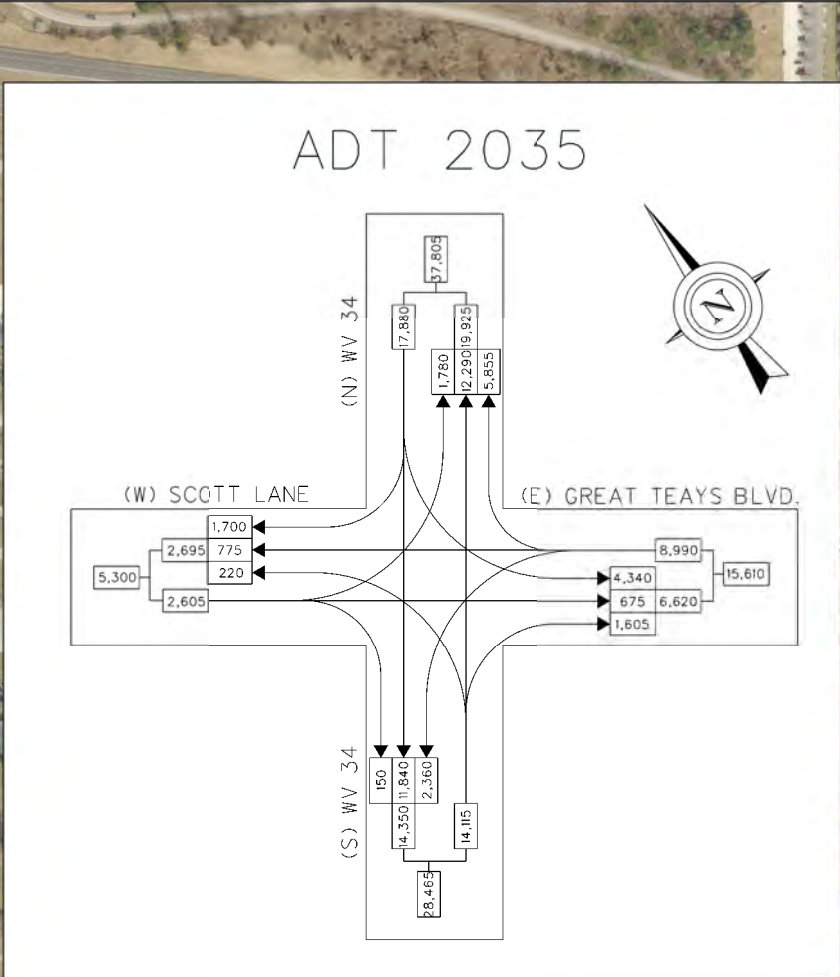
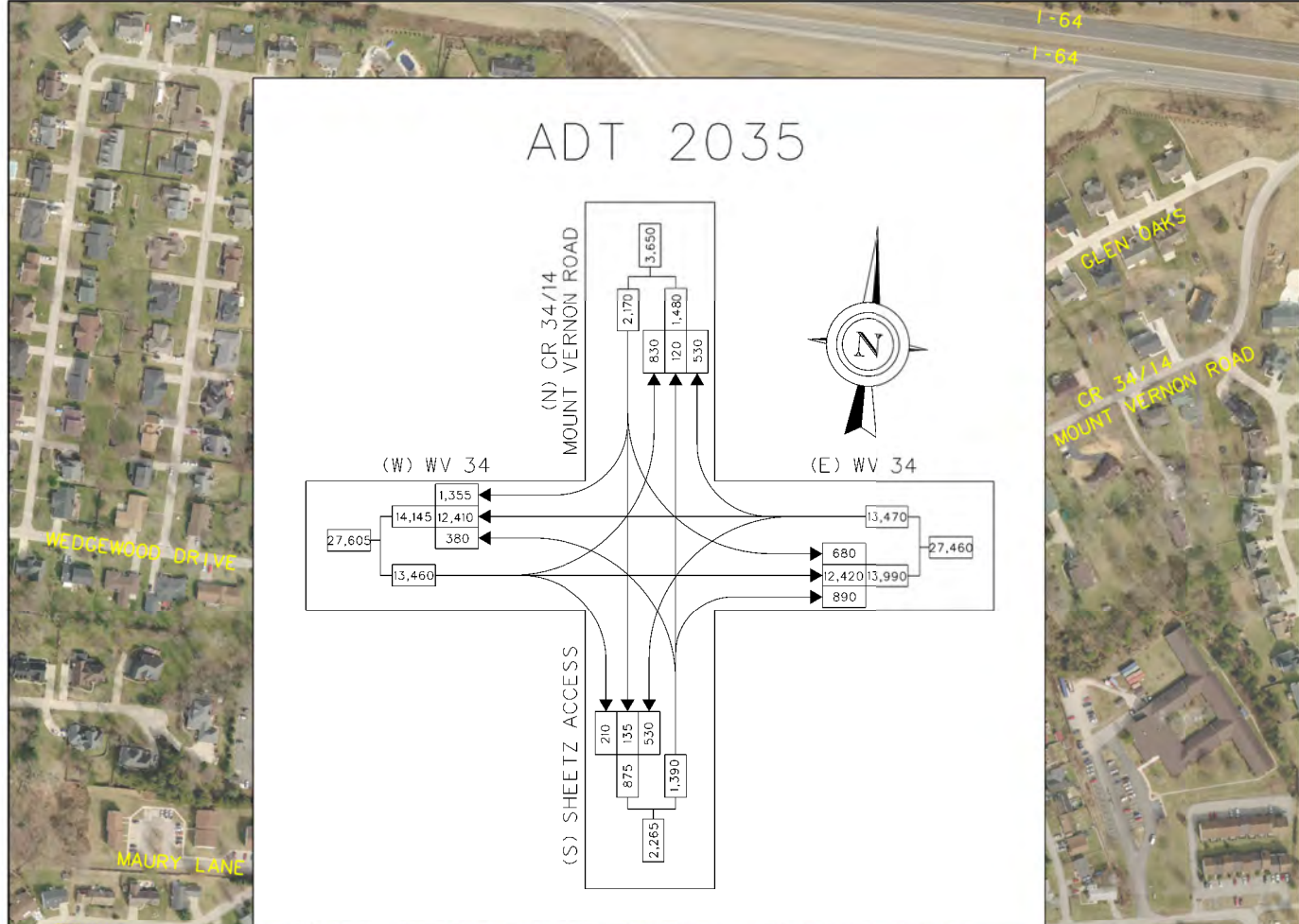


SCALE : 0 200 FT.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TRAFFIC SKETCH MAP**  
EXISTING CONDITIONS (2015)

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	5	110



SCALE : 0 100 200

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**TRAFFIC SKETCH MAP**  
**FUTURE CONDITIONS (2035)**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	6	110

**EH-1**  
PI = 101+24.48  
▲ = 4°05'09.30"  
Dc= 3°12'00.00"  
R = 1790.49  
L = 127.68  
T = 63.87  
e = 1.14  
N = 528437.6030  
E = 1694143.4880

**EH-7**  
PI = 113+29.72  
▲ = 0°54'13.34"  
Dc= 4°30'00.01"  
R = 1273.24  
L = 20.08  
T = 10.04  
e = 0.04  
N = 529624.2098  
E = 1694273.6660

**EH-15**  
PI = 126+27.02  
▲ = 46°47'12.42"  
Dc= 41°00'00.00"  
R = 139.75  
L = 114.11  
T = 60.45  
e = 12.52  
N = 530855.9644  
E = 1694680.6179

**EH-23**  
PI = 137+20.18  
▲ = 0°56'27.24"  
N = 531334.1814  
E = 1695670.9922  
NO CURVE

**EH-30**  
PI = 154+24.07  
▲ = 1°42'53.74"  
N = 531571.3978  
E = 1696859.6956  
NO CURVE

**EH-37**  
PI = 168+97.64  
▲ = 0°46'29.19"  
N = 531220.7402  
E = 1698288.1101  
NO CURVE

**EH-44**  
PI = 178+73.97  
▲ = 66°58'10.53"  
Dc= 79°30'00.65"  
R = 72.07  
L = 84.24  
T = 47.67  
e = 14.34  
N = 530938.7408  
E = 1699218.7368

**EH-51**  
PI = 190+40.88  
▲ = 19°29'28.26"  
Dc= 28°30'00.00"  
R = 201.04  
L = 68.39  
T = 34.53  
e = 2.94  
N = 529765.4095  
E = 1699322.3165

**EH-2**  
PI = 102+77.85  
▲ = 17°46'16.27"  
Dc= 15°15'00.00"  
R = 375.71  
L = 116.53  
T = 58.74  
e = 4.56  
N = 528587.5841  
E = 1694111.1931

**EH-8**  
PI = 114+66.20  
▲ = 0°43'57.57"  
N = 529753.6606  
E = 1694316.8828  
NO CURVE

**EH-16**  
PI = 129+71.44  
▲ = 0°47'08.25"  
N = 531005.1760  
E = 1694998.5624  
NO CURVE

**EH-24**  
PI = 139+46.13  
▲ = 3°20'13.68"  
Dc= 1°45'46.61"  
R = 3250.00  
L = 189.29  
T = 94.67  
e = 1.38  
N = 531435.9346  
E = 1695872.7412

**EH-31**  
PI = 155+31.20  
▲ = 1°04'58.01"  
Dc= 1°12'00.00"  
R = 4774.65  
L = 90.23  
T = 45.12  
e = 0.21  
N = 531549.8270  
E = 1696964.6390

**EH-38**  
PI = 170+99.54  
▲ = 0°36'59.40"  
N = 531171.4518  
E = 1698483.9030  
NO CURVE

**EH-45**  
PI = 180+53.15  
▲ = 0°51'58.72"  
Dc= 1°08'45.30"  
R = 5000.00  
L = 75.60  
T = 37.80  
e = 0.14  
N = 530749.2190  
E = 1699235.8630

**EH-52**  
PI = 191+94.62  
▲ = 42°09'54.15"  
Dc= 42°30'00.00"  
R = 134.81  
L = 99.21  
T = 51.97  
e = 9.67  
N = 529614.7804  
E = 1699288.3696

**EH-3**  
PI = 105+59.48  
▲ = 0°45'17.97"  
N = 528868.8020  
E = 1694138.8630  
NO CURVE

**EH-9**  
PI = 117+06.24  
▲ = 0°29'24.52"  
N = 529980.3567  
E = 1694395.8007  
NO CURVE

**EH-17**  
PI = 130+58.48  
▲ = 1°16'51.23"  
N = 531043.2303  
E = 1695076.8407  
NO CURVE

**EH-25**  
PI = 141+37.34  
▲ = 58°12'06.15"  
Dc= 44°00'00.83"  
R = 130.22  
L = 132.28  
T = 72.48  
e = 18.81  
N = 531511.9778  
E = 1696048.2382

**EH-32**  
PI = 157+22.79  
▲ = 7°28'18.71"  
Dc= 4°30'00.00"  
R = 1273.24  
L = 166.04  
T = 83.14  
e = 2.71  
N = 531507.7137  
E = 1697151.5408

**EH-39**  
PI = 172+03.90  
▲ = 0°06'48.61"  
N = 531144.8873  
E = 1698584.8281  
NO CURVE

**EH-46**  
PI = 181+82.90  
▲ = 0°44'12.96"  
N = 530619.8310  
E = 1699245.5854  
NO CURVE

**EH-4**  
PI = 106+71.57  
▲ = 1°14'29.47"  
N = 528980.2013  
E = 1694151.3081  
NO CURVE

**EH-10**  
PI = 117+88.07  
▲ = 0°31'26.60"  
N = 530057.8633  
E = 1694422.0412  
NO CURVE

**EH-18**  
PI = 131+47.36  
▲ = 0°56'04.59"  
N = 531083.8699  
E = 1695155.8923  
NO CURVE

**EH-26**  
PI = 142+35.47  
▲ = 4°02'09.39"  
N = 531621.6096  
E = 1696064.3707  
NO CURVE

**EH-33**  
PI = 159+97.26  
▲ = 14°56'51.83"  
Dc= 14°15'00.00"  
R = 402.08  
L = 104.90  
T = 52.75  
e = 3.45  
N = 531412.9946  
E = 1697409.3982

**EH-40**  
PI = 173+53.52  
▲ = 0°56'04.97"  
N = 531107.0887  
E = 1698729.5981  
NO CURVE

**EH-47**  
PI = 182+66.98  
▲ = 0°38'21.69"  
N = 530535.9193  
E = 1699250.8063  
NO CURVE

**EH-5**  
PI = 108+66.75  
▲ = 3°22'34.74"  
Dc= 4°30'00.00"  
R = 1273.24  
L = 75.03  
T = 37.53  
e = 0.55  
N = 529173.6559  
E = 1694177.1752

**EH-11**  
PI = 121+00.00  
▲ = 0°16'49.75"  
N = 530354.2263  
E = 1694519.3653  
NO CURVE

**EH-19**  
PI = 131+98.08  
▲ = 1°02'45.66"  
N = 531106.3192  
E = 1695201.3697  
NO CURVE

**EH-27**  
PI = 145+94.17  
▲ = 92°29'26.24"  
Dc= 22°55'05.92"  
R = 250.00  
L = 403.57  
T = 261.11  
e = 111.50  
N = 531979.2834  
E = 1696091.4850

**EH-34**  
PI = 161+95.04  
▲ = 9°47'25.97"  
Dc= 4°30'00.00"  
R = 1273.24  
L = 217.57  
T = 109.05  
e = 4.66  
N = 531394.9380  
E = 1697606.9621

**EH-41**  
PI = 174+39.23  
▲ = 2°25'51.41"  
N = 531086.7928  
E = 1698812.8668  
NO CURVE

**EH-48**  
PI = 184+02.19  
▲ = 0°36'38.19"  
N = 530401.0732  
E = 1699260.7080  
NO CURVE

**EH-6**  
PI = 110+57.40  
▲ = 13°19'05.28"  
Dc= 7°30'00.00"  
R = 763.94  
L = 177.58  
T = 89.19  
e = 5.19  
N = 529363.8012  
E = 1694191.2708

**EH-12**  
PI = 122+51.86  
▲ = 0°10'03.39"  
N = 530498.7354  
E = 1694566.0389  
NO CURVE

**EH-20**  
PI = 132+81.47  
▲ = 0°31'47.36"  
N = 531141.8595  
E = 1695276.8059  
NO CURVE

**EH-28**  
PI = 150+03.19  
▲ = 63°05'10.62"  
Dc= 22°22'52.19"  
R = 256.00  
L = 281.87  
T = 157.14  
e = 44.38  
N = 531916.5694  
E = 1696615.4154

**EH-35**  
PI = 165+06.08  
▲ = 0°39'13.45"  
N = 531314.2324  
E = 1697907.8931  
NO CURVE

**EH-42**  
PI = 175+85.28  
▲ = 17°41'09.65"  
Dc= 15°30'00.03"  
R = 369.65  
L = 114.10  
T = 57.51  
e = 4.45  
N = 531058.2560  
E = 1698956.1062

**EH-49**  
PI = 186+32.73  
▲ = 0°37'23.96"  
N = 530171.3421  
E = 1699280.0405  
NO CURVE

**EH-13**  
PI = 123+56.51  
▲ = 0°06'10.40"  
N = 530598.4167  
E = 1694597.9123  
NO CURVE

**EH-21**  
PI = 134+72.86  
▲ = 1°25'29.11"  
Dc= 2°00'00.00"  
R = 2864.79  
L = 71.24  
T = 35.62  
e = 0.22  
N = 531221.8278  
E = 1695450.6952


**EH-29**  
PI = 153+05.70  
▲ = 56°34'54.89"  
Dc= 35°15'00.95"  
R = 162.54  
L = 160.51  
T = 87.49  
e = 22.05  
N = 531602.0224  
E = 1696730.4482

**EH-36**  
PI = 166+85.27  
▲ = 1°00'13.77"  
N = 531269.7942  
E = 1698081.4847  
NO CURVE

**EH-14**  
PI = 125+20.73  
▲ = 0°26'36.91"  
N = 530754.9184  
E = 1694647.6446  
NO CURVE

**EH-22**  
PI = 135+79.55  
▲ = 1°35'01.34"  
N = 531268.8026  
E = 1695546.4914  
NO CURVE

25 MPH POSTED SPEED LIMIT  
4% MAXIMUM SUPERELEVATION RATE  
154' MINIMUM RADIUS FOR DESIGN

 DENOTES CURVES THAT DO NOT MEET MINIMUM RADIUS FOR 25 MPH DESIGN

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CURVE DATA**

TEMPORARY TRAFFIC CONTROL SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	
		UNIT	TOTAL
636002-001	AGGREGATE FOR MAINTAINING TRAFFIC, STONE OR GRAVEL	TON	
636002-002	AGGREGATE FOR MAINTAINING TRAFFIC, SLAG	TON	
636003-001	BITUMINOUS MATERIAL FOR DUST PALLIATIVE	GAL.	
636004-001	CALCIUM CHLORIDE FOR DUST PALLIATIVE	TON	
636005-001	TEMPORARY STRUCTURE FOR MAINTAINING TRAFFIC	L.S.	
636006-001	PILOT TRUCK AND DRIVER	DAY	
636007-001	ERADICATION OF PAVEMENT MARKING	L.F.	
636008-001	TEMPORARY PAVEMENT MARKINGS - PAINT 4 IN	L.F.	
636009-001	TEMPORARY PAVEMENT MARKINGS - TAPE 4 IN	L.F.	
636010-003	TEMPORARY RAISED PAVEMENT MARKER - TYPE TCZ	EACH	
636011-001	TRAFFIC CONTROL DEVICE	UNIT	
636012-010	PROJECT TRAFFIC CONTROL DEVICE CLEANING	EACH	
636013-001	INDIVIDUAL TRAFFIC CONTROL DEVICE CLEANING	EACH	
636014-001	FLAGGER	HOURL	
636014-002	TRAFFIC DIRECTOR	HOURL	
636015-001	TEMPORARY GUARDRAIL CHANNELIZATION DEVICE	L.F.	
636017-001	TEMPORARY CONCRETE BARRIER	L.F.	
636017-002	DOH FURNISHED TEMPORARY CONCRETE BARRIER	L.F.	
636018-001	REMOVE & RESET TEMPORARY CONCRETE BARRIER	L.F.	
636018-002	REMOVE & RESET DOH FURNISHED TEMP. CONCRETE BARRIER	L.F.	
636019-001	TEMPORARY GUARDRAIL BARRIER	L.F.	
636020-001	REMOVE & RESET TEMPORARY GUARDRAIL BARRIER	L.F.	
636021-001	ELECTRIC ARROW	DAY	
636022-001	CHANGEABLE MESSAGE SIGN	DAY	
636023-001	TEMPORARY TRAFFIC SIGNAL	L.S.	
636024-001	TEMPORARY PIPE FOR MAINTAINING TRAFFIC	L.F.	
636025-001	WARNING LIGHTS, TYPE A	DAY	
636025-001	WARNING LIGHTS, TYPE B	DAY	
636025-001	WARNING LIGHTS, TYPE C	DAY	
636026-001	TEMPORARY LIGHTING	L.S.	
636028-001	SHADOW VEHICLE	DAY	
664001-009	REMOVE AND RESET ATTENUATOR DEVICE	EACH	
664011-001	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE II	EACH	

**TEMPORARY TRAFFIC CONTROL NOTES**

**A. TEMPORARY TRAFFIC CONTROL**

- TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH SECTION 636 OF THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, STANDARD SPECIFICATIONS, ROADS AND BRIDGES, ADOPTED 2010, THE SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 1, 2016, THE MANUAL ON TEMPORARY TRAFFIC CONTROL FOR STREETS AND HIGHWAYS, 2006 EDITION, THE CONTRACT DOCUMENTS, THE CONTRACT PLANS, AND THE TRAFFIC PLAN FOR INDIVIDUAL SEGMENTS AS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL MAINTAIN WORKING STORM DRAINAGE SYSTEMS THROUGH THE WORK AREAS AT ALL TIMES DURING CONSTRUCTION. THE WORKING SYSTEM MAY CONSIST OF THE EXISTING STORM DRAINAGE SYSTEM, THE PROPOSED STORM DRAINAGE SYSTEM, OR A COMBINATION THEREOF. DRAINAGE PIPES FOR THE PROPOSED SYSTEMS SHALL BE CONSTRUCTED IN SECTION LENGTHS NECESSARY TO MAINTAIN THE LANES OF TRAFFIC INDICATED IN THE TEMPORARY TRAFFIC CONTROL PLANS.
- SITE GRADE TO DRAIN, SEED AND MULCH ALL DISTURBED AREAS AFTER REMOVAL OF TEMPORARY ROADS AND WORK AREAS.
- ANY EXISTING SIGNS OR DELINEATORS THAT ARE RELOCATED, REMOVED, OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT HIS EXPENSE AS PART OF ITEM 636011-001.
- TEMPORARY TAPE: ALL TEMPORARY TAPE SHALL BE MECHANICALLY APPLIED. SOLID LINES SHALL HAVE A 2 INCH GAP EVERY 50 FEET.
- ACCESS TO ALL RESIDENCES SHALL BE MAINTAINED AT ALL TIMES.

**B. TRAFFIC CONTROL DEVICES**

- FINAL LOCATION OF ALL TRAFFIC CONTROL DEVICES ARE TO BE ESTABLISHED BY THE ENGINEER IN THE FIELD.
- REFLECTIVE SHEETING ON TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE OF NEW CONDITION AT THE BEGINNING OF THE PROJECT LIFE. NIGHT VISIBILITY AND LEGIBILITY SHALL BE MAINTAINED.
- DURING EACH STEP OF CONSTRUCTION, THE CONTRACTOR SHALL COVER ALL SIGNS WHICH ARE NOT APPROPRIATE TO THE CONTRACTOR'S TRAFFIC RESTRICTIONS. WHEN COVERING EXISTING SIGNS THE CONTRACTOR HAS THE OPTION OF USING:
  - THIN WOOD OVERLAY (E.G. PLYWOOD)
  - TAKING SIGNS DOWN AND REINSTALLING WHEN APPROPRIATE
 ANY DAMAGE CAUSED BY THE ABOVE NAMED SHALL BE REPAIRED/REPLACED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL ABOVE SHALL BE BID INCIDENTAL TO ITEM 636011-001.
- ALL TEMPORARY BARRIER SHALL HAVE 8" X 12" TYPE B-1 DELINEATORS WITH HI-INTENSITY SHEETING (WHITE OR YELLOW AS APPROPRIATE) FACING TRAFFIC AT 40 FOOT CENTERS. ALL DELINEATORS AND WORK ASSOCIATED WITH INSTALLING AND REMOVING SHALL BE BID INCIDENTAL TO ITEM NUMBER 636017-001. TEMPORARY BARRIERS SHALL BE FLARED AWAY APPROPRIATELY OR TIED INTO GUARDRAIL OR PROTECTED WITH TEMPORARY IMPACT ATTENUATOR AS DIRECTED BY THE ENGINEER.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	7	110

SEQUENCE OF CONSTRUCTION

CASE B1 OR MODIFIED CASE B1 SHOULD BE USED FOR THIS PROJECT

PHASE I  
INSTALL LEAD-IN WARNING DEVICES.

CONSTRUCT PEDESTRIAN FACILITIES AND APPURTENANCES.

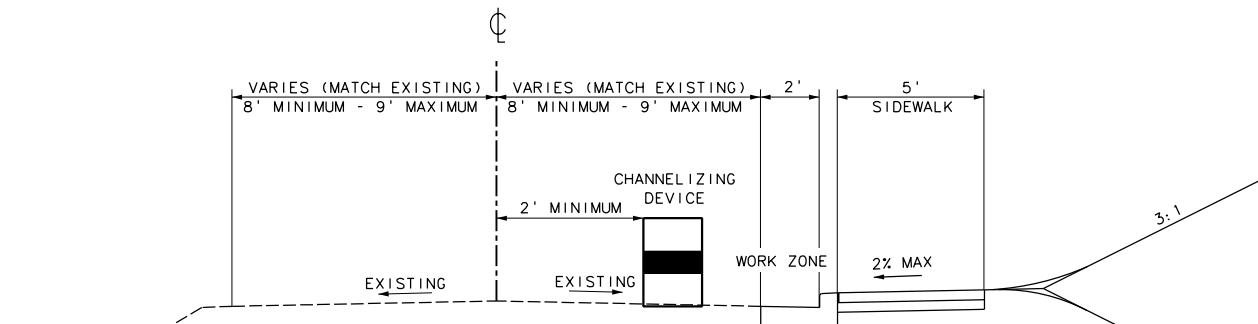
PHASE II  
REMOVE TEMPORARY TRAFFIC CONTROL.

OPEN TO TRAFFIC AND PEDESTRIANS.

**ITEM 636011-001 - TRAFFIC CONTROL DEVICE QUANTITY TABLE**

DEVICE	DESCRIPTION	QUANTITIES	VALUES IN UNITS	TOTAL
* 1	SIGNS ON PORTABLE MOUNTS AND BARRICADES (TOTAL SIGN AREA 16 SQ. FT. OR GREATER)		170	
* 2	SIGNS ON PORTABLE MOUNTS AND BARRICADES (TOTAL SIGN AREA LESS THAN 16 SQ. FT.)		80	
* 3	SIGNS ON PERMANENT POSTS (TOTAL SIGN AREA 16 SQ. FT. OR GREATER)		180	
* 4	SIGNS ON PERMANENT POSTS (TOTAL SIGN AREA LESS THAN 16 SQ. FT.)		90	
* * 5	BARRICADES - TYPE I		35	
* * 6	BARRICADES - TYPE II		60	
* * 7	BARRICADES - TYPE III		90	
* * 8	DRUMS		60	
9	CONES		5	
10	VERTICAL PANELS OR GROUND MOUNTED DELINEATORS		10	
11	BARRIER OR GUARDRAIL MOUNTED DELINEATORS (TO BE BID INCIDENTAL TO THE COST OF THE BARRIER OR GUARDRAIL)		0	
12	TEMPORARY OVERLAYS AND TEMPORARY OVERSIZE SIGNS		300	
13	CHANNELIZER CONES		40	
			TOTAL	

- \* - ORANGE SIGN SHEETING TO BE FLUORESCENT ORANGE - TYPE V (ROLL-UP SIGNS) OR TYPE IX OR TYPE XI (RIGID SIGNS)
- \* \* - BARRICADES AND DRUM SHEETING TO BE 6" TYPE III.



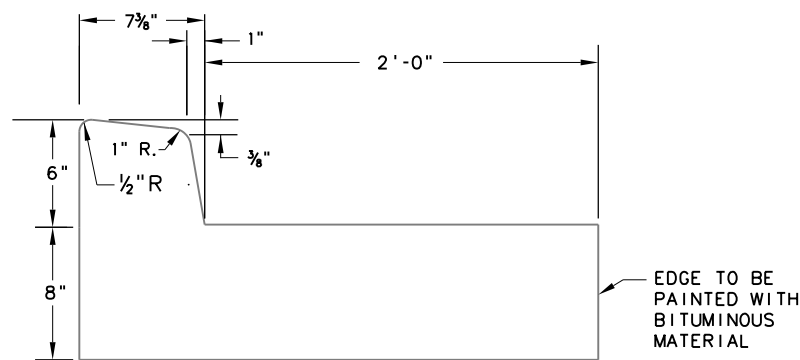
SNAP SHOT TYPICAL SECTION FOR  
TEMPORARY TRAFFIC CONTROL  
ONE LANE TWO-WAY OPERATION WITH FLAGGERS

NO SCALE

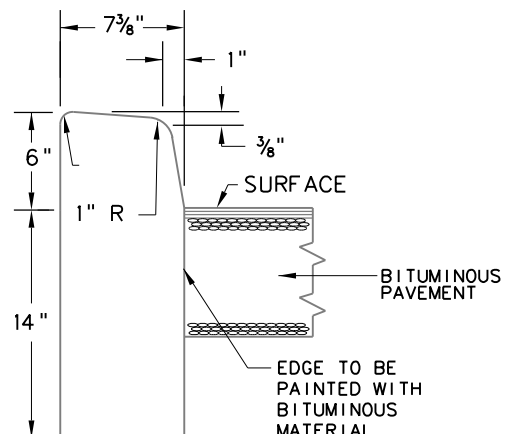
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**TEMPORARY TRAFFIC CONTROL**

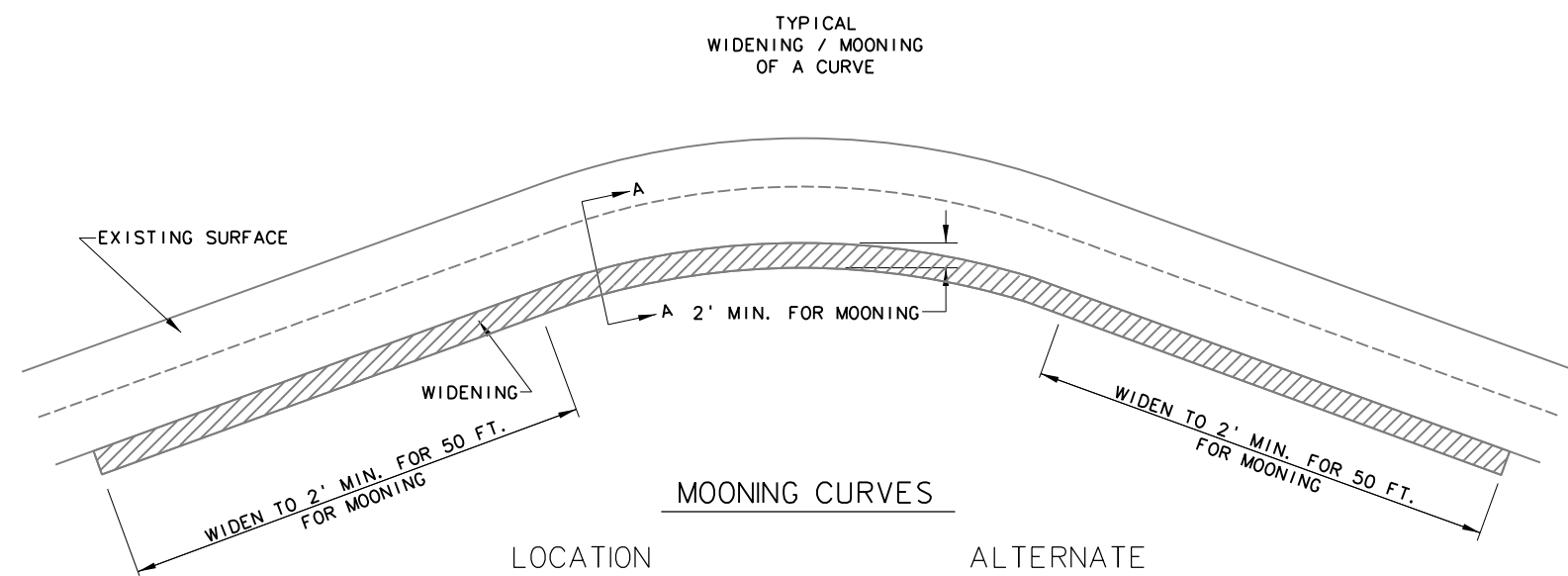
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	8	110



COMBINATION CONCRETE CURB AND GUTTER TYPE I

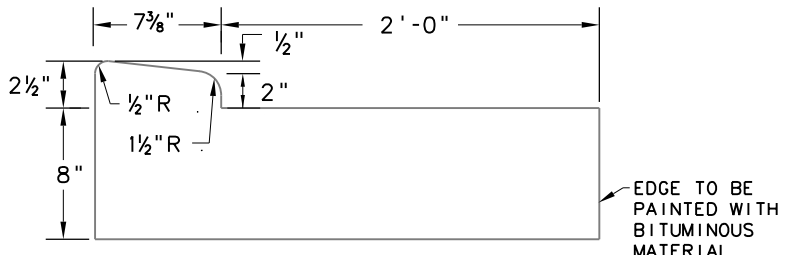


PLAIN CONCRETE CURBING TYPE I

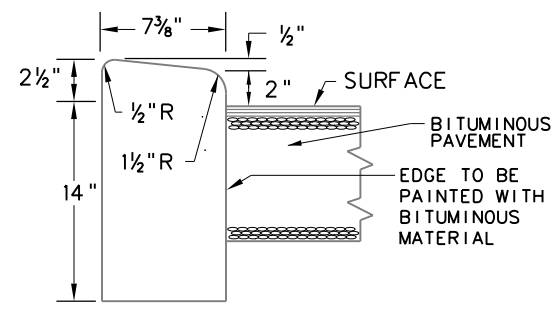


MOONING CURVES

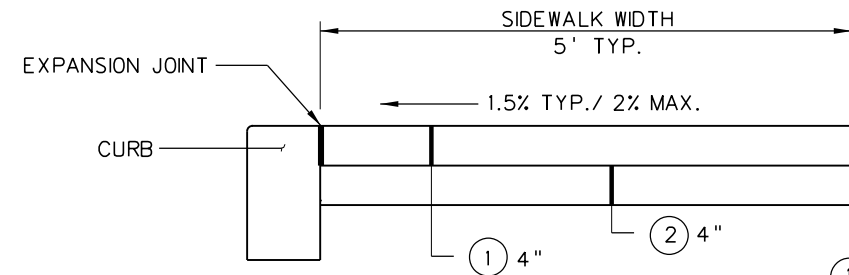
- |                           |           |
|---------------------------|-----------|
| LOCATION                  | ALTERNATE |
| (EH-15) STA. 126+27.02 RT | 2/2A, 3   |
| (EH-25) STA. 141+37.34 LT | 1/1A, 3   |
| (EH-44) STA. 178+73.97 RT | 2/2A, 3   |
| (SCOTT LN) STA. 187+00 LT | 1/1A      |



COMBINATION CONCRETE CURB AND GUTTER TYPE IV

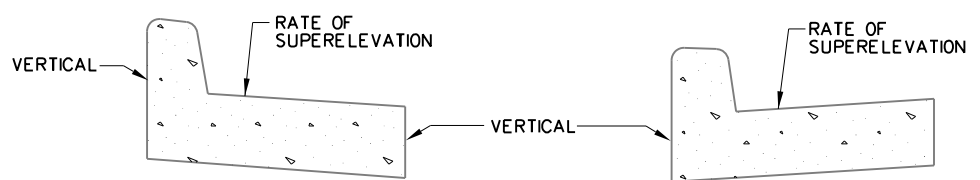


PLAIN CONCRETE CURBING TYPE IV



SIDEWALK TYPICAL

- ① CONCRETE SIDEWALK ITEM 609001 S.Y.
- ② BED COURSE MATERIAL ITEM 609002 C.Y.



SKETCH SHOWING METHOD OF PLACING CURB ON HIGH SIDE OF SUPERELEVATED SECTION

SKETCH SHOWING METHOD OF PLACING CURB ON LOW SIDE OF SUPERELEVATED SECTION

NOTES

FOR ALL CONCRETE CURBING, THE FACE OF THE CURBING SHALL BE OFFSET A MINIMUM OF TWO FEET FROM THE EDGE OF TRAFFIC LANE, UNLESS OTHERWISE SHOWN ON THE PLANS.

CONSTRUCTION OF CONCRETE CURBING SHALL BE BY THE "SEPARATE METHOD" WHEN SAWED JOINTS ARE CONSTRUCTED IN THE PAVEMENT.

ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

FOR COMBINATION CONCRETE CURBS AND GUTTERS, THE SLOPE OF THE 2'-0" WIDE CONCRETE GUTTER SHALL CONFORM TO THE PAVEMENT SLOPE OR AS OTHERWISE SPECIFIED ON THE PLANS.

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CONC. CURBING, SIDEWALK & MOONING OF CURVES**

NOT TO SCALE

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	9	110

**NOTES**

THE STANDARD CURB TAPER, CLASS I, SHALL BE USED AT THE ENDS OF ALL PLAIN CONCRETE CURBING, UNLESS OTHERWISE CALLED FOR ON THE PLANS.

THE STANDARD CURB TAPER, CLASS II, SHALL BE USED AT THE ENDS OF ALL COMBINATION CURB AND GUTTER, AND ALL INTEGRAL CONCRETE CURBING, UNLESS OTHERWISE CALLED FOR ON THE PLANS.

THE DETAILS AS SHOWN FOR SIDEWALK AND CURB TREATMENT AT DRIVEWAYS ARE TO BE UTILIZED UNLESS OTHERWISE CALLED FOR ON THE PLANS.

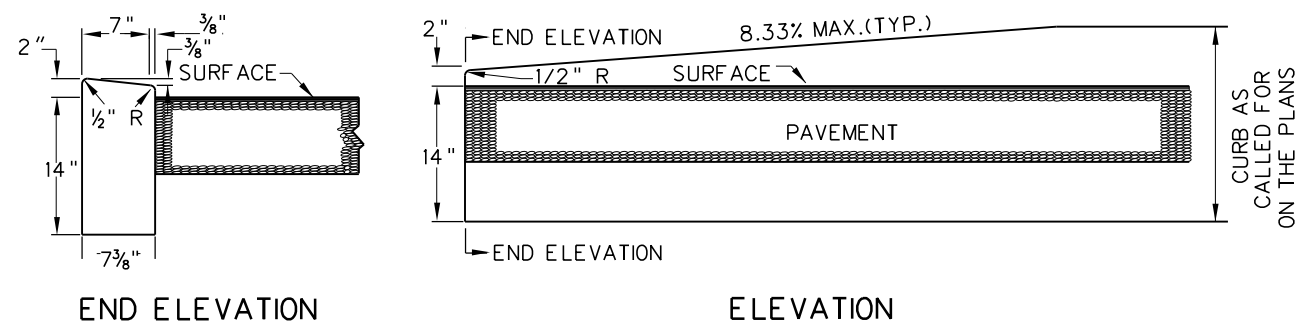
SECTION A-A DETAILS A 6' TRANSITION LENGTH IN THE HEIGHT OF THE CURB WHERE DRIVEWAYS AND TYPE IV CURBING ARE ENCOUNTERED.

SECTION B-B & C-C DETAILS ADDITIONAL DEPTH OF SIDEWALK AT DRIVEWAYS AND SECTION D-D DETAILS STANDARD DEPTH SIDEWALK.

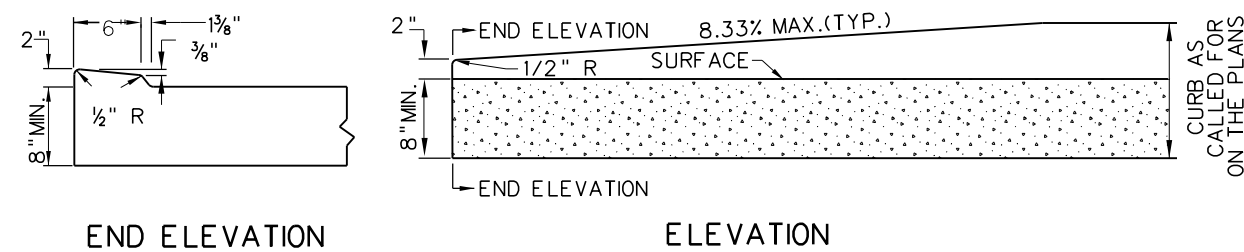
SIDEWALK WIDTH SHALL BE EXCLUSIVE OF CURB. WIDTH SHALL BE 5' UNLESS OTHERWISE SHOWN ON PLANS.

SIDEWALK CROSS SLOPE OF 2% IS ABSOLUTE MAXIMUM. THERE IS NO CONSTRUCTION TOLERANCE FOR INCREASED CROSS SLOPE PAST 2%.

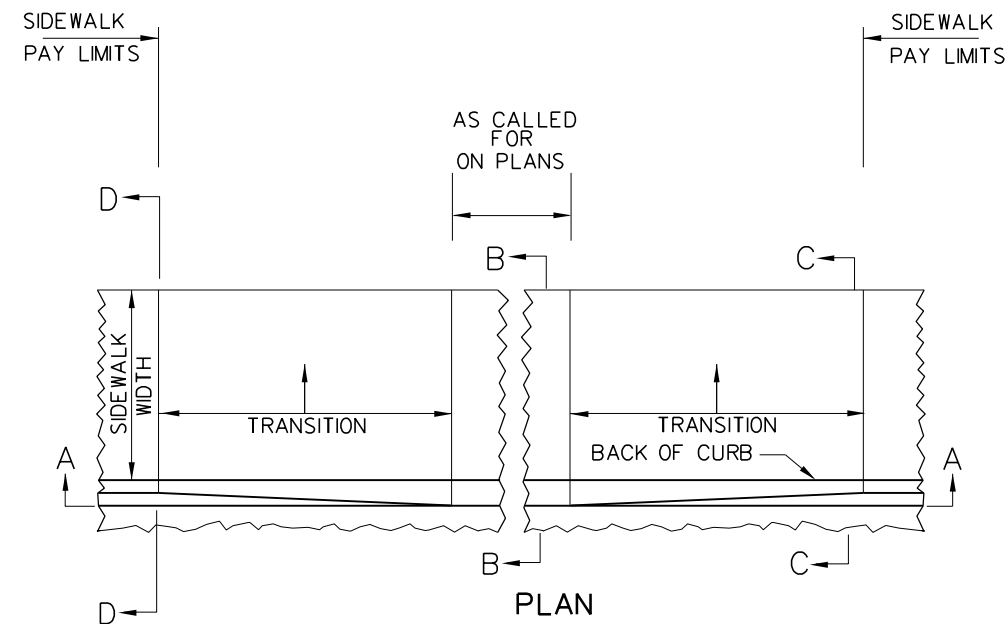
SIDEWALKS LESS THAN 5' IN WIDTH SHALL HAVE A 5' X 5' PASSING SPACE AT INTERVALS OF 200' OR LESS.



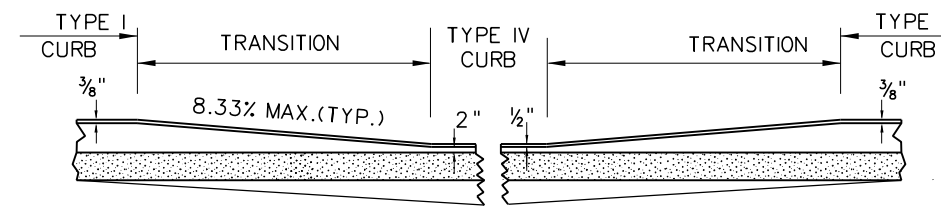
**STANDARD CURB TAPER CLASS I**



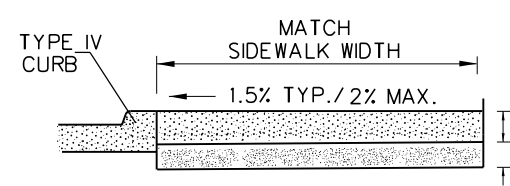
**STANDARD CURB TAPER CLASS II**



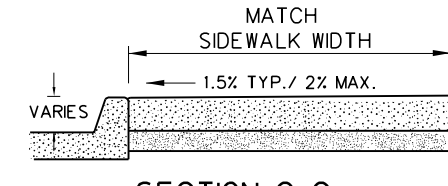
**PLAN**



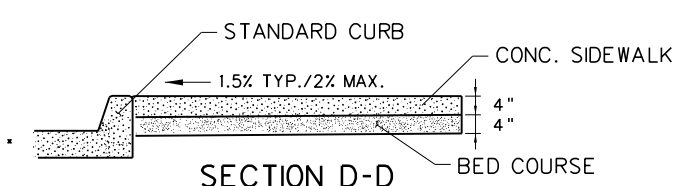
**SECTION A-A**



**SECTION B-B**



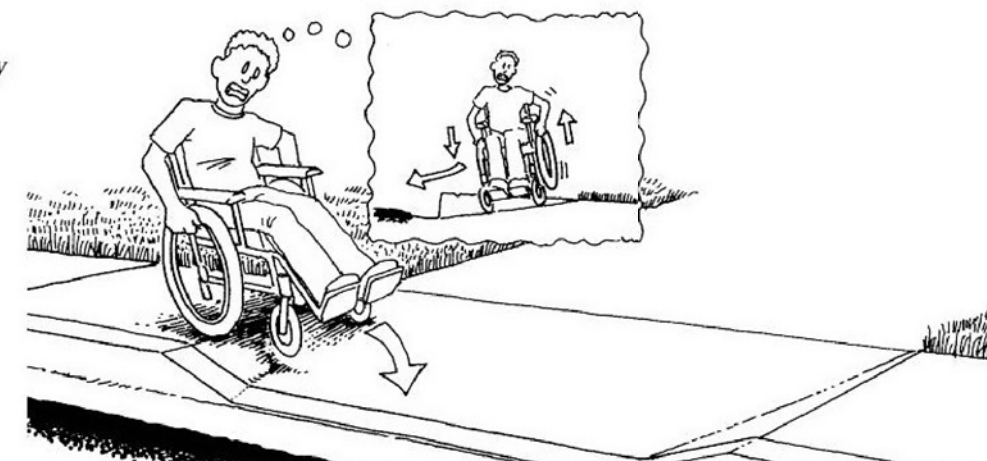
**SECTION C-C**



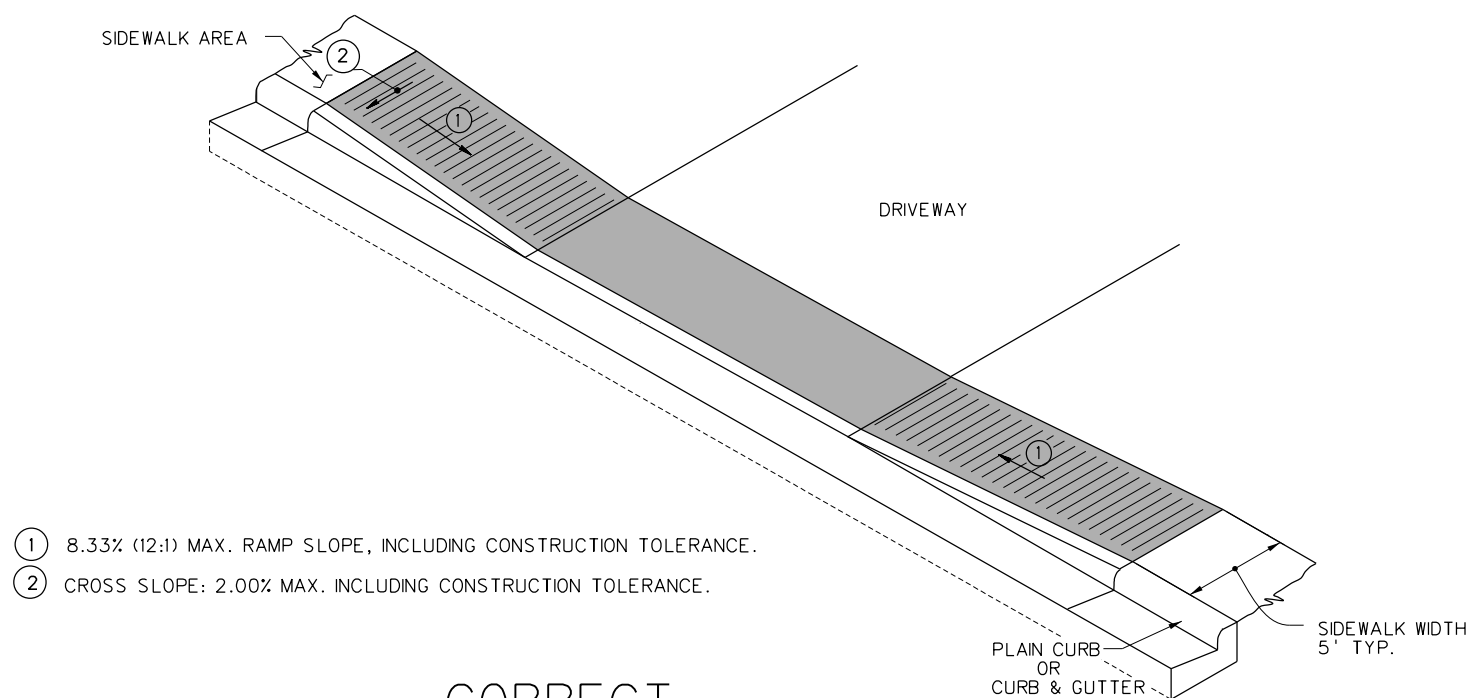
**SECTION D-D**

**SIDEWALK AND CURB TREATMENT AT DRIVEWAYS**

*When cross-slopes change rapidly over a short distance, wheelchair use becomes extremely unstable.*



**INCORRECT DRIVEWAY AND SIDEWALK RAMP CROSSING**



**CORRECT**

- ① 8.33% (12:1) MAX. RAMP SLOPE, INCLUDING CONSTRUCTION TOLERANCE.
- ② CROSS SLOPE: 2.00% MAX. INCLUDING CONSTRUCTION TOLERANCE.

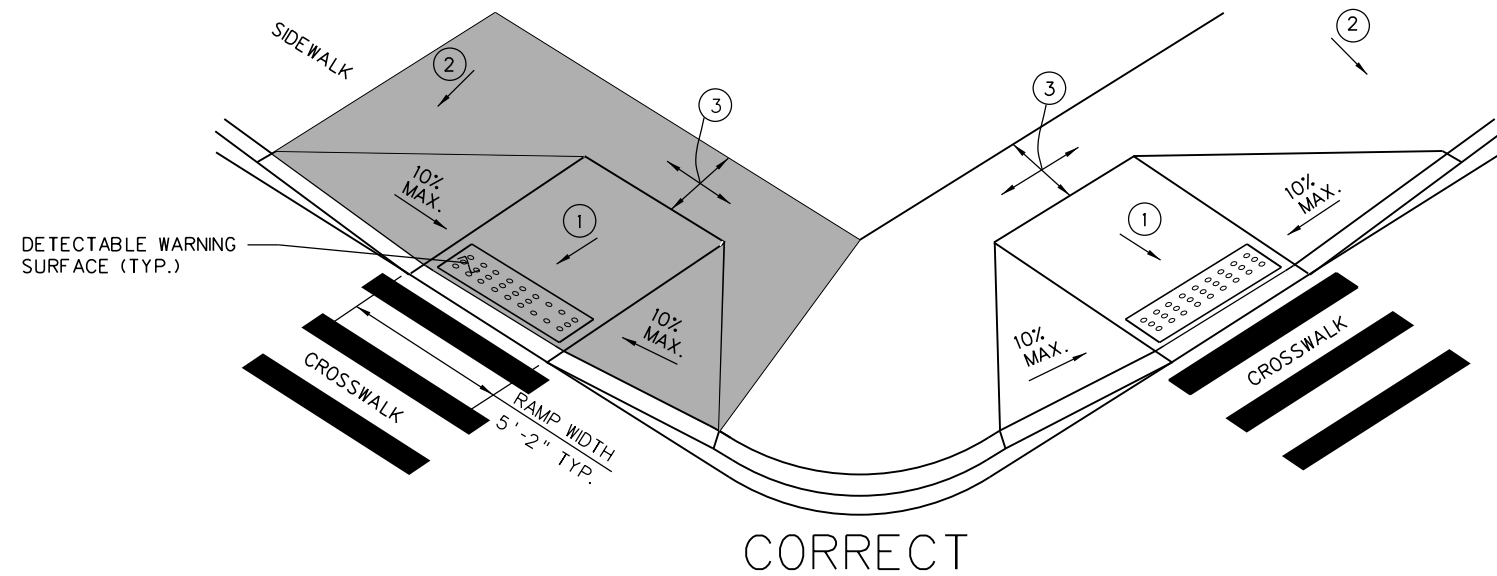
- 6" PCC PAVEMENT OR PER DRIVEWAY TYP.
- 6" AGGREGATE BASE, 4" FREE DRAINING BASE OR PER DRIVEWAY TYP.

NOT TO SCALE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

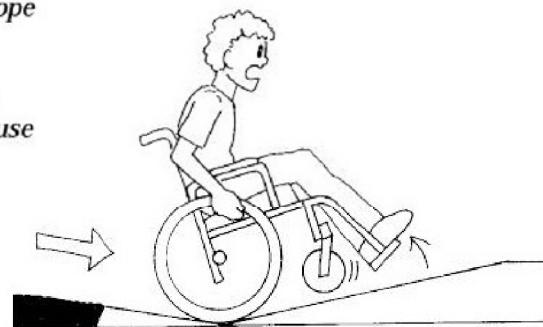
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CONC. CURBING & SIDEWALK AT DRIVEWAY LOCATIONS**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	10	110



**TYPE I RAMPS SHOWN AT INTERSECTION**  
 • SEPARATE PAY ITEMS

*Excessive slope differences between a gutter and a ramp can cause wheelchairs to slip over backward.*



INCORRECT SIDEWALK RAMP

*Excessive slope differences between gutter and ramp can cause a wheelchair to tip forward.*



INCORRECT SIDEWALK RAMP

- ① 8.33% (12:1) MAX. RAMP SLOPE, INCLUDING CONSTRUCTION TOLERANCE.
- ② CROSS SLOPE: 2.00% MAX. INCLUDING CONSTRUCTION TOLERANCE.
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

**NOTES**

RAMP CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 609 OF THE SPECIFICATIONS. RAMP SURFACE SHALL INCLUDE A "DETECTABLE WARNING SURFACE" (SEE PVT7 SHT. 3 OF 3) AS SHOWN FOR EACH RAMP TYPE. A COARSE BROOM FINISH, TRANVERSE TO FLARE SLOPES, OR EQUAL NON-SKID FINISH SHALL BE PROVIDED ON CONCRETE SURFACES.

NORMAL GUTTER FLOW LINE AND PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA, UNLESS OTHERWISE SHOWN OR SPECIFIED.

¼" PREFORMED EXPANSION JOINT FILLER, MEETING THE REQUIREMENTS OF SECTION 609 OF THE SPECIFICATIONS, SHALL BE PLACED AT ALL LOCATIONS WHERE RAMP CONTACTS CURB, GUTTER, OR CONCRETE PAVEMENT. WHEN THE RAMP IS POURED SEPARATELY FROM THE SIDE WALK, THE EXPANSION MATERIAL SHALL BE PLACED AT ALL LOCATIONS WHERE THE NORMAL SIDEWALK AND THE RAMP ABUT.

DRAINAGE STRUCTURES SHALL NOT BE PLACED IN LINE WITH RAMPS. LOCATION OF THE RAMP SHALL TAKE PRECEDENCE OVER LOCATION OF THE DRAINAGE STRUCTURE, EXCEPT WHERE EXISTING STRUCTURES ARE BEING UTILIZED FOR CONSTRUCTION OF NEW RAMPS.

ANY GRATE IN PEDESTRIAN AREAS SHALL HAVE OPENINGS NOT GREATER THAN 1/2" AND SHALL BE PLACED WITH LONG DIMENSION OF OPENING PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.

IF THE 8.33% (12:1) SLOPE CANNOT BE OBTAINED DUE TO GRADE OF THE ADJACENT ROADWAY, THE SLOPED PORTION OF THE RAMP SHALL BE EXTENDED TO A MAXIMUM LENGTH OF 15'-0".

A TURNING SPACE AS DEPICTED IN THE DETAILS SHALL BE PROVIDED AT THE TOP OF APPROPRIATE CURB RAMPS. THE TURNING SPACE SHALL HAVE A MINIMUM WIDTH OF 4 FT. WHEN NO OBSTRUCTIONS EXIST AT THE BACKSIDE OF THE LANDING. WHEN AN OBSTRUCTION EXISTS SUCH AS A BUILDING, LIGHT POLE, ETC. THE MINIMUM DIMENSION OF THE LANDING SHALL BE 5 FEET.

CURB RAMP WIDTH SHALL MATCH SIDEWALK WIDTH PLUS CLEARANCE. TYPICAL SIDEWALK WIDTH IS 5'. MINIMUM WIDTH IS 4'.

THE TYPE OF RAMP TO BE USED SHALL BE AS SPECIFIED ON THE PLANS. THE FOLLOWING CAN BE CONSIDERED GUIDELINES IN SELECTING RAMP TYPES, BUT ARE INCLUDED HERE FOR INFORMATION ONLY.

**RAMP TYPES**

- TYPE I** FOR USE WHERE SIDEWALK EXTENDS TO STREET AND WHERE SIDEWALK WIDTH IS ADEQUATE FOR RAMP AND TURNING SPACE.
- TYPE II** NOT APPLICABLE
- TYPE III** PARALLEL RAMPS ARE FOR USE WHEN ADEQUATE SIDEWALK WIDTH FOR BOTH RAMPS AND TURNING SPACE CANNOT BE PROVIDED.
- TYPE IV** COMBINES ASPECTS OF TYPE I AND TYPE III RAMPS AS NECESSARY. USE WHERE SIDEWALK IS SET BACK FROM STREET AND A GRASS OR LANDSCAPED STRIP IS PROVIDED BETWEEN SIDEWALK AND STREET.

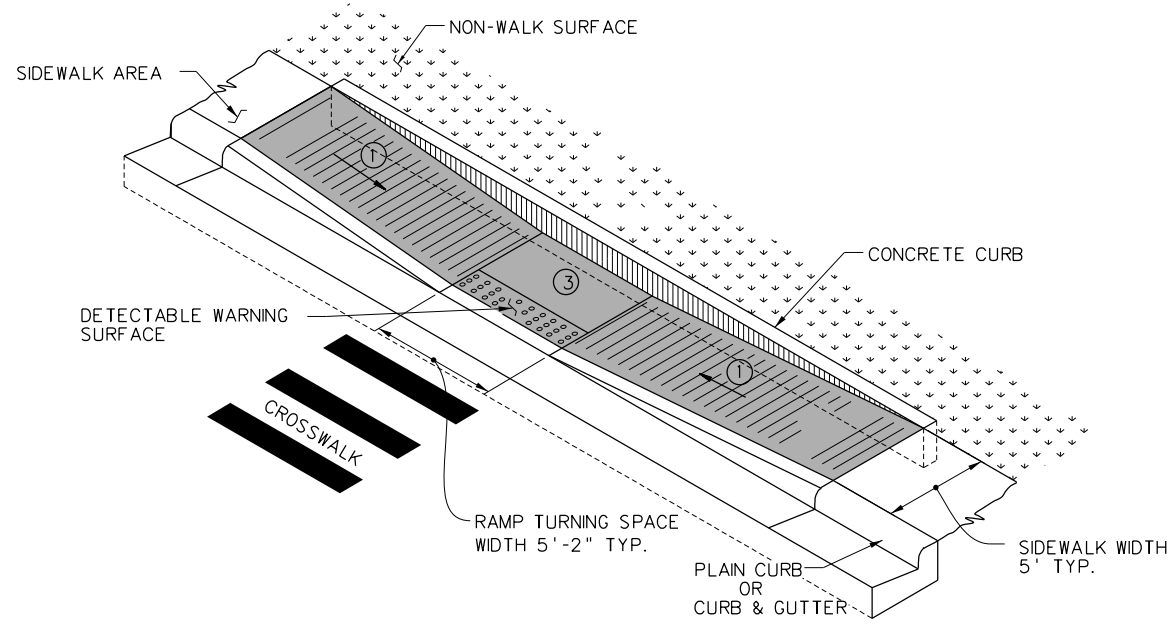
PAY LIMITS FOR CURB RAMPS

NOT TO SCALE

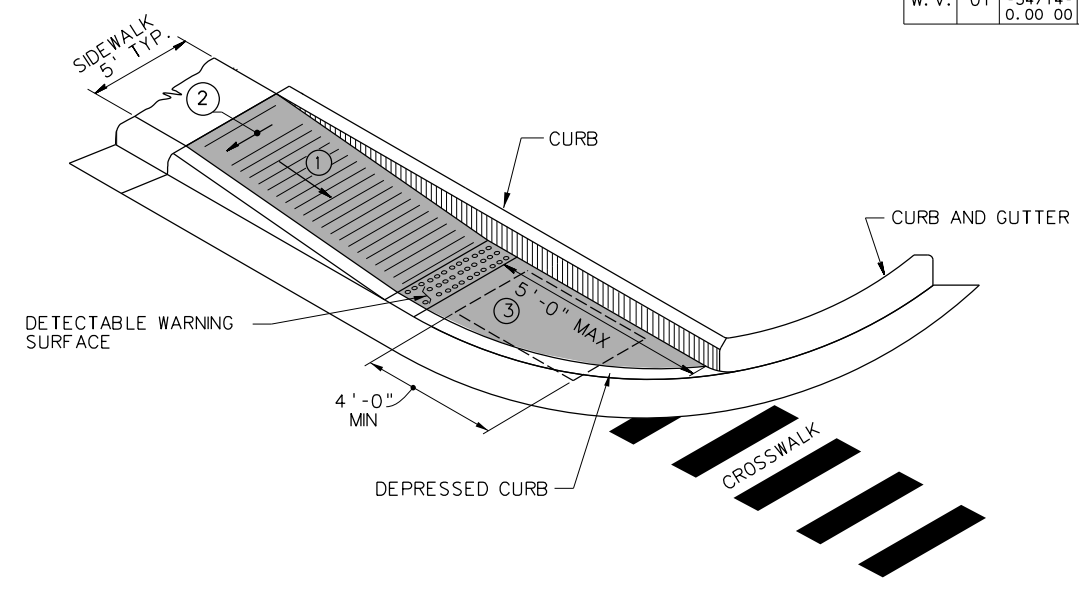
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

SEE PLAN SHEETS FOR CROSSWALK LOCATIONS  
 THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**SIDEWALK RAMPS**

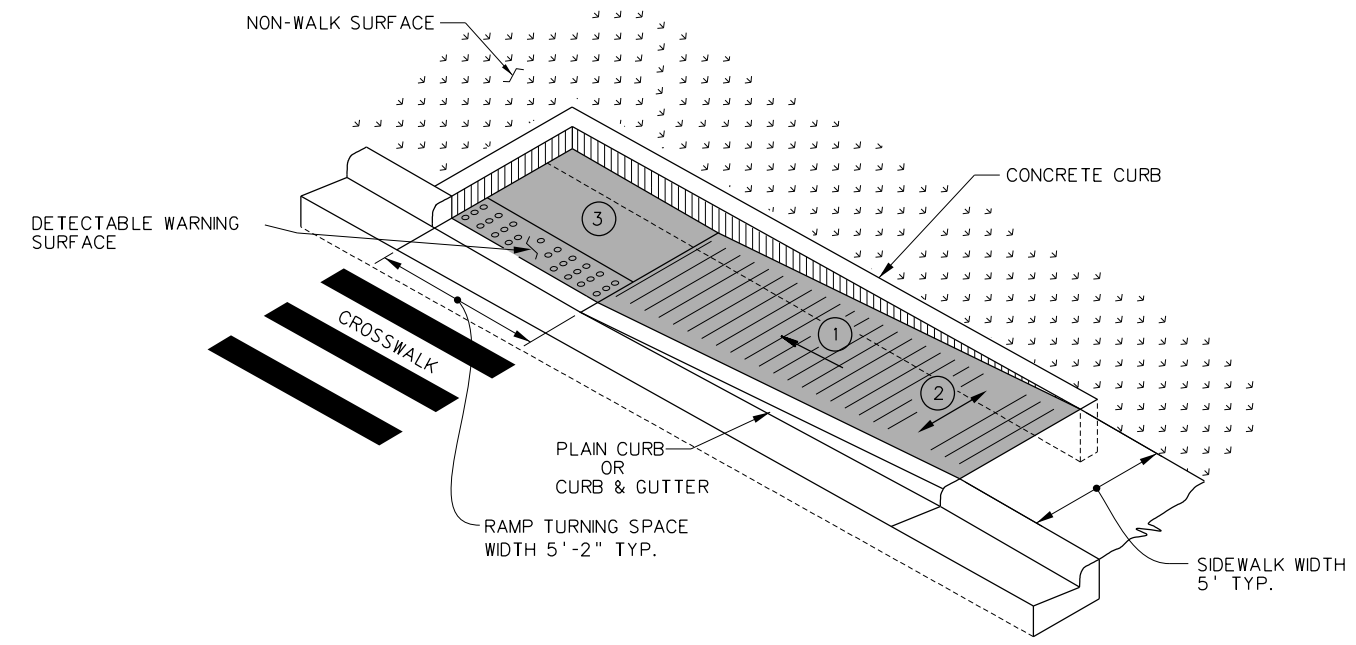
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	11	110



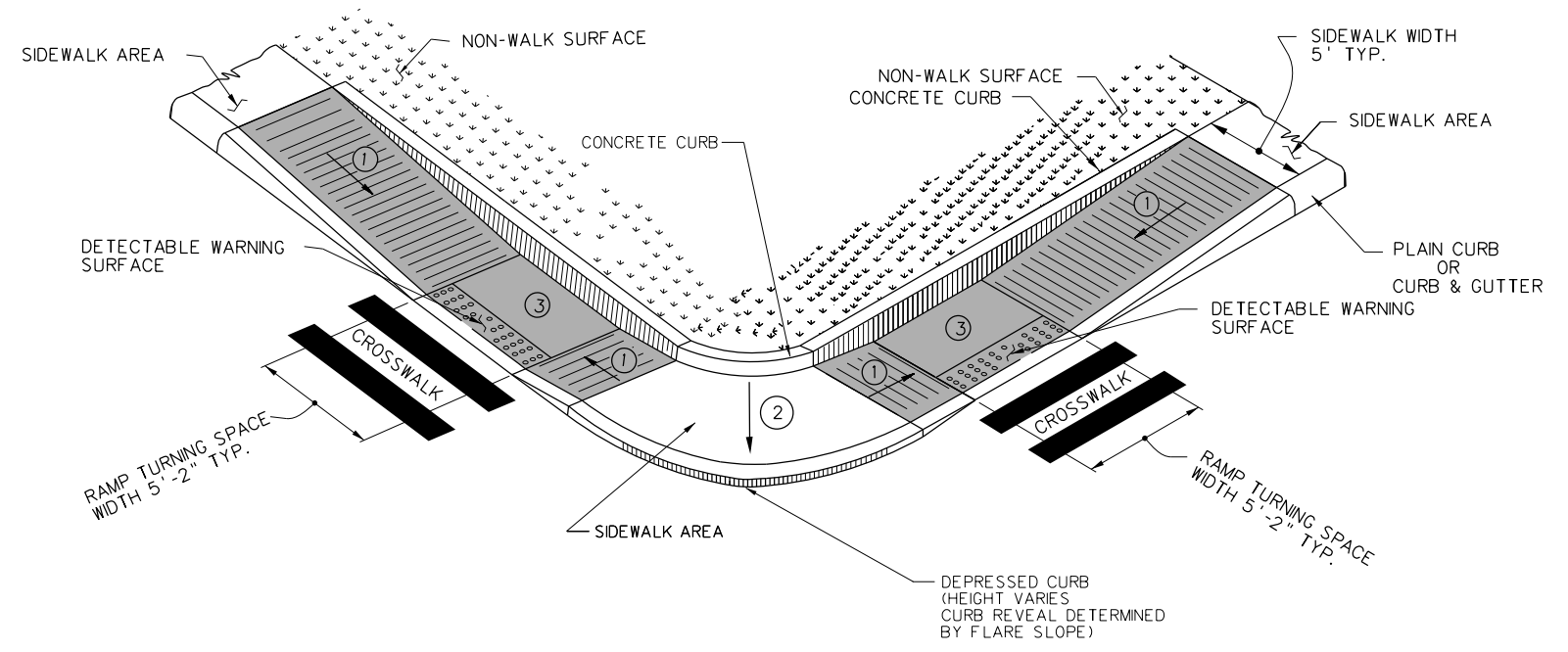
TYPE III



TYPE III B



TYPE III A



TYPE III RAMPS AT INTERSECTION

- ① 8.33% (12:1) MAX. RAMP SLOPE, INCLUDING CONSTRUCTION TOLERANCE.
- ② CROSS SLOPE: 2.00% MAX. INCLUDING CONSTRUCTION TOLERANCE.
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

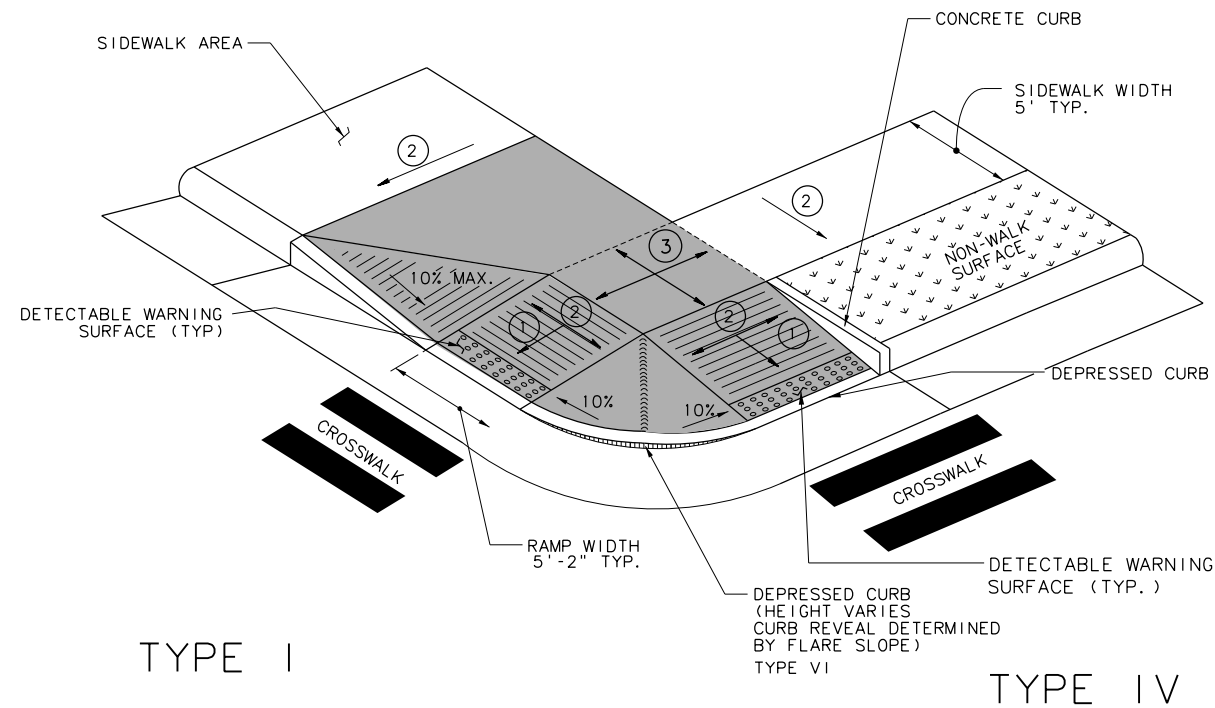
PAY LIMITS FOR CURB RAMPS

NOT TO SCALE

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

SEE PLAN SHEETS FOR CROSSWALK LOCATIONS  
 THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**SIDEWALK RAMPS**

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	12	110



TYPE I RAMP AND TYPE IV RAMP SHOWN AT INTERSECTION  
 \* TWO SEPARATE PAY ITEMS

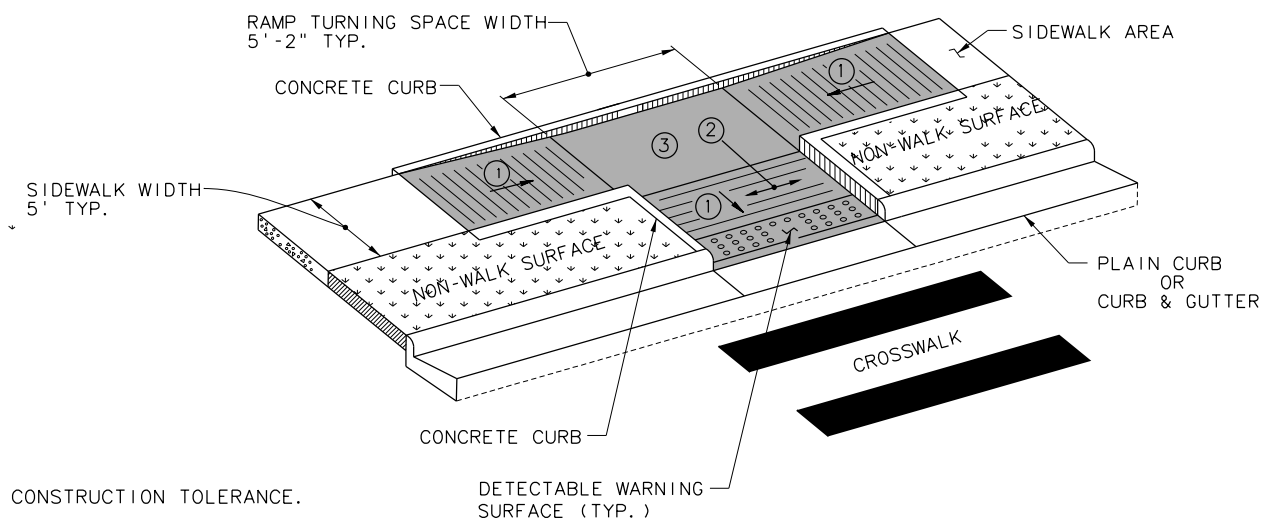
**NOTES**

DETECTABLE WARNING SURFACES SHALL EXTEND ACROSS THE FULL WIDTH OF THE CURB RAMP, LANDING OR TRANSITION.

