

# **Noise Technical Report**

## **I-75 and I-24 Interchange Phase 2 (IA)**

### **Hamilton County, Tennessee**

**Phase I: Based on Design Build Proposal Plans, dated 2019**

**Phase II: Based on Preliminary Plans, dated 2021**

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## 1.0 EXECUTIVE SUMMARY

The I-75 Interchange at I-24, Phase 2 project is “Type I” per the Federal Highway Administration (FHWA) noise regulation; *Procedures for Abatement of Highway Traffic and Construction Noise*, 23 CFR 772 (FHWA, 2010) and requires a noise study.

This study was conducted per the FHWA noise regulation; the *Tennessee Department of Transportation’s (TDOT) Policy on Highway Traffic Noise Abatement* (TDOT, July 15, 2011); and Section 5.3.4 (Noise) of the *Tennessee Environmental Procedures Manual* (TDOT, 2011). The study determined the number and locations of impacted noise-sensitive land uses under the Build Alternative and evaluated noise abatement to mitigate those impacts.

The study identified 22 areas of noise-sensitive land uses, called Noise Analysis Areas (NAAs), along the project corridor. Fifteen NAAs have Category B residential land uses and ten NAAs have Category C land uses including swimming pools, churches, schools, golf courses, a soccer field, and a greenway. Two NAAs include a Category E land use (gazebos at an office complex and a restaurant at a soccer stadium), and five NAAs include Category D land uses that do not have exterior areas of frequent human use and must be evaluated for interior impacts (churches and a college facility).

Short-term and long-term noise measurements were conducted at locations in the project area to characterize the existing noise environment. Existing worst-hour measured noise levels range from a low of 60 *A-weighted* decibels (dBA) to a high of 77 dBA. The differences in measured noise levels are primarily a function of the distance between the measurement locations and the interstate.

The FHWA Traffic Noise Model Version 2.5 (TNM) computer program predicted design year 2045 worst-hour noise levels under the Build Alternative for the noise-sensitive land uses in each NAA. Noise impacts were then evaluated by comparing design year noise levels to FHWA’s Noise Abatement Criteria (NAC) and existing noise levels.

The project will not substantially increase noise levels, so all resulting impacts are based on the NAC. The predicted design year noise levels in three NAAs (9, 16, and 20) are below the NAC, so these NAAs are not impacted. However, land uses in 19 NAAs are predicted to be impacted. The impacted Category B land uses include 418 residences. Impacted Category C land uses include Our Lady of Perpetual Help athletic field and sitting area in NAA 1, Brainerd Crossroads soccer field and Calvary Baptist Church basketball goal in NAA 2, the Midtown Ridge Apartments swimming pool in NAA 6, the Chattanooga Charter School playground in NAA 8, the Brown Acres Golf Course in NAAs 10 and 11, the community swimming pool in NAA 12, the Concord Golf Course/Club in NAA 15, and the South Chickamauga Creek Greenway in NAA 19.

Two Category D (interior) land uses are predicted to be impacted: The Calvary Baptist Church in NAA 2 and the North Terrace Church of Christ in NAA 22. One Category E land use is predicted to be impacted: a gazebo at The Pointe Center office complex in NAA 13.

Noise abatement was evaluated for the impacted land uses in each of the 19 impacted NAAs per TDOT's noise policy and procedures. For noise barriers to be included in a project, they must be determined to be both feasible and reasonable.

NAA 7 is protected by an existing noise barrier. Additional noise abatement is not feasible since there are no impacted first-row residences. Similarly, noise barriers are not feasible for NAAs 5, 12, and 14 since there are no impacted *first-row* land uses. The Brown Acres Golf Course is located between the impacted residences in NAA 12 and the interstate, and a commercial property exists between the impacted residences in NAA 14 and the interstate, making these residences *second-row* relative to I-75. A noise barrier for the Brainerd Baptist Church soccer field in NAA 2 is not acoustically feasible although a noise barrier for the residences in NAA 2 is acoustically feasible. Noise barriers for the other NAAs are preliminary feasible.

The feasible barriers also meet TDOT's Noise Reduction Design Goal. Each feasible barrier that also met the Noise Reduction Design Goal was evaluated to determine if the required barrier *area per benefited residence* was less than the *allowable barrier area per benefited residence* and, therefore, preliminarily reasonable.

Noise barriers for NAAs 8, 10, 11, 13, 15, and 19 are not reasonable because the required *area per benefited residence* is greater than the allowable *area per benefited residence*. However, the required *area per benefited residence* is less than the allowable *area per benefited residence* for NAAs 1 (residences), 2 (residences), 3, 4, 6, 21, 22, 23, and 24. TDOT solicited the viewpoints of the benefited residents and property owners of these nine NAAs as required by the FHWA noise regulation and TDOT's noise policy. The results indicate community support for the construction of the barriers: 361.5 weighted responses support the barriers, and 15 weighted responses oppose the barriers. Ninety-six percent (96%) of the benefited responses (weighted) supported the barriers, while only 4% of the benefited responses (weighted) opposed the barriers. Therefore, noise barriers for these NAAs are likely to be included in the project plans. The proposed locations are shown in Figure 12.

### *Construction Noise*

Construction activities could produce intermittent noise that exceeds the noise levels generated by existing heavy traffic on I-24 and I-75. The generated noise levels will depend on the types of equipment, time and duration of activities, distances between the activities and land uses, and intervening shielding. TDOT's construction specifications will apply to this project.

### *Information for Local Officials*

Most land in the project area is developed, especially along I-24. However, a few tracts are undeveloped, including large tracts on the southeast and southwest quadrants of the interchange. Existing properties could also be redeveloped in the future. The FHWA noise regulation does not allow federal funds to be used to construct noise abatement for new land uses. Therefore, TDOT encourages the local governments with jurisdiction over these lands, as well as potential developers of these lands, to practice noise compatibility planning to avoid future noise impacts.

## 2.0 INTRODUCTION

In coordination with FHWA, TDOT is improving the I-75 interchange at I-24 in Chattanooga, Hamilton County to increase the safety, efficiency, and operation of the interstate, while providing congestion relief and addressing the existing interchange deficiencies. The project area includes I-24 from west of Germantown Road to the I-24/I-75 interchange and I-75 from near Ringgold Road to the East Brainerd Road interchange. The project involves widening and adding lanes to the interchange ramps.

The project is *Type I* per the FHWA noise regulation and requires a noise study. TDOT previously prepared the initial noise study for the project using functional project plans dated June 19, 2017. The results were summarized in the Categorical Exclusion (CE) for the project that FHWA approved on March 27, 2018.

That study identified 19 NAAs and concluded that the project would create noise impacts in 16 NAAs. Noise barriers were evaluated for each NAA per TDOT's noise policy and procedures. Noise barriers for 11 of the 16 impacted NAAs were determined to be either not feasible or not reasonable. However, noise barriers were determined to be preliminarily feasible and reasonable for NAAs 1, 2, 3, 4, and 7.

On July 9, 2018, TDOT submitted an interchange modification request to FHWA that included changes to the welcome center ramps. Those changes did not affect the noise study results and conclusions. FHWA approved TDOT's construction reevaluation for those changes on July 25, 2018.

On February 13, 2019, TDOT submitted another interchange modification request to FHWA that involved the reconfiguration of the vertical alignment of the I-75 mainline and interchange ramps and reduction in the design speed from 55 mph to 50 mph, and FHWA approved the request. TDOT then developed Definitive Design Plans for Phase 1 of the project that included I-24 from Spring Creek to the interchange and I-75 from Ringgold Road to east of East Brainerd Road. The changes to the plans affected the noise study results for NAA 7, so the analysis for NAA 7 was updated and included in TDOT's construction reevaluation, which FHWA approved on July 10, 2019. The noise barrier for NAA 7 was constructed as part of Phase 1.

TDOT is now conducting a Categorical Exclusion (CE) for Phase 2 of the project and determined that all the NAAs within the Phase 2 project limits should be evaluated using the current plans and traffic projections. This report documents the results of the noise analysis of Phase 2. The project area and limits are shown in Figure 1. The cover pages and typical cross-sections from the current project plans are included in Appendix A.

## 3.0 NOISE EVALUATION

This study includes the following tasks:

- *Identification of noise analysis areas*: Identification of existing land uses in the project area that are sensitive to highway traffic noise

- *Determination of existing noise levels:* Measurement and prediction of existing noise levels at sensitive land uses to characterize the existing noise environment in the project area
- *Determination of future noise levels:* Prediction of future, design year, worst-hour noise levels for the No-Build and Build Alternatives
- *Determination of traffic noise impacts:* Determination of noise impacts based on the increase in existing noise levels, as well as design year noise levels
- *Noise abatement evaluation:* Evaluation of noise abatement for areas determined to be impacted by the project
- *Discussion of construction noise*
- *Information for local officials*

Each of these analysis steps is discussed below following a discussion of TDOT's criteria for determining noise impacts.

### 3.1 Criteria for Determining Impacts

#### 3.1.1 Traffic Noise Terminology

Traffic noise levels are expressed in terms of the hourly, A-weighted equivalent sound level in decibels (dBA). A sound level represents the level of the rapid air pressure fluctuations caused by sources (such as traffic) that are heard as noise. A decibel is a unit that relates the sound pressure of noise to the faintest sound the young human ear can hear.

The A-weighting refers to the amplification or attenuation of the different frequencies of the sound (subjectively, the pitch) to correspond to the way the human ear "hears" these frequencies. Generally, when the sound level exceeds the mid-60 dBA range, outdoor conversation in normal tones at a distance of three feet becomes difficult. Common indoor and outdoor sound levels are shown in Figure 2.

A 9-10 dB increase in sound level is typically judged by the listener to be twice as loud as the original sound, while a 9-10 dB reduction is judged to be half as loud. Doubling the number of sources (i.e., vehicles) will increase the hourly equivalent sound level by approximately 3 dB, which is usually the smallest change in hourly equivalent A-weighted traffic noise levels that people can detect without specifically listening for the change.

Because most environmental noise fluctuates from moment to moment, it is standard practice to condense data into a single level called the equivalent sound level ( $L_{eq}$ ). The  $L_{eq}$  is a steady sound level that would contain the same amount of sound energy as the actual time-varying sound evaluated over the same period. The  $L_{eq}$  averages the louder and quieter moments but gives much more weight to the louder moments in the averaging. For traffic noise assessment purposes,  $L_{eq}$  is typically evaluated over the worst one-hour period and is defined as  $L_{eq}(1h)$ .

The term insertion loss (IL) is generally used to describe the reduction in  $L_{eq}(1h)$  at a location after a noise barrier is constructed. For example, if the  $L_{eq}(1h)$  at a residence before a barrier is constructed is 75 dBA and the  $L_{eq}(1h)$  after a barrier constructed is 65 dBA, then the insertion loss would be 10 dB.

### 3.1.2 Noise Abatement Criteria (NAC)

Noise impact is determined by comparing future project noise levels to 1) a set of Noise Abatement Criteria (NAC) for a particular land use category and 2) to existing noise levels. The FHWA noise regulation and TDOT's noise policy state that traffic noise impacts require consideration of abatement when worst-hour noise levels approach or exceed the NAC listed in Table 1. TDOT's noise policy defines "approach" as one decibel below the NAC, or 66 dBA for Category B and C land uses. The FHWA noise regulation and TDOT's noise policy also define impacts to occur if there is a *substantial increase* in existing noise levels. TDOT's criteria to define substantial noise increases are presented in Table 2.

## 3.2 Noise Analysis Areas

The Phase 1 noise study included 19 NAAs. The land uses within the Phase 2 project limits were reviewed to identify any changes or additions to the NAAs. The NAAs studied for Phase 1 are all within the Phase 2 project limits except NAAs 17 and 18, which are along I-75 south of the project limit. Therefore, NAAs 17 and 18 were not included in this study.

The Chattanooga Red Wolves Soccer facility was not permitted at the time of the previous study but is now under construction. The facility is on the west side of I-75 south of the interchange and was included as NAA 20 in this study. Development plans on the Red Wolves website show that the facility will include a soccer field; stadium seating on the east, west, and north sides; a playground; and a restaurant with outdoor seating.

The west project limit along I-24 has also been extended to just west of Germantown Road. The areas on the north and south sides of I-24 between Belvoir Avenue and west of Germantown Road have been added as NAAs 21 through 24.

As a result, this study includes a total of 22 NAAs. Figures 3 through 6 show the NAA locations and Table 3 lists the land uses in each NAA. Fifteen (15) NAAs have Category B residential land uses. Ten (10) NAAs have Category C land uses including Our Lady of Perpetual Help Church and School football field, playground, and sitting area (NAA 1); Brainerd Crossroads soccer field and Calvary Christian School playground and basketball goal (NAA 2); First Church of the Nazarene and the Jewish Community Federation of Greater Chattanooga playgrounds (NAA 6); Chattanooga Charter School of Excellence playground (NAA 8); Brown Acres Golf Course (NAAs 10 & 11); a community swimming pool (NAA 12); Concord Golf Course/Club (NAA 15), South Chickamauga Creek Greenway (NAA 19); and the Chattanooga Red Wolves Soccer field, seats, and playground (NAA 20). Noise impacts will be identified, and noise abatement will be considered for these Category B and C land uses, if design year noise levels are 66 dBA or higher, or if the project causes a *substantial increase* in existing noise levels.

Five NAAs include Category D land uses that do not have exterior areas of frequent human use and must be evaluated for interior impacts. These uses include the First Bible Missionary Baptist Church (NAA 1), the Calvary Church (NAA 2), the East Ridge Church of Christ (NAA 3), the Virginia College School of Business and Health (NAA 9), and the North Terrace Church of Christ (NAA 22). Noise impacts will be identified, and noise abatement will be considered if

interior design year noise levels are 51 dBA or higher, or if the project causes a substantial increase in existing noise levels.

Two NAAs include Category E land uses: two gazebos at The Pointe Centre office complex (NAA 13) and a restaurant with outdoor seating at the Chattanooga Red Wolves Soccer facility (NAA 20). Noise impacts will be identified, and noise abatement will be considered for these Category E land uses if design year noise levels are 71 dBA or higher, or if the project causes a substantial increase in existing noise levels.

Numerous Category F commercial properties exist within the project limits. As indicated in Table 1, these land uses are not noise-sensitive and do not have an NAC. Therefore, they have not been included in the noise study. The Physician's Care Medical Clinic at 403 McBrien Road (NAA 5) and several office buildings in the project area that do not have exterior areas of frequent human use are also Category F.

Finally, some tracts of Activity Category G undeveloped lands exist in the project area. These undeveloped lands are not noise-sensitive and have not been included in the noise analysis. However, noise impacts could occur in the future if noise-sensitive land uses are constructed near I-24 and I-75. A discussion of future noise levels and the need for noise-compatible land use planning is provided later in this report in the "Information for Local Officials" in Section 3.8.

### 3.3 Existing Noise Levels

The analysis used *Method 3: Measurement and Prediction of Existing Noise Levels* of TDOT's noise procedures to determine existing noise levels in the project area. Method 3 also includes validation of TNM for selected sites.

#### 3.3.1 Noise Measurements

Noise measurements at several noise-sensitive land uses were conducted on September 17-18, 2014, for the previous noise study. Measurements were repeated at many of these sites on September 29, 2021, to ensure the measurements are representative of current conditions. Additional measurements were conducted in NAA 20, for the Chattanooga Red Wolves Soccer Stadium that is under construction, and in NAAs 21 and 22, which were not within the limits of the previous noise study. Additionally, while there were measurements at 1039 Roselawn Drive in both 2014 and 2021, the measurements were in different locations in the yard due to contingencies that arose during the field work. The existing noise levels at the measurement locations are summarized in Table 4 and shown in Figures 7 through 11. Noise measurement data sheets and site photographs are included in Appendix B.

Short-term (20 to 25 minute) measurements at all locations were conducted using one-minute intervals. Background noise (e.g., dog barking, sirens, etc.) during these measurements was noted, and the corresponding one-minute measurement intervals were eliminated.

Noise levels vary throughout the day depending on the proximity of noise-sensitive land uses to roads and other noise sources. Noise levels can also vary with environmental changes, including shifts in wind speed and direction and changes in the vertical temperature profile. As a

result, the short-term measurement data provides only a snapshot of the existing noise environment at each measurement location. To gain an understanding of noise level changes throughout the day, reference microphones were used to collect continuous noise level data. The reference microphones for the 2014 noise measurements were located adjacent to I-24 near the Unitarian Universalist Church (3224 Navajo Drive) and adjacent to I-75 within the I-75 right-of-way directly in front of the Chattanooga Veteran's Affairs (VA) Clinic (1208 Pointe Centre Drive). The reference microphones for the 2021 noise measurements were located adjacent to I-24 near the North Terrace Church of Christ (3701 North Terrace) and at the right-of-way fence of I-75 near the Chattanooga VA Clinic, 50 feet further from I-75 than the 2014 reference. The hourly noise levels at these reference sites are in Appendix B.

The long-term data at these reference sites were used to develop adjustments that were applied to measurements conducted during off-peak periods to arrive at the worst-hour noise levels presented in Table 4. The worst-hour existing noise levels range from a low of 60 dBA at 5508 Miller Drive in NAA 7, which is behind an existing noise barrier, to a high of 77 dBA at 4511 Rockford Lane in NAA 2, which is only 115 feet away from the interstate with an unobstructed view of the near lanes of traffic. The differences in measured noise levels are primarily a function of the distance between the measurement locations and I-24 or I-75 and the presence of intervening terrain or other objects that affects noise propagation.

### 3.3.2 Model Validation

Validation involves conducting noise measurements at locations near the existing roadway while counting vehicles and documenting travel speeds on the road. The traffic volumes and speeds during the measurement period are input into a TNM model that represents existing conditions. The predicted noise levels from TNM are then compared to the measured noise levels. Per FHWA, if the levels are within 3 dB, the model is considered *validated* and can be used to predict noise levels. If the model is not within 3 dB, then the model is not considered *validated* until additional measurements are conducted or until the reason for the discrepancy is identified or the model is corrected.

Noise measurements for TNM model validation were conducted at three (3) community locations adjacent to I-24 and I-75 on September 30, 2021:

- 529/531 Brookfield Avenue (NAA 1)
- South Howell Avenue and South Terrace (NAA 3)
- The Pointe Centre (gazebo) (NAA 13)

Traffic volumes by vehicle type were counted from video footage taken during each measurement period, and speed data was collected for each vehicle type using a radar gun. Noise measurement data sheets and site photographs for the validation locations, as well as noise measurement and traffic data, are in Appendix B. TNM predicted the noise level for each validation site based on the input traffic and speed data for the associated measurement period.

I-24 and I-75 are Portland Cement Concrete (PCC) pavement. TNM includes a "PCC pavement" type; however, it is important to understand the differences between the noise generating characteristics of the *TNM* PCC pavement and the *actual* PCC on I-24 and I-75. Therefore,



pavement reference noise measurements were also conducted on September 30, 2021, and TNM was used to predict the noise levels at these locations in the same manner as for the community locations. The validation results for the pavement reference locations are summarized in Table 5. As shown, the I-24 PCC pavement generates noise levels that are 0.9 dB lower than the predicted TNM level, and the I-75 PCC generates noise levels that are 1.3 dB lower than the predicted TNM level.

These pavement adjustments were applied to the predicted noise levels at the validation locations in the community to account for the difference between the I-24 and I-75 PCC pavements and the TNM PCC pavement. The validation results are summarized in Table 6. As shown, the differences between the predicted and measured levels at all three validation locations are within 3 dB. Therefore, the model is considered “validated.”

### 3.3.3 Prediction of Existing Noise Levels

Noise modeling of the project area was completed using TNM per *TDOT Guidelines for Noise Modeling Using FHWA's Traffic Noise Model* (TDOT, 2010). MicroStation design files of the project plans (provided by TDOT) were used to help develop the TNM runs. When developing the TNM files, the points of TNM objects (including roadways, receivers, barriers, terrain lines, and building rows) were first digitized into MicroStation Powerdraft. Elevations were determined from both the Hamilton County GIS and project plans. The noise-sensitive land uses in each NAA were modeled as receivers.

TDOT's Strategic Transportation Investments Division developed traffic projections for the project for the base year 2025. These volumes include 15% daily trucks on I-24 and 18% daily trucks on I-75. The traffic data is provided in Appendix C. The base year 2025 volumes were reduced to reflect year 2021 conditions and entered into the TNM model of existing conditions. The posted speed of 55 mph was modeled on I-24 and I-75, and the posted speed of 45 mph was modeled for North and South Terrace. The applicable posted speeds were also modeled on local roads.

The predicted existing noise levels at the noise-sensitive land uses are summarized for each NAA in Table 7. Tables showing the predicted existing noise levels at each receiver are provided in Appendix E. Existing predicted noise levels range from 40 (interior) to 78 dBA. The residences with the highest noise levels are closest to I-24 and I-75.

The TNM quality control checklist and plan views showing all modeled TNM objects including the location of the modeled roadways and receivers are included in Appendix D.

## 3.4 Future Noise Levels

TDOT's Strategic Transportation Investments Division developed traffic projections for the project for the design year 2045. These projections include traffic volumes for the “design hour” which represents a theoretical “worst traffic” condition. The noise analysis used these traffic projections since they represent the combination of traffic volume and speed that would generate the highest noise levels and, therefore, represent the worst noise hour. Additionally, the design hour traffic projections at some locations are higher than what could be

accommodated at the posted speed, which provides a conservative estimate of potential traffic noise impacts. The design year traffic projections are included in Appendix C.

#### 3.4.1 No-Build Alternative

Noise levels for the No-Build Alternative can be reasonably estimated by evaluating existing and future traffic volumes on I-75 and I-24. Doubling the traffic on a roadway would result in a 3 dB increase in the noise level at a given receiver, assuming all other conditions remain the same. Design year 2045 traffic volumes on I-75 and I-24 are predicted to be 21% to 28% higher than existing volumes. This increase in traffic would increase noise levels at nearby land uses by approximately 1 dB. As a result, existing noise levels were increased by 1 dB to arrive at design year 2045 noise levels for the No-Build Alternative at the measurement locations shown in Figures 7 through 11.

#### 3.4.2 Build Alternative

Noise modeling of the Build Alternative was completed using TNM in the same manner as for existing conditions. The program calculated design hour noise levels in design year 2045 for the noise-sensitive land uses in each NAA.

The project modeling utilized the current project plans included in Appendix A. The design year traffic projections provided by TDOT were used for the noise analysis. These projections indicated design hour volumes between 9 -13% total trucks on I-75 and I-24. Traffic projections are included in Appendix C. The posted speed of 55 mph was modeled on I-24 and I-75, and the posted speed of 45 mph was modeled for North and South Terrace. The applicable posted speeds were also modeled on local roads.

The predicted design year noise levels for the land uses in each NAA are summarized in Table 7 and discussed in the following section. Interior noise levels for the churches in NAAs 1, 2, 3, 9, and 22 were estimated by applying a typical 25 dB reduction for building attenuation assuming standard construction and air conditioning per FHWA guidance (FHWA, 2011).

TNM plan views showing all modeled TNM objects, including the locations of the modeled roadways and receivers, are provided in Appendix D. Tables showing the predicted future noise levels at each modeled receiver are provided in Appendix E.

### 3.5 Noise Impact Evaluation

A noise-sensitive land use is *impacted* if 1) the predicted worst hour noise level approaches or exceeds the NAC or 2) the project *substantially increases* existing noise levels. Design year noise levels for the Build Alternative are predicted to be up to 3 dB greater than existing noise levels. These increases are not “substantial” per TDOT’s noise policy. Therefore, none of the land uses are predicted to be impacted by a *substantial increase* in noise level.

Category B residences and Category C land uses would also be impacted if predicted design year noise levels are 66 dBA or higher. Similarly, Category E land uses would be impacted if

predicted design year noise levels are 71 dBA or higher, and Category D uses would be impacted if predicted interior design year noise levels are 51 dBA or higher.

As shown in Table 7, the predicted design year noise levels in NAA 9 (Virginia College School of Business and Health), NAA 16 (residences on Phyllis Lane and Durham Drive), and NAA 20 (Chattanooga Red Wolves Soccer Stadium) are below the NAC; therefore, these NAAs are not impacted. However, land uses in the other 19 NAAs *are* predicted to be impacted.

A total of 418 Activity Category B residences in 13 NAAs are predicted to be impacted.

Impacted Category C land uses include Our Lady of Perpetual Help football field and sitting area in NAA 1, Brainerd Crossroads soccer field and Calvary Baptist Church basketball goal in NAA 2, the Midtown Ridge Apartments swimming pool in NAA 6 the Chattanooga Charter School playground in NAA 8, the Brown Acres Golf Course in NAAs 10 and 11, the Concord Golf Course/Club in NAA 15, and parts of the South Chickamauga Creek Greenway in NAA 19. The impacted sections of the Greenway include approximately 400 feet of trail on the south side of I-75 and 600 feet of trail on the north side of I-75.

The interiors of two churches, the Calvary Baptist Church in NAA 2 and the North Terrace Church of Christ in NAA 22, are predicted to be impacted based on the assumed 25 dB value for building attenuation.

One Activity Category E gazebo in NAA 13 is predicted to be impacted. However, the second gazebo in NAA 13 and the restaurant outdoor seating area in NAA 20 are not predicted to be impacted.

### **3.6 Noise Abatement Evaluation**

For noise barriers to be included in a project, they must be determined to be both feasible and reasonable per TDOT's noise policy as discussed below. Noise abatement was evaluated for the impacted land uses in each of the 19 impacted NAAs per TDOT's procedures.

#### **3.6.1 Noise Barrier Feasibility**

Feasibility means that the construction of a barrier would not be anticipated to pose any major design, construction, maintenance, or safety problems, and the noise barriers will provide a noise reduction (insertion loss) of 5 dB in design year highway traffic noise levels for the majority of the impacted first-row receptors.

NAA 7 is protected by an existing noise barrier that was constructed for Phase 1 of the project. Predicted noise levels at the first-row residences behind the barrier are in the low 60 dBA range, so these residences are not impacted. However, some of the second-row residences on Miller Street are predicted to be impacted due to traffic on Miller Street. Since there are no first-row impacts, additional noise abatement would not be feasible and was not evaluated.

The impacted residence in NAA 5 is also *not* a first-row impact. Part of the Brown Acres Golf Course is between the impacted residences in NAA 12 and I-75 making the residences *second-*

row relative to I-75. This is also the case for NAA 14 where a commercial property exists between the impacted residence and I-75. Noise abatement is only feasible for impacted *first-row* land uses; therefore, noise barriers for NAAs 5, 12, and 14 are not feasible.

Noise barriers were designed and evaluated for the remaining 15 impacted NAAs. The most acoustically effective noise barrier locations for each NAA were identified and evaluated as summarized in Table 8. Appendix F shows the evaluated locations.

The most effective noise barrier location is at the shoulder for NAAs 10, 11, 15, and 19, which are along I-75, north of the interchange. The right-of-way is the most effective location for NAA 13. The shoulder is also the most effective location for NAA 8, on the north side of the interchange, and for NAAs 23 and 24, west of S Germantown Road, although NAA 23 includes a short section near the right-of-way. Various noise barrier options were identified for the remaining NAAs along I-24 that include barrier sections along the frontage roads, ramps, or shoulder. TDOT will select the options for construction for NAAs based on design and engineering factors.

Table 8 indicates if design or engineering issues are anticipated that could affect feasibility. As shown, engineering issues, such as sight distance and utility conflicts, could affect the feasibility of barriers for NAAs 1-4, 6, and 21-24. TDOT has evaluated these issues and has determined that the barriers are feasible to construct.

TNM was used to assess whether the noise barriers could be designed to provide a minimum of 5 dB IL at the majority of impacted first-row residences. This analysis indicated that 5 dB IL could be achieved at the majority of impacted first-row receptors in each of the NAAs, except for the Brainerd Crossroads soccer field at the west end of NAA 2. A 5 dB IL was not possible since the fields are already significantly shielded from I-24 by the top of cut of the south side of North Terrace. Feasibility alone does not dictate whether a noise barrier will be built. Each noise barrier must also pass a “reasonableness” test as described below.

### 3.6.2 Noise Barrier Reasonableness

For a noise barrier to be reasonable, the following conditions must be met:

1. TDOT’s Noise Reduction Design Goal must be achieved
2. The required noise barrier *area per benefited residence* must be less than or equal to the allowable *area per benefited residence*
3. The benefited residents and/or property owners must support the construction of the noise barrier

#### 3.6.2.1 Noise Barrier Design

The noise barriers were designed to meet the Noise Reduction Design Goal while also minimizing the barrier *area per benefited residence* so that the designed barrier is the one that is most likely to be reasonable per TDOT’s noise policy.

### 3.6.2.2 Noise Reduction Design Goal

For a noise barrier to be reasonable, the barrier must provide at least 7 dB noise reduction at 60% or more of the first-row benefited receptors. Noise barriers for each of the NAAs were designed to meet the Noise Reduction Design Goal. The results are shown in Table 9. As shown, the Noise Reduction Design Goal is achieved for all NAAs.

### 3.6.2.3 Noise Barrier Area Per Benefited Residence

The noise barrier *area per benefited residence* must also be less than or equal to the allowable noise barrier *area per benefited residence*. The allowable barrier *area per benefited residence* is calculated using the following equation:

	Base Allowance	_____	square feet
+	Previous Type I Widening Allowance	_____	square feet
+	Design Year Noise Levels Allowance	_____	square feet
	+ Noise Level Increase Allowance	_____	square feet
+	Noise Compatible Planning Allowance	_____	square feet
=	<b>Total Allowable Area per Benefited Residence</b>	_____	<b>square feet</b>

The values for each allowance type are shown in Table 10 and the calculation of the allowable *area per benefited residence* for each NAA is shown in Table 11. The Base Allowance for the residences in NAAs 1-4 and NAAs 21-24 is 1,500 square feet because the residences were constructed before I-24. The Brown Acres Golf Course (NAAs 10 and 11) also predated I-75 and receive a Base Allowance of 1,500 square feet. The Chattanooga Charter School of Excellence in NAA 8 was constructed in 2011 and the gazebo at The Pointe Center in NAA 13 was built in 2006. These uses receive a Base Allowance of 250 square feet. The land uses in NAAs 6, 15, and 19 were constructed after I-24 or I-75 but before 2005 and receive a Base Allowance of 750 square feet. I-75 has been widened so the adjacent NAAs (8, 10, 11, 15, and 19) receive a Type I Widening Allowance of 200 square feet. All NAAs except NAAs 19 and 22 receive a Design Year Noise Levels Allowance of 100 square feet. NAAs 19 and 22 receive a Design Year Noise Levels Allowance of 200 square feet. The project will increase noise levels between 1 and 3 dB, so Noise Levels Increase Allowances were not assigned. Hamilton County has no policies to require that noise be considered in the land development process. Therefore, the NAAs do not receive a Noise Compatible Planning Allowance. The resulting allowable *area per benefited residence* ranges from 350 to 1,800 square feet.

The required *area per benefited residence* for each NAA was then calculated by dividing the barrier area in square feet by the number of residences that would be benefited by the barrier. *Benefited* residences receive 5 dB or more of insertion loss due to the construction of the barrier. The insertion loss for each modeled receiver was used to determine the total number of benefited residences for each barrier.

Nine NAAs include common use areas that would be benefited by a noise barrier: NAA 1 includes the Our Lady of Perpetual Help football field and sitting area; NAAs 2 and 8 include playgrounds; NAA 6 includes a swimming pool; NAAs 10, 11, and 15 include golf courses;

NAA 13 includes a gazebo, and NAA 19 includes a greenway. An equivalent number of residences must be calculated for the common use areas per the TDOT's noise procedures using the following calculation:

$$\text{Equivalent Residences} = \frac{\text{Number of Users}}{\text{Number of People Per Residence}} \times \text{Usage}$$

where:

*Number of Users* = Average Number of Users during Usage Times

*Number of People per Residence* = 2.5 (Tennessee Average from Census)

*Usage* = (Hours Used Per Day/24 Hours) x (Days Used Per Year/365 Days)

The *Number of Users*, *Hours Used per Day*, and *Days Used per Year* are determined by evaluating the characteristics of each individual use. TDOT's noise procedures state that variables that might be included in assessing the *Number of Users* could include the maximum capacity of the facility or the number of parking spaces. When maximum capacities are used, these capacities are multiplied by a Typical User Factor to arrive at the average number of users during usage times.

TDOT's noise procedures state that active sports areas are not considered to be noise-sensitive since a quiet noise environment is not important for normal activities. Therefore, Our Lady of Perpetual Help's football field is equivalent to one residence. The sitting area would not be benefited by the barrier, so is not included in the reasonableness calculation.

TDOT's noise procedures include guidance on calculating the maximum number of users for playgrounds and swimming pools as shown in Table 12. The equivalent number of residences for the Calvary Baptist Church basketball goal (playground) in NAA 2 is 0.2 residences while the equivalent number of residences for the Midtown Ridge Apartments swimming pool in NAA 6 and Chattanooga Charter School playground in NAA 8 are 2.1 and 2.5 residences, respectively, as shown in Table 13.

The Brown Acres Golf Course (NAAs 10 and 11) is equivalent to 4.5 residences and the Concord Golf Course (NAA 15) is equivalent to 1.2 residences. The office gazebo in NAA 13 is equivalent to 0.3 residences, and the Chickamauga Creek Greenway (NAA 19) is equivalent to 3.7 residences.

The First Bible Mission Church in NAA 1, the Calvary Baptist Church in NAA 2, and the North Terrace Church of Christ in NAA 22 are also predicted to be benefited. However, a 5 dB reduction in interior noise levels might not be realized when noise generated by interior church activities is included. To provide a conservative analysis, the churches were not included as benefited.

The reasonableness analysis results are shown in Table 14. The required *area per benefited residence* is greater than the allowable *area per benefited residence* for NAAs 1 (football field), 8, 10, 11, 13, 15, and 19. Therefore, noise barriers for these NAAs are not reasonable.

The required *area per benefited residence* is less than the allowable *area per benefited residence* for all the options for NAAs 1 (residences), 2 (residences), 3, 4, 6, 21, 22, 23, and 24.

The predicted design year noise levels and insertion losses for each of the modeled land uses, the preliminary noise barrier design table, and the barrier locations are supplied in Appendix F. The likely noise barrier locations are shown in Figure 12 and Appendix G.

#### **3.6.2.4 Views of Benefited Residents and Property Owners**

TDOT's noise policy and procedures require that the views of the benefited property owners and residents be considered in making final noise abatement decisions. TDOT sent a questionnaire, dated November 19, 2021, to each benefited resident and property owner both via regular and certified mail. Appendix G includes a copy of the questionnaires. TDOT considered responses postmarked by December 3, 2021, in making final "reasonableness" decisions.

Responses from residents or owners of properties that are predicted to be impacted as well as benefited were counted as two responses. Responses from residents or owners of properties that are predicted to be benefited but not impacted were counted as one response. TDOT concludes that a community desires the construction of a noise barrier unless a majority (at least 51%) of the responding property owners and residents indicate that they do not want the proposed noise barrier.

The results indicate community support for the construction of the barriers: 361.5 weighted responses support the barriers, and 15 weighted responses oppose the barriers. Ninety-six percent (96%) of the benefited responses (weighted) supported the barriers, while only 4% of the benefited responses (weighted) opposed the barriers.

#### **3.6.3 Statement of Likelihood**

Based on the current project plans, noise barriers have been determined feasible and reasonable for nine NAAs: 1, 2, 3, 4, 6, 21, 22, 23, and 24. The barrier locations are shown in Figure 12. Barriers for these NAAs are to be incorporated into the project plans.

### **3.7 Construction Noise**

I-24 west of the interchange is heavily developed with residential uses, as well as several churches and schools. The only noise-sensitive land uses along I-75 south of the interchange within the project limits is the Chattanooga Red Wolves Soccer Stadium, which is under construction. Some residential development exists along I-75 north of the interchange; however, the closest residences are approximately 500 feet from I-75. The land uses immediately adjacent to I-75 north of the interchange include the Virginia College School of Business and Health, the Brown Acres Golf Course, the Concord Golf Course/Club, and The Pointe Centre gazebos. Construction activities could produce temporary intermittent noise at these land uses that exceeds the noise levels generated by existing heavy traffic on I-24 and I-75. The generated noise levels will be temporary and will depend on the types of equipment, time and duration of activities, distances between the activities and land uses, and intervening shielding.

Construction procedures will be governed by TDOT's Standard Specifications for Road and Bridge Construction (TDOT, 2021), as amended by the most recent applicable supplements.

Construction equipment will meet the standards set forth in Section 108.04.B (Methods and Equipment).

### 3.8 Information for Local Officials

Undeveloped tracts of land are adjacent to I-24 and I-75. TDOT encourages the local governments with jurisdiction over these lands, as well as potential developers of these lands, to practice noise compatibility planning to avoid future noise impacts. The following language is included in TDOT's noise policy:

*"Highway traffic noise should be reduced through a program of shared responsibility. Local governments should use their power to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway or that the developments are planned, designed and constructed in such a way that noise impacts are minimized."*

FHWA developed two guidance documents on noise-compatible land use planning: The Audible Landscape: A Manual for Highway Noise and Land Use (FHWA, 1974) and Entering the Quiet Zone: Noise Compatibility Land Use Planning (FHWA, 2002).

Design year noise levels for areas along I-24 and I-75 where vacant and possibly developable lands exist are listed in Table 15. Noise predictions were made at distances of 100 to 600 feet from the centerline of the near lane for the design year 2045. Noise levels within approximately 450 feet of the centerline of the near lane of I-24 and I-75 will approach or exceed the NAC of 66 dBA. Noise-sensitive land uses should generally not be constructed in these areas unless noise mitigation measures are provided by the developer.

The values in Table 15 do not represent predicted levels at every location at a particular distance from the roadway. Noise levels will vary with changes in terrain and will be affected by the shielding of objects, such as buildings. This information is being included to make local officials and planners aware of anticipated highway noise levels so that future development will be compatible with these levels.

Finally, TDOT has constructed Type II or "retrofit" noise barriers along existing highways. TDOT's noise policy includes the criteria for a neighborhood to qualify for a Type II noise barrier. The I-75 Interchange at I-24, Phase 2 project will also provide Type I noise barriers for large parts of two areas that have been on TDOT's Type II project list since the program was established. Those areas can be removed from TDOT's Type II list.

### 3.9 Meteorological (Weather) Effects on Noise Levels

Noise levels from highways or other sources are louder or quieter during certain times of the day or year. Changes in weather conditions are often the cause of these higher or lower noise levels. The effects on a community depend on the distance to highways and the frequency and duration of certain weather conditions.



Higher noise levels will be more common in areas where the wind typically blows from a highway toward a community (*downwind*) than in locations where the wind blows from the community toward the highway (*upwind*). Downwind conditions cause sound waves to bend back toward the earth and increase sound levels.

When the air above the ground is warmer than the air near the ground, a *temperature inversion* occurs that causes sound waves to bend back toward the earth and increase noise levels. Temperature inversions often occur at night when the weather is clear, and the winds are calm.

Changes in weather conditions also affect how well a noise barrier performs. Temperature inversions and downwind conditions can increase noise levels in neighborhoods protected by a noise barrier, while temperature lapses and upwind conditions can further reduce noise levels in neighborhoods protected by a noise barrier.

#### 4.0 CONCLUSIONS

The noise evaluation identified 22 NAAs within the project limits. Fifteen NAAs include Category B residential uses; ten NAAs include Category C land uses such as churches, schools, and golf courses with exterior areas of frequent human use; and two NAAs include Category E land uses. Five NAAs include Category D land uses that were evaluated for interior impacts. Existing worst-hour exterior noise levels at the measurement locations in the NAAs range from 60 dBA to 77 dBA.

Noise impacts are not predicted in NAAs 9, 16, and 20. However, noise impacts are predicted in the other 19 NAAs.

A noise abatement evaluation was conducted for each of the 19 impacted NAAs. Noise barriers are not feasible for four NAAs (5, 7, 12, and 14) because there are no first-row impacts. The noise barriers for the other 15 NAAs are feasible and meet the Noise Reduction Design Goal.

Noise barriers for six NAAs (8, 10, 11, 13, 15, and 19) are not reasonable because the required *area per benefited residence* is greater than the allowable *area per benefited residence*.

Noise barriers for nine NAAs (1, 2, 3, 4, 6, 21, 22, 23, and 24; see Figure 12) have been determined feasible and reasonable based on the current plans. Therefore, noise barriers for these NAAs are to be included in the project plans.

Construction noise effects will be temporary and intermittent, and construction will be governed by TDOT's construction specifications.

The FHWA noise regulation does not allow federal funds to be used to construct noise abatement for newly constructed land uses.

## 5.0 REFERENCES

Federal Highway Administration, November 1974, *The Audible Landscape: A Manual for Highway Noise and Land Use*.

Federal Highway Administration, May 2002, *Entering the Quiet Zone: Noise Compatibility Land Use Planning*.

Federal Highway Administration, July 2010, *Procedures for Abatement of Highway Traffic and Construction Noise*, 23 CFR 772.

Federal Highway Administration, December 1, 2011, *Highway Traffic Noise: Analysis and Abatement Guidance*.

Tennessee Department of Transportation, April 2010, *TDOT Guidelines for Noise Modeling Using FHWA's Traffic Noise Model*.

Tennessee Department of Transportation, July 13, 2011, *Policy on Highway Traffic Noise Abatement*.

Tennessee Department of Transportation, July 15, 2011, *Procedures for Highway Traffic Noise Abatement*.

Tennessee Department of Transportation, January 1, 2021, *Standard Specifications for Road and Bridge Construction*.

**Table 1: Noise Abatement Criteria in 23 CFR 772**

Activity Category	L <sub>Aeq</sub> (1h) dBA	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B <sup>(1)</sup>	67	Exterior	Residential.
C <sup>(1)</sup>	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E <sup>(1)</sup>	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A-D, or F.
F	---	---	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	---	---	Undeveloped lands that are not permitted.

(1) Includes undeveloped lands permitted for this activity category.

**Table 2: Substantial Noise Level Increase**

Existing Noise Level (dBA) <sup>(1)</sup>	Predicted Design Year Noise Level Increase (dB) <sup>(2)</sup>
42 or less	15 or more
43	14 or more
44	13 or more
45	12 or more
46	11 or more
47 or more	10 or more

(1) Worst hour noise level from the combination of natural and mechanical sources and human activity.

(2) Predicted design year noise level minus existing noise level.

**Table 3: Noise Analysis Areas**

Noise Analysis Area	Description	Activity Category	NAC (dBA)	Evaluated for Phase 1?	Within Phase 2 Project Limits?
1	South of I-24 between Belvoir Avenue and S Moore Road: Single-family and multi-family residences; the First Bible Missionary Baptist Church (interior); and Our Lady of Perpetual Help Church and School football field, playground, and sitting area (501 and 505 S Moore Road).	B, C, D	67, 52	Yes	Yes
2	North of I-24 between Belvoir Avenue and S Moore Road: Single-family and multi-family residences; the Brainerd Crossroads soccer field (4011 Austin Street); Calvary Christian School playground and basketball goal (4601 North Terrace); and the Calvary Church (interior).	B, C, D	67, 52	Yes	Yes
3	South of I-24 between S Moore Road and McBrien Road: Single-family and multi-family residences and the East Ridge Church of Christ (951 McBrien Road, interior).	B, D	67, 52	Yes	Yes
4	North of I-24 between S Moore Road and McBrien Road: Single-family and multi-family residences and the Carriage House Condominiums (315-317 McBrien Road).	B	67	Yes	Yes
5	South of I-24 between McBrien Road and Sunnyside Circle: Single-family residences on Anderson Avenue and Reneau Way.	B	67	Yes	Yes
6	North of I-24 between McBrien Road and Spring Creek Road: Single-family residences; the Midtown Ridge Apartments (312-314 McBrien Road); First Church of the Nazarene playground (5455 North Terrace); and the Jewish Community Federation of Greater Chattanooga playground (5461 North Terrace).	B, C	67	Yes	Yes

**Table 3: Noise Analysis Areas**

Noise Analysis Area	Description	Activity Category	NAC (dBA)	Evaluated for Phase 1?	Within Phase 2 Project Limits?
7	North of I-24/I-75 interchange between Spring Creek Road and Eastgate Loop: Single-family residences on Miller Drive and Honeysuckle Drive.	B	67	Yes	Yes
8	North of I-24/I-75 interchange at Eastgate Complex: Chattanooga Charter School of Excellence playground (5600 Brainerd Road).	C	67	Yes	Yes
9	North of I-24/I-75 interchange between Eastgate Loop and Greenway View Drive: Virginia College School of Business and Health (721 Eastgate Loop, interior).	D	52	Yes	Yes
10	West of I-75 between I-24 and rail line: Brown Acres Golf Course.	C	67	Yes	Yes
11	East of I-75 between I-24 and rail line: Brown Acres Golf Course.	B, C	67	Yes	Yes
12	West of I-75 between I-24 and rail line: Single-family residences on Brown Road, Osborne Drive, Los Lomas Drive, and Benham Drive in Brainerd Hills and the community swimming pool.	B, C	67	Yes	Yes
13	West of I-75, north of rail line: Two gazebos in The Pointe Centre office complex.	E	72	Yes	Yes
14	West of I-75, south of East Brainerd Road: Single-family residences on Roselawn Drive in Roselawn Heights.	B	67	Yes	Yes
15	East of I-75, north of rail line: Concord Golf Course/Club.	C	67	Yes	Yes
16	East of I-75 at E Brainerd Road: Single-family residences on Phyllis Lane and Durham Drive in Concord Heights.	B	67	Yes	Yes

**Table 3: Noise Analysis Areas**

Noise Analysis Area	Description	Activity Category	NAC (dBA)	Evaluated for Phase 1?	Within Phase 2 Project Limits?
17	West of I-75, north of Ringgold Road: East Ridge Retirement Center (1417 N Mack Smith Road); Superior Creek Lodge balconies and pool (1410 N Mack Smith Road); and the Super 8 swimming pool (6519 Ringgold Road).	Not within Phase 2 project limits.			
18	West of I-75, north of Ringgold Road: Single-family residences on McCall Road, N Smith Street, Schofield Avenue, Blanton Drive, Floyd Drive, Hurst Street, and Lansdell Road in the Lansdell subdivision.	Not within Phase 2 project limits.			
19	South Chickamauga Creek Greenway (north and south of I-75).	C	67	Yes	Yes
20	Chattanooga Red Wolves Soccer Stadium: Soccer field; stadium seating on east, west, and north sides; a playground; and a restaurant with outdoor seating. (permitted/under construction).	C, E	67, 72	No <sup>(1)</sup>	Yes
21	South of I-24 between S Germantown Road and Belvoir Avenue: Single-family and multi-family residences; and the Bacon Trail Apartments swimming pool.	B	67	No <sup>(2)</sup>	Yes
22	North of I-24 between S Germantown Road and Belvoir Avenue: Single-family and multi-family residences; the Woodlawn Apartments; and the North Terrace Church of Christ (3701 N Terrace, interior).	B, D	67, 52	No <sup>(2)</sup>	Yes
23	South of I-24 west of S Germantown Road: Single-family and multi-family residences.	B	67	No	Yes
24	North of I-24 west of S Germantown Road: Single-family and multi-family residences.	B	67	No	Yes

(1) Permitted since Phase 1.

(2) Beyond previous noise study project limits.

**Table 4: Existing Noise Levels at Measurement Locations**

Location	Noise Analysis Area	Distance to I-24/I-75 (feet) <sup>(1)</sup>	Date	Period	L <sub>eq</sub> (1h) (dBA)	Adjustment <sup>(2)</sup>	Worst Hour L <sub>eq</sub> (1h) (dBA)
Unitarian Universalist Church (Reference)	n/a	95	9/17/14	10:48 – 11:48 am	74	0	74
North Terrace Church of Christ (Reference)	22	110	9/29/21	8:33 – 9:32 am	73	0	73
529/531 Brookfield Avenue	1	140	9/17/14	12:34 – 12:54 pm	65	1	66
4511 Rockford Lane	2	115	9/17/14	3:44 – 4:04 pm	76	1	77
412 Thornton Avenue	2	130	9/18/14	1:23 – 1:43 pm	69	1	70
			9/29/21	12:05 – 12:25 pm	70	1	71
318 S St. Marks Avenue	4	225	9/17/14	3:04 – 3:24 pm	62	1	63
314 McBrien Road (Midtown Ridge Apartments pool)	6	190	9/18/14	12:37 – 12:58 pm	63	0	63
			9/29/21	5:35 – 5:55 pm	62	2	64
5508 Miller Drive	7	140	9/17/14	2:11 – 2:34 pm	63	0	63
			9/29/21	6:15 – 6:35 pm	58 <sup>3</sup>	2	60
517 Brown Road	12	515	9/18/14	8:56 – 9:16 am	66	1	67
		530	9/29/21	2:25 – 2:45 pm	64	0	64
I-75 right-of-way near The Pointe Center (Reference)	13	35	9/18/14	8:06 – 9:05 am	82	0	82
		85	9/29/21	9:30 – 10:29 am	82	0	82

**Table 4: Existing Noise Levels at Measurement Locations**

Location	Noise Analysis Area	Distance to I-24/I-75 (feet) <sup>(1)</sup>	Date	Period	L <sub>eq</sub> (1h) (dBA)	Adjustment <sup>(2)</sup>	Worst Hour L <sub>eq</sub> (1h) (dBA)
1039 Roselawn Drive	14	490	9/18/14	8:03 – 8:20 am	61	0	61
		555	9/29/21	3:10 – 3:30 pm	62	2	64
1301 Phyllis Lane	16	650	9/18/14	10:57 – 11:19 am	61	0	61
			9/29/21	3:10 – 3:30 pm	63	1	64
Chattanooga Red Wolves Soccer Stadium	20	215	9/29/21	4:54 – 5:14 pm	72	0	72
3701 Anderson Avenue	21	260	9/29/21	10:25 – 10:45 am	67	1	68
3837 North Terrace	22	165	9/29/21	11:15 – 11:35 AM	71	1	72

(1) From proposed edge-of-pavement.

(2) Based on noise levels at reference microphone.

(3) Now protected by a noise barrier



**Table 5: TNM Model Validation Results, Pavement Reference Locations**

Road	Measurement Location	Time Start	Time End	Measured L <sub>eq</sub> (1h), dBA	Predicted L <sub>eq</sub> (1h), dBA	Predicted - Measured Difference, dB
I-24	At I-24 right-of-way, westbound side, between S Moore Road and Belvoir Avenue	10:40 AM	11:00 AM	81.2	82.1	0.9
I-75	Northbound Side of I- 75, 50 feet from the edge of pavement, southwest of the off- ramp to Brainerd Road	1:35 PM	1:55 PM	77.9	79.2	1.3

**Table 6: TNM Model Validation Results, Community Locations**

Location	NAA	Time Start	Time End	Measured L <sub>eq</sub> (1h), dBA	Predicted L <sub>eq</sub> (1h), dBA	Pavement Adjustment	Adjusted Predicted L <sub>eq</sub> (1h), dBA	Predicted - Measured Difference, dB
529/531 Brookfield Circle	1	9:30 AM	9:50 AM	73.6	74.1	-0.9	73.2	-0.4
Howell Avenue	3	11:57 AM	12:16 PM	73.4	76.3	-0.9	75.4	2.0
The Pointe Centre (gazebo)	13	1:35 PM	1:55 PM	69.2	71.7	-1.3	70.4	1.2

**Table 7: Noise Impact Analysis, Design Year 2045, Build Alternative**

Noise Analysis Area	Existing Noise Levels (dBA)	Design Year Noise Levels (dBA)	Impacted?	Impacts				
				Category B	Category C	Category D	Category E	Total
1	49 <sup>(1)</sup> - 75	50 <sup>(1)</sup> - 74	Yes	64	2 (Our Lady of Perpetual Help football field and sitting area)	---	---	66
2	50 - 75	52 - 76	Yes	64	2 (Brainerd Crossroads soccer field, Calvary Baptist Church playground)	1 (Calvary Baptist Church)	---	66
3	39 <sup>(1)</sup> - 74	40 <sup>(1)</sup> - 76	Yes	22	---	---	---	22
4	55 - 69	55 - 72	Yes	21	---	---	---	21
5	58 - 65	60 - 66	Yes	1	---	---	---	1
6	42 - 74	42 - 75	Yes	17	1 (Midtown Ridge pool)	---	---	18
7	58 - 65	59 - 67	Yes	6	---	---	---	6
8	70	71	Yes	---	1 (Chattanooga Charter School playground)	---	---	1
9	42 <sup>(1)</sup>	44 <sup>(1)</sup>	No	---	---	---	---	---
10	62 - 71	63 - 72	Yes	---	1 (Brown Acres Golf Course west of I-75)	---	---	1
11	59 - 72	60 - 73	Yes	---	1 (Brown Acres Golf Course east of I-75)	---	---	1
12	46 - 68	47 - 69	Yes	25	1 (Community Lot w/pool)	---	---	25
13	62 - 70	63 - 71	Yes	---	---	---	1 (The Pointe Center Gazebo)	1

**Table 7: Noise Impact Analysis, Design Year 2045, Build Alternative**

Noise Analysis Area	Existing Noise Levels (dBA)	Design Year Noise Levels (dBA)	Impacted?	Impacts				
				Category B	Category C	Category D	Category E	Total
14	62 - 65	63 - 66	Yes	1	---	---	---	1
15	59 - 74	60 - 75	Yes	---	1 (Concord Golf Course/Club)	---	---	1
16	56 - 64	57 - 65	No	---	---	---	---	---
17	Not within Phase 2 project limits.							
18	Not within Phase 2 project limits.							
19	59 - 76	61 - 77	Yes	---	1 (South Chickamauga Creek Greenway, 400 feet south, 600 feet north)	---	---	1
20	57 - 62	58 - 63	No	---	---	---	---	---
21	55 - 74	56 - 76	Yes	74	---	---	---	74
22	49 - 76	50 - 77	Yes	42	---	1 (North Terrace Church of Christ)	---	43
23	61 - 78	62 - 80	Yes	33	---	---	---	34
24	47 - 78	48 - 80	Yes	48	---	---	---	48
<b>Total</b>				<b>418</b>	<b>11</b>	<b>2</b>	<b>1</b>	<b>432</b>

(1) Interior.

**Table 8: Noise Barrier Locations and Feasibility Analysis**

Noise Analysis Area	First-Row Impacts?	Barrier Location(s)	Engineering Issues?	Acoustically Feasible?
1 (Residences)	Yes	Option #1: Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
		Option #2: Frontage Road//Shoulder	Possible <sup>(1)</sup>	<b>Yes</b>
1 (Field)	Yes	Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
2 (Residences)	Yes	Option #1: Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
		Option #2: Frontage Road/Shoulder	Possible <sup>(1)</sup>	<b>Yes</b>
		Option #3: Frontage Road/Shoulder	Possible <sup>(1)</sup>	<b>Yes</b>
2 (Field)	Yes	Frontage Road	Possible <sup>(1)</sup>	No
3	Yes	Option #1: Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
		Option #2: Shoulder	Possible <sup>(1)</sup>	<b>Yes</b>
4	Yes	Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
6	Yes	Option #1: Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
		Option #2: Shoulder/Frontage Road	Possible <sup>(1)</sup>	<b>Yes</b>
7	No	n/a	n/a	No
8	Yes	Shoulder	No	<b>Yes</b>
10	Yes	Shoulder	No	<b>Yes</b>
11	Yes	Shoulder	No	<b>Yes</b>

**Table 8: Noise Barrier Locations and Feasibility Analysis**

Noise Analysis Area	First-Row Impacts?	Barrier Location(s)	Engineering Issues?	Acoustically Feasible?
12	No	n/a	n/a	No
13	Yes	Right-of-way	No	<b>Yes</b>
14	No	n/a	n/a	No
15	Yes	Shoulder	No	<b>Yes</b>
19	Yes	Shoulder	No	<b>Yes</b>
21	Yes	Shoulder/Frontage Road	No	<b>Yes</b>
22	Yes	Option #1: Frontage Road	No	<b>Yes</b>
		Option #2: Frontage Road/Shoulder	No	<b>Yes</b>
23	Yes	Right-of-way/Shoulder	No <sup>(2)</sup>	<b>Yes</b>
24	Yes	Shoulder	No <sup>(2)</sup>	<b>Yes</b>

(1) Utility and sight distance conflicts

(2) Utility conflicts.

**Table 9: Noise Reduction Design Goal Analysis**

Noise Analysis Area	First-Row Benefited Receptors			Noise Reduction Design Goal Met?
	Total	Receiving 7 dB IL	Percent	
1 (Option 1)	21	13	62%	Yes
1 (Option 2)	21	13	62%	Yes
1 (Field)	3	2	67%	Yes
2 (Option 1)	18	12	67%	Yes
2 (Option 2)	20	13	65%	Yes
2 (Option 3)	19	12	63%	Yes
3 (Option 1)	4	3	75%	Yes
3 (Option 2)	4	3	75%	Yes
4	3	2	67%	Yes
6 (Option 1)	17	11	65%	Yes
6 (Option 2)	17	12	71%	Yes
8	1	1	100%	Yes
10	3	2	67%	Yes
11	5	4	80%	Yes
13	1	1	100%	Yes
15	3	2	67%	Yes
19	10	8	80%	Yes
21	23	15	65%	Yes
22 (Option 1)	25	15	60%	Yes
22 (Option 2)	25	16	64%	Yes
23	9	9	100%	Yes
24	14	13	93%	Yes

**Table 10: TDOT Reasonableness Allowances**

<b>Allowance Type</b>	<b>Criteria</b>	<b>Allowance in square feet</b>
Base Allowance	Residences pre-date the highway <sup>(1)</sup> or the project is on a new alignment.	1,500
	Residences post-date the highway <sup>(2)</sup> but were constructed before September 16, 2005. <sup>(3)</sup>	750
	Residences were constructed after September 16, 2005. <sup>(3)</sup>	250
Previous Type I Widening Allowance <sup>(4)</sup>	Residences pre-date a Type I widening project on the adjacent highway.	200
Design Year Noise Levels Allowance <sup>(5)</sup>	69 dBA or less	0
	70 – 74 dBA	100
	75 dBA or more	200
Noise Level Increase Allowance <sup>(6)(7)</sup>	0 – 4 dB	0
	5 – 9 dB	200
	10 or more dB	400
Noise Compatible Planning Allowance	The local government of the jurisdiction in which the project will be constructed has no policies to require that noise be considered in the land development process.	0
	The local government of the jurisdiction in which the project will be constructed has adopted official and enforceable policies to require that noise be considered as an integral component of the land development process.	100

(1) The majority (more than 50%) of residences existed before the original highway construction.

(2) The majority (more than 50%) of residences were constructed after the original highway construction.

(3) TDOT's previous noise policy became effective on September 16, 2005. FHWA's approval of this policy was contingent upon TDOT's completion of a public outreach program to 1) notify local jurisdictions of the changes in TDOT's new noise policy and 2) encourage them to consider noise compatible land use planning when noise-sensitive land uses are proposed adjacent to TDOT's highways. As a result, development that occurs after this date receives less consideration in the reasonableness analysis.

(4) The majority (more than 50%) of residences existed before the most recent Type I project that added through traffic lanes.

(5) Based on an average of the impacted first-row receivers' levels (design year noise levels for Type I projects and existing noise levels for Type II projects).

(6) An average of the increases from existing noise levels to design year noise levels for the Build Alternative at the impacted first-row receivers.

(7) Not applicable for Type II projects.

**Table 11: Reasonableness Allowances for Noise Analysis Areas**

Noise Analysis Area	I-24/I-75 Construction	Base Allowance		Previous Type I Widening Allowance			Design Year Noise Levels Allowance		Noise Level Increase Allowance		Total
		Construction Dates <sup>(1)</sup>	Allowance	Subsequent Widening	Pre-Date Widening <sup>(1)</sup>	Allowance	Noise Level (dBA) <sup>(1)</sup>	Allowance	Noise Level Increase (dBA) <sup>(1)</sup>	Allowance	
1 (Residences)	1962	1923-2005	1,500	N/A	N/A	0	70	100	0	0	1,600
1 (Field)	1962	Before 2005	750	N/A	N/A	0	72	100	2	0	850
2 (Residences)	1962	1918-2006	1,500	N/A	N/A	0	74	100	2	0	1,600
3	1962	1930-1965	1,500	N/A	N/A	0	72	100	2	0	1,600
4	1962	1920-1985	1,500	N/A	N/A	0	70	100	3	0	1,600
6	1962	1939-1995	750	N/A	N/A	0	71	100	1	0	850
8	1963	2011	250	1992, 2020	100%	200	71	100	1	0	550
10	1963	1955 (approx.)	1,500	1992	100%	200	70	100	1	0	1,800
11	1963	1955 (approx.)	1,500	1992	100%	200	71	100	1	0	1,800
13	1963	2006	250	1992	0%	0	71	100	1	0	350
15	1963	1975	750	1992	100%	200	70	100	1	0	1,050
19	1963	1994	750	1992	0%	0	75	200	1	0	950
21	1962	1920-2018	1,500	N/A	N/A	0	71	100	1	0	1,600
22	1962	1924-2000	1,500	N/A	N/A	0	75	200	1	0	1,700
23	1962	1930-1984	1,500	N/A	N/A	0	72	100	1	0	1,600
24	1962	1895-1995	1,500	N/A	N/A	0	74	100	1	0	1,600

(1) For impacted first-row land uses.



**Table 12: Number of Users Calculation for Playgrounds and Swimming Pools**

<b>Land Use</b>	<b>Number of Users</b>	<b>Maximum Users</b>	<b>Typical User Factor</b>
Swimming Pool	Maximum Users x Typical User Factor	Swimming Pool Area (sq. ft.)/ 10 sq. ft. <sup>(1)</sup>	10% to 50% <sup>(2)</sup>
Playground	Maximum Users x Typical User Factor	Playground Area (sq. ft.)/ 50 sq. ft. <sup>(3)</sup>	10% to 75% <sup>(4)</sup>

(1) Maximum occupancy based on Davidson County and Hamilton County swimming pool regulations that require 10 sq. ft. of swimming pool area (deck areas excluded) per person.

(2) The typical number of users would be significantly less than the maximum number of users.

(3) Based on Tennessee licensure regulations for playgrounds requiring 50 sq. ft. of area per child.

(4) School playgrounds that are used throughout the day (i.e., schools) would have higher Typical User Factors than playgrounds at other facilities (i.e., churches, libraries, etc.).

**Table 13: Equivalent Number of Residences**

	<b>NAA 2 (Calvary Baptist Church Basketball Goal)</b>	<b>NAA 6 (Midtown Ridge Apartments Pool)</b>	<b>NAA 8 (Chattanooga Charter School of Excellence playground)</b>	<b>NAA 10 (Brown Acres Golf Course)</b>	<b>NAA 11 (Brown Acres Golf Course)</b>	<b>NAA 13 (The Pointe Center Gazebo)</b>	<b>NAA 15 (Concord Golf Course/ Club)</b>	<b>NAA 19 (South Chickamauga Creek Greenway)</b>
<b>Number of Users</b>	<b>5</b>	<b>22</b>	<b>25</b>	<b>10</b>	<b>20</b>	<b>2</b>	<b>8</b>	<b>18.3</b>
Maximum Users	20	86 <sup>(1)</sup>	50 <sup>(2)</sup>	20 <sup>(3)</sup>	40 <sup>(4)</sup>	8 <sup>(5)</sup>	16 <sup>(6)</sup>	73 <sup>(7)</sup>
Typical User Factor	25%	25%	50%	50%	50%	25%	50%	25%
<b>People Per Residence <sup>(8)</sup></b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>
<b>Usage</b>	<b>0.12</b>	<b>0.12</b>	<b>0.25</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.50</b>
Hours Used Per Day	4	12	8	12	12	12	12	12
Days Used Per Year	182 <sup>(9)</sup>	182 <sup>(9)</sup>	270 <sup>(10)</sup>	270 <sup>(10)</sup>	270 <sup>(10)</sup>	270 <sup>(10)</sup>	270 <sup>(10)</sup>	365
<b>Equivalent Residences</b>	<b>0.2</b>	<b>2.1</b>	<b>2.5</b>	<b>1.5</b>	<b>3.0</b>	<b>0.3</b>	<b>1.2</b>	<b>3.7</b>

(1) The benefited pool area is approximately 860 square feet.

(2) The benefited playground area is approximately 2,500 square feet.

(3) Two tee-boxes and three greens are benefited. Maximum number of users based on a foursome at each green and tee-box.

(4) Four tee-boxes and six greens are benefited. Maximum number of users based on a foursome at each green and tee-box.

(5) The gazebo is approximately 320 square feet and includes one picnic table that could seat approximately 8 people with some additional standing room.

(6) Three tee-boxes and one green are benefited. Maximum number of users based on a foursome at each green and tee-box.

(7) Approximately 730 feet of greenway would be benefited. Maximum number of users based on one person every ten feet.

(8) Tennessee average from census.

(9) Six months per year.

(10) Nine months per year.

**Table 14: Noise Barrier Design Results and Reasonableness Analysis**

<b>Area</b>	<b>Length (ft.)</b>	<b>Average Height (ft.)</b>	<b>Barrier Area (sq. ft.)</b>	<b>Benefited Residences</b>	<b>Equivalent Benefited Residences</b>	<b>Total Benefits</b>	<b>Area Per Benefited Residence (sq. ft.)</b>	<b>Allowable Area Per Benefited Residence</b>	<b>Reasonable?</b>
1 (Option 1)	2,800	17	47,418	73	0	73	650	1,600	<b>Yes</b>
1 (Option 2)	2,700	18	47,796	78	0	78	613		<b>Yes</b>
1 (Field)	1,100	16	17,830	0	1	1	17,830	850	No
2 (Option 1)	3,405	17	57,472	89	0.2	89.2	644	1,600	<b>Yes</b>
2 (Option 2)	3,600	15	52,814	101	0.2	101.2	522		<b>Yes</b>
2 (Option 3)	3,420	15	49,668	95	0.2	95.2	522		<b>Yes</b>
3 (Option 1)	1,010	13	13,530	20	0	20	677	1,600	<b>Yes</b>
3 (Option 2)	1,110	15	16,570	23	0	23	720		<b>Yes</b>
4	1,470	14	20,724	25	0	25	829	1,600	<b>Yes</b>
6 (Option 1)	985	15	15,152	16	2.1	18.1	837	850	<b>Yes</b>
6 (Option 2)	1,084	14	15,164	16	2.1	18.1	838		<b>Yes</b>
8	1,200	13	16,000	0	2.5	2.5	6,400	550	No
10	2,040	12	24,396	0	1.5	1.5	16,264	1,800	No
11	3,040	11	32,934	0	3	3	10,978	1,800	No
13	650	20	13,020	0	0.3	0.3	43,400	350	No
15	1,870	11	20,958	0	1.2	1.2	17,465	1,050	No

**Table 14: Noise Barrier Design Results and Reasonableness Analysis**

<b>Area</b>	<b>Length (ft.)</b>	<b>Average Height (ft.)</b>	<b>Barrier Area (sq. ft.)</b>	<b>Benefited Residences</b>	<b>Equivalent Benefited Residences</b>	<b>Total Benefits</b>	<b>Area Per Benefited Residence (sq. ft.)</b>	<b>Allowable Area Per Benefited Residence</b>	<b>Reasonable?</b>
19	1,545	12	17,942	0	3.7	3.7	4,849	950	No
21	2,530	17	42,284	60	0	60	705	1,600	<b>Yes</b>
22 (Option 1)	1,500	18	26,968	43	0	43	627	1,700	<b>Yes</b>
22 (Option 2)	1,600	15	24,238	44	0	44	551		<b>Yes</b>
23	1,500	13	19,396	37	0	37	524	1,600	<b>Yes</b>
24	1,630	15	23,840	56	0	56	426	1,600	<b>Yes</b>

**Table 15: Design Year 2045 Noise Levels for Undeveloped Lands**

Distance from Road <sup>(1)</sup>	L <sub>eq</sub> (1h) (dBA) <sup>(2)</sup>	
	I-24	I-75
200 feet	73	73
300 feet	69	70
400 feet	67	68
500 feet	65	65

(1) Perpendicular distance to the center of the near lane.

(2) At-grade situation.

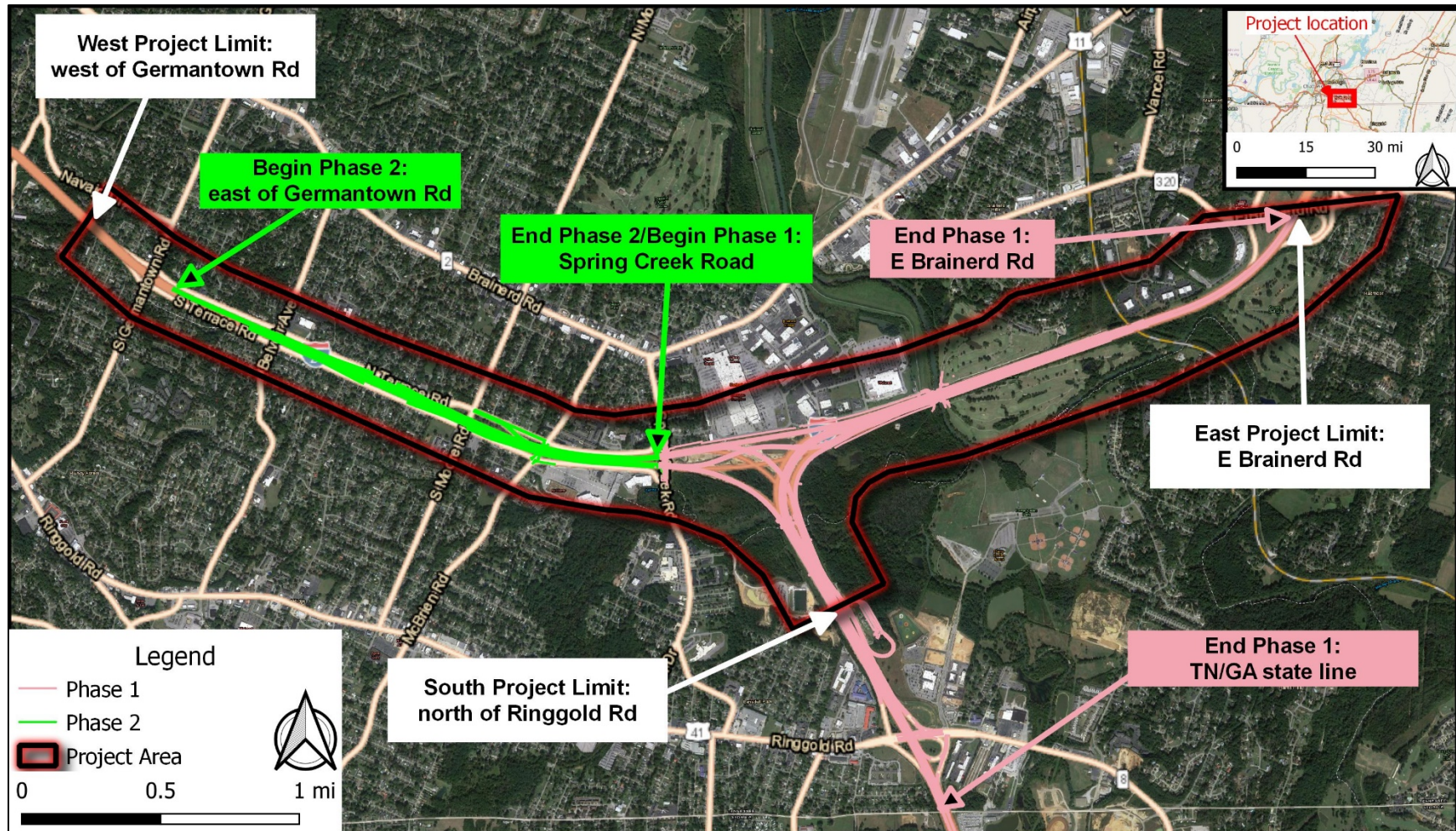


Figure 1: Phase 1 Project Area and Limits



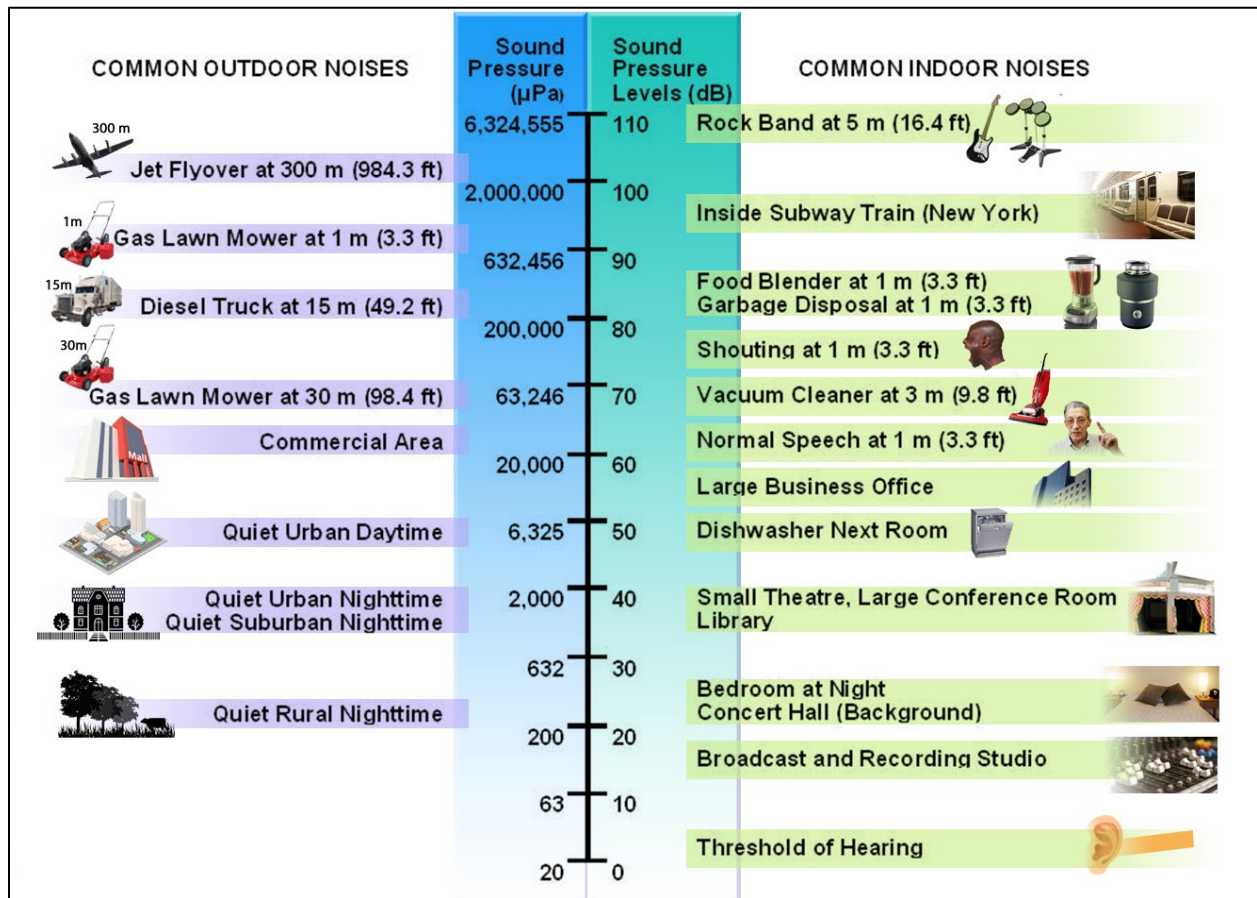


Figure 2: Common Sound Levels



Figure 3: Noise Analysis Areas 1, 2, &amp; 21-24





Figure 4: Noise Analysis Areas 3-7



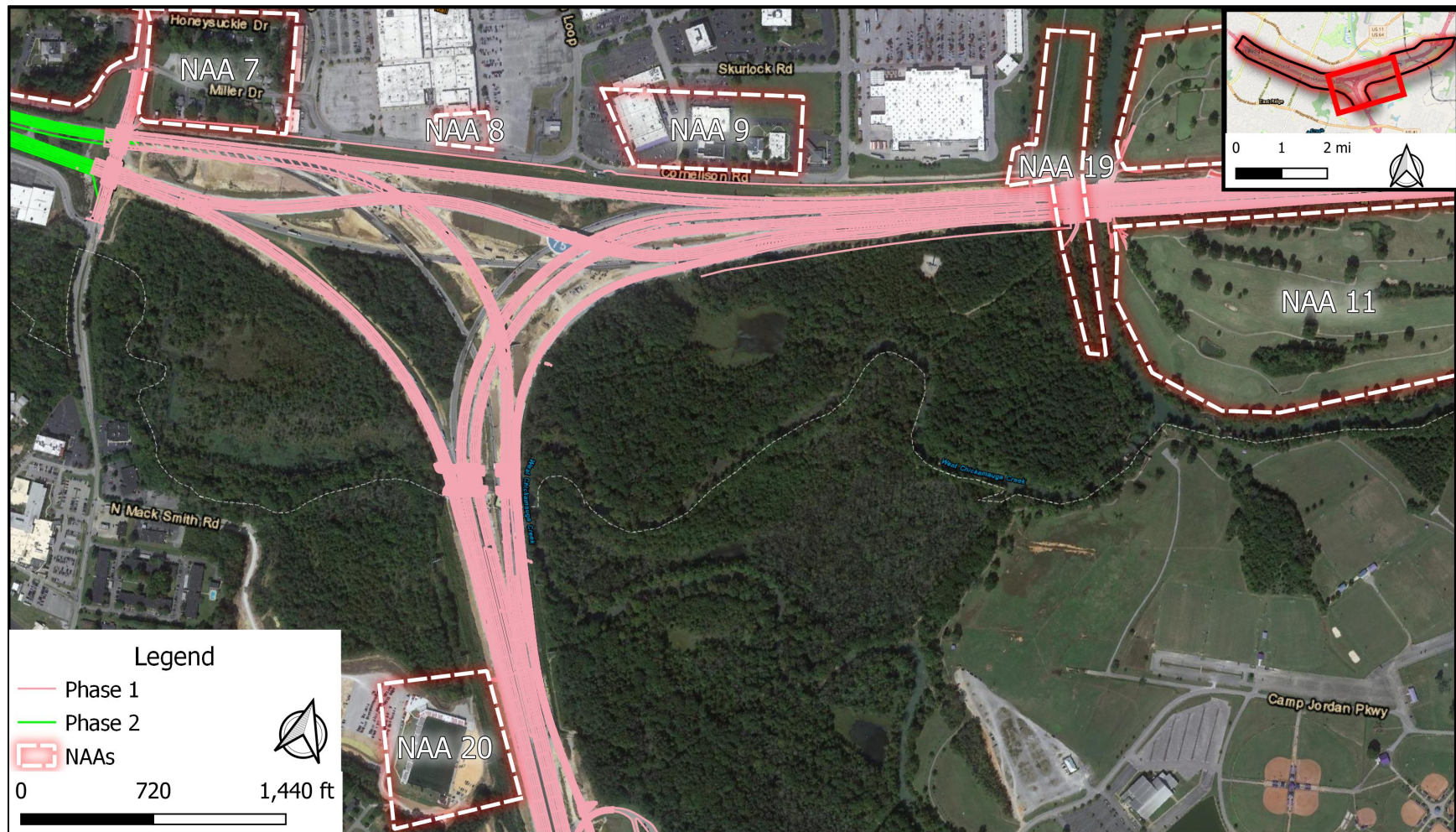


Figure 5: Noise Analysis Areas 7-9, 19, & 20





Figure 6: Noise Analysis Areas 10-16



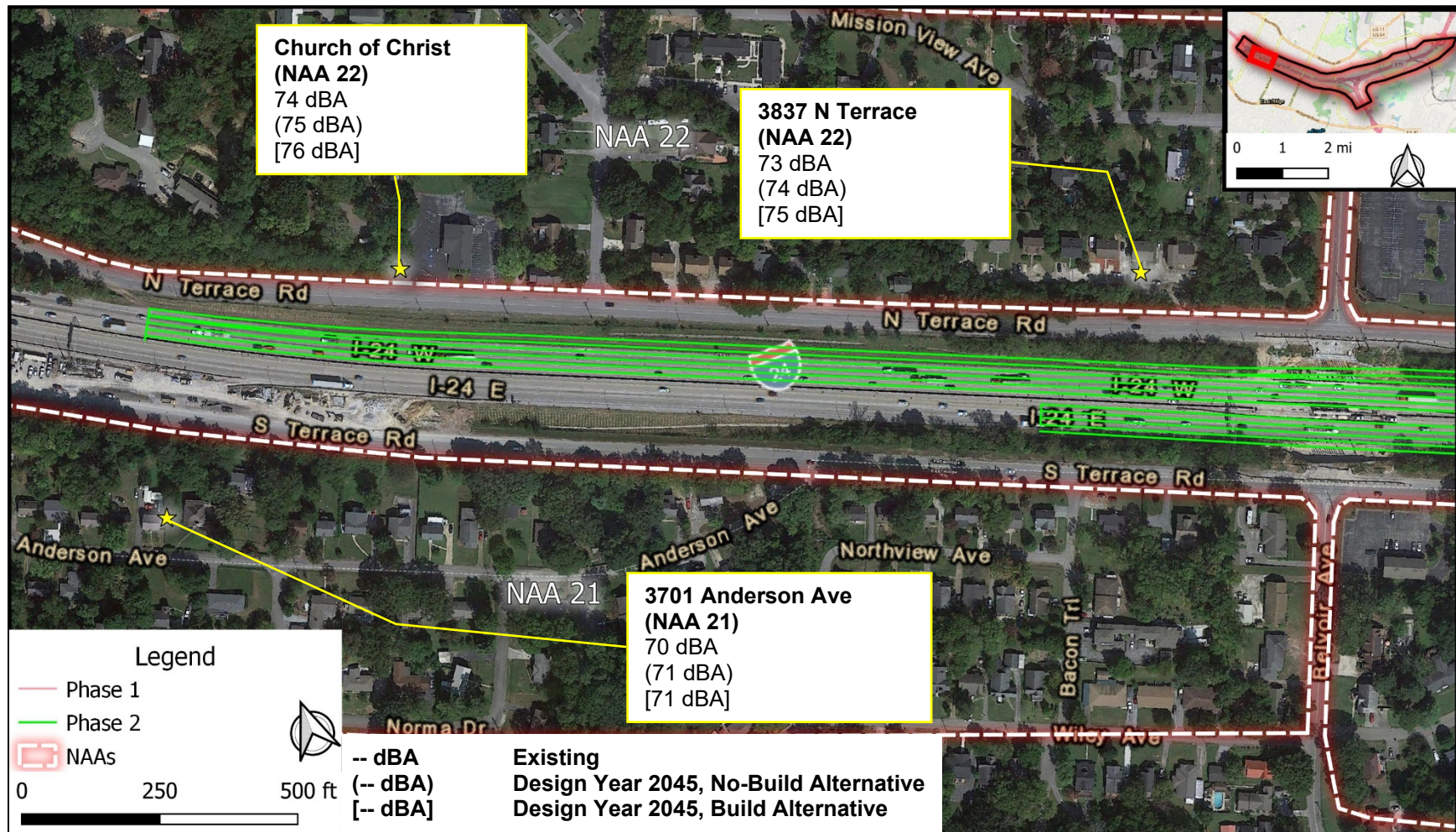


Figure 7: Noise Levels at Measurement Locations: Noise Analysis Areas 21 and 22







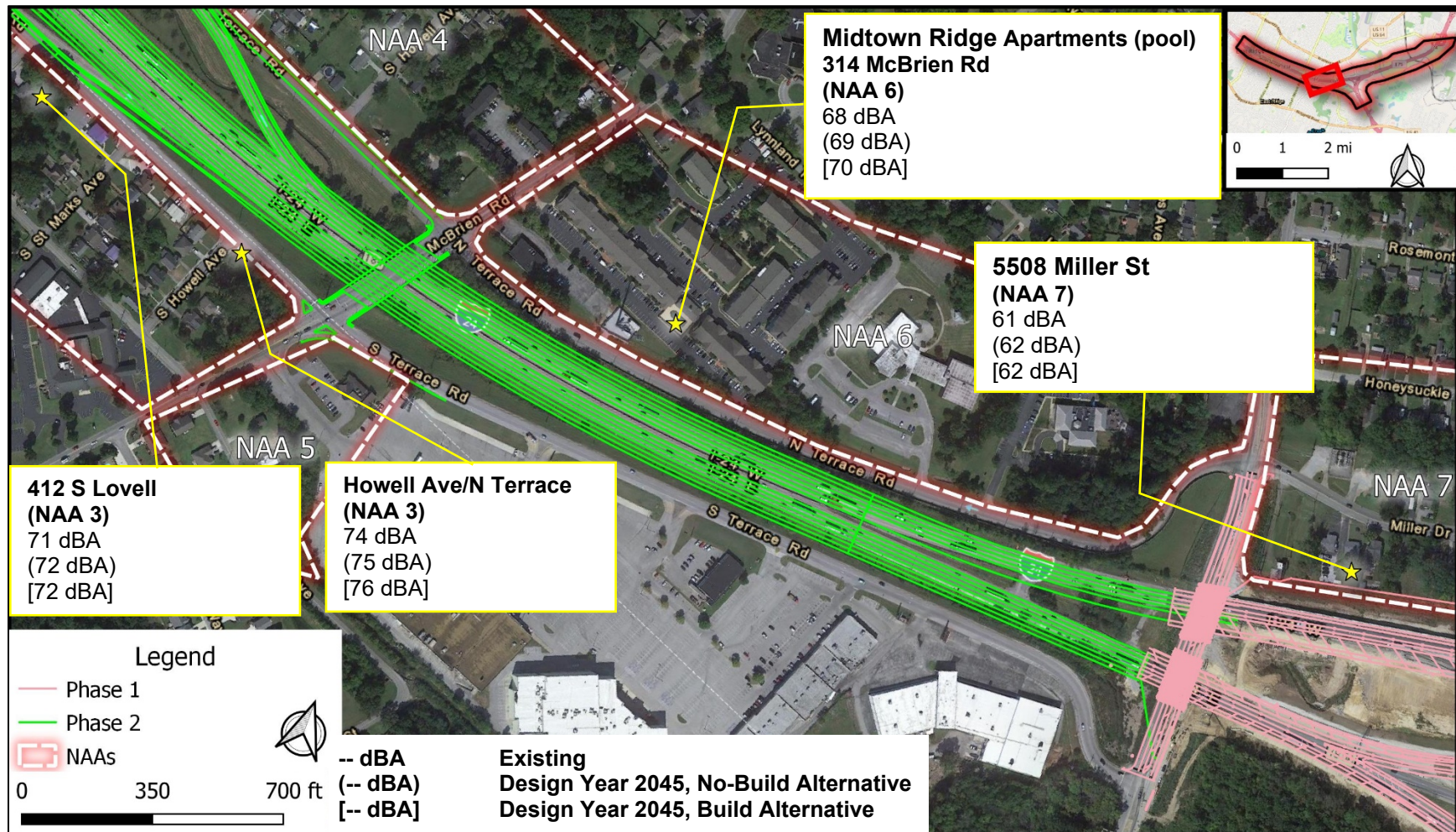


Figure 9: Noise Levels at Measurement Locations: Noise Analysis Areas 3, 6, and 7



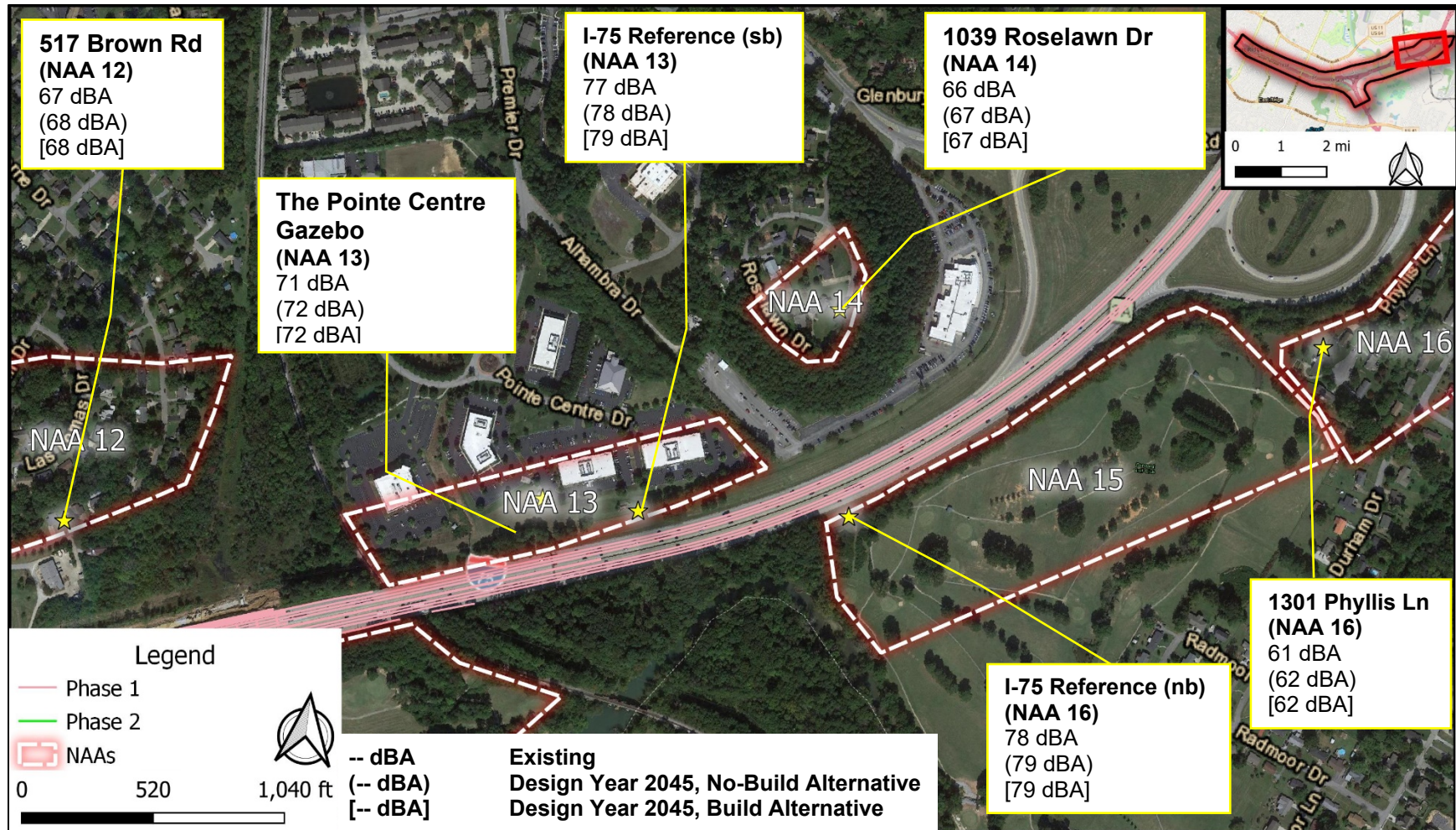


Figure 10: Noise Levels at Measurement Locations: Noise Analysis Areas 12-16



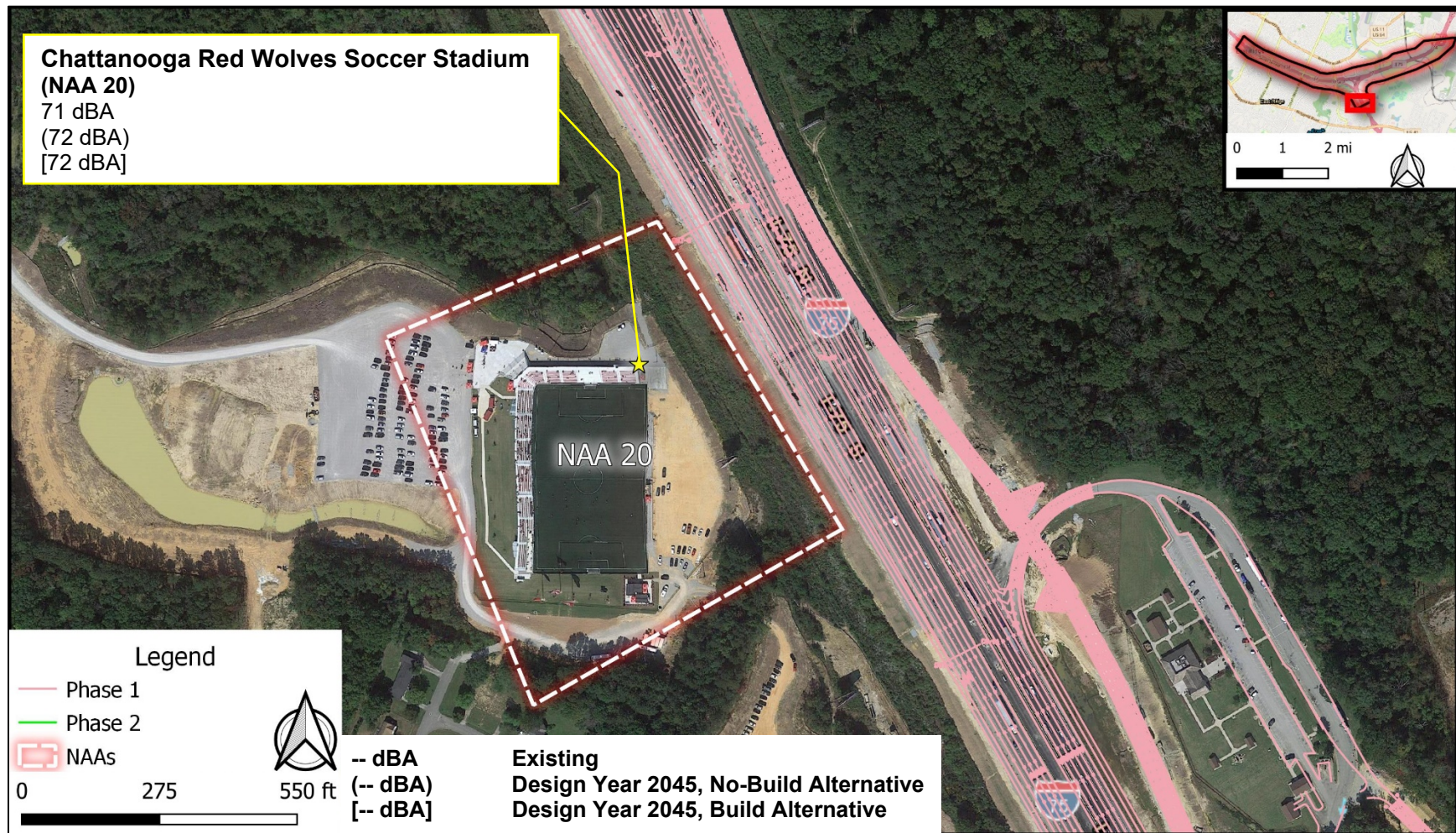


Figure 11: Noise Levels at Measurement Locations: Noise Analysis Areas 20



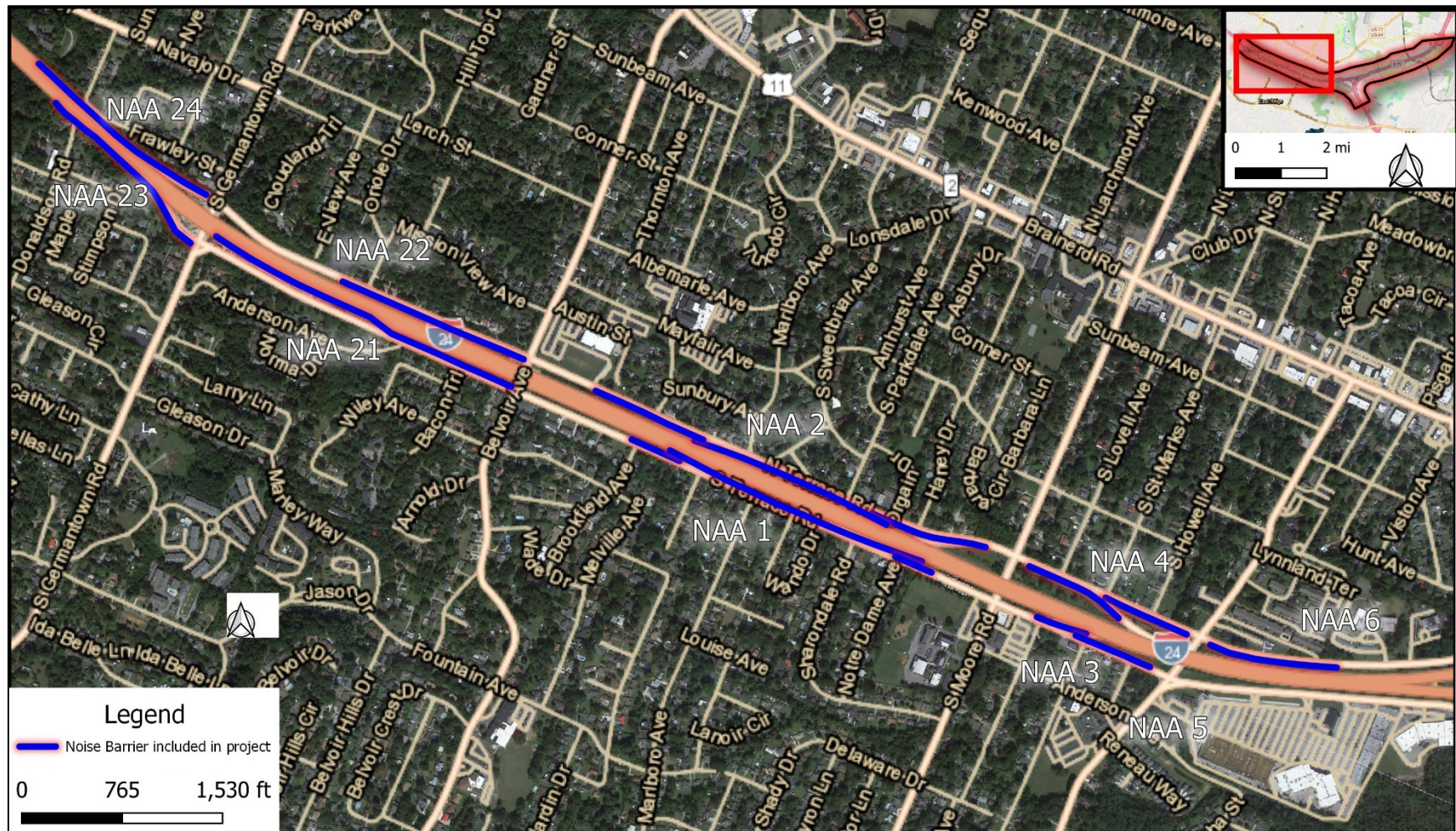


Figure 12: Noise Barrier Locations

**Appendix A**  
**Cover Pages and Typical Cross Sections from Project Plans**



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Index Of Sheets

TITLE SHEET .....	1
TYPICAL .....	2, 2A-2B
PRESENT LAYOUT(S) .....	4 - 14
RIGHT-OF-WAY DETAILS .....	4A - 14A
PROPOSED LAYOUT(S) .....	4B - 14B
PROPOSED PROFILE(S) .....	4C -12C
SIDE ROADS PROFILE(S) .....	13 – 14
RAMP PROFILE(S) .....	15 – 21
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I-24 CROSS SECTIONS .....	100-184
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RAMP L-N CROSS SECTIONS .....	206-225
RAMP O CROSS SECTIONS .....	226-239
RAMP P CROSS SECTIONS .....	240-252

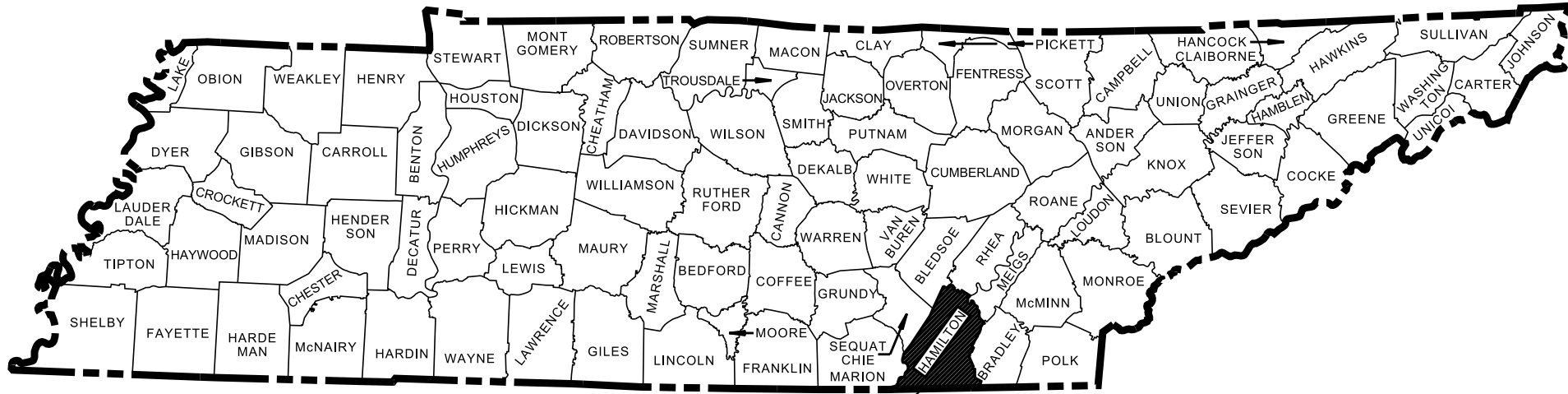
STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

HAMILTON COUNTY

INTERSTATE 24  
RAMP MODIFICATIONS

PRELIMINARY

STATE HIGHWAY NO. I-75/I-24 F.A.H.S. NO. I-75/I-24



PROJECT LOCATION

BRIDGE ID. #

NO EXCLUSIONS

33005-1185-44  
BEGIN PROJECT NO. IM/NH-75-1(131) PRELIMINARY  
STA. 78+00.00 INTERSTATE 24  
N 248497.0649 E 2192862.6175

33005-1185-44  
END PROJECT NO. IM/NH-75-1(131) PRELIMINARY  
STA. 178+17.53 INTERSTATE 24  
N 245249.04162 E 2201363.3455

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

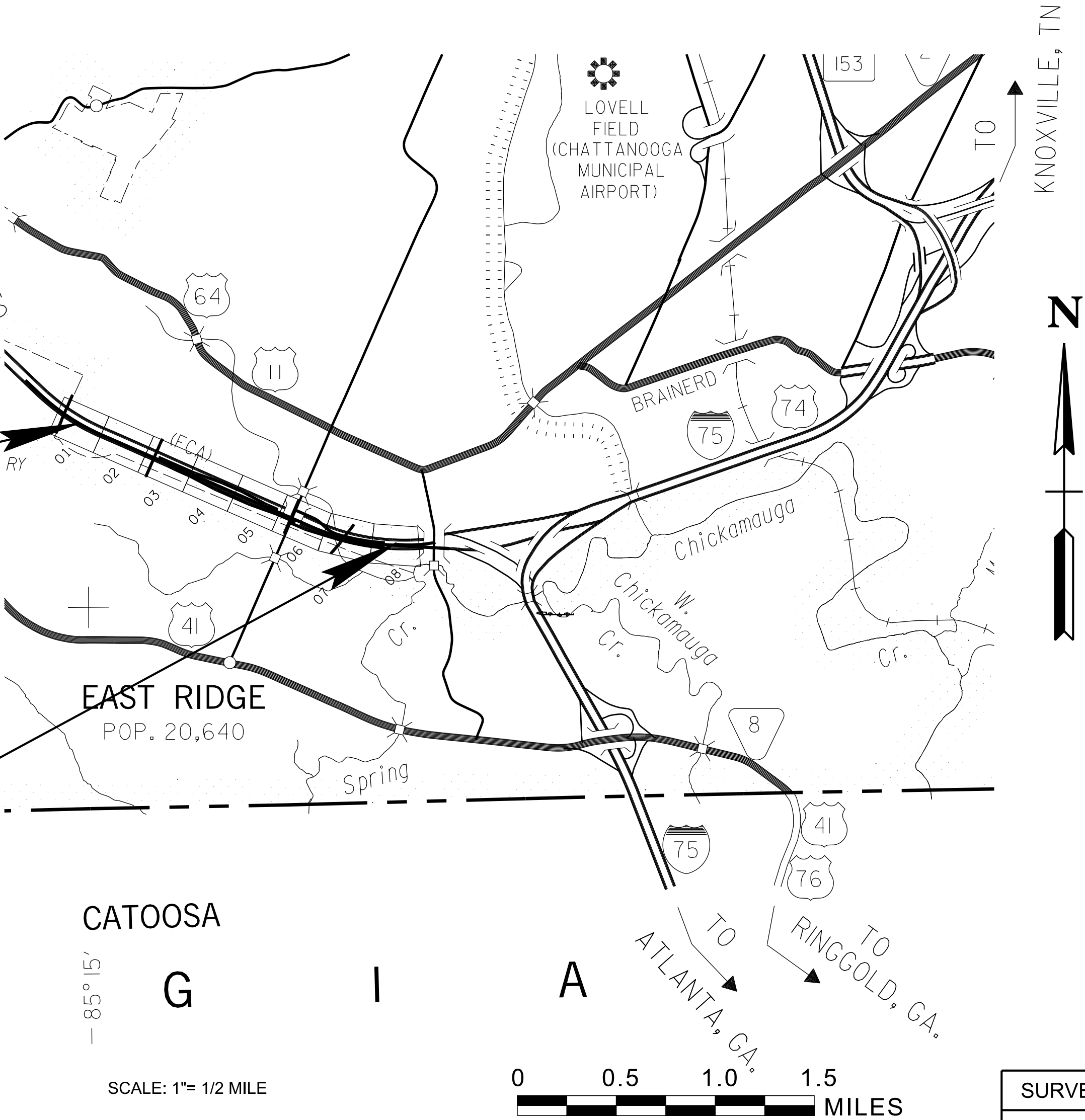
TDOT C.E. MANAGER 1 OR  
TDOT TRANSPORTATION MANAGER 1 : \_\_\_\_\_

DESIGNED BY : xxxxxxxxxxxxxxxxxxxx, P.E.

DESIGNER : NEEL-SCHAFFER, INC. CHECKED BY LANCE TAYLOR, P.E.

P.E. NO. xxxxxxxxxxxx> (NEPA) <<

PIN NO. XXXXXXXXXX



CATOOSA

SCALE: 1"= 1/2 MILE

R.O.W. LENGTH 1.675 MILES  
ROADWAY LENGTH 1.675 MILES  
PROJECT LENGTH 1.675 MILES

INTERSTATE 24

SURVEY 08-24-18	TRAFFIC DATA	
	ADT (2021)	118410
	ADT (2041)	146100
	DHV (2041)	13465
	D	50 - 50
	T (ADT)	18 %
	T (DHV)	12 %
	V	60 MPH

STATE PLANE COORDINATES ARE BASED ON GPS MEASUREMENTS  
OBTAINED - - USING GEOID MODEL AND DATUM  
ADJUSTMENT FACTOR OF 0.99998

APPROVED:   
PAUL D. DEGGES, CHIEF ENGINEER

DATE: \_\_\_\_\_

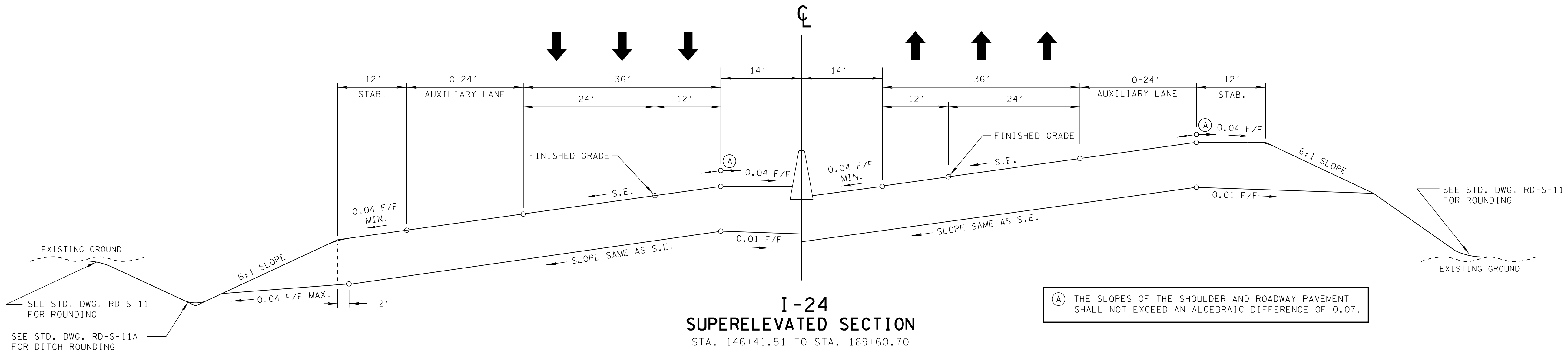
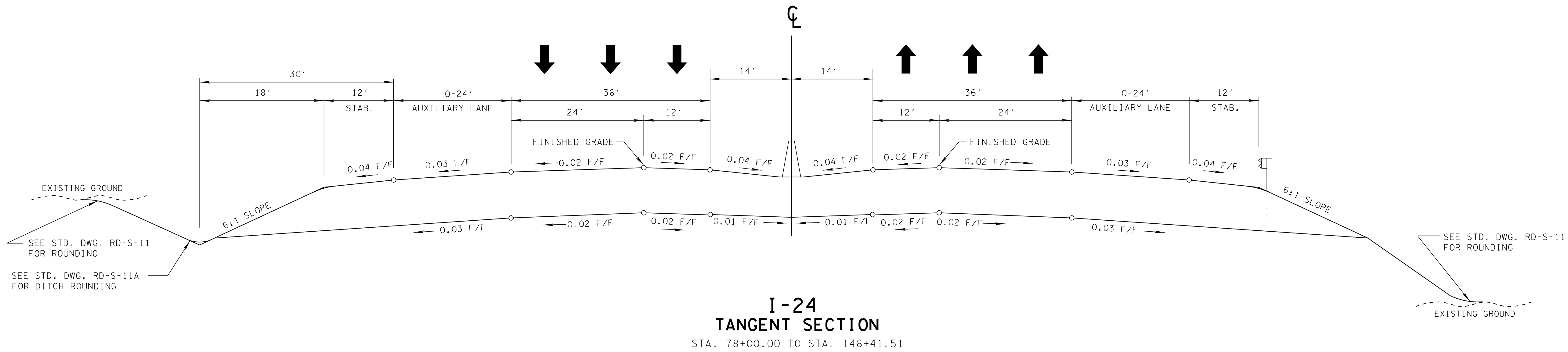
APPROVED:   
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2021	IM/NH-75-1(131)	2



**CAUTION!**  
**PRELIMINARY**  
**PLANS**  
**SUBJECT TO**  
**CHANGE**

SEALED BY

**STATE OF TENNESSEE**  
**DEPARTMENT OF**  
**TRANSPORTATION**

**TYPICAL**  
**SECTIONS**

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TYPICAL SECTIONS .....	2, 2A,2A1 – 2A8
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BRIDGE SHEETS .....	B01-B35

33005-1185-44  
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44330-1185-44  
BEGIN PROJECT NO. IM/NH-75-1(131) PRELIM.  
 STA. 303+51.97 INTERSTATE 75  
 N: 238539.1748 E: 2207642.6817

TDOT C.E. MANAGER 1 OR  
TDOT TRANSPORTATION MANAGER 1 : LIA OBAID, P.E.

---

DESIGNED BY : BARGE DESIGN SOLUTIONS, INC.

---

DESIGNER : JONATHAN HAYCRAFT, P.E.

---

P.E. NO. 44330-1185-44 (NEPA)

---

PIN NO. 114174.00

[illegible]

A horizontal scale bar with alternating black and white segments. Above the bar are numerical labels: 0, 0.5, 1.0, and 1.5. To the right of the bar is the word "MILES". The bar is divided into segments such that the total length represents 1.5 miles, with each major segment being 0.5 miles long.

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OBTAINED 05-20-17 USING GEOID 12B MODEL AND DATUM  
ADJUSTMENT FACTOR OF 0.99998

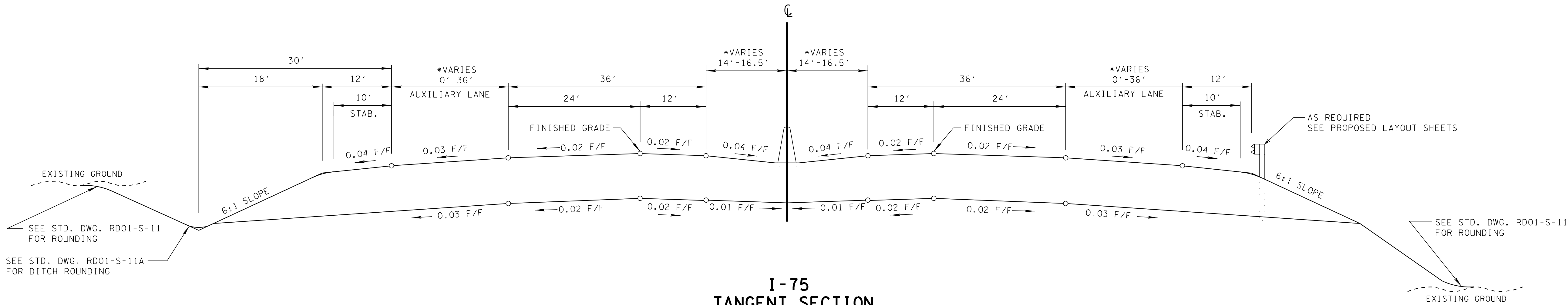
SEALED BY

APPROVED: \_\_\_\_\_

\_\_\_\_\_  
DIVISION ADMINISTRATOR                      DATE



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2019	IM/NH-75-1(131)	2

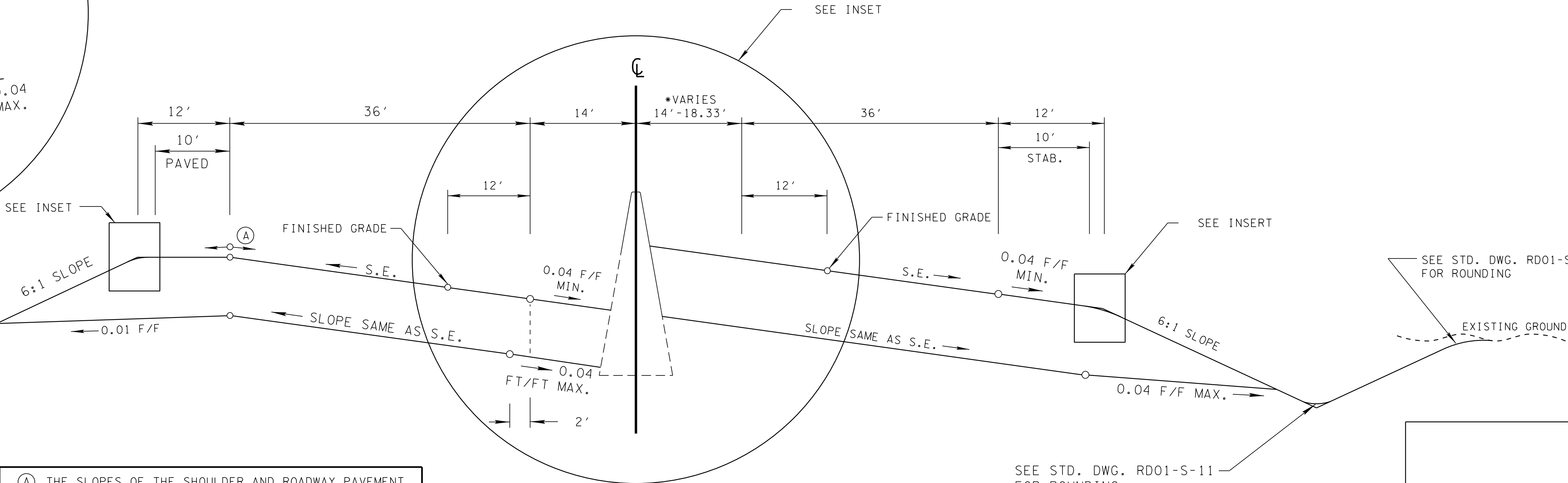
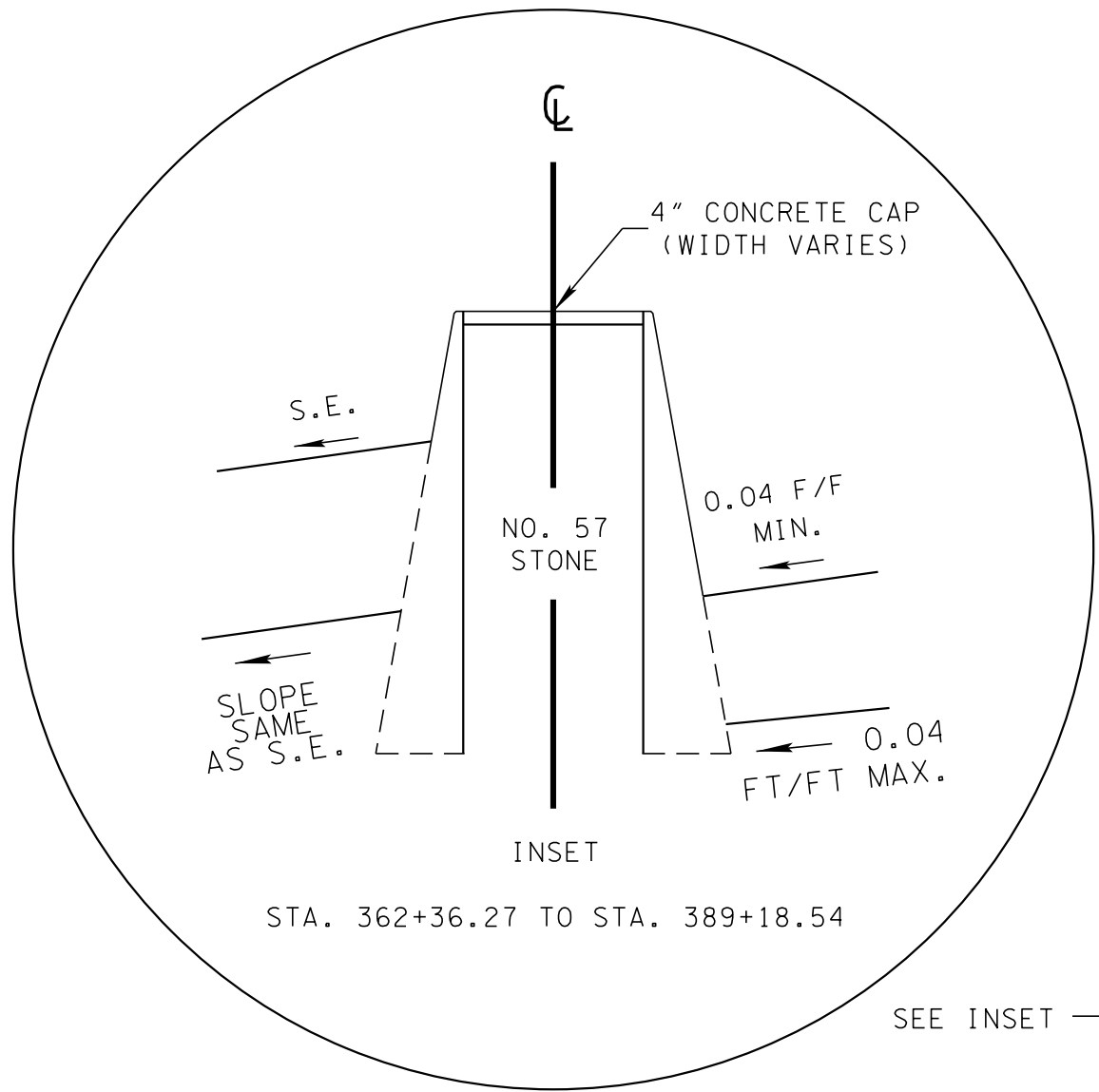


**I-75  
TANGENT SECTION**

(BASED ON STD. DWG. RD01-TS-5W)

STA. 303+51.97 TO STA. 362+72.33  
STA. 388+82.49 TO STA. 406+59.93  
\*SEE PROPOSED LAYOUT SHEETS  
FOR LANE TAPERS

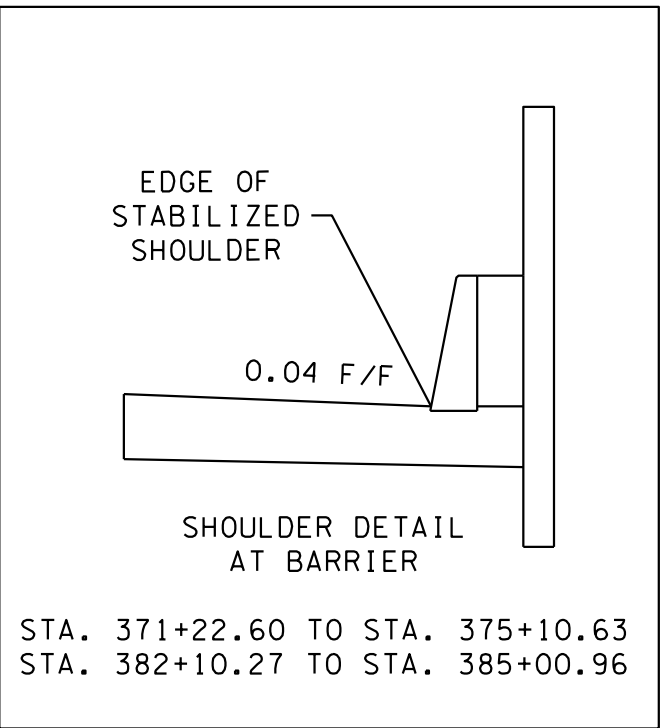
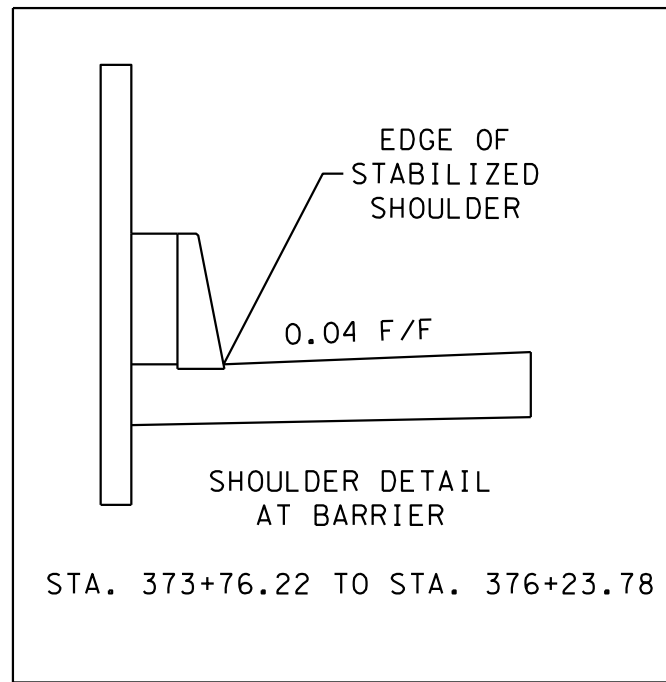
NOTE: SEE PROPOSED LAYOUTS & SHEETS R-01 THRU R-22  
FOR LOCATIONS OF RETAINING WALLS.



**I-75  
SUPERELEVATED SECTION**

(BASED ON STD. DWG. RD01-TS-5W)  
STA. 362+72.33 TO STA. 388+82.49  
\*SEE PROPOSED LAYOUT SHEETS  
FOR LANE TAPERS

(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT  
SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.



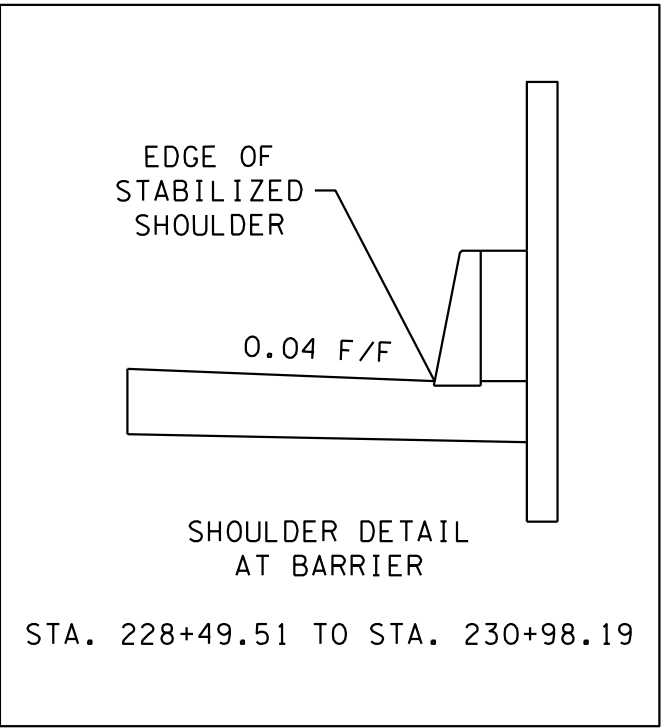
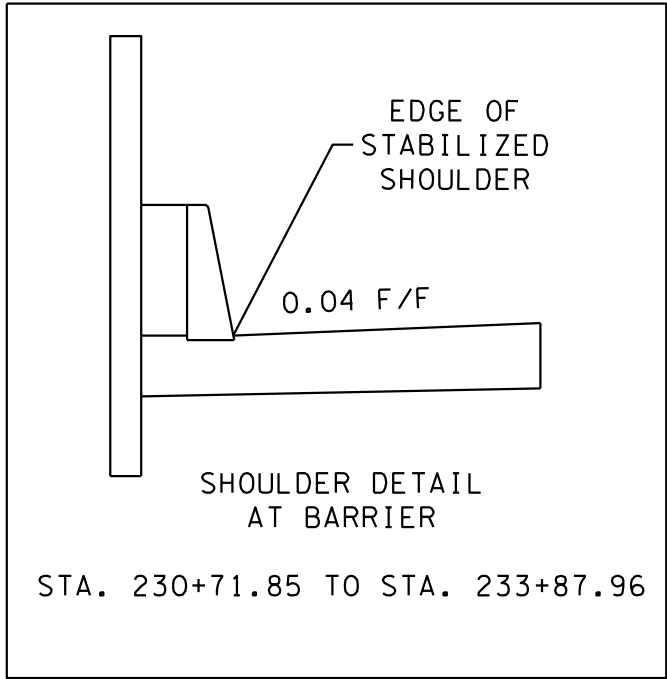
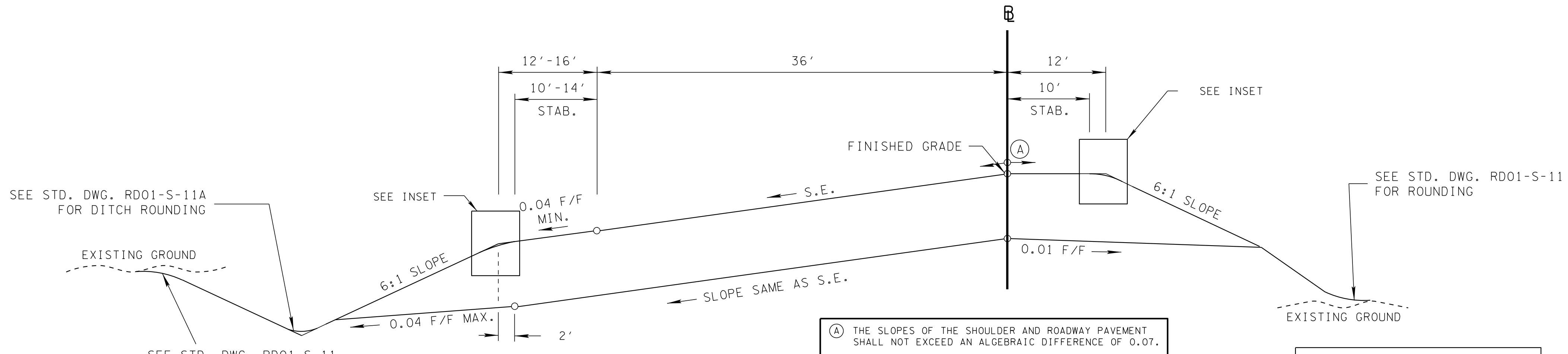
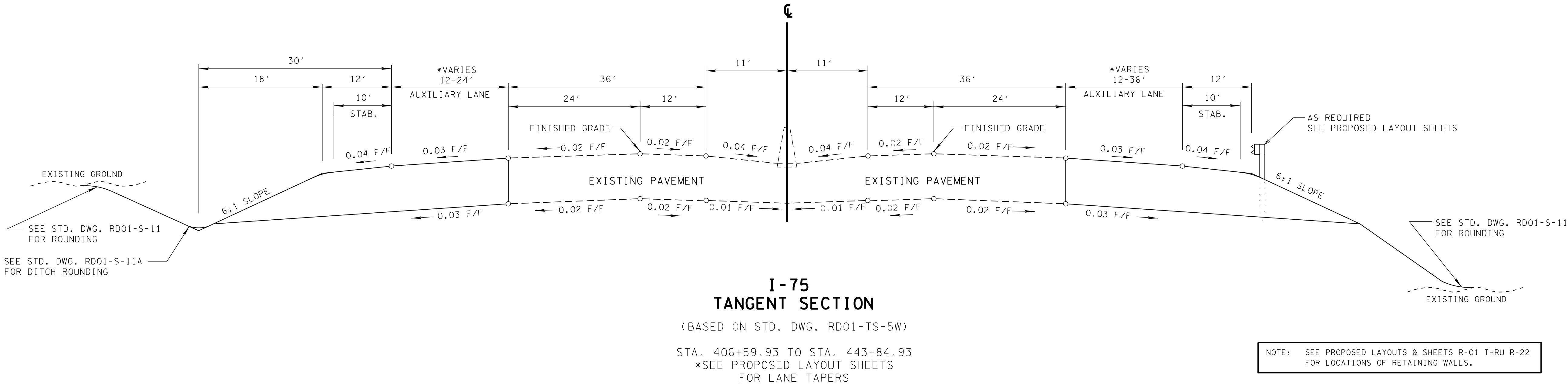
**CAUTION !**  
DESIGN-BUILD  
DEFINITIVE  
DESIGN PLANS  
SUBJECT TO  
CHANGE

SEALED BY

STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION

TYPICAL  
SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2019	IM/NH-75-1(131)	2A



**CAUTION !**  
DESIGN-BUILD  
DEFINITIVE  
DESIGN PLANS  
SUBJECT TO  
CHANGE

SEALED BY

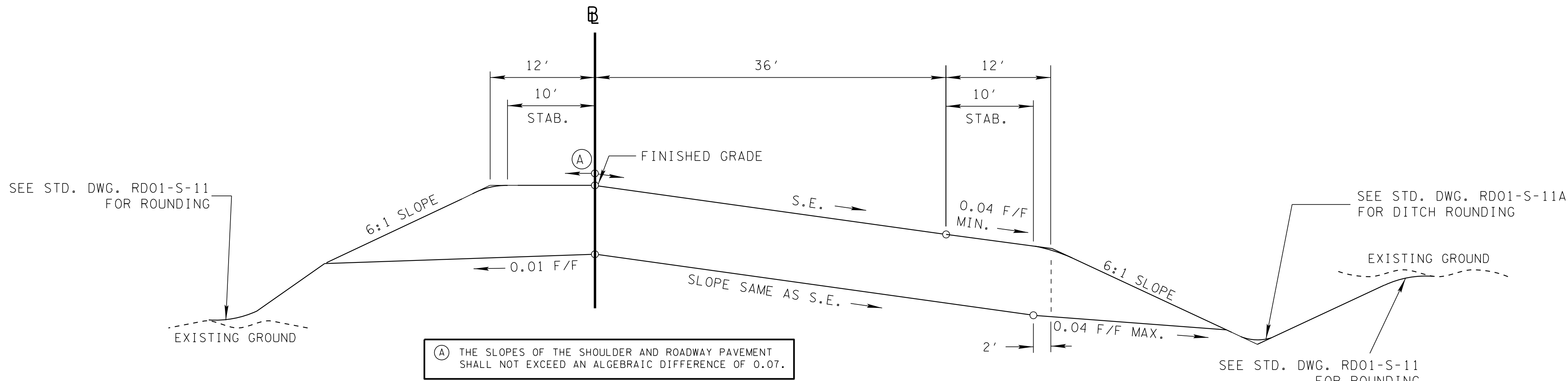
STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION

TYPICAL  
SECTIONS





TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2019	IM/NH-75-1(131)	2A2

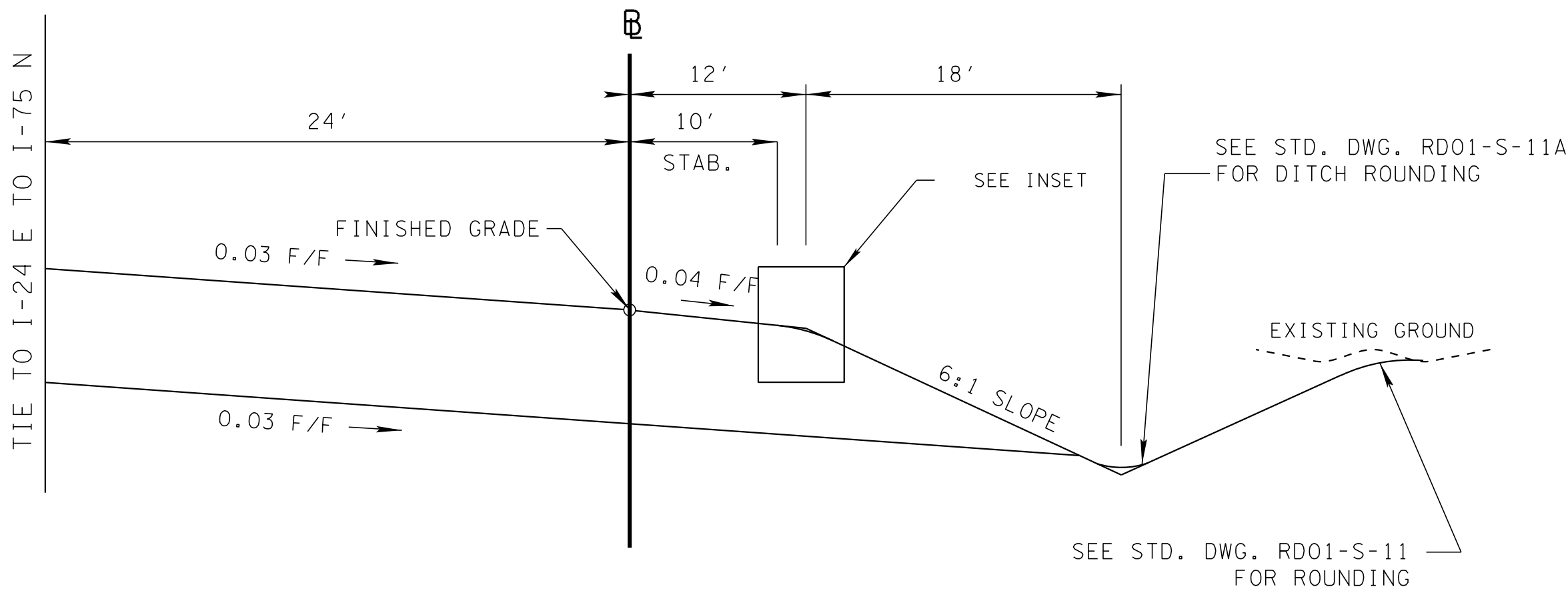


**I-75 NORTHBOUND TO I-24 WESTBOUND  
SUPERELEVATED SECTION**

(BASED ON STD. DWG. RD01-TS-3B)

STA. 246+80.97 TO STA. 247+50.97

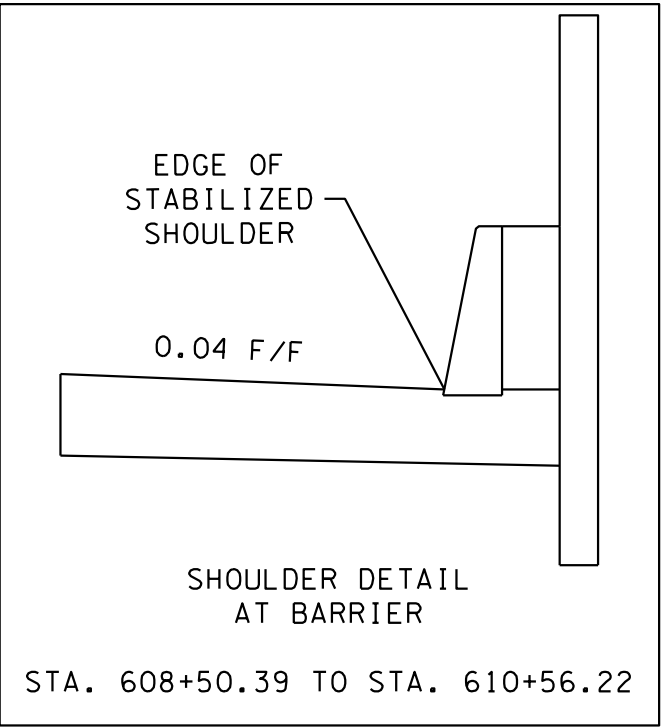
NOTE: SEE PROPOSED LAYOUTS & SHEETS R-01 THRU R-22  
FOR LOCATIONS OF RETAINING WALLS.



**I-24 EASTBOUND TO I-75 SOUTHBOUND  
TANGENT SECTION**

(BASED ON STD. DWG. RD01-TS-3B)

STA. 608+50.39 TO STA. 611+60.24



**CAUTION !**  
DESIGN-BUILD  
DEFINITIVE  
DESIGN PLANS  
SUBJECT TO  
CHANGE

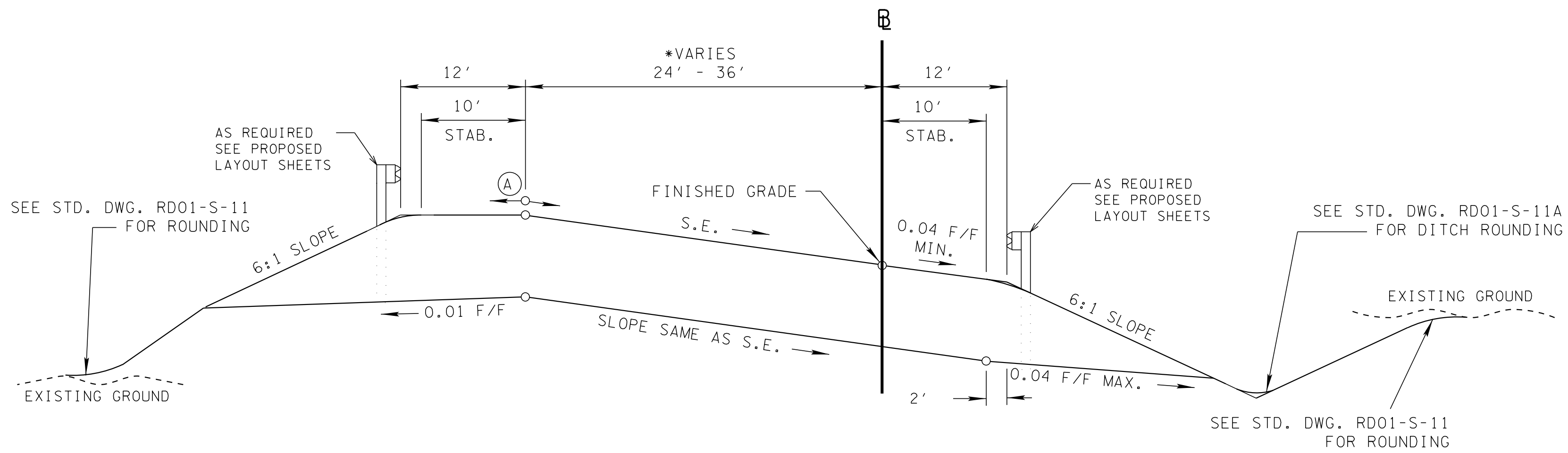
SEALED BY

STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION

TYPICAL  
SECTIONS

2/14/2019  
F:\36\36908\3690800\04\_CAD\TRNS\002-Typicals.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2019	IM/NH-75-1(131)	2A3

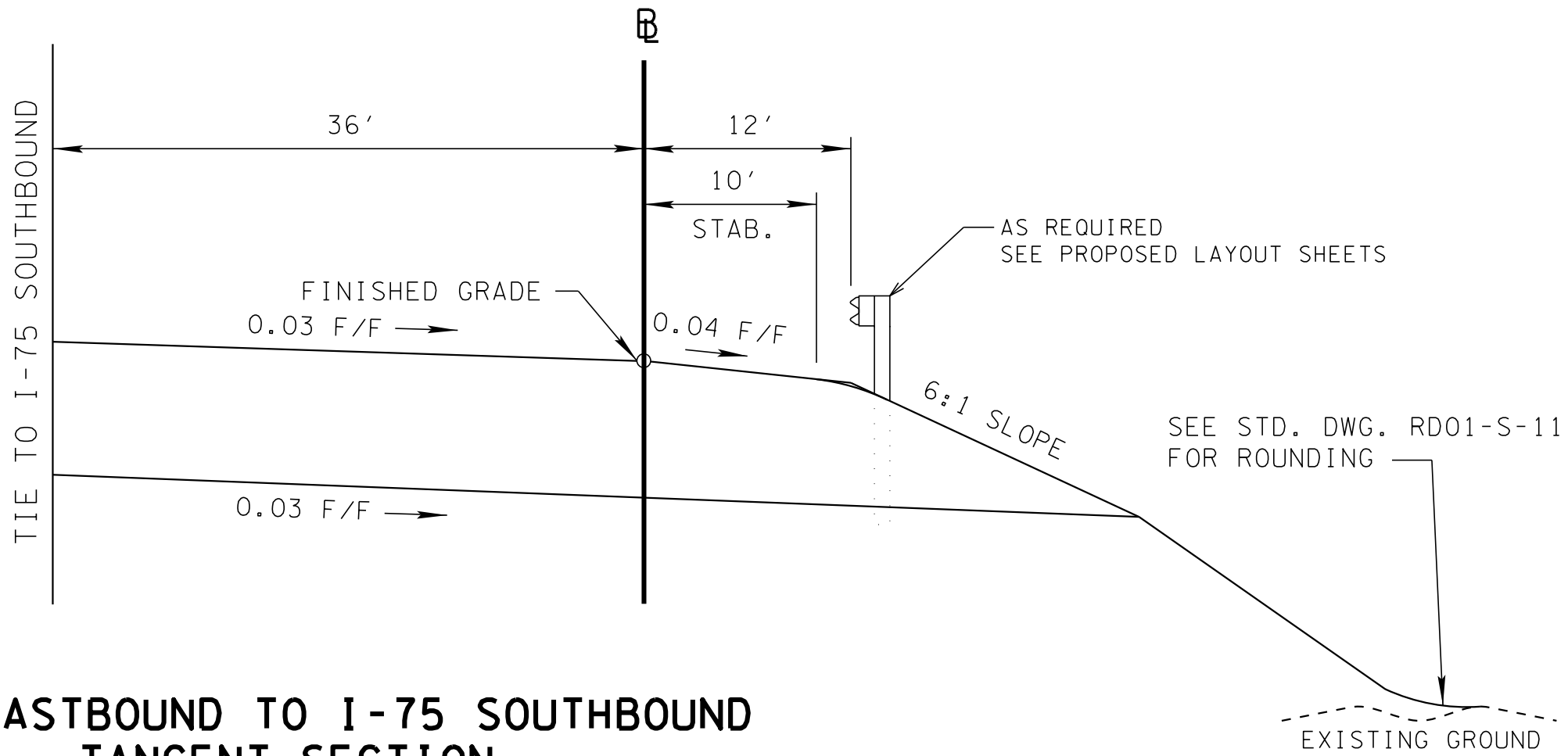


**I-24 EASTBOUND TO I-75 SOUTHBOUND  
SUPERELEVATED SECTION**  
(BASED ON STD. DWG. RD01-TS-3B)

STA. 611+60.24 TO STA. 636+22.22  
\*SEE PROPOSED LAYOUT SHEETS  
FOR LANE TAPERS

(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT  
SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.

NOTE: SEE PROPOSED LAYOUTS & SHEETS R-01 THRU R-22  
FOR LOCATIONS OF RETAINING WALLS.



**I-24 EASTBOUND TO I-75 SOUTHBOUND  
TANGENT SECTION**  
(BASED ON STD. DWG. RD01-TS-3B)

STA. 636+22.22 TO STA. 650+69.10

**CAUTION !**  
DESIGN-BUILD  
DEFINITIVE  
DESIGN PLANS  
SUBJECT TO  
CHANGE

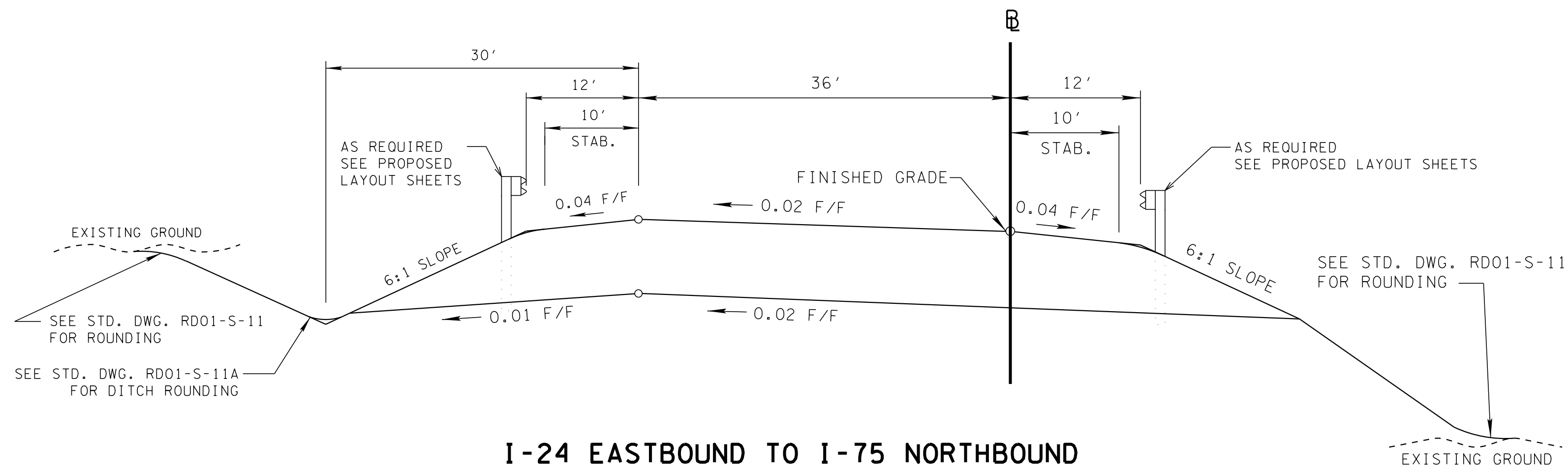
SEALED BY

STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION

TYPICAL  
SECTIONS

2/14/2019  
F:\36\36908\3690800\04\_CAD\TRNS\002-Typicals.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2019	IM/NH-75-1(131)	2A4



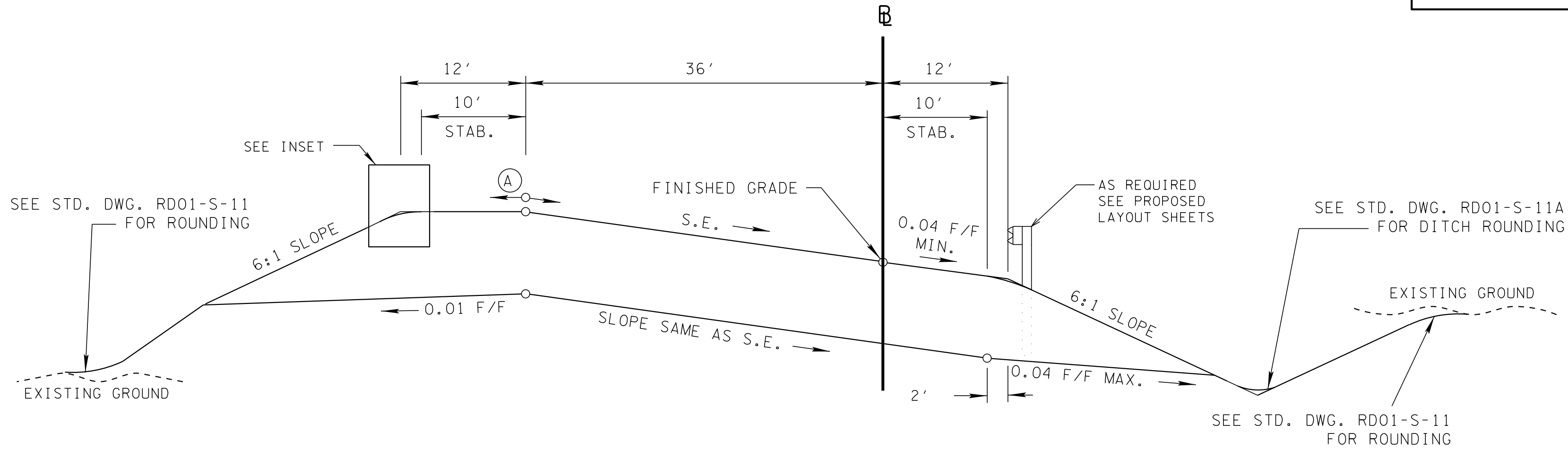
**I-24 EASTBOUND TO I-75 NORTHBOUND  
TANGENT SECTION**

(BASED ON STD. DWG. RD01-TS-3B)

STA. 897+59.83 TO STA. 899+90.63  
STA. 910+42.21 TO STA. 911+90.21  
STA. 921+37.85 TO STA. 923+65.03  
STA. 933+59.86 TO STA. 933+79.75  
STA. 938+47.19 TO STA. 938+48.77  
STA. 943+57.00 TO STA. 944+43.46

NOTE: STA 800+00.00 TO STA. 899+90.63  
RIGHT SIDE TIES TO I-24 EB TO I-75SB

NOTE: SEE PROPOSED LAYOUTS & SHEETS R-01 THRU R-22  
FOR LOCATIONS OF RETAINING WALLS.



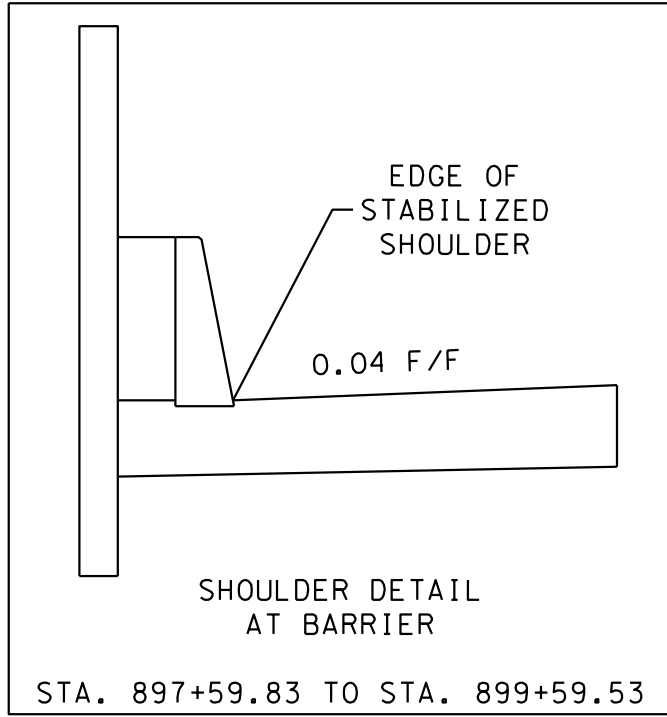
**I-24 EASTBOUND TO I-75 NORTHBOUND  
SUPERELEVATED SECTION**

(BASED ON STD. DWG. RD01-TS-3B)

STA. 899+90.63 TO STA. 910+42.21  
STA. 911+90.21 TO STA. 921+37.85  
STA. 923+65.03 TO STA. 933+59.86  
STA. 933+79.75 TO STA. 938+47.19  
STA. 938+48.77 TO STA. 943+57.00

NOTE: STA 899+90.63 TO STA. 902+91.76  
RIGHT SIDE TIES TO I-24 EB TO I-75SB

(A) THE SLOPES OF THE SHOULDER AND ROADWAY PAVEMENT  
SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 0.07.



**CAUTION !**  
DESIGN-BUILD  
DEFINITIVE  
DESIGN PLANS  
SUBJECT TO  
CHANGE

SEALED BY

STATE OF TENNESSEE  
DEPARTMENT OF  
TRANSPORTATION

TYPICAL  
SECTIONS

**Appendix B**  
**Noise Measurement Data Sheets and Photographs**

## **Validation Noise Measurement Data**

Site	Date	Time	Lane	Traffic Volumes															Speed					
				EB					WB					Terrace					EB			WB		
				Auto	MT	HT	Bus	MC	Auto	MT	HT	Bus	MC	Auto	MT	HT	Bus	MC	Auto	MT	HT	Auto	MT	HT
1	9/30/2021	9:30:25 AM	Inside	1521	30	81	0	9	1209	24	48	0	6	642	15	3	0	3	66	66	62	64	57	59
			Middle	762	57	360	3	0	744	45	342	0	0	0	0	0	0	0						
			Outside	543	45	276	3	0	489	33	255	3	0	0	0	0	0	0						
2		10:40:00 AM	Inside	1284	30	72	0	3	1134	27	69	0	3	126	0	0	0	0	64	58	61	63	59	60
			Middle	915	69	324	3	3	693	36	426	0	6	0	0	0	0	0						
			Outside	621	48	246	0	0	636	42	216	0	0	0	0	0	0	0						
3		11:56:48 AM	Ramp	240	0	6	0	0	261	9	6	0	0	0	0	0	0	0						
			Inside	1449	18	90	0	6	1140	30	120	3	3	342	6	6	0	0	65	65	61	60	60	56
			Middle	939	63	363	0	3	693	69	441	9	9	0	0	0	0	0						
4		1:35:03 PM	Outside	618	24	339	3	6	717	57	153	9	3	0	0	0	0	0						
			Ramp	288	6	6	0	0	324	0	0	0	0	0	0	0	0	0						
			Lane	NB					SB										NB			SB		
			Auto	MT	HT	Bus	MC	Auto	MT	HT	Bus	MC						Auto	MT	HT	Auto	MT	HT	
			Inside	579	3	9	0	0	684	12	45	3	6						63	57	59	63	57	59
			Middle Inside	783	9	150	18	3	708	39	258	0	0											
		Middle Outside	903	36	231	0	3	765	21	180	0	0												
		Outside	915	48	180	9	0	678	27	123	0	0												

**529/531 Brookfield Avenue Looking North**



**529/531 Brookfield Avenue Looking West**





**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> <i>D. Reiter</i>		<b>Site Sketch</b>	
<b>Date</b> <i>9-30-21</i>		<p>Indicate North</p>	
<b>Address</b> <i>529/531 Brookfield</i>			
<b>Land Use</b> <i>Residential</i>			
<b>Meteorological Conditions</b>			
Temperature(s) <i>71</i> °F	Wind Speed & Dir <i>mph, from</i>		
<b>Calibration</b>			
Analyzer/File Name <i>0001604 / 033</i>			
(Pre) Cal Time/Level <i>9:20 AM / 114.0</i>			
(Post) Cal Time/Level <i>2:10 PM / 113.8</i>			

Period #	Start Time	Event Description(s)	A	MT	HT	MC
1	9:30	69-73 dB, HT - 776				
2	9:31	Autos on ST = 74-75				
3	9:32	MC = 77				
4	9:33	ONLY I-24 70-72				
5	9:34	Load Truck on I-24 = 76, I-24 71-74				
6	9:35	I-				
7	9:36	I-24 = 72				
8	9:37	MT = 80				
9	9:38	Truck on I-24 = 78				
10	9:39					
11	9:40	W11 = 66 dB				
12	9:41					
13	9:42					
14	9:43					
15	9:44	JAKE BRIDGE = 82				
16	9:45	W11 = 68, I-24 - 71-72				
17	9:46					
18	9:47					
19	9:48	I-24 70-71				
20	9:49	Load MT				
21	9:50					
22						
23						
24						
25						
26						
27						
28						
29						
30						



# Tennessee Department of Transportation

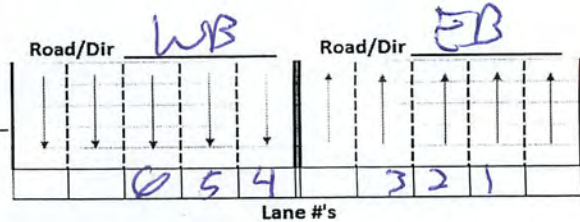
<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>529_531 Brookfield</b>
<b>Description:</b>	<b>Duplex</b>
<b>SLM Filename:</b>	<b>LxT_1604_Data.033.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	9:30:25 AM	74.1	77.1		
2	9:31:25 AM	73.1	76.1		
3	9:32:25 AM	73.4	78.5		
4	9:33:25 AM	72.6	75.7		
5	9:34:25 AM	73.7	77.8		
6	9:35:25 AM	72.7	76.0		
7	9:36:25 AM	73.2	75.4		
8	9:37:25 AM	74.0	80.3		
9	9:38:25 AM	73.7	77.0		
10	9:39:25 AM	73.9	78.7		
11	9:40:25 AM	72.4	76.2		
12	9:41:25 AM	73.5	77.7		
13	9:42:25 AM	74.0	76.4		
14	9:43:25 AM	74.0	81.0		
15	9:44:25 AM	74.8	84.5		Jakebrake
16	9:45:25 AM	73.2	75.4		
17	9:46:25 AM	73.3	75.6		
18	9:47:25 AM	74.4	78.8		
19	9:48:25 AM	72.7	76.4		
20	9:49:25 AM	74.3	80.3		
<b>Leq</b>		<b>73.6</b>			

Vehicle Speed Data Sheet

Date 9/30/2021 Name GP

Site Belvoir Overpass



Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Notes (start/end time, incident, file name, etc.)
9:30	67	HT	2	9:35	58	HT	5	9:40	60	HT	2	
	65	A	2		65	A	5		66	HT	2	
	64	A	2		66	HT	5		67	A	2	
	62	HT	2		64	A	4		66	A	1	
	69	HT	3		59	A	6		64	HT	2	
	64	HT	1		60	HT	5		62	HT	2	
	56	HT	1		58	HT	6		60	HT	1	
	71	A	3		60	A	6		62	MT	3	
	66	MT	1		66	A	6		66	A	1	
	57	A	2		68	A	5		62	HT	2	
	69	A	3		69	A	5		65	HT	2	
	61	A	2		62	HT	5		63	HT	1	
	64	HT	2		62	HT	5		66	A	3	
	55	A	2		55	HT	5		65	HT	2	
	69	A	1		55	A	6		67	A	3	
	63	A	5		54	HT	6		67	A	2	
	63	HT	1		60	A	6		67	A	3	
	74	A	3		52	HT	6		65	HT	2	
	64	HT	1		59	HT	5		66	A	2	
	70	MT	3		58	HT	4		63	HT	2	
	68	A	2		63	A	4		68	A	1	
					57	MT	6		60	A	1	
									69	A	3	
<hr/>												
9:45	64	A	4		58	HT	5					
	57	HT	5		62	A	5					
	68	A	4		60	A	6					
	57	HT	6		52	HT	6					
	66	HT	5		60	HT	5					
	67	A	4									
	67	A	5									
	62	HT	5									
	67	A	6									
	62	HT	6									
	63	HT	6									
	60	HT	6									
	53	A	5									
	56	MT	6									
	62	A	6									



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b>	
<b>Date</b>	9/30/2021	Indicate North	
<b>Address</b>	ROW - Pymt. Ret		
<b>Land Use</b>	N/A		
<b>Meteorological Conditions</b>			
Temperature(s)	61 °F		
Wind Speed & Dir	5 mph, from NE		
<b>Calibration</b>			
Analyzer/File name	1605		
(Pre) Cal Time/Level	8:11 114.0		
(Post) Cal Time/Level			

Period #	Start Time	Event Description(s)
1	8:14	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
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21		
22		
23		
24		
25		
26		
27		
28		
29		
30		



**I-24 Pavement Reference Looking South**



**I-24 Pavement Reference Looking East**



## Tennessee Department of Transportation

<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>Site 2 Pvmnt Inside ROW</b>
<b>Description:</b>	<b>Pavement REF Inside ROW</b>
<b>SLM Filename:</b>	<b>LxT_1605_Data.017.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	10:40:00 AM	82.0	83.6		
2	10:40:10 AM	81.6	82.9		
3	10:40:20 AM	80.7	83.2		
4	10:40:30 AM	82.1	84.1		
5	10:40:40 AM	81.2	84.4		
6	10:40:50 AM	81.1	83.4		
7	10:41:00 AM	80.3	81.7		
8	10:41:10 AM	81.5	83.1		
9	10:41:20 AM	82.1	84.6		
10	10:41:30 AM	79.2	80.0		
11	10:41:40 AM	78.7	80.0		
12	10:41:50 AM	78.9	83.1		
13	10:42:00 AM	81.8	83.8		
14	10:42:10 AM	80.0	81.8		
15	10:42:20 AM	82.6	87.1		
16	10:42:30 AM	83.2	85.0		
17	10:42:40 AM	81.5	83.2		
18	10:42:50 AM	79.6	82.0		
19	10:43:00 AM	82.3	83.6		
20	10:43:10 AM	79.8	82.5		
21	10:43:20 AM	79.4	82.1		
22	10:43:30 AM	77.0	81.9		
23	10:43:40 AM	82.6	85.1		
24	10:43:50 AM	82.1	84.0		
25	10:44:00 AM	82.0	84.4		
26	10:44:10 AM	81.6	83.3		
27	10:44:20 AM	82.1	85.4		
28	10:44:30 AM	82.6	84.9		
29	10:44:40 AM	79.6	81.6		
30	10:44:50 AM	80.6	83.4		
31	10:45:00 AM	81.3	83.3		
32	10:45:10 AM	80.6	83.3		
33	10:45:20 AM	81.7	83.8		
34	10:45:30 AM	80.7	82.6		
35	10:45:40 AM	81.7	83.4		
36	10:45:50 AM	81.7	84.5		
37	10:46:00 AM	81.7	84.4		
38	10:46:10 AM	82.0	83.4		
39	10:46:20 AM	79.8	81.7		
40	10:46:30 AM	79.8	81.8		
41	10:46:40 AM	80.2	81.8		
42	10:46:50 AM	79.8	81.5		
43	10:47:00 AM	78.3	80.1		
44	10:47:10 AM	78.8	81.6		
45	10:47:20 AM	80.5	81.9		
46	10:47:30 AM	79.8	80.4		
47	10:47:40 AM	81.8	84.9		
48	10:47:50 AM	82.0	84.6		
49	10:48:00 AM	82.3	83.4		
50	10:48:10 AM	81.1	83.6		
51	10:48:20 AM	83.1	87.9		
52	10:48:30 AM	84.0	86.2		
53	10:48:40 AM	81.7	82.6		
54	10:48:50 AM	80.5	82.7		
55	10:49:00 AM	78.9	80.9		
56	10:49:10 AM	80.5	83.6		
57	10:49:20 AM	82.6	86.2		
58	10:49:30 AM	79.9	84.3		
59	10:49:40 AM	82.5	84.2		
60	10:49:50 AM	82.2	86.5		
61	10:50:00 AM	82.6	83.6		
62	10:50:10 AM	83.1	84.8		
63	10:50:20 AM	82.1	83.9		
64	10:50:30 AM	79.9	81.9		

# Tennessee Department of Transportation

<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>Site 2 Pvmnt Inside ROW</b>
<b>Description:</b>	<b>Pavement REF Inside ROW</b>
<b>SLM Filename:</b>	<b>LxT_1605_Data.017.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

Period #	Time Start	Leq	Lmax	Delete?	Notes
65	10:50:40 AM	79.7	81.7		
66	10:50:50 AM	80.9	83.4		
67	10:51:00 AM	81.0	83.1		
68	10:51:10 AM	80.2	83.1		
69	10:51:20 AM	81.6	83.7		
70	10:51:30 AM	82.0	84.1		
71	10:51:40 AM	83.8	86.3		
72	10:51:50 AM	78.4	80.3		
73	10:52:00 AM	77.3	78.9		
74	10:52:10 AM	79.1	81.8		
75	10:52:20 AM	80.3	82.6		
76	10:52:30 AM	81.6	83.6		
77	10:52:40 AM	82.2	83.7		
78	10:52:50 AM	81.6	84.9		
79	10:53:00 AM	82.7	84.8		
80	10:53:10 AM	80.7	81.4		
81	10:53:20 AM	80.6	81.8		
82	10:53:30 AM	81.3	84.0		
83	10:53:40 AM	83.7	87.5		
84	10:53:50 AM	78.5	83.4		
85	10:54:00 AM	82.1	84.4		
86	10:54:10 AM	82.6	85.0		
87	10:54:20 AM	80.3	81.6		
88	10:54:30 AM	80.3	82.1		
89	10:54:40 AM	80.1	81.9		
90	10:54:50 AM	78.3	79.7		
91	10:55:00 AM	79.2	82.1		
92	10:55:10 AM	81.7	83.4		
93	10:55:20 AM	78.2	81.3		
94	10:55:30 AM	81.7	83.8		
95	10:55:40 AM	80.8	82.9		
96	10:55:50 AM	81.1	84.0		
97	10:56:00 AM	80.7	82.2		
98	10:56:10 AM	79.7	81.6		
99	10:56:20 AM	83.0	84.8		
100	10:56:30 AM	81.5	83.7		
101	10:56:40 AM	79.7	83.9		
102	10:56:50 AM	81.1	83.7		
103	10:57:00 AM	81.1	83.4		
104	10:57:10 AM	79.5	80.9		
105	10:57:20 AM	80.1	81.7		
106	10:57:30 AM	81.4	83.7		
107	10:57:40 AM	80.9	83.9		
108	10:57:50 AM	81.6	85.2		
109	10:58:00 AM	81.1	83.3		
110	10:58:10 AM	84.5	87.9		
111	10:58:20 AM	80.2	82.4		
112	10:58:30 AM	79.6	83.0		
113	10:58:40 AM	81.3	83.2		
114	10:58:50 AM	82.1	84.7		
115	10:59:00 AM	79.8	82.4		
116	10:59:10 AM	81.1	84.1		
117	10:59:20 AM	81.8	83.6		
118	10:59:30 AM	82.0	84.0		
119	10:59:40 AM	80.6	83.6		
120	10:59:50 AM	81.9	84.2		
<b>Leq</b>		<b>81.2</b>			



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b>	
<b>Date</b> 9/30/2021		Indicate North	
<b>Address</b> ROW - Pymt. Ret			
<b>Land Use</b> N/A			
<b>Meteorological Conditions</b>			
Temperature(s) 61 °F			
Wind Speed & Dir 5 mph, from NE			
<b>Calibration</b>			
Analyzer/File name 1605			
(Pre) Cal Time/Level 8:11 114.0			
(Post) Cal Time/Level			

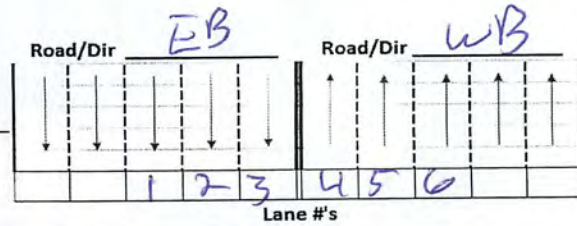
Period #	Start Time	Event Description(s)
1	8:14	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
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30		





# Vehicle Speed Data Sheet

Date 9/30/2021 Name GP  
 Site Moore Overpass



Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Notes (start/end time, incident, file name, etc.)
<del>10:40</del>				10:48	59	HT	5	10:54	59	A	1	
10:40	66	A	1		60	HT	6		60	HT	1	
	61	HT	2		64	A	5		70	A	2	
	66	A	3		65	HT	5		03	A	1	
	59	HT	2		63	A	4		67	A	3	
	62	HT	1		57	A	6		62	HT	2	
	62	A	1		62	HT	5		60	A	2	
	65	HT	3		61	A	6		66	HT	2	
	66	A	2		52	HT	5		59	HT	2	
	56	HT	2		56	HT	5		65	HT	1	
	59	A	2		65	A	4		60	HT	2	
	57	HT	2		62	HT	5		61	A	1	
	59	HT	2		67	A	4		64	A	3	
	62	HT	2		62	A	5		62	HT	1	
	60	HT	3		61	HT	5		60	A	2	
	59	HT	1		60	HT	6		64	A	2	
	59	HT	1		68	A	5		65	A	3	
	62	HT	1		62	A	5		62	A	2	
	62	A	1		65	A	5		66	HT	1	
	68	A	3		67	A	4		60	A	3	
	65	A	3		64	A	4		61	A	2	
	62	A	2		62	HT	6		60	HT	2	
					59	HT	5		60	HT	2	
					60	HT	5		64	A	2	
									60	HT	1	
<hr/>												
10:58	66	A	4	90	HT	5						
	61	HT	6	60	A	4						
	60	HT	5	56	A	5						
	59	A	6	65	HT	5						
	63	HT	5	63	A	4						
	65	A	3	62	HT	5						
	59	A	6	57	HT	5						
	56	HT	5	53	HT	5						
	59	HT	5	58	HT	5						
	56	HT	5	61	A	4						
	60	A	4									
	56	HT	6									
	60	HT	5									



**Howell Avenue and South Terrace Looking North**



**Howell Avenue and South Terrace Looking South**



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b>	D. Reiter	<b>Site Sketch</b>	
<b>Date</b>	9-30-21	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Indicate North</p> </div> <div> </div> </div>	
<b>Address</b>	S. Howell Ave / N. Terrace		
<b>Land Use</b>	VACANT		
<b>Meteorological Conditions</b>			
Temperature(s)	76 °F		
Wind Speed & Dir	35 mph, from NW (low winds)		
<b>Calibration</b>			
Analyzer/File Name	COO1604/035		
(Pre) Cal Time/Level	9:20 AM / 114.0		
(Post) Cal Time/Level	2:10 PM / 113.8		

Period #	Start Time	Event Description(s)	A	MT	HT
1	11:57	HTS - 74-76, Lull - 69	HTT		
2	11:58		I		
3	11:59		II		
4	12:00		HTT HTT I	I	
5	12:01		HTT III		
6	12:02	HTS - 75-76	HTT		
7	12:03		HTT III		
8	12:04		HTT		
9	12:05		HTT		
10	12:06				
11	12:07		I		
12	12:08	I-24 - 72-73	HTT		
13	12:09		I		
14	12:10	HTS - 75	HTT HTT II		I
15	12:11	HTS - 74	II		
16	12:12		HTT HTT II	I	
17	12:13	I-24 - 72-73, HT - 76			
18	12:14	Lull - 68	HTT HTT I		
19	12:15		II		I
20	12:16		HTT HTT HTT III		
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

## Tennessee Department of Transportation

<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>S Howell Ave_S Terrace</b>
<b>Description:</b>	<b>Vacant Lot</b>
<b>SLM Filename:</b>	<b>LxT_1604_Data.035.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

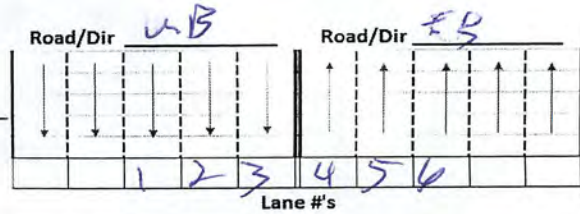
Period #	Time Start	Leq	Lmax	Delete?	Notes
1	11:56:48 AM	74.0	77.9		
2	11:57:48 AM	74.3	77.7		
3	11:58:48 AM	73.0	75.0		
4	11:59:48 AM	72.4	76.2		
5	12:00:48 PM	73.5	77.1		
6	12:01:48 PM	74.4	76.7		
7	12:02:48 PM	73.4	76.6		
8	12:03:48 PM	73.4	76.1		
9	12:04:48 PM	73.0	75.5		
10	12:05:48 PM	73.8	76.6		
11	12:06:48 PM	74.3	82.4		
12	12:07:48 PM	73.4	75.3		
13	12:08:48 PM	72.9	74.2		
14	12:09:48 PM	73.6	77.8		
15	12:10:48 PM	73.0	75.3		
16	12:11:48 PM	72.6	75.1		
17	12:12:48 PM	73.2	75.2		
18	12:13:48 PM	73.6	76.0		
19	12:14:48 PM	71.8	74.3		
20	12:15:48 PM	73.2	76.2		
<b>Leq</b>		<b>73.4</b>			



Vehicle Speed Data Sheet

Date 08 Name 9/30/2021

Site Moose Overpass



Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Notes (start/end time, incident, file name, etc.)
11:53	62	HT	4	11:58	58	A	3	12:03	63	A	5	
	60	HT	5		54	HT	3		68	HT	5	
	63	HT	6		59	HT	2		63	A	5	
	65	A	2		54	A	2		65	HT	5	
	63	A	5		65	A	2		57	HT	5	
	64	HT	5		61	A	1		55	HT	5	
	64	HT	5		58	A	2		56	A	5	
	64	A	4		54	HT	2		58	HT	6	
	62	HT	6		64	A	1		64	HT	5	
	66	A	5		64	HT	2		58	HT	5	
	57	HT	5		51	HT	1		62	A	4	
	65	A	5		52	A	2		62	HT	5	
	64	A	4		59	HT	2		65	HT	5	
	72	HT	6		60	HT	2		59	A	5	
	70	A	4		57	A	1		65	HT	5	
	68	A	4		60	HT	2		62	HT	6	
	64	A	5		61	A	2		70	A	4	
	60	A	5		67	A	2		70	A	5	
	60	A	4		64	HT	2		61	HT	5	
	63	HT	6		58	HT	2					
	61	A	5		61	A	2					
	63	A	6									
<hr/>												
12:08	53	HT	2	12:08	58	A	2					
	58	HT	2		65	A	3					
	44	HT	2		60	A	1					
	58	HT	1		71	HT	2					
	59	A	2		58	HT	1					
	58	A	3									
	58	HT	2	12:10	65	A	5		A	54	6	12:16 M out Over sign
	59	A	2		58	HT	6					
	62	A	1		56	HT	5					
	63	A	3		64	A	5					
	76	HT	2		69	A	4					
	60	A	2		65	HT	5					
	60	HT	2		74	A	4					
	63	A	2		64	A	5					
	55	A	1		60	HT	6					
	60	A	2		62	HT	5					



**I-75 Pavement Reference Looking Northwest**



**I-75 Pavement Reference Looking Southwest**





**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> CP		<b>Site Sketch</b>	
<b>Date</b> 9/30/2017		Indicate North	
<b>Address</b> I-75 R&W			
<b>Land Use</b>			
<b>Meteorological Conditions</b>			
Temperature(s) 77 °F			
Wind Speed & Dir 2mph, from V			
<b>Calibration</b>			
Analyzer/File Name 1605			
(Pre) Cal Time/Level 114.0			
(Post) Cal Time/Level 14:40 113.4			

Period #	Start Time	Event Description(s)
1	12:55	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
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## Tennessee Department of Transportation

<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>I-75 Pvmnt</b>
<b>Description:</b>	<b>I-75 Pavement Reference</b>
<b>SLM Filename:</b>	<b>LxT_1605_Data.017.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	1:35:00 PM	78.4	79.5		
2	1:35:10 PM	77.6	78.7		
3	1:35:20 PM	78.4	79.7		
4	1:35:30 PM	77.9	79.3		
5	1:35:40 PM	77.3	79.2		
6	1:35:50 PM	75.0	76.3		
7	1:36:00 PM	75.4	77.7		
8	1:36:10 PM	76.3	77.8		
9	1:36:20 PM	78.1	79.1		
10	1:36:30 PM	76.8	78.3		
11	1:36:40 PM	79.0	80.3		
12	1:36:50 PM	80.2	81.5		
13	1:37:00 PM	77.6	79.0		
14	1:37:10 PM	76.4	77.7		
15	1:37:20 PM	77.7	78.2		
16	1:37:30 PM	77.5	78.7		
17	1:37:40 PM	76.9	79.1		
18	1:37:50 PM	77.5	78.7		
19	1:38:00 PM	76.8	79.2		
20	1:38:10 PM	78.4	79.7		
21	1:38:20 PM	78.4	79.7		
22	1:38:30 PM	76.2	77.4		
23	1:38:40 PM	78.1	79.3		
24	1:38:50 PM	77.5	79.2		
25	1:39:00 PM	77.3	77.9		
26	1:39:10 PM	78.2	80.0		
27	1:39:20 PM	77.9	78.8		
28	1:39:30 PM	78.0	80.5		
29	1:39:40 PM	79.7	81.9		
30	1:39:50 PM	79.1	79.8		
31	1:40:00 PM	79.3	80.3		
32	1:40:10 PM	78.2	78.9		
33	1:40:20 PM	77.6	77.9		
34	1:40:30 PM	77.6	78.6		
35	1:40:40 PM	77.6	78.7		
36	1:40:50 PM	76.8	79.3		
37	1:41:00 PM	75.9	78.7		
38	1:41:10 PM	75.7	78.0		
39	1:41:20 PM	77.8	79.6		
40	1:41:30 PM	79.2	80.4		
41	1:41:40 PM	80.1	80.5		
42	1:41:50 PM	79.8	81.0		
43	1:42:00 PM	78.3	79.8		
44	1:42:10 PM	80.2	81.8		
45	1:42:20 PM	79.7	81.9		
46	1:42:30 PM	79.4	81.4		
47	1:42:40 PM	75.9	76.7		
48	1:42:50 PM	77.8	79.4		
49	1:43:00 PM	78.9	79.8		
50	1:43:10 PM	78.9	79.5		
51	1:43:20 PM	79.9	82.1		
52	1:43:30 PM	79.0	80.3		
53	1:43:40 PM	78.3	80.1		
54	1:43:50 PM	79.5	80.6		
55	1:44:00 PM	77.9	78.6		
56	1:44:10 PM	78.1	78.7		
57	1:44:20 PM	77.0	77.7		
58	1:44:30 PM	78.0	79.0		
59	1:44:40 PM	78.7	79.8		
60	1:44:50 PM	79.3	82.3		
61	1:45:00 PM	77.8	79.4		
62	1:45:10 PM	78.6	80.3		
63	1:45:20 PM	79.2	80.6		
64	1:45:30 PM	78.1	80.2		

# Tennessee Department of Transportation

<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>I-75 Pvmnt</b>
<b>Description:</b>	<b>I-75 Pavement Reference</b>
<b>SLM Filename:</b>	<b>LxT_1605_Data.017.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

Period #	Time Start	Leq	Lmax	Delete?	Notes
65	1:45:40 PM	77.2	78.2		
66	1:45:50 PM	78.0	78.9		
67	1:46:00 PM	78.9	80.2		
68	1:46:10 PM	77.4	78.2		
69	1:46:20 PM	77.2	78.4		
70	1:46:30 PM	77.6	79.1		
71	1:46:40 PM	77.9	78.5		
72	1:46:50 PM	76.8	78.4		
73	1:47:00 PM	77.5	78.5		
74	1:47:10 PM	79.5	81.2		
75	1:47:20 PM	77.1	79.3		
76	1:47:30 PM	75.8	77.1		
77	1:47:40 PM	76.7	77.9		
78	1:47:50 PM	77.4	78.8		
79	1:48:00 PM	76.8	79.3		
80	1:48:10 PM	77.2	78.6		
81	1:48:20 PM	78.0	78.6		
82	1:48:30 PM	76.7	78.0		
83	1:48:40 PM	75.9	80.0		
84	1:48:50 PM	78.1	79.7		
85	1:49:00 PM	78.6	79.6		
86	1:49:10 PM	77.7	79.0		
87	1:49:20 PM	78.5	80.1		
88	1:49:30 PM	77.2	78.6		
89	1:49:40 PM	77.6	78.9		
90	1:49:50 PM	79.1	80.8		
91	1:50:00 PM	77.3	78.0		
92	1:50:10 PM	76.8	77.4		
93	1:50:20 PM	78.4	83.3		
94	1:50:30 PM	79.0	83.3		
95	1:50:40 PM	78.5	79.2		
96	1:50:50 PM	77.1	78.4		
97	1:51:00 PM	77.0	77.8		
98	1:51:10 PM	78.0	79.0		
99	1:51:20 PM	75.0	78.0		
100	1:51:30 PM	76.7	80.1		
101	1:51:40 PM	77.4	80.0		
102	1:51:50 PM	77.2	78.9		
103	1:52:00 PM	76.2	78.6		
104	1:52:10 PM	75.2	76.5		
105	1:52:20 PM	77.5	78.4		
106	1:52:30 PM	78.3	79.3		
107	1:52:40 PM	77.2	78.0		
108	1:52:50 PM	75.0	77.8		
109	1:53:00 PM	77.2	79.2		
110	1:53:10 PM	76.4	78.1		
111	1:53:20 PM	76.1	77.7		
112	1:53:30 PM	80.3	81.4		
113	1:53:40 PM	78.0	79.0		
114	1:53:50 PM	77.5	79.4		
115	1:54:00 PM	79.3	81.4		
116	1:54:10 PM	78.8	81.4		
117	1:54:20 PM	77.5	78.3		
118	1:54:30 PM	75.8	77.1		
119	1:54:40 PM	77.0	77.9		
120	1:54:50 PM	77.4	78.6		
<b>Leq</b>		<b>77.9</b>			



**VA Covered Gazebo Looking Southwest**



**VA Covered Gazebo Looking Northwest**





**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b>	D. Reiter	<b>Site Sketch</b> Indicate North 
<b>Date</b>	9-30-21	
<b>Address</b>	VA Clinic - Premier Dr.	
<b>Land Use</b>	Clinic - Gazebo	
<b>Meteorological Conditions</b>		
Temperature(s)	79 °F	
Wind Speed & Dir	1-2 mph, from S	
<b>Calibration</b>		
Analyzer/File Name	0001604 / 036	
(Pre) Cal Time/Level	9:20 AM / 114.0	
(Post) Cal Time/Level	2:10 PM / 113.8	

Period #	Start Time	Event Description(s)
1	1:35	I-75 = 69
2	1:36	ITS = 70
3	1:37	I-75 = 69-70
4	1:38	
5	1:39	
6	1:40	Lull = 67
7	1:41	
8	1:42	Steady, Sake Brake = 73
9	1:43	
10	1:44	
11	1:45	Airplane Plow - 75, Load Truck - 75
12	1:46	
13	1:47	
14	1:48	
15	1:49	
16	1:50	Steady 69-70, Load Truck - 71
17	1:51	
18	1:52	Lull - 68
19	1:53	
20	1:54	Winds at 4-6 during last minute
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

## Tennessee Department of Transportation

<b>Project Name:</b>	<b>I-24/75 Interchange</b>
<b>Site:</b>	<b>VA Gazebo</b>
<b>Description:</b>	<b>VA Clinic, Premier Drive</b>
<b>SLM Filename:</b>	<b>LxT_1604_Data.036.xlsx</b>
<b>Date:</b>	<b>9/30/2021</b>

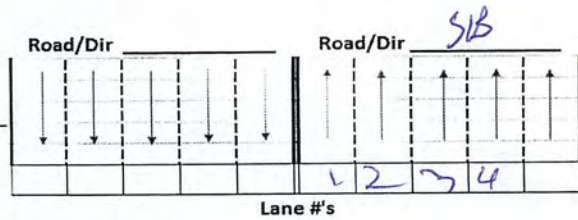
Period #	Time Start	Leq	Lmax	Delete?	Notes
1	1:35:03 PM	68.6	69.5		
2	1:36:03 PM	69.8	71.6		
3	1:37:03 PM	69.5	71.2		
4	1:38:03 PM	69.1	70.5		
5	1:39:03 PM	69.2	70.2		
6	1:40:03 PM	68.4	70.5		
7	1:41:03 PM	69.2	70.5		
8	1:42:03 PM	69.2	73.1		
9	1:43:03 PM	69.0	71.7		
10	1:44:03 PM	70.1	75.5		
11	1:45:03 PM	71.1	75.4	x	Airplane flyover
12	1:46:03 PM	69.3	71.1		
13	1:47:03 PM	68.7	69.8		
14	1:48:03 PM	68.7	70.2		
15	1:49:03 PM	68.8	69.6		
16	1:50:03 PM	69.5	72.7		
17	1:51:03 PM	70.5	71.7		
18	1:52:03 PM	69.8	72.2		
19	1:53:03 PM	68.7	69.9		
20	1:54:03 PM	68.4	69.2		
<b>Leq</b>		<b>69.2</b>			



Vehicle Speed Data Sheet

Date 7/30/2021 Name CP

Site LMU/VA/C spine Office  
The Point



Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Log #	Speed	Veh type	Lane	Notes (start/end time, incident, file name, etc.)
13:35	57	HT		13:47	70	HT	4					
	61	A			65	A	4					
	63	A			53	HT	2					
	65	A			55	A	4					
	67	HT	1		66	A	2					
	58	HT	1		64	A	3					
	63	A	4		62	A	2					
	58	HT	3		69	A	3					
	62	A	3		61	A	4					
	60	HT	2		61	A	4					
	63	HT	2		63	A	3					
	51	MT	4		61	HT	3					
	63	A	4		62	HT	2					
	61	HT	2		51	HT	4					
	62	HT	4		64	A	4					
	64	MT	3		58	HT	4					
	63	HT	2		64	A	3					
	61	HT	3		65	A	2					
					67	A	3					
13:40	62	HT	3		59	A	4					
	55	MT	4		58	HT	4					
	67	HT	2									
	65	A	4									
	61	A	4									
	52	HT	4									
	60	HT	2									
	66	A	4									
	54	A	4									
	58	HT	2									
	51	HT	4									
	61	A	2									
	58	HT	2									
	59	A	3									
	59	HT	3									
	63	A	4									
	60	HT	4									

## **2021 Noise Measurement Data**



**North Terrace Church of Christ Looking South**



**North Terrace Church of Christ Looking East**



Noise Measurement Data Sheet	
Project Name:	I-24/75 Interchange
Site:	<i>Reference</i>
Description:	North Terrace Church of Christ
SLM Filename:	LXT_Data_1638.005.xlsx
Date:	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	8:33 AM	71.4	74.0		
2	8:34 AM	71.6	75.6		
3	8:35 AM	73.7	83.9		
4	8:36 AM	71.4	74.9		
5	8:37 AM	72.3	76.3		
6	8:38 AM	74.9	85.8		
7	8:39 AM	72.7	78.8		
8	8:40 AM	75.2	87.9		
9	8:41 AM	71.1	75.1		
10	8:42 AM	72.9	76.2		
11	8:43 AM	72.5	76.1		
12	8:44 AM	74.8	82.6		
13	8:45 AM	72.1	74.8		
14	8:46 AM	72.3	77.3		
15	8:47 AM	72.1	74.3		
16	8:48 AM	74.1	77.5		
17	8:49 AM	72.0	73.8		
18	8:50 AM	70.9	74.8		
19	8:51 AM	72.2	76.5		
20	8:52 AM	72.4	76.6		
21	8:53 AM	74.8	81.7		
22	8:54 AM	72.4	74.8		
23	8:55 AM	72.1	75.8		
24	8:56 AM	71.6	74.2		
25	8:57 AM	72.5	78.4		
26	8:58 AM	71.4	75.1		
27	8:59 AM	74.5	81.1		
28	9:00 AM	72.0	75.0		
29	9:01 AM	71.5	74.0		
30	9:02 AM	72.1	74.9		
31	9:03 AM	71.6	75.3		
32	9:04 AM	72.5	76.5		
33	9:05 AM	72.2	75.8		
34	9:06 AM	72.5	76.3		
35	9:07 AM	71.6	73.9		
36	9:08 AM	75.9	83.9		
37	9:09 AM	71.8	75.1		
38	9:10 AM	73.2	77.8		
39	9:11 AM	73.4	79.5		
40	9:12 AM	72.2	75.7		
41	9:13 AM	72.1	76.7		
42	9:14 AM	71.5	76.7		
43	9:15 AM	72.1	76.1		
44	9:16 AM	71.7	74.0		
45	9:17 AM	72.3	75.6		
46	9:18 AM	72.1	75.7		
47	9:19 AM	72.3	76.4		
48	9:20 AM	74.0	81.8		
49	9:21 AM	71.7	79.4		
50	9:22 AM	73.9	80.5		
51	9:23 AM	72.1	74.5		
52	9:24 AM	71.7	77.7		
53	9:25 AM	72.2	76.3		
54	9:26 AM	71.7	74.3		
55	9:27 AM	72.8	75.5		
56	9:28 AM	72.0	74.1		
57	9:29 AM	72.4	76.3		
58	9:30 AM	72.3	75.0		
59	9:31 AM	73.3	76.7		
60	9:32 AM	72.4	76.8		
61	9:33 AM	73.5	80.3		
62	9:34 AM	71.8	76.2		

Leq(20min)	Leq(1 hr)
72.8	72.7
73.0	72.7
73.0	72.7
73.0	72.7
73.0	72.7
73.0	72.7
72.8	72.6
72.9	72.6
72.7	72.5
72.7	72.5
72.7	72.5
72.6	72.6
72.5	72.5
72.5	72.5
72.5	72.5
72.5	72.5
72.6	72.5
72.6	72.4
72.7	72.4
72.8	72.5
72.8	72.5
72.6	72.5
72.6	72.5
72.6	72.5
72.6	72.5
72.6	72.5
72.6	72.5
72.4	72.4
72.6	72.4
72.6	72.4
72.7	72.4
72.7	72.5
72.7	72.4
72.7	72.4
72.6	72.4
72.7	72.4
72.4	72.3
72.4	72.3
72.4	72.3
72.4	72.3
72.4	72.3
72.4	72.3
72.5	72.3
72.4	72.3
72.5	72.3
72.5	72.3
72.4	72.3
72.4	72.3
72.3	72.3
72.3	72.3
72.3	72.3
72.4	72.3
72.5	72.3
72.4	72.3
72.4	72.2
72.4	72.2
72.3	72.2
72.3	72.2
72.3	72.2
72.3	72.2
72.5	72.1



Period #	Time Start	Leq	Lmax	Delete?	Notes
134	10:46 AM	71.6	73.7		
135	10:47 AM	71.9	75.1		
136	10:48 AM	71.0	73.3		
137	10:49 AM	70.6	73.6		
138	10:50 AM	72.2	76.2		
139	10:51 AM	72.0	77.6		
140	10:52 AM	71.3	74.5		
141	10:53 AM	70.8	73.4		
142	10:54 AM	72.1	78.1		
143	10:55 AM	73.0	80.5		
144	10:56 AM	72.4	80.0		
145	10:57 AM	72.2	75.6		
146	10:58 AM	71.6	74.8		
147	10:59 AM	71.8	76.9		
148	11:00 AM	72.8	76.5		
149	11:01 AM	71.0	75.1		
150	11:02 AM	71.0	73.6		
151	11:03 AM	70.4	72.8		
152	11:04 AM	71.0	75.3		
153	11:05 AM	70.9	73.9		
154	11:06 AM	72.2	76.3		
155	11:07 AM	73.0	77.8		
156	11:08 AM	71.9	75.4		
157	11:09 AM	73.2	79.2		
158	11:10 AM	70.9	74.6		
159	11:11 AM	70.2	72.9		
160	11:12 AM	71.1	74.6		
161	11:13 AM	71.5	78.5		
162	11:14 AM	70.6	74.0		
163	11:15 AM	70.3	73.0		
164	11:16 AM	70.1	72.7		
165	11:17 AM	70.8	74.2		
166	11:18 AM	73.2	80.0		
167	11:19 AM	72.5	79.4		
168	11:20 AM	71.9	76.7		
169	11:21 AM	71.9	75.1		
170	11:22 AM	71.9	79.8		
171	11:23 AM	73.4	80.5		
172	11:24 AM	71.4	75.0		
173	11:25 AM	70.3	73.1		
174	11:26 AM	72.8	78.6		
175	11:27 AM	71.2	75.9		
176	11:28 AM	74.9	84.8		
177	11:29 AM	71.6	76.0		
178	11:30 AM	71.5	74.4		
179	11:31 AM	71.4	75.4		
180	11:32 AM	73.3	79.9		
181	11:33 AM	71.5	73.6		
182	11:34 AM	71.5	75.3		
183	11:35 AM	72.2	77.6		
184	11:36 AM	71.5	73.7		
185	11:37 AM	72.2	76.1		
186	11:38 AM	73.9	83.1		
187	11:39 AM	70.9	74.2		
188	11:40 AM	72.6	79.0		
189	11:41 AM	72.6	77.3		
190	11:42 AM	71.8	74.6		
191	11:43 AM	69.8	73.5		
192	11:44 AM	71.4	74.7		
193	11:45 AM	70.7	73.0		
194	11:46 AM	71.7	77.5		
195	11:47 AM	72.5	77.1		
196	11:48 AM	73.7	83.0		
197	11:49 AM	69.2	71.0		
198	11:50 AM	71.4	77.0		
199	11:51 AM	74.5	81.7		
200	11:52 AM	70.0	73.0		
201	11:53 AM	72.1	76.6		
202	11:54 AM	73.0	81.3		
203	11:55 AM	78.6	90.8		
204	11:56 AM	72.0	76.9		

Leq(20min)	Leq(1 hr)
71.6	71.8
71.7	71.8
71.7	71.9
71.8	71.9
71.9	71.9
71.9	71.9
71.8	71.9
71.8	71.9
71.8	71.9
71.7	72.0
71.6	72.2
71.5	72.2
71.4	72.2
71.5	72.2
71.6	72.2
71.5	72.1
71.5	72.1
71.6	72.1
71.8	72.2
71.8	72.2
71.7	72.2
71.8	72.2
71.7	72.2
71.9	72.2
71.8	72.1
71.8	72.2
71.9	72.2
72.0	72.2
72.0	72.2
72.1	72.2
72.2	72.2
72.2	72.3
72.3	72.3
72.2	72.2
72.2	72.3
72.3	72.3
72.3	72.3
72.3	72.3
72.1	72.3
72.1	72.3
72.1	72.3
72.1	72.3
72.1	72.3
72.0	72.2
71.9	72.2
71.9	72.2
72.1	72.2
72.0	72.2
72.1	72.2
72.8	72.2
72.8	72.1
72.7	72.1
72.7	72.1
72.7	72.1
72.6	72.0
72.5	72.0
72.5	72.0
72.6	72.1
72.6	72.0
72.6	72.1
72.6	72.1
72.6	72.1
72.5	72.0
72.6	72.1
72.7	72.1
72.5	72.0
72.6	72.0
72.6	72.1
72.5	72.1
71.7	71.9



Period #	Time Start	Leq	Lmax	Delete?	Notes
205	11:57 AM	71.0	76.4		
206	11:58 AM	72.6	80.0		
207	11:59 AM	70.2	73.4		
208	12:00 PM	71.2	74.9		
209	12:01 PM	70.2	73.0		
210	12:02 PM	72.6	77.4		
211	12:03 PM	71.9	74.5		
212	12:04 PM	71.5	75.4		
213	12:05 PM	70.0	73.9		
214	12:06 PM	71.7	75.4		
215	12:07 PM	72.8	80.1		
216	12:08 PM	72.3	76.1		
217	12:09 PM	72.2	75.9		
218	12:10 PM	72.6	78.9		
219	12:11 PM	71.8	73.7		
220	12:12 PM	72.2	75.6		
221	12:13 PM	71.1	74.7		
222	12:14 PM	70.3	73.6		
223	12:15 PM	72.0	75.5		
224	12:16 PM	71.7	77.3		
225	12:17 PM	74.1	82.4		
226	12:18 PM	71.1	76.2		
227	12:19 PM	71.8	76.1		
228	12:20 PM	74.2	83.2		
229	12:21 PM	71.8	76.9		
230	12:22 PM	72.5	77.7		
231	12:23 PM	72.4	77.0		
232	12:24 PM	71.1	73.8		
233	12:25 PM	72.4	78.3		
234	12:26 PM	71.0	75.7		
235	12:27 PM	73.4	79.8		
236	12:28 PM	70.6	77.3		
237	12:29 PM	71.0	73.2		
238	12:30 PM	71.5	74.6		
239	12:31 PM	70.0	73.6		
240	12:32 PM	72.1	78.0		
241	12:33 PM	71.5	73.5		
242	12:34 PM	71.0	74.4		
243	12:35 PM	70.6	73.0		
244	12:36 PM	70.5	73.2		
245	12:37 PM	71.3	73.7		
246	12:38 PM	70.3	73.7		
247	12:39 PM	71.2	74.9		
248	12:40 PM	70.8	75.7		
249	12:41 PM	70.4	73.7		
250	12:42 PM	70.9	73.1		
251	12:43 PM	73.4	80.4		
252	12:44 PM	70.2	72.9		
253	12:45 PM	72.8	77.4		
254	12:46 PM	71.2	77.1		
255	12:47 PM	72.4	77.1		
256	12:48 PM	71.8	77.7		
257	12:49 PM	71.6	74.3		
258	12:50 PM	71.0	76.2		
259	12:51 PM	71.2	73.6		
260	12:52 PM	70.5	73.5		
261	12:53 PM	71.8	76.8		
262	12:54 PM	76.7	86.2		
263	12:55 PM	72.9	78.7		
264	12:56 PM	72.0	76.1		
265	12:57 PM	71.4	74.3		
266	12:58 PM	70.7	74.1		
267	12:59 PM	71.2	74.0		
268	1:00 PM	70.6	74.7		
269	1:01 PM	74.0	82.8		
270	1:02 PM	73.3	78.9		
271	1:03 PM	71.5	75.6		
272	1:04 PM	70.5	72.3		
273	1:05 PM	69.6	71.9		
274	1:06 PM	73.1	82.6		
275	1:07 PM	71.1	75.8		

Leq(20min)	Leq(1 hr)
71.7	71.9
71.9	71.9
71.8	71.8
71.9	71.9
72.0	71.8
72.1	71.9
72.1	71.9
72.1	71.9
72.1	71.9
72.2	71.9
72.2	71.9
72.2	71.9
72.1	71.9
72.1	71.9
72.0	71.9
72.0	72.0
72.0	72.0
72.0	72.0
71.9	72.0
71.9	72.0
71.7	72.0
71.7	72.0
71.4	71.9
71.4	71.9
71.3	71.9
71.4	71.8
71.3	71.8
71.3	71.8
71.4	71.8
71.3	71.8
71.3	71.7
71.4	71.8
71.3	71.8
71.3	71.9
71.3	71.9
71.3	71.8
71.8	71.9
72.0	71.9
72.0	71.9
72.0	71.9
72.0	71.9
72.2	72.0
72.3	72.0
72.2	72.0
72.3	72.0
72.1	72.0
72.2	72.0
72.2	72.0
72.2	72.0
72.3	72.0
72.4	72.0
72.5	72.0
72.5	72.0
72.2	71.8
72.2	71.8
72.2	71.8
72.1	71.8
72.2	71.8
72.2	71.8
72.2	71.8
71.9	71.7
71.8	71.7
71.9	71.7
71.9	71.7
71.8	71.7

Period #	Time Start	Leq	Lmax	Delete?	Notes
276	1:08 PM	72.9	78.7		
277	1:09 PM	73.6	80.9		
278	1:10 PM	72.0	77.2		
279	1:11 PM	73.2	83.1		
280	1:12 PM	71.7	78.6		
281	1:13 PM	71.6	77.7		
282	1:14 PM	74.0	82.9		
283	1:15 PM	72.2	77.7		
284	1:16 PM	71.3	74.5		
285	1:17 PM	70.5	73.6		
286	1:18 PM	71.9	79.3		
287	1:19 PM	71.5	74.9		
288	1:20 PM	70.7	73.9		
289	1:21 PM	71.0	73.5		
290	1:22 PM	71.1	75.4		
291	1:23 PM	70.2	72.2		
292	1:24 PM	71.3	73.4		
293	1:25 PM	69.5	72.5		
294	1:26 PM	71.3	77.3		
295	1:27 PM	71.3	77.3		
296	1:28 PM	69.5	71.3		
297	1:29 PM	74.6	85.2		
298	1:30 PM	70.8	75.9		
299	1:31 PM	74.4	83.5		
300	1:32 PM	69.0	71.6		
301	1:33 PM	71.2	74.6		
302	1:34 PM	72.3	77.0		
303	1:35 PM	69.7	73.3		
304	1:36 PM	70.7	75.4		
305	1:37 PM	72.6	80.0		
306	1:38 PM	70.9	74.8		
307	1:39 PM	74.3	82.2		
308	1:40 PM	69.9	73.7		
309	1:41 PM	73.1	80.1		
310	1:42 PM	70.7	74.0		
311	1:43 PM	72.1	78.0		
312	1:44 PM	73.3	84.2		
313	1:45 PM	73.0	81.7		
314	1:46 PM	72.6	79.9		
315	1:47 PM	71.4	75.3		
316	1:48 PM	70.7	73.7		
317	1:49 PM	71.9	78.8		
318	1:50 PM	71.6	80.0		
319	1:51 PM	69.8	72.8		
320	1:52 PM	71.5	75.1		
321	1:53 PM	70.8	75.2		
322	1:54 PM	70.6	73.1		
323	1:55 PM	69.0	73.0		
324	1:56 PM	85.3	99.5	x	Unrepresentative
325	1:57 PM	70.8	73.8		
326	1:58 PM	71.5	75.2		
327	1:59 PM	72.4	76.7		
328	2:00 PM	70.4	75.0		
329	2:01 PM	70.9	73.2		
330	2:02 PM	70.4	73.2		
331	2:03 PM	72.4	77.0		
332	2:04 PM	72.2	79.7		
333	2:05 PM	70.9	76.7		
334	2:06 PM	70.6	74.0		
335	2:07 PM	70.6	75.2		
336	2:08 PM	73.7	81.8		
337	2:09 PM	72.0	78.8		
338	2:10 PM	70.4	75.1		
339	2:11 PM	73.1	81.2		
340	2:12 PM	69.5	72.5		
341	2:13 PM	70.6	75.5		
342	2:14 PM	69.9	71.4		
343	2:15 PM	72.8	79.6		
344	2:16 PM	70.0	72.9		
345	2:17 PM	70.5	75.7		
346	2:18 PM	70.3	72.4		

Leq(20min)	Leq(1 hr)
71.8	71.7
71.6	71.7
71.7	71.7
71.7	71.7
71.8	71.6
71.7	71.6
71.6	71.6
71.5	71.5
71.4	71.5
71.4	71.5
71.5	71.5
71.4	71.5
71.6	71.5
71.6	71.5
71.7	71.5
71.7	71.5
71.8	71.6
71.9	71.6
72.0	71.6
72.1	71.6
72.1	71.6
72.1	71.6
72.0	71.6
72.0	71.6
71.7	71.5
71.8	71.5
71.8	71.5
71.7	71.5
71.7	71.5
71.8	71.5
71.7	71.5
71.7	71.5
71.6	71.4
71.6	71.4
71.4	71.4
71.4	71.4
71.4	71.4
71.4	71.3
71.2	71.2
71.1	71.3
71.1	71.4
71.3	71.3
71.3	71.4
71.2	71.3
71.4	71.6
71.3	71.6
71.3	71.6
71.5	71.7
71.4	71.7
71.4	71.7
71.3	71.7
71.3	71.7
71.3	71.8
71.4	71.8
71.4	71.8
71.4	71.8
71.4	71.8
71.5	71.8
71.6	71.8
71.4	71.8
71.4	71.8
71.4	71.8
71.3	71.8
71.3	71.8
71.4	71.9
71.3	71.9
71.3	72.0
71.4	72.1

Period #	Time Start	Leq	Lmax	Delete?	Notes
347	2:19 PM	70.9	75.5		
348	2:20 PM	70.5	74.3		
349	2:21 PM	71.9	77.3		
350	2:22 PM	72.2	77.5		
351	2:23 PM	72.6	82.2		
352	2:24 PM	71.3	75.0		
353	2:25 PM	70.4	74.5		
354	2:26 PM	73.5	80.3		
355	2:27 PM	71.4	73.9		
356	2:28 PM	71.3	77.9		
357	2:29 PM	71.1	74.6		
358	2:30 PM	71.7	75.0		
359	2:31 PM	71.9	74.9		
360	2:32 PM	69.7	72.5		
361	2:33 PM	70.3	72.7		
362	2:34 PM	71.2	78.5		
363	2:35 PM	70.8	76.3		
364	2:36 PM	71.5	78.0		
365	2:37 PM	71.8	77.3		
366	2:38 PM	72.2	76.6		
367	2:39 PM	69.3	73.9		
368	2:40 PM	69.4	76.1		
369	2:41 PM	70.5	74.7		
370	2:42 PM	73.2	83.4		
371	2:43 PM	69.3	73.7		
372	2:44 PM	69.5	73.9		
373	2:45 PM	69.9	73.1		
374	2:46 PM	74.6	84.2		
375	2:47 PM	73.9	80.3		
376	2:48 PM	70.0	72.7		
377	2:49 PM	72.3	79.9		
378	2:50 PM	70.3	74.0		
379	2:51 PM	78.4	89.9		
380	2:52 PM	70.4	73.1		
381	2:53 PM	70.2	72.9		
382	2:54 PM	70.4	71.9		
383	2:55 PM	71.5	75.8		
384	2:56 PM	71.3	76.0		
385	2:57 PM	72.9	81.6		
386	2:58 PM	71.2	76.7		
387	2:59 PM	71.6	75.0		
388	3:00 PM	71.8	75.2		
389	3:01 PM	74.6	80.4		
390	3:02 PM	71.2	75.6		
391	3:03 PM	71.5	76.1		
392	3:04 PM	71.2	78.0		
393	3:05 PM	70.8	73.2		
394	3:06 PM	72.1	78.3		
395	3:07 PM	73.2	79.0		
396	3:08 PM	72.6	82.5		
397	3:09 PM	72.4	80.5		
398	3:10 PM	70.2	72.9		
399	3:11 PM	72.9	79.1		
400	3:12 PM	71.4	75.5		
401	3:13 PM	70.3	74.6		
402	3:14 PM	73.7	79.8		
403	3:15 PM	75.3	84.1		
404	3:16 PM	74.4	79.8		
405	3:17 PM	73.8	83.5		
406	3:18 PM	71.2	82.5		
407	3:19 PM	71.1	73.4		
408	3:20 PM	72.7	81.4		
409	3:21 PM	71.9	79.3		
410	3:22 PM	71.9	77.5		
411	3:23 PM	73.7	82.2		
412	3:24 PM	70.8	75.1		
413	3:25 PM	71.9	75.4		
414	3:26 PM	74.4	82.5		
415	3:27 PM	72.5	81.6		
416	3:28 PM	71.1	77.4		
417	3:29 PM	70.3	72.5		

Leq(20min)	Leq(1 hr)
71.5	72.1
71.4	72.1
71.4	72.1
71.3	72.1
71.4	72.1
71.2	72.1
71.2	72.1
71.1	72.2
71.2	72.2
71.4	72.2
71.4	72.2
71.4	72.2
71.4	72.2
71.4	72.3
72.1	72.3
72.2	72.3
72.2	72.3
72.1	72.3
72.2	72.3
72.2	72.3
72.2	72.3
72.2	72.3
72.2	72.3
72.2	72.3
72.3	72.3
72.5	72.3
72.5	72.3
72.5	72.3
72.6	72.4
72.6	72.4
72.4	72.4
72.4	72.3
72.5	72.5
72.5	72.5
72.5	72.6
71.9	72.3
71.9	72.3
71.9	72.3
72.1	72.4
72.3	72.4
72.5	72.4
72.6	72.4
72.6	72.4
72.6	72.4
72.5	72.4
72.6	72.4
72.4	72.4
72.4	72.4
72.6	72.4
72.6	72.4
72.7	72.3
72.7	72.3
72.6	72.3
72.5	72.3
72.8	72.3
72.7	72.3
72.7	72.3
72.7	72.3
72.5	72.2
72.3	72.1
72.2	72.1
72.1	72.0
72.1	72.0
72.0	72.1
71.9	72.0
71.9	72.0
71.9	71.9
71.9	71.9
71.9	71.8
72.4	71.8

Period #	Time Start	Leq	Lmax	Delete?	Notes
418	3:30 PM	75.1	83.3		
419	3:31 PM	71.2	74.0		
420	3:32 PM	71.1	75.1		
421	3:33 PM	70.9	74.5		
422	3:34 PM	73.2	81.3		
423	3:35 PM	71.9	76.4		
424	3:36 PM	71.1	73.8		
425	3:37 PM	71.9	77.9		
426	3:38 PM	69.1	71.9		
427	3:39 PM	70.5	74.6		
428	3:40 PM	70.1	73.7		
429	3:41 PM	70.6	74.5		
430	3:42 PM	70.8	73.3		
431	3:43 PM	73.4	82.0		
432	3:44 PM	73.0	82.1		
433	3:45 PM	69.7	72.6		
434	3:46 PM	74.4	82.0		
435	3:47 PM	71.9	75.7		
436	3:48 PM	77.4	88.3		
437	3:49 PM	71.0	75.0		
438	3:50 PM	74.9	83.7		
439	3:51 PM	69.1	71.7		
440	3:52 PM	70.8	76.5		
441	3:53 PM	71.1	73.8		
442	3:54 PM	74.2	84.5		
443	3:55 PM	70.9	74.7		
444	3:56 PM	70.3	75.9		
445	3:57 PM	71.0	75.5		
446	3:58 PM	71.5	77.1		
447	3:59 PM	71.5	77.8		
448	4:00 PM	75.1	84.5		
449	4:01 PM	72.5	76.4		
450	4:02 PM	71.5	76.6		
451	4:03 PM	71.0	74.6		
452	4:04 PM	70.4	71.9		
453	4:05 PM	69.8	71.5		
454	4:06 PM	70.4	73.0		
455	4:07 PM	72.7	78.7		
456	4:08 PM	71.2	76.5		
457	4:09 PM	69.6	72.3		
458	4:10 PM	71.5	74.7		
459	4:11 PM	72.1	77.4		
460	4:12 PM	72.9	82.5		
461	4:13 PM	71.4	75.9		
462	4:14 PM	72.2	80.8		
463	4:15 PM	70.9	73.8		
464	4:16 PM	70.0	75.5		
465	4:17 PM	70.4	74.7		
466	4:18 PM	69.7	71.9		
467	4:19 PM	71.2	75.3		
468	4:20 PM	73.3	81.8		
469	4:21 PM	69.9	72.5		
470	4:22 PM	70.1	72.3		
471	4:23 PM	69.7	72.6		
472	4:24 PM	72.4	82.8		
473	4:25 PM	69.6	72.5		
474	4:26 PM	70.0	74.0		
475	4:27 PM	71.1	73.9		
476	4:28 PM	70.9	74.2		
477	4:29 PM	72.1	75.3		
478	4:30 PM	72.4	78.9		
479	4:31 PM	70.7	74.6		
480	4:32 PM	70.7	74.1		
481	4:33 PM	69.2	75.8		
482	4:34 PM	73.2	79.1		
483	4:35 PM	70.7	73.8		
484	4:36 PM	69.8	71.9		
485	4:37 PM	69.9	79.0		
486	4:38 PM	72.0	78.9		
487	4:39 PM	71.4	74.2		
488	4:40 PM	71.1	75.1		

Leq(20min)	Leq(1 hr)
72.4	71.9
72.4	71.8
72.4	71.8
72.3	71.8
72.4	71.7
72.4	71.7
72.4	71.7
72.4	71.7
72.3	71.7
72.4	71.7
72.4	71.7
72.7	71.7
72.8	71.7
72.8	71.7
72.7	71.7
72.6	71.7
72.6	71.8
72.4	71.7
72.4	71.7
71.9	71.5
71.8	71.4
71.6	71.4
71.7	71.4
71.8	71.4
71.8	71.4
71.7	71.3
71.7	71.3
71.7	71.3
71.6	71.3
71.6	71.3
71.5	71.3
71.4	71.2
71.2	71.1
71.2	71.1
71.1	71.1
71.2	71.1
71.2	71.1
71.1	71.1
71.1	71.1
71.2	71.1
71.3	71.1
71.2	71.1
71.1	71.0
71.0	71.0
71.0	70.9
71.0	70.9
71.0	70.9
71.0	70.9
71.1	70.9
71.1	70.9
71.0	70.8
71.0	70.8
71.0	70.8
71.1	70.8
71.2	70.8
71.4	70.8
71.5	70.9
71.4	70.9
71.4	70.9
71.3	70.8
71.2	70.8
71.2	70.8
71.3	70.8
71.2	70.8
71.2	70.8
71.3	70.9
71.3	70.9
71.2	70.8
71.2	70.8



Period #	Time Start	Leq	Lmax	Delete?	Notes
489	4:41 PM	70.5	75.0		
490	4:42 PM	70.8	74.5		
491	4:43 PM	70.4	73.0		
492	4:44 PM	73.6	84.0		
493	4:45 PM	74.1	82.7		
494	4:46 PM	70.7	73.0		
495	4:47 PM	70.2	72.7		
496	4:48 PM	71.4	74.9		
497	4:49 PM	68.6	71.5		
498	4:50 PM	71.5	78.8		
499	4:51 PM	69.9	74.3		
500	4:52 PM	71.5	74.2		
501	4:53 PM	70.7	75.0		
502	4:54 PM	71.9	78.6		
503	4:55 PM	69.6	74.4		
504	4:56 PM	72.1	78.7		
505	4:57 PM	70.6	74.2		
506	4:58 PM	70.5	76.5		
507	4:59 PM	70.4	73.1		
508	5:00 PM	71.2	76.1		
509	5:01 PM	69.4	72.4		
510	5:02 PM	70.7	74.1		
511	5:03 PM	69.9	74.1		
512	5:04 PM	71.3	79.7		
513	5:05 PM	70.3	76.2		
514	5:06 PM	72.5	81.6		
515	5:07 PM	68.6	71.3		
516	5:08 PM	69.1	72.2		
517	5:09 PM	69.7	72.7		
518	5:10 PM	73.0	80.8		
519	5:11 PM	69.8	73.7		
520	5:12 PM	69.6	73.6		
521	5:13 PM	68.4	71.5		
522	5:14 PM	68.9	72.3		
523	5:15 PM	69.5	72.4		
524	5:16 PM	70.7	73.3		
525	5:17 PM	70.4	74.7		
526	5:18 PM	70.5	74.6		
527	5:19 PM	69.1	71.7		
528	5:20 PM	69.9	71.7		
529	5:21 PM	70.0	73.4		
530	5:22 PM	70.4	74.3		
531	5:23 PM	69.3	72.3		
532	5:24 PM	71.5	75.7		
533	5:25 PM	70.7	76.3		
534	5:26 PM	73.2	81.6		
535	5:27 PM	70.3	74.7		
536	5:28 PM	70.8	75.1		
537	5:29 PM	69.1	71.7		
538	5:30 PM	69.5	72.6		
539	5:31 PM	72.3	82.3		
540	5:32 PM	71.4	77.0		
541	5:33 PM	71.4	77.9		
542	5:34 PM	72.4	80.0		
543	5:35 PM	72.4	79.3		
544	5:36 PM	69.4	73.2		
545	5:37 PM	69.5	72.0		
546	5:38 PM	69.7	72.2		
547	5:39 PM	70.5	76.7		
548	5:40 PM	71.4	75.1		
549	5:41 PM	71.4	78.2		
550	5:42 PM	69.3	72.8		
551	5:43 PM	70.7	74.4		
552	5:44 PM	70.7	76.4		
553	5:45 PM	70.9	75.0		
554	5:46 PM	72.6	81.2		
555	5:47 PM	70.2	73.1		
556	5:48 PM	71.2	77.6		
557	5:49 PM	70.7	74.6		
558	5:50 PM	70.3	72.8		
559	5:51 PM	70.1	73.5		

Leq(20min)	Leq(1 hr)
71.2	70.8
71.2	70.8
71.2	70.8
71.1	70.8
71.0	70.7
70.7	70.7
70.8	70.7
70.8	70.7
70.7	70.7
70.7	70.7
70.8	70.7
70.7	70.7
70.6	70.7
70.5	70.7
70.5	70.7
70.4	70.7
70.4	70.7
70.4	70.7
70.3	70.7
70.2	70.7
70.3	70.7
70.2	70.7
70.2	70.7
70.2	70.7
70.3	70.7
70.3	70.7
70.4	70.7
70.5	70.7
70.4	70.7
70.2	70.7
70.4	70.7
70.5	70.7
70.6	70.8
70.8	70.8
70.9	70.9
70.9	70.9
70.8	71.0
70.8	71.0
70.9	71.0
70.9	71.0
71.0	71.0
71.0	71.0
71.0	70.9
70.9	70.9
70.9	70.9
70.9	70.9
71.0	71.0
71.0	71.0
70.9	70.9
70.9	70.9
70.9	71.0
70.7	70.9
70.7	70.9
70.8	70.9
70.9	70.9
70.9	70.9
70.9	70.9
71.0	70.9
71.0	70.9
70.9	70.9
70.9	70.9
70.7	#N/A
70.8	#N/A
70.7	#N/A
70.7	#N/A
70.7	#N/A
70.7	#N/A



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b>	
<b>Date</b> 8/29/2021		Indicate North	
<b>Address</b> I-24 REF Church of Christ			
<b>Land Use</b>			
<b>Meteorological Conditions</b>			
Temperature(s) 63 °F			
Wind Speed & Dir 0 mph, from			
<b>Calibration</b>			
Analyzer/File name 1638			
(Pre) Cal Time/Level 114.5 8.30			
(Post) Cal Time/Level 18.47 113.8			

Period #	Start Time	Event Description(s)
1	4:33	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

1638 LXT-DGAR.005



**412 Thornton Avenue Looking South**



**412 Thornton Avenue Looking East**





Noise Measurement Data Sheet	
<b>Project Name:</b>	I-24/75 Interchange
<b>Site:</b>	412 Thornton Avenue
<b>Description:</b>	Residential
<b>SLM Filename:</b>	LxT_0001604-20210929 120500-LxT_Data.023.xlsx
<b>Date:</b>	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	12:05:00 PM	69.4	72.0		
2	12:06:00 PM	69.8	72.1		
3	12:07:00 PM	71.1	77.8		
4	12:08:00 PM	69.6	72.8		
5	12:09:00 PM	70.1	73.0		
6	12:10:00 PM	70.0	71.7		
7	12:11:00 PM	70.1	72.6		
8	12:12:00 PM	69.8	72.8		
9	12:13:00 PM	69.6	73.0		
10	12:14:00 PM	69.4	71.2		
11	12:15:00 PM	71.2	78.8		
12	12:16:00 PM	70.9	77.0		
13	12:17:00 PM	70.5	72.9		
14	12:18:00 PM	70.8	73.0		
15	12:19:00 PM	70.4	75.4		
16	12:20:00 PM	71.8	79.1		
17	12:21:00 PM	69.6	72.4		
18	12:22:00 PM	69.3	72.2		
19	12:23:00 PM	70.4	72.7		
20	12:24:00 PM	70.7	73.5		
<b>Leq</b>		<b>70.3</b>			

**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> CP		<b>Site Sketch</b>	
<b>Date</b> 9/29/2021		Indicate North	
<b>Address</b> 412 Thornton			
<b>Land Use</b> Res			
<b>Meteorological Conditions</b>			
Temperature(s)	79 °F		
Wind Speed & Dir	3 mph, from N		
<b>Calibration</b>			
Analyzer/File name	1604		
(Pre) Cal Time/Level	12:03 114.0		
(Post) Cal Time/Level	12:25 114.0		

Period #	Start Time	Event Description(s)
1	12:05	68-69 dB I-24 HT 71 dB;
2	06	71 dB HT stack; 72 dB HT;
3	07	73 dB HT WB; 72 dB MT Terrace, 72 dB MCER
4	08	69 dB HT WB; 71 dB HT;
5	09	71 dB HT; cars on Terrace 70 dB
6	10	<del>68</del> 68 dB I-24; 72 dB HT;
7	11	72 dB HT stack; 71 cars on Terrace + I-24
8	12	71 dB MT Terrace; 70 dB HT; 73 dB HT;
9	13	73 dB HT stack; 68 I-24
10	14	71 dB HT; 71 dB HT stack;
11	15	72 dB HT; 79 dB HT Terrace;
12	16	67 dB I-24; 72 dB HT stack; 77 dB HT Terrace
13	17	71 dB HT; 73 dB veh Terrace;
14	18	68-69 dB I-24; 71 dB HT;
15	19	75 dB MC Terrace;
16	20	70 dB HT; 72 dB HT; 79 dB HT stack;
17	21	68 dB I-24; 71 dB HT; 72 dB HTs;
18	22	71 dB HT; OK
19	23	71 dB HT;
20	24	70 dB HT;
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

1604-LxT, Data. 023



**314 McBrien Road (Royal Arms Apartments Pool) Looking South**



**314 McBrien Road (Royal Arms Apartments Pool) Looking North**

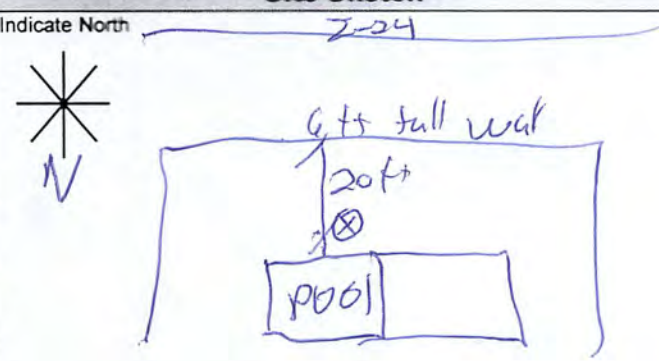


Noise Measurement Data Sheet	
<b>Project Name:</b>	I-24/75 Interchange
<b>Site:</b>	314 McBrien Road
<b>Description:</b>	Swimming Pool
<b>SLM Filename:</b>	LxT_0001604-20210929 173500-LxT_Data.031.xlsx
<b>Date:</b>	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	5:35:00 PM	61.9	64.0		
2	5:36:00 PM	62.3	64.4		
3	5:37:00 PM	61.3	62.8		
4	5:38:00 PM	63.0	67.0		
5	5:39:00 PM	63.7	70.3		
6	5:40:00 PM	61.2	63.1		
7	5:41:00 PM	61.6	63.0		
8	5:42:00 PM	61.7	63.9		
9	5:43:00 PM	62.8	66.7		
10	5:44:00 PM	63.2	66.2		
11	5:45:00 PM	62.3	64.5		
12	5:46:00 PM	63.0	64.6		
13	5:47:00 PM	62.5	64.2		
14	5:48:00 PM	62.8	65.2		
15	5:49:00 PM	63.2	66.5		
16	5:50:00 PM	63.4	65.1		
17	5:51:00 PM	62.0	64.0		
18	5:52:00 PM	60.5	62.0		
19	5:53:00 PM	61.5	64.3		
20	5:54:00 PM	63.3	66.3		
<b>Leq</b>		<b>62.4</b>			



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b>	
<b>Date</b>	9/29/2021	Indicate North 	
<b>Address</b>	314 McBrien Pool		
<b>Land Use</b>	Apt. Pool		
<b>Meteorological Conditions</b>			
Temperature(s)	82 °F		
Wind Speed & Dir	0 mph, from N		
<b>Calibration</b>			
Analyzer/File name	1604		
(Pre) Cal Time/Level	17:34 114.0		
(Post) Cal Time/Level	17:55 114.0		

Period #	Start Time	Event Description(s)
1	17:35	I-24 59-61 dB; HT 62 dB; HT 63 dB;
2	36	I-24 60-61 dB; 62 dB;
3	37	I-24 61-62 dB;
4	38	67 dB HT stack; 66 dB HT;
5	39	70 dB HT stack
6	40	I-24 61 dB;
7	41	I-24 61-62 dB; 64 dB;
8	42	
9	43	I-24 61-62 dB; HT 66 dB
10	44	I-24 61-62 dB; HT 64 dB;
11	45	HT 64 dB;
12	46	I-24 61-62 dB; HT 65 dB;
13	47	I-24 61 dB;
14	48	65 dB HT; voices
15	49	65 dB HT; 66 dB HT;
16	50	63-64 dB I-24; 64 dB HT;
17	51	
18	52	I-24 60-61 dB;
19	53	I-24 59-60 dB;
20	54	63-64 dB HTs; 66 dB HTs;
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

1604-LxT-Data.031



**5508 Miller Drive Looking South**



**5508 Miller Drive Looking North**

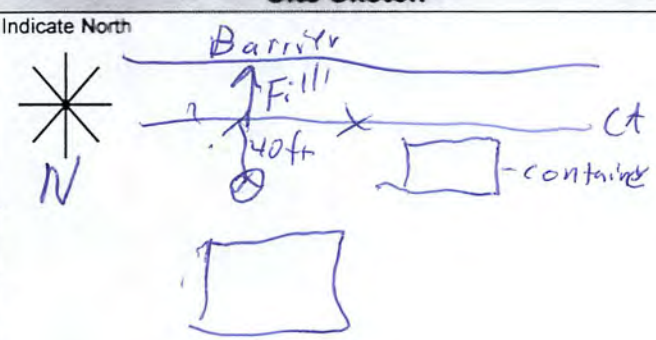


Noise Measurement Data Sheet	
Project Name:	I-24/75 Interchange
Site:	5508 Miller Drive
Description:	Residential
SLM Filename:	LxT_1604_Data.032.xlsx
Date:	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	6:15:00 PM	58.2	61.1		
2	6:16:00 PM	57.4	60.8		
3	6:17:00 PM	58.2	62.4		
4	6:18:00 PM	57.5	60.4		
5	6:19:00 PM	57.8	59.4		
6	6:20:00 PM	57.5	59.4		
7	6:21:00 PM	58.0	65.7		
8	6:22:00 PM	58.5	61.1		
9	6:23:00 PM	58.4	61.4		
10	6:24:00 PM	58.4	63.0		
11	6:25:00 PM	57.5	60.3		
12	6:26:00 PM	59.6	63.9		
13	6:27:00 PM	57.9	59.5		
14	6:28:00 PM	57.6	59.4		
15	6:29:00 PM	57.4	59.4		
16	6:30:00 PM	57.3	59.6		
17	6:31:00 PM	59.5	63.0	x	Jet
18	6:32:00 PM	57.9	64.2		
19	6:33:00 PM	58.6	61.9		
20	6:34:00 PM	59.4	63.5	x	Jet
Leq		58.0			



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> <i>GT</i>		<b>Site Sketch</b>  Indicate North 
<b>Date</b>	<i>4/24/2021</i>	
<b>Address</b>	<i>Miller St</i>	
<b>Land Use</b>	<i>Res</i>	
<b>Meteorological Conditions</b>		
Temperature(s)	<i>82 °F</i>	
Wind Speed & Dir	<i>6 mph, from NE</i>	
<b>Calibration</b>		
Analyzer/File Name	<i>1604</i>	
(Pre) Cal Time/Level	<i>10:13 114.0</i>	
(Post) Cal Time/Level	<i>10:35 114.1</i>	

Period #	Start Time	Event Description(s)
1	<i>14:15</i>	<i>I-24 56 dB, 57 dB HT, 61 dB HT;</i>
2	<i>16</i>	<i>I-24 56-58 dB, 60 dB HT, 5</i>
3	<i>17</i>	<i>alarm audible; alarm 62 dB;</i>
4	<i>18</i>	<i>60 dB MC EB; 60 dB HT;</i>
5	<i>19</i>	<i>58 dB HT;</i>
6	<i>20</i>	<i>I-24 58 dB, 58 dB accel; 59 dB HT;</i>
7	<i>21</i>	<i>I-24 55 dB, 58 dB HT, 66 dB HT/MC</i>
8	<i>22</i>	<i>61 dB HTs; 61 dB HT stack;</i>
9	<i>23</i>	<i>61 dB HT;</i>
10	<i>24</i>	<i>56-57 I-24; 63 dB MC; 61 dB HT;</i>
11	<i>25</i>	<i>60 dB HT; 56-57 dB I-24;</i>
12	<i>26</i>	<i>58 dB HT; 64 dB HT;</i>
13	<i>27</i>	<i>57-58 dB I-24;</i>
14	<i>28</i>	<i>57-58 dB I-24; 59 dB HT;</i>
15	<i>29</i>	<i>57-58 dB I-24 58 dB HT;</i>
16	<i>30</i>	<i>58 dB HT; 59 dB HT; 57 dB HT 60 dB jet</i>
17	<i>x 31</i>	<i>61 dB jet</i>
18	<i>32</i>	<i>64 dB MC;</i>
19	<i>33</i>	<i>59 dB HT;</i>
20	<i>x 34</i>	<i>59 dB MC stack, Jet 63 dB</i>
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

*1604-Data-LxT.032*



**517 Brown Road Looking South**



**517 Brown Road Looking West**





Noise Measurement Data Sheet	
<b>Project Name:</b>	I-24/75 Interchange
<b>Site:</b>	517 Brown Road
<b>Description:</b>	Residential
<b>SLM Filename:</b>	LxT_0001604-20210929 142500-LxT_Data.026.xlsx
<b>Date:</b>	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	2:25:00 PM	62.2	64.2		
2	2:26:00 PM	63.0	64.7		
3	2:27:00 PM	63.5	65.6		
4	2:28:00 PM	62.5	64.5		
5	2:29:00 PM	64.7	68.7		
6	2:30:00 PM	63.9	67.8		
7	2:31:00 PM	63.0	64.6		
8	2:32:00 PM	62.6	64.7		
9	2:33:00 PM	64.1	66.3		
10	2:34:00 PM	63.4	65.4		
11	2:35:00 PM	66.1	75.1		
12	2:36:00 PM	62.4	65.7		
13	2:37:00 PM	61.5	64.6		
14	2:38:00 PM	63.2	65.2		
15	2:39:00 PM	64.7	66.3		
16	2:40:00 PM	63.4	65.2		
17	2:41:00 PM	62.6	66.6		
18	2:42:00 PM	63.6	67.7		
19	2:43:00 PM	62.6	64.4		
20	2:44:00 PM	63.4	65.8		
<b>Leq</b>		<b>63.5</b>			



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b> Indicate North  I-75  521 517
<b>Date</b>	517 Brown	
<b>Address</b>	9/29/2021	
<b>Land Use</b>	RES	
<b>Meteorological Conditions</b>		
Temperature(s)	52 °F	
Wind Speed & Dir	6 mph, from NNE	
<b>Calibration</b>		
Analyzer/File Name	1604	
(Pre) Cal Time/Level	14:23 1140	
(Post) Cal Time/Level		

Period #	Start Time	Event Description(s)
1	14:25	63-64 dB I-75 64 dB HT
2	26	62-63 I-75
3	27	64 dB I-75; 65 dB HT;
4	28	
5	29	61-62 I-75, local HT 68, 69 dB
6	30	64 dB I-75; 67 dB HT stack; 68 dB
7	31	
8	32	local wh, barely audible;
9	33	
10	34	65 dB HT I-75 62 dB HT stack
11	35	75 dB HT Jake brakes, 2 local wh
12	36	local wh I-75 61-62 dB; 65 dB HT
13	37	local wh
14	38	65 dB HT;
15	39	65 dB HTs;
16	40	local wh barely audible 2 local whs
17	41	67 dB HT Jake brake, local HTs on
18	42	local wh barely audible, 68 dB HTs;
19	43	
20	44	64-65 dB I-75
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

1604 - LxT. Data. 020



**I-75 Right-of-Way Looking South**



**I-75 Right-of-Way Looking West**





Noise Measurement Data Sheet	
Project Name:	I-24/75 Interchange
Site:	Reference
Description:	I-75 ROW Reference
SLM Filename:	LXT_Data_1637.006.xlsx
Date:	9/29/2021

9:30:00 AM	Start Time
10:30:00 AM	End Time

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	7:57 AM	76.4	77.6		
2	7:58 AM	75.9	78.5		
3	7:59 AM	75.1	78.0		
4	8:00 AM	75.7	77.7		
5	8:01 AM	75.6	77.3		
6	8:02 AM	76.9	80.0		
7	8:03 AM	78.0	79.8		
8	8:04 AM	78.1	79.8		
9	8:05 AM	76.0	77.9		
10	8:06 AM	76.4	78.0		
11	8:07 AM	77.0	79.1		
12	8:08 AM	77.4	78.5		
13	8:09 AM	78.6	84.4		
14	8:10 AM	77.1	78.7		
15	8:11 AM	76.4	78.3		
16	8:12 AM	77.3	79.3		
17	8:13 AM	77.7	79.8		
18	8:14 AM	79.0	80.7		
19	8:15 AM	78.3	80.7		
20	8:16 AM	79.8	85.0		
21	8:17 AM	80.2	83.2		
22	8:18 AM	80.6	83.6		
23	8:19 AM	80.4	83.4		
24	8:20 AM	79.6	81.2		
25	8:21 AM	79.5	81.6		
26	8:22 AM	80.9	82.7		
27	8:23 AM	80.9	83.6		
28	8:24 AM	81.6	85.0		
29	8:25 AM	80.0	83.1		
30	8:26 AM	81.1	83.0		
31	8:27 AM	80.1	83.1		
32	8:28 AM	81.4	84.0		
33	8:29 AM	79.7	83.0		
34	8:30 AM	80.5	81.7		
35	8:31 AM	80.2	83.2		
36	8:32 AM	80.3	82.1		
37	8:33 AM	79.9	81.9		
38	8:34 AM	81.1	84.1		
39	8:35 AM	80.9	85.0		
40	8:36 AM	81.5	84.3		
41	8:37 AM	80.8	83.8		
42	8:38 AM	80.5	84.1		
43	8:39 AM	82.1	85.6		
44	8:40 AM	80.7	82.6		
45	8:41 AM	81.0	82.9		
46	8:42 AM	81.6	83.1		
47	8:43 AM	82.0	85.0		
48	8:44 AM	81.5	82.8		
49	8:45 AM	81.7	84.7		
50	8:46 AM	81.0	83.5		
51	8:47 AM	81.6	83.0		
52	8:48 AM	80.1	82.2		
53	8:49 AM	79.5	81.7		
54	8:50 AM	80.7	82.8		
55	8:51 AM	80.6	83.1		
56	8:52 AM	80.1	81.7		
57	8:53 AM	81.7	83.1		
58	8:54 AM	81.4	83.9		
59	8:55 AM	82.4	83.7		
60	8:56 AM	81.7	83.9		
61	8:57 AM	81.1	82.5		
62	8:58 AM	81.1	84.3		
63	8:59 AM	81.8	83.6		
64	9:00 AM	81.9	83.9		
65	9:01 AM	81.0	82.5		
66	9:02 AM	81.8	85.9		
67	9:03 AM	81.9	83.8		

Leq(20min)	Leq(1 hr)
77.3	80.0
77.5	80.0
77.8	80.1
78.1	80.2
78.3	80.3
78.4	80.3
78.7	80.4
78.8	80.5
79.0	80.5
79.2	80.6
79.4	80.6
79.5	80.7
79.7	80.7
79.8	80.7
79.9	80.8
80.1	80.9
80.2	80.9
80.3	81.0
80.4	80.9
80.5	80.9
80.6	80.9
80.6	80.9
80.6	80.8
80.7	80.8
80.7	80.8
80.8	80.8
80.8	80.8
80.9	80.8
80.9	80.8
81.0	80.9
81.0	80.9
81.1	80.9
81.0	80.9
81.0	80.9
81.0	80.9
81.0	81.0
81.0	81.0
81.1	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.3	81.0
81.3	81.1
81.3	81.0
81.3	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.3	81.1
81.4	81.1
81.4	81.1
81.5	81.1
81.4	81.1
81.3	81.1
81.1	81.1
81.0	81.1
80.8	81.1
80.7	81.1
80.5	81.1
80.4	81.1
80.4	81.1
80.3	81.1

Period #	Time Start	Leq	Lmax	Delete?	Notes
68	9:04 AM	80.7	84.3		
69	9:05 AM	81.6	85.7		
70	9:06 AM	81.2	82.5		
71	9:07 AM	81.4	84.8		
72	9:08 AM	80.6	82.7		
73	9:09 AM	81.3	83.5		
74	9:10 AM	81.7	84.0		
75	9:11 AM	81.9	84.2		
76	9:12 AM	82.0	85.3		
77	9:13 AM	79.8	81.9		
78	9:14 AM	78.2	80.5		
79	9:15 AM	77.0	82.2		
80	9:16 AM	77.6	79.8		
81	9:17 AM	76.1	80.1		
82	9:18 AM	77.3	79.8		
83	9:19 AM	77.5	80.4		
84	9:20 AM	79.0	81.7		
85	9:21 AM	81.7	83.6		
86	9:22 AM	80.8	83.0		
87	9:23 AM	80.6	83.9		
88	9:24 AM	81.5	86.8		
89	9:25 AM	81.8	84.1		
90	9:26 AM	80.9	82.7		
91	9:27 AM	81.6	83.6		
92	9:28 AM	80.6	83.0		
93	9:29 AM	81.6	83.0		
94	9:30 AM	81.9	84.0		
95	9:31 AM	81.8	84.3		
96	9:32 AM	81.2	83.8		
97	9:33 AM	80.7	82.9		
98	9:34 AM	80.7	84.4		
99	9:35 AM	81.5	83.7		
100	9:36 AM	81.7	83.3		
101	9:37 AM	81.9	84.5		
102	9:38 AM	82.0	83.9		
103	9:39 AM	81.2	84.5		
104	9:40 AM	82.4	88.0		
105	9:41 AM	81.5	83.6		
106	9:42 AM	81.1	83.0		
107	9:43 AM	81.2	83.9		
108	9:44 AM	80.7	84.0		
109	9:45 AM	81.6	84.0		
110	9:46 AM	82.2	85.5		
111	9:47 AM	81.3	84.3		
112	9:48 AM	81.4	84.5		
113	9:49 AM	81.3	84.4		
114	9:50 AM	80.4	82.6		
115	9:51 AM	82.0	85.3		
116	9:52 AM	82.0	83.7		
117	9:53 AM	79.8	81.7		
118	9:54 AM	80.5	82.0		
119	9:55 AM	81.1	82.8		
120	9:56 AM	81.9	83.8		
121	9:57 AM	81.8	84.9		
122	9:58 AM	81.5	84.3		
123	9:59 AM	81.2	84.8		
124	10:00 AM	81.2	83.9		
125	10:01 AM	80.8	82.9		
126	10:02 AM	81.3	85.3		
127	10:03 AM	81.2	85.2		
128	10:04 AM	81.9	88.2		
129	10:05 AM	80.7	83.4		
130	10:06 AM	81.3	84.0		
131	10:07 AM	81.5	84.6		
132	10:08 AM	81.5	83.2		
133	10:09 AM	81.8	84.1		
134	10:10 AM	80.5	83.1		
135	10:11 AM	82.1	83.5		
136	10:12 AM	80.5	83.0		
137	10:13 AM	81.7	84.1		
138	10:14 AM	80.8	84.7		
139	10:15 AM	82.1	89.1		
140	10:16 AM	82.1	84.7		
141	10:17 AM	81.7	84.3		
142	10:18 AM	81.3	83.9		

Leq(20min)	Leq(1 hr)
80.3	81.0
80.3	81.1
80.3	81.0
80.3	81.0
80.3	81.1
80.3	81.1
80.3	81.1
80.4	81.1
80.3	81.1
80.3	81.0
80.3	81.1
80.4	81.1
80.6	81.2
80.8	81.2
81.0	81.3
81.2	81.3
81.3	81.3
81.4	81.4
81.4	81.4
81.4	81.4
81.5	81.4
81.4	81.4
81.4	81.4
81.5	81.4
81.5	81.4
81.5	81.4
81.4	81.5
81.4	81.5
81.5	81.5
81.4	81.5
81.4	81.5
81.4	81.5
81.4	81.5
81.4	81.4
81.4	81.4
81.4	81.4
81.3	81.3
81.3	81.3
81.3	81.3
81.3	81.3
81.4	81.3
81.3	81.3
81.3	81.2
81.3	81.2
81.3	81.2
81.3	81.1
81.3	81.2
81.2	81.1
81.3	81.1
81.3	81.1
81.4	81.1
81.4	81.1
81.4	81.1
81.4	81.1
81.4	81.0
81.4	81.0
81.3	81.0
81.3	81.0
81.4	80.9
81.4	80.9
81.3	80.9
81.3	80.8
81.8	80.8
81.8	80.8
81.8	80.7
81.8	80.7
81.8	80.7
81.7	80.7
81.6	80.7
81.5	80.7

Period #	Time Start	Leq	Lmax	Delete?	Notes
143	10:19 AM	80.6	82.4		
144	10:20 AM	81.9	84.1		
145	10:21 AM	80.3	82.3		
146	10:22 AM	80.5	82.5		
147	10:23 AM	81.1	82.4		
148	10:24 AM	81.3	82.9		
149	10:25 AM	81.6	83.8		
150	10:26 AM	81.8	83.0		
151	10:27 AM	80.8	83.9		
152	10:28 AM	80.8	83.3		
153	10:29 AM	86.7	100.2		
154	10:30 AM	81.4	83.9		
155	10:31 AM	81.2	87.8		
156	10:32 AM	82.0	83.9		
157	10:33 AM	79.8	82.0		
158	10:34 AM	80.3	82.3		
159	10:35 AM	79.9	82.0		
160	10:36 AM	80.7	82.4		
161	10:37 AM	79.7	81.8		
162	10:38 AM	79.2	82.7		
163	10:39 AM	80.3	82.7		
164	10:40 AM	79.1	80.5		
165	10:41 AM	79.9	83.0		
166	10:42 AM	80.5	84.7		
167	10:43 AM	80.1	84.6		
168	10:44 AM	80.4	85.5		
169	10:45 AM	79.9	84.5		
170	10:46 AM	79.5	80.4		
171	10:47 AM	80.1	82.6		
172	10:48 AM	80.2	81.9		
173	10:49 AM	79.1	80.3		
174	10:50 AM	79.2	82.5		
175	10:51 AM	82.4	88.6		
176	10:52 AM	80.8	82.1		
177	10:53 AM	80.7	82.6		
178	10:54 AM	80.7	82.7		
179	10:55 AM	80.9	83.8		
180	10:56 AM	81.9	89.0		
181	10:57 AM	79.1	81.2		
182	10:58 AM	79.6	81.7		
183	10:59 AM	79.3	81.0		
184	11:00 AM	79.5	81.2		
185	11:01 AM	80.4	82.2		
186	11:02 AM	80.1	88.5		
187	11:03 AM	80.0	82.0		
188	11:04 AM	80.1	82.5		
189	11:05 AM	79.8	81.6		
190	11:06 AM	78.8	80.1		
191	11:07 AM	78.3	79.9		
192	11:08 AM	79.0	80.8		
193	11:09 AM	79.4	80.6		
194	11:10 AM	79.6	81.0		
195	11:11 AM	79.5	81.4		
196	11:12 AM	80.1	82.2		
197	11:13 AM	82.3	91.2		
198	11:14 AM	80.8	82.3		
199	11:15 AM	82.6	88.7		
200	11:16 AM	81.3	84.9		
201	11:17 AM	81.4	85.0		
202	11:18 AM	81.5	82.9		
203	11:19 AM	82.0	84.4		
204	11:20 AM	80.8	83.9		
205	11:21 AM	82.0	85.7		
206	11:22 AM	81.0	84.1		
207	11:23 AM	80.4	82.5		
208	11:24 AM	82.6	87.7		
209	11:25 AM	80.9	82.9		
210	11:26 AM	82.4	87.5		
211	11:27 AM	82.2	83.7		
212	11:28 AM	81.6	84.7		
213	11:29 AM	81.0	83.0		
214	11:30 AM	81.2	83.7		
215	11:31 AM	82.1	85.9		
216	11:32 AM	81.6	84.7		
217	11:33 AM	81.5	84.1		

Leq(20min)	Leq(1 hr)
81.4	80.7
81.4	80.8
81.3	80.7
81.3	80.8
81.3	80.8
81.2	80.8
81.2	80.8
81.1	80.8
81.0	80.8
81.0	80.8
81.0	80.8
80.2	80.6
80.1	80.6
80.2	80.6
80.1	80.6
80.2	80.7
80.2	80.7
80.3	80.7
80.3	80.7
80.3	80.7
80.3	80.8
80.3	80.8
80.3	80.9
80.3	80.9
80.3	80.9
80.3	80.9
80.3	80.9
80.3	81.0
80.2	81.0
80.2	81.0
80.1	81.0
80.1	81.0
80.0	81.0
79.9	81.0
80.0	81.1
80.0	81.1
80.2	81.1
80.1	81.1
80.2	81.1
80.3	81.1
80.5	81.1
80.5	81.2
80.6	81.2
80.7	81.2
80.7	81.2
80.8	81.2
80.9	81.2
81.1	81.3
81.2	81.3
81.3	81.3
81.4	81.3
81.5	81.4
81.6	81.4
81.6	81.4
81.6	81.4
81.6	81.4
81.5	81.3
81.6	81.3
81.6	81.3
81.6	81.3
81.6	81.3
81.6	81.3
81.6	81.3
81.6	81.3
81.5	81.3
81.5	81.3
81.4	81.3
81.4	81.3
81.4	81.3

Period #	Time Start	Leq	Lmax	Delete?	Notes
218	11:34 AM	81.5	83.0		
219	11:35 AM	81.2	84.0		
220	11:36 AM	81.5	84.2		
221	11:37 AM	81.6	84.2		
222	11:38 AM	81.7	84.2		
223	11:39 AM	81.3	83.0		
224	11:40 AM	82.2	89.7		
225	11:41 AM	81.7	84.4		
226	11:42 AM	80.9	83.6		
227	11:43 AM	81.4	84.1		
228	11:44 AM	82.3	86.3		
229	11:45 AM	81.3	84.2		
230	11:46 AM	81.4	83.2		
231	11:47 AM	81.0	83.3		
232	11:48 AM	80.0	82.3		
233	11:49 AM	80.4	83.4		
234	11:50 AM	80.4	83.4		
235	11:51 AM	81.4	84.9		
236	11:52 AM	81.5	84.2		
237	11:53 AM	82.6	84.5		
238	11:54 AM	81.4	84.0		
239	11:55 AM	80.7	83.2		
240	11:56 AM	80.8	83.3		
241	11:57 AM	81.6	83.8		
242	11:58 AM	80.5	82.1		
243	11:59 AM	81.2	83.1		
244	12:00 PM	82.1	84.3		
245	12:01 PM	79.8	82.5		
246	12:02 PM	81.1	83.7		
247	12:03 PM	81.6	85.0		
248	12:04 PM	80.9	83.0		
249	12:05 PM	80.2	85.8		
250	12:06 PM	81.6	86.0		
251	12:07 PM	80.9	83.6		
252	12:08 PM	80.7	82.2		
253	12:09 PM	81.3	84.3		
254	12:10 PM	81.0	84.0		
255	12:11 PM	81.2	83.0		
256	12:12 PM	81.6	85.1		
257	12:13 PM	81.2	83.7		
258	12:14 PM	80.9	85.4		
259	12:15 PM	80.2	81.9		
260	12:16 PM	81.0	83.2		
261	12:17 PM	80.9	83.5		
262	12:18 PM	81.5	86.2		
263	12:19 PM	81.2	84.7		
264	12:20 PM	81.2	84.0		
265	12:21 PM	81.0	83.6		
266	12:22 PM	82.5	84.9		
267	12:23 PM	80.2	83.3		
268	12:24 PM	81.8	85.3		
269	12:25 PM	80.4	82.7		
270	12:26 PM	81.2	82.9		
271	12:27 PM	82.0	83.8		
272	12:28 PM	81.4	84.2		
273	12:29 PM	81.9	84.1		
274	12:30 PM	81.1	85.0		
275	12:31 PM	81.2	83.6		
276	12:32 PM	81.1	85.8		
277	12:33 PM	81.9	83.8		
278	12:34 PM	80.6	83.3		
279	12:35 PM	80.7	84.0		
280	12:36 PM	81.4	83.7		
281	12:37 PM	82.1	84.3		
282	12:38 PM	81.5	83.6		
283	12:39 PM	80.5	84.6		
284	12:40 PM	81.6	85.9		
285	12:41 PM	81.2	85.3		
286	12:42 PM	81.7	83.6		
287	12:43 PM	80.9	83.3		
288	12:44 PM	80.9	83.6		
289	12:45 PM	81.5	84.7		
290	12:46 PM	81.2	83.9		
291	12:47 PM	80.2	83.1		
292	12:48 PM	80.9	83.8		

Leq(20min)	Leq(1 hr)
81.4	81.3
81.4	81.3
81.4	81.2
81.4	81.2
81.4	81.3
81.3	81.2
81.3	81.2
81.3	81.2
81.2	81.2
81.2	81.2
81.2	81.2
81.1	81.2
81.1	81.2
81.1	81.2
81.1	81.2
81.1	81.2
81.2	81.2
81.2	81.2
81.2	81.2
81.1	81.2
81.1	81.1
81.1	81.1
81.0	81.1
81.1	81.1
81.1	81.1
81.0	81.1
81.1	81.1
81.2	81.1
81.1	81.0
81.1	81.0
81.1	81.0
81.1	81.0
81.2	81.0
81.3	81.0
81.3	81.0
81.2	80.9
81.3	80.9
81.3	80.9
81.3	80.9
81.3	80.9
81.4	80.9
81.4	80.9
81.3	80.9
81.3	80.9
81.4	80.8
81.3	80.8
81.3	80.8
81.3	80.8
81.3	80.8
81.2	80.8
81.2	80.7
81.1	80.7
81.2	80.7
81.1	80.7
81.1	80.7
81.1	80.7
81.0	80.7
80.9	80.7
80.9	80.7
80.8	80.7
80.8	80.7
80.8	80.7
80.8	80.7
80.8	80.7
80.7	80.7
80.7	80.7
80.7	80.7
80.6	80.7
80.5	80.6
80.6	80.7





