# **New Jersey Department of Transportation**





## **Sample Plans-2016**

The Sample Plans illustrate presentation format and have been developed with the purpose of instituting uniformity in the presentation of Roadway and Bridge construction plans. It is not the intent of the Sample Plans to reproduce all presentation situations that are already adequately covered by the New Jersey Department of Transportation Design Manuals, Standard Specifications, Procedures Manual and other publications readily available to the Designer.

The various plan sheets of the Sample Plans have been compiled from an assortment of projects and are not to be used by Designers for design purposes. The presentation and format of the plan sheets are to be used as guidance in preparation of contract plans prior to their development. When used in conjunction with good engineering knowledge, the Sample Plans will enable the Designer to submit an acceptable set of contract plans.

The Sample Plans do not depict all possible circumstances that may be encountered in the design of the various sheets, nor do they depict all possible types of items that may be encountered on a particular 'type' of sheet. It is recognized that situations will occur where good engineering judgement dictates deviations from the presentation shown in the Sample Plans.

Though implementation of the presentation format is highly desirable, exemptions from the presentation format may be made by the Project Manager. However, if the implementation would delay the project schedule or increase the project cost, the Designer must contact the Department's Project Manager to determine how to proceed.

Item numbers and descriptions are shown for illustrative purposes only. Sheet numbers represent the numbering of the sample sheets and do not correspond to the actual numbers to be used for a project. The following commentary to be used as a guide in conjunction with the sample plan sheets.

#### 1.0 General

Use standard 22" x 36" size sheets made of 4 mils thick polyester film, such as Mylar or Herculene for the contract plan set which is matted on both sides and drafted in black ink. Submit Plan sheets produced by CADD on Mylar. Cross Section sheets, however, may be matted on one side and may be 3 mils thick. Electrical drawings to also be matted on one side and to be produced by CADD in accordance with Traffic Signal and Safety Standards. Adhesive backed reproduction film of any type (stick-ons) will not be permitted.

Due to the approximate half scale size of the Sample Plans, the standard element sizes shown have been increased for clarity purposes. Plan presentation should conform to the "online" CADD standards and information available through the NJDOT, Design Services website. Other sizes will be accepted as long as it is legible at a reduced scale and reasonably matches the standards.

Show a microfilm mark on all plan sheets. This mark is to extend downward, perpendicular, 1/4" from the bottom border line at the center of the sheet. Use the same weight for the line and the border.

Draw a split circle for the sheet number in the lower right corner on all plan sheets. Number all plan sheets consecutively in the upper portion of the split circle beginning with Number 1 for the Key Sheet. The total number of sheets to be indicated in the lower portion of the circle on the first and last sheets of the plans. Plan sheet numbers not to be repeated with letter designations.

**Cross-outs on plan sheets will not be permitted**. If a revision requires deletion of information on the plan sheets, remove the information from the drawing rather than crossed out.

Establish a double reference numbering system, as specified under the headings of the various plan sheets for each 'type of plan' in the contract set of plans. Utilize the following abbreviations and preferred order of plans for the double reference numbering:

1 2 3 4 5 6 7 8	EDQ TS PSI CL C EP D ADA	Estimate and Distribution of Quantities - Roadway Typical Sections Plan Sheet Index Construction Legend Construction Plans Environmental, Soil Erosion & Sediment Control Plans Drainage and Erosion Control Plans Curb Ramp Layout Detail
9	DTL	Construction Details
10 11	P T	Profiles Ties
12	G	Grades
13	TC	Traffic Control (and Staging Plans)
14	TSP	Traffic Signal Plans
15	E E	Electrical Plans
16	– HL	Highway Lighting Plans
17	ITS	Intelligent Transportation System Plans
18	U	Utility Plans
19	SL	Sign Location Plans
20	TSS	Traffic Signing and Striping Plans
21	STD	Sign Text Detail
22	L	Landscape Plans
23	MS	Method of Cross Sections
24	X	Cross Sections
25	EQB	Estimate of Quantities - Bridge
26	В	Bridge Plans

As examples, the first Construction Plan sheet, of 20 total construction plan sheets, label C-1 of C-20, the second C-2 of C-20, and the last construction plan sheet label C-20 of C-20. Label Construction Plan sheets between these sheets consecutively, C-3, C-4, etc. The first Electrical Plan sheet of six total electrical plan sheets, label E-1 of E-6.

Variations to the above abbreviations for combined plan sheets are acceptable. The double reference number would then be a combination of the individual plans (Example: D&L - Drainage and Landscaping Plans). The plan that appears first in the plan sheet listing to be first in the abbreviation.

Federal blocks located in the upper right corner of the plan sheets to show a Federal Project Number(s) when applicable. On 100% State funded projects, the Federal block to remain on the plan sheet but to remain blank.

All sheets, except Estimate-Distribution of Quantities, Estimate of Quantities-Bridge, Tie Sheets, Cross Sections, Construction Details and sheets with charts or text, to show a graphic scale. Place the graphic scale at the top center of each plan sheet or centered above the title block but the location should remain consistent throughout the construction set. Cross Section sheets to delineate scale either by appropriate numbers on the heavy vertical and horizontal lines or by a graphic scale.

#### 2.0 Item Numbers

The item number consists of seven characters: first three numbers correspond to the specification section number; the following three numbers are sequential numbers from 001 to 999, and the suffix "M" or "P" designates if the item is either a measured quantity or a proposal quantity.

Item Numbers on all plan sheets to indicate proposed work, such as Construction Plans, Drainage Plans, etc. in the **"TO BE CONSTRUCTED"** boxes and in the elliptical shaped bubbles. Provide Item numbers with the suffix "M" or "P" in the **"TO BE CONSTRUCTED"** box. However, suffix "M" or "P" is not required in the elliptical shaped bubbles due to space constraints.

For more instructions on how to handle Item numbers, refer to the **CONSTRUCTION COST ESTIMATE GUIDELINES.** 

#### 3.0 KEY

The Key sheet to include a Key Map indicating the location of the project. The Key Map to be centered on the sheet and to be drawn to a scale of about 1"=1000' to 1"=4000', except Local Highway projects which may be submitted at a smaller scale. Clearly indicate the delineation of the proposed project by **BEGIN PROJECT**, **END PROJECT**, **BEGIN FEDERAL PROJECT** and **END FEDERAL PROJECT** with a Federal Project Number (Construction) when applicable, and all **STOPS** and **RESUMES** to be noted and marked by stationing on the Key Map. Provide the mainline *beginning* and *ending* station at the major construction work limits of the project with mile marker references. Exclude proposed signage, striping, related to traffic control items installed in advance of, or beyond the major construction work of the project. When the project involves more than one State Highway, provide a **BEGIN PROJECT** and **END PROJECT** for each State Highway. For projects that encompass a single work site location such as a bridge deck, superstructure,

or full bridge replacement or multiple work site locations such as sign structure replacements or multiple bridge sites, the use of a project site designation on the Key Map without a project length is permissible.

The longitude and latitude for the midpoint of the project must be shown on the key map in the following format: DD<sup>o</sup> MM' SS" (with direction).

Definition of midpoint of project:

For a continuous project, it would be the actual midpoint.

For a non-continuous project, identify the midpoint as if the project were continuous.

For an intersection improvement, draw a circle around all the intersections and use the center of the circle as the midpoint.

For Statewide projects, use the geographical center of NJ, which is:

Longitude: 74° 38' 42" W Latitude: 40° 11' 01" N

For Bridge projects, use the center of the entire project as the midpoint.

For multiple bridges, draw a circle around all the bridges and use the center of the circle as the midpoint.

A north arrow, station equations, names and locations of corporate lines, municipalities, counties, streets, structures, railroads, and waterways to be clearly shown on the map.

The Control Section number, when applicable, above the right corner of the Key Map. Indicate below the left corner of the Map the type of highway as obtained from the Straight Line Diagram and from the table shown below. A graphic scale for the Key Map, and the length of the project and length of the Federal project in linear feet and miles to appear beneath the Map.

Highway Type Legend						
Facility Type Functional Classification						
F	Interstate /Freeway	Р	Principal Arterial (Urban or Rural)			
Е	Expressway	М	Minor Arterial (Urban or Rural)			
D	Divided	С	Collector (Urban or Rural Major)			
U	Undivided	R	Collector (Rural Minor)			
		L	Local (Urban or Rural)			

Identify the Project Category abbreviation on the key sheet for all projects (located at the left corner over the Key Map). The six categories of projects, followed by the accepted abbreviation, are shown below:

- Interstate New Construction or Reconstruction (I NEW/RECON)
- Interstate Resurfacing, Restoration, and Rehabilitation (I 3R)
- National Highway System New Construction or Reconstruction (NHS-NEW/RECON)
- National Highway System Resurfacing, Restoration, and Rehabilitation (NHS 3R)
- Non-National Highway System (Non-NHS)
- Major / Unusual

Put the following note below the index of sheets box and indicate the year applicable to the project:

Standard Roadway Construction/Traffic Control/Bridge Construction Details Booklet dated (Year) and Standard Electrical Details dated (Year) are applicable to this project except for those details contained herein.

#### 3.1 Utilities

List all utilities located within the project limits in the Utilities box in the upper left corner of the Key sheet regardless of utility involvement. Pole lines, gas mains, transmission lines, rail roads, etc. to be noted. Also list electrical installations of the NJDOT (Traffic Signals and Lighting).

#### 3.2 Right of Way

When Right of Way is required for the project, the Route and Right of Way Section to be shown below the right corner of the Key Map.

#### **3.3 Proposed Structures**

Bridges, walls, sign structures, temporary structures, noise barriers, culverts to be constructed and structures to be demolished as part of the project to be listed in a box on the left hand side of the Key sheet. The listing to include a description of the type of proposed structure(s) and a legend to denote the structure(s). Structure numbers to also be included, if available. The location of the proposed structure(s) to be indicated on the Key Map by use of the legend.

Bridge Sample Plans provide guidance on the proper presentation of projects that include multiple structure types; such as, bridge structures, sign support structures and retaining walls. A General Note format to specify the design and construction specifications, concrete strengths and type of superstructure material is provided. Other drawings present guidance on abutment, deck slab, substructure element and framing plan illustrations.

#### 3.4 Design Traffic Data

Depict Design Traffic Data box in the lower left portion of the Key sheet. Include information as shown on the sample Key sheet and as described in the NJDOT Roadway Design Manual.

The anticipated date of construction is the present year. The future year for new construction and reconstruction projects is 20 years beyond the anticipated date of Plans, Specifications and Estimate (PS&E), and 10 years beyond the anticipated date of PS&E for resurfacing, restoration, and rehabilitation projects.

#### 3.5 Index of Sheets

List all sheets contained in the contract plans in the Index of Sheets box provided in the upper right portion of the Key sheet. The listing of the sheets are to follow the order shown in the section titled "General" on Page 1 of these Sample Plans. When the project includes Bridge Plans, the Estimate of Quantities - Bridge sheet to be included in the plans as shown on the listing included under General Information. If the number of contract plan sheets is large enough to require the sheets to be divided into multiple parts, modify the Box of Index Sheets to indicate the various parts as shown on the sample Key sheet. Generally, each part to consist of approximately 150 sheets.

#### 3.6 Consultant Signature

Write the name of the Designer in the lower left hand border of the sheet. Add the following statement to the Key sheet of all projects designed by Consultants:

"CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COMPARISON OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE FILED AT THE OFFICE OF THE CONSULTANT".

(NAME OF CONSULTANT) (CERTIFICATE OF AUTHORIZATION NO.\_\_\_ OR PROFESSIONAL ASSOCIATION)

(ENGINEER'S SIGNATURE) (DATE)

(ENGINEER'S NAME PRINTED)

(TYPE OF LICENSE AND NO.)

Each sheet in a Consultant designed set of plans, excluding plan sheets provided by the NJDOT and utility companies, must have the name of the consultant (consulting firm) and also state "Certificate of Authorization No. \_\_\_\_\_" or "Professional Association" as applicable, in the space adjacent to the name. In the space under "Engineer's name printed" state "New Jersey Professional Engineer License No. \_\_\_\_\_". Each consultant-designed sheet to be signed and dated by the consultant in the space provided under the "name of the consultant", just prior to the designer's plans, specifications, and estimate submission. However, if the utility company provides the design, it is also responsible for providing its professional engineer's signature.

Plans provided by a licensed landscape architect shall contain the following information in a title block, which shall be placed on all construction contract drawings prepared under his or her direction. The information shall appear legibly on the construction contract drawings and shall be clearly reproducible.

- 1. The full name of the licensed landscape architect as it appears on the license issued by the Board;
- 2. The signature of the licensed architect;
- 3. The license number and title: New Jersey Licensed Landscape Architect;
- 4. The date when signed; and
- 5. If applicable, the certificate of authorization number as required under N.J.S.A. 45:3A-16 and N.J.A.C. 13:27-8.11.

#### 3.7 Project Name

The titling of the Key Map sheet must include the following information and adhere to the format:

- Use the Project name as it appears in the Statewide Transportation Improvement Program (STIP) report.

Use of Supplemental Description such as:

- Township/County Location
- Route and Contract Number (or local street name when applicable)
- Work Limits (i.e. Riverdale Road to South Main St.)
- Work Description (i.e. Grading, Paving, Sign Structures, etc.)

After the Project name is permitted.

## State of New Jersey Department of Transportation

PLANS OF

**ROUTE 287** 

**ROUTE 23 TO NJ TURNPIKE** 

AND

ROUTE 23

RIVERDALE ROAD TO COTLUSS ROAD

CONTRACT NO. 045961901

GRADING, PAVING, AND STRUCTURES

SUPPLEMENTAL DESCRIPTION

BOROUGH OF RIVERDALE
TOWNSHIPS OF KINNELON,
PEQUANNOCK & MONTVILLE

SCALES AS INDICATED

**MORRIS COUNTY** 

JULY 2016 (Month and Year project will be advertised)

Projects will be identified by using a Route and a nine digit Contract Number. Supplemental information such as the limits of work will be consistent with the Project Name. Abbreviations are not permitted within the Key Map. The criteria for developing the Contract Number are as follows:

The first three numbers represent the beginning milepost to the nearest mile and the remaining six numbers consist of the Universal Project Code (UPC). The UPC and the Contract Number are established by the Project Management Office when the project is created. Contract numbers must be developed for all projects.

When the project involves more than one State Highway, the beginning milepost will be determined from the following list:

- 1. Interstate Highway
- 2. U.S. Highway
- 3. State Highway

If the project involves highways with the same priority, the beginning milepost of the lower numbered route will be used. For projects involving statewide improvements, the milepost designation will be replaced with an "SWI" designation (ie. SWIxxxxxx).

The Contract Number for a project on a county or municipal route will be determined as noted above for State Highways. If more than one County Route is involved, the 500 Route Series will have precedence over the 600 Route Series. Should more than one route of the same series be involved, the beginning milepost on the lower numbered route will be used. If the route is not mileposted, the first three letters of the county will be substituted for the milepost designation (ie. Mercer - Merxxxxxx).

Once established, the Contract Number will not be changed, even if the beginning milepost of the project is revised due to a change in project scope.

Work description shall be denoted for major design elements (i.e. Grading, Paving) proposed in the contract.

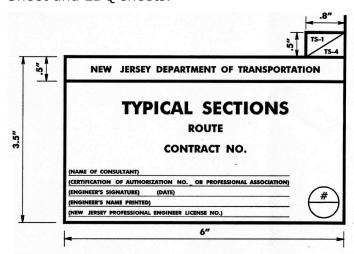
Include a Department signature block in the lower right corner of the Key sheet as shown with the titles, Director Project Management and State Transportation Engineer.

For Local-Aid projects, the key sheet must bear the signature of the County Engineer, or County Representative or Municipal Engineer, as applicable.

#### 4.0 Title Blocks

#### **Roadway Plans:**

In the lower right hand corner, a title block to be provided to include Consultant information as shown below. The title blocks to be applicable for all sheets except Key Sheet and EDQ sheets.



When a project involves work that has been prepared by a Subconsultant and/or Land Surveyor; Subconsultant, Land Surveyor and the Consultant, must sign the plan sheets that have been developed by the Subconsultant and Land Surveyor. The Subconsultant and Land Surveyor title block to appear adjacent to the Consultant title block as shown below.

#### **Structural Plans:**

The title block for structural plans will be in accordance with the Design Manual for Bridges and Structures.

## 5.0 Estimate-Distribution of Quantities

On this sheet show a complete listing of the items, contract quantities, and the quantity distribution for all roadway items in the project. The nomenclature, unit designation, and order of the items to be in accordance with current "New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction".

Route and Contract Number or Local Street name, if applicable, to be shown to the right of center of the bottom box and should match the Title Block. The Estimate of Quantities portion is on the left hand side of the EDQ sheet. The Distribution of Quantities portion of the sheet is on the right hand side. Each column provided in the Distribution portion has been divided into two subcolumns. The left hand subcolumn is for the plan sheet number as described in the double reference numbering system (e.g. C-1, E-1, L-1, X-1, etc.) on sheet 2 of these Sample Plans while the right hand subcolumn is for the quantities. Item Numbers to be inserted in the column and row provided in ascending order.

If the description of the item does not fit adequately in the space provided, continue in the next row. If part of the description will continue on the next sheet, the entire description to be written on the next sheet. Also, at least 3-4 rows to be left blank on the sheet at Final Design Submission in order to accommodate changes.

If the columns provided for the Distribution of Quantities portion of the sheet are not sufficient, the following rows to be used to enter the information. These rows then to be separated by a dotted horizontal line as shown on the EDQ sheet. If the quantities from one item will continue on the next sheet, the entire description and quantity listing to be written on the next sheet.

Abbreviations of pay units to be as shown on the sample sheet. Alternate items to appear on the Estimate-Distribution of Quantities and Estimate of Quantities - Bridge sheets. Letter designations "A" through "M" to be used for alternate groups of Roadway items, letter designations "N" through "Z" with the exception of letter "O" to be used for alternate groups of Bridge items. On projects with bridge involvement, separate Estimate of Quantities sheets to be prepared for bridge items. The Estimate of Quantities - Bridge sheet to be the first sheet of the Bridge Plans if there is only one structure in the contract. If there are two or more structures in the contract, this sheet to be the second sheet of the Bridge Plans. The bridge estimate sheet to have a "B" sheet number.

Use of "No Item" is allowed only when an Item has been eliminated during the PS&E submission or during the post-advertisement revision. Replace the eliminated item with number 999999.

The Estimate of Quantities - Bridge sheet not to be include "Plan Sheet Total" or "If and Where Directed" columns or the "Distribution: Plan Sheet Quantity" columns since the bridge items are not distributed.

### **5.1** Multiple Funded Projects

All of the above comments pertaining to the Estimate-Distribution of Quantities and Estimate of Quantities - Bridge sheets to remain valid for projects with more than one funding source.

Bridge projects with more than one Federal Project Number or cost sharing to utilize the format shown on the sample Estimate of Quantities - Bridge sheet. By utilizing this format, as-built quantities will be charged to the appropriate Federal Project Number or funding source.

Projects with more than one Federal funding category (for example I, IR), having the same pro-rata percentages (90% - 10%), must show individual Federal breakout columns. Provide a column for each Federal Project Number.

Quantity breakouts for each funding source to be shown in their respective columns. Each quantity breakout column to be labeled with a Federal Project Number or cost sharing source. A column labeled State Quantity to be shown on Federal projects whenever a portion of the project within designated limits does not have Federal funding participation. A separate column is not required when there are relatively few non-participating items.

The amount to be shown in the "Contract Quantity" column to be the total of all combined funding quantities. Further instruction for the treatment of breakouts will be discussed under the headings Plan Sheet Index and Construction Plans.

#### 5.2 Contract Quantity

Add all plan sheet quantities, and the IWD quantity. Enter the resulting number under the column "Contract Quantity". However, the quantities for the following Items must be provided under "Contract Quantities" column only. (Do not provide quantities for these Items under plan sheet quantities).

- All Pavement Reflectors Items
- All Raised Pavement Markers (RPM) Items
- · Flexible Delineators, Ground Mounted
- Rumble Strips

#### 5.3 If and Where Directed (IWD) Quantity

Provide IWD quantities for the following Items only unless the Department SME concurs with the inclusion of other Items that have not been designated as such. Round off all IWD quantities to the nearest whole numbers.

- Soil Erosion and Sediment Control and Water Quality Control Items. Specify in the Special Provisions if the provided Items are to remain after the Completion.
  - Silt Fence- Add 10% of total length. On project not designed with silt fence, include a minimum 100 linear feet.
  - o Silt Fence, Heavy Duty and Caution Fence Add 10% of total length.
  - Haybales Add 25 units.
  - Erosion Control Sediment Removal -2 % of Roadway Excavation but no more than 1000 CY.
- Traffic Control Items. Specify in the Special Provisions if the provided Items are to remain after the Completion.
- Prime Coat, Tack Coat / Tack Coat 64-22, Polymerized Joint Adhesive
- Construction Driveway If more than one driveway is proposed, the plan quantities for each driveway has to be shown.
- Excavation, Test Pit
- Traffic Stripes, Traffic Markings, Rumble Strips Item
- Signs
- HMA Patch
- All Concrete Pavement Rehabilitation (CPR) Items
- Sealing of Cracks in HMA Surface Course
- Sawing and Sealing Joints in HMA Overlay
- Disposal of Regulated Material
- Soil Sample and Analyses, Regulated
- Used for Temporary Erosion Control; Add 10% of Total Quantity of all Seeding Types combined and create a "Type F Seed" quantity. This amount is also added to the Straw Mulching item. Add 10% to the Soil Stabilization matting item; Hay Bale item,

Silt Fence item. For the item "Mowing" estimate  $2 \times 1$  the quality of fertilizing and seeding rounded up to the nearest acre. For some longer time frame projects this may be increased.

• Add up to 10% to the quantity for each HMA paving item.

#### 6.0 Typical Section Sheets

Typical sections need only be shown where roadway conditions are 'typical' or representative of the project. It is not necessary to show a separate typical section to delineate minor variations from the basic typical and transition area, however, whenever an area is not covered by a typical section, clearly show pavement materials, thicknesses, and grades elsewhere on the plans.

Show all the existing and proposed roadway conditions. Superimpose the proposed resurfacing and/or widening over the existing conditions.

The proposed typical sections to agree with the approved pavement recommendation issued or approved by the Bureau of Pavement & Drainage Management and Technology.

Show the following features for each typical section:

- 1. Profile control, baseline, and survey line
- 2. Limiting stations or road names
- 3. Type of proposed and existing pavement with thicknesses, subbases, etc.
- 4. Topsoiling, Fertilizing and Seeding, or Turf Repair Strips with their respective limits
- 5. Slopes for various heights of fill and cut
- 6. Lane, shoulder, and sidewalk widths with cross slopes shown
- 7. Limits in rock cuts, unsuitable material, or I-11 Backfill
- 8. Slope limits defined
- 9. Vertical curb and barrier curb sizes with curb reveal dimensions
- 10. Proposed and existing Guide Rail and fence location
- 11. Indicate rollover on superelevated sections
- 12. R.O.W. lines (existing and proposed)
- 13. Crossover Crown Line
- .4. Structural elements such as retaining walls, piers, noise barriers, and culverts

# Abutments, Overhead Sign Structures, and Utility Poles are not to be shown on the typical sections.

When ramp or auxiliary road profiles are included in the plans, indicate their design speed (V) on their typical sections.

Show a Legend of Materials Box with the proposed Item Numbers on each Typical Section sheet. Use the Item Numbers as construct notes or to denote proposed items and the relative location where the work is to be performed on the typical section.

#### 7.0 Plan Sheet Index

This sheet depicts the layout of plan sheets with existing and proposed conditions and drawn to a scale of 1"=200'. Include a Plan Sheet Index covering the entire length of project in the plans when interchanges, ramps, and intersections are involved. Show soil borings, when applicable, on these sheets by use of a boring symbol and number. When a Plan Sheet Index is not included in the plans, show borings on the Construction Plans. Overlap plan sheets 1 inch minimum or use match lines for the layout.

For projects with multiple funding sources (more than one Federal Project Number or cost sharing involvement), the location limits for each funding to be clearly indicated on the Plan Sheet Index with station to station limits. If a Federal Project Number or category is provided exclusively for landscaping items, bridge items, etc., and applicable throughout the project or for a specific portion of the project, a plan sheet by plan sheet breakout will not be required, except include a note indicating the designated limits and appropriate funding.

A north arrow and graphic scale to be provided on all sheets.

Include the double reference numbering system designated for the project plan sheets on the Plan Sheet Index. Only reference sheets with proposed work.

#### 8.0 Construction Legend

This sheet contains the Standard Legend and General Notes. If additional symbols are required for the project, include them in the Legend. No topography is to be shown on this sheet.

#### 9.0 Construction Plan Sheets

The sample Construction Plan sheets are provided as a basic standard format for 'typical' construction plan sheets. In almost all cases, this format can be adhered to with proper planning. The scale to be used for roadway construction plans is generally 1"=30'.

General comments pertaining to the Construction Plan sheets are as follows:

- (1) Show north arrow, graphic scale, municipality and county on all sheets.
- (2) Show the existing topography for 500 feet before the beginning and beyond the end of the project. For projects involving local roads, this distance may be reduced, but to no less than 100 feet.
- (3) For State and Federal projects, note the Stationed BEGIN and END OF PROJECT. All project STOPS and RESUMES to be noted and stationed with topography shown 500 feet beyond the STOP and 500 feet before the RESUME. On Federal projects with multiple funding sources, note funding limits with stations.
- (4) Show all existing topography with thin lines, proposed with thicker lines and lettered as shown in this sample set. Screened drawings may be used when the proposed information on the plan needs to standout from the other proposed line work. Plans such as Drainage Plans, Landscape Plans, and Signing and Striping Plans are examples of acceptable plan types for screening.

- (5) Label baselines, survey lines, etc. with stations at 100 foot intervals. Note Station equations where required. Baselines of side roads and streets must be provided with sufficient information for complete layout.
  - An equation should be shown, if required, on the first construction plan sheet which shows how the new survey baseline ties into the old survey.
- (6) When the same stationing appears on more than one baseline, the baselines to be designated A, B, etc. Westbound, Eastbound, etc. baselines may be designated on dual highways. Show all stationing in the same direction. When practical, it is desired for proposed ramps to be stationed in the direction of travel.
- (7) Do not show topography beyond match lines. Match lines to be stationed with the full station number. Show double reference sheet numbers as discussed under General comments.
- (8) Include a TO BE CONSTRUCTED box in each plan sheet. Plan sheets without proposed work are not to be included in the contract set except as required by note No. 2.
- (9) Type of pavement for all existing roads to be noted.
- (10) Show lane widths for all proposed pavements at the match line on all plan sheets, and at changes of lane widths.
- (11) Note R.O.W. lines, limits of NO ACCESS lines and existing and proposed easements, except for Slope, Temporary Site Mitigation Work and Temporary Site Alternative Access easements.
- (12) Bench marks must be shown at approximate 400 to 600 foot spacing for vertical control. A description and elevation to appear in the lower left hand corner of the sheet. Show bench mark elevations to 0.001 foot accuracy.
- (13) Quantity totals from construction notes to appear in TO BE CONSTRUCTED boxes. Individual construct notes and totals require back-up calculations to be bound and submitted for review with the plans. The calculations to be complete to cover all plan quantities.

# All item quantities, except permanent signs, to be rounded up to whole numbers.

- (14) For projects with more than one funding source use the format shown on sample construction sheet C-2. Set separate columns for each funding category. Designers to break-out quantities for items which fall within designated funding limits and provide quantity break-outs in the appropriate columns. Use this format only when there is more than one funding indicated on the plan sheet.
  - If the project has multiple funding and a specific funding is applicable throughout the project (for example, landscape items), it is not necessary to show a breakout of quantities for this funding on the plan sheets. A general note to this effect to be made on the Plan Sheet Index.
- (15) Denote proposed construction with construction notes consisting of the item number placed in an elliptical symbol along with the item quantity and unit designation. TO BE CONSTRUCTED boxes to conform to those shown on these sample sheets with items appearing in numeric order.

- (16) Show presentation of Alternate Items as shown in the Sample Plan sheet C-3. When used as a construct note or to denote proposed items of work, the alternate items are to be placed in connected square symbols. In TO BE CONSTRUCTED boxes, keep alternate items together with headings as indicated under the Estimate-Distribution of Quantities sheet.
- (17) Show all existing drainage structures. Label type and size of existing pipes and structures, show flow direction (arrow) and existing invert elevations when drainage is affected by proposed work.
- (18) Proposed drainage may be shown on the Construction Plans except when drainage construction is extensive or there is a need to enhance clarity on Construction Plans. In these instances, separate Drainage Plans (or Grades) are to be used, see sample plans. In either case, show proposed drainage with:
  - type of proposed structure noted (Inlet Type E, Inlet Type D-1, Manholes, etc.)
  - proposed grate and invert elevations (except as noted below)
  - proposed station and offset (except as noted below)
  - depth of proposed structure clearly indicated
  - proposed flow direction with an arrow
  - type of proposed pipe (R.C.P., D.I.P., etc.)
  - length of proposed pipe
  - proposed high and low points indicated (by arrow symbol)

Also apply the following:

When separate Drainage Plans are included in the set of plans, the Construction Plans must show the locations and types of the proposed drainage structures with the proposed pipes along with station numbers and offset.

When Grade Sheets are included in the set of plans, the proposed grate and rim elevations must be shown on the Grade Sheets, therefore, grate or rim elevations need not be repeated on the Construction or Drainage Plans.

Retention basins, contour lines and all details are shown on Drainage Plans.

- (19) Note begin and end station limits of various size proposed curbs (vertical and barrier) and their transition lengths.
- (20) Note the Limits of Paving, Milling, Joint Removal, and Removal of Pavement.
- (21) Where driveways are proposed, the 'type' of existing driveway to be noted (gravel, HMA, concrete, etc.) along with the proposed width dimensions and limits of paving. Proposed driveways to conform to the State Highway Access Management Code. Show all existing driveways.
- (22) Designers must include Construction Details for transitioning proposed pavement to existing pavement, details for transitions at bridge decks, details for maintaining existing vertical clearances at overpasses and any additional transition details required for milled areas.

- (23) Existing monuments within project limits must be shown. Relocate monuments within the traveled way or enclose in a monument box. Proposed Monuments to be located by station and offset.
- (24) If Drainage structures are to be cleaned, the depth of the Drainage structures must be shown. If pipes are to be cleaned, note diameter and the length of pipe to be cleaned.
- (25) Note Drainage structures which are non-standard on the plans. Provide a detail for such structure in the plan set.
- (26) Provide baseline station and offset for proposed guide rail locations, including end treatments and all breakpoints along the guide rail.
- (27) Note all above and below ground existing utility facilities located within the project limits by type, size and location. Limit aerial pole line facilities to the indication of poles and their corresponding pole numbers. All temporary poles, proposed poles, and utility facilities relocated within the project limits must be located on the plans with types and sizes shown. When separate Utility Plans are included in the set of plans, the construction plans must provide all existing utility facilities and poles with type and pole numbers. Show existing and proposed facilities on the Utility Plans as indicated above, see sample utility plans.
- (28) When work is to be performed "by others", Designers must specify who will be performing the work. (For example: by Verizon, by Public Service Electric and Gas, by Sunshine Developers, etc.)
- (29) At locations showing riprap, the area of the proposed riprap to be fully dimensioned, the thickness indicated and the calculated stone size noted at each location.
- (30) Soil Borings, when required, must be shown on the Construction Plans for small projects that do not require a Plan Sheet Index.
- (31) On plan sheets where space is limited and enhanced clarity is needed, in place of construct notes, a separate quantity box may be used to denote items of work. In the box show Item Numbers, stations and offsets of work to be performed, and item quantities. Typical use of this box may be when numerous driveway items are proposed on a sheet or where joint removal is required. The Designer to also consider separating specific aspects of the design such as drainage or utilities onto separate plan sets to enhance the clarity of the information being presented. Discuss the creation of separate plans with the Project Manager prior to the Preliminary Design Submission.

- (32) When proposing cross drain replacement by trenching, Designers must indicate the appropriate standard construction detail to be used at its relative location on the construction plans. Specifications provide that payment for pipe items include the cost of excavating the pipe trench. When constructing cross drains in existing concrete pavement, appropriate items for pavement removal and for replacing the existing pavement surface must be indicated separately. Complete information must be provided to determine the depth of the pipe trench, especially in areas not covered by cross sections.
- (33) When the item Demolition of Buildings is proposed, show the following additional information:
  - buildings to be demolished clearly designated by heavy solid outlines and shown as per legend symbol
  - house numbers
  - R.O.W. parcel numbers
  - demolition numbers
  - building type (frame dwelling, brick, etc.)
  - number of floors
  - basement noted where applicable
  - clearly indicate additional buildings on the property (garages, sheds, etc.) to be removed
- (34) When proposing Concrete pavements, show the location of the transverse expansion joints and irregular slabs at critical locations. Show the location of the slabs at mainline intersections with ramps and crossroads, the approach and exit sides of bridges and other locations where irregular slab shapes or sizes are required.
- (35) Some Standard Construction Detail Sheets may indicate more than one "treatment" or "type" of construction for an item of work; examples are: Construction Driveway, Curb Ramps, and Guide Rail Attachments at Bridges. When proposing such items of work, Designer's must indicate the "type" to be constructed on the Construction Plan sheet. This may be shown by indicating the "type" below the item number, or when several "types" are to be constructed on a plan sheet, a box may be provided with Item number, baseline location and offset and "type" to be constructed.
- (36) Location of existing and proposed curb ramps must be shown at intersections. Traffic signals, lighting, guide rail in the vicinity of the ramps, must be shown with every effort made to avoid locating the proposed work within limits of curb ramps.
- (37) Show actual Milling depths (i.e. 1" or 4") on typical sections and drainage plans, but used item that has correct range of depth (i. e. 0-3, or 3-6).

### 10.0 Environmental, Soil Erosion & Sediment Control Plans

The purpose of the Environmental, Soil Erosion & Sediment Control Plans is to show the location of soil erosion and sediment control items, list environmental notes and commitments and identify sensitive environmental areas to be avoided or where activities are restricted, such as wetlands, floodplains, regulated streams, parklands, historic sites, conservation lands, endangered species habitats, contaminated sites and any other environmentally sensitive areas that pertain to the project.

Contact the Bureau of Landscape Architecture and Environmental Solutions and the Project Manager to determine whether there is a need to identify environmentally sensitive areas on the project. The content and title of the Environmental and Soil Erosion & Sediment Control Plans may vary if there are no sensitive areas or permits to be identified, or if there are no soil erosion and sediment control measures needed. At a minimum, every project must have Environmental Plans listing the environmental notes and commitments.

In general, the plan scale should not be smaller than 1"=60' provided the installation of erosion and sedimentation control devices can be clearly shown. In addition, when there are extensive environmentally sensitive areas on a project, a small scale Environmental Plan (typically 1"=100' or 1"=200') may be included to clearly identify those areas.

If environmentally sensitive areas must be identified, but there is no need for soil erosion and sediment control measures, provide a 1"=100' or 1"=200' scale Environmental Plan.

The first sheet of the Environmental and Soil Erosion & Sediment Control Plans includes the list of environmental notes and commitments (including those promoting environmental stewardship and those made to the State Historic Preservation Office or other agencies) and, if spaces allows, boxes for permits and reforestation information. If space is not available, these boxes will be included on subsequent sheets. Also, if symbols are used to identify environmentally sensitive areas, a legend.

Trees removed for safety (i.e. clear zone, sight distance, guiderail and crash cushion recovery areas or clearance to utility lines) are not included in the "No Net Loss Reforestation Calculation."

Clearly indicate on the plans the areas where the Contractor is not permitted to perform work, locate a concrete washout facility, store materials or enter with construction equipment. Also, note constraints to any construction activities (e.g., town's "Founder's Day" festival or night work that will not be permitted adjacent to a hospital, etc.) or other specific Department commitments.

Depict caution fence locations on the plans to delineate areas where the contractor is not permitted. Caution fence may be used alone to prevent encroachment into an environmentally sensitive area (such as a wetland, historic site, etc.) where potential sedimentation is not an issue. In areas where both silt fence and caution fence are warranted, use heavy duty silt fence, orange in place of the combined rows of fencing (e.g., to protect a wetland from sedimentation and encroachment by the contractor).

Design silt fences (regular silt fence, heavy duty silt fence, black and heavy duty silt fence, orange) according to anticipated soil loss, topography, and adjacent sensitive areas. Clearly show the limits of each type of silt fence on the plans.

Soil Stabilization Matting shall be provided in the following areas:

- Swales in medians and sidewalk areas having grades of 1½ percent or steeper.
- Slopes steeper than 2:1 next to wing walls at bridges and headwalls.
- Longitudinal intercepting ditches at the top of cut slopes.
- Transverse ditches at the low points of longitudinal ditches and plow furrows.

In reference to the concrete washout system in Section 158 of the Standard Specifications for Road and Bridge Construction, the distance for the placement of the concrete washout facility (ies) from environmentally sensitive areas may need to be greater than 50 feet, depending on project specific conditions/restrictions, such as the presence of exceptional value wetlands or Category One Waters, as designated by NJDEP, which have larger buffer zone requirements. More than one facility may be necessary depending on ease of access and the amount of concrete being poured at one time.

Provide at least 2 oil-only emergency spill kits with each kit capable of cleaning up at least 95 gallons of spill.

#### 11.0 Profile Sheets

Show the existing mainline profile line for 500 feet before the start and 500 feet beyond the proposed work. On local road projects, this distance may be reduced, but to no less than 100 feet. Plot the existing ground line and the proposed finished grade line with station elevations shown at 50 feet intervals. Show all elevations in feet.

Label the following items on the profiles:

- Profile Identification (Ramp A, Rt. 295 S.B., etc.)
- Datum
- Vertical Curve Limits
- P.V.C., P.V.I., P.V.T.
- L Length of Vertical Curve
- E Difference between P.V.I. Elevations and Vertical Curve Elevations at the P.V.I. Stations
- High and Low Points with Stations and Elevations
- Culvert and Invert Elevations
- Limits of Borrow Excavation Bridge Foundation and Porous Fill
- Slope in %
- Minimum Vertical Clearances at Bridges and Structures
- Ramp Design Speeds

Show the definition of "E" on the first Profile Sheet.

#### 12.0 Tie Sheets

**All control points must be tied to a baseline**. Ties must be stationed and offset and may be shown on the Construction Plans if not too congested, but preferably on a separate Tie sheet. The baseline designation must be clearly labeled and identified. A Legend may be required to explain the designation. Assumed baselines to be designated "survey lines" and to be used only if extensive investigation does not disclose a baseline.

Notes on the first Tie Sheet must state the following:

- Horizontal datum

- Vertical datum
- Field book reference (conventional survey)

#### 12.1 Horizontal and Vertical Datum

The Survey Datum information shall be included as shown on the first sample Tie Sheet of these Sample Plans.

Survey datums should be referenced to the recommended datums as described in the current version of the NJDOT Survey Manual. When elevations are based on other survey datums, the appropriate datum information must be provided.

All projects involving new alignment or major reconstruction shall include coordinates for all control points tied to the New Jersey Plane Coordinate System. Tie sheets shall provide a listing of the Geodetic Control Monuments used for the project. Notes shall also state the date of the recovery of the monument. In addition, any other monuments used to establish the control line shall be listed and shown on the tie sheets. Existing Geodetic Control Points and previous project baseline monuments or control points shall be used where possible and made part of the control network.

Where a field survey line differs from a project baseline, control ties and connections from the survey line to all P.C.'s, P.I.'s, and P.T.'s shall be shown.

A description of the control shall be provided with a detailed sketch showing distances and directions to locations (or reference) points. All control points shall have a minimum of three location (reference) marks.

Tie sheets shall also show bench mark locations from the survey line or baseline. In addition, a note shall be added to indicate whether the bench mark is located in an area that will be affected by construction activity. The note may specify or recommend relocating the bench mark, prior to construction activity.

A note shall be added to the Tie sheets when affected monuments need to be preserved.

#### 13.0 Grade Sheets

Show proposed grades and cross slopes at 25 feet intervals in transition area and areas where finished grades deviate from the typical sections. Also show grades in areas that require additional clarification. Show contours for infield areas that are not fully covered by cross sections.

In Grade Sheets include the following:

- proposed high and low points
- type of proposed drainage structure
- proposed grate or rim elevations
- north arrow
- graphic scale

When Grade Sheets are not included in the Plans, the grate and rim elevations will be shown on the Construction or Drainage Plans. (See item No. 19 under the "Construction Plan Sheet" heading for additional information).

#### **14.0 Traffic Control Plan Sheets**

The purpose of Traffic Control Plans is to provide guidance and establish procedures to assure that adequate consideration of safety is given to motorists, pedestrians, and construction workers during the construction project.

Sufficient data must be provided to the Contractor that will enable the Contractor to construct the project as designated for the full range of worksite situations. The proper and adequate placement of highway signs, pavement markings, barricades, and other traffic control devices to be in accordance with the current Standard Traffic Control Details, Manual on Uniform Traffic Control Devices (MUTCD), Section 14 of the NJDOT Design Manual, Roadway and Standard Specifications for Road and Bridge Construction.

For TC-1 and TC-2 of the Traffic Control Plans modify standard traffic control detail sheets TCD-1 and TCD-2, respectively, for the subject project. These sheets require design specific information to be added, such as the allowable lane closure hours. Designers must delete notes from these sheets which are not applicable to the project. Crossing out of notes is not acceptable. TC-1 in this set of Sample Plans depicts a typical treatment of selecting project specific information to be provided.

Traffic Control Plan Sheet TC-1 must also contain project specific notes that are not covered by the General Notes on the Traffic Control Details in the Standard Detail Booklet. The notes must include, but not be limited to: specific restrictions placed on travel lanes, duration of closures, hours when work may be performed, number of lanes of unobstructed traffic to be maintained in each direction, allowable minimum widths of traveled way, number of lanes to be open to traffic, diversionary routes with any restrictions, and traffic lanes or patterns to be maintained during construction for local roads affected by construction.

In order to estimate the required quantity of Construction signs in square feet, Designers should prepare a summary of signs for the project. This summary of construction signs should be shown in a table, and included on the first sheet of the Traffic Control Plans. An example of a completed table listing the Sign Designation, quantity and area in square feet is shown on TC-1 of the Sample Plans. The total quantity of construction signs in square feet should be shown on the Estimate-Distribution of Quantities (EDQ) sheet. On EDQ sheet, the total quantity of signs in square feet should be indicated as "If and Where Directed" items.

For quantity purposes, the If and Where Directed number of units or linear feet of traffic control devices and signs to be the maximum quantity required to be in use at any one time. For purposes of indicating speed limits or speed reductions through the construction zone, provide 35 square feet of additional **construction signs**.

Include additional Traffic Control Plans to show plan views of project specific work sites when these locations are not adequately covered by the Standard Traffic Control Details or where design features of traffic control devices (such as the type of precast construction barrier) or temporary pavement markings need to be indicated. Select the scale of the Traffic Control Plans so that the optimum amount of information is shown on a minimum number of plan sheets. Provide Construction Details for traffic control devices not adequately covered by Standard Construction Details. Separate details showing placement of Crash Cushions, Inertial Barrier System, \_\_\_\_, and Modules to be provided and designated by location when more than

one configuration of modules are required for the project. Also, any construction sign not depicted on the Standard Construction Details must be shown in detail.

All plan sheets except Traffic Control Details to show a graphic scale and north arrow.

#### **15.0 Traffic Control and Staging Plans**

All comments pertaining to Traffic Control Plans to remain valid for Traffic Control and Staging Plans.

Use Traffic Control and Staging Plans when a staging or sequence of construction needs to be specified. Do not use these plans for projects involving lane closures without sequence of work (such as simple resurfacing or electrical installations).

Notes pertaining to the various stages of construction to be included on the Traffic Control and Staging Plans. The notes must thoroughly describe each phase of construction in the sequence to be performed, including the establishment and removal of temporary traffic control items.

The Legend on Traffic Control and Staging Plan Sheet TC-1 must be modified to differentiate work to be performed during each stage of construction, and work already completed during previous stages.

When temporary pavement areas are required, provide a Typical Section. Temporary pavement to be used for Traffic Control to be shown with plan sheet quantities. Item Numbers with construct quantities and a **TO BE CONSTRUCTED** box must be shown on the Traffic Control and Staging Plans when temporary pavement is to be constructed. Items for the removal of temporary pavement and restoration to original when required must be provided.

#### 16.0 Electrical Plans

The purpose of the Electrical Plans is to provide guidance as to the preparation of the electrical engineering aspects of a complete traffic signal installation including traffic signal timing and intersection lighting. Each traffic signal design requires Electrical Plans.

The Electrical Plan for the traffic signal is used for presenting the electrical design of the traffic signal, including all underground and above ground elements. The plan is to include the block wiring diagram, loop detector schedule and **TO BE CONSTRUCTED** items. An additional sheet can be used to show sketches that require more detail in order to facilitate construction. A separate sheet showing the traffic signal timing and operation is required to facilitate its implementation in the field.

The Title block for each Electrical Plan should be completed by the designer, as shown in the Sample Plans.

All Electrical Plans are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained from the Department's website or upon written request to the Manager of Traffic Signal and Safety Engineering.

### 17.0 Traffic Signal Plans

The purpose of the Traffic Signal Plans is to provide guidance as to the preparation of the traffic engineering aspects of a complete traffic signal installation. Each traffic signal design requires Traffic Signal Plans.

The Traffic Signal Plan is the traffic engineering plan that includes all the above ground traffic signal equipment, the regulatory, warning and mast arm signing that pertain to the operation of the traffic signal, and the overall areas of detection. The Traffic Signal Plan is necessary because upon activation of the traffic signal, it is submitted for final approval and becomes the Departments legal document for the operation of the signal and its associated signing and striping. Because the final plan must be signed by the Manager of Traffic Signal and Safety Engineering (TSSE) the title block shown on this plan is to be used for all Traffic Signal Plans.

The designer will complete the Title block for each Traffic Signal Plan, as shown in the Sample Plans.

All Traffic Signal Plans are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained from the Department's website or upon written request to the Manager of Traffic Signal and Safety Engineering.

#### **18.0 Highway Lighting Plans**

The purpose of the Highway Lighting Plans is to present the lighting design using approved Department lighting design software. The Highway Lighting Plans are used to present the underground and above ground electrical elements in the designated nomenclature and the **TO BE CONSTRUCTED** items and quantities. The Highway Lighting Plan format is to be used for both intersections and for highway interchanges.

The Title block for each Highway Lighting Plan should be completed by the designer, as shown in the Sample Plans.

All Highway Lighting Plans are to be prepared according to current Department and Traffic Signal and Safety Engineering CADD standards. These standards can be obtained upon written request to the Manager of Traffic Signal and Safety Engineering.

#### 19.0 ITS Plans

The purpose of the ITS Plans is to provide guidance as to the preparation of the ITS Engineering aspects of a complete ITS system installation design including the power and communication sources. The various communication links of all individual devices installed in the field to the designated Traffic Operation Centers is to be determined by the designer and must be shown in the plans. Each plan including any ITS device installation design requires a 1:30 scale ITS Plan. ITS Plans showing only the layout of conduits and junction boxes are to be on a scale of 1:100.

The ITS Plans are used for presenting the layout of underground conduits carrying fiber optic cables or other communication cables as well as electrical service conduits and conductors along with all devices.

For CTSS projects lead by Mobility and Systems Engineering (MSE), ITS Sample Plans are used in conjunction with Electrical Plans that require coordination with Traffic Engineering and Advance Arterial Management (AAM) group of MSE.

The plan is to include existing and proposed junction boxes, conduits, power and communications sources, meter cabinets, control cabinets, cabinet foundations, camera pole foundation, devices, grid pavers, guide rail (if warranted) and **TO BE CONSTRUCTED** items. Proposed junction boxes for fiber optic trunk cable to generally be located at 2500 feet intervals. When ITS conduit Type A is also used for installing electrical wires for power, electrical junction boxes are required at a distance of 250 feet apart for the power conduit only. Propose ITS junction box Type B in the paved area or in an area where there is a possibility of widening in the future. Additional sheets are also necessary to show details of the work in order to facilitate construction. Separate details, including a system block diagram, rack profiles and fiber assignment diagrams, are required in order to show the communication equipment components, configuration parameters and the designated fibers for each communication link. The system block diagram must also include separate blocks for each field device and their interconnection with the existing and proposed TOC equipment including any routing through communication hubs.

If there are more than four plans to show the ITS sites, then a large scale, 200 to 500 scale, ITS Location Plan must be provided. The ITS legend and General Notes, with applicable electrical symbols, must be included on this ITS Location Plan or the first ITS Plan sheet for those Contracts without an ITS Location Plan. Include applicable legends for non-ITS work impacting the ITS work such as guide rail.

The ITS Plans must show the following existing/proposed information:

- Existing topography, where applicable to the ITS deployment
- Roadway including striping of the lane configurations and direction of traffic
- Drainage with low and high points indicated on the highway
- Guide rail
- Grid Pavers
- Static Signs
- Top and toe of slopes
- High and/or low point of the highway if located within the plan sheet
- R.O.W., including fencing
- Bridge Structures
- Utility facilities Note: The associated items for work not covered under Division 700 to be on the respective Construction Plans unless the Contract is for ITS work only

Add note on plans for orientation of the CCTV blind spot (medians).

All ITS Plans are to be prepared according to the current Department CADD standards including specifics for ITS. These standards can be obtained from the Department's website.

Show ITS symbols for existing and proposed ITS facilities on the Construction Plans. Additional ITS and CTSS Sample Plans are available in the TSM Procedure Manual posted at: http://www.state.nj.us/transportation/eng/elec/ITS/

Include Landscape planting sheets:

- Proposed planting and landscape architectural work
- Existing topography, where applicable
- Drainage
- Guide rail
- Curbs
- Walks
- Signs
- Top and toe of slopes
- R.O.W. lines and No Access Lines
- Bridge Structures
- Proposed and existing fencing
- Easements
- Proposed roadway
- Utilities (overhead and underground)

Do not show additional information unrelated to Landscape on planting sheets unless approved by the Project Manager.

### 21.0 Traffic Signing and Striping Plans

Keep the number of plan sheets included for Traffic Signing and Striping to a minimum by using such drafting techniques as break-lines and out of scale drawings. Traffic Signing and Striping Plans produced by superimposing traffic stripes and signs on other plan view sheets will only be accepted for smaller projects having three or less plan view sheets.

When Permanent Warning or Regulatory Signs are included in the project, place a similar sign table as shown on TSS-1 (Permanent Sign Table) of the Sample Plans on the first signing and striping plan sheet. Show the total quantity of Permanent Signs in square feet on the Estimate-Distribution of Quantities (EDQ) sheet. On the EDQ sheet, the total quantity of signs in square feet should be indicated as "If and Where" items.

#### 22.0 Method of Cross Sections

Provide a Method of Cross Sections sheet for interchange areas or any area where Cross Sections may vary from the normal method of sections. Stations must be shown and must conform to the cross sections. The baseline from which the sections are taken to be clearly indicated.

### 23.0 Cross Sections

Cross Section sheets to follow the format shown in this sample plan set. Scale must normally be 1"=10' or 1"=5'. Show Sections in ink on polyester type cross sectional Mylar or CADD generated equivalent. Sections must show the existing ground line plus the proposed section template and baseline.

Show original ground elevation at the baseline and show proposed elevations at the profile line. Designers are reminded that excavation and embankment quantities shown on the Cross Sections to be measured between the dashed lines representing the surface of the existing ground and the solid lines representing the limits of excavation or embankment. Where Topsoiling is proposed, the solid lines to indicate the bottom of the proposed Topsoil. Sections not to show the location of vertical or barrier curbs. Show retaining walls, crib wall, abutments, piers, and building foundations. Equations to be noted where necessary.

In order to clarify the method used to determine earthwork quantities from cross sections, show the standard notes and legend on the first Cross Section sheet as indicated on the sample sheet. Indicate a Datum for each section (vertical and horizontal). Note limits for Topsoiling, Stripping, and I-7 soil aggregate or I-11 soil aggregate on the sections. Items such as Removal of Pavement, I-9 soil aggregate, I-10 soil aggregate and any select embankments to be calculated and shown as plan sheet quantities. Show placement limits on the cross sections so that no additional quantities of other items are calculated. Sections indicating areas of Excavation unclassified (wet areas) and Unsuitable Material must show apparent firm bottom with side slope ratios.

Unclassified excavation in ditches or channels must be noted with quantities. Also note Quantities for Topsoiling, Stripping, and cuts and fills in the units shown on the legend.

Noted on the Cross Sections, that additional embankment available from the project to be used to reduce the amount of Borrow Excavation accordingly.

Above the title block, the location (Main Line, Ramp Z, etc.) and note station to station of the sheet.

Cross Sections are an important element of the Construction Plans. **CROSS SECTIONS SHOULD NOT BE DISREGARDED, EVEN ON RESURFACING PROJECTS**. Projects may include Cross Sections for the following reasons:

- HMA courses may bury the curb on the high side of superelevation and undercut pavement on the low side. Drainage problems may be created in the areas adjacent to the traveled way or shoulder.
- Driveway touch down limits are unknown on the high side of the superelevation.
- The effect of the superelevation on the sidewalk area may require an additional R.O.W. acquisition.
- Design exceptions may be required to vary cross slopes of superelevation to lessen the impact on sidewalks or driveways.

- The amount of paving material required to meet the proposed cross slopes or grades is not properly estimated.
- If HMA thickness is not known, the Contractor cannot determine the number of passes required to construct the bottom courses of HMA paving.

#### CROSS SECTIONS ARE NOT NECESSARY IF THE FOLLOWING CRITERIAS ARE MET:

- 1. Cross slopes are unchanged with milling and paving the same thickness or the gutter line elevation remains the same.
- 2. The proposed and existing Typical Section is an umbrella section roadway and cross slopes will not change significantly.
- 3. The proposed and existing Typical Section is a curb section where cross slopes do not significantly change and the elevation of the curb will not change. Cross Sections may be required in critical areas to determine curb reveal.

#### 23.1 Retaining Wall System

For projects with Retaining Walls, refer to Bridge Plans for alternate types of retaining walls. This work must include the construction of the walls as shown on the bridge plans, including required Excavation and Embankment within the "limits of common structure volume" of the Structures. For showing the limits of common structure volume, on contract plans, refer to sample control plan standard drawings of the NJDOT "Bridge and Structures Design Manual".

The Cross Sections to clearly denote, at each site, the limits of common structure volume. Which applies to all alternate retaining wall designs. The payment for Roadway Excavation, Unclassified and for Backfill within the "limits of common structure volume" for Retaining Walls to be made under the item for the Retaining Walls; therefore, do not include the quantity for Roadway Excavation and Backfill in the roadway earthwork calculations.

#### **23.2 Earthwork Summary**

# ANY PROJECT WITH CROSS SECTIONS MUST INCLUDE AN EARTHWORK SUMMARY.

The Earthwork Summary to appear on the last Cross Section sheet or on the same sheet as the Earthwork Chart. The Earthwork Summary will vary from project to project, but the format provided in this sample set to be used as a guide.

The following items to be noted when preparing the summary:

- The quantity for stripping in cuts to be deducted from the Roadway Excavation from Cross Sections.

- 1. Excavation, Unclassified from plan sheets must be quantities not covered on Cross Sections.
- All earthwork quantities from Cross Sections and Plan Sheets to be reflected in the earthwork summary.
- The total area of stripping times the stripping thickness indicated in the quantity calculations must equal the total quantity of stripping in cut plus the stripping in fill.
- If detour roads require temporary embankments, ensure that the removal quantity for the detour road has been included in the excavation total.
- Consider staging of construction in determining the suitable excavated material that will be available for embankment, or to be borrowed as required for the embankment.
- The total quantity for Stripping available will be compared with the quantity required for topsoil.
- The item, Borrow Topsoil, is required when the quantity required for Topsoil is greater than the Stripping available.