DOMES SHALL BE ALIGNED IN THE PREDOMINANT DIRECTION OF THE CURB RAMP.

DESIGN AND PLACEMENT OF DETECTABLE WARNING SYSTEMS SHALL BE IN ACCORDANCE WITH SECTION 609 OF THE SPECIFICATIONS AND THE PUBLIC RIGHTS OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

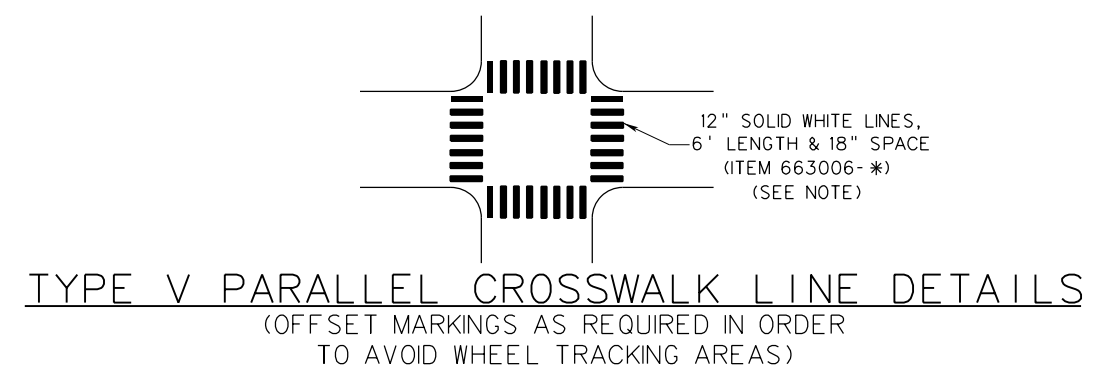
**DETECTABLE WARNING SURFACE**



TYPE IV RAMP

- ① 8.33% (12:1) MAX. RAMP SLOPE, INCLUDING CONSTRUCTION TOLERANCE.
- ② CROSS SLOPE: 2.00% MAX. INCLUDING CONSTRUCTION TOLERANCE.
- ③ CURB RAMPS REQUIRE A (4'-0") MINIMUM TURNING SPACE WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR CURB RAMPS



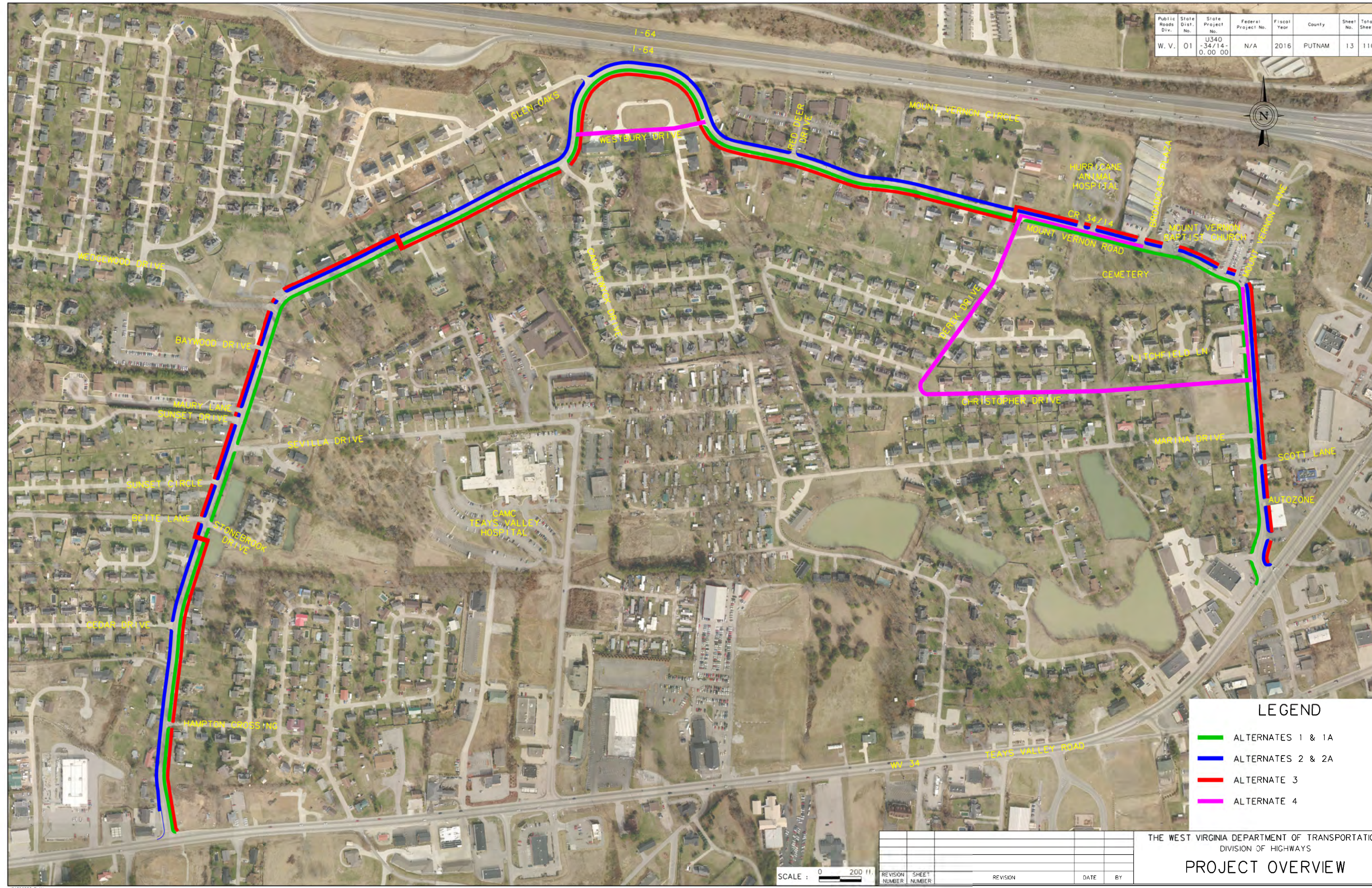
**NOTE:**  
 THE TYPE V MATERIAL USED FOR CROSSWALK MARKINGS SHALL BE ENHANCED SKID RESISTANT MATERIAL, AS CATEGORIZED ON THE DIVISION'S APL FOR TYPE V MATERIALS. ENHANCED SKID RESISTANT MATERIAL SHALL ALSO BE USED FOR OTHER TYPE V MARKINGS WHEN INDICATED IN THE PROJECT PLANS.

SEE PLAN SHEETS FOR CROSSWALK LOCATIONS  
 THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**SIDEWALK RAMPS &  
 CROSSWALKS**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

NOT TO SCALE

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00.00	N/A	2016	PUTNAM	13	110



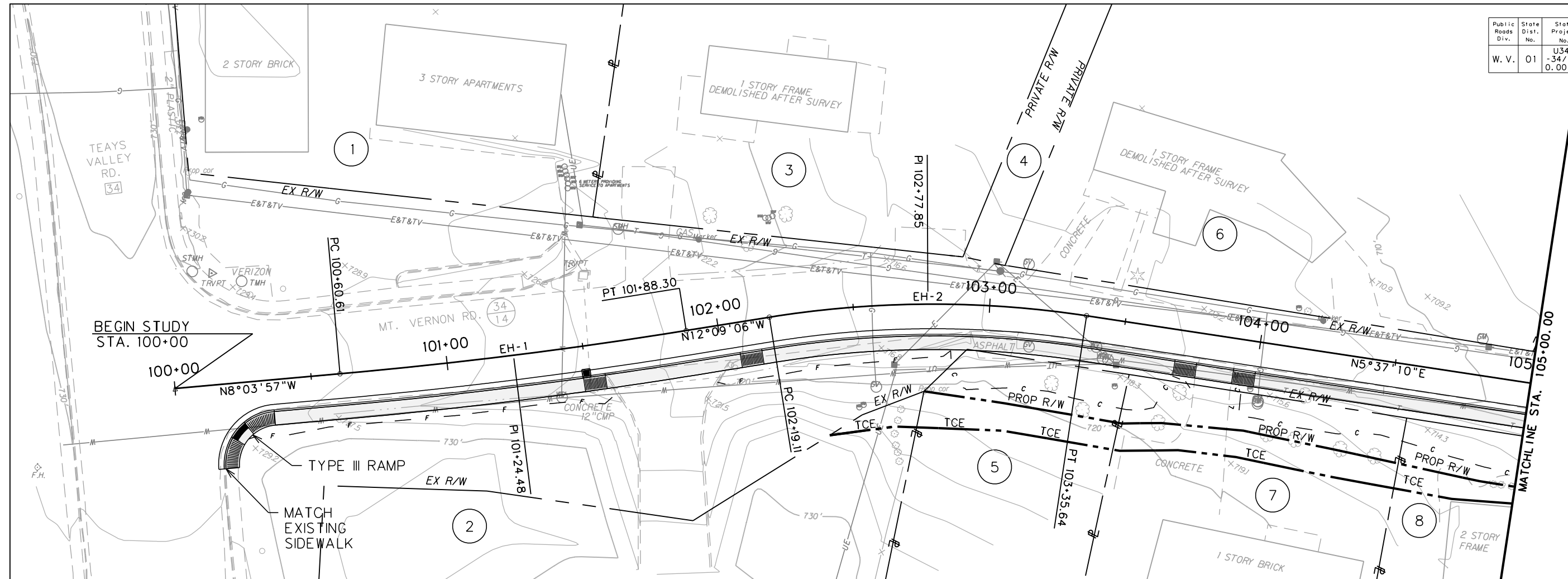
LEGEND	
<span style="color: green;">—</span>	ALTERNATES 1 & 1A
<span style="color: blue;">—</span>	ALTERNATES 2 & 2A
<span style="color: red;">—</span>	ALTERNATE 3
<span style="color: magenta;">—</span>	ALTERNATE 4




REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PROJECT OVERVIEW**

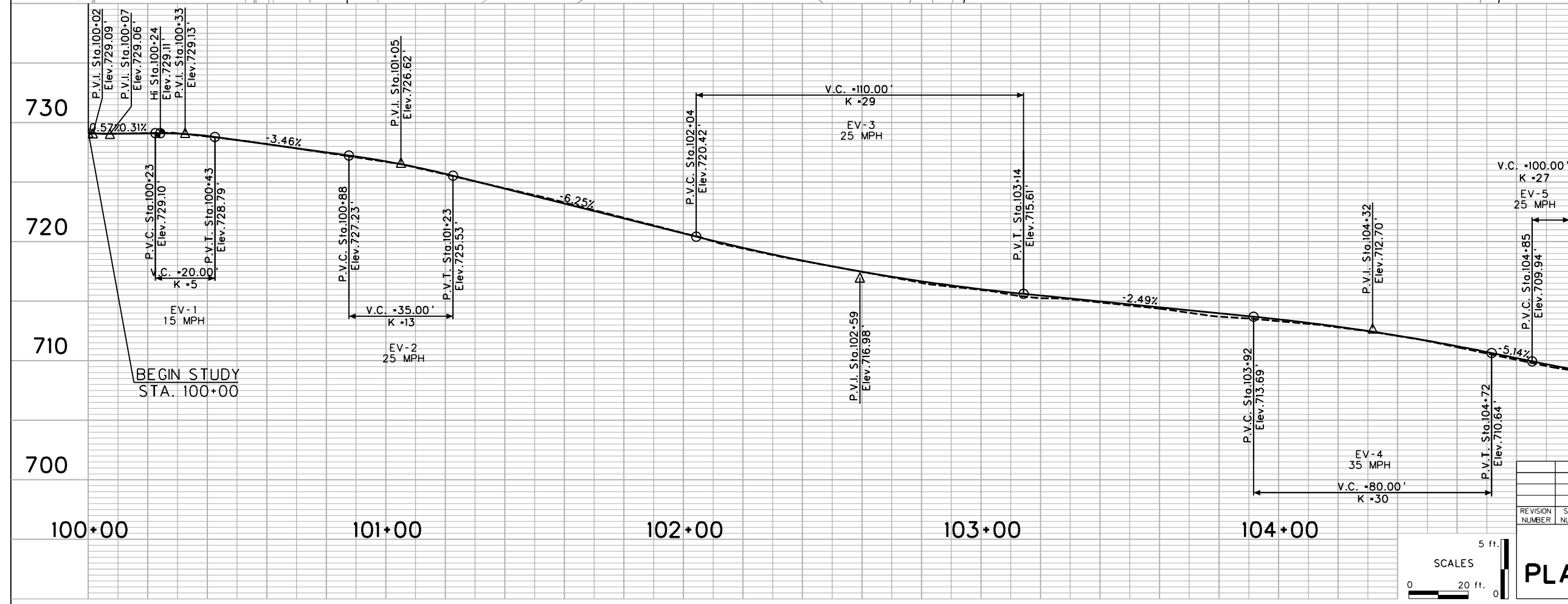
SCALE : 0 200 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	14	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



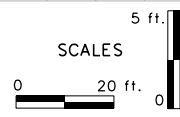
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

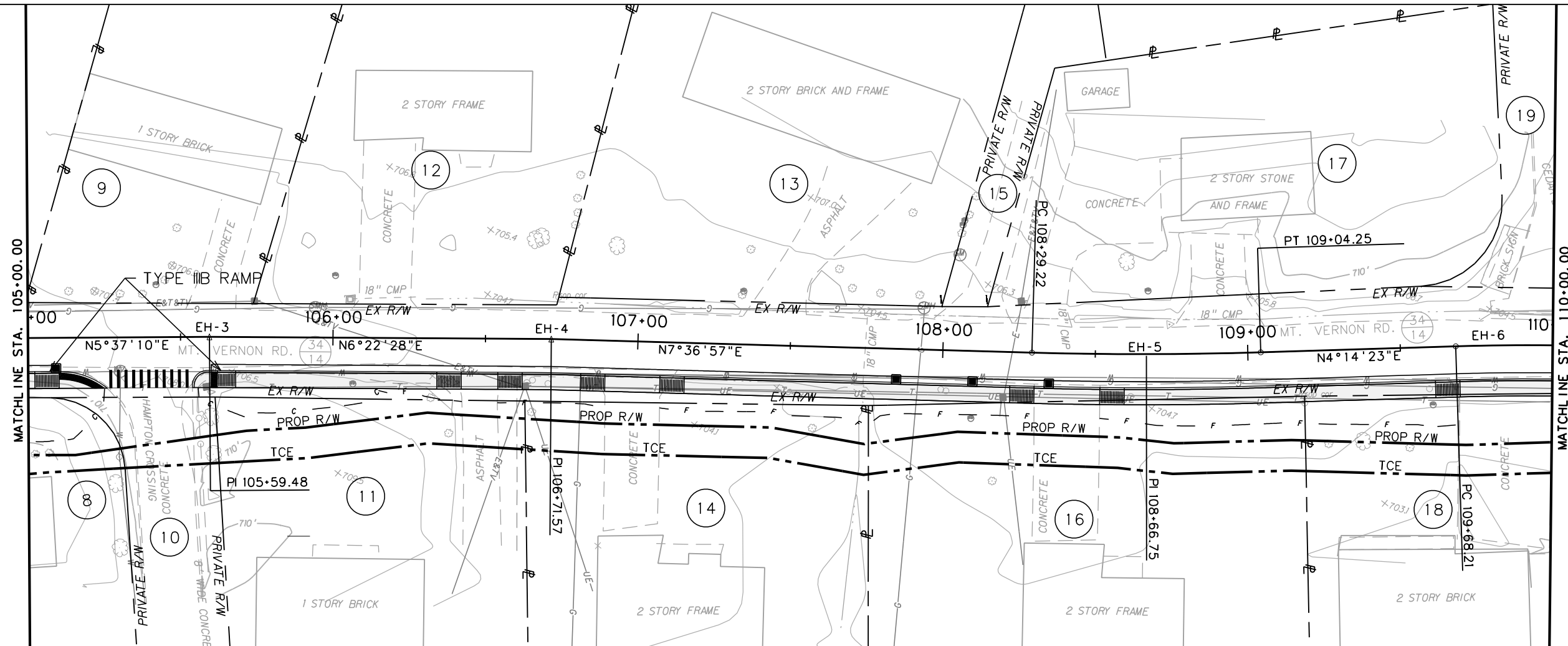
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

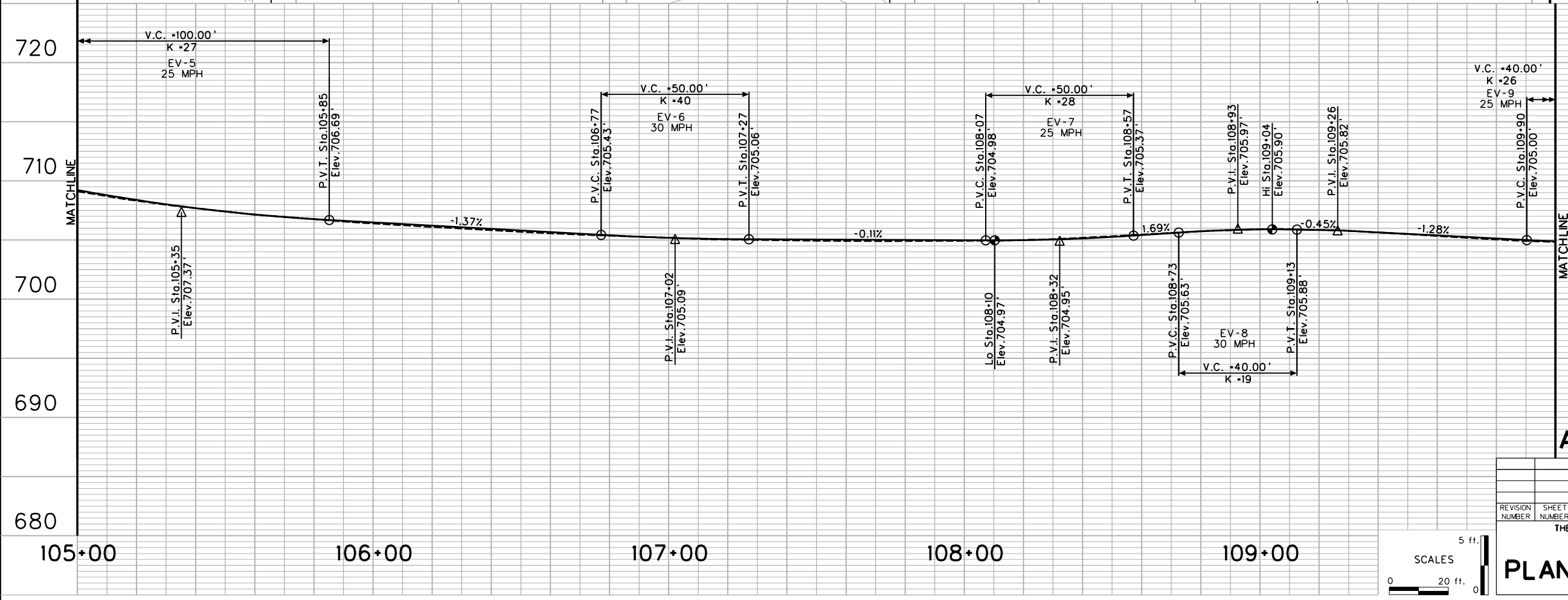


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	15	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

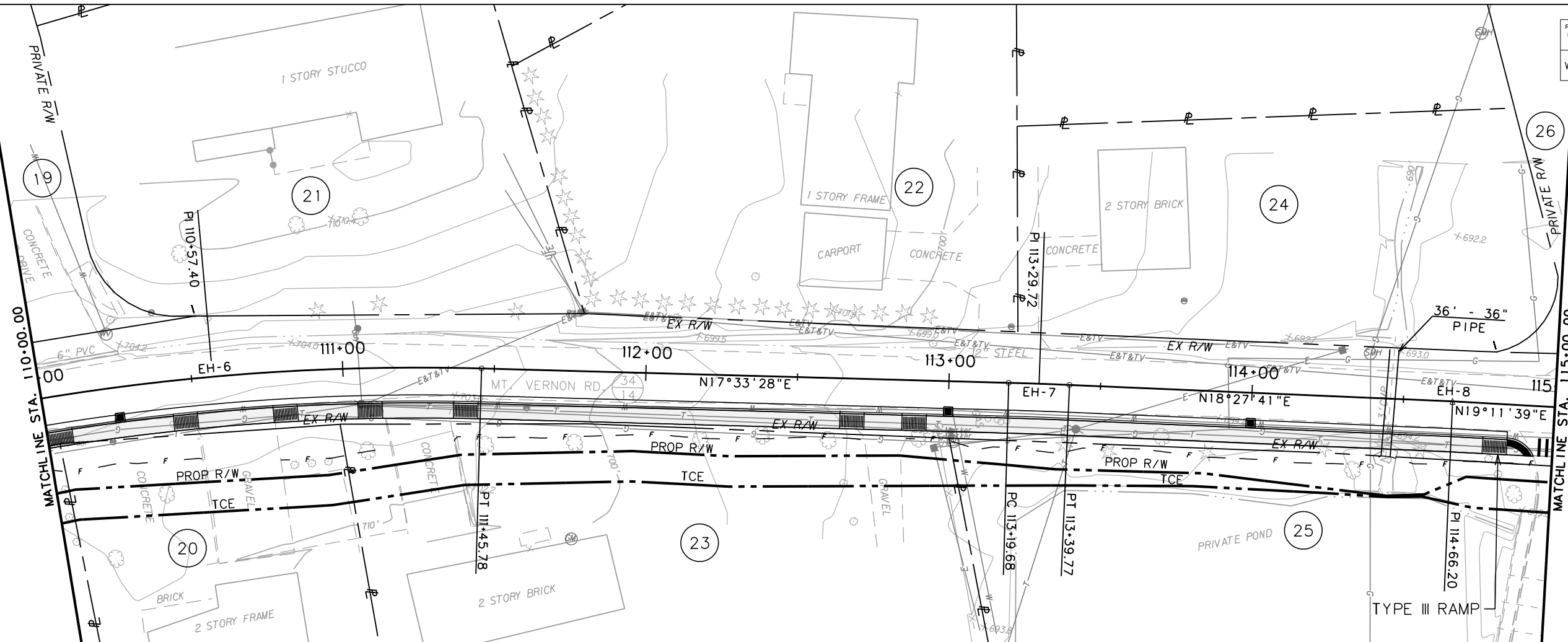
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

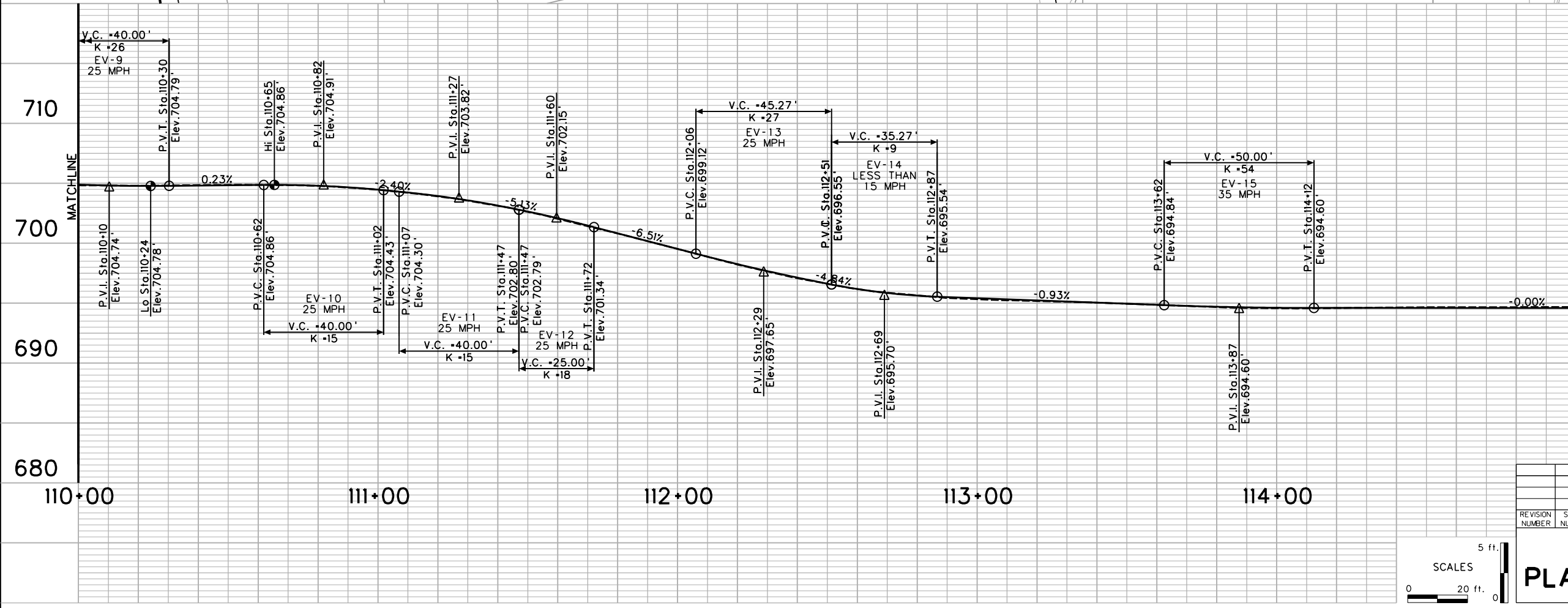
5 ft.  
SCALES  
0 20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	16	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.

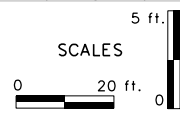


THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

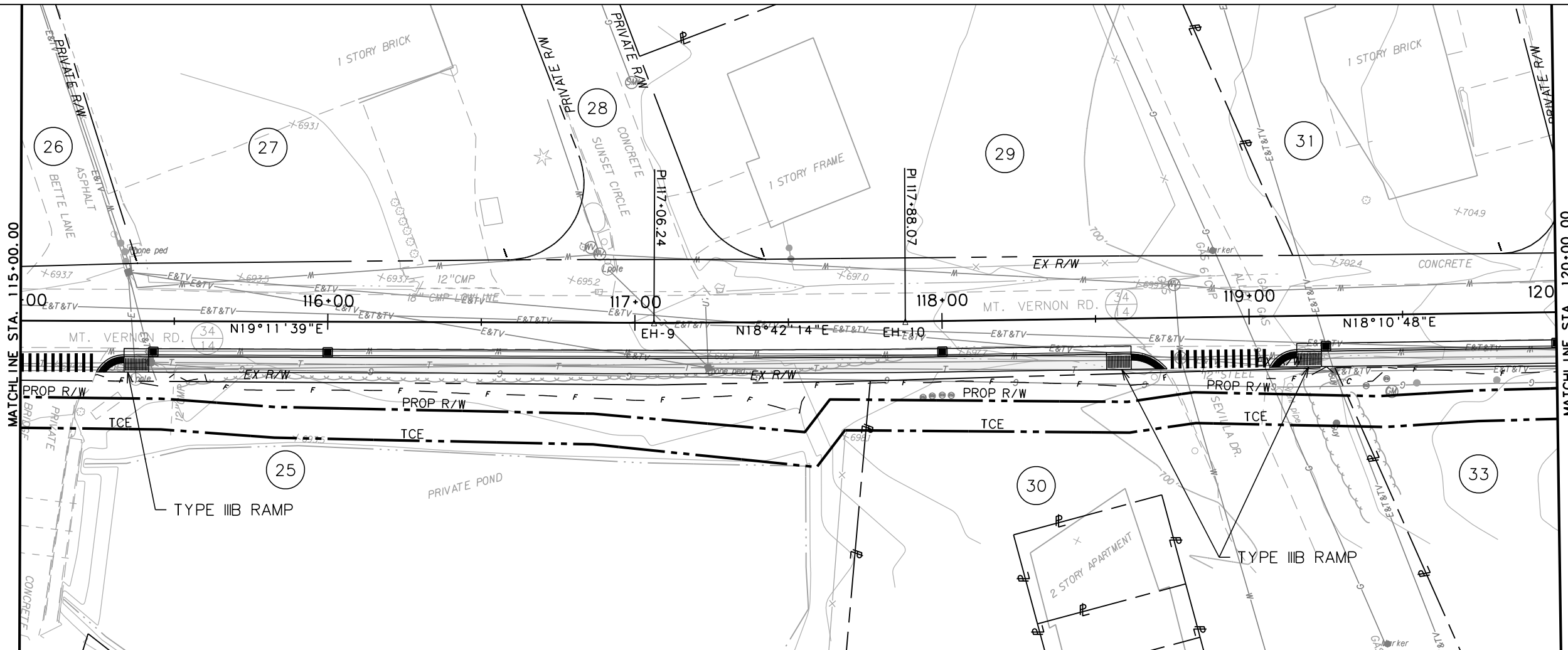
**ALTERNATES 1 & 1A**




REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLAN & PROFILE SHEET**

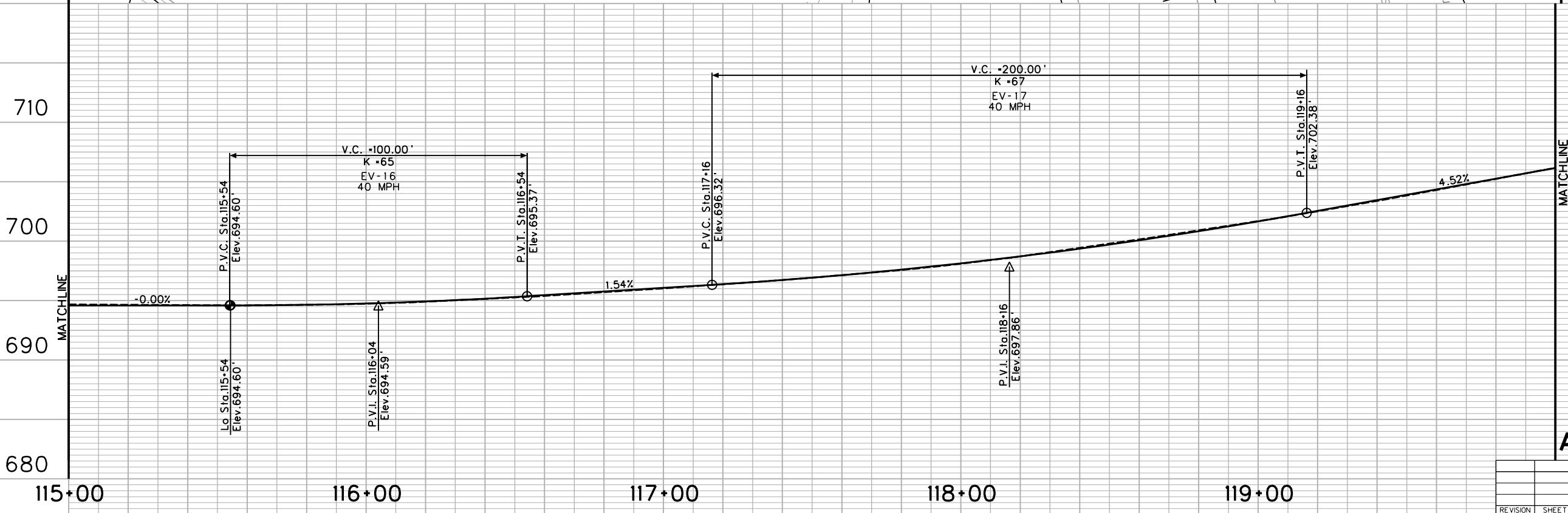


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	17	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

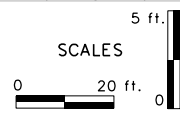
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

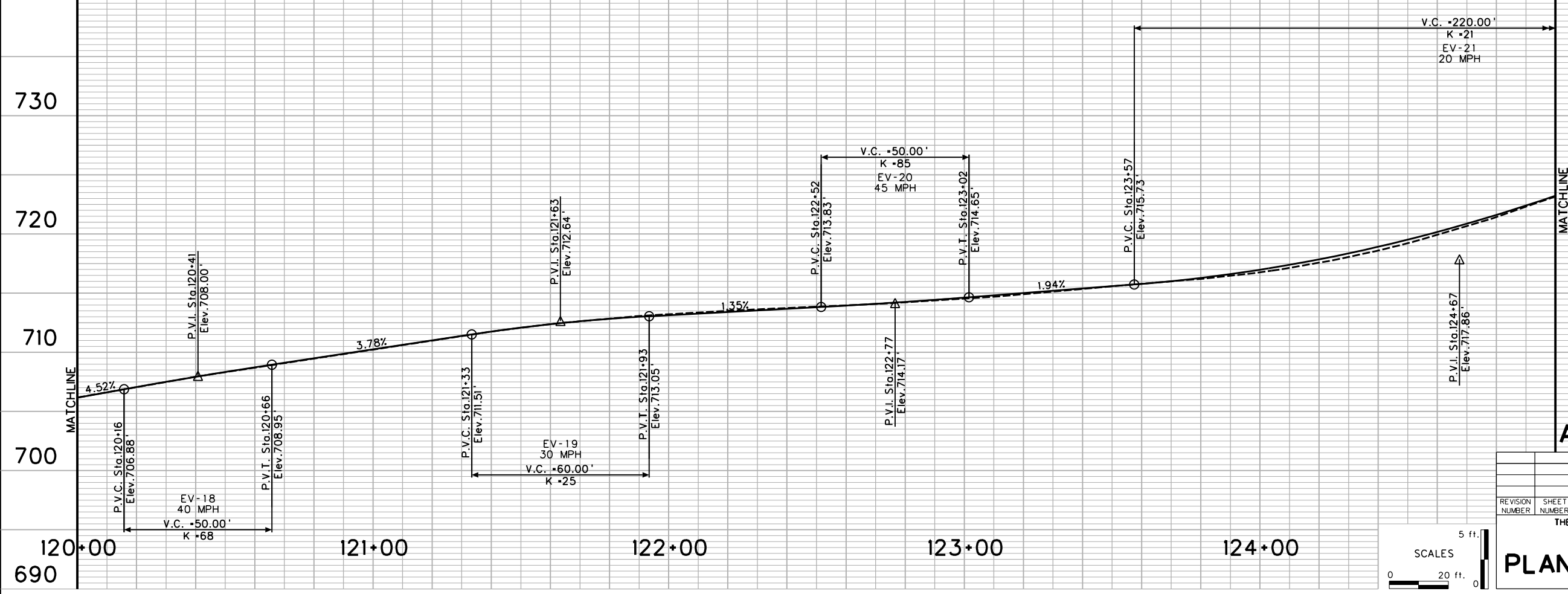
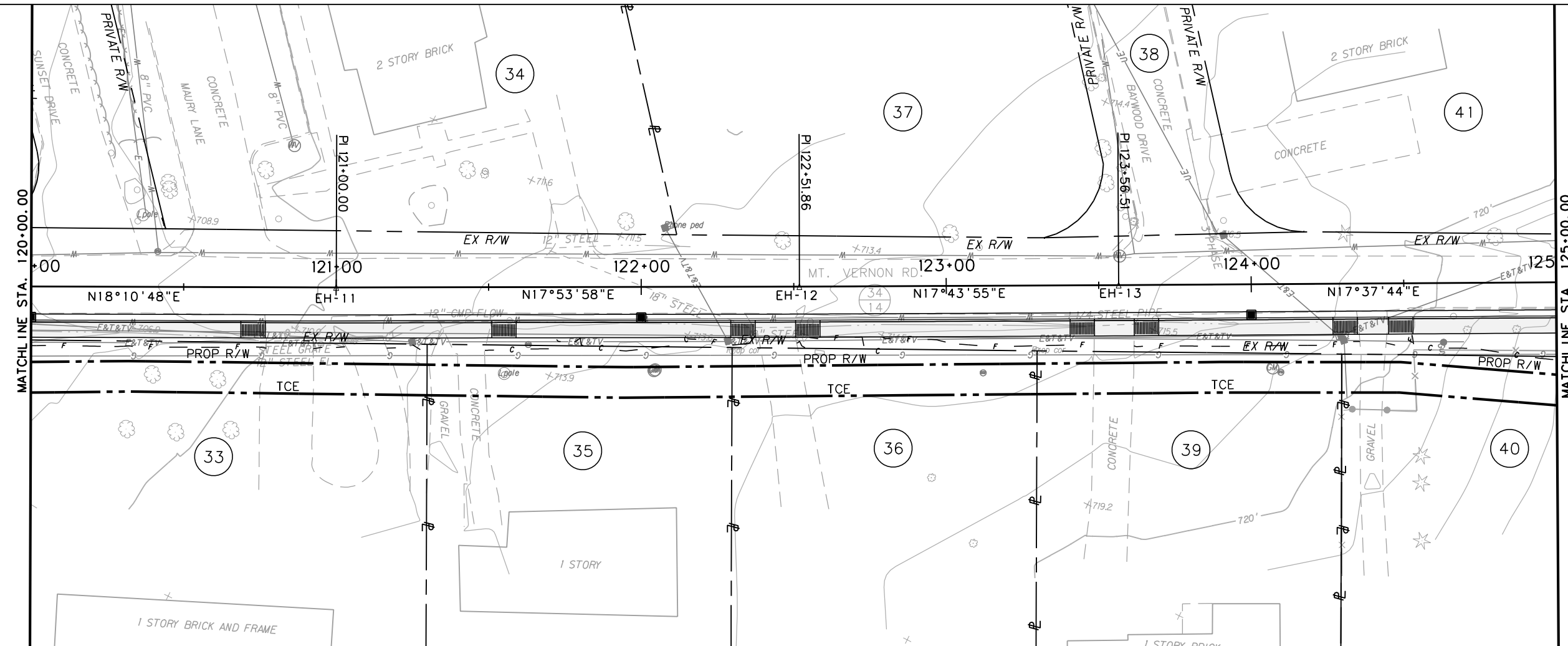


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	18	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

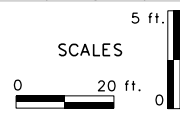
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

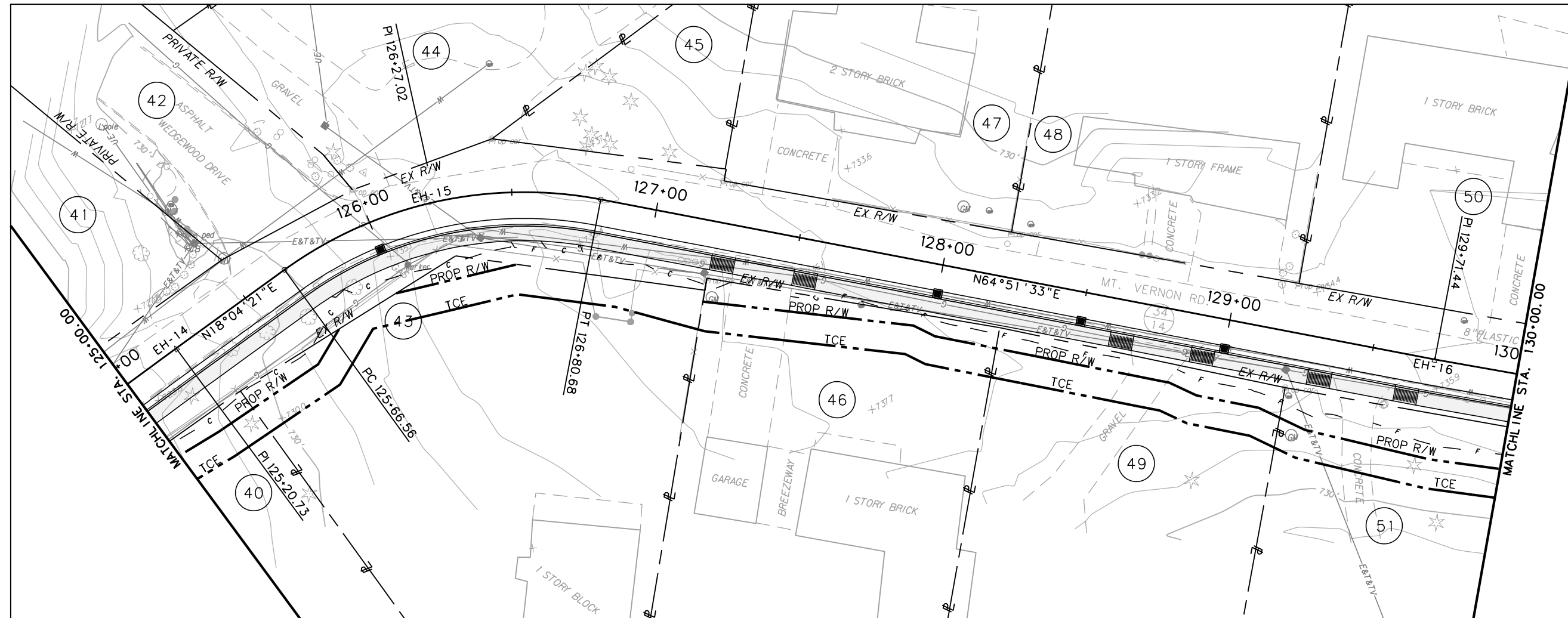
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

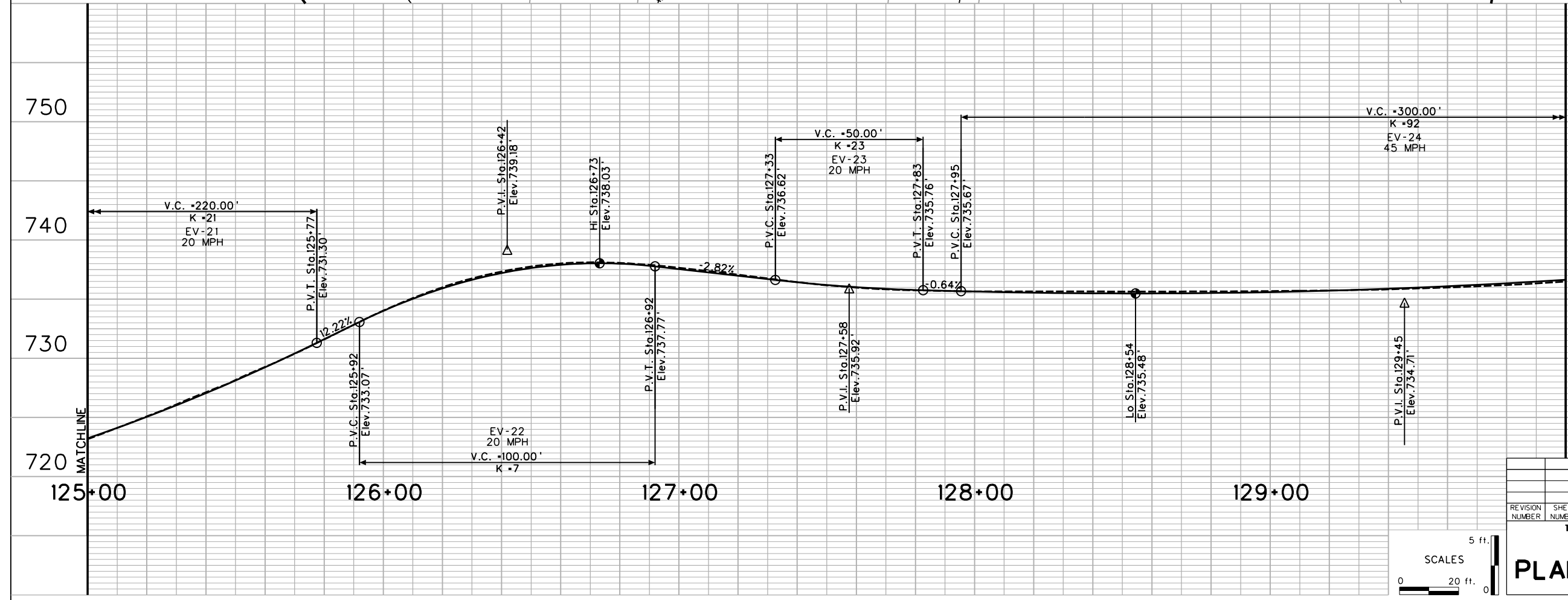


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	19	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



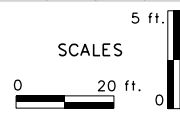
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

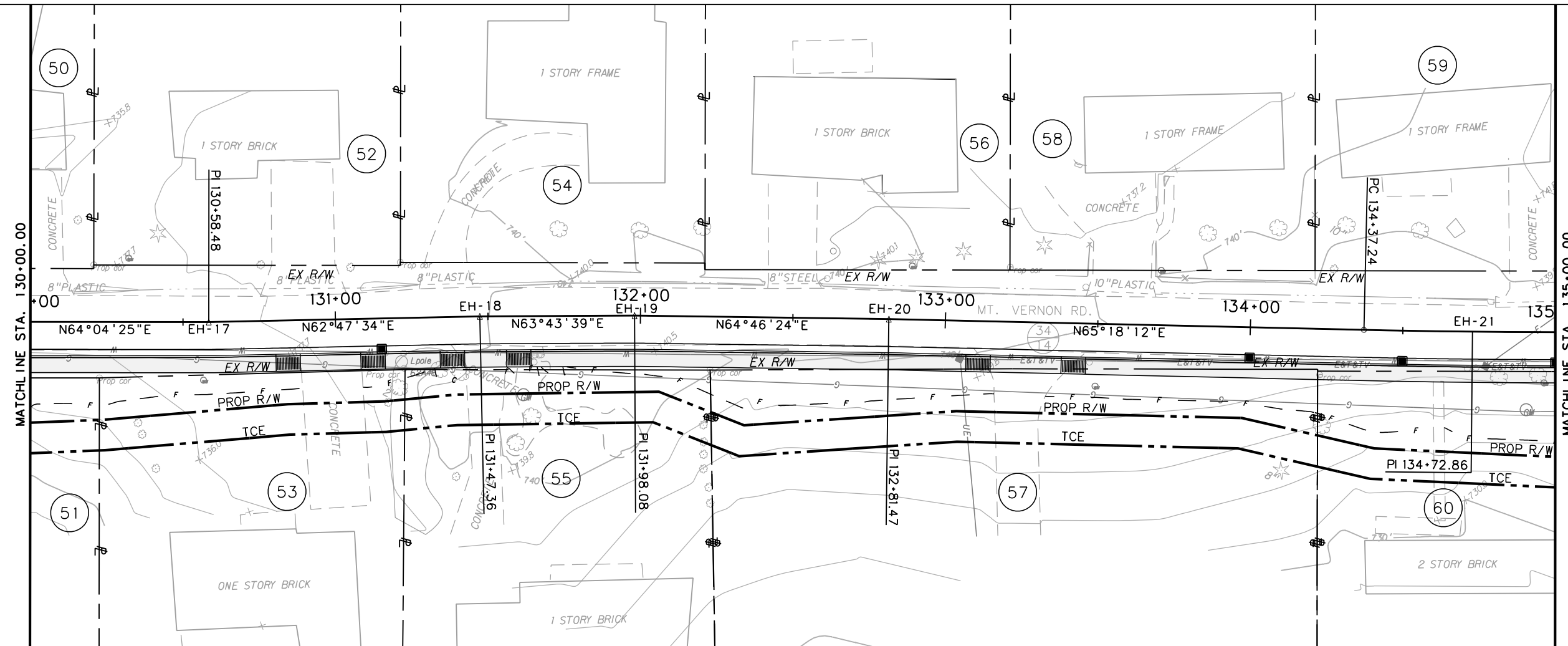
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

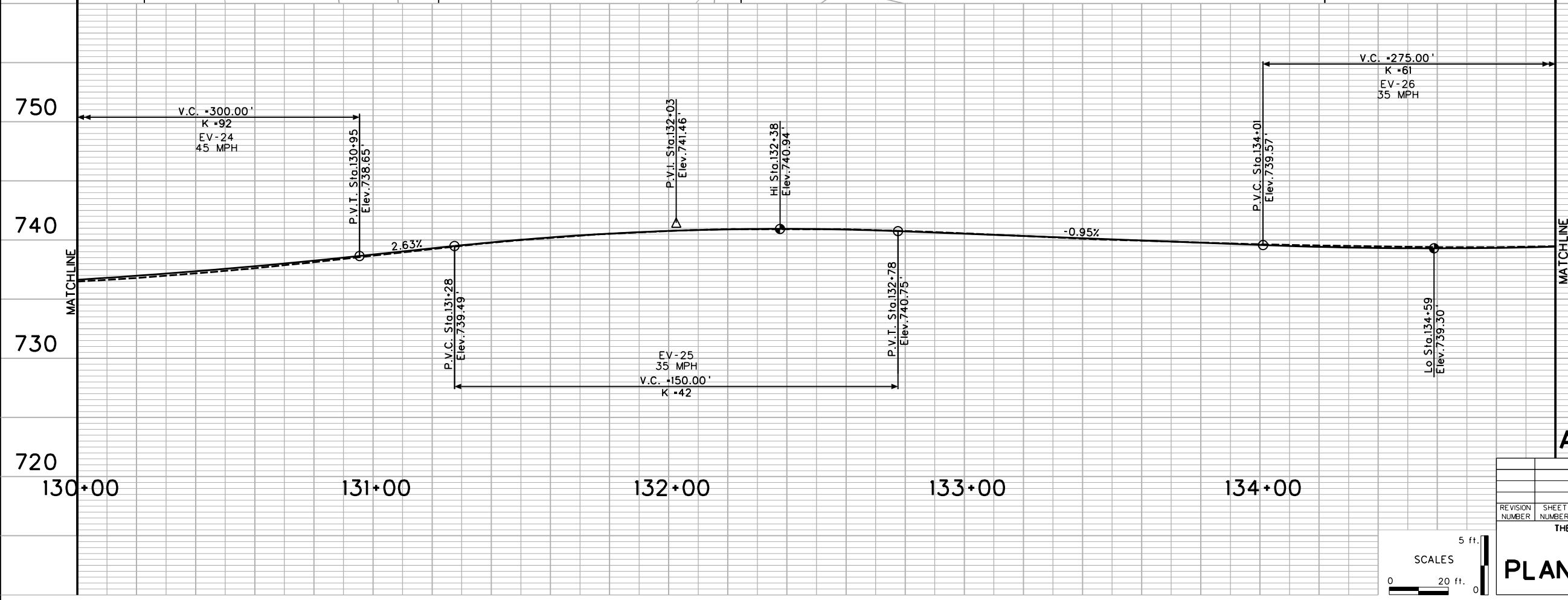


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	20	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

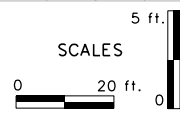
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

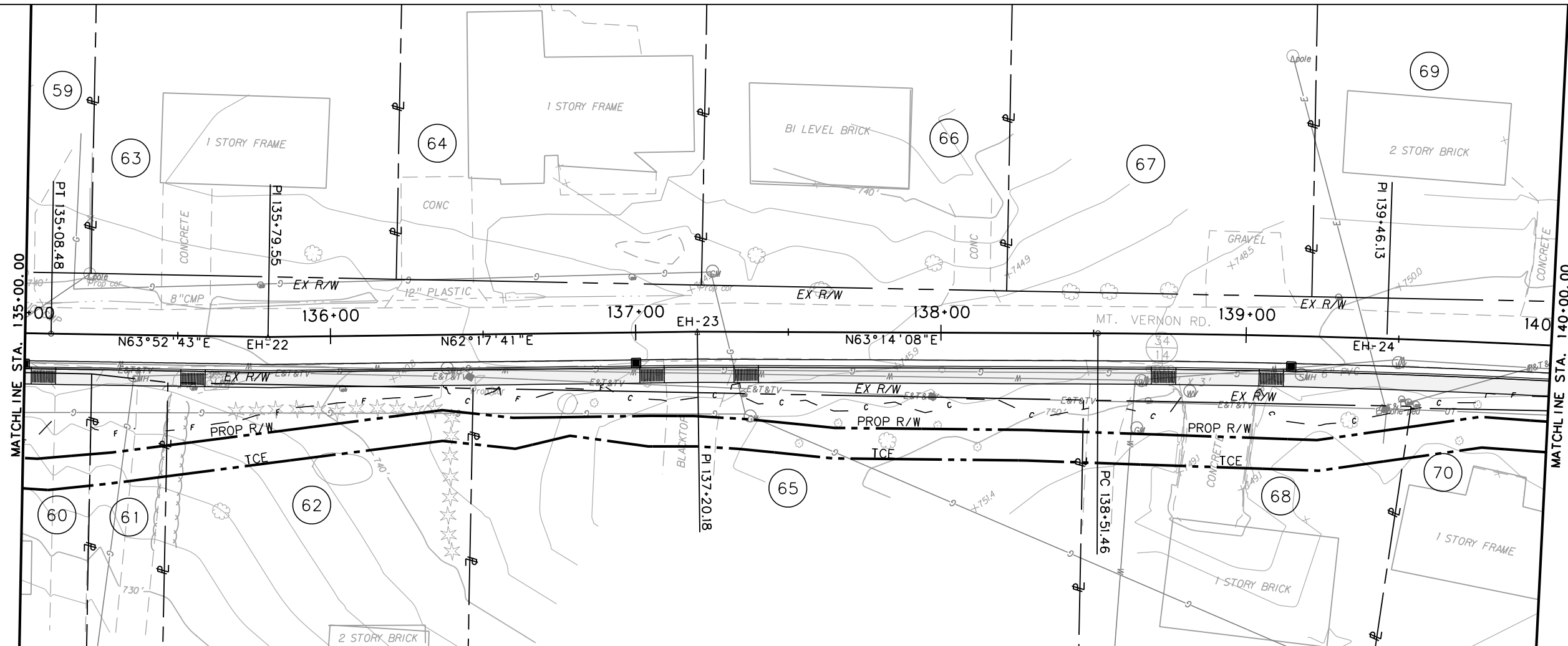
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

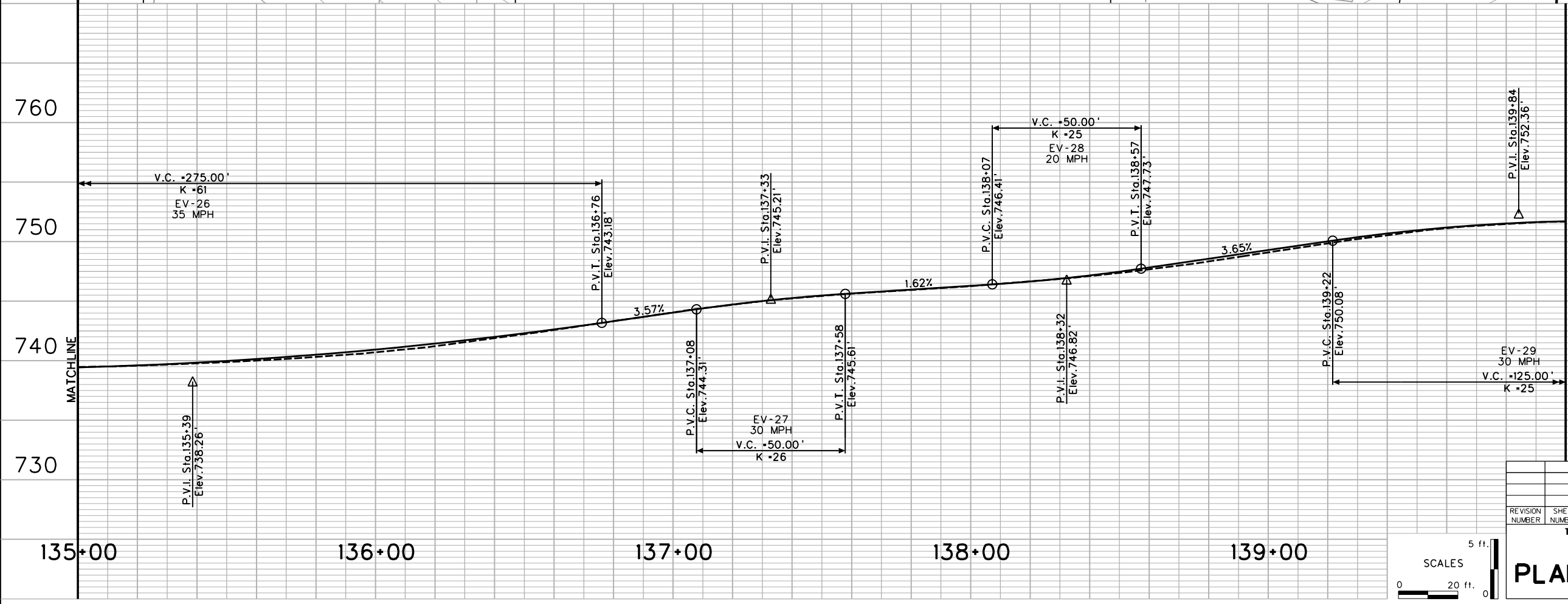


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	21	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATES 1 & 1A**

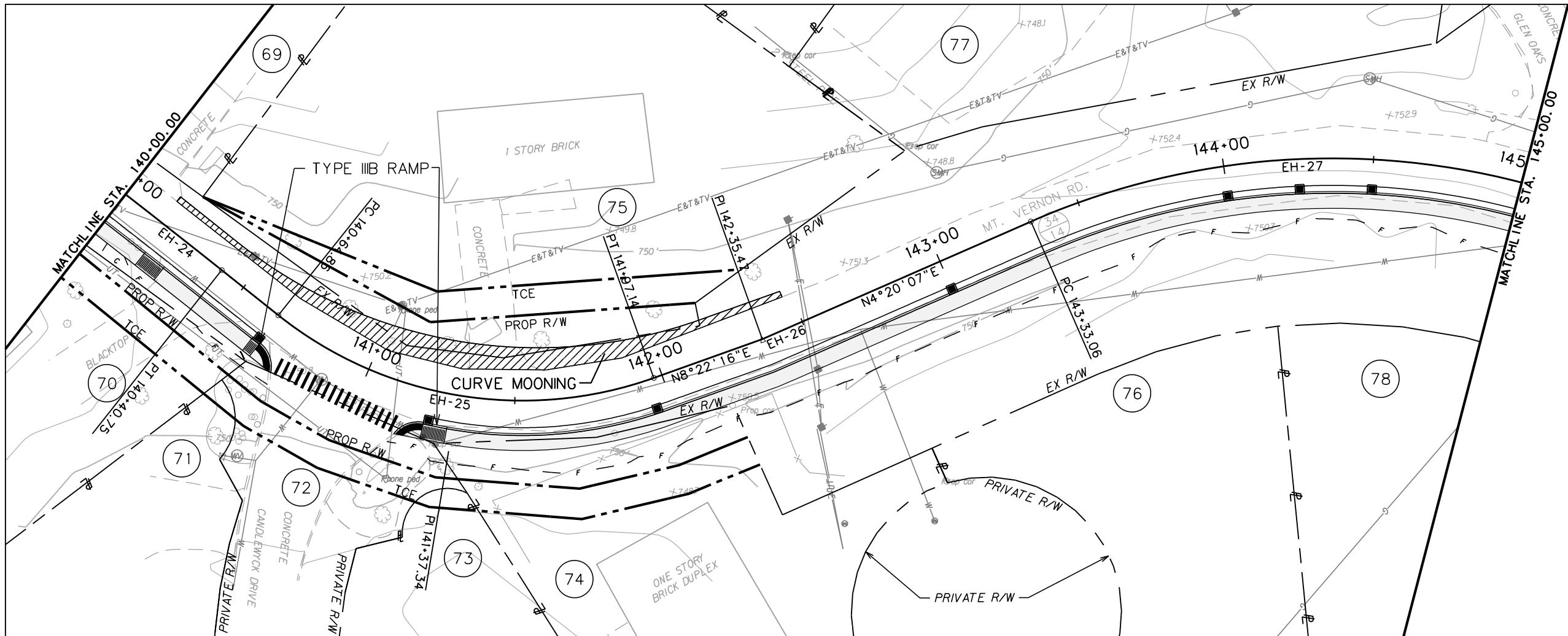
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

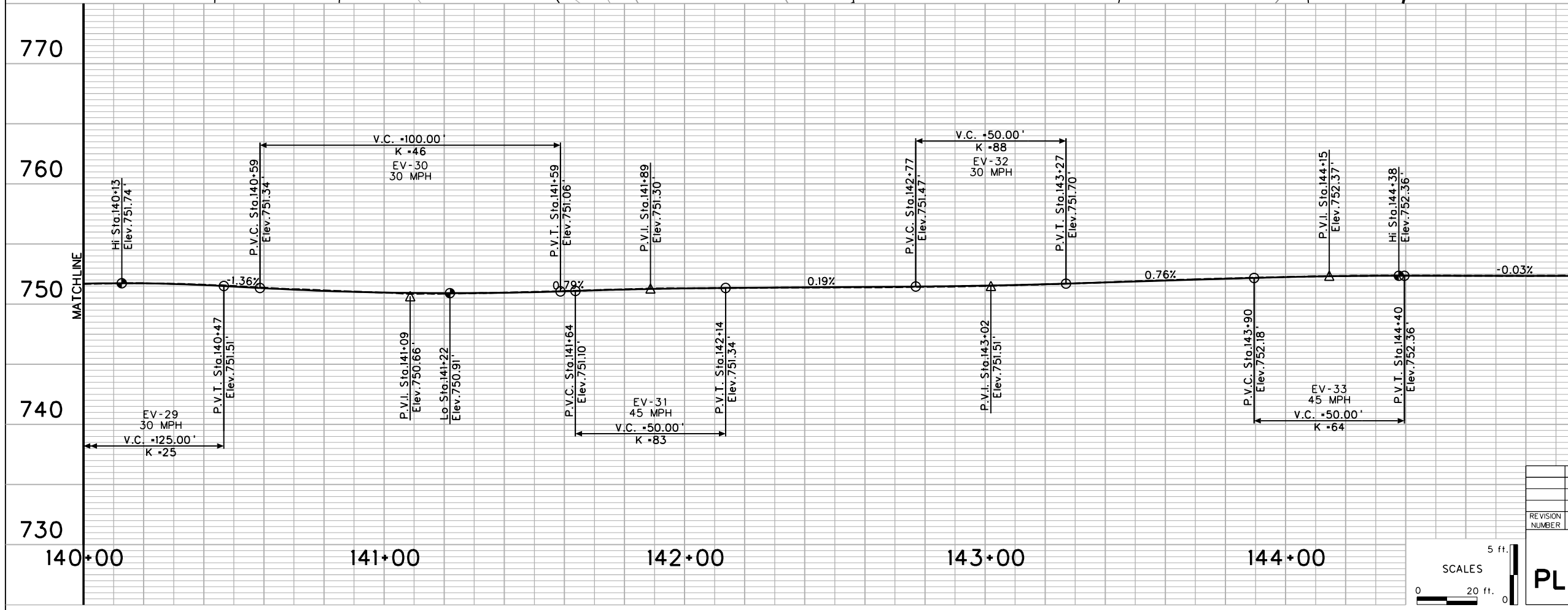
5 ft.  
20 ft.  
0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	22	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

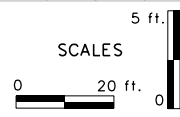
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

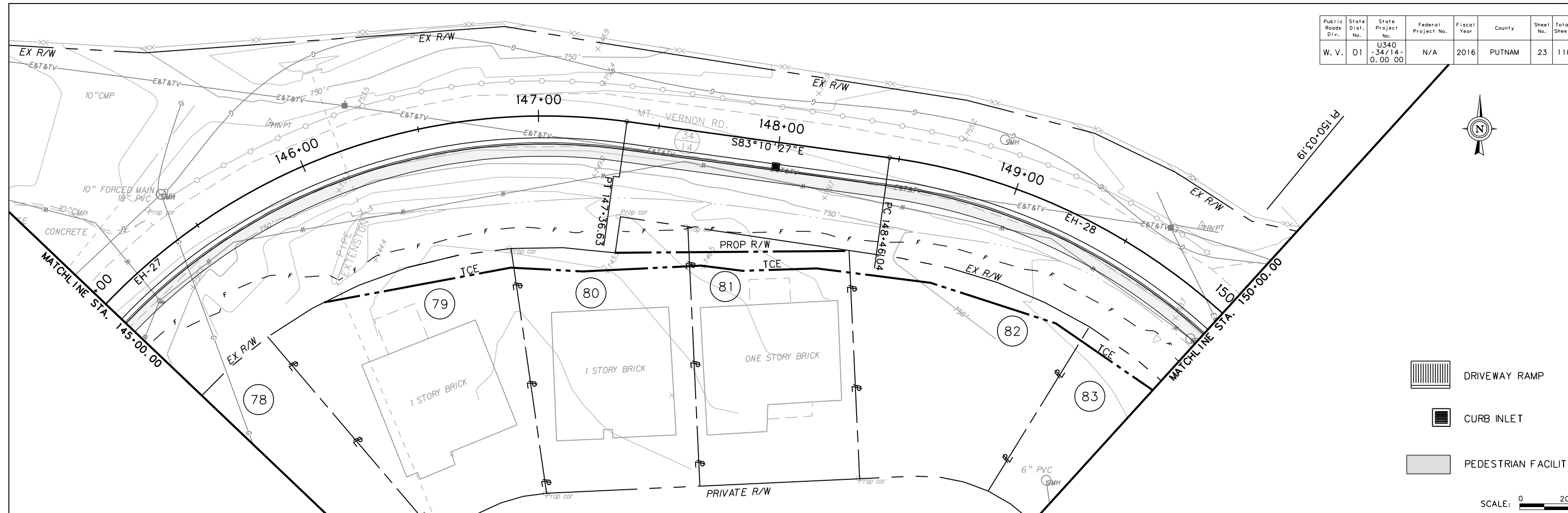
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

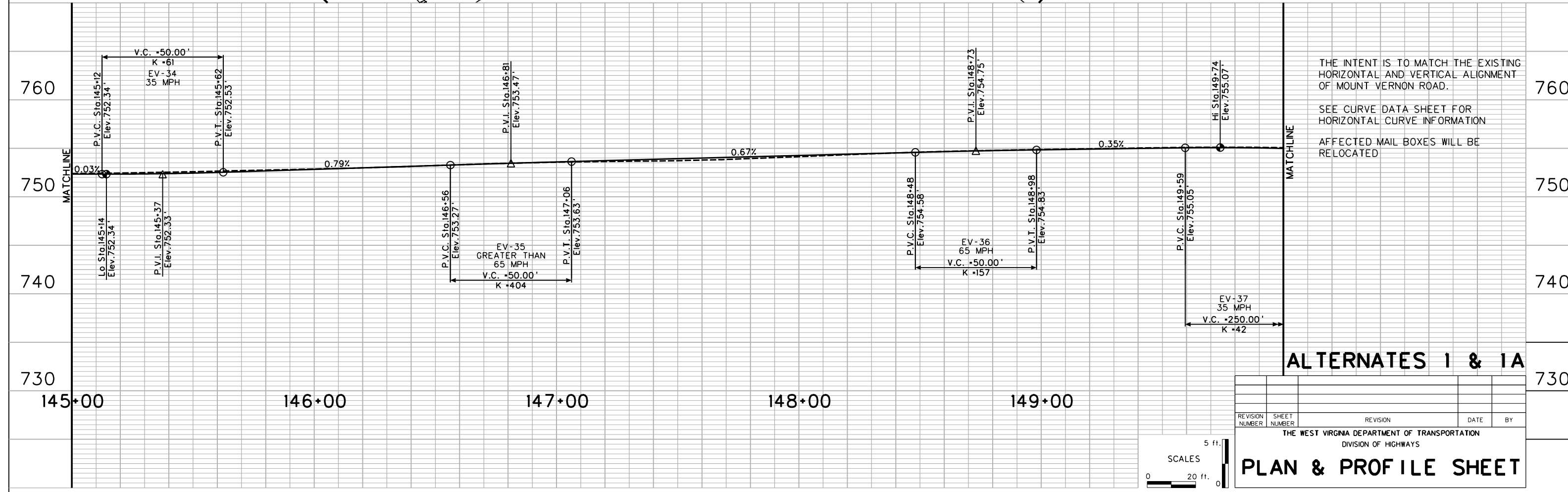


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	23	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.