Period #	Time Start	Leq	Lmax	Delete?	Notes
368	2:04 PM	81.2	84.3		
369	2:05 PM	79.7	82.3		
370	2:06 PM	81.2	85.9		
371	2:07 PM	80.3	81.7		
372	2:08 PM	80.3	82.6		
373	2:09 PM	81.4	84.0		
374	2:10 PM	81.0	83.4		
375	2:11 PM	81.2	83.6		
376	2:12 PM	80.3	84.0		
377	2:13 PM	80.7	83.5		
378	2:14 PM	81.1	83.5		
379	2:15 PM	81.3	83.8		
380	2:16 PM	80.8	84.3		
381	2:17 PM	80.3	83.7		
382	2:18 PM	80.8	83.1		
383	2:19 PM	81.3	84.7		
384	2:20 PM	79.3	82.3		
385	2:21 PM	81.2	84.4		
386	2:22 PM	81.2	83.4		
387	2:23 PM	80.8	83.1		
388	2:24 PM	80.6	82.3		
389	2:25 PM	80.7	83.5		
390	2:26 PM	80.7	83.4		
391	2:27 PM	80.9	83.2		
392	2:28 PM	81.0	83.9		
393	2:29 PM	80.8	83.3		
394	2:30 PM	81.3	83.4		
395	2:31 PM	81.3	85.4		
396	2:32 PM	80.4	83.5		
397	2:33 PM	79.8	81.8		
398	2:34 PM	81.3	87.6		
399	2:35 PM	80.7	82.6		
400	2:36 PM	81.3	89.6		
401	2:37 PM	81.4	84.6		
402	2:38 PM	81.7	83.1		
403	2:39 PM	81.4	84.5		
404	2:40 PM	81.4	84.0		
405	2:41 PM	81.1	83.1		
406	2:42 PM	81.3	83.6		
407	2:43 PM	81.0	83.0		
408	2:44 PM	81.2	83.6		
409	2:45 PM	81.9	85.3		
410	2:46 PM	79.8	82.7		
411	2:47 PM	79.7	85.0		
412	2:48 PM	80.5	83.5		
413	2:49 PM	80.5	81.9		
414	2:50 PM	80.5	83.3		
415	2:51 PM	81.5	83.1		
416	2:52 PM	79.7	82.8		
417	2:53 PM	79.5	81.1		
418	2:54 PM	79.5	82.4		
419	2:55 PM	80.4	82.1		
420	2:56 PM	80.8	82.8		
421	2:57 PM	80.9	83.9		
422	2:58 PM	81.4	83.2		
423	2:59 PM	81.6	85.6		
424	3:00 PM	80.8	84.5		
425	3:01 PM	80.6	82.5		
426	3:02 PM	81.1	83.8		
427	3:03 PM	81.3	83.8		
428	3:04 PM	80.4	83.8		
429	3:05 PM	81.3	84.7		
430	3:06 PM	81.1	85.0		
431	3:07 PM	81.3	85.0		
432	3:08 PM	81.4	83.3		
433	3:09 PM	80.6	84.3		
434	3:10 PM	80.3	82.4		
435	3:11 PM	81.3	83.2		
436	3:12 PM	80.6	83.8		
437	3:13 PM	80.5	82.6		
438	3:14 PM	81.3	83.9		
439	3:15 PM	80.4	81.9		
440	3:16 PM	81.0	86.7		
441	3:17 PM	80.4	82.2		
442	3:18 PM	81.1	82.5		

Leq(20min)	Leq(1 hr)
80.8	80.8
80.8	80.8
80.8	80.9
80.8	80.9
80.8	80.9
80.9	80.9
80.8	80.9
80.8	80.9
80.8	80.9
80.8	80.9
80.8	80.9
80.8	80.9
80.8	80.9
80.8	80.9
80.9	80.9
80.9	80.9
80.9	80.9
81.0	80.9
81.0	80.9
81.0	80.9
81.0	80.9
81.0	80.8
81.1	80.8
81.1	80.8
81.0	80.7
81.0	80.7
81.0	80.6
80.9	80.6
81.0	80.5
80.9	80.5
80.9	80.4
80.8	80.4
80.8	80.3
80.8	80.2
80.8	80.2
80.7	80.2
80.8	80.1
80.7	80.0
80.7	79.9
80.7	79.9
80.7	79.8
80.7	79.8
80.6	79.7
80.7	79.7
80.8	79.7
80.8	79.7
80.8	79.7
80.8	79.6
80.8	79.6
80.9	79.6
81.0	79.6
81.0	79.6
81.0	79.6
80.9	79.6
80.9	79.6
80.9	79.6
80.9	79.6
80.8	79.6
80.8	79.6
80.7	79.6
80.6	79.6
80.4	79.6
80.2	79.6
80.1	79.6
79.9	79.7
79.7	79.7
79.5	79.8
79.3	79.8
79.0	79.8
78.8	79.8
78.6	79.8
78.5	79.8



Period #	Time Start	Leq	Lmax	Delete?	Notes
518	4:34 PM	82.0	83.1		
519	4:35 PM	81.1	84.0		
520	4:36 PM	81.0	83.4		
521	4:37 PM	82.0	85.2		
522	4:38 PM	80.7	85.3		
523	4:39 PM	81.4	85.4		
524	4:40 PM	81.6	84.8		
525	4:41 PM	81.1	87.3		
526	4:42 PM	81.5	83.4		
527	4:43 PM	81.7	83.3		
528	4:44 PM	80.6	82.5		
529	4:45 PM	81.7	85.2		
530	4:46 PM	82.0	84.1		
531	4:47 PM	81.8	83.2		
532	4:48 PM	81.2	82.9		
533	4:49 PM	80.9	82.7		
534	4:50 PM	80.5	82.0		
535	4:51 PM	80.0	82.0		
536	4:52 PM	80.0	82.2		
537	4:53 PM	81.1	83.7		
538	4:54 PM	82.0	90.8		
539	4:55 PM	81.8	86.8		
540	4:56 PM	81.1	82.2		
541	4:57 PM	81.0	83.2		
542	4:58 PM	80.3	82.5		
543	4:59 PM	81.7	87.1		
544	5:00 PM	81.5	87.9		
545	5:01 PM	80.9	83.2		
546	5:02 PM	81.5	87.1		
547	5:03 PM	80.5	84.2		
548	5:04 PM	81.0	83.7		
549	5:05 PM	82.9	89.3		
550	5:06 PM	81.0	84.2		
551	5:07 PM	80.7	82.6		
552	5:08 PM	80.1	81.1		
553	5:09 PM	80.6	82.8		
554	5:10 PM	83.2	95.1		
555	5:11 PM	80.9	83.6		
556	5:12 PM	80.9	82.9		
557	5:13 PM	81.0	83.1		
558	5:14 PM	81.3	84.0		
559	5:15 PM	81.0	83.4		
560	5:16 PM	80.9	86.3		
561	5:17 PM	80.3	82.4		
562	5:18 PM	80.1	81.9		
563	5:19 PM	79.6	82.4		
564	5:20 PM	80.8	82.7		
565	5:21 PM	80.0	82.0		
566	5:22 PM	80.6	83.1		
567	5:23 PM	80.5	82.8		
568	5:24 PM	79.9	81.8		
569	5:25 PM	79.3	82.1		
570	5:26 PM	79.8	81.2		
571	5:27 PM	81.1	83.8		
572	5:28 PM	81.6	85.7		
573	5:29 PM	81.2	83.9		
574	5:30 PM	81.0	84.4		
575	5:31 PM	81.4	83.7		
576	5:32 PM	81.3	83.0		
577	5:33 PM	81.1	82.6		
578	5:34 PM	80.6	82.1		
579	5:35 PM	80.1	82.8		
580	5:36 PM	80.6	83.0		
581	5:37 PM	79.9	82.1		
582	5:38 PM	79.8	81.5		
583	5:39 PM	79.3	81.4		
584	5:40 PM	79.5	83.0		
585	5:41 PM	79.3	80.5		
586	5:42 PM	79.4	80.7		
587	5:43 PM	80.0	83.4		
588	5:44 PM	79.6	81.4		
589	5:45 PM	78.9	80.5		
590	5:46 PM	80.0	81.8		
591	5:47 PM	80.0	82.1		
592	5:48 PM	81.3	82.9		

Leq(20min)	Leq(1 hr)
81.2	81.1
81.2	81.1
81.3	81.0
81.3	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.2	81.0
81.2	80.9
81.2	80.9
81.2	80.9
81.2	80.9
81.2	80.8
81.2	80.8
81.2	80.8
81.2	80.8
81.3	80.8
81.2	80.8
81.1	80.7
81.1	80.7
81.1	80.7
81.2	80.7
81.2	80.7
81.3	80.8
81.3	80.8
81.3	80.8
81.3	80.8
81.3	80.8
81.2	80.7
81.2	80.7
81.2	80.7
81.2	80.7
81.1	80.7
81.1	80.7
81.0	80.7
81.0	80.7
81.0	80.7
80.9	80.7
80.7	80.6
80.7	80.6
80.7	80.6
80.7	80.6
80.8	80.6
80.6	80.6
80.6	80.6
80.6	80.6
80.7	80.6
80.7	80.6
80.6	80.5
80.6	80.5
80.6	80.5
80.6	80.5
80.6	80.5
80.6	80.5
80.6	80.5
80.5	80.5
80.5	80.5
80.5	80.5
80.4	80.5
80.4	80.5
80.4	80.6
80.4	80.6
80.4	80.6
80.3	80.6
80.4	80.6
80.3	80.6
80.3	80.6
80.3	80.6
80.3	80.6
80.3	80.6
80.3	80.6
80.2	80.6
80.2	80.6
80.3	80.5
80.3	80.6
80.3	80.6
80.3	80.6
80.4	80.6
80.4	80.6
80.4	80.6
80.5	80.7
80.5	80.7
80.6	80.7
80.6	80.7
80.7	80.8
80.8	80.8
80.8	80.8
80.8	80.8
80.9	80.8





Period #	Time Start	Leq	Lmax	Delete?	Notes
668	7:04 PM	81.5	86.6		
669	7:05 PM	80.1	82.3		

Leq(20min)	Leq(1 hr)
#N/A	#N/A
#N/A	#N/A

**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> <i>GP</i>		<b>Site Sketch</b> Indicate North 
<b>Date</b>	<i>9/29/2021</i>	
<b>Address</b>	<i>I-75 REF</i>	
<b>Land Use</b>		
<b>Meteorological Conditions</b>		
Temperature(s)	<i>01</i> °F	
Wind Speed & Dir	<i>0</i> mph, from	
<b>Calibration</b>		
Analyzer/Filename	<i>1637</i>	
(Pre) Cal Time/Level	<i>7:55 114.0</i>	
(Post) Cal Time/Level	<i>11:07 114.0</i>	

Period #	Start Time	Event Description(s)
1	<i>7:57</i>	
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

*1637 Lxt-Data.006*



**10369 Roselawn Drive Looking South**



**10369 Roselawn Drive Looking North**

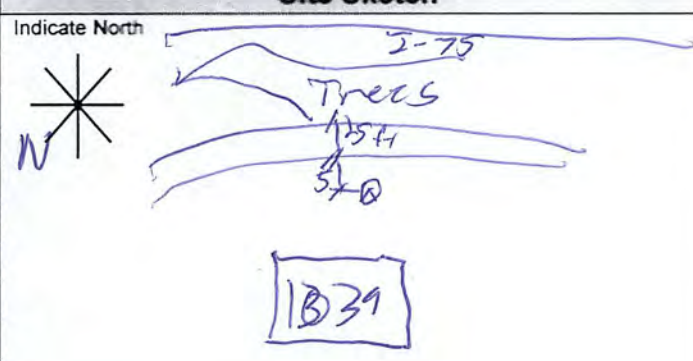




Noise Measurement Data Sheet	
<b>Project Name:</b>	I-24/75 Interchange
<b>Site:</b>	1039 Roselawn Drive
<b>Description:</b>	Residential
<b>SLM Filename:</b>	LxT_0001604-20210929 151000-LxT_Data.027.xlsx
<b>Date:</b>	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	3:10:00 PM	62.3	63.5		
2	3:11:00 PM	62.5	63.8		
3	3:12:00 PM	61.9	62.8		
4	3:13:00 PM	62.9	64.4		
5	3:14:00 PM	62.6	64.3		
6	3:15:00 PM	61.5	62.8		
7	3:16:00 PM	62.2	63.8		
8	3:17:00 PM	62.2	63.1		
9	3:18:00 PM	61.4	62.4		
10	3:19:00 PM	61.7	62.3		
11	3:20:00 PM	61.9	63.3		
12	3:21:00 PM	61.5	62.5		
13	3:22:00 PM	63.0	66.7		
14	3:23:00 PM	61.5	62.5		
15	3:24:00 PM	61.7	62.8		
16	3:25:00 PM	61.7	63.6		
17	3:26:00 PM	62.4	63.1		
18	3:27:00 PM	65.9	74.6		
19	3:28:00 PM	61.6	63.6		
20	3:29:00 PM	61.7	63.6		
<b>Leq</b>		<b>62.3</b>			

**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b>	
<b>Date</b> 9/29/2021		Indicate North 	
<b>Address</b> 1039 Roselawn			
<b>Land Use</b> RTS			
<b>Meteorological Conditions</b>			
Temperature(s)	84 °F		
Wind Speed & Dir	6 mph, from NE		
<b>Calibration</b>			
Analyzer/Filename	1604		
(Pre) Cal Time/Level	15:08 114.0		
(Post) Cal Time/Level	15:30 114.0		

Period #	Start Time	Event Description(s)
1	15:10	I-75 61-62 dB 63 dB HT,
2	11	I-75 63 dB
3	12	I-75 62 dB
4	13	I-75 62 dB; HTs 63-64 dB;
5	14	63-64 dB HTs;
6	15	I-75 61-62 dB
7	16	I-75 62-61 dB; 64 dB HT/MC
8	17	
9	18	61-62 dB I-75
10	19	61-62 dB I-75 62-63 dB HTs;
11	20	I-75 62-63 dB;
12	21	I-75 62 dB;
13	22	67 dB MC; I-75 61-62 dB
14	23	I-75 61-62 dB;
15	24	I-75 61-62 dB;
16	25	HT 64 dB; I-75 62-63 dB
17	26	I-75 62 dB;
18	27	local w/ 64 dB; airplane 74 dB
19	28	I-75 61 dB; I-75 62 dB HT 63 dB
20	29	63 dB HT;
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

1604 LxT - Data-027



**1031 Phyllis Ln Looking West**



**1031 Phyllis Ln Looking South**

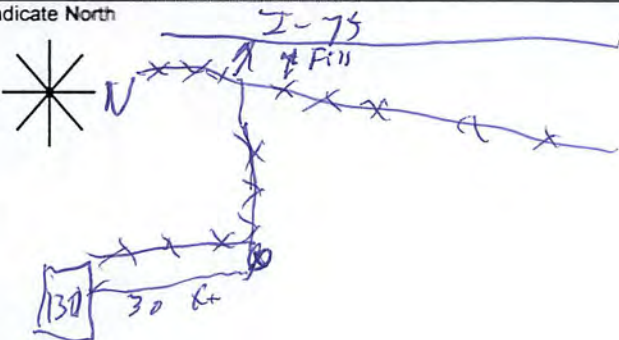


Noise Measurement Data Sheet	
<b>Project Name:</b>	I-24/75 Interchange
<b>Site:</b>	1301 Phyllis Lane
<b>Description:</b>	Residential
<b>SLM Filename:</b>	LxT_0001604-20210929 154700-LxT_Data.028.xlsx
<b>Date:</b>	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	3:47:00 PM	61.2	65.0		
2	3:48:00 PM	61.1	63.6		
3	3:49:00 PM	61.7	63.2		
4	3:50:00 PM	61.1	62.1		
5	3:51:00 PM	62.1	63.6		
6	3:52:00 PM	62.4	63.2		
7	3:53:00 PM	64.0	68.8		
8	3:54:00 PM	63.0	68.3		
9	3:55:00 PM	60.4	61.3		
10	3:56:00 PM	62.8	66.1		
11	3:57:00 PM	63.0	64.1		
12	3:58:00 PM	62.2	63.3		
13	3:59:00 PM	62.4	63.5		
14	4:00:00 PM	63.2	64.8		
15	4:01:00 PM	63.7	65.4		
16	4:02:00 PM	63.5	64.6		
17	4:03:00 PM	64.1	67.1		
18	4:04:00 PM	63.1	63.9		
19	4:05:00 PM	62.9	64.3		
20	4:06:00 PM	62.5	64.2		
<b>Leq</b>		<b>62.6</b>			



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b> Indicate North 
<b>Date</b>	9/29/2011	
<b>Address</b>	1307 Phyllis Ln	
<b>Land Use</b>	R75	
<b>Meteorological Conditions</b>		
Temperature(s)	52°F	
Wind Speed & Dir	5 mph, from NE	
<b>Calibration</b>		
Analyzer/File name	1604	
(Pre) Cal Time/Level	15:46 114.0	
(Post) Cal Time/Level	16:07 114.0	

Period #	Start Time	Event Description(s)
1	15:47	I-75 60 dB; HT stack I-75 61-62 dB
2	48	I-75 61 dB; HT 64 dB;
3	49	I-75 61-62 dB;
4	50	I-75 61-62 dB; bird 60 dB.
5	51	I-75 60-61 dB; 61-62 dB; I-75 63 dB
6	52	I-75 63 dB;
7	53	68 dB HT stack; 67 dB HT stack
8	54	68 dB ML I-75 on ramp
9	55	I-75 60-61 dB;
10	56	I-75 60-61 dB; HT 63 dB; ML 65 dB;
11	57	I-75 63 dB; I-75 63-64 dB
12	58	I-75 61-62 dB; I-75 63 dB;
13	59	I-75 62-63 dB; I-75 61-62 dB;
14	16:00	TEP
15	01	I-75 64 dB 65 dB HT
16	02	I-75 63-64 dB;
17	03	I-75 64 dB; HT 65 dB
18	04	I-75 63 dB;
19	05	I-75 63-64 dB
20	06	I-75 61-62 dB; 64 dB ML accel
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22	08	
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1604 LxT-Data.028



**Chattanooga Red Wolves Soccer Stadium Looking East**



**Chattanooga Red Wolves Soccer Stadium Looking South**



Noise Measurement Data Sheet	
<b>Project Name:</b>	I-24/75 Interchange
<b>Site:</b>	CHI Memorial Stadium
<b>Description:</b>	Soccer Stadium
<b>SLM Filename:</b>	LxT_0001604-20210929 165400-LxT_Data.030.xlsx
<b>Date:</b>	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	4:54:00 PM	71.0	74.5		
2	4:55:00 PM	72.3	76.6		
3	4:56:00 PM	73.1	78.3		
4	4:57:00 PM	71.0	74.5		
5	4:58:00 PM	72.1	81.6		
6	4:59:00 PM	72.5	76.9		
7	5:00:00 PM	70.3	73.3		
8	5:01:00 PM	72.0	74.5		
9	5:02:00 PM	73.6	79.1		
10	5:03:00 PM	71.6	74.3		
11	5:04:00 PM	71.8	73.9		
12	5:05:00 PM	72.1	75.6		
13	5:06:00 PM	72.2	74.7		
14	5:07:00 PM	72.4	77.4		
15	5:08:00 PM	72.2	74.0		
16	5:09:00 PM	71.7	74.0		
17	5:10:00 PM	71.5	74.7		
18	5:11:00 PM	71.8	75.3		
19	5:12:00 PM	72.0	75.3		
20	5:13:00 PM	74.7	82.3		
<b>Leq</b>		<b>72.2</b>			



**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> CP		<b>Site Sketch</b> Indicate North 
<b>Date</b>	9/29/2011	
<b>Address</b>	CHI stadium	
<b>Land Use</b>		
<b>Meteorological Conditions</b>		
Temperature(s)	84 °F	
Wind Speed & Dir	0 mph, from NW	
<b>Calibration</b>		
Analyzer/File name	1604	
(Pre) Cal Time/Level	16:52 114.0	
(Post) Cal Time/Level		

Period #	Start Time	Event Description(s)
1	16:54	73 dB HT; I-75 71-73 dB; 74 dB HT SB;
2	55	73 dB HT SB; 73-74 dB I-75;
3	56	74 dB HTs; 78 dB pickup truck;
4	57	74 dB HT;
5	58	<del>74 dB HTs; 70 dB HT;</del> 71 dB HT; 81 dB conv;
6	59	73 dB HTs; 76 dB HT;
7	17:00	71 dB HT; 73 dB HTs; 72 dB HTs
8	01	72 dB HTs; 72 dB HTs; 74 dB HTs; 74 dB HT
9	02	79 dB pickup
10	03	72 dB HTs;
11	04	72 dB HT;
12	05	74 dB HTs;
13	06	73 dB I-75; 73 dB HTs;
14	07	
15	08	
16	09	
17	10	74 dB HTs; 75 dB HTs;
18	11	75 dB HTs;
19	12	
20	13	73 dB HTs; 82 dB HT stack
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1604 LxT-Data.030



**3701 Anderson Avenue Looking North**



**3701 Anderson Avenue Looking West**





Noise Measurement Data Sheet	
Project Name:	I-24/75 Interchange
Site:	3701 Anderson Avenue
Description:	Residential
SLM Filename:	LxT_0001604-20210929 102500-LxT_Data.021.xlsx
Date:	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	10:25:00 AM	65.7	69.3		
2	10:26:00 AM	66.4	68.5		
3	10:27:00 AM	66.3	68.9		
4	10:28:00 AM	67.4	70.0		
5	10:29:00 AM	67.0	70.8		
6	10:30:00 AM	66.0	69.3		
7	10:31:00 AM	66.3	70.4		
8	10:32:00 AM	67.1	72.8		
9	10:33:00 AM	67.3	73.8		
10	10:34:00 AM	68.3	73.1		
11	10:35:00 AM	68.1	72.9		
12	10:36:00 AM	68.3	71.9		
13	10:37:00 AM	66.9	70.3		
14	10:38:00 AM	66.6	70.2		
15	10:39:00 AM	65.9	68.0		
16	10:40:00 AM	66.6	70.9		
17	10:41:00 AM	66.8	69.3		
18	10:42:00 AM	66.7	70.0		
19	10:43:00 AM	67.2	71.6		
20	10:44:00 AM	66.5	69.9		
Leq		66.9			

**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> GP		<b>Site Sketch</b> Indicate North 
<b>Date</b>	9/29/2001	
<b>Address</b>	3708 Anderson Ave	
<b>Land Use</b>	Res	
<b>Meteorological Conditions</b>		
Temperature(s)	70°F	
Wind Speed & Dir	2mph, from W	
<b>Calibration</b>		
Analyzer/File Name	1601	
(Pre) Cal Time/Level	10:33 114.0	
(Post) Cal Time/Level	10:45 113.9	

Period #	Start Time	Event Description(s)
1	10:25	HT EB 69 dB; 68 dB HT;
2	26	68 dB HT; 68 dB HT; helicopter 68 dB
3	27	I-24 66 dB; HT 69 dB; 68 dB HT; 1157 dB 68 dB HT
4	28	70 dB HTs; 68 dB HTs; local car gear, 70 dB HTs;
5	29	71 dB HT EB;
6	30	69 dB HT; 68 dB HT;
7	31	68 dB I-24; 67 dB HT; 68 dB HT; 70 dB HT;
8	32	69 dB HT EB; 68 70 dB HT
9	33	74 dB MC; 67 dB HT; 72 dB HT EB;
10	34	69 dB HT; 70 dB HT; 70 dB HT;
11	35	73 dB HT WB; 71 dB HT EB; 68 dB HT;
12	36	69 dB HT EB; 69 dB HT; 71 dB MC/HT
13	37	70 dB HT EB; 69 dB HT EB; 68 dB HT EB;
14	38	68-67 dB I-24; 70 dB HT stack;
15	39	67 dB I-24; 68 dB I-24 EB;
16	40	71 dB HTs;
17	41	67 dB I-24; 68 dB HT; 69 dB HT; 69 dB HT
18	42	68 dB HTs; 69-70 dB HTs;
19	43	71 dB HTs stack;
20	44	69 dB HTs, 70 dB HT stack; 69 dB HT
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1601 LxT-Data.021



**3837 North Terrace Looking South**



**3837 North Terrace Looking North**





Noise Measurement Data Sheet	
Project Name:	I-24/75 Interchange
Site:	3837 N Terrace
Description:	Residential
SLM Filename:	LxT_0001604-20210929 111500-LxT_Data.022
Date:	9/29/2021

Period #	Time Start	Leq	Lmax	Delete?	Notes
1	11:15:00 AM	71.0	72.5		
2	11:16:00 AM	70.4	72.3		
3	11:17:00 AM	70.4	72.2		
4	11:18:00 AM	71.6	74.8		
5	11:19:00 AM	70.9	73.8		
6	11:20:00 AM	73.2	79.3		
7	11:21:00 AM	71.2	73.9		
8	11:22:00 AM	72.2	79.2		
9	11:23:00 AM	71.9	76.6		
10	11:24:00 AM	71.4	73.2		
11	11:25:00 AM	70.4	72.0		
12	11:26:00 AM	71.3	73.3		
13	11:27:00 AM	70.7	72.7		
14	11:28:00 AM	71.8	75.0		
15	11:29:00 AM	70.9	73.0		
16	11:30:00 AM	71.6	75.6		
17	11:31:00 AM	71.4	73.9		
18	11:32:00 AM	72.3	81.5		
19	11:33:00 AM	70.6	73.2		
20	11:34:00 AM	71.1	73.4		
Leq		71.4			

**Noise Measurement Data Sheet**  
**I-24/75 Widening, Hamilton County, Tennessee**

<b>Analyst Name</b> CP		<b>Site Sketch</b> Indicate North 
<b>Date</b>	9/29/2021	
<b>Address</b>	3837 N. Terrace	
<b>Land Use</b>	Res Duplex	
<b>Meteorological Conditions</b>		
Temperature(s)	73 °F	
Wind Speed & Dir	3 mph, from NW	
<b>Calibration</b>		
Analyzer/File Name	1604	
(Pre) Cal Time/Level	11:13 114.0	
(Post) Cal Time/Level	11:35 114.0	

Period #	Start Time	Event Description(s)
1	11:15	I-24 70-71 dB HT 72.4 dB 73 dB HT
2	11:16	72 dB HT; 72 dB HTs; 72 dB HT;
3	17	71 dB HT; 71 dB I-24;
4	18	72 dB HTs; 75 dB HT WB;
5	19	68-69 dB I-24; 72 dB HT;
6	20	74 dB HT EB;
7	21	69-70 dB I-24; 74 dB HT;
8	22	71 dB I-24 75 dB HT; 79 dB HT stack
9	23	76 dB HT/cancel car; 73 dB HT; 75 dB HT;
10	24	71-72 dB HTs; 73 dB HT;
11	25	72 dB HT; 69-70 dB I-24; 71 dB HT;
12	26	72-73 dB HTs; 73 dB HT;
13	27	71 dB I-24 72 dB HTs; 73 dB HTs;
14	28	74 dB HTs; 75 dB HT stack 72 dB HT
15	29	70 dB HTs; 72 dB HTs; 73 dB HT stacks;
16	30	72 dB I-24; 76 dB HT WB;
17	31	70-71 dB I-24; 74 dB HT;
18	32	68-69 dB I-24; 82 dB HT stack;
19	33	70-71 dB I-24; 73 dB HT;
20	34	71 dB HTs; 73 dB HTs;
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1604-LxT-Data.022

## **2014 Noise Measurement Data**





**Unitarian Universalist Church looking south**



**Unitarian Universalist Church looking northwest**





**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14	
Address/Location	3224 Navajo / Unitarian	
Land Use	Church	
Analyst Name	R. Williamson	
<b>Meteorological Conditions</b>		
Temperature(s)	65°F @ 9:30	
Wind Speed(s)	0-2 mph @ 9:50 a.m.	
Wind Direction(s)	from east	
<b>Calibration</b>		
Meter/Analyzer	Rion 00840868	AU2-0017
	Pre-Measurement	Post-Measurement
Calibration Time	9:43 a.m.	6:31 p.m.
Calibration Level	94.0 dB	94.0

Period #	Start Time	Event Description(s)
1	9:50 a.m.	
2	51	
3	52	
4	53	MT @ 85 dB
5	54	
6	55	
7	56	HT @ 76 dB
8	57	
9		
10		
11		
12		
13	2:45	Check
14		
15		
16		
17		
18	6:18 pm X	Talking with person from church near mic
19	19 X	
20	20	
21	21	
22	22	
23	23	:55 HT @ 76
24	24	:46 HTS @ 80
25	25	
26	26	
27	27	
28	28	:55 HT @ 76
29	29	:45 MC @ 76
30	30	

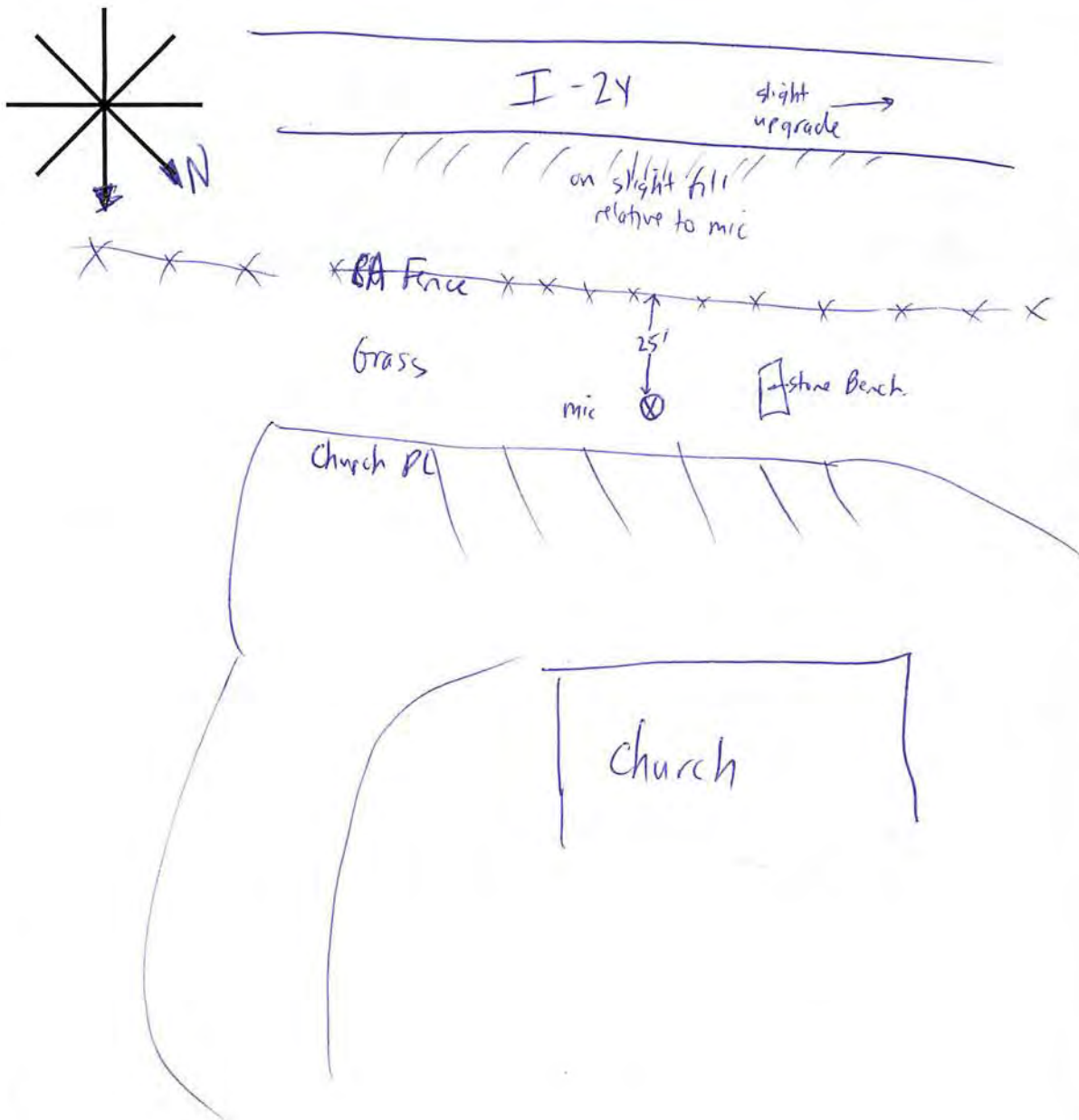
Stop @ 6:30



**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14
Address	3224 Navajo
Land Use	Church

Indicate North





I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/17/14  
Site: Reference - Day 1 (Church at 3224 Navajo Dr)  
Description: Unitarian Universalist Church  
Filename: AU2\_0017

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
1	9:50 AM	72.2	75.5	16595869	y	1		72.8	72.8
2	9:51 AM	71.6	77.4	14454398	y	1		72.8	72.8
3	9:52 AM	71.3	74.7	13489629	y	1		72.9	72.9
4	9:53 AM	74.9	85.1	30902954	y	1		72.9	72.9
5	9:54 AM	72.3	75.6	16982437	y	1		72.7	72.8
6	9:55 AM	72.7	77.9	18620871	y	1		72.8	72.9
7	9:56 AM	73.5	79.7	22387211	y	1		72.7	72.9
8	9:57 AM	72.3	78.2	16982437	y	1		72.7	72.9
9	9:58 AM	73.1	80.9	20417379	y	1		72.6	72.9
10	9:59 AM	73.7	77.0	23442288	y	1		72.7	72.9
11	10:00 AM	71.1	75.6	12882496	y	1		72.6	72.9
12	10:01 AM	71.8	76.1	15135612	y	1		72.6	73.0
13	10:02 AM	73.0	76.1	19952623	y	1		72.6	73.0
14	10:03 AM	73.5	79.8	22387211	y	1		72.6	73.0
15	10:04 AM	72.6	76.3	18197009	y	1		72.6	73.0
16	10:05 AM	73.8	76.7	23986329	y	1		72.7	73.0
17	10:06 AM	73.0	76.8	19952623	y	1		72.6	73.0
18	10:07 AM	73.0	80.6	19952623	y	1		72.7	73.0
19	10:08 AM	72.8	77.6	19054607	y	1		72.6	72.9
20	10:09 AM	71.5	76.5	14125375	y	1		72.7	72.9
21	10:10 AM	72.1	76.7	16218101	y	1		72.8	72.9
22	10:11 AM	74.1	77.1	25703958	y	1		72.8	72.9
23	10:12 AM	72.1	77.4	16218101	y	1		72.7	72.9
24	10:13 AM	71.3	75.7	13489629	y	1		72.7	73.0
25	10:14 AM	72.8	76.9	19054607	y	1		72.7	73.0
26	10:15 AM	72.3	75.6	16982437	y	1		72.7	73.0
27	10:16 AM	71.6	76.0	14454398	y	1		72.7	73.0
28	10:17 AM	71.3	76.2	13489629	y	1		72.7	73.1
29	10:18 AM	74.4	78.8	27542287	y	1		72.8	73.1
30	10:19 AM	71.8	76.2	15135612	y	1		72.8	73.1
31	10:20 AM	72.3	76.2	16982437	y	1		72.8	73.1
32	10:21 AM	71.4	76.4	13803843	y	1		72.8	73.1
33	10:22 AM	72.7	75.6	18620871	y	1		72.9	73.2
34	10:23 AM	73.7	77.7	23442288	y	1		72.8	73.2
35	10:24 AM	73.9	82.7	24547089	y	1		72.8	73.2
36	10:25 AM	72.1	76.0	16218101	y	1		72.7	73.1
37	10:26 AM	73.7	77.8	23442288	y	1		72.8	73.2
38	10:27 AM	72.6	79.3	18197009	y	1		72.8	73.1
39	10:28 AM	74.1	78.8	25703958	y	1		72.8	73.1
40	10:29 AM	72.9	76.2	19498446	y	1		72.7	73.1
41	10:30 AM	73.1	77.4	20417379	y	1		72.7	73.1
42	10:31 AM	71.6	76.3	14454398	y	1		72.8	73.1
43	10:32 AM	72.3	77.3	16982437	y	1		73.0	73.2
44	10:33 AM	72.4	77.0	17378008	y	1		73.0	73.2
45	10:34 AM	72.3	77.4	16982437	y	1		73.1	73.2
46	10:35 AM	71.3	74.1	13489629	y	1		73.1	73.2
47	10:36 AM	72.9	77.3	19498446	y	1		73.2	73.3
48	10:37 AM	73.6	77.8	22908677	y	1		73.3	73.3
49	10:38 AM	73.3	78.5	21379621	y	1		73.3	73.3
50	10:39 AM	72.1	76.1	16218101	y	1		73.3	73.4
51	10:40 AM	72.7	78.4	18620871	y	1		73.3	73.4
52	10:41 AM	72.5	76.5	17782794	y	1		73.5	73.4
53	10:42 AM	72.5	75.7	17782794	y	1		73.5	73.4
54	10:43 AM	73.5	76.8	22387211	y	1		73.5	73.4
55	10:44 AM	72.4	76.9	17378008	y	1		73.5	73.4
56	10:45 AM	72.7	77.0	18620871	y	1		73.5	73.5
57	10:46 AM	73.6	78.6	22908677	y	1		73.5	73.5
58	10:47 AM	73.2	78.3	20892961	y	1		73.4	73.5
59	10:48 AM	71.9	74.8	15488166	y	1		73.3	73.5
60	10:49 AM	73.3	76.6	21379621	y	1		73.3	73.5
61	10:50 AM	74.9	81.1	30902954	y	1		73.3	73.5
62	10:51 AM	74.3	85.3	26915348	y	1		73.2	73.4
63	10:52 AM	73.6	76.5	22908677	y	1		73.1	73.4
64	10:53 AM	72.9	76.2	19498446	y	1		73.1	73.4
65	10:54 AM	72.9	76.5	19498446	y	1		73.2	73.4
66	10:55 AM	73.4	78.5	21877616	y	1		73.1	73.4
67	10:56 AM	74.4	80.7	27542287	y	1		73.2	73.4
68	10:57 AM	74.4	78.8	27542287	y	1		73.2	73.4
69	10:58 AM	72.9	76.0	19498446	y	1		73.2	73.4
70	10:59 AM	73.3	76.9	21379621	y	1		73.2	73.4
71	11:00 AM	75.5	79.7	35481339	y	1		73.2	73.3
72	11:01 AM	72.8	76.0	19054607	y	1		73.0	73.3
73	11:02 AM	73.1	77.7	20417379	y	1		73.1	73.3
74	11:03 AM	72.7	79.7	18620871	y	1		73.1	73.3
75	11:04 AM	72.8	78.7	19054607	y	1		73.1	73.3
76	11:05 AM	72.3	75.9	16982437	y	1		73.1	73.3
77	11:06 AM	72.2	77.3	16595869	y	1		73.2	73.3
78	11:07 AM	70.3	74.9	10715193	y	1		73.2	73.3
79	11:08 AM	72.1	76.0	16218101	y	1		73.3	73.3
80	11:09 AM	73.0	77.0	19952623	y	1		73.4	73.3
81	11:10 AM	72.2	75.2	16595869	y	1		73.4	73.3
82	11:11 AM	73.2	77.2	20892961	y	1		73.4	73.4
83	11:12 AM	73.7	78.0	23442288	y	1		73.4	73.4
84	11:13 AM	74.4	78.4	27542287	y	1		73.4	73.4
85	11:14 AM	71.1	76.1	12882496	y	1		73.4	73.4
86	11:15 AM	75.0	85.8	31622777	y	1		73.5	73.4
87	11:16 AM	74.0	78.7	25118864	y	1		73.3	73.4
88	11:17 AM	73.5	76.2	22387211	y	1		73.4	73.3
89	11:18 AM	74.1	78.4	25703958	y	1		73.4	73.3

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/17/14  
Site: Reference - Day 1 (Church at 3224 Navajo Dr)  
Description: Unitarian Universalist Church  
Filename: AU2\_0017

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
90	11:19 AM	72.1	80.1	16218101	y	1		73.6	73.3
91	11:20 AM	72.1	75.5	16218101	y	1		73.6	73.3
92	11:21 AM	74.4	79.9	27542287	y	1		73.6	73.3
93	11:22 AM	74.2	79.2	26302680	y	1		73.5	73.3
94	11:23 AM	72.7	76.3	18620871	y	1		73.5	73.3
95	11:24 AM	72.2	76.3	16595869	y	1		73.6	73.3
96	11:25 AM	73.6	78.8	22908677	y	1		73.9	73.3
97	11:26 AM	72.0	75.3	15848932	y	1		73.9	73.3
98	11:27 AM	73.2	77.0	20892961	y	1		74.0	73.3
99	11:28 AM	74.2	79.1	26302680	y	1		74.0	73.3
100	11:29 AM	72.9	77.4	19498446	y	1		73.8	73.3
101	11:30 AM	72.5	78.9	17782794	y	1		73.7	73.3
102	11:31 AM	74.1	80.1	25703958	y	1		73.7	73.3
103	11:32 AM	72.5	76.8	17782794	y	1		73.7	73.3
104	11:33 AM	74.5	78.4	28183829	y	1		73.8	73.3
105	11:34 AM	73.9	79.2	24547089	y	1		73.7	73.2
106	11:35 AM	72.5	76.2	17782794	y	1		73.6	73.2
107	11:36 AM	74.3	77.0	26915348	y	1		73.7	73.2
108	11:37 AM	74.3	79.8	26915348	y	1		73.6	73.2
109	11:38 AM	76.2	85.7	41686938	y	1		73.5	73.2
110	11:39 AM	73.5	76.4	22387211	y	1		73.3	73.1
111	11:40 AM	72.1	75.9	16218101	y	1		73.2	73.1
112	11:41 AM	72.9	75.4	19498446	y	1		73.3	73.1
113	11:42 AM	73.9	77.8	24547089	y	1		73.3	73.1
114	11:43 AM	73.3	76.1	21379621	y	1		73.3	73.1
115	11:44 AM	77.0	86.9	50118723	y	1		73.2	73.1
116	11:45 AM	74.4	78.5	27542287	y	1		72.8	73.0
117	11:46 AM	73.3	77.3	21379621	y	1		72.7	73.0
118	11:47 AM	73.6	77.5	22908677	y	1		72.6	73.0
119	11:48 AM	66.8	70.7	4786301	y	1		72.6	73.0
120	11:49 AM	71.0	73.9	12589254	y	1		72.8	73.0
121	11:50 AM	72.7	75.3	18620871	y	1		72.9	73.0
122	11:51 AM	73.6	78.6	22908677	y	1		73.1	73.0
123	11:52 AM	74.4	80.7	27542287	y	1		73.1	73.0
124	11:53 AM	71.5	75.4	14125375	y	1		73.0	73.0
125	11:54 AM	72.7	75.9	18620871	y	1		73.0	73.0
126	11:55 AM	74.0	78.1	25118864	y	1		73.1	73.0
127	11:56 AM	71.7	75.1	14791084	y	1		73.0	73.0
128	11:57 AM	72.8	77.8	19054607	y	1		73.1	73.0
129	11:58 AM	73.0	77.7	19952623	y	1		73.0	73.0
130	11:59 AM	72.7	77.0	18620871	y	1		73.0	73.0
131	12:00 PM	73.0	77.8	19952623	y	1		73.0	73.1
132	12:01 PM	72.9	77.1	19498446	y	1		72.9	73.1
133	12:02 PM	73.7	78.4	23442288	y	1		73.0	73.1
134	12:03 PM	72.5	75.9	17782794	y	1		73.0	73.0
135	12:04 PM	71.8	75.4	15135612	y	1		73.0	73.1
136	12:05 PM	71.7	75.2	14791084	y	1		73.1	73.1
137	12:06 PM	72.3	75.8	16982437	y	1		73.2	73.1
138	12:07 PM	72.7	76.5	18620871	y	1		73.2	73.0
139	12:08 PM	72.7	76.2	18620871	y	1		73.2	73.1
140	12:09 PM	73.5	77.7	22387211	y	1		73.3	73.0
141	12:10 PM	76.0	83.8	39810717	y	1		73.2	73.0
142	12:11 PM	73.2	77.7	20892961	y	1		73.0	72.9
143	12:12 PM	72.2	75.6	16595869	y	1		73.0	72.9
144	12:13 PM	73.4	76.2	21877616	y	1		73.1	72.9
145	12:14 PM	73.2	75.9	20892961	y	1		73.0	72.9
146	12:15 PM	73.1	79.2	20417379	y	1		72.9	72.9
147	12:16 PM	72.8	76.2	19054607	y	1		73.0	72.9
148	12:17 PM	71.6	76.3	14454398	y	1		72.9	72.9
149	12:18 PM	73.5	77.8	22387211	y	1		73.1	72.9
150	12:19 PM	72.4	77.7	17378008	y	1		73.0	72.9
151	12:20 PM	71.2	75.8	13182567	y	1		73.0	72.9
152	12:21 PM	74.1	82.0	25703958	y	1		73.1	72.9
153	12:22 PM	72.8	76.2	19054607	y	1		73.0	72.9
154	12:23 PM	73.2	75.4	20892961	y	1		73.0	72.9
155	12:24 PM	73.7	77.9	23442288	y	1		73.0	72.9
156	12:25 PM	73.6	77.8	22908677	y	1		73.1	72.9
157	12:26 PM	73.5	75.9	22387211	y	1		73.1	72.9
158	12:27 PM	72.3	75.8	16982437	y	1		73.1	72.9
159	12:28 PM	73.5	76.9	22387211	y	1		73.0	72.9
160	12:29 PM	72.2	76.4	16595869	y	1		73.0	72.9
161	12:30 PM	73.3	76.6	21379621	y	1		72.9	73.0
162	12:31 PM	73.2	75.8	20892961	y	1		73.0	72.9
163	12:32 PM	73.6	77.8	22908677	y	1		73.0	72.9
164	12:33 PM	70.8	75.1	12022644	y	1		72.9	72.9
165	12:34 PM	71.7	75.9	14791084	y	1		73.1	72.9
166	12:35 PM	74.4	77.5	27542287	y	1		73.1	73.0
167	12:36 PM	72.3	77.5	16982437	y	1		73.0	72.9
168	12:37 PM	74.5	81.8	28183829	y	1		73.0	72.9
169	12:38 PM	71.4	76.8	13803843	y	1		72.9	72.9
170	12:39 PM	71.8	76.8	15135612	y	1		73.0	72.9
171	12:40 PM	73.4	78.2	21877616	y	1		73.2	72.9
172	12:41 PM	72.2	77.4	16595869	y	1		73.2	72.9
173	12:42 PM	74.0	79.9	25118864	y	1		73.2	73.0
174	12:43 PM	73.2	75.6	20892961	y	1		73.1	72.9
175	12:44 PM	74.0	79.0	25118864	y	1		73.1	72.9
176	12:45 PM	73.8	78.1	23988329	y	1		73.0	72.9
177	12:46 PM	73.4	77.0	21877616	y	1		72.9	72.9
178	12:47 PM	71.8	77.2	15135612	y	1		72.8	72.9

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/17/14  
Site: Reference - Day 1 (Church at 3224 Navajo Dr)  
Description: Unitarian Universalist Church  
Filename: AU2\_0017

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
179	12:48 PM	72.2	75.5	16595869	y	1		72.9	72.9
180	12:49 PM	70.8	73.6	12022644	y	1		72.8	72.9
181	12:50 PM	73.9	76.3	24547089	y	1		72.9	72.9
182	12:51 PM	73.4	78.9	21877616	y	1		72.8	73.0
183	12:52 PM	72.2	75.9	16595869	y	1		72.7	73.0
184	12:53 PM	74.0	77.2	25118864	y	1		72.7	73.0
185	12:54 PM	73.1	77.9	20417379	y	1		72.7	72.9
186	12:55 PM	71.5	77.3	14125375	y	1		72.6	72.9
187	12:56 PM	73.4	78.5	21877616	y	1		72.7	73.0
188	12:57 PM	71.9	76.3	15488166	y	1		72.8	73.0
189	12:58 PM	74.3	79.7	26915348	y	1		72.8	73.0
190	12:59 PM	74.6	76.7	28840315	y	1		72.7	73.0
191	1:00 PM	73.5	80.1	22387211	y	1		72.5	73.0
192	1:01 PM	73.0	75.7	19952623	y	1		72.5	73.0
193	1:02 PM	71.8	75.5	15135612	y	1		72.6	73.0
194	1:03 PM	73.4	77.5	21877616	y	1		72.6	73.0
195	1:04 PM	72.4	76.4	17378008	y	1		72.6	73.0
196	1:05 PM	70.9	74.5	12302688	y	1		72.6	73.0
197	1:06 PM	71.6	76.1	14454398	y	1		72.8	73.0
198	1:07 PM	73.4	79.9	21877616	y	1		72.9	73.0
199	1:08 PM	70.4	73.2	10964782	y	1		72.9	73.0
200	1:09 PM	71.3	75.3	13489629	y	1		73.0	73.1
201	1:10 PM	73.0	76.3	19952623	y	1		73.1	73.1
202	1:11 PM	71.7	76.5	14791084	y	1		73.1	73.1
203	1:12 PM	72.6	76.2	18197009	y	1		73.1	73.1
204	1:13 PM	72.7	78.0	18620871	y	1		73.1	73.1
205	1:14 PM	72.5	77.1	17782794	y	1		73.1	73.1
206	1:15 PM	72.9	77.7	19498446	y	1		73.2	73.1
207	1:16 PM	74.7	77.9	29512092	y	1		73.1	73.1
208	1:17 PM	72.7	76.3	18620871	y	1		73.0	73.1
209	1:18 PM	71.5	76.1	14125375	y	1		73.0	73.1
210	1:19 PM	72.0	75.6	15848932	y	1		73.0	73.1
211	1:20 PM	73.8	77.6	23988329	y	1		73.0	73.1
212	1:21 PM	73.8	78.0	23988329	y	1		73.0	73.1
213	1:22 PM	73.0	75.9	19952623	y	1		73.0	73.1
214	1:23 PM	73.2	76.9	20892961	y	1		73.0	73.1
215	1:24 PM	72.1	75.1	16218101	y	1		72.9	73.1
216	1:25 PM	74.8	81.2	30199517	y	1		72.9	73.1
217	1:26 PM	73.7	80.4	23442288	y	1		72.9	73.1
218	1:27 PM	72.6	75.9	18197009	y	1		72.9	73.1
219	1:28 PM	73.3	76.0	21379621	y	1		72.9	73.1
220	1:29 PM	73.3	76.9	21379621	y	1		72.9	73.1
221	1:30 PM	72.9	76.0	19498446	y	1		72.9	73.1
222	1:31 PM	79.8	92.0	0	N	0	abnormal Lmax	73.0	73.1
223	1:32 PM	72.1	75.9	16218101	y	1		73.0	73.1
224	1:33 PM	73.0	75.9	19952623	y	1		73.0	73.1
225	1:34 PM	73.2	75.7	20892961	y	1		73.0	73.1
226	1:35 PM	72.2	75.9	16595869	y	1		73.0	73.1
227	1:36 PM	72.5	76.5	17782794	y	1		73.1	73.1
228	1:37 PM	73.2	77.6	20892961	y	1		73.2	73.1
229	1:38 PM	71.4	77.6	13803843	y	1		73.2	73.1
230	1:39 PM	71.0	75.0	12589254	y	1		73.2	73.1
231	1:40 PM	74.2	76.7	26302680	y	1		73.3	73.1
232	1:41 PM	74.3	77.1	26915348	y	1		73.3	73.1
233	1:42 PM	71.9	76.7	15488166	y	1		73.3	73.0
234	1:43 PM	72.3	76.2	16982437	y	1		73.3	73.1
235	1:44 PM	72.1	76.9	16218101	y	1		73.3	73.1
236	1:45 PM	73.6	77.2	22908677	y	1		73.3	73.1
237	1:46 PM	73.6	78.6	22908677	y	1		73.3	73.1
238	1:47 PM	73.9	78.4	24547089	y	1		73.3	73.1
239	1:48 PM	73.4	77.4	21877616	y	1		73.2	73.1
240	1:49 PM	72.0	78.2	15848932	y	1		73.2	73.1
241	1:50 PM	75.2	84.8	33113112	y	1		73.3	73.1
242	1:51 PM	72.4	79.2	17378008	y	1		73.2	73.1
243	1:52 PM	72.2	76.2	16595869	y	1		73.3	73.1
244	1:53 PM	72.9	77.4	19498446	y	1		73.3	73.2
245	1:54 PM	73.5	77.3	22387211	y	1		73.2	73.2
246	1:55 PM	73.7	76.9	23442288	y	1		73.2	73.1
247	1:56 PM	74.6	79.1	28840315	y	1		73.2	73.1
248	1:57 PM	73.2	76.6	20892961	y	1		73.1	73.1
249	1:58 PM	71.4	74.4	13803843	y	1		73.1	73.1
250	1:59 PM	74.0	78.8	25118864	y	1		73.1	73.1
251	2:00 PM	74.3	80.2	26915348	y	1		73.0	73.1
252	2:01 PM	73.1	82.1	20417379	y	1		73.0	73.1
253	2:02 PM	72.4	76.3	17378008	y	1		72.9	73.1
254	2:03 PM	72.5	75.9	17782794	y	1		73.0	73.1
255	2:04 PM	72.3	76.4	16982437	y	1		72.9	73.1
256	2:05 PM	73.6	79.0	22908677	y	1		73.0	73.1
257	2:06 PM	73.8	76.8	23988329	y	1		73.0	73.1
258	2:07 PM	72.4	76.3	17378008	y	1		73.0	73.1
259	2:08 PM	73.3	75.9	21379621	y	1		73.1	73.1
260	2:09 PM	73.5	78.1	22387211	y	1		73.0	73.1
261	2:10 PM	73.2	76.1	20892961	y	1		73.0	73.1
262	2:11 PM	74.1	80.0	25703958	y	1		72.9	73.1
263	2:12 PM	72.6	80.0	18197009	y	1		72.9	73.1
264	2:13 PM	71.4	74.4	13803843	y	1		72.9	73.0
265	2:14 PM	72.7	77.7	18620871	y	1		73.0	73.0
266	2:15 PM	73.5	78.7	22387211	y	1		73.0	73.1
267	2:16 PM	73.5	79.0	22387211	y	1		73.0	73.0



I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/17/14  
Site: Reference - Day 1 (Church at 3224 Navajo Dr)  
Description: Unitarian Universalist Church  
Filename: AU2\_0017

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
268	2:17 PM	72.2	77.5	16595869	y	1		72.9	73.0
269	2:18 PM	72.5	81.1	17782794	y	1		72.9	73.0
270	2:19 PM	72.5	77.8	17782794	y	1		73.0	73.0
271	2:20 PM	73.3	75.8	21379621	y	1		73.0	73.0
272	2:21 PM	72.5	76.3	17782794	y	1		72.9	73.0
273	2:22 PM	73.1	76.3	20417379	y	1		72.9	73.0
274	2:23 PM	71.9	76.4	15488166	y	1		72.9	72.9
275	2:24 PM	72.6	76.8	18197009	y	1		73.0	73.0
276	2:25 PM	73.8	77.1	23988329	y	1		73.0	73.0
277	2:26 PM	74.4	77.7	27542287	y	1		73.1	73.0
278	2:27 PM	74.2	79.8	26302680	y	1		73.0	72.9
279	2:28 PM	71.9	75.7	15488166	y	1		72.9	72.9
280	2:29 PM	72.9	79.1	19498446	y	1		72.9	72.9
281	2:30 PM	71.3	75.4	13489629	y	1		73.1	72.9
282	2:31 PM	73.7	77.3	23442288	y	1		73.2	72.9
283	2:32 PM	72.4	75.0	17378008	y	1		73.2	72.9
284	2:33 PM	72.8	77.2	19054607	y	1		73.3	72.9
285	2:34 PM	73.4	79.0	21877616	y	1		73.3	72.9
286	2:35 PM	73.2	78.7	20892961	y	1		73.3	72.9
287	2:36 PM	71.2	76.5	13182567	y	1		73.2	73.0
288	2:37 PM	73.6	78.6	22908677	y	1		73.3	73.0
289	2:38 PM	73.8	77.1	23988329	y	1		73.2	73.0
290	2:39 PM	71.5	75.6	14125375	y	1		73.3	73.0
291	2:40 PM	71.5	75.5	14125375	y	1		73.3	73.1
292	2:41 PM	72.4	77.8	17378008	y	1		73.3	73.1
293	2:42 PM	73.8	79.0	23988329	y	1		73.4	73.1
294	2:43 PM	73.3	77.0	21379621	y	1		73.3	73.1
295	2:44 PM	73.6	76.5	22908677	y	1		73.3	73.1
296	2:45 PM	74.3	78.2	26915348	y	1		73.3	73.1
297	2:46 PM	72.5	77.1	17782794	y	1		73.2	73.1
298	2:47 PM	72.2	79.2	16595869	y	1		73.3	73.1
299	2:48 PM	73.6	77.1	22908677	y	1		73.3	73.1
300	2:49 PM	75.0	80.7	31622777	y	1		73.3	73.1
301	2:50 PM	73.6	79.3	22908677	y	1		73.2	73.0
302	2:51 PM	74.7	78.4	29512092	y	1		73.1	73.0
303	2:52 PM	73.4	77.6	21877616	y	1		73.0	73.0
304	2:53 PM	72.4	77.6	17378008	y	1		72.9	73.0
305	2:54 PM	73.2	76.4	20892961	y	1		72.9	73.0
306	2:55 PM	72.9	76.5	19498446	y	1		72.9	73.0
307	2:56 PM	72.1	77.3	16218101	y	1		72.8	72.9
308	2:57 PM	72.9	76.3	19498446	y	1		72.9	73.0
309	2:58 PM	74.1	79.8	25703958	y	1		72.8	72.9
310	2:59 PM	71.8	75.7	15135612	y	1		72.7	72.9
311	3:00 PM	72.4	75.8	17378008	y	1		72.7	72.9
312	3:01 PM	73.8	79.1	23988329	y	1		72.8	72.9
313	3:02 PM	72.4	76.1	17378008	y	1		72.7	72.9
314	3:03 PM	74.0	78.0	25118864	y	1		72.6	72.9
315	3:04 PM	73.7	79.3	23442288	y	1		72.6	72.9
316	3:05 PM	71.6	75.5	14454398	y	1		72.6	72.9
317	3:06 PM	74.3	77.7	26915348	y	1		72.6	73.0
318	3:07 PM	73.1	79.7	20417379	y	1		72.5	72.9
319	3:08 PM	73.4	79.6	21877616	y	1		72.5	72.9
320	3:09 PM	71.3	73.5	13489629	y	1		72.4	72.9
321	3:10 PM	72.2	77.3	16595869	y	1		72.5	72.9
322	3:11 PM	73.5	77.9	22387211	y	1		72.5	73.0
323	3:12 PM	71.2	76.0	13182567	y	1		72.5	72.9
324	3:13 PM	72.5	74.9	17782794	y	1		72.6	73.0
325	3:14 PM	72.8	77.0	19054607	y	1		72.5	73.0
326	3:15 PM	71.8	75.4	15135612	y	1		72.5	73.0
327	3:16 PM	72.2	76.6	16595869	y	1		72.9	73.0
328	3:17 PM	71.8	74.8	15135612	y	1		72.9	73.0
329	3:18 PM	71.8	75.1	15135612	y	1		73.1	73.0
330	3:19 PM	72.0	75.2	15848932	y	1		73.1	73.1
331	3:20 PM	73.6	78.0	22908677	y	1		73.2	73.1
332	3:21 PM	71.9	74.8	15488166	y	1		73.2	73.1
333	3:22 PM	70.6	73.6	11481536	y	1		73.2	73.1
334	3:23 PM	74.1	78.0	25703958	y	1		73.3	73.1
335	3:24 PM	73.2	76.6	20892961	y	1		73.3	73.1
336	3:25 PM	73.1	77.1	20417379	y	1		73.4	73.1
337	3:26 PM	71.7	76.0	14791084	y	1		73.4	73.1
338	3:27 PM	72.5	76.2	17782794	y	1		73.4	73.2
339	3:28 PM	72.8	76.6	19054607	y	1		73.4	73.2
340	3:29 PM	72.1	76.9	16218101	y	1		73.4	73.2
341	3:30 PM	72.8	77.3	19054607	y	1		73.4	73.2
342	3:31 PM	73.9	79.2	24547089	y	1		73.4	73.2
343	3:32 PM	72.7	75.9	18620871	y	1		73.3	73.1
344	3:33 PM	72.0	76.5	15848932	y	1		73.4	73.1
345	3:34 PM	72.8	75.8	19054607	y	1		73.4	73.2
346	3:35 PM	76.2	81.4	41686938	y	1		73.4	73.2
347	3:36 PM	73.8	79.9	23988329	y	1		73.1	73.1
348	3:37 PM	74.1	79.9	25703958	y	1		73.1	73.1
349	3:38 PM	73.5	78.7	22387211	y	1		73.0	73.1
350	3:39 PM	73.3	77.1	21379621	y	1		72.9	73.0
351	3:40 PM	73.0	76.6	19952623	y	1		72.8	73.0
352	3:41 PM	72.4	76.9	17378008	y	1		72.8	73.0
353	3:42 PM	72.9	75.9	19498446	y	1		72.8	73.0
354	3:43 PM	74.4	78.3	27542287	y	1		72.8	73.0
355	3:44 PM	74.5	78.6	28183829	y	1		72.8	73.0
356	3:45 PM	73.3	78.3	21379621	y	1		72.9	72.9

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/17/14  
Site: Reference - Day 1 (Church at 3224 Navajo Dr)  
Description: Unitarian Universalist Church  
Filename: AU2\_0017

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
357	3:46 PM	72.7	75.9	18620871	y	1		72.9	72.9
358	3:47 PM	71.3	74.8	13489629	y	1		72.9	72.9
359	3:48 PM	73.8	76.5	23988329	y	1		72.9	72.9
360	3:49 PM	72.0	75.0	15848932	y	1		72.9	72.9
361	3:50 PM	73.1	76.6	20417379	y	1		72.9	72.9
362	3:51 PM	72.3	77.0	16982437	y	1		73.0	72.9
363	3:52 PM	73.0	81.2	19952623	y	1		73.0	72.9
364	3:53 PM	73.5	76.5	22387211	y	1		72.9	72.9
365	3:54 PM	72.6	76.4	18197009	y	1		73.0	72.9
366	3:55 PM	71.4	74.0	13803843	y	1		73.0	72.9
367	3:56 PM	73.1	77.0	20417379	y	1		73.0	73.0
368	3:57 PM	71.6	75.6	14454398	y	1		73.0	73.0
369	3:58 PM	72.2	75.2	16595869	y	1		73.1	73.0
370	3:59 PM	71.5	75.0	14125375	y	1		73.1	73.0
371	4:00 PM	72.4	76.1	17378008	y	1		73.2	73.1
372	4:01 PM	73.4	77.5	21877616	y	1		73.2	73.1
373	4:02 PM	72.3	76.6	16982437	y	1		73.2	73.0
374	4:03 PM	74.0	77.8	25118864	y	1		73.2	73.0
375	4:04 PM	75.6	85.8	36307805	y	1		73.1	73.1
376	4:05 PM	73.1	77.1	20417379	y	1		73.0	73.0
377	4:06 PM	73.1	76.1	20417379	y	1		72.9	73.0
378	4:07 PM	72.3	75.6	16982437	y	1		73.2	73.0
379	4:08 PM	73.1	79.9	20417379	y	1		73.2	73.0
380	4:09 PM	72.8	77.3	19054607	y	1		73.1	73.0
381	4:10 PM	74.1	78.5	25703958	y	1		73.1	72.9
382	4:11 PM	71.6	77.2	14454398	y	1		73.0	72.9
383	4:12 PM	72.6	77.4	18197009	y	1		73.1	72.9
384	4:13 PM	73.9	78.8	24547089	y	1		73.1	73.0
385	4:14 PM	72.4	75.2	17378008	y	1		73.1	73.0
386	4:15 PM	72.3	75.6	16982437	y	1		73.1	73.0
387	4:16 PM	72.8	76.0	19054607	y	1		73.2	73.0
388	4:17 PM	73.6	79.2	22908677	y	1		73.1	73.0
389	4:18 PM	73.3	76.5	21379621	y	1		73.1	73.0
390	4:19 PM	73.5	77.9	22387211	y	1		73.1	73.0
391	4:20 PM	72.2	76.8	16595869	y	1		73.1	73.0
392	4:21 PM	73.9	77.3	24547089	y	1		73.1	73.0
393	4:22 PM	71.6	75.2	14454398	y	1		73.0	73.0
394	4:23 PM	72.6	77.3	18197009	y	1		73.0	73.0
395	4:24 PM	73.5	77.4	22387211	y	1		73.0	73.0
396	4:25 PM	72.4	76.9	17378008	y	1		73.0	72.9
397	4:26 PM	76.5	86.9	44668359	y	1		72.9	72.9
398	4:27 PM	72.2	75.0	16595869	y	1		72.6	72.9
399	4:28 PM	71.9	75.4	15488166	y	1		72.6	72.9
400	4:29 PM	72.4	76.2	17378008	y	1		72.7	72.9
401	4:30 PM	72.7	76.9	18620871	y	1		72.7	72.9
402	4:31 PM	72.6	78.5	18197009	y	1		72.7	72.9
403	4:32 PM	73.4	77.8	21877616	y	1		72.8	72.9
404	4:33 PM	72.9	77.3	19498446	y	1		72.8	72.9
405	4:34 PM	72.7	76.6	18620871	y	1		72.8	72.9
406	4:35 PM	73.8	78.8	23988329	y	1		72.8	72.9
407	4:36 PM	72.0	75.4	15848932	y	1		72.8	72.8
408	4:37 PM	73.4	77.1	21877616	y	1		72.9	72.8
409	4:38 PM	72.6	81.0	18197009	y	1		72.9	72.8
410	4:39 PM	73.6	81.1	22908677	y	1		72.9	72.8
411	4:40 PM	71.6	79.6	14454398	y	1		72.9	72.8
412	4:41 PM	73.3	77.0	21379621	y	1		72.9	72.8
413	4:42 PM	72.0	76.7	15848932	y	1		72.8	72.8
414	4:43 PM	72.5	76.7	17782794	y	1		72.8	72.8
415	4:44 PM	72.0	75.6	15848932	y	1		73.0	72.8
416	4:45 PM	71.4	78.6	13803843	y	1		73.0	72.9
417	4:46 PM	71.5	75.0	14125375	y	1		73.0	72.9
418	4:47 PM	72.9	76.1	19498446	y	1		73.1	72.9
419	4:48 PM	74.0	77.3	25118864	y	1		73.1	72.9
420	4:49 PM	71.3	75.2	13489629	y	1		73.0	72.9
421	4:50 PM	73.2	81.2	20892961	y	1		73.0	72.9
422	4:51 PM	73.8	78.5	23988329	y	1		72.9	72.9
423	4:52 PM	73.0	77.5	19952623	y	1		72.9	72.9
424	4:53 PM	73.8	78.3	23988329	y	1		73.0	72.9
425	4:54 PM	71.9	75.7	15488166	y	1		73.0	72.9
426	4:55 PM	73.8	77.5	23988329	y	1		73.0	72.9
427	4:56 PM	74.8	81.7	30199517	y	1		73.0	72.9
428	4:57 PM	73.1	76.0	20417379	y	1		72.9	72.8
429	4:58 PM	71.8	76.1	15135612	y	1		72.8	72.8
430	4:59 PM	73.4	78.0	21877616	y	1		72.9	72.8
431	5:00 PM	72.0	75.3	15848932	y	1		73.0	72.8
432	5:01 PM	71.9	76.6	15488166	y	1		73.0	72.8
433	5:02 PM	71.6	75.4	14454398	y	1		73.0	72.8
434	5:03 PM	75.4	82.7	34673685	y	1		73.0	72.9
435	5:04 PM	71.9	74.9	15488166	y	1		72.8	72.8
436	5:05 PM	72.5	76.5	17782794	y	1		72.8	72.8
437	5:06 PM	72.4	75.9	17378008	y	1		72.9	72.8
438	5:07 PM	73.0	75.6	19952623	y	1		72.9	72.8
439	5:08 PM	72.1	78.2	16218101	y	1		72.9	72.8
440	5:09 PM	71.6	75.3	14454398	y	1		72.9	72.9
441	5:10 PM	71.4	74.9	13803843	y	1		72.9	72.9
442	5:11 PM	73.4	75.8	21877616	y	1		73.0	72.9
443	5:12 PM	74.5	81.0	28183829	y	1		73.0	72.9
444	5:13 PM	73.9	77.0	24547089	y	1		72.9	72.9
445	5:14 PM	72.6	75.9	18197009	y	1		72.8	72.9

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/17/14  
Site: Reference - Day 1 (Church at 3224 Navajo Dr)  
Description: Unitarian Universalist Church  
Filename: AU2\_0017

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
446	5:15 PM	74.1	77.0	25703958	y	1		72.8	72.9
447	5:16 PM	71.7	75.8	14791084	y	1		72.7	72.9
448	5:17 PM	72.8	76.2	19054607	y	1		72.7	72.9
449	5:18 PM	73.0	76.9	19952623	y	1		72.7	72.9
450	5:19 PM	75.0	79.0	31622777	y	1		72.6	72.9
451	5:20 PM	71.8	75.3	15135612	y	1		72.5	72.8
452	5:21 PM	72.0	75.5	15848932	y	1		72.5	72.8
453	5:22 PM	72.3	75.9	16982437	y	1		72.5	72.9
454	5:23 PM	72.2	75.2	16595869	y	1		72.5	72.8
455	5:24 PM	72.3	78.1	16982437	y	1		72.6	72.9
456	5:25 PM	73.0	78.6	19952623	y	1		72.8	72.9
457	5:26 PM	73.7	76.9	23442288	y	1		72.7	72.9
458	5:27 PM	71.6	76.0	14454398	y	1		72.7	72.9
459	5:28 PM	72.1	76.6	16218101	y	1		72.7	72.9
460	5:29 PM	73.0	76.0	19952623	y	1		72.8	72.9
461	5:30 PM	72.8	76.4	19054607	y	1		72.8	72.9
462	5:31 PM	72.6	75.7	18197009	y	1		72.8	72.9
463	5:32 PM	73.9	80.4	24547089	y	1		72.9	
464	5:33 PM	71.6	75.2	14454398	y	1		72.7	
465	5:34 PM	71.9	74.3	15488166	y	1		72.8	
466	5:35 PM	72.6	76.0	18197009	y	1		72.8	
467	5:36 PM	72.7	76.4	18620871	y	1		72.9	
468	5:37 PM	71.0	74.7	12589254	y	1		72.9	
469	5:38 PM	72.8	76.4	19054607	y	1		73.0	
470	5:39 PM	73.8	77.9	23988329	y	1		72.9	
471	5:40 PM	71.6	76.7	14454398	y	1		72.8	
472	5:41 PM	71.6	74.8	14454398	y	1		72.8	
473	5:42 PM	72.8	76.4	19054607	y	1		72.9	
474	5:43 PM	72.9	76.3	19498446	y	1		73.0	
475	5:44 PM	75.0	80.4	31622777	y	1		73.1	
476	5:45 PM	72.6	75.9	18197009	y	1		72.8	
477	5:46 PM	72.6	77.6	18197009	y	1		72.8	
478	5:47 PM	73.1	76.3	20417379	y	1		72.9	
479	5:48 PM	73.2	77.0	20892961	y	1		72.9	
480	5:49 PM	73.8	81.5	23988329	y	1		73.0	
481	5:50 PM	72.7	77.1	18620871	y	1		73.0	
482	5:51 PM	72.9	77.3	19498446	y	1		73.0	
483	5:52 PM	71.4	75.5	13803843	y	1		72.9	
484	5:53 PM	73.2	79.5	20892961	y	1		73.0	
485	5:54 PM	72.8	76.8	19054607	y	1		73.0	
486	5:55 PM	73.2	76.9	20892961	y	1		73.0	
487	5:56 PM	73.2	77.6	20892961	y	1		73.0	
488	5:57 PM	72.4	75.5	17378008	y	1		73.0	
489	5:58 PM	71.8	76.7	15135612	y	1		73.0	
490	5:59 PM	72.4	76.6	17378008	y	1		73.1	
491	6:00 PM	71.8	75.2	15135612	y	1		73.1	
492	6:01 PM	72.9	77.1	19498446	y	1		73.1	
493	6:02 PM	74.3	83.4	26915348	y	1		73.1	
494	6:03 PM	74.1	78.4	25703958	y	1		73.0	
495	6:04 PM	71.0	76.5	12589254	y	1		72.9	
496	6:05 PM	71.8	76.4	15135612	y	1		73.0	
497	6:06 PM	73.4	79.3	21877616	y	1		73.1	
498	6:07 PM	74.0	77.5	25118864	y	1		73.1	
499	6:08 PM	74.4	80.5	27542287	y	1		73.0	
500	6:09 PM	73.6	80.6	22908677	y	1		72.9	
501	6:10 PM	73.2	80.2	20892961	y	1		72.8	
502	6:11 PM	71.8	75.0	15135612	y	1		72.8	
503	6:12 PM	72.6	76.8	18197009	y	1			
504	6:13 PM	73.4	76.2	21877616	y	1			
505	6:14 PM	72.9	77.3	19498446	y	1			
506	6:15 PM	72.8	76.3	19054607	y	1			
507	6:16 PM	72.7	77.0	18620871	y	1			
508	6:17 PM	73.3	76.4	21379621	y	1			
509	6:18 PM	72.0	74.7	0	N	0	Talking with person near mic		
510	6:19 PM	71.1	76.1	0	N	0	Talking with person near mic		
511	6:20 PM	72.2	75.6	16595869	y	1			
512	6:21 PM	73.3	77.9	21379621	y	1			
513	6:22 PM	72.0	77.1	15848932	y	1			
514	6:23 PM	73.1	76.6	20417379	y	1			
515	6:24 PM	73.1	78.6	20417379	y	1			
516	6:25 PM	73.4	78.3	21877616	y	1			
517	6:26 PM	73.0	76.8	19952623	y	1			
518	6:27 PM	72.6	77.7	18197009	y	1			
519	6:28 PM	72.3	75.6	16982437	y	1			
520	6:29 PM	72.9	75.9	19498446	y	1			
521	6:30 PM	72.6	75.5	0	N	0	stop		
Energy Su				10352523236	517				
Leq				73.0					





**529/531 Brookfield Ave looking northeast**



**529/531 Brookfield Ave looking northwest**





**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14	
Address/Location	529/531 Brookfield Ave	
Land Use	Residential	
Analyst Name	R. W. Harrison	
<b>Meteorological Conditions</b>		
Temperature(s)	75°F	
Wind Speed(s)	<del>14</del> occasional gusts 4-6 mph	
Wind Direction(s)	<del>14</del> <del>from</del> from east	
<b>Calibration</b>		
Meter/Analyzer	R10n	AN2-1704
	Pre-Measurement	Post-Measurement
Calibration Time	12:30	12:54
Calibration Level	94.0 dB	93.9 dB

Period #	Start Time	Event Description(s)
1	12:34	
2	35	HT @ 68 on I 24
3	36	MT on S Terrace @ 66 dB
4	37	
5	38	<del>25</del> HT @ 68 Autos on S Terrace - 64 dB
6	39 X	HT on I-24 @ 68 ; local truck pulling out of driveway (4026 S Terrace)
7	40	
8	41	:50 HT stuck on I-24 to 68
9	42	:00 wind gusts to 6 mph
10	43 X	:20 MC on S Terrace ; HT horn on I-24 to 75
11	44	
12	45	:30 HT muffler @ 71 on I-24
13	46	:24 HT on S Terrace at 68
14	47	:10 HTS on I-24 @ 67
15	48	
16	49	:43 MT on S Terrace @ 69
17	50	:05 MC on S Terrace @ 68 5 sec. ; :40 muffler on I-24 to 67
18	51	
19	52	
20	53	:05 Auto on S Terrace @ 66 (whining noise)
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

I-24 noise dominant

Typically 63-66

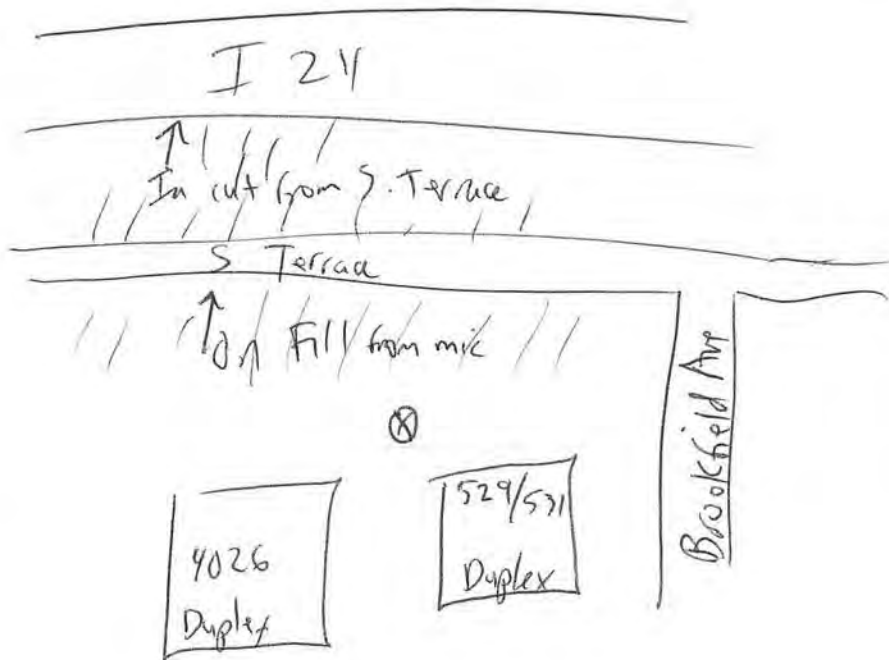
to 67



**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14
Address	529/531 Brookfield Ave
Land Use	Residential

Indicate North





**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/17/14  
**Site:** 529/531 Brookfield Ave  
**Description:** Residential (Duplex)  
**Filename:** AU2\_1704

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	12:34:00 PM	64.3	66.6	2691535	Y	1	
2	12:35:00 PM	64.6	67.0	2884032	Y	1	
3	12:36:00 PM	66.6	68.2	4570882	Y	1	
4	12:37:00 PM	65.6	67.6	3630781	Y	1	
5	12:38:00 PM	64.2	65.2	2630268	Y	1	
6	12:39:00 PM	65.0	68.3	0	N	0	local truck pulling out of driveway
7	12:40:00 PM	65.5	67.2	3548134	Y	1	
8	12:41:00 PM	66.5	68.3	4466836	Y	1	
9	12:42:00 PM	64.6	66.6	2884032	Y	1	
10	12:43:00 PM	67.8	75.3	0	N	0	:40 orn on I-24 to I-75
11	12:44:00 PM	65.6	68.0	3630781	Y	1	
12	12:45:00 PM	66.9	71.6	4897788	Y	1	
13	12:46:00 PM	64.9	69.5	3090295	Y	1	
14	12:47:00 PM	65.1	67.4	3235937	Y	1	
15	12:48:00 PM	64.9	67.3	3090295	Y	1	
16	12:49:00 PM	65.0	69.4	3162278	Y	1	
17	12:50:00 PM	65.0	68.6	3162278	Y	1	
18	12:51:00 PM	65.4	67.8	3467369	Y	1	
19	12:52:00 PM	64.9	66.4	3090295	Y	1	
20	12:53:00 PM	65.7	67.8	3715352	Y	1	
21	12:54:00 PM	66.5	66.7	0	N	0	stop
22				0	N	0	
23				0	N	0	
24				0	N	0	
25				0	N	0	
Energy Sum				61849166		18	
Leq				65.4			



**4511 Rockford Ln looking south**



**4511 Rockford Ln looking west**





# **Noise Measurement Data Sheet** **I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14	
Address/Location	4511 N Terrace Rockford Ln	
Land Use	Residential	
Analyst Name	R. Williams	
<b>Meteorological Conditions</b>		
Temperature(s)	75-80	
Wind Speed(s)	N/A	
Wind Direction(s)	N/A	
<b>Calibration</b>		
Meter/Analyzer	R100	Aur 1708
	Pre-Measurement	Post-Measurement
Calibration Time	3:42	4:04
Calibration Level	94.0	93.9

Typical  
77-78dB

Period #	Start Time	Event Description(s)
1	3:44	:26 Auto on N Terrace @ 75dB
2	45	
3	46	
4	47	WB HT's @ 80
5	48	
6	49	
7	50	
8	51	
9	52	
10	53	
11	54	
12	55	
13	56	
14	57	HT's @ 80
15	58	
16	59	
17	4:00	
18	01	:00 S.L. to 71 (less volume)
19	02	:15 HT's @ 80dB
20	03	
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

Not much  
traffic on  
N Terrace

Steady  
Traffic  
throughout

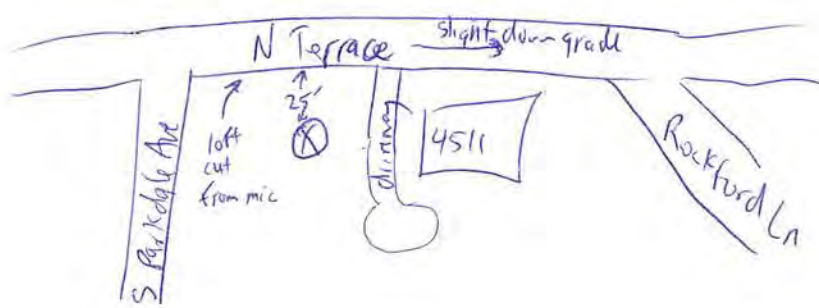
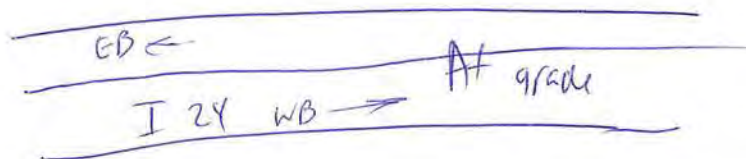
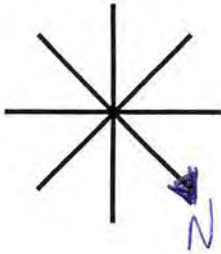




**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14
Address	4511 <del>N Terrace</del> Rockford Ln
Land Use	Residential

Indicate North



**I-75/24 Interchange, Hamilton County, TN  
Noise Measurements**

**Date:** 09/17/14  
**Site:** 4511 Rockford Ln  
**Description:** Residential  
**Filename:** AU2\_1708

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	3:44:00 PM	76.7	79.0	46773514	Y	1	
2	3:45:00 PM	76.2	78.9	41686938	Y	1	
3	3:46:00 PM	75.2	77.8	33113112	Y	1	
4	3:47:00 PM	77.1	80.7	51286138	Y	1	
5	3:48:00 PM	76.2	79.0	41686938	Y	1	
6	3:49:00 PM	76.3	79.8	42657952	Y	1	
7	3:50:00 PM	74.9	76.6	30902954	Y	1	
8	3:51:00 PM	76.6	78.9	45708819	Y	1	
9	3:52:00 PM	76.6	78.5	45708819	Y	1	
10	3:53:00 PM	76.9	80.1	48977882	Y	1	
11	3:54:00 PM	77.0	80.6	50118723	Y	1	
12	3:55:00 PM	75.9	79.3	38904514	Y	1	
13	3:56:00 PM	76.3	79.7	42657952	Y	1	
14	3:57:00 PM	77.5	80.8	56234133	Y	1	
15	3:58:00 PM	75.2	78.1	33113112	Y	1	
16	3:59:00 PM	76.4	79.2	43651583	Y	1	
17	4:00:00 PM	76.6	79.6	45708819	Y	1	
18	4:01:00 PM	75.9	78.9	38904514	Y	1	
19	4:02:00 PM	77.8	80.8	60255959	Y	1	
20	4:03:00 PM	76.9	79.1	48977882	Y	1	
21	4:04:00 PM	76.0	75.7	0	N	0	stop
22				0	N	0	
23				0	N	0	
24				0	N	0	
25				0	N	0	
Energy Sum				887030259		20	
Leq				76.5			



**412 Thornton Ave looking south**



**412 Thornton Ave looking east**





# **Noise Measurement Data Sheet** **I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14
Address/Location	412 Thornton Ave
Land Use	Residential
Analyst Name	R. Williamson

## **Meteorological Conditions**

Temperature(s)	75°F
Wind Speed(s)	0-2 mph
Wind Direction(s)	from south

## **Calibration**

Meter/Analyzer	Rion	AUL-1806
	Pre-Measurement	Post-Measurement
Calibration Time	1:21	1:43
Calibration Level	94.0 dB	94.0

w/o  
I-24  
Typically  
67-70

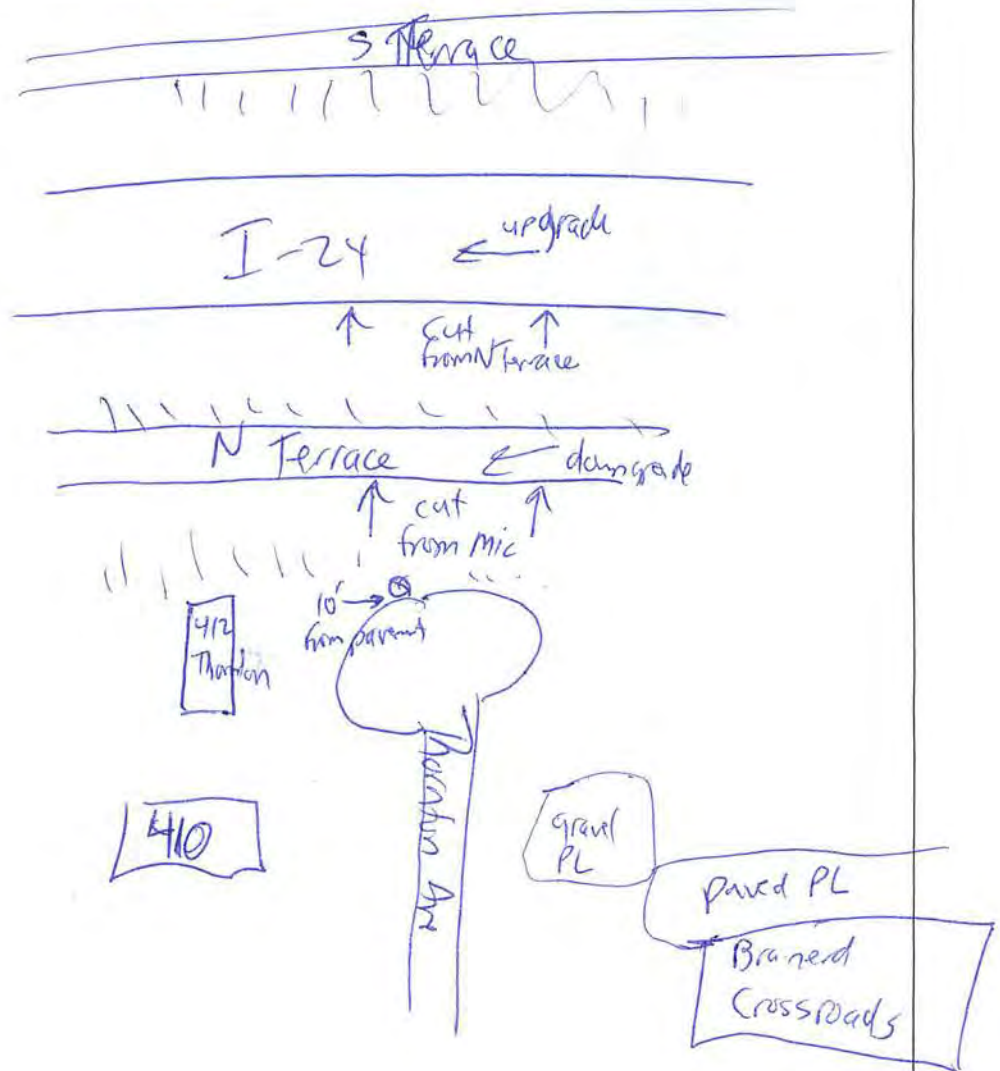
Occasional  
N. Terrace  
Noise to  
~71

Period #	Start Time	Event Description(s)
1	1:23	
2	24	
3	25	:15 HT @ 76 dB (5 secs) 24 :40 MT on N Terrace @ 70 dB
4	26 X	:25 vehicle on N Terrace Radio @ 71
5	27	!
6	28	:15 HT on I-24 @ 74
7	29	:30 MC on N Terrace @ 72
8	30	
9	31	:00 auto on N Terrace @ 72
10	32	
11	33	
12	34	
13	35	:50 Auto on N Terrace @ 71
14	36	:44 5-10 sec full to 64 dB
15	37	:00 HT on I-24 to 72-74
16	38	
17	39	:35 MT on N Terrace @ 73 (5-10 secs)
18	40	:54 MT on " " @ 71 (5 secs)
19	41	
20	42	:30 auto to 70 dB (5 secs)
21		stop @ 1:43
22		
23		
24		
25		
26		
27		
28		
29		
30		

**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14
Address	412 Thornton Ave
Land Use	Residential

Indicate North



**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/18/14  
**Site:** 412 Thornton Ave  
**Description:** Residential  
**Filename:** AU2\_1806

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	1:23:00 PM	69.9	72.2	9772372	Y	1	
2	1:24:00 PM	69.2	71.6	8317638	Y	1	
3	1:25:00 PM	70.2	76.1	10471285	Y	1	
4	1:26:00 PM	69.7	71.8	0	N	0	vehicle on N Terrace loud radio
5	1:27:00 PM	69.9	71.7	9772372	Y	1	
6	1:28:00 PM	70.3	74.5	10715193	Y	1	
7	1:29:00 PM	69.8	72.7	9549926	Y	1	
8	1:30:00 PM	69.6	72.4	9120108	Y	1	
9	1:31:00 PM	68.4	72.7	6918310	Y	1	
10	1:32:00 PM	69.4	71.5	8709636	Y	1	
11	1:33:00 PM	68.8	71.1	7585776	Y	1	
12	1:34:00 PM	67.8	70.4	6025596	Y	1	
13	1:35:00 PM	68.3	71.2	6760830	Y	1	
14	1:36:00 PM	68.1	71.7	6456542	Y	1	
15	1:37:00 PM	68.4	71.7	6918310	Y	1	
16	1:38:00 PM	68.2	70.6	6606934	Y	1	
17	1:39:00 PM	68.9	73.2	7762471	Y	1	
18	1:40:00 PM	69.4	71.2	8709636	Y	1	
19	1:41:00 PM	68.2	70.6	6606934	Y	1	
20	1:42:00 PM	69.4	71.7	8709636	Y	1	
21	1:43:00 PM	69.7	70.1	0	n	0	stop
22				0	n	0	
23				0	n	0	
24				0	n	0	
25				0	n	0	
Energy Sum				155489506		19	
Leq				69.1			





**318 S St. Marks Ave looking south**



**318 S St. Marks Ave looking west**





**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14	
Address/Location	318 S St. Marks	
Land Use	Residential	
Analyst Name	R. Williamson	
<b>Meteorological Conditions</b>		
Temperature(s)	75	
Wind Speed(s)	occasional gusts same to 8 <sup>1/2</sup> mph	
Wind Direction(s)	from NE	
<b>Calibration</b>		
Meter/Analyzer	Rion Aug 17 07	
	Pre-Measurement	Post-Measurement
Calibration Time	3:03	3:24
Calibration Level	94.0	93.9

Period #	Start Time	Event Description(s)
1	3:04 X	Plane overhead to 68 dB
2	05	:20 veh traffic @ 65 on I-24
3	06	:15 HT on N Terrace @ 71
4	7	
5	8 X	Plane (audible, overhead)
6	9	
7	10	
8	11	
9	12 X	Wind gust to 12 mph from NE
10	13	
11	14	:35 school bus @ 63 on N Terrace
12	15	
13	16	:50 HT on I-24 @ 64
14	17	
15	18	:35 HT on I-24 @ 66
16	19	
17	20	
18	21	
19	22	
20	23	
21		
22		Stop @ 3:24
23		
24		
25		
26		
27		
28		
29		
30		

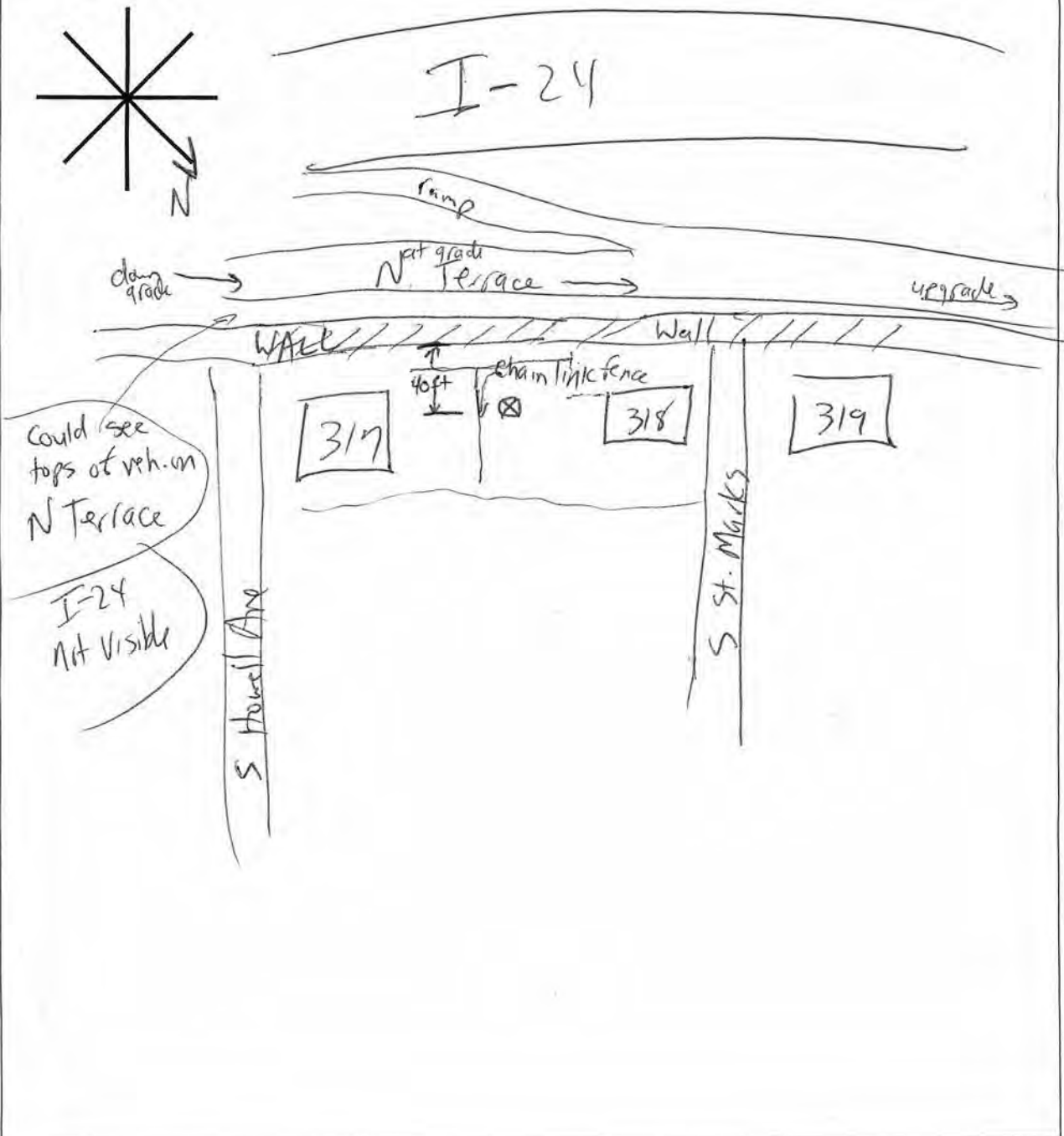
Typically  
60-62 dB



**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14
Address	318 S. St Marks
Land Use	Residential

Indicate North





**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/17/14  
**Site:** 318 S St. Marks  
**Description:** Residential  
**Filename:** AU2\_1707

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	3:04:00 PM	64.2	68.7	0	N	0	Plane overhead to 68 dB
2	3:05:00 PM	63.0	65.8	1995262	Y	1	
3	3:06:00 PM	65.3	72.0	3388442	Y	1	
4	3:07:00 PM	61.6	63.0	1445440	Y	1	
5	3:08:00 PM	62.7	64.5	0	N	0	Plane (audible, overhead)
6	3:09:00 PM	62.3	64.9	1698244	Y	1	
7	3:10:00 PM	61.5	63.3	1412538	Y	1	
8	3:11:00 PM	60.7	62.5	1174898	Y	1	
9	3:12:00 PM	61.0	62.9	0	N	0	wind gust to 12mph from NE
10	3:13:00 PM	62.0	64.8	1584893	Y	1	
11	3:14:00 PM	61.3	63.3	1348963	Y	1	
12	3:15:00 PM	61.7	63.6	1479108	Y	1	
13	3:16:00 PM	62.5	64.5	1778279	Y	1	
14	3:17:00 PM	62.2	64.1	1659587	Y	1	
15	3:18:00 PM	63.1	66.5	2041738	Y	1	
16	3:19:00 PM	62.2	63.6	1659587	Y	1	
17	3:20:00 PM	60.5	62.9	1122018	Y	1	
18	3:21:00 PM	62.6	64.4	1819701	Y	1	
19	3:22:00 PM	61.8	63.5	1513561	Y	1	
20	3:23:00 PM	62.2	64.0	1659587	Y	1	
21	3:24:00 PM	61.2	61.1	0	N	0	stop
22				0	N	0	
23				0	N	0	
24				0	N	0	
25				0	N	0	
Energy Sum				28781846		17	
<b>Leq</b>				<b>62.3</b>			



**Royal Apts Pool (314 McBrien Rd) looking south**



**Royal Apts Pool (314 McBrien Rd) looking west**



**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14	
Address/Location	314 McBrayer Royal Pkwy	
Land Use	Residential (apt pool)	
Analyst Name	R. Williams	
<b>Meteorological Conditions</b>		
Temperature(s)	75°F	
Wind Speed(s)	N/A Occasional 0-2 mph	
Wind Direction(s)	N/A from west	
<b>Calibration</b>		
Meter/Analyzer	Rion 412-1805	
	Pre-Measurement	Post-Measurement
Calibration Time	12:36	12:58
Calibration Level	94.0 dB	93.8 dB

Period #	Start Time	Event Description(s)
1	12:37	:40 HT to 66
2	38	:20 HT to 67
3	39	
4	40 X	hammering at adjacent bldg.
5	41 X	HT to 70 dB (5 secs) on I-24
6	42 X	hammering at <del>adj.</del> bldg
7	43 X	" " "
8	44	:42 HT to 67 dB (4 secs)
9	45	:55 vehs to 65 dB
10	46 X	:55 plane flyover 70 dB
11	47 X	5:15
12	48 X	:05 HT @ 67 :15-20 hammer noise
13	49	:15 to 60 :25 to 66 HT
14	50	
15	51 X	:04 HT to 66 intermittent compressor heard adjacent to gun
16	52 X	
17	53	
18	54	:24 HT to 65
19	55	:35 HT to 67.5 (5 secs)
20	56	
21	57	
22		stop @ 12:58
23		
24		
25		
26		
27		
28		
29		
30		

Typicaly  
~~62-65~~  
 62-65

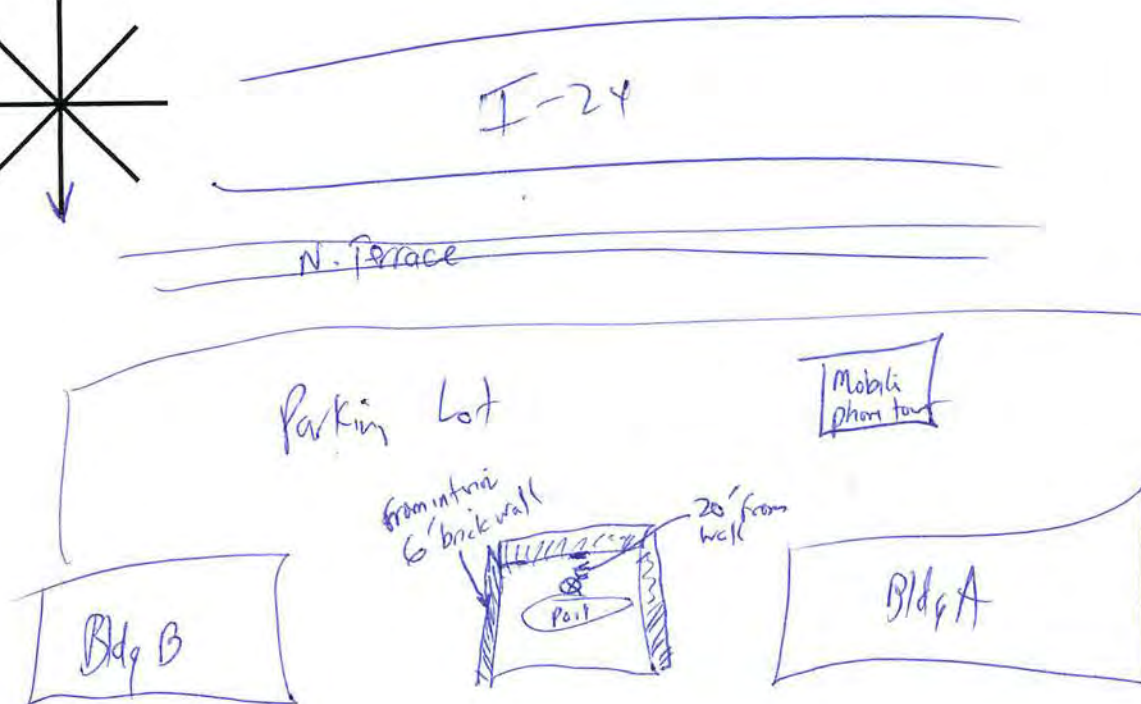




**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14
Address	Royal Oaks Apt (Pos)
Land Use	Res

Indicate North



**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/18/14  
**Site:** 314 McBrien (Royal Apts pool)  
**Description:** Residential (Apt complex)  
**Filename:** AU2\_1805

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	12:37:00 PM	64.1	65.6	2570396	Y	1	
2	12:38:00 PM	64.7	67.7	2951209	Y	1	
3	12:39:00 PM	64.1	65.1	2570396	Y	1	
4	12:40:00 PM	65.3	67.7	0	n	0	hammering at adjacent bldg
5	12:41:00 PM	65.2	70.3	0	n	0	hammering at adjacent bldg
6	12:42:00 PM	64.2	68.6	0	n	0	hammering at adjacent bldg
7	12:43:00 PM	63.2	65.6	0	n	0	hammering at adjacent bldg
8	12:44:00 PM	64.0	67.5	2511886	Y	1	
9	12:45:00 PM	62.9	65.2	1949845	Y	1	
10	12:46:00 PM	64.7	69.2	0	n	0	plane flyover
11	12:47:00 PM	64.9	69.5	0	n	0	plane flyover
12	12:48:00 PM	64.3	66.0	0	n	0	hammering at adjacent bldg
13	12:49:00 PM	63.7	67.1	2344229	Y	1	
14	12:50:00 PM	62.9	65.2	1949845	Y	1	
15	12:51:00 PM	62.4	66.5	0	n	0	intermittent compressor gun heard adjacent bldg
16	12:52:00 PM	61.4	63.4	0	n	0	intermittent compressor gun heard adjacent bldg
17	12:53:00 PM	60.9	63.3	1230269	Y	1	
18	12:54:00 PM	61.8	65.3	1513561	Y	1	
19	12:55:00 PM	63.3	67.6	2137962	Y	1	
20	12:56:00 PM	62.6	66.7	1819701	Y	1	
21	12:57:00 PM	62.8	64.2	1905461	Y	1	
22	12:58:00 PM	65.0	64.9	0	n	0	stop
23				0	n	0	
24				0	n	0	
25				0	n	0	
Energy Sum				25454759		12	
Leq				63.3			



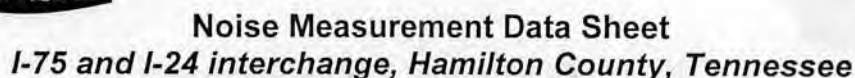


**5508 Miller Dr looking south**



**5508 Miller Dr looking west**





Period #	Start Time	Event Description(s)
1	12:14	
2	12	:47 HT @ 67
3	13	:20 HT @ 68
4	14	:40 MC @ 65 to 56 w/ little traffic
5	15 X	Spoke w/ resident 20 ft from mic
6	16	
7	17	:30 Veh @ 65
8	18 X	Spoke w/ another resident
9	19 X	Military Plane to 71 dB flying (landing)
10	20	
11	21	
12	22	:25 HT @ 65 ; :35 HT to 67
13	23	:15 HT @ 68
14	24	:06 HT muffler @ 68
15	25 X	local vehicle parking/music playing
16	26 X	" " " " "
17	27 X	" " " " "
18	28	
19	29	
20	30	
21	31 X	:16 loud veh to 71 dB (2 secs), loud local veh
22	32 X	Military Plane
23	33	
24		
25		
26		
27		
28		
29		
30		

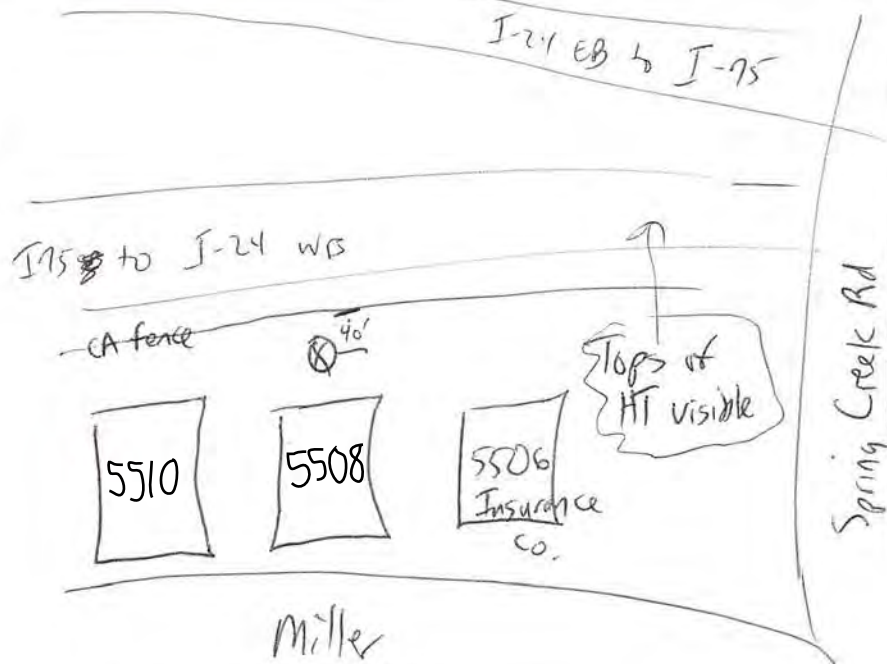
push  
to 6-67



**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/17/14
Address	5508 Miller Drive
Land Use	Residential

Indicate North



**I-75/24 Interchange, Hamilton County, TN  
Noise Measurements**

**Date:** 09/17/14  
**Site:** 5508 Miller Dr  
**Description:** Residential  
**Filename:** AU2\_1706

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	2:11:00 PM	62.5	66.6	1778279	Y	1	
2	2:12:00 PM	62.5	66.8	1778279	Y	1	
3	2:13:00 PM	63.5	67.7	2238721	Y	1	
4	2:14:00 PM	61.8	64.8	1513561	Y	1	
5	2:15:00 PM	63.2	70.7	0	N	0	Spoke w/resident 20ft from mic
6	2:16:00 PM	62.3	65.9	1698244	Y	1	
7	2:17:00 PM	62.3	66.4	1698244	Y	1	
8	2:18:00 PM	63.9	67.1	0	N	0	spoke w/another resident
9	2:19:00 PM	64.8	71.4	0	N	0	Military Plane to 71dB
10	2:20:00 PM	63.0	65.6	1995262	Y	1	
11	2:21:00 PM	62.2	67.8	1659587	Y	1	
12	2:22:00 PM	63.6	67.3	2290868	Y	1	
13	2:23:00 PM	63.4	67.8	2187762	Y	1	
14	2:24:00 PM	64.5	67.9	2818383	Y	1	
15	2:25:00 PM	64.4	68.5	0	N	0	local vehicle parking/music playing
16	2:26:00 PM	61.3	64.7	0	N	0	local vehicle parking/music playing
17	2:27:00 PM	62.6	66.3	0	N	0	local vehicle parking/music playing
18	2:28:00 PM	63.1	65.5	2041738	Y	1	
19	2:29:00 PM	62.2	64.5	1659587	Y	1	
20	2:30:00 PM	62.6	64.9	1819701	Y	1	
21	2:31:00 PM	64.6	71.6	0	N	0	:16 loud vehicle to 71dB (2 secs), loud local vehicle on Miller
22	2:32:00 PM	65.6	70.5	0	N	0	Military Plane
23	2:33:00 PM	62.7	69.5	1862087	Y	1	
24	2:34:00 PM	67.2	69.5	0	N	0	stop
25				0	N	0	
Energy Sum				29040303		15	
Leq				62.9			





**517 Brown Rd looking south**



**517 Brown Rd looking west**



# **Noise Measurement Data Sheet** **I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14	
Address/Location	517	
Land Use	Residential	
Analyst Name	R. Williamson	
<b>Meteorological Conditions</b>		
Temperature(s)	65	
Wind Speed(s)	N/A	
Wind Direction(s)	N/A	
<b>Calibration</b>		
Meter/Analyzer	Rian	NU2-1802
	Pre-Measurement	Post-Measurement
Calibration Time	8:55	9:17
Calibration Level	94.0	94.0 dB

Period #	Start Time	Event Description(s)
1	8:50 X	local vehicle passby;
2	57	
3	58 X	Brown Acres Golf Course Maintenance lawn mower
4	59	:30 vehicle on I-75 @ 68 dB
5	9:00	
6	01	
7	2	
8	3	
9	4 X	Engine noise from Brown Acres - Audible (but not loud) Vehicle to 69 on I-75
10	5	
11	6	
12	7 X	local horn : 55
13	8 X	Brown Acres lawn mower
14	9 X	" " noise from maintenance
15	10	I-75 noise to 68 dB (:30) :50 engine noise on I-75
16	11	:17 noise from I-75 @ 70 dB (3-4) secs
17	12 X	<del>local horn</del>
18	13 X	<del>Brown Acres lawn mower</del> :50 I-75 traffic noise down to 64 dB (15-30 secs)
19	14	
20	15	
21	<del>16</del>	
22		Stop @ 9:16
23		
24		
25		
26		
27		
28		
29		
30		

I-75 traffic  
S.C.  
Typically  
66 dB  
- 67 dB  
occasionally  
down to 65

occasionally  
down to 65

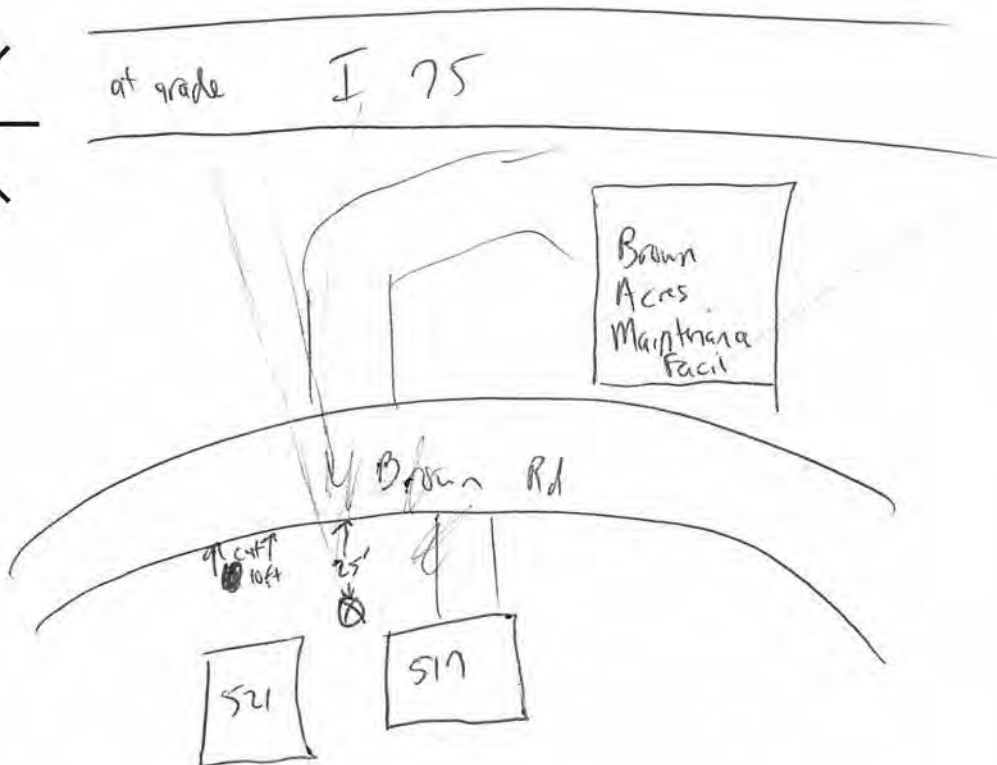
I-75 traffic noise down to 64 dB (15-30 secs)



**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14
Address	517 Brown Rd
Land Use	Residential

Indicate North





**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/18/14  
**Site:** 517 Brown Rd  
**Description:** Residential  
**Filename:** AU2\_1802

<u>Period #</u>	<u>Time Start</u>	<u>Leg</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	8:56:00 AM	67.0	68.5	0	N	0	local vehicle passby
2	8:57:00 AM	65.9	67.4	3890451	Y	1	
3	8:58:00 AM	66.8	68.4	0	N	0	Brown Acres Golf Course Maintenance - lawn mower
4	8:59:00 AM	65.9	68.2	3890451	Y	1	
5	9:00:00 AM	66.3	68.3	4265795	Y	1	
6	9:01:00 AM	66.6	69.4	4570882	Y	1	
7	9:02:00 AM	66.8	68.6	4786301	Y	1	
8	9:03:00 AM	66.8	67.9	4786301	Y	1	
9	9:04:00 AM	67.0	68.5	0	N	0	Engine noise from Brown Acres - audible but not loud
10	9:05:00 AM	67.8	69.3	6025596	Y	1	
11	9:06:00 AM	65.6	67.1	3630781	Y	1	
12	9:07:00 AM	66.7	68.9	0	N	0	local horn
13	9:08:00 AM	65.1	66.5	0	N	0	Brown Acres lawn mower
14	9:09:00 AM	66.7	68.8	0	N	0	Brown Acres lawn mower
15	9:10:00 AM	66.7	68.4	4677351	Y	1	
16	9:11:00 AM	65.8	70.6	3801894	Y	1	
17	9:12:00 AM	65.6	67.2	3630781	Y	1	
18	9:13:00 AM	64.6	66.0	2884032	Y	1	
19	9:14:00 AM	65.8	68.5	3801894	Y	1	
20	9:15:00 AM	65.5	68.1	3548134	Y	1	
21	9:16:00 AM	65.9	65.9	0	N	0	stop
22				0	N	0	
23				0	N	0	
24				0	N	0	
25				0	N	0	
Energy Sum				58190644		14	
Leq				66.2			



**I-75 ROW at University of Phoenix looking south**



**I-75 ROW at University of Phoenix looking west**





**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14	
Address/Location	I-75 SB near ROW	
Land Use	N/A	
Analyst Name	R. Williamson	
<b>Meteorological Conditions</b>		
Temperature(s)	60°F @ start	
Wind Speed(s)	N/A	
Wind Direction(s)	N/A	
<b>Calibration</b>		
Meter/Analyzer	Rion 00840868	File AV2_0018 19
	Pre-Measurement	Post-Measurement
Calibration Time	6:39	2:16
Calibration Level	94.0 dB	93.9

Period #	Start Time	Event Description(s)
1	6:46	
2		
3		
4		
5		
6		
7		
8		
9	11:39	check HT 78.6 dB Autos 79-81
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21	2:16	Stop
22		
23		
24		
25		
26		
27		
28		
29		
30		

Levels in  
80s

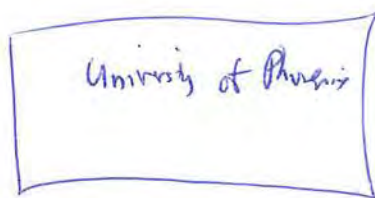
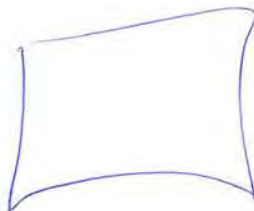
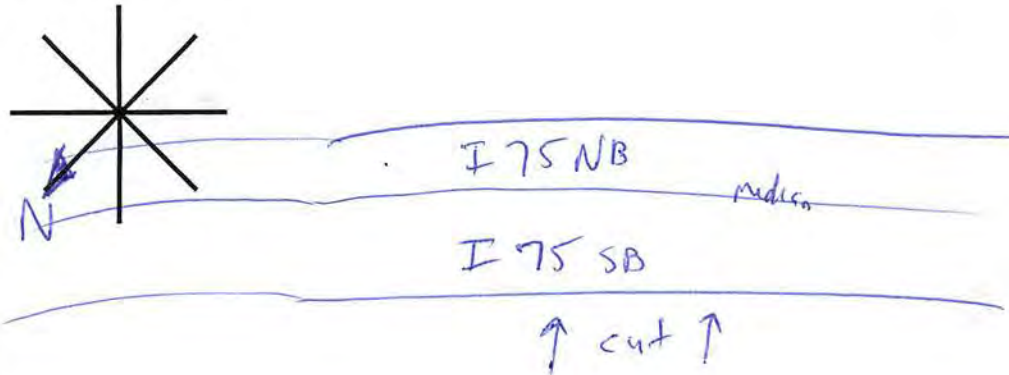




**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	2/18/14
Address	I-75 SB side
Land Use	NA

Indicate North



I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/18/14  
Site: Reference - Day 2 (I-75 ROW)  
Description: I-75 SB side inside ROW, in front of University of Phoenix  
Filename: AU2\_0019

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
1	6:45 AM	82.1	85.8	162181010	y	1		81.7	80.6
2	6:46 AM	81.9	84.7	154881662	y	1		81.6	80.5
3	6:47 AM	80.7	83.5	117489755	y	1		81.6	80.4
4	6:48 AM	80.2	83.1	104712855	y	1		81.7	80.4
5	6:49 AM	81.0	84.2	125892541	y	1		81.7	80.3
6	6:50 AM	81.8	84.7	151356125	y	1		81.7	80.2
7	6:51 AM	81.7	85.1	147910839	y	1		81.7	80.2
8	6:52 AM	81.7	84.7	147910839	y	1		81.7	80.1
9	6:53 AM	81.5	84.7	141253754	y	1		81.7	80.0
10	6:54 AM	82.9	86.2	194984460	y	1		81.8	80.0
11	6:55 AM	82.5	87.5	177827941	y	1		81.8	79.9
12	6:56 AM	80.8	83.5	120226443	y	1		81.8	79.8
13	6:57 AM	81.4	85.3	138038426	y	1		81.8	79.7
14	6:58 AM	82.9	85.7	194984460	y	1		81.9	79.7
15	6:59 AM	82.2	86.1	165958691	y	1		81.8	79.6
16	7:00 AM	81.8	85.8	151356125	y	1		81.7	79.5
17	7:01 AM	81.9	85.4	154881662	y	1		81.6	79.5
18	7:02 AM	80.7	84.0	117489755	y	1		81.5	79.4
19	7:03 AM	81.9	85.5	154881662	y	1		81.5	79.4
20	7:04 AM	80.8	84.8	120226443	y	1		81.4	79.4
21	7:05 AM	80.9	84.5	123026877	y	1		81.5	79.5
22	7:06 AM	81.9	84.7	154881662	y	1		81.5	79.5
23	7:07 AM	81.7	85.6	147910839	y	1		81.3	79.5
24	7:08 AM	81.2	83.2	131825674	y	1		81.1	79.5
25	7:09 AM	81.4	83.4	138038426	y	1		81.0	79.5
26	7:10 AM	81.3	84.2	134896288	y	1		81.0	79.5
27	7:11 AM	81.5	84.2	141253754	y	1		81.0	79.6
28	7:12 AM	82.6	84.9	181970086	y	1		80.9	79.6
29	7:13 AM	82.8	85.4	190546072	y	1		80.7	79.6
30	7:14 AM	82.3	85.4	169824365	y	1		80.4	79.5
31	7:15 AM	82.6	86.6	181970086	y	1		80.2	79.5
32	7:16 AM	82.2	85.0	165958691	y	1		79.9	79.5
33	7:17 AM	82.1	86.3	162181010	y	1		79.6	79.5
34	7:18 AM	80.9	83.5	123026877	y	1		79.3	79.5
35	7:19 AM	80.9	84.2	123026877	y	1		79.0	79.5
36	7:20 AM	78.4	82.1	69183097	y	1		78.7	79.6
37	7:21 AM	79.2	81.2	83176377	y	1		78.6	79.6
38	7:22 AM	80.1	83.1	102329299	y	1		78.5	79.7
39	7:23 AM	81.5	83.7	141253754	y	1		78.2	79.7
40	7:24 AM	81.2	84.2	131825674	y	1		77.8	79.8
41	7:25 AM	80.9	84.9	123026877	y	1		77.4	79.8
42	7:26 AM	76.8	81.0	47863009	y	1		77.1	79.8
43	7:27 AM	76.4	78.8	43651583	y	1		77.0	79.9
44	7:28 AM	79.6	83.9	91201084	y	1		76.9	80.0
45	7:29 AM	81.2	84.1	131825674	y	1		76.7	80.0
46	7:30 AM	80.4	86.8	109647820	y	1		76.2	80.1
47	7:31 AM	79.3	82.8	85113804	y	1		75.8	80.1
48	7:32 AM	77.7	80.0	58884366	y	1		75.5	80.1
49	7:33 AM	77.8	79.9	60255959	y	1		75.4	80.2
50	7:34 AM	76.9	79.5	48977882	y	1		75.5	80.3
51	7:35 AM	77.1	80.7	51286138	y	1		75.6	80.4
52	7:36 AM	75.5	77.7	35481339	y	1		75.8	80.5
53	7:37 AM	73.7	76.2	23442288	y	1		75.9	80.6
54	7:38 AM	74.4	76.6	27542287	y	1		76.1	80.7
55	7:39 AM	73.9	76.6	24547089	y	1		76.3	80.8
56	7:40 AM	75.6	78.7	36307805	y	1		76.7	80.8
57	7:41 AM	74.4	76.9	27542287	y	1		76.9	80.9
58	7:42 AM	73.1	77.0	20417379	y	1		77.2	81.0
59	7:43 AM	73.7	76.8	23442288	y	1		77.6	81.1
60	7:44 AM	75.8	78.3	38018940	y	1		78.1	81.1
61	7:45 AM	75.6	77.6	36307805	y	1		78.4	81.2
62	7:46 AM	74.5	76.7	28183829	y	1		78.7	81.3
63	7:47 AM	73.8	76.3	23988329	y	1		79.0	81.4
64	7:48 AM	75.6	79.9	36307805	y	1		79.5	81.4
65	7:49 AM	75.9	77.5	38904514	y	1		79.7	81.5
66	7:50 AM	74.9	78.2	30902954	y	1		80.0	81.6
67	7:51 AM	75.0	77.9	31622777	y	1		80.3	81.6
68	7:52 AM	77.1	80.1	51286138	y	1		80.6	81.7
69	7:53 AM	78.4	81.3	69183097	y	1		80.8	81.8
70	7:54 AM	78.5	81.7	70794578	y	1		81.0	81.8
71	7:55 AM	79.3	81.6	85113804	y	1		81.1	81.9
72	7:56 AM	76.8	80.3	47863009	y	1		81.1	81.9
73	7:57 AM	77.9	81.1	61659500	y	1		81.4	81.9
74	7:58 AM	78.6	81.4	72443596	y	1		81.5	82.0
75	7:59 AM	80.1	83.1	102329299	y	1		81.7	82.0
76	8:00 AM	78.9	81.6	77624712	y	1		81.8	82.0
77	8:01 AM	79.9	83.1	97723722	y	1		81.9	82.1
78	8:02 AM	81.0	84.6	125892541	y	1		82.0	82.1
79	8:03 AM	81.9	86.2	154881662	y	1		82.0	82.1

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/18/14

Site: Reference - Day 2 (I-75 ROW)

Description: I-75 SB side inside ROW, in front of University of Phoenix

Filename: AU2\_0019

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
80	8:04 AM	81.4	85.6	138038426	y	1		82.1	82.1
81	8:05 AM	81.5	83.7	141253754	y	1		82.2	82.1
82	8:06 AM	81.4	86.4	138038426	y	1		82.2	82.1
83	8:07 AM	83.1	84.8	204173794	y	1		82.2	82.1
84	8:08 AM	81.1	84.0	128824955	y	1		82.1	82.1
85	8:09 AM	82.6	85.1	181970086	y	1		82.2	82.1
86	8:10 AM	82.6	85.9	181970086	y	1		82.2	82.1
87	8:11 AM	82.4	85.0	173780083	y	1		82.1	82.1
88	8:12 AM	82.1	85.4	162181010	y	1		82.1	82.0
89	8:13 AM	81.6	84.0	144543977	y	1		82.1	82.0
90	8:14 AM	81.7	86.1	147910839	y	1		82.2	82.0
91	8:15 AM	80.6	83.5	114815362	y	1		82.2	82.0
92	8:16 AM	83.1	86.5	204173794	y	1		82.3	82.0
93	8:17 AM	82.0	85.1	158489319	y	1		82.3	82.0
94	8:18 AM	81.8	84.8	151356125	y	1		82.3	82.0
95	8:19 AM	82.9	85.9	194984460	y	1		82.3	82.0
96	8:20 AM	81.8	85.9	151356125	y	1		82.3	81.9
97	8:21 AM	82.1	84.9	162181010	y	1		82.3	81.9
98	8:22 AM	81.6	84.5	144543977	y	1		82.3	81.9
99	8:23 AM	83.1	86.4	204173794	y	1		82.3	81.9
100	8:24 AM	83.0	85.3	199526231	y	1		82.2	81.9
101	8:25 AM	84.1	93.7	0	N	0	Lmax >90	82.1	81.8
102	8:26 AM	82.1	85.2	162181010	y	1		82.2	81.8
103	8:27 AM	81.1	84.1	128824955	y	1		82.2	81.8
104	8:28 AM	82.2	84.2	165958691	y	1		82.2	81.8
105	8:29 AM	82.3	86.2	169824365	y	1		82.2	81.8
106	8:30 AM	82.0	86.9	158489319	y	1		82.2	81.8
107	8:31 AM	82.2	84.2	165958691	y	1		82.2	81.8
108	8:32 AM	82.3	86.5	169824365	y	1		82.2	81.8
109	8:33 AM	82.2	85.0	165958691	y	1		82.2	81.7
110	8:34 AM	83.1	88.7	204173794	y	1		82.2	81.7
111	8:35 AM	82.0	85.1	158489319	y	1		82.2	81.7
112	8:36 AM	82.5	86.1	177827941	y	1		82.2	81.7
113	8:37 AM	83.1	85.9	204173794	y	1		82.1	81.7
114	8:38 AM	81.7	86.4	147910839	y	1		82.1	81.7
115	8:39 AM	82.2	85.4	165958691	y	1		82.1	81.7
116	8:40 AM	81.3	84.5	134896288	y	1		82.1	81.7
117	8:41 AM	82.3	85.1	169824365	y	1		82.1	81.7
118	8:42 AM	81.7	84.3	147910839	y	1		82.0	81.7
119	8:43 AM	81.8	85.6	151356125	y	1		82.0	81.7
120	8:44 AM	82.2	85.4	165958691	y	1		82.0	81.7
121	8:45 AM	83.2	87.2	208929613	y	1		82.0	81.7
122	8:46 AM	82.3	85.7	169824365	y	1		81.9	81.6
123	8:47 AM	81.4	84.8	138038426	y	1		81.9	81.6
124	8:48 AM	82.0	85.0	158489319	y	1		81.9	81.6
125	8:49 AM	82.8	84.9	190546072	y	1		81.8	81.6
126	8:50 AM	81.5	84.4	141253754	y	1		81.8	81.6
127	8:51 AM	81.9	85.4	154881662	y	1		81.8	81.6
128	8:52 AM	82.4	84.8	173780083	y	1		81.7	81.6
129	8:53 AM	81.9	85.9	154881662	y	1		81.6	81.6
130	8:54 AM	83.0	86.4	199526231	y	1		81.6	81.6
131	8:55 AM	82.2	86.0	165958691	y	1		81.6	81.5
132	8:56 AM	81.2	84.1	131825674	y	1		81.5	81.5
133	8:57 AM	81.6	83.8	144543977	y	1		81.5	81.5
134	8:58 AM	82.0	85.2	158489319	y	1		81.5	81.5
135	8:59 AM	81.8	85.1	151356125	y	1		81.5	81.5
136	9:00 AM	81.2	84.5	131825674	y	1		81.5	81.5
137	9:01 AM	80.3	83.1	107151931	y	1		81.5	81.5
138	9:02 AM	82.0	84.7	158489319	y	1		81.6	81.5
139	9:03 AM	82.0	85.2	158489319	y	1		81.5	81.6
140	9:04 AM	82.0	85.7	158489319	y	1		81.4	81.6
141	9:05 AM	82.6	86.6	181970086	y	1		81.4	81.6
142	9:06 AM	80.7	84.7	117489755	y	1		81.3	81.5
143	9:07 AM	82.2	85.5	165958691	y	1		81.3	81.5
144	9:08 AM	80.5	84.9	112201845	y	1		81.3	81.5
145	9:09 AM	81.5	85.0	141253754	y	1		81.4	81.5
146	9:10 AM	82.1	86.9	162181010	y	1		81.4	81.5
147	9:11 AM	80.5	84.5	112201845	y	1		81.3	81.5
148	9:12 AM	79.9	84.2	97723722	y	1		81.3	81.5
149	9:13 AM	81.7	85.9	147910839	y	1		81.4	81.6
150	9:14 AM	82.0	86.2	158489319	y	1		81.4	81.6
151	9:15 AM	80.7	84.3	117489755	y	1		81.4	81.6
152	9:16 AM	82.0	86.0	158489319	y	1		81.4	81.6
153	9:17 AM	80.5	84.2	112201845	y	1		81.4	81.6
154	9:18 AM	82.5	86.3	177827941	y	1		81.4	81.6
155	9:19 AM	81.2	85.2	131825674	y	1		81.4	81.6
156	9:20 AM	81.2	85.8	131825674	y	1		81.4	81.6
157	9:21 AM	82.0	85.6	158489319	y	1		81.4	81.6
158	9:22 AM	81.5	84.2	141253754	y	1		81.5	81.6



I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/18/14

Site: Reference - Day 2 (I-75 ROW)

Description: I-75 SB side inside ROW, in front of University of Phoenix

Filename: AU2\_0019

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
159	9:23 AM	80.3	84.7	107151931	y	1		81.4	81.6
160	9:24 AM	80.9	85.1	123026877	y	1		81.5	81.6
161	9:25 AM	80.7	84.1	117489755	y	1		81.6	81.6
162	9:26 AM	81.8	84.5	151356125	y	1		81.7	81.6
163	9:27 AM	81.9	85.4	154881662	y	1		81.6	81.6
164	9:28 AM	81.5	84.9	141253754	y	1		81.6	81.6
165	9:29 AM	82.0	85.5	158489319	y	1		81.6	81.6
166	9:30 AM	80.4	83.9	109647820	y	1		81.6	81.6
167	9:31 AM	80.9	84.8	123026877	y	1		81.6	81.6
168	9:32 AM	80.4	83.9	109647820	y	1		81.6	81.6
169	9:33 AM	81.7	84.0	147910839	y	1		81.7	81.6
170	9:34 AM	82.2	87.6	165958691	y	1		81.7	81.7
171	9:35 AM	81.3	85.9	134896288	y	1		81.7	81.7
172	9:36 AM	82.3	87.3	169824365	y	1		81.7	81.7
173	9:37 AM	80.7	84.8	117489755	y	1		81.7	81.6
174	9:38 AM	81.8	84.9	151356125	y	1		81.7	81.6
175	9:39 AM	82.1	85.4	162181010	y	1		81.6	81.6
176	9:40 AM	81.6	85.5	144543977	y	1		81.6	81.6
177	9:41 AM	82.1	86.5	162181010	y	1		81.6	81.7
178	9:42 AM	80.9	84.2	123026877	y	1		81.6	81.7
179	9:43 AM	81.9	85.2	154881662	y	1		81.7	81.7
180	9:44 AM	82.4	85.0	173780083	y	1		81.7	81.7
181	9:45 AM	82.5	85.0	177827941	y	1		81.7	81.7
182	9:46 AM	80.7	84.3	117489755	y	1		81.6	81.6
183	9:47 AM	81.3	85.5	134896288	y	1		81.6	81.6
184	9:48 AM	81.8	87.8	151356125	y	1		81.7	81.6
185	9:49 AM	81.2	85.3	131825674	y	1		81.6	81.6
186	9:50 AM	81.7	86.2	147910839	y	1		81.7	81.7
187	9:51 AM	81.4	84.6	138038426	y	1		81.7	81.7
188	9:52 AM	82.3	85.7	169824365	y	1		81.7	81.7
189	9:53 AM	81.7	84.2	147910839	y	1		81.6	81.6
190	9:54 AM	81.7	86.1	147910839	y	1		81.6	81.7
191	9:55 AM	82.0	85.8	158489319	y	1		81.6	81.7
192	9:56 AM	81.6	84.5	144543977	y	1		81.6	81.7
193	9:57 AM	81.7	83.9	147910839	y	1		81.6	81.7
194	9:58 AM	78.9	84.3	77624712	y	1		81.5	81.7
195	9:59 AM	81.8	87.1	151356125	y	1		81.7	81.7
196	10:00 AM	81.6	85.5	144543977	y	1		81.7	81.7
197	10:01 AM	82.0	84.7	158489319	y	1		81.7	81.7
198	10:02 AM	82.9	86.9	194984460	y	1		81.7	81.7
199	10:03 AM	82.3	85.9	169824365	y	1		81.6	81.7
200	10:04 AM	81.7	84.6	147910839	y	1		81.5	81.7
201	10:05 AM	80.9	83.9	123026877	y	1		81.5	81.7
202	10:06 AM	80.9	85.2	123026877	y	1		81.5	81.7
203	10:07 AM	82.0	86.8	158489319	y	1		81.6	81.7
204	10:08 AM	80.9	83.8	123026877	y	1		81.6	81.7
205	10:09 AM	81.8	85.9	151356125	y	1		81.6	81.7
206	10:10 AM	82.3	87.6	169824365	y	1		81.6	81.7
207	10:11 AM	80.9	84.7	123026877	y	1		81.6	81.8
208	10:12 AM	85.4	93.6	0	n	0	Lmax >90	81.6	81.8
209	10:13 AM	82.3	93.5	0	n	0	Lmax >90	81.6	81.8
210	10:14 AM	82.1	88.4	162181010	y	1		81.7	81.8
211	10:15 AM	80.6	84.7	114815362	y	1		81.6	81.8
212	10:16 AM	81.3	85.2	134896288	y	1		81.6	81.8
213	10:17 AM	81.4	85.2	138038426	y	1		81.7	81.8
214	10:18 AM	81.8	87.4	151356125	y	1		81.6	81.9
215	10:19 AM	82.4	87.0	173780083	y	1		81.6	81.9
216	10:20 AM	81.7	87.0	147910839	y	1		81.6	81.9
217	10:21 AM	82.0	85.9	158489319	y	1		81.7	81.9
218	10:22 AM	81.1	84.5	128824955	y	1		81.6	81.9
219	10:23 AM	81.5	84.8	141253754	y	1		81.7	81.9
220	10:24 AM	81.5	85.1	141253754	y	1		81.7	81.9
221	10:25 AM	80.9	84.4	123026877	y	1		81.7	81.9
222	10:26 AM	81.6	86.0	144543977	y	1		81.7	81.9
223	10:27 AM	82.1	85.8	162181010	y	1		81.7	81.9
224	10:28 AM	81.6	84.0	144543977	y	1		81.7	81.9
225	10:29 AM	81.2	87.0	131825674	y	1		81.7	81.9
226	10:30 AM	82.5	85.8	177827941	y	1		81.7	81.9
227	10:31 AM	80.6	85.0	114815362	y	1		81.8	81.9
228	10:32 AM	81.6	84.3	144543977	y	1		81.8	81.9
229	10:33 AM	83.0	86.3	199526231	y	1		81.7	81.9
230	10:34 AM	81.1	85.4	128824955	y	1		81.7	81.9
231	10:35 AM	81.2	85.0	131825674	y	1		81.7	81.9
232	10:36 AM	81.9	84.6	154881662	y	1		81.8	81.9
233	10:37 AM	80.7	85.2	117489755	y	1		81.7	81.9
234	10:38 AM	80.8	85.0	120226443	y	1		81.8	82.0
235	10:39 AM	82.6	86.4	181970086	y	1		81.8	82.0
236	10:40 AM	82.5	84.9	177827941	y	1		81.8	81.9
237	10:41 AM	81.8	87.1	151356125	y	1		81.7	81.9

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/18/14

Site: Reference - Day 2 (I-75 ROW)

Description: I-75 SB side inside ROW, in front of University of Phoenix

Filename: AU2\_0019

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
238	10:42 AM	81.3	85.6	134896288	y	1		81.8	81.9
239	10:43 AM	81.9	86.2	154881662	y	1		81.8	81.9
240	10:44 AM	82.1	86.3	162181010	y	1		81.8	81.9
241	10:45 AM	81.1	85.8	128824955	y	1		81.8	81.9
242	10:46 AM	81.7	85.8	147910839	y	1		81.8	81.9
243	10:47 AM	81.3	85.4	134896288	y	1		81.8	81.9
244	10:48 AM	82.0	85.0	158489319	y	1		81.9	81.9
245	10:49 AM	82.2	87.3	165958691	y	1		81.9	81.9
246	10:50 AM	82.6	87.2	181970086	y	1		81.9	81.9
247	10:51 AM	80.9	85.3	123026877	y	1		81.9	81.8
248	10:52 AM	80.9	83.4	123026877	y	1		82.0	81.8
249	10:53 AM	82.3	85.7	169824365	y	1		82.0	81.9
250	10:54 AM	81.7	84.7	147910839	y	1		82.0	81.8
251	10:55 AM	82.1	85.3	162181010	y	1		82.0	81.8
252	10:56 AM	81.5	84.9	141253754	y	1		82.0	81.8
253	10:57 AM	81.3	84.9	134896288	y	1		82.1	81.8
254	10:58 AM	81.9	87.5	154881662	y	1		82.2	81.8
255	10:59 AM	81.9	84.9	154881662	y	1		82.1	81.8
256	11:00 AM	80.9	84.8	123026877	y	1		82.2	81.8
257	11:01 AM	83.1	88.4	204173794	y	1		82.2	81.8
258	11:02 AM	81.1	85.1	128824955	y	1		82.2	81.8
259	11:03 AM	82.1	86.3	162181010	y	1		82.2	81.8
260	11:04 AM	82.9	86.1	194984460	y	1		82.2	81.8
261	11:05 AM	81.1	84.8	128824955	y	1		82.1	81.8
262	11:06 AM	82.2	85.4	165958691	y	1		82.2	81.8
263	11:07 AM	82.4	87.0	173780083	y	1		82.2	81.8
264	11:08 AM	81.6	84.6	144543977	y	1		82.2	81.8
265	11:09 AM	82.2	85.9	165958691	y	1		82.2	81.8
266	11:10 AM	82.6	86.0	181970086	y	1		82.2	81.8
267	11:11 AM	82.4	86.8	173780083	y	1		82.2	81.7
268	11:12 AM	82.6	85.5	181970086	y	1		82.1	81.7
269	11:13 AM	81.7	85.0	147910839	y	1		82.1	81.7
270	11:14 AM	81.8	85.0	151356125	y	1		82.1	81.7
271	11:15 AM	82.1	85.0	162181010	y	1		82.1	81.7
272	11:16 AM	83.3	86.6	213796209	y	1		82.1	81.7
273	11:17 AM	82.4	84.6	173780083	y	1		82.0	81.7
274	11:18 AM	81.6	84.3	144543977	y	1		81.9	81.7
275	11:19 AM	82.0	84.6	158489319	y	1		81.9	81.7
276	11:20 AM	82.8	86.3	190546072	y	1		81.8	81.6
277	11:21 AM	81.4	85.0	138038426	y	1		81.7	81.6
278	11:22 AM	81.7	85.4	147910839	y	1		81.7	81.7
279	11:23 AM	82.2	84.6	165958691	y	1		81.7	81.6
280	11:24 AM	81.5	85.3	141253754	y	1		81.6	81.6
281	11:25 AM	83.0	86.4	199526231	y	1		81.6	81.6
282	11:26 AM	82.8	87.4	190546072	y	1		81.6	81.6
283	11:27 AM	81.1	86.4	128824955	y	1		81.5	81.6
284	11:28 AM	82.3	86.5	169824365	y	1		81.5	81.6
285	11:29 AM	81.6	84.3	144543977	y	1		81.5	81.6
286	11:30 AM	82.2	85.3	165958691	y	1		81.5	81.6
287	11:31 AM	81.6	85.3	144543977	y	1		81.4	81.6
288	11:32 AM	81.3	84.2	134896288	y	1		81.4	81.5
289	11:33 AM	82.2	85.9	165958691	y	1		81.4	81.6
290	11:34 AM	81.7	83.8	147910839	y	1		81.4	81.6
291	11:35 AM	81.9	84.4	154881662	y	1		81.3	81.6
292	11:36 AM	81.8	86.5	151356125	y	1		81.3	81.6
293	11:37 AM	81.2	85.5	131825674	y	1		81.3	81.6
294	11:38 AM	81.3	84.7	134896288	y	1		81.3	81.5
295	11:39 AM	80.5	84.3	112201845	y	1		81.3	81.6
296	11:40 AM	80.6	84.0	114815362	y	1		81.3	81.6
297	11:41 AM	81.0	84.4	125892541	y	1		81.4	81.6
298	11:42 AM	81.2	85.4	131825674	y	1		81.4	81.6
299	11:43 AM	81.2	83.6	131825674	y	1		81.4	81.6
300	11:44 AM	81.4	84.7	138038426	y	1		81.5	81.6
301	11:45 AM	82.4	90.5	0	n	0	Lmax >90	81.5	81.6
302	11:46 AM	82.3	86.6	169824365	y	1		81.5	81.6
303	11:47 AM	81.1	85.1	128824955	y	1		81.5	81.6
304	11:48 AM	81.7	85.0	147910839	y	1		81.5	81.6
305	11:49 AM	81.0	84.0	125892541	y	1		81.5	81.6
306	11:50 AM	81.4	84.3	138038426	y	1		81.5	81.6
307	11:51 AM	81.1	85.6	128824955	y	1		81.5	81.6
308	11:52 AM	81.9	84.9	154881662	y	1		81.6	81.6
309	11:53 AM	81.0	84.4	125892541	y	1		81.6	81.7
310	11:54 AM	81.6	84.2	144543977	y	1		81.6	81.7
311	11:55 AM	81.3	84.7	134896288	y	1		81.6	81.7
312	11:56 AM	81.4	84.6	138038426	y	1		81.6	81.7
313	11:57 AM	81.0	84.4	125892541	y	1		81.7	81.7
314	11:58 AM	81.3	84.7	134896288	y	1		81.8	81.7
315	11:59 AM	80.6	84.6	114815362	y	1		81.7	81.7
316	12:00 PM	82.7	86.2	186208714	y	1		81.8	81.7

I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/18/14  
Site: Reference - Day 2 (I-75 ROW)  
Description: I-75 SB side inside ROW, in front of University of Phoenix  
Filename: AU2\_0019

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
317	12:01 PM	80.9	84.1	123026877	y	1		81.7	81.7
318	12:02 PM	81.7	88.8	147910839	y	1		81.8	81.7
319	12:03 PM	81.7	85.5	147910839	y	1		81.8	81.7
320	12:04 PM	81.8	86.5	151356125	y	1		81.8	81.7
321	12:05 PM	82.6	85.7	181970086	y	1		81.8	81.7
322	12:06 PM	82.0	85.7	158489319	y	1		81.7	81.7
323	12:07 PM	81.1	84.1	128824955	y	1		81.7	81.7
324	12:08 PM	83.4	93.2	0	N	0	Lmax >90	81.8	81.7
325	12:09 PM	83.5	94.6	0	N	0	Lmax >90	81.8	81.7
326	12:10 PM	80.9	85.6	123026877	y	1		81.7	81.7
327	12:11 PM	82.4	89.1	173780083	y	1		81.7	81.7
328	12:12 PM	81.9	85.2	154881662	y	1		81.7	81.7
329	12:13 PM	80.6	83.4	114815362	y	1		81.7	81.7
330	12:14 PM	81.5	85.4	141253754	y	1		81.7	81.7
331	12:15 PM	82.0	86.0	158489319	y	1		81.8	81.7
332	12:16 PM	82.4	86.5	173780083	y	1		81.8	81.7
333	12:17 PM	82.5	86.9	177827941	y	1		81.7	81.7
334	12:18 PM	80.9	83.6	123026877	y	1		81.6	81.7
335	12:19 PM	81.4	85.8	138038426	y	1		81.6	81.7
336	12:20 PM	81.8	85.4	151356125	y	1		81.7	81.7
337	12:21 PM	82.9	87.2	194984460	y	1		81.7	81.6
338	12:22 PM	81.2	84.2	131825674	y	1		81.6	81.6
339	12:23 PM	81.7	84.8	147910839	y	1		81.6	81.6
340	12:24 PM	81.2	85.9	131825674	y	1		81.6	81.6
341	12:25 PM	81.7	85.2	147910839	y	1		81.6	81.6
342	12:26 PM	82.1	85.3	162181010	y	1		81.6	81.5
343	12:27 PM	82.0	85.7	158489319	y	1		81.6	81.5
344	12:28 PM	81.7	85.9	147910839	y	1		81.5	81.5
345	12:29 PM	81.4	84.3	138038426	y	1		81.5	81.5
346	12:30 PM	80.4	85.3	109647820	y	1		81.5	81.5
347	12:31 PM	81.0	83.6	125892541	y	1		81.6	81.5
348	12:32 PM	82.2	84.5	165958691	y	1		81.7	81.5
349	12:33 PM	81.9	84.7	154881662	y	1		81.7	81.5
350	12:34 PM	82.3	86.2	169824365	y	1		81.7	81.5
351	12:35 PM	81.9	86.3	154881662	y	1		81.7	81.5
352	12:36 PM	81.0	85.6	125892541	y	1		81.7	81.4
353	12:37 PM	80.7	83.1	117489755	y	1		81.8	81.4
354	12:38 PM	81.4	84.4	138038426	y	1		81.8	81.5
355	12:39 PM	82.5	89.2	177827941	y	1		81.7	81.4
356	12:40 PM	81.3	85.9	134896288	y	1		81.6	81.4
357	12:41 PM	81.6	84.3	144543977	y	1		81.7	81.4
358	12:42 PM	81.4	84.1	138038426	y	1		81.7	81.4
359	12:43 PM	81.4	84.4	138038426	y	1		81.7	81.4
360	12:44 PM	81.6	84.2	144543977	y	1		81.6	81.4
361	12:45 PM	81.1	85.0	128824955	y	1		81.6	81.4
362	12:46 PM	82.0	86.3	158489319	y	1		81.7	81.4
363	12:47 PM	81.4	84.7	138038426	y	1		81.7	81.4
364	12:48 PM	81.3	83.5	134896288	y	1		81.7	81.4
365	12:49 PM	81.6	84.4	144543977	y	1		81.7	81.4
366	12:50 PM	82.0	84.8	158489319	y	1		81.8	81.4
367	12:51 PM	82.6	85.8	181970086	y	1		81.7	81.4
368	12:52 PM	82.9	85.7	194984460	y	1		81.7	81.4
369	12:53 PM	81.5	87.0	141253754	y	1		81.7	81.3
370	12:54 PM	81.5	84.4	141253754	y	1		81.7	81.3
371	12:55 PM	82.9	88.4	194984460	y	1		81.6	81.3
372	12:56 PM	82.2	86.1	165958691	y	1		81.6	81.3
373	12:57 PM	79.8	82.8	95499259	y	1		81.5	81.3
374	12:58 PM	80.6	83.7	114815362	y	1		81.6	81.3
375	12:59 PM	80.9	84.8	123026877	y	1		81.6	81.3
376	1:00 PM	81.6	85.3	144543977	y	1		81.7	81.3
377	1:01 PM	82.4	88.3	173780083	y	1		81.6	81.3
378	1:02 PM	81.4	87.3	138038426	y	1		81.6	81.3
379	1:03 PM	80.1	82.8	102329299	y	1		81.5	81.3
380	1:04 PM	81.4	85.6	138038426	y	1		81.5	81.3
381	1:05 PM	82.2	84.6	165958691	y	1		81.5	81.3
382	1:06 PM	81.7	85.0	147910839	y	1		81.4	81.3
383	1:07 PM	81.6	84.3	144543977	y	1		81.3	81.3
384	1:08 PM	81.8	85.0	151356125	y	1		81.3	81.3
385	1:09 PM	82.8	85.5	190546072	y	1		81.3	81.3
386	1:10 PM	81.4	83.5	138038426	y	1		81.2	81.3
387	1:11 PM	82.4	89.5	173780083	y	1		81.2	81.3
388	1:12 PM	81.8	85.2	151356125	y	1		81.1	81.2
389	1:13 PM	81.1	86.0	128824955	y	1		81.1	81.2
390	1:14 PM	80.8	83.6	120226443	y	1		81.1	81.2
391	1:15 PM	81.9	83.7	154881662	y	1		81.1	81.2
392	1:16 PM	81.3	84.4	134896288	y	1		81.0	81.2
393	1:17 PM	81.7	85.5	147910839	y	1		81.0	
394	1:18 PM	81.6	87.0	144543977	y	1		81.0	
395	1:19 PM	81.5	85.4	141253754	y	1		80.9	



I-75/24 Interchange, Hamilton County, TN  
Noise Measurements

Date: 09/18/14

Site: Reference - Day 2 (I-75 ROW)

Description: I-75 SB side inside ROW, in front of University of Phoenix

Filename: AU2\_0019

Period #	Time Start	Leq	Lmax	Energy	Keep?	Count	Note	Leq(20min)	Leq(1 hr)
396	1:20 PM	80.5	87.0	112201845	y	1		80.9	
397	1:21 PM	81.4	83.9	138038426	y	1		80.9	
398	1:22 PM	80.8	85.1	120226443	y	1		81.0	
399	1:23 PM	79.6	83.3	91201084	y	1		81.0	
400	1:24 PM	80.7	84.5	117489755	y	1		81.1	
401	1:25 PM	79.4	83.0	87096359	y	1		81.1	
402	1:26 PM	81.0	84.5	125892541	y	1		81.2	
403	1:27 PM	80.5	84.6	112201845	y	1		81.2	
404	1:28 PM	81.7	85.5	147910839	y	1		81.3	
405	1:29 PM	81.8	85.6	151356125	y	1		81.3	
406	1:30 PM	81.1	84.7	128824955	y	1		81.2	
407	1:31 PM	81.4	83.9	138038426	y	1		81.2	
408	1:32 PM	81.0	85.5	125892541	y	1		81.2	
409	1:33 PM	80.6	85.6	114815362	y	1		81.2	
410	1:34 PM	81.3	87.3	134896288	y	1		81.2	
411	1:35 PM	80.4	84.8	109647820	y	1		81.2	
412	1:36 PM	81.2	83.8	131825674	y	1		81.2	
413	1:37 PM	81.2	85.4	131825674	y	1		81.2	
414	1:38 PM	80.8	84.9	120226443	y	1		81.2	
415	1:39 PM	80.9	84.6	123026877	y	1		81.2	
416	1:40 PM	80.9	84.5	123026877	y	1		81.3	
417	1:41 PM	81.9	85.0	154881662	y	1		81.3	
418	1:42 PM	81.7	85.3	147910839	y	1		81.3	
419	1:43 PM	81.0	84.3	125892541	y	1		81.3	
420	1:44 PM	82.2	86.8	165958691	y	1		81.3	
421	1:45 PM	80.9	85.2	123026877	y	1		81.3	
422	1:46 PM	80.9	85.6	123026877	y	1		81.3	
423	1:47 PM	81.7	85.3	147910839	y	1		81.3	
424	1:48 PM	81.8	86.6	151356125	y	1		81.3	
425	1:49 PM	80.6	84.5	114815362	y	1		81.3	
426	1:50 PM	81.2	84.4	131825674	y	1		81.4	
427	1:51 PM	81.0	84.1	125892541	y	1		81.4	
428	1:52 PM	80.4	83.4	109647820	y	1		81.4	
429	1:53 PM	81.5	84.4	141253754	y	1		81.4	
430	1:54 PM	80.6	84.6	114815362	y	1		81.4	
431	1:55 PM	81.3	84.8	134896288	y	1		81.4	
432	1:56 PM	81.5	85.2	141253754	y	1		81.4	
433	1:57 PM	81.1	86.4	128824955	y	1			
434	1:58 PM	81.3	84.9	134896288	y	1			
435	1:59 PM	81.4	85.2	138038426	y	1			
436	2:00 PM	81.9	86.0	154881662	y	1			
437	2:01 PM	81.8	86.4	151356125	y	1			
438	2:02 PM	81.4	84.4	138038426	y	1			
439	2:03 PM	81.1	83.9	128824955	y	1			
440	2:04 PM	82.2	85.3	165958691	y	1			
441	2:05 PM	80.6	84.6	114815362	y	1			
442	2:06 PM	81.8	85.8	151356125	y	1			
443	2:07 PM	81.2	86.1	131825674	y	1			
444	2:08 PM	81.5	86.0	141253754	y	1			
445	2:09 PM	81.8	84.9	151356125	y	1			
446	2:10 PM	81.7	86.2	147910839	y	1			
447	2:11 PM	80.6	83.4	114815362	y	1			
448	2:12 PM	82.0	86.0	158489319	y	1			
449	2:13 PM	81.0	84.6	125892541	y	1			
450	2:14 PM	80.5	83.6	112201845	y	1			
451	2:15 PM	80.1	83.0	102329299	y	1			
Energy Sum				61879098826	445				
Leq				81.4					



**1039 Roselawn Dr looking south**



**1039 Roselawn Dr looking north**





**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14	
Address/Location	1039 Roselawn Dr.	
Land Use	Residential	
Analyst Name	R. Williams	
<b>Meteorological Conditions</b>		
Temperature(s)	60°F	
Wind Speed(s)	N/A	
Wind Direction(s)	N/A	
<b>Calibration</b>		
Meter/Analyzer	Rion	AN2-1801
	Pre-Measurement	Post-Measurement
Calibration Time	7:49 am	
Calibration Level	94.0 dB	

Period #	Start Time	Event Description(s)
1	7:53	
2	:54	
3	:55	:30 Bird in tree to 64dB (3 secs)
4	:56	
5	:57 X	local motor (weed eater?)
6	:58 X	" " "
7	:59 X	Birds in trees @ 64 ; loud vehicle engine noise on I-75 @ 66
8	8:00 X	local motor (still)
9	:01 X	Birds in trees to 63 intermittent
10	:02 X	" stopped @ <del>8:02</del>
11	:03	
12	:04 X	plane heard @ 62dB
13	:05	
14	:06	
15	:07	
16	:08	
17	:09	
18	:10 X	local vehicle passby noise (10 sec)
19	:11	
20	:12	
21	:13	
22	:14	
23	:15	
24	:16	loud vehicle engine on I-75 @ 62-63
25	:17	
26	:18	
27	:19	
28	:20	stop @ 8:20
29	21	
30	22	

Vehicles on I-75  
 typically  
 ~ 61dB-62  
 at start

Birds in trees pushed  
 levels to  
 63 to 64  
 (occasionally noted)

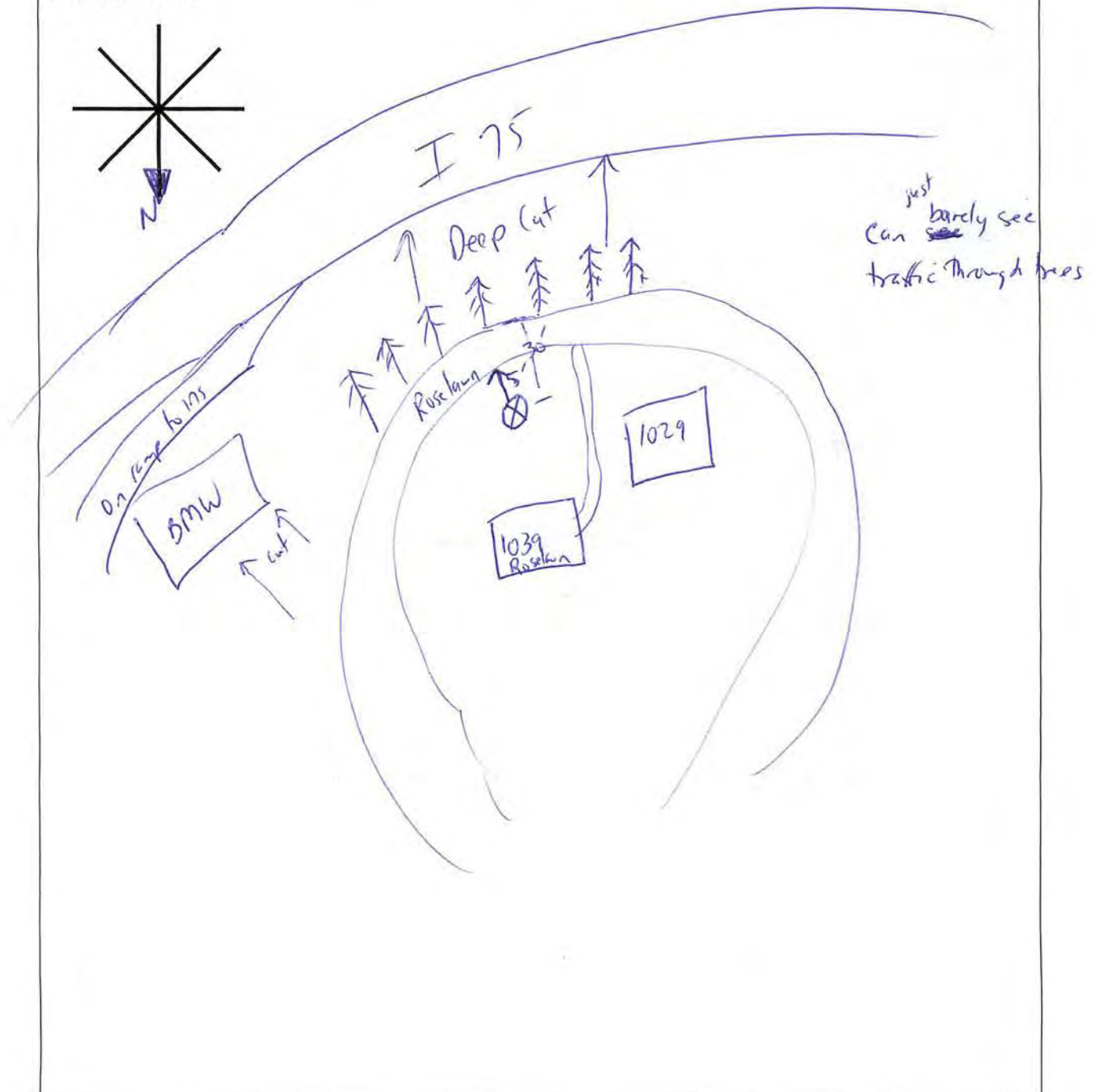
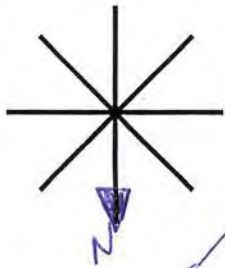




**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14
Address	1039 Roselawn
Land Use	Residential

Indicate North



**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/18/14  
**Site:** 1039 Roselawn Dr  
**Description:** Residential  
**Filename:** AU2\_1801

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	8:03:00 AM	61.1	62.2	1288250	Y	1	
2	8:04:00 AM	61.6	62.4	0	N	0	Plane heard @ 62dB
3	8:05:00 AM	61.4	62.0	1380384	Y	1	
4	8:06:00 AM	60.9	61.8	1230269	Y	1	
5	8:07:00 AM	61.8	62.8	1513561	Y	1	
6	8:08:00 AM	61.5	62.4	1412538	Y	1	
7	8:09:00 AM	61.8	62.4	1513561	Y	1	
8	8:10:00 AM	61.9	66.9	0	N	0	local vehicle passby mic (10secs)
9	8:11:00 AM	61.5	62.0	1412538	Y	1	
10	8:12:00 AM	61.3	62.0	1348963	Y	1	
11	8:13:00 AM	61.3	62.1	1348963	Y	1	
12	8:14:00 AM	61.0	62.1	1258925	Y	1	
13	8:15:00 AM	60.6	61.7	1148154	Y	1	
14	8:16:00 AM	61.5	62.8	1412538	Y	1	
15	8:17:00 AM	61.3	61.7	1348963	Y	1	
16	8:18:00 AM	60.8	61.6	1202264	Y	1	
17	8:19:00 AM	61.0	61.8	1258925	Y	1	
18	8:20:00 AM	60.2	60.2	0	N	0	stop measurement
19				0	N	0	
20				0	N	0	
21				0	N	0	
22				0	N	0	
23				0	N	0	
24				0	N	0	
25				0	N	0	
Energy Sum				20078795		15	
Leq				61.3			



**1301 Phyllis Ln looking west**



**1301 Phyllis Ln looking south**





**Noise Measurement Data Sheet**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14	
Address/Location	1701 Phyllis Ln	
Land Use	Residential	
Analyst Name	R. Williams	
<b>Meteorological Conditions</b>		
Temperature(s)	70°F	
Wind Speed(s)	N/A	
Wind Direction(s)	N/A	
<b>Calibration</b>		
Meter/Analyzer	Rion	A42-1804
	Pre-Measurement	Post-Measurement
Calibration Time	10:53	11:21
Calibration Level	94.0 dB	94.0 dB

Start

S.L.  
Typical  
60 - 62

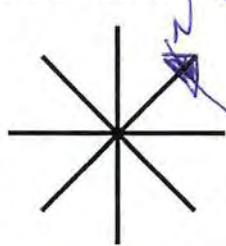
Period #	Start Time	Event Description(s)
1	10:57	
2	58 X	Spoke w/ neighbor near mic
3	59 X	" " " " "
4	11:00	
5	01 X	plane overhead ~ 62 dB (30 secs)
6	02	
7	03	
8	04	:55 HT on ramp @ 64
9	05	:10 Truck on I-75 @ 62 ; :30 HTs on ramp 62-64
10	06	
11	07	
12	08	:20-40 HT to 84dB on ramp (take Brakes!)
13	09	
14	10	
15	11	
16	12	
17	13 X	GA plane @ :50 (overhead)
18	14 X	GA plane to :30
19	15	
20	16	
21	17	
22	18	stop @ 11:18
23		
24		
25		
26		
27		
28		
29		
30		



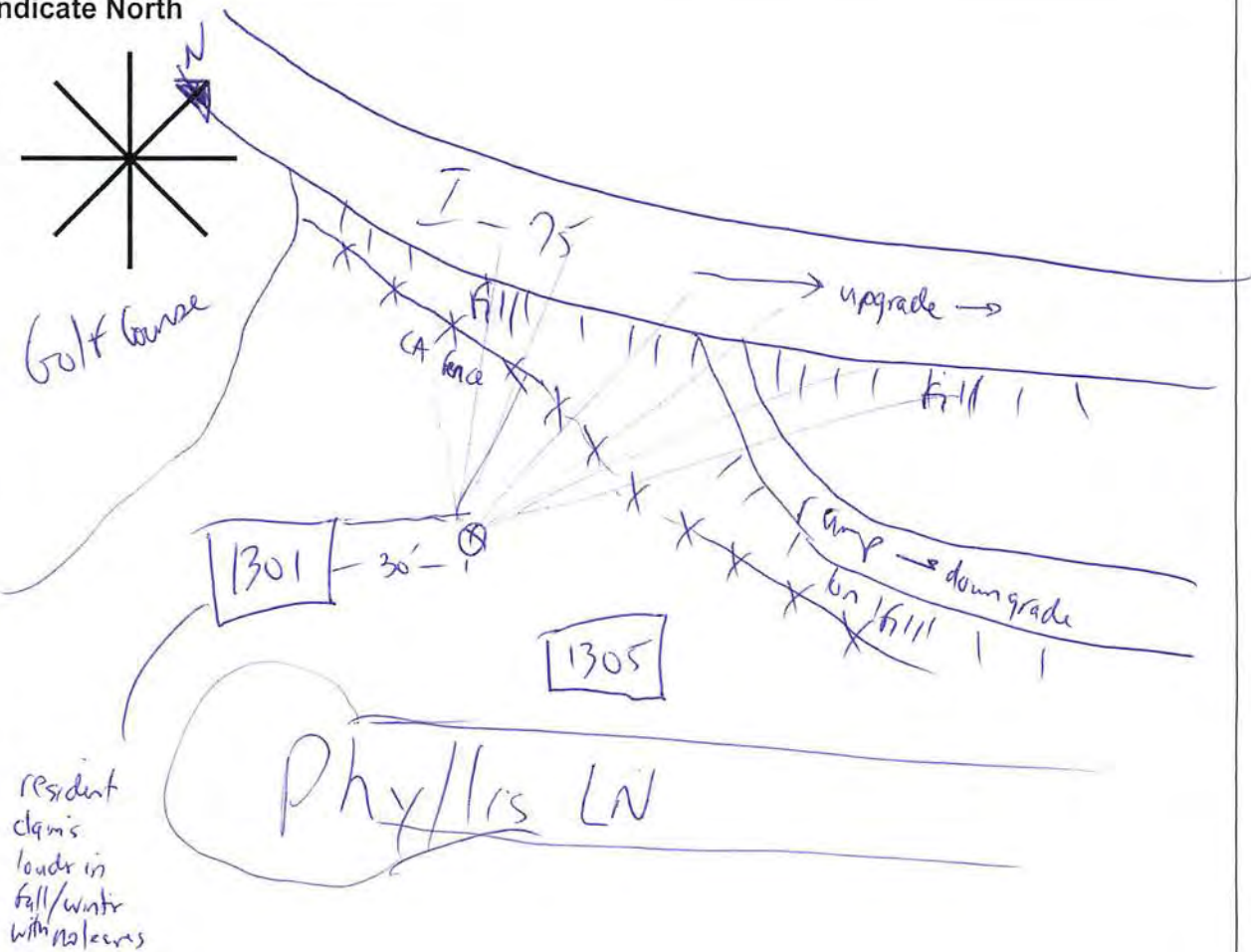
**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	
Address	
Land Use	

Indicate North



Golf Course



**I-75/24 Interchange, Hamilton County, TN**  
**Noise Measurements**

**Date:** 09/18/14  
**Site:** 1301 Phyllis Ln  
**Description:** Residential  
**Filename:** AU2\_1804

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	10:57:00 AM	62.5	63.4	1778279	Y	1	
2	10:58:00 AM	63.8	67.7	0	N	0	spoke with neighbor near mic
3	10:59:00 AM	64.0	69.7	0	N	0	spoke with neighbor near mic
4	11:00:00 AM	60.5	62.7	1122018	Y	1	
5	11:01:00 AM	61.3	62.5	0	N	0	plane overhead @ 62dB
6	11:02:00 AM	60.9	62.2	1230269	Y	1	
7	11:03:00 AM	61.2	62.5	1318257	Y	1	
8	11:04:00 AM	61.3	64.6	1348963	Y	1	
9	11:05:00 AM	62.1	63.8	1621810	Y	1	
10	11:06:00 AM	60.1	61.8	1023293	Y	1	
11	11:07:00 AM	60.8	62.8	1202264	Y	1	
12	11:08:00 AM	71.7	84.3	0	N	0	loud jake brakes on ramp
13	11:09:00 AM	61.4	62.5	1380384	Y	1	
14	11:10:00 AM	60.9	62.3	1230269	Y	1	
15	11:11:00 AM	60.5	62.7	1122018	Y	1	
16	11:12:00 AM	60.9	62.3	1230269	Y	1	
17	11:13:00 AM	62.1	63.8	0	N	0	GA plane @ :50
18	11:14:00 AM	62.6	63.8	0	N	0	GA plane until :30
19	11:15:00 AM	61.3	63.1	1348963	Y	1	
20	11:16:00 AM	60.9	62.4	1230269	Y	1	
21	11:17:00 AM	60.6	62.8	1148154	Y	1	
22	11:18:00 AM	60.3	61.8	1071519	Y	1	
23	11:19:00 AM	0.0	0.0	0	N	0	stop
24				0	N	0	
25				0	N	0	
Energy Sum				20406999		16	
Leq				61.1			



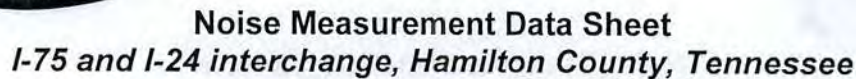


**6517 McCall Rd looking south**



**6517 McCall Rd looking north**





Period #	Start Time	Event Description(s)
1	953	
2	54 X	Neighbors talking @ 61 dB
3	55 X	Plane overhead @ 66 (30-45 secs)
4	56 X	local car; neighbors talking
5	57	truck @ 62 on I-75 (muffler 15 secs)
6	58 X	dog barking @ 60
7	59	vehicles @ 61 on I-75 (10-15 secs)
8	10 00	:55 vehicles @ 62 on I-75 (10 secs); :33 horn @ 62 I-75
9	1	
10	2	:25 momentarily lull - down to 55 dB
11	3 X	Residents talking <del>in air conditioning</del> driving away @ 61
12	4 X	" " " " " " loud noise on 75
13	5	
14	6	
15	7 X	HT on I-75 61 (10secs) } Volume increase on I-75
16	8	
17	9 X	local resident return in vehicle = 40
18	10	
19	11	loud muffler on I-75 :10 -:25 @ 63 dB
20	12	
21	13 X	local MT / local vehicle { to 63 dB <del>to 62 dB</del>
22	14 X	GTA plane to 68 to 72
23	15 X	" " " "
24	16	
25	17	
26	18	Stop @ 10:18
27		
28		
29		
30		

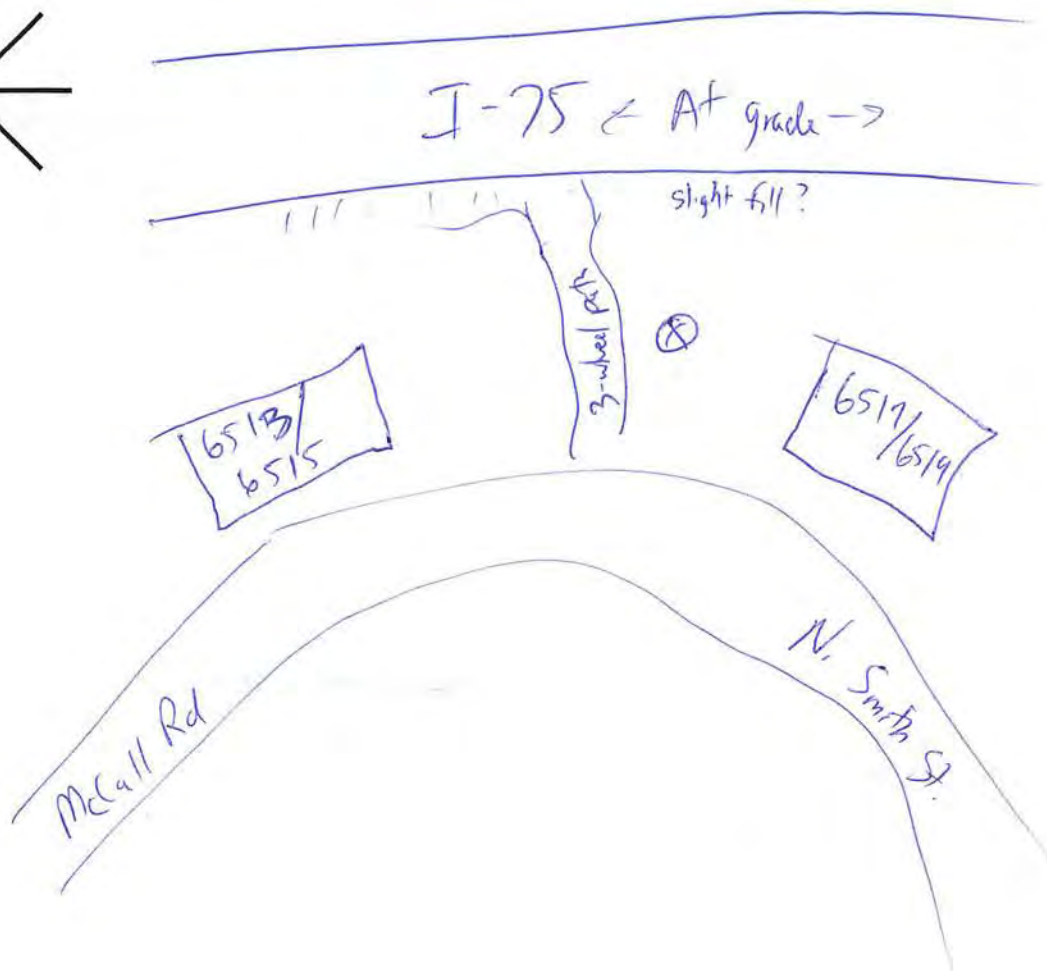
(1 sec @ 62)



**Noise Measurement Site Sketch**  
**I-75 and I-24 interchange, Hamilton County, Tennessee**

Date	9/18/14
Address	6519 McCall
Land Use	Residential Duplex

Indicate North





**I-75/24 Interchange, Hamilton County, TN  
Noise Measurements**

**Date:** 09/18/14  
**Site:** 6517 McCall Rd  
**Description:** Residential  
**Filename:** AU2\_1803

<u>Period #</u>	<u>Time Start</u>	<u>Leq</u>	<u>Lmax</u>	<u>Energy</u>	<u>Keep?</u>	<u>Count</u>	<u>Note</u>
1	9:57:00 AM	59.8	62.6	954993	Y	1	
2	9:58:00 AM	59.7	61.0	0	N	0	dog barking @60 dB
3	9:59:00 AM	58.8	61.1	758578	Y	1	
4	10:00:00 AM	58.8	62.9	758578	Y	1	
5	10:01:00 AM	59.4	62.4	870964	Y	1	
6	10:02:00 AM	58.8	60.7	758578	Y	1	
7	10:03:00 AM	60.3	63.0	0	N	0	residents talking/driving away @ 61
8	10:04:00 AM	59.1	62.3	0	N	0	residents talking/driving away
9	10:05:00 AM	59.2	60.5	831764	Y	1	
10	10:06:00 AM	58.3	61.1	676083	Y	1	
11	10:07:00 AM	60.5	62.1	1122018	Y	1	
12	10:08:00 AM	58.7	60.9	741310	Y	1	
13	10:09:00 AM	60.1	62.2	0	N	0	local resident returned in vehicle
14	10:10:00 AM	59.0	61.2	794328	Y	1	
15	10:11:00 AM	59.6	63.2	912011	Y	1	
16	10:12:00 AM	58.7	61.0	741310	Y	1	
17	10:13:00 AM	62.3	65.3	0	N	0	local MT/local vehicle (63 to 72 dB)
18	10:14:00 AM	64.7	72.9	0	N	0	GA plane to 68 dB
19	10:15:00 AM	60.0	62.8	0	N	0	GA plane
20	10:16:00 AM	59.0	61.0	794328	Y	1	
21	10:17:00 AM	59.1	60.5	812831	Y	1	
22	10:18:00 AM	58.8	59.6	0	N	0	stop
23				0	N	0	
24				0	N	0	
25				0	N	0	
Energy Sum				11527672		14	
Leq				59.2			

**Appendix C**  
**Traffic Data**

**TENNESSEE DEPARTMENT OF TRANSPORTATION  
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: IM/NH-75-1(131) : 33005-0176-44 ROUTE: I-24 & I-75  
 COUNTY: HAMILTON CITY: CHATTANOOGA  
 PROJECT PIN NUMBER: 114174.01  
 PROJECT DESCRIPTION: I-24 @ I-75 INTERCHANGE MODIFICATION [PHASE 2]

[1] I-24 AVERAGE TRAFFIC DATA.

[2] I-75 AVERAGE TRAFFIC DATA.

**DIVISION REQUESTING:**

MAINTENANCE ☐

S.T.I.D. ☐

PROG. DEVELOPMENT & ADM. ☐

PUBLIC TRANS. & AERO. ☐

YEAR PROJECT PROGRAMMED FOR CONSTRUCTION: 2025

PROJECTED LETTING DATE: 2025

PAVEMENT DESIGN ☐

STRUCTURES ☐

SURVEY & ROADWAY DESIGN ☒

TRAFFIC SIGNAL DESIGN ☐

OTHER ☐

**TRAFFIC ASSIGNMENT:**

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
[1] 124,720	2025	154,910	14,415	9	2045	50-50	10	15	5,017	7,917
[2] 112,780	2025	140,910	12,866	9	2045	53-47	12	18	5,582	8,824

REQUESTED BY: NAME RACHEL GENTRY DATE 11/24/19  
 DIVISION REGION II PROJECT DEVELOPMENT  
 ADDRESS 7512 VOLKSWAGEN DRIVE  
CHATTANOOGA TN 37416

REVIEWED BY: DEBBI HOWARD Debbi Howard DATE 12/30/19  
 TRANSPORTATION MANAGER I  
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: TONY ARMSTRONG Tony Armstrong DATE 12.30.19  
 TRANSPORTATION MANAGER 2  
 SUITE 1000, JAMES K. POLK BUILDING

**COMMENTS:**

THIS TRAFFIC EXTENDED THE PROJECT THRU THE I-24 GERMANTOWN INTERCHANGE AND ADDED TWO INTERSECTIONS ALONG S.R. 8 @ I-75.

Cc: GREG JUDY, NEEL-SCHAFFER

**DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.**

**NOTE:** FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR ADTs OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.

SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 4/1/18)



**TENNESSEE DEPARTMENT OF TRANSPORTATION  
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: IM/NH-75-1(131) : 33005-0176-44

ROUTE NO.: I-24 [1]

COUNTY: HAMILTON

CITY: CHATTANOOGA

PROJECT DESCRIPTION: I-24 @ I-75 INTERCHANGE MODIFICATION [PHASE 2]

**Interstate**

Pavement Structural Design

Calculation of Equivalent Daily 18 Kip Single Axle Loads

Type Vehicle	ADT (No. Counted)	Flexible		Rigid	
		18-kip Factor	ADL	18-kip Factor	ADL
Pass. cars and motorcycles (1-2)	82,113	0.001	82	0.001	82
Pick-up, Panel, Van (3)	36,729	0.004	147	0.005	184
Sing. Unit	Buses (4)	0.300	112	0.300	112
	2-axle, 6-tire (5)	0.170	398	0.170	398
	3-axle or more (6-7)	0.700	963	1.000	1,375
	4-axle (8)	0.700	375	0.780	417
Comb.	5-axle or more (9-13)	1.100	17,983	1.780	29,099
Totals (2035 AADT)			20,059		31,668

Suggested Percentages of Trucks in Design Lane

	4 Lane	6 Lane	8 Lane
5,000 or less ADT	90%	75%	70%
5,000 - 10,000 ADT	80%	70%	65%
10,000 - 15,000 ADT	75%	65%	60%
15,000 - 20,000 ADT	75%	65%	55%
20,000 - 30,000 ADT	70%	60%	50%
30,000 Plus ADT	65%	60%	50%

No. of Lanes: 10

% Trucks in Design Lane: 50%

ADL in Design Lane:

FLEX:	0.5	X	0.50	X	20058.9	=	5,015
RIGID:	0.5	X	0.50	X	31667.5	=	7,917

ADL Calculations By: TONY ARMSTRONG

Date: 12/27/2019

Reviewed By:

Date:

[REV. 7-1-14]

**TENNESSEE DEPARTMENT OF TRANSPORTATION  
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: IM/NH-75-1(131) : 33005-0176-44

ROUTE NO.: I-75 [2]

COUNTY: HAMILTON

CITY: CHATTANOOGA

PROJECT DESCRIPTION: I-24@ I-75 INTERCHANGE MODIFICATION

**Interstate**

Pavement Structural Design

Calculation of Equivalent Daily 18 Kip Single Axle Loads

Type Vehicle	ADT (No. Counted)	Flexible		Rigid	
		18-kip Factor	ADL	18-kip Factor	ADL
Pass. cars and motorcycles (1-2)	64,768	0.001	65	0.001	65
Pick-up, Panel, Van (3)	38,751	0.004	155	0.005	194
Buses (4)	457	0.300	137	0.300	137
Sing. Unit	2-axle, 6-tire (5)	0.170	457	0.170	457
	3-axle or more (6-7)	0.700	746	1.000	1,065
	4-axle (8)	0.700	452	0.780	504
Comb. 5-axle or more (9-13)	18,469	1.100	20,316	1.780	32,875
<b>Totals (2035 AADT)</b>	<b>126,845</b>		<b>22,328</b>		<b>35,296</b>

Suggested Percentages of Trucks in Design Lane

	<u>4 Lane</u>	<u>6 Lane</u>	<u>8 Lane</u>
5,000 or less ADT	90%	75%	70%
5,000 - 10,000 ADT	80%	70%	65%
10,000 - 15,000 ADT	75%	65%	60%
15,000 - 20,000 ADT	75%	65%	55%
20,000 - 30,000 ADT	70%	60%	50%
30,000 Plus ADT	65%	60%	50%

No. of Lanes: 10

% Trucks in Design Lane: 50%

ADL in Design Lane:

FLEX:	0.5	X	0.50	X	22327.6	=	5,582
RIGID:	0.5	X	0.50	X	35296.5	=	8,824

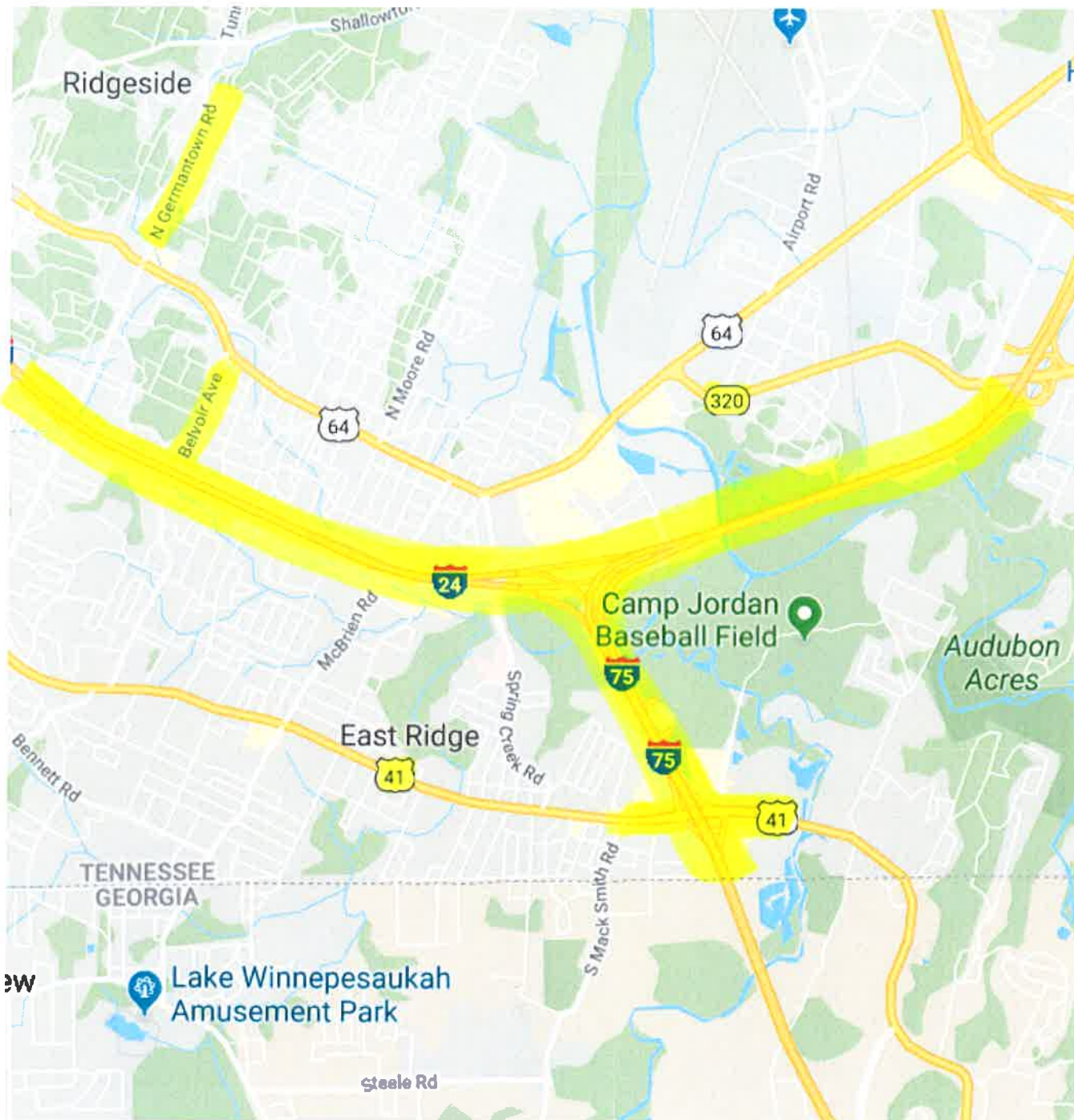
ADL Calculations By: TONY ARMSTRONG

Date: 11/21/2019

Reviewed By: *Debra Howard*

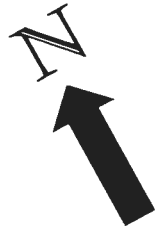
Date: 11/21/19

[REV. 7-1-14]



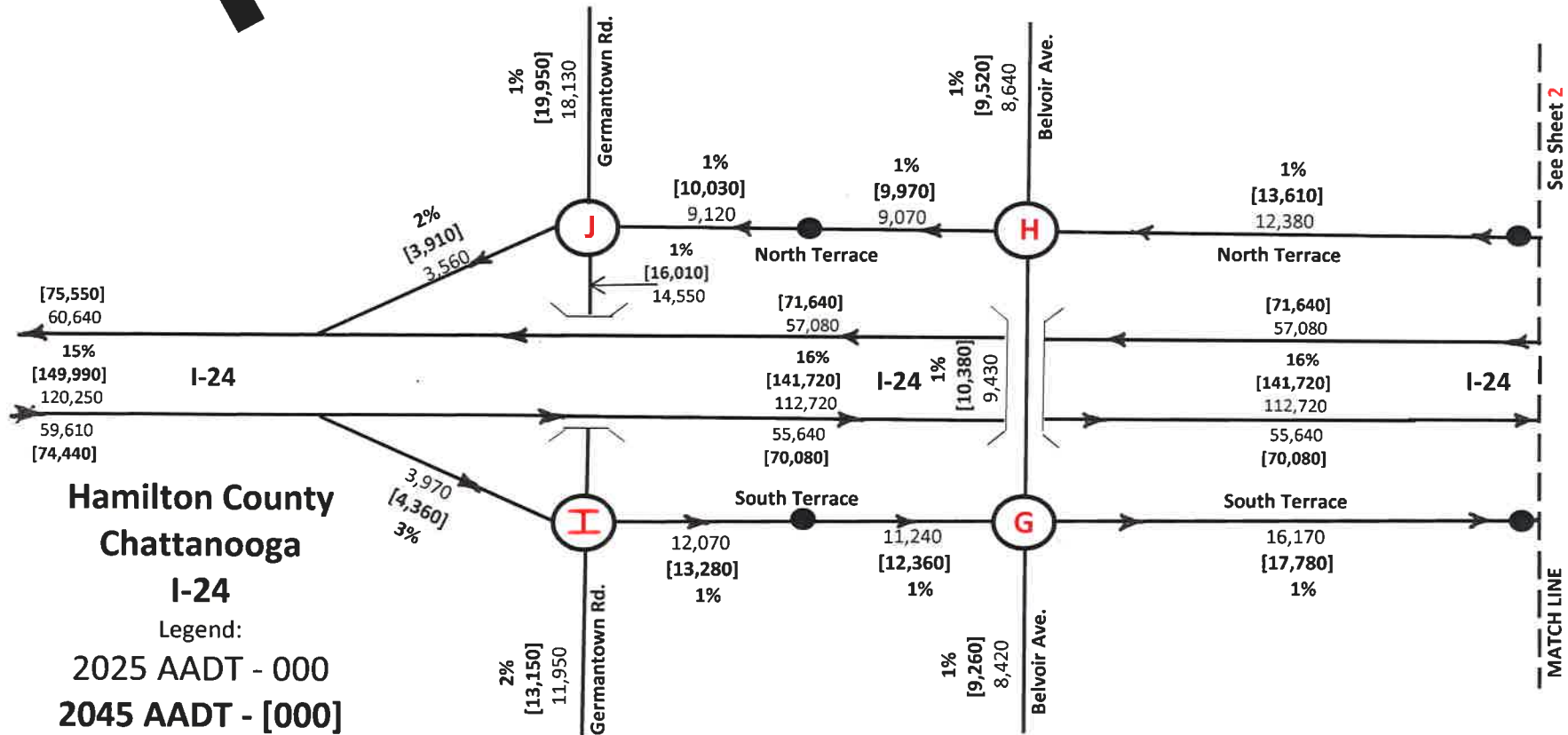
HAMILTON COUNTY  
CHATTANOOGA  
I-24 @ I-75





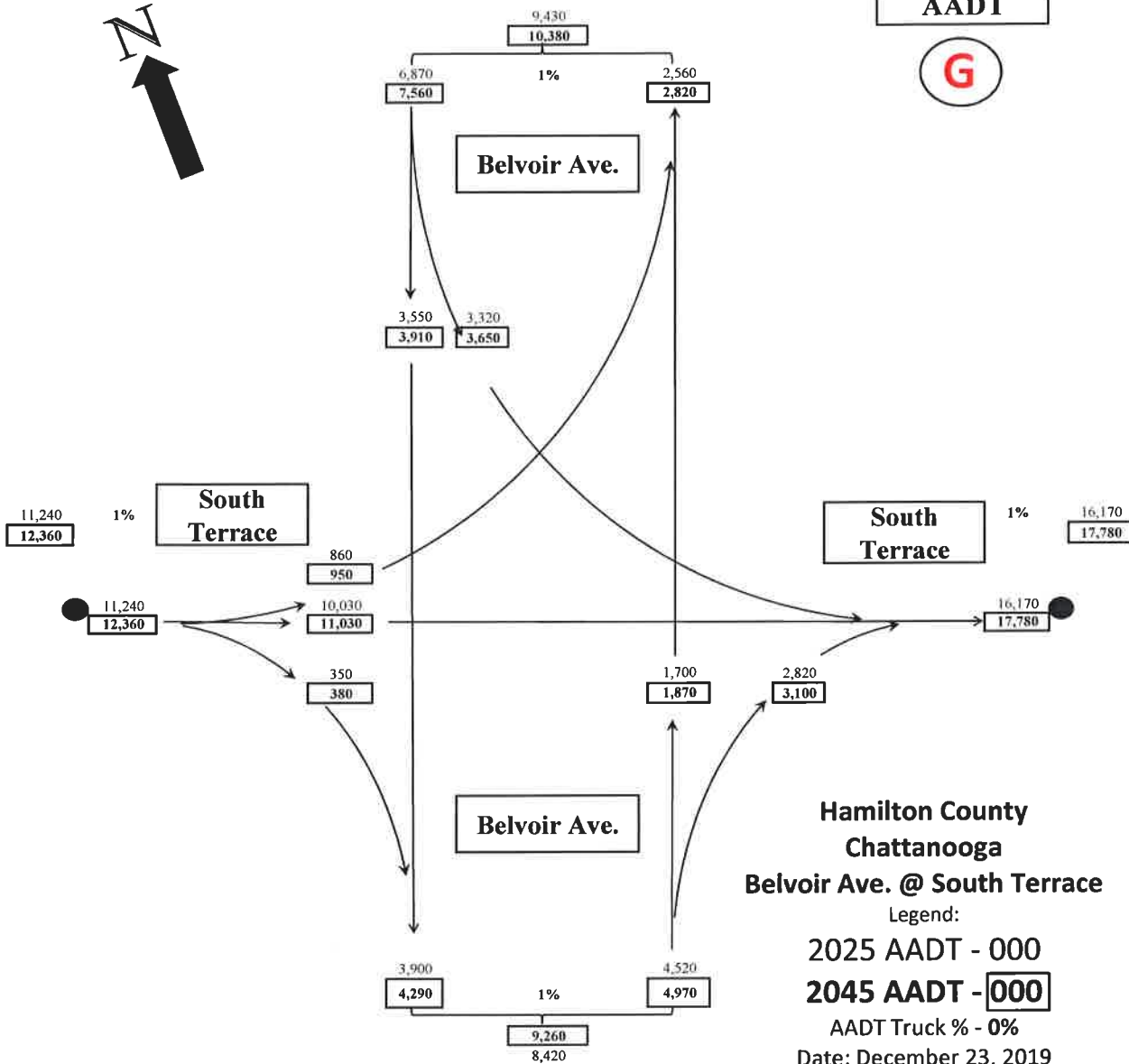
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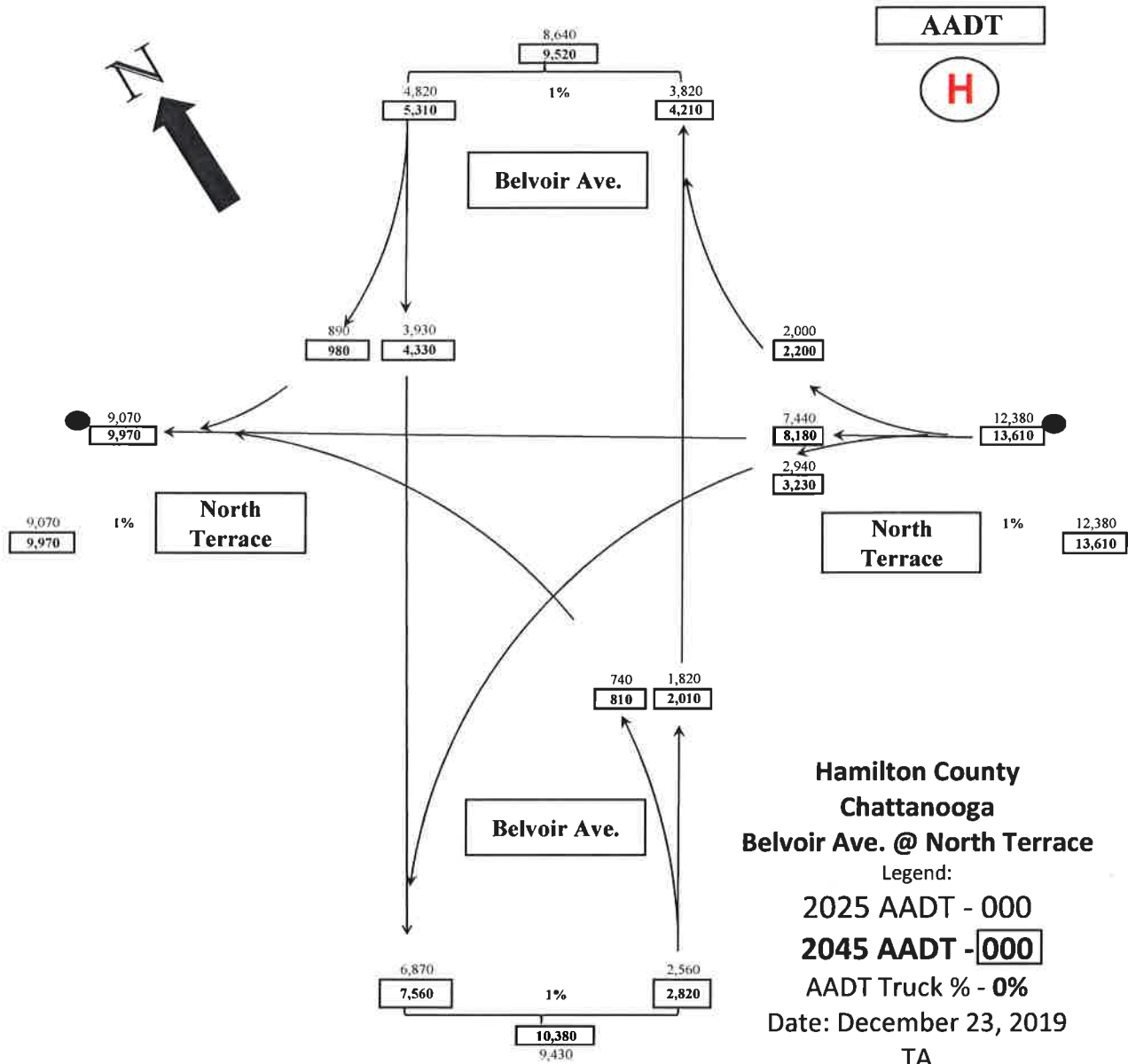
Sheet **1** of **6**





AADT

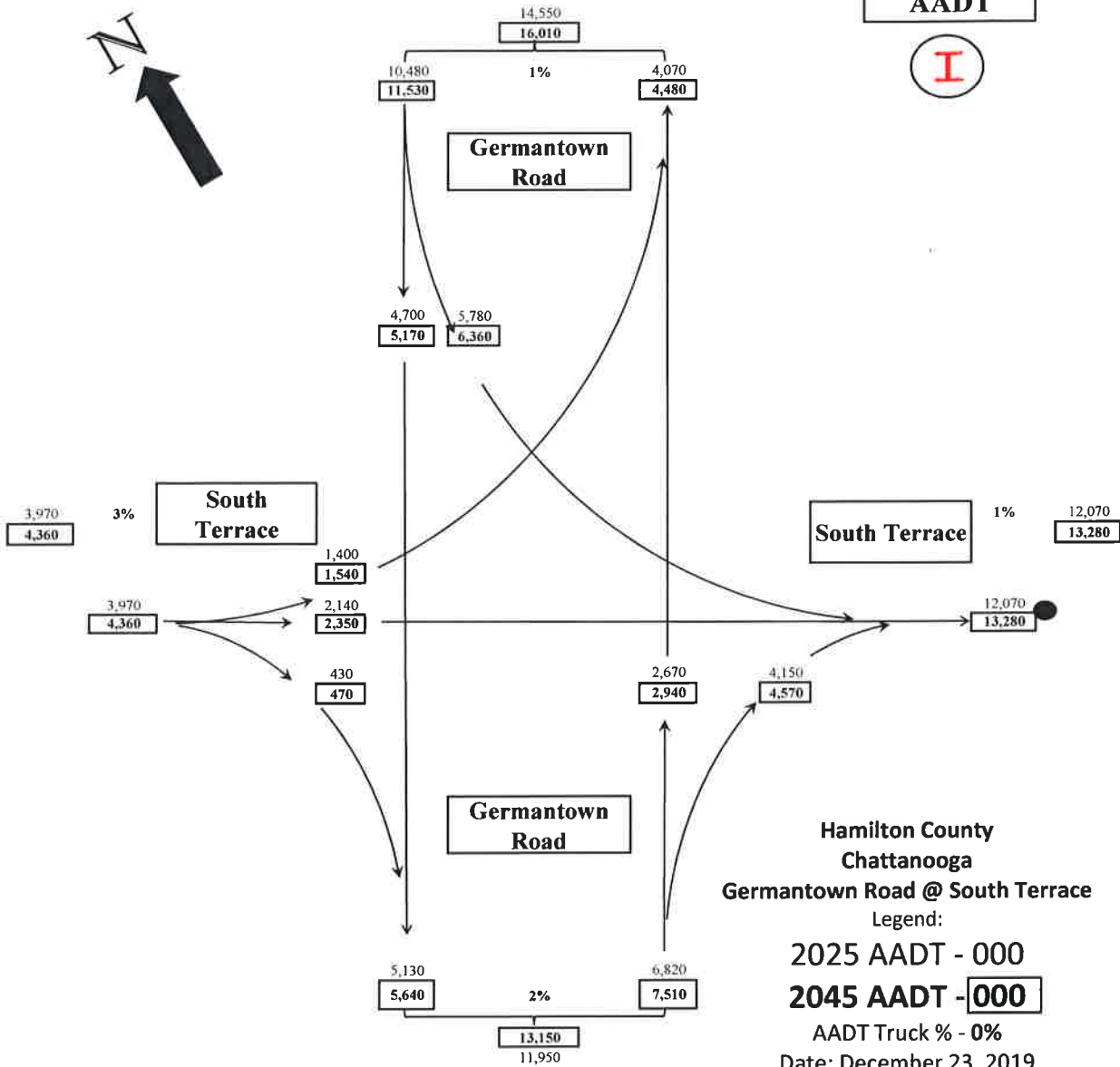








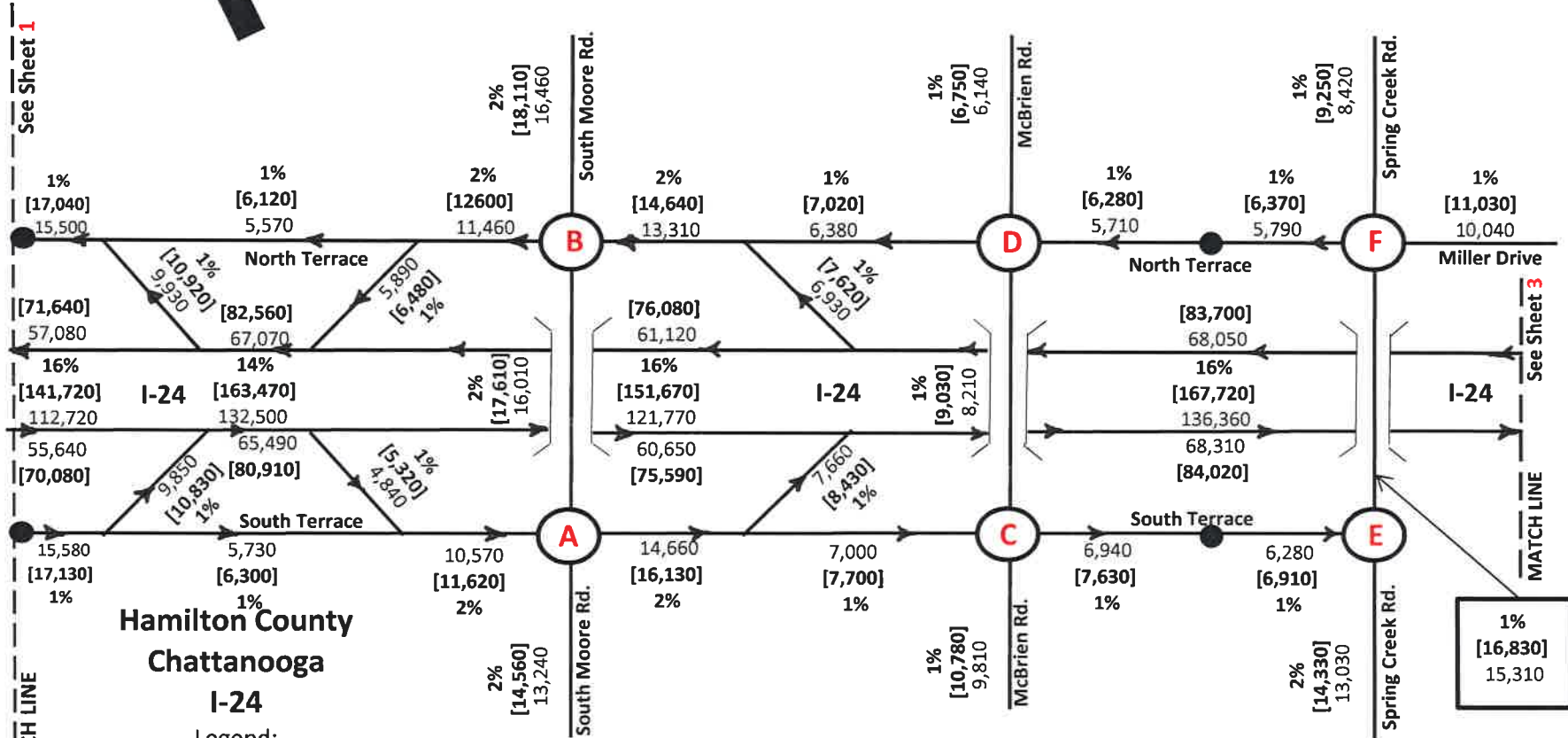
AADT





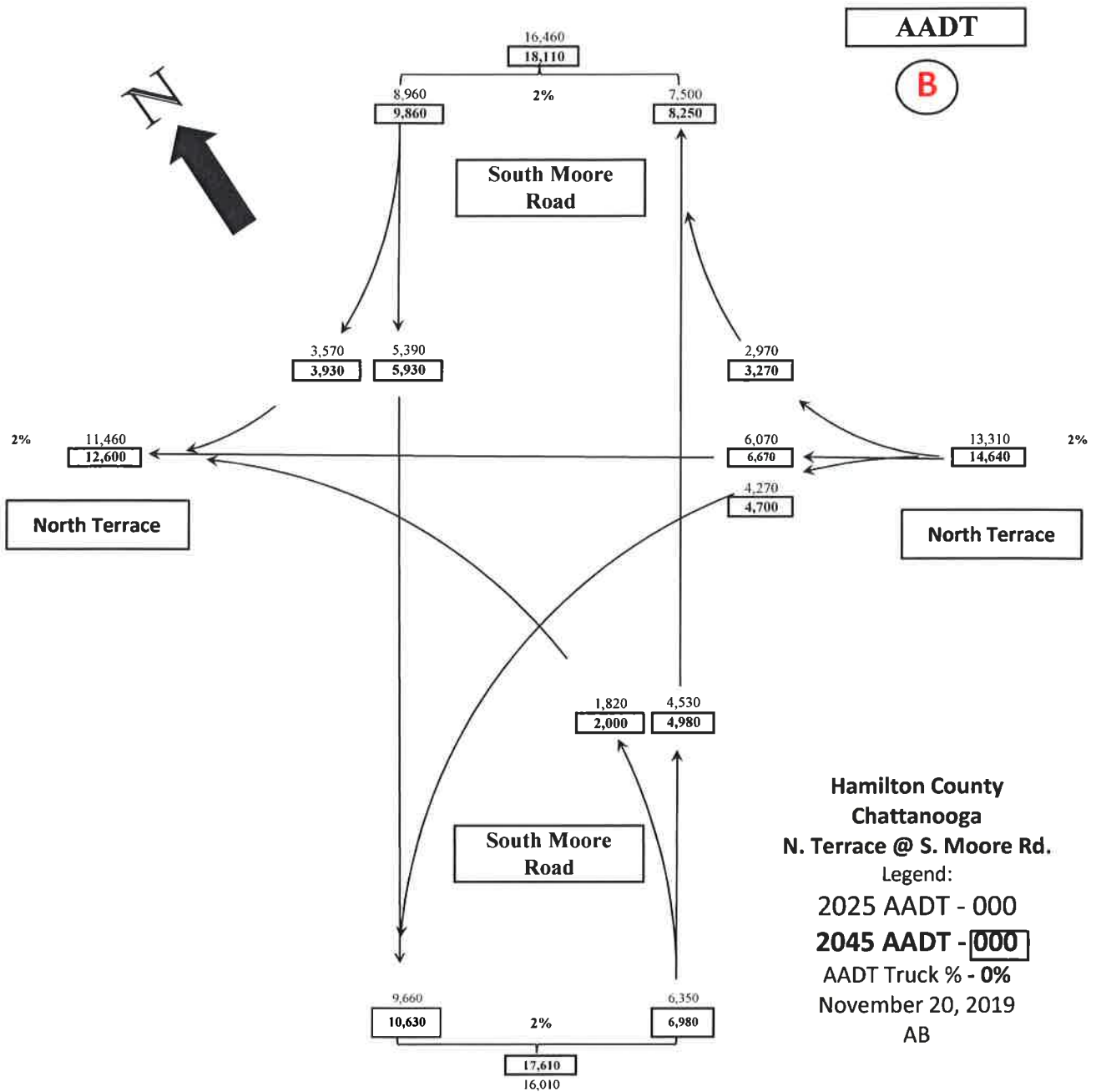
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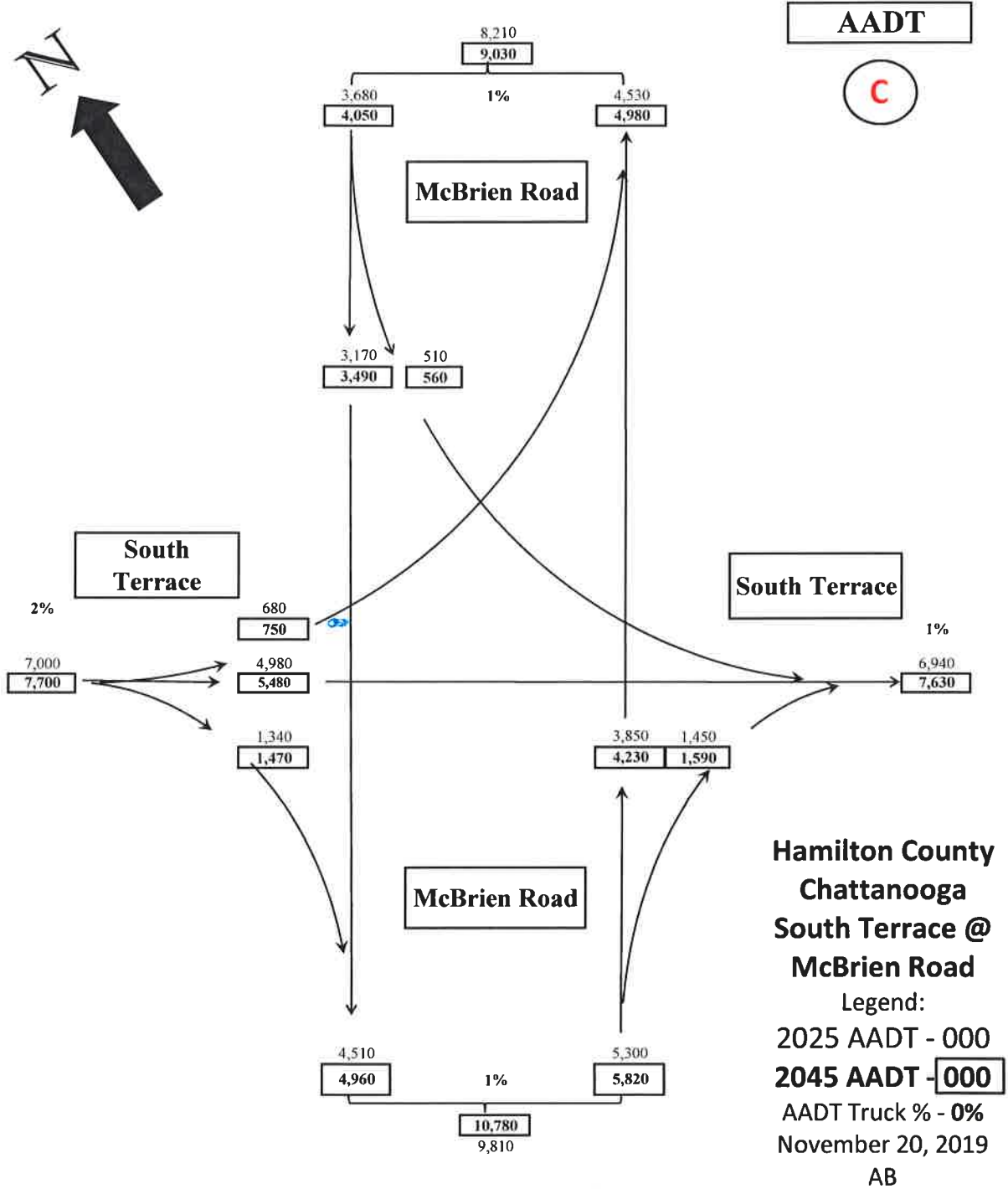
Sheet 2 of 6



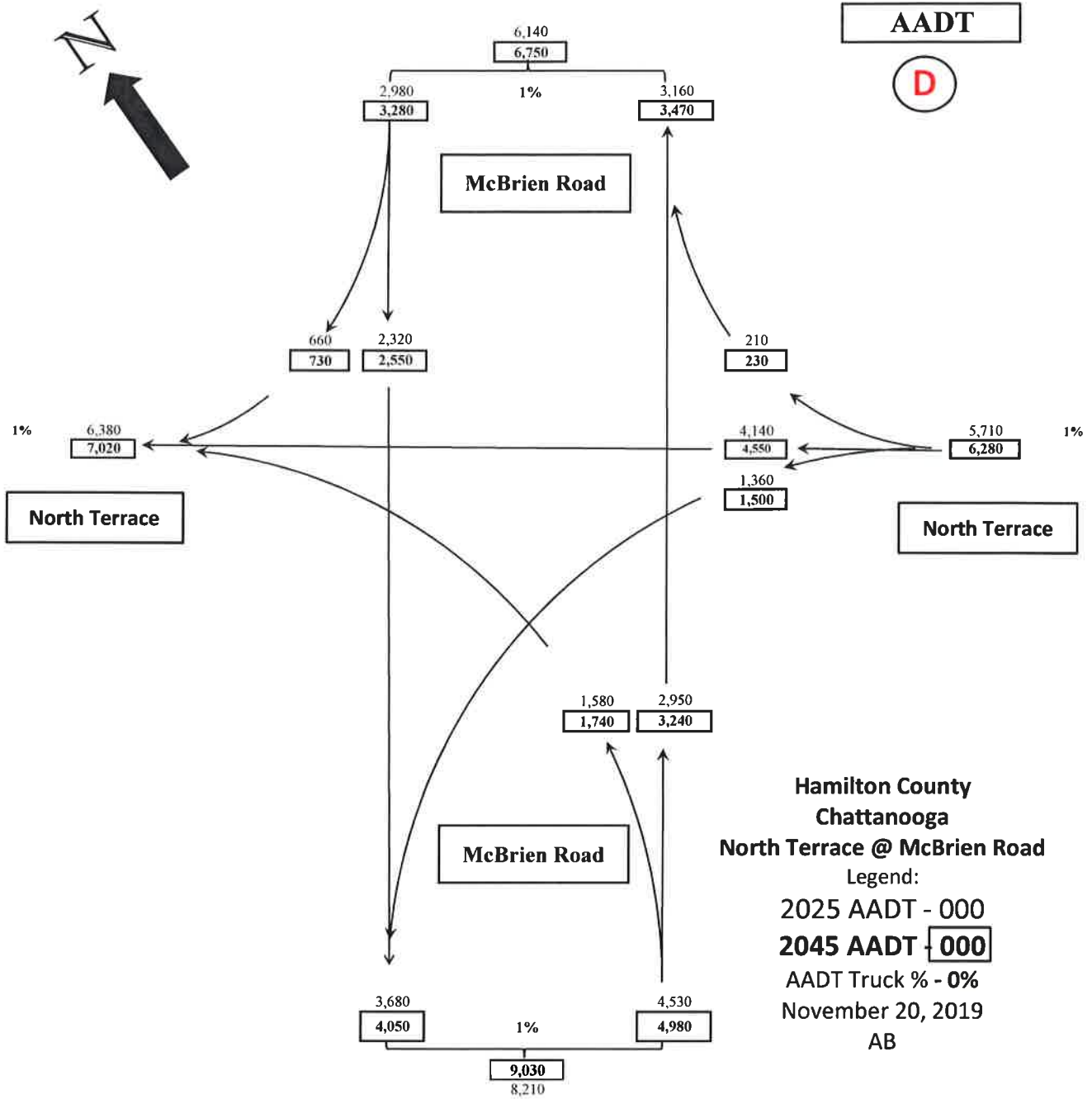


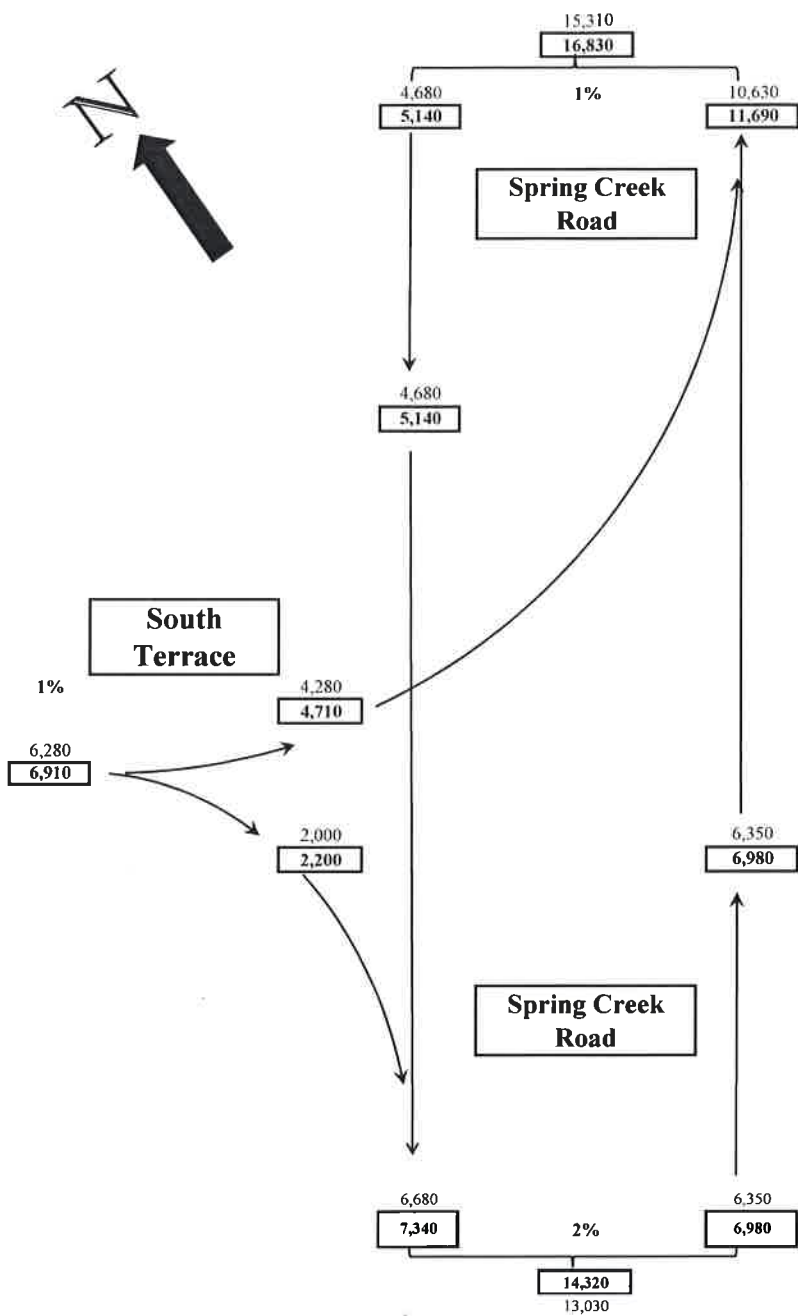












**AADT**



**Hamilton County  
Chattanooga  
South Terrace @ Spring  
Creek Road**

Legend:

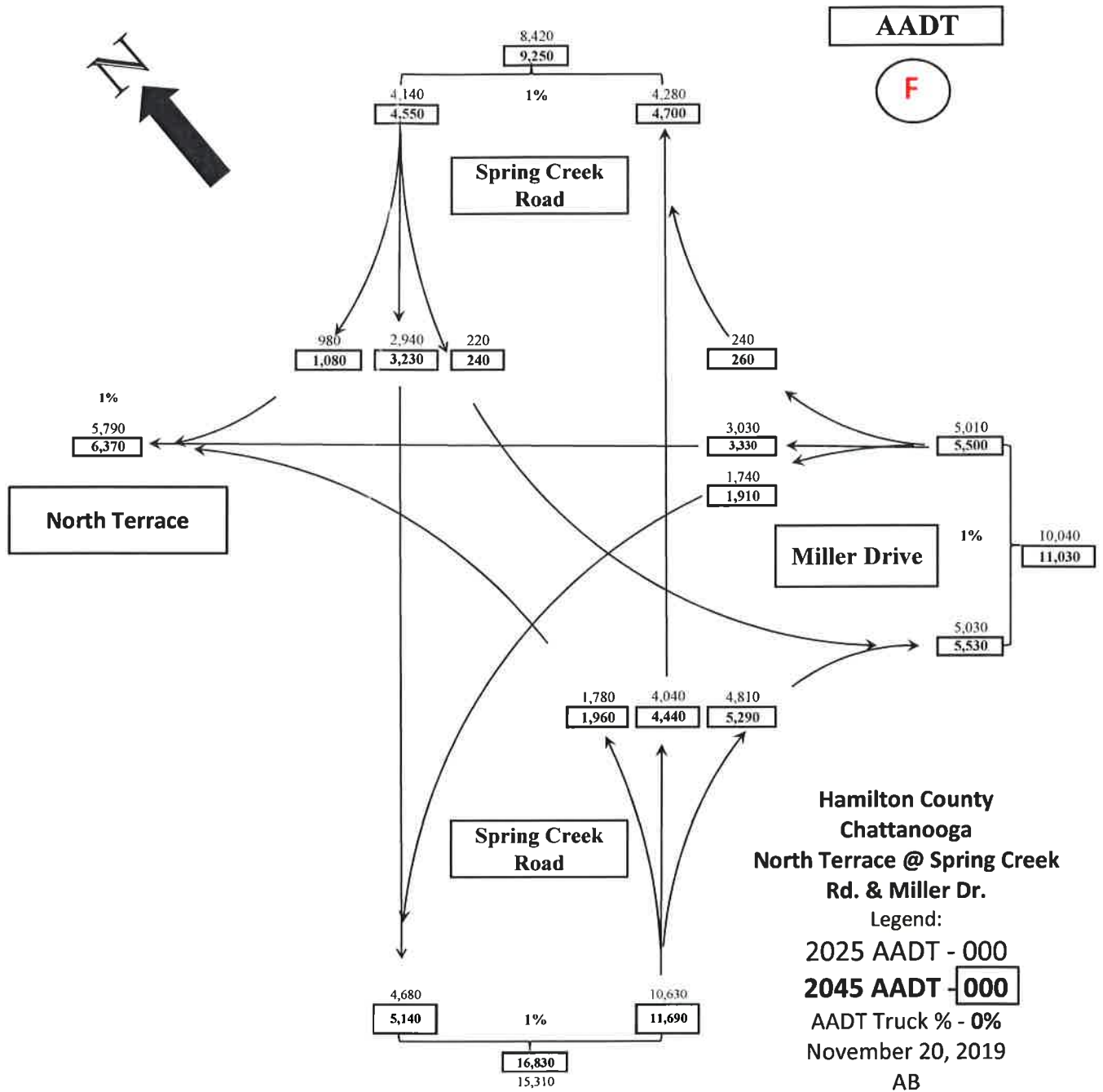
2025 AADT - 000

**2045 AADT - 000**

AADT Truck % - 0%

November 20, 2019

AB

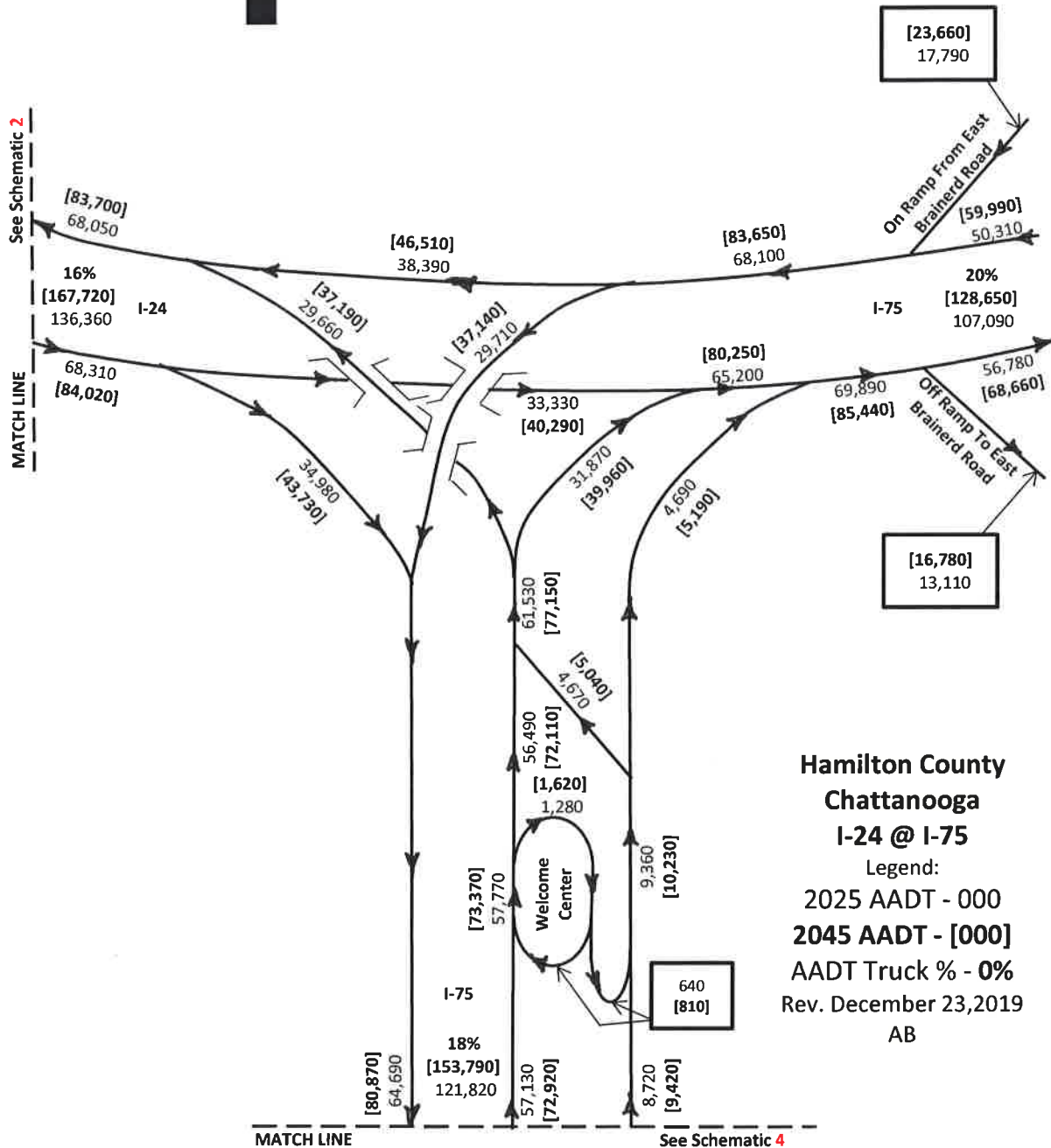


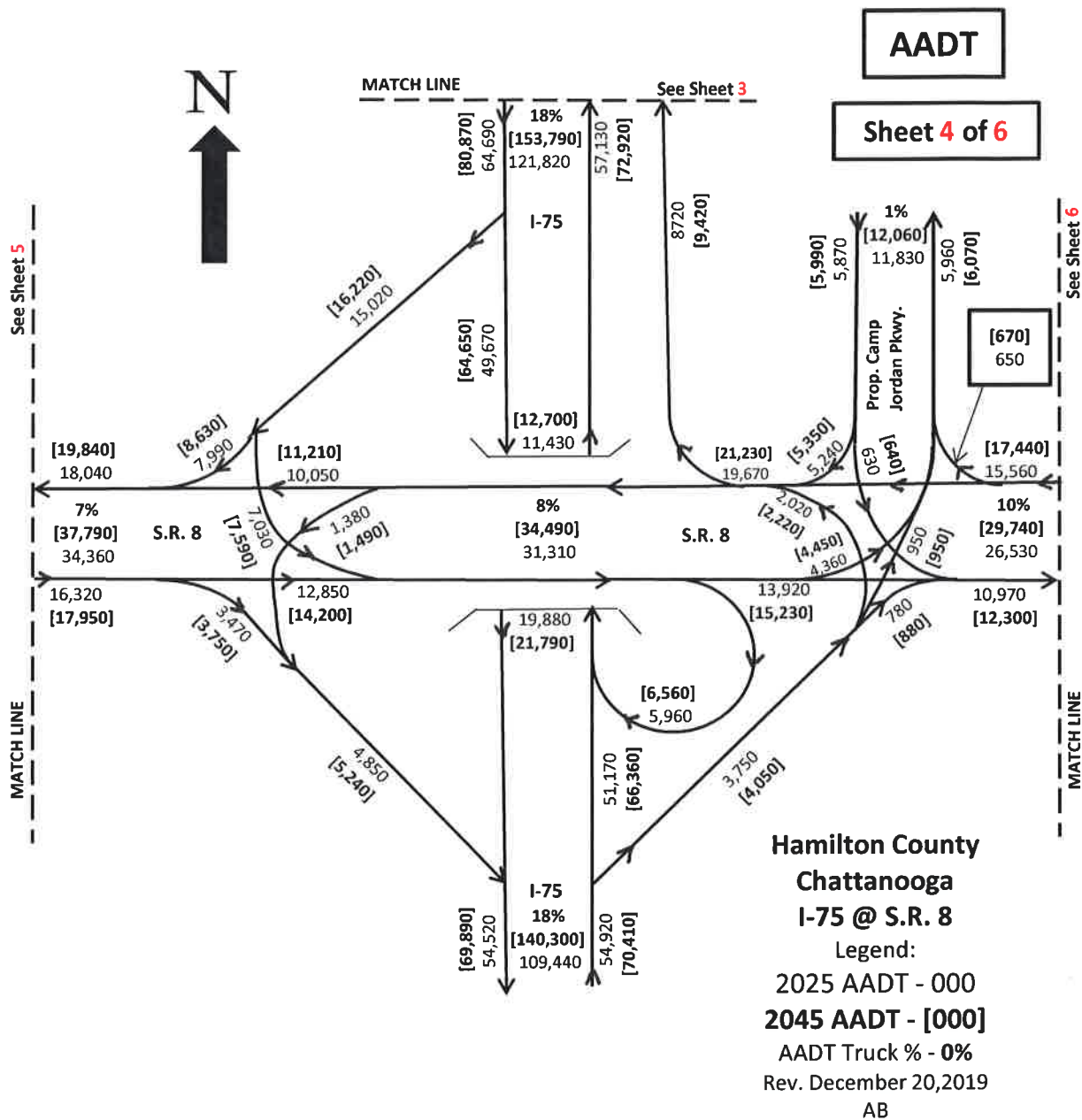




**AADT**

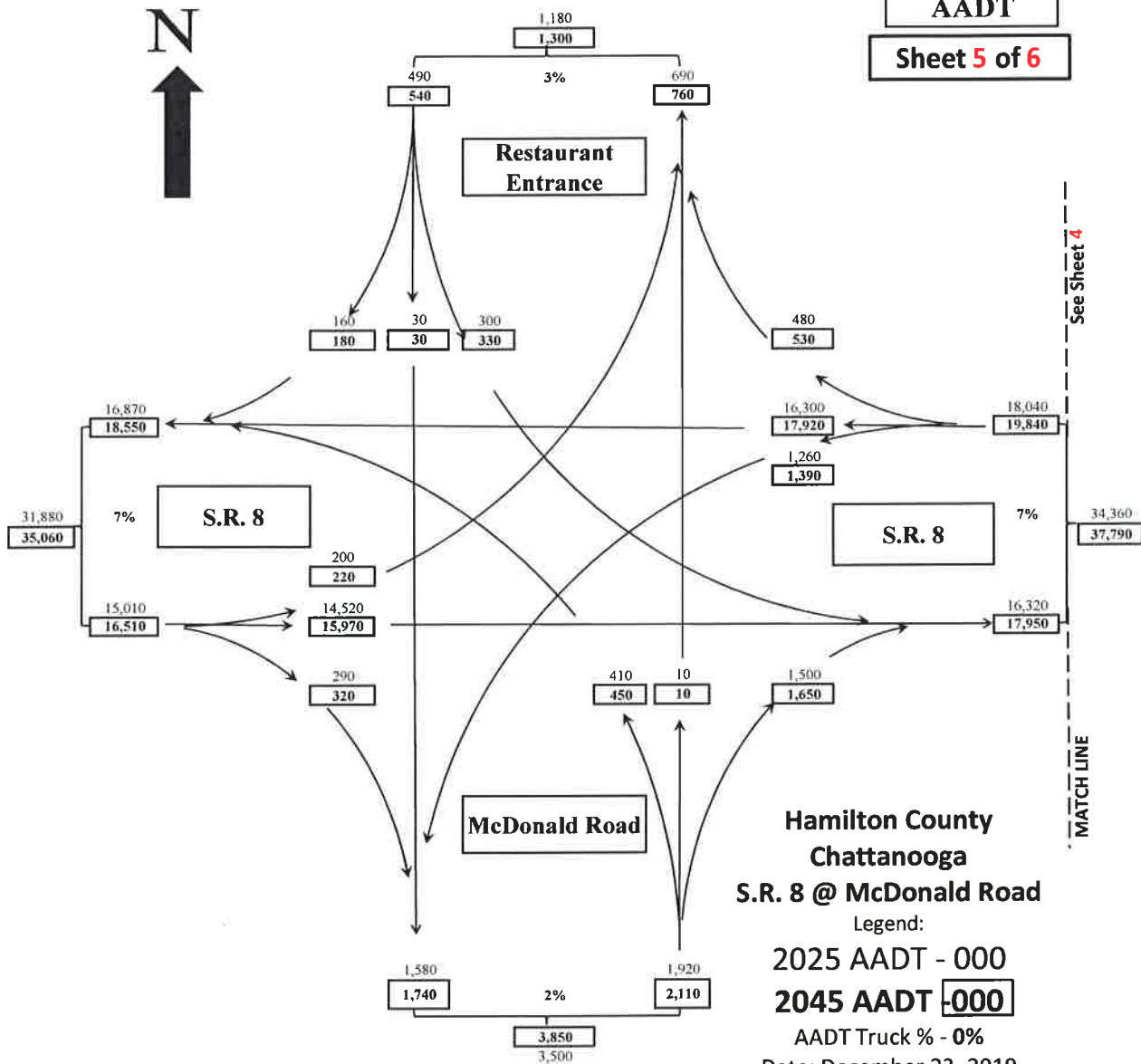
**Sheet 3 of 6**







AADT  
Sheet 5 of 6

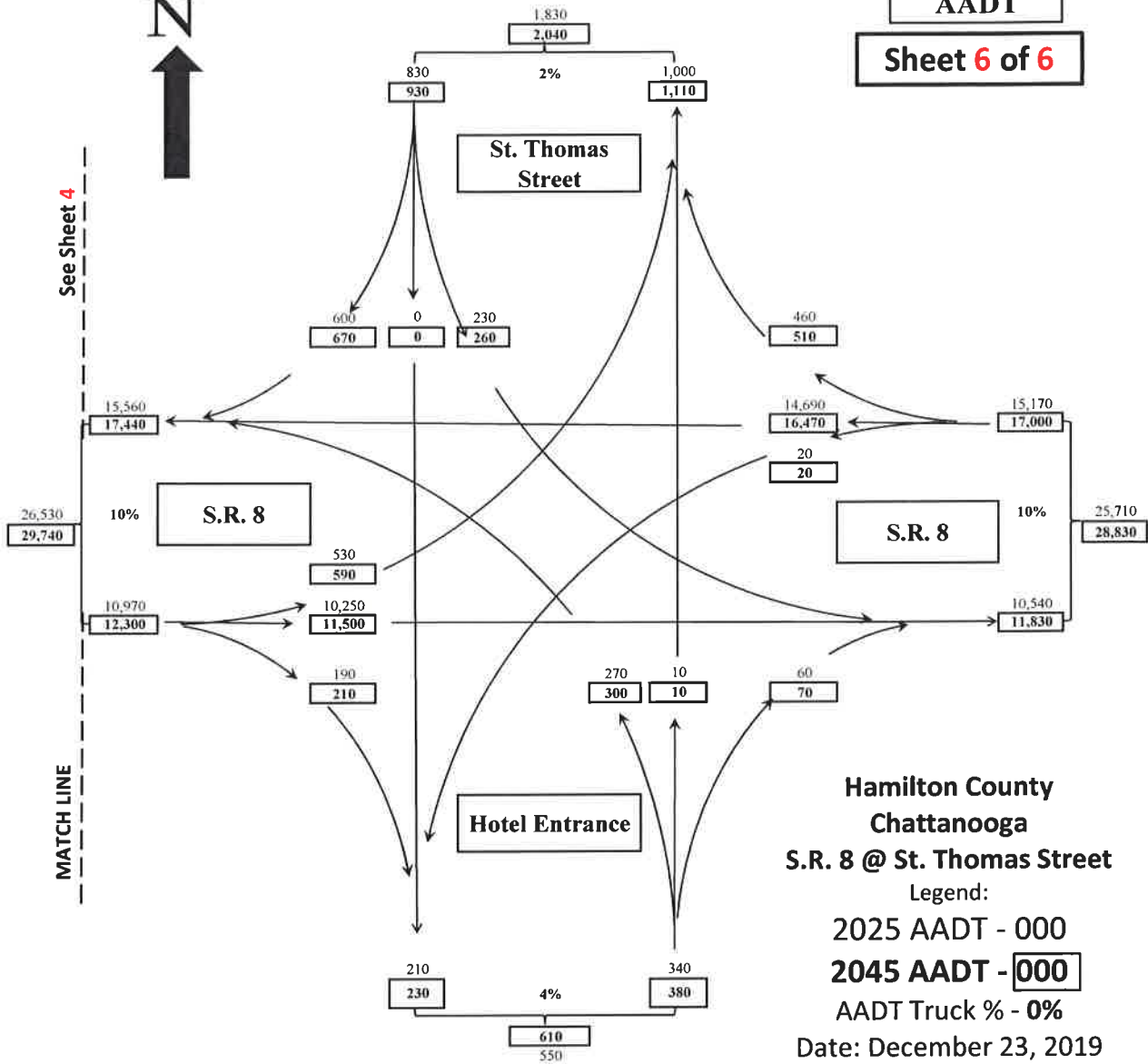






AADT

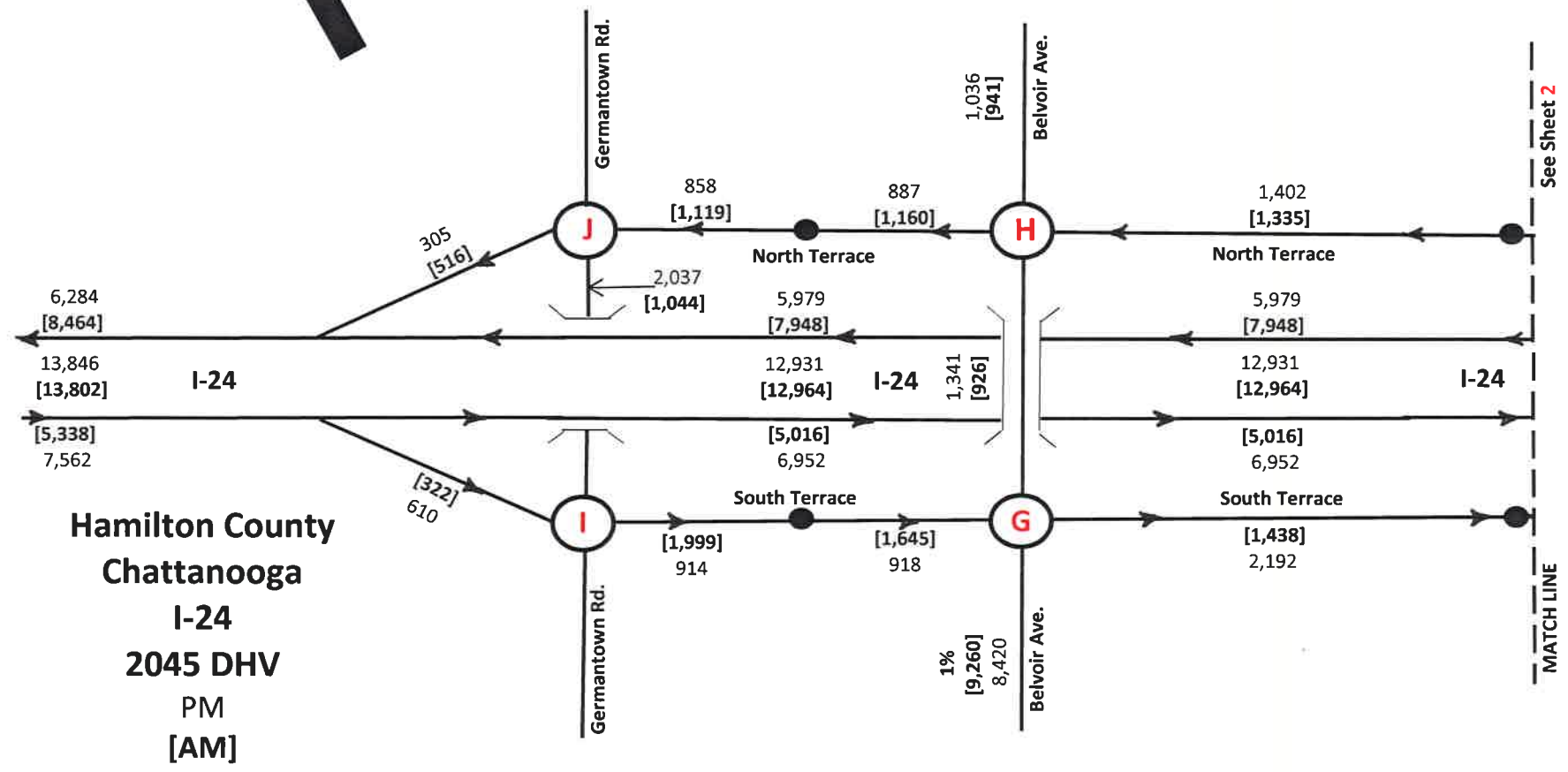
Sheet 6 of 6





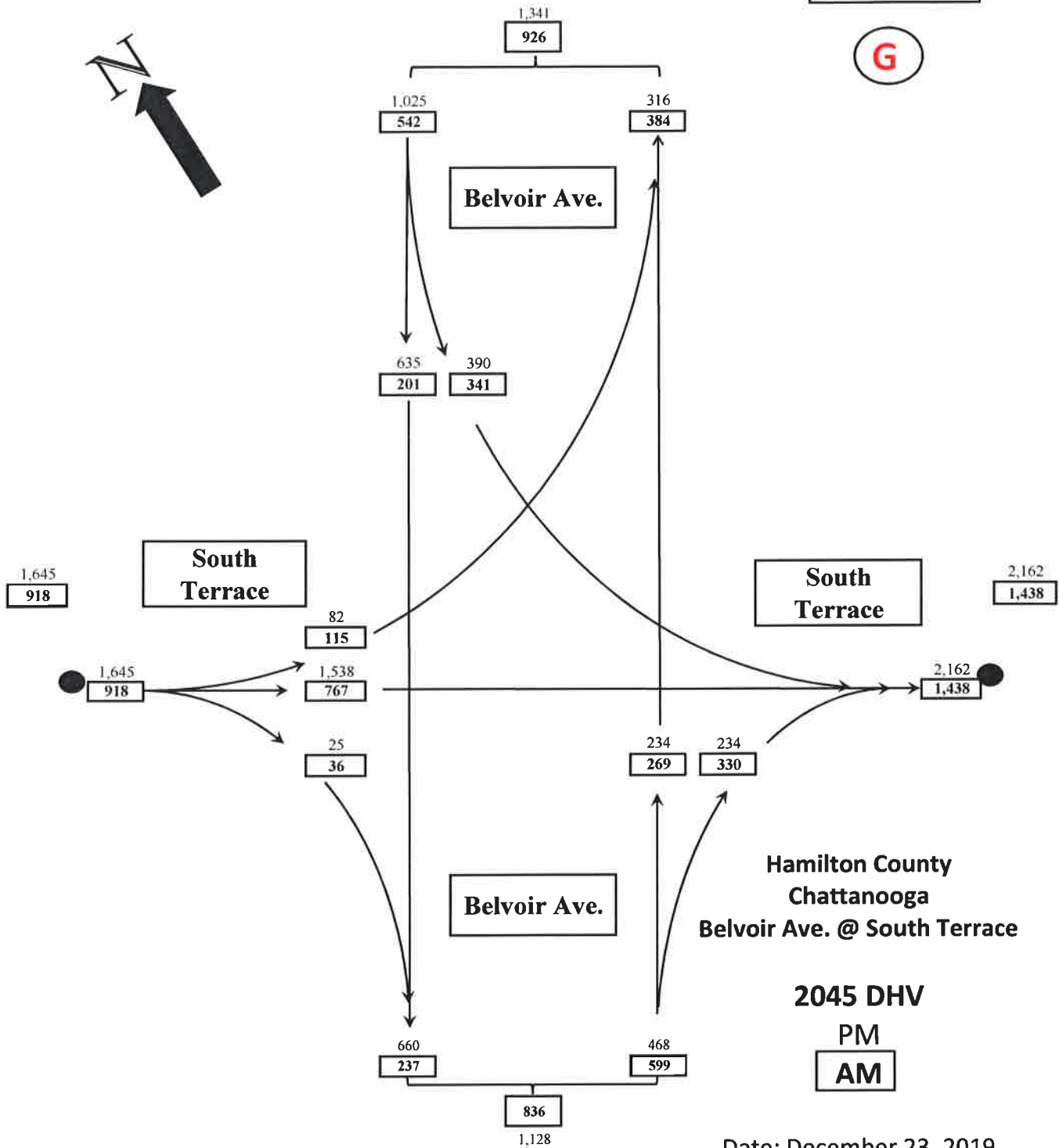
2045 DHV

Sheet 1 of 6



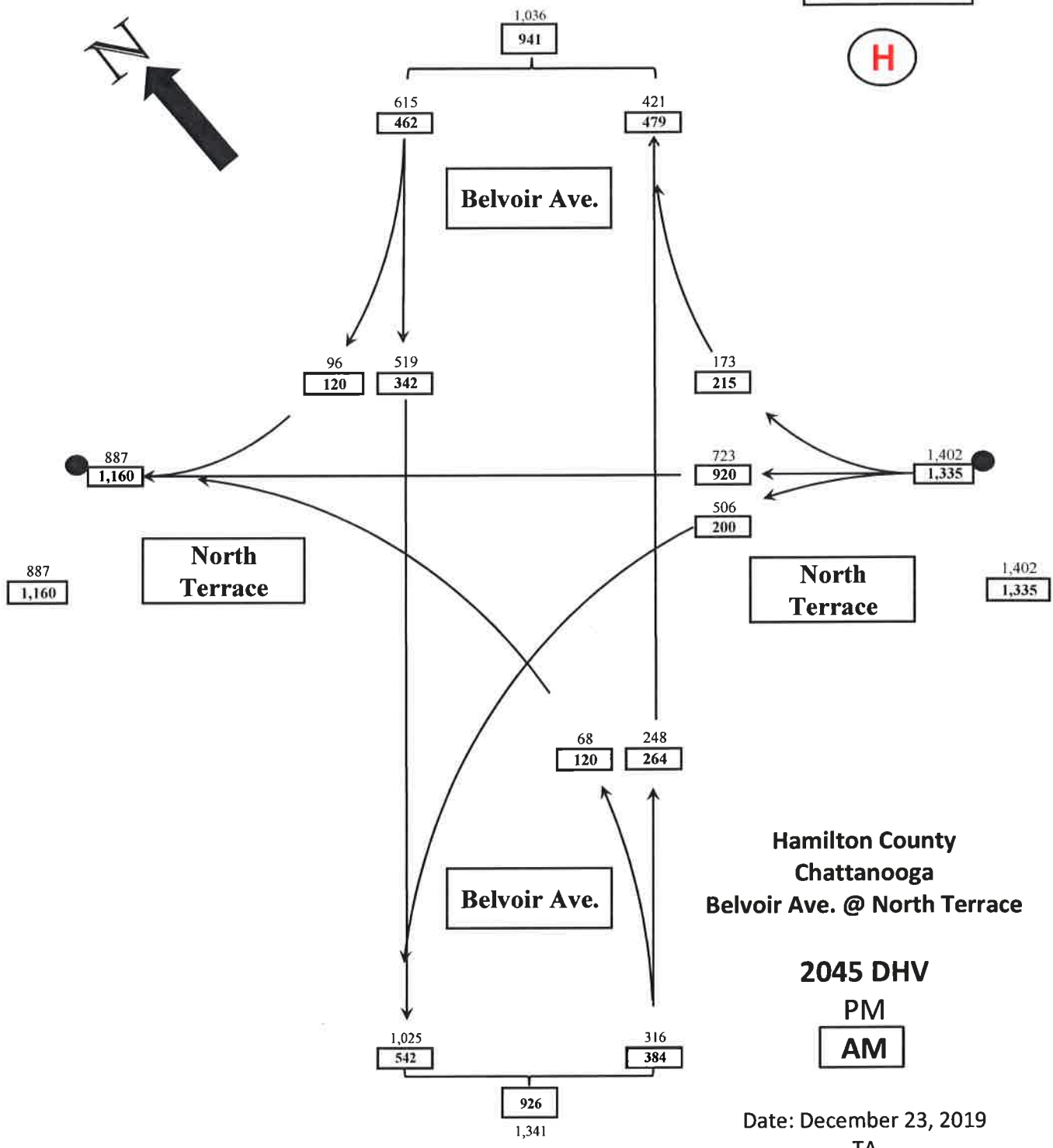
Date: December 20, 2019  
TA

2045 DHV





2045 DHV

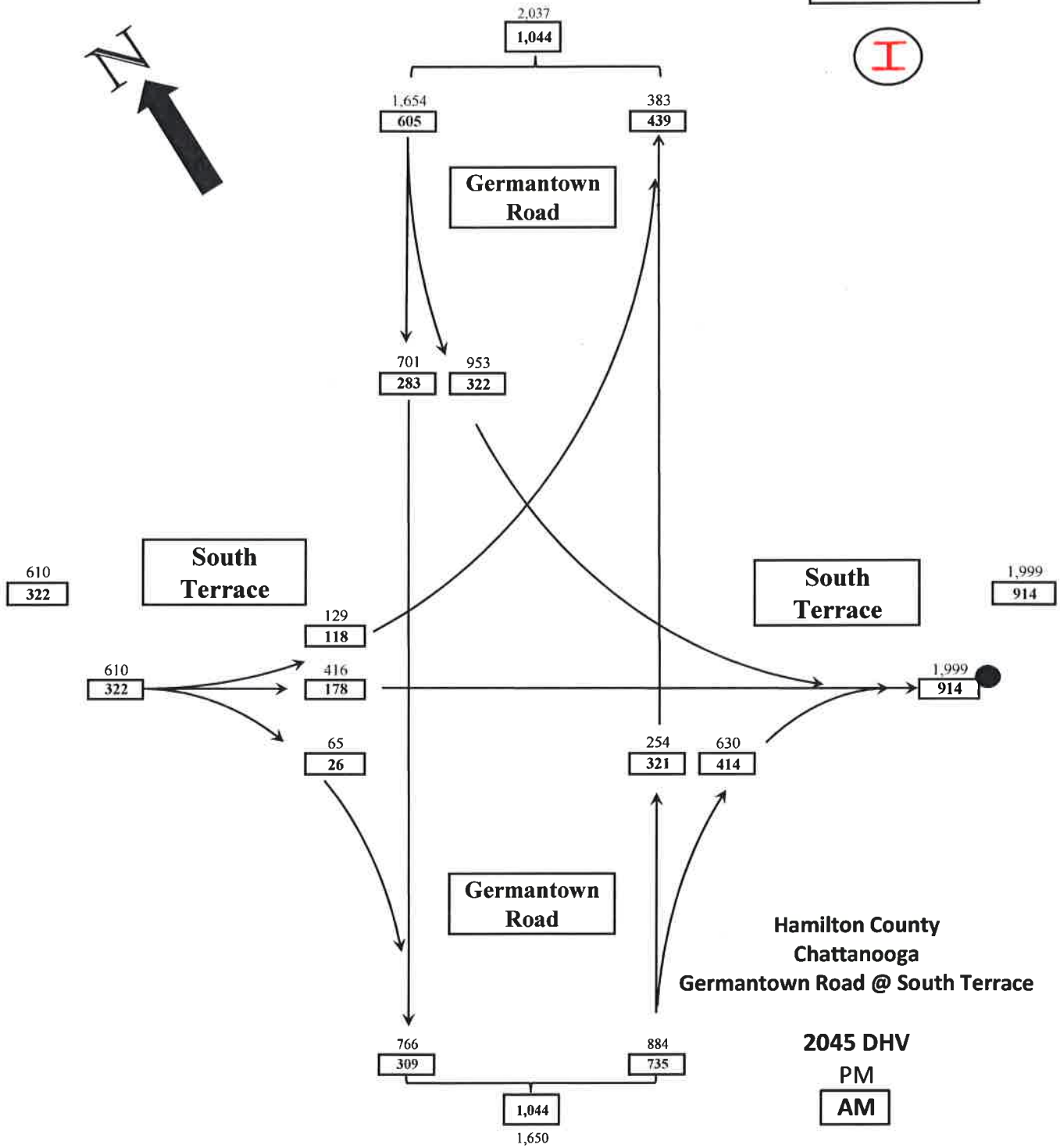


Hamilton County  
Chattanooga  
Belvoir Ave. @ North Terrace

2045 DHV  
PM  
AM

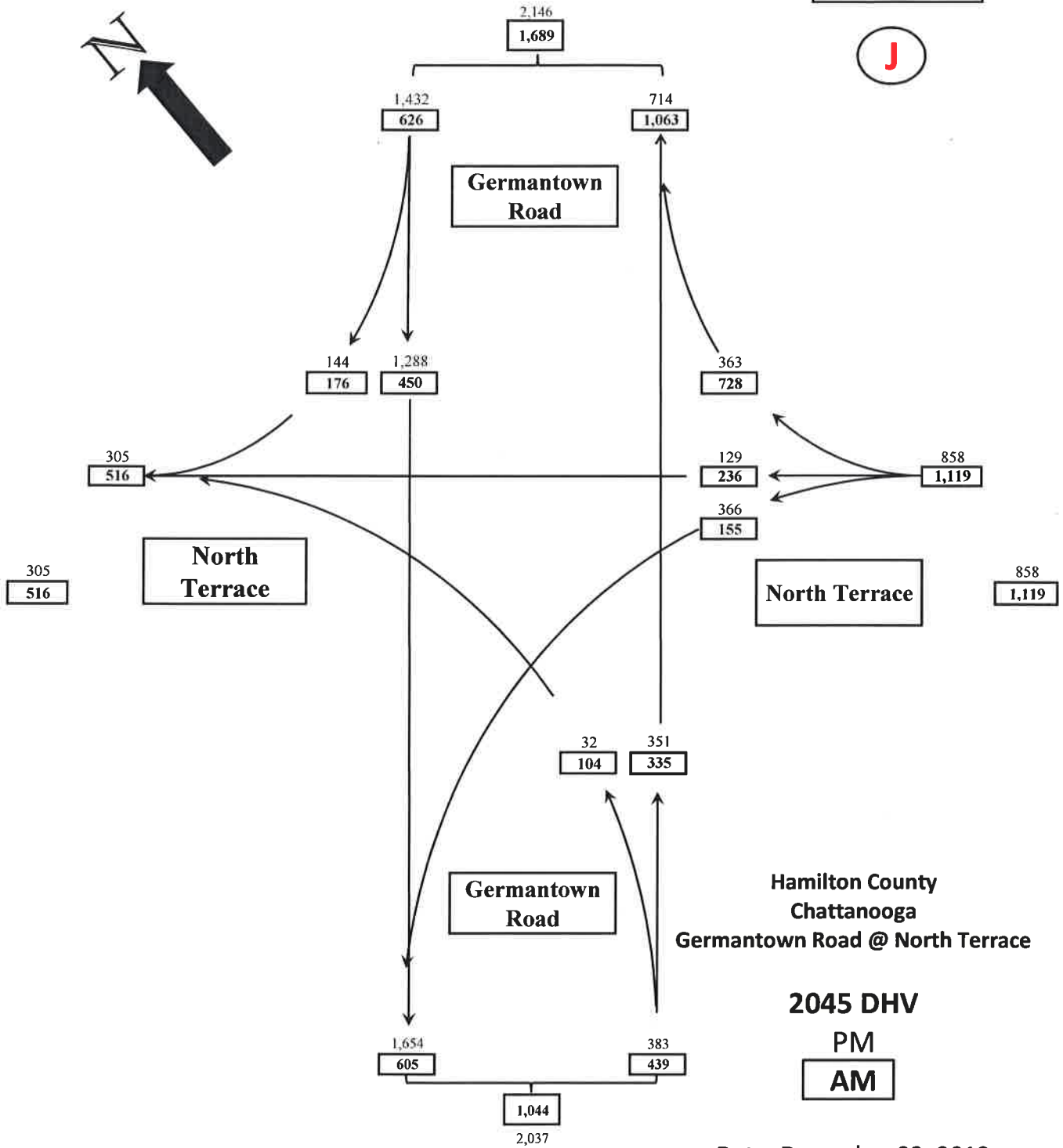
Date: December 23, 2019  
TA

2045 DHV



Date: December 23, 2019  
TA

2045 DHV



Hamilton County  
Chattanooga  
Germantown Road @ North Terrace

2045 DHV

PM

AM

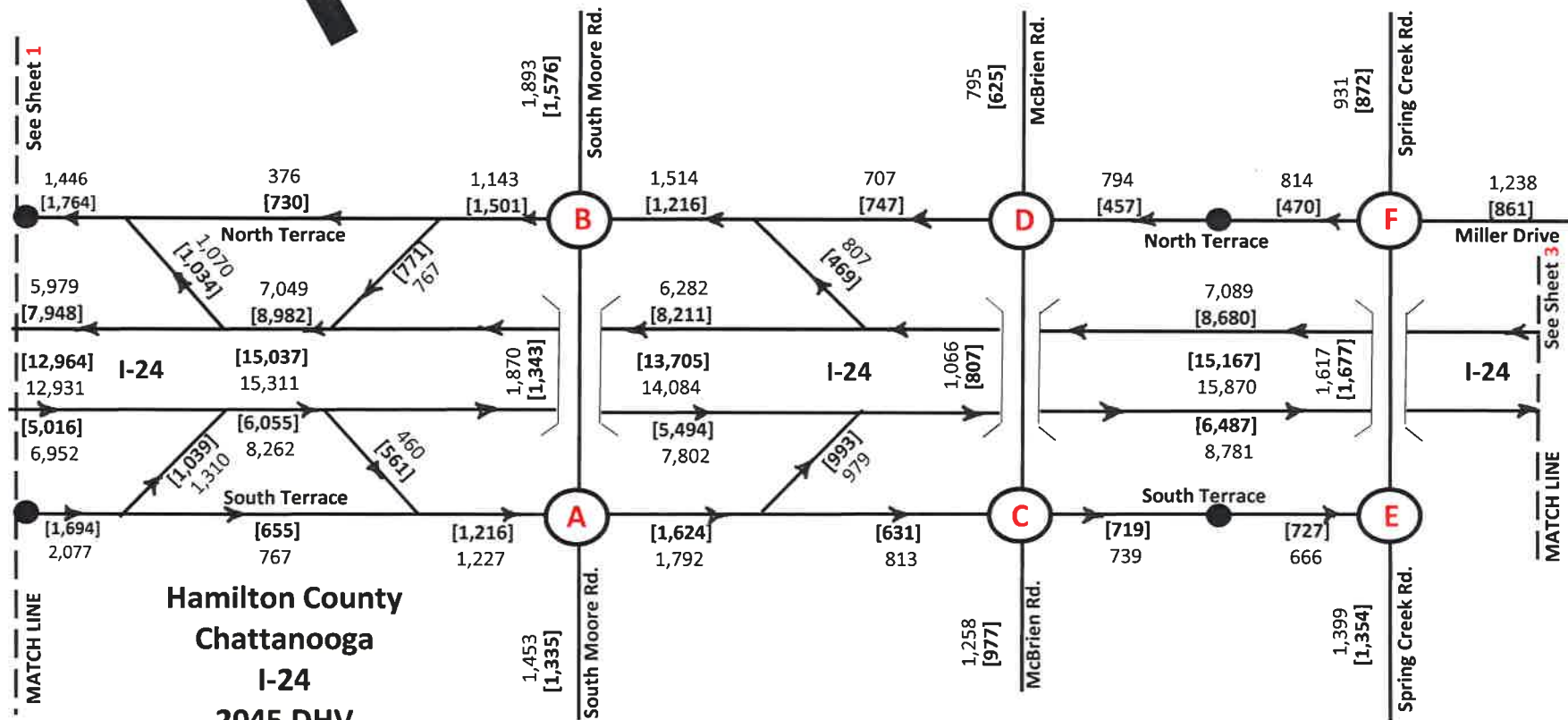
Date: December 23, 2019

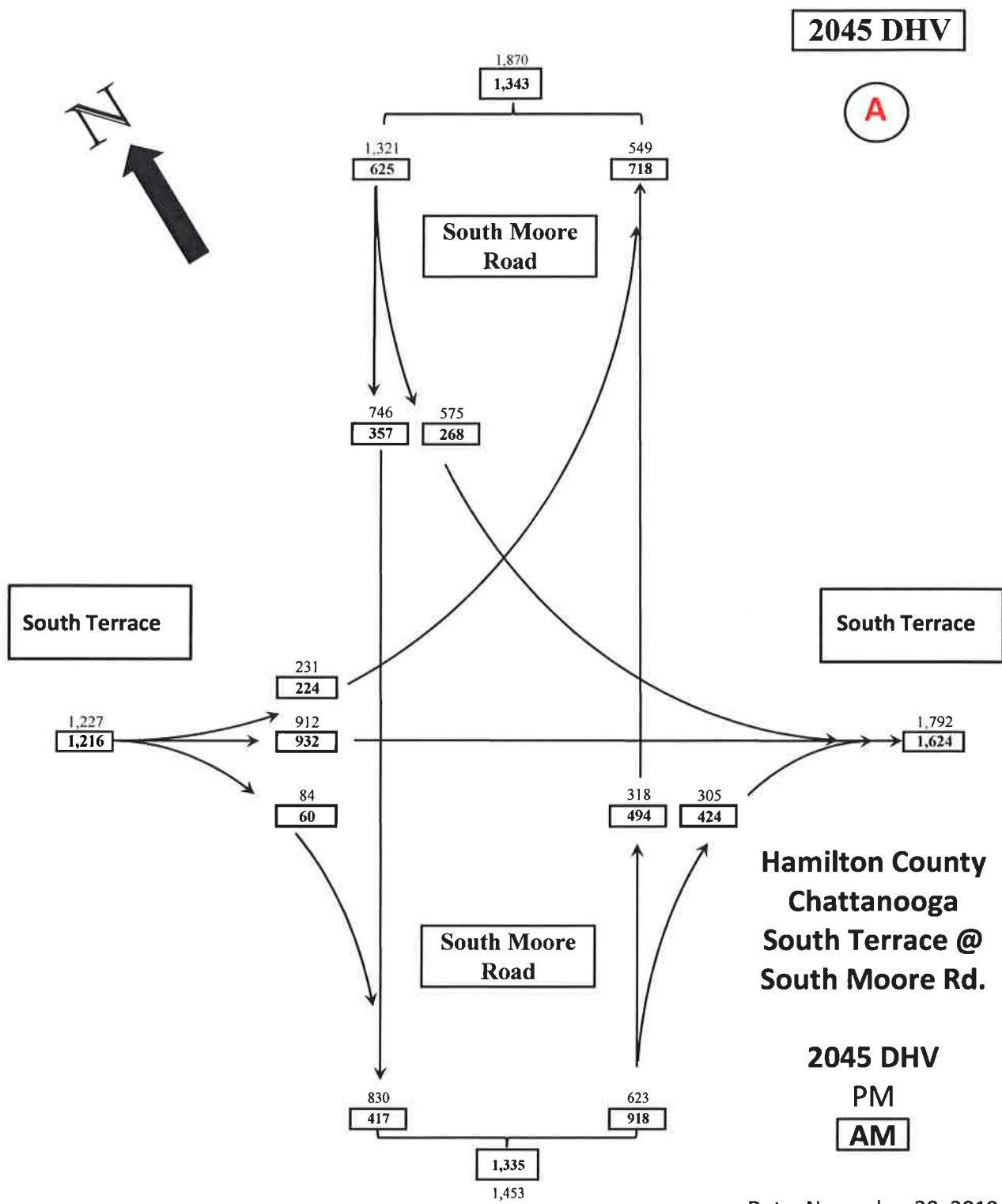
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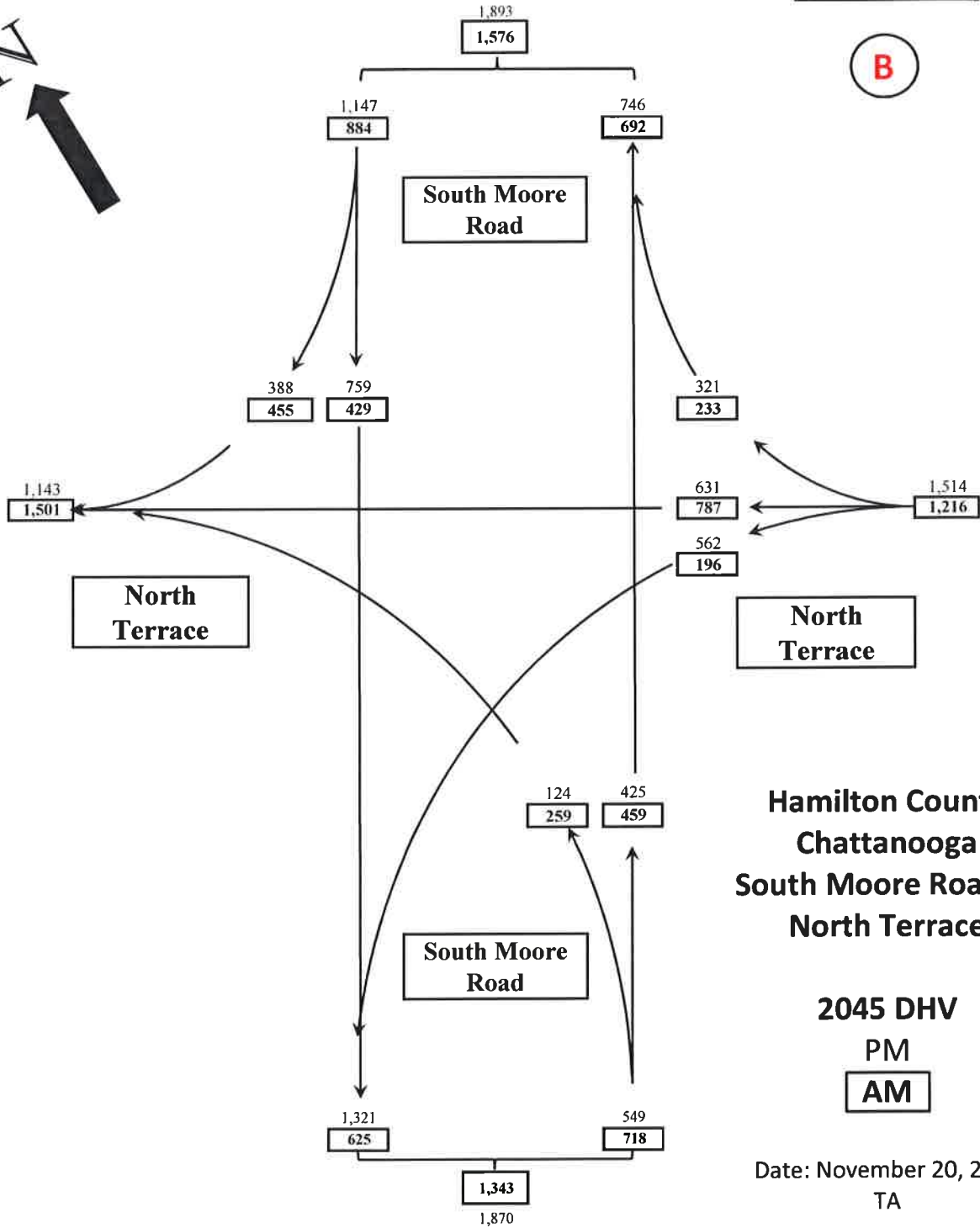
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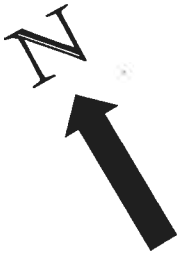
Sheet 2 of 6





Date: November 20, 2019  
TA





2045 DHV



South Terrace

South Terrace

813  
631

71  
82

557  
482

185  
67

614  
198

562  
172

McBrien Road

McBrien Road

52  
26

381  
527

130  
211

747  
239

511  
738

977  
1,258

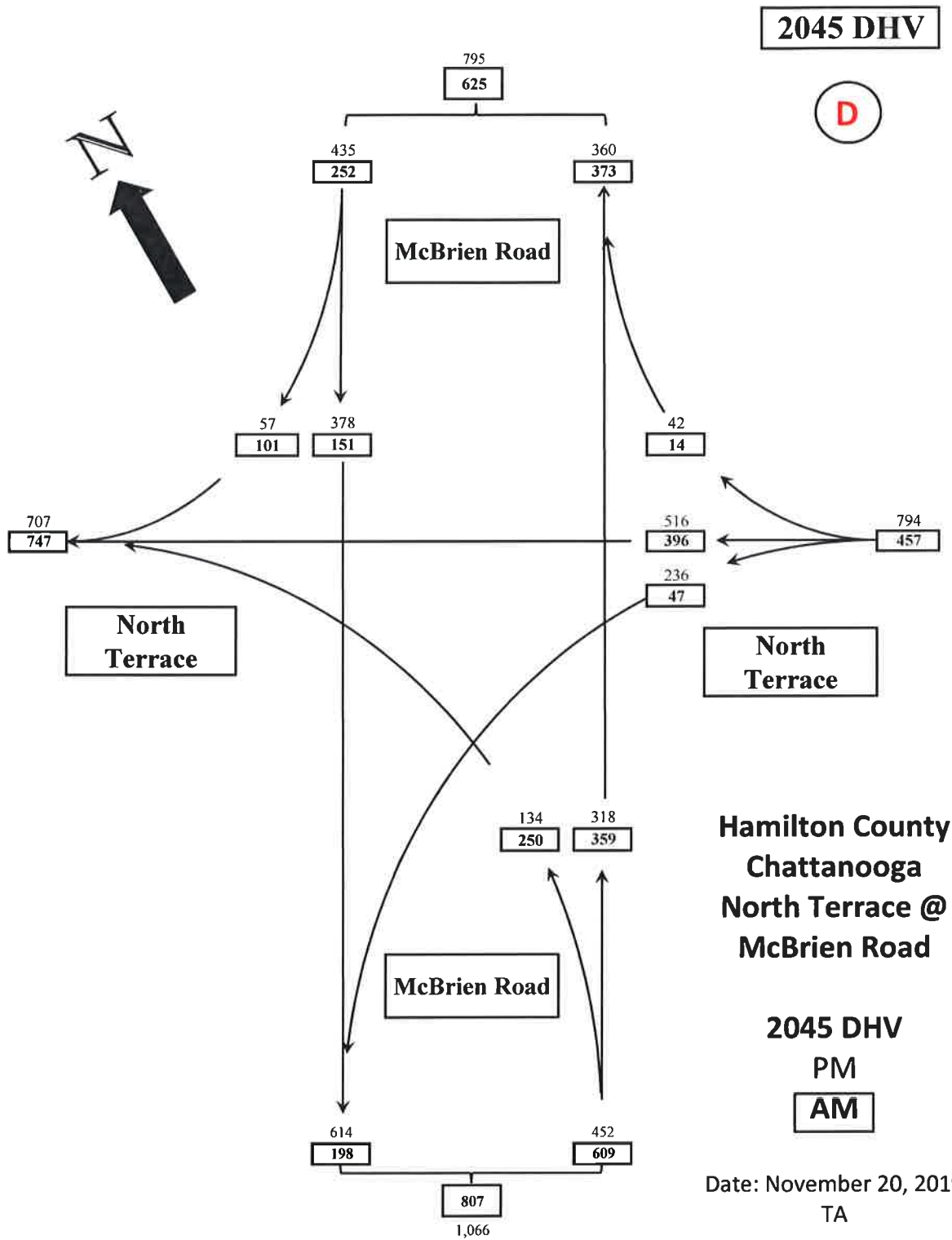
452  
609

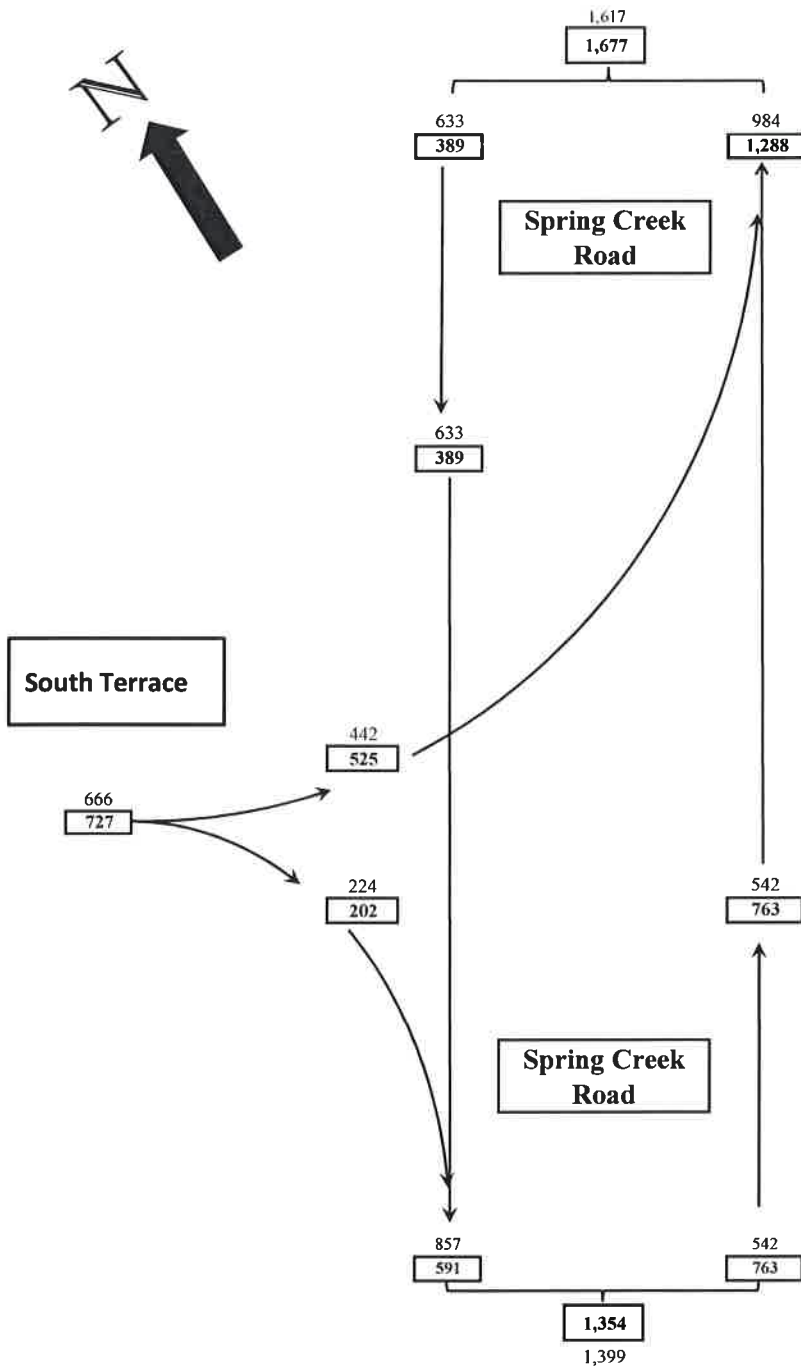
Hamilton County  
Chattanooga  
South Terrace @  
McBrien Rd.