The two formats shown must be used as a guide in preparing the suitable Earthwork Summary.

Sample No. 1 (Format to be used for project with single funding sources).

Sample No. 2 (Format to be used for projects with multiple funding sources).

#### 23.3 Earthwork Chart Sheet

An Earthwork Chart Sheet should be provided only when the project is a large earth moving project and complex enough to warrant a graphic picture of available embankment sites. If the Designer feels that an Earthwork Chart is necessary, the subject must be discussed with the Project Manager and a determination will be made.

### **24.0 Roadway Construction Details**

Two Standard Construction Detail Booklets are available to Designers and Contractors; one containing Standard Roadway Construction Details, Standard Traffic Control Details and Bridge Standard Details, and the other containing Standard Electrical Details. These booklets are available on Department's website for download.

Place a note on the Key Sheet immediately below the Index of Sheets box, stating the applicable booklet for the project. Standard details will not be included in the plans. HOWEVER, DETAILS REVISED BY BASELINE DOCUMENT CHANGE (BDC) ANNOUNCEMENT SUBSEQUENT TO THE ISSUANCE OF THE BOOKLETS APPLICABLE FOR THE PROJECT, NON-STANDARD DETAILS, AND SHEETS THAT REQUIRE DESIGN SPECIFIC INFORMATION ARE TO BE INCLUDED IN THE PLANS. Non-Standard details must be signed by the Designer and inserted in the Contract Plans before revised details by BDCs.

There are several construction details that contain the following note in the booklet:

"THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS." For example: (CD-612-6 and CD 612-10)

Therefore, these sheets must be included in the plans with the design specific information added.

### 24.1 Curb Ramp Layout Detail

Include a curb ramp layout detail, drawn to scale, when depicting modified curb ramps that do not meet the standard criteria depicted on the construction detail sheets (CD-606-1 & CD-606-2). Also, include a curb ramp layout detail for those locations where it becomes necessary to provide additional detail/information to ensure accuracy of the curb ramp construction. Label the title block "Curb Ramp Layout Detail". Each detail must be representative of what it will look like when constructed and at least contain the following:

- Name of the intersection and location of modified curb ramp.
- Reference to the plan sheet where curb ramp is shown.
- Labeling (e.g. Curb Ramp Type 7 Modified; Curb Ramp Type 3).
- Location of the center of the curb ramp shown as a distance from a fixed object or as a station and offset.
- Slopes for all parts of the curb ramp including landing, flares, ramp running slope and cross slope. Dimensions for sidewalk width and landing width.
- Detectable warning surface location may be shown on the detail.
- Place the following note on the plans: "Curb ramps are drawn to scale, but final dimensions of curb ramp length for running slope (I.E. 12:1) and transitions (I.E. 10:1) will be determined by field measurements during construction."

These details must follow all the notes that apply from the Standard Construction Details.

#### 25.0 Structural Plans

Prepare Structural plans in accordance with criteria that are provided in the Design Manual for Bridges and Structures.

#### **25.1** Bridge Construction Details (BCD)

Any standard detail or BCD that does not represent the proposed bridge construction concept that is used on a given project, must be modified and placed in the Bridge plans. The Designer must include notes in the Bridge plans that identify which Bridge Construction Detail has been changed and is no longer valid for the given project. The Designer's attention is directed to the following comments concerning the use of the Bridge Construction Details sheets:

- Bridge deck rehabilitation details will not be used for deck patching repair work. Details for bridge deck patching to be developed by the Designer from information provided by Structural Engineering. Include Bridge deck patching details in the bridge plans. Deck patching repair work differs from deck rehabilitation work in the type of repairs to be performed and the way in which the repairs are to be done and paid for.
- Variations in details that are provided for deck joint assemblies to be submitted for the RE's approval in accordance with working drawing submission requirements.
- The Designer will identify by details or notes on the bridge plans the type of bridge parapet to be used for each bridge in the project. The Designer may need to make changes to the bridge parapets for the addition of metal railings or fencing. BRIDGE MEDIAN BARRIER" details indicate the height of the bridge barrier at 32 inches. The Designer will verify that the heights of the roadway approach barriers match the height of the bridge barrier or provide a smooth transition between the barriers.
- Details for sawcut grooving on bridge decks are indicated. This work is to be included in the overall cost of constructing the deck.
- The "TYPICAL PLAN CULVERT AND HEADWALL" detail identifies a concrete apron to be used at the culvert ends when required by hydraulic design. The Designer will provide a detail on the Bridge plans as to size and location of concrete aprons, if aprons are required to be constructed at the ends of the culvert. See view titled, "TYPICAL PLAN ABUTMENTS", this detail identifies joints between the abutment wall and retaining walls. The Designer will show by note(s) on the Bridge plans whether these joints are expansion or contraction joints.
- To complete the "DRAINAGE BACK OF WALL" presentation, show the invert elevations for the underdrain pipe on the Bridge plans. The Designer will investigate and identify the location of the nearest roadway inlet for the pipe to connect with. Note this information on the Bridge plans.
- Details of chain-link fence, bridge 6'-3" high, curved top and chain-link fence, bridge 6'-3" high are provided.
- The Bridge Construction Detail sheets for stay-in-place (SIP) forms were developed from various Guide Sheets contained in the NJDOT "Bridges and Structures Design Manual".
- Details for provision of concrete bridge approach are included as Bridge Construction Details.

The Bridge Design Manual also contains Standard Drawings. The Standard Drawings are full size (22" x 36") drawings and are intended to be incorporated into the Bridge plans, if applicable to the project. This practice of including Bridge Standard Drawings in the plans will be maintained and is unaffected by using the Bridge Construction Detail sheets. Final Design submission guidelines are provided in the Bridges and Structures Design Manual.

NEW JERSEY BELL (POLE LINES, CONDUIT)

ALGONQUIN GAS TRANSMISSION (TRANSMISSION MAINS)

BOROUGH OF RIVERDALE (WATER MAINS)

BOROUGH OF POMPTON LAKES M.U.A. (WATER MAINS)

U.A./COLUMBIA CABLEVISION

CONRAIL (RAILROAD FACILITIES)

NEW JERSEY DEPARTMENT OF TRANSPORTATION (TRAFFIC SIGNALS AND HIGHWAY LIGHTING)

**BRIDGES IN THIS CONTRACT** 

- 1 BRIDGE NO. 1003-007 RTE. 23 OVER 1-287
- 2 BRIDGE NO. 1003-008 RTE. 23 OVER RAMP C

WALLS IN THIS CONTRACT

- 3 WALL NO. 2 BETWEEN RAMPS C & D WALL NO. 3 AT RELOCATED HIGHLAND AVE.
- 5 WALL NO. 4 AT RAMP LM

SIGN SUPPORT STRUCTURES IN THIS CONTRACT

- CANTILEVER SIGN SUPPORT STRUCTURE NO. 3
- CANTILEVER SIGN SUPPORT STRUCTURE NO. 4
- **CANTILEVER SIGN SUPPORT STRUCTURE NO. 5**
- OVERHEAD SIGN SUPPORT STRUCTURE NO. 7
- CANTILEVER SIGN SUPPORT STRUCTURE NO. 8
- BRIDGE MOUNTED SIGN SUPPORT STRUCTURE NO. 9 **CANTILEVER SIGN SUPPORT STRUCTURE NO. 10**

OVERHEAD SIGN SUPPORT STRUCTURE NO. 12

**OVERHEAD SIGN SUPPORT STRUCTURE NO. 11** 

**TEMPORARY STRUCTURES** 

(15) TEMPORARY STRUCTURE UNDER RTE. 23 DETOUR

IN THIS CONTRACT

**CULVERTS IN THIS CONTRACT** 

- (16) CULVERT UNDER MAINLINE
- (17) CULVERT UNDER MAINLINE

DESIGN	TRAFFIC	DATA	_	RTE. 287

A.D.T. (2000) - 2 WAY	-	48,460
A.D.T. (2020) - 2 WAY	=	74,680
D.H.V. (2020) - 2 WAY	=	8,550
D	=	50%
T	-	15%

### **DESIGN TRAFFIC DATA - RTE. 23**

A.D.T. (2000) - 2 WAY	=	32,350
A.D.T. (2020) - 2 WAY	=	51,740
D.H.V. (2020) - 2 WAY	=	4,990
D	=	50%
Т	=	15%
v	_	40 M B U

"CHANGES MADE TO THESE PLANS SINCE SIGNATURE BY THE CONSULTANT MAY BE DETERMINED BY COM-PARISON OF THE PLANS FILED AT THE DEPARTMENT WITH THOSE FILES AT THE OFFICE OF THE CONSULTANT."

Individual, Firm, Partnership, etc.

(signature) (date)

NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 99999

60 M.P.H.

State of New Jersey Department of Transportation

PLANS OF

**ROUTE 287** 

**ROUTE 23 TO NJ TURNPIKE** 

**AND** 

**ROUTE 23** 

RIVERDALE ROAD TO COTLUSS ROAD

CONTRACT NO. 045961901 **GRADING, PAVING & STRUCTURES** 

**BOROUGH OF RIVERDALE** TOWNSHIPS OF KINNELON, **PEQUANNOCK & MONTVILLE** 

**SCALES AS INDICATED** 

N.B. B.L. STA. 491+00 BK.: N.B. B.L. STA. 492+00 AH.

COUNTY

PROJECT

I - NEW/RECON

**MORRIS** 

MONTVILLE

BEGIN PROJECT

N.B. B.L. STA. 471+00

NO. I-287-3(42)50

**BEGIN FEDERAL PROJECT** 

N.B. B.L. STA. 474+70.71

**ROUTE 287** 

**ROUTE 287** 

M.P. 44.702

TYPE OF HIGHWAY - F.P. (ROUTE I-287)

TYPE OF HIGHWAY - D.P. (ROUTE 23)

CATEGORIES NHS - NEW/RECON

**MORRIS COUNTY** 

**JULY 2007** 

RIVERDALE

BOROUGH

END FEDERAL PROJECT ROUTE 23 NO. FR-54(134) ROUTE 23 B.L. STA. 493+85 M.P. 13.637

END FEDERAL PROJECT ROUTE 23

BEGIN FEDERAL PROJECT ROUTE 23

ROUTE 23 B.L. STA. 473+50 M.P. 13.252

PEQUANNOCK

NO. I-287-3(42) 50

MP. 12.446

**BEGIN FEDERAL PROJECT** 

**ROUTE 23 B.L. STA. 430+95** 

NO. I-287-3 (42) 50

INDEX OF SHEETS DESCRIPTION NUMBERS KEY 2-9 ESTIMATE - DISTRIBUTION OF QUANTITIES TYPICAL SECTIONS 10\_15 16-17 PLAN SHEET INDEX CONSTRUCTION PLANS 18-36 37-43 44-55 56-61 62-87 GRADES 88-115 TRAFFIC CONTROL AND STAGING PLANS 116-121 ELECTRICAL PLANS 122-128 ELECTRICAL DETAILS LANDSCAPE PLANS 155-180 TRAFFIC STRIPING AND SIGNING PLANS METHOD OF CROSS SECTIONS 182-236 CROSS SECTIONS 237-245 CONSTRUCTION DETAILS 246-247 ESTIMATE OF QUANTITIES - BRIDGE 248-390 BRIDGE PLANS

N.J. I-287-3(42)50

C.S. 1003 & 1095 **PASSAIC** COUNTY BLOOMINGDALE END PROJECT B.L. STA. 724+05 **END FEDERAL PROJECT** NO. I-287-3 (42) 50 B.L. STA. 719+25 **WAYNE** *\_\_\_\_ TOWNSHIP*∕ ROW SECTION RT 287 - 1 & 2 : RT 23 - 4

**ROUTE 287** 

ROUTE 287

M.P. 49.405

STANDARD ROADWAY CONSTRUCTION-TRAFFIC CONTROL-BRIDGE CONSTRUCTION DETAILS BOOKLET, (Year) AND STANDARD ELECTRICAL DETAILS BOOKLET, (Year) ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

MID-POINT OF PROJECT LONGITUDE: 74 ° 38' 42" W LATITUDE: 40 ° 11' 01" N

PART 1 OF 3

## KEY MAP



LENGTH OF PROJECT ROUTE 287 = 18,705 LIN. FT. OR 3.542 MILES LENGTH OF PROJECT ROUTE 23 = 6,290 LIN. FT. OR 1.191 MILES TOTAL LENGTH OF PROJECT = 24,995 LIN. FT. OR 4.733 MILES

PROJECT STOPS N.B. B.L. STA. 512+00

C.S. 1003 C.S. 1095

KINNELON **TOWNSHIP** 

LINCOLN PARK

PROJECT RESUMES N.B. B.L. STA. 577+00 M.P. 46.629

TOTAL LENGTH OF FEDERAL PROJECT NO. I–287–3(42)50 = 22,109 LIN. FT. OR 4.187 MILES TOTAL LENGTH OF FEDERAL PROJECT NO. FR-54 (134) = 2,035 LIN. FT. OR 0.385 MILES

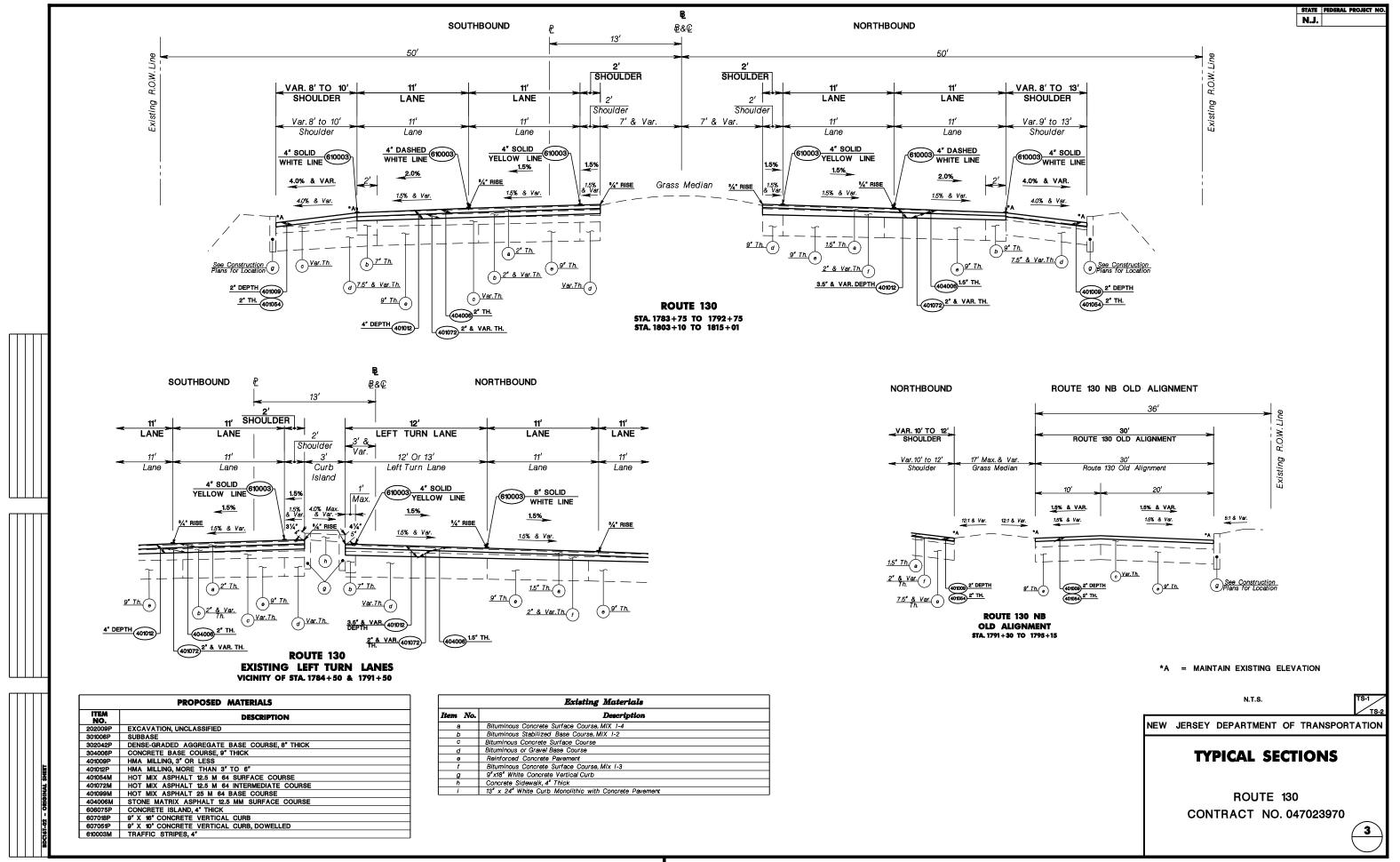
Director, Division Of Project Date

(YEAR) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO GOVERN

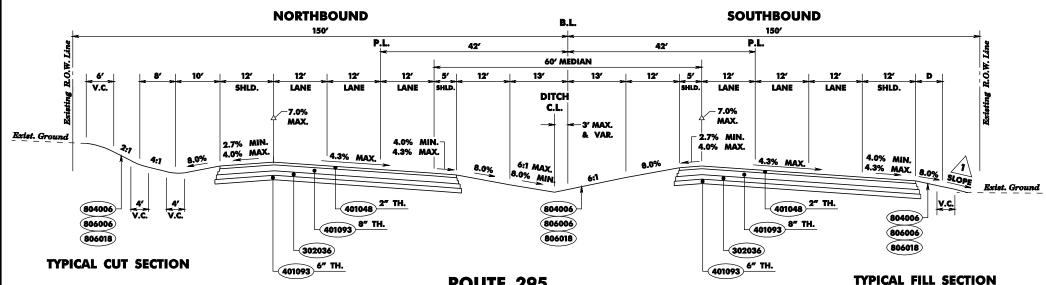
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State Transportation Enginee

SEC		ITEM NO. DESCRIPTION	UNIT	CONTRACT	PLAN SHEET TOTALS	IF AND WHERE DIRECTED		IXAF-26(112) QUANTITY			DIS	TRI	BUT	ION:	PLAN	SHEET	QUANTI	TY			STATE N.J.	FEDERAL PROJECT N BHF-17 (121) IX4F-26 (112)
1	_	51003M PERFORMANCE BOND AND PAYMENT BOND	L.S.	L.S.		-	40%	40%	20%		!	i		i	1	1	1 1	!		I I		
2 3		55009M FIELD OFFICE TYPE C SET-UP 55027M FIELD OFFICE TYPE C MAINTENANCE	M.O.	24		24	50% 12	30% 7	20% 8			+		-			+ + +	+				+ + +
4		02009P EXCAVATION, UNCLASSIFIED	C.Y.	90697	90697		301	90076		C-2 111 C-3	223	C-9	287 X	- <del>9</del> 0 9007								
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	6011	01112P 15" REINFORCED CONCRETE PIPE	L.F.	112	112		112			C-2 62 C-3				!							<del>                                     </del>	
6		101114P 18" REINFORCED CONCRETE PIPE	L.F.	76	76		76			C-2 46 C-3	30	<del>- i</del>		-	- :	!	1 1	1		- :	+	
7	601	501118P 24" REINFORCED CONCRETE PIPE	L.F.	118	118		118			C-2 78 C-3	40	<u> </u>		i						i		
	+	ALTERNATE GROUP M - METAL PIPE									+	+					+ + +				+	<del>                                     </del>
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9		601076P 15" CORRUGATED METAL PIPE 601078P 18" CORRUGATED METAL PIPE	L.F.	112 76	112 76		112 76			C-2 62 C-3 C-2 62 C-3	50	<del></del>		i	<u> </u>	!	1 1	<u> </u>		<u> </u>	+	<del>     </del>
10	601	501082P 24" CORRUGATED METEL PIPE	L.F.	118	118		118			C-2 78 C-3		- 1		i							1	
		END ALTERNATE GROUP ITEMS									-	+		<u> </u>	!	!	; ;	!			+	: :
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11 12		59003M BREAKAWAY BARRICADES 59015M CONSTRUCTION IDENTIFICATION SIGNS, 4' x 8'	U	25 2		25 2	15	5	5 2			<u> </u>		i	<u> </u>	+	+ + +	1		<del>- i</del> -	+	+ +
13	6510	51057P 8" DUCTILE IRON WATER PIPE, CLASS 52	L.F.	4716	4716	_				C-2 2608 C-3		-		1 1 1	 					 	世	
14	7010	701006P 2" RIGID METALLIC CONDUIT, TYPE CUG	L.F.	18500	18500					E-1 804 E-2 E-15 1000 E-16					E-9 804	E-10   804   E-11	2000 E-12 4	002 E-13 4	4002		+-	1 1
15	7010	701087M FOUNDATIONS, TYPE SFT	U	5	5		3	2		E-2 2 E-9	2	E-15	1		1							
	_	702015M TRAFFIC SIGNAL STANDARD, STEEL 804006P TOPSOILING, 4" THICK	U \$.Y.	5 390	\$ 390		100	3	100	E-3 2 E-9 C-3 200 L-1				-3 40	<u> </u>							
17 18		066018P FERTILIZING AND SEEDING, TYPE F	5.Y. 5.Y.	390 38	370	38	100	100 10	190 18	200 I-I	100		30 I		! !	1	1 1	!			<del></del>	
		06006P FERTILIZING AND SEEDING, TYPE A-3	S.Y.	390	390		100	100		C-3 200 L-1					!							
		109009P STRAW MULCHING 11006M LARGE DECIDUOUS TREE, 2-2 1/2" CALIPER, B&B	S.Y. U	428 24	390 24	38	110 12	110 10	208 2	C-3 200 L-1	100	L-2 ;	50 L	-3 40	<u> </u>	1	1 1	<u> </u>		<del>- i</del>	+	<del>:                                    </del>
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		New Jersey Department Of Transport	tation					PROJECI	r: ROUT									Individu	al. Fir	m. Partre	arship	. 1 /
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1900	Ľ	ESTIMATE-DISTRIBUTION OF	$\mathbf{Q}\mathbf{U}_{A}$			23												John L.	Doe		-	<b>(2</b> )

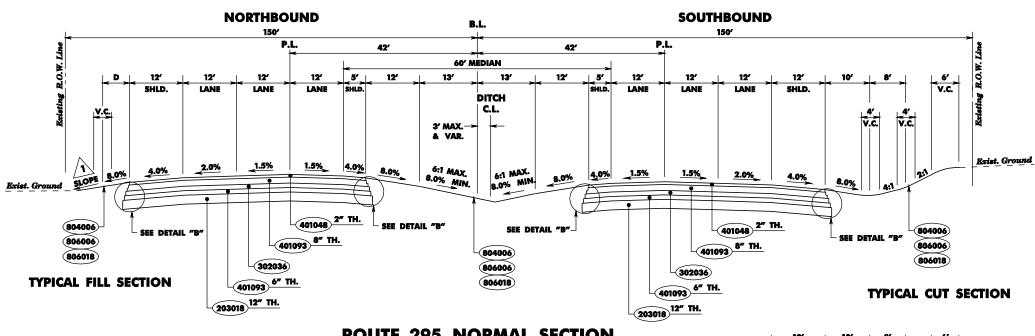






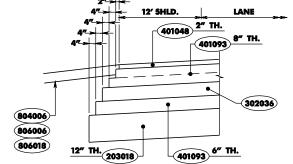
**ROUTE 295 SUPERELEVATED SECTION (RIGHT)** 

STA. 960+00



## **ROUTE 295 NORMAL SECTION**

STA. 1135+00



**PAVEMENT EDGE DETAIL "B"** 

_ _ 12′	_ 10′ _ _ 8′ _   _ 6′ _	
4.0%	V.C. V.C. Exist. Ground	
	401093 8" TH. 804006 401093 8" TH. 806006 806008 401093 6" TH.	

**ROUTE 295** STA. 1112+00 TO 1116+50

	PROPOSED MATERIALS
ITEM NO.	DESCRIPTION
203018P	I – 13 SOIL AGGREGATE
401093M	HOT MIX ASPHALT 25 M 64 BASE COURSE
302036P	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK
401093M	HOT MIX ASPHALT 25 M 64 BASE COURSE
401048M	HOT MIX ASPHALT 12.5 M 64 SURFACE COURSE
804006P	TOPSOILING, 4" THICK
806006P	FERTILIZING AND SEEDING, TYPE A3
806018P	FERTILIZING AND SEEDING, TYPE F



SLOPE TR	EATM	ENT	IN FILL
FILL HEIGHT	D	V.C.	SLOPE
0 TO 5'	2′	4'	6:1
5' TO 10'	3′	6′	4:1
OVER 10'	7′	6′	2:1

N.T.S.

TS-2

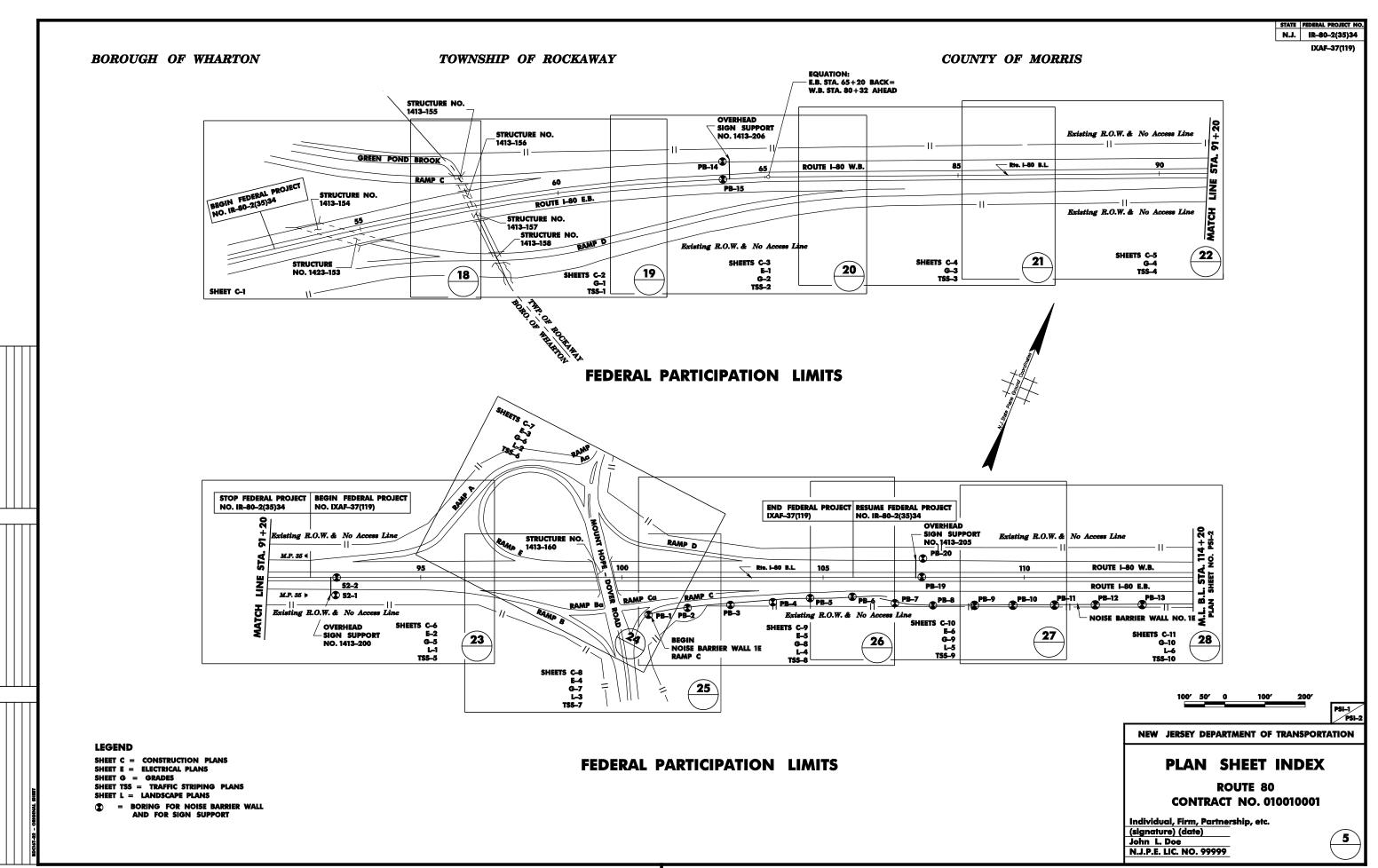
NEW JERSEY DEPARTMENT OF TRANSPORTATION

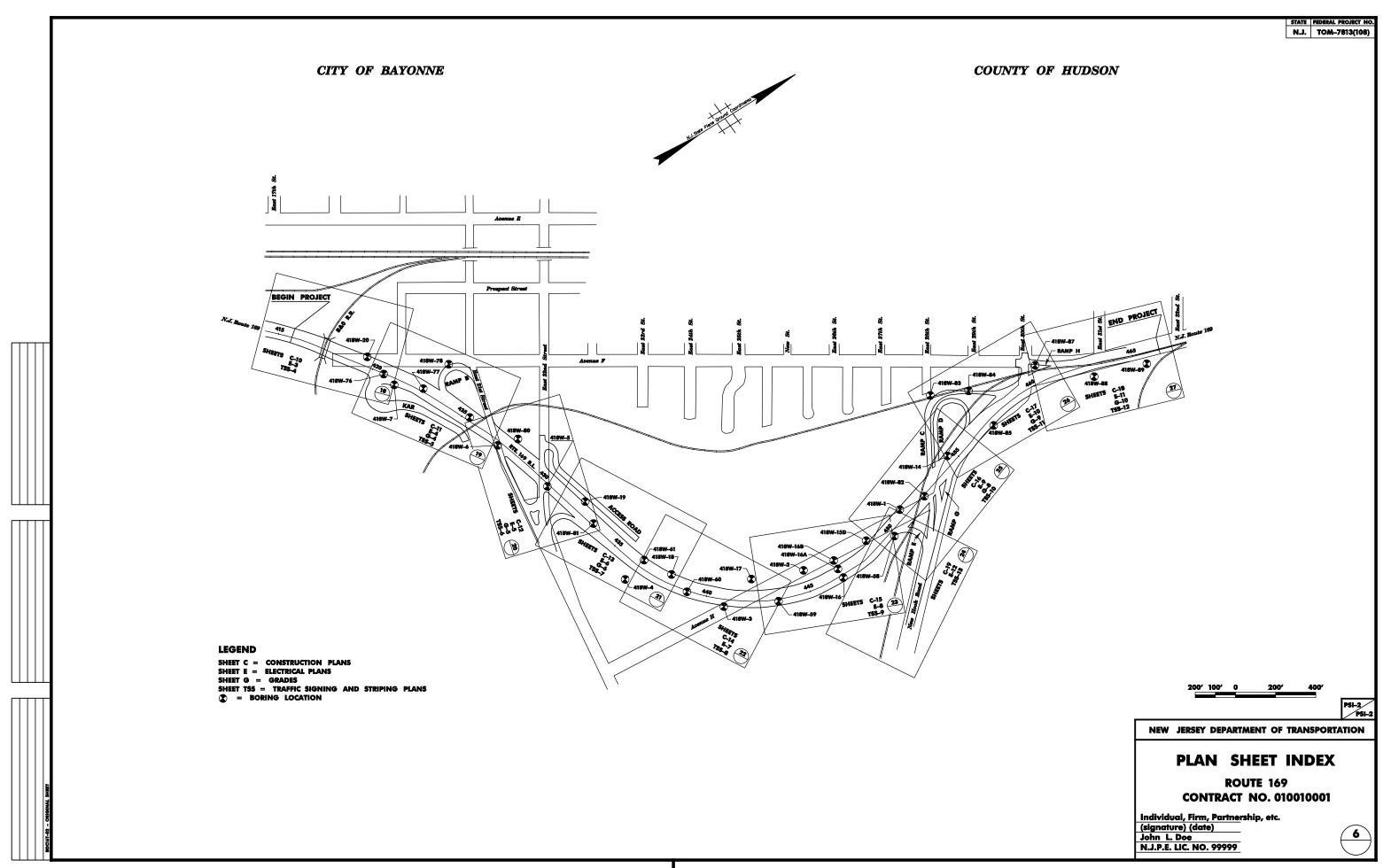
## **TYPICAL SECTIONS**

**ROUTE 295 CONTRACT NO. 010010001** 

Individual, Firm, Partnership, etc. (signature) (date) John L. Doe N.J.P.E. LIC. NO. 99999







f

#### GR. HT. HEIGHT H.W. HEADWALL HYD. HYDRANT INVERT

B.M.

C.I.P.

D.I.P.

D.C.

DE

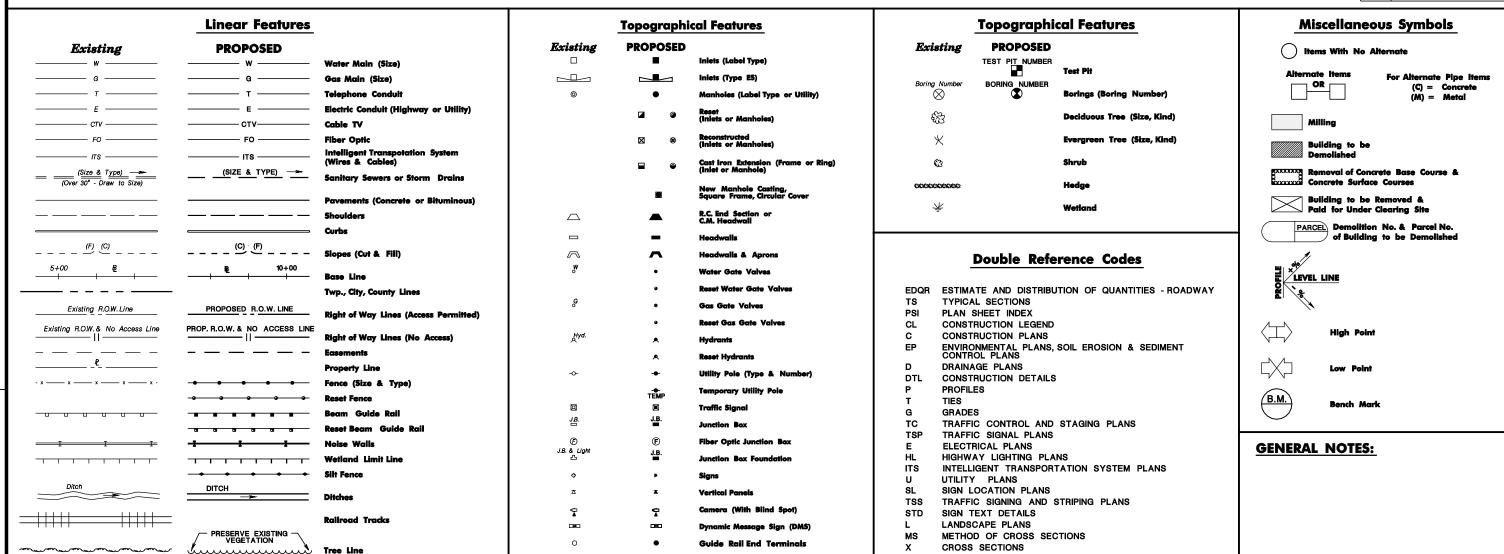
DH

DWY

Tidelands Line

## NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD LEGEND

STATE	FEDERAL PROJECT NO.
N.J.	I-IR-IG-295-2(93)61

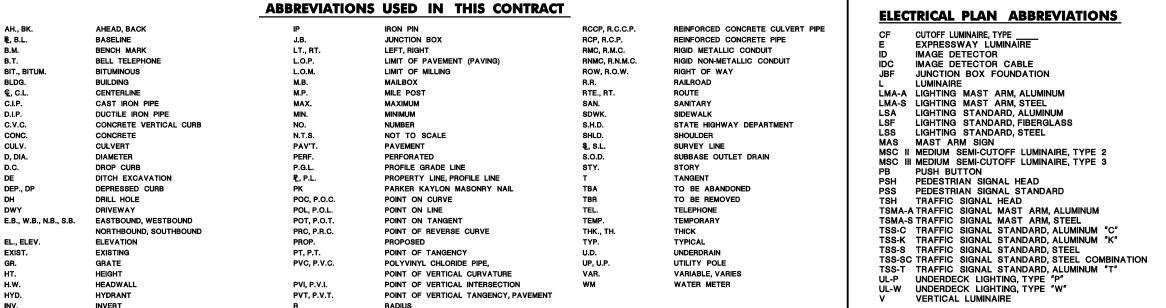


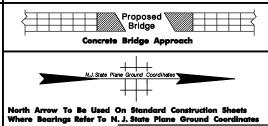
**ROW Monument (ROW Control Points)** 

ESTIMATE OF QUANTITIES - BRIDGE

BRIDGE PLANS

EQB





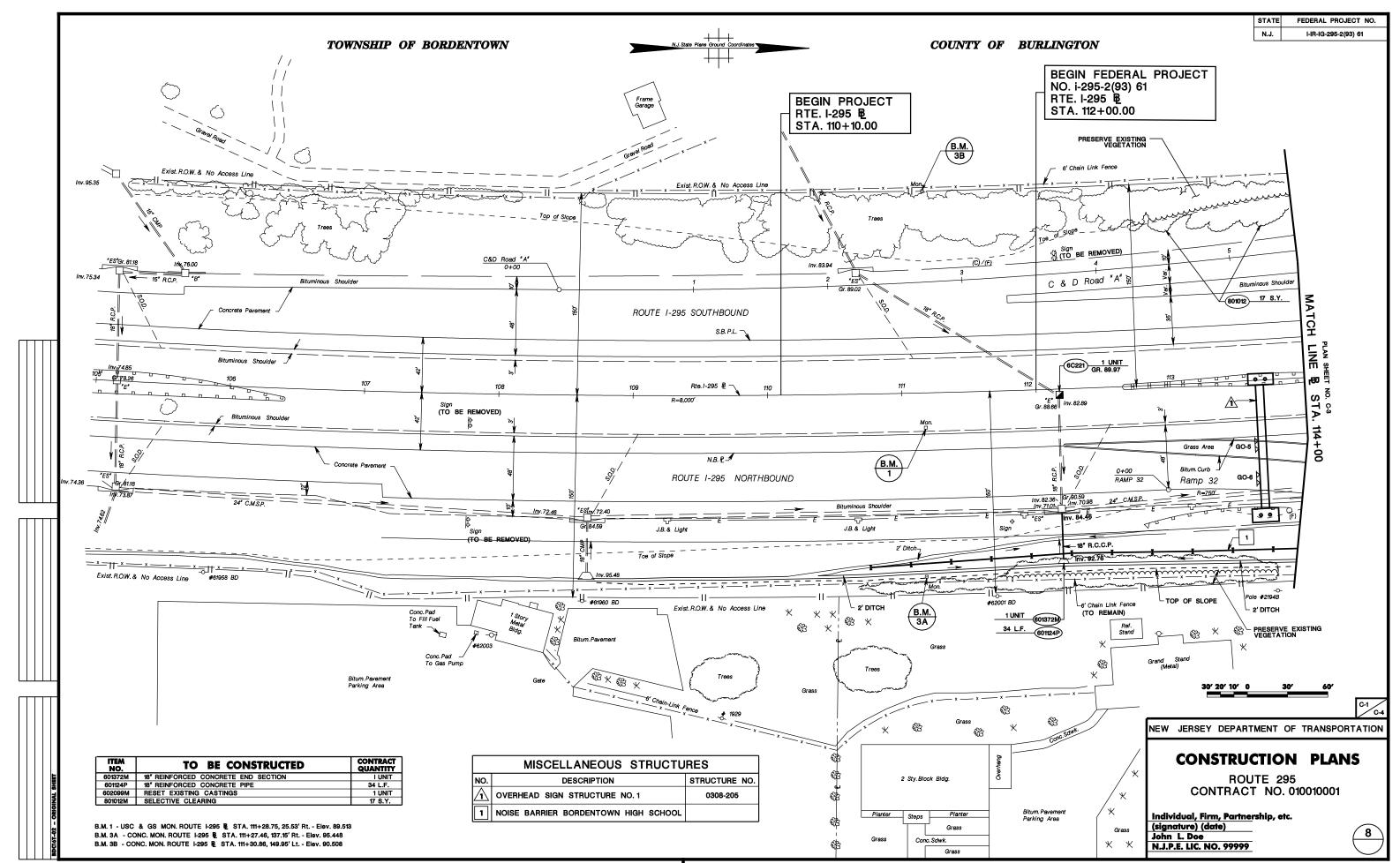
NEW JERSEY DEPARTMENT OF TRANSPORTATION

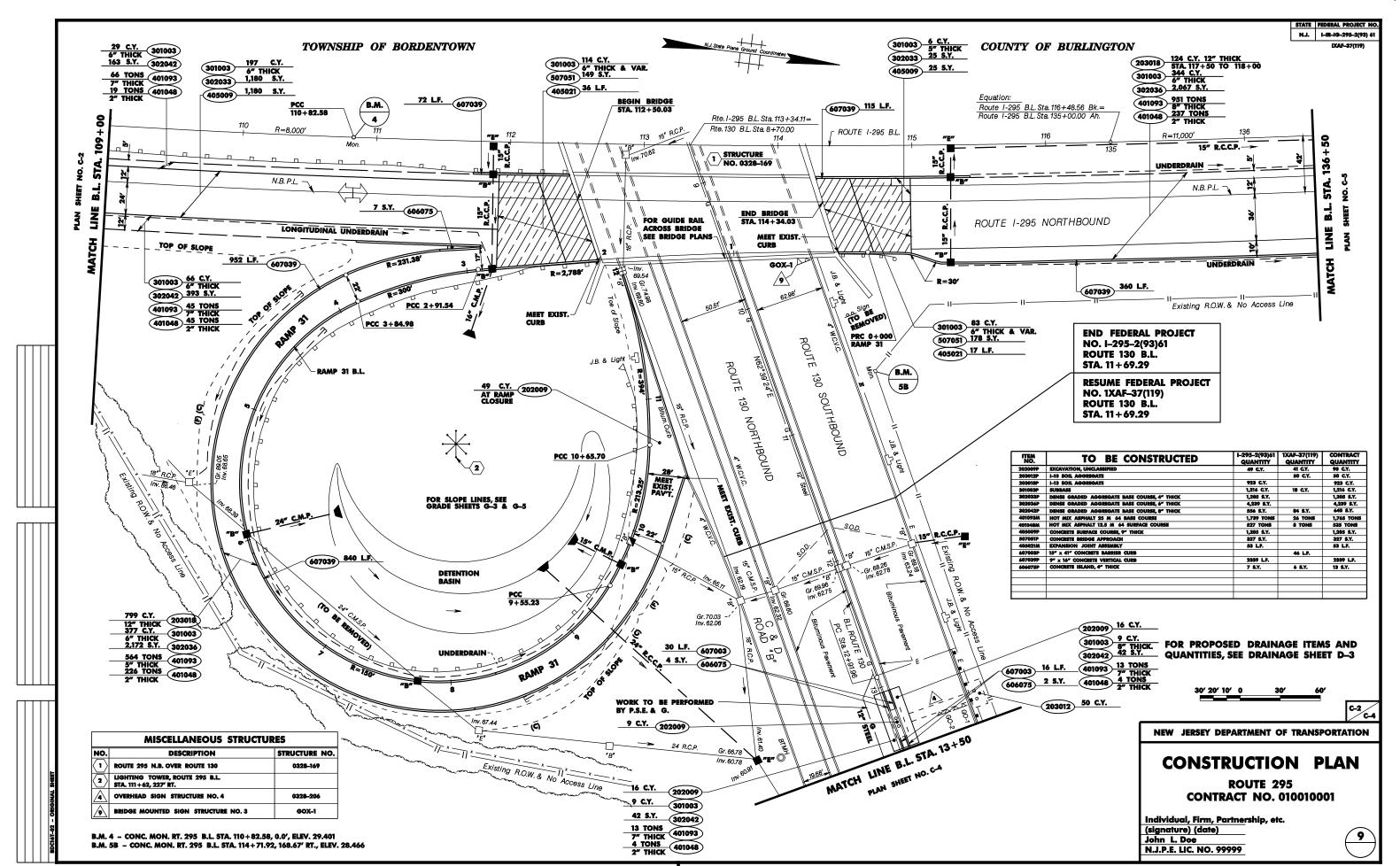
## **CONSTRUCTION LEGEND**

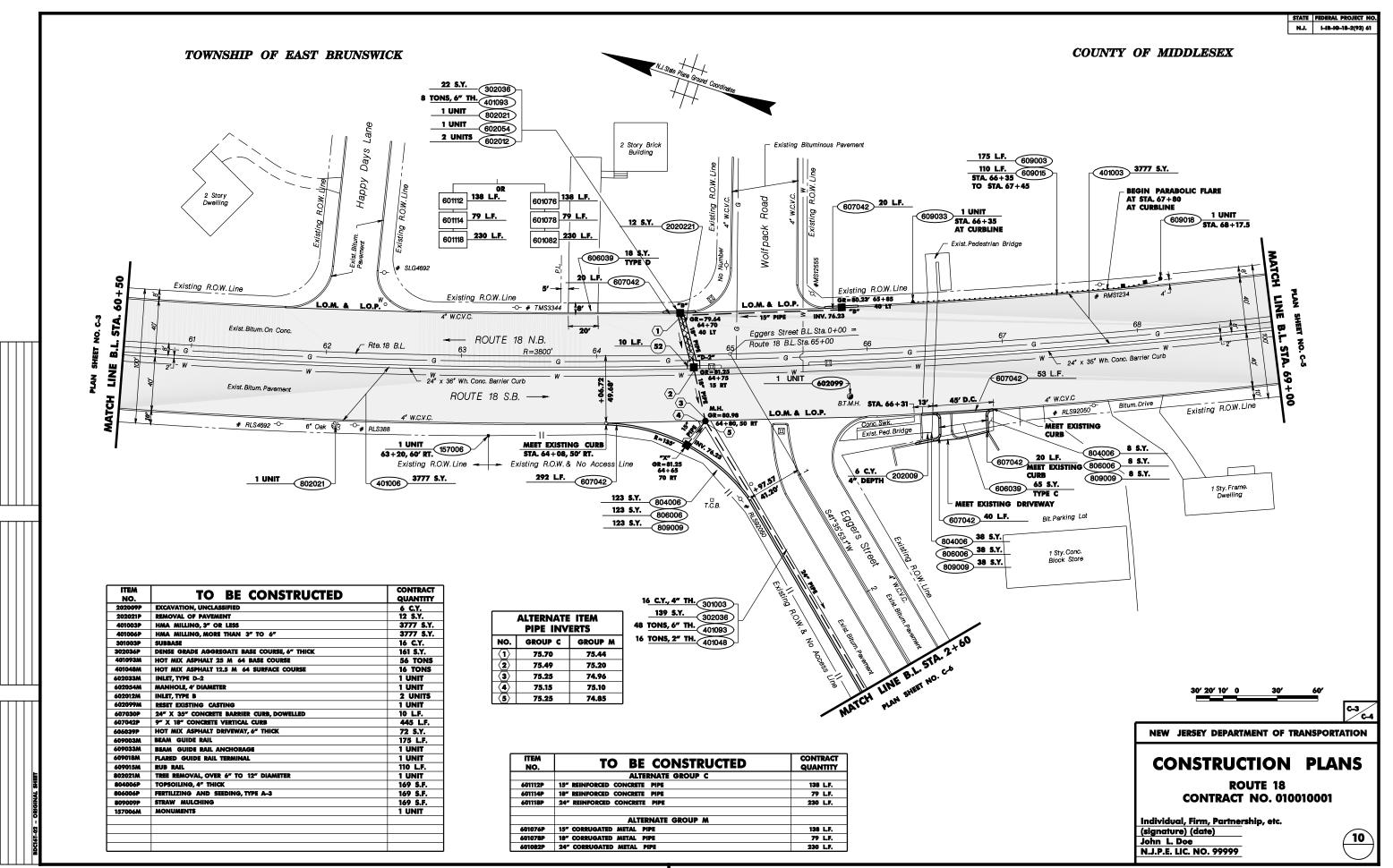
ROUTE 295 CONTRACT NO. 010010001

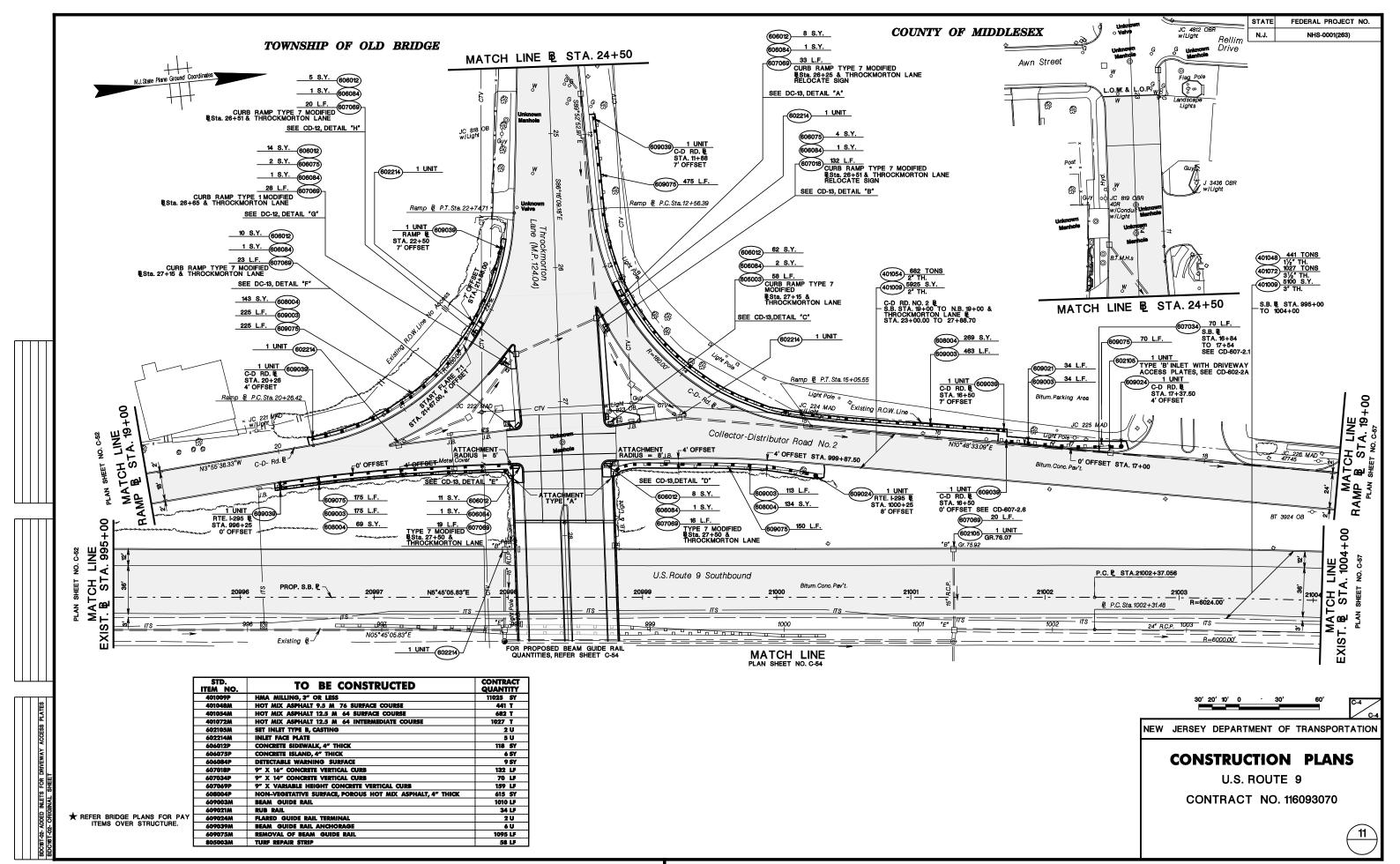
Individual, Firm, Partnership, etc. (signature) (date) John L. Doe N.J.P.E. LIC. NO. 99999











1. SENSITIVE AREA - DO NOT ENCROACH UPON OR STORE ANY EQUIPMENT/VEHICLE/MATERIALS IN WETLANDS/TRANSITION AREAS/STATE OPEN WATER AREAS/FLOODPLAINS BEYOND THE HEAVY DUTY ORANGE SILT FENCE OR CAUTION FENCE AS SHOWN ON THE PLANS. ADHERE TO THE LOCATIONS OF THE SILT FENCE AND CAUTION FENCE. THE ENVIRONMENTAL PERMITS DO NOT ALLOW FOR ENCROACHMENT BEYOND THE FENCING LOCATIONS. IN ADDITION, DO NOT LOCATE STOCKPILES, VEHICLES, CONCRETE WASHOUT FACILITIES, AND/OR EQUIPMENT WITHIN 50 FEET, IF FEASIBLE, OF A SLOPE, DRAINAGE FACILITY, WATERBODY, WETLAND, FLOODPLAIN, OR OTHER ENVIRONMENTALLY SENSITIVE AREA. PROTECT STOCKPILE BASES WITH A HAY BALE BARRIER OR SILT FENCE.

#### NOTE TO DESIGNER:

THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS. ALSO, THE PLACEMENT OF FENCING SHOULD BE BASED ON PROJECT SPECIFIC ENVIRONMENTAL CONSTRAINTS AND ENCROACHMENTS AUTHORIZED BY THE ENVIRONMENTAL PERMITS.

HERE MAY BE OTHER ENVIRONMENTALLY SENSITIVE AREAS INCLUDING, BUT NOT LIMITED TO, PARKLAND, HISTORIC SITES, CONSERVATION LANDS, ENDANGERED SPECIES HABITAT, AND CONTAMINATED SITES THAT WOULD REQUIRE PROTECTION FROM ENCROACHMENT BY THE CONTRACTOR THROUGH THE USE OF FENCING AND, ON A PROJECT-SPECIFIC BASIS, MAY REQUIRE PRE-CONSTRUCTION PHOTO DOCUMENTATION. THE ABOVE NOTE MAY NEED TO BE AMENDED TO INCLUDE THESE ADDITIONAL SENSITIVE AREAS.

- 2. ALL TERMS AND CONDITIONS OF THE ENVIRONMENTAL PERMITS ARE TO BE ADHERED TO. KEEP A COPY OF ALL PERMITS/APPROVALS AT THE WORK SITE, AND EXHIBIT THEM UPON REQUEST OF ANY PERSON.
- 3. MAKE NO CHANGES IN PERMIT-RELATED PLANS OR SPECIFICATIONS EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF THE NUDER. ANY CONSTRUCTION, GRADING, REMOVAL OF VEGETATION, OR OTHER ACTIVITY AT THIS SITE THAT AFFECTS A REGULATED AREA. OTHER THAN SPECIFICALLY APPROVED BY THE ENVIRONMENTAL PERMITS OR AS DETAILED BY THE APPROVED DRAWINGS, REQUIRES ADDITIONAL WRITTEN APPROVALS FROM THE NJDEP. THE COMMENCEMENT OF SUCH REGULATED ACTIVITIES WITHOUT THE APPROPRIATE APPROVALS IS IN VIOLATION OF STATE LAW. CONSULT WITH THE NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' ENVIRONMENTAL TEAM REGARDING POTENTIAL PERMIT MODIFICATIONS.

NOTE TO DESIGNER: THE ISSUING AGENCY OF THE PERMIT MAY BE ANOTHER AGENCY, SUCH AS THE U.S. ARMY CORPS OF ENGINEERS. THIS NOTE SHOULD BE REVISED ACCORDINGLY AND MAY ALSO NEED TO REFER TO FEDERAL LAW.

- 4. PERFORM THE WORK IN ACCORDANCE WITH THE NJDOT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN THE CURRENT NUDOT SPECIFICATIONS.
- 5. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES AND CAUTION FENCE ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED. CORRECT NON-FUNCTIONING SOIL EROSION AND SEDIMENT CONTROL MEASURES AND SITE WASTE CONTROL MEASURES WITHIN 24 HOURS AND AS SPECIFIED IN SECTION 158 OF THE SPECIFICATIONS. ALL ORANGE FENCE WILL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION. THE COLOR OF THE SILT FENCE INDICATED ON THE PLANS MUST BE ADHERED TO. BLACK SILT FENCE CAN NOT BE SUBSTITUTED FOR ORANGE AND VICE VERSA.

