STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

JENNIFER COHAN
SECRETARY

VIA WEBSITE POSTING

October 5, 2020

Contract No. T201907601
Federal Aid Project No. EBHN-S014(22)
BR 3-155N&S on SR1 over Broadkill River
Sussex County

Ladies and Gentlemen:

Enclosed is Addendum No. 3 for the referenced contract consisting of the following:

1. The Bid Proposal Cover, revised, to be substituted for the same page of the Proposal.

2. Six (6) pages, General Description, revised, to be substituted for the same pages in the Proposal. Bids Due, OJT Trainees, Completion Time and Disincentives for Construction Phases has been revised.

3. Two (2) pages, Special Provision 401502 - Asphalt Cement Cost Adjustment, **revised**, to be substituted for the same pages in the Proposal.

4. Two (2) pages, Bid Proposal Forms, pages 1 and 2, **revised**, to be substituted for the same pages in the Proposal.

   The following Item Numbers have revised quantities: 803001, 805001, 807004, 810001 813001, 817013 and 817031

5. The following plan sheets have been revised sheets: 1, 3, 36, 37, 38, 157, 165, 174 through 194.

6. The following plan sheets have been added: 181A through 194A.

7. Bid Express Amendment File No. 3, **new**.

Please note the revisions listed above and submit your bid based upon this information.

Sincerely,
~signature on file~
Connie Ivins
Competitively Bid Contracts Coordinator
Delaware Department of Transportation

Addendum No. 3
October 5, 2020

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

BID PROPOSAL

CONTRACT T201907601

BR 3-155N&S ON SR1 OVER BROADKILL RIVER

Federal Aid No. EBHN-S014(22)
CFDA: 20.205

Advertisement Date: August 6, 2020

INCLUDED IN THIS DOCUMENT:

BID PROPOSAL:
GENERAL DESCRIPTION
PROSPECTIVE BIDDERS NOTES
GENERAL NOTICES
PREVAILING WAGES
SPECIAL PROVISIONS
STATEMENTS
QUANTITY SHEET SUMMARY

ADDITIONAL BID PROPOSAL ITEMS:

ATTACHED OR POSTED DOCUMENTS:
PROJECT PLANS
QUESTIONS & ANSWERS (if posted)
GUARDRAIL END-TREATMENT INFO
OJT GUIDELINES

PAPER BIDDERS CONTACT DELDOT FOR BID SUBMITTAL DOCUMENTS:
DRUG TESTING AFFIDAVIT
CERTIFICATION FORM
BID BOND FORM
CD FOR BID PRICE ENTRY & PRINTING

This Bid Proposal and related documents can be viewed on bids.delaware.gov and bidx.com/de/

Internet Bids for Bidders with Bid Express® accounts can be submitted at BIDX.com/de; **OR**;

Paper Bids with CD will be received in the Bidder's Room at the DelDOT Administration Building, Dover, DE; **ALL BIDS DUE PRIOR TO 2:00 P.M. Local Time, ~~September 15~~ October 6, 2020**

GENERAL DESCRIPTION

A. BIDS DUE: **September 15, 2020** **PRIOR TO 2:00 P.M. Local Time** – unless changed via Addendum.
LOCATION: Bidder's Room, DelDOT Administration Building, 800 South Bay Road, Dover, DE 19901.
OR; Bidders with Bid Express® accounts can submit bids at BIDX.com/de.

B. PRE-BID MEETING: No

C. DBE GOAL: 9% Disadvantaged Business Enterprise Percent

D. OJT TRAINEES: Two (2) See Prospective Bidder's Notes and posted OJT Manual for details.

E. LOCATION: Sussex County
These improvements are more specifically shown on the Location Map(s) of the attached Plans.

F. DESCRIPTION: The improvements consist of furnishing all labor and materials for the rehabilitation of BR 3-155N&S. This project involves replacement of the existing concrete deck with a new concrete deck and barriers, replacement of bearings, constructing new bearing pedestals, cleaning and painting of steel members, repair of cracks and spalls in the concrete piers and abutments, replacement of pile jackets, and placement of riprap for scour protection. Some of the additional work includes minor approach roadway reconstruction. The crossovers will be constructed prior to the project.

G. COMPLETION TIME: All work on this contract must be complete within ~~521~~ 214 Calendar Days.
The Contract Time includes an allowance for ~~94~~ 38 Weather Days.
The Department's intent is to issue a Notice to Proceed for work to start on or ~~about October 1, 2020~~ before October 1, 2021 with a limited NTP to be issued for material procurement on or before March 1, 2021.

H. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DELAWARE DEPARTMENT OF TRANSPORTATION, AUGUST 2016 apply to this Bid Proposal and Project. The Contractor shall make himself aware of any revisions and corrections (Supplemental Specifications, if any) and apply them to the applicable item(s) of this contract. The Standard and Supplemental Specifications can be viewed here. Units of Measure can be found at 101.04.

I. ATTACHMENTS: Included as part of this Bid Proposal are; *Project Plans*; *Questions & Answers* (if posted); *Addenda, Referenced Documents, Documents Posted with this Bid Proposal*; and *Bid documents mailed to contractors.*

J. ADDENDA: All Addenda are posted on the internet at bids.delaware.gov, and bidx.com/de/ and are included as part of the Bid Proposal. The Bidder is responsible to check the Website as needed to ensure that the Bidder is aware of Addenda that are included in the Bid Proposal. If Addenda are issued, the final Addendum will be posted no later than the end of the day two business days prior to the bid date. Each Addendum number and issue date must be entered on the submitted Certification Form. This original Bid Proposal will not be updated, you must refer to each Addendum.

K. QUESTIONS: E-MAIL TO; **dot-ask@delaware.gov**
Questions regarding this project are to be e-mailed to the above address no less than **six business days** prior to the bid opening date in order to receive a posted response. Please include the Contract number in the subject line. Questions and responses are posted at bids.delaware.gov, and bidx.com/de/. The date of the final posted Questions and Answers document must be entered on the submitted Certification Form.

L. Time is of the essence and is an essential element of this Contract. The Contract Drawings and notes provide a sequence of construction for this Contract. Several temporary traffic conditions shown on the Plans and listed below will result in significant congestion, delay, and/or operational constraints to the traveling public.

1. Disincentives for Construction Phases

The Maintenance of Traffic (MOT) shown on the plans for Phases 1 and 3 of this contract will result in significant congestion, delay, and/or operational constraints to the traveling public. For each Phase, a number of Calendar Days allotted time are indicated. Disincentives in the amount of Twelve Thousand Dollars ($12,000.00) per Calendar Day will be assessed for each Calendar Day the MOT is in place in excess of the number of Calendar Days indicated for that Phase. The amount of disincentives shall be deducted from any money due the Contractor, not as a penalty, but as a Liquidated Damage assessed to recover the cost of inconvenience to the public, the added cost of engineering and supervision, and the other extra expenditures of public funds caused by the Contractor's failure to complete the Work within an allotted time. Damages in excess of any monies due or retained percentage shall be paid to the Department by the Contractor.

~~i. Phase 1 – Contraflow on the Existing Northbound Bridge [Starting no earlier than January 4, 2021 and finishing no later than March 11, 2021 (67 Calendar Days Allotted Time including 23 weather days)] – A lane reduction approaching the work area is required in each direction and southbound traffic will be crossed over to the northbound roadway (i.e. contraflow) using the temporary crossovers. The traffic control devices present in Phase 1 that implement the lane reductions and contraflow movement must be removed and two travel lanes must be restored in each direction of SR 1 as shown on the Phase 2 plans.~~

~~ii. Phase 3 – Contraflow on the Existing Southbound Bridge [Starting no earlier than October 6, 2021 and finishing no later than December 9, 2021 (65 Calendar Days Allotted Time including 10 weather days)] – A lane reduction approaching the work area is required in each direction and northbound traffic will be crossed over to the southbound roadway (i.e. contraflow) using the temporary crossovers. The traffic control devices present in Phase 3 that implement the lane reductions and contraflow movement must be removed and two travel lanes must be restored in each direction of SR 1 as shown on the Phase 4 plans.~~

i. Phase 1 and Phase 3 – Contraflow on the Existing Northbound and Southbound Bridges [Starting no earlier than October 04, 2021 and finishing no later than March 7, 2022 (154 Calendar Days Allotted Time including 29 weather days)] – A lane reduction approaching the work area is required in each direction. Southbound traffic will be crossed over to the northbound roadway (i.e. contraflow) during Phase 1 and northbound traffic will be crossed over the to the southbound roadway during Phase 3 using the temporary crossovers. The traffic control devices present in Phases 1 and 3 that implement the lane reductions and contraflow movements must be removed and two travel lanes must be restored in each direction of SR 1 as shown on the Phase 4 plans.

2. Updates and Other General Conditions

1. In order to minimize disruption and cost to the traveling public, the Contractor shall give his/her full attention to the project, such that work will be completed as soon as possible after “Notice to Proceed”.
2. The Disincentives specified in Paragraph A above do not alter or replace the liquidated damages as specified in Standard Specification Subsection 108.08 “Failure to Complete on Time”. Once the Contract Completion Date has been reached, liquidated damages will be assessed on the Contract as a whole.
3. The completeness of work shall be determined solely by the Engineer.
4. Calendar Days for the Disincentive shall be defined as the 24 hour period starting at the time the MOT measures (impacting traffic) are implemented for the Construction Phase. For example, if the MOT measures are implemented at 8:00 p.m., one Calendar Day will be reached by 8:00 p.m. the following day.
5. The Contractor may propose a different sequence of construction or modified construction phasing / MOT plan that does not exactly match the construction phasing / MOT shown on the plans. As part of the approval process, the Engineer shall impose similar Calendar Day restrictions on the modified construction phasing / MOT as appropriate. The Engineer may reject the Contractor’s modified construction phasing / MOT plan for any reason. The Contractor shall have no claim against the Department for costs or delays due to the Department’s rejection of a modified construction phasing / MOT plan, including, but not limited to, development costs, loss of anticipated profits, increased material cost, or increased labor costs.

6. In the event that contract changes affect the critical path for all work to be performed under the original proposal, contract time will be shortened or lengthened based on the Engineer's approval. The Engineer shall be the sole judge as to what and whether a time reduction or extension shall be considered justifiable and each extension granted shall be documented in writing by the Engineer with reason for the extension. The Contractor is advised that in order to complete the work on or before the number of calendar days permitted by the contract, it may be necessary to provide multiple crews, work extended hours, overtime, and/or weekends and holidays without additional cost to the Department.

3. Definition of Phase 1 and Phase 3 Work

Phase 1 – Southbound Bridge

1. Removing portions of the bridge as shown on the Plans.
2. Constructing new concrete bearing pedestals.
3. Erecting the new superstructure and constructing the longitudinal closure pours and transverse expansion joint and link slabs.
4. Constructing the new shear blocks, backwalls, and cheekwalls.
5. Constructing the sleeper slabs and approach slabs.
6. Constructing the deck overs.
7. Constructing the cast-in-place portions of the parapets.
8. Diamond grinding the bridge deck and approach slabs.
9. Constructing the PPC overlay.
10. Removal of Phase 1 temporary traffic control devices. Installation of Phase ~~2~~ 3 temporary traffic control devices and opening the roadway to traffic as shown on the Phase ~~2~~ 3 plans.

Phase 3 – Northbound Bridge

1. Removing portions of the bridge as shown on the Plans.
2. Constructing new concrete bearing pedestals.
3. Erecting the new superstructure and constructing the longitudinal closure pours and transverse expansion joint and link slabs.
4. Constructing the new shear blocks, backwalls, and cheekwalls.
5. Constructing the sleeper slabs and approach slabs.
6. Constructing the deck overs.
7. Constructing the cast-in-place portions of the parapets.
8. Diamond grinding the bridge deck and approach slabs.
9. Constructing the PPC overlay.
10. Removal of Phase 3 temporary traffic control devices. Installation of Phase 4 temporary traffic control devices and opening the roadway to traffic as shown on the Phase 4 plans.

4. Additional Disincentive Provisions

Disincentives for Lane Closures

The Contract permits the closure of SR 1 lanes to perform construction. Interim Road User Cost (RUC) disincentives for delays in opening lanes along SR 1 NB and SB will be enforced according to the tables below. RUC disincentives for lane closures will not be assessed during Phases 1 and 3 with 24/7 long term lane closures on SR 1 are permitted in conjunction with the contraflow operations.

Table 1a – Liquidated Damages for Failure to Reopen a Lane (AM)

Time All Lanes Reopened ("Verizon Time")	Single Lane Closure
6:00 AM to 6:14 AM	$300.00
6:15 AM to 6:29 AM	$600.00
6:30 AM to 6:44 AM	$900.00
6:45 AM to 6:59 AM	$1,200.00
7:00 AM to 7:14 AM	$1,500.00
7:15 AM to 7:29 AM	$1,800.00
7:30 AM to 7:44 AM	$2,100.00
7:45 AM to 7:59 AM	$2,400.00
8:00 AM to 8:14 AM	$2,700.00
8:15 AM to 8:29 AM	$3,000.00
8:30 AM to 8:44 AM	$3,300.00
8:45 AM to 8:59 AM	$3,600.00

For every hour, or portion thereof that a lane remains closed after 8:59 AM, $1,200.00 will be assessed up to a **one day total of $7,200.00**.

Table 1b – Liquidated Damages for Failure to Reopen a Lane (PM)

Time All Lanes Reopened ("Verizon Time")	Single Lane Closure
3:00 PM to 3:14 PM	$300.00
3:15 PM to 3:29 PM	$600.00
3:30 PM to 3:44 PM	$900.00
3:45 PM to 3:59 PM	$1,200.00
4:00 PM to 4:14 PM	$1,500.00
4:15 PM to 4:29 PM	$1,800.00
4:30 PM to 4:44 PM	$2,100.00
4:45 PM to 4:59 PM	$2,400.00
5:00 PM to 5:14 PM	$2,700.00
5:15 PM to 5:29 PM	$3,000.00
5:30 PM to 5:44 PM	$3,300.00
5:45 PM to 5:59 PM	$3,600.00
6:00 PM to 6:14 PM	$3,900.00
6:15 PM to 6:29 PM	$4,200.00
6:30 PM to 6:44 PM	$4,500.00
6:45 PM to 6:59 PM	$4,800.00

For every hour, or portion thereof that a lane remains closed after 6:59 PM, $1,200.00 will be assessed up to a **one day total of $7,200.00**.

Disincentives for Roadway Closures and Detours

The Contract permits the closure and detour of SR 1 NB and SB to perform bridge construction. Interim Road User Cost (RUC) disincentives for delays in opening the roadway following a roadway closure and detour along SR 1 NB and SB will be enforced according to the table below:

Table 2 – Liquidated Damages for Failure to Reopen the Roadway

Time All Lanes Reopened ("Verizon Time")	Road Closure
6:00 AM to 6:14 AM	$2,500.00
6:15 AM to 6:29 AM	$5,000.00
6:30 AM to 6:44 AM	$7,500.00
6:45 AM to 6:59 AM	$10,000.00
7:00 AM to 7:14 AM	$15,000.00
7:15 AM to 7:29 AM	$20,000.00
7:30 AM to 7:44 AM	$25,000.00
7:45 AM to 7:59 AM	$30,000.00
8:00 AM to 8:14 AM	$34,500.00
8:15 AM to 8:29 AM	$39,000.00
8:30 AM to 8:44 AM	$43,500.00
8:45 AM to 8:59 AM	$48,000.00
Not Open by 9:59 AM	$68,000.00

For every hour, or portion thereof that a direction of the roadway remains closed after 9:59 AM, $20,000.00 will be assessed up to a **one day total of $100,000.00**.

Assessment of Road User Costs (RUCs) and Liquidated Damages will be made by change order. There is no limit on the number of hours or days that RUCs can be assessed. The Engineer will be the sole approving authority as to when road closures, lane closures, lane width restrictions, and shoulder width restrictions are complete after traffic is returned to the ultimate alignment. The Contractor will be assessed the RUCs for failure to open the roadway on time per the Contract.

5. Additional Notes

Liquidated Damages from these notices shall be combined when multiple requirements are not met. For example, if SR 1 remains in contraflow beyond the number of calendar days permitted by the Contract and a lane closure extends beyond the allowable closure time, liquidated damages from both infractions will be added together and deducted from any monies due to the Contractor as a cumulative liquidated damage.

M. PROSPECTIVE BIDDERS NOTES:

1. **BIDDERS MUST BE REGISTERED** with DelDOT in order to submit a bid. E-Mail dot-ask@delaware.gov or call (302) 760-2031 to request registration information.
2. **BIDS MUST BE SUBMITTED VIA**:

   (a) Internet - Bidders with Bid Express® accounts can submit bids at www.bidx.com/de/.

   OR:

   (b) Paper Bid with supplied CD and printout of Bid Item prices and all required documents and forms.

   For paper bids, contact DelDOT at dot-ask@delaware.gov or (302) 760-2031 to request a CD for bidding, required forms, and instructions. Bidders enter their Bid Item prices onto the supplied CD then print the form and submit the form along with the CD and other required documents prior to the Bid due date and time.
   (CD's cannot be used to submit bids to bidx.com)

   Do not submit both Internet and Paper Bids. *If so, the Internet bid will be rejected.*

3. **SURETY BOND** - Each proposal must be accompanied by a deposit of either surety bond or security for a sum equal to at least 10% of the amount bid.

4. **DRUG TESTING** - Regulation 4104; The state Office of Management and Budget has developed regulations that require Contractors and Subcontractors to implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds pursuant to 29 Del.C. §6908(a)(6). **Refer to the full requirements at the following link:**
http://regulations.delaware.gov/register/december2017/final/21%20DE%20Reg%20503%2012-01-17.htm
Note a few of the requirements;
   * At bid submission - Each bidder must submit with the bid a single signed affidavit certifying that the bidder and its subcontractors has in place or will implement during the entire term of the contract a Mandatory Drug Testing Program that complies with the regulation (*a blank affidavit form is attached)*;
   * At least two business days prior to contract execution - The awarded Contractor shall provide to DelDOT copies of the Employee Drug Testing Program for the Contractor, each participating DBE firm, and all other listed Subcontractors;
   * Subcontractors - Contractors that employ Subcontractors on the job site may do so only after submitting a copy of the Subcontractor's Employee Drug Testing Program along with the standard required subcontractor information. A Subcontractor shall not commence work until **DelDOT** has approved the program in writing.

5. **PERFORMANCE-BASED RATING SYSTEM** - 29 Del.C. §6962 (c)(12)(a) requires DelDOT to include a performance-based rating system for contractors. The Performance Rating for each Contractor shall be used as a prequalification to bid at the time of bid. Refer to *'General Notices'* for details.

6. **NO RETAINAGE** will be withheld on this contract unless through the Performance-Based Rating System.

7. **EXTERNAL COMPLAINT PROCEDURE** can be viewed on DelDOT's Website, https://deldot.gov/Business/cr/index.shtml?dc=civil_rights_eeo or request a copy by calling (302) 760-2555.

8. **DBE PROGRAM REQUIREMENTS** (49CFR §26.53(b)(3)(i)(B)) require submission of DBE participation information from the apparent low bidder no later than five (5) calendar days after bid opening,

9. **FLATWORK CONCRETE** TECHNICIAN CERTIFICATION TRAINING:
Section 501.03, 503.03, 505.03, 610.03, 701.03 and 702.03 of the 2016 Standard Specifications require contractors to provide an American Concrete Institute (ACI) or National Ready-Mix Concrete Association (NRMCA) certified concrete flatwork technician to supervise all finishing of flatwork concrete.

10. On The Job Trainee(s). The program(s) must be submitted online as soon as possible by the apparent low bidder at https://deldotojt.com. Award of the Contract will not take place until acceptable On-the-Job (OJT) program plans are received and approved by the Department's Civil Rights Section. Failure of the apparent low bidder to submit acceptable OJT Trainee Programs within ten (10) calendar days of bid opening shall create a rebuttable presumption that the bid is not responsive.

- end –

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Contract No. T201907601

401502 - ASPHALT CEMENT COST ADJUSTMENT

For Sections 304, 401, 402, 403, 404, and 405, payments to the Contractor shall be adjusted to reflect increases or decreases in the Delaware Posted Asphalt Cement Price when compared to the Project Asphalt Cement Base Price, as defined in these Special Provisions.

The Delaware Posted Asphalt Cement Price will be issued monthly by the Department and will be the industry posted price for Asphalt Cement, F.O.B. Philadelphia, Pennsylvania. The link for the posting is https://deldot.gov/Business/bids/index.shtml?dc=asphalt_cement_english.