2045 DHV  
PM  
AM

Date: November 20, 2019  
TA







2045 DHV



Hamilton County  
Chattanooga  
South Terrace @  
Spring Creek Rd.

2045 DHV

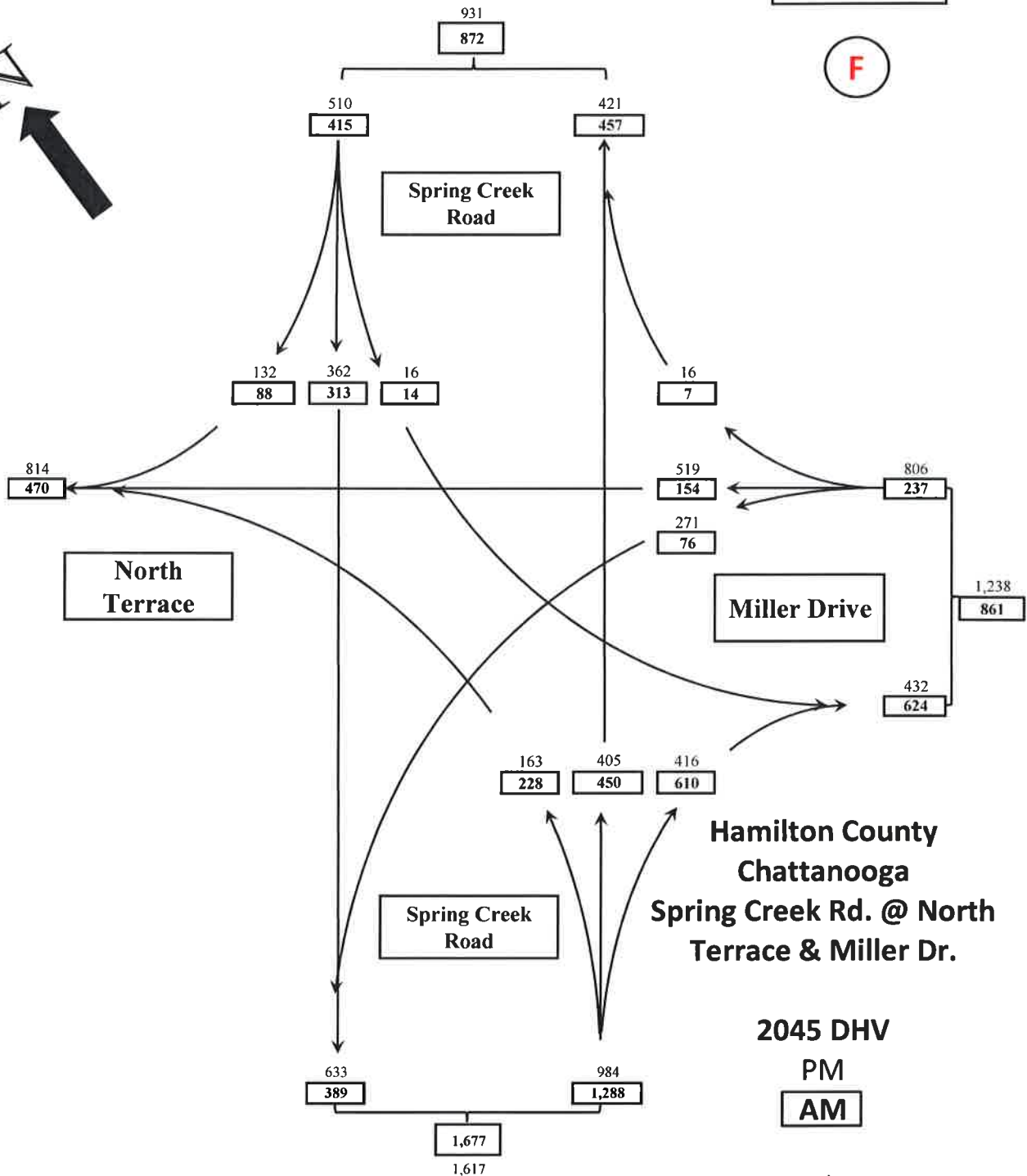
PM

AM

Date: November 20, 2019  
TA



2045 DHV



Hamilton County  
Chattanooga  
Spring Creek Rd. @ North  
Terrace & Miller Dr.

2045 DHV

PM

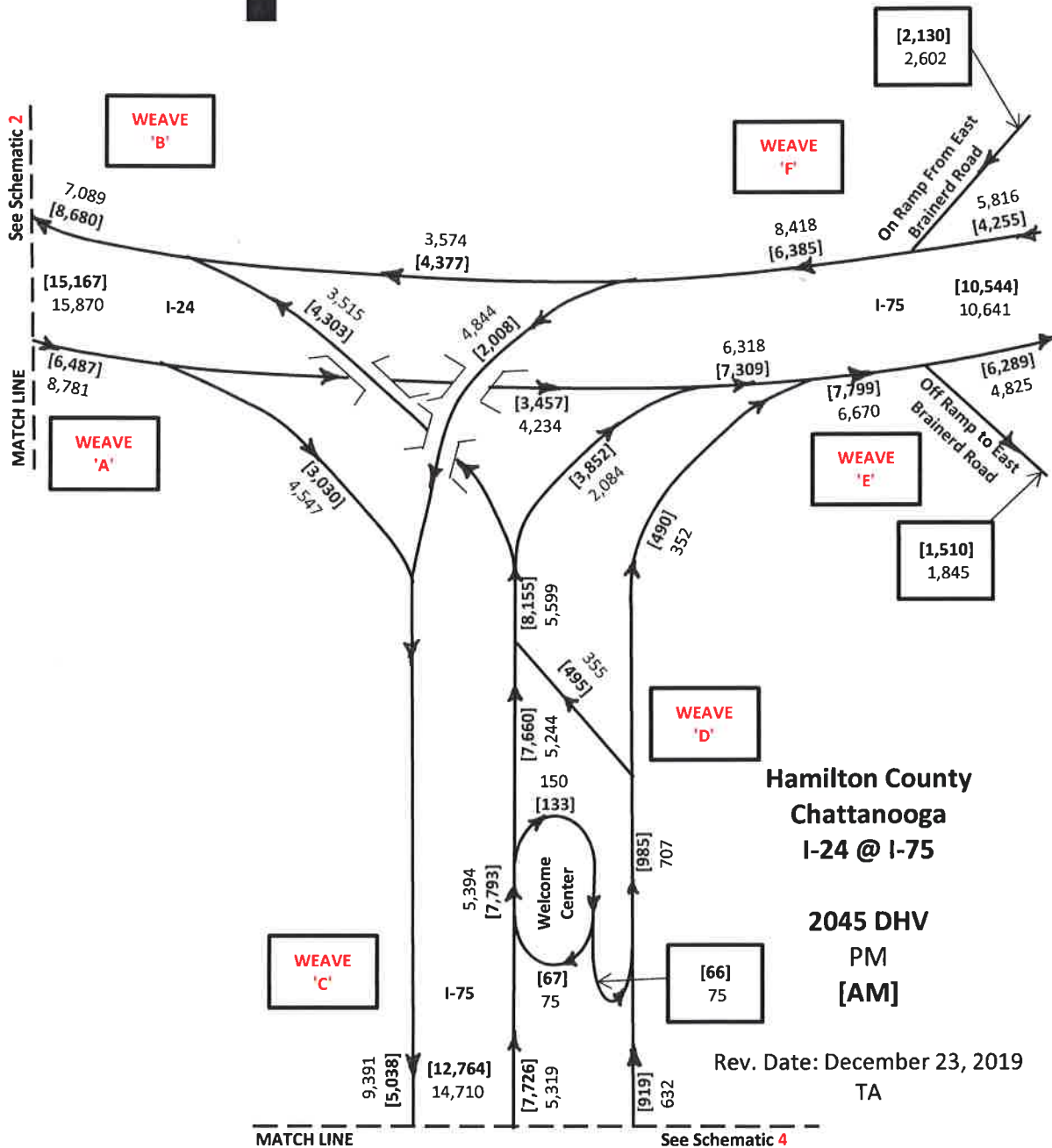
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Date: November 20, 2019  
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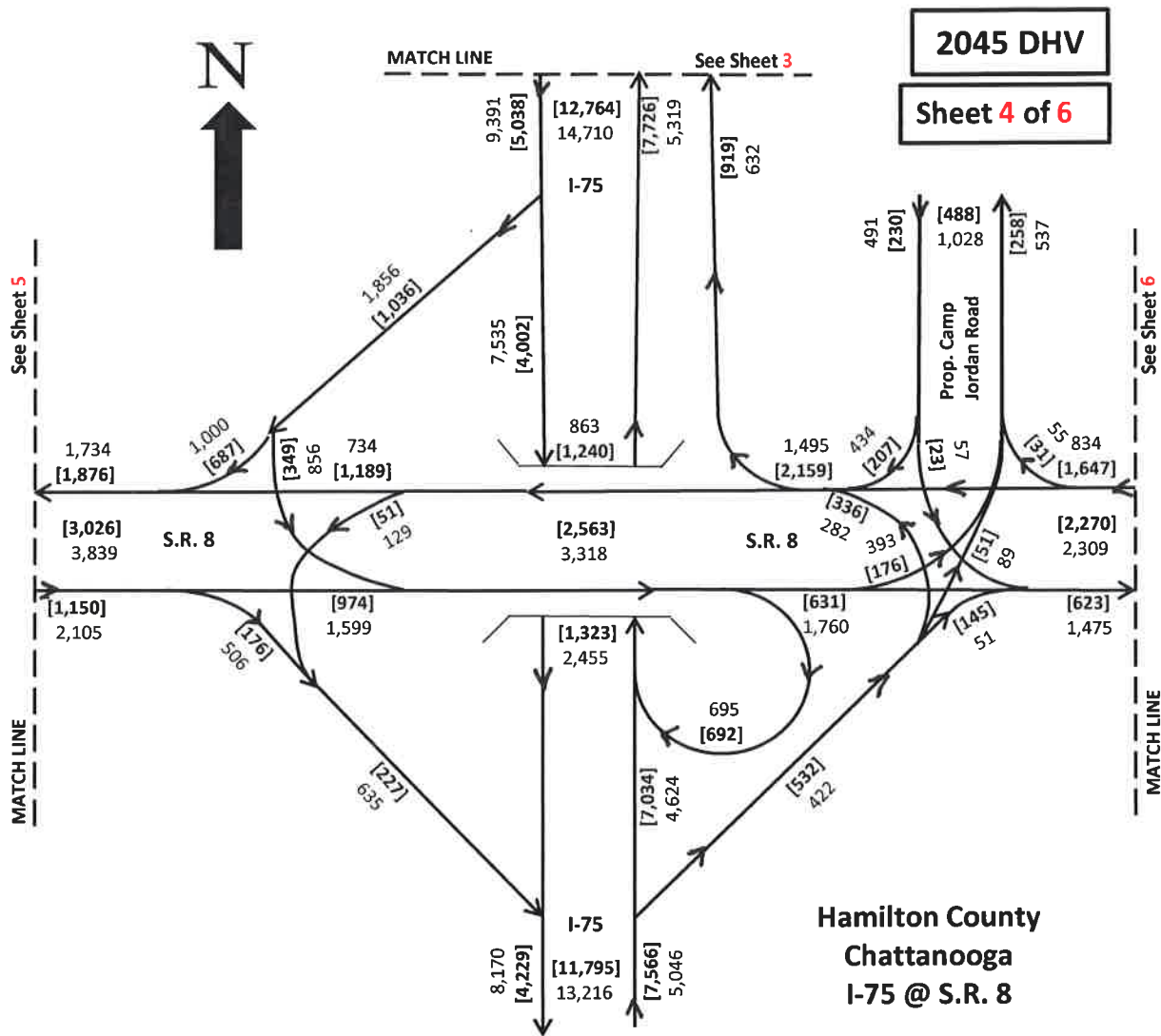


2045 DHV

Sheet 3 of 6



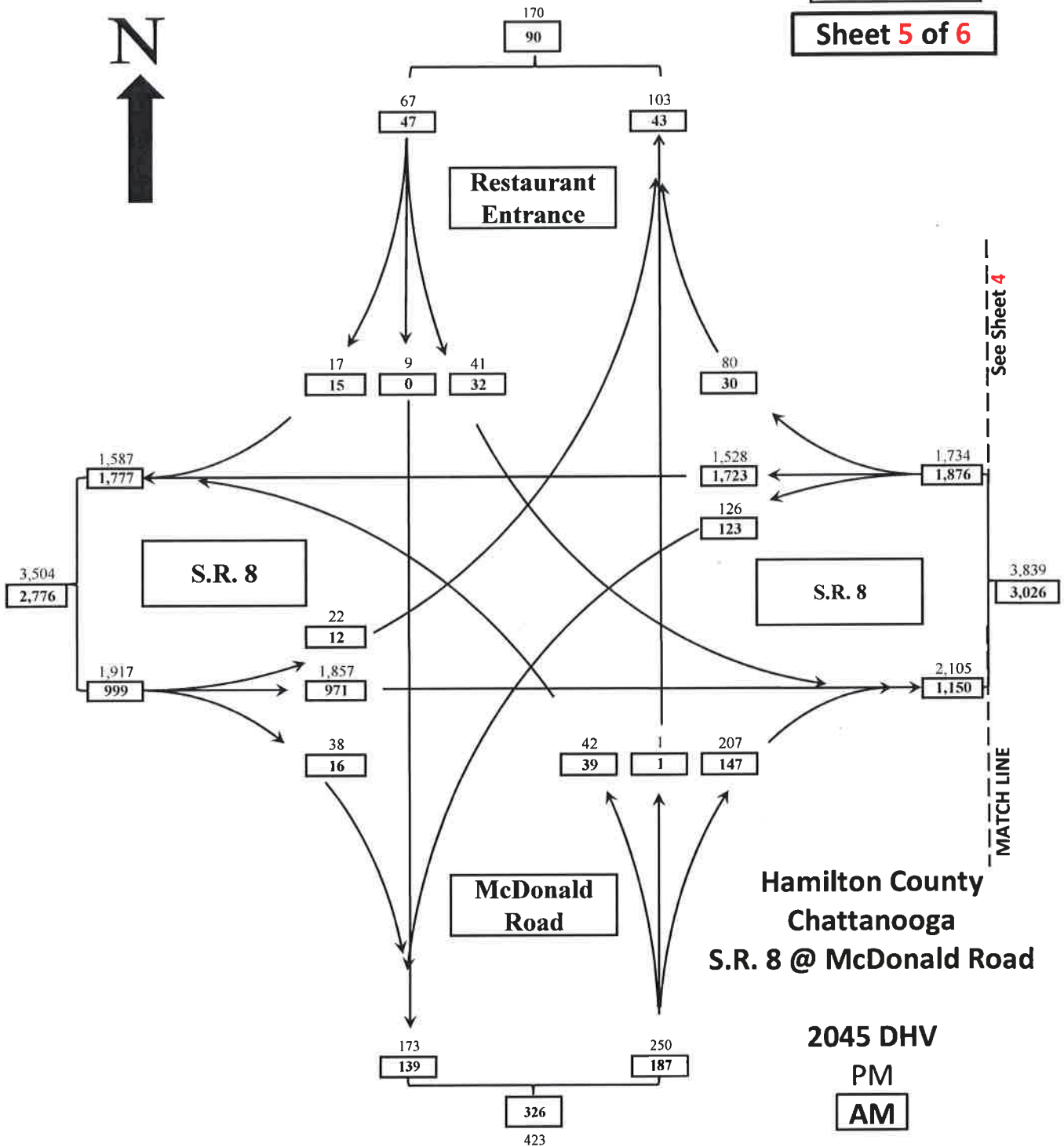






2045 DHV

Sheet 5 of 6

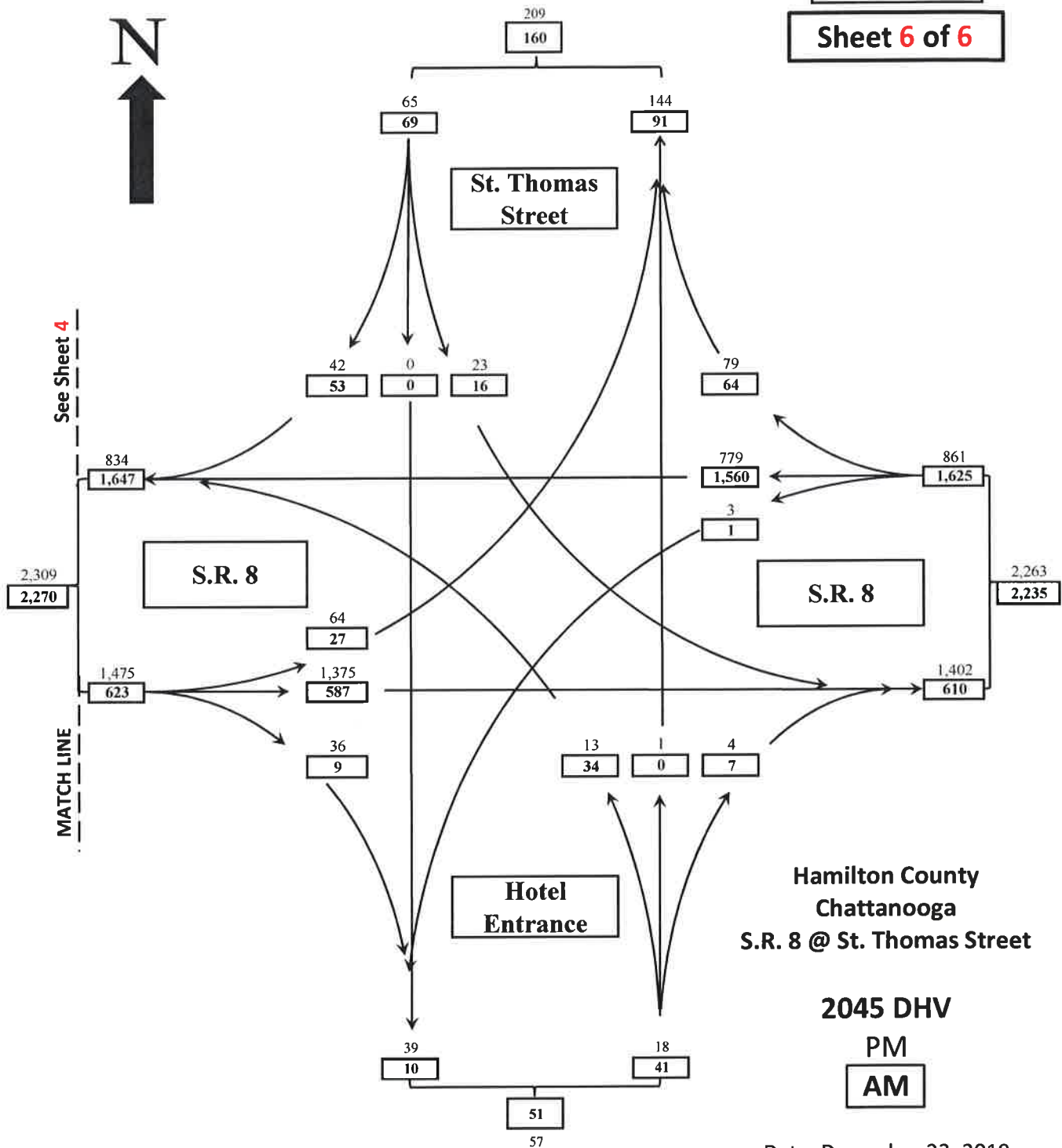


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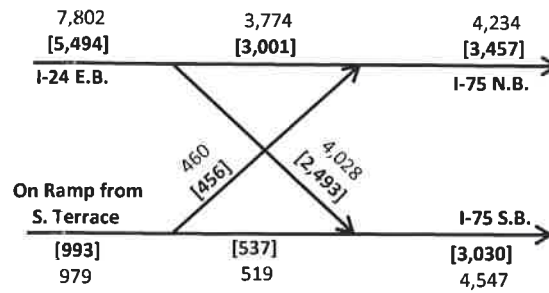
2045 DHV

Sheet 6 of 6



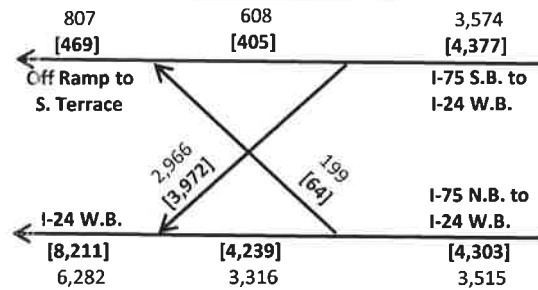
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Sheet 1 of 2



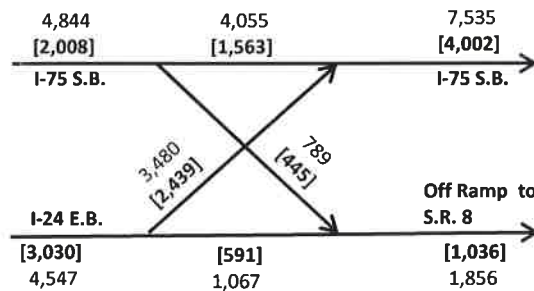
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PM  
[AM]

### Weave 'B'



2045 DHV  
PM  
[AM]

### Weave 'C'



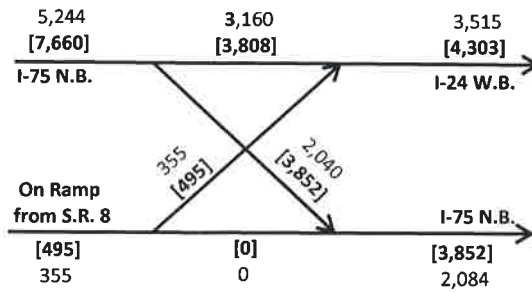
2045 DHV  
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[AM]

See DHV Sheet 2 of 3 for WEAWE Locations.



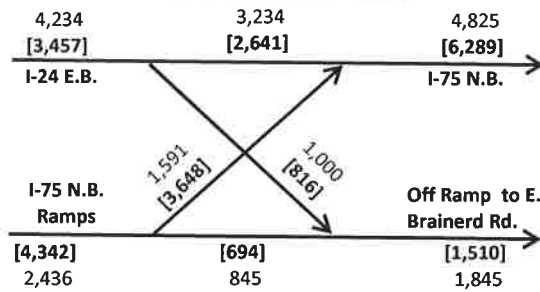
### Weave 'D'

Sheet 2 of 2



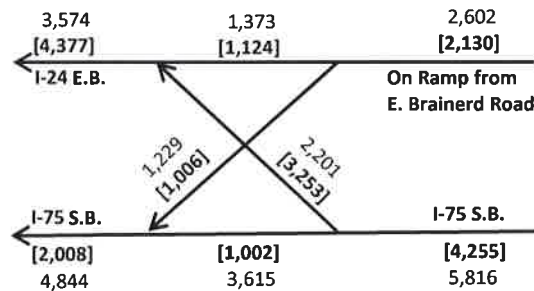
2045 DHV  
PM  
[AM]

### Weave 'E'



2045 DHV  
PM  
[AM]

### Weave 'F'



2045 DHV  
PM  
[AM]

See DHV Sheet 2 of 3 for WEAWE Locations.

<b>Project:</b>	<b>I-75 Interchange at I-24, Phase 2 (IA)</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>117174.00</b>
<b>Description:</b>	<b>Interchange Modifications</b>
<b>Design Year:</b>	<b>2045</b>
<b>Alternative:</b>	<b>Build</b>

Road	From	To	AADT Trucks	DHV Trucks	AM Peak Hour				PM Peak Hour			
					Total	Autos	MTs	HTs	Total	Autos	MTs	HTs
I-24, Ramps, and Frontage Roads												
I-24 Eastbound	Project End	Exit to S Terrace/Germantown Rd	15%	10%	5,338	4,804	104	430	7,562	6,806	147	609
	Exit to S Terrace/Germantown Rd	Entrance from S Terrace/Belvoir Ave	16%	11%	5,016	4,481	104	431	6,952	6,210	145	597
	Entrance from S Terrace/Belvoir Ave	Exit to S Terrace/S Moore Rd	14%	9%	6,055	5,490	110	455	8,262	7,491	150	621
	Exit to S Terrace/S Moore Rd	Entrance from S Terrace/S Moore Rd	16%	11%	5,494	4,908	114	472	7,802	6,970	162	670
	Entrance from S Terrace/S Moore Rd	I-75	16%	11%	6,487	5,795	135	557	8,781	7,844	183	754
I-24 Eastbound Ramps	I-24	S Terrace/Germantown Rd	3%	2%	322	316	5	1	610	598	2	10
	Entrance from S Terrace/Belvoir Ave	I-24	1%	1%	1,039	1,032	6	1	1,310	1,301	2	7
	I-24	S Terrace/S Moore Rd	1%	1%	561	557	3	1	460	457	1	2
	S Terrace/S Moore	I-24	1%	1%	993	986	5	1	979	972	1	5
I-24 Westbound	I-75	Exit to N Terrace/S Moore Rd	16%	11%	8,680	7,754	181	745	7,089	6,333	147	609
	Exit to N Terrace/S Moore Rd	Entrance from N Terrace/S Moore Rd	16%	11%	8,211	7,335	171	705	6,282	5,612	131	539
	Entrance from N Terrace/S Moore Rd	Exit to N Terrace/Germantown Rd	14%	9%	8,982	8,144	163	675	7,049	6,391	128	530
	Exit to N Terrace/Germantown Rd	Entrance from N Terrace/Germantown Rd	16%	11%	7,948	7,100	165	682	5,979	5,341	124	513
	Entrance from N Terrace/Germantown Rd	Project End	15%	10%	8,464	7,618	165	681	6,284	5,656	123	506
I-24 Westbound Ramps	I-24	N Terrace/S Moore Rd	1%	1%	469	466	3	1	807	802	4	1
	N Terrace/S Moore Rd	I-24	1%	1%	771	766	4	1	767	762	4	1
	I-24	N Terrace/Belvoir Ave	1%	1%	1,034	1,027	6	1	1,070	1,063	6	1
	N Terrace/Germantown Rd	I-24	2%	1%	516	509	6	1	305	301	3	1
S Terrace	Germantown Rd	Anderson Ave	1%	1%	1,999	1,986	11	3	914	908	5	1
	Anderson Ave	Belvoir Ave	1%	1%	1,645	1,634	9	2	918	912	5	1
	Belvoir Ave	I-24 Entrance Ramp	1%	1%	1,694	1,683	9	2	2,077	2,063	11	3
	I-24 Entrance Ramp	I-24 Exit Ramp	1%	1%	655	651	3	1	767	762	4	1
	I-24 Exit Ramp	S Moore Rd	2%	1%	1,216	1,200	13	3	1,227	1,211	13	3
	S Moore Rd	I-24 Entrance Ramp	2%	1%	1,624	1,602	17	4	1,792	1,768	19	5
	I-24 Entrance Ramp	McBrien Rd	1%	1%	631	627	3	1	813	808	4	1
	McBrien Rd	Spring Creek Rd	1%	1%	727	722	4	1	666	662	4	1
Miller Dr	Eastgate Loop	Spring Creek Rd	1%	1%	861	855	5	1	1,238	1,230	7	2
N Terrace	Spring Creek Rd	McBrien Rd	1%	1%	470	467	3	1	814	809	4	1
	McBrien Rd	I-24 Exit Ramp	1%	1%	747	742	4	1	707	702	4	1
	I-24 Exit Ramp	S Moore Rd	2%	1%	1,216	1,200	13	3	1,514	1,494	16	4
	S Moore Rd	I-24 Entrance Ramp	2%	1%	1,501	1,481	16	4	1,143	1,128	12	3
	I-24 Entrance Ramp	I-24 Exit Ramp	1%	1%	730	725	4	1	376	373	2	1
	I-24 Exit Ramp	Brookfield Ave	1%	1%	1,764	1,752	9	2	1,446	1,436	8	2
	Brookfield Ave	Belvoir Ave	1%	1%	1,335	1,326	7	2	1,402	1,393	7	2
	Belvoir Ave	Germantown Rd	1%	1%	1,160	1,152	6	2	887	881	5	1
Germantown Rd	South	S Terrace	1%	1%	1,044	1,037	6	1	1,650	1,639	9	2
	S Terrace	N Terrace	1%	1%	1,044	1,037	6	1	2,037	2,023	11	3
	N Terrace	North	1%	1%	1,689	1,678	9	2	2,146	2,132	11	3
Belvoir Ave	South	S Terrace	1%	1%	836	830	4	1	1,128	1,120	6	2
	S Terrace	N Terrace	1%	1%	926	920	5	1	1,341	1,332	7	2
S Moore Rd	N Terrace	North	1%	1%	941	935	5	1	1,036	1,029	6	1
	South	S Terrace	2%	1%	1,335	1,317	14	4	1,453	1,434	15	4
	S Terrace	N Terrace	2%	1%	1,343	1,325	14	4	1,870	1,845	20	5
	N Terrace	North	2%	1%	1,576	1,555	17	4	1,893	1,868	20	5
McBrien Rd	South	S Terrace	1%	1%	977	970	5	1	1,258	1,250	7	2
	S Terrace	N Terrace	1%	1%	807	802	4	1	1,066	1,059	6	1
	N Terrace	North	1%	1%	625	621	3	1	795	790	4	1
Spring Creek Rd	South	S Terrace	2%	1%	1,354	1,336	14	4	1,399	1,380	15	4
	S Terrace	N Terrace	1%	1%	1,677	1,666	9	2	1,617	1,606	9	2
	N Terrace	North	1%	1%	872	866	5	1	931	925	5	1

Road	From	To	AADT Trucks	DHV Trucks	AM Peak Hour				PM Peak Hour			
					Total	Autos	MTs	HTs	Total	Autos	MTs	HTs
Interchange Ramps												
I-24 Ramps	I-24 Eastbound	I-75 Northbound	16%	11%	3,457	3,088	72	297	4,234	3,782	88	364
		I-75 Southbound	16%	11%	3,030	2,707	63	260	4,547	4,062	95	390
I-75 Ramps	I-75 Northbound	I-24 Westbound	18%	12%	4,303	3,787	101	416	3,515	3,093	82	340
		I-75 Northbound	18%	12%	3,852	3,390	90	372	2,084	1,834	49	201
	I-75 Southbound	I-24 Westbound	20%	13%	4,377	3,793	114	470	3,574	3,097	93	384
		I-75 Southbound	20%	13%	2,008	1,740	52	216	4,844	4,198	126	520
I-75 South of Interchange												
I-75 Northbound	Ringgold Rd	Welcome Center	18%	12%	7,726	6,799	181	746	5,319	4,681	124	514
	Welcome Center	I-75 Entrance Ramp	18%	12%	7,660	6,741	179	740	5,244	4,615	123	507
	Entrance from Ringgold Rd	Interchange	18%	12%	8,155	7,176	191	788	5,599	4,927	131	541
NB Entrance from Ringgold Rd	Ringgold Rd	Welcome Center	18%	12%	919	809	22	89	632	556	15	61
	Welcome Center	I-75 Entrance Ramp	18%	12%	985	867	23	95	707	622	17	68
	I-75 Entrance Ramp	I-75 Northbound	18%	12%	490	431	11	47	352	310	8	34
I-75 Southbound	Interchange	Ringgold Rd	18%	12%	5,038	4,433	118	487	9,391	8,264	220	907
I-75 North of Interchange												
I-75 Northbound	Interchange	Ringgold Rd Entrance Ramp	20%	13%	7,309	6,334	190	784	6,318	5,476	164	678
	Ringgold Rd Entrance Ramp	Exit Ramp to E Brainerd Rd	20%	13%	7,799	6,759	203	837	6,670	5,781	173	716
	Exit Ramp to E Brainerd Rd	Entrance Ramp from E Brainerd Rd	20%	13%	6,289	5,450	164	675	4,825	4,182	125	518
I-75 Southbound	N of E Brainerd Rd	Entrance Ramp from E Brainerd Rd	20%	13%	4,255	3,688	111	457	5,816	5,041	151	624
	Entrance Ramp from E Brainerd Rd	Interchange	20%	13%	6,385	5,534	166	685	8,418	7,296	219	904
E Brainerd Ramps	I-75 Northbound	E Brainerd Rd	5%	3%	1,510	1,460	10	41	1,845	1,784	12	50
	E Brainerd Rd	I-75 Southbound	5%	3%	2,130	2,059	14	57	2,602	2,515	17	70

**Appendix D**  
**TNM Checklists and Plan Views**



*All modeling must be done in accordance with TDOT's Noise Procedures and TNM Modeling Guidelines*

<b>Project</b>	<b>I-75 Interchange at I-24</b>
<b>County</b>	<b>Hamilton</b>
<b>PIN</b>	<b>114174.01</b>
<b>Project Number</b>	<b>33005-0176-44</b>
<b>Project Plans Description and Date</b>	
<b>Traffic Data Source and Date</b>	
<b>TNM Modeler</b>	<b>R. Williamson</b>
<b>Date Checklist Completed</b>	<a href="#">Click here to enter a date.</a>
<b>TNM Reviewer</b>	<b>G. Pratt</b>
<b>Date Checklist Completed</b>	10/15/2021

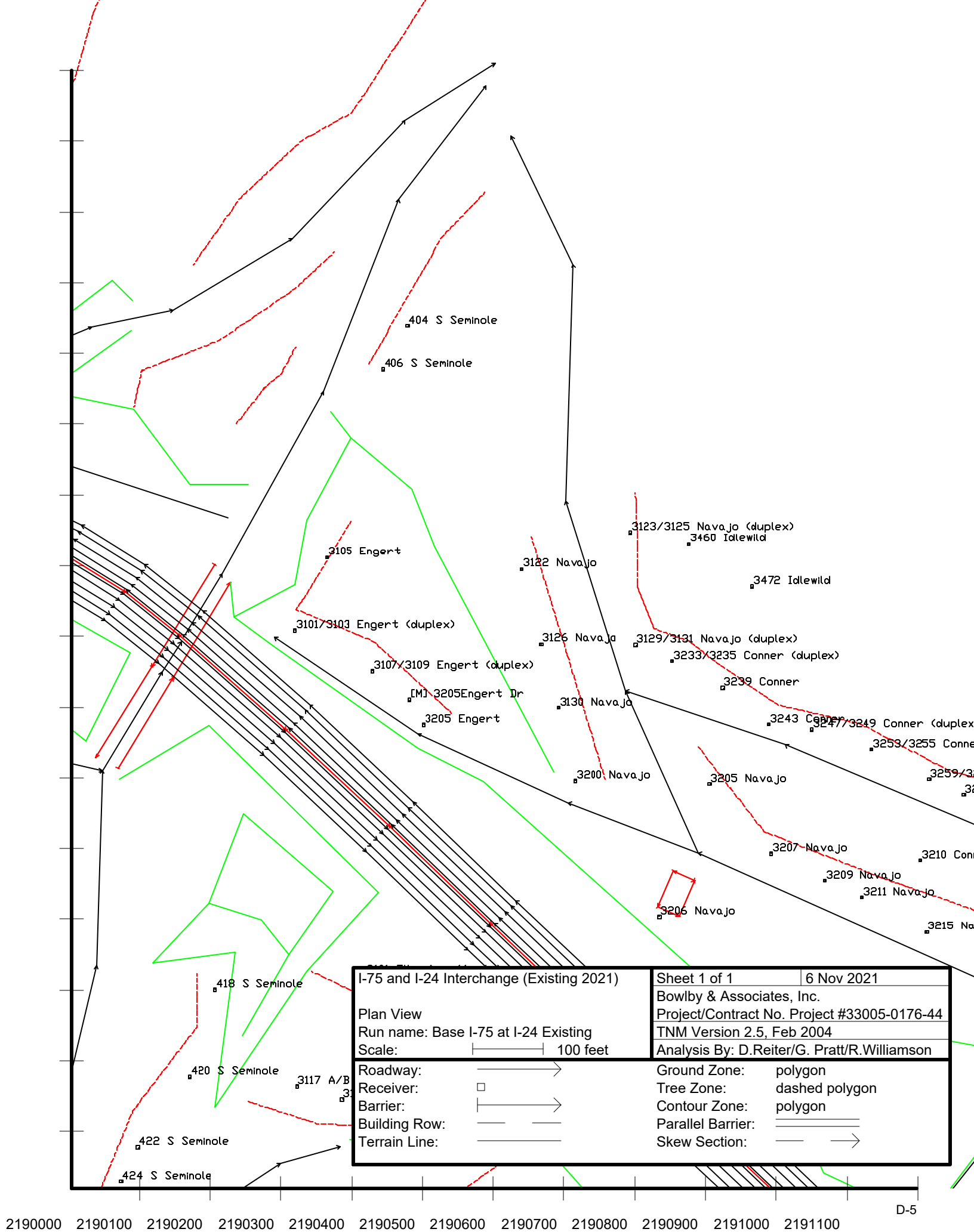
<b>TNM Run</b>	<b>I-75 at I-24 Existing</b>		<b>Modeling Year</b>	2021
<b>Input</b>	<b>Task</b>	<b>Complete?</b>	<b>Notes</b>	
Setup	Run Information	<input checked="" type="checkbox"/>		
	General	<input checked="" type="checkbox"/>		
Roadways	Roadway names assigned	<input checked="" type="checkbox"/>		
	Widths of All Roadways per Guidance	<input type="checkbox"/>	<b>Roadway "Sheridan" overlaps with Terrain Line "Sheridan Dr"</b> <b>Roadway "Thornton" overlaps with Ground Zones Brainerd XRoads PL 1 and 2."</b> <b>Fair amount of default lawn in the median of I-75, especially in the curve. {fixed, RW}</b>	
	Lengths of all roadways are adequate to represent roadway contributions	<input checked="" type="checkbox"/>		
	Points tied to stationing if available	<input checked="" type="checkbox"/>		
	Elevations seem correct	<input checked="" type="checkbox"/>		
	Traffic/Speeds on all Roadways	<input type="checkbox"/>	<b>Not yet</b>	
	Modeled traffic volumes match projections and truck percentages are correct	<input type="checkbox"/>		






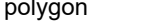

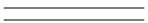
TNM Run	I-75 at I-24 Existing	Modeling Year	2021
Input	Task	Complete?	Notes
	Traffic Flow Control Devices Modeled (Traffic Signals, Stop Signs, & On-Ramps)	<input type="checkbox"/>	Needed on Ramp D? <b>{fixed, RW}</b>
	Roadways modeled on structure as appropriate	<input checked="" type="checkbox"/>	Need Crest Road Overpass? <b>{added, RW}</b>
Receivers	Receivers named by address or stationing; "M" identifies measurement rec's	<input checked="" type="checkbox"/>	
	Number of dwelling units set for each receiver (if applicable)	<input checked="" type="checkbox"/>	
	Receivers in order of adjacent traffic flow	<input checked="" type="checkbox"/>	
	Elevations appear to be correct	<input type="checkbox"/>	Check pictures for the soccer stadium. It looks like they built up an embankment for the stadium. <b>{need clarification on this; no change, RW}</b>
	Elevations at second-story locations at appropriate heights (if applicable)	<input checked="" type="checkbox"/>	
	Enough receivers modeled (for impacts and benefits)	<input type="checkbox"/>	Do the receivers south of the project limits on I-75 heading into Georgia need to be removed (south of the soccer stadium)? <b>{fixed, RW}</b>
	NAC set per State's Policy for each receiver/ land use	<input checked="" type="checkbox"/>	
	Noise Reduction set per State's Policy	<input checked="" type="checkbox"/>	
	Substantial Increase set per State's Policy	<input checked="" type="checkbox"/>	
Barriers	Significant buildings modeled	<input checked="" type="checkbox"/>	
	Parapets, etc. modeled	<input checked="" type="checkbox"/>	
	Perturbable barriers modeled as applicable	<input checked="" type="checkbox"/>	
	Barrier names assigned	<input checked="" type="checkbox"/>	
	Barrier points named by stationing or length	<input type="checkbox"/>	
	Barrier heights assigned	<input checked="" type="checkbox"/>	
	Elevations appear to be correct	<input type="checkbox"/>	Elevations of I-75 SB parapet 242.5-241 and I-75 NB parapet 242-243.5 look wrong. <b>{fixed</b>

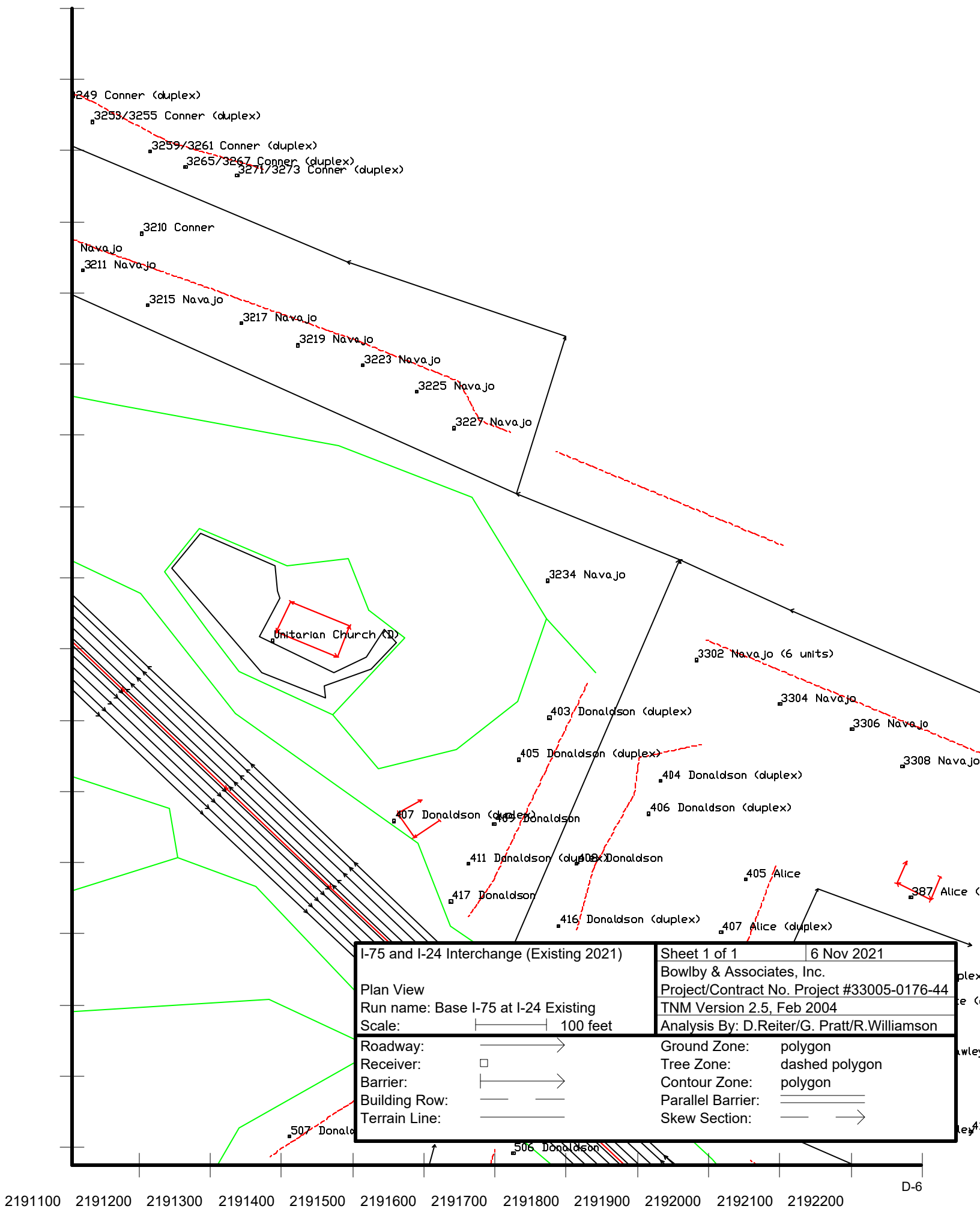
TNM Run	I-75 at I-24 Existing		Modeling Year	2021
Input	Task	Complete?	Notes	
			<b>coordinates, point names, and object names based on new stationing, RW}</b>	
	Increment and #up/down assigned	<input checked="" type="checkbox"/>		
	Barriers modeled on structure as appropriate and shielded lists are correct	<input checked="" type="checkbox"/>		
Building Rows	Building rows modeled per FHWA Guidance	<input checked="" type="checkbox"/>		
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
	Height and percentage assigned	<input checked="" type="checkbox"/>		
Terrain Lines	Significant terrain features modeled	<input checked="" type="checkbox"/>		
	Terrain line names assigned	<input type="checkbox"/>	<b>Some generic names (no change, RW)</b>	
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
Ground Zones	Ground Zones modeled per FHWA Guidance	<input checked="" type="checkbox"/>		
	Ground zone names assigned	<input type="checkbox"/>	<b>Ground Zone47 {fixed, RW}</b>	
	Ground zone types assigned	<input checked="" type="checkbox"/>	<b>Should the soccer field (Ground Zone47) be Hard Soil?</b> Tree zn of NAA 18 is pavement? This zone includes the soccer stadium. <b>{changed soccer field to loose soil (for turf) and deleted "Tree zn..", RW}</b>	
Tree Zones	Tree zones modeled per FHWA Guidance	<input checked="" type="checkbox"/>		
	Tree zone names assigned	<input type="checkbox"/>	<b>Generic name {fixed, RW}</b>	
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
Perspective Views	Perspective views checked for accuracy	<input checked="" type="checkbox"/>		
Skew Views	Numerous skew views cut and checked for accuracy	<input checked="" type="checkbox"/>		
Input Check	Input Check completed and errors fixed/documentated	<input type="checkbox"/>	Illegal intersection: Ground zone 'Tree zn of NAA 18' and Ground zone 'Ground Zone47' Inconsistent intersection: Terrain Line 'N Chickamauga Cr.:point227' and	

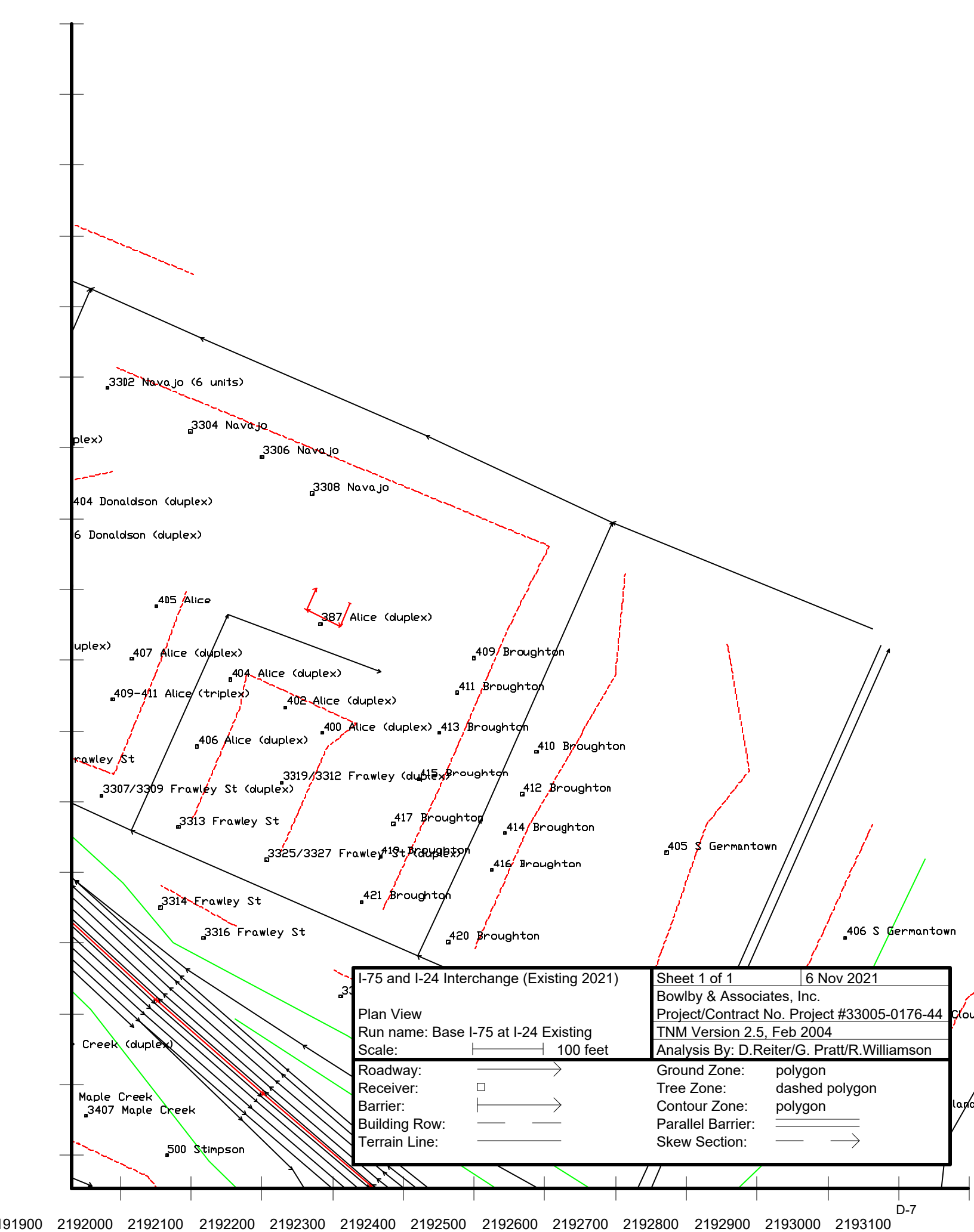
TNM Run	I-75 at I-24 Existing		Modeling Year	2021
Input	Task	Complete?	Notes	
			Barrier 'I-75 SB parapet 204-201.5::I75SB 204' Inconsistent intersection: Terrain Line 'N Chickamauga Cr.:point228' and Barrier 'I-75 SB parapet 204-201.5::I75SB 204' Inconsistent intersection: Barrier 'I-75 SB parapet 204-201.5::I75SB 204' and Terrain Line 'Terrain Line105::point699' <b>{fixed, RW}</b>	

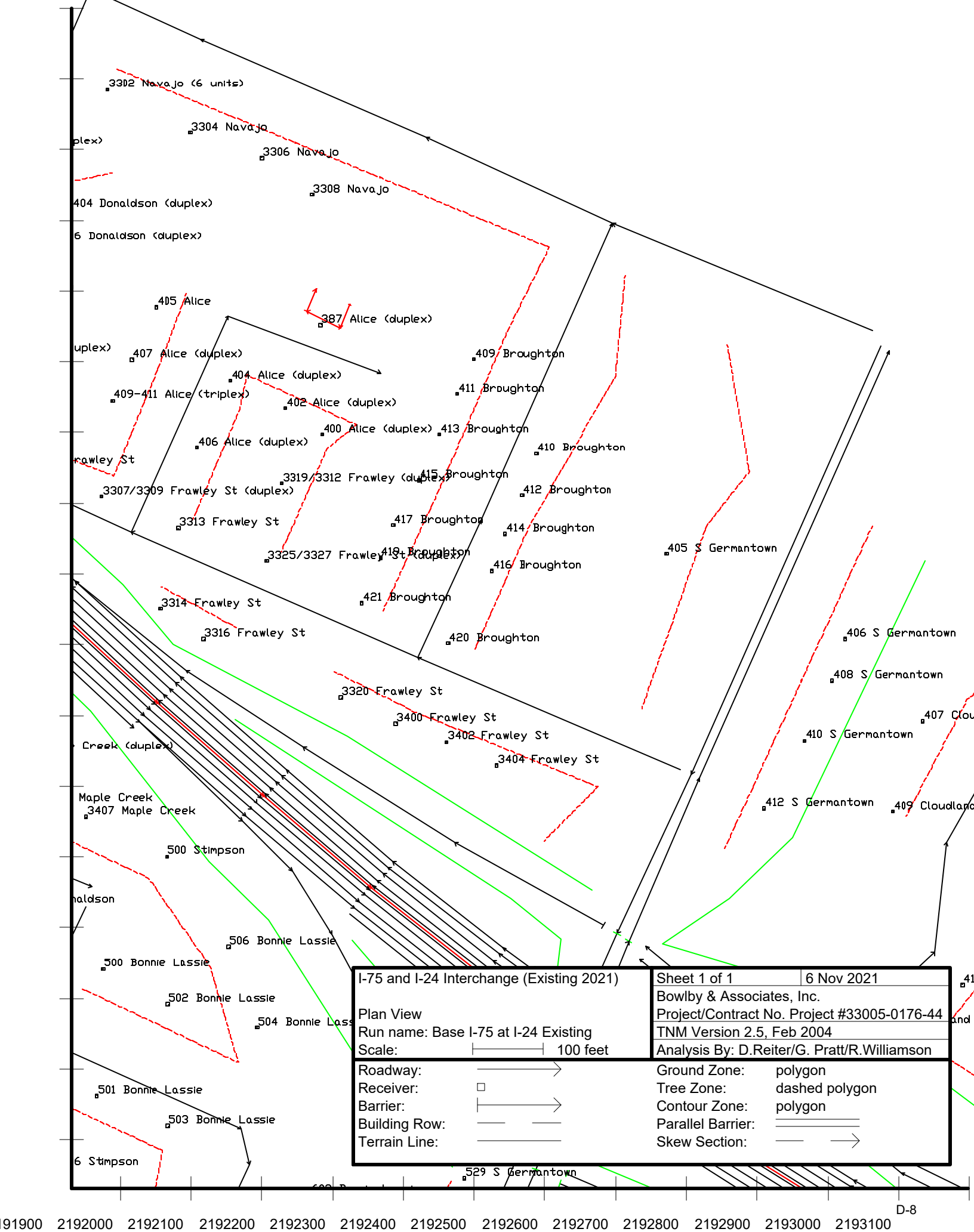




I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	







### I-75 and I-24 Interchange (Existing 2021)

Plan View

Run name: Base I-75 at I-24 Existing

Scale: 100 feet

Roadway: ———→

Receiver: □

Barrier: ———→

Building Row: ————

Terrain Line: ————

Sheet 1 of 1

6 Nov 2021

Bowlby & Associates, Inc.

Project/Contract No. Project #33005-0176-44

TNM Version 2.5, Feb 2004

Analysis By: D.Reiter/G. Pratt/R.Williamson

Ground Zone: polygon

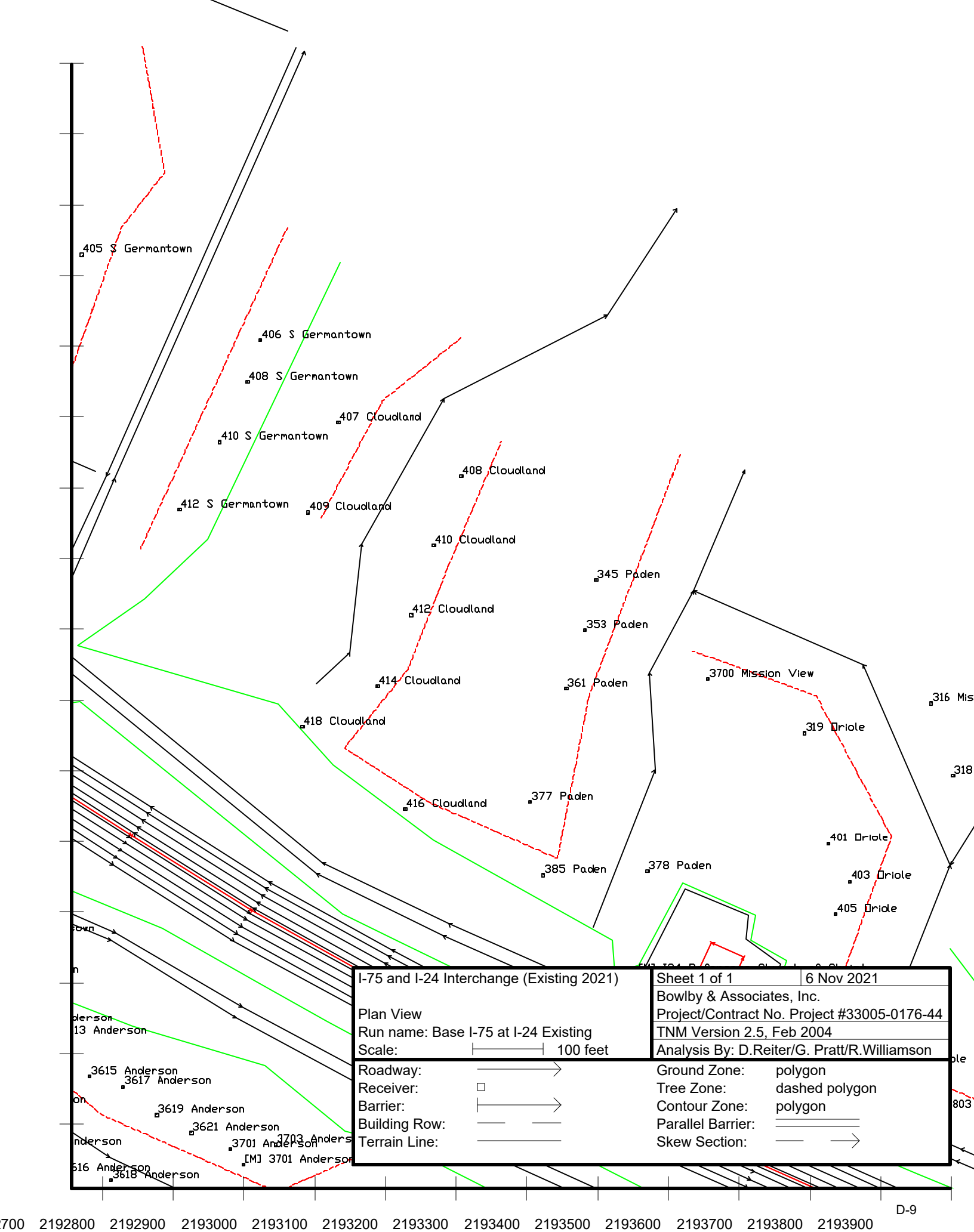
Tree Zone: dashed polygon

Contour Zone: polygon

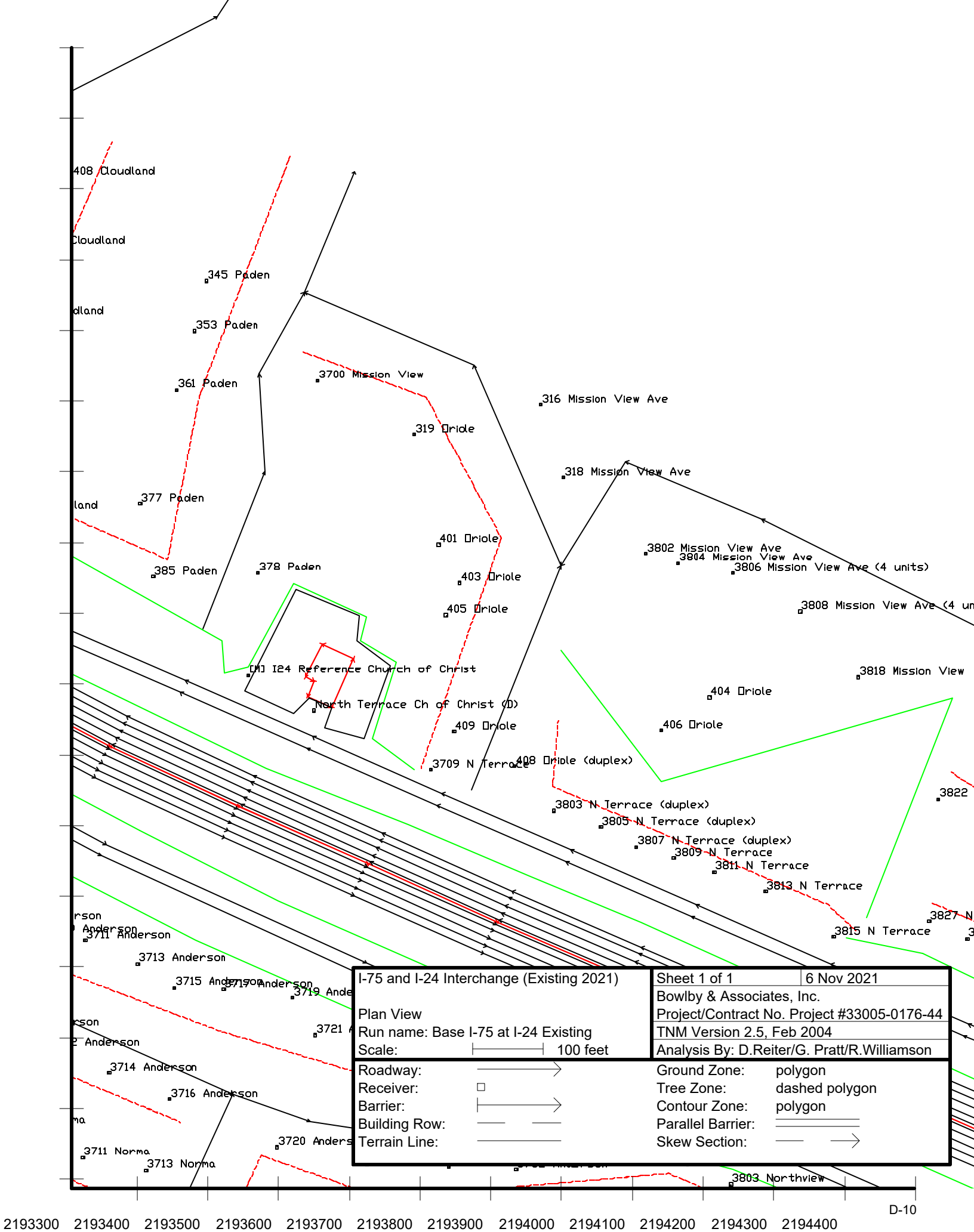
Parallel Barrier: ————

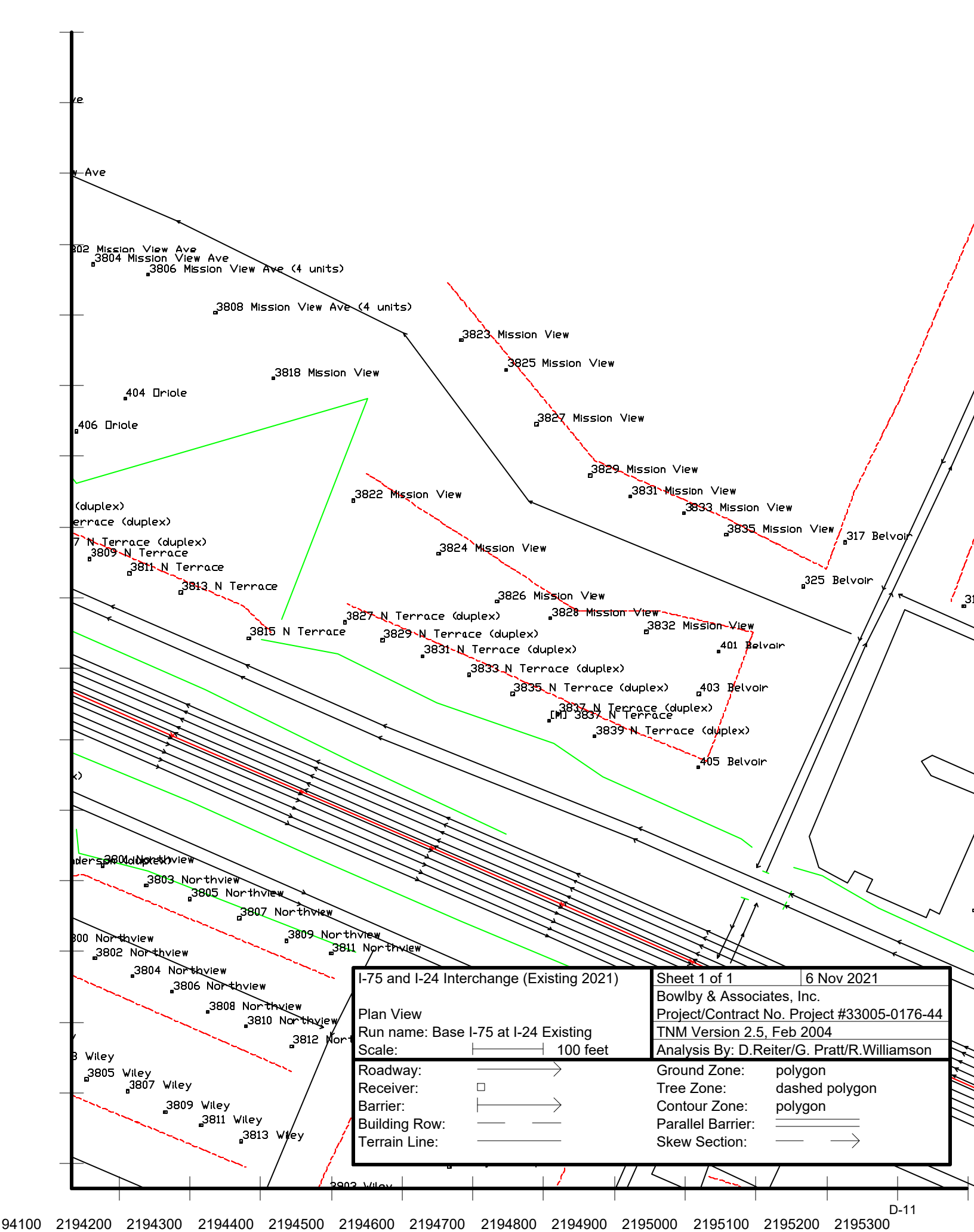
Skew Section: ———→



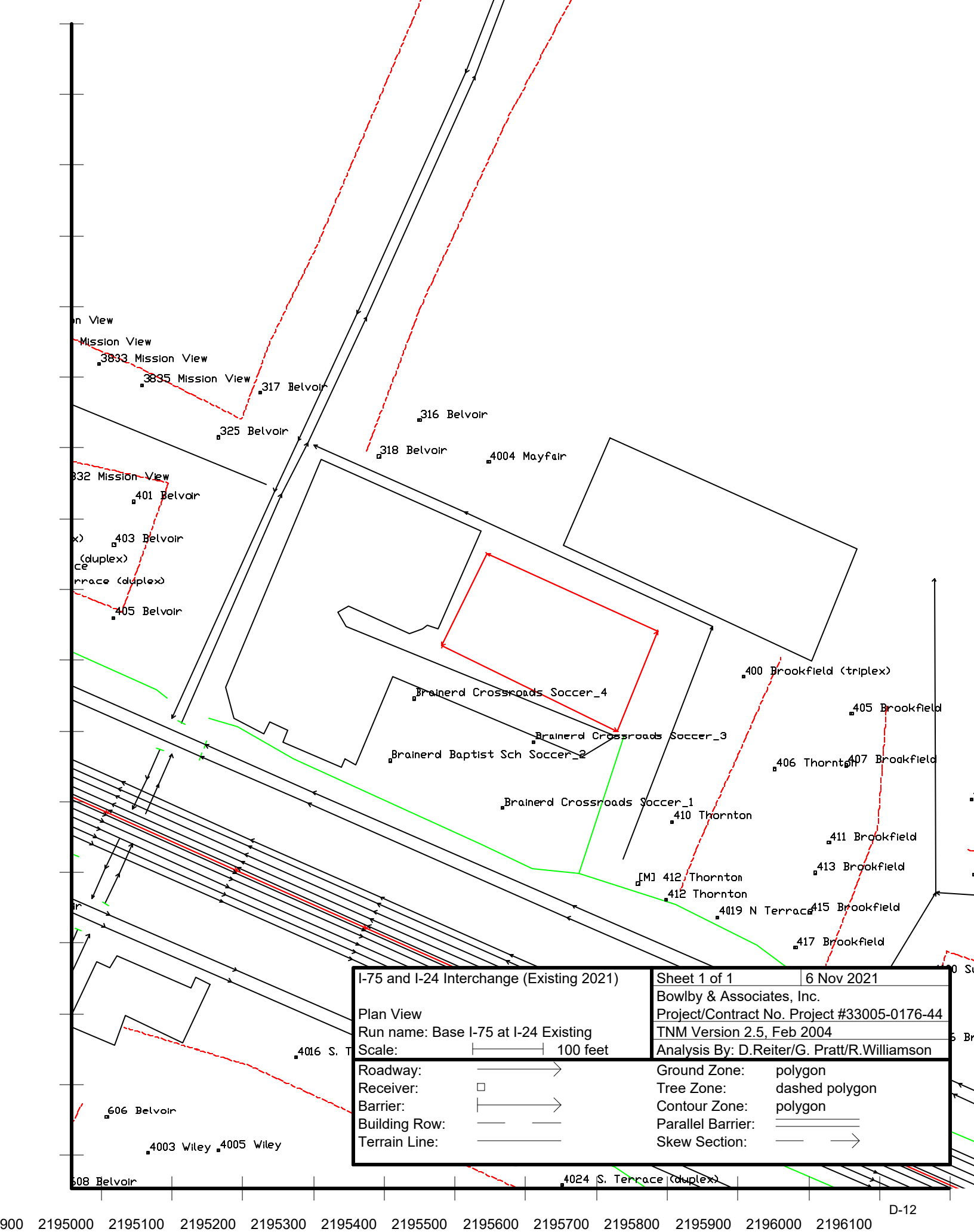


I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Bowlby & Associates, Inc.			
Project/Contract No. Project #33005-0176-44			
TNM Version 2.5, Feb 2004			
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	—————>	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	—————>	Contour Zone:	polygon
Building Row:	—————	Parallel Barrier:	—————
Terrain Line:	—————	Skew Section:	—————>

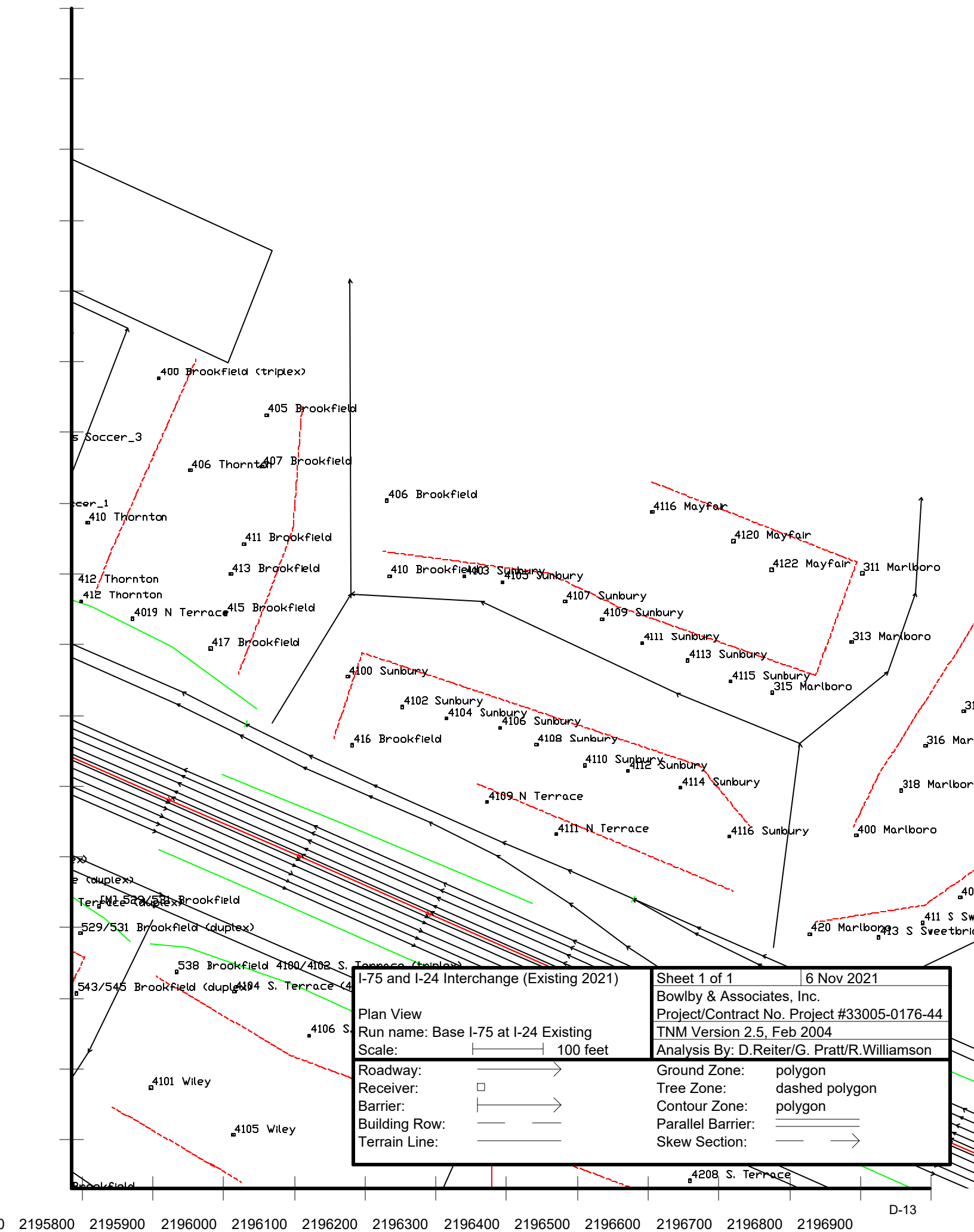


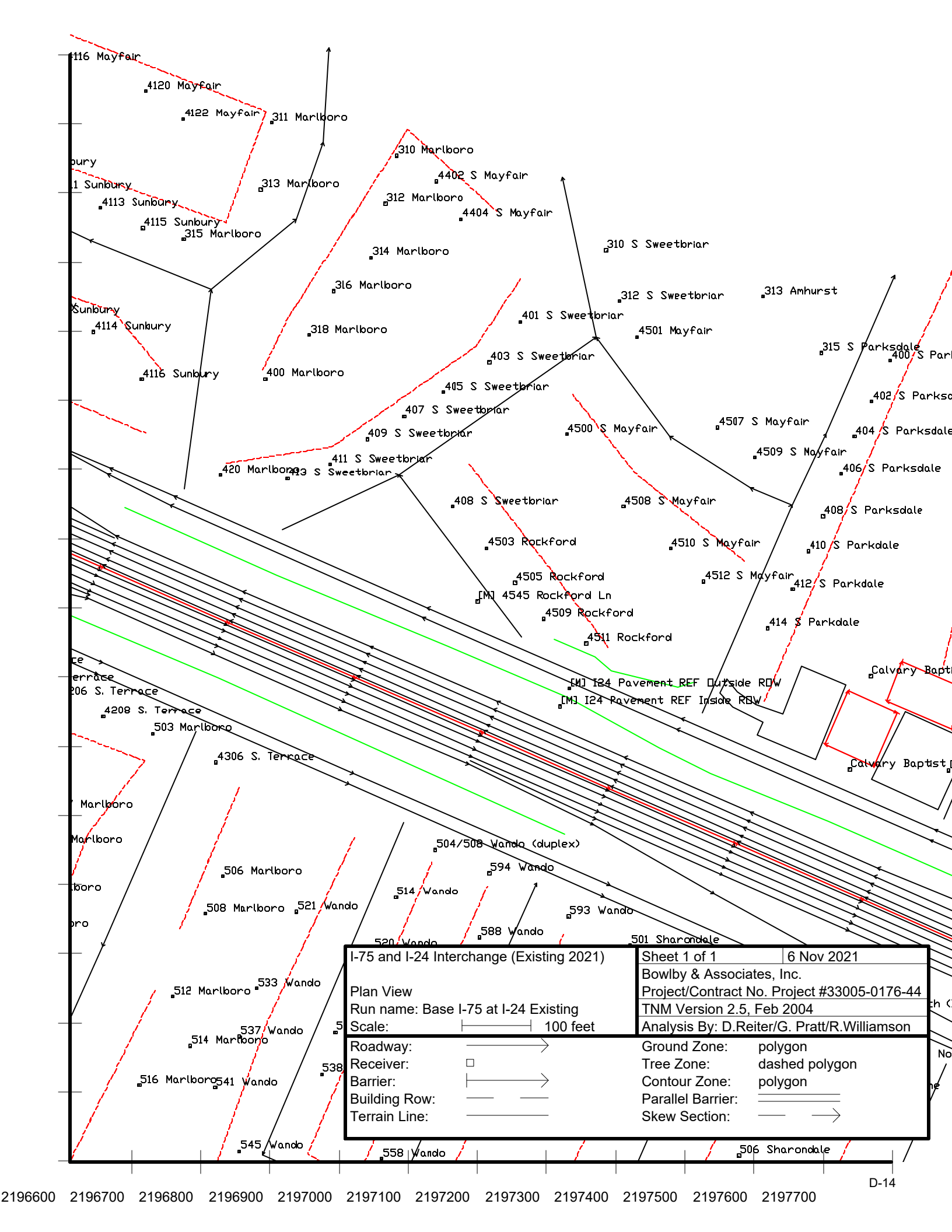









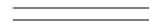
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 100 feet		TNM Version 2.5, Feb 2004	
Roadway: —————>		Ground Zone: polygon	
Receiver: □		Tree Zone: dashed polygon	
Barrier: —————>		Contour Zone: polygon	
Building Row: —————		Parallel Barrier: —————	
Terrain Line: —————		Skew Section: —————>	

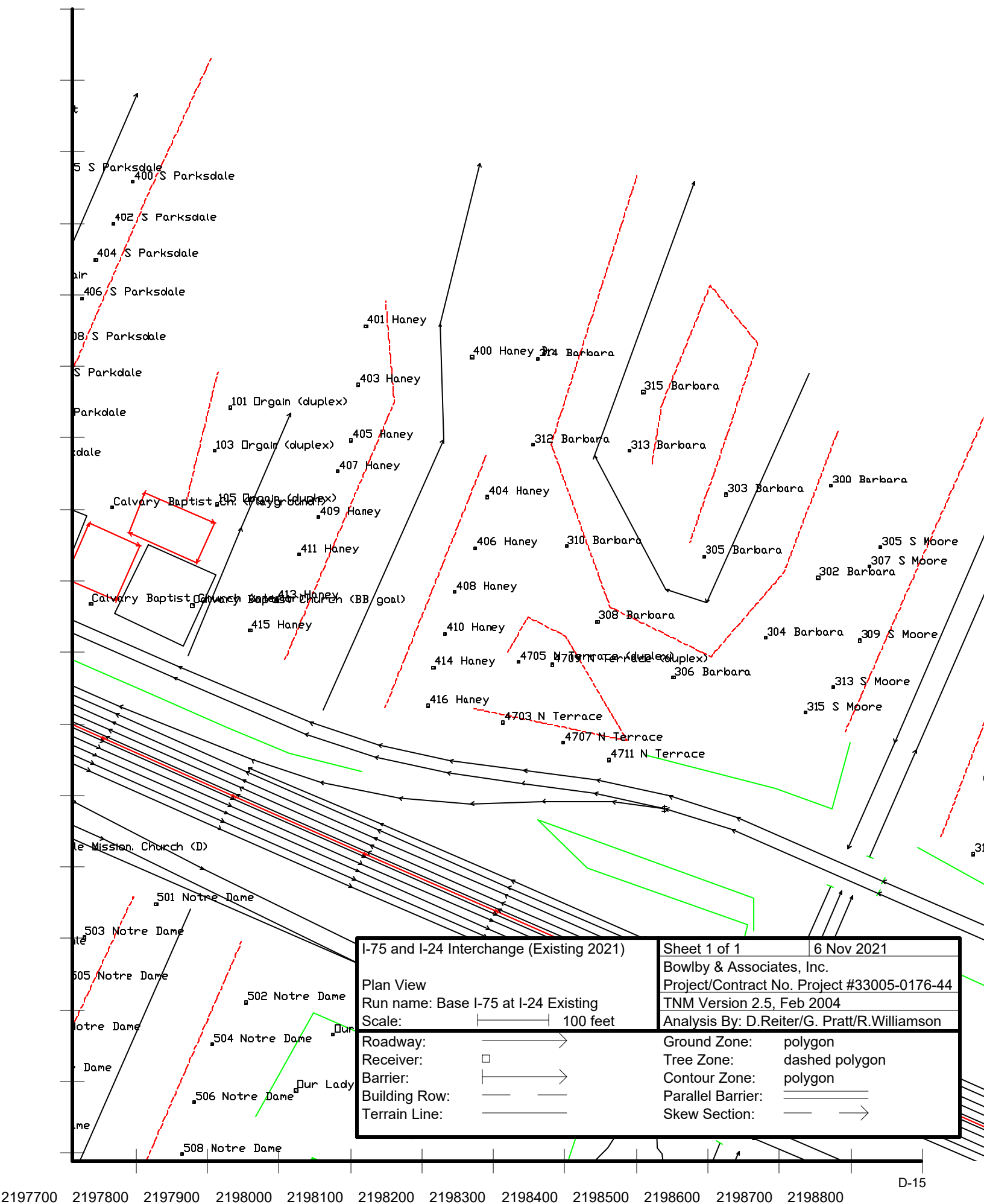


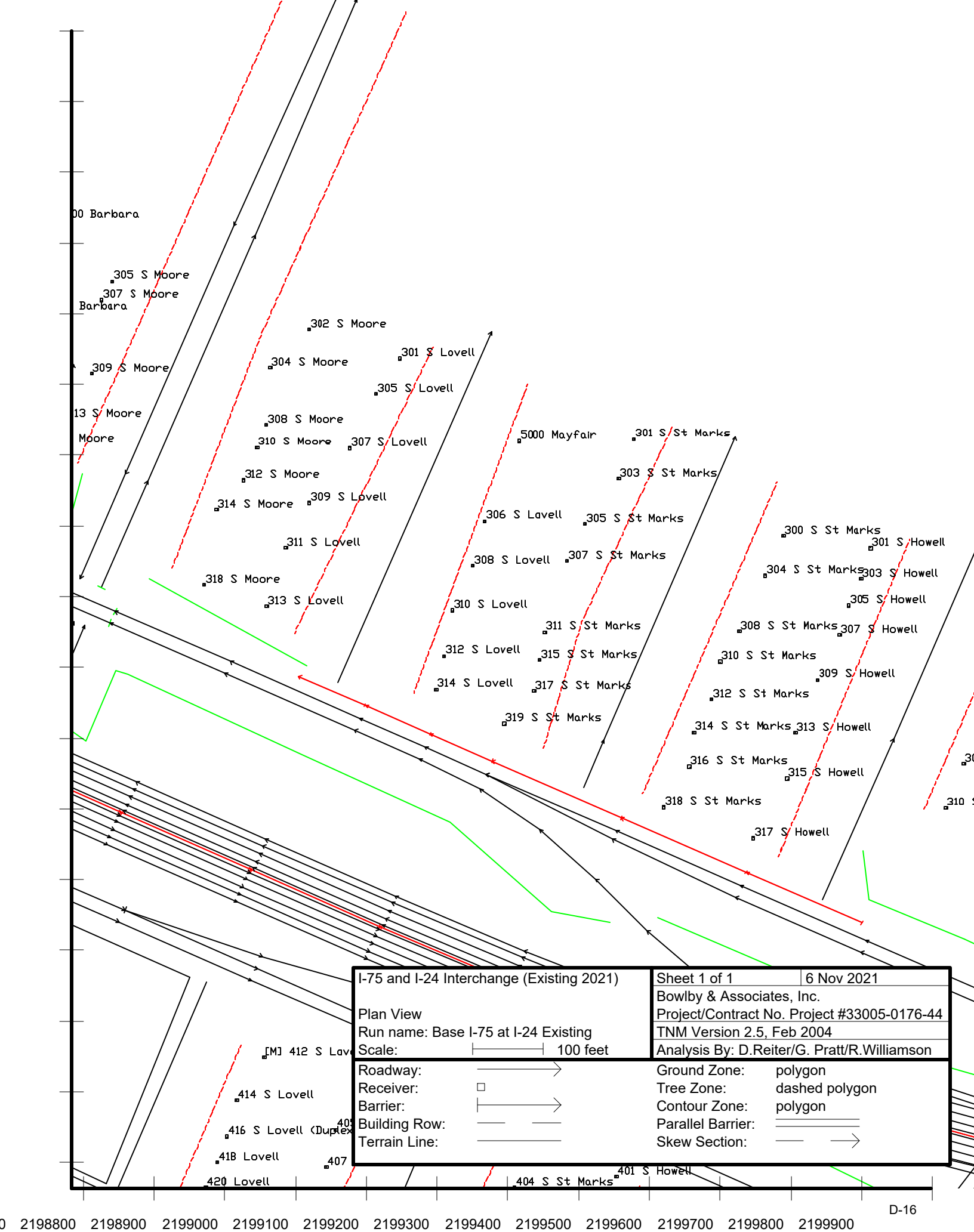






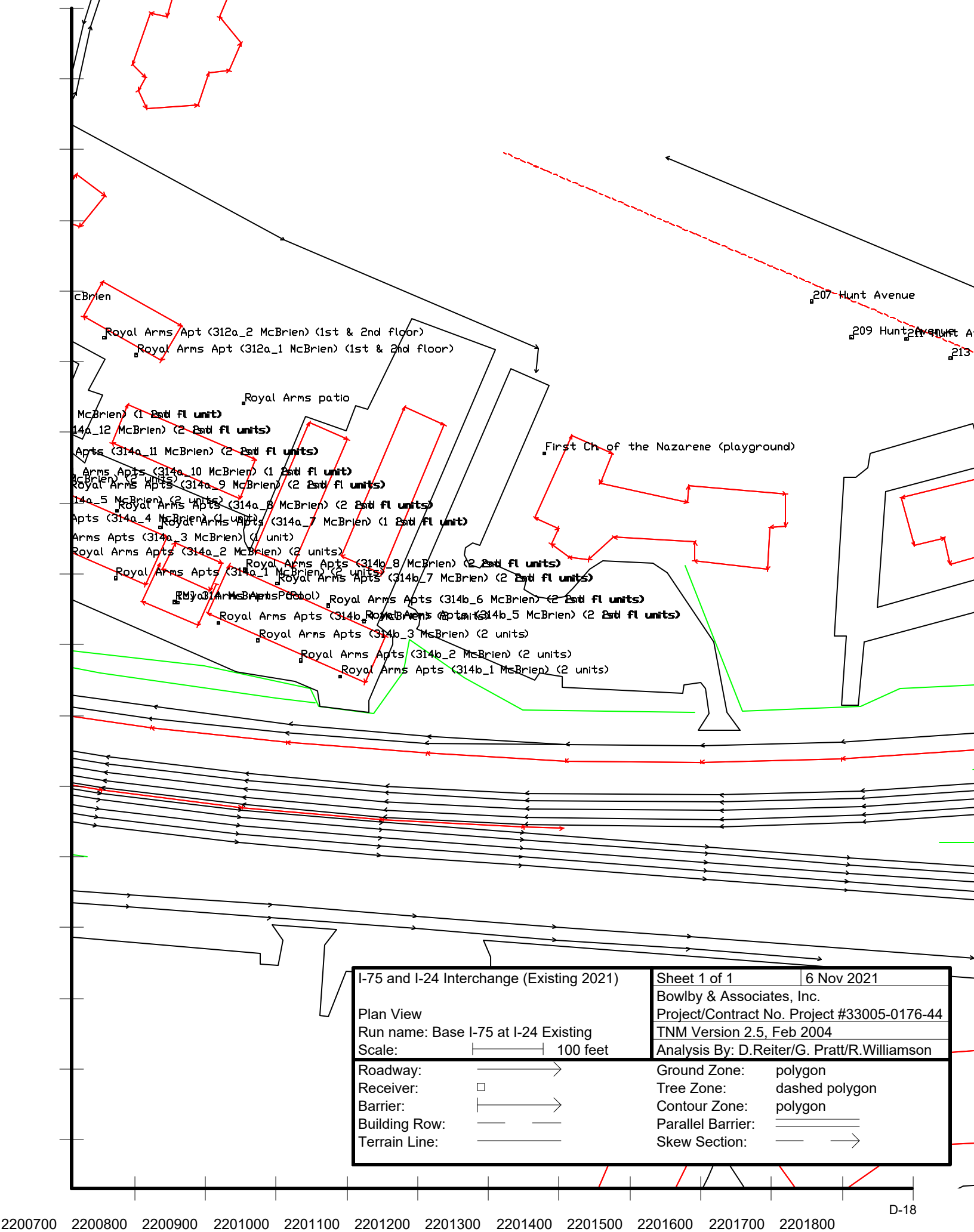
<b>I-75 and I-24 Interchange (Existing 2021)</b>		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Roadway: 		Ground Zone:	polygon
Receiver: 		Tree Zone:	dashed polygon
Barrier: 		Contour Zone:	polygon
Building Row: 		Parallel Barrier:	
Terrain Line: 		Skew Section: 	

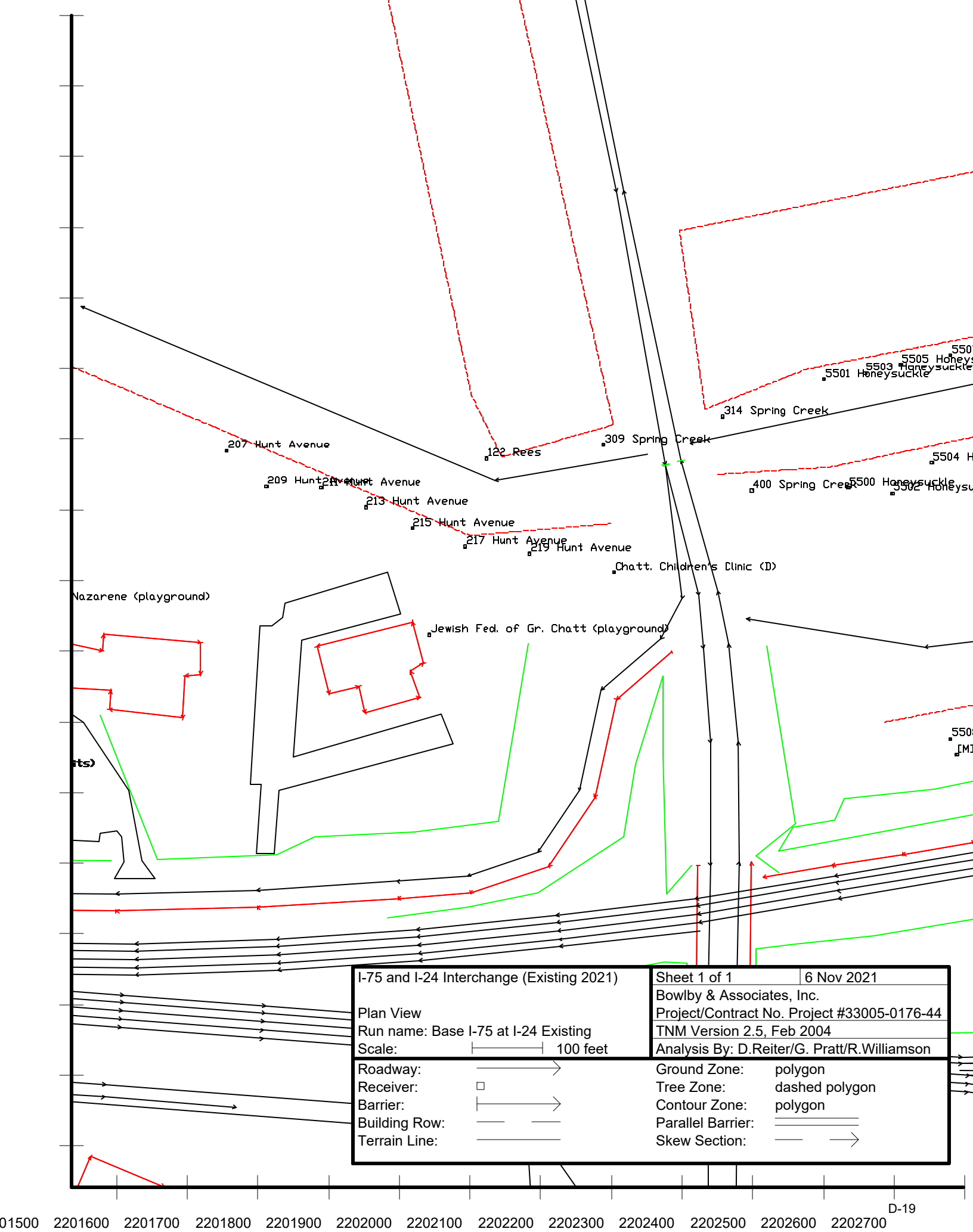


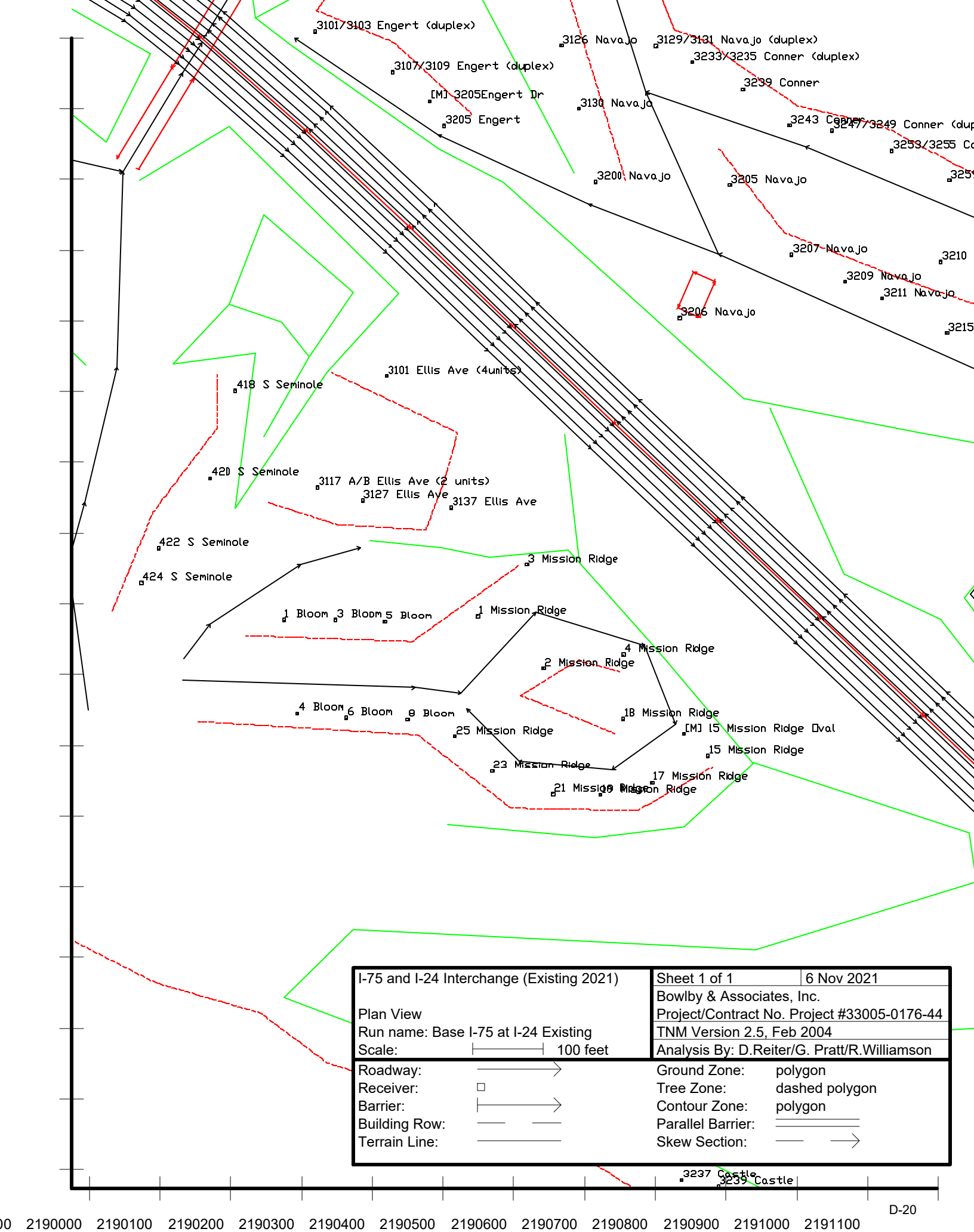














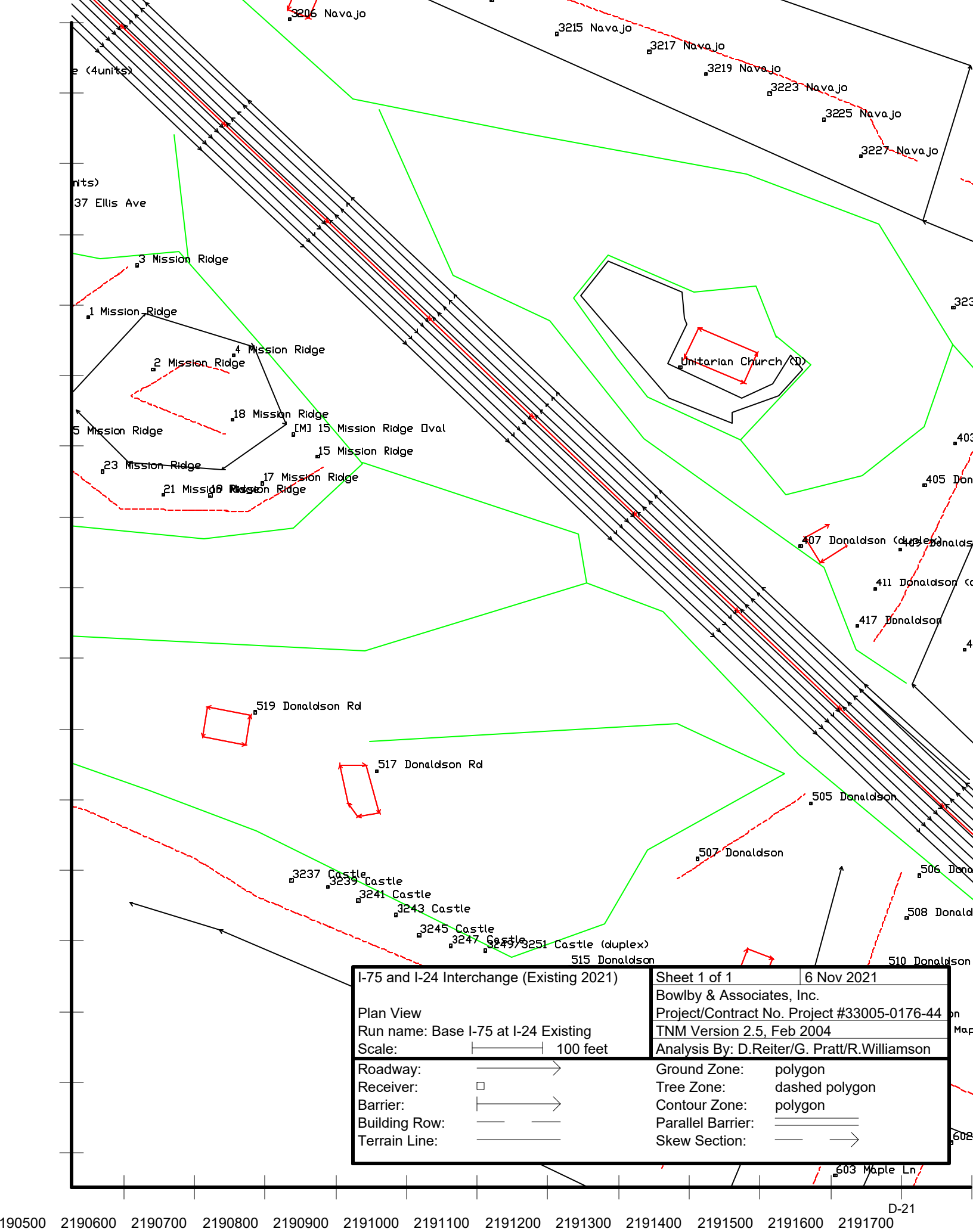


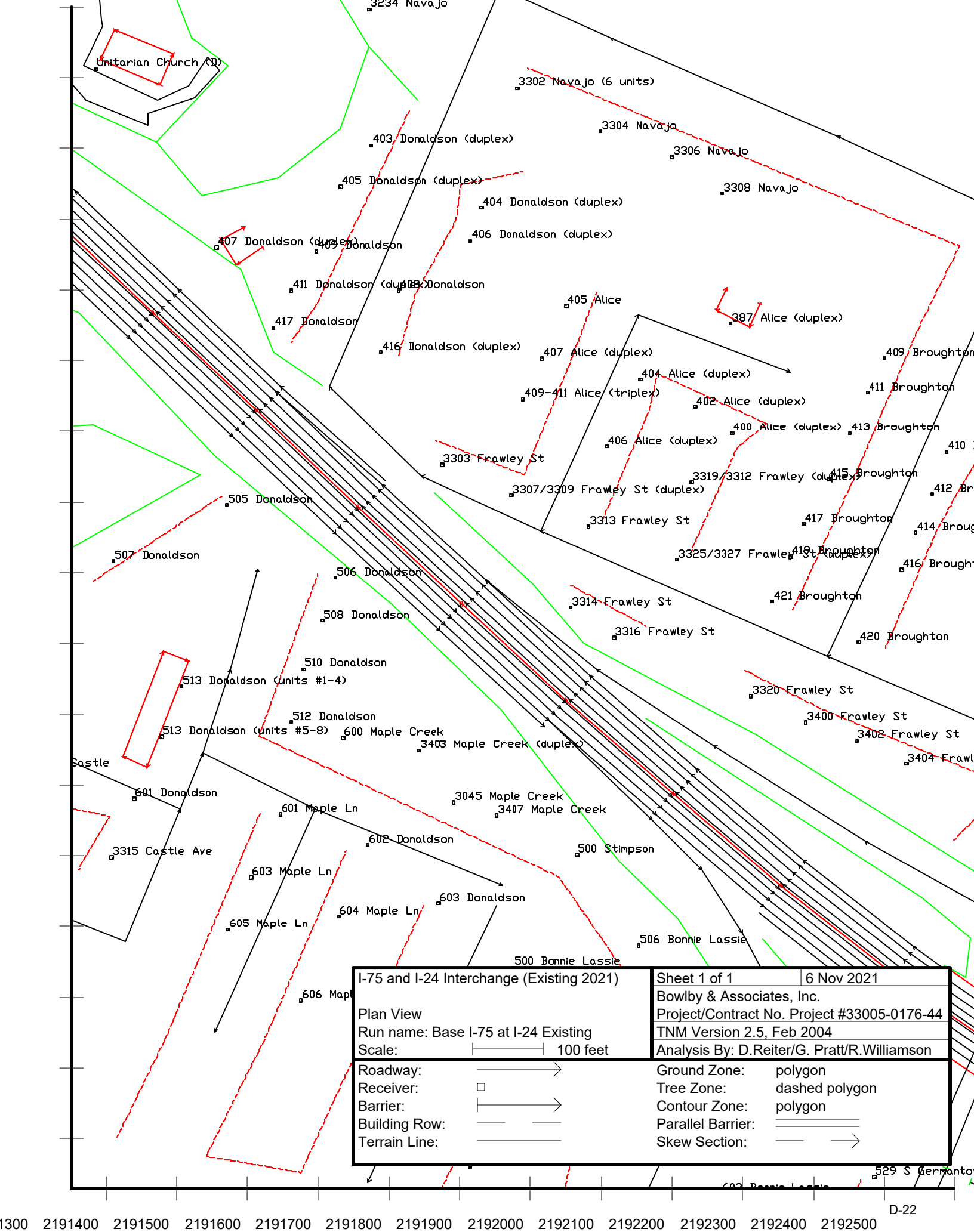




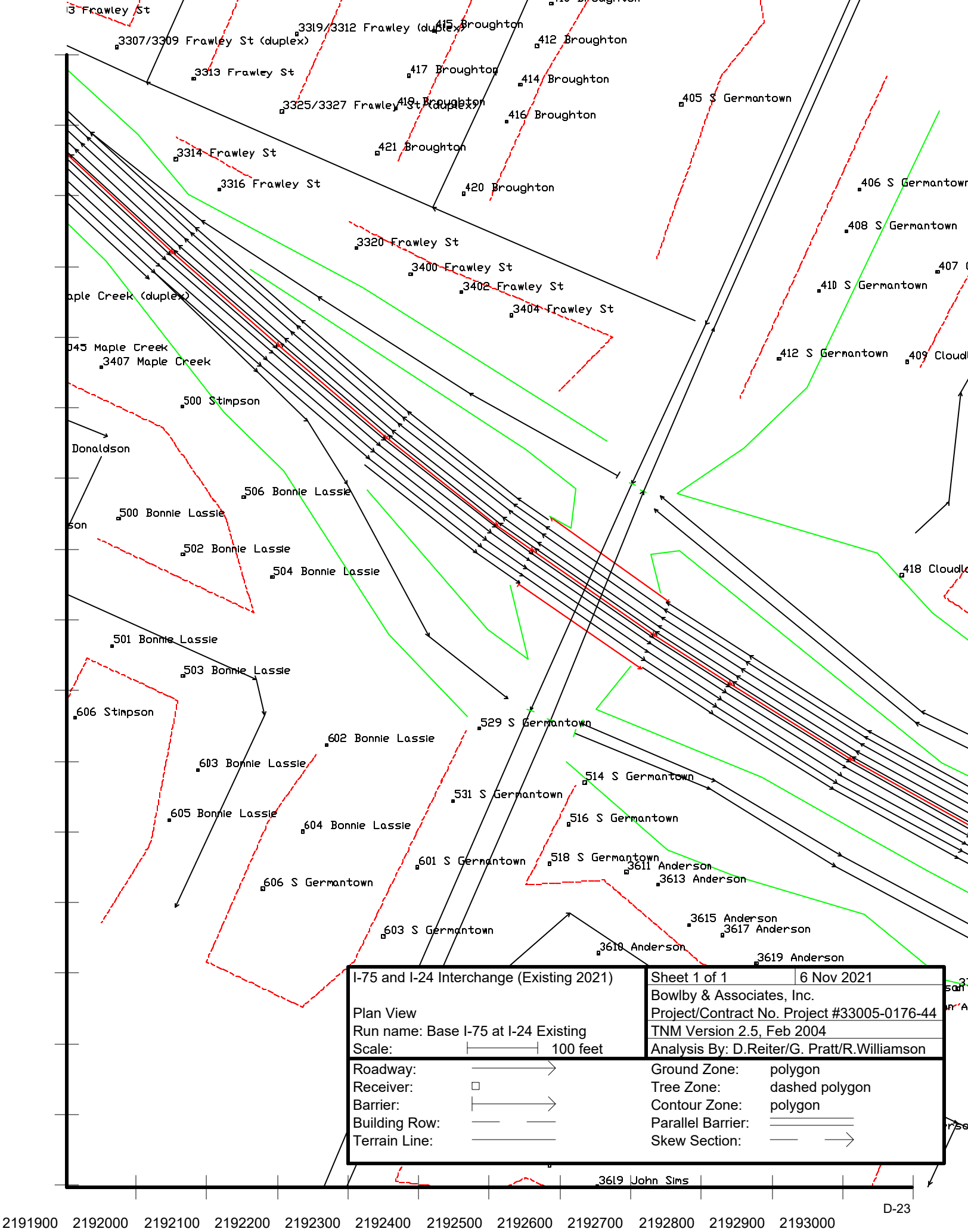
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Roadway: 		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Receiver: 		Ground Zone: polygon	
Barrier: 		Tree Zone: dashed polygon	
Building Row: 		Contour Zone: polygon	
Terrain Line: 		Parallel Barrier: 	
		Skew Section: 	

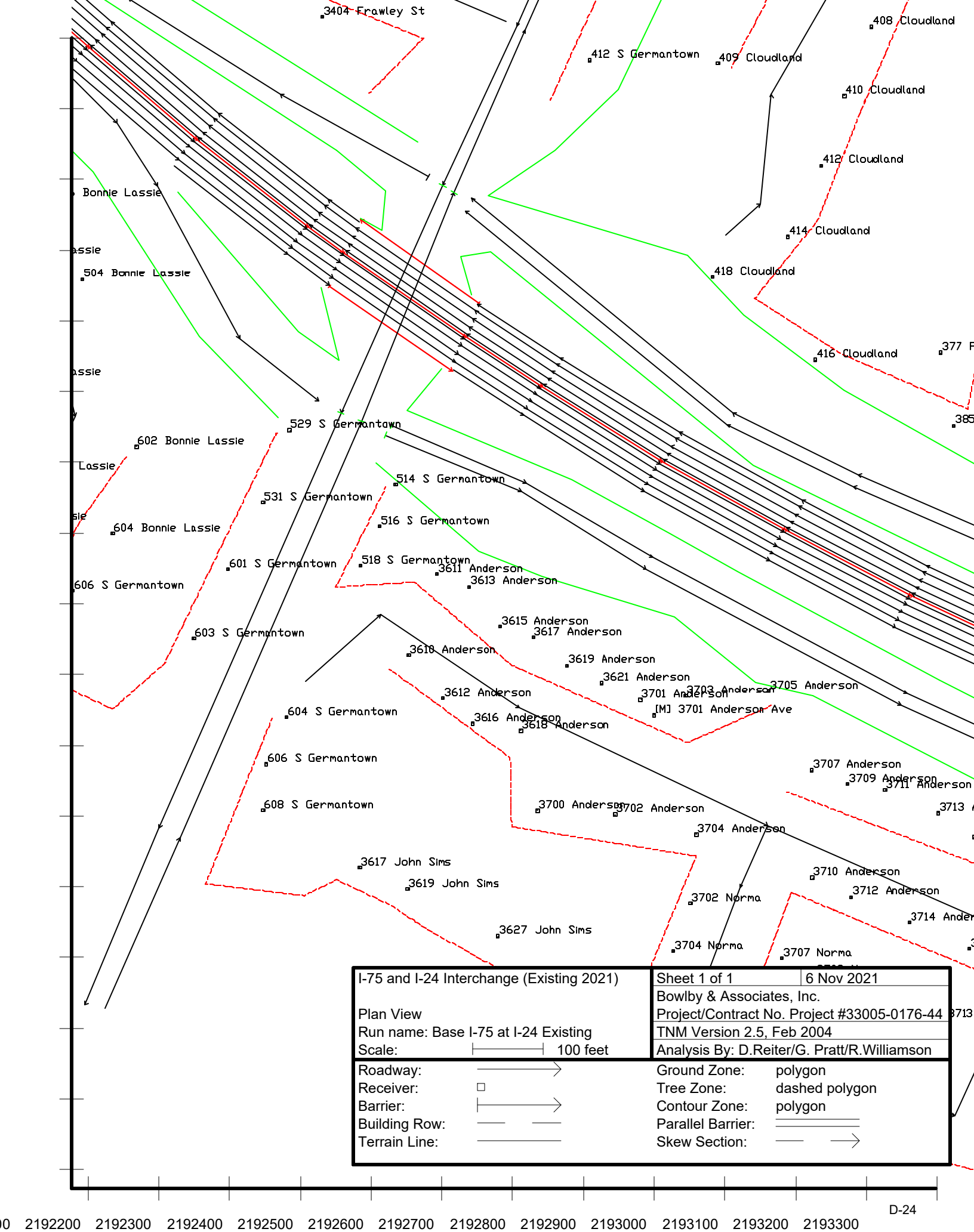




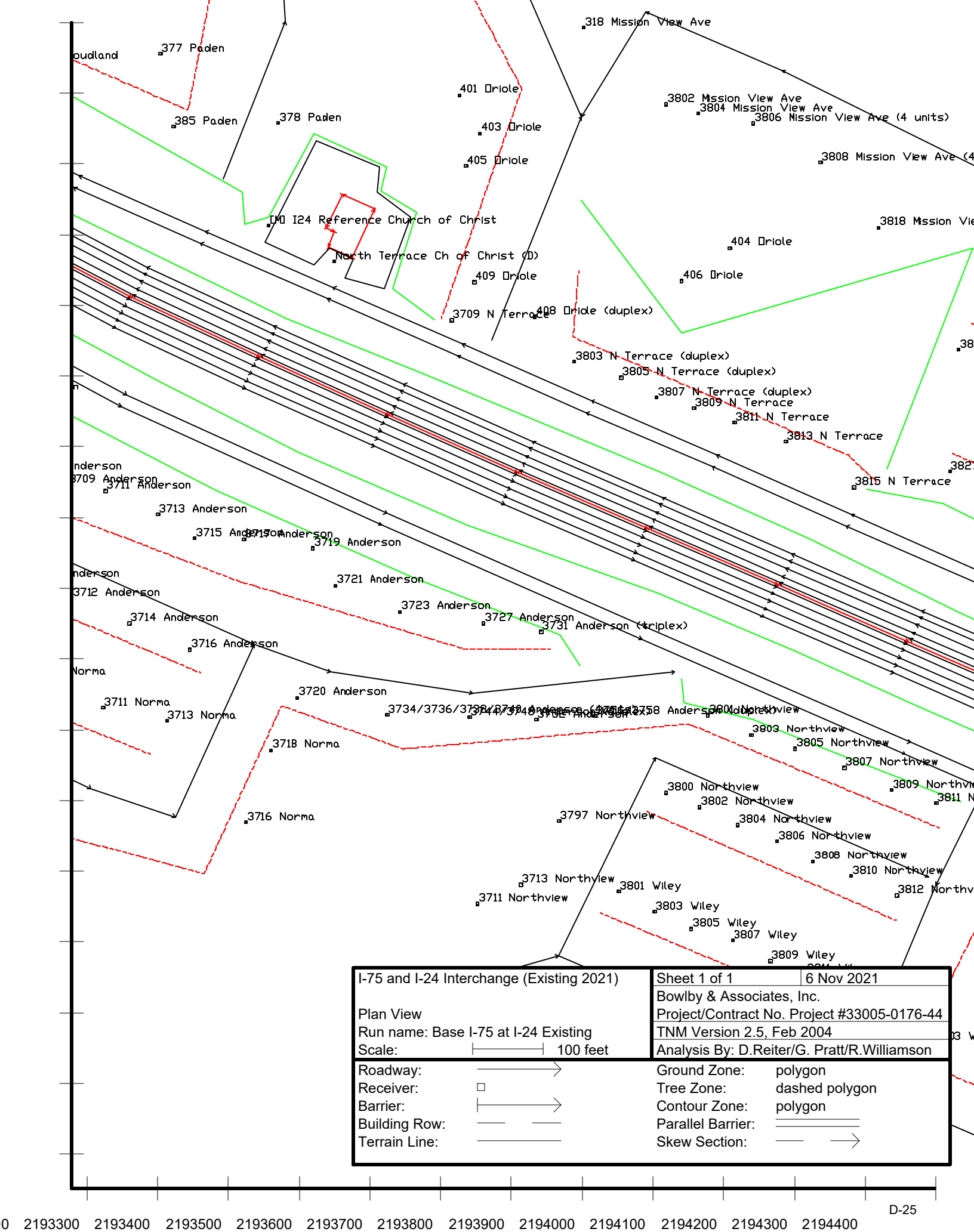


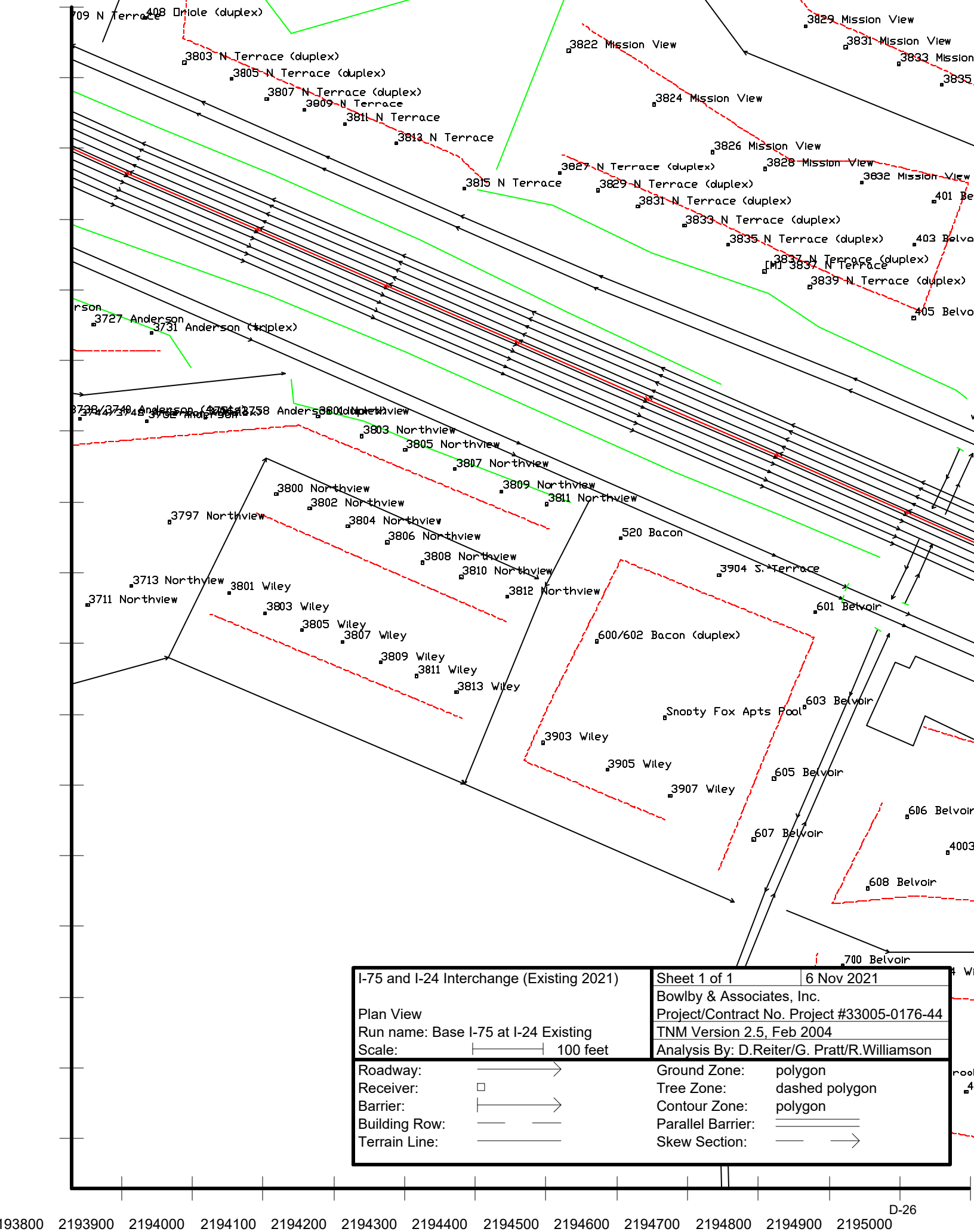
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Bowlby & Associates, Inc.			
Project/Contract No. Project #33005-0176-44			
TNM Version 2.5, Feb 2004			
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	→	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	→	Contour Zone:	polygon
Building Row:	— —	Parallel Barrier:	— —
Terrain Line:	— —	Skew Section:	— →

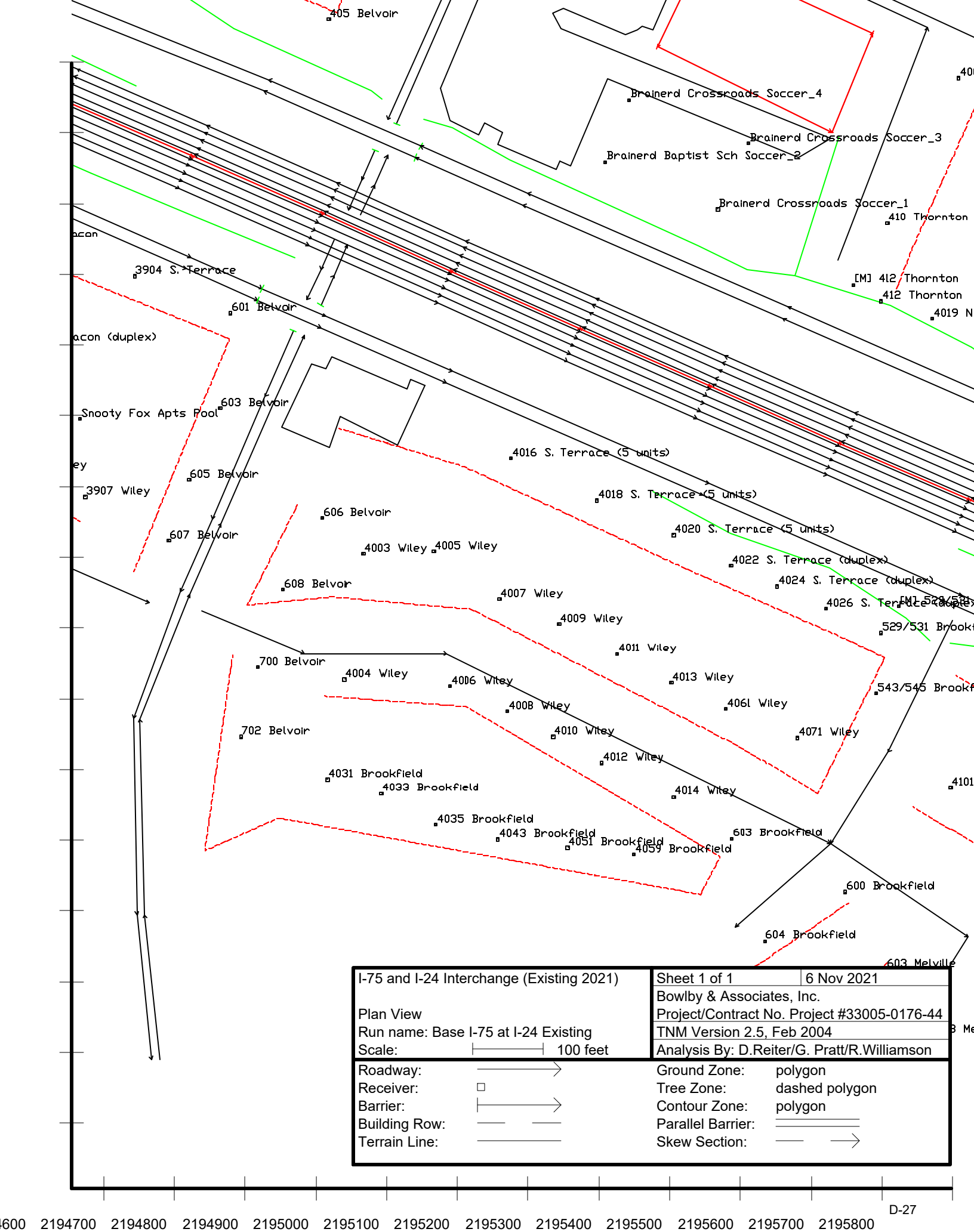


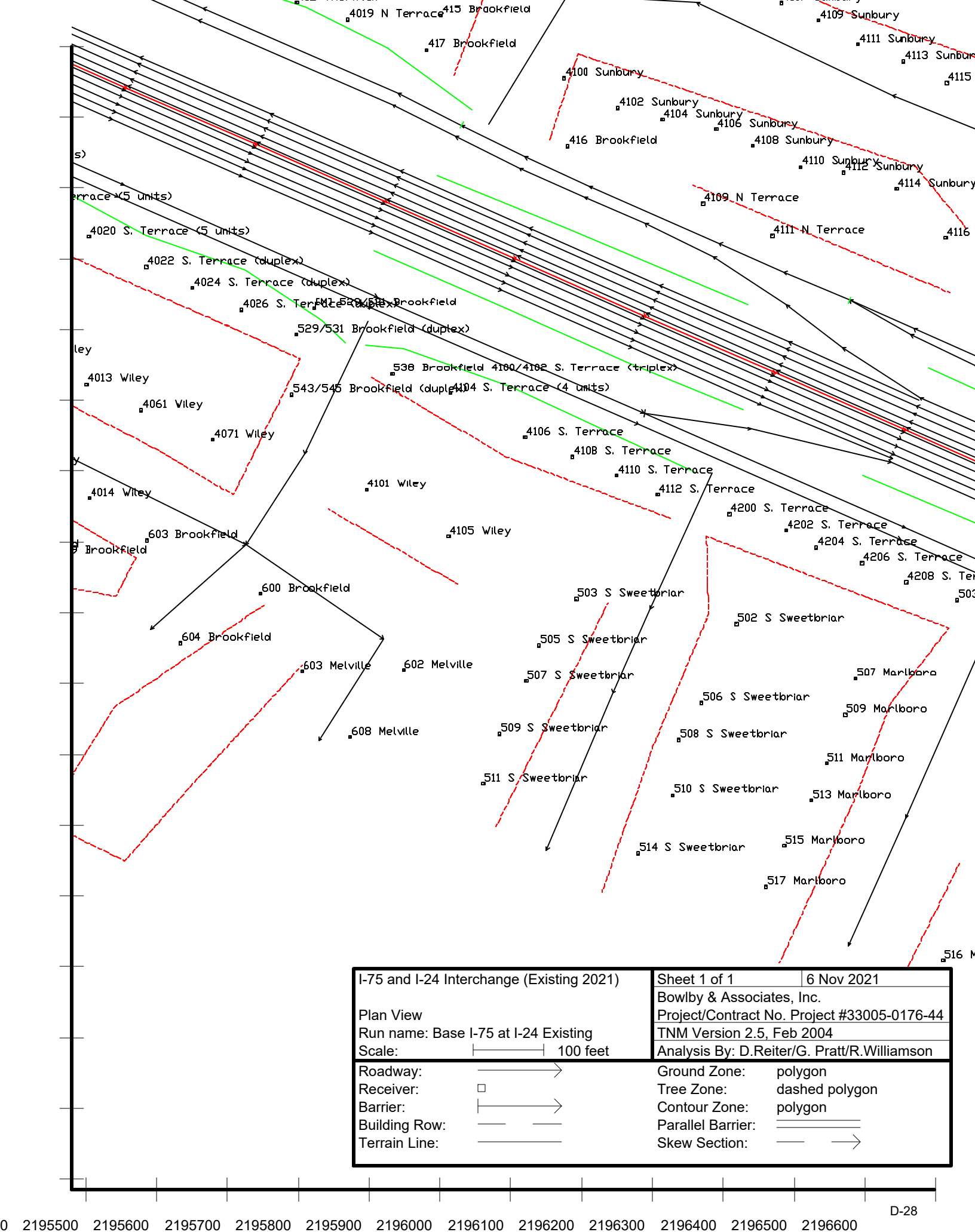




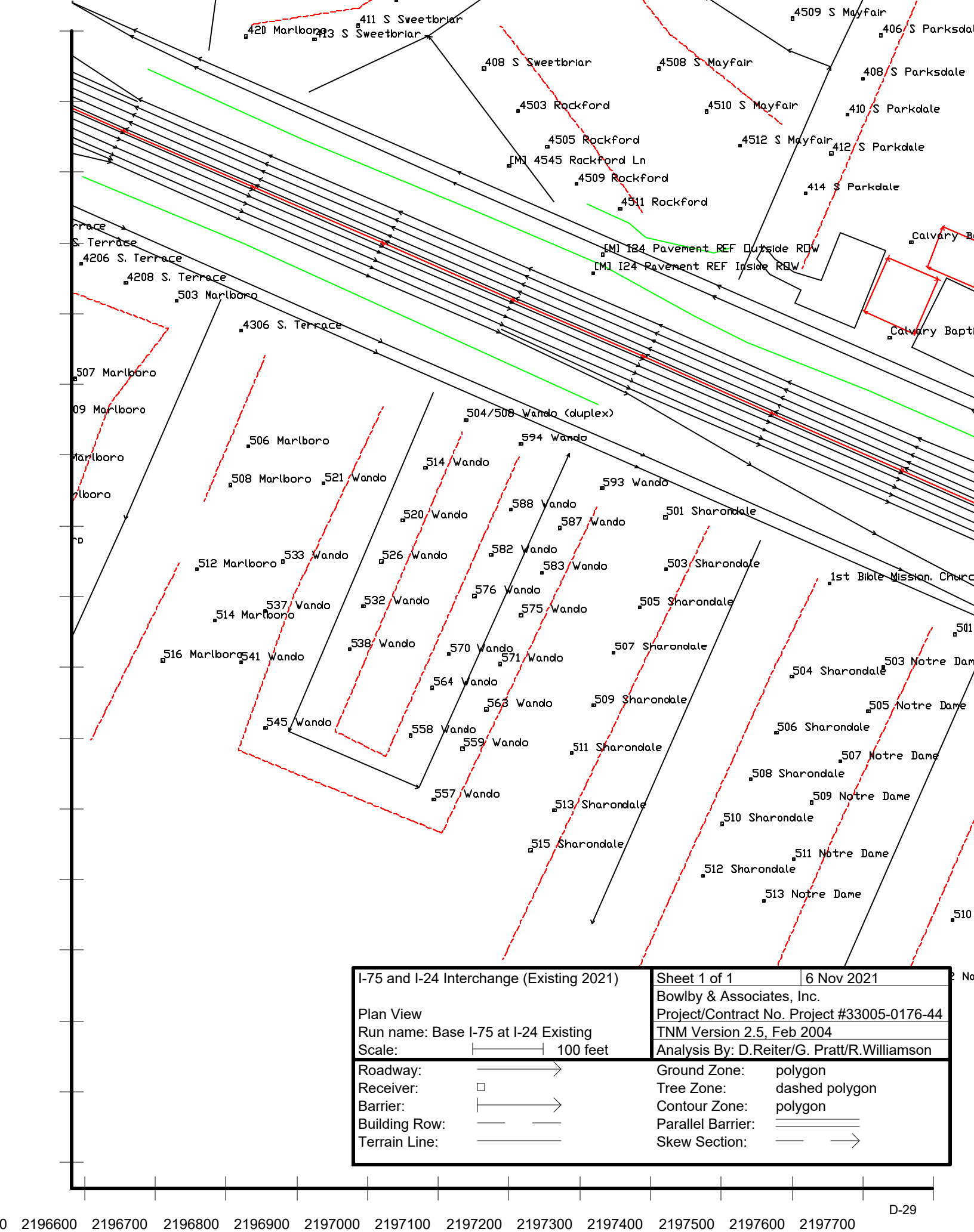







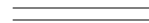




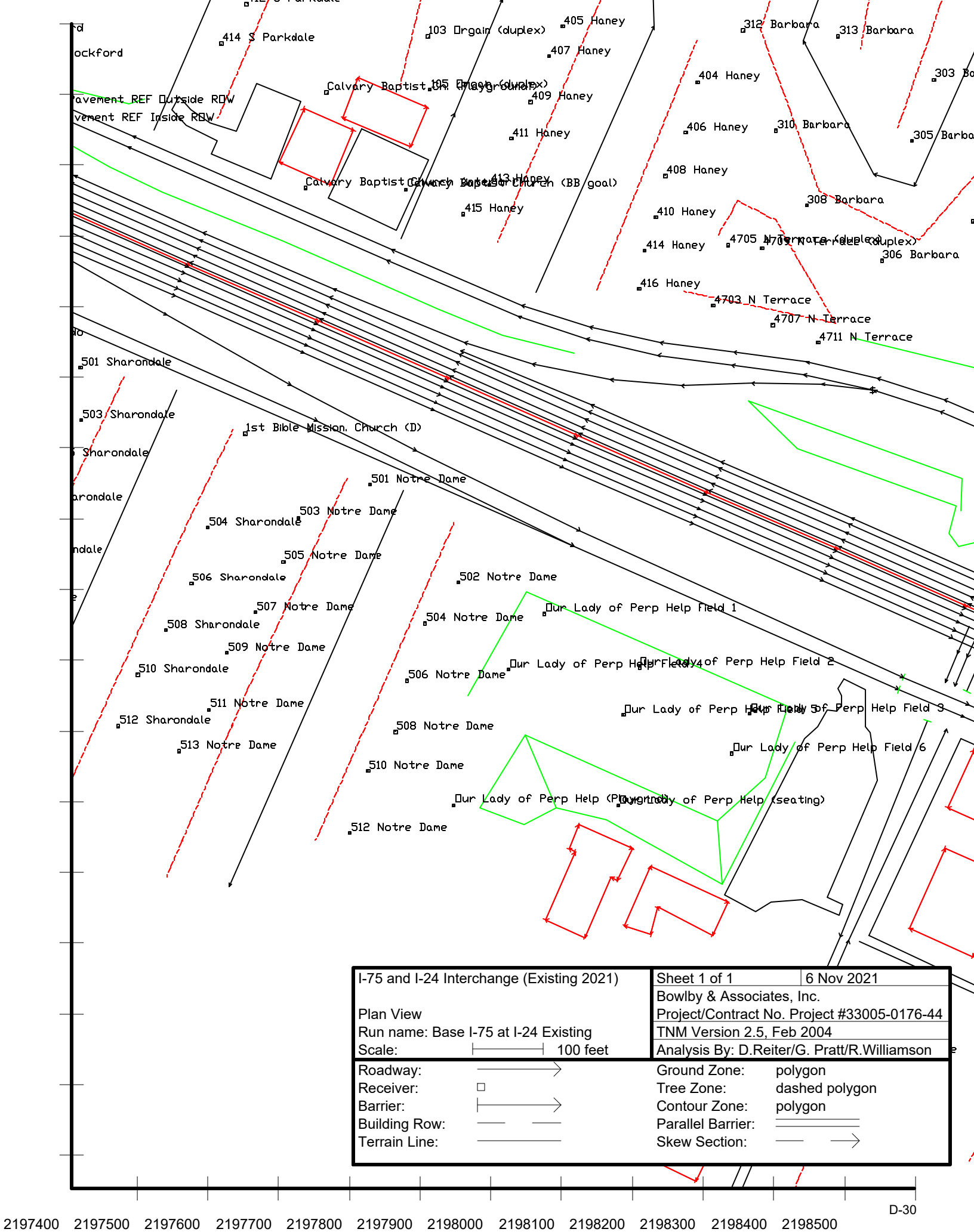


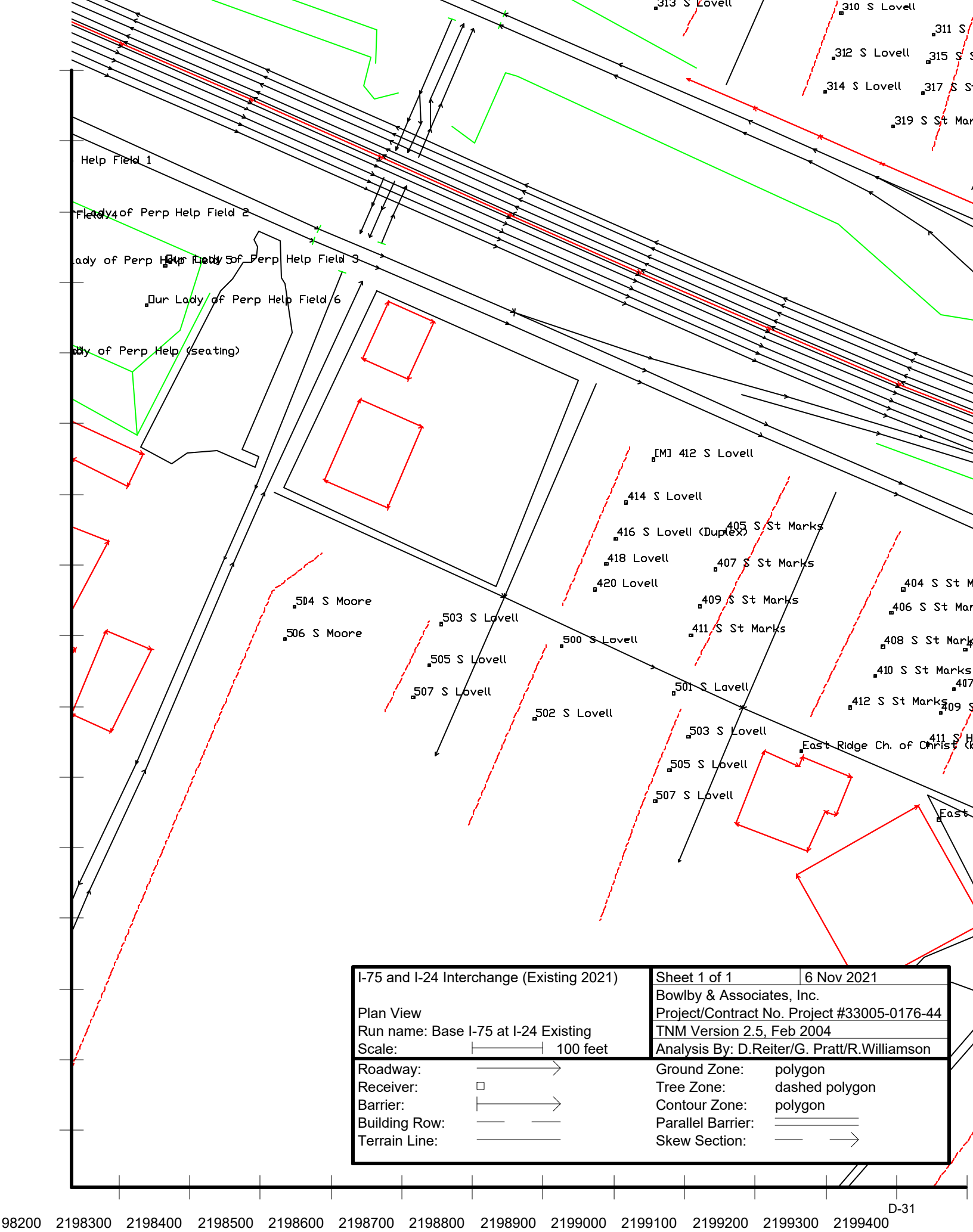












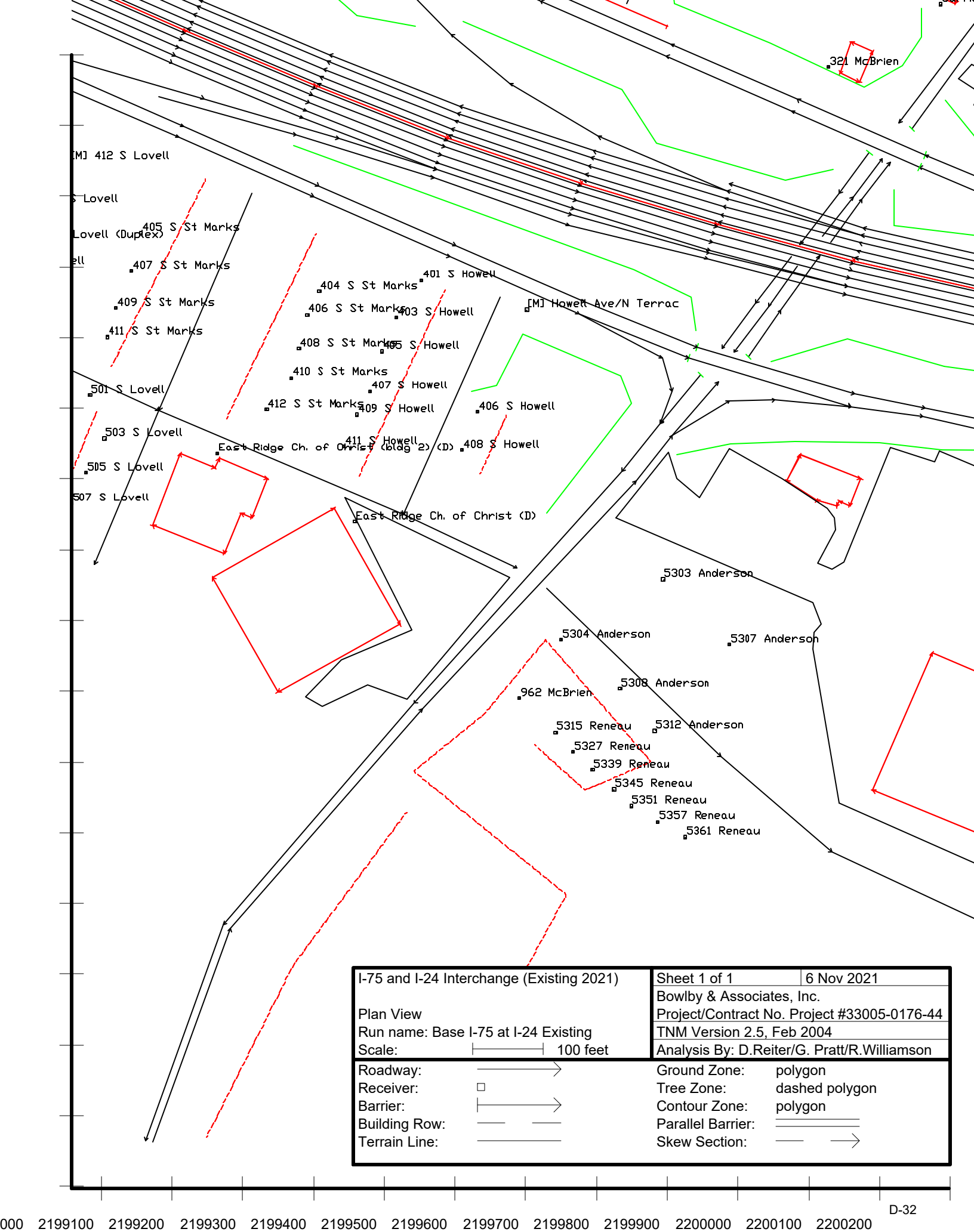










I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Roadway: 		Ground Zone: polygon	
Receiver: 		Tree Zone: dashed polygon	
Barrier: 		Contour Zone: polygon	
Building Row: 		Parallel Barrier: 	
Terrain Line: 		Skew Section: 	



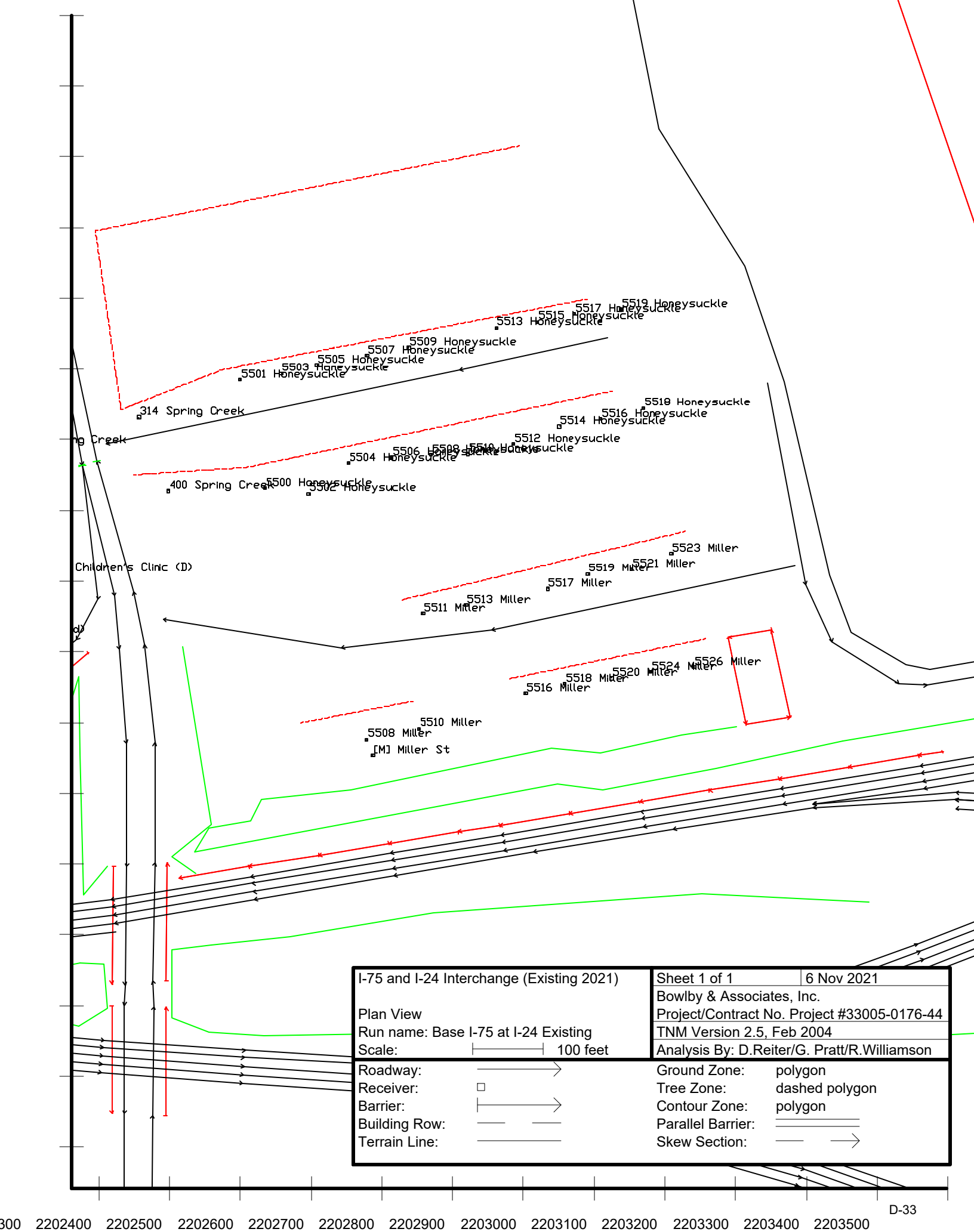


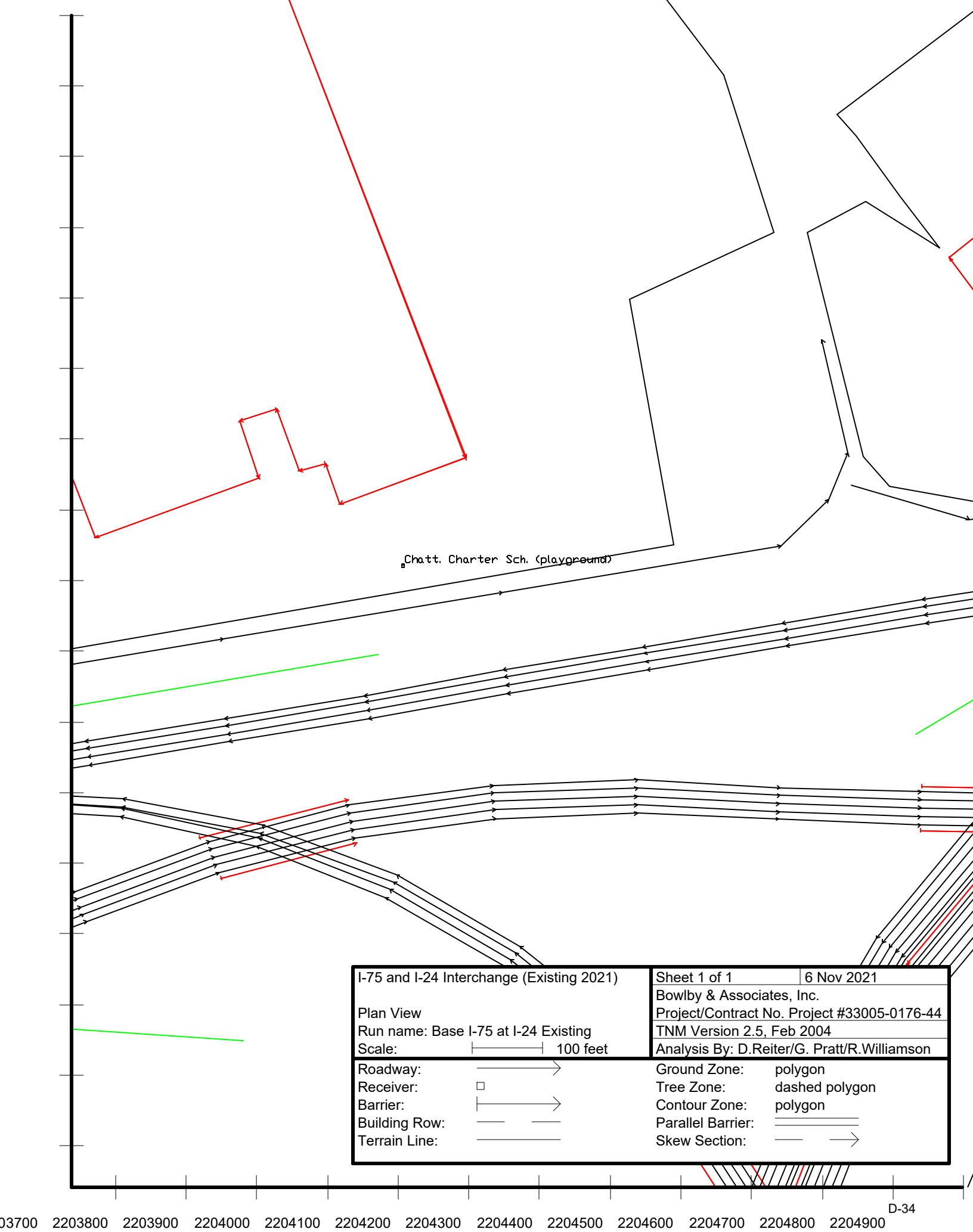
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 		TNM Version 2.5, Feb 2004	
		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

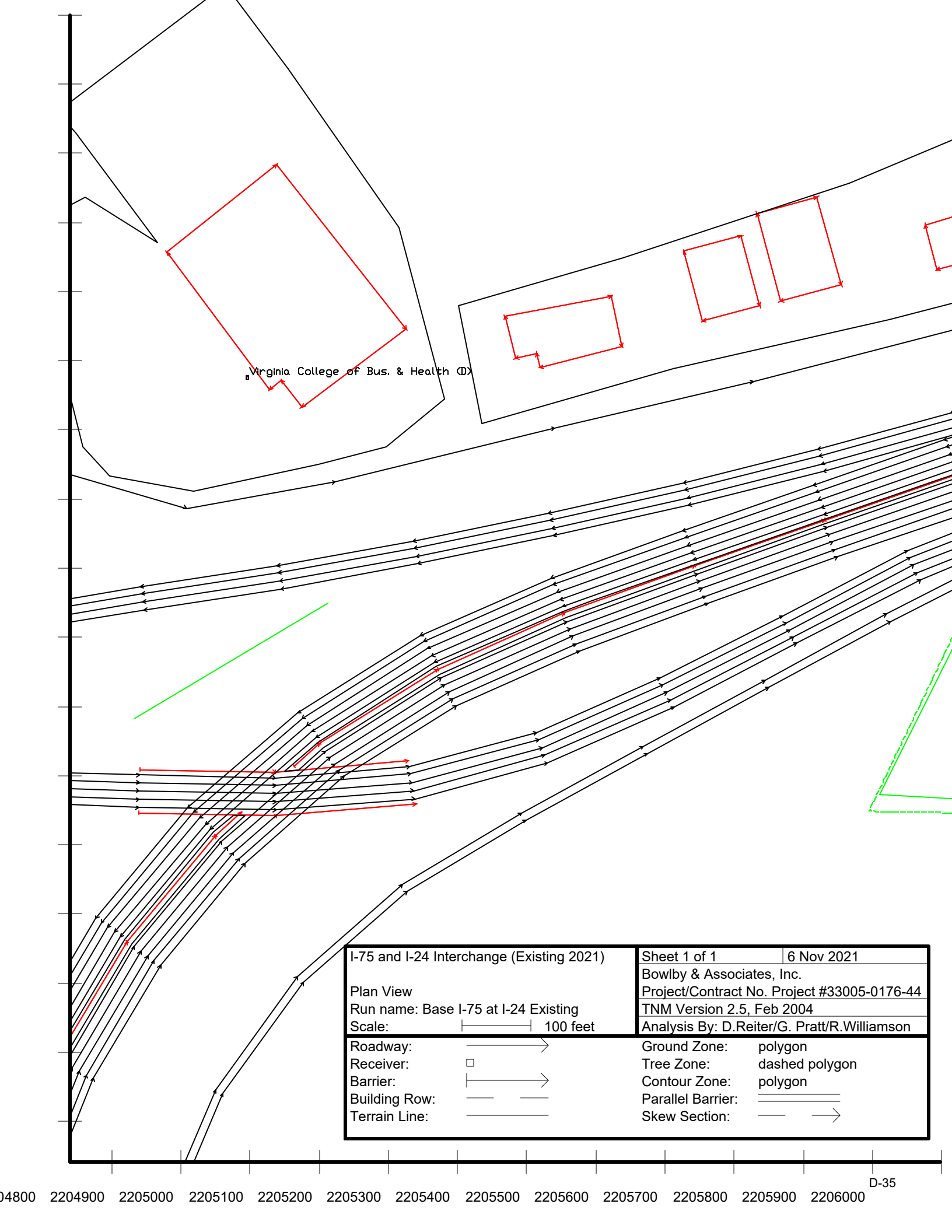


I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



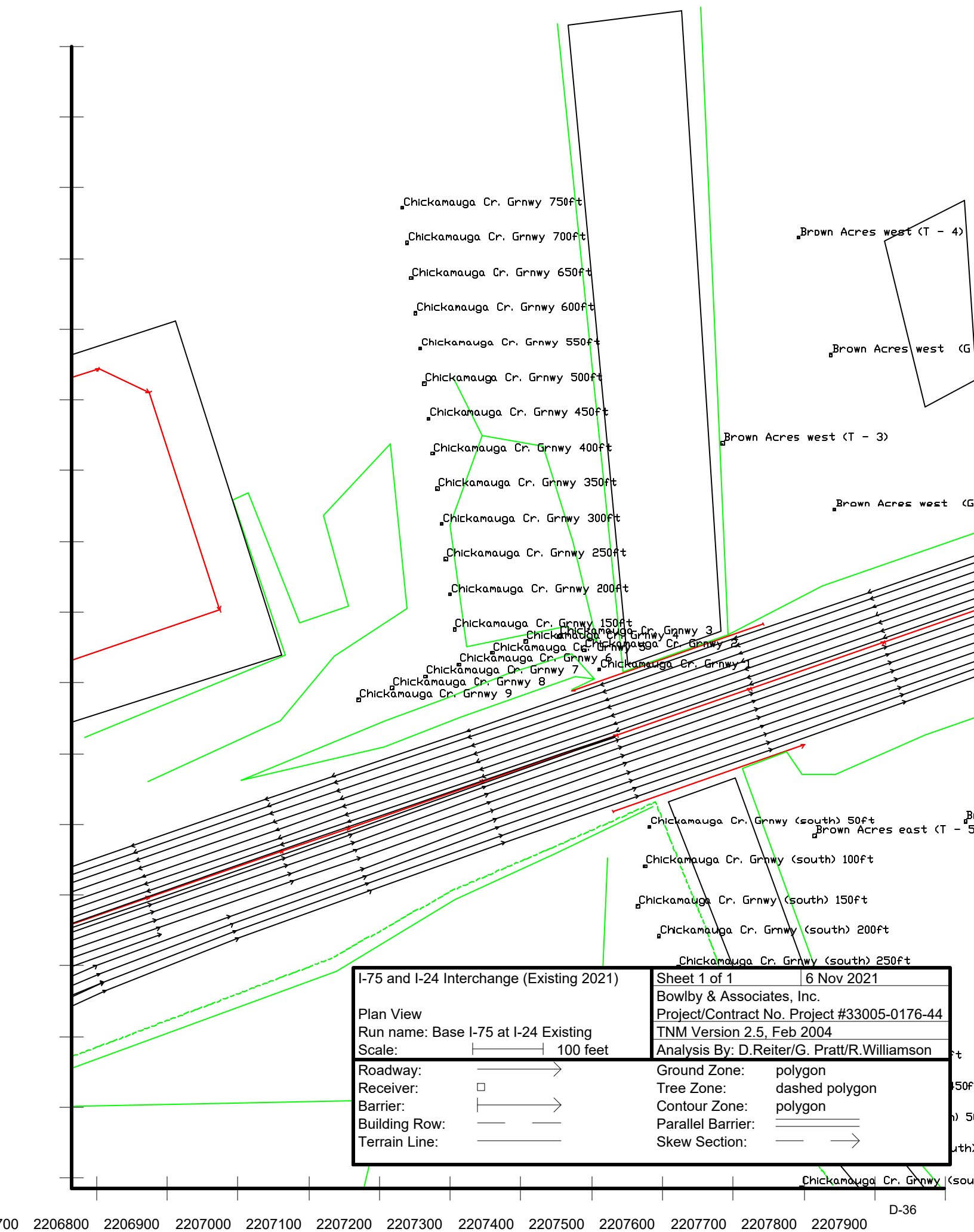




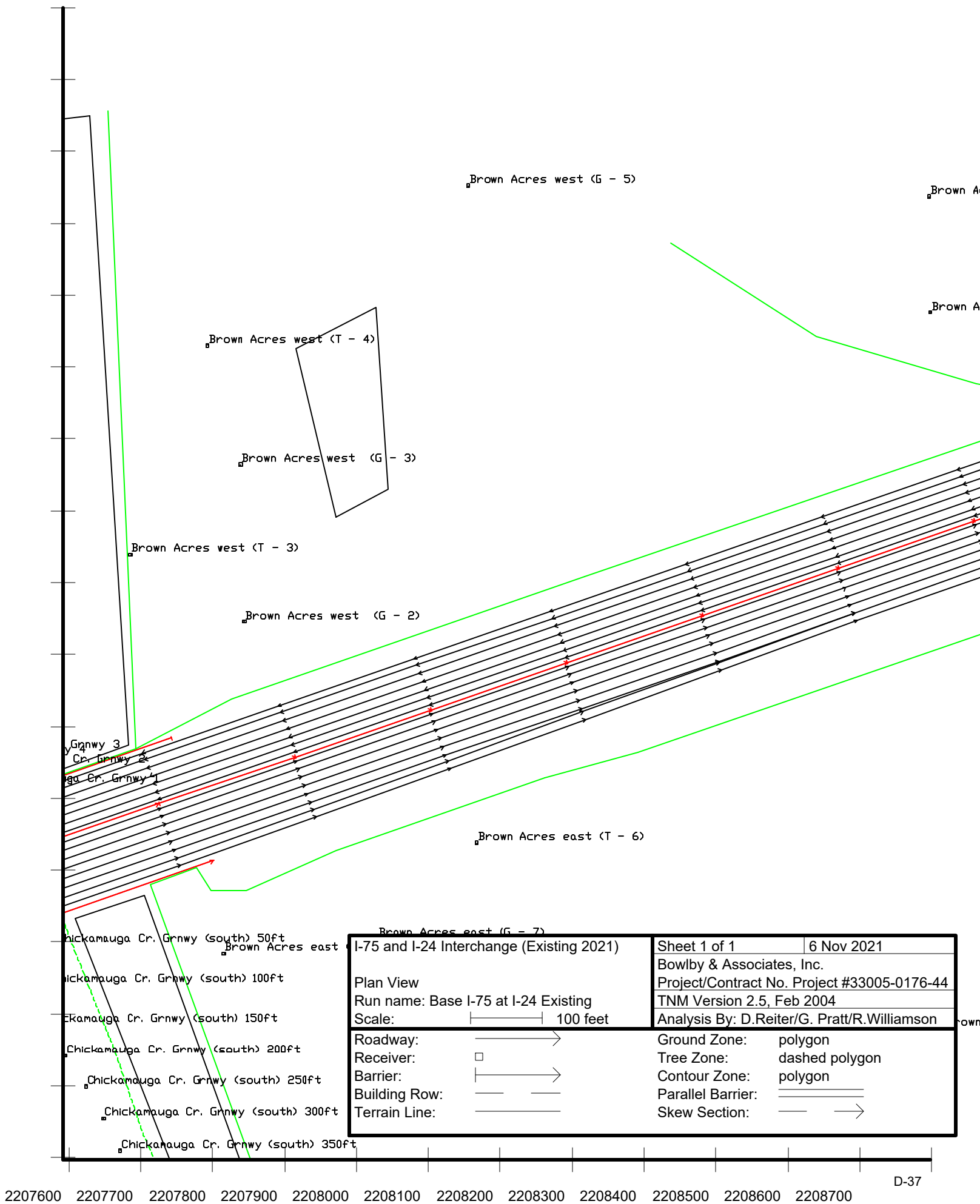


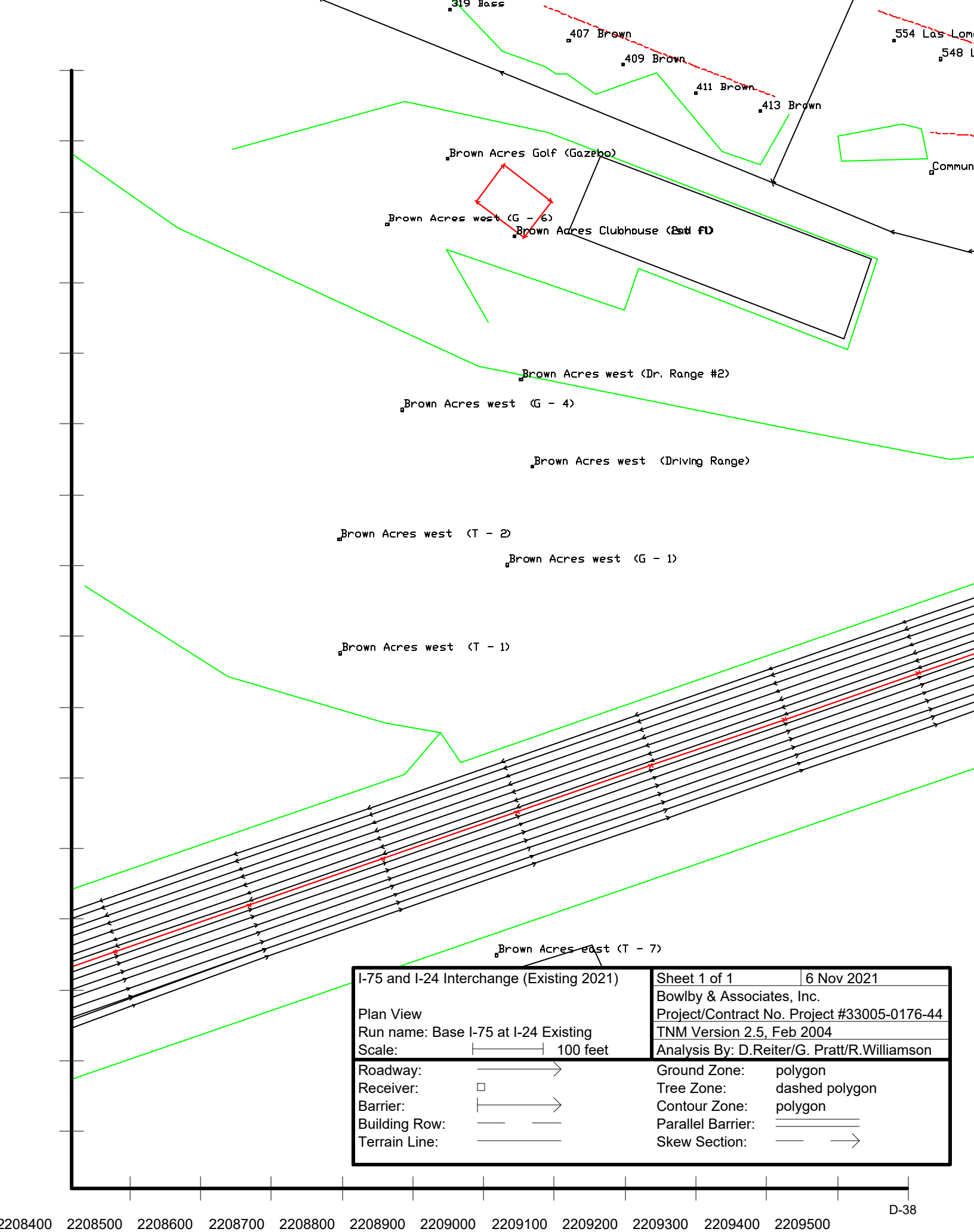
Virginia College of Bus. & Health

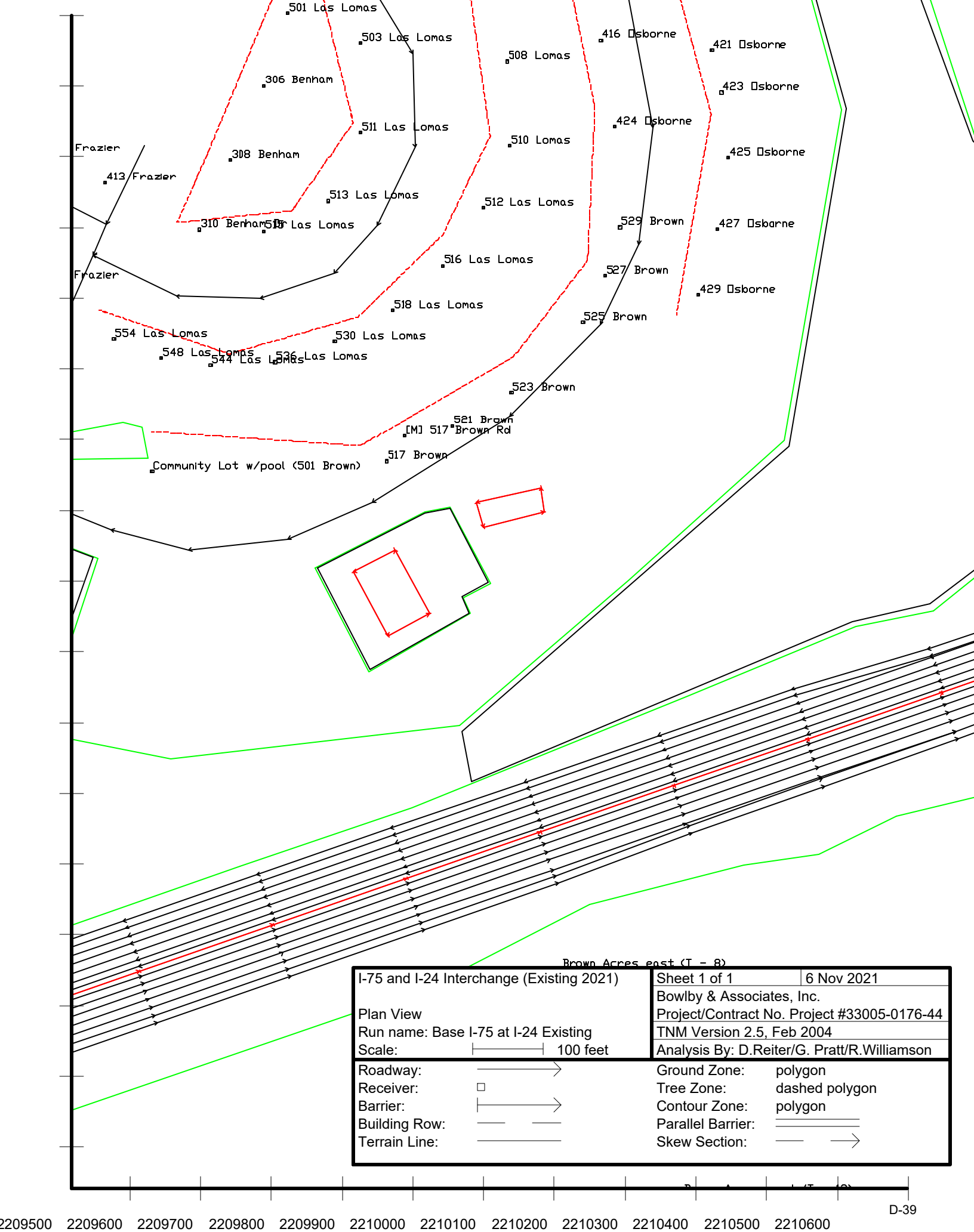
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	→	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	→	Contour Zone:	polygon
Building Row:	— —	Parallel Barrier:	— —
Terrain Line:	— —	Skew Section:	— →

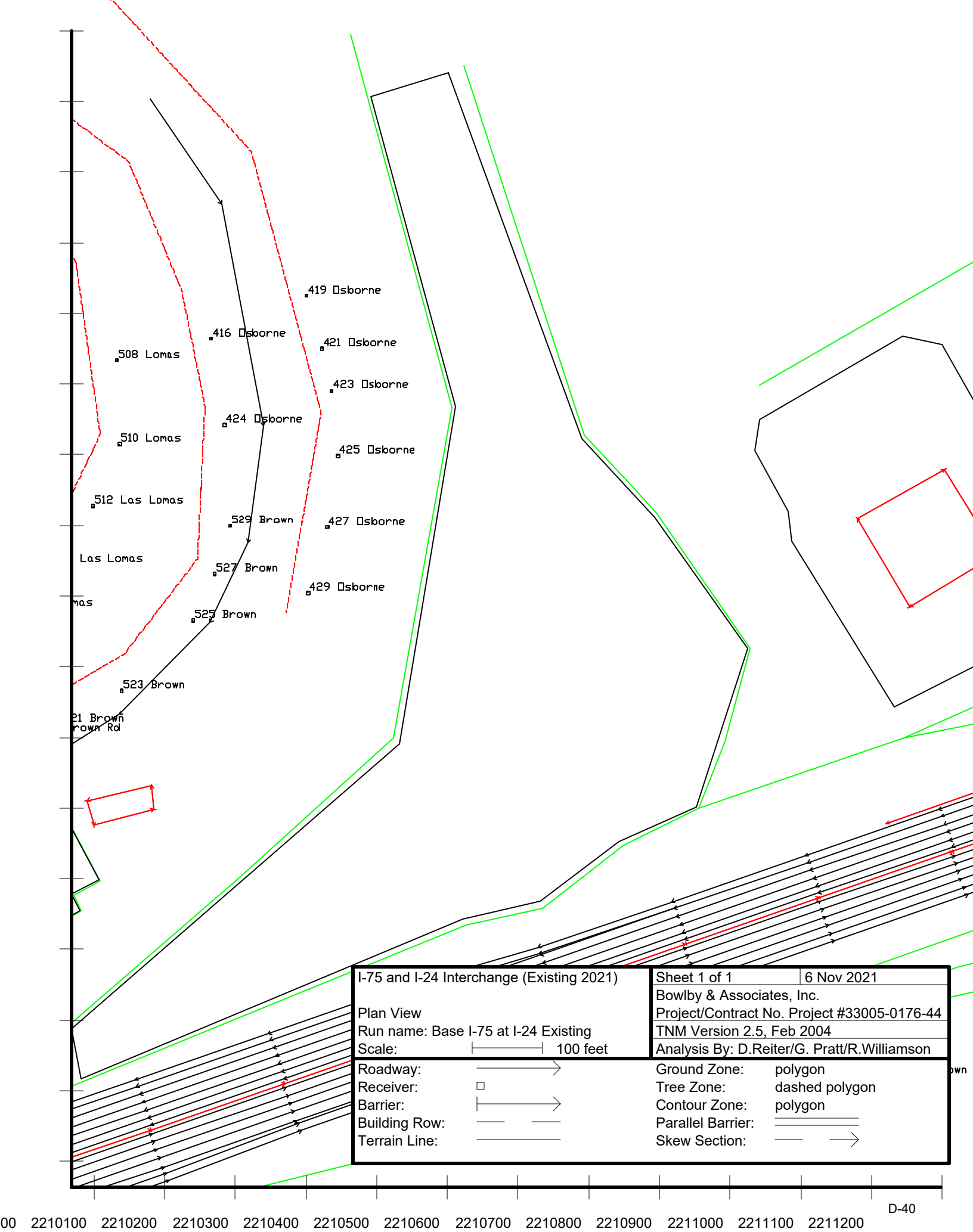




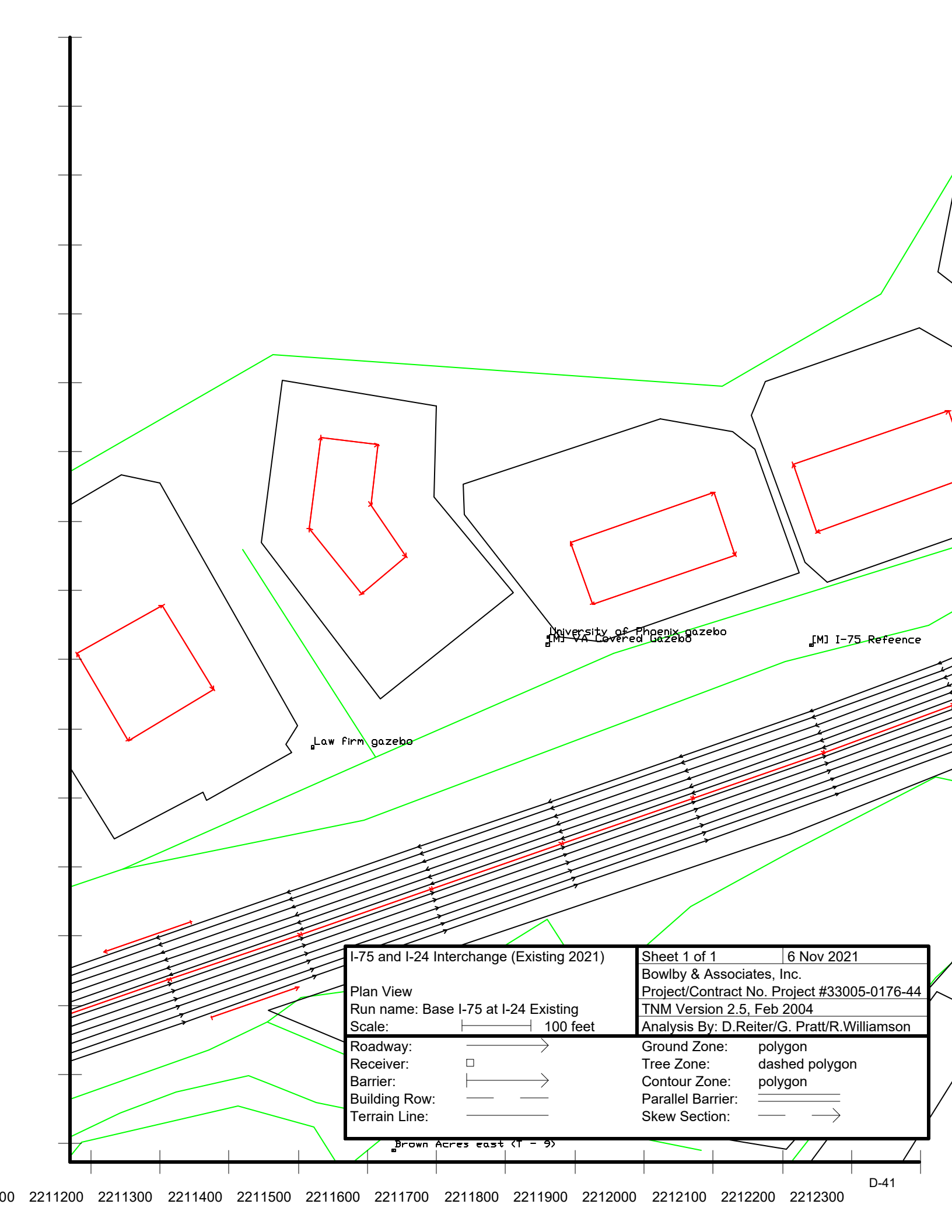




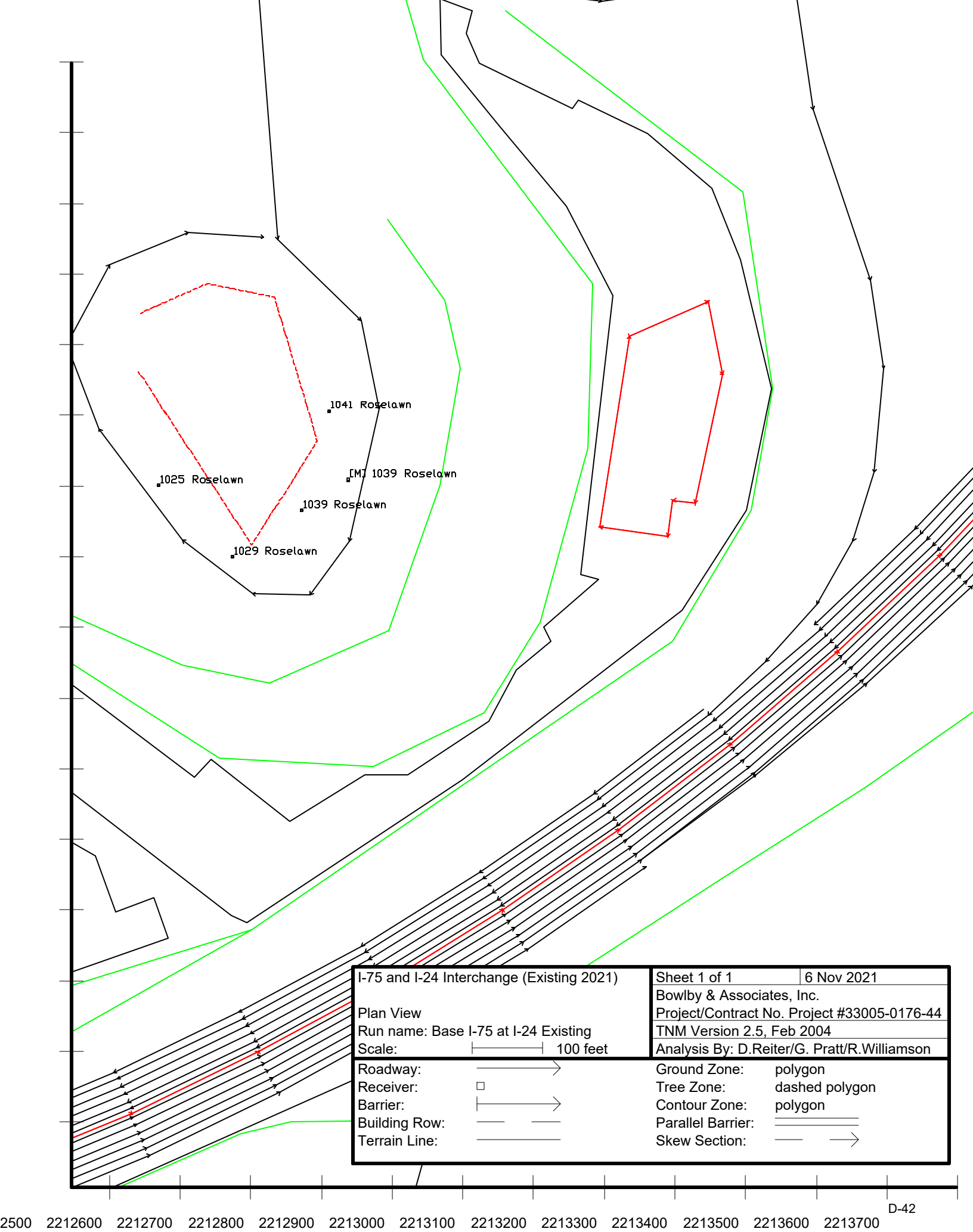


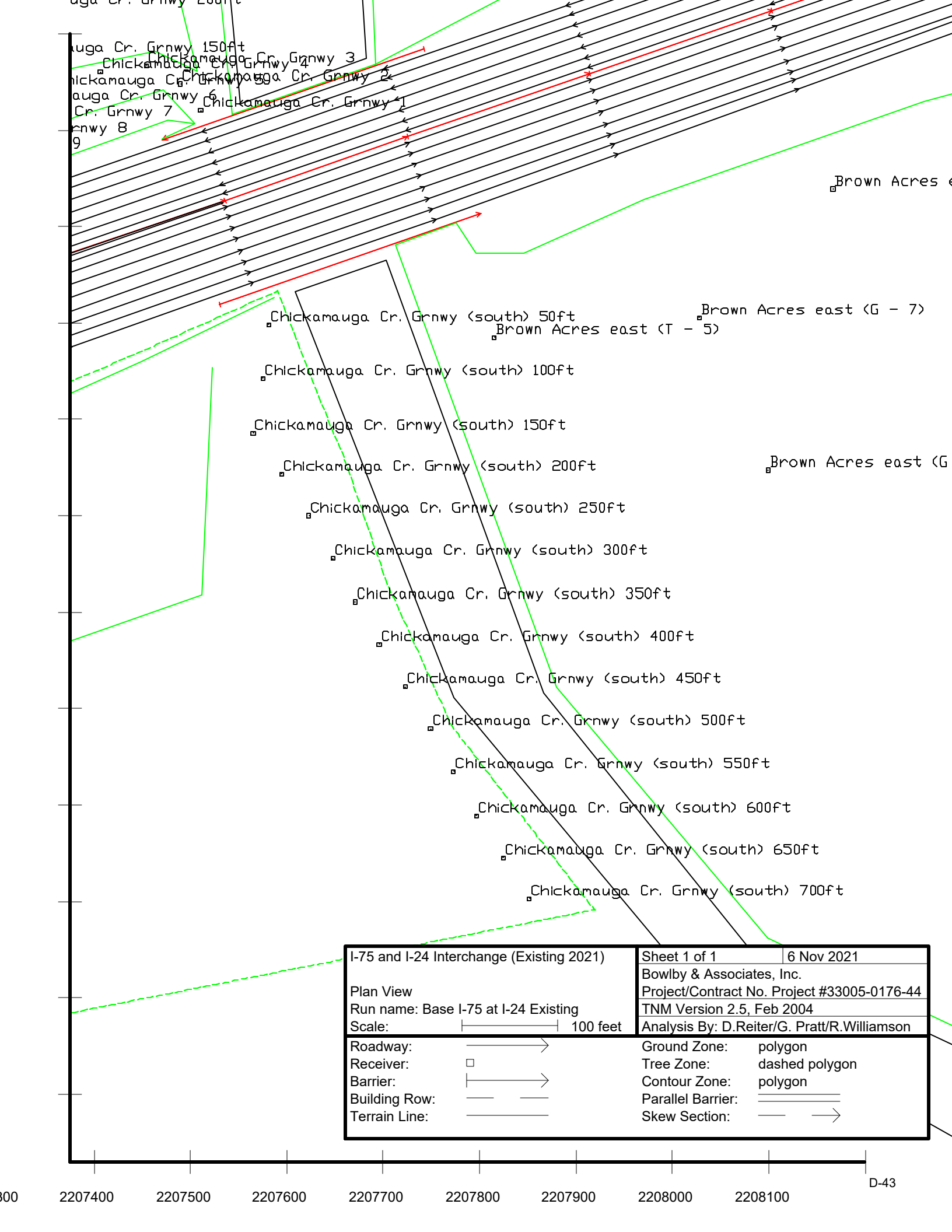






I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	→	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	→	Contour Zone:	polygon
Building Row:	— —	Parallel Barrier:	— —
Terrain Line:	— —	Skew Section:	— →





Chickamauga Cr. Grnwy 150ft  
Chickamauga Cr. Grnwy 3  
Chickamauga Cr. Grnwy 2  
Chickamauga Cr. Grnwy 6  
Chickamauga Cr. Grnwy 1  
Chickamauga Cr. Grnwy 7  
Chickamauga Cr. Grnwy 8  
Chickamauga Cr. Grnwy 9

Brown Acres

Chickamauga Cr. Grnwy (south) 50ft  
Brown Acres east (G - 7)  
Brown Acres east (T - 5)

Chickamauga Cr. Grnwy (south) 100ft

Chickamauga Cr. Grnwy (south) 150ft

Chickamauga Cr. Grnwy (south) 200ft

Brown Acres east (G

Chickamauga Cr. Grnwy (south) 250ft

Chickamauga Cr. Grnwy (south) 300ft

Chickamauga Cr. Grnwy (south) 350ft

Chickamauga Cr. Grnwy (south) 400ft

Chickamauga Cr. Grnwy (south) 450ft

Chickamauga Cr. Grnwy (south) 500ft

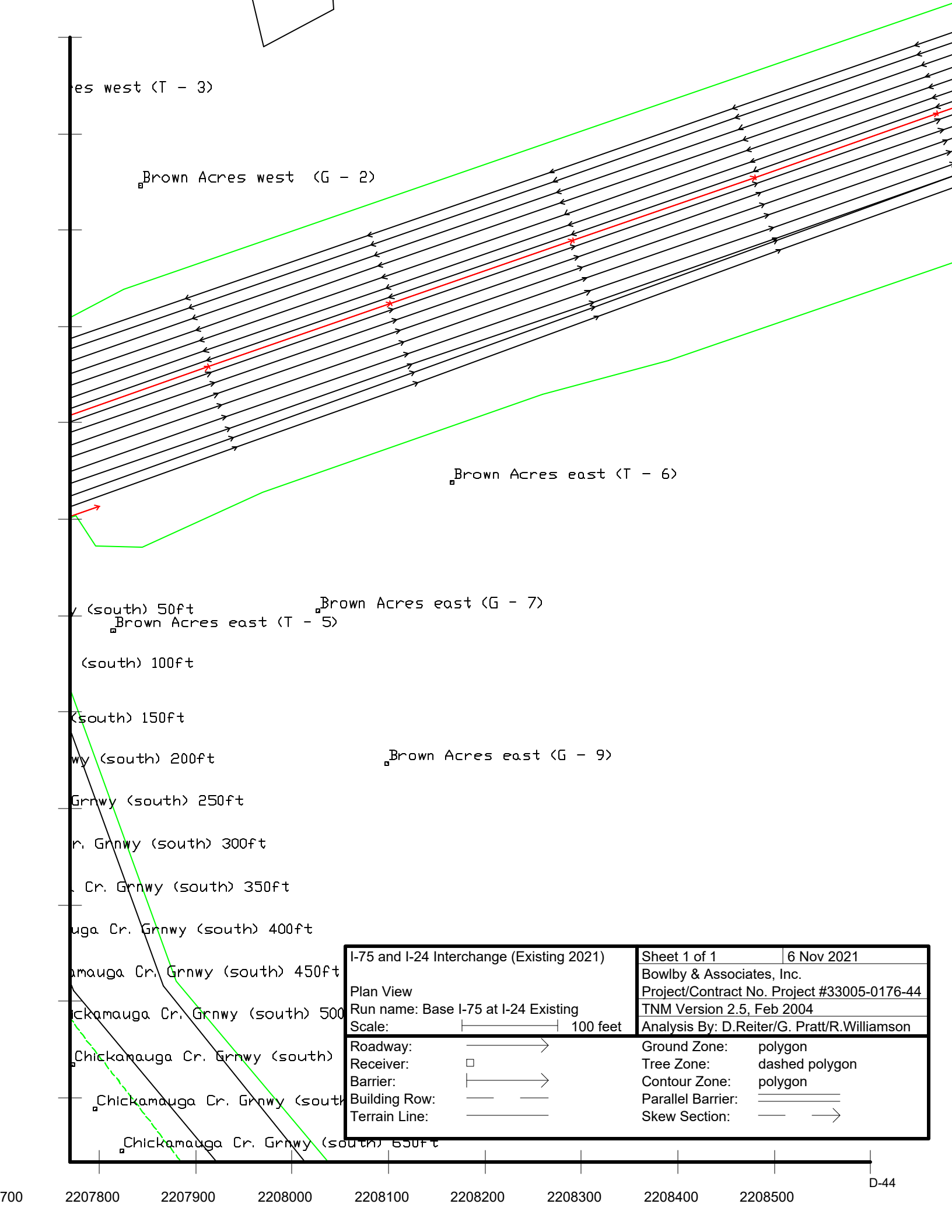
Chickamauga Cr. Grnwy (south) 550ft

Chickamauga Cr. Grnwy (south) 600ft

Chickamauga Cr. Grnwy (south) 650ft

Chickamauga Cr. Grnwy (south) 700ft

I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 1" = 100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	—————>	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	—————>	Contour Zone:	polygon
Building Row:	—— ———	Parallel Barrier:	—— ———
Terrain Line:	—— ———	Skew Section:	—— ———>



es west (T - 3)

□ Brown Acres west (G - 2)

□ Brown Acres east (T - 6)

y (south) 50ft

□ Brown Acres east (G - 7)

□ Brown Acres east (T - 5)

(south) 100ft

(south) 150ft

wy (south) 200ft

□ Brown Acres east (G - 9)

Grnwy (south) 250ft

r. Grnwy (south) 300ft

l. Cr. Grnwy (south) 350ft

uga Cr. Grnwy (south) 400ft







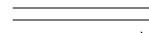

amauga Cr. Grnwy (south) 450ft

ckamauga Cr. Grnwy (south) 500

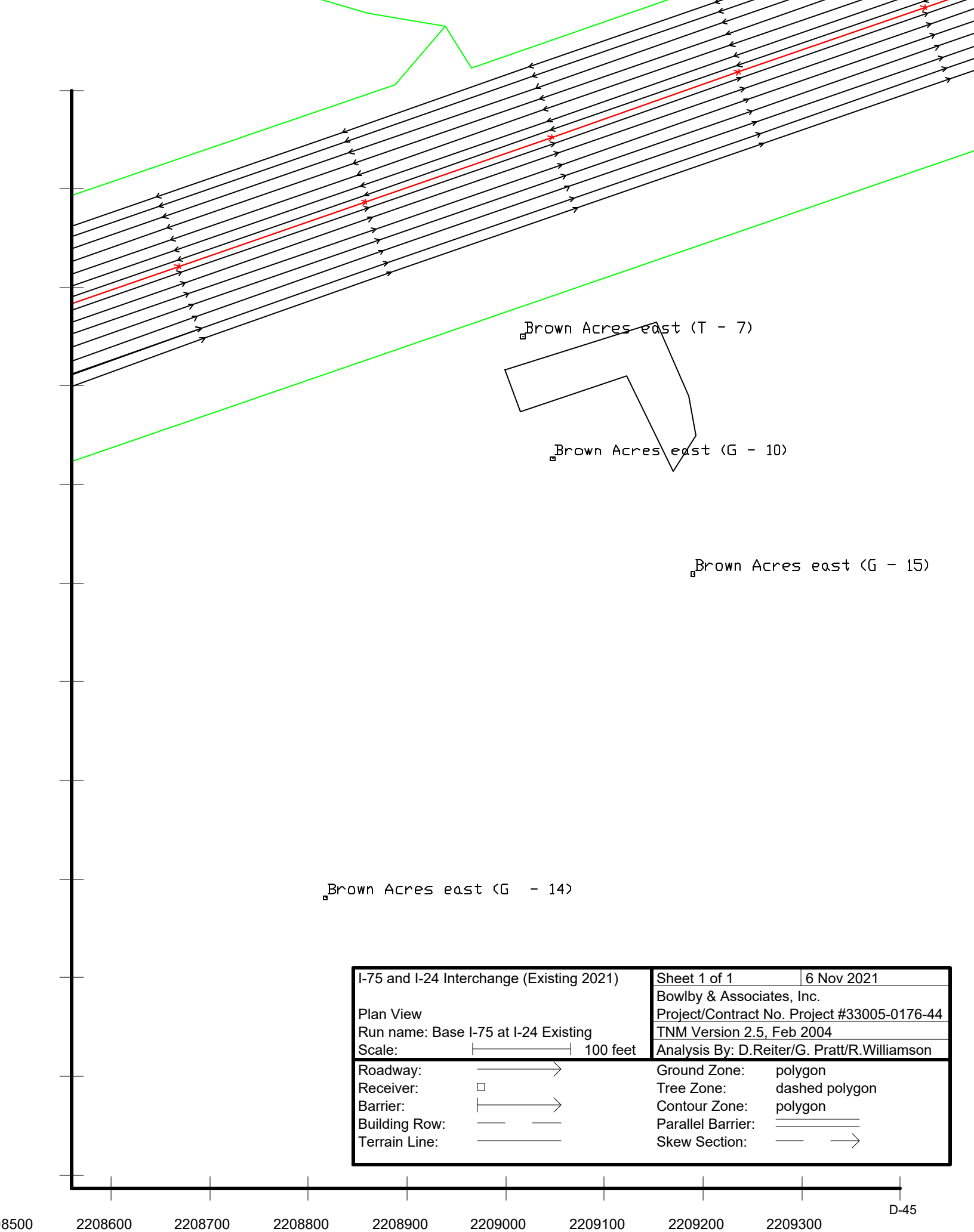
Chickamauga Cr. Grnwy (south)









Chickamauga Cr. Grnwy (south)

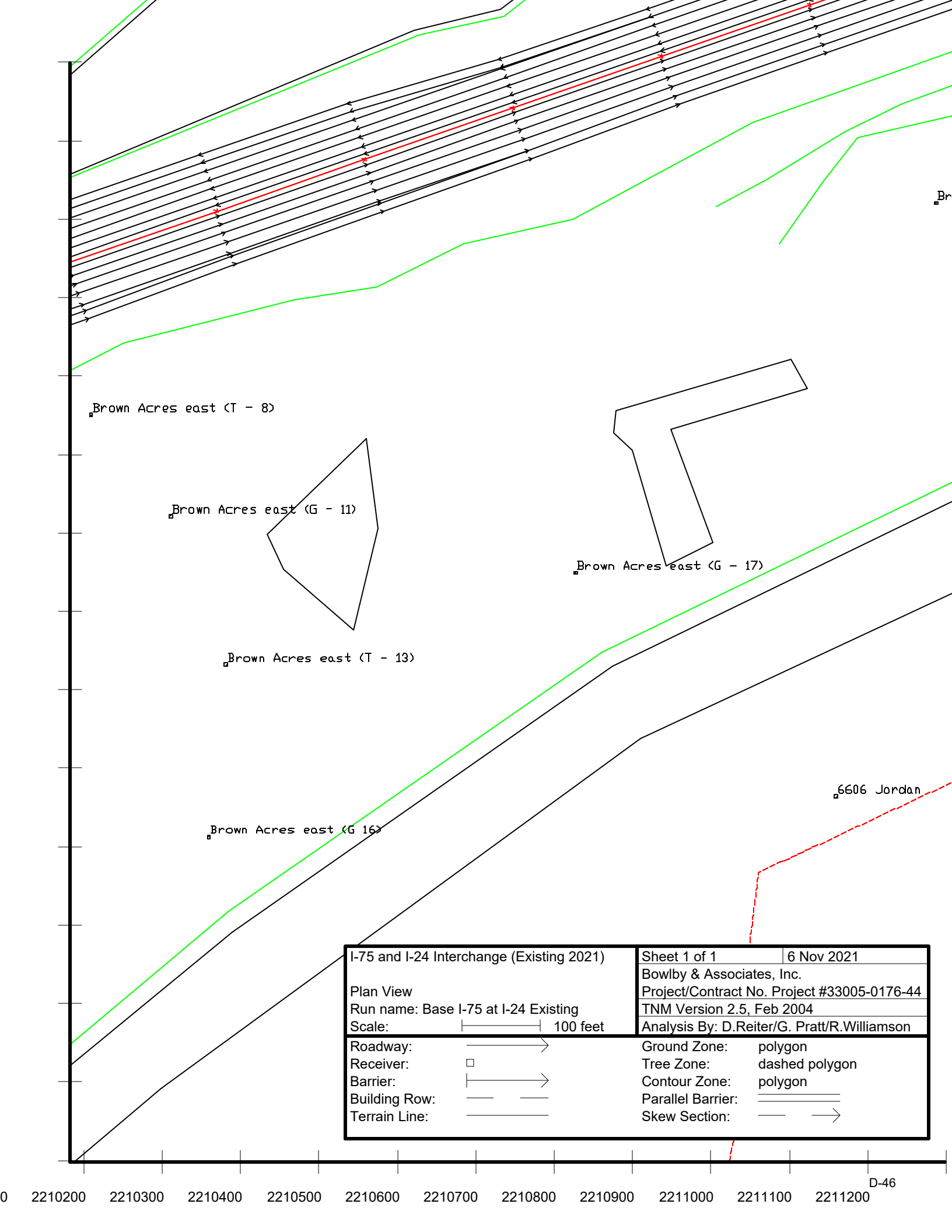
Chickamauga Cr. Grnwy (south) 650ft

I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 		TNM Version 2.5, Feb 2004	
Roadway: 		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Receiver: 		Ground Zone: polygon	
Barrier: 		Tree Zone: dashed polygon	
Building Row: 		Contour Zone: polygon	
Terrain Line: 		Parallel Barrier: 	
		Skew Section: 	





I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 		TNM Version 2.5, Feb 2004	
		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



Brown Acres east (T - 8)






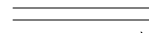


Brown Acres east (G - 11)

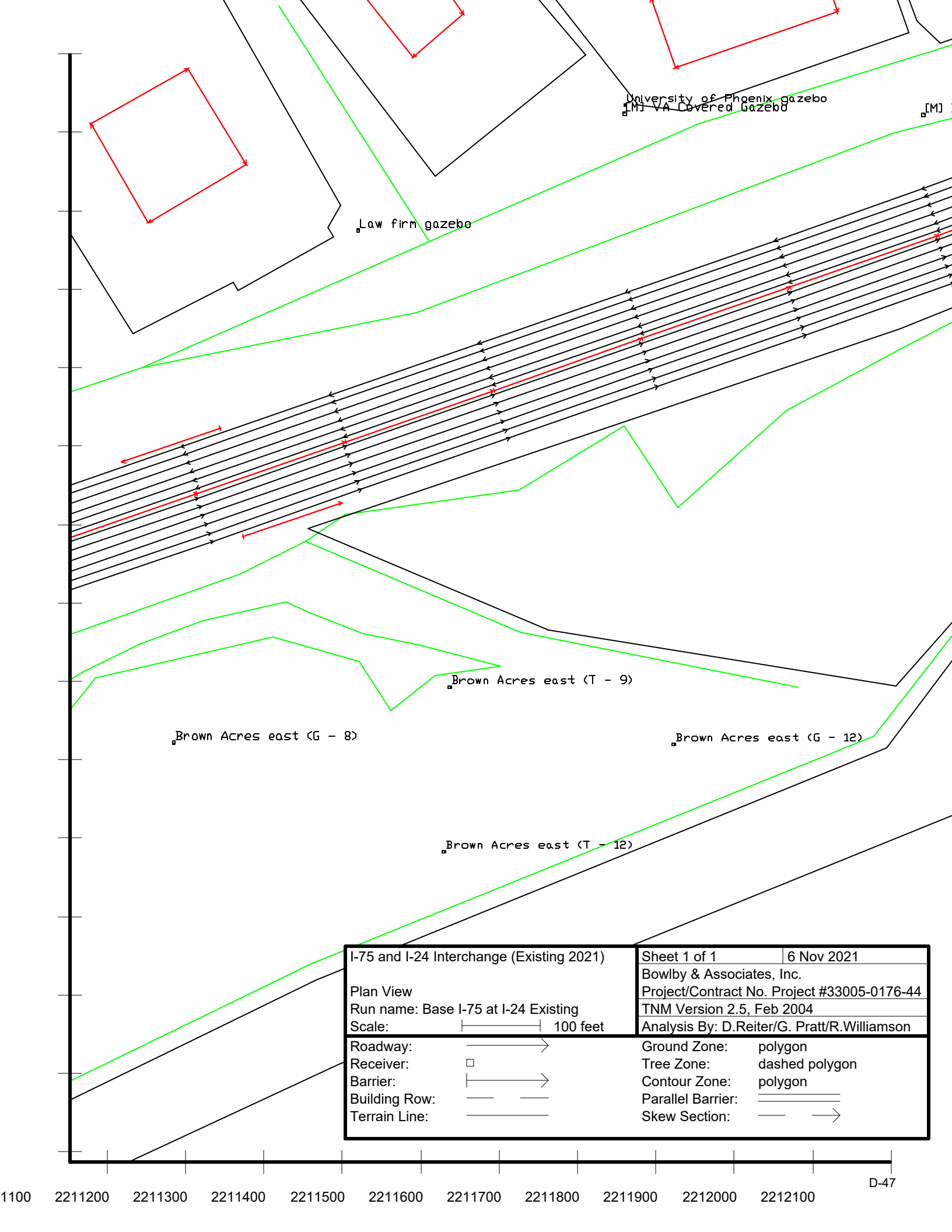
Brown Acres east (T - 13)

Brown Acres east (G 16)

Brown Acres east (G - 17)

6606 Jordan

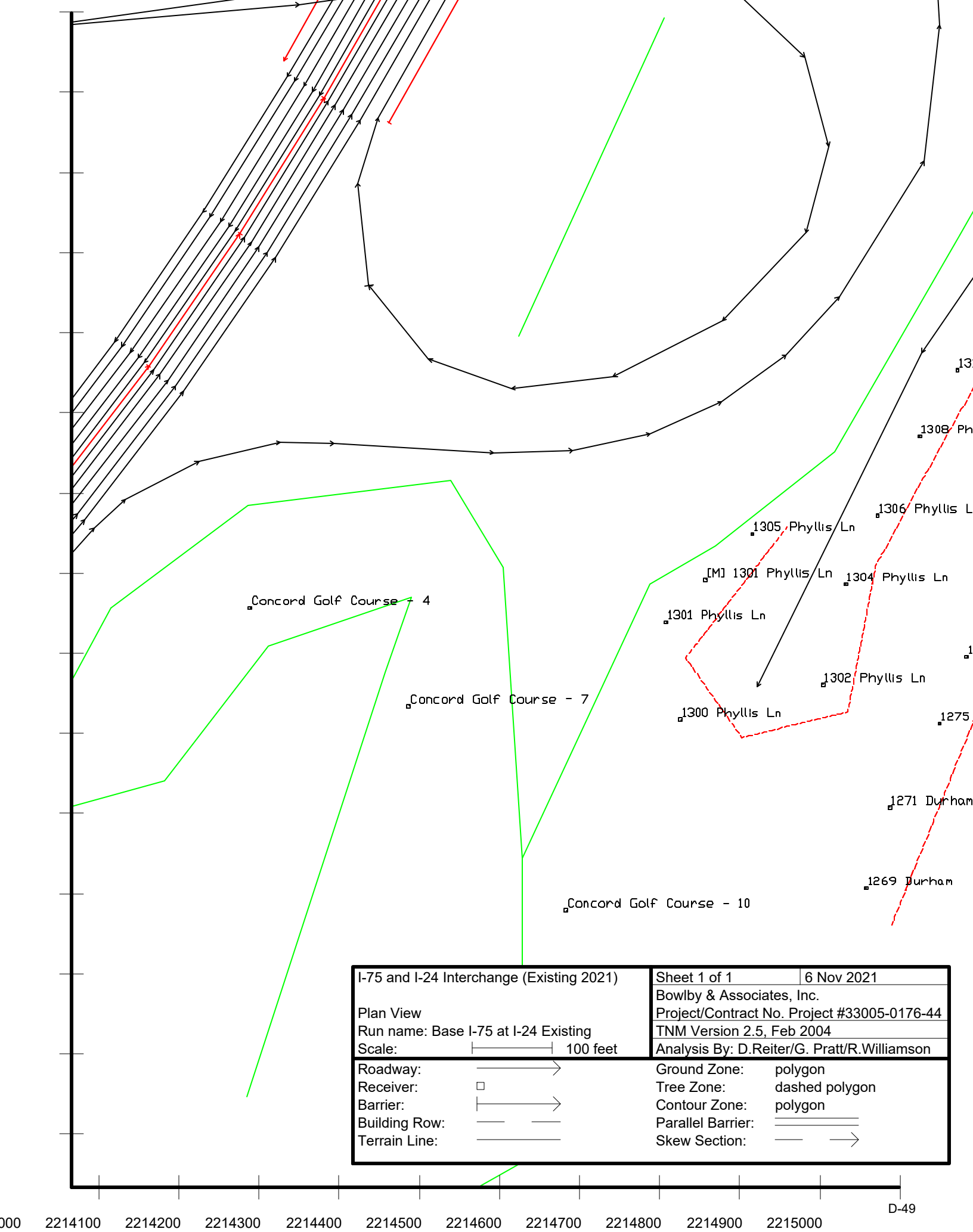
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway: 	Ground Zone: polygon		
Receiver: 	Tree Zone: dashed polygon		
Barrier: 	Contour Zone: polygon		
Building Row: 	Parallel Barrier: 		
Terrain Line: 	Skew Section: 		











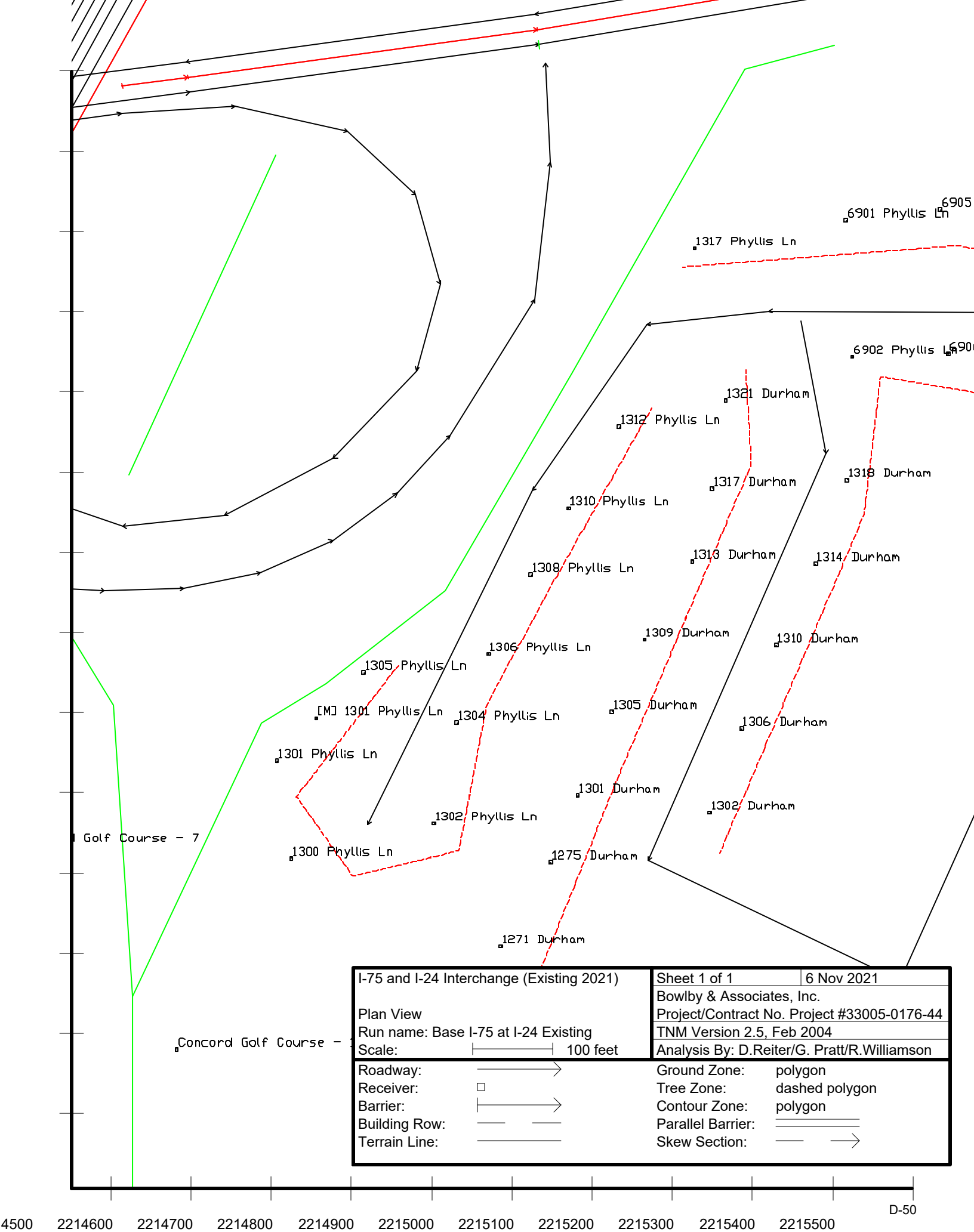
I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Bowlby & Associates, Inc.			
Project/Contract No. Project #33005-0176-44			
TNM Version 2.5, Feb 2004			
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	→	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	→	Contour Zone:	polygon
Building Row:	— —	Parallel Barrier:	— —
Terrain Line:	— —	Skew Section:	— →



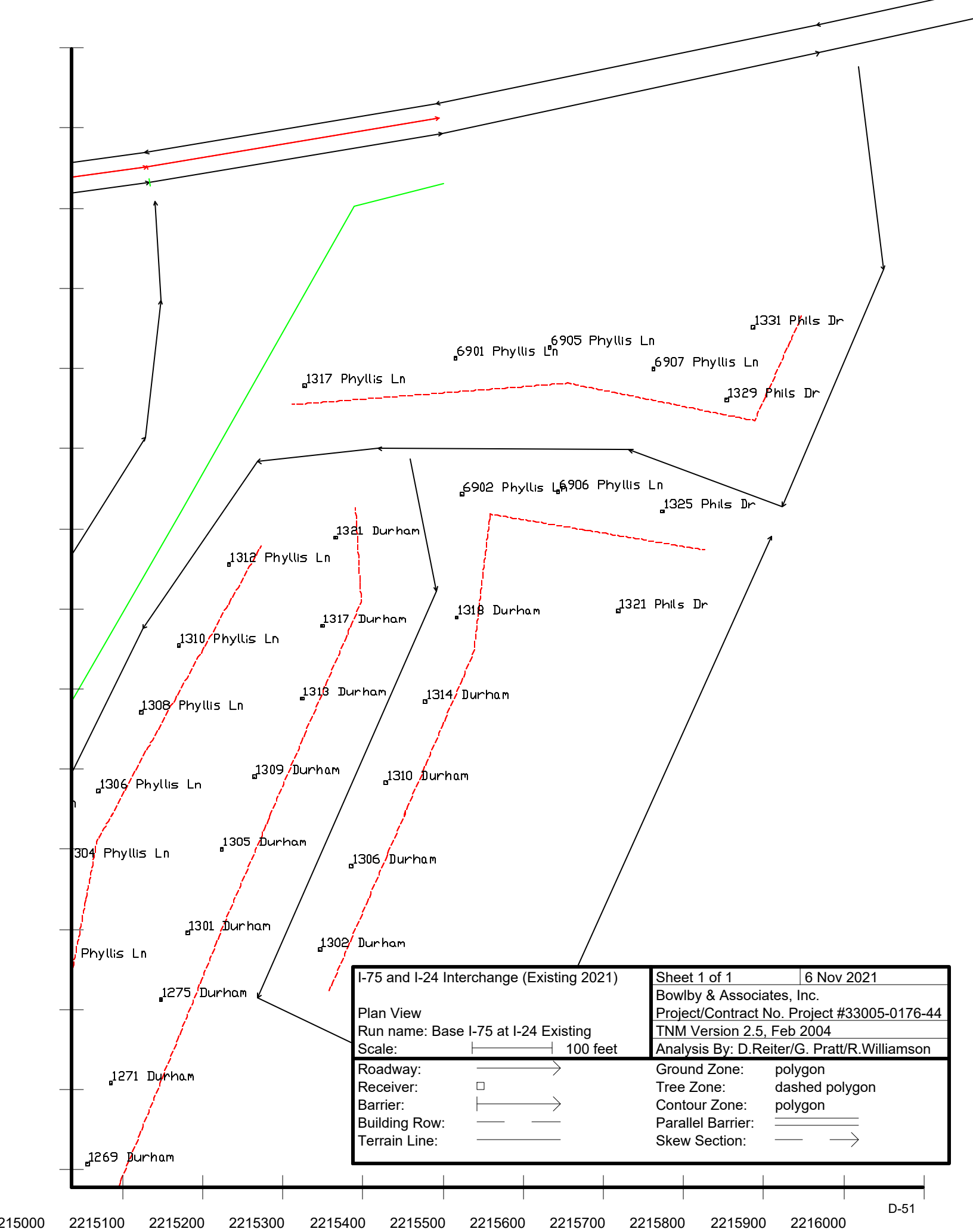


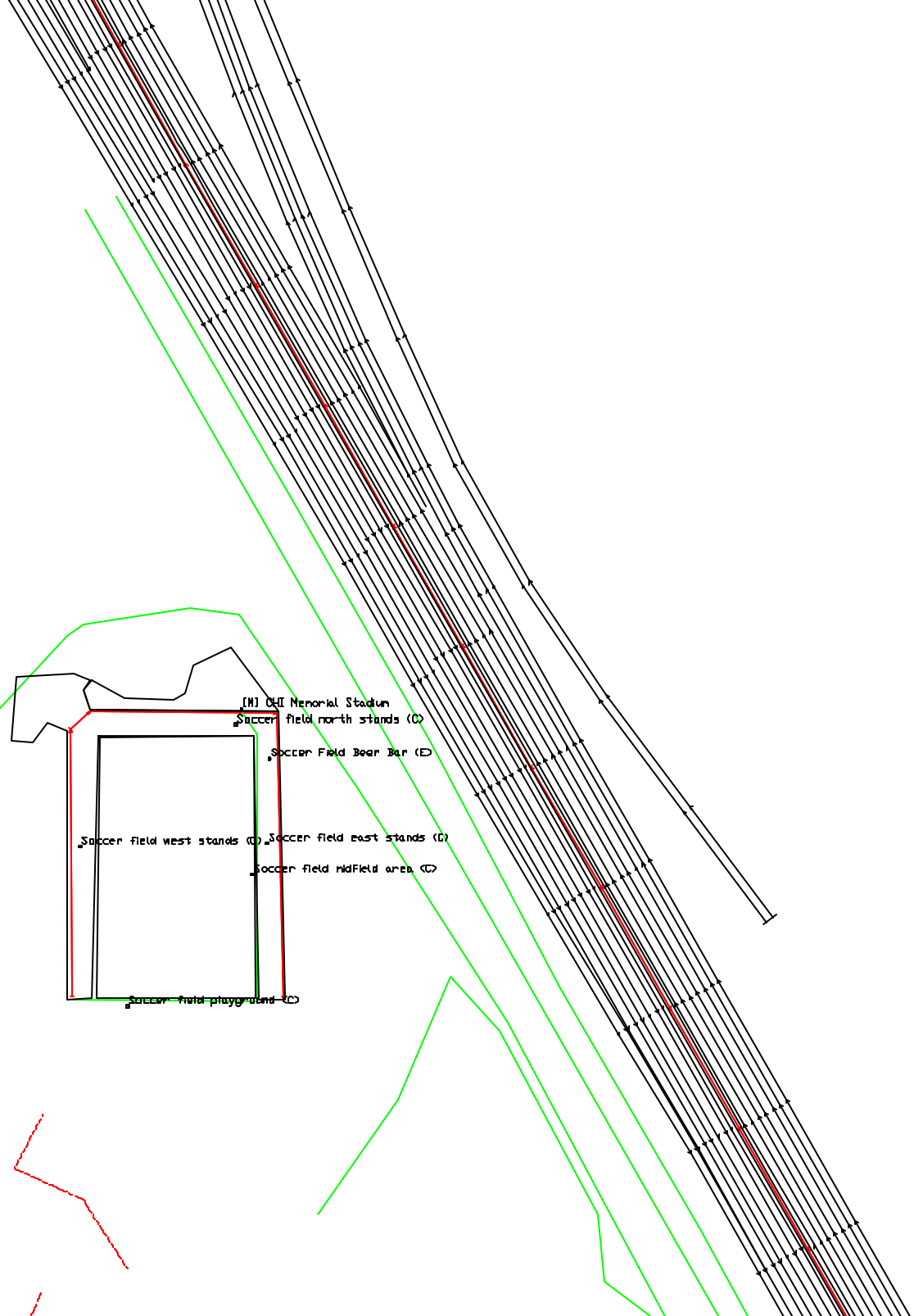








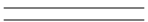

I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: 		TNM Version 2.5, Feb 2004	
		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



I-75 and I-24 Interchange (Existing 2021)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-75 at I-24 Existing		Project/Contract No. Project #33005-0176-44	
Scale: ————— 100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	—→	Ground Zone:	polygon
Receiver:	□	Tree Zone:	dashed polygon
Barrier:	—→	Contour Zone:	polygon
Building Row:	— —	Parallel Barrier:	— —
Terrain Line:	—	Skew Section:	— →





I-75 and I-24 Interchange (Exist 2021) AM		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: NAA 20		Project/Contract No. Project #33005-0176-44	
Scale: 		TNM Version 2.5, Feb 2004	
Roadway: 		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Receiver: 		Ground Zone: polygon	
Barrier: 		Tree Zone: dashed polygon	
Building Row: 		Contour Zone: polygon	
Terrain Line: 		Parallel Barrier: 	
		Skew Section: 	



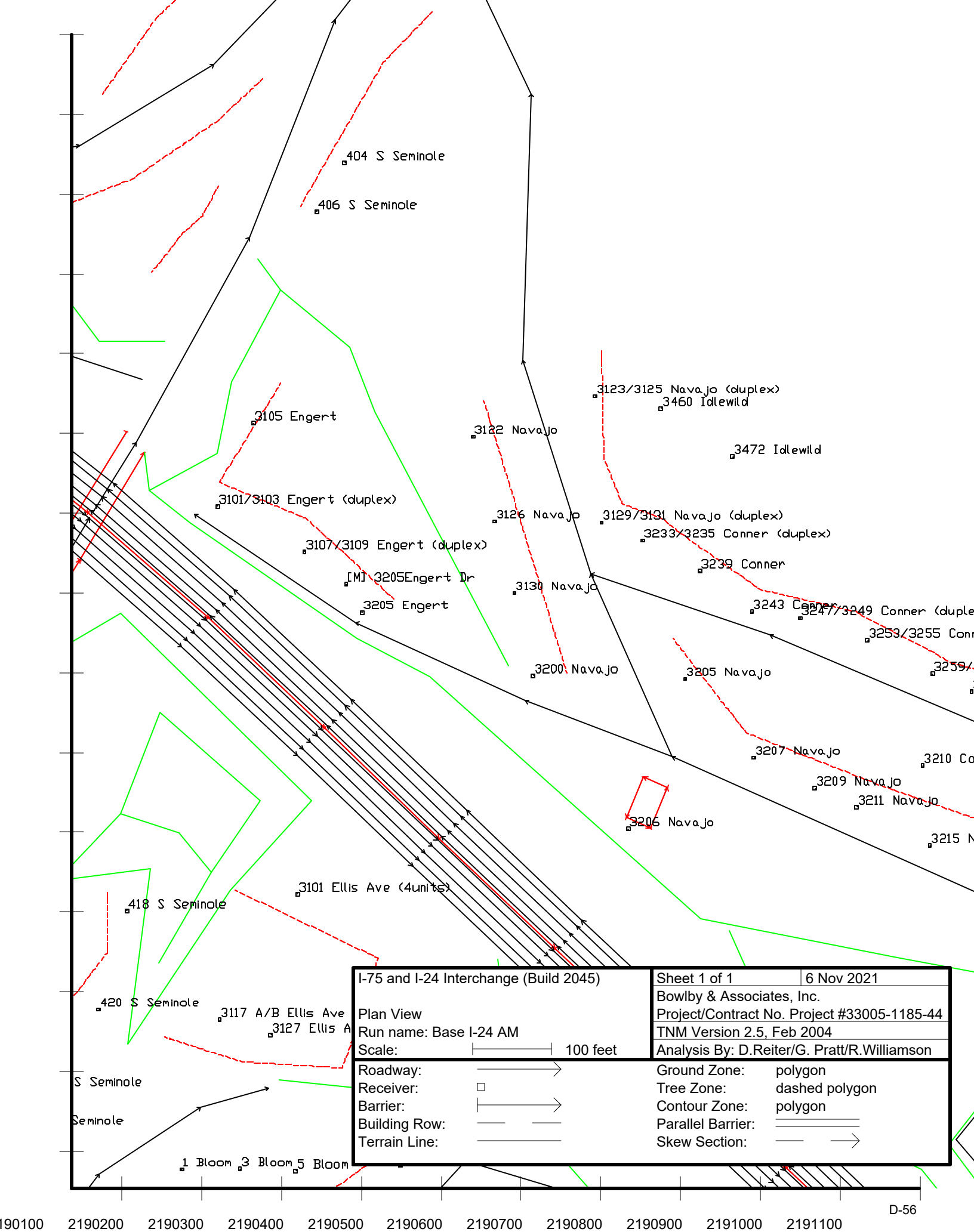
All modeling must be done in accordance with TDOT's Noise Procedures and TNM Modeling Guidelines

<b>Project</b>	<b>I-75 Interchange at I-24</b>
<b>County</b>	<b>Hamilton</b>
<b>PIN</b>	<b>114174.01</b>
<b>Project Number</b>	<b>33005-0176-44</b>
<b>Project Plans Description and Date</b>	
<b>Traffic Data Source and Date</b>	
<b>TNM Modeler</b>	<b>R. Williamson</b>
<b>Date Checklist Completed</b>	Click here to enter a date.
<b>TNM Reviewer</b>	<b>G. Pratt</b>
<b>Date Checklist Completed</b>	Click here to enter a date.