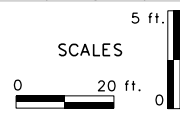


**ALTERNATES 1 & 1A**

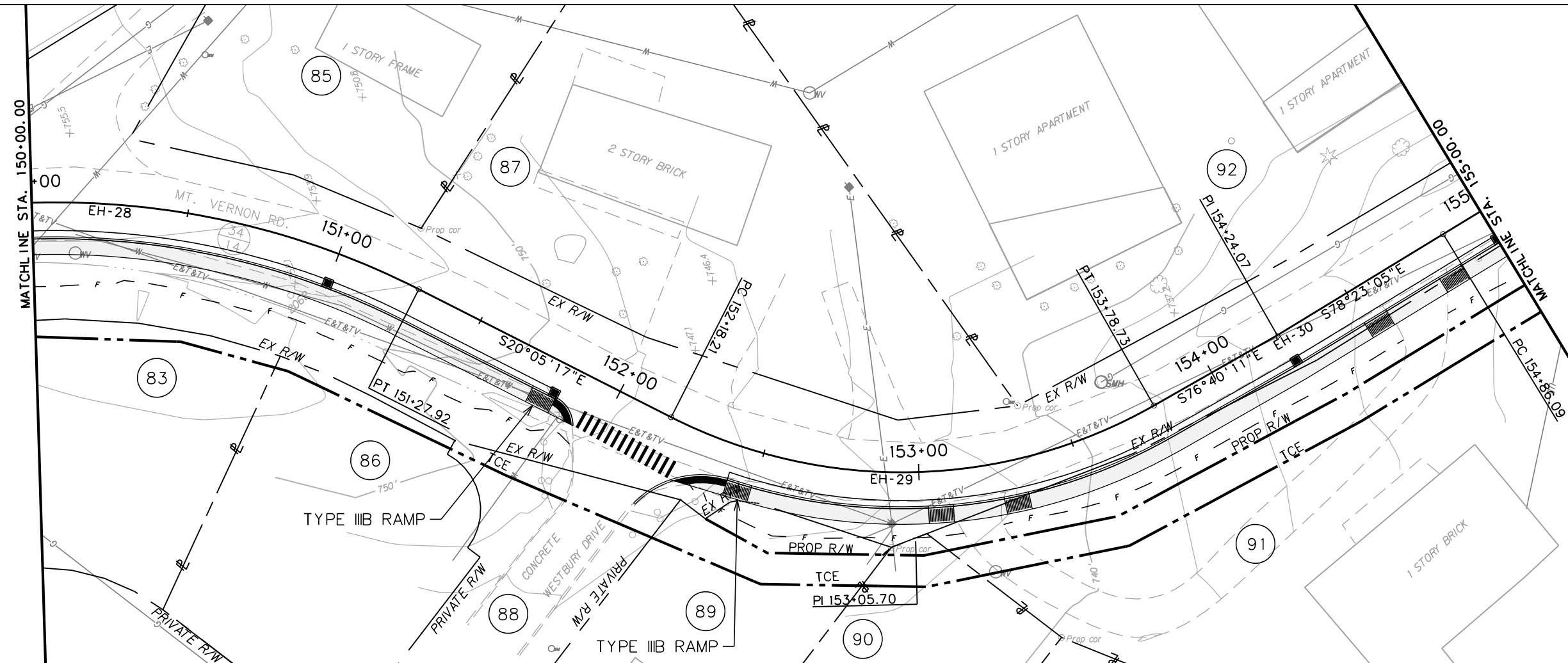
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

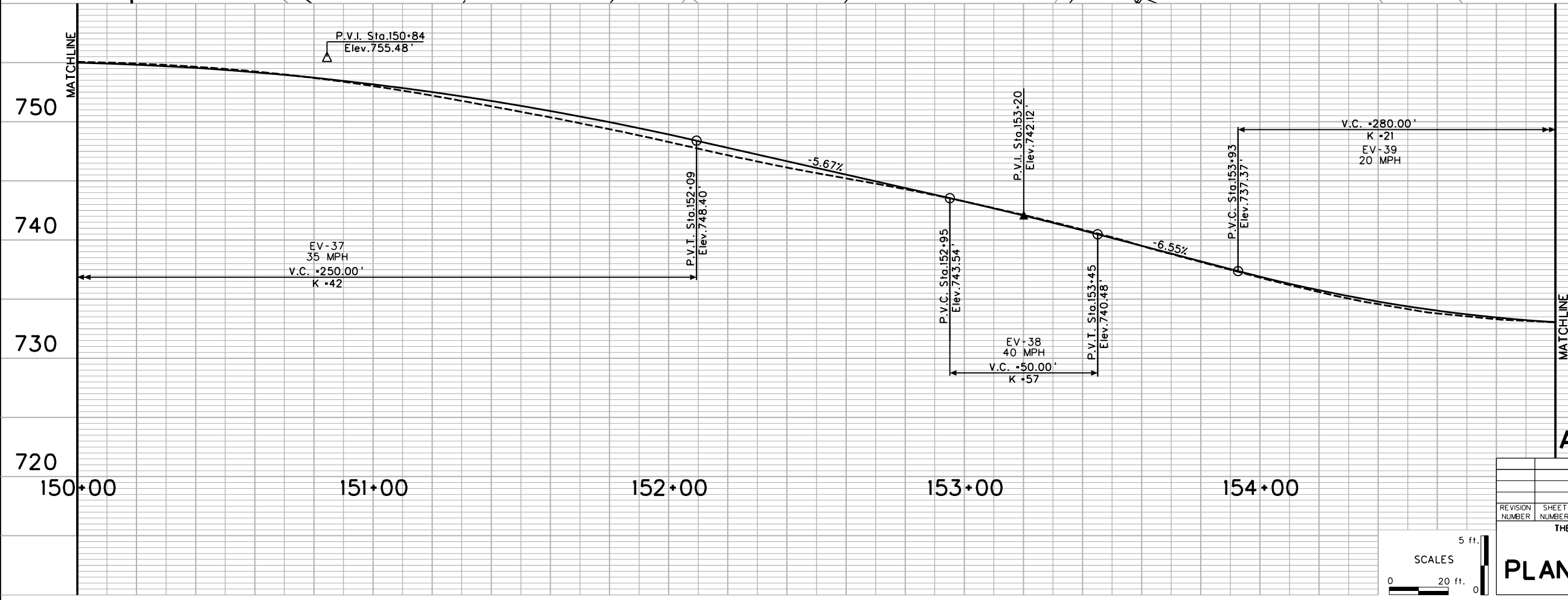


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	24	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.

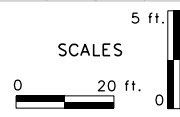


THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

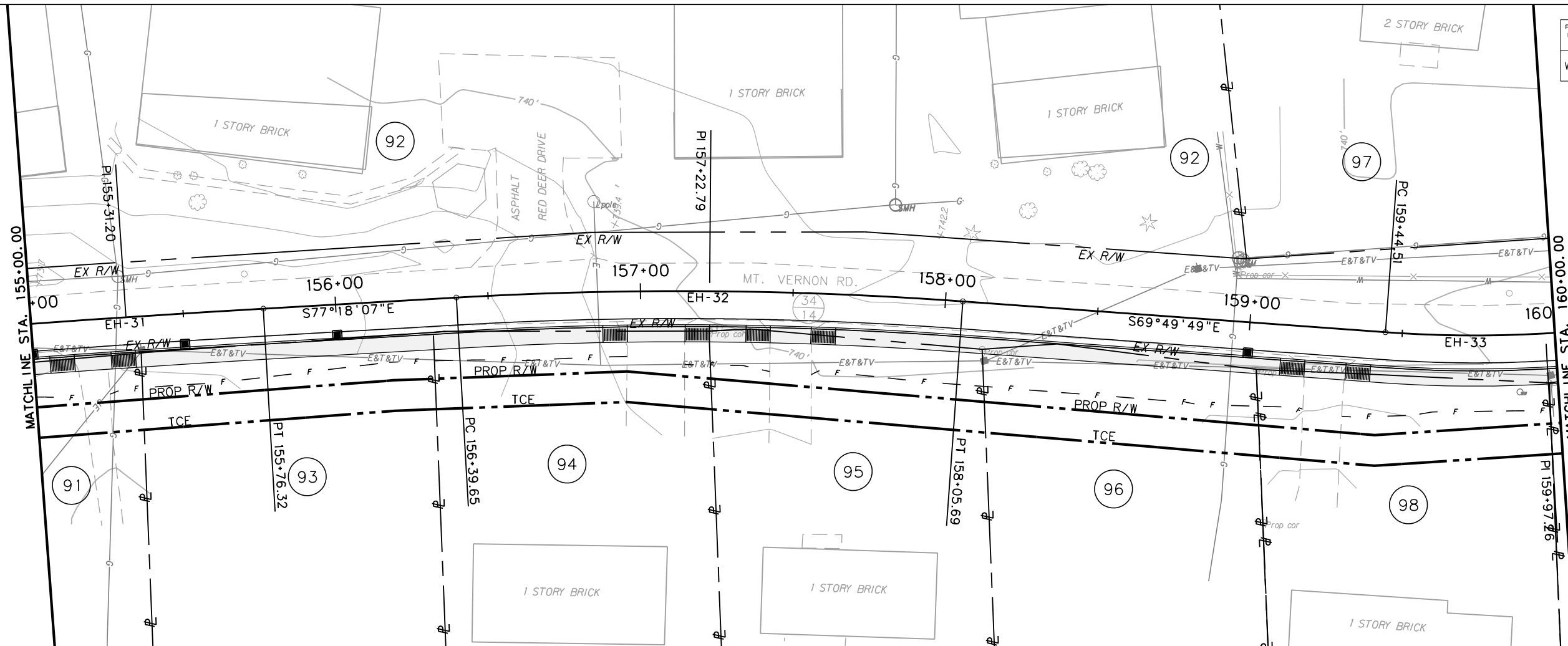
### ALTERNATES 1 & 1A




REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLAN & PROFILE SHEET**

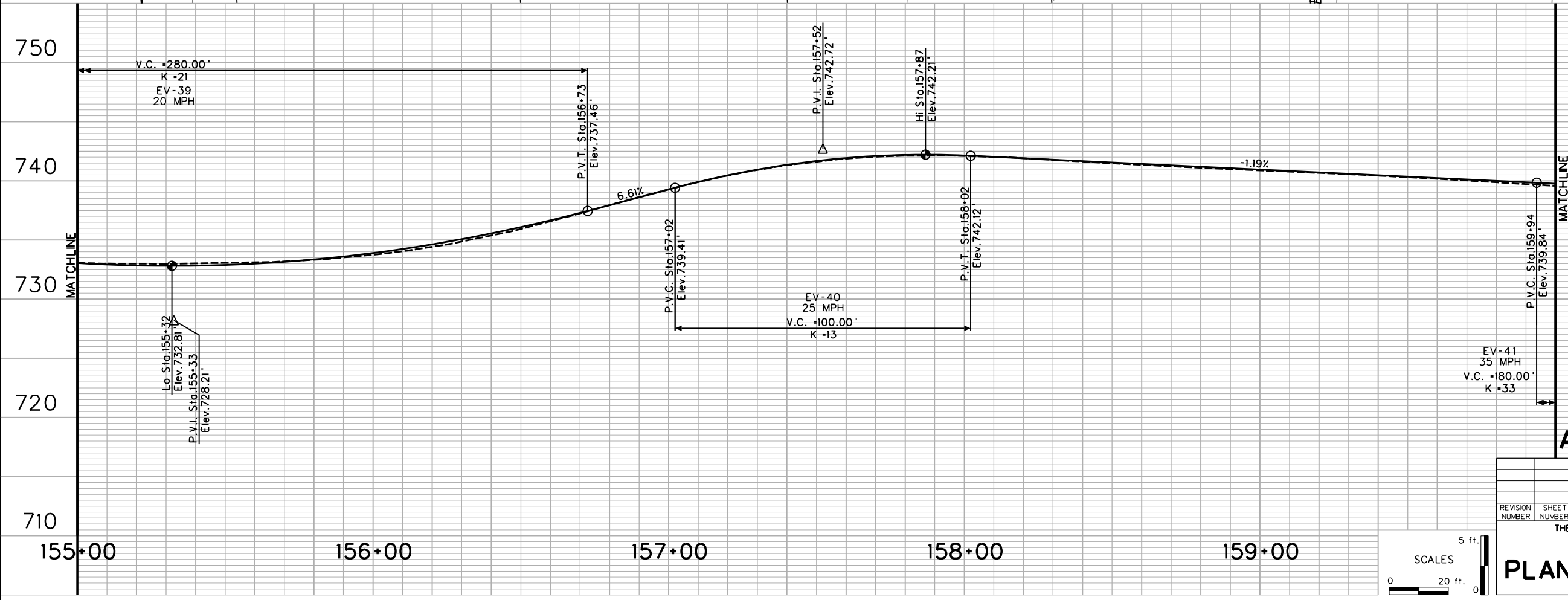


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	25	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

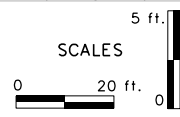
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

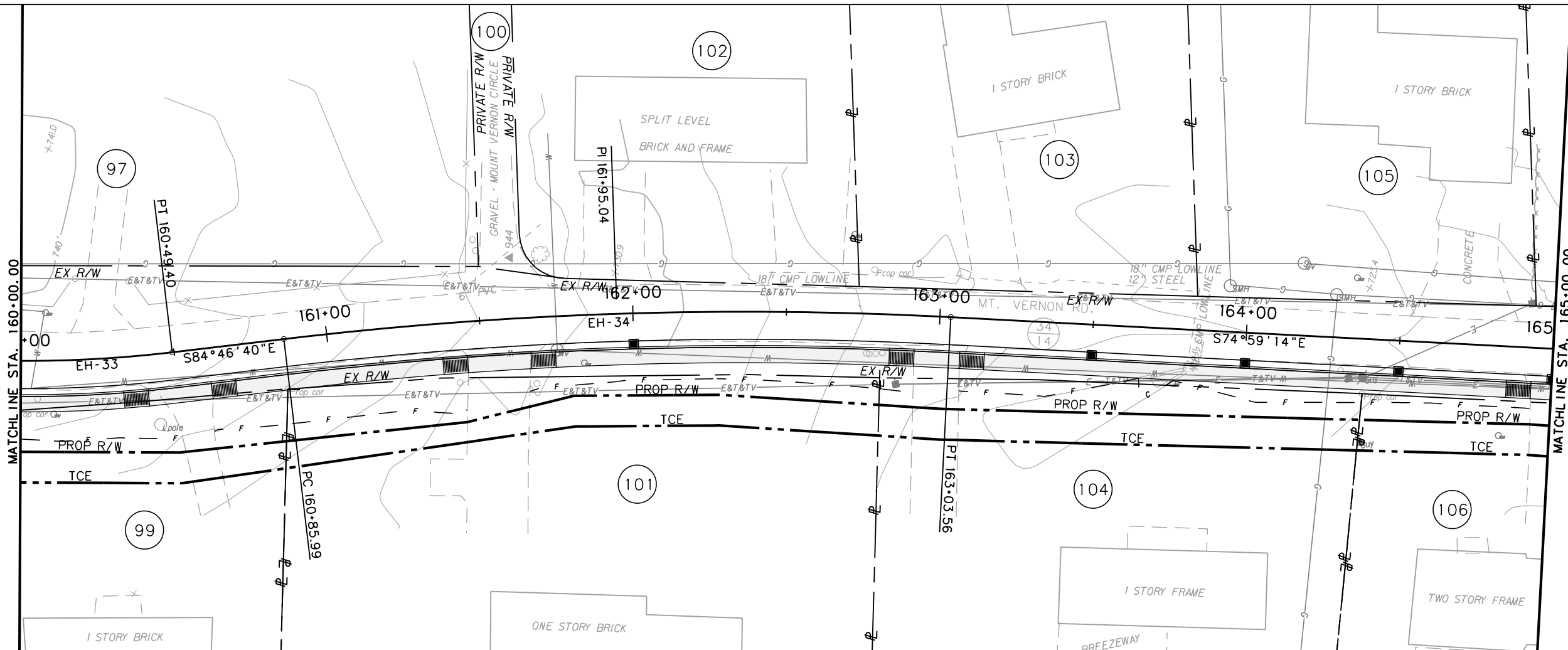
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

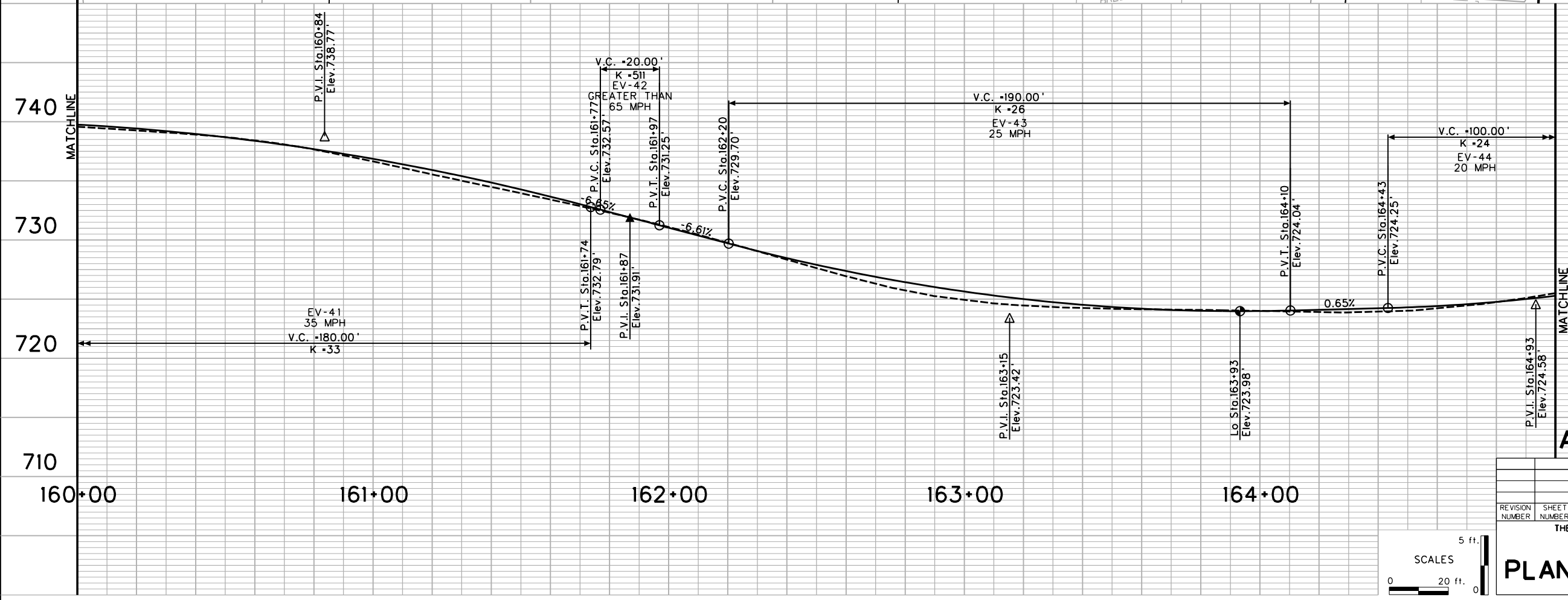


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	26	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

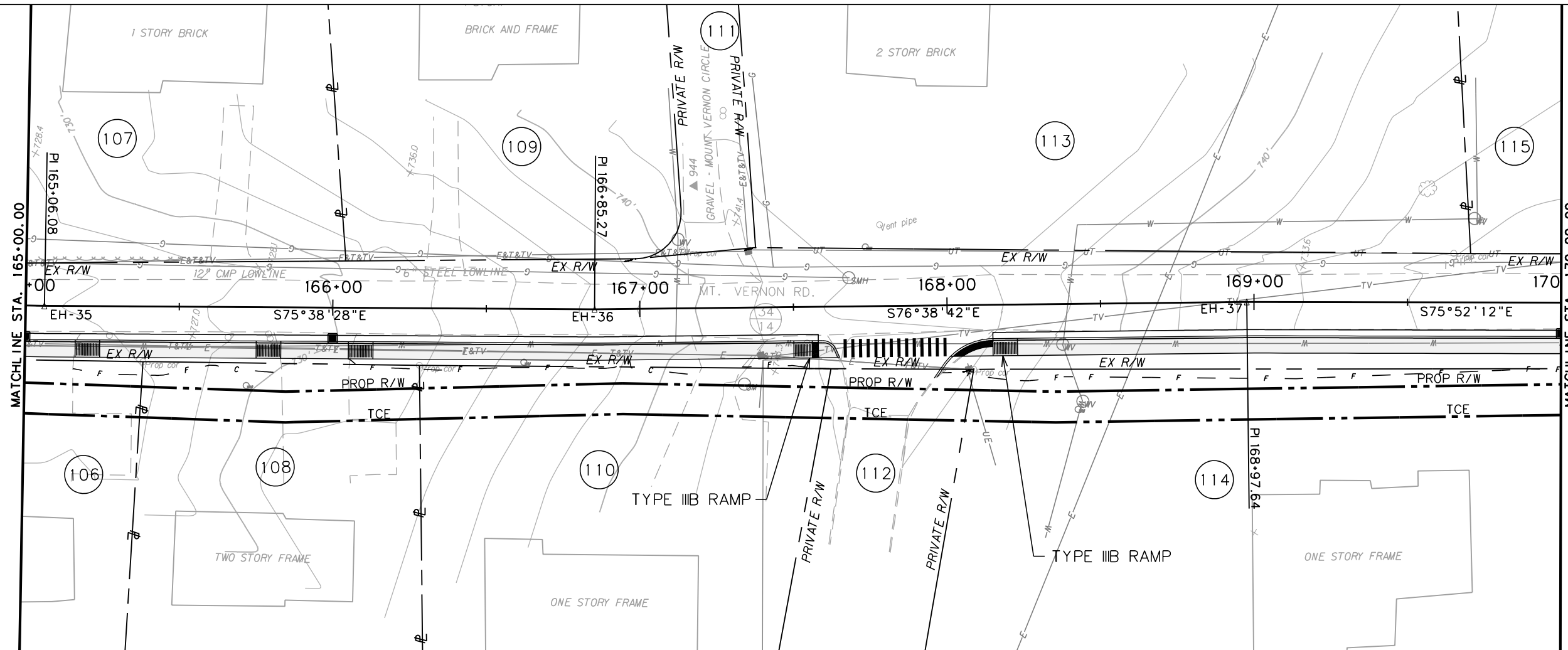
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

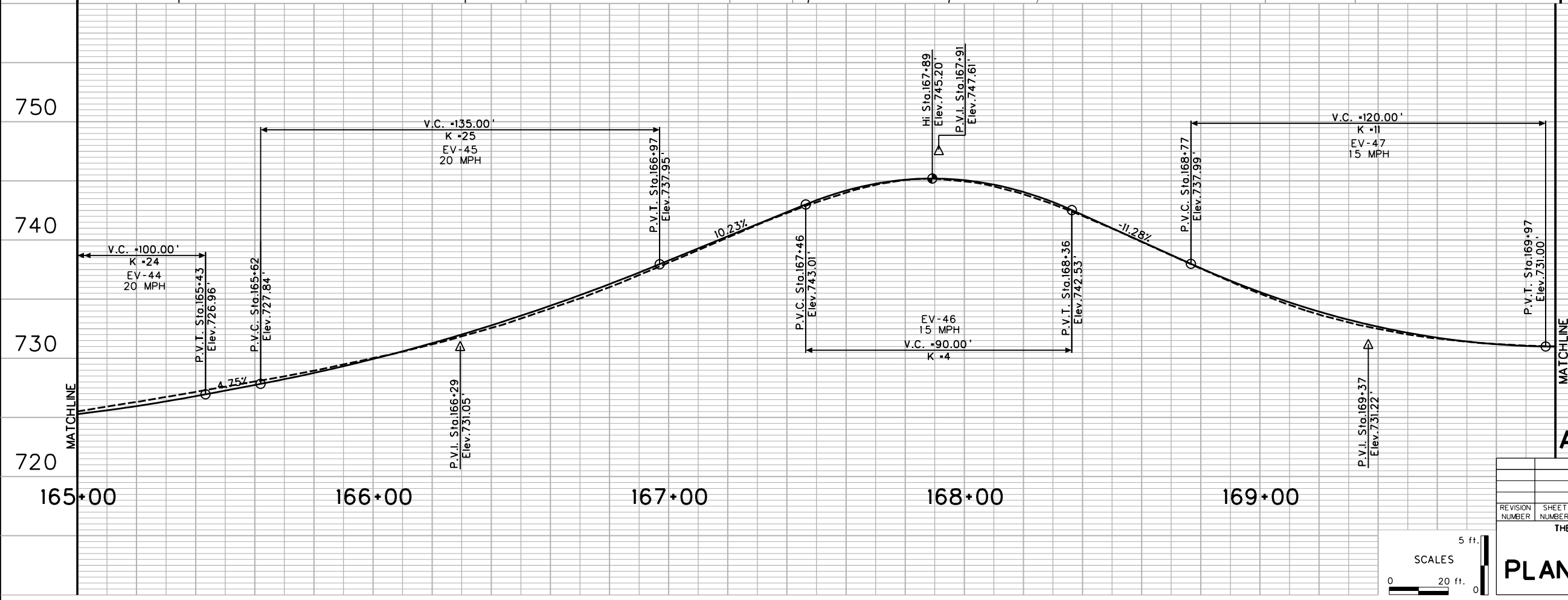
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	27	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

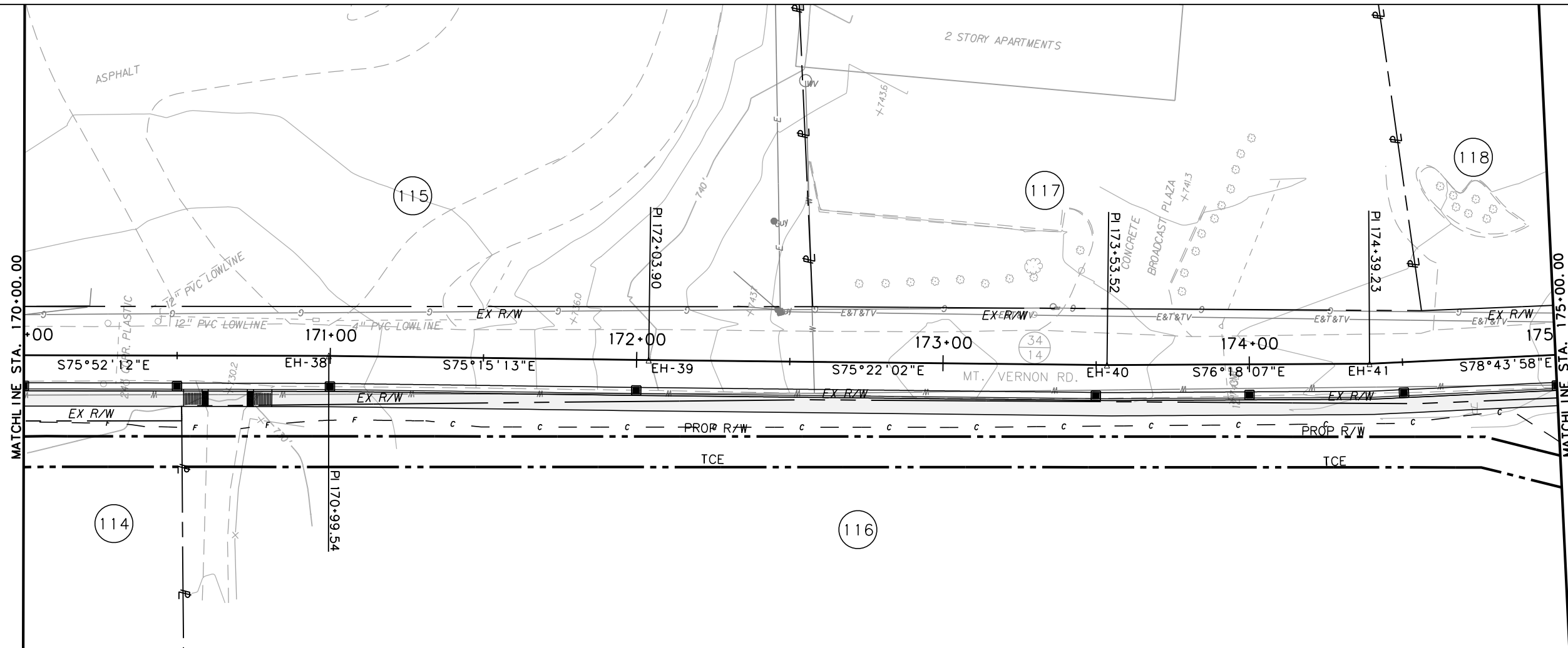
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

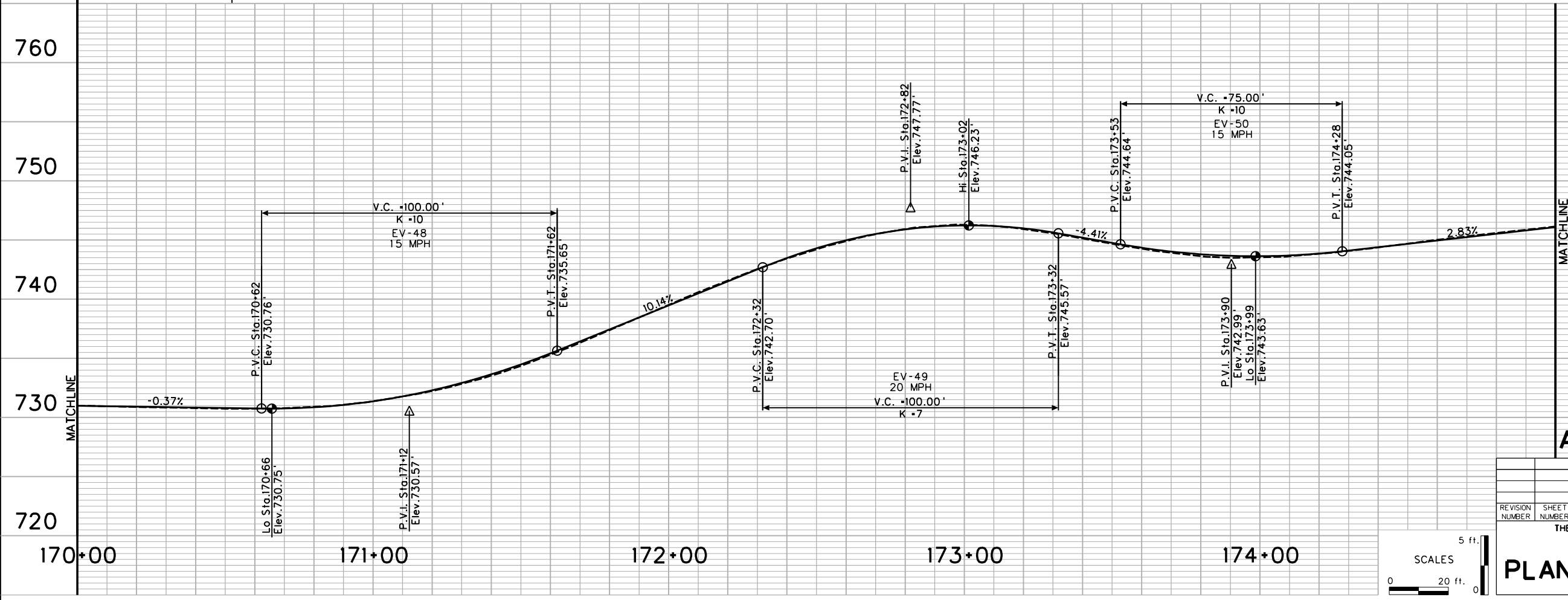
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	28	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

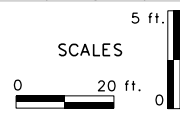
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

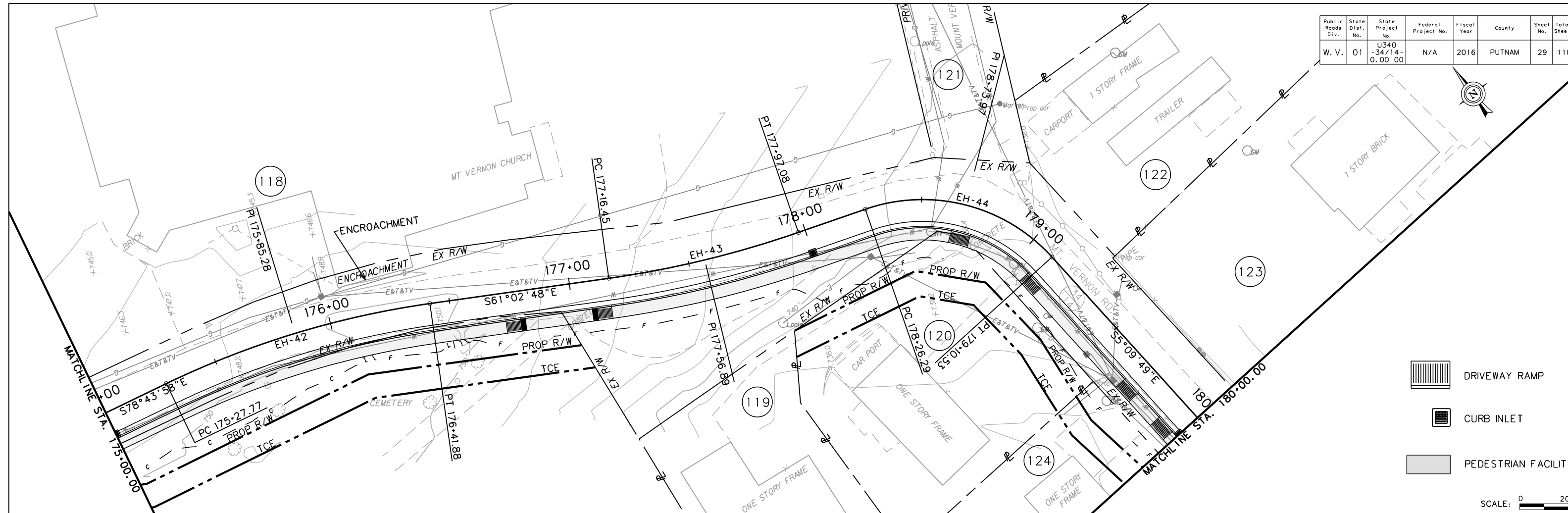
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

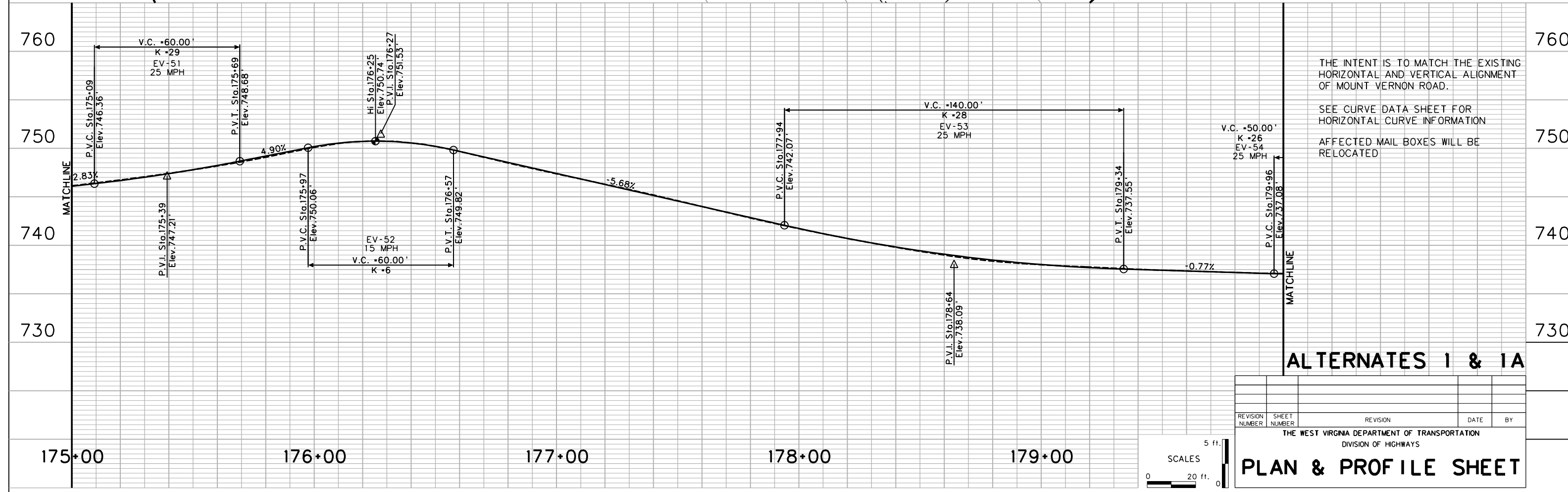


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	29	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATES 1 & 1A**

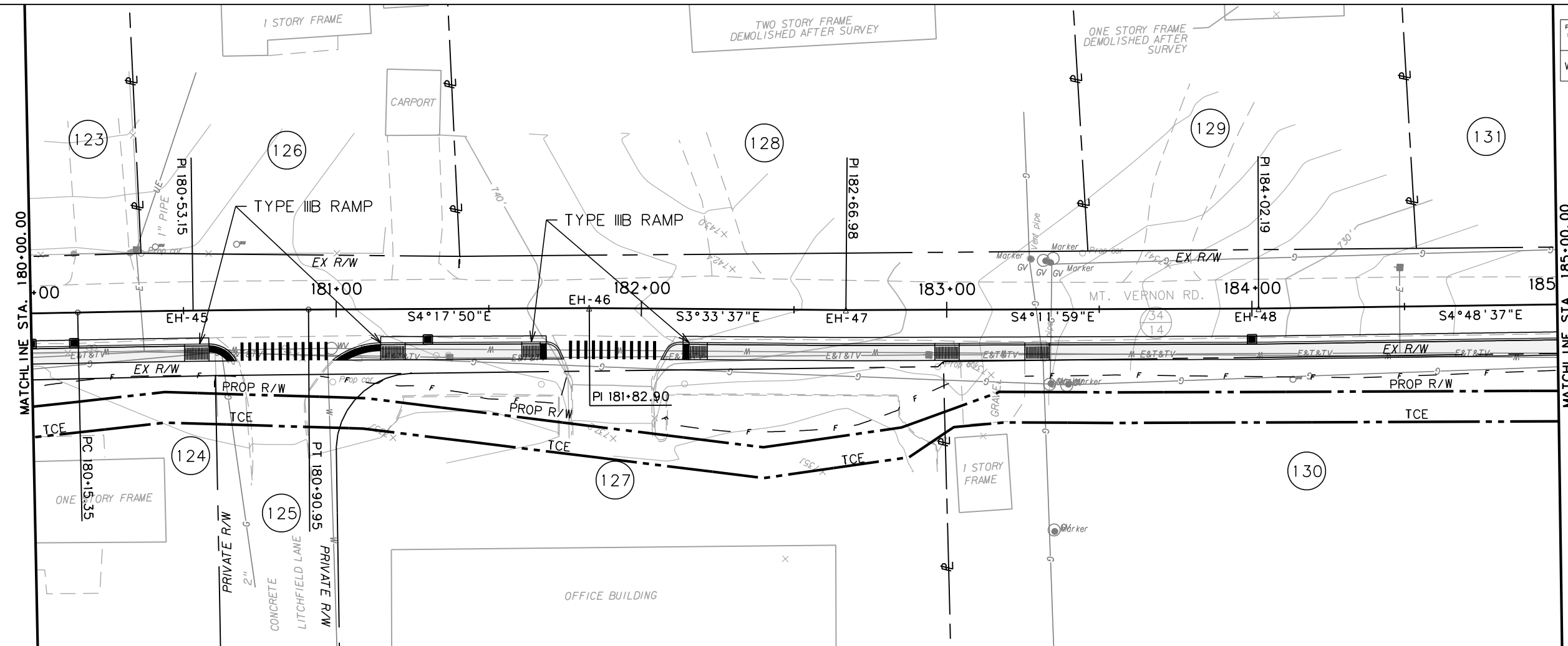
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

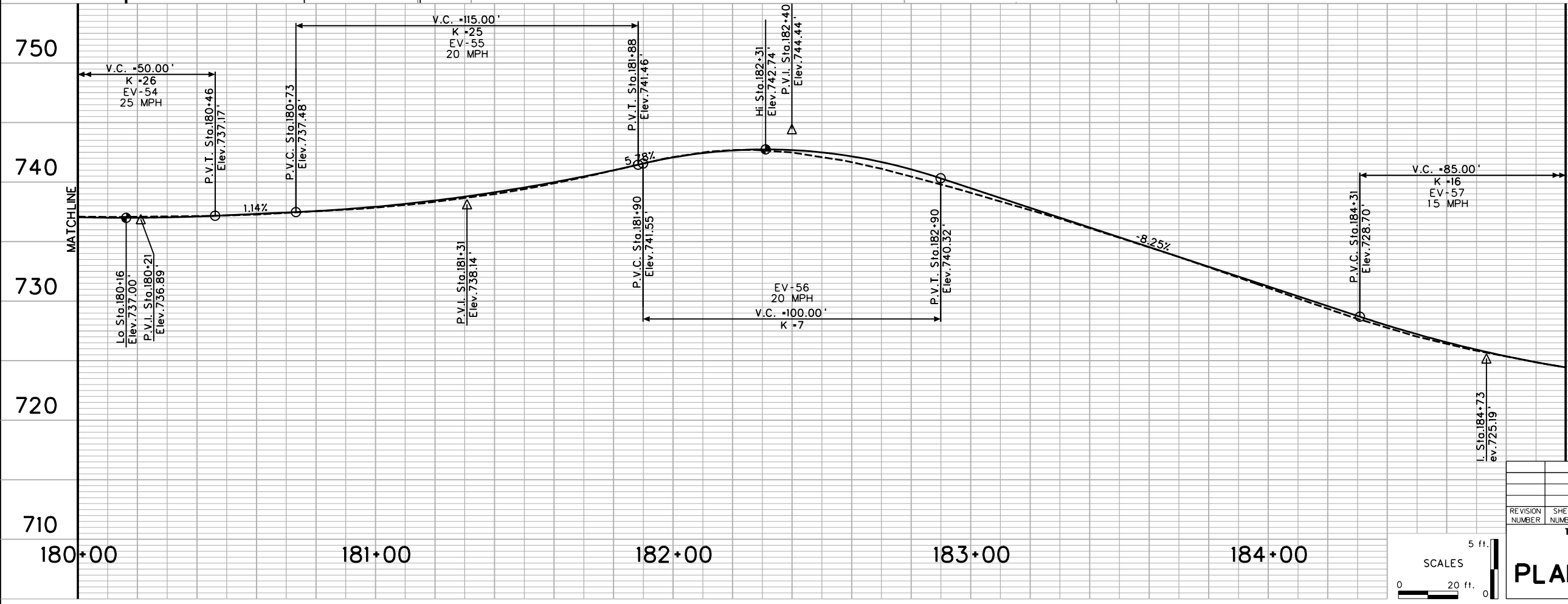
5 ft.  
SCALES  
0 20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	30	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

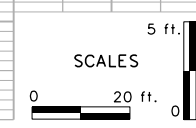
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

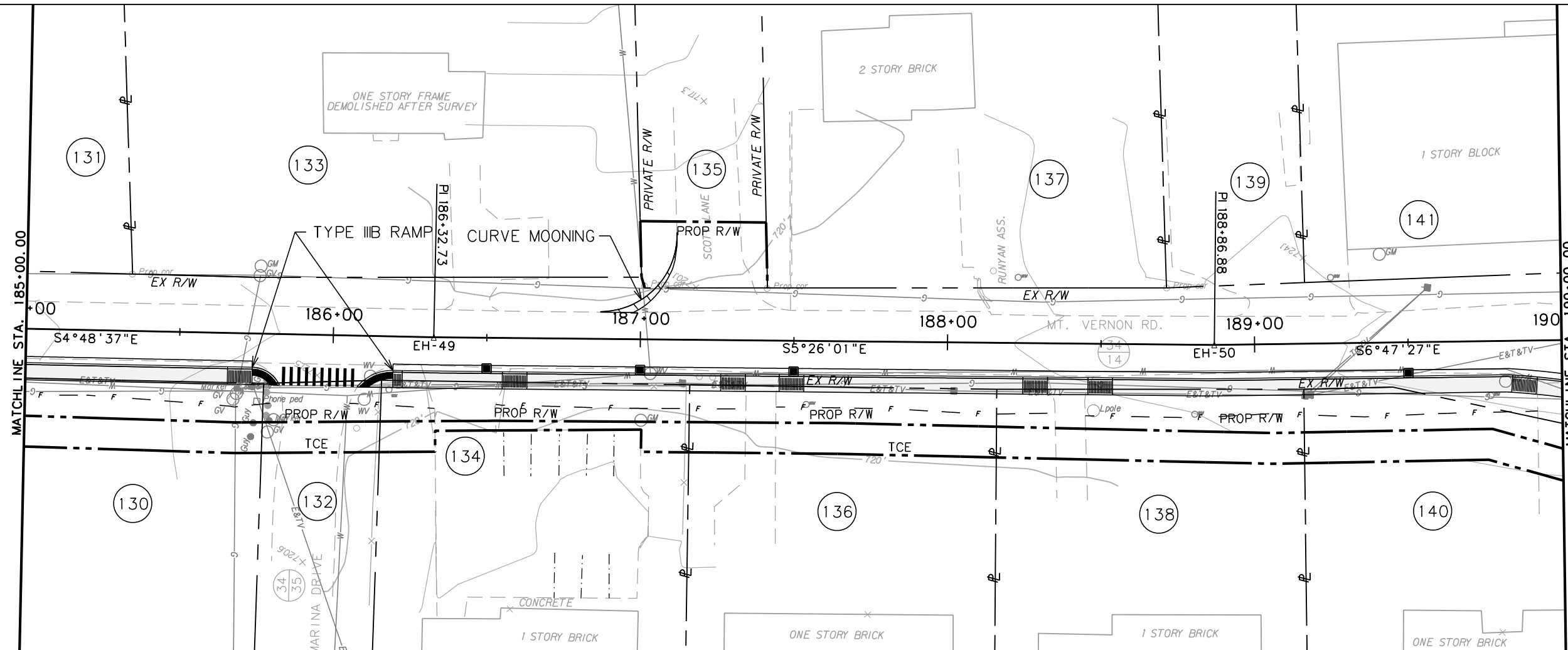
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

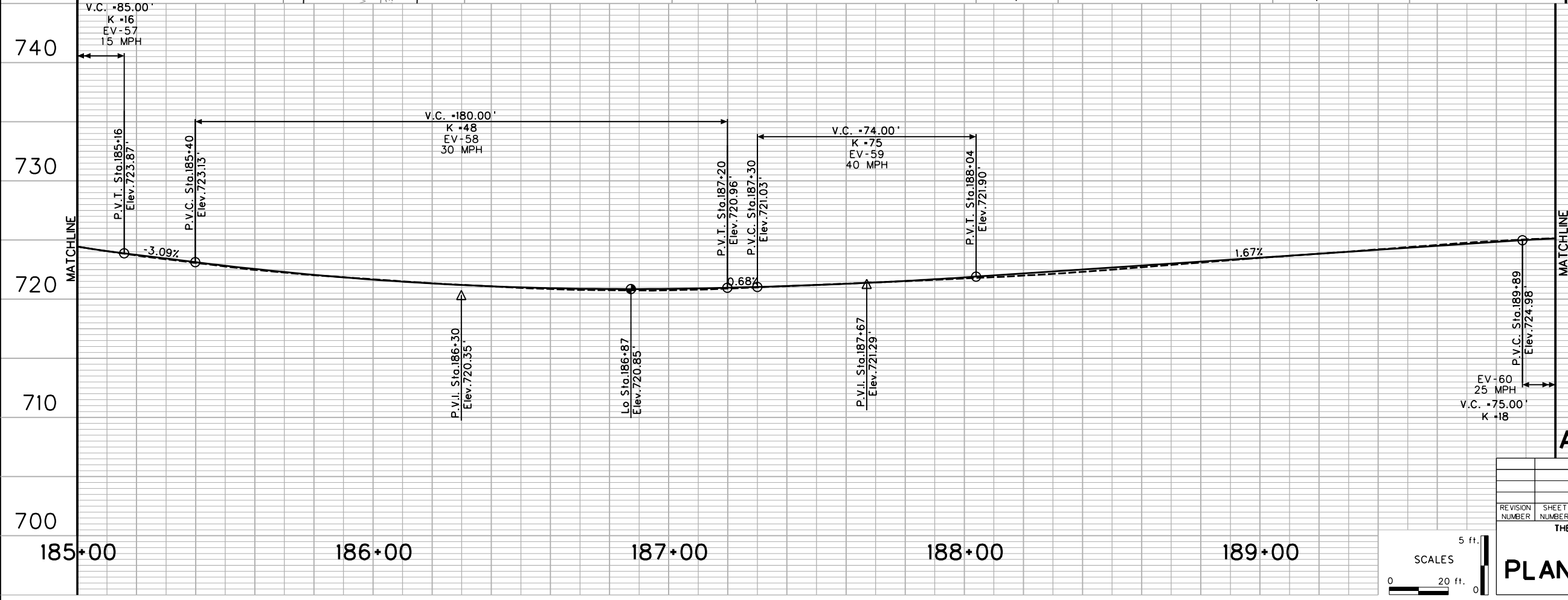


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	31	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

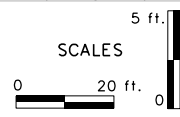
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

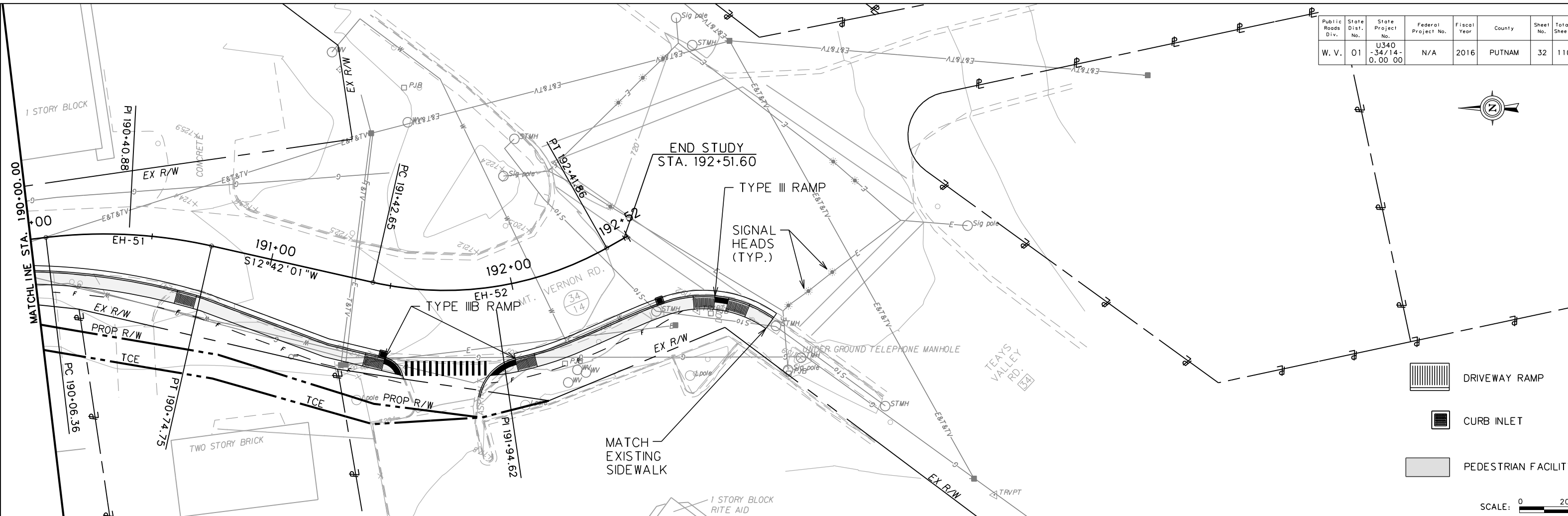
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

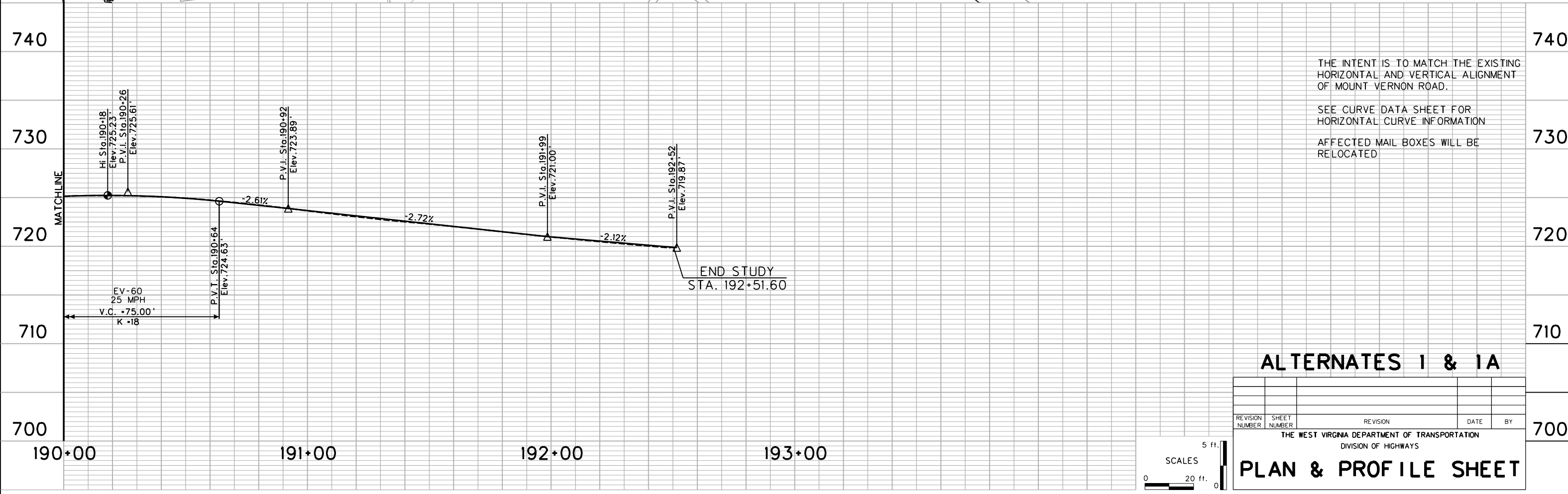


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	32	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

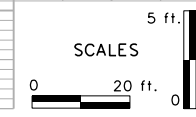
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATES 1 & 1A

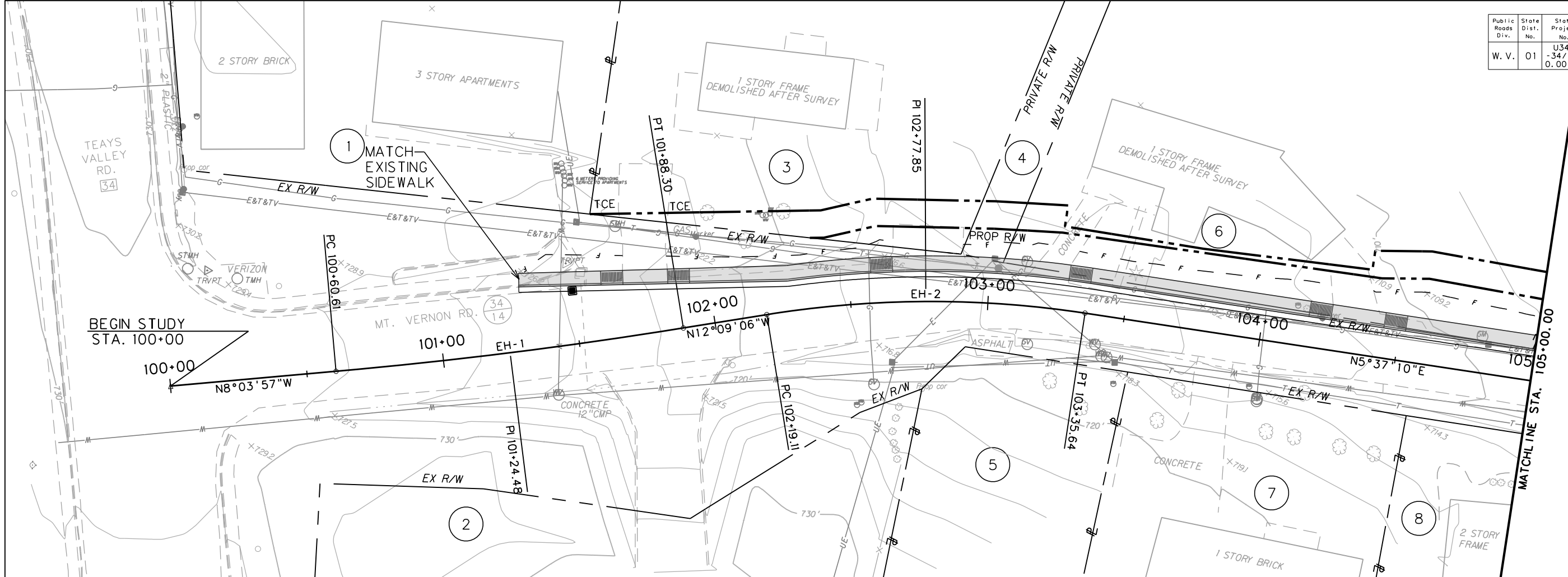
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

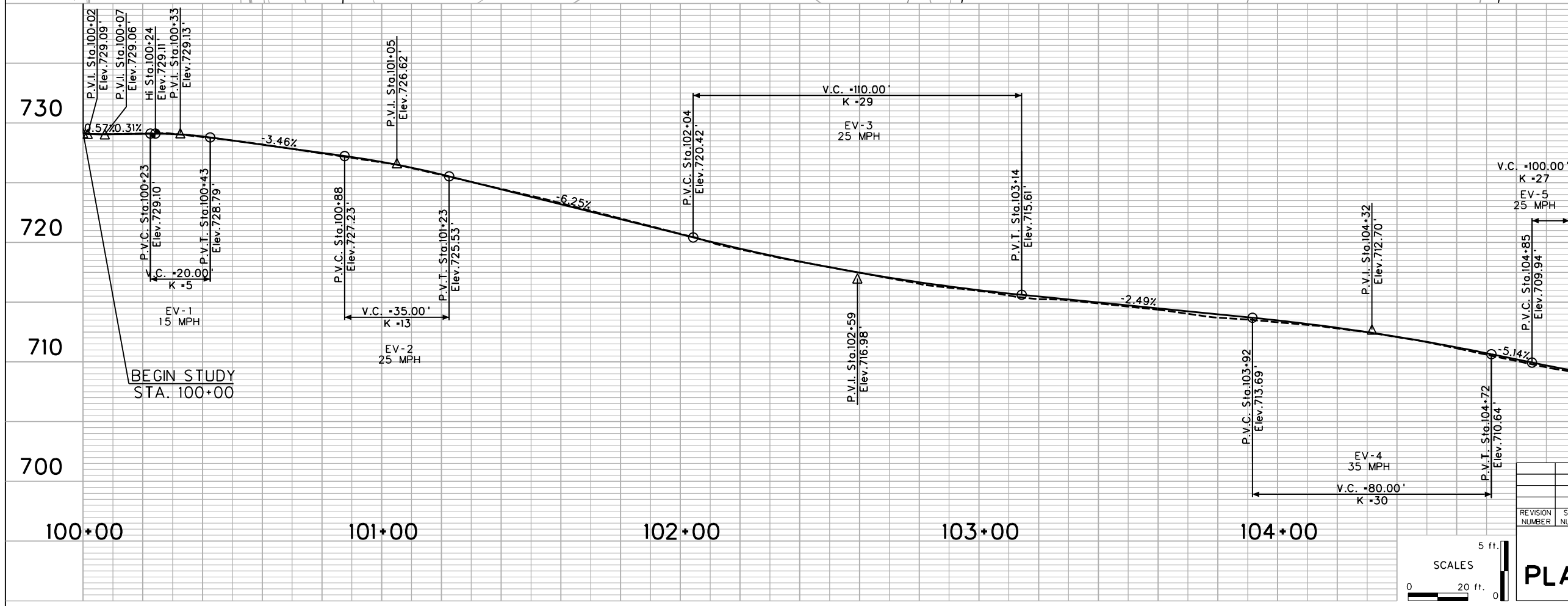


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	33	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



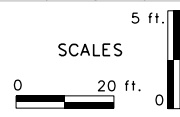
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

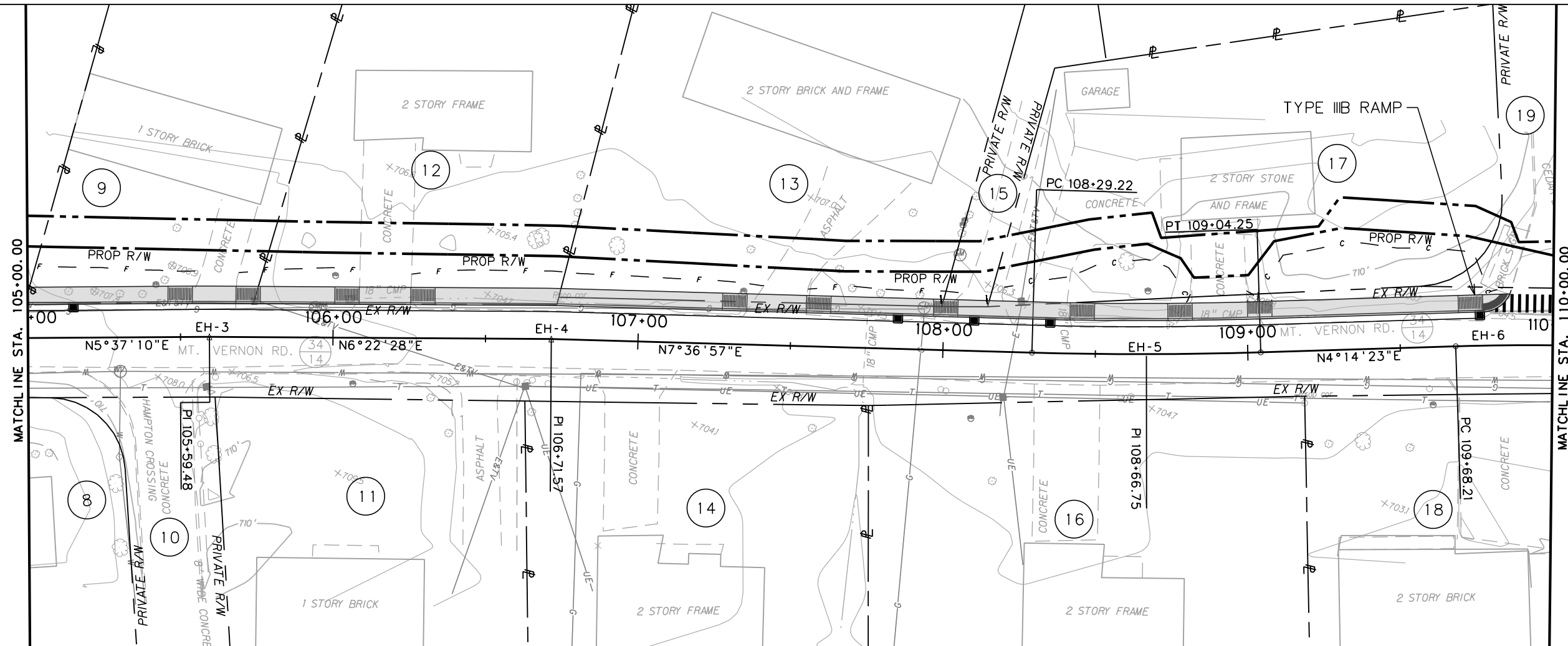
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