NOTE TO DESIGNER: THE LIMITS OF BLACK SILT FENCE VERSUS ORANGE HEAVY DUTY SILT FENCE SHOULD BE CLEARLY SHOWN ON THE PLANS. IN AREAS WHERE BOTH SILT FENCE AND CAUTION FENCE ARE WARRANTED, ORANGE HEAVY DUTY SILT FENCE IS TO BE USED IN PLACE OF THE COMBINED ROWS OF FENCING.

- 6. THE RE MAY LIMIT CLEARING, GRUBBING, GRADING, OR OTHER SOIL DISTURBING ACTIVITIES TO A MAXIMUM OF 17 ACRES BASED ON SITE CONDITIONS AND THE CONTRACTOR'S ABILITY TO INSTALL AND MAINTAIN SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- 7. IN ORDER TO PROTECT THE FISHERY RESOURCES WITHIN (INSERT NAME OF WATERBODY) AND ITS TRIBUTARIES, ANY PROPOSED GRADING OR CONSTRUCTION ACTIVITIES (INCLUDING THE INSTALLATION OF COFFERDAMS) WITHIN THE BANKS OF THIS OR ANY OTHER WATERBODY ON SITE ARE PROHIBITED BETWEEN (INSERT RESTRICTION DATES FROM PERMIT CONDITION) OF EACH YEAR. IN ADDITION, ANY ACTIVITY WITHIN THE 100-YEAR FLOODPLAIN OR FLOOD HAZARD AREA DRAINING TO THE WATERBODY(IES) THAT COULD INTRODUCE SEDIMENT INTO SAID WATERBODY(IES) OR THAT COULD CAUSE AN INCREASE IN THE NATURAL LEVEL OF TURBIDITY IS ALSO PROHIBITED DURING THIS PERIOD. THE NJDEP RESERVES THE RIGHT TO SUSPEND ALL REGULATED ACTIVITIES ON SITE SHOULD IT BE DETERMINED THAT PROPER PRECAUTIONS HAVE NOT BEEN TAKEN TO ENSURE CONTINUOUS COMPLIANCE WITH THESE CONDITIONS.

#### NOTE TO DESIGNER:

THE ISSUING AGENCY OF THE PERMIT WITH THE TIMING RESTRICTION MAY BE ANOTHER AGENCY, SUCH AS THE U.S. ARMY CORPS OF ENGINEERS. THIS NOTE SHOULD BE REVISED ACCORDINGLY.

SEPARATE COMMITMENTS MAY NEED TO BE INCLUDED ON THE PLANS IF ADDITIONAL TIMING RESTRICTIONS ARE REQUIRED TO PROTECT THREATENED/ENDANGERED SPECIES.

8. LOW FLOW FISH PASSAGE: THE PLACEMENT OF PIPE CULVERTS MUST BE AT OR JUST SLIGHTLY BELOW EXISTING STREAM BOTTOM INVERTS AS FOUND IMMEDIATELY UPSTREAM AND DOWNSTREAM OF THE CROSSINGS. ASSOCIATED APRON(S) MUST HAVE A CONCAVE BOTTOM TO MATCH THE PIPES AND RIP-RAP MUST BE PLACED, SHAPED AND/OR EMBEDDED INTO THE CHANNEL IN ACCORDANCE WITH THE CULVERT PIPE(S) PLACEMENT TO ALLOW FOR LOW FLOW FISH PASSAGE. THE NJDEP RESERVES THE RIGHT TO SUSPEND ALL REGULATED ACTIVITIES ON SITE SHOULD IT BE DETERMINED THAT PROPER PRECAUTIONS HAVE NOT BEEN TAKEN TO ENSURE CONTINUOUS COMPLIANCE WITH THESE CONDITIONS.

9. ENSURE THE FLOW OF WATERBODIES IS MAINTAINED AT ALL TIMES. PLACE FLOATING TURBIDITY BARRIER AROUND
THE WORK AREA/DEWATERING ACTIVITY DISCHARGE SO THAT IT DOES NOT RESTRICT A STREAM CHANNEL BY MORE THAN 50% OF ITS WIDTH/CROSS SECTIONAL AREA. INSTALL THE BARRIER AS CLOSE TO THE SHORE OR STRUCTURE AS PRACTICABLE. PLACEMENT IS TO BE PARALLEL TO STREAM FLOW AND ANCHORED TO THE SHORELINE UPSTREAM AND DOWNSTREAM OF THE WORK AREA, UNLESS OTHERWISE DIRECTED BY THE RE. IF NEEDED, A COFFERDAM SHOULD CORRAL THE WORK AREA. ERECT FLOATING TURBIDITY BARRIER AROUND THE WORK AREA (OUTSIDE OF WHERE THE COFFERDAM WILL BE INSTALLED) PRIOR TO CONSTRUCTING A COFFERDAM. LEAVE THE FLOATING TURBIDITY BARRIER IN PLACE UNTIL WORK IN THAT AREA IS COMPLETED, THE COFFERDAM IS REMOVED (IF APPLICABLE) AND, IF APPLICABLE, THE ADJACENT GROUND AREA HAS ESTABLISHED A FIRM STAND OF VEGETATION.

NOTE TO DESIGNER: THE DESIGNER WILL SPECIFY THE TYPE OF FLOATING TURBIDITY BARRIER AND THE CURTAIN DEPTHS AND WEIGHTS THAT ARE REQUIRED FOR A SPECIFIC PROJECT. IN ADDITION, TURBIDITY BARRIERS ARE NEEDED AROUND PILES THAT ARE TO BE JETTED, AND AROUND THE SHAFT DURING THE DRILLING AND FILLING PROCESSES OF THE DRILLED SHAFT CONSTRUCTION.

- 10. DURING THE COURSE OF CONSTRUCTION, NEITHER THE APPLICANT NOR ITS AGENTS WILL CAUSE OR PERMIT ANY UNREASONABLE INTERFERENCE WITH THE FREE FLOW OF THE STREAM BY PLACING OR DUMPING ANY MATERIALS, EQUIPMENT, DEBRIS OR STRUCTURES WITHIN OR ADJACENT TO THE STREAM CORRIDOR UPON COMPLETION OR ABANDONMENT OF THE WORK. THE APPLICANT AND/OR ITS AGENTS WILL REMOVE AND DISPOSE OF IN A LAWFUL MANNER ALL EXCESS MATERIAL, EQUIPMENT AND DEBRIS FROM THE STREAM CORRIDOR AND ADJACENT LANDS.
- 11. EARTHEN BERMS WILL NOT BE USED AS COFFERDAMS.
- 12. PRECAUTIONS MUST BE TAKEN TO PREVENT RAW CONCRETE/GROUT FROM COMING INTO CONTACT WITH WATERBODIES. RAW CONCRETE/GROUT IS TOXIC TO AQUATIC BIOTA. ANY RAW CONCRETE/GROUT THAT COMES IN CONTACT WITH A WATERBODY MUST BE REMOVED IMMEDIATELY. NO PUMPED WATER FROM CONCRETE/GROUT OPERATIONS MAY BE DISCHARGED DIRECTLY TO A WATERBODY. ALL PUMPED WATER IS TO BE DISCHARGED TO A HOLDING TANK OR CONCRETE WASHOUT FACILITY AND MANAGED AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158,
- 13. THE CONTRACTOR IS NOT ALLOWED TO DROP WASTE CONCRETE, DEBRIS, OR OTHER CONSTRUCTION MATERIAL INTO WATERBODIES, UNIMPACTED WETLANDS/TRANSITION AREAS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. TEMPORARY SHIELDING IS TO BE USED DURING DEMOLITION OF BRIDGES OVER THESE ENVIRONMENTALLY SENSITIVE AREAS TO CATCH DEBRIS. TEMPORARY SHIELDING IS TO BE DESIGNED TO PREVENT FINES, AS WELL AS LARGER PIECES OF DEBRIS, FROM ENTERING THE WATERBODY. IF DEBRIS DOES ACCIDENTALLY FALL INTO ANY OF THESE ENVIRONMENTALLY SENSITIVE AREAS, PROMPTLY REMOVE IT. THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' ENVIRONMENTAL TEAM SHOULD BE CONTACTED FOR GUIDANCE IF RETRIEVAL OF DEBRIS MAY POTENTIALLY CAUSE DAMAGE TO THE ENVIRONMENTALLY SENSITIVE AREA.
- 14. PUMPING OF SEDIMENT-LADEN WATER FROM DEWATERING ACTIVITIES DIRECTLY INTO WATERBODIES, WETLANDS, OR INLETS IS PROHIBITED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. PERFORM DEWATERING AS SPECIFIED IN SECTION 501 OF THE SPECIFICATIONS. STANDARD SOIL EROSION AND SEDIMENT CONTROL ITEMS ARE LISTED IN SECTION 158. BASINS/SEDIMENT CONTROL TANKS/SEDIMENT CONTROL BAGS NEEDED FOR DEWATERING ACTIVITIES SHOULD NOT BE LOCATED IN UNIMPACTED WETLAND OR TRANSITION AREAS OR IN FLOODPLAINS, IF FEASIBLE, OTHERWISE, PERMIT MODIFICATIONS MAY BE REQUIRED. CONSTRUCTION OF DEWATERING FACILITIES INVOLVING GROUND DISTURBANCE NEAR A WATERBODY IS TO BE DONE OUTSIDE OF ANY REGULATORY PERMIT TIMING RESTRICTION PERIOD. CLEAN AND CLEAR WATER FROM DEWATERING ACTIVITIES SHOULD BE RETURNED TO A PORTION OF THE WATERBODY THAT IS PROTECTED BY TURBIDITY BARRIER WITHOUT CAUSING SCOUR OR EROSION.
- 15. PLACE STLT FENCE/HAY BALES AROUND SEDIMENT CONTROL BAGS WHERE APPLICABLE. ALSO PLACE FLOATING TURBIDITY BARRIERS TO CORRAL THE DISCHARGE AREA IF THE DISCHARGE FROM THE SEDIMENT CONTROL BAG FLOWS INTO A RECEIVING WATERBODY.
- 16. IMMEDIATELY CEASE AN ACTIVITY THAT CAUSES TURBIDITY BEYOND CONTROL MEASURES.
- 17. PROTECT ALL DRAINAGE SYSTEM INLETS (NEW AND EXISTING) FROM SILTATION.
- 18. STABILIZE STORM DRAINAGE OUTLETS BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
- 19. DUST/DIRT CONTROL/TRACKING: EMPLOY CONSTRUCTION METHODS THAT MINIMIZE AIRBORNE DUST AND PREVENT SOILS AND OTHER MATERIALS FROM BEING DEPOSITED ON EXISTING ROADWAYS. APPLY WATER OR OTHER RE APPROVED MATERIALS TO UNPAYED AREAS TO CONTROL DUST CAUSED BY HAULING OR OTHER CONSTRUCTION OPERATIONS. IMMEDIATELY REMOVE ALL SOIL OR OTHER MATERIALS WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 20. DURING SAWCUTTING, MILLING, CORE SAMPLING, INSTALLING LONGITUDINAL JOINT TIES, DIAMOND GRINDING, SLIP-FORM PAYING, PLACEMENT OF PERMANENT ROADWAY REFLECTIVE MARKERS, AND SIMILAR OPERATIONS THAT COULD CAUSE DUST, SLURRY, AND STORMWATER RUNOFF PROBLEMS, DO NOT CREATE A DUST HAZARD AND ENSURE THAT DEBRIS AND SLURRY DO NOT ENTER INLETS OR ENVIRONMENTALLY SENSITIVE AREAS, SUCH AS WETLANDS AND WATERBODIES. THIS INCLUDES, BUT IS NOT LIMITED TO, BRIDGE DECK, APPROACH SLAB, AND TRANSITION SLAB SAWCUTTING. PROVIDE FOR CONTINUOUS REMOVAL OF GRINDING RESIDUE FROM THE PAVEMENT SURFACE BEFORE IT IS BLOWN ABOUT BY TRAFFIC MOTION, WIND, OR PRECIPITATION. CONTAIN THE CONCRETE SLURRY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. THE CONTRACTOR MAY MANAGE THE SLURRY IN A CONCRETE WASHOUT FACILITY IF THAT ITEM IS PART OF THE CONTRACT.
- 21. ACID-PRODUCING SOIL: ACID-PRODUCING SOIL IS TO BE TREATED ACCORDING TO THE NEW JERSEY STANDARDS FOR SOIL FROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN 202.03.05 OF THE SPECIFICATIONS. FISHER THE CLEANING OF EQUIPMENT USED TO MOVE ACID-PRODUCING SOIL IS CONDUCTED AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.

NOTE TO DESIGNER: THE POTENTIAL FOR ACID-PRODUCING SOIL SHOULD BE IDENTIFIED. ALL KNOWN AREAS OF ACID-PRODUCING SOIL SHOULD BE IDENTIFIED ON THE PLANS. THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS.

- 22. EXCAVATED MATERIAL THAT WILL NOT BE USED AS BACKFILL MUST BE DISPOSED OF IN A LAWFUL MANNER OUTSIDE OF ANY REGULATED FLOODPLAIN, OPEN WATER, WETLAND, OR TRANSITION AREA, AND IN SUCH A WAY AS NOT TO INTERFERE WITH THE POSITIVE DRAINAGE OF THE RECEIVING AREA.
- 23. ENSURE THAT TREES, SHRUBS, GRASSES, AND OTHER VEGETATION LOCATED ON STREAM BANKS AND WITHIN 50 FFFT FROM THE TOP OF ALL STREAM BANKS ON SITE ARE NOT DISTURBED FOR ANY REASON. EXCEPT WHERE APPROVED BY THE NJDEP. THIS CONDITION APPLIES TO ALL STREAMS AND WATERWAYS ON SITE, REGARDLESS OF THE CONTRIBUTORY DRAINAGE AREA.

NOTE TO DESIGNER: A DISTANCE GREATER THAN 50 FEET MAY BE NEEDED FOR WATERCOURSES SUCH AS THOSE ASSOCIATED WITH TROUT, CATEGORY ONE WATERS, THREATENED/ENDANGERED SPECIES, OR ACID-PRODUCING SOILS.

- 24. ENSURE ALL VEGETATION OUTSIDE LIMITS OF DISTURBANCE IS PRESERVED.
- 25. UPON COMPLETION OF THE PROJECT, ALL TEMPORARILY DISTURBED AREAS, INCLUDING UPLANDS. STATE OPEN WATER, WETLANDS, AND TRANSITION AREAS, MUST BE RESTORED TO THEIR PRE-CONSTRUCTION GRADES USING NATIVE SOILS AND PLANTED WITH INDIGENOUS NON-INVASIVE VEGETATION AS DIRECTED BY THE RE IN CONSULTATION WITH THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' ENVIRONMENTAL TEAM.
- 26. IN ORDER TO AVOID ADDITIONAL MITIGATION REQUIREMENTS, ALL TEMPORARY DISTURBANCES TO WETLANDS MUST BE COMPLETED WITHIN SIX MONTHS AFTER THEY ARE BEGUN AND THESE AREAS MUST BE RESTORED TO
- 27. ENSURE TIMBER MATTING IS USED UNDER EQUIPMENT IN WET AREAS TO PREVENT SOIL COMPACTION.
- 28. DURING THE INSTALLATION OR REMOVAL OF TREATED TIMBERS IN A WATERBODY, PLACE OIL-ABSORBENT BOOMS AROUND THE WORK AREA.
- 29. TREATED TIMBERS: TREATED TIMBER PRODUCTS ARE PROHIBITED IN SHELLFISH AREAS (MARINE AND FRESHWATER) AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SUCH AS, BUT NOT LIMITED TO, ESSENTIAL FISH HABITAT, ENDANGERED/THREATENED SPECIES HABITAT, CATEGORY ONE WATERS, TROUT-ASSOCIATED WATERS, AND WETLANDS. NON-POLLUTING MATERIALS, SUCH AS FIBERGLASS COMPOSITES, ARE TO BE USED IN THESE AREAS. LISE OF TREATED TIMBER PRODUCTS IN OTHER AREAS REQUIRES NUMBER BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS' APPROVAL PRIOR TO USAGE EXCEPT WHERE SPECIFIED IN THE CONTRACT.

NOTE TO DESIGNER: THIS ITEM IS INTENDED TO PROVIDE DIRECTION TO THE DESIGNER, AS WELL AS THE CONTRACTOR, REGARDING THE USE OF NON-POLLUTING MATERIALS.

- 30. IF DIVERS ARE TO BE USED TO INSPECT THE BED OF A WATERBODY, A VIDEO OF THIS INSPECTION MUST BE SUPPLIED TO THE RE FOR HIS REVIEW AND APPROVAL.
- 31. IE AN ARCHAEOLOGY SITE OR UNDERGROUND STORAGE TANKS ARE UNEXPECTEDLY DISCOVERED DURING CONSTRUCTION, CEASE OPERATIONS IMMEDIATELY AND CONTACT THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS THROUGH THE RE.
- 32. ENSURE A SITE SPECIFIC HEALTH AND SAFETY PLAN IS SUBMITTED AND IMPLEMENTED IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND SAFETY REQUIREMENTS FOR WORK IN AND WITH CONTAMINATED SOIL, SEDIMENT, WASTE AND WATER. THE PLAN GOVERNS ALL HEALTH AND SAFETY FACETS OF THE PROJECT CONSTRUCTION AND ENCOMPASSES THE ACTIVITIES OF ALL PERSONS WHO ENTER THE SITE.

#### NOTE TO DESIGNER:

THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS, THESE NOTES CAN BE AMENDED/OMITTED TO REFLECT PROJECT SPECIFIC CONDITIONS, ADDITIONAL NOTES MAY BE NEEDED.

COORDINATE WITH NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND **ENVIRONMENTAL SOLUTIONS** WHEN DEVELOPING THE NOTES FOR A SPECIFIC PROJECT.

REMOVE THIS NOTE AND OTHER DESIGNER NOTES AFTER DESIGN SPECIFIC INFORMATION IS ADDED.

## **ENVIRONMENTAL NOTES** AND COMMITMENTS



NEW JERSEY DEPARTMENT OF TRANSPORTATION

**ENVIRONMENTAL, SOIL EROSION** & SEDIMENT CONTROL PLANS

> **ROUTE 10 OVER BRADY'S BROOK** CONTRACT NO. 012345678

(NAME OF CONSULTA

(CERTIFICATE OF AUTHORIZATION NO. OR PROFESSIONAL ASSOCIATION)

ENGINEERS SIGNATURE) (DATE) DINEERS NAME PRINTER

NEW JERSEY PROFESSIONAL ENG



- 33. ENSURE ALL PERSONNEL, EQUIPMENT, AND ANCILLARY SERVICES ARE PROVIDED TO COLLECT, ANALYZE, AND TRANSPORT ENVIRONMENTAL SAMPLES REQUIRED TO CHARACTERIZE CONTAMINATED MATERIAL IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE NUDEP FIELD SAMPLING PROCEDURES MANUAL, NUDEP MANAGEMENT OF EXCAYATED SOILS GUIDELINES, APPENDIX I OF THE NUDEP WASTE CLASSIFICATION FORM, AND ACCORDING TO THE RECYCLING OR DISPOSAL FACILITY ACCEPTING THE WASTE.
- 34. ENSURE ALL PERSONNEL, MATERIALS AND EQUIPMENT ARE PROVIDED TO PROPERLY STORE AND PROTECT CONTAMINATED MATERIAL AT THE EXCAVATION AND IN TEMPORARY STOCKPILES. LOCATE TEMPORARY STOCKPILES IN DRY AREAS SELECTED BY THE CONTRACTOR AND APPROVED BY THE RE. PLACE STOCKPILES ON PLASTIC SHEETING TO PREVENT MIGRATION OF CONTAMINANTS INTO ADJACENT SOILS, SURFACE WATER, AND GROUNDWATER.
- 35. ENSURE A POLLUTION PREVENTION AND CONTROL PLAN IS DEVELOPED AND IMPLEMENTED TO MANAGE CONTAMINATED WATER AND GROUNDWATER. DO NOT DISCHARGE CONTAMINATED STORMWATER, GROUNDWATER, SEDIMENTS OR FREE PRODUCT TO LOCAL STORM SEWER SYSTEMS OR WATERWAYS EXCEPT AS AUTHORIZED BY A DISCHARGE APPROVAL OR PERMIT.
- 36. ENSURE ALL PERSONNEL, MATERIALS AND EQUIPMENT ARE PROVIDED TO MOBILIZE, OPERATE AND MAINTAIN AN OIL-WATER SEPARATOR FOR REMOVAL OF FREE PRODUCT AND CONTAMINATED SEDIMENTS GENERATED DURING DEWATERING ACTIVITIES IN AREAS OF PETROLEUM-CONTAMINATED GROUNDWATER. ENSURE THE OIL-WATER SEPARATOR IS A SELF-CONTAINED, FACTORY ASSEMBLED UNIT CAPABLE OF MEETING ALL DISCHARGE APPROVALS OR PERMITS OBTAINED BY THE CONTRACTOR.
- 37. ENSURE A MATERIAL HANDLING PLAN IS DEVELOPED AND IMPLEMENTED TO MANAGE CONTAMINATED SOIL.

NOTE TO DESIGNER: IN THE INTEREST OF PROMOTING ENVIRONMENTAL STEWARDSHIP, THE FOLLOWING NOTES SHOULD BE INCLUDED ON ALL PROJECTS (WITH THE EXCEPTION BEING THE NOTE REGARDING CONCRETE WASHOUT SYSTEM, WHICH IS NOT REQUIRED FOR PROJECTS THAT DO NOT INVOLVE THE PLACEMENT OF CONCRETE):

38. STORE PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING COMPOUNDS IN CONTAINERS IN A DRY COVERED AREA. ENSURE MANUFACTURERS' RECOMMENDED APPLICATION RATES, USES, AND METHODS ARE STRICTLY FOLLOWED TO THE EXTENT NECESSARY TO PREVENT OR MINIMIZE THE PRESENCE OF WASTE FROM SUCH MATERIALS IN THE STORMWATER DISCHARGE/RUNOFF FROM THE PROJECT LIMITS. STORE PRODUCTS AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.

NOTE TO DESIGNER: THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS.

- 39. ENSURE THE HANDLING OF WASTE BUILDING MATERIAL, RUBBLE AND OTHER CONSTRUCTION SITE WASTES, INCLUDING LITTER AND HAZARDOUS AND SANITARY WASTES. IS IN ACCORDANCE WITH THE STATE SOLID WASTE MANAGEMENT ACT, N.J.S.A. 13:1E-1 ET SEQ., AND ITS IMPLEMENTING RULES AT N.J.A.C. 7:26, 7:26, 7:26, AND 7:26G; THE NEW JERSEY PESTICIDE CONTROL CODE AT N.J.A.C. 7:30; THE STATE LITTER STATUTE (N.J.S.A. 13:1E-99.3); AND OSHA REQUIREMENTS FOR SANITATION AT 29 C.F.R. 1926.
- 40. ENSURE THE PROJECT LIMITS ARE KEPT CLEAN AND FREE OF DEBRIS, TRASH AND LITTER. CONTAIN LITTER AND WASTE THAT HAS THE POTENTIAL TO BE TRANSPORTED BY STORMWATER DISCHARGE/RUNDOF. ENSURE THE PROJECT LIMITS HAVE ONE OR MORE DESIGNATED WASTE COLLECTION AREAS ONSITE OR ADJACENT TO THE SITE, AND AN ADEQUATE NUMBER OF CONTAINERS (WITH LIDS OR COVERS) FOR WASTE. ENSURE WASTE IS COLLECTED FROM SUCH CONTAINERS BEFORE THEY OVERFLOW. IMMEDIATELY CLEANUP SPILLS AT SUCH CONTAINERS SHOULD THEY OCCUR.
- 41. CONCRETE WASHOUT SYSTEM: CONCRETE WASHOUT WITHIN THE PROJECT LIMITS IS PROHIBITED OUTSIDE OF DESIGNATED AREAS. PROVIDE CONCRETE WASHOUT FACILITY(IES) AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158. MORE THAN ONE DESIGNATED CONCRETE WASHOUT FACILITY LOCATION MAY BE NECESSARY DEPENDING ON EASE OF ACCESS AND THE AMOUNT OF CONCRETE BEING POURED AT ONE TIME.

NOTE TO DESIGNER: A PAY ITEM FOR CONCRETE WASHOUT SYSTEM IS REQUIRED ON ALL PROJECTS THAT INVOLVE
THE PLACEMENT OF CONCRETE. REGARDLESS OF THE AMOUNT. THE DISTANCE FOR THE LOCATION OF THE CONCRETE
WASHOUT FACILITY(IES) FROM ENVIRONMENTALLY SENSITIVE AREAS MAY NEED TO BE GREATER THAN 50 FEET, DEPENDING
UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR
CATEGORY ONE WATERS, AS DESIGNATED BY NJDEP, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS.

- 42. SANITARY SEWAGE/SEPTAGE DISPOSAL: DISCHARGES OF RAW SANITARY SEWAGE OR SEPTAGE ONSITE ARE STRICTLY PROHIBITED. ENSURE PROPER DISPOSAL OF SANITARY SEWAGE/SEPTAGE. PROVIDE AND MAINTAIN ADEQUATE FACILITIES ADJACENT TO THE WORK SITE FOR ALL WORKERS AND OTHER SANITARY NEEDS.
- 43. BEFORE THE START OF CONSTRUCTION OPERATIONS, PROVIDE A MINIMUM OF TWO (2) OIL-ONLY EMERGENCY SPILL KITS ACCORDING TO THE SPECIFICATIONS. THAT ARE READILY AVAILABLE WITHIN THE PROJECT LIMITS, WITH EACH KIT CAPABLE OF CLEANING UP AT LEAST 95 GALLONS OF SPILL. ENSURE THE KITS ARE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158. IMMEDIATELY CONTAIN AND CLEAN UP ALL SPILLS. ENSURE CLEANED UP MATERIALS ARE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL. STATE. AND LOCAL LAWS, RULES, AND REGULATIONS AND AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. REPLACE COMPONENTS OF SPILL KITS AS USED.

NOTE TO DESIGNER: THE NUMBER OF SPILL KITS MAY VARY DEPENDING ON PROJECT SPECIFIC SITE CONDITIONS,
THE AMOUNT OF PETROLEUM PRODUCTS AND TYPES OF EQUIPMENT THAT WILL BE ON THE PROJECT SITE. AND EASE OF ACCESS
TO THE LOCATION OF THE SPILL KITS. HOWEVER, EACH KIT SHOULD STILL HAVE THE CAPABILITY TO CLEAN UP AT LEAST
95 GALLONS OF SPILL AND A MINIMUM OF TWO (2) KITS IS REQUIRED. THE DESIGNER MAY CONTACT THE BUREAU OF
LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS FOR GUIDANCE IN DETERMINING THE NUMBER OF SPILL KITS.
ADDITIONAL OIL-ONLY EMERGENCY SPILL KIT(S) WILL BE REQUIRED IF A BARGE OR SOME OTHER FLOATING DEVICE IS
USED TO TRANSPORT, OR IS USED AS A PLATFORM FOR, CONSTRUCTION MACHINERY. THESE ADDITIONAL SPILL KITS SHALL BE
PLACED ON THE BARGE OR FLOATING DEVICE WHILE ON THE PROJECT. IF REFUELING OCCURS ON A BARGE OR FLOATING DEVICE
ON A WATERBODY, ABSORBENT BOOMS AND OIL CONTAINMENT BOOMS WILL BE REQUIRED TO SURROUND THE OPERATION.
OIL CONTAINMENT BOOMS ARE A SEPARATE PAY ITEM. FOR PROJECTS THAT WILL UTILIZE A BARGE OR FLOATING DEVICE TO
TRANSPORT, OR AS A PLATFORM FOR, CONSTRUCTION MACHINERY, THE FOLLOWING TEXT SHOULD BE INCLUDED IN THE SPILL
KIT NOTE; "PLACE ADDITIONAL SPILL KITS AND OIL CONTAINMENT BOOMS ON BARGES OR FLOATING DEVICE ON
A WATERBODY, ABSORBENT BOOMS AND OIL CONTAINMENT BOOMS ARE REQUIRED TO SURROUND THE OPERATION.\*
(THE DESIGNER SHOULD SPECIFY THE NUMBER OF KITS AND OIL CONTAINMENT BOOMS TO BE PLACED ON THE BARGES OR
FLOATING DEVICES AND THIS NUMBER SHOULD BE STATED IN THE NOTE ON THE PLANS AND INCLUDED IN THE GUANTITIES
FOR THE PROJECT.)

- 44. IF A SPILL OCCURS AS A RESULT OF THE CONTRACTOR'S OPERATIONS, IMMEDIATELY CONTAIN IT AND IMMEDIATELY CONTACT THE NJOEP HOTLINE AT 1-877-YARN DEP (1-877-927-6337), AS WELL AS THE RE. CLEAN UP AND REMEDIATE THE SPILL AS DIRECTED BY NJDEP, SUBMIT AN INCIDENT REPORT TO THE RE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158.
- 45. DISCHARGES OF HAZARDOUS SUBSTANCES (AS DEFINED IN N.J.A.C. 7:1E-1.6) IN CONSTRUCTION SITE WASTES ARE SUBJECT TO THE PROVISIONS OF THE SPILL COMPENSATION AND CONTROL ACT, N.J.S.A. 58:10-23.11 ET SEQ., AND OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES FOR DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES AT N.J.A.C. 7:1E.
- 46. ENSURE REFUELING OPERATIONS ARE CONDUCTED AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA. DO NOT STORE FUEL TANKS CLOSER THAN 50 FEET, WHERE FEASIBLE, FROM THES SENSITIVE AREAS. IMMEDIATELY REPAIR LEAKING EQUIPMENT OR REMOVE IT FROM THE PROJECT LIMITS. CLEAN UP THE TAINTED MATERIAL AND DISPOSE OF THE MATERIAL AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. PROTECT FUELING AREAS FROM RUN-ON AND RUNOFF.

NOTE TO DESIGNER: THE 50 - FOOT DISTANCE MAY NEED TO BE INCREASED DEPENDING UPON PROJECT SPECIFIC CONDITIONS/RESTRICTIONS, SUCH AS THE PRESENCE OF EXCEPTIONAL VALUE WETLANDS OR CATEGORY ONE WATERS, WHICH HAVE LARGER BUFFER ZONE REQUIREMENTS. ALSO, SEE THE NOTE TO DESIGNER, REGARDING THE SPILL KIT ENVIRONMENTAL NOTE, FOR PROJECTS INVOLVING REFUELING THAT WILL OCCUR ON A BARGE OR FLOATING DEVICE ON A WATERBOODY.

47. ENVIRONMENTAL COMPLIANCE INSPECTIONS (INCLUDING, BUT NOT LIMITED TO, SOIL EROSION AND SEDIMENT CONTROL MEASURES, WATER QUALITY MEASURES, AND SITE WASTE CONTROL OPERATIONS) ARE TO BE PERFORMED BY THE CONTRACTOR AND THE RE AS SPECIFIED IN SECTION 158 OF THE SPECIFICATIONS. COMPLETE THE NUDOT ENVIRONMENTAL COMPLIANCE CHECKLIST AND INSPECTION FORM FOR EACH INSPECTION AND RETAIN THE ORIGINAL WITHIN THE PROJECT LIMITS. MAKE THE FORM AVAILABLE UPON REQUEST.

#### PERMITS BOX

NOTE TO DESIGNER: IN ADDITION TO LISTING THE PERMITS THAT ARE SPECIFICALLY ISSUED FOR A PROJECT, REFERENCE TO THE NJPDES 5G3 CONSTRUCTION ACTIVITY STORMWATER GENERAL PERMIT (NJGØØ88323) SHOULD BE INCLUDED IN THE PERMITS BOX IF THE PROJECT DISTURBS ONE ACRE OR MORE OF LAND. THIS PERMIT REGULATES STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATION ACTIVITIES. THE PERMIT SHOULD BE REFERENCED AS FOLLOWS: 'NJPDES 5G3 - CONSTRUCTION ACTIVITY STORMWATER GENERAL PERMIT (NJGØØ88323) (REQUEST FOR AUTHORIZATION

EXCEPTION: THE PERMIT IS NOT APPLICABLE TO ROUTINE MAINTENANCE PROJECTS THAT ARE PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE, HYDRAULIC CAPACITY, OR ORIGINAL PURPOSE OF THE FACILITY THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE ACRE OF LAND AND LESS THAN FIVE ACRES, HOWEVER, IN AN EFFORT TO PROMOTE ENVIRONMENTAL STEWARDSHIP, THE CONCRETE WASHOUT (IF THE PROJECT INVOLVES THE PLACEMENT OF CONCRETE), SPILL KIT, AND INSPECTION REQUIREMENTS ARE TO BE IMPLEMENTED ON ALL NJDOT PROJECTS, REGARDLESS OF THE SIZE OF LAND DISTURBANCE.

NOTE TO DESIGNER: INCLUDE THE FOLLOWING NOTE AS THE LAST ITEM IN THE SELECTED CONDITIONS COLUMN OF THE PERMITS BOX: 'IN ADDITION, REFER TO THE ENVIRONMENTAL NOTES AND COMMITMENTS ON SHEET NUMBER \_\_ AND THE SOIL EROSION AND SEDIMENT CONTROL GENERAL NOTES ON SHEET NUMBER \_\_.' IF THE SOIL EROSION AND SEDIMENT CONTROL PLANS ARE SEPARATE FROM THE ENVIRONMENTAL PLANS, ALSO REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLANS.

48. PROVIDE THE GPS LOCATIONS OF ALL STORMWATER OUTFALLS, MANUFACTURED TREATMENT DEVICES AND BASINS TO THE NJDOT BUREAU OF ROADWAY MAINTENANCE ENGINEERING & OPERATIONS, DRAINAGE UNIT.

NOTE TO DESIGNER: PROVIDE AN ELECTRONIC COPY AND A HARD COPY OF THE MAINTENANCE MANUAL REQUIRED TO BE PREPARED FOR SPECIFIC STORMWATER MANAGEMENT FACILITIES TO THE BUREAU OF ROADWAY MAINTENANCE ENGINEEERING & OPERATIONS, DRAINAGE UNIT.

49. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, VERIFY THAT ALL STORMWATER MANAGEMENT BASINS CONSTRUCTED AS PART OF THE PROJECT ARE FUNCTIONING AS INTENDED BY THEIR DESIGN. MAKE ANY NECESSARY REVISIONS REQUIRED TO BRING DEFICIENT BASINS TO THEIR INTENDED FUNCTIONS.

#### NOTE TO DESIGNER:

THIS SHEET REQUIRES DESIGN SPECIFIC INFORMATION TO BE ADDED AND INCLUDED IN THE CONTRACT PLANS. THESE NOTES CAN BE AMENDED/OMITTED TO REFLECT PROJECT SPECIFIC CONDITIONS. ADDITIONAL NOTES MAY BE NEEDED.

COORDINATE WITH NJDOT BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS WHEN DEVELOPING THE NOTES FOR A SPECIFIC PROJECT.

REMOVE THIS NOTE AND OTHER DESIGNER NOTES AFTER DESIGN SPECIFIC INFORMATION IS ADDED.

# ENVIRONMENTAL NOTES AND COMMITMENTS

N.T.S.



NEW JERSEY DEPARTMENT OF TRANSPORTATION

## ENVIRONMENTAL, SOIL EROSION & SEDIMENT CONTROL PLANS

ROUTE 25 OVER LEGUME RIVER CONTRACT NO. 123567486

(NAME OF CONSULTANT)

(CERTIFICATE OF AUTHORIZATION NO. OR PROFESSIONAL ASSOCIATION)

ENGINEERS SIGNATURE) (DATE)

ENGINEERS NAME PRINTED)

/ JERSHY PROFESSIONAL ENGINEER LICENSE



#### MINIMUM LIST OF ENVIRONMENTAL NOTES & COMMITMENTS THAT APPLY TO EVERY PROJECT.

- SENSITIVE AREA: DO NOT ENCROACH UPON OR STORE ANY EQUIPMENT/VEHICLE/MATERIALS IN WETLANDS/TRANSITION
  AREAS/STATE OPEN WATER AREAS/FLOODPLAINS. IN ADDITION. DO NOT LOCATE STOCKPILES, VEHICLES, CONCRETE
  WASHOUT FACILITIES, AND/OR EQUIPMENT WITHIN 50 FEET. IF FEASIBLE, OF A SLOPE, DRAINAGE FACILITY,
  WATERBODY, WETLAND, FLOODPLAIN, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.
- PERFORM THE WORK IN ACCORDANCE WITH THE NJDOT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL AND AS SPECIFIED IN THE CURRENT NJDOT SPECIFICATIONS.
- 3. DUST/DIRT CONTROL/TRACKING: EMPLOY CONSTRUCTION METHODS THAT MINIMIZE AIRBORNE DUST AND PREVENT SOILS AND OTHER MATERIALS FROM BEING DEPOSITED ON EXISTING ROADWAYS. APPLY WATER OR OTHER RE APPROVED MATERIALS TO UNPAVED AREAS TO CONTROL DUST CAUSED BY HAULING OR OTHER CONSTRUCTION OPERATIONS, IMMEDIATELY REMOVE ALL SOIL OR OTHER MATERIALS WASHED, DROPPED, DEPOSED OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 4. DURING SAWCUTTING, MILLING, AND SIMILAR OPERATIONS THAT COULD CAUSE DUST, SLURRY, AND RUNOFF PROBLEMS, DO NOT CREATE A DUST HAZARD AND ENSURE THAT DEBRIS AND SLURRY DO NOT ENTER INLETS OR ENVIRONMENTALLY SENSITIVE AREAS, SUCH AS WETLANDS AND WATERBODIES. PROVIDE FOR CONTINUOUS REMOVAL OF GRINDING RESIDUE FROM THE PAVEMENT SURFACE BEFORE IT IS BLOWN ABOUT BY TRAFFIC MOTION, WIND, OR PRECIPITATION. CONTAIN THE CONCRETE SLURRY AND DISPOSE OF IT AS SPECIFIED IN 202.03.07.B OF THE SPECIFICATIONS. THE CONTRACTOR MAY MANAGE THE SLURRY IN A CONCRETE WASHOUT FACILITY.
- 5. ENSURE ALL VEGETATION OUTSIDE LIMITS OF DISTURBANCE IS PRESERVED.
- 6. UPON COMPLETION OF THE PROJECT, ALL TEMPORARILY DISTURBED AREAS, MUST BE RESTORED TO THEIR PRE-CONSTRUCTION ORADES USING NATIVE SOILS AND PLANTED WITH INDIGENOUS NON-INVASIVE VEGETATION AS DIRECTED BY THE RE IN CONSULTATION WITH THE BUREAU OF LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL SOLUTIONS. ENVIRONMENTAL TEAM.
- 7. STORE PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING COMPOUNDS IN CONTAINERS IN A DRY COVERED AREA. ENSURE MANUFACTURERS, RECOMMENDED APPLICATION RATES, USES, AND METHODS ARE STRICTLY FOLLOWED TO THE EXTENT NECESSARY TO PREVENT OR MINIMIZE THE PRESENCE OF WASTE FROM SUCH MATERIALS IN THE STORMWATER DISCHARGE/RUNOFF FROM THE PROJECT LIMITS. STORE PRODUCTS AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA.
- 8. ENSURE THE HANDLING OF WASTE BUILDING MATERIAL, RUBBLE AND OTHER CONSTRUCTION SITE WASTES, INCLUDING LITTER AND HAZARDOUS AND SANITARY WASTES, IS IN ACCORDANCE WITH THE STATE SOLID WASTE MANAGEMENT ACT. N. J.S.A. 13:1E-1 ET SEO., AND ITS IMPLEMENTING RULES AT N. J.A.C. 7:26, 7:26A, AND 7:26G; THE NEW JERSEY PESTICIDE CONTROL CODE AT N. J.A.C. 7:30; THE STATE LITTER STATUTE (N. J.S.A. 13:1E-99.3); AND OSHA REQUIREMENTS FOR SANITATION AT 29 C.F.R. 1926.
- 9. ENSURE THE PROJECT LIMITS ARE KEPT CLEAN AND FREE OF DEBRIS, TRASH AND LITTER. CONTAIN LITTER AND WASTE THAT HAS THE POTENTIAL TO BE TRANSPORTED BY STORMWATER DISCHARGE/RUNDOFF. ENSURE THE PROJECT LIMITS HAVE ONE OR MORE DESIGNATED WASTE COLLECTION AREAS ONSITE OR ADJACENT TO THE SITE, AND AN ADEQUATE NUMBER OF CONTAINERS (WITH LIDS OR COVERS) FOR WASTE. ENSURE WASTE IS COLLECTED FROM SUCH CONTAINERS BEFORE THEY OVERFLOW. IMMEDIATELY CLEANUP SPILLS AT SUCH CONTAINERS SHOULD THEY OCCUR.
- 10. CONCRETE WASHOUT WITHIN THE PROJECT LIMITS IS PROHIBITED OUTSIDE OF DESIGNATED AREAS. PROVIDE CONCRETE WASHOUT FACILITY(IES) AS SPECIFIED IN THE CONCRETE WASHOUT SYSTEM SPECIFICATION IN SECTION 158.
- 11. DISCHARGES OF RAW SANITARY SEWAGE OR SEPTAGE ONSITE ARE STRICTLY PROHIBITED. ENSURE PROPER DISPOSAL OF SANITARY SEWAGE/SEPTAGE. PROVIDE AND MAINTAIN ADEQUATE FACILITIES ADJACENT TO THE WORK SITE FOR ALL WORKERS AND OTHER SANITARY NEEDS.
- 12. BEFORE THE START OF CONSTRUCTION OPERATIONS, PROVIDE A MINIMUM OF TWO (2) OIL-ONLY EMERGENCY SPILL KITS, AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158, THAT ARE READILY AVAILABLE WITHIN THE PROJECT LIMITS. IMMEDIATELY CONTAIN AND CLEAN UP ALL SPILLS. ENSURE CLEANED UP MATERIALS ARE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS AND AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. REPLACE COMPONENTS OF SPILL KITS AS USED.
- 13. IF A SPILL OCCURS AS A RESULT OF THE CONTRACTOR'S OPERATIONS, IMMEDIATELY CONTAIN IT AND IMMEDIATELY CONTACT THE NUDEP HOTLINE AT 1\*877-WARN DEP (1-877-927-6337), AS WELL AS THE RE. CLEAN UP AND REMEDIATE THE SPILL AS DIRECTED BY NUDEP. SUBMIT AN INCIDENT REPORT TO THE RE AS SPECIFIED IN THE OIL-ONLY EMERGENCY SPILL KIT SPECIFICATION IN SECTION 158.
- 14. ENSURE REFUELING OPERATIONS ARE CONDUCTED AT A MINIMUM OF 50 FEET, IF FEASIBLE, FROM A WATERBODY, WETLAND, OR OTHER ENVIRONMENTALLY SENSITIVE AREA. DO NOT STORE FUEL TANKS CLOSER THAN 50 FEET, WHERE FEASIBLE, FROM THESE SENSITIVE AREAS. IMMEDIATELY REPAIR LEAKING EQUIPMENT OR REMOVE IT FROM THE PROJECT LIMITS. CLEAN UP THE TAINTED MATERIAL AND DISPOSE OF THE MATERIAL AS SPECIFIED IN 202.03.08 OF THE SPECIFICATIONS. PROTECT FUELING AREAS FROM RUN-ON AND RUNOFF.
- 15. ENVIRONMENTAL COMPLIANCE INSPECTIONS (INCLUDING, BUT NOT LIMITED TO, SOIL EROSION AND SEDIMENT CONTROL MEASURES, WATER QUALITY MEASURES, AND SITE WASTE CONTROL OPERATIONS) ARE TO BE PERFORMED BY THE CONTRACTOR AND THE RE AS SPECIFIED IN SECTION 158 OF THE SPECIFICATIONS. COMPLETE THE NUDOT ENVIRONMENTAL COMPLIANCE CHECKLIST AND INSPECTION FORM FOR EACH INSPECTION AND RETAIN THE ORIGINAL WITHIN THE PROJECT LIMITS. MAKE THE FORM AVAILABLE UPON REQUEST.

NOTE TO DESIGNER: INSERT THIS SHEET AS AN ENVIRONMENTAL PLAN SHEET AND MODIFY AS NEEDED.

# ENVIRONMENTAL NOTES AND COMMITMENTS

N.T.S.

EP-3 EP-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

## ENVIRONMENTAL, SOIL EROSION & SEDIMENT CONTROL PLANS

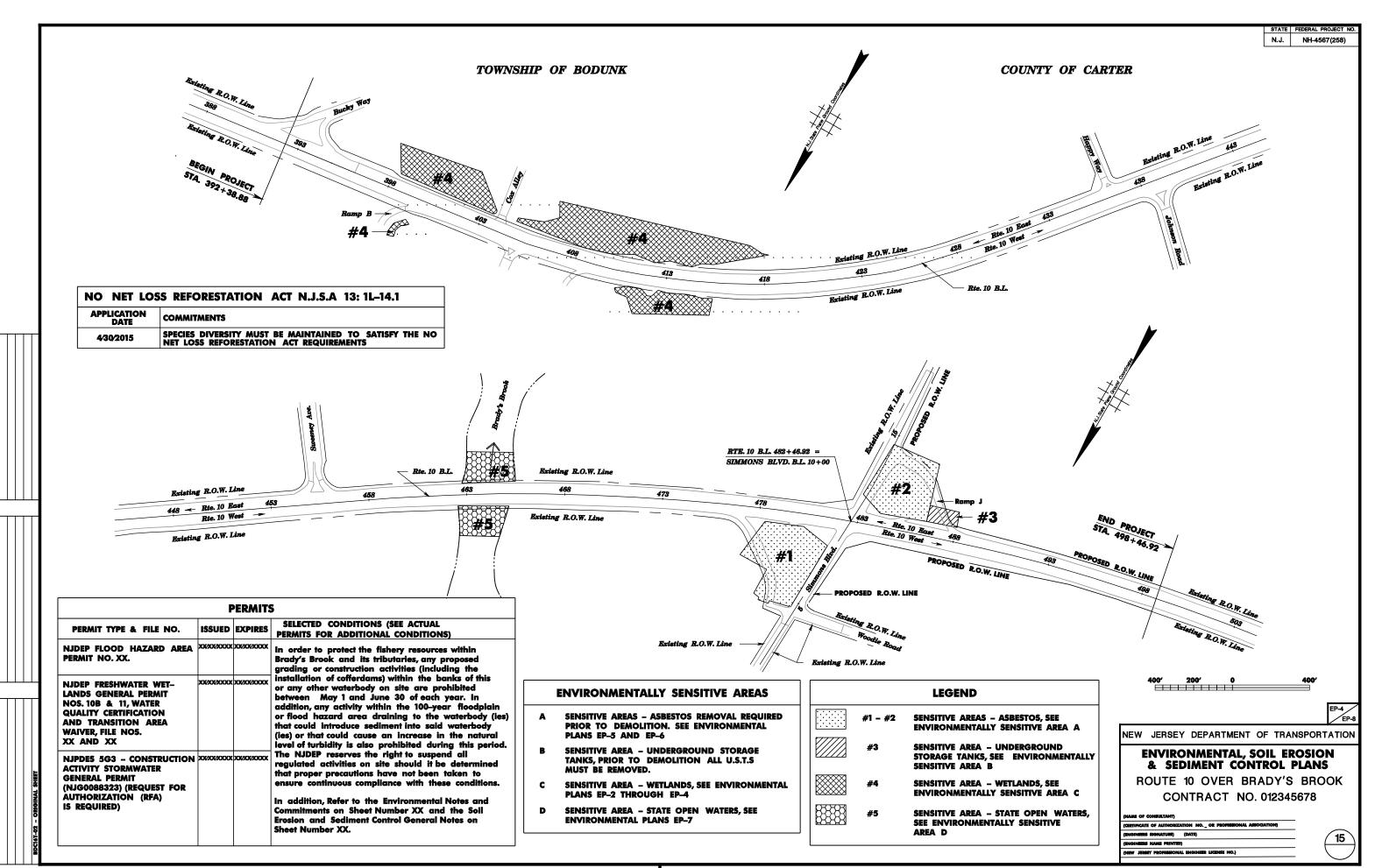
ROUTE 25 OVER LEGUME RIVER CONTRACT NO. 123567486

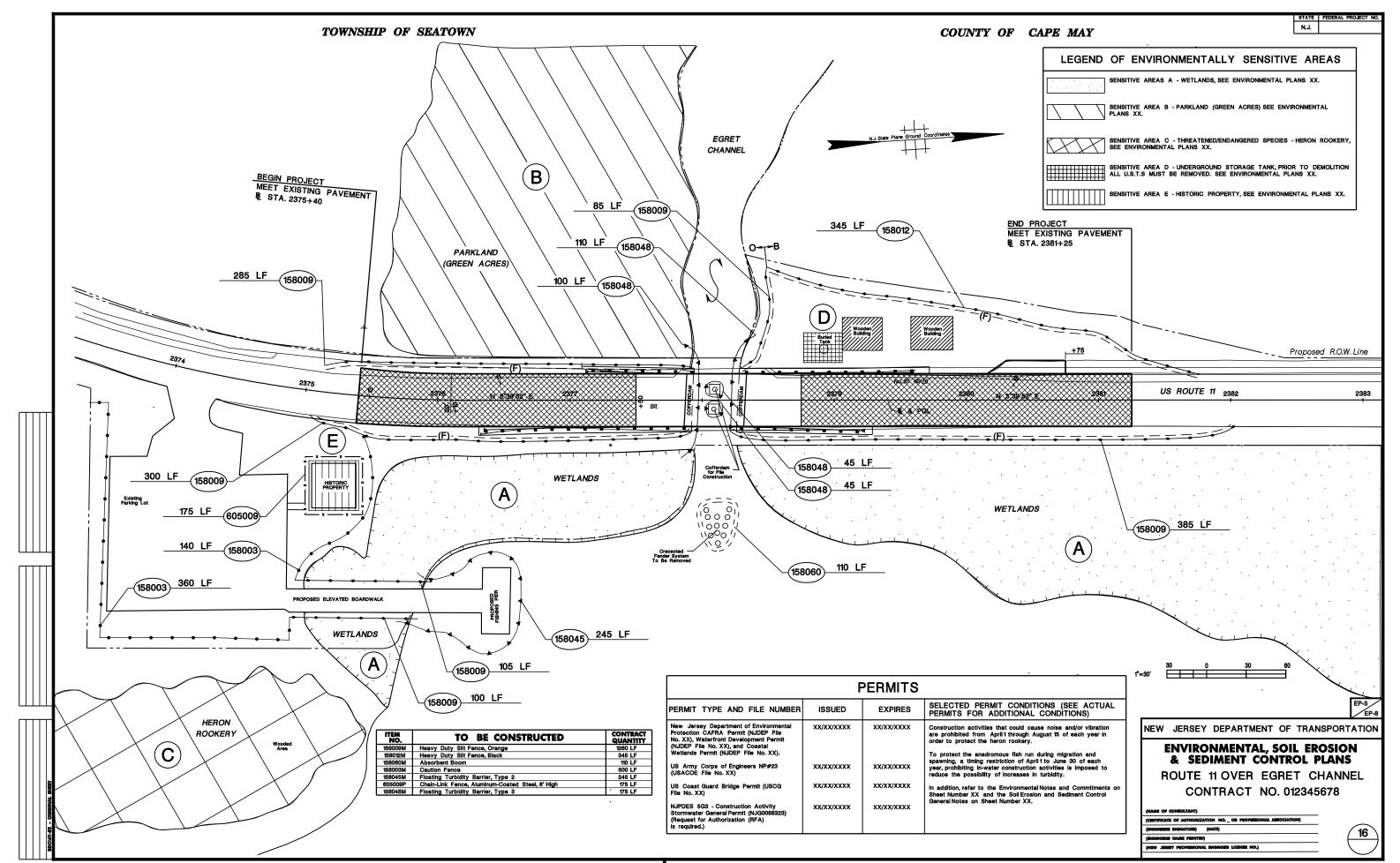
(NAME OF CONSULTANT)

(CERTIFICATE OF AUTHORIZATION NO. OR PROFESSIONAL ASSOCIATION)

NGINEERS SIGNATURE) (DATE)
NGINEERS NAME PRINTED)

(NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO.)





A. SENSITIVE AREA: WETLANDS - SEE ENVIRONMENTAL PLANS EP-3 TO EP-4

BEGIN FEDERAL PROJECT NO. BR-2085(M02) RTE. 25 & STA. 118+25

- C. SENSITIVE AREA: N.J. FLOOD HAZARD AREA SEE ENVIRONMENTAL PLANS EP-3 TO EP-7
- D. SENSITIVE AREA: FLOODWAY SEE ENVIRONMENTAL PLANS EP-3 TO EP-6
- E. SENSITIVE AREA: SPECIAL WATER RESOURCE PROTECTION AREA SEE ENVIRONMENTAL PLANS EP-4 TO EP-6, EP-8

7<del>-17/17/17/</del>17/1

. SENSITIVE AREA: REGULATED WASTE (ARSENIC) - SEE ENVIRONMENTAL PLAN EP-4

	PERMITS			
PERMIT TYPE	NJDEP FILE No.	ISSUED	EXPIRES	CONDITIONS
NJDEP FRESHWATER WETLANDS:     STATEWIDE GENERAL PERMIT NO. 08;     STATEWIDE GENERAL PERMIT NO. 21;     TRANSITION AREA, SPECIAL ACTIVITY     WAIVER FOR LINEAR DEVELOPMENT;     TRANSITION AREA, SPECIAL ACTIVITY     WAIVER FOR STORMWATER MANAGEMENT  2. NJDEP MAJOR FLOOD HAZARD AREA     PERMIT AND HARDSHIP WAIVER REQUEST		XX/XX/XXXX XX/XX/XXXX XX/XX/XXXX		SEE PERMIT CONDITIONS 1 - 18

#### **ENVIRONMENTAL NOTES AND COMMITMENTS**

- 1. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETED AND/OR AREA IS STABILIZED.
- 2. ALL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PROJECT WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NJDOT SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
- 3. ALL CONSTRUCTION SOIL DISTURBANCES, INCLUDING UTILITY REMOVAL AND INSTALLATION, WHERE SOIL IS SUBJECT TO MOVEMENT OUTSIDE OF PROJECT LIMITS WILL REQUIRE SILT FENCING AROUND THE TEMPORARY CONSTRUCTION DISTURBANCE.
- 4. ALL TERMS AND CONDITIONS OF THE ENVIRONMENTAL PERMITS SHALL BE ADHERED TO. NO CHANGES IN THE CONDITIONS, PLANS OR SPECIFICATIONS SHALL BE MADE EXCEPT WITH THE PRIOR WRITTEN PERMISSION OF THE NUFFP.
- 5. A COPY OF THE PERMITS SHALL BE KEPT AT THE WORK SITE AND SHALL BE EXHIBITED UPON REQUEST OF ANY PERSON.
- 6. AREAS OF TEMPORARY DISTURBANCE SHALL BE RESTORED TO ORIGINAL GRADE AND SHALL BE REPLANTED WITH APPROPRIATE VEGETATION UPON COMPLETION OF CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER IN CONSULTATION WITH THE ENVIRONMENTAL TEAM AND THE LANDSCAPE AND URBAN DESIGN UNIT.
- 7. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE OF THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY, WILL BE REMOVED IMMEDIATELY. PAVED ROADS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- 8. CONTRACTOR IS RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
- 10. GROUNDWATER MONITORING WELLS IN AND NEAR THE CONSTRUCTION ZONE (UNLESS OTHERWISE INDICATED) MUST BE BARRICADED TO PREVENT THEM FROM BEING DAMAGED. ANY WELLS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 11. THE TOP 2 FEET OF SEDIMENT IS TO BE HANDLED AS REGULATED WASTE (K032 WASTE ARSENIC).
- 12. GROUNDWATER AND SURFACE WATER ARE KNOWN TO CONTAIN ARSENIC AND WILL BE HANDLED PER NJDEP REQUIREMENTS.