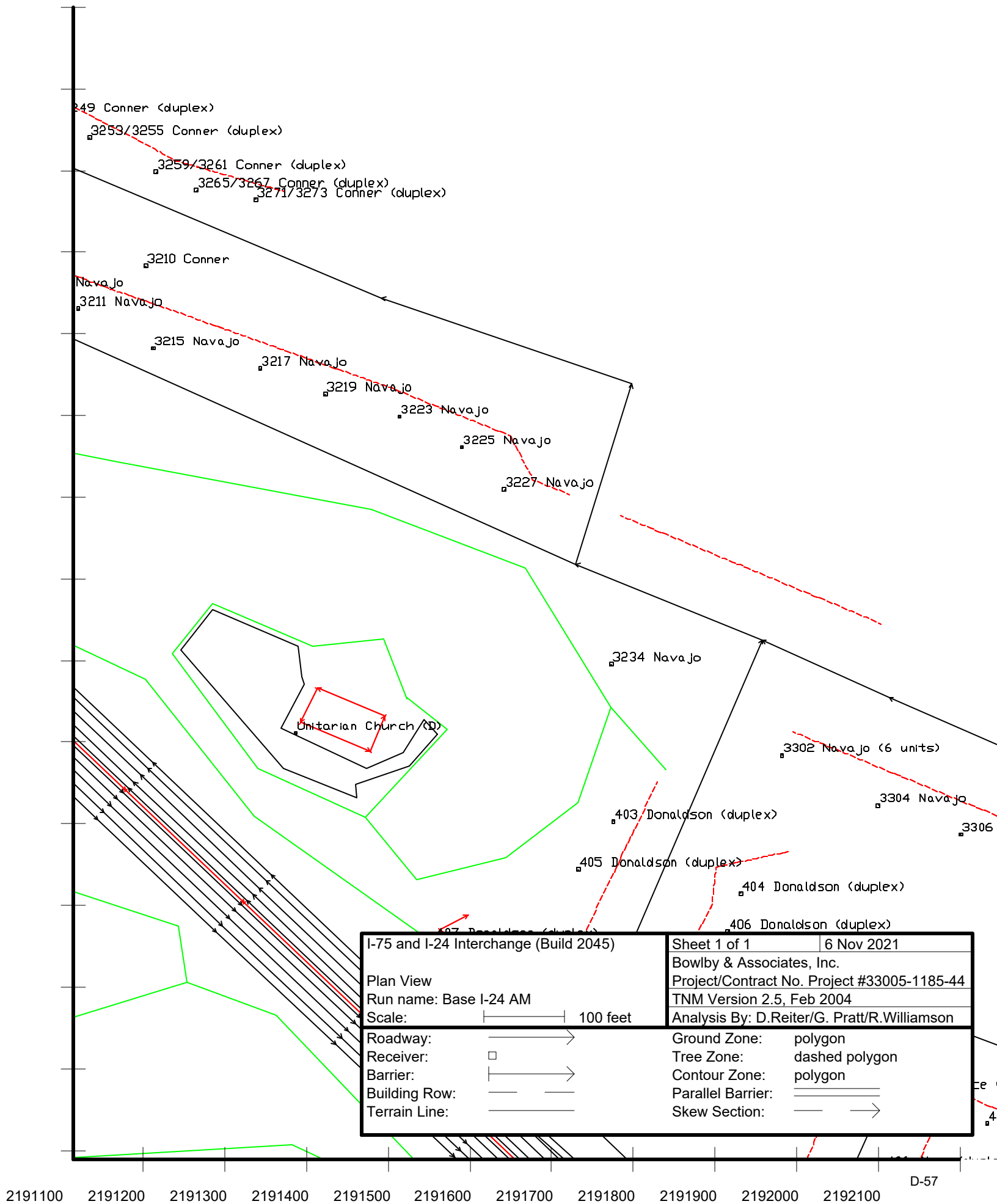
<b>TNM Run</b>	<b>I-75 at I-24 Build</b>		<b>Modeling Year</b>	2045
<b>Input</b>	<b>Task</b>	<b>Complete?</b>	<b>Notes</b>	
Setup	Run Information	<input checked="" type="checkbox"/>		
	General	<input checked="" type="checkbox"/>		
Roadways	Roadway names assigned	<input checked="" type="checkbox"/>		
	Widths of All Roadways per Guidance	<input checked="" type="checkbox"/>		
	Lengths of all roadways are adequate to represent roadway contributions	<input checked="" type="checkbox"/>		
	Points tied to stationing if available	<input checked="" type="checkbox"/>		
	Elevations seem correct	<input type="checkbox"/>	<b>STA 132, Check retaining wall and on ramp elevations. {fixed, RW}</b>	
	Traffic/Speeds on all Roadways	<input type="checkbox"/>	<b>Not yet</b>	
	Modeled traffic volumes match projections and truck percentages are correct	<input type="checkbox"/>		
	Traffic Flow Control Devices Modeled (Traffic Signals, Stop Signs, & On-Ramps)	<input type="checkbox"/>	<b>Brookfield and North Terrace is not signalized. N Terrace (outer) STA126-110.5-2 should not be signalized. {fixed, RW}</b>	

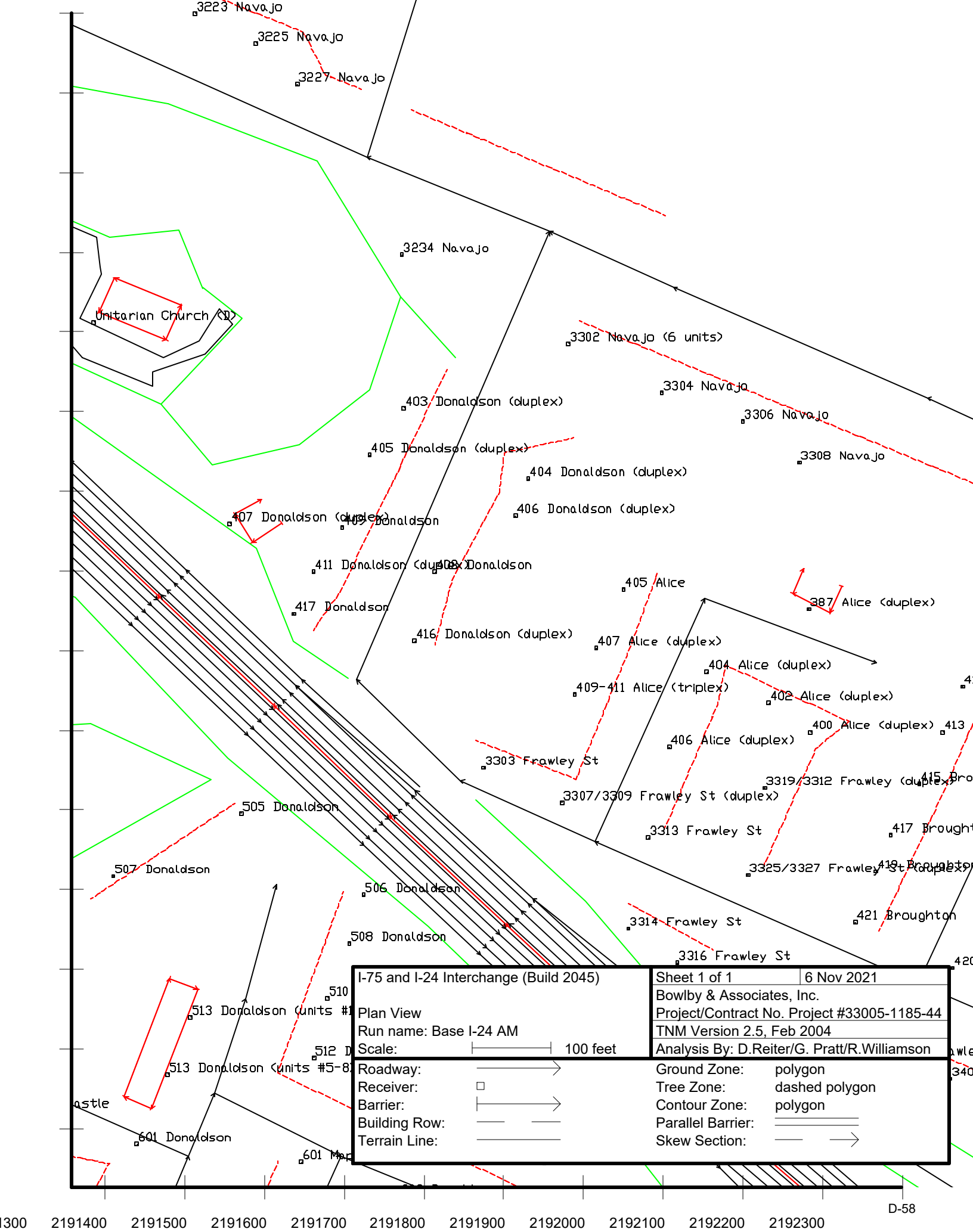
TNM Run	I-75 at I-24 Build		Modeling Year	2045
Input	Task	Complete?	Notes	
	Roadways modeled on structure as appropriate	<input checked="" type="checkbox"/>		
Receivers	Receivers named by address or stationing; "M" identifies measurement rec's	<input checked="" type="checkbox"/>		
	Number of dwelling units set for each receiver (if applicable)	<input type="checkbox"/>		
	Receivers in order of adjacent traffic flow	<input checked="" type="checkbox"/>		
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
	Elevations at second-story locations at appropriate heights (if applicable)	<input checked="" type="checkbox"/>		
	Enough receivers modeled (for impacts and benefits)	<input checked="" type="checkbox"/>		
	NAC set per State's Policy for each receiver/ land use	<input checked="" type="checkbox"/>		
	Noise Reduction set per State's Policy	<input checked="" type="checkbox"/>		
	Substantial Increase set per State's Policy	<input checked="" type="checkbox"/>		
Barriers	Significant buildings modeled	<input checked="" type="checkbox"/>		
	Parapets, etc. modeled	<input checked="" type="checkbox"/>		
	Perturbable barriers modeled as applicable	<input type="checkbox"/>	N/A	
	Barrier names assigned	<input checked="" type="checkbox"/>		
	Barrier points named by stationing or length	<input checked="" type="checkbox"/>		
	Barrier heights assigned	<input checked="" type="checkbox"/>		
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
	Increment and #up/down assigned	<input type="checkbox"/>	N/A	
	Barriers modeled on structure as appropriate and shielded lists are correct	<input type="checkbox"/>	outer parap I24eb to I75nb (914 to 916) and inner parap I24eb to I75nb (914 to 916) has some roadways missing from shielded list (may not be important). {fixed, RW}	
Building Rows	Building rows modeled per FHWA Guidance	<input checked="" type="checkbox"/>		

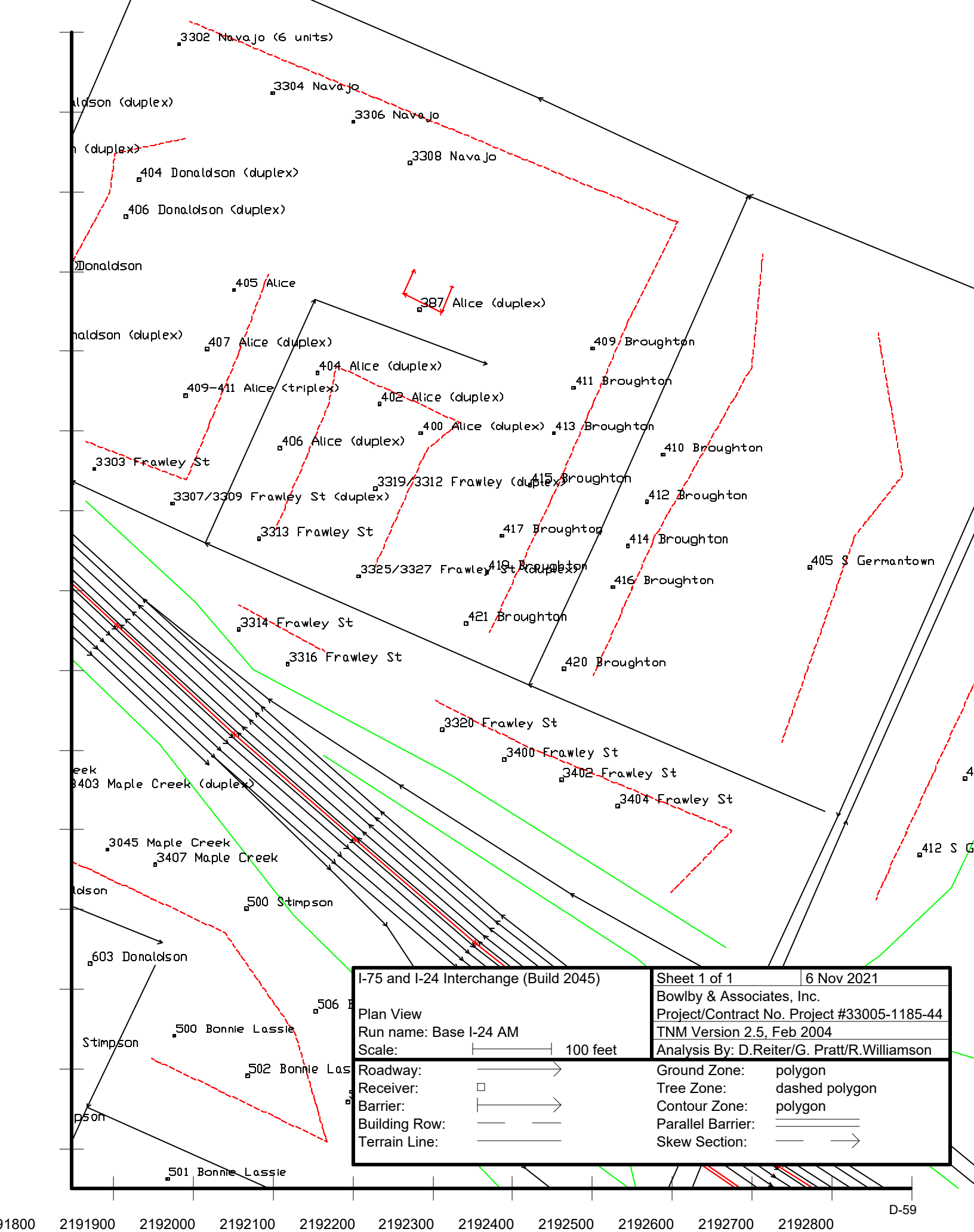
TNM Run	I-75 at I-24 Build		Modeling Year	2045
Input	Task	Complete?	Notes	
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
	Height and percentage assigned	<input checked="" type="checkbox"/>		
Terrain Lines	Significant terrain features modeled	<input type="checkbox"/>	Put terrain line at the top of modeled retaining walls {fixed, RW}	
	Terrain line names assigned	<input type="checkbox"/>	Some generics {not fixed, RW}	
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
Ground Zones	Ground Zones modeled per FHWA Guidance	<input type="checkbox"/>	GZ S Terrace Plaza Place overlaps with S Terrace {fixed, RW}	
	Ground zone names assigned	<input checked="" type="checkbox"/>		
	Ground zone types assigned	<input checked="" type="checkbox"/>	One generic {fixed, RW}	
Tree Zones	Tree zones modeled per FHWA Guidance	<input checked="" type="checkbox"/>		
	Tree zone names assigned	<input checked="" type="checkbox"/>		
	Elevations appear to be correct	<input checked="" type="checkbox"/>		
Perspective Views	Perspective views checked for accuracy	<input checked="" type="checkbox"/>		
Skew Views	Numerous skew views cut and checked for accuracy	<input checked="" type="checkbox"/>		
Input Check	Input Check completed and errors fixed/documented	<input checked="" type="checkbox"/>		

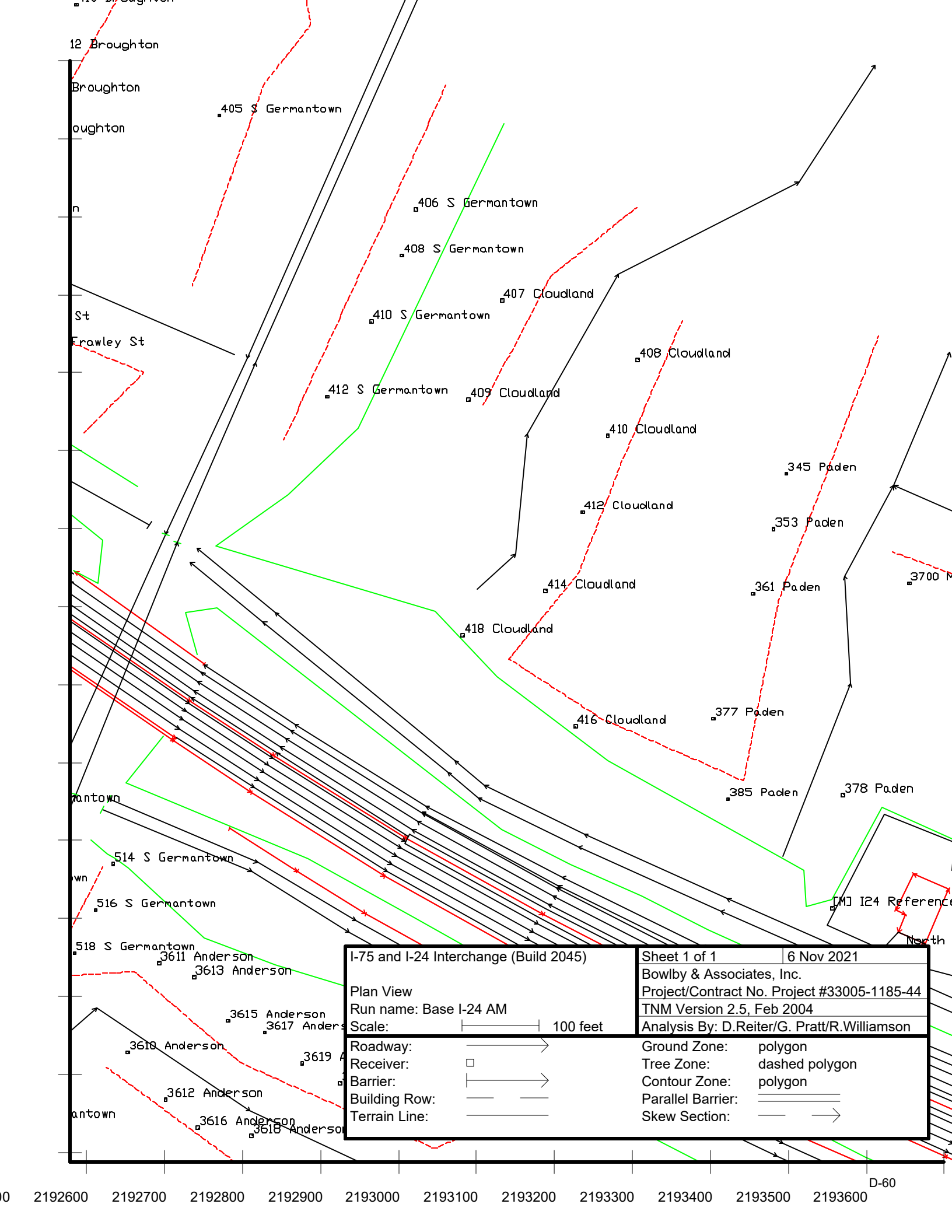














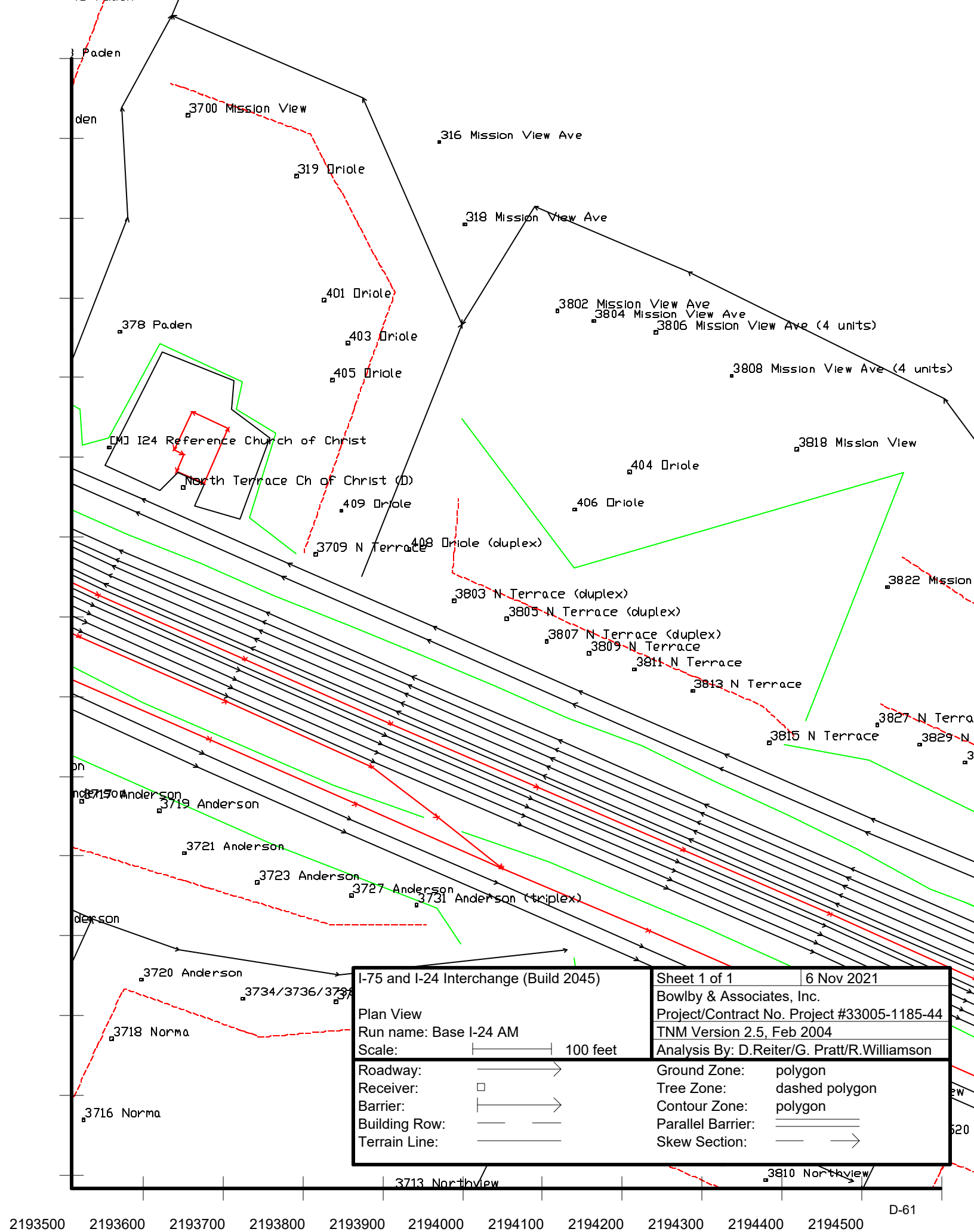












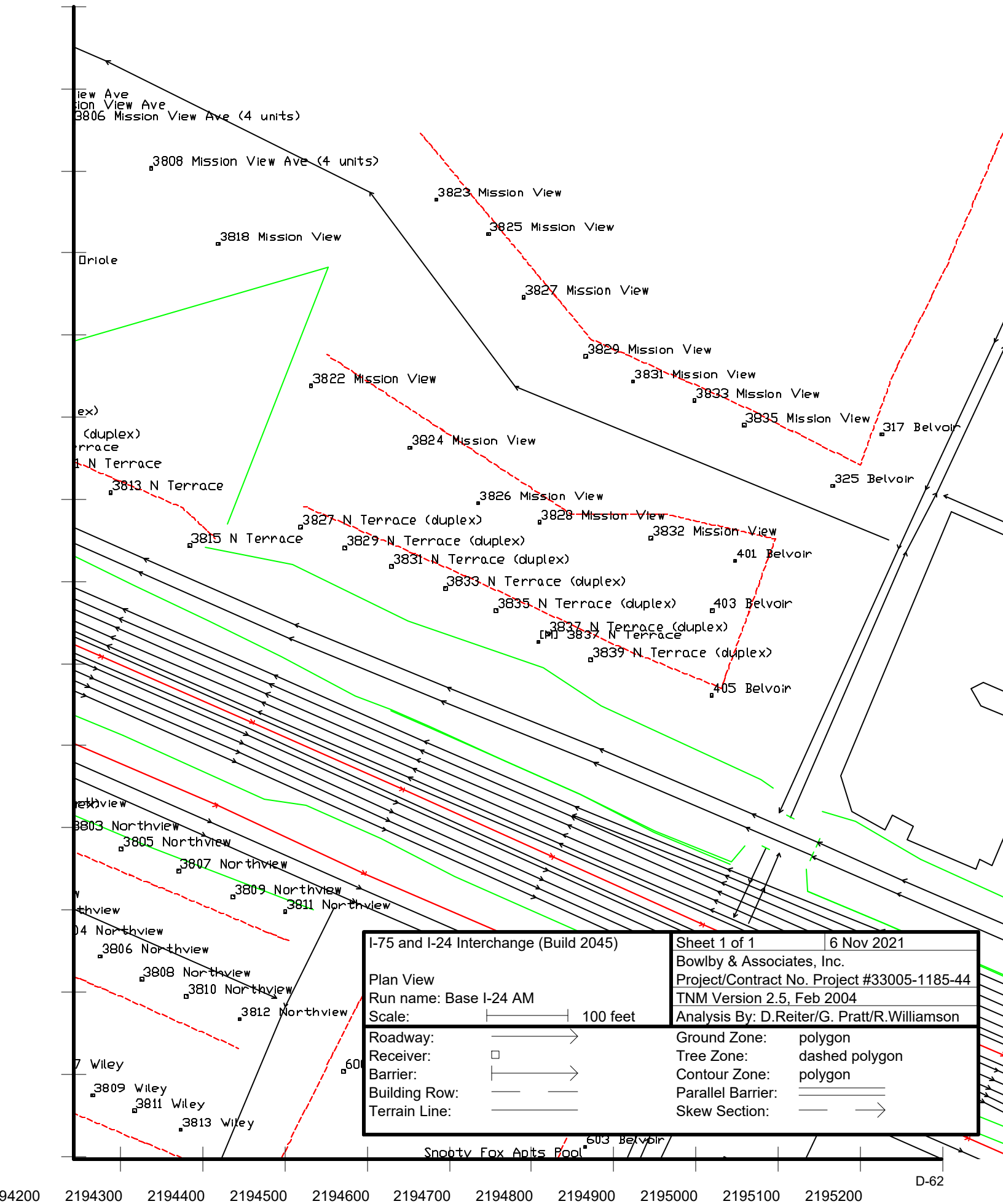


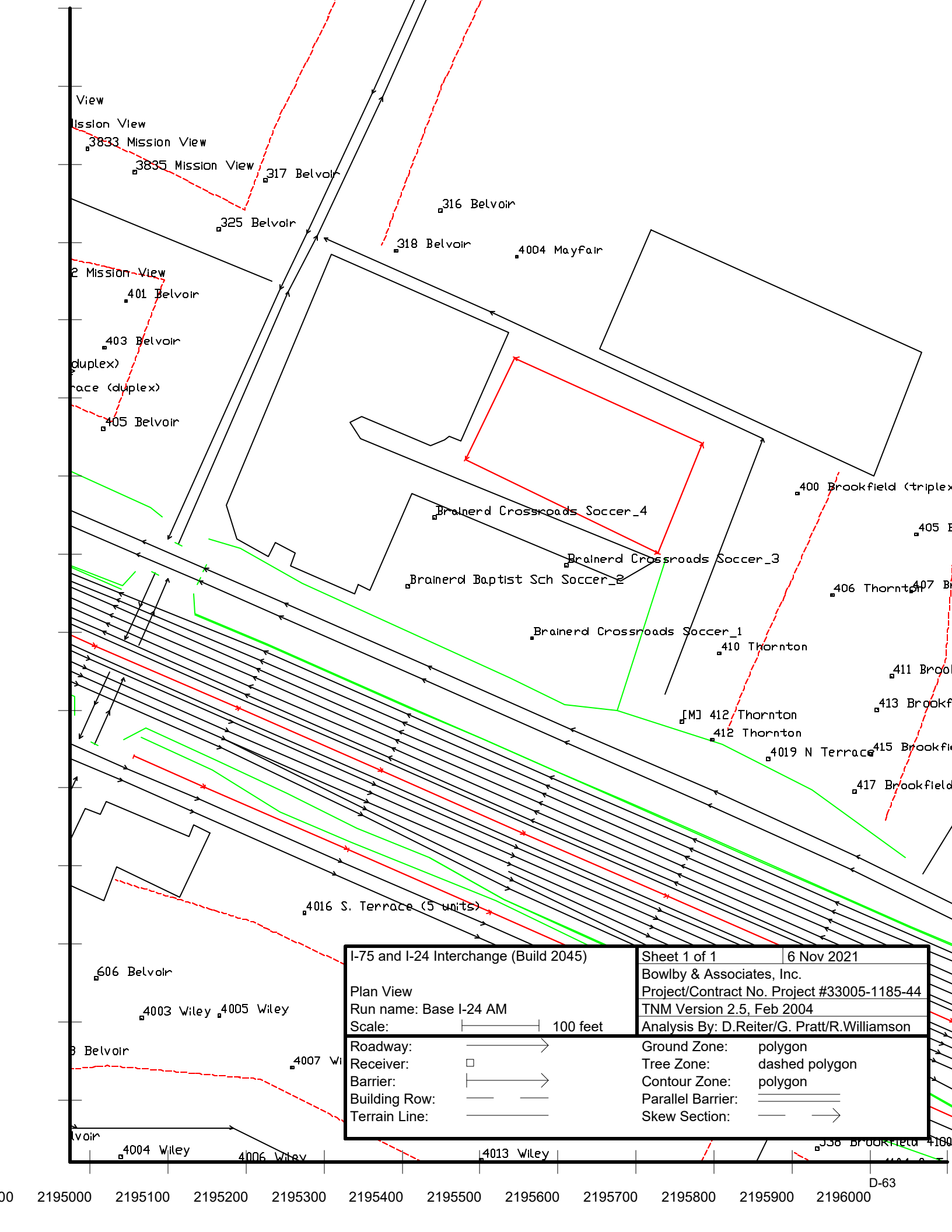
<b>I-75 and I-24 Interchange (Build 2045)</b>		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-24 AM		Project/Contract No. Project #33005-1185-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Roadway: 		Ground Zone: polygon	
Receiver: 		Tree Zone: dashed polygon	
Barrier: 		Contour Zone: polygon	
Building Row: 		Parallel Barrier: 	
Terrain Line: 		Skew Section: 	











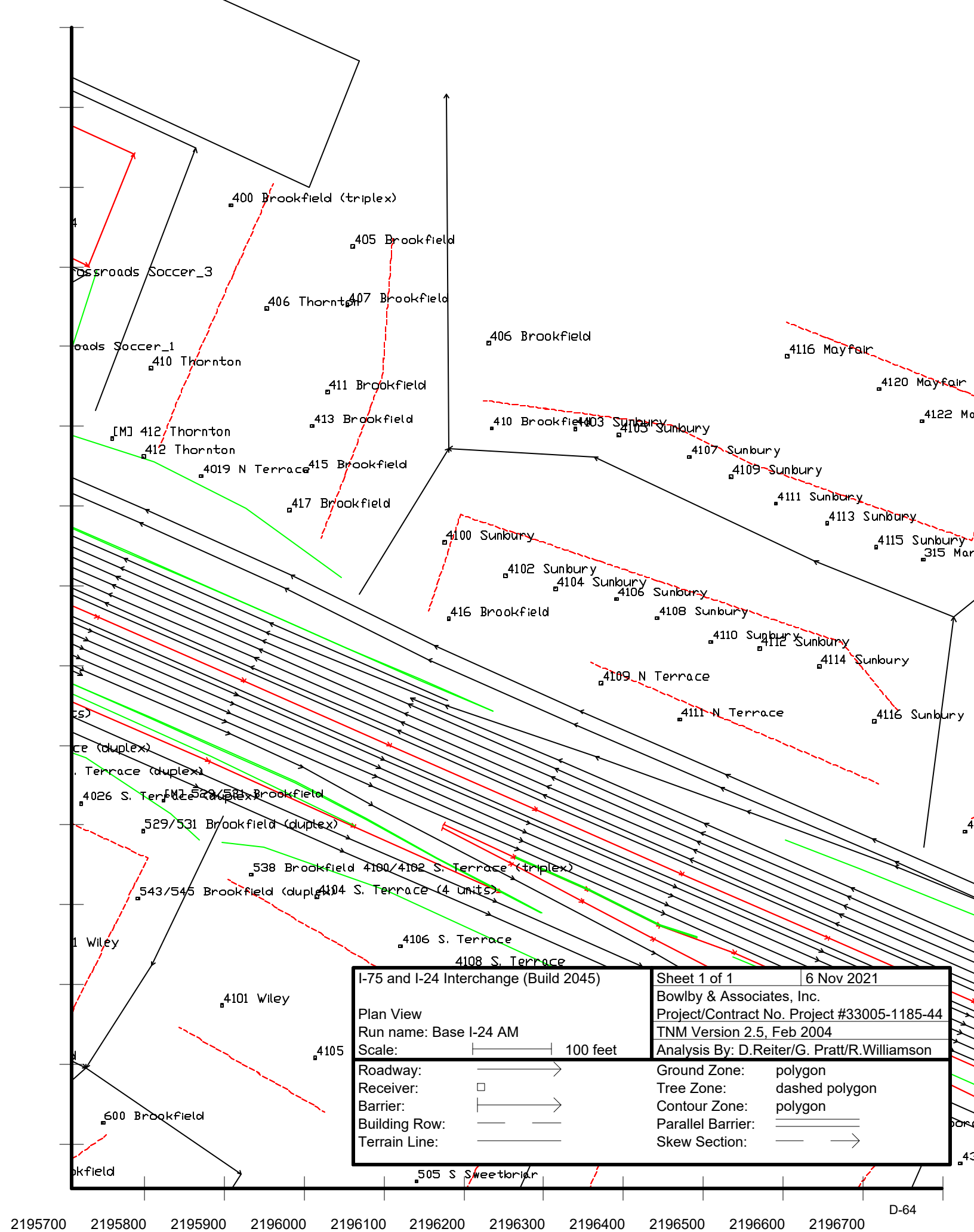


I-75 and I-24 Interchange (Build 2045)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-24 AM		Project/Contract No. Project #33005-1185-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway: 	Ground Zone: polygon		
Receiver: 	Tree Zone: dashed polygon		
Barrier: 	Contour Zone: polygon		
Building Row: 	Parallel Barrier: 		
Terrain Line: 	Skew Section: 		

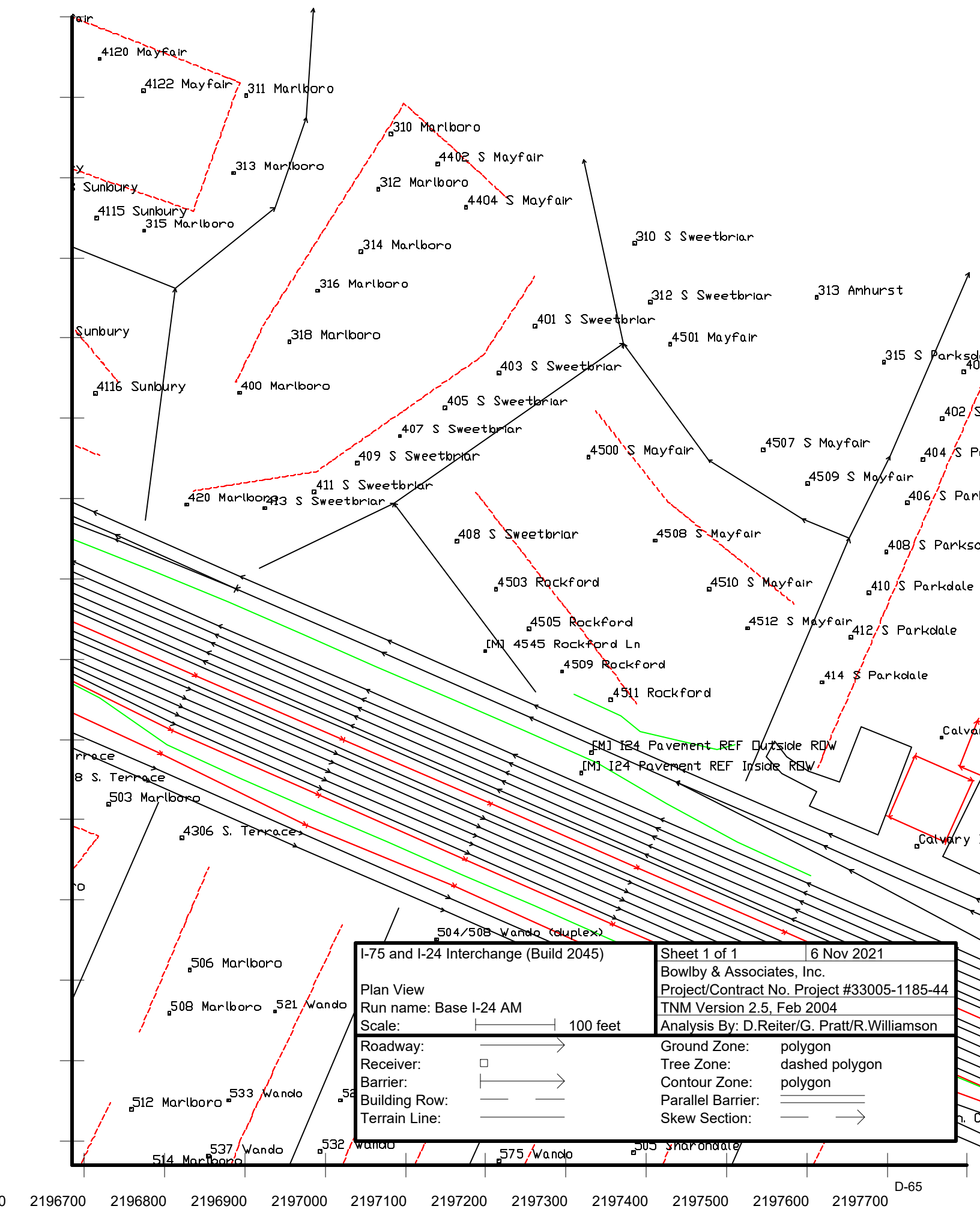


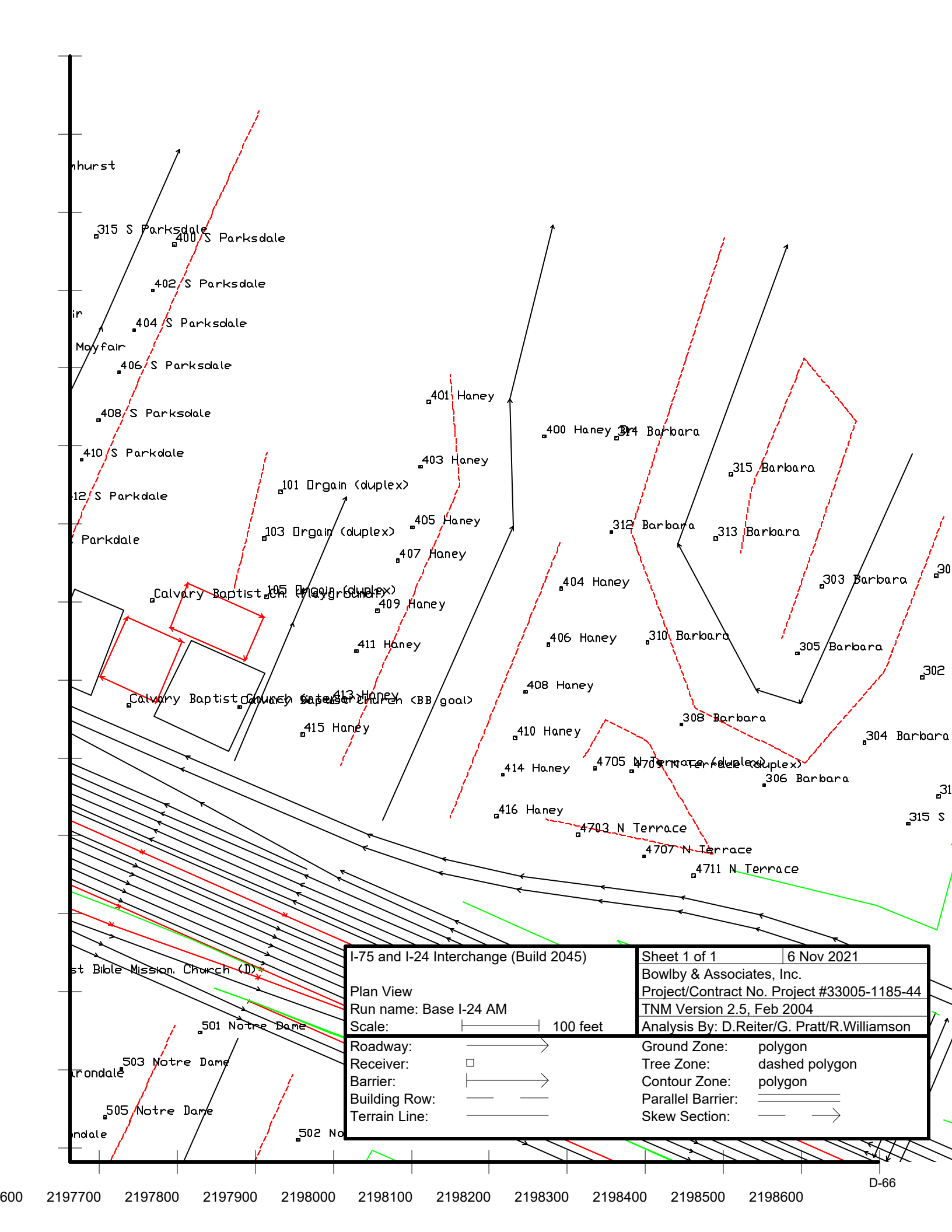


I-75 and I-24 Interchange (Build 2045)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-24 AM		Project/Contract No. Project #33005-1185-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Roadway: 		Ground Zone: polygon	
Receiver: 		Tree Zone: dashed polygon	
Barrier: 		Contour Zone: polygon	
Building Row: 		Parallel Barrier: 	
Terrain Line: 		Skew Section: 	

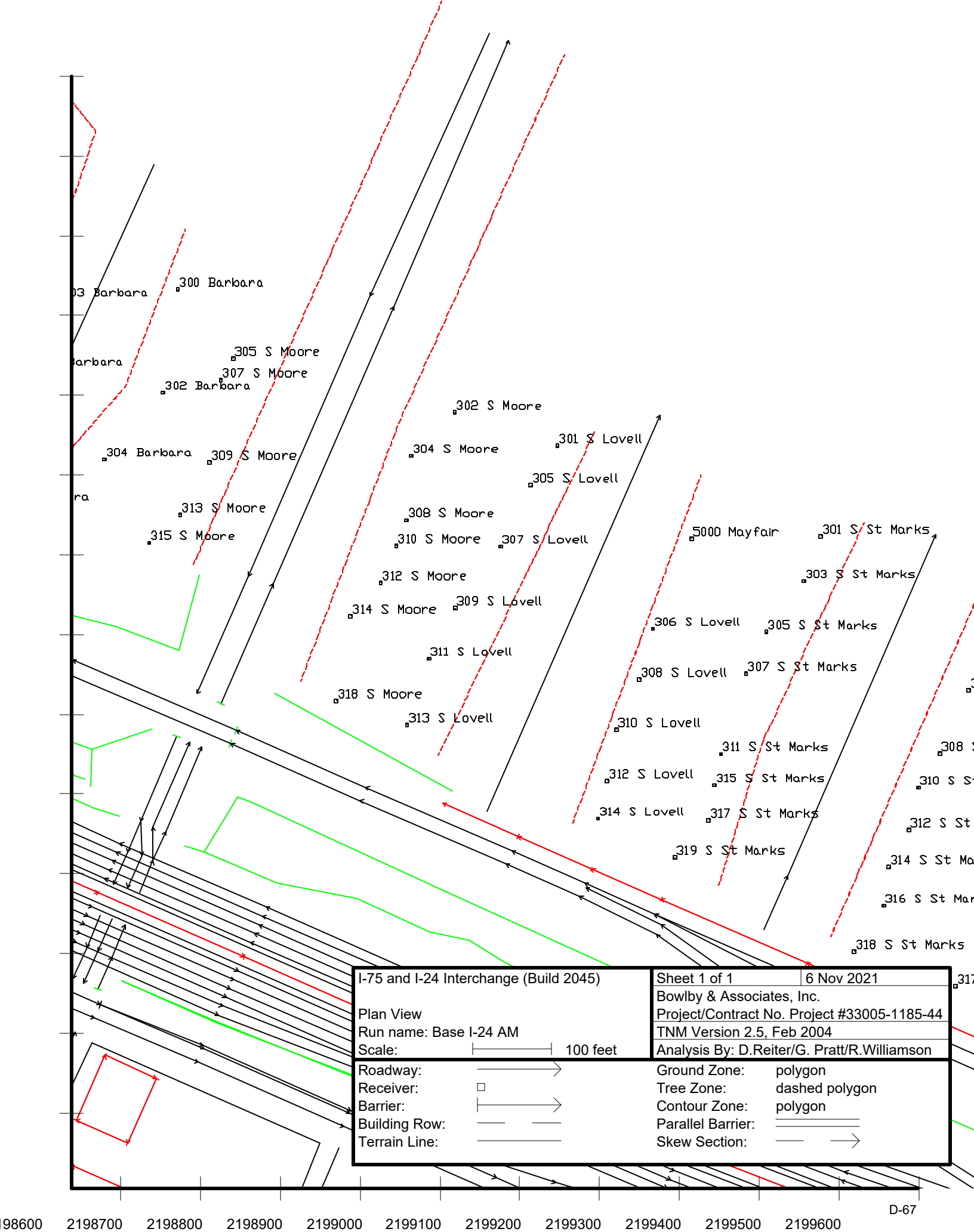


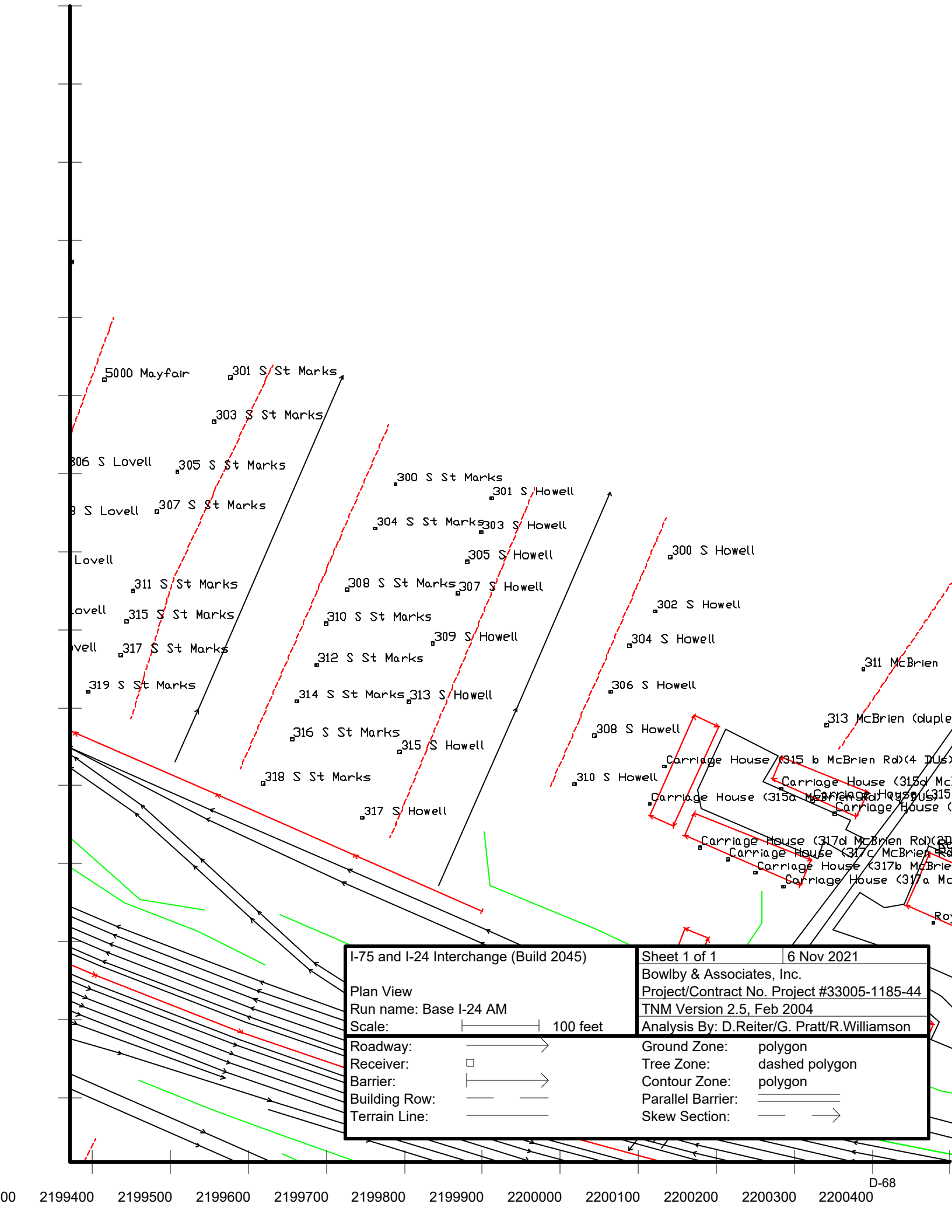




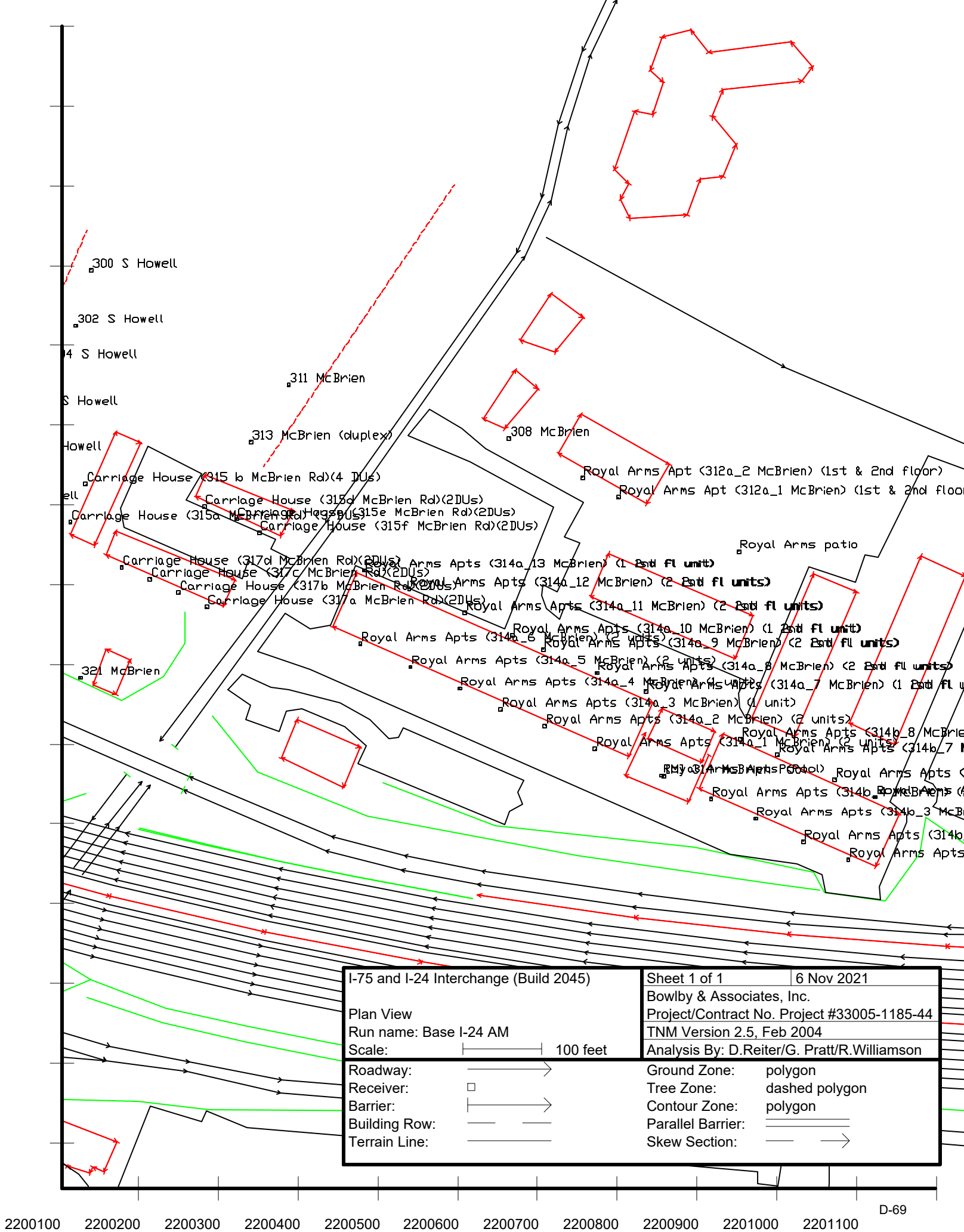


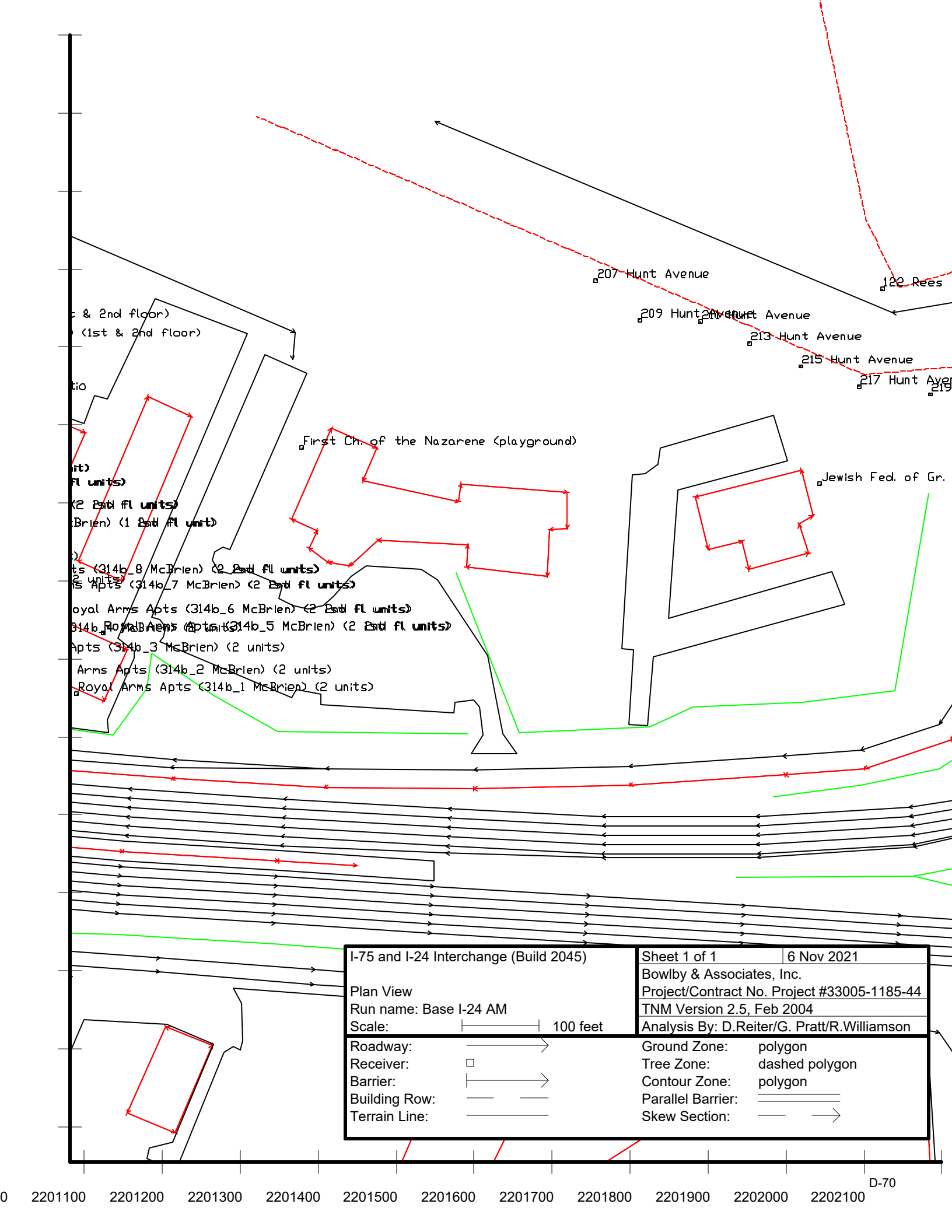
I-75 and I-24 Interchange (Build 2045)		Sheet 1 of 1	6 Nov 2021
Bowlby & Associates, Inc.			
Project/Contract No. Project #33005-1185-44			
TNM Version 2.5, Feb 2004			
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:	→		
Receiver:	□		
Barrier:	→		
Building Row:	— —		
Terrain Line:	— — — —		
Ground Zone:	polygon		
Tree Zone:	dashed polygon		
Contour Zone:	polygon		
Parallel Barrier:	— — — —		
Skew Section:	— →		











1st & 2nd floor)  
(1st & 2nd floor)

tio

it)  
fl units)  
(2 2nd fl units)  
Brien) (1 2nd fl unit)

ts (314b\_8 McBrien) (2 2nd fl units)

ts (314b\_7 McBrien) (2 2nd fl units)

oyal Arms Apts (314b\_6 McBrien) (2 2nd fl units)

314b\_4 Royal Arms Apts (314b\_5 McBrien) (2 2nd fl units)

Apts (314b\_3 McBrien) (2 units)

Arms Apts (314b\_2 McBrien) (2 units)

Royal Arms Apts (314b\_1 McBrien) (2 units)

First Chr. of the Nazarene (playground)

Jewish Fed. of Gr.

207 Hunt Avenue

209 Hunt Avenue

213 Hunt Avenue

215 Hunt Avenue

217 Hunt Avenue

122 Rees

I-75 and I-24 Interchange (Build 2045)

Plan View

Run name: Base I-24 AM

Scale: 100 feet

Roadway: —————>

Receiver: □

Barrier: —————>

Building Row: ——— ———

Terrain Line: ——— ———

Sheet 1 of 1

6 Nov 2021

Bowlby & Associates, Inc.

Project/Contract No. Project #33005-1185-44

TNM Version 2.5, Feb 2004

Analysis By: D.Reiter/G. Pratt/R.Williamson

Ground Zone: polygon

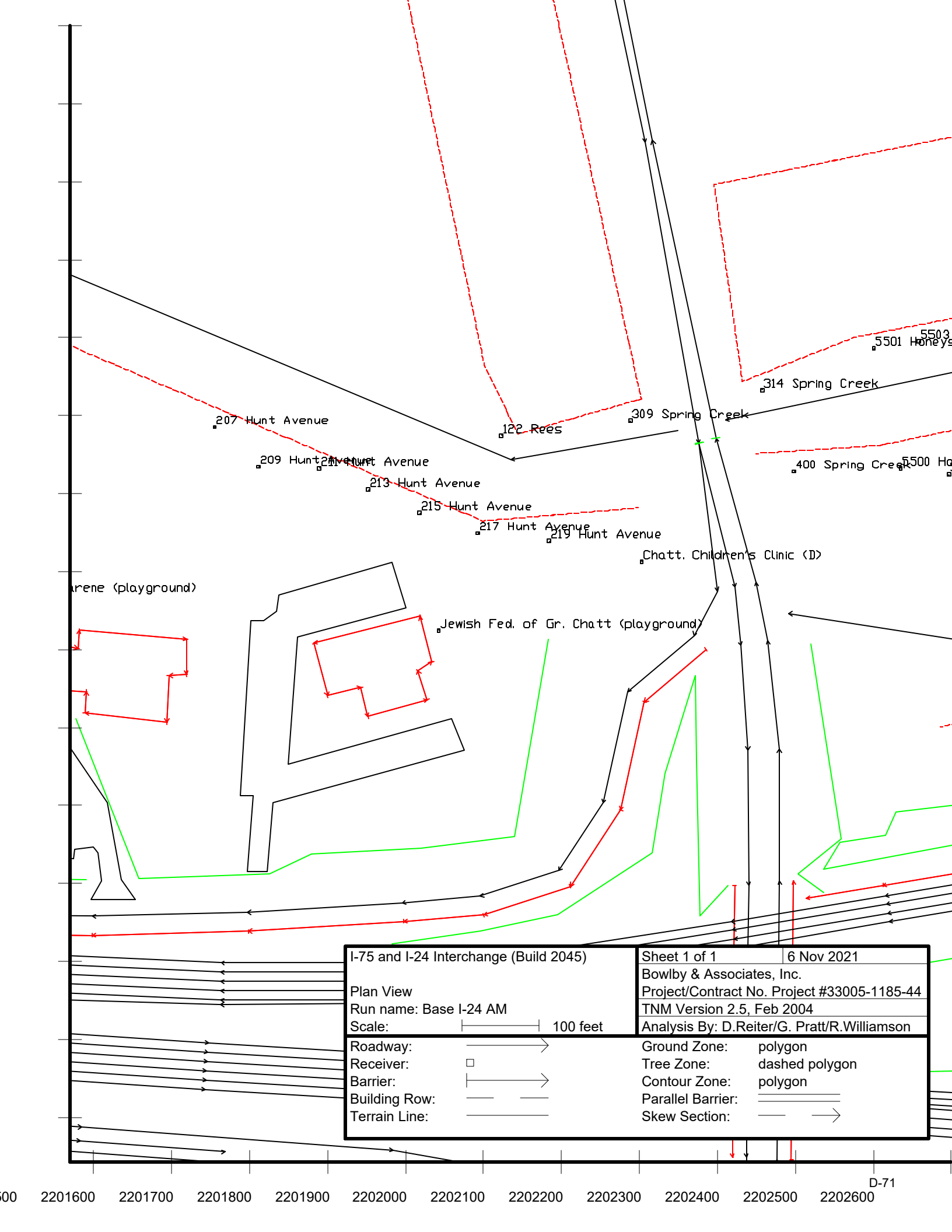
Tree Zone: dashed polygon









Contour Zone: polygon

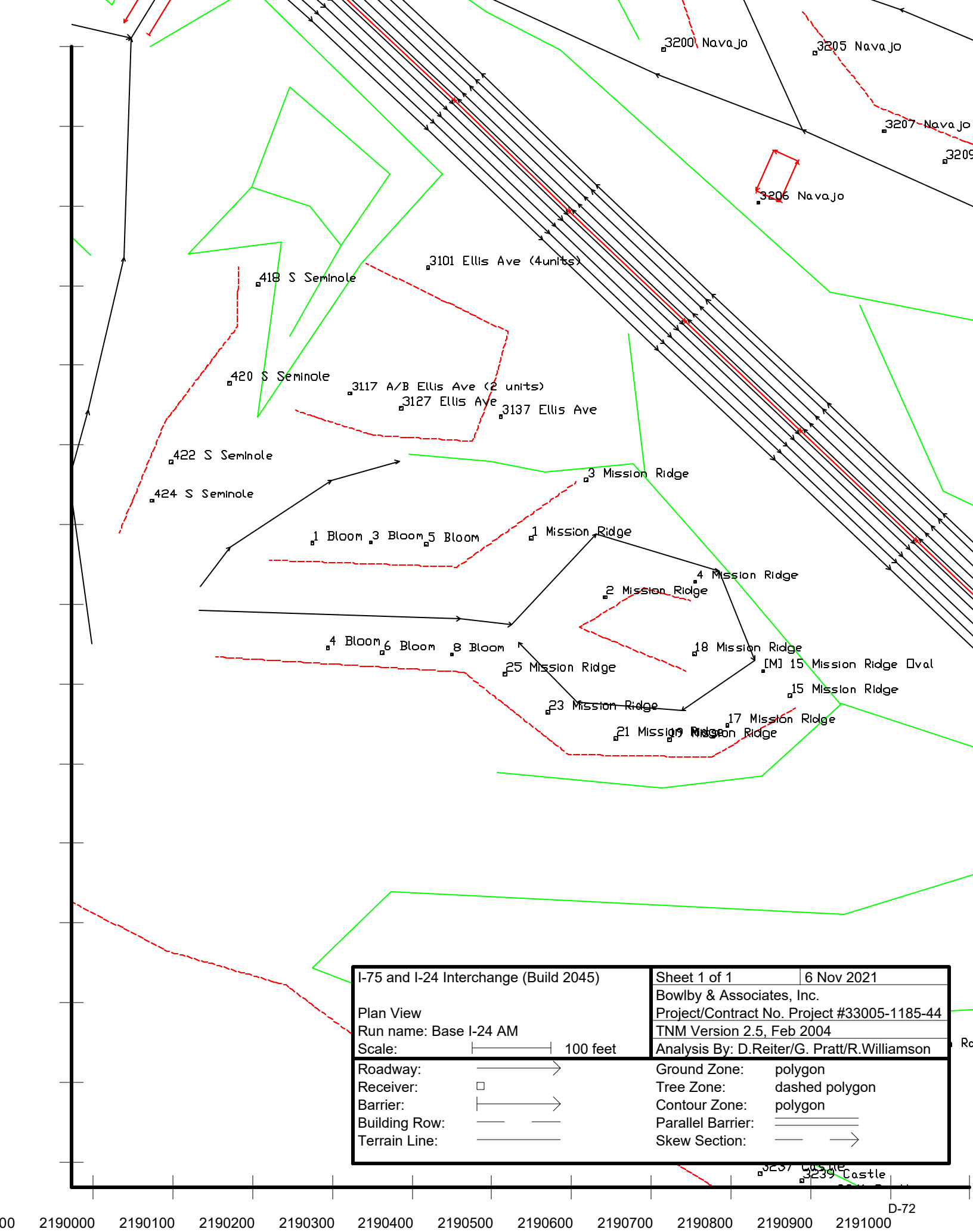
Parallel Barrier: ——— ———

Skew Section: ——— ———>

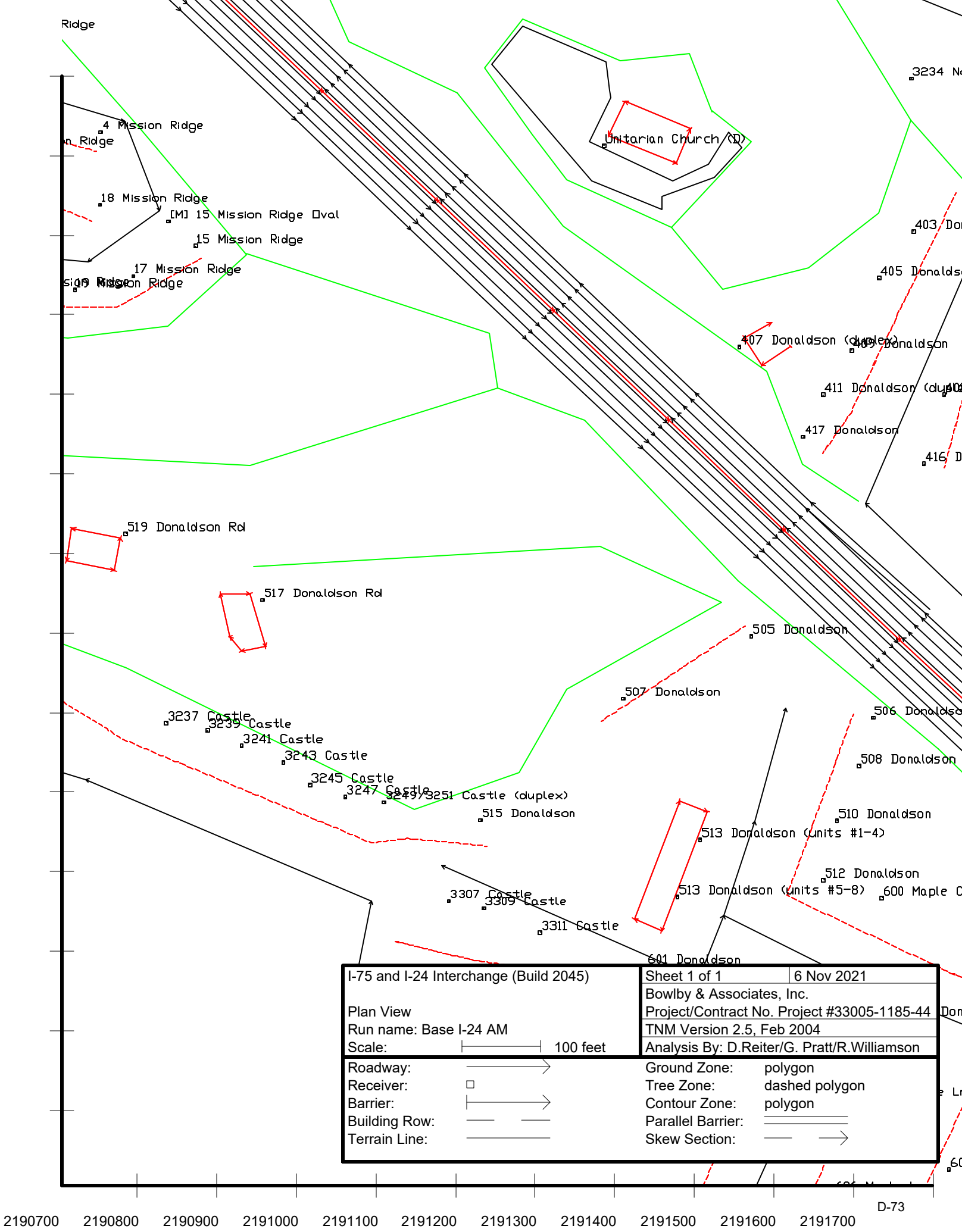
D-70

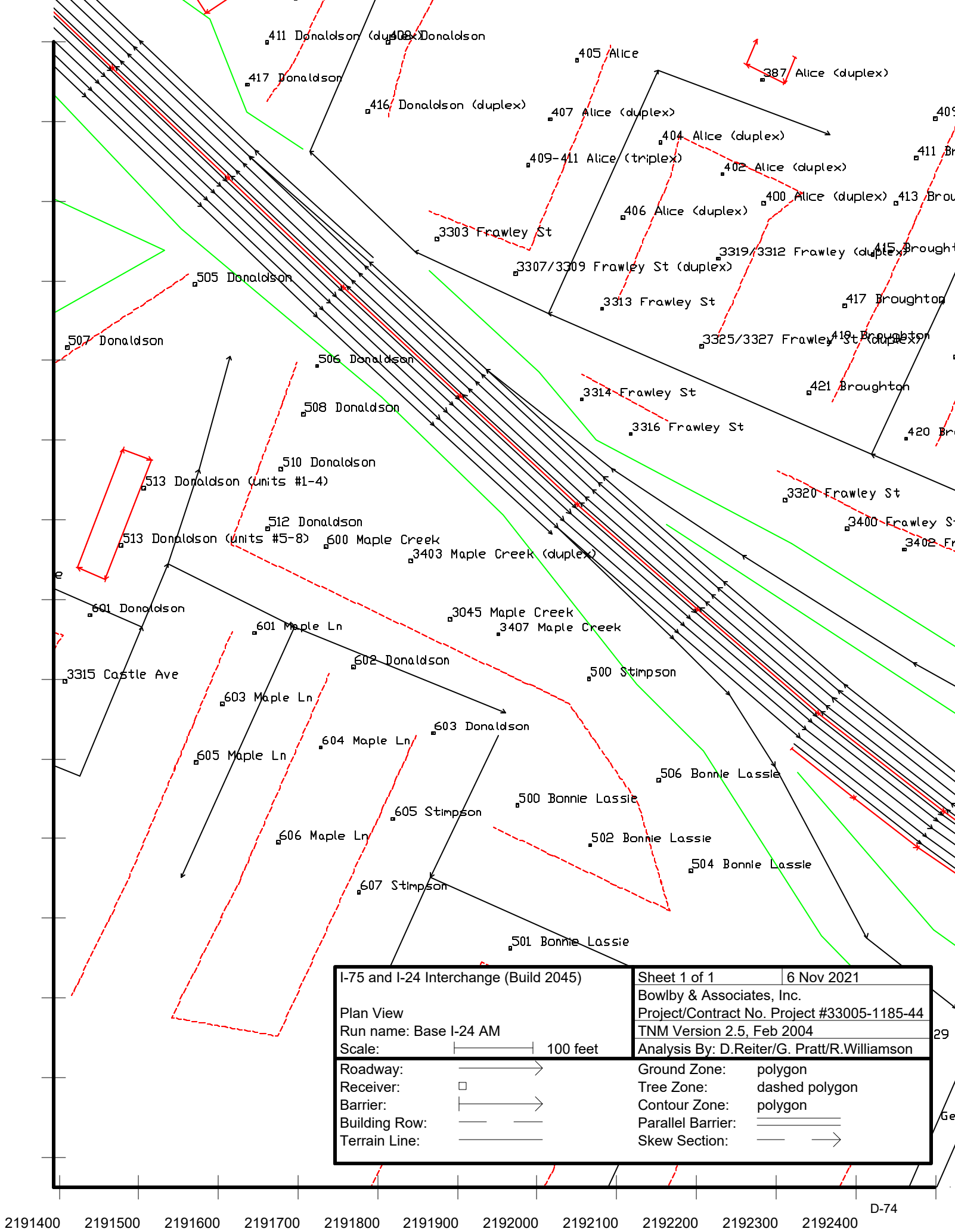


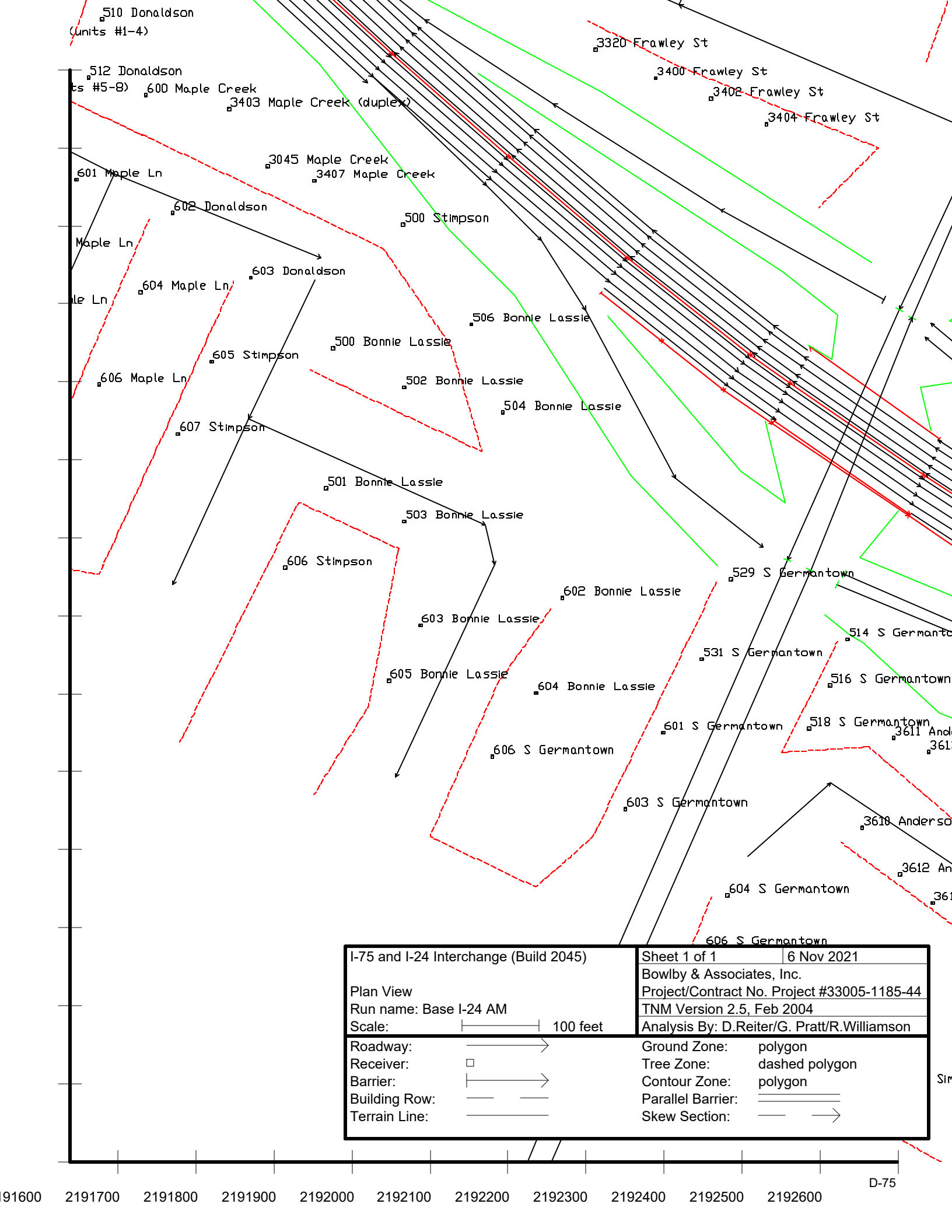
I-75 and I-24 Interchange (Build 2045)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-24 AM		Project/Contract No. Project #33005-1185-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	















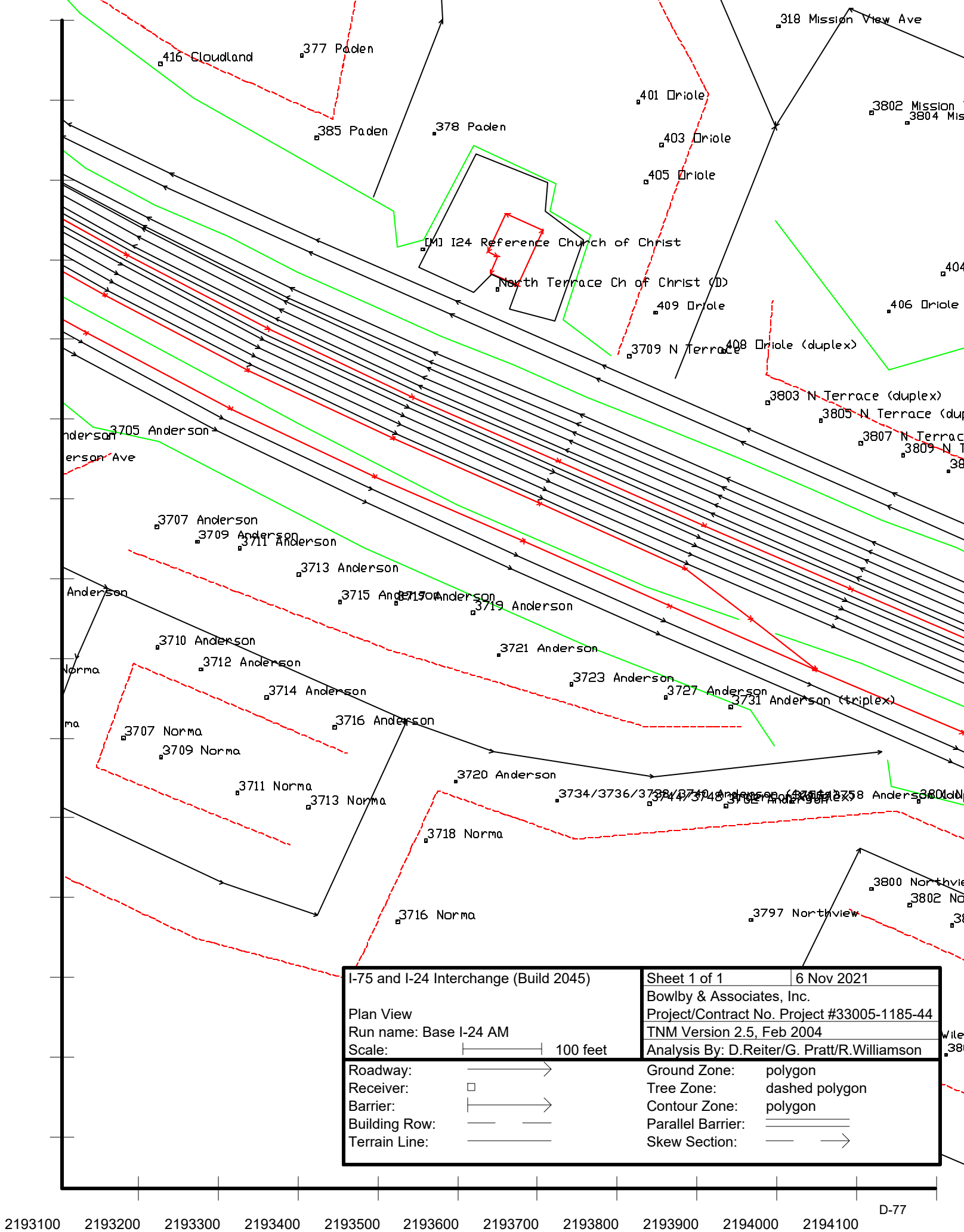


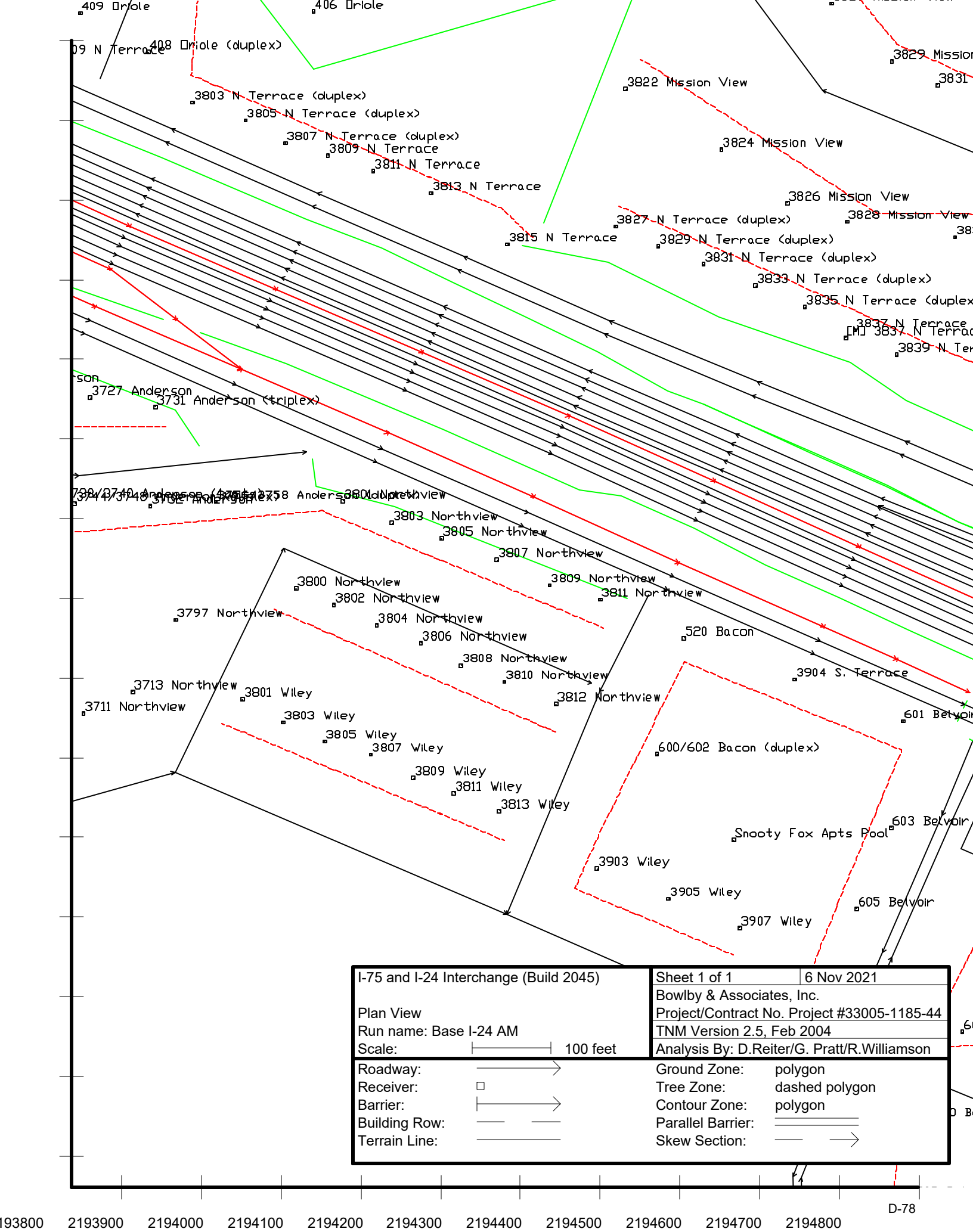


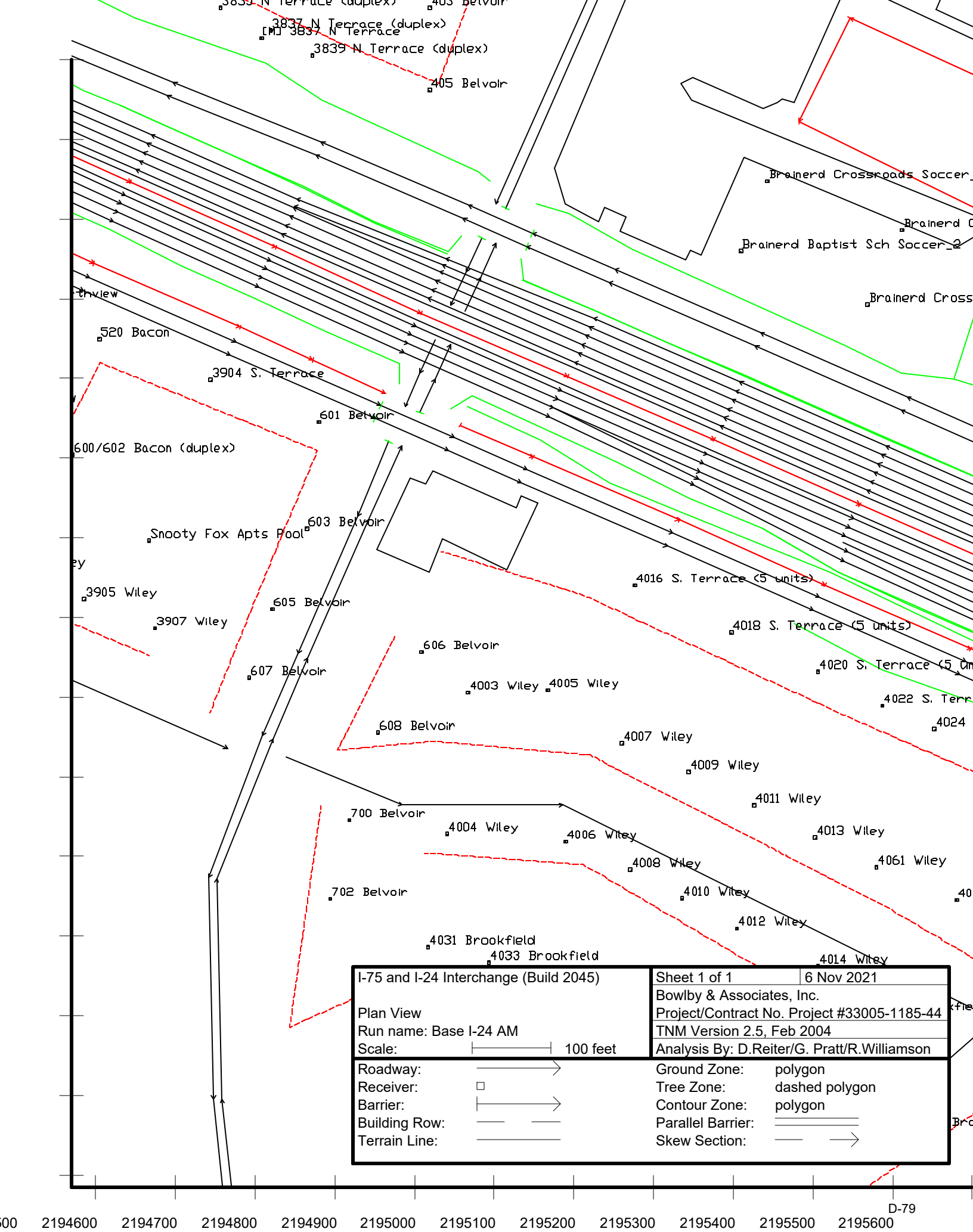
I-75 and I-24 Interchange (Build 2045)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-24 AM		Project/Contract No. Project #33005-1185-44	
Scale: 		TNM Version 2.5, Feb 2004	
Roadway: 		Analysis By: D.Reiter/G. Pratt/R.Williamson	
Receiver: 		Ground Zone: polygon	
Barrier: 		Tree Zone: dashed polygon	
Building Row: 		Contour Zone: polygon	
Terrain Line: 		Parallel Barrier: 	
		Skew Section: 	

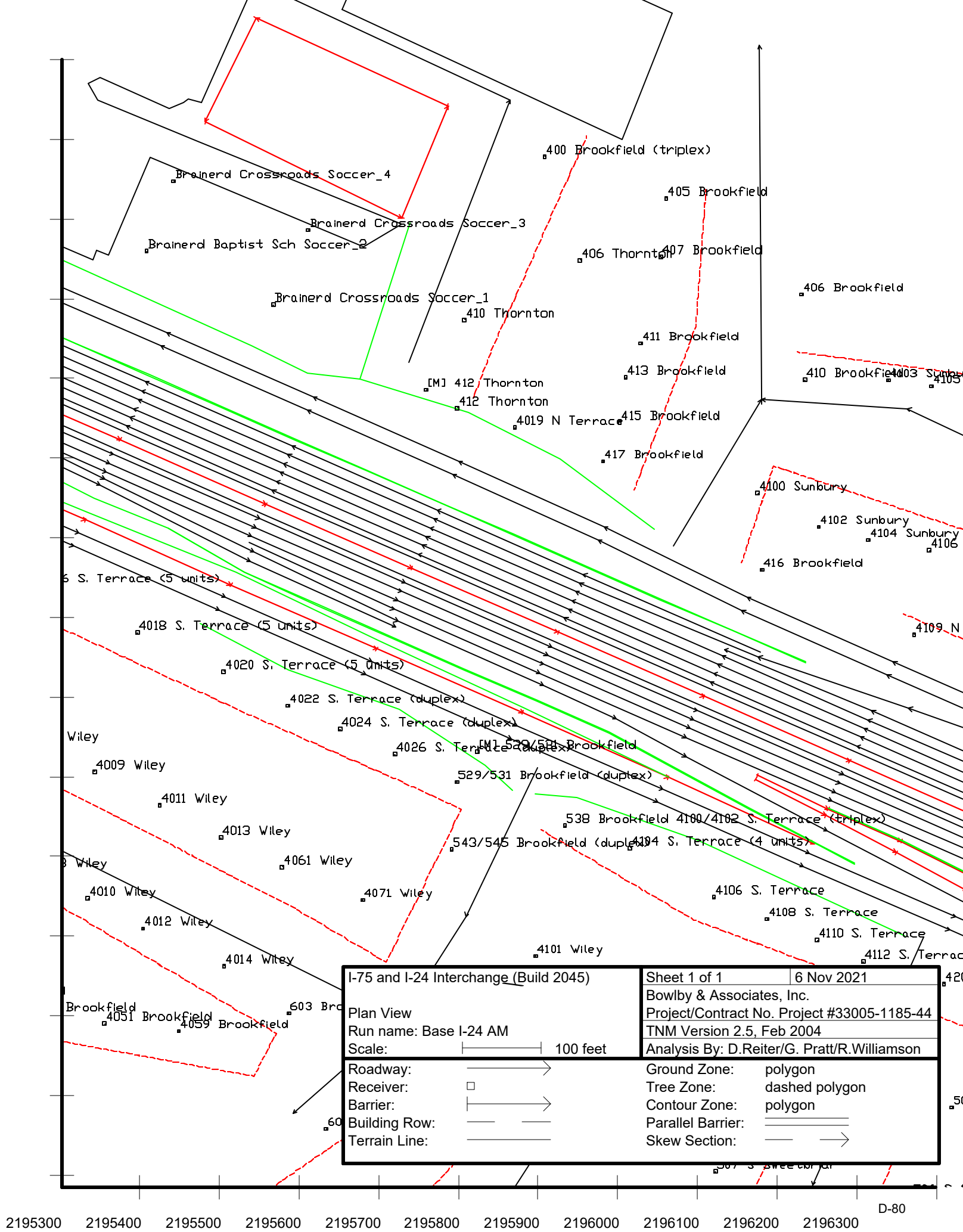






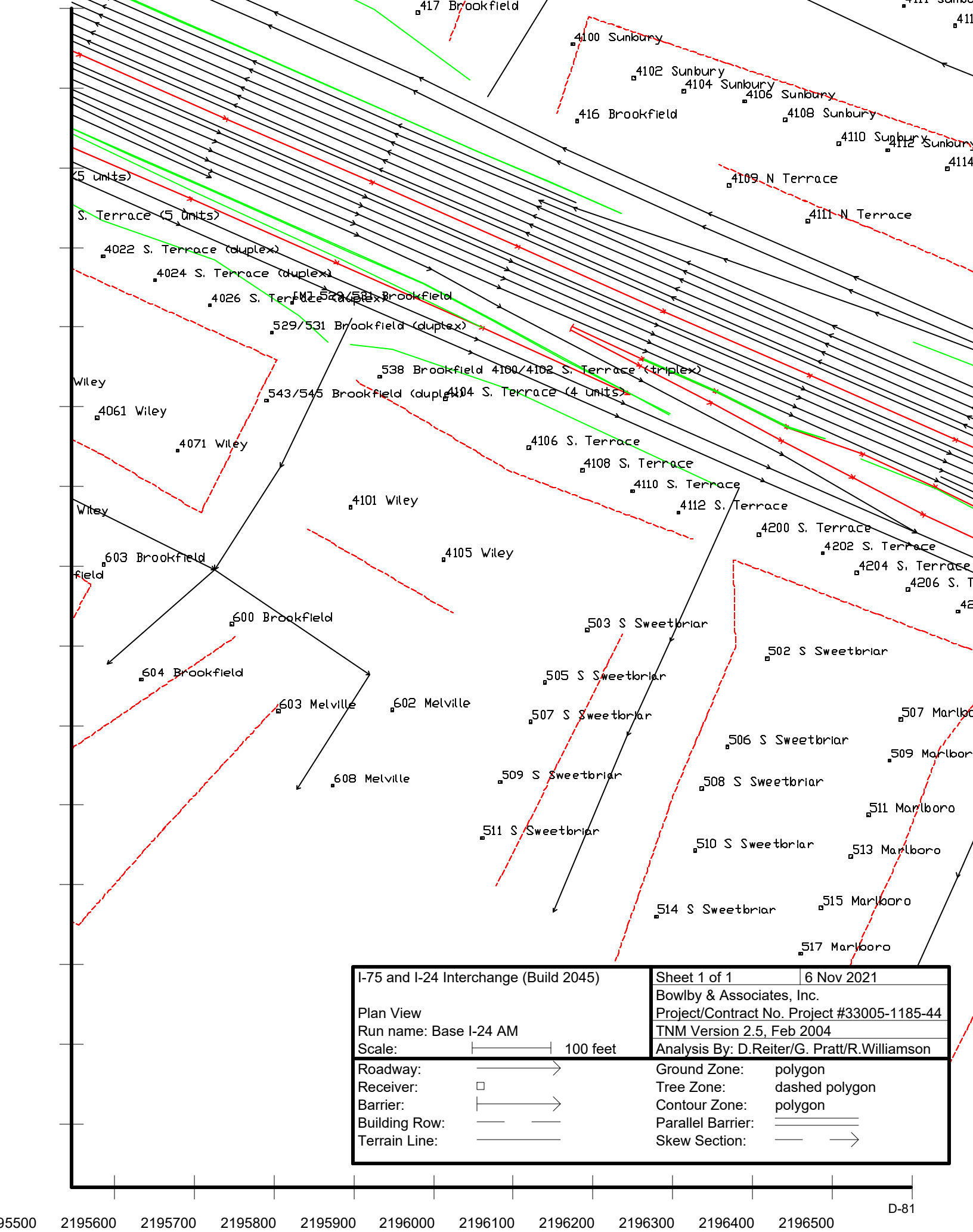


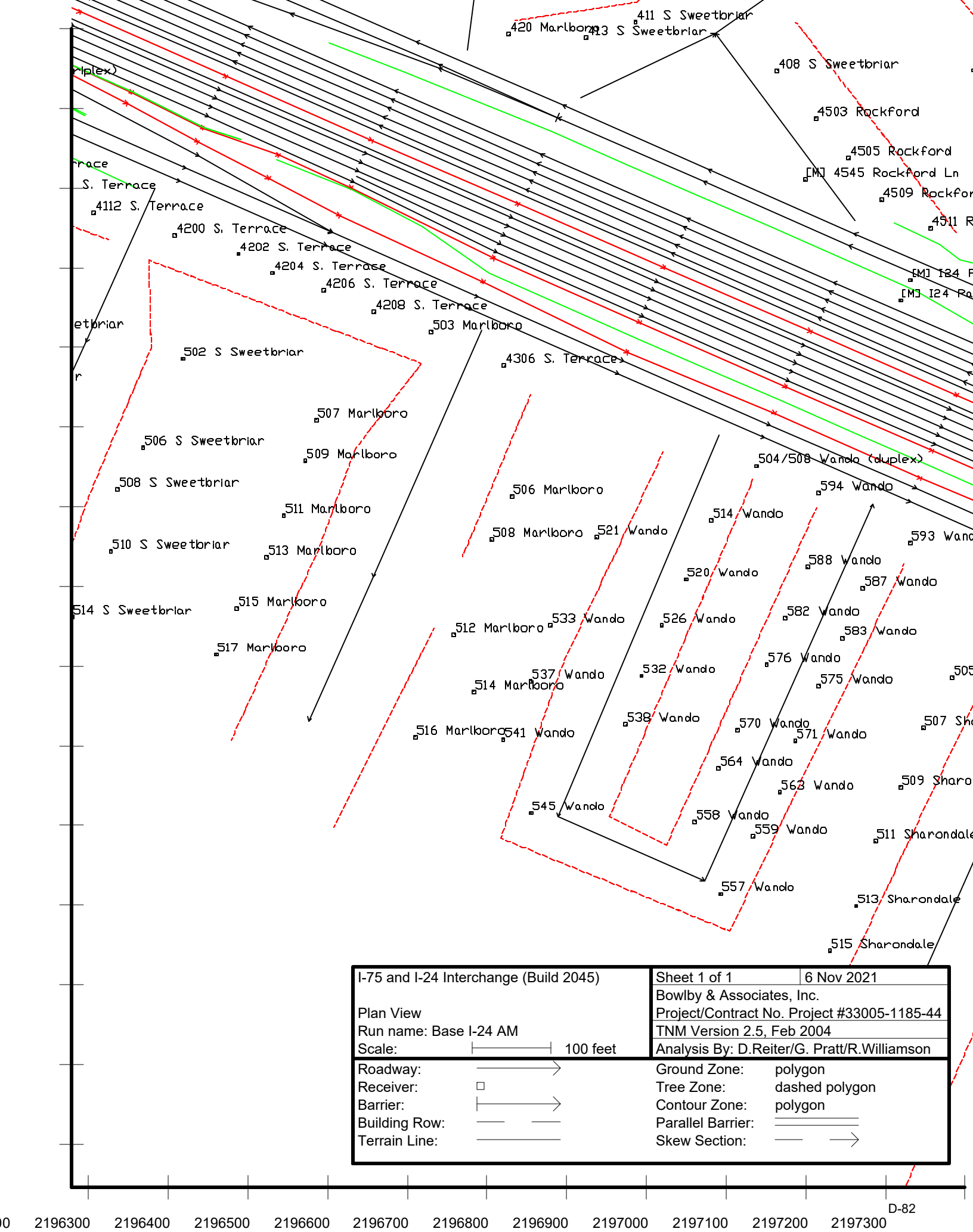


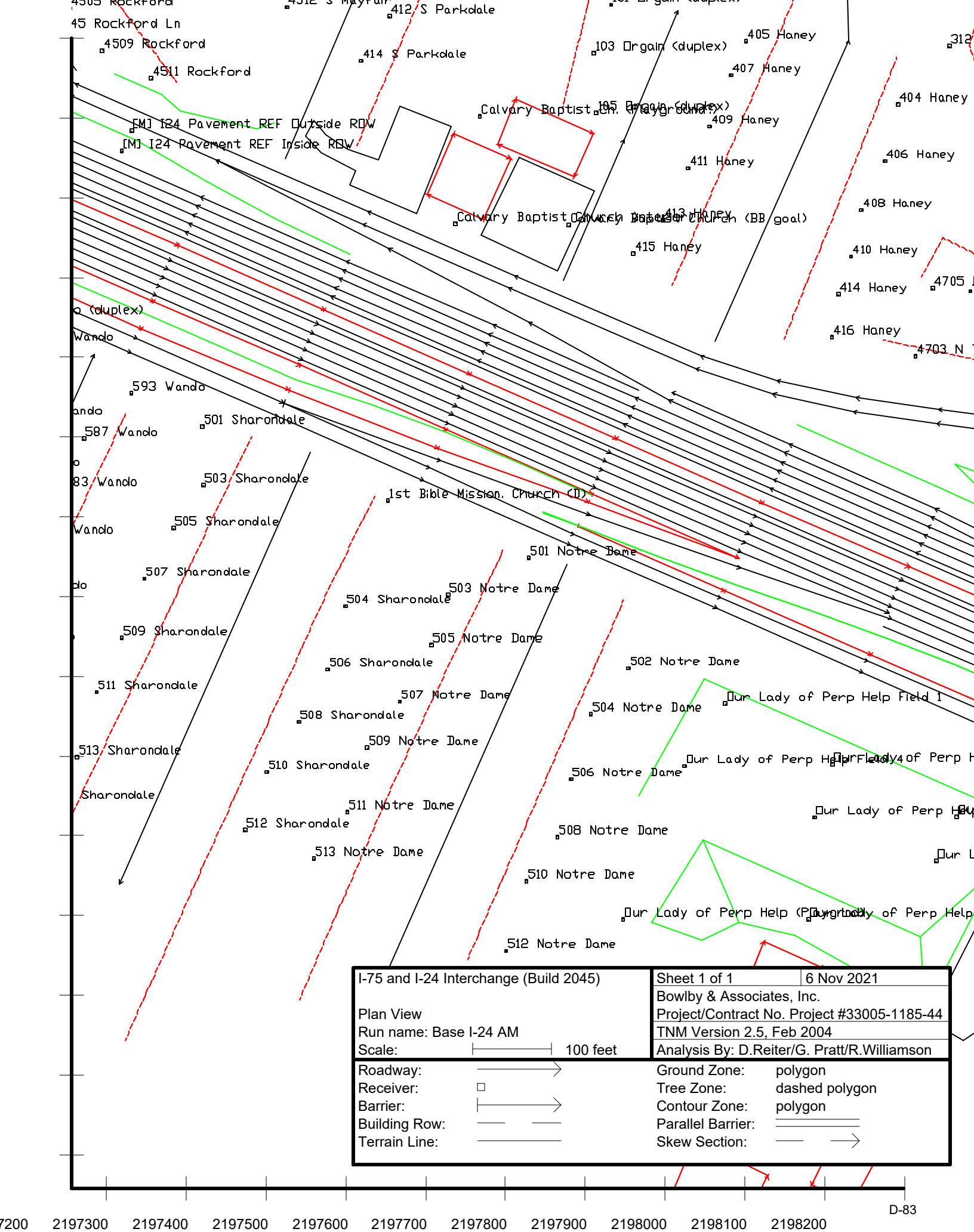


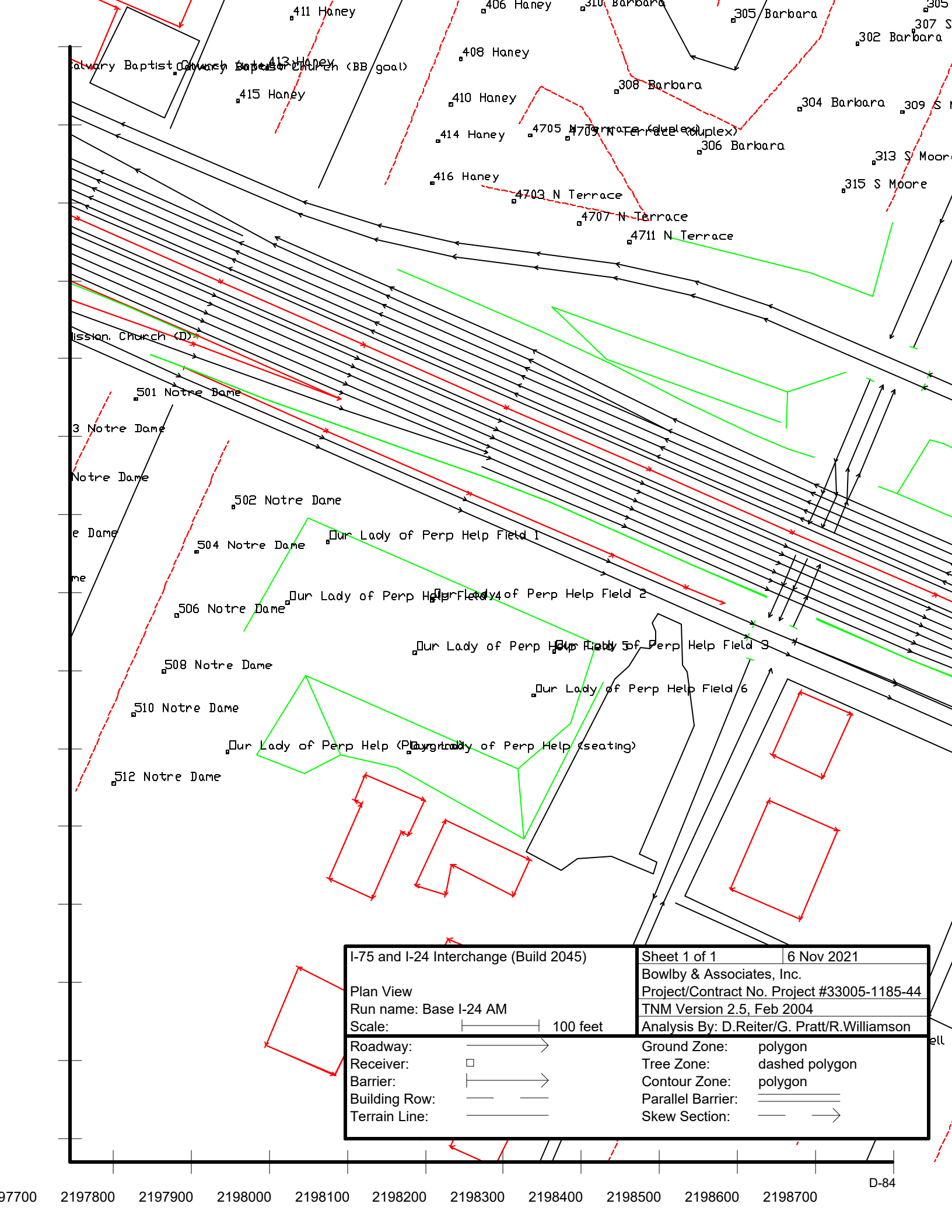
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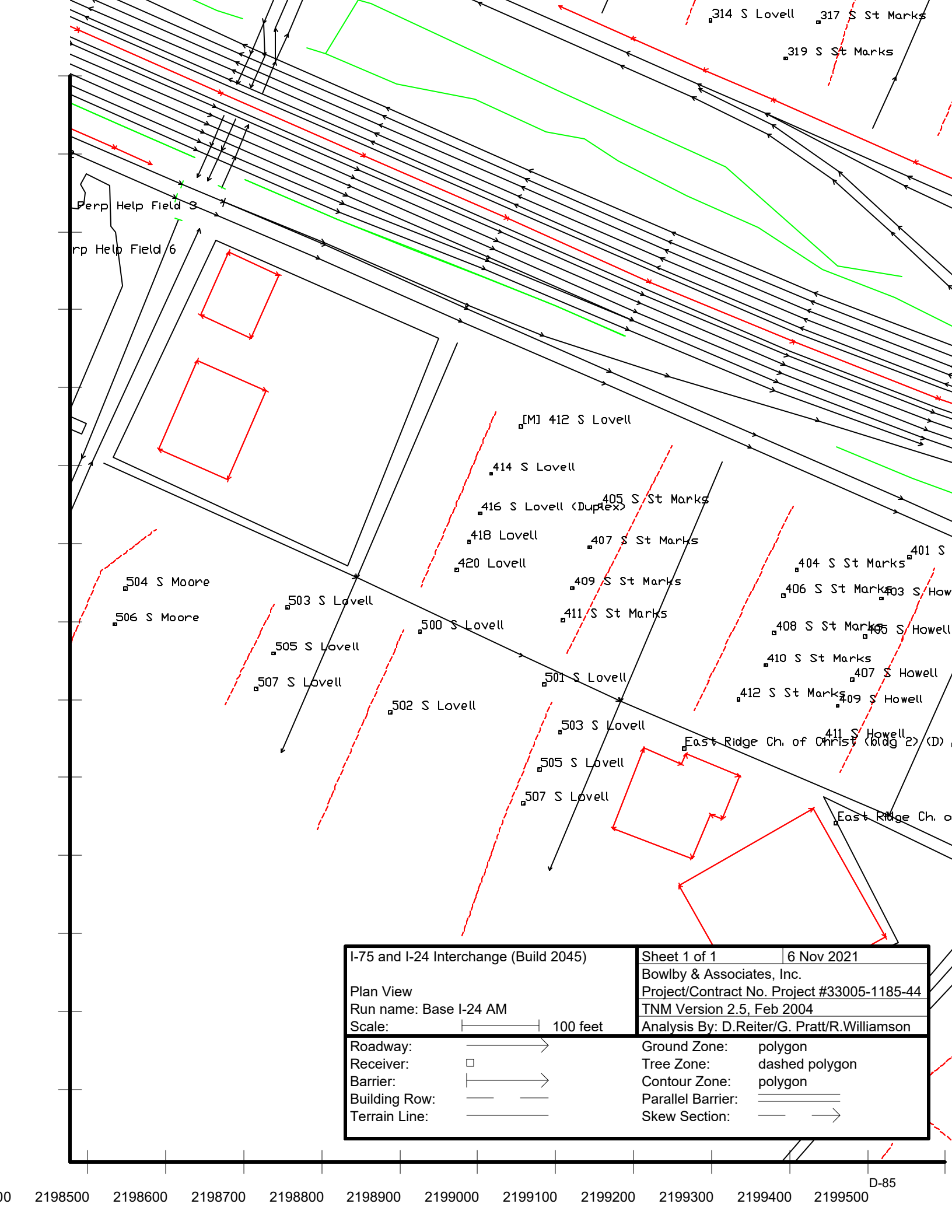












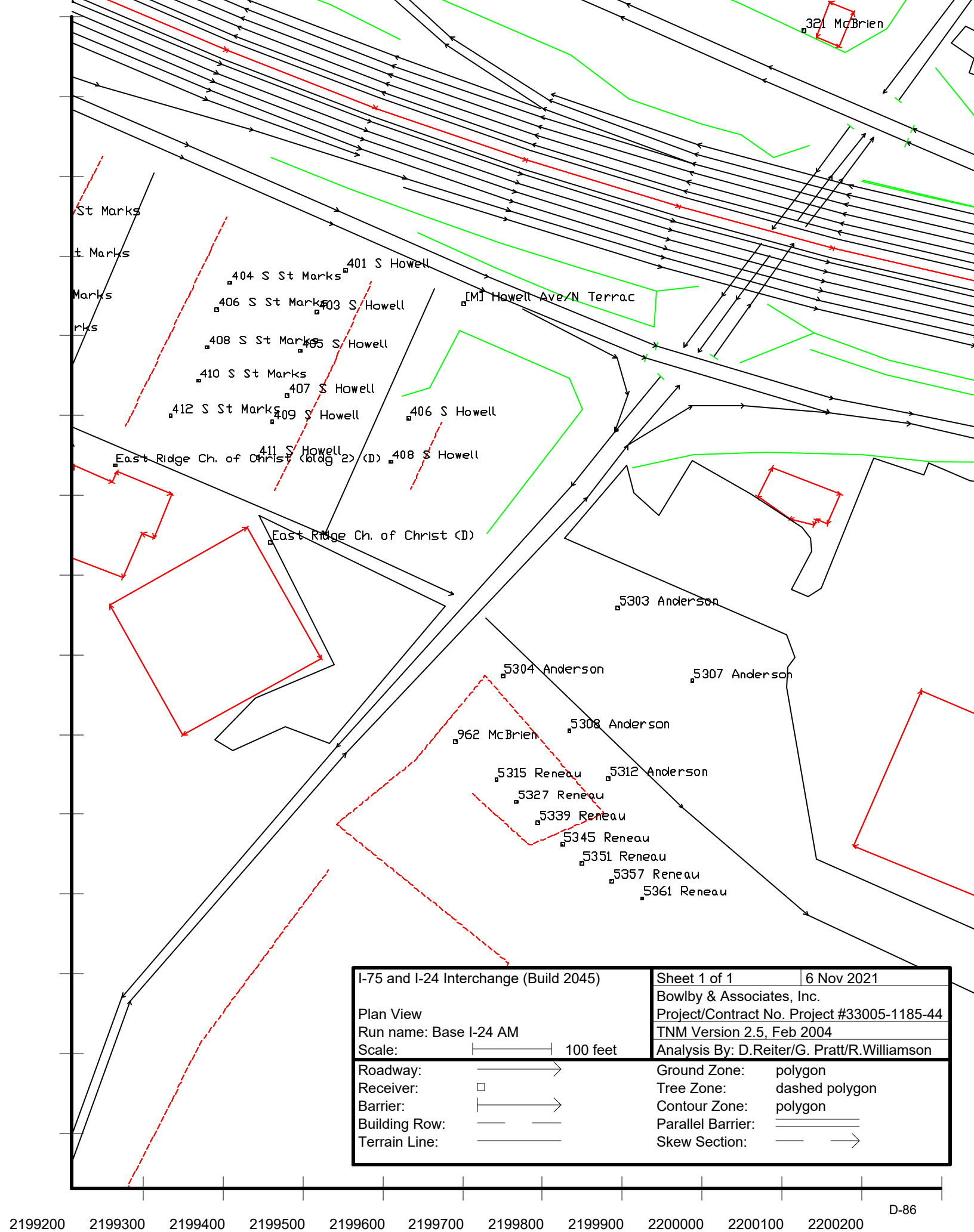








I-75 and I-24 Interchange (Build 2045)		Sheet 1 of 1	6 Nov 2021
Plan View		Bowlby & Associates, Inc.	
Run name: Base I-24 AM		Project/Contract No. Project #33005-1185-44	
Scale:  100 feet		TNM Version 2.5, Feb 2004	
Analysis By: D.Reiter/G. Pratt/R.Williamson			
Roadway: 	Ground Zone: polygon		
Receiver: 	Tree Zone: dashed polygon		
Barrier: 	Contour Zone: polygon		
Building Row: 	Parallel Barrier: 		
Terrain Line: 	Skew Section: 		



**Appendix E**  
**Design Year Noise Levels and Impacts**

Project:	I-24 and I-75 Interchange Phase 2
PIN:	114174.00
Design Year:	2045
Alternative:	Build

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
<b>NAA 1</b>											
01-01	4016 S. Terrace (5 units)	B	5	Yes	71	68	Yes	-3.0	No	Yes	5
01-02	4018 S. Terrace (5 units)	B	5	Yes	70	67	Yes	-3.0	No	Yes	5
01-03	4020 S. Terrace (5 units)	B	5	Yes	69	66	Yes	-3.0	No	Yes	5
01-04	4022 S. Terrace (duplex)	B	2	Yes	62	62	No	0.0	No	No	0
01-05	4024 S. Terrace (duplex)	B	2	Yes	61	61	No	0.0	No	No	0
01-06	4026 S. Terrace (duplex)	B	2	Yes	60	60	No	0.0	No	No	0
01-07	529/531 Brookfield (duplex)	B	2	Yes	63	63	No	0.0	No	No	0
01-08	538 Brookfield, 4100/4102 S. Terrace (triplex)	B	3	Yes	70	69	Yes	-1.0	No	Yes	3
01-09	4104 S. Terrace (4 units)	B	4	Yes	73	71	Yes	-2.0	No	Yes	4
01-10	4106 S. Terrace	B	1	Yes	70	70	Yes	0.0	No	Yes	1
01-11	4108 S. Terrace	B	1	Yes	71	70	Yes	-1.0	No	Yes	1
01-12	4110 S. Terrace	B	1	Yes	71	70	Yes	-1.0	No	Yes	1
01-13	4112 S. Terrace	B	1	Yes	71	71	Yes	0.0	No	Yes	1
01-14	4200 S. Terrace	B	1	Yes	72	73	Yes	1.0	No	Yes	1
01-15	4202 S. Terrace	B	1	Yes	73	72	Yes	-1.0	No	Yes	1
01-16	4204 S. Terrace	B	1	Yes	73	73	Yes	0.0	No	Yes	1
01-17	4206 S. Terrace	B	1	Yes	73	72	Yes	-1.0	No	Yes	1
01-18	4208 S. Terrace	B	1	Yes	73	72	Yes	-1.0	No	Yes	1
01-19	503 Marlboro	B	1	Yes	73	70	Yes	-3.0	No	Yes	1
01-20	4306 S. Terrace	B	1	Yes	73	72	Yes	-1.0	No	Yes	1
01-21	504/508 Wando (duplex)	B	2	Yes	75	73	Yes	-2.0	No	Yes	2
01-22	594 Wando	B	1	Yes	74	74	Yes	0.0	No	Yes	1
01-23	593 Wando	B	1	Yes	74	73	Yes	-1.0	No	Yes	1
01-24	501 Sharondale	B	1	Yes	74	74	Yes	0.0	No	Yes	1
01-25	1st Bible Mission. Church (D)	D	0	Yes	49	50	No	1.0	No	No	0
01-26	501 Notre Dame	B	1	Yes	74	73	Yes	-1.0	No	Yes	1
01-27	Our Lady of Perp Help Field 1	C	0	Yes	71	73	Yes	2.0	No	Yes	0
01-28	Our Lady of Perp Help Field 2	C	0	Yes	70	72	Yes	2.0	No	Yes	0
01-29	Our Lady of Perp Help Field 3	C	0	Yes	69	71	Yes	2.0	No	Yes	0
01-30	606 Belvoir	B	1	No	64	65	No	1.0	No	No	0
01-31	4003 Wiley	B	1	No	62	64	No	2.0	No	No	0
01-32	4005 Wiley	B	1	No	62	62	No	0.0	No	No	0
01-33	4007 Wiley	B	1	No	61	62	No	1.0	No	No	0
01-34	4009 Wiley	B	1	No	60	60	No	0.0	No	No	0
01-35	4011 Wiley	B	1	No	59	60	No	1.0	No	No	0
01-36	4013 Wiley	B	1	No	59	59	No	0.0	No	No	0
01-37	4061 Wiley	B	1	No	58	59	No	1.0	No	No	0
01-38	4071 Wiley	B	1	No	58	58	No	0.0	No	No	0
01-39	543/545 Brookfield (duplex)	B	2	No	58	58	No	0.0	No	No	0
01-40	4101 Wiley	B	1	No	56	56	No	0.0	No	No	0
01-41	4105 Wiley	B	1	No	58	58	No	0.0	No	No	0
01-42	503 S Sweetbriar	B	1	No	60	64	No	4.0	No	No	0
01-43	502 S Sweetbriar	B	1	No	66	67	Yes	1.0	No	Yes	1
01-44	507 Marlboro	B	1	No	65	67	Yes	2.0	No	Yes	1
01-45	509 Marlboro	B	1	No	64	65	No	1.0	No	No	0
01-46	506 Marlboro	B	1	No	67	68	Yes	1.0	No	Yes	1
01-47	508 Marlboro	B	1	No	65	66	Yes	1.0	No	Yes	1
01-48	512 Marlboro	B	1	No	62	63	No	1.0	No	No	0
01-49	514 Marlboro	B	1	No	61	62	No	1.0	No	No	0
01-50	516 Marlboro	B	1	No	58	60	No	2.0	No	No	0
01-51	521 Wando	B	1	No	66	68	Yes	2.0	No	Yes	1
01-52	514 Wando	B	1	No	69	70	Yes	1.0	No	Yes	1
01-53	520 Wando	B	1	No	66	67	Yes	1.0	No	Yes	1
01-54	526 Wando	B	1	No	65	65	No	0.0	No	No	0
01-55	532 Wando	B	1	No	64	64	No	0.0	No	No	0
01-56	538 Wando	B	1	No	62	63	No	1.0	No	No	0
01-57	587 Wando	B	1	No	70	71	Yes	1.0	No	Yes	1
01-58	583 Wando	B	1	No	67	69	Yes	2.0	No	Yes	1
01-59	575 Wando	B	1	No	65	67	Yes	2.0	No	Yes	1
01-60	571 Wando	B	1	No	63	64	No	1.0	No	No	0
01-61	563 Wando	B	1	No	61	63	No	2.0	No	No	0
01-62	559 Wando	B	1	No	60	62	No	2.0	No	No	0
01-63	557 Wando	B	1	No	59	60	No	1.0	No	No	0
01-64	504 Sharondale	B	1	No	67	69	Yes	2.0	No	Yes	1
01-65	506 Sharondale	B	1	No	65	67	Yes	2.0	No	Yes	1
01-66	508 Sharondale	B	1	No	63	64	No	1.0	No	No	0
01-67	510 Sharondale	B	1	No	61	62	No	1.0	No	No	0
01-68	512 Sharondale	B	1	No	59	61	No	2.0	No	No	0
01-69	502 Notre Dame	B	1	No	71	71	Yes	0.0	No	Yes	1
01-70	504 Notre Dame	B	1	No	67	67	Yes	0.0	No	Yes	1
01-71	506 Notre Dame	B	1	No	64	64	No	0.0	No	No	0
01-72	508 Notre Dame	B	1	No	63	64	No	1.0	No	No	0
01-73	510 Notre Dame	B	1	No	61	62	No	1.0	No	No	0
01-74	512 Notre Dame	B	1	No	60	61	No	1.0	No	No	0
01-75	Our Lady of Perp Help Field 4	C	0	No	67	68	Yes	1.0	No	Yes	0
01-76	Our Lady of Perp Help Field 5	C	0	No	67	68	Yes	1.0	No	Yes	0
01-77	Our Lady of Perp Help Field 6	C	0	No	67	68	Yes	1.0	No	Yes	0
01-78	608 Belvoir	B	1	No	61	62	No	1.0	No	No	0
01-79	4004 Wiley	B	1	No	58	60	No	2.0	No	No	0
01-80	4006 Wiley	B	1	No	59	61	No	2.0	No	No	0
01-81	4008 Wiley	B	1	No	59	60	No	1.0	No	No	0
01-82	4010 Wiley	B	1	No	58	59	No	1.0	No	No	0
01-83	4012 Wiley	B	1	No	58	58	No	0.0	No	No	0
01-84	4014 Wiley	B	1	No	56	57	No	1.0	No	No	0
01-85	603 Brookfield	B	1	No	55	56	No	1.0	No	No	0
01-86	600 Brookfield	B	1	No	55	56	No	1.0	No	No	0
01-87	604 Brookfield	B	1	No	55	55	No	0.0	No	No	0
01-88	603 Melville	B	1	No	54	55	No	1.0	No	No	0
01-89	602 Melville	B	1	No	53	54	No	1.0	No	No	0
01-90	608 Melville	B	1	No	53	54	No	1.0	No	No	0
01-91	505 S Sweetbriar	B	1	No	56	59	No	3.0	No	No	0
01-92	507 S Sweetbriar	B	1	No	54	55	No	1.0	No	No	0



Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
01-93	509 S Sweetbriar	B	1	No	53	54	No	1.0	No	No	0
01-94	511 S Sweetbriar (duplex)	B	2	No	53	54	No	1.0	No	No	0
01-95	506 S Sweetbriar	B	1	No	62	64	No	2.0	No	No	0
01-96	508 S Sweetbriar	B	1	No	60	62	No	2.0	No	No	0
01-97	510 S Sweetbriar	B	1	No	58	60	No	2.0	No	No	0
01-98	514 S Sweetbriar	B	1	No	55	56	No	1.0	No	No	0
01-99	511 Marlboro	B	1	No	62	64	No	2.0	No	No	0
01-100	513 Marlboro	B	1	No	61	63	No	2.0	No	No	0
01-101	515 Marlboro	B	1	No	59	61	No	2.0	No	No	0
01-102	517 Marlboro	B	1	No	57	58	No	1.0	No	No	0
01-103	533 Wando	B	1	No	64	65	No	1.0	No	No	0
01-104	537 Wando	B	1	No	62	63	No	1.0	No	No	0
01-105	588 Wando	B	1	No	70	71	Yes	1.0	No	Yes	1
01-106	582 Wando	B	1	No	67	68	Yes	1.0	No	Yes	1
01-107	576 Wando	B	1	No	65	67	Yes	2.0	No	Yes	1
01-108	570 Wando	B	1	No	63	64	No	1.0	No	No	0
01-109	564 Wando	B	1	No	62	63	No	1.0	No	No	0
01-110	558 Wando	B	1	No	60	61	No	1.0	No	No	0
01-111	503 Sharondale	B	1	No	70	71	Yes	1.0	No	Yes	1
01-112	505 Sharondale	B	1	No	68	69	Yes	1.0	No	Yes	1
01-113	507 Sharondale	B	1	No	66	67	Yes	1.0	No	Yes	1
01-114	509 Sharondale	B	1	No	64	66	Yes	2.0	No	Yes	1
01-115	511 Sharondale	B	1	No	63	64	No	1.0	No	No	0
01-116	513 Sharondale	B	1	No	61	62	No	1.0	No	No	0
01-117	515 Sharondale	B	1	No	60	61	No	1.0	No	No	0
01-118	503 Notre Dame	B	1	No	70	72	Yes	2.0	No	Yes	1
01-119	505 Notre Dame	B	1	No	68	69	Yes	1.0	No	Yes	1
01-120	507 Notre Dame	B	1	No	66	67	Yes	1.0	No	Yes	1
01-121	509 Notre Dame	B	1	No	64	66	Yes	2.0	No	Yes	1
01-122	511 Notre Dame	B	1	No	62	63	No	1.0	No	No	0
01-123	513 Notre Dame	B	1	No	60	61	No	1.0	No	No	0
01-124	Our Lady of Perp Help (Playgrnd)	C	0	No	62	63	No	1.0	No	No	0
01-125	Our Lady of Perp Help (seating)	C	0	No	67	68	Yes	1.0	No	Yes	0
01-126	700 Belvoir	B	1	No	57	60	No	3.0	No	No	0
01-127	702 Belvoir	B	1	No	56	58	No	2.0	No	No	0
01-128	4031 Brookfield	B	1	No	56	57	No	1.0	No	No	0
01-129	4033 Brookfield	B	1	No	55	57	No	2.0	No	No	0
01-130	4035 Brookfield	B	1	No	55	57	No	2.0	No	No	0
01-131	4043 Brookfield	B	1	No	54	55	No	1.0	No	No	0
01-132	4051 Brookfield	B	1	No	54	55	No	1.0	No	No	0
01-133	4059 Brookfield	B	1	No	54	55	No	1.0	No	No	0
01-134	541 Wando	B	1	No	60	61	No	1.0	No	No	0
01-135	545 Wando	B	1	No	59	60	No	1.0	No	No	0
01-136	[M] 529/531 Brookfield	N/A	0	No	74	75	No	1.0	No	N/A	0
<b>NAA 2</b>											
02-01	315 S Moore	B	1	Yes	64	67	Yes	3.0	No	Yes	1
02-02	4711 N Terrace	B	1	Yes	73	74	Yes	1.0	No	Yes	1
02-03	4707 N Terrace	B	1	Yes	72	74	Yes	2.0	No	Yes	1
02-04	4703 N Terrace	B	1	Yes	72	75	Yes	3.0	No	Yes	1
02-05	416 Haney	B	1	Yes	73	75	Yes	2.0	No	Yes	1
02-06	415 Haney	B	1	Yes	73	75	Yes	2.0	No	Yes	1
02-07	Calvary Baptist Church (BB goal)	C	0	Yes	72	75	Yes	3.0	No	Yes	0
02-08	Calvary Baptist Church (D)	D	0	Yes	51	52	Yes	1.0	No	Yes	0
02-09	4511 Rockford	B	1	Yes	75	76	Yes	1.0	No	Yes	1
02-10	4509 Rockford	B	1	Yes	74	75	Yes	1.0	No	Yes	1
02-11	4505 Rockford	B	1	Yes	73	74	Yes	1.0	No	Yes	1
02-12	4503 Rockford	B	1	Yes	71	73	Yes	2.0	No	Yes	1
02-13	408 S Sweetbriar	B	1	Yes	70	72	Yes	2.0	No	Yes	1
02-14	409 S Sweetbriar	B	1	Yes	69	71	Yes	2.0	No	Yes	1
02-15	411 S Sweetbriar	B	1	Yes	70	73	Yes	3.0	No	Yes	1
02-16	413 S Sweetbriar	B	1	Yes	73	75	Yes	2.0	No	Yes	1
02-17	420 Marlboro	B	1	Yes	75	75	Yes	0.0	No	Yes	1
02-18	4111 N Terrace	B	1	Yes	75	76	Yes	1.0	No	Yes	1
02-19	4109 N Terrace	B	1	Yes	75	76	Yes	1.0	No	Yes	1
02-20	416 Brookfield	B	1	Yes	75	74	Yes	-1.0	No	Yes	1
02-21	417 Brookfield	B	1	Yes	71	74	Yes	3.0	No	Yes	1
02-22	4019 N Terrace	B	1	Yes	72	73	Yes	1.0	No	Yes	1
02-23	412 Thornton	B	1	Yes	73	72	Yes	-1.0	No	Yes	1
02-24	Brainerd Crossroads Soccer 1	C	0	Yes	64	65	No	1.0	No	No	0
02-25	Brainerd Baptist Sch Soccer 2	C	0	Yes	66	68	Yes	2.0	No	Yes	0
02-26	313 S Moore	B	1	No	64	66	Yes	2.0	No	Yes	1
02-27	304 Barbara	B	1	No	64	65	No	1.0	No	No	0
02-28	306 Barbara	B	1	No	65	66	Yes	1.0	No	Yes	1
02-29	4709 N Terrace (duplex)	B	2	No	66	69	Yes	3.0	No	Yes	2
02-30	4705 N Terrace (duplex)	B	2	No	67	70	Yes	3.0	No	Yes	2
02-31	414 Haney	B	1	No	70	73	Yes	3.0	No	Yes	1
02-32	410 Haney	B	1	No	68	71	Yes	3.0	No	Yes	1
02-33	413 Haney	B	1	No	70	72	Yes	2.0	No	Yes	1
02-34	411 Haney	B	1	No	68	70	Yes	2.0	No	Yes	1
02-35	409 Haney	B	1	No	66	68	Yes	2.0	No	Yes	1
02-36	Calvary Baptist Ch. (Playground)	C	0	No	61	61	No	0.0	No	No	0
02-37	414 S Parkdale	B	1	No	69	71	Yes	2.0	No	Yes	1
02-38	4512 S Mayfair	B	1	No	70	71	Yes	1.0	No	Yes	1
02-39	4510 S Mayfair	B	1	No	70	71	Yes	1.0	No	Yes	1
02-40	4508 S Mayfair	B	1	No	69	70	Yes	1.0	No	Yes	1
02-41	4500 S Mayfair	B	1	No	67	68	Yes	1.0	No	Yes	1
02-42	407 S Sweetbriar	B	1	No	68	69	Yes	1.0	No	Yes	1
02-43	405 S Sweetbriar	B	1	No	66	68	Yes	2.0	No	Yes	1
02-44	400 Marlboro	B	1	No	69	71	Yes	2.0	No	Yes	1
02-45	4116 Sunbury	B	1	No	70	72	Yes	2.0	No	Yes	1
02-46	4114 Sunbury	B	1	No	68	71	Yes	3.0	No	Yes	1
02-47	4112 Sunbury	B	1	No	68	70	Yes	2.0	No	Yes	1
02-48	4110 Sunbury	B	1	No	68	70	Yes	2.0	No	Yes	1
02-49	4108 Sunbury	B	1	No	69	71	Yes	2.0	No	Yes	1
02-50	4106 Sunbury	B	1	No	69	71	Yes	2.0	No	Yes	1
02-51	4104 Sunbury	B	1	No	71	73	Yes	2.0	No	Yes	1
02-52	4102 Sunbury	B	1	No	71	73	Yes	2.0	No	Yes	1
02-53	4100 Sunbury	B	1	No	68	70	Yes	2.0	No	Yes	1

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
02-54	415 Brookfield	B	1	No	66	70	Yes	4.0	No	Yes	1
02-55	413 Brookfield	B	1	No	62	65	No	3.0	No	No	0
02-56	410 Thornton	B	1	No	61	63	No	2.0	No	No	0
02-57	Brainerd Crossroads Soccer 3	C	0	No	60	61	No	1.0	No	No	0
02-58	Brainerd Crossroads Soccer 4	C	0	No	62	62	No	0.0	No	No	0
02-59	309 S Moore	B	1	No	65	66	Yes	1.0	No	Yes	1
02-60	302 Barbara	B	1	No	63	64	No	1.0	No	No	0
02-61	300 Barbara	B	1	No	61	62	No	1.0	No	No	0
02-62	305 Barbara	B	1	No	63	65	No	2.0	No	No	0
02-63	303 Barbara	B	1	No	61	63	No	2.0	No	No	0
02-64	308 Barbara	B	1	No	63	65	No	2.0	No	No	0
02-65	310 Barbara	B	1	No	63	66	Yes	3.0	No	Yes	1
02-66	408 Haney	B	1	No	66	69	Yes	3.0	No	Yes	1
02-67	406 Haney	B	1	No	65	67	Yes	2.0	No	Yes	1
02-68	404 Haney	B	1	No	63	65	No	2.0	No	No	0
02-69	407 Haney	B	1	No	64	66	Yes	2.0	No	Yes	1
02-70	105 Orgain (duplex)	B	2	No	64	66	Yes	2.0	No	Yes	2
02-71	103 Orgain (duplex)	B	2	No	63	64	No	1.0	No	No	0
02-72	101 Orgain (duplex)	B	2	No	62	64	No	2.0	No	No	0
02-73	412 S Parkdale	B	1	No	67	69	Yes	2.0	No	Yes	1
02-74	410 S Parkdale	B	1	No	64	66	Yes	2.0	No	Yes	1
02-75	4509 S Mayfair	B	1	No	66	67	Yes	1.0	No	Yes	1
02-76	4507 S Mayfair	B	1	No	63	65	No	2.0	No	No	0
02-77	4501 Mayfair	B	1	No	59	60	No	1.0	No	No	0
02-78	312 S Sweetbriar	B	1	No	59	60	No	1.0	No	No	0
02-79	403 S Sweetbriar	B	1	No	65	67	Yes	2.0	No	Yes	1
02-80	401 S Sweetbriar	B	1	No	63	65	No	2.0	No	No	0
02-81	318 Marlboro	B	1	No	67	68	Yes	1.0	No	Yes	1
02-82	316 Marlboro	B	1	No	64	66	Yes	2.0	No	Yes	1
02-83	315 Marlboro	B	1	No	63	64	No	1.0	No	No	0
02-84	4115 Sunbury	B	1	No	62	63	No	1.0	No	No	0
02-85	4113 Sunbury	B	1	No	60	61	No	1.0	No	No	0
02-86	4111 Sunbury	B	1	No	55	57	No	2.0	No	No	0
02-87	4109 Sunbury	B	1	No	55	56	No	1.0	No	No	0
02-88	4107 Sunbury	B	1	No	55	57	No	2.0	No	No	0
02-89	4105 Sunbury	B	1	No	57	59	No	2.0	No	No	0
02-90	4103 Sunbury	B	1	No	61	62	No	1.0	No	No	0
02-91	410 Brookfield	B	1	No	64	66	Yes	2.0	No	Yes	1
02-92	411 Brookfield	B	1	No	59	63	No	4.0	No	No	0
02-93	407 Brookfield	B	1	No	56	57	No	1.0	No	No	0
02-94	406 Thornton	B	1	No	55	57	No	2.0	No	No	0
02-95	307 S Moore	B	1	No	64	65	No	1.0	No	No	0
02-96	305 S Moore	B	1	No	63	64	No	1.0	No	No	0
02-97	313 Barbara	B	1	No	61	63	No	2.0	No	No	0
02-98	315 Barbara	B	1	No	60	61	No	1.0	No	No	0
02-99	312 Barbara	B	1	No	62	64	No	2.0	No	No	0
02-100	314 Barbara	B	1	No	60	62	No	2.0	No	No	0
02-101	400 Haney	B	1	No	60	62	No	2.0	No	No	0
02-102	405 Haney	B	1	No	63	65	No	2.0	No	No	0
02-103	403 Haney	B	1	No	61	64	No	3.0	No	No	0
02-104	401 Haney	B	1	No	60	62	No	2.0	No	No	0
02-105	408 S Parkdale	B	1	No	63	64	No	1.0	No	No	0
02-106	406 S Parkdale	B	1	No	63	64	No	1.0	No	No	0
02-107	404 S Parkdale	B	1	No	62	63	No	1.0	No	No	0
02-108	402 S Parkdale	B	1	No	62	63	No	1.0	No	No	0
02-109	400 S Parkdale	B	1	No	61	63	No	2.0	No	No	0
02-110	315 Amhurst	B	1	No	62	63	No	1.0	No	No	0
02-111	313 Amhurst	B	1	No	57	59	No	2.0	No	No	0
02-112	310 S Sweetbriar	B	1	No	59	60	No	1.0	No	No	0
02-113	314 Marlboro	B	1	No	62	64	No	2.0	No	No	0
02-114	312 Marlboro	B	1	No	59	61	No	2.0	No	No	0
02-115	4404 S Mayfair	B	1	No	59	61	No	2.0	No	No	0
02-116	4402 S Mayfair	B	1	No	58	60	No	2.0	No	No	0
02-117	310 Marlboro	B	1	No	58	60	No	2.0	No	No	0
02-118	313 Marlboro	B	1	No	59	61	No	2.0	No	No	0
02-119	311 Marlboro	B	1	No	57	58	No	1.0	No	No	0
02-120	4122 Mayfair	B	1	No	56	58	No	2.0	No	No	0
02-121	4120 Mayfair	B	1	No	56	57	No	1.0	No	No	0
02-122	4116 Mayfair	B	1	No	55	56	No	1.0	No	No	0
02-123	406 Brookfield	B	1	No	59	61	No	2.0	No	No	0
02-124	405 Brookfield	B	1	No	54	55	No	1.0	No	No	0
02-125	400 Thornton (triplex)	B	3	No	50	52	No	2.0	No	No	0
02-126	[M] 412 Thornton	N/A	0	No	72	73	No	1.0	No	N/A	0
02-127	[M] I24 Pavement REF Inside ROW	N/A	0	No	81	79	No	-2.0	No	N/A	0
02-128	[M] I24 Pavement REF Outside ROW	N/A	0	No	79	81	No	2.0	No	N/A	0
02-129	[M] 4545 Rockford	N/A	0	No	75	77	No	2.0	No	N/A	0
02-130	4004 Mayfair	B	0	No	55	56	No	1.0	No	No	0
02-131	318 Belvoir	B	1	No	58	59	No	1.0	No	No	0
02-132	316 Belvoir	B	1	No	54	55	No	1.0	No	No	0
<b>NAA 3</b>											
03-01	401 S Howell	B	1	Yes	74	76	Yes	2.0	No	Yes	1
03-02	414 S Lovell	B	1	Yes	68	70	Yes	2.0	No	Yes	1
03-03	404 S St Marks	B	1	Yes	71	73	Yes	2.0	No	Yes	1
03-04	403 S Howell	B	1	No	71	73	Yes	2.0	No	Yes	1
03-05	406 S Howell	B	1	No	67	67	Yes	0.0	No	Yes	1
03-06	503 S Lovell	B	1	No	63	64	No	1.0	No	No	0
03-07	505 S Lovell	B	1	No	62	62	No	0.0	No	No	0
03-08	507 S Lovell	B	1	No	60	61	No	1.0	No	No	0
03-09	416 S Lovell (Duplex)	B	2	No	67	68	Yes	1.0	No	Yes	2
03-10	405 S St Marks	B	1	Yes	70	71	Yes	1.0	No	Yes	1
03-11	407 S St Marks	B	1	No	67	69	Yes	2.0	No	Yes	1
03-12	409 S St Marks	B	1	No	66	67	Yes	1.0	No	Yes	1
03-13	411 S St Marks	B	1	No	64	66	Yes	2.0	No	Yes	1
03-14	406 S St Marks	B	1	No	70	71	Yes	1.0	No	Yes	1
03-15	405 S Howell	B	1	No	69	71	Yes	2.0	No	Yes	1
03-16	407 S Howell	B	1	No	68	70	Yes	2.0	No	Yes	1
03-17	409 S Howell	B	1	No	67	68	Yes	1.0	No	Yes	1
03-18	411 S Howell	B	1	No	65	67	Yes	2.0	No	Yes	1

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
03-19	408 S Howell	B	1	No	66	67	Yes	1.0	No	Yes	1
03-20	504 S Moore	B	1	No	62	63	No	1.0	No	No	0
03-21	506 S Moore	B	1	No	61	62	No	1.0	No	No	0
03-22	418 Lovell	B	1	No	66	67	Yes	1.0	No	Yes	1
03-23	420 Lovell	B	1	No	65	66	Yes	1.0	No	Yes	1
03-24	500 S Lovell	B	1	No	63	65	No	2.0	No	No	0
03-25	502 S Lovell	B	1	No	62	63	No	1.0	No	No	0
03-26	501 S St Marks	B	1	No	63	64	No	1.0	No	No	0
03-27	503 S St Marks	B	1	No	62	63	No	1.0	No	No	0
03-28	505 S St Marks	B	1	No	60	61	No	1.0	No	No	0
03-29	507 S St Marks	B	1	No	59	60	No	1.0	No	No	0
03-30	408 S St Marks	B	1	No	68	70	Yes	2.0	No	Yes	1
03-31	410 S St Marks	B	1	No	67	69	Yes	2.0	No	Yes	1
03-32	412 S St Marks	B	1	No	66	67	Yes	1.0	No	Yes	1
03-33	East Ridge Ch. of Christ (D)	D	0	No	39	40	No	1.0	No	No	0
03-34	East Ridge Ch. of Christ (bldg 2) (D)	D	0	No	39	41	No	2.0	No	No	0
03-35	[M] 412 S Lovell	N/A	0	No	71	72	No	1.0	No	N/A	0
03-36	[M] Howell/N Terrace	N/A	0	No	74	76	No	2.0	No	N/A	0
<b>NAA 4</b>											
04-01	321 McBrien	B	1	Yes	61	63	No	2.0	No	No	0
04-02	317 S Howell	B	1	Yes	68	71	Yes	3.0	No	Yes	1
04-03	318 S St Marks	B	1	Yes	68	72	Yes	4.0	No	Yes	1
04-04	319 S St Marks	B	1	Yes	68	71	Yes	3.0	No	Yes	1
04-05	314 S Lovell	B	1	Yes	69	71	Yes	2.0	No	Yes	1
04-06	313 S Lovell	B	1	Yes	67	67	Yes	0.0	No	Yes	1
04-07	318 S Moore	B	1	Yes	65	65	No	0.0	No	No	0
04-08	Carriage House (317a McBrien Rd)(2DUs)	B	2	No	64	66	Yes	2.0	No	Yes	2
04-09	Carriage House (317b McBrien Rd)(2DUs)	B	2	No	63	64	No	1.0	No	No	0
04-10	Carriage House (317c McBrien Rd)(2DUs)	B	2	No	62	64	No	2.0	No	No	0
04-11	Carriage House (317d McBrien Rd)(2DUs)	B	2	No	62	64	No	2.0	No	No	0
04-12	Carriage House (315a McBrien Rd) (3 DUs)	B	3	No	63	64	No	1.0	No	No	0
04-13	310 S Howell	B	1	No	61	63	No	2.0	No	No	0
04-14	315 S Howell	B	1	No	63	66	Yes	3.0	No	Yes	1
04-15	316 S St Marks	B	1	No	67	70	Yes	3.0	No	Yes	1
04-16	314 S St Marks	B	1	No	66	69	Yes	3.0	No	Yes	1
04-17	312 S St Marks	B	1	No	65	68	Yes	3.0	No	Yes	1
04-18	310 S St Marks	B	1	No	64	67	Yes	3.0	No	Yes	1
04-19	308 S St Marks	B	1	No	62	64	No	2.0	No	No	0
04-20	304 S St Marks	B	1	No	61	64	No	3.0	No	No	0
04-21	300 S St Marks	B	1	No	60	62	No	2.0	No	No	0
04-22	317 S St Marks	B	1	No	67	70	Yes	3.0	No	Yes	1
04-23	315 S St Marks	B	1	No	66	69	Yes	3.0	No	Yes	1
04-24	311 S St Marks	B	1	No	65	68	Yes	3.0	No	Yes	1
04-25	307 S St Marks	B	1	No	65	67	Yes	2.0	No	Yes	1
04-26	305 S St Marks	B	1	No	64	66	Yes	2.0	No	Yes	1
04-27	303 S St Marks	B	1	No	62	64	No	2.0	No	No	0
04-28	301 S St Marks	B	1	No	61	63	No	2.0	No	No	0
04-29	311 S Lovell	B	1	No	65	66	Yes	1.0	No	Yes	1
04-30	314 S Moore	B	1	No	64	65	No	1.0	No	No	0
04-31	Carriage House (315f McBrien Rd)(2DUs)	B	2	No	63	63	No	0.0	No	No	0
04-32	Carriage House (315e McBrien Rd)(2DUs)	B	2	No	59	59	No	0.0	No	No	0
04-33	Carriage House (315d McBrien Rd)(2DUs)	B	2	No	57	57	No	0.0	No	No	0
04-34	Carriage House (315b McBrien Rd)(4 DUs)	B	4	No	61	64	No	3.0	No	No	0
04-35	308 S Howell	B	1	No	60	62	No	2.0	No	No	0
04-36	313 S Howell	B	1	No	62	64	No	2.0	No	No	0
04-37	312 S Lovell	B	1	No	67	70	Yes	3.0	No	Yes	1
04-38	310 S Lovell	B	1	No	65	68	Yes	3.0	No	Yes	1
04-39	308 S Lovell	B	1	No	63	66	Yes	3.0	No	Yes	1
04-40	306 S Lovell	B	1	No	63	65	No	2.0	No	No	0
04-41	5000 Mayfair	B	1	No	62	64	No	2.0	No	No	0
04-42	309 S Lovell	B	1	No	63	64	No	1.0	No	No	0
04-43	307 S Lovell	B	1	No	61	62	No	1.0	No	No	0
04-44	305 S Lovell	B	1	No	60	61	No	1.0	No	No	0
04-45	301 S Lovell	B	1	No	60	61	No	1.0	No	No	0
04-46	312 S Moore	B	1	No	63	64	No	1.0	No	No	0
04-47	310 S Moore	B	1	No	64	65	No	1.0	No	No	0
04-48	308 S Moore	B	1	No	63	64	No	1.0	No	No	0
04-49	304 S Moore	B	1	No	63	64	No	1.0	No	No	0
04-50	302 S Moore	B	1	No	62	63	No	1.0	No	No	0
04-51	313 McBrien (duplex)	B	2	No	55	55	No	0.0	No	No	0
04-52	311 McBrien	B	1	No	57	58	No	1.0	No	No	0
04-53	306 S Howell	B	1	No	59	61	No	2.0	No	No	0
04-54	304 S Howell	B	1	No	58	59	No	1.0	No	No	0
04-55	302 S Howell	B	1	No	57	59	No	2.0	No	No	0
04-56	300 S Howell	B	1	No	56	58	No	2.0	No	No	0
04-57	309 S Howell	B	1	No	61	63	No	2.0	No	No	0
04-58	307 S Howell	B	1	No	59	61	No	2.0	No	No	0
04-59	305 S Howell	B	1	No	58	60	No	2.0	No	No	0
04-60	303 S Howell	B	1	No	59	61	No	2.0	No	No	0
04-61	301 S Howell	B	1	No	58	61	No	3.0	No	No	0
<b>NAA 5</b>											
05-01	5303 Anderson	B	1	No	64	64	No	0.0	No	No	0
05-02	5307 Anderson	B	1	No	63	64	No	1.0	No	No	0
05-03	5304 Anderson	B	1	No	65	66	Yes	1.0	No	Yes	1
05-04	5308 Anderson	B	1	No	62	64	No	2.0	No	No	0
05-05	5312 Anderson	B	1	No	61	63	No	2.0	No	No	0
05-06	962 McBrien	B	1	No	62	62	No	0.0	No	No	0
05-07	5315 Reneau	B	1	No	59	61	No	2.0	No	No	0
05-08	5327 Reneau	B	1	No	59	60	No	1.0	No	No	0
05-09	5339 Reneau	B	1	No	58	60	No	2.0	No	No	0
05-10	5345 Reneau	B	1	No	58	60	No	2.0	No	No	0
05-11	5351 Reneau	B	1	No	59	60	No	1.0	No	No	0
05-12	5357 Reneau	B	1	No	59	60	No	1.0	No	No	0
05-13	5361 Reneau	B	1	No	58	60	No	2.0	No	No	0
<b>NAA 6</b>											
06-01	Midtown Ridge (314b_1 McBrien) (1 unit)	B	1	Yes	74	75	Yes	1.0	No	Yes	1
06-02	Midtown Ridge (314b_2 McBrien) (2 units)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
06-03	Midtown Ridge (314b_3 McBrien) (2 units)	B	2	Yes	73	74	Yes	1.0	No	Yes	2

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
06-04	Midtown Ridge (314b 4 McBrien) (1 unit)	B	1	Yes	72	73	Yes	1.0	No	Yes	1
06-05	Midtown Ridge (Pool)	C	0	Yes	69	70	Yes	1.0	No	Yes	0
06-06	Midtown Ridge (314a 1 McBrien) (2 units)	B	2	Yes	70	71	Yes	1.0	No	Yes	2
06-07	Midtown Ridge (314a 2 McBrien) (2 units)	B	2	Yes	70	71	Yes	1.0	No	Yes	2
06-08	Midtown Ridge (314a 3 McBrien) (1 unit)	B	1	Yes	69	70	Yes	1.0	No	Yes	1
06-09	Midtown Ridge (314a 4 McBrien) (1 unit)	B	1	Yes	68	70	Yes	2.0	No	Yes	1
06-10	Midtown Ridge (314a 5 McBrien) (2 units)	B	2	Yes	67	69	Yes	2.0	No	Yes	2
06-11	Midtown Ridge (314a 6 McBrien) (2 units)	B	2	Yes	66	68	Yes	2.0	No	Yes	2
06-12	Midtown Ridge (314b 5 McBrien) (2 1st fl units)	B	2	No	61	62	No	1.0	No	No	0
06-13	Midtown Ridge (314b 5 McBrien) (2 2nd fl units)	B	2	No	65	65	No	0.0	No	No	0
06-14	Midtown Ridge (314b 6 McBrien) (2 1st fl units)	B	2	No	59	60	No	1.0	No	No	0
06-15	Midtown Ridge (314b 6 McBrien) (2 2nd fl units)	B	2	No	62	63	No	1.0	No	No	0
06-16	Midtown Ridge (314b 7 McBrien) (2 1st fl units)	B	2	No	58	59	No	1.0	No	No	0
06-17	Midtown Ridge (314b 7 McBrien) (2 2nd fl units)	B	2	No	61	62	No	1.0	No	No	0
06-18	Midtown Ridge (314b 8 McBrien) (2 1st fl units)	B	2	No	58	59	No	1.0	No	No	0
06-19	Midtown Ridge (314b 8 McBrien) (2 2nd fl units)	B	2	No	60	61	No	1.0	No	No	0
06-20	Midtown Ridge (314a 7 McBrien) (1 1st fl unit)	B	1	No	57	58	No	1.0	No	No	0
06-21	Midtown Ridge (314a 7 McBrien) (1 2nd fl unit)	B	1	No	58	59	No	1.0	No	No	0
06-22	Midtown Ridge (314a 8 McBrien) (2 1st fl units)	B	2	No	56	57	No	1.0	No	No	0
06-23	Midtown Ridge (314a 8 McBrien) (2 2nd fl units)	B	2	No	57	58	No	1.0	No	No	0
06-24	Midtown Ridge (314a 9 McBrien) (2 1st fl units)	B	2	No	55	56	No	1.0	No	No	0
06-25	Midtown Ridge (314a 9 McBrien) (2 2nd fl units)	B	2	No	57	57	No	0.0	No	No	0
06-26	Midtown Ridge (314a 10 McBrien) (1 1st fl unit)	B	1	No	55	55	No	0.0	No	No	0
06-27	Midtown Ridge (314a 10 McBrien) (1 2nd fl unit)	B	1	No	56	57	No	1.0	No	No	0
06-28	Midtown Ridge (314a 11 McBrien) (2 1st fl units)	B	2	No	54	55	No	1.0	No	No	0
06-29	Midtown Ridge (314a 11 McBrien) (2 2nd fl units)	B	2	No	57	57	No	0.0	No	No	0
06-30	Midtown Ridge (314a 12 McBrien) (2 1st fl units)	B	2	No	56	56	No	0.0	No	No	0
06-31	Midtown Ridge (314a 12 McBrien) (2 2nd fl units)	B	2	No	58	58	No	0.0	No	No	0
06-32	Midtown Ridge (314a 13 McBrien) (1 1st fl unit)	B	1	No	61	61	No	0.0	No	No	0
06-33	Midtown Ridge (314a 13 McBrien) (1 2nd fl unit)	B	1	No	62	62	No	0.0	No	No	0
06-34	Midtown Ridge patio	C	0	No	50	50	No	0.0	No	No	0
06-35	Midtown Ridge (312a 1 McBrien) (1st & 2nd floor)	B	2	No	57	57	No	0.0	No	No	0
06-36	Midtown Ridge (312a 2 McBrien) (1st & 2nd floor)	B	4	No	58	58	No	0.0	No	No	0
06-37	Jewish Fed. of Gr. Chatt (playground)	C	0	No	63	63	No	0.0	No	No	0
06-38	First Ch. of the Nazarene (playground)	C	0	No	59	60	No	1.0	No	No	0
06-39	Chatt. Children's Clinic (D)	N/A	0	No	67	67	No	0.0	No	N/A	0
06-40	219 Hunt	B	1	No	64	64	No	0.0	No	No	0
06-41	217 Hunt	B	1	No	62	62	No	0.0	No	No	0
06-42	215 Hunt	B	1	No	60	61	No	1.0	No	No	0
06-43	213 Hunt	B	1	No	59	60	No	1.0	No	No	0
06-44	211 Hunt	B	1	No	59	60	No	1.0	No	No	0
06-45	209 Hunt	B	1	No	59	60	No	1.0	No	No	0
06-46	207 Hunt	B	1	No	58	58	No	0.0	No	No	0
06-47	309 Spring Creek	B	1	No	66	66	Yes	0.0	No	Yes	1
06-48	122 Rees	B	1	No	61	61	No	0.0	No	No	0
06-49	308 McBrien	B	1	No	58	58	No	0.0	No	No	0
06-50	[M] 314 McBrien Pool	N/A	0	No	68	70	No	2.0	No	N/A	0
NAA 7											
07-01	5526 Miller	B	1	Yes	60	62	No	2.0	No	No	0
07-02	5524 Miller	B	1	Yes	61	62	No	1.0	No	No	0
07-03	5520 Miller	B	1	Yes	61	63	No	2.0	No	No	0
07-04	5518 Miller	B	1	Yes	62	63	No	1.0	No	No	0
07-05	5516 Miller	B	1	Yes	62	63	No	1.0	No	No	0
07-06	5510 Miller	B	1	Yes	62	63	No	1.0	No	No	0
07-07	5508 Miller	B	1	Yes	61	62	No	1.0	No	No	0
07-08	5523 Miller	B	1	No	64	66	Yes	2.0	No	Yes	1
07-09	5521 Miller	B	1	No	65	66	Yes	1.0	No	Yes	1
07-10	5519 Miller	B	1	No	64	66	Yes	2.0	No	Yes	1
07-11	5517 Miller	B	1	No	65	66	Yes	1.0	No	Yes	1
07-12	5513 Miller	B	1	No	65	66	Yes	1.0	No	Yes	1
07-13	5511 Miller	B	1	No	65	67	Yes	2.0	No	Yes	1
07-14	5518 Honeysuckle	B	1	No	60	61	No	1.0	No	No	0
07-15	5516 Honeysuckle	B	1	No	60	61	No	1.0	No	No	0
07-16	5514 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-17	5512 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-18	5510 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-19	5508 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-20	5506 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-21	5504 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-22	5502 Honeysuckle	B	1	No	60	61	No	1.0	No	No	0
07-23	5500 Honeysuckle	B	1	No	60	61	No	1.0	No	No	0
07-24	400 Spring Creek	B	1	No	65	65	No	0.0	No	No	0
07-25	5519 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-26	5517 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-27	5515 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-28	5513 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-29	5509 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-30	5507 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-31	5505 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-32	5503 Honeysuckle	B	1	No	58	59	No	1.0	No	No	0
07-33	5501 Honeysuckle	B	1	No	59	60	No	1.0	No	No	0
07-34	314 Spring Creek	B	1	No	65	65	No	0.0	No	No	0
07-35	[M] 5508 Miller	N/A	0	No	61	62	No	1.0	No	N/A	0
NAA 8											
08-01	Chatt. Charter Sch. (playground)	C	0	Yes	70	71	Yes	1.0	No	Yes	0
NAA 9											
09-01	Virginia College of Bus. & Health (D)	D	0	No	42	44	No	2.0	No	No	0
NAA 10											
10-01	Brown Acres west (G - 1)	C	0	Yes	68	69	Yes	1.0	No	Yes	0
10-02	Brown Acres west (T - 1)	C	0	Yes	69	70	Yes	1.0	No	Yes	0
10-03	Brown Acres west (G - 2)	C	0	Yes	71	72	Yes	1.0	No	Yes	0
10-04	Brown Acres west (Driving Range)	C	0	No	67	68	Yes	1.0	No	Yes	0
10-05	Brown Acres west (T - 2)	C	0	No	66	67	Yes	1.0	No	Yes	0
10-06	Brown Acres west (G - 3)	C	0	No	67	68	Yes	1.0	No	Yes	0
10-07	Brown Acres west (T - 3)	C	0	No	68	69	Yes	1.0	No	Yes	0
10-08	Brown Acres west (Dr. Range #2)	C	0	No	66	67	Yes	1.0	No	Yes	0
10-09	Brown Acres west (G - 4)	C	0	No	66	67	Yes	1.0	No	Yes	0



Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
10-10	Brown Acres west (G - 5)	C	0	No	62	63	No	1.0	No	No	0
10-11	Brown Acres west (T - 4)	C	0	No	64	65	No	1.0	No	No	0
10-12	Brown Acres Clubhouse (1st fl)	C	0	No	64	66	Yes	2.0	No	Yes	0
10-13	Brown Acres Clubhouse (2nd fl)	C	0	No	66	68	Yes	2.0	No	Yes	0
10-14	Brown Acres west (G - 6)	C	0	No	63	65	No	2.0	No	No	0
10-15	Brown Acres Golf (Gazebo)	C	0	No	63	64	No	1.0	No	No	0
NAA 11											
11-01	Brown Acres east (T - 5)	C	0	Yes	68	69	Yes	1.0	No	Yes	0
11-02	Brown Acres east (G - 7)	C	0	Yes	69	70	Yes	1.0	No	Yes	0
11-03	Brown Acres east (T - 6)	C	0	Yes	69	70	Yes	1.0	No	Yes	0
11-04	Brown Acres east (T - 7)	C	0	Yes	72	73	Yes	1.0	No	Yes	0
11-05	Brown Acres east (T - 8)	C	0	Yes	71	72	Yes	1.0	No	Yes	0
11-06	Brown Acres east (G - 8)	C	0	Yes	64	65	No	1.0	No	No	0
11-07	Brown Acres east (T - 9)	C	0	No	68	69	Yes	1.0	No	Yes	0
11-08	Brown Acres east (G - 9)	C	0	No	66	67	Yes	1.0	No	Yes	0
11-09	Brown Acres east (G - 10)	C	0	No	70	71	Yes	1.0	No	Yes	0
11-10	Brown Acres east (G - 11)	C	0	No	68	70	Yes	2.0	No	Yes	0
11-11	Brown Acres east (T - 12)	C	0	No	61	62	No	1.0	No	No	0
11-12	Brown Acres east (G - 12)	C	0	No	62	63	No	1.0	No	No	0
11-13	Brown Acres east (G - 13)	C	0	No	59	60	No	1.0	No	No	0
11-14	Brown Acres east (G - 14)	C	0	No	63	64	No	1.0	No	No	0
11-15	Brown Acres east (G - 15)	C	0	No	68	69	Yes	1.0	No	Yes	0
11-16	Brown Acres east (T - 13)	C	0	No	65	66	Yes	1.0	No	Yes	0
11-17	Brown Acres east (G 16)	C	0	No	63	64	No	1.0	No	No	0
11-18	Brown Acres east (G - 17)	C	0	No	64	66	Yes	2.0	No	Yes	0
11-19	6606 Jordan	B	1	No	63	64	No	1.0	No	No	0
NAA 12											
12-01	425 Osborne	B	1	No	63	64	No	1.0	No	No	0
12-02	427 Osborne	B	1	No	64	66	Yes	2.0	No	Yes	1
12-03	429 Osborne	B	1	No	65	67	Yes	2.0	No	Yes	1
12-04	525 Brown	B	1	No	66	67	Yes	1.0	No	Yes	1
12-05	523 Brown	B	1	No	67	68	Yes	1.0	No	Yes	1
12-06	521 Brown	B	1	No	66	68	Yes	2.0	No	Yes	1
12-07	517 Brown	B	1	No	67	68	Yes	1.0	No	Yes	1
12-08	Community Lot w/pool (501 Brown)	C	0	No	68	69	Yes	1.0	No	Yes	0
12-09	527 Brown	B	1	No	66	67	Yes	1.0	No	Yes	1
12-10	529 Brown	B	1	No	64	65	No	1.0	No	No	0
12-11	512 Las Lomas	B	1	No	66	67	Yes	1.0	No	Yes	1
12-12	516 Las Lomas	B	1	No	67	68	Yes	1.0	No	Yes	1
12-13	518 Las Lomas	B	1	No	67	69	Yes	2.0	No	Yes	1
12-14	530 Las Lomas	B	1	No	67	69	Yes	2.0	No	Yes	1
12-15	536 Las Lomas	B	1	No	67	69	Yes	2.0	No	Yes	1
12-16	544 Las Lomas	B	1	No	67	68	Yes	1.0	No	Yes	1
12-17	548 Las Lomas	B	1	No	67	68	Yes	1.0	No	Yes	1
12-18	554 Las Lomas	B	1	No	67	68	Yes	1.0	No	Yes	1
12-19	513 Las Lomas	B	1	No	66	67	Yes	1.0	No	Yes	1
12-20	515 Las Lomas	B	1	No	66	67	Yes	1.0	No	Yes	1
12-21	419 Osborne	B	1	No	60	61	No	1.0	No	No	0
12-22	421 Osborne	B	1	No	61	62	No	1.0	No	No	0
12-23	423 Osborne	B	1	No	62	63	No	1.0	No	No	0
12-24	424 Osborne	B	1	No	62	64	No	2.0	No	No	0
12-25	416 Osborne	B	1	No	60	62	No	2.0	No	No	0
12-26	508 Lomas	B	1	No	62	63	No	1.0	No	No	0
12-27	510 Lomas	B	1	No	65	66	Yes	1.0	No	Yes	1
12-28	413 Brown	B	1	No	65	66	Yes	1.0	No	Yes	1
12-29	411 Brown	B	1	No	63	65	No	2.0	No	No	0
12-30	409 Brown	B	1	No	65	66	Yes	1.0	No	Yes	1
12-31	407 Brown	B	1	No	65	66	Yes	1.0	No	Yes	1
12-32	412 Frazier	B	1	No	66	67	Yes	1.0	No	Yes	1
12-33	410 Frazier	B	1	No	65	66	Yes	1.0	No	Yes	1
12-34	408 Frazier	B	1	No	64	65	No	1.0	No	No	0
12-35	406 Frazier	B	1	No	64	65	No	1.0	No	No	0
12-36	503 Las Lomas	B	1	No	59	61	No	2.0	No	No	0
12-37	511 Las Lomas	B	1	No	62	63	No	1.0	No	No	0
12-38	310 Benham	B	1	No	66	67	Yes	1.0	No	Yes	1
12-39	308 Benham	B	1	No	65	66	Yes	1.0	No	Yes	1
12-40	306 Benham	B	1	No	59	60	No	1.0	No	No	0
12-41	501 Las Lomas	B	1	No	53	55	No	2.0	No	No	0
12-42	319 Bass	B	1	No	63	64	No	1.0	No	No	0
12-43	317 Bass	B	1	No	64	65	No	1.0	No	No	0
12-44	315 Bass	B	1	No	63	64	No	1.0	No	No	0
12-45	413 Frazier	B	1	No	64	65	No	1.0	No	No	0
12-46	411 Frazier	B	1	No	57	58	No	1.0	No	No	0
12-47	409 Frazier	B	1	No	46	47	No	1.0	No	No	0
12-48	[M] 517 Brown	N/A	0	N/A	67	68	No	1.0	No	N/A	0
NAA 13											
13-01	VA Covered Gazebo	E	0	Yes	70	71	Yes	1.0	No	Yes	0
13-02	Office gazebo	E	0	Yes	62	63	No	1.0	No	No	0
13-03	[M] I-75 REF	N/A	0	N/A	77	79	No	2.0	No	N/A	0
13-04	[M] VA Covered Gazebo	N/A	0	N/A	71	72	No	1.0	No	N/A	0
NAA 14											
14-01	1039 Roselawn	B	1	No	63	65	No	2.0	No	No	0
14-02	1029 Roselawn	B	1	No	65	66	Yes	1.0	No	Yes	1
14-03	1041 Roselawn	B	1	No	62	63	No	1.0	No	No	0
14-04	1025 Roselawn	B	1	No	62	63	No	1.0	No	No	0
14-05	[M] 1039 Roselawn	N/A	0	No	66	67	No	1.0	No	N/A	0
NAA 15											
15-01	Concord Golf Course - 1	C	0	No	59	60	No	1.0	No	No	0
15-02	Concord Golf Course - 2	C	0	Yes	74	75	Yes	1.0	No	Yes	0
15-03	Concord Golf Course - 3	C	0	Yes	67	67	Yes	0.0	No	Yes	0
15-04	Concord Golf Course - 4	C	0	Yes	66	67	Yes	1.0	No	Yes	0
15-05	Concord Golf Course - 5	C	0	No	60	61	No	1.0	No	No	0
15-06	Concord Golf Course - 6	C	0	No	66	66	Yes	0.0	No	Yes	0
15-07	Concord Golf Course - 7	C	0	No	64	65	No	1.0	No	No	0
15-08	Concord Golf Course - 8	C	0	No	62	63	No	1.0	No	No	0
15-09	Concord Golf Course - 9	C	0	No	65	65	No	0.0	No	No	0
15-10	Concord Golf Course - 10	C	0	No	61	62	No	1.0	No	No	0

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
15-11	[M] I-75 Pavement REF	N/A	0	N/A	78	79	No	1.0	No	N/A	0
<b>NAA 16</b>											
16-01	1301 Phyllis	B	1	Yes	62	63	No	1.0	No	No	0
16-02	1305 Phyllis	B	1	Yes	62	63	No	1.0	No	No	0
16-03	1306 Phyllis	B	1	Yes	63	64	No	1.0	No	No	0
16-04	1308 Phyllis	B	1	Yes	63	63	No	0.0	No	No	0
16-05	1310 Phyllis	B	1	Yes	64	64	No	0.0	No	No	0
16-06	1312 Phyllis	B	1	Yes	64	64	No	0.0	No	No	0
16-07	1317 Phyllis	B	1	Yes	62	63	No	1.0	No	No	0
16-08	6901 Phyllis	B	1	No	60	61	No	1.0	No	No	0
16-09	6905 Phyllis	B	1	No	59	60	No	1.0	No	No	0
16-10	6907 Phyllis	B	1	No	57	58	No	1.0	No	No	0
16-11	1300 Phyllis	B	1	No	62	63	No	1.0	No	No	0
16-12	1302 Phyllis	B	1	No	63	64	No	1.0	No	No	0
16-13	1304 Phyllis	B	1	No	63	63	No	0.0	No	No	0
16-14	1317 Durham	B	1	No	63	64	No	1.0	No	No	0
16-15	1321 Durham	B	1	No	62	63	No	1.0	No	No	0
16-16	6902 Phyllis	B	1	No	60	62	No	2.0	No	No	0
16-17	6906 Phyllis	B	1	No	58	59	No	1.0	No	No	0
16-18	1331 Phils	B	1	No	57	58	No	1.0	No	No	0
16-19	1305 Durham	B	1	No	63	65	No	2.0	No	No	0
16-20	1309 Durham	B	1	No	64	65	No	1.0	No	No	0
16-21	1313 Durham	B	1	No	63	64	No	1.0	No	No	0
16-22	1325 Phils	B	1	No	56	58	No	2.0	No	No	0
16-23	1329 Phils	B	1	No	56	57	No	1.0	No	No	0
16-24	1269 Durham	B	1	No	62	64	No	2.0	No	No	0
16-25	1271 Durham	B	1	No	62	64	No	2.0	No	No	0
16-26	1275 Durham	B	1	No	63	64	No	1.0	No	No	0
16-27	1301 Durham	B	1	No	63	65	No	2.0	No	No	0
16-28	1302 Durham	B	1	No	62	63	No	1.0	No	No	0
16-29	1306 Durham	B	1	No	62	63	No	1.0	No	No	0
16-30	1310 Durham	B	1	No	62	63	No	1.0	No	No	0
16-31	1314 Durham	B	1	No	61	63	No	2.0	No	No	0
16-32	1318 Durham	B	1	No	61	62	No	1.0	No	No	0
16-33	1321 Phils	B	1	No	57	59	No	2.0	No	No	0
16-34	[M] 1301 Phyllis	N/A	0	N/A	61	62	No	1.0	No	N/A	0
<b>NAA 19</b>											
19-01	Chickamauga Cr. Grnwy 1	C	0	Yes	69	70	Yes	1.0	No	Yes	0
19-02	Chickamauga Cr. Grnwy 2	C	0	Yes	73	74	Yes	1.0	No	Yes	0
19-03	Chickamauga Cr. Grnwy 3	C	0	Yes	73	74	Yes	1.0	No	Yes	0
19-04	Chickamauga Cr. Grnwy 4	C	0	Yes	75	76	Yes	1.0	No	Yes	0
19-05	Chickamauga Cr. Grnwy 5	C	0	Yes	75	77	Yes	2.0	No	Yes	0
19-06	Chickamauga Cr. Grnwy 6	C	0	Yes	76	77	Yes	1.0	No	Yes	0
19-07	Chickamauga Cr. Grnwy 7	C	0	Yes	76	77	Yes	1.0	No	Yes	0
19-08	Chickamauga Cr. Grnwy 8	C	0	Yes	75	77	Yes	2.0	No	Yes	0
19-09	Chickamauga Cr. Grnwy 9	C	0	Yes	76	77	Yes	1.0	No	Yes	0
19-10	Chickamauga Cr. Grnwy 150ft	C	0	No	73	75	Yes	2.0	No	Yes	0
19-11	Chickamauga Cr. Grnwy 200ft	C	0	No	72	73	Yes	1.0	No	Yes	0
19-12	Chickamauga Cr. Grnwy 250ft	C	0	No	71	72	Yes	1.0	No	Yes	0
19-13	Chickamauga Cr. Grnwy 300ft	C	0	No	70	71	Yes	1.0	No	Yes	0
19-14	Chickamauga Cr. Grnwy 350ft	C	0	No	69	70	Yes	1.0	No	Yes	0
19-15	Chickamauga Cr. Grnwy 400ft	C	0	No	68	69	Yes	1.0	No	Yes	0
19-16	Chickamauga Cr. Grnwy 450ft	C	0	No	67	69	Yes	2.0	No	Yes	0
19-17	Chickamauga Cr. Grnwy 500ft	C	0	No	67	68	Yes	1.0	No	Yes	0
19-18	Chickamauga Cr. Grnwy 550ft	C	0	No	66	67	Yes	1.0	No	Yes	0
19-19	Chickamauga Cr. Grnwy 600ft	C	0	No	65	67	Yes	2.0	No	Yes	0
19-20	Chickamauga Cr. Grnwy 650ft	C	0	No	65	66	Yes	1.0	No	Yes	0
19-21	Chickamauga Cr. Grnwy 700ft	C	0	No	64	65	No	1.0	No	No	0
19-22	Chickamauga Cr. Grnwy 750ft	C	0	No	64	65	No	1.0	No	No	0
19-23	Chickamauga Cr. Grnwy (south) 50ft	C	0	Yes	67	68	Yes	1.0	No	Yes	0
19-24	Chickamauga Cr. Grnwy (south) 100ft	C	0	Yes	67	68	Yes	1.0	No	Yes	0
19-25	Chickamauga Cr. Grnwy (south) 150ft	C	0	No	66	67	Yes	1.0	No	Yes	0
19-26	Chickamauga Cr. Grnwy (south) 200ft	C	0	No	65	66	Yes	1.0	No	Yes	0
19-27	Chickamauga Cr. Grnwy (south) 250ft	C	0	No	64	65	No	1.0	No	No	0
19-28	Chickamauga Cr. Grnwy (south) 300ft	C	0	No	64	65	No	1.0	No	No	0
19-29	Chickamauga Cr. Grnwy (south) 350ft	C	0	No	64	65	No	1.0	No	No	0
19-30	Chickamauga Cr. Grnwy (south) 400ft	C	0	No	63	64	No	1.0	No	No	0
19-31	Chickamauga Cr. Grnwy (south) 450ft	C	0	No	63	64	No	1.0	No	No	0
19-32	Chickamauga Cr. Grnwy (south) 500ft	C	0	No	62	63	No	1.0	No	No	0
19-33	Chickamauga Cr. Grnwy (south) 550ft	C	0	No	61	63	No	2.0	No	No	0
19-34	Chickamauga Cr. Grnwy (south) 600ft	C	0	No	61	62	No	1.0	No	No	0
19-35	Chickamauga Cr. Grnwy (south) 650ft	C	0	No	60	61	No	1.0	No	No	0
19-36	Chickamauga Cr. Grnwy (south) 700ft	C	0	No	59	61	No	2.0	No	No	0
<b>NAA 20</b>											
20-01	Soccer field north stands (C)	C	0	Yes	57	59	No	2.0	No	No	0
20-02	Soccer field playground (C)	C	0	Yes	62	63	No	1.0	No	No	0
20-03	Soccer field midfield area (C)	C	0	Yes	57	59	No	2.0	No	No	0
20-04	[M] CHI Memorial Stadium	N/A	0	N/A	71	72	No	1.0	No	N/A	0
20-05	Soccer field west stands (C)	C	0	No	59	60	No	1.0	No	No	0
20-06	Soccer Field Beer Bar (E)	E	0	No	61	62	No	1.0	No	No	0
20-07	Soccer field east stands (C)	C	0	No	57	58	No	1.0	No	No	0
<b>NAA 21</b>											
21-01	514 S Germantown	B	1	Yes	74	75	Yes	1.0	No	Yes	1
21-02	3611 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-03	3613 Anderson	B	1	Yes	71	71	Yes	0.0	No	Yes	1
21-04	3615 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-05	3617 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-06	3619 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-07	3621 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-08	3701 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-09	3703 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-10	3705 Anderson	B	1	Yes	69	68	Yes	-1.0	No	Yes	1
21-11	3707 Anderson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
21-12	3709 Anderson	B	1	Yes	69	71	Yes	2.0	No	Yes	1
21-13	3711 Anderson	B	1	Yes	69	70	Yes	1.0	No	Yes	1
21-14	3713 Anderson	B	1	Yes	68	69	Yes	1.0	No	Yes	1
21-15	3715 Anderson	B	1	Yes	68	69	Yes	1.0	No	Yes	1

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
21-16	3717 Anderson	B	1	Yes	68	69	Yes	1.0	No	Yes	1
21-17	3719 Anderson	B	1	Yes	68	69	Yes	1.0	No	Yes	1
21-18	3721 Anderson	B	1	Yes	67	68	Yes	1.0	No	Yes	1
21-19	3723 Anderson	B	1	Yes	66	68	Yes	2.0	No	Yes	1
21-20	3727 Anderson	B	1	Yes	67	69	Yes	2.0	No	Yes	1
21-21	3731 Anderson (triplex)	B	3	Yes	65	67	Yes	2.0	No	Yes	3
21-22	3801 Northview	B	1	Yes	74	75	Yes	1.0	No	Yes	1
21-23	3803 Northview	B	1	Yes	74	75	Yes	1.0	No	Yes	1
21-24	3805 Northview	B	1	Yes	74	75	Yes	1.0	No	Yes	1
21-25	3807 Northview	B	1	Yes	74	75	Yes	1.0	No	Yes	1
21-26	3809 Northview	B	1	Yes	73	74	Yes	1.0	No	Yes	1
21-27	3811 Northview	B	1	Yes	73	74	Yes	1.0	No	Yes	1
21-28	520 Bacon	B	1	Yes	73	74	Yes	1.0	No	Yes	1
21-29	3904 S. Terrace	B	1	Yes	74	76	Yes	2.0	No	Yes	1
21-30	601 Belvoir	B	1	Yes	74	74	Yes	0.0	No	Yes	1
21-31	516 S Germantown	B	1	No	69	68	Yes	-1.0	No	Yes	1
21-32	518 S Germantown	B	1	No	66	66	Yes	0.0	No	Yes	1
21-33	3610 Anderson	B	1	No	62	63	No	1.0	No	No	0
21-34	3612 Anderson	B	1	No	65	66	Yes	1.0	No	Yes	1
21-35	3616 Anderson	B	1	No	67	68	Yes	1.0	No	Yes	1
21-36	3618 Anderson	B	1	No	68	70	Yes	2.0	No	Yes	1
21-37	3700 Anderson	B	1	No	66	68	Yes	2.0	No	Yes	1
21-38	3702 Anderson	B	1	No	67	68	Yes	1.0	No	Yes	1
21-39	3704 Anderson	B	1	No	68	69	Yes	1.0	No	Yes	1
21-40	3710 Anderson	B	1	No	68	69	Yes	1.0	No	Yes	1
21-41	3712 Anderson	B	1	No	67	69	Yes	2.0	No	Yes	1
21-42	3714 Anderson	B	1	No	67	68	Yes	1.0	No	Yes	1
21-43	3716 Anderson	B	1	No	63	65	No	2.0	No	No	0
21-44	3720 Anderson	B	1	No	66	68	Yes	2.0	No	Yes	1
21-45	3734/3736/3738/3740 Anderson (4units)	B	4	No	68	69	Yes	1.0	No	Yes	4
21-46	3744/3748 Anderson (duplex)	B	2	No	68	70	Yes	2.0	No	Yes	2
21-47	3752 Anderson	B	1	No	68	70	Yes	2.0	No	Yes	1
21-48	3756/3758 Anderson (duplex)	B	2	No	70	72	Yes	2.0	No	Yes	2
21-49	3800 Northview	B	1	No	71	73	Yes	2.0	No	Yes	1
21-50	3802 Northview	B	1	No	71	73	Yes	2.0	No	Yes	1
21-51	3804 Northview	B	1	No	71	72	Yes	1.0	No	Yes	1
21-52	3806 Northview	B	1	No	71	72	Yes	1.0	No	Yes	1
21-53	3808 Northview	B	1	No	69	71	Yes	2.0	No	Yes	1
21-54	3810 Northview	B	1	No	68	70	Yes	2.0	No	Yes	1
21-55	3812 Northview	B	1	No	67	69	Yes	2.0	No	Yes	1
21-56	600/602 Bacon (duplex)	B	2	No	68	70	Yes	2.0	No	Yes	2
21-57	Snooty Fox Apts Pool	B	0	No	68	70	Yes	2.0	No	Yes	0
21-58	603 Belvoir	B	1	No	69	70	Yes	1.0	No	Yes	1
21-59	604 S Germantown	B	1	No	65	66	Yes	1.0	No	Yes	1
21-60	606 S Germantown	B	1	No	64	65	No	1.0	No	No	0
21-61	608 S Germantown	B	1	No	63	64	No	1.0	No	No	0
21-62	3617 John Sims	B	1	No	64	65	No	1.0	No	No	0
21-63	3619 John Sims	B	1	No	63	64	No	1.0	No	No	0
21-64	3627 John Sims	B	1	No	59	60	No	1.0	No	No	0
21-65	3702 Norma	B	1	No	64	65	No	1.0	No	No	0
21-66	3704 Norma	B	1	No	55	56	No	1.0	No	No	0
21-67	3707 Norma	B	1	No	60	61	No	1.0	No	No	0
21-68	3709 Norma	B	1	No	59	61	No	2.0	No	No	0
21-69	3711 Norma	B	1	No	59	61	No	2.0	No	No	0
21-70	3713 Norma	B	1	No	60	62	No	2.0	No	No	0
21-71	3718 Norma	B	1	No	64	66	Yes	2.0	No	Yes	1
21-72	3716 Norma	B	1	No	64	65	No	1.0	No	No	0
21-73	3797 Northview	B	1	No	68	70	Yes	2.0	No	Yes	1
21-74	3713 Northview	B	1	No	67	69	Yes	2.0	No	Yes	1
21-75	3711 Northview	B	1	No	67	69	Yes	2.0	No	Yes	1
21-76	3801 Wiley	B	1	No	67	69	Yes	2.0	No	Yes	1
21-77	3803 Wiley	B	1	No	66	68	Yes	2.0	No	Yes	1
21-78	3805 Wiley	B	1	No	64	66	Yes	2.0	No	Yes	1
21-79	3807 Wiley	B	1	No	63	65	No	2.0	No	No	0
21-80	3809 Wiley	B	1	No	63	65	No	2.0	No	No	0
21-81	3811 Wiley	B	1	No	62	64	No	2.0	No	No	0
21-82	3813 Wiley	B	1	No	62	64	No	2.0	No	No	0
21-83	3903 Wiley	B	1	No	62	64	No	2.0	No	No	0
21-84	3905 Wiley	B	1	No	63	65	No	2.0	No	No	0
21-85	3907 Wiley	B	1	No	64	66	Yes	2.0	No	Yes	1
21-86	605 Belvoir	B	1	No	67	68	Yes	1.0	No	Yes	1
21-87	607 Belvoir	B	1	No	66	67	Yes	1.0	No	Yes	1
21-88	[M] 3701 Anderson	N/A	0	N/A	70	71	No	1.0	No	N/A	0
NAA 22											
22-01	405 Belvoir	B	1	Yes	70	71	Yes	1.0	No	Yes	1
22-02	3839 N Terrace (duplex)	B	2	Yes	72	73	Yes	1.0	No	Yes	2
22-03	3837 N Terrace (duplex)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
22-04	3835 N Terrace (duplex)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
22-05	3833 N Terrace (duplex)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
22-06	3831 N Terrace (duplex)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
22-07	3829 N Terrace (duplex)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
22-08	3827 N Terrace (duplex)	B	2	Yes	73	75	Yes	2.0	No	Yes	2
22-09	3815 N Terrace	B	1	Yes	75	76	Yes	1.0	No	Yes	1
22-10	3813 N Terrace	B	1	Yes	73	75	Yes	2.0	No	Yes	1
22-11	3811 N Terrace	B	1	Yes	74	76	Yes	2.0	No	Yes	1
22-12	3809 N Terrace	B	1	Yes	74	76	Yes	2.0	No	Yes	1
22-13	3807 N Terrace (duplex)	B	2	Yes	74	76	Yes	2.0	No	Yes	2
22-14	3805 N Terrace (duplex)	B	2	Yes	74	76	Yes	2.0	No	Yes	2
22-15	3803 N Terrace (duplex)	B	2	Yes	74	76	Yes	2.0	No	Yes	2
22-16	408 Oriole (duplex)	B	2	No	70	70	Yes	0.0	No	Yes	2
22-17	3709 N Terrace	B	1	Yes	76	77	Yes	1.0	No	Yes	1
22-18	North Terrace Ch of Christ (D)	D	0	No	50	52	Yes	2.0	No	Yes	0
22-19	378 Paden	B	1	No	64	66	Yes	2.0	No	Yes	1
22-20	385 Paden	B	1	Yes	67	68	Yes	1.0	No	Yes	1
22-21	416 Cloudland	B	1	Yes	75	76	Yes	1.0	No	Yes	1
22-22	418 Cloudland	B	1	Yes	74	75	Yes	1.0	No	Yes	1
22-23	403 Belvoir	B	1	No	57	59	No	2.0	No	No	0
22-24	401 Belvoir	B	1	No	56	57	No	1.0	No	No	0

Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
22-25	3832 Mission View	B	1	No	61	63	No	2.0	No	No	0
22-26	3828 Mission View	B	1	No	67	69	Yes	2.0	No	Yes	1
22-27	3826 Mission View	B	1	No	68	69	Yes	1.0	No	Yes	1
22-28	3824 Mission View	B	1	No	69	70	Yes	1.0	No	Yes	1
22-29	3822 Mission View	B	1	No	70	71	Yes	1.0	No	Yes	1
22-30	406 Oriole	B	1	No	64	66	Yes	2.0	No	Yes	1
22-31	404 Oriole	B	1	No	66	66	Yes	0.0	No	Yes	1
22-32	409 Oriole	B	1	No	69	72	Yes	3.0	No	Yes	1
22-33	405 Oriole	B	1	No	61	63	No	2.0	No	No	0
22-34	377 Paden	B	1	No	58	59	No	1.0	No	No	0
22-35	414 Cloudland	B	1	No	66	67	Yes	1.0	No	Yes	1
22-36	412 S Germantown	B	1	No	64	65	No	1.0	No	No	0
22-37	325 Belvoir	B	1	No	59	59	No	0.0	No	No	0
22-38	317 Belvoir	B	1	No	60	61	No	1.0	No	No	0
22-39	3835 Mission View	B	1	No	55	55	No	0.0	No	No	0
22-40	3833 Mission View	B	1	No	54	55	No	1.0	No	No	0
22-41	3831 Mission View	B	1	No	53	54	No	1.0	No	No	0
22-42	3829 Mission View	B	1	No	50	51	No	1.0	No	No	0
22-43	3827 Mission View	B	1	No	51	52	No	1.0	No	No	0
22-44	3825 Mission View	B	1	No	56	56	No	0.0	No	No	0
22-45	3823 Mission View	B	1	No	60	62	No	2.0	No	No	0
22-46	3818 Mission View	B	1	No	67	69	Yes	2.0	No	Yes	1
22-47	3808 Mission View (4 units)	B	4	No	64	62	No	-2.0	No	No	0
22-48	3806 Mission View (4 units)	B	4	No	64	64	No	0.0	No	No	0
22-49	3804 Mission View (7 units)	B	7	No	64	63	No	-1.0	No	No	0
22-50	3802 Mission View (5 units)	B	5	No	63	63	No	0.0	No	No	0
22-51	318 Mission View	B	1	No	60	61	No	1.0	No	No	0
22-52	316 Mission View	B	1	No	60	61	No	1.0	No	No	0
22-53	403 Oriole	B	1	No	60	61	No	1.0	No	No	0
22-54	401 Oriole	B	1	No	59	60	No	1.0	No	No	0
22-55	319 Oriole	B	1	No	57	58	No	1.0	No	No	0
22-56	3700 Mission View	B	1	No	54	55	No	1.0	No	No	0
22-57	361 Paden	B	1	No	49	50	No	1.0	No	No	0
22-58	353 Paden	B	1	No	51	52	No	1.0	No	No	0
22-59	345 Paden	B	1	No	52	53	No	1.0	No	No	0
22-60	412 Cloudland	B	1	No	62	63	No	1.0	No	No	0
22-61	410 Cloudland	B	1	No	62	63	No	1.0	No	No	0
22-62	408 Cloudland	B	1	No	63	64	No	1.0	No	No	0
22-63	409 Cloudland	B	1	No	65	67	Yes	2.0	No	Yes	1
22-64	407 Cloudland	B	1	No	64	65	No	1.0	No	No	0
22-65	410 S Germantown	B	1	No	63	64	No	1.0	No	No	0
22-66	408 S Germantown	B	1	No	63	64	No	1.0	No	No	0
22-67	406 S Germantown	B	1	No	62	63	No	1.0	No	No	0
22-68	[M] I24 Reference Church of Christ	N/A	0	N/A	74	76	No	2.0	No	N/A	0
22-69	[M] 3837 N Terrace	N/A	0	N/A	73	75	No	2.0	No	N/A	0
<b>NAA 23</b>											
23-01	505 Donaldson	B	1	Yes	76	79	Yes	3.0	No	Yes	1
23-02	506 Donaldson	B	1	Yes	78	80	Yes	2.0	No	Yes	1
23-03	3403 Maple Creek (duplex)	B	2	Yes	70	71	Yes	1.0	No	Yes	2
23-04	3045 Maple Creek	B	1	Yes	69	70	Yes	1.0	No	Yes	1
23-05	3407 Maple Creek	B	1	Yes	69	71	Yes	2.0	No	Yes	1
23-06	500 Stimpson	B	1	Yes	70	71	Yes	1.0	No	Yes	1
23-07	506 Bonnie Lassie	B	1	Yes	69	70	Yes	1.0	No	Yes	1
23-08	504 Bonnie Lassie	B	1	Yes	68	69	Yes	1.0	No	Yes	1
23-09	602 Bonnie Lassie	B	1	No	65	66	Yes	1.0	No	Yes	1
23-10	529 S Germantown	B	1	Yes	69	71	Yes	2.0	No	Yes	1
23-11	507 Donaldson	B	1	No	66	66	Yes	1.0	No	Yes	1
23-12	513 Donaldson (units #1-4)	B	4	No	66	67	Yes	1.0	No	Yes	4
23-13	513 Donaldson (units #5-8)	B	4	No	65	66	Yes	1.0	No	Yes	4
23-14	508 Donaldson	B	1	No	73	75	Yes	2.0	No	Yes	1
23-15	510 Donaldson	B	1	No	70	71	Yes	1.0	No	Yes	1
23-16	512 Donaldson	B	1	No	67	68	Yes	1.0	No	Yes	1
23-17	600 Maple Creek	B	1	No	68	69	Yes	1.0	No	Yes	1
23-18	602 Donaldson	B	1	No	66	67	Yes	1.0	No	Yes	1
23-19	603 Donaldson	B	1	No	67	68	Yes	1.0	No	Yes	1
23-20	500 Bonnie Lassie	B	1	No	67	68	Yes	1.0	No	Yes	1
23-21	502 Bonnie Lassie	B	1	No	67	68	Yes	1.0	No	Yes	1
23-22	604 Bonnie Lassie	B	1	No	63	64	No	1.0	No	No	0
23-23	531 S Germantown	B	1	No	68	69	Yes	1.0	No	Yes	1
23-24	515 Donaldson	B	1	No	62	63	No	1.0	No	No	0
23-25	3309 Castle	B	1	No	62	64	No	2.0	No	No	0
23-26	3307 Castle	B	1	No	62	63	No	1.0	No	No	0
23-27	3311 Castle	B	1	No	62	63	No	1.0	No	No	0
23-28	601 Donaldson	B	1	No	65	66	Yes	1.0	No	Yes	1
23-29	3315 Castle Ave	B	1	No	62	63	No	1.0	No	No	0
23-30	601 Maple	B	1	No	66	67	Yes	1.0	No	Yes	1
23-31	603 Maple	B	1	No	63	64	No	1.0	No	No	0
23-32	605 Maple	B	1	No	63	64	No	1.0	No	No	0
23-33	604 Maple	B	1	No	66	67	Yes	1.0	No	Yes	1
23-34	606 Maple	B	1	No	64	65	No	1.0	No	No	0
23-35	605 Stimpson	B	1	No	65	66	Yes	1.0	No	Yes	1
23-36	607 Stimpson	B	1	No	63	64	No	1.0	No	No	0
23-37	501 Bonnie Lassie	B	1	No	64	65	No	1.0	No	No	0
23-38	503 Bonnie Lassie	B	1	No	64	65	No	1.0	No	No	0
23-39	603 Bonnie Lassie	B	1	No	64	65	No	1.0	No	No	0
23-40	605 Bonnie Lassie	B	1	No	64	65	No	1.0	No	No	0
23-41	606 Stimpson	B	1	No	62	63	No	1.0	No	No	0
23-42	606 Bonnie Lassie	B	1	No	61	62	No	1.0	No	No	0
23-43	601 S Germantown	B	1	No	64	65	No	1.0	No	No	0
23-44	603 S Germantown	B	1	No	62	63	No	1.0	No	No	0
<b>NAA 24</b>											
24-01	3404 Frawley	B	1	Yes	69	70	Yes	1.0	No	Yes	1
24-02	3402 Frawley	B	1	Yes	69	70	Yes	1.0	No	Yes	1
24-03	3400 Frawley	B	1	Yes	70	71	Yes	1.0	No	Yes	1
24-04	3320 Frawley	B	1	Yes	71	72	Yes	1.0	No	Yes	1
24-05	3316 Frawley	B	1	Yes	78	79	Yes	1.0	No	Yes	1
24-06	3314 Frawley	B	1	Yes	78	80	Yes	2.0	No	Yes	1
24-07	3307/3309 Frawley (duplex)	B	2	Yes	71	73	Yes	2.0	No	Yes	2



Receiver Number	TNM Receiver Name	FHWA Activity Category	# of Residences	1st row? (Yes/No)	Predicted Existing, dBA	Predicted Build, dBA	Approach/ Exceed NAC?	Increase (dBA)	Substantial Increase?	Build Noise Impact ?	Impacted Receptors
24-08	3303 Frawley	B	1	Yes	72	74	Yes	2.0	No	Yes	1
24-09	416 Donaldson (duplex)	B	2	Yes	70	71	Yes	1.0	No	Yes	2
24-10	417 Donaldson	B	1	Yes	78	79	Yes	1.0	No	Yes	1
24-11	407 Donaldson (duplex)	B	2	Yes	72	73	Yes	1.0	No	Yes	2
24-12	Unitarian Church (D)	N/A	0	Yes	72	73	No	1.0	No	N/A	0
24-13	420 Broughton	B	1	No	70	71	Yes	1.0	No	Yes	1
24-14	421 Broughton	B	1	No	72	73	Yes	1.0	No	Yes	1
24-15	419 Broughton	B	1	No	70	71	Yes	1.0	No	Yes	1
24-16	417 Broughton	B	1	No	69	71	Yes	2.0	No	Yes	1
24-17	3325/3327 Frawley (duplex)	B	2	No	73	74	Yes	1.0	No	Yes	2
24-18	3313 Frawley	B	1	No	74	75	Yes	1.0	No	Yes	1
24-19	409-411 Alice (triplex)	B	3	No	68	70	Yes	2.0	No	Yes	3
24-20	408 Donaldson	B	1	No	67	68	Yes	1.0	No	Yes	1
24-21	411 Donaldson (duplex)	B	2	No	70	72	Yes	2.0	No	Yes	2
24-22	409 Donaldson	B	1	No	68	69	Yes	1.0	No	Yes	1
24-23	405 S Germantown	B	1	No	63	64	No	1.0	No	No	0
24-24	416 Broughton	B	1	No	68	69	Yes	1.0	No	Yes	1
24-25	414 Broughton	B	1	No	67	68	Yes	1.0	No	Yes	1
24-26	412 Broughton	B	1	No	66	67	Yes	1.0	No	Yes	1
24-27	410 Broughton	B	1	No	64	65	No	1.0	No	No	0
24-28	415 Broughton	B	1	No	68	69	Yes	1.0	No	Yes	1
24-29	413 Broughton	B	1	No	66	67	Yes	1.0	No	Yes	1
24-30	411 Broughton	B	1	No	63	64	No	1.0	No	No	0
24-31	409 Broughton	B	1	No	61	62	No	1.0	No	No	0
24-32	3319/3312 Frawley (duplex)	B	2	No	71	72	Yes	1.0	No	Yes	2
24-33	406 Alice (duplex)	B	2	No	71	72	Yes	1.0	No	Yes	2
24-34	400 Alice (duplex)	B	2	No	69	70	Yes	1.0	No	Yes	2
24-35	402 Alice (duplex)	B	2	No	69	70	Yes	1.0	No	Yes	2
24-36	404 Alice (duplex)	B	2	No	69	70	Yes	1.0	No	Yes	2
24-37	387 Alice (duplex)	B	2	No	63	64	No	1.0	No	No	0
24-38	407 Alice (duplex)	B	2	No	67	69	Yes	2.0	No	Yes	2
24-39	405 Alice	B	1	No	65	66	Yes	1.0	No	Yes	1
24-40	406 Donaldson (duplex)	B	2	No	63	65	No	2.0	No	No	0
24-41	404 Donaldson (duplex)	B	2	No	63	64	No	1.0	No	No	0
24-42	3302 Navajo (6 units)	B	6	No	61	62	No	1.0	No	No	0
24-43	3304 Navajo	B	1	No	61	62	No	1.0	No	No	0
24-44	3306 Navajo	B	1	No	60	61	No	1.0	No	No	0
24-45	3308 Navajo	B	1	No	58	59	No	1.0	No	No	0
24-46	405 Donaldson (duplex)	B	2	No	66	67	Yes	1.0	No	Yes	2
24-47	403 Donaldson (duplex)	B	2	No	64	65	No	1.0	No	No	0
24-48	3234 Navajo	B	1	No	62	63	No	1.0	No	No	0







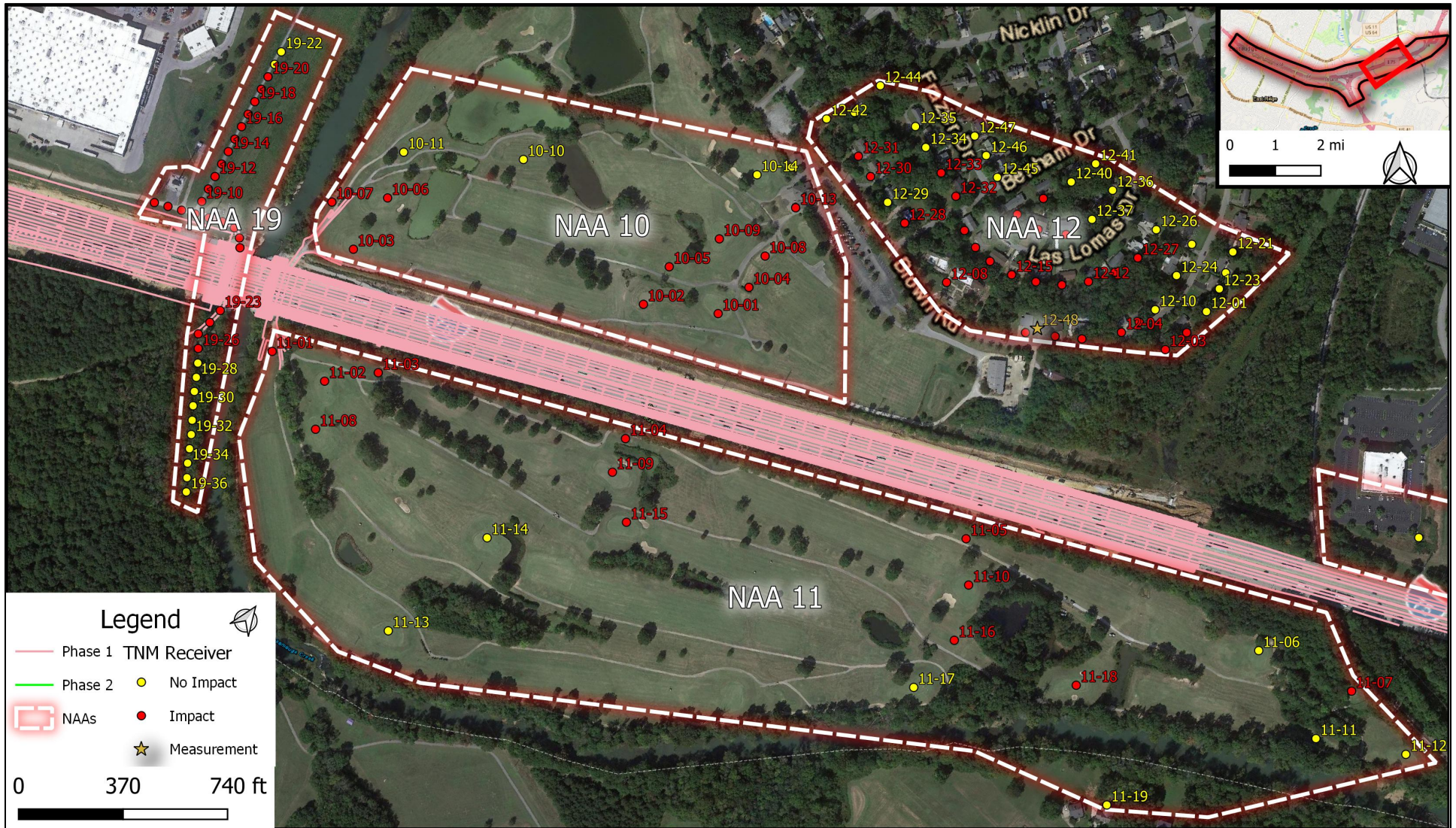






**Noise Impacts: Noise Analysis Areas 8, 9, & 20**





**Noise Impacts: Noise Analysis Areas 10 – 12, & 19**



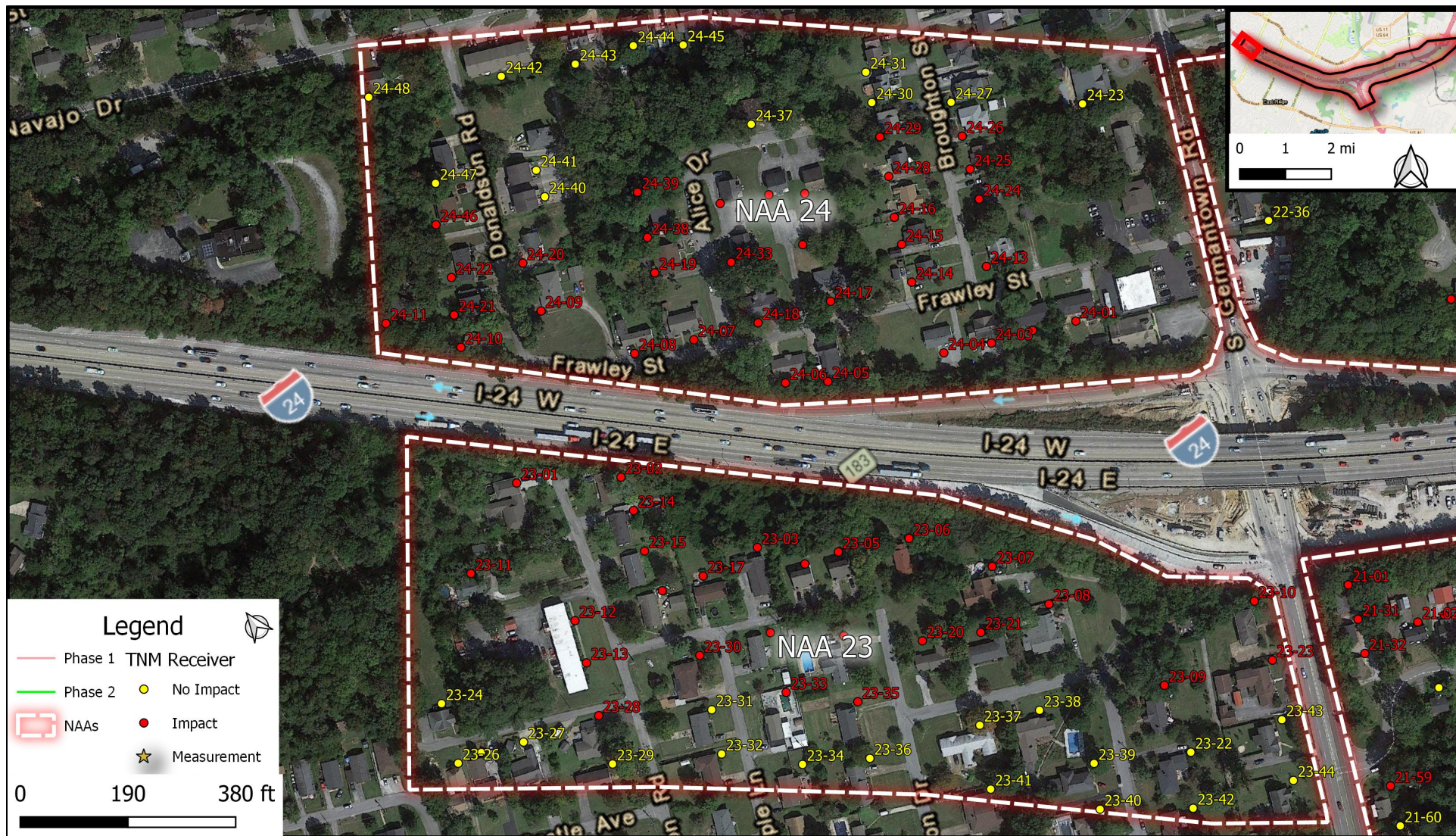






Noise Impacts: Noise Analysis Areas 21 & 22





Noise Impacts: Noise Analysis Areas 23 – 24



**Appendix F**  
**Evaluated Noise Barrier Locations, Noise Barrier Design and Analysis Results**



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Football Field)
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	3
# of 1st row impacted and benefited	3
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	1
Total Benefits	1
Benefited, first-row, receiving 7dB	2
Benefited, first-row	3
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-124	Our Lady of Perp Help (Playgrnd)	0	C	No	1980	63	No	58	4	No	0	0	No	0
01-125	Our Lady of Perp Help (seating)	0	C	No	1980	68	Yes	64	5	Yes	0	0	No	0
01-77	Our Lady of Perp Help Field 6	0	C	No	1980	68	Yes	64	4	No	0	0	No	0
01-76	Our Lady of Perp Help Field 5	0	C	No	1980	68	Yes	63	5	Yes	0	0	No	0
01-75	Our Lady of Perp Help Field 4	0	C	No	1980	68	Yes	62	6	Yes	0	0	No	0
01-29	Our Lady of Perp Help Field 3	0	C	Yes	1980	71	Yes	66	5	Yes	0	0	No	0
01-28	Our Lady of Perp Help Field 2	0	C	Yes	1980	72	Yes	65	7	Yes	0	0	Yes	0
01-27	Our Lady of Perp Help Field 1	0	C	Yes	1980	73	Yes	66	7	Yes	0	0	Yes	0



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>1 (Football Field)</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

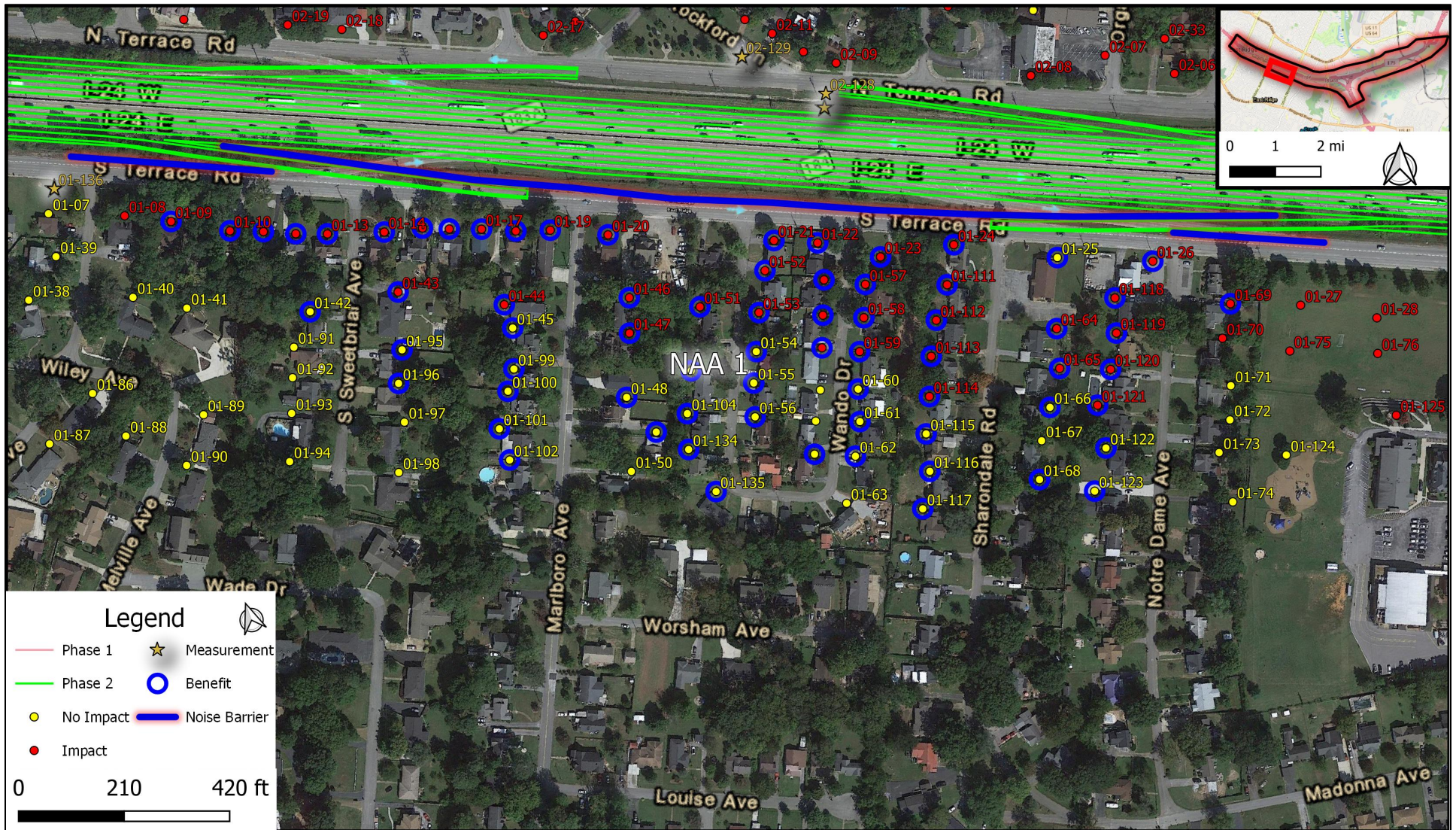
<b>Length (ft)</b>	<b>1,103</b>
<b>Area (ft<sup>2</sup>)</b>	<b>17,830</b>
<b>Average Height (ft)</b>	<b>16.2</b>
<b>Number of Benefited Residences</b>	<b>1</b>
<b>Area Per Benefited Residence</b>	<b>17,830</b>
<b>Allowable Area per Benefited Residence</b>	<b>850</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 128+00 [F]	STA 129+00 [F]	100	F (F)	686	694	8	800
STA 129+00 [F]	STA 130+00 [F]	100	F (F)	687	701	14	1,400
STA 130+00 [F]	STA 131+00 [F]	100	F (F)	687	705	18	1,800
STA 131+00 [F]	end	100	F (F)	686	706	20	2,000
STA 132+00 [F]	STA 133+00 [F]	100	F (F)	690	706	16	1,600
STA 133+00 [F]	STA 134+00 [F]	101	F (F)	690	710	20	2,020
STA 134+00 [F]	STA 135+00 [F]	100	F (F)	690	710	20	2,000
STA 135+00 [F]	STA 136+00 [F]	100	F (F)	690	710	20	2,000
STA 136+00 [F]	STA 137+00 [F]	100	F (F)	689	709	20	2,000
STA 137+00 [F]	STA 138+00 [F]	99	F (F)	692	706	14	1,386
STA 138+00 [F]	end	103	F (F)	694	702	8	824

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 1, Option 1



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Option 1), Residences Only
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	39
# of 1st row impacted and benefited	21
% of 1st row impacts receiving 5 dB	54%
Feasible?	Yes
Benefited Residences	73
Equivalent Benefits	0
Total Benefits	73
Benefited, first-row, receiving 7dB	13
Benefited, first-row	21
NRDG	61.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-01	4016 S. Terrace (5 units)	5	B	Yes	1960	68	Yes	68	0	No	0	0	No	0
01-02	4018 S. Terrace (5 units)	5	B	Yes	1960	67	Yes	67	0	No	0	0	No	0
01-03	4020 S. Terrace (5 units)	5	B	Yes	1960	66	Yes	66	0	No	0	0	No	0
01-04	4022 S. Terrace (duplex)	2	B	Yes	1974	62	No	62	0	No	0	0	No	0
01-05	4024 S. Terrace (duplex)	2	B	Yes	1974	61	No	61	0	No	0	0	No	0
01-06	4026 S. Terrace (duplex)	2	B	Yes	1974	60	No	60	0	No	0	0	No	0
01-07	529/531 Brookfield (duplex)	2	B	Yes	1974	63	No	62	1	No	0	0	No	0
01-08	538 Brookfield 4100/4102 S. Terrace (triplex)	3	B	Yes	1941	69	Yes	66	3	No	0	0	No	0
01-09	4104 S. Terrace (4 units)	4	B	Yes	1977	71	Yes	65	6	Yes	4	4	No	0
01-10	4106 S. Terrace	1	B	Yes	1941	70	Yes	64	7	Yes	1	1	Yes	1
01-11	4108 S. Terrace	1	B	Yes	1935	70	Yes	64	6	Yes	1	1	No	0
01-12	4110 S. Terrace	1	B	Yes	1945	70	Yes	64	7	Yes	1	1	Yes	1
01-13	4112 S. Terrace	1	B	Yes	1937	71	Yes	64	7	Yes	1	1	Yes	1
01-14	4200 S. Terrace	1	B	Yes	1940	73	Yes	66	7	Yes	1	1	Yes	1
01-15	4202 S. Terrace	1	B	Yes	1940	72	Yes	66	6	Yes	1	1	No	0
01-16	4204 S. Terrace	1	B	Yes	1938	72	Yes	66	7	Yes	1	1	Yes	1
01-17	4206 S. Terrace	1	B	Yes	1999	72	Yes	66	6	Yes	1	1	No	0
01-18	4208 S. Terrace	1	B	Yes	1930	72	Yes	65	7	Yes	1	1	Yes	1
01-19	503 Marlboro	1	B	Yes	2005	70	Yes	63	8	Yes	1	1	Yes	1
01-20	4306 S. Terrace	1	B	Yes	1930	71	Yes	65	7	Yes	1	1	Yes	1
01-21	504/508 Wando (duplex)	2	B	Yes	1970	73	Yes	66	8	Yes	2	2	Yes	2
01-22	594 Wando	1	B	Yes	1940	74	Yes	66	8	Yes	1	1	Yes	1
01-23	593 Wando	1	B	Yes	1940	73	Yes	67	7	Yes	1	1	Yes	1
01-24	501 Sharondale	1	B	Yes	1940	74	Yes	67	7	Yes	1	1	Yes	1
01-25	1st Bible Mission. Church (D)	0	D	No	1970	50	No	45	5	Yes	0	0	No	0
01-26	501 Notre Dame	1	B	Yes	1945	73	Yes	67	6	Yes	1	1	No	0
01-27	Our Lady of Perp Help Field 1	0	C	No	1980	73	Yes	69	3	No	0	0	No	0
01-28	Our Lady of Perp Help Field 2	0	C	No	1980	72	Yes	71	1	No	0	0	No	0
01-29	Our Lady of Perp Help Field 3	0	C	No	1980	71	Yes	70	1	No	0	0	No	0
01-30	606 Belvoir	1	B	No	1942	65	No	65	0	No	0	0	No	0
01-31	4003 Wiley	1	B	No	1952	64	No	64	0	No	0	0	No	0
01-32	4005 Wiley	1	B	No	1952	62	No	62	0	No	0	0	No	0
01-33	4007 Wiley	1	B	No	1952	62	No	62	0	No	0	0	No	0
01-34	4009 Wiley	1	B	No	1960	60	No	60	0	No	0	0	No	0
01-35	4011 Wiley	1	B	No	1956	60	No	59	0	No	0	0	No	0
01-36	4013 Wiley	1	B	No	1956	59	No	59	0	No	0	0	No	0
01-37	4061 Wiley	1	B	No	1956	59	No	58	0	No	0	0	No	0
01-38	4071 Wiley	1	B	No	1952	58	No	57	1	No	0	0	No	0
01-39	543/545 Brookfield (duplex)	2	B	No	1974	58	No	57	1	No	0	0	No	0
01-40	4101 Wiley	1	B	No	1960	56	No	55	1	No	0	0	No	0
01-41	4105 Wiley	1	B	No	1959	58	No	57	1	No	0	0	No	0
01-42	503 S Sweetbriar	1	B	No	1959	64	No	59	5	Yes	1	0	No	0
01-43	502 S Sweetbriar	1	B	No	1961	67	Yes	60	7	Yes	1	0	No	0
01-44	507 Marlboro	1	B	No	1923	67	Yes	60	7	Yes	1	0	No	0
01-45	509 Marlboro	1	B	No	1923	65	No	60	6	Yes	1	0	No	0
01-46	506 Marlboro	1	B	No	1935	68	Yes	61	7	Yes	1	0	No	0
01-47	508 Marlboro	1	B	No	1935	66	Yes	61	5	Yes	1	0	No	0
01-48	512 Marlboro	1	B	No	1925	63	No	58	5	Yes	1	0	No	0
01-49	514 Marlboro	1	B	No	1945	62	No	56	7	Yes	1	0	No	0
01-50	516 Marlboro	1	B	No	1933	60	No	58	2	No	0	0	No	0
01-51	521 Wando	1	B	No	1930	68	Yes	61	7	Yes	1	0	No	0
01-52	514 Wando	1	B	No	1940	70	Yes	62	7	Yes	1	0	No	0
01-53	520 Wando	1	B	No	1946	67	Yes	60	7	Yes	1	0	No	0
01-54	526 Wando	1	B	No	1930	65	No	59	7	Yes	1	0	No	0
01-55	532 Wando	1	B	No	1946	64	No	58	7	Yes	1	0	No	0
01-56	538 Wando	1	B	No	1944	63	No	56	7	Yes	1	0	No	0
01-57	587 Wando	1	B	No	1946	71	Yes	65	7	Yes	1	0	No	0
01-58	583 Wando	1	B	No	1946	69	Yes	62	7	Yes	1	0	No	0
01-59	575 Wando	1	B	No	1946	67	Yes	62	5	Yes	1	0	No	0
01-60	571 Wando	1	B	No	1946	64	No	60	5	Yes	1	0	No	0
01-61	563 Wando	1	B	No	1946	63	No	57	6	Yes	1	0	No	0
01-62	559 Wando	1	B	No	1946	62	No	57	5	Yes	1	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Option 1), Residences Only
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	39
# of 1st row impacted and benefited	21
% of 1st row impacts receiving 5 dB	54%
Feasible?	Yes
Benefited Residences	73
Equivalent Benefits	0
Total Benefits	73
Benefited, first-row, receiving 7dB	13
Benefited, first-row	21
NRDG	61.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-63	557 Wando	1	B	No	1946	60	No	57	3	No	0	0	No	0
01-64	504 Sharondale	1	B	No	1947	69	Yes	63	6	Yes	1	0	No	0
01-65	506 Sharondale	1	B	No	1945	67	Yes	60	6	Yes	1	0	No	0
01-66	508 Sharondale	1	B	No	1945	64	No	58	6	Yes	1	0	No	0
01-67	510 Sharondale	1	B	No	1945	62	No	59	4	No	0	0	No	0
01-68	512 Sharondale	1	B	No	1945	61	No	55	5	Yes	1	0	No	0
01-69	502 Notre Dame	1	B	No	1940	71	Yes	66	5	Yes	1	0	No	0
01-70	504 Notre Dame	1	B	No	1946	67	Yes	63	4	No	0	0	No	0
01-71	506 Notre Dame	1	B	No	1940	64	No	60	4	No	0	0	No	0
01-72	508 Notre Dame	1	B	No	1940	64	No	60	4	No	0	0	No	0
01-73	510 Notre Dame	1	B	No	1945	62	No	58	3	No	0	0	No	0
01-74	512 Notre Dame	1	B	No	1940	61	No	57	3	No	0	0	No	0
01-75	Our Lady of Perp Help Field 4	0	C	No	1980	68	Yes	65	3	No	0	0	No	0
01-76	Our Lady of Perp Help Field 5	0	C	No	1980	68	Yes	66	2	No	0	0	No	0
01-77	Our Lady of Perp Help Field 6	0	C	No	1980	68	Yes	67	1	No	0	0	No	0
01-78	608 Belvoir	1	B	No	1951	62	No	62	0	No	0	0	No	0
01-79	4004 Wiley	1	B	No	1952	60	No	60	0	No	0	0	No	0
01-80	4006 Wiley	1	B	No	1950	61	No	61	0	No	0	0	No	0
01-81	4008 Wiley	1	B	No	1962	60	No	60	0	No	0	0	No	0
01-82	4010 Wiley	1	B	No	1952	59	No	59	0	No	0	0	No	0
01-83	4012 Wiley	1	B	No	1956	58	No	58	0	No	0	0	No	0
01-84	4014 Wiley	1	B	No	1960	57	No	56	0	No	0	0	No	0
01-85	603 Brookfield	1	B	No	1954	56	No	56	1	No	0	0	No	0
01-86	600 Brookfield	1	B	No	1960	56	No	55	1	No	0	0	No	0
01-87	604 Brookfield	1	B	No	1960	55	No	55	1	No	0	0	No	0
01-88	603 Melville	1	B	No	1960	55	No	54	1	No	0	0	No	0
01-89	602 Melville	1	B	No	1960	54	No	53	1	No	0	0	No	0
01-90	608 Melville	1	B	No	1958	54	No	53	1	No	0	0	No	0
01-91	505 S Sweetbriar	1	B	No	1951	59	No	57	2	No	0	0	No	0
01-92	507 S Sweetbriar	1	B	No	1950	55	No	55	1	No	0	0	No	0
01-93	509 S Sweetbriar	1	B	No	1952	54	No	54	1	No	0	0	No	0
01-94	511 S Sweetbriar	1	B	No	1972	54	No	53	1	No	0	0	No	0
01-95	506 S Sweetbriar	1	B	No	1955	64	No	59	5	Yes	1	0	No	0
01-96	508 S Sweetbriar	1	B	No	1951	62	No	56	6	Yes	1	0	No	0
01-97	510 S Sweetbriar	1	B	No	1955	60	No	56	4	No	0	0	No	0
01-98	514 S Sweetbriar	1	B	No	1968	56	No	53	4	No	0	0	No	0
01-99	511 Marlboro	1	B	No	1923	63	No	58	6	Yes	1	0	No	0
01-100	513 Marlboro	1	B	No	1923	63	No	57	6	Yes	1	0	No	0
01-101	515 Marlboro	1	B	No	1925	61	No	56	5	Yes	1	0	No	0
01-102	517 Marlboro	1	B	No	1946	58	No	54	5	Yes	1	0	No	0
01-103	533 Wando	1	B	No	1945	65	No	58	7	Yes	1	0	No	0
01-104	537 Wando	1	B	No	1945	63	No	56	7	Yes	1	0	No	0
01-105	588 Wando	1	B	No	1945	71	Yes	64	7	Yes	1	0	No	0
01-106	582 Wando	1	B	No	1946	68	Yes	61	7	Yes	1	0	No	0
01-107	576 Wando	1	B	No	1958	67	Yes	59	7	Yes	1	0	No	0
01-108	570 Wando	1	B	No	1942	64	No	60	4	No	0	0	No	0
01-109	564 Wando	1	B	No	1946	63	No	60	3	No	0	0	No	0
01-110	558 Wando	1	B	No	1942	61	No	57	5	Yes	1	0	No	0
01-111	503 Sharondale	1	B	No	1930	71	Yes	64	7	Yes	1	0	No	0
01-112	505 Sharondale	1	B	No	1940	69	Yes	62	7	Yes	1	0	No	0
01-113	507 Sharondale	1	B	No	1948	67	Yes	60	7	Yes	1	0	No	0
01-114	509 Sharondale	1	B	No	1945	66	Yes	57	8	Yes	1	0	No	0
01-115	511 Sharondale	1	B	No	1945	64	No	57	7	Yes	1	0	No	0
01-116	513 Sharondale	1	B	No	1947	62	No	56	6	Yes	1	0	No	0
01-117	515 Sharondale	1	B	No	1947	61	No	55	6	Yes	1	0	No	0
01-118	503 Notre Dame	1	B	No	1946	72	Yes	66	6	Yes	1	0	No	0
01-119	505 Notre Dame	1	B	No	1945	69	Yes	63	6	Yes	1	0	No	0
01-120	507 Notre Dame	1	B	No	1945	67	Yes	61	6	Yes	1	0	No	0
01-121	509 Notre Dame	1	B	No	1945	66	Yes	60	6	Yes	1	0	No	0
01-122	511 Notre Dame	1	B	No	1947	63	No	58	6	Yes	1	0	No	0
01-123	513 Notre Dame	1	B	No	1945	61	No	55	5	Yes	1	0	No	0
01-124	Our Lady of Perp Help (Playgrnd)	0	C	No	1980	63	No	59	4	No	0	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Option 1), Residences Only
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	39
# of 1st row impacted and benefited	21
% of 1st row impacts receiving 5 dB	54%
Feasible?	Yes
Benefited Residences	73
Equivalent Benefits	0
Total Benefits	73
Benefited, first-row, receiving 7dB	13
Benefited, first-row	21
NRDG	61.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-125	Our Lady of Perp Help (seating)	0	C	No	1980	68	Yes	67	2	No	0	0	No	0
01-126	700 Belvoir	1	B	No	1940	60	No	60	0	No	0	0	No	0
01-127	702 Belvoir	1	B	No	1948	58	No	58	0	No	0	0	No	0
01-128	4031 Brookfield	1	B	No	1960	57	No	57	0	No	0	0	No	0
01-129	4033 Brookfield	1	B	No	1960	57	No	57	0	No	0	0	No	0
01-130	4035 Brookfield	1	B	No	1960	57	No	56	0	No	0	0	No	0
01-131	4043 Brookfield	1	B	No	1955	55	No	55	0	No	0	0	No	0
01-132	4051 Brookfield	1	B	No	1965	55	No	54	0	No	0	0	No	0
01-133	4059 Brookfield	1	B	No	1965	55	No	55	0	No	0	0	No	0
01-134	541 Wando	1	B	No	1945	61	No	56	5	Yes	1	0	No	0
01-135	545 Wando	1	B	No	1960	60	No	54	6	Yes	1	0	No	0



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>1 (Option 1), Residences Only</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

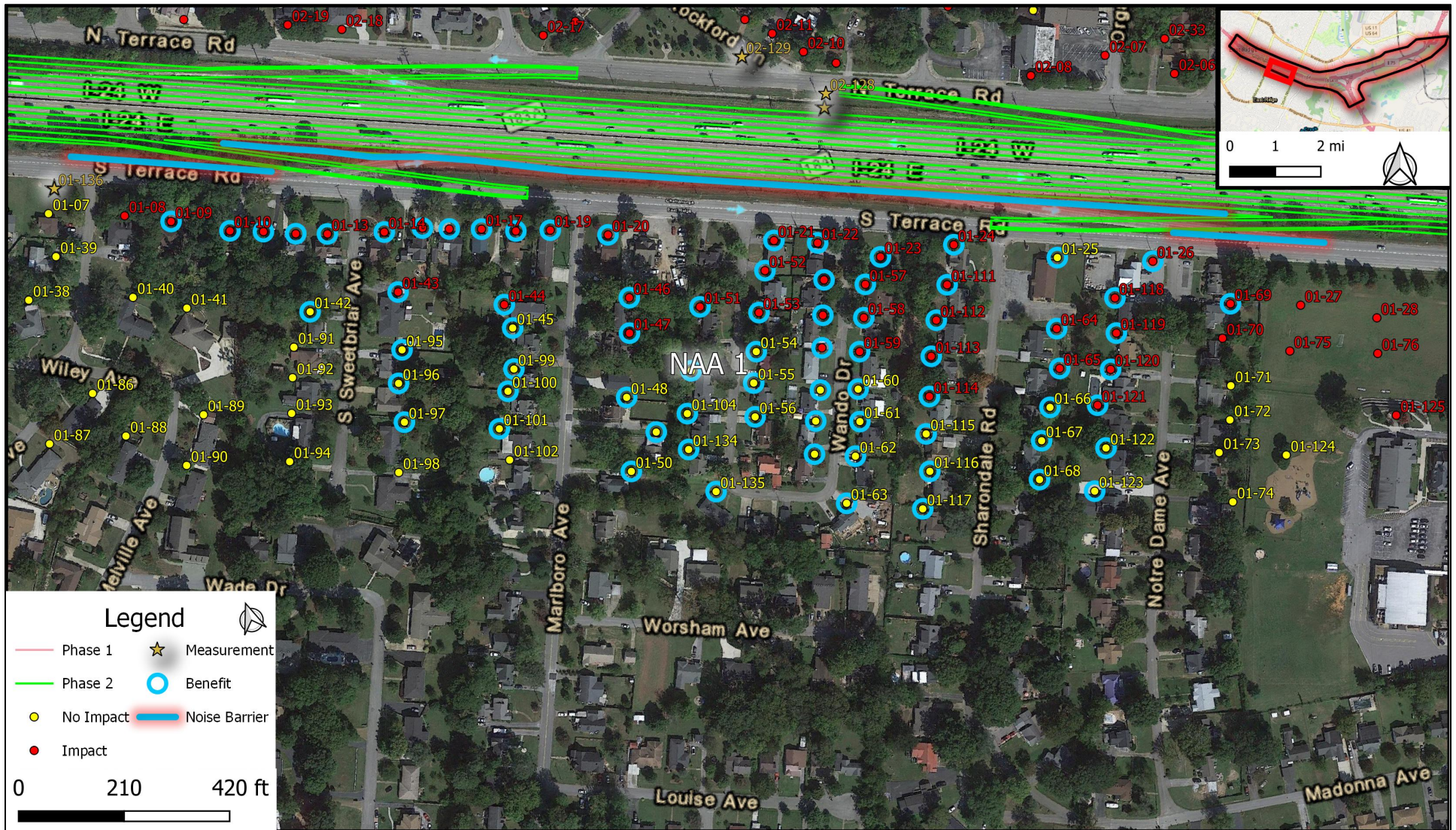
<b>Length (ft)</b>	<b>2,801</b>
<b>Area (ft<sup>2</sup>)</b>	<b>47,418</b>
<b>Average Height (ft)</b>	<b>16.9</b>
<b>Number of Benefited Residences</b>	<b>73</b>
<b>Area Per Benefited Residence</b>	<b>650</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 110+00 [F]	STA 111+00 [F]	100	F (F)	736	752	16	1,600
STA 111+00 [F]	STA 112+00 [F]	100	F (F)	733	749	16	1,600
STA 112+00 [F]	STA 113+00 [F]	100	F (F)	730	748	18	1,800
STA 113+00 [F]	end	100	F (F)	724	740	16	1,600
STA 113+00 [F]	STA 114+00 [F]	99	F (F)	713	727	14	1,386
STA 114+00 [F]	STA 115+00 [F]	100	F (F)	713	731	18	1,800
STA 115+00 [F]	STA 116+00 [F]	101	F (F)	713	731	18	1,818
STA 116+00 [F]	STA 117+00 [F]	100	F (F)	709	729	20	2,000
STA 117+00 [F]	STA 118+00 [F]	100	F (F)	706	726	20	2,000
STA 118+00 [F]	STA 119+00 [F]	100	F (F)	704	724	20	2,000
STA 119+00 [F]	STA 120+00 [F]	100	F (F)	701	721	20	2,000
STA 120+00 [F]	STA 121+00 [F]	100	F (F)	698	718	20	2,000
STA 121+00 [F]	STA 122+00 [F]	100	F (F)	696	714	18	1,800
STA 122+00 [F]	STA 123+00 [F]	100	F (F)	694	712	18	1,800
STA 123+00 [F]	STA 124+00 [F]	100	F (F)	692	710	18	1,800
STA 124+00 [F]	STA 125+00 [F]	100	F (F)	689	707	18	1,800
STA 125+00 [F]	STA 126+00 [F]	100	F (F)	688	704	16	1,600
STA 126+00 [F]	STA 127+00 [F]	100	F (F)	687	703	16	1,600
STA 127+00 [F]	STA 128+00 [F]	100	F (F)	687	703	16	1,600
STA 128+00 [F]	STA 129+00 [F]	100	F (F)	686	702	16	1,600
STA 129+00 [F]	STA 130+00 [F]	100	F (F)	687	703	16	1,600
STA 130+00 [F]	STA 131+00 [F]	100	F (F)	687	703	16	1,600
STA 131+00 [F]	STA 132+00 [F]	100	F (F)	686	702	16	1,600
STA 132+00 [F]	STA 133+00 [F]	100	F (F)	685	701	16	1,600
STA 133+00 [F]	end	100	F (F)	684	700	16	1,600
STA 132+00 [F]	STA 133+00 [F]	100	F (F)	690	704	14	1,400
STA 133+00 [F]	STA 134+00 [F]	101	F (F)	690	704	14	1,414
STA 134+00 [F]	end	100	F (F)	690	704	14	1,400

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





**Proposed Noise Barrier: Noise Analysis Area 1, Option 2**



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Option 2), Residences Only
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	39
# of 1st row impacted and benefited	21
% of 1st row impacts receiving 5 dB	54%
Feasible?	Yes
Benefited Residences	78
Equivalent Benefits	0
Total Benefits	78
Benefited, first-row, receiving 7dB	13
Benefited, first-row	21
NRDG	61.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-01	4016 S. Terrace (5 units)	5	B	Yes	1960	68	Yes	68	0	No	0	0	No	0
01-02	4018 S. Terrace (5 units)	5	B	Yes	1960	67	Yes	67	0	No	0	0	No	0
01-03	4020 S. Terrace (5 units)	5	B	Yes	1960	66	Yes	66	0	No	0	0	No	0
01-04	4022 S. Terrace (duplex)	2	B	Yes	1974	62	No	62	0	No	0	0	No	0
01-05	4024 S. Terrace (duplex)	2	B	Yes	1974	61	No	61	0	No	0	0	No	0
01-06	4026 S. Terrace (duplex)	2	B	Yes	1974	60	No	60	0	No	0	0	No	0
01-07	529/531 Brookfield (duplex)	2	B	Yes	1974	63	No	62	1	No	0	0	No	0
01-08	538 Brookfield 4100/4102 S. Terrace (triplex)	3	B	Yes	1941	69	Yes	66	3	No	0	0	No	0
01-09	4104 S. Terrace (4 units)	4	B	Yes	1977	71	Yes	65	6	Yes	4	4	No	0
01-10	4106 S. Terrace	1	B	Yes	1941	70	Yes	64	7	Yes	1	1	Yes	1
01-11	4108 S. Terrace	1	B	Yes	1935	70	Yes	64	6	Yes	1	1	No	0
01-12	4110 S. Terrace	1	B	Yes	1945	70	Yes	64	7	Yes	1	1	Yes	1
01-13	4112 S. Terrace	1	B	Yes	1937	71	Yes	64	7	Yes	1	1	Yes	1
01-14	4200 S. Terrace	1	B	Yes	1940	73	Yes	66	6.5	Yes	1	1	Yes	1
01-15	4202 S. Terrace	1	B	Yes	1940	72	Yes	66	6	Yes	1	1	No	0
01-16	4204 S. Terrace	1	B	Yes	1938	72	Yes	66	7	Yes	1	1	Yes	1
01-17	4206 S. Terrace	1	B	Yes	1999	72	Yes	66	6	Yes	1	1	No	0
01-18	4208 S. Terrace	1	B	Yes	1930	72	Yes	65	7	Yes	1	1	Yes	1
01-19	503 Marlboro	1	B	Yes	2005	70	Yes	63	8	Yes	1	1	Yes	1
01-20	4306 S. Terrace	1	B	Yes	1930	71	Yes	65	7	Yes	1	1	Yes	1
01-21	504/508 Wando (duplex)	2	B	Yes	1970	73	Yes	65	8	Yes	2	2	Yes	2
01-22	594 Wando	1	B	Yes	1940	74	Yes	66	8	Yes	1	1	Yes	1
01-23	593 Wando	1	B	Yes	1940	73	Yes	67	7	Yes	1	1	Yes	1
01-24	501 Sharondale	1	B	Yes	1940	74	Yes	67	7	Yes	1	1	Yes	1
01-25	1st Bible Mission. Church (D)	0	B	No	1970	75	Yes	70	5	Yes	0	0	No	0
01-26	501 Notre Dame	1	B	Yes	1945	73	Yes	67	6	Yes	1	1	No	0
01-27	Our Lady of Perp Help Field 1	0	C	No	1980	73	Yes	69	3	No	0	0	No	0
01-28	Our Lady of Perp Help Field 2	0	C	No	1980	72	Yes	71	1	No	0	0	No	0
01-29	Our Lady of Perp Help Field 3	0	C	No	1980	71	Yes	70	1	No	0	0	No	0
01-30	606 Belvoir	1	B	No	1942	65	No	65	0	No	0	0	No	0
01-31	4003 Wiley	1	B	No	1952	64	No	64	0	No	0	0	No	0
01-32	4005 Wiley	1	B	No	1952	62	No	62	0	No	0	0	No	0
01-33	4007 Wiley	1	B	No	1952	62	No	62	0	No	0	0	No	0
01-34	4009 Wiley	1	B	No	1960	60	No	60	0	No	0	0	No	0
01-35	4011 Wiley	1	B	No	1956	60	No	59	0	No	0	0	No	0
01-36	4013 Wiley	1	B	No	1956	59	No	59	0	No	0	0	No	0
01-37	4061 Wiley	1	B	No	1956	59	No	58	0	No	0	0	No	0
01-38	4071 Wiley	1	B	No	1952	58	No	57	1	No	0	0	No	0
01-39	543/545 Brookfield (duplex)	2	B	No	1974	58	No	57	1	No	0	0	No	0
01-40	4101 Wiley	1	B	No	1960	56	No	55	1	No	0	0	No	0
01-41	4105 Wiley	1	B	No	1959	57	No	57	1	No	0	0	No	0
01-42	503 S Sweetbriar	1	B	No	1959	64	No	59	5	Yes	1	0	No	0
01-43	502 S Sweetbriar	1	B	No	1961	67	Yes	61	7	Yes	1	0	No	0
01-44	507 Marlboro	1	B	No	1923	67	Yes	59	7	Yes	1	0	No	0
01-45	509 Marlboro	1	B	No	1923	65	No	58	7	Yes	1	0	No	0
01-46	506 Marlboro	1	B	No	1935	68	Yes	60	8	Yes	1	0	No	0
01-47	508 Marlboro	1	B	No	1935	66	Yes	58	8	Yes	1	0	No	0
01-48	512 Marlboro	1	B	No	1925	63	No	56	7	Yes	1	0	No	0
01-49	514 Marlboro	1	B	No	1945	62	No	55	7	Yes	1	0	No	0
01-50	516 Marlboro	1	B	No	1933	60	No	53	6	Yes	1	0	No	0
01-51	521 Wando	1	B	No	1930	68	Yes	60	8	Yes	1	0	No	0
01-52	514 Wando	1	B	No	1940	70	Yes	61	9	Yes	1	0	No	0
01-53	520 Wando	1	B	No	1946	67	Yes	58	8	Yes	1	0	No	0
01-54	526 Wando	1	B	No	1930	65	No	59	7	Yes	1	0	No	0
01-55	532 Wando	1	B	No	1946	64	No	57	7	Yes	1	0	No	0
01-56	538 Wando	1	B	No	1944	63	No	56	7	Yes	1	0	No	0
01-57	587 Wando	1	B	No	1946	71	Yes	63	9	Yes	1	0	No	0
01-58	583 Wando	1	B	No	1946	69	Yes	60	9	Yes	1	0	No	0
01-59	575 Wando	1	B	No	1946	66	Yes	60	7	Yes	1	0	No	0
01-60	571 Wando	1	B	No	1946	64	No	57	7	Yes	1	0	No	0
01-61	563 Wando	1	B	No	1946	63	No	56	7	Yes	1	0	No	0
01-62	559 Wando	1	B	No	1946	61	No	54	7	Yes	1	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Option 2), Residences Only
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	39
# of 1st row impacted and benefited	21
% of 1st row impacts receiving 5 dB	54%
Feasible?	Yes
Benefited Residences	78
Equivalent Benefits	0
Total Benefits	78
Benefited, first-row, receiving 7dB	13
Benefited, first-row	21
NRDG	61.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-63	557 Wando	1	B	No	1946	60	No	54	6	Yes	1	0	No	0
01-64	504 Sharondale	1	B	No	1947	69	Yes	62	7	Yes	1	0	No	0
01-65	506 Sharondale	1	B	No	1945	67	Yes	60	7	Yes	1	0	No	0
01-66	508 Sharondale	1	B	No	1945	64	No	58	7	Yes	1	0	No	0
01-67	510 Sharondale	1	B	No	1945	62	No	56	6	Yes	1	0	No	0
01-68	512 Sharondale	1	B	No	1945	61	No	55	6	Yes	1	0	No	0
01-69	502 Notre Dame	1	B	No	1940	71	Yes	66	5	Yes	1	0	No	0
01-70	504 Notre Dame	1	B	No	1946	67	Yes	63	4	No	0	0	No	0
01-71	506 Notre Dame	1	B	No	1940	64	No	60	4	No	0	0	No	0
01-72	508 Notre Dame	1	B	No	1940	64	No	60	4	No	0	0	No	0
01-73	510 Notre Dame	1	B	No	1945	62	No	58	4	No	0	0	No	0
01-74	512 Notre Dame	1	B	No	1940	61	No	57	4	No	0	0	No	0
01-75	Our Lady of Perp Help Field 4	0	C	No	1980	68	Yes	65	3	No	0	0	No	0
01-76	Our Lady of Perp Help Field 5	0	C	No	1980	68	Yes	66	2	No	0	0	No	0
01-77	Our Lady of Perp Help Field 6	0	C	No	1980	68	Yes	67	1	No	0	0	No	0
01-78	608 Belvoir	1	B	No	1951	62	No	62	0	No	0	0	No	0
01-79	4004 Wiley	1	B	No	1952	60	No	60	0	No	0	0	No	0
01-80	4006 Wiley	1	B	No	1950	61	No	61	0	No	0	0	No	0
01-81	4008 Wiley	1	B	No	1962	60	No	60	0	No	0	0	No	0
01-82	4010 Wiley	1	B	No	1952	59	No	59	0	No	0	0	No	0
01-83	4012 Wiley	1	B	No	1956	58	No	58	0	No	0	0	No	0
01-84	4014 Wiley	1	B	No	1960	57	No	56	1	No	0	0	No	0
01-85	603 Brookfield	1	B	No	1954	56	No	56	1	No	0	0	No	0
01-86	600 Brookfield	1	B	No	1960	56	No	55	1	No	0	0	No	0
01-87	604 Brookfield	1	B	No	1960	55	No	54	1	No	0	0	No	0
01-88	603 Melville	1	B	No	1960	55	No	54	1	No	0	0	No	0
01-89	602 Melville	1	B	No	1960	54	No	53	1	No	0	0	No	0
01-90	608 Melville	1	B	No	1958	54	No	53	1	No	0	0	No	0
01-91	505 S Sweetbriar	1	B	No	1951	59	No	57	2	No	0	0	No	0
01-92	507 S Sweetbriar	1	B	No	1950	55	No	54	1	No	0	0	No	0
01-93	509 S Sweetbriar	1	B	No	1952	54	No	53	1	No	0	0	No	0
01-94	511 S Sweetbriar	1	B	No	1972	54	No	52	1	No	0	0	No	0
01-95	506 S Sweetbriar	1	B	No	1955	64	No	58	6	Yes	1	0	No	0
01-96	508 S Sweetbriar	1	B	No	1951	62	No	56	6	Yes	1	0	No	0
01-97	510 S Sweetbriar	1	B	No	1955	60	No	55	5	Yes	1	0	No	0
01-98	514 S Sweetbriar	1	B	No	1968	56	No	53	3	No	0	0	No	0
01-99	511 Marlboro	1	B	No	1923	64	No	57	7	Yes	1	0	No	0
01-100	513 Marlboro	1	B	No	1923	63	No	57	6	Yes	1	0	No	0
01-101	515 Marlboro	1	B	No	1925	61	No	55	6	Yes	1	0	No	0
01-102	517 Marlboro	1	B	No	1946	58	No	54	4	No	0	0	No	0
01-103	533 Wando	1	B	No	1945	65	No	57	8	Yes	1	0	No	0
01-104	537 Wando	1	B	No	1945	63	No	56	7	Yes	1	0	No	0
01-105	588 Wando	1	B	No	1945	71	Yes	66	5	Yes	1	0	No	0
01-106	582 Wando	1	B	No	1946	68	Yes	59	9	Yes	1	0	No	0
01-107	576 Wando	1	B	No	1958	67	Yes	58	9	Yes	1	0	No	0
01-108	570 Wando	1	B	No	1942	64	No	57	8	Yes	1	0	No	0
01-109	564 Wando	1	B	No	1946	63	No	56	7	Yes	1	0	No	0
01-110	558 Wando	1	B	No	1942	61	No	54	7	Yes	1	0	No	0
01-111	503 Sharondale	1	B	No	1930	71	Yes	63	9	Yes	1	0	No	0
01-112	505 Sharondale	1	B	No	1940	69	Yes	60	9	Yes	1	0	No	0
01-113	507 Sharondale	1	B	No	1948	67	Yes	59	9	Yes	1	0	No	0
01-114	509 Sharondale	1	B	No	1945	66	Yes	57	8	Yes	1	0	No	0
01-115	511 Sharondale	1	B	No	1945	64	No	56	8	Yes	1	0	No	0
01-116	513 Sharondale	1	B	No	1947	62	No	55	7	Yes	1	0	No	0
01-117	515 Sharondale	1	B	No	1947	61	No	54	7	Yes	1	0	No	0
01-118	503 Notre Dame	1	B	No	1946	72	Yes	65	7	Yes	1	0	No	0
01-119	505 Notre Dame	1	B	No	1945	69	Yes	62	7	Yes	1	0	No	0
01-120	507 Notre Dame	1	B	No	1945	67	Yes	60	7	Yes	1	0	No	0
01-121	509 Notre Dame	1	B	No	1945	66	Yes	59	6	Yes	1	0	No	0
01-122	511 Notre Dame	1	B	No	1947	63	No	57	6	Yes	1	0	No	0
01-123	513 Notre Dame	1	B	No	1945	61	No	55	6	Yes	1	0	No	0
01-124	Our Lady of Perp Help (Playgrnd)	0	C	No	1980	63	No	59	4	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	1 (Option 2), Residences Only
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	39
# of 1st row impacted and benefited	21
% of 1st row impacts receiving 5 dB	54%
Feasible?	Yes
Benefited Residences	78
Equivalent Benefits	0
Total Benefits	78
Benefited, first-row, receiving 7dB	13
Benefited, first-row	21
NRDG	61.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
01-125	Our Lady of Perp Help (seating)	0	C	No	1980	68	Yes	66	2	No	0	0	No	0
01-126	700 Belvoir	1	B	No	1940	60	No	60	0	No	0	0	No	0
01-127	702 Belvoir	1	B	No	1948	58	No	58	0	No	0	0	No	0
01-128	4031 Brookfield	1	B	No	1960	57	No	57	0	No	0	0	No	0
01-129	4033 Brookfield	1	B	No	1960	57	No	57	0	No	0	0	No	0
01-130	4035 Brookfield	1	B	No	1960	57	No	56	0	No	0	0	No	0
01-131	4043 Brookfield	1	B	No	1955	55	No	55	1	No	0	0	No	0
01-132	4051 Brookfield	1	B	No	1965	55	No	54	1	No	0	0	No	0
01-133	4059 Brookfield	1	B	No	1965	55	No	55	1	No	0	0	No	0
01-134	541 Wando	1	B	No	1945	61	No	55	7	Yes	1	0	No	0
01-135	545 Wando	1	B	No	1960	59	No	53	6	Yes	1	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>1 (Option 2), Residences Only</b>
<b>Description:</b>	<b>Barrier at Frontage/Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>2,700</b>
<b>Area (ft<sup>2</sup>)</b>	<b>47,796</b>
<b>Average Height (ft)</b>	<b>17.7</b>
<b>Number of Benefited Residences</b>	<b>78</b>
<b>Area Per Benefited Residence</b>	<b>613</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 110+00 [F]	STA 111+00 [F]	100	F (F)	736	752	16	1,600
STA 111+00 [F]	STA 112+00 [F]	100	F (F)	733	749	16	1,600
STA 112+00 [F]	STA 113+00 [F]	100	F (F)	730	748	18	1,800
STA 113+00 [F]	end	100	F (F)	724	740	16	1,600
STA 113+00 [EOP]	STA 114+00 [EOP]	99	F (R)	713	731	18	1,782
STA 114+00 [EOP]	STA 115+00 [EOP]	100	F (R)	712	732	20	2,000
STA 115+00 [EOP]	STA 116+00 [EOP]	100	F (R)	710	730	20	2,000
STA 116+00 [EOP]	STA 117+00 [EOP]	100	F (T)	704	724	20	2,000
STA 117+00 [EOP]	STA 118+00 [EOP]	100	F (F)	699	719	20	2,000
STA 118+00 [EOP]	STA 119+00 [EOP]	100	F (F)	697	717	20	2,000
STA 119+00 [EOP]	STA 120+00 [EOP]	100	F (F)	695	715	20	2,000
STA 120+00 [EOP]	STA 121+00 [EOP]	100	F (F)	694	712	18	1,800
STA 121+00 [EOP]	STA 122+00 [EOP]	100	F (F)	692	710	18	1,800
STA 122+00 [EOP]	STA 123+00 [EOP]	100	F (F)	691	709	18	1,800
STA 123+00 [EOP]	STA 124+00 [EOP]	100	F (F)	690	708	18	1,800
STA 124+00 [EOP]	STA 125+00 [EOP]	100	F (F)	689	707	18	1,800
STA 125+00 [EOP]	STA 126+00 [EOP]	100	F (F)	688	706	18	1,800
STA 126+00 [EOP]	STA 127+00 [EOP]	100	F (F)	687	705	18	1,800
STA 127+00 [EOP]	STA 128+00 [EOP]	100	F (F)	687	705	18	1,800
STA 128+00 [EOP]	STA 129+00 [EOP]	100	F (F)	686	704	18	1,800
STA 129+00 [EOP]	STA 130+00 [EOP]	100	F (F)	686	704	18	1,800
STA 130+00 [EOP]	STA 131+00 [EOP]	100	F (F)	685	703	18	1,800
STA 131+00 [EOP]	STA 132+00 [EOP]	100	F (F)	685	703	18	1,800
STA 132+00 [EOP]	end	100	F (F)	685	701	16	1,600
STA 132+00 [F]	STA 133+00 [F]	100	F (F)	690	704	14	1,400
STA 133+00 [F]	STA 134+00 [F]	101	F (F)	690	704	14	1,414
STA 134+00 [F]	end	100	F (F)	690	704	14	1,400

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.







Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 1), Residences Only
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	18
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	89
Equivalent Benefits	0.2
Total Benefits	89.2
Benefited, first-row, receiving 7dB	12
Benefited, first-row	18
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-01	315 S Moore	1	B	No	1950	67	Yes	65	1.5	No	0	0	No	0
02-02	4711 N Terrace	1	B	Yes	1989	74	Yes	70	4.2	No	0	0	No	0
02-03	4707 N Terrace	1	B	Yes	1989	74	Yes	69	5.2	Yes	1	1	No	0
02-04	4703 N Terrace	1	B	Yes	1989	75	Yes	69	6.0	Yes	1	1	No	0
02-05	416 Haney	1	B	Yes	1950	75	Yes	69	6.7	Yes	1	1	Yes	1
02-06	415 Haney	1	B	Yes	1940	75	Yes	68	7.0	Yes	1	1	Yes	1
02-07	Calvary Baptist Church (BB goal)	0	C	Yes	1960	75	Yes	68	6.6	Yes	0	0	Yes	0
02-08	Calvary Baptist Church (interior)	0	D	No	1960	52	Yes	47	5.7	Yes	0	0	No	0
02-09	4511 Rockford	1	B	Yes	1930	76	Yes	69	7.3	Yes	1	1	Yes	1
02-10	4509 Rockford	1	B	Yes	1930	75	Yes	67	8.0	Yes	1	1	Yes	1
02-11	4505 Rockford	1	B	Yes	2006	74	Yes	65	8.6	Yes	1	1	Yes	1
02-12	4503 Rockford	1	B	Yes	1930	73	Yes	65	8.1	Yes	1	1	Yes	1
02-13	408 S Sweetbriar	1	B	Yes	1930	72	Yes	64	8.1	Yes	1	1	Yes	1
02-14	409 S Sweetbriar	1	B	Yes	1930	71	Yes	64	7.0	Yes	1	1	Yes	1
02-15	411 S Sweetbriar	1	B	Yes	1935	73	Yes	64	8.1	Yes	1	1	Yes	1
02-16	413 S Sweetbriar	1	B	Yes	1940	75	Yes	68	7.0	Yes	1	1	Yes	1
02-17	420 Marlboro	1	B	Yes	1945	75	Yes	68	6.6	Yes	1	1	Yes	1
02-18	4111 N Terrace	1	B	Yes	1965	76	Yes	70	6.3	Yes	1	1	No	0
02-19	4109 N Terrace	1	B	Yes	1935	76	Yes	71	5.0	Yes	1	1	No	0
02-20	416 Brookfield	1	B	Yes	1930	74	Yes	68	5.4	Yes	1	1	No	0
02-21	417 Brookfield	1	B	Yes	1918	74	Yes	69	4.9	Yes	1	1	No	0
02-22	4019 N Terrace	1	B	Yes	1940	73	Yes	69	4.2	No	0	0	No	0
02-23	412 Thornton	1	B	Yes	1950	72	Yes	69	3.7	No	0	0	No	0
02-24	Brainerd Crossroads Soccer 1	0	C	No	2005	65	No	65	0.2	No	0	0	No	0
02-25	Brainerd Baptist Sch Soccer 2	0	C	No	2005	68	Yes	68	0.1	No	0	0	No	0
02-26	313 S Moore	1	B	No	1955	66	Yes	64	1.3	No	0	0	No	0
02-27	304 Barbara	1	B	No	1960	65	No	62	3.2	No	0	0	No	0
02-28	306 Barbara	1	B	No	1958	66	Yes	63	3.7	No	0	0	No	0
02-29	4709 N Terrace (duplex)	2	B	No	1989	69	Yes	64	5.3	Yes	2	0	No	0
02-30	4705 N Terrace (duplex)	2	B	No	1989	70	Yes	63	6.7	Yes	2	0	No	0
02-31	414 Haney	1	B	No	1940	73	Yes	66	7.5	Yes	1	0	No	0
02-32	410 Haney	1	B	No	1950	71	Yes	63	8.1	Yes	1	0	No	0
02-33	413 Haney	1	B	No	1950	72	Yes	64	7.8	Yes	1	0	No	0
02-34	411 Haney	1	B	No	1950	70	Yes	62	8.0	Yes	1	0	No	0
02-35	409 Haney	1	B	No	1946	68	Yes	60	7.9	Yes	1	0	No	0
02-36	Calvary Baptist Ch. (Playground?)	0	C	No	1960	61	No	57	4.8	Yes	0	0	No	0
02-37	414 S Parkdale	1	B	No	1940	71	Yes	64	7.4	Yes	1	0	No	0
02-38	4512 S Mayfair	1	B	No	1930	71	Yes	65	6.4	Yes	1	0	No	0
02-39	4510 S Mayfair	1	B	No	1930	71	Yes	64	7.1	Yes	1	0	No	0
02-40	4508 S Mayfair	1	B	No	1930	70	Yes	63	7.4	Yes	1	0	No	0
02-41	4500 S Mayfair	1	B	No	1930	68	Yes	61	7.7	Yes	1	0	No	0
02-42	407 S Sweetbriar	1	B	No	1930	69	Yes	61	8.4	Yes	1	0	No	0
02-43	405 S Sweetbriar	1	B	No	1930	68	Yes	60	8.4	Yes	1	0	No	0
02-44	400 Marlboro	1	B	No	1945	71	Yes	62	8.7	Yes	1	0	No	0
02-45	4116 Sunbury	1	B	No	1945	72	Yes	64	8.1	Yes	1	0	No	0
02-46	4114 Sunbury	1	B	No	1930	71	Yes	62	8.4	Yes	1	0	No	0
02-47	4112 Sunbury	1	B	No	1925	70	Yes	63	7.5	Yes	1	0	No	0
02-48	4110 Sunbury	1	B	No	1947	70	Yes	63	7.5	Yes	1	0	No	0
02-49	4108 Sunbury	1	B	No	1940	71	Yes	63	7.8	Yes	1	0	No	0
02-50	4106 Sunbury	1	B	No	1920	71	Yes	64	7.6	Yes	1	0	No	0
02-51	4104 Sunbury	1	B	No	1935	73	Yes	66	7.1	Yes	1	0	No	0
02-52	4102 Sunbury	1	B	No	1930	73	Yes	66	6.4	Yes	1	0	No	0
02-53	4100 Sunbury	1	B	No	1930	70	Yes	65	5.5	Yes	1	0	No	0
02-54	415 Brookfield	1	B	No	1930	70	Yes	65	4.8	Yes	1	0	No	0
02-55	413 Brookfield	1	B	No	1930	65	No	61	4.3	No	0	0	No	0
02-56	410 Thornton	1	B	No	1940	63	No	62	1.1	No	0	0	No	0
02-57	Brainerd Crossroads Soccer 3	0	C	No	2005	61	No	61	0.1	No	0	0	No	0
02-58	Brainerd Crossroads Soccer 4	0	C	No	2005	62	No	62	0.0	No	0	0	No	0
02-59	309 S Moore	1	B	No	1940	66	Yes	64	1.4	No	0	0	No	0
02-60	302 Barbara	1	B	No	1960	64	No	62	1.7	No	0	0	No	0
02-61	300 Barbara	1	B	No	1958	62	No	61	0.9	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 1), Residences Only
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	18
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	89
Equivalent Benefits	0.2
Total Benefits	89.2
Benefited, first-row, receiving 7dB	12
Benefited, first-row	18
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-62	305 Barbara	1	B	No	1958	65	No	61	3.9	No	0	0	No	0
02-63	303 Barbara	1	B	No	1956	63	No	60	2.7	No	0	0	No	0
02-64	308 Barbara	1	B	No	1968	65	No	60	4.6	Yes	1	0	No	0
02-65	310 Barbara	1	B	No	1972	66	Yes	59	6.4	Yes	1	0	No	0
02-66	408 Haney	1	B	No	1945	69	Yes	61	8.0	Yes	1	0	No	0
02-67	406 Haney	1	B	No	1948	67	Yes	60	7.2	Yes	1	0	No	0
02-68	404 Haney	1	B	No	1950	65	No	59	6.7	Yes	1	0	No	0
02-69	407 Haney	1	B	No	1950	66	Yes	59	7.1	Yes	1	0	No	0
02-70	105 Orgain (duplex)	2	B	No	1971	66	Yes	59	7.2	Yes	2	0	No	0
02-71	103 Orgain (duplex)	2	B	No	1971	64	No	58	6.4	Yes	2	0	No	0
02-72	101 Orgain (duplex)	2	B	No	1972	64	No	59	5.9	Yes	2	0	No	0
02-73	412 S Parkdale	1	B	No	1930	69	Yes	62	7.1	Yes	1	0	No	0
02-74	410 S Parkdale	1	B	No	1930	66	Yes	60	5.8	Yes	1	0	No	0
02-75	4509 S Mayfair	1	B	No	1940	67	Yes	62	5.1	Yes	1	0	No	0
02-76	4507 S Mayfair	1	B	No	1940	65	No	60	5.0	Yes	1	0	No	0
02-77	4501 Mayfair	1	B	No	1930	60	No	55	5.6	Yes	1	0	No	0
02-78	312 S Sweetbriar	1	B	No	1948	60	No	55	5.7	Yes	1	0	No	0
02-79	403 S Sweetbriar	1	B	No	1928	67	Yes	59	8.3	Yes	1	0	No	0
02-80	401 S Sweetbriar	1	B	No	1935	65	No	57	7.8	Yes	1	0	No	0
02-81	318 Marlboro	1	B	No	1945	68	Yes	60	8.8	Yes	1	0	No	0
02-82	316 Marlboro	1	B	No	1930	66	Yes	58	8.5	Yes	1	0	No	0
02-83	315 Marlboro	1	B	No	1950	64	No	58	6.4	Yes	1	0	No	0
02-84	4115 Sunbury	1	B	No	1950	63	No	58	5.6	Yes	1	0	No	0
02-85	4113 Sunbury	1	B	No	1940	61	No	56	5.2	Yes	1	0	No	0
02-86	4111 Sunbury	1	B	No	1940	57	No	53	3.8	No	0	0	No	0
02-87	4109 Sunbury	1	B	No	1984	56	No	52	4.0	No	0	0	No	0
02-88	4107 Sunbury	1	B	No	1945	57	No	53	4.3	No	0	0	No	0
02-89	4105 Sunbury	1	B	No	1945	59	No	55	4.3	No	0	0	No	0
02-90	4103 Sunbury	1	B	No	1928	62	No	58	4.2	No	0	0	No	0
02-91	410 Brookfield	1	B	No	1940	65	No	61	4.4	No	0	0	No	0
02-92	411 Brookfield	1	B	No	1930	63	No	59	3.6	No	0	0	No	0
02-93	407 Brookfield	1	B	No	1928	57	No	54	2.9	No	0	0	No	0
02-94	406 Thornton	1	B	No	1949	57	No	56	1.2	No	0	0	No	0
02-95	307 S Moore	1	B	No	1930	65	No	64	1.2	No	0	0	No	0
02-96	305 S Moore	1	B	No	1930	64	No	63	1.0	No	0	0	No	0
02-97	313 Barbara	1	B	No	1976	63	No	59	4.4	No	0	0	No	0
02-98	315 Barbara	1	B	No	1980	61	No	57	4.6	Yes	1	0	No	0
02-99	312 Barbara	1	B	No	1982	64	No	58	6.1	Yes	1	0	No	0
02-100	314 Barbara	1	B	No	1968	62	No	57	5.4	Yes	1	0	No	0
02-101	400 Haney Dr	1	B	No	1950	62	No	57	4.9	Yes	1	0	No	0
02-102	405 Haney	1	B	No	1950	65	No	58	6.8	Yes	1	0	No	0
02-103	403 Haney	1	B	No	1950	64	No	57	6.3	Yes	1	0	No	0
02-104	401 Haney	1	B	No	1950	62	No	57	5.3	Yes	1	0	No	0
02-105	408 S Parkdale	1	B	No	1930	64	No	58	5.4	Yes	1	0	No	0
02-106	406 S Parkdale	1	B	No	1930	64	No	59	4.4	No	0	0	No	0
02-107	404 S Parkdale	1	B	No	1930	63	No	59	4.5	Yes	1	0	No	0
02-108	402 S Parkdale	1	B	No	1930	63	No	59	4.4	No	0	0	No	0
02-109	400 S Parkdale	1	B	No	1941	63	No	58	4.2	No	0	0	No	0
02-110	315 Amhurst	1	B	No	1930	63	No	59	4.5	Yes	1	0	No	0
02-111	313 Amhurst	1	B	No	1930	59	No	54	5.0	Yes	1	0	No	0
02-112	310 S Sweetbriar	1	B	No	1955	60	No	54	6.2	Yes	1	0	No	0
02-113	314 Marlboro	1	B	No	1925	64	No	57	7.2	Yes	1	0	No	0
02-114	312 Marlboro	1	B	No	1950	61	No	55	6.1	Yes	1	0	No	0
02-115	4404 S Mayfair	1	B	No	1935	61	No	55	6.0	Yes	1	0	No	0
02-116	4402 S Mayfair	1	B	No	1920	60	No	54	6.0	Yes	1	0	No	0
02-117	310 Marlboro	1	B	No	1930	60	No	54	6.0	Yes	1	0	No	0
02-118	313 Marlboro	1	B	No	1935	61	No	56	5.2	Yes	1	0	No	0
02-119	311 Marlboro	1	B	No	1935	58	No	54	4.4	No	0	0	No	0
02-120	4122 Mayfair	1	B	No	1950	58	No	54	4.2	No	0	0	No	0
02-121	4120 Mayfair	1	B	No	1950	57	No	52	4.6	Yes	1	0	No	0
02-122	4116 Mayfair	1	B	No	1950	56	No	51	4.7	Yes	1	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 1), Residences Only
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	18
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	89
Equivalent Benefits	0.2
Total Benefits	89.2
Benefited, first-row, receiving 7dB	12
Benefited, first-row	18
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-123	406 Brookfield	1	B	No	1930	61	No	57	3.5	No	0	0	No	0
02-124	405 Brookfield	1	B	No	1930	55	No	52	3.2	No	0	0	No	0
02-125	400 Thornton (triplex)	3	B	No	1960	52	No	50	1.9	No	0	0	No	0
02-130	4004 Mayfair	0	B	No	1930	56	No	55	0.5	No	0	0	No	0
02-131	318 Belvoir	1	B	No	1930	59	No	59	0.0	No	0	0	No	0
02-132	316 Belvoir	1	B	No	1938	55	No	55	0.3	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 1), Residences Only</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>3,405</b>
<b>Area (ft<sup>2</sup>)</b>	<b>57,472</b>
<b>Average Height (ft)</b>	<b>16.9</b>
<b>Number of Benefited Residences</b>	<b>89.2</b>
<b>Area Per Benefited Residence</b>	<b>644</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 138+00 [F]	STA 137+00 [F]	101	F (F)	689	703	14	1,414
STA 137+00 [F]	STA 136+00 [F]	103	F (F)	685	699	14	1,442
STA 136+00 [F]	STA 135+00 [F]	104	F (F)	681	695	14	1,456
STA 135+00 [F]	STA 134+00 [F]	103	F (F)	679	695	16	1,648
STA 134+00 [F]	STA 133+00 [F]	101	F (F)	680	698	18	1,818
STA 133+00 [F]	STA 132+00 [F]	100	F (F)	680	698	18	1,800
STA 132+00 [F]	STA 131+00 [F]	100	F (F)	681	695	14	1,400
STA 131+00 [F]	STA 130+00 [F]	100	F (F)	682	696	14	1,400
STA 130+00 [F]	end	95	F (F)	683	697	14	1,330
STA 1029+00 [Ramp]	STA 1028+00 [Ramp]	98	F (F)	684	702	18	1,764
STA 1028+00 [Ramp]	STA 1027+00 [Ramp]	100	F (F)	685	703	18	1,800
STA 1027+00 [Ramp]	STA 1026+00 [Ramp]	100	F (F)	686	704	18	1,800
STA 1026+00 [Ramp]	STA 1025+00 [Ramp]	100	F (F)	687	705	18	1,800
STA 1025+00 [Ramp]	STA 1024+00 [Ramp]	100	F (F)	687	705	18	1,800
STA 1024+00 [Ramp]	STA 1023+00 [Ramp]	100	F (F)	686	706	20	2,000
STA 1023+00 [Ramp]	STA 1022+00 [Ramp]	100	F (F)	684	704	20	2,000
STA 1022+00 [Ramp]	STA 1021+00 [Ramp]	100	F (F)	685	705	20	2,000
STA 1021+00 [Ramp]	STA 1020+00 [Ramp]	100	F (F)	686	706	20	2,000
STA 1020+00 [Ramp]	STA 1019+00 [Ramp]	100	F (F)	688	708	20	2,000
STA 1019+00 [Ramp]	STA 1018+00 [Ramp]	100	F (F)	689	709	20	2,000
STA 1018+00 [Ramp]	STA 1017+00 [Ramp]	103	F (F)	691	713	22	2,266
STA 1017+00 [Ramp]	STA 1016+00 [Ramp]	97	F (F)	692	714	22	2,134
STA 1016+00 [Ramp]	STA 1015+00 [Ramp]	100	F (F)	694	712	18	1,800
STA 1015+00 [Ramp]	STA 1014+00 [Ramp]	100	F (F)	697	715	18	1,800
STA 1014+00 [Ramp]	end	100	F (F)	701	719	18	1,800
STA 115+00 [F]	STA 114+00 [F]	100	F (F)	703	719	16	1,600
STA 114+00 [F]	STA 113+00 [F]	100	F (F)	708	724	16	1,600
STA 113+00 [F]	STA 112+00 [F]	100	F (F)	716	730	14	1,400
STA 112+00 [F]	STA 111+00 [F]	100	F (F)	723	737	14	1,400
STA 111+00 [F]	STA 110+00 [F]	100	F (F)	731	745	14	1,400

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 1), Residences Only</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

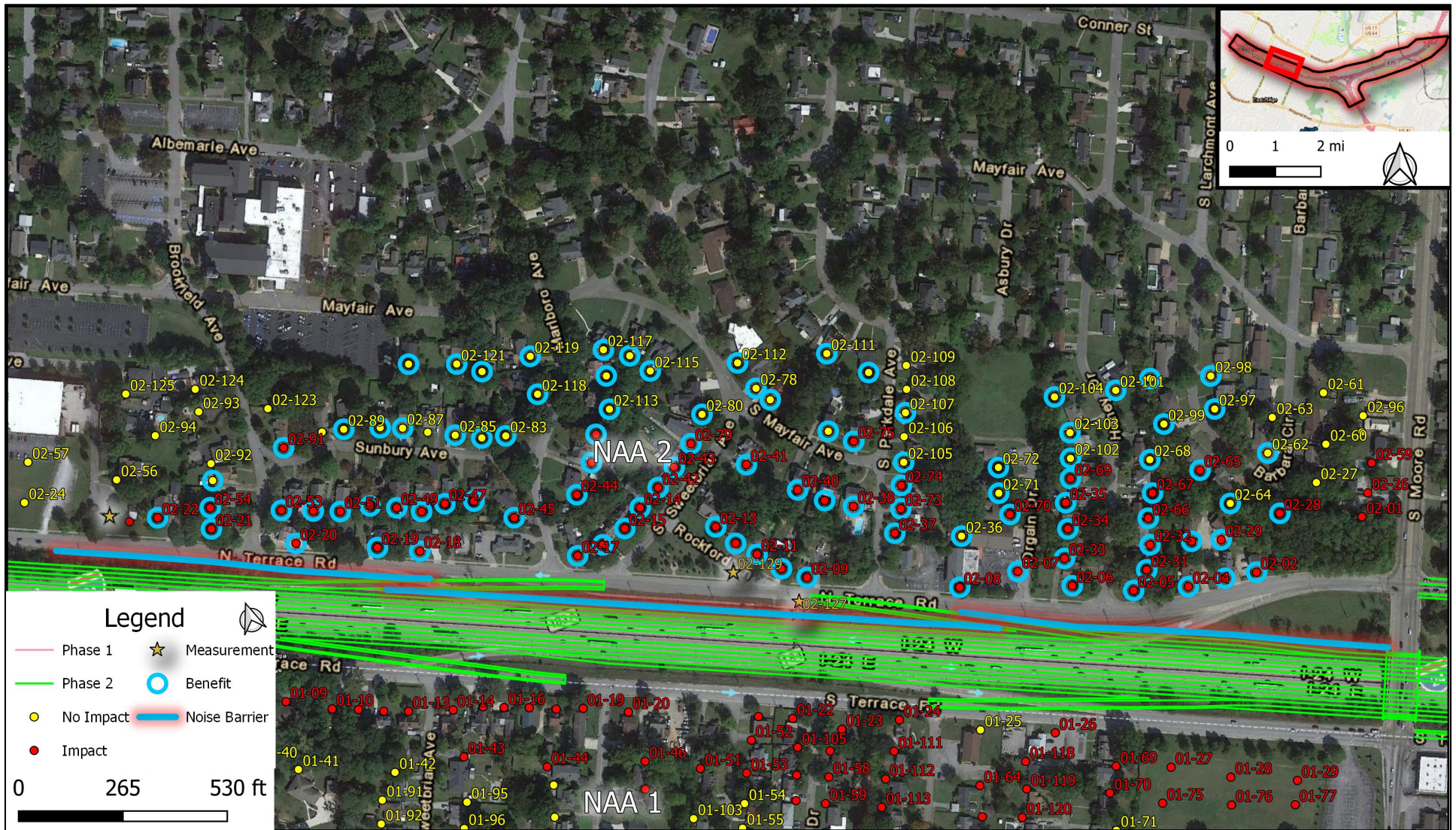
<b>Length (ft)</b>	<b>3,405</b>
<b>Area (ft<sup>2</sup>)</b>	<b>57,472</b>
<b>Average Height (ft)</b>	<b>16.9</b>
<b>Number of Benefited Residences</b>	<b>89.2</b>
<b>Area Per Benefited Residence</b>	<b>644</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Top Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 110+00 [F]	STA 109+00 [F]	100	F (F)	738	752	14	1,400
STA 109+00 [F]	STA 108+00 [F]	100	F (F)	745	759	14	1,400
STA 108+00 [F]	STA 107+00 [F]	100	F (F)	752	766	14	1,400
STA 107+00 [F]	end	100	F (F)	755	769	14	1,400

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 2, Option 2



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 2), Residences Only
Description:	Barrier at Shoulder/Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	20
% of 1st row impacts receiving 5 dB	95%
Feasible?	Yes
Benefited Residences	101
Equivalent Benefits	0.2
Total Benefits	101.2
Benefited, first-row, receiving 7dB	13
Benefited, first-row	20
NRDG	65.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-01	315 S Moore	1	B	No	1950	67	Yes	65	2.2	No	0	0	No	0
02-02	4711 N Terrace	1	B	Yes	1989	74	Yes	69	5.0	Yes	1	1	No	0
02-03	4707 N Terrace	1	B	Yes	1989	74	Yes	68	5.8	Yes	1	1	No	0
02-04	4703 N Terrace	1	B	Yes	1989	75	Yes	68	6.5	Yes	1	1	Yes	1
02-05	416 Haney	1	B	Yes	1950	75	Yes	69	6.8	Yes	1	1	Yes	1
02-06	415 Haney	1	B	Yes	1940	75	Yes	68	7.4	Yes	1	1	Yes	1
02-07	Calvary Baptist Church (BB goal)	0	C	Yes	1960	75	Yes	67	7.2	Yes	0	0	Yes	0
02-08	Calvary Baptist Church (interior)	0	D	No	1960	52	Yes	47	5.7	Yes	0	0	No	0
02-09	4511 Rockford	1	B	Yes	1930	76	Yes	69	7.0	Yes	1	1	Yes	1
02-10	4509 Rockford	1	B	Yes	1930	75	Yes	68	7.8	Yes	1	1	Yes	1
02-11	4505 Rockford	1	B	Yes	2006	74	Yes	66	8.3	Yes	1	1	Yes	1
02-12	4503 Rockford	1	B	Yes	1930	73	Yes	65	8.5	Yes	1	1	Yes	1
02-13	408 S Sweetbriar	1	B	Yes	1930	72	Yes	63	8.7	Yes	1	1	Yes	1
02-14	409 S Sweetbriar	1	B	Yes	1930	71	Yes	62	8.7	Yes	1	1	Yes	1
02-15	411 S Sweetbriar	1	B	Yes	1935	73	Yes	64	8.3	Yes	1	1	Yes	1
02-16	413 S Sweetbriar	1	B	Yes	1940	75	Yes	68	7.1	Yes	1	1	Yes	1
02-17	420 Marlboro	1	B	Yes	1945	75	Yes	68	6.5	Yes	1	1	Yes	1
02-18	4111 N Terrace	1	B	Yes	1965	76	Yes	69	6.4	Yes	1	1	No	0
02-19	4109 N Terrace	1	B	Yes	1935	75	Yes	70	5.5	Yes	1	1	No	0
02-20	416 Brookfield	1	B	Yes	1930	73	Yes	67	5.5	Yes	1	1	No	0
02-21	417 Brookfield	1	B	Yes	1918	74	Yes	68	5.3	Yes	1	1	No	0
02-22	4019 N Terrace	1	B	Yes	1940	73	Yes	68	4.6	Yes	1	1	No	0
02-23	412 Thornton	1	B	Yes	1950	72	Yes	68	4.0	No	0	0	No	0
02-24	Brainerd Crossroads Soccer 1	0	C	No	2005	65	No	65	0.2	No	0	0	No	0
02-25	Brainerd Baptist Sch Soccer 2	0	C	No	2005	68	Yes	68	0.0	No	0	0	No	0
02-26	313 S Moore	1	B	No	1955	66	Yes	64	2.0	No	0	0	No	0
02-27	304 Barbara	1	B	No	1960	65	No	61	4.1	No	0	0	No	0
02-28	306 Barbara	1	B	No	1958	66	Yes	62	4.6	Yes	1	0	No	0
02-29	4709 N Terrace (duplex)	2	B	No	1989	69	Yes	62	6.7	Yes	2	0	No	0
02-30	4705 N Terrace (duplex)	2	B	No	1989	70	Yes	62	7.5	Yes	2	0	No	0
02-31	414 Haney	1	B	No	1940	73	Yes	66	7.6	Yes	1	0	No	0
02-32	410 Haney	1	B	No	1950	71	Yes	63	8.3	Yes	1	0	No	0
02-33	413 Haney	1	B	No	1950	72	Yes	64	8.0	Yes	1	0	No	0
02-34	411 Haney	1	B	No	1950	70	Yes	61	8.3	Yes	1	0	No	0
02-35	409 Haney	1	B	No	1946	68	Yes	60	8.3	Yes	1	0	No	0
02-36	Calvary Baptist Ch. (Playground?)	0	C	No	1960	61	No	56	5.1	Yes	0	0	No	0
02-37	414 S Parkdale	1	B	No	1940	71	Yes	64	6.9	Yes	1	0	No	0
02-38	4512 S Mayfair	1	B	No	1930	71	Yes	66	5.8	Yes	1	0	No	0
02-39	4510 S Mayfair	1	B	No	1930	71	Yes	65	6.1	Yes	1	0	No	0
02-40	4508 S Mayfair	1	B	No	1930	70	Yes	63	7.1	Yes	1	0	No	0
02-41	4500 S Mayfair	1	B	No	1930	68	Yes	61	7.8	Yes	1	0	No	0
02-42	407 S Sweetbriar	1	B	No	1930	69	Yes	61	8.6	Yes	1	0	No	0
02-43	405 S Sweetbriar	1	B	No	1930	68	Yes	60	8.4	Yes	1	0	No	0
02-44	400 Marlboro	1	B	No	1945	71	Yes	62	8.4	Yes	1	0	No	0
02-45	4116 Sunbury	1	B	No	1945	72	Yes	64	8.0	Yes	1	0	No	0
02-46	4114 Sunbury	1	B	No	1930	70	Yes	62	8.7	Yes	1	0	No	0
02-47	4112 Sunbury	1	B	No	1925	70	Yes	62	8.1	Yes	1	0	No	0
02-48	4110 Sunbury	1	B	No	1947	70	Yes	62	7.9	Yes	1	0	No	0
02-49	4108 Sunbury	1	B	No	1940	70	Yes	62	8.1	Yes	1	0	No	0
02-50	4106 Sunbury	1	B	No	1920	71	Yes	63	7.8	Yes	1	0	No	0
02-51	4104 Sunbury	1	B	No	1935	73	Yes	65	7.5	Yes	1	0	No	0
02-52	4102 Sunbury	1	B	No	1930	73	Yes	66	6.7	Yes	1	0	No	0
02-53	4100 Sunbury	1	B	No	1930	70	Yes	64	5.7	Yes	1	0	No	0
02-54	415 Brookfield	1	B	No	1930	70	Yes	65	5.3	Yes	1	0	No	0
02-55	413 Brookfield	1	B	No	1930	65	No	60	4.8	Yes	1	0	No	0
02-56	410 Thornton	1	B	No	1940	63	No	61	1.4	No	0	0	No	0
02-57	Brainerd Crossroads Soccer 3	0	C	No	2005	61	No	60	0.1	No	0	0	No	0
02-58	Brainerd Crossroads Soccer 4	0	C	No	2005	62	No	62	0.0	No	0	0	No	0
02-59	309 S Moore	1	B	No	1940	66	Yes	64	2.2	No	0	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 2), Residences Only
Description:	Barrier at Shoulder/Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	20
% of 1st row impacts receiving 5 dB	95%
Feasible?	Yes
Benefited Residences	101
Equivalent Benefits	0.2
Total Benefits	101.2
Benefited, first-row, receiving 7dB	13
Benefited, first-row	20
NRDG	65.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-60	302 Barbara	1	B	No	1960	64	No	61	2.9	No	0	0	No	0
02-61	300 Barbara	1	B	No	1958	61	No	60	1.8	No	0	0	No	0
02-62	305 Barbara	1	B	No	1958	65	No	60	5.3	Yes	1	0	No	0
02-63	303 Barbara	1	B	No	1956	63	No	59	4.1	No	0	0	No	0
02-64	308 Barbara	1	B	No	1968	65	No	59	5.5	Yes	1	0	No	0
02-65	310 Barbara	1	B	No	1972	66	Yes	59	6.6	Yes	1	0	No	0
02-66	408 Haney	1	B	No	1945	69	Yes	60	8.4	Yes	1	0	No	0
02-67	406 Haney	1	B	No	1948	67	Yes	59	8.0	Yes	1	0	No	0
02-68	404 Haney	1	B	No	1950	65	No	58	7.5	Yes	1	0	No	0
02-69	407 Haney	1	B	No	1950	66	Yes	58	7.9	Yes	1	0	No	0
02-70	105 Orgain (duplex)	2	B	No	1971	66	Yes	58	7.8	Yes	2	0	No	0
02-71	103 Orgain (duplex)	2	B	No	1971	64	No	57	7.1	Yes	2	0	No	0
02-72	101 Orgain (duplex)	2	B	No	1972	64	No	57	7.1	Yes	2	0	No	0
02-73	412 S Parkdale	1	B	No	1930	69	Yes	62	6.8	Yes	1	0	No	0
02-74	410 S Parkdale	1	B	No	1930	66	Yes	60	6.0	Yes	1	0	No	0
02-75	4509 S Mayfair	1	B	No	1940	67	Yes	62	5.0	Yes	1	0	No	0
02-76	4507 S Mayfair	1	B	No	1940	65	No	60	5.2	Yes	1	0	No	0
02-77	4501 Mayfair	1	B	No	1930	60	No	54	6.0	Yes	1	0	No	0
02-78	312 S Sweetbriar	1	B	No	1948	60	No	54	6.2	Yes	1	0	No	0
02-79	403 S Sweetbriar	1	B	No	1928	67	Yes	59	8.0	Yes	1	0	No	0
02-80	401 S Sweetbriar	1	B	No	1935	65	No	57	7.8	Yes	1	0	No	0
02-81	318 Marlboro	1	B	No	1945	68	Yes	60	8.7	Yes	1	0	No	0
02-82	316 Marlboro	1	B	No	1930	66	Yes	58	8.5	Yes	1	0	No	0
02-83	315 Marlboro	1	B	No	1950	64	No	57	7.2	Yes	1	0	No	0
02-84	4115 Sunbury	1	B	No	1950	63	No	57	6.8	Yes	1	0	No	0
02-85	4113 Sunbury	1	B	No	1940	61	No	55	6.1	Yes	1	0	No	0
02-86	4111 Sunbury	1	B	No	1940	57	No	53	4.4	No	0	0	No	0
02-87	4109 Sunbury	1	B	No	1984	56	No	52	4.5	Yes	1	0	No	0
02-88	4107 Sunbury	1	B	No	1945	57	No	52	5.3	Yes	1	0	No	0
02-89	4105 Sunbury	1	B	No	1945	59	No	54	4.9	Yes	1	0	No	0
02-90	4103 Sunbury	1	B	No	1928	62	No	58	4.3	No	0	0	No	0
02-91	410 Brookfield	1	B	No	1940	66	Yes	61	4.7	Yes	1	0	No	0
02-92	411 Brookfield	1	B	No	1930	63	No	59	4.0	No	0	0	No	0
02-93	407 Brookfield	1	B	No	1928	57	No	55	2.8	No	0	0	No	0
02-94	406 Thornton	1	B	No	1949	57	No	56	1.4	No	0	0	No	0
02-95	307 S Moore	1	B	No	1930	65	No	63	2.0	No	0	0	No	0
02-96	305 S Moore	1	B	No	1930	64	No	62	1.8	No	0	0	No	0
02-97	313 Barbara	1	B	No	1976	63	No	57	5.8	Yes	1	0	No	0
02-98	315 Barbara	1	B	No	1980	61	No	55	6.6	Yes	1	0	No	0
02-99	312 Barbara	1	B	No	1982	64	No	57	7.4	Yes	1	0	No	0
02-100	314 Barbara	1	B	No	1968	62	No	56	6.3	Yes	1	0	No	0
02-101	400 Haney Dr	1	B	No	1950	62	No	56	6.2	Yes	1	0	No	0
02-102	405 Haney	1	B	No	1950	65	No	57	7.5	Yes	1	0	No	0
02-103	403 Haney	1	B	No	1950	64	No	57	7.1	Yes	1	0	No	0
02-104	401 Haney	1	B	No	1950	62	No	55	6.7	Yes	1	0	No	0
02-105	408 S Parkdale	1	B	No	1930	64	No	58	5.6	Yes	1	0	No	0
02-106	406 S Parkdale	1	B	No	1930	64	No	59	4.3	No	0	0	No	0
02-107	404 S Parkdale	1	B	No	1930	63	No	59	4.5	Yes	1	0	No	0
02-108	402 S Parkdale	1	B	No	1930	63	No	59	4.1	No	0	0	No	0
02-109	400 S Parkdale	1	B	No	1941	62	No	58	4.2	No	0	0	No	0
02-110	315 Amhurst	1	B	No	1930	63	No	59	4.6	Yes	1	0	No	0
02-111	313 Amhurst	1	B	No	1930	59	No	53	5.5	Yes	1	0	No	0
02-112	310 S Sweetbriar	1	B	No	1955	60	No	54	6.3	Yes	1	0	No	0
02-113	314 Marlboro	1	B	No	1925	64	No	56	8.2	Yes	1	0	No	0
02-114	312 Marlboro	1	B	No	1950	61	No	54	7.0	Yes	1	0	No	0
02-115	4404 S Mayfair	1	B	No	1935	61	No	54	6.6	Yes	1	0	No	0
02-116	4402 S Mayfair	1	B	No	1920	60	No	54	6.8	Yes	1	0	No	0
02-117	310 Marlboro	1	B	No	1930	60	No	53	6.6	Yes	1	0	No	0
02-118	313 Marlboro	1	B	No	1935	61	No	55	6.2	Yes	1	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 2), Residences Only
Description:	Barrier at Shoulder/Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	20
% of 1st row impacts receiving 5 dB	95%
Feasible?	Yes
Benefited Residences	101
Equivalent Benefits	0.2
Total Benefits	101.2
Benefited, first-row, receiving 7dB	13
Benefited, first-row	20
NRDG	65.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-119	311 Marlboro	1	B	No	1935	58	No	53	4.9	Yes	1	0	No	0
02-120	4122 Mayfair	1	B	No	1950	58	No	52	5.5	Yes	1	0	No	0
02-121	4120 Mayfair	1	B	No	1950	57	No	51	5.8	Yes	1	0	No	0
02-122	4116 Mayfair	1	B	No	1950	56	No	50	5.9	Yes	1	0	No	0
02-123	406 Brookfield	1	B	No	1930	61	No	57	3.5	No	0	0	No	0
02-124	405 Brookfield	1	B	No	1930	55	No	52	3.0	No	0	0	No	0
02-125	400 Thornton (triplex)	3	B	No	1960	52	No	50	2.3	No	0	0	No	0
02-130	4004 Mayfair	0	B	No	1930	56	No	55	0.5	No	0	0	No	0
02-131	318 Belvoir	1	B	No	1930	59	No	59	0.0	No	0	0	No	0
02-132	316 Belvoir	1	B	No	1938	55	No	55	0.3	No	0	0	No	0



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 2), Residences Only</b>
<b>Description:</b>	<b>Barrier at Shoulder/Frontage</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>3,601</b>
<b>Area (ft<sup>2</sup>)</b>	<b>52,814</b>
<b>Average Height (ft)</b>	<b>14.7</b>
<b>Number of Benefited Residences</b>	<b>101.2</b>
<b>Area Per Benefited Residence</b>	<b>522</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 140+00 [F]	STA 138+00 [F]	193	F (EOP)	681	695	14	2,702
STA 138+00 [F]	STA 136+00 [F]	196	F (EOP)	682	696	14	2,744
STA 136+00 [F]	STA 134+00 [F]	205	F (EOP)	683	697	14	2,870
STA 134+00 [F]	STA 132+00 [F]	197	F (EOP)	684	698	14	2,758
STA 132+00 [F]	STA 131+00 [F]	107	F (EOP)	683	697	14	1,498
STA 131+00 [F]	STA 130+00 [F]	97	F (EOP)	683	697	14	1,358
STA 130+00 [F]	end	96	F (EOP)	683	697	14	1,344
STA 130+00 [EOP]	STA 129+00 [EOP]	103	F (EOP)	685	699	14	1,442
STA 129+00 [EOP]	STA 128+00 [EOP]	100	F (EOP)	686	700	14	1,400
STA 128+00 [EOP]	STA 127+00 [EOP]	100	F (EOP)	686	700	14	1,400
STA 127+00 [EOP]	STA 126+00 [EOP]	100	F (EOP)	687	701	14	1,400
STA 126+00 [EOP]	STA 125+00 [EOP]	100	F (EOP)	687	701	14	1,400
STA 125+00 [EOP]	STA 124+00 [EOP]	100	F (EOP)	688	702	14	1,400
STA 124+00 [EOP]	STA 123+00 [EOP]	100	F (EOP)	689	703	14	1,400
STA 123+00 [EOP]	STA 122+00 [EOP]	100	F (EOP)	690	704	14	1,400
STA 122+00 [EOP]	STA 121+00 [EOP]	100	F (EOP)	691	705	14	1,400
STA 121+00 [EOP]	STA 120+00 [EOP]	100	F (EOP)	692	706	14	1,400
STA 120+00 [EOP]	STA 119+00 [EOP]	100	F (EOP)	694	710	16	1,600
STA 119+00 [EOP]	STA 118+00 [EOP]	100	F (EOP)	695	711	16	1,600
STA 118+00 [EOP]	STA 117+00 [EOP]	100	F (EOP)	697	711	14	1,400
STA 117+00 [EOP]	STA 116+00 [EOP]	100	F (EOP)	699	713	14	1,400
STA 116+00 [EOP]	STA 115+00 [EOP]	100	F (EOP)	702	716	14	1,400
STA 115+00 [EOP]	end	55	F (EOP)	706	720	14	770
STA 115+50 [F]	STA 115+00 [F]	52	F (F)	703	717	14	728
STA 115+00 [F]	STA 114+00 [F]	100	F (F)	703	721	18	1,800
STA 114+00 [F]	STA 113+00 [F]	100	F (F)	708	724	16	1,600
STA 113+00 [F]	STA 112+00 [F]	100	F (F)	716	732	16	1,600
STA 112+00 [F]	STA 111+00 [F]	100	F (F)	723	739	16	1,600

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 2), Residences Only</b>
<b>Description:</b>	<b>Barrier at Shoulder/Frontage</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>3,601</b>
<b>Area (ft<sup>2</sup>)</b>	<b>52,814</b>
<b>Average Height (ft)</b>	<b>14.7</b>
<b>Number of Benefited Residences</b>	<b>101.2</b>
<b>Area Per Benefited Residence</b>	<b>522</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 111+00 [F]	STA 110+00 [F]	100	F (F)	731	747	16	1,600
STA 110+00 [F]	STA 109+00 [F]	100	F (F)	738	754	16	1,600
STA 109+00 [F]	STA 108+00 [F]	100	F (F)	745	761	16	1,600
STA 108+00 [F]	STA 107+00 [F]	100	F (F)	752	768	16	1,600
STA 107+00 [F]	end	100	F (F)	755	771	16	1,600

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.







Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 3), Residences Only
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	19
% of 1st row impacts receiving 5 dB	90%
Feasible?	Yes
Benefited Residences	95
Equivalent Benefits	0.2
Total Benefits	95.2
Benefited, first-row, receiving 7dB	12
Benefited, first-row	19
NRDG	63.2%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-01	315 S Moore	1	B	No	1950	67	Yes	65	1.5	No	0	0	No	0
02-02	4711 N Terrace	1	B	Yes	1989	74	Yes	69	4.5	Yes	1	1	No	0
02-03	4707 N Terrace	1	B	Yes	1989	74	Yes	69	5.4	Yes	1	1	No	0
02-04	4703 N Terrace	1	B	Yes	1989	75	Yes	69	6.0	Yes	1	1	No	0
02-05	416 Haney	1	B	Yes	1950	75	Yes	69	6.6	Yes	1	1	Yes	1
02-06	415 Haney	1	B	Yes	1940	75	Yes	68	7.1	Yes	1	1	Yes	1
02-07	Calvary Baptist Church (BB goal)	0	C	Yes	1960	75	Yes	68	6.6	Yes	0	0	Yes	0
02-08	Calvary Baptist Church (interior)	0	D	No	1960	52	Yes	47	5.5	Yes	0	0	No	0
02-09	4511 Rockford	1	B	Yes	1930	76	Yes	69	6.9	Yes	1	1	Yes	1
02-10	4509 Rockford	1	B	Yes	1930	75	Yes	68	7.8	Yes	1	1	Yes	1
02-11	4505 Rockford	1	B	Yes	2006	74	Yes	66	8.3	Yes	1	1	Yes	1
02-12	4503 Rockford	1	B	Yes	1930	73	Yes	65	8.5	Yes	1	1	Yes	1
02-13	408 S Sweetbriar	1	B	Yes	1930	72	Yes	63	8.7	Yes	1	1	Yes	1
02-14	409 S Sweetbriar	1	B	Yes	1930	71	Yes	62	8.7	Yes	1	1	Yes	1
02-15	411 S Sweetbriar	1	B	Yes	1935	73	Yes	64	8.3	Yes	1	1	Yes	1
02-16	413 S Sweetbriar	1	B	Yes	1940	75	Yes	68	7.1	Yes	1	1	Yes	1
02-17	420 Marlboro	1	B	Yes	1945	75	Yes	68	6.5	Yes	1	1	Yes	1
02-18	4111 N Terrace	1	B	Yes	1965	76	Yes	69	6.3	Yes	1	1	No	0
02-19	4109 N Terrace	1	B	Yes	1935	75	Yes	70	5.3	Yes	1	1	No	0
02-20	416 Brookfield	1	B	Yes	1930	73	Yes	67	5.3	Yes	1	1	No	0
02-21	417 Brookfield	1	B	Yes	1918	74	Yes	69	5.1	Yes	1	1	No	0
02-22	4019 N Terrace	1	B	Yes	1940	73	Yes	69	4.3	No	0	0	No	0
02-23	412 Thornton	1	B	Yes	1950	72	Yes	69	3.8	No	0	0	No	0
02-24	Brainerd Crossroads Soccer 1	0	C	No	2005	65	No	65	0.2	No	0	0	No	0
02-25	Brainerd Baptist Sch Soccer 2	0	C	No	2005	68	Yes	68	0.0	No	0	0	No	0
02-26	313 S Moore	1	B	No	1955	66	Yes	64	1.3	No	0	0	No	0
02-27	304 Barbara	1	B	No	1960	65	No	62	3.2	No	0	0	No	0
02-28	306 Barbara	1	B	No	1958	66	Yes	63	3.7	No	0	0	No	0
02-29	4709 N Terrace (duplex)	2	B	No	1989	69	Yes	63	5.4	Yes	2	0	No	0
02-30	4705 N Terrace (duplex)	2	B	No	1989	70	Yes	63	6.8	Yes	2	0	No	0
02-31	414 Haney	1	B	No	1940	73	Yes	66	7.4	Yes	1	0	No	0
02-32	410 Haney	1	B	No	1950	71	Yes	63	7.9	Yes	1	0	No	0
02-33	413 Haney	1	B	No	1950	72	Yes	64	7.8	Yes	1	0	No	0
02-34	411 Haney	1	B	No	1950	70	Yes	61	8.1	Yes	1	0	No	0
02-35	409 Haney	1	B	No	1946	68	Yes	60	7.9	Yes	1	0	No	0
02-36	Calvary Baptist Ch. (Playground?)	0	C	No	1960	61	No	56	5.1	Yes	0	0	No	0
02-37	414 S Parkdale	1	B	No	1940	71	Yes	64	6.9	Yes	1	0	No	0
02-38	4512 S Mayfair	1	B	No	1930	71	Yes	66	5.7	Yes	1	0	No	0
02-39	4510 S Mayfair	1	B	No	1930	71	Yes	65	6.0	Yes	1	0	No	0
02-40	4508 S Mayfair	1	B	No	1930	70	Yes	63	7.1	Yes	1	0	No	0
02-41	4500 S Mayfair	1	B	No	1930	68	Yes	61	7.7	Yes	1	0	No	0
02-42	407 S Sweetbriar	1	B	No	1930	69	Yes	61	8.6	Yes	1	0	No	0
02-43	405 S Sweetbriar	1	B	No	1930	68	Yes	60	8.4	Yes	1	0	No	0
02-44	400 Marlboro	1	B	No	1945	71	Yes	62	8.3	Yes	1	0	No	0
02-45	4116 Sunbury	1	B	No	1945	72	Yes	64	8.0	Yes	1	0	No	0
02-46	4114 Sunbury	1	B	No	1930	70	Yes	62	8.5	Yes	1	0	No	0
02-47	4112 Sunbury	1	B	No	1925	70	Yes	62	7.7	Yes	1	0	No	0
02-48	4110 Sunbury	1	B	No	1947	70	Yes	62	7.5	Yes	1	0	No	0
02-49	4108 Sunbury	1	B	No	1940	70	Yes	63	7.6	Yes	1	0	No	0
02-50	4106 Sunbury	1	B	No	1920	71	Yes	64	7.3	Yes	1	0	No	0
02-51	4104 Sunbury	1	B	No	1935	73	Yes	66	6.9	Yes	1	0	No	0
02-52	4102 Sunbury	1	B	No	1930	73	Yes	67	6.1	Yes	1	0	No	0
02-53	4100 Sunbury	1	B	No	1930	70	Yes	65	5.4	Yes	1	0	No	0
02-54	415 Brookfield	1	B	No	1930	70	Yes	66	4.8	Yes	1	0	No	0
02-55	413 Brookfield	1	B	No	1930	65	No	61	4.4	No	0	0	No	0
02-56	410 Thornton	1	B	No	1940	63	No	61	1.2	No	0	0	No	0
02-57	Brainerd Crossroads Soccer 3	0	C	No	2005	61	No	60	0.1	No	0	0	No	0
02-58	Brainerd Crossroads Soccer 4	0	C	No	2005	62	No	62	0.0	No	0	0	No	0
02-59	309 S Moore	1	B	No	1940	66	Yes	64	1.5	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 3), Residences Only
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	19
% of 1st row impacts receiving 5 dB	90%
Feasible?	Yes
Benefited Residences	95
Equivalent Benefits	0.2
Total Benefits	95.2
Benefited, first-row, receiving 7dB	12
Benefited, first-row	19
NRDG	63.2%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-60	302 Barbara	1	B	No	1960	64	No	62	1.8	No	0	0	No	0
02-61	300 Barbara	1	B	No	1958	61	No	61	0.9	No	0	0	No	0
02-62	305 Barbara	1	B	No	1958	65	No	61	4.3	No	0	0	No	0
02-63	303 Barbara	1	B	No	1956	63	No	60	2.8	No	0	0	No	0
02-64	308 Barbara	1	B	No	1968	65	No	60	4.4	No	0	0	No	0
02-65	310 Barbara	1	B	No	1972	66	Yes	59	6.6	Yes	1	0	No	0
02-66	408 Haney	1	B	No	1945	69	Yes	61	7.9	Yes	1	0	No	0
02-67	406 Haney	1	B	No	1948	67	Yes	60	7.2	Yes	1	0	No	0
02-68	404 Haney	1	B	No	1950	65	No	58	6.7	Yes	1	0	No	0
02-69	407 Haney	1	B	No	1950	66	Yes	59	7.2	Yes	1	0	No	0
02-70	105 Orgain (duplex)	2	B	No	1971	66	Yes	59	7.2	Yes	2	0	No	0
02-71	103 Orgain (duplex)	2	B	No	1971	64	No	58	6.5	Yes	2	0	No	0
02-72	101 Orgain (duplex)	2	B	No	1972	64	No	58	6.5	Yes	2	0	No	0
02-73	412 S Parkdale	1	B	No	1930	69	Yes	62	6.6	Yes	1	0	No	0
02-74	410 S Parkdale	1	B	No	1930	66	Yes	60	5.8	Yes	1	0	No	0
02-75	4509 S Mayfair	1	B	No	1940	67	Yes	63	4.7	Yes	1	0	No	0
02-76	4507 S Mayfair	1	B	No	1940	65	No	60	5.0	Yes	1	0	No	0
02-77	4501 Mayfair	1	B	No	1930	60	No	55	5.8	Yes	1	0	No	0
02-78	312 S Sweetbriar	1	B	No	1948	60	No	54	6.1	Yes	1	0	No	0
02-79	403 S Sweetbriar	1	B	No	1928	67	Yes	59	8.0	Yes	1	0	No	0
02-80	401 S Sweetbriar	1	B	No	1935	65	No	58	7.7	Yes	1	0	No	0
02-81	318 Marlboro	1	B	No	1945	68	Yes	60	8.7	Yes	1	0	No	0
02-82	316 Marlboro	1	B	No	1930	66	Yes	58	8.5	Yes	1	0	No	0
02-83	315 Marlboro	1	B	No	1950	64	No	57	7.1	Yes	1	0	No	0
02-84	4115 Sunbury	1	B	No	1950	63	No	57	6.8	Yes	1	0	No	0
02-85	4113 Sunbury	1	B	No	1940	61	No	55	6.1	Yes	1	0	No	0
02-86	4111 Sunbury	1	B	No	1940	57	No	52	4.5	Yes	1	0	No	0
02-87	4109 Sunbury	1	B	No	1984	56	No	51	4.7	Yes	1	0	No	0
02-88	4107 Sunbury	1	B	No	1945	57	No	52	5.4	Yes	1	0	No	0
02-89	4105 Sunbury	1	B	No	1945	59	No	54	4.8	Yes	1	0	No	0
02-90	4103 Sunbury	1	B	No	1928	62	No	58	4.5	Yes	1	0	No	0
02-91	410 Brookfield	1	B	No	1940	66	Yes	61	4.3	No	0	0	No	0
02-92	411 Brookfield	1	B	No	1930	63	No	59	3.6	No	0	0	No	0
02-93	407 Brookfield	1	B	No	1928	57	No	55	2.8	No	0	0	No	0
02-94	406 Thornton	1	B	No	1949	57	No	56	1.3	No	0	0	No	0
02-95	307 S Moore	1	B	No	1930	65	No	64	1.2	No	0	0	No	0
02-96	305 S Moore	1	B	No	1930	64	No	63	1.0	No	0	0	No	0
02-97	313 Barbara	1	B	No	1976	63	No	58	4.9	Yes	1	0	No	0
02-98	315 Barbara	1	B	No	1980	61	No	56	5.3	Yes	1	0	No	0
02-99	312 Barbara	1	B	No	1982	64	No	58	6.6	Yes	1	0	No	0
02-100	314 Barbara	1	B	No	1968	62	No	56	5.6	Yes	1	0	No	0
02-101	400 Haney Dr	1	B	No	1950	62	No	57	5.4	Yes	1	0	No	0
02-102	405 Haney	1	B	No	1950	65	No	58	7.0	Yes	1	0	No	0
02-103	403 Haney	1	B	No	1950	64	No	57	6.6	Yes	1	0	No	0
02-104	401 Haney	1	B	No	1950	62	No	56	5.6	Yes	1	0	No	0
02-105	408 S Parkdale	1	B	No	1930	64	No	58	5.3	Yes	1	0	No	0
02-106	406 S Parkdale	1	B	No	1930	64	No	60	4.0	No	0	0	No	0
02-107	404 S Parkdale	1	B	No	1930	63	No	59	4.2	No	0	0	No	0
02-108	402 S Parkdale	1	B	No	1930	63	No	60	3.9	No	0	0	No	0
02-109	400 S Parkdale	1	B	No	1941	62	No	59	3.9	No	0	0	No	0
02-110	315 Amhurst	1	B	No	1930	63	No	59	4.3	No	0	0	No	0
02-111	313 Amhurst	1	B	No	1930	59	No	54	5.2	Yes	1	0	No	0
02-112	310 S Sweetbriar	1	B	No	1955	60	No	54	6.2	Yes	1	0	No	0
02-113	314 Marlboro	1	B	No	1925	64	No	56	8.2	Yes	1	0	No	0
02-114	312 Marlboro	1	B	No	1950	61	No	54	7.0	Yes	1	0	No	0
02-115	4404 S Mayfair	1	B	No	1935	61	No	54	6.5	Yes	1	0	No	0
02-116	4402 S Mayfair	1	B	No	1920	60	No	54	6.7	Yes	1	0	No	0
02-117	310 Marlboro	1	B	No	1930	60	No	53	6.6	Yes	1	0	No	0
02-118	313 Marlboro	1	B	No	1935	61	No	55	6.2	Yes	1	0	No	0

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	2 (Option 3), Residences Only
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	21
# of 1st row impacted and benefited	19
% of 1st row impacts receiving 5 dB	90%
Feasible?	Yes
Benefited Residences	95
Equivalent Benefits	0.2
Total Benefits	95.2
Benefited, first-row, receiving 7dB	12
Benefited, first-row	19
NRDG	63.2%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
02-119	311 Marlboro	1	B	No	1935	58	No	53	4.8	Yes	1	0	No	0
02-120	4122 Mayfair	1	B	No	1950	58	No	52	5.4	Yes	1	0	No	0
02-121	4120 Mayfair	1	B	No	1950	57	No	51	6.0	Yes	1	0	No	0
02-122	4116 Mayfair	1	B	No	1950	56	No	50	5.8	Yes	1	0	No	0
02-123	406 Brookfield	1	B	No	1930	61	No	58	3.4	No	0	0	No	0
02-124	405 Brookfield	1	B	No	1930	55	No	52	3.1	No	0	0	No	0
02-125	400 Thornton (triplex)	3	B	No	1960	52	No	49	2.5	No	0	0	No	0
02-130	4004 Mayfair	0	B	No	1930	56	No	55	0.4	No	0	0	No	0
02-131	318 Belvoir	1	B	No	1930	59	No	59	0.0	No	0	0	No	0
02-132	316 Belvoir	1	B	No	1938	55	No	55	0.2	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 3), Residences Only</b>
<b>Description:</b>	<b>Barrier at Frontage/Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>3,418</b>
<b>Area (ft<sup>2</sup>)</b>	<b>49,668</b>
<b>Average Height (ft)</b>	<b>14.5</b>
<b>Number of Benefited Residences</b>	<b>95.2</b>
<b>Area Per Benefited Residence</b>	<b>522</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 138+00	STA 137+00	101	F (F)	689	703	14	1,414
STA 137+00	STA 136+00	103	F (F)	685	699	14	1,442
STA 136+00	STA 135+00	104	F (F)	681	697	16	1,664
STA 135+00	STA 134+00	103	F (F)	679	695	16	1,648
STA 134+00	STA 133+00	101	F (F)	680	696	16	1,616
STA 133+00	STA 132+00	100	F (F)	680	696	16	1,600
STA 132+00	STA 131+00	100	F (F)	681	697	16	1,600
STA 131+00	STA 130+00	100	F (F)	682	698	16	1,600
STA 130+00	<b>Barrier End</b>	96	F (F)	683	697	14	1,344
STA 130+00	STA 129+00	103	F (EOP)	685	699	14	1,442
STA 129+00	STA 128+00	100	F (EOP)	686	700	14	1,400
STA 128+00	STA 127+00	100	F (EOP)	686	700	14	1,400
STA 127+00	STA 126+00	100	F (EOP)	687	701	14	1,400
STA 126+00	STA 125+00	100	F (EOP)	687	701	14	1,400
STA 125+00	STA 124+00	100	F (EOP)	688	702	14	1,400
STA 124+00	STA 123+00	100	F (EOP)	689	703	14	1,400
STA 123+00	STA 122+00	100	F (EOP)	690	704	14	1,400
STA 122+00	STA 121+00	100	F (EOP)	691	705	14	1,400
STA 121+00	STA 120+00	100	F (EOP)	692	706	14	1,400
STA 120+00	STA 119+00	100	F (EOP)	694	710	16	1,600
STA 119+00	STA 118+00	100	F (EOP)	695	711	16	1,600
STA 118+00	STA 117+00	100	F (EOP)	697	713	16	1,600
STA 117+00	STA 116+00	100	F (EOP)	699	713	14	1,400
STA 116+00	STA 115+00	100	F (EOP)	702	716	14	1,400
STA 115+00	<b>Barrier End</b>	55	F (EOP)	706	720	14	770
STA 115+50	STA 115+00	52	F (F)	703	717	14	728
STA 115+00	STA 114+00	100	F (F)	703	717	14	1,400
STA 114+00	STA 113+00	100	F (F)	708	722	14	1,400

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 3), Residences Only</b>
<b>Description:</b>	<b>Barrier at Frontage/Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

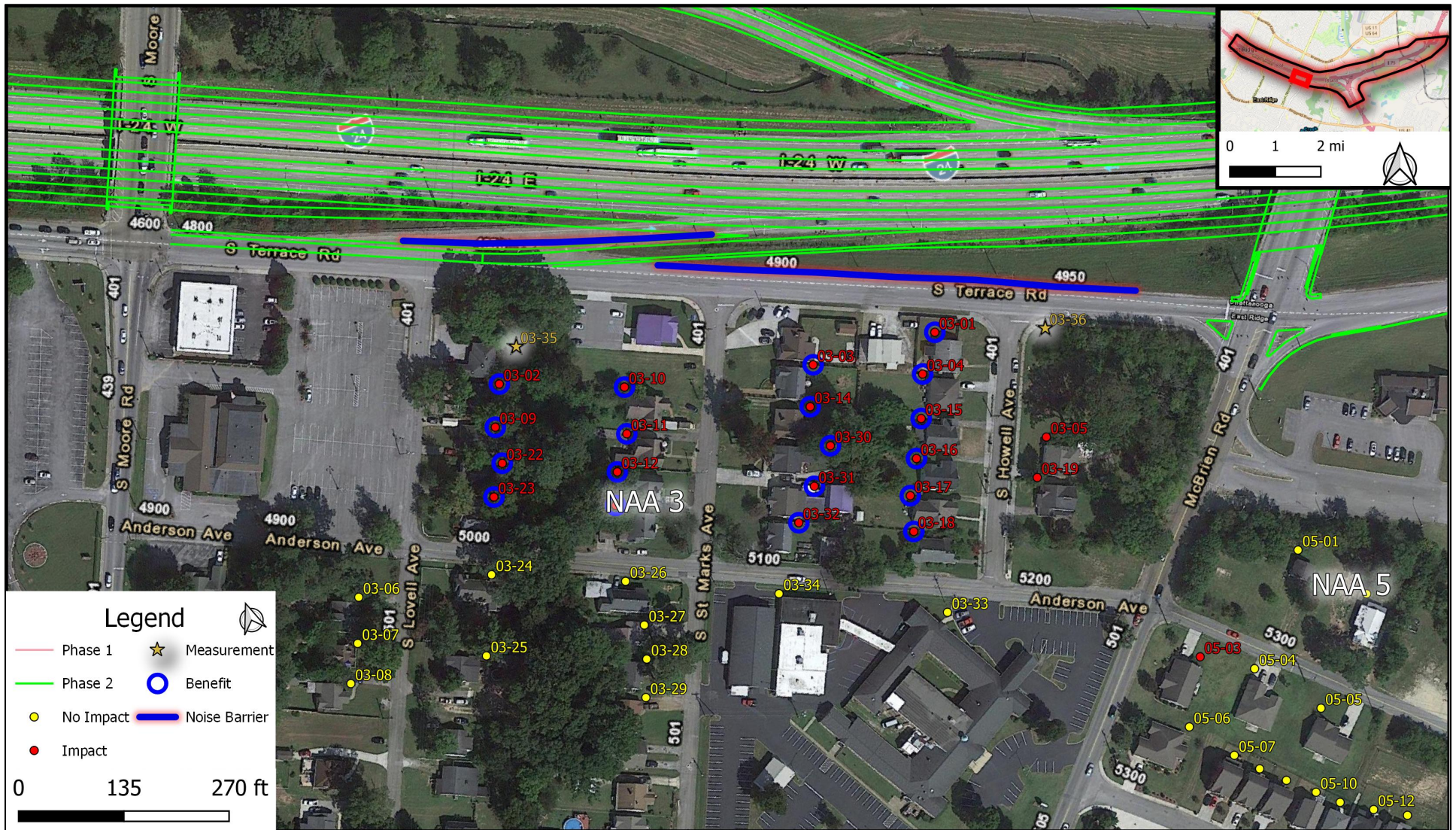
<b>Length (ft)</b>	<b>3,418</b>
<b>Area (ft<sup>2</sup>)</b>	<b>49,668</b>
<b>Average Height (ft)</b>	<b>14.5</b>
<b>Number of Benefited Residences</b>	<b>95.2</b>
<b>Area Per Benefited Residence</b>	<b>522</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 113+00	STA 112+00	100	F (F)	716	730	14	1,400
STA 112+00	STA 111+00	100	F (F)	723	737	14	1,400
STA 111+00	STA 110+00	100	F (F)	731	745	14	1,400
STA 110+00	STA 109+00	100	F (F)	738	752	14	1,400
STA 109+00	STA 108+00	100	F (F)	745	759	14	1,400
STA 108+00	STA 107+00	100	F (F)	752	766	14	1,400
STA 107+00	<b>Barrier End</b>	100	F (F)	755	769	14	1,400

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





**Proposed Noise Barrier: Noise Analysis Area 3, Option 1**

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	3 (Option 1)
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	4
# of 1st row impacted and benefited	4
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	20
Equivalent Benefits	0
Total Benefits	20
Benefited, first-row, receiving 7dB	3
Benefited, first-row	4
NRDG	75.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
03-01	401 S Howell	1	B	Yes	1940	76	Yes	69	7	Yes	1	1	Yes	1
03-02	414 S Lovell	1	B	Yes	1955	70	Yes	64	6	Yes	1	1	No	0
03-03	404 S St Marks	1	B	Yes	1936	73	Yes	66	7	Yes	1	1	Yes	1
03-04	403 S Howell	1	B	No	1940	73	Yes	66	7	Yes	1	0	No	0
03-05	406 S Howell	1	B	No	1940	67	Yes	63	4	No	0	0	No	0
03-06	503 S Lovell	1	B	No	1940	64	No	61	3	No	0	0	No	0
03-07	505 S Lovell	1	B	No	1940	62	No	60	2	No	0	0	No	0
03-08	507 S Lovell	1	B	No	1940	61	No	59	2	No	0	0	No	0
03-09	416 S Lovell (Duplex)	2	B	No	1965	68	Yes	63	5	Yes	2	0	No	0
03-10	405 S St Marks	1	B	Yes	1940	71	Yes	64	7	Yes	1	1	Yes	1
03-11	407 S St Marks	1	B	No	1940	69	Yes	63	6	Yes	1	0	No	0
03-12	409 S St Marks	1	B	No	1940	67	Yes	62	5	Yes	1	0	No	0
03-13	411 S St Marks	1	B	No	1940	66	Yes	61	5	Yes	1	0	No	0
03-14	406 S St Marks	1	B	No	1936	71	Yes	64	7	Yes	1	0	No	0
03-15	405 S Howell	1	B	No	1935	71	Yes	65	6	Yes	1	0	No	0
03-16	407 S Howell	1	B	No	1940	70	Yes	63	6	Yes	1	0	No	0
03-17	409 S Howell	1	B	No	1940	68	Yes	63	5	Yes	1	0	No	0
03-18	411 S Howell	1	B	No	1940	67	Yes	62	5	Yes	1	0	No	0
03-19	408 S Howell	1	B	No	1940	67	Yes	63	4	No	0	0	No	0
03-20	504 S Moore	1	B	No	1940	63	No	61	2	No	0	0	No	0
03-21	506 S Moore	1	B	No	1940	62	No	60	2	No	0	0	No	0
03-22	418 Lovell	1	B	No	1930	67	Yes	63	5	Yes	1	0	No	0
03-23	420 Lovell	1	B	No	1930	66	Yes	62	5	Yes	1	0	No	0
03-24	500 S Lovell	1	B	No	1945	65	No	61	4	No	0	0	No	0
03-25	502 S Lovell	1	B	No	1950	63	No	60	3	No	0	0	No	0
03-26	501 S St Marks	1	B	No	1940	64	No	61	4	No	0	0	No	0
03-27	503 S St Marks	1	B	No	1940	63	No	59	3	No	0	0	No	0
03-28	505 S St Marks	1	B	No	1940	61	No	58	4	No	0	0	No	0
03-29	507 S St Marks	1	B	No	1940	60	No	56	4	No	0	0	No	0
03-30	408 S St Marks	1	B	No	1940	70	Yes	63	7	Yes	1	0	No	0
03-31	410 S St Marks	1	B	No	1940	69	Yes	63	6	Yes	1	0	No	0
03-32	412 S St Marks	1	B	No	1940	67	Yes	62	5	Yes	1	0	No	0
03-33	East Ridge Ch. of Christ (D)	0	D	No	1937	40	No	37	3	No	0	0	No	0
03-34	East Ridge Ch. of Christ (bldg 2) (D)	0	D	No	1937	41	No	37	4	No	0	0	No	0



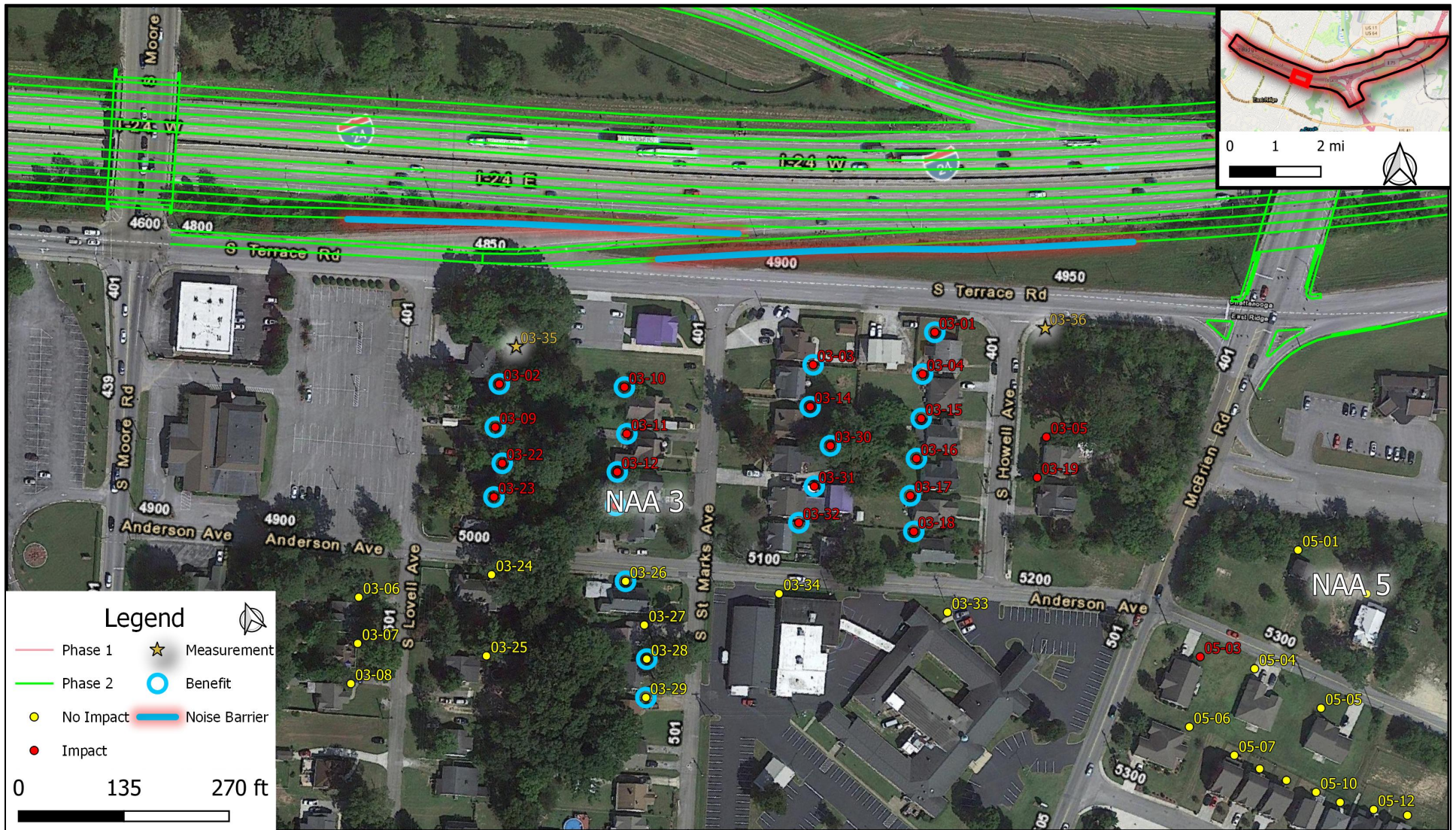
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>3 (Option 1)</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>1,011</b>
<b>Area (ft<sup>2</sup>)</b>	<b>13,530</b>
<b>Average Height (ft)</b>	<b>13.4</b>
<b>Number of Benefited Residences</b>	<b>20</b>
<b>Area Per Benefited Residence</b>	<b>677</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 4003+00 [ramp]	STA 4004+00 [ramp]	99	F (F)	688	698	10	990
STA 4004+00 [ramp]	STA 4005+00 [ramp]	99	F (F)	685	701	16	1,584
STA 4005+00 [ramp]	STA 4006+00 [ramp]	100	F (F)	683	699	16	1,600
STA 4006+00 [ramp]	end	98	F (F)	680	696	16	1,568
STA 147+00 [F]	STA 148+00 [F]	102	F (F)	682	696	14	1,428
STA 148+00 [F]	STA 149+00 [F]	103	F (F)	682	696	14	1,442
STA 149+00 [F]	STA 150+00 [F]	102	F (F)	681	695	14	1,428
STA 150+00 [F]	STA 151+00 [F]	102	F (F)	680	692	12	1,224
STA 151+00 [F]	STA 152+00 [F]	103	F (F)	680	692	12	1,236
STA 152+00 [F]	end	103	F (F)	683	693	10	1,030

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



**Proposed Noise Barrier: Noise Analysis Area 3, Option 2**



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	3 (Option 2)
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	4
# of 1st row impacted and benefited	4
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	23
Equivalent Benefits	0
Total Benefits	23
Benefited, first-row, receiving 7dB	3
Benefited, first-row	4
NRDG	75.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
03-01	401 S Howell	1	B	Yes	1940	76	Yes	69	7	Yes	1	1	Yes	1
03-02	414 S Lovell	1	B	Yes	1955	70	Yes	64	6	Yes	1	1	No	0
03-03	404 S St Marks	1	B	Yes	1936	73	Yes	66	7	Yes	1	1	Yes	1
03-04	403 S Howell	1	B	No	1940	73	Yes	65	8	Yes	1	0	No	0
03-05	406 S Howell	1	B	No	1940	67	Yes	63	4	No	0	0	No	0
03-06	503 S Lovell	1	B	No	1940	64	No	61	4	No	0	0	No	0
03-07	505 S Lovell	1	B	No	1940	62	No	59	3	No	0	0	No	0
03-08	507 S Lovell	1	B	No	1940	61	No	58	3	No	0	0	No	0
03-09	416 S Lovell (Duplex)	2	B	No	1965	68	Yes	62	6	Yes	2	0	No	0
03-10	405 S St Marks	1	B	Yes	1940	71	Yes	64	7	Yes	1	1	Yes	1
03-11	407 S St Marks	1	B	No	1940	69	Yes	63	6	Yes	1	0	No	0
03-12	409 S St Marks	1	B	No	1940	67	Yes	62	6	Yes	1	0	No	0
03-13	411 S St Marks	1	B	No	1940	66	Yes	61	5	Yes	1	0	No	0
03-14	406 S St Marks	1	B	No	1936	71	Yes	64	7	Yes	1	0	No	0
03-15	405 S Howell	1	B	No	1935	71	Yes	64	7	Yes	1	0	No	0
03-16	407 S Howell	1	B	No	1940	70	Yes	63	7	Yes	1	0	No	0
03-17	409 S Howell	1	B	No	1940	68	Yes	62	6	Yes	1	0	No	0
03-18	411 S Howell	1	B	No	1940	67	Yes	61	6	Yes	1	0	No	0
03-19	408 S Howell	1	B	No	1940	67	Yes	63	4	No	0	0	No	0
03-20	504 S Moore	1	B	No	1940	63	No	61	2	No	0	0	No	0
03-21	506 S Moore	1	B	No	1940	62	No	60	2	No	0	0	No	0
03-22	418 Lovell	1	B	No	1930	67	Yes	62	5	Yes	1	0	No	0
03-23	420 Lovell	1	B	No	1930	66	Yes	61	5	Yes	1	0	No	0
03-24	500 S Lovell	1	B	No	1945	65	No	60	4	No	0	0	No	0
03-25	502 S Lovell	1	B	No	1950	63	No	59	4	No	0	0	No	0
03-26	501 S St Marks	1	B	No	1940	64	No	60	5	Yes	1	0	No	0
03-27	503 S St Marks	1	B	No	1940	63	No	59	4	No	0	0	No	0
03-28	505 S St Marks	1	B	No	1940	61	No	57	5	Yes	1	0	No	0
03-29	507 S St Marks	1	B	No	1940	60	No	55	5	Yes	1	0	No	0
03-30	408 S St Marks	1	B	No	1940	70	Yes	63	7	Yes	1	0	No	0
03-31	410 S St Marks	1	B	No	1940	69	Yes	63	6	Yes	1	0	No	0
03-32	412 S St Marks	1	B	No	1940	67	Yes	62	5	Yes	1	0	No	0
03-33	East Ridge Ch. of Christ (D)	0	D	No	1937	40	No	36	3	No	0	0	No	0
03-34	East Ridge Ch. of Christ (bldg 2) (D)	0	D	No	1937	41	No	37	4	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>3 (Option 2)</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>1,111</b>
<b>Area (ft<sup>2</sup>)</b>	<b>16,570</b>
<b>Average Height (ft)</b>	<b>14.9</b>
<b>Number of Benefited Residences</b>	<b>23</b>
<b>Area Per Benefited Residence</b>	<b>720</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 143+00 [EOP]	STA 144+00 [EOP]	100	F (EOP)	688	700	12	1,200
STA 144+00 [EOP]	STA 145+00 [EOP]	100	F (EOP)	686	700	14	1,400
STA 145+00 [EOP]	STA 146+00 [EOP]	100	F (EOP)	680	696	16	1,600
STA 146+00 [EOP]	STA 147+00 [EOP]	100	F (EOP)	680	696	16	1,600
STA 147+00 [EOP]	end	101	F (EOP)	680	694	14	1,414
STA 147+00 [EOP]	STA 148+00 [EOP]	102	F (EOP)	680	696	16	1,632
STA 148+00 [EOP]	STA 149+00 [EOP]	102	F (EOP)	680	696	16	1,632
STA 149+00 [EOP]	STA 150+00 [EOP]	102	F (EOP)	679	695	16	1,632
STA 150+00 [EOP]	STA 151+00 [EOP]	102	F (EOP)	679	695	16	1,632
STA 151+00 [EOP]	STA 152+00 [EOP]	101	F (EOP)	679	693	14	1,414
STA 152+00 [EOP]	end	101	F (EOP)	679	693	14	1,414

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.







Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	4
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	5
# of 1st row impacted and benefited	3
% of 1st row impacts receiving 5 dB	60%
Feasible?	Yes
Benefited Residences	25
Equivalent Benefits	0
Total Benefits	25
Benefited, first-row, receiving 7dB	2
Benefited, first-row	3
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
04-01	321 McBrien	1	B	Yes	1939	63	No	61	1.1	No	0	0	No	0
04-02	317 S Howell	1	B	Yes	1942	71	Yes	65	5.9	Yes	1	1	No	0
04-03	318 S St Marks	1	B	Yes	1950	72	Yes	64	7.7	Yes	1	1	Yes	1
04-04	319 S St Marks	1	B	Yes	1960	71	Yes	65	6.5	Yes	1	1	Yes	1
04-05	314 S Lovell	1	B	Yes	1981	71	Yes	69	2.0	No	0	0	No	0
04-06	313 S Lovell	1	B	Yes	1940	67	Yes	64	3.6	No	0	0	No	0
04-07	318 S Moore	1	B	Yes	1940	65	No	63	2	No	0	0	No	0
04-08	Carriage House (317a McBrien Rd)(2DUs)	2	B	No	1985	66	Yes	64	2	No	0	0	No	0
04-09	Carriage House (317b McBrien Rd)(2DUs)	2	B	No	1985	64	No	62	2	No	0	0	No	0
04-10	Carriage House (317c McBrien Rd)(2DUs)	2	B	No	1985	64	No	61	3	No	0	0	No	0
04-11	Carriage House (317d McBrien Rd)(2DUs)	2	B	No	1985	64	No	61	3	No	0	0	No	0
04-12	Carriage House (315a McBrien Rd) (3 DUs)	3	B	No	1985	64	No	60	4	No	0	0	No	0
04-13	310 S Howell	1	B	No	1950	63	No	60	3	No	0	0	No	0
04-14	315 S Howell	1	B	No	1960	66	Yes	61	4	No	0	0	No	0
04-15	316 S St Marks	1	B	No	1948	70	Yes	63	7	Yes	1	0	No	0
04-16	314 S St Marks	1	B	No	1946	69	Yes	61	8	Yes	1	0	No	0
04-17	312 S St Marks	1	B	No	1947	68	Yes	60	8	Yes	1	0	No	0
04-18	310 S St Marks	1	B	No	1946	67	Yes	59	8	Yes	1	0	No	0
04-19	308 S St Marks	1	B	No	1947	64	No	59	6	Yes	1	0	No	0
04-20	304 S St Marks	1	B	No	1940	64	No	57	7	Yes	1	0	No	0
04-21	300 S St Marks	1	B	No	1960	62	No	56	6	Yes	1	0	No	0
04-22	317 S St Marks	1	B	No	1950	70	Yes	64	7	Yes	1	0	No	0
04-23	315 S St Marks	1	B	No	1950	69	Yes	62	7	Yes	1	0	No	0
04-24	311 S St Marks	1	B	No	1940	68	Yes	63	5	Yes	1	0	No	0
04-25	307 S St Marks	1	B	No	1935	67	Yes	60	7	Yes	1	0	No	0
04-26	305 S St Marks	1	B	No	1950	66	Yes	59	6	Yes	1	0	No	0
04-27	303 S St Marks	1	B	No	1950	64	No	58	6	Yes	1	0	No	0
04-28	301 S St Marks	1	B	No	1946	63	No	58	5	Yes	1	0	No	0
04-29	311 S Lovell	1	B	No	1950	66	Yes	63	4	No	0	0	No	0
04-30	314 S Moore	1	B	No	1963	65	No	63	2	No	0	0	No	0
04-31	Carriage House (315f McBrien Rd)(2DUs)	2	B	No	1985	63	No	63	0	No	0	0	No	0
04-32	Carriage House (315e McBrien Rd)(2DUs)	2	B	No	1985	59	No	59	0	No	0	0	No	0
04-33	Carriage House (315d McBrien Rd)(2DUs)	2	B	No	1985	57	No	57	1	No	0	0	No	0
04-34	Carriage House (315 b McBrien Rd)(4 DUs)	4	B	No	1985	64	No	60	4	No	0	0	No	0
04-35	308 S Howell	1	B	No	1945	62	No	59	3	No	0	0	No	0
04-36	313 S Howell	1	B	No	1959	64	No	60	5	Yes	1	0	No	0
04-37	312 S Lovell	1	B	No	1981	70	Yes	63	7	Yes	1	0	No	0
04-38	310 S Lovell	1	B	No	1950	68	Yes	62	6	Yes	1	0	No	0
04-39	308 S Lovell	1	B	No	1955	66	Yes	61	5	Yes	1	0	No	0
04-40	306 S Lovell	1	B	No	1955	65	No	60	5	Yes	1	0	No	0
04-41	5000 Mayfair	1	B	No	1920	64	No	59	5	Yes	1	0	No	0
04-42	309 S Lovell	1	B	No	1950	64	No	61	3	No	0	0	No	0
04-43	307 S Lovell	1	B	No	1955	62	No	60	2	No	0	0	No	0
04-44	305 S Lovell	1	B	No	1950	61	No	59	2	No	0	0	No	0
04-45	301 S Lovell	1	B	No	1954	61	No	59	3	No	0	0	No	0
04-46	312 S Moore	1	B	No	1945	64	No	62	2	No	0	0	No	0
04-47	310 S Moore	1	B	No	1940	65	No	63	2	No	0	0	No	0
04-48	308 S Moore	1	B	No	1935	64	No	63	2	No	0	0	No	0
04-49	304 S Moore	1	B	No	1930	64	No	62	2	No	0	0	No	0
04-50	302 S Moore	1	B	No	1955	63	No	61	2	No	0	0	No	0
04-51	313 McBrien (duplex)	2	B	No	1950	55	No	55	0	No	0	0	No	0
04-52	311 McBrien	1	B	No	1950	58	No	56	2	No	0	0	No	0
04-53	306 S Howell	1	B	No	1945	61	No	57	4	No	0	0	No	0
04-54	304 S Howell	1	B	No	1939	59	No	56	3	No	0	0	No	0
04-55	302 S Howell	1	B	No	1945	59	No	55	4	No	0	0	No	0
04-56	300 S Howell	1	B	No	1950	58	No	55	3	No	0	0	No	0
04-57	309 S Howell	1	B	No	1946	63	No	58	5	Yes	1	0	No	0
04-58	307 S Howell	1	B	No	1945	61	No	57	4	No	0	0	No	0
04-59	305 S Howell	1	B	No	1952	60	No	57	3	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	4
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	5
# of 1st row impacted and benefited	3
% of 1st row impacts receiving 5 dB	60%
Feasible?	Yes
Benefited Residences	25
Equivalent Benefits	0
Total Benefits	25
Benefited, first-row, receiving 7dB	2
Benefited, first-row	3
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
04-60	303 S Howell	1	B	No	1952	61	No	57	5	Yes	1	0	No	0
04-61	301 S Howell	1	B	No	1942	61	No	57	4	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>4</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

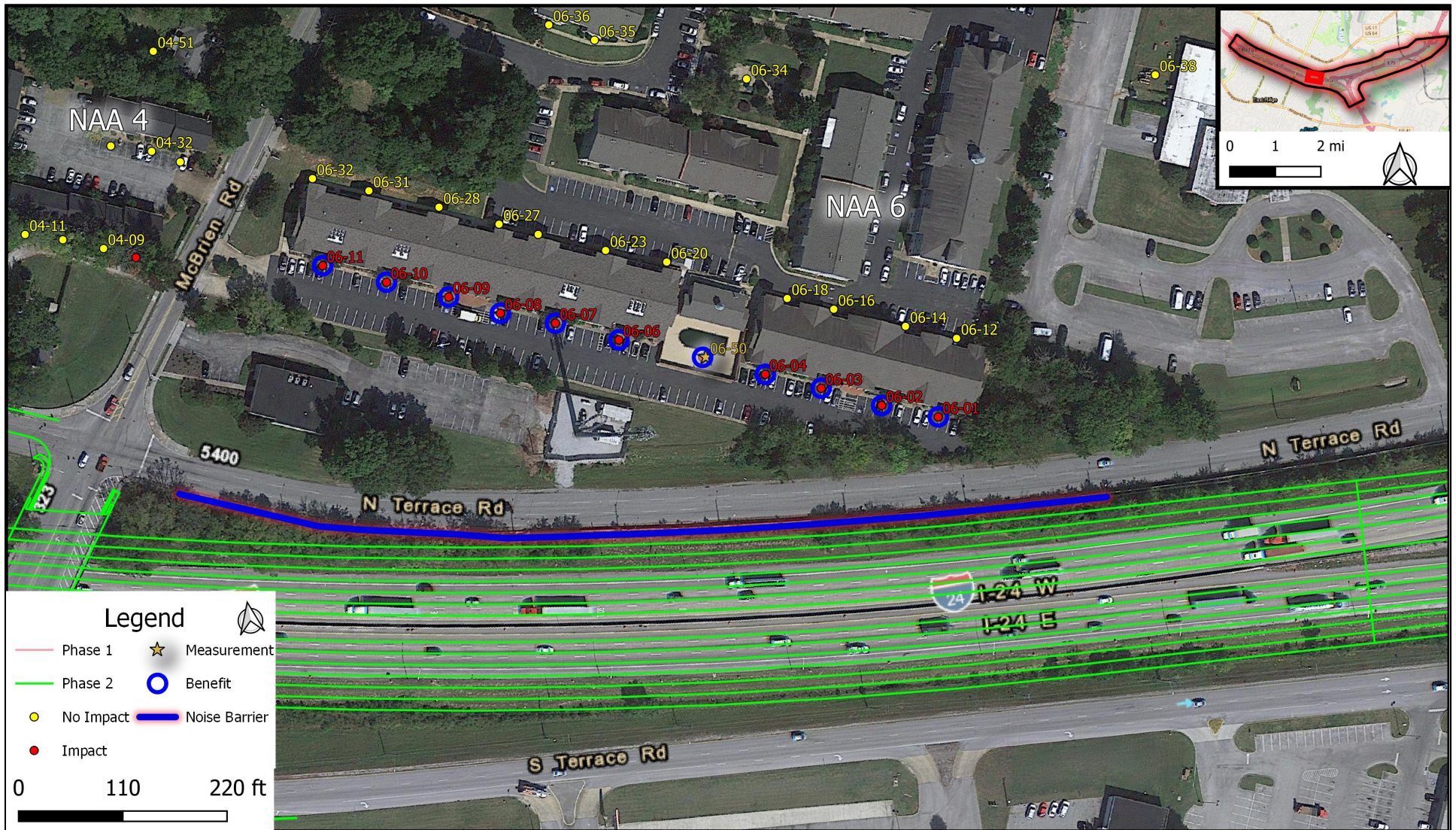
<b>Length (ft)</b>	<b>1,471</b>
<b>Area (ft<sup>2</sup>)</b>	<b>20,724</b>
<b>Average Height (ft)</b>	<b>14.1</b>
<b>Number of Benefited Residences</b>	<b>25</b>
<b>Area Per Benefited Residence</b>	<b>829</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 3009+00	STA 3008+00	100	F (F)	675	689	14	1,400
STA 3008+00	STA 3007+00	100	F (F)	676	692	16	1,600
STA 3007+00	STA 3006+00	100	F (F)	677	695	18	1,800
STA 3006+00	STA 3005+00	106	F (F)	677	697	20	2,120
STA 3005+00	STA 3004+00	100	F (F)	677	697	20	2,000
STA 3004+00	STA 3003+00	100	F (F)	678	694	16	1,600
STA 3003+00	STA 3002+00	100	F (F)	683	693	10	1,000
STA 3002+00	end	88	F (F)	688	696	8	704
STA 155+00 [F]	STA 154+00 [F]	98	F (F)	693	701	8	784
STA 154+00 [F]	STA 153+00 [F]	97	F (F)	693	701	8	776
STA 153+00 [F]	STA 152+00 [F]	97	F (F)	690	702	12	1,164
STA 152+00 [F]	STA 151+00 [F]	97	F (F)	685	701	16	1,552
STA 151+00 [F]	STA 150+00 [F]	96	F (F)	682	698	16	1,536
STA 150+00 [F]	STA 149+00 [F]	96	F (F)	679	695	16	1,536
STA 149+00 [F]	end	96	F (F)	678	690	12	1,152

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 6, Option 1



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	6 (Option 1)
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	17
# of 1st row impacted and benefited	17
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	16
Equivalent Benefits	2.1
Total Benefits	18.1
Benefited, first-row, receiving 7dB	11
Benefited, first-row	17
NRDG	64.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
06-01	Royal Arms (314b 1 McBrien) (1 unit)	1	B	Yes	1952	75	Yes	69	6.1	Yes	1	1	No	0
06-02	Royal Arms (314b 2 McBrien) (2 units)	2	B	Yes	1952	75	Yes	68	6.8	Yes	2	2	Yes	2
06-03	Royal Arms (314b 3 McBrien) (2 units)	2	B	Yes	1952	74	Yes	67	7.1	Yes	2	2	Yes	2
06-04	Royal Arms (314b 4 McBrien) (1 unit)	1	B	Yes	1952	73	Yes	66	7.0	Yes	1	1	Yes	1
06-05	Royal Arms (Pool)	0	C	Yes	1952	70	Yes	64	5.5	Yes	0	0	No	0
06-06	Royal Arms (314a 1 McBrien) (2 units)	2	B	Yes	1952	71	Yes	64	7.2	Yes	2	2	Yes	2
06-07	Royal Arms (314a 2 McBrien) (2 units)	2	B	Yes	1952	71	Yes	64	6.8	Yes	2	2	Yes	2
06-08	Royal Arms (314a 3 McBrien) (1 unit)	1	B	Yes	1952	70	Yes	63	6.9	Yes	1	1	Yes	1
06-09	Royal Arms (314a 4 McBrien) (1 unit)	1	B	Yes	1952	70	Yes	63	6.8	Yes	1	1	Yes	1
06-10	Royal Arms (314a 5 McBrien) (2 units)	2	B	Yes	1952	69	Yes	63	5.7	Yes	2	2	No	0
06-11	Royal Arms (314a 6 McBrien) (2 units)	2	B	Yes	1952	68	Yes	63	4.5	Yes	2	2	No	0
06-12	Royal Arms (314b 5 McBrien) (2 1st fl units)	2	B	No	1952	62	No	62	0	No	0	0	No	0
06-13	Royal Arms (314b 5 McBrien) (2 2nd fl units)	2	B	No	1952	65	No	65	0	No	0	0	No	0
06-14	Royal Arms (314b 6 McBrien) (2 1st fl units)	2	B	No	1952	60	No	60	0	No	0	0	No	0
06-15	Royal Arms (314b 6 McBrien) (2 2nd fl units)	2	B	No	1952	63	No	63	0	No	0	0	No	0
06-16	Royal Arms (314b 7 McBrien) (2 1st fl units)	2	B	No	1952	59	No	59	0	No	0	0	No	0
06-17	Royal Arms (314b 7 McBrien) (2 2nd fl units)	2	B	No	1952	62	No	61	0	No	0	0	No	0
06-18	Royal Arms (314b 8 McBrien) (2 1st fl units)	2	B	No	1952	59	No	59	0	No	0	0	No	0
06-19	Royal Arms (314b 8 McBrien) (2 2nd fl units)	2	B	No	1952	61	No	61	0	No	0	0	No	0
06-20	Royal Arms (314a 7 McBrien) (1 1st fl unit)	1	B	No	1952	58	No	58	0	No	0	0	No	0
06-21	Royal Arms (314a 7 McBrien) (1 2nd fl unit)	1	B	No	1952	59	No	59	0	No	0	0	No	0
06-22	Royal Arms (314a 8 McBrien) (2 1st fl units)	2	B	No	1952	57	No	57	0	No	0	0	No	0
06-23	Royal Arms (314a 8 McBrien) (2 2nd fl units)	2	B	No	1952	58	No	58	0	No	0	0	No	0
06-24	Royal Arms (314a 9 McBrien) (2 1st fl units)	2	B	No	1952	56	No	56	0	No	0	0	No	0
06-25	Royal Arms (314a 9 McBrien) (2 2nd fl units)	2	B	No	1952	57	No	57	0	No	0	0	No	0
06-26	Royal Arms (314a 10 McBrien) (1 1st fl unit)	1	B	No	1952	55	No	55	0	No	0	0	No	0
06-27	Royal Arms (314a 10 McBrien) (1 2nd fl unit)	1	B	No	1952	57	No	57	0	No	0	0	No	0
06-28	Royal Arms (314a 11 McBrien) (2 1st fl units)	2	B	No	1952	55	No	55	0	No	0	0	No	0
06-29	Royal Arms (314a 11 McBrien) (2 2nd fl units)	2	B	No	1952	57	No	57	0	No	0	0	No	0
06-30	Royal Arms (314a 12 McBrien) (2 1st fl units)	2	B	No	1952	56	No	56	0	No	0	0	No	0
06-31	Royal Arms (314a 12 McBrien) (2 2nd fl units)	2	B	No	1952	58	No	58	0	No	0	0	No	0
06-32	Royal Arms (314a 13 McBrien) (1 1st fl unit)	1	B	No	1952	61	No	61	0	No	0	0	No	0
06-33	Royal Arms (314a 13 McBrien) (1 2nd fl unit)	1	B	No	1952	62	No	62	0	No	0	0	No	0
06-34	Royal Arms patio	0	C	No	1952	50	No	49	0	No	0	0	No	0
06-35	Royal Arms (312a 1 McBrien) (1st & 2nd floor)	2	B	No	1986	57	No	56	0	No	0	0	No	0
06-36	Royal Arms (312a 2 McBrien) (1st & 2nd floor)	4	B	No	1986	58	No	58	0	No	0	0	No	0
06-37	Jewish Fed. of Gr. Chatt (playground)	0	C	No	1995	63	No	63	0	No	0	0	No	0
06-38	First Ch. of the Nazarene (playground)	0	C	No	1974	60	No	58	3	No	0	0	No	0
06-39	Chatt. Children's Clinic (D)	0	D	No	1990	42	No	42	0	No	0	0	No	0
06-40	219 Hunt Avenue	1	B	No	1947	64	No	64	0	No	0	0	No	0
06-41	217 Hunt Avenue	1	B	No	1947	62	No	62	0	No	0	0	No	0
06-42	215 Hunt Avenue	1	B	No	1947	61	No	61	0	No	0	0	No	0
06-43	213 Hunt Avenue	1	B	No	1947	60	No	60	0	No	0	0	No	0
06-44	211 Hunt Avenue	1	B	No	1947	60	No	60	0	No	0	0	No	0
06-45	209 Hunt Avenue	1	B	No	1939	60	No	60	0	No	0	0	No	0
06-46	207 Hunt Avenue	1	B	No	1947	58	No	58	0	No	0	0	No	0
06-47	309 Spring Creek	1	B	No	1950	66	Yes	66	0	No	0	0	No	0
06-48	122 Rees	1	B	No	1950	61	No	61	0	No	0	0	No	0
06-49	308 McBrien	1	B	No	1960	58	No	58	0	No	0	0	No	0



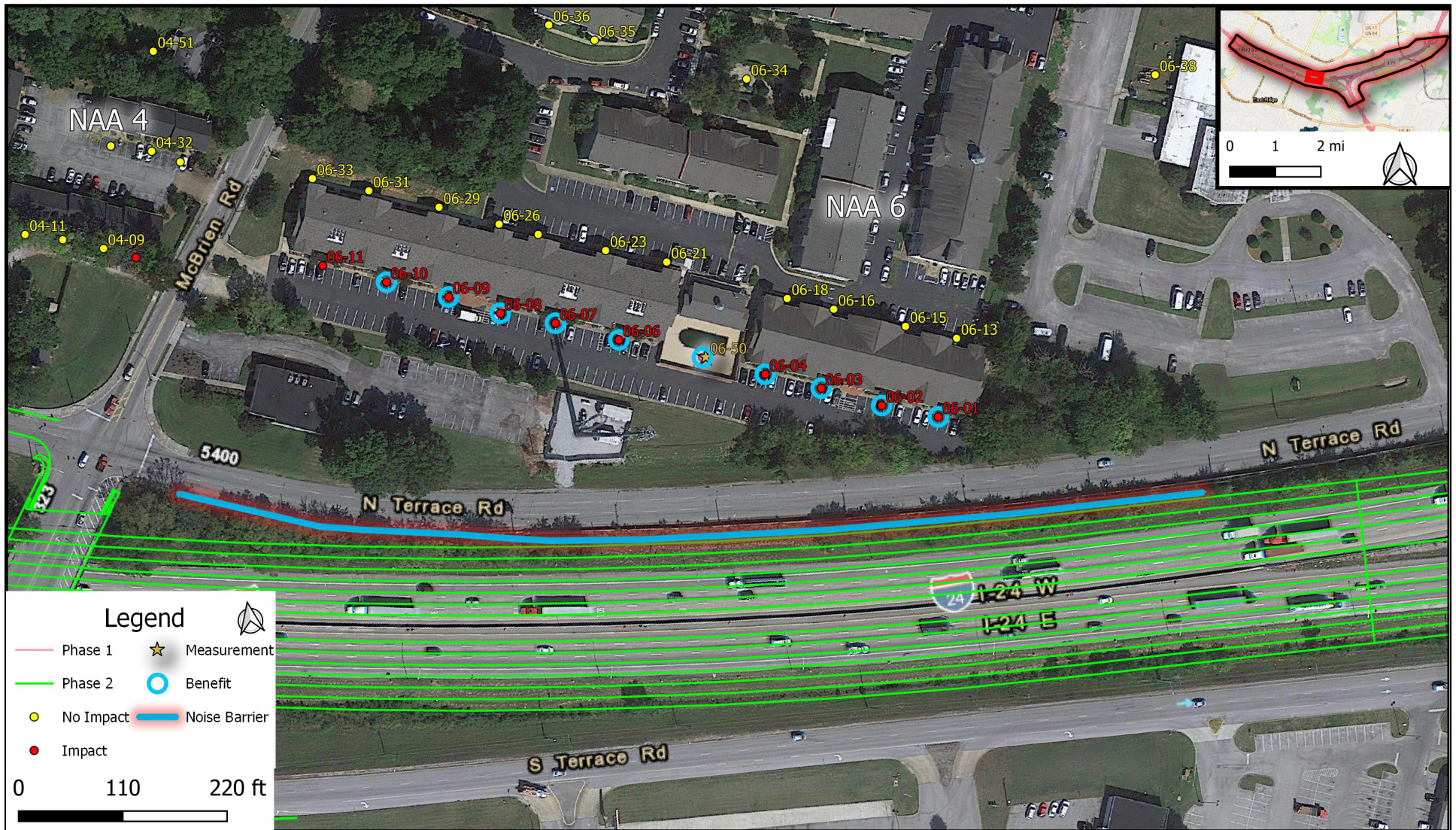
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>6 (Option 1)</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>985</b>
<b>Area (ft<sup>2</sup>)</b>	<b>15,152</b>
<b>Average Height (ft)</b>	<b>15.4</b>
<b>Number of Benefited Residences</b>	<b>18.1</b>
<b>Area Per Benefited Residence</b>	<b>837</b>
<b>Allowable Area per Benefited Residence</b>	<b>850</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 167+00 [F]	STA 166+00 [F]	98	F (F)	677	693	16	1,568
STA 166+00 [F]	STA 165+00 [F]	99	F (F)	677	693	16	1,584
STA 165+00 [F]	STA 164+00 [F]	98	F (F)	677	693	16	1,568
STA 164+00 [F]	STA 163+00 [F]	99	F (F)	677	695	18	1,782
STA 163+00 [F]	STA 162+00 [F]	98	F (F)	677	695	18	1,764
STA 162+00 [F]	STA 161+00 [F]	98	F (F)	679	697	18	1,764
STA 161+00 [F]	STA 160+50 [F]	46	F (F)	681	699	18	828
STA 160+50 [F]	STA 160+00 [F]	53	F (F)	682	700	18	954
STA 160+00 [F]	STA 159+00 [F]	98	F (F)	683	699	16	1,568
STA 159+00 [F]	STA 158+50 [F]	47	F (F)	687	699	12	564
STA 158+50 [F]	STA 158+00 [F]	52	F (F)	689	697	8	416
STA 158+00 [F]	end	99	F (F)	690	698	8	792

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



**Proposed Noise Barrier: Noise Analysis Area 6, Option 2**



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	6 (Option 2)
Description:	Barrier at Shoulder/Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	17
# of 1st row impacted and benefited	17
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	16
Equivalent Benefits	2.1
Total Benefits	18.1
Benefited, first-row, receiving 7dB	12
Benefited, first-row	17
NRDG	70.6%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Number Receiving 7 dB
06-01	Royal Arms Apts (314b 1 McBrien) (1 unit)	1	B	Yes	1952	75	Yes	69	7	Yes	1	1	Yes	1
06-02	Royal Arms Apts (314b 2 McBrien) (2 units)	2	B	Yes	1952	75	Yes	67	7	Yes	2	2	Yes	2
06-03	Royal Arms Apts (314b 3 McBrien) (2 units)	2	B	Yes	1952	74	Yes	66	8	Yes	2	2	Yes	2
06-04	Royal Arms Apts (314b 4 McBrien) (1 unit)	1	B	Yes	1952	73	Yes	65	7	Yes	1	1	Yes	1
06-05	Royal Arms Apts (Pool)	0	C	Yes	1952	70	Yes	64	6	Yes	0	0	No	0
06-06	Royal Arms Apts (314a 1 McBrien) (2 units)	2	B	Yes	1952	71	Yes	64	7	Yes	2	2	Yes	2
06-07	Royal Arms Apts (314a 2 McBrien) (2 units)	2	B	Yes	1952	71	Yes	64	7	Yes	2	2	Yes	2
06-08	Royal Arms Apts (314a 3 McBrien) (1 unit)	1	B	Yes	1952	70	Yes	63	7	Yes	1	1	Yes	1
06-09	Royal Arms Apts (314a 4 McBrien) (1 unit)	1	B	Yes	1952	70	Yes	63	7	Yes	1	1	Yes	1
06-10	Royal Arms Apts (314a 5 McBrien) (2 units)	2	B	Yes	1952	69	Yes	63	6	Yes	2	2	No	0
06-11	Royal Arms Apts (314a 6 McBrien) (2 units)	2	B	Yes	1952	68	Yes	63	4.5	Yes	2	2	No	0
06-12	Royal Arms Apts (314b 5 McBrien) (2 1st fl units)	2	B	No	1952	62	No	62	0	No	0	0	No	0
06-13	Royal Arms Apts (314b 5 McBrien) (2 2nd fl units)	2	B	No	1952	65	No	65	0	No	0	0	No	0
06-14	Royal Arms Apts (314b 6 McBrien) (2 1st fl units)	2	B	No	1952	60	No	60	0	No	0	0	No	0
06-15	Royal Arms Apts (314b 6 McBrien) (2 2nd fl units)	2	B	No	1952	63	No	63	0	No	0	0	No	0
06-16	Royal Arms Apts (314b 7 McBrien) (2 1st fl units)	2	B	No	1952	59	No	59	0	No	0	0	No	0
06-17	Royal Arms Apts (314b 7 McBrien) (2 2nd fl units)	2	B	No	1952	62	No	61	0	No	0	0	No	0
06-18	Royal Arms Apts (314b 8 McBrien) (2 1st fl units)	2	B	No	1952	59	No	59	0	No	0	0	No	0
06-19	Royal Arms Apts (314b 8 McBrien) (2 2nd fl units)	2	B	No	1952	61	No	61	0	No	0	0	No	0
06-20	Royal Arms Apts (314a 7 McBrien) (1 1st fl unit)	1	B	No	1952	58	No	58	0	No	0	0	No	0
06-21	Royal Arms Apts (314a 7 McBrien) (1 2nd fl unit)	1	B	No	1952	59	No	59	0	No	0	0	No	0
06-22	Royal Arms Apts (314a 8 McBrien) (2 1st fl units)	2	B	No	1952	57	No	57	0	No	0	0	No	0
06-23	Royal Arms Apts (314a 8 McBrien) (2 2nd fl units)	2	B	No	1952	58	No	58	0	No	0	0	No	0
06-24	Royal Arms Apts (314a 9 McBrien) (2 1st fl units)	2	B	No	1952	56	No	56	0	No	0	0	No	0
06-25	Royal Arms Apts (314a 9 McBrien) (2 2nd fl units)	2	B	No	1952	57	No	57	0	No	0	0	No	0
06-26	Royal Arms Apts (314a 10 McBrien) (1 1st fl unit)	1	B	No	1952	55	No	55	0	No	0	0	No	0
06-27	Royal Arms Apts (314a 10 McBrien) (1 2nd fl unit)	1	B	No	1952	57	No	57	0	No	0	0	No	0
06-28	Royal Arms Apts (314a 11 McBrien) (2 1st fl units)	2	B	No	1952	55	No	55	0	No	0	0	No	0
06-29	Royal Arms Apts (314a 11 McBrien) (2 2nd fl units)	2	B	No	1952	57	No	57	0	No	0	0	No	0
06-30	Royal Arms Apts (314a 12 McBrien) (2 1st fl units)	2	B	No	1952	56	No	56	0	No	0	0	No	0
06-31	Royal Arms Apts (314a 12 McBrien) (2 2nd fl units)	2	B	No	1952	58	No	58	0	No	0	0	No	0
06-32	Royal Arms Apts (314a 13 McBrien) (1 1st fl unit)	1	B	No	1952	61	No	61	0	No	0	0	No	0
06-33	Royal Arms Apts (314a 13 McBrien) (1 2nd fl unit)	1	B	No	1952	62	No	62	0	No	0	0	No	0
06-34	Royal Arms patio	0	C	No	1952	50	No	49	0	No	0	0	No	0
06-35	Royal Arms Apt (312a 1 McBrien) (1st & 2nd floor)	2	B	No	1986	57	No	56	0	No	0	0	No	0
06-36	Royal Arms Apt (312a 2 McBrien) (1st & 2nd floor)	4	B	No	1986	58	No	58	0	No	0	0	No	0
06-37	Jewish Fed. of Gr. Chatt (playground)	0	C	No	1995	63	No	63	0	No	0	0	No	0
06-38	First Ch. of the Nazarene (playground)	0	C	No	1974	60	No	57	3	No	0	0	No	0
06-39	Chatt. Children's Clinic (D)	0	D	No	1990	42	No	42	0	No	0	0	No	0
06-40	219 Hunt Avenue	1	B	No	1947	64	No	64	0	No	0	0	No	0
06-41	217 Hunt Avenue	1	B	No	1947	62	No	62	0	No	0	0	No	0
06-42	215 Hunt Avenue	1	B	No	1947	61	No	61	0	No	0	0	No	0
06-43	213 Hunt Avenue	1	B	No	1947	60	No	60	0	No	0	0	No	0
06-44	211 Hunt Avenue	1	B	No	1947	60	No	60	0	No	0	0	No	0
06-45	209 Hunt Avenue	1	B	No	1939	60	No	60	0	No	0	0	No	0
06-46	207 Hunt Avenue	1	B	No	1947	58	No	58	0	No	0	0	No	0
06-47	309 Spring Creek	1	B	No	1950	66	Yes	66	0	No	0	0	No	0
06-48	122 Rees	1	B	No	1950	61	No	61	0	No	0	0	No	0
06-49	308 McBrien	1	B	No	1960	58	No	58	0	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>6 (Option 2)</b>
<b>Description:</b>	<b>Barrier at Shoulder/Frontage</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>1,084</b>
<b>Area (ft<sup>2</sup>)</b>	<b>15,164</b>
<b>Average Height (ft)</b>	<b>14.0</b>
<b>Number of Benefited Residences</b>	<b>18.1</b>
<b>Area Per Benefited Residence</b>	<b>838</b>
<b>Allowable Area per Benefited Residence</b>	<b>850</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 168+00 [EOP]	STA 167+00 [EOP]	99	F (EOP)	678	686	8	792
STA 167+00 [EOP]	STA 166+00 [EOP]	99	F (EOP)	679	693	14	1,386
STA 166+00 [EOP]	STA 165+00 [EOP]	98	F (EOP)	679	693	14	1,372
STA 165+00 [EOP]	STA 164+00 [EOP]	99	F (EOP)	679	695	16	1,584
STA 164+00 [EOP]	STA 163+00 [EOP]	98	F (EOP)	679	695	16	1,568
STA 163+00 [EOP]	STA 162+00 [EOP]	98	F (EOP)	678	694	16	1,568
STA 162+00 [EOP]	STA 161+00 [EOP]	98	F (EOP)	678	696	18	1,764
STA 161+00 [EOP]	STA 160+50 [T]	46	F (T)	678	696	18	828
STA 160+50 [T]	STA 160+00 [F]	53	F (T)	682	700	18	954
STA 160+00 [F]	STA 159+00 [F]	98	F (F)	683	701	18	1,764
STA 159+00 [F]	STA 158+50 [F]	47	F (F)	687	695	8	376
STA 158+50 [F]	STA 158+00 [F]	52	F (F)	689	697	8	416
STA 158+00 [F]	end	99	F (F)	690	698	8	792

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





**Evaluated Noise Barrier: Noise Analysis Area 8**

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	8
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1963
Roadway - date of widening	1992, 2020

# of 1st row impacts	1
# of 1st row impacted and benefited	1
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	2.5
Total Benefits	2.5
Benefited, first-row, receiving 7dB	1
Benefited, first-row	1
NRDG	100.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
08-01	Chatt. Charter Sch. (playground)	0	C	Yes	2011	71	Yes	64	7	Yes	1	1	Yes	1



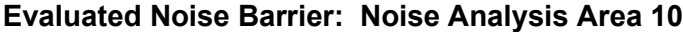
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>8</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>1,200</b>
<b>Area (ft<sup>2</sup>)</b>	<b>16,000</b>
<b>Average Height (ft)</b>	<b>13.3</b>
<b>Number of Benefited Residences</b>	<b>2.5</b>
<b>Area Per Benefited Residence</b>	<b>6,400</b>
<b>Allowable Area per Benefited Residence</b>	<b>550</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
WB 817+00	WB 818+00	100	F (EOP)	681	689	8	800
WB 818+00	WB 819+00	100	F (EOP)	681	691	10	1,000
WB 819+00	WB 820+00	100	F (EOP)	681	691	10	1,000
WB 820+00	WB 821+00	100	F (EOP)	681	693	12	1,200
WB 821+00	WB 822+00	100	F (EOP)	681	695	14	1,400
WB 822+00	WB 823+00	100	F (EOP)	681	699	18	1,800
WB 823+00	WB 824+00	100	F (EOP)	681	701	20	2,000
WB 824+00	WB 825+00	100	F (EOP)	681	701	20	2,000
WB 825+00	WB 826+00	100	F (EOP)	681	697	16	1,600
WB 826+00	WB 827+00	100	F (EOP)	681	693	12	1,200
WB 827+00	WB 828+00	100	F (EOP)	681	693	12	1,200
WB 828+00	end	100	F (EOP)	681	689	8	800

(1) F = free standing barrier. EOP = edge of pavement; ROW = right-of-way; T = transition between EOP and ROW.

(2) At beginning station.





Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	10 (Brown Acres West)
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1963
Roadway - date of widening	1992

# of 1st row impacts	3
# of 1st row impacted and benefited	3
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	1.5
Total Benefits	1.5
Benefited, first-row, receiving 7dB	2
Benefited, first-row	3
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
10-01	Brown Acres west (G - 1)	0	C	Yes	1955	69	Yes	65	5	Yes	1	1	No	0
10-02	Brown Acres west (T - 1)	0	C	Yes	1955	70	Yes	64	7	Yes	0	0	Yes	0
10-03	Brown Acres west (G - 2)	0	C	Yes	1955	72	Yes	65	7	Yes	0	0	Yes	0
10-04	Brown Acres west (Driving Range)	0	C	No	1955	68	Yes	65	3	No	0	0	No	0
10-05	Brown Acres west (T - 2)	0	C	No	1955	67	Yes	63	4	No	0	0	No	0
10-06	Brown Acres west (G - 3)	0	C	No	1955	68	Yes	64	4	No	0	0	No	0
10-07	Brown Acres west (T - 3)	0	C	No	1955	69	Yes	65	4	No	0	0	No	0
10-08	Brown Acres west (Dr. Range #2)	0	C	No	1955	67	Yes	64	3	No	0	0	No	0
10-09	Brown Acres west (G - 4)	0	C	No	1955	67	Yes	63	4	No	0	0	No	0
10-10	Brown Acres west (G - 5)	0	C	No	1955	63	No	60	3	No	0	0	No	0
10-11	Brown Acres west (T - 4)	0	C	No	1955	65	No	62	3	No	0	0	No	0
10-12	Brown Acres Clubhouse (1st fl)	0	C	No	1955	66	Yes	63	3	No	0	0	No	0
10-13	Brown Acres Clubhouse (2nd fl)	0	C	No	1955	68	Yes	65	2	No	0	0	No	0
10-14	Brown Acres west (G - 6)	0	C	No	1955	65	No	62	3	No	0	0	No	0
10-15	Brown Acres Golf (Gazebo)	0	C	No	1955	64	No	60	4	No	0	0	No	0

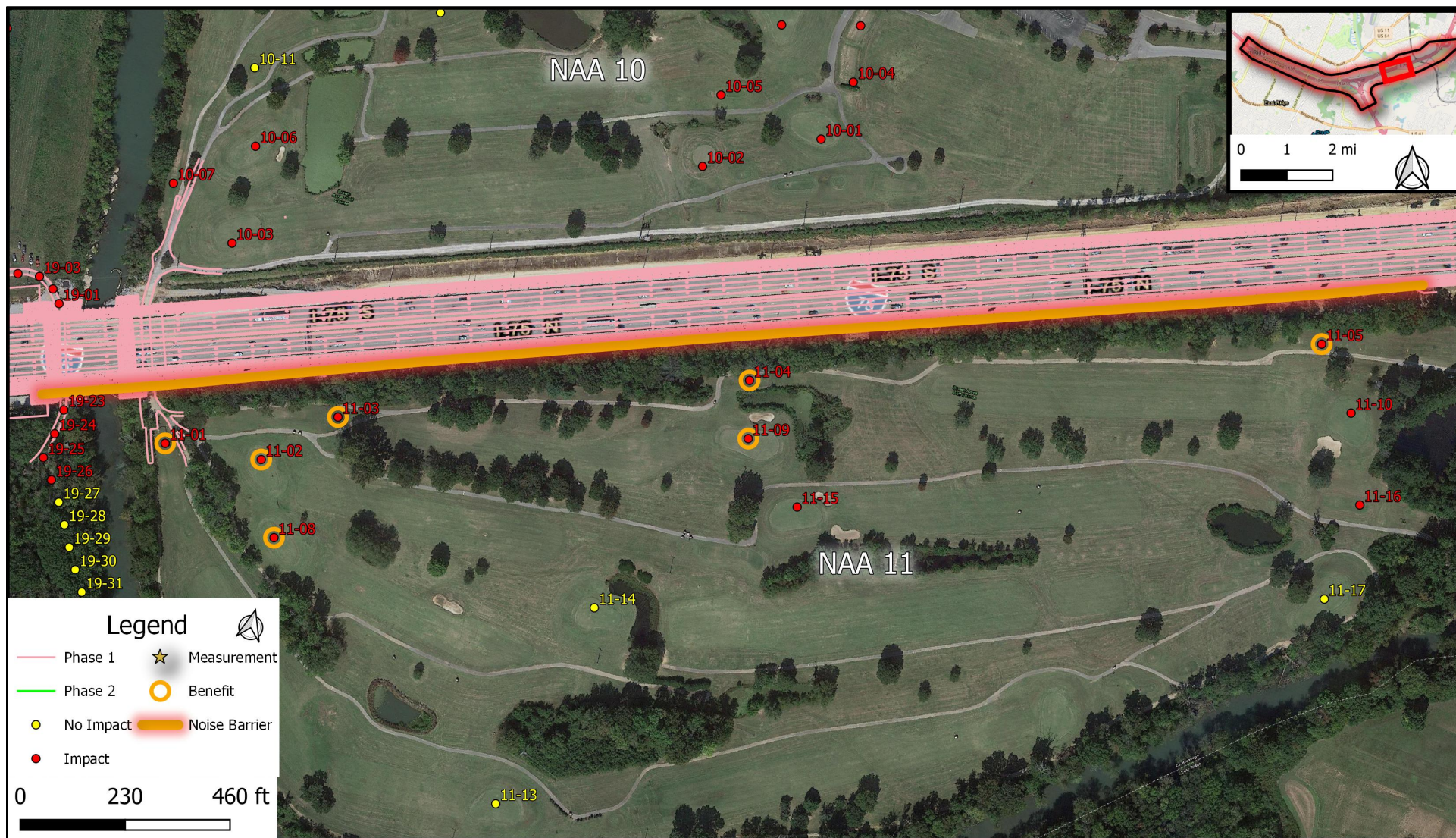
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>10 (Brown Acres West)</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>2,040</b>
<b>Area (ft<sup>2</sup>)</b>	<b>24,396</b>
<b>Average Height (ft)</b>	<b>12.0</b>
<b>Number of Benefited Residences</b>	<b>1.5</b>
<b>Area Per Benefited Residence</b>	<b>16,264</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,800</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
SB 428+00	SB 426+00	198	F (EOP)	680	692	12	2,376
SB 426+00	SB 424+00	203	F (EOP)	678	690	12	2,436
SB 424+00	SB 422+00	200	F (EOP)	678	692	14	2,800
SB 422+00	SB 420+00	198	F (EOP)	678	692	14	2,772
SB 420+00	SB 418+00	202	F (EOP)	678	690	12	2,424
SB 418+00	SB 416+00	198	F (EOP)	678	690	12	2,376
SB 416+00	SB 414+00	200	F (EOP)	678	690	12	2,400
SB 414+00	SB 412+00	201	F (EOP)	679	691	12	2,412
SB 412+00	SB 410+50	153	F (EOP)	679	689	10	1,530
SB 410+50	end	287	F (EOP)	680	690	10	2,870

(1) F = free standing barrier. EOP = edge of pavement; ROW = right-of-way; T = transition between EOP and ROW.

(2) At beginning station.



**Evaluated Noise Barrier: Noise Analysis Area 11**



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	11 (Brown Acres East)
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1963
Roadway - date of widening	1992

# of 1st row impacts	5
# of 1st row impacted and benefited	5
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	3.0
Total Benefits	3.0
Benefited, first-row, receiving 7dB	4
Benefited, first-row	5
NRDG	80.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
11-01	Brown Acres east (T - 5)	0	C	Yes	1955	69	Yes	63	7	Yes	1	0	Yes	0
11-02	Brown Acres east (G - 7)	0	C	Yes	1955	70	Yes	63	7	Yes	1	0	Yes	0
11-03	Brown Acres east (T - 6)	0	C	Yes	1955	70	Yes	63	8	Yes	1	0	Yes	0
11-04	Brown Acres east (T - 7)	0	C	Yes	1955	73	Yes	65	7	Yes	1	0	Yes	0
11-05	Brown Acres east (T - 8)	0	C	Yes	1955	72	Yes	68	5	Yes	1	0	No	0
11-06	Brown Acres east (G - 8)	0	C	Yes	1955	65	No	65	0	No	0	0	No	0
11-07	Brown Acres east (T - 9)	0	C	No	1955	69	Yes	68	0	No	0	0	No	0
11-08	Brown Acres east (G - 9)	0	C	No	1955	67	Yes	61	5	Yes	0	0	No	0
11-09	Brown Acres east (G - 10)	0	C	No	1955	71	Yes	66	5	Yes	0	0	No	0
11-10	Brown Acres east (G - 11)	0	C	No	1955	70	Yes	68	2	No	0	0	No	0
11-11	Brown Acres east (T - 12)	0	C	No	1955	62	No	61	0	No	0	0	No	0
11-12	Brown Acres east (G - 12)	0	C	No	1955	63	No	63	0	No	0	0	No	0
11-13	Brown Acres east (G - 13)	0	C	No	1955	60	No	57	2	No	0	0	No	0
11-14	Brown Acres east (G - 14)	0	C	No	1955	64	No	61	3	No	0	0	No	0
11-15	Brown Acres east (G - 15)	0	C	No	1955	69	Yes	65	4	No	0	0	No	0
11-16	Brown Acres east (T - 13)	0	C	No	1955	66	Yes	65	1	No	0	0	No	0
11-17	Brown Acres east (G 16)	0	C	No	1955	64	No	63	1	No	0	0	No	0
11-18	Brown Acres east (G - 17)	0	C	No	1955	66	Yes	65	1	No	0	0	No	0
11-19	6606 Jordan	1	B	No	1955	64	No	63	1	No	0	0	No	0



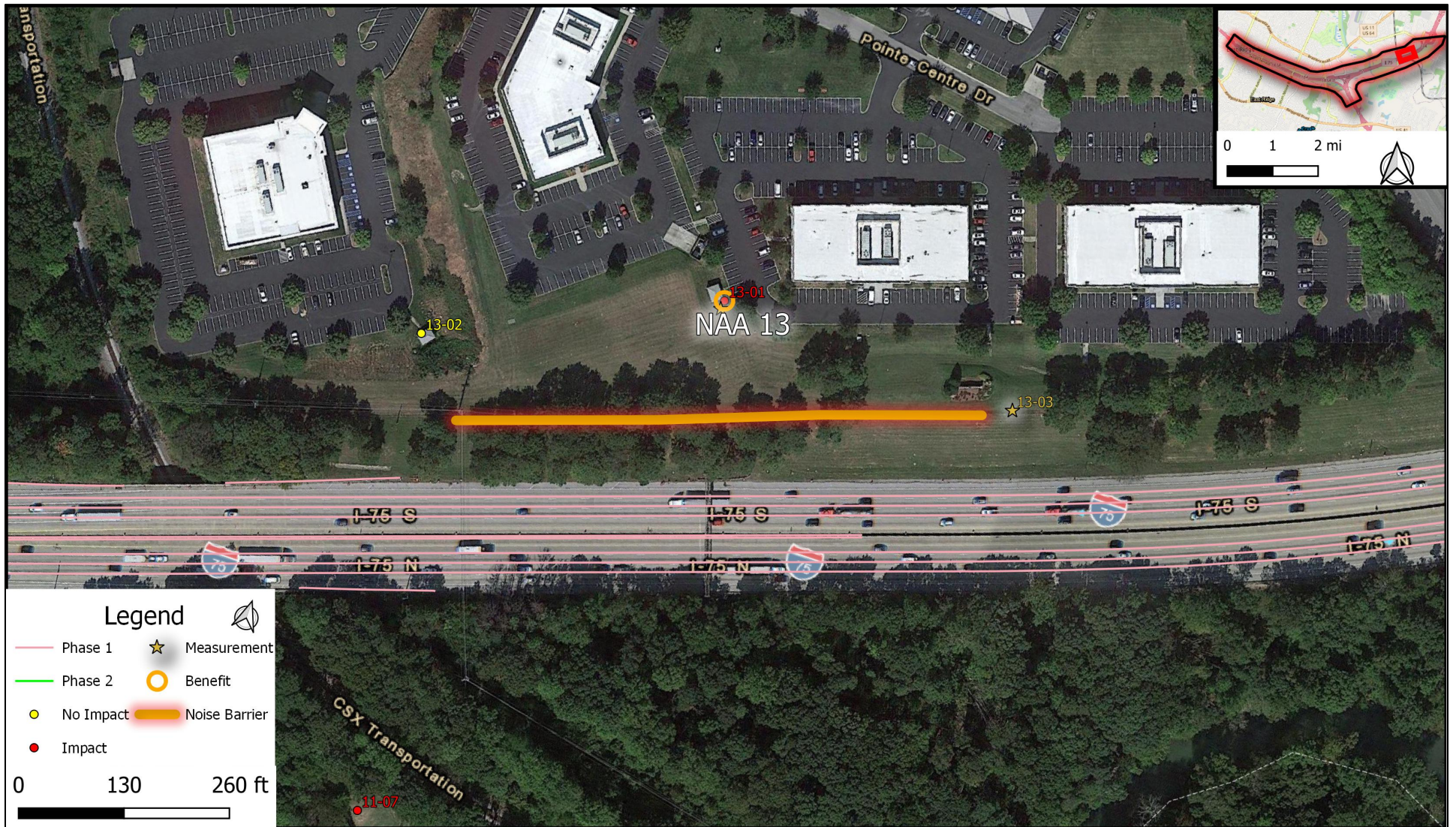
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>11 (Brown Acres East)</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>3,038</b>
<b>Area (ft<sup>2</sup>)</b>	<b>32,934</b>
<b>Average Height (ft)</b>	<b>10.8</b>
<b>Number of Benefited Residences</b>	<b>3.0</b>
<b>Area Per Benefited Residence</b>	<b>10,978</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,800</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
NB 407+50	NB 410+40	286	F (EOP)	682	696	14	4,004
NB 410+40	NB 412+00	152	F (EOP)	682	696	14	2,128
NB 412+00	NB 414+00	202	F (EOP)	681	695	14	2,828
NB 414+00	NB 416+00	197	F (EOP)	680	692	12	2,364
NB 416+00	NB 418+00	199	F (EOP)	680	690	10	1,990
NB 418+00	NB 420+00	202	F (EOP)	679	689	10	2,020
NB 420+00	NB 422+00	198	F (EOP)	679	689	10	1,980
NB 422+00	NB 424+00	203	F (EOP)	678	688	10	2,030
NB 424+00	NB 426+00	197	F (EOP)	678	688	10	1,970
NB 426+00	NB 428+00	201	F (EOP)	678	688	10	2,010
NB 428+00	NB 430+00	199	F (EOP)	678	688	10	1,990
NB 430+00	NB 432+00	204	F (EOP)	678	688	10	2,040
NB 432+00	NB 434+00	197	F (EOP)	678	688	10	1,970
NB 434+00	NB 436+00	201	F (EOP)	680	690	10	2,010
NB 436+00	end	200	F (EOP)	683	691	8	1,600

(1) F = free standing barrier. EOP = edge of pavement; ROW = right-of-way; T = transition between EOP and ROW.

(2) At beginning station.



Evaluated Noise Barrier: Noise Analysis Area 13

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	13 (The Pointe Center gazebo)
Description:	Barrier at ROW
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1963
Roadway - date of widening	1992

# of 1st row impacts	3
# of 1st row impacted and benefited	3
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	0.3
Total Benefits	0.3
Benefited, first-row, receiving 7dB	1
Benefited, first-row	1
NRDG	100.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
13-02	Office gazebo	0	C	No	1975	61	No	61	1	No	0	0	No	0
13-01	VA Covered Gazebo	0	C	Yes	1975	71	Yes	64	7	Yes	0	0	Yes	0



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>13 (The Pointe Center gazebo)</b>
<b>Description:</b>	<b>Barrier at ROW</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>651</b>
<b>Area (ft<sup>2</sup>)</b>	<b>13,020</b>
<b>Average Height (ft)</b>	<b>20.0</b>
<b>Number of Benefited Residences</b>	<b>0.3</b>
<b>Area Per Benefited Residence</b>	<b>43,400</b>
<b>Allowable Area per Benefited Residence</b>	<b>350</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Top Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
SB458+00	end	651	F (ROW)	744	764	20	13,020

(1) F = free standing barrier. EOP = edge of pavement; ROW = right-of-way; T = transition between EOP and ROW.

(2) At beginning station.





**Evaluated Noise Barrier: Noise Analysis Area 15**

Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	15 (Concord Golf Club)
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1963
Roadway - date of widening	1992

# of 1st row impacts	3
# of 1st row impacted and benefited	3
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	1.2
Total Benefits	1.2
Benefited, first-row, receiving 7dB	2
Benefited, first-row	3
NRDG	66.7%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
15-01	Concord Golf Course - 1	0	C	No	1975	60	No	60	0	No	0	0	No	0
15-02	Concord Golf Course - 2	0	C	Yes	1975	75	Yes	68	7	Yes	0	0	Yes	0
15-03	Concord Golf Course - 3	0	C	Yes	1975	67	Yes	61	7	Yes	0	0	Yes	0
15-04	Concord Golf Course - 4	0	C	Yes	1975	67	Yes	62	5	Yes	0	0	No	0
15-05	Concord Golf Course - 5	0	C	No	1975	61	No	59	2	No	0	0	No	0
15-06	Concord Golf Course - 6	0	C	No	1975	66	Yes	60	7	Yes	0	0	No	0
15-07	Concord Golf Course - 7	0	C	No	1975	65	No	62	3	No	0	0	No	0
15-08	Concord Golf Course - 8	0	C	No	1975	63	No	58	5	Yes	0	0	No	0
15-09	Concord Golf Course - 9	0	C	No	1975	65	No	59	6	Yes	0	0	No	0
15-10	Concord Golf Course - 10	0	C	No	1975	62	No	60	2	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>15 (Concord Golf Club)</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

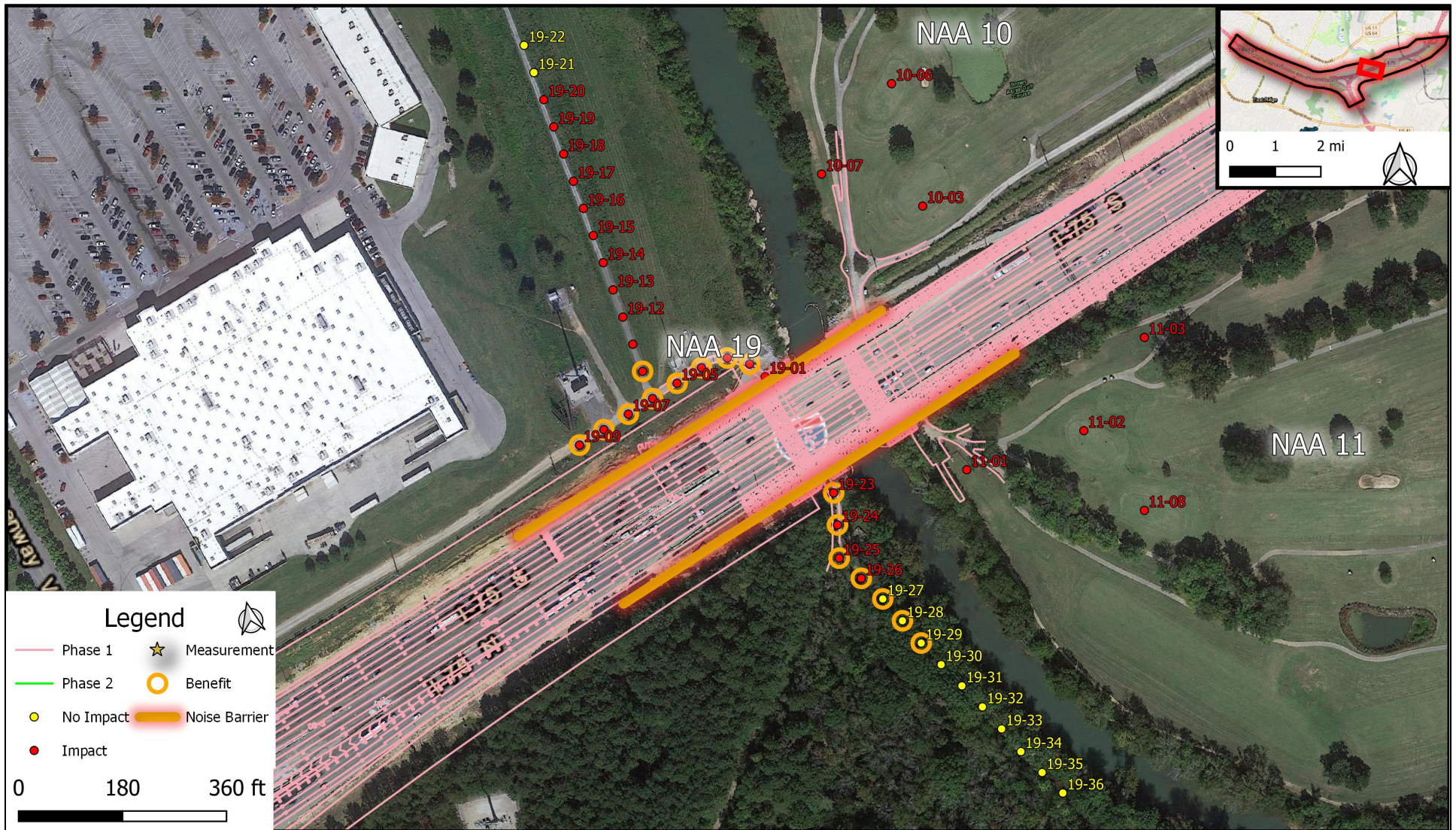
<b>Length (ft)</b>	<b>1,872</b>
<b>Area (ft<sup>2</sup>)</b>	<b>20,958</b>
<b>Average Height (ft)</b>	<b>11.2</b>
<b>Number of Benefited Residences</b>	<b>1.2</b>
<b>Area Per Benefited Residence</b>	<b>17,465</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,050</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Top Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
NB 464+00	NB 466+00	202	F (EOP)	732	742	10	2,020
NB 466+00	NB 468+00	204	F (EOP)	731	745	14	2,856
NB 468+00	NB 470+00	202	F (EOP)	729	743	14	2,828
NB 470+00	NB 472+00	204	F (EOP)	725	739	14	2,856
NB 472+00	NB 474+00	202	F (EOP)	720	730	10	2,020
NB 474+00	NB 476+00	204	F (EOP)	714	724	10	2,040
NB 476+00	NB 478+00	203	F (EOP)	708	718	10	2,030
NB 478+00	NB 480+00	205	F (EOP)	702	712	10	2,050
NB 480+00	NB Ramp 2	51	F (EOP)	699	709	10	510
NB Ramp 2	NB Ramp 3	94	F (EOP)	701	711	10	940
NB Ramp 3	end	101	F (EOP)	700	708	8	808

(1) F = free standing barrier. EOP = edge of pavement; ROW = right-of-way; T = transition between EOP and ROW.

(2) At beginning station.





**Evaluated Noise Barrier: Noise Analysis Area 19**



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	19 (Chickamauga Greenway)
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1963
Roadway - date of widening	1992

# of 1st row impacts	10
# of 1st row impacted and benefited	10
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	0
Equivalent Benefits	3.7
Total Benefits	3.7
Benefited, first-row, receiving 7dB	8
Benefited, first-row	10
NRDG	80.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
North Side														
19-01	Chickamauga Cr. Grnwy 1	0	C	Yes	1994	65	No	64	1	No	1	0	No	0
19-02	Chickamauga Cr. Grnwy 2	0	C	Yes	1994	74	Yes	67	7	Yes	1	0	Yes	0
19-03	Chickamauga Cr. Grnwy 3	0	C	Yes	1994	74	Yes	68	6	Yes	1	0	No	0
19-04	Chickamauga Cr. Grnwy 4	0	C	Yes	1994	76	Yes	69	7	Yes	1	0	Yes	0
19-05	Chickamauga Cr. Grnwy 5	0	C	Yes	1994	77	Yes	69	7	Yes	1	0	Yes	0
19-06	Chickamauga Cr. Grnwy 6	0	C	Yes	1994	77	Yes	69	8	Yes	0	0	Yes	0
19-07	Chickamauga Cr. Grnwy 7	0	C	Yes	1994	77	Yes	70	7	Yes	0	0	Yes	0
19-08	Chickamauga Cr. Grnwy 8	0	C	Yes	1994	77	Yes	70	7	Yes	0	0	Yes	0
19-09	Chickamauga Cr. Grnwy 9	0	C	Yes	1994	77	Yes	71	7	Yes	0	0	Yes	0
19-10	Chickamauga Cr. Grnwy 150ft	0	C	No	1994	75	Yes	69	5	Yes	0	0	No	0
19-11	Chickamauga Cr. Grnwy 200ft	0	C	No	1994	73	Yes	69	4	No	0	0	No	0
19-12	Chickamauga Cr. Grnwy 250ft	0	C	No	1994	72	Yes	69	3	No	0	0	No	0
19-13	Chickamauga Cr. Grnwy 300ft	0	C	No	1994	71	Yes	68	3	No	0	0	No	0
19-14	Chickamauga Cr. Grnwy 350ft	0	C	No	1994	70	Yes	68	2	No	0	0	No	0
19-15	Chickamauga Cr. Grnwy 400ft	0	C	No	1994	69	Yes	67	2	No	0	0	No	0
19-16	Chickamauga Cr. Grnwy 450ft	0	C	No	1994	68	Yes	67	2	No	0	0	No	0
19-17	Chickamauga Cr. Grnwy 500ft	0	C	No	1994	68	Yes	66	2	No	0	0	No	0
19-18	Chickamauga Cr. Grnwy 550ft	0	C	No	1994	67	Yes	66	1	No	0	0	No	0
19-19	Chickamauga Cr. Grnwy 600ft	0	B	No	1994	66	Yes	65	1	No	0	0	No	0
19-20	Chickamauga Cr. Grnwy 650ft	0	B	No	1994	66	Yes	65	1	No	0	0	No	0
19-21	Chickamauga Cr. Grnwy 700ft	0	B	No	1994	65	No	64	1	No	0	0	No	0
19-22	Chickamauga Cr. Grnwy 750ft	0	B	No	1994	65	No	64	1	No	0	0	No	0
South Side														
19-23	Chickamauga Cr. Grnwy (south) 50ft	0	B	Yes	1994	68	Yes	61	6	Yes	0	0	No	0
19-24	Chickamauga Cr. Grnwy (south) 100ft	0	B	Yes	1994	68	Yes	61	7	Yes	0	0	Yes	0
19-25	Chickamauga Cr. Grnwy (south) 150ft	0	B	No	1994	67	Yes	61	7	Yes	0	0	No	0
19-26	Chickamauga Cr. Grnwy (south) 200ft	0	B	No	1994	66	Yes	60	6	Yes	0	0	No	0
19-27	Chickamauga Cr. Grnwy (south) 250ft	0	B	No	1994	65	No	60	5	Yes	0	0	No	0
19-28	Chickamauga Cr. Grnwy (south) 300ft	0	B	No	1994	65	No	60	5	Yes	0	0	No	0
19-29	Chickamauga Cr. Grnwy (south) 350ft	0	B	No	1994	65	No	60	5	Yes	0	0	No	0
19-30	Chickamauga Cr. Grnwy (south) 400ft	0	B	No	1994	64	No	60	4	No	0	0	No	0
19-31	Chickamauga Cr. Grnwy (south) 450ft	0	B	No	1994	64	No	60	3	No	0	0	No	0
19-32	Chickamauga Cr. Grnwy (south) 500ft	0	B	No	1994	63	No	60	3	No	0	0	No	0
19-33	Chickamauga Cr. Grnwy (south) 550ft	0	B	No	1994	62	No	60	3	No	0	0	No	0
19-34	Chickamauga Cr. Grnwy (south) 600ft	0	B	No	1994	62	No	59	3	No	0	0	No	0
19-35	Chickamauga Cr. Grnwy (south) 650ft	0	B	No	1994	61	No	59	3	No	0	0	No	0
19-36	Chickamauga Cr. Grnwy (south) 700ft	0	B	No	1994	60	No	58	2	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>19 (Chickamauga Greenway)</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

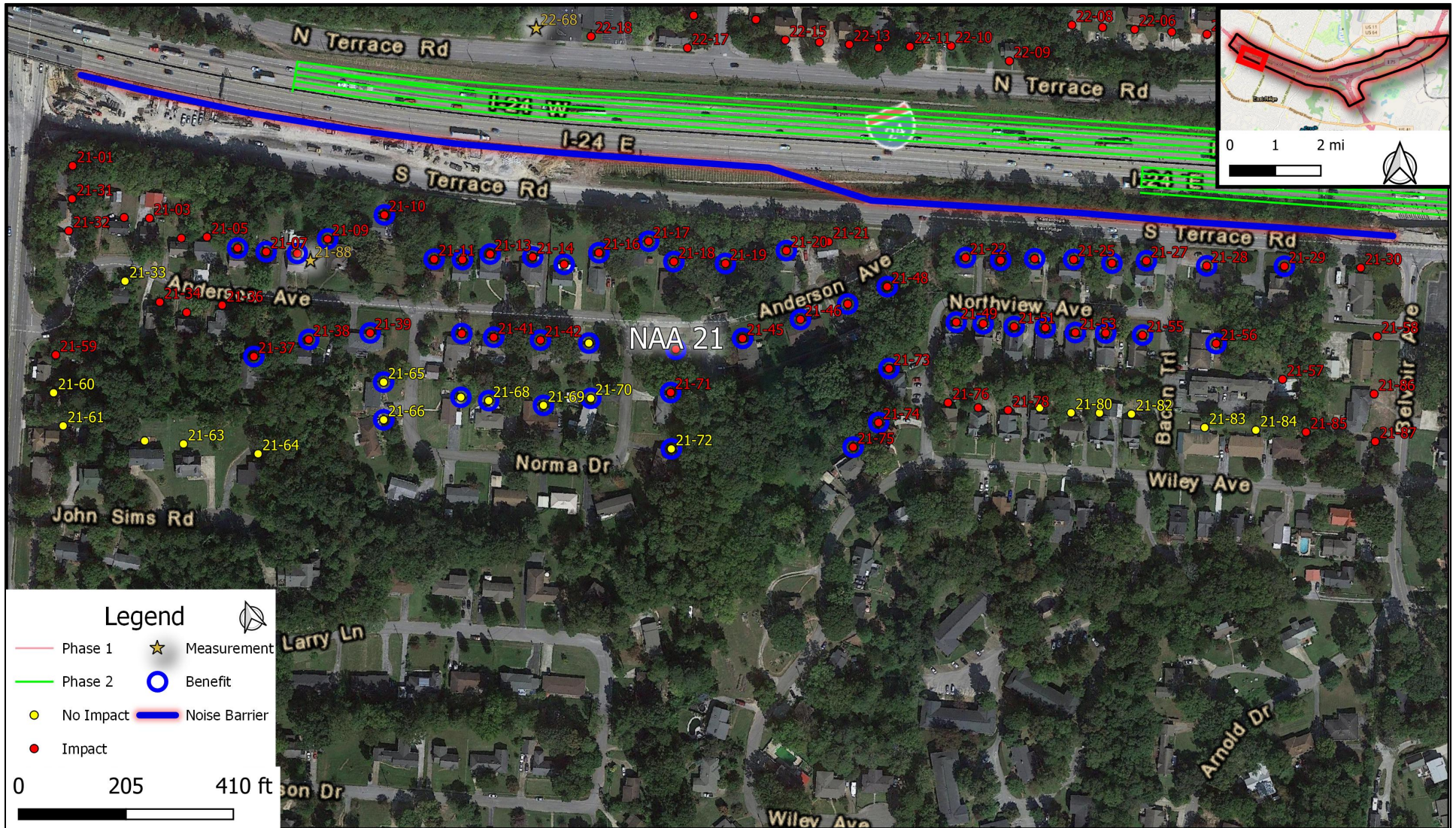
<b>Length (ft)</b>	<b>1,544</b>
<b>Area (ft<sup>2</sup>)</b>	<b>17,942</b>
<b>Average Height (ft)</b>	<b>11.6</b>
<b>Number of Benefited Residences</b>	<b>3.7</b>
<b>Area Per Benefited Residence</b>	<b>4,849</b>
<b>Allowable Area per Benefited Residence</b>	<b>950</b>
<b>Reasonable?</b>	<b>No</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Top Elevation (ft) <sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
<b>North Side</b>							
SB 410+60	SP 407+70	281	F (EOP)	682	692	10	2,810
SP 407+70	SB 406+00	162	F (EOP)	682	694	12	1,944
SB 406+00	SB 404+00	197	F (EOP)	682	694	12	2,364
SB 404+00	end	100	F (EOP)	682	692	10	1,000
<b>South Side</b>							
NB 404+00	NB 406+00	204	F (EOP)	682	692	10	2,040
NB 406+00	NB 407+70	161	F (EOP)	682	696	14	2,254
NB 407+70	NB 410+60	285	F (EOP)	682	696	14	3,990
NB 410+60	end	154	F (EOP)	682	692	10	1,540

(1) F = free standing barrier. EOP = edge of pavement; ROW = right-of-way; T = transition between EOP and ROW.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 21



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	21
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	32
# of 1st row impacted and benefited	23
% of 1st row impacts receiving 5 dB	72%
Feasible?	Yes
Benefited Residences	60
Equivalent Benefits	0
Total Benefits	60
Benefited, first-row, receiving 7dB	15
Benefited, first-row	23
NRDG	65.2%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
21-01	514 S Germantown	1	B	Yes	1950	75	Yes	72	2	No	0	0	No	0
21-02	3611 Anderson	1	B	Yes	1950	71	Yes	69	1	No	0	0	No	0
21-03	3613 Anderson	1	B	Yes	1950	71	Yes	70	2	No	0	0	No	0
21-04	3615 Anderson	1	B	Yes	1950	71	Yes	68	3	No	0	0	No	0
21-05	3617 Anderson	1	B	Yes	2018	71	Yes	67	4	No	0	0	No	0
21-06	3619 Anderson	1	B	Yes	1950	71	Yes	65	6	Yes	1	1	No	0
21-07	3621 Anderson	1	B	Yes	1950	71	Yes	63	8	Yes	1	1	Yes	1
21-08	3701 Anderson	1	B	Yes	1950	71	Yes	63	8	Yes	1	1	Yes	1
21-09	3703 Anderson	1	B	Yes	1930	71	Yes	64	8	Yes	1	1	Yes	1
21-10	3705 Anderson	1	B	Yes	1950	68	Yes	64	5	Yes	1	1	No	0
21-11	3707 Anderson	1	B	Yes	1940	71	Yes	63	8	Yes	1	1	Yes	1
21-12	3709 Anderson	1	B	Yes	1950	71	Yes	63	8	Yes	1	1	Yes	1
21-13	3711 Anderson	1	B	Yes	1945	70	Yes	63	7	Yes	1	1	Yes	1
21-14	3713 Anderson	1	B	Yes	1935	69	Yes	62	7	Yes	1	1	Yes	1
21-15	3715 Anderson	1	B	Yes	1951	69	Yes	62	7	Yes	1	1	Yes	1
21-16	3717 Anderson	1	B	Yes	1930	69	Yes	63	7	Yes	1	1	Yes	1
21-17	3719 Anderson	1	B	Yes	1936	69	Yes	63	6	Yes	1	1	No	0
21-18	3721 Anderson	1	B	Yes	1950	68	Yes	62	7	Yes	1	1	Yes	1
21-19	3723 Anderson	1	B	Yes	1935	68	Yes	61	7	Yes	1	1	Yes	1
21-20	3727 Anderson	1	B	Yes	1947	69	Yes	63	6	Yes	1	1	No	0
21-21	3731 Anderson (triplex)	3	B	Yes	1929	67	Yes	63	4	No	0	0	No	0
21-22	3801 Northview	1	B	Yes	1946	75	Yes	69	7	Yes	1	1	Yes	1
21-23	3803 Northview	1	B	Yes	1946	75	Yes	68	7	Yes	1	1	Yes	1
21-24	3805 Northview	1	B	Yes	1946	75	Yes	68	7	Yes	1	1	Yes	1
21-25	3807 Northview	1	B	Yes	1945	75	Yes	69	7	Yes	1	1	Yes	1
21-26	3809 Northview	1	B	Yes	1940	74	Yes	68	6	Yes	1	1	No	0
21-27	3811 Northview	1	B	Yes	1939	74	Yes	69	6	Yes	1	1	No	0
21-28	520 Bacon	1	B	Yes	1947	74	Yes	69	6	Yes	1	1	No	0
21-29	3904 S. Terrace	1	B	Yes	1920	76	Yes	70	6	Yes	1	1	No	0
21-30	601 Belvoir	1	B	Yes	1957	74	Yes	71	3	No	0	0	No	0
21-31	516 S Germantown	1	B	No	1950	68	Yes	67	1	No	0	0	No	0
21-32	518 S Germantown	1	B	No	1950	66	Yes	66	1	No	0	0	No	0
21-33	3610 Anderson	1	B	No	1940	63	No	63	0	No	0	0	No	0
21-34	3612 Anderson	1	B	No	1948	66	Yes	65	1	No	0	0	No	0
21-35	3616 Anderson	1	B	No	1948	68	Yes	66	2	No	0	0	No	0
21-36	3618 Anderson	1	B	No	1940	70	Yes	66	4	No	0	0	No	0
21-37	3700 Anderson	1	B	No	1930	68	Yes	63	5	Yes	1	0	No	0
21-38	3702 Anderson	1	B	No	1949	68	Yes	62	6	Yes	1	0	No	0
21-39	3704 Anderson	1	B	No	1960	69	Yes	62	8	Yes	1	0	No	0
21-40	3710 Anderson	1	B	No	1956	69	Yes	60	9	Yes	1	0	No	0
21-41	3712 Anderson	1	B	No	1955	69	Yes	60	9	Yes	1	0	No	0
21-42	3714 Anderson	1	B	No	1957	68	Yes	59	9	Yes	1	0	No	0
21-43	3716 Anderson	1	B	No	1957	65	No	57	8	Yes	1	0	No	0
21-44	3720 Anderson	1	B	No	1957	68	Yes	59	9	Yes	1	0	No	0
21-45	3734/3736/3738/3740 Anderson (4units)	4	B	No	1969	69	Yes	61	9	Yes	4	0	No	0
21-46	3744/3748 Anderson (duplex)	2	B	No	1979	70	Yes	62	8	Yes	2	0	No	0
21-47	3752 Anderson	1	B	No	1955	70	Yes	62	8	Yes	1	0	No	0
21-48	3756/3758 Anderson (duplex)	2	B	No	1960	72	Yes	65	7	Yes	2	0	No	0
21-49	3800 Northview	1	B	No	1935	73	Yes	68	5	Yes	1	0	No	0
21-50	3802 Northview	1	B	No	1935	73	Yes	68	5	Yes	1	0	No	0
21-51	3804 Northview	1	B	No	1929	72	Yes	67	6	Yes	1	0	No	0
21-52	3806 Northview	1	B	No	1930	72	Yes	66	6	Yes	1	0	No	0
21-53	3808 Northview	1	B	No	1935	71	Yes	65	6	Yes	1	0	No	0
21-54	3810 Northview	1	B	No	1930	70	Yes	65	6	Yes	1	0	No	0
21-55	3812 Northview	1	B	No	1935	69	Yes	64	5	Yes	1	0	No	0
21-56	600/602 Bacon (duplex)	2	B	No	1963	70	Yes	65	5	Yes	2	0	No	0
21-57	Snooty Fox Apts Pool	0	C	No	1968	70	Yes	67	3	No	0	0	No	0
21-58	603 Belvoir	1	B	No	1950	70	Yes	69	1	No	0	0	No	0
21-59	604 S Germantown	1	B	No	1940	66	Yes	66	0	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	21
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	32
# of 1st row impacted and benefited	23
% of 1st row impacts receiving 5 dB	72%
Feasible?	Yes
Benefited Residences	60
Equivalent Benefits	0
Total Benefits	60
Benefited, first-row, receiving 7dB	15
Benefited, first-row	23
NRDG	65.2%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
21-60	606 S Germantown	1	B	No	1940	65	No	65	0	No	0	0	No	0
21-61	608 S Germantown	1	B	No	1930	64	No	64	0	No	0	0	No	0
21-62	3617 John Sims	1	B	No	1996	65	No	64	1	No	0	0	No	0
21-63	3619 John Sims	1	B	No	1996	64	No	63	1	No	0	0	No	0
21-64	3627 John Sims	1	B	No	1961	60	No	60	1	No	0	0	No	0
21-65	3702 Norma	1	B	No	1955	65	No	57	8	Yes	1	0	No	0
21-66	3704 Norma	1	B	No	1956	56	No	51	5	Yes	1	0	No	0
21-67	3707 Norma	1	B	No	1957	61	No	54	8	Yes	1	0	No	0
21-68	3709 Norma	1	B	No	1952	61	No	53	8	Yes	1	0	No	0
21-69	3711 Norma	1	B	No	1956	61	No	53	8	Yes	1	0	No	0
21-70	3713 Norma	1	B	No	1956	62	No	54	8	Yes	1	0	No	0
21-71	3718 Norma	1	B	No	1957	66	Yes	56	9	Yes	1	0	No	0
21-72	3716 Norma	1	B	No	1957	65	No	56	10	Yes	1	0	No	0
21-73	3797 Northview	1	B	No	2009	70	Yes	65	6	Yes	1	0	No	0
21-74	3713 Northview	1	B	No	1937	69	Yes	64	5	Yes	1	0	No	0
21-75	3711 Northview	1	B	No	1955	69	Yes	64	5	Yes	1	0	No	0
21-76	3801 Wiley	1	B	No	1930	69	Yes	65	4	No	0	0	No	0
21-77	3803 Wiley	1	B	No	1928	68	Yes	64	4	No	0	0	No	0
21-78	3805 Wiley	1	B	No	1930	66	Yes	63	3	No	0	0	No	0
21-79	3807 Wiley	1	B	No	1930	65	No	62	3	No	0	0	No	0
21-80	3809 Wiley	1	B	No	1930	65	No	62	3	No	0	0	No	0
21-81	3811 Wiley	1	B	No	1930	64	No	61	3	No	0	0	No	0
21-82	3813 Wiley	1	B	No	1925	64	No	61	3	No	0	0	No	0
21-83	3903 Wiley	1	B	No	1963	64	No	62	2	No	0	0	No	0
21-84	3905 Wiley	1	B	No	1963	65	No	63	2	No	0	0	No	0
21-85	3907 Wiley	1	B	No	1963	66	Yes	64	2	No	0	0	No	0
21-86	605 Belvoir	1	B	No	1950	68	Yes	68	1	No	0	0	No	0
21-87	607 Belvoir	1	B	No	1955	67	Yes	67	0	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>21</b>
<b>Description:</b>	<b>Barrier at Frontage/Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

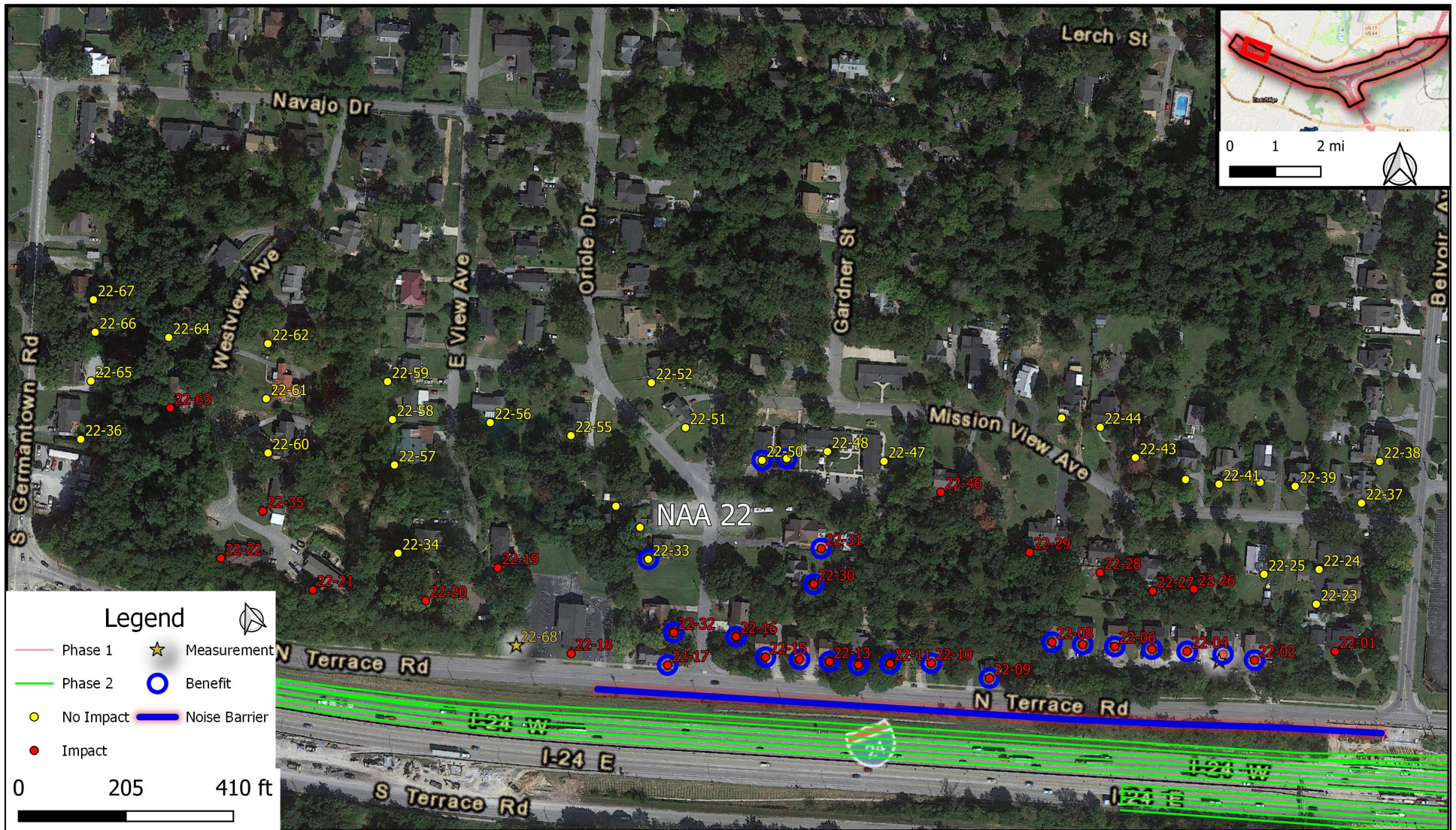
<b>Length (ft)</b>	<b>2,532</b>
<b>Area (ft<sup>2</sup>)</b>	<b>42,284</b>
<b>Average Height (ft)</b>	<b>16.7</b>
<b>Number of Benefited Residences</b>	<b>60</b>
<b>Area Per Benefited Residence</b>	<b>705</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

From	To	Segment Length (ft.)	Wall Type <sup>(1)</sup>	Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft)	Barrier Area (sq ft)
STA 74+80 [EOP]	STA 76+00 [EOP]	119	F(EOP)	802	816	14	1,666
STA 76+00 [EOP]	STA 77+00 [EOP]	101	F(EOP)	803	817	14	1,414
STA 77+00 [EOP]	STA 78+00 [EOP]	101	F(EOP)	805	819	14	1,414
STA 78+00 [EOP]	STA 79+00 [EOP]	101	F(EOP)	806	822	16	1,616
STA 79+00 [EOP]	STA 80+00 [EOP]	101	F(EOP)	804	822	18	1,818
STA 80+00 [EOP]	STA 81+00 [EOP]	101	F(EOP)	802	820	18	1,818
STA 81+00 [EOP]	STA 82+00 [EOP]	101	F(EOP)	800	818	18	1,818
STA 82+00 [EOP]	STA 83+00 [EOP]	101	F(EOP)	799	817	18	1,818
STA 83+00 [EOP]	STA 84+00 [EOP]	101	F(EOP)	796	814	18	1,818
STA 84+00 [EOP]	STA 85+00 [EOP]	100	F(EOP)	793	813	20	2,000
STA 85+00 [EOP]	STA 86+00 [EOP]	100	F(EOP)	789	809	20	2,000
STA 86+00 [EOP]	STA 87+00 [EOP]	100	F(EOP)	785	803	18	1,800
STA 87+00 [EOP]	STA 88+00 [T]	100	F (T)	780	798	18	1,800
STA 88+00 [T]	STA 89+00 [T]	103	F (T)	775	793	18	1,854
STA 89+00 [T]	STA 90+00 [F]	103	F (F)	767	783	16	1,648
STA 90+00 [F]	STA 91+00 [F]	100	F (F)	772	788	16	1,600
STA 91+00 [F]	STA 92+00 [F]	100	F (F)	771	787	16	1,600
STA 92+00 [F]	STA 93+00 [F]	100	F (F)	770	786	16	1,600
STA 93+00 [F]	STA 94+00 [F]	100	F (F)	767	783	16	1,600
STA 94+00 [F]	STA 95+00 [F]	99	F (F)	764	782	18	1,782
STA 95+00 [F]	STA 96+00 [F]	100	F (F)	758	776	18	1,800
STA 96+00 [F]	STA 97+00 [F]	100	F (F)	753	769	16	1,600
STA 97+00 [F]	STA 98+00 [F]	100	F (F)	747	763	16	1,600
STA 98+00 [F]	STA 99+00 [F]	100	F (F)	741	755	14	1,400
STA 99+00 [F]	end	100	F (F)	738	752	14	1,400

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 22, Option 1



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	22 (Option 1)
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	29
# of 1st row impacted and benefited	25
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	43
Equivalent Benefits	0
Total Benefits	43
Benefited, first-row, receiving 7dB	15
Benefited, first-row	25
NRDG	60.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
22-01	405 Belvoir	1	B	Yes	1940	71	Yes	67	4	No	0	0	No	0
22-02	3839 N Terrace (duplex)	2	B	Yes	1991	73	Yes	67	7	Yes	2	2	Yes	2
22-03	3837 N Terrace (duplex)	2	B	Yes	1991	75	Yes	68	7	Yes	2	2	Yes	2
22-04	3835 N Terrace (duplex)	2	B	Yes	1991	75	Yes	68	7	Yes	2	2	Yes	2
22-05	3833 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	6	Yes	2	2	No	0
22-06	3831 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	5	Yes	2	2	No	0
22-07	3829 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	5	Yes	2	2	No	0
22-08	3827 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	5	Yes	2	2	No	0
22-09	3815 N Terrace	1	B	Yes	1945	76	Yes	70	7	Yes	1	1	Yes	1
22-10	3813 N Terrace	1	B	Yes	1955	75	Yes	68	7	Yes	1	1	Yes	1
22-11	3811 N Terrace	1	B	Yes	1950	76	Yes	69	7	Yes	1	1	Yes	1
22-12	3809 N Terrace	1	B	Yes	1950	76	Yes	70	6	Yes	1	1	No	0
22-13	3807 N Terrace (duplex)	2	B	Yes	1991	76	Yes	69	7	Yes	2	2	Yes	2
22-14	3805 N Terrace (duplex)	2	B	Yes	1991	76	Yes	68	7	Yes	2	2	Yes	2
22-15	3803 N Terrace (duplex)	2	B	Yes	1991	76	Yes	68	7	Yes	2	2	Yes	2
22-16	408 Oriole (duplex)	2	B	No	1991	70	Yes	64	6	Yes	2	0	No	0
22-17	3709 N Terrace	1	B	Yes	1950	77	Yes	72	6	Yes	1	1	No	0
22-18	North Terrace Ch of Christ (D)	0	D	No	1975	52	Yes	51	1	No	0	0	No	0
22-19	378 Paden	1	B	No	1960	66	Yes	65	1	No	0	0	No	0
22-20	385 Paden	1	B	Yes	1940	68	Yes	67	1	No	0	0	No	0
22-21	416 Cloudland	1	B	Yes	1955	76	Yes	76	0	No	0	0	No	0
22-22	418 Cloudland	1	B	Yes	1954	75	Yes	75	0	No	0	0	No	0
22-23	403 Belvoir	1	B	No	1924	59	No	58	0	No	0	0	No	0
22-24	401 Belvoir	1	B	No	1940	57	No	57	1	No	0	0	No	0
22-25	3832 Mission View	1	B	No	1940	63	No	62	1	No	0	0	No	0
22-26	3828 Mission View	1	B	No	1940	69	Yes	66	3	No	0	0	No	0
22-27	3826 Mission View	1	B	No	1936	69	Yes	67	3	No	0	0	No	0
22-28	3824 Mission View	1	B	No	1940	70	Yes	68	3	No	0	0	No	0
22-29	3822 Mission View	1	B	No	1945	71	Yes	69	3	No	0	0	No	0
22-30	406 Oriole	1	B	No	1940	66	Yes	60	5	Yes	1	0	No	0
22-31	404 Oriole	1	B	No	1940	66	Yes	58	8	Yes	1	0	No	0
22-32	409 Oriole	1	B	No	1947	72	Yes	65	7	Yes	1	0	No	0
22-33	405 Oriole	1	B	No	1928	63	No	58	5	Yes	1	0	No	0
22-34	377 Paden	1	B	No	1930	59	No	57	2	No	0	0	No	0
22-35	414 Cloudland	1	B	No	1950	67	Yes	66	0	No	0	0	No	0
22-36	412 S Germantown	1	B	No	1950	65	No	65	0	No	0	0	No	0
22-37	325 Belvoir	1	B	No	1937	59	No	59	0	No	0	0	No	0
22-38	317 Belvoir	1	B	No	1950	61	No	61	0	No	0	0	No	0
22-39	3835 Mission View	1	B	No	1939	55	No	55	0	No	0	0	No	0
22-40	3833 Mission View	1	B	No	1940	55	No	54	0	No	0	0	No	0
22-41	3831 Mission View	1	B	No	1940	54	No	53	1	No	0	0	No	0
22-42	3829 Mission View	1	B	No	1940	51	No	51	1	No	0	0	No	0
22-43	3827 Mission View	1	B	No	1940	52	No	52	1	No	0	0	No	0
22-44	3825 Mission View	1	B	No	1955	56	No	55	1	No	0	0	No	0
22-45	3823 Mission View	1	B	No	1930	62	No	60	1	No	0	0	No	0
22-46	3818 Mission View	1	B	No	1950	69	Yes	66	3	No	0	0	No	0
22-47	3808 Mission View (4 units)	4	B	No	2000	62	No	59	3	No	0	0	No	0
22-48	3806 Mission View (4 units)	4	B	No	2000	64	No	59	4	No	0	0	No	0
22-49	3804 Mission View (7 units)	7	B	No	1930	63	No	58	6	Yes	7	0	No	0
22-50	3802 Mission View (5 units)	5	B	No	1930	63	No	58	5	Yes	5	0	No	0
22-51	318 Mission View	1	B	No	1939	61	No	57	4	No	0	0	No	0
22-52	316 Mission View	1	B	No	1950	61	No	57	4	No	0	0	No	0
22-53	403 Oriole	1	B	No	1935	61	No	57	4	No	0	0	No	0
22-54	401 Oriole	1	B	No	1930	60	No	56	4	No	0	0	No	0
22-55	319 Oriole	1	B	No	1930	58	No	54	4	No	0	0	No	0
22-56	3700 Mission View	1	B	No	1955	55	No	53	3	No	0	0	No	0
22-57	361 Paden	1	B	No	1949	49	No	47	2	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	22 (Option 1)
Description:	Barrier at Frontage
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	29
# of 1st row impacted and benefited	25
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	43
Equivalent Benefits	0
Total Benefits	43
Benefited, first-row, receiving 7dB	15
Benefited, first-row	25
NRDG	60.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
22-58	353 Paden	1	B	No	1950	52	No	49	3	No	0	0	No	0
22-59	345 Paden	1	B	No	1950	53	No	51	3	No	0	0	No	0
22-60	412 Cloudland	1	B	No	1952	63	No	62	0	No	0	0	No	0
22-61	410 Cloudland	1	B	No	1953	63	No	63	0	No	0	0	No	0
22-62	408 Cloudland	1	B	No	1950	64	No	64	0	No	0	0	No	0
22-63	409 Cloudland	1	B	No	1951	67	Yes	67	0	No	0	0	No	0
22-64	407 Cloudland	1	B	No	1959	65	No	65	0	No	0	0	No	0
22-65	410 S Germantown	1	B	No	1942	64	No	64	0	No	0	0	No	0
22-66	408 S Germantown	1	B	No	1947	64	No	64	0	No	0	0	No	0
22-67	406 S Germantown	1	B	No	1946	63	No	63	0	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>22 (Option 1)</b>
<b>Description:</b>	<b>Barrier at Frontage</b>
<b>Design Year:</b>	<b>2045</b>

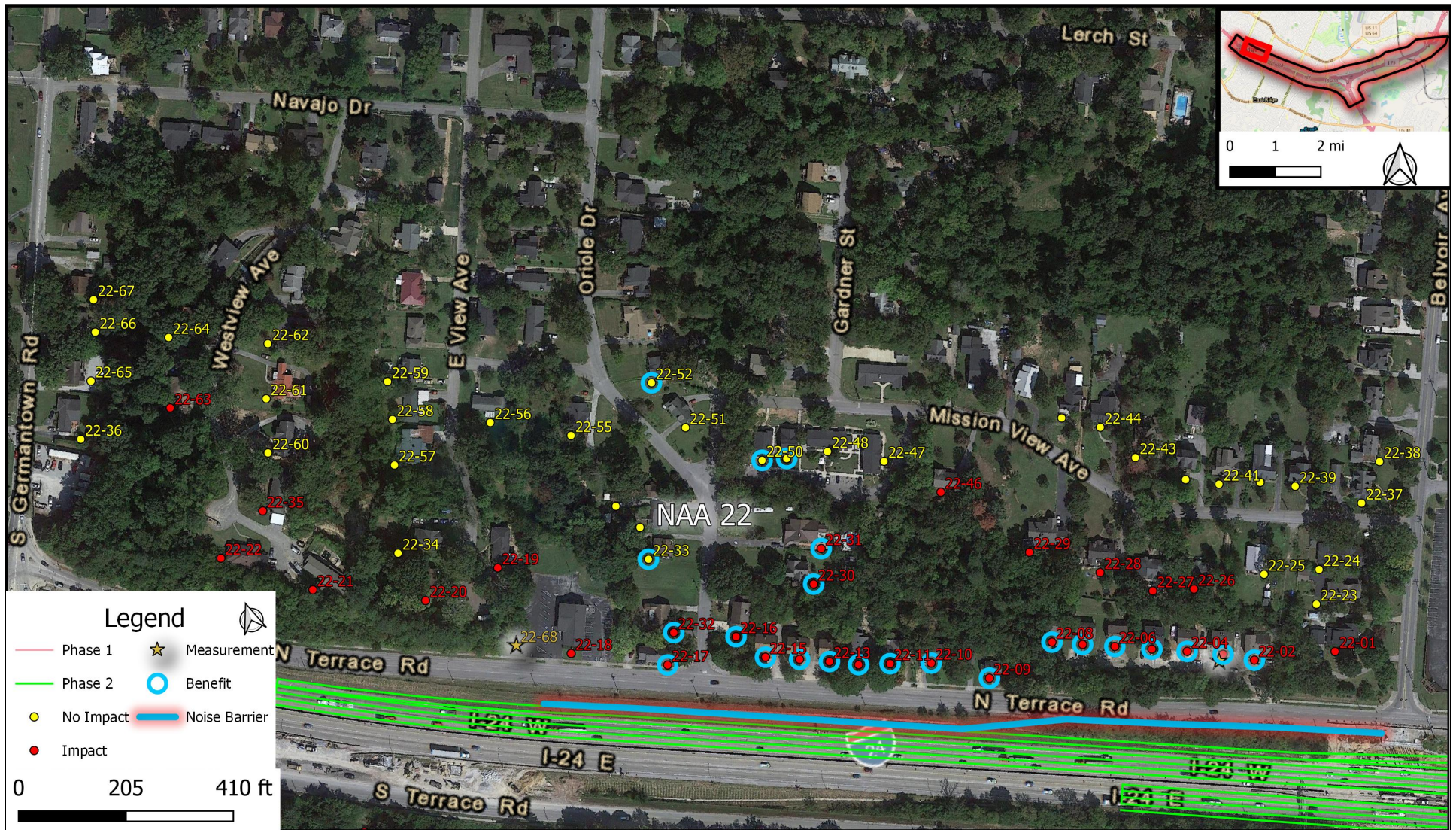
<b>Length (ft)</b>	<b>1,498</b>
<b>Area (ft<sup>2</sup>)</b>	<b>26,968</b>
<b>Average Height (ft)</b>	<b>18.0</b>
<b>Number of Benefited Residences</b>	<b>43</b>
<b>Area Per Benefited Residence</b>	<b>627</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,700</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 100+00 [F]	STA 99+00 [F]	100	F (F)	752	770	18	1,800
STA 99+00 [F]	STA 98+00 [F]	100	F (F)	751	771	20	2,000
STA 98+00 [F]	STA 97+00 [F]	100	F (F)	750	770	20	2,000
STA 97+00 [F]	STA 96+00 [F]	100	F (F)	750	770	20	2,000
STA 96+00 [F]	STA 95+00 [F]	100	F (F)	751	771	20	2,000
STA 95+00 [F]	STA 94+00 [F]	100	F (F)	751	771	20	2,000
STA 94+00 [F]	STA 93+00 [F]	100	F (F)	751	771	20	2,000
STA 93+00 [F]	STA 92+00 [F]	100	F (F)	752	770	18	1,800
STA 92+00 [F]	STA 91+00 [F]	100	F (F)	753	771	18	1,800
STA 91+00 [F]	STA 90+00 [F]	100	F (F)	757	773	16	1,600
STA 90+00 [F]	STA 89+00 [F]	100	F (F)	761	777	16	1,600
STA 89+00 [F]	STA 88+00 [F]	100	F (F)	768	784	16	1,600
STA 88+00 [F]	STA 87+00 [F]	99	F (F)	774	790	16	1,584
STA 87+00 [F]	STA 86+00 [F]	99	F (F)	780	796	16	1,584
STA 86+00 [F]	end	100	F (F)	787	803	16	1,600

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 22, Option 2



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	22 (Option 2)
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	29
# of 1st row impacted and benefited	25
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	44
Equivalent Benefits	0
Total Benefits	44
Benefited, first-row, receiving 7dB	16
Benefited, first-row	25
NRDG	64.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
22-01	405 Belvoir	1	B	Yes	1940	71	Yes	67	4	No	0	0	No	0
22-02	3839 N Terrace (duplex)	2	B	Yes	1991	73	Yes	67	7	Yes	2	2	Yes	2
22-03	3837 N Terrace (duplex)	2	B	Yes	1991	75	Yes	68	7	Yes	2	2	Yes	2
22-04	3835 N Terrace (duplex)	2	B	Yes	1991	75	Yes	68	7	Yes	2	2	Yes	2
22-05	3833 N Terrace (duplex)	2	B	Yes	1991	75	Yes	68	6	Yes	2	2	No	0
22-06	3831 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	6	Yes	2	2	No	0
22-07	3829 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	6	Yes	2	2	No	0
22-08	3827 N Terrace (duplex)	2	B	Yes	1991	75	Yes	69	6	Yes	2	2	No	0
22-09	3815 N Terrace	1	B	Yes	1945	76	Yes	70	7	Yes	1	1	Yes	1
22-10	3813 N Terrace	1	B	Yes	1955	75	Yes	68	7	Yes	1	1	Yes	1
22-11	3811 N Terrace	1	B	Yes	1950	76	Yes	69	7	Yes	1	1	Yes	1
22-12	3809 N Terrace	1	B	Yes	1950	76	Yes	69	7	Yes	1	1	Yes	1
22-13	3807 N Terrace (duplex)	2	B	Yes	1991	76	Yes	69	7	Yes	2	2	Yes	2
22-14	3805 N Terrace (duplex)	2	B	Yes	1991	76	Yes	69	7	Yes	2	2	Yes	2
22-15	3803 N Terrace (duplex)	2	B	Yes	1991	76	Yes	69	7	Yes	2	2	Yes	2
22-16	408 Oriole (duplex)	2	B	No	1991	70	Yes	65	5	Yes	2	0	No	0
22-17	3709 N Terrace	1	B	Yes	1950	77	Yes	72	5	Yes	1	1	No	0
22-18	North Terrace Ch of Christ (D)	0	D	No	1975	52	Yes	49	3	No	0	0	No	0
22-19	378 Paden	1	B	No	1960	66	Yes	64	2	No	0	0	No	0
22-20	385 Paden	1	B	Yes	1940	68	Yes	67	1	No	0	0	No	0
22-21	416 Cloudland	1	B	Yes	1955	76	Yes	76	0	No	0	0	No	0
22-22	418 Cloudland	1	B	Yes	1954	75	Yes	75	0	No	0	0	No	0
22-23	403 Belvoir	1	B	No	1924	59	No	58	0	No	0	0	No	0
22-24	401 Belvoir	1	B	No	1940	57	No	57	1	No	0	0	No	0
22-25	3832 Mission View	1	B	No	1940	63	No	61	1	No	0	0	No	0
22-26	3828 Mission View	1	B	No	1940	69	Yes	66	3	No	0	0	No	0
22-27	3826 Mission View	1	B	No	1936	69	Yes	66	3	No	0	0	No	0
22-28	3824 Mission View	1	B	No	1940	70	Yes	67	3	No	0	0	No	0
22-29	3822 Mission View	1	B	No	1945	71	Yes	68	3	No	0	0	No	0
22-30	406 Oriole	1	B	No	1940	66	Yes	60	6	Yes	1	0	No	0
22-31	404 Oriole	1	B	No	1940	66	Yes	58	8	Yes	1	0	No	0
22-32	409 Oriole	1	B	No	1947	72	Yes	66	6	Yes	1	0	No	0
22-33	405 Oriole	1	B	No	1928	63	No	58	5	Yes	1	0	No	0
22-34	377 Paden	1	B	No	1930	59	No	57	2	No	0	0	No	0
22-35	414 Cloudland	1	B	No	1950	67	Yes	66	0	No	0	0	No	0
22-36	412 S Germantown	1	B	No	1950	65	No	65	0	No	0	0	No	0
22-37	325 Belvoir	1	B	No	1937	59	No	59	0	No	0	0	No	0
22-38	317 Belvoir	1	B	No	1950	61	No	61	0	No	0	0	No	0
22-39	3835 Mission View	1	B	No	1939	55	No	55	0	No	0	0	No	0
22-40	3833 Mission View	1	B	No	1940	55	No	54	0	No	0	0	No	0
22-41	3831 Mission View	1	B	No	1940	54	No	53	1	No	0	0	No	0
22-42	3829 Mission View	1	B	No	1940	51	No	51	1	No	0	0	No	0
22-43	3827 Mission View	1	B	No	1940	52	No	51	1	No	0	0	No	0
22-44	3825 Mission View	1	B	No	1955	56	No	55	1	No	0	0	No	0
22-45	3823 Mission View	1	B	No	1930	62	No	60	2	No	0	0	No	0
22-46	3818 Mission View	1	B	No	1950	69	Yes	65	3	No	0	0	No	0
22-47	3808 Mission View Ave (4 units)	4	B	No	2000	62	No	59	3	No	0	0	No	0
22-48	3806 Mission View Ave (4 units)	4	B	No	2000	64	No	60	3	No	0	0	No	0
22-49	3804 Mission View (7 units)	7	B	No	1930	63	No	58	5	Yes	7	0	No	0
22-50	3802 Mission View (5 units)	5	B	No	1930	63	No	58	6	Yes	5	0	No	0
22-51	318 Mission View Ave	1	B	No	1939	61	No	57	4	No	0	0	No	0
22-52	316 Mission View Ave	1	B	No	1950	61	No	56	5	Yes	1	0	No	0
22-53	403 Oriole	1	B	No	1935	61	No	57	4	No	0	0	No	0
22-54	401 Oriole	1	B	No	1930	60	No	56	4	No	0	0	No	0
22-55	319 Oriole	1	B	No	1930	58	No	54	4	No	0	0	No	0
22-56	3700 Mission View	1	B	No	1955	55	No	52	3	No	0	0	No	0
22-57	361 Paden	1	B	No	1949	49	No	47	2	No	0	0	No	0
22-58	353 Paden	1	B	No	1950	52	No	48	3	No	0	0	No	0
22-59	345 Paden	1	B	No	1950	53	No	50	3	No	0	0	No	0



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	22 (Option 2)
Description:	Barrier at Frontage/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	29
# of 1st row impacted and benefited	25
% of 1st row impacts receiving 5 dB	86%
Feasible?	Yes
Benefited Residences	44
Equivalent Benefits	0
Total Benefits	44
Benefited, first-row, receiving 7dB	16
Benefited, first-row	25
NRDG	64.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
22-60	412 Cloudland	1	B	No	1952	63	No	62	0	No	0	0	No	0
22-61	410 Cloudland	1	B	No	1953	63	No	63	0	No	0	0	No	0
22-62	408 Cloudland	1	B	No	1950	64	No	64	0	No	0	0	No	0
22-63	409 Cloudland	1	B	No	1951	67	Yes	67	0	No	0	0	No	0
22-64	407 Cloudland	1	B	No	1959	65	No	65	0	No	0	0	No	0
22-65	410 S Germantown	1	B	No	1942	64	No	64	0	No	0	0	No	0
22-66	408 S Germantown	1	B	No	1947	64	No	64	0	No	0	0	No	0
22-67	406 S Germantown	1	B	No	1946	63	No	63	0	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>22 (Option 2)</b>
<b>Description:</b>	<b>Barrier at Frontage/Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

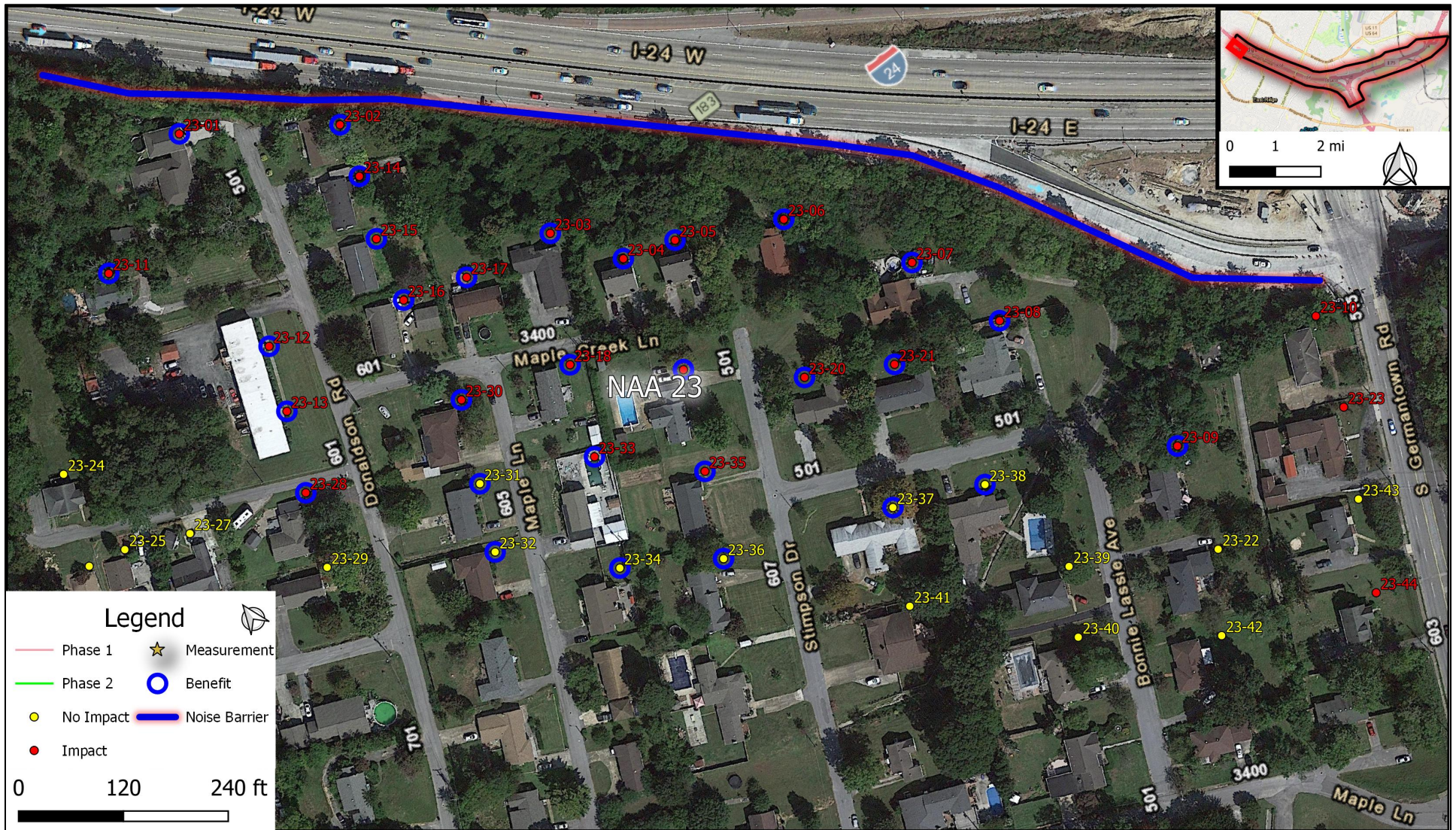
<b>Length (ft)</b>	<b>1,602</b>
<b>Area (ft<sup>2</sup>)</b>	<b>24,238</b>
<b>Average Height (ft)</b>	<b>15.1</b>
<b>Number of Benefited Residences</b>	<b>44</b>
<b>Area Per Benefited Residence</b>	<b>551</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,700</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 100+00 [F]	STA 99+00 [F]	100	F (F)	752	770	18	1,800
STA 99+00 [F]	STA 98+00 [F]	100	F (F)	751	769	18	1,800
STA 98+00 [F]	STA 97+00 [F]	100	F (F)	750	768	18	1,800
STA 97+00 [F]	STA 96+00 [F]	100	F (F)	750	768	18	1,800
STA 96+00 [F]	STA 95+00 [F]	100	F (F)	751	769	18	1,800
STA 95+00 [F]	STA 94+00 [F]	100	F (F)	751	771	20	2,000
STA 94+00 [F]	STA 93+00 [T]	101	F (T)	751	771	20	2,020
STA 93+00 [T]	STA 92+00 [EOP]	101	F (T)	749	767	18	1,818
STA 92+00 [EOP]	STA 91+00 [EOP]	100	F (EOP)	756	768	12	1,200
STA 91+00 [EOP]	STA 90+00 [EOP]	100	F (EOP)	761	773	12	1,200
STA 90+00 [EOP]	STA 89+00 [EOP]	100	F (EOP)	766	778	12	1,200
STA 89+00 [EOP]	STA 88+00 [EOP]	100	F (EOP)	770	782	12	1,200
STA 88+00 [EOP]	STA 87+00 [EOP]	100	F (EOP)	775	787	12	1,200
STA 87+00 [EOP]	STA 86+00 [EOP]	100	F (EOP)	780	792	12	1,200
STA 86+00 [EOP]	STA 85+00 [EOP]	100	F (EOP)	785	797	12	1,200
STA 85+00 [EOP]	end	100	F (EOP)	789	799	10	1,000

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 23



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	23
Description:	Barrier at ROW/Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	10
# of 1st row impacted and benefited	9
% of 1st row impacts receiving 5 dB	90%
Feasible?	Yes
Benefited Residences	37
Equivalent Benefits	0
Total Benefits	37
Benefited, first-row, receiving 7dB	9
Benefited, first-row	9
NRDG	100.0%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
23-01	505 Donaldson	1	B	Yes	1955	79	Yes	69	10	Yes	1	1	Yes	1
23-02	506 Donaldson	1	B	Yes	1957	80	Yes	67	12	Yes	1	1	Yes	1
23-03	3403 Maple Creek (duplex)	2	B	Yes	1984	71	Yes	63	8	Yes	2	2	Yes	2
23-04	3045 Maple Creek	1	B	Yes	1984	70	Yes	62	8	Yes	1	1	Yes	1
23-05	3407 Maple Creek	1	B	Yes	1983	71	Yes	62	8	Yes	1	1	Yes	1
23-06	500 Stimpson	1	B	Yes	1930	71	Yes	63	8	Yes	1	1	Yes	1
23-07	506 Bonnie Lassie	1	B	Yes	1936	70	Yes	62	8	Yes	1	1	Yes	1
23-08	504 Bonnie Lassie	1	B	Yes	1950	69	Yes	62	7	Yes	1	1	Yes	1
23-09	602 Bonnie Lassie	1	B	No	1948	66	Yes	62	5	Yes	1	0	No	0
23-10	529 S Germantown	1	B	Yes	1954	71	Yes	68	2	No	0	0	No	0
23-11	507 Donaldson	1	B	No	1930	66	Yes	62	5	Yes	1	0	No	0
23-12	513 Donaldson (units #1-4)	4	B	No	1955	67	Yes	61	6	Yes	4	0	No	0
23-13	513 Donaldson (units #5-8)	4	B	No	1956	66	Yes	61	5	Yes	4	0	No	0
23-14	508 Donaldson	1	B	No	1959	75	Yes	65	9	Yes	1	0	No	0
23-15	510 Donaldson	1	B	No	1959	71	Yes	63	8	Yes	1	0	No	0
23-16	512 Donaldson	1	B	No	1959	68	Yes	62	7	Yes	1	0	No	0
23-17	600 Maple Creek	1	B	No	1957	69	Yes	62	7	Yes	1	0	No	0
23-18	602 Donaldson	1	B	No	1955	67	Yes	60	7	Yes	1	0	No	0
23-19	603 Donaldson	1	B	No	1950	68	Yes	61	8	Yes	1	0	No	0
23-20	500 Bonnie Lassie	1	B	No	1953	68	Yes	60	7	Yes	1	0	No	0
23-21	502 Bonnie Lassie	1	B	No	1956	68	Yes	60	8	Yes	1	0	No	0
23-22	604 Bonnie Lassie	1	B	No	1957	64	No	61	3	No	0	0	No	0
23-23	531 S Germantown	1	B	No	1954	69	Yes	68	1	No	0	0	No	0
23-28	601 Donaldson	1	B	No	1950	66	Yes	61	5	Yes	1	0	No	0
23-29	3315 Castle Ave	1	B	No	1945	63	No	59	4	No	0	0	No	0
23-30	601 Maple Ln	1	B	No	1965	67	Yes	61	6	Yes	1	0	No	0
23-31	603 Maple Ln	1	B	No	1955	64	No	58	6	Yes	1	0	No	0
23-32	605 Maple Ln	1	B	No	1954	64	No	59	5	Yes	1	0	No	0
23-33	604 Maple Ln	1	B	No	1955	67	Yes	60	7	Yes	1	0	No	0
23-34	606 Maple Ln	1	B	No	1955	65	No	60	5	Yes	1	0	No	0
23-35	605 Stimpson	1	B	No	1950	66	Yes	60	6	Yes	1	0	No	0
23-36	607 Stimpson	1	B	No	1950	64	No	60	5	Yes	1	0	No	0
23-37	501 Bonnie Lassie	1	B	No	1950	65	No	61	5	Yes	1	0	No	0
23-38	503 Bonnie Lassie	1	B	No	1955	65	No	60	5	Yes	1	0	No	0
23-39	603 Bonnie Lassie	1	B	No	1960	65	No	62	4	No	0	0	No	0
23-40	605 Bonnie Lassie	1	B	No	1951	65	No	62	3	No	0	0	No	0
23-41	606 Stimpson	1	B	No	1950	63	No	59	4	No	0	0	No	0
23-42	606 Bonnie Lassie	1	B	No	1940	62	No	60	2	No	0	0	No	0
23-43	601 S Germantown	1	B	No	1954	65	No	64	1	No	0	0	No	0
23-44	603 S Germantown	1	B	No	1946	63	No	62	1	No	0	0	No	0



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>23</b>
<b>Description:</b>	<b>Barrier at ROW/Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

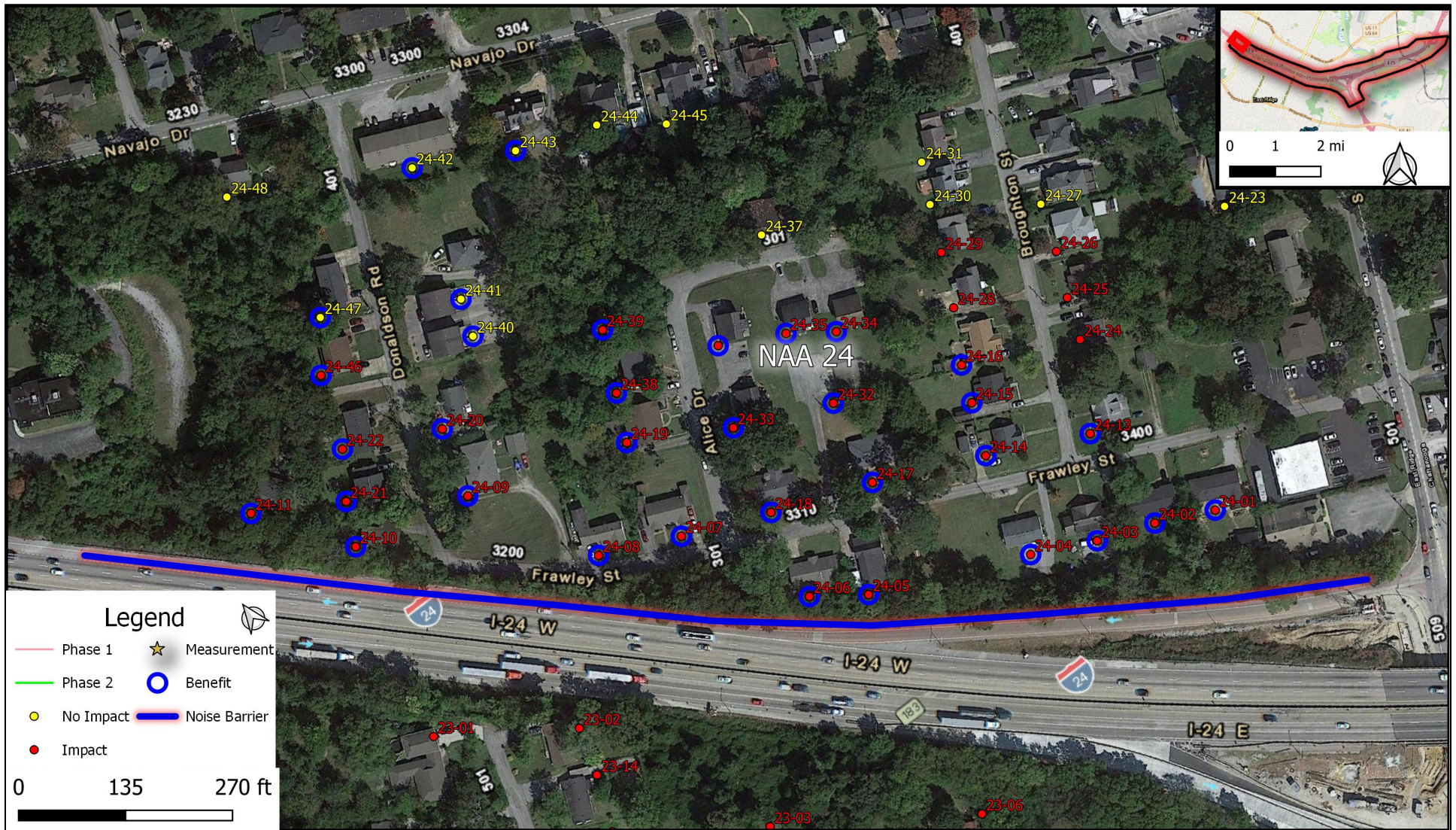
<b>Length (ft)</b>	<b>1,499</b>
<b>Area (ft<sup>2</sup>)</b>	<b>19,396</b>
<b>Average Height (ft)</b>	<b>12.9</b>
<b>Number of Benefited Residences</b>	<b>37</b>
<b>Area Per Benefited Residence</b>	<b>524</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 59+00	STA 60+00	101	F (ROW)	836	850	14	1,414
STA 60+00	STA 61+00	101	F (ROW)	832	846	14	1,414
STA 61+00	STA 62+00	100	F (ROW)	826	840	14	1,400
STA 62+00	STA 63+00	101	F (T)	820	834	14	1,414
STA 63+00	STA 64+00	100	F (EOP)	812	826	14	1,400
STA 64+00	STA 66+00	201	F (EOP)	809	823	14	2,814
STA 66+00	STA 68+00	201	F (EOP)	803	815	12	2,412
STA 68+00	STA 69+00	98	F (EOP)	798	810	12	1,176
STA 69+00	STA 70+00 (Ramp)	104	F (EOP)	798	810	12	1,248
STA 70+00 (Ramp)	STA 71+00 (Ramp)	99	F (EOP)	797	809	12	1,188
STA 71+00 (Ramp)	STA 71+70 (Ramp)	99	F (EOP)	795	807	12	1,188
STA 71+70 (Ramp)	STA 72+00 (Ramp)	49	F (EOP)	793	805	12	588
STA 72+00 (Ramp)	STA 72+50 (Ramp)	48	F (EOP)	792	804	12	576
STA 72+50 (Ramp)	STA 73+00 (Ramp)	49	F (EOP)	791	803	12	588
STA 73+00 (Ramp)	end	48	F (EOP)	791	803	12	576

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.





Proposed Noise Barrier: Noise Analysis Area 24



Project:	I-75 and I-24 Interchange Phase 2
PIN:	114174.01
Noise Analysis Area:	24
Description:	Barrier at Shoulder
Design Year:	2045
Alternative:	Build
Roadway - date of construction	1962
Roadway - date of widening	N/A

# of 1st row impacts	14
# of 1st row impacted and benefited	14
% of 1st row impacts receiving 5 dB	100%
Feasible?	Yes
Benefited Residences	56
Equivalent Benefits	0
Total Benefits	56
Benefited, first-row, receiving 7dB	13
Benefited, first-row	14
NRDG	92.9%

Receiver #	Receiver	Number of Residences	FHWA Category	First Row? (Yes/No)	Development Date	No Barrier L <sub>eq</sub> (dBA)	Impacted?	With Barrier L <sub>eq</sub> (dBA)	IL (dBA)	Benefited?	Number of Benefits	Noise Reduction Design Goal		
												First Row Benefits	Receiving 7 dB?	Receiving 7 dB
24-01	3404 Frawley St	1	B	Yes	1949	70	Yes	65	5	Yes	1	1	No	0
24-02	3402 Frawley St	1	B	Yes	1950	70	Yes	64	7	Yes	1	1	Yes	1
24-03	3400 Frawley St	1	B	Yes	1950	71	Yes	63	8	Yes	1	1	Yes	1
24-04	3320 Frawley St	1	B	Yes	1954	72	Yes	64	8	Yes	1	1	Yes	1
24-05	3316 Frawley St	1	B	Yes	1895	79	Yes	67	12	Yes	1	1	Yes	1
24-06	3314 Frawley St	1	B	Yes	1976	80	Yes	67	13	Yes	1	1	Yes	1
24-07	3307/3309 Frawley St (duplex)	2	B	Yes	1950	73	Yes	64	9	Yes	2	2	Yes	2
24-08	3303 Frawley St	1	B	Yes	1957	74	Yes	64	9	Yes	1	1	Yes	1
24-09	416 Donaldson (duplex)	2	B	Yes	1964	71	Yes	62	9	Yes	2	2	Yes	2
24-10	417 Donaldson	1	B	Yes	1977	79	Yes	67	13	Yes	1	1	Yes	1
24-11	407 Donaldson (duplex)	2	B	Yes	1995	73	Yes	65	8	Yes	2	2	Yes	2
24-13	420 Broughton	2	B	No	1947	71	Yes	66	5	Yes	2	0	No	0
24-14	421 Broughton	1	B	No	1940	73	Yes	67	6	Yes	1	0	No	0
24-15	419 Broughton	1	B	No	1948	71	Yes	66	5	Yes	1	0	No	0
24-16	417 Broughton	1	B	No	1948	71	Yes	66	5	Yes	1	0	No	0
24-17	3325/3327 Frawley St (duplex)	2	B	No	1969	74	Yes	67	7	Yes	2	0	No	0
24-18	3313 Frawley St	1	B	No	1959	75	Yes	65	10	Yes	1	0	No	0
24-19	409-411 Alice (triplex)	3	B	No	1954	70	Yes	61	9	Yes	3	0	No	0
24-20	408 Donaldson	1	B	No	1946	68	Yes	60	8	Yes	1	0	No	0
24-21	411 Donaldson (duplex)	2	B	No	1986	72	Yes	63	9	Yes	2	0	No	0
24-22	409 Donaldson	1	B	No	1950	69	Yes	62	7	Yes	1	0	No	0
24-23	405 S Germantown	1	B	No	1920	64	No	63	1	No	0	0	No	0
24-24	416 Broughton	1	B	No	1950	69	Yes	66	3	No	0	0	No	0
24-25	414 Broughton	1	B	No	1950	68	Yes	65	3	No	0	0	No	0
24-26	412 Broughton	1	B	No	1920	67	Yes	64	2	No	0	0	No	0
24-27	410 Broughton	1	B	No	1920	65	No	63	2	No	0	0	No	0
24-28	415 Broughton	1	B	No	1941	69	Yes	65	4	No	0	0	No	0
24-29	413 Broughton	1	B	No	1949	67	Yes	64	4	No	0	0	No	0
24-30	411 Broughton	1	B	No	1949	64	No	60	3	No	0	0	No	0
24-31	409 Broughton	1	B	No	1950	62	No	59	3	No	0	0	No	0
24-32	3319/3321 Frawley (duplex)	2	B	No	1985	72	Yes	66	6	Yes	2	0	No	0
24-33	406 Alice (duplex)	2	B	No	1983	72	Yes	64	8	Yes	2	0	No	0
24-34	400 Alice (duplex)	2	B	No	1985	70	Yes	64	6	Yes	2	0	No	0
24-35	402 Alice (duplex)	2	B	No	1985	70	Yes	65	6	Yes	2	0	No	0
24-36	404 Alice (duplex)	1	B	No	1984	70	Yes	63	7	Yes	1	0	No	0
24-37	387 Alice (duplex)	1	B	No	1957	64	No	60	4	No	0	0	No	0
24-38	407 Alice (duplex)	2	B	No	1956	69	Yes	60	8	Yes	2	0	No	0
24-39	405 Alice	1	B	No	1946	66	Yes	59	7	Yes	1	0	No	0
24-40	406 Donaldson (duplex)	2	B	No	1920	65	No	57	8	Yes	2	0	No	0
24-41	404 Donaldson (duplex)	2	B	No	1920	64	No	57	7	Yes	2	0	No	0
24-42	3302 Navajo (6 units)	6	B	No	1925	62	No	58	5	Yes	6	0	No	0
24-43	3304 Navajo	1	B	No	1934	62	No	57	5	Yes	1	0	No	0
24-44	3306 Navajo	1	B	No	1938	61	No	57	4	No	0	0	No	0
24-45	3308 Navajo	1	B	No	1937	59	No	56	4	No	0	0	No	0
24-46	405 Donaldson (duplex)	2	B	No	1986	67	Yes	61	6	Yes	2	0	No	0
24-47	403 Donaldson (duplex)	2	B	No	1987	65	No	61	5	Yes	2	0	No	0
24-48	3234 Navajo	1	B	No	1957	63	No	59	4	No	0	0	No	0

<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>PIN:</b>	<b>114174.01</b>
<b>Noise Analysis Area:</b>	<b>24</b>
<b>Description:</b>	<b>Barrier at Shoulder</b>
<b>Design Year:</b>	<b>2045</b>

<b>Length (ft)</b>	<b>1,627</b>
<b>Area (ft<sup>2</sup>)</b>	<b>23,840</b>
<b>Average Height (ft)</b>	<b>14.7</b>
<b>Number of Benefited Residences</b>	<b>56</b>
<b>Area Per Benefited Residence</b>	<b>426</b>
<b>Allowable Area per Benefited Residence</b>	<b>1,600</b>
<b>Reasonable?</b>	<b>Yes</b>

<b>From</b>	<b>To</b>	<b>Segment Length (ft.)</b>	<b>Wall Type <sup>(1)</sup></b>	<b>Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)</b>	<b>Barrier Area (sq ft)</b>
STA 72+00 (Ramp)	STA 71+50 (Ramp)	60	F (ROW)	776	792	16	960
STA 71+50 (Ramp)	STA 71+00 (Ramp)	60	F (ROW)	777	793	16	960
STA 71+00 (Ramp)	STA 70+50 (Ramp)	60	F (ROW)	779	795	16	960
STA 70+50 (Ramp)	STA 70+00	51	F (T)	781	797	16	816
STA 70+00	STA 69+00	101	F (EOP)	783	799	16	1,616
STA 69+00	STA 68+00	101	F (EOP)	789	805	16	1,616
STA 68+00	STA 67+00	98	F (EOP)	794	810	16	1,568
STA 67+00	STA 66+00	98	F (EOP)	797	811	14	1,372
STA 66+00	STA 64+00	199	F (EOP)	801	815	14	2,786
STA 64+00	STA 62+00	199	F (EOP)	809	823	14	2,786
STA 62+00	STA 60+00	200	F (EOP)	816	830	14	2,800
STA 60+00	STA 58+00	200	F (EOP)	823	837	14	2,800
STA 58+00	end	200	F (EOP)	830	844	14	2,800

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



**Appendix G**  
**Noise Barrier Questionnaires and Approximate Noise Barrier Locations**

## NOISE BARRIER QUESTIONNAIRE

### Noise Analysis Areas 1-4, 21, & 22

**I-75 Interchange at I-24, Phase 2 (IA) Project**  
**Hamilton County**  
**PIN # 114174.01; Project #33005-0176-44**  
**November 19, 2021**

NAME: \_\_\_\_\_

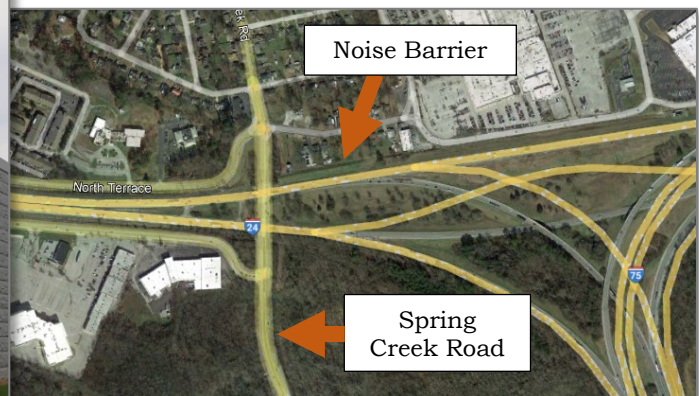
ADDRESS: \_\_\_\_\_

Do you support or oppose the construction of the noise barriers as shown on the following page?

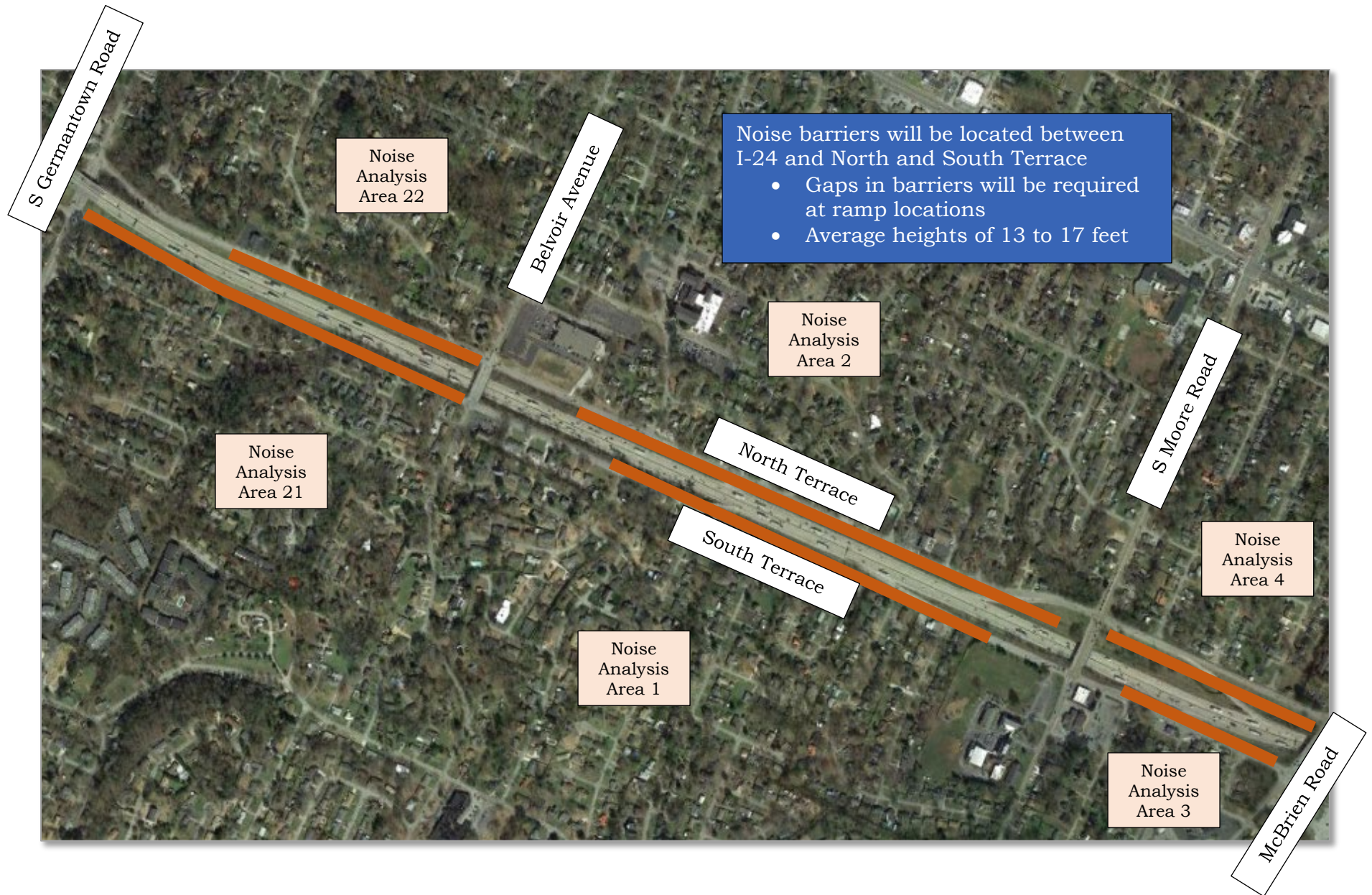
\_\_\_\_\_ Support  
\_\_\_\_\_ Oppose

### NOISE BARRIER AESTHETIC FINISH

The community side of the noise barrier will be a gray random cut stone pattern like the barrier constructed near Miller Street for Phase 1 (photo below).



## Approximate Noise Barrier Locations Along Interstate 24





## NOISE BARRIER QUESTIONNAIRE

### Midtown Ridge Apartments

**I-75 Interchange at I-24, Phase 2 (IA) Project**

**Hamilton County**

**PIN # 114174.01; Project #33005-0176-44**

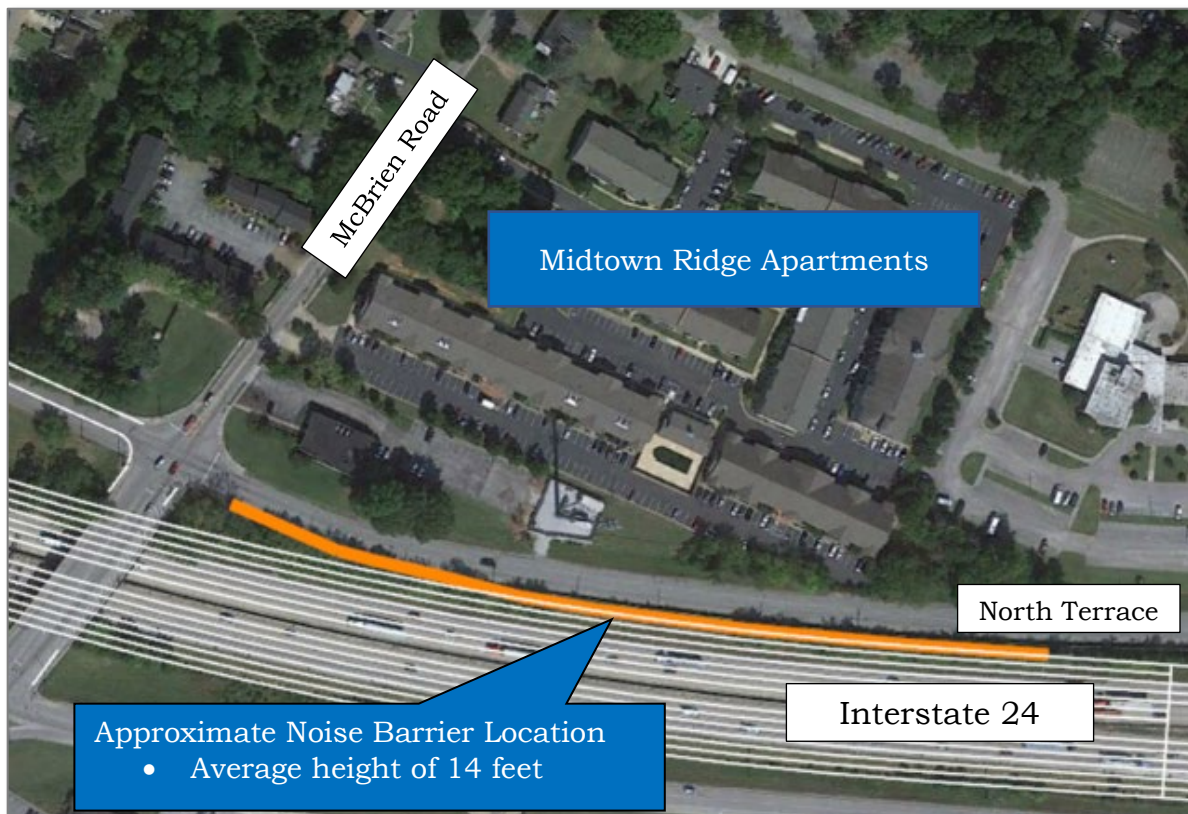
**November 19, 2021**

**NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**Do you support or oppose the construction of the noise barrier as shown below?**

\_\_\_\_\_ Support  
\_\_\_\_\_ Oppose





## NOISE BARRIER AESTHETIC FINISH

The community side of the noise barrier will be a gray random cut stone pattern like the barrier constructed near Miller Street for Phase 1 (photo below).



Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## NOISE BARRIER QUESTIONNAIRE

### Noise Analysis Area 23

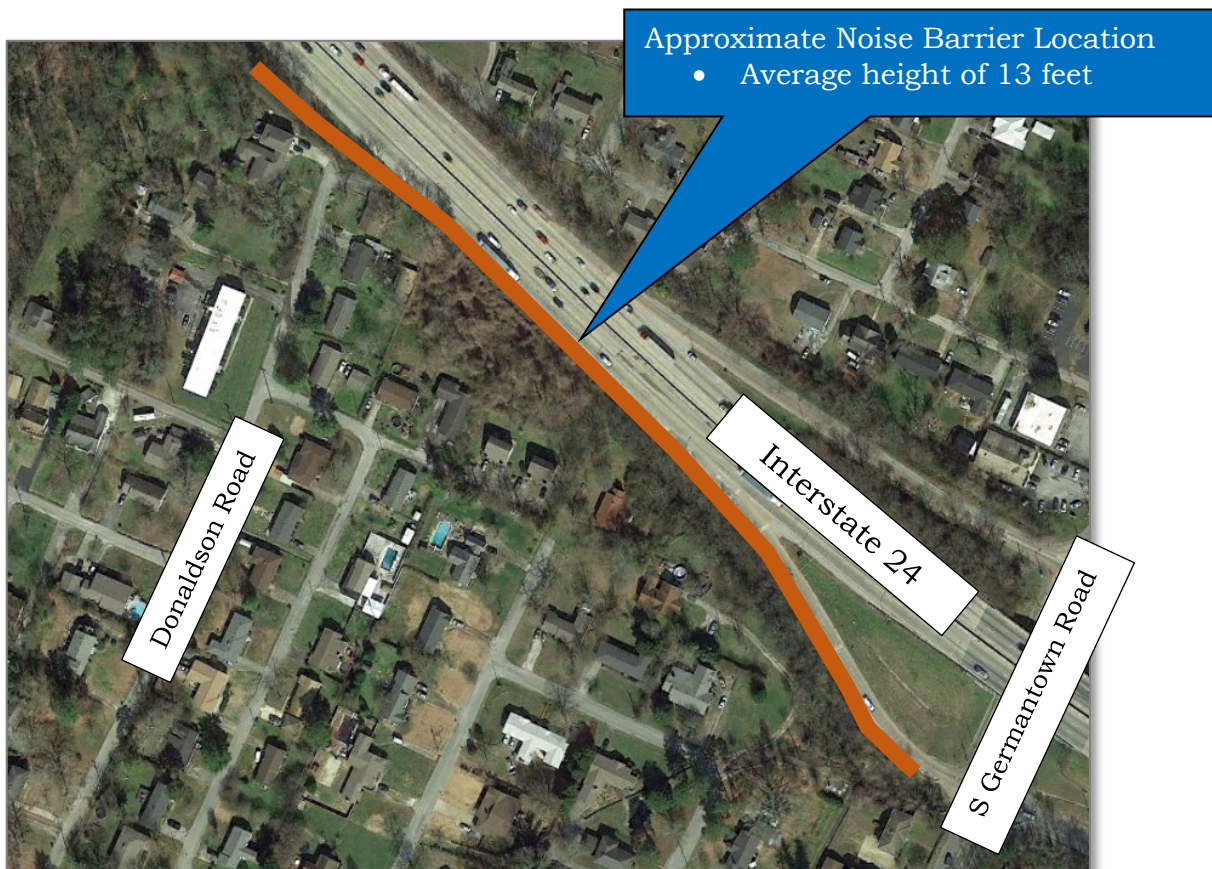
I-75 Interchange at I-24, Phase 2 (IA) Project  
Hamilton County  
PIN # 114174.01; Project #33005-0176-44  
November 19, 2021

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Do you support or oppose the construction of the noise barrier as shown below?

\_\_\_\_\_ Support  
\_\_\_\_\_ Oppose



## NOISE BARRIER AESTHETIC FINISH

The community side of the noise barrier will be a gray random cut stone pattern like the barrier constructed near Miller Street for Phase 1 (photo below).



Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## NOISE BARRIER QUESTIONNAIRE

### Noise Analysis Area 24

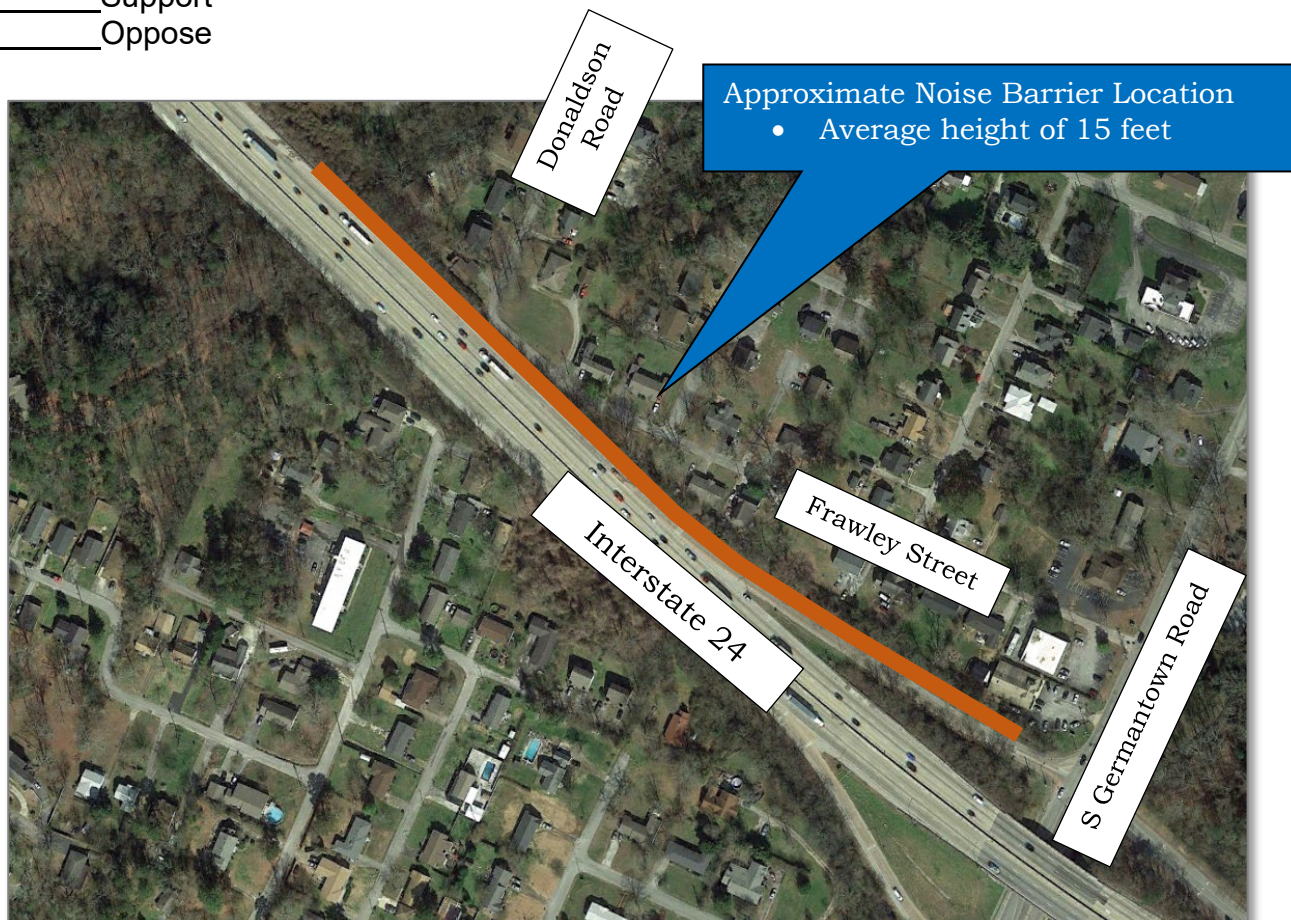
I-75 Interchange at I-24, Phase 2 (IA) Project  
Hamilton County  
PIN # 114174.01; Project #33005-0176-44  
November 19, 2021

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Do you support or oppose the construction of the noise barrier as shown below?

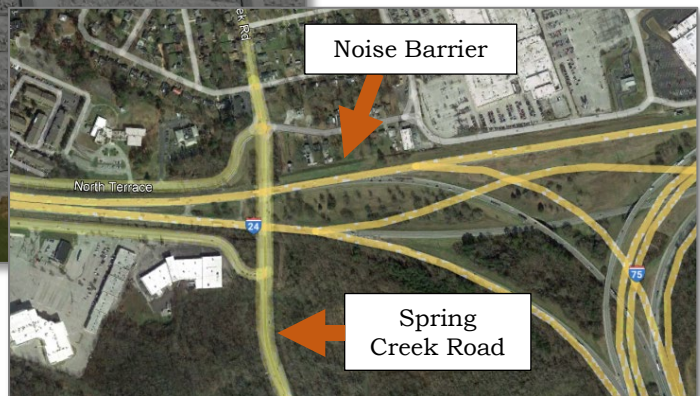
\_\_\_\_\_ Support  
\_\_\_\_\_ Oppose





## NOISE BARRIER AESTHETIC FINISH

The community side of the noise barrier will be a gray random cut stone pattern like the barrier constructed near Miller Street for Phase 1 (photo below).



Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Appendix H**  
**Noise Barrier Design Package, November 2021**

I-75 and I-24 Interchange Phase 2 (IA)  
Hamilton County  
PIN Number: 114174.01  
Project Number: 33005-0176-44  
November 2021

NOISE BARRIER LOCATIONS ALONG I-24





## EASTBOUND I-24

### NAA 23 (WEST OF GERMANTOWN RD)





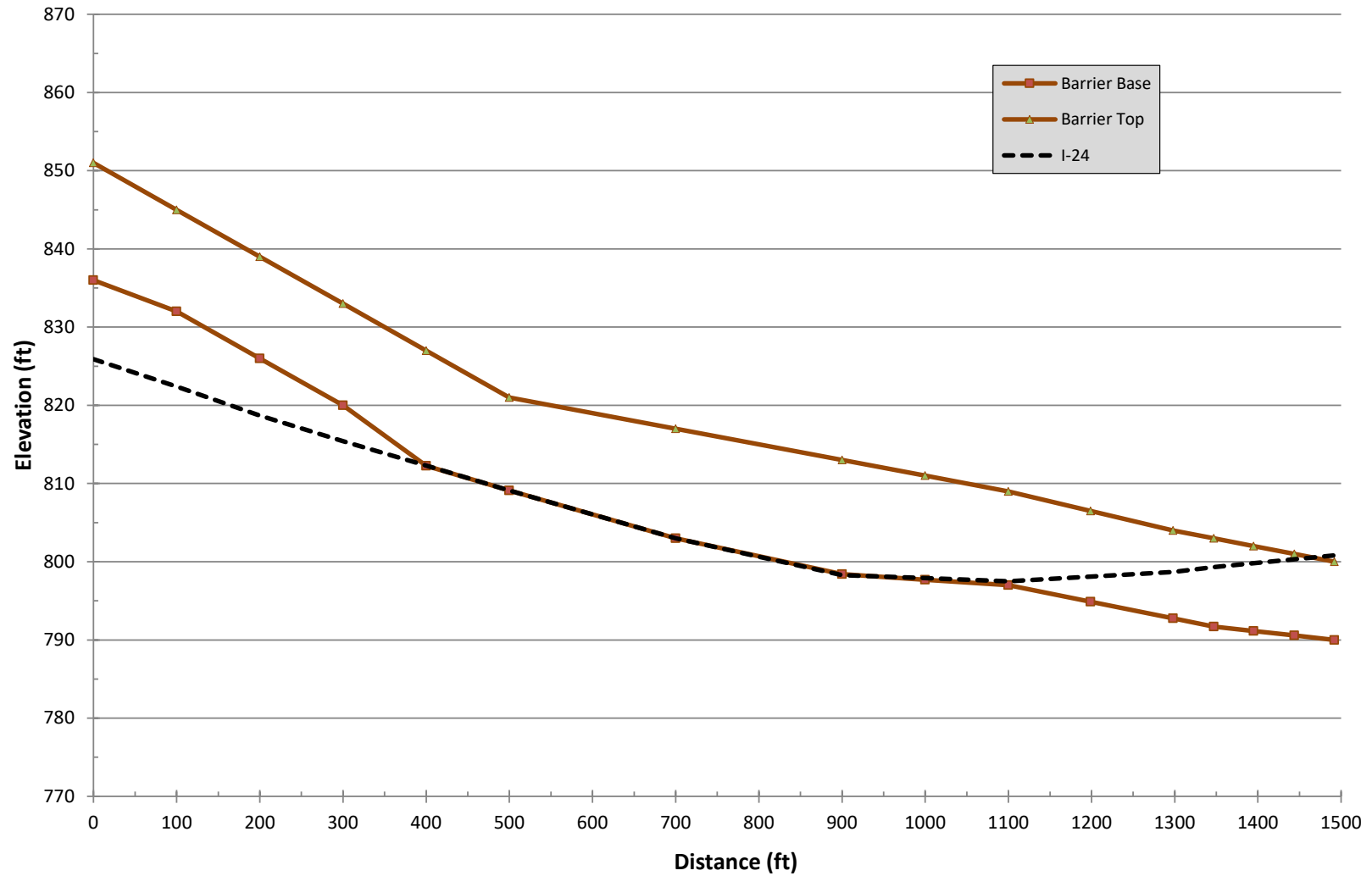
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>114174.00</b>
<b>Noise Analysis Area:</b>	<b>23</b>
<b>Design Year:</b>	<b>2045</b>
<b>Barrier Type:</b>	<b>Absorptive</b>
<b>Barrier Location:</b>	<b>ROW/Shoulder</b>
<b>Date:</b>	<b>Nov-21</b>

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 59+00	STA 60+00	100	F (ROW)	836.0	851.0	15.0	1,500
STA 60+00	STA 61+00	100	F (ROW)	832.0	845.0	13.0	1,300
STA 61+00	STA 62+00	100	F (ROW)	826.0	839.0	13.0	1,300
STA 62+00	STA 63+00	100	F (T)	820.0	833.0	13.0	1,300
STA 63+00	STA 64+00	100	F (EOP)	812.3	827.0	14.8	1,475
STA 64+00	STA 66+00	200	F (EOP)	809.1	821.0	11.9	2,380
STA 66+00	STA 68+00	200	F (EOP)	803.0	817.0	14.0	2,800
STA 68+00	STA 69+00	100	F (EOP)	798.4	813.0	14.6	1,460
STA 69+00	STA 70+00	100	F (EOP)	797.7	811.0	13.3	1,330
STA 70+00	STA 71+00	99	F (EOP)	797.0	809.0	12.0	1,188
STA 71+00	STA 71+70	99	F (EOP)	794.9	806.5	11.6	1,150
STA 71+70	STA 72+00	49	F (EOP)	792.8	804.0	11.2	551
STA 72+00	STA 72+50	48	F (EOP)	791.7	803.0	11.3	542
STA 72+50	STA 73+00	49	F (EOP)	791.1	802.0	10.9	533
STA 73+00	STA 73+50	48	F (EOP)	790.6	801.0	10.4	501
STA 73+50	Barrier End	--	F (EOP)	790.0	800.0	10.0	--
						Barrier Area (sq. ft.):	19,310
						Average Height:	12.9

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 23, Eastbound Barrier STA 59+00-73+50**



NAA 21 (GERMANTOWN ROAD TO BELVOIR AVE)



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>114174.00</b>
<b>Noise Analysis Area:</b>	<b>21</b>
<b>Design Year:</b>	<b>2045</b>
<b>Barrier Type:</b>	<b>Absorptive</b>
<b>Barrier Location:</b>	<b>Shoulder/Frontage</b>
<b>Date:</b>	<b>Nov-21</b>

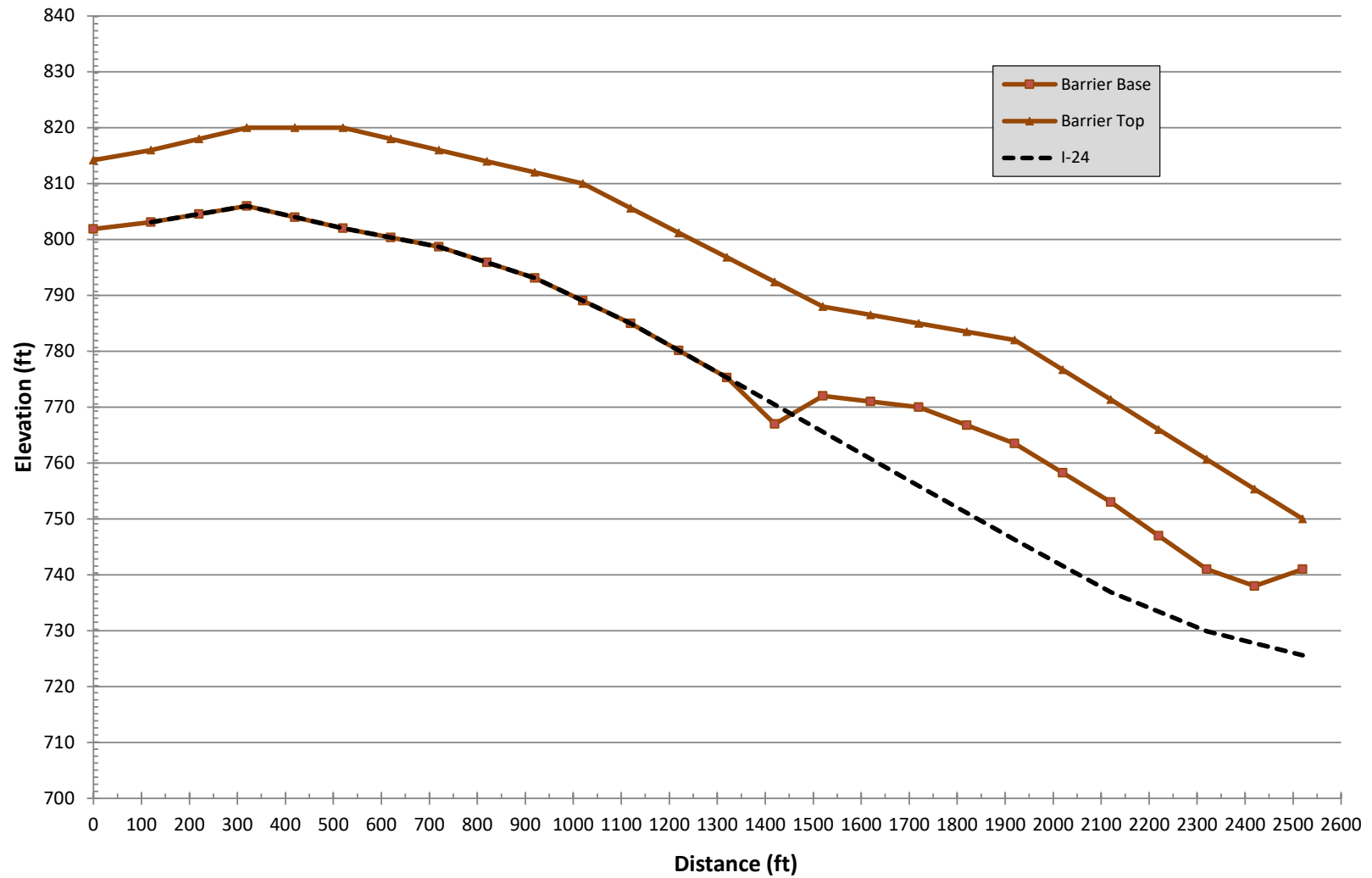
From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 74+80	STA 76+00	120	F(EOP)	801.9	814.2	12.3	1,476
STA 76+00	STA 77+00	100	F(EOP)	803.1	816.0	12.9	1,290
STA 77+00	STA 78+00	100	F(EOP)	804.6	818.0	13.5	1,345
STA 78+00	STA 79+00	100	F(EOP)	806.0	820.0	14.0	1,400
STA 79+00	STA 80+00	100	F(EOP)	804.0	820.0	16.0	1,600
STA 80+00	STA 81+00	100	F(EOP)	802.0	820.0	18.0	1,800
STA 81+00	STA 82+00	100	F(EOP)	800.4	818.0	17.7	1,765
STA 82+00	STA 83+00	100	F(EOP)	798.7	816.0	17.3	1,730
STA 83+00	STA 84+00	100	F(EOP)	795.9	814.0	18.1	1,810
STA 84+00	STA 85+00	100	F(EOP)	793.1	812.0	18.9	1,890
STA 85+00	STA 86+00	100	F(EOP)	789.1	810.0	21.0	2,095
STA 86+00	STA 87+00	100	F(EOP)	785.0	805.6	20.6	2,060
STA 87+00	STA 88+00	100	F(EOP)	780.2	801.2	21.1	2,105
STA 88+00	STA 89+00	100	F (T)	775.3	796.8	21.5	2,150
STA 89+00	STA 90+00	100	F (T)	767.0	792.4	25.4	2,540
STA 90+00	STA 91+00	100	F (F)	772.0	788.0	16.0	1,600
STA 91+00	STA 92+00	100	F (F)	771.0	786.5	15.5	1,550
STA 92+00	STA 93+00	100	F (F)	770.0	785.0	15.0	1,500
STA 93+00	STA 94+00	100	F (F)	766.8	783.5	16.8	1,675
STA 94+00	STA 95+00	100	F (F)	763.5	782.0	18.5	1,850
STA 95+00	STA 96+00	100	F (F)	758.3	776.7	18.4	1,842
STA 96+00	STA 97+00	100	F (F)	753.0	771.3	18.3	1,833
STA 97+00	STA 98+00	100	F (F)	747.0	766.0	19.0	1,900
STA 98+00	STA 99+00	100	F (F)	741.0	760.7	19.7	1,967
STA 99+00	STA 100+00	100	F (F)	738.0	755.3	17.3	1,733
STA 100+00	<b>Barrier End</b>	---	F (F)	741.0	750.0	9.0	---
		<b>Length (ft.):</b>	<b>2,520</b>			<b>Barrier Area (sq. ft.):</b>	<b>44,506</b>
						<b>Average Height:</b>	<b>17.7</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 21, Eastbound Barrier STA 74+80-100+00**



## NAA 1 (BELVOIR AVE TO S MOORE RD)

### OPTION #1 (FRONTAGE)



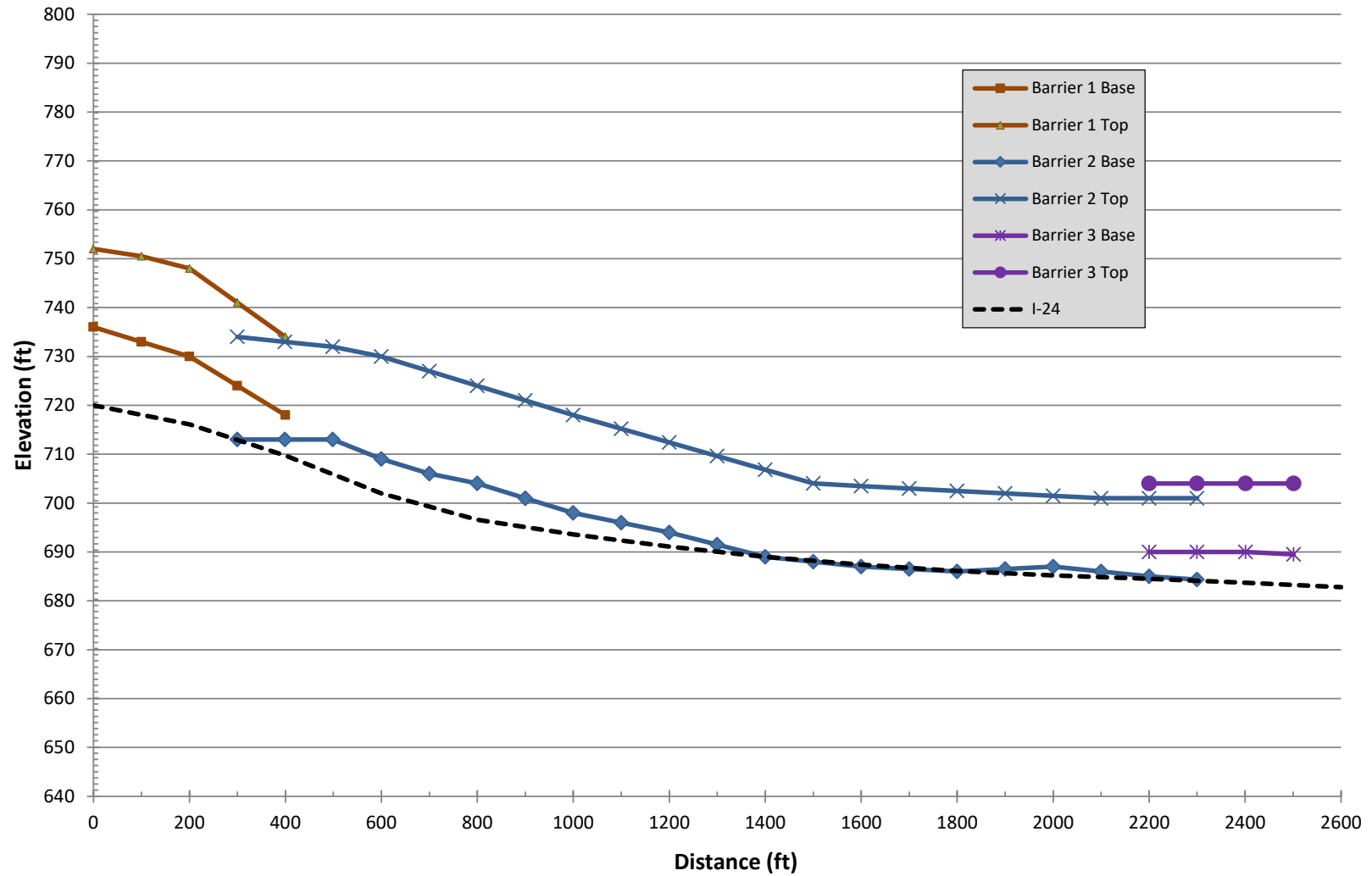
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>114174.00</b>
<b>Noise Analysis Area:</b>	<b>1 (Option 1)</b>
<b>Design Year:</b>	<b>2045</b>
<b>Barrier Type:</b>	<b>Absorptive</b>
<b>Barrier Location:</b>	<b>Frontage</b>
<b>Date:</b>	<b>Nov-21</b>

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 110+00	STA 111+00	100	F (F)	736.0	752.0	16.0	1,600
STA 111+00	STA 112+00	100	F (F)	733.0	750.5	17.5	1,750
STA 112+00	STA 113+00	100	F (F)	730.0	748.0	18.0	1,800
STA 113+00	STA 114+00	100	F (F)	724.0	741.0	17.0	1,700
STA 114+00	<b>Barrier End</b>	---	F (F)	718.0	734.0	16.0	---
STA 113+00	STA 114+00	99	F (F)	713.0	734.0	21.0	2,079
STA 114+00	STA 115+00	100	F (F)	713.0	733.0	20.0	2,000
STA 115+00	STA 116+00	101	F (F)	713.0	732.0	19.0	1,919
STA 116+00	STA 117+00	100	F (F)	709.0	730.0	21.0	2,100
STA 117+00	STA 118+00	100	F (F)	706.0	727.0	21.0	2,100
STA 118+00	STA 119+00	100	F (F)	704.0	724.0	20.0	2,000
STA 119+00	STA 120+00	100	F (F)	701.0	721.0	20.0	2,000
STA 120+00	STA 121+00	100	F (F)	698.0	718.0	20.0	2,000
STA 121+00	STA 122+00	100	F (F)	696.0	715.2	19.2	1,920
STA 122+00	STA 123+00	100	F (F)	694.0	712.4	18.4	1,840
STA 123+00	STA 124+00	100	F (F)	691.5	709.6	18.1	1,810
STA 124+00	STA 125+00	100	F (F)	689.0	706.8	17.8	1,780
STA 125+00	STA 126+00	100	F (F)	688.0	704.0	16.0	1,600
STA 126+00	STA 127+00	100	F (F)	687.0	703.5	16.5	1,650
STA 127+00	STA 128+00	100	F (F)	686.5	703.0	16.5	1,650
STA 128+00	STA 129+00	100	F (F)	686.0	702.5	16.5	1,650
STA 129+00	STA 130+00	100	F (F)	686.5	702.0	15.5	1,550
STA 130+00	STA 131+00	100	F (F)	687.0	701.5	14.5	1,450
STA 131+00	STA 132+00	100	F (F)	686.0	701.0	15.0	1,500
STA 132+00	STA 133+00	100	F (F)	685.0	701.0	16.0	1,600
STA 133+00	<b>Barrier End</b>	---	F (F)	684.4	701.0	16.7	---
STA 132+00	STA 133+00	100	F (F)	690.0	704.0	14.0	1,400
STA 133+00	STA 134+00	101	F (F)	690.0	704.0	14.0	1,414
STA 134+00	STA 135+00	100	F (F)	690.0	704.0	14.0	1,400
STA 135+00	<b>Barrier End</b>	---	F (F)	689.5	704.0	14.5	---
<b>Length (ft.):</b>		<b>2,701</b>			<b>Barrier Area (sq. ft.):</b>		<b>47,262</b>
					<b>Average Height:</b>		<b>17.5</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 1 Option 1, Eastbound Barrier STA 110+00-135+00**





OPTION #2 (FRONTAGE/SHOULDER)



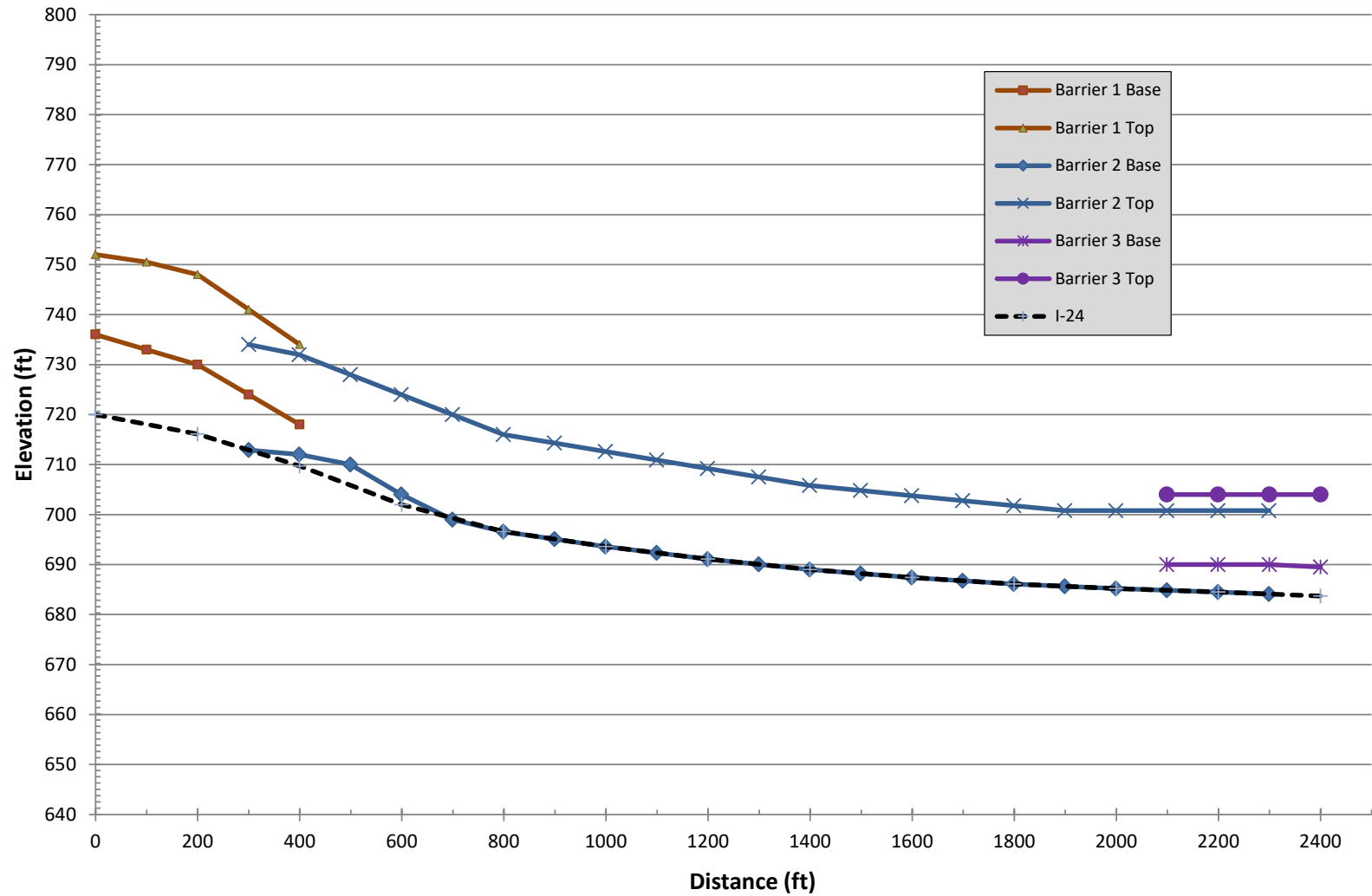
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	1 (Option 2)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Frontage/Shoulder/Retaining Wall
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 110+00	STA 111+00	100	F (F)	736.0	752.0	16.0	1,600
STA 111+00	STA 112+00	100	F (F)	733.0	750.5	17.5	1,750
STA 112+00	STA 113+00	100	F (F)	730.0	748.0	18.0	1,800
STA 113+00	STA 114+00	100	F (F)	724.0	741.0	17.0	1,700
STA 114+00	<b>Barrier End</b>	---	F (F)	718.0	734.0	16.0	---
STA 113+00	STA 114+00	99	F (R)	712.9	734.0	21.1	2,089
STA 114+00	STA 115+00	100	F (R)	712.0	732.0	20.0	2,000
STA 115+00	STA 116+00	100	F (R)	710.0	728.0	18.0	1,800
STA 116+00	STA 117+00	100	F (T)	704.0	724.0	20.0	2,000
STA 117+00	STA 118+00	100	F (EOP)	699.0	720.0	21.0	2,100
STA 118+00	STA 119+00	100	F (EOP)	696.6	716.0	19.4	1,940
STA 119+00	STA 120+00	100	F (EOP)	695.1	714.3	19.2	1,920
STA 120+00	STA 121+00	100	F (EOP)	693.6	712.6	19.0	1,900
STA 121+00	STA 122+00	100	F (EOP)	692.4	710.9	18.5	1,855
STA 122+00	STA 123+00	100	F (EOP)	691.1	709.2	18.1	1,810
STA 123+00	STA 124+00	100	F (EOP)	690.1	707.5	17.4	1,745
STA 124+00	STA 125+00	100	F (EOP)	689.0	705.8	16.8	1,680
STA 125+00	STA 126+00	100	F (EOP)	688.2	704.8	16.6	1,660
STA 126+00	STA 127+00	100	F (EOP)	687.4	703.8	16.4	1,640
STA 127+00	STA 128+00	100	F (EOP)	686.8	702.8	16.0	1,605
STA 128+00	STA 129+00	100	F (EOP)	686.1	701.8	15.7	1,570
STA 129+00	STA 130+00	100	F (EOP)	685.7	700.8	15.2	1,515
STA 130+00	STA 131+00	100	F (EOP)	685.2	700.8	15.6	1,560
STA 131+00	STA 132+00	100	F (EOP)	684.9	700.8	15.9	1,595
STA 132+00	STA 133+00	100	F (EOP)	684.5	700.8	16.3	1,630
STA 133+00	<b>Barrier End</b>	---	F (EOP)	684.1	700.8	16.7	---
STA 132+00	STA 133+00	100	F (F)	690.0	704.0	14.0	1,400
STA 133+00	STA 134+00	101	F (F)	690.0	704.0	14.0	1,414
STA 134+00	STA 135+00	100	F (F)	690.0	704.0	14.0	1,400
STA 135+00	<b>Barrier End</b>	---	F (F)	689.5	704.0	14.5	---
<b>Length (ft.):</b>		<b>2,700</b>			<b>Barrier Area (sq. ft.):</b>		<b>46,678</b>
					<b>Average Height:</b>		<b>17.3</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

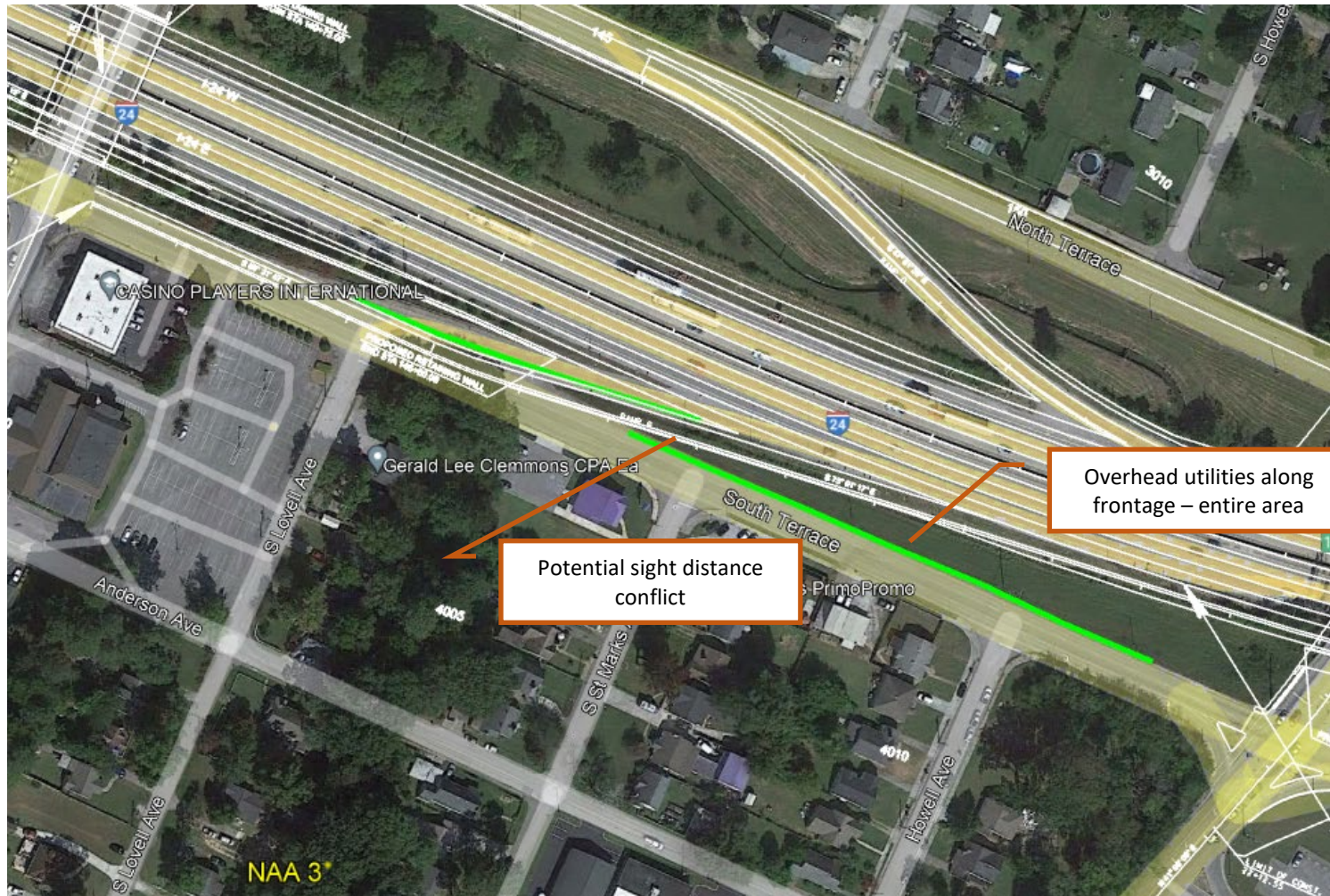
**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 1 Option 2, Eastbound Barrier STA 110+00-135+00**





## NAA 3 ( S MOORE RD TO MCBRIEN RD)

### OPTION #1 (FRONTAGE)





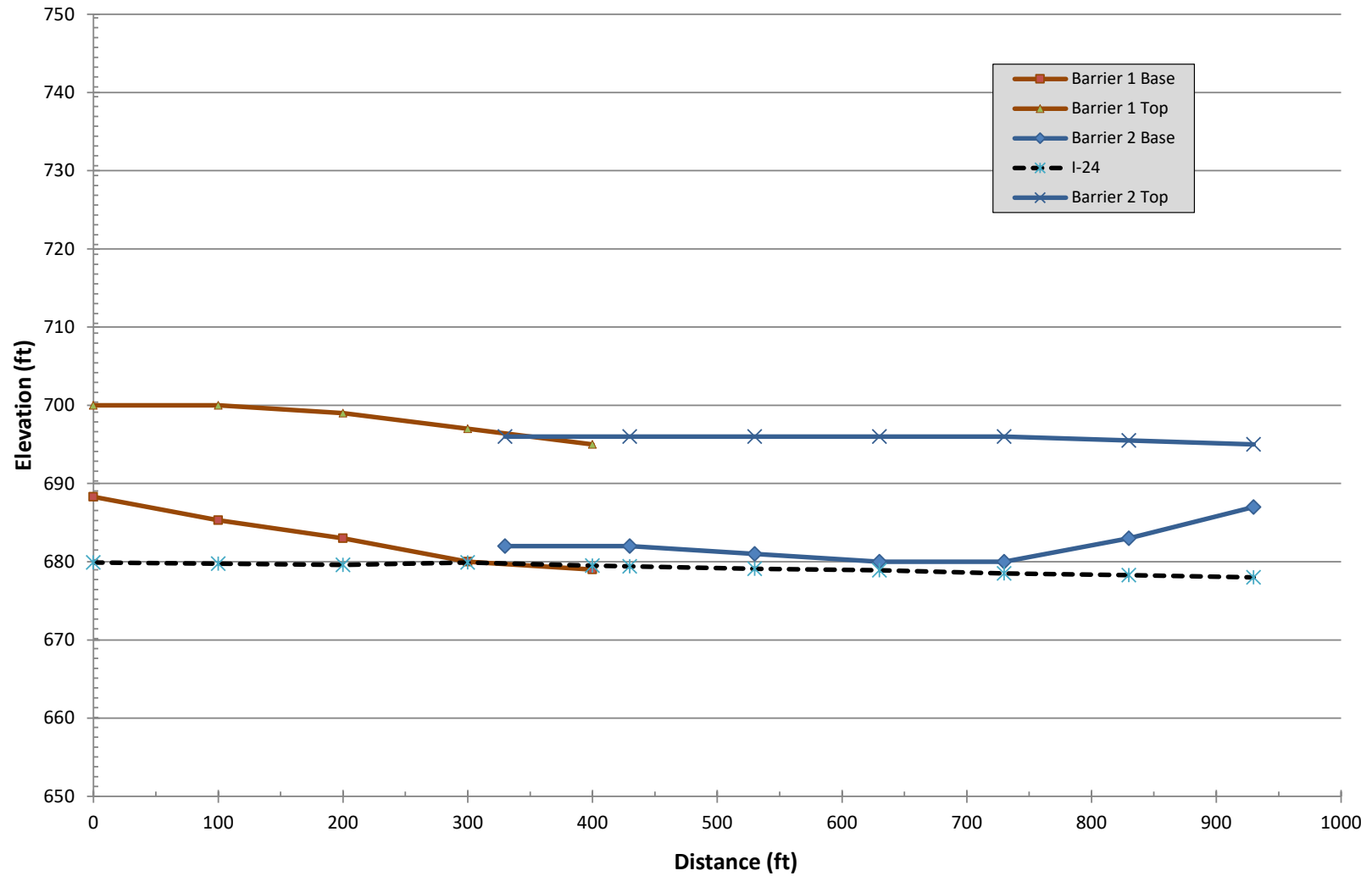
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	3 (Option 1)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Frontage
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 4003+00	STA 4004+00	100	F (F)	688.3	700.0	11.7	1,170
STA 4004+00	STA 4005+00	100	F (F)	685.3	700.0	14.7	1,470
STA 4005+00	STA 4006+00	100	F (F)	683.0	699.0	16.0	1,600
STA 4006+00	STA 4007+00	100	F (F)	680.0	697.0	17.0	1,700
STA 4007+00	<b>Barrier End</b>	---	F (F)	679.0	695.0	16.0	---
STA 147+00	STA 148+00	100	F (F)	682.0	696.0	14.0	1,400
STA 148+00	STA 149+00	100	F (F)	682.0	696.0	14.0	1,400
STA 149+00	STA 150+00	100	F (F)	681.0	696.0	15.0	1,500
STA 150+00	STA 151+00	100	F (F)	680.0	696.0	16.0	1,600
STA 151+00	STA 152+00	100	F (F)	680.0	696.0	16.0	1,600
STA 152+00	STA 153+00	100	F (F)	683.0	695.5	12.5	1,250
STA 153+00	<b>Barrier End</b>	---	F (F)	687.0	695.0	8.0	---
<b>Length (ft.):</b>		<b>1,000</b>			<b>Barrier Area (sq. ft.):</b>		<b>14,690</b>
					<b>Average Height:</b>		<b>14.7</b>

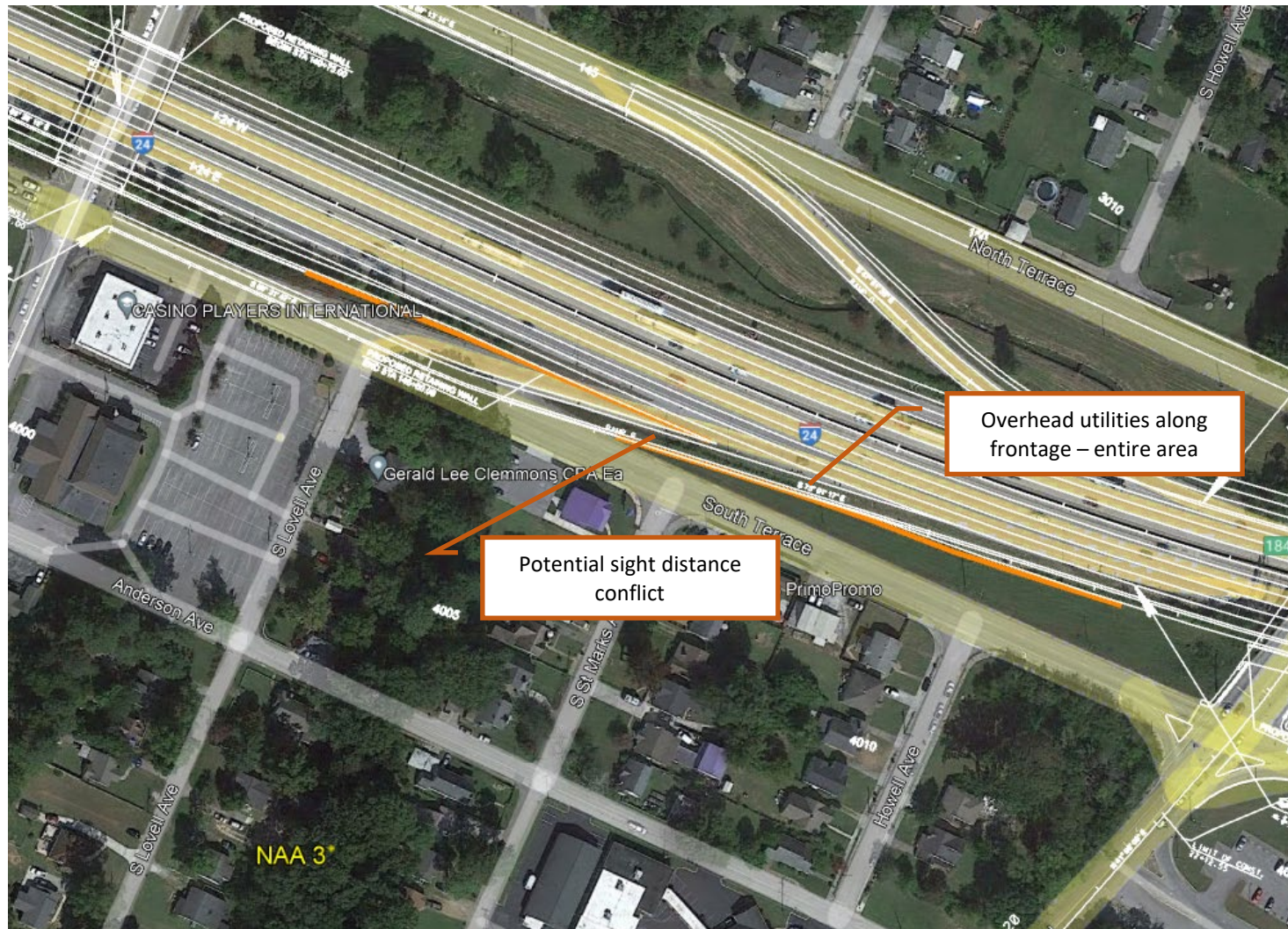
(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 3 Option 1, Eastbound Barrier STA 4003+00 (Ramp) to STA 153+00**



OPTION #2 (SHOULDER)



<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	3 (Option 2)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Retaining Wall/Shoulder
<b>Date:</b>	Nov-21

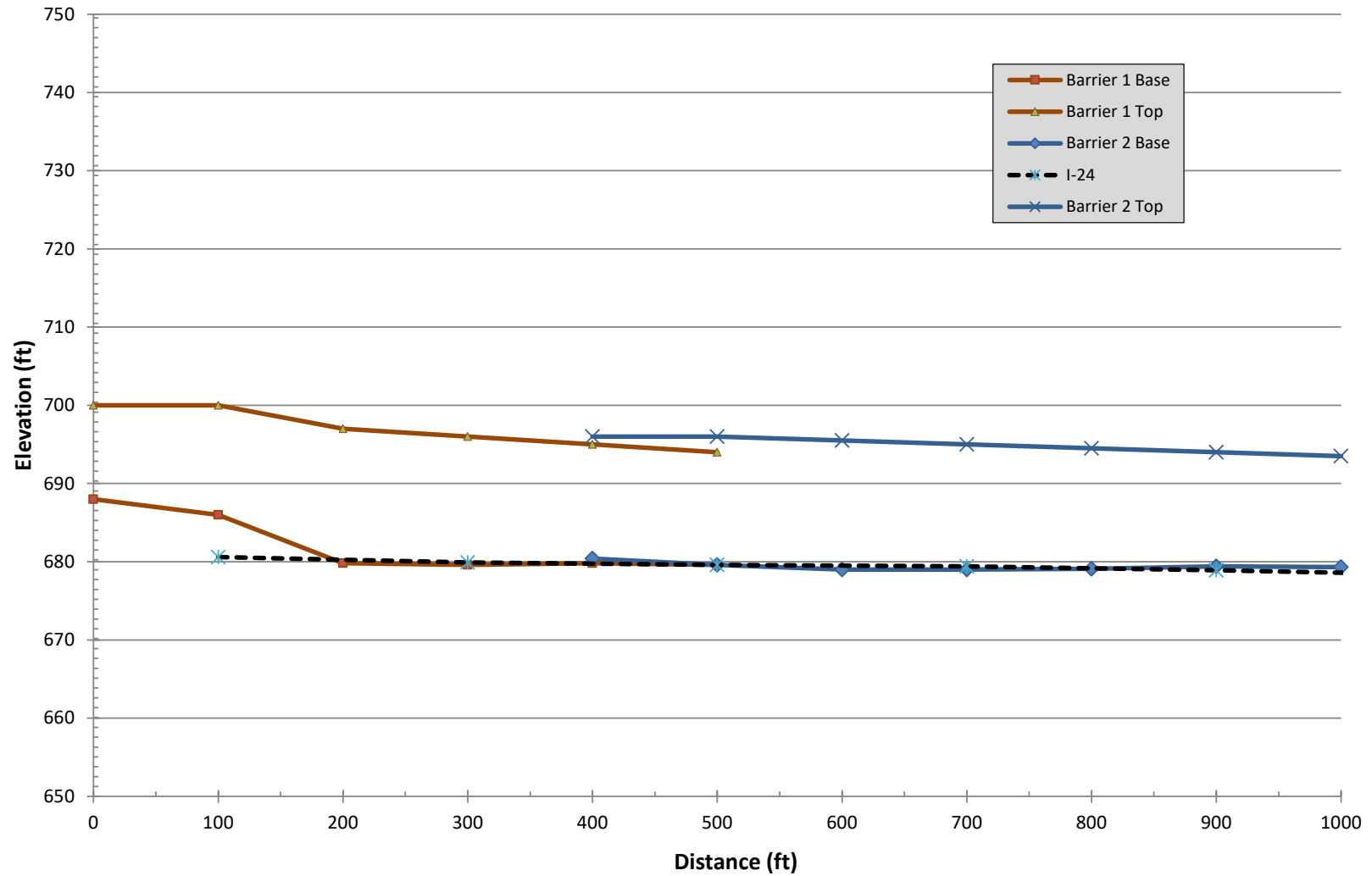
From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 143+00	STA 144+00	100	F (R)	688.0	700.0	12.0	1,200
STA 144+00	STA 145+00	100	F (R)	686.0	700.0	14.0	1,400
STA 145+00	STA 146+00	100	F (EOP)	679.8	697.0	17.2	1,720
STA 146+00	STA 147+00	100	F (EOP)	679.6	696.0	16.4	1,640
STA 147+00	STA 148+00	100	F (EOP)	679.8	695.0	15.2	1,520
STA 148+00	<b>Barrier End</b>	---	F (EOP)	679.6	694.0	14.4	---
						0.0	
STA 147+00	STA 148+00	100	F (EOP)	680.4	696.0	15.6	1,560
STA 148+00	STA 149+00	100	F (EOP)	679.6	696.0	16.4	1,640
STA 149+00	STA 150+00	100	F (EOP)	679.0	695.5	16.5	1,650
STA 150+00	STA 151+00	100	F (EOP)	679.0	695.0	16.0	1,600
STA 151+00	STA 152+00	100	F (EOP)	679.1	694.5	15.4	1,540
STA 152+00	STA 153+00	100	F (EOP)	679.4	694.0	14.6	1,460
STA 153+00	<b>Barrier End</b>	---	F (EOP)	679.3	693.5	14.2	---
<b>Length (ft.):</b>		<b>1,100</b>			<b>Barrier Area (sq. ft.):</b>		<b>16,930</b>
					<b>Average Height:</b>		<b>15.4</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



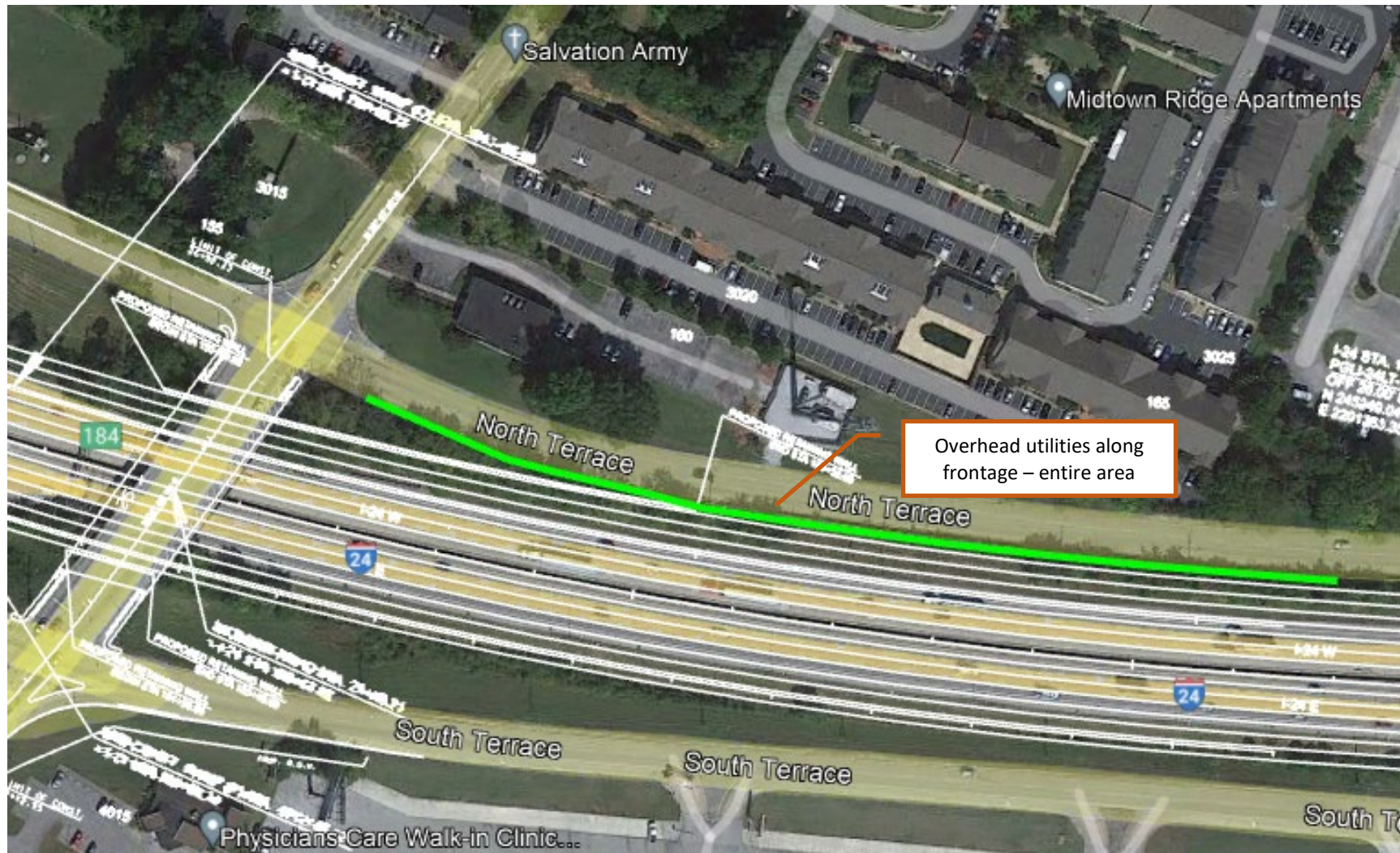
**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 3 Option 2, Eastbound Barrier STA 143+00-153+00**



## WESTBOUND I-24

### NAA 6 (SPRINGROOK RD TO MCBRIEN RD)

#### OPTION #1 (FRONTAGE)



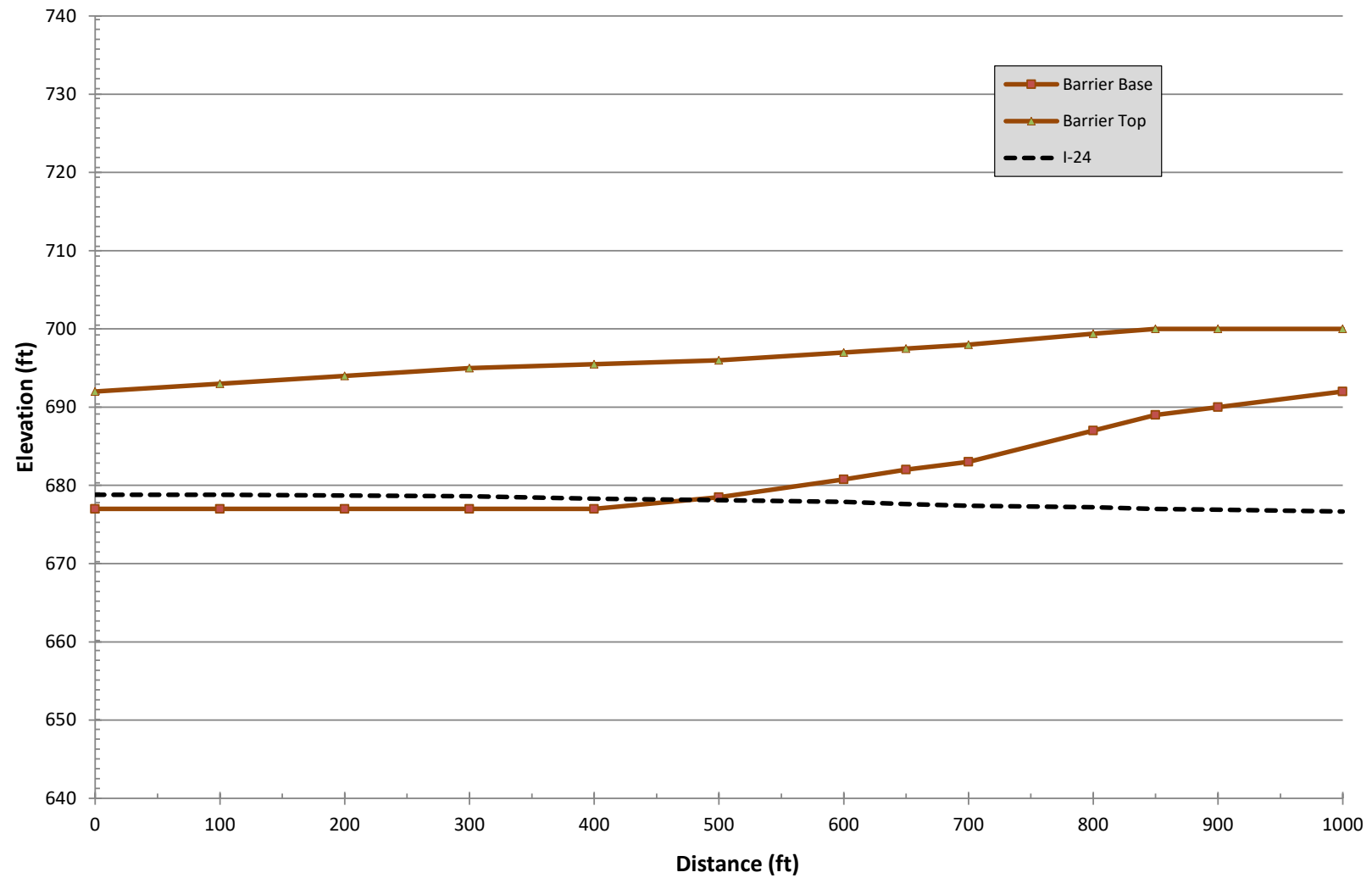
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	6 (Option 1)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Frontage
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 167+00	STA 166+00	100	F (F)	677.0	692.0	15.0	1,500
STA 166+00	STA 165+00	100	F (F)	677.0	693.0	16.0	1,600
STA 165+00	STA 164+00	100	F (F)	677.0	694.0	17.0	1,700
STA 164+00	STA 163+00	100	F (F)	677.0	695.0	18.0	1,800
STA 163+00	STA 162+00	100	F (F)	677.0	695.5	18.5	1,850
STA 162+00	STA 161+00	100	F (F)	678.5	696.0	17.5	1,750
STA 161+00	STA 160+50	50	F (F)	680.8	697.0	16.3	813
STA 160+50	STA 160+00	50	F (F)	682.0	697.5	15.5	775
STA 160+00	STA 159+00	100	F (F)	683.0	698.0	15.0	1,500
STA 159+00	STA 158+50	50	F (F)	687.0	699.4	12.4	620
STA 158+50	STA 158+00	50	F (F)	689.0	700.0	11.0	550
STA 158+00	STA 157+00	100	F (F)	690.0	700.0	10.0	1,000
STA 157+00	Barrier End	---	F (F)	692.0	700.0	8.0	---
				Barrier Area (sq. ft.):			15,458
				Average Height:			15.5

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

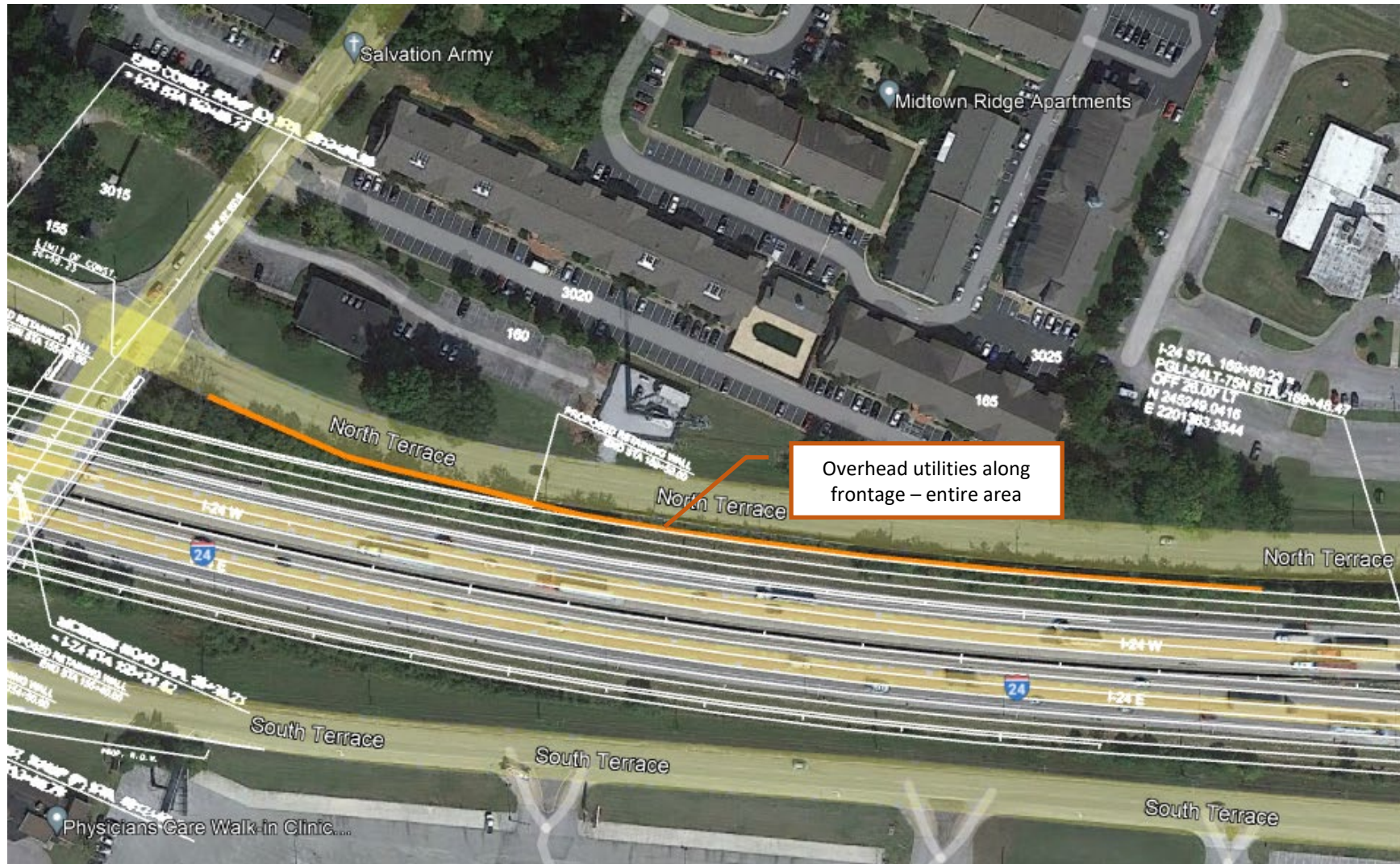
(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 6 Option 1, Westbound Barrier, STA 167+00-157+00**





OPTION #2 (SHOULDER)



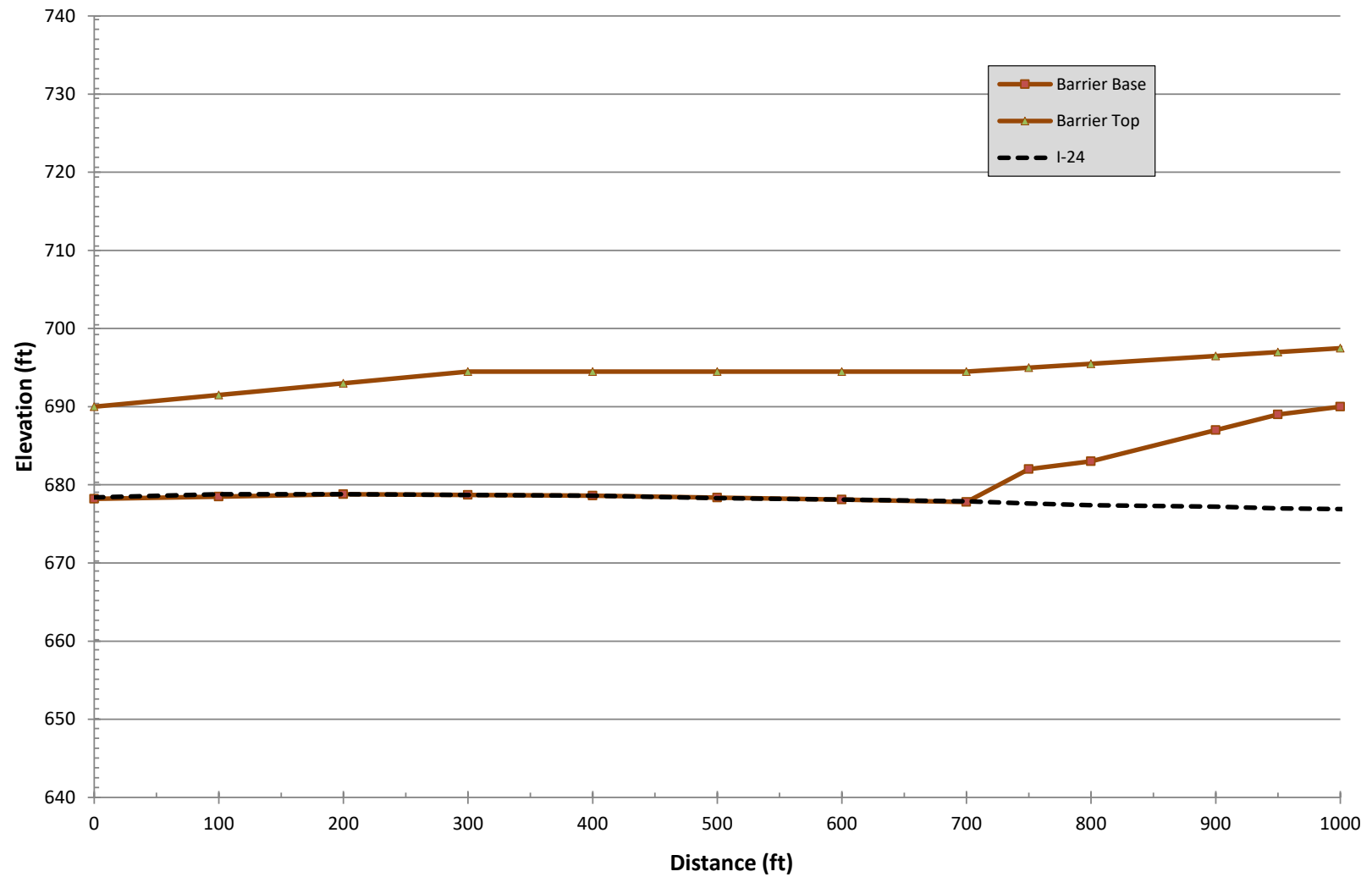
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	6 (Option 2)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Shoulder/Frontage
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 168+00	STA 167+00	100	F (EOP)	678.2	690.0	11.8	1,180
STA 167+00	STA 166+00	100	F (EOP)	678.5	691.5	13.0	1,300
STA 166+00	STA 165+00	100	F (EOP)	678.8	693.0	14.2	1,420
STA 165+00	STA 164+00	100	F (EOP)	678.7	694.5	15.8	1,580
STA 164+00	STA 163+00	100	F (EOP)	678.6	694.5	15.9	1,590
STA 163+00	STA 162+00	100	F (EOP)	678.4	694.5	16.2	1,615
STA 162+00	STA 161+00	100	F (EOP)	678.1	694.5	16.4	1,640
STA 161+00	STA 160+50	50	F (T)	677.8	694.5	16.7	835
STA 160+50	STA 160+00	50	F (T)	682.0	695.0	13.0	650
STA 160+00	STA 159+00	100	F (F)	683.0	695.5	12.5	1,250
STA 159+00	STA 158+50	50	F (F)	687.0	696.5	9.5	475
STA 158+50	STA 158+00	50	F (F)	689.0	697.0	8.0	400
STA 158+00	STA 157+00	100	F (F)	690.0	697.5	7.5	750
STA 157+00	Barrier End	---	F (F)	692.0	698.5	6.5	---
Length (ft.):		1,100				Barrier Area (sq. ft.):	14,685
						Average Height:	13.4

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 6 Option 2, Westbound Barrier STA 168+00-157+00**





NAA 4 (MCBRIEN RD TO S MOORE RD)





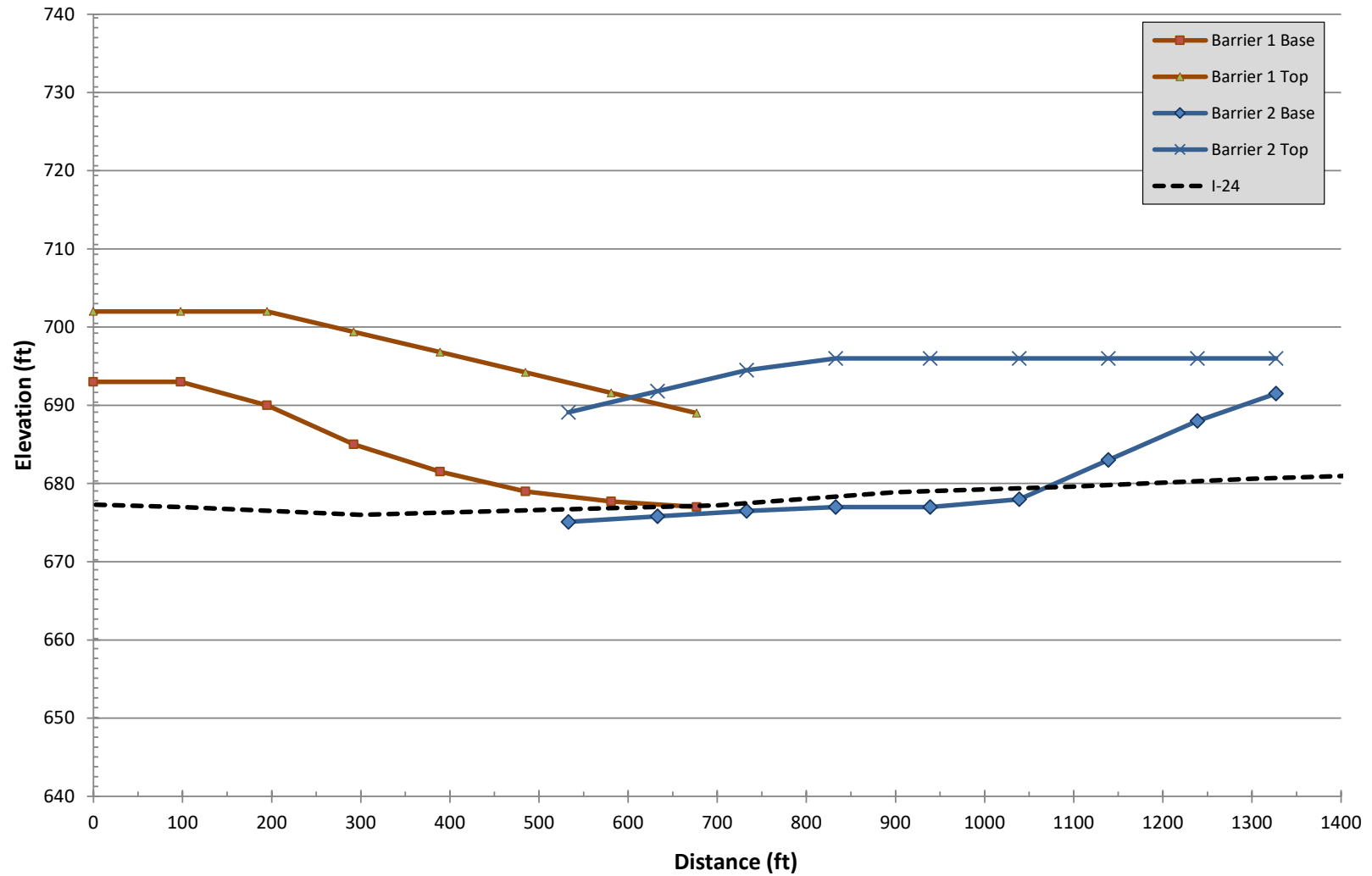
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	4
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Frontage
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 155+00	STA 154+00	98	F (F)	693.0	702.0	9.0	882
STA 154+00	STA 153+00	97	F (F)	693.0	702.0	9.0	873
STA 153+00	STA 152+00	97	F (F)	690.0	702.0	12.0	1,164
STA 152+00	STA 151+00	97	F (F)	685.0	699.4	14.4	1,397
STA 151+00	STA 150+00	96	F (F)	681.5	696.8	15.3	1,469
STA 150+00	STA 149+00	96	F (F)	679.0	694.2	15.2	1,459
STA 149+00	STA 148+00	96	F (F)	677.7	691.6	13.9	1,334
STA 148+00	<b>Barrier End</b>	---	F (F)	677.0	689.0	12.0	---
STA 3009+00	STA 3008+00	100	F (F)	675.1	689.1	14.0	1,400
STA 3008+00	STA 3007+00	100	F (F)	675.8	691.8	16.0	1,600
STA 3007+00	STA 3006+00	100	F (F)	676.5	694.5	18.0	1,800
STA 3006+00	STA 3005+00	106	F (F)	677.0	696.0	19.0	2,014
STA 3005+00	STA 3004+00	100	F (F)	677.0	696.0	19.0	1,900
STA 3004+00	STA 3003+00	100	F (F)	678.0	696.0	18.0	1,800
STA 3003+00	STA 3002+00	100	F (F)	683.0	696.0	13.0	1,300
STA 3002+00	STA 3001+00	88	F (F)	688.0	696.0	8.0	704
STA 3001+00	<b>Barrier End</b>	---	F (F)	691.5	696.0	4.5	---
<b>Length (ft.):</b>		<b>1,471</b>			<b>Barrier Area (sq. ft.):</b>		<b>21,096</b>
					<b>Average Height:</b>		<b>14.3</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 4, Westbound Barrier STA 155+00-3001+00 (Ramp)**



## NAA 2 (S MOORE RD TO BELVOIR AVE)

### OPTION #1 (FRONTAGE)



<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	2 (Option 1)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Frontage
<b>Date:</b>	Nov-21

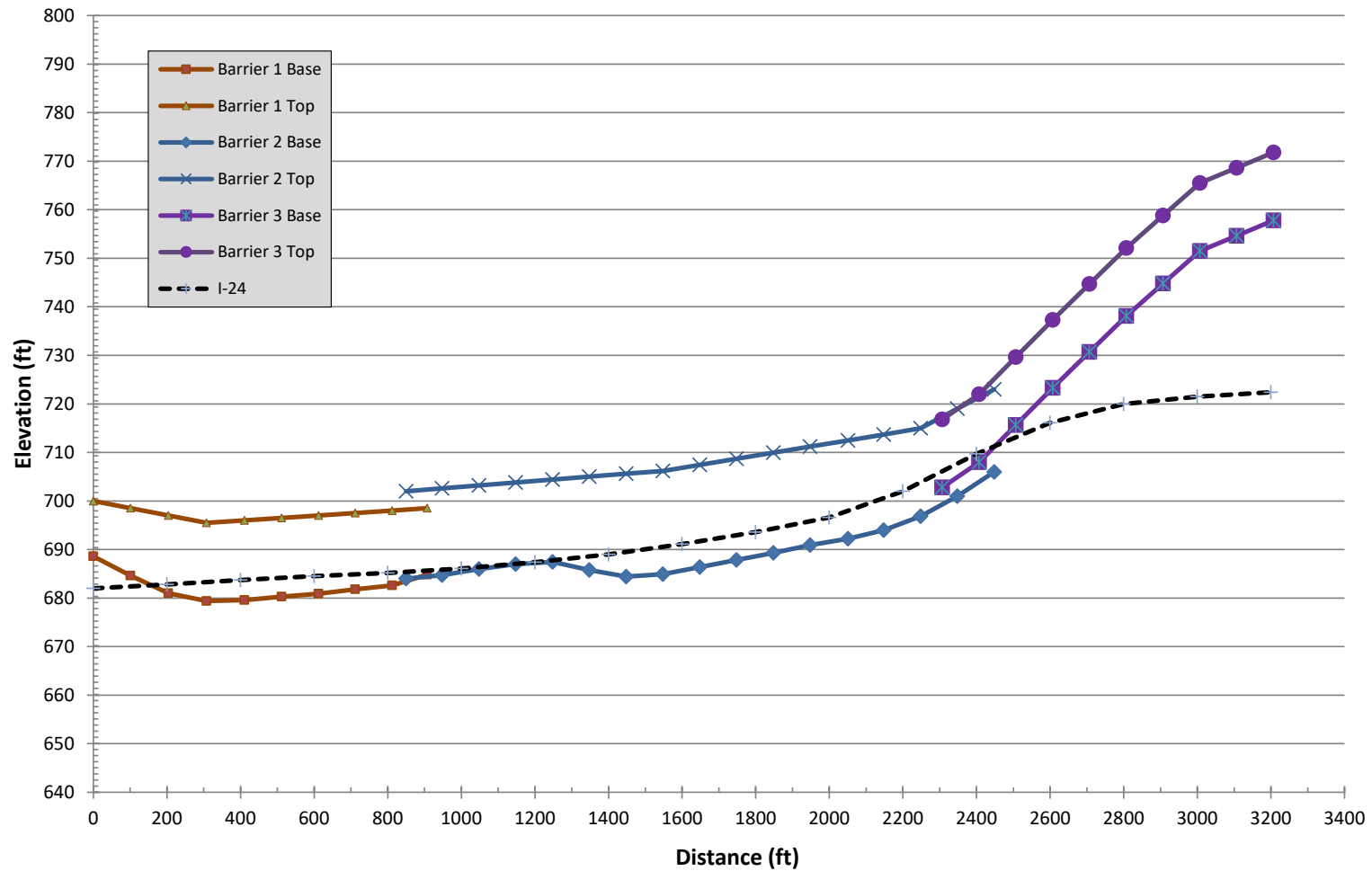
From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 138+00	STA 137+00	101	F (F)	688.6	700.0	11.4	1,151
STA 137+00	STA 136+00	103	F (F)	684.6	698.5	13.9	1,432
STA 136+00	STA 135+00	104	F (F)	681.0	697.0	16.0	1,664
STA 135+00	STA 134+00	103	F (F)	679.4	695.5	16.1	1,658
STA 134+00	STA 133+00	101	F (F)	679.6	696.0	16.4	1,656
STA 133+00	STA 132+00	100	F (F)	680.3	696.5	16.2	1,620
STA 132+00	STA 131+00	100	F (F)	680.9	697.0	16.1	1,610
STA 131+00	STA 130+00	100	F (F)	681.8	697.5	15.7	1,570
STA 130+00	STA 129+00	95	F (F)	682.6	698.0	15.4	1,463
STA 129+00	<b>Barrier End</b>	---	F (F)	684.8	698.5	13.7	---
STA 1029+00	STA 1028+00	98	F (F)	684.0	702.0	18.0	1,764
STA 1028+00	STA 1027+00	100	F (F)	684.7	702.6	17.9	1,790
STA 1027+00	STA 1026+00	100	F (F)	686.0	703.2	17.2	1,721
STA 1026+00	STA 1025+00	100	F (F)	687.0	703.8	16.8	1,680
STA 1025+00	STA 1024+00	100	F (F)	687.4	704.4	17.0	1,697
STA 1024+00	STA 1023+00	100	F (F)	685.8	705.0	19.2	1,924
STA 1023+00	STA 1022+00	100	F (F)	684.4	705.6	21.2	2,120
STA 1022+00	STA 1021+00	100	F (F)	684.9	706.2	21.3	2,126
STA 1021+00	STA 1020+00	100	F (F)	686.4	707.5	21.1	2,108
STA 1020+00	STA 1019+00	100	F (F)	687.9	708.7	20.9	2,085
STA 1019+00	STA 1018+00	100	F (F)	689.3	710.0	20.6	2,062
STA 1018+00	STA 1017+00	103	F (F)	690.9	711.2	20.3	2,089
STA 1017+00	STA 1016+00	97	F (F)	692.3	712.5	20.2	1,959
STA 1016+00	STA 1015+00	100	F (F)	694.0	713.7	19.7	1,970
STA 1015+00	STA 1014+00	100	F (F)	696.8	715.0	18.2	1,816
STA 1014+00	STA 1013+00	100	F (F)	701.0	719.0	18.0	1,800
STA 1013+00	<b>Barrier End</b>	---	F (F)	706.0	723.0	17.0	---
STA 115+00	STA 114+00	100	F (F)	702.8	716.8	14.0	1,400
STA 114+00	STA 113+00	100	F (F)	708.0	722.0	14.0	1,400
STA 113+00	STA 112+00	100	F (F)	715.7	729.7	14.0	1,400
STA 112+00	STA 111+00	100	F (F)	723.3	737.3	14.0	1,400
STA 111+00	STA 110+00	100	F (F)	730.7	744.7	14.0	1,400
STA 110+00	STA 109+00	100	F (F)	738.1	752.1	14.0	1,400
STA 109+00	STA 108+00	100	F (F)	744.8	758.8	14.0	1,400
STA 108+00	STA 107+00	100	F (F)	751.5	765.5	14.0	1,400
STA 107+00	STA 106+00	100	F (F)	754.7	768.7	14.0	1,400
STA 106+00	<b>Barrier End</b>	---	F (F)	757.8	771.8	14.0	---
<b>Length (ft.):</b>		<b>3,405</b>			<b>Barrier Area (sq. ft.):</b>		<b>57,136</b>
					<b>Average Height:</b>		<b>16.8</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 2 Option 1, Westbound Barrier STA 138+00-106+00**



OPTION #2 (FRONTAGE/SHOULDER)



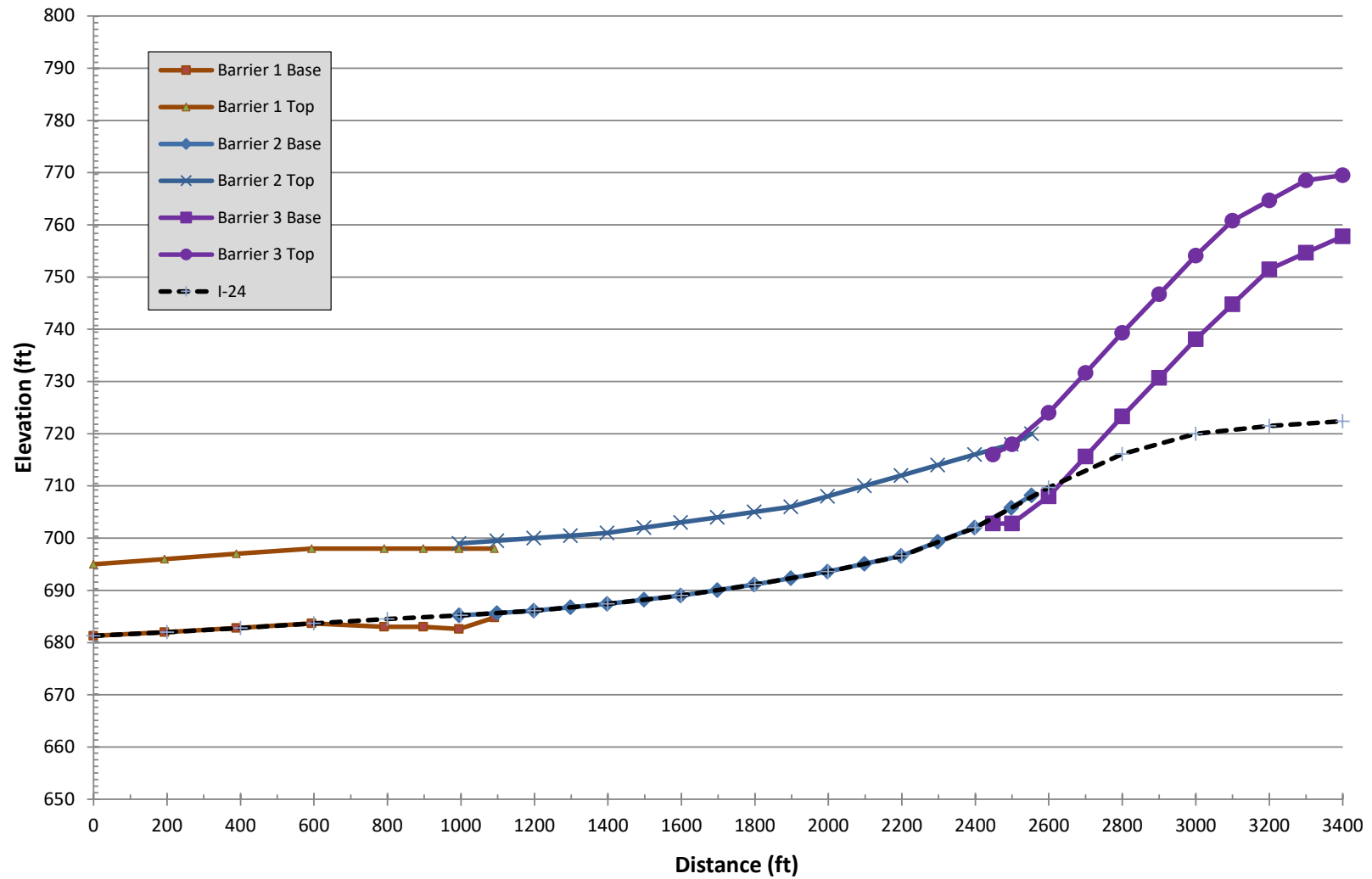
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	2 (Option 2)
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Shoulder/Frontage
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 140+00	STA 138+00	193	F (EOP)	681.3	695.0	13.7	2,644
STA 138+00	STA 136+00	196	F (EOP)	682.0	696.0	14.0	2,744
STA 136+00	STA 134+00	205	F (EOP)	682.8	697.0	14.2	2,911
STA 134+00	STA 132+00	197	F (EOP)	683.7	698.0	14.3	2,817
STA 132+00	STA 131+00	107	F (EOP)	683.0	698.0	15.0	1,605
STA 131+00	STA 130+00	97	F (EOP)	683.0	698.0	15.0	1,455
STA 130+00	STA 129+00	96	F (EOP)	682.6	698.0	15.4	1,478
STA 129+00	<b>Barrier End</b>	---	F (EOP)	684.8	698.0	13.2	---
STA 130+00	STA 129+00	103	F (EOP)	685.2	699.0	13.8	1,421
STA 129+00	STA 128+00	100	F (EOP)	685.7	699.5	13.9	1,385
STA 128+00	STA 127+00	100	F (EOP)	686.1	700.0	13.9	1,390
STA 127+00	STA 126+00	100	F (EOP)	686.8	700.5	13.8	1,375
STA 126+00	STA 125+00	100	F (EOP)	687.4	701.0	13.6	1,360
STA 125+00	STA 124+00	100	F (EOP)	688.2	702.0	13.8	1,380
STA 124+00	STA 123+00	100	F (EOP)	689.0	703.0	14.0	1,400
STA 123+00	STA 122+00	100	F (EOP)	690.1	704.0	14.0	1,395
STA 122+00	STA 121+00	100	F (EOP)	691.1	705.0	13.9	1,390
STA 121+00	STA 120+00	100	F (EOP)	692.4	706.0	13.7	1,365
STA 120+00	STA 119+00	100	F (EOP)	693.6	708.0	14.4	1,440
STA 119+00	STA 118+00	100	F (EOP)	695.1	710.0	14.9	1,490
STA 118+00	STA 117+00	100	F (EOP)	696.6	712.0	15.4	1,540
STA 117+00	STA 116+00	100	F (EOP)	699.3	714.0	14.7	1,470
STA 116+00	STA 115+00	100	F (EOP)	702.0	716.0	14.0	1,400
STA 115+00	STA 114+50	55	F (EOP)	705.8	718.0	12.2	671
STA 114+50	<b>Barrier End</b>	---	F (EOP)	708.2	720.0	11.8	---
STA 115+50	STA 115+00	52	F (F)	702.8	716.0	13.2	686
STA 115+00	STA 114+00	100	F (F)	702.8	718.0	15.2	1,520
STA 114+00	STA 113+00	100	F (F)	708.0	724.0	16.0	1,600
STA 113+00	STA 112+00	100	F (F)	715.7	731.7	16.0	1,600
STA 112+00	STA 111+00	100	F (F)	723.3	739.3	16.0	1,600
STA 111+00	STA 110+00	100	F (F)	730.7	746.7	16.0	1,600
STA 110+00	STA 109+00	100	F (F)	738.1	754.1	16.0	1,600
STA 109+00	STA 108+00	100	F (F)	744.8	760.8	16.0	1,600
STA 108+00	STA 107+00	100	F (F)	751.5	764.7	13.2	1,320
STA 107+00	STA 106+00	100	F (F)	754.7	768.5	13.9	1,385
STA 106+00	<b>Barrier End</b>	---	F (F)	757.8	769.5	11.7	---
<b>Length (ft.):</b>		<b>3,601</b>			<b>Barrier Area (sq. ft.):</b>		<b>52,038</b>
					<b>Average Height:</b>		<b>14.5</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 2 Option 2, Westbound Barrier STA 140+00-106+00**





### OPTION 3 (FRONTAGE/SHOULDER)



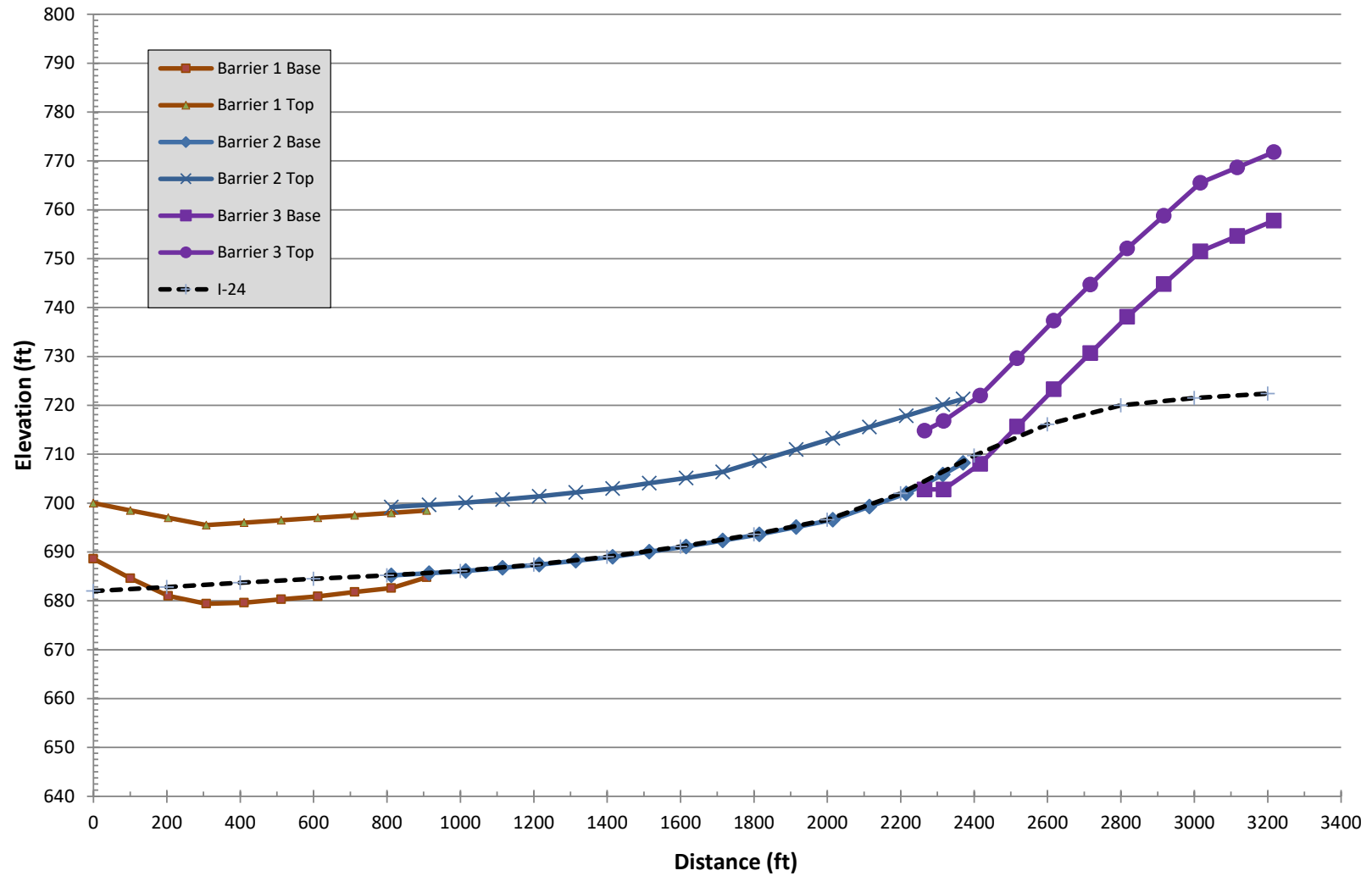
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>114174.00</b>
<b>Noise Analysis Area:</b>	<b>2 (Option 3)</b>
<b>Design Year:</b>	<b>2045</b>
<b>Barrier Type:</b>	<b>Absorptive</b>
<b>Barrier Location:</b>	<b>Frontage/Shoulder</b>
<b>Date:</b>	<b>Nov-21</b>

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 138+00	STA 137+00	101	F (F)	688.6	700.0	11.4	1,151
STA 137+00	STA 136+00	103	F (F)	684.6	698.5	13.9	1,432
STA 136+00	STA 135+00	104	F (F)	681.0	697.0	16.0	1,664
STA 135+00	STA 134+00	103	F (F)	679.4	695.5	16.1	1,658
STA 134+00	STA 133+00	101	F (F)	679.6	696.0	16.4	1,656
STA 133+00	STA 132+00	100	F (F)	680.3	696.5	16.2	1,620
STA 132+00	STA 131+00	100	F (F)	680.9	697.0	16.1	1,610
STA 131+00	STA 130+00	100	F (F)	681.8	697.5	15.7	1,570
STA 130+00	STA 129+00	96	F (F)	682.6	698.0	15.4	1,478
STA 129+00	<b>Barrier End</b>	---	F (F)	684.8	698.5	13.7	---
STA 130+00	STA 129+00	103	F (EOP)	685.2	699.2	14.0	1,442
STA 129+00	STA 128+00	100	F (EOP)	685.7	699.7	14.0	1,400
STA 128+00	STA 127+00	100	F (EOP)	686.1	700.1	14.0	1,400
STA 127+00	STA 126+00	100	F (EOP)	686.8	700.8	14.0	1,400
STA 126+00	STA 125+00	100	F (EOP)	687.4	701.4	14.0	1,400
STA 125+00	STA 124+00	100	F (EOP)	688.2	702.2	14.0	1,400
STA 124+00	STA 123+00	100	F (EOP)	689.0	703.0	14.0	1,400
STA 123+00	STA 122+00	100	F (EOP)	690.1	704.1	14.0	1,400
STA 122+00	STA 121+00	100	F (EOP)	691.1	705.1	14.0	1,400
STA 121+00	STA 120+00	100	F (EOP)	692.4	706.4	14.0	1,400
STA 120+00	STA 119+00	100	F (EOP)	693.6	708.7	15.1	1,505
STA 119+00	STA 118+00	100	F (EOP)	695.1	711.0	15.8	1,585
STA 118+00	STA 117+00	100	F (EOP)	696.6	713.3	16.6	1,665
STA 117+00	STA 116+00	100	F (EOP)	699.3	715.6	16.2	1,625
STA 116+00	STA 115+00	100	F (EOP)	702.0	717.9	15.8	1,585
STA 115+00	STA 114+50	55	F (EOP)	705.8	720.2	14.3	789
STA 114+50	<b>Barrier End</b>	---	F (EOP)	708.2	721.3	13.1	---
STA 115+50	STA 115+00	52	F (F)	702.8	714.8	12.0	624
STA 115+00	STA 114+00	100	F (F)	702.8	716.8	14.0	1,400
STA 114+00	STA 113+00	100	F (F)	708.0	722.0	14.0	1,400
STA 113+00	STA 112+00	100	F (F)	715.7	729.7	14.0	1,400
STA 112+00	STA 111+00	100	F (F)	723.3	737.3	14.0	1,400
STA 111+00	STA 110+00	100	F (F)	730.7	744.7	14.0	1,400
STA 110+00	STA 109+00	100	F (F)	738.1	752.1	14.0	1,400
STA 109+00	STA 108+00	100	F (F)	744.8	758.8	14.0	1,400
STA 108+00	STA 107+00	100	F (F)	751.5	765.5	14.0	1,400
STA 107+00	STA 106+00	100	F (F)	754.7	768.7	14.0	1,400
STA 106+00	<b>Barrier End</b>	---	F (F)	757.8	771.8	14.0	---
<b>Length (ft.):</b>		<b>3,418</b>				<b>Barrier Area (sq. ft.):</b>	<b>49,860</b>
						<b>Average Height:</b>	<b>14.6</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 2 Option 3, Westbound Barrier STA 138+00-106+00**





## NAA 22 (BELVOIR AVE TO GERMANTOWN RD)

### OPTION #1 (FRONTAGE)





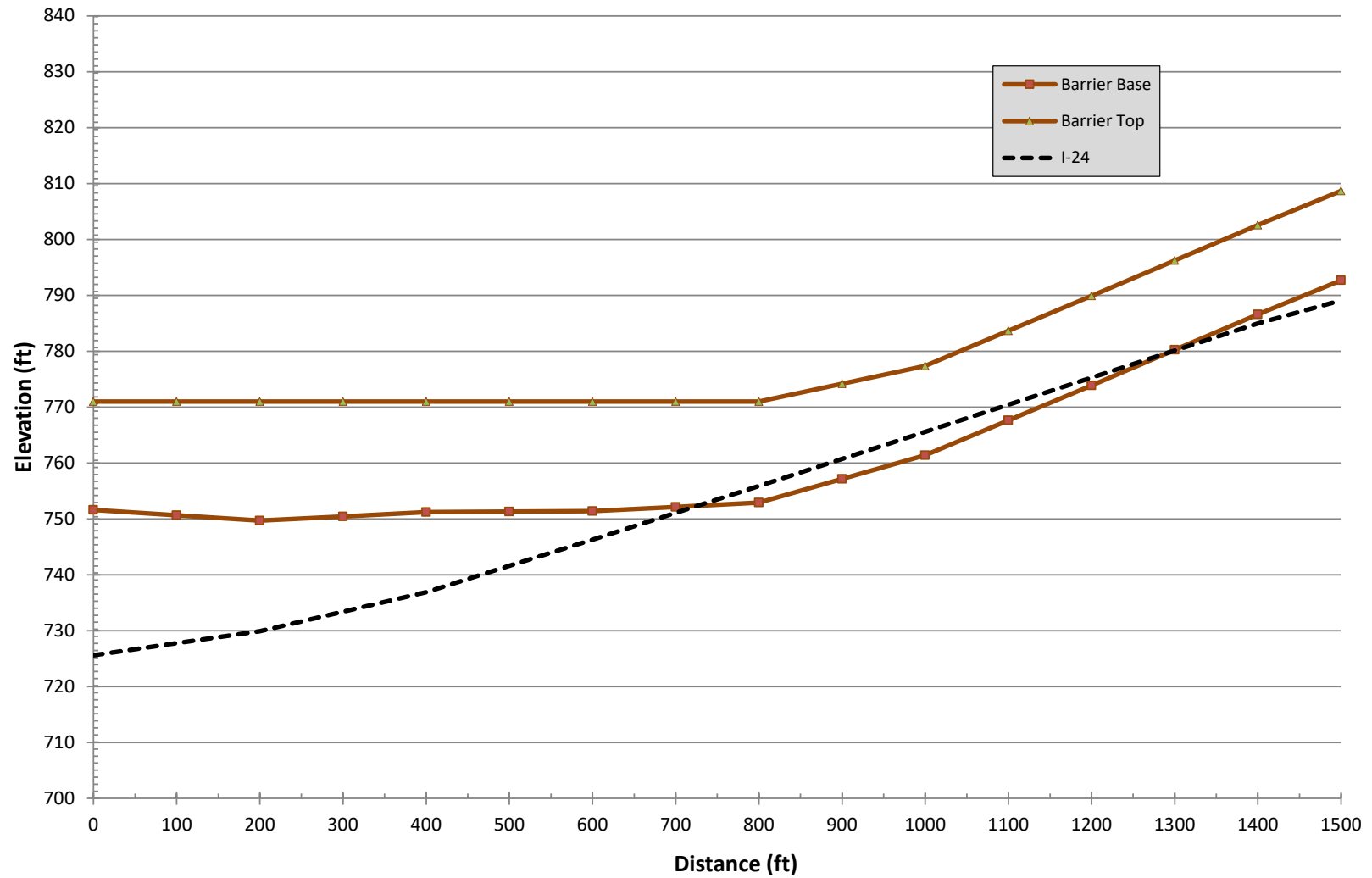
<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>114174.00</b>
<b>Noise Analysis Area:</b>	<b>22 (Option 1)</b>
<b>Design Year:</b>	<b>2045</b>
<b>Barrier Type:</b>	<b>Absorptive</b>
<b>Barrier Location:</b>	<b>Frontage</b>
<b>Date:</b>	<b>Nov-21</b>

<b>From</b>	<b>To</b>	<b>Approximate Segment Length (ft.)</b>	<b>Wall Type <sup>(1)(2)</sup></b>	<b>Approximate Barrier Base Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Top Elevation (ft)<sup>(2)</sup></b>	<b>Barrier Height (ft)<sup>(2)</sup></b>	<b>Approximate Barrier Area (sq ft)</b>
STA 100+00	STA 99+00	100	F (F)	751.6	771.0	19.4	1,940
STA 99+00	STA 98+00	100	F (F)	750.7	771.0	20.4	2,035
STA 98+00	STA 97+00	100	F (F)	749.7	771.0	21.3	2,130
STA 97+00	STA 96+00	100	F (F)	750.5	771.0	20.6	2,055
STA 96+00	STA 95+00	100	F (F)	751.2	771.0	19.8	1,980
STA 95+00	STA 94+00	100	F (F)	751.3	771.0	19.7	1,970
STA 94+00	STA 93+00	100	F (F)	751.4	771.0	19.6	1,960
STA 93+00	STA 92+00	100	F (F)	752.2	771.0	18.9	1,885
STA 92+00	STA 91+00	100	F (F)	752.9	771.0	18.1	1,810
STA 91+00	STA 90+00	100	F (F)	757.2	774.2	17.1	1,705
STA 90+00	STA 89+00	100	F (F)	761.4	777.4	16.0	1,600
STA 89+00	STA 88+00	100	F (F)	767.7	783.7	16.0	1,600
STA 88+00	STA 87+00	100	F (F)	773.9	789.9	16.0	1,600
STA 87+00	STA 86+00	100	F (F)	780.3	796.3	16.0	1,600
STA 86+00	STA 85+00	100	F (F)	786.6	802.6	16.0	1,600
STA 85+00	<b>Barrier End</b>	100	F (F)	792.7	808.7	16.0	1,600
		<b>Length (ft.):</b>	<b>1,600</b>				
						<b>Barrier Area (sq. ft.):</b>	<b>29,070</b>
						<b>Average Height:</b>	<b>18.2</b>

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 22, Option 1, Westbound Barrier STA 100+00-85+00**



OPTION #2 (FRONTAGE/SHOULDER)



<b>Project:</b>	<b>I-75 and I-24 Interchange Phase 2</b>
<b>County:</b>	<b>Hamilton</b>
<b>PIN:</b>	<b>114174.00</b>
<b>Noise Analysis Area:</b>	<b>22 (Option 2)</b>
<b>Design Year:</b>	<b>2045</b>
<b>Barrier Type:</b>	<b>Absorptive</b>
<b>Barrier Location:</b>	<b>Frontage/Shoulder</b>
<b>Date:</b>	<b>Nov-21</b>

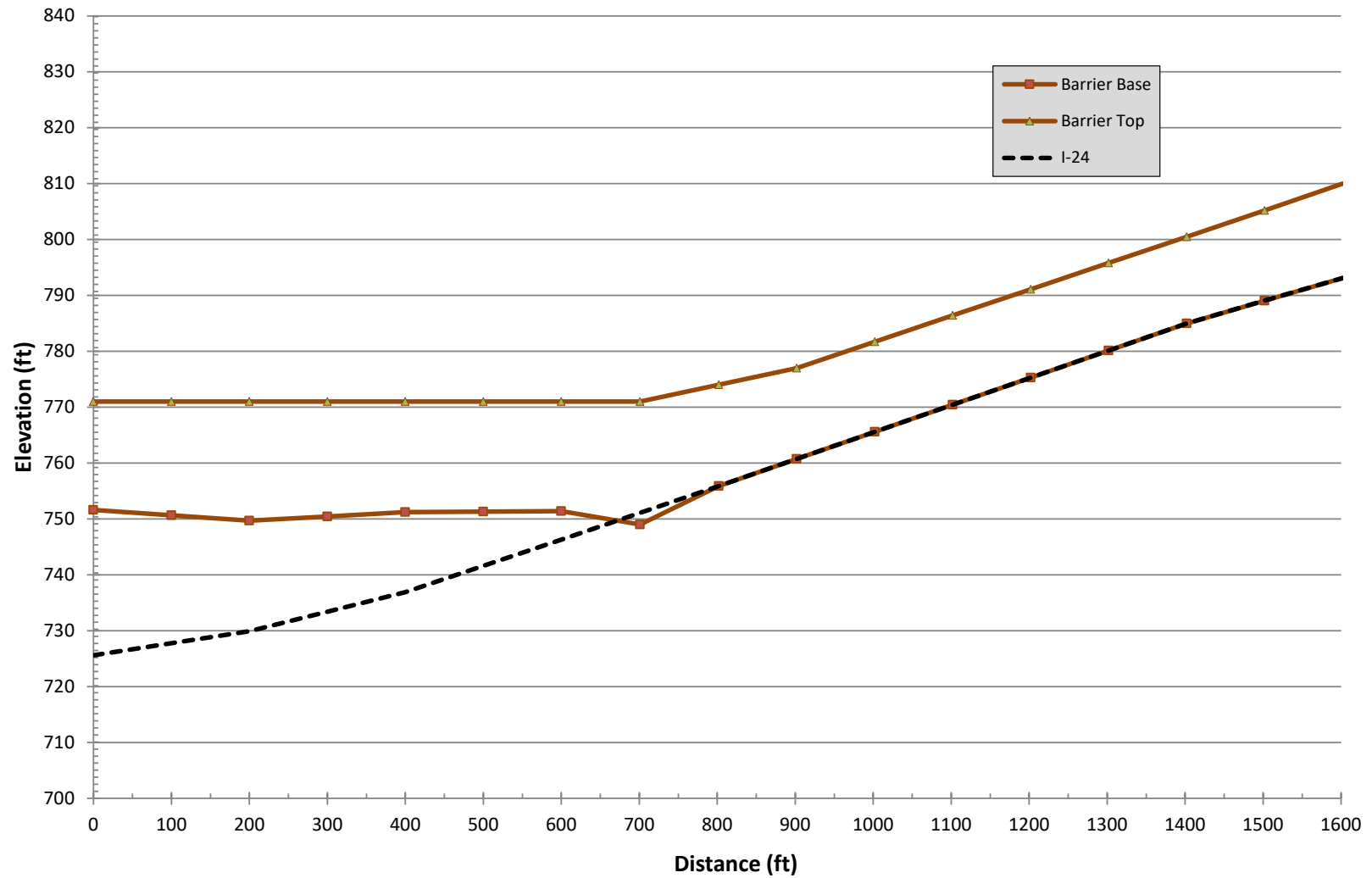
From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)
STA 100+00	STA 99+00	100	F (F)	751.6	771.0	19.4	1,940
STA 99+00	STA 98+00	100	F (F)	750.7	771.0	20.4	2,035
STA 98+00	STA 97+00	100	F (F)	749.7	771.0	21.3	2,130
STA 97+00	STA 96+00	100	F (F)	750.5	771.0	20.6	2,055
STA 96+00	STA 95+00	100	F (F)	751.2	771.0	19.8	1,980
STA 95+00	STA 94+00	100	F (F)	751.3	771.0	19.7	1,970
STA 94+00	STA 93+00	101	F (T)	751.4	771.0	19.6	1,980
STA 93+00	STA 92+00	101	F (T)	749.0	771.0	22.0	2,222
STA 92+00	STA 91+00	100	F (EOP)	755.9	774.0	18.1	1,810
STA 91+00	STA 90+00	100	F (EOP)	760.8	777.0	16.3	1,625
STA 90+00	STA 89+00	100	F (EOP)	765.6	781.7	16.1	1,610
STA 89+00	STA 88+00	100	F (EOP)	770.5	786.4	16.0	1,595
STA 88+00	STA 87+00	100	F (EOP)	775.3	791.1	15.8	1,580
STA 87+00	STA 86+00	100	F (EOP)	780.2	795.8	15.7	1,565
STA 86+00	STA 85+00	100	F (EOP)	785.0	800.5	15.5	1,550
STA 85+00	STA 84+00	100	F (EOP)	789.1	805.2	16.2	1,615
STA 84+00	Barrier End	---	F (EOP)	793.1	810.0	16.9	---
					Barrier Area (sq. ft.):		29,262
					Average Height:		18.3

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.



**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 22, Option 2, Westbound Barrier STA 100+00-84+00**



## NAA 24 (WEST OF GERMANTOWN RD)



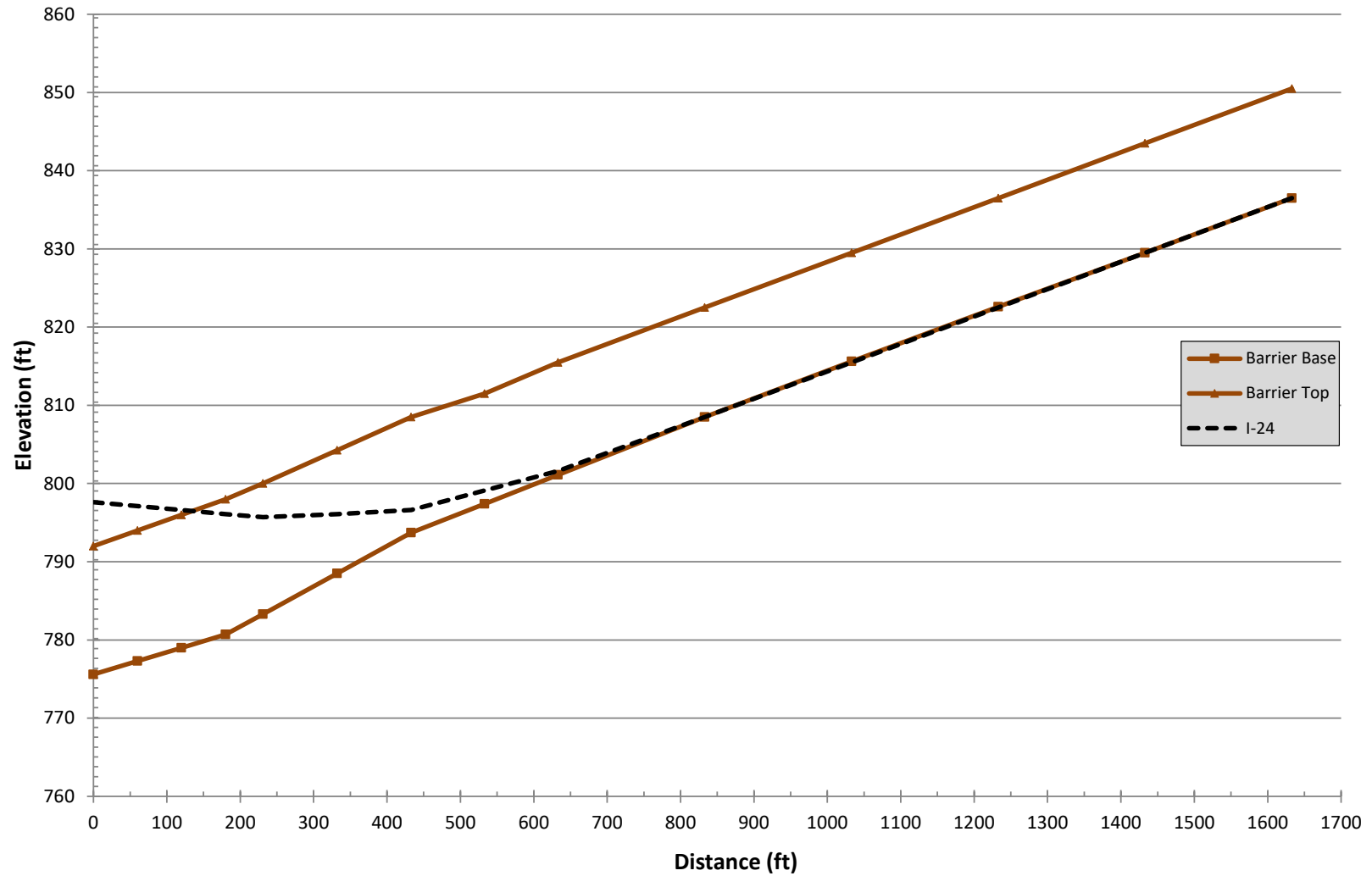
<b>Project:</b>	I-75 and I-24 Interchange Phase 2
<b>County:</b>	Hamilton
<b>PIN:</b>	114174.00
<b>Noise Analysis Area:</b>	24
<b>Design Year:</b>	2045
<b>Barrier Type:</b>	Absorptive
<b>Barrier Location:</b>	Shoulder
<b>Date:</b>	Nov-21

From	To	Approximate Segment Length (ft.)	Wall Type <sup>(1)(2)</sup>	Approximate Barrier Base Elevation (ft) <sup>(2)</sup>	Barrier Top Elevation (ft) <sup>(2)</sup>	Barrier Height (ft) <sup>(2)</sup>	Approximate Barrier Area (sq ft)	
STA 72+00	STA 71+50	60	F (EOP)	775.6	792.0	16.4	984	
STA 71+50	STA 71+00	60	F (EOP)	777.3	794.0	16.7	1,002	
STA 71+00	STA 70+50	60	F (EOP)	779.0	796.0	17.0	1,020	
STA 70+50	STA 70+00	51	F (EOP)	780.7	798.0	17.3	882	
STA 70+00	STA 69+00	101	F (EOP)	783.3	800.0	16.7	1,687	
STA 69+00	STA 68+00	101	F (EOP)	788.5	804.3	15.8	1,591	
STA 68+00	STA 67+00	100	F (EOP)	793.7	808.5	14.8	1,480	
STA 67+00	STA 66+00	100	F (EOP)	797.4	811.5	14.1	1,410	
STA 66+00	STA 64+00	200	F (EOP)	801.1	815.5	14.4	2,880	
STA 64+00	STA 62+00	200	F (EOP)	808.5	822.5	14.0	2,800	
STA 62+00	STA 60+00	200	F (EOP)	815.6	829.5	13.9	2,780	
STA 60+00	STA 58+00	200	F (EOP)	822.6	836.5	13.9	2,780	
STA 58+00	STA 56+00	200	F (EOP)	829.5	843.5	14.0	2,800	
STA 56+00	Barrier End	---	F (EOP)	836.5	850.5	14.0	---	
		Length (ft.):	1,633	Barrier Area (sq. ft.):			24,096	
					Average Height:			14.8

(1) F = free standing barrier. EOP = edge of pavement; F = frontage; R = retaining wall; T = transition.

(2) At beginning station.

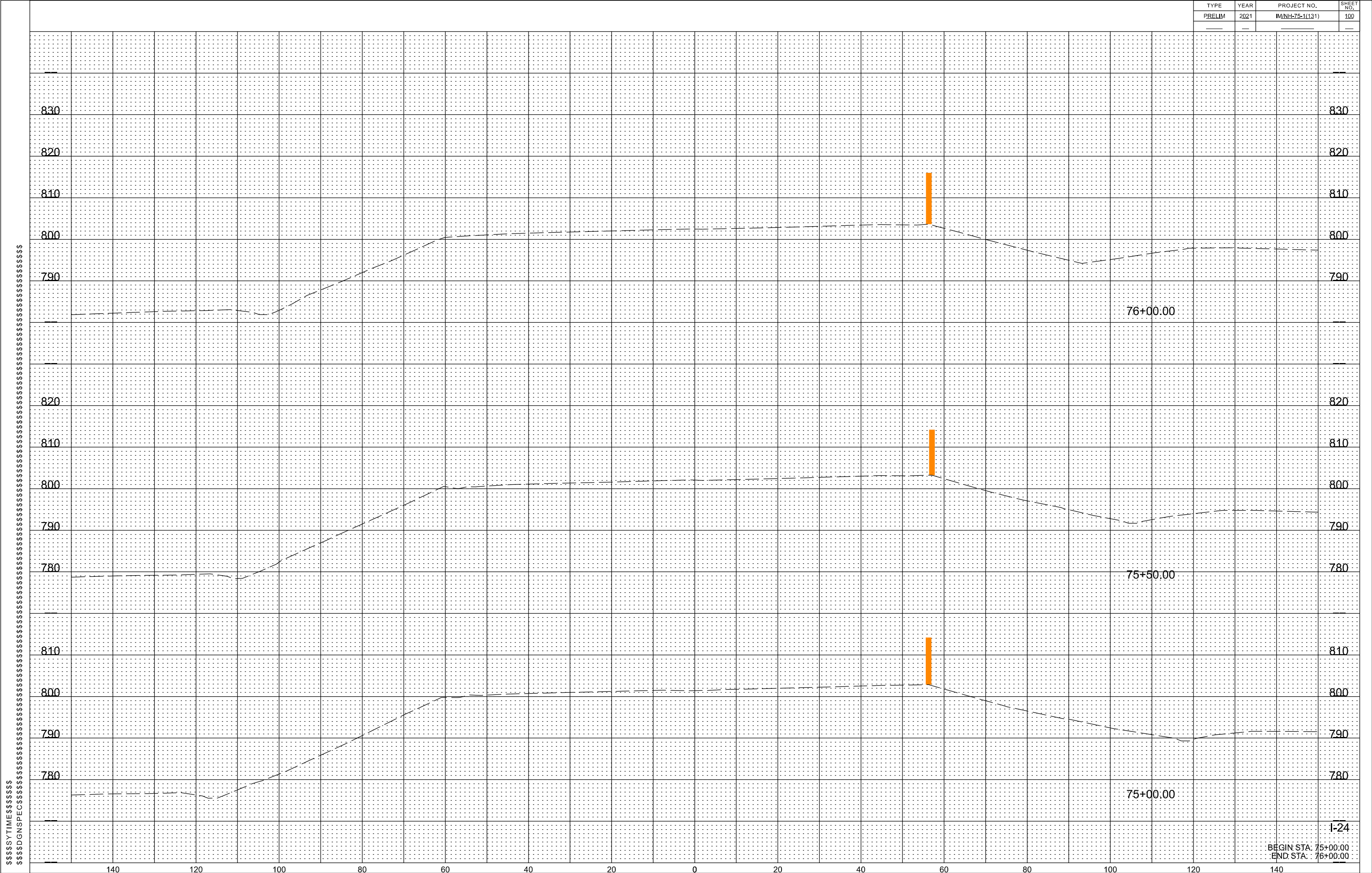
**I-75 and I-24 Interchange Phase 2, PIN #114174.00**  
**NAA 24, Westbound Barrier STA 72+00-56+00**



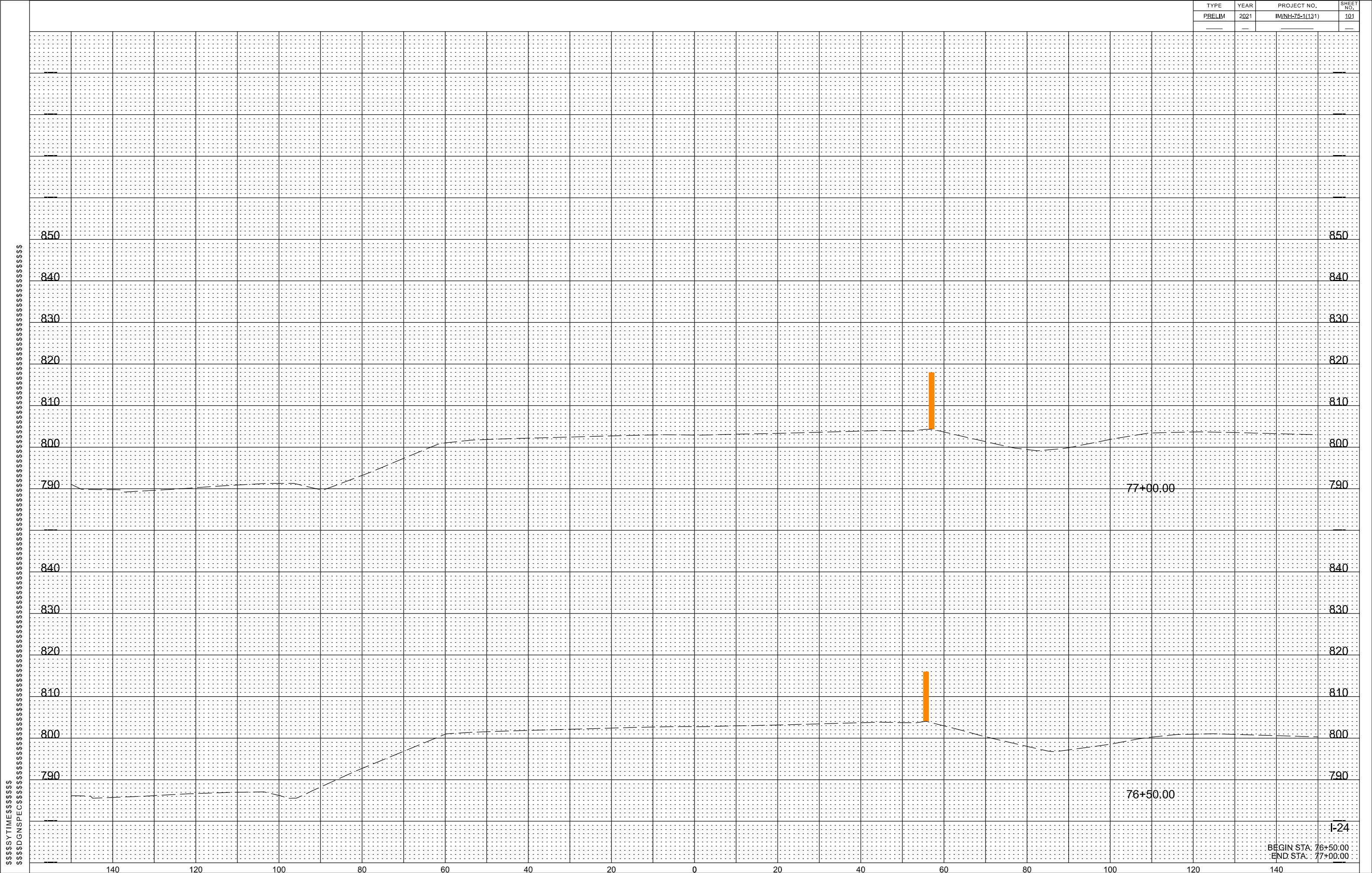


**Eastbound  
Cross Sections**

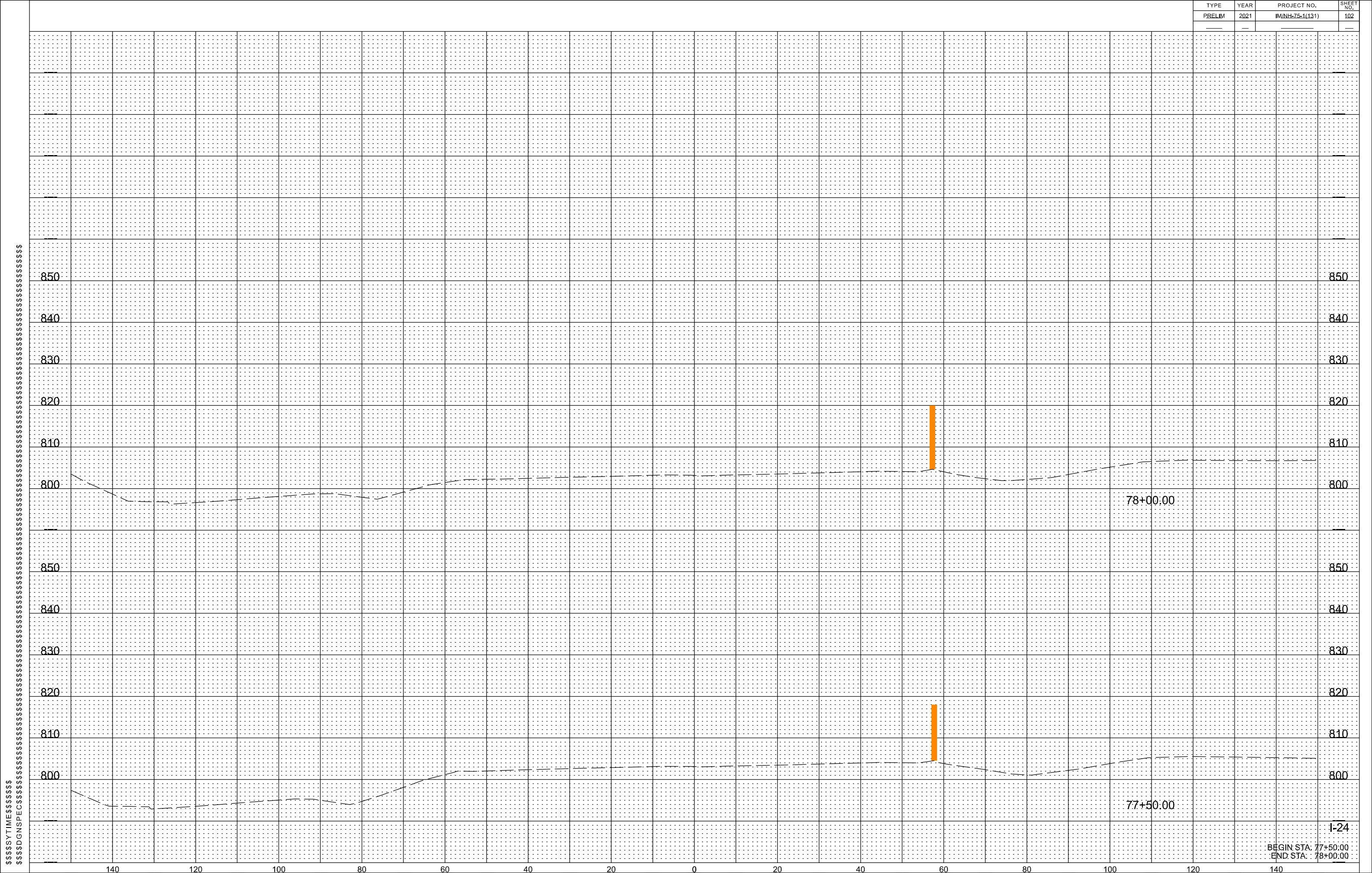
**NAA 21**



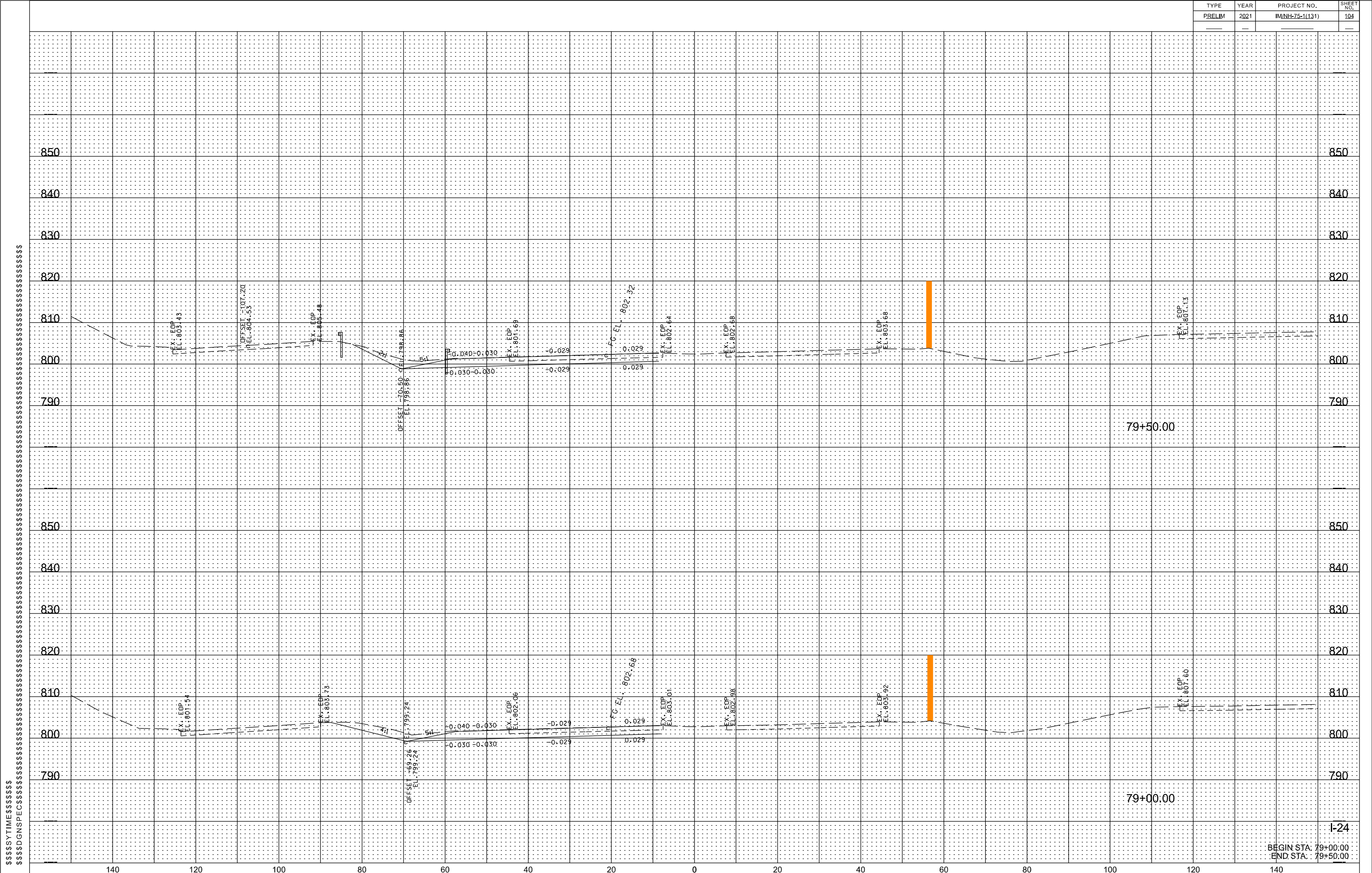
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\$\$\$\$DGN\$PEC\$\$\$\$





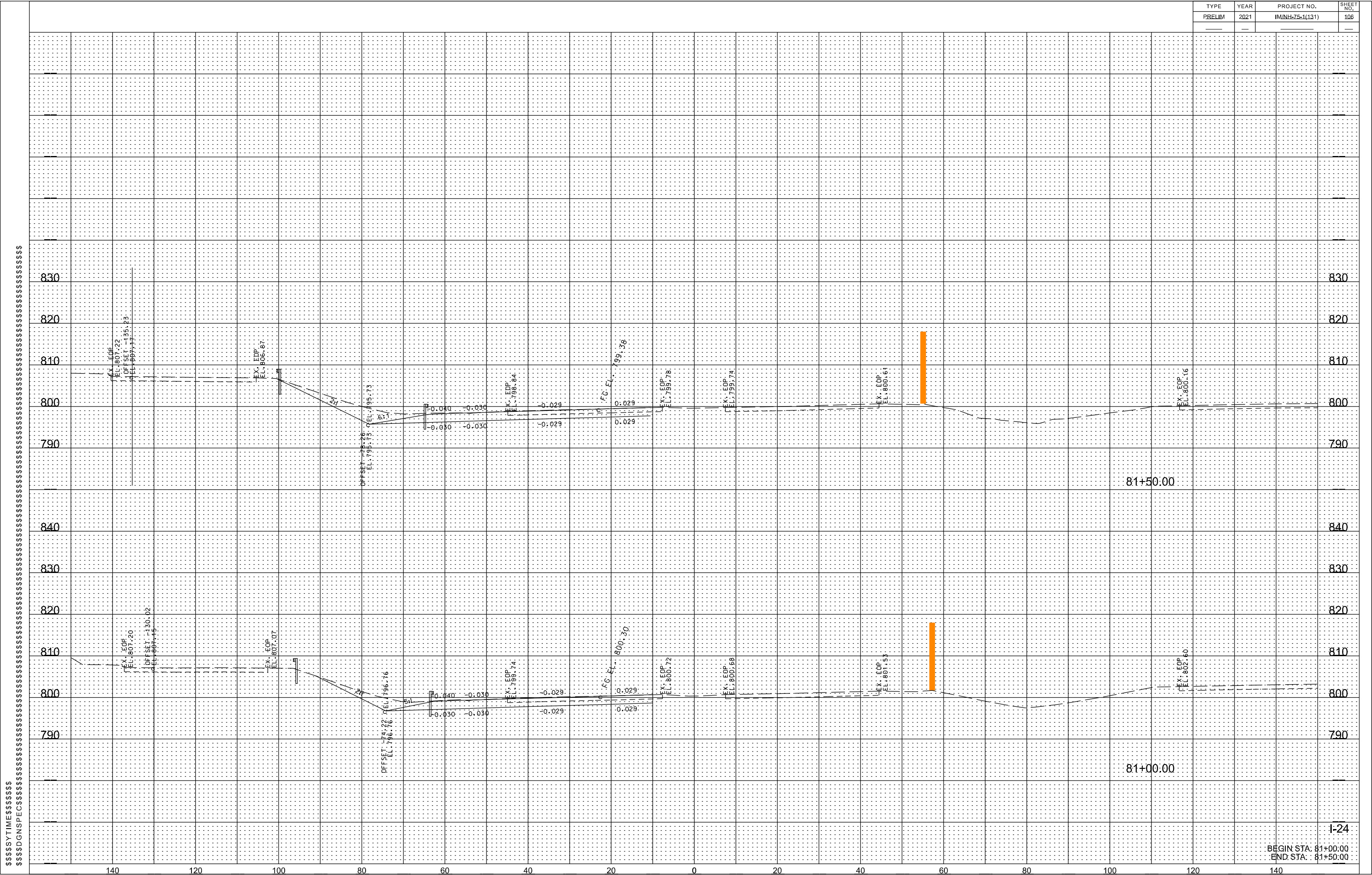








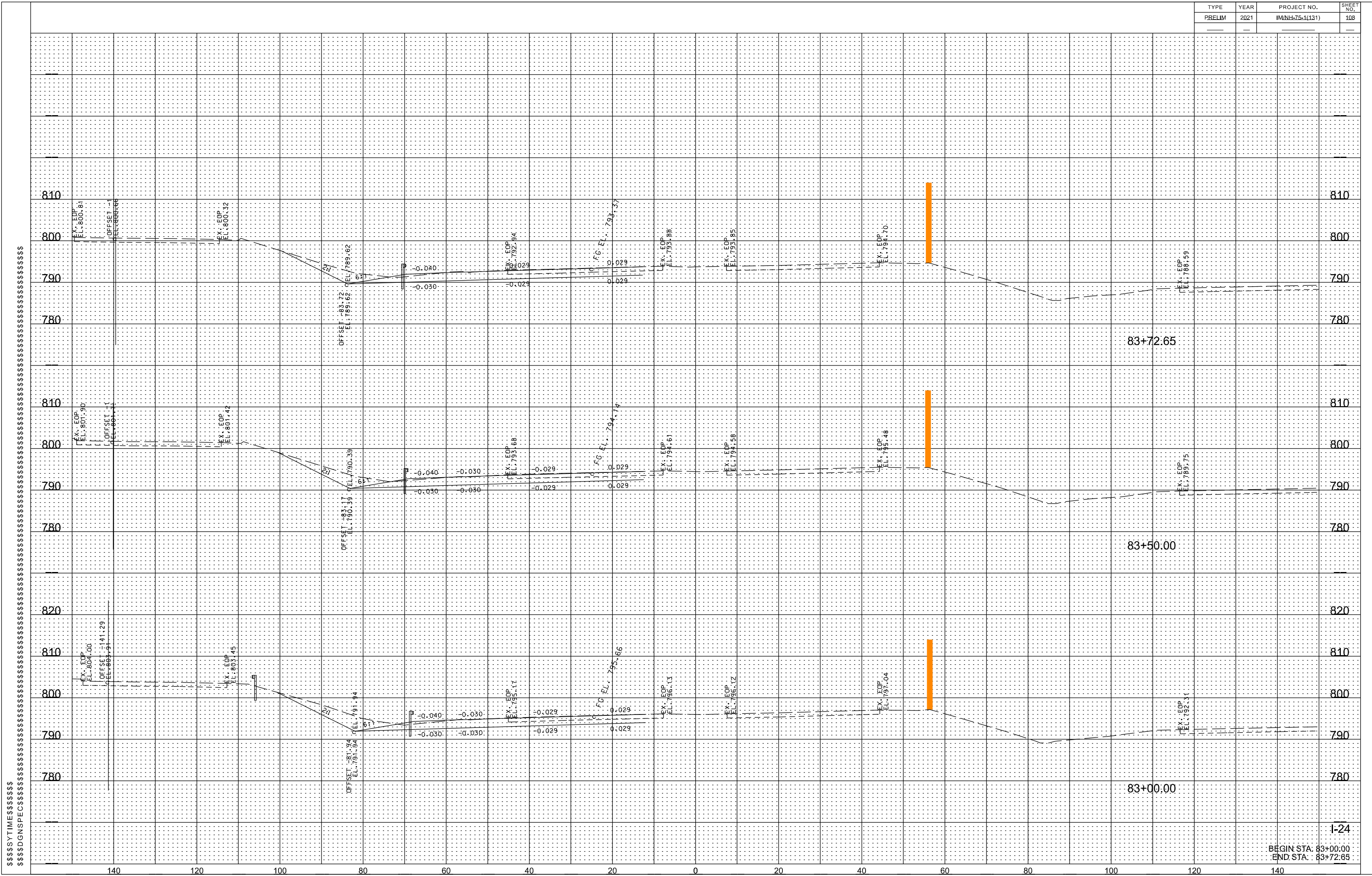




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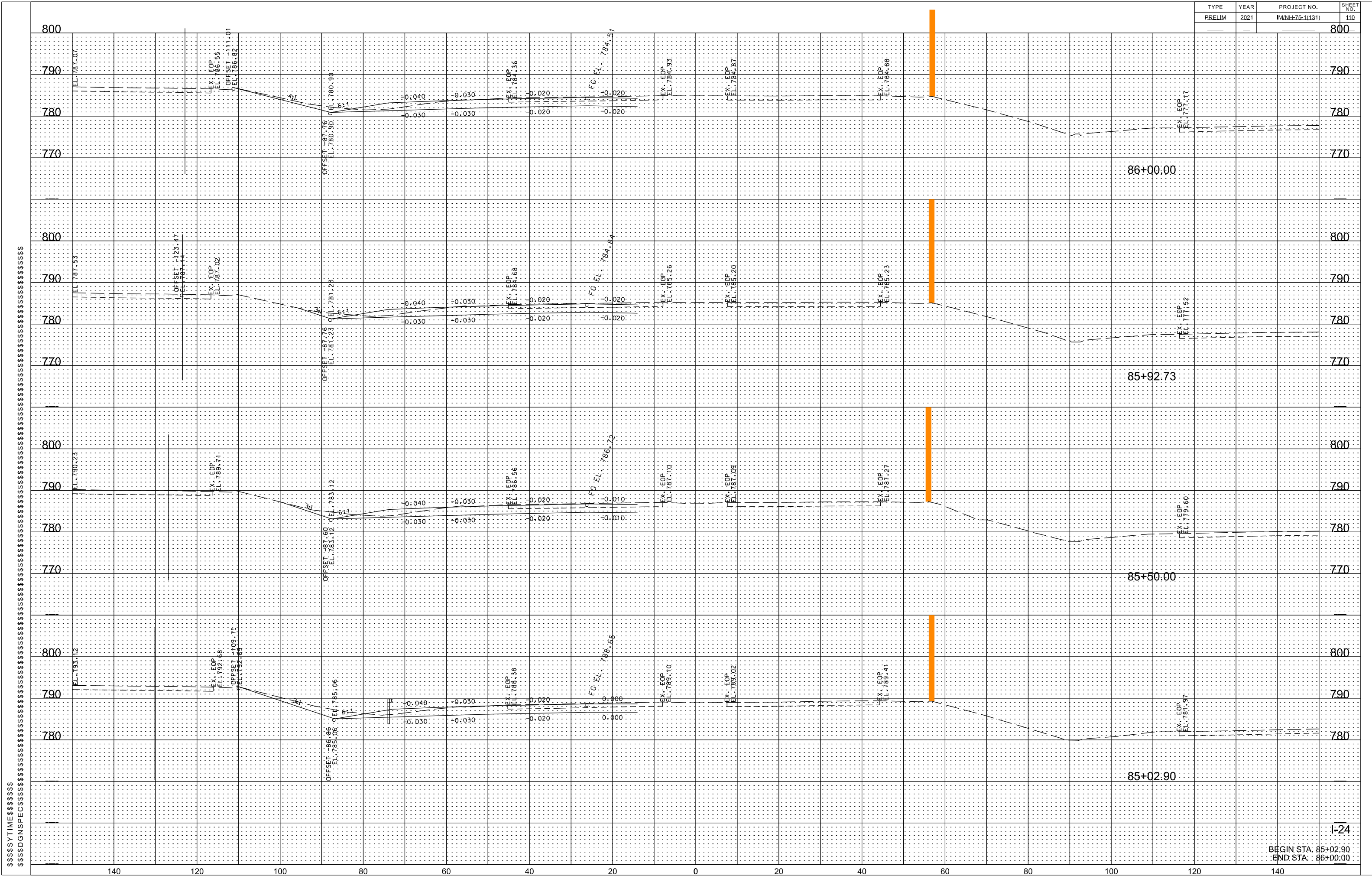
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	108
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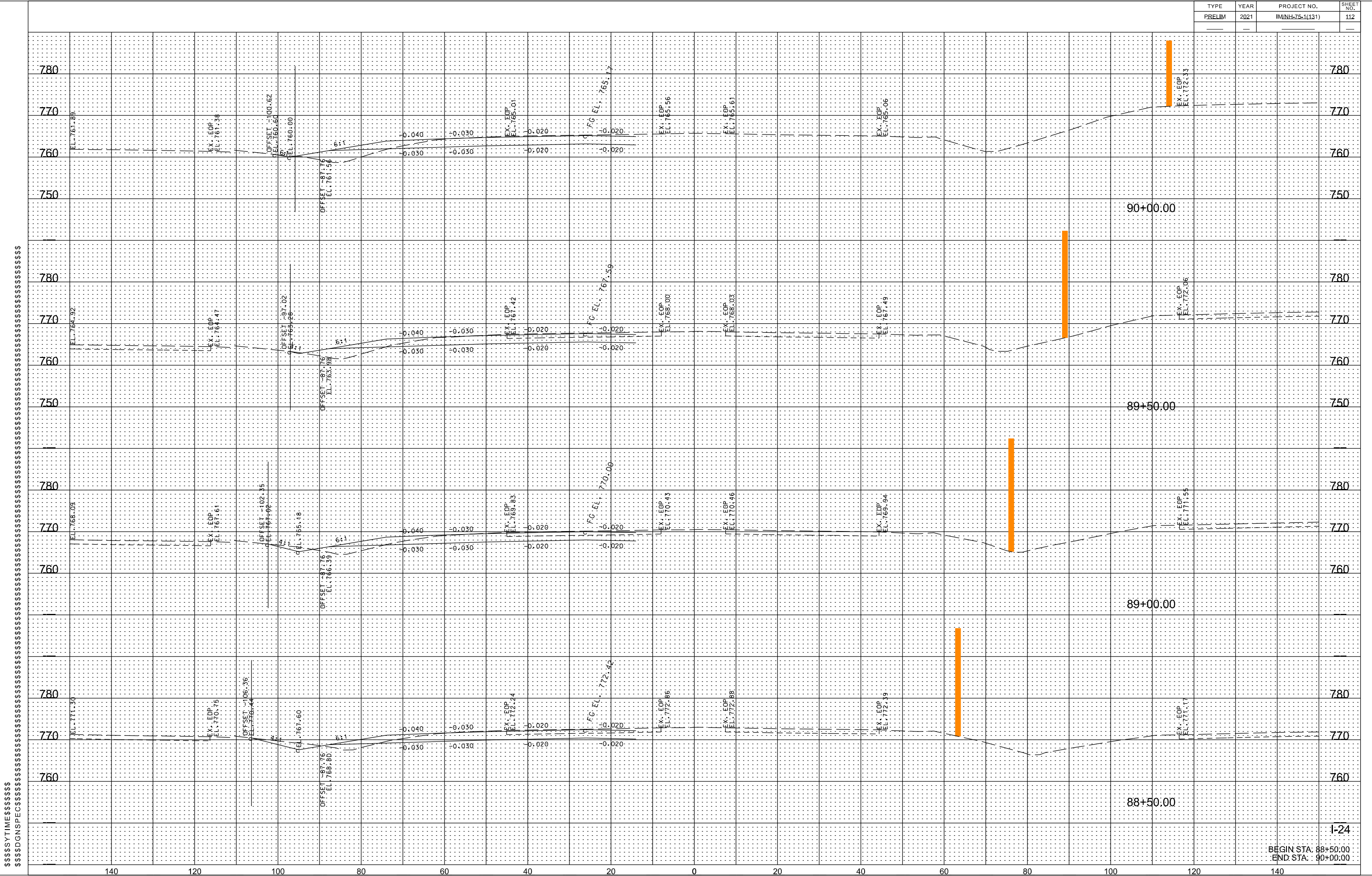




TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	110
—	—	—	800—



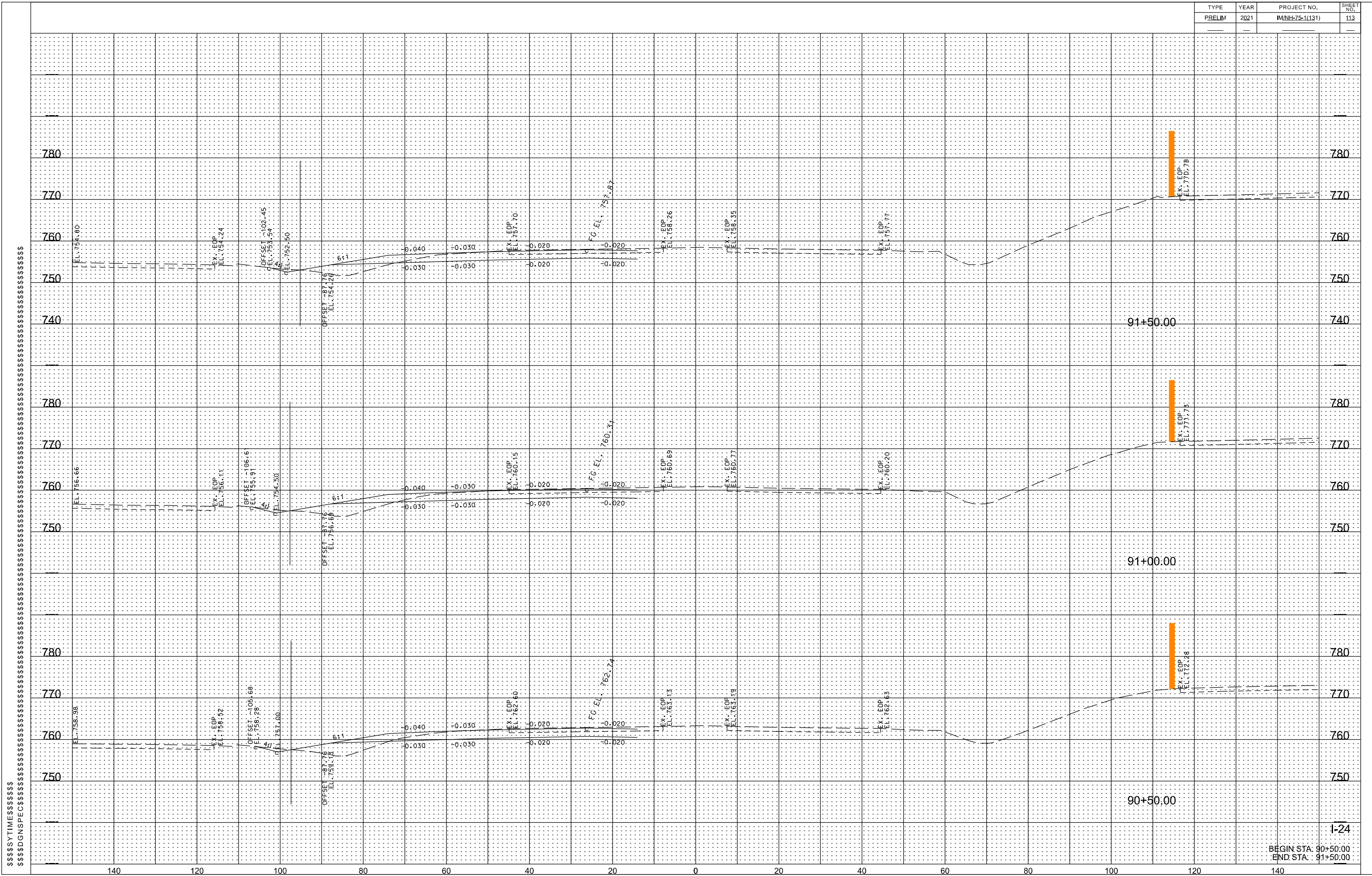




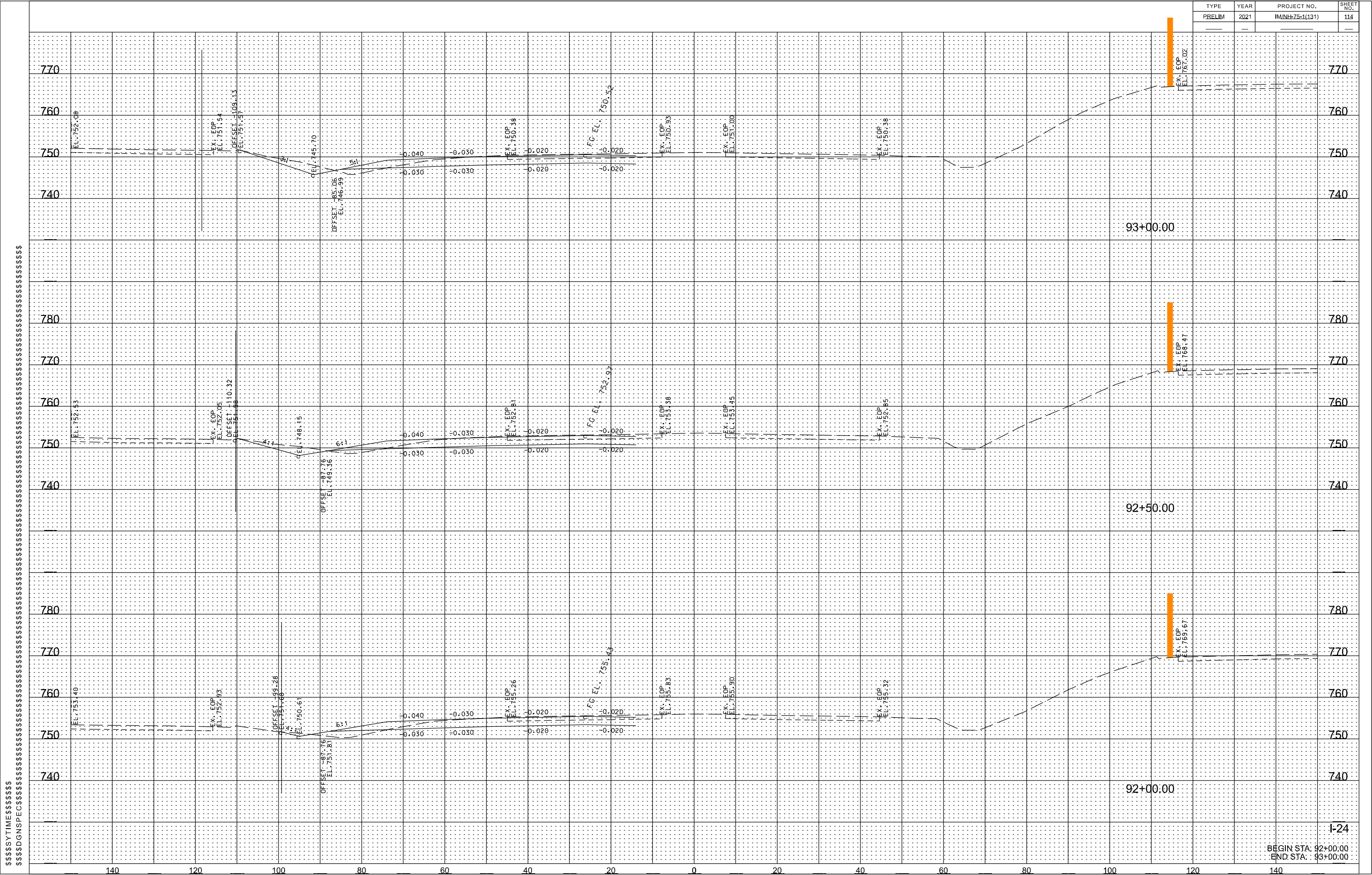
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	112

BEGIN STA: 88+50.00  
END STA: 90+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
<u>PRELIM</u>	<u>2021</u>	<u>IM/NH-75-1(131)</u>	<u>113</u>
—	—	—	—



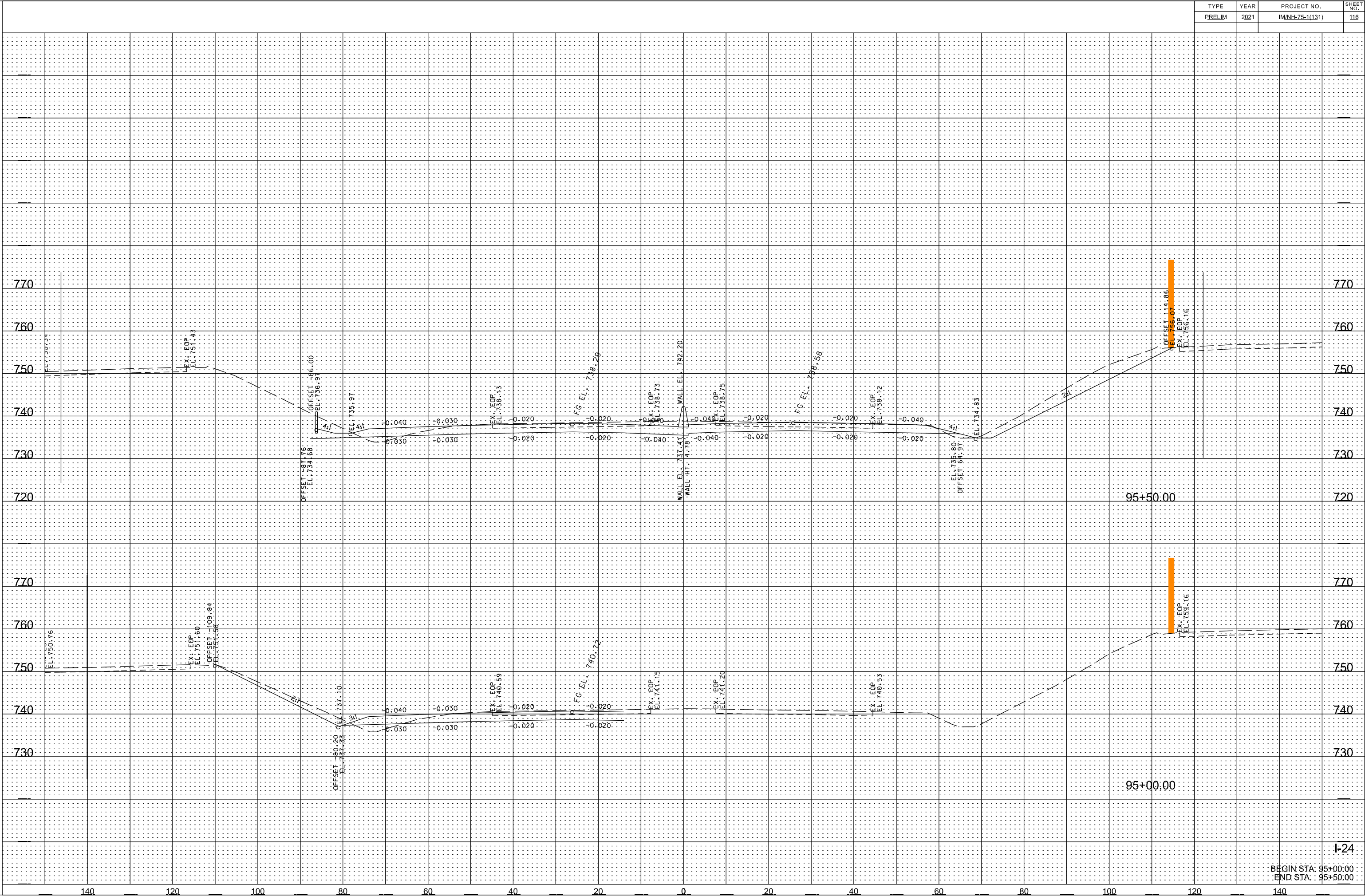


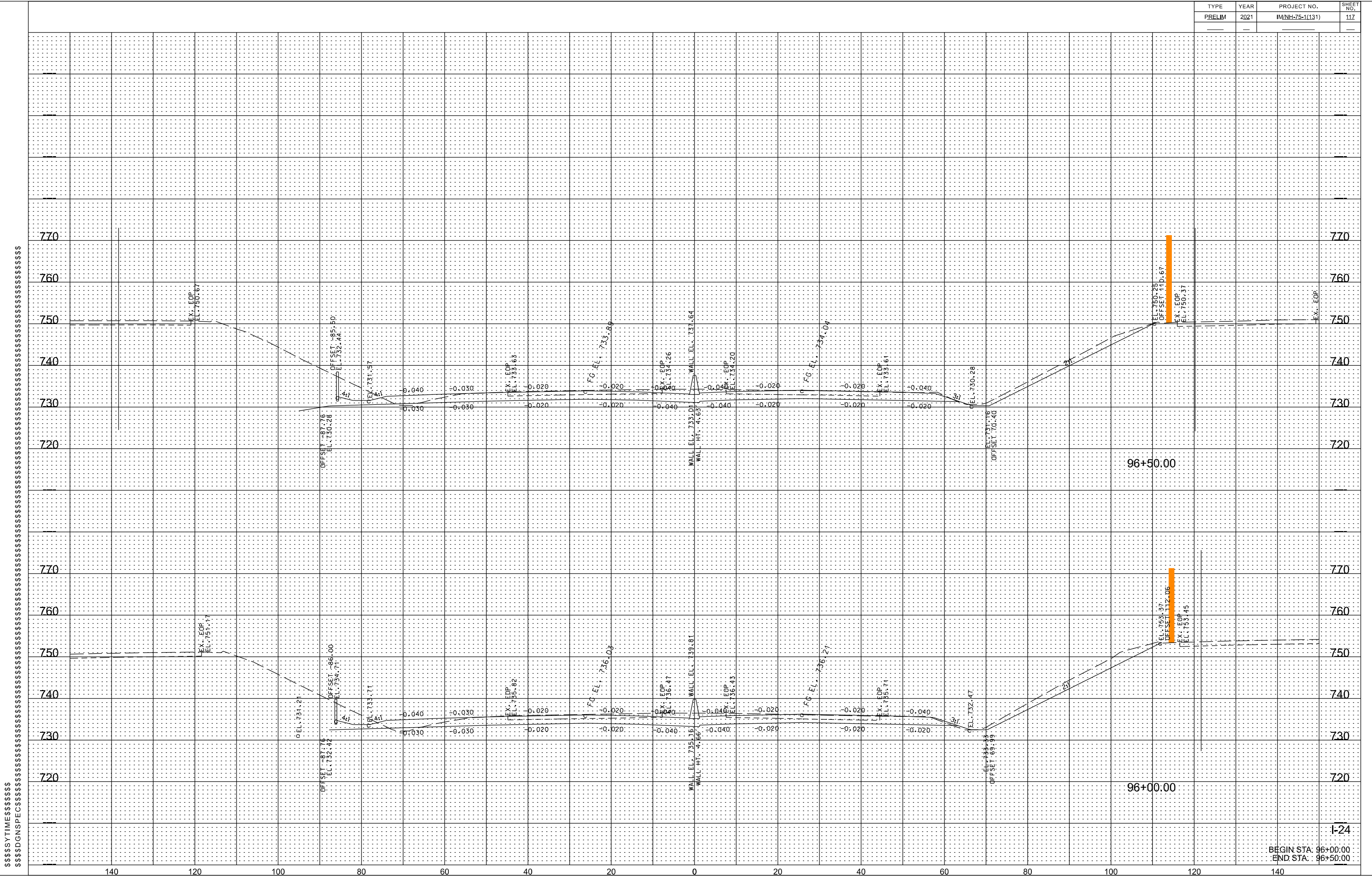


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\$\$\$\$DGN\$PE\$\$\$\$



\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PEC\$\$\$\$





TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	117

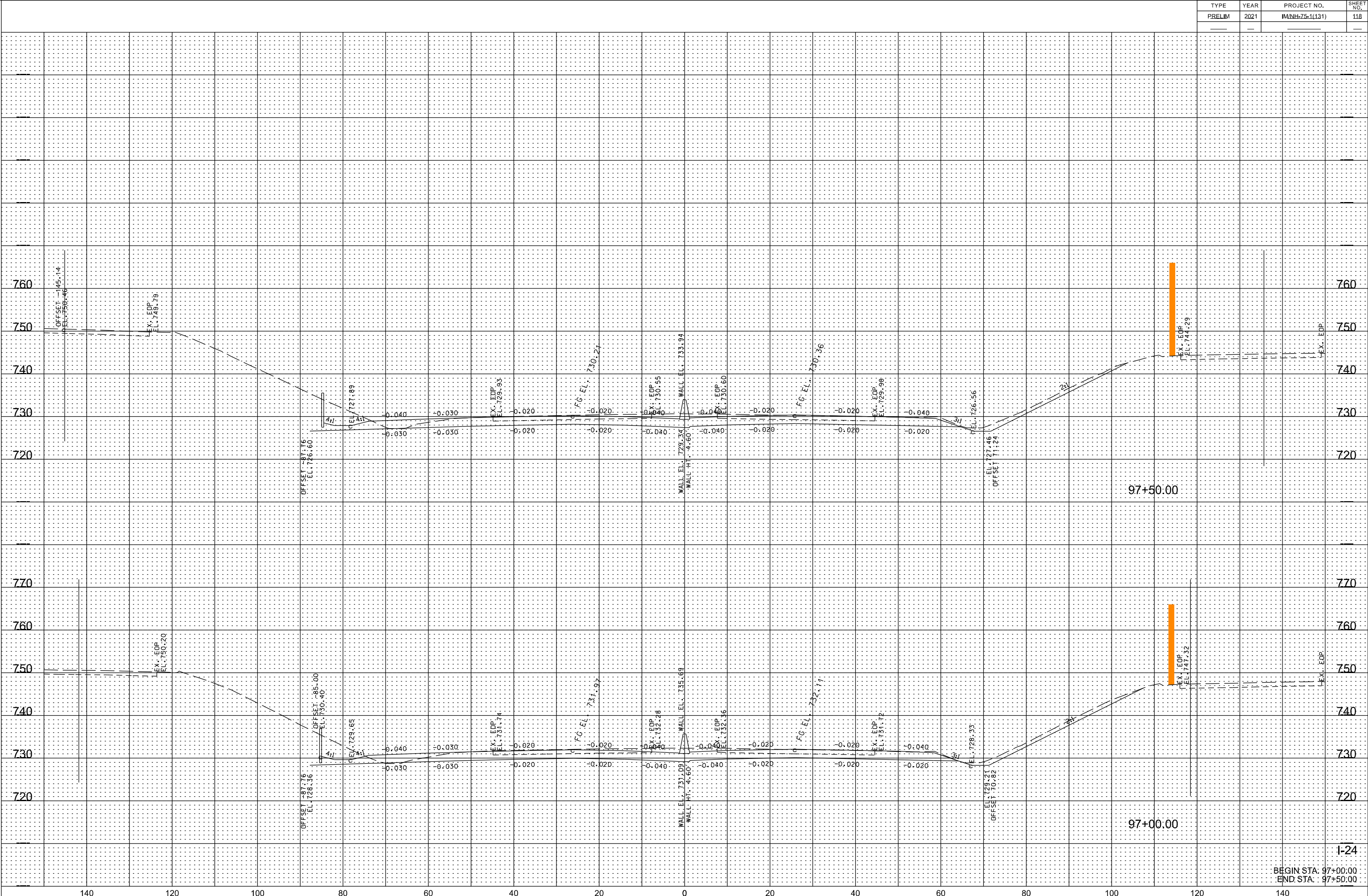
BEGIN STA: 96+00.00  
END STA: 96+50.00

I-24



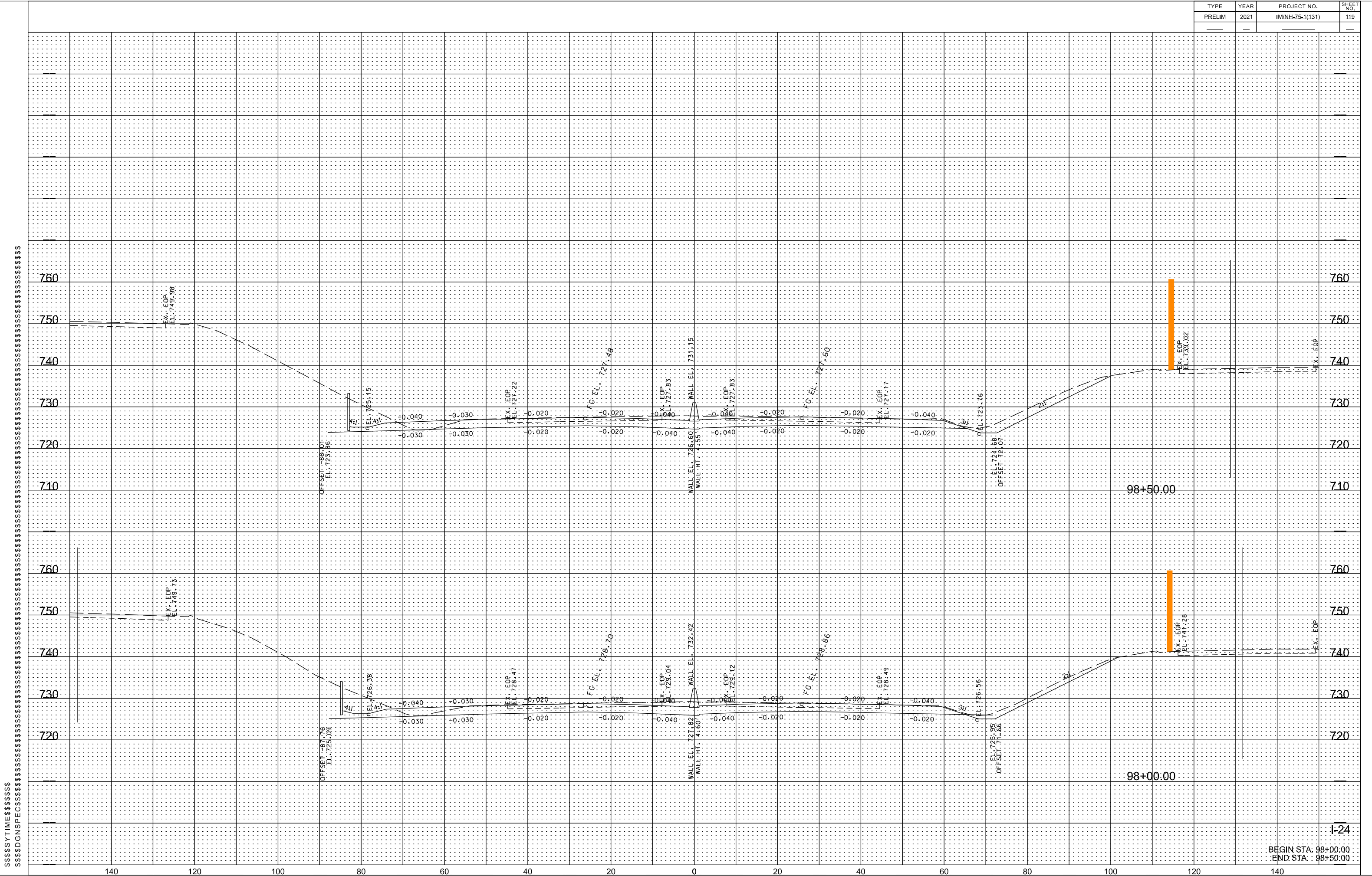
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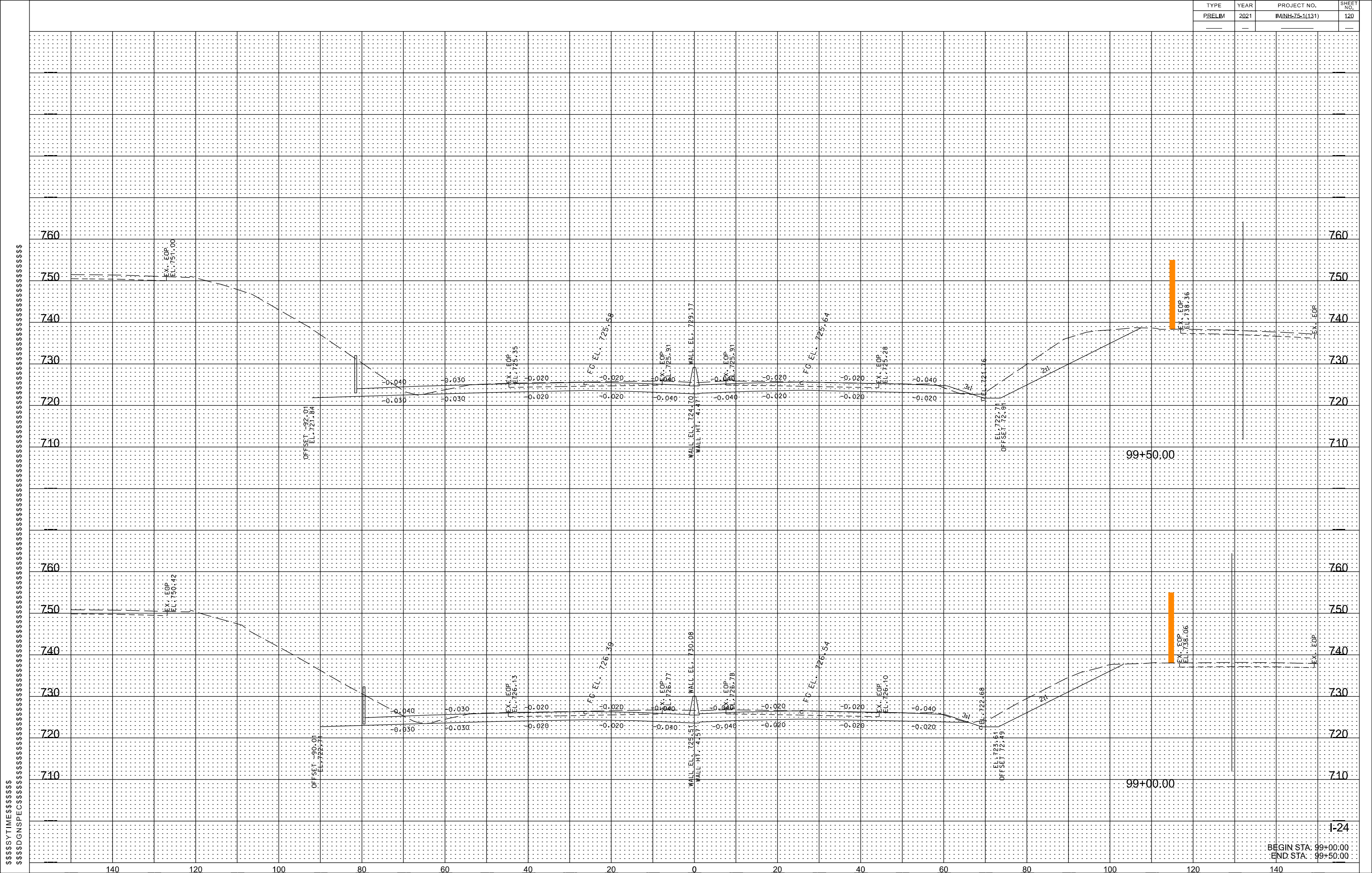
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	MMNH-75-1(131)	118
—	—	—	—



BEGIN STA: 97+00.00  
END STA: 97+50.00

I-24





TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	MMNH-75-1(131)	120
—	—	—	—

BEGIN STA: 99+00.00  
END STA: 99+50.00

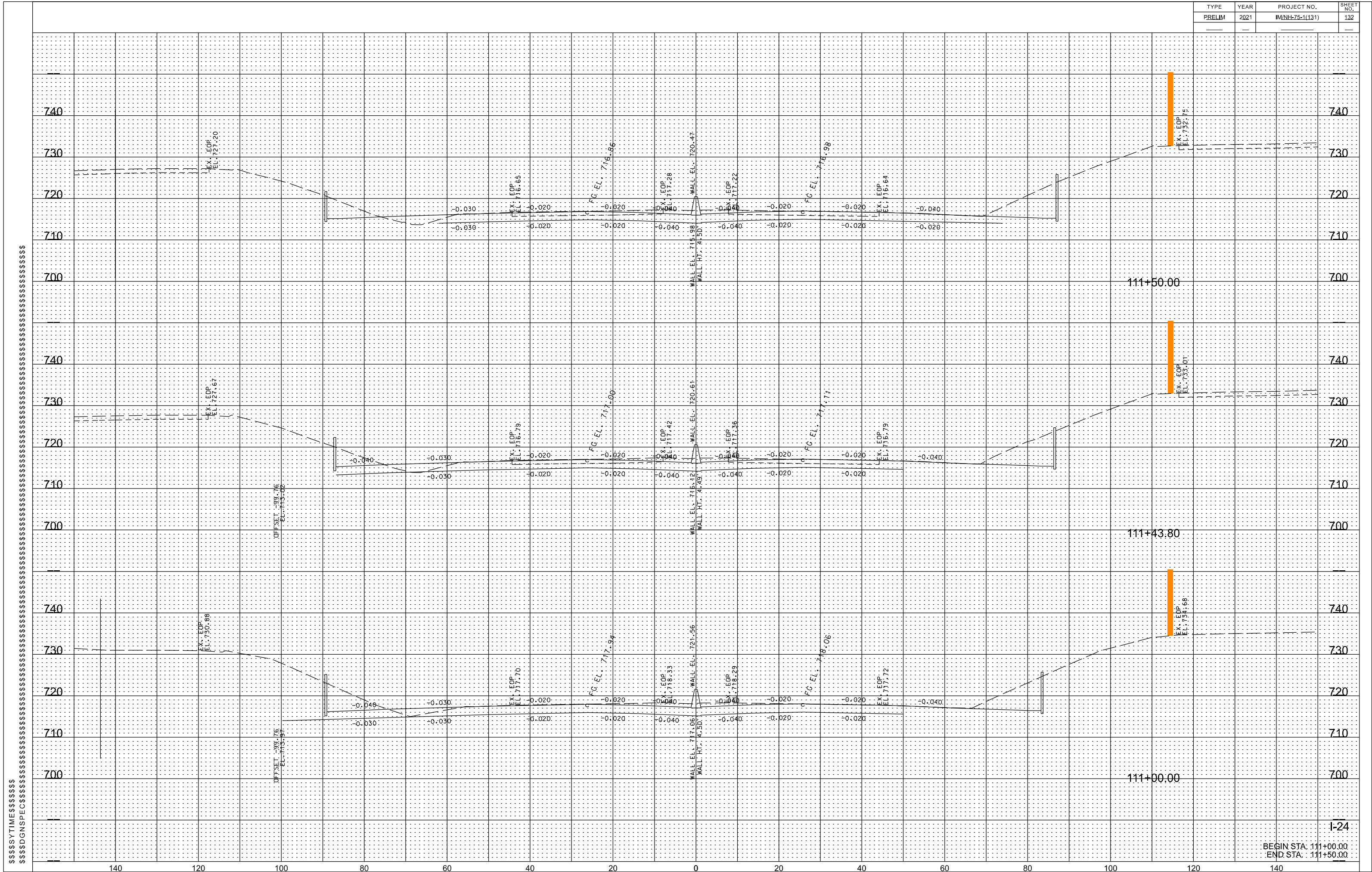


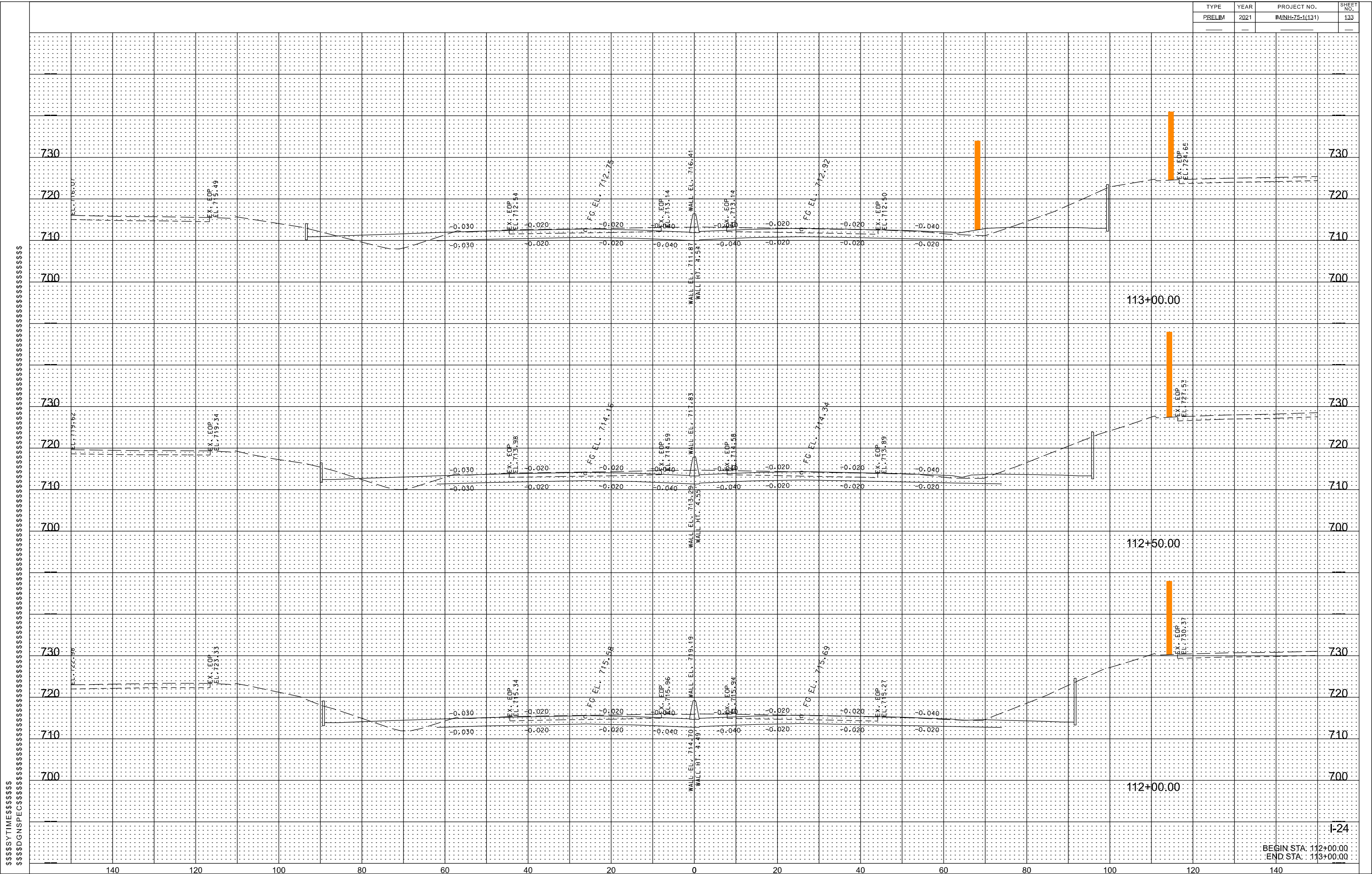


**NAA 1, Option 1**

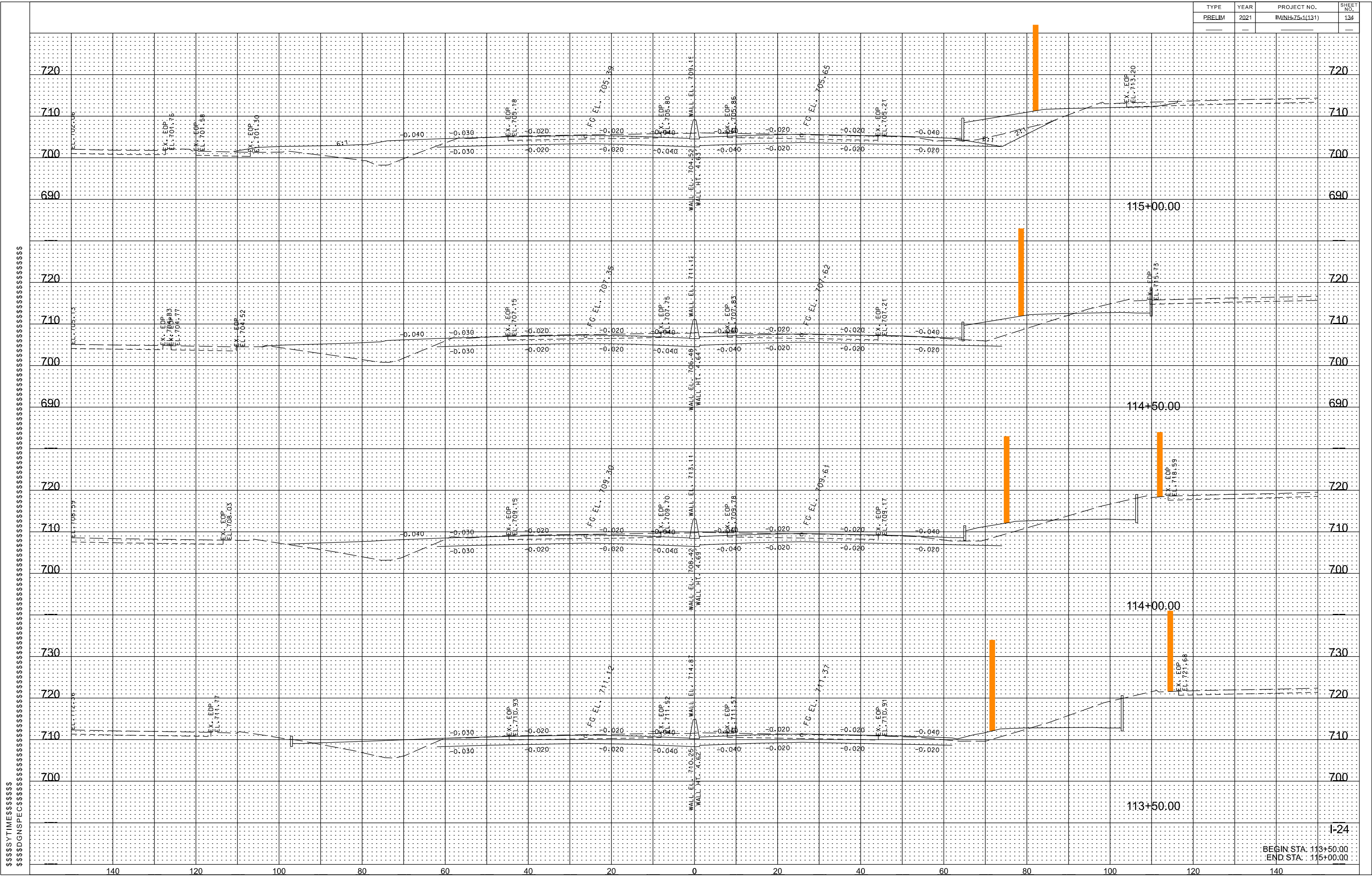


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	132
—	—	—	—



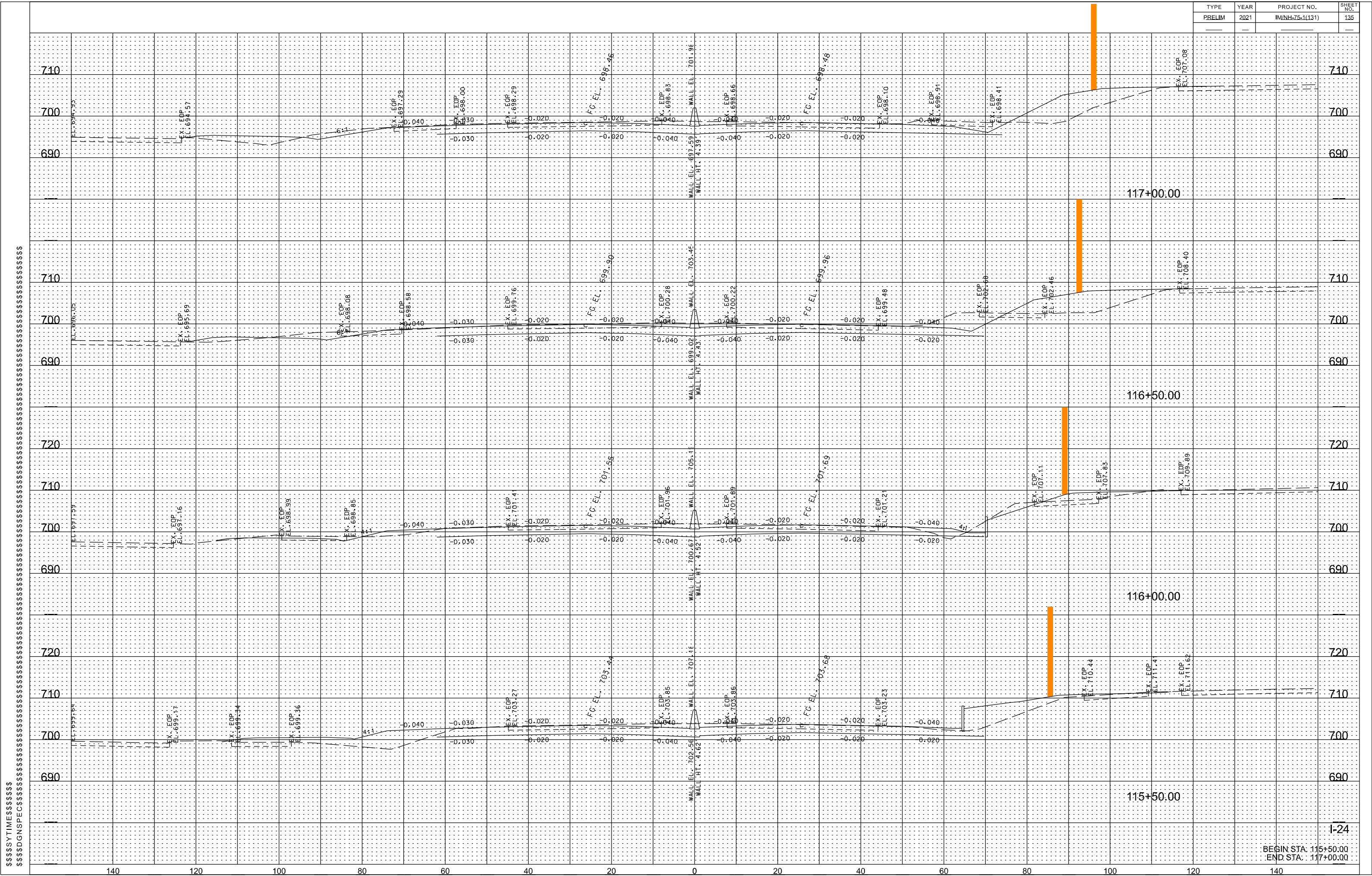






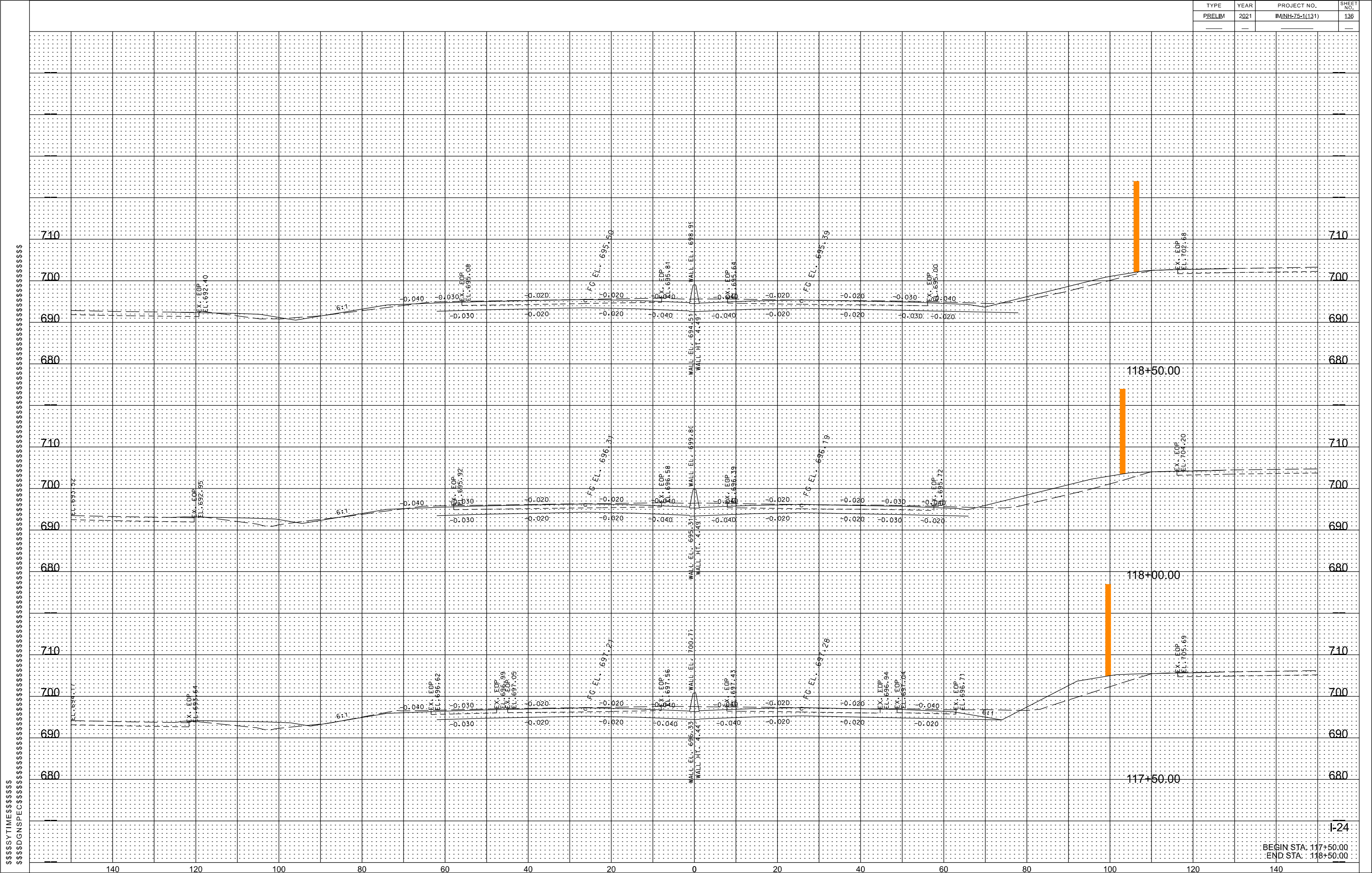
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	134
—	—	—	—

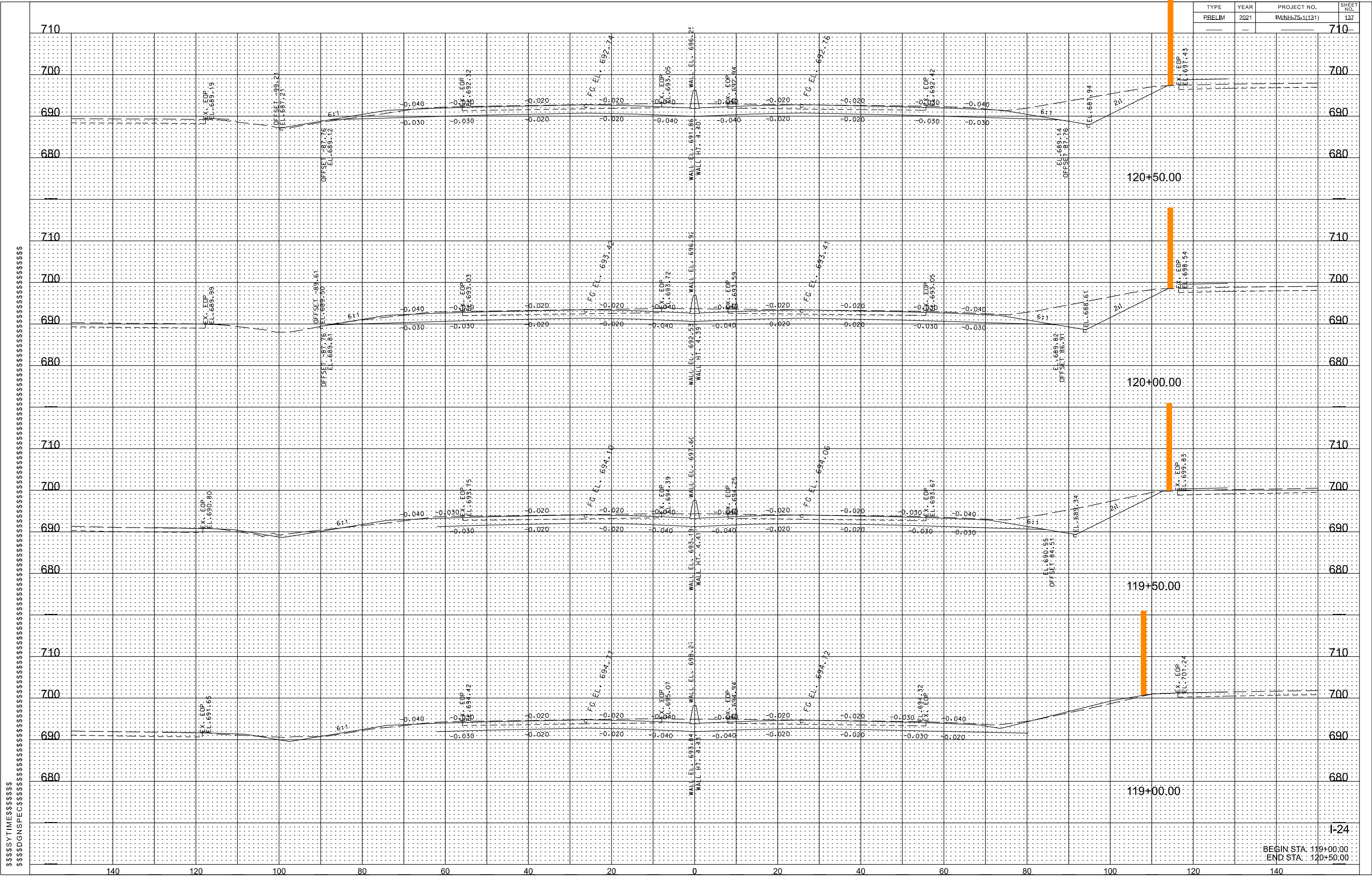
BEGIN STA: 113+50.00  
END STA: 115+00.00



\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN SPEC\$\$\$\$\$

BEGIN STA: 115+50.00  
END STA: 117+00.00

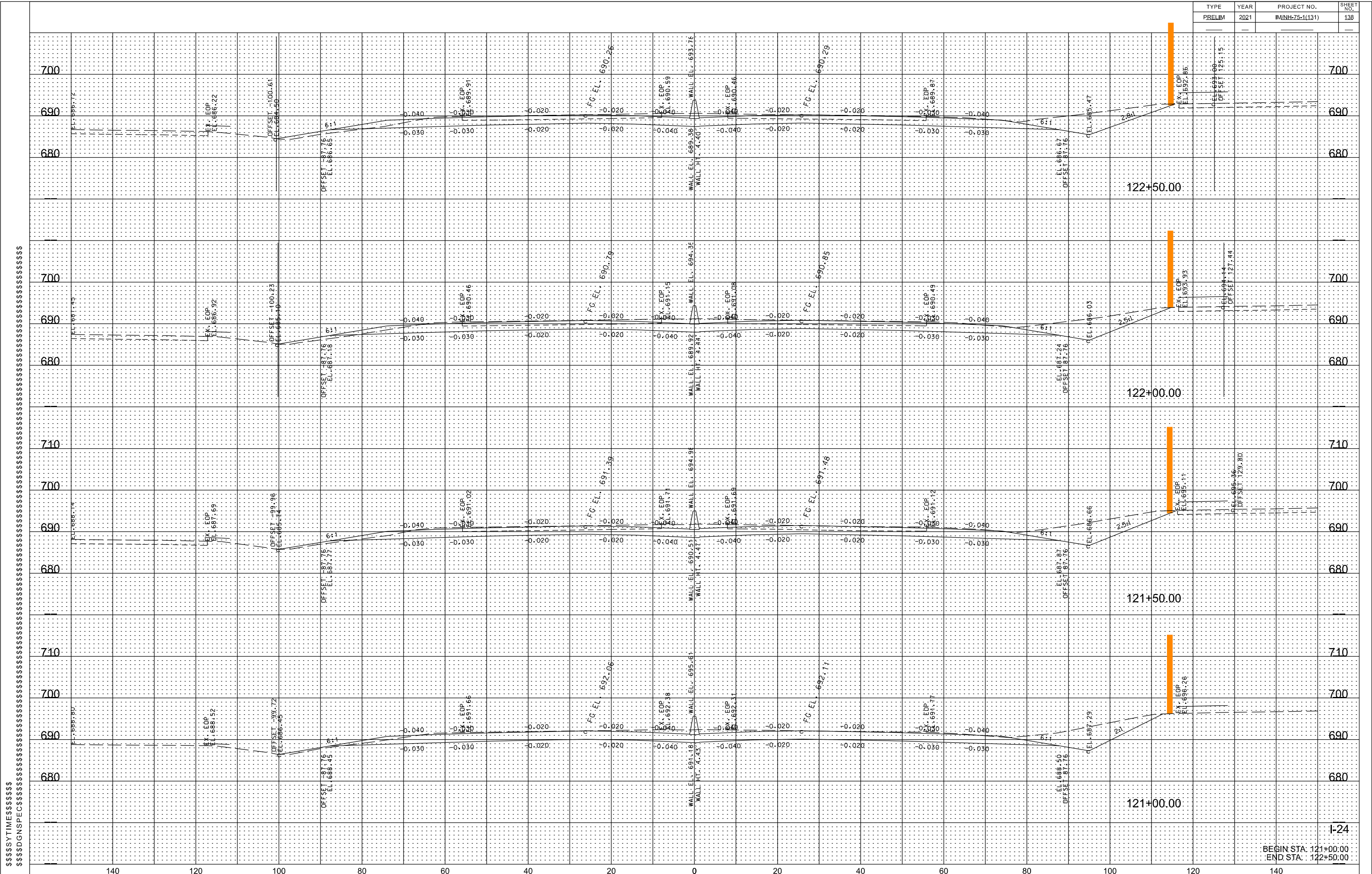


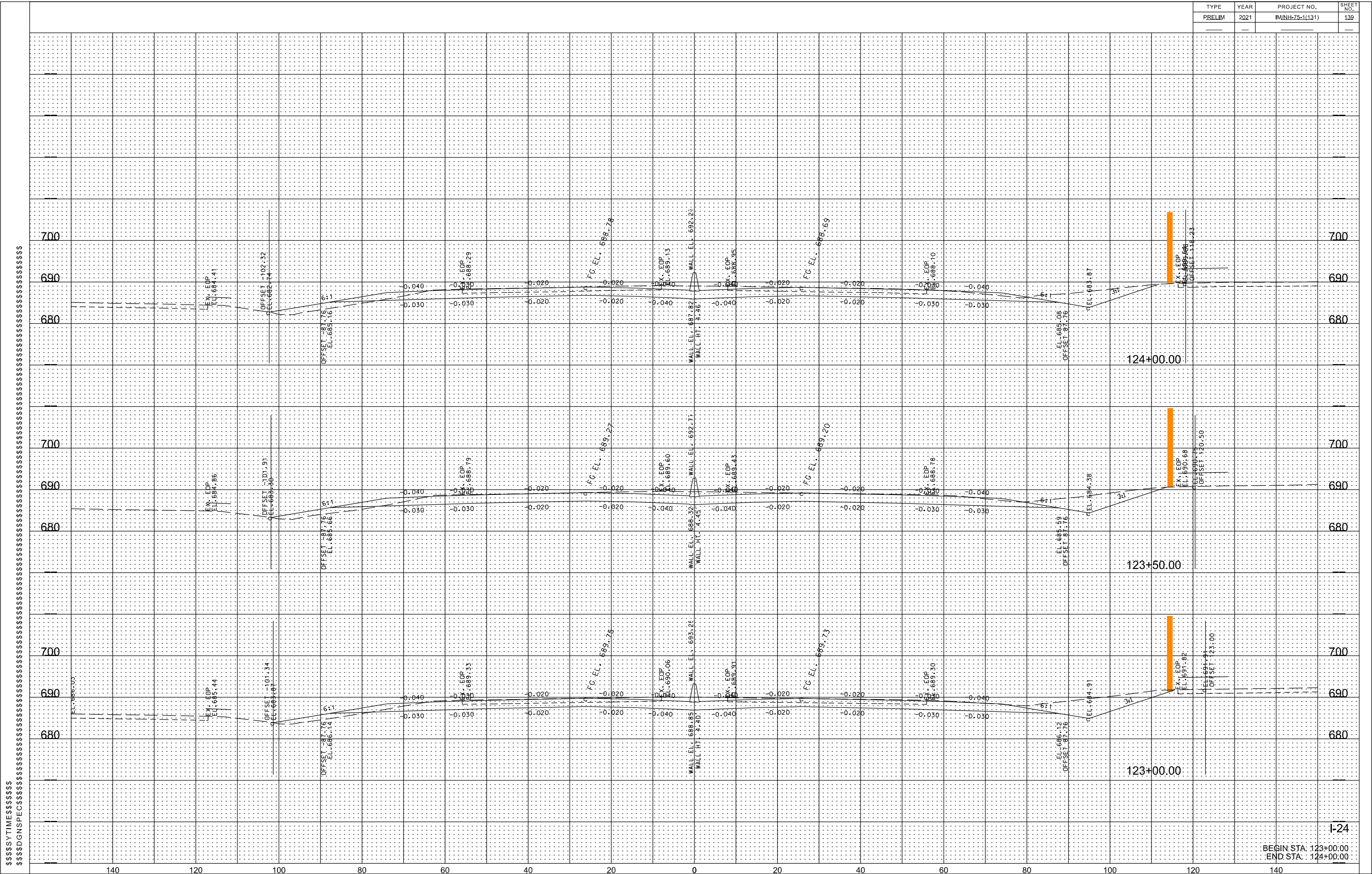


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	137

BEGIN STA: 119+00.00  
END STA: 120+50.00

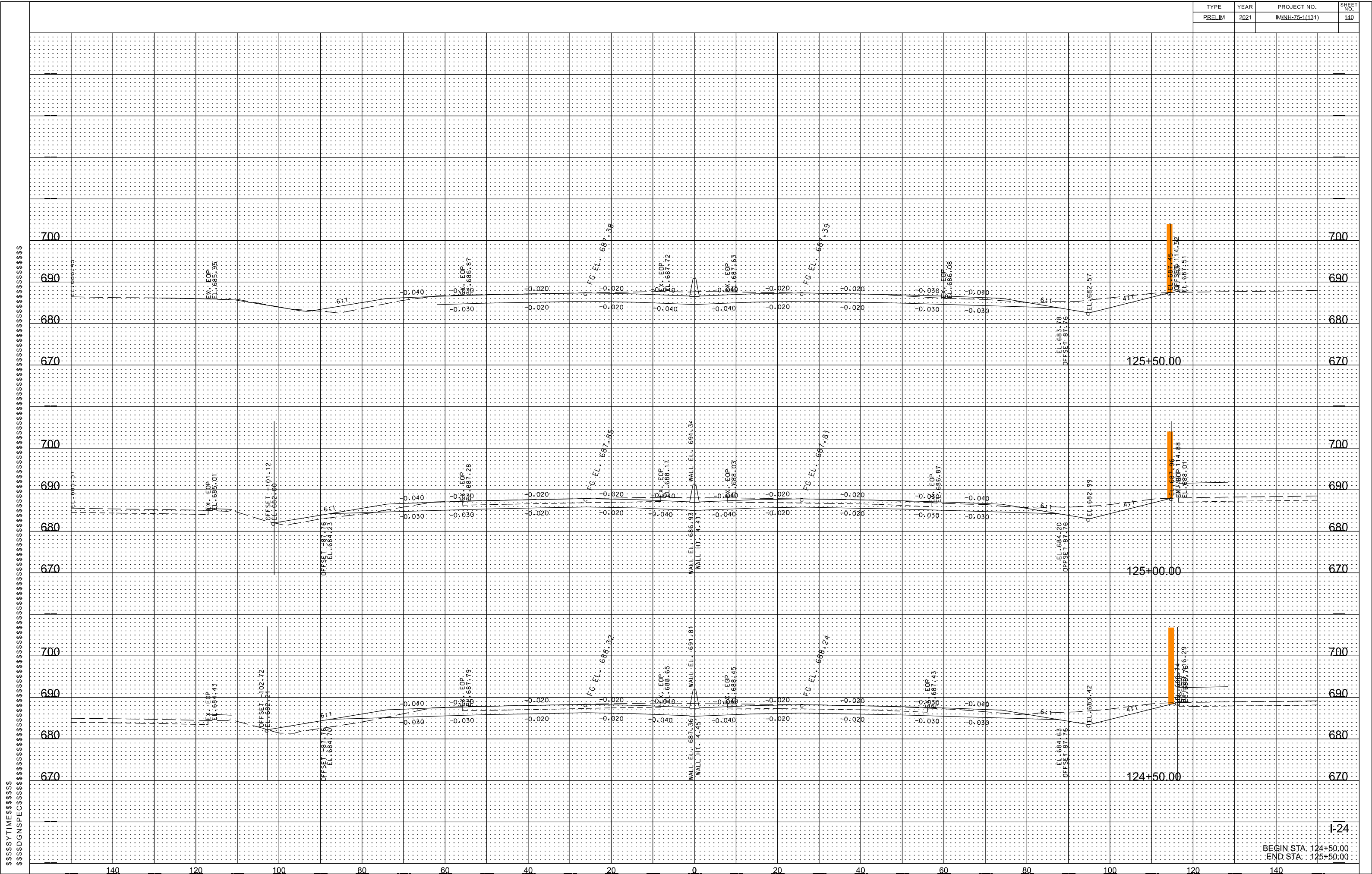






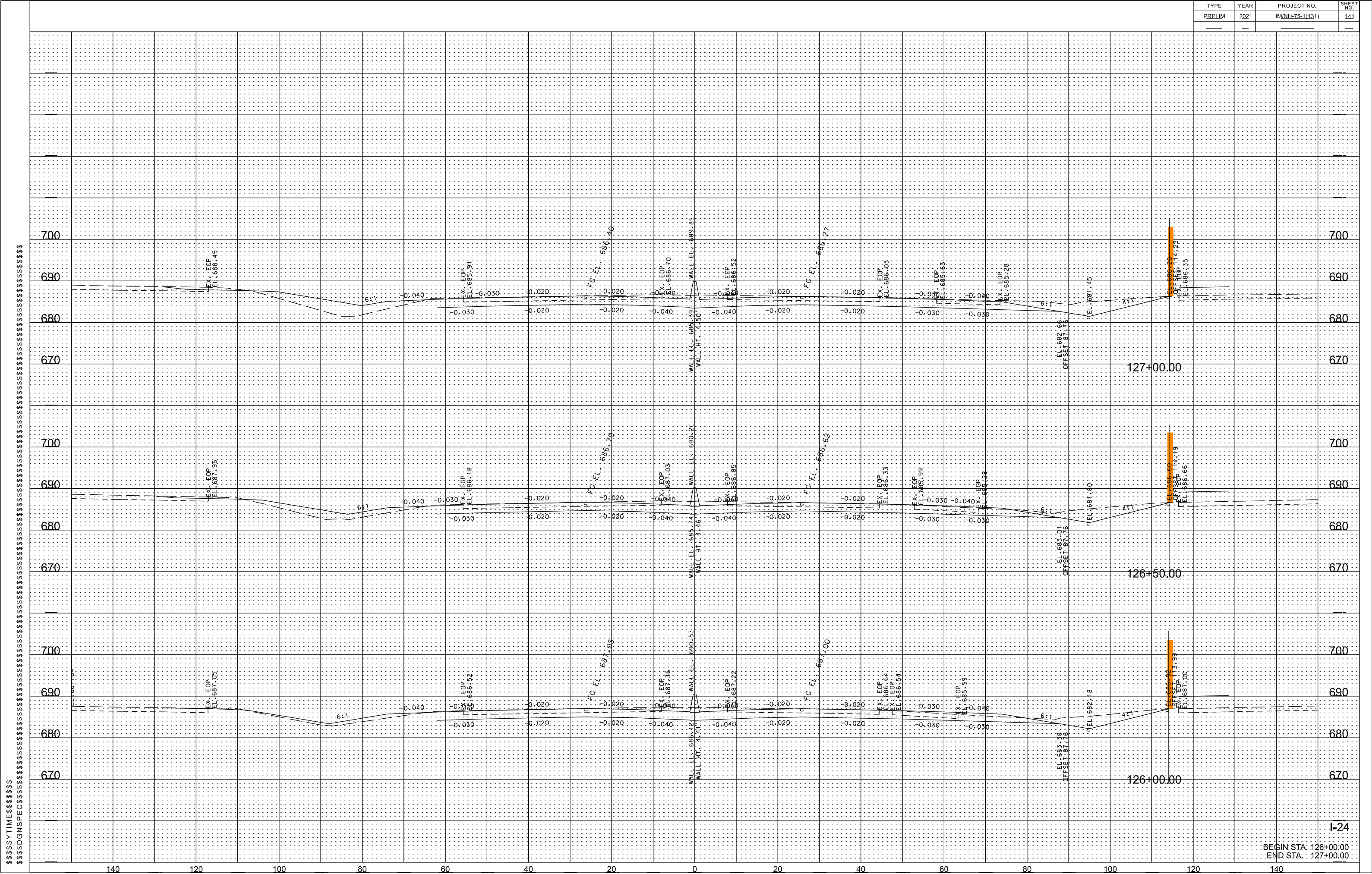
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	139
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BEGIN STA: 123+00.00  
END STA: 124+00.00



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	140
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BEGIN STA: 124+50.00  
END STA: 125+50.00

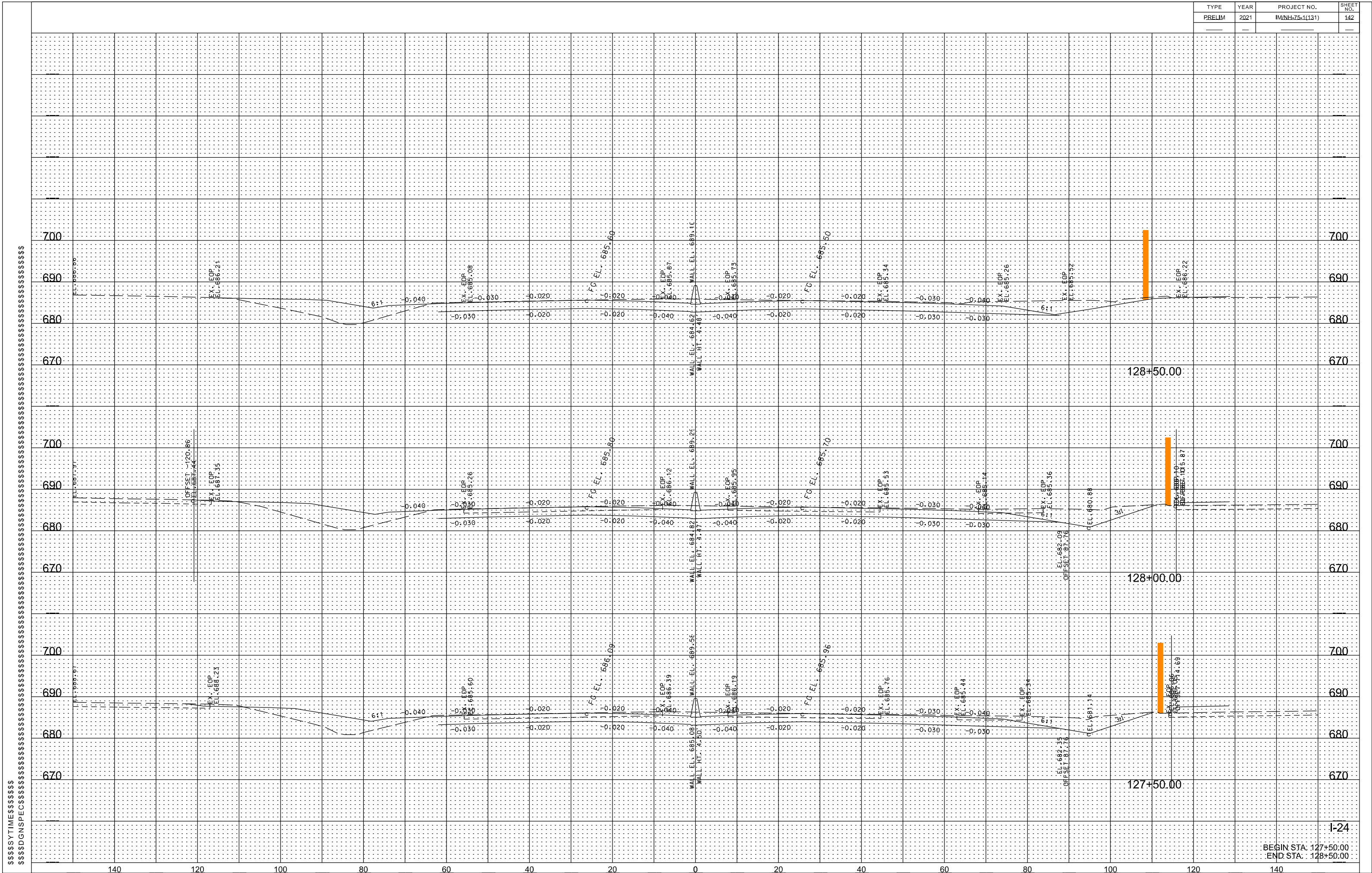


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NHL-75-1(131)	141
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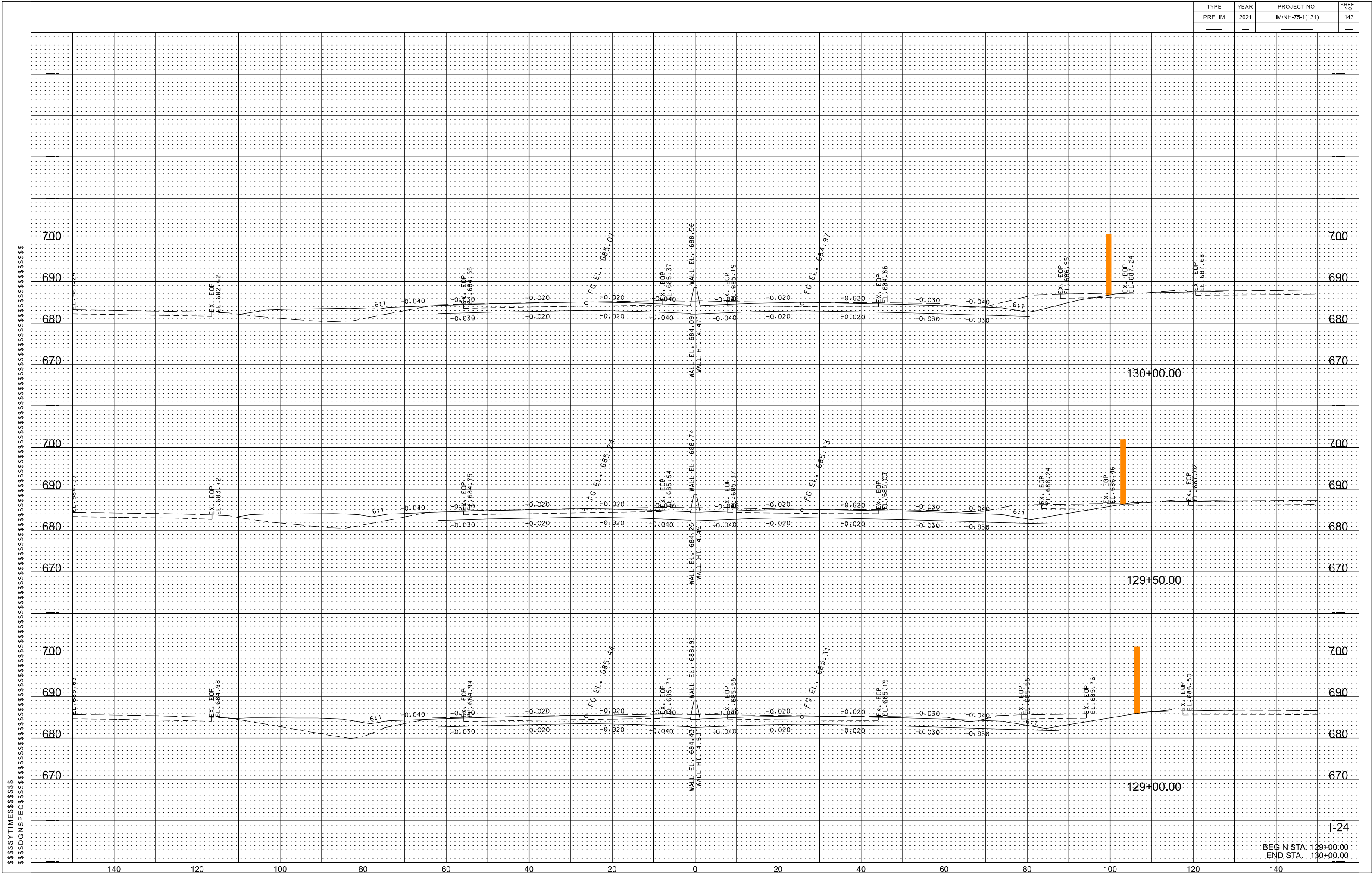
BEGIN STA: 126+00.00  
END STA: 127+00.00

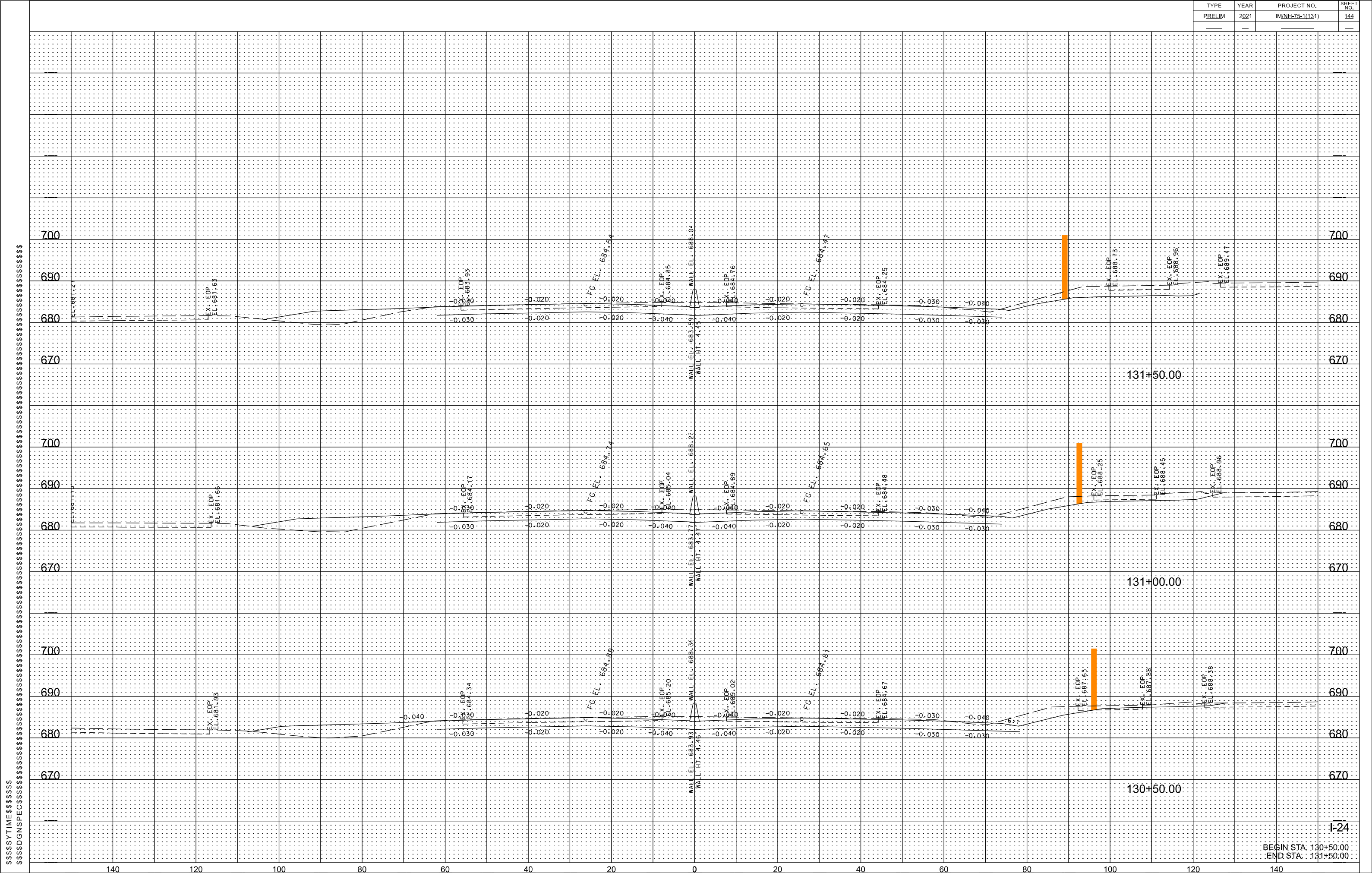


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	142
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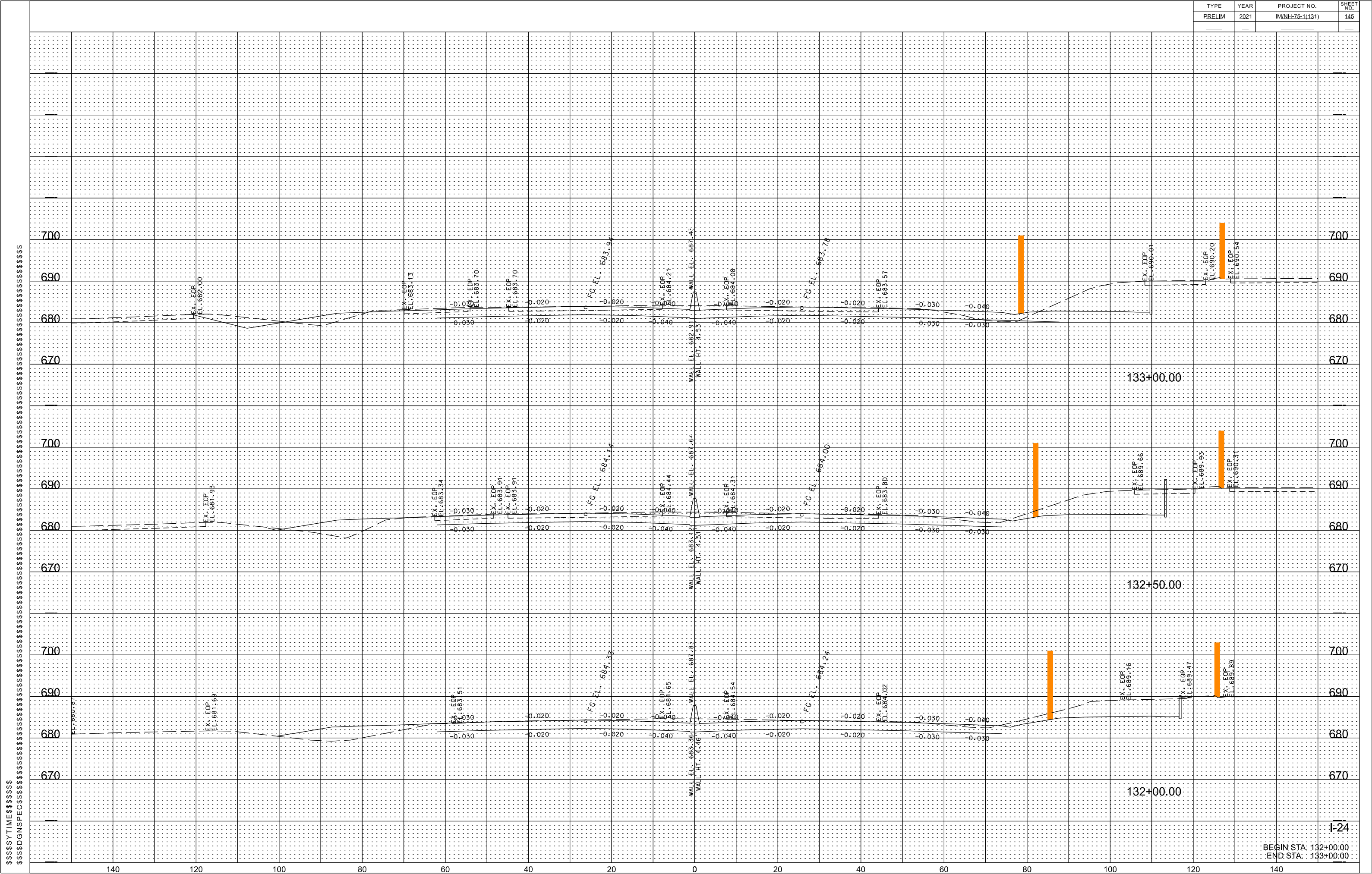


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	143
—	—	—	—



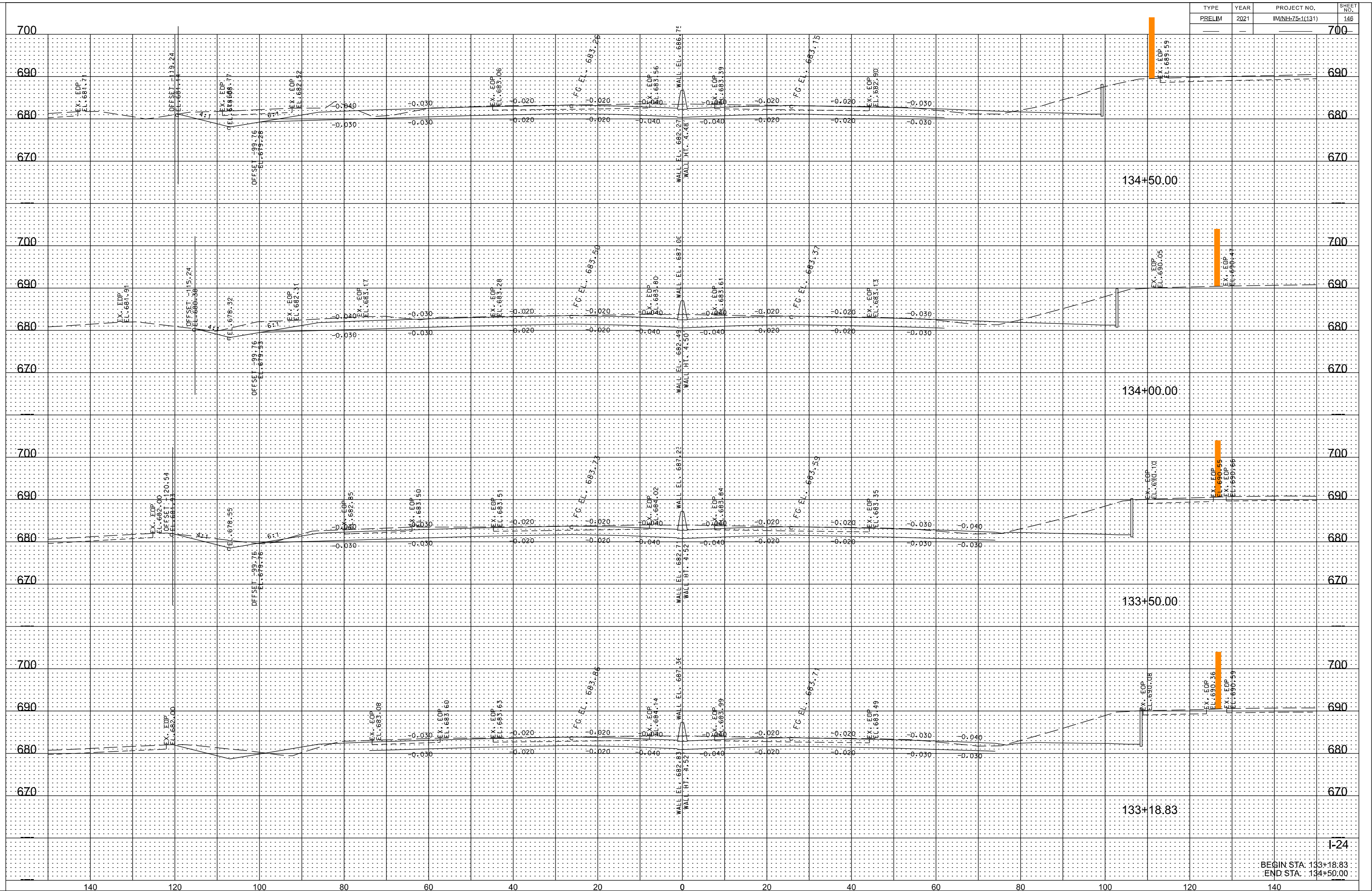
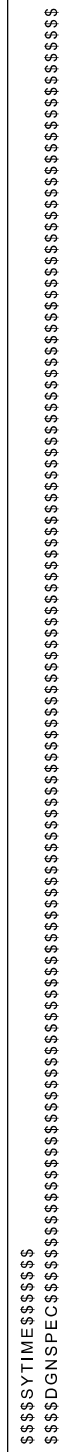


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	144
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	146
			700

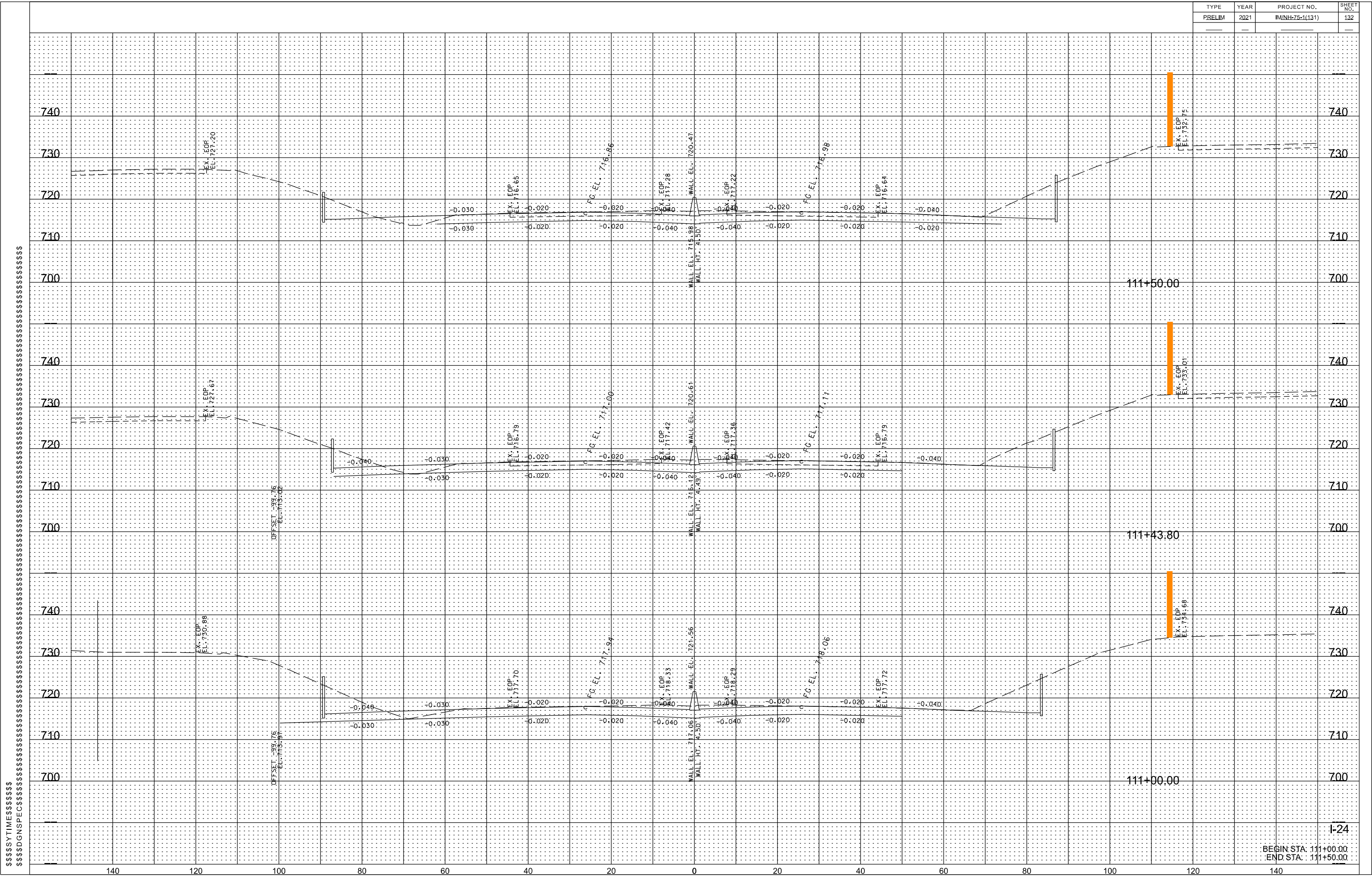


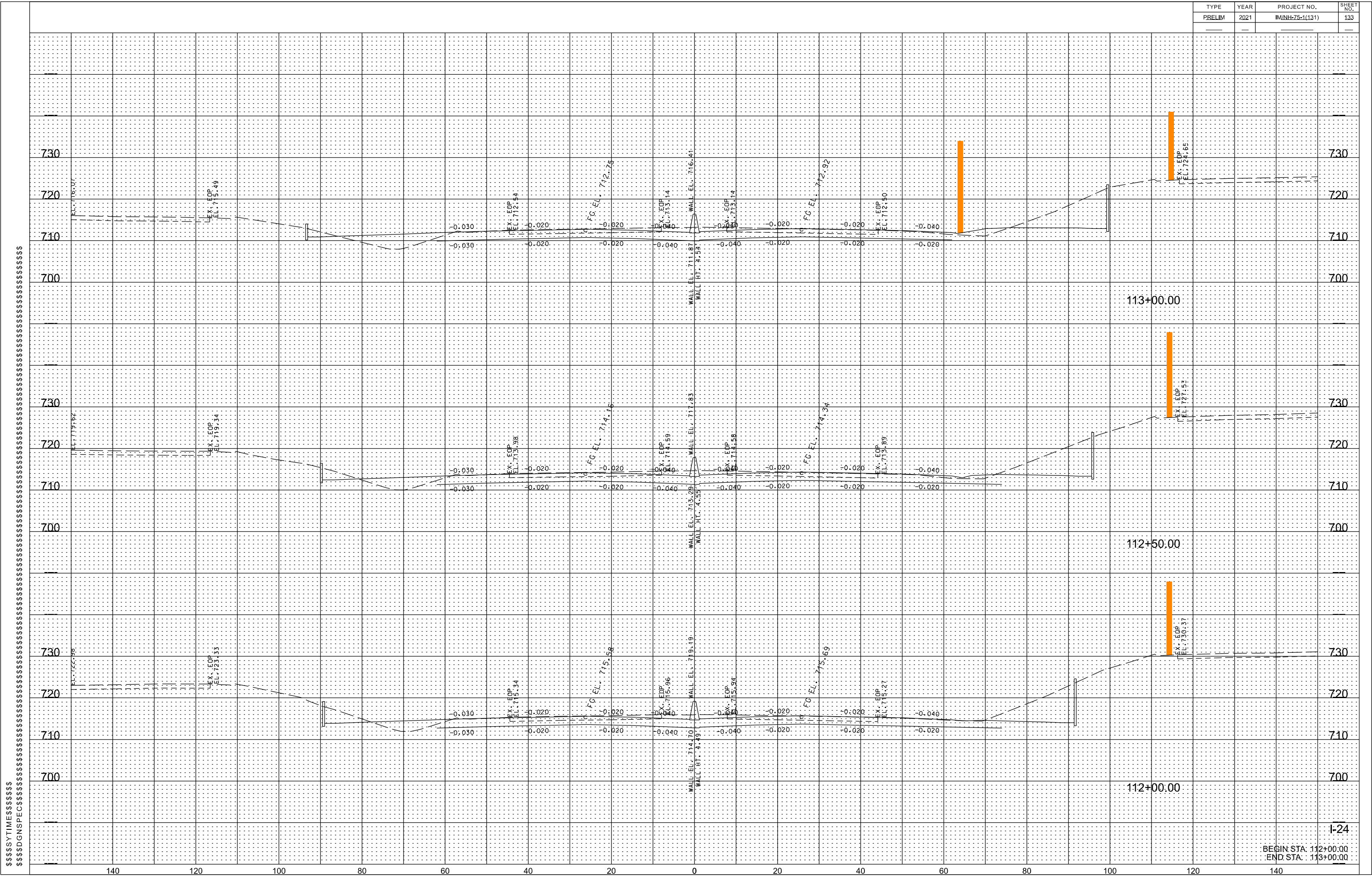


**NAA 1, Option 2**







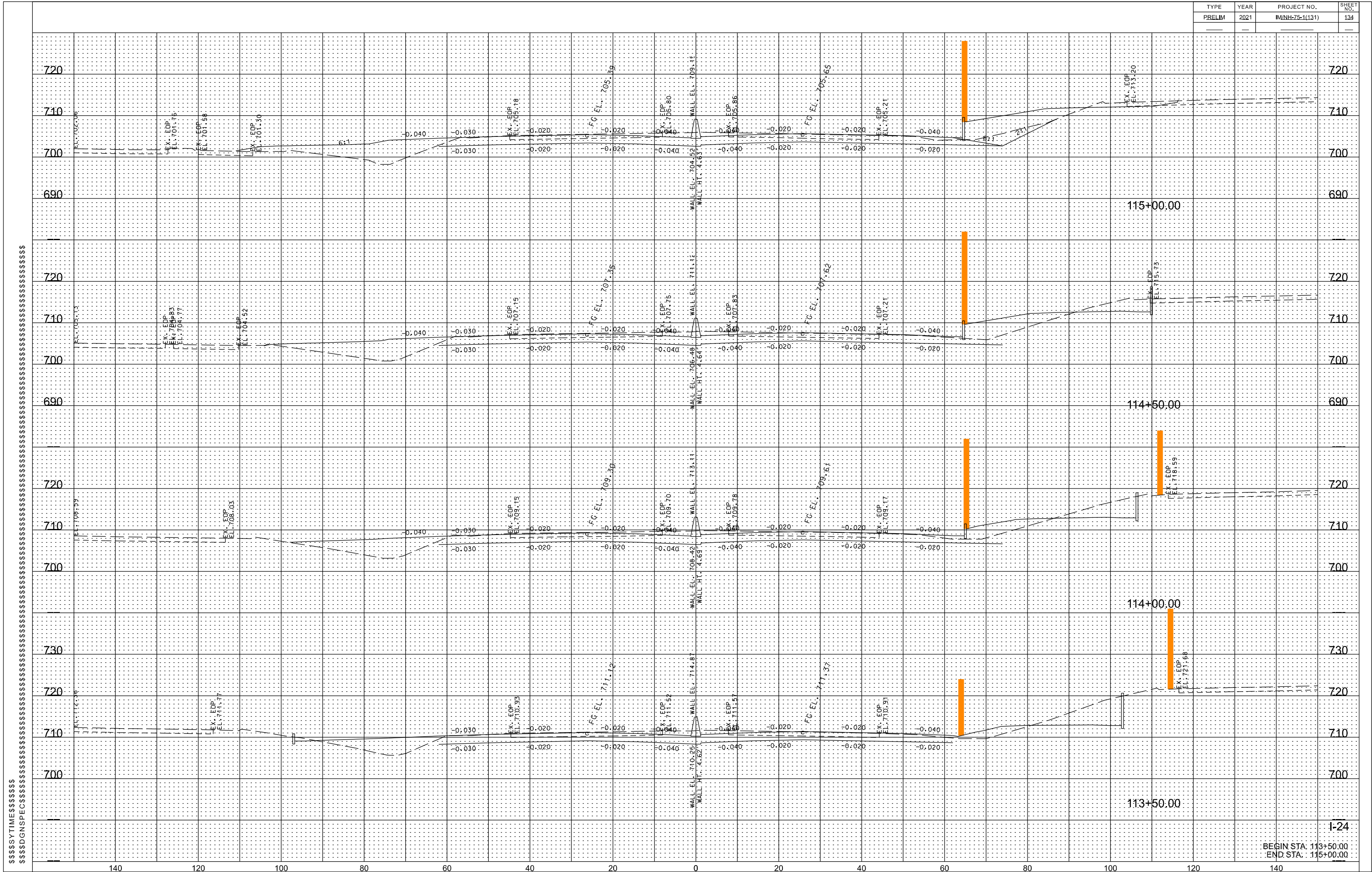


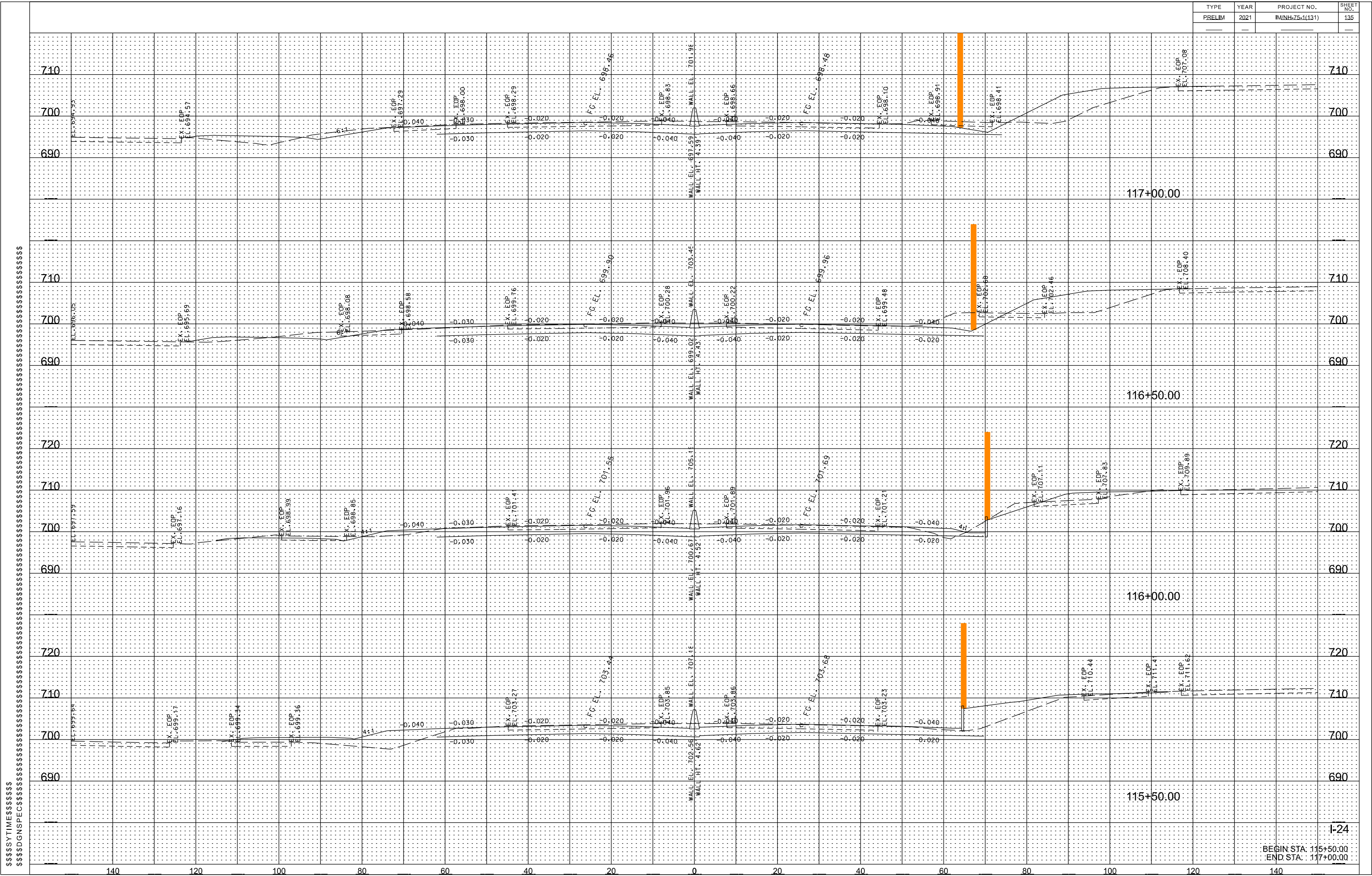
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	133
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BEGIN STA: 112+00.00  
END STA: 113+00.00

1-24

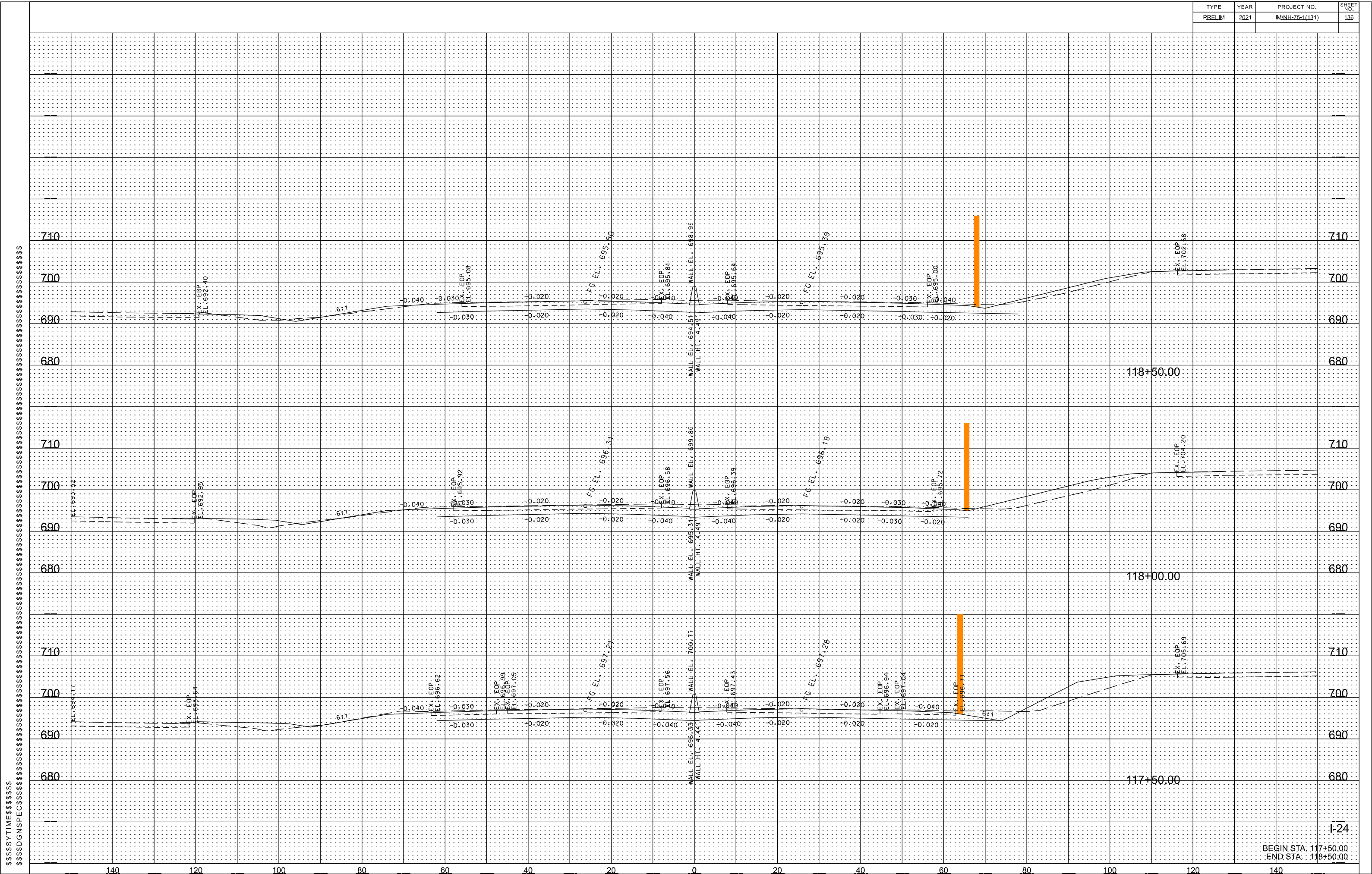
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	134



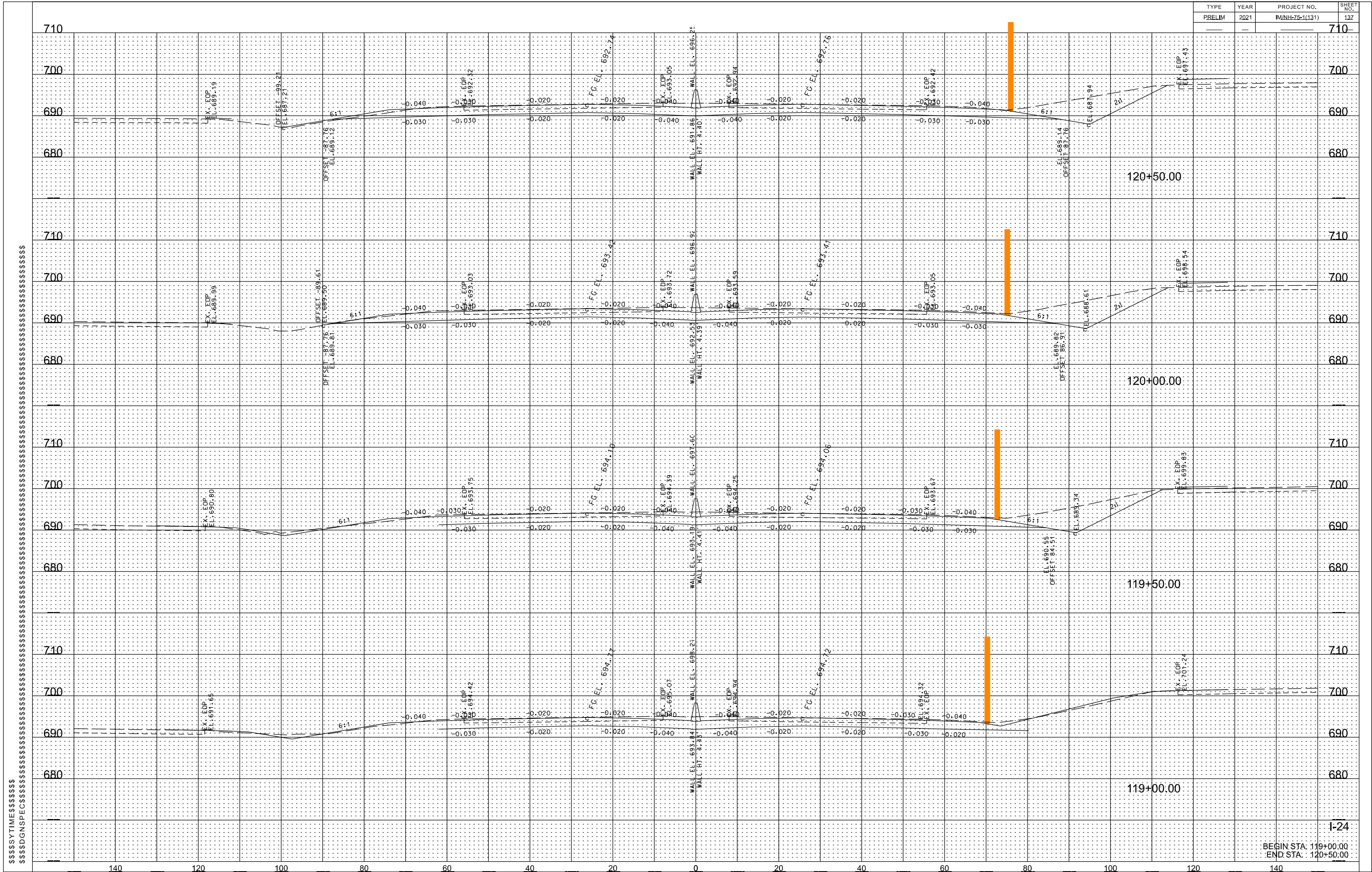


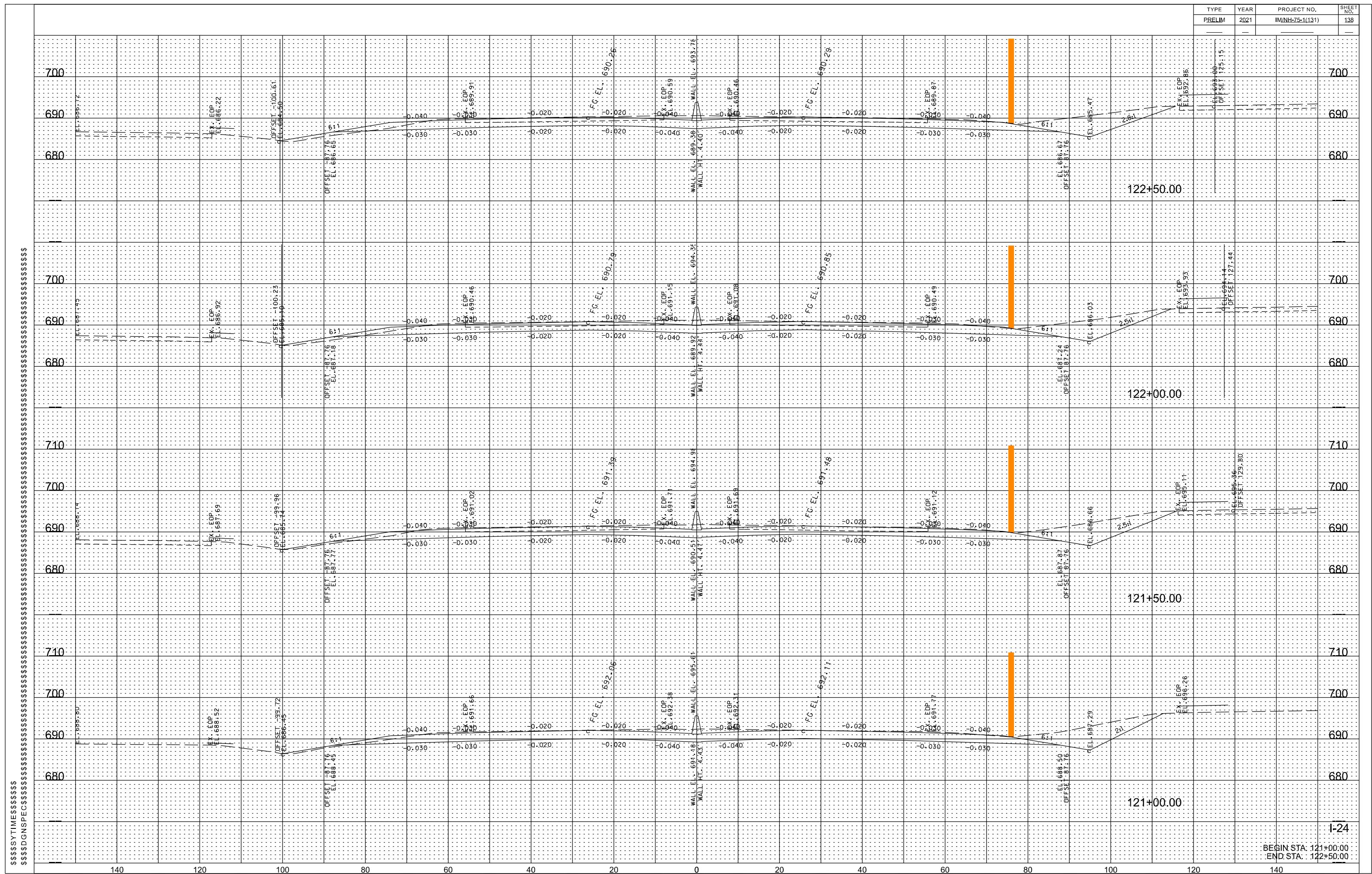
BEGIN STA: 115+50.00  
END STA: 117+00.00

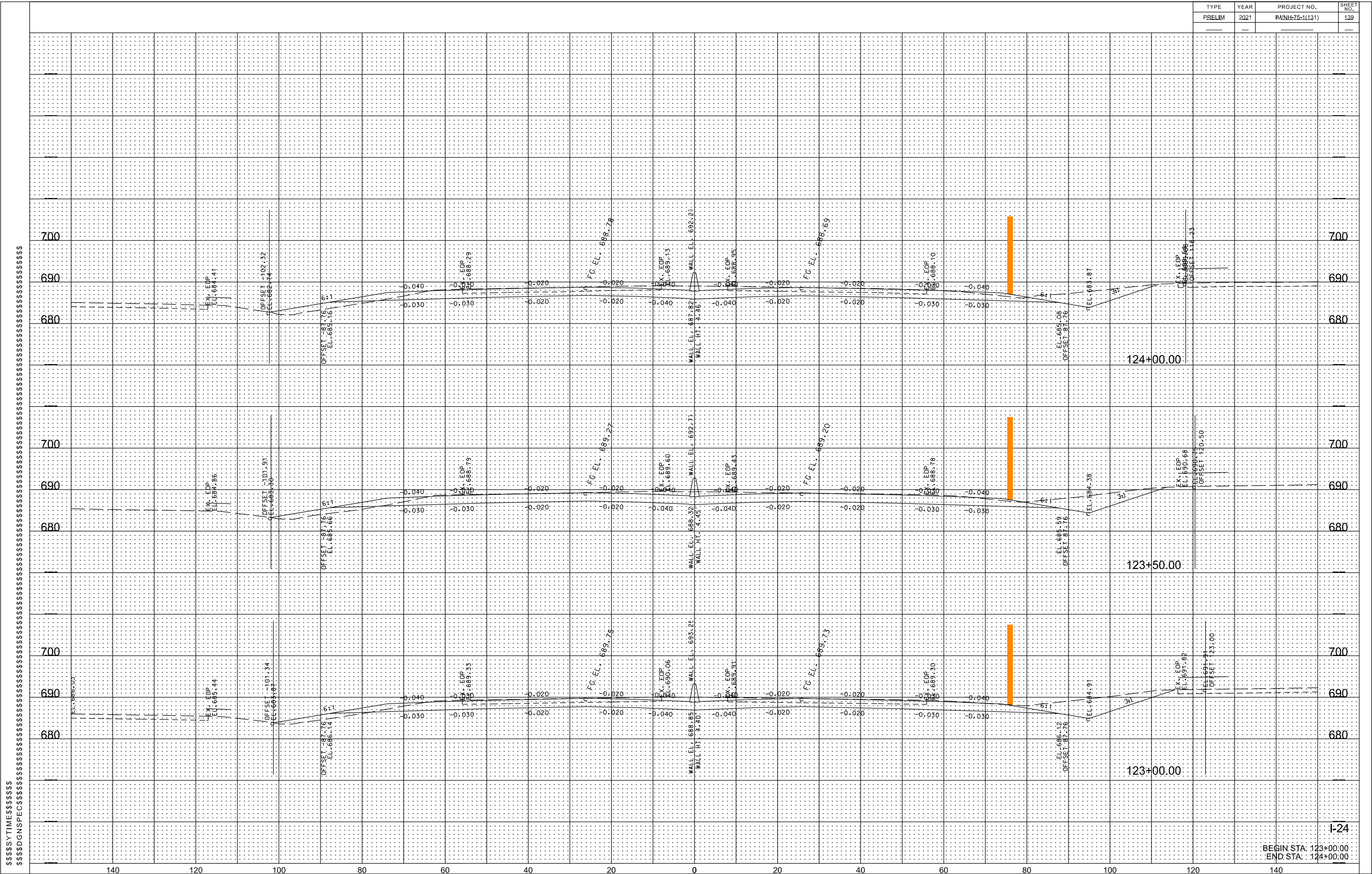




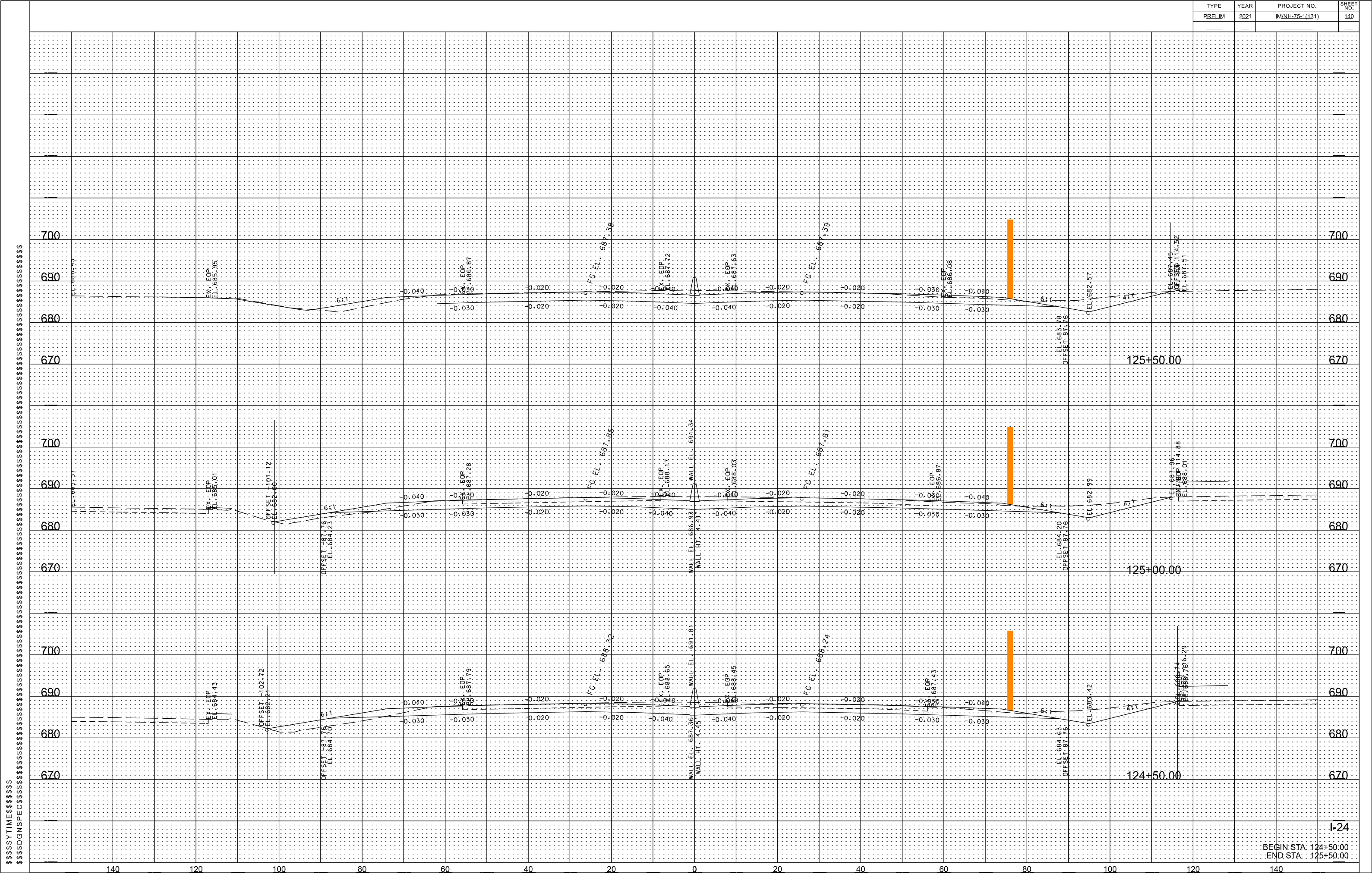
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	137
—	—	—	710—





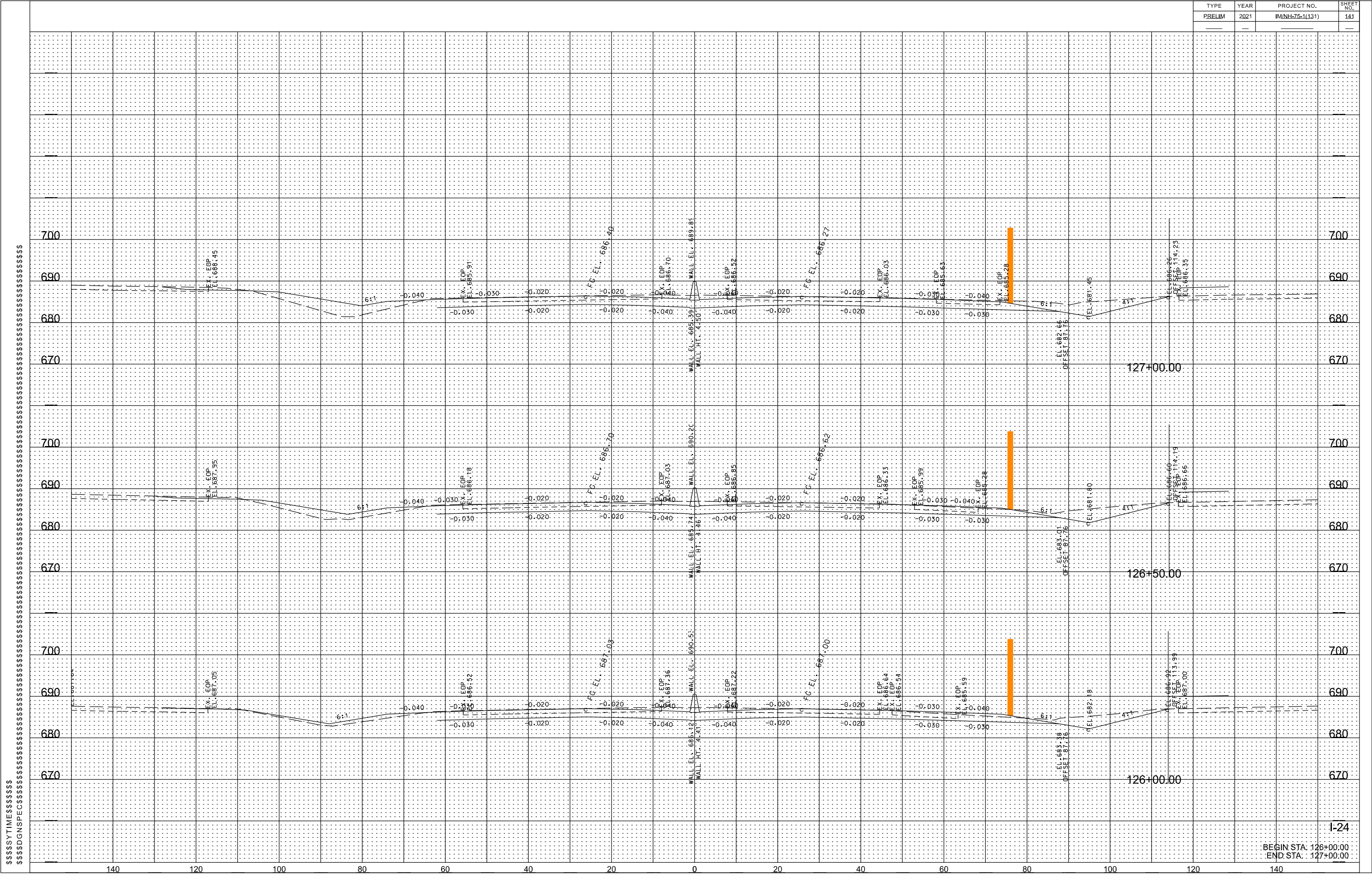






TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	140
—	—	—	—

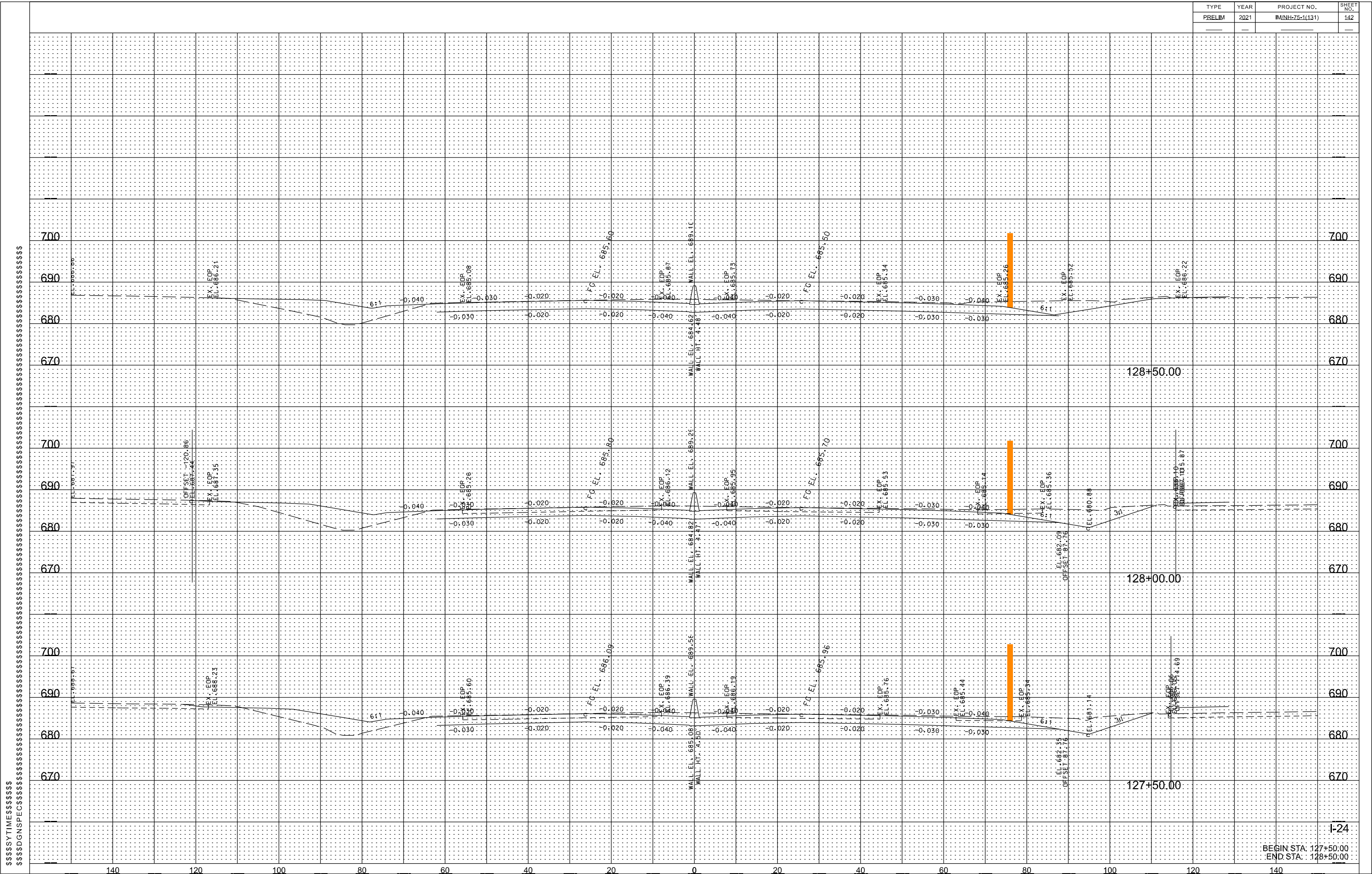
BEGIN STA: 124+50.00  
END STA: 125+50.00

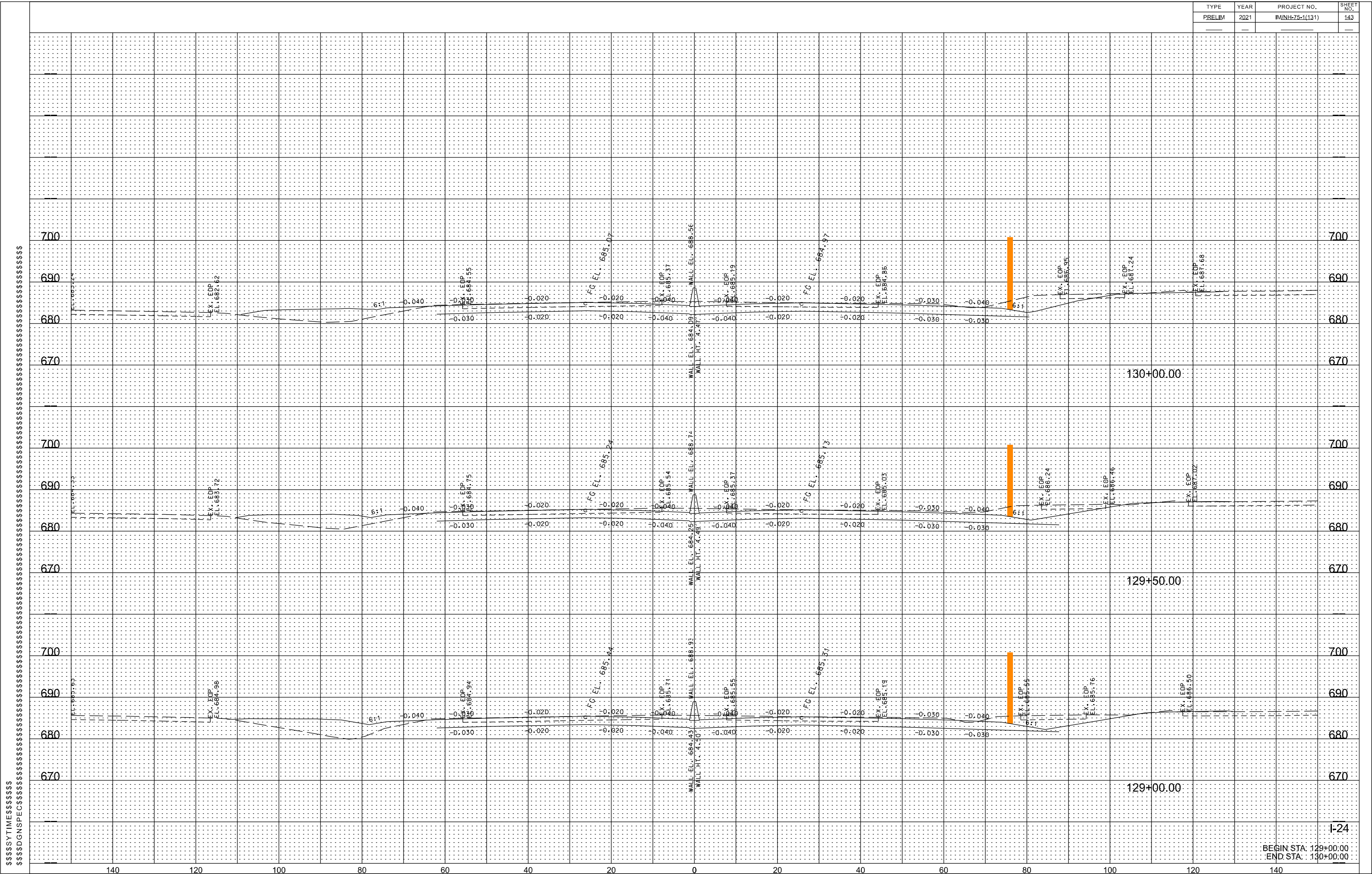


\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN SPEC\$\$\$\$\$

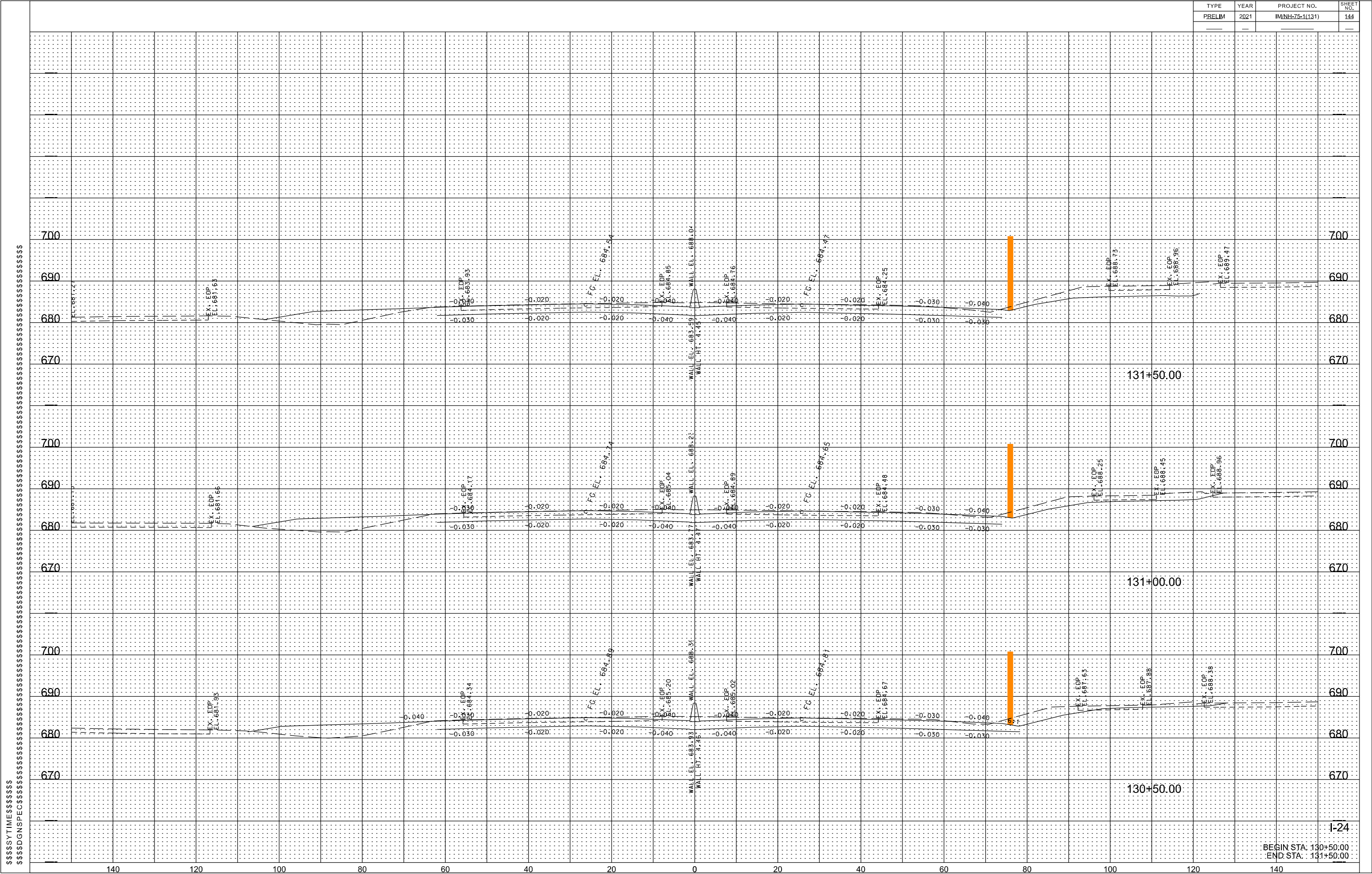
BEGIN STA: 126+00.00  
END STA: 127+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	142
—	—	—	—





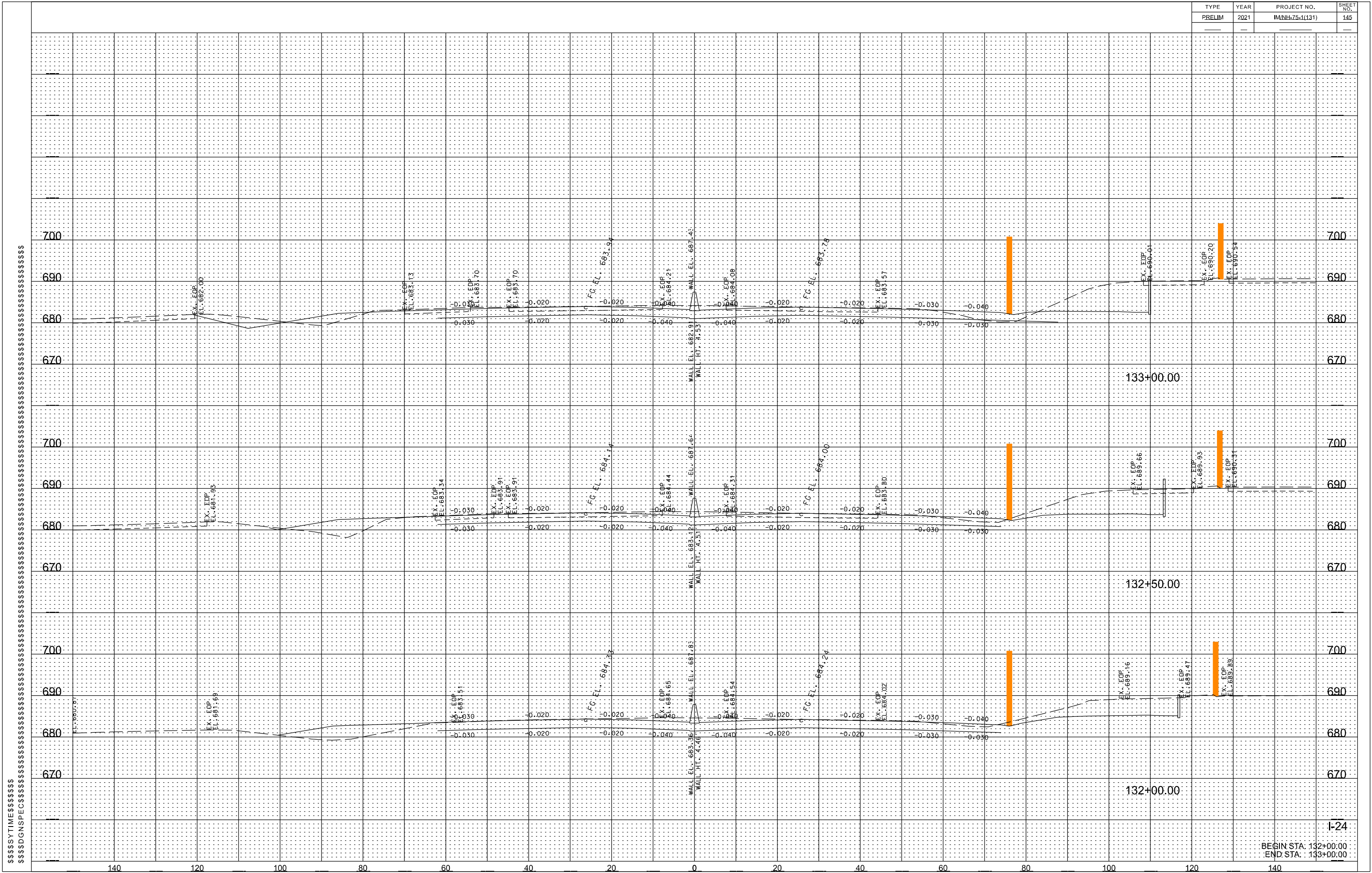


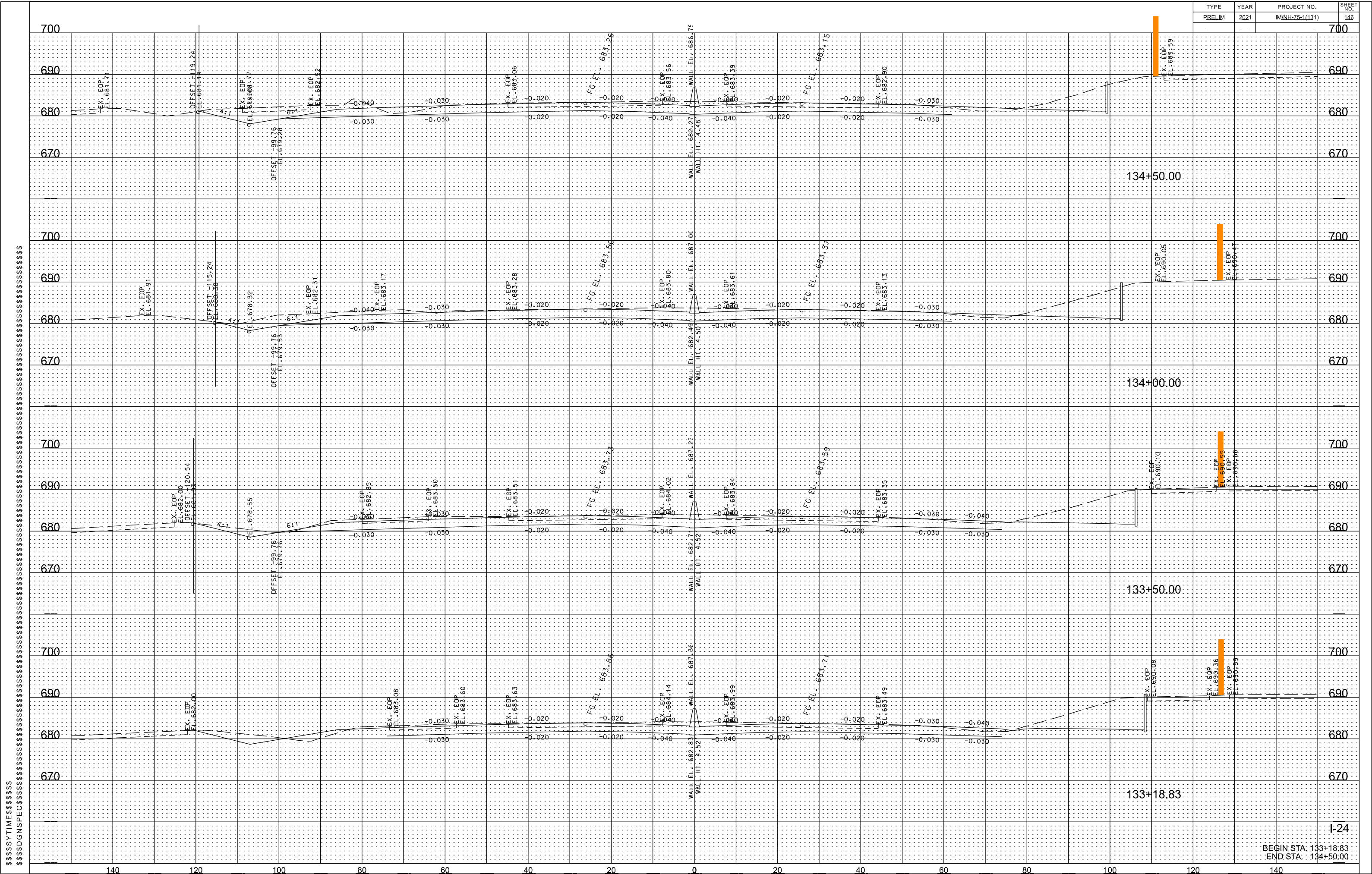


\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN SPEC\$\$\$\$\$

BEGIN STA: 130+50.00  
END STA: 131+50.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	145
—	—	—	—