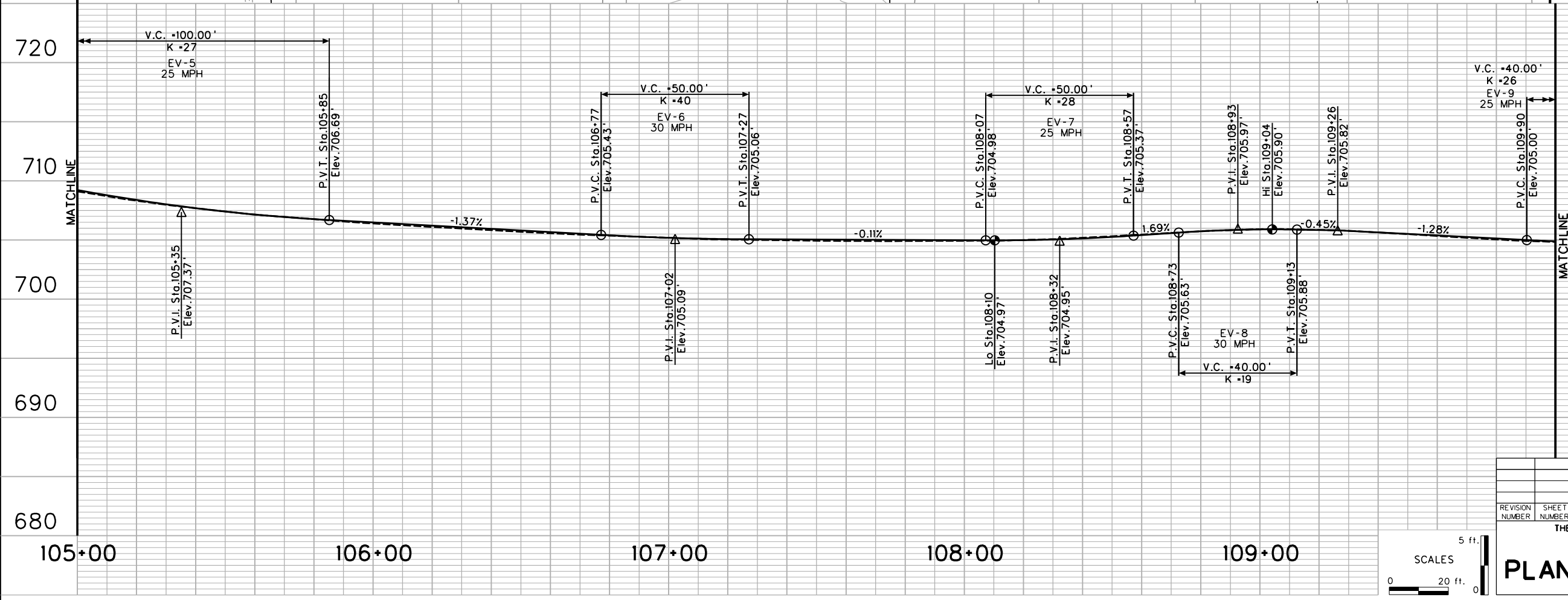


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	34	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



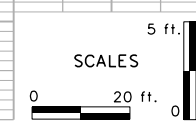
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

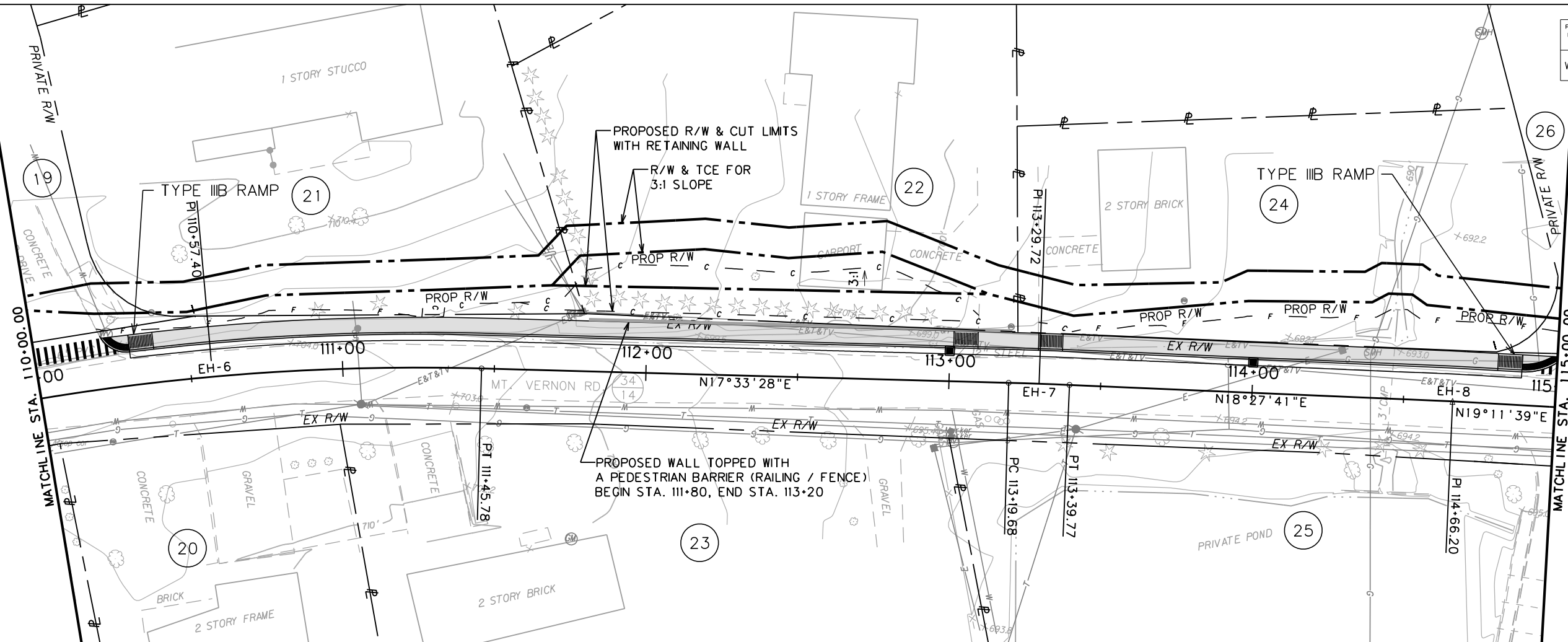
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

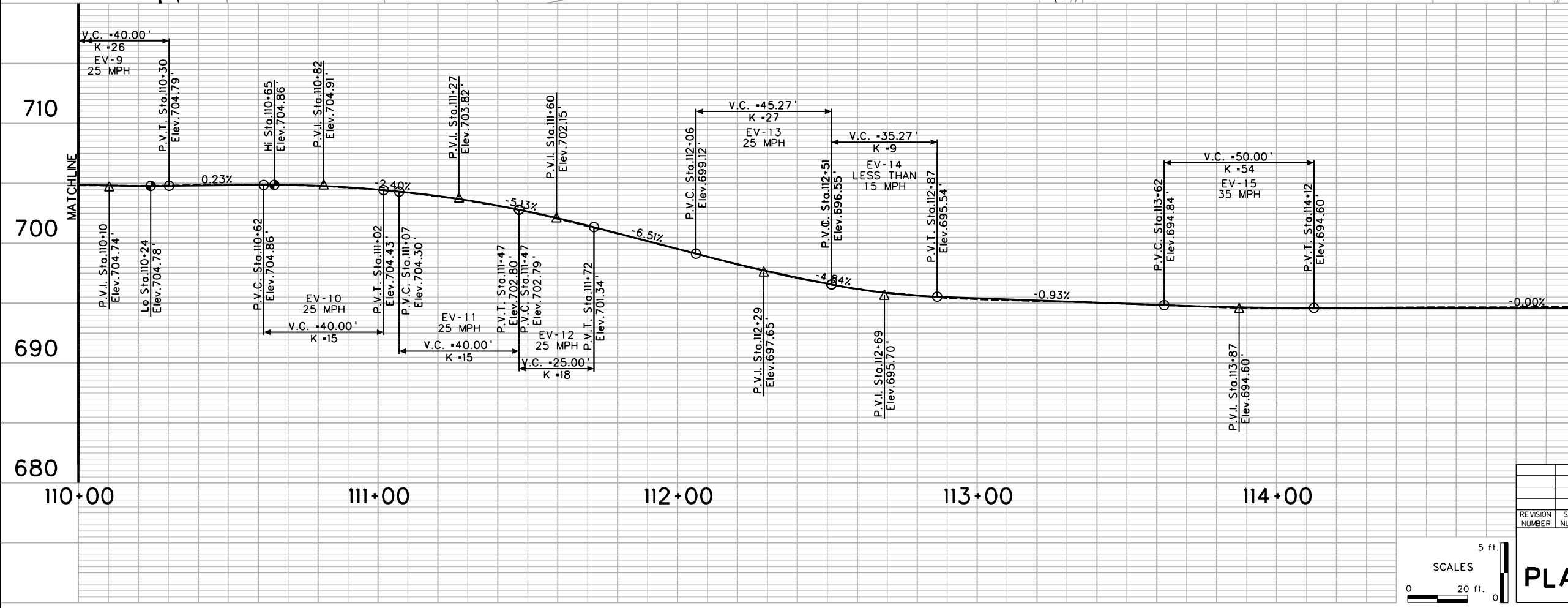


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	35	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

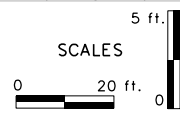
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

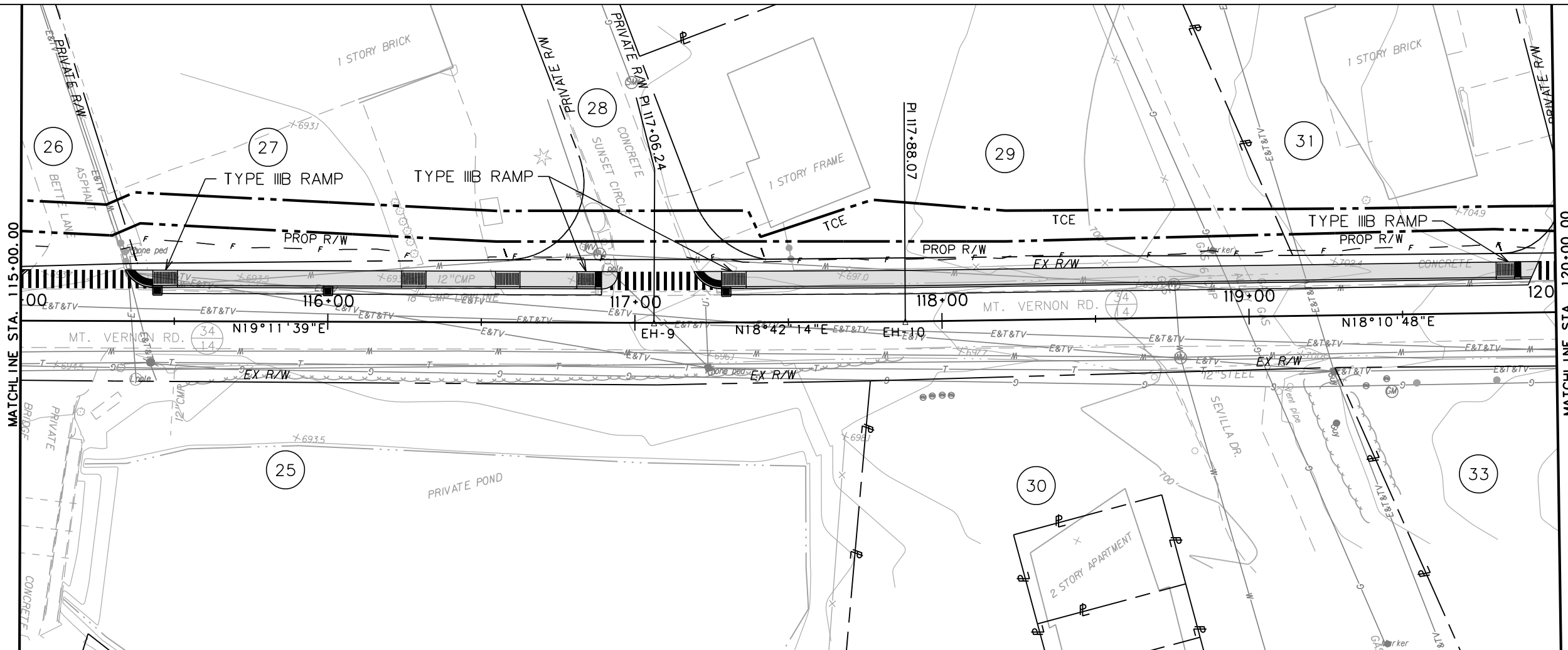
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

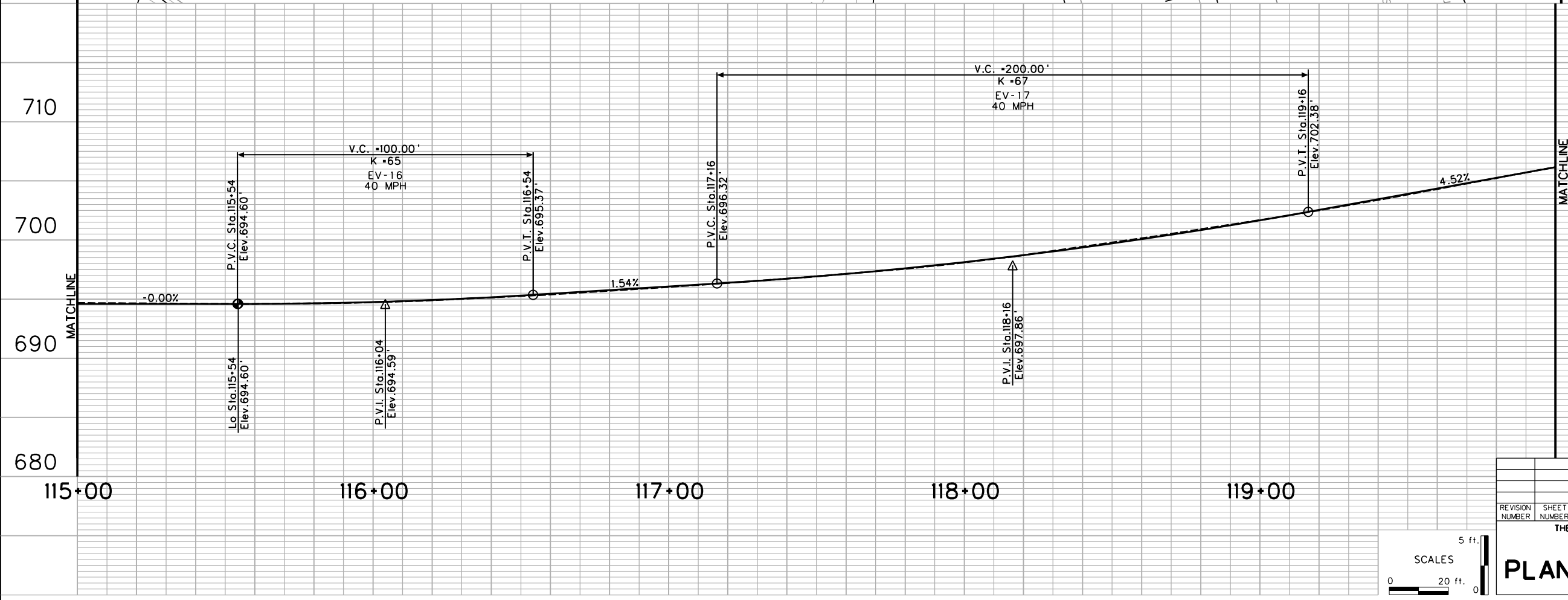


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	36	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

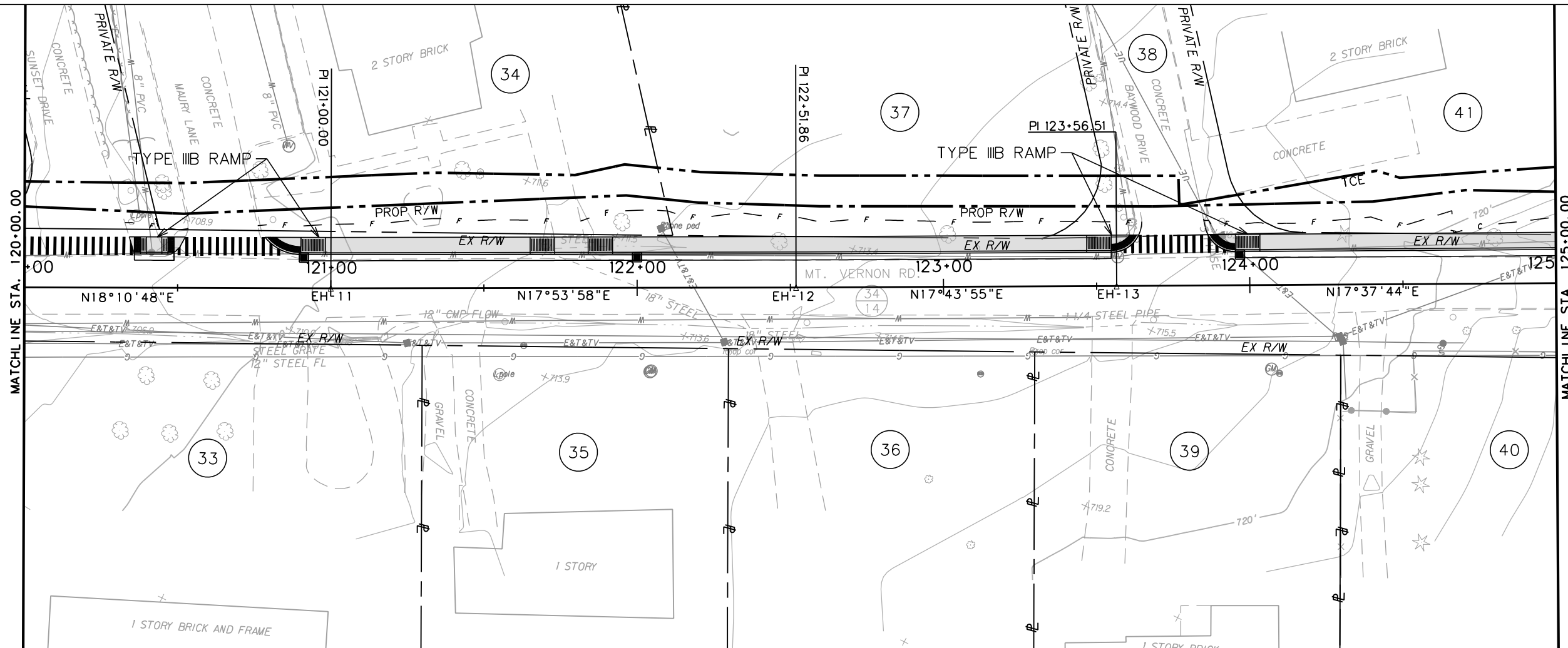
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

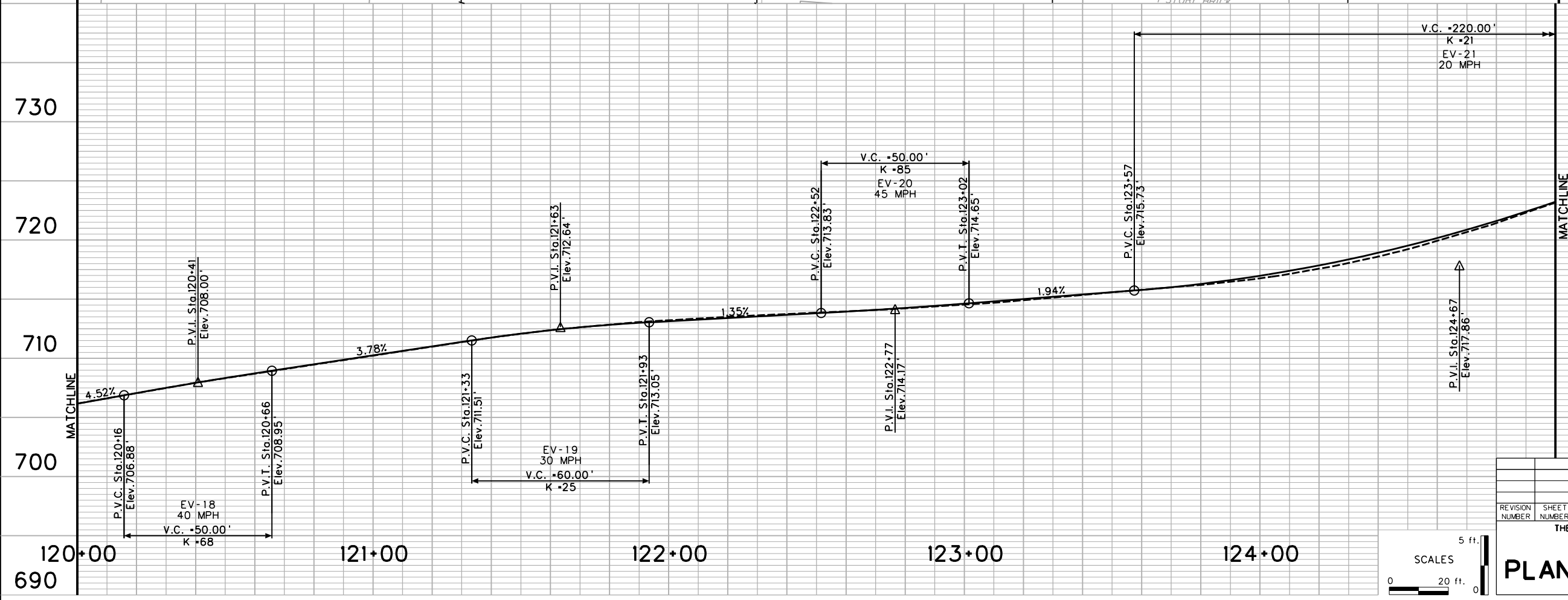
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	37	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

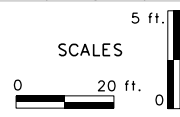
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

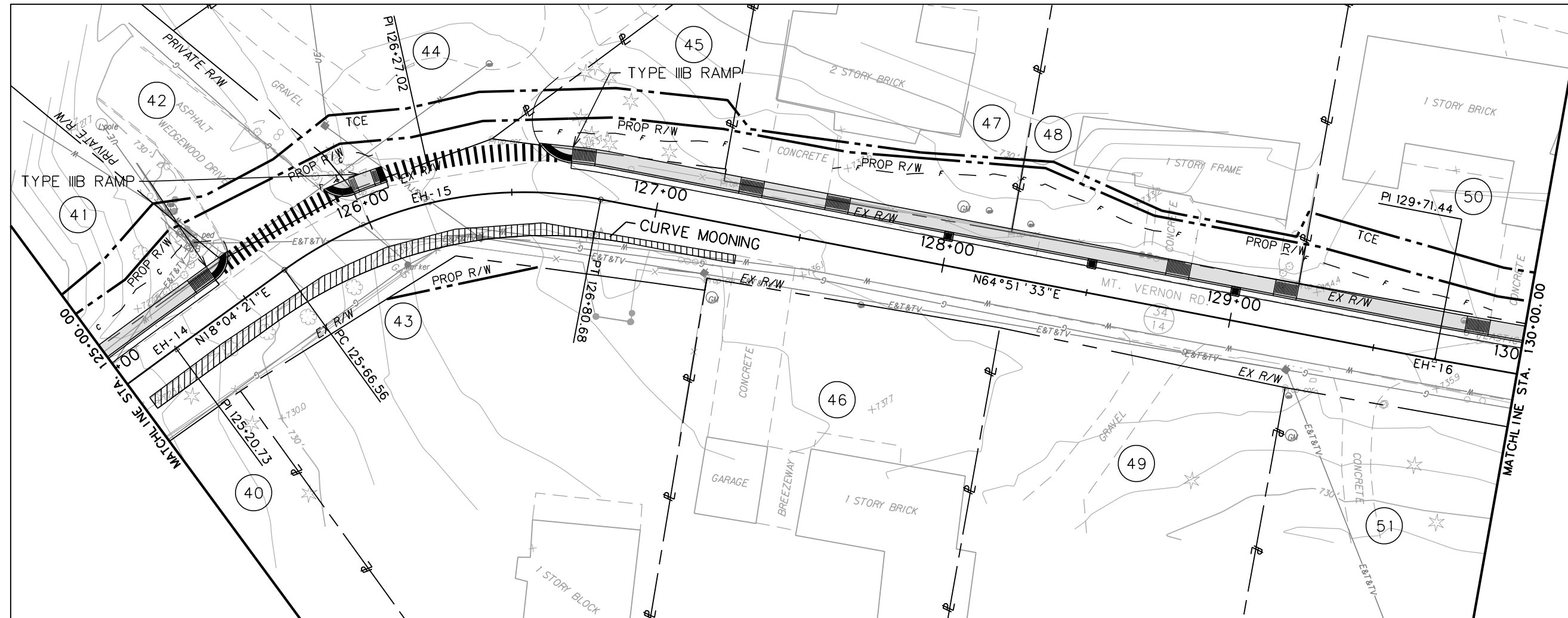
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

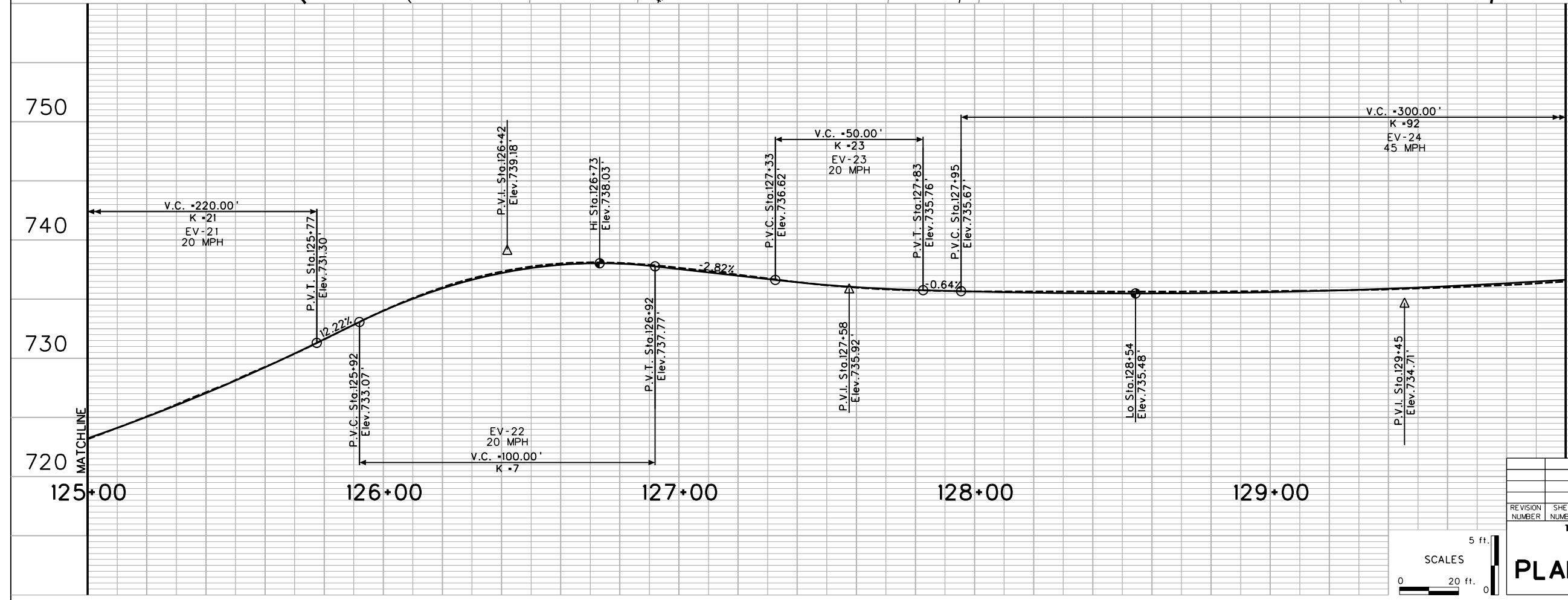


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	38	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



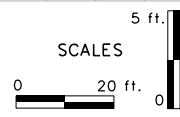
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

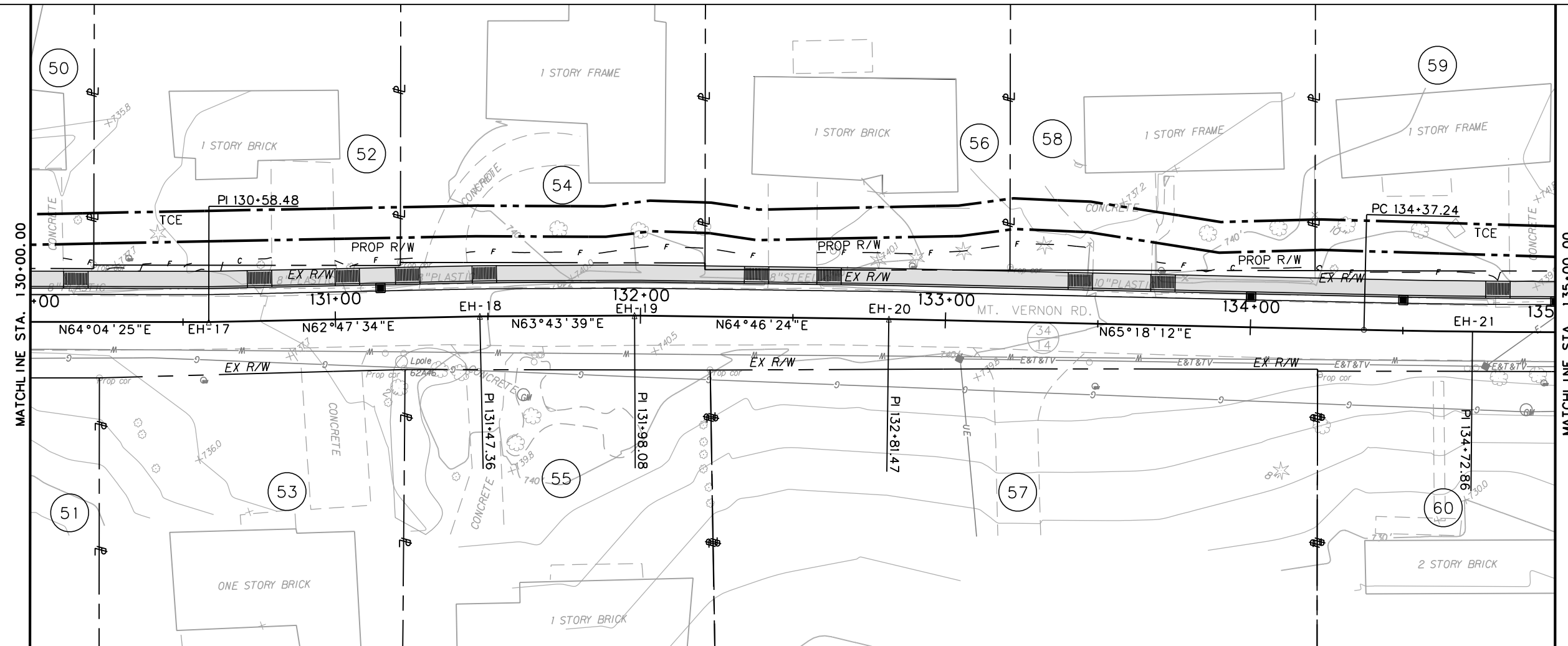
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

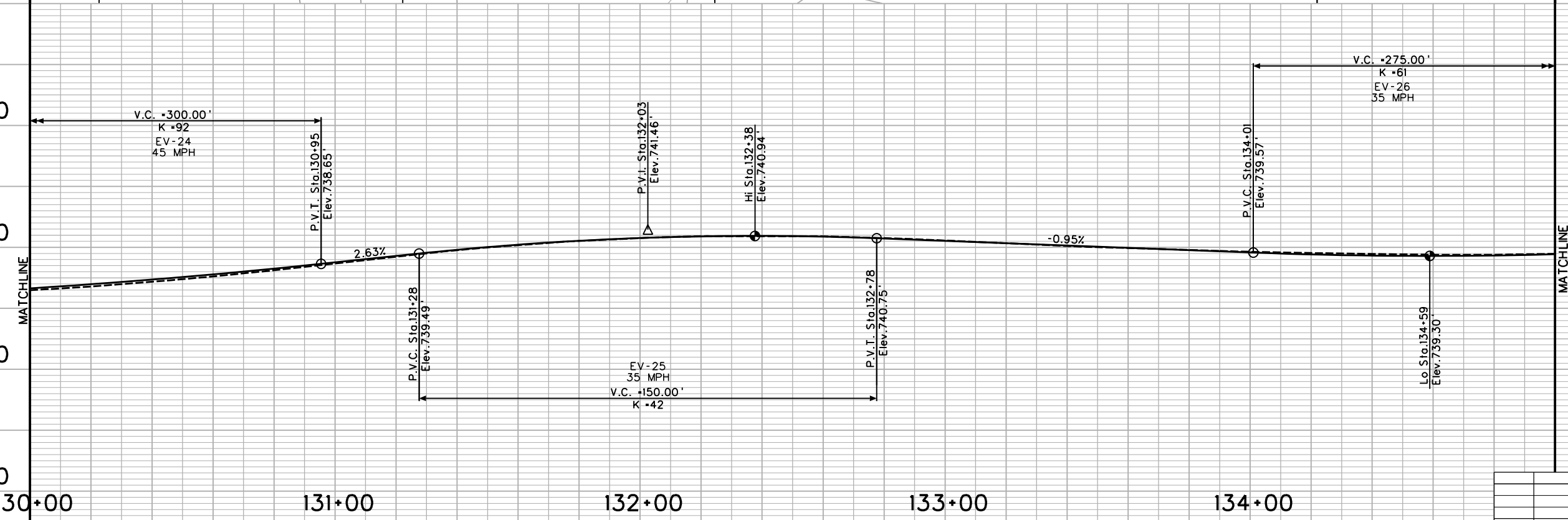
## PLAN & PROFILE SHEET



Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	39	110



SCALE: 0 20 ft.

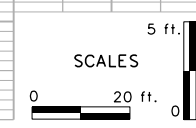


### ALTERNATE 2 & 2A

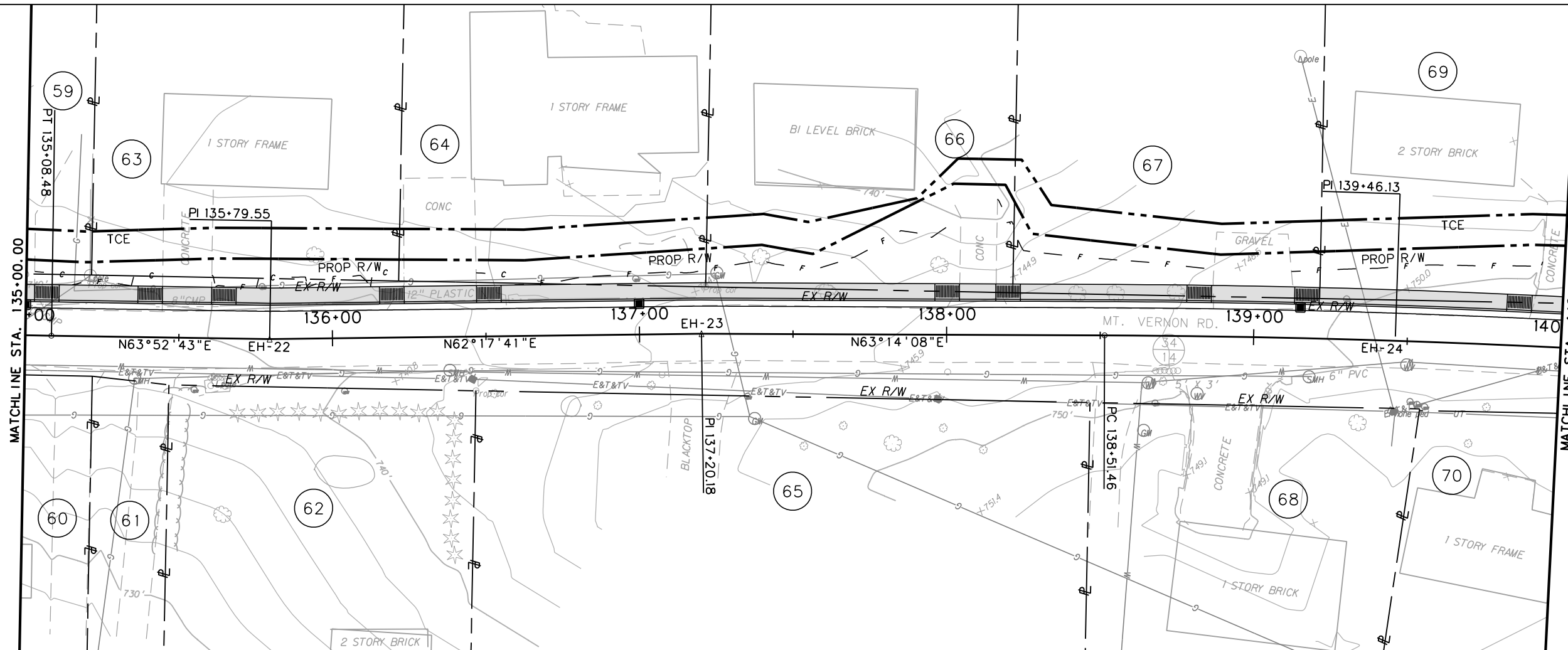
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

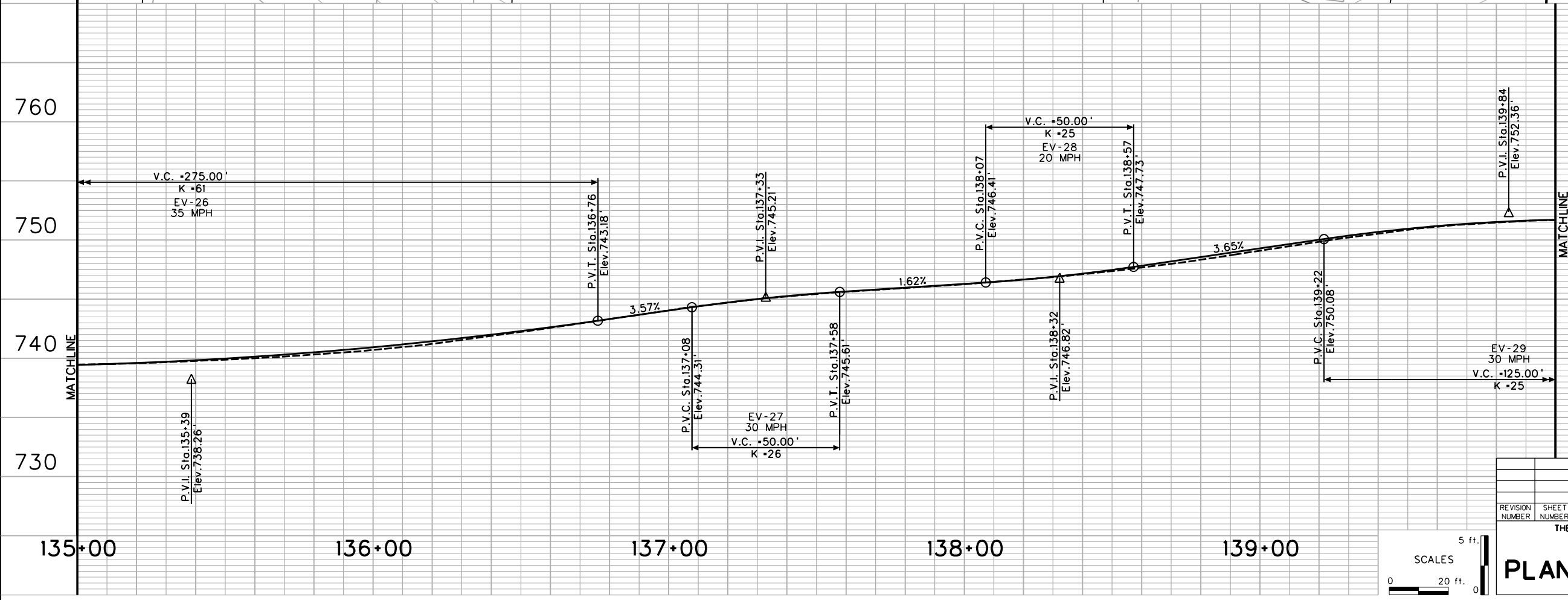


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	40	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



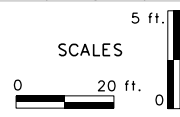
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

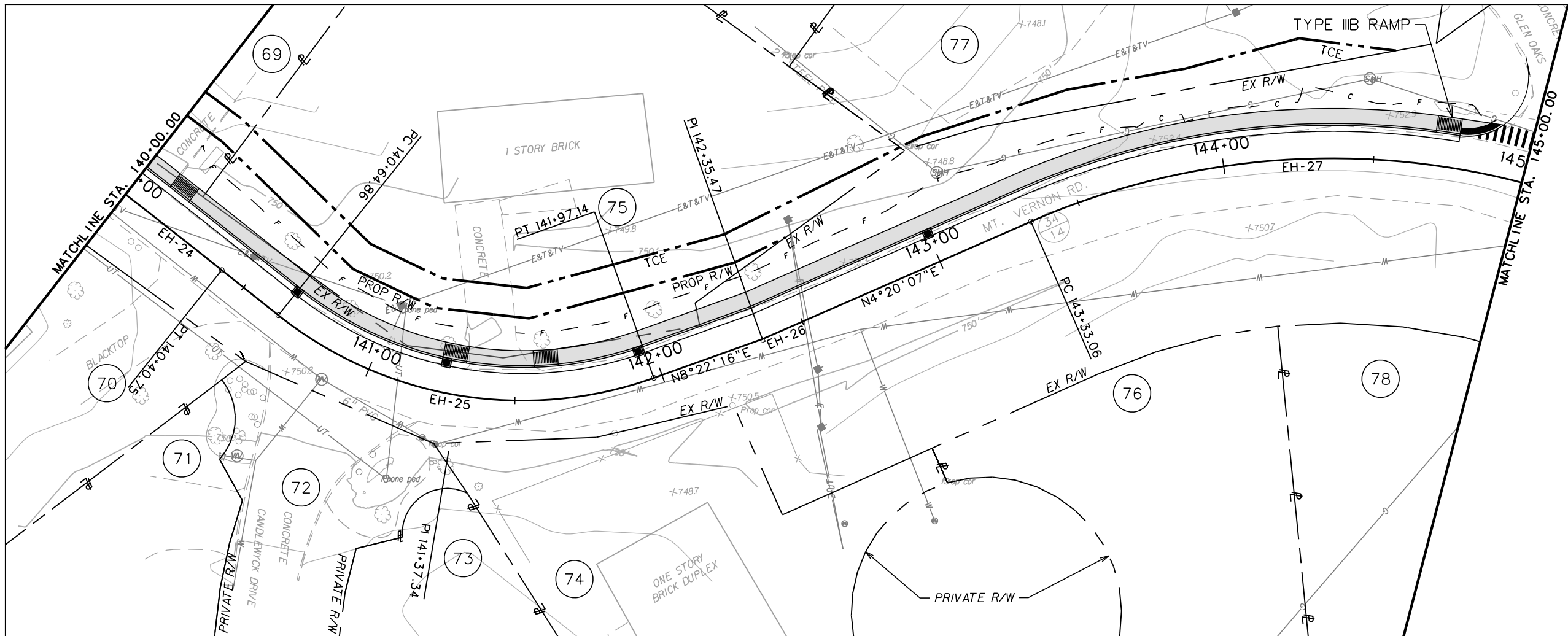
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

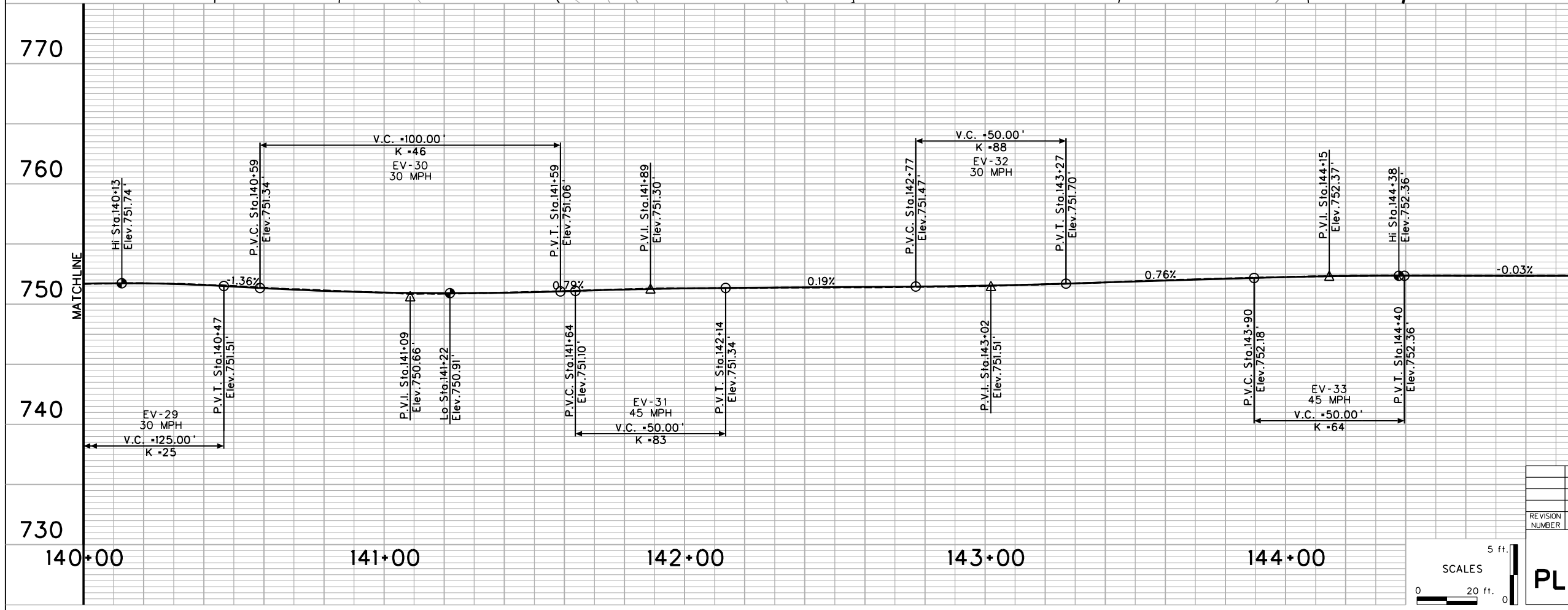


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	41	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

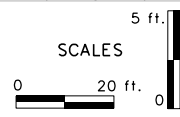
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

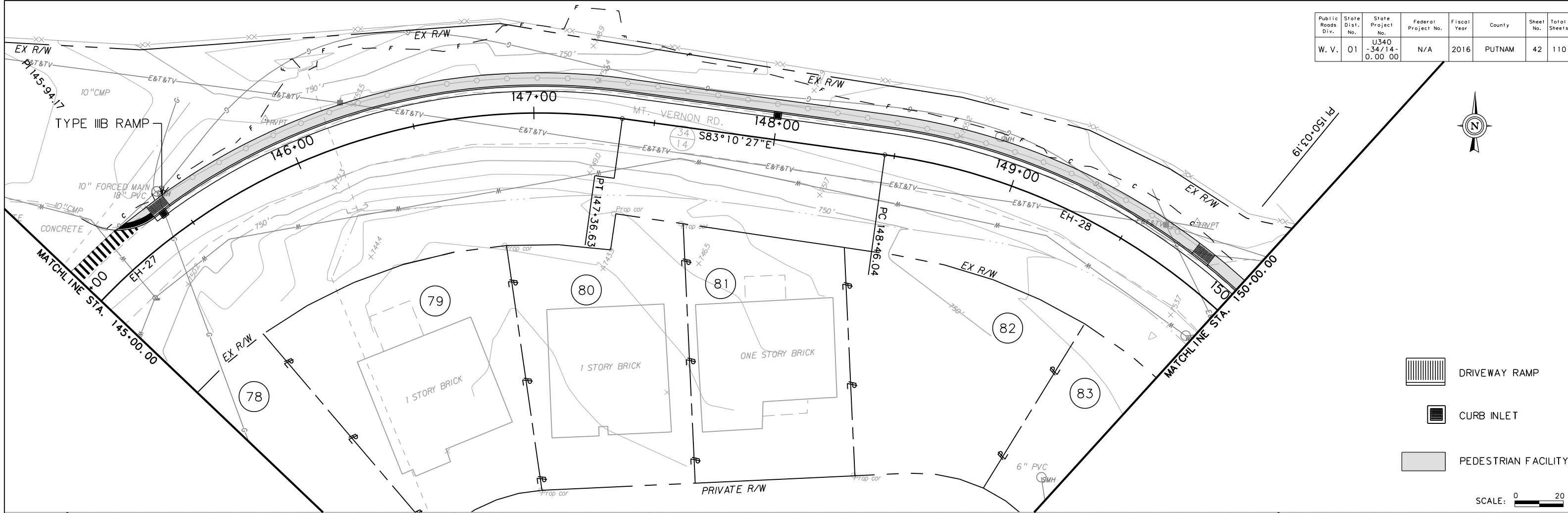
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

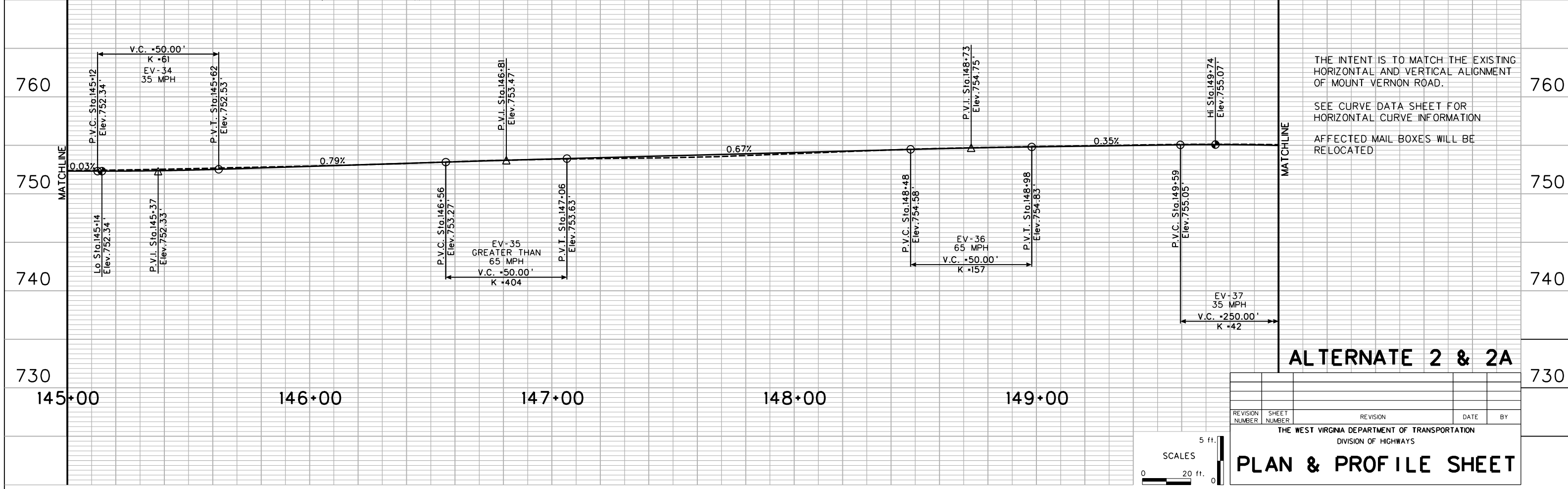


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	42	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
 SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
 AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

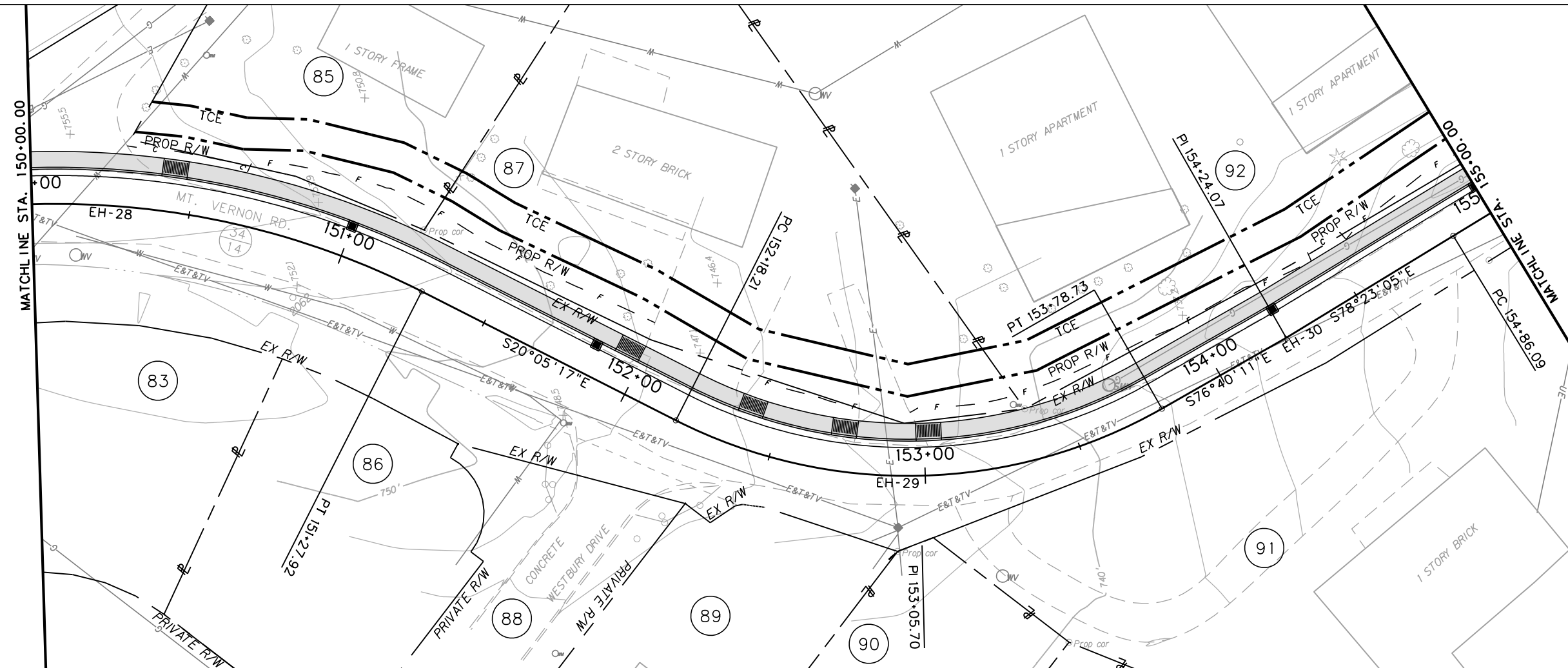
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

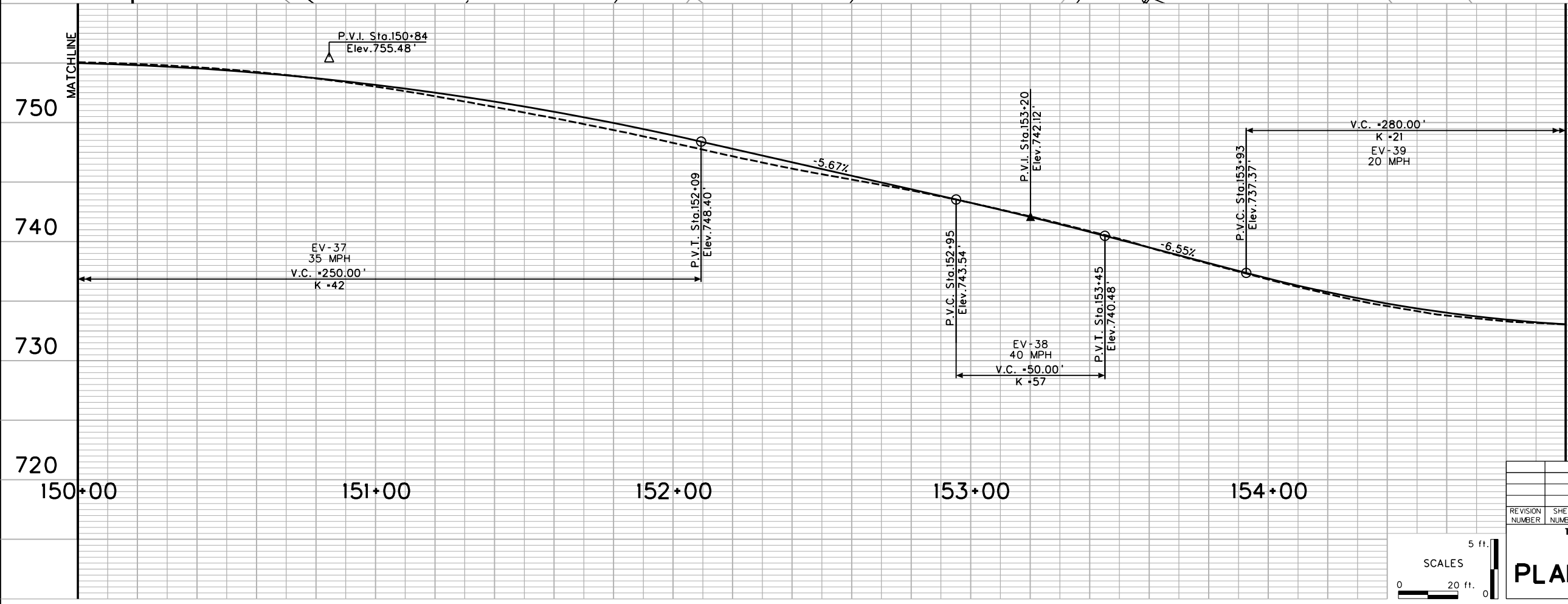
5 ft.  
 SCALES  
 0 20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	43	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

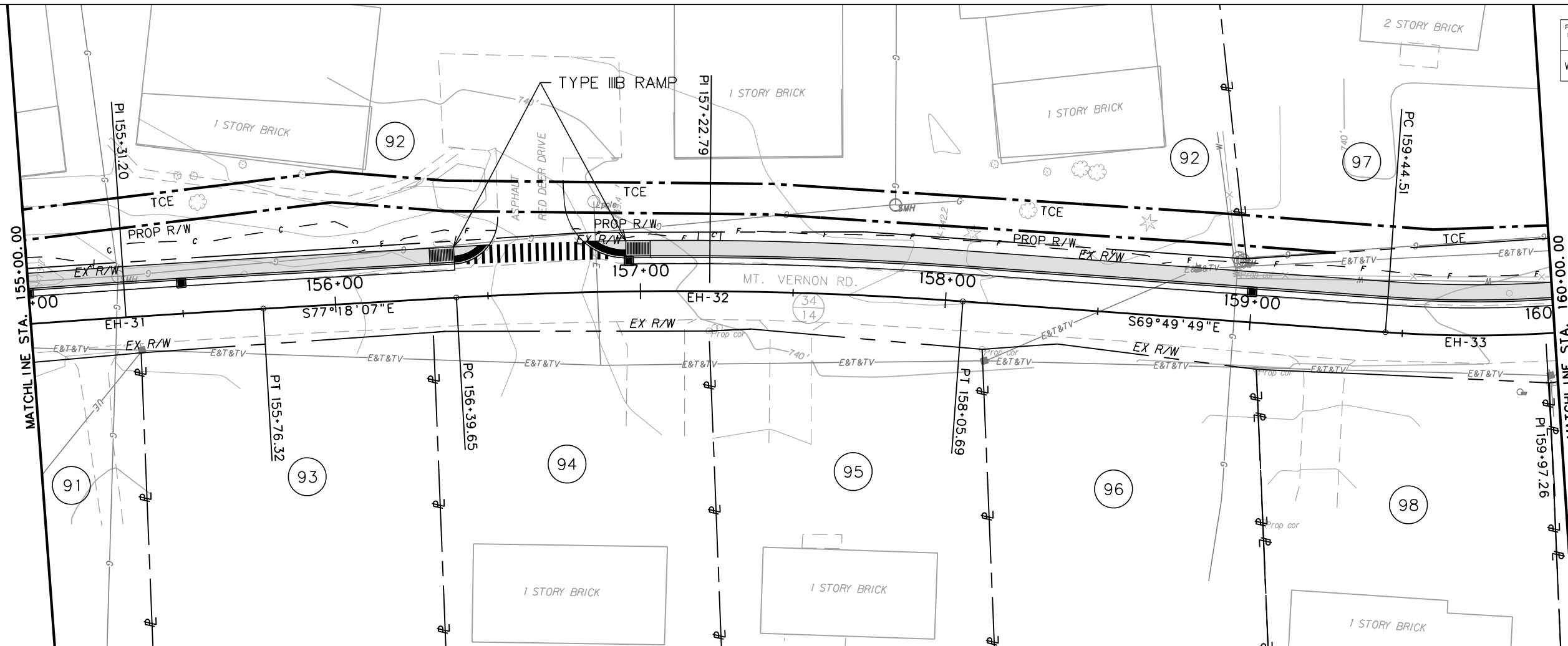
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

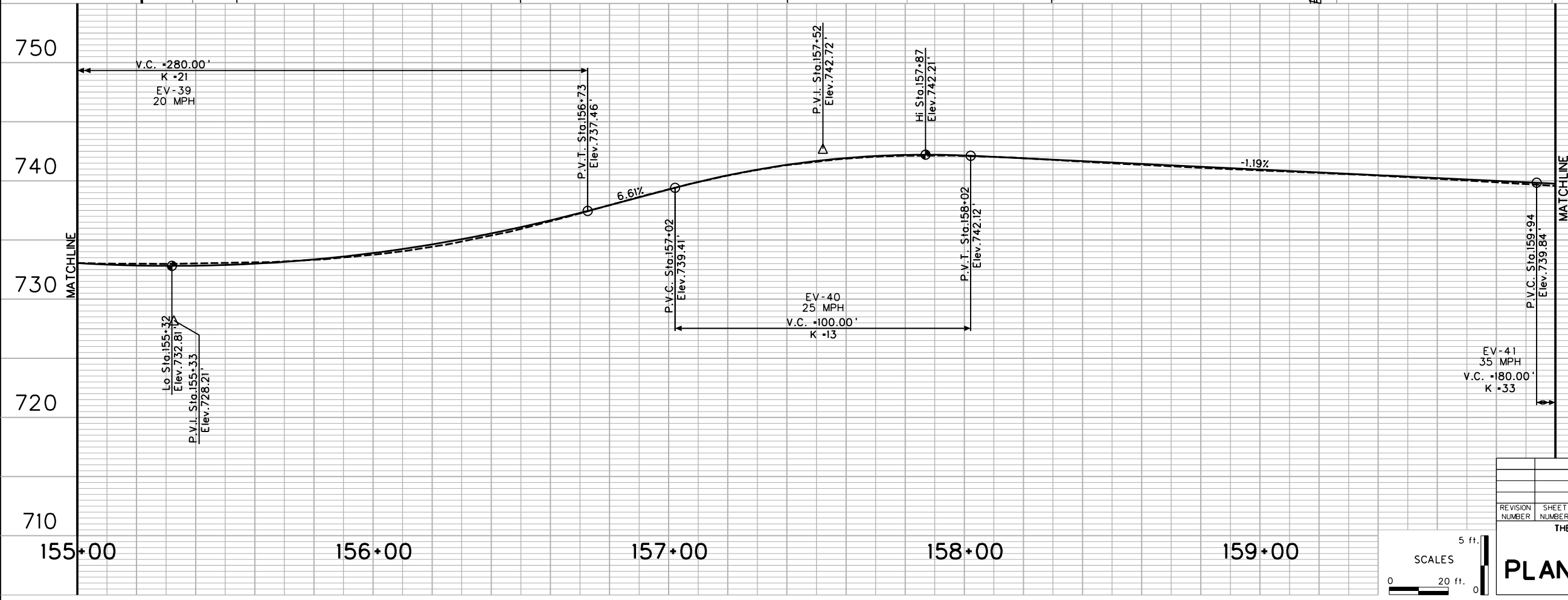
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	44	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

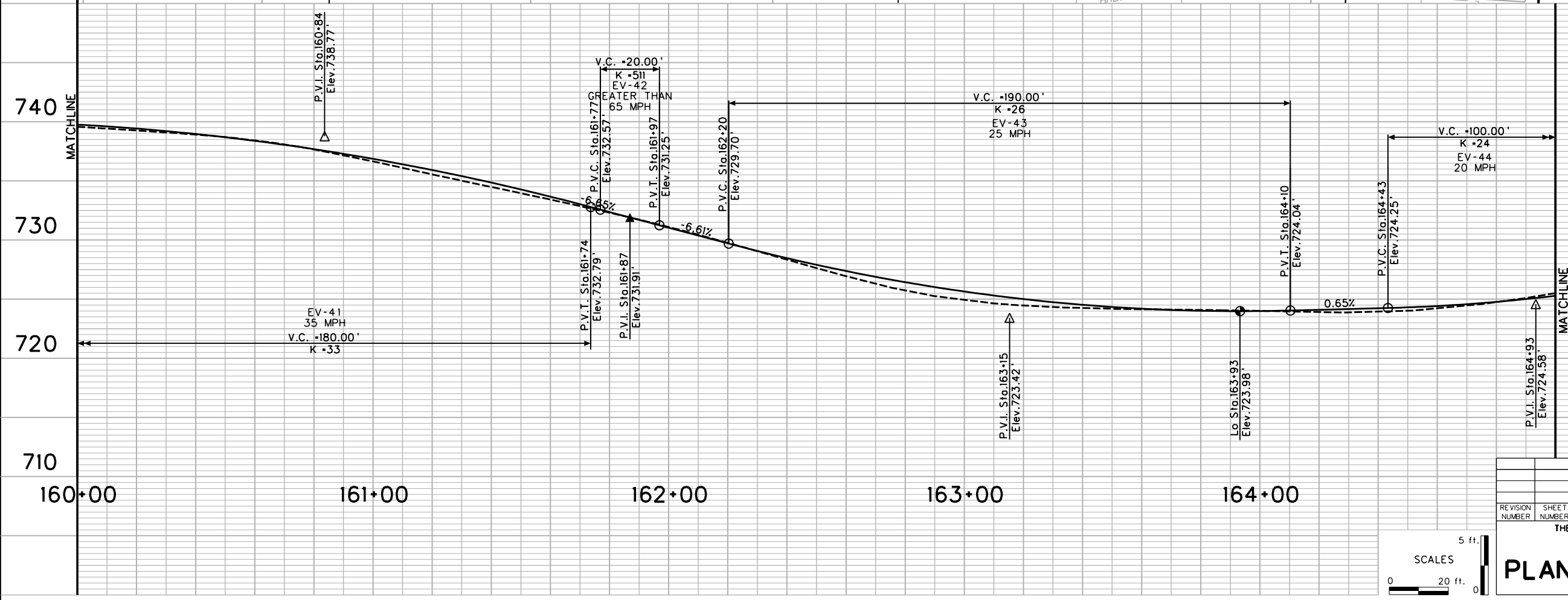
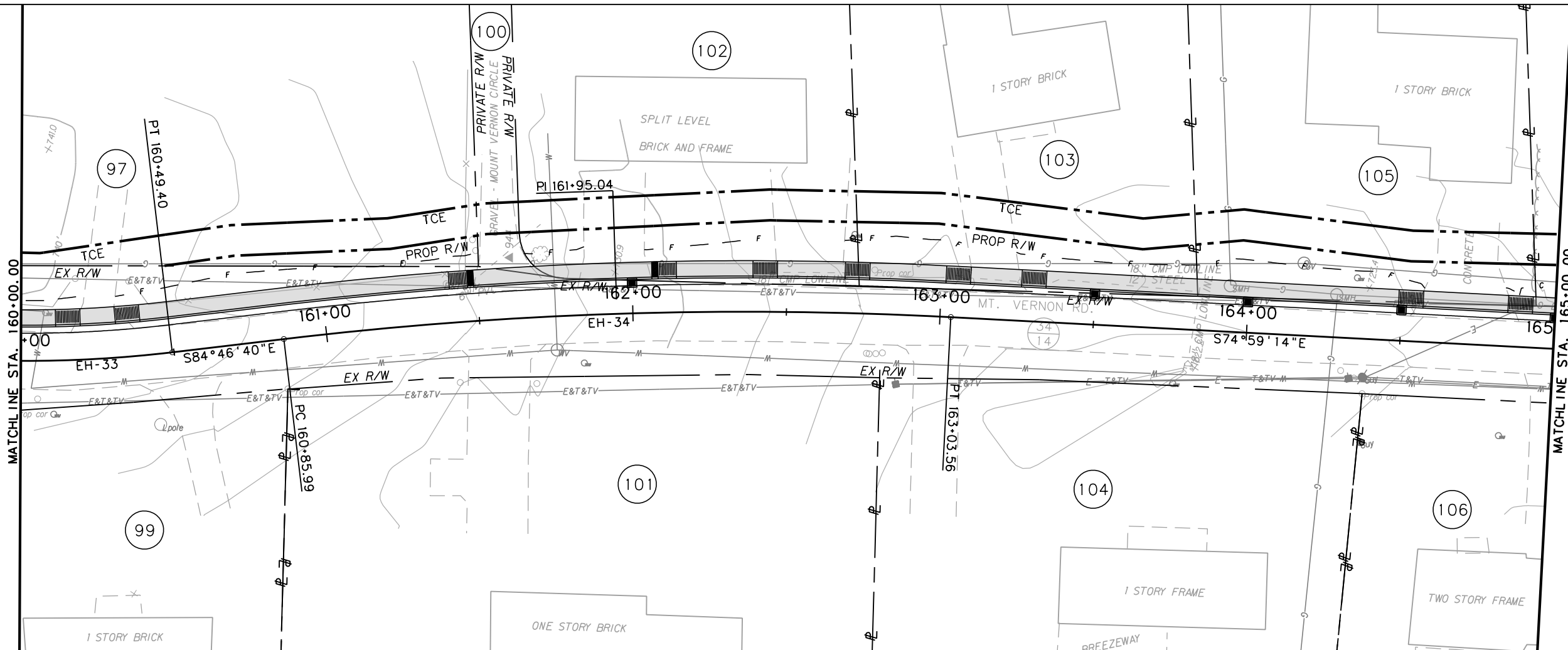
5 ft.  
20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	45	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