#### **PERMIT CONDITIONS**

CITY OF OAKGROVE

COUNTY OF SALEM

FLOODW AY

-11111111111 WCB 1111111111111111 

- All activities approved by this permit shall be performed under the supervision and direction of a Professional Engineer licensed in the State of New Jersey, and shall be undertaken using the best management practices available. Furthermore, the site shall be subject to inspection at any time by representatives of the Department to ensure the continuous application of the provisions of this permit.
- -All activities authorized by this permit shall be stabilized in accordance with Standards for Soil Erosion and Sediment Control in New Jersey (obtainable from local Soil Conservation District Offices), or equal engineering specifications, to prevent eroded soil and sediment from entering adjacent waterways and wetlands at any time during and subsequent to construction. The Department reserves the right to order the suspension of any activity if unacceptable levels of erosion or turbidity result from the same. Furthermore, the applicant shall maintain the stream corridor as shown on the approved drawings for either such time as is required for the channel and/or banks to become reasonably stabilized, or for one year after completion of the project (as evidenced by a Certificate of Completion), whichever period of time is longer.
- 3. In order to protect the trout stocked waters and the recreational use as well as any pickerel and warmwater fish spawning within the Legume River, any proposed grading or constructic activities within the banks of this or any other stream onsite are prohibited between March 15 and June 30 of each year. In addition, any activity within the 100 year floodplain or flood hezard area of this watercourse which could introduce sediment into said stream or which would cause an increase in the natural level of turbidity is also prohibited during this period. The Department reserves the right to suspend all regulated activities onsite should it be determined that the applicant has not taken proper precautions to ensure continuous compilance with this condition.
- 4. The bridge span shall be sized so that the natural streambed will remain stable under storm flows without the aid of instream armoring. Also, the streambed shall be left intact and any minor disturbances are to be restored using native substrate.
- Since the project area is in proximity to the Division of Fish and Wildlife's Legume Wildlife Management Area, the Southern Bureau of Lands Management (John Doe, 856-555-5555) shall be informed of the construction schedules a minimum of two weeks prior to the projects implementation.
- 8. All workers shall be instructed to remove any turtles and/or any wildlife in general out of harms way. Slit fencing should be placed along active construction areas/to prevent their access into these areas.
- - -The Transition Area, Special Activity Waiver for Linear Development, authorizes the disturbance of a maximum of 2.294 acres of transition area for road improvements and rem of the existing Legume River Parkway.
- Dewatering of cofferdams must include properly sized temporary sediment basins or other filtering methods to reduce turbidity. The stream area to receive return water discharged from cofferdams must be encompassed by turbidity barrier. The turbidity barrier must be located parallel to the stream banks and anchored to the shoreline to maintain free flow of the stream center. In order to avoid obstruction of stream flows or flah passage, turbidity barriers must not be placed across the stream channel.
- 11. Areas of temporary excavation must be restored with native, indigenous species. The stream bank must be restored with native vegetation and stabilized with the use of bioengineering materials, such as biologs, fiber matting, etc., except where riprap is required.
- 12. The upper-most 18-inches of any temporary trench excavation is backfilled with the original soil material if feasible, and otherwise with clean suitable material free from toxic pollutants (see 40 CFR 401) in toxic amounts, and shall comply with all applicable Department rules and specifications regarding use of dredged or fill material. Excavations must be backfilled to the pre-existing elevations, where feasible.

- 13. All substrate removed for construction activities, must be stockpiled outside of freshwater wetlands, transition areas and State open waters. The replaced native substrate must be pla meet existing stream bottom invert and cross-channel profile as found immediately upstream and downstream of the crossing.
- 15. Prior to any construction activities, the project site must be surveyed for the presence of Eastern Box turtle, Carpenters frog and Fowlers toad. Any turtles/frogs/toads encountered must be removed from the construction site to safe areas. Immediately following the survey, the construction site must be encompassed by silt fencing or other small mesh fencing to prevent turtles/frogs/toads from re-entering the construction area.
- am sediment filter bags shall remain in place until all in-water work is complete. These barriers shall be removed once work is complete
- 17. Positive means shall be taken to prevent any hot work, debris or construction material from entering the waterway. This includes sand blasting material, paint or epoxy and any concrete by-products. If welding or burning is to take place, some type of flame-proof material shall be the uppermost protective containment material.
- 18. All pavement/fill removal associated with the existing Legume River Parkway shall be taken down to the natural substrate. The areas outside of the authorized inflitration basin shall be stabilized with a mixture of warm and cool seasonal grasses, containing at least 20% warm seasonal grasses.

STA. 122+88

END FEDERAL PROJECT NO. BR-2085(M02)

	SEE ENVIRONMENTALLY SENSITIVE AREA A
//////	SENSITIVE AREA: 150' WETLAND TRANSITION AREA - SEE ENVIRONMENTALLY SENSITIVE AREA B
—	SENSITIVE AREA: N.J. FLOOD HAZARD AREA - SEE ENVIRONMENTALLY SENSITIVE AREA C
	SENSITIVE AREA: FLOODWAY - SEE ENVIRONMENTALLY SENSITIVE AREA D

SENSITIVE AREA: WETLANDS

TOWNSHIP OF OAKWOOD

COUNTY OF CUMBERLAND

MATCH LINE SHEET EP-2

SENSITIVE AREA: 300' RIPARIAN BUFFER -SEE ENVIRONMENTALLY SENSITIVE AREA E

SENSITIVE AREA: REGULATED WASTE (ARSENIC) SEE ENVIRONMENTALLY SENSITIVE AREA F

SUMMARY OF WE	TLAND IMP	ACTS – ENTI	RE PROJECT
PERMIT NAME	AREA OF IMPACT (WETLANDS)	AREA OF IMPACT (TRANSITION AREA)	
STATEWIDE GENERAL PERMIT NO. 10B	0.215 AC.	0.007 AC.	(.222 AC.
TRANSITION AREA, SPECIAL ACTIVITY WAIVER FOR LINEAR DEVELOPMENT	0.000 AC.	.294 AC.	2.294 AC.
TRANSITION AREA, SPECIAL ACTIVITY WAIVER FOR STORMWATER MANAGEMENT	0.000 AC.	0.575 AC.	0.575 AC.
STATEWIDE GENERAL PERMIT NO. 21 (FOR UTILITY POLES)	0.0007 AC.	0.0005 AC.	0.001 AC.
TOTAL	0.216 AC.	2.876 AC.	3.092 AC.

EP-8

NEW JERSEY DEPARTMENT OF TRANSPORTATION

#### **ENVIRONMENTAL, SOIL EROSION** & SEDIMENT CONTROL PLANS

**ROUTE 25 OVER LEGUME RIVER** CONTRACT NO. 123567486

IEERS SIGNATURE) (DATE)

HERS NAME PRINTED) (NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO

201030M SEALING OF ABANDONED WELL

202015P EXCAVATION, REGULATED MATERIA

202024M DISPOSAL OF REGULATED MATERIAL

#### ATLANTIC COUNTY

#### **GENERAL NOTES**

- PREPARE, SUBMIT, AND IMPLEMENT A SITE SPECIFIC HEALTH AND SAFETY PLAN IN ACCORDANCE WITH ALL APPLICABLE HEALTH AND SAFETY REQUIREMENTS FOR WORK IN AND WITH CONTAMINATED SOIL, SEDIMENT, WASTE AND WATER AND THE MAJOR LANDFILL DISRUPTION APPROVAL. THE PLAN WILL GOVERN ALL HEALTH AND SAFETY FACETS OF THE PROJECT CONSTRUCTION AND ENCOMPASS THE ACTIVITIES OF ALL PERSONS WHO ENTER THE SITE.
- 2. PROVIDE ALL PERSONNEL, EQUIPMENT, AND ANCILLARY SERVICES TO COLLECT, ANALYZE, AND TRANSPORT ENVIRONMENTAL SAMPLES REQUIRED TO CHARACTERIZE CONTAMINATED MATERIAL IN ACCORDANCE WITH THE CURRENT VERSIONS OF THE NUDEP FIELD SAMPLING PROCEDURES MANUAL, NUDEP MANAGEMENT OF EXCAVATED SOILS GUIDELINES, APPENDIX 10F THE NUDEP WASTE CLASSIFICATION FORM, AND ACCORDING TO THE RECYCLING OR DISPOSAL FACILITY ACCEPTING THE WASTE.
- 3. PROVIDE ALL PERSONNEL, MATERIALS AND EQUIPMENT TO PROPERLY STORE AND PROTECT CONTAMINATED MATERIALS AT THE EXCAVATION AND IN TEMPORARY STOCKPILES. SELECT ALL TEMPORARY STOCKPILE LOCATIONS WHICH MUST BE APPROVED BY THE RE. TEMPORARY STOCKPILE LOCATIONS SHALL BE LOCATED IN DRY AREAS AND BE PLACED ON PLASTIC SHEETING TO PREVENT MIGRATION OF CONTAMINANTS INTO ADJACENT SOILS, SURFACE WATER, AND GROUNDWATER.
- 4. DEVELOP AND IMPLEMENT A POLLUTION PREVENTION AND CONTROL PLAN TO MANAGE CONTAMINATED WATER AND GROUNDWATER. CONTAMINATED STORMWATER, GROUNDWATER, SEDIMENTS OR FREE PRODUCT SHALL NOT BE DISCHARGED TO LOCAL STORM SEWER SYSTEMS OR WATERBODIES EXCEPT AS AUTHORIZED BY A DISCHARGE APPROVAL OR PERMIT.
- 5. PROVIDE PERSONNEL, MATERIALS AND EQUIPMENT TO MOBILIZE, OPERATE AND MAINTAIN
  AN OIL-WATER SEPARATOR FOR REMOVAL OF FREE PRODUCT AND CONTAMINATED SEDIMENTS GENERATED DURING
  DEWATERING ACTIVITIES IN AREAS OF PETROLEUM-CONTAMINATED GROUNDWATER SHOULD THE OIL-WATER SEPARATOR
  IS A SELF-CONTAINED, FACTORY ASSEMBLED UNIT CAPABLE OF MEETING ALL DISCHARGE APPROVALS OR PERMITS OBTAINED
- 6. DEVELOP AND IMPLEMENT A MATERIAL HANDLING PLAN TO MANAGE CONTAMINATED SOIL.

#### SOIL SAMPLING RESULTS

(Besulte in parte per million [ppm] )

(Hesuite in parts per million (ppm).)							
SAMPLE	SB-GF-1	SB-GF-2	SB-GF-3	SB-GF-4	RDCSCC	NRDCSCC	IGWSCC
DEPTH OF SAMPLE (FT)	4.5-5.0	5.0-5.5	5.0-5.5	5.5-6.0			
TPHCs	49	13	8	66	1,000	1,000	1,000
VO+10	ND	ND	ND	ND	CS	CS	CS

(Results in parts per million [ppm].)

SAMPLE	SB-BL-1	SB-BL-2*	SB-BL-3	RDCSCC	NRDCSCC	IGWSCC
DEPTH OF SAMPLE (FT)	4.5-5.0	3.0-3.5	4.5-5.0			
TPHCs	*5.2	22	*5.1	1,000	1,000	1,000
TOLUENE	ND	0.17	ND	1,000	1,000	500
ETHYLBENZENE	ND	1.78	0.15	1,000	1,000	100
XYLENES (TOTAL)	ND	14.4	0.17	410	1,000	67
TICs (TOTAL)	ND	17.3	11.4	1,000	1,000	1,000

\* SOIL SAMPLE SB-BL-2 EXHIBITED DISCOLORATION AND A PETROLEUM ODOR.

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SAMPLE	SB-NN-1	SB-NN-2	SB-NN-3	SB-NN-4	SB-NN-5	RDCSCC	NRDCSCC	IGWSCC	
DEPTH OF SAMPLE (FT)	6.0-6.5	6.0-6.5	3.0-0.5	6.0-6.5	6.0-6.5				
TPHCs	*5.4	2,545	483	*5.3	*5.4	1,000	1,000	1,000	
VO*10	ND	ND	ND	ND	ND	cs	CS	CS	

RDCSCC - Residential Direct Contact Soil Cleanup Criteria
NRDCSCC - Nonresidential Direct Contact Soil Cleanup Criteria;
IGWSCC - Impact to Groundwater Soil Cleanup Criteria;
1,000 ppm is the action level
TPHCs - Total Petroleum Hydrocarbons
ND - Not detacted
CS - Compound Specific
TiCs - Tentatively Indentified Compounds



#### **LEGEND**

3 UNIT

12 C.Y.

- SENSITIVE AREA GROUNDWATER CONTAMINATION

TATA - UST LOCATION, TO BE REMOVED

SOIL SAMPLE LOCATION

- AREA OF REGULATED WASTE

MONITORING WELL

NEW JERSEY DEPARTMENT OF TRANSPORTATION **ENVIRONMENTAL, SOIL EROSION** 

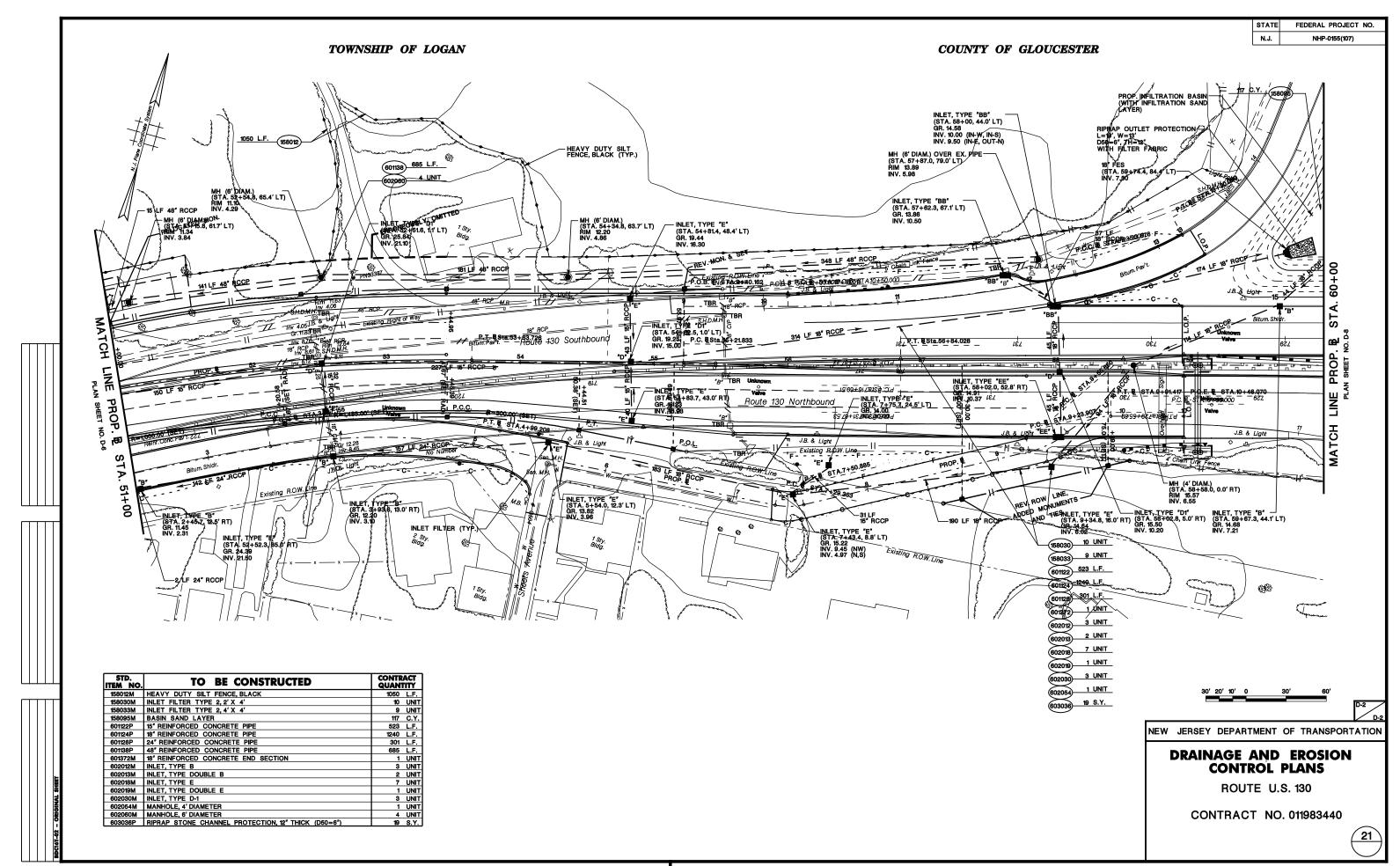
& SEDIMENT CONTROL PLANS

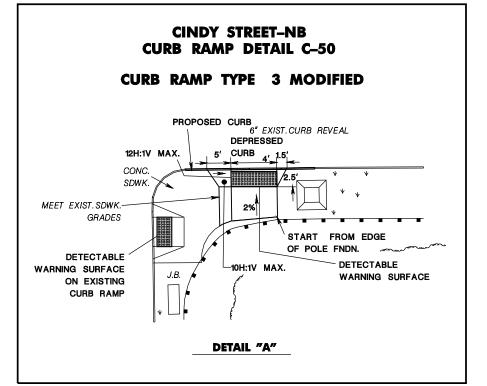
ROUTE 10 OVER WAYFINDER ROAD **CONTRACT NO. 123567486** 

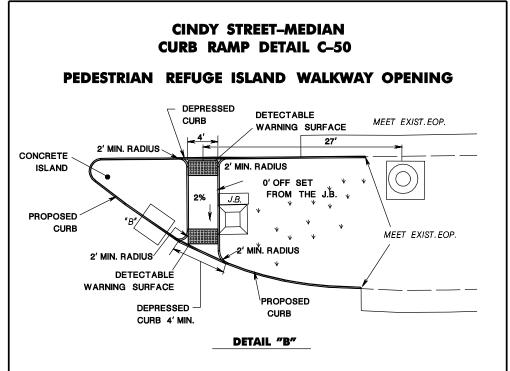
(NEW JURSEY PROFESSIONAL ENGINEER LICENSE NO.)

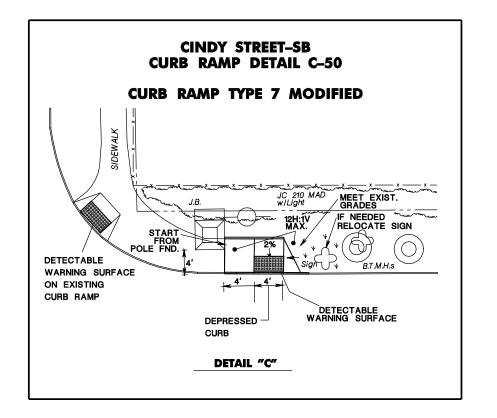
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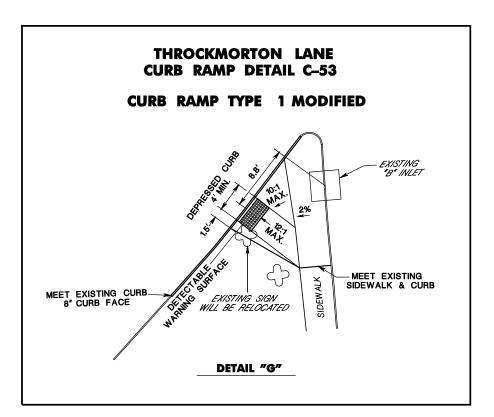
EP-8

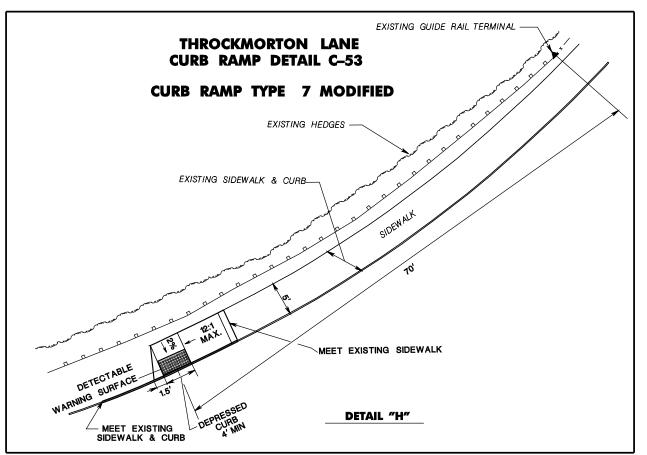












NOTE:

CURB RAMPS ARE DRAWN TO SCALE, BUT FINAL DIMENSIONS OF CURB RAMP LENGTH FOR RUNNING SLOPE (I.E. 12:1) AND TRANSITIONS (I.E. 10:1) WILL BE DETERMINED BY FIELD MEASUREMENTS DURING CONSTRUCTION.

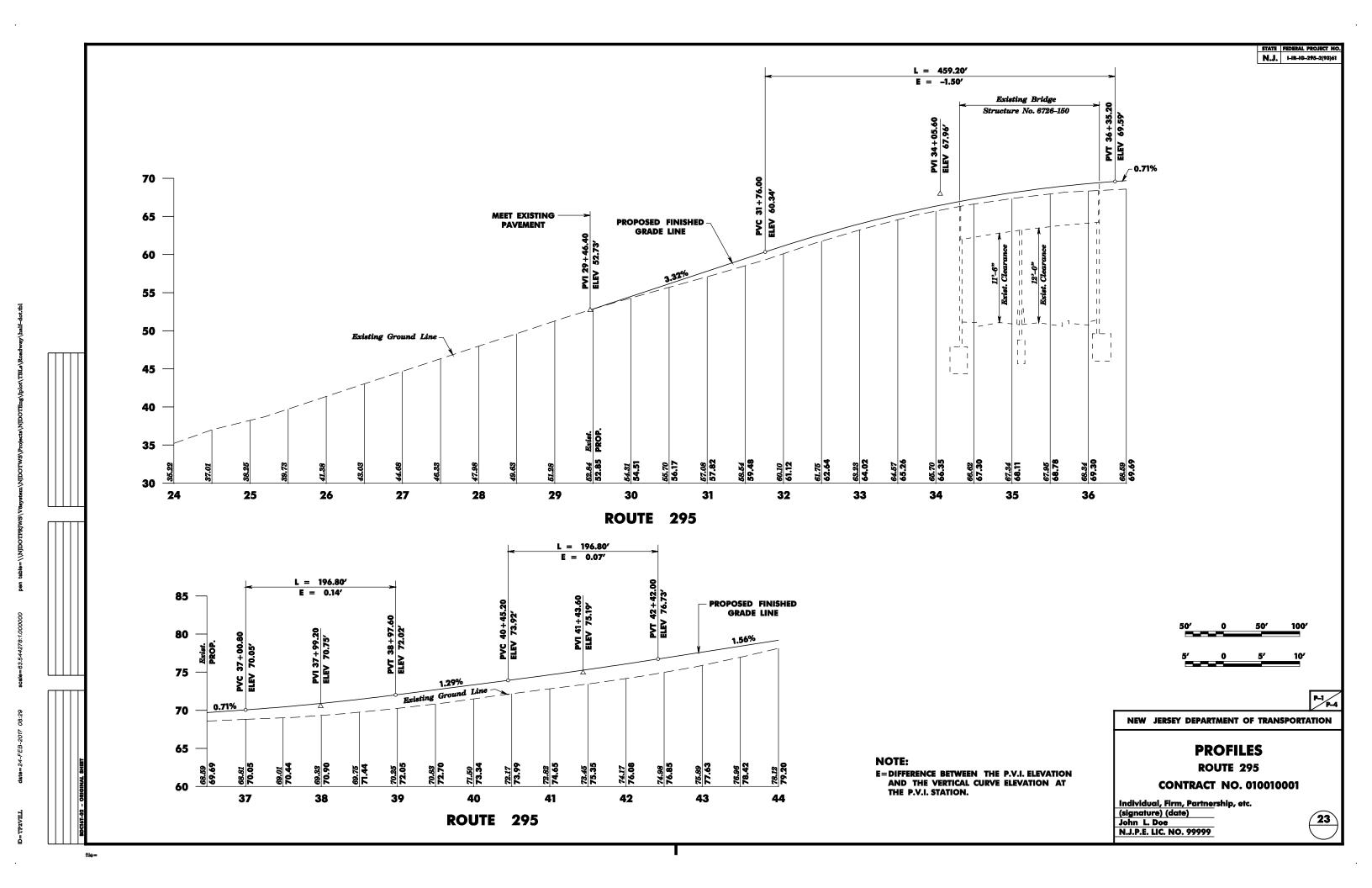
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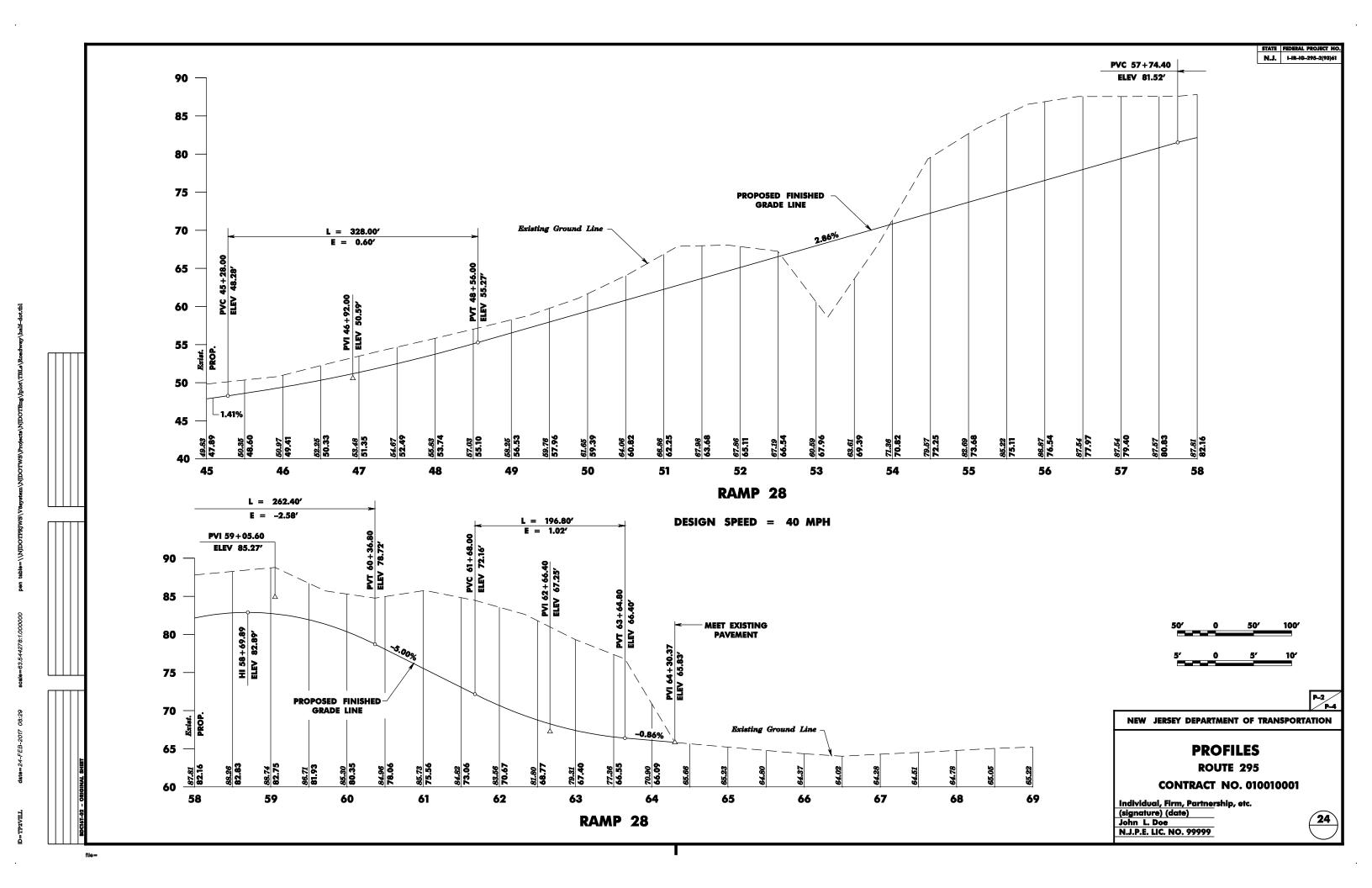
NEW JERSEY DEPARTMENT OF TRANSPORTATION

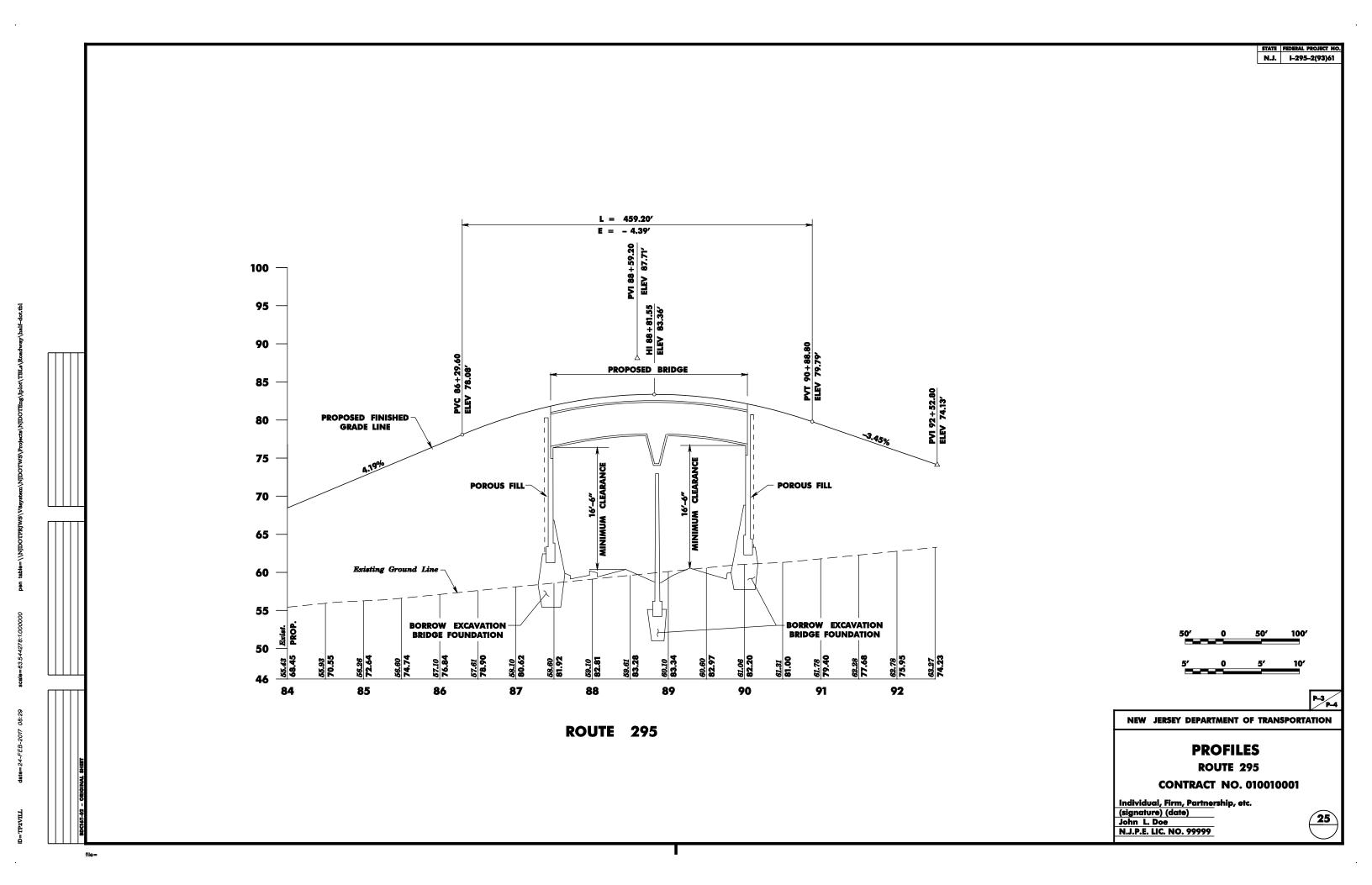
### **CURB RAMP LAYOUT DETAIL**

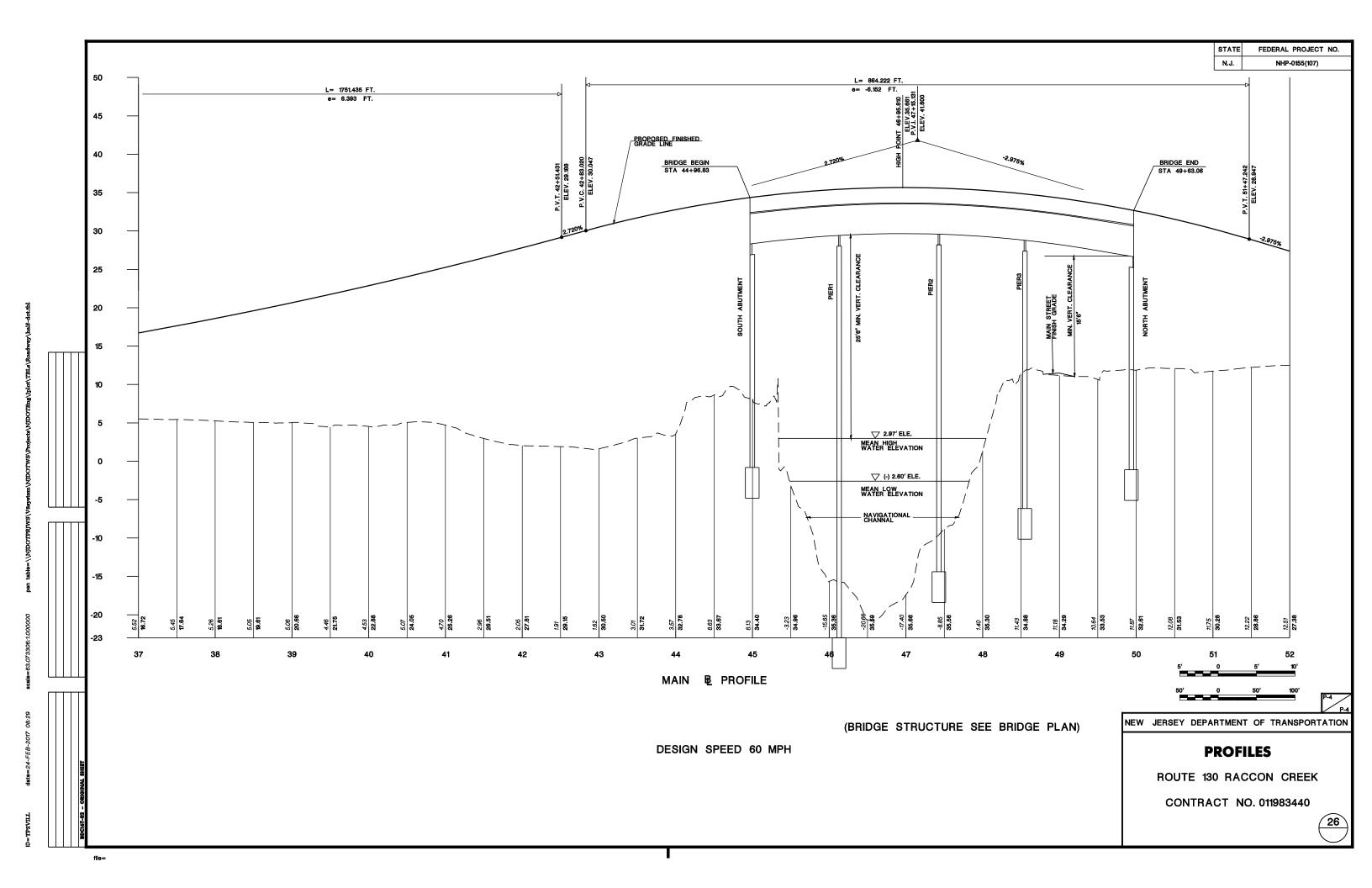
U.S. ROUTE 9 CONTRACT NO. 116093070

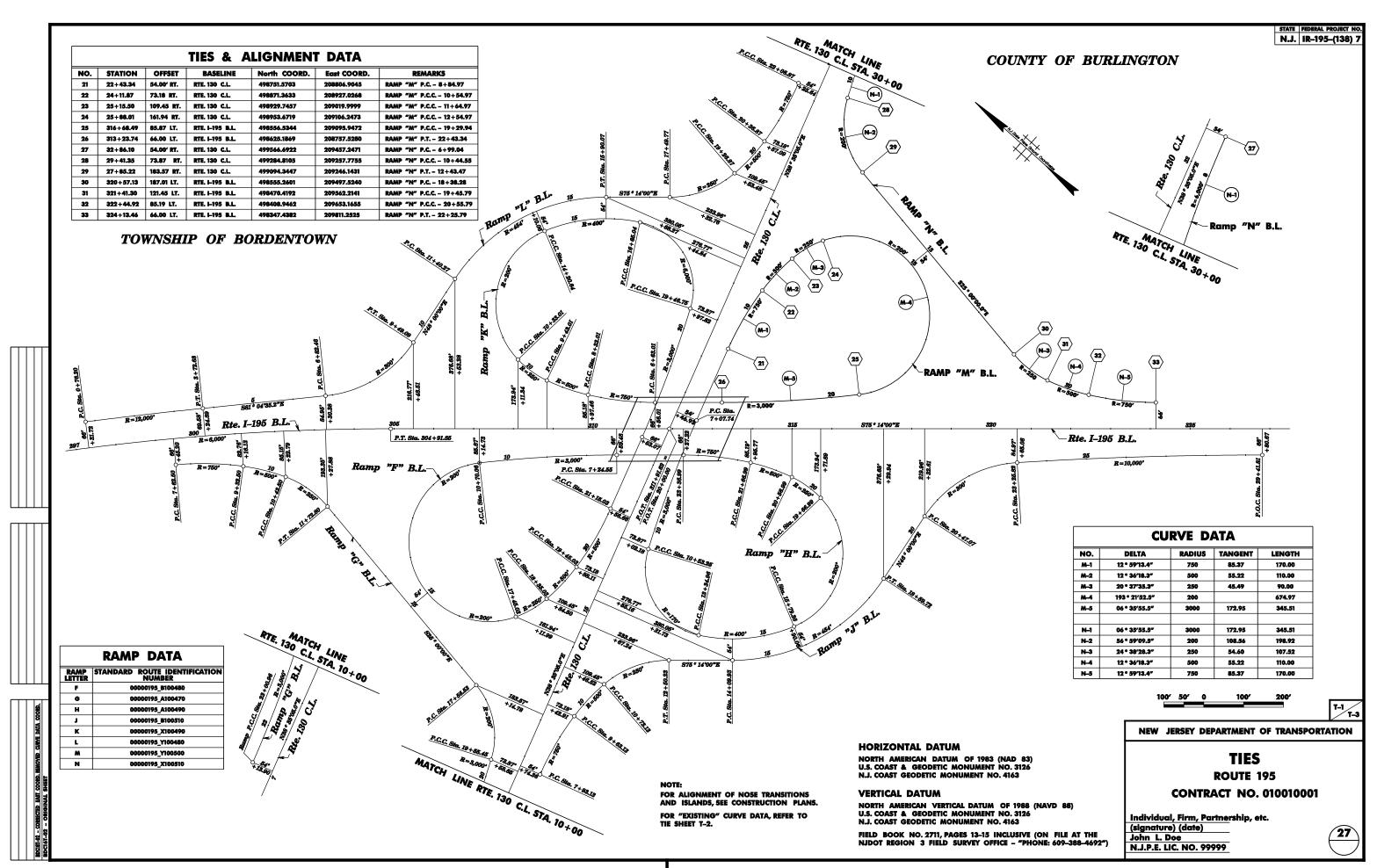
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ALIGNMENT DATA						
NO.	STATION	OFFSET	BASELINE	North COORD.	East COORD.	REMARKS
J-1	7+93.13	0′	RAMP J	497,837.8012	208,077.8411	P.C.
J-2	9+63.13	0′	"	497,957.5922	208,197.9617	P.C.C.
J-3	10 + 73.13	0′	<i>m</i>	498,015.9683	208.290.9371	P.C.C.
J-4	12+50.23	0′	"	498,032.6733	208,463.5514	P.T.
J-5	14+09.93	0′	"	497,991.9710	208,617.9741	P.C.
J-6	18+59.73	0′	"	498,093.5802	209,037.4727	P.T.
J-7	20+47.07	0'	"	498,218,9485	209,176.6911	P.C.
J-8	23+25.82	0'	"	498,290.2473	209,435.8912	P.C.C.
J-9	29+41.81	0'	RAMP J	498,151.6831	210,035.9911	P.T.
J-10	11+63,24	64' RT.	RAMP Y.R.	497,901.0455	208,141.0921	P.C.
J-11	9+61.18	0'	RAMP J	497,956.3882	208,196.4401	P.C.C.
J-12	10+06.30	27' LT.	"	498,005,4439	208,218.0012	CTR. NOSE
J-13	10+59.67	22' LT.	RAMP J	498,029.4817	208,268.7816	P.C.
J-14	14+26.90	54' RT.	RAMP Y.R.	498,113.3773	208,297.7113	P.T.
J-15	22+16.16	22' LT.	RAMP J	498,313.3926	209,323.1422	P.C.C.
J-16	23+03.59	18.11' LT.	"	498,311.7412	209,416.1521	P.C.C.
J-17	23+25.82	18' LT.	"	498,307.9076	209,439.4051	CTR. NOSE
J-18	25+95.62	14' LT.	"	498,247.7655	209,702,8711	CTR. NOSE
J-19	23+59.01	10' RT.	"	498,273.9283	209,466.4412	P.R.C.
J-20	23+42.46	5.01' RT.	RAMP J	498,282,0763	209,451,2213	P.R.C.
J-20	25 + 42.40	J.VI KI.	MAMP 3	770,202.0703	207,431.2213	F-R-V-
A-1	9+61.00	0'	ACCESS RD. I	497,091.8573	207,413.6131	P.O.T.
A-2	10+36.00	0′	# # # # # # # # # # # # # # # # # # #	497,138.6362	207,354,9811	P.C.
A-3	11+14.54	0′	"	497,208.9086	207,347.0816	P.T.
A-4	16+37.00	0′	ACCESS RD. I	497,617.3077	207,672.9251	P.O.T.
A-5	0+27.11	43.01 LT.	RAMP Y.R.	497,079.6883	207,348.8719	P.C.C.
A-6		19.97 LT.	ACCESS RD. I	· ·	-	
A-7	10 + 33.11 11 + 14.54	15.00 LT.	ACCESS RD. I	497,121.2272 497,218.2546	207,344.7918 207,335.3615	P.R.C. P.T.
A-/ A-8		45.06 LT.		-		P.C.C.
	1+65.38		RAMP Y.R.	497,189.0445	207,433.5151	
A-9	1+18.43	51.25 LT.	RAMP Y.R.	497,156.2099	207,399.3919	P.C.C.
A-10	11+14.54	15.00 RT.	ACCESS RD. I	497,199.5482	207,358.8118	P.T.
*** *	0/0 : 01 00	01	D I DTF 407	400 /0/ 0//-	004 400 0055	
	269+31.90	0′	B.L. RTE. 195	498,636.8467	204,430.9811	P.C.
	304+91.85	0′	"	498,773.3984	207,936.2814	P.T.
	367+64.56	0′	"	497,174.5944	214,001.8151	P.C.
	381+23.98	0′		496,739.9585	215,288.7713	P.T.
	415+52.99	0′	"	495,424.6530	218,455.4931	P.C.
	430 + 61.24	0′	"	494,953.1503	219,886.6510	P.T.
	461 + 27.31	0′	"	494,215.8176	222,862.7512	P.C.
	475+15.82	0′	"	493,766.9904	224,174.8615	P.T.
ML-9	504+05.93	0′	B.L. RTE. 195	492,598.0199	226,818.0001	P.O.T.

	CU	RVE D	ATA	
NO.	DELTA	RADIUS	TANGENT	LENGTH
J-A	12 ° 59′13.4″	750′	85.37	170.00
J-B	12 ° 36′18.3″	500′	55.22	110.00
J_C	40 ° 35′23.3″	250′	92.45	177.11
J-D	56 ° 46′00.0″	454'	245.31	449.81
J–E	53 ° 50′14.4″	300′	150.35	278.75
J_F	3 ° 31′45.6″	10,000′	308.09	615.98
J_G	12 ° 50′18.8″	350′	39.38	78.43
J_H	2 ° 33′48.3″	3,000′	67.12	134.22
J-I	21 ° 26′40.3″	250′	47.34	93.57
J–J	1 ° 40′59.9″	10,000′	146.91	293.79
J–K	33 ° 39′09.0″	30′	9.07	17.62
J-L	33 ° 27′44.5″	30′	9.02	17.52
AR-A	90 ° 00′00.0″	50′	50.00	78.54
AR-B	88 ° 16′24.1″	70′	67.92	107.85
AR-C	88 ° 08′50.7″	30′	29.05	46.15
AR-D	163 ° 24′21.6″	30′	205.72	85.56
AR-E	18 ° 09′47.3″	150′	23.98	47.55
ML-A	33 ° 59′42.0″	6,000′	1,834.10	3,559.95
ML-B	7 ° 47′20.0″	10,000	680.76	1,359.42
ML-C	8 ° 38′30.0″	10,000′	755.56	1,508.26
ML-D	9 ° 56′40.0″	8,000'	696.00	1,388.51

	SURVEY	BASELI	NE DATA
NO.	North COORD.	East COORD.	REMARKS
TR-A	493,919.454	223,889.690	2"x2"x18" Hub
TR-B	494,055.347	223,252.052	IP - #5 Rebar (36")
TR-C	494,319.892	222,919.641	2"x2"x18" Hub
TR-D	494,139.989	222,189.984	D.H. (S.W. Corner Step)
TR-E	494,805.554	220,502.930	PK w/Ribbon
TR-F	495,584.560	218,347.601	PK w/Ribbon
TR-G	495,864.561	217,767.792	2"x2"x18" Hub
TR-H	496,160.553	217,157.175	IP - #5 Rebar (36")
TR-K	496,391.688	216,561.661	PK w/Ribbon
TR-L	496,664.295	216,032.945	DH Sdwk.
TR-M	496,834.526	215,602.300	DH Curb
TR-N	497,031.642	215,202.612	2"x2"x18" Hub
TR-0	497,235.056	213,977.108	PK w/Ribbon
TR-P	497,310.665	213,521.615	PK w/Ribbon
TR-Q	497,689.779	212,015.452	2"x2"x18" Hub
TR-R	497,984.782	210,893.275	2"x2"x18" Hub
TR-S	498,131.948	210,226.160	2"x2"x18" Hub
TR-T	498,307.678	209,691.814	DH Curb
TR-U	498,614.004	208,535.355	DH Sdwk.
TR-V	498,605.107	208,568.959	2"x2"x18" Hub
TR-W	498,931.933	207,750.851	2"x2"x18" Hub
TR-X	498,876.158	207,346.677	2"x2"x18" Hub
M-1	493,628.028	220.694.244	USC&G Mon. #8140
M-2	494,853.604	220,505.588	USC&G Mon. #8141
M-3	499,480.510	209,264.223	USC&G Mon. #2156

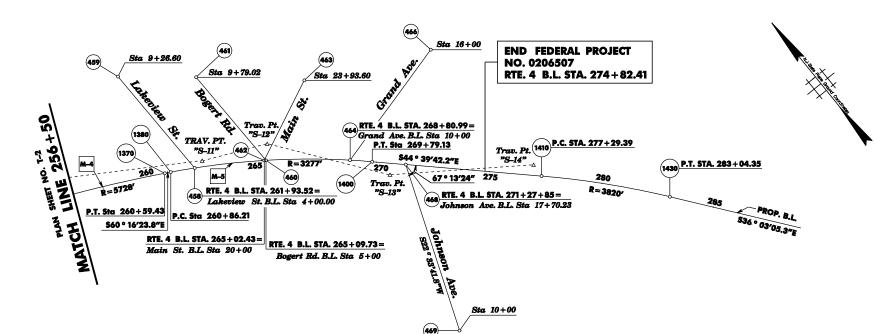
NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES **ROUTE 195** CONTRACT NO. 010010001

Individual, Firm, Partnership, etc. (signature) (date) John L. Doe N.J.P.E. LIC. NO. 99999







CURVE DATA							
NO.	DELTA	RADIUS	TANGENT	LENGTH			
M-4	10 ° 28′7.8″	5728'	524.76′	1046.59'			
M-5	15 ° 36′41.5″	3277′	449.24′	892.92'			

		TRAN	SVERSE	ALIGNM	MENT DA	A <i>TA</i>
No.	Station	Offset	Baseline	North Coord.	East Coord.	Remarks
S-11	261 + 76.88	44.96' Lt.	Rte.4	757,639.1676	272,330.9932	Traverse Point
S-12	265 + 62.38	100.21° Lt.	Rte.4	757,468.3475	272,693.6952	Traverse Point
S-13	270+66.51	44.99' Rt.	Rte.4	757,026.2409	272,982.5376	Traverse Point
S-14	276+75.87	47.72' Lt.	Rte.4	756,675.9858	273,476.8169	Traverse Point

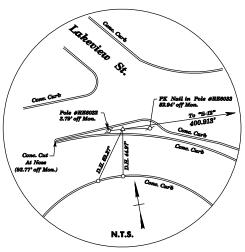
#### **HORIZONTAL DATUM**

NORTH AMERICAN DATUM OF 1983 (NAD 83) U.S. COAST & GEODETIC MONUMENT NO. 3126 N.J. GEODETIC MONUMENT NO. 4163

#### **VERTICAL DATUM**

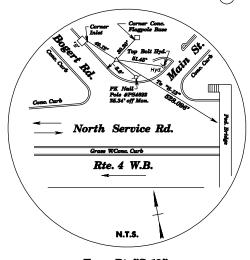
NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) U.S. COAST & GEODETIC MONUMENT NO. 3126 N.J. GEODETIC MONUMENT NO. 4163

FIELD BOOK NO. 2711, PAGES 13-15 INCLUSIVE (ON FILE AT THE NJDOT AREA "B" FIELD SURVEY OFFICE - "PHONE: 001-388-4692")

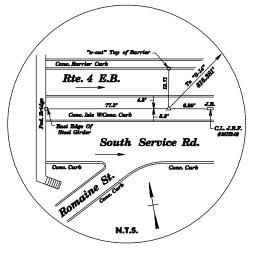


**BOROUGH OF PARAMUS** 

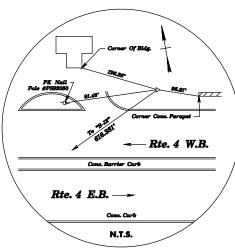
Trav. Pt. "S-11" Mon. Plug W/Punch (Mon. Box) Sta. 261 + 76.88, 44.96' Lt.



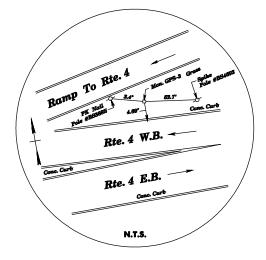
Trav. Pt. "S-12" Conc. Mon. W/Drill Hole Sta. 265 + 62.38, 100.21' Lt.



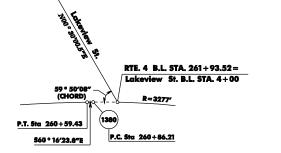
Trav. Pt. "S-13" Mon. Plug W/Punch (Mon. Box) Sta. 270+66.51, 44.99' Rt.



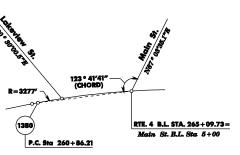
Trav. Pt. "S-14" "x" Steel Angle Iron (3" Above Ground) Sta. 276+75.87, 47.72' Lt.



G.P.S. Monument #3, Elev. 73.964 Sta. 281 + 74.61, 44.96' Lt.

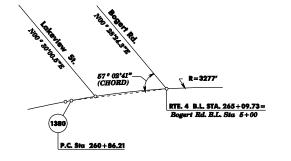


N.T.S. Lakeview St.

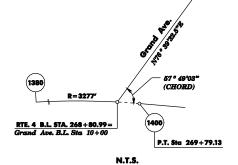


Main St.

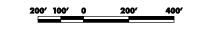
N.T.S.



N.T.S. Bogert Rd.



Grand Ave.

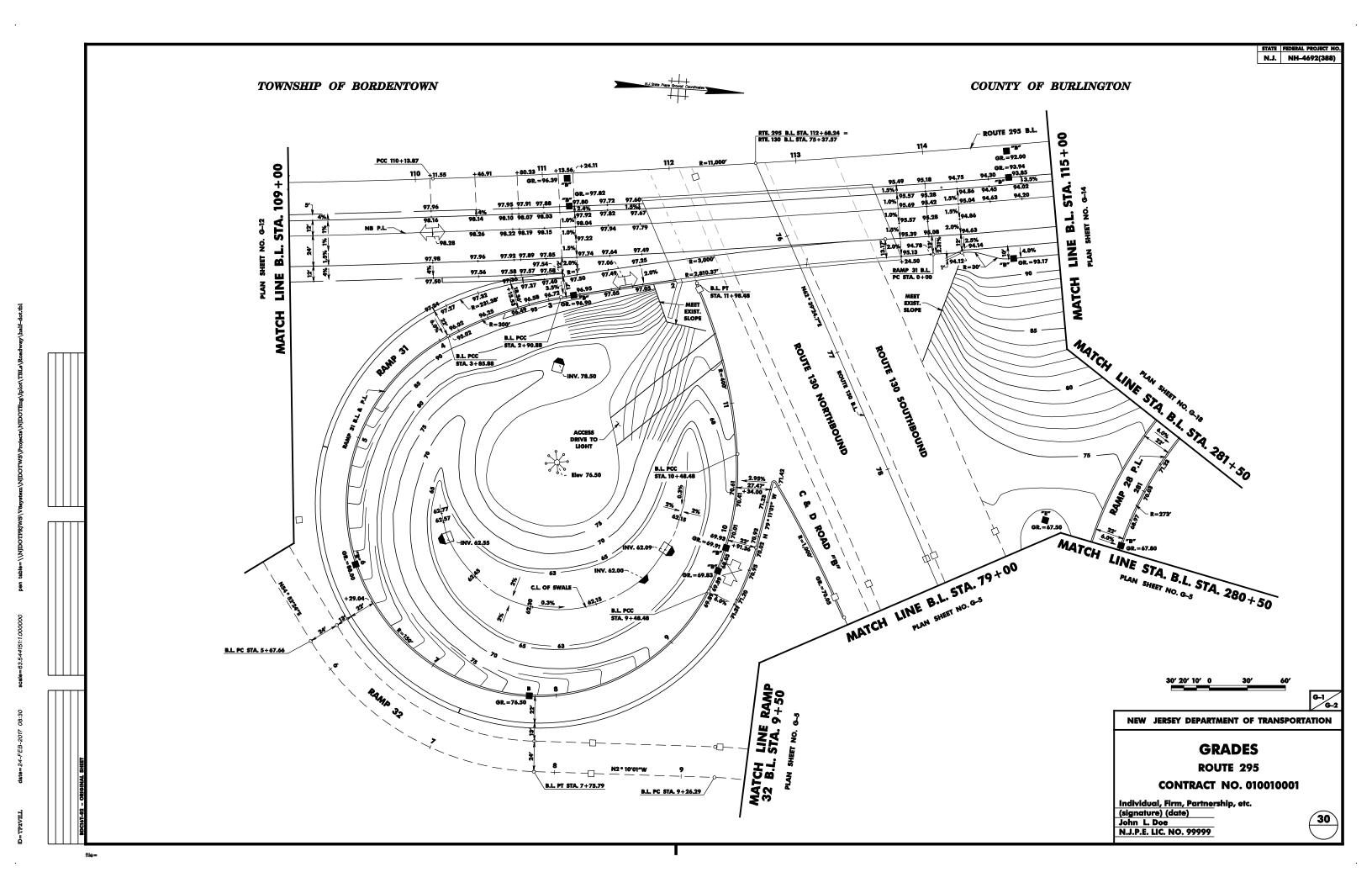


NEW JERSEY DEPARTMENT OF TRANSPORTATION

TIES **ROUTE 4 CONTRACT NO. 010010001** 

Individual, Firm, Partnership, etc. (signature) (date)
John L. Doe N.J.P.E. LIC. NO. 99999





# **LEGEND**

**BREAKAWAY BARRICADES** BREAKAWAY BARRICADES WITH SIGN

CONSTRUCTION SIGNS

PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)

TRAILER MOUNTED MOUNTED ARROW BOARD SHOWING CAUTION MODE

TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE

A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.

CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.

ADVANCE WARNING SIGNS DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO

THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY THE RE TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL

PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL

RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-IF SIGN (ROAD WORK

ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE RE.

MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI "STANDARDS AND GUIDES

FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS', UNLESS OTHERWISE NOTED IN

CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR

CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION LILUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.

**GENERAL NOTES:** 

THE PLANS AND SPECIFICATIONS.

CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF

CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST.

MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER, THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION THAT SHALL MOVE WITH THE WORK AREAS TO KEEP A 80 FEET MIN. AND 150 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.

13. THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE RE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON AT LEAST 6H : 1V SLOPE BEFORE THE END OF EACH WORK DAY, OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE SHALL BE BACKFILLED.

15 WHERE REQUIRED THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING EDESTRIAN CROSSING LOCATIONS AND TYPE, AS DIRECTED BY THE I

16. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES SHALL BE TRANSITIONED ON A MINIMUM 20H : 1V SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.

17. THE PLACEMENT AND / OR RELOCATION OF CONSTRUCTION BARRIER CURB TO BE DONE DURING ALLOWABLE LANE CLOSURE HOURS.

CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING, REGIONAL TRAFFIC ENGINEER - WORK ZONE, AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE RE.

19. THE SPEED LIMIT, R2-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGNS SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING REGIONAL TRAFFIC ENGINEER - WORK ZONE.

THE REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.

TRAFFIC FINES DOUBLED IN WORK AREA R(N.))5-17(S), 4 FEET BY 2.5 FEET SIGN SHALL BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.

THE FINAL HMA SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE RE OR INDICATED ON THE PLANS, MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 20H :1V SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE

23. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.

24. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE RE.

25 TRAFFIC IMPACT NOTICES AND CHANGES

WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING SHALL BE AS FOLLOWS:

I. IMPACTS TO NORMAL TRAFFIC FLOW - WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.

II. TEMPORARY LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.

III. PERMANENT LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.

B. ADVANCE NOTICES

FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON THE ADVANCE FORM TO-103 PROVIDED BY THE DEPARTMENT, OF THE PROPOSED DATE. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CANNOT BE COMPLETED ON THE PROPOSED DATE.

FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON ADVANCE FORM TO-103, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CANNOT BE COMPLETED ON THE PROPOSED DATE.

STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN SHALL BEGIN NO EARLIER THAN 11:00 PM FIDAY AND SHALL BE COMPLETED AND READY FOR OPERATIONS BY 6:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT SHALL BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT.

ADVANCE NOTICES SENT PRIOR TO THE PRE-CONSTRUCTION MEETING SHALL BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.

C. PROGRESS NOTICES

ALL "IMPACTS TO NORMAL TRAFFIC FLOW" SCHEDULED FOR THE SEVEN DAY PERIOD STARTING ON THE FOLLOWING MONDAY SHALL BE SUBMITTED TO THE RE BY 9:00 AM OF EACH FRIDAY ON WEEKLY FORM TO-100 PROVIDED BY THE DEPARTMENT.

EACH DAY OF "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE RE BY 9:00 AM THE DAY IN ADVANCE OF THE START OF THOSE OPERATIONS ON DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.

"TEMPORARY LANE CLOSURES" FOR WEEKENDS SHALL BE SUBMITTED TO THE RE BY 9:00 AM ON THE IMMEDIATELY PRECEDING FRIDAY ON THE DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.

D. CHANGES TO THE SCHEDULED CLOSURES

REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE RE AS FOLLOWS:

CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE RE AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.

OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" SHALL BE SUBMITTED TO THE RE AS SPECIFIED IN THE SPECIFICATIONS.

28. WHERE MILLING OR HMA PAVING IS PERFORMED AND THE LANE IS TO BE RE-OPENED TO TRAFFIC EACH DAY, APPLY TRAFFIC STRIPES AS DIRECTED BY THE RE.

SIGN DESIGNATION	MESSAGE	SIZE	AREA IN S.F.	REQUIRED QUANTITY IN NUMBER	TOTAL AREA IN 5.F
W20-1D	ROAD WORK 1/2 OR 1 MILE	48" x 48"	16	4	64
W20-5A	LEFT TWO LANES CLOSED 1500 FT.	48" x 48"	16	2	32
W20-5B	LEFT TWO LANES CLOSED 1000 FT.	48" x 48"	16	2	32
W4-2(5)	N/A	48" x 48"	16	4	64
G20-2A	END ROAD WORK	60" x 24"	10	2	20

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND STAGING PLAN **ROUTE 38** 

**CONTRACT NO. 010010001** , Firm, Partnership, etc.

John L. Doe N.J.P.E. LIC. NO. 99999

DRUMS

CONE

DIRECTION OF TRAFFIC FLOW

TRAFFIC DIRECTOR, FLAGGER

вотн

ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)

LEFT RIGHT BOTH

RIGHT

TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)

TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM

TEMPORARY CRASH CUSHION, (all other approved)

BUFFER ZONE



WORK AREA



PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

## **NOTES - TRAFFIC CONTROL PLANS**

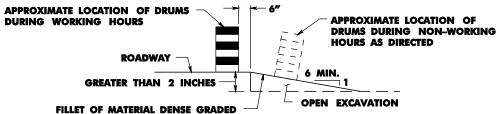
1. ONE LANE OF 11 FEET WIDE UNOBSTRUCTED TRAVELED WAY SHALL BE MAINTAINED ON ROUTE 38 AT ALL TIMES BETWEEN THE HOURS OF 8:00 P.M. AND 5:30 A.M.

2. ROUTE 38 ROADWAY CONSTRUCTION FOR THE VARIOUS STAGES SHALL BE COMPLETED TO THE TOP OF THE BITUMINOUS CONCRETE SURFACE COURSE MIX 1-4 SO THAT THE FINAL SURFACE COURSE CAN BE PLACED IN ONE CONTINUOUS OPERATION DURING

3. LANE CLOSURES WILL NOT BE PERMITTED AFTER NOON OF THE DAY BEFORE, DURING, AND UNTIL NOON OF THE DAY AFTER THE FOLLOWING HOLIDAY'S OR HOLIDAY WEEKEND PERIODS: NEW YEAR'S DAY, PRESIDENT'S DAY, GOOD FRIDAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, COLUMBUS DAY, THANKSGIVING, AND CHRISTMAS. LANE CLOSURES WILL NOT BE PERMITTED ON ELECTION DAY BETWEEN THE HOURS OF 7AM AND 8PM.

4. THE CONTRACTOR SHALL PERFORM THE WORK ON ROUTE 38 IN ACCORDANCE WITH THE FOLLOWING SCHEDULES

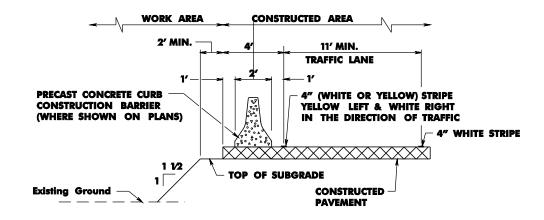
	MONDAY THRU THURSDAY	FRIDAY	SATURDAY	SUNDAY
NO CLOSURE	6:00 AM to 11:00 AM and 2:00 PM to 8:00 PM	6:00 AM to 11:06 AM and 2:00 PM to 8:00 PM		
ONE LANE CLOSURE	11:00 AM to 2:00 PM and 8:00 PM to 11:00 PM	11:00 AM to 2:00 PM and 8:00 PM to MIDNIGHT	6:00 AM to 9:00 PM	6:00 AM to 4:00 PM
TWO LANE CLOSURES	11:00 PM to 6:00 AM	MIDNIGHT TO 6:00 AM	MIDNIGHT to 6:00 AM and 9:00 PM to MIDNIGHT	MIDNIGHT to 6:00 AM and 4:00 PM to MIDNIGHT



AGGREGATE BASE COURSE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER

> ESCAPE RAMPS MUST BE CONSTRUCTED AND MAINTAINED DURING NON-WORKING HOURS WHERE A VERTICAL DROP GREATER THAN 2 INCHES EXISTS ADJACENT TO TRAVELED LANE.

### **ESCAPE RAMP DETAIL**



**TYPICAL SECTION PLACEMENT OF PRECAST CONCRETE CONSTRUCTION BARRIER** 

REGULATORY APPROACH SPEED OF	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS				
TRAFFIC	DESI	MINIMUM			
MILES/HOUR	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET		
25	375	525	150		
30	450	625	200		
35	525	725	250		
40	600	825	325		
45	675	925	400		
50	750	1025	475		
55	875	1150	550		
60	1000	1275	650		
65	1050		725		

#### NOTES:

- 1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
- 2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
- 3. RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
- 4. DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
- 5. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

RECO	MMENDED TAI				SPACING	RECOMMENDED SPACING ALONG TANGENTS
REGULATORY APPROACH SPEED OF TRAFFIC	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	TAP	INIMU ER LEN FOR L WIDTHS	GTH ANE	MAXIMUM DEVICE (B) SPACING ALONG TAPERS IN FEET	MAXIMUM DEVICE (D) SPACING ALONG TANGENTS IN FEET
MILES/HOUR	0	10'	11′	12'		
25	10.5:1	105	115	125	25	50
30	15:1	150	165	180	30	60
35	20.5:1	205	225	245	35	70
40	27:1	270	300	325	40	80
45	45:1	450	495	540	45	90
50	50:1	500	550	600	50	100
55	55:1	550	605	660	55	110
60	60:1	600	660	720	60	120
65	65:1	650	715	780	65	130

THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

N.T.S.

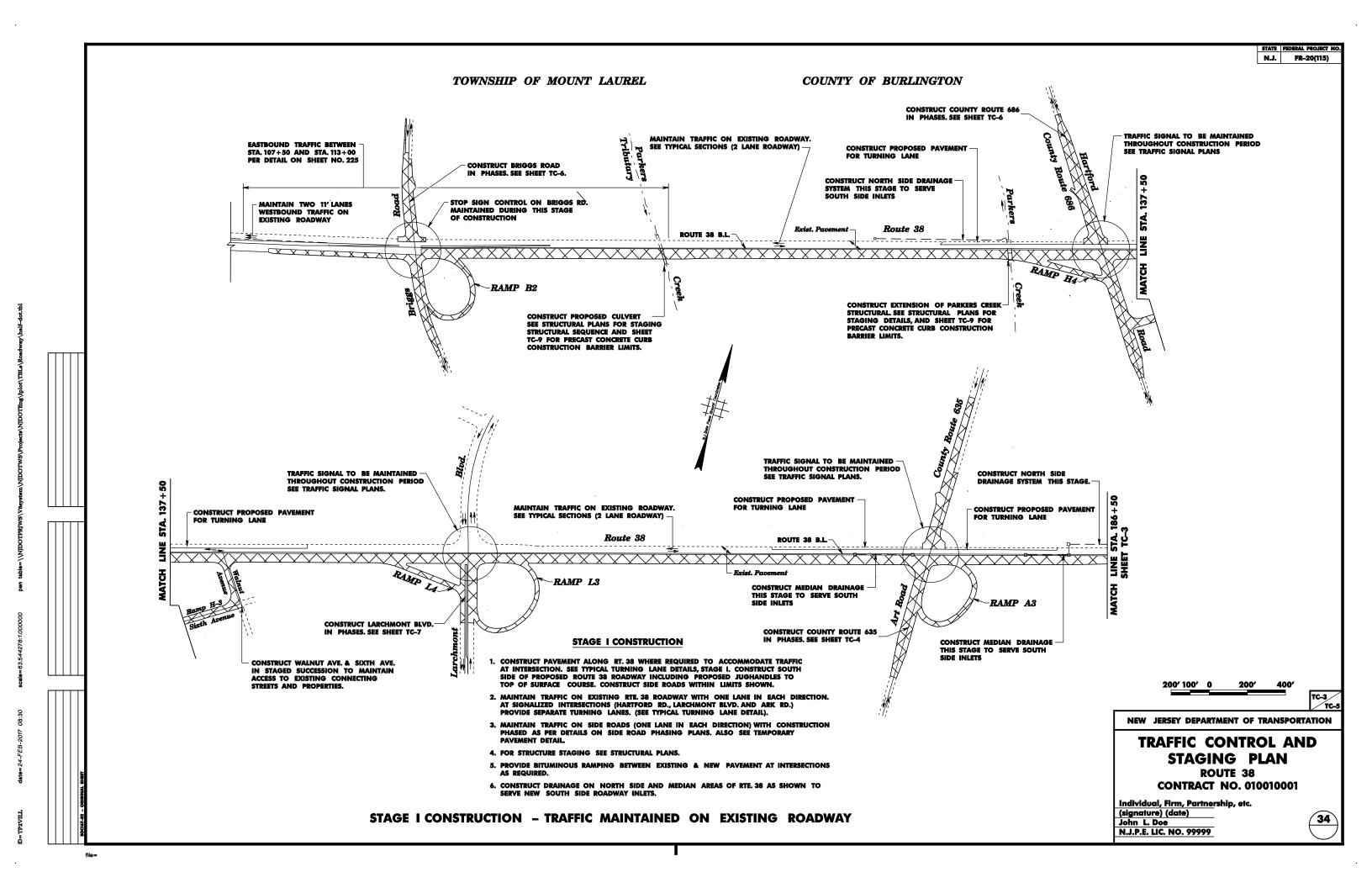
**NEW JERSEY DEPARTMENT OF TRANSPORTATION** 

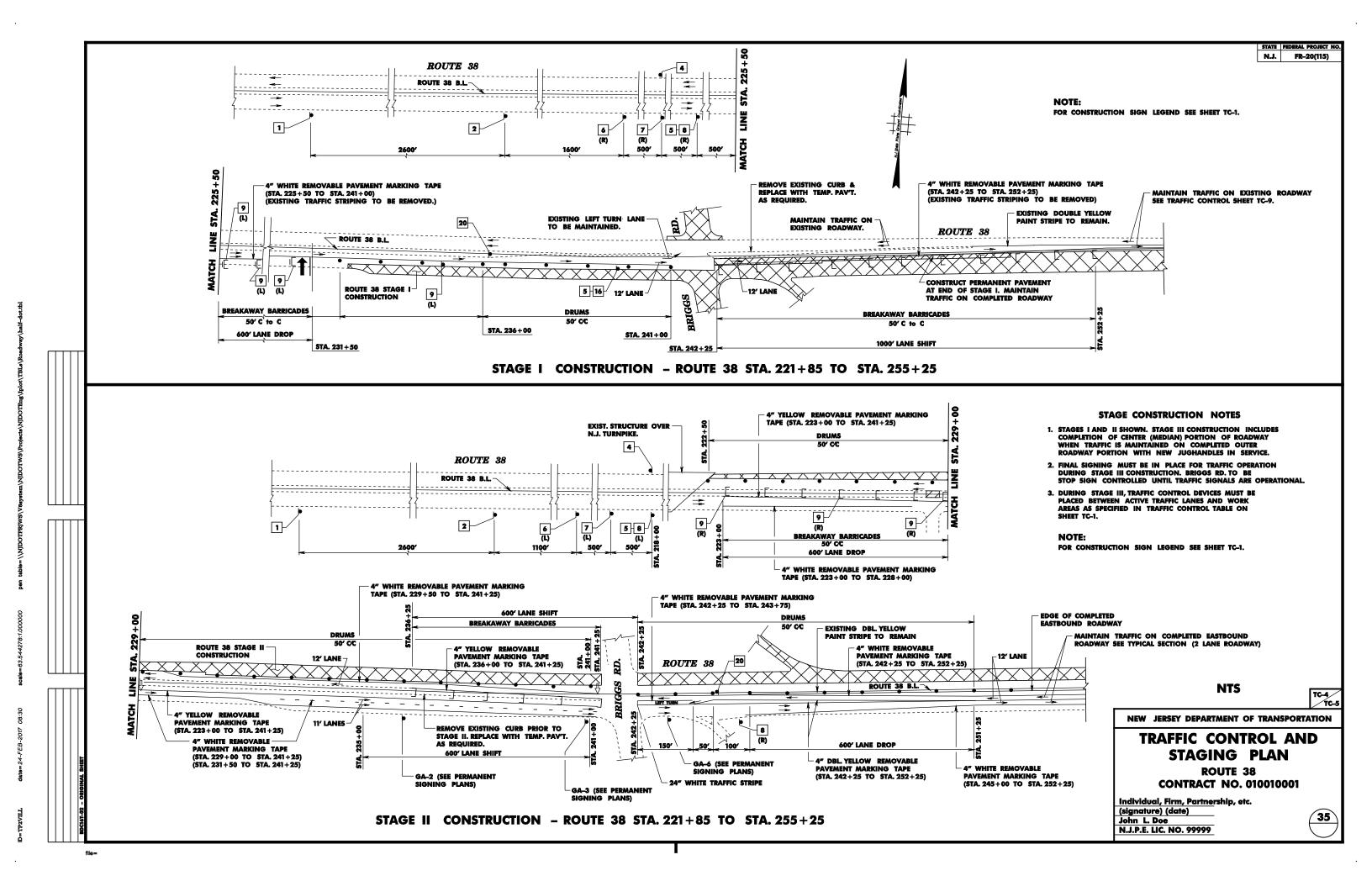
TRAFFIC CONTROL AND STAGING PLAN **ROUTE 38** 

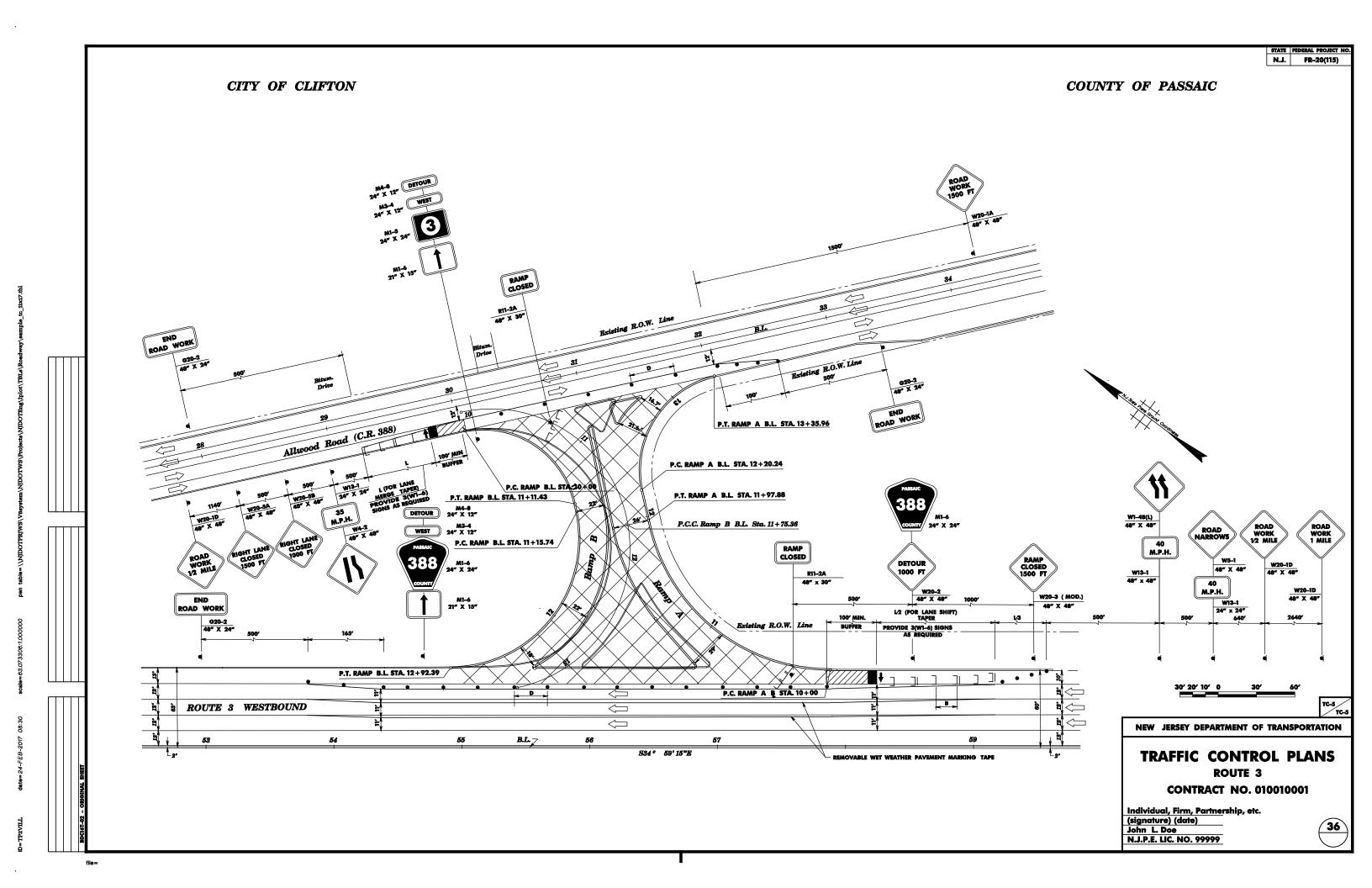
**CONTRACT NO. 010010001** 

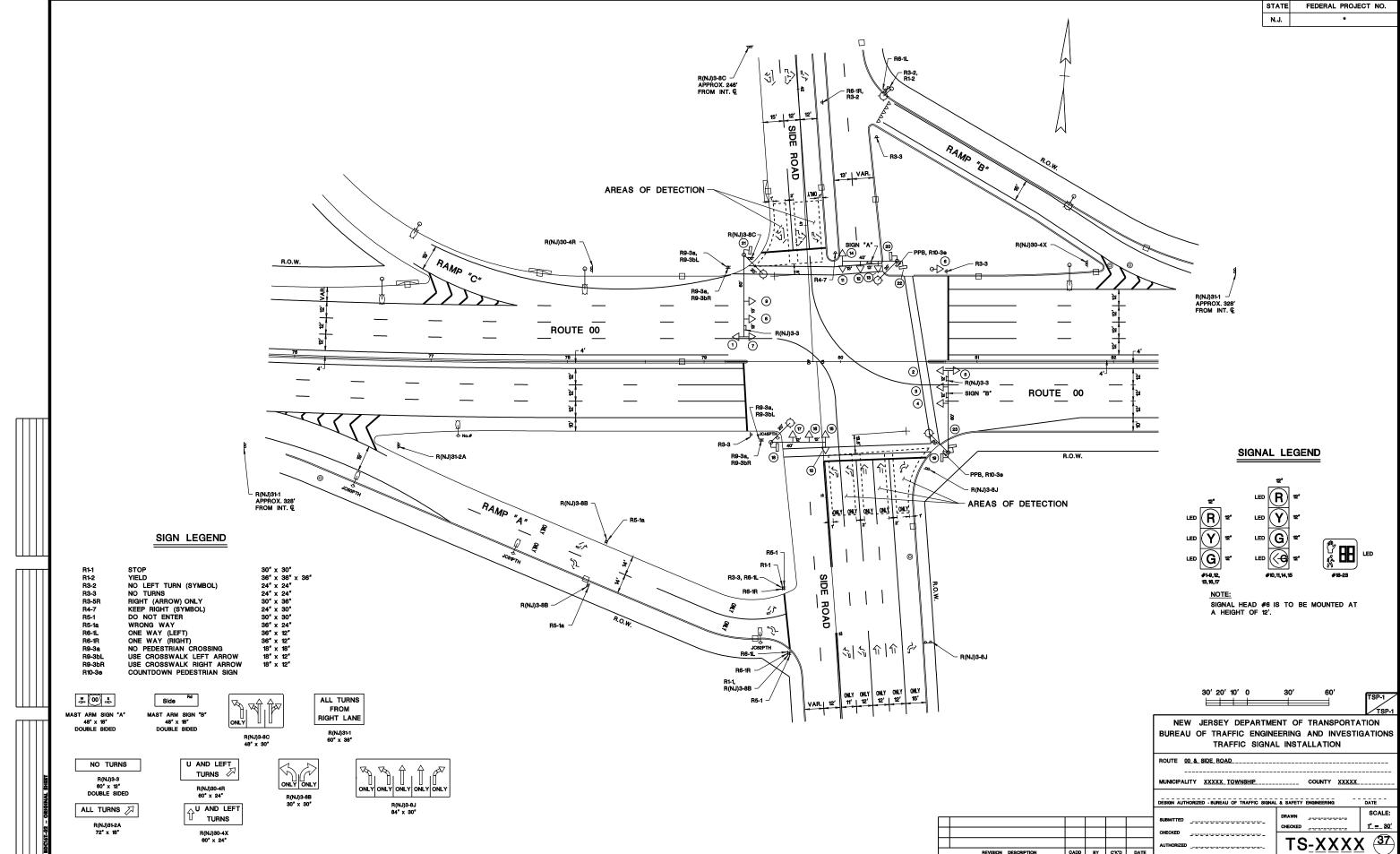
Individual, Firm, Partnership, etc. (signature) (date) John L. Doe

N.J.P.E. LIC. NO. 99999

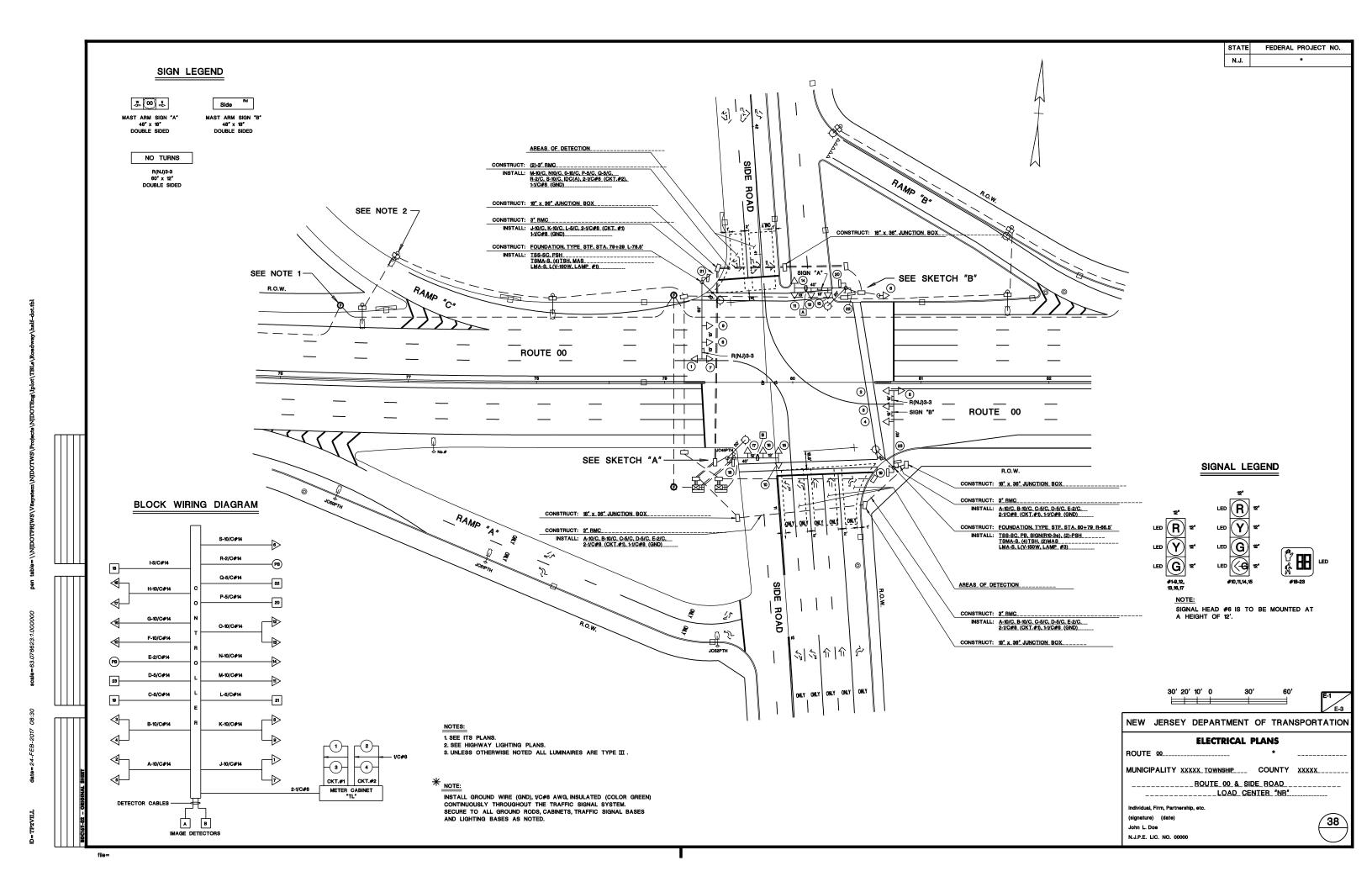




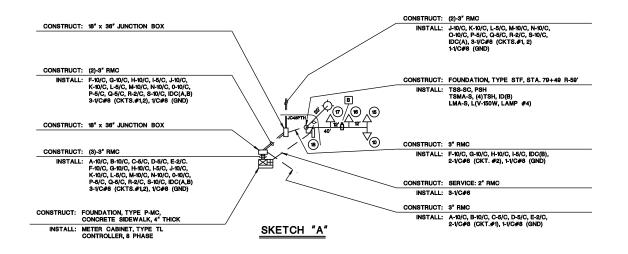


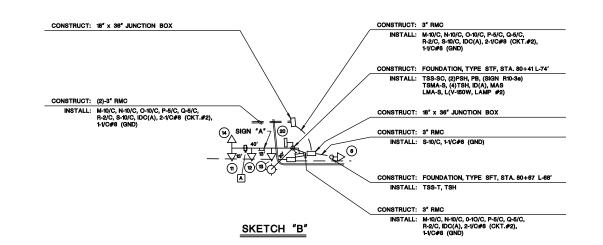


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ITEM NUMBER	TO BE CONSTRUCTED	CONTRACT QUANTITY
606012P	CONCRETE SIDEWALK 4" THICK	2 SY
701012P	11/2" RIGID METALLIC CONDUIT	13 LF
701015P	2" RIGID METALLIC CONDUIT	148 LF
701021P	3" RIGID METALLIC CONDUIT	833 LF
701102M	18" x 36" JUNCTION BOX	11 UNITS
701123M	FOUNDATION, TYPE SFT	1 UNIT
701132M	FOUNDATION, TYPE P-MC	1 UNIT
701138M	FOUNDATION, TYPE STF	4 UNITS
701171M	METER CABINET, TYPE TL	1 UNIT
701192P	GROUND WIRE, NO. 8 AWG	276 LF
701201P	MULTIPLE LIGHTING WIRE, NO. 8 AWG	450 LF
701213P	SERVICE WIRE, NO. 6 AWG	285 LF
702009M	CONTROLLER, 8 PHASE	1 UNIT
702012M	TRAFFIC SIGNAL STANDARD, ALUMINUM	1 UNIT
702015M	TRAFFIC SIGNAL STANDARD, STEEL	4 UNITS
702024M	TRAFFIC SIGNAL MAST ARM, STEEL	4 UNITS
702027P	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	787 LF
702030P	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	1722 LF
702033P	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	2789 LF
702036M	TRAFFIC SIGNAL HEAD	17 UNITS
702039M	PEDESTRIAN SIGNAL HEAD	6 UNITS
702042M	PUSH BUTTON	2 UNITS
702045M	IMAGE DETECTOR	2 UNITS
702057M	INTERIM TRAFFIC SIGNAL SYSTEM, LOCATION 1	LUMP SUM
702060M	CONTROLLER TURN-ON	1 UNIT
703015M	LIGHTING MAST ARM, STEEL	4 UNITS
703018M	LUMINAIRE	4 UNITS







# NEW JERSEY DEPARTMENT OF TRANSPORTATION

## **ELECTRICAL PLANS**

ROUTE 00

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

ROUTE 00 & SIDE ROAD LOAD CENTER "NR"

Individual, Firm, Partnership, etc. (signature) (date) John L. Doe

N.J.P.E. LIC. NO. 00000

CONTROL SECTION
NO. XXXXXXX



FEDERAL PROJECT NO.

N.J.

# **ROUTE 00 & SIDE ROAD**

# TOWNSHIP OF XXXXXX

### SIGNAL INDICATIONS

# COUNTY OF XXXXXX

WITHOUT	PEDESTRIAN	ACTUATION
---------	------------	-----------

	<u>1-9</u>	10,11	12,13	14,15	16,17	18-21	22,23	TIME <u>I</u>	(sec)
1. Rte. 00 R.O.W. PED. CLEARANCE CHANGE CLEARANCE	G G Y R	R R R	R R R	R R R	R R R	W FDW DW	DW DW DW DW	40-20 25 5* 2	60-35 25 5** 2
2. Side Rd. S/B R.O.W. CHANGE CLEARANCE	R R R	R R R	R R R	G/ <g- Y R</g- 	G Y R	DW DW DW	DW DW DW	7-17 4 3	7-22 4 3
3. Side Rd. N/B R.O.W. CHANGE CLEARANCE	R R R	G/ <g- Y R</g- 	G Y R	R R R	R R R	DW DW DW	DW DW DW	7-17 4 3	7-17 4 3
		WITH	PEDESTF	RIAN ACTUA	TION				
1. Rte. 00 R.O.W. PED. CLEARANCE CHANGE CLEARANCE	G G Y R	R R R	R R R	R R R	R R R	W FDW DW DW	DW DW DW	10 25 5* 2	30 25 5** 2
2. Side Rd. S/B R.O.W. CHANGE CLEARANCE	R R R	R R R	R R R	G/ <g- Y R</g- 	G Y R	DW DW DW	DW DW DW	7 4 3	7 4 3
3. Side Rd. N/B R.O.W. PED. CLEARANCE CHANGE CLEARANCE	R R R	G/ <g- G/<g- Y R</g- </g- 	G G Y R	R R R	R R R	DW DW DW	W FDW DW DW	5 32 4 3	5 32 4 3
EMERGENCY FLASH	Y	R	R	R	R	DARK	DARK		

<sup>\*</sup> An Offset of 8 seconds is to be measured from the beginning of yellow to Route 00 at Reference Road to the beginning of yellow to Route 00 at this intersection.

The Side Road N.B. right turn loops are to be equipped with a 10 second delay.

Memory-disconnected

Vehicle Extension-2 seconds

Manual Control-disconnected

HOURS OF OPERATION:

Timing Schedule II (120 Second Background Cycle) is to be in effect Monday-Friday, 6:30 a.m.-9:00 a.m.

Timing Schedule I (100 Second Background Cycle) is to be in effect all other times.

(NOTE: TEXT HAS BEEN ENLARGED FOR VISUAL PRESENTATION IN THE SAMPLE PLAN SET.)

NEW JERSEY DEPARTMENT OF TRANSPORTATION

ELECTRICAL PLANS

ROUTE 00

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

ROUTE 00 & SIDE ROAD

LOAD CENTER "NR"

(signature) (date)

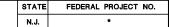
(signature) (date)
John L. Doe
N.J.P.E. LIC. NO. 00000

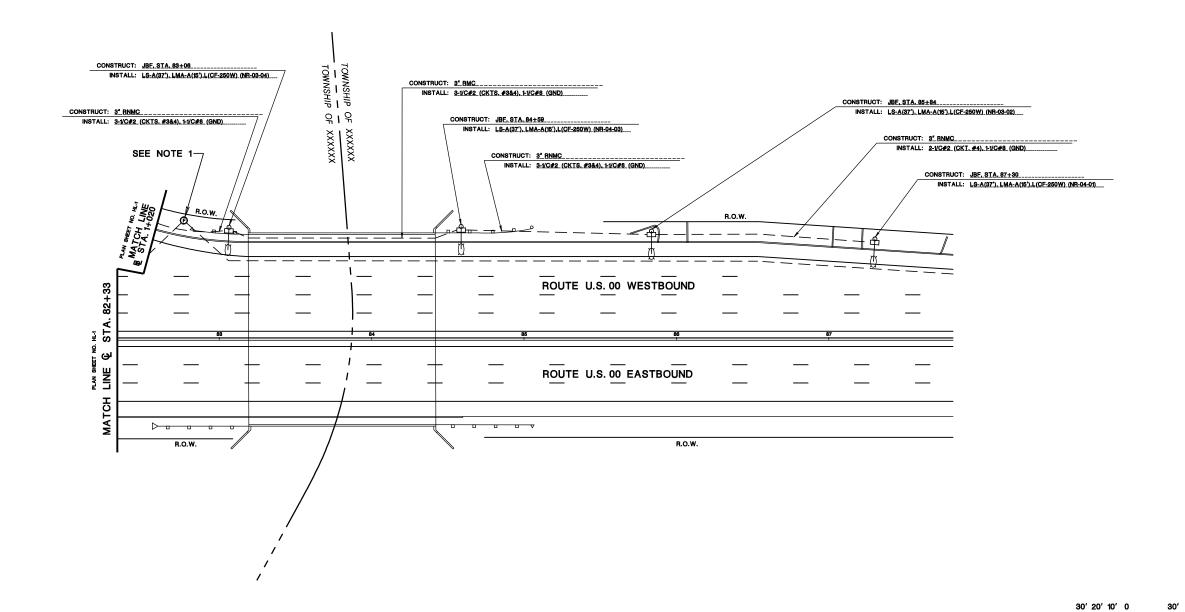


<sup>\*\*</sup> An Offset of 0 seconds is to be measured from the beginning of yellow to Route 00 at this intersection.

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TO BE CONSTRUCTED 701021P 3" RIGID METALLIC CONDUIT 150\_ LF 443 LF 701030P 3" RIGID NONMETALLIC CONDUIT 701117M JUNCTION BOX FOUNDATION 4\_ UNITS 701195P MULTIPLE LIGHTING WIRE, NO. 2 AWG 6562 LF 703003M LIGHTING STANDARD ALUMINUM 4 UNITS 703012M LIGHTING MAST ARM ALUMINUM 4\_ UNITS 703018M LUMINAIRE 4\_ UNITS 701192P GROUND WIRE, NO. 8 AWG \_600 LF





1. SEE ITS PLANS.

NOTES:

2. UNLESS OTHERWISE NOTED ALL LUMINAIRES ARE TYPE III.

(signature) (date) John L. Doe NO. XXXXXXXN.J.P.E. LIC. NO. 00000

NEW JERSEY DEPARTMENT OF TRANSPORTATION HIGHWAY LIGHTING PLANS

MUNICIPALITY XXXXX TOWNSHIP COUNTY XXXXX

LOAD CENTER "NR"

\_\_\_\_\_ROUTE\_00 & SIDE\_ROAD

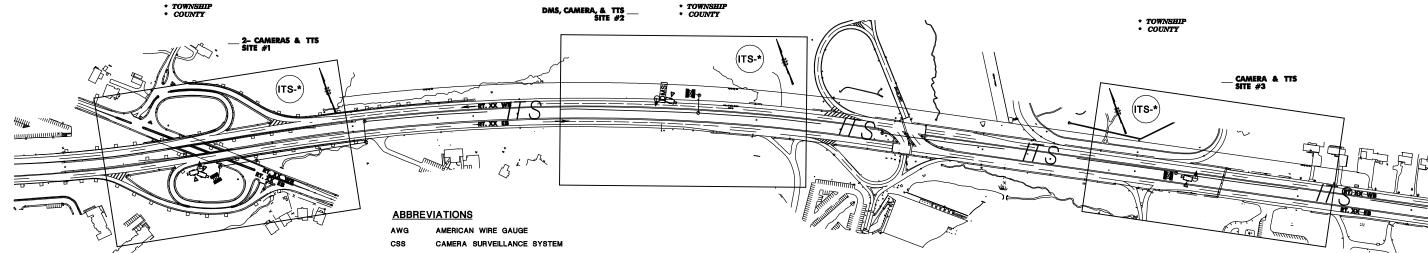
ROUTE .....

Individual, Firm, Partnership, etc.

# SITE LOCATION CHART

TOC N/S	JOB SITE	PLAN SHEET	ROUTE AND INTERSECTION	MUNICIPALITY	COUNTY	DEVICE	ТҮРЕ	DEVICE MOUTING	COMMUNICATIONS
N		ITS-XX	ROUTE XX WB M.P. XX	* TOWNSHIP	* COUNTY	CAMERA	DOME	PROPOSED CAMERA	FIBER OPTIC
"	N   1   113-AA	113-77	ROUTE AX WB M.F. AX	TOWNSHIP	COUNTY	TTS	TYPE C	STANDARD TYPE A	TIDEN OF TIO
						DMS	FRONT ACCESS	PROPOSED GROUND	
N 2	! ITS-XX	ROUTE XX EB M.P. XX	* TOWNSHIP	* COUNTY	CAMERA	DOME	MOUNTED SIGN STRUCTURE	FIBER OPTIC	
					TTS	TYPE C		1	
N	N 3	ITS-XX	ROUTE XX MEDIAN M.P. XX	4 TOWNSHIP	* COUNTY	CAMERA	DOME	PROPOSED CAMERA	FIBER OPTIC
N 3	110-77	ROUTE AX MEDIAN M.F. XX	* TOWNSHIP	COUNTY	TTS	TYPE C	STANDARD TYPE A	TIBER OF TIO	

INCLUDE ALL NON STANDARD DETAILS INTO THE BID SET



LEGEND OF SYMBOLS AND NOTATIONS					
<u>EXISTING</u>	PROPOSED	DESCRIPTION			
□ ▲	₽\$	CAMERA (WITH BLIND SPOT)			
$\bigoplus \blacktriangleright$	<b>→</b>	TRAVEL TIME SYSTEM (TTS TYPE C)			
DMS	[DMS]	DMS SIGN			
		ITS WIRES & CABLES (NO. AND SIZE AS SHOWN ON THE PLANS)			
	$\bowtie$	CONTROLLER CABINET W/ SIDEWALK			
Meter ⊞ Cabinet	Meter ⊞ Cabinet	METER CABINET			
Ē	€	JUNCTION BOX ITS TYPE A			
J.B. □	J.B.	JUNCTION BOX ITS TYPE C			
PIC	PIC	JUNCTION BOX ITS TYPE D			
S.S.	s.s.	STAINLESS STEEL JUNCTION BOX			
	(( <del>(</del> )))	WIRELESS			
□VSL ]	(VSLI)	VSLS			
<b>В</b>	IDMS I	GROUND MOUNTED DMS SIGN			
	DMS I	BUTTERFLY SIGN STRUCTURE DMS SIGN			
	€ I DMS	CANTILEVER SIGN STRUCTURE DMS SIGN			
		TURF PAVERS			

DYNAMIC MESSAGE SYSTEM

**EASTBOUND** GROUND

GARDEN STATE NETWORK

INTERNET PROTOCOL INTERNET SERVICE PROVIDER

INTELLIGENT TRANSPORTATION SYSTEM

JUNCTION BOX FOUNDATION

LINEAR FEET METER CABINET

MOBILITY & SYSTEMS ENGINEERING

NEW JERSEY DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

OFFICE OF INFORMATION TECHNOLOGY

RIGID METALLIC CONDUIT

POWER DISTRIBUTION UNIT

RT. ROUTE

SOUTHBOUND

STA.

STATEWIDE TRAFFIC MANAGEMENT CENTER TOCN/S

TRAFFIC OPERATIONS CENTER NORTH/ SOUTH

TRAVEL TIME SYSTEM

TYP TYPICAL

VLAN VIRTUAL LOCAL AREA NETWORK

WESTBOUND

### **GENERAL NOTES:**

- 2. FIELD VERIFY THE EXISTING DRAINAGE FACILITIES AND OTHER UNDERGROUND UTILITIES PRIOR TO START OF ANY ITS WORK. ENSURE MINIMUM DISTANCE REQUIRED BY THE UNDERGROUND UTILITY OWNERS IS MAINTAINED BETWEEN THE EXISTING SUBSURFACE UTILITIES AND THE PROPOSED ITS/ELECTRICAL FACILITIES. PROTTECT ALL UTILITIES PER NJDOT STANDARD SPECIFICATIONS, SUBSECTION 105.07. PROVIDE ALTERNATE EXCAVATION PLAN TO THE RE FOR APPROVAL IF THERE ARE ANY CONFLICTS TO EXISTING FACILITIES.
- 3. FIELD VERIFY EXISTING CONDUITS AND JUNCTION BOXES THAT ARE TO BE USED IN THIS PROJECT. CLEAN THE EXISTING CONDUITS AND JUNCTION BOXES PER NJDOT STANDARD SPECIFICATIONS.
- 4. NOTIFY THE RE AT LEAST SEVEN (7) WORKING DAYS PRIOR TO THE START AND/OR COMPLETION OF ANY WORK AT ANY SITE.
- 5. ENSURE TO PROVIDE MINIMUM FIBER CABLE SLACK INSIDE THE JUNCTION BOXES AS PER NJDOT SPECIFICATIONS.
- 6. COORDINATE WITH NEW JERSEY OFFICE OF INFORMATION TECHNOLOGY (NJOIT) TO OBTAIN IP ADDRESSES PRIOR TO SUBMITTING WORKING DRAWINGS.
- 7. STAKE OUT ALL CONDUIT RUNS JUNCTION BOXES, FOUNDATIONS, AND CABINETS FOR THE DEPARTMENT'S APPROVAL PRIOR TO INSTALLATION. ANY LOCATION CHANGES FOR ITS FACILITIES MUST FIRST BE APPROVED BY NJDOT MM PRIOR TO INSTALLATION.
- 8. EXISTING ITS FACILITIES LOCATED IN THE FIELD ARE CONTROLLED AND MONITORED BY NJDOT TRAFFIC OPERATIONS. PRIOR TO START OF ANY WORK, CONTACT THE MANAGER AT TRAFFIC OPERATIONS AND DOCUMENT THE OPERATIONS, CONTROL AND MONITORING OF THE EXISTING ITS DEVICES LOCATED IN THE FIELD. ENSURE OPERATION, CONTROL AND MONITORING OF THE EXISTING FIELD ITS DEVICES ARE MAINTAINED DURING AND AFTER CONSTRUCTION.
- 9. COORDINATE WITH TRAFFIC OPERATIONS FOR APPROVAL OF FINAL PLACEMENT OF PROPOSED CAMERA STANDARDS
- 10. COORDINATE WITH TRAFFIC OPERATIONS FOR APPROVAL OF CAMERA BLIND SPOTS PRIOR TO INSTALLING THE CAMERAS.
- THE DRAWINGS REPRESENT THE FIELD CONDITIONS AS ACCURATE AS POSSIBLE CONTRACTOR IS RESPONSIBLE TO VERIFY THE INFORMATION ON THE DRAWINGS AND FIELD CONDITIONS.
- 12. SEE PLANS ITS-XX THROUGH ITS-XX FOR LOCATIONS AND CONSTRUCTION OF ITS FIELD DEVICES AND POWER DISTRIBUTION.
- 13. SEE PLANS ITS-XX THROUGH ITS-XX FOR FIBER OPTIC CABLE INSTALLATION.
- 14. COORDINATE WITH ITS MAINTENANCE THROUGH ACCESS FORM ON WEB TO RESERVE THE PORTS AT FIBER CROSS CONNECT CABINET, COMMUNICATION HUB, AND ALL OTHER LOCATIONS AS REQUIRED. TAG THE RESERVED PORTS FOR USE ON THIS PROJECT.
- 15. SUBMIT WORKING DRAWINGS FOR ALL EQUIPMENT AND EQUIPMENT LIST TABLE SHOWING MANUFACTURER MAKE AND MODEL FOR ALL EQUIPMENT INSTALLED UNDER THIS PROJECT. FOR DETAILS FOLLOW STANDARD ELECTRICAL/ ITS DETAILS.