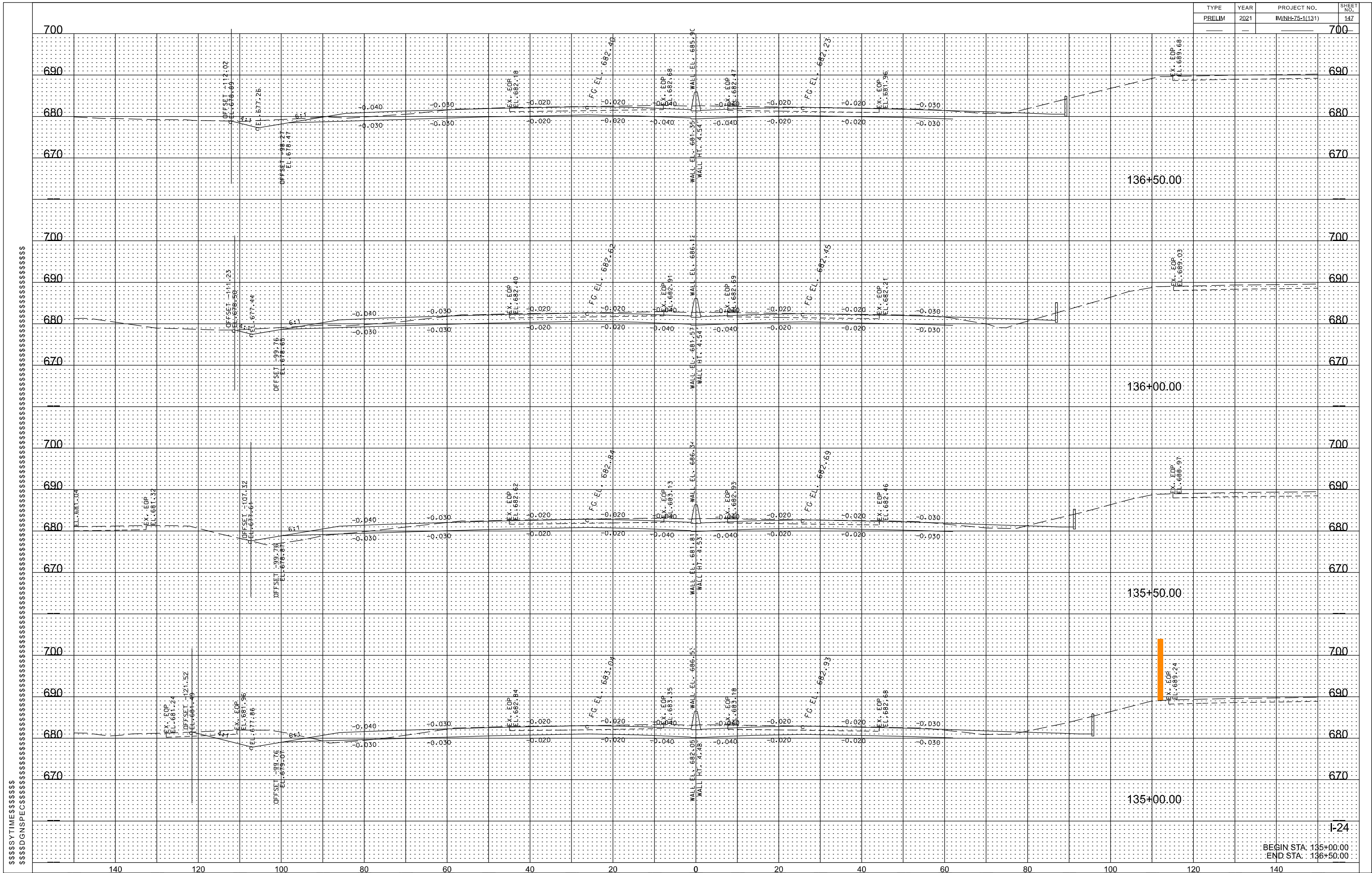




TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	146

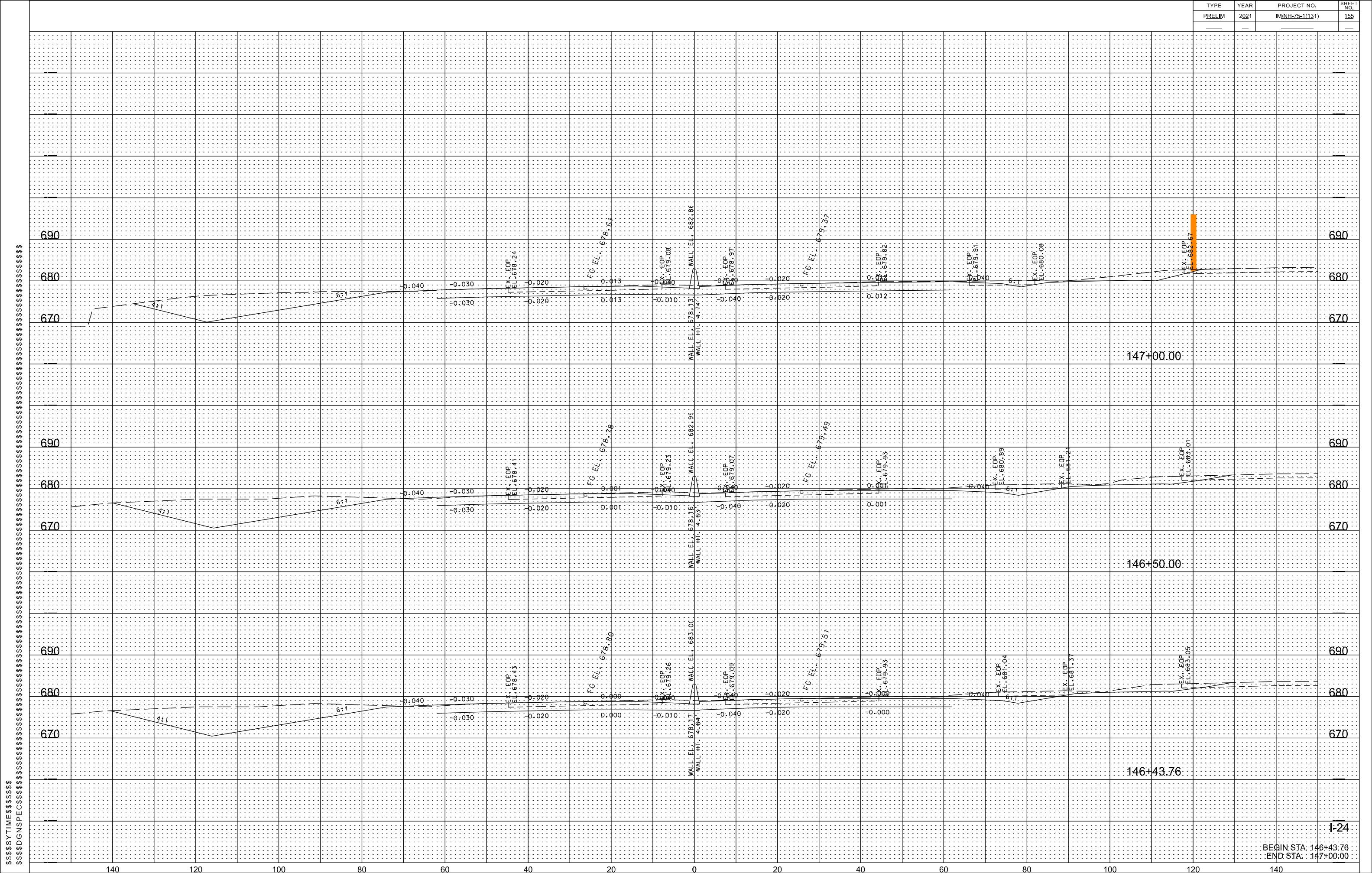
BEGIN STA: 133+18.83  
END STA: 134+50.00

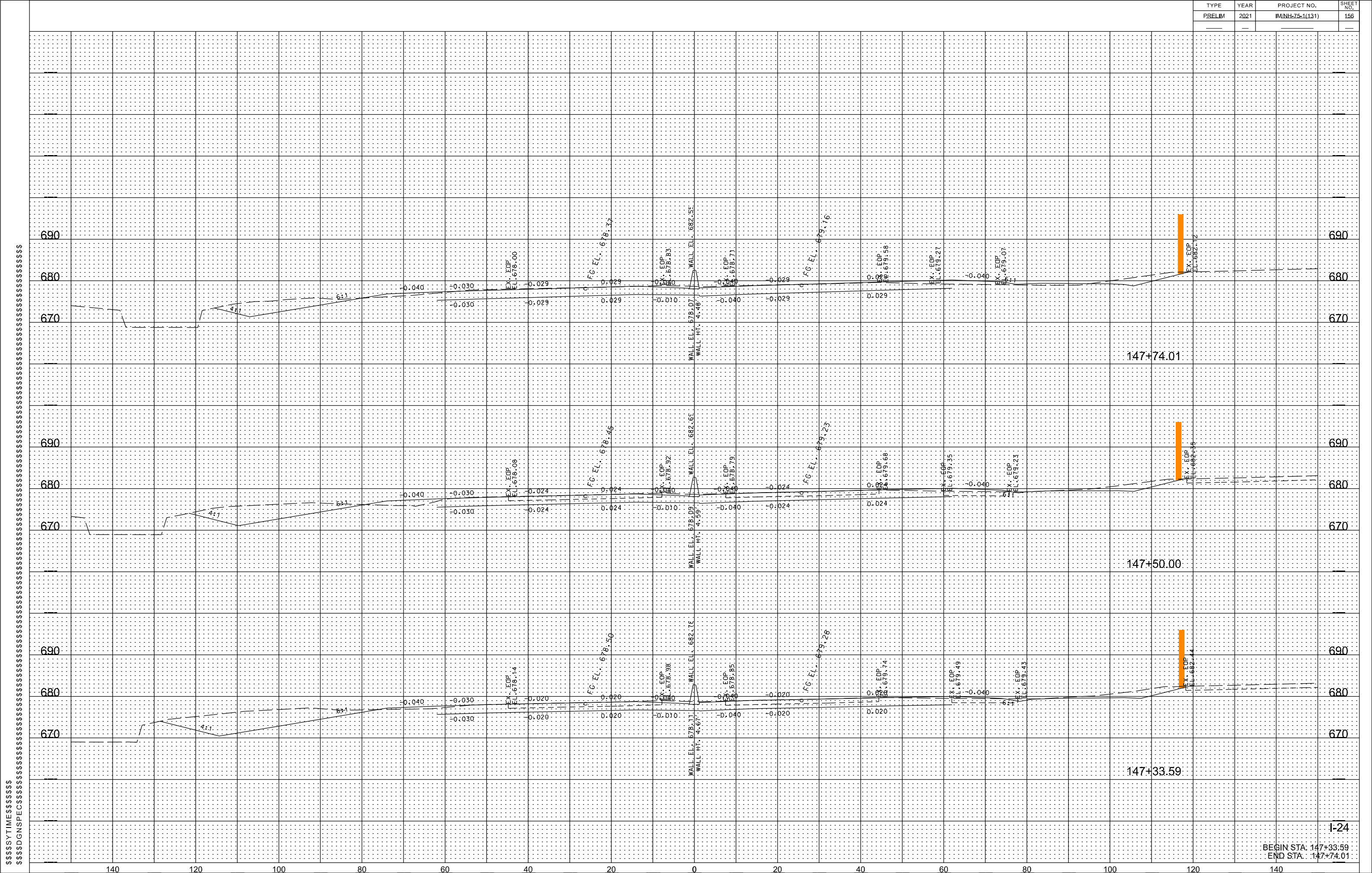
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	147
—	—	—	700—





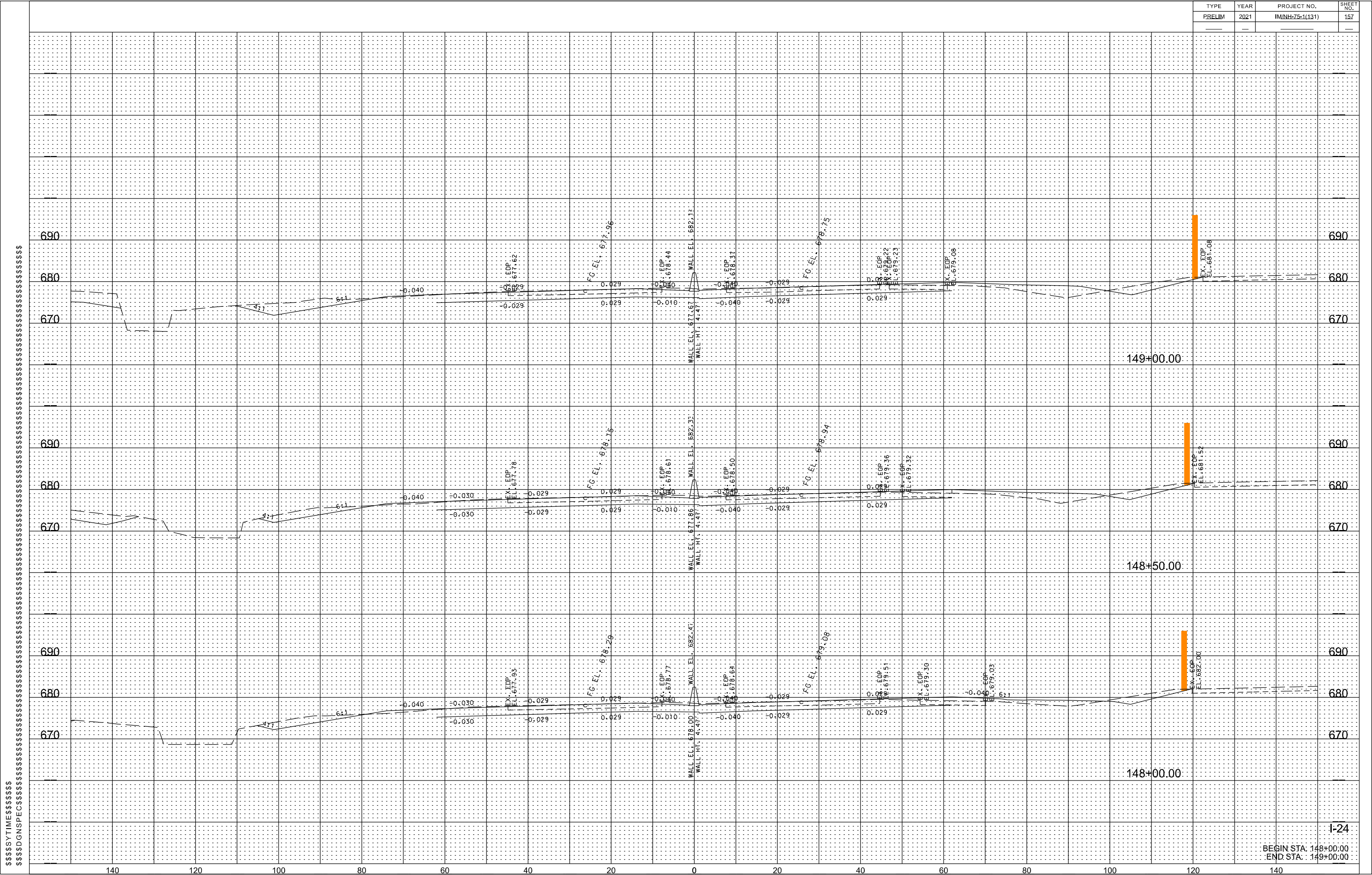
**NAA 3, Option 1**





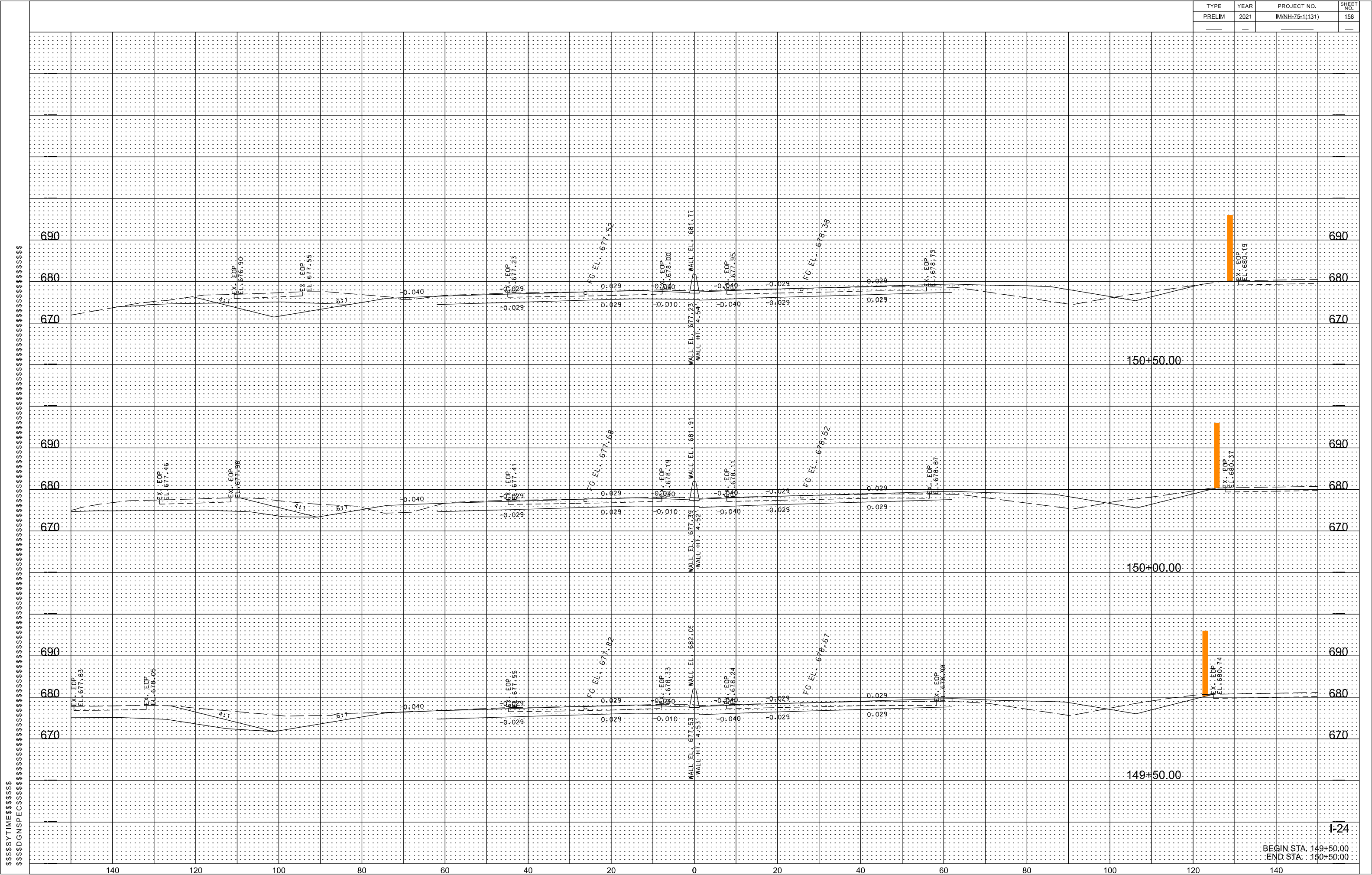
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	MMNH-75-1(131)	156
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BEGIN STA. 147+33.59  
END STA. 147+74.01

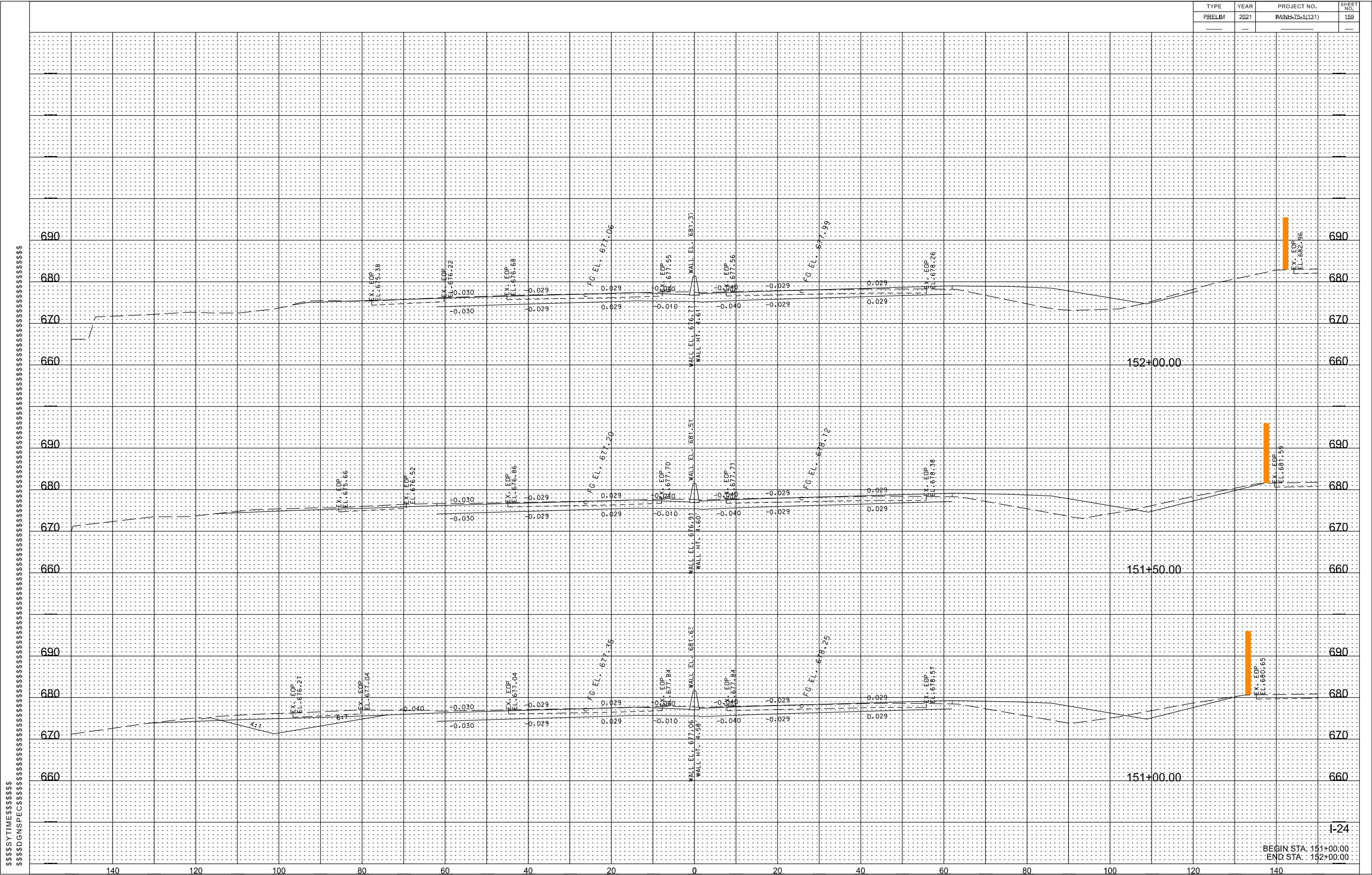


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IMNH-75-1(131)	157
—	—	—	—





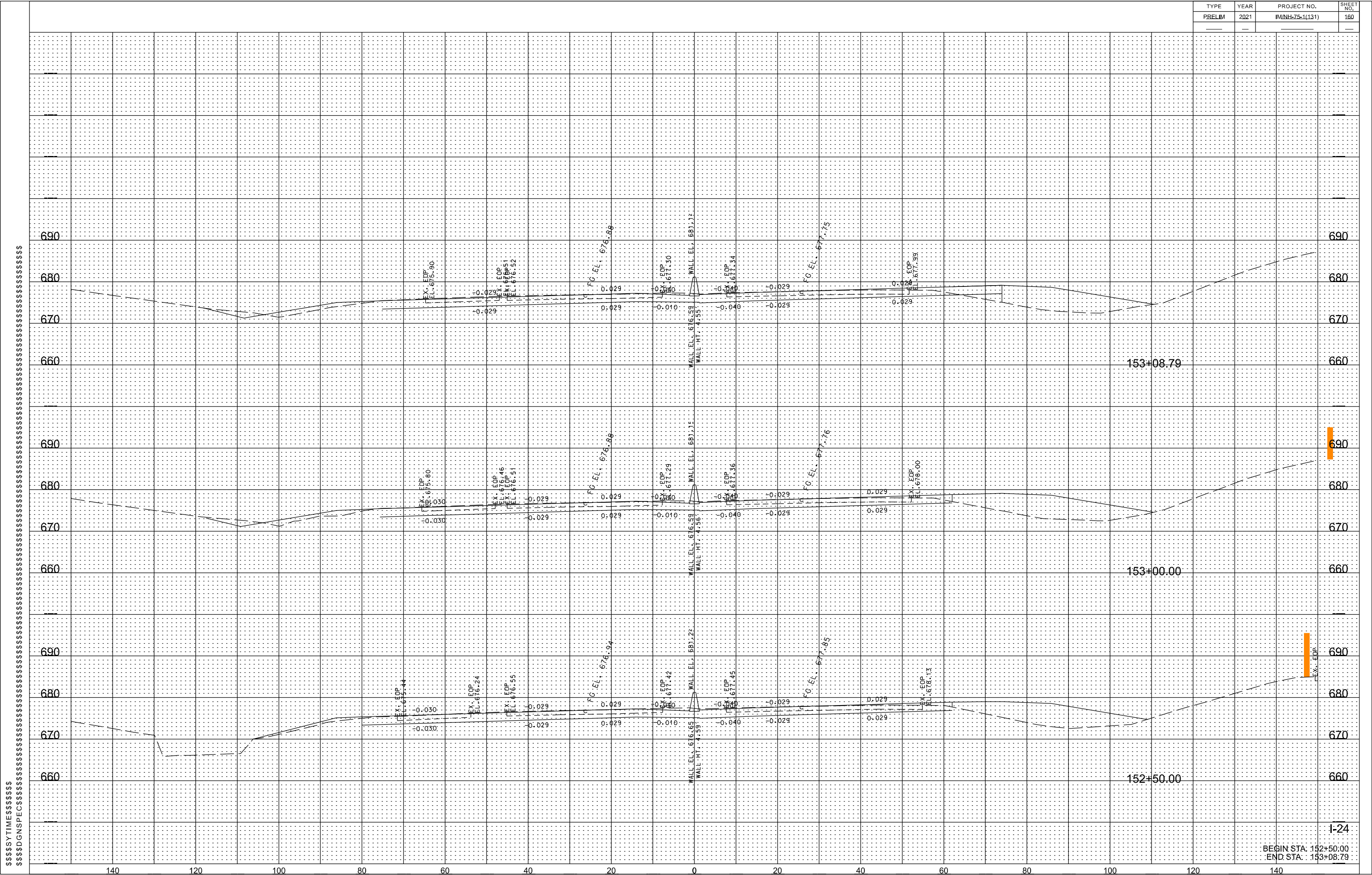
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IMNH-75-1(131)	158
—	—	—	—



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IMNH-75-1(131)	159
—	—	—	—

\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$SPEC\$\$\$\$\$

BEGIN STA: 151+00.00  
END STA: 152+00.00

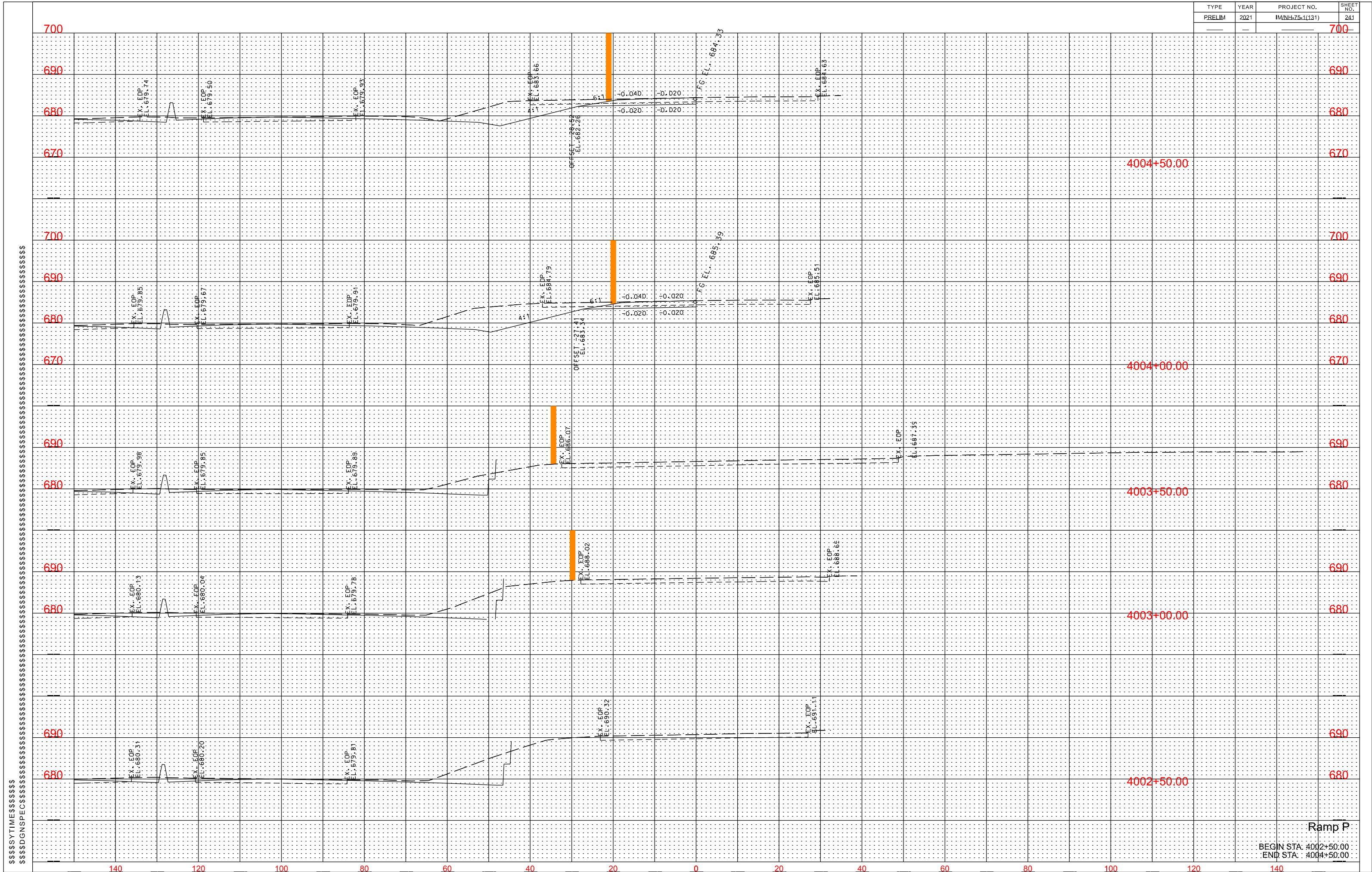


\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DONSPES\$\$\$\$

BEGIN STA: 152+50.00  
END STA: 153+08.79

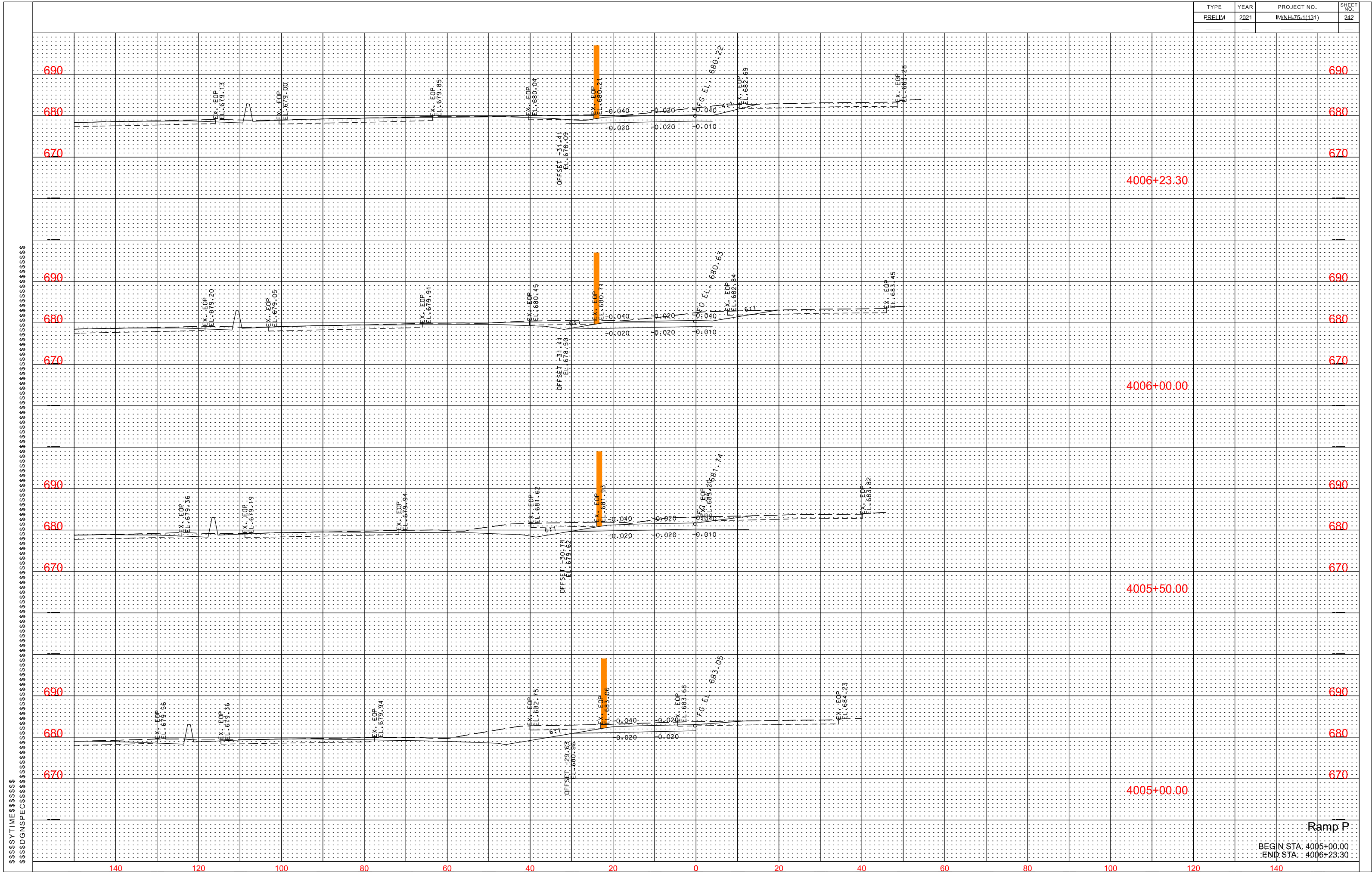
I-24

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	241
—	—	—	—



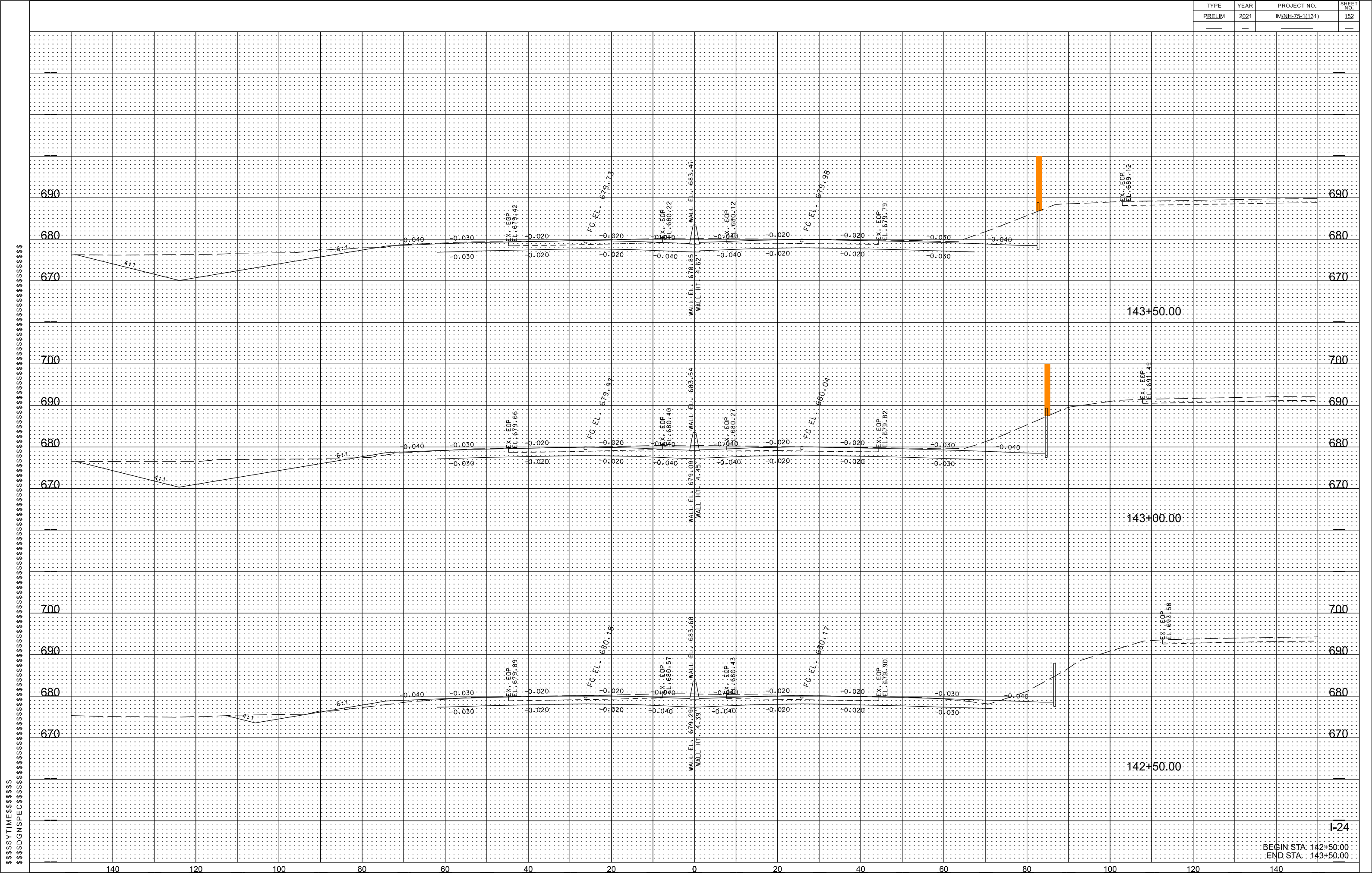


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	242
—	—	—	—





**NAA 3, Option 2**

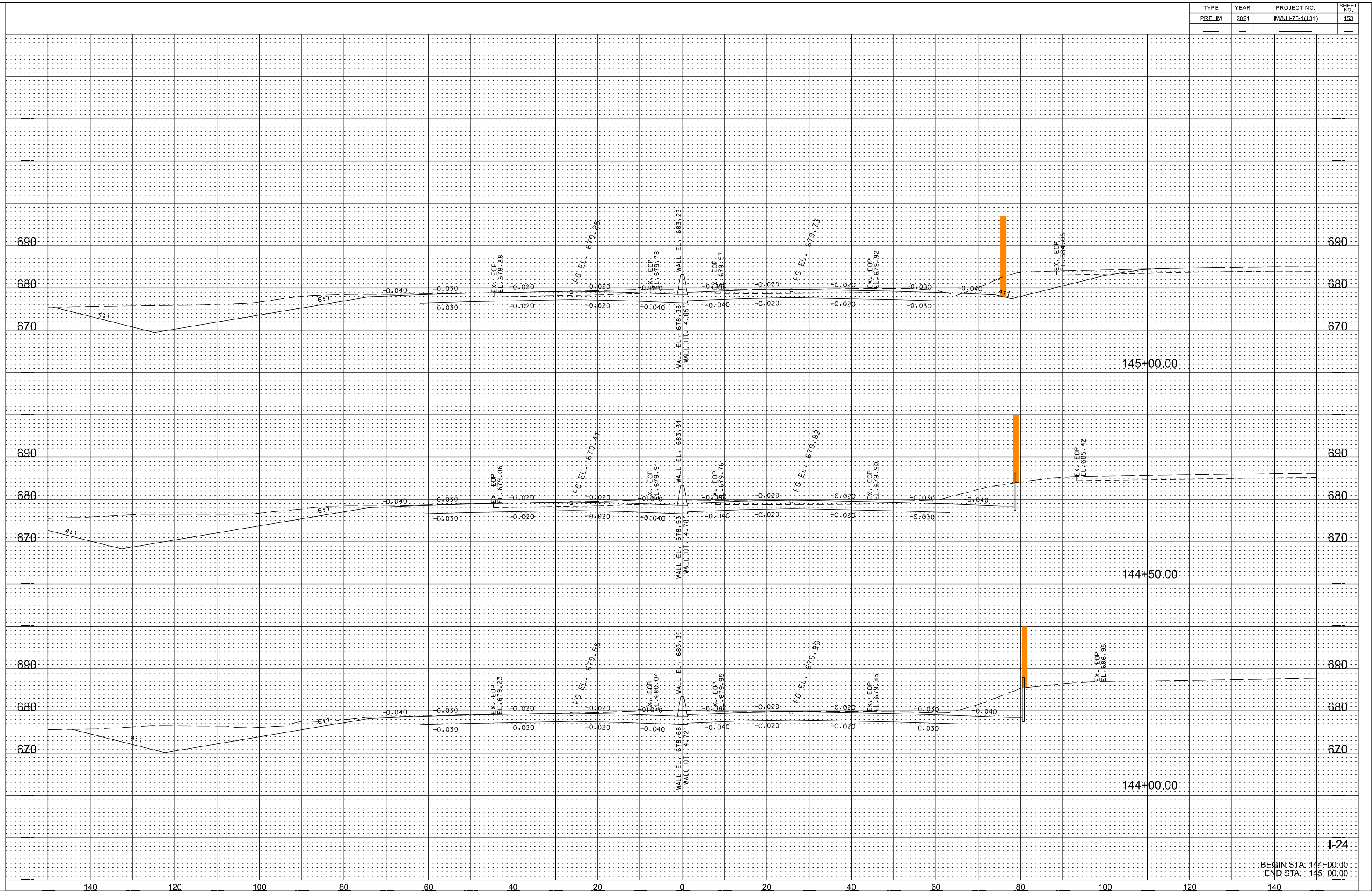
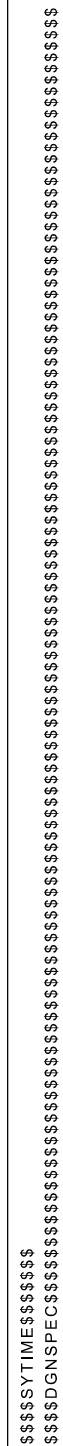


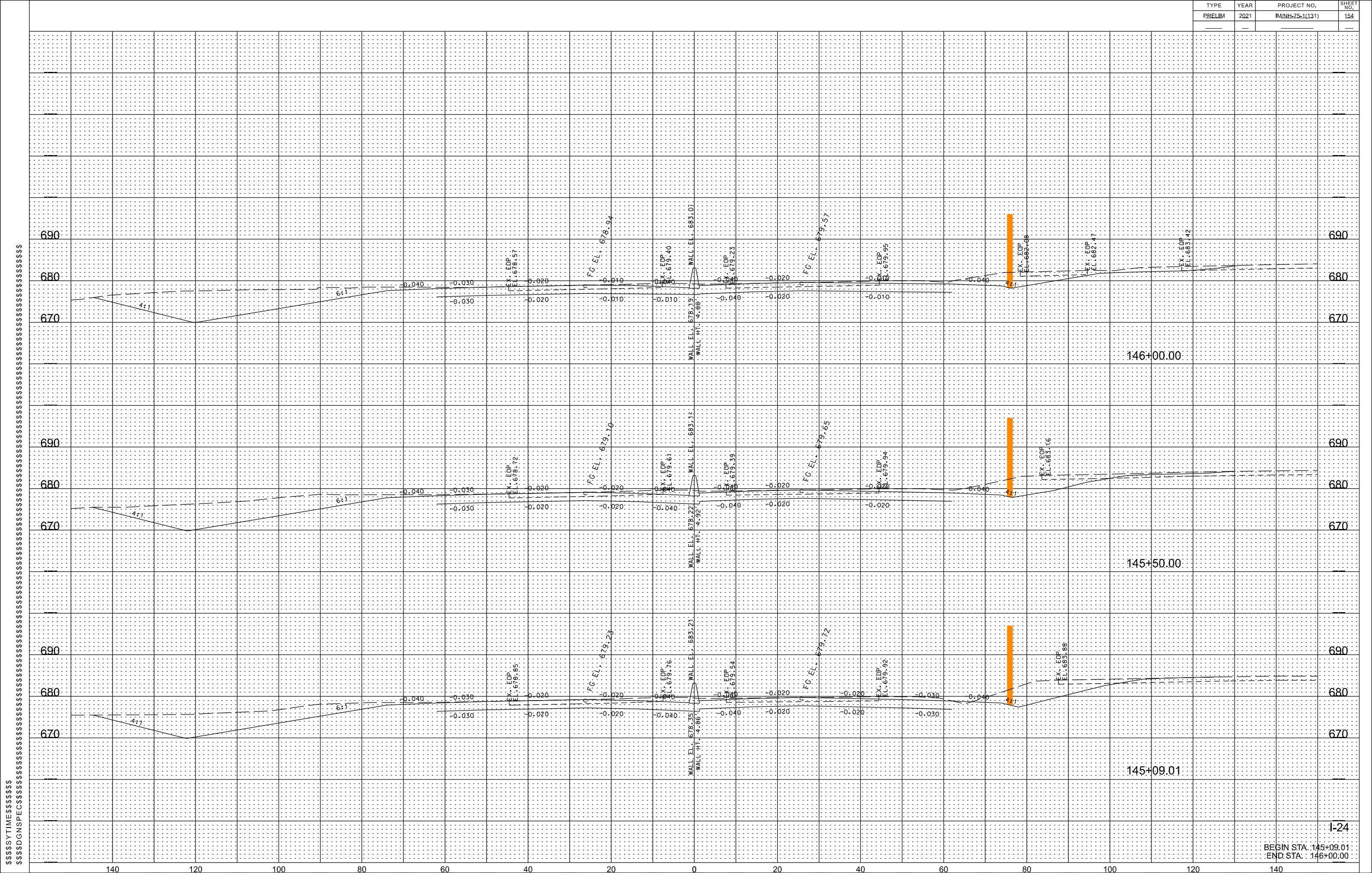
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	152
—	—	—	—

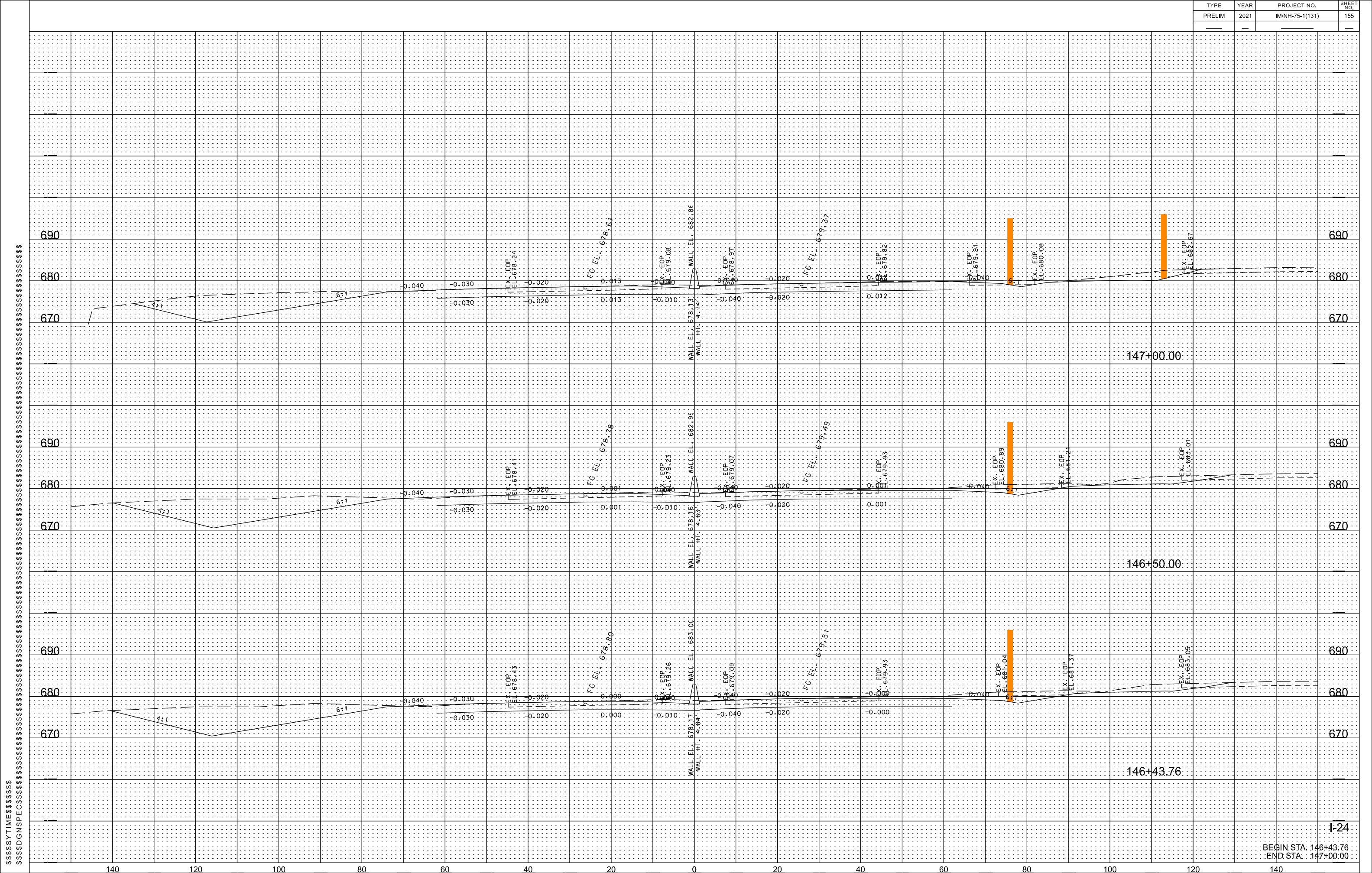
BEGIN STA: 142+50.00  
END STA: 143+50.00



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	153
—	—	—	—

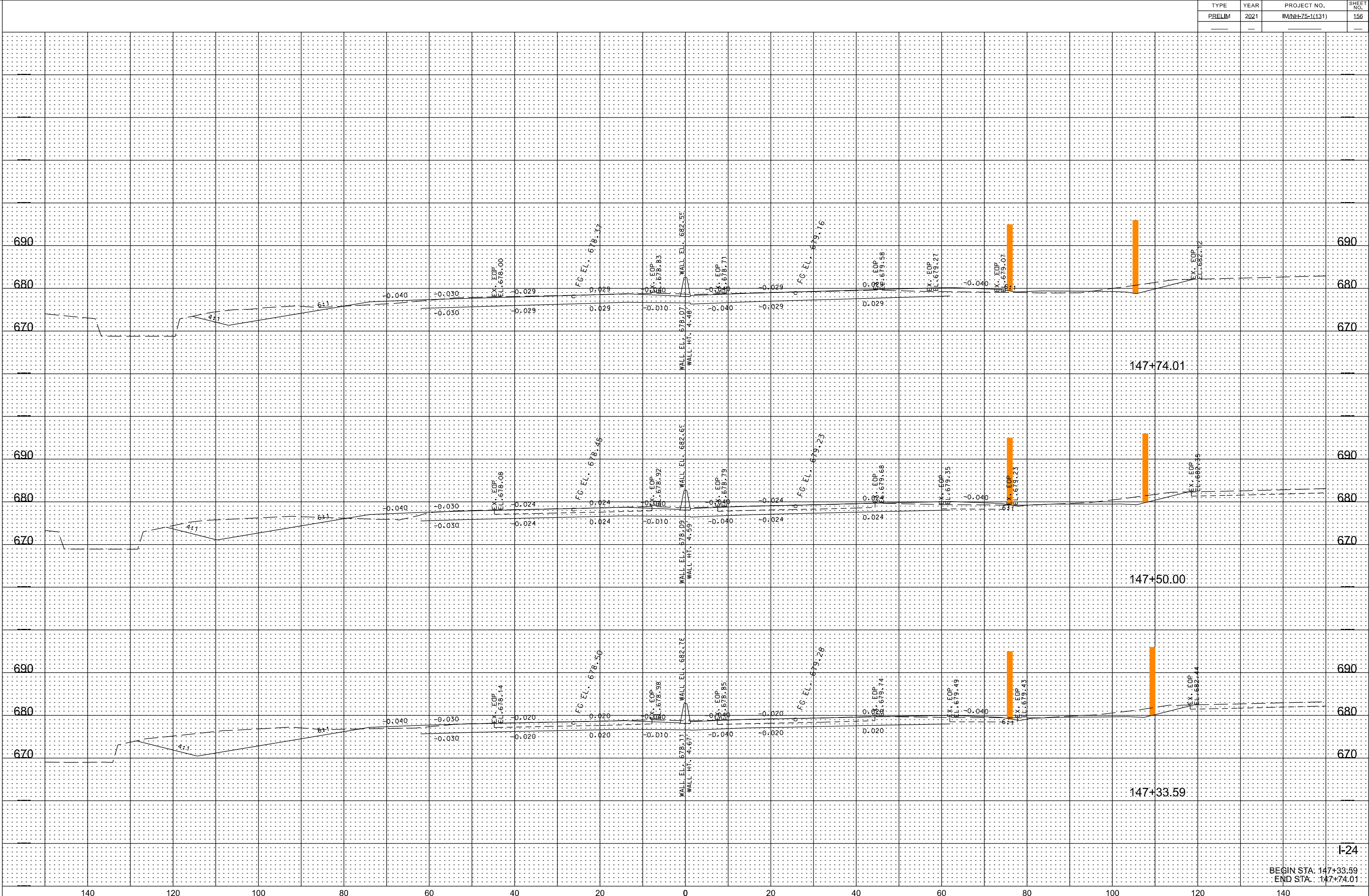






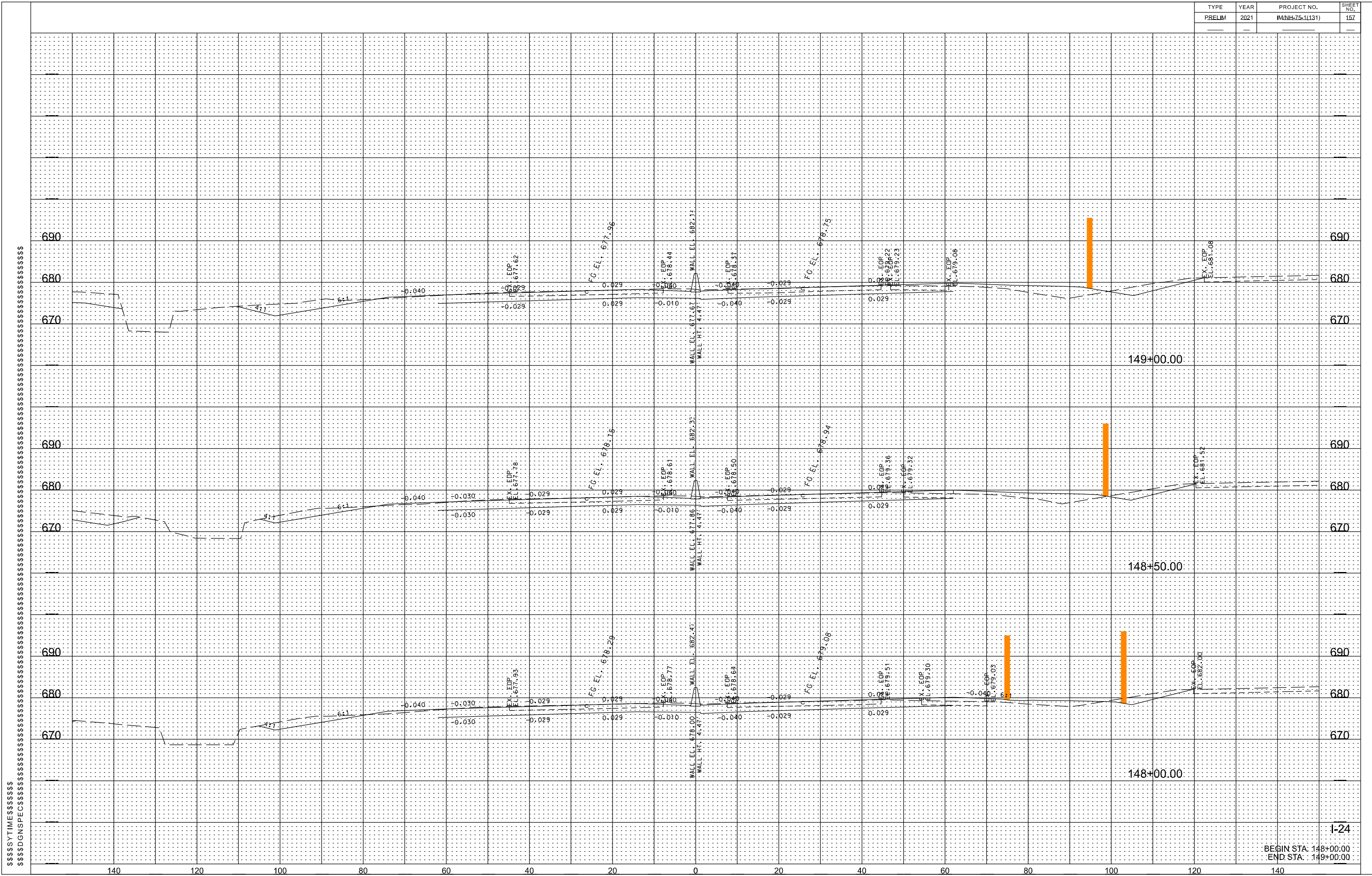
\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PEC\$\$\$\$

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	156
—	—	—	—

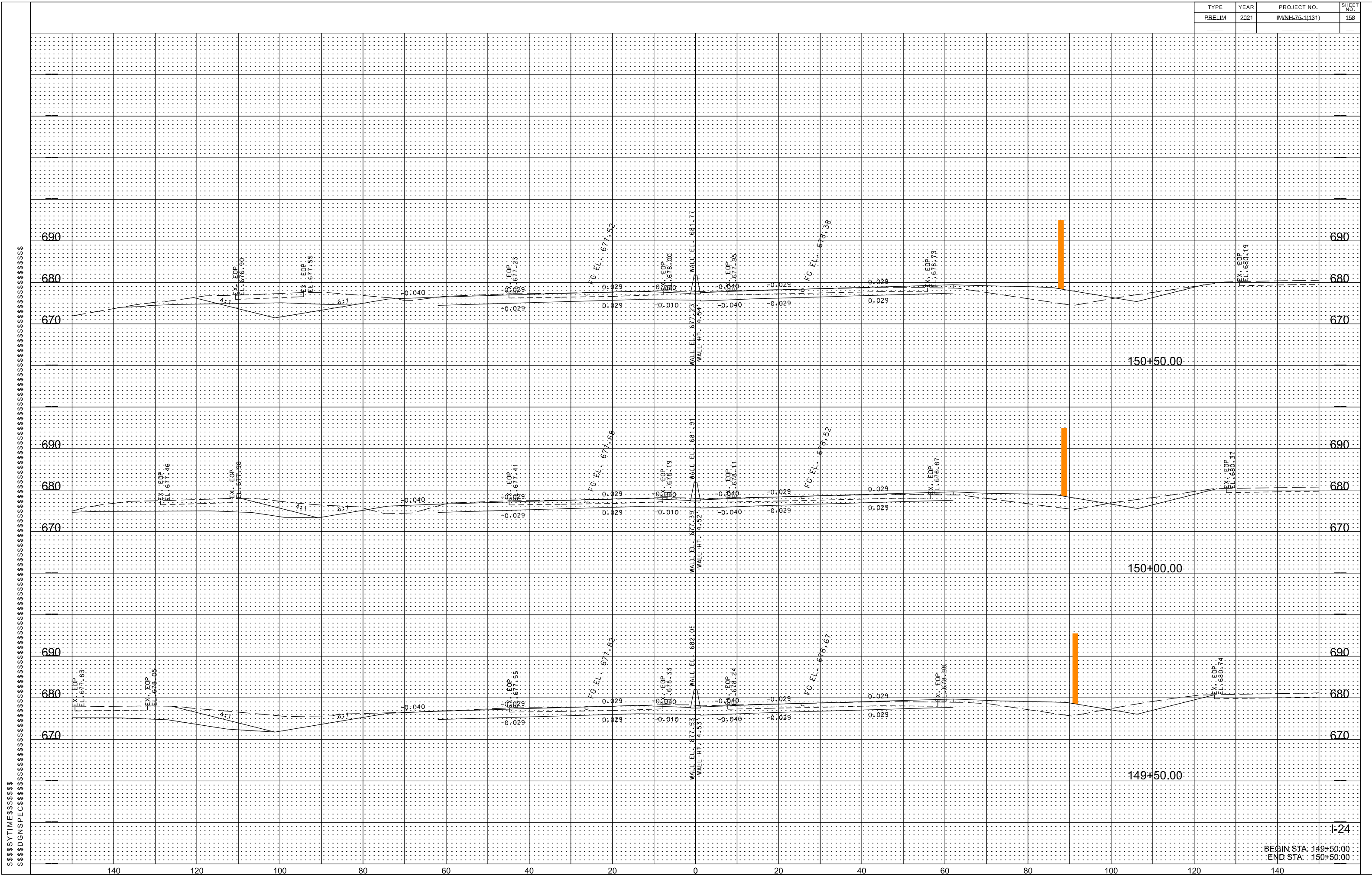




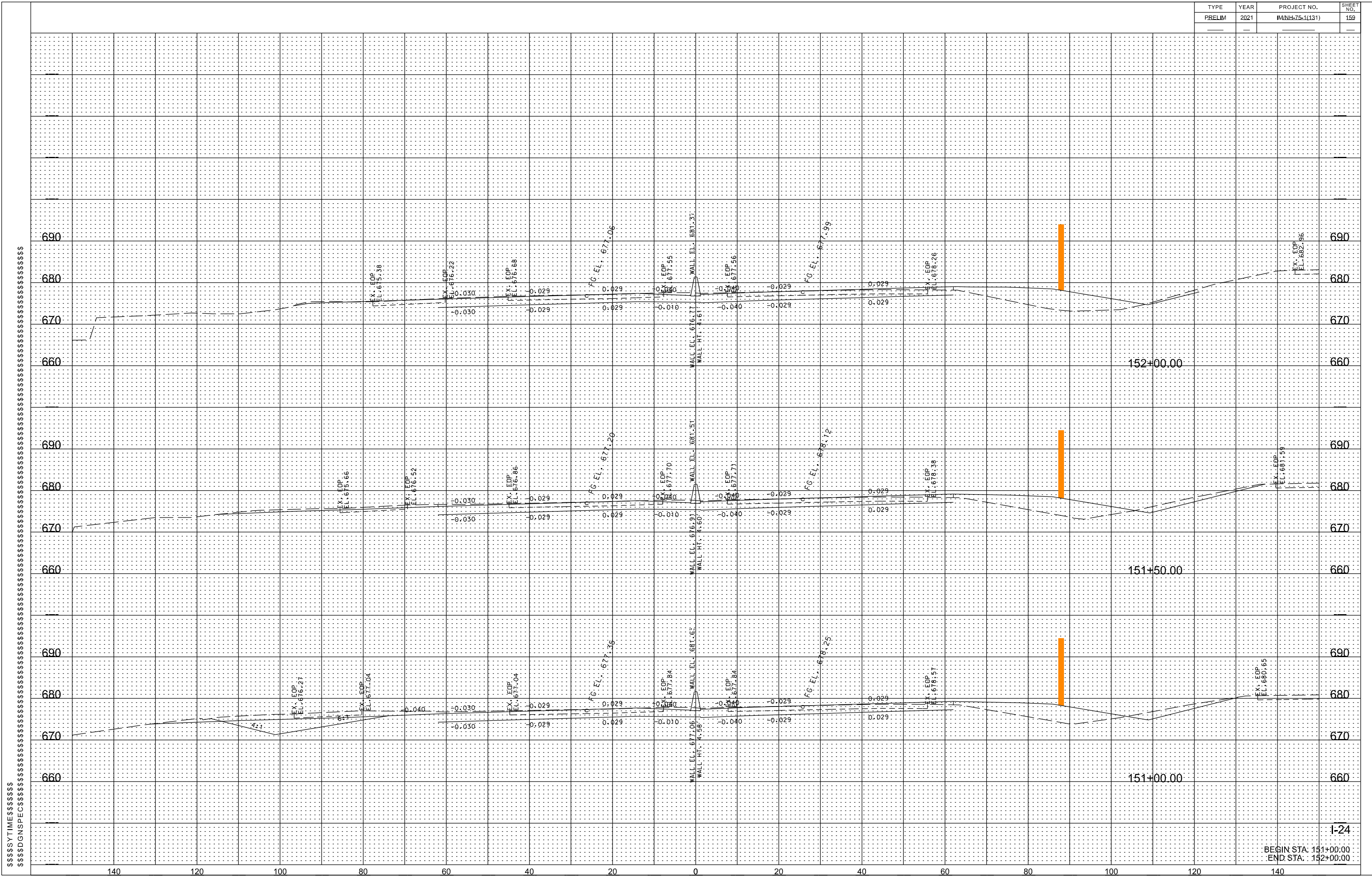
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	157
—	—	—	—

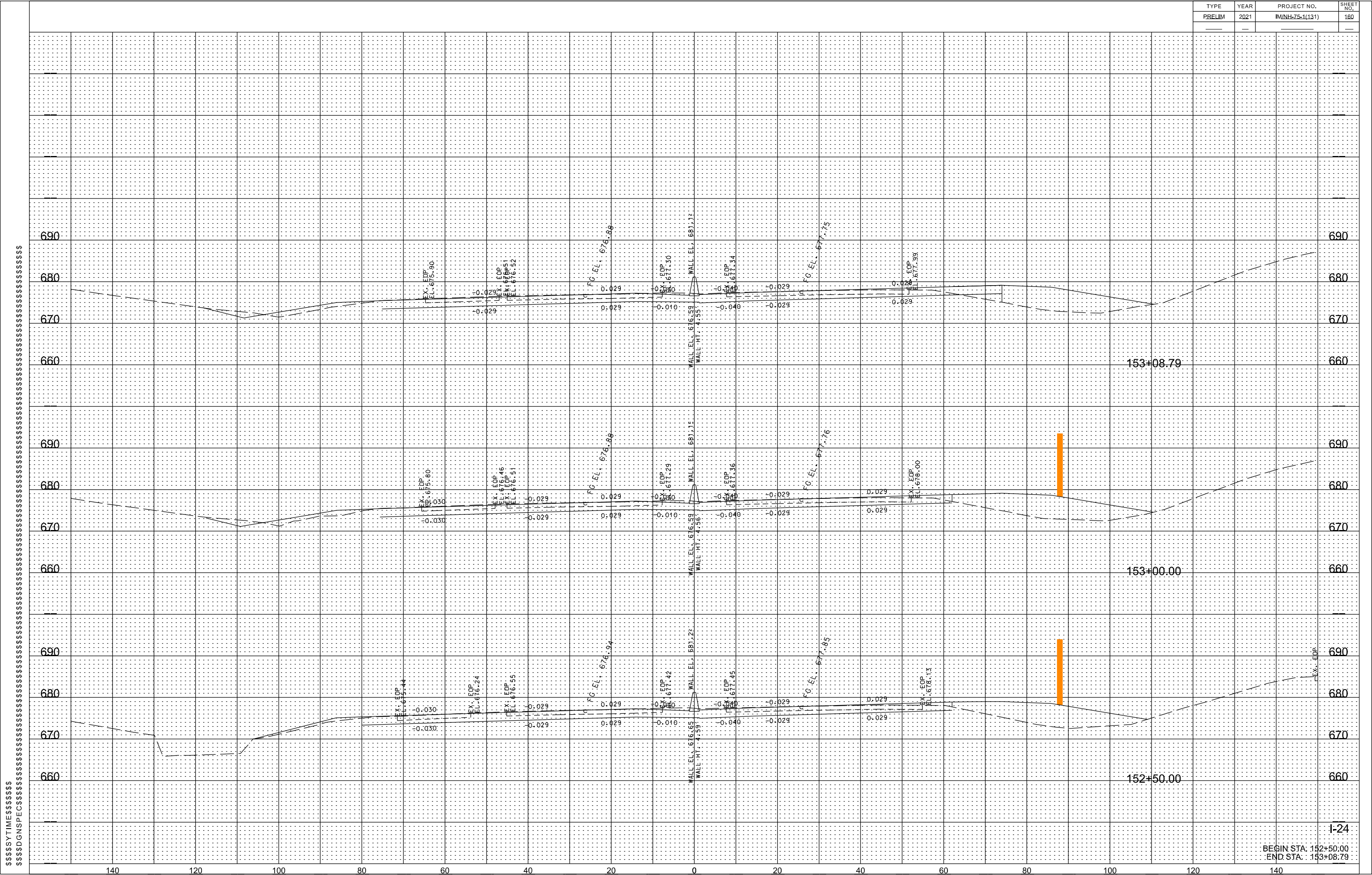


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	158
—	—	—	—



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	159
—	—	—	—





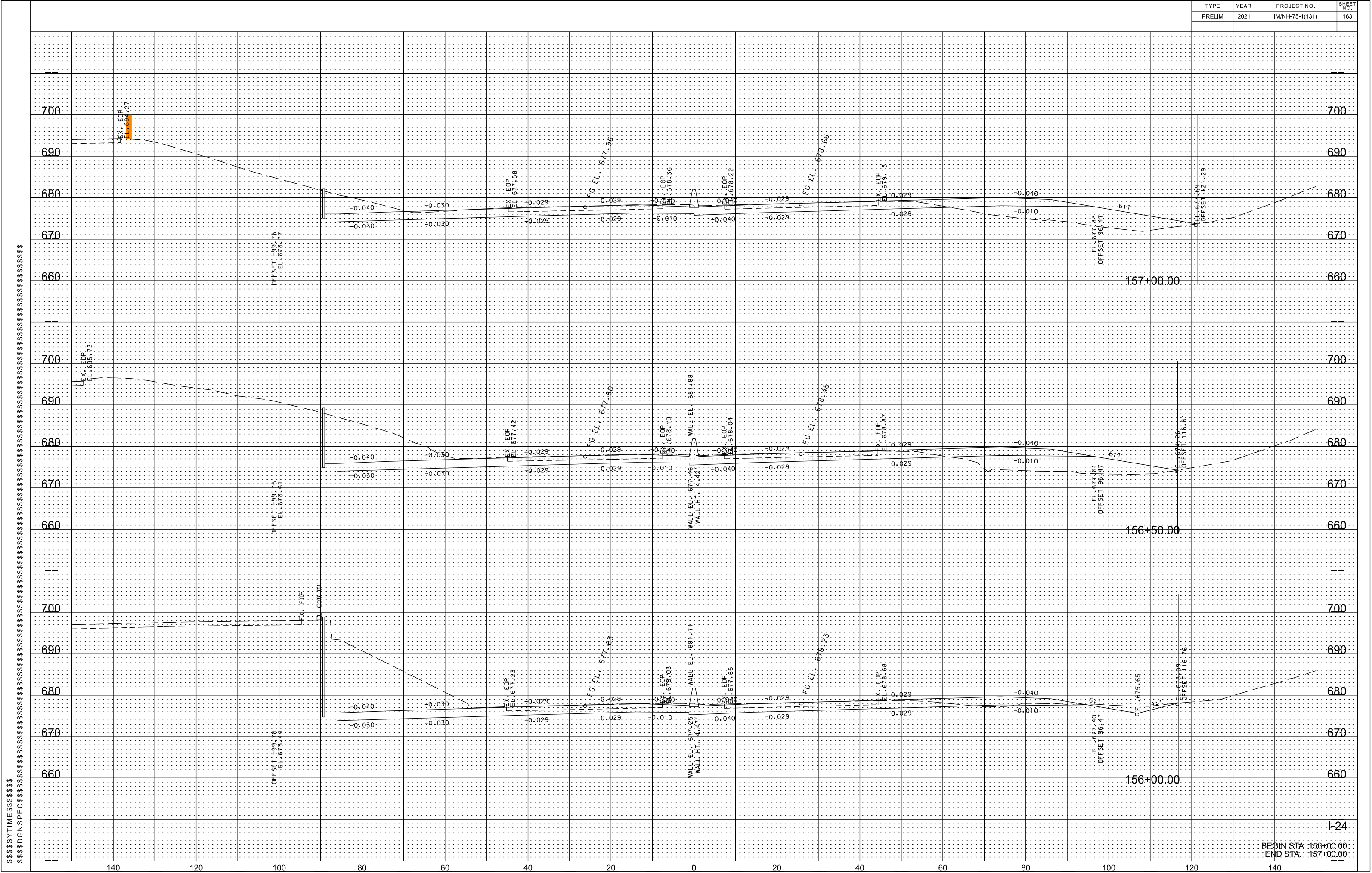
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	180
—	—	—	—

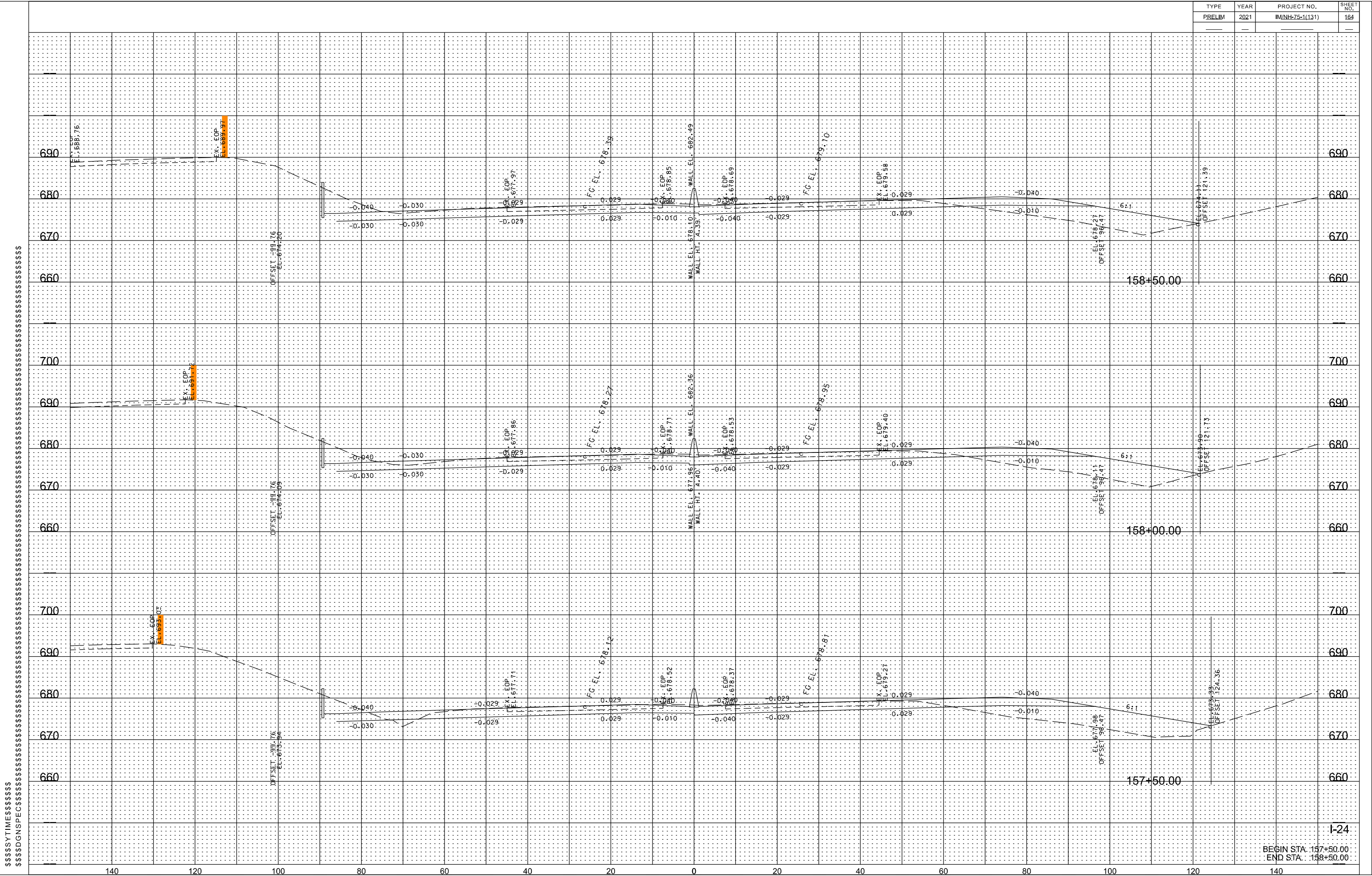
BEGIN STA: 152+50.00  
END STA: 153+08.79



**Westbound  
Cross Sections**

**NAA 6, Option 1**





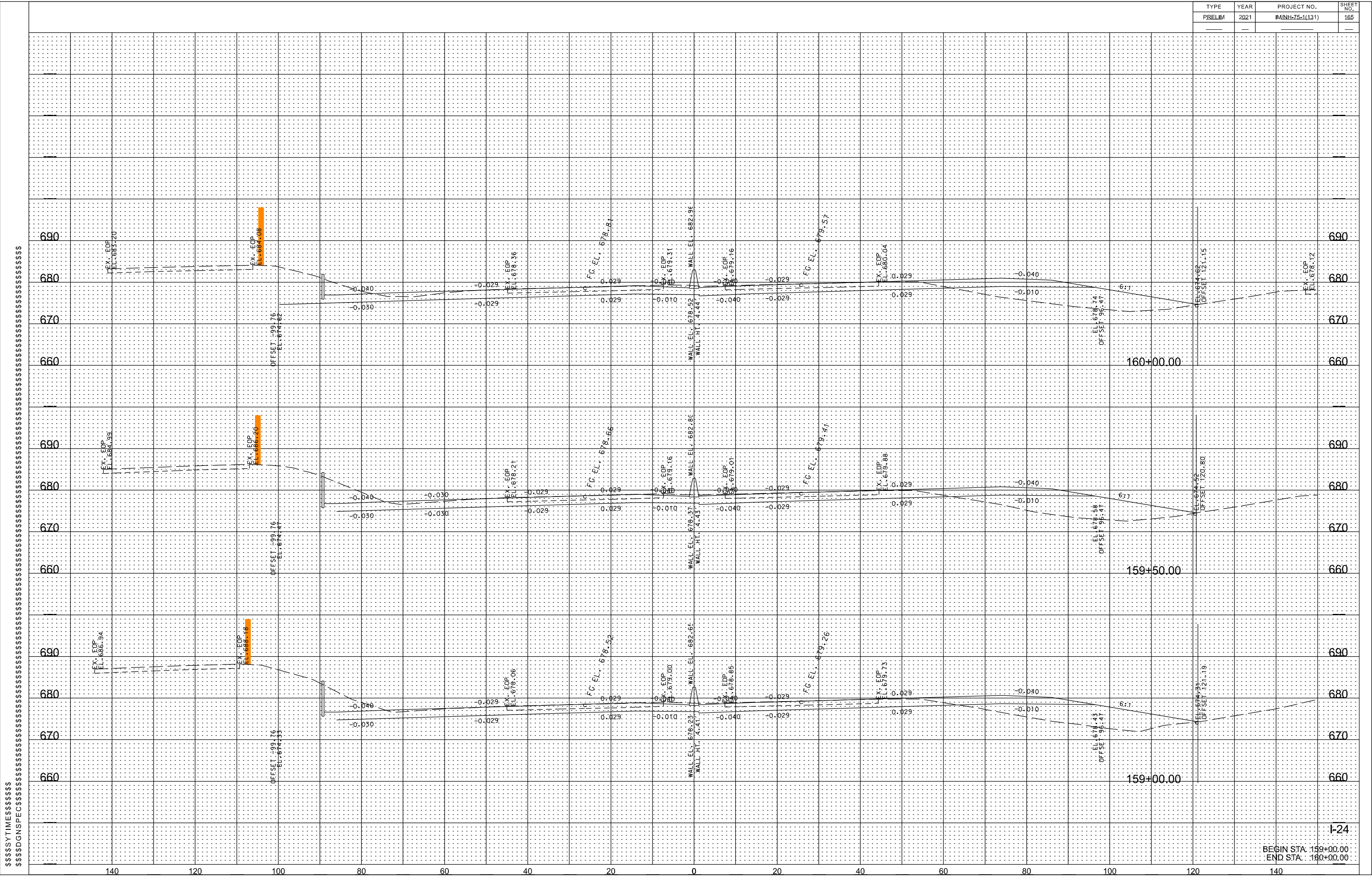
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	164
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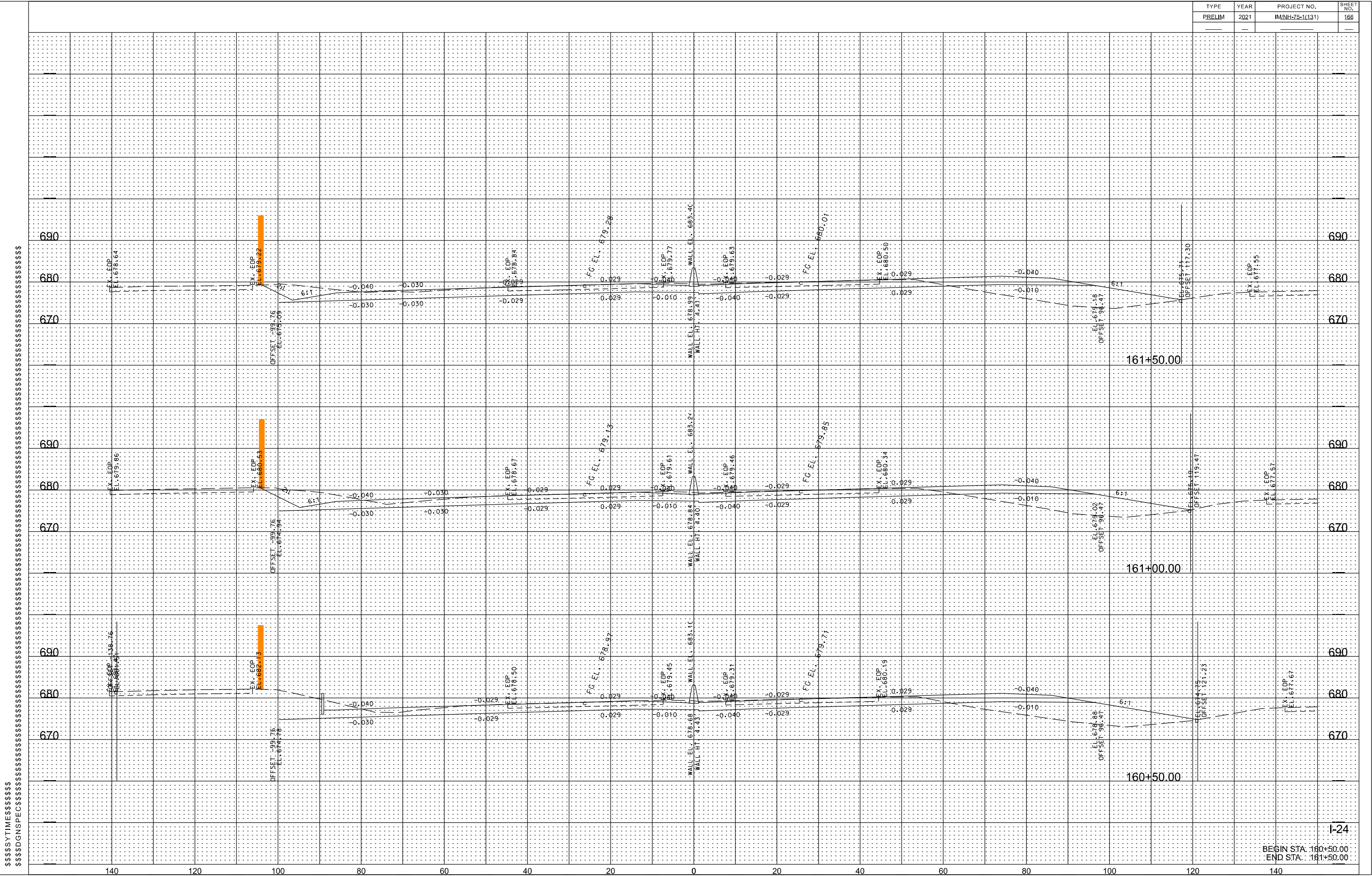
\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DONSPEC\$\$\$\$\$

BEGIN STA: 157+50.00  
END STA: 158+50.00

I-24



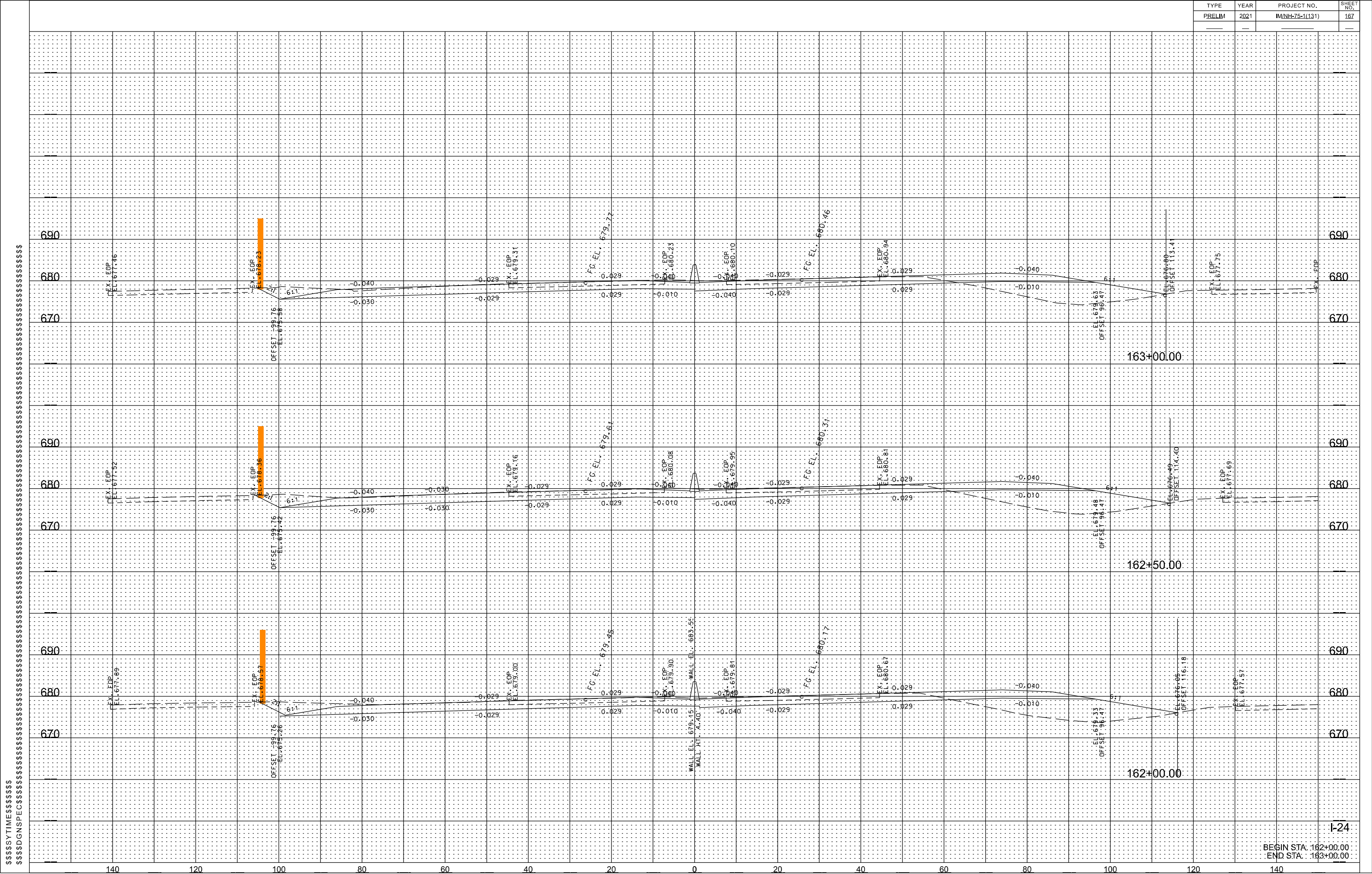


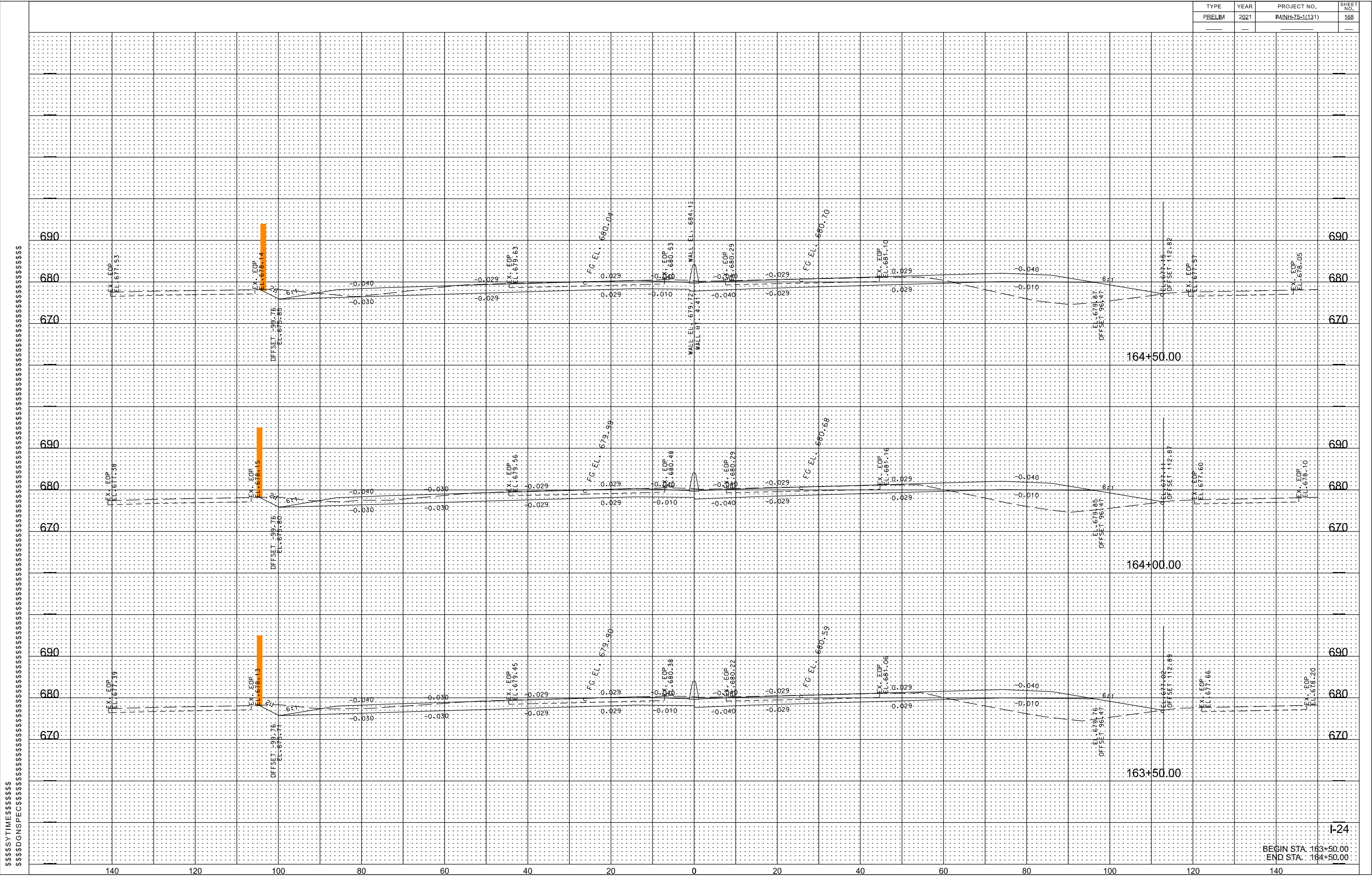


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	166
---	---	---	---

BEGIN STA: 160+50.00  
END STA: 161+50.00

I-24



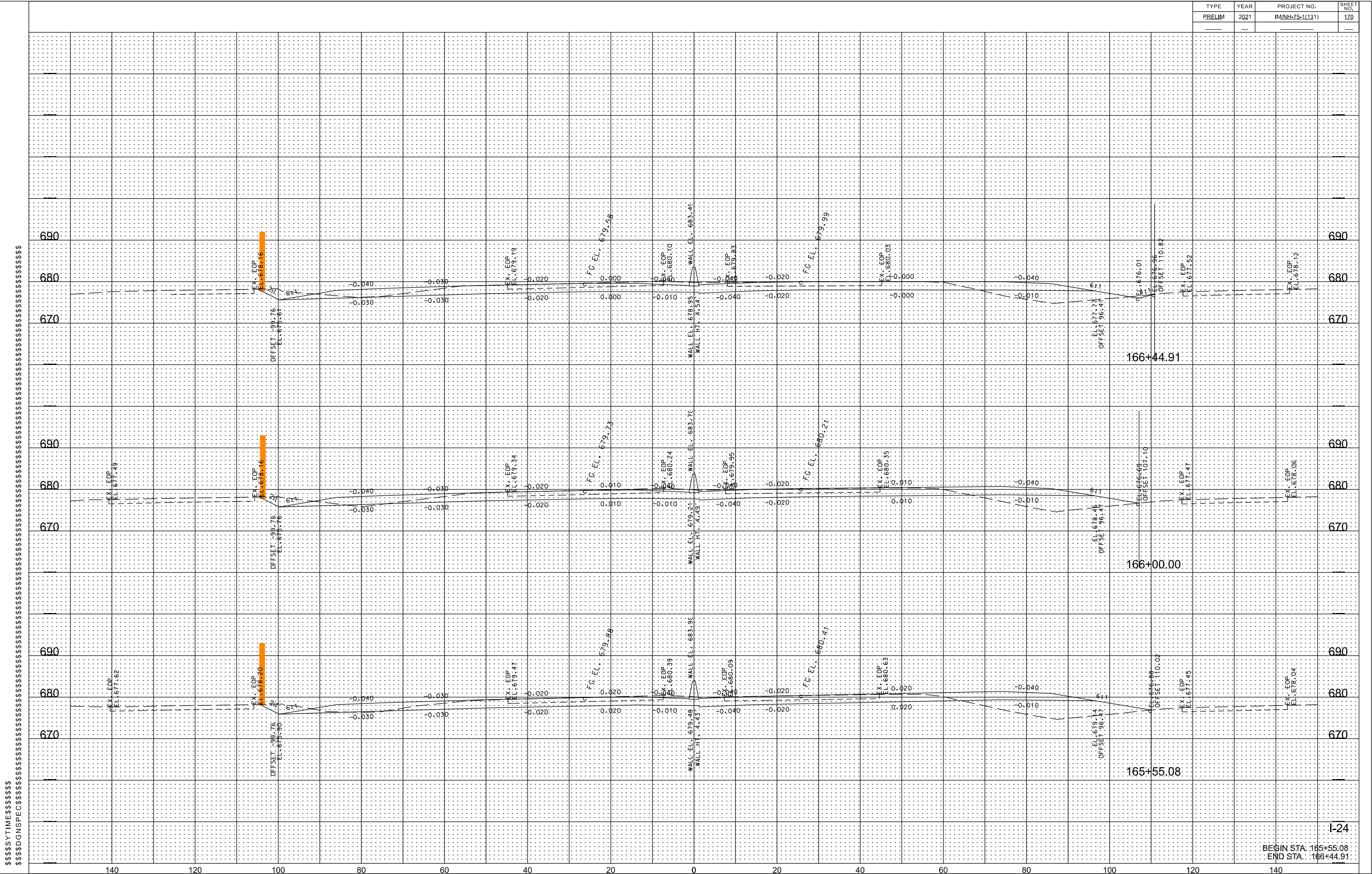


\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$PC\$\$\$\$\$

BEGIN STA: 163+50.00  
END STA: 164+50.00

I-24

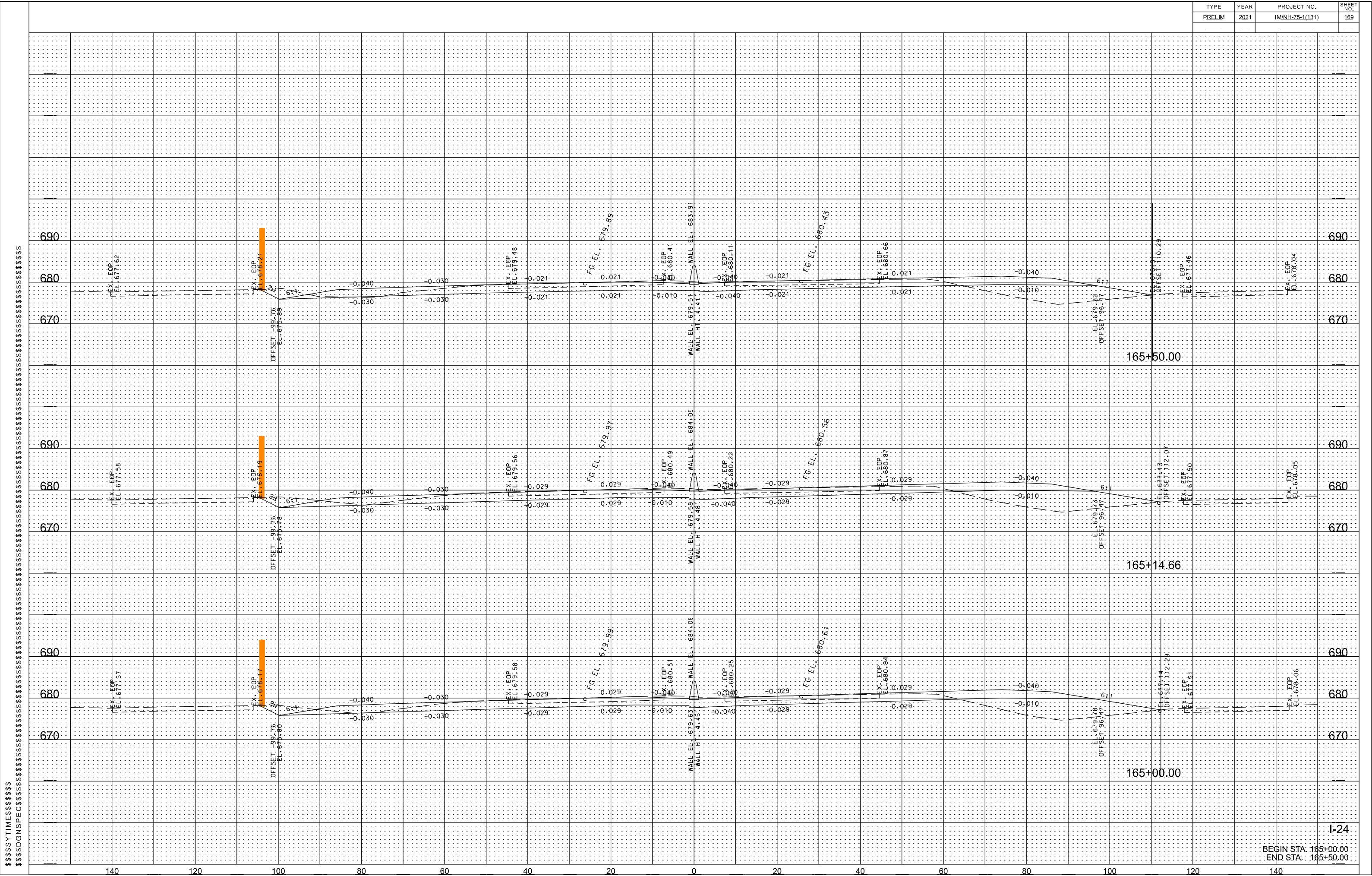




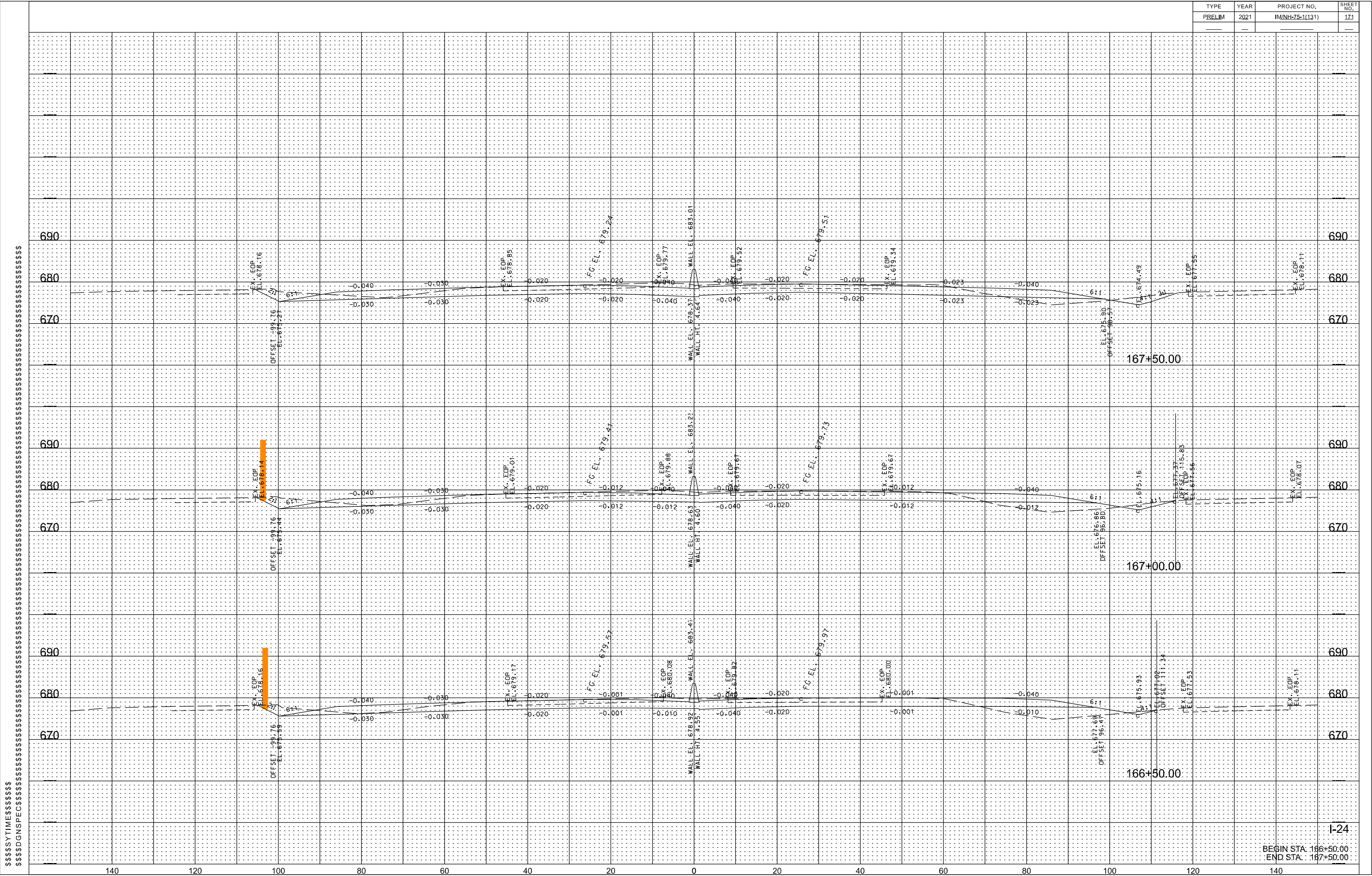
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	170
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BEGIN STA: 165+55.08  
END STA: 166+44.91

I-24



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	169
—	—	—	—



\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$PC\$\$\$\$\$

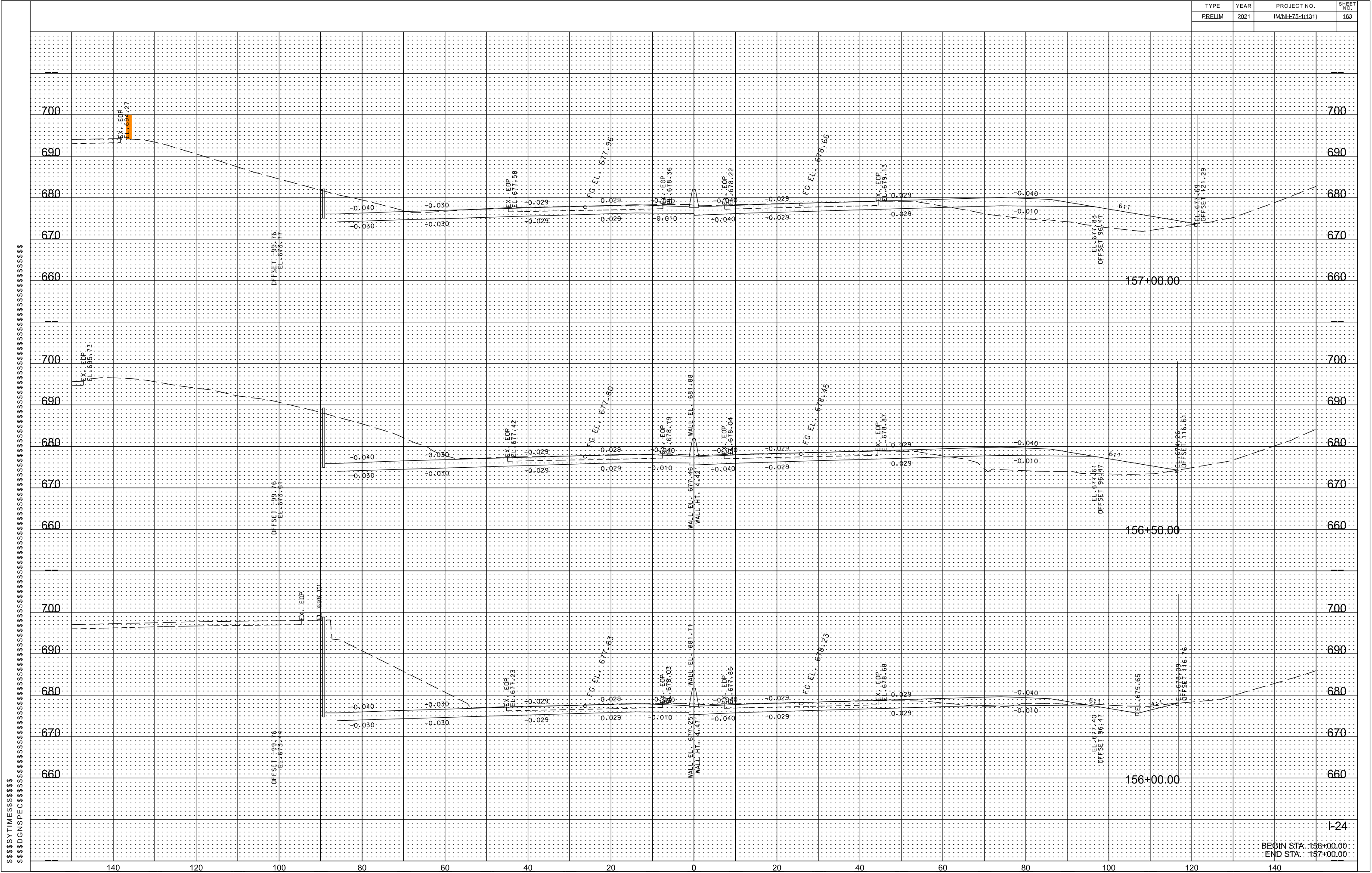
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	121
---	---	---	---

BEGIN STA: 166+50.00  
END STA: 167+50.00

I-24

**NAA 6, Option 2**

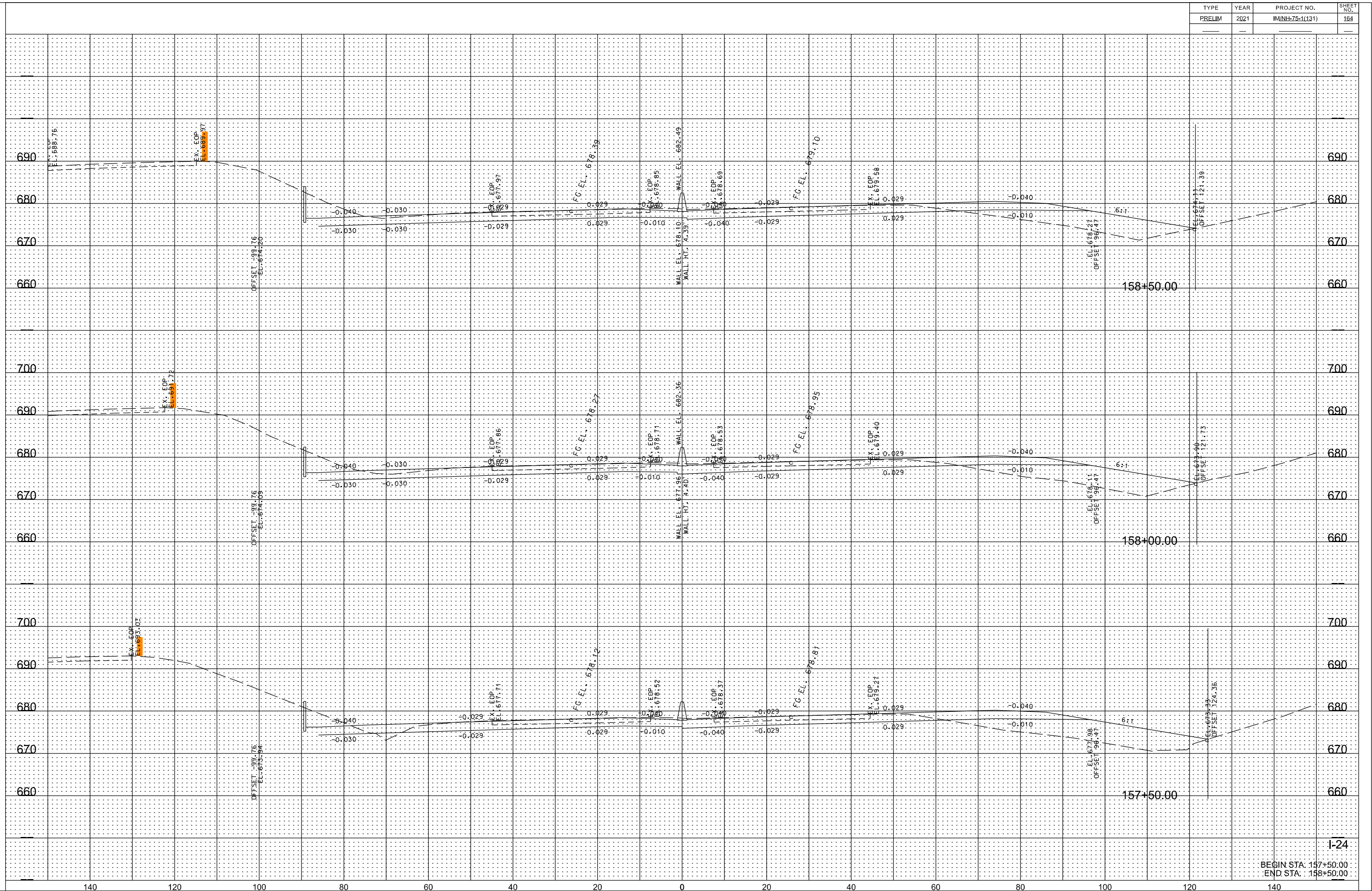
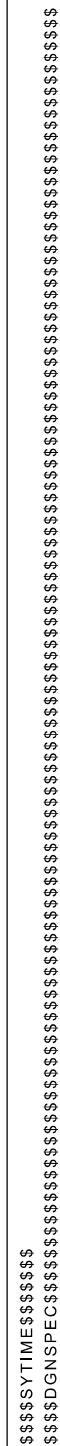




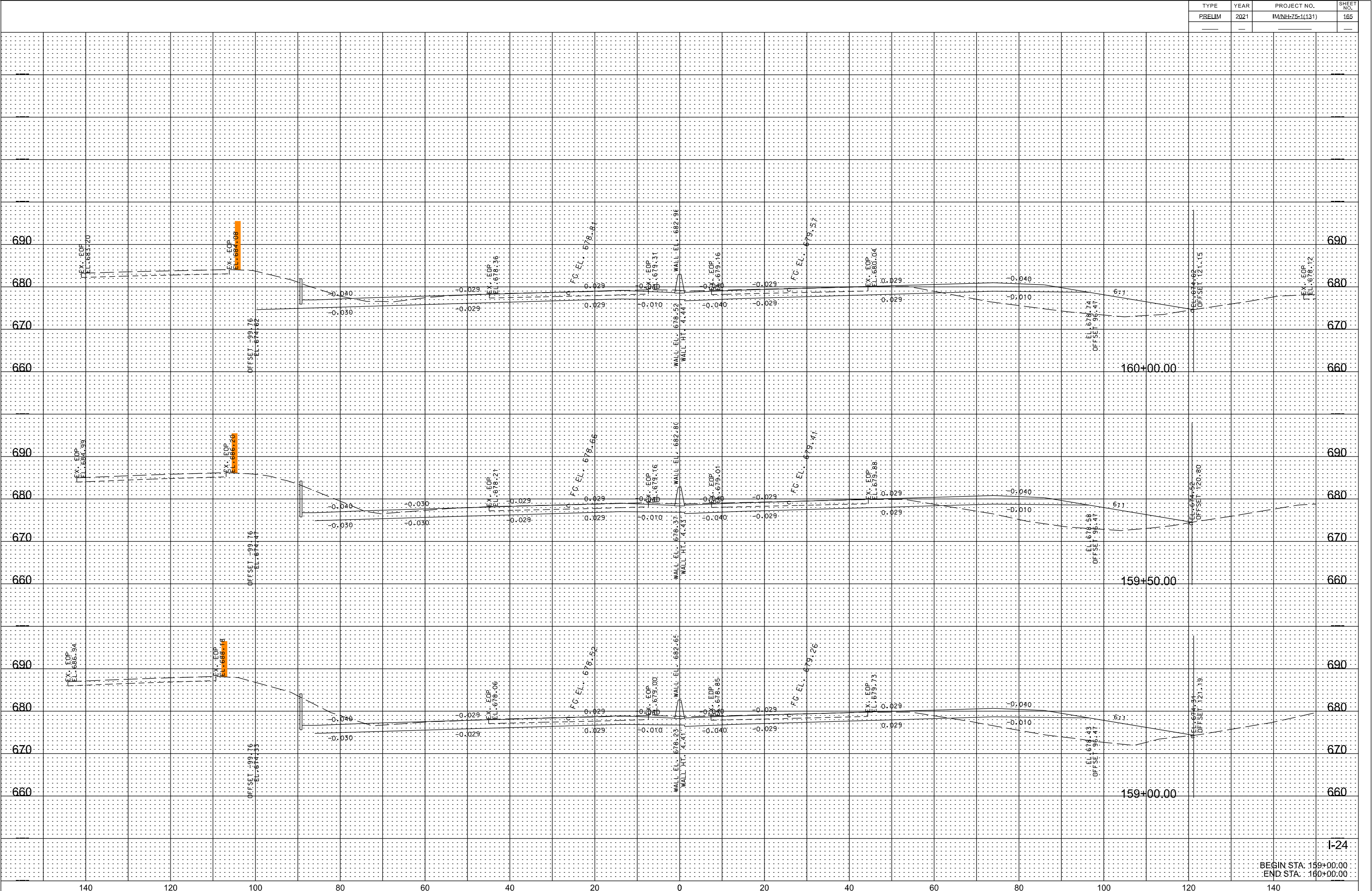
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	163
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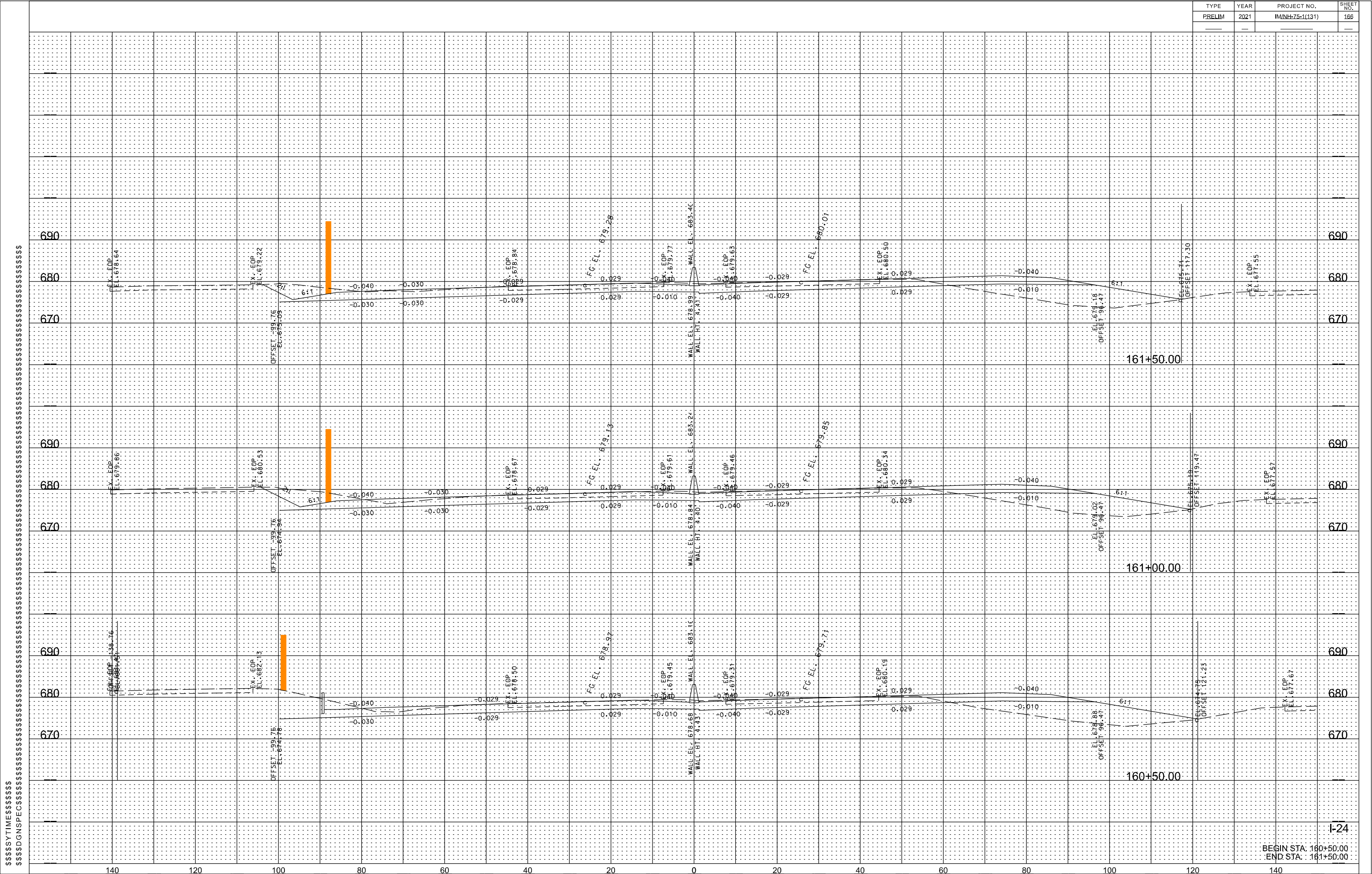
BEGIN STA. 156+00.00  
END STA. 157+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	164
—	—	—	—



\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PEO\$\$\$\$

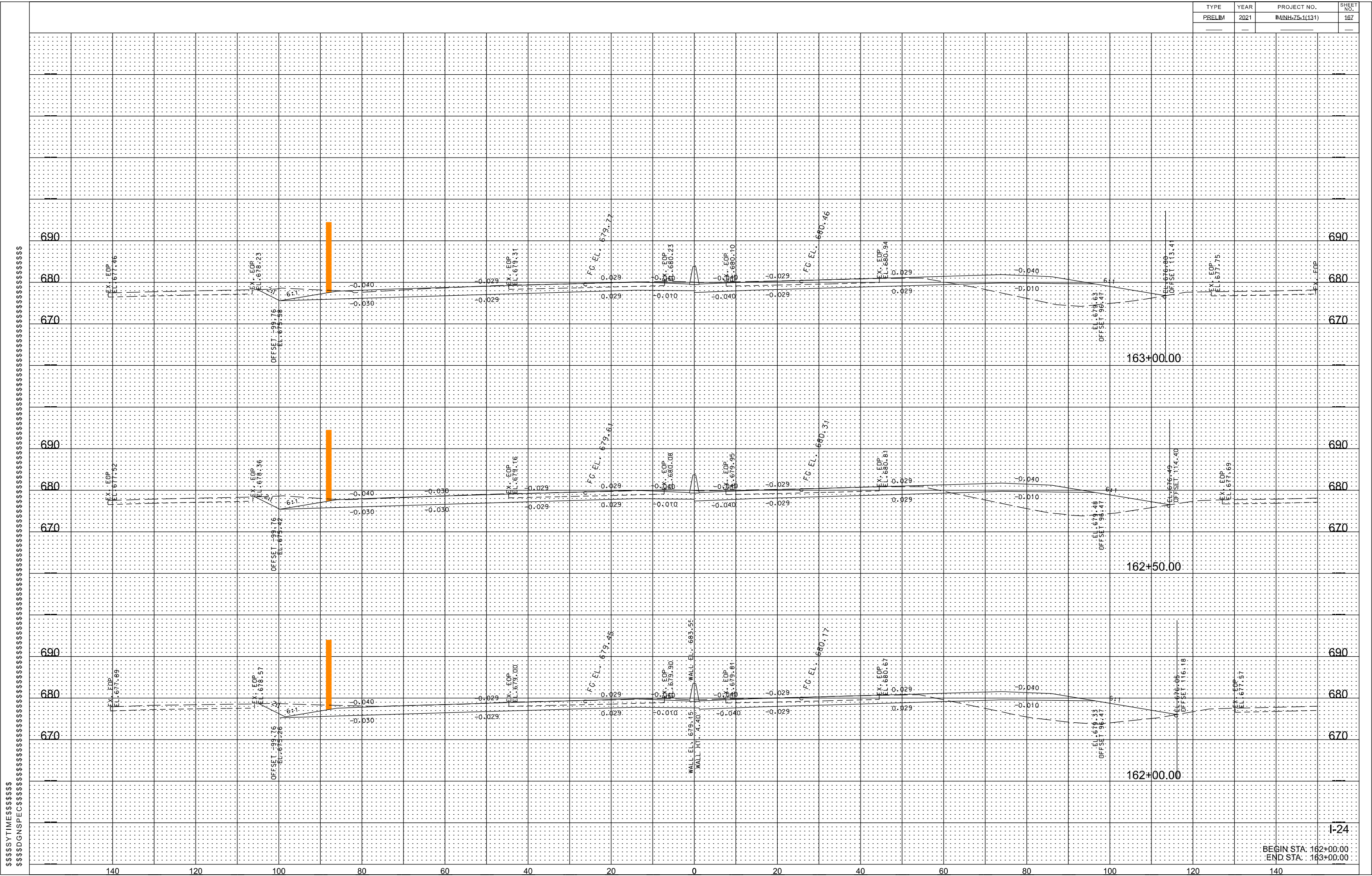




\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$SPEC\$\$\$\$

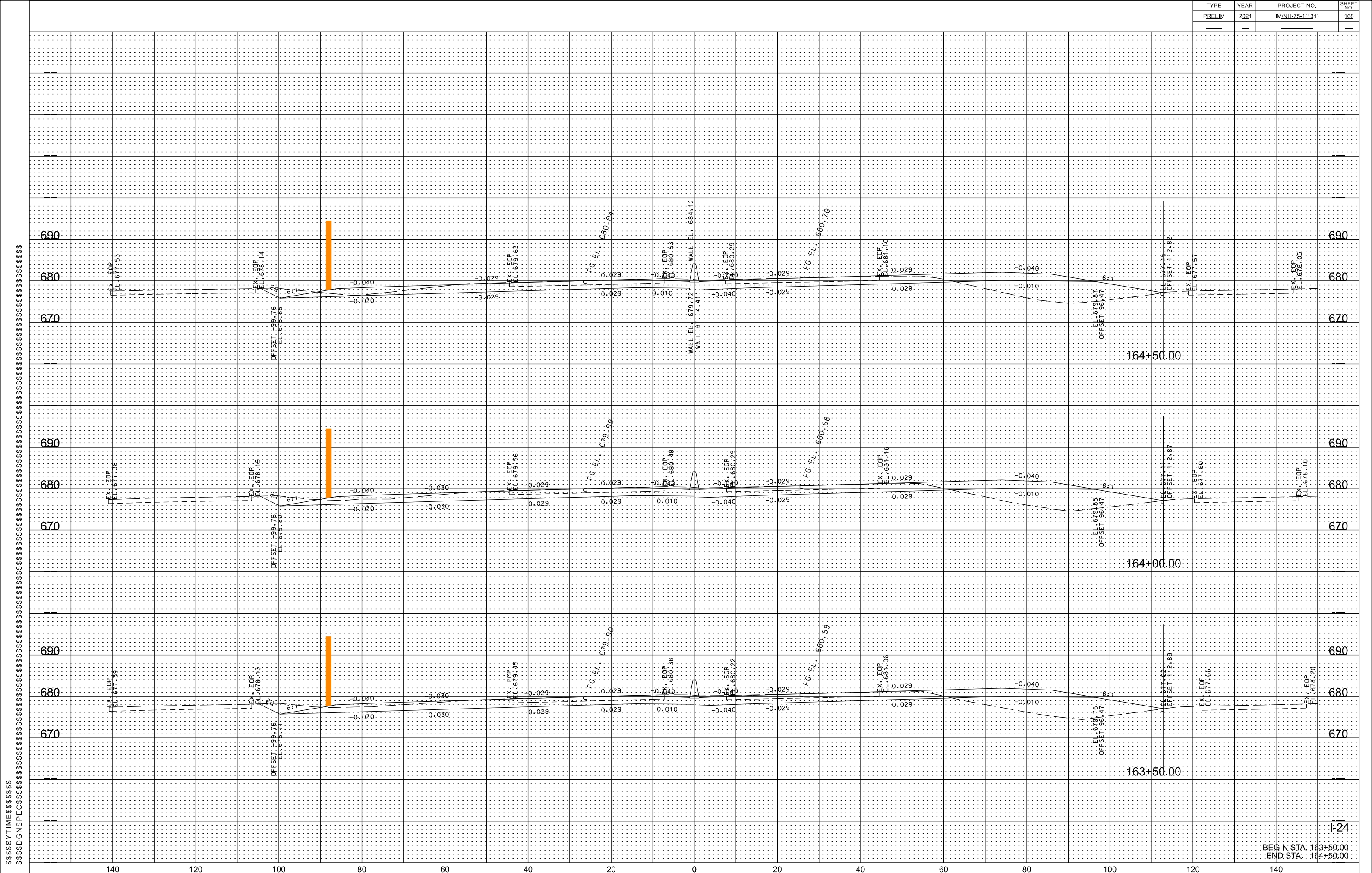
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	166
---	---	---	---





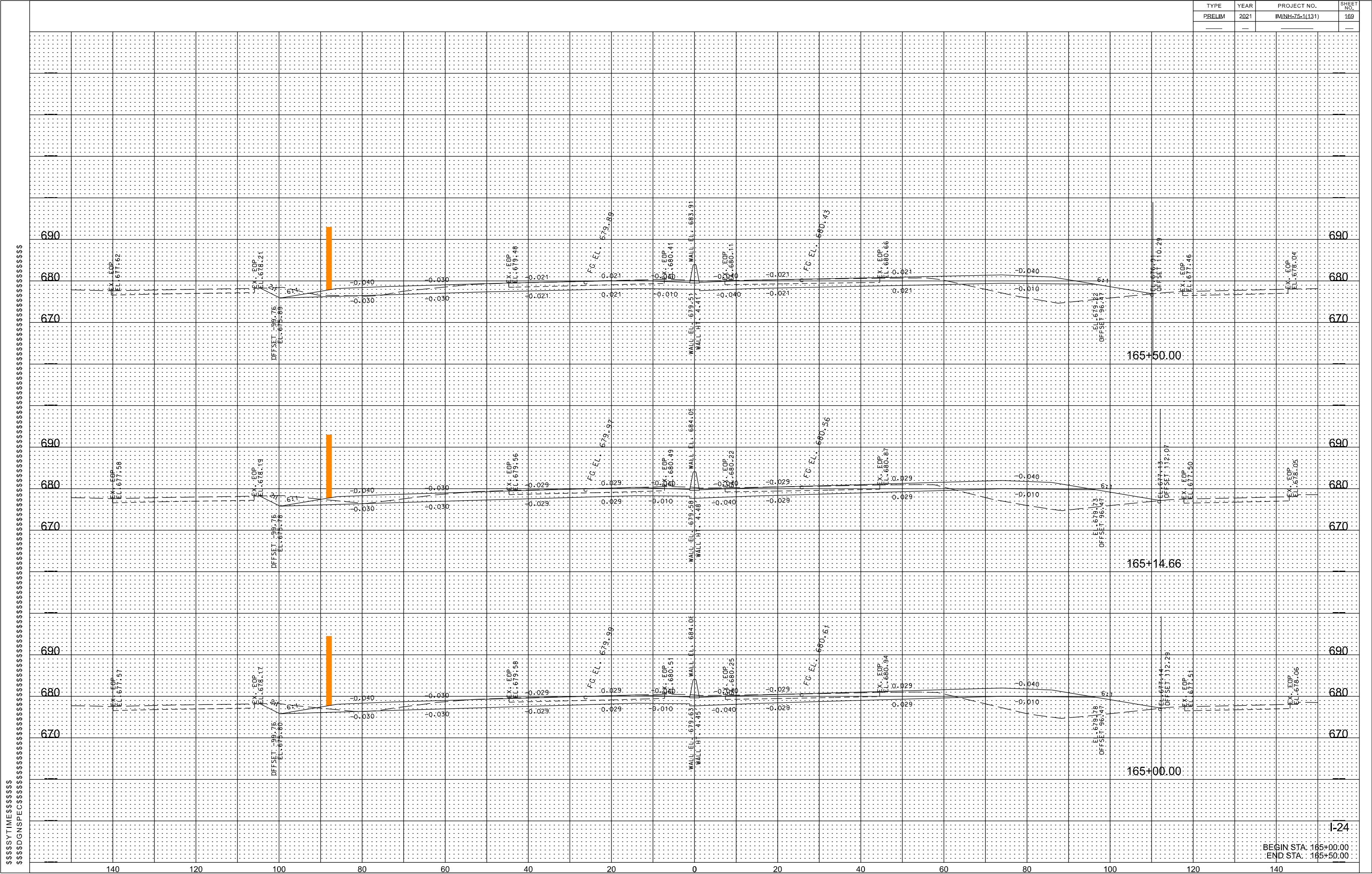
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	167
—	—	—	—

BEGIN STA: 162+00.00  
END STA: 163+00.00



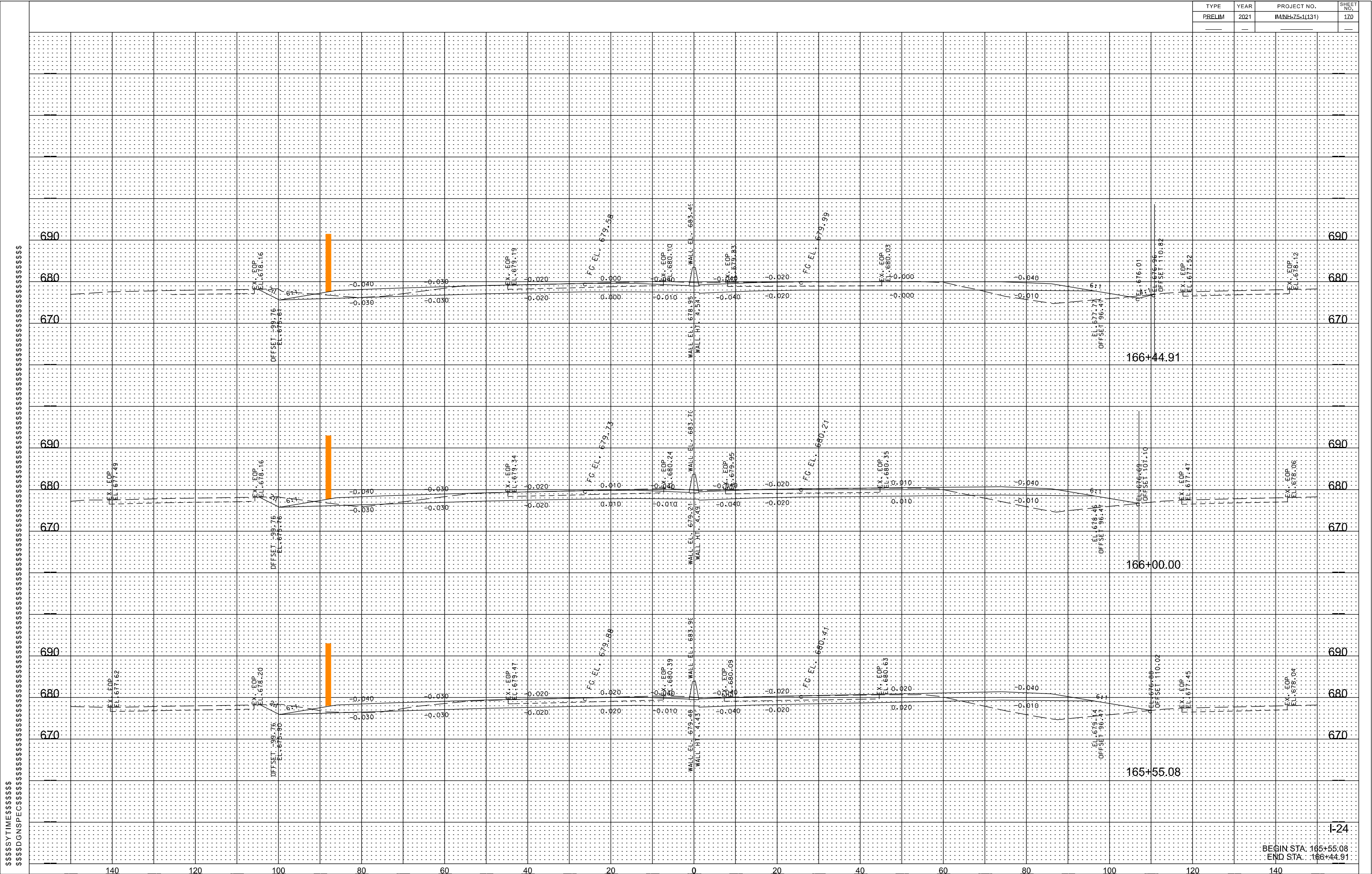
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	168
—	—	—	—

BEGIN STA: 163+50.00  
END STA: 164+50.00



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	169
—	—	—	—

BEGIN STA: 165+00.00  
END STA: 165+50.00



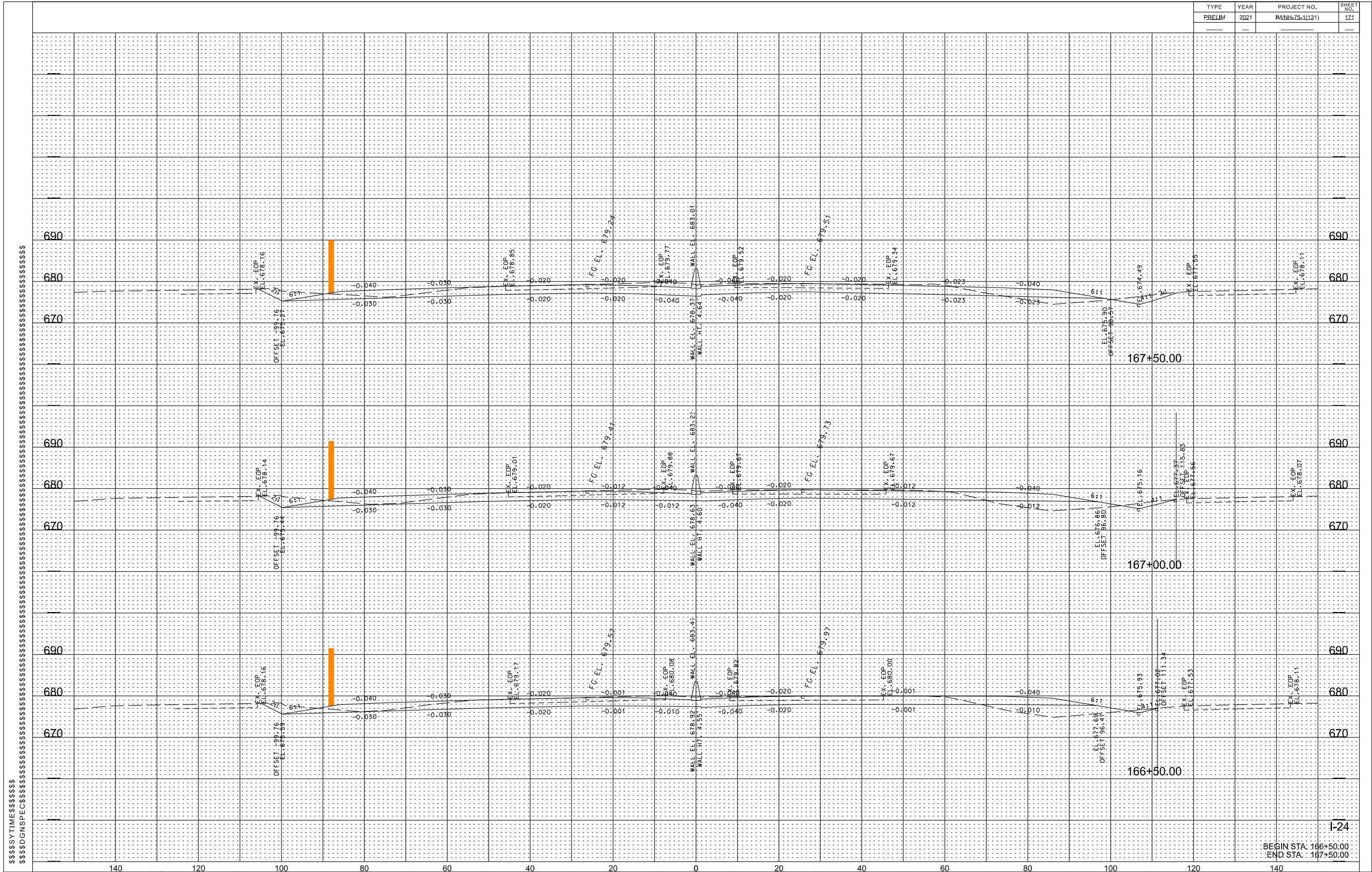
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	170
---	---	---	---

BEGIN STA: 165+55.08  
END STA: 166+44.91

I-24

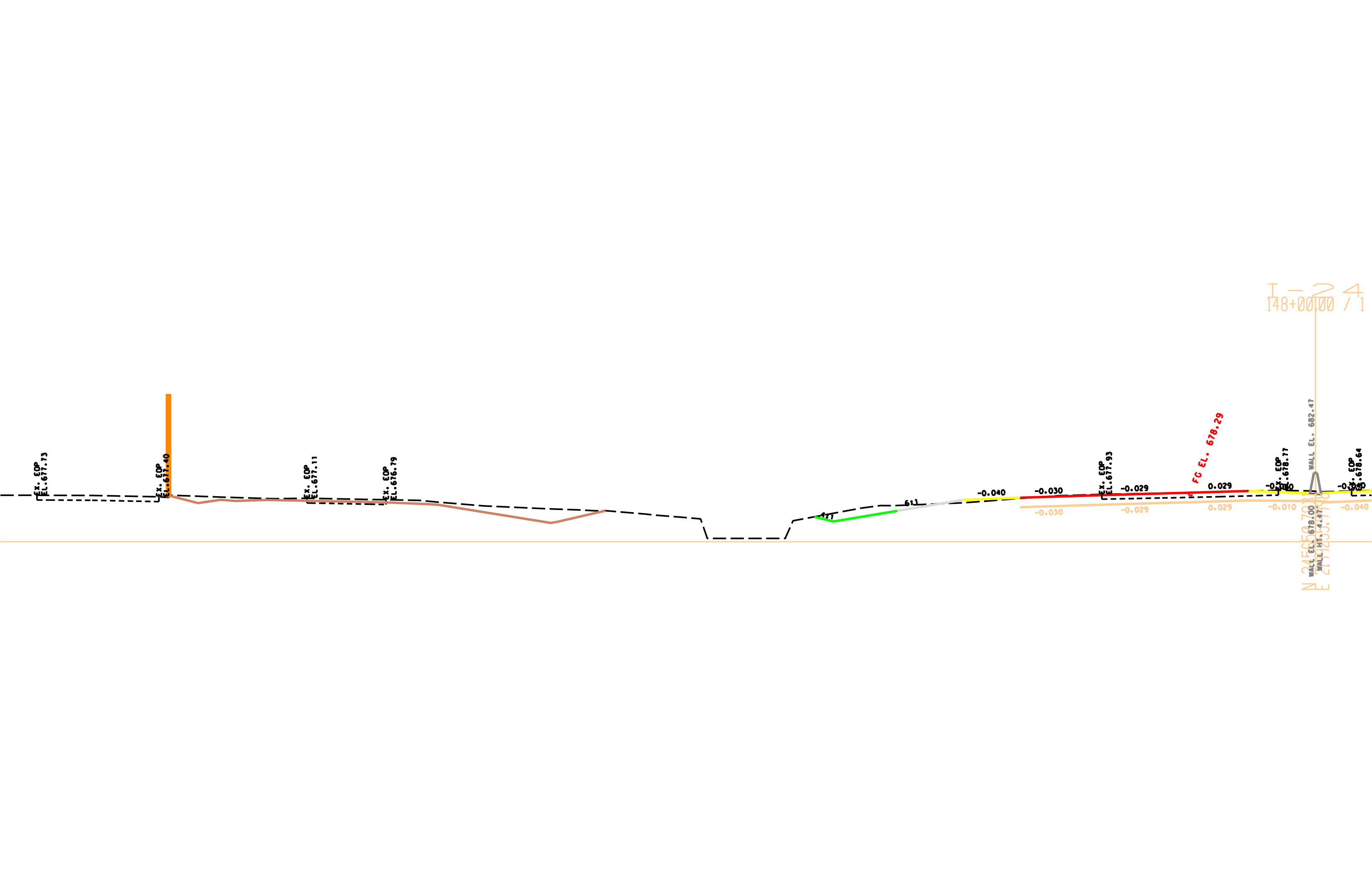


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	171

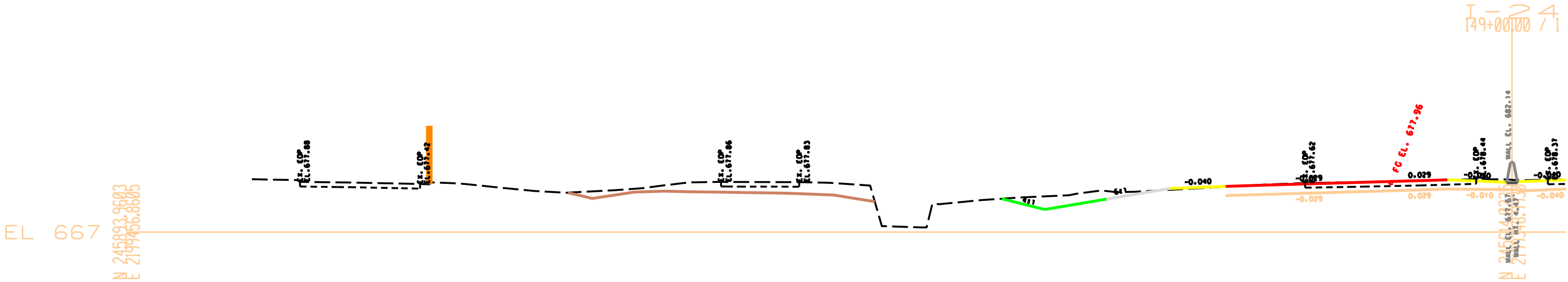


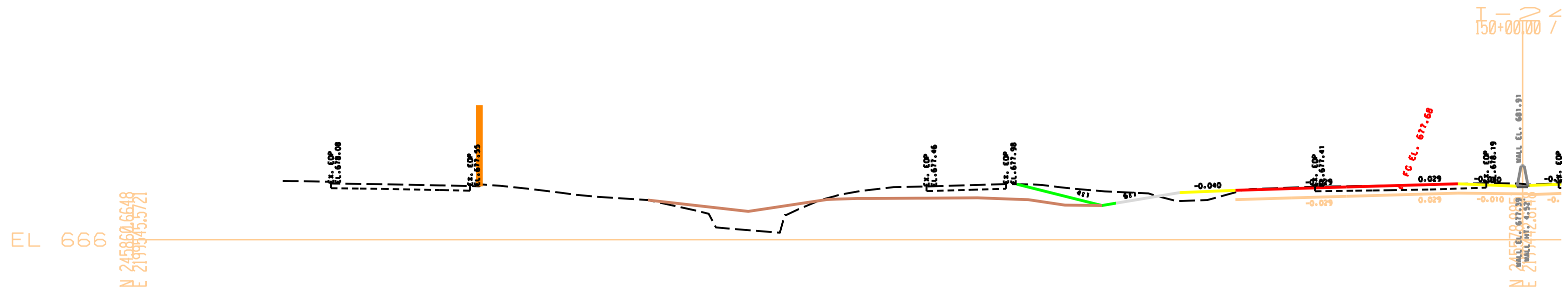


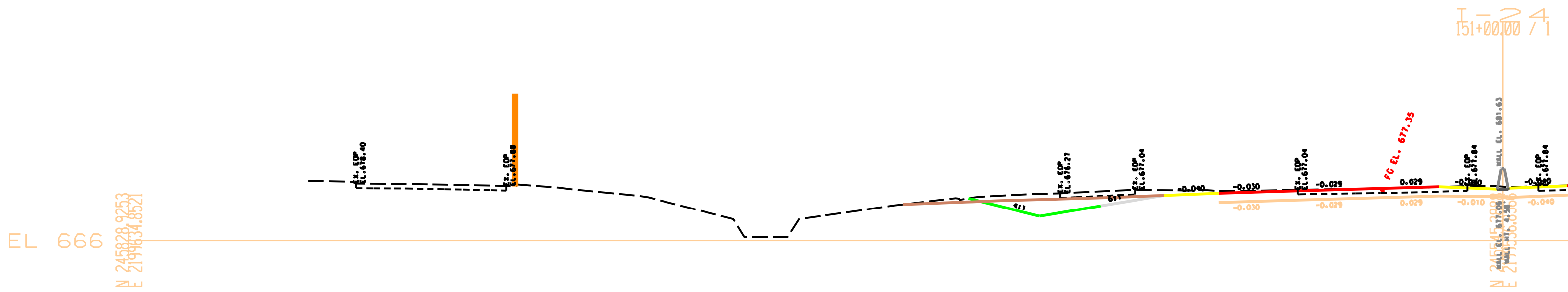
**NAA 4**

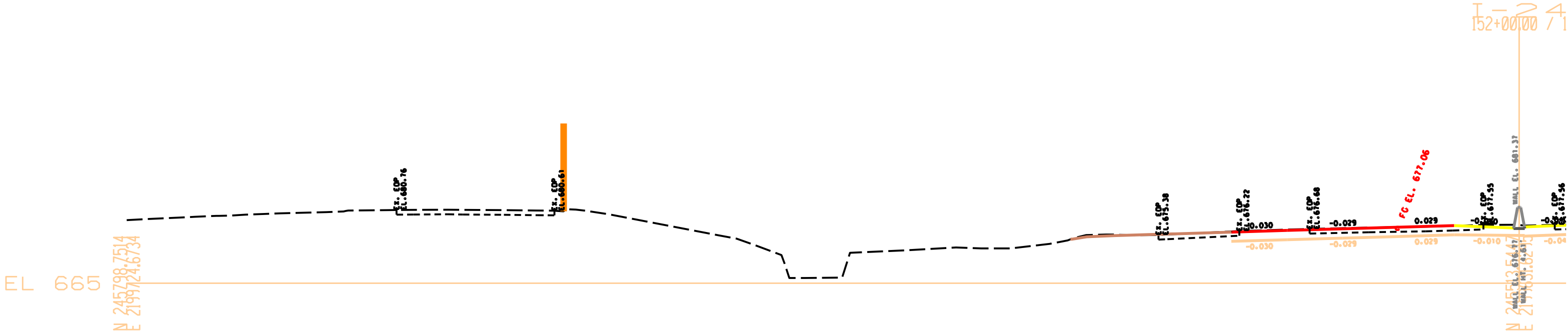








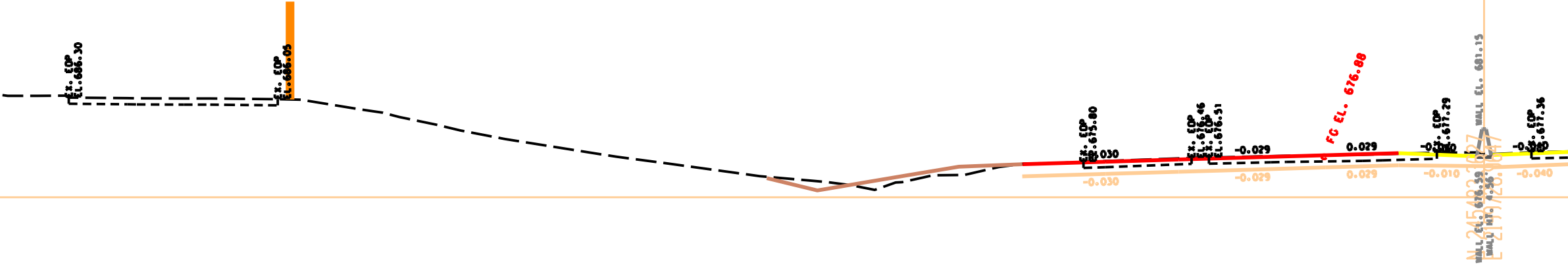




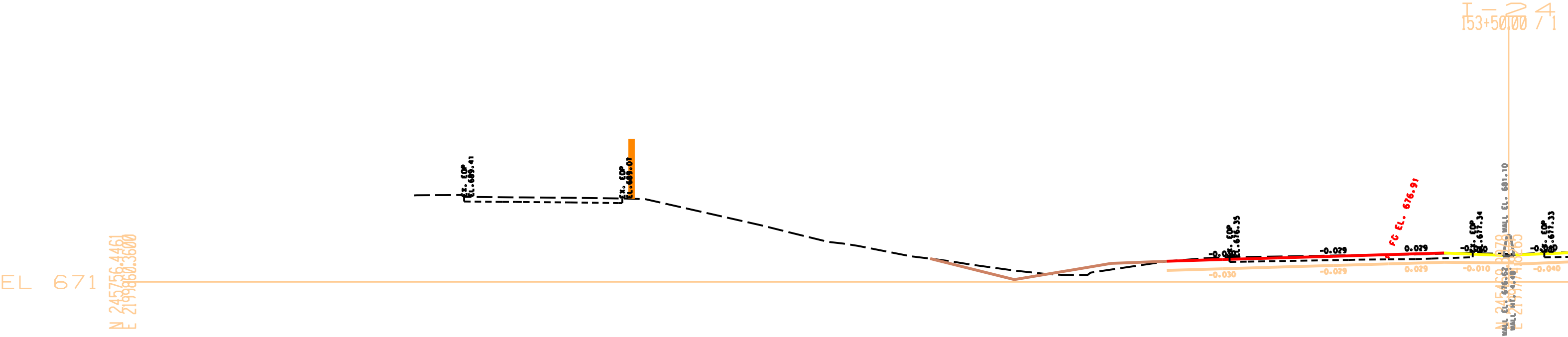


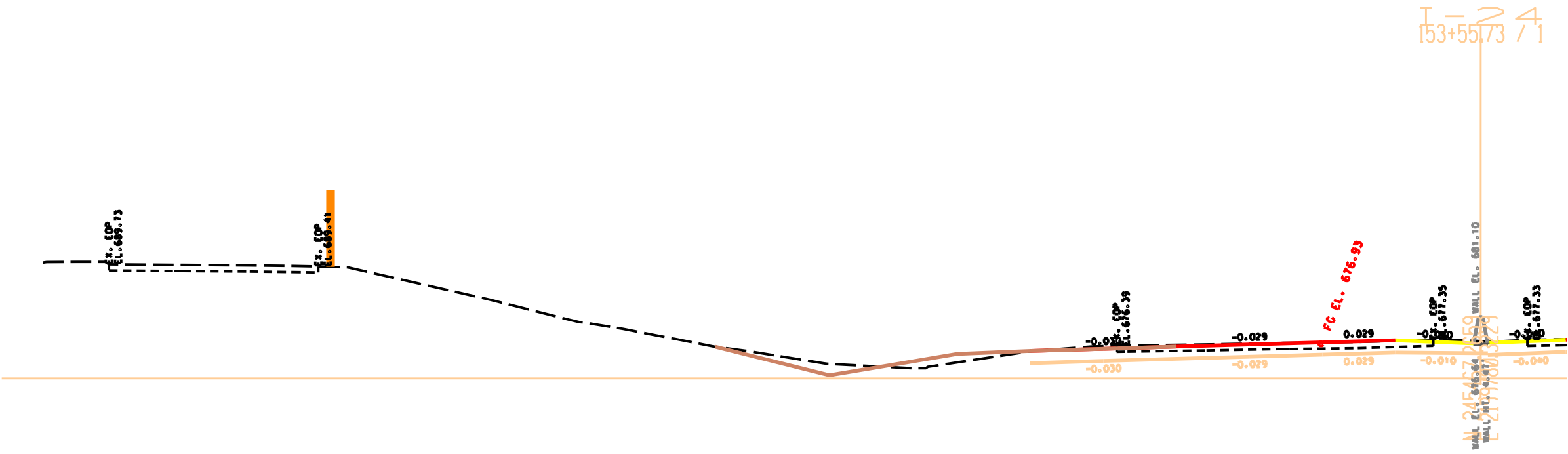
EL 670

N 245770.1523  
E 2199815.0065



153+00.00 / 1





EL 672

N 245743.1368  
E 2199905.8297

EL. 691.90  
EL. 691.90

EL. 691.79  
EL. 691.79

OFFSET -122.37  
EL. 676.76

EL. 671.63  
EL. 671.63

OFFSET -99.16  
EL. 672.84

6.1

-0.040

-0.030

EL. 676.47  
EL. 676.47

-0.029

-0.029

FG EL. 677.03  
0.029

0.029

EL. 677.44  
EL. 677.44

-0.010

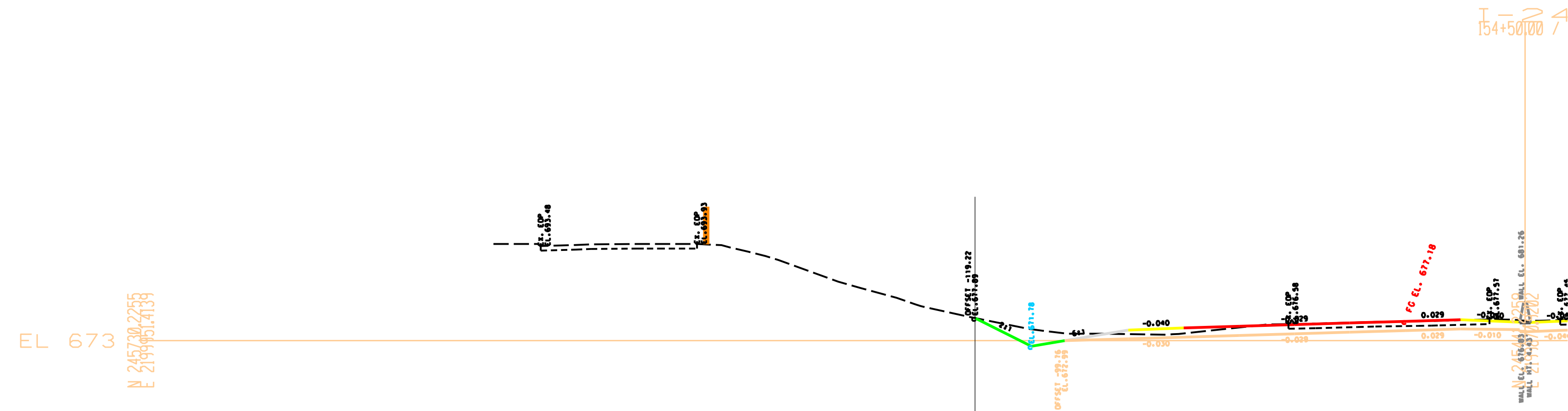
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EL. 677.36

-0.040

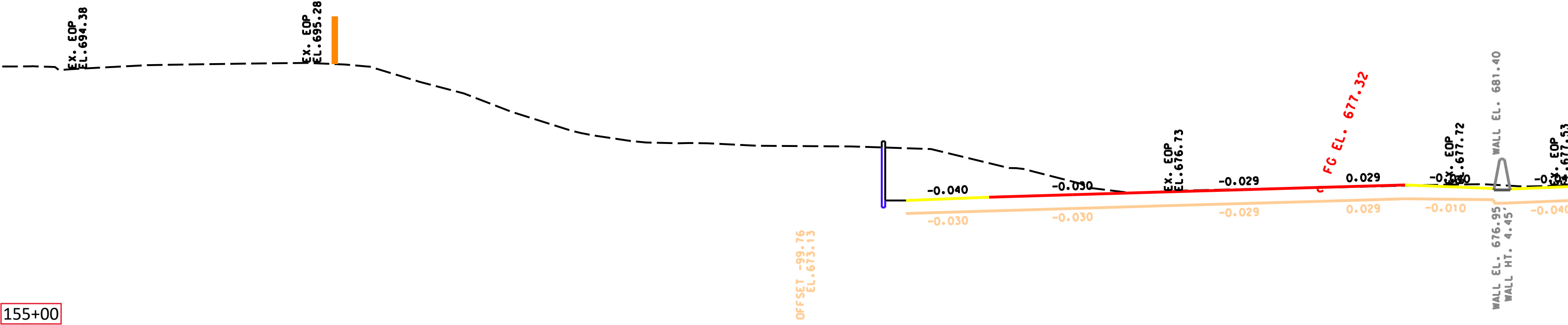
I-24  
154+00.00 / 1

N 245454.4519  
E 2199824.6129



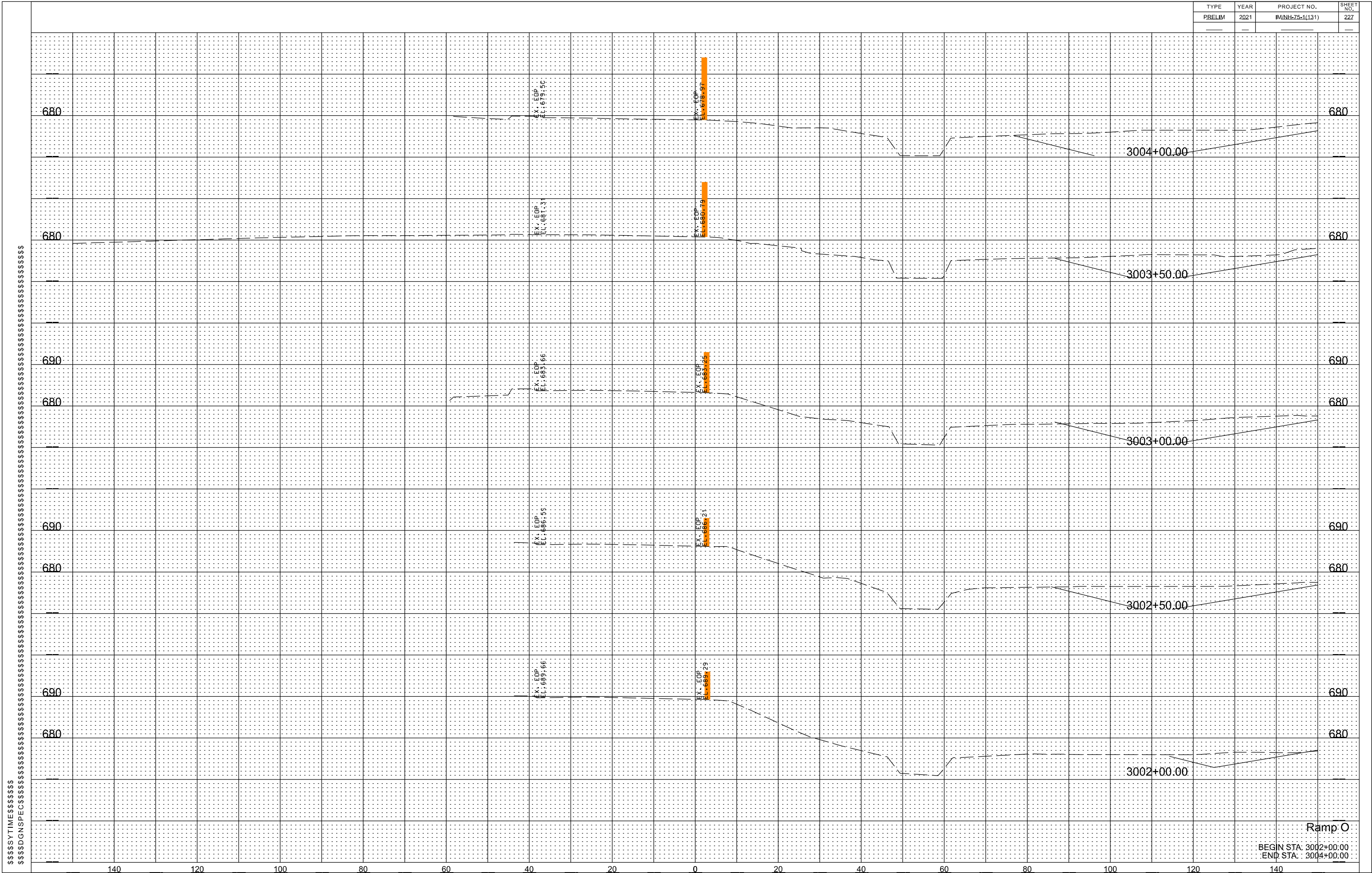


155+00

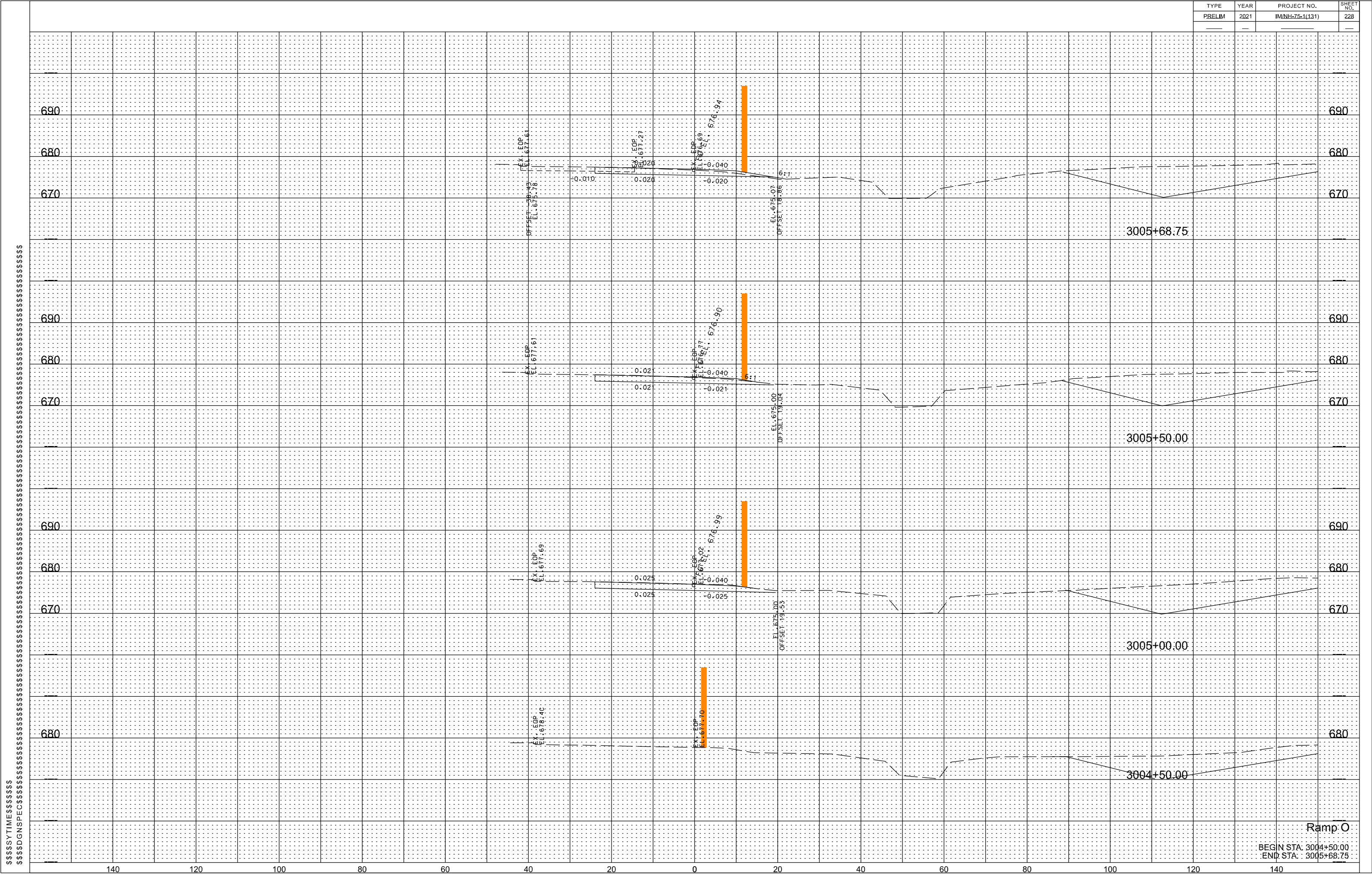




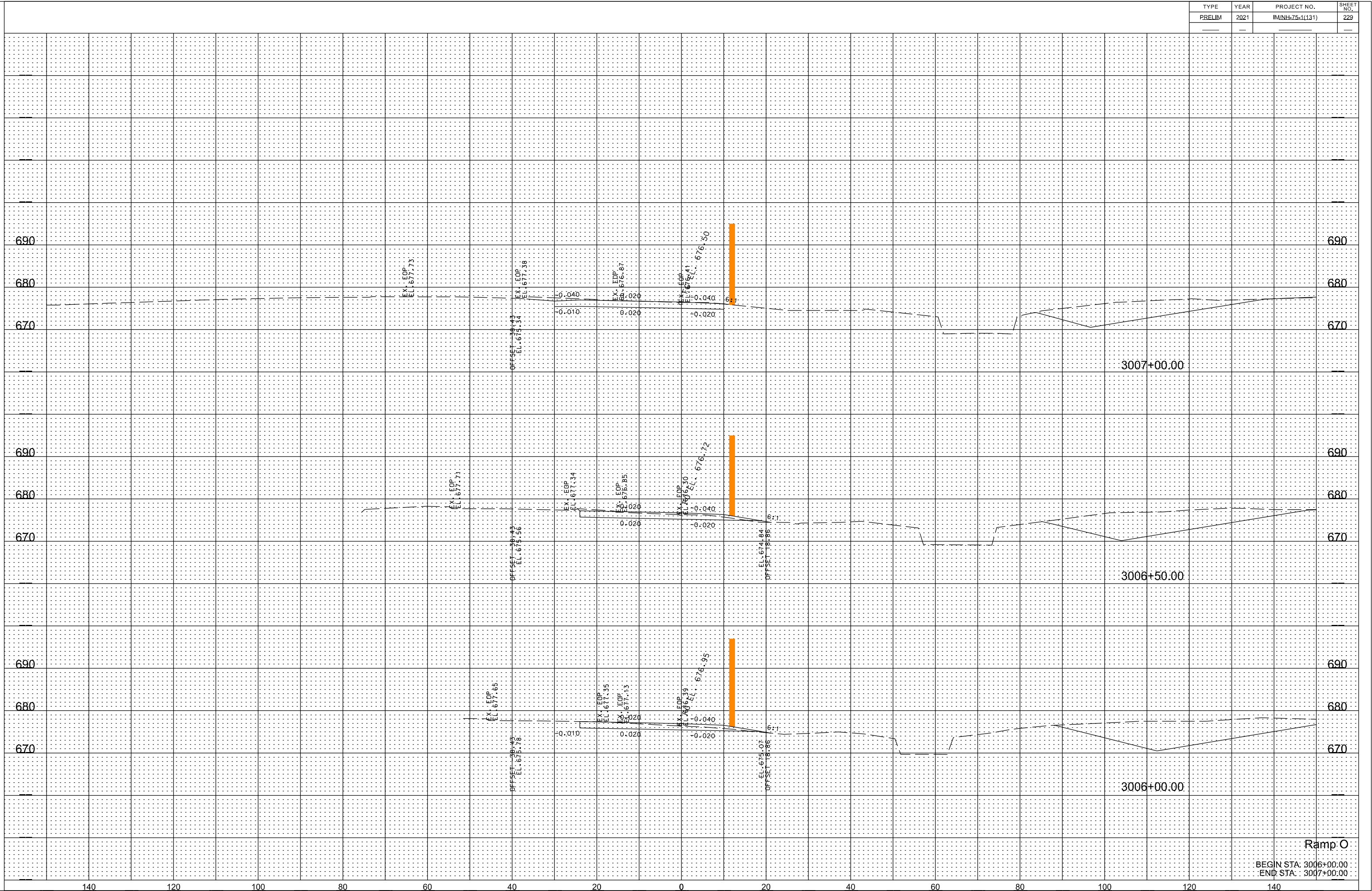
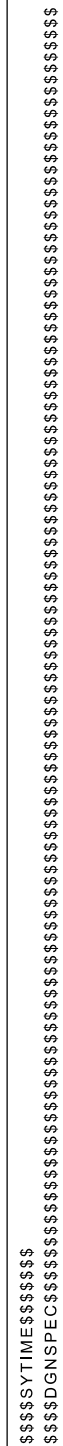
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	227
—	—	—	—

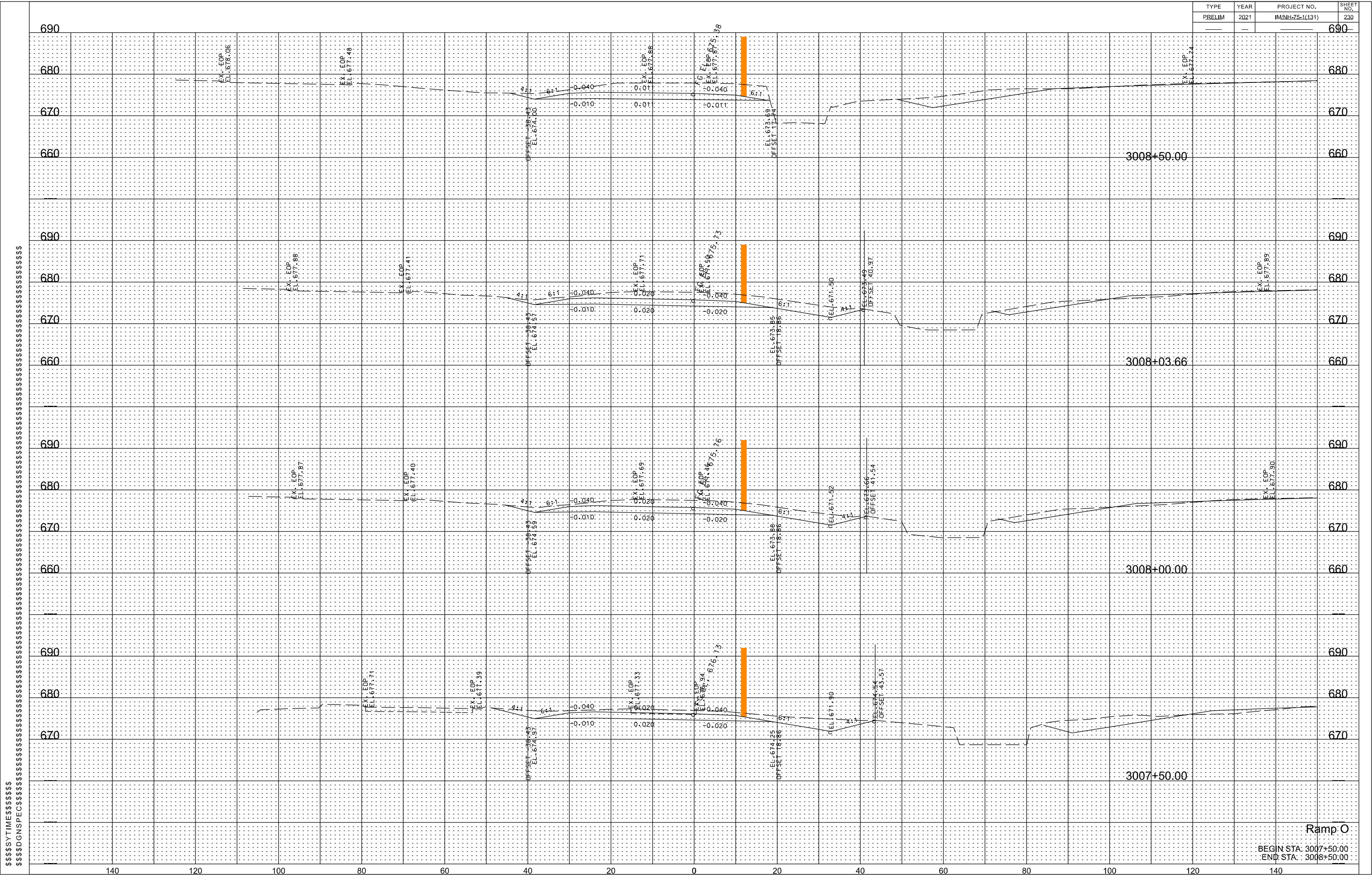


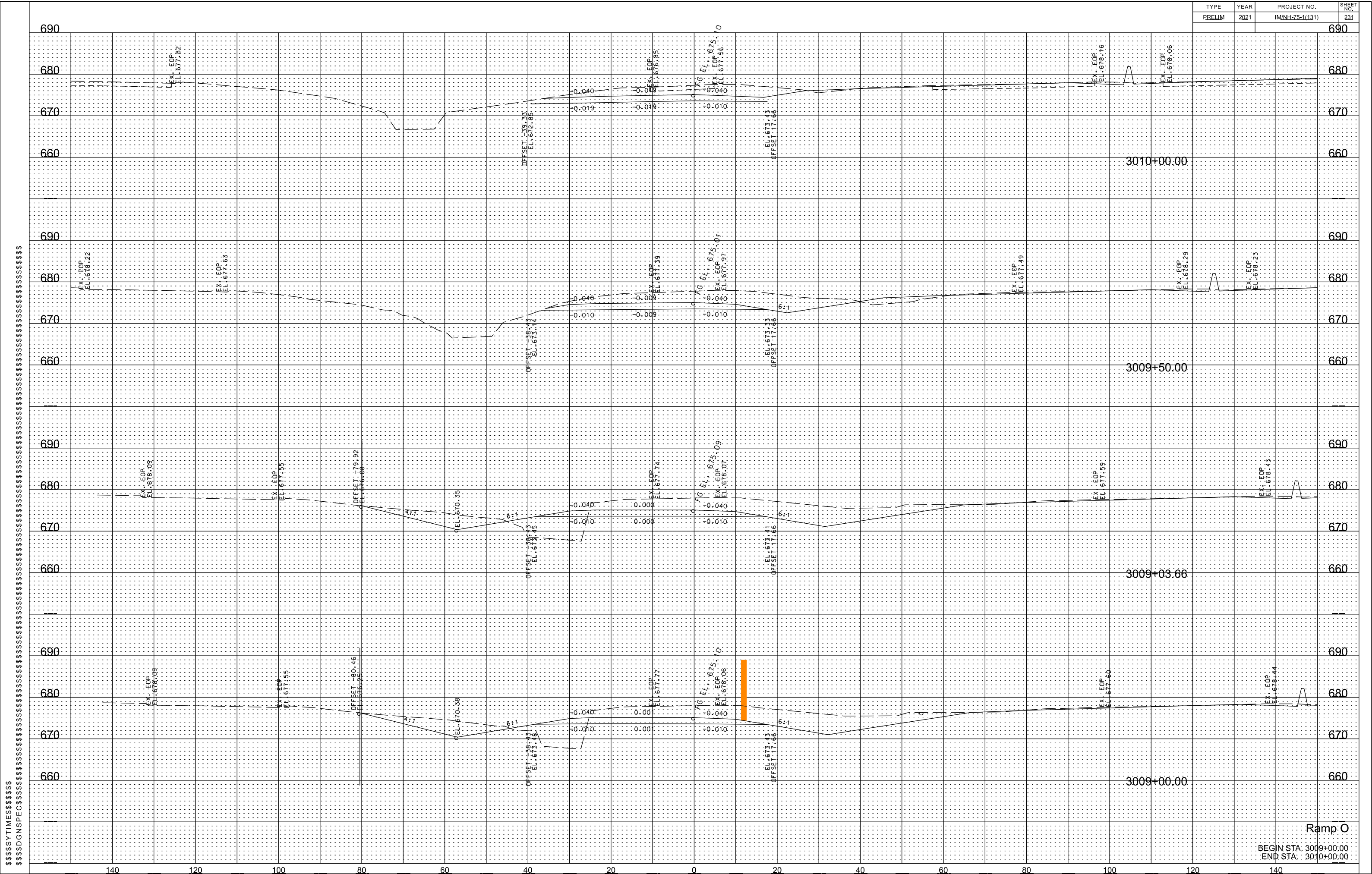




TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	229
—	—	—	—



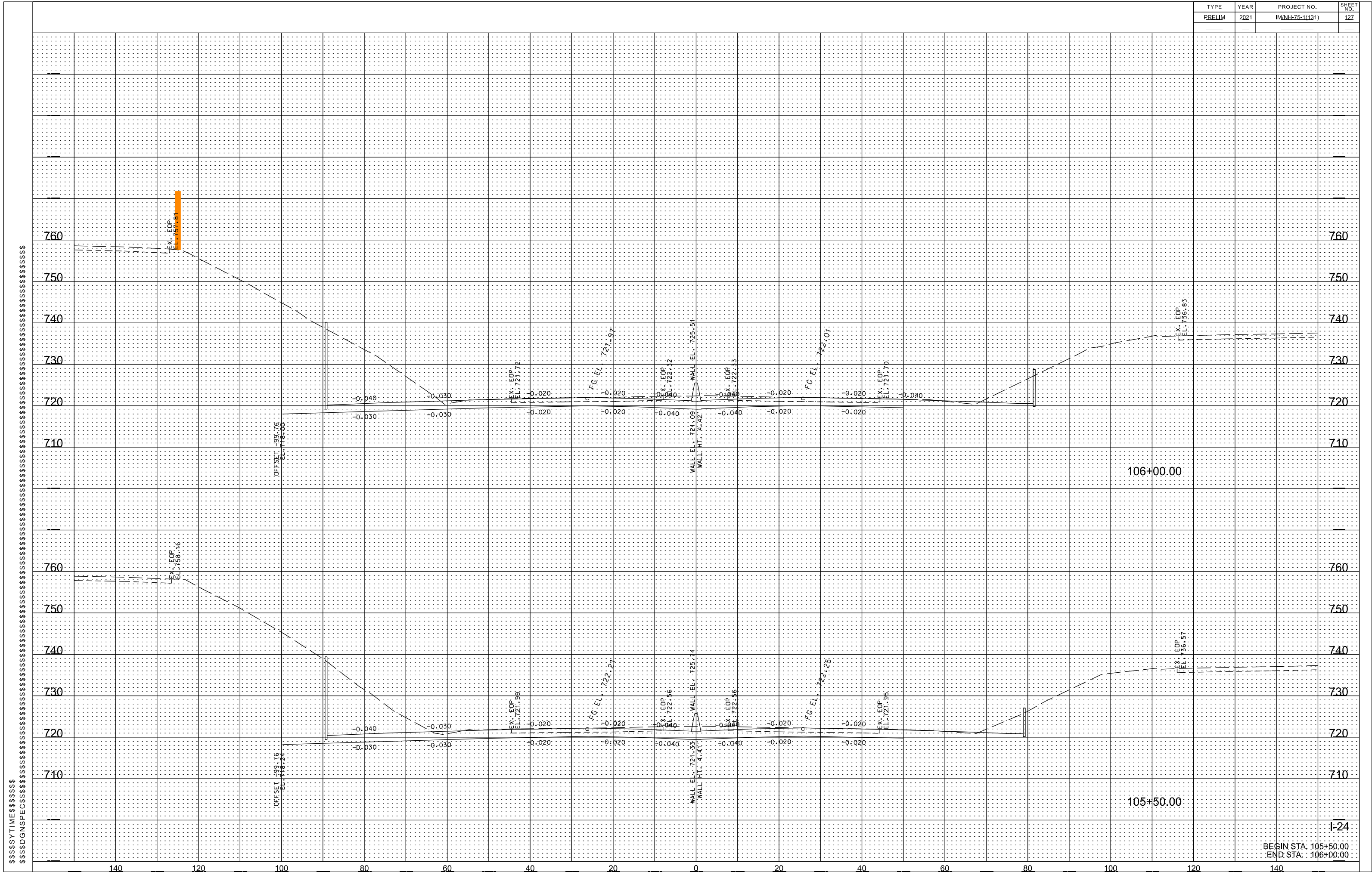


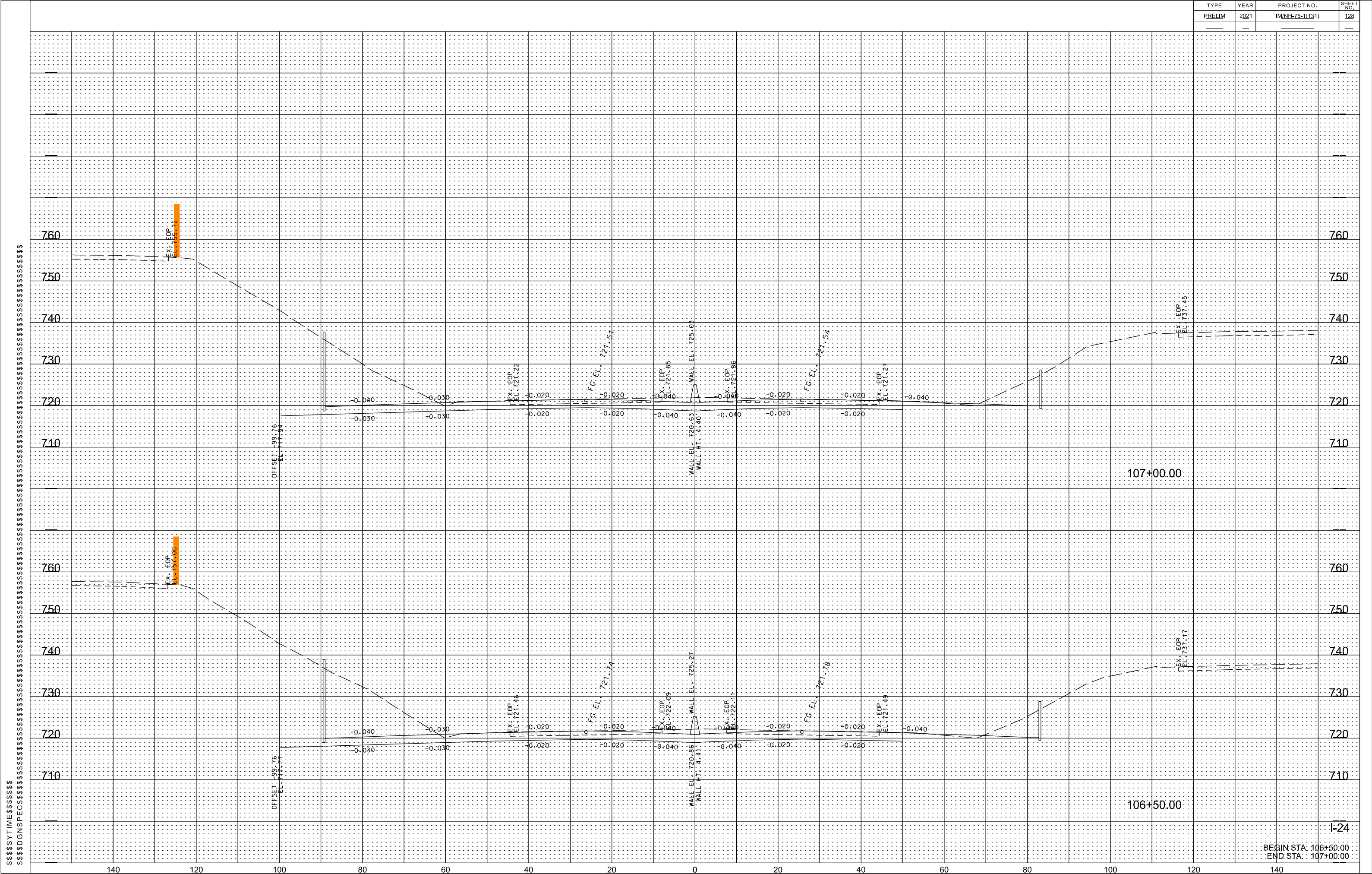


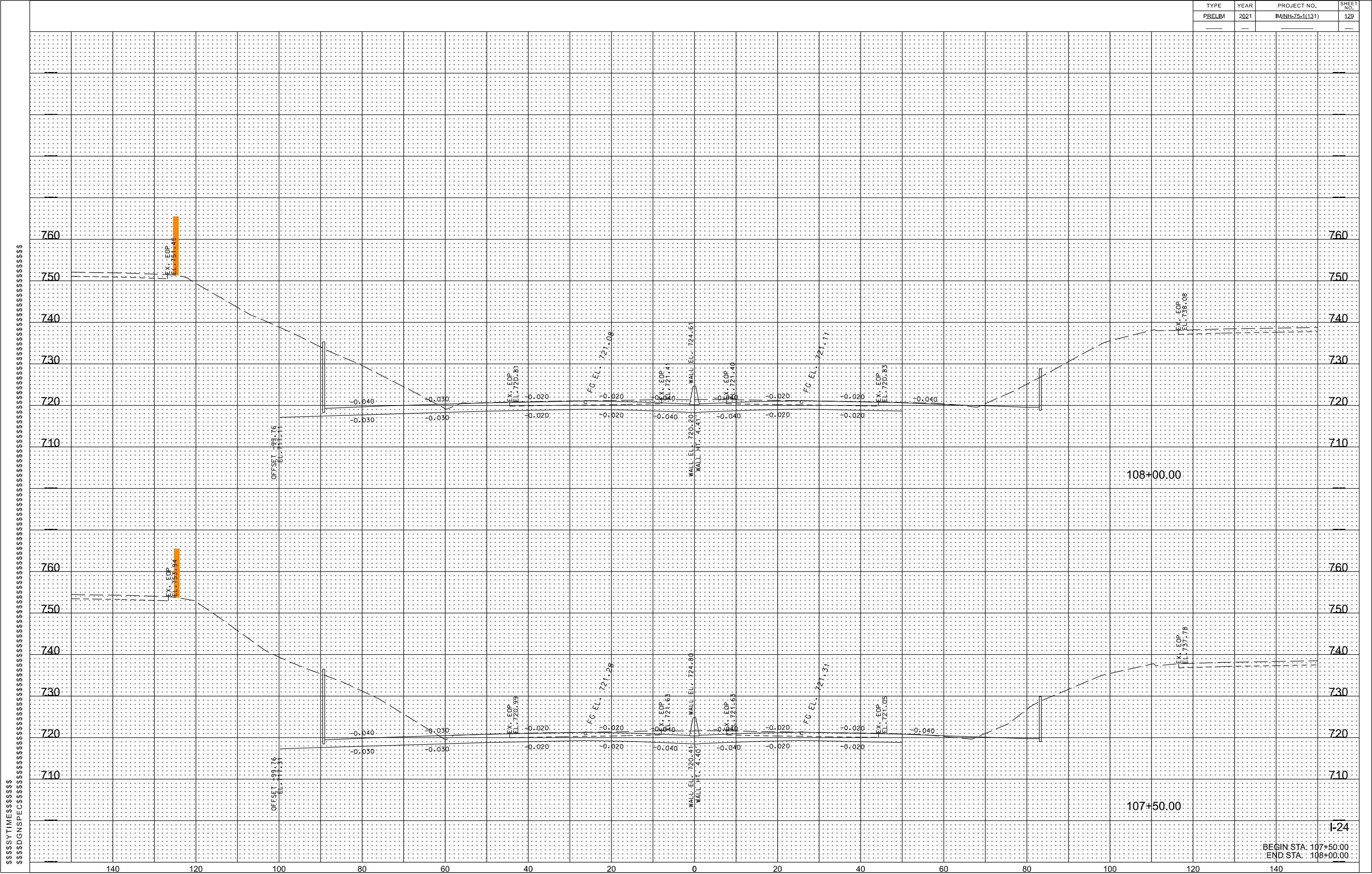


NAA 2, Option 1

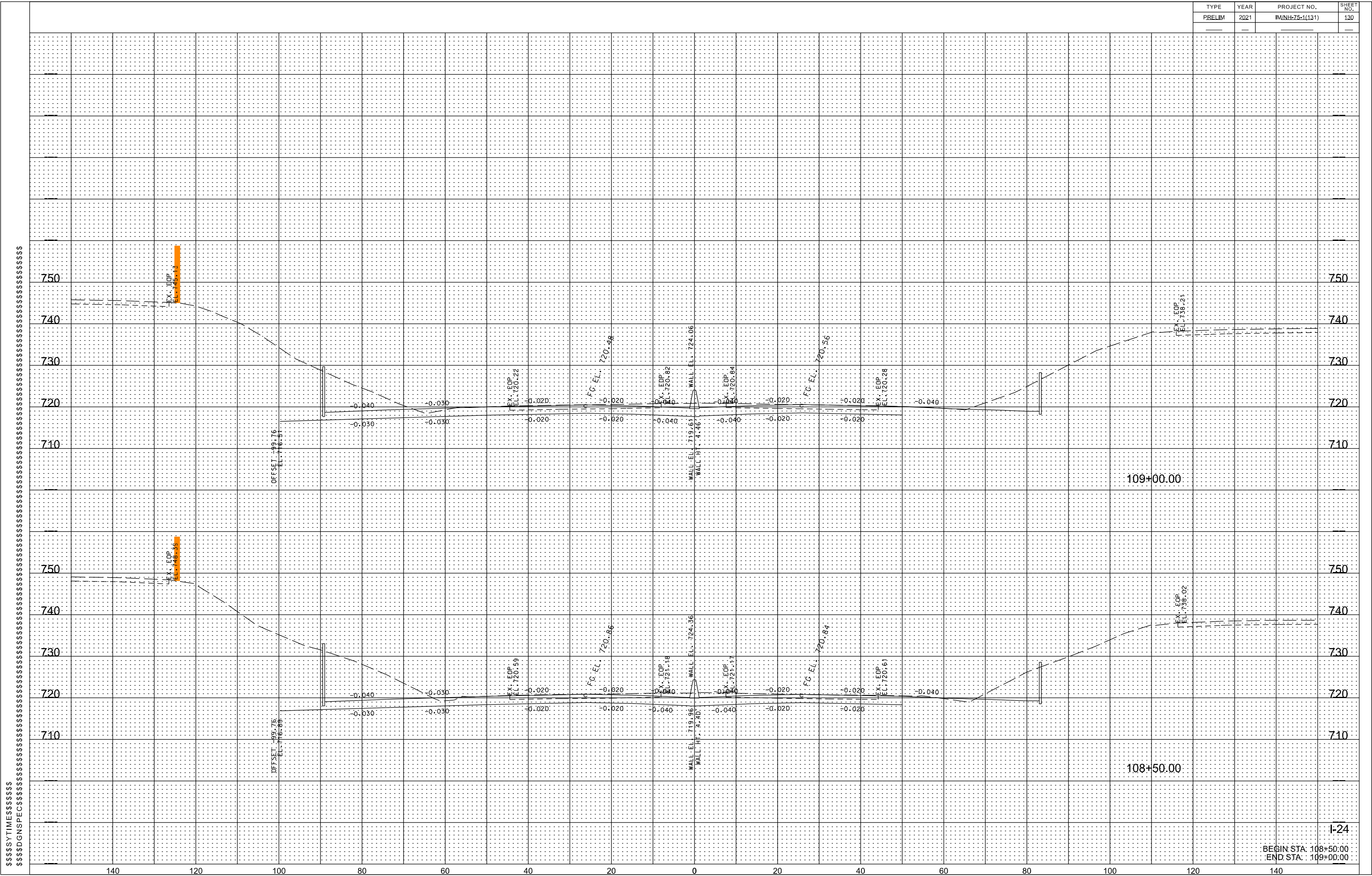
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	127
—	—	—	—

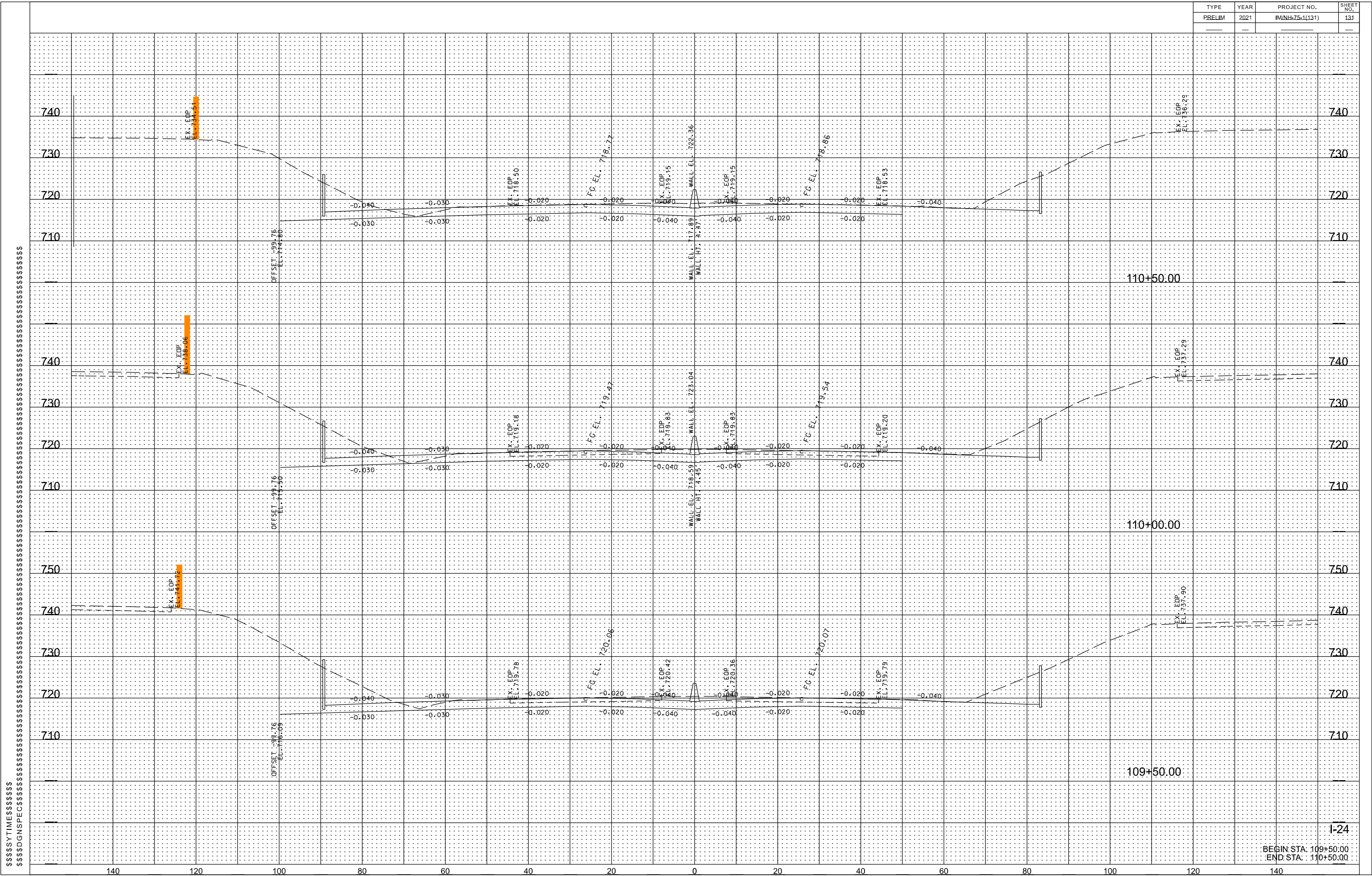


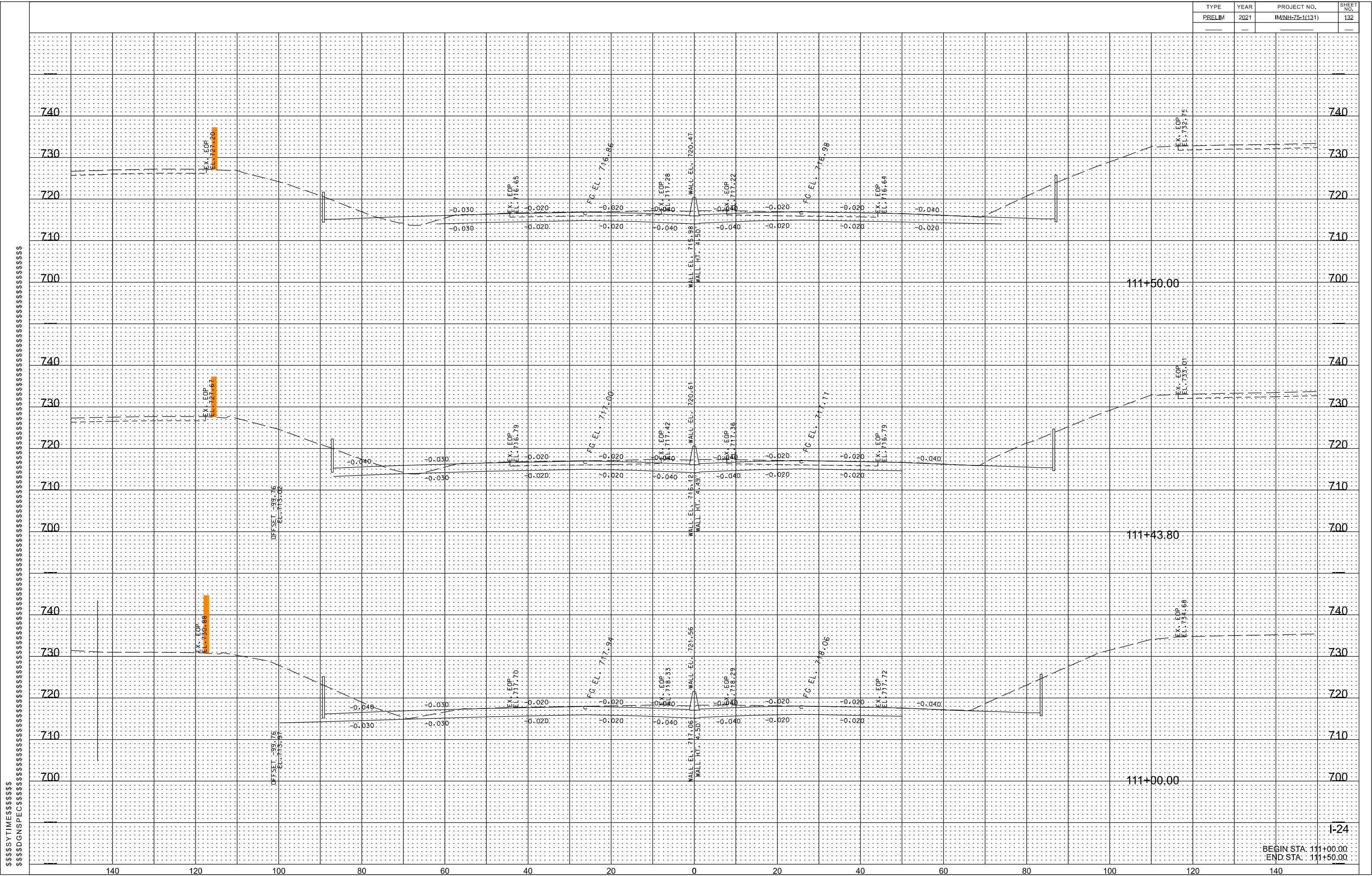


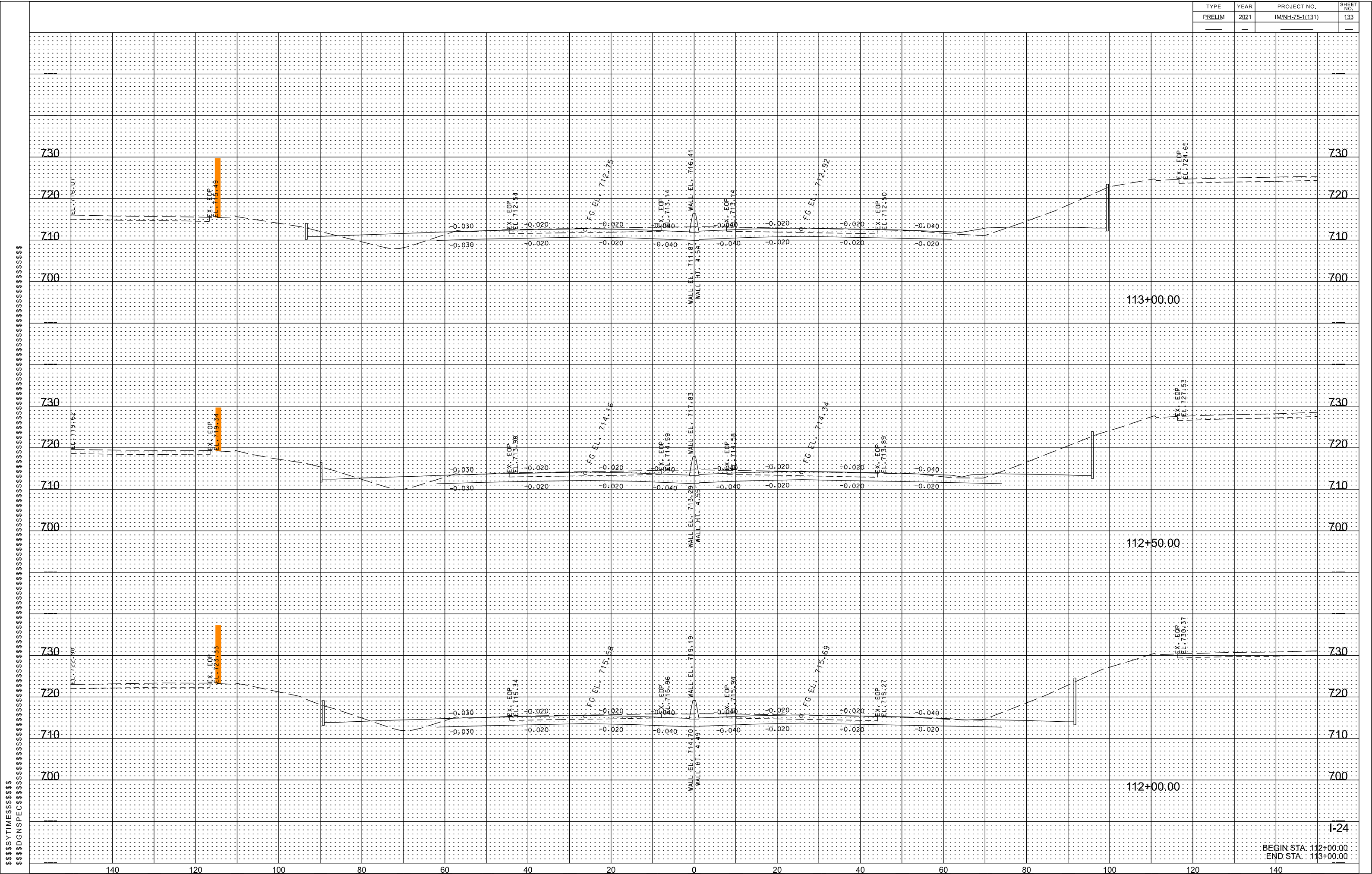




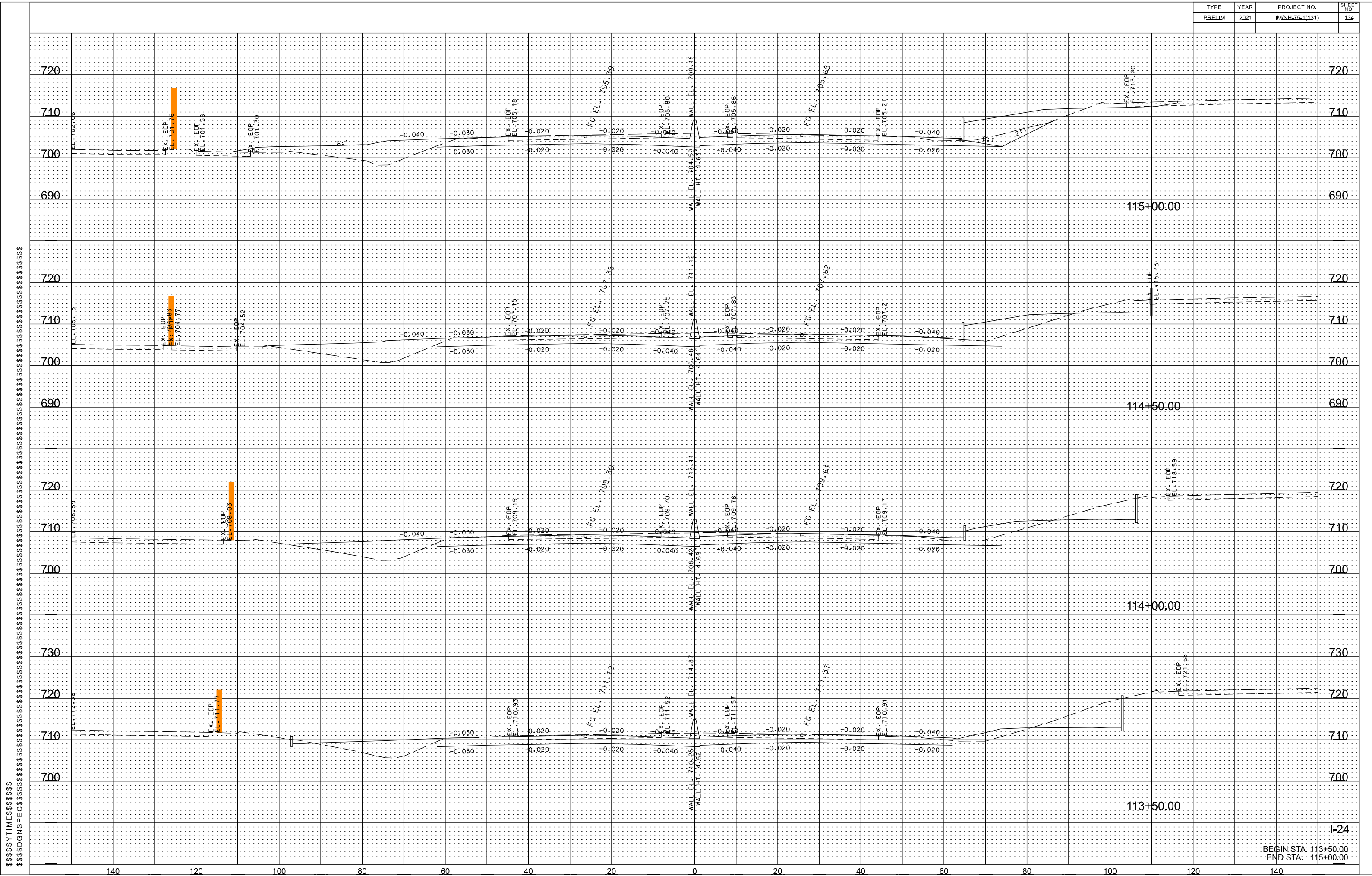


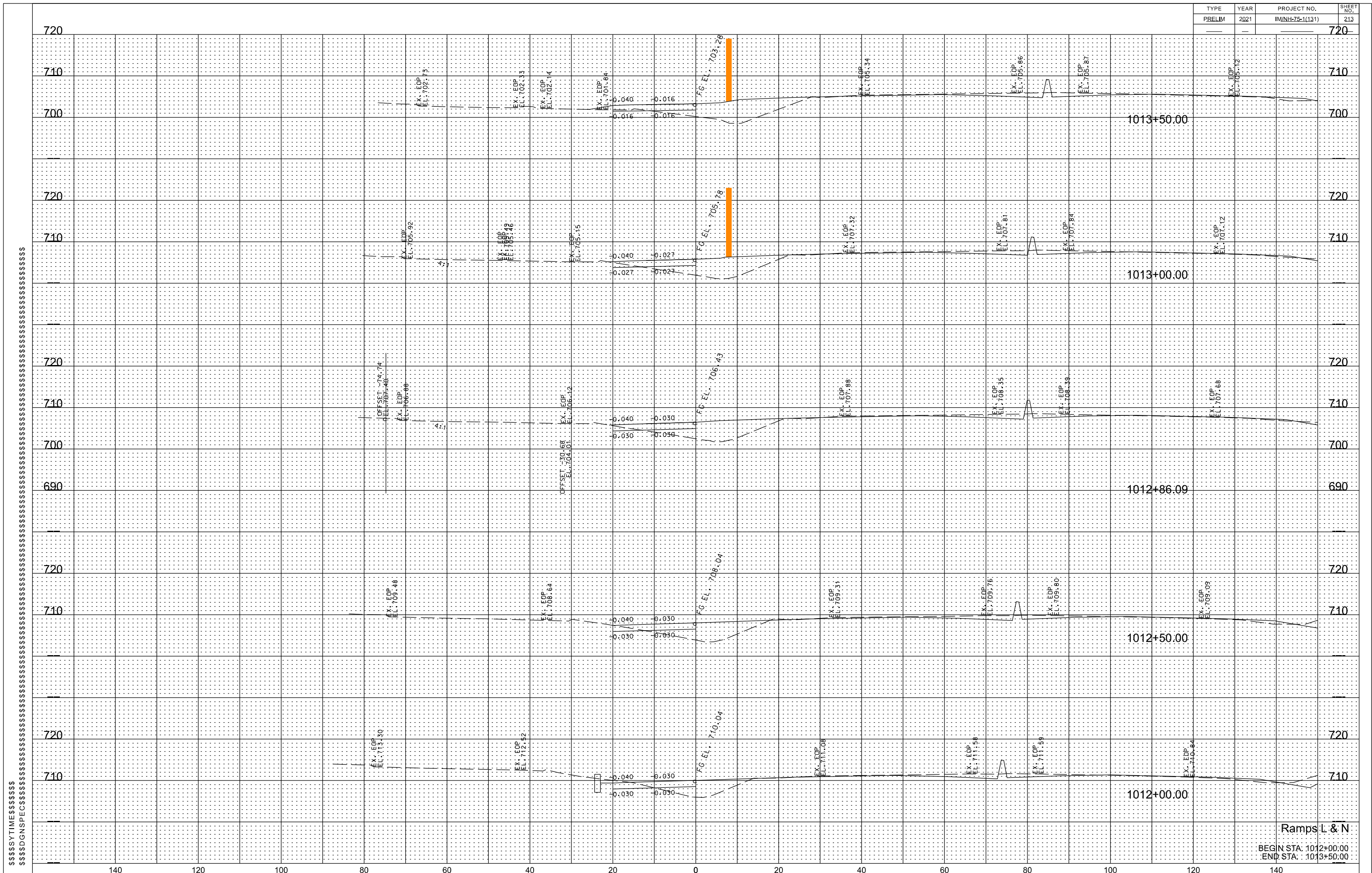




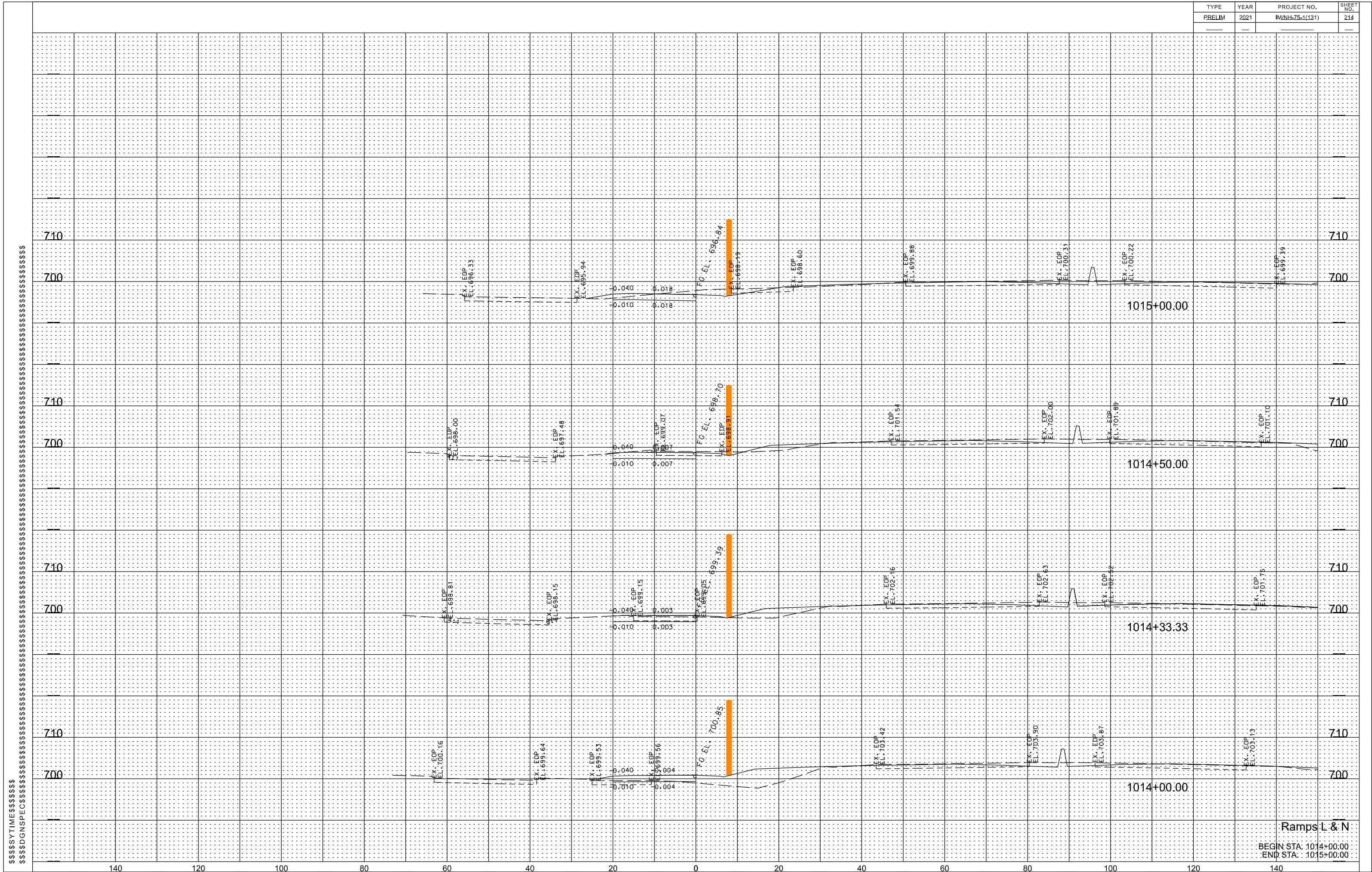






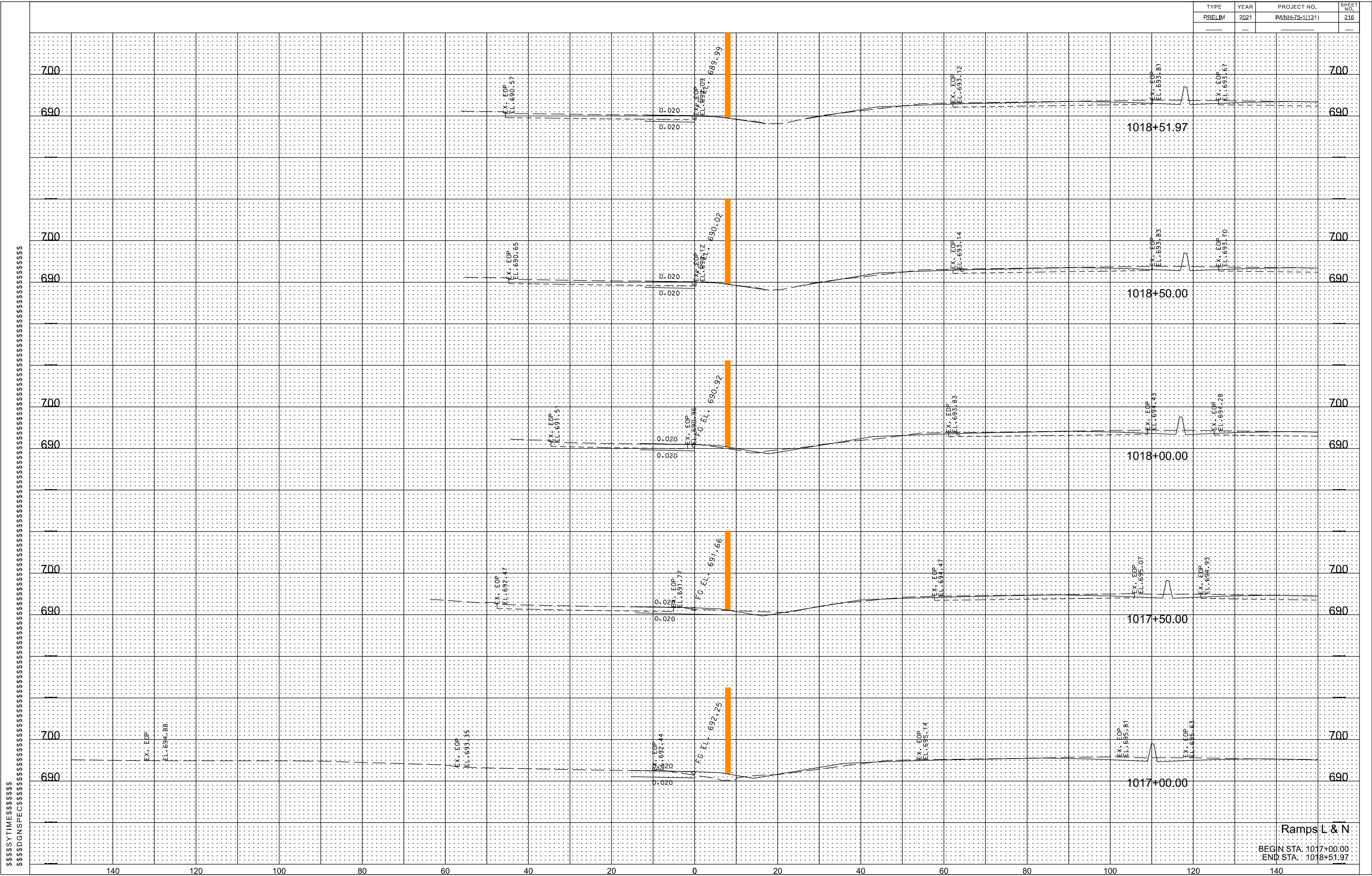


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	214
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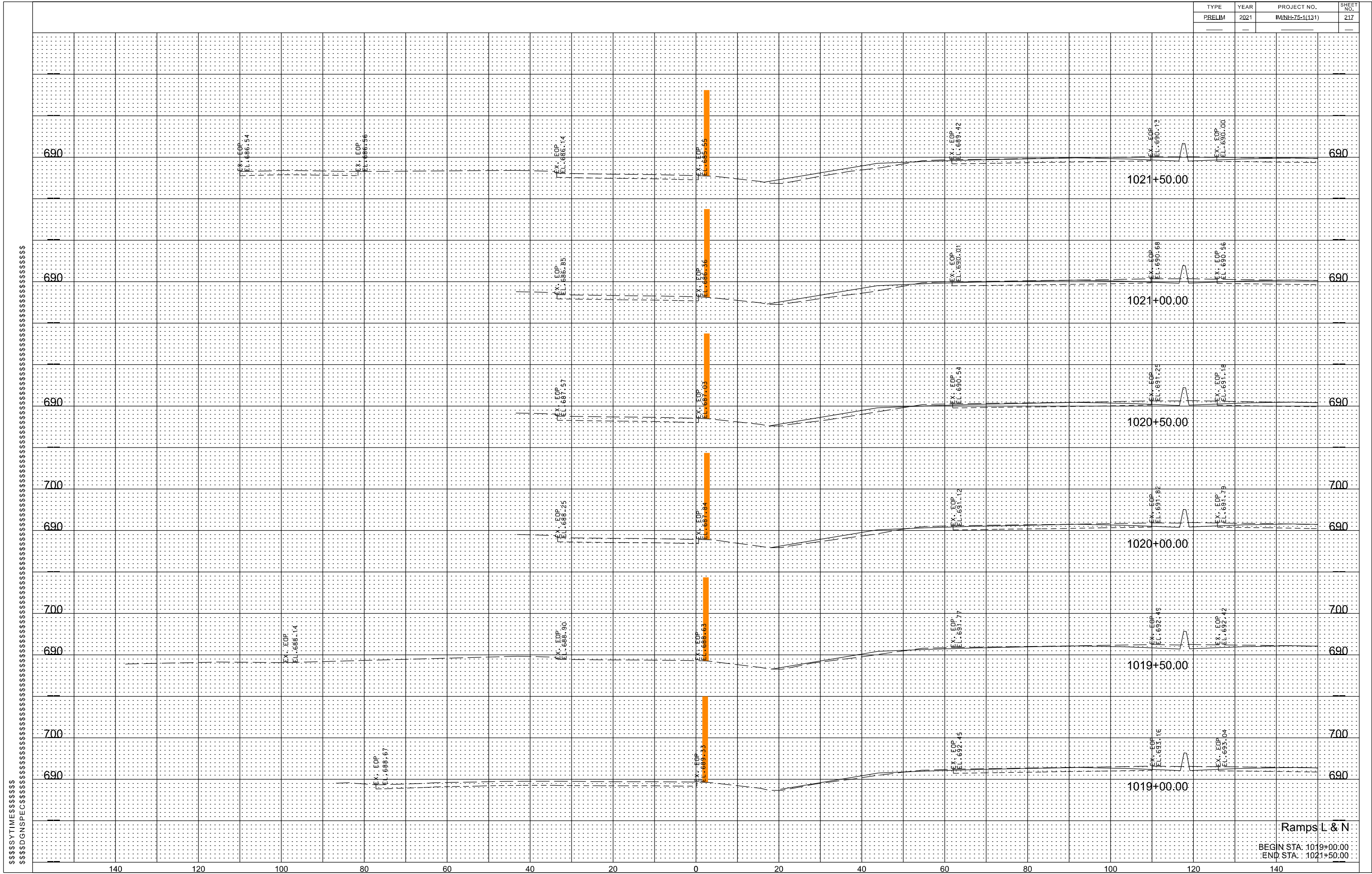


\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$PC\$\$\$\$\$

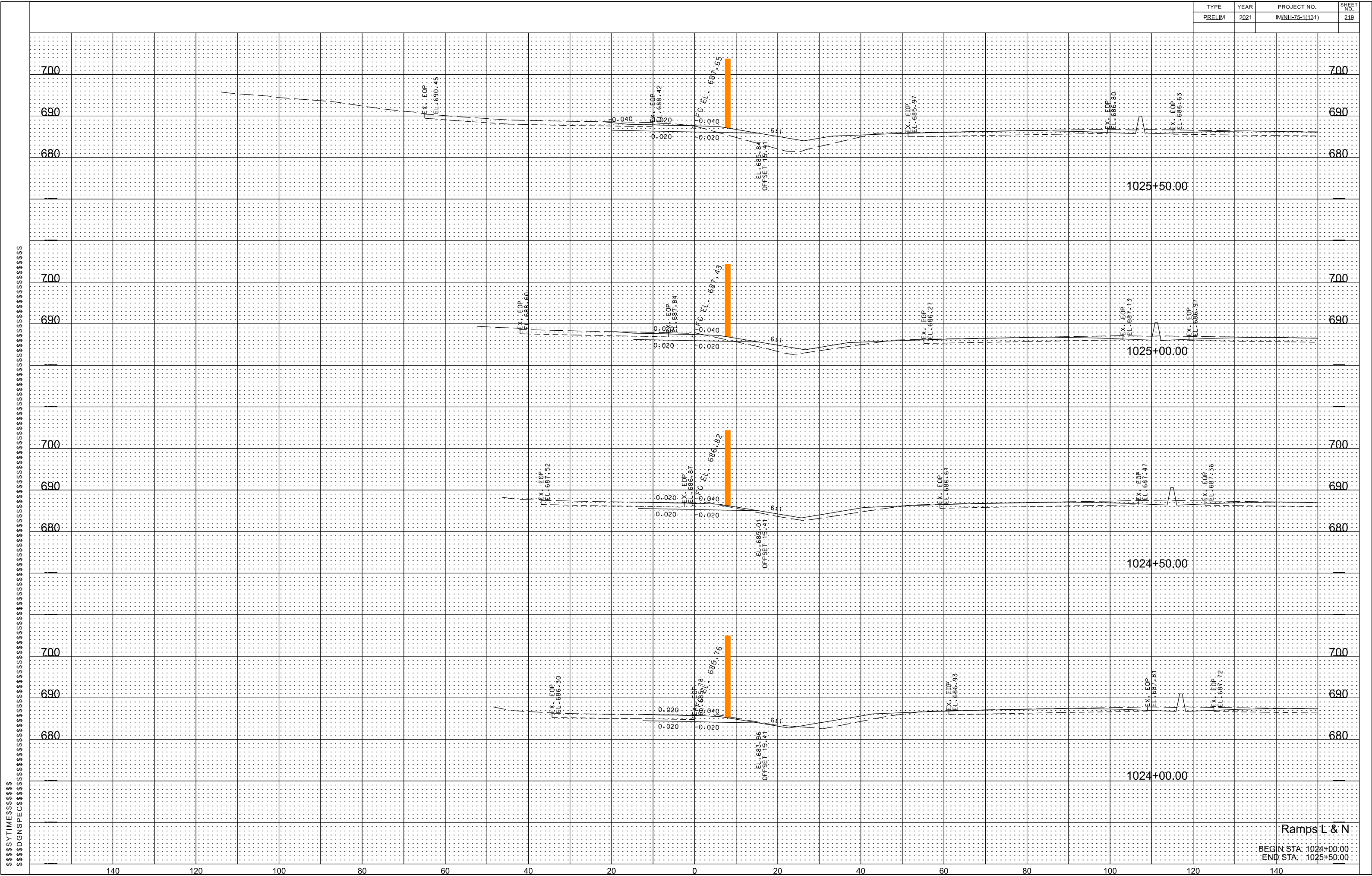
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	216
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Ramps L & N  
BEGIN STA: 1017+00.00  
END STA: 1018+51.97

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	217
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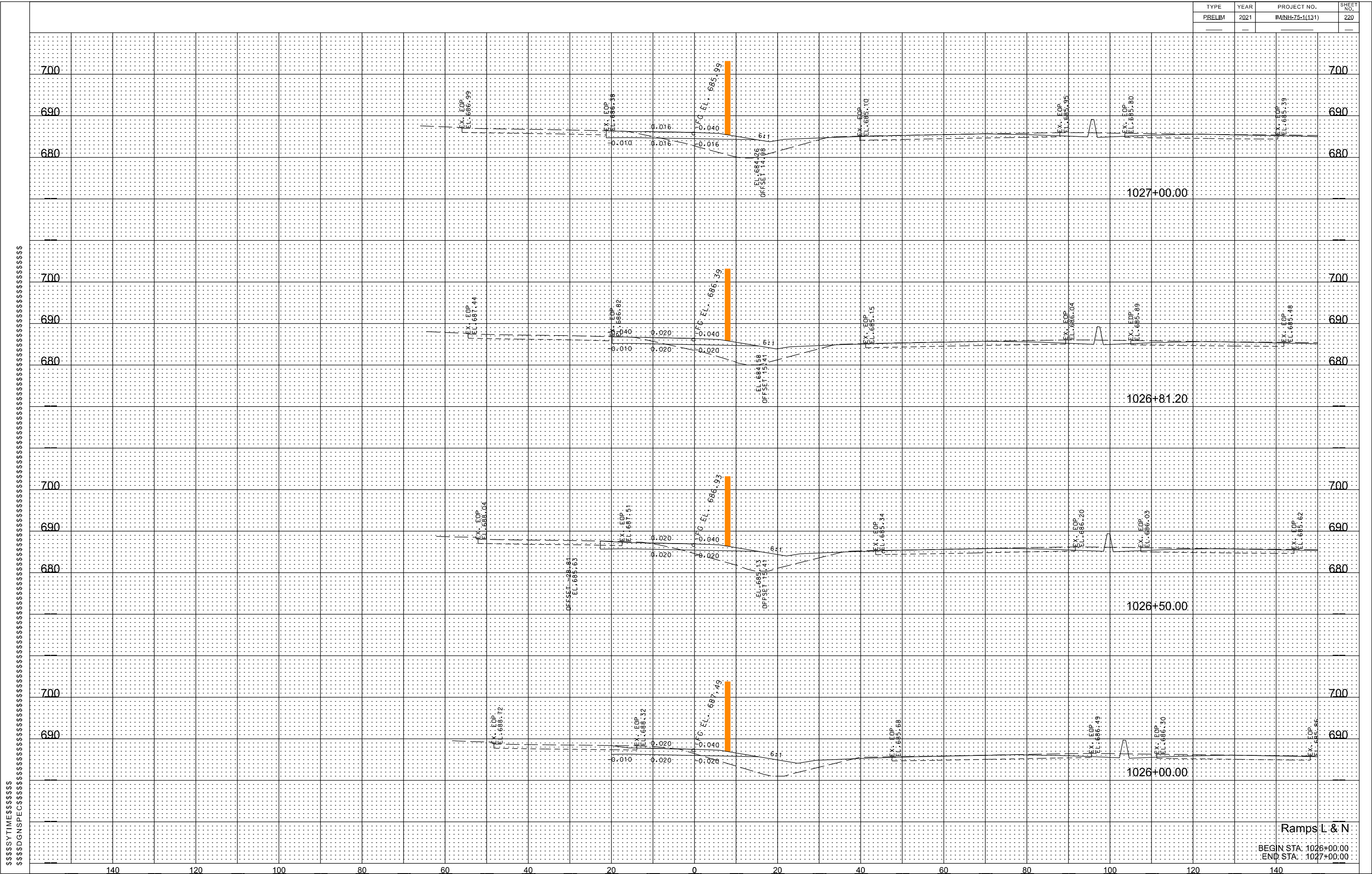




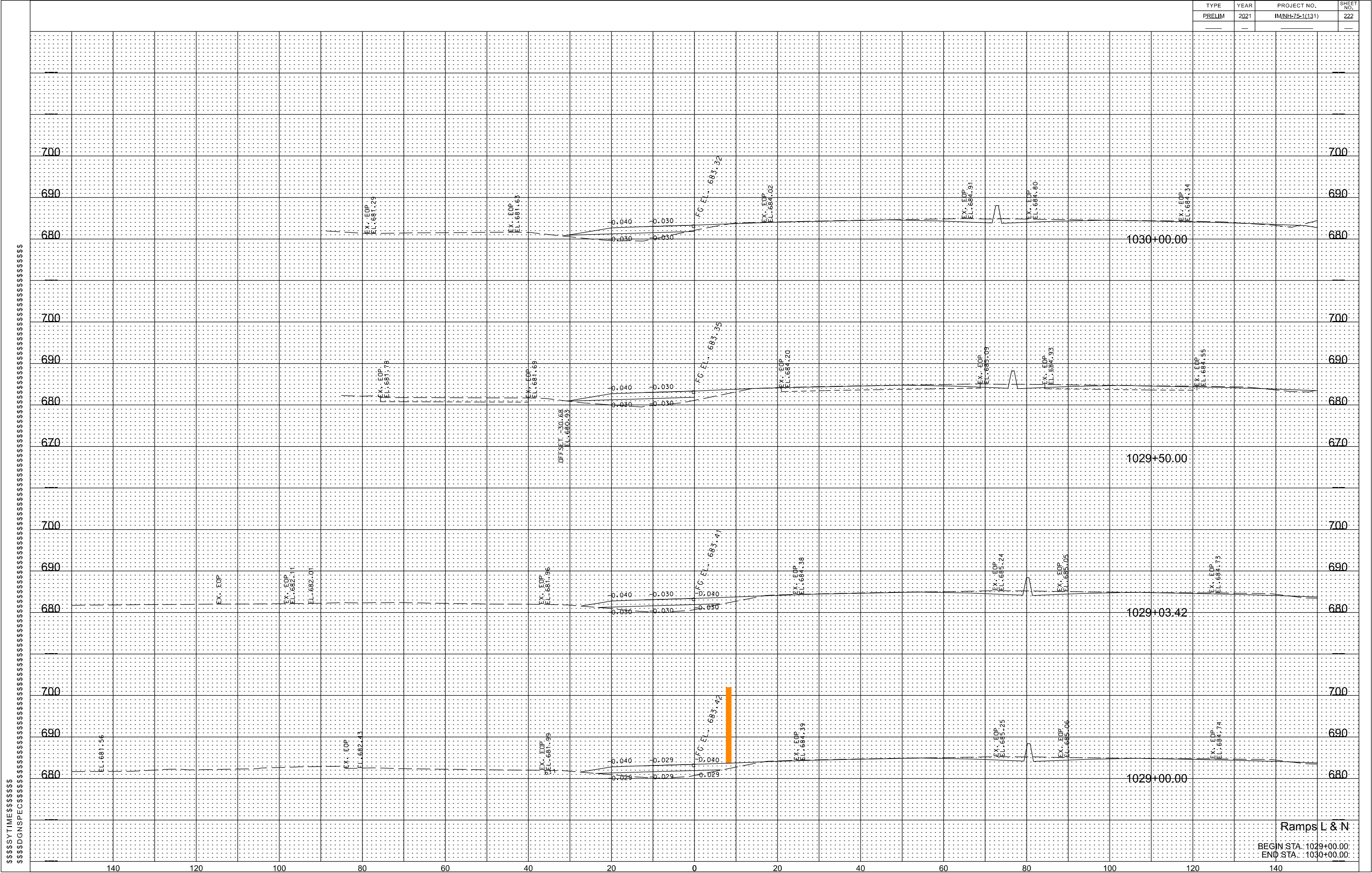


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	219
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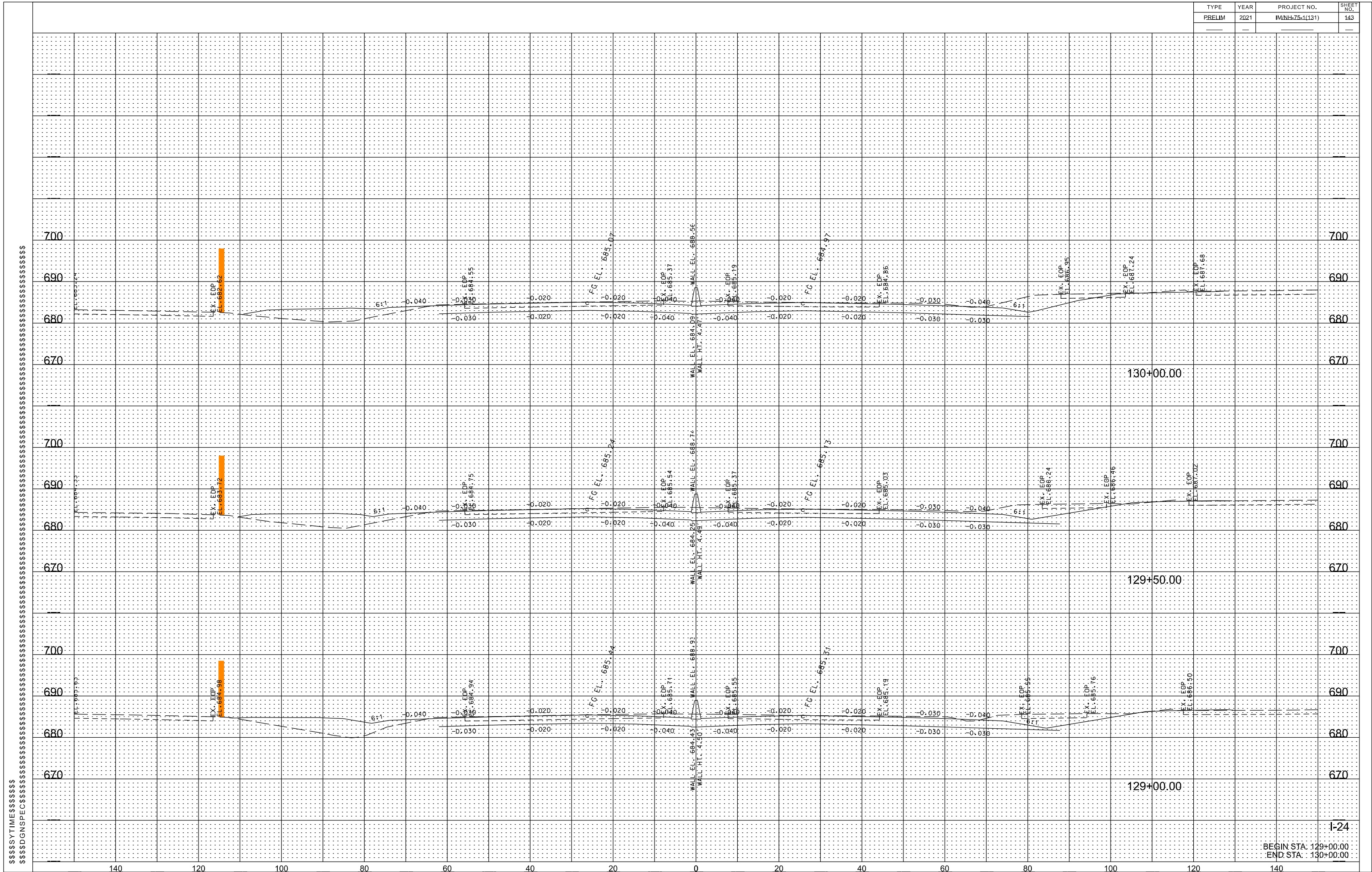




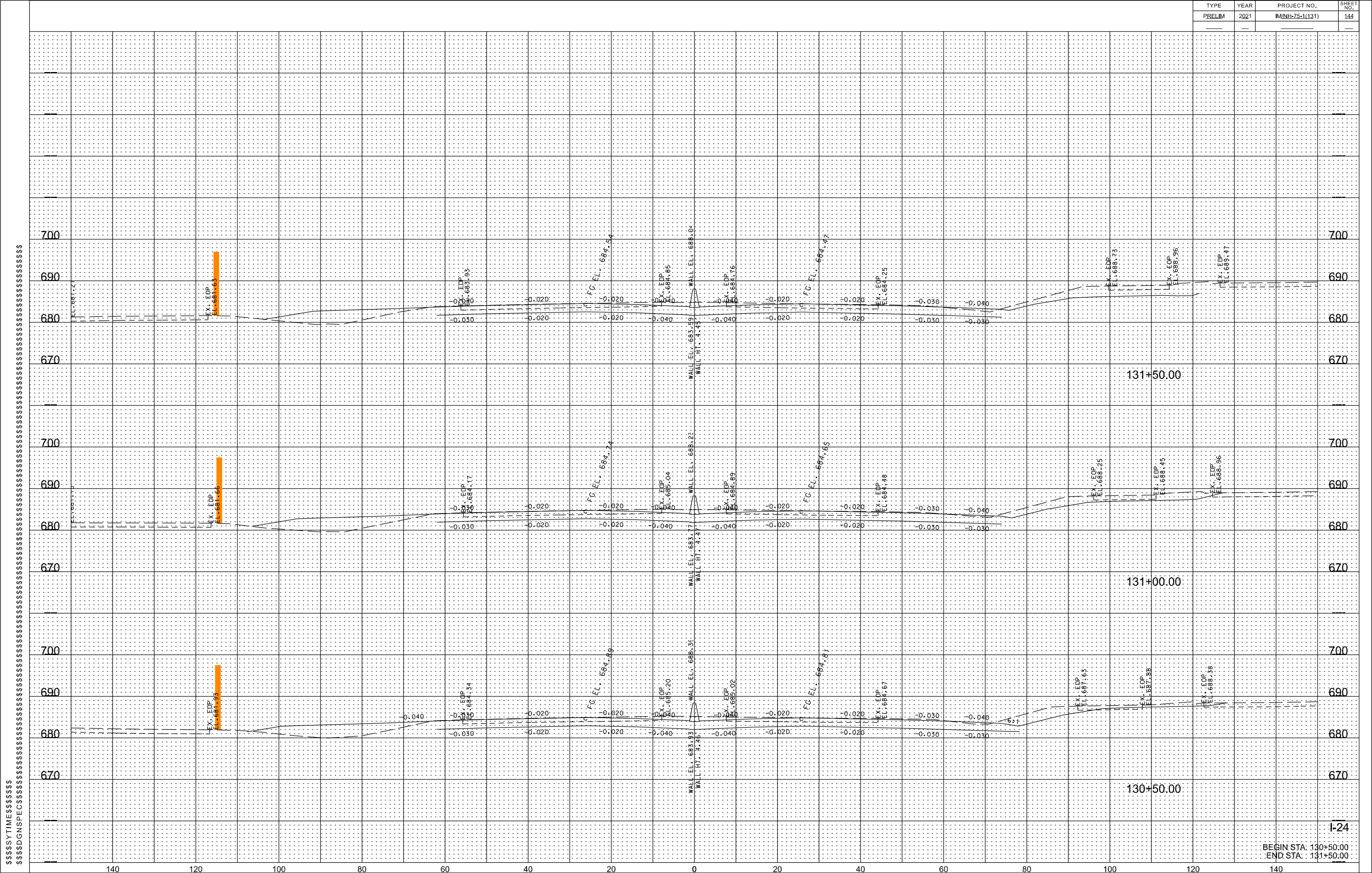




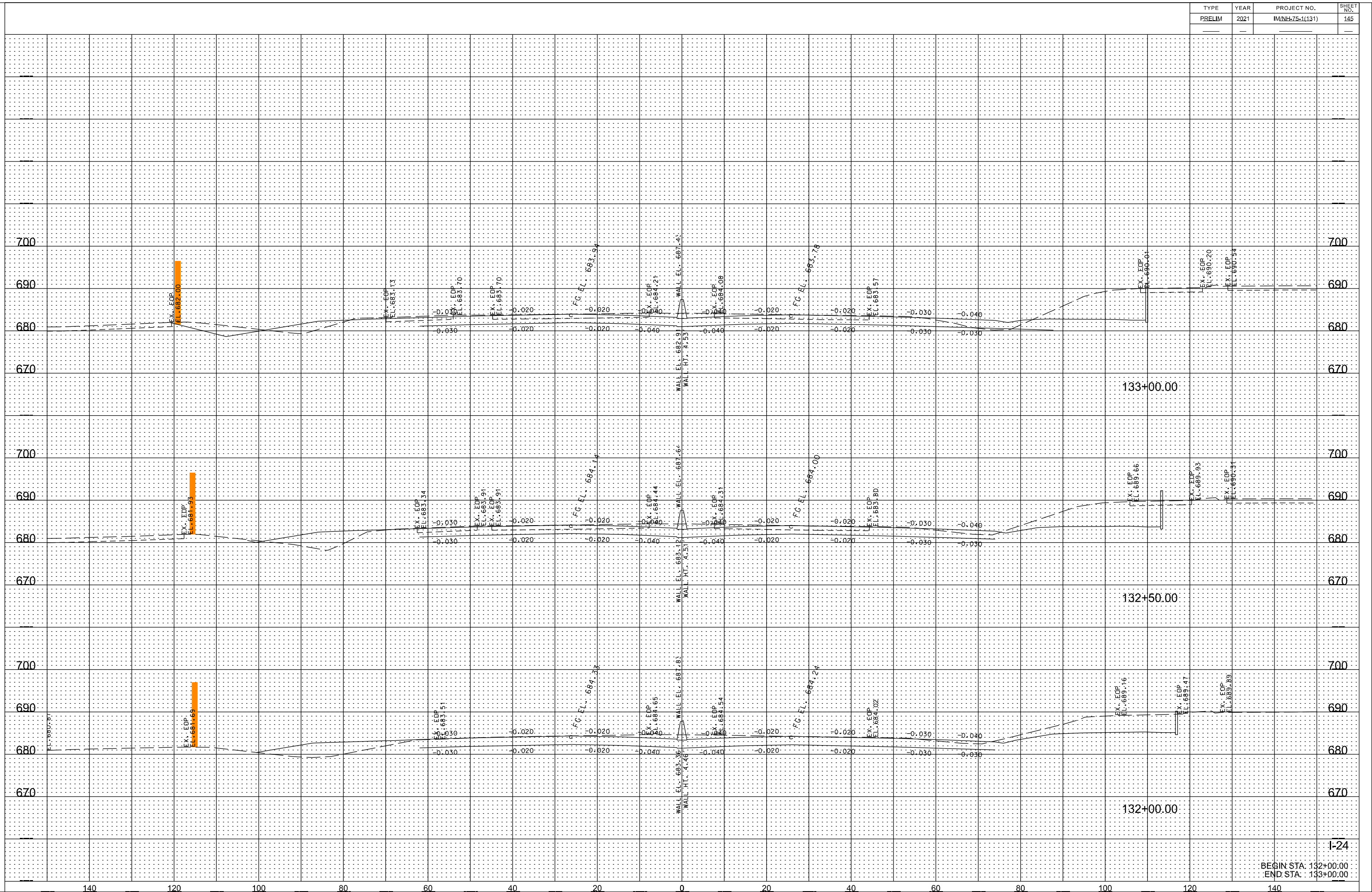
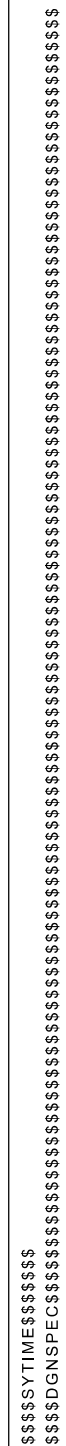
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	143



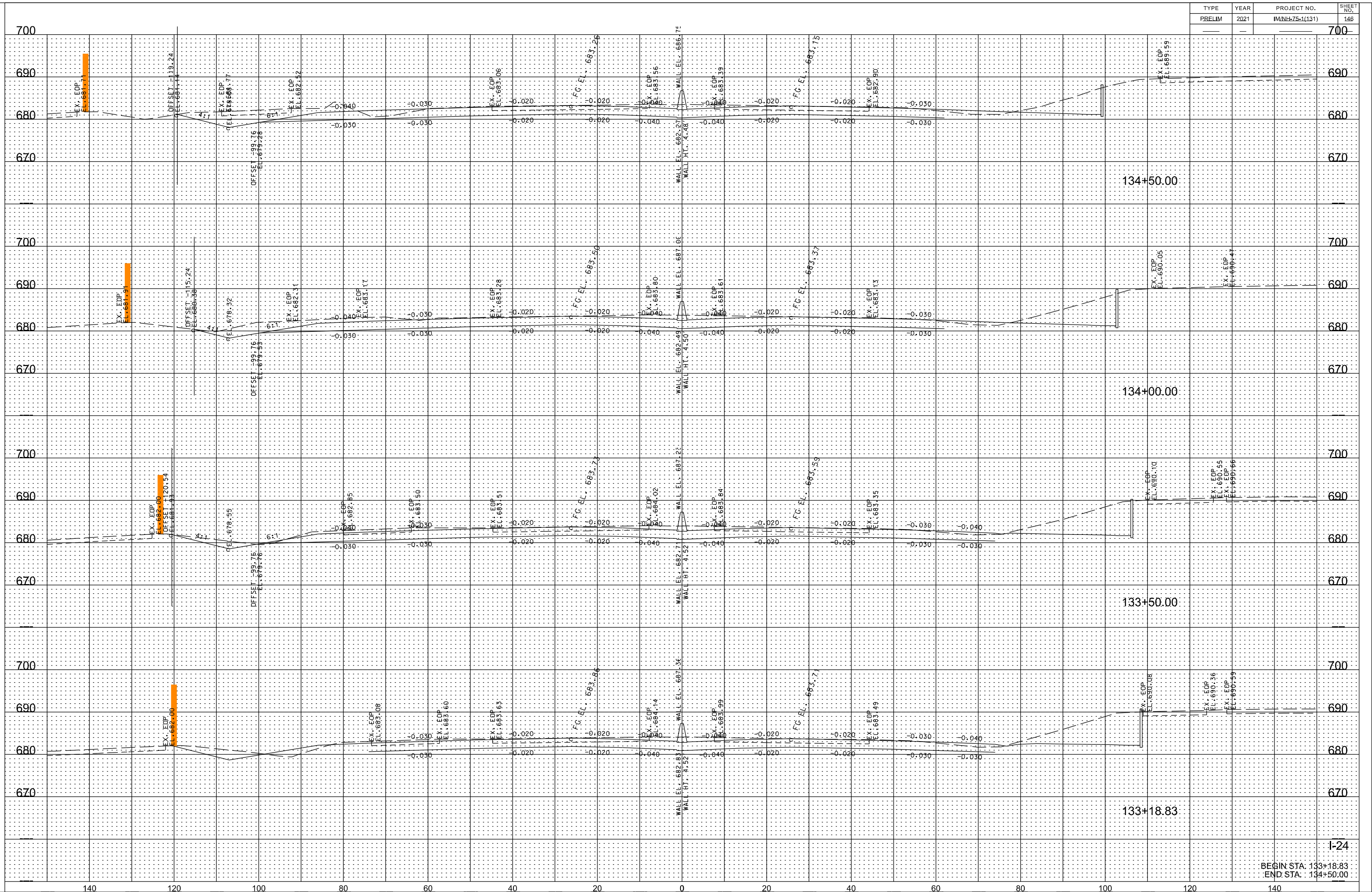
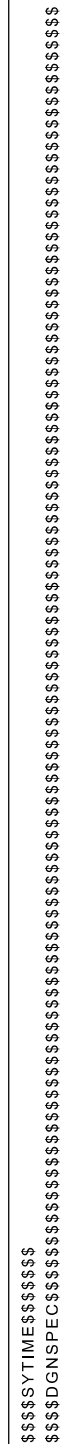