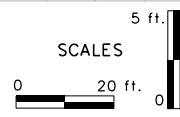
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

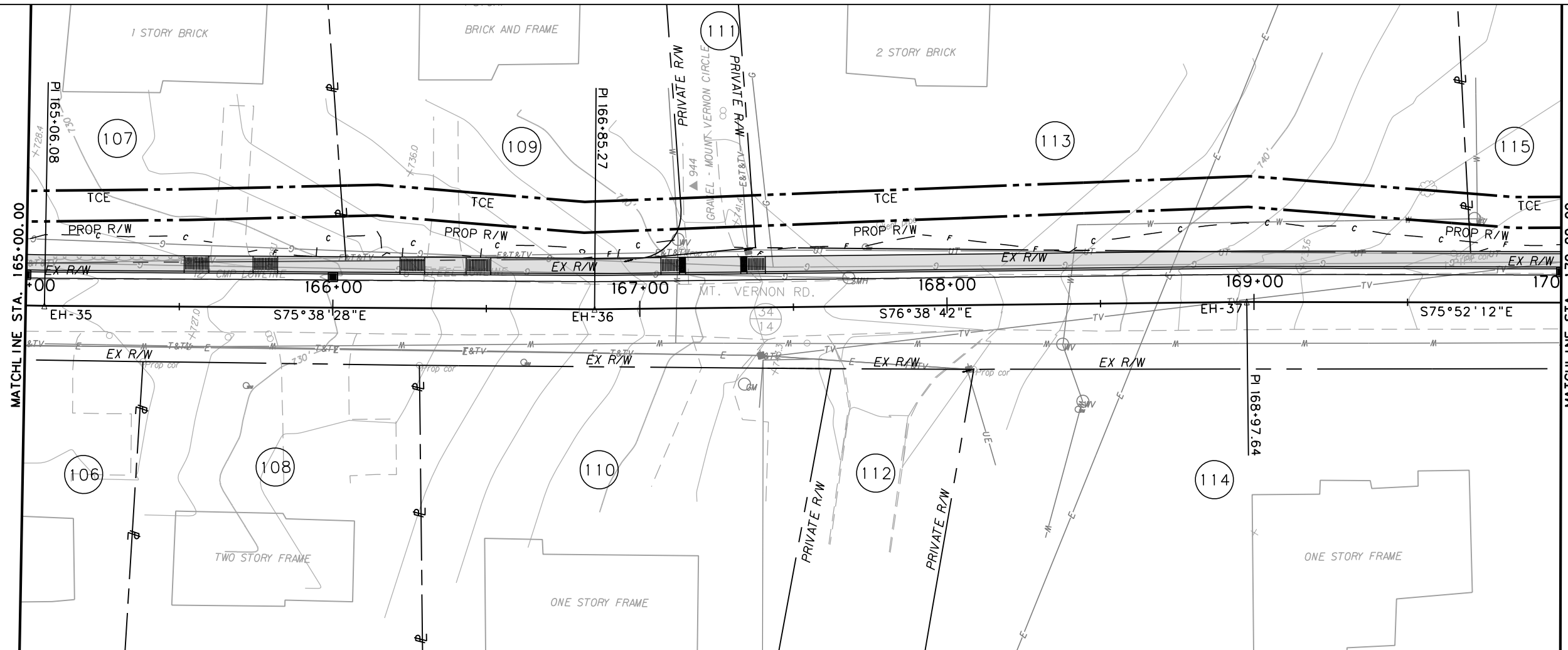
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

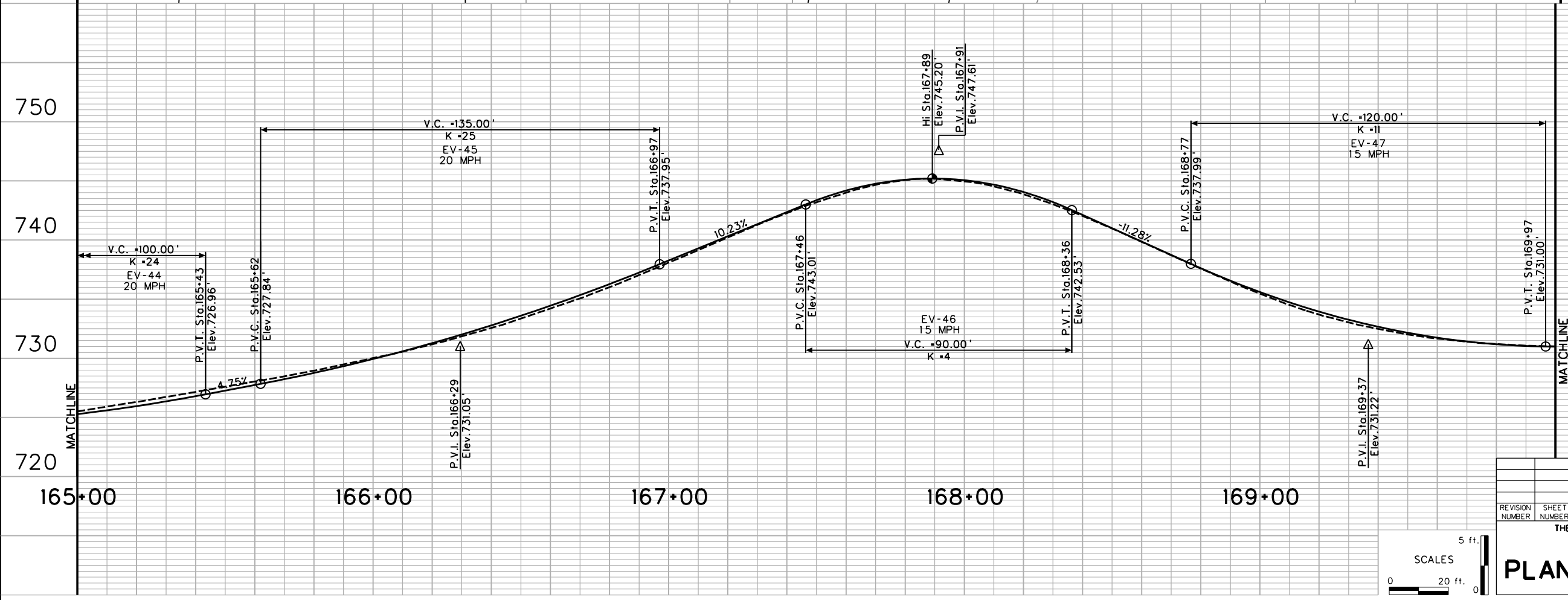


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	46	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

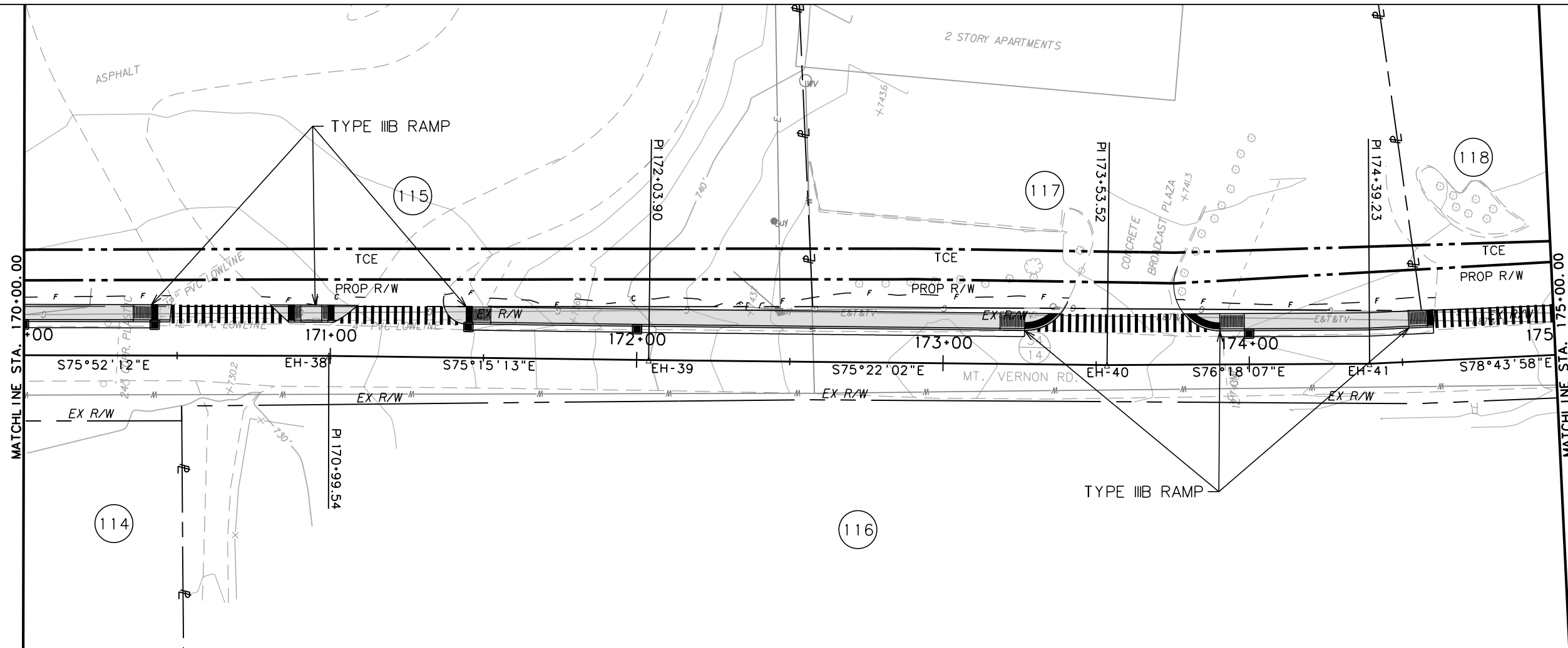
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

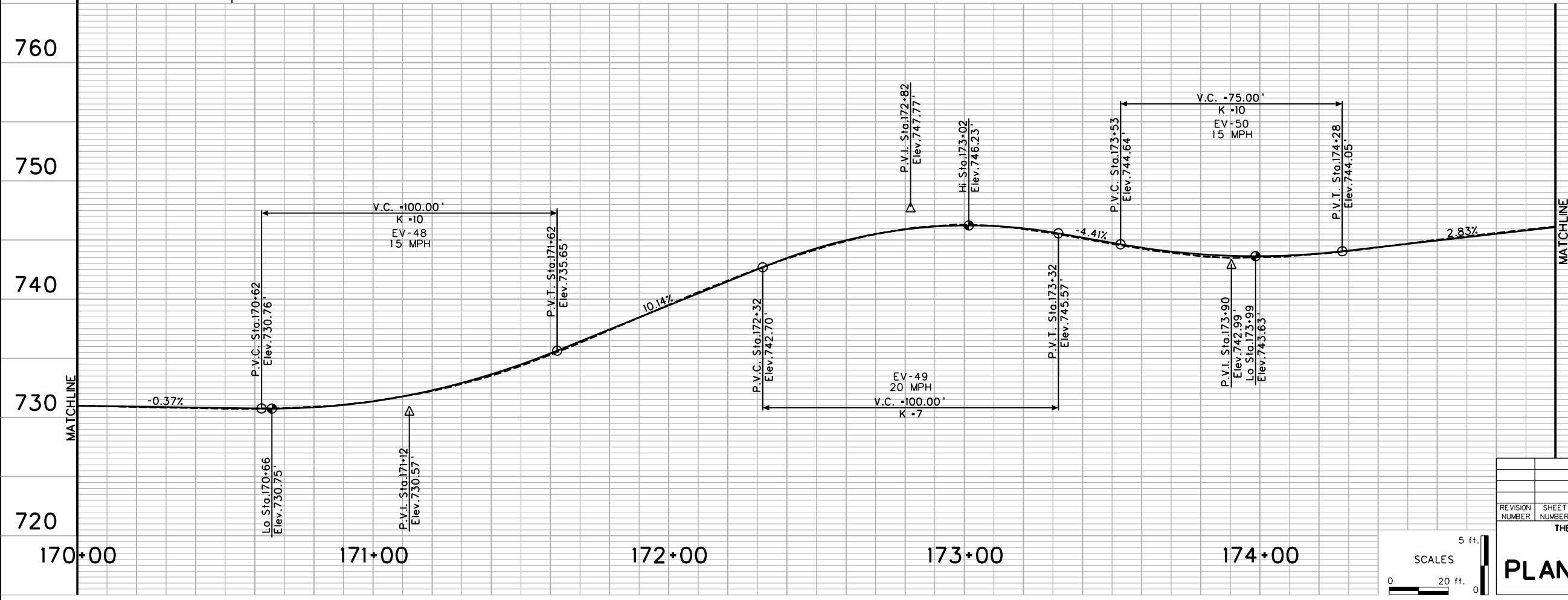
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	47	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

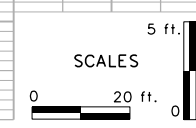
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

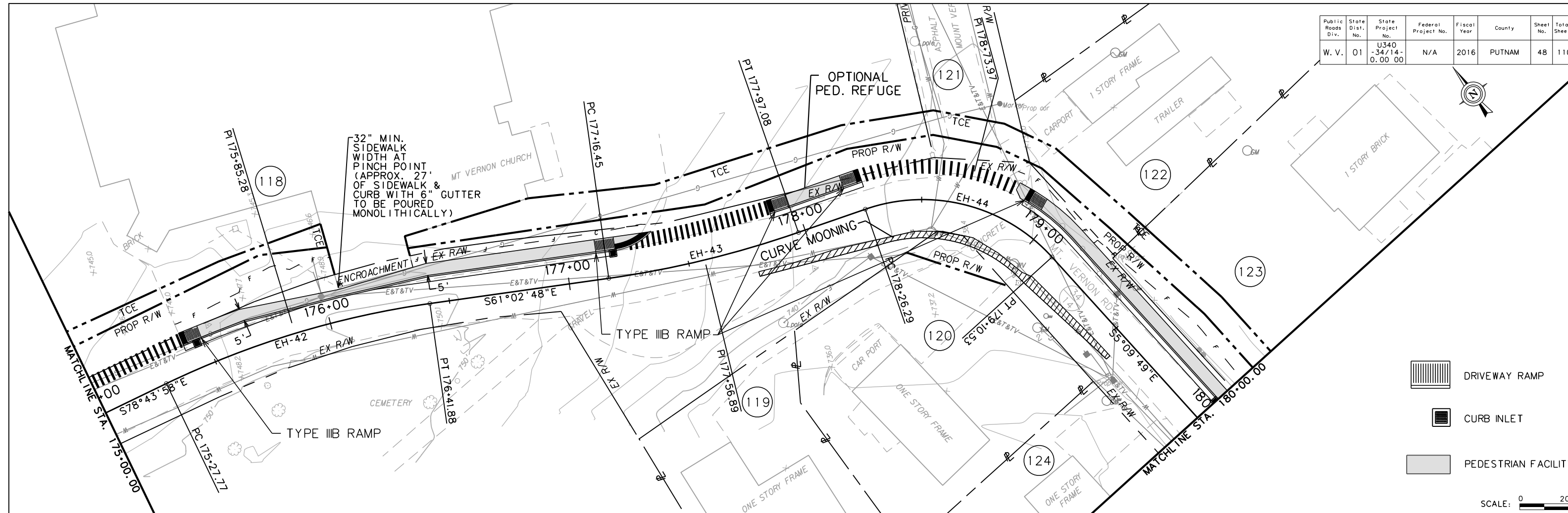
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

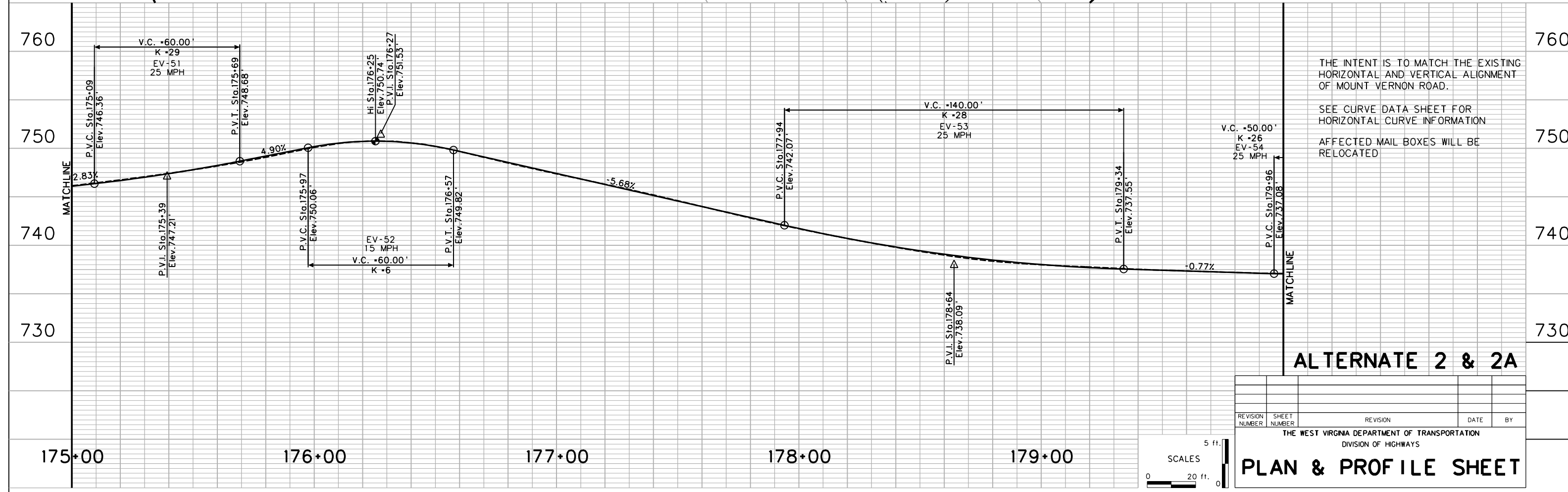


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	48	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

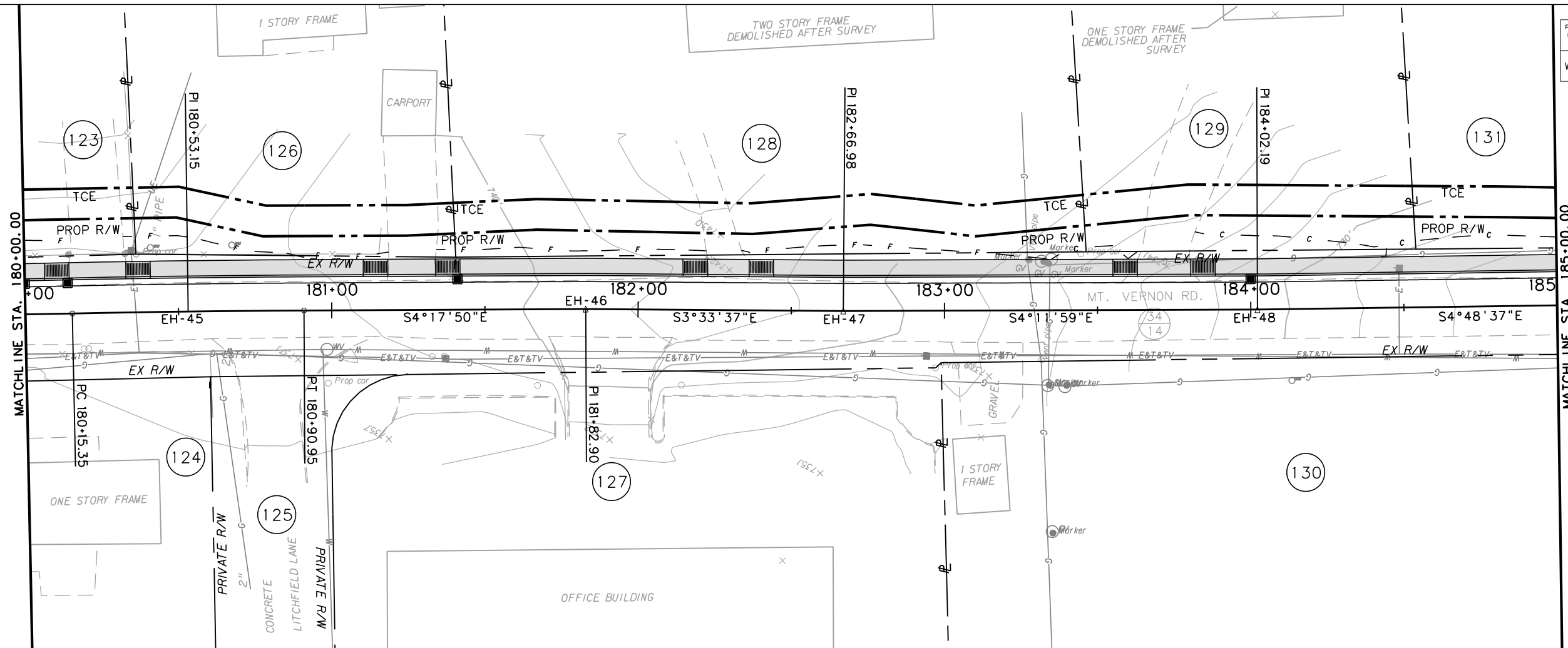
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

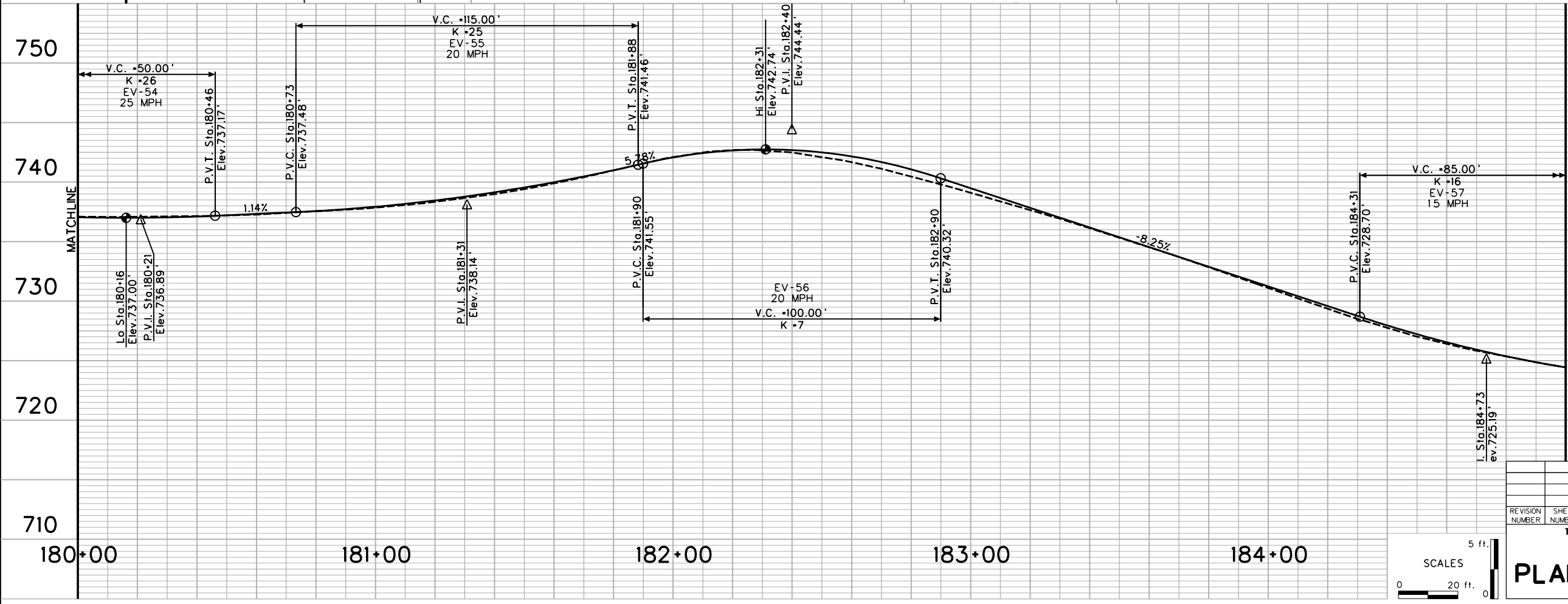
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	49	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

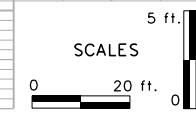
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

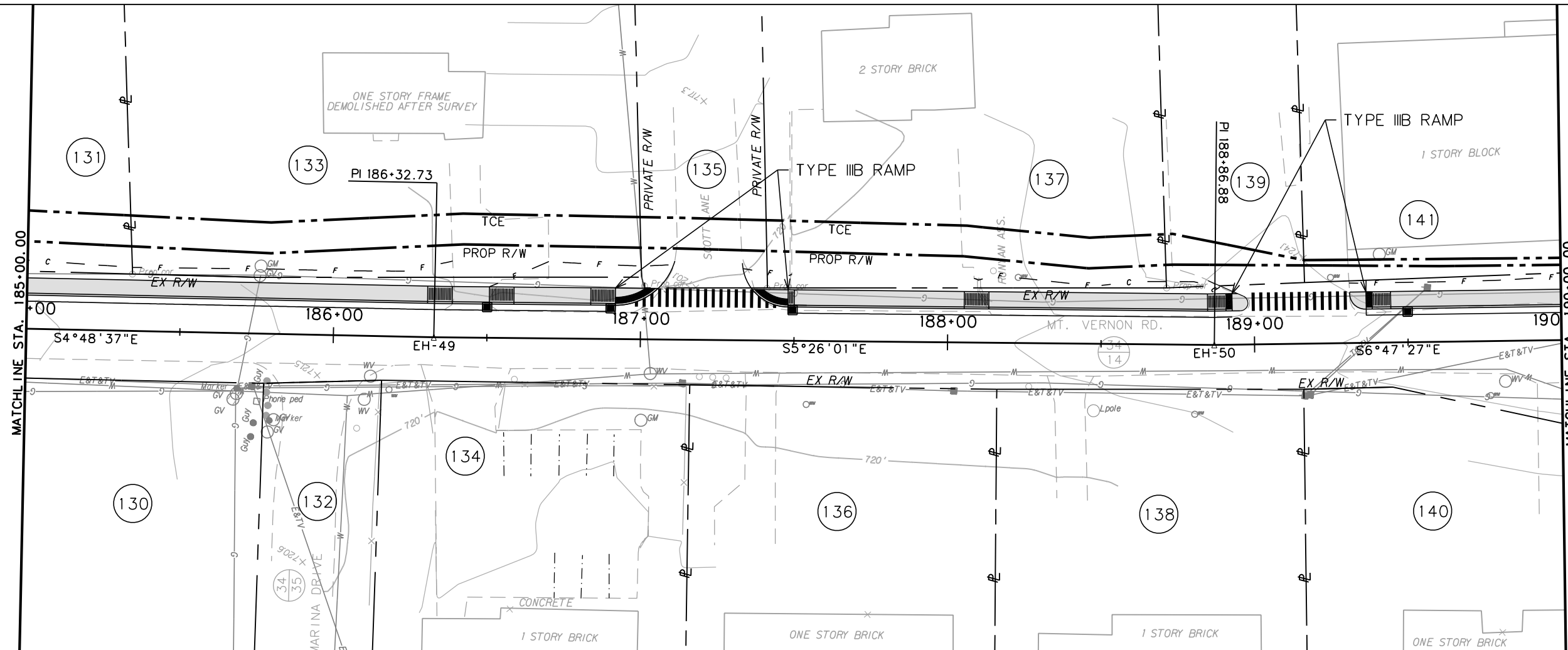
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

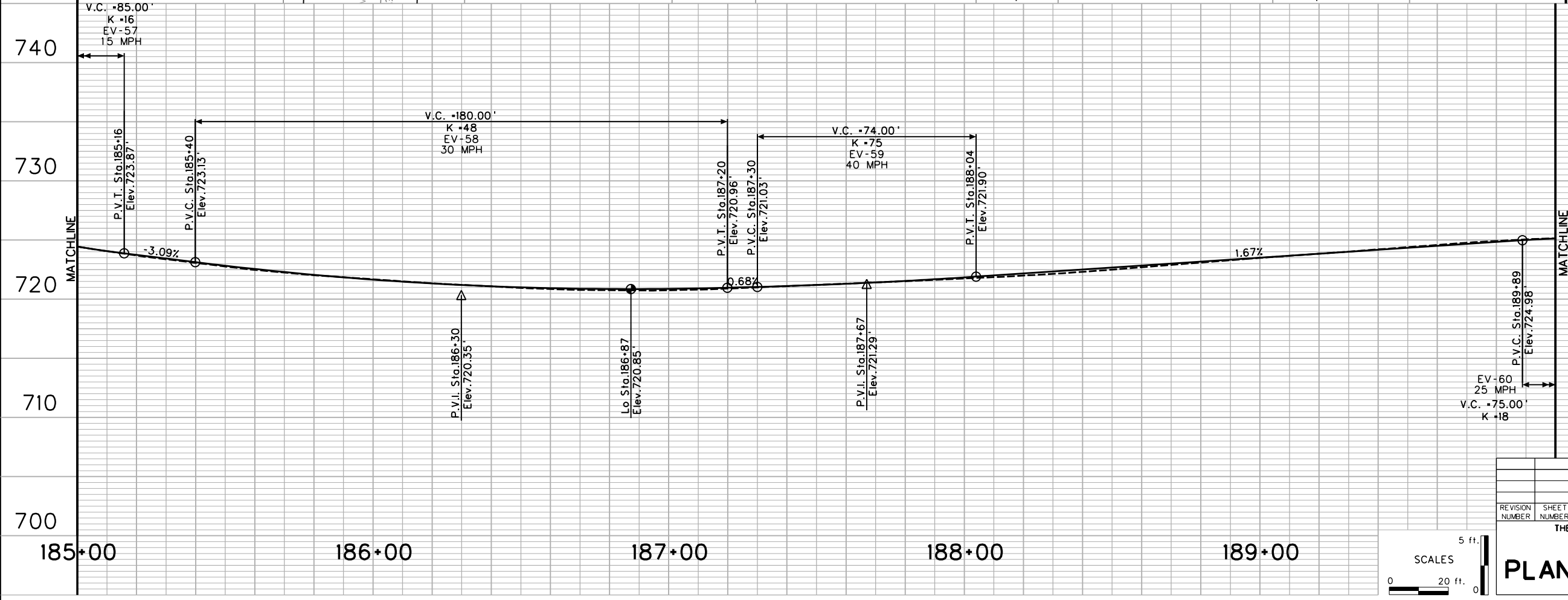


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	50	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

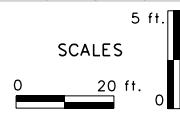
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 2 & 2A**

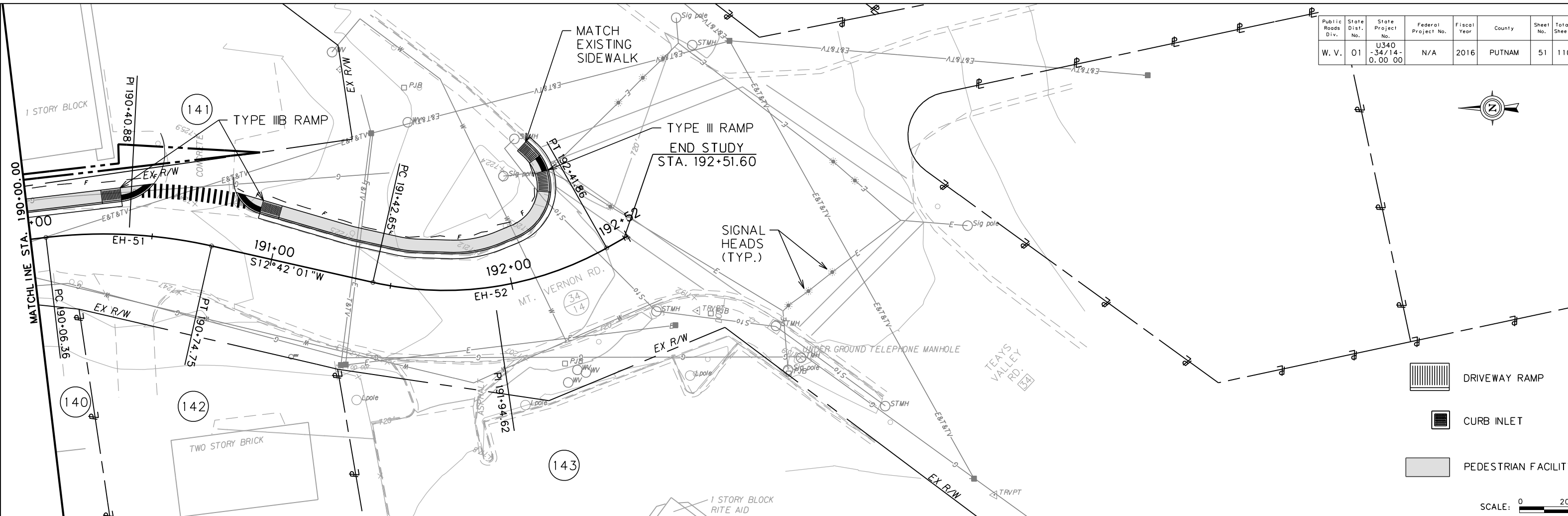
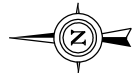
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

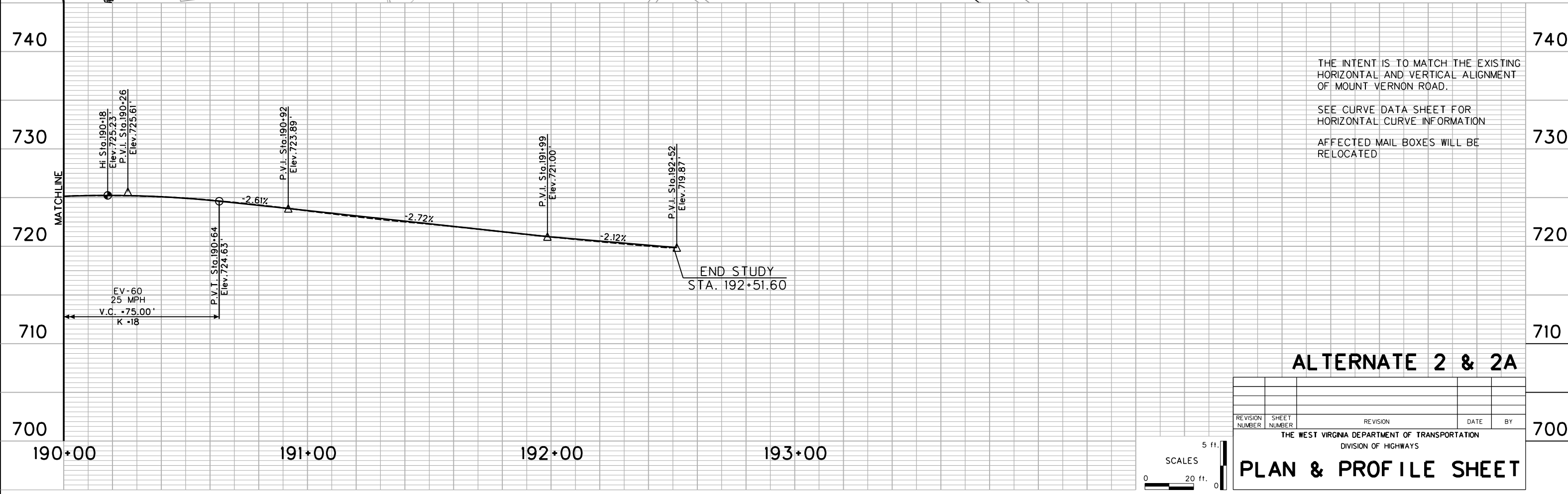


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	51	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

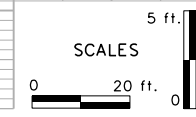
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 2 & 2A

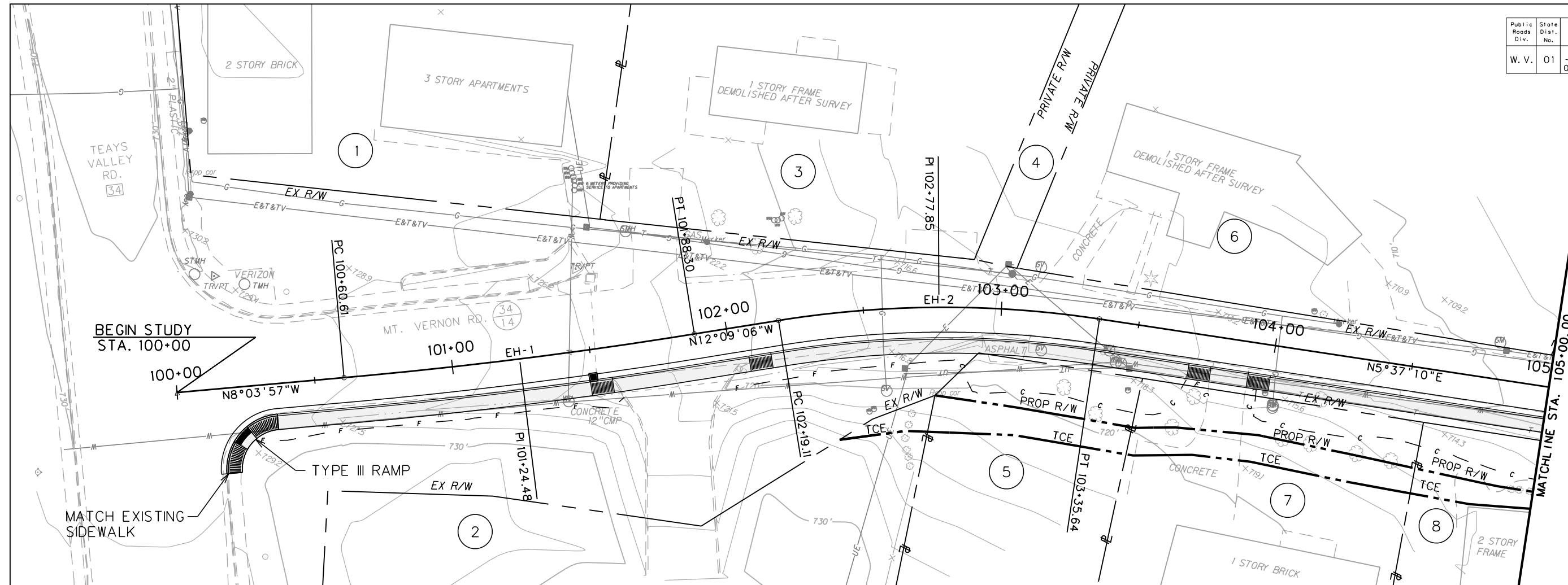
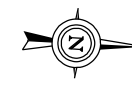
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

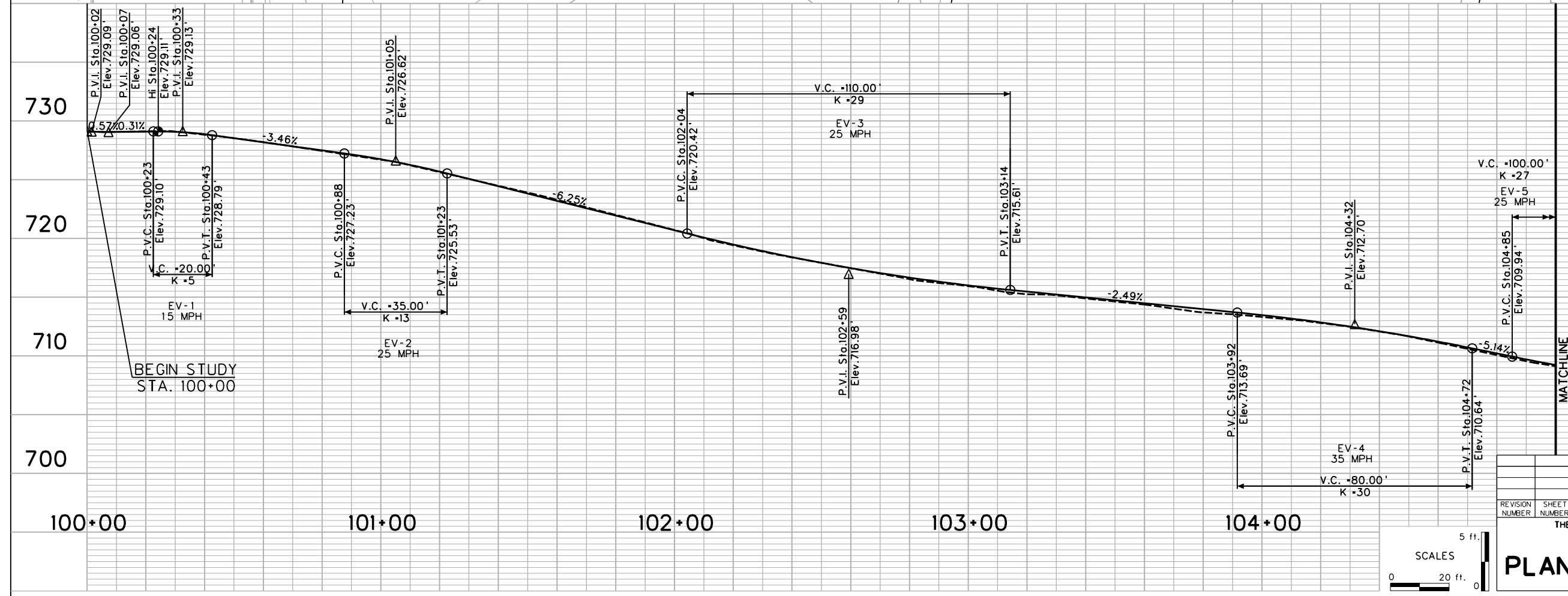


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	52	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



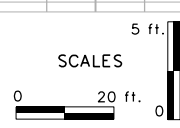
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

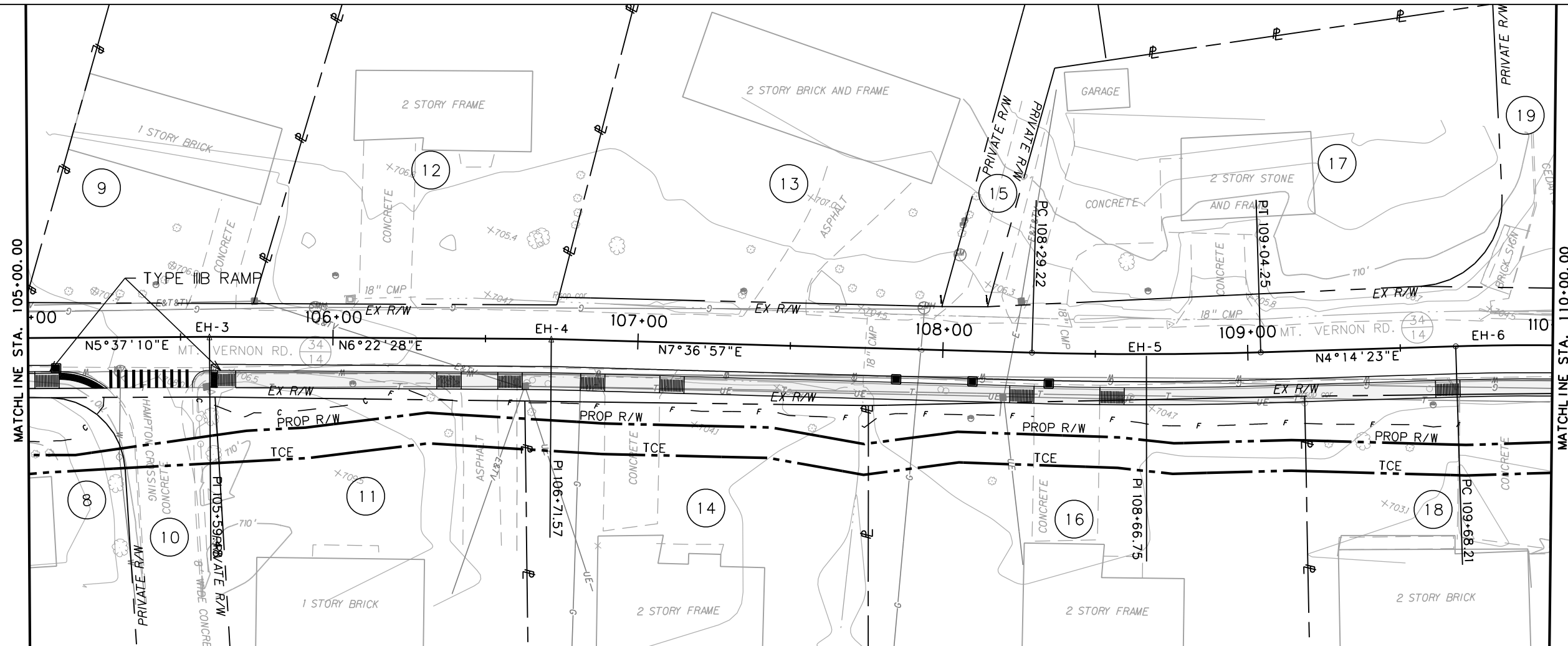
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

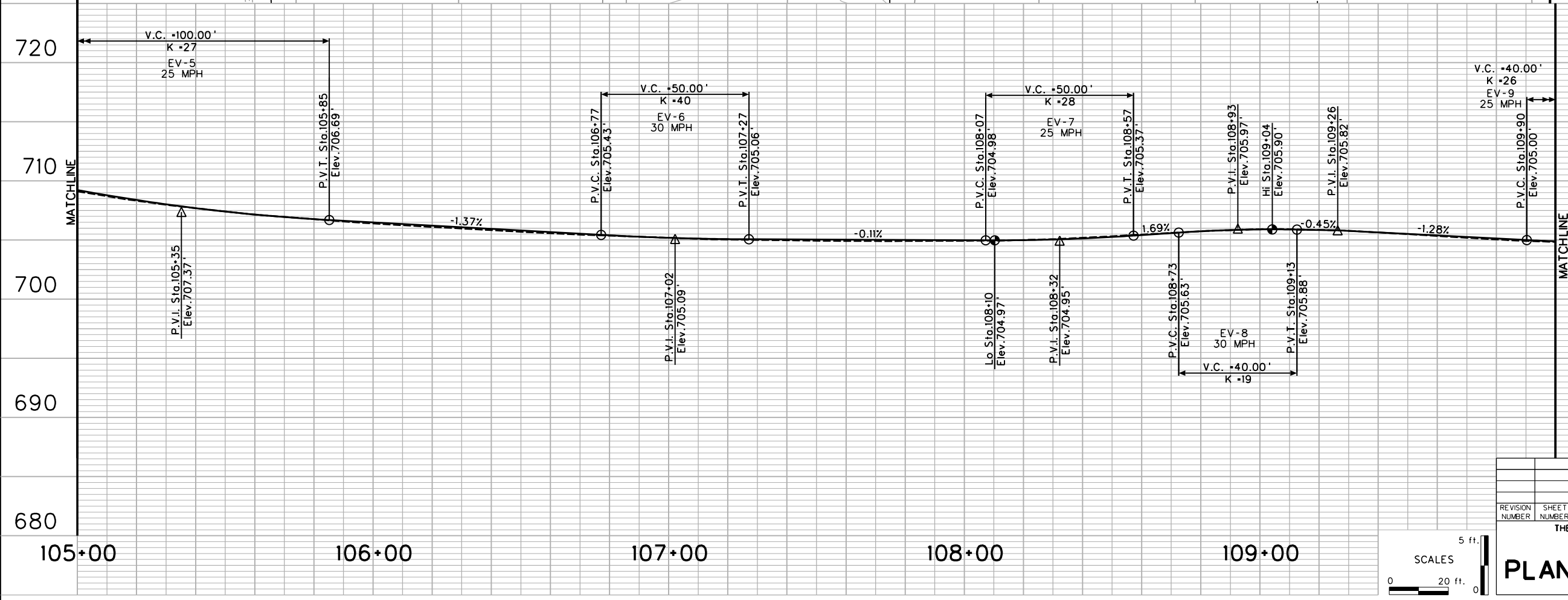


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	53	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

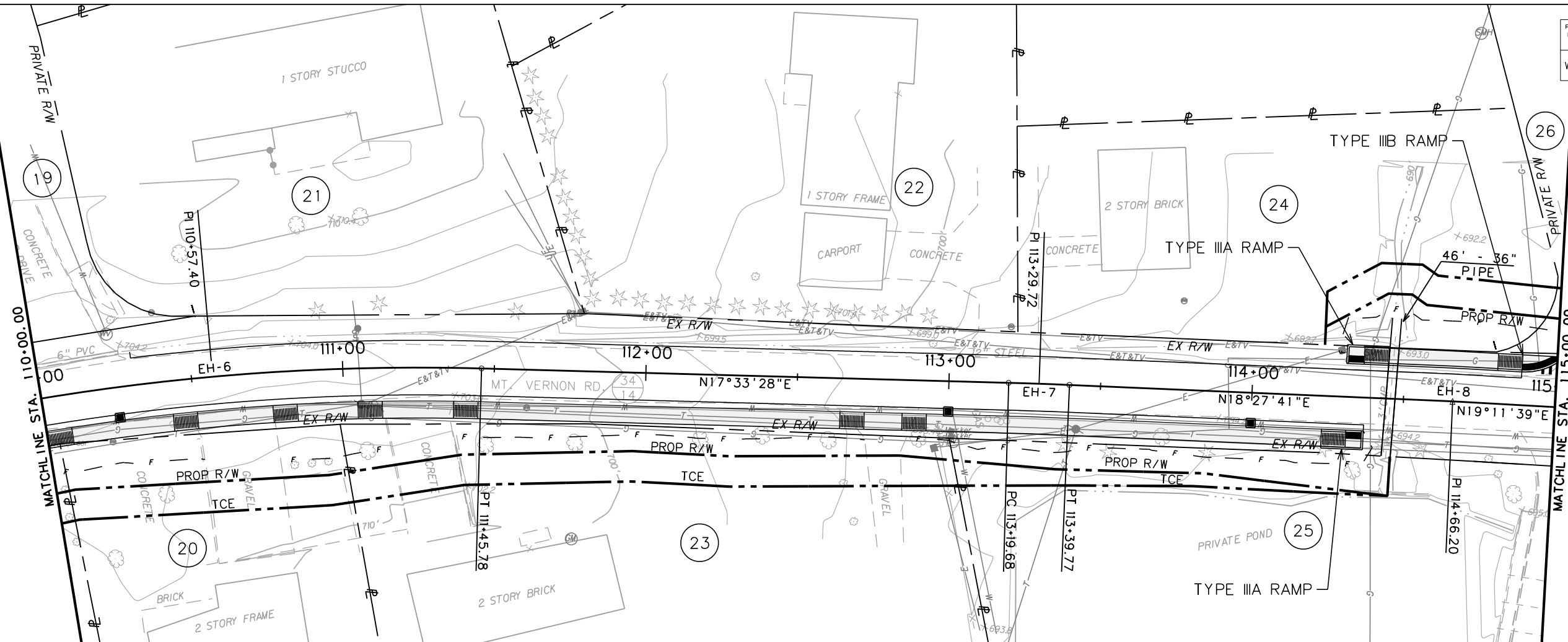
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

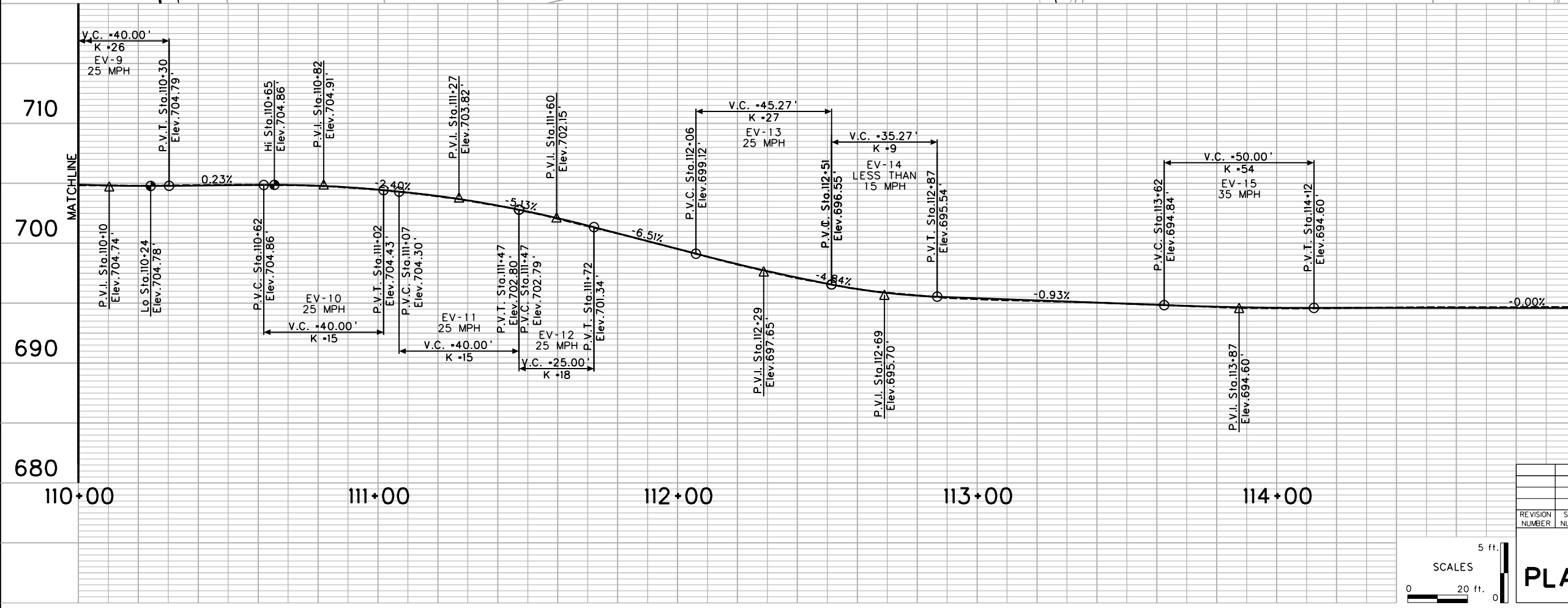
5 ft.  
20 ft.  
0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	54	110



- DRIVEWAY RAMP
- CURB INLET
- PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

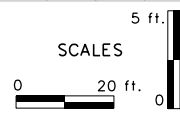
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

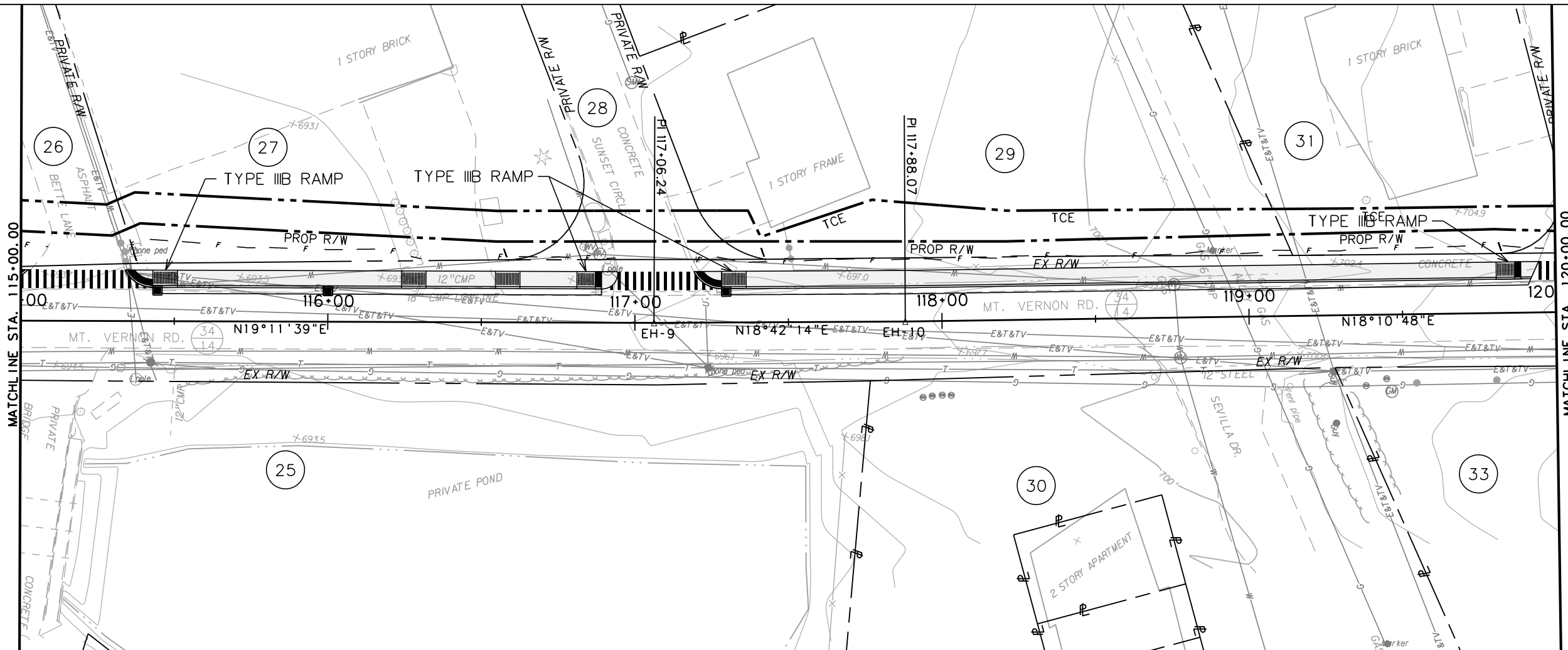
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

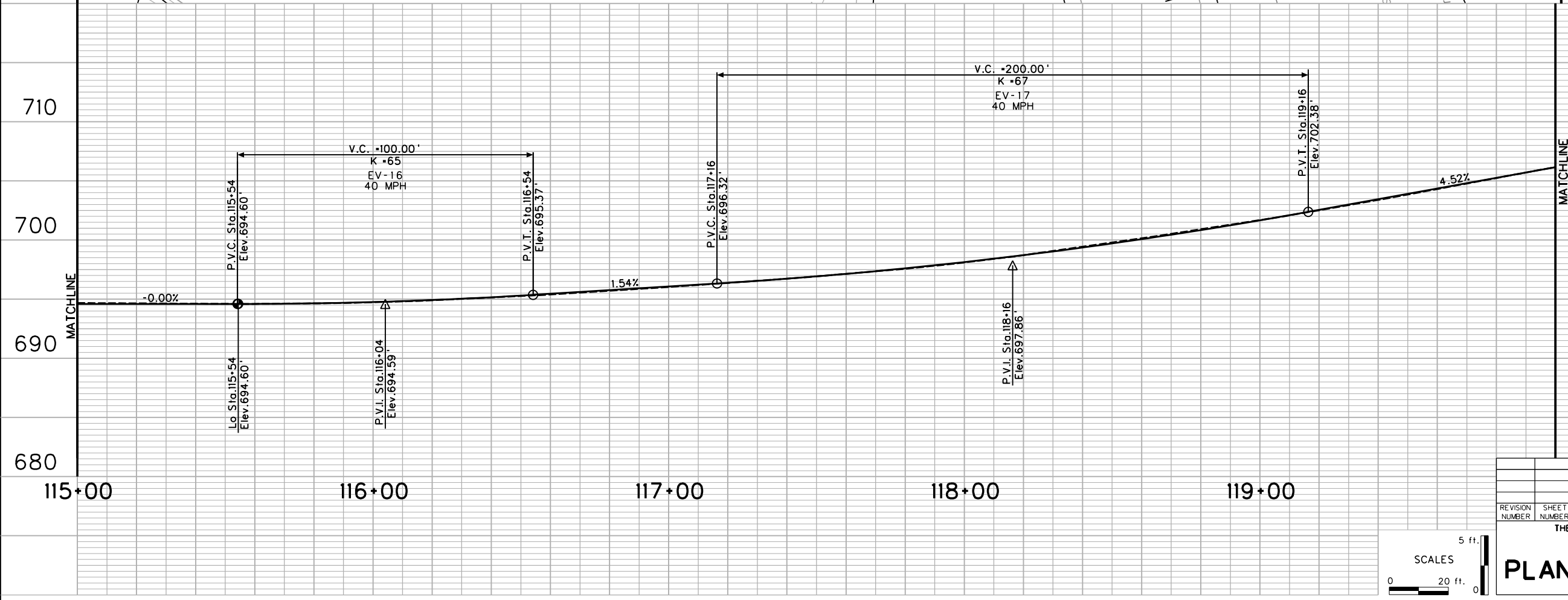


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	55	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

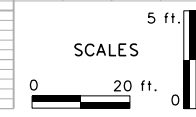
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

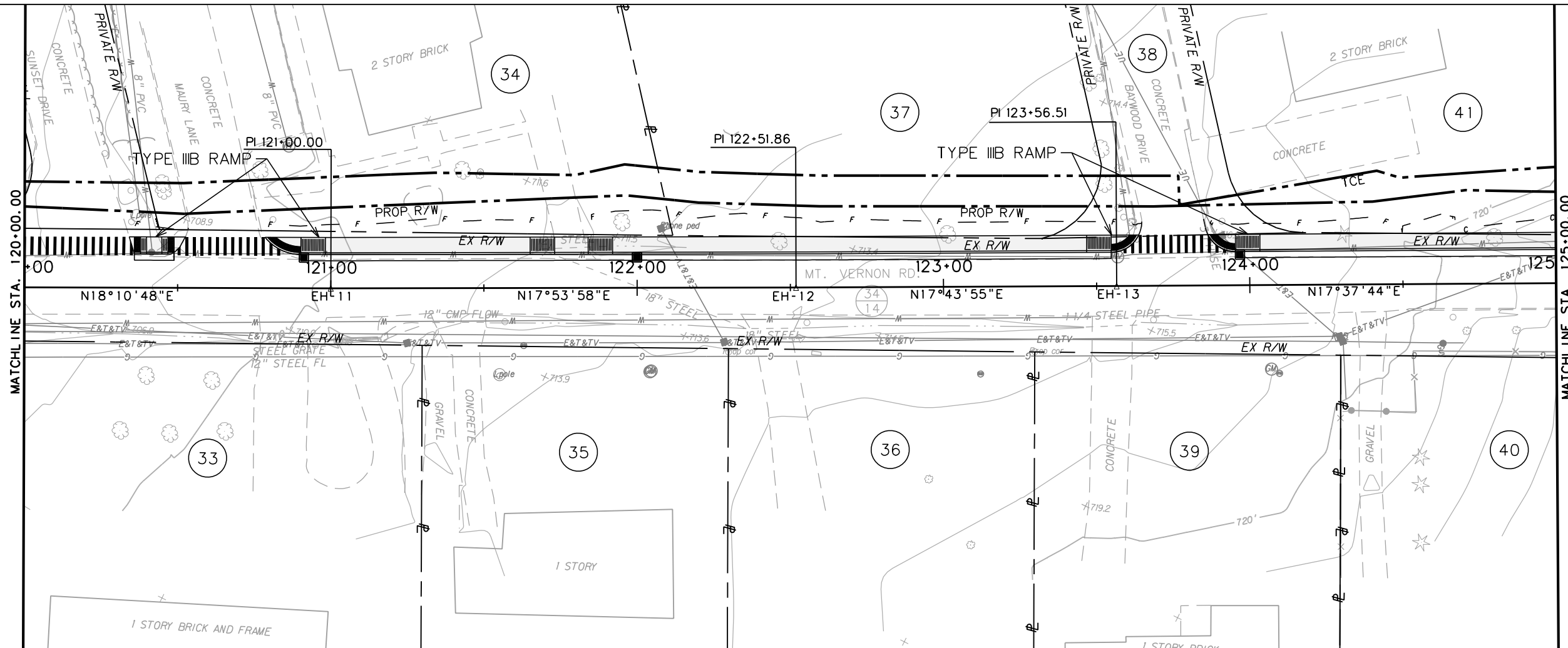
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

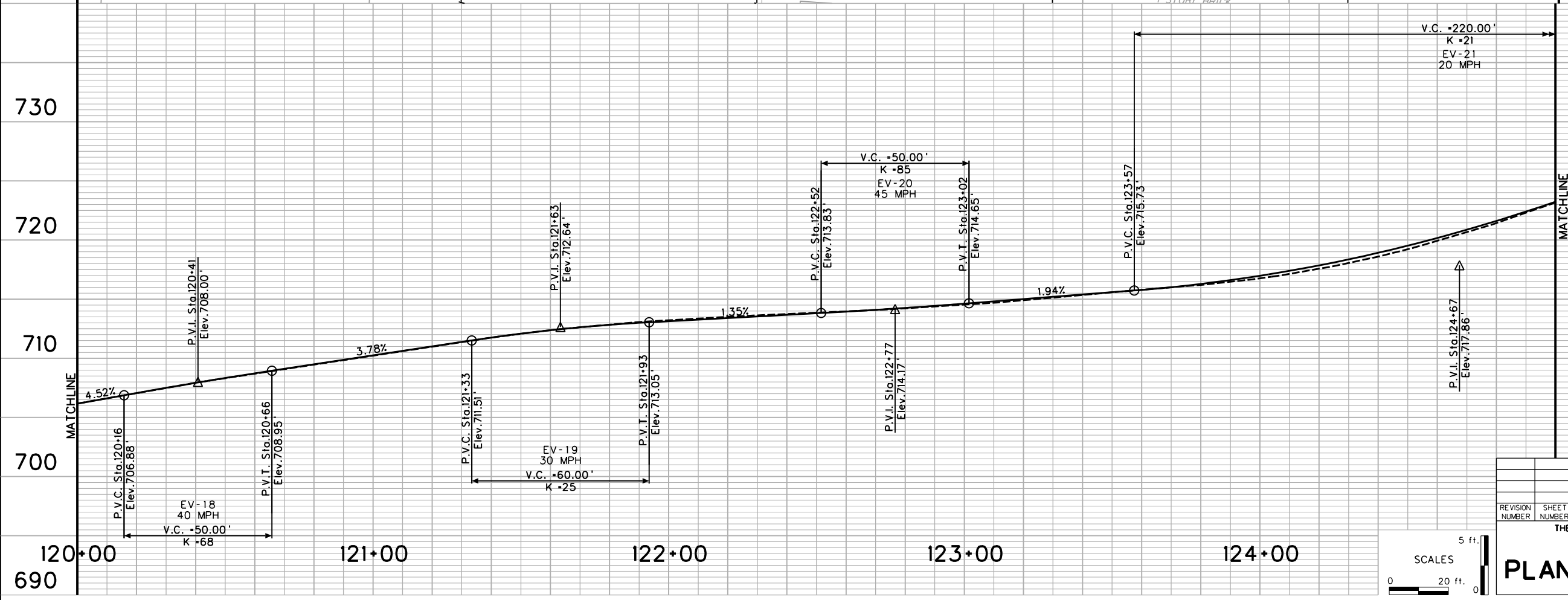


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	56	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

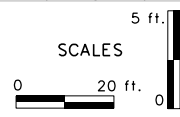
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