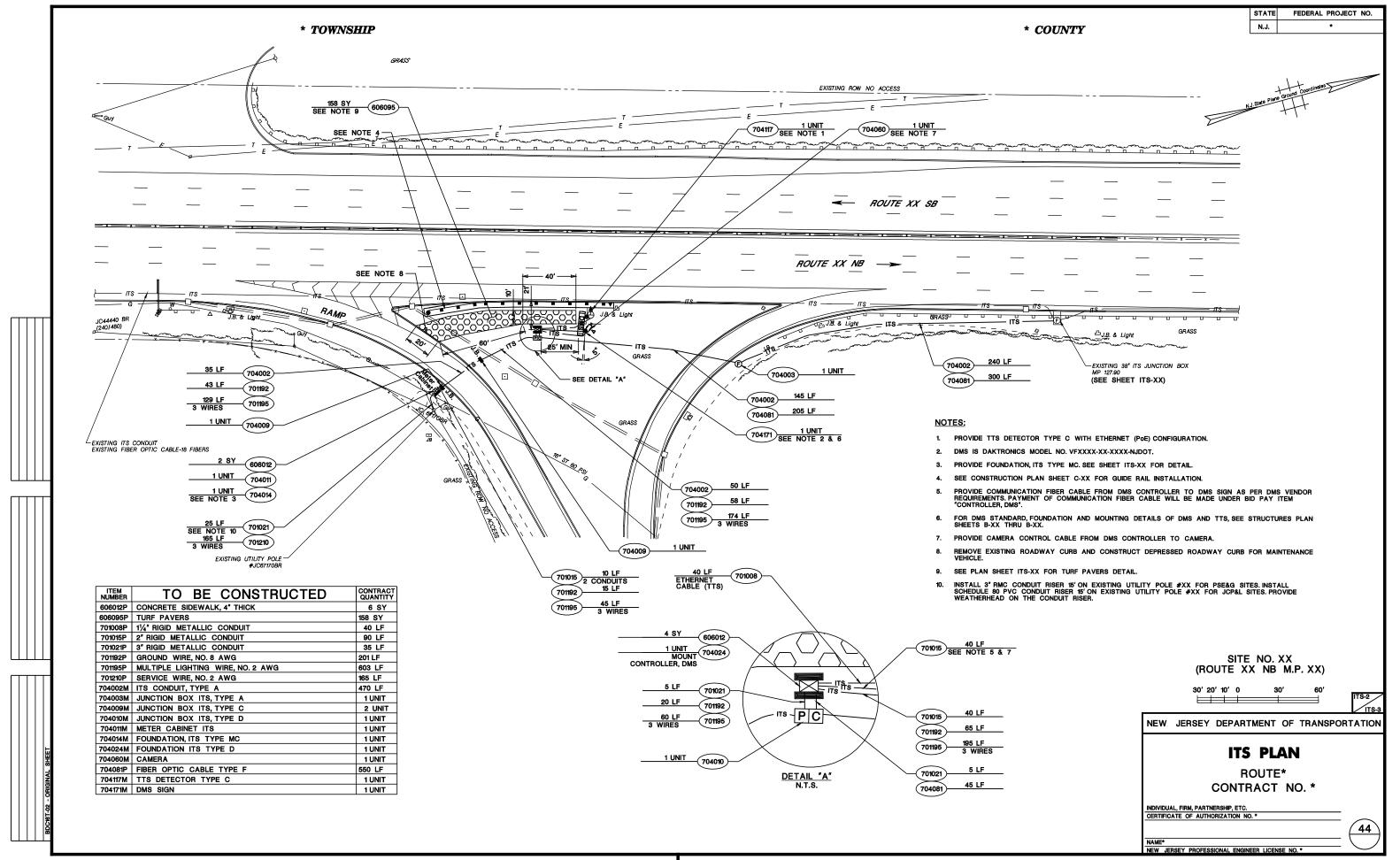
NEW JERSEY DEPARTMENT OF TRANSPORTATION

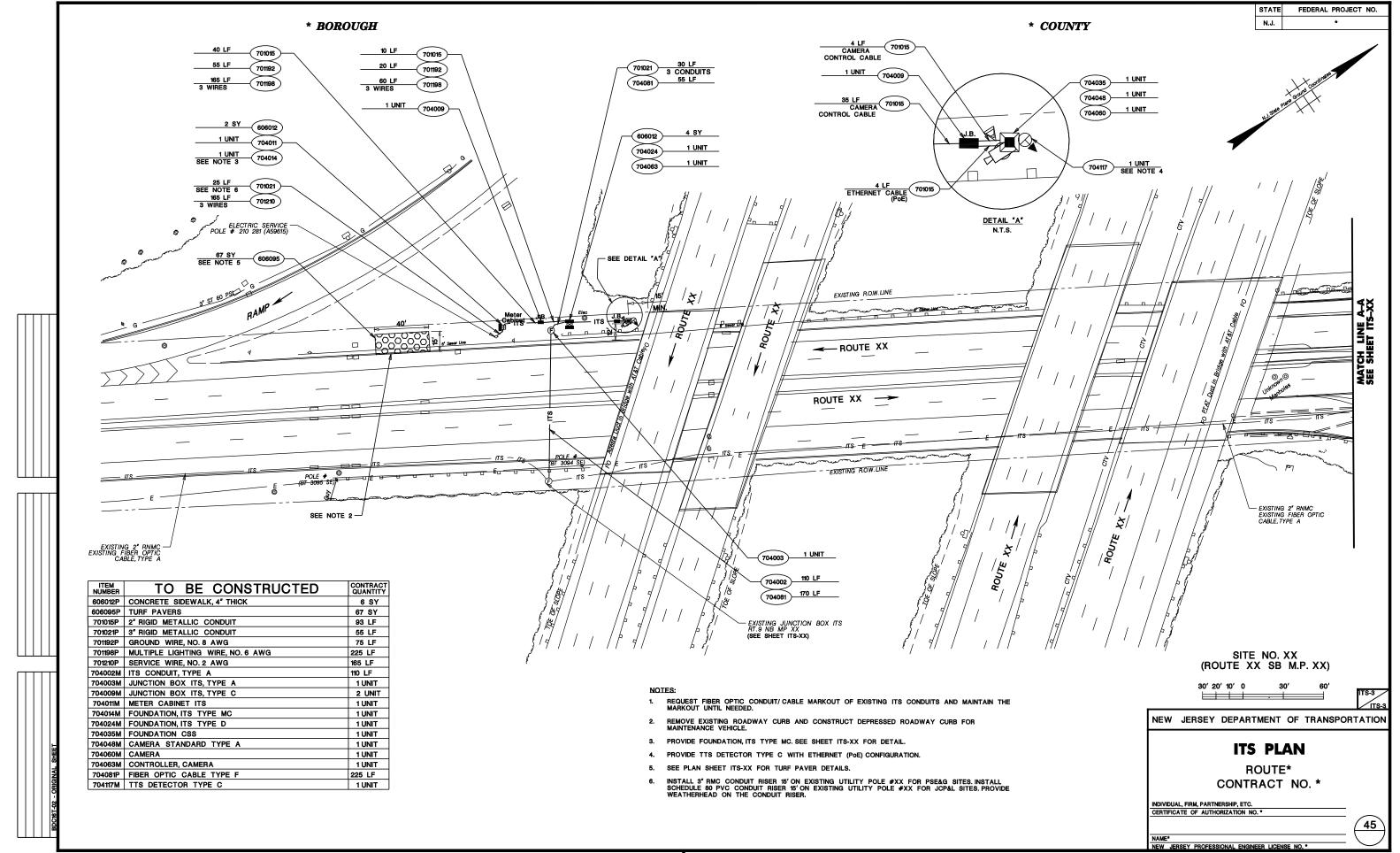
# ITS LOCATION PLAN

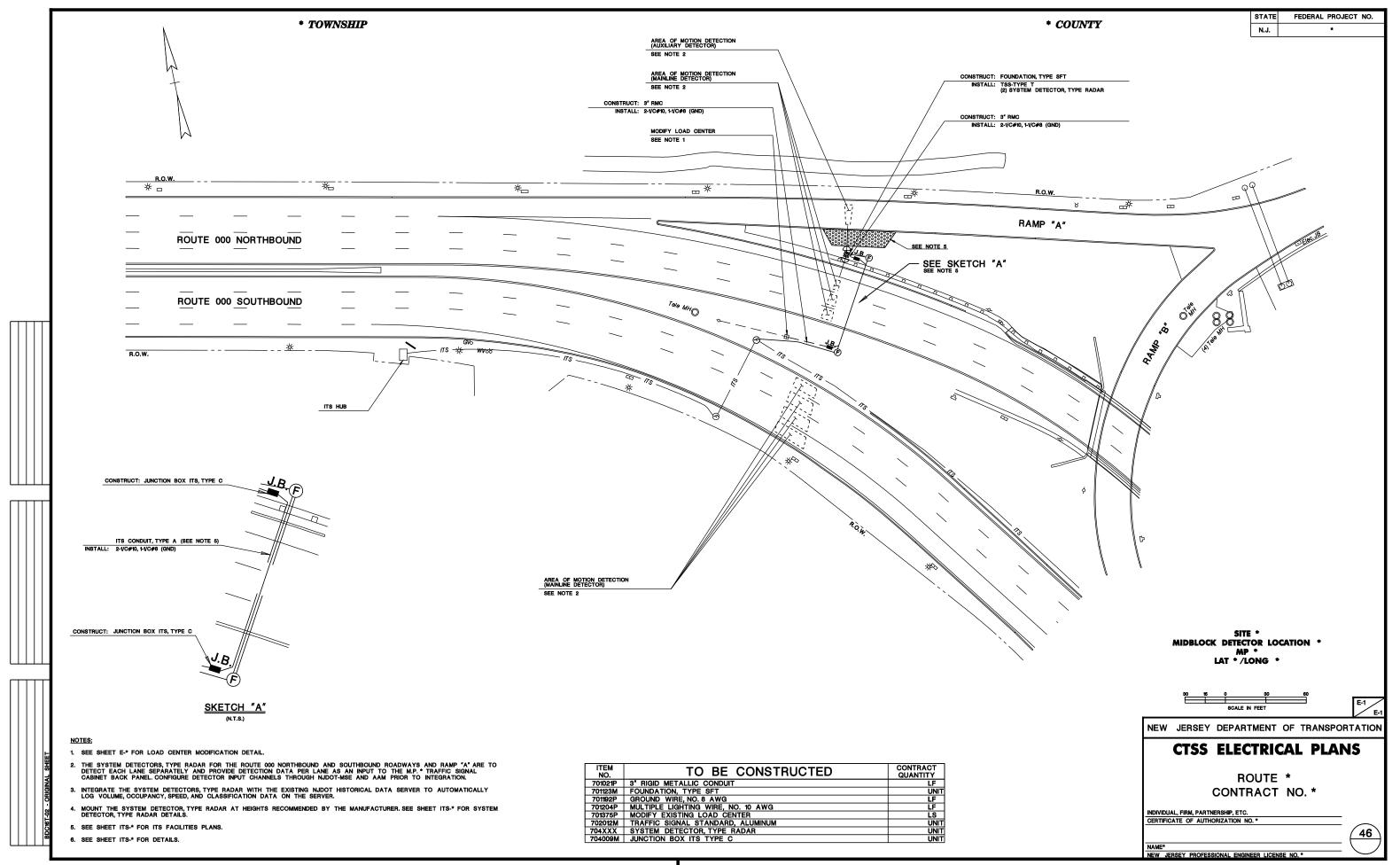
**ROUTE\*** CONTRACT NO. \*

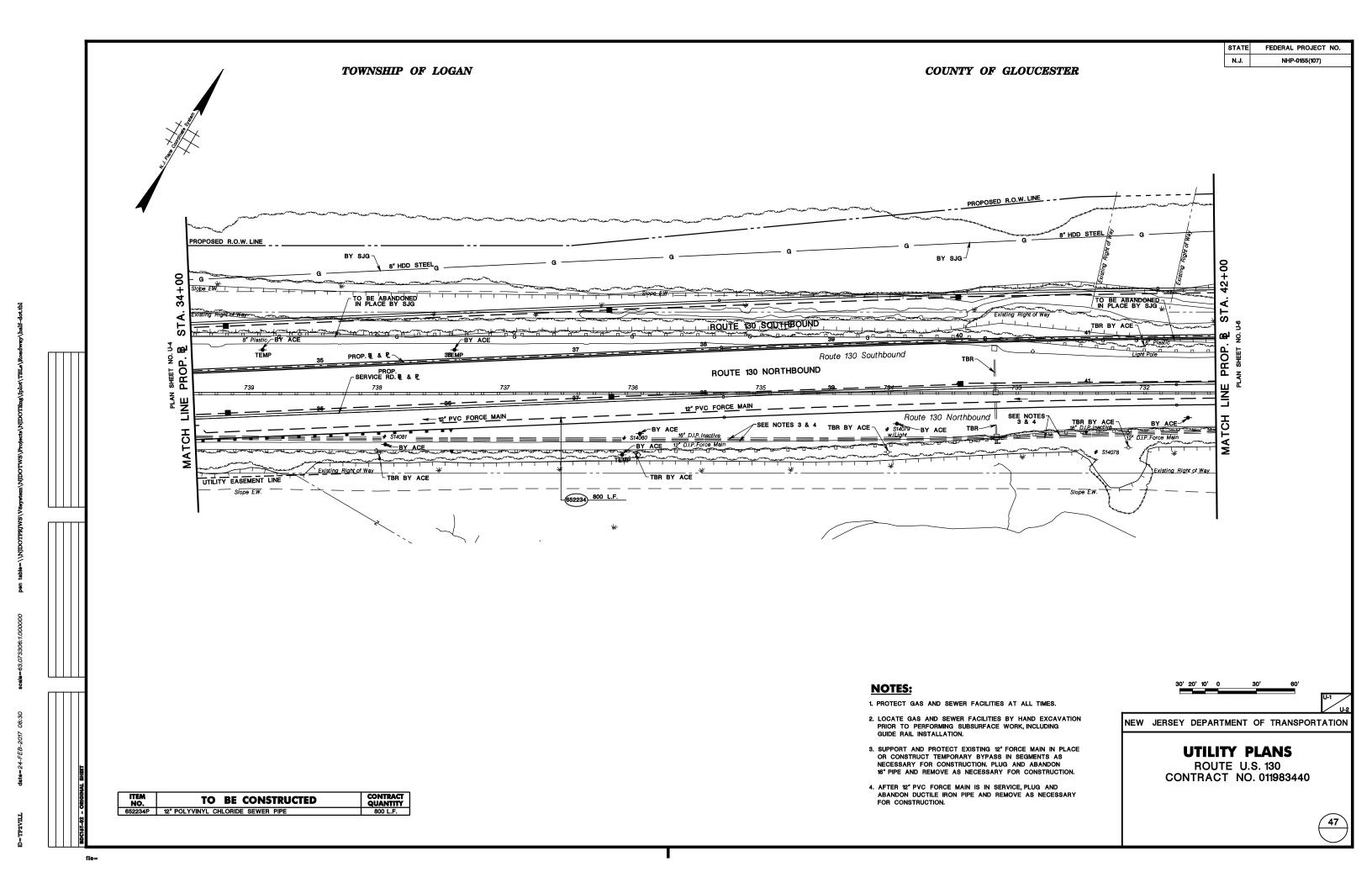
INDIVIDUAL, FIRM, PARTNERSHIP, ETC CERTIFICATE OF AUTHORIZATION NO. \*

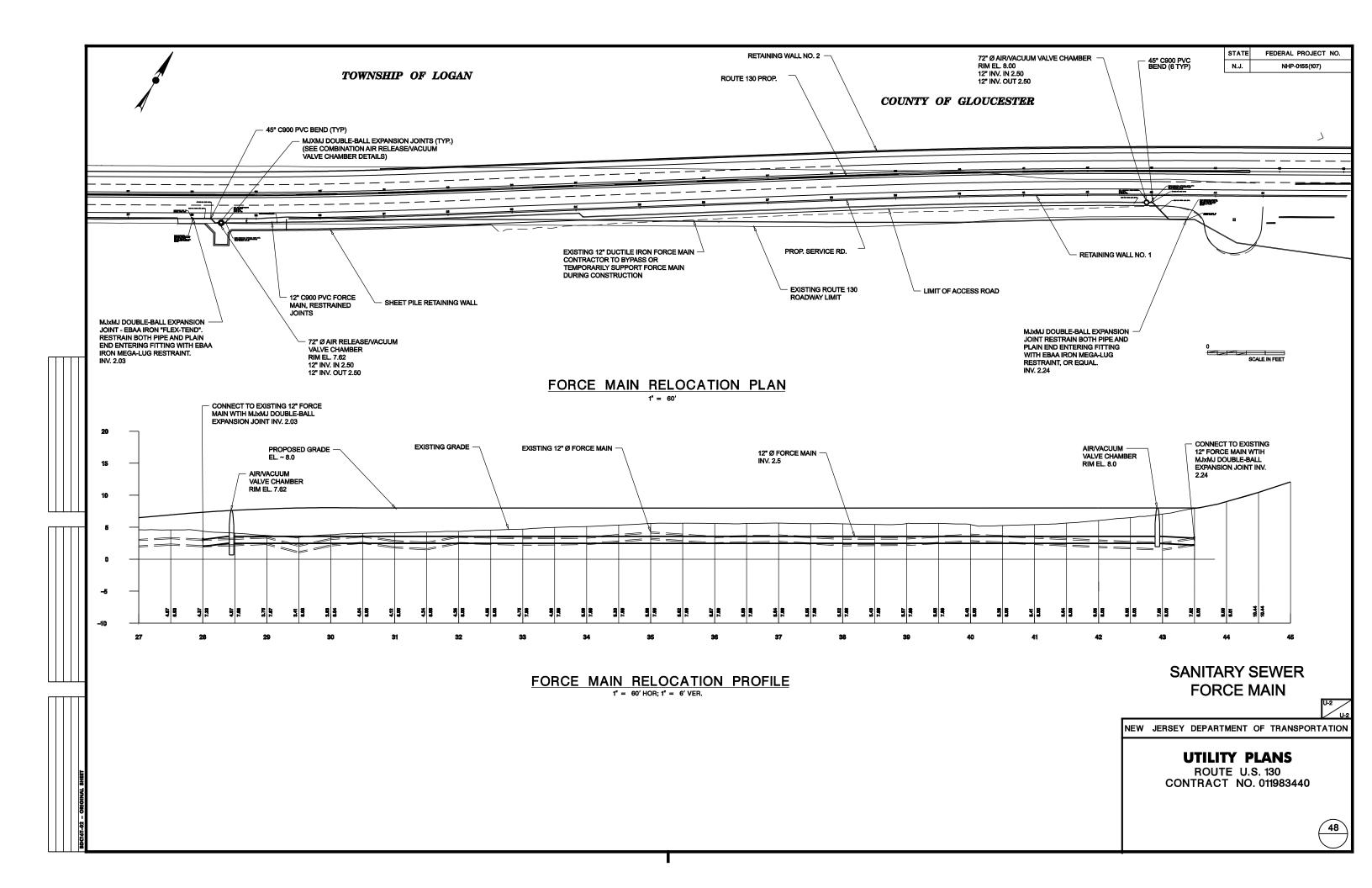
43

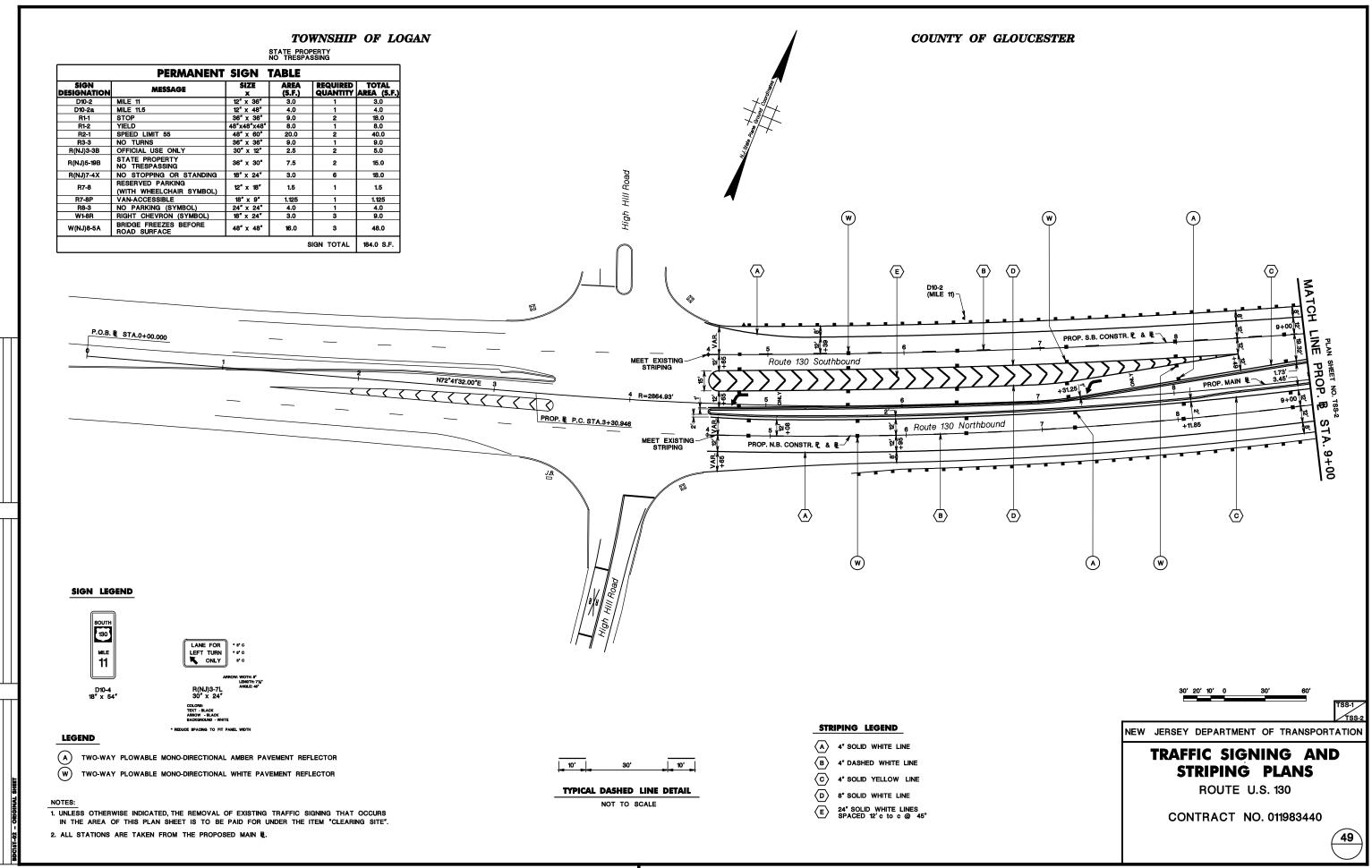


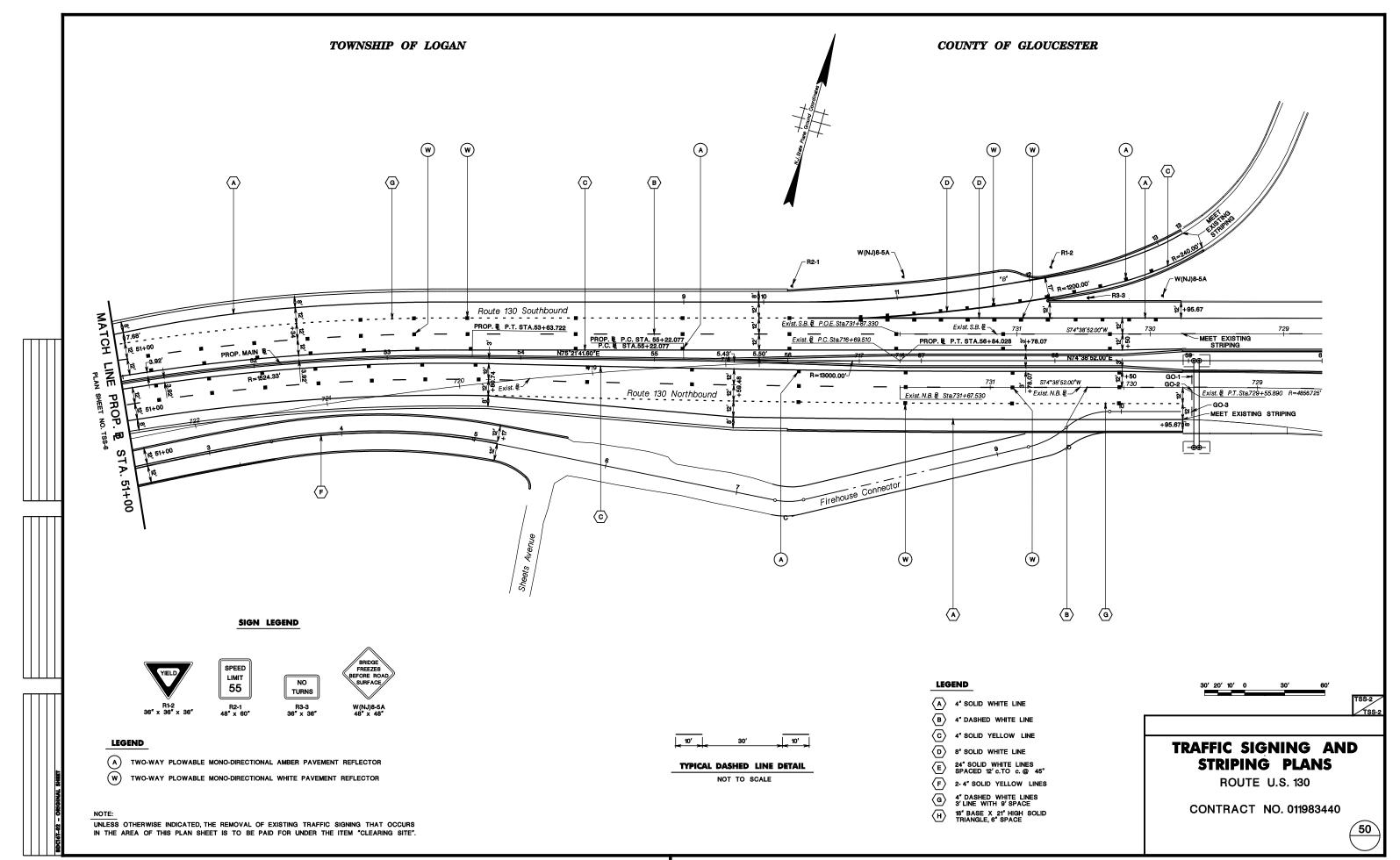












	PLANTING SUMMARY						
ITEM NUMBER	DESCRIPTION	SYM.	PLANT NAME	PLAN SHEET QUANTITY	IF & WHERE DIRECTED QUANTITY	CONTRACT QUANTITY	AS-BUILT QUANTITY
811003M	Large Deciduous Tree, 3 - 3 1/2" Caliper, B&B					322	
		Ao	Acer rubrum 'October Glory'	101 221			
811004M	Large Deciduous Tree, 2 1/2 - 3" Caliper, B&B	Qp	Quercus palustris	221		780	
011001111	harge bedadous free, 2 1/2 o Camper, Bab	Ar	Acer rubrum 'Red Sunset'	135		700	
		Q	Quercus bicolor	240			
		Tg	Tilia cordata 'Greenspire'	250			
01100CM	I D: I M 9 9 1/9" C-1: D P	Al	Acer saccharum 'Legacy'	155		1710	
811006M	Large Deciduous Tree, 2 - 2 1/2" Caliper, B&B	Ab	Acer rubrum 'Autumn Blaze'	176		1712	
		As	Acer saccharum 'Green Mountain'	160			
		Ls	Liquidambar styraciflua	419			
		Lt	Liriodendron tulipifera	303			
		Po	Platanus occidentalis	196			
		Qr U	Quercus rubra Ulmus carpinifolia 'Regal'	218 240			
811009M	Large Deciduous Tree, 1 - 1 1/4" Caliper, B&B	- 0	Omius carpinnona Kegai	240		310	
011000111	large bedautus 11ee, 1 1111 Camper, Bab	Ov	Ostrya virginiana	90		010	
		Pb	Platanus x. acerifolia 'Bloodgood'	220			
811015M	Large Deciduous Tree, Seedling 18 - 24" High, Pot o					179	
	ļ	L No.	Liriodendron tulipifera	36	-		
	<b>+</b>	Ns Oa	Nyssa sylvatica Oxydendrum arboreum	65 33	-		
		S	Sassafras albidum	45			
811018M	Large Deciduous Tree, Seedling 15 - 18" High, Pot or			10		105	
		C	Carya ovata	48			
01100175	G ND IN G N DOD	Ur	Ulmus rubra	57			
811024M	Small Deciduous Tree, 2 - 2 1/2" Caliper, B&B	Pr	D	159		159	
811031M	Small Deciduous Tree, 7 - 8' High, B&B	Pr	Prunus sargentii	199		483	
OTTOOTM	Sman Deciduodo Tree, 7 - 0 Trigii, Deb	Ac	Amelanchier canadensis	140		100	
		Cc	Cornus florida 'Cherokee Brave'	54			
		Mv	Magnolia virginiana	54			
		V	Viburnum prunifolium	160			
811032M	Small Deciduous Tree, 8 - 10' High, B&B	Cn	Cornus florida 'Cloud Nine'	75		190	
611052W	Sman Deciduous Tree, 6 - 10 Trigii, D&B	В	Betula nigra 'Heritage'	66		190	
		Ce	Cercis canadensis	100			
		Mp	Malus 'Prairifire'	24			
811033M	Evergreen Tree, 9 - 10' High, B&B			0.0		422	
		M P	Metasequoia glyptostroboides Picea abies	66 356			
811036M	Evergreen Tree, 8 - 9' High, B&B	I	ricea ables	300		879	
CIIOGOM	Treigicen free, e v fright, bab	A	Abies concolor	374		0.0	
		Ps	Pinus strobus	426			
		Td	Taxodium distichum	79			
811048M	Evergreen Tree, 3 - 4' High, B&B		T	100		183	
806030P	   Wildflower Seeding	J	Juniperus virginiana	183		150	
0000001	whenever occurre	W	Wildflower Seeding	150		100	
811057M	Deciduous Shrub, 3 - 4' High, B&B			200		437	
		Hv	Hamamelis virginiana	352			
01100035	D :1	Sy	Syringa vulgaris	85		902	
811060M	Deciduous Shrub, 24 - 30" High, B&B	Ca	Cornus amomum	257		326	
	<del> </del>	Ig	Ilex glabra	69	<del>                                     </del>		
811061M	Deciduous Shrub, 30 - 36" High, B&B	15	and Bulletin	30		360	
	, , , , , , , , , , , , , , , , , , ,	Cl	Clethra alnifolia	26			
04:00:	(n	Vd	Viburnum dentatum	334			
811090M	Evergreen Shrub, 24 - 30" Spread, B&B	D	Dhododon day	990		338	
811190M	Perennial, 2" Plug	Rv	Rhododendron viscosum	338		49984	
OTITAUM	1 Crommar, 2 1 rug	Av	Andropogon virginicus	6026		40004	
		An	Aster novae-angliae	3425			
		Eu	Eupatorium maculatum	2628			
		Iv	Iris versicolor	9625			
		Je	Juncus effusus	5117			
		Lc Sc	Lobelia cardinalis Scirpus cyperinus	9701 1020	1		
		Ss	Solidago sempervirens	12442			
811123M	Bulb					7430	
		N	Narcissus	4260			
		Nt	Narcissus in Turf	3170			

NEW JERSEY DEPARTMENT OF TRANSPORTATION

# LANDSCAPE PLANS

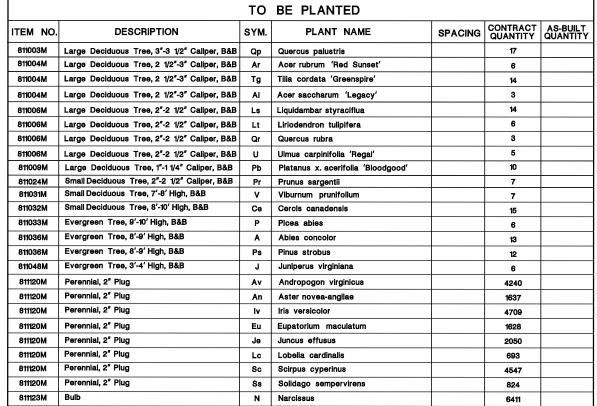
ROUTE U.S. 206 (1990) BYPASS SECTION 14A & 15A

CONTRACT A CONTRACT NO. 064098006

51

(NAME OF OFFICE)
(CERTIFICATE OF AUTHORIZATION) (SIGNATURE) (DATE) (NAME PRINTED) (L.A. TITLE) (DATE PRINTED)
(LICENSE NO.)

## COUNTY OF SOMERSET



CONTRACT QUANTITY 150 SY ITEM TO BE CONSTRUCTED

> (NAME OF OFFICE) (CERTIFICATE OF AUTHORIZATION)

> > (DATE)

(DATE PRINTED)

(LICENSE NO.)

(SIGNATURE)

(L.A. TITLE)

(NAME PRINTED)

NEW JERSEY DEPARTMENT OF TRANSPORTATION

# LANDSCAPE PLANS

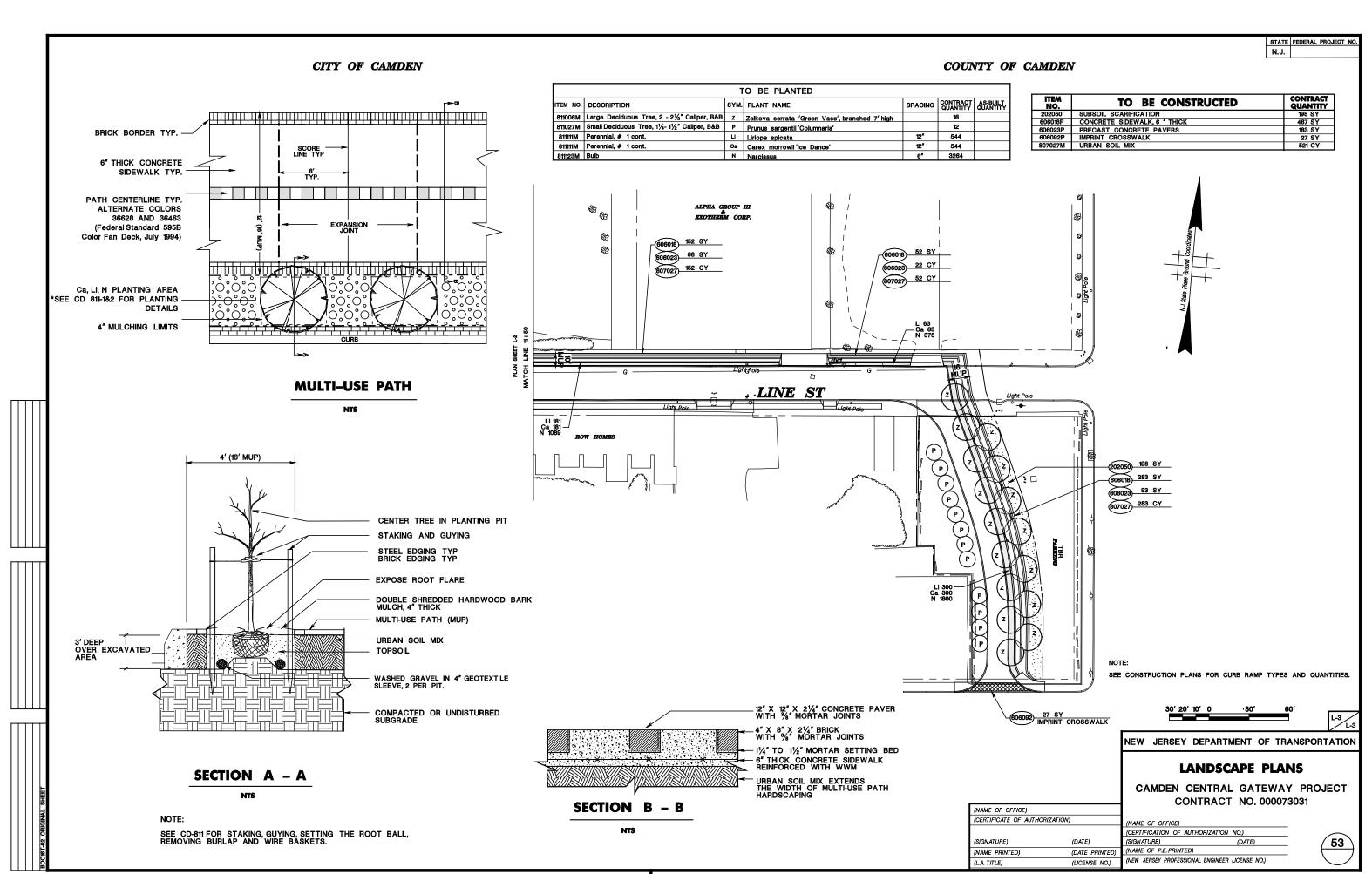
ROUTE U.S. 206 (1990) BYPASS SECTION 14A & 15A

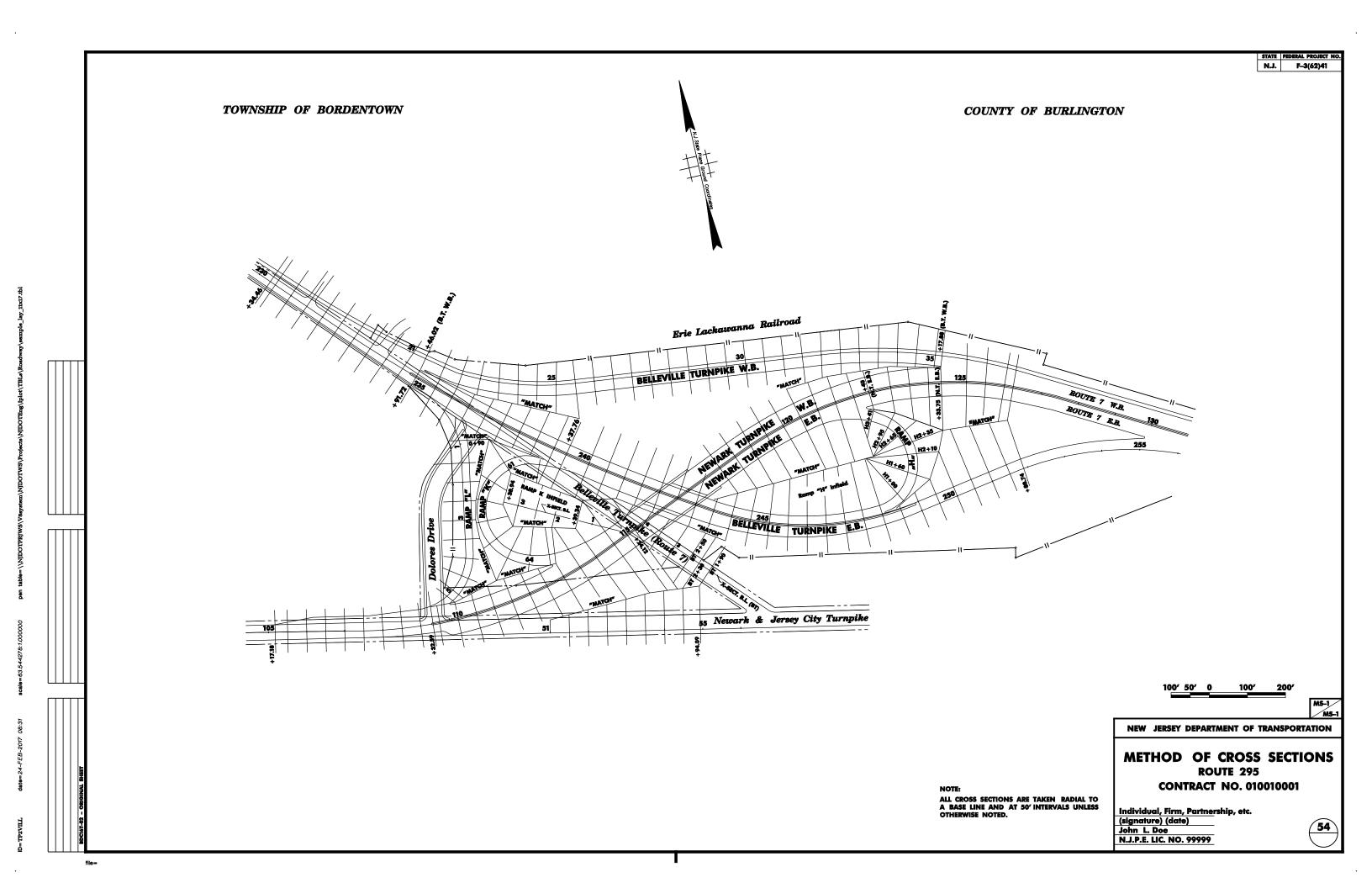
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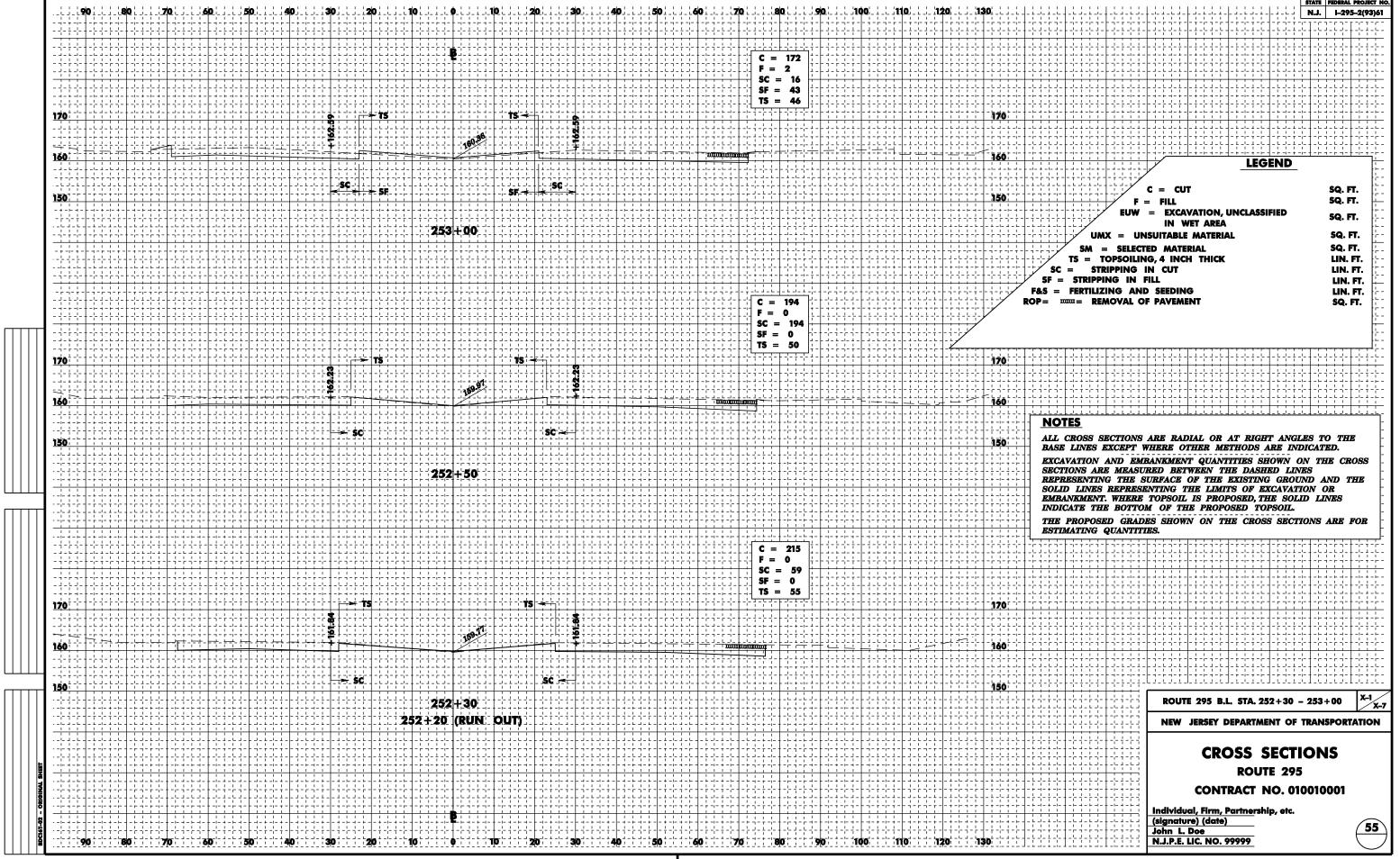
CONTRACT A CONTRACT NO. 064098006	

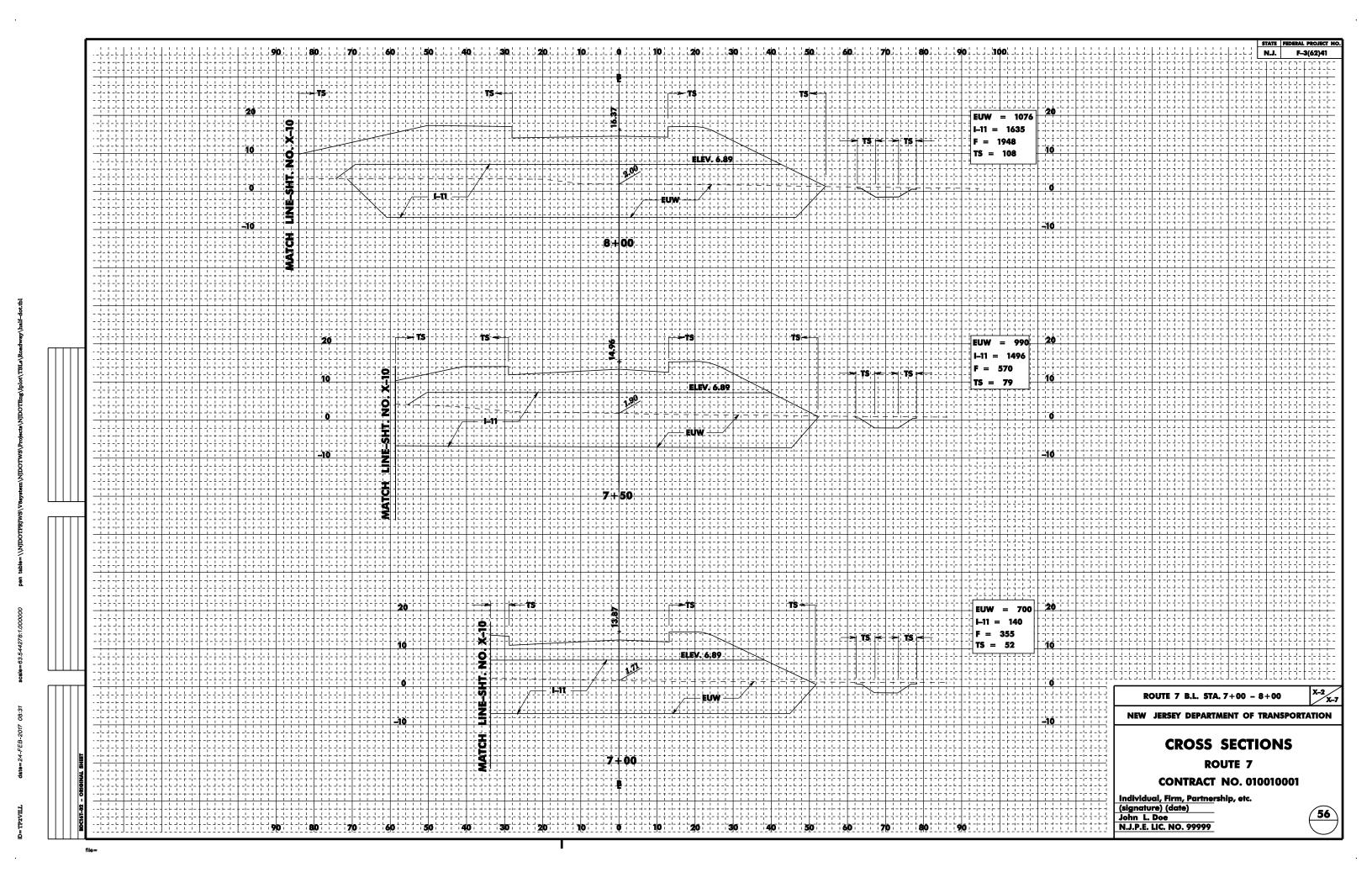
52

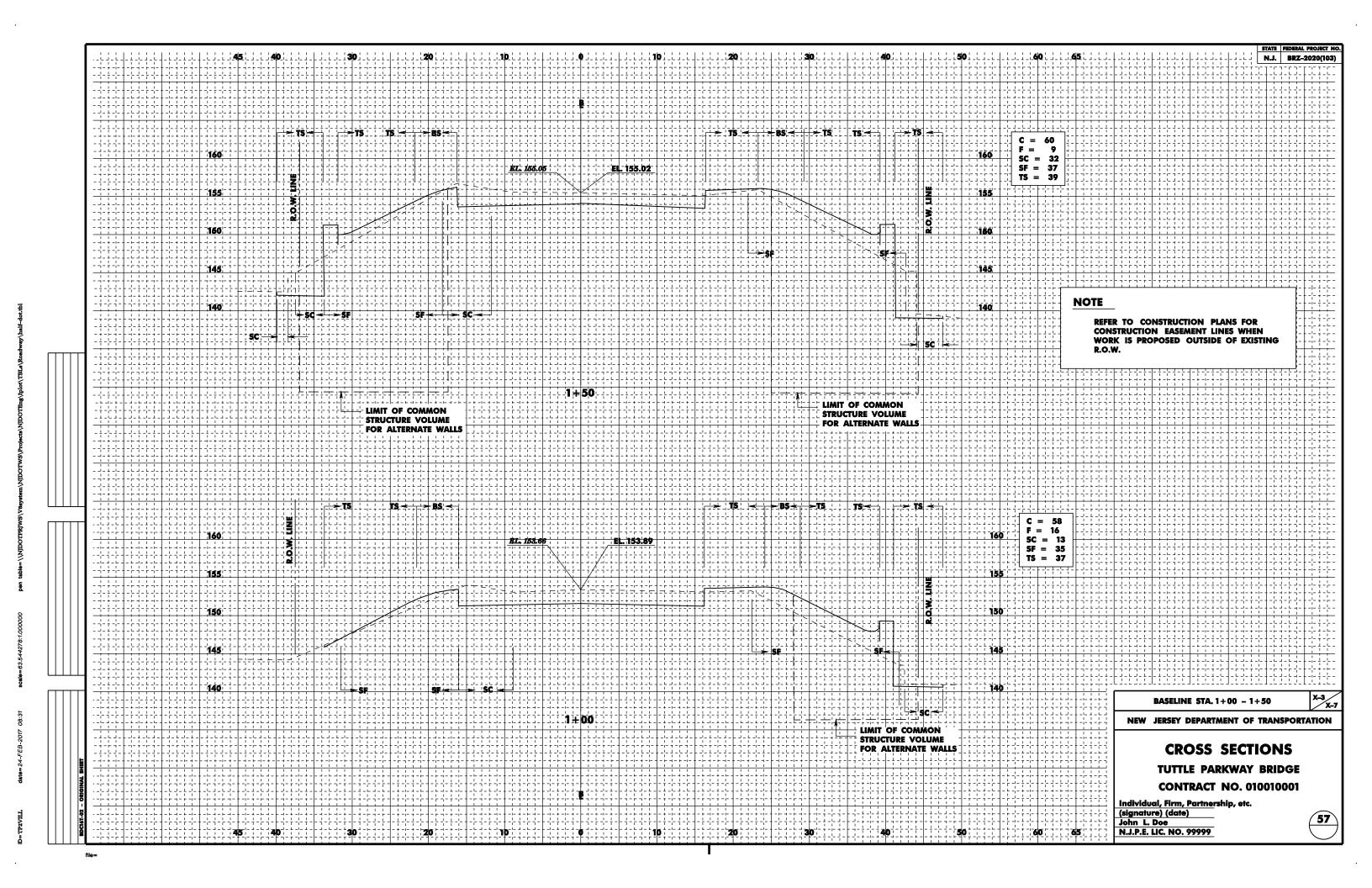
PROPOSED R.O.W. LINE  BIORETENTION  BASIN  BIORETENTON  BASIN  BIORETENTION  BASIN  BIORETENTON  BIORETENTON  BASIN  BIORETENTON  BASIN  BIORETENTON  BIORE	TOWNSHIP OF HILLSBOROUGH		CC
## ATCH LINE 94-10  ## MATCH L	N.J. State Plane Ground Coordinates		
MATCH LINE 9-10  MATCH LINE 4-23			
PROVIDE SANIAL SET OF THE SANI		ITEM NO.	DE
## COURT AND LINE    Court   C		<u> </u>	_
## COURT AND LINE    Court   C	PROPOSED EASEMENT LINE	<b>-</b>	
MATCH LINE 4+23			
PROFORE ROW LISE    100 Color		_	
MATCH LINE 4-23			
MATCH LINE 4-23	* * * * * *		
MATCH LINE 24-23			-
PROOMED B.O.R. LINE  100 M. Severen Tree. 100 M. Se			Large Deciduous
PROPOSED BOWLING  PROPOSED BOW	Or Ar Ar Selection Con Con Ar Selection Con Con Contract Con Contract Con Contract Con Contract	811024M	Small Deciduous
MATCH LINE 4+23			
MATCH LINE 4+23	Area W		
MATCH LINE 4+23	ELUDIO CONTRACTOR LES OF STATE		
PROPOSED ROWING  TO LINE  TO SERVICIAL PROPOSED ROWING  TO SERVICI			
PROPOSED ROWING  TO LINE  TO SERVICIAL PROPOSED ROWING  TO SERVICI			
BIND HONGE ROW LET TO GO TO THE LAST PROPERTY OF THE SECOND SHEET			
MATCH LINE 2+02  MATCH LINE 4+23	PROPOSED R.O.W. LINE 7 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
AND TO HOLD PROMISE 2 PROMISE AND TO HOLD PROM			Perennial, 2" Plug
SOUNT U.S. 700 STRASS S.A.  SO	BIORETENTION 1940.9.	811120M	Perennial, 2" Plug
OUT U.S. 200 FFMSS S.S.  OUT U.S. 200 FFMSS S.	The state of the s	811120M	Perennial, 2" Plug
8 1900 Presental, 2º Piate 1900 Bold Bold Presental, 2º Piate 1900 Bold Bold Bold Bold Bold Bold Bold Bold			Perennial, 2" Plug
OCH GU THE STAND THE SECOND STAND SALE TO ST	Ar Mayreau Congry Lyr		
OH ATCH LINE 24+02  MATCH LINE 24+23	Phy 7 ft - all the line I say that I had the line I had		
	NATCH LINE 4+23	QUANTITIES ON MATCHIN	LOCATED IG SHEET

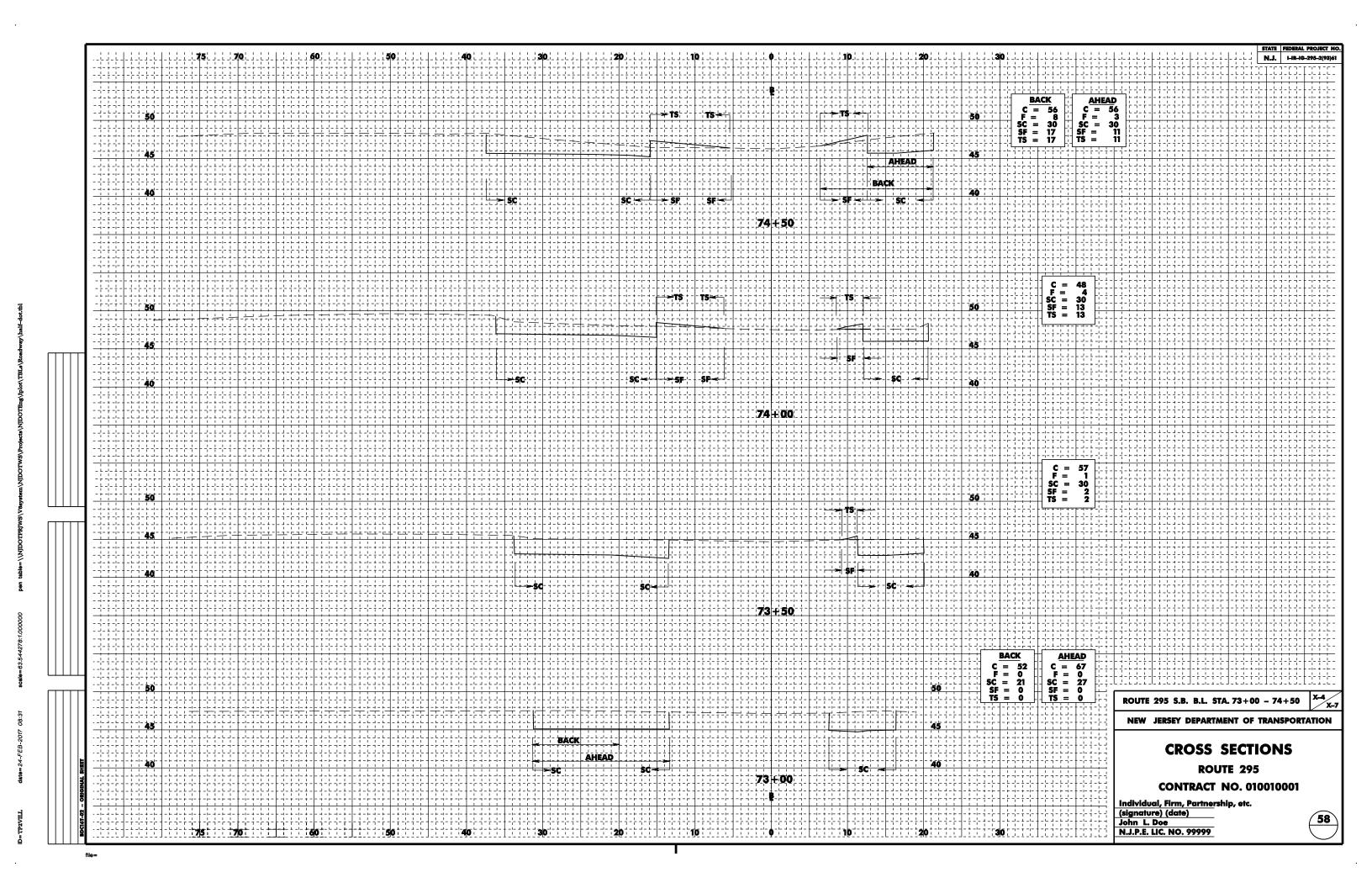












N.J. NOTES:
ALL CROSS SECTIONS ARE RADIAL OR AT RIGHT ANGLES TO THE BASE LINES EXCEPT WHERE OTHER METHODS ARE INDICATED. EXCAVATION AND EMBANKMENT QUANTITIES SHOWN ON THE CROSS SECTIONS ARE MEASURED BETWEEN THE DASHED LINES REPRESENTING THE SURFACE OF THE EXISTING GROUND AND THE SOLID LINES REPRESENTING THE LIMITS OF EXCAVATION OR EMBANKMENT, WHERE TOPSOILING IS PROPOSED. THE SOLID LINES INDICATE THE BOTTOM OF THE PROPOSED GRADES SHOWN ON THE CROSS SECTIONS ARE FOR ESTIMATING QUANTITIES. **₽&**₽ 11 + 5011+0010 + 5010 + 00₽ STA. 10+00 TO STA. 11+50 **B&P** NEW JERSEY DEPARTMENT OF TRANSPORTATION **CROSS SECTIONS** ROUTE U.S. 9 AND BENNETTS CROSSING ROAD CONTRACT NO. 004950203

Sample No: 1

**Earthwork Summary** 

Laturw	Ork Summary		
Descrip	otion	Contr Quan	
Everyotion		Quan	шу
Excavation (A) Excavated Materials			
<ul><li>(A) Excavated Materials</li><li>(1) Excavated Material available for I-14 Embankr</li></ul>	ment		
Excavation, Unclassified from Cross Sections	Hent	9,396	CY
Less Stripping in Cuts	(1800 SY x 4" thick)	-200	
Excavation, Unclassified from Plan Sheets		5,053	CY
	Total Excavation, Unclassified	14,249	CY
Excavation, from Pipe, Inlets & other Substructur	res	200	CY
Removal of Pavement	(2,763 SY x 12" thick)	921	
<u>Less</u> Unsuitable Excavation Unclassified		-300	
Unsuitable Pavement	(813 SY x 12" thick)	-271	
	Material available for I-14 Embankment	14,799	CY
(2) Everystian Regulated Material available for I	14 Embankment		
(2) Excavation, Regulated Material available for I- Excavation, Regulated from Cross Sections	- 14 Embankment	10,671	CV
Less Stripping in Cuts	(0 SY x 4" thick)		CY
Excavation, Regulated from Plan Sheets		420	CY
	Total Excavation, Regulated	11,091	CY
Excavation, from Pipe, Inlets & Other Substructu	ures in regulated areas	65	CY
Less Unsuitable Excavation Regulated Mate		-210	
Unsuitable Excavation Regulated Mat	erial	-300	CY
	Material available for I-14 Embankment	10,646	CY
Disposal of Regulated Material, Hazardous (210	* 1.755 TON/CY)	369	TON
Disposal of Regulated Material (300 * 1.755 TON	/CY)	527	TON
(3) Excavation, Acid Producing Soil available for	I-14 Embankment		
Excavation, Acid Producing Soil from Cross Sect		2,100	CY
<u>Less</u> Stripping in Cuts	(0 SY x 4" thick)		CY
Excavation, Acid Producing Soil from Plan Sheet		520	
	Total Excavation, Acid Producing Soil	2,620	CY
Excavation, from Pipe, Inlets & Other Substructu	res in Acid Producing Soil	145	CY
<u>Less</u> Unsuitable Excavation Acid Producing		-700	
	Material available for I-14 Embankment	2,065	CY
Disposal of Acid Producing Soil (700 * 1.75	55 TON/CY)	1,229	TON
Total Excavated Materials available for I-14 Er (14,799 +10,646 + 2,065)* 0.90 shrinkage	mbankment (Total of 1+2+3)*0.90	24,759	CY
(B) I-14 Embankment Quantity Required			
Embankment from Cross Sections Embankment from Plan Sheets		7,986 2,840	
Stripping in Fill		175	
<u>Less</u> I-13 Soil Aggregate		-300	
I-11 Soil Aggregate		-250	
I-10 Soil Aggregate		-145	
I-9 Soil Aggregate I-7 Soil Aggregate		-85 -100	
1. 25	Total Embankment Required	10,121	
	-	·	
Excavated Materials Excess (Suitable for 1 Excavated Materials to be Borrowed (Suita		14,638 0	CY
	,	_	
<u>Topsoiling</u> (A) Topsoil Available			
Stripping in Cut (200+0+0)		200	
Stripping in Fill (175)	Total Stripping available for Tarrell	175	
(P) Topsoil Poquised	Total Stripping available for Topsoil	375	CY
(B) Topsoil Required  Topsoiling, 4" Thick from Cross Sections		2,750	SV
Topsoiling, 4" Thick from Plan Sheets		2,750 1,450	
Total Topsoiling 4" Thick	required in SY	4,200	
· · · · · · · · · · · · · · · · · · ·	ng 4" Thick required in CY (4,200 SY x 4" thick)		
Evenes Tensoil		^	CV
Excess Topsoil			CY
Borrow Topsoil		92	CY