The Project Asphalt Cement Base Price will be the Delaware Posted Asphalt Cement Price in effect on the date of advertisement.

All deviations of the Delaware Posted Asphalt Cement Price from the Project Asphalt Cement Base Price are eligible for cost adjustment. No minimum increases or decreases or corresponding percentages are required to qualify for cost adjustment.

Actual quantity of asphalt cement qualifying for any Asphalt Cement Cost Adjustment will be computed using the weight of eligible asphalt that is shown on the QA/QC pay sheets as a percentage for the delivered material.

If the mix was not inspected and no QA/QC pay sheet was generated, then the asphalt percentage will be obtained from the job mix formula for that mix ID.

The asphalt percentage eligible for cost adjustment shall only be the virgin asphalt cement added to the mix.

There shall be no separate payment per ton cost of asphalt cement. That cost shall be included in the various unit prices bid per ton for those bid items that contain asphalt cement (mentioned above).

The Asphalt cement cost adjustment will be calculated on grade PG 64-22 asphalt regardless of the actual grade of asphalt used. The Project Asphalt Cement Base Price per ton for the project will be the Delaware Posted Asphalt Cement Price in effect on the date of project advertisement.

Contract No. T201907601

If the Contractor exceeds the authorized allotted completion time, the price of asphalt cement on the last authorized allotted work day, shall be the prices used for cost adjustment during the time liquidated damages are assessed. However, if the industry posted price for asphalt cement goes down, the asphalt-cement cost shall be adjusted downward accordingly.

NOTE:

Application of Asphalt Cement Cost Adjustment requirements as indicated above shall apply only to those contracts involving items related to bituminous base and pavements, and with bitumen, having a total of 1,000 tons or more of hot-mix bid quantity in case of Sections 401, 402 and 403; and 15,000 gallons or more in case of Sections 304, 404 and 405.

9/16/2020

DelDOT

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T201907601

Project Descripton: BR 3-155N&S on SR1 over Broadkill River

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
763508	PROJECT CONTROL SYSTEM DEVELOPMENT PLAN	LS	1
763509	CPM SCHEDULE UPDATES AND/OR REVISED UPDATES	EAMO	12
763599	FIELD OFFICE, SPECIAL II	EAMO	12
801000	MAINTENANCE OF TRAFFIC	LS	1
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	EADY	180
804001	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY (FLOOD LIGHTS)	EADY	110
805001	PLASTIC DRUMS	EADY	30000
806001	TRAFFIC OFFICERS	HOUR	500
807001	FURNISH AND INSTALL TEMPORARY PORTLAND CEMENT CONCRETE SAFETY BARRIER, UNPINNED	LF	4200
807004	RELOCATE TEMPORARY PORTLAND CEMENT CONCRETE SAFETY BARRIER, UNPINNED	LF	175
807007	REFLECTOR PANELS	EACH	110
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	EADY	200
809001	INSTALL TEMPORARY IMPACT ATTENUATOR	EACH	3
809005	FURNISH TEMPORARY IMPACT ATTENUATOR - NON-GATING, REDIRECTIVE, TEST LEVEL 3	EACH	3
810001	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	10000
720015	BRIDGE RAIL RETROFIT, TYPE 2	LF	40

This page is for information only. Do not use this page to submit a Bid.

DelDOT

Delaware Department of Transportation
Quantity Sheet Summary

Proposal ID: T201907601

Project Descripton: BR 3-155N&S on SR1 over Broadkill River

NOT TO BE USED FOR BIDDING

Item Number	Description	Unit	Quantity
610016	PORTLAND CEMENT CONCRETE MASONRY, CLASS D	CY	44
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	EACH	4
824001	BARRIER MOUNTED DELINEATOR	EACH	16
813001	TEMPORARY BARRICADES, TYPE III	LFDY	11000
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	SF	300
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	SF	275
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	88500
817018	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, BLACK, 3"`	LF	800
817027	RAISED/RECESSED PAVEMENT MARKER	EACH	160
817031	REMOVAL OF PAVEMENT STRIPING	SF	31000
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	EACH	77
819019	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS	SF	169
830002	CONDUIT JUNCTION WELL, TYPE 4, 20" X 42-1/2" PRECAST CONCRETE	EACH	16
830004	CONDUIT JUNCTION WELL, TYPE 7, 36" X 60" PRECAST POLYMER CONCRETE	EACH	4
831002	FURNISH AND INSTALL UP TO 4" SCEDULE 80 HDPE CONDUIT (BORE)	LF	300
721001	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	EACH	4
201000	CLEARING AND GRUBBING	LS	1

This page is for information only. Do not use this page to submit a Bid.

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

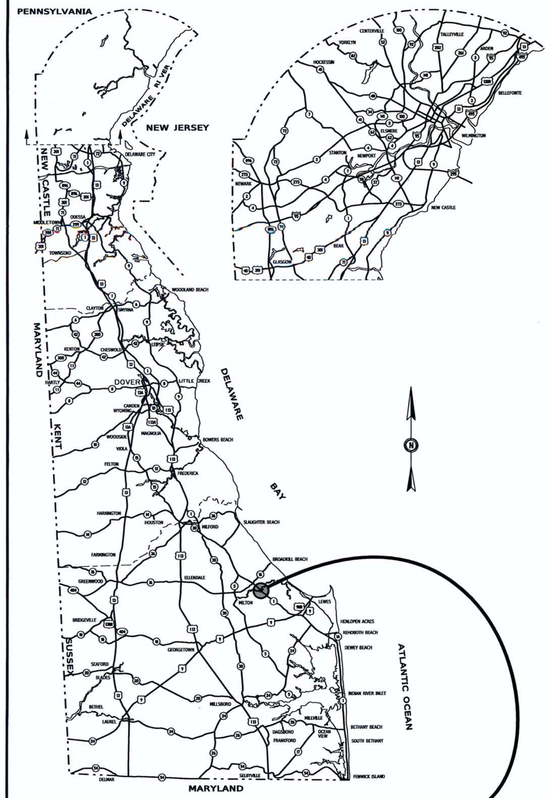
CONSTRUCTION PLANS FOR:

BR 3-155N&S ON SR1 OVER BROADKILL RIVER

CONTRACT NUMBER: T201907601

FEDERAL AID PROJECT NUMBER: EBHN-S014(22)

COUNTY: SUSSEX **M.R. #:** 14



GENERAL LOCATION OF CONTRACT

DESIGN DESIGNATION

MRD #: 14	ROAD NAME: SR 1 - COASTAL HIGHWAY		
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 4,459	YEAR: 2050
TYPE OF CONSTRUCTION: BRIDGE REHABILITATION		DESIGN SPEED: 55 M.P.H.	
A.A.D.T. CURRENT: 32,329	YEAR: 2018	TRUCKS: 6 %	
A.A.D.T. PROJECTED: 44,591	YEAR: 2050	DIRECTION OF DISTRIBUTION: 50 %	

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA / REVISIONS

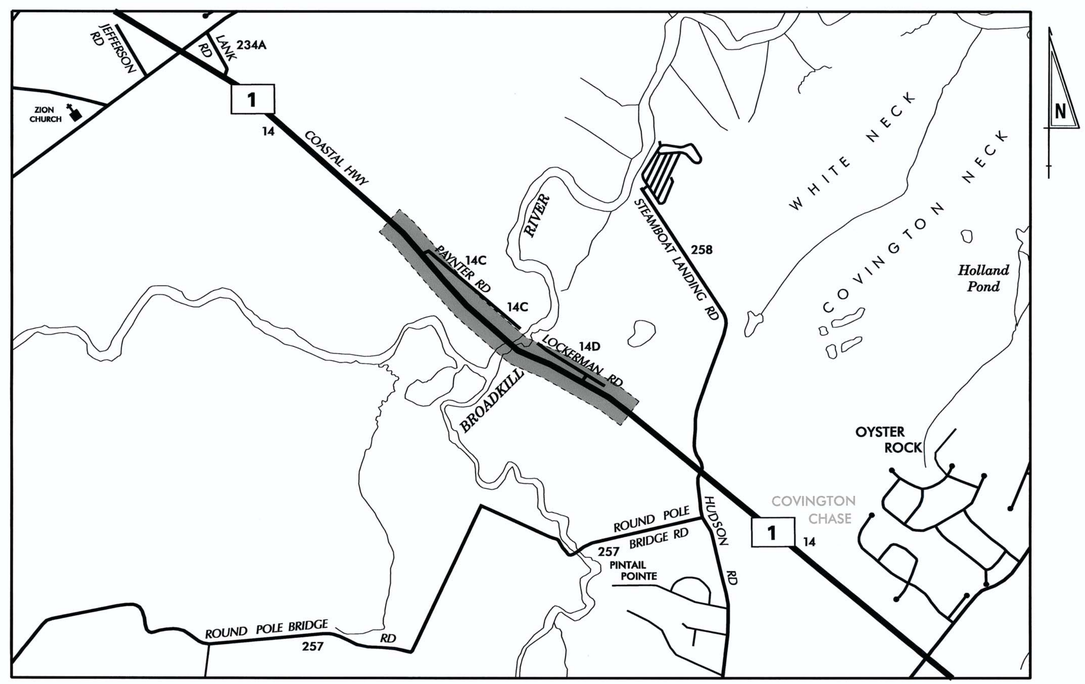
ADDENDUM 3 — F. OPHARDT 09/16/2020

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
352	REHOBOTH ROAD TO BROADKILL BEACH
1151	SR 1 (ROAD 14), FIVE POINTS TO ROAD 38
65-010-02	SR 1 (ROAD 14), NASSAU TO SR 16 (PAVING)
68-030-01	SR 1 (ROAD 14), SR 16 TO MILFORD BYPASS
89-076-04	BRIDGE 155N, 155S, AND 725 ON SR 1
21-076-04	BRIDGE 155 AND BRIDGE 725 DECK PRESERVATION

APPROVED FOR ADVERTISEMENT

DIRECTOR OF TRANSPORTATION SOLUTIONS — DATE: 05/26/2020



LOCATION MAP
SCALE: NONE

PREPARED BY
Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915
3/12/20 — DATE
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "WRA" SECTION DESIGNATION.
WILLIAM A. GESCHWEI LICENSE No. 15578 DELAWARE PROFESSIONAL ENGINEER — SEAL

PREPARED BY
RJM ENGINEERING
6031 University Blvd, Ellicott City, Maryland 21043
03/12/2020 — DATE
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "RJM" SECTION DESIGNATION.
WEIWEI JIA LICENSE No. 19452 DELAWARE PROFESSIONAL ENGINEER — SEAL

PREPARED BY
TOTAL CONTROL SYSTEMS
3/11/2020 — DATE
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "TCS" SECTION DESIGNATION.
JEFFREY C. MARCHETTI LICENSE No. 24147 DELAWARE PROFESSIONAL ENGINEER — SEAL

LAST REVISED: 11/26/2018
3/9/2020
11:15:13 AM
N:\32122-003\CADD\TC01_SR18.dgn

ADDENDUM PREPARED BY

WRA Whitman, Requardt and Associates, LLP
Engineers • Architects • Environmental Planners Est. 1915

09/16/2020
DATE

THIS SEAL APPLIES TO THE FOLLOWING SHEETS CHANGED UNDER ADDENDUM #3:
36, 37, 38, 165, 174, 175, 176, 177, 178, 179, 180, 181, 181A, 182, 182A, 183, 183A, 184, 184A, 185, 185A, 186, 186A, 187, 187A, 188, 188A, 189, 189A, 190, 190A, 191, 191A, 192, 192A, 193, 193A, 194, 194A

WILLIAM A. GESCHREI
LICENSE
No. 15576
DELAWARE
PROFESSIONAL ENGINEER

SEAL

ADDENDUM PREPARED BY

TCS TOTAL CONTROL SYSTEMS

09/16/2020
DATE

THIS SEAL APPLIES TO THE FOLLOWING SHEETS CHANGED UNDER ADDENDUM #3:
157

JEFFREY C. MARCHETTI
LICENSE
No. 24147
DELAWARE
PROFESSIONAL ENGINEER

SEAL

AR-01

ADDENDA / REVISIONS		
3 ADDENDUM 3	F. OPHARDT 09/16/2020	

NOT TO SCALE

BR 3-155 N&S ON SR 1
OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	BR-155N&S
T201907601	DESIGNED BY: S. BEALL	
COUNTY	CHECKED BY: T. OLIVER	
SUSSEX		

ADDENDA AND REVISIONS

SECTION
WRA
SHEET NO.
3

9/17/2020
9:37:01 AM
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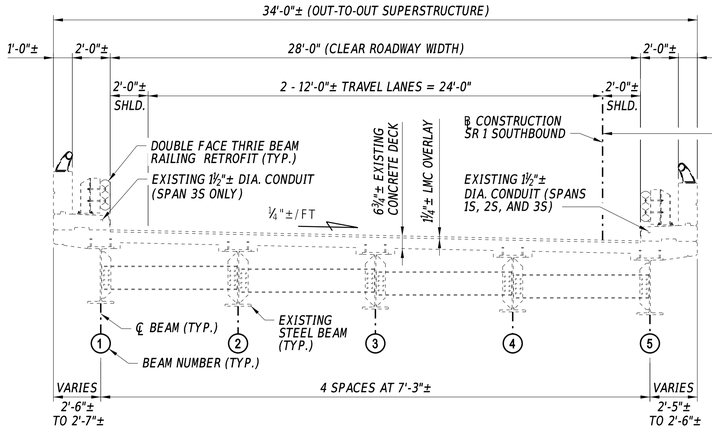
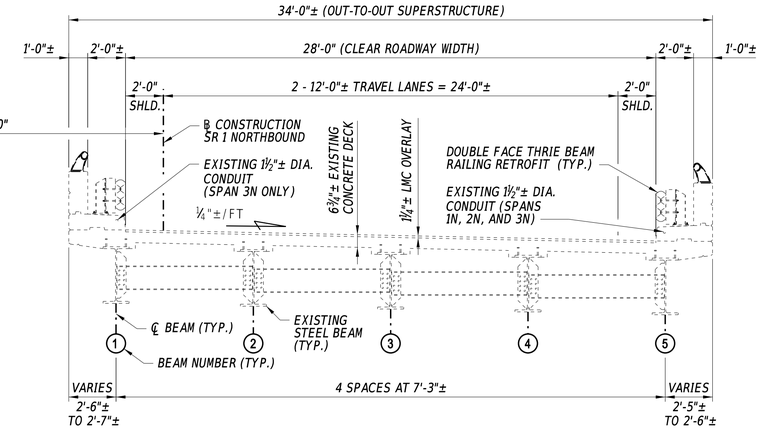


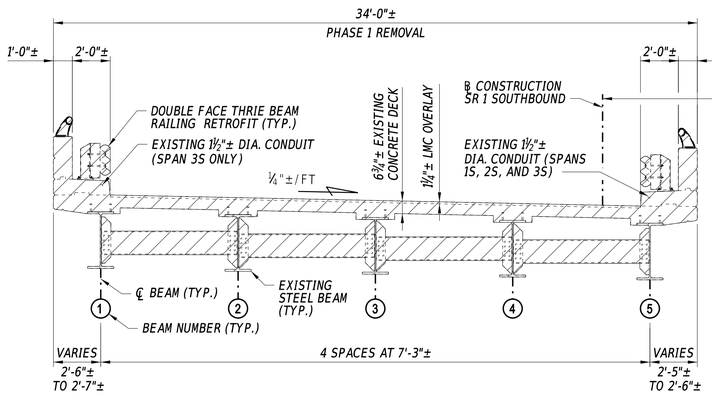
BR. 3-155S



BR. 3-155N

EXISTING TYPICAL SECTIONS

1/4" = 1'-0"



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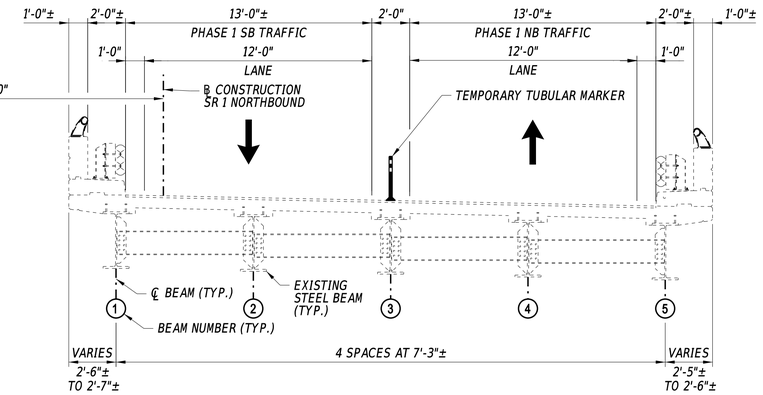
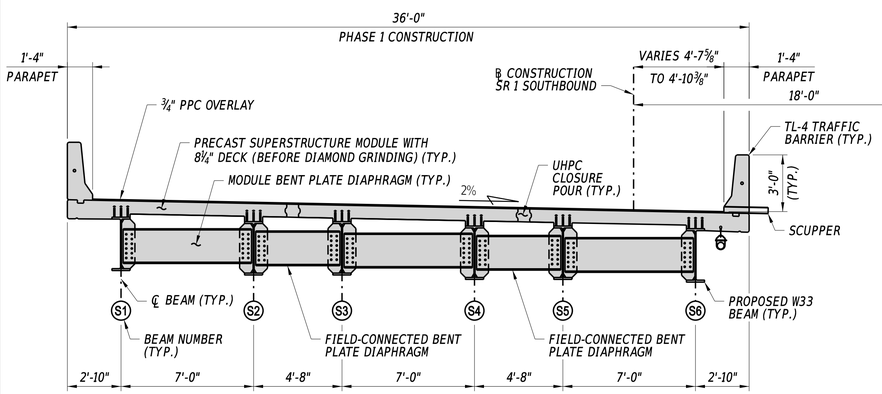


BR. 3-155N

PHASE 1 - REMOVAL

1/4" = 1'-0"



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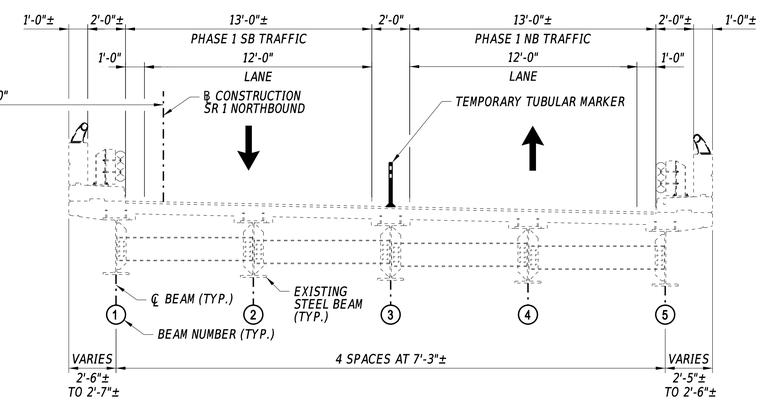

BR. 3-155N

PHASE 1 - CONSTRUCTION

1/4" = 1'-0"

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 1

1. INSTALL TEMPORARY PROTECTIVE SHIELDS (BRIDGE 3-155S). THIS MAY OCCUR PRIOR TO CLOSURE OF THE SOUTHBOUND ROADWAY.
2. INSTALL TEMPORARY NAVIGATIONAL LIGHTING UNTIL SPAN 3S IS REMOVED (BRIDGE 3-155S).
3. REMOVE EXISTING TRAFFIC BARRIERS, CONCRETE DECK, STEEL SUPERSTRUCTURE, BEARINGS, CONCRETE BEARING PEDESTALS, APPROACH SLABS, ABUTMENT BACKWALLS AND CHEEKWALLS, AND PARTIAL REMOVAL OF WING WALLS (BRIDGE 3-155S).
4. CONSTRUCT NEW CONCRETE BEARING PEDESTALS (BRIDGE 3-155S).
5. ERECT THE SUPERSTRUCTURE MODULES AND INSTALL THE FIELD-CONNECTED DIAPHRAGMS. REINSTALL TEMPORARY NAVIGATIONAL LIGHTS UPON THE ERECTION OF THE SPAN 3S MODULES (BRIDGE 3-155S).
6. CONSTRUCT THE LONGITUDINAL UHPC CLOSURE POURS. CONSTRUCT THE LINK SLABS AND EXPANSION JOINTS AFTER THE ADJACENT LONGITUDINAL UHPC CLOSURE POUR REACHES A COMPRESSIVE STRENGTH OF 14 KSI (BRIDGE 3-155S).
7. CONSTRUCT THE CAST-IN-PLACE SHEAR BLOCKS AT THE PIERS AND THE ABUTMENT BACKWALLS AND CHEEKWALLS (BRIDGE 3-155S).
8. BACKFILL BEHIND THE ABUTMENTS, INSTALL THE PRECAST PORTIONS OF THE SLEEPER SLABS, AND CONSTRUCT THE CAST-IN-PLACE PORTION OF THE SLEEPER SLABS (BRIDGE 3-155S).
9. INSTALL THE PRECAST PORTIONS OF THE APPROACH SLABS AND CONSTRUCT THE CAST-IN-PLACE PORTION OF THE APPROACH SLABS (BRIDGE 3-155S).
10. CONSTRUCT THE CAST-IN-PLACE DECK OVERS (BRIDGE 3-155S).
11. DIAMOND GRIND THE DECK AND APPROACH SLAB SURFACES (BRIDGE 3-155S).
12. CONSTRUCT THE PPC OVERLAY (BRIDGE 3-155S).
13. APPLY SILICONE-BASED ACRYLIC CONCRETE SEALER TO THE PARAPETS (BRIDGE 3-155S) .