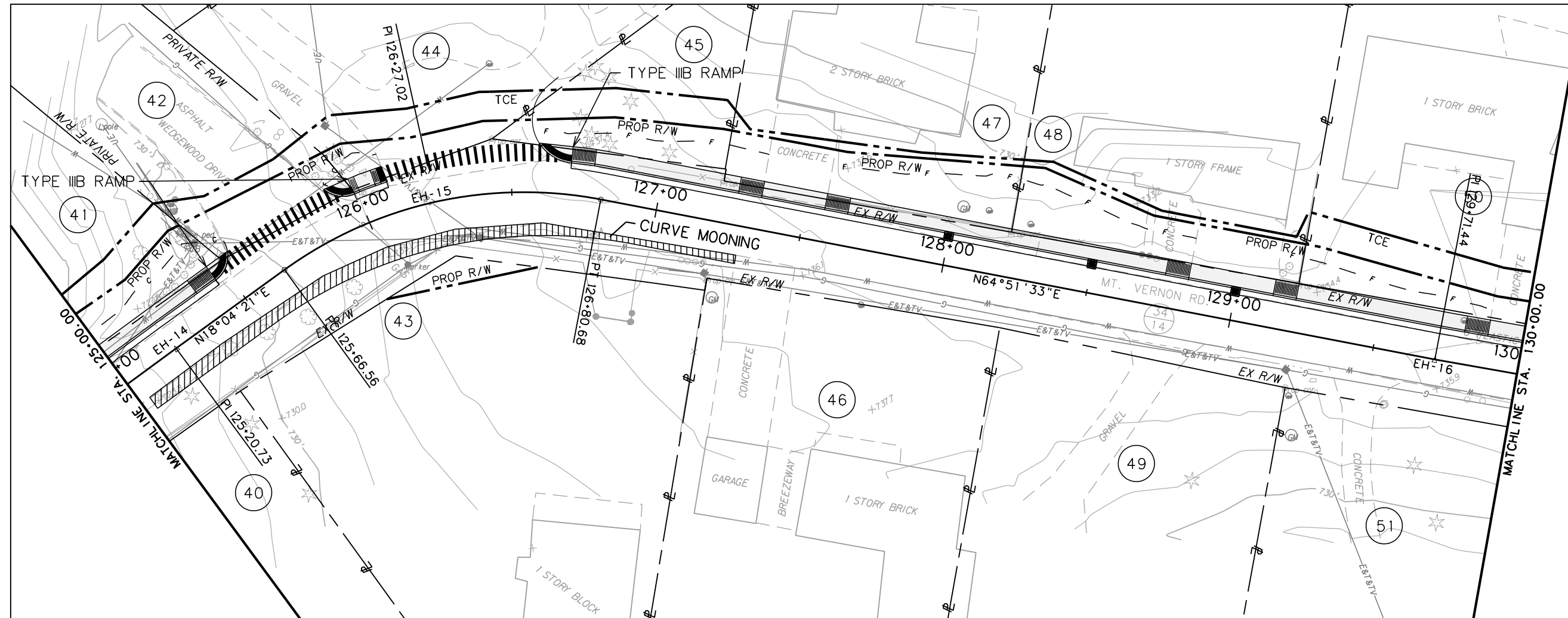
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

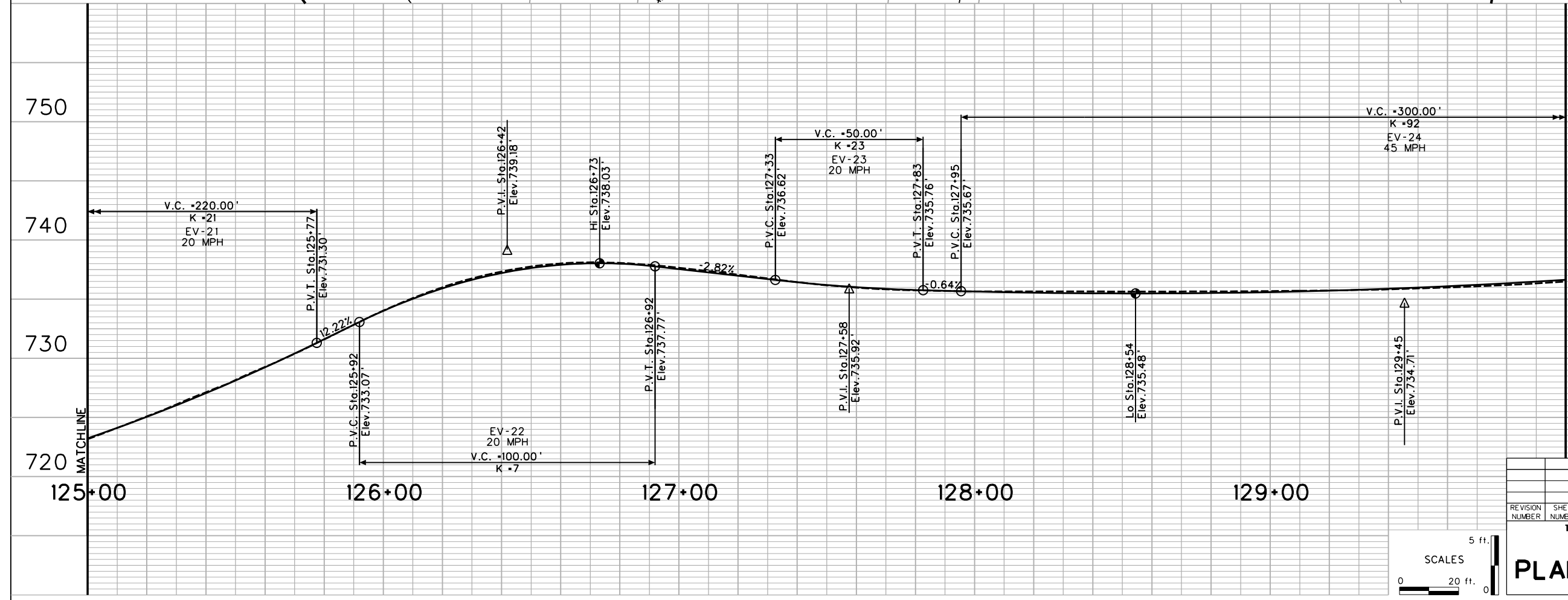


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	57	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

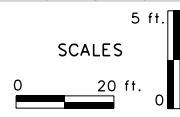
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

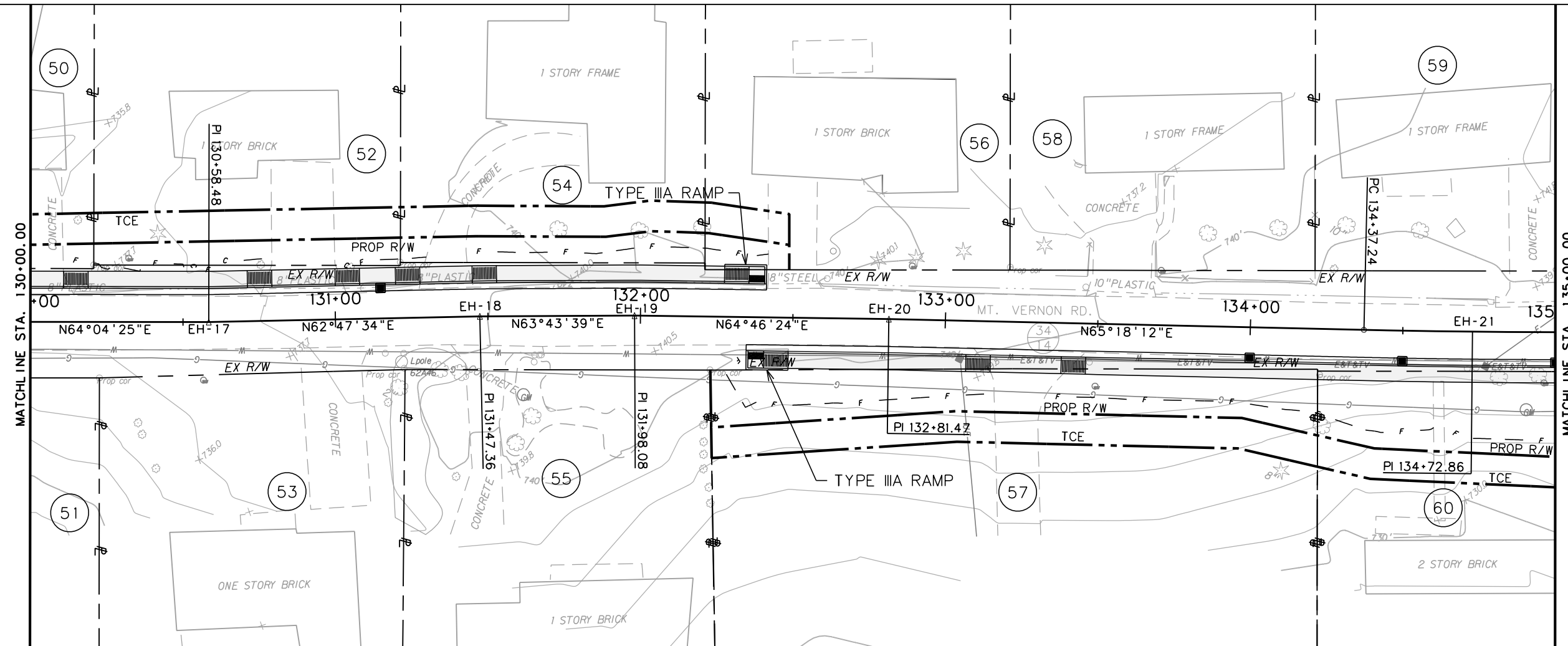
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

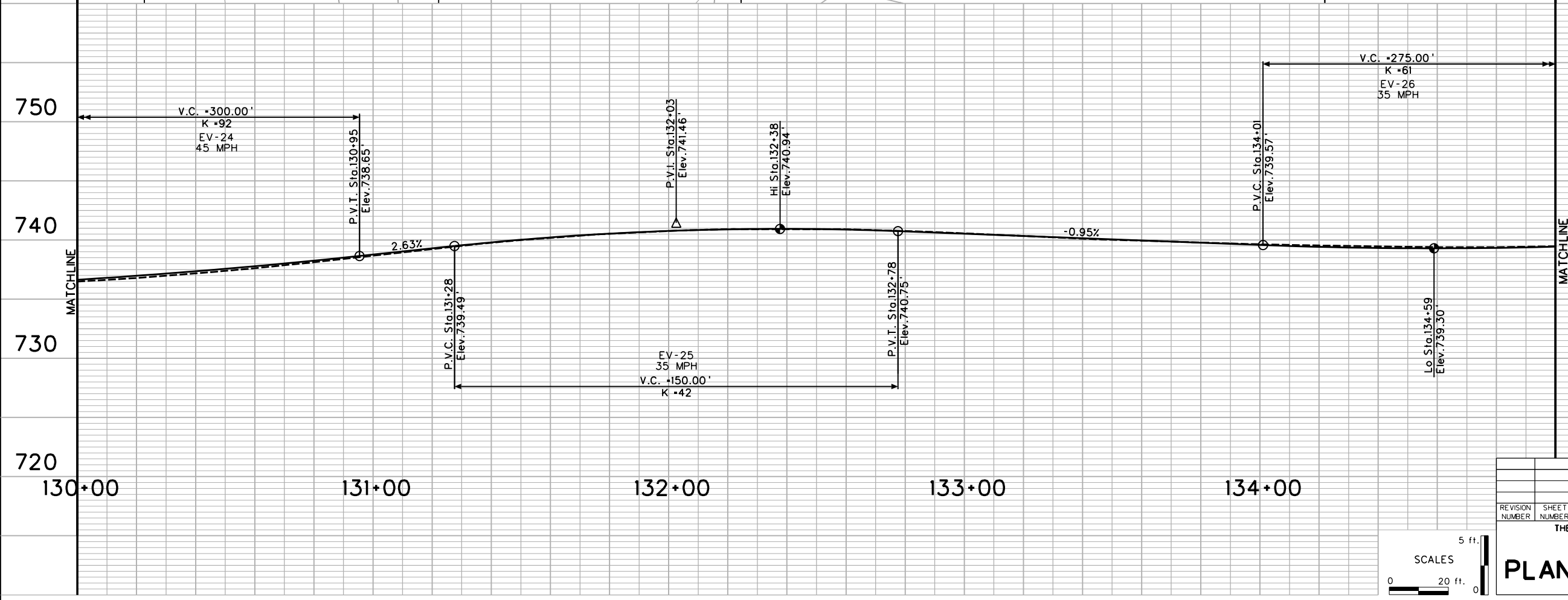


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	58	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

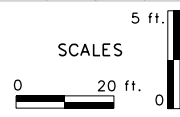
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

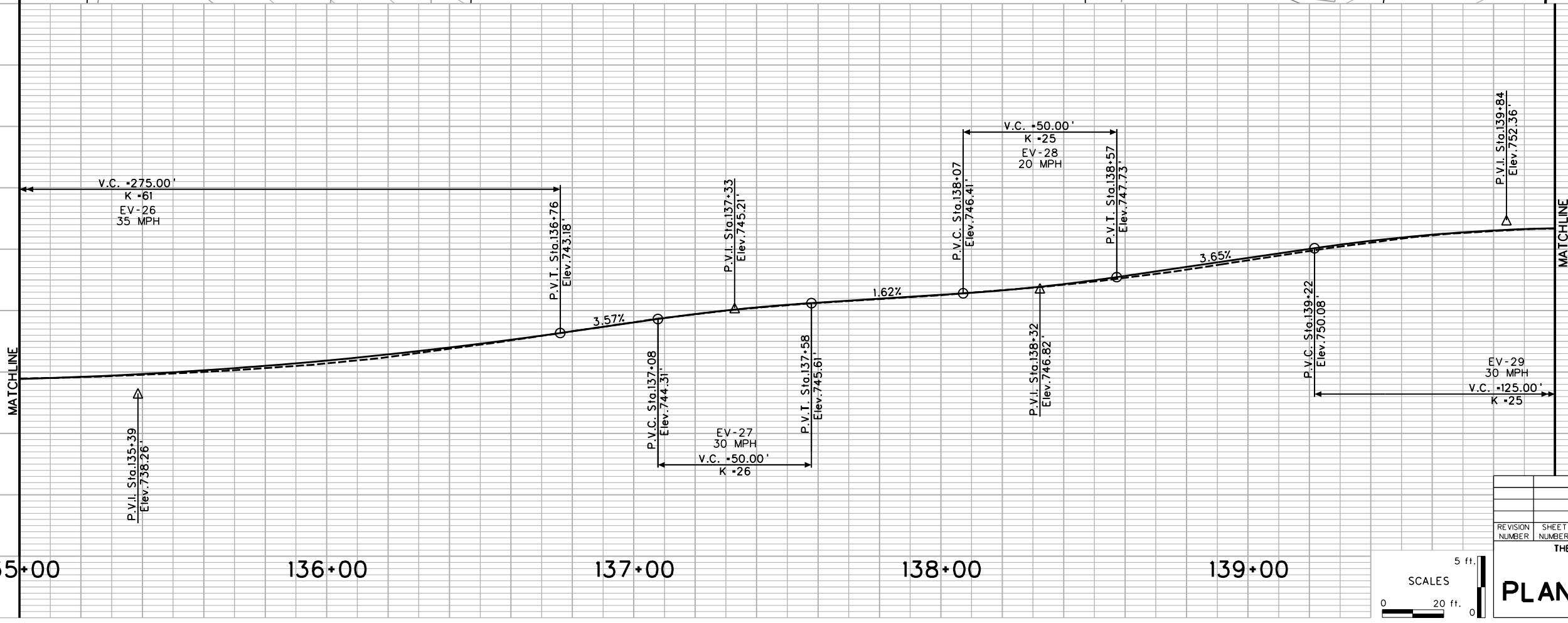
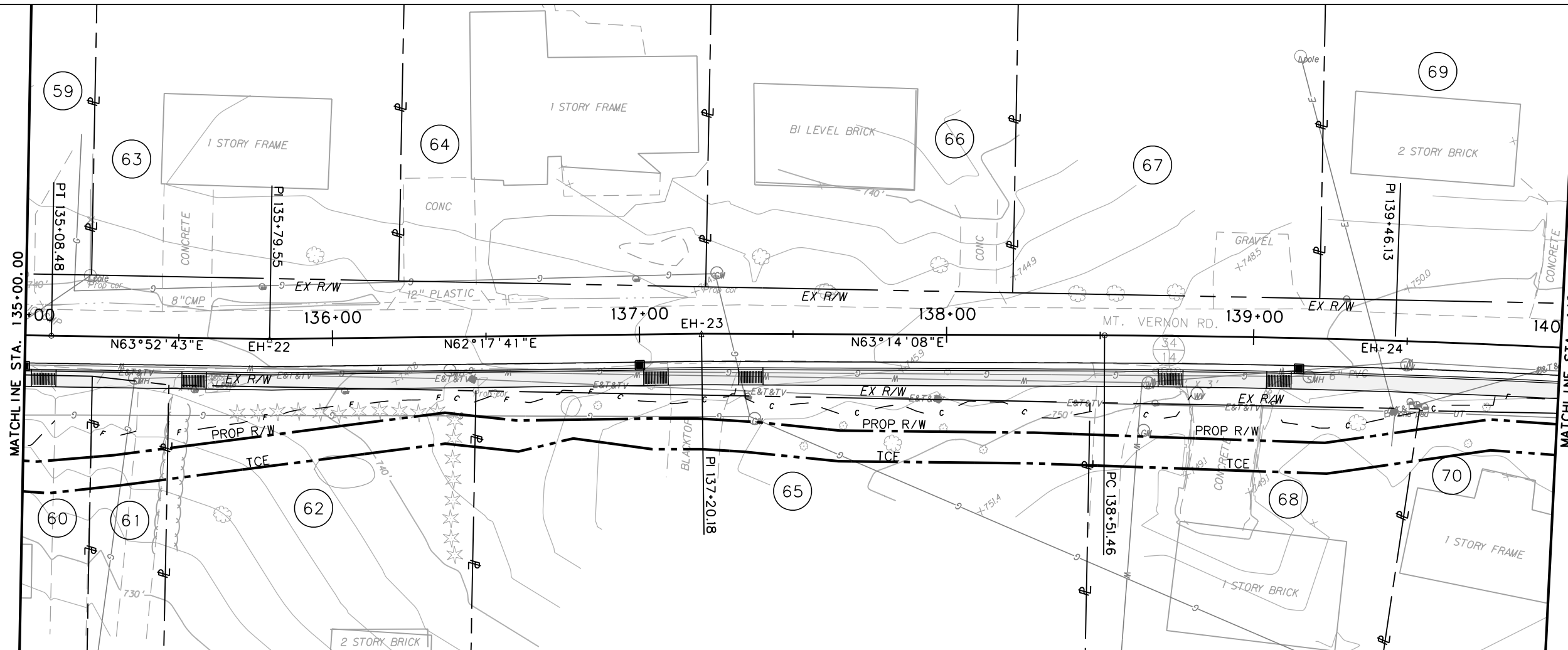


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	59	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

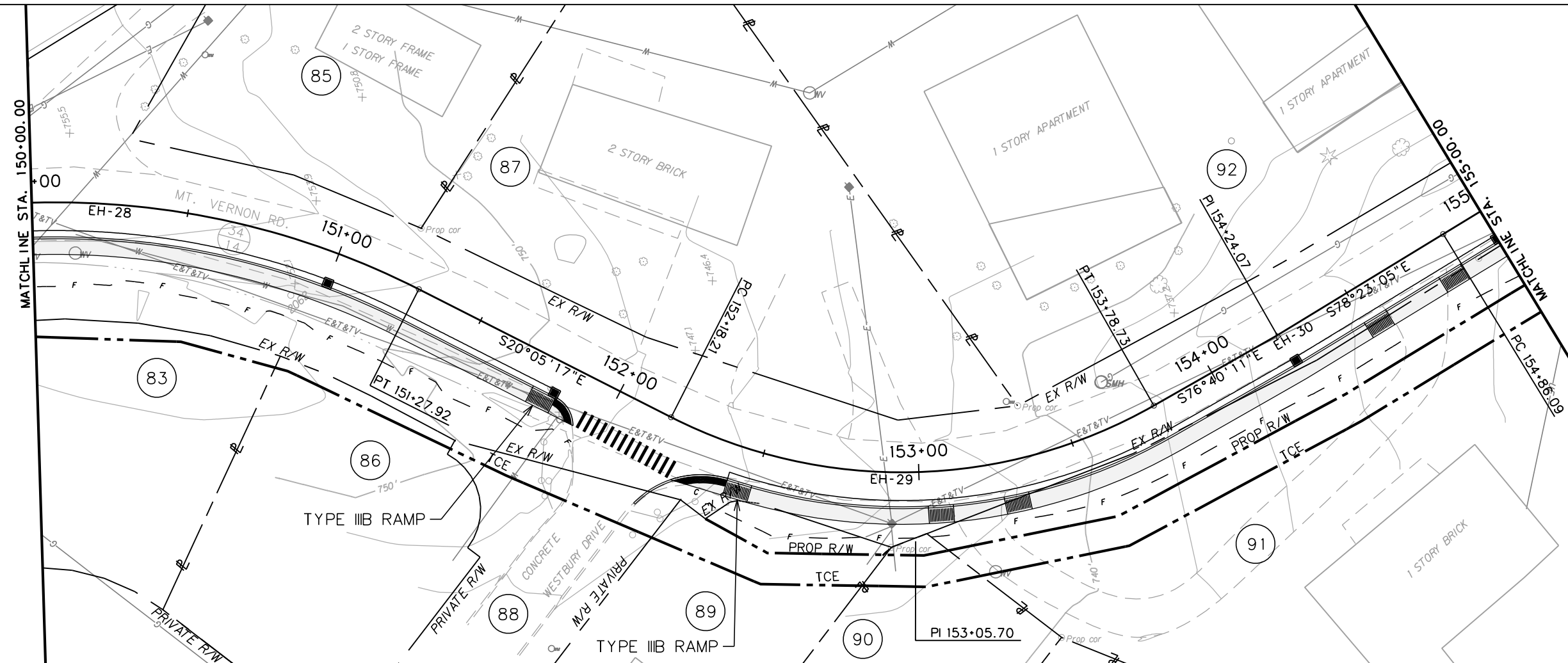
## PLAN & PROFILE SHEET




5 ft.  
20 ft.



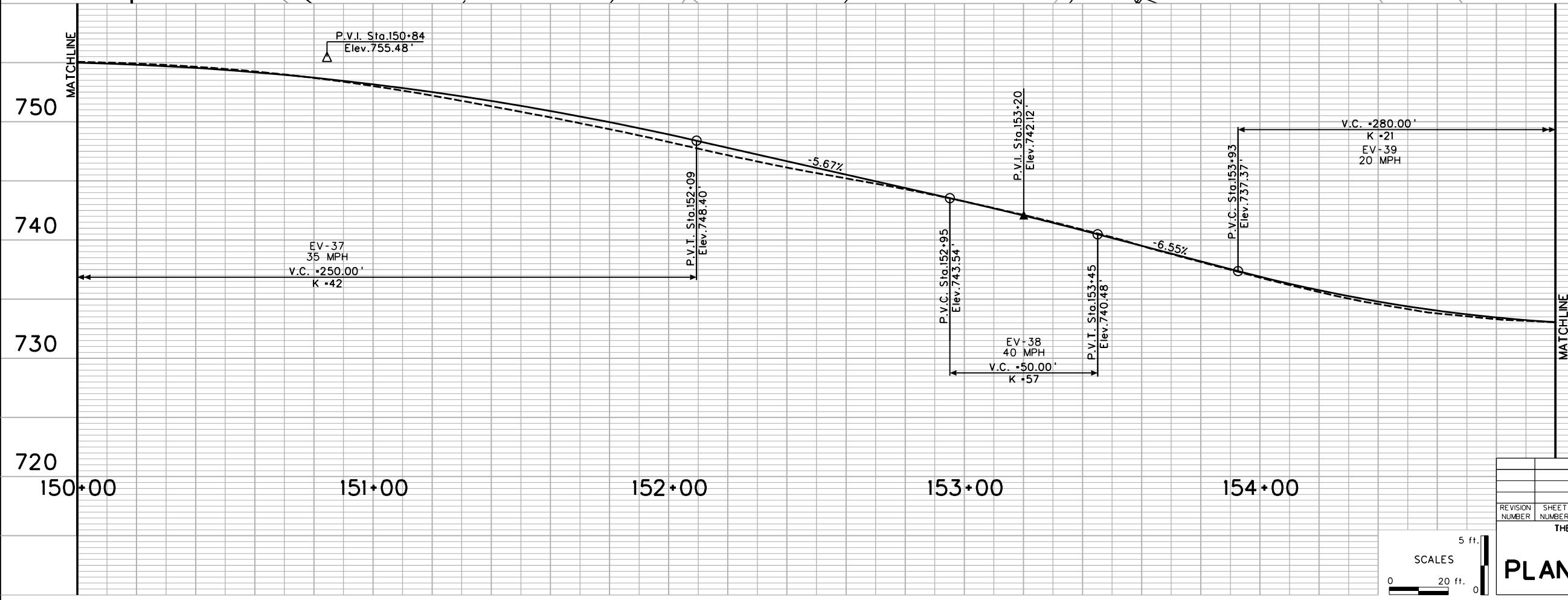


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	62	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



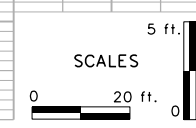
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

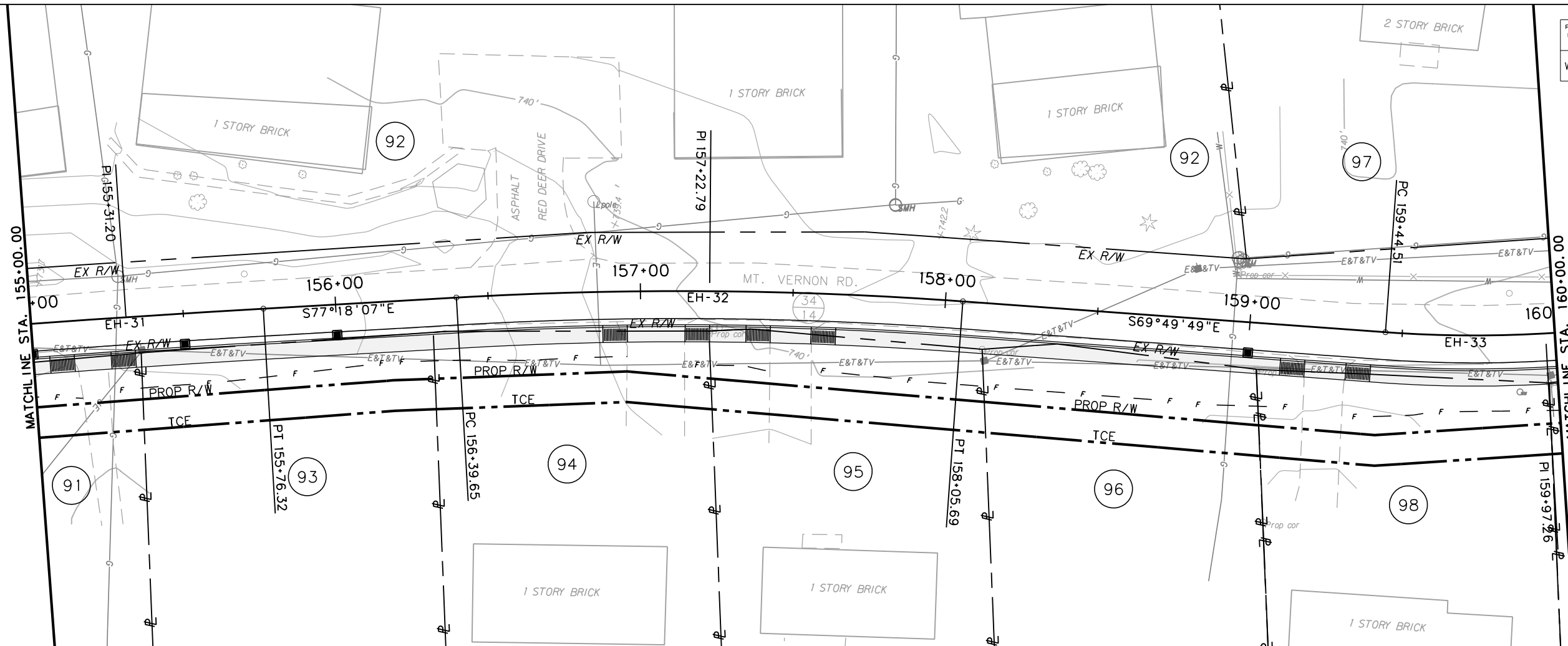
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

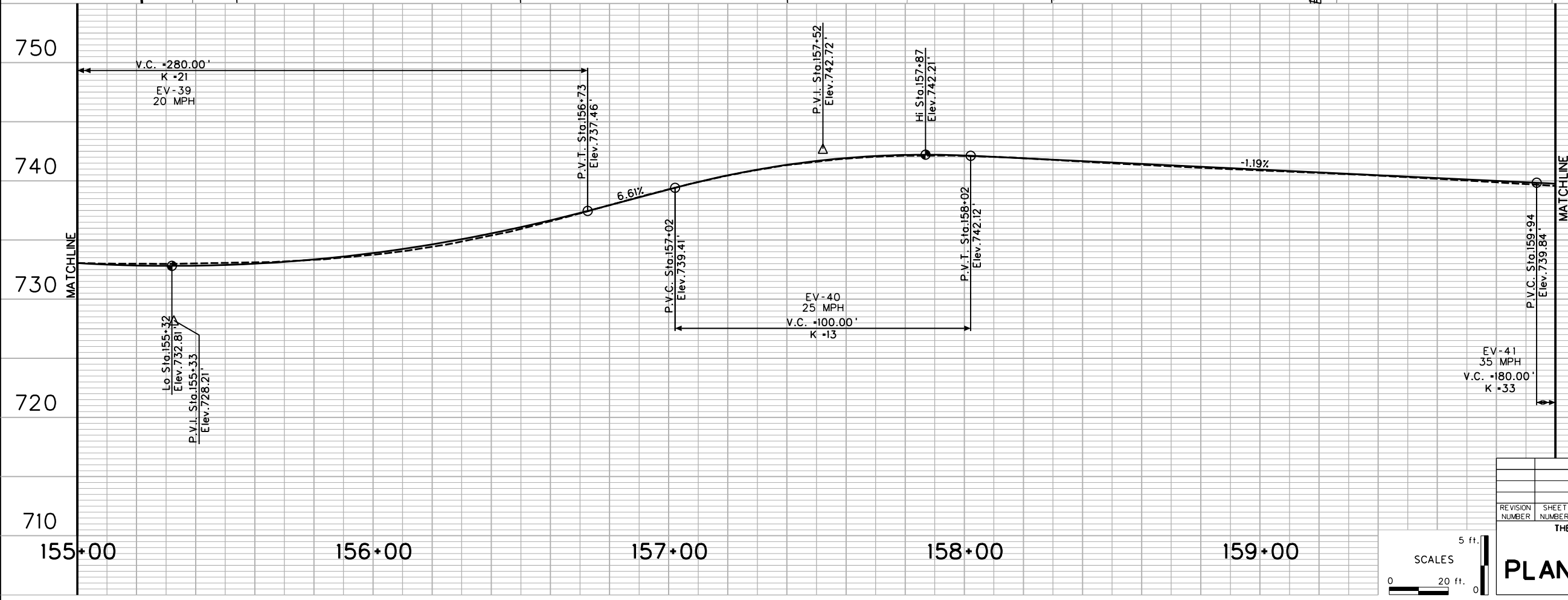


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	63	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

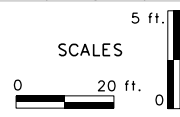
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

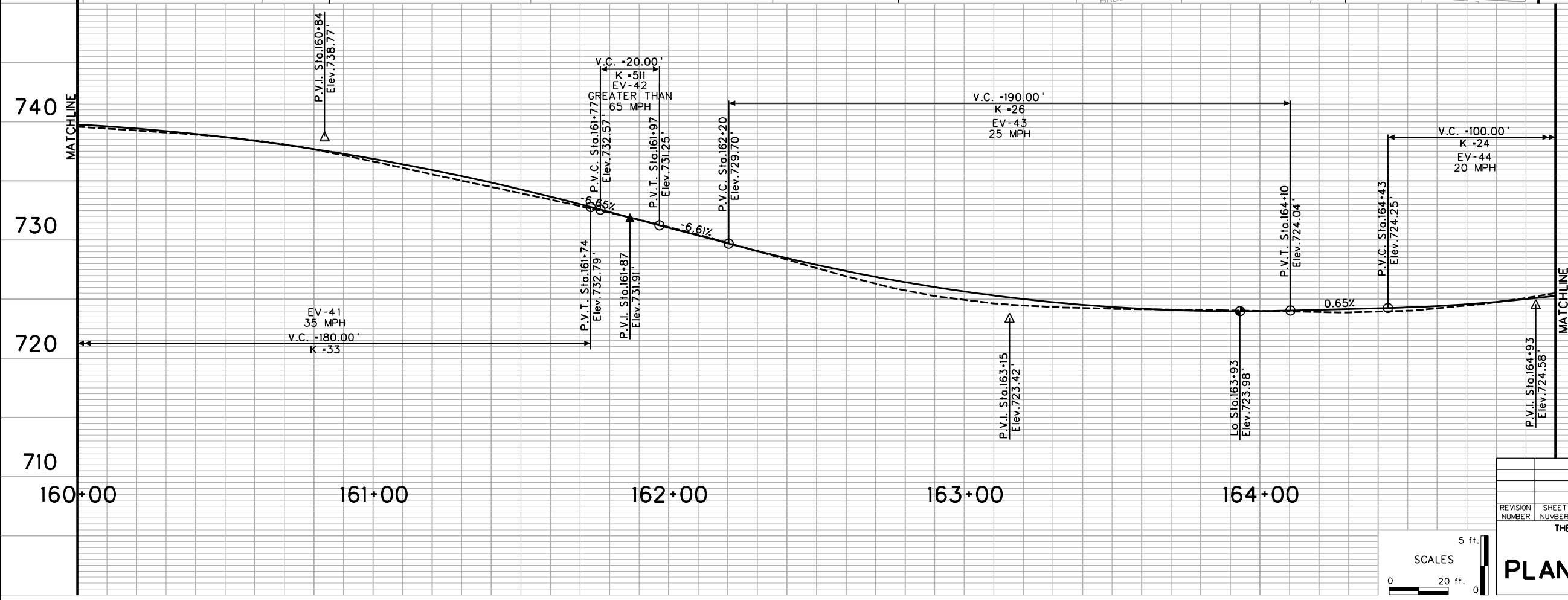
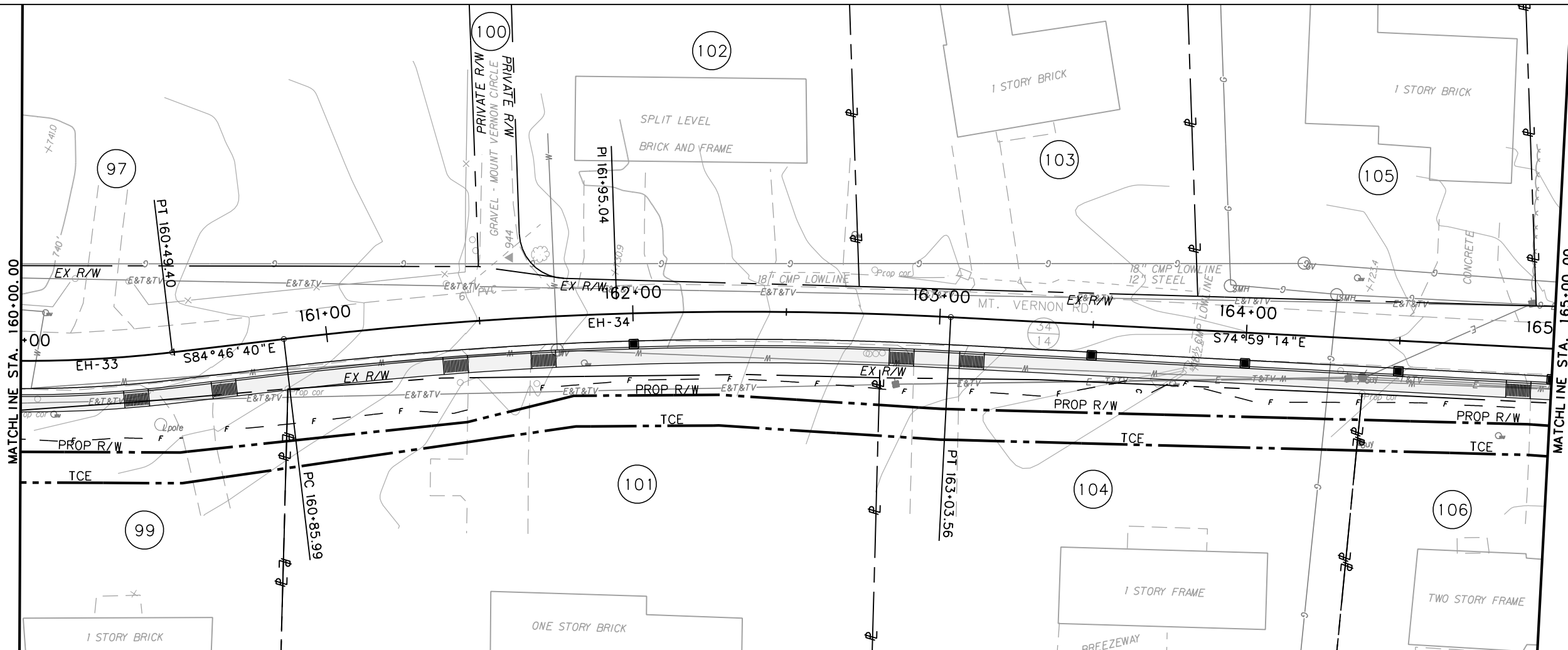


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	64	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



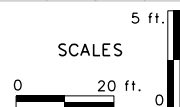
THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.  
SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION  
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

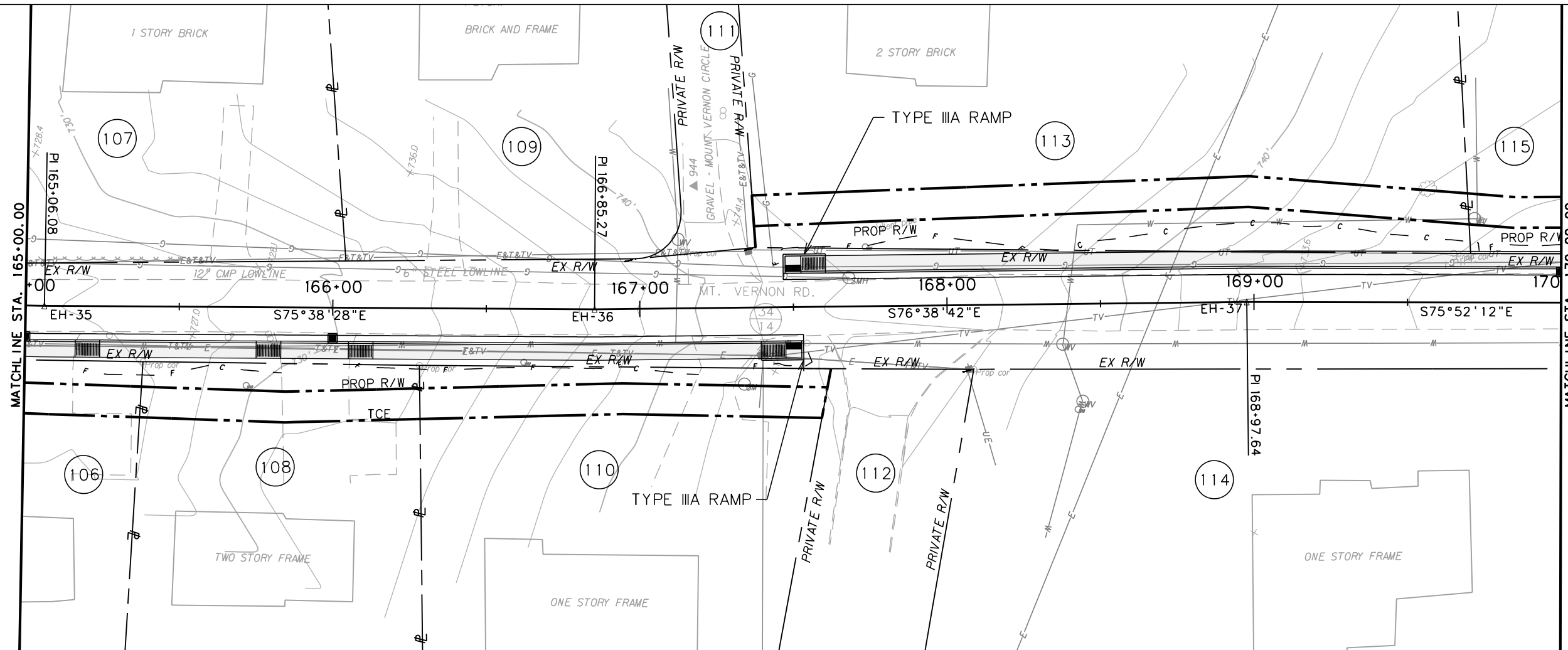
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

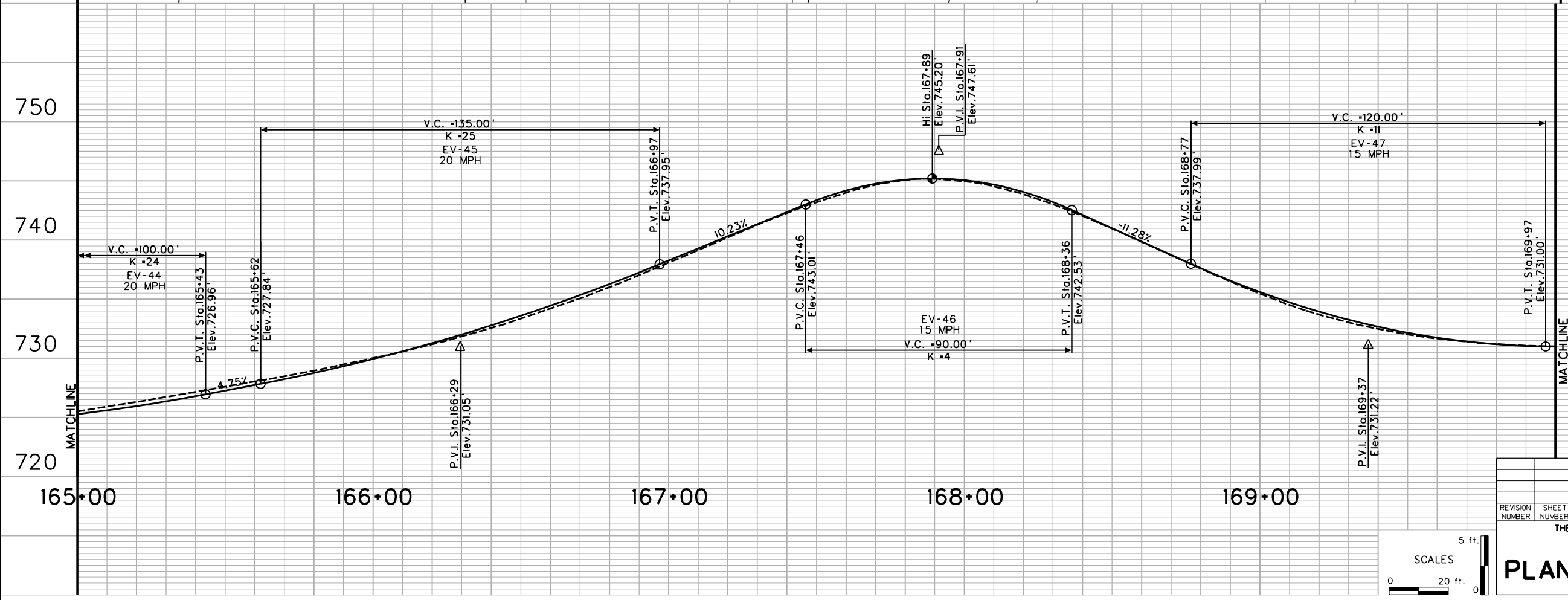


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	65	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

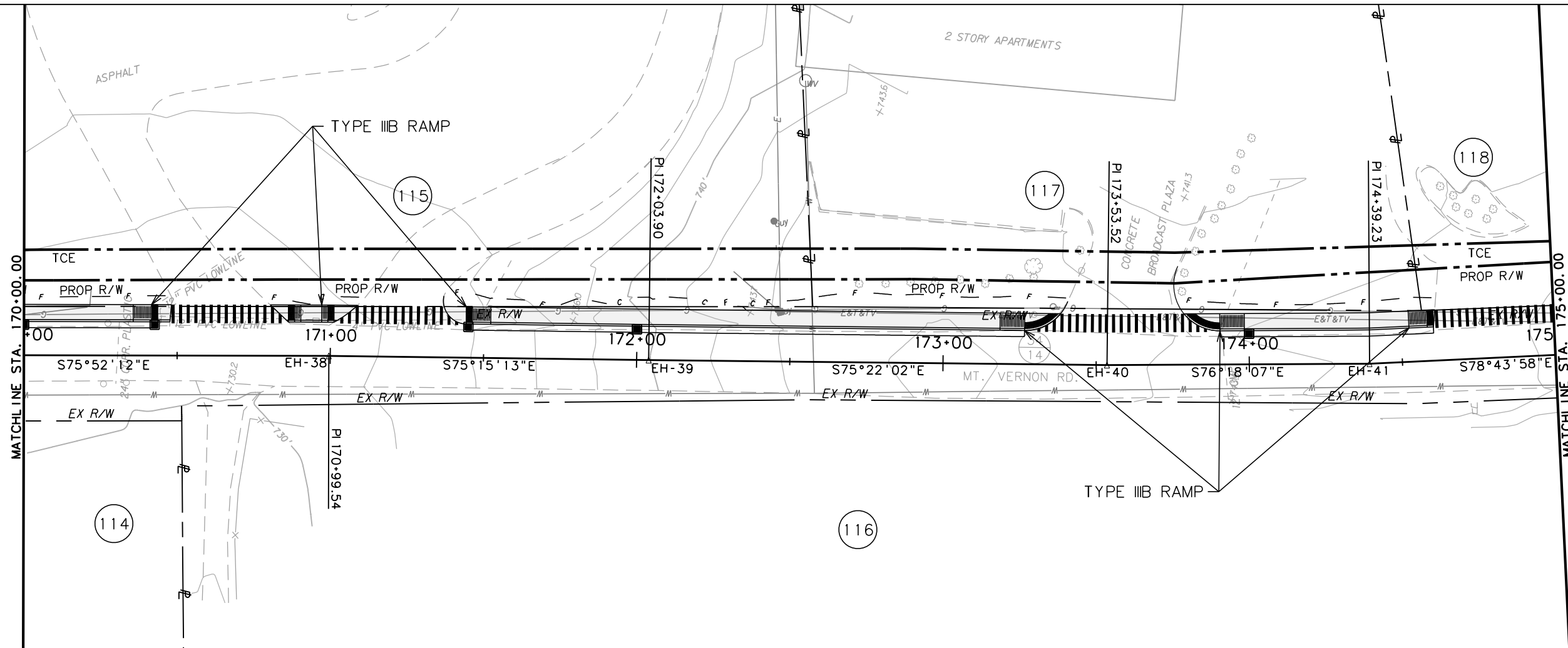
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THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

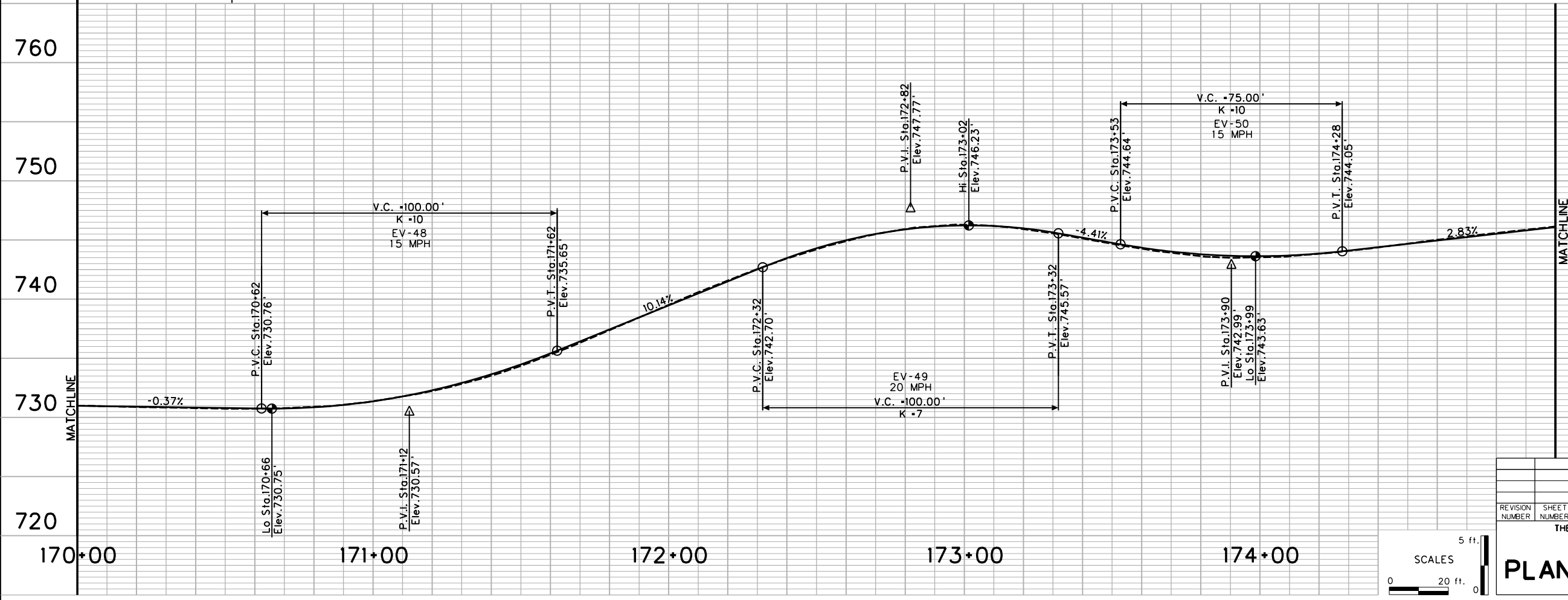
5 ft.  
SCALES  
0 20 ft. 0

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	66	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

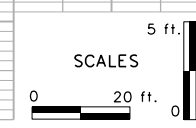
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

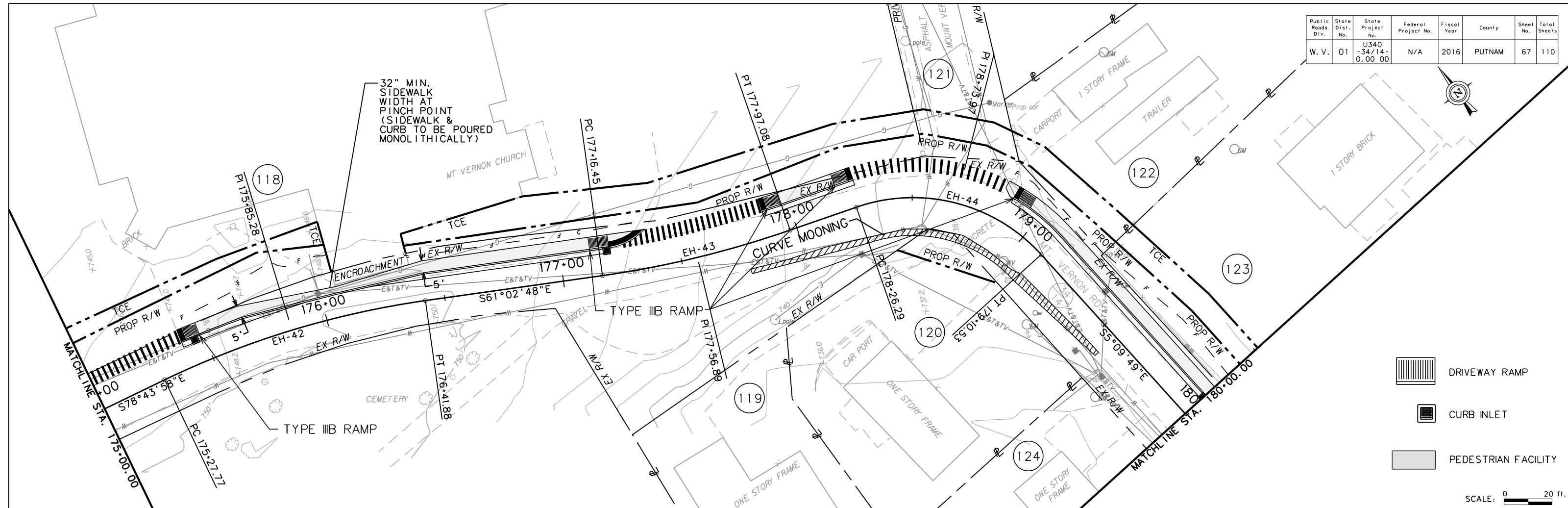
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

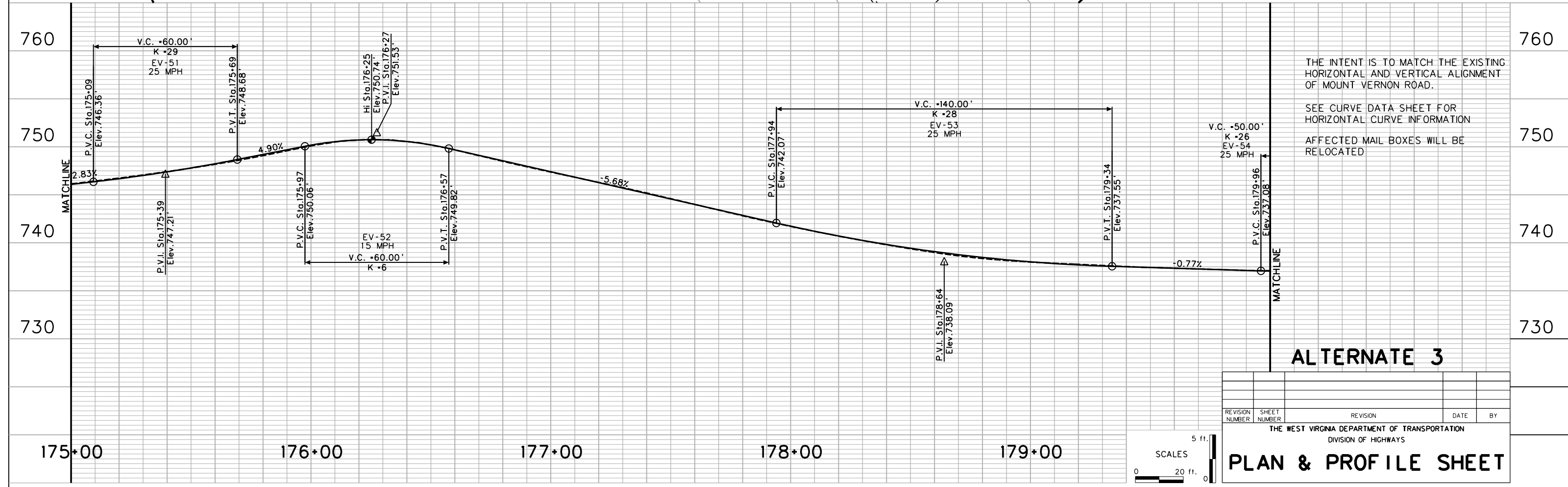


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	67	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



**ALTERNATE 3**

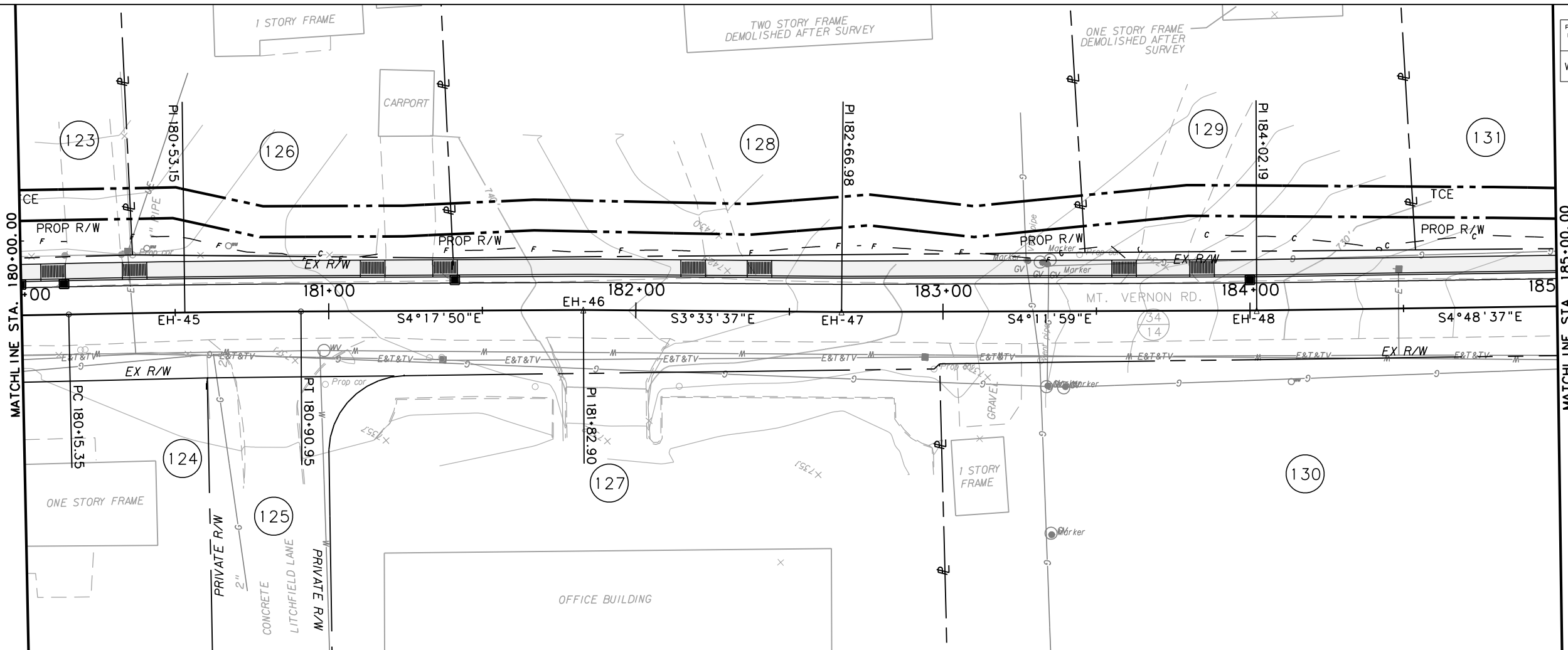
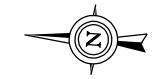
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

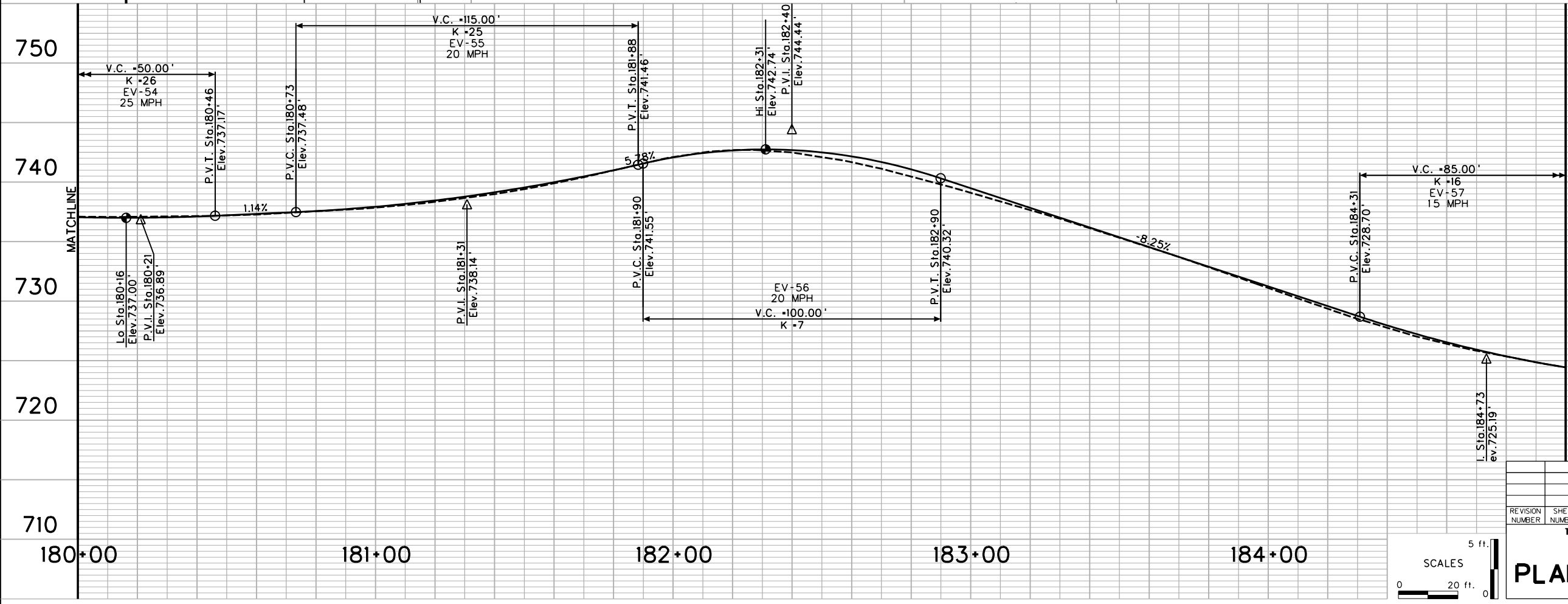
5 ft.  
SCALES  
0 20 ft.

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	68	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

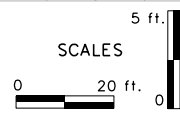
AFFECTED MAIL BOXES WILL BE RELOCATED

**ALTERNATE 3**

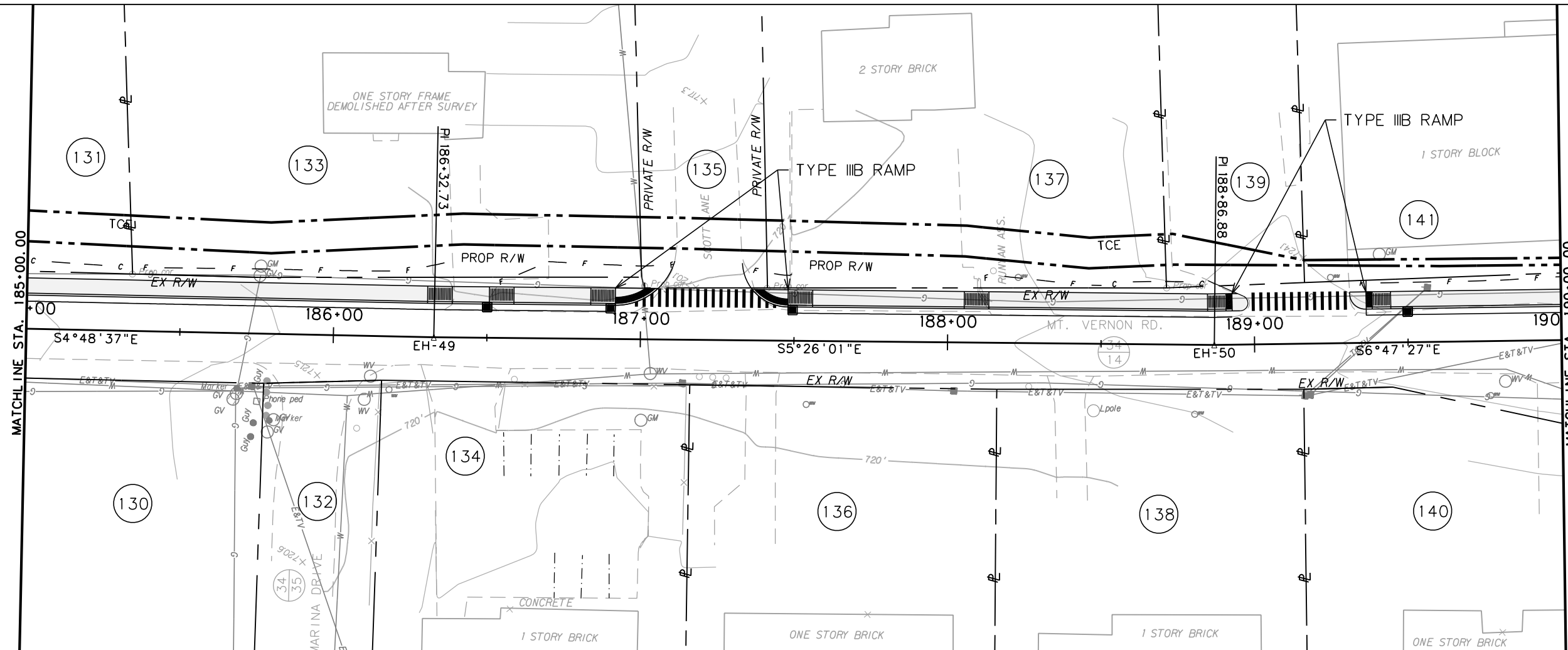
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PLAN & PROFILE SHEET**

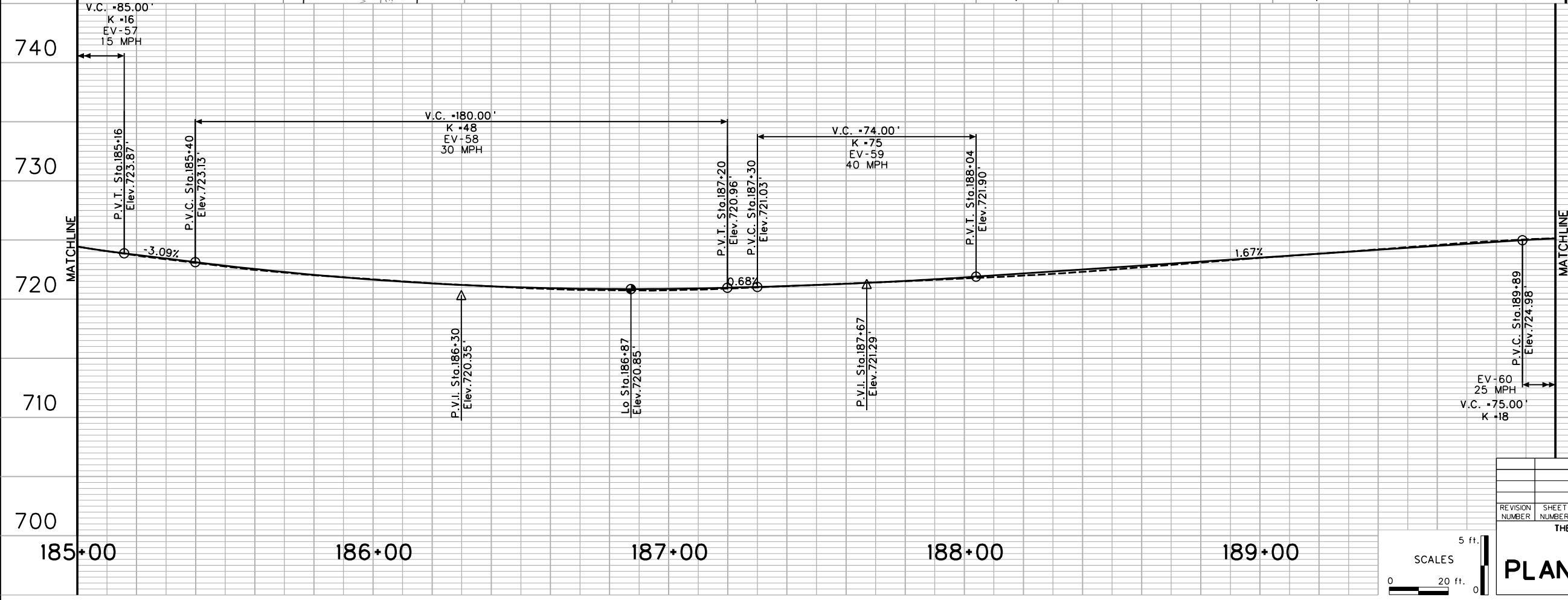


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	69	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

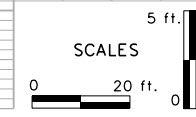
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

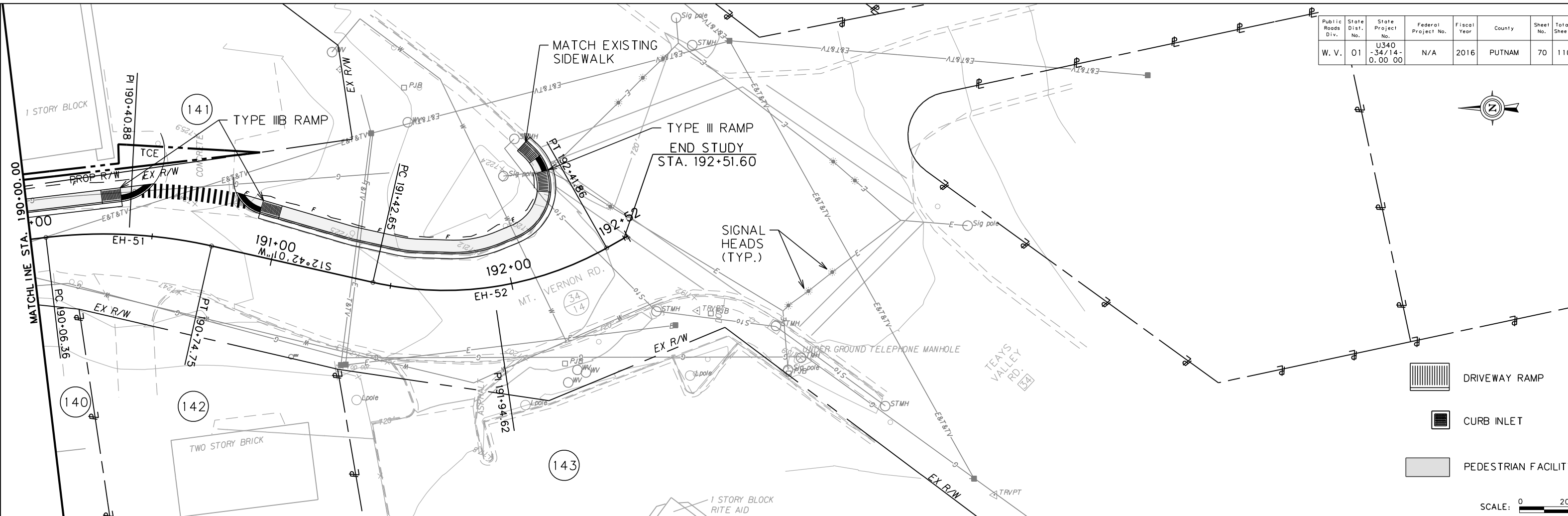
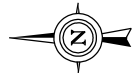
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY




THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET

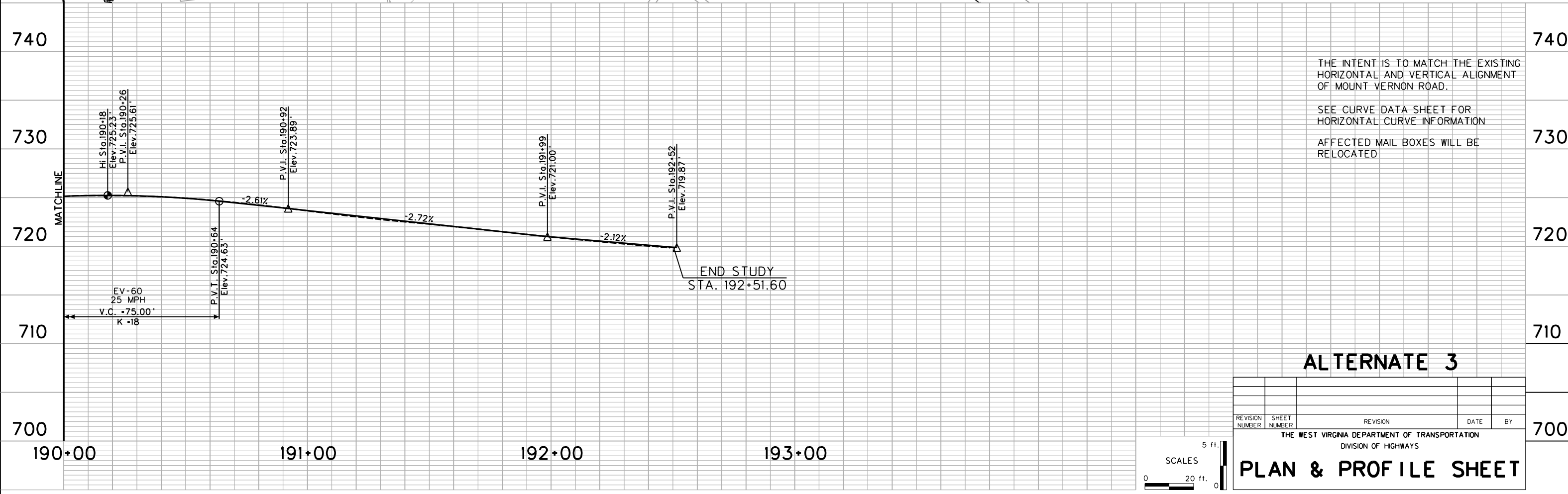


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	U340-34/14-0.00 00	N/A	2016	PUTNAM	70	110



-  DRIVEWAY RAMP
-  CURB INLET
-  PEDESTRIAN FACILITY

SCALE: 0 20 ft.