STATE FEDERAL PROJECT NO.
N.J. BHF-29(135)

**Earthwork Summary** 

Sample No: 2

Description		Federal Quantity	Town Center Associates	100% State Quanitity	Contract Quantity
Excavation		-	Quantity		
(A) Excavated Materials					
(1) Excavated Material available for I-14 Embank	ment				
Excavation, Unclassified from Cross Sections		5,696 CY	100 CY	3,700 CY	9,496 CY
Less Stripping in Cuts	(2700 SY x 4" thick)	-150 CY	-50 CY	-100 CY	-300 CY
Excavation, Unclassified from Plan Sheets		5,053 CY	0 CY	0 CY	5,053 CY
	Total Excavation, Unclassified	10,599 CY	50 CY	3,600 CY	14,249 CY
Excavation, from pipe, inlets & other substructure		800 CY	21 CY	0 CY	821 CY
Removal of Pavement	(2,763 SY x 12" thick)	800 CY	21 CY	100 CY	921 CY -300 CY
<u>Less</u> Unsuitable Excavation Unclassified Unsuitable Pavement	(813 SY x 12" thick)	-300 CY -226 CY	0 CY	0 CY -45 CY	-300 CY -271 CY
Choditable F dveliferit	Material available for I-14 Embankment	11,673 CY	92 CY	3,655 CY	15.420 CY
		1.,,,,,,,	32 0.	5,555 01	.0,.2001
(2) Excavation, Regulated Material available for	-14 Embankment				
Excavation, Regulated from Cross Sections	—	6,311 CY	3,671 CY	689 CY	10,671 CY
Less Stripping in Cuts	(0 SY x 4" thick)	0 CY	0 CY	0 CY	0 CY
Excavation, Regulated from Plan Sheets		220 CY	0 CY	200 CY	420 CY
	Total Excavation, Regulated	6,531 CY	3,671 CY	889 CY	11,091 CY
Excavation, from pipe, inlets & other substructur		55 CY	10 CY	0 CY	65 CY
Less Unsuitable Excavation Regulated Ma		-210 CY	0 CY	0 CY	-210 CY
Unsuitable Excavation Regulated Ma	terial Material available for I-14 Embankment	-300 CY 6,076 CY	0 CY 3,681 CY	0 CY 889 CY	-300 CY 10,646 CY
	Material available for 1-14 Embankment	6,076 C Y	3,681 C 1	889 C Y	10,646 C Y
Disposal of Regulated Material, Hazardous (210	) * 1.755 TON/CY)	369 TON	0 TON	0 TON	369 TON
Disposal of Regulated Material (300 * 1.755 TON		527 TON	0 TON	0 TON	527 TON
(3) Excavation, Acid Producing Soil available for	I-14 Embankment				
Excavation, Acid Producing Soil from Cross Sec		2,000 CY	0 CY	100 CY	2,100 CY
Less Stripping in Cuts	(0 SY x 4" thick)	0 CY	0 CY	0 CY	0 CY
Excavation, Acid Producing Soil from Plan Shee		485 CY	0 CY	35 CY	520 CY
	Total Excavation, Acid Producing Soil	2,485 CY	0 CY	135 CY	2,620 CY
Excavation, from pipe, inlets & other substructure	res in Acid Producing Soil	145 CY	0 CY	0 CY	145 CY
Less Unsuitable Excavation Acid Producin		-700 CY	0 CY	0 CY	-700 CY
<del></del>	Material available for I-14 Embankment	1,930 CY	0 CY	135 CY	2,065 CY
Disposal of Acid Producing Soil (700 * 1.7	55 TON/CY)	1,229 TON	0 TON	0 TON	1,229 TO
Total Excavated Materials available for I-14 E (15,420 +10,646 + 2,065)* 0.90 shrinkage	imparisment (Total of 1+2+3) 0.90	17,711 CY	3,396 CY	4,211 CY	25,318 CY
(B) I-14 Embankment Quantity Required					
Embankment from Cross Sections		7,236 CY	500 CY	250 CY	7,986 CY
Embankment from Plan Sheets		2,360 CY	480 CY	0 CY	2,840 CY
Stripping in Fill		100 CY	25 CY	50 CY	175 CY
<u>Less</u> I-13 Soil Aggregate I-11 Soil Aggregate		-300 CY -350 CY	0 CY	0 CY 100 CY	-300 CY -250 CY
I-10 Soil Aggregate		-185 CY	40 CY	0 CY	-250 CY
I-9 Soil Aggregate		-85 CY	0 CY	0 CY	-85 CY
I-7 Soil Aggregate		-100 CY	0 CY	0 CY	-100 CY
	Total Embankment Required	8,676 CY	1,045 CY	400 CY	10,121 CY
Excavated Materials Excess (Suitable for		9,035 CY	2,351 CY	3,811 CY	15,197 CY
Excavated Materials to be Borrowed (Suita	able for  I-14 Embankment)	0 CY	0 CY	0 CY	0 CY
Topsoiling					
(A) Topsoil Available		150.00	50 CV	100 61/	300 CY
Stripping in Cut (300+0+0) Stripping in Fill (175)		150 CY 100 CY	50 CY 25 CY	100 CY 50 CY	175 CY
Subbind min (119)	Total Stripping available for Topsoil	250 CY	75 CY	150 CY	475 CY
(B) Topsoil Required	Total Calipping available for Topooli	200 01	,,,,,,	100 01	4,001
Topsoiling, 4" Thick from Cross Sections		1,450 SY	800 SY	500 SY	2,750 SY
Topsoiling, 4" Thick from Plan Sheets		1,000 SY	0 SY	450 SY	1,450 SY
Total Topsoiling 4" Thick	required in SY	2,450 SY	800 SY	950 SY	4,200 SY
	ing 4" Thick required in CY (4,200 SY x 4" thick)	,	89 CY	106 CY	467 CY
	- (,,				
Excess Topsoil		0 CY	0 CY	44 CY	8 CY
Borrow Topsoil		22 CY	14 CY	0 CY	0 CY
•					

NEW JERSEY DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS** ROUTE 287

**CONTRACT NO. 010010001** 

Individual, Firm, Partnership, etc. (signature) (date) John L. Doe N.J.P.E. LIC. NO. 99999



Descrip	otion	Contract Quantity
<u>Excavation</u>		-
(A) Excavated Materials		
(1) Excavated Material available for I-14 Embankn	nent	
Excavation, Unclassified from Cross Sections	(4000 CV 4" 4E-1-)	9,396 CY
<u>Less</u> Stripping in Cuts Excavation, Unclassified from Plan Sheets	(1800 SY x 4" thick)	-200 CY 5,053 CY
Excavation, Officiassified from Flair Sheets	Total Excavation, Unclassified	14,249 CY
		·
Excavation, from Pipe, Inlets & other Substructure Removal of Pavement	es (2,763 SY x 12" thick)	200 CY 921 CY
Less Unsuitable Excavation Unclassified	(2,700 01 x 12 think)	-300 CY
Unsuitable Pavement	(813 SY x 12" thick)  Material available for I-14 Embankment	-271 CY
	Material available for 1-14 Embankment	14,799 CY
(2) Excavation, Regulated Material available for I-	14 Embankment	
Excavation, Regulated from Cross Sections		10,671 CY
<u>Less</u> Stripping in Cuts	(0 SY x 4" thick)	0 CY
Excavation, Regulated from Plan Sheets	Total Francisco Brandata I	420 CY
	Total Excavation, Regulated	11,091 CY
Excavation, from Pipe, Inlets & other Substructure	es in Regulated Areas	65 CY
<u>Less</u> Unsuitable Excavation Regulated Mate		-210 CY
Unsuitable Excavation Regulated Mate		-300 CY
	Material available for I-14 Embankment	10,646 CY
Disposal of Regulated Material, Hazardous (210	* 1.755 TON/CY)	369 TON
Disposal of Regulated Material (300 * 1.755 TON/	CY)	527 TON
3) Excavation, Acid Producing Soil available for I		0.400.014
Excavation, Acid Producing Soil from Cross Sect  Less Stripping in Cuts	(0 SY x 4" thick)	2,100 CY 0 CY
Excavation, Acid Producing Soil from Plan Sheets		520 CY
Executation, riotal riotaloning confident rian eneca	Total Excavation, Acid Producing Soil	2,620 CY
5 II ( B) (		445 694
Excavation, from Pipe, Inlets & other Substructure  Less Unsuitable Excavation Acid Producing		145 CY -700 CY
Edds Chodhable Executation / total i loddoning	Material available for I-14 Embankment	2,065 CY
Disposal of Acid Producing Soil (700 * 1.75	5 TON/CY)	1,229 TON
- "	,	
Fotal Excavated Materials available for I-14 Er 14,799 +10,646 + 2,065) * 0.90 shrinkage	mbankment (Total of 1+2+3)*0.90	24,759 CY
B) I-14 Embankment Quantity Required Embankment from Cross Sections		7,986 CY
Embankment from Cross Sections Embankment from Plan Sheets		7,986 CY 2,840 CY
Stripping in Fill		175 CY
Less I-13 Soil Aggregate		-300 CY
I-11 Soil Aggregate		-250 CY
I-10 Soil Aggregate		-145 CY
I-9 Soil Aggregate I-7 Soil Aggregate		-85 CY -100 CY
I-7 Soil Aggregate	Total Embankment Required	10,121 CY
Excavated Materials Excess (Suitable for I		14,638 CY
Excavated Materials to be Borrowed (Suita	DIE TOT 1-14 EMDANKMENT)	0 CY
Topsoiling		
(A) Topsoil Available		
Stripping in Cut (200+0+0)		200 CY
Stripping in Fill (175)	Total Chimpins and John T. 11	175 CY
D) Toposil Possired	Total Stripping available for Topsoil	375 CY
B) Topsoil Required Topsoiling, 4" Thick from Cross Sections		2,750 SY
Topsoiling, 4" Thick from Plan Sheets		1,450 SY
Total Topsoiling 4" Thick r	required in SY	4,200 SY
	ng 4" Thick required in CY (4,200 SY x 4" thick)	467 CY

Stage 1

## **EARTHWORK SUMMARY BY STAGE**

	Stage 2	
	Description	Contract Quantity
Excavated N	laterials Excess from Stage 1	14,638 CY
Excavation		
(A) Excavate	d Materials	
	d Material available for I-14 Embankment	
	ion, Unclassified from Cross Sections (4.500 SV v. 4" thick)	7,555 CY -500 CY
<u>Less</u> Excavat	Stripping in Cuts (4,500 SY x 4" thick) ion, Unclassified from Plan Sheets	3,054 CY
	Total Excavation, Unclassified	10,109 CY
Excavat	ion, from Pipe, Inlets & other Substructures	700 CY
	l of Pavement (1,800 SY x 12" thick)	600 CY
<u>Less</u>	Unsuitable Excavation Unclassified	-400 CY
	Unsuitable Pavement (1,131 SY x 12" thick)  Material available for I-14 Embankment	-377 CY 10,632 CY
		.5,552 01
	on, Regulated Material available for I-14 Embankment	
Excavat <b>Less</b>	ion, Regulated from Cross Sections Stripping in Cuts (0 SY x 4" thick)	6,750 CY 0 CY
	Stripping in Cuts (0 SY x 4" thick) ion, Regulated from Plan Sheets	220 CY
	Total Excavation, Regulated	6,970 CY
		25 21
Excavat <b>Less</b>	ion, from Pipe, Inlets & other Substructures in Regulated Areas Unsuitable Excavation Regulated Material, Hazardous	95 CY -300 CY
Less	Unsuitable Excavation Regulated Material	-300 CY
	Material available for I-14 Embankment	6,465 CY
Disposa	l of Regulated Material, Hazardous (300 * 1.755 TON/CY)	527 TON
Disposa	l of Regulated Material (300 * 1.755 TON/CY)	527 TON
3) Excavation	on, Acid Producing Soil available for I-14 Embankment	
	ion, Acid Producing Soil from Cross Sections	1,750 CY
Less	Stripping in Cuts (0 SY x 4" thick)	0 CY
Excavat	ion, Acid Producing Soil from Plan Sheets	340 CY
	Total Excavation, Acid Producing Soil	2,090 CY
	ion, from Pipe, Inlets & other Substructures in Acid Producing Soil	159 CY
Less	Unsuitable Excavation Acid Producing Soil  Material available for I-14 Embankment	-900 CY 1,349 CY
	material available for 1-14 Ellibatikilletit	1,343 C1
Dispos	al of Acid Producing Soil(900 * 1.755 TON/CY)	1,580 TON
Total Excav	ated Materials available for I-14 Embankment Total Stage 1+[(1+2+3)*0.90]	31,239 CY
	32 + 6,465 + 1,349) * 0.90 shrinkage]	,
	ankment Quantity Required	40.055.07
	ment from Cross Sections ment from Plan Sheets	19,955 CY 15,340 CY
	Stripping in Fill	275 CY
Less	I-13 Soil Aggregate	-100 CY
	I-11 Soil Aggregate	-150 CY -85 CY
	I-10 Soil Aggregate I-9 Soil Aggregate	-85 CY
	I-7 Soil Aggregate	-100 CY
	Total Embankment Required	35,050 CY
Evenyated	Materials Excess (Suitable for I-14 Embankment)	0 CY
	Materials Excess (Suitable for I-14 Embankment)	3,811 CY
	,	,
Topsoiling		
Top Soil Exc (A) Topsoil A	sess from Stage 1	0 CY
	g in Cut (500 + 0 + 0)	500 CY
	g in Fill (275)	275 CY
	Total Stripping available for Topsoil	775 CY
B) Topsoil I		1 000 CV
	ng, 4" Thick from Cross Sections ng, 4" Thick from Plan Sheets	1,000 SY 1,450 SY
iopaolii	Total Topsoiling 4" Thick required in SY	2,450 SY
	Total Topsoiling 4" Thick required in CY (2,450 SY x 4" thick)	272 CY
Excess Top	psoil	503 CY
Borrow To		0 CY

Stage 3

Desci	ription	Contract Quantity
Excavated Materials Excess from Stage 2		0 CY
Excavation		
A) Excavated Materials		
Excavated Material available for I-14 Emban	kment	
Excavation, Unclassified from Cross Sections  Less Stripping in Cuts	(3600 SY x 4" thick)	6,786 CY -400 CY
<u>Less</u> Stripping in Cuts  Excavation, Unclassified from Plan Sheets	(3600 31 x 4 thick)	4,034 CY
	Total Excavation, Unclassified	10,420 CY
Formation from Direct Inlate 9 Other Collections	<b>.</b>	200 61/
Excavation, from Pipe, Inlets & Other Substruc Removal of Pavement	(2,925 SY x 12" thick)	200 CY 975 CY
<u>Less</u> Unsuitable Excavation Unclassified		-500 CY
Unsuitable Pavement	(1413 SY x 12" thick)	-471 CY
	Material available for I-14 Embankment	10,624 CY
Excavation, Regulated Material available for	I-14 Embankment	
Excavation, Regulated from Cross Sections		10,375 CY
Less Stripping in Cuts	(0 SY x 4" thick)	0 CY
Excavation, Regulated from Plan Sheets	Total Excavation, Regulated	220 CY 10,595 CY
	Total Exocutation, Negulated	10,000 01
Excavation, from Pipe, Inlets & Other Substruc		45 CY
Less Unsuitable Excavation Regulated M: Unsuitable Excavation Regulated M:		-310 CY -200 CY
Onsultable Excavation Regulated in	Material available for I-14 Embankment	10,130 CY
Disposal of Regulated Material, Hazardous (31 Disposal of Regulated Material (200 * 1.755 TO		544 TON 351 TON
Disposal of Regulated Material (200 - 1.755 TO	NA/CY)	351 101
B) Excavation, Acid Producing Soil available for		
Excavation, Acid Producing Soil from Cross Se		2,300 CY
<u>Less</u> Stripping in Cuts  Excavation, Acid Producing Soil from Plan She	(0 SY x 4" thick)	0 CY 600 CY
	Total Excavation, Acid Producing Soil	2,900 CY
Excavation, from Pipe, Inlets & Other Substruc  Less Unsuitable Excavation Acid Produci		150 CY -500 CY
	Material available for I-14 Embankment	2,550 CY
Disposal of Acid Producing Soil (500 * 1.7	755 TON/CY)	878 TO
otal Excavated Materials available for I-14	Embankment Total Stage 2+[(1+2+3)*0.90]	20,974 CY
+ [(10,624 +10,130 + 2,550) * 0.90 shrinkage]		
3) I-14 Embankment Quantity Required		9.754.00/
Embankment from Cross Sections Embankment from Plan Sheets		8,754 CY 3,755 CY
Stripping in Fill		375 CY
Less I-13 Soil Aggregate		-400 CY
I-11 Soil Aggregate I-10 Soil Aggregate		-350 CY -275 CY
I-9 Soil Aggregate		-90 CY
I-7 Soil Aggregate	Total Forbandons at Booking	-100 CY
	Total Embankment Required	11,669 CY
xcavated Materials Excess (Suitable for	I-14 Embankment)	9,305 CY
xcavated Materials to be Borrowed (Sui		0 CY
	•	
opsoiling		F00 C1
op Soil Excess from Stage 2 A) Topsoil Available		503 CY
Stripping in Cut (400 + 0 + 0)		400 CY
Stripping in Fill (375)	T. I. O	375 CY
N Tanadi Daminad	Total Stripping available for Topsoil	775 CY
3) Topsoil Required Topsoiling, 4" Thick from Cross Sections		2,750 SY
Topsoiling, 4" Thick from Plan Sheets		1,450 SY
Total Topsoiling 4" Thic	-	4,200 SY
Total Topso	iling 4" Thick required in CY (4,200 SY x 4" thick)	467 CY
ivees Tonseil		944 07
xcess Topsoil Borrow Topsoil		811 CY 0 CY
JOHOW TOPSON		0 01

NEW JERSEY DEPARTMENT OF TRANSPORTATION

### **EARTHWORK SUMMARY** BY STAGE **ROUTE 287**

**CONTRACT NO. 010010001** 

Individual, Firm, Partnership, etc. (signature) (date) John L. Doe N.J.P.E. LIC. NO. 99999

61

N.J. BHF-29(135)

PROVIDE AN EARTHWORK SUMMARY BY STAGE WHEN THE PROJECT EARTHWORK SUMMARY SHOWS NO BORROW EXCAVATION BUT 2,500 CUBIC YARDS OR MORE OF BORROW EXCAVATION IS REQUIRED IN ONE OR MORE OF THE STAGES AND THERE IS A MINIMUM OF 15,000 CUBIC YARDS OF EMBANKMENT BEING CONSTRUCTED.

0 CY 92 CY

EITHER OF THE 3 EXCAVATED MATERIALS (UNCLASSIFIED, REGULATED, AND ACID PRODUCING) NEED NOT BE SHOWN IF IT DOES NOT OCCUR ON THE PROJECT.

Excess Topsoil

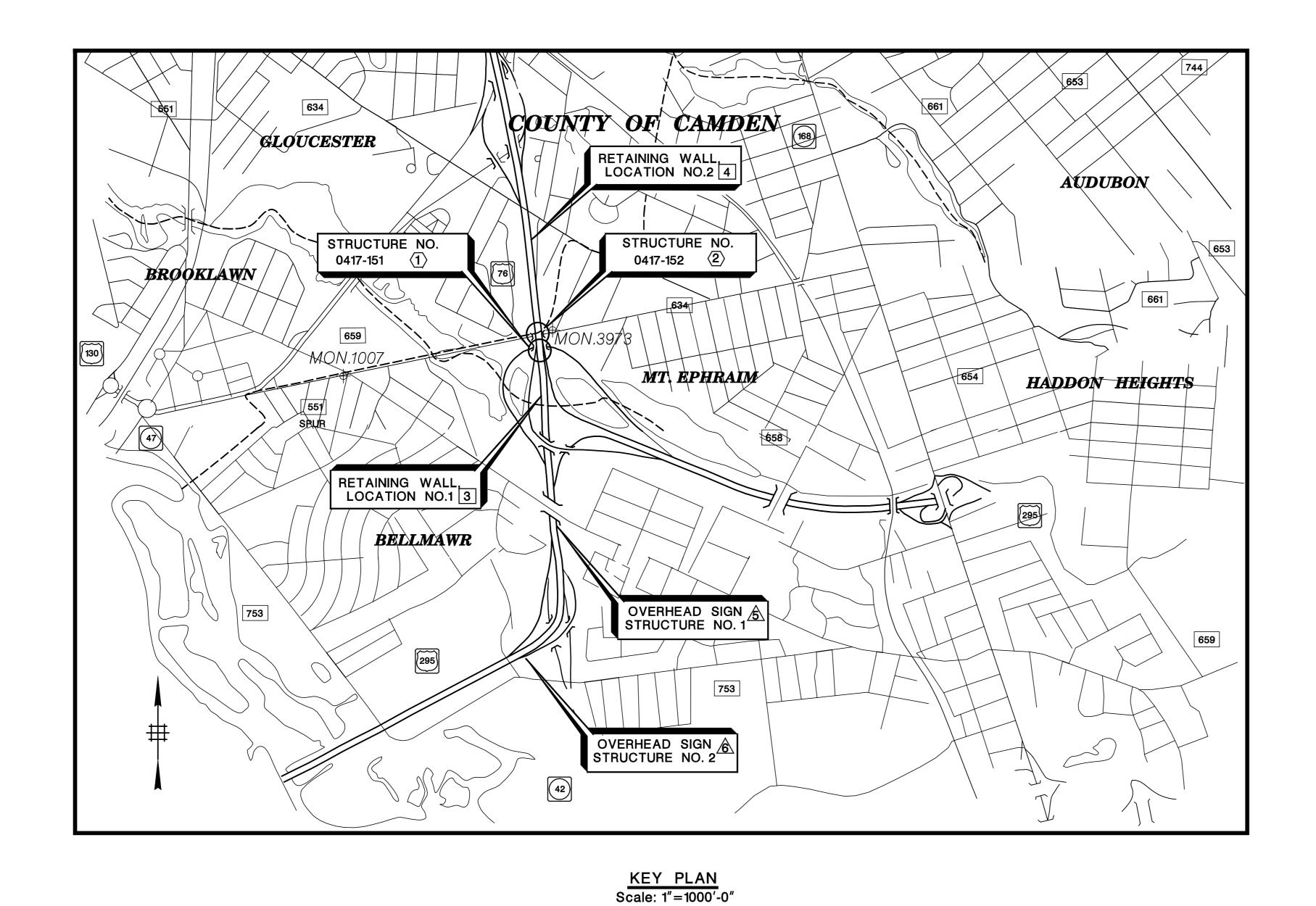
**Borrow Topsoil** 

STATE FEDERAL PROJECT NO. SHEET TOTAL SHEETS

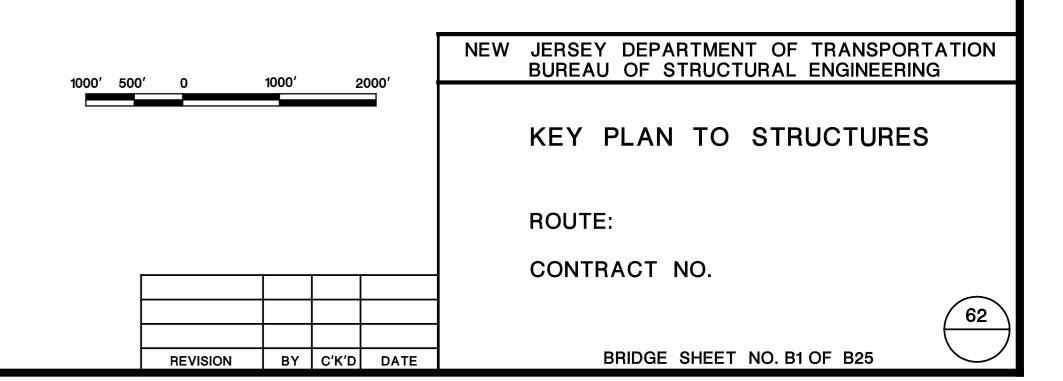
N. J.

STRUCTURE NO.

STRUCTURE NAME



	STRUCTURES IN THIS CONTRACT					
NO.	STRUCTURE NO.	SHEET No.				
		BRIDGES				
1	0417-151	ROUTE I-76 OVER ROUTE 295 RAMP "C"	В - ТО - В			
<b>(2</b> )	2 0417-152 ROUTE I-76 OVER KINGS HIGHWAY					
	RETAINING WALLS					
3	RETAINING WALL, LOCATION NO. 1					
4	RETAINING WALL, LOCATION NO. 2					
	SIGN SUPPORT STRUCTURES					
<u>\$</u>	0417-998	OVERHEAD SIGN STRUCTURE NO. 1	B - TO - B			
<u></u>	0417-999	CANTILEVER SIGN STRUCTURE NO. 2				



CONTROL
SECTION

DES.

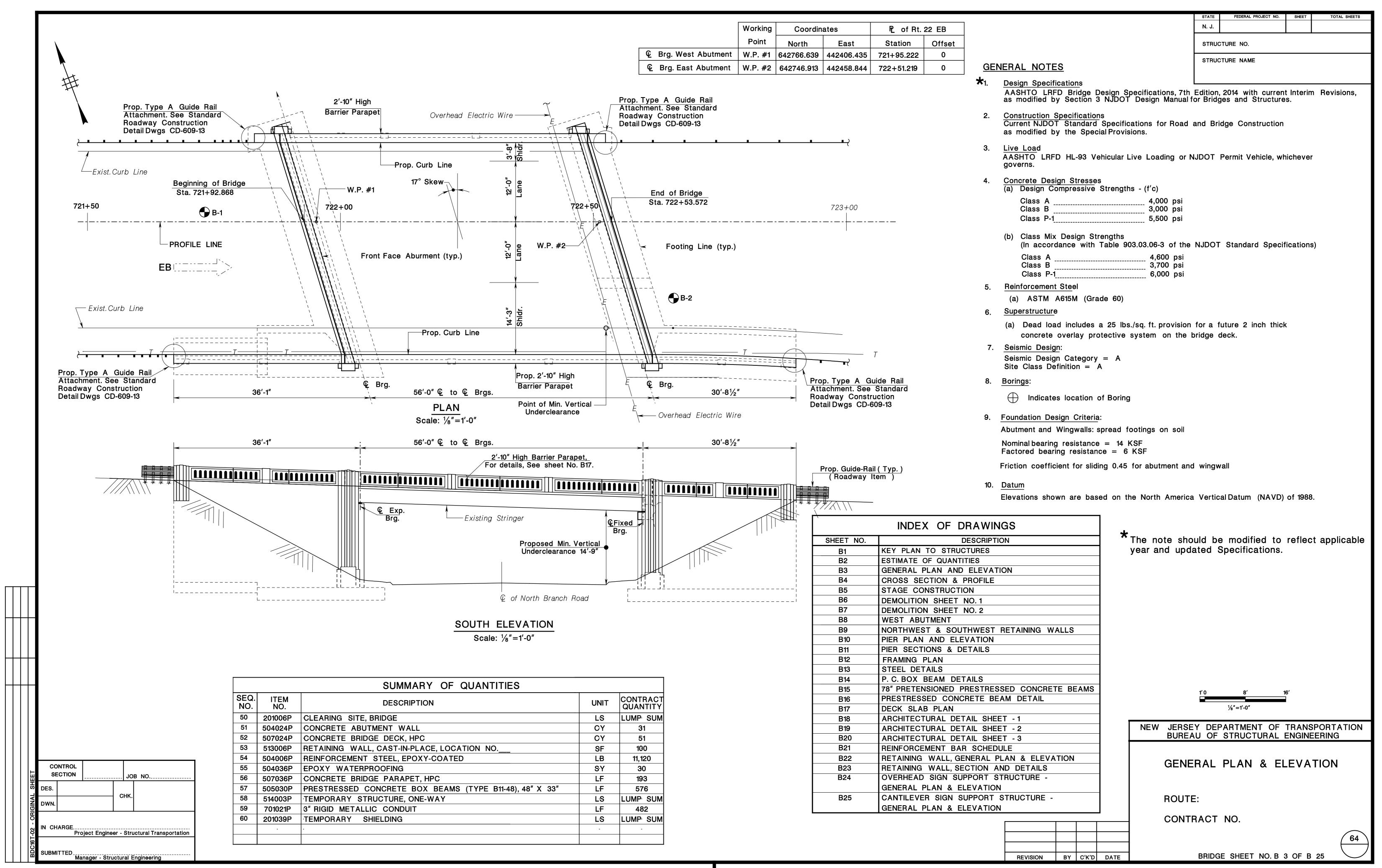
DWN.

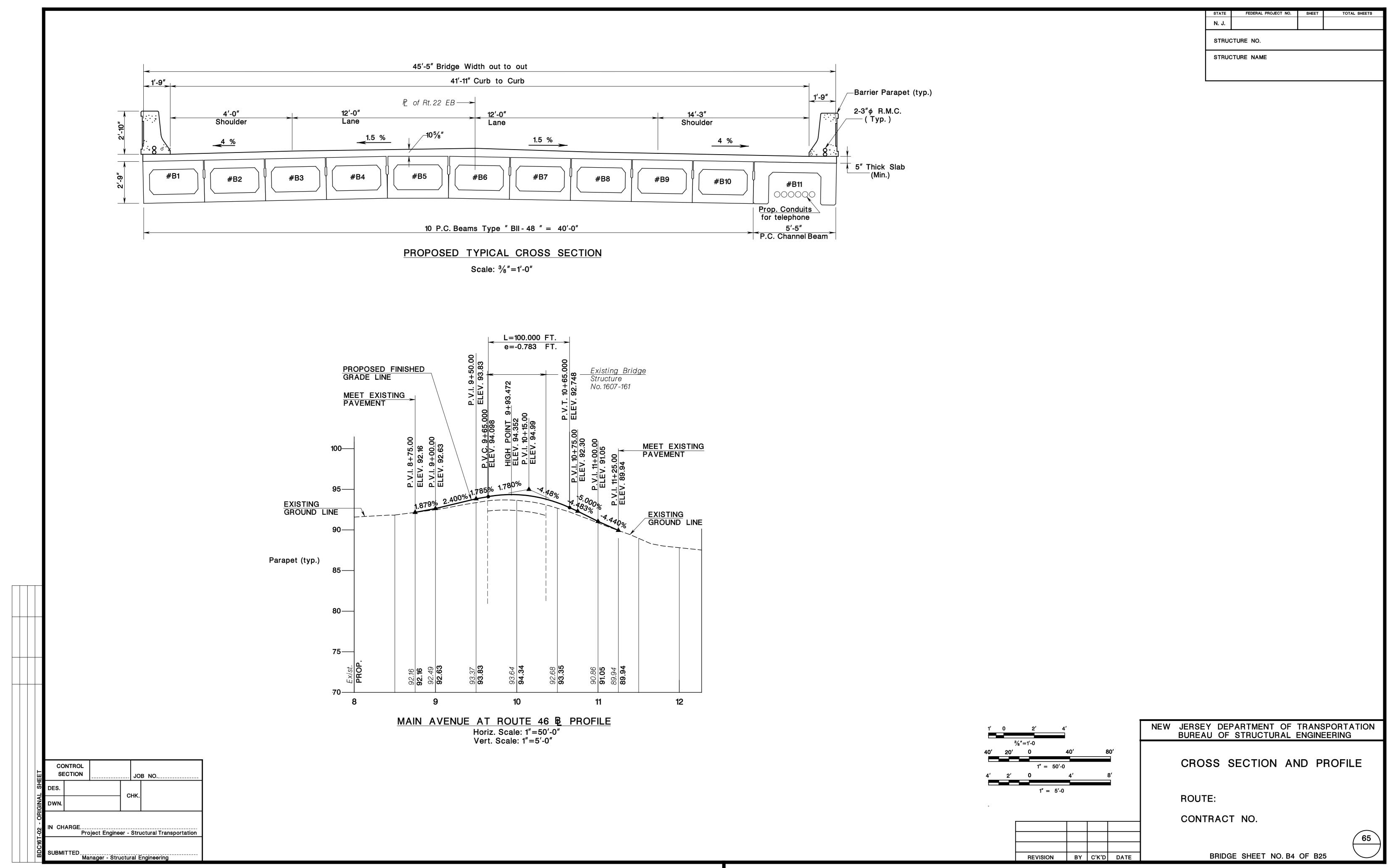
IN CHARGE
Project Engineer - Structural Transportation

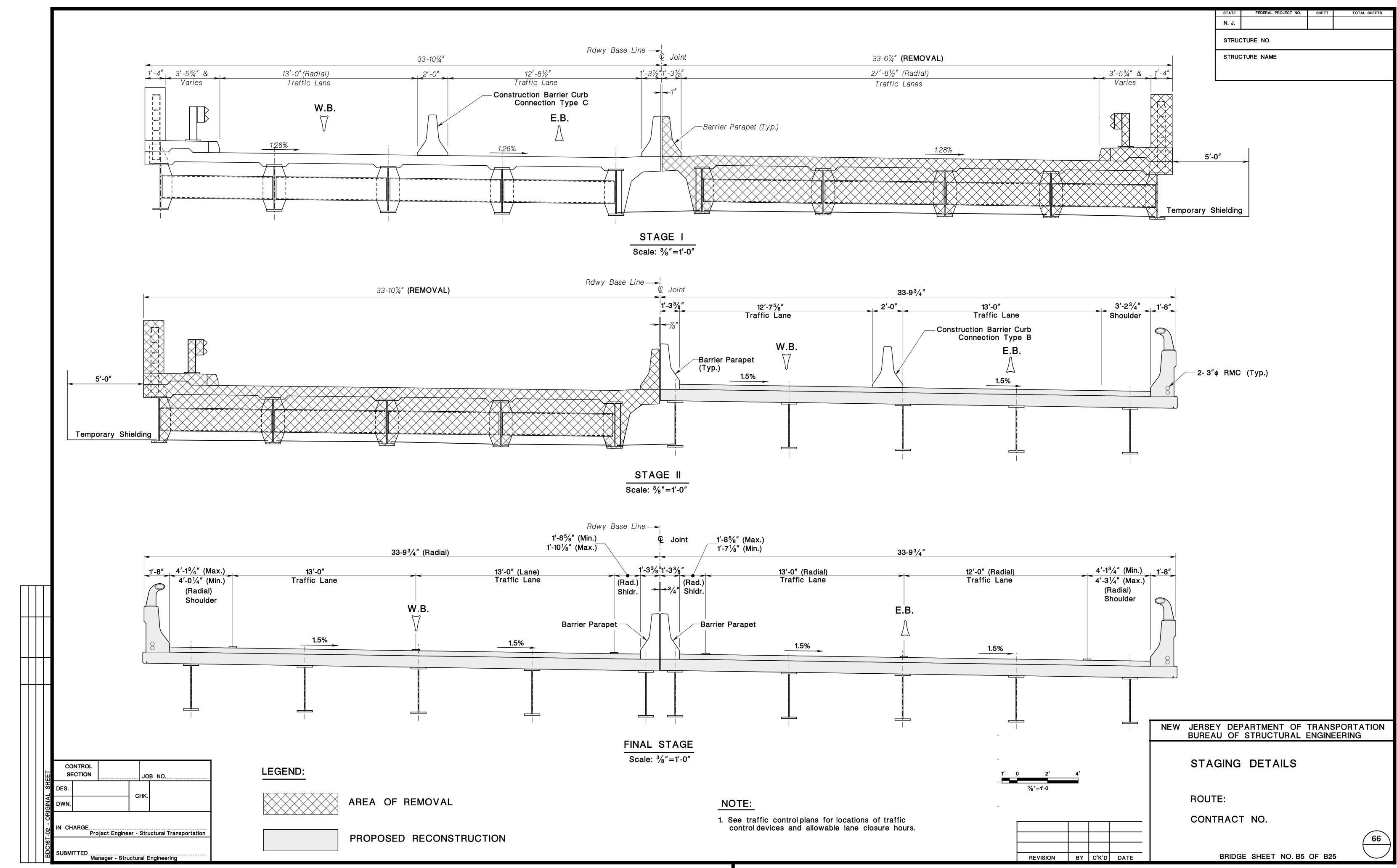
SUBMITTED
Manager - Structural Engineering

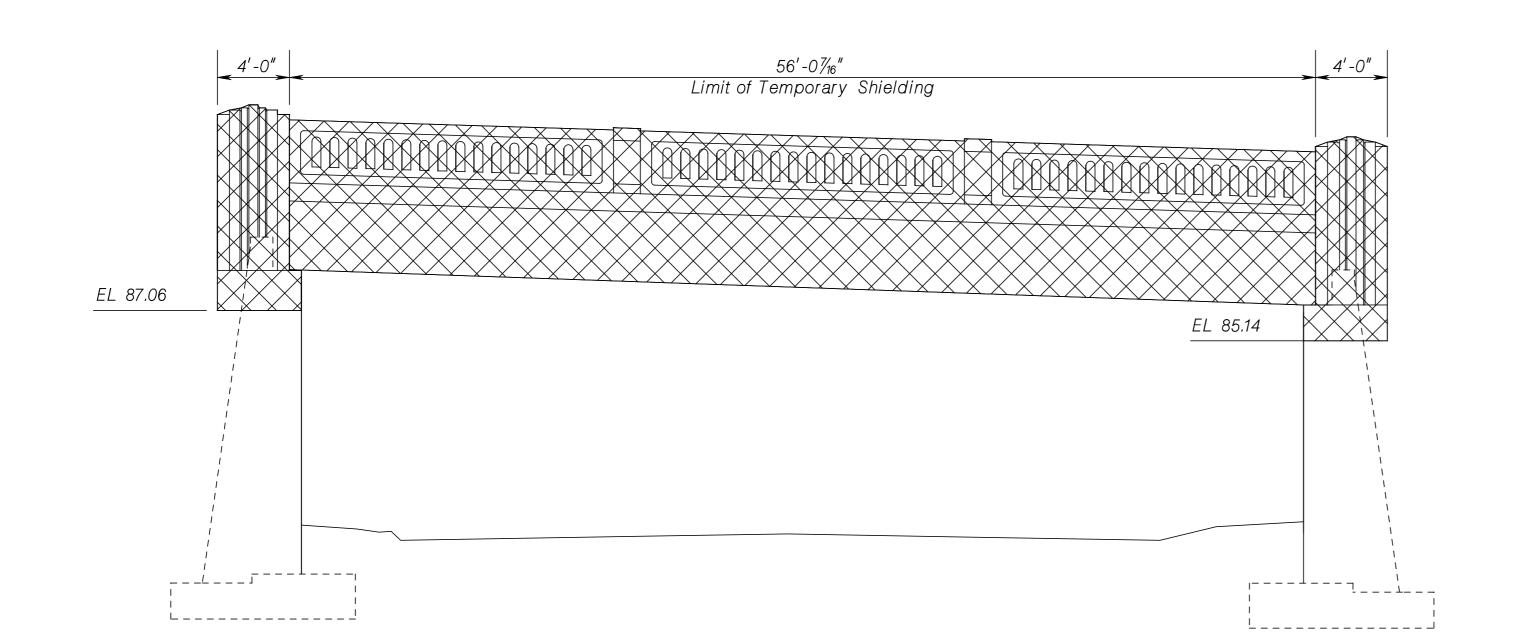
FEDERAL PROJECT NO.

TOTAL SHEETS







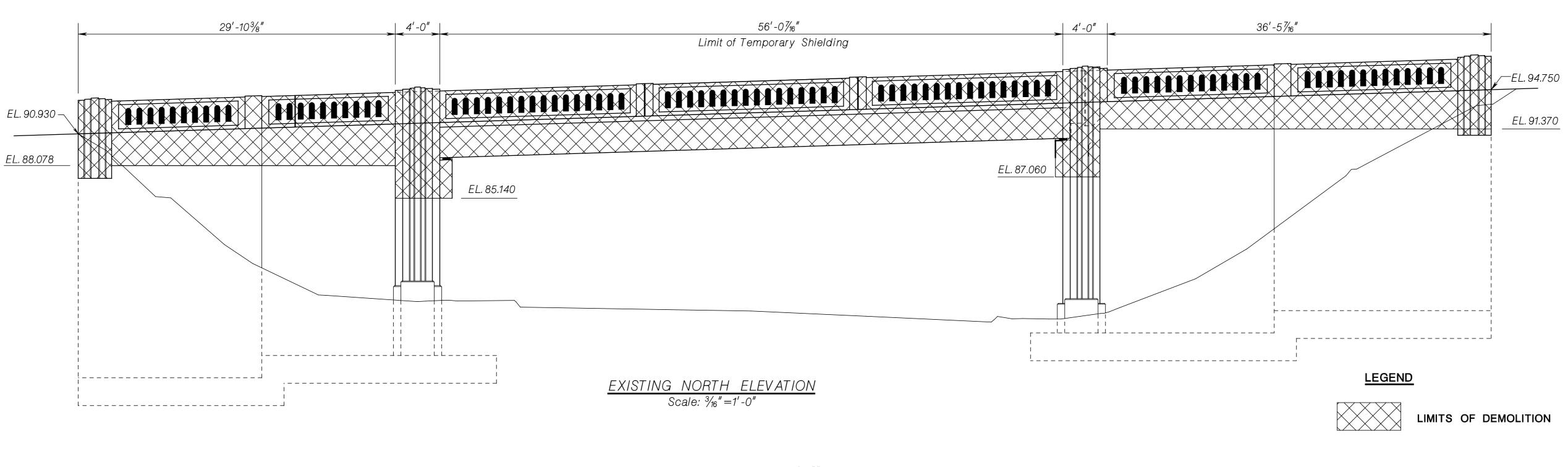


EXISTING SOUTH ELEVATION Scale: 3/16"=1'-0"

### DEMOLITION NOTES

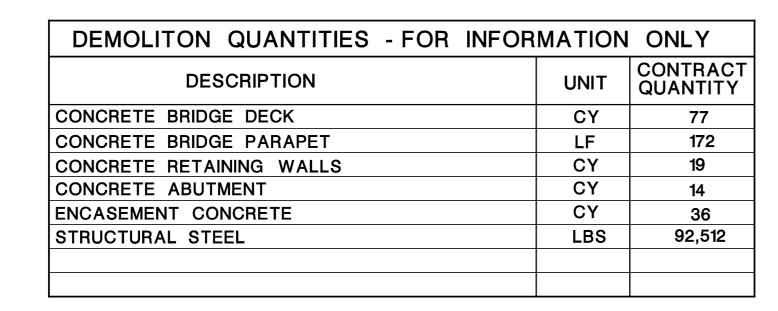
- 1. The information presented hereon is for information purpose only and is not guaranteed to be correct. Bidders shall visit the site before submitting bids to ascertain the extent of work.
- The contractor is alerted to the fact that there are utilities in this area. The utilities have been located on the contract drawings using the most up-to-date available information. This does not relieve the contractor from the responsibility of contacting the utility agencies and accurately locating all the utilities which may interfere with the construction of this project prior to the start of any work. The contractor shall include all the locations of the utilities on any applicable working drawings.
- 3. The removal of the existing bridge will be paid under the pay item "Clearing Site, Bridge".
- Temporary shielding will be provided as directed by the RE to prevent debris from falling on the roadway traffic.
- 5. Work this sheet with Sheet No. B7.
- 6. Prior to beginning a partial demolition of any structural element a  $\frac{1}{2}$ " deep cut shall be made first along all edges adjacent to concrete to remain.

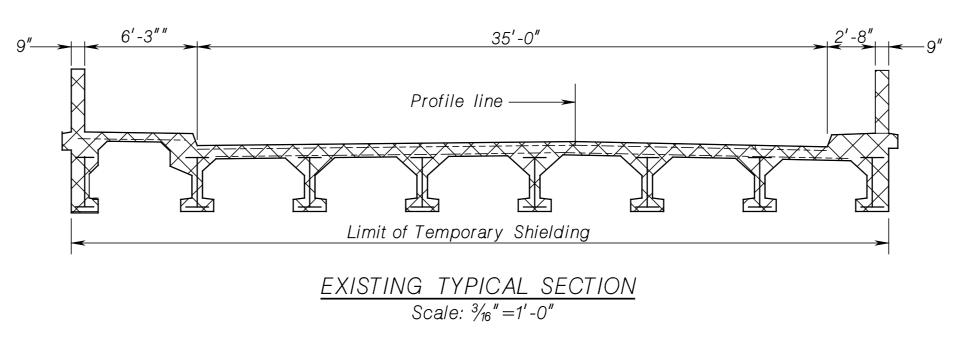
	SUMMARY OF QUANTITIE	S	
ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201039P	TEMPORARY SHIELDING	LS	LUMP SUM



CONTROL **SECTION** JOB NO. DES. DWN. Project Engineer - Structural Transportation

Manager - Structural Engineering



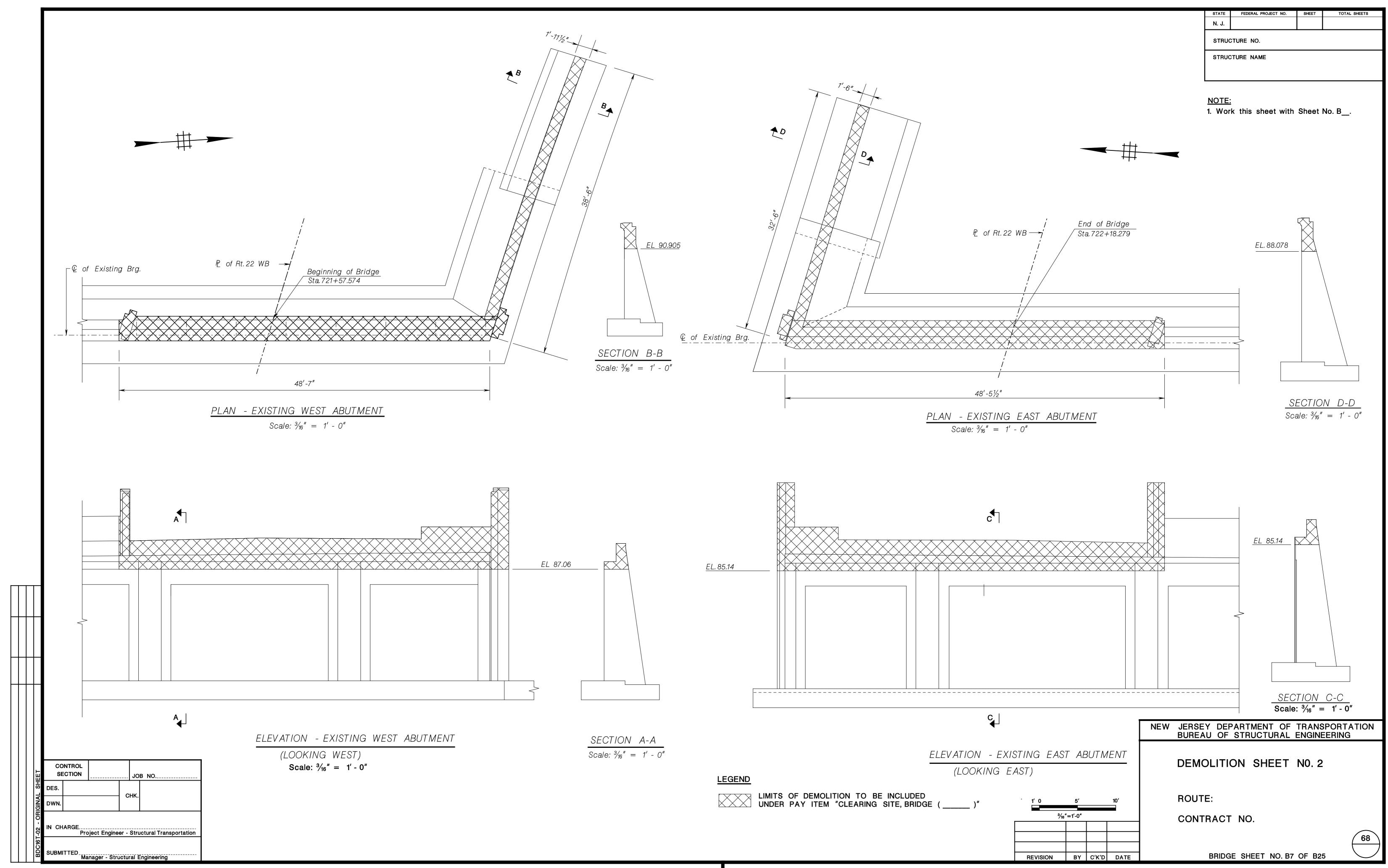


NEW JERSEY DEPARTMENT OF TRANSPORTATION BUREAU OF STRUCTURAL ENGINEERING **DEMOLITION SHEET NO. 1 ROUTE:** 

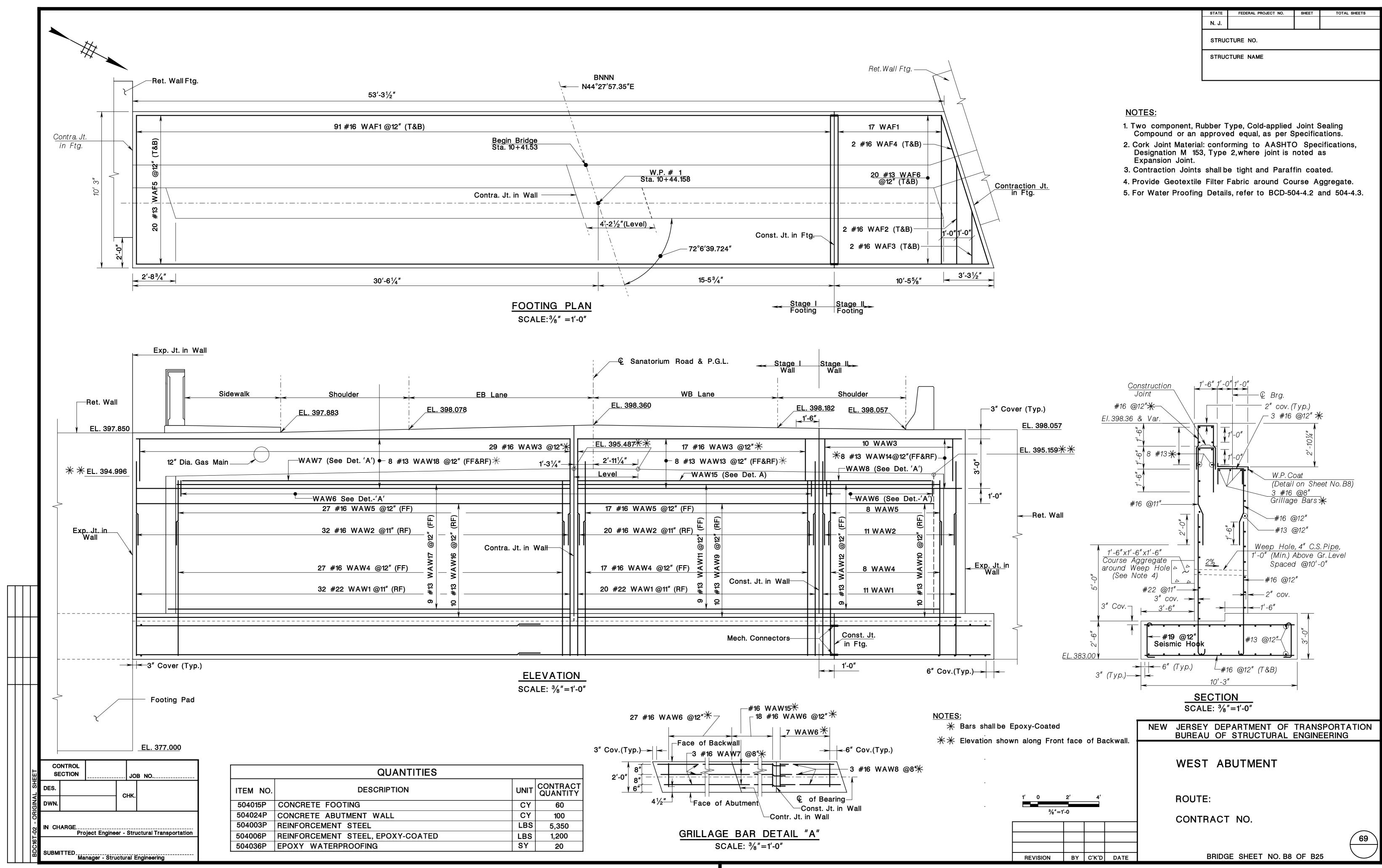
BY C'K'D DATE

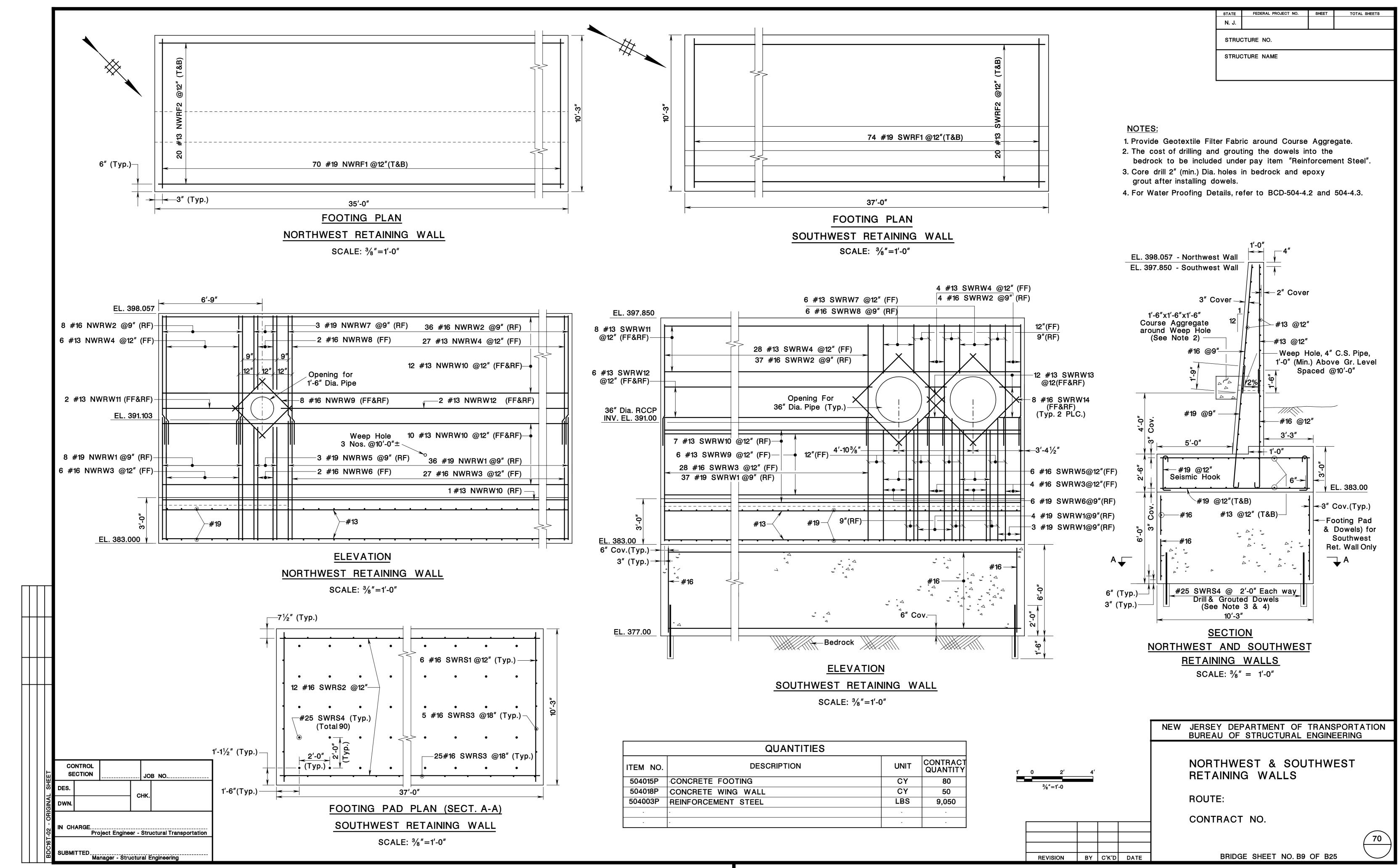
CONTRACT NO.