STEPS A THRU E BELOW CAN BE PERFORMED CONCURRENTLY WITH OTHER STEPS.

A. INSTALL THE TEMPORARY PROTECTIVE SHIELD SYSTEM (BRIDGE 3-155N). REMOVE THE TEMPORARY PROTECTION SHIELD SYSTEM (BRIDGE 3-155S).

B. PERFORM SUBSTRUCTURE CONCRETE REPAIRS AND REPLACE PILE PROTECTIVE JACKETS. APPLY EPOXY CONCRETE SEALER AND SILICONE-BASED ACRYLIC CONCRETE SEALER TO THE SUBSTRUCTURE UNITS (BOTH BRIDGES).

C. REMOVE AND REPLACE THE EXISTING SLOPE PROTECTION (BOTH BRIDGES).

D. INSTALLATION OF THE PERMANENT NAVIGATIONAL LIGHTING SYSTEM (BRIDGE 3-155S).

E. INSTALLATION OF THE ITMS CONDUIT (BRIDGE 3-155S).

NOTES:

3 ~~1. FOR PHASE 2 SUGGESTED SEQUENCE OF CONSTRUCTION, SEE DWG. SC-02.~~

2. FOR PHASE 3 REMOVAL AND CONSTRUCTION, SEE DWG. SC-02.
3. FOR PHASE 3 SUGGESTED SEQUENCE OF CONSTRUCTION, SEE DWG. SC-02.

LEGEND:

LIMITS OF REMOVAL

PROPOSED CONSTRUCTION

ADDENDA / REVISIONS		
3	REMOVED NOTE	F. OPHARDT 9/16/2020

SCALE AS NOTED

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N&S
T201907601	DESIGNED BY: F. OPHARDT	
COUNTY		
SUSSEX	CHECKED BY: W. GESCHREI	

SEQUENCE OF CONSTRUCTION - 1

SC-01
SECTION
WRA
SHEET NO.
36

9/16/2020
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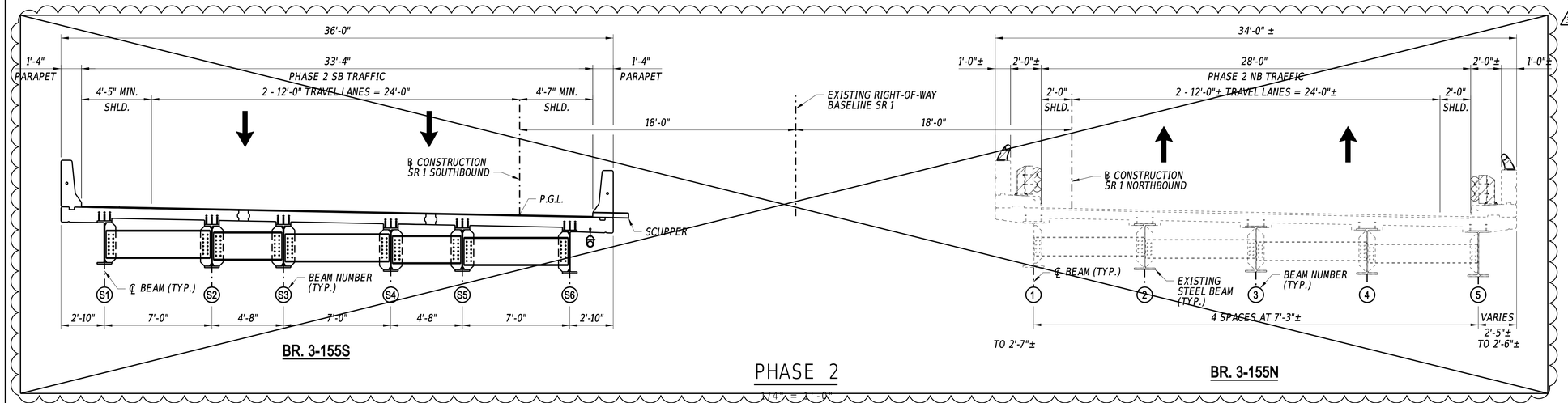
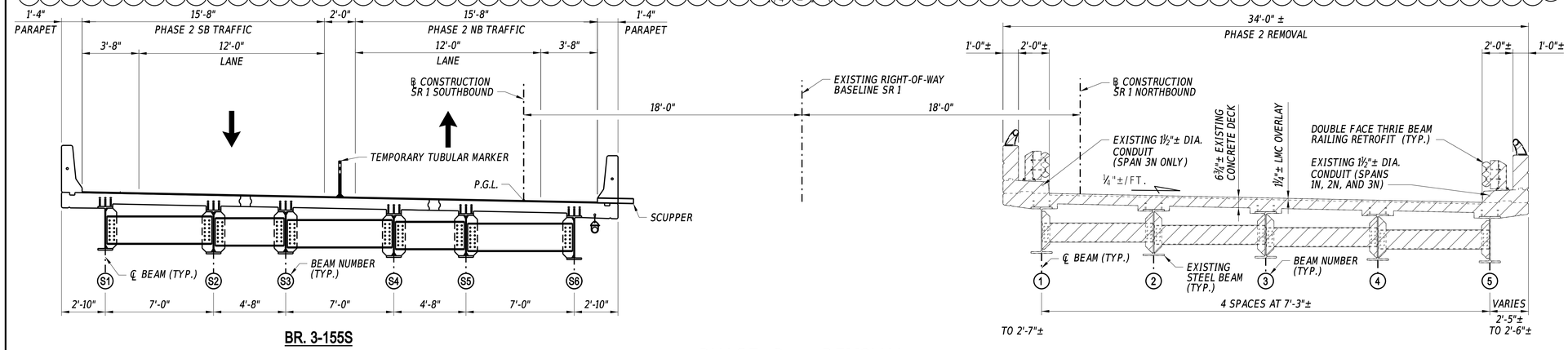


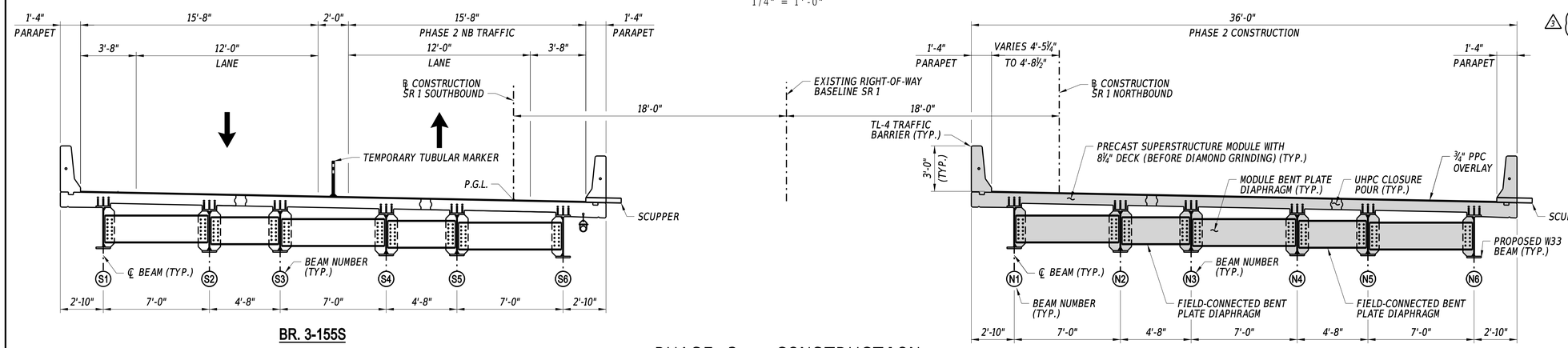
PHASE 2

1/4" = 1'-0"



PHASE 3 - REMOVAL

1/4" = 1'-0"



PHASE 3 - CONSTRUCTION

1/4" = 1'-0"

SUGGESTED SEQUENCE OF CONSTRUCTION:

PHASE 2

STEPS A THRU F BELOW CAN BE PERFORMED CONCURRENTLY. ANY WORK SCHEDULED SHALL COMPLY WITH THE CONSTRUCTION RESTRICTIONS NOTED ON DWG. EC-01.

A. INSTALL THE TEMPORARY PROTECTION SHIELD SYSTEM (BRIDGE 3-155N).

B. PERFORM SUBSTRUCTURE CONCRETE REPAIRS AND REPLACE PILE PROTECTIVE JACKETS (BOTH BRIDGES).

C. REMOVE AND REPLACE THE EXISTING SLOPE PROTECTION (BOTH BRIDGES).

D. INSTALLATION OF THE PERMANENT NAVIGATIONAL LIGHTING SYSTEM (BRIDGE 3-155S).

E. INSTALLATION OF THE TEMPORARY NAVIGATIONAL LIGHTING SYSTEM (BRIDGE 3-155N).

F. INSTALLATION OF THE ITMS CONDUIT (BRIDGE 3-155S).

PHASE 3

1. INSTALL TEMPORARY NAVIGATIONAL LIGHTING UNTIL SPAN 3N IS REMOVED (BRIDGE 3-155N).
2. REMOVE EXISTING TRAFFIC BARRIERS, CONCRETE DECK, STEEL SUPERSTRUCTURE, BEARINGS, CONCRETE BEARING PEDESTALS, APPROACH SLABS, ABUTMENT BACKWALLS AND CHEEKWALLS, AND PARTIAL REMOVAL OF WING WALLS (BRIDGE 3-155N).
3. CONSTRUCT NEW CONCRETE BEARING PEDESTALS (BRIDGE 3-155N).
4. ERECT THE SUPERSTRUCTURE MODULES AND INSTALL THE FIELD-CONNECTED DIAPHRAGMS. REINSTALL TEMPORARY NAVIGATIONAL LIGHTS UPON ERECTION OF THE SPAN 3N MODULES (BRIDGE 3-155N).
5. CONSTRUCT THE LONGITUDINAL UHPC CLOSURE POURS. CONSTRUCT THE LINK SLABS AND EXPANSION JOINTS AFTER THE ADJACENT LONGITUDINAL UHPC CLOSURE POUR REACHES A COMPRESSIVE STRENGTH OF 14 KSI (BRIDGE 3-155N).
6. CONSTRUCT THE CAST-IN-PLACE SHEAR BLOCKS AT THE PIERS AND THE ABUTMENT BACKWALLS AND CHEEKWALLS (BRIDGE 3-155N).
7. BACKFILL BEHIND THE ABUTMENTS, INSTALL THE PRECAST PORTIONS OF THE SLEEPER SLABS, AND CONSTRUCT THE CAST-IN-PLACE PORTION OF THE SLEEPER SLABS (BRIDGE 3-155N).
8. INSTALL THE PRECAST PORTIONS OF THE APPROACH SLABS AND CONSTRUCT THE CAST-IN-PLACE PORTION OF THE APPROACH SLABS (BRIDGE 3-155N).
9. CONSTRUCT THE CAST-IN-PLACE DECK OVERS (BRIDGE 3-155N).
10. DIAMOND GRIND THE DECK AND APPROACH SLAB SURFACES (BRIDGE 3-155N).
11. CONSTRUCT THE PPC OVERLAY (BRIDGE 3-155N).
12. APPLY SILICONE-BASED ACRYLIC CONCRETE SEALER TO THE PARAPETS (BRIDGE 3-155N).

STEPS A THRU D BELOW CAN BE PERFORMED CONCURRENTLY WITH OTHER STEPS.

A. PERFORM SUBSTRUCTURE CONCRETE REPAIRS AND REPLACE PILE PROTECTIVE JACKETS. APPLY EPOXY CONCRETE SEALER AND SILICONE-BASED ACRYLIC CONCRETE SEALER TO THE SUBSTRUCTURE UNITS (BOTH BRIDGES).

B. REMOVE AND REPLACE THE EXISTING SLOPE PROTECTION (BOTH BRIDGES).

C. INSTALLATION OF THE PERMANENT NAVIGATIONAL LIGHTING SYSTEM (BRIDGE 3-155N).

D. INSTALLATION OF THE ITMS CONDUIT (BRIDGE 3-155S)

NOTES:

1. FOR PHASE 1 REMOVAL AND CONSTRUCTION, SEE DWG. SC-01.
2. FOR PHASE 1 SUGGESTED SEQUENCE OF CONSTRUCTION, SEE DWG. SC-01.
3. FOR COMPLETED TYPICAL SECTIONS, SEE DWG. SC-03.

LEGEND:

LIMITS OF REMOVAL

PROPOSED CONSTRUCTION

ADDENDA / REVISIONS

3 REMOVED PHASE 2; REVISED PHASE 3 NOTES F. OPHARDT 9/16/2020

SCALE AS NOTED

BR 3-155 N&S ON SR 1
OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N&S
T201907601	DESIGNED BY: F. OPHARDT	
COUNTY		
SUSSEX	CHECKED BY: W. GESCHREI	

SEQUENCE OF
CONSTRUCTION - 2

SC-02
SECTION
WRA
SHEET NO.
37

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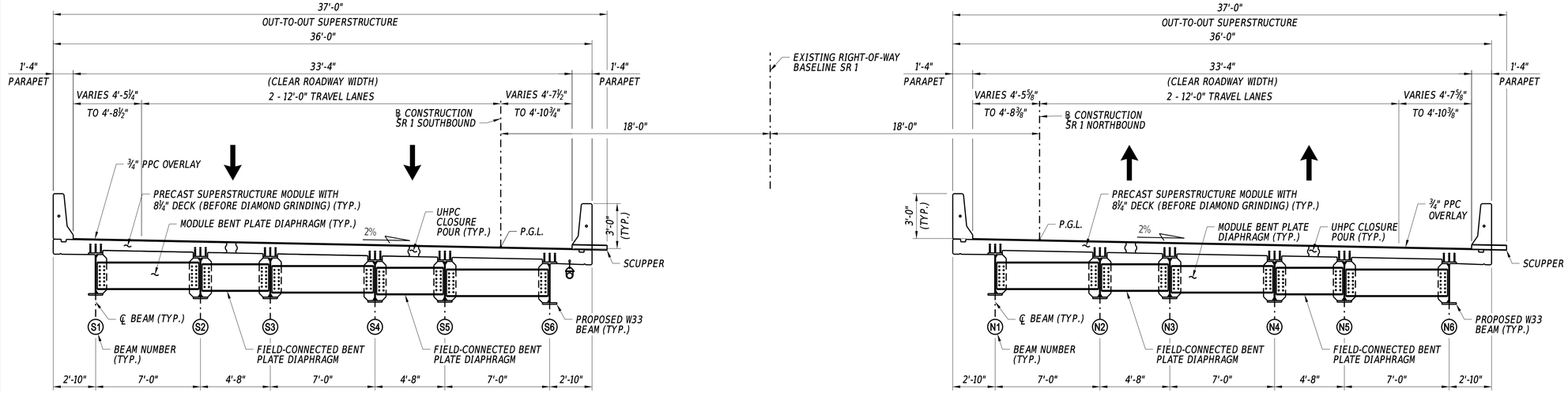

BR. 3-155S

BR. 3-155N

PROPOSED TYPICAL SECTIONS

1/4" = 1'-0"

NOTES:

1. FOR PHASE 1 REMOVAL AND CONSTRUCTION, SEE DWG. SC-01.
2. FOR PHASE 1 SUGGESTED SEQUENCE OF CONSTRUCTION, SEE DWG. SC-01.
3. FOR PHASE 3 REMOVAL AND CONSTRUCTION, SEE DWG. SC-02.
4. (3) FOR ~~PHASES 2 AND 3 SUGGESTED SEQUENCES~~ PHASE 3 SUGGESTED SEQUENCE OF CONSTRUCTION, SEE DWG. SC-02.

9/16/2020
10:15:57 AM
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ADDENDA / REVISIONS		
3 REVISED NOTE	F. OPHARDT 9/16/2020	

SCALE AS NOTED

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N&S
T201907601	DESIGNED BY: F. OPHARDT	
COUNTY	CHECKED BY: W. GESCHREI	
SUSSEX		

SEQUENCE OF CONSTRUCTION - 3

SC-03
SECTION
WRA
SHEET NO.
38

DESCRIPTION OF ELECTRICAL SCOPE OF WORK

INDEX OF ELECTRICAL DRAWINGS

DRAWING NO.	SHEET TITLE
NL-01	INDEX OF ELECTRICAL DRAWINGS & ELECTRICAL NOTES
NL-02	KEY PLAN
NL-03	UTILITY AND CONTROL PANEL
NL-04	NAVIGATION LIGHTING DETAILS - 1
NL-05	NAVIGATION LIGHTING DETAILS - 2

1. GENERAL NOTES

A. ALL WORK SHALL BE IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA), THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE), STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING (NECA 1), THE NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA), THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST VERSION) AND ALL OTHER APPLICABLE STATE AND LOCAL CODES AND STANDARDS.

B. THE CONTRACTOR AND/OR SUBCONTRACTOR PERFORMING THE ELECTRICAL WORK SHALL BE PROPERLY QUALIFIED, SKILLED AND EXPERIENCED IN THE TYPE OF WORK REQUIRED.

C. IN NO WAY SHALL THESE PLANS BE INTERPRETED AS REQUIRING A VIOLATION OF THE NATIONAL ELECTRICAL CODE OR ANY OTHER APPLICABLE FEDERAL, STATE, OR LOCAL CODES OR REGULATIONS. IN ANY CASE OF DISPUTE BETWEEN THESE PLANS AND APPLICABLE CODES AND STANDARDS, THE HIGHER (MORE STRINGENT) STANDARD SHALL GOVERN.

D. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR ALL COORDINATION WITH THE U.S. COAST GUARD FOR WORK IN AND/OR OVER NAVIGABLE WATERS, INCLUDING OBTAINING ALL REQUIRED PERMITS AND SHALL PAY ANY FINES AND/OR PENALTIES RESULTING FROM SUCH WORK.

E. THE NAVIGATION LIGHTING SYSTEM SHALL BE OPERATIONAL AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TEMPORARY NAVIGATION LIGHTING AS REQUIRED TO MAINTAIN THE NAVIGATION LIGHTING SYSTEMS IN SERVICE. SEE STAGING REQUIREMENTS.

F. THE CONTRACTOR IS REQUIRED TO DELIVER A COMPLETE, WORKING, RELIABLE AND SAFE ELECTRICAL SYSTEM IN ACCORDANCE WITH THESE PLANS AND ALL APPLICABLE CODES, STANDARDS, AND STANDARD SPECIFICATIONS.

G. PROPOSED VARIATIONS FROM THESE PLANS SHALL BE SUBMITTED TO, AND MUST BE APPROVED BY, THE OWNER OR OWNER'S REPRESENTATIVE PRIOR TO PERFORMANCE OF THE RELATED WORK. ALL CHANGES SHALL BE REFLECTED IN THE AS-BUILT DRAWINGS.

H. IN ADDITION TO THE EQUIPMENT, MATERIALS, AND OTHER ITEMS WHICH ARE EXPLICITLY SHOWN ON THESE PLANS, PROVIDE ALL OTHER MISCELLANEOUS ITEMS AND APPURTENANCES REQUIRED TO PROVIDE A COMPLETE, WORKING, RELIABLE, AND SAFE ELECTRICAL SYSTEM.

I. THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR COORDINATION INCLUDING FIELD VERIFICATION OF ALL RELEVANT DIMENSIONS, EQUIPMENT SPECIFICATIONS, ELECTRICAL LOADS, CIRCUIT REQUIREMENTS, AND POINT TO POINT WIRING, PRIOR TO PURCHASE, FABRICATION OF EQUIPMENT AND MATERIALS, AND INSTALLATION.