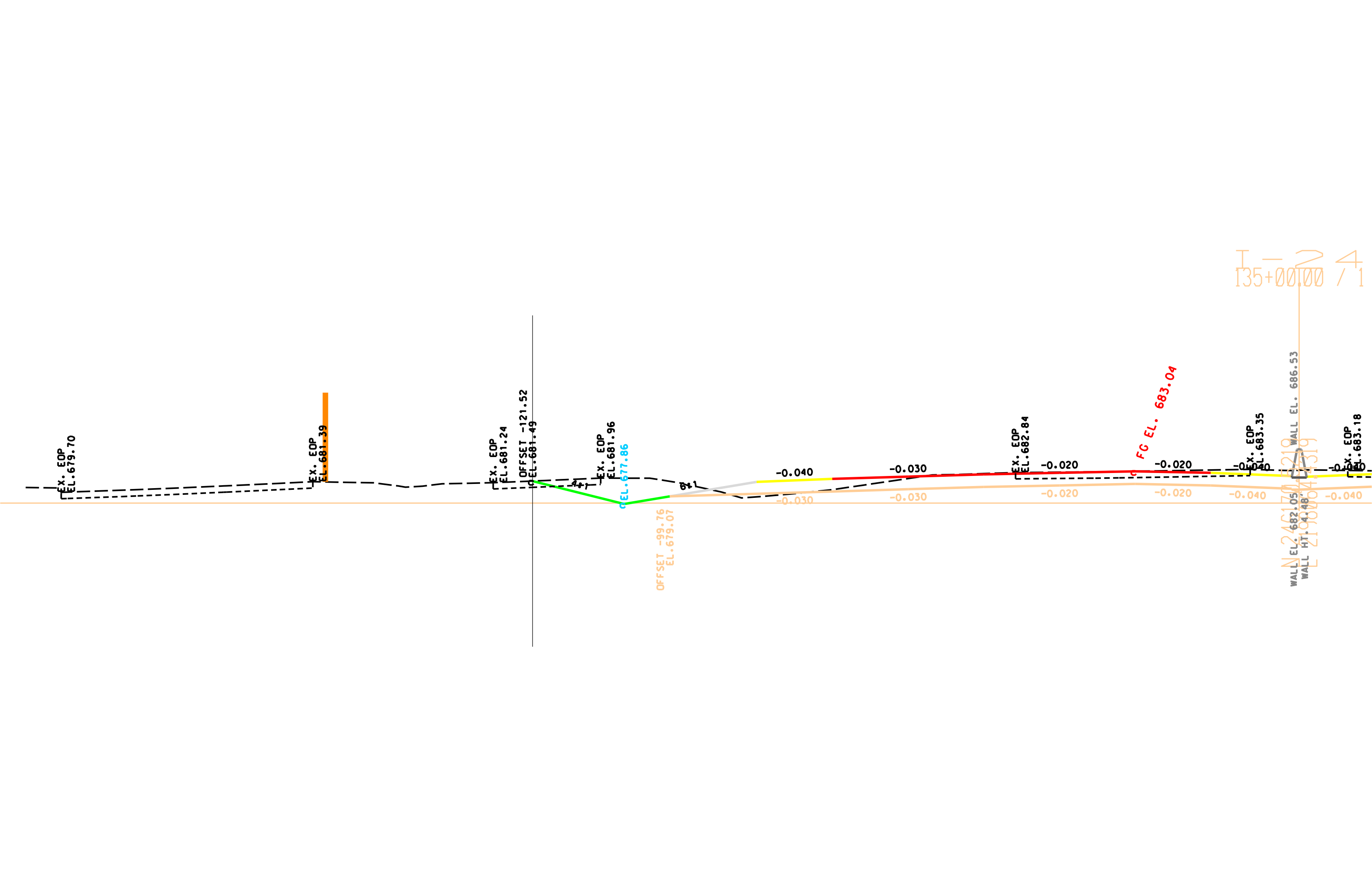


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	145

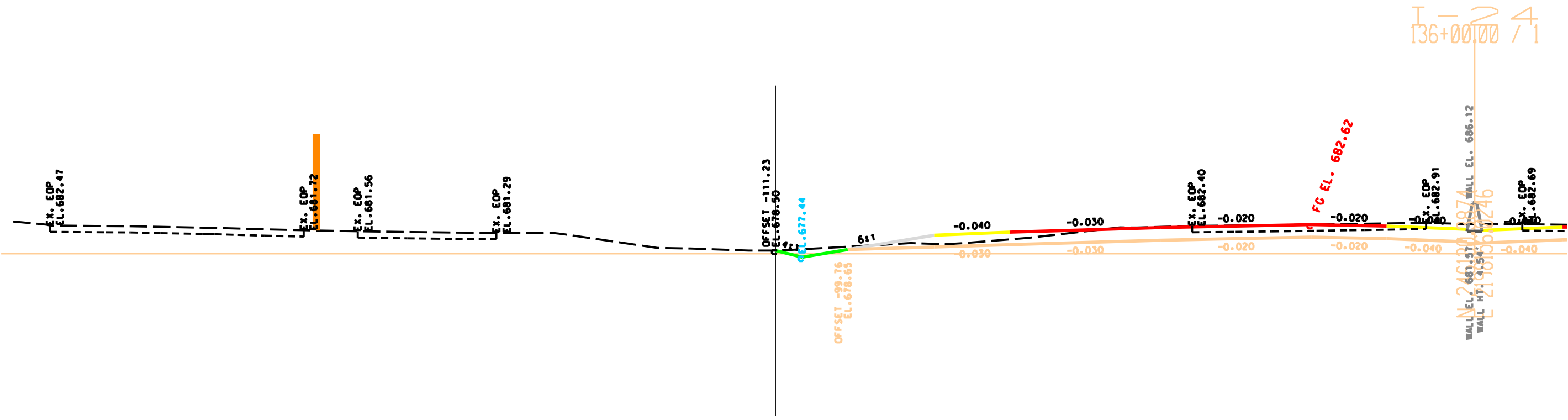


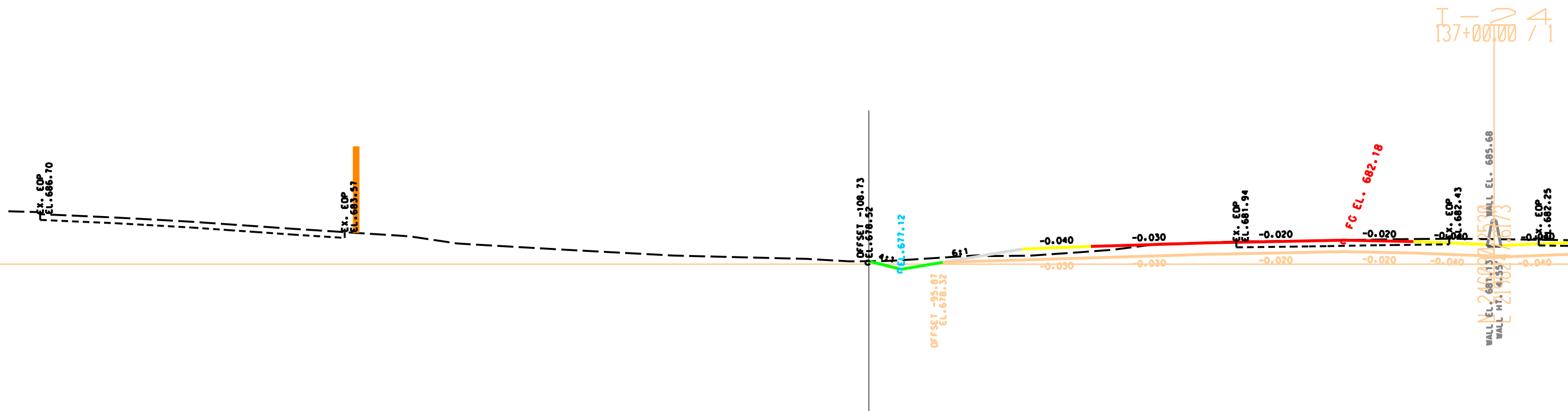
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	146
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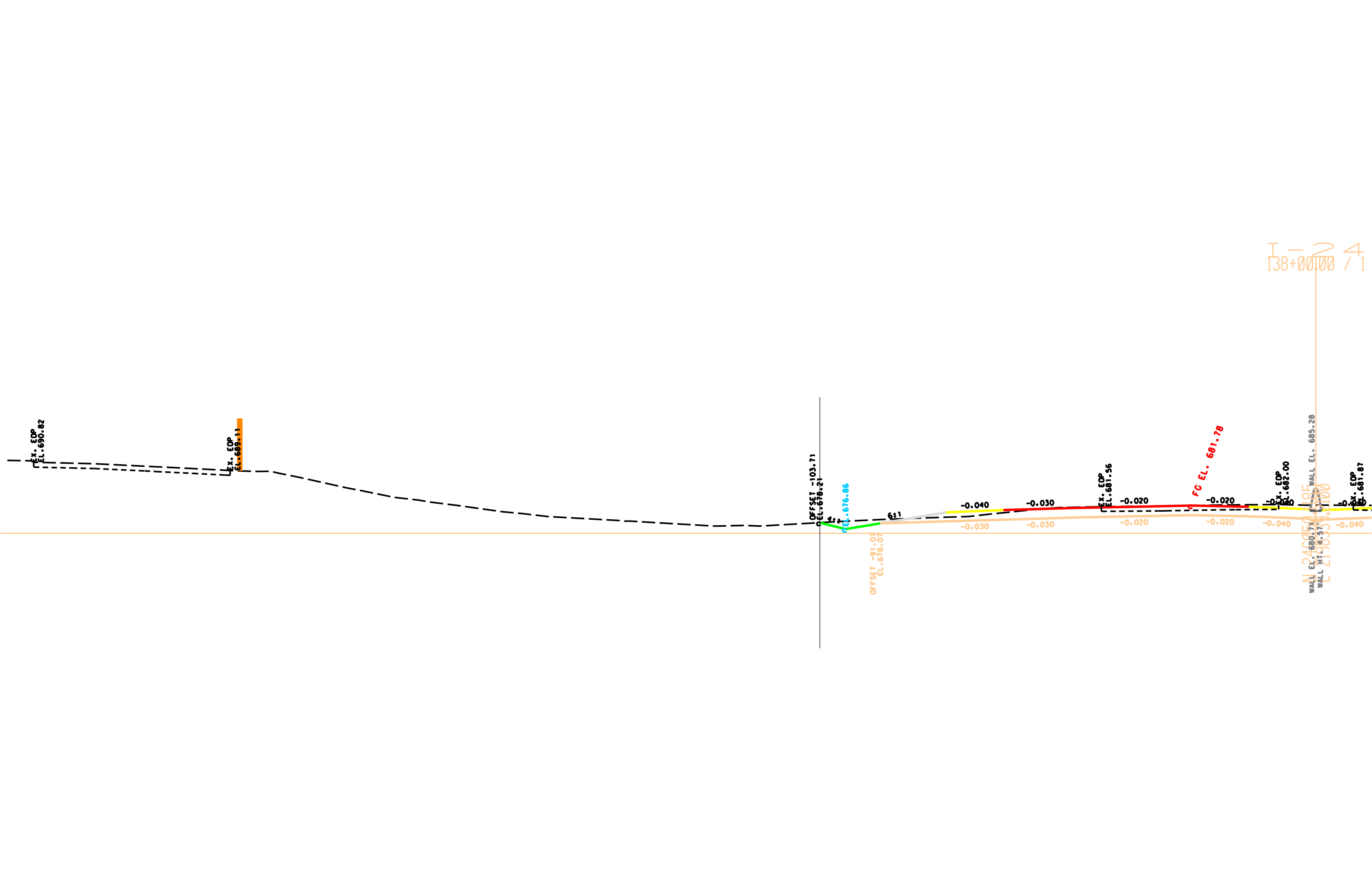






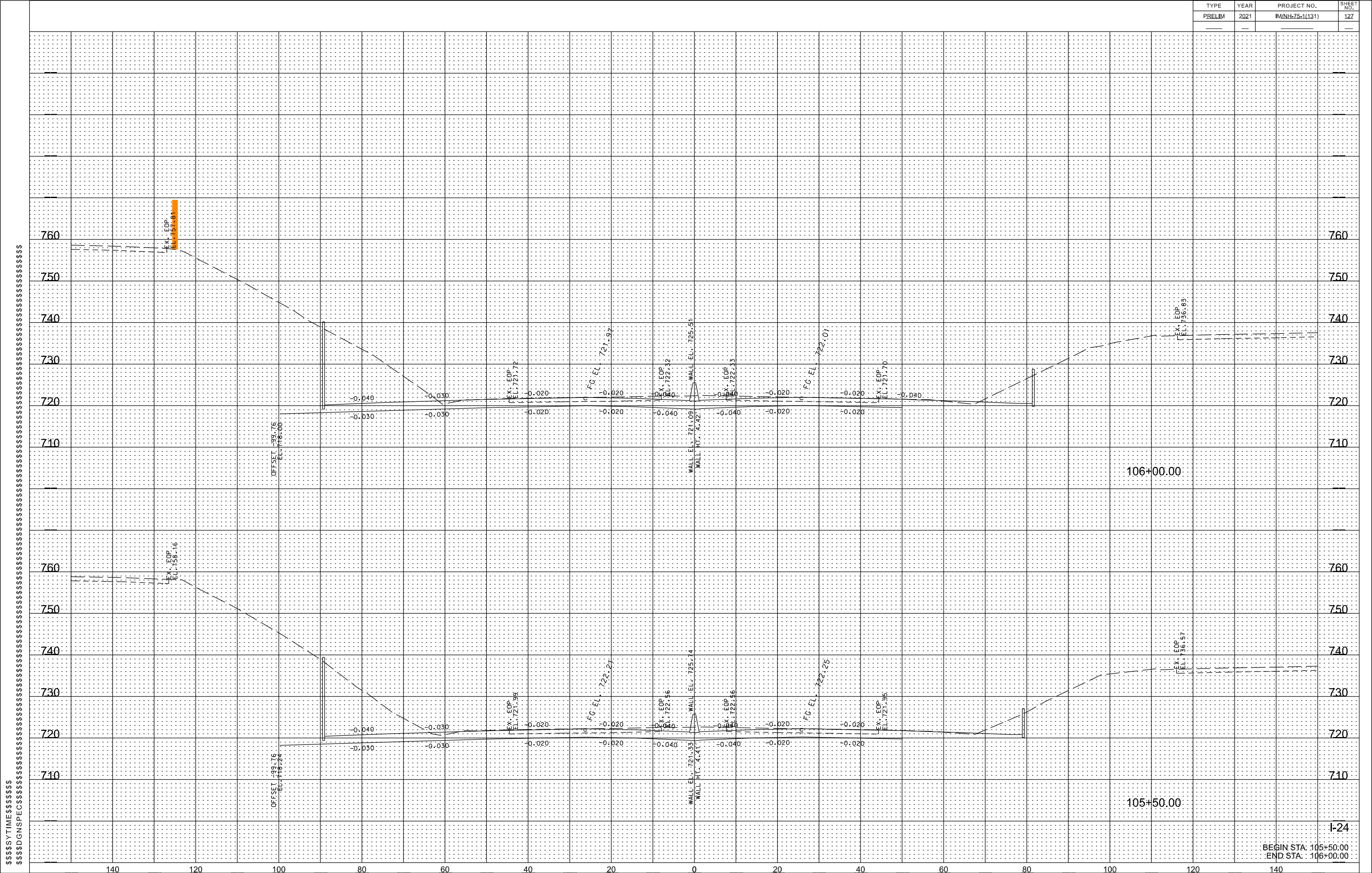


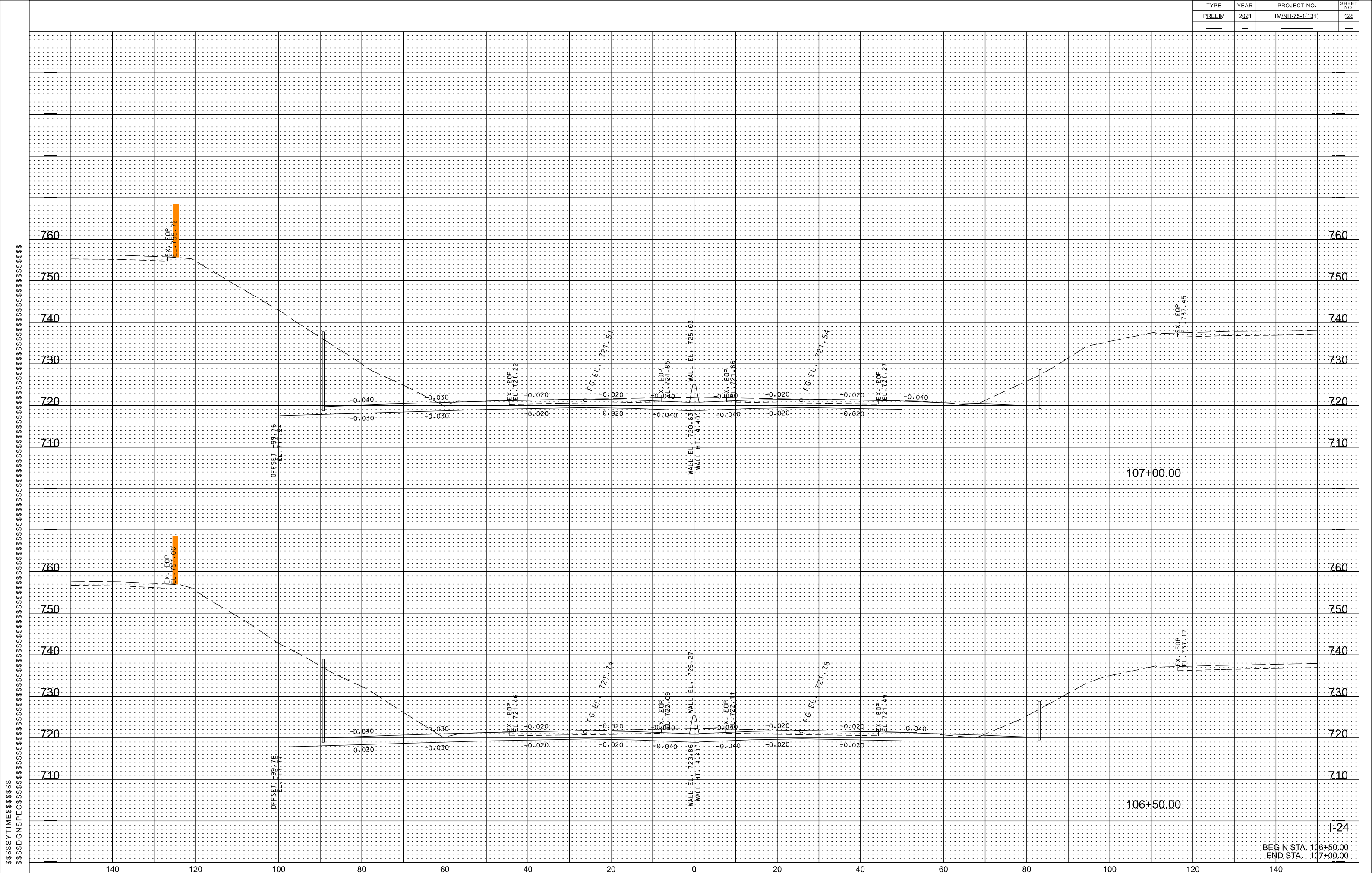




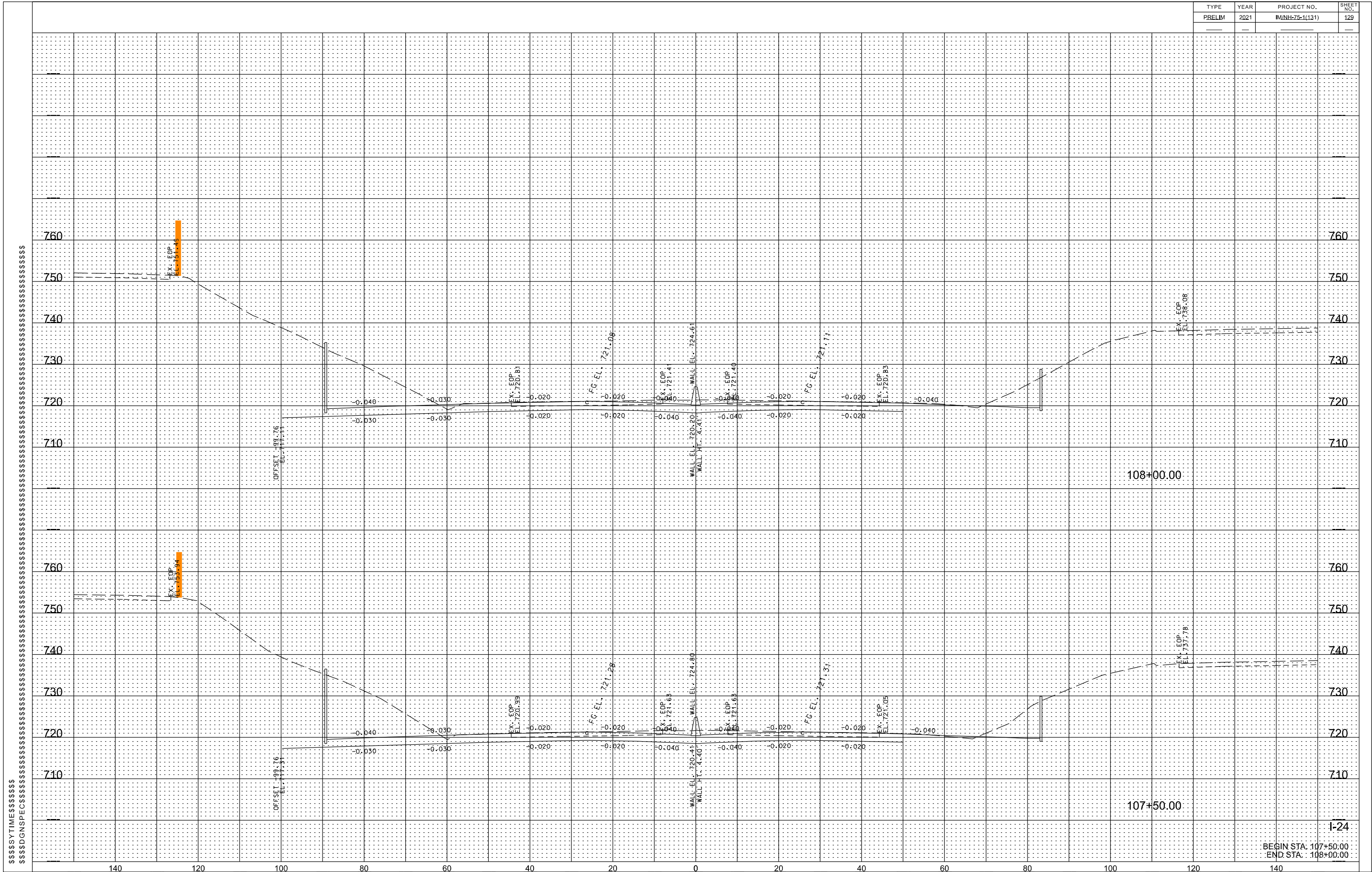
**NAA 2, Option 2**

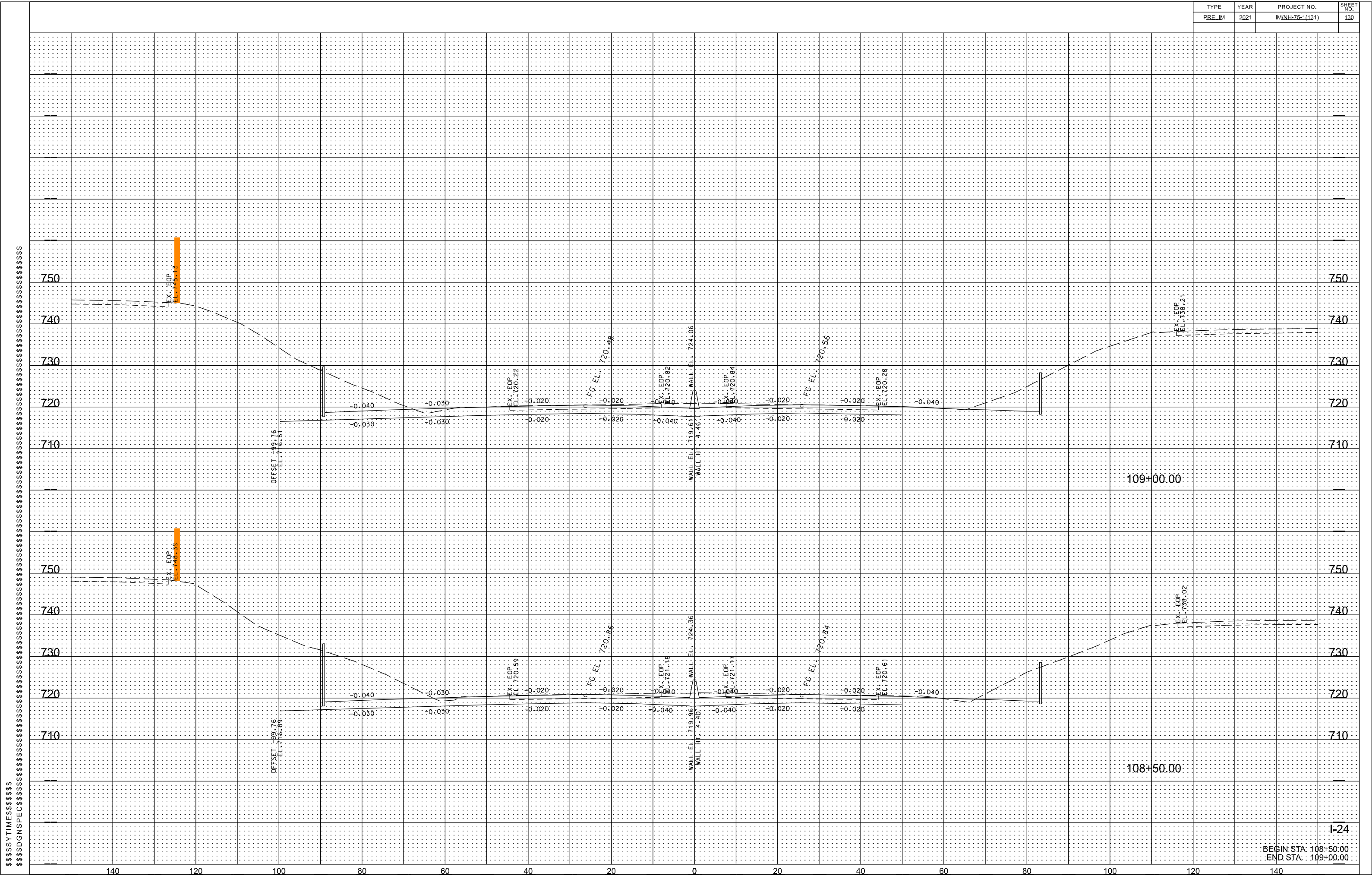






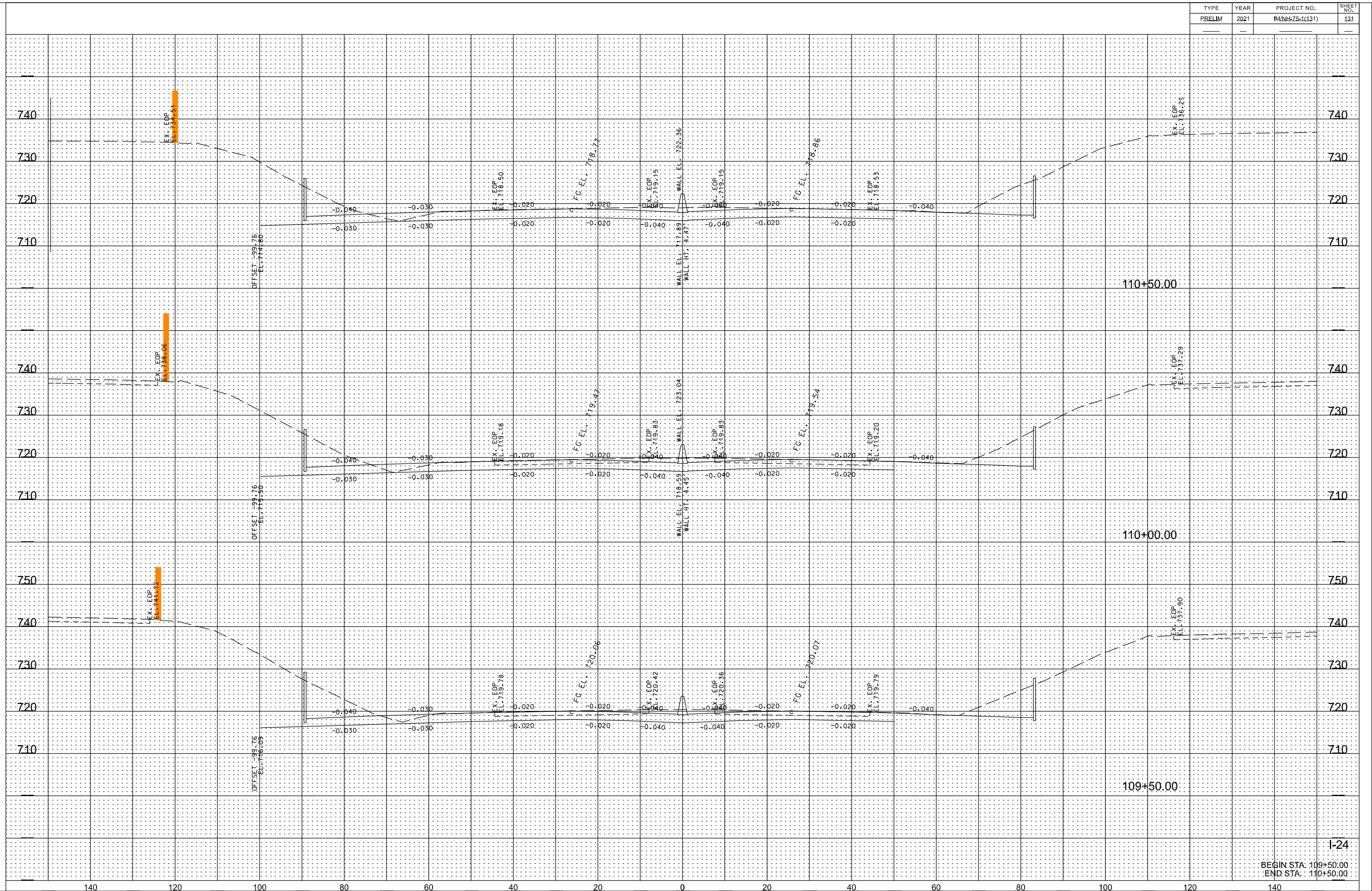
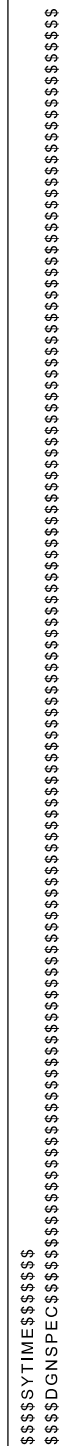
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	129
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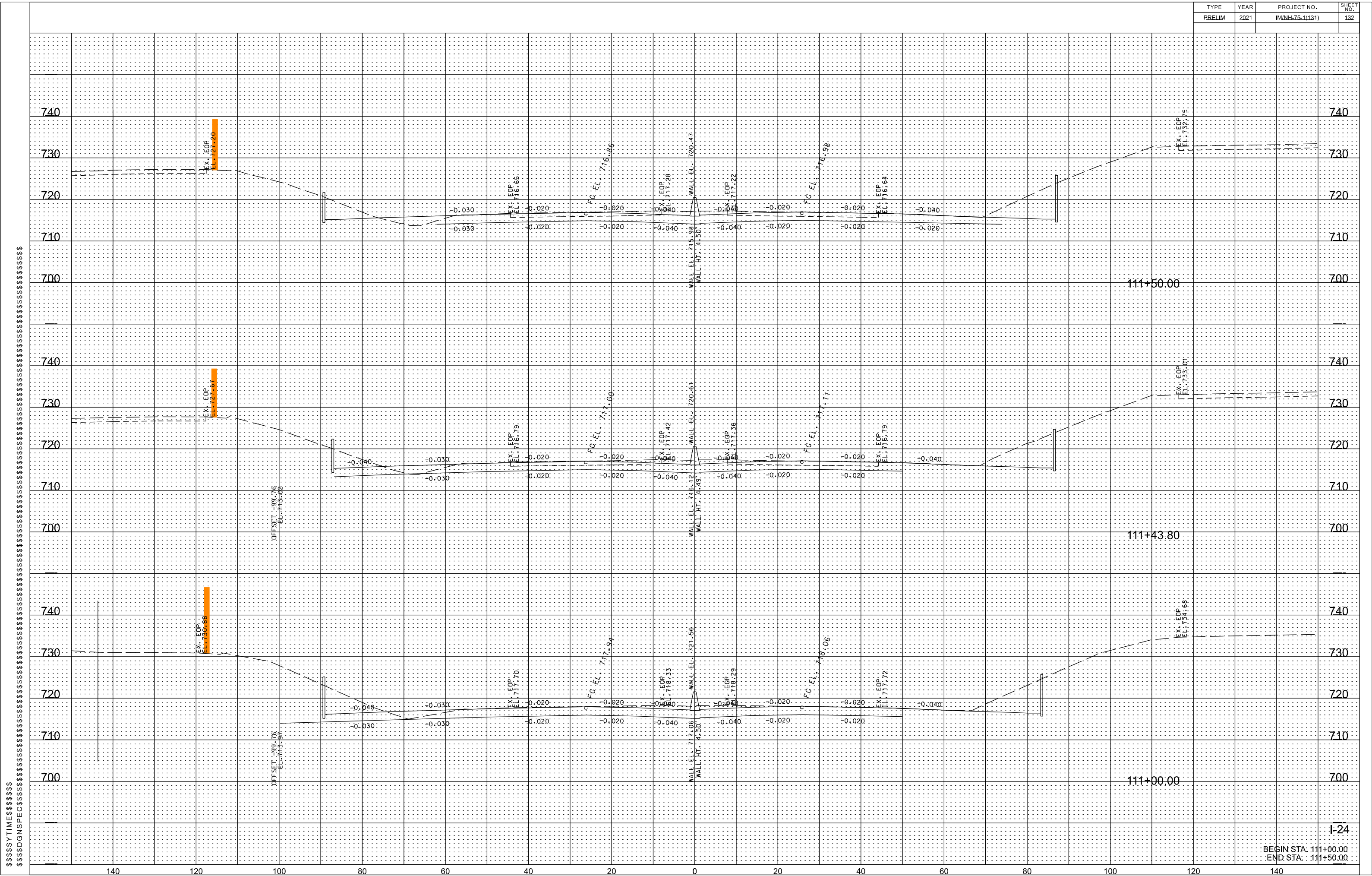






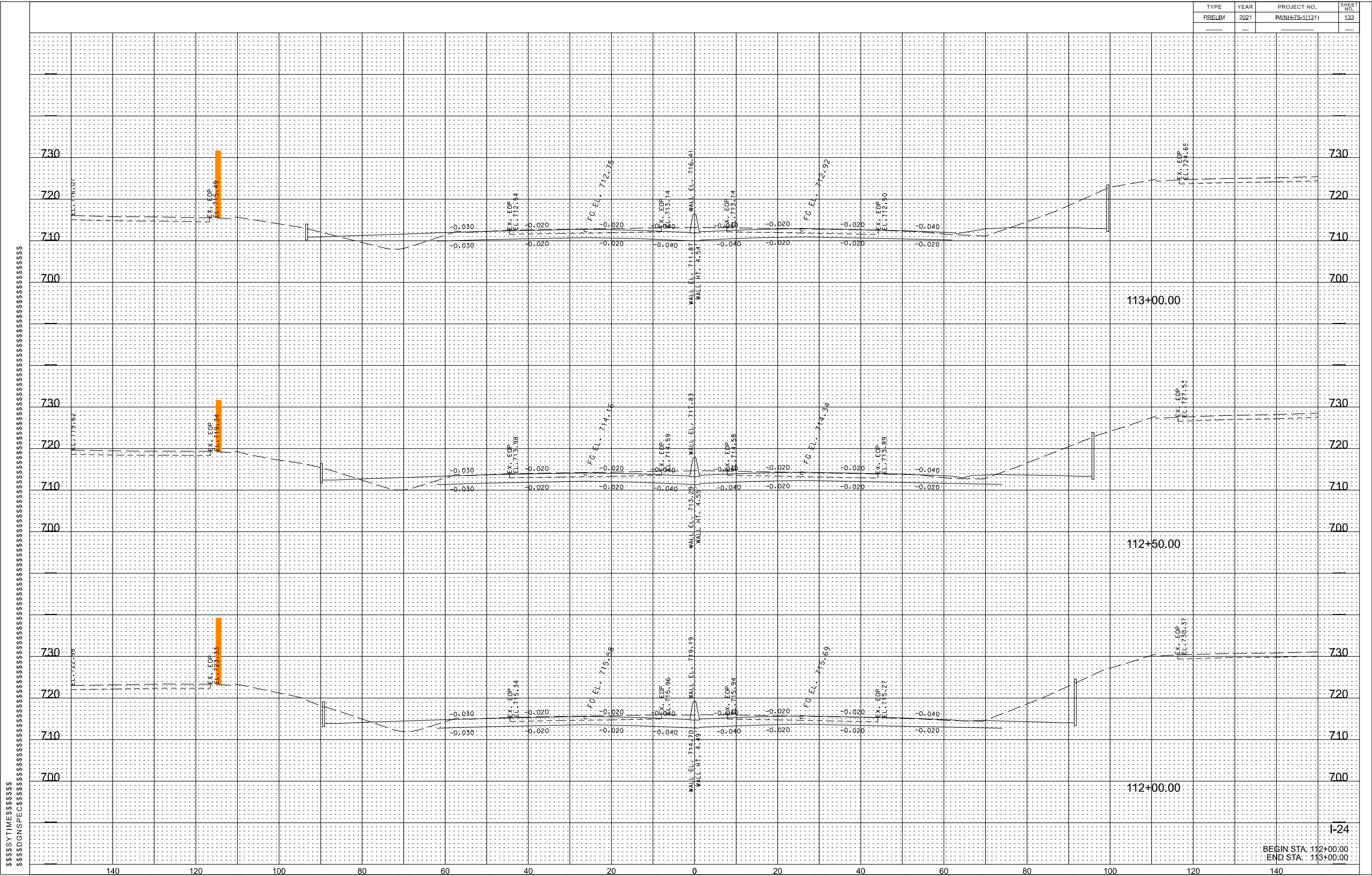
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	131

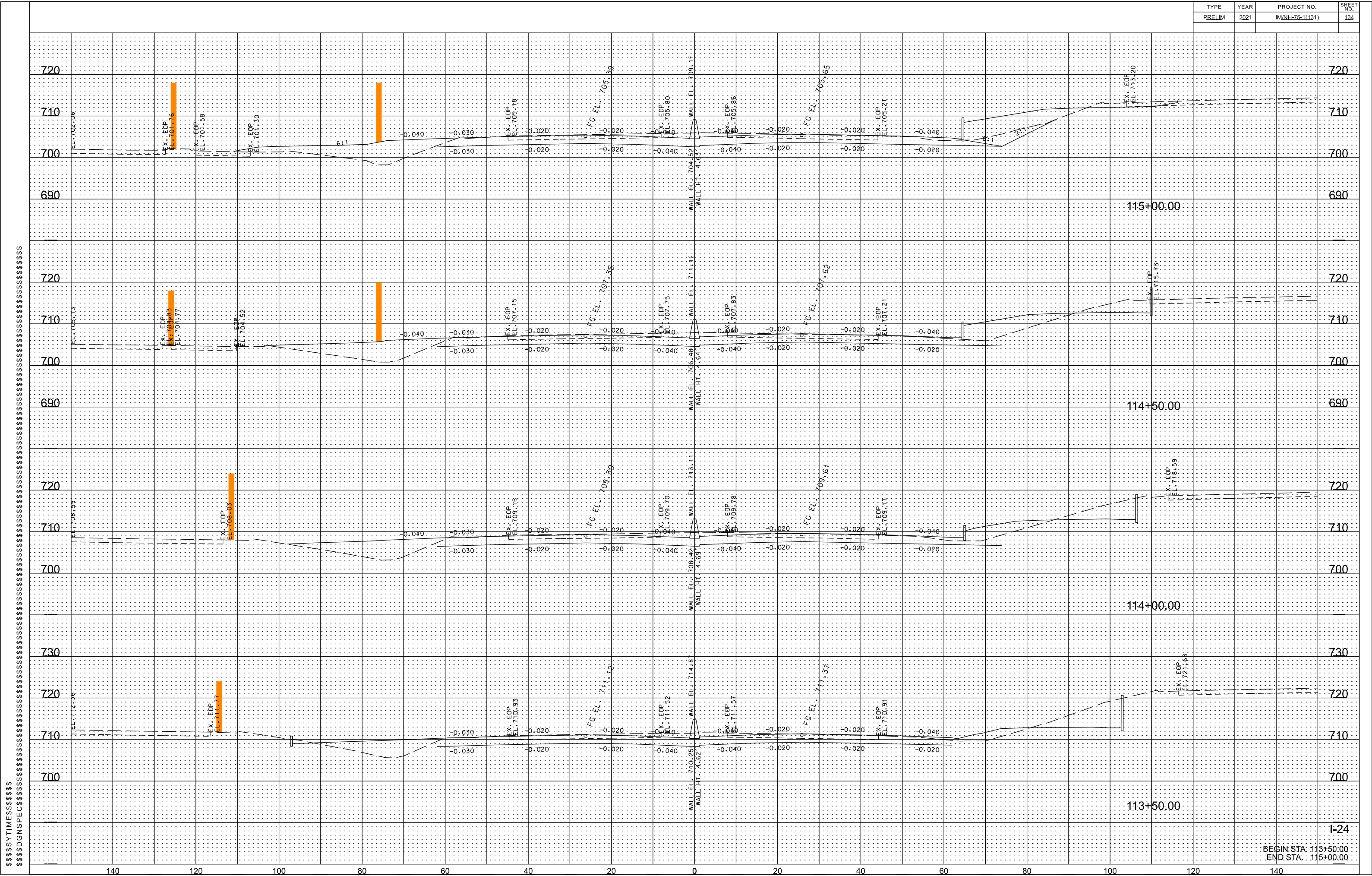




TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	132
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BEGIN STA: 111+00.00  
END STA: 111+50.00

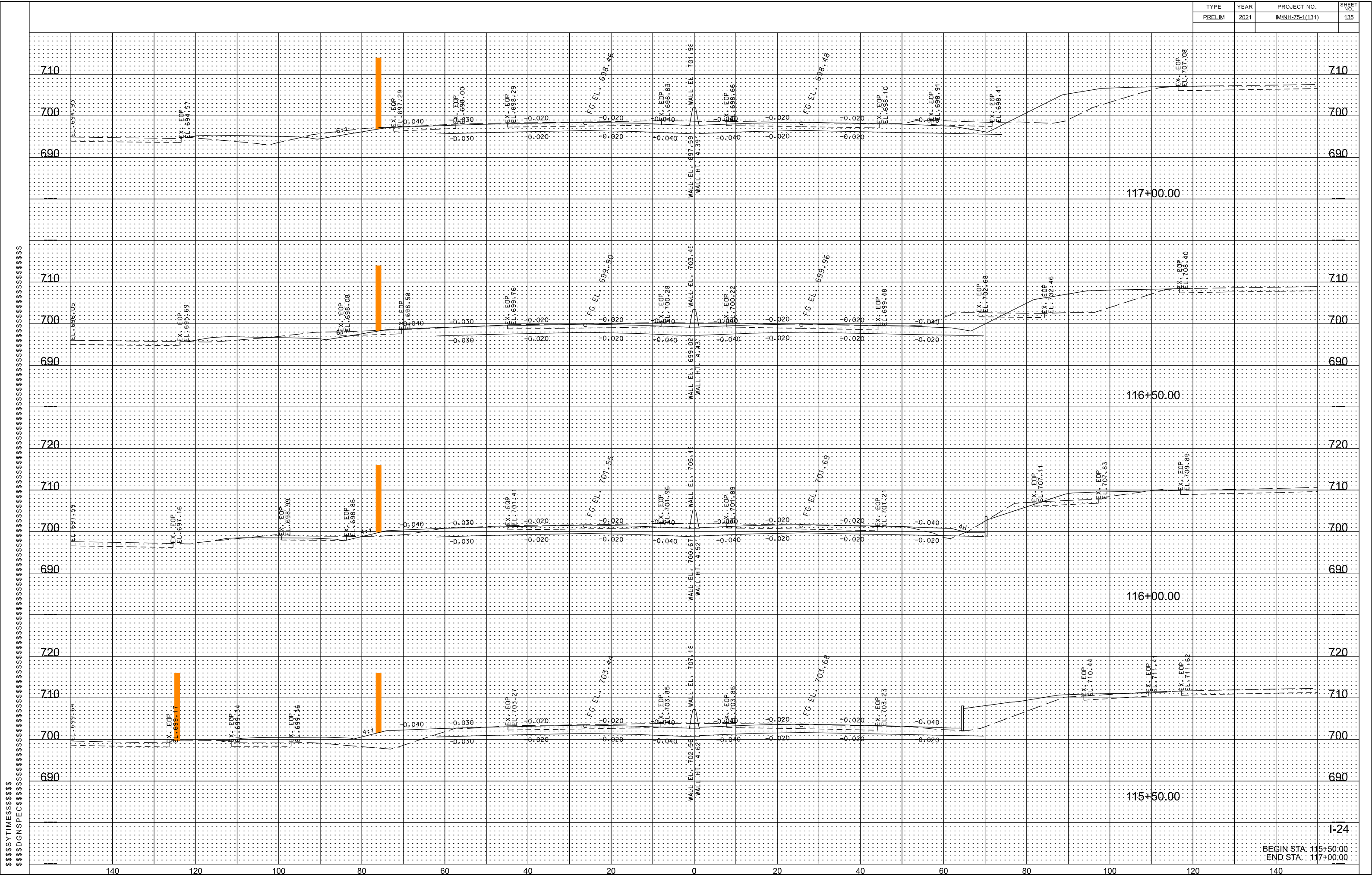




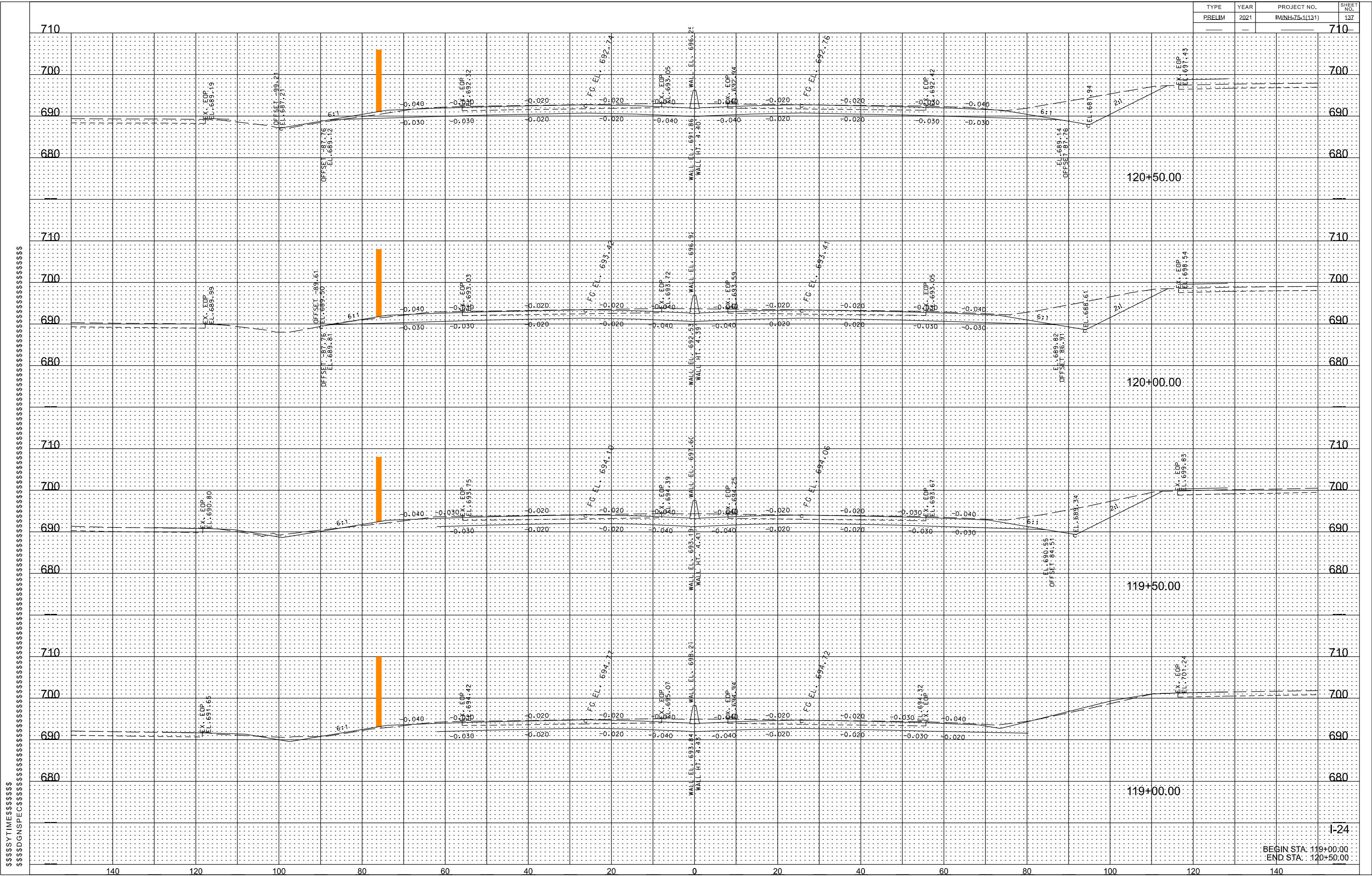
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	134
—	—	—	—

BEGIN STA: 113+50.00  
END STA: 115+00.00



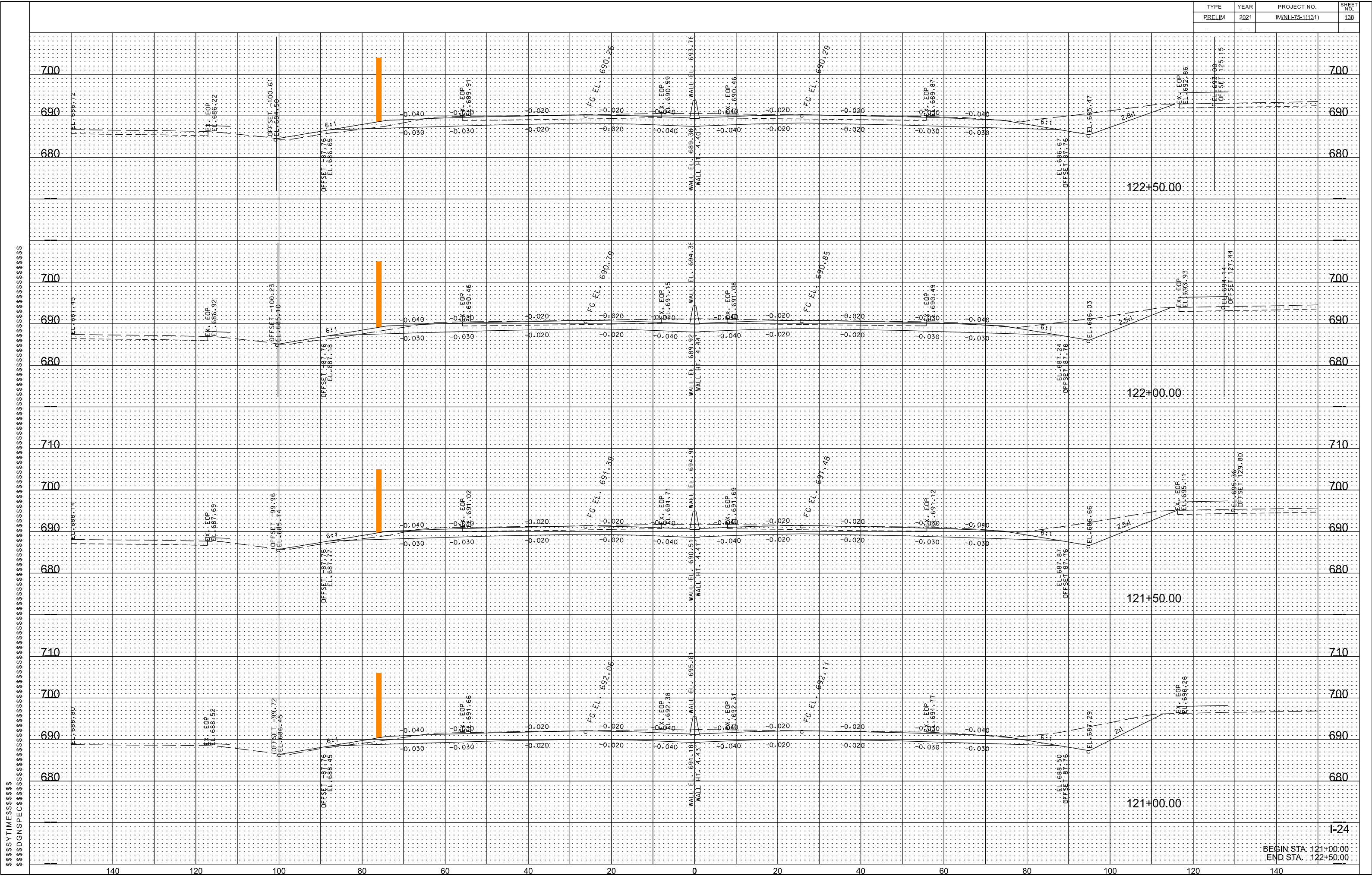






TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH/75-1(131)	137

BEGIN STA: 119+00.00  
END STA: 120+50.00

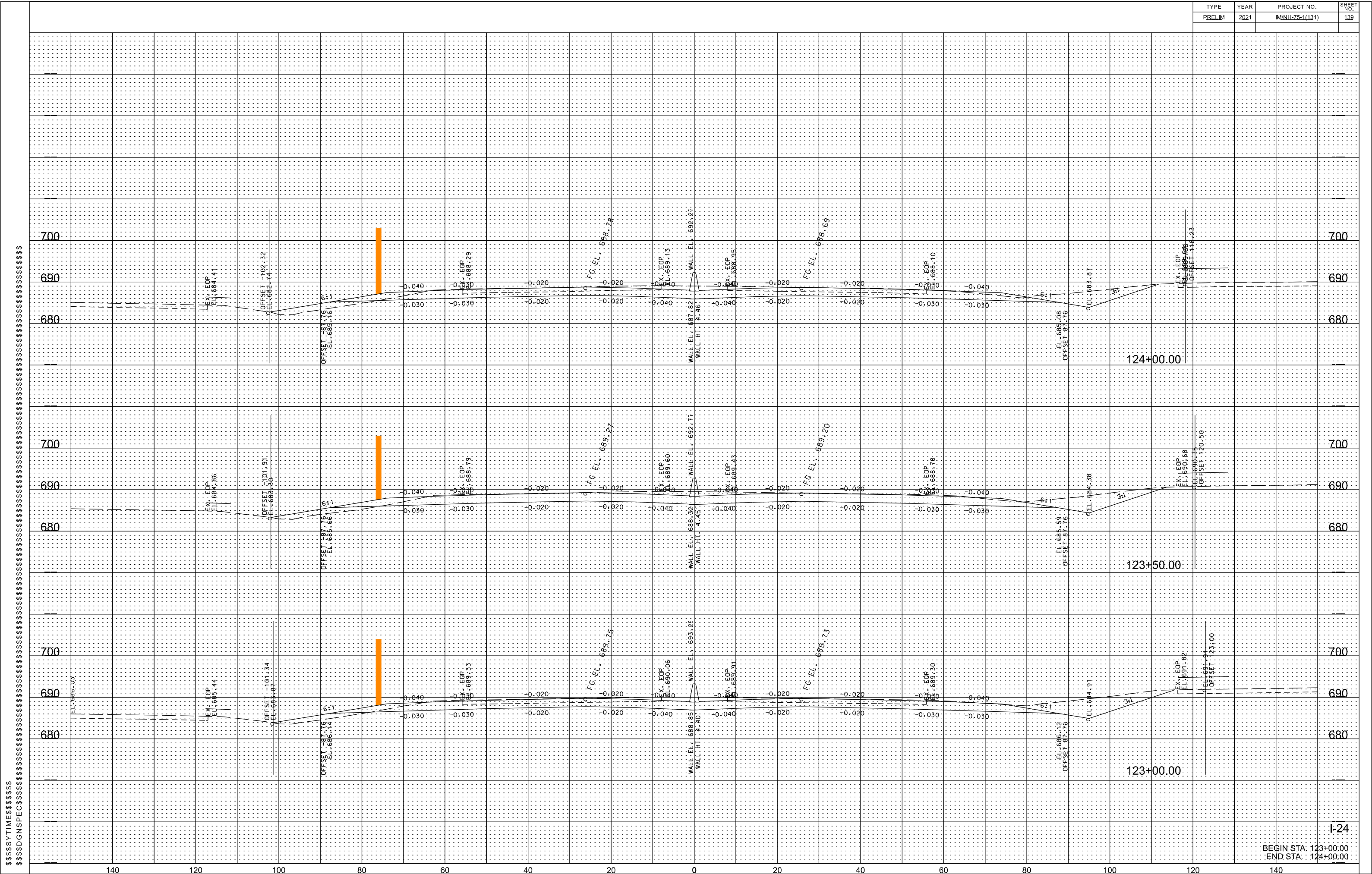


\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$PC\$\$\$\$\$

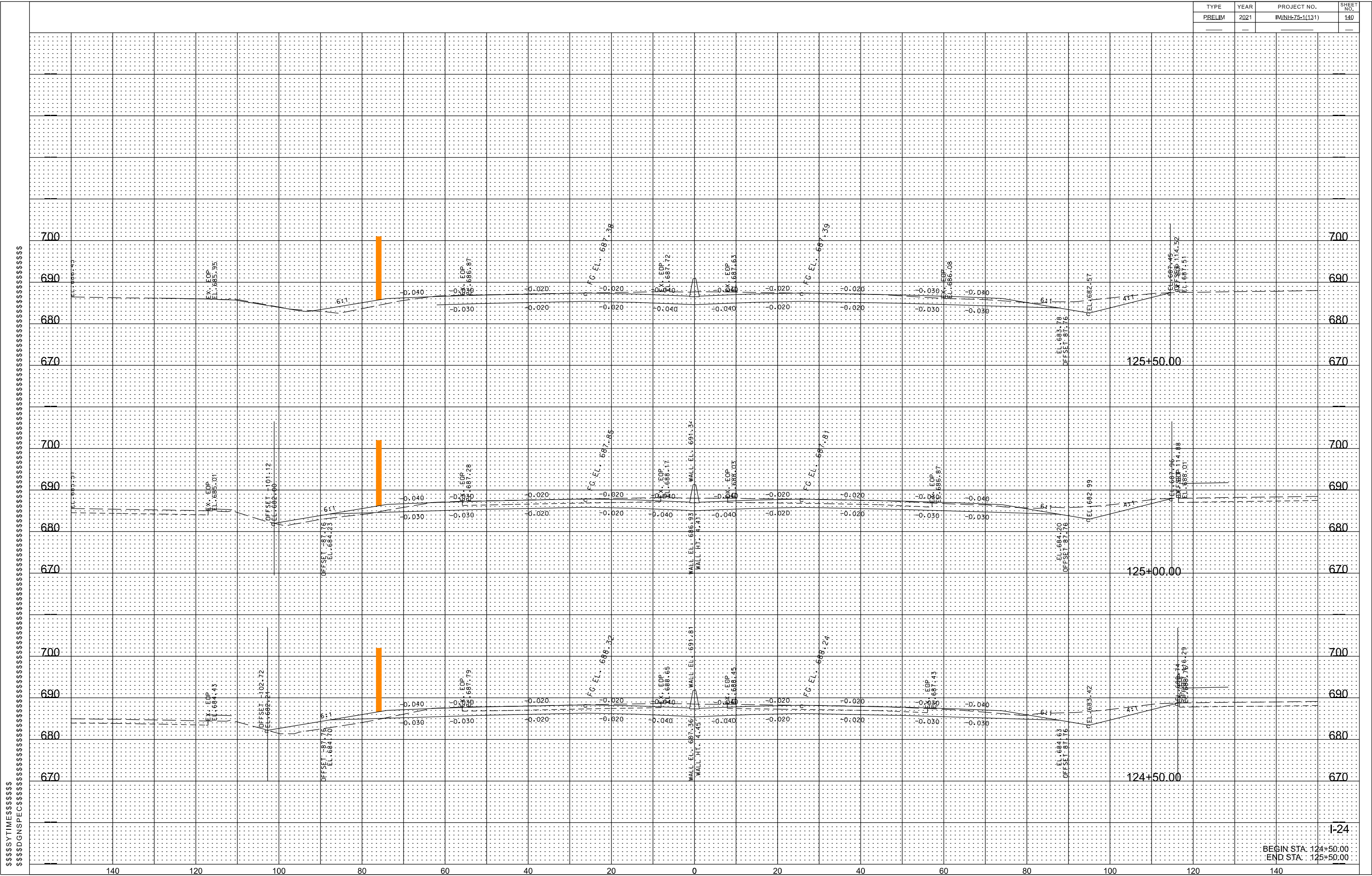
BEGIN STA: 121+00.00  
END STA: 122+50.00

I-24



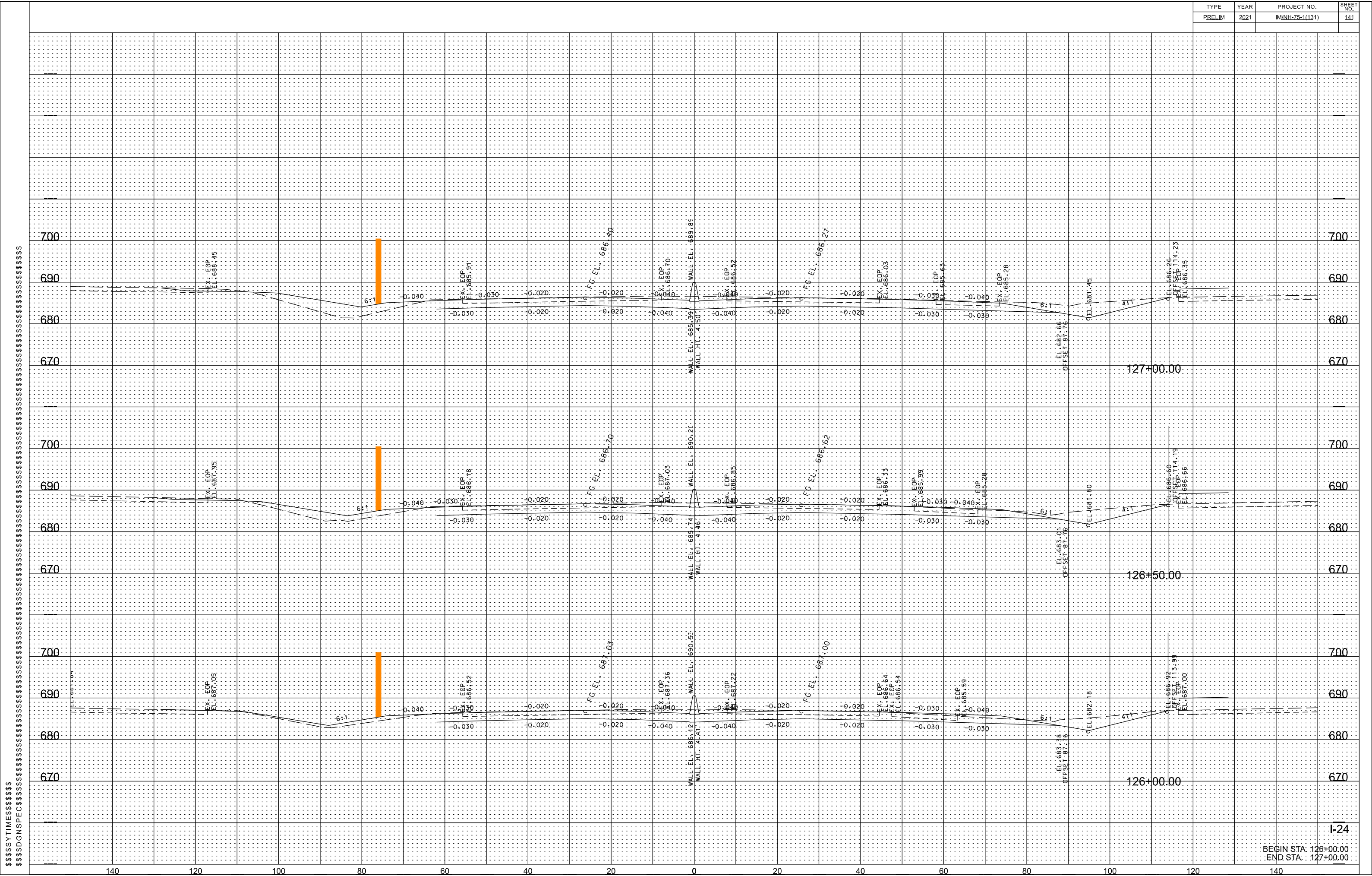


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	139
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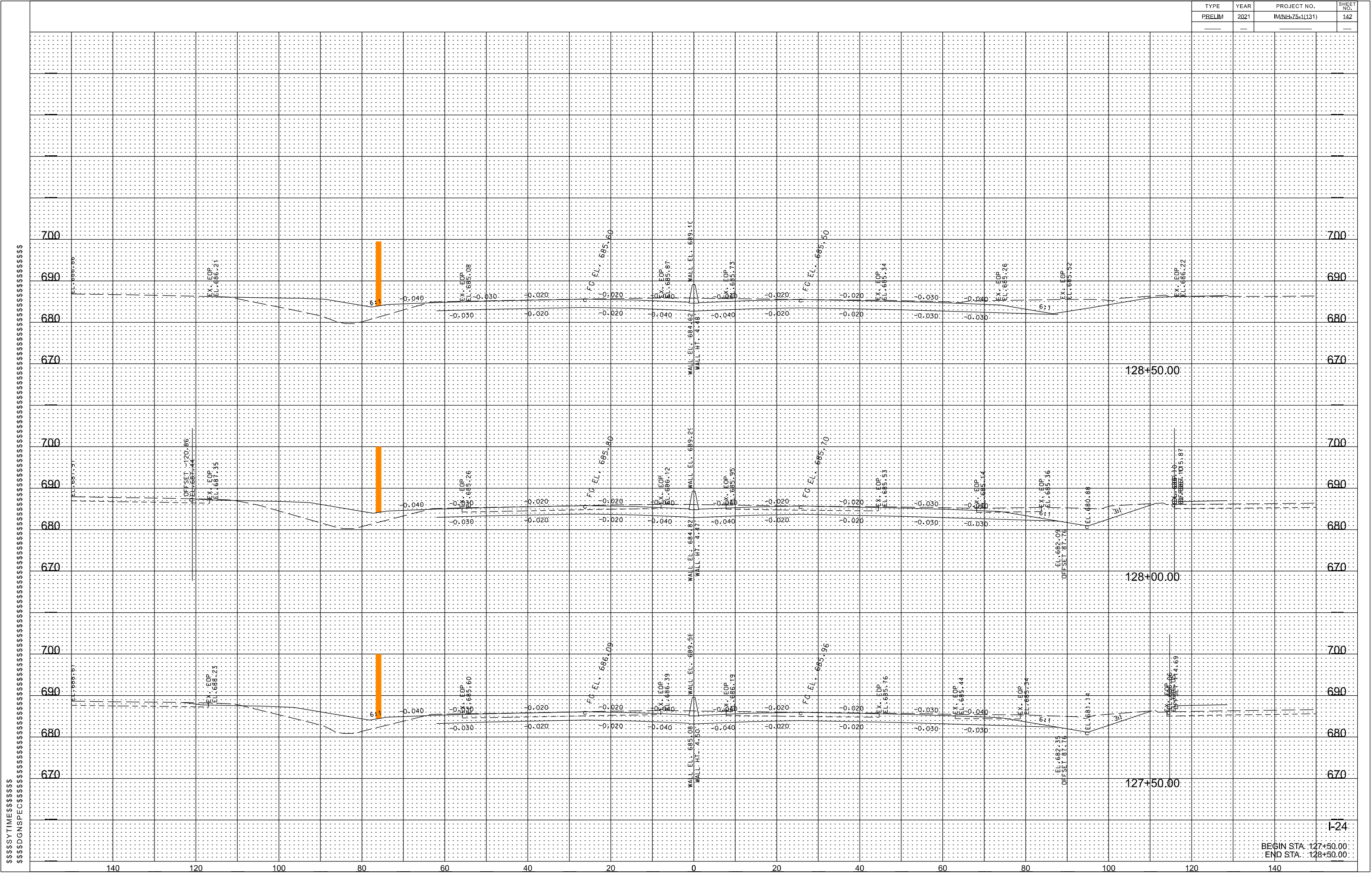


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	140
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BEGIN STA: 124+50.00  
END STA: 125+50.00



\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$PC\$\$\$\$\$



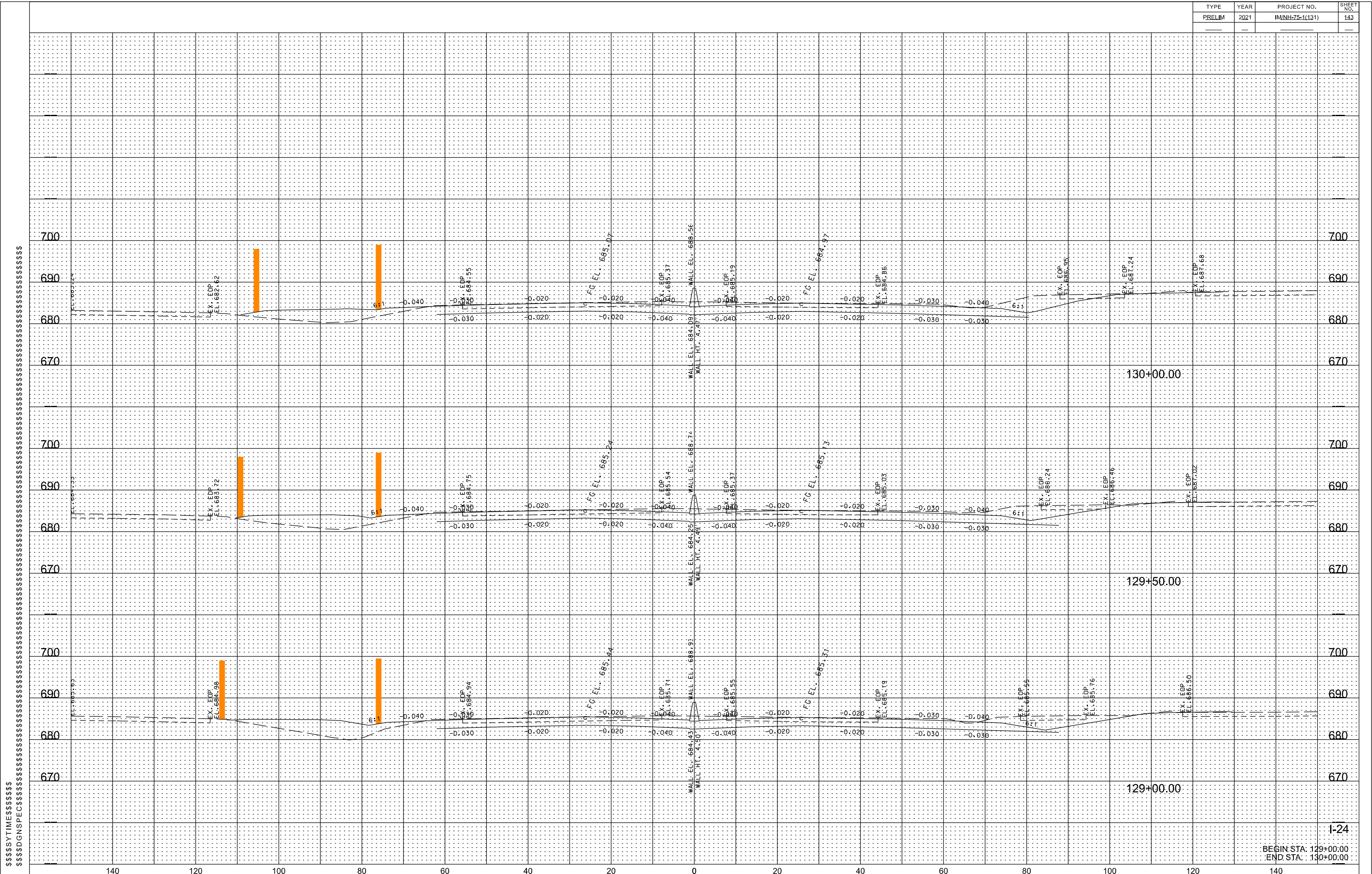
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	142
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\$\$\$\$SYTIME\$\$\$\$  
\$\$\$\$DGN\$PC\$\$\$\$

BEGIN STA: 127+50.00  
END STA: 128+50.00

I-24





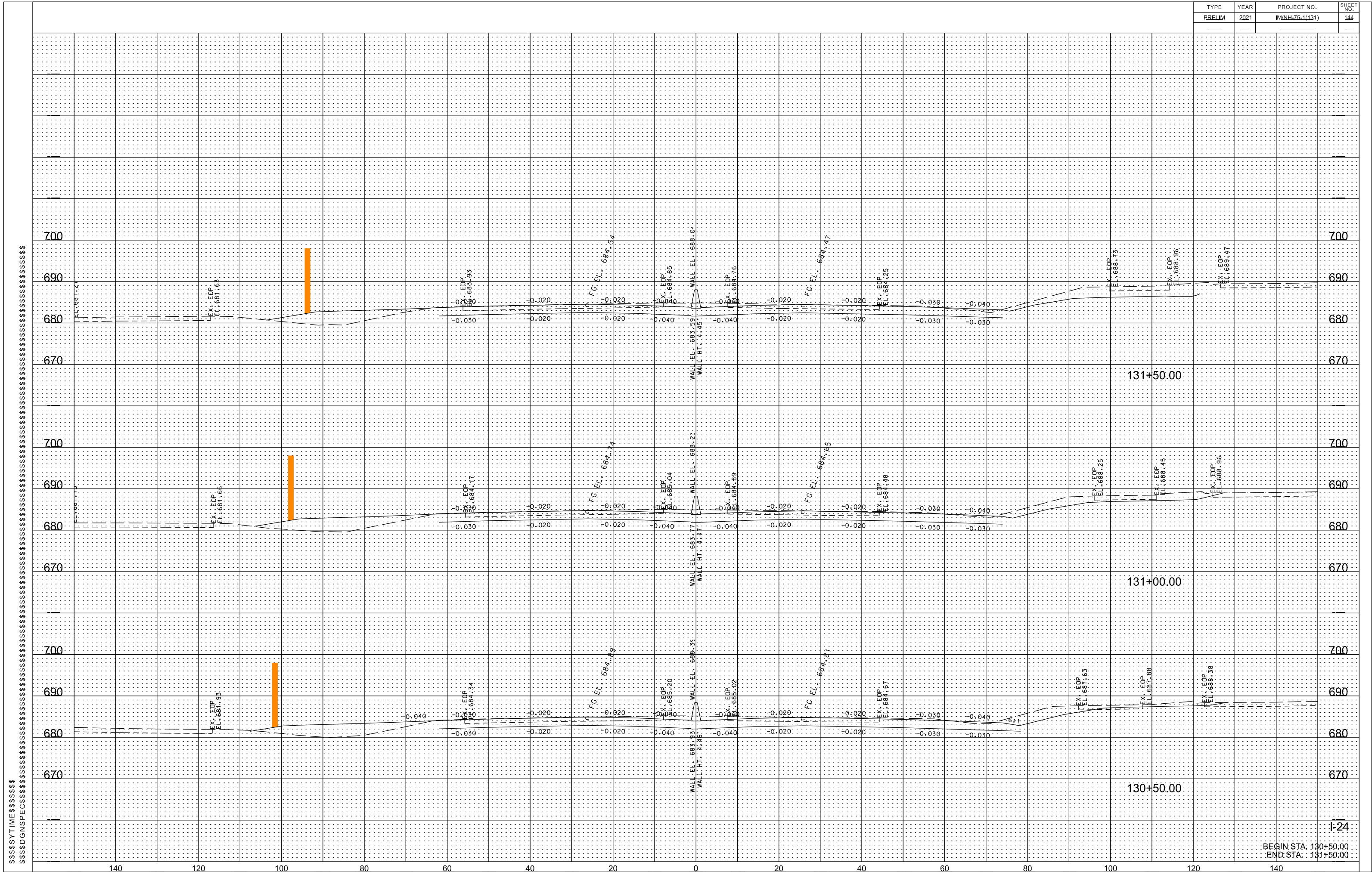
\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DN\$PC\$\$\$\$\$

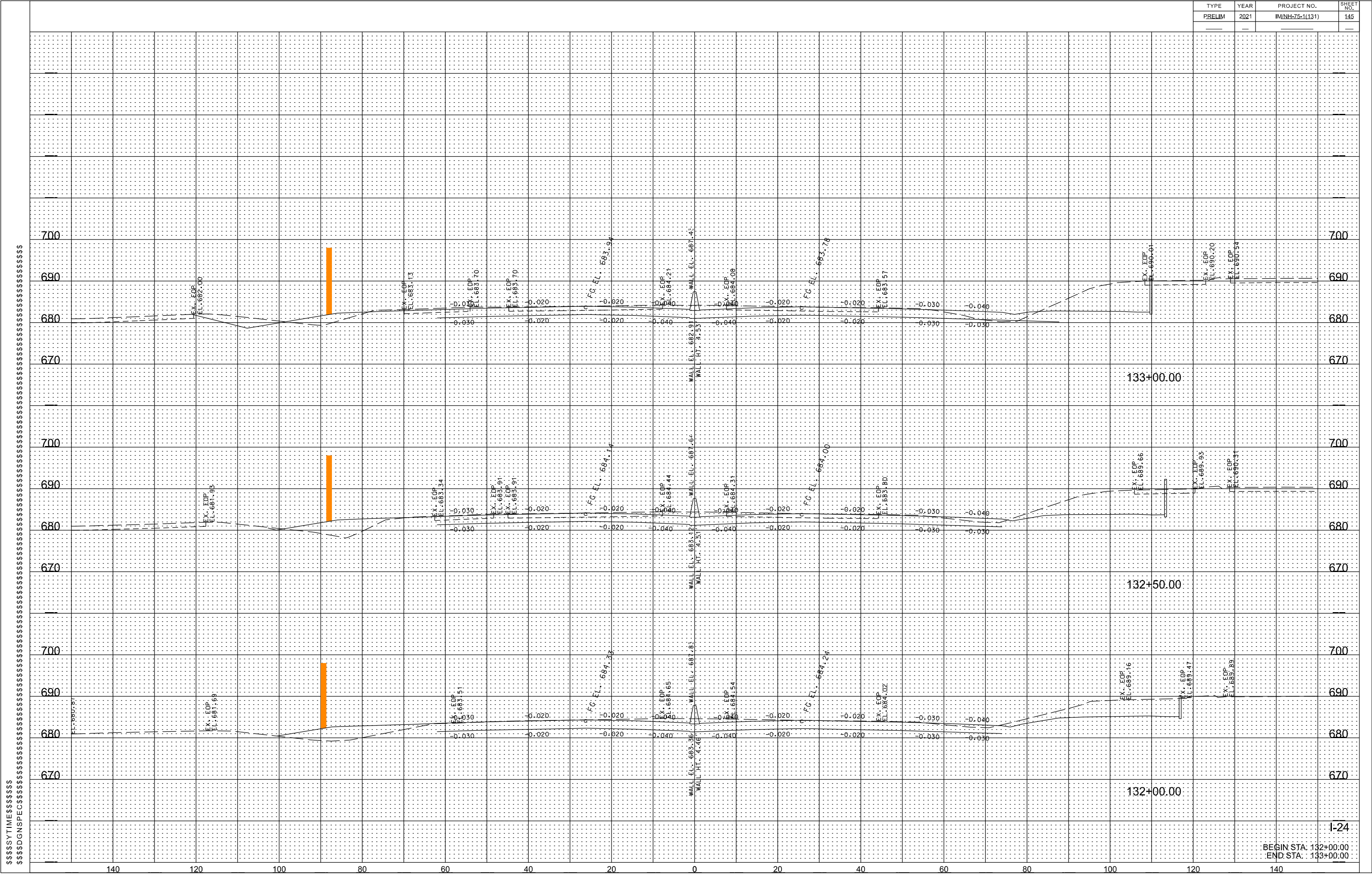
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	143
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BEGIN STA: 129+00.00  
END STA: 130+00.00

1-24

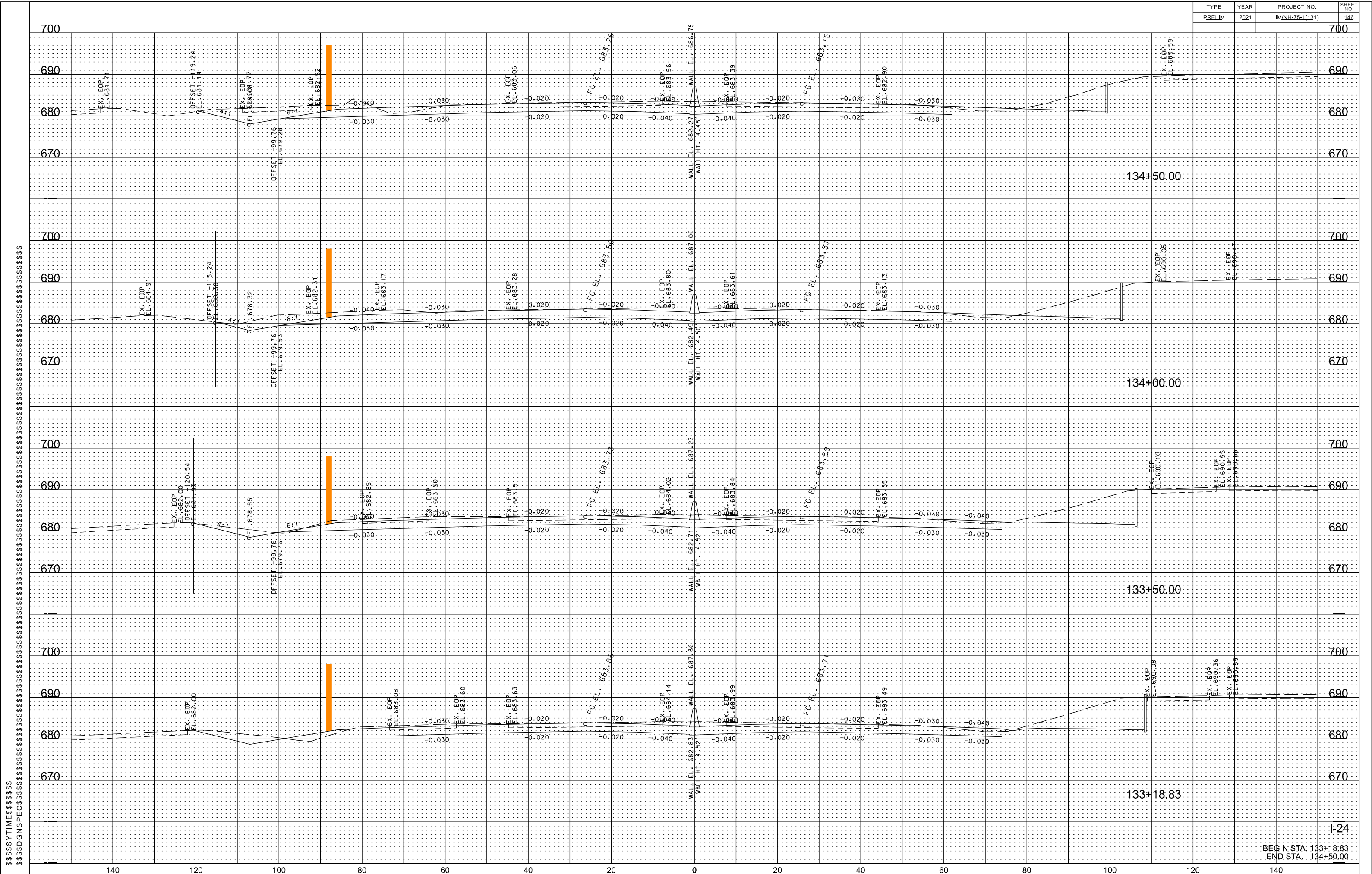
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	144
—	—	—	—



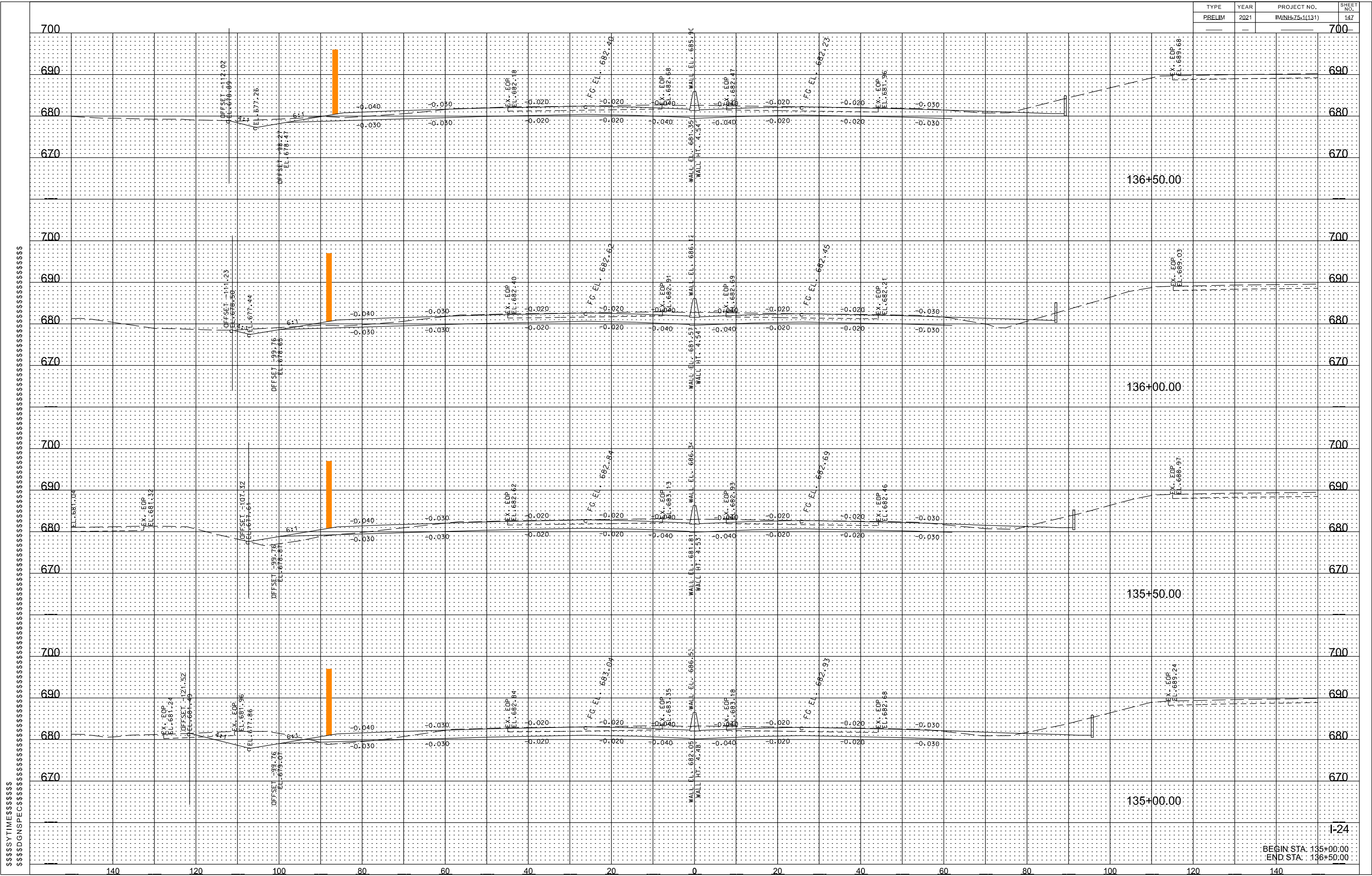


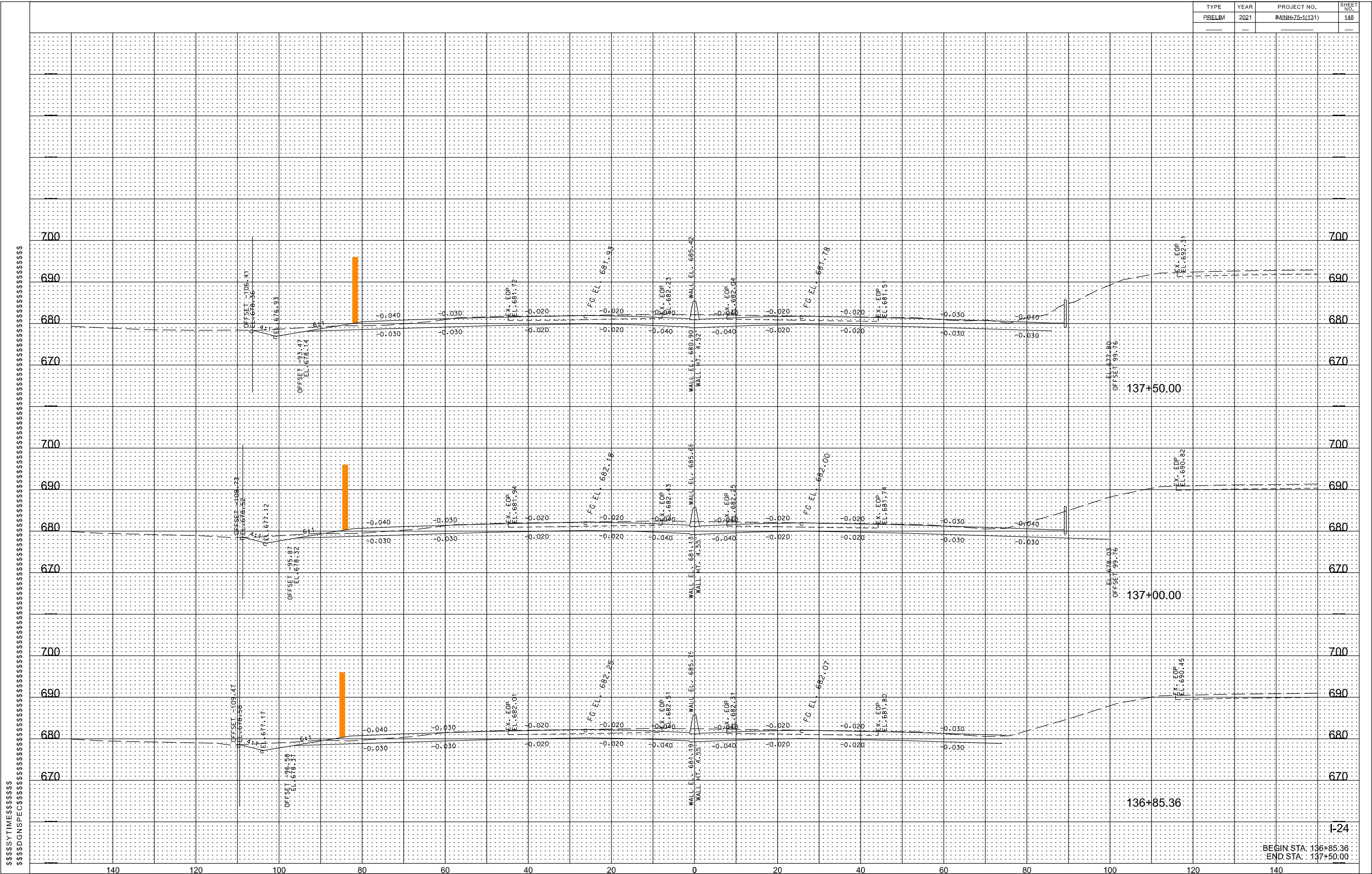
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	145
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BEGIN STA: 132+00.00  
END STA: 133+00.00



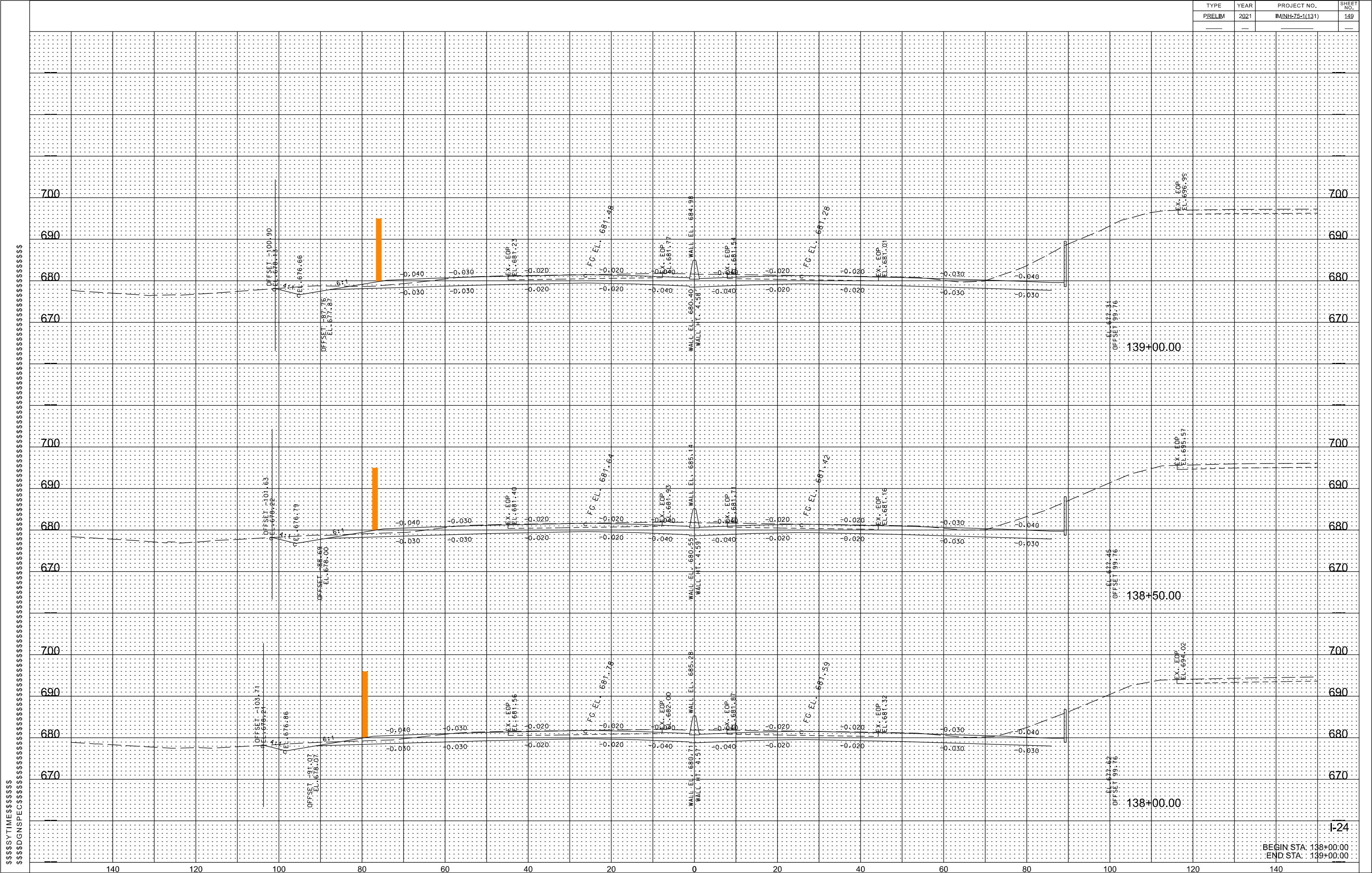






TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	148
—	—	—	—

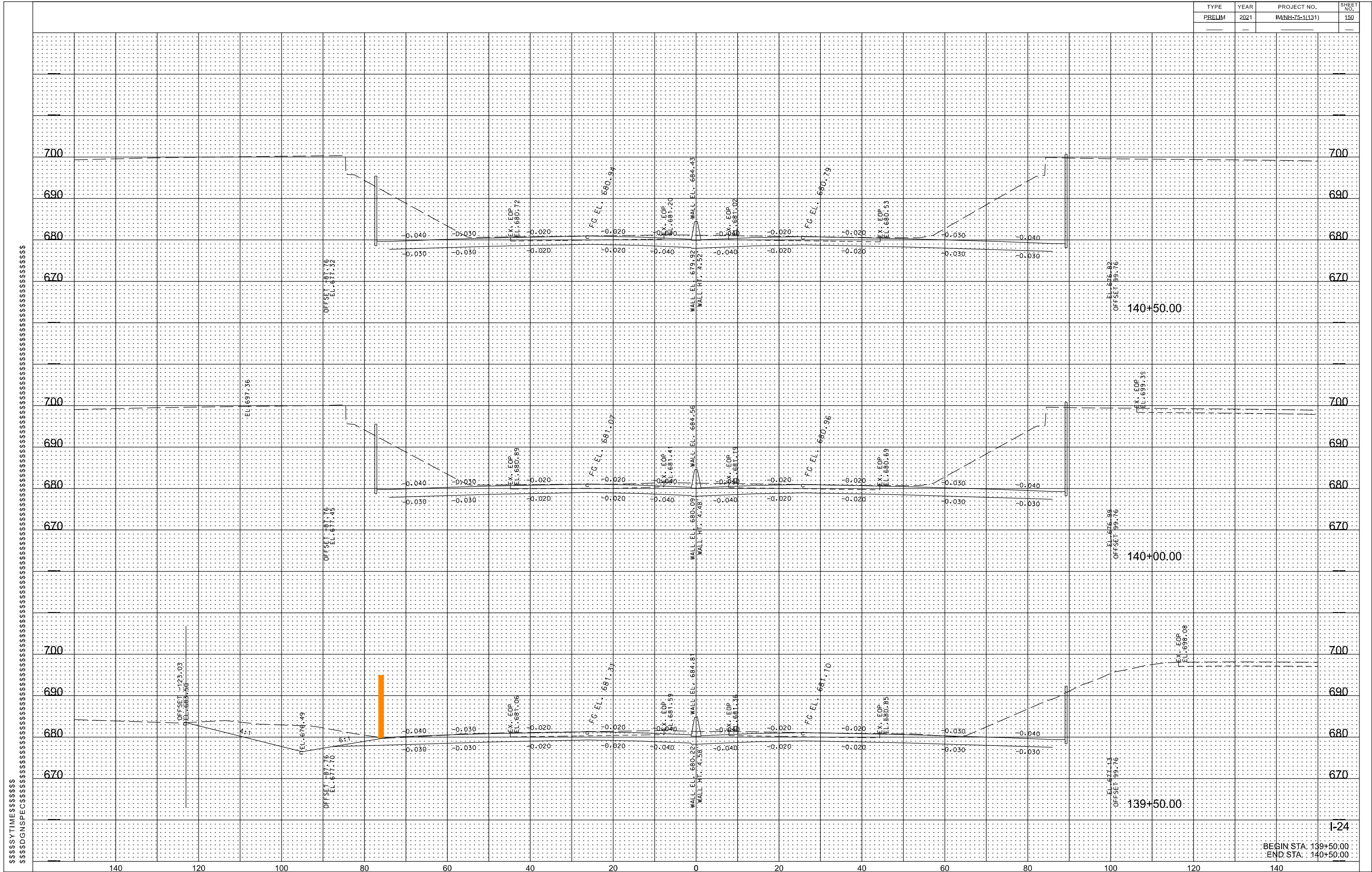
BEGIN STA: 136+85.36  
END STA: 137+50.00



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	149
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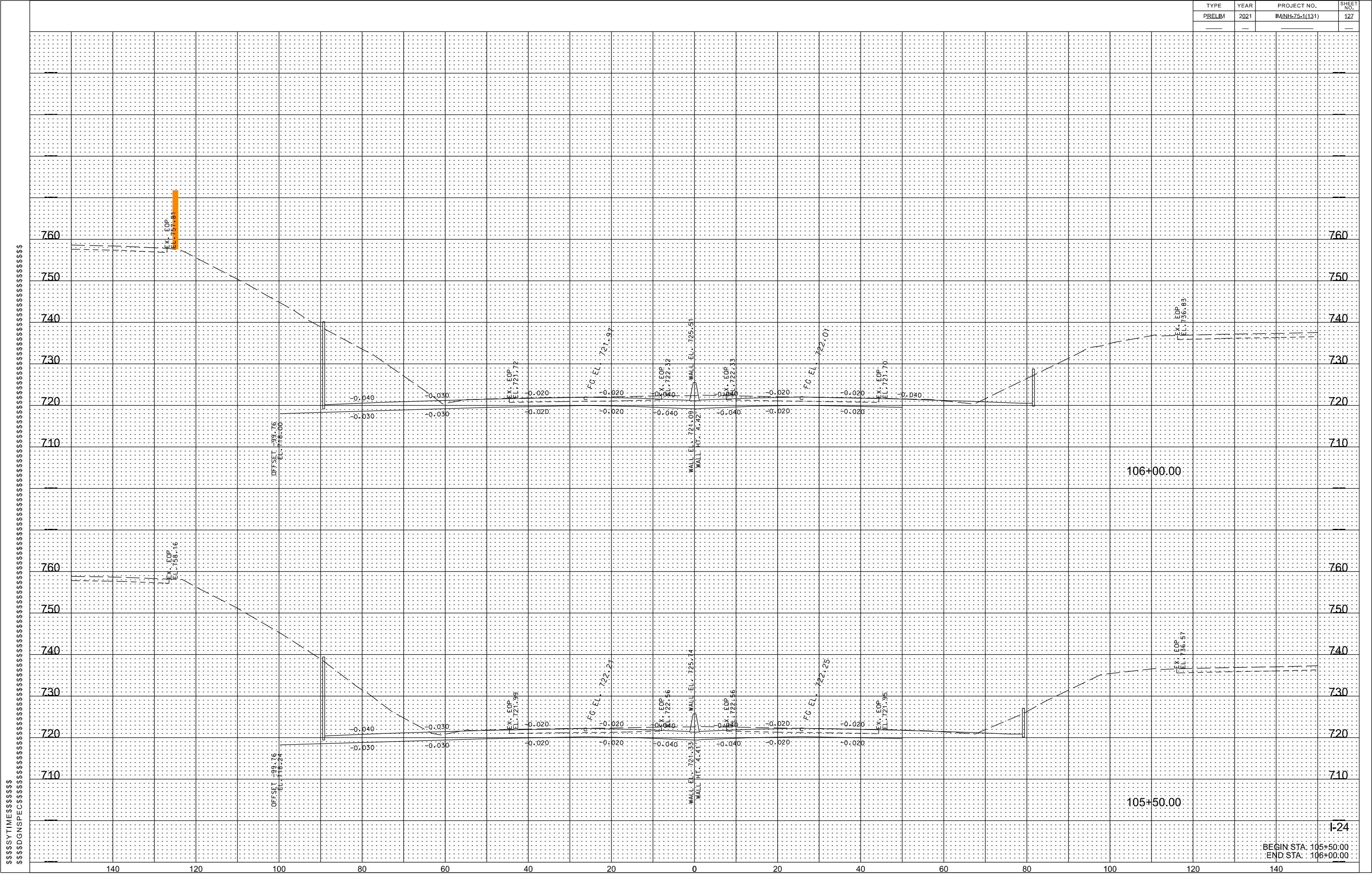
BEGIN STA: 138+00.00  
END STA: 139+00.00

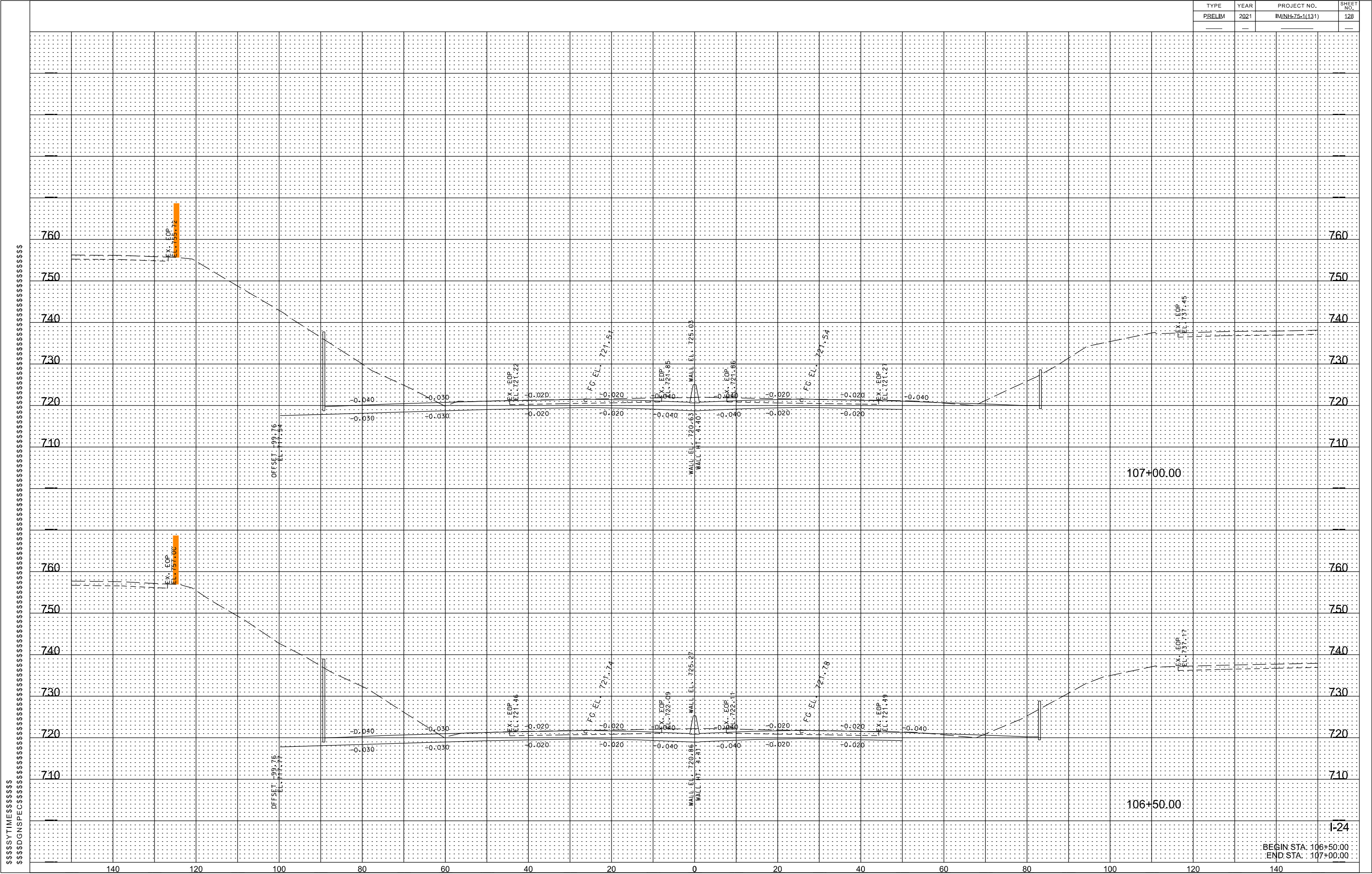
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	150
—	—	—	—





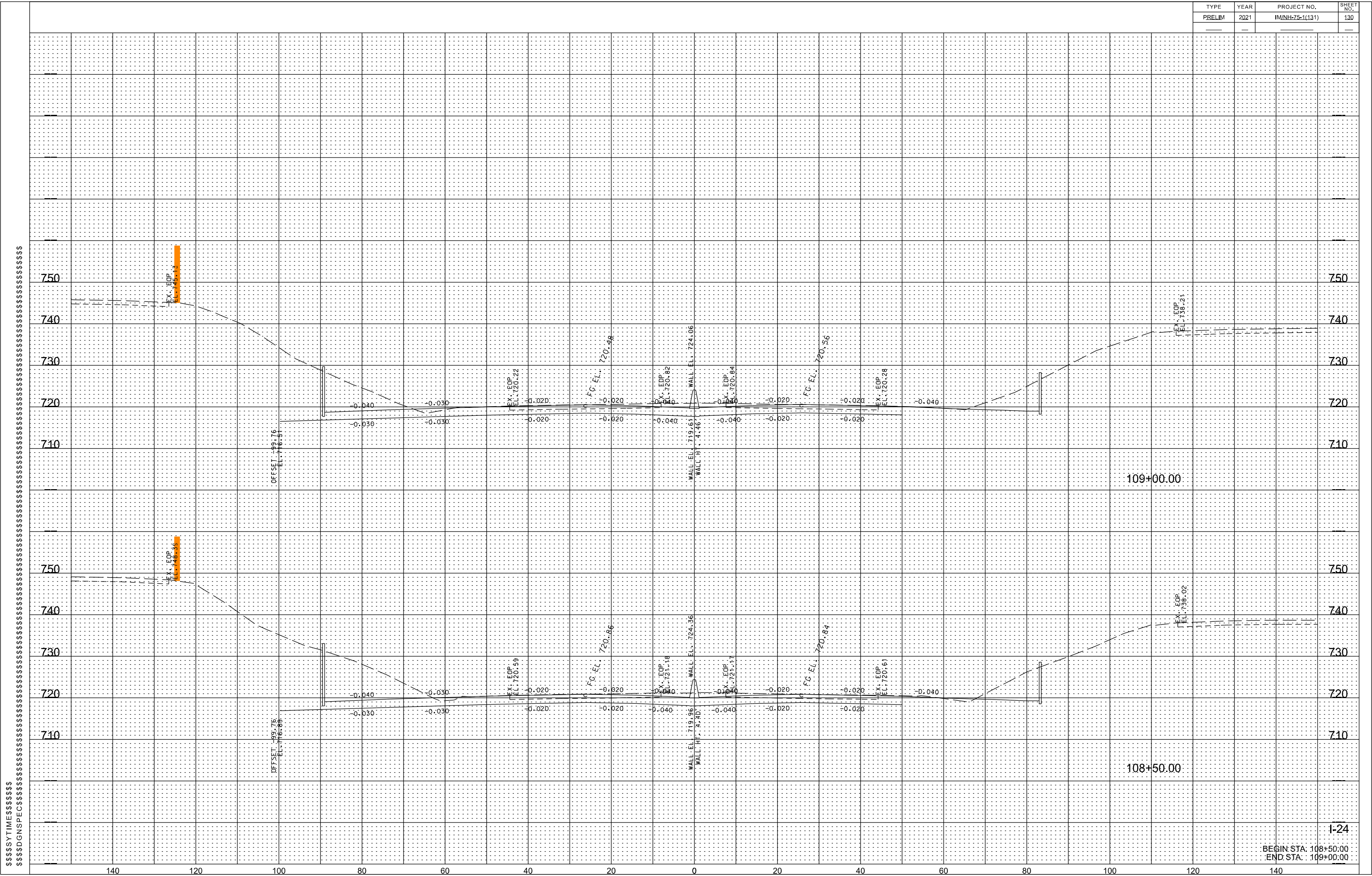
**NAA 2, Option 3**





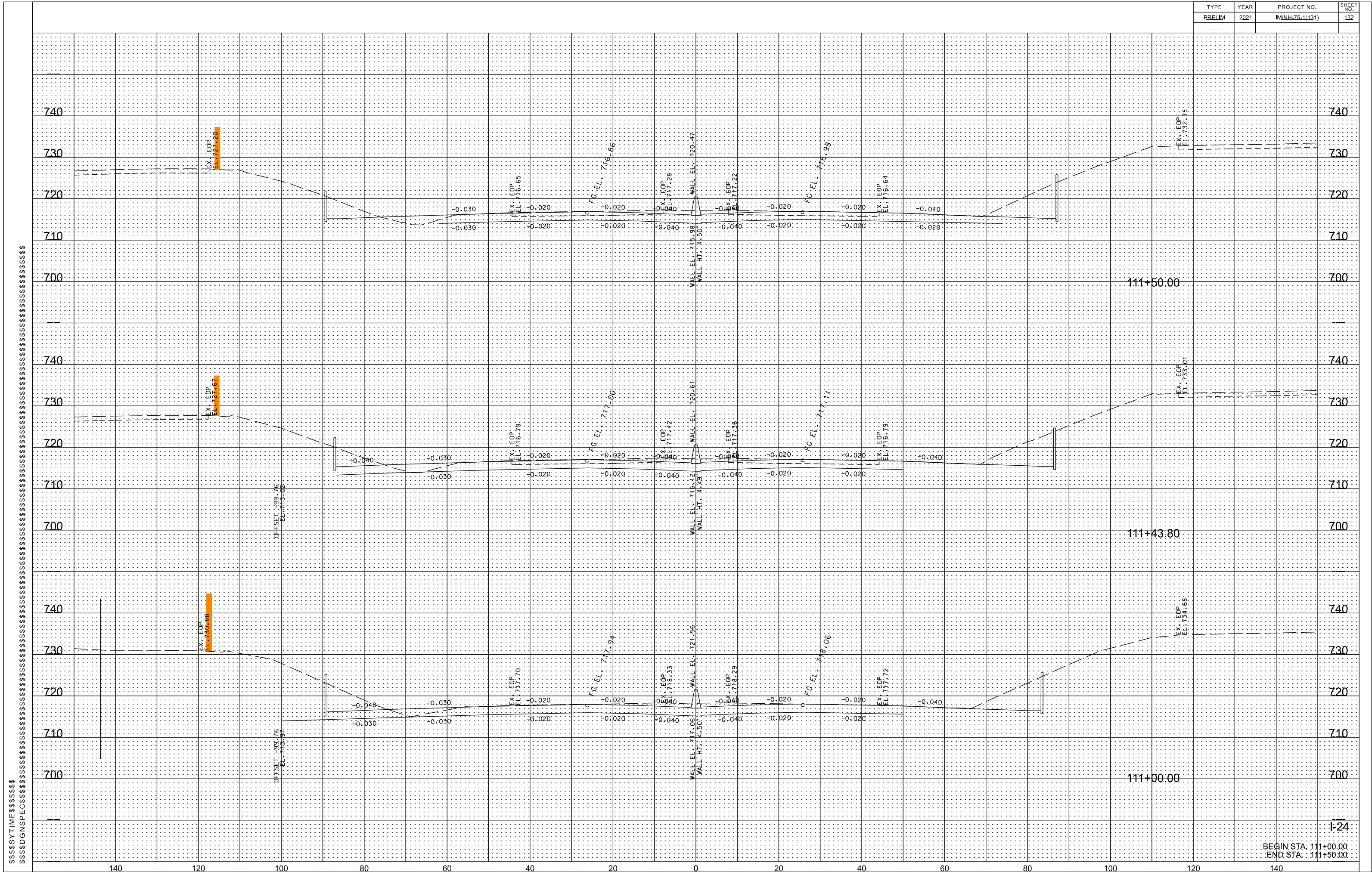


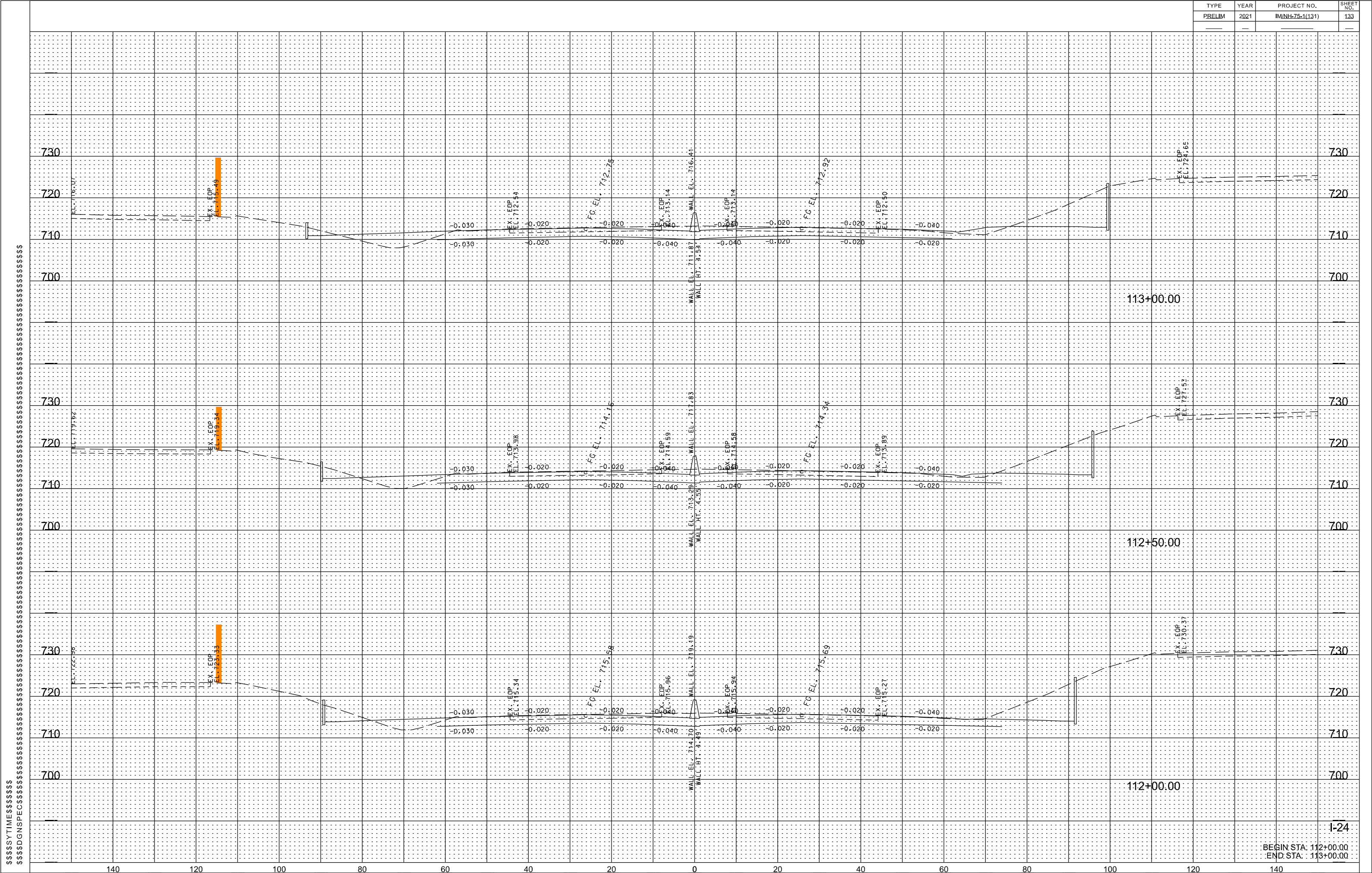






TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	132
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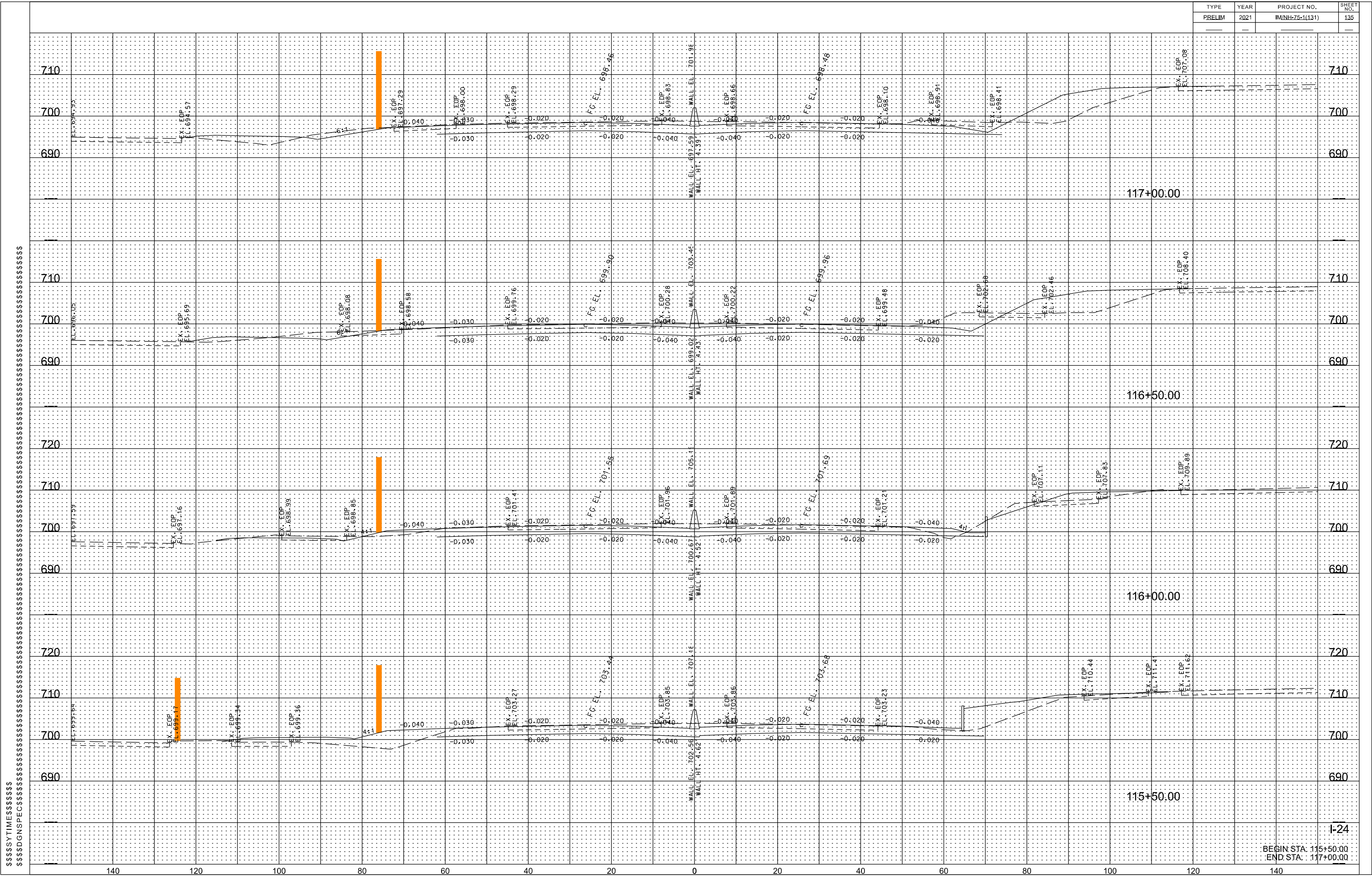


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	133
—	—	—	—

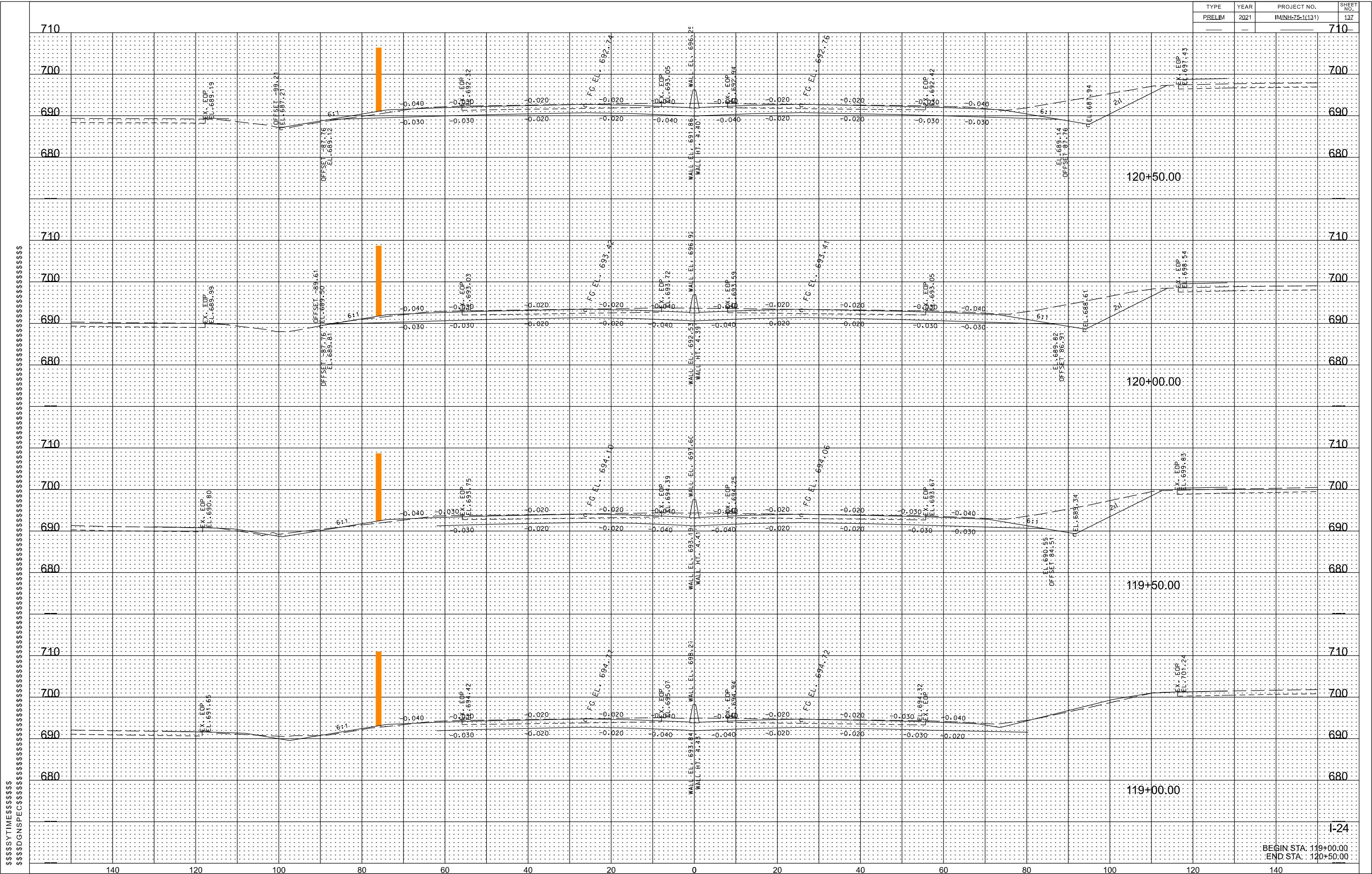
BEGIN STA: 112+00.00  
END STA: 113+00.00











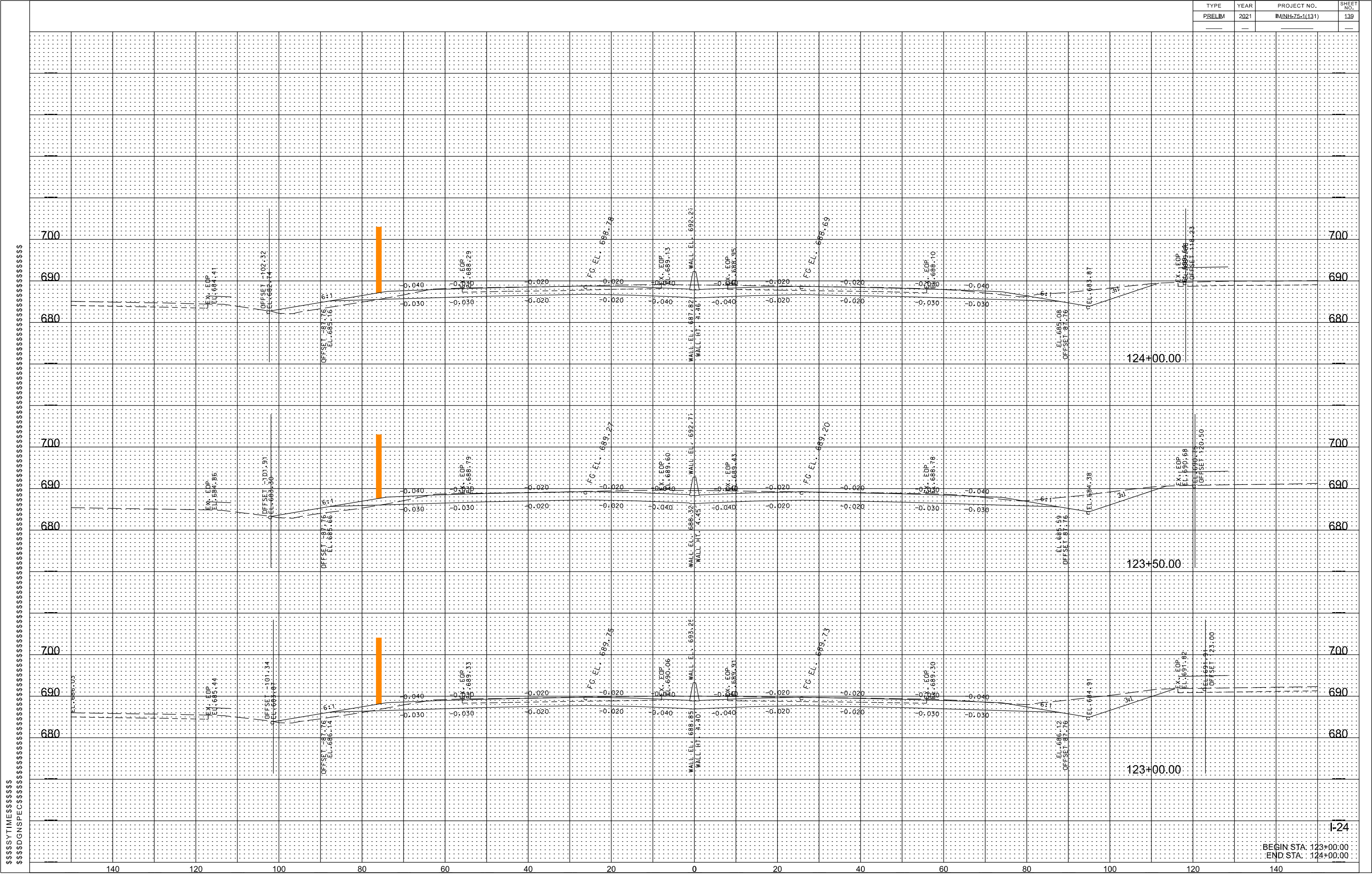
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	137
			137

BEGIN STA: 119+00.00  
END STA: 120+50.00

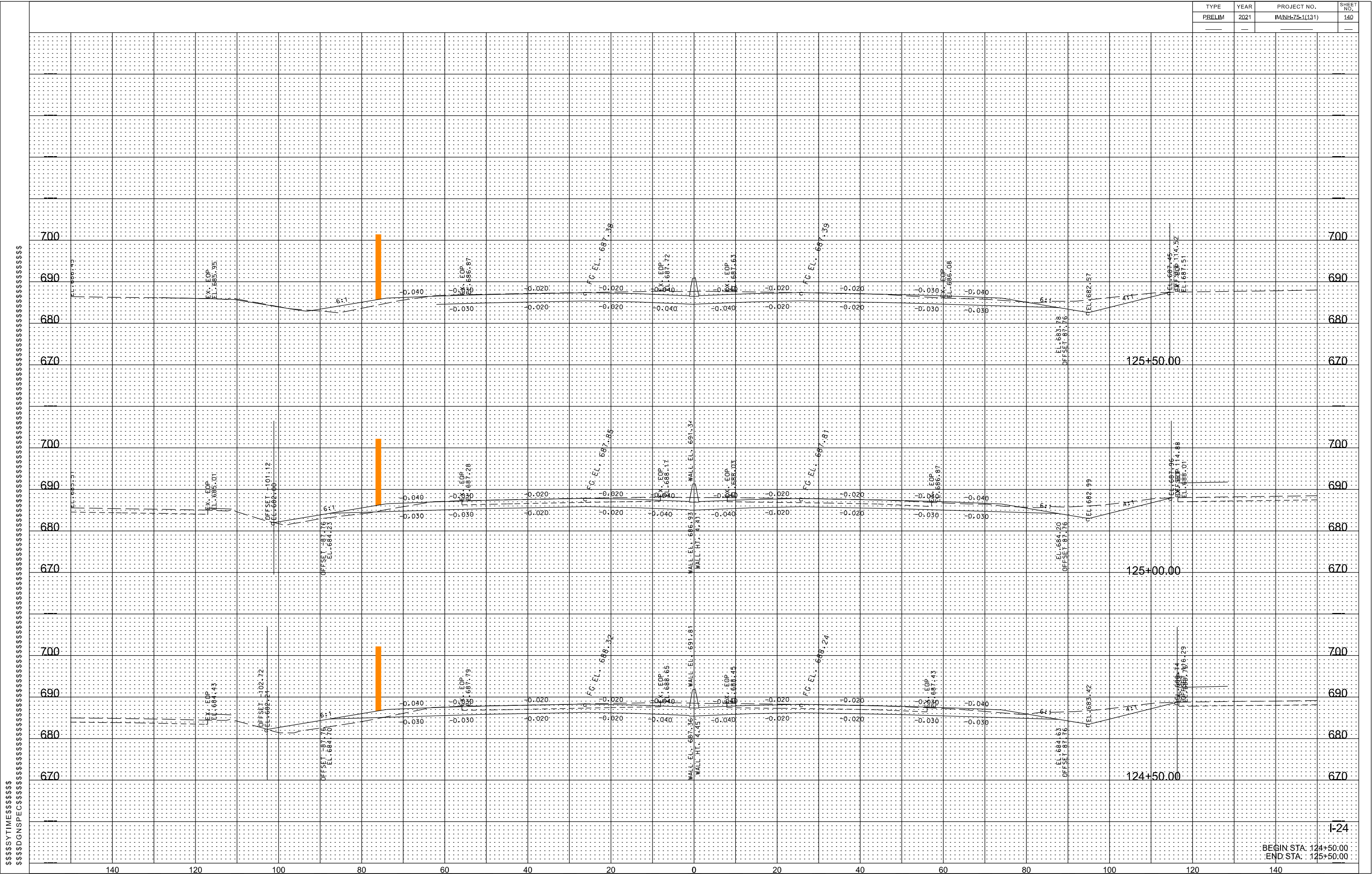
1-24





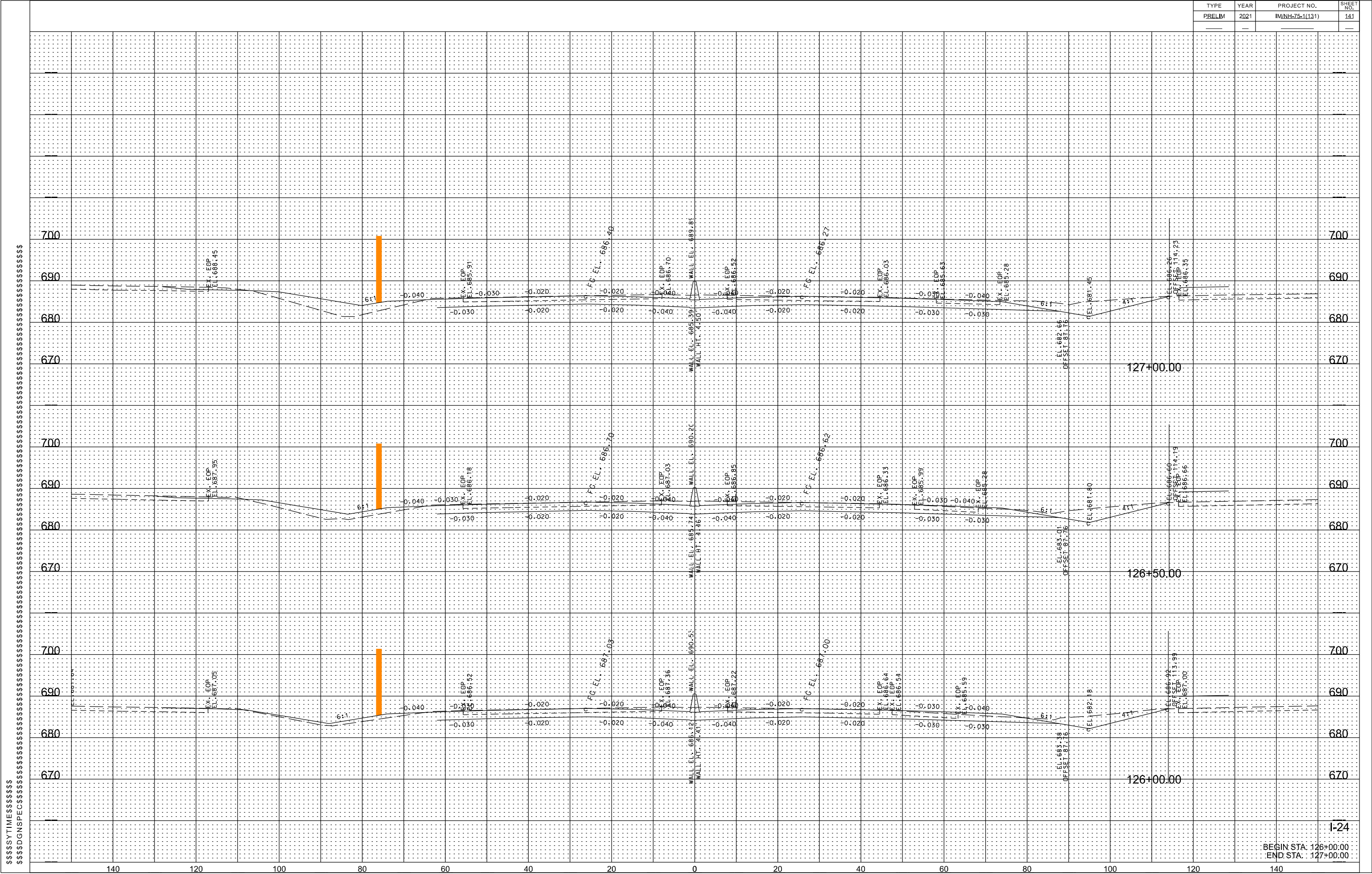


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	139
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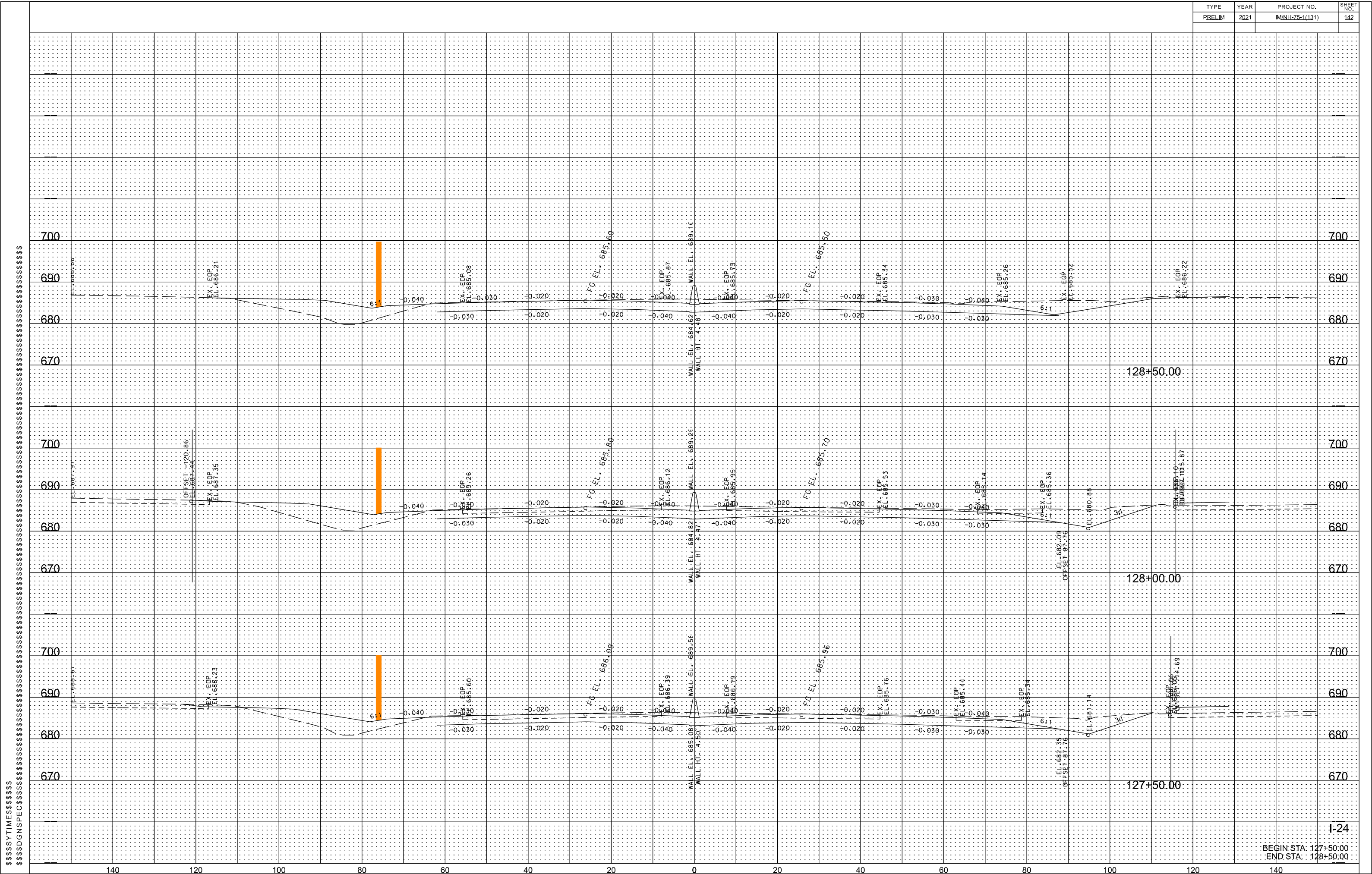


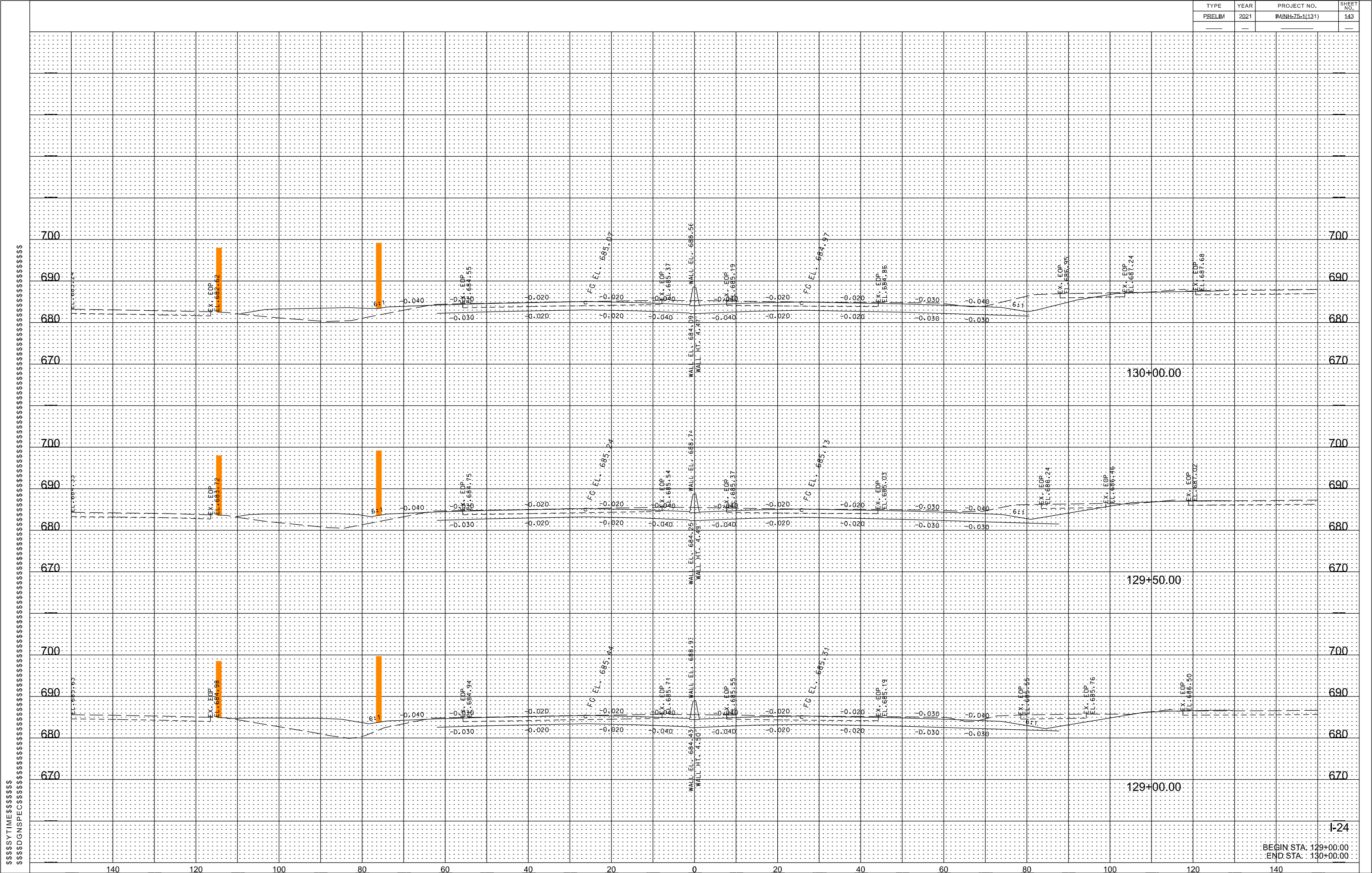
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	140
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BEGIN STA: 124+50.00  
END STA: 125+50.00







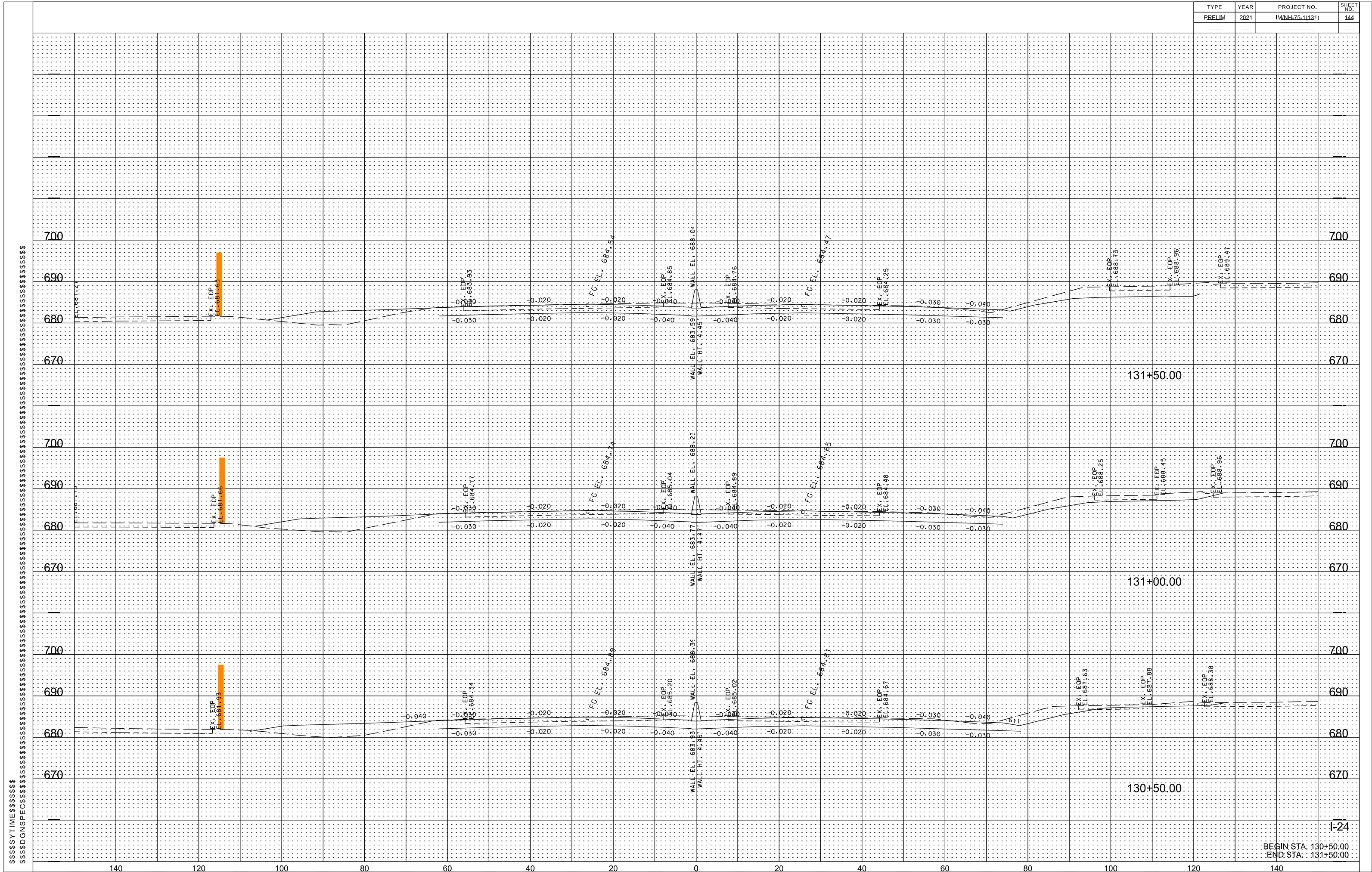


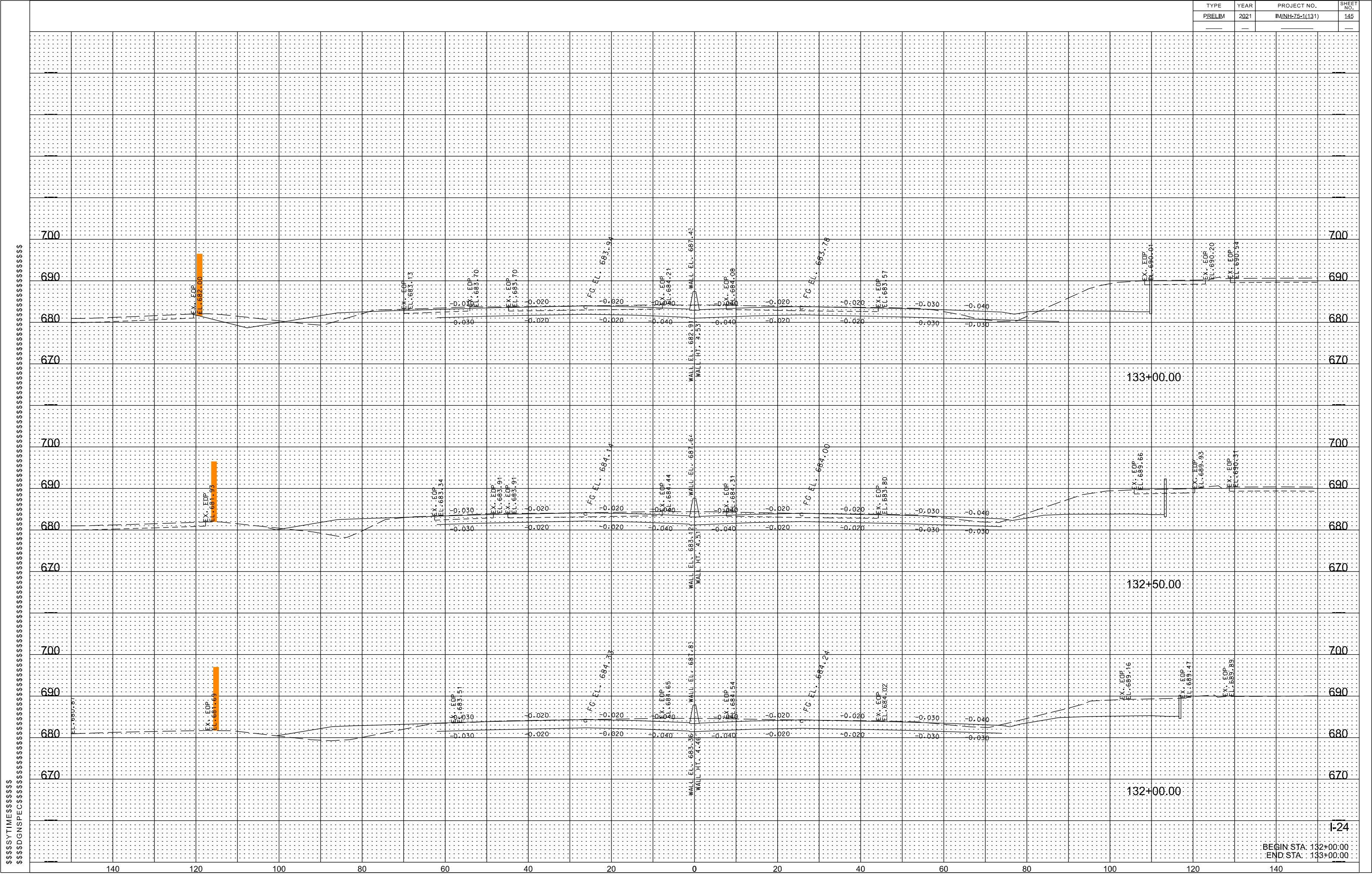
\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN SPEC\$\$\$\$\$

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	143
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BEGIN STA: 129+00.00  
END STA: 130+00.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	144
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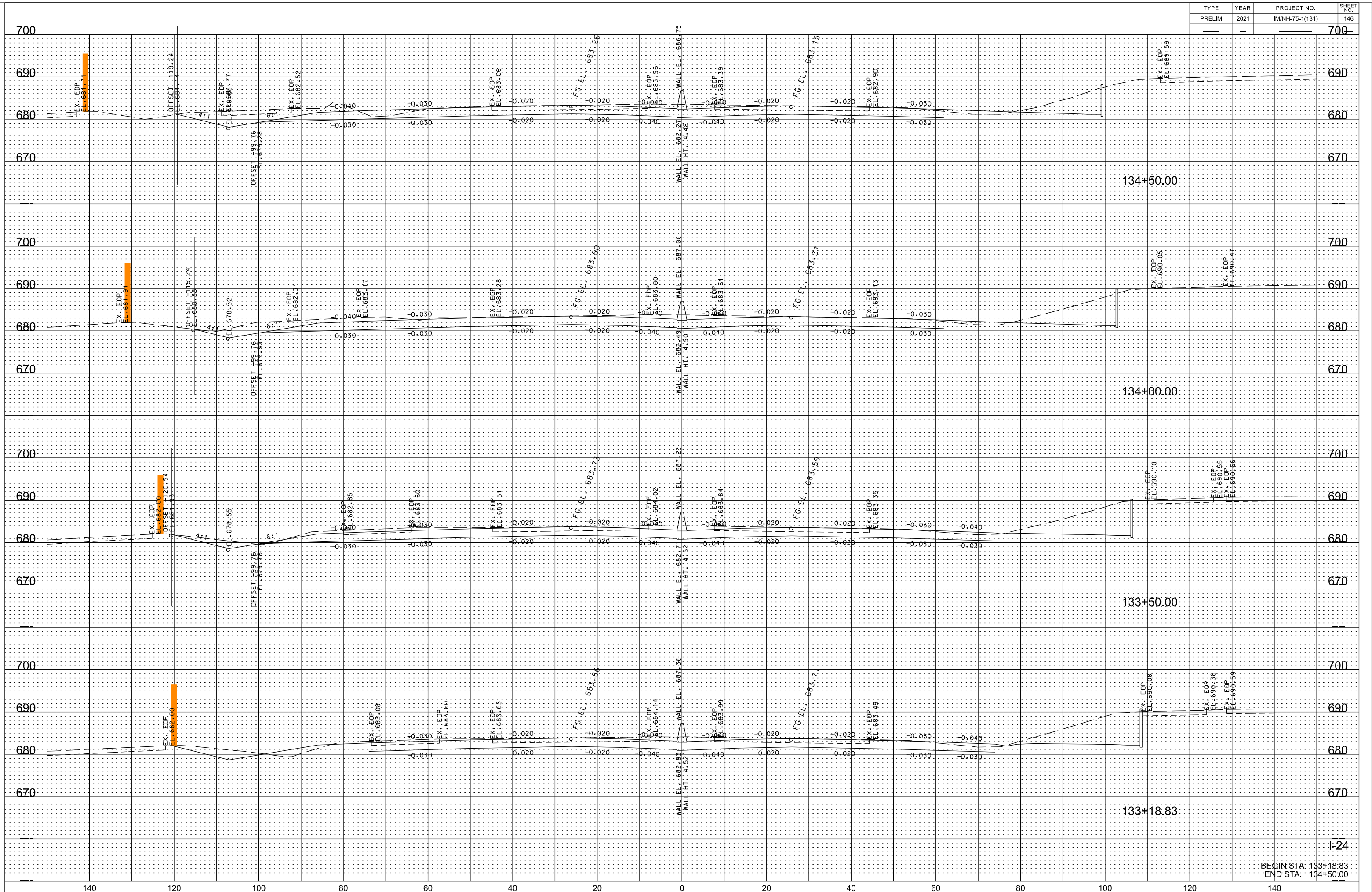
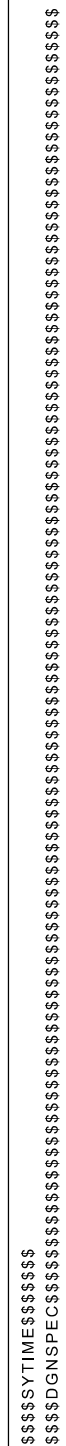


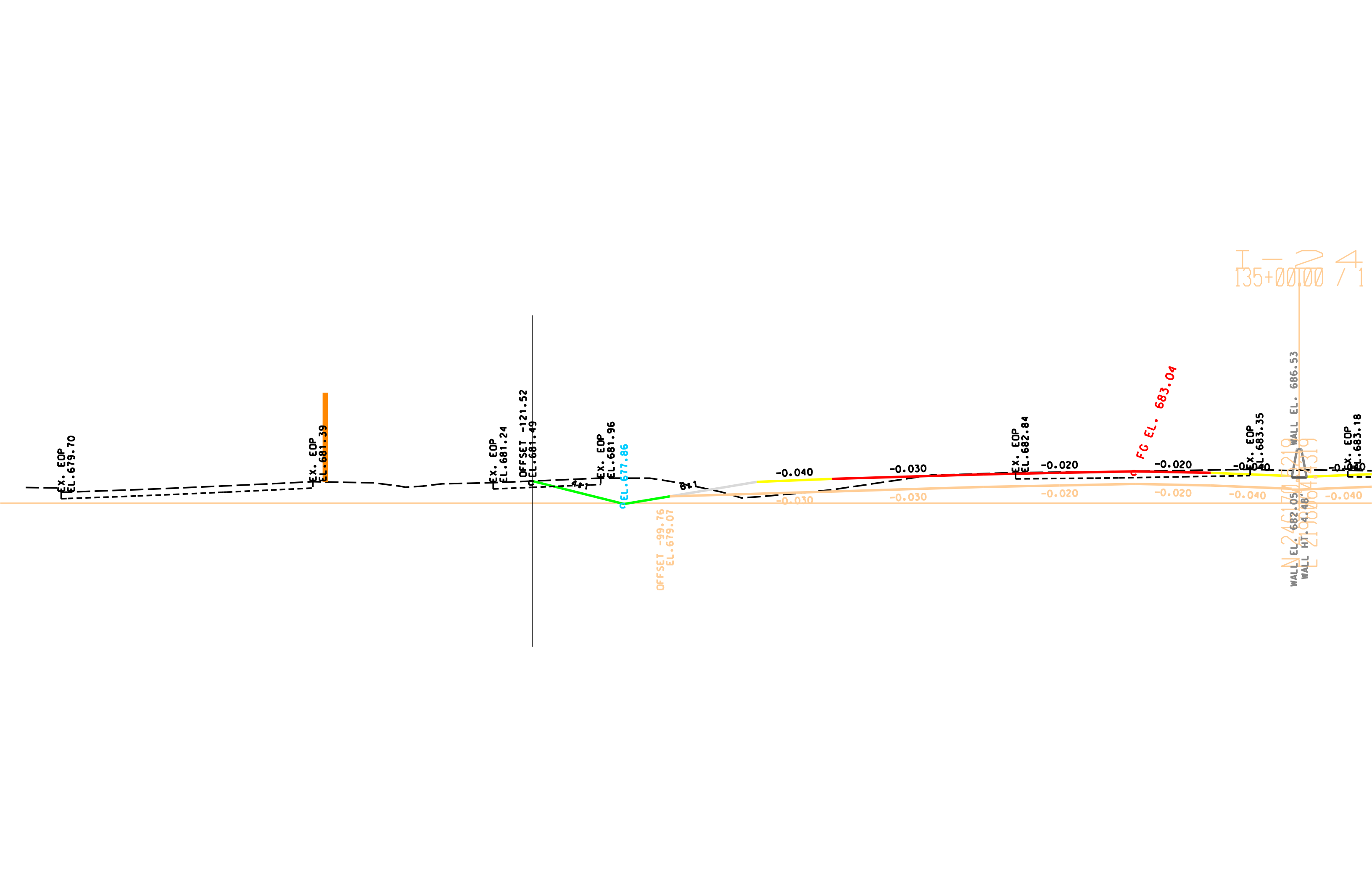
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	145
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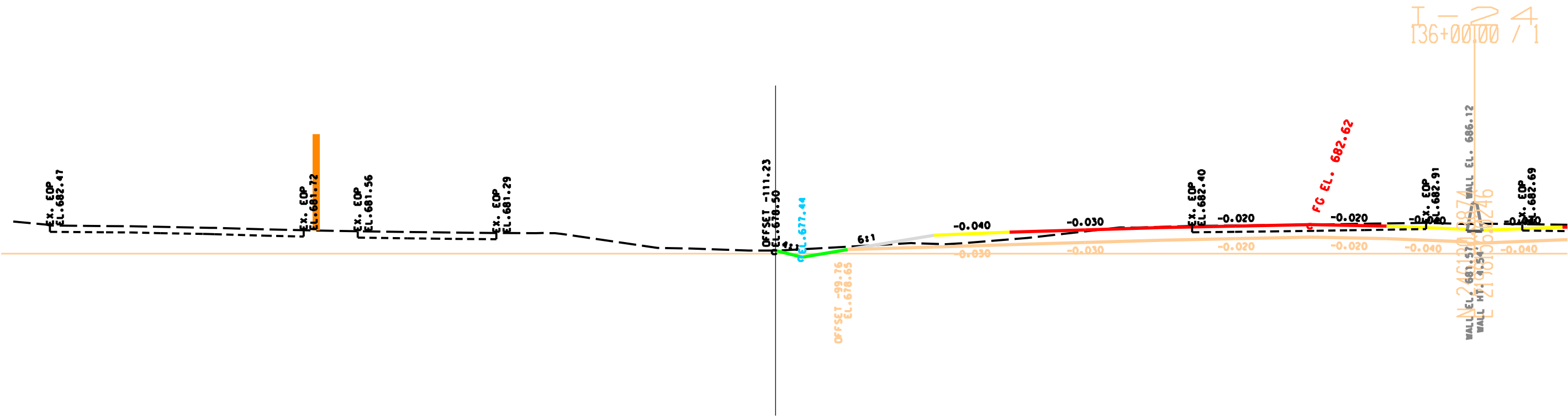
BEGIN STA: 132+00.00  
END STA: 133+00.00

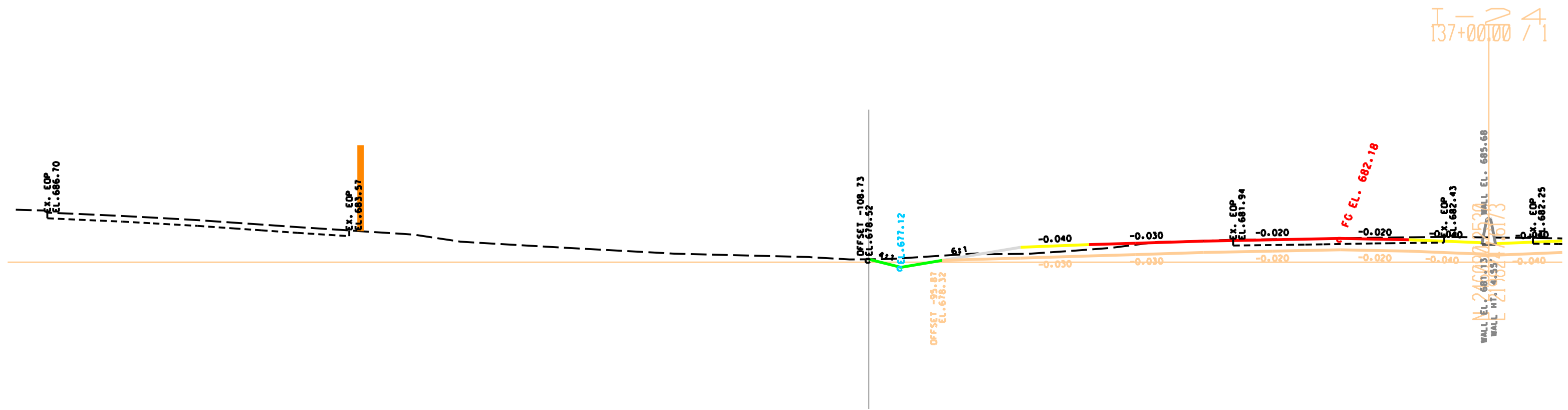


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	146
—	—	—	700—

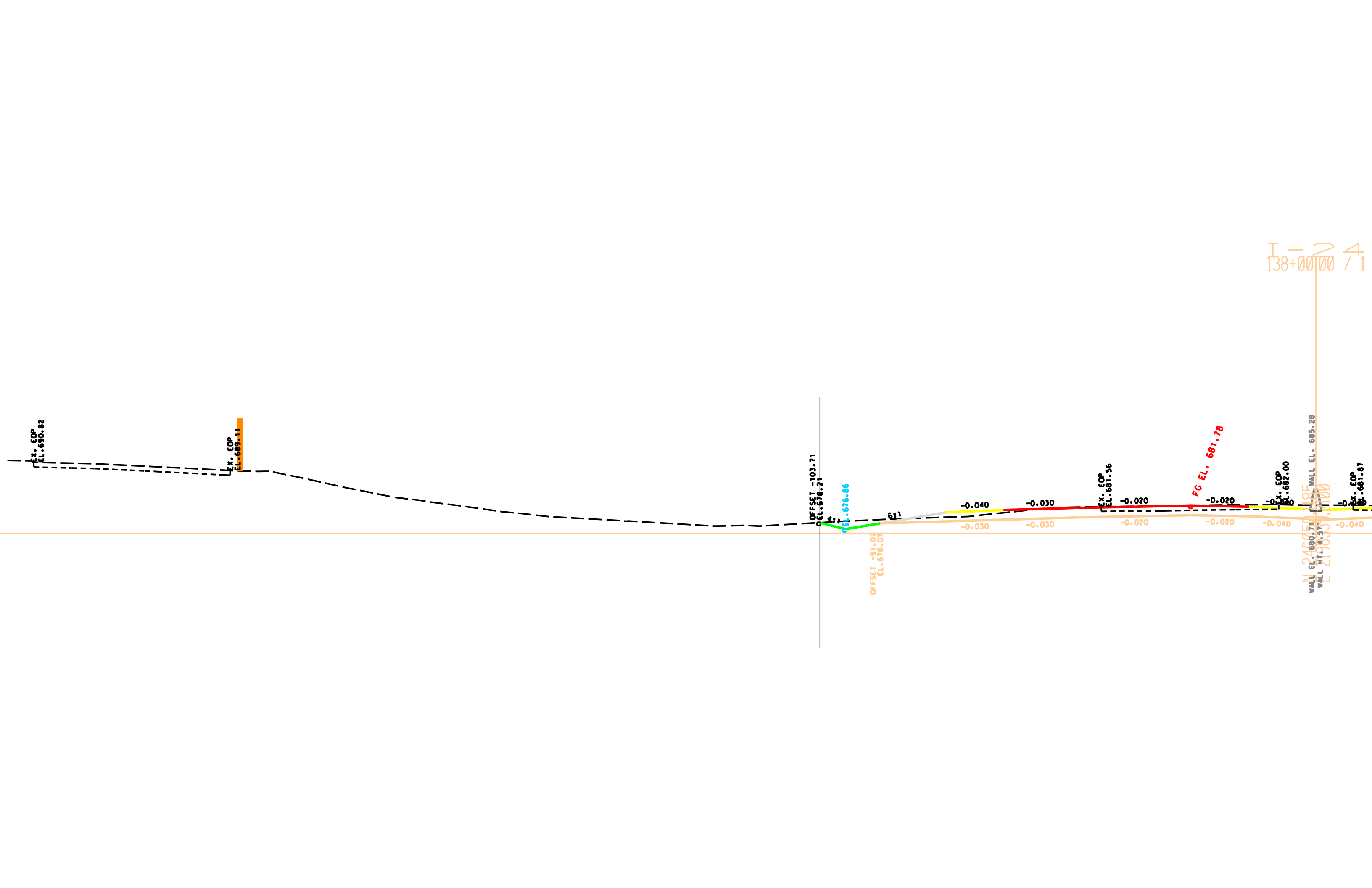








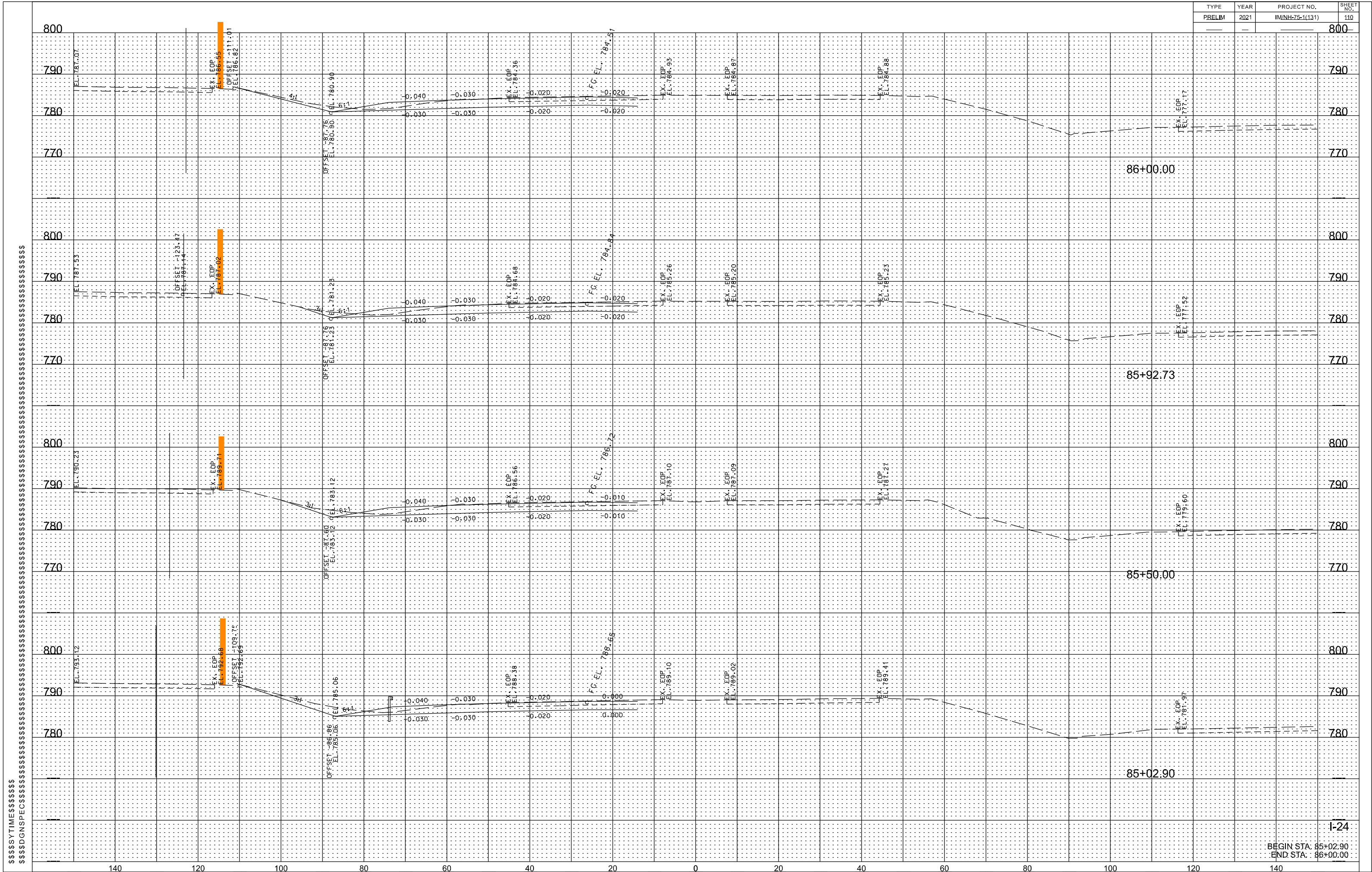




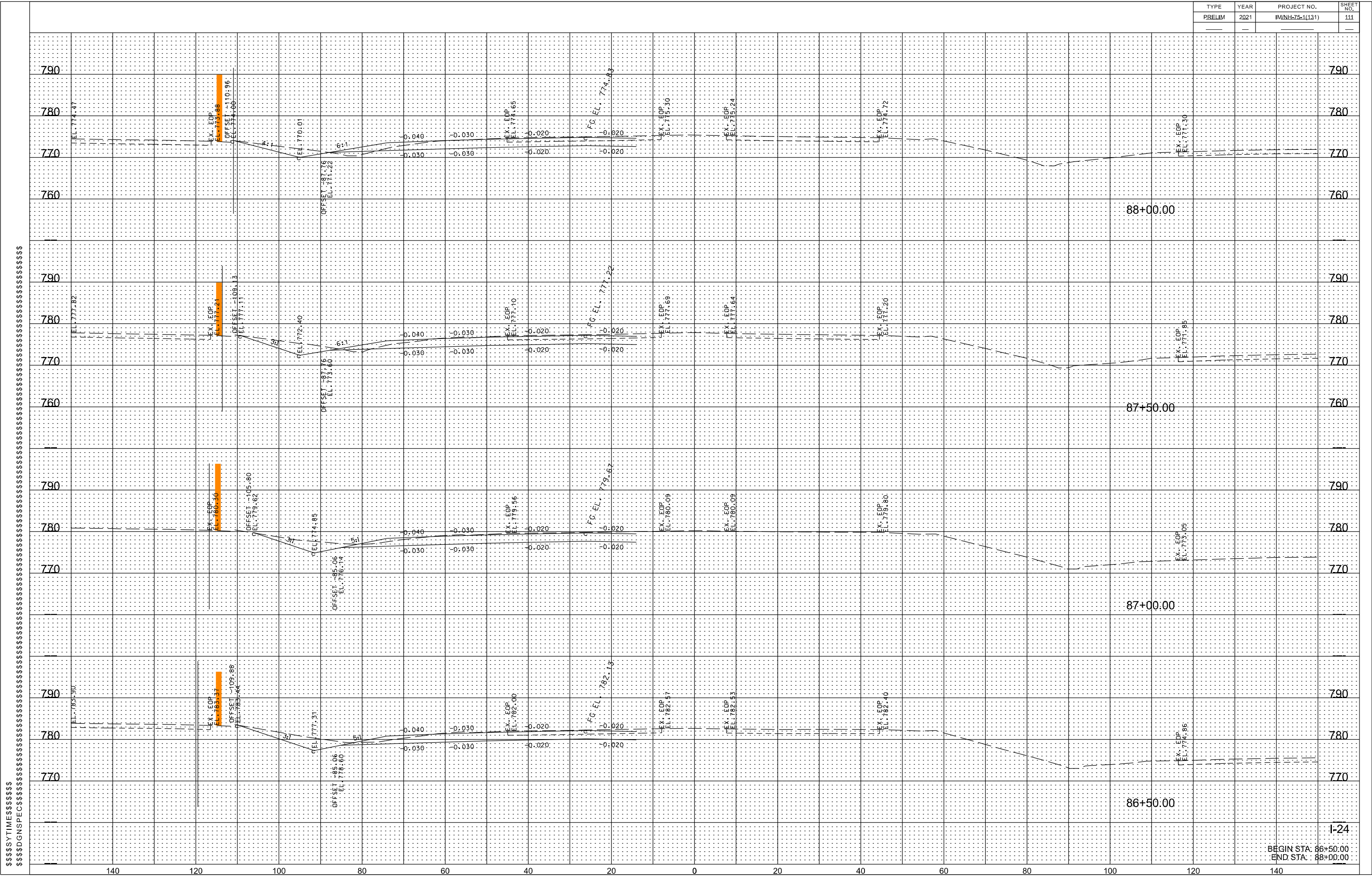
**NAA 22, Option 1**



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	110
			800



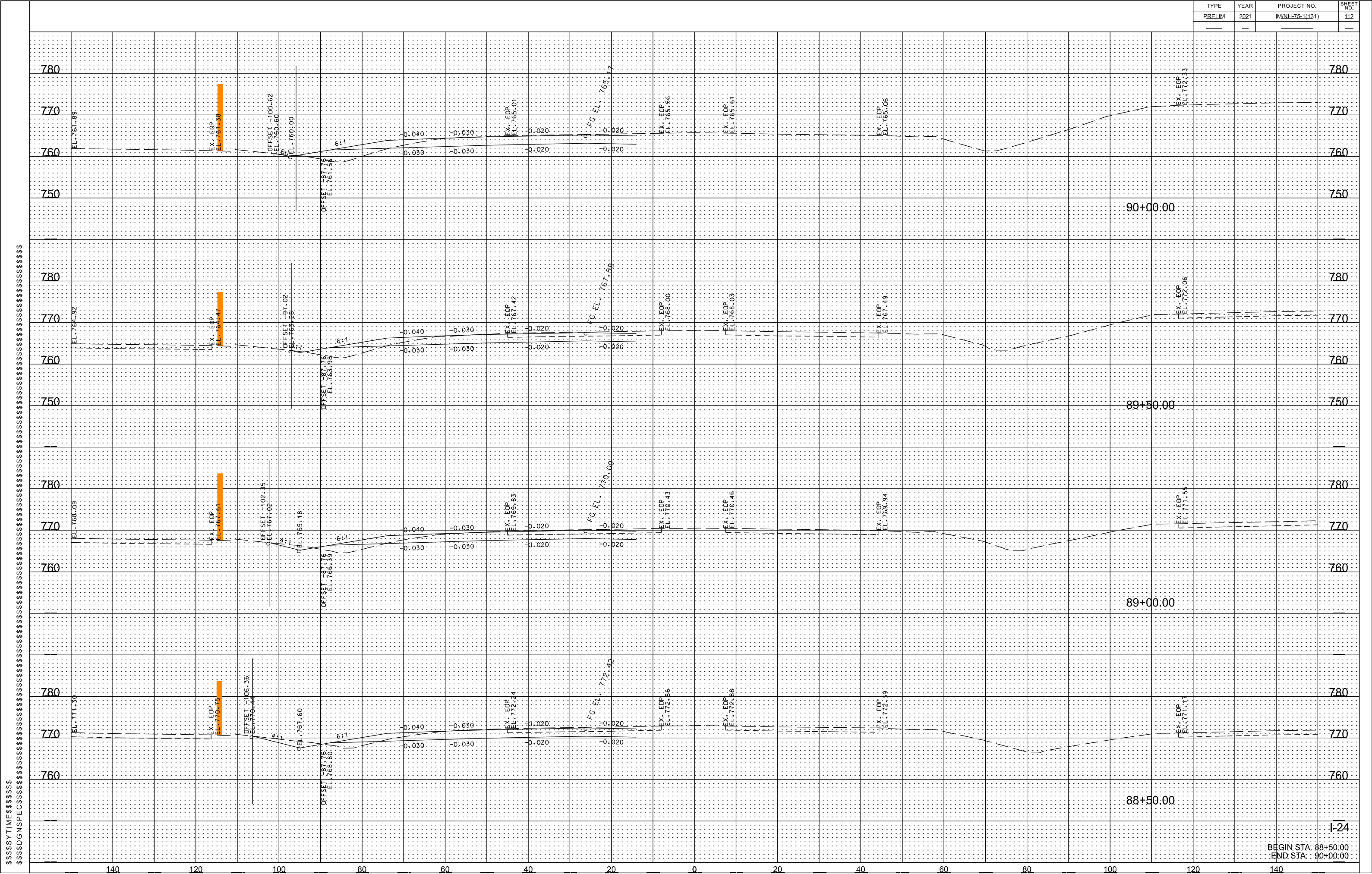




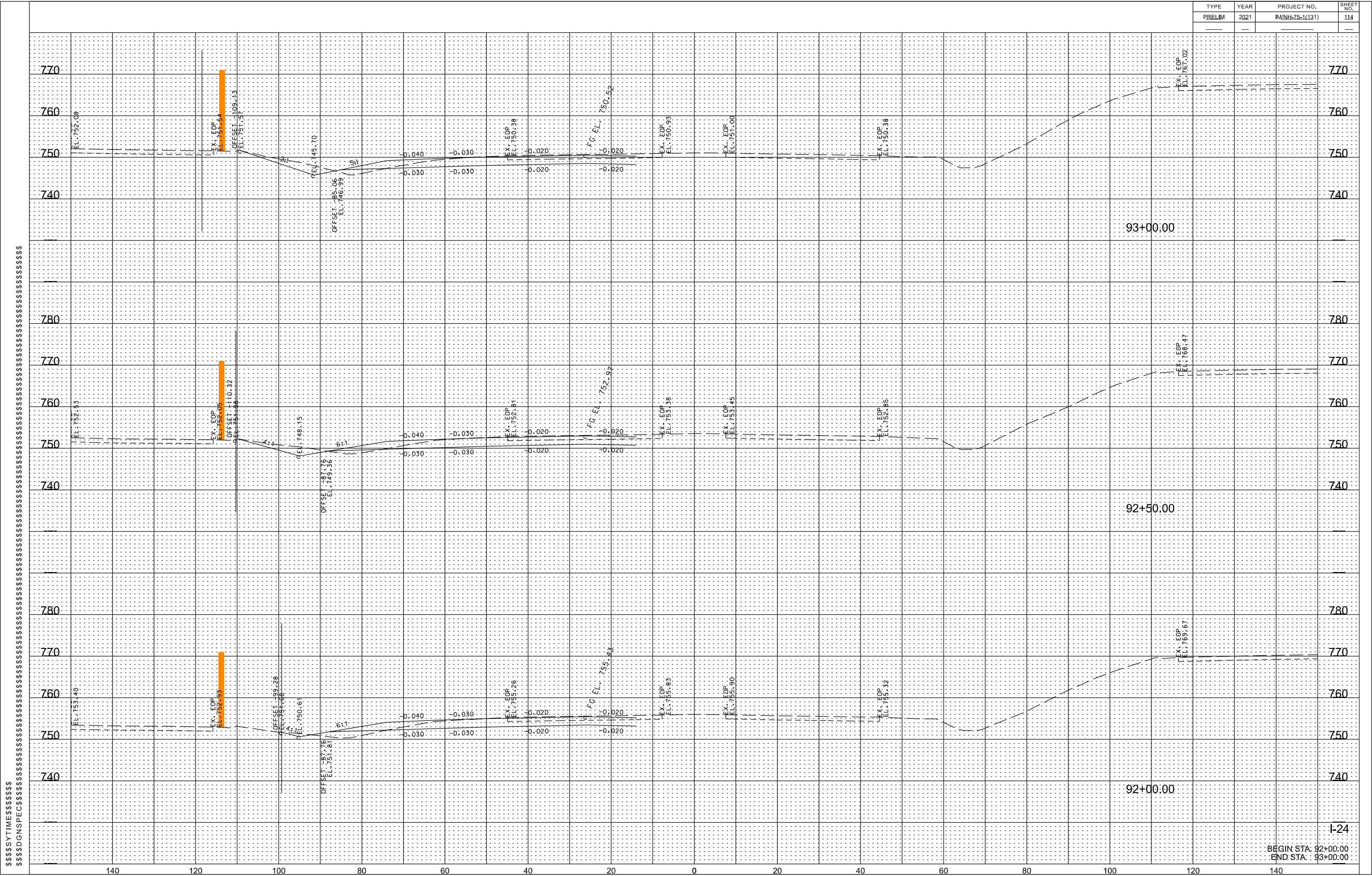
\$\$\$\$\$TIME\$\$\$\$\$  
\$\$\$\$\$DGN\$PC\$\$\$\$\$

BEGIN STA: 86+50.00  
END STA: 88+00.00

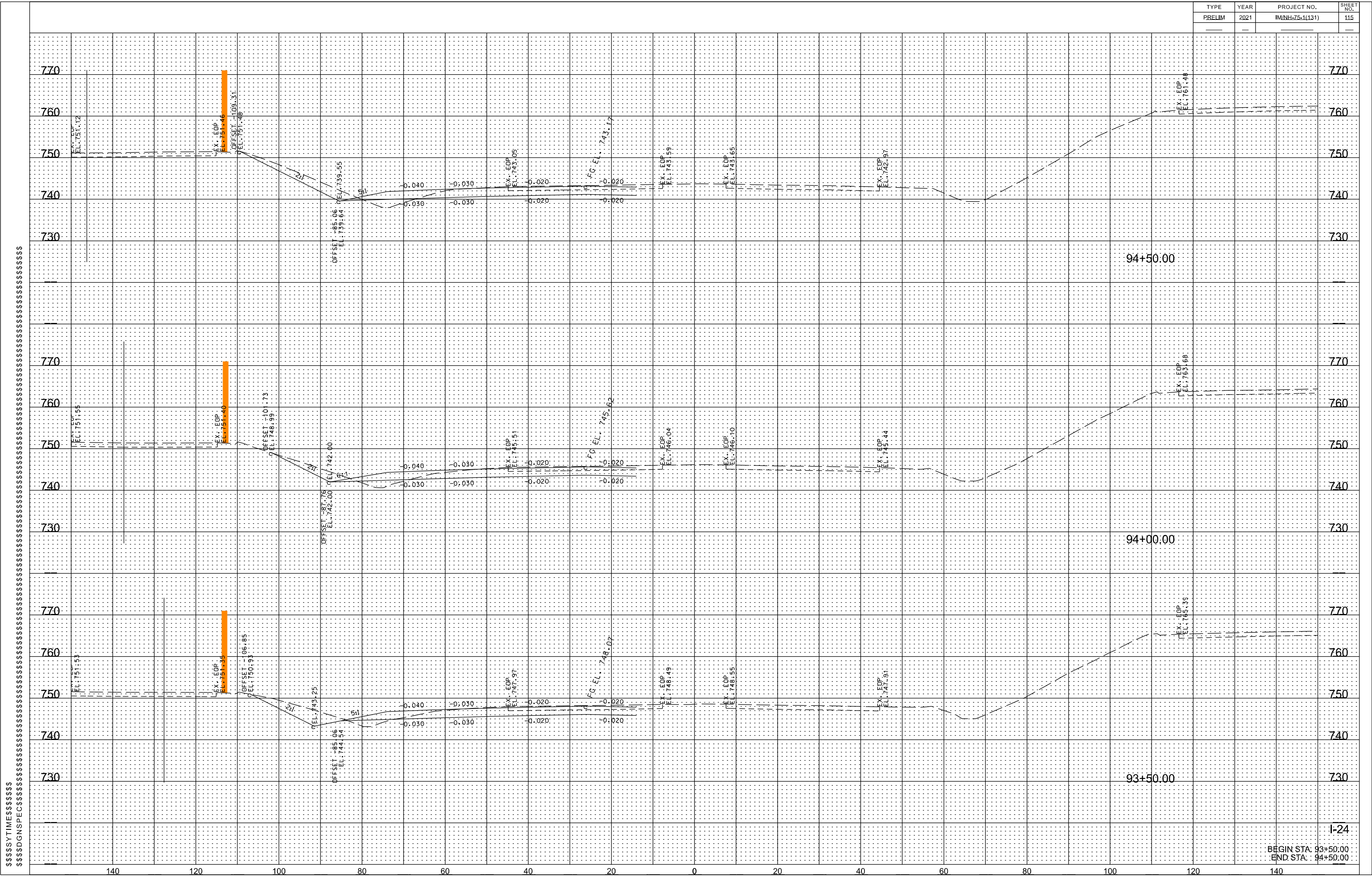
1-24



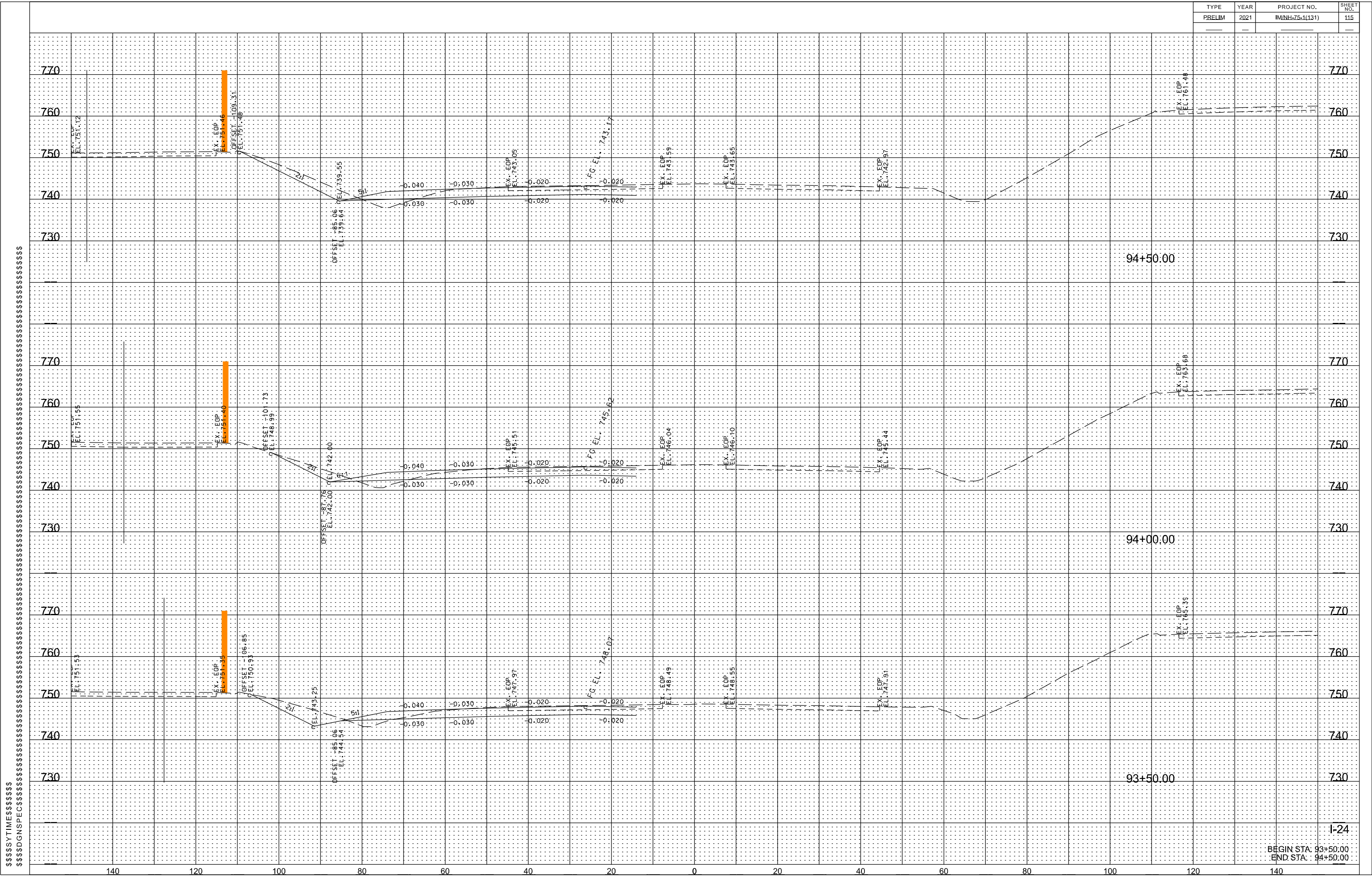






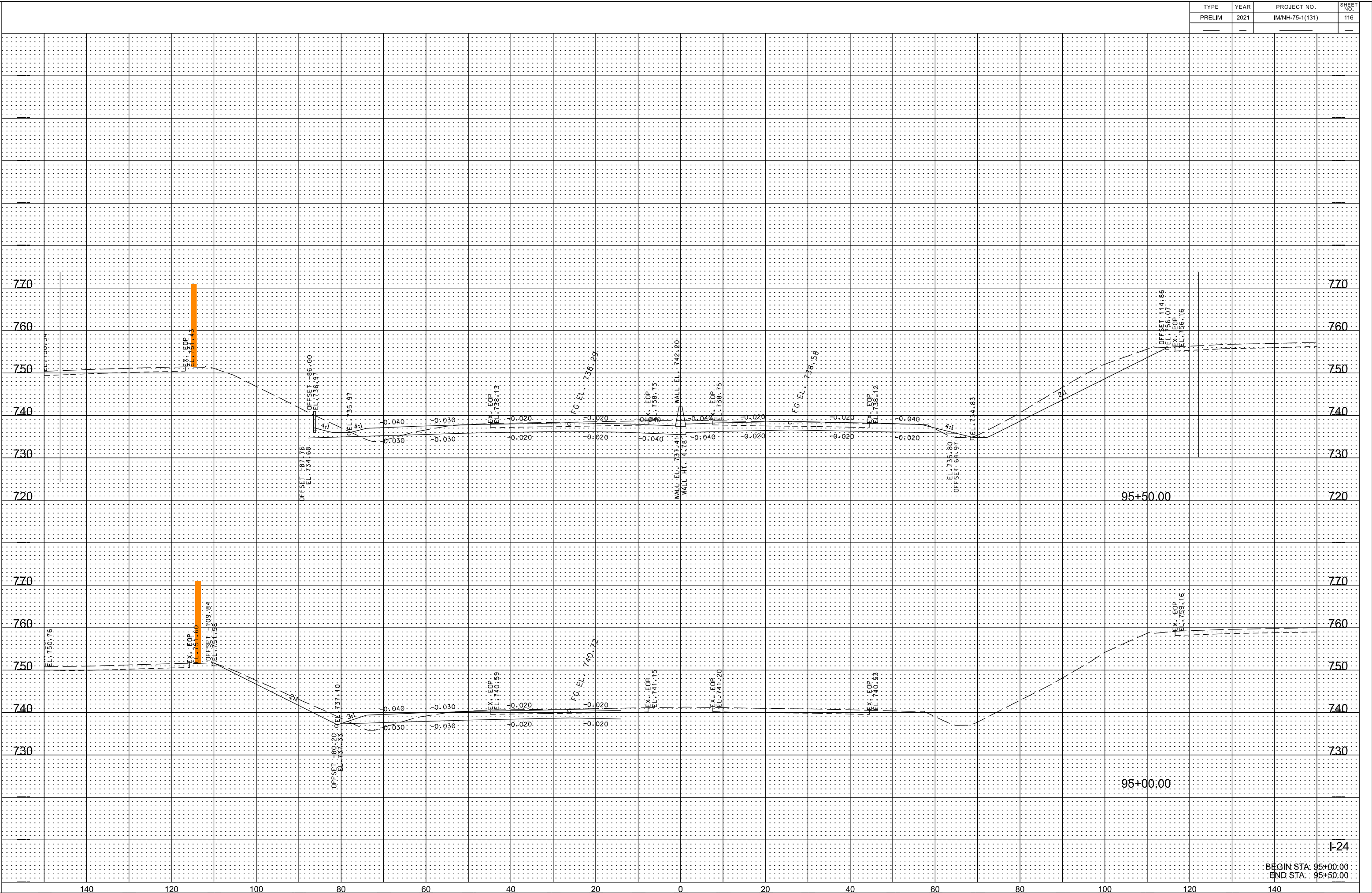
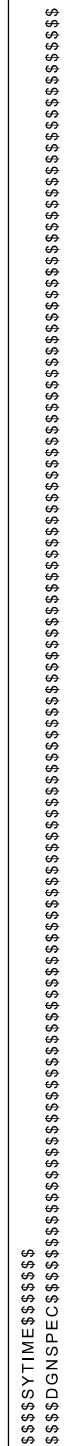


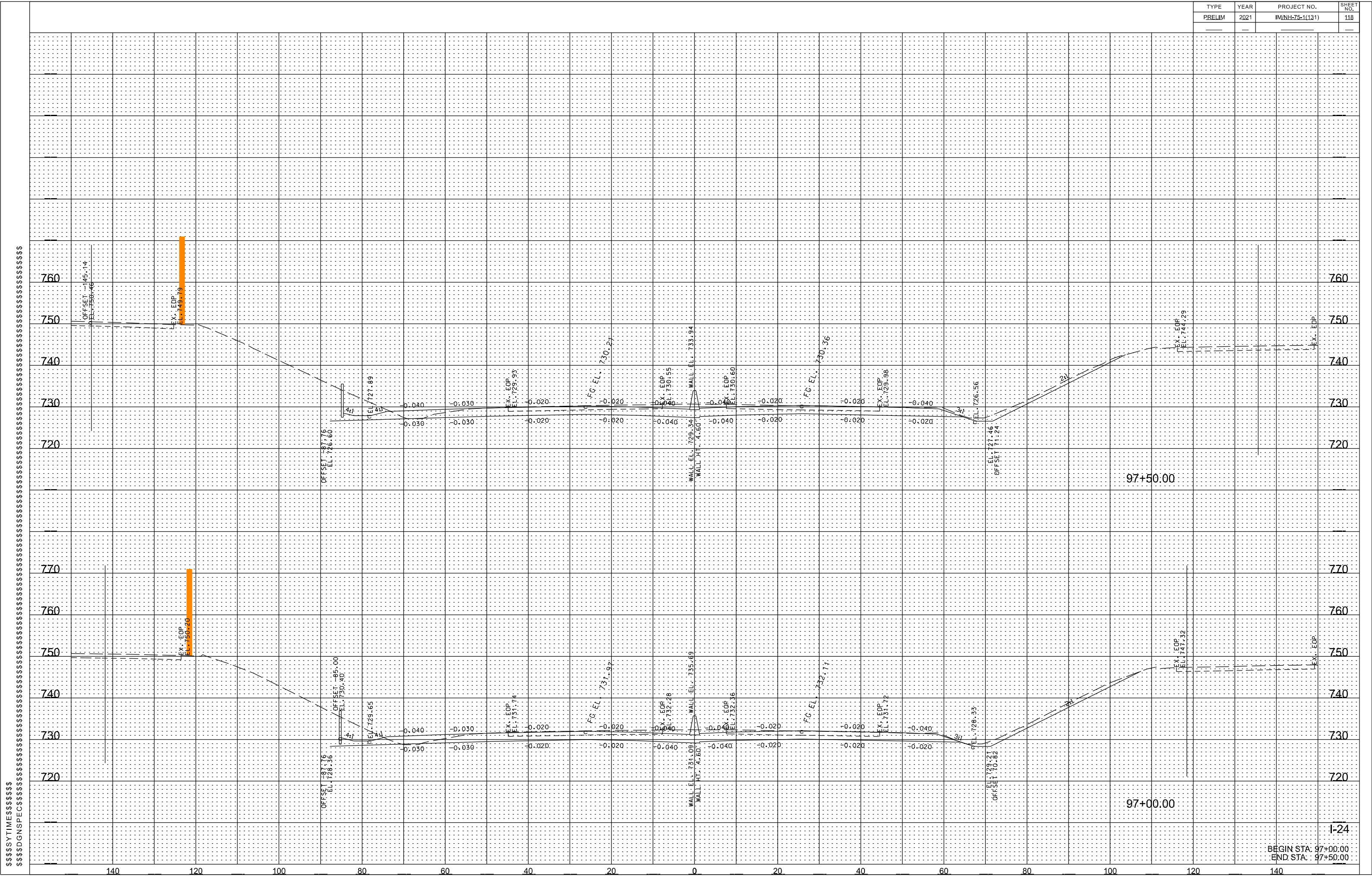
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NHL-75-1(131)	115
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TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NHL-75-1(131)	115
—	—	—	—

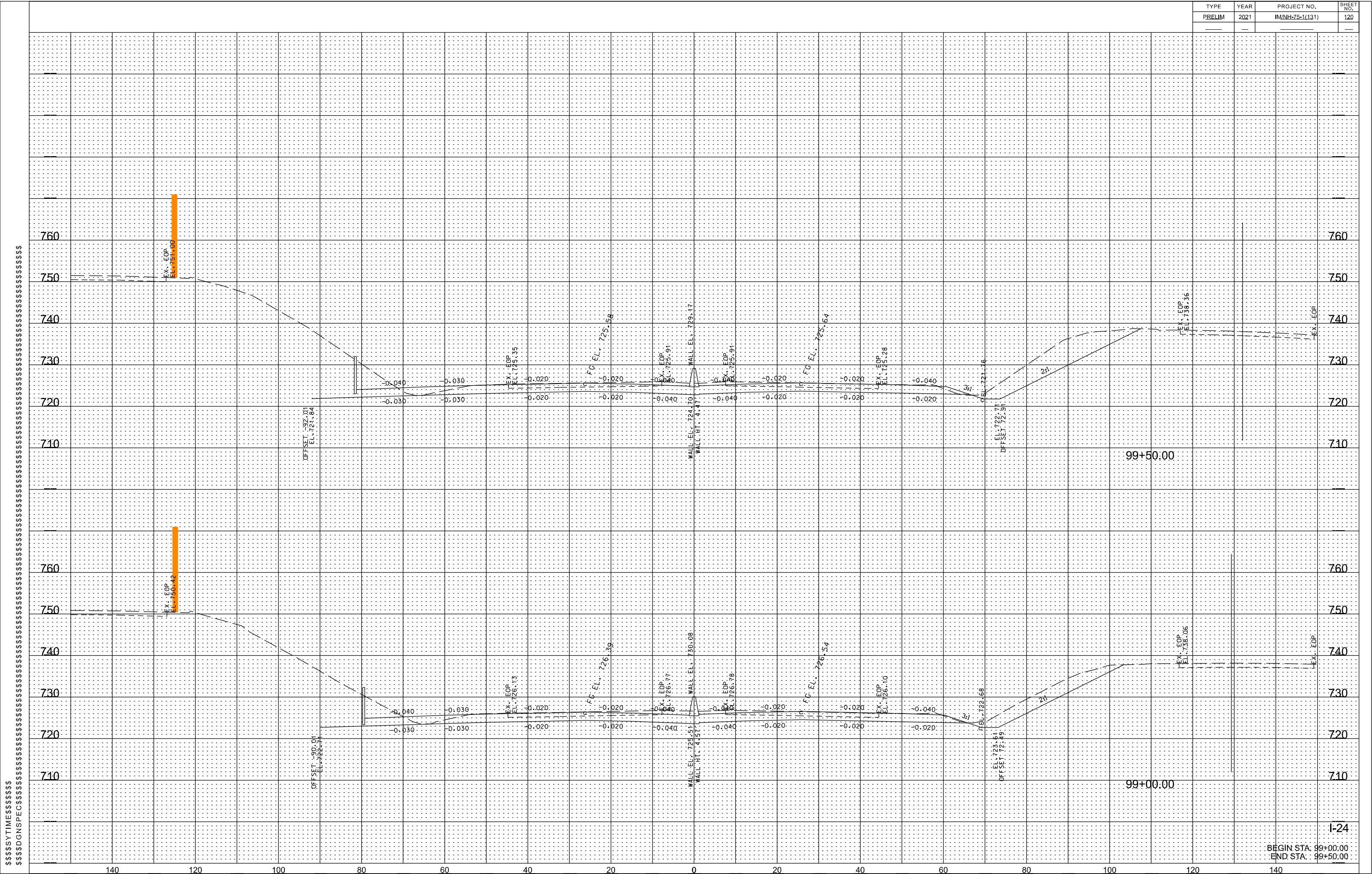
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	116
—	—	—	—



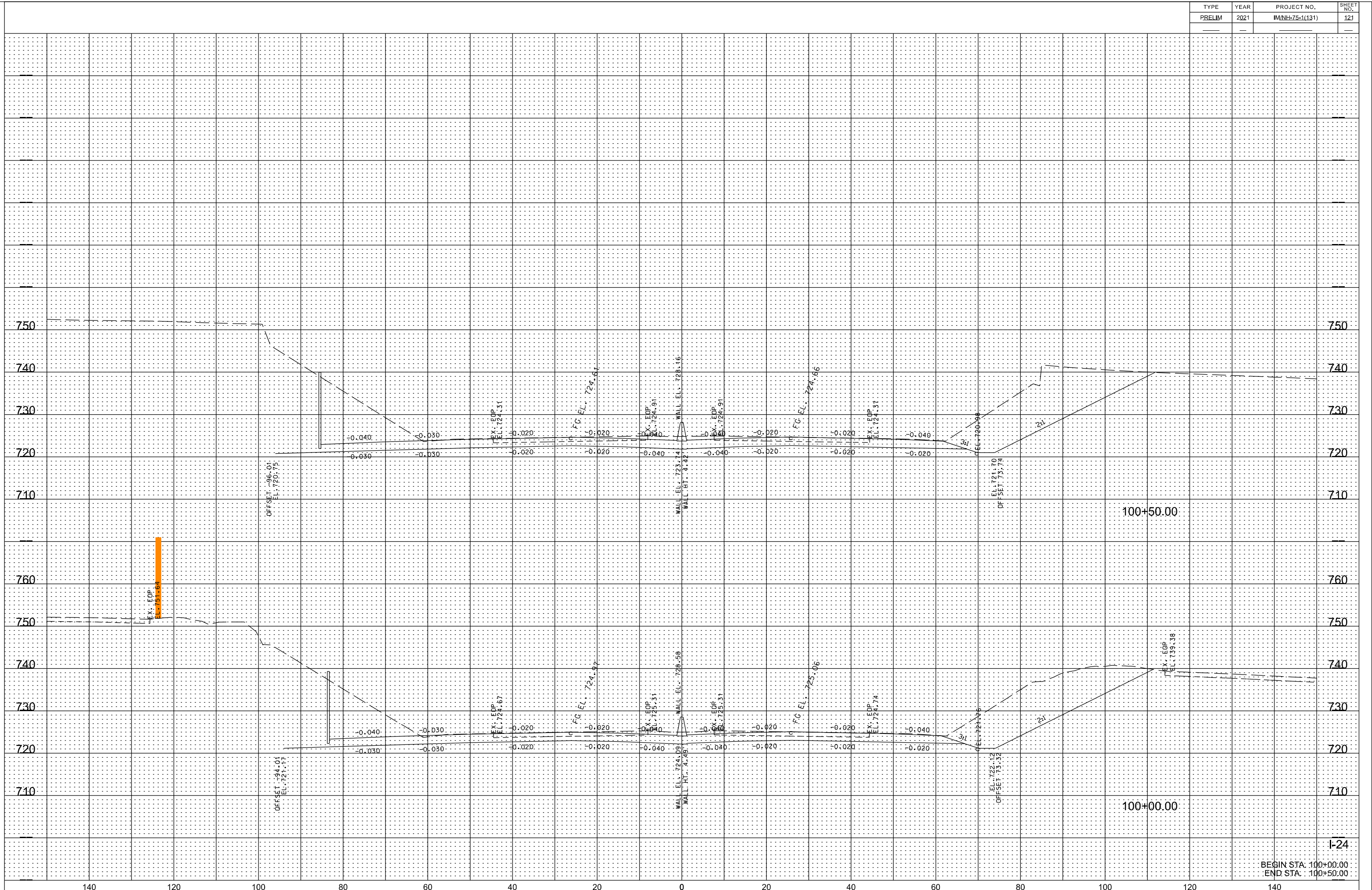
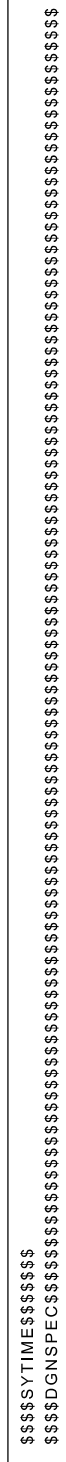








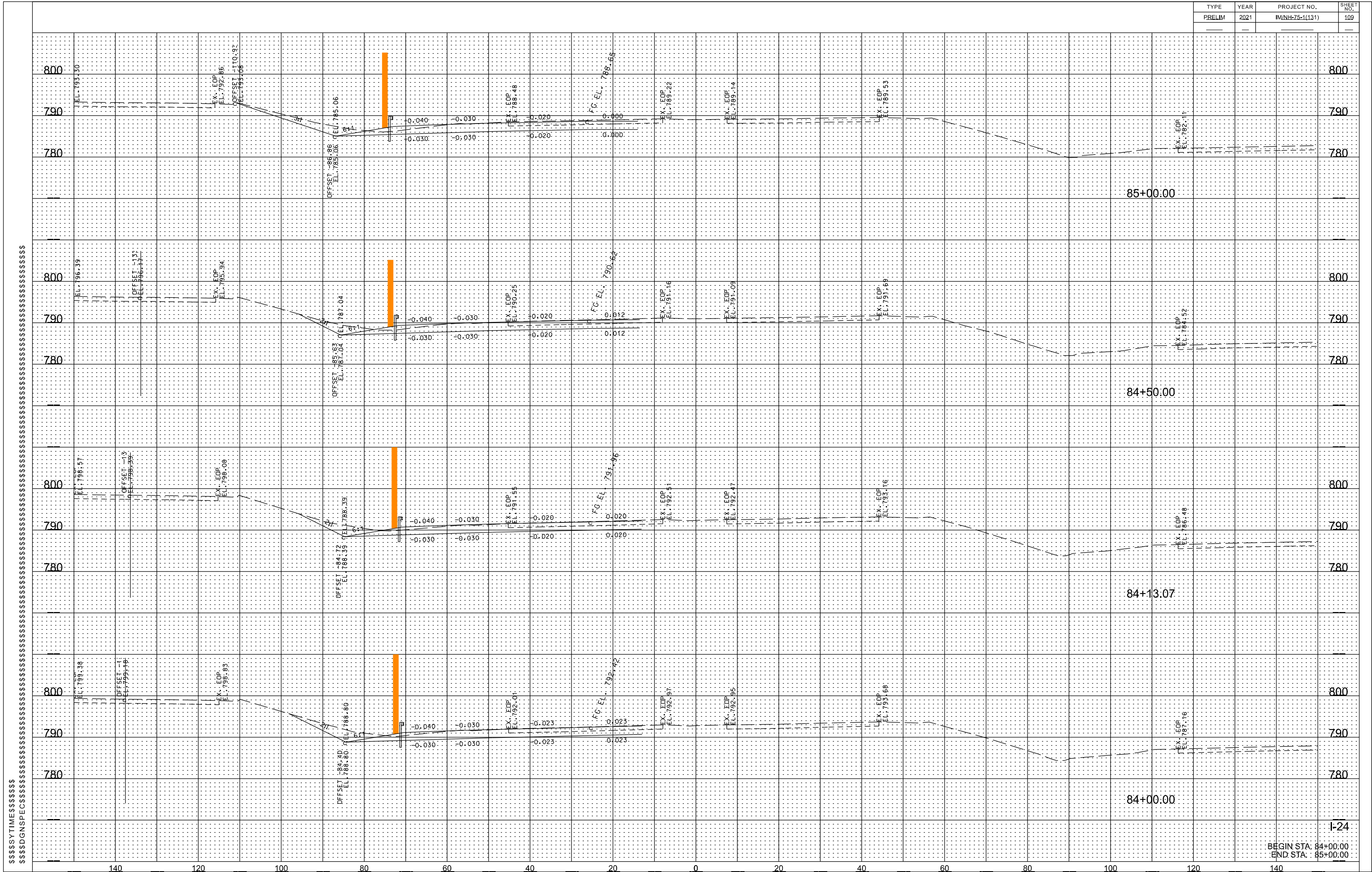
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	121
—	—	—	—



**NAA 22, Option 2**



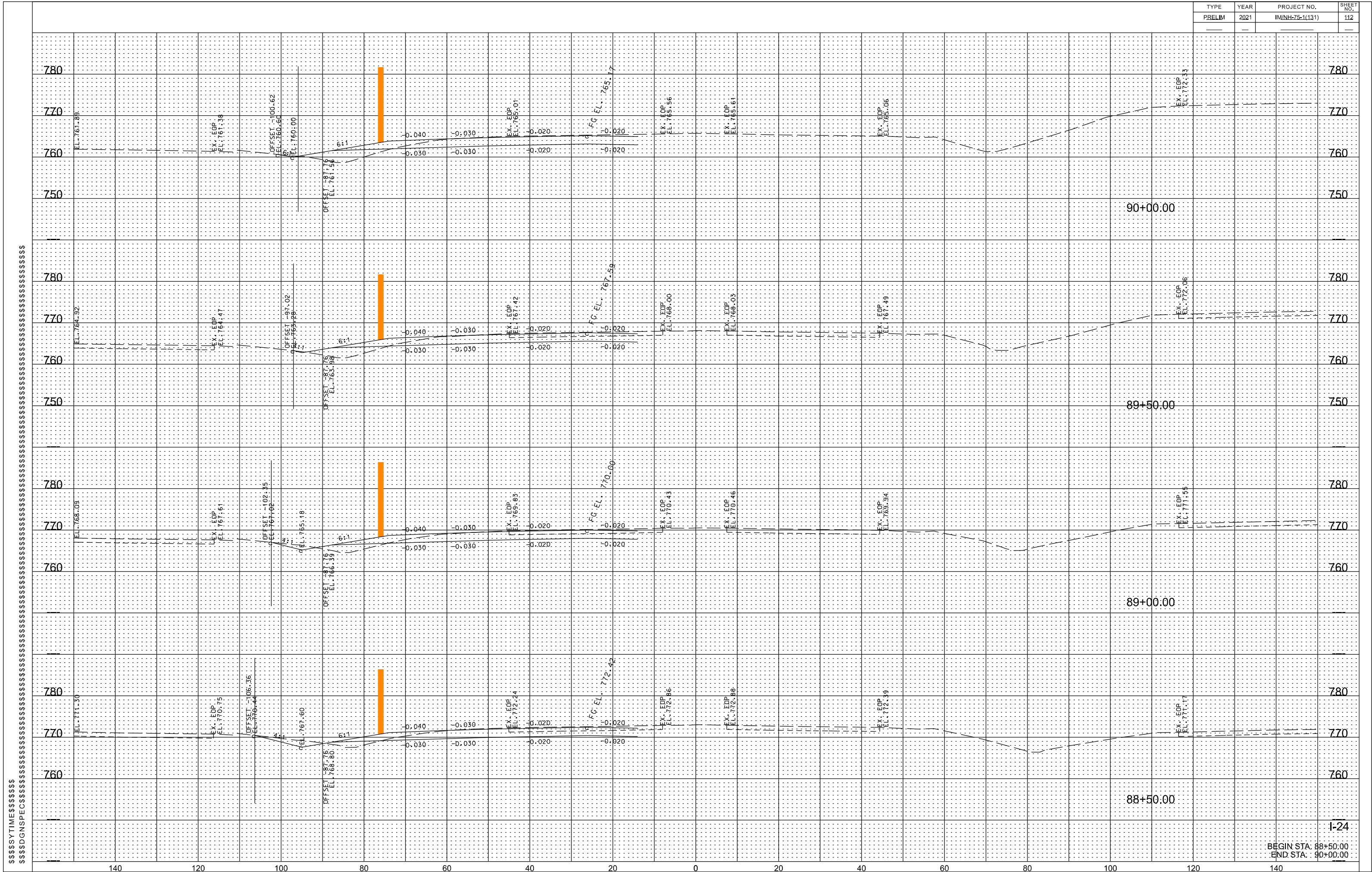
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	109
—	—	—	—



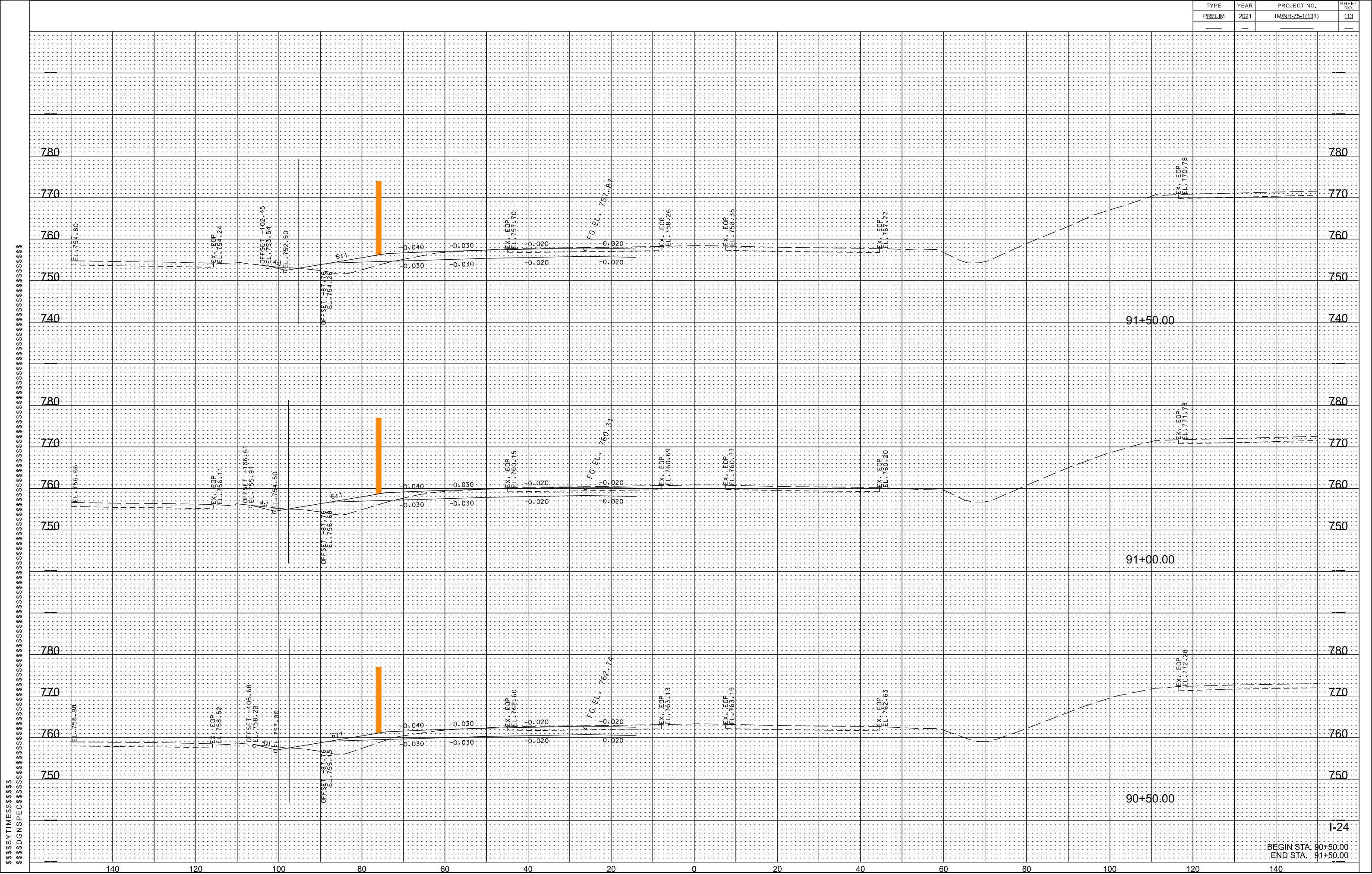


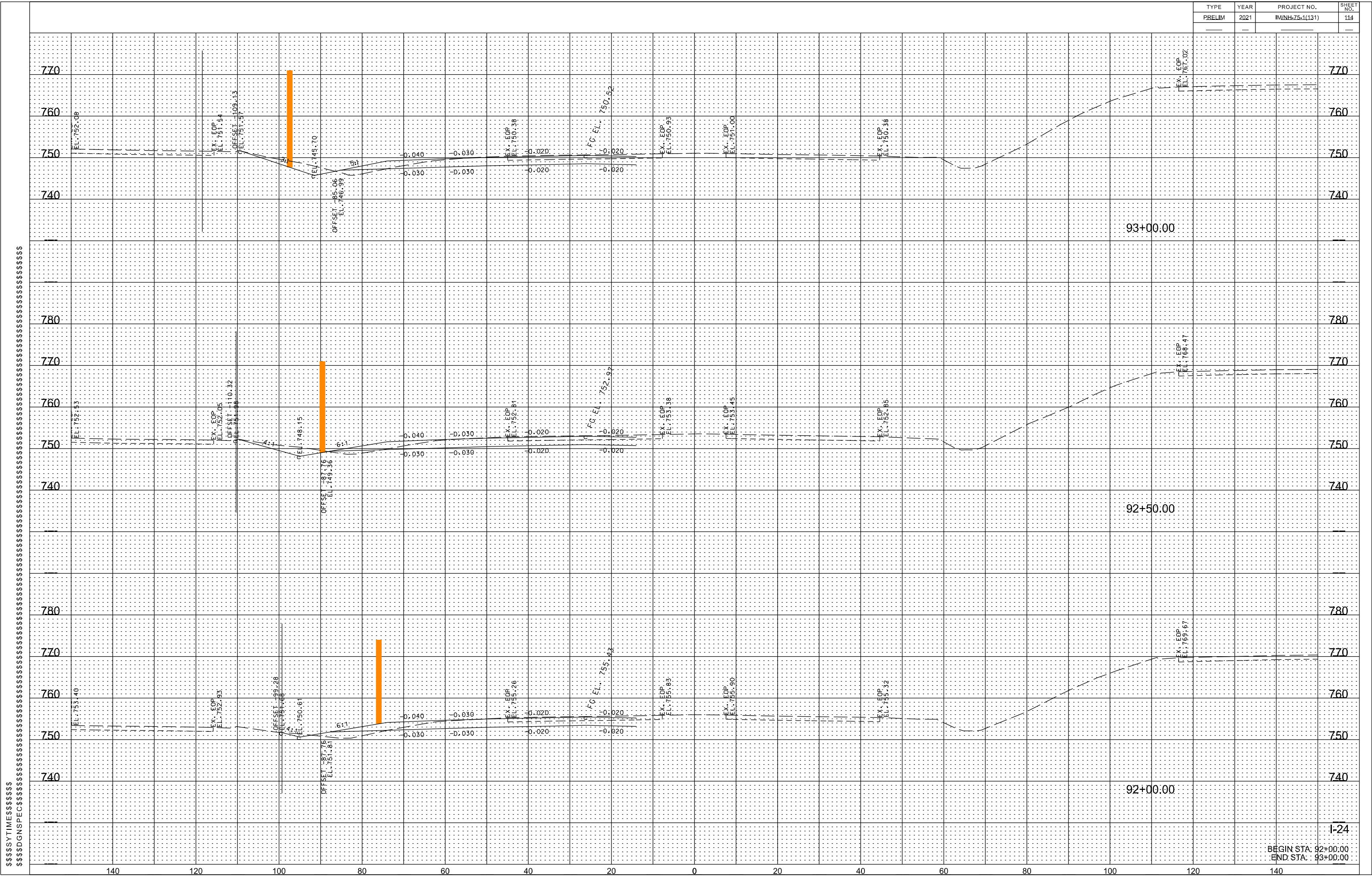


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	112
—	—	—	—





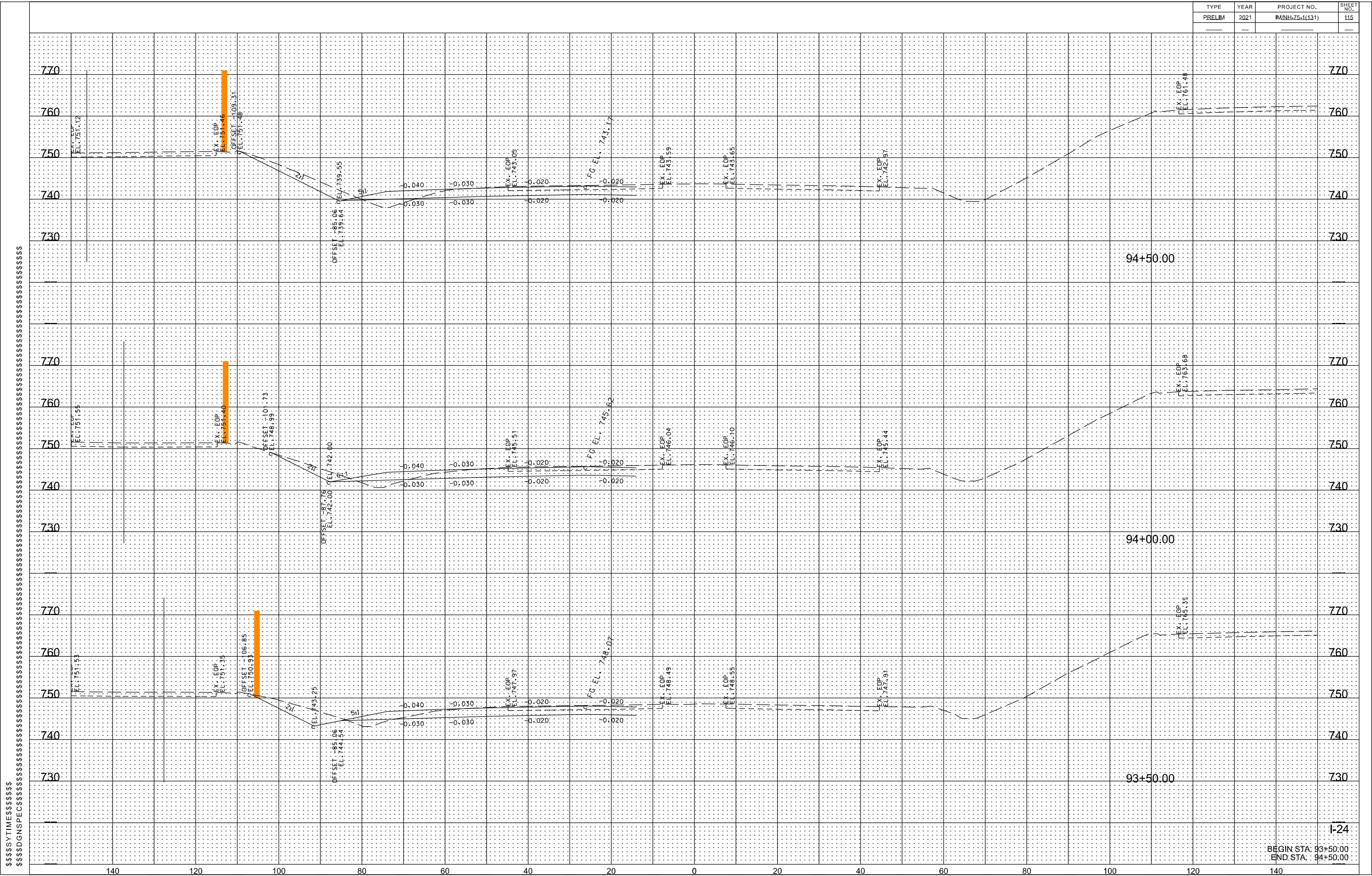




TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	114
—	—	—	—

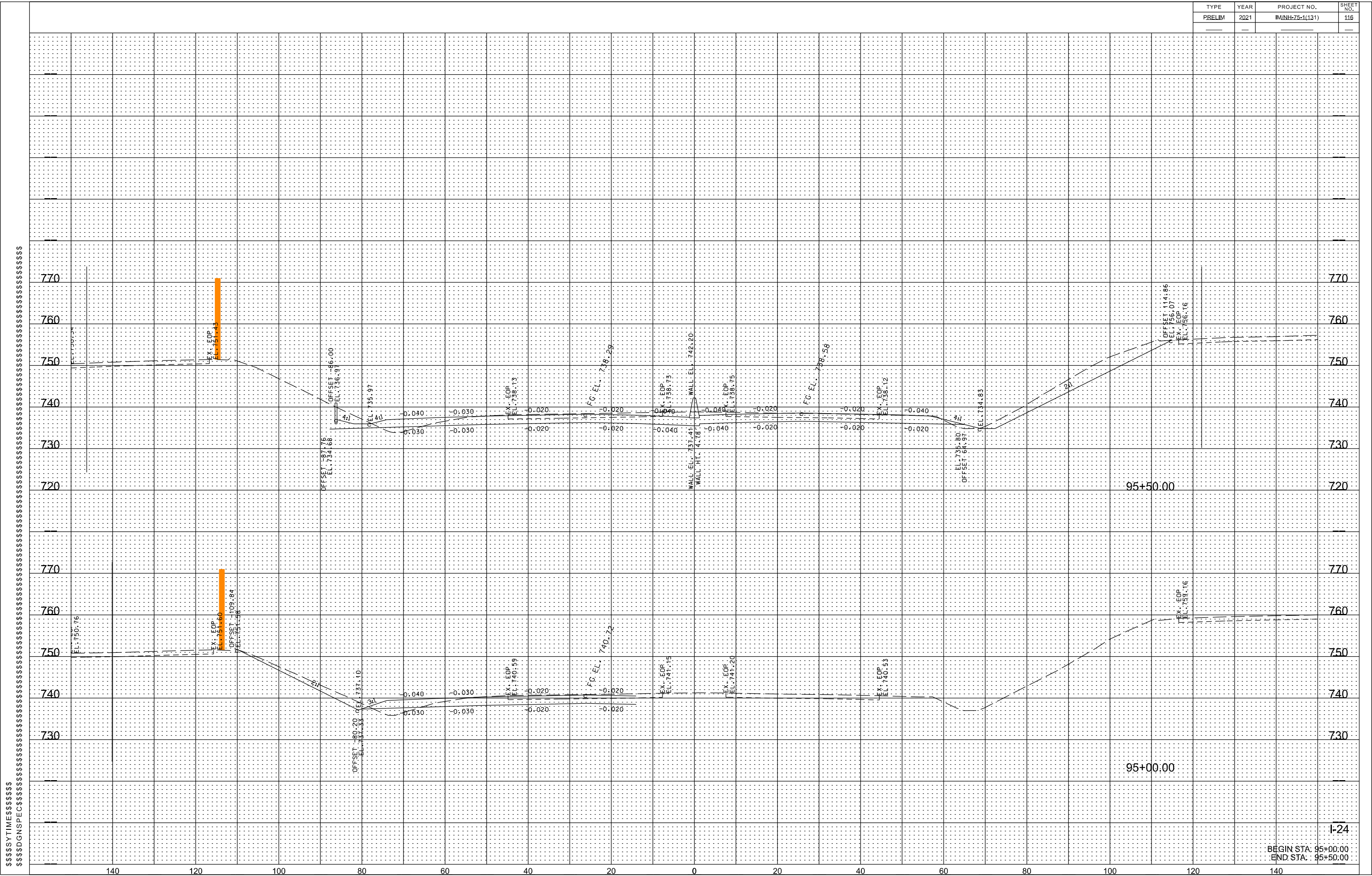
BEGIN STA: 92+00.00  
END STA: 93+00.00

1-24



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	115
—	—	—	—

BEGIN STA: 93+50.00  
END STA: 94+50.00

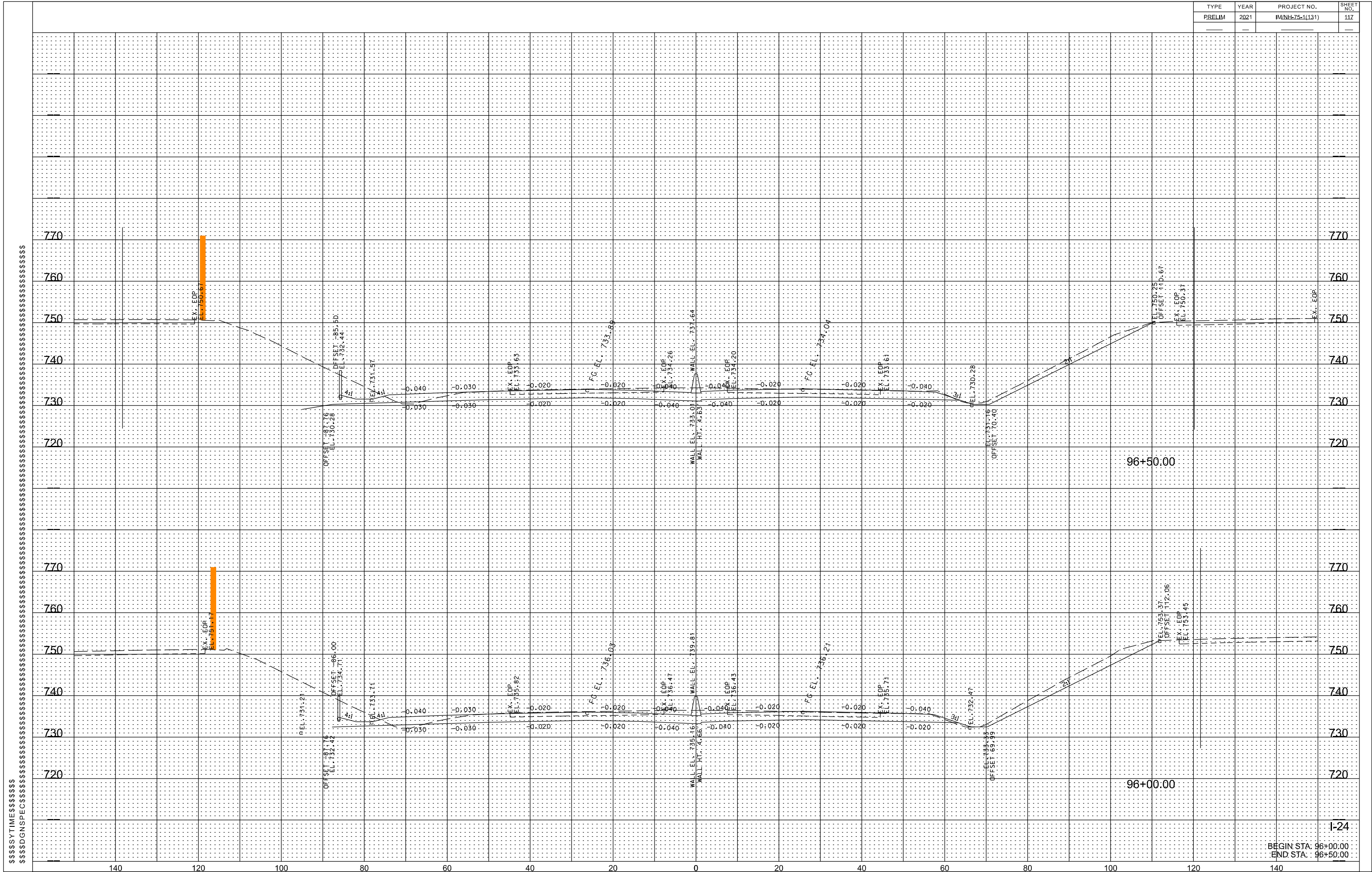


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	116
—	—	—	—

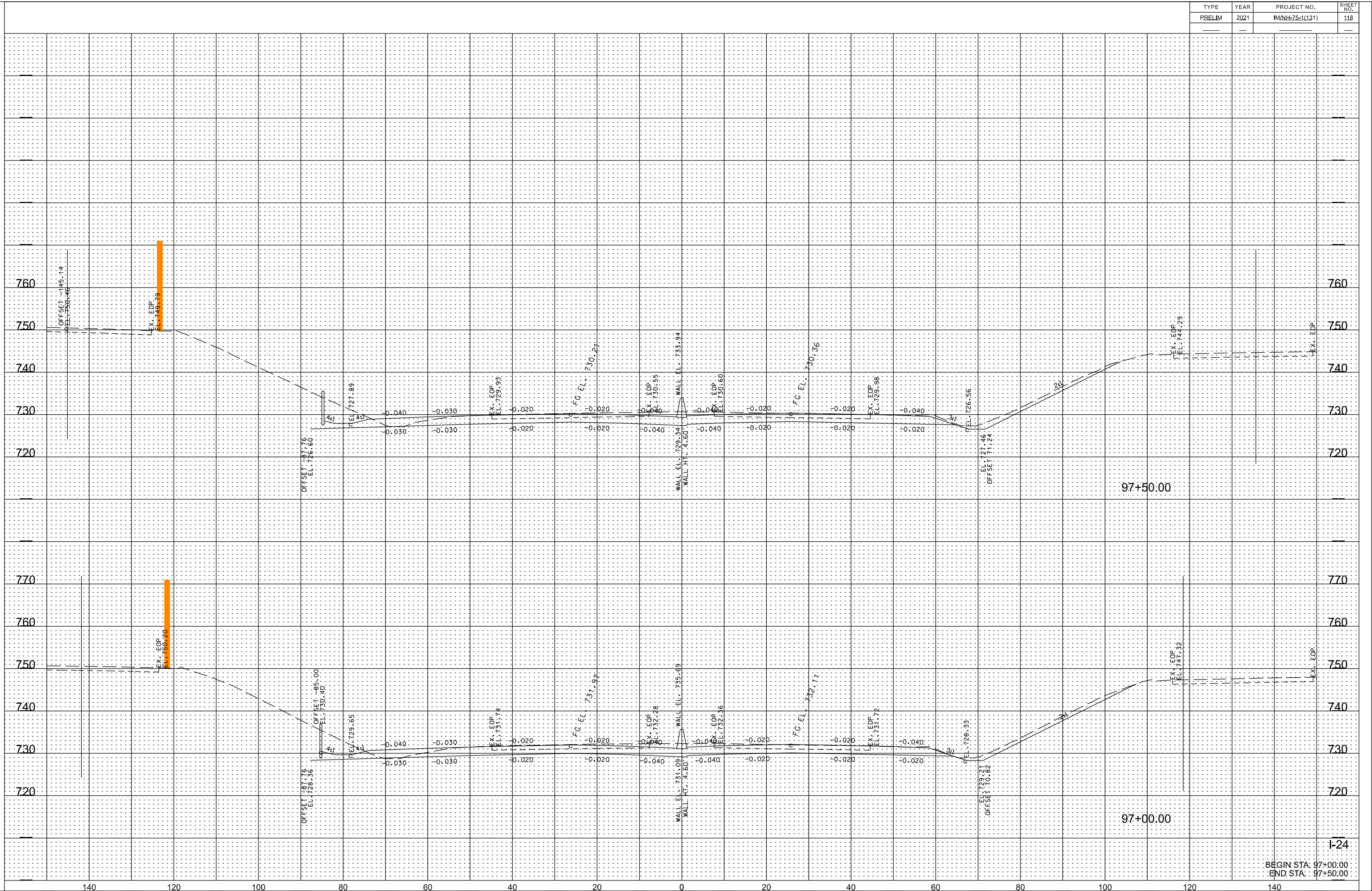
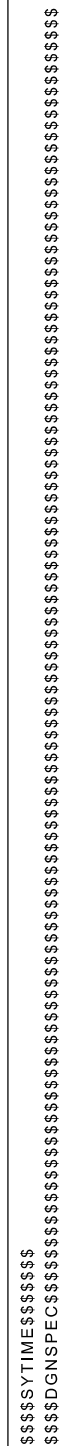
BEGIN STA: 95+00.00  
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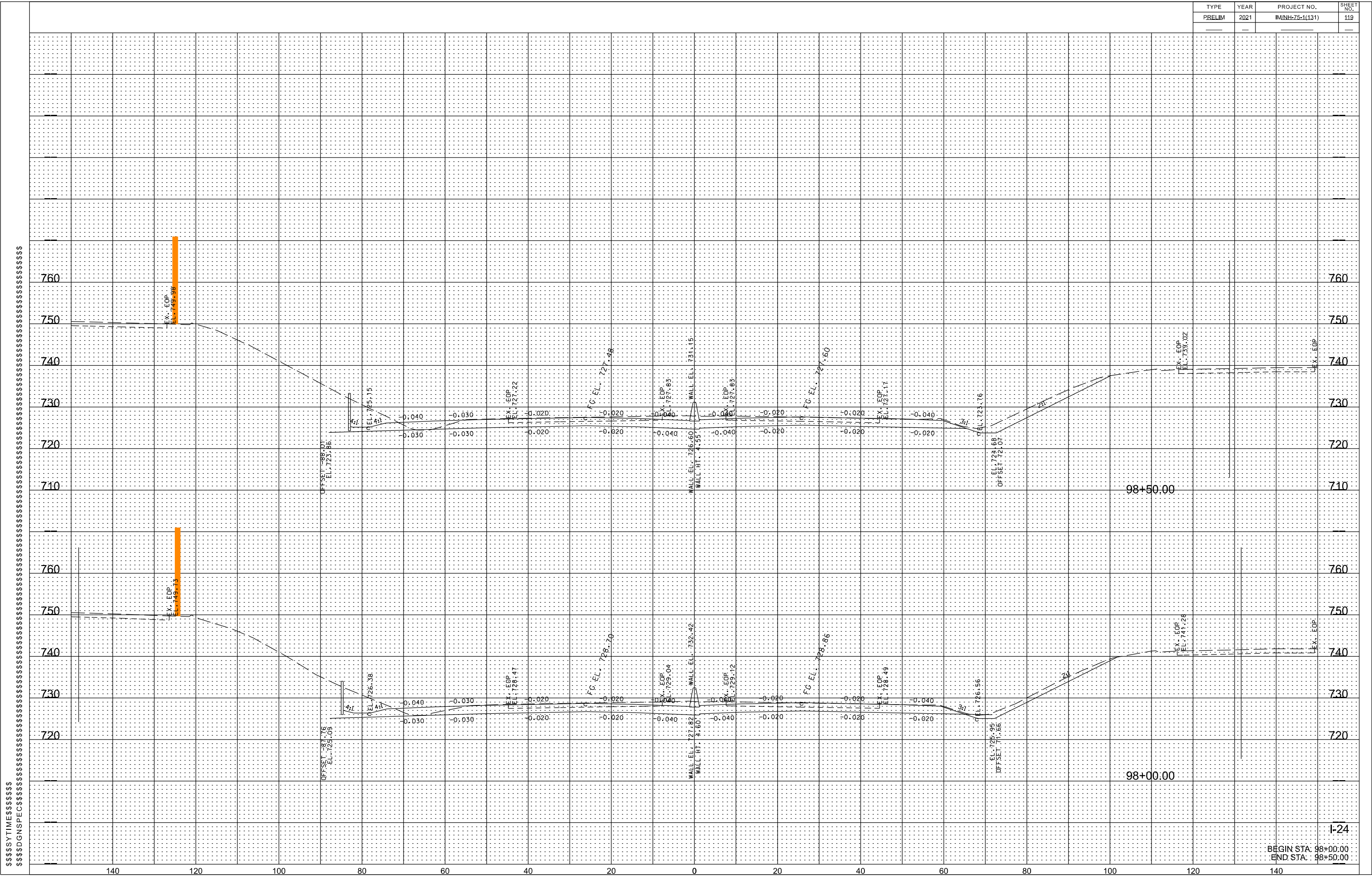


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	117
—	—	—	—

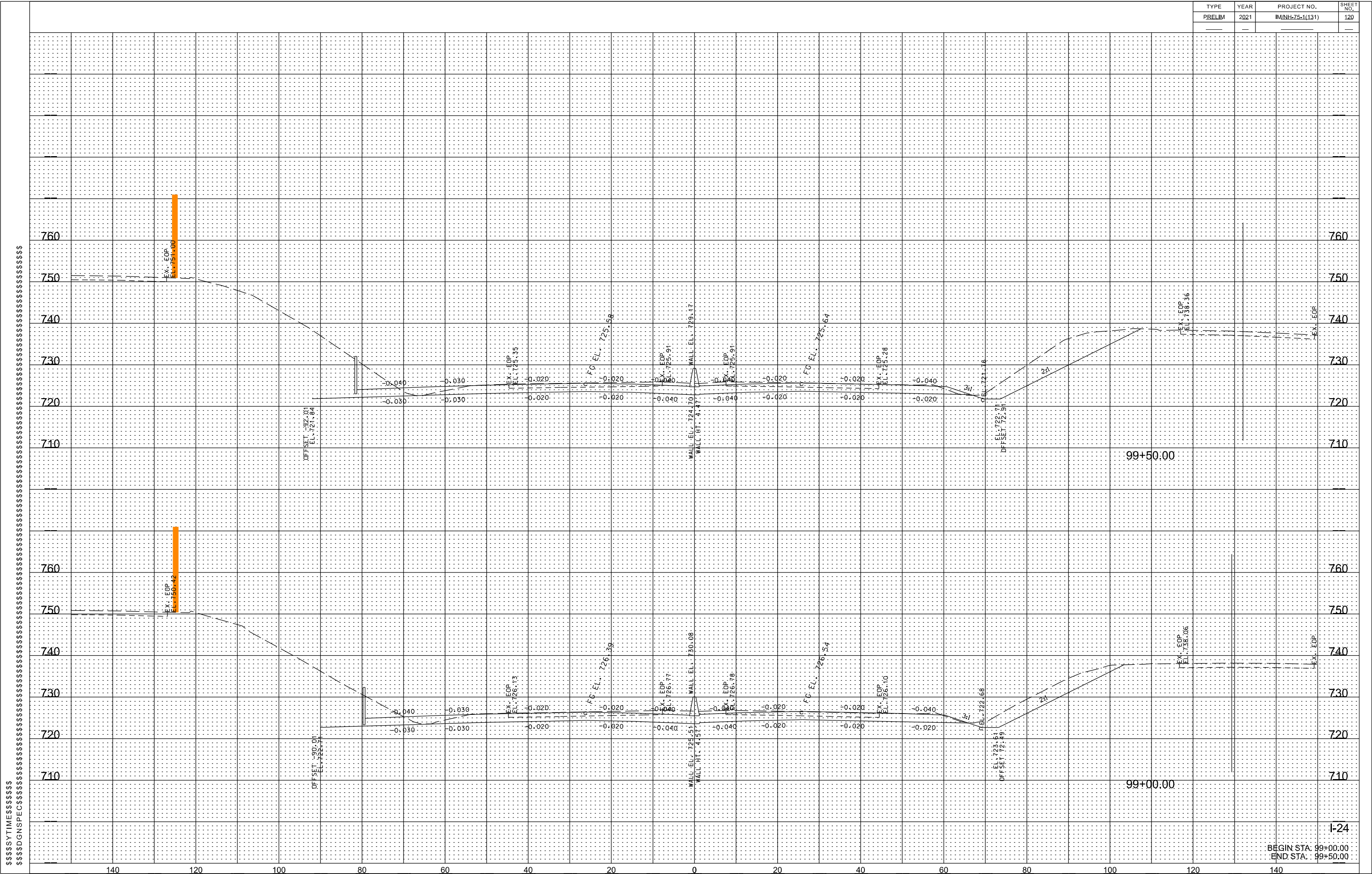


TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	118
—	—	—	—

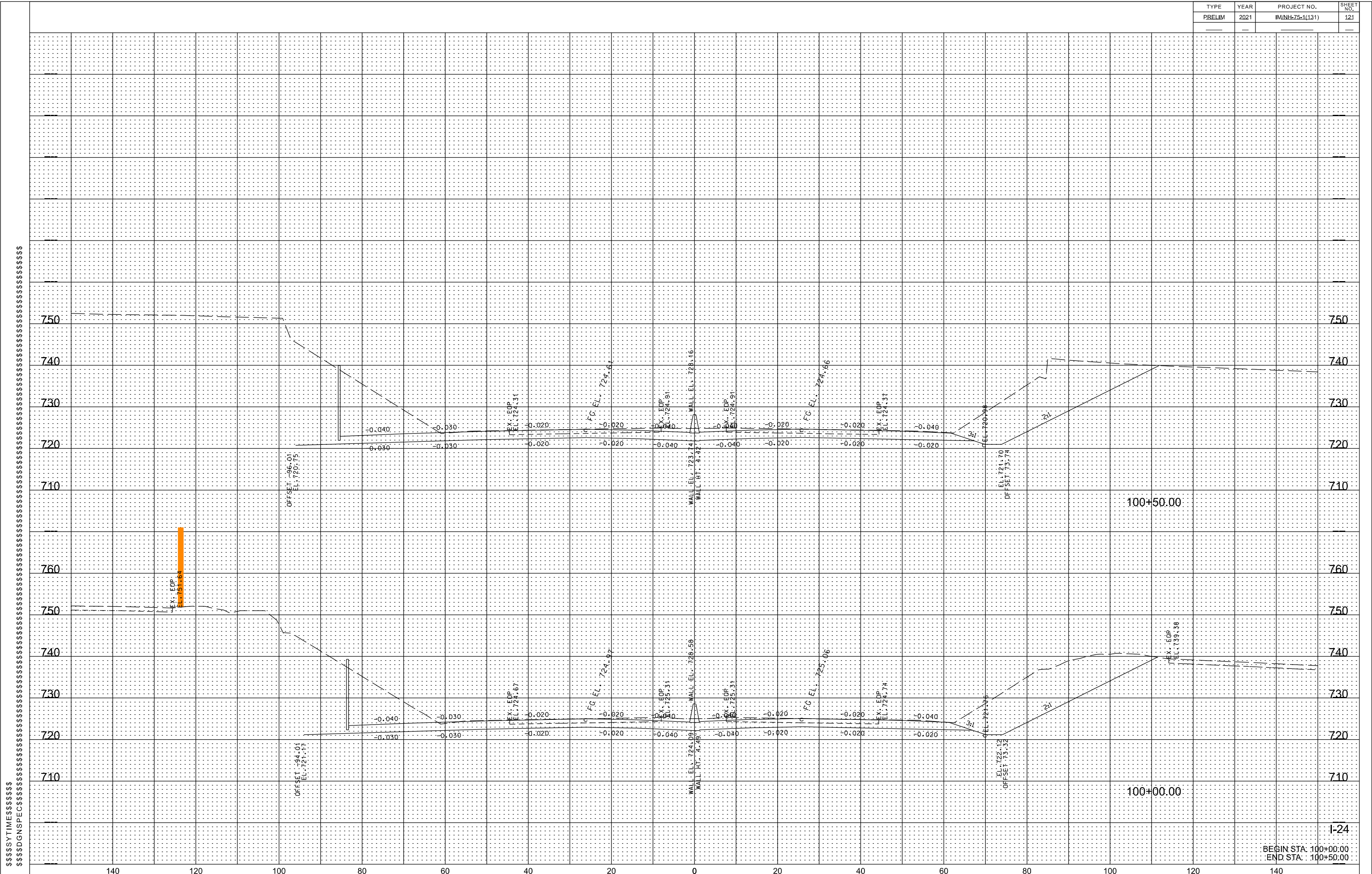




TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH-75-1(131)	119
—	—	—	—







TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM	2021	IM/NH/75-1(131)	121
—	—	—	—

BEGIN STA: 100+00.00  
END STA: 100+50.00