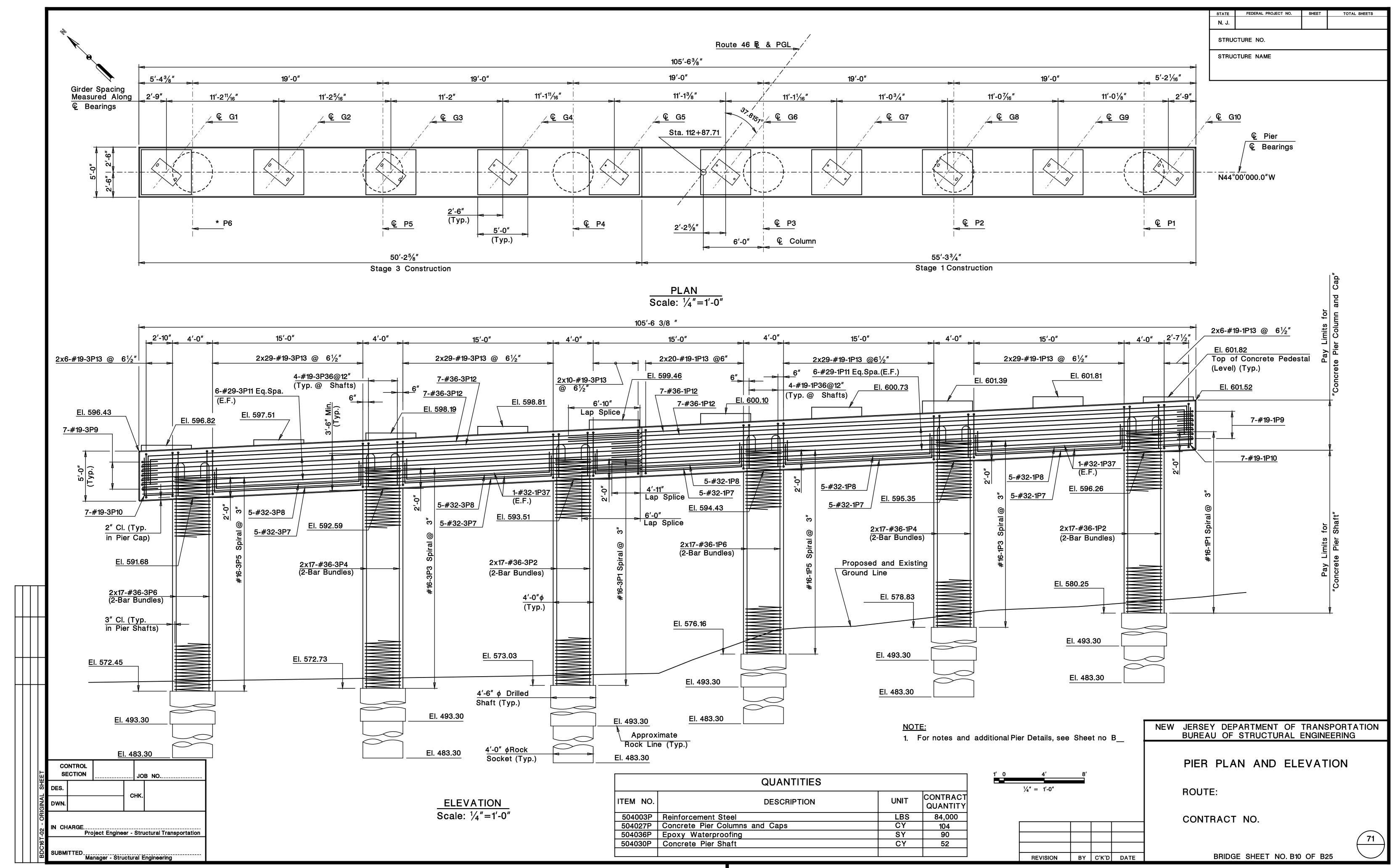
BRIDGE SHEET NO. B6 OF B25

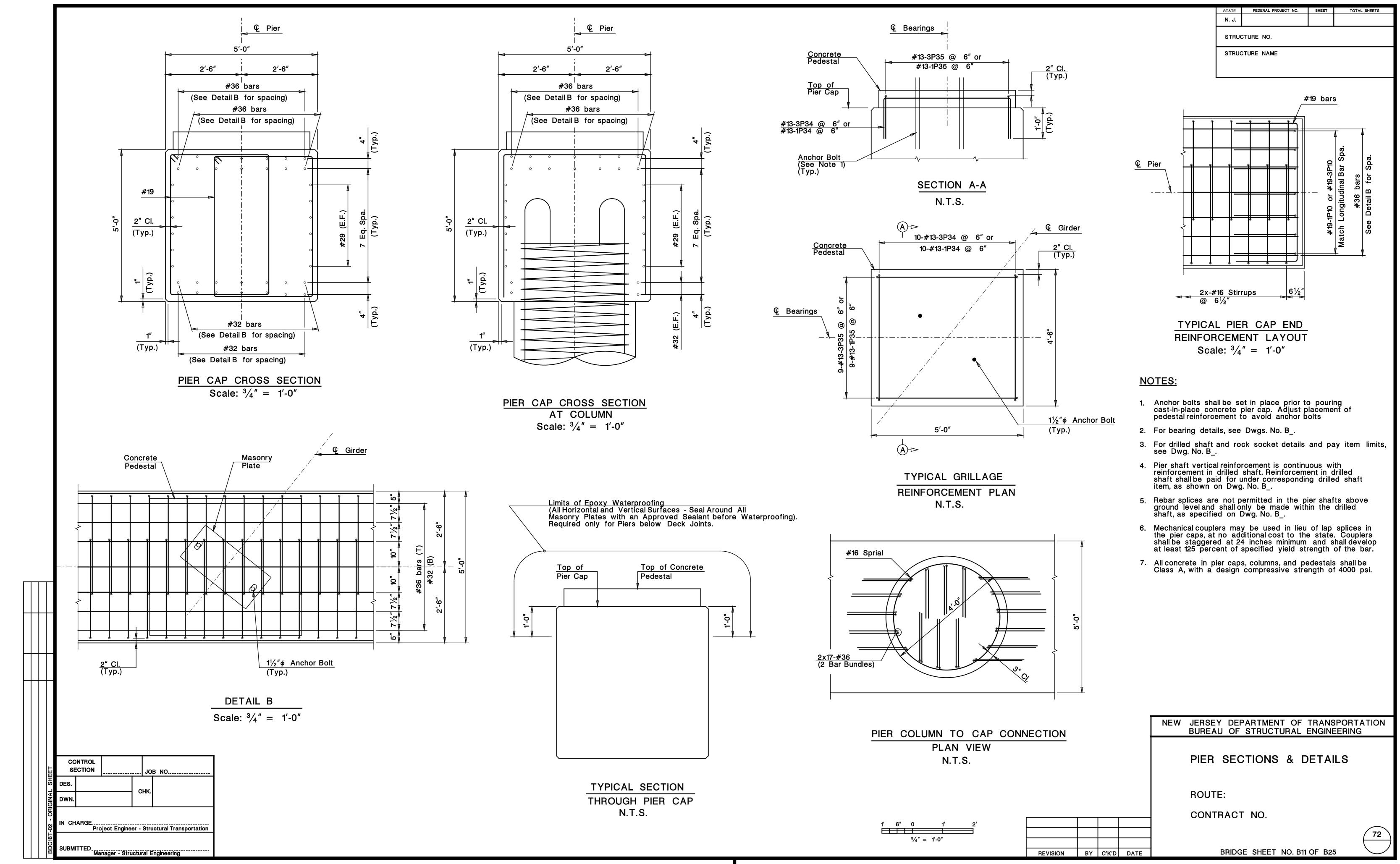


file=\_Design Projects by Route/Route 045/04500901 Rt 45 Main St to Chestnut St MP 9.44 to 22.5/Bridge/SP 68 Demolition Sheet Number 2 B7.dgn



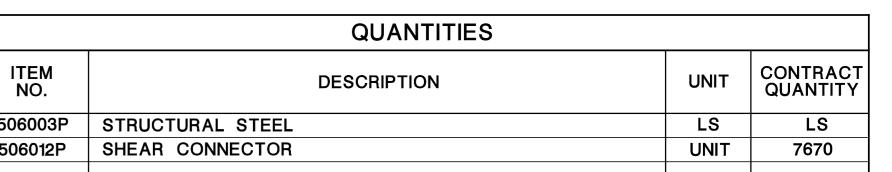


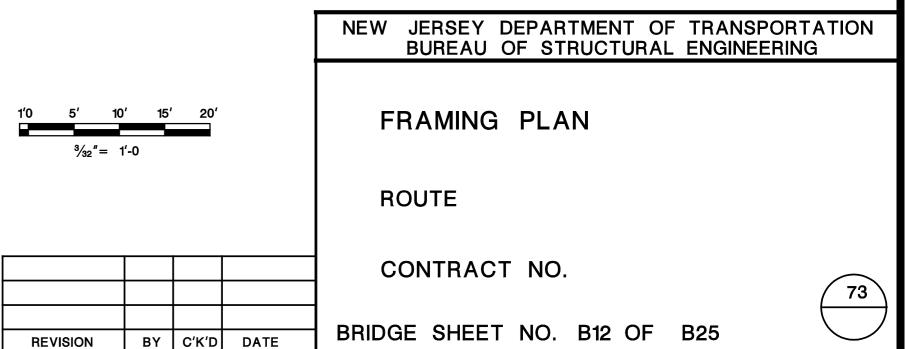




STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS	
N. J.				
STRUCTURE NO.				
STRUC	CTURE NAME			

TOP ELEVATION AT CENTER LINE OF BEAM						
Beam No.	Elevation At	Elevation At	Beam No.	Elevation At ② Brg. East Pier	Elevation At	
B1	174.91	175.16	B21	175.12	174.77	
B2	175.14	175.38	B22	175.30	174.94	
В3	175.16	175.38	B23	175.28	174.90	
B4	175.52	175.68	B24	175.55	175.20	
B5	175.54	175.69	B25	175.53	175.16	
В6	175.55	175.69	B26	175.52	175.15	
B7	175.57	175.69	B27	175.49	175.10	
B8	175.25	175.40	B28	175.17	174.73	
B9	175.27	175.41	B29	175.15	174.69	
B10	175.08	175.20	B30	174.91	174.44	



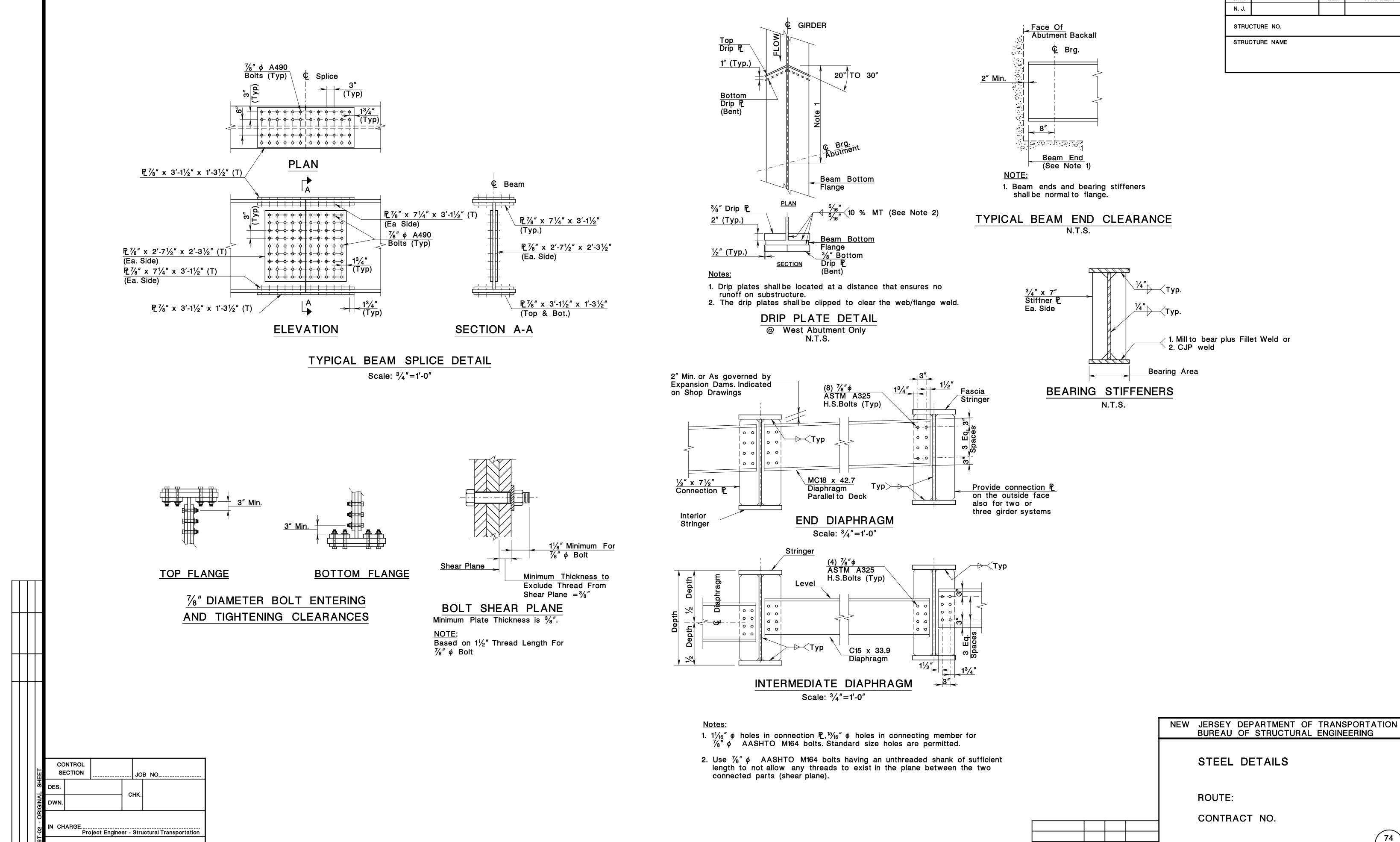


Project Engineer - Structural Transportation

SUBMITTED\_\_\_\_\_\_\_Manager - Structural Engineering

IN CHARGE

file=\_Design Projects by Route/Route 045/04500901 Rt 45 Main St to Chestnut St MP 9.44 to 22.5/Bridge/SP 73 Framing Plan B12 .dgn

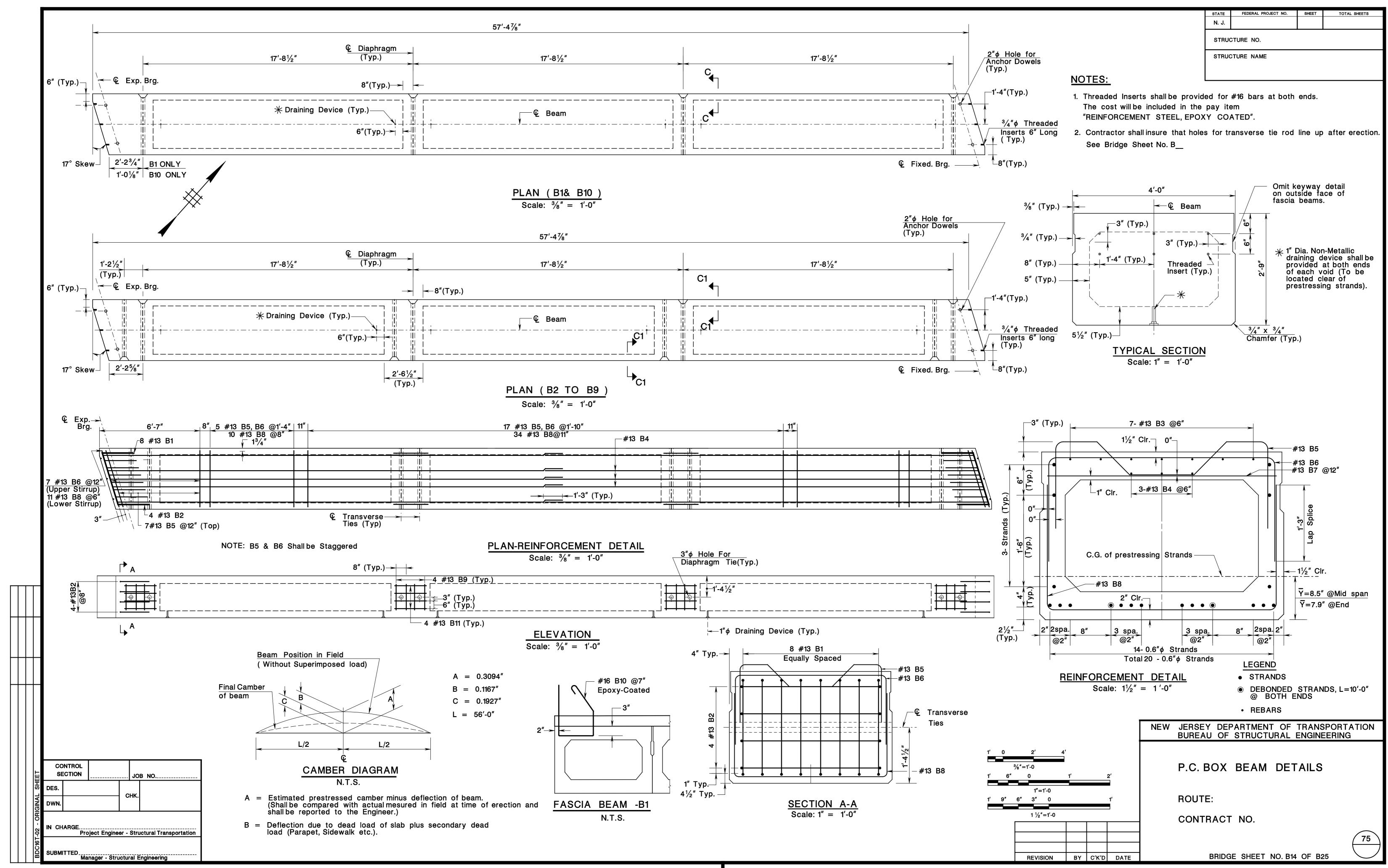


file=\_Design Projects by Route/Route 045/04500901 Rt 45 Main St to Chestnut St MP 9.44 to 22.5/Bridge/SP 74 Steel Details B13 .dgn

Manager - Structural Engineering

REVISION BY C'K'D DATE

BRIDGE SHEET NO. B13 OF B25

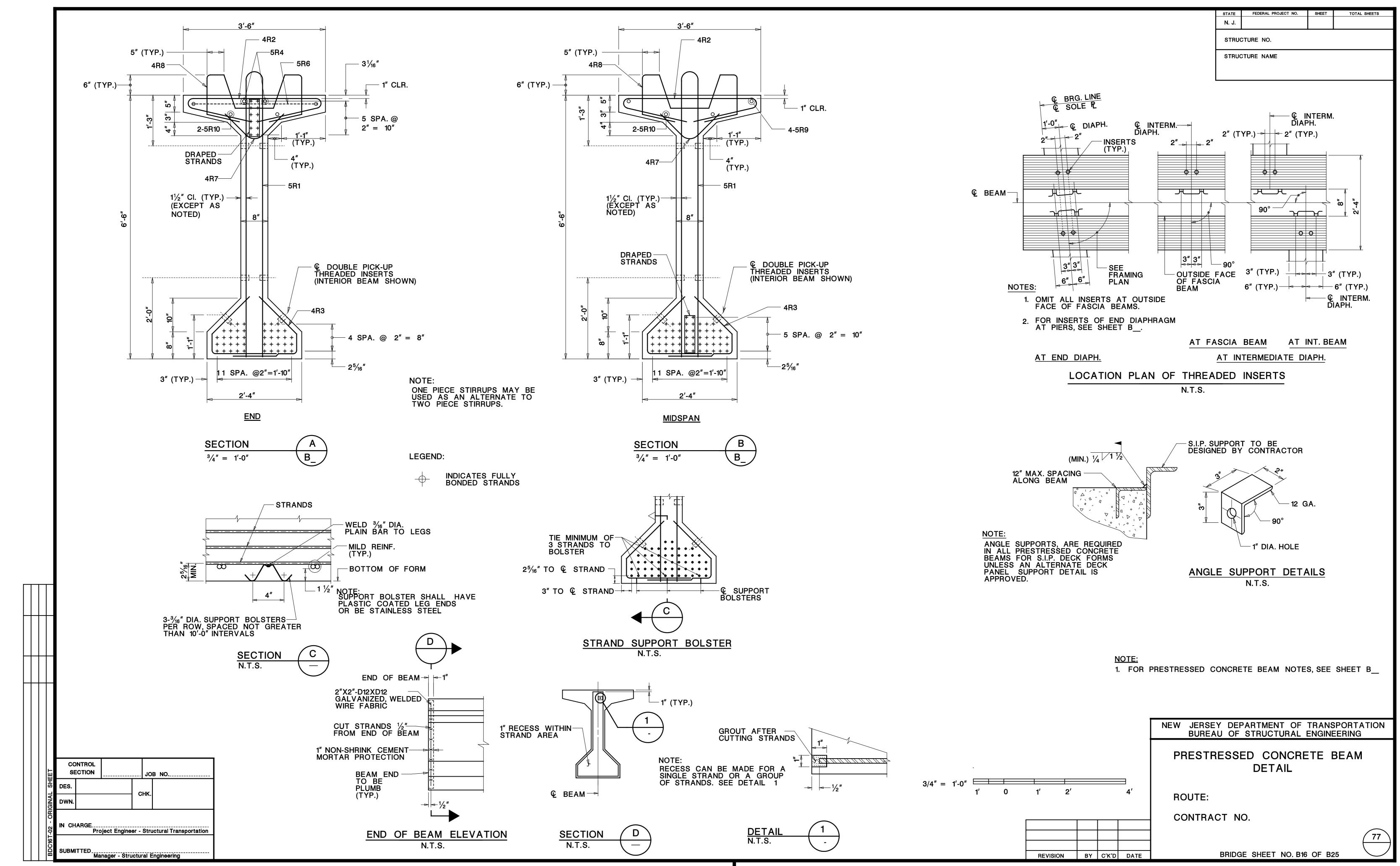


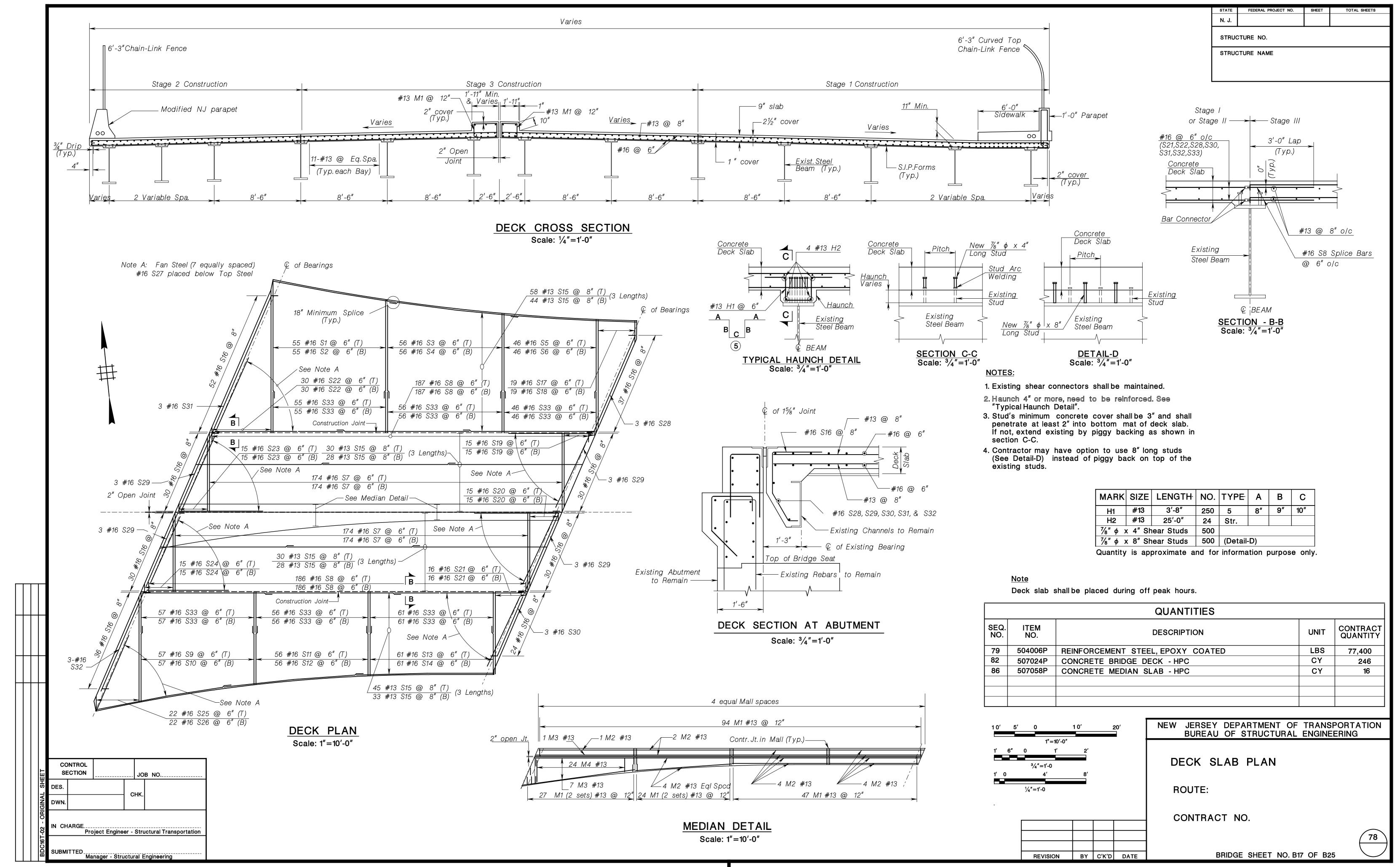
BRIDGE SHEET NO. B15 OF B25

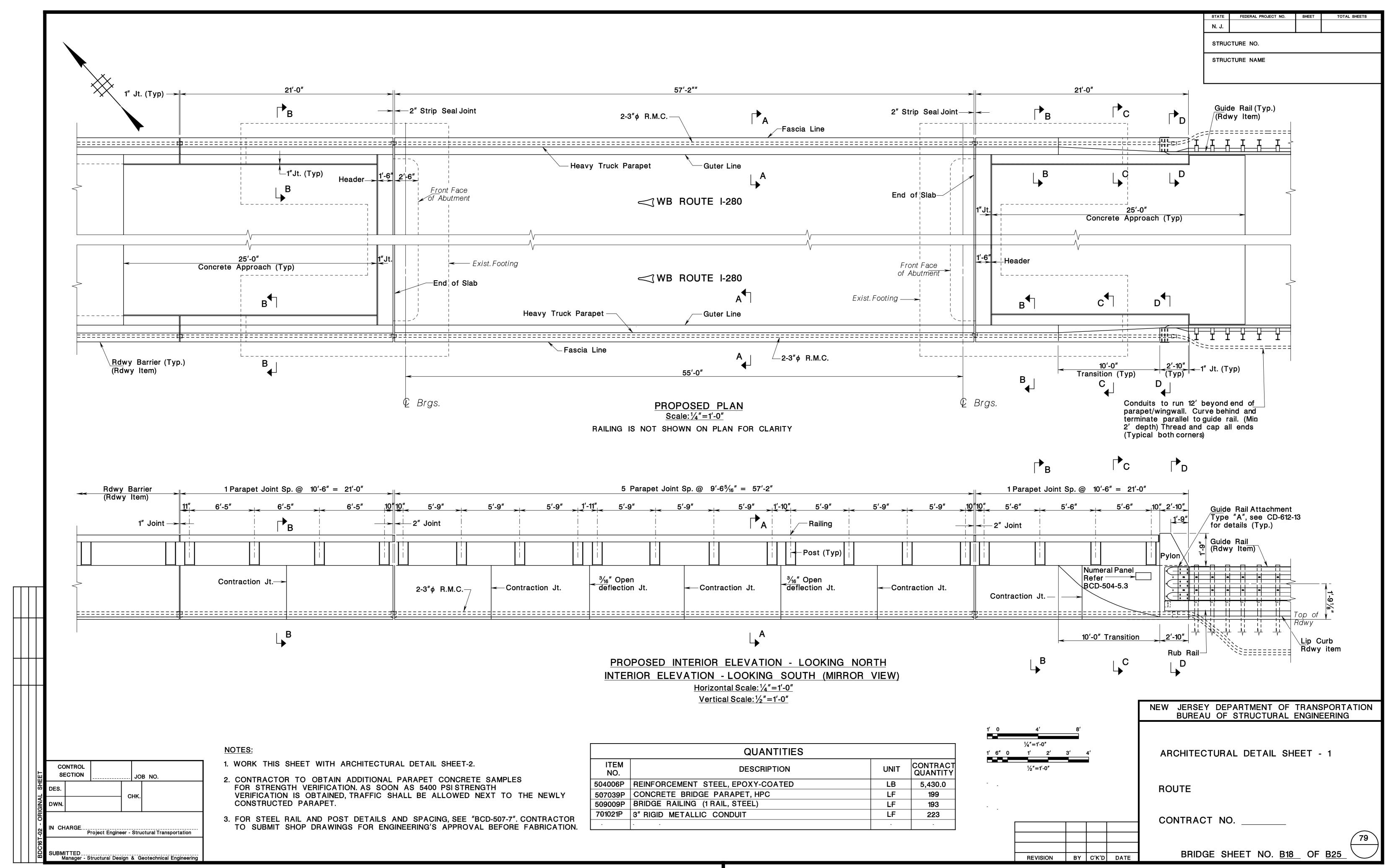
BY C'K'D DATE

REVISION

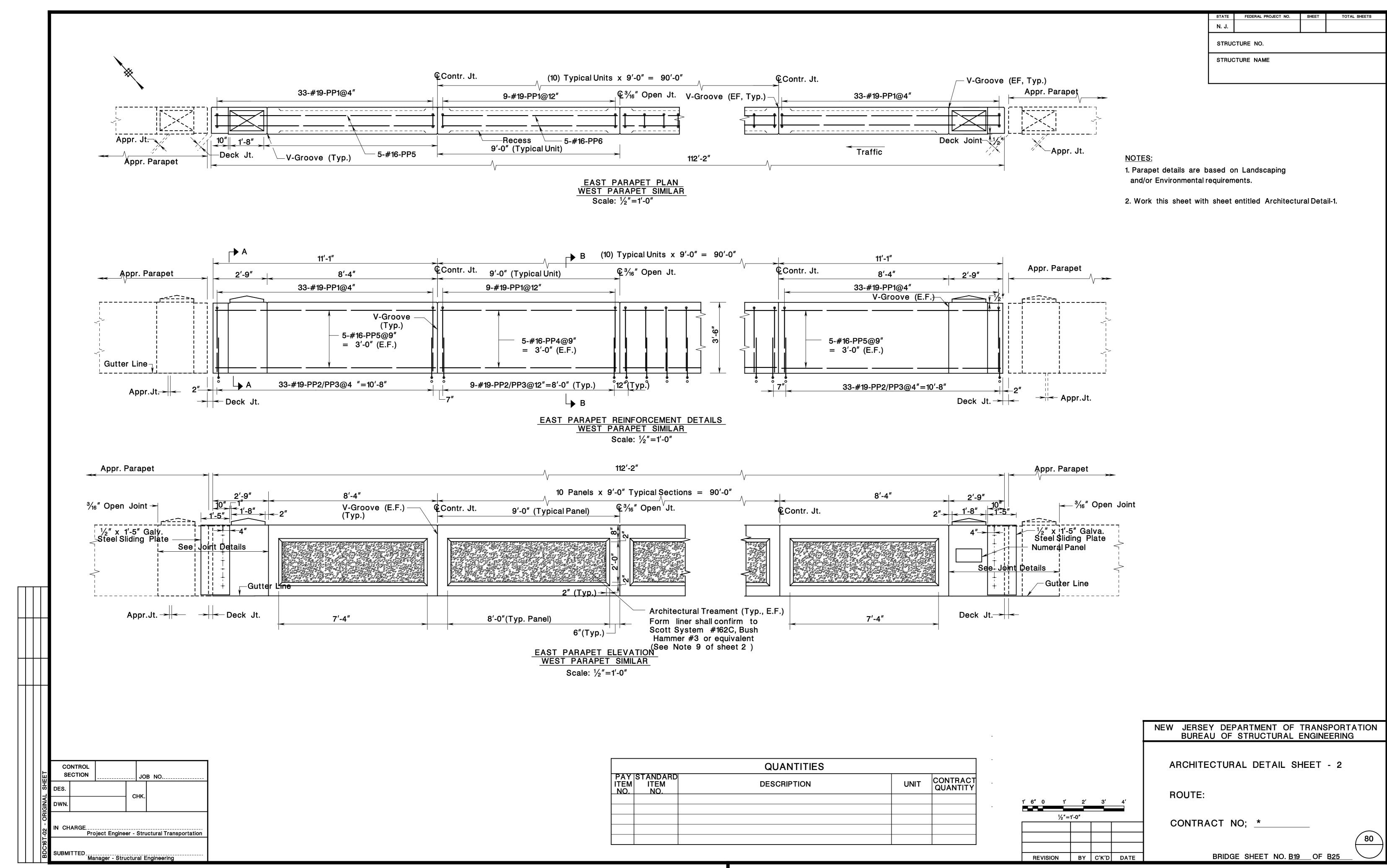
Manager - Structural Engineering

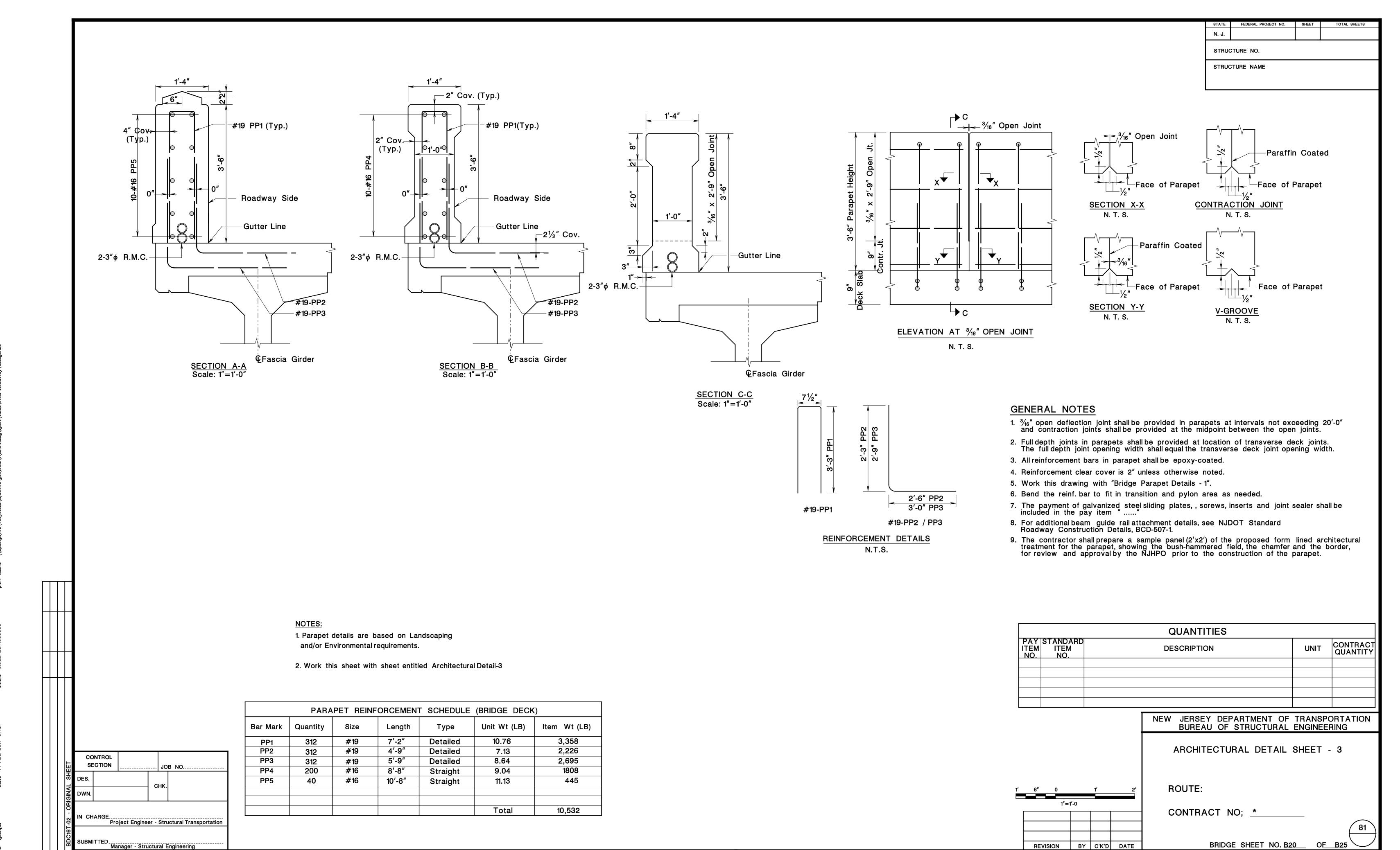




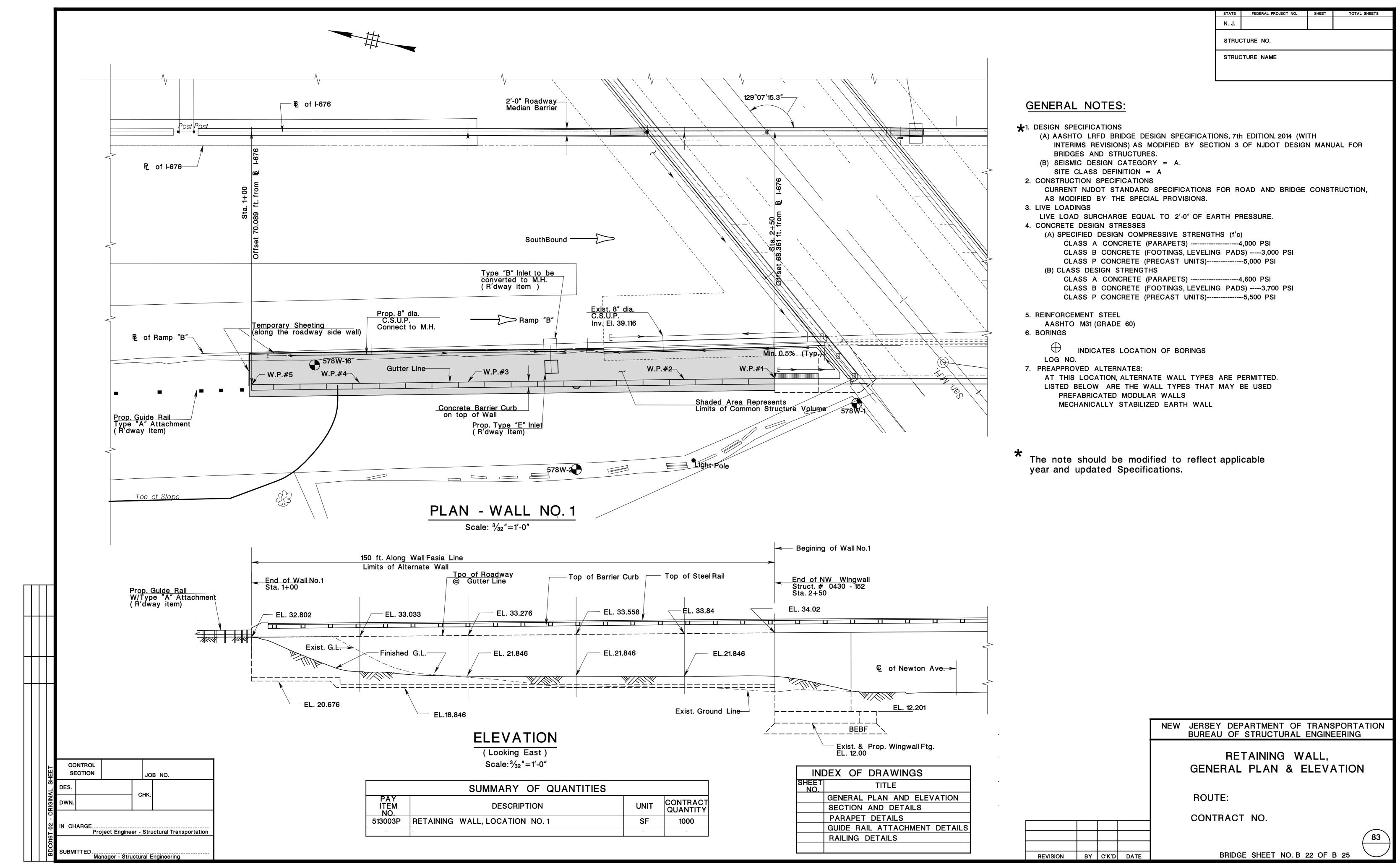


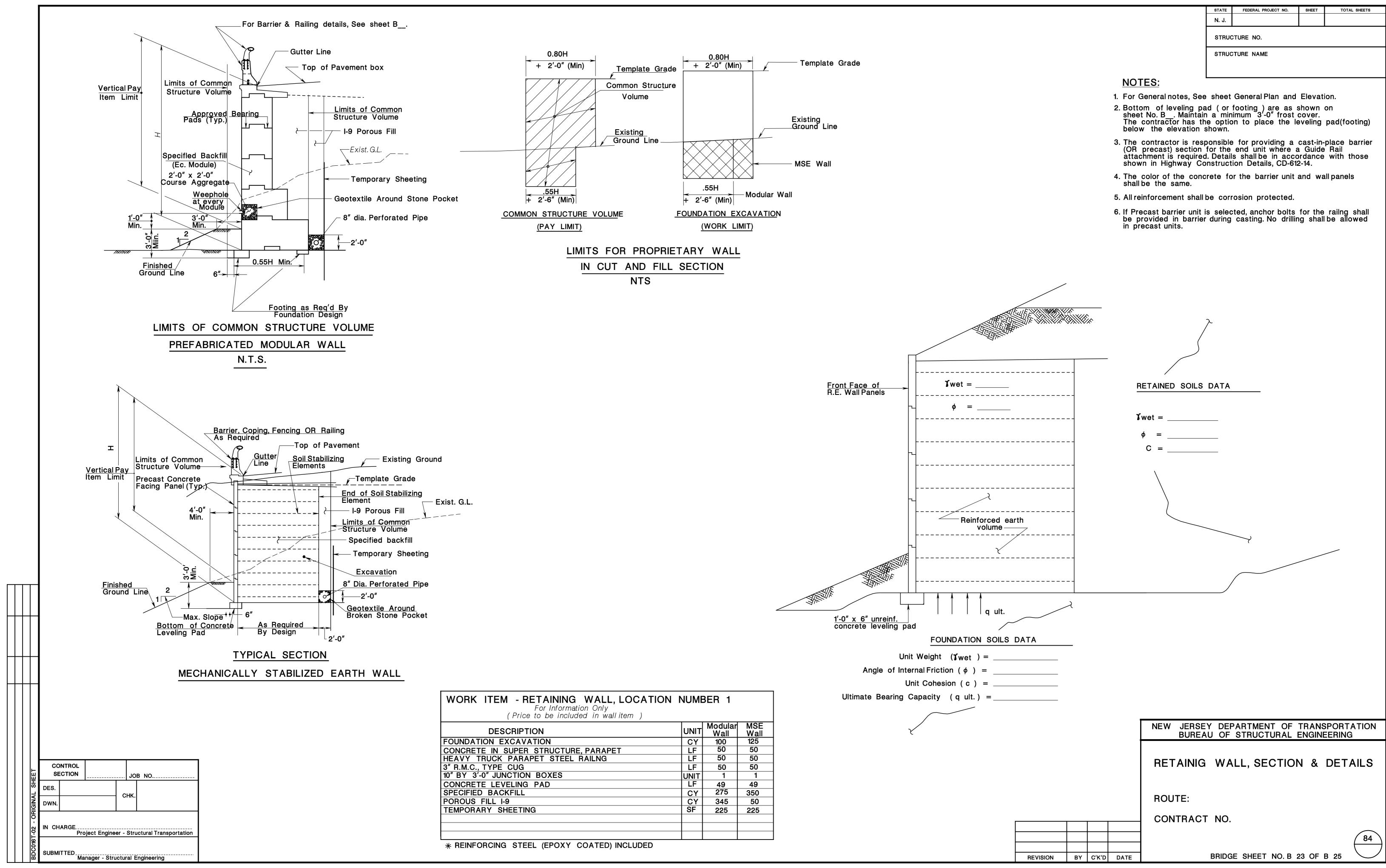
file=\_Design Projects by Route/Route 045/04500901 Rt 45 Main St to Chestnut St MP 9.44 to 22.5/Bridge/SP 79 Architectural detail Sheet-1 B18.dgn





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STATE	FEDERAL PROJECT NO.	SHEET	TOTAL SHEETS		
N. J.					
STRUCTURE NO.					
STRUC	CTURE NAME				
	N. J.	N. J.	N. J. STRUCTURE NO.		

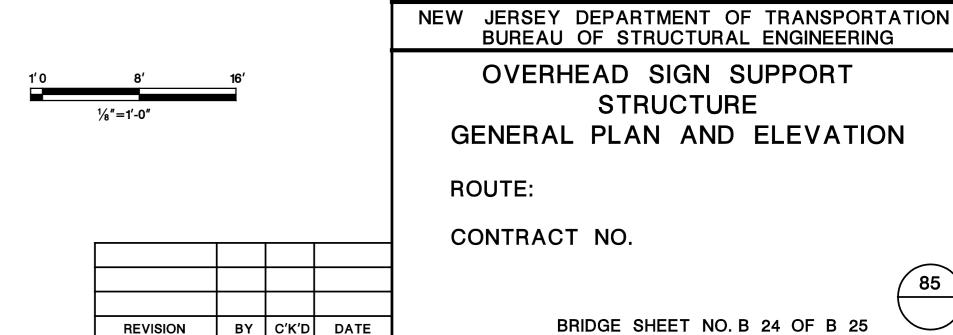
# NOTES:

- 1. For General Notes and Index of Drawings see sheet entitled, "Overhead Sign Support Structures, General Notes, Plan and Elevations" (Standard Drawing Plate No. OH-D1). For Quantities, see sheet entitled "Overhead Sign Support Structures Schedule of Structures" (Standard Drawing Plate No. OH-D2).
- 2. Top of Pedestals shall be set 4" minimum above the finished ground line.
- The elevation of the bottom of the Tower Shaft Base Plates shall be set at (Anchor Bolt Dia. + 1") above top of Pedestal or top of Barrier Pedestal see sheet entitled, "Overhead Sign Support Structures Tower Shaft Base and Truss Seat Details" (Standard Drawing Plate No. OH-D8).
- 4. The dimensions shown on the Plan are along the Centerline of the Structure.
- 5. For details of Barrier Pedestal, Pedestal and Foundations see sheets entitled "Overhead Sign Support Structures Schedule of Foundations and Miscelaneous Details" (Standard Drawing Plate No. OH-D3) and "Overhead Sign Support Structures Foundation Details" (Standard Drawing Plate No. OH-D4).
- 6. OSHA proximity rules regarding the Overhead High Voltage Transmission Lines shall be adhered to when using the construction equipment.
- 7. The point at a minimum vertical clearance elevation shall be used to locate the proposed sign structure.
- 8. The highest point of Roadway Elevations is taken from Existing Microfilm Plans. The Contractor shall verify elevations in the field. Any discrepancies shall be reported to the Design Unit. The Contractor shall get an approval before Sign Support fabrication.
- For Gude Rail, Existing and Proposed Utilities' locations and details refer to Roadway Plans.
- 10. Existing Sign Structure Pedestals shall be removed to a depth of 2 feet below ground level and the area shall be restored with backfilling, topsoiling, fertilizing, seeding and straw mulching in accordance with Roadway Plans.
- 11. Existing Sign Structure and Pedestals shall be removed to a depth of 2 feet below ground level and the area shall be restored with backfilling, topsoiling, fertilizing, seeding and straw mulching in accordance with Roadway Plans.

  The cost shall be included in "Clearing Site, Structure".

THE CONTRACTOR SHALL COMPLY WITH THE STATE'S UNDERGROUND FACILITY PROTECTION ACT AND NOTIFY THE STATE'S ONE CALL SYSTEM AND IDENTIFY ITSELF AS THE STATE'S CONTRACTOR AND SPECIFY THE ROUTE AND MILEPOST OF THE SIGN STRUCTURE BEFORE PERFORMING WORK ON THE PROJECT. THE ONE CALL SYSTEM CAN BE REACHED BY CALLING 1-800-272-1000. THE CONTRACTOR SHALL ALSO MAKE SEPARATE NOTIFICATIONS TO THE DEPARTMENT'S ELECTRICAL MAINTENANCE AND TRAFFIC OPERATIONS BUREAUS WHERE CONSTRUCTION MAY IMPACT OR BE ADJACENT TO THIER RESPECTIVE EXISTING FACILITIES. NO DEPARTMENT-OWNED FACILITIES AS DESCRIBED IN THE SPECIAL PROVISIONS SHALL BE ACCESSED, MODIFIED, REMOVED OR DISTURBED IN ANY MANNER, WITHOUT MAKING SUCH NOTIFICATIONS.

	SUMMARY OF QUANTITIES		
ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201009P	CLEARING SITE, STRUCTURE ( )	LUMP SUM	LUMP SUM
202009P	EXCAVATION, UNCLASSIFIED	CY	144
504015P	CONCRETE FOOTING	CY	42
504003P	REINFORCEMENT STEEL	LBS	2105
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LBS	1205
512012M	OVERHEAD SIGN SUPPORT, STRUCTURE NO. 1	UNIT	1
501003P	TEMPORARY SHEETING	SF	1344



file=\_Design Projects by Route/Route 045/04500901 Rt 45 Main St to Chestnut St MP 9.44 to 22.5/Bridge/SP 85 Overhead Sign Support B24.dgn

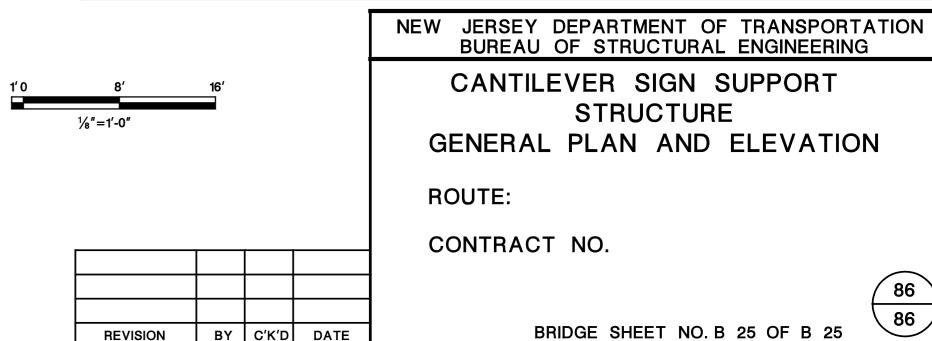
Project Engineer - Structural Transportation

# NOTES:

- 1. For General Notes and Index of Drawings see sheet entitled, "Cantilever Sign Support Structures General Notes and Elevations" (Standard Drawing Plate No. CA-D1). For Quantities, see sheet entitled "Cantilever Sign Support Structures Structure and Foundation Schedules" (Standard Drawing Plate No. CA-D2).
- 2. Top of Pedestals shall be set 4" minimum above the finished ground line.
- 3. The elevation of the bottom of the Tower Shaft Base Plates shall be set at (Anchor Bolt Dia. + 1") above top of Pedestal or top of Barrier Pedestal see sheet entitled, "Cantilever Sign Support Structures Post Base and Foundation Details" (Standard Drawing Plate No. CA-D6).
- 4. The dimensions shown on the Plan are along the Centerline of the Structure.
- 5. For details of Barrier Pedestal, Pedestal and Footing see sheet entitled "Cantilever Sign Support Structures Foundation Details" (Standard Drawing Plate No. CA-D3).
- 6. OSHA proximity rules regarding the Overhead High Voltage Transmission Lines shall be adhered to when using the construction equipment.
- 7. The point at a minimum vertical clearance elevation shall be used to locate the proposed sign structure.
- 8. The highest point of Roadway Elevations is taken from the Field Survey. The Contractor shall verify elevations in the field. Any discrepancies shall be reported to the Design Unit. The Contractor shall get an approval before Sign Support fabrication.
- 9. For Guide Rail, Existing and Proposed Utilities locations and details refer to Roadway Plans.
- 10. The Proposed Sign Support Structure is not relocated. The Contractor shall remove the Existing Footings and Pedestals. Build new Footings and Pedestals as shown on the plan. The cost of removal of the Existing Footings and Pedestals shall be included in "Clearing Site, Structure".
- 11. The Proposed Sign Support Structure is not relocated. The Contractor shall shall remove the Existing Footings and Pedestals. Build new Footings and Pedestals as shown on the plan. The cost of removal of the Existing Footings and Pedestals shall be included in "Clearing Site, Structure".
- 12. The Sign Structure shall receive Lumitrack Lighting System. Refer to Special Provisions for details. Fixtures shall be included in "Sign Lighting Assembly" see Roadway Plans.
- 13. Sign panel hangers shall not be used for supporting Lumitrack Lighting System. Lumitrack Lighting System shall be independently supported by steel truss.

THE CONTRACTOR SHALL COMPLY WITH THE STATE'S UNDERGROUND FACILITY PROTECTION ACT AND NOTIFY THE STATE'S ONE CALL SYSTEM AND IDENTIFY ITSELF AS THE STATE'S CONTRACTOR AND SPECIFY THE ROUTE AND MILEPOST OF THE SIGN STRUCTURE BEFORE PERFORMING WORK ON THE PROJECT. THE ONE CALL SYSTEM CAN BE REACHED BY CALLING 1-800-272-1000. THE CONTRACTOR SHALL ALSO MAKE SEPARATE NOTIFICATIONS TO THE DEPARTMENT'S ELECTRICAL MAINTENANCE AND TRAFFIC OPERATIONS BUREAUS WHERE CONSTRUCTION MAY IMPACT OR BE ADJACENT TO THIER RESPECTIVE EXISTING FACILITIES. NO DEPARTMENT-OWNED FACILITIES AS DESCRIBED IN THE SPECIAL PROVISIONS SHALL BE ACCESSED, MODIFIED, REMOVED OR DISTURBED IN ANY MANNER, WITHOUT MAKING SUCH NOTIFICATIONS.

	SUMMARY OF QUANTITIES		
ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY
201009P	CLEARING SITE, STRUCTURE ( )	LUMP SUM	LUMP SUM
202009P	EXCAVATION, UNCLASSIFIED	CY	76
504015P	CONCRETE FOOTING	CY	20
504003P	REINFORCEMENT STEEL	LBS	1876
504006P	REINFORCEMENT STEEL, EPOXY-COATED	LBS	1330
512003M	CANTILEVER SIGN SUPPORT STRUCTURE NO. 1	UNIT	1
501003P	TEMPORARY SHEETING	SF	685



file=\_Design Projects by Route⁄Route 045⁄04500901 Rt 45 Main St to Chestnut St MP 9.44 to 22.5⁄Bridge∕SP 86 Cantilever Sign Support B25.dgn