J. THE CONTRACTOR SHALL CAREFULLY AND THOROUGHLY INVESTIGATE AND VERIFY THE LOCATIONS AND CHARACTERISTICS OF ALL EXISTING FEATURES AND FACILITIES, ABOVE GROUND AND UNDERGROUND, PRIOR TO CONSTRUCTION. ANY DAMAGE TO EXISTING FEATURES OR FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE DEPARTMENT.

K. PRIOR TO DISCONNECTING THE EXISTING CIRCUITS AND REMOVING EXISTING EQUIPMENT, THE CONTRACTOR SHALL IDENTIFY ALL EQUIPMENT, RACEWAYS, CABLES, CONDUCTORS AND ITEMS WHICH ARE TO REMAIN OR TO BE RELOCATED OR RE-ROUTED FOR THE WORK DESCRIBED HEREIN. THOROUGHLY LOCATE, TRACE, IDENTIFY, AND DOCUMENT ALL CIRCUITS OF SUCH EQUIPMENT. THE CONTRACTOR SHALL PREPARE AND SUBMIT WORKING DRAWINGS, INCLUDING BUT NOT LIMITED TO CONDUIT AND WIRING SCHEDULES, TABULATIONS, AND WIRING DIAGRAMS WITH INDICATED QUANTITY AND SIZE OF CONDUCTORS OF EACH CIRCUIT, SOURCE AND EQUIPMENT SERVED OF EACH CIRCUIT AND WIRE LABELING. THESE WORKING DRAWINGS SHALL BE USED FOR THE RECONNECTION OR RELOCATION TO ENSURE THAT, AFTER THE INSTALLATION, EXISTING EQUIPMENT WHICH IS TO REMAIN OR TO BE RELOCATED SHALL FUNCTION PROPERLY AS INTENDED FOR EACH SYSTEM TO THE SATISFACTION OF THE ENGINEER.

L. THE CONTRACTOR SHALL EXERCISE CARE TO NOT DAMAGE ANY ITEMS WHICH ARE EXISTING AND ARE TO REMAIN IN PLACE OR TO BE RE-LOCATED.

M. LOCATIONS OF RACEWAYS, CABLES AND EQUIPMENT SHOWN ON THESE PLANS ARE DIAGRAMMATIC ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND SUBJECT TO THE APPROVAL OF THE ENGINEER.

2. MATERIALS AND WORKMANSHIP

A. ALL EQUIPMENT AND MATERIALS SHALL BE SUITABLE FOR THE INTENDED USE AND SHALL BE FURNISHED WITH ALL NECESSARY HARDWARE AND COMPONENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MODIFICATIONS OR FABRICATIONS NECESSARY FOR PROPER INSTALLATION AND OPERATION OF EQUIPMENT.

B. REFERENCE TO A SPECIFIC MANUFATURER'S NAME AND CATALOG NUMBER OR MODEL NUMBER IS INTENDED TO DENOTE THE PERFORMANCE, RATING, QUALITY, CHARACTERISTICS, AND PHYSICAL DIMENSIONS OF THE EQUIPMENT AND MATERIAL, AND IS NOT INTENDED TO EXCLUDE OTHER ACCEPTABLE PRODUCTS OF EQUAL OR BETTER PERFORMANCE OR QUALITY. ALL ITEMS SPECIFIED WITH MANUFACTURER'S NAME AND CATALOG/MODEL NUMBER SHALL BE CONSIDERED TO BE FOLLOWED BY A PHRASE "OR APPROVED EQUAL", UNLESS OTHERWISE NOTED. PRODUCTS OF EQUAL OR BETTER PERFORMANCE AND QUALITY, PROPOSED TO SUBSTITUTE REFERENCED ITEMS MUST BE SUPPORTED BY MANUFACTURER'S SPECIFICATIONS, SHOP DRAWINGS, AND DOCUMENTS TO INDICATE SO, AND MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

C. PRIOR TO ORDERING EQUIPMENT, THE CONTRACTOR SHALL CHECK ALL EQUIPMENT CATALOG/MODEL NUMBERS, VERIFY THE COMPATIBILITY OF THE EQUIPMENT TO BE INSTALLED AND USED WITH OTHER SYSTEMS AND SUB-SYSTEMS, CHECK THE AVAILABILITY OF EQUIPMENT WITH SUPPLIERS, AND COORDINATE WITH ALL OTHER SUBCONTRACTORS.

D. ALL WORK SHALL BE OF THE HIGHEST QUALITY. ALL EQUIPMENT, RACEWAYS, WIRING, ETC. SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH NECA 1 (STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING), AND WITHOUT VIOLATING ANY CLEAR WORKING CLEARANCE SPACE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE. EQUIPMENT ENCLOSURES, CABINETS, BOXES, AND SIMILAR ITEMS SHALL BE INSTALLED PLUMB AND SECURELY FASTENED IN PLACE. ALL MOUNTINGS SHALL BE RIGID.

E. THE INSTALLATION OF ALL EQUIPMENT AND MATERIALS SHALL COMPLY WITH THE RECOMMENDATIONS AND INSTALLATION PROCEDURES OF THEIR RESPECTIVE MANUFACTURERS.

F. THE CONTRACTOR SHALL PROTECT THE ENTIRE SYSTEM, AND ALL PARTS THEREOF, FROM INJURY DURING CONSTRUCTION AND UP TO AND INCLUDING ACCEPTANCE OF THE SYSTEM.

3. STAGING

PHASE 1

A. AFTER SOUTHBOUND TRAFFIC IS ON THE BRIDGE 3-155N, PROVIDE TEMPORARY BATTERY OR SOLAR POWERED SPAN LIGHTING ON EAST AND WEST SIDES OF BRIDGE 3-155S AND PIER LIGHTING ON THE EAST SIDE OF BRIDGE 3-155S (PIER 2S ONLY) UNTIL THE SPAN IS REMOVED. AS SOON AS THE CHANNEL IS OBSTRUCTED BY THE CONSTRUCTION OF THE NEW BRIDGE, TEMPORARY NAVIGATION LIGHTS MUST BE REINSTALLED. THE NEW, PERMANENT LIGHTING UNITS MAY BE USED AND MODIFIED FOR THE TEMPORARY SPAN LIGHTING PROVIDED THEY ARE IN NEW CONDITION AT THE TIME OF ACCEPTANCE.

B. ISOLATE POWER AT THE METERING BOARD BY TURNING OFF AND LOCKING OUT THE ASSOCIATED CIRCUIT BREAKER AND COMPLETELY DISCONNECTING THE WIRING FROM BRIDGE 3-155S CONDUIT AT THE ELECTRICAL SERVICE AND CONTROL PEDESTAL.

C. REMOVE EXISTING, PERMANENT BRIDGE 3-155S SPAN NAVIGATION LIGHTS, THE PIER NAVIGATION LIGHT, MOUNTING BRACKETS AND ACCESSORIES, AND CONDUIT. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO ITEM 21100 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

D. DURING BRIDGE CONSTRUCTION, INSTALL NEW LIGHTING, JUNCTION BOXES AND ACCESSORIES AND CONDUIT ON BRIDGE 3-155S AND BETWEEN THE BRIDGES UP TO THE POINT OF CONDUIT CROSSING THE BRIDGE 3-155N APPROACH. THE CONTRACTOR SHALL ENSURE THAT CONDUIT IN PREFORMED SLABS ARE IN ACCORDANCE WITH SHOP DRAWINGS.

PHASE ~~2~~ 3 (3)

E. AFTER NORTHBOUND TRAFFIC IS ON BRIDGE 3-155S, PROVIDE TEMPORARY BATTERY OR SOLAR POWERED SPAN LIGHTING ON THE EAST AND WEST SIDES OF BRIDGE 3-155N AND PIER LIGHTING ON THE WEST SIDE OF BRIDGE 3-155N (PIER 3N ONLY) UNTIL THE SPAN IS REMOVED. AS SOON AS THE CHANNEL IS OBSTRUCTED BY THE CONSTRUCTION OF THE NEW BRIDGE, TEMPORARY NAVIGATION LIGHTS MUST BE REINSTALLED. NEW LIGHTING UNITS MAY BE USED AND MODIFIED FOR THE TEMPORARY SPAN LIGHTING PROVIDED THEY ARE IN NEW CONDITION AT THE TIME OF ACCEPTANCE.

F. ISOLATE POWER AT THE METERING BOARD BY TURNING OFF AND LOCKING OUT ASSOCIATED BREAKER AND COMPLETELY DISCONNECTING THE WIRING FROM THE BRIDGE 3-155N CONDUIT AT THE ELECTRICAL SERVICE AND CONTROL PEDESTAL.

G. REMOVE EXISTING BRIDGE 3-155N SPAN NAVIGATION LIGHTS, PIER NAVIGATION LIGHT, MOUNTING BRACKETS AND ACCESSORIES, AND CONDUIT. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO ITEM 21000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

H. DURING BRIDGE CONSTRUCTION INSTALL NEW LIGHTING, JUNCTION BOXES AND ACCESSORIES AND CONDUIT BURIED UNDER THE BRIDGE 3-155N APPROACH, FROM THE ELECTRICAL SERVICE AND CONTROL PEDESTAL TO THE BRIDGE AND ON BRIDGE 3-155N. COMPLETE ELECTRICAL CONNECTION OF BRIDGE 3-155S CONDUCTORS TO THE COMPLETE ELECTRICAL SYSTEM.

I. CONTACT AND COORDINATE WITH UTILITY TO ISOLATE POWER TO ELECTRICAL SERVICE. REPLACE THE ELECTRICAL SERVICE AND CONTROL PEDESTAL WHILE USING TEMPORARY POWER FOR ALL NAVIGATION LIGHTING.

J. TEMPORARY OR PERMANENT LIGHTING MUST BE IN PLACE AND IN OPERATION FROM THE START OF THE CONTRACT TO FINAL ACCEPTANCE. CONTRACTOR TO PROVIDE DETAILED PLAN ON KEEPING THE BRIDGE LIT TO COASTGUARD REQUIREMENTS THROUGHOUT AND THE PLAN MUST BE APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE PRIOR TO THE START OF WORK.

4. ELECTRICAL SERVICE

THE EXISTING ELECTRICAL SERVICE TRANSFORMER SHALL REMAIN AND THE CONDUIT TO THE LOCATION OF THE EXISTING SERVICE PANEL SHALL BE MODIFIED. DURING THE REMOVAL OF THE EXISTING SERVICE PANEL AND THE INSTALLATION OF THE NEW ELECTRICAL SERVICE AND CONTROL PEDESTAL, THE CONDUIT AND WIRING STUBBING UP INTO THE EQUIPMENT SHALL BE REPLACED WITH NEW PVC COATED RIGID GALVANIZED STEEL TYPE AS SHOWN ON THE PLANS. TEMPORARY POWER TO THE NAVIGATION LIGHTING SHALL BE PROVIDED DURING THE CHANGEOVER TO ASSURE THE NAVIGATION LIGHTING IS AVAILABLE AT ALL TIMES.

THE EXISTING ELECTRICAL SERVICE SHALL BE TESTED AND METERED FOR EXISTING LOAD AND EXISTING ADDITIONAL CAPACITY TO DETERMINE POWER AVAILABLE FOR THE MEDIAN CROSSOVER LIGHTING. AFTER DETERMINATION OF ADEQUATE POWER, TWO NEW CIRCUIT BREAKERS SHALL BE INSTALLED IN THE SERVICE PANEL FOR USE OF THE NORTH AND SOUTH MEDIAN CROSSOVER LIGHTING.

THE NEW ELECTRICAL SERVICE AND CONTROL PEDESTAL SHALL BE FURNISHED AND INSTALLED AS SHOWN ON THE PLANS. IT SHALL BE MOUNTED ON A RIGID CHANNEL FRAME SYSTEM AS SHOWN ON THE PLANS. THE CONDUIT TO THE NAVIGATION LIGHTING SHALL BE NEW.

5. NAVIGATION LIGHTING

NEW NAVIGATION LIGHTS SHALL BE PROVIDED FOR BRIDGES 3-155N AND 3-155S IN ACCORDANCE WITH U.S. COAST GUARD REGULATION 33 CFR PART 118.

SPAN NAVIGATION LIGHTS SHALL BE LED TUBE LIGHT CONSTRUCTION MANUFACTURED BY MCDERMOTT LIGHT AND SIGNAL OR APPROVED EQUAL. SPAN NAVIGATION LIGHTS SHALL BE MOUNTED TO PARAPET AND POSITIONED IN ACCORDANCE WITH U.S. COAST GUARD REGULATIONS AND AS SHOWN ON THE PLANS. PIER NAVIGATION LIGHTS SHALL BE INSTALLED ON PIERS 2S AND 3N ON THE INTER-SPAN SIDES AND SHALL BE MANUFACTURED BY B&B ROADWAY (TYPE PL WITH LED LAMP AND JUNCTION BOX OPTIONS) OR APPROVED EQUAL.

TEMPORARY POWER AND TEMPORARY USE OF EXISTING NAVIGATION LIGHTING SHALL BE AS CALLED OUT IN THE STAGING REQUIREMENTS.

6. CONDUIT, WIRING AND ENCLOSURES

INSTALLATION OF CONDUIT, WIRING, JUNCTION BOXES/WELLS, AND ACCESSORIES AND HARDWARE SHALL BE IN ACCORDANCE WITH THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION (DELDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2016 VERSION).

APPLY CONDUIT/DUCT SEALANT DURING CONDUIT INSTALLATION AS SPECIFIED BY DELDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2016 VERSION).

PROVIDE COVER FOR BURIED CONDUIT IN ACCORDANCE WITH DELDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2016).

THE CONTRACTOR SHALL PERFORM CONTINUITY AND INSULATION RESISTANCE TESTS ON ALL CONDUCTORS AND CABLES, AND TEST ALL ELECTRICAL DEVICES REQUIRED TO COMPLETE THE INSTALLATION AS INDICATED ON THE PLANS AND IN ACCORDANCE WITH NETA AND DELDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2016 VERSION).

GROUND TESTING SHALL BE CONDUCTED FOR THE ENTIRE GROUNDING SYSTEM AND SHALL BE IN ACCORDANCE WITH NETA AND DELDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2016 VERSION).

CONDUIT PROVIDING ELECTRICAL SERVICE AND CONDUIT FROM ELECTRICAL SERVICE PEDESTAL TO JUNCTION WELLS AND BETWEEN JUNCTION WELLS SHALL BE 2". ALL CONDUIT EXITING JUNCTION WELLS INTO BRIDGE SPAN STRUCTURES SHALL BE 1-1/2". BURIED OR EMBEDDED CONDUIT SHALL BE SCHEDULE 80 PVC TYPE RATED FOR UNDERGROUND BURIAL AND EMBEDDING IN POURED CONCRETE UNLESS OTHERWISE NOTED. ALL EXPOSED CONDUIT SHALL BE PVC COATED GALVANIZED STEEL CONDUIT UNLESS OTHERWISE NOTED.

ALL ENCLOSURES SHALL BE RATED NEMA 4X AND FABRICATED FROM TYPE 316 STAINLESS STEEL. CONDUIT ENTRY INTO ENCLOSURES SHALL BE AT THE SIDE OR BOTTOM OF ALL ENCLOSURES. TOP ENTRY INTO ENCLOSURES IS NOT PERMITTED.

CONDUIT EMBEDDED IN THE PARAPET BARRIERS SHALL BE PROVIDED WITH EMBEDDED PULL/JUNCTION BOXES AT EACH LIGHT FIXTURE AS SHOWN ON THE PLANS AND WHERE REQUIRED BY CODE. EXPANSION, DEFLECTION AND EXPANSION/DEFLECTION FITTINGS SHALL BE PROVIDED WHEREVER EXPANSION AND/OR DEFLECTION WILL OCCUR.

ALL EXPOSED CONDUITS AND CABLES THROUGHOUT THE BRIDGE SHALL BE INSTALLED USING CONDUIT AND CABLE SUPPORTS IN ACCORDANCE WITH DELDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (AUGUST 2016). ALL SUPPORTS SHALL BE CORROSION AND UV RESISTANT AND VIBRATION PROOF.

ALL WIRING SHALL BE MINIMUM #12AWG XHHW-2 STRANDED CONDUCTORS. THE CONTRACTOR SHALL VERIFY WIRE SIZING FOR CONDUIT FILL AND VOLTAGE DROP.

GENERAL EROSION CONTROL NOTES

1.

EROSION POTENTIAL FOR THIS PROJECT	CONTRACTOR ESC SUPERVISOR REQUIREMENT
( ) INSIGNIFICANT	NONE
( ) MINOR	CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
(X) MAJOR	CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 6.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.

2. THE DISTURBED AREA FOR THIS PROJECT IS 1.45 ACRES.

3. THE TOTAL IMPERVIOUS AREA ADDED AS RESULT OF THIS PROJECT IS 0.11 ACRES.

4. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A FIVE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE FIVE YEARS, THE CONTRACTOR WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

EROSION CONTROL SEQUENCE OF CONSTRUCTION

PHASE 1:

1. IN CONJUNCTION WITH INSTALLATION OF TRAFFIC CONTROLS SHOWN ON CS-101 THROUGH CS-107, INSTALL NEW MEDIAN INLET PROTECTIONS ON EXISTING MEDIAN INLETS AS SHOWN ON CS-103 AND CS-105.

2. UPON SHIFT OF TRAFFIC FROM SR 1 SB TO SR 1 NB, INSTALL STABILIZED CONSTRUCTION ENTRANCES FOR SB BRIDGE RECONSTRUCTION AS SHOWN ON CS-104.

3. AS SHOWN ON CS-104 AND IN ACCORDANCE WITH THE BRIDGE RECONSTRUCTION PLANS/SEQUENCE OF CONSTRUCTION; THE REQUIREMENTS ON THE ENVIRONMENTAL COMPLIANCE PLANS; AND ALL APPLICABLE PERMITS AND REGULATIONS, INSTALL COMPOST FILTER LOGS, SANDBAG DIVERSIONS AND TURBIDITY CURTAINS AND PROCEED WITH THE RECONSTRUCTION THE SR 1 SB BRIDGE AND INSTALLATION OF THE ASSOCIATED SCOUR COUNTERMEASURES AND PIER REPAIRS.

3 4. WITH THE APPROVAL OF THE ENGINEER, SCOUR COUNTERMEASURES AND PIER REPAIRS FOR THE SR 1 NB BRIDGE MAY BE IMPLEMENTED DURING PHASE 1. THIS WORK AND THE ASSOCIATED EROSION AND SEDIMENT CONTROLS ARE THEREFORE SHOWN ON THE PHASE 1 PLANS. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY OF CONFIRMING THE EXTENT OF WORK TO BE PERFORMED DURING PHASE 1 WITH THE ENGINEER IN ORDER TO ENSURE FEASIBLITY OF CONSTRUCTION OPERATIONS WITH TRAFFIC CONTROL OPERATIONS, ENVIRONMENTAL REQUIREMENTS AND ANY OTHER CONTRACT REQUIREMENTS IMPACTING EXECUTION OF THE PLANNED WORK. MAINTENANCE OF STREAM FLOW DEVICES INCLUDING SANDBAGS, TURBIDITY CURTAINS, PUMPS AND ANY OTHER DEVICES USED DURING THE INSTALLATION OF THE SCOUR COUNTERMEASURES SHALL ONLY BE LEFT IN PLACE DURING PHASE 3 TO ALLOW FOR COMPLETION OF SCOUR COUNTERMEASURE INSTALLATION. WITH THE APPROVAL OF THE ENGINEER, COMPOST FILTER LOGS AT THE BRIDGE ABUTMENTS MAY BE LEFT IN PLACE.

5. STABILIZE ALL REMAINING, DISTURBED AREAS IN THE PHASE 1 WORK ZONE WITH TOPSOIL, SEED AND ECBM IN ACCORDANCE WITH THE ROADWAY TYPICAL SECTIONS AND ANY REQUIREMENTS OF THE ENVIRONMENTAL COMPLIANCE PLANS.

3 6. UPON COMPLETION OF THE SR 1 SB BRIDGE AND WITH THE APPROVAL OF THE ENGINEER, REMOVE THE PHASE 1 STABILIZED CONSTRUCTION ENTRANCES AND PROCEED WITH IMPLEMENTATION OF PHASE 3 OPERATIONS.