THE INTENT IS TO MATCH THE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF MOUNT VERNON ROAD.

SEE CURVE DATA SHEET FOR HORIZONTAL CURVE INFORMATION

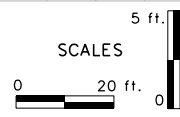
AFFECTED MAIL BOXES WILL BE RELOCATED

### ALTERNATE 3

REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

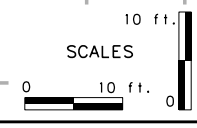
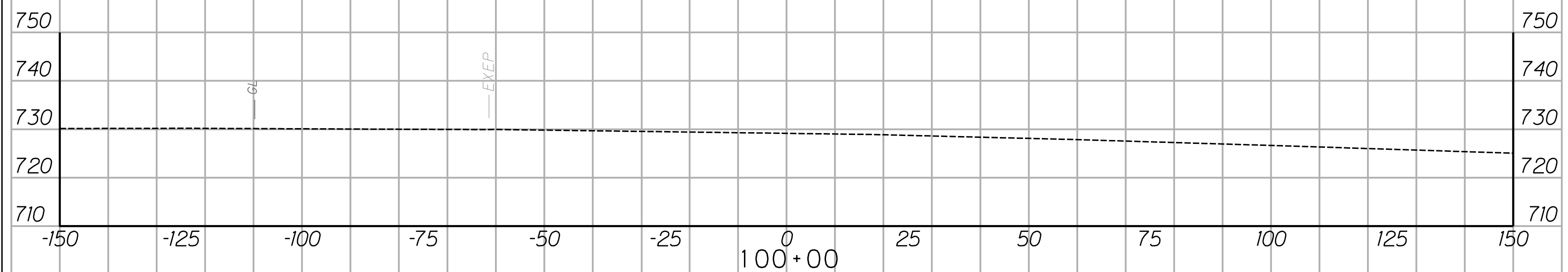
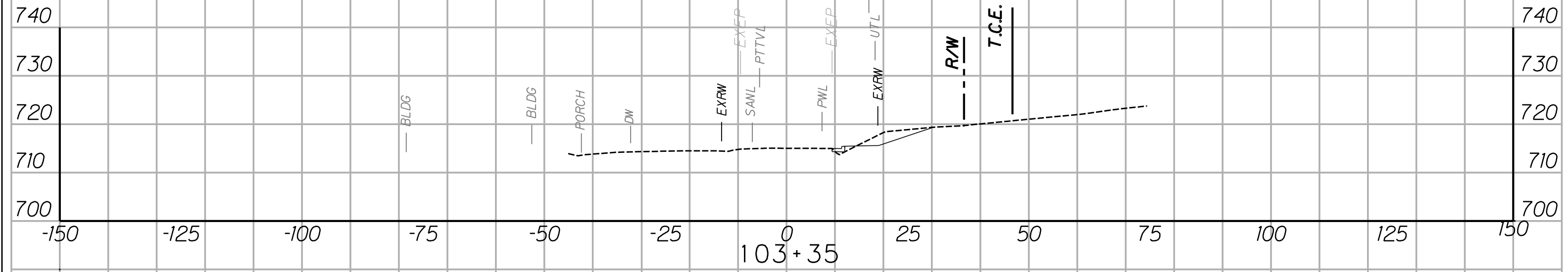
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

## PLAN & PROFILE SHEET



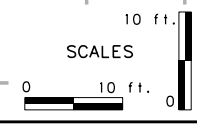
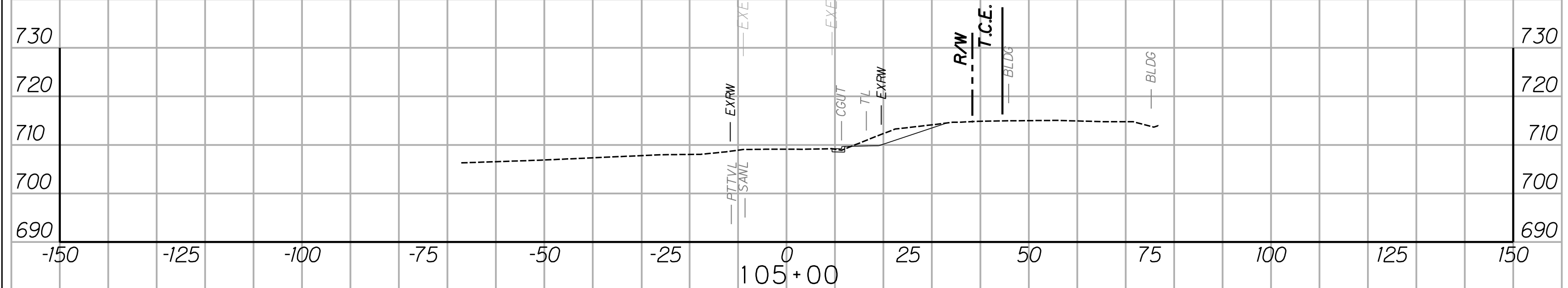
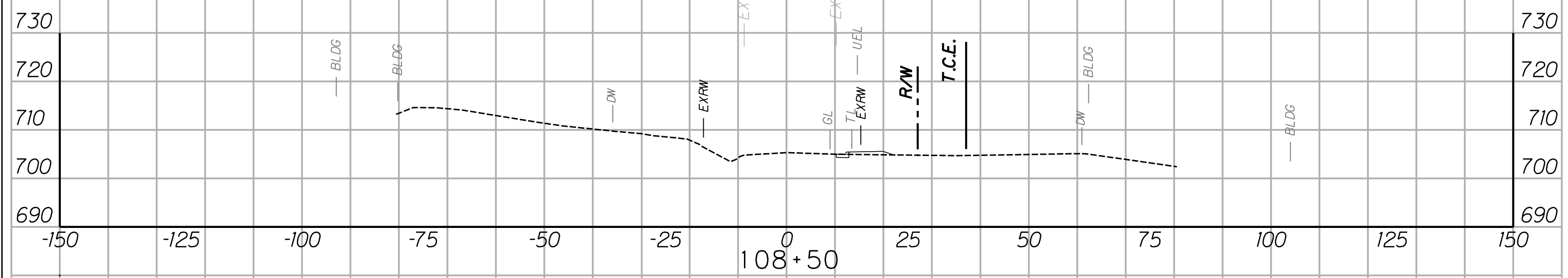


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	72	110



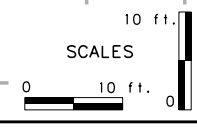
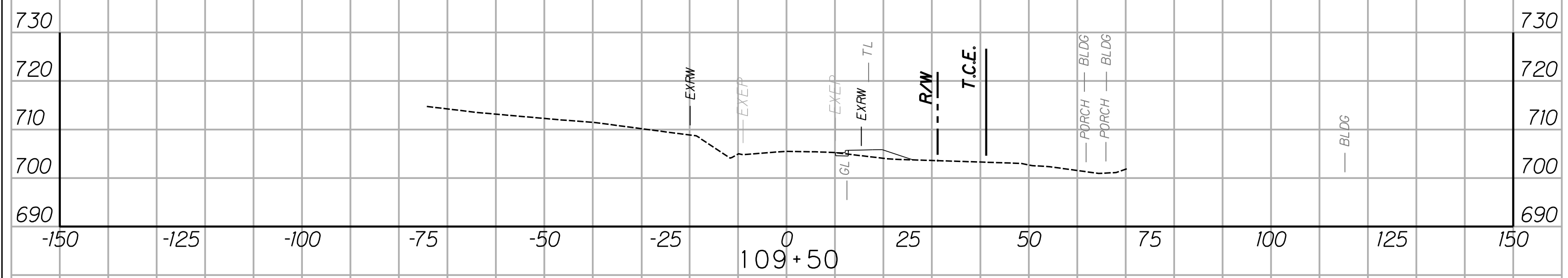
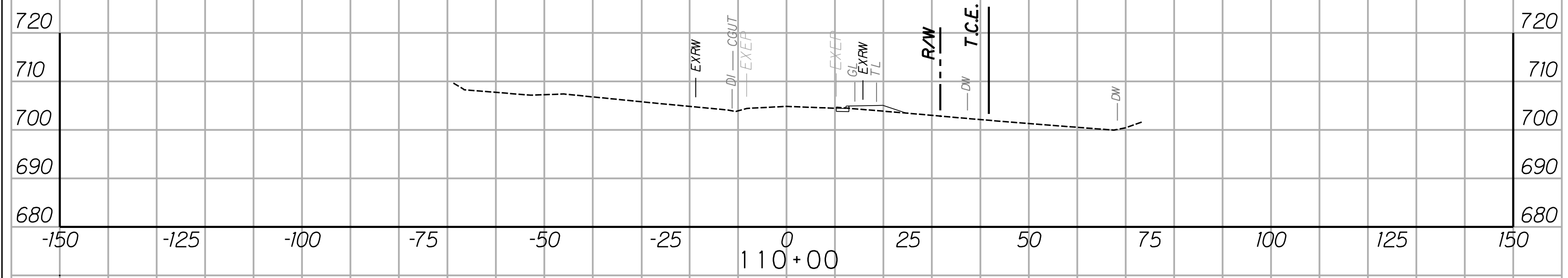
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 100+00 to Sta. 103+35



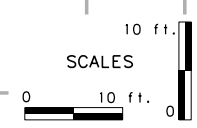
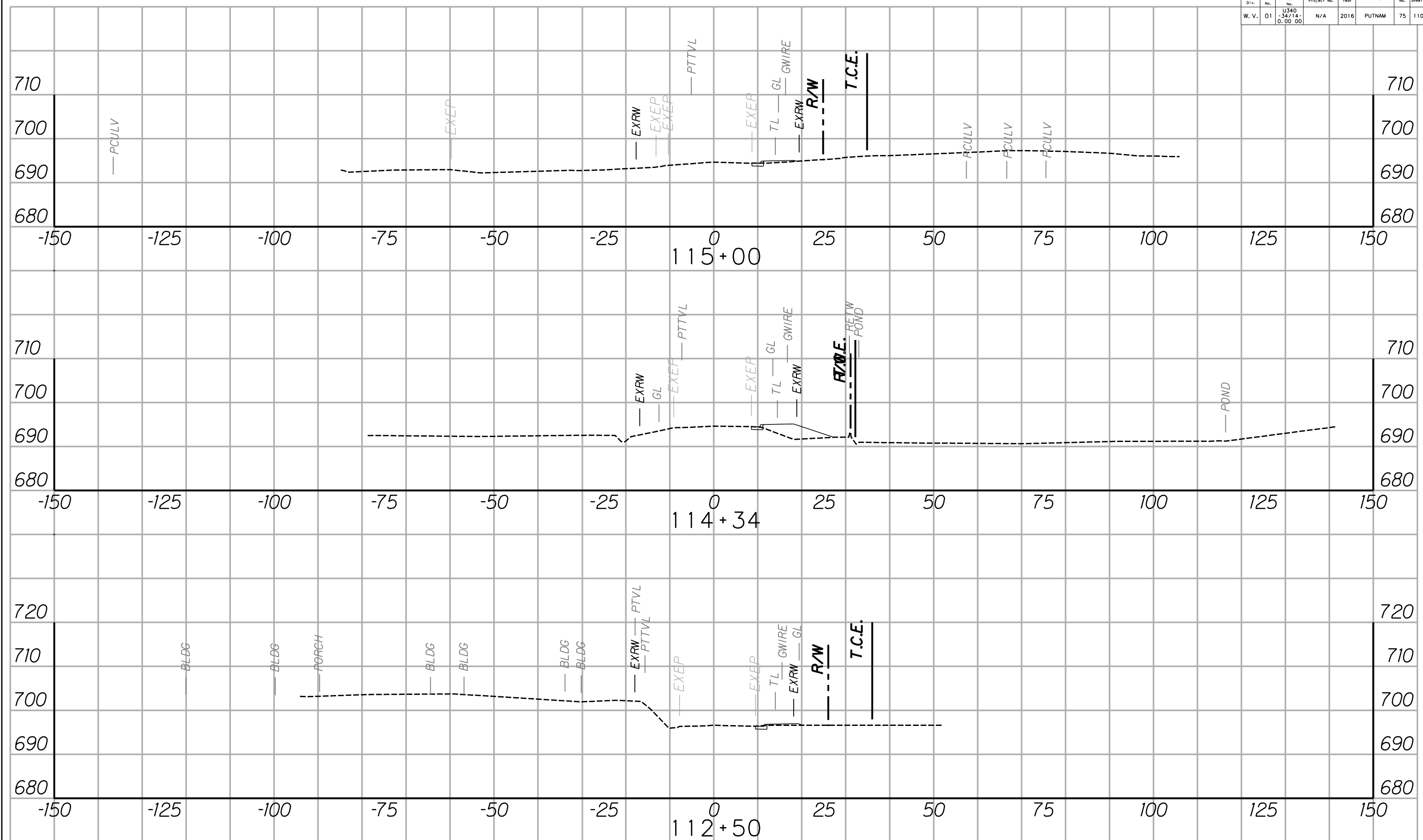
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 105+00 to Sta. 108+50



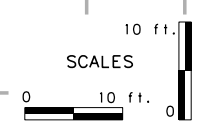
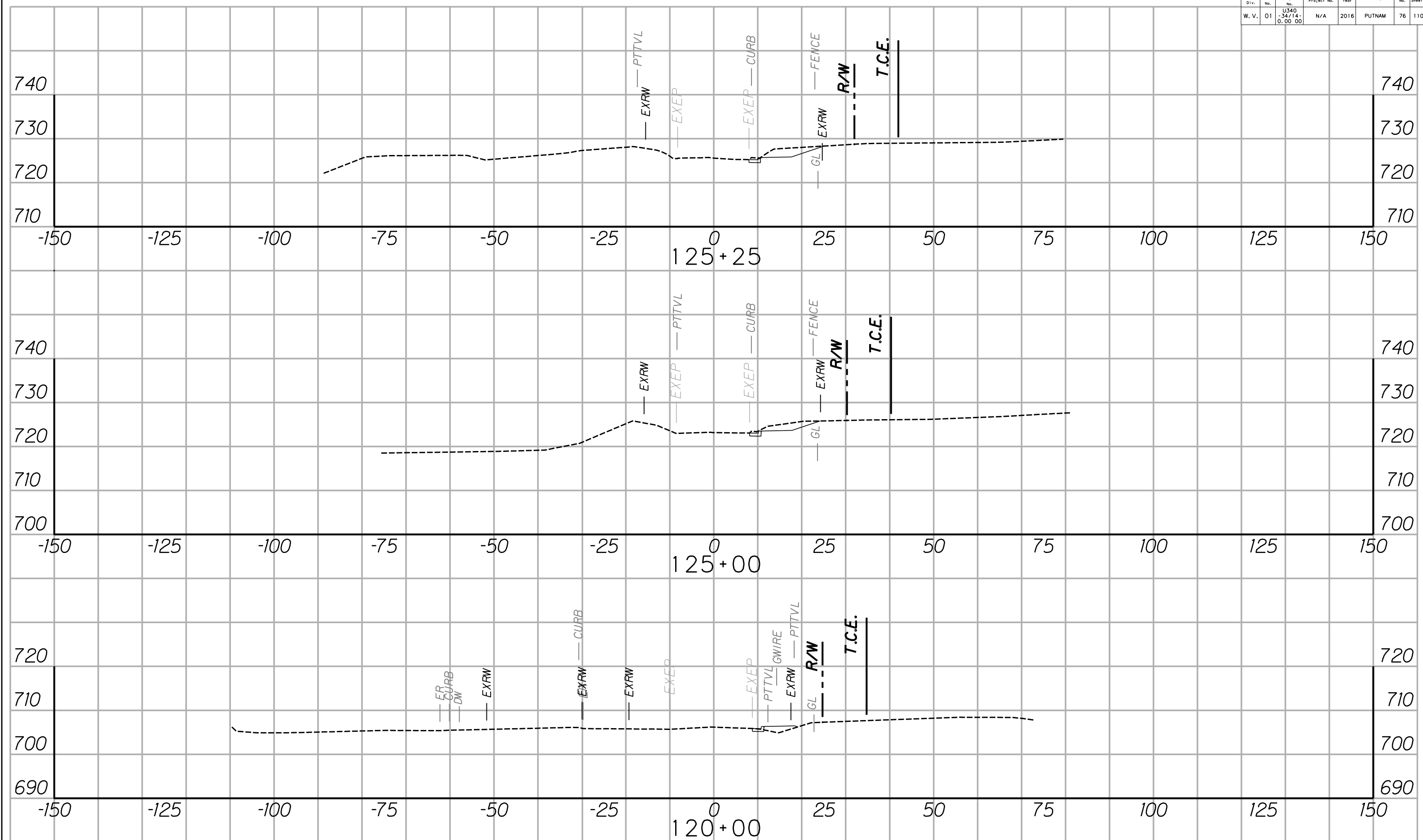
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 109+50 to Sta. 110+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

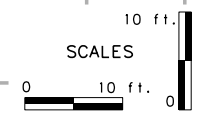
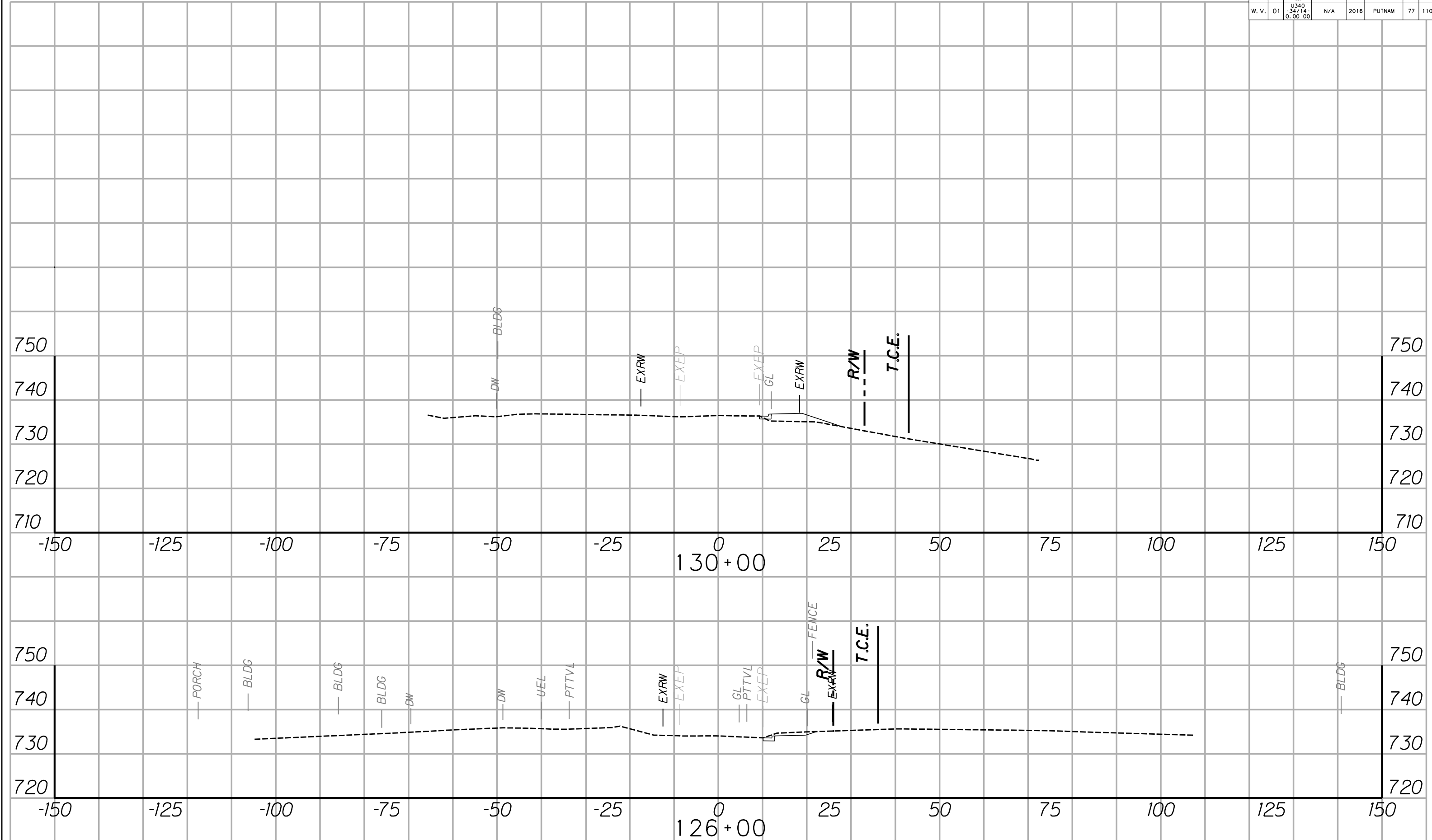
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 112+50 to Sta. 115+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 120+00 to Sta. 125+25

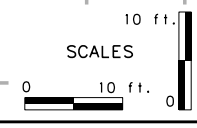
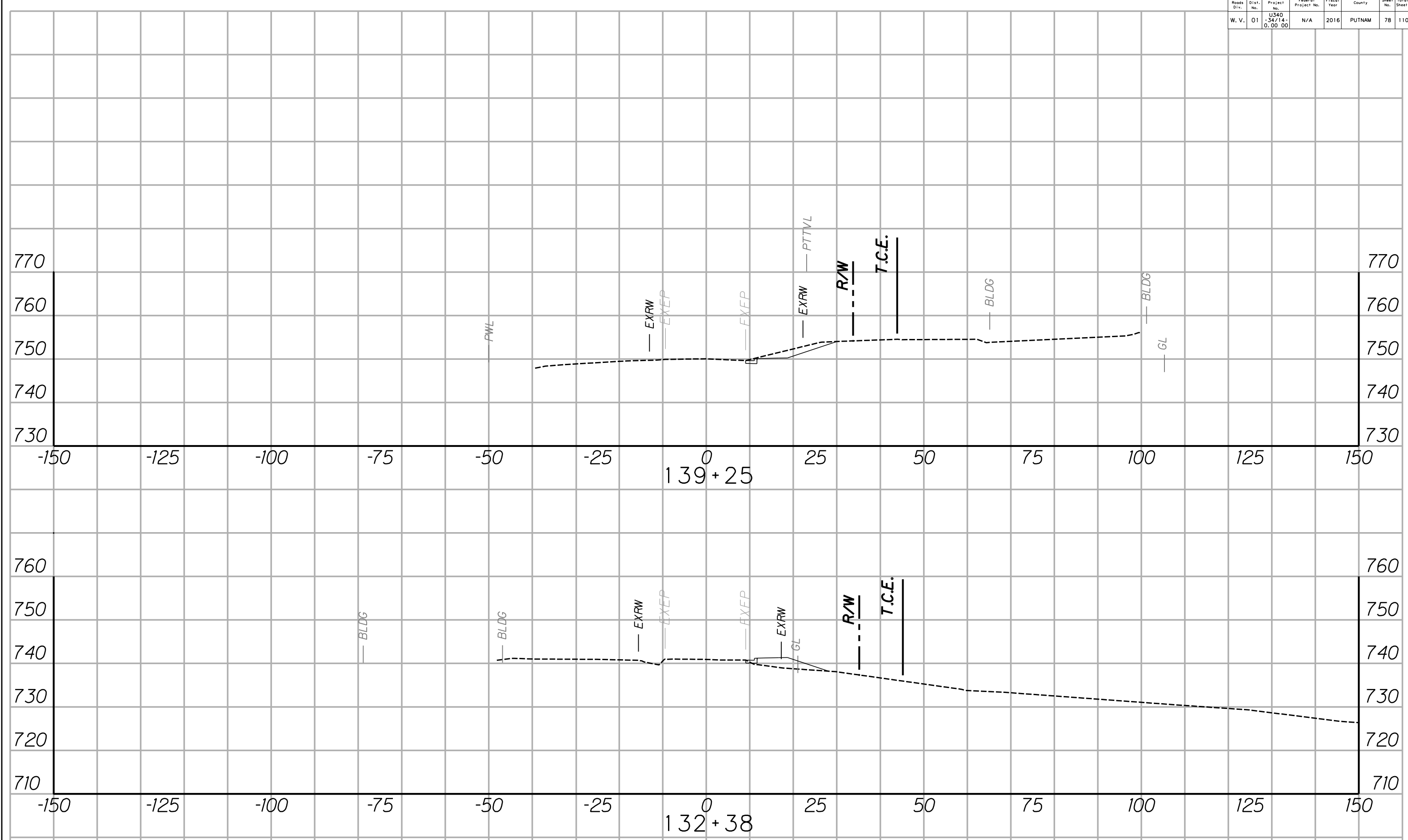
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	77	110



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

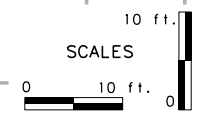
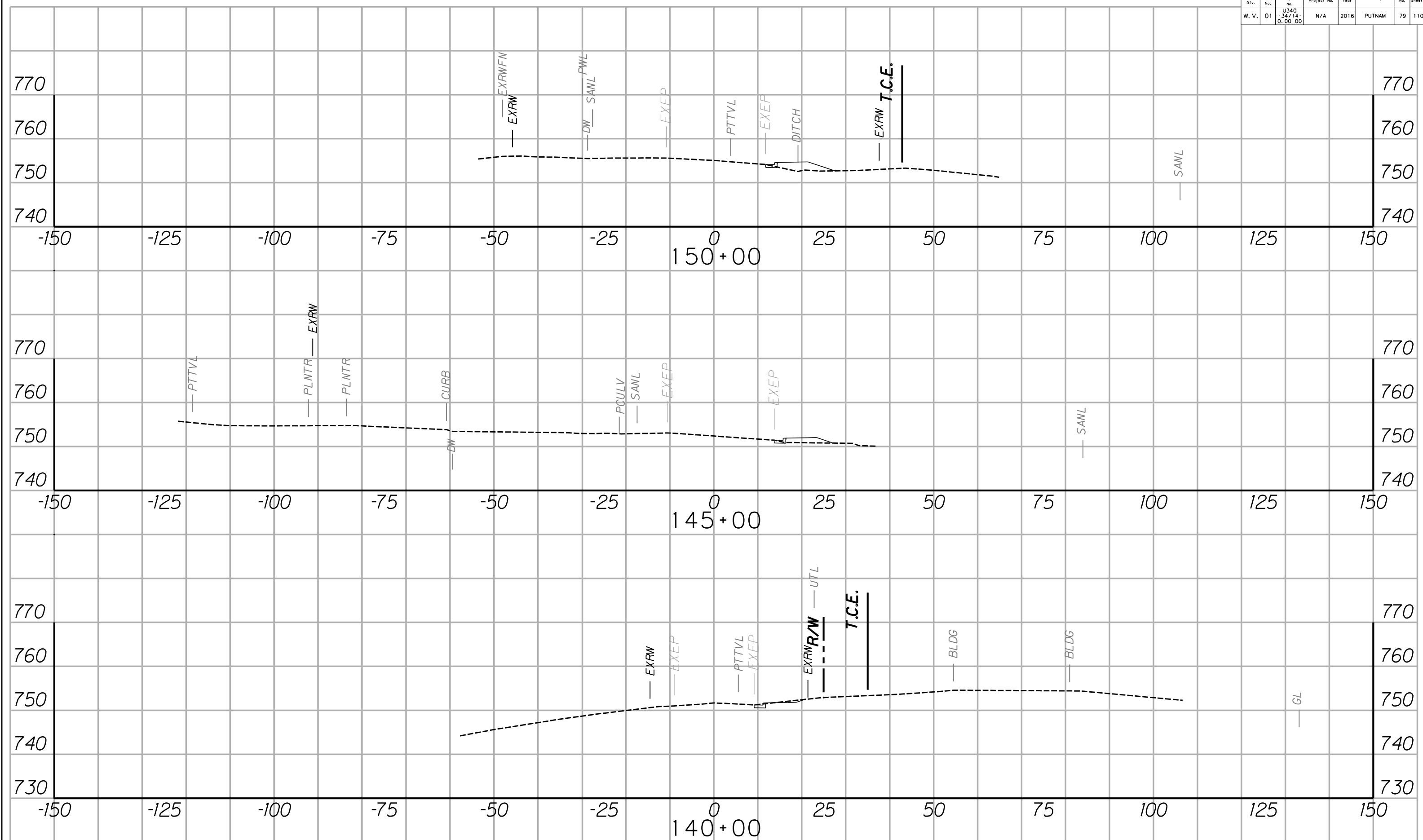
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**ALTERNATE 1**  
**CROSS-SECTION SHEET**  
Sta. 126+00 to Sta. 130+00

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	78	110



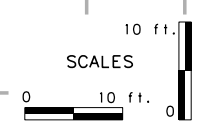
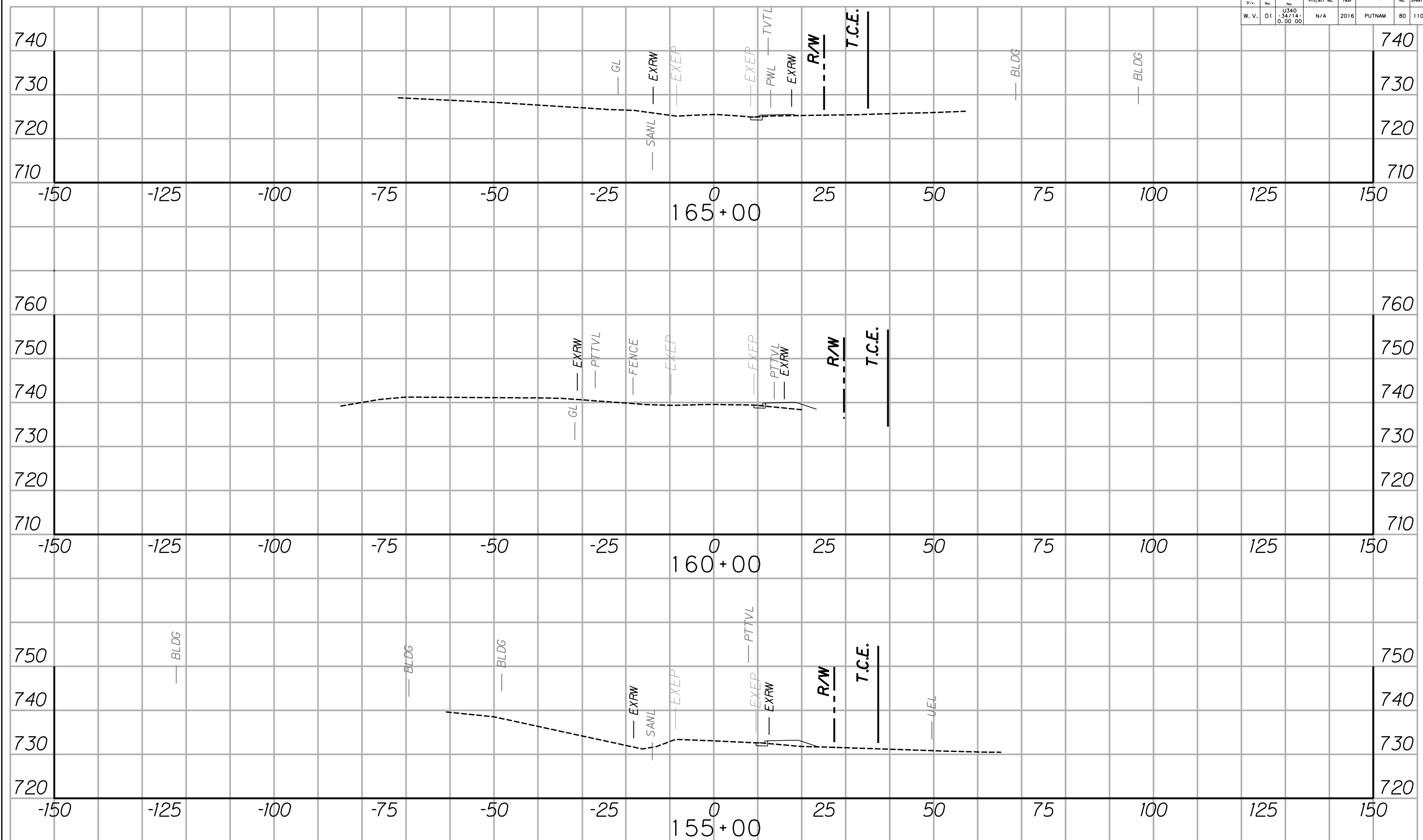
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 132+38 to Sta. 139+25



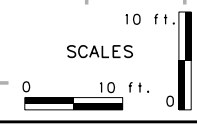
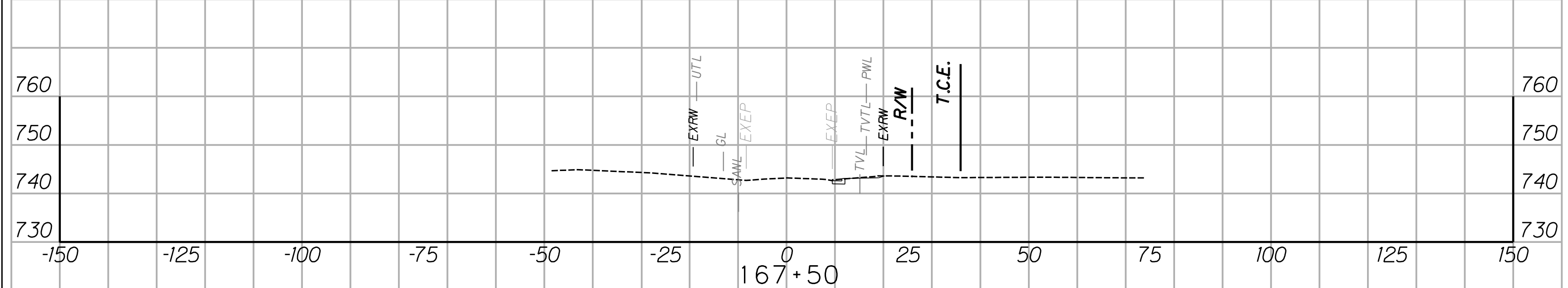
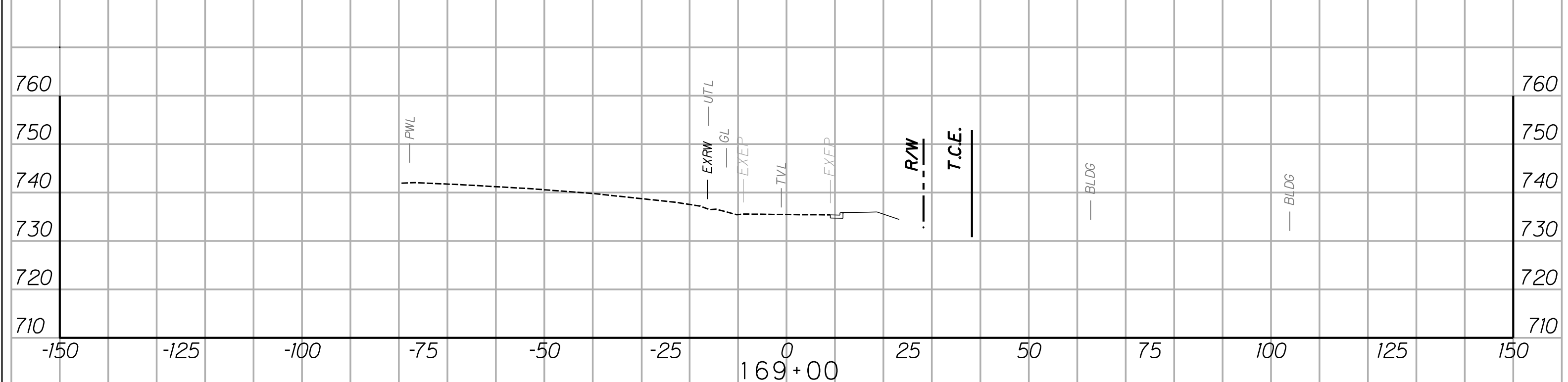
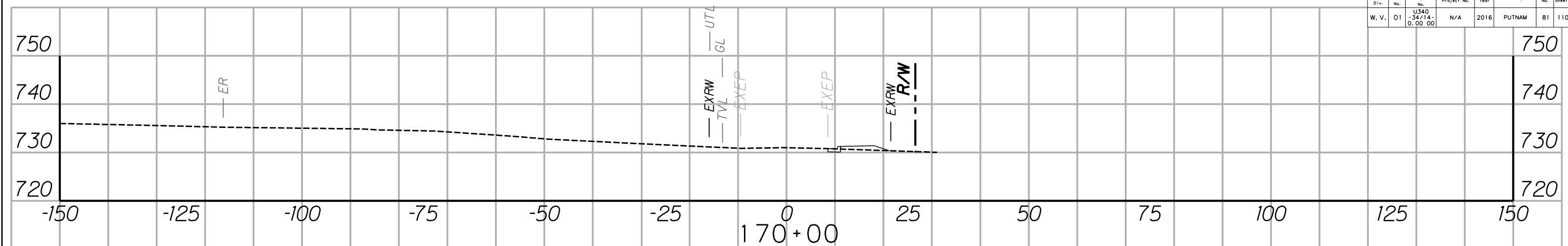
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 140+00 to Sta. 150+00



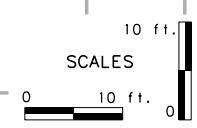
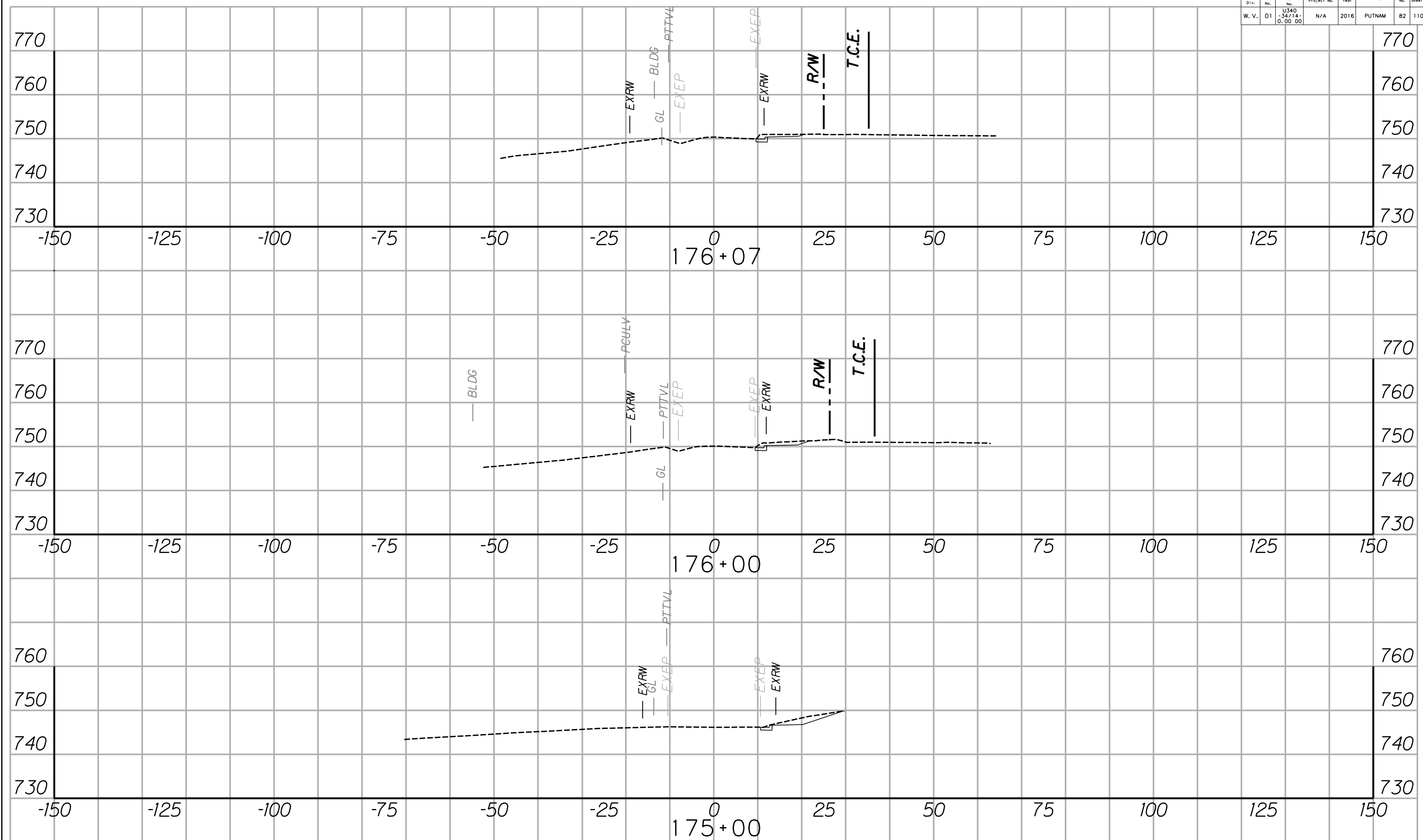
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 155+00 to Sta. 165+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

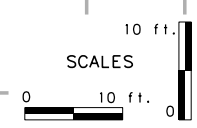
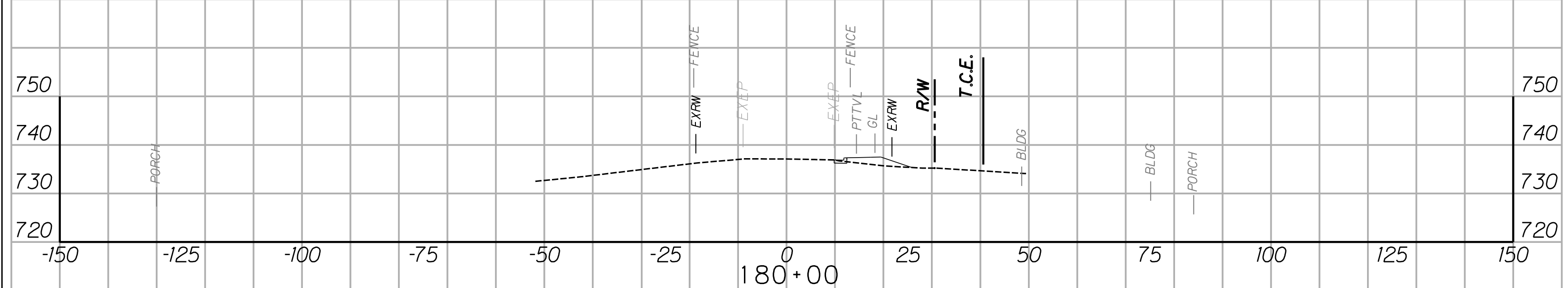
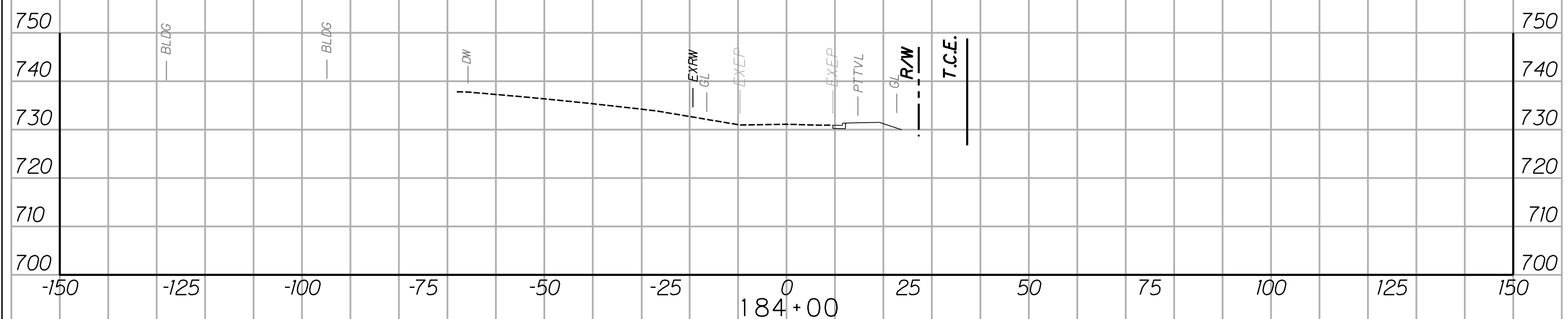
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 167+50 to Sta. 170+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

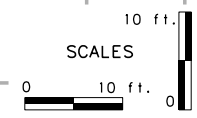
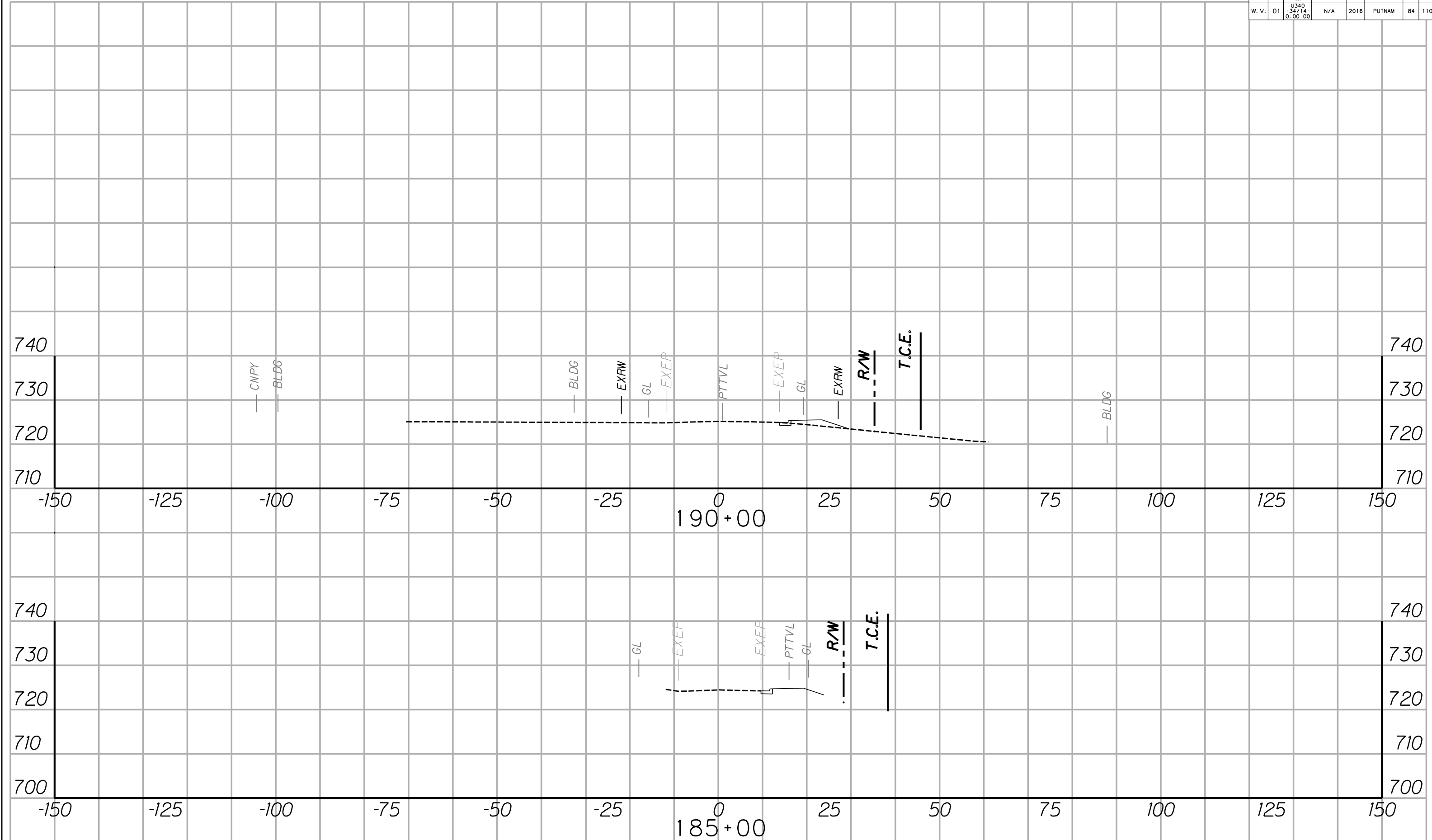
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 175+00 to Sta. 176+07

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	83	110



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

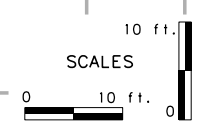
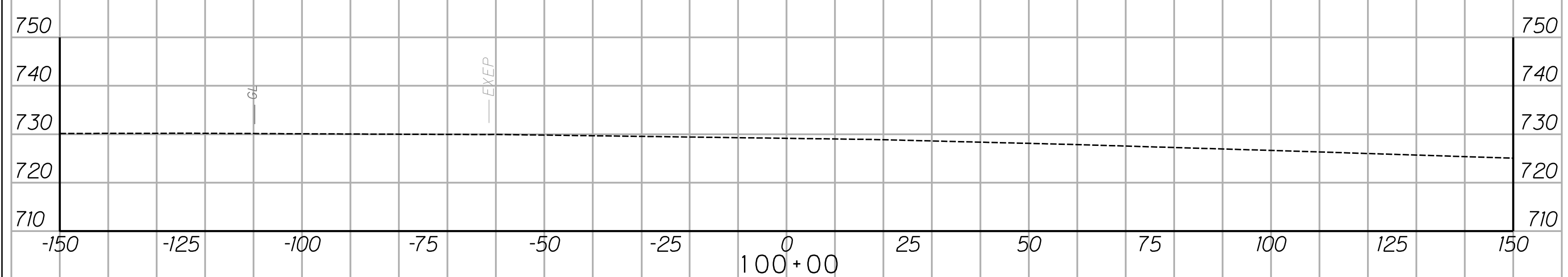
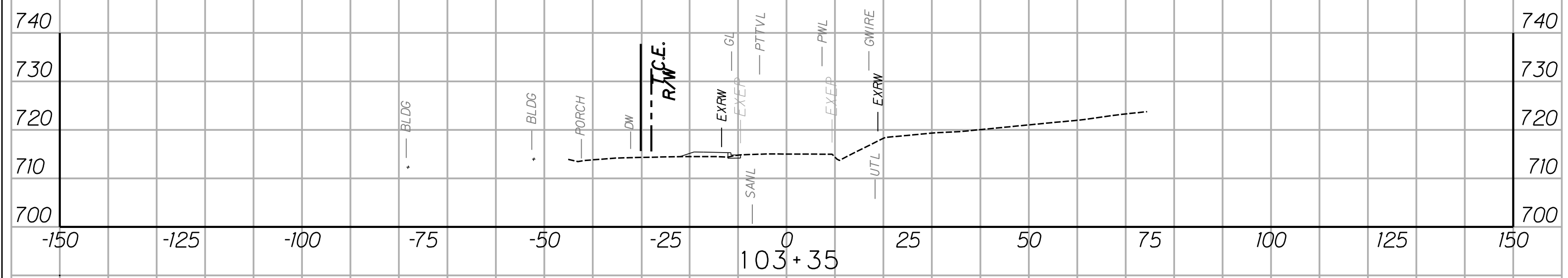
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 180+00 to Sta. 184+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

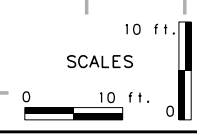
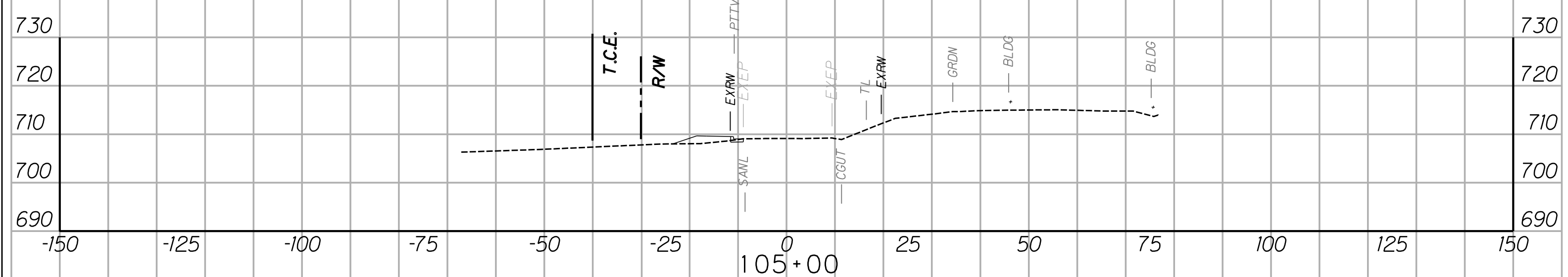
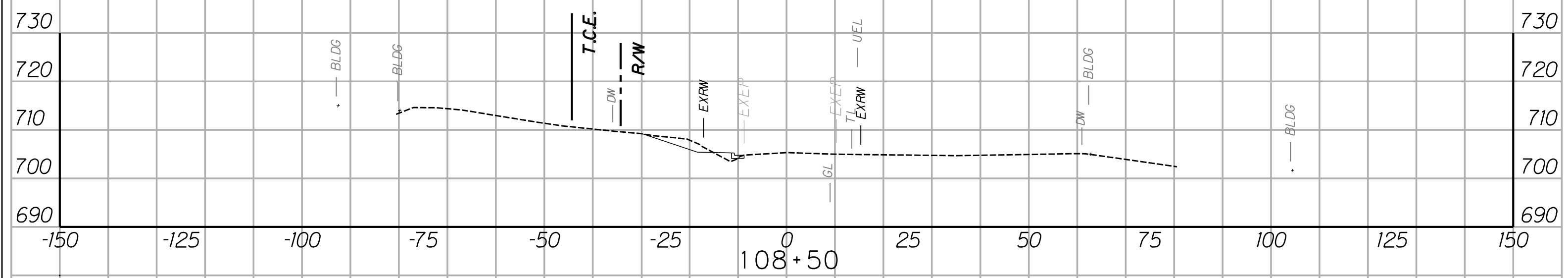
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 185+00 to Sta. 190+00

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	85	110



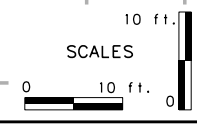
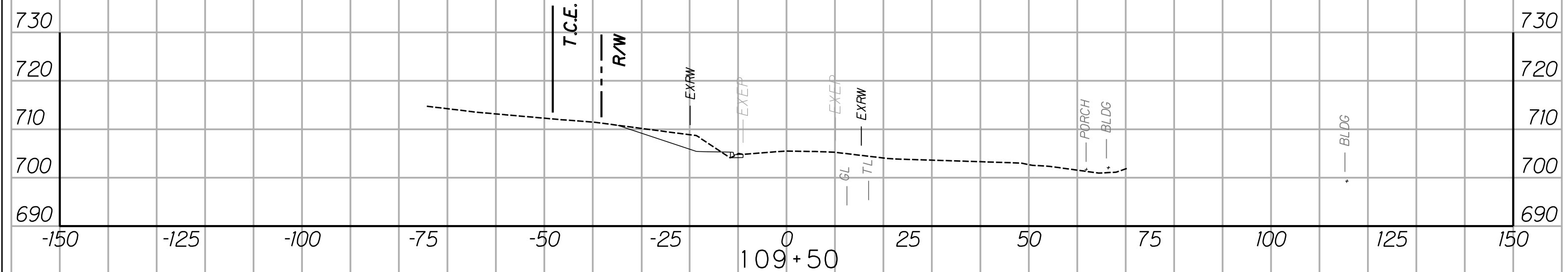
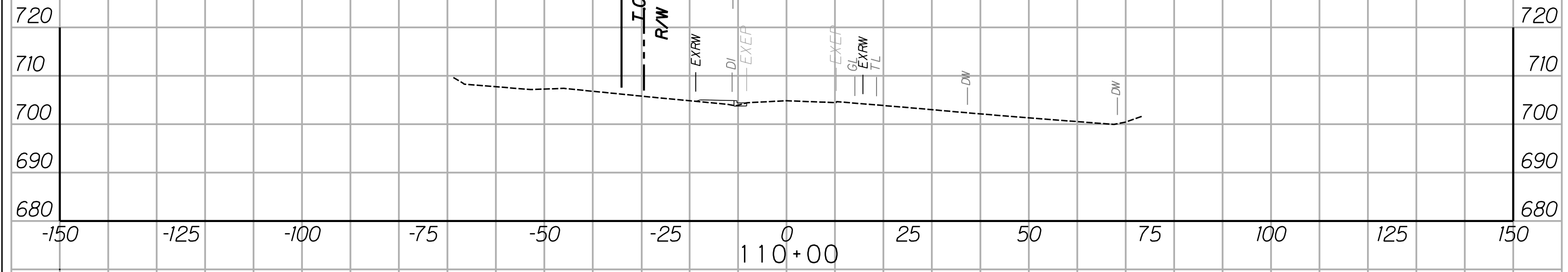
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 100+00 to Sta. 103+35



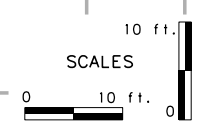
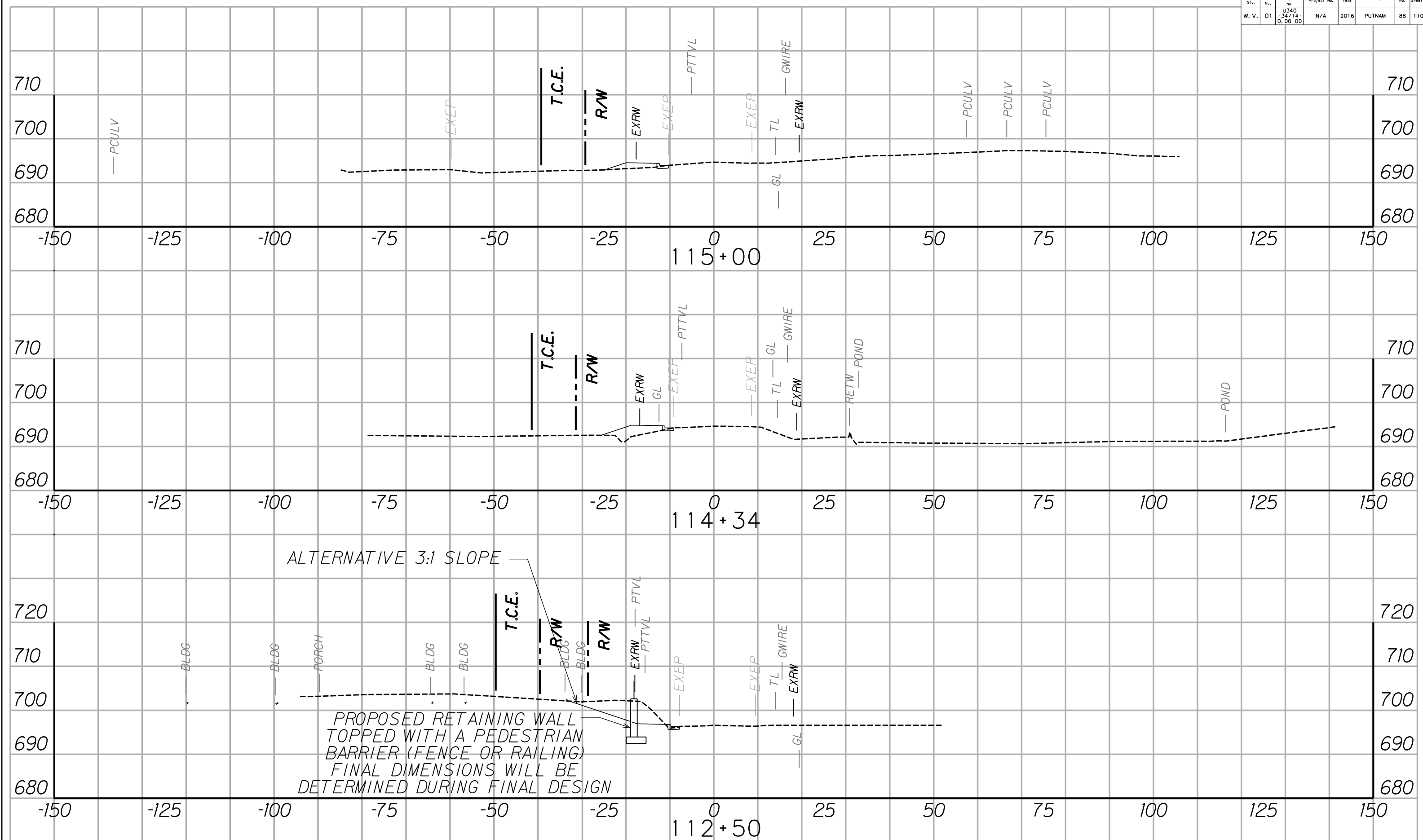
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 105+00 to Sta. 108+50

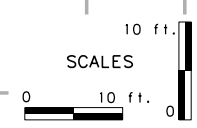
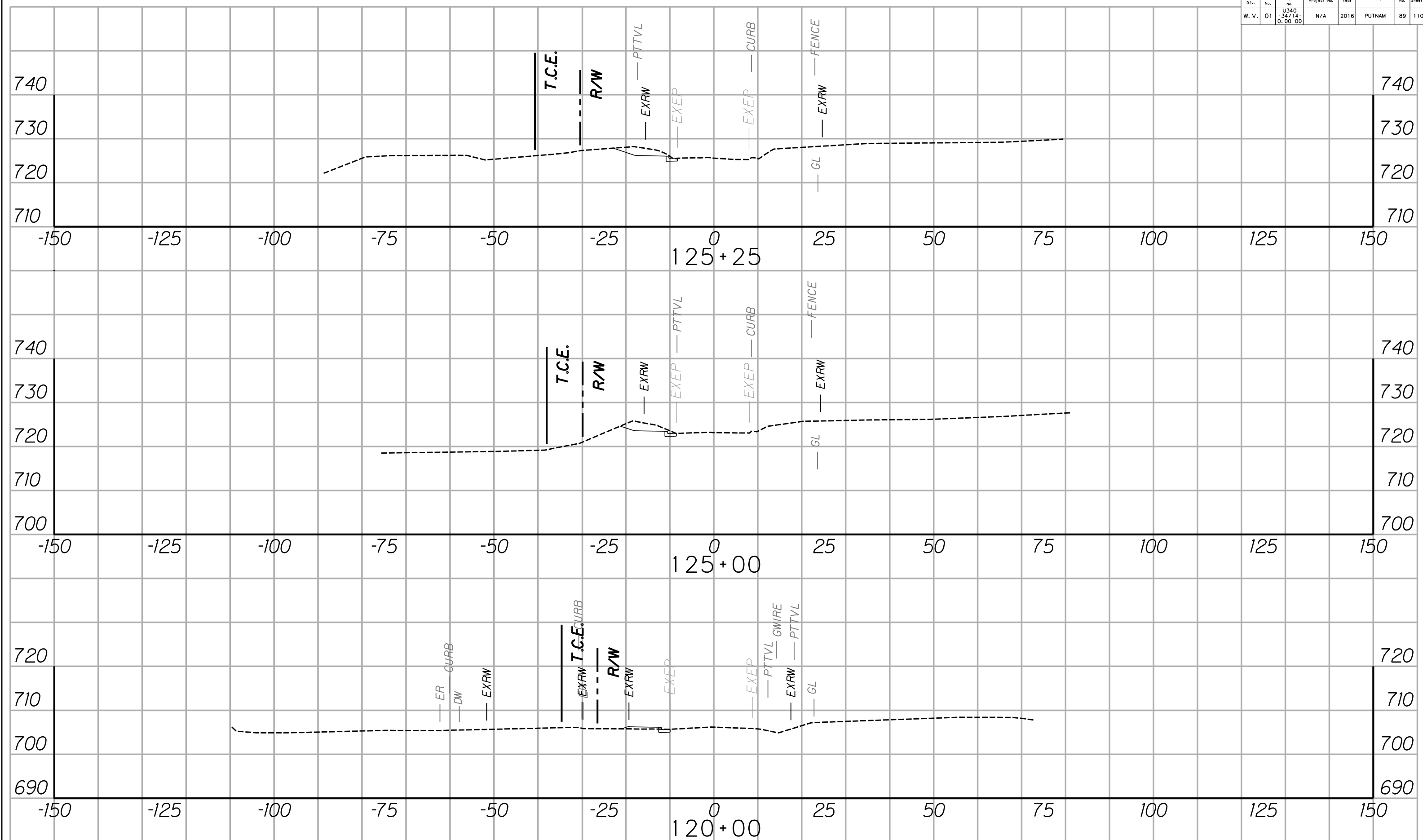