3 ~~## PHASE 2:~~

~~1. MAINTAIN ALL PHASE 1 INLET PROTECTION AND COMPOST FILTER LOG SEDIMENT CONTROLS FOR DURATION OF PHASE 2, DURING WHICH NO ACTIVE CONSTRUCTION ACTIVITIES ARE TO TAKE PLACE UNLESS AUTHORIZED BY THE ENGINEER.~~

PHASE 3:

1. MAINTAIN ALL REMAINING, PHASE 1 EROSION AND SEDIMENT CONTROL DEVICES.

2. UPON SHIFT OF TRAFFIC FROM SR 1 NB TO SR 1 SB, INSTALL STABILIZED CONSTRUCTION ENTRANCES FOR NB BRIDGE RECONSTRUCTION AS SHOWN ON CS-303 AND CS-304.

3 3. AS SHOWN ON CS-304 AND IN ACCORDANCE WITH THE BRIDGE RECONSTRUCTION PLANS/SEQUENCE OF CONSTRUCTION; THE REQUIREMENTS ON THE ENVIRONMENTAL COMPLIANCE PLANS; AND ALL APPLICABLE PERMITS AND REGULATIONS, INSTALL OR MAINTAIN FROM PHASE 1 INSTALLATION ALL COMPOST FILTER LOGS, SANDBAG DIVERSIONS AND TURBIDITY CURTAINS AND PROCEED WITH THE RECONSTRUCTION THE SR 1 NB BRIDGE AND THE ASSOCIATED SCOUR COUNTERMEASURES AND PIER REPAIRS. MAINTENANCE OF STREAM FLOW DEVICES INCLUDING SANDBAG DIVERSIONS AND TURBIDITY CURTAINS ARE SHOWN FOR BOTH THE SR 1 NB AND SB BRIDGES IN THE EVENT THAT WORK ON THE SB BRIDGE ELEMENTS AND SCOUR COUNTERMEASURES WAS NOT COMPLETED DURING PHASE 1.

4. UPON COMPLETION OF ALL SCOUR COUNTERMEASURES AND PIER REPAIRS, STABILIZE ALL AREAS OF BARE EARTH DIRECTLY ADJACENT TO THE BROADKILL RIVER IN ACCORDANCE WITH THE ROADWAY TYPICAL SECTIONS AND THE ENVIRONMENTAL COMPLIANCE PLANS.

5. STABILIZE ALL REMAINING, DISTURBED AREAS IN THE PHASE 3 WORK ZONE WITH TOPSOIL, SEED AND INSTALL ECBM MULCH IN ACCORDANCE WITH THE ROADWAY TYPICAL SECTIONS AND ANY REQUIREMENTS OF THE ENVIRONMENTAL COMPLIANCE PLANS.

PHASE 4:

1. MAINTAIN ALL REMAINING EROSION AND SEDIMENT CONTROL DEVICES FROM PREVIOUS PHASES.

2. UPON SHIFT OF TRAFFIC FROM MEDIAN CROSSOVERS TO PERMANENT SR 1 NB AND SB TRAVEL LANES, INSTALL STABILIZED CONSTRUCTION ENTRANCES AS SHOWN ON CS-402, CS-403 AND CS-405, AND INSTALL ADDITIONAL INLET PROTECTION ON EXISTING MEDIAN INLET AT APPROXIMATELY STA 1275+50, RT, BASELINE SR 1 SB.

3. PROCEED WITH REMOVAL OF MEDIAN CROSSOVER ROADWAYS, FINAL DITCH GRADING AND CONVERSION OF JUNCTION BOXES TO MEDIAN INLETS AS SHOWN ON THE CONSTRUCTION PLANS. IMMEDIALTELY INSTALL INLET PROTECITONS ON JUNCTION BOXES CONVERTED TO INLETS.

4. REMAINING SIGING, LIGHTING AND CONDUIT WORK MAY PROCEED CONCURRENTLY WITH THIS PHASE OF WORK OR PHASES 1 AND/OR 2 UPON THE APPROVAL OF THE ENGINEER ADN PROVIDED THAT ANY DISTURBED AREAS ARE VEGETATIVELY STABILIZED IMMEDIATELY.

5. STABILIZE ALL REMAINING, DISTURBED AREAS WITH TOPSOIL, SEED AND ECBM IN ACCORDANCE WITH THE ROADWAY TYPICAL SECTIONS AND ANY REQUIREMENTS OF THE ENVIRONMENTAL COMPLIANCE PLANS.

6. UPON THE APPROVAL OF THE ENGINEER, REMOVE ALL REMAINING EROSION AND SEDIMENT CONTOL DEVICES AND STABILIZE THE AREA OF THE REMOVAL IMMEDIATELY WITH TOPSOIL, SEED AND MULCH.

DELDOT STORMWATER ENGINEER — DATE 9/22/20

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THESE PLANS MEET THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS AND THAT ALL CLEARING, GRADING, AND CONSTRUCTION WILL BE ACCOMPLISHED PURSUANT TO THE PLAN."

EROSION & SEDIMENT CONTROL	
CFL	COMPOST FILTER LOG
CFL	COMPOST FILTER LOG / LENGTH
DWBAG	DEWATERING BAG
DWB	DEWATERING BASIN
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE / LENGTH
SF	SILT FENCE
RSF	REINFORCED SILT FENCE / LENGTH
RSF	REINFORCED SILT FENCE
SSF	SUPER SILT FENCE / LENGTH
SSF	SUPER SILT FENCE
SP	SUMP PIT
ST	SEDIMENT TRAP / NUMBER
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN
T XXX	TURBIDITY CURTAIN / LENGTH
T	TURBIDITY CURTAIN

ADDENDA / REVISIONS

3	REVISED SEQUENCE OF CONSTRUCTION	J. COSLER	9/16/2020

NOT TO SCALE

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO. N/A
T201907601	DESIGNED BY: WRA
COUNTY	
SUSSEX	CHECKED BY: WRA

EROSION CONTROL NOTES

CS-002

SECTION	SHEET NO.
WRA	165

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SEQUENCE OF CONSTRUCTION

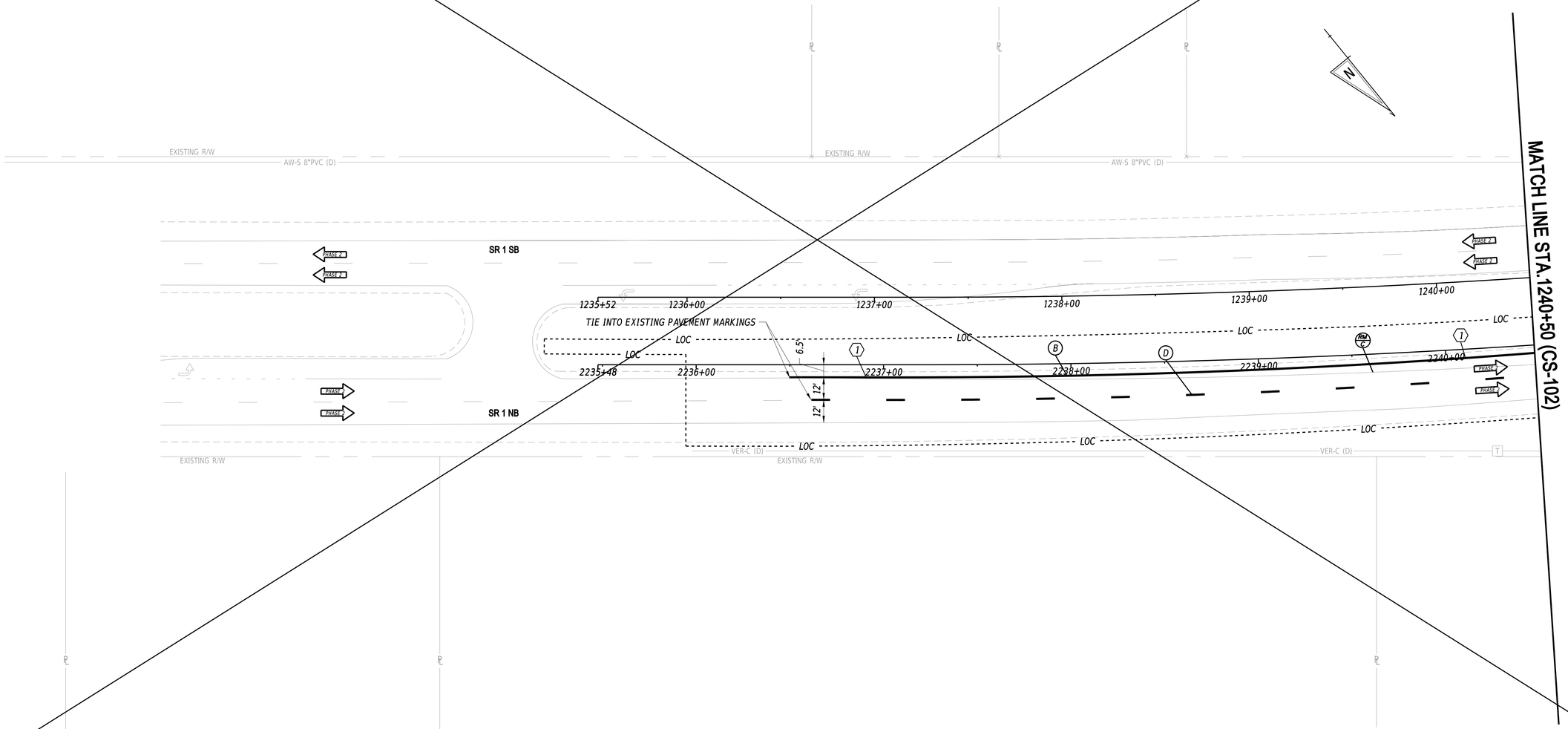
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	0 LF
B	5" SOLID YELLOW EPOXY	399 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	100 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 2

CS-201

SECTION
WRA
SHEET NO.
174

9/17/2020
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SEQUENCE OF CONSTRUCTION

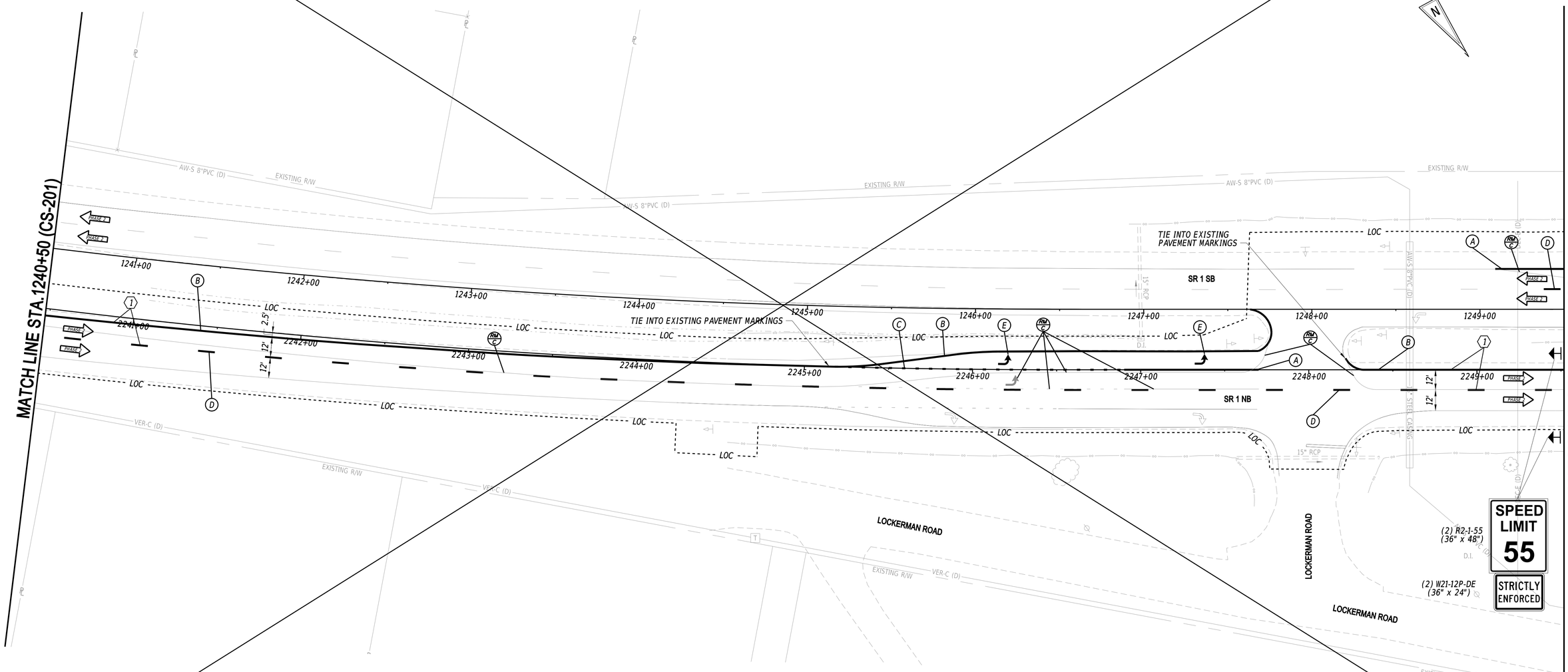
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	121 LF
B	5" SOLID YELLOW EPOXY	895 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	44 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	240 LF
E	WHITE PAINT PAVEMENT SYMBOL	31 SF



ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 2

CS-202

SECTION	SHEET NO.
WRA	175

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SEQUENCE OF CONSTRUCTION

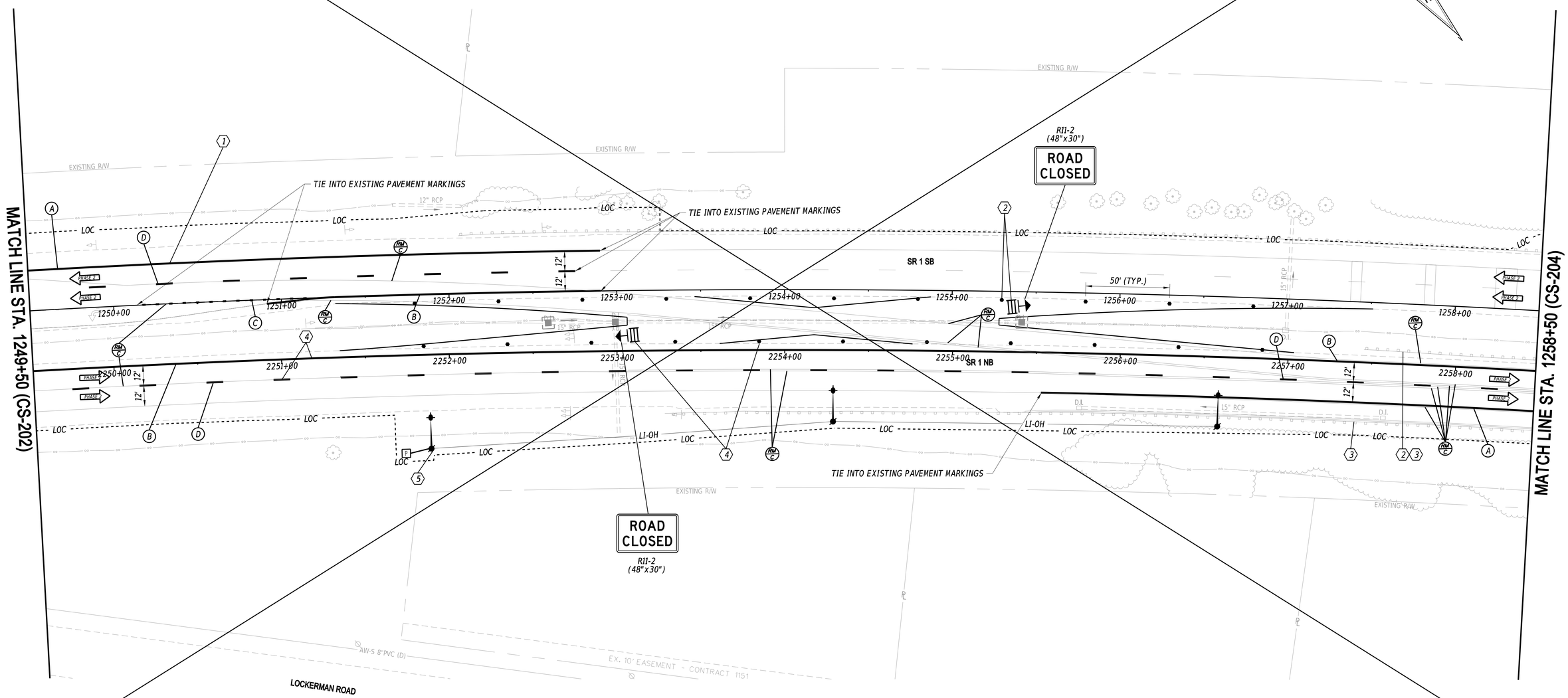
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
2. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
3. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
4. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
5. TEMPORARY LIGHTING EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY. TEMPORARY LIGHTING IS NOT REQUIRED TO BE IN OPERATION DURING PHASE 2.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	636 LF
B	5" SOLID YELLOW EPOXY	1,099 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	26 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	300 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 2

CS-203

SECTION	SHEET NO.
WRA	176

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CONSTRUCTION STAGING LEGEND

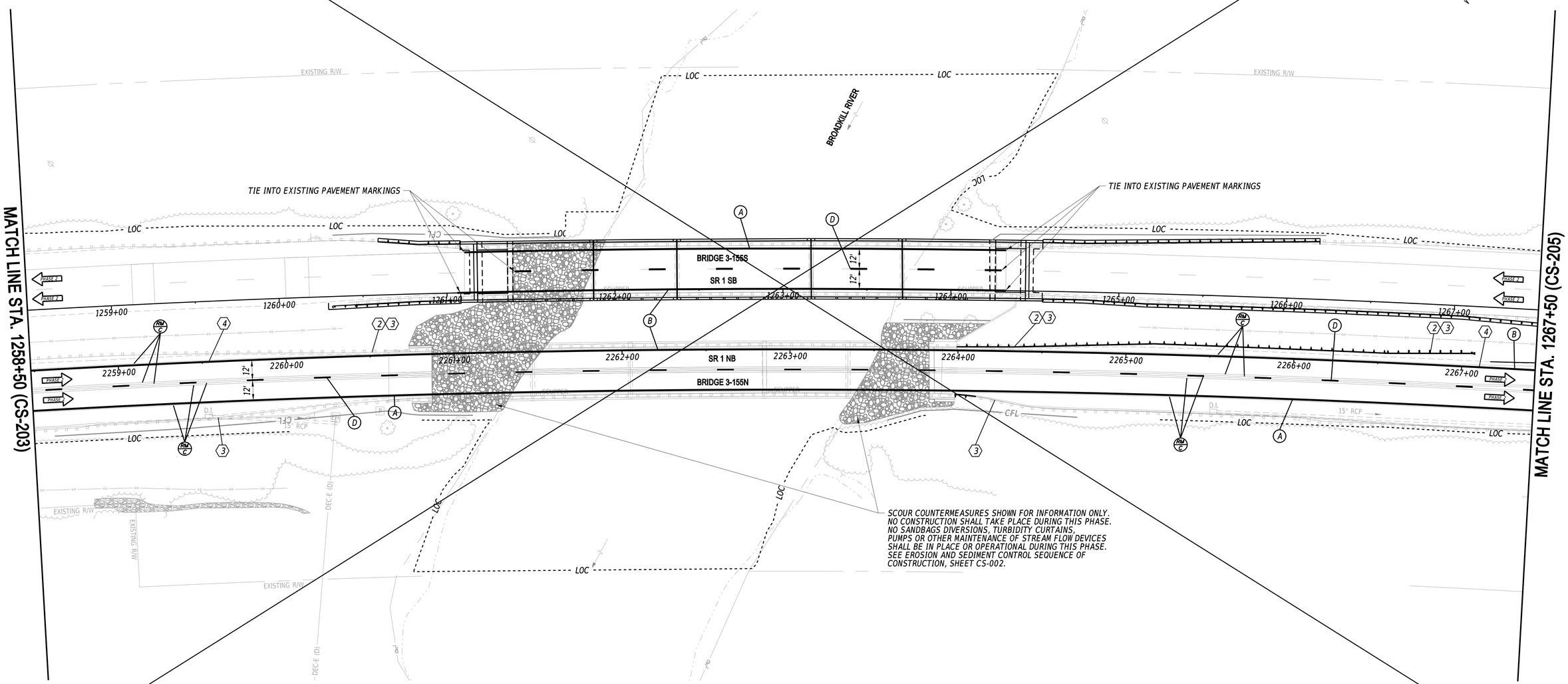
- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,225 LF
B	5" SOLID YELLOW EPOXY	1,225 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	300 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF

SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
2. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
3. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
4. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.



CS-204

ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N/3-155S
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 2

SECTION	SHEET NO.
WRA	177

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SEQUENCE OF CONSTRUCTION

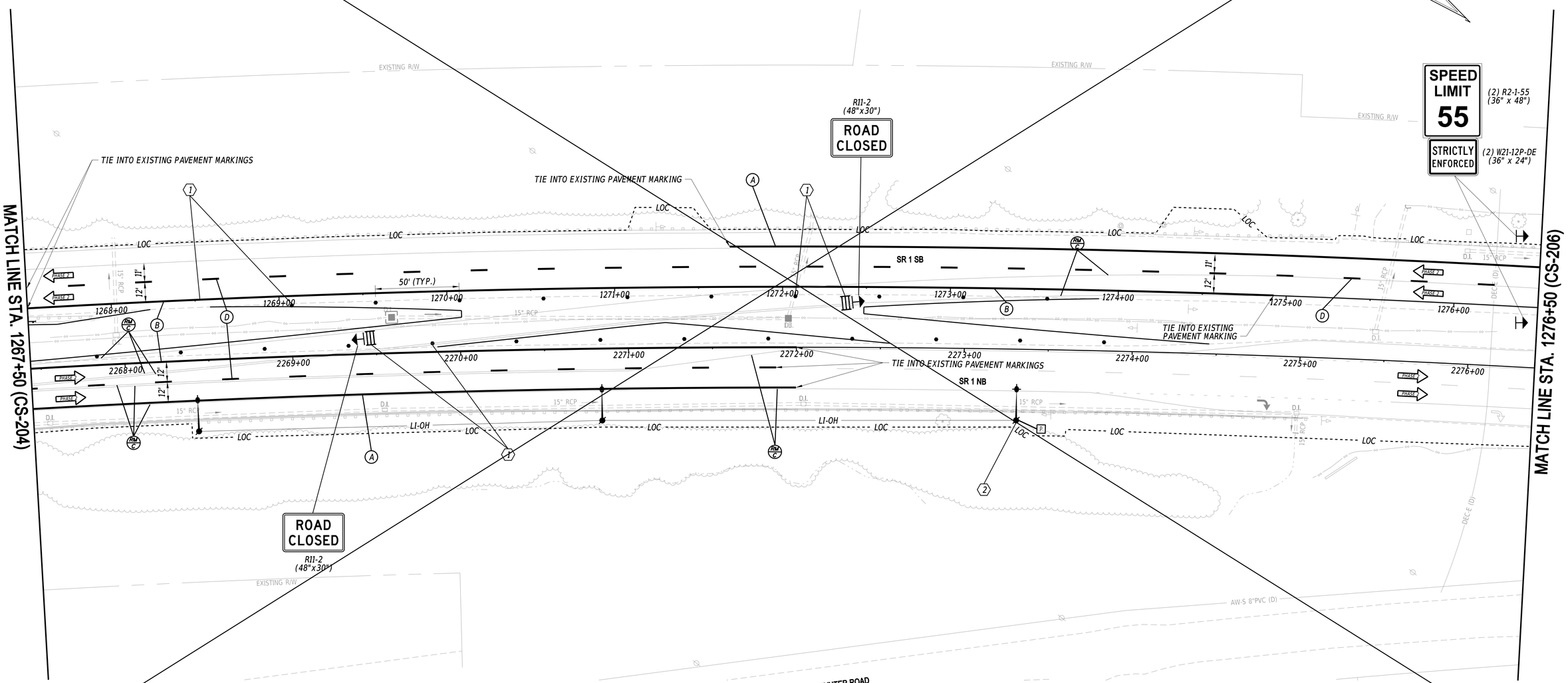
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. TEMPORARY LIGHTING EQUIPMENT SHOWN FOR REFERENCE PURPOSES ONLY. TEMPORARY LIGHTING IS NOT REQUIRED TO BE IN OPERATION DURING PHASE 2.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	938 LF
B	5" SOLID YELLOW EPOXY	1,198 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	340 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 2

CS-205

SECTION	SHEET NO.
WRA	178

9/17/2020
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SEQUENCE OF CONSTRUCTION

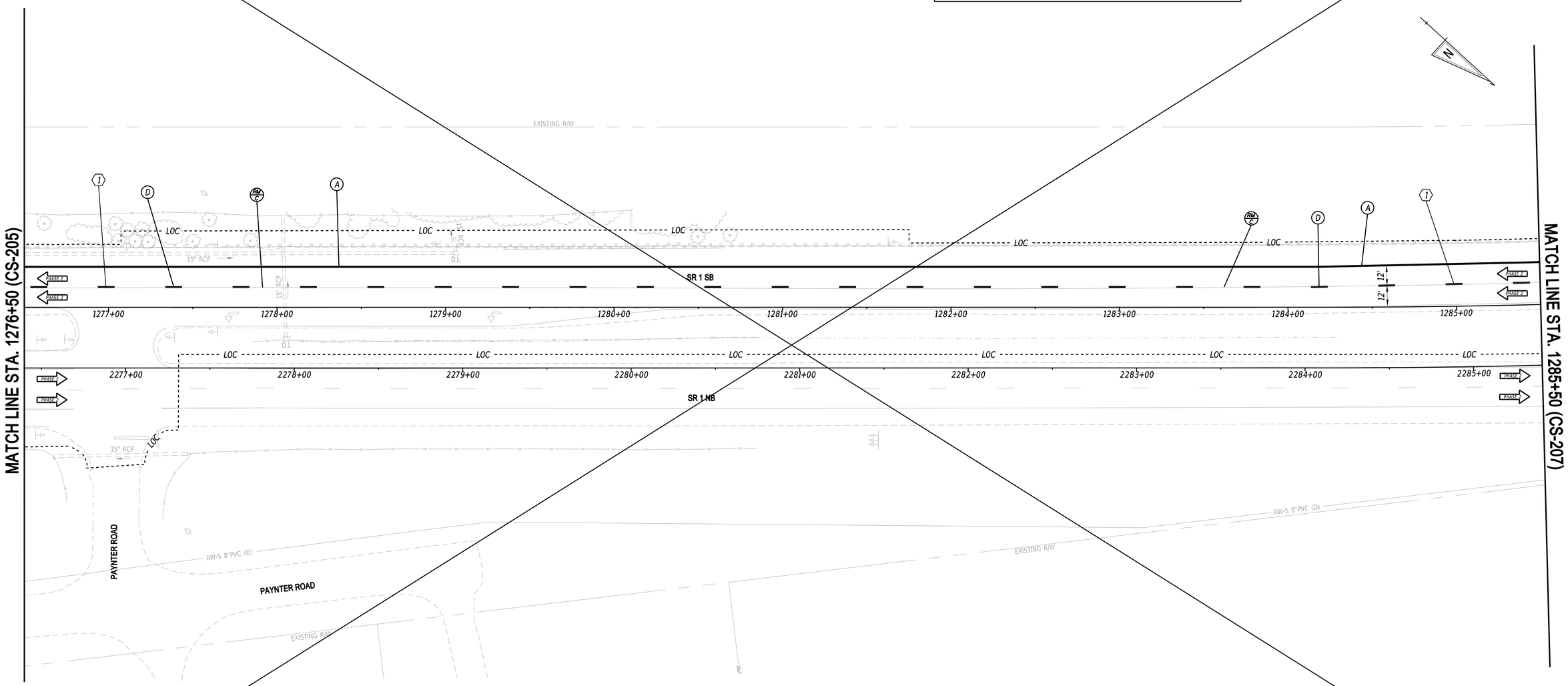
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	900 LF
B	5" SOLID YELLOW EPOXY	0 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	230 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 2

CS-206
SECTION
WRA
SHEET NO.
179

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SEQUENCE OF CONSTRUCTION

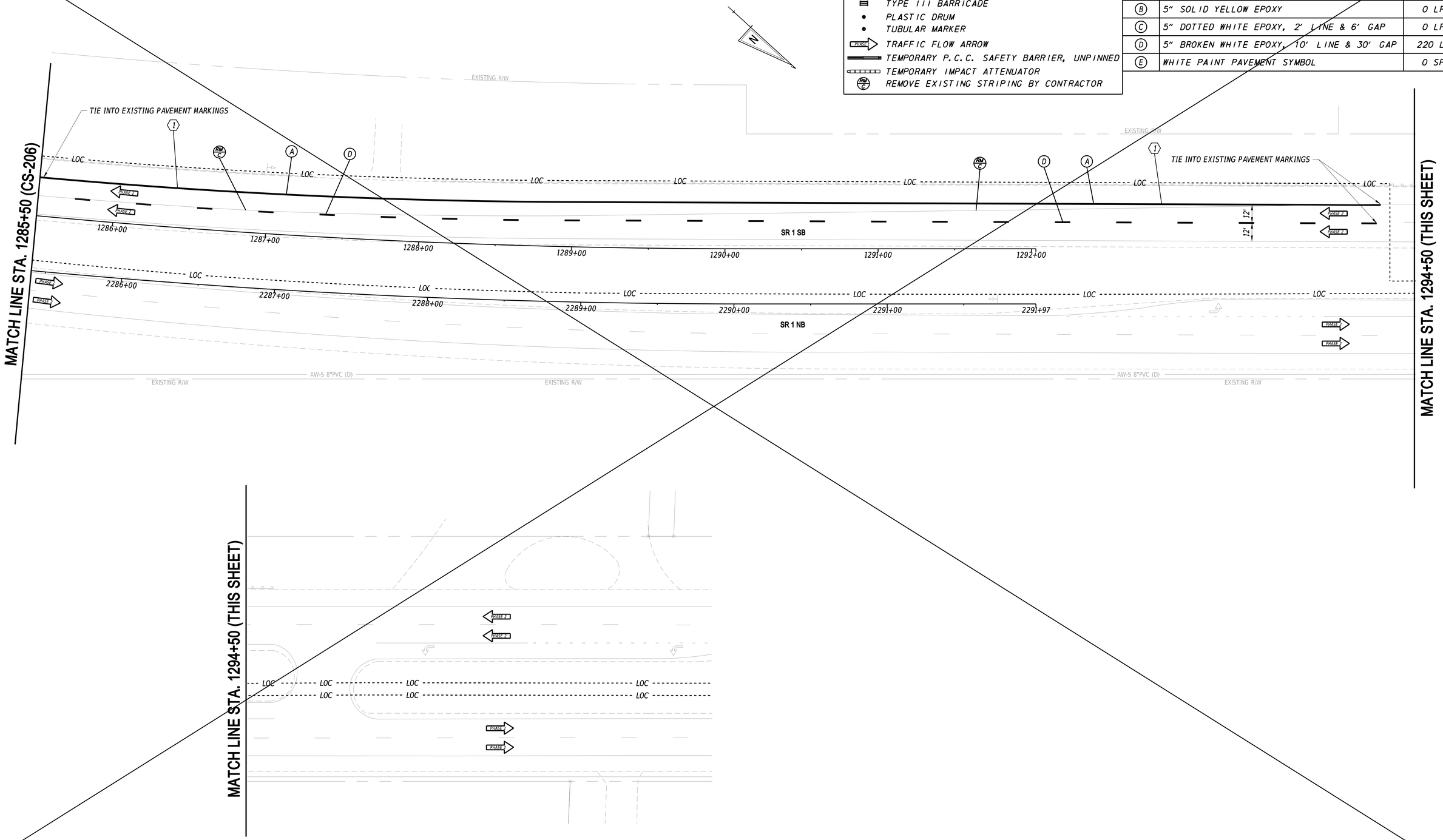
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 2 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- (RM/C) REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY	875 LF
(B)	5" SOLID YELLOW EPOXY	0 LF
(C)	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
(D)	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	220 LF
(E)	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-207
SECTION WRA
SHEET NO. 180

9/17/2020
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SEQUENCE OF CONSTRUCTION

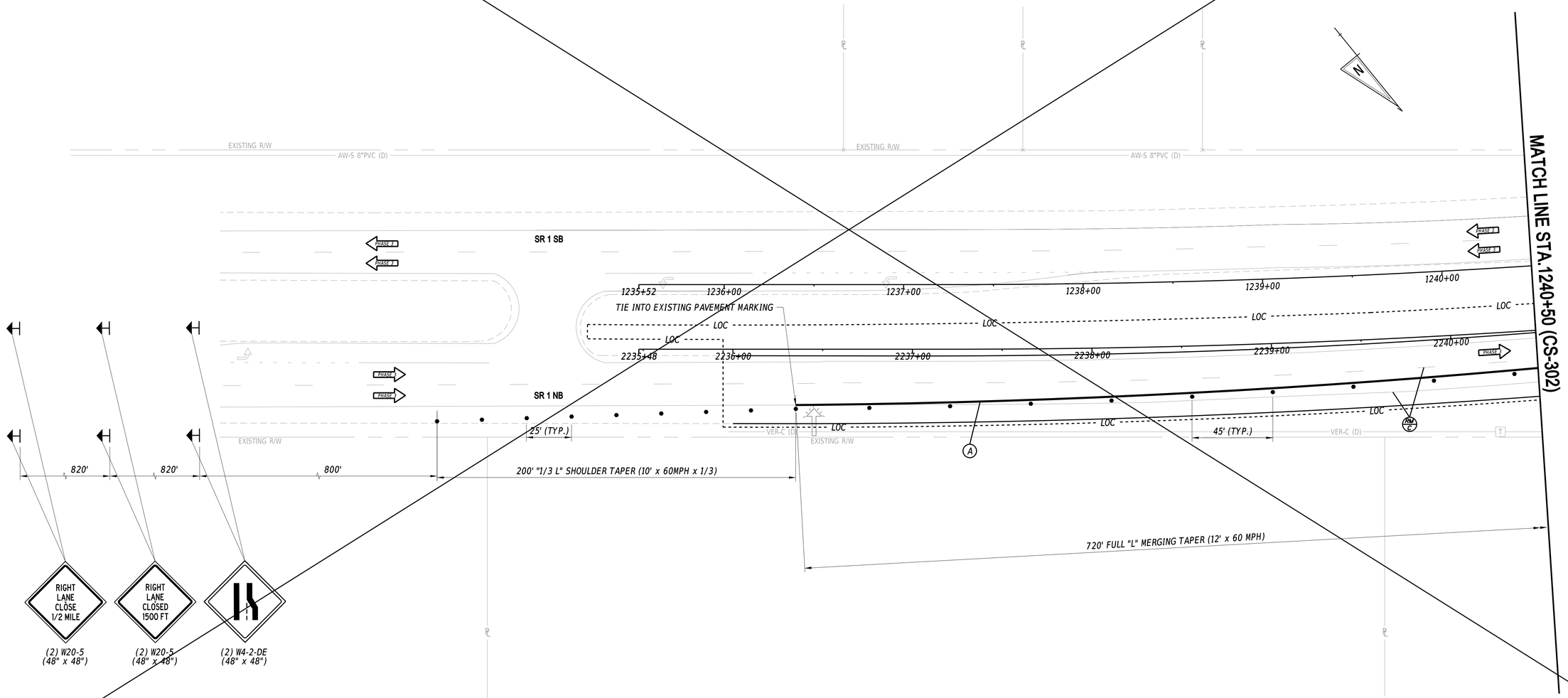
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	414 LF
B	5" SOLID YELLOW EPOXY	0 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-301

SECTION WRA

SHEET NO. 181

9/17/2020
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SEQUENCE OF CONSTRUCTION

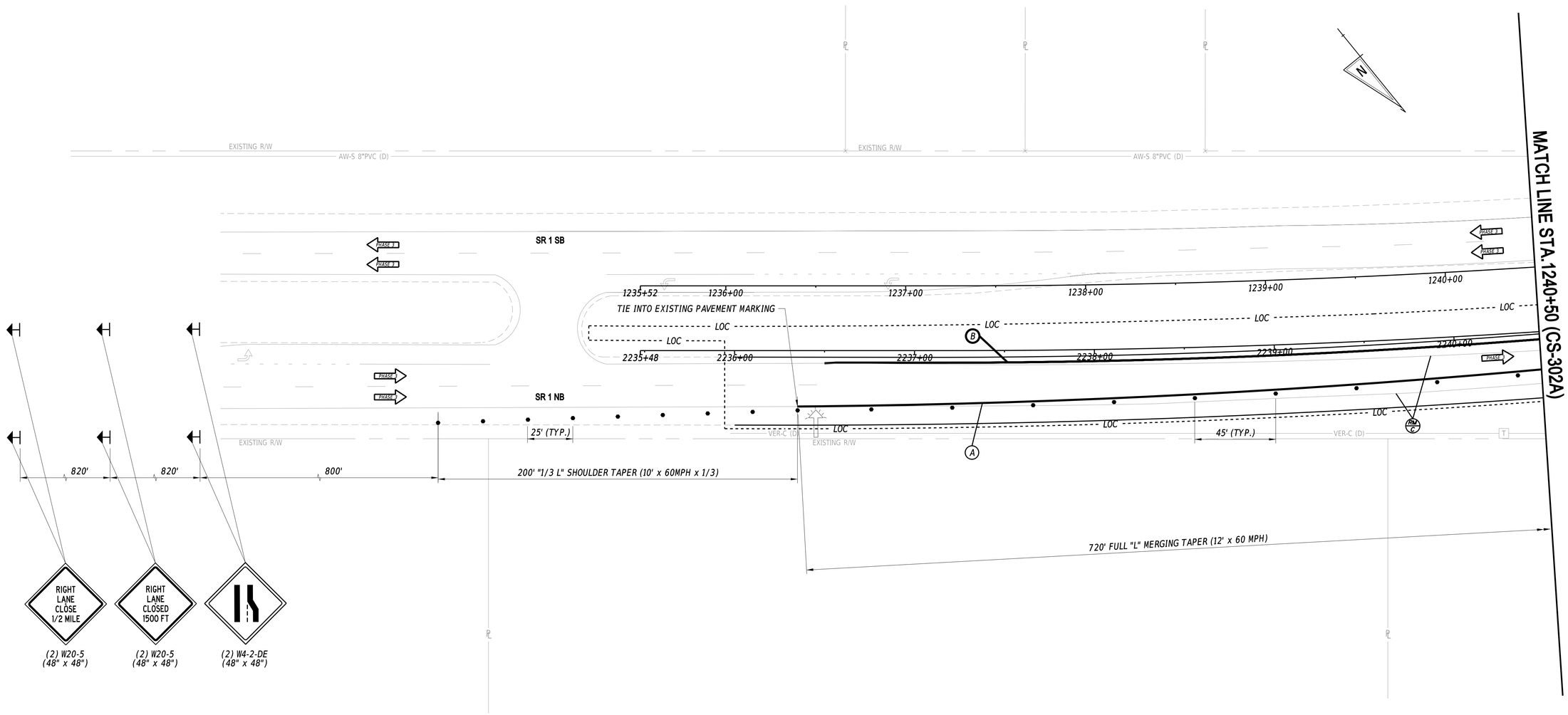
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	414 LF
B	5" SOLID YELLOW EPOXY	398 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-301A

SECTION	SHEET NO.
WRA	181A

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SEQUENCE OF CONSTRUCTION

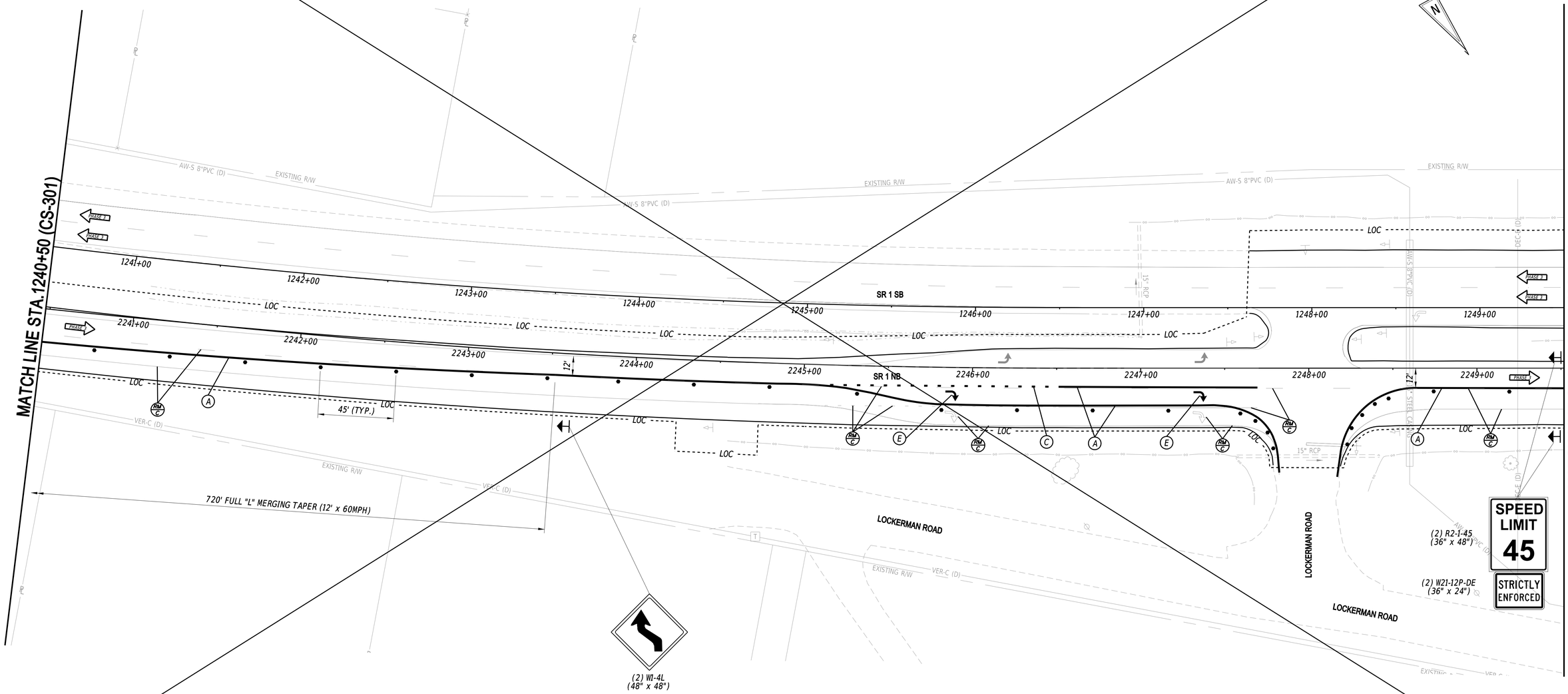
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1050 LF
B	5" SOLID YELLOW EPOXY	0 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	38 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	31 SF



ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-302

SECTION
WRA
SHEET NO.
182

9/17/2020
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SEQUENCE OF CONSTRUCTION

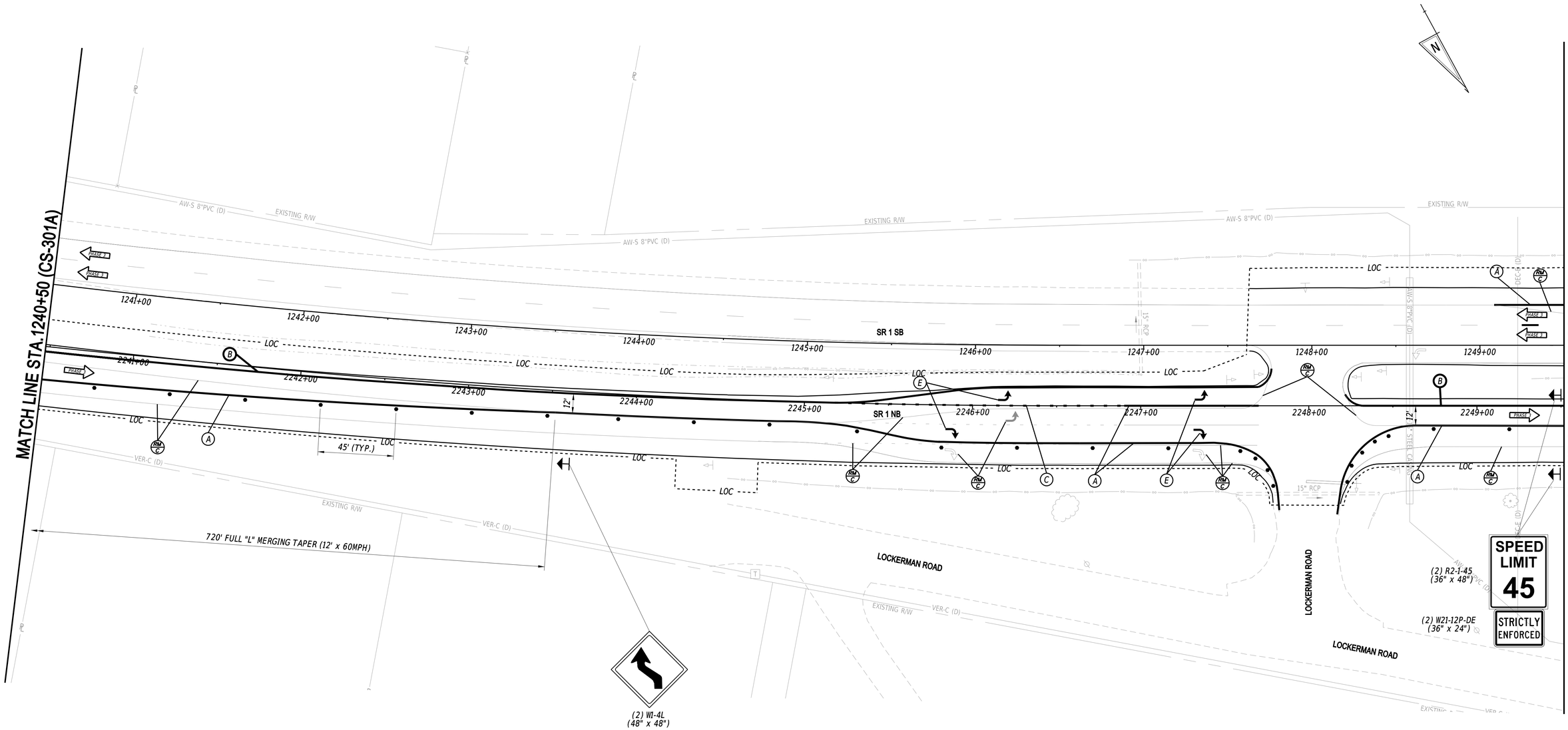
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	962 LF
B	5" SOLID YELLOW EPOXY	871 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	42 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	62 SF



ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-302A	
SECTION	WRA
SHEET NO.	182A

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SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. REPLACE EXISTING GUARDRAIL. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. PERFORM SR 1 NB ROADWAY REHABILITATION.

NOTES:

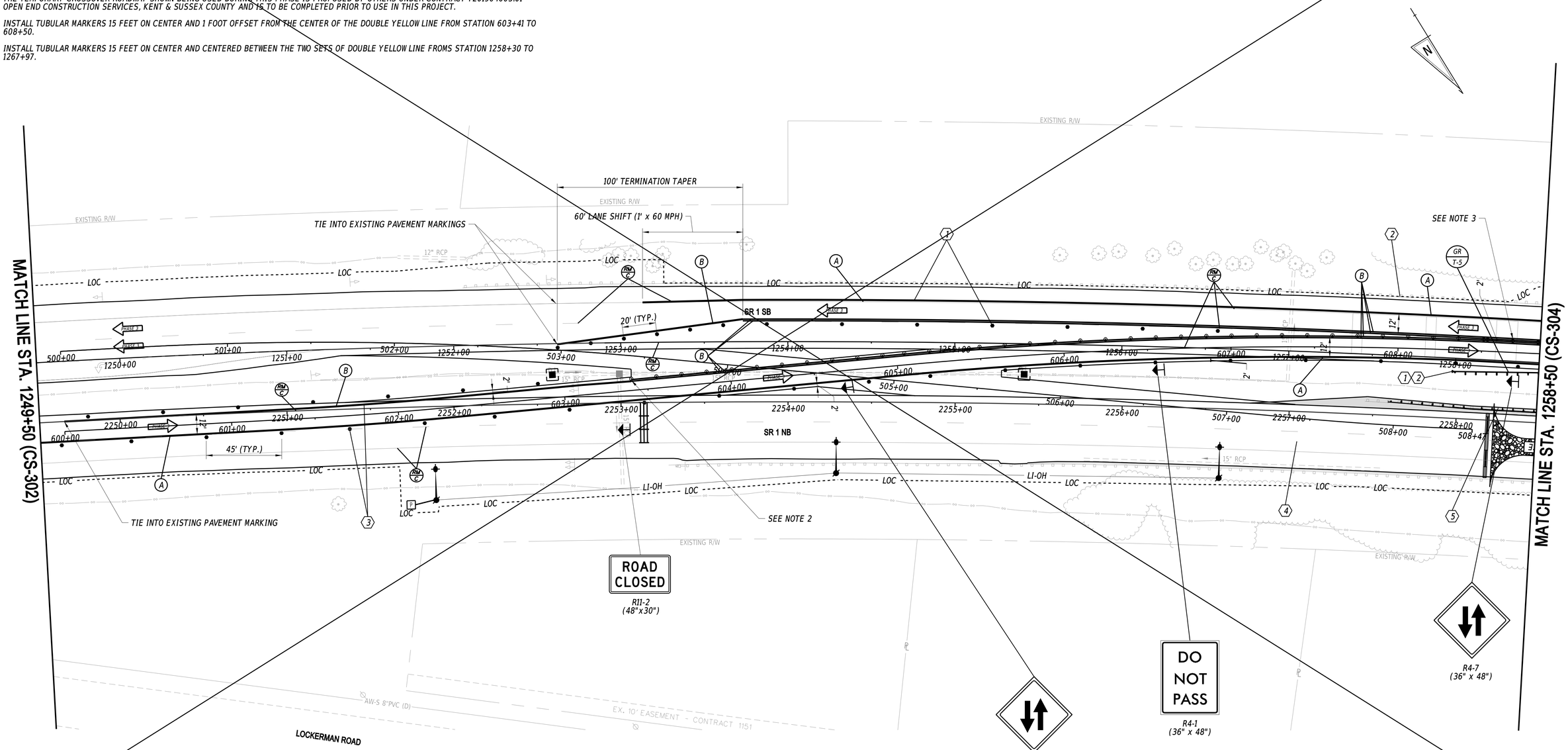
1. THE TEMPORARY CROSSOVER ROADWAY SHOWN BEING USED DURING THIS PHASE IS PROPOSED BY OTHERS UNDER CONTRACT T201904003.01 - OPEN END CONSTRUCTION SERVICES, KENT & SUSSEX COUNTY AND IS TO BE COMPLETED PRIOR TO USE IN THIS PROJECT.
2. INSTALL TUBULAR MARKERS 15 FEET ON CENTER AND 1 FOOT OFFSET FROM THE CENTER OF THE DOUBLE YELLOW LINE FROM STATION 603+41 TO 608+50.
3. INSTALL TUBULAR MARKERS 15 FEET ON CENTER AND CENTERED BETWEEN THE TWO SETS OF DOUBLE YELLOW LINE FROMS STATION 1258+30 TO 1267+97.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,487 LF
B	5" SOLID YELLOW EPOXY	2,525 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



TEMPORARY GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET*	LENGTH
T-5	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	1257+98.2	8.0'	50.0'

*OFFSETS SHOWN IN THE GUARDRAIL SCHEDULE WITH A MINUS SIGN ARE TO THE LEFT OF THE BASELINE.

ADDENDA / REVISIONS

3	DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-303

SECTION	SHEET NO.
WRA	183

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SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. REPLACE EXISTING GUARDRAIL. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. PERFORM SR 1 NB ROADWAY REHABILITATION.

NOTES:

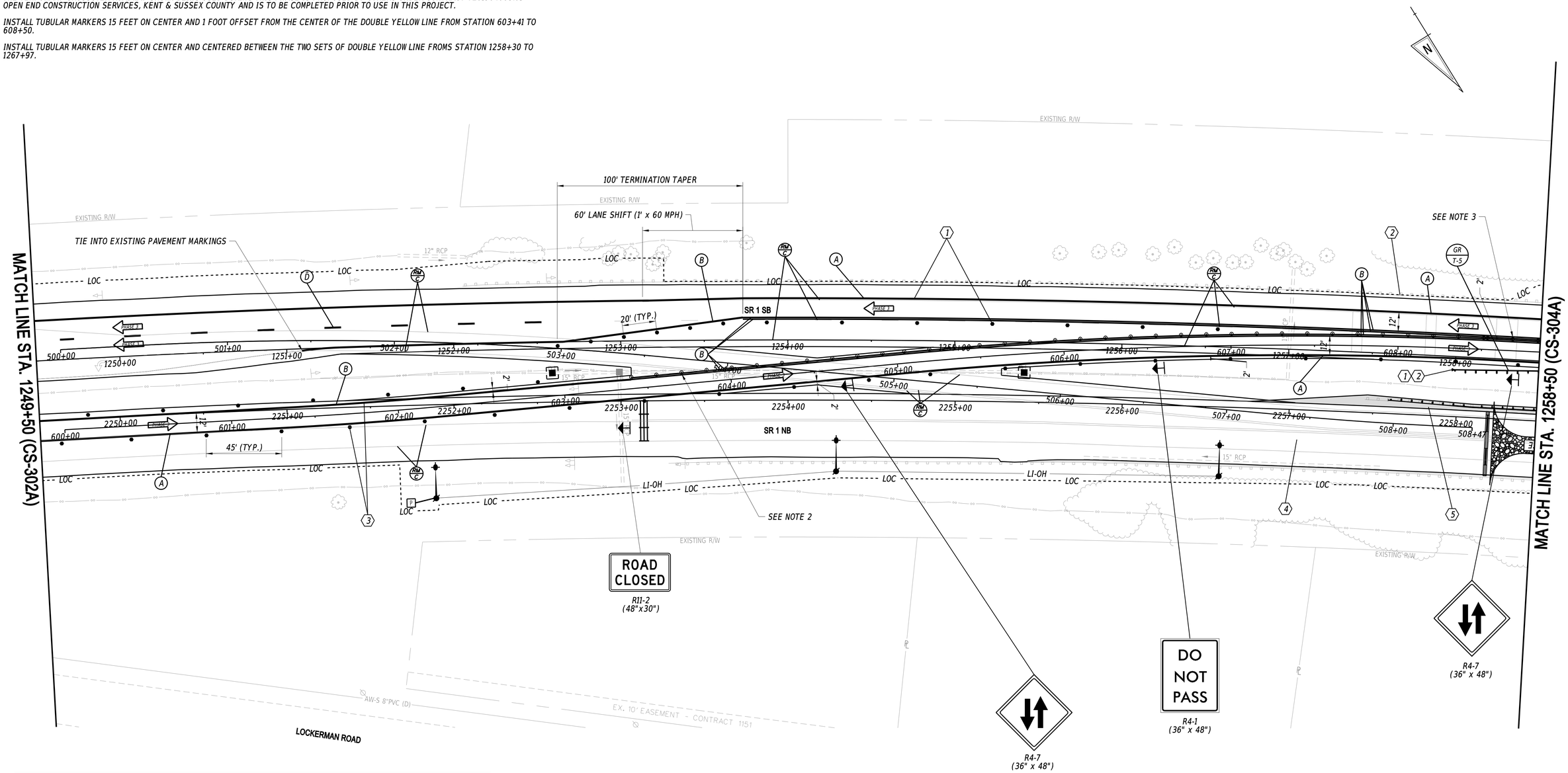
1. THE TEMPORARY CROSSOVER ROADWAY SHOWN BEING USED DURING THIS PHASE IS PROPOSED BY OTHERS UNDER CONTRACT T201904003.01 - OPEN END CONSTRUCTION SERVICES, KENT & SUSSEX COUNTY AND IS TO BE COMPLETED PRIOR TO USE IN THIS PROJECT.
2. INSTALL TUBULAR MARKERS 15 FEET ON CENTER AND 1 FOOT OFFSET FROM THE CENTER OF THE DOUBLE YELLOW LINE FROM STATION 603+41 TO 608+50.
3. INSTALL TUBULAR MARKERS 15 FEET ON CENTER AND CENTERED BETWEEN THE TWO SETS OF DOUBLE YELLOW LINE FROMS STATION 1258+30 TO 1267+97.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,799 LF
B	5" SOLID YELLOW EPOXY	2,666 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	80 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



TEMPORARY GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET*	LENGTH
T-5	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	1257+98.2	8.0'	50.0'

*OFFSETS SHOWN IN THE GUARDRAIL SCHEDULE WITH A MINUS SIGN ARE TO THE LEFT OF THE BASELINE.

ADDENDA / REVISIONS

3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	T201907601
COUNTY	SUSSEX
BRIDGE NO.	N/A
DESIGNED BY:	WRA
CHECKED BY:	WRA

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-303A	
SECTION	WRA
SHEET NO.	183A

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CONSTRUCTION STAGING LEGEND

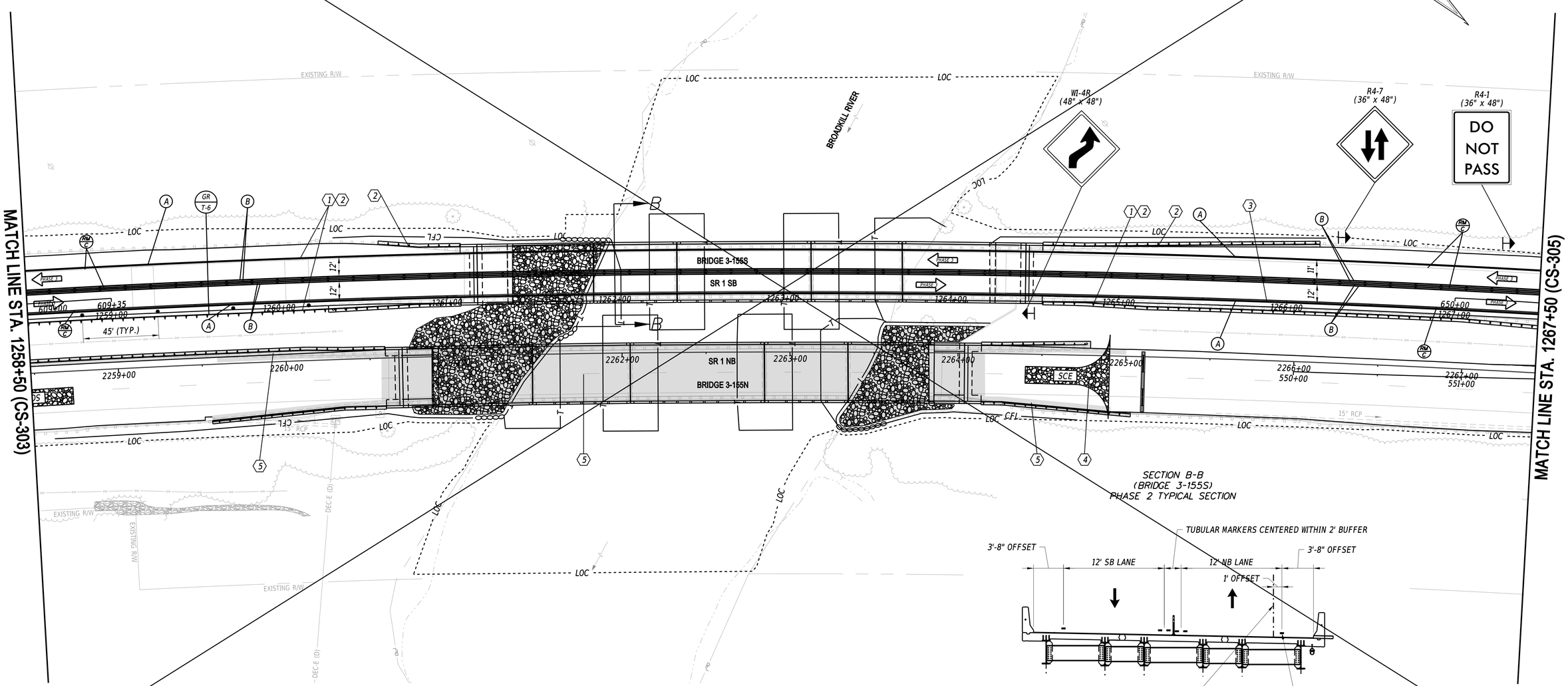
- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,800 LF
B	5" SOLID YELLOW EPOXY	3,600 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF

SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. REPLACE EXISTING GUARDRAIL. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. PERFORM SR 1 NB ROADWAY REHABILITATION.



TEMPORARY GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET*	LENGTH
T-6	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	1258+50.0	6.0'	195.7'

*OFFSETS SHOWN IN THE GUARDRAIL SCHEDULE WITH A MINUS SIGN ARE TO THE LEFT OF THE BASELINE.

ADDENDA / REVISIONS

3 DELETED SHEET J.CHENG 9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N/3-155S
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-304
SECTION
WRA
SHEET NO.
184

9/17/2020
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CONSTRUCTION STAGING LEGEND

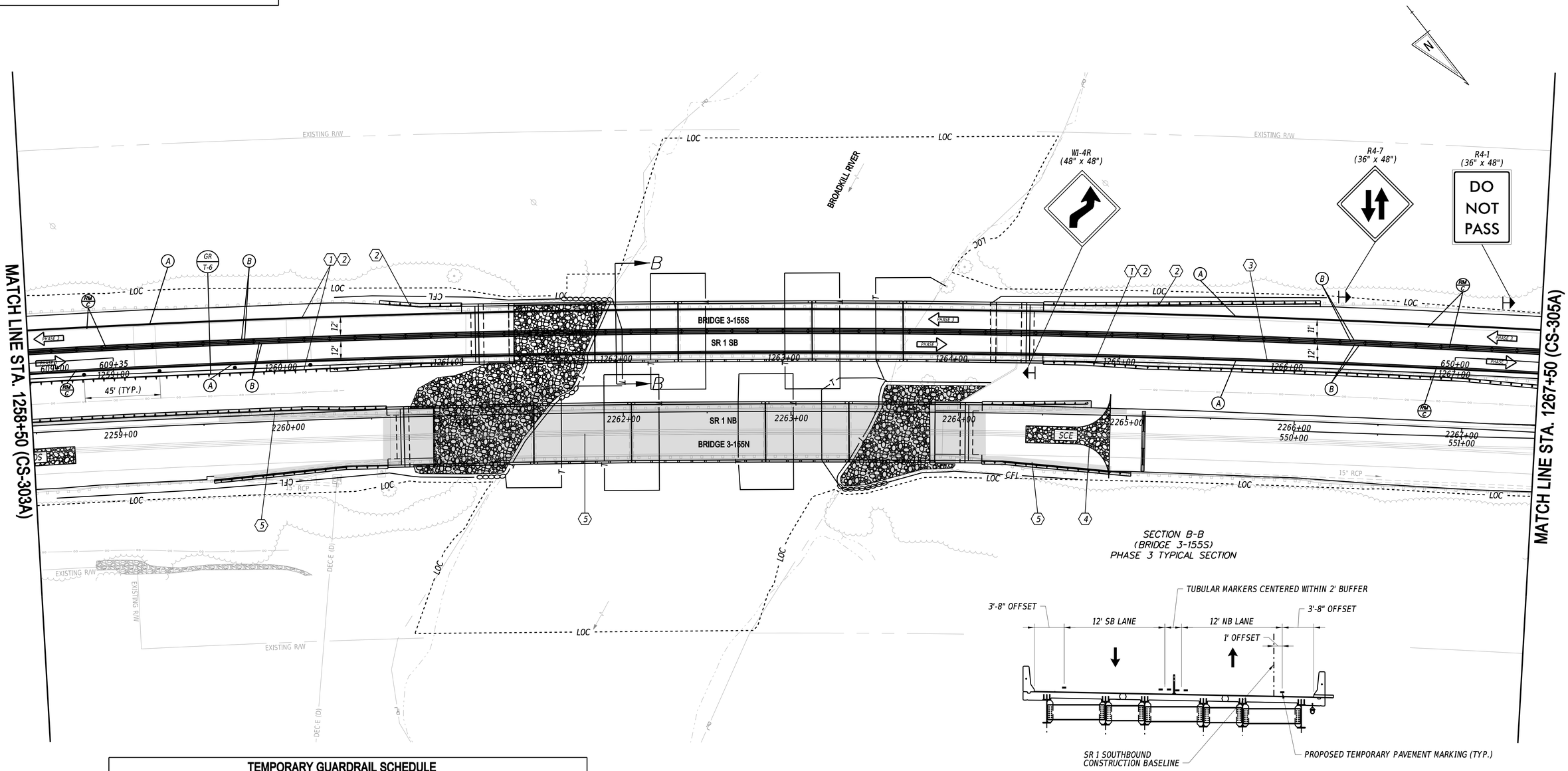
- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,800 LF
B	5" SOLID YELLOW EPOXY	3,600 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF

SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. REPLACE EXISTING GUARDRAIL. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. PERFORM SR 1 NB ROADWAY REHABILITATION.



TEMPORARY GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET*	LENGTH
T-6	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	1258+50.0	6.0'	195.7'

*OFFSETS SHOWN IN THE GUARDRAIL SCHEDULE WITH A MINUS SIGN ARE TO THE LEFT OF THE BASELINE.

ADDENDA / REVISIONS

3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N/3-155S
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-304A	
SECTION	WRA
SHEET NO.	184A

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SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.

NOTES:

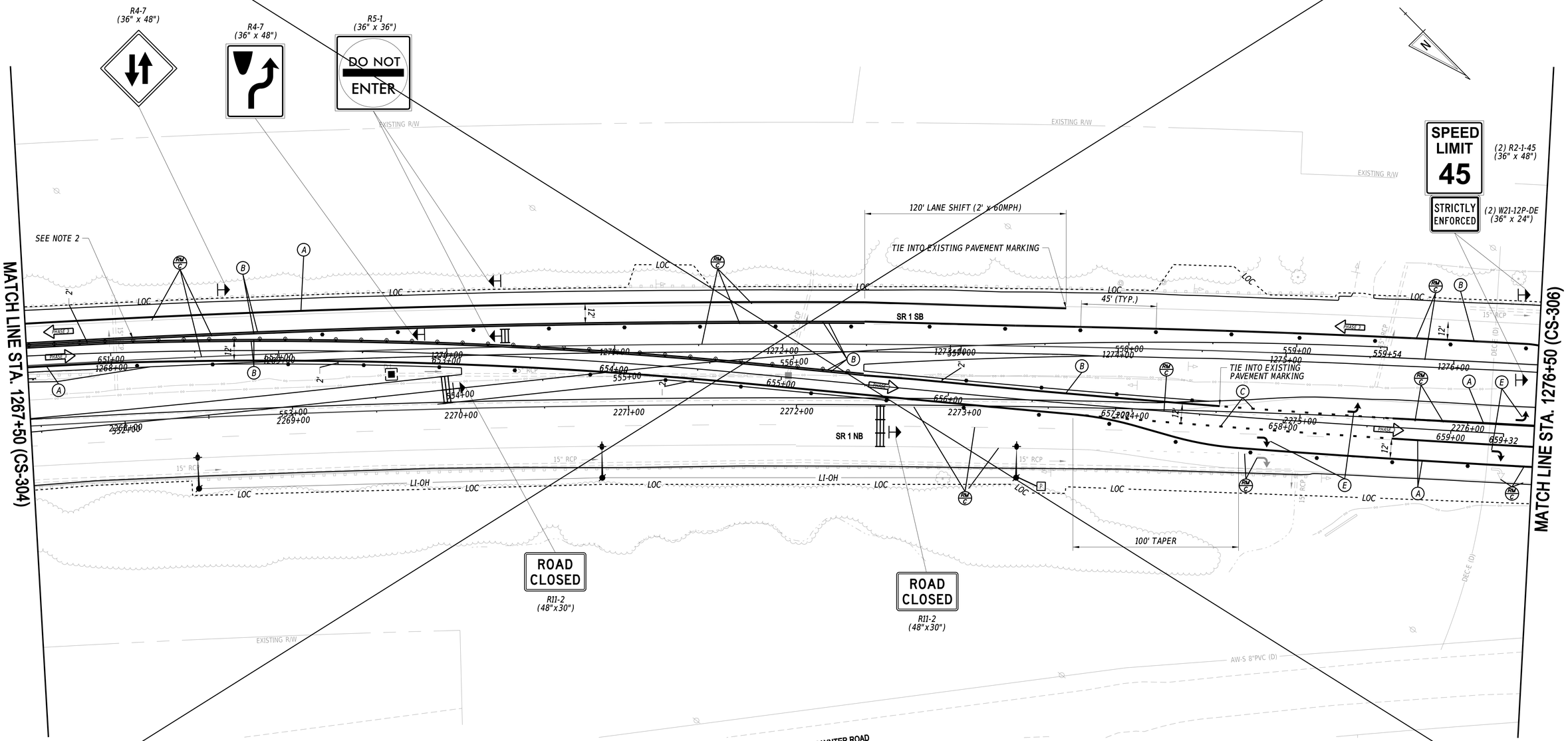
1. THE TEMPORARY CROSSOVER ROADWAY SHOWN BEING USED DURING THIS PHASE IS PROPOSED BY OTHERS UNDER CONTRACT T201904003.01 - OPEN END CONSTRUCTION SERVICES, KENT & SUSSEX COUNTY AND IS TO BE COMPLETED PRIOR TO USE IN THIS PROJECT.
2. INSTALL TUBULAR MARKERS 15 FEET ON CENTER AND 1 FOOT OFFSET FROM THE CENTER OF THE DOUBLE YELLOW LINE FROM STATION 651+14 TO 655+39.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,173 LF
B	5" SOLID YELLOW EPOXY	2,615 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	44 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	62 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-305
SECTION
WRA
SHEET NO.
185

9/17/2020
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SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.

NOTES:

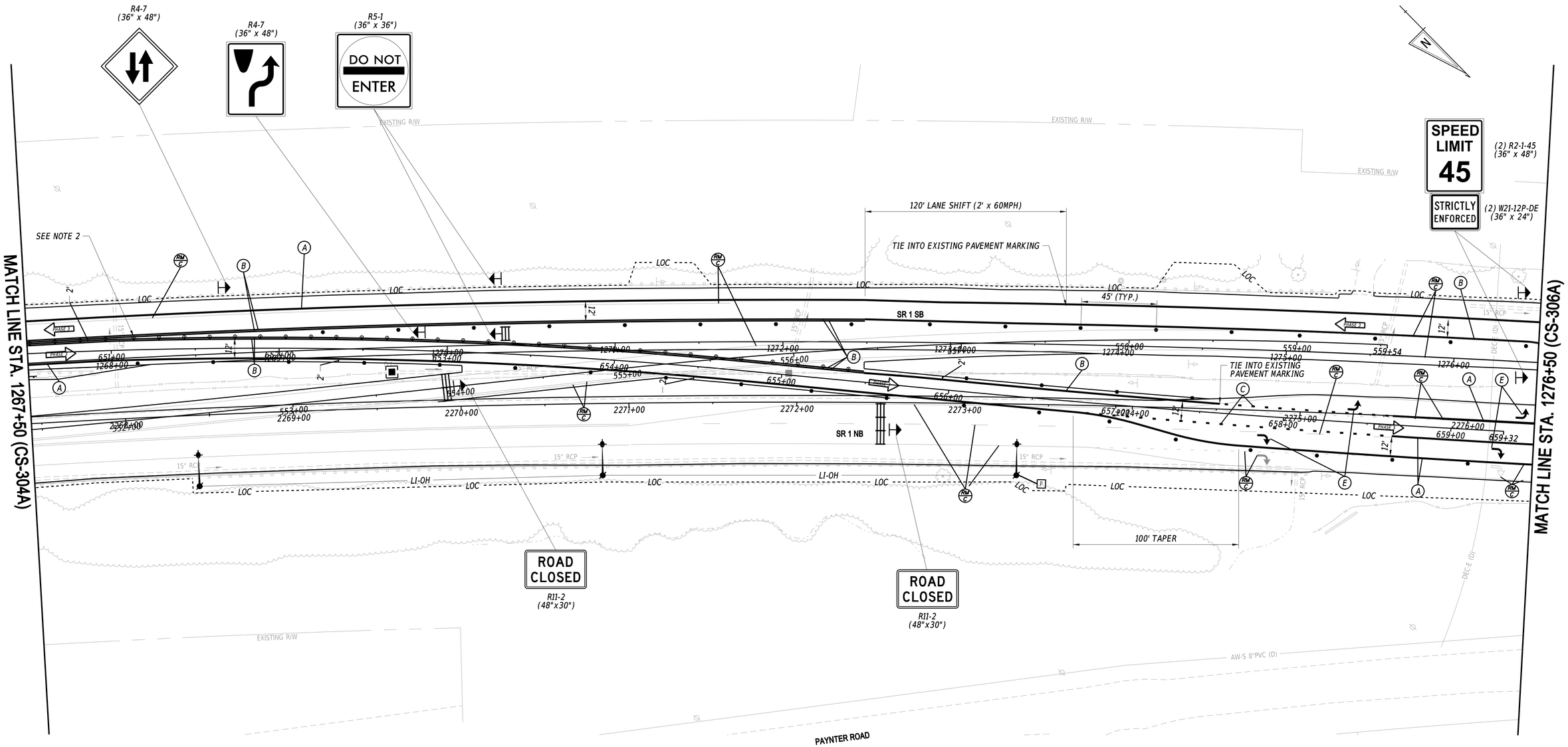
1. THE TEMPORARY CROSSOVER ROADWAY SHOWN BEING USED DURING THIS PHASE IS PROPOSED BY OTHERS UNDER CONTRACT T201904003.01 - OPEN END CONSTRUCTION SERVICES, KENT & SUSSEX COUNTY AND IS TO BE COMPLETED PRIOR TO USE IN THIS PROJECT.
2. INSTALL TUBULAR MARKERS 15 FEET ON CENTER AND 1 FOOT OFFSET FROM THE CENTER OF THE DOUBLE YELLOW LINE FROM STATION 651+14 TO 655+39.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,967 LF
B	5" SOLID YELLOW EPOXY	2,615 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	72 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	62 SF



ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-305A
SECTION
WRA
SHEET NO.
185A

9/18/2020
11:50:18 AM
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SEQUENCE OF CONSTRUCTION

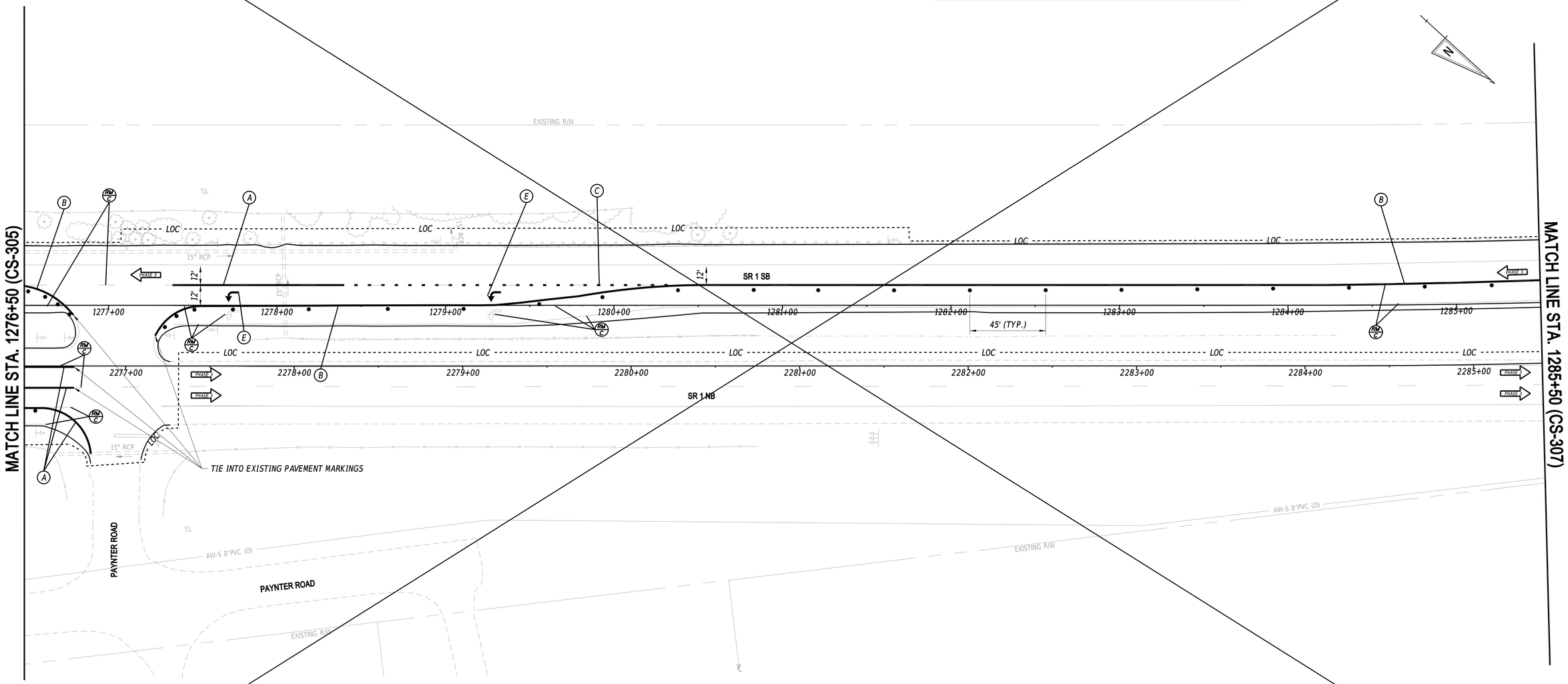
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	0 LF
B	5" SOLID YELLOW EPOXY	970 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	47 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	31 SF



ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-306
SECTION
WRA
SHEET NO.
186

9/17/2020
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SEQUENCE OF CONSTRUCTION

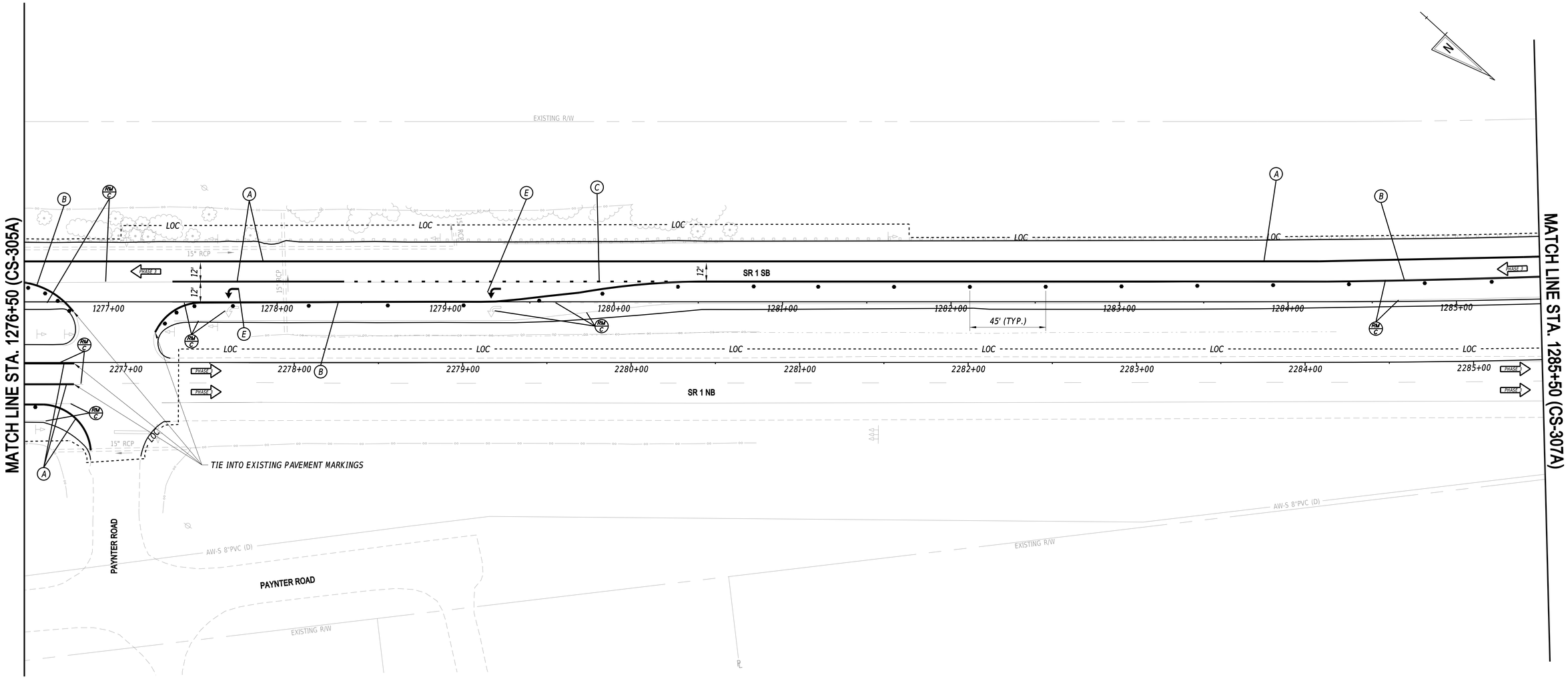
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,124 LF
B	5" SOLID YELLOW EPOXY	861 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	47 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	31 SF



ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-306A
SECTION
WRA
SHEET NO.
186A

9/18/2020
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SEQUENCE OF CONSTRUCTION