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 109+50 to Sta. 110+00

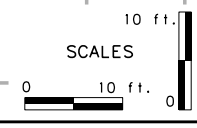
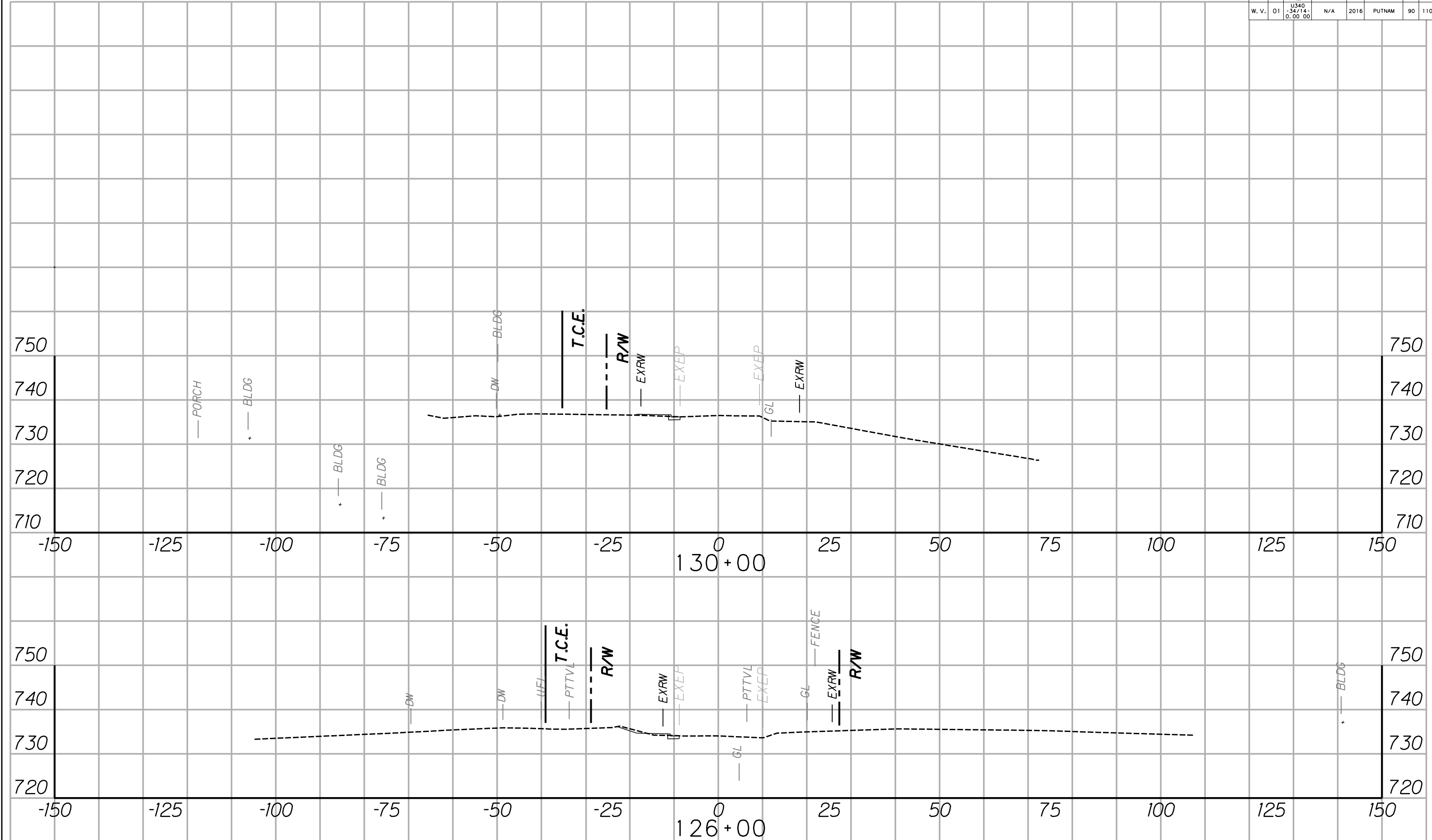


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

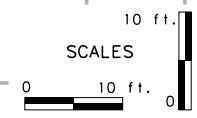
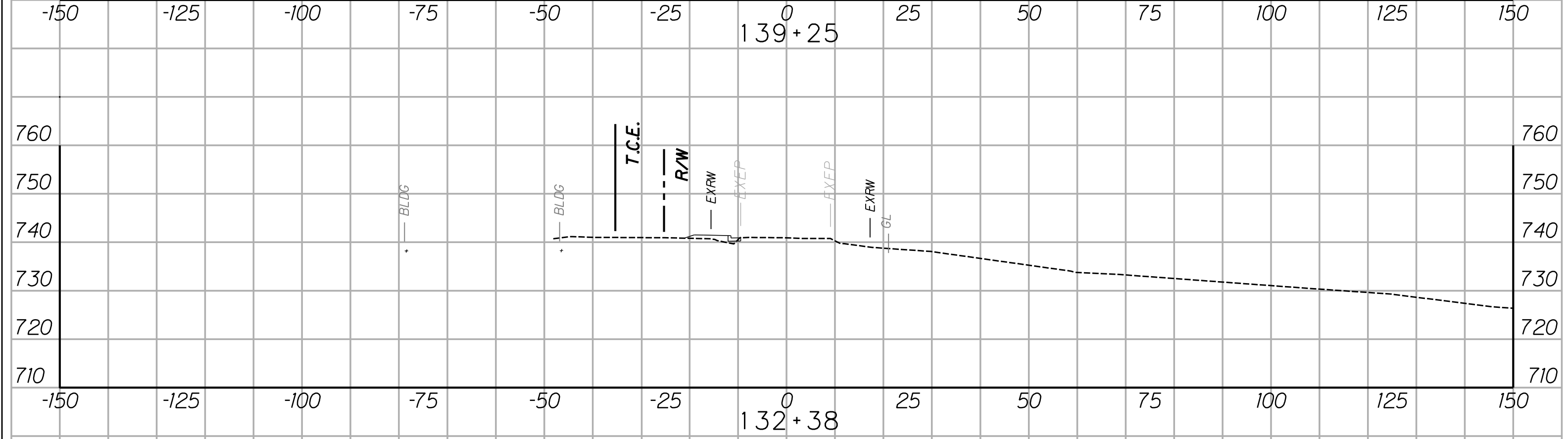
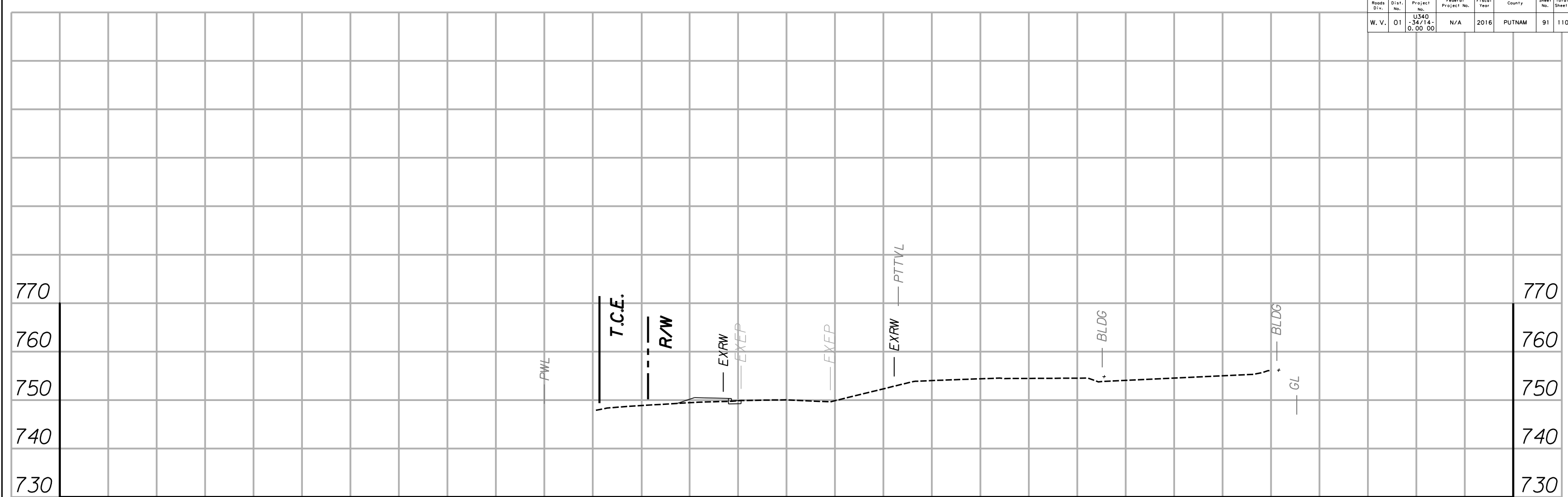
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 120+00 to Sta. 125+25



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

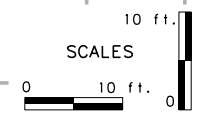
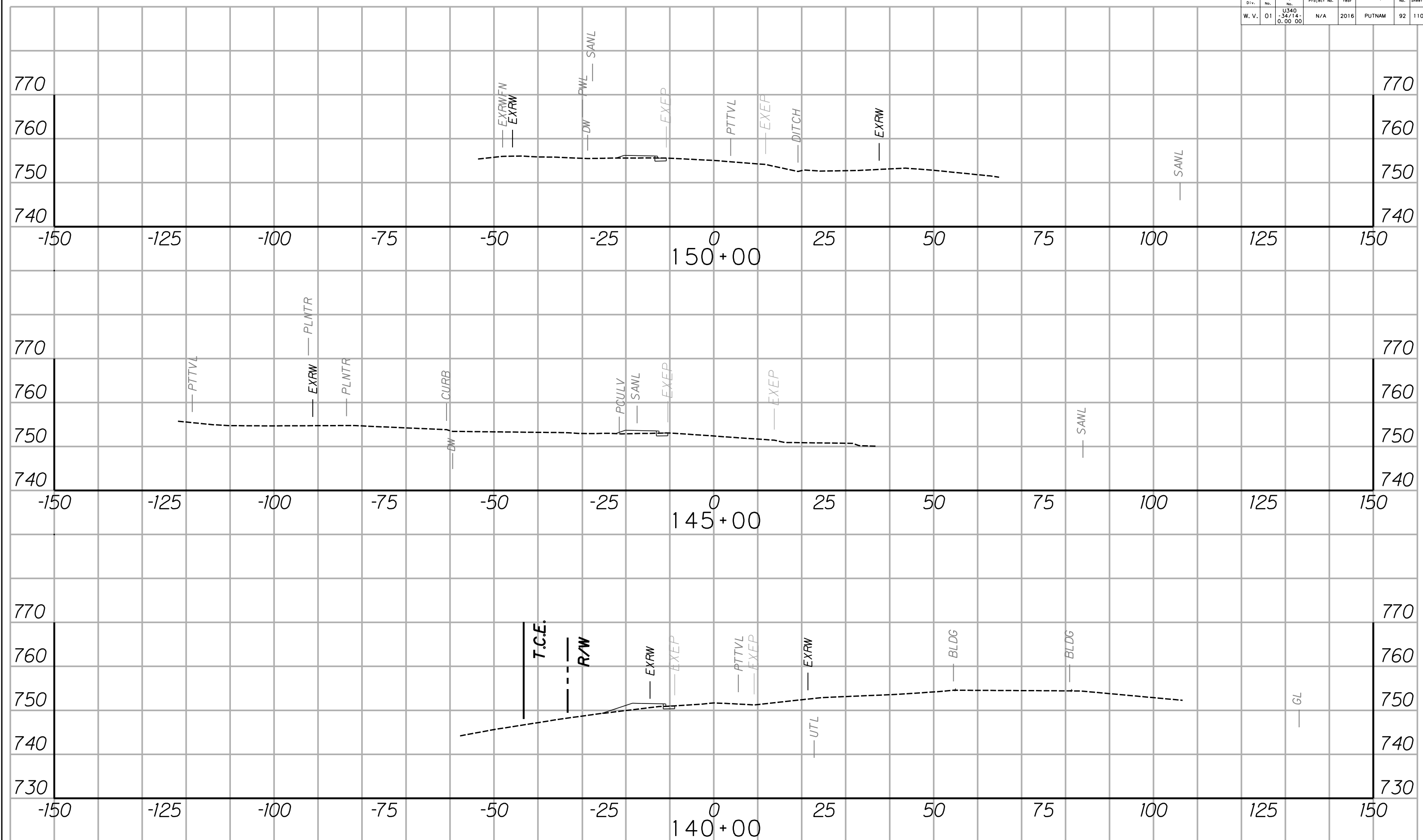
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 126+00 to Sta. 130+00

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	91	110



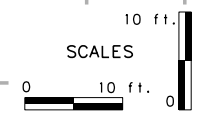
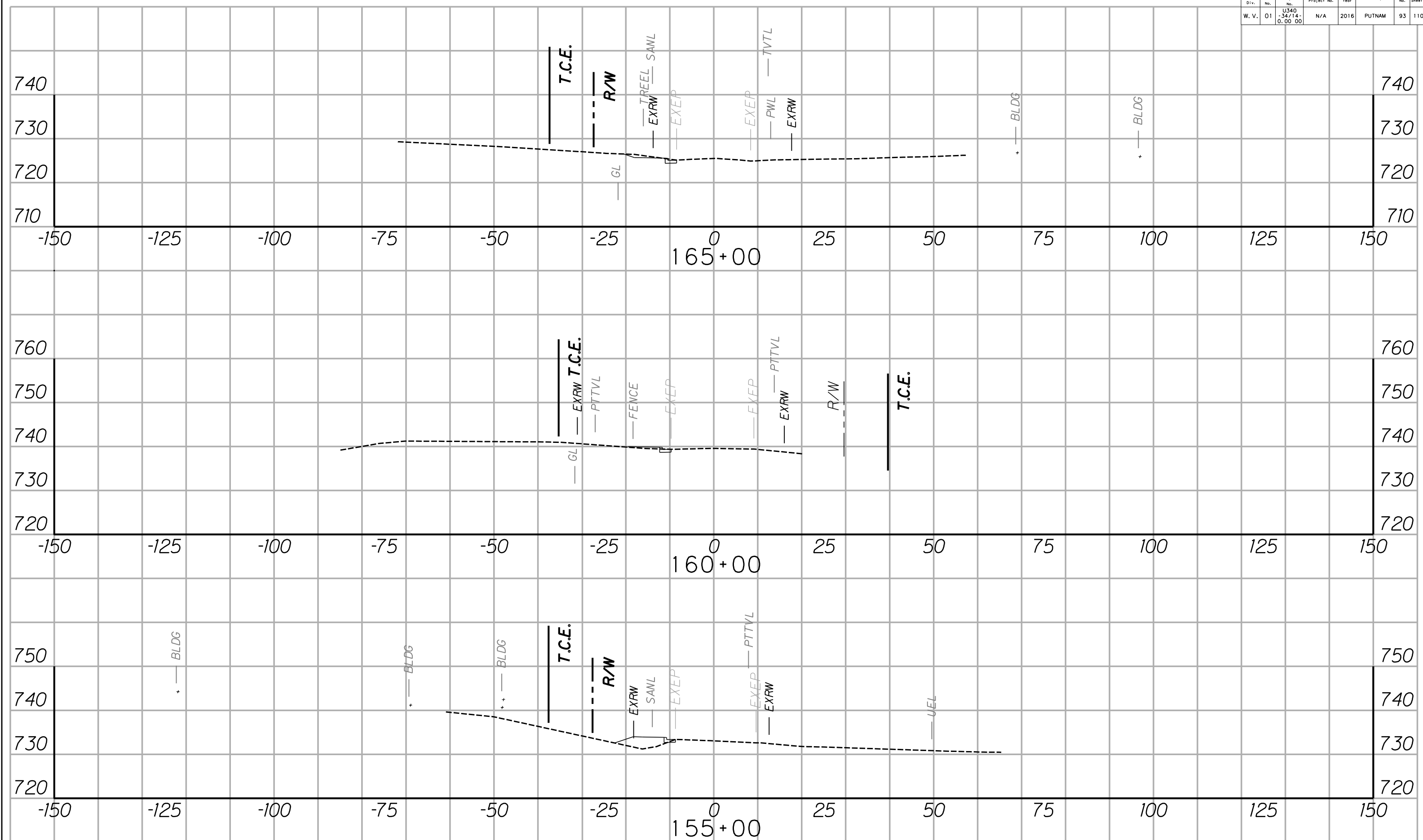
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 132+38 to Sta. 139+25



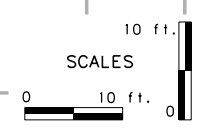
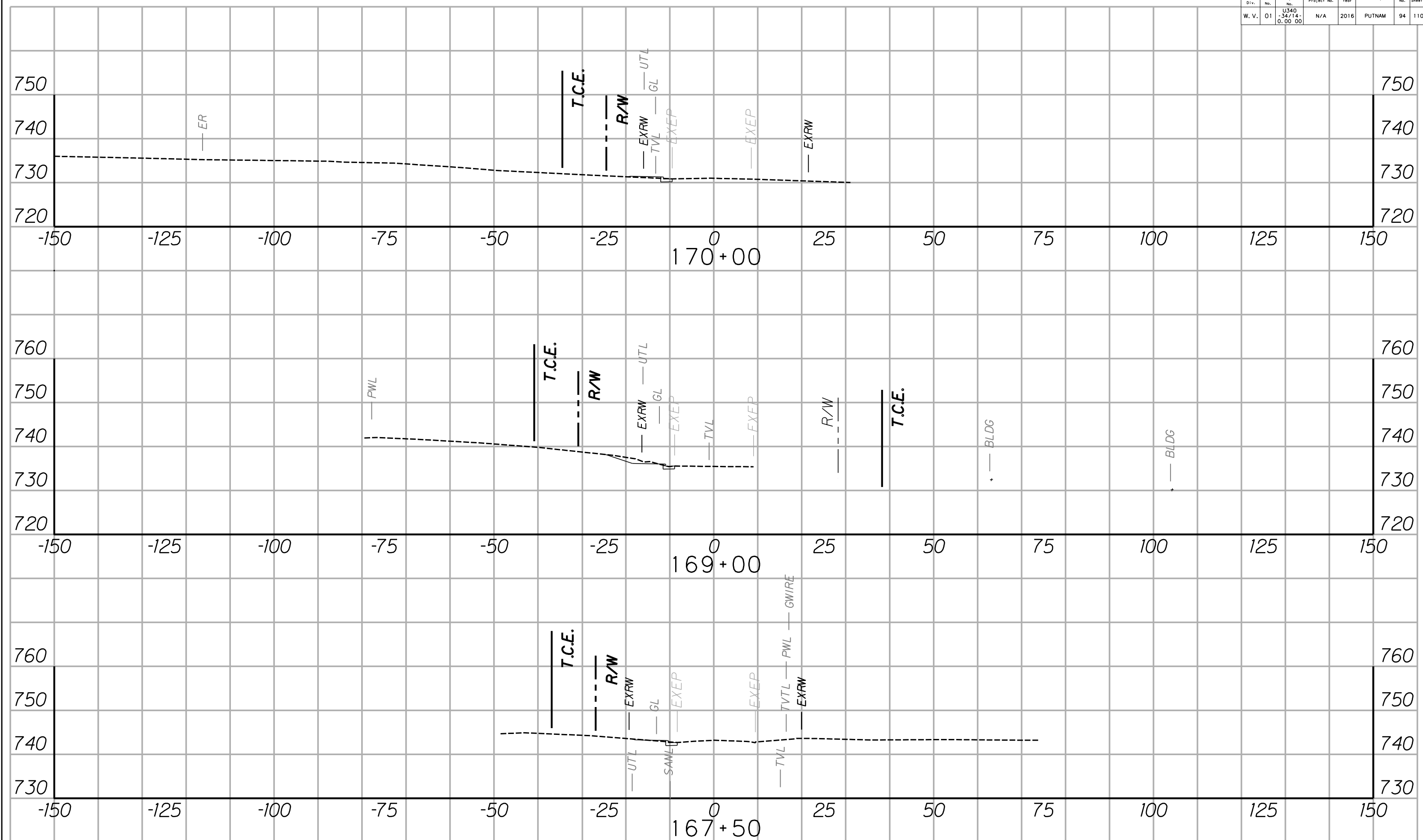
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 140+00 to Sta. 150+00



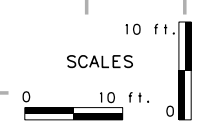
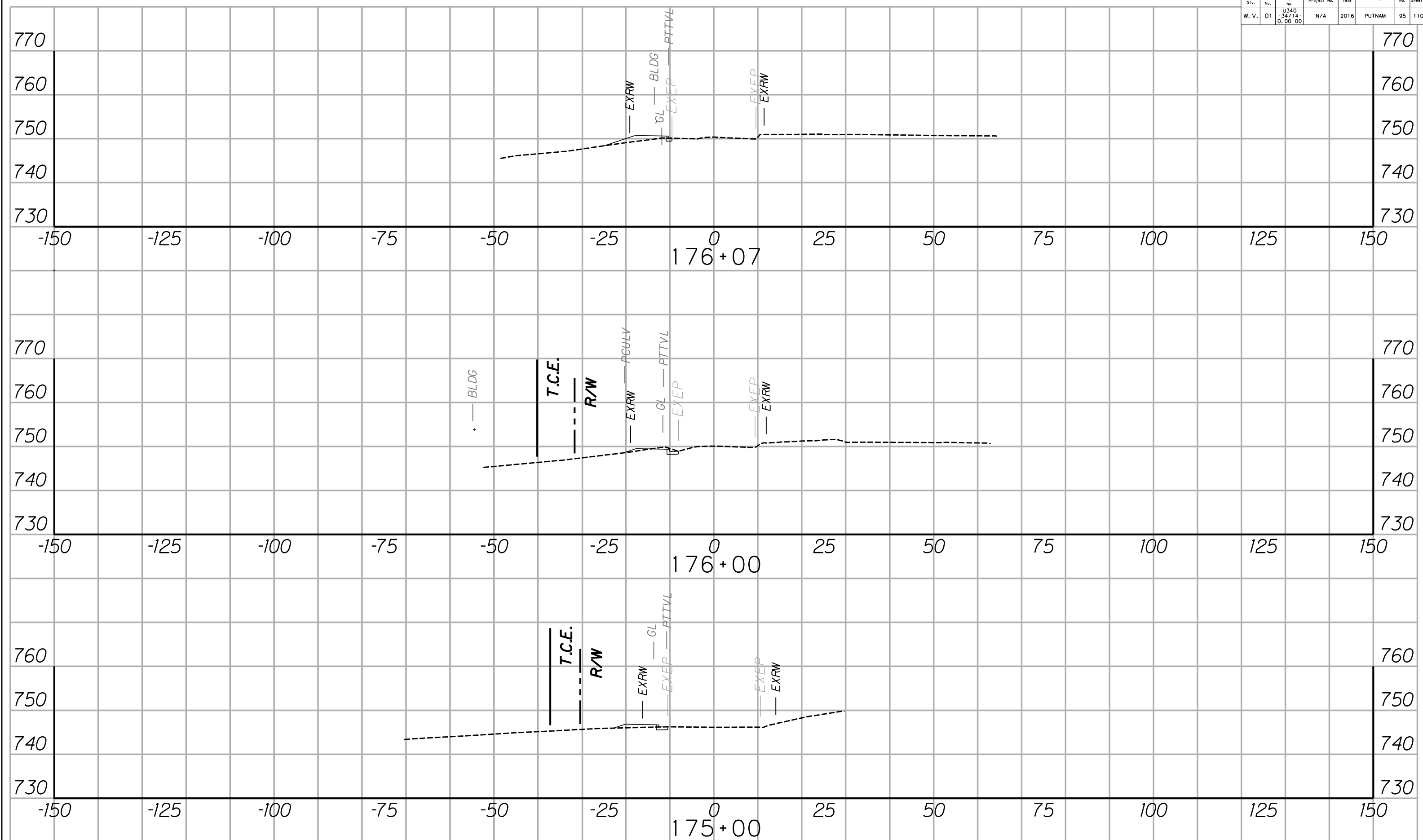
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 155+00 to Sta. 165+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 167+50 to Sta. 170+00

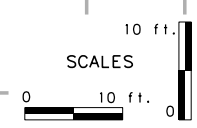
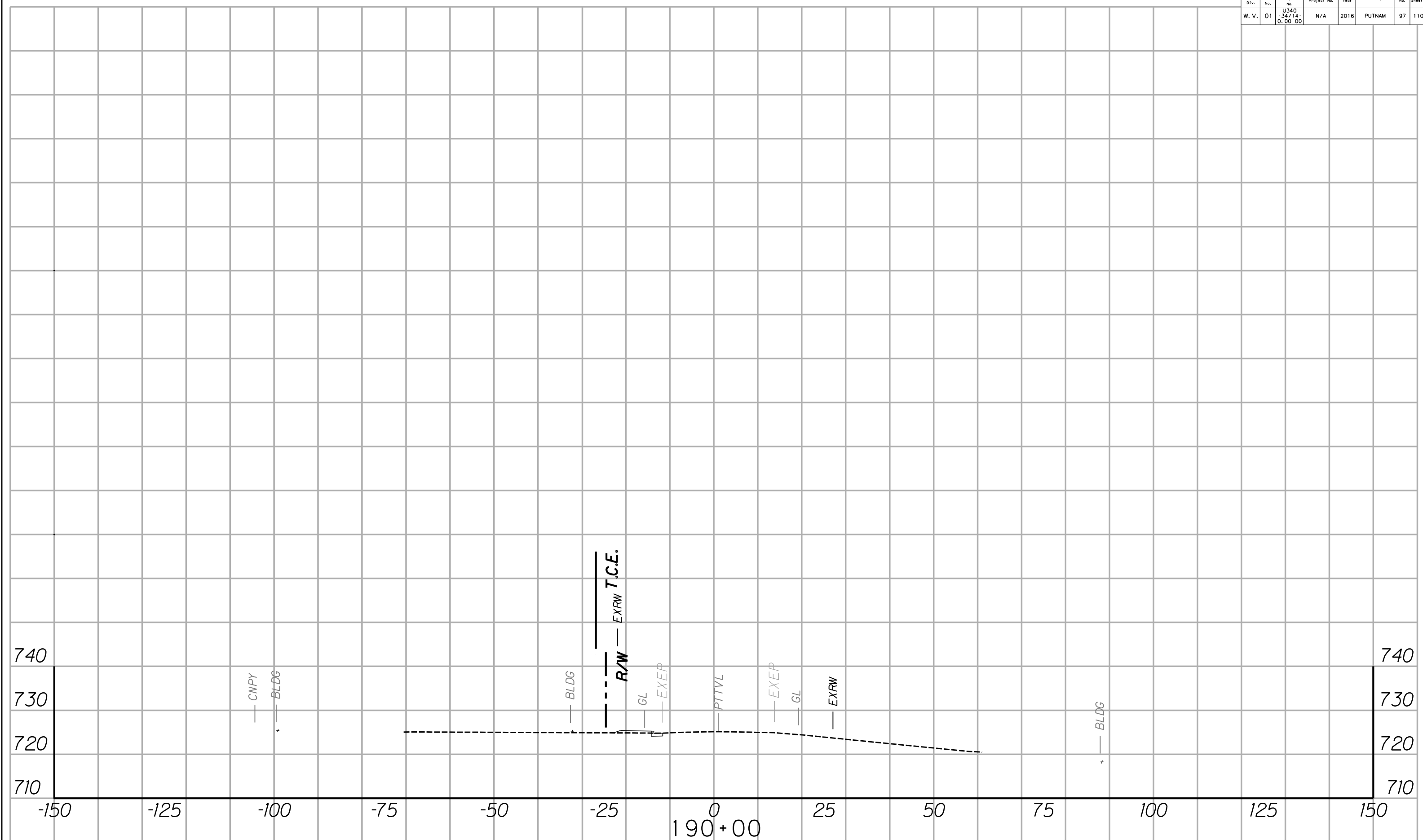


REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 175+00 to Sta. 176+07

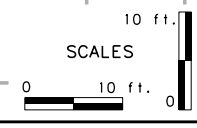
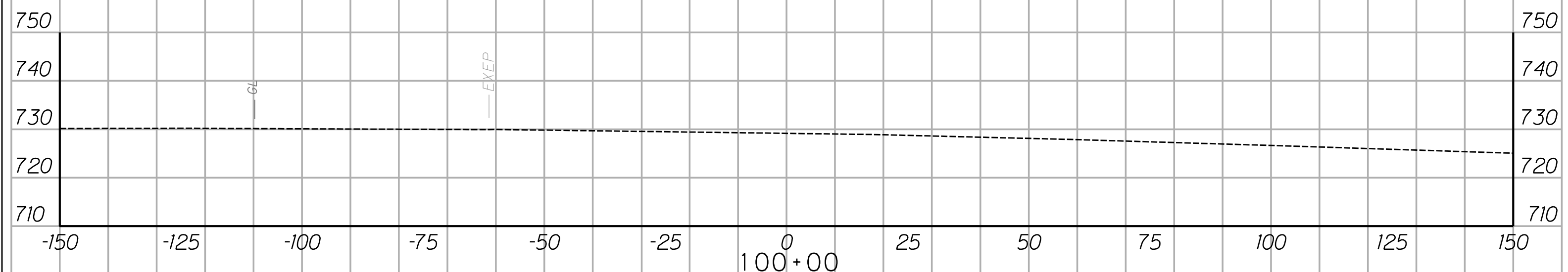
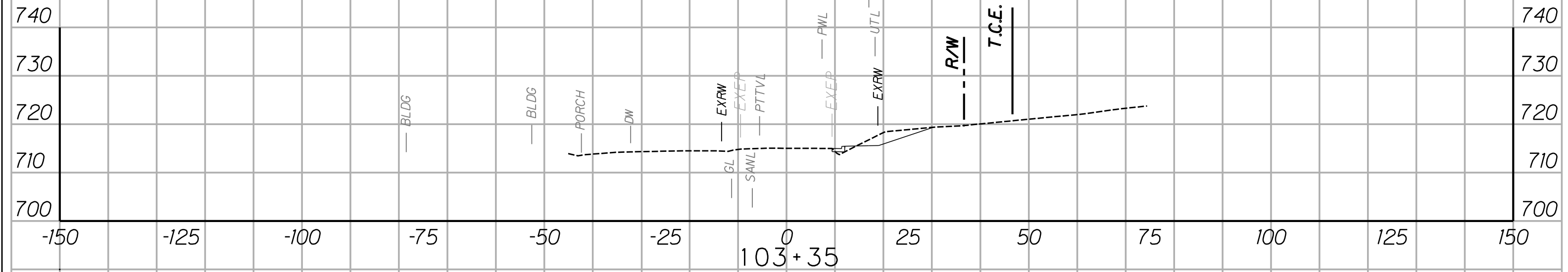


Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	97	110



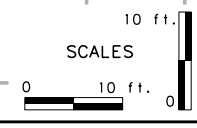
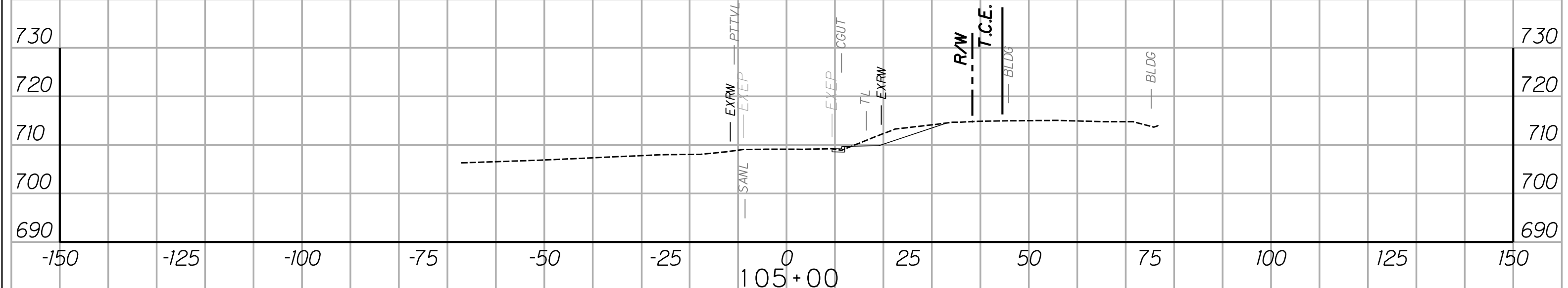
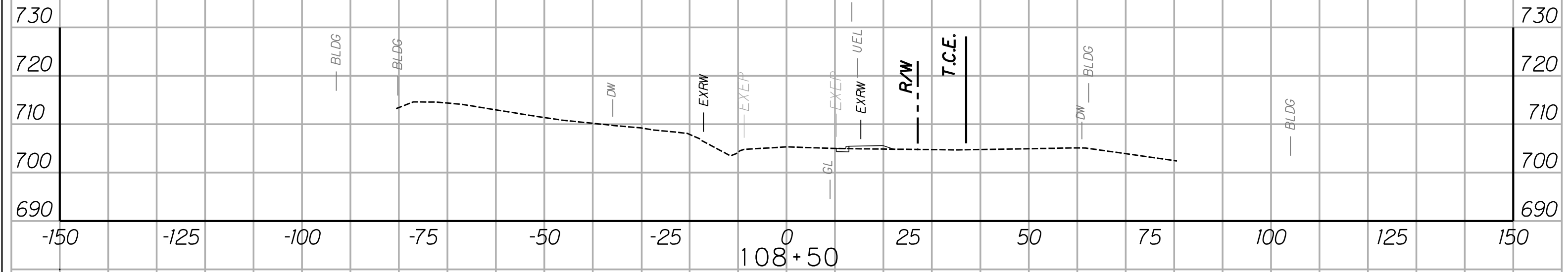
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 190+00 to Sta. 190+00



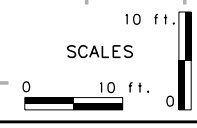
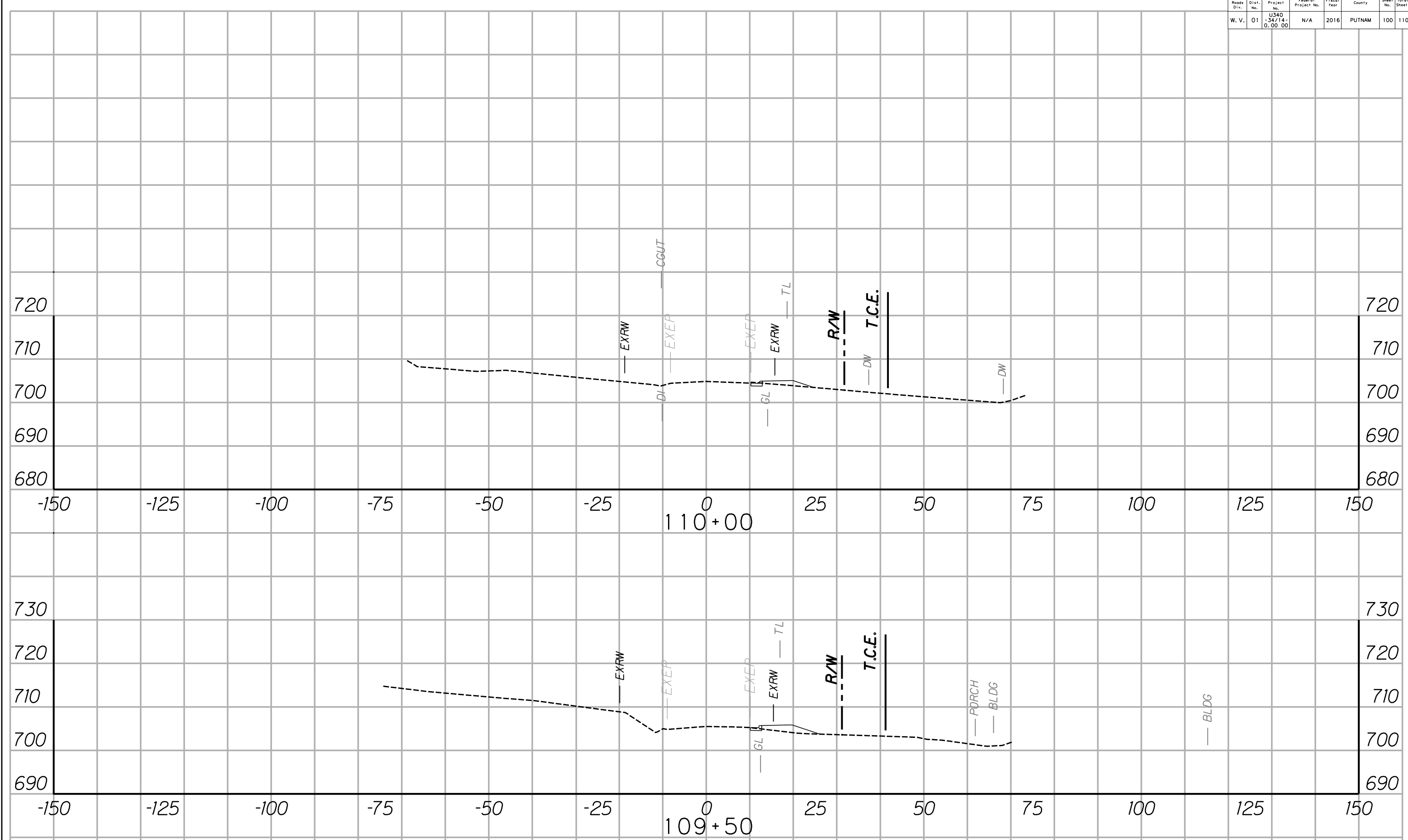
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 100+00 to Sta. 103+35



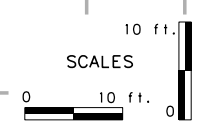
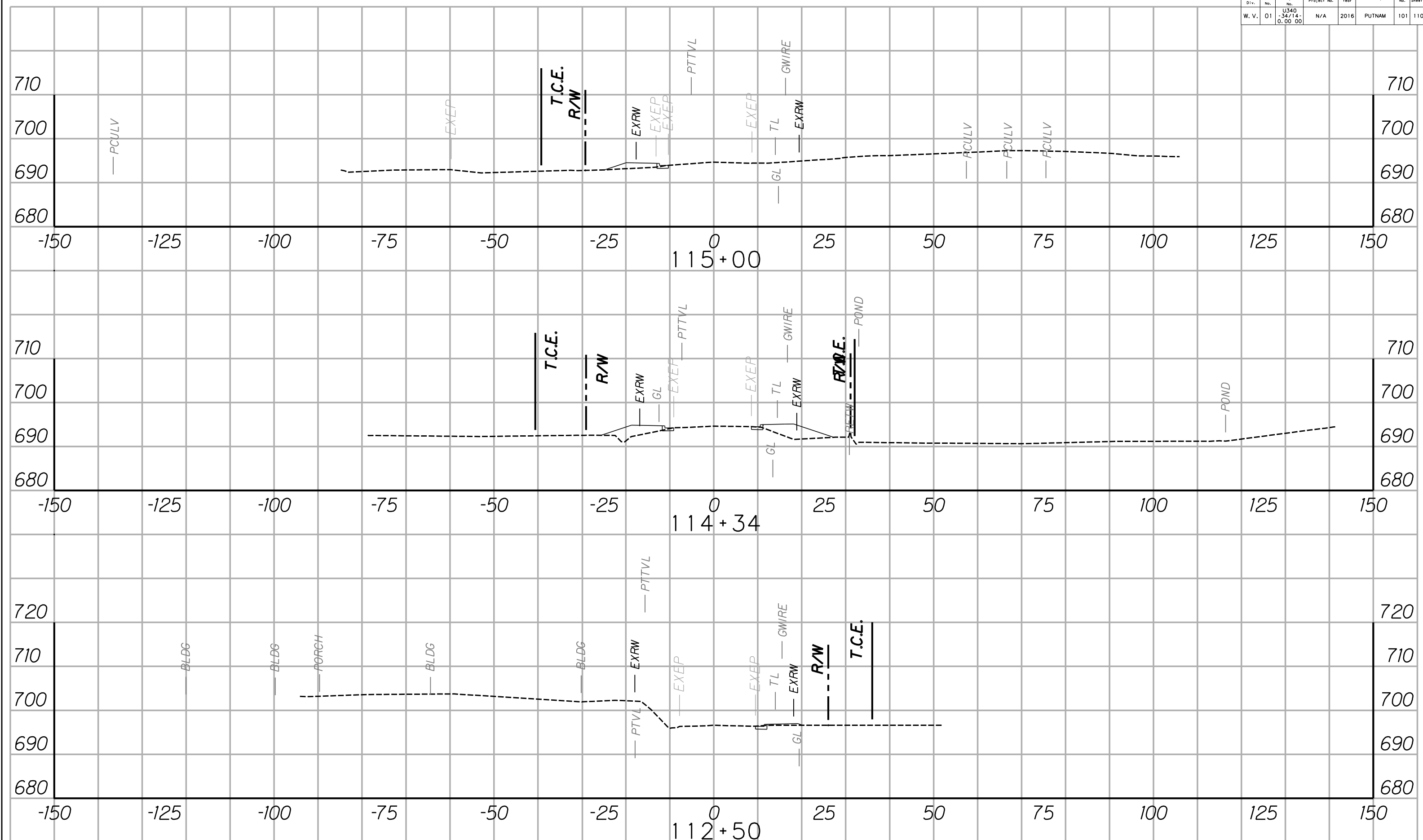
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 105+00 to Sta. 108+50



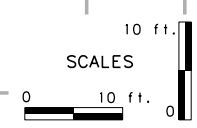
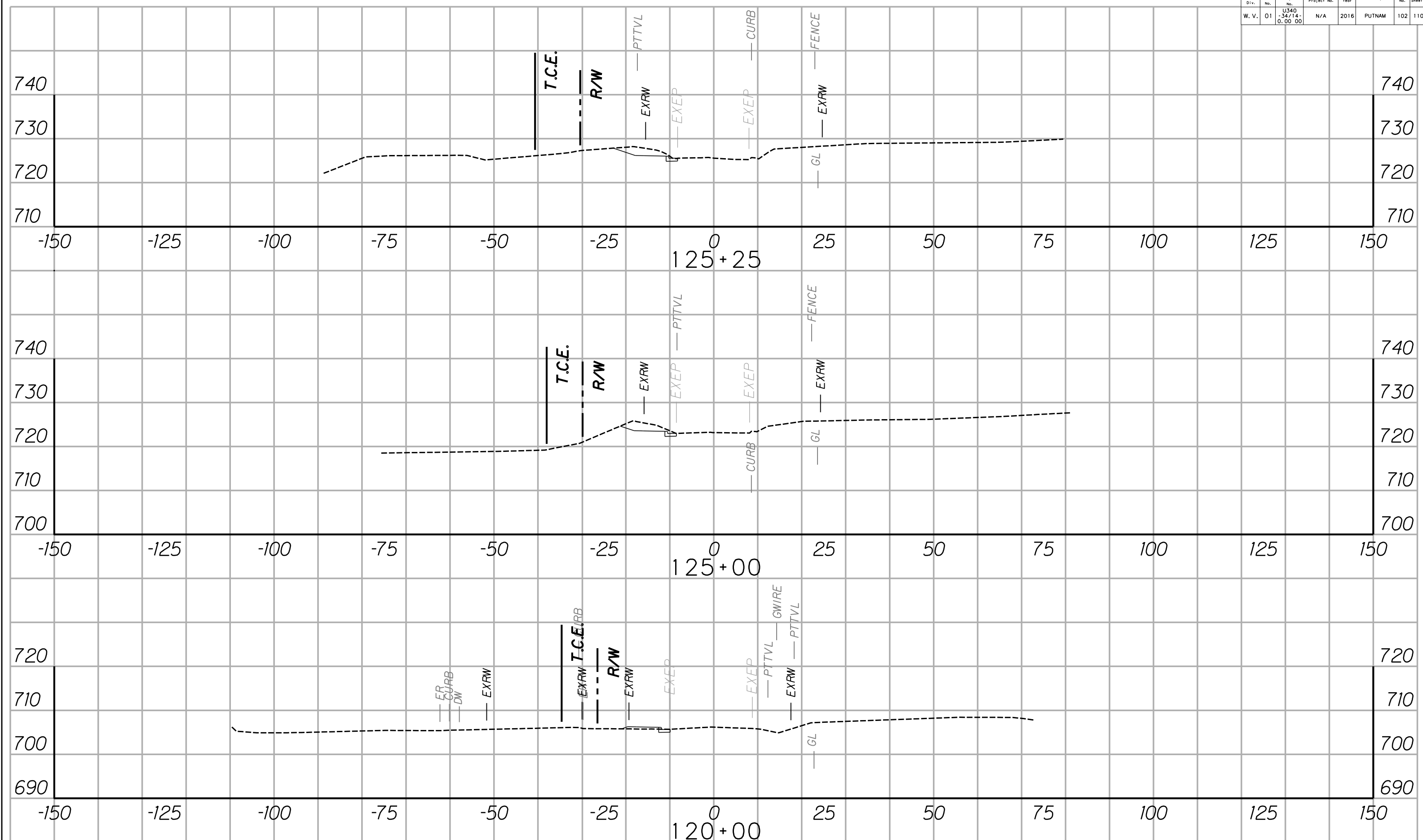
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 109+50 to Sta. 110+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

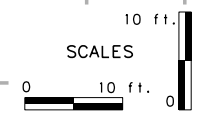
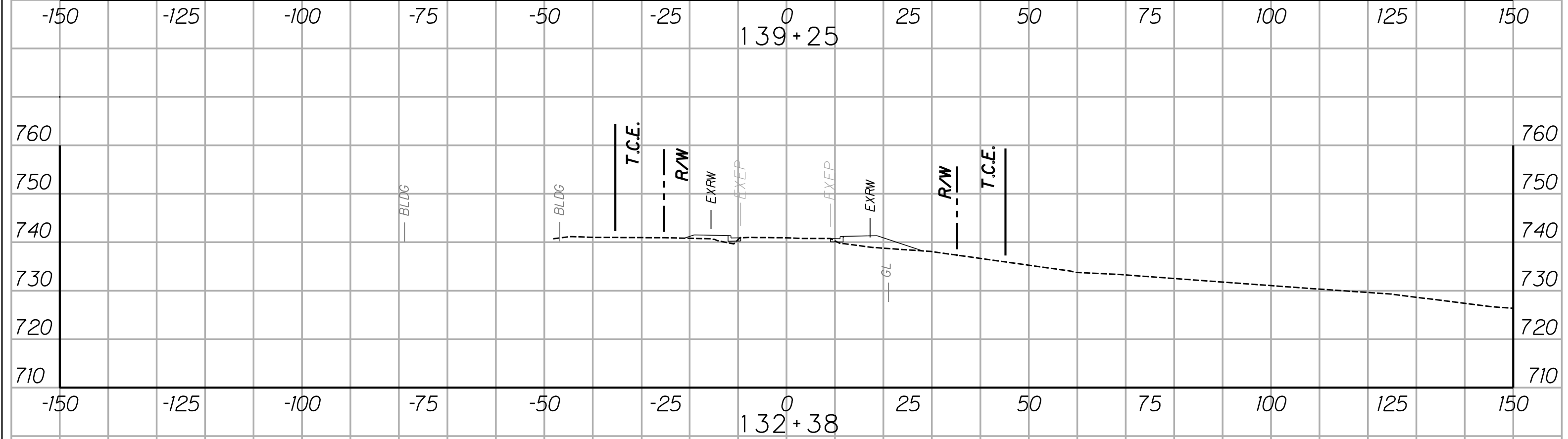
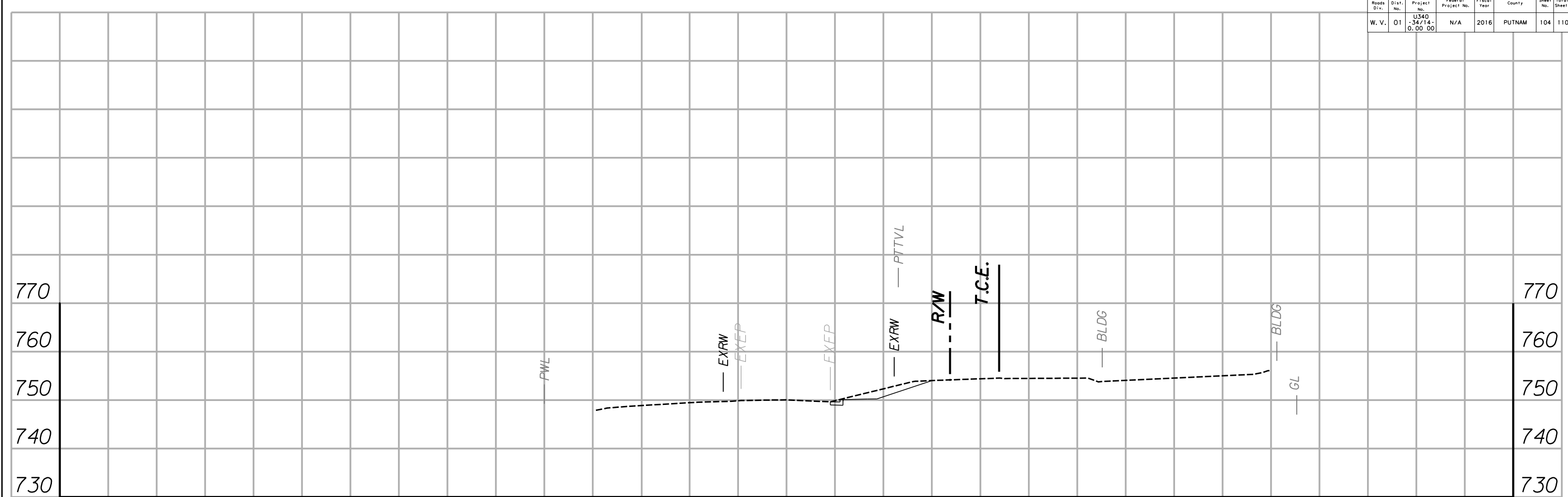
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 112+50 to Sta. 115+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 120+00 to Sta. 125+25

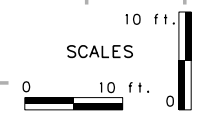
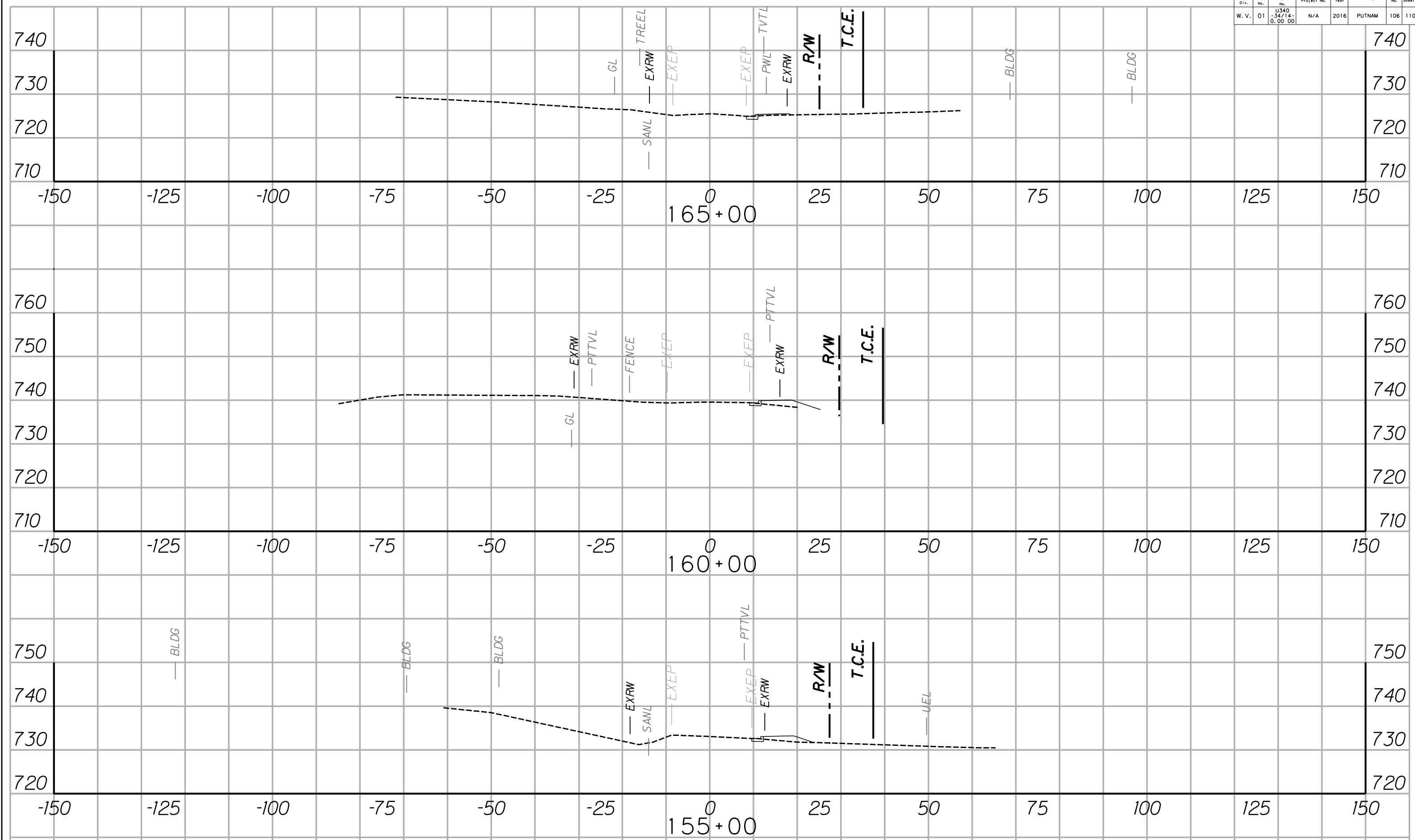




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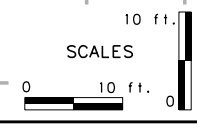
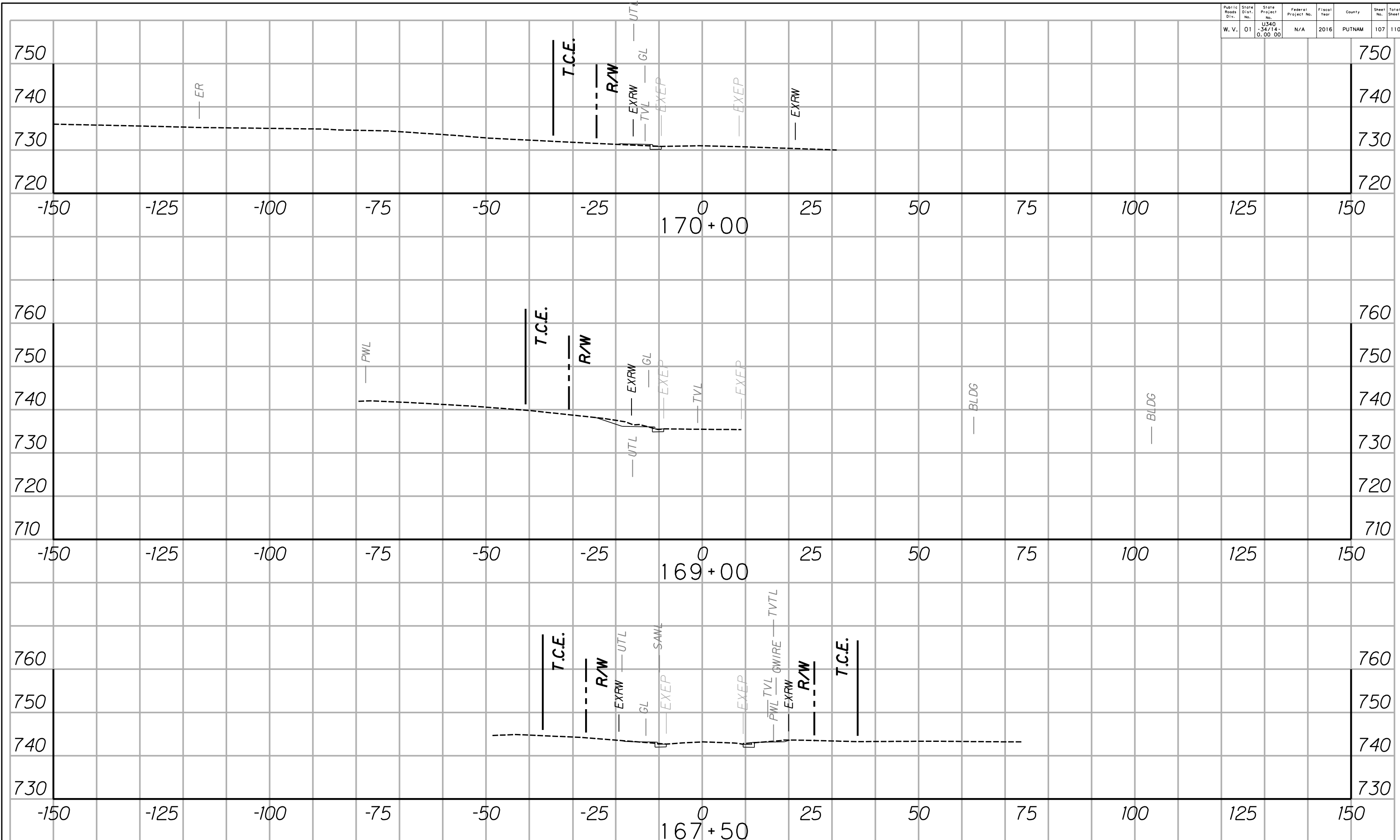
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 132+38 to Sta. 139+25





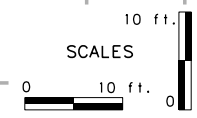
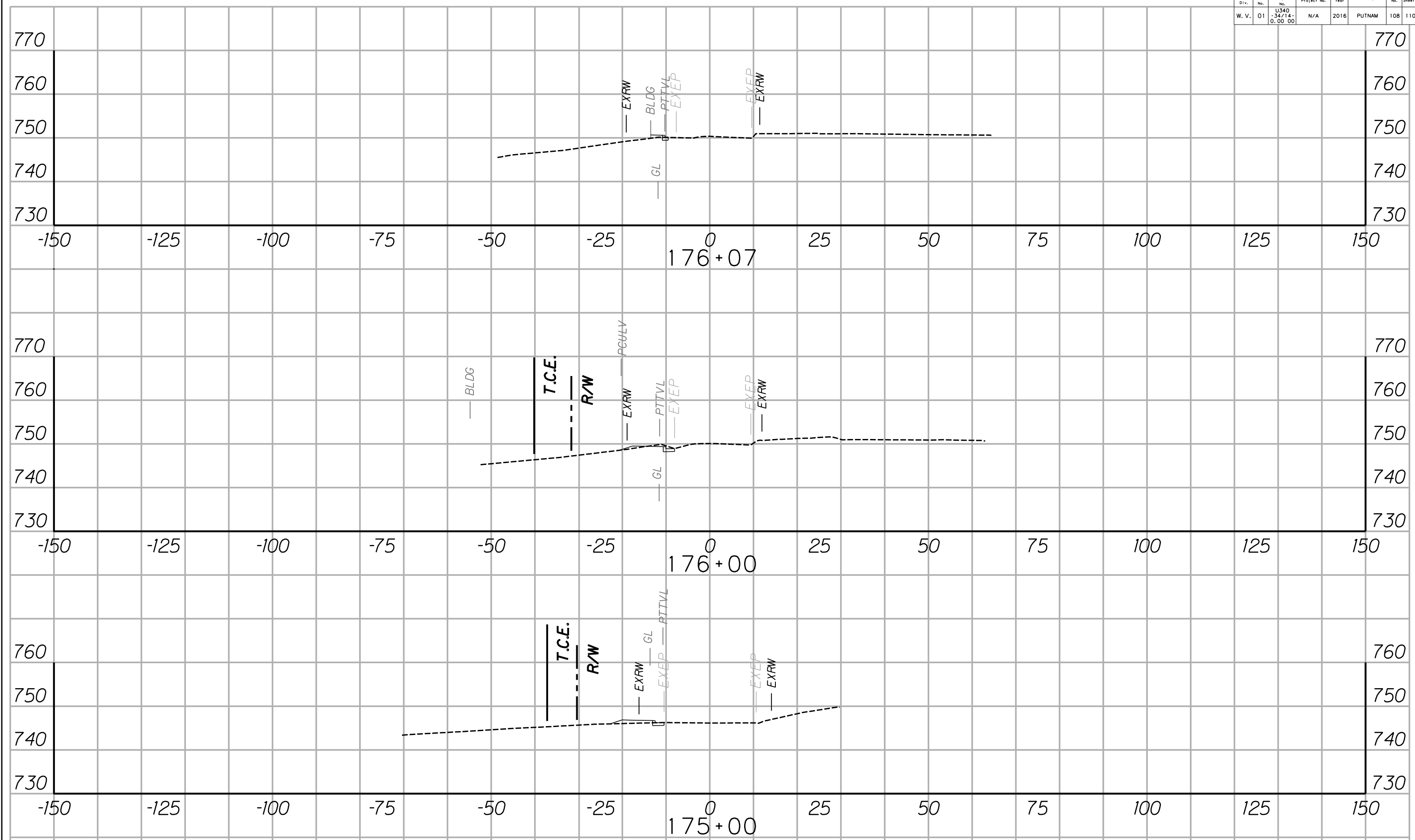
REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 155+00 to Sta. 165+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

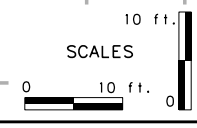
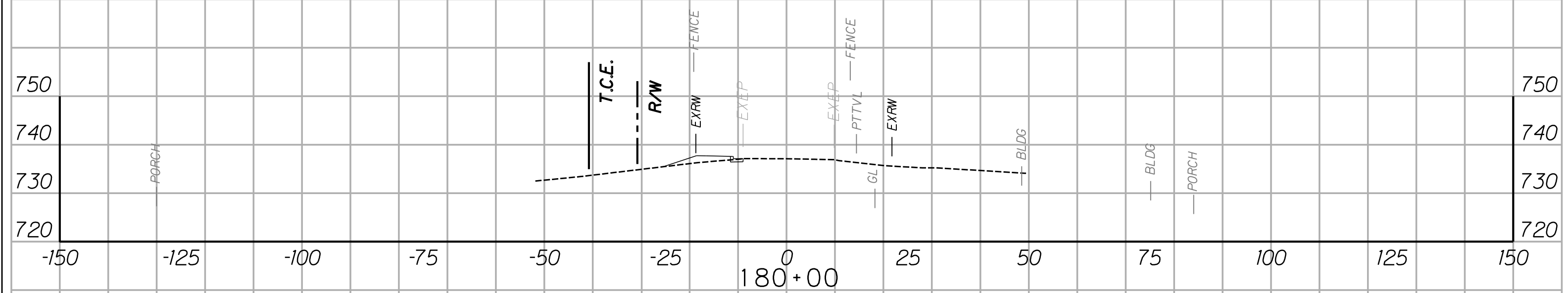
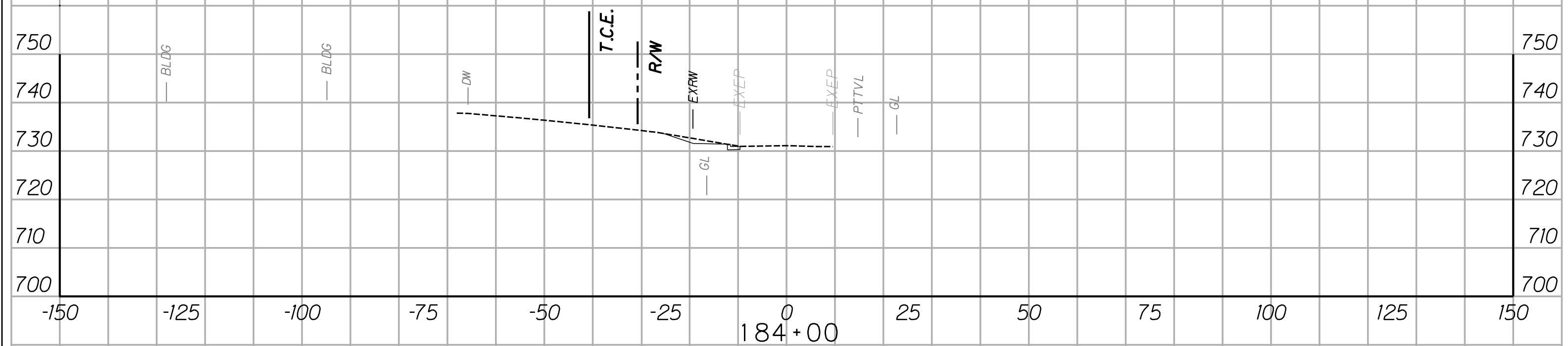
THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
Sta. 167+50 to Sta. 170+00



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 175+00 to Sta. 176+07

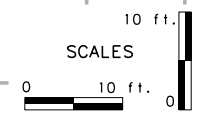
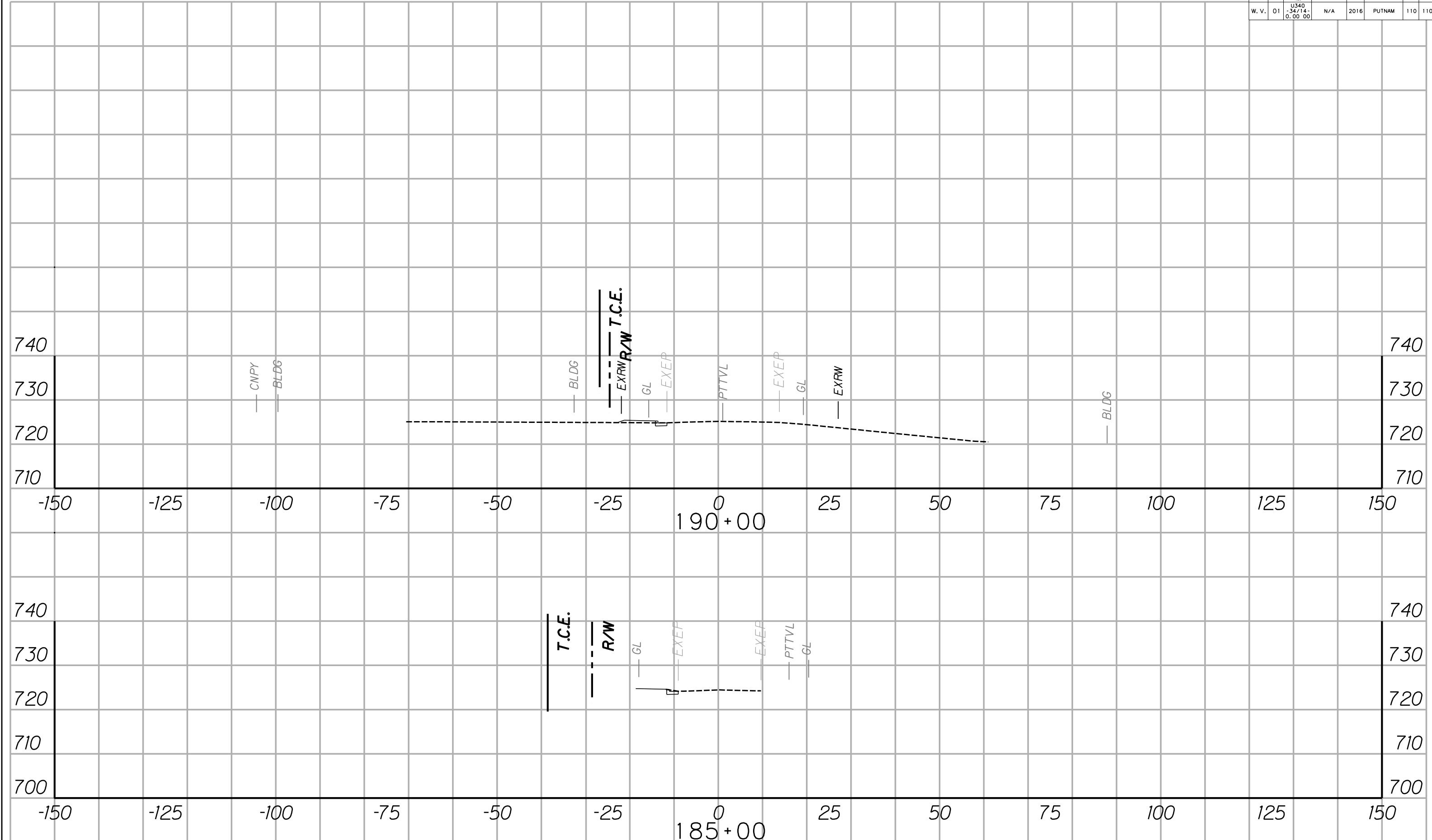
Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	109	110



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 180+00 to Sta. 184+00

Public Roads Div.	State Dist. No.	State Project No.	Federal Project No.	Fiscal Year	County	Sheet No.	Total Sheets
W. V.	01	US40 -34/14- 0.00 00	N/A	2016	PUTNAM	110	110



REVISION NUMBER	SHEET NUMBER	REVISION	DATE	BY

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**CROSS-SECTION SHEET**  
 Sta. 185+00 to Sta. 190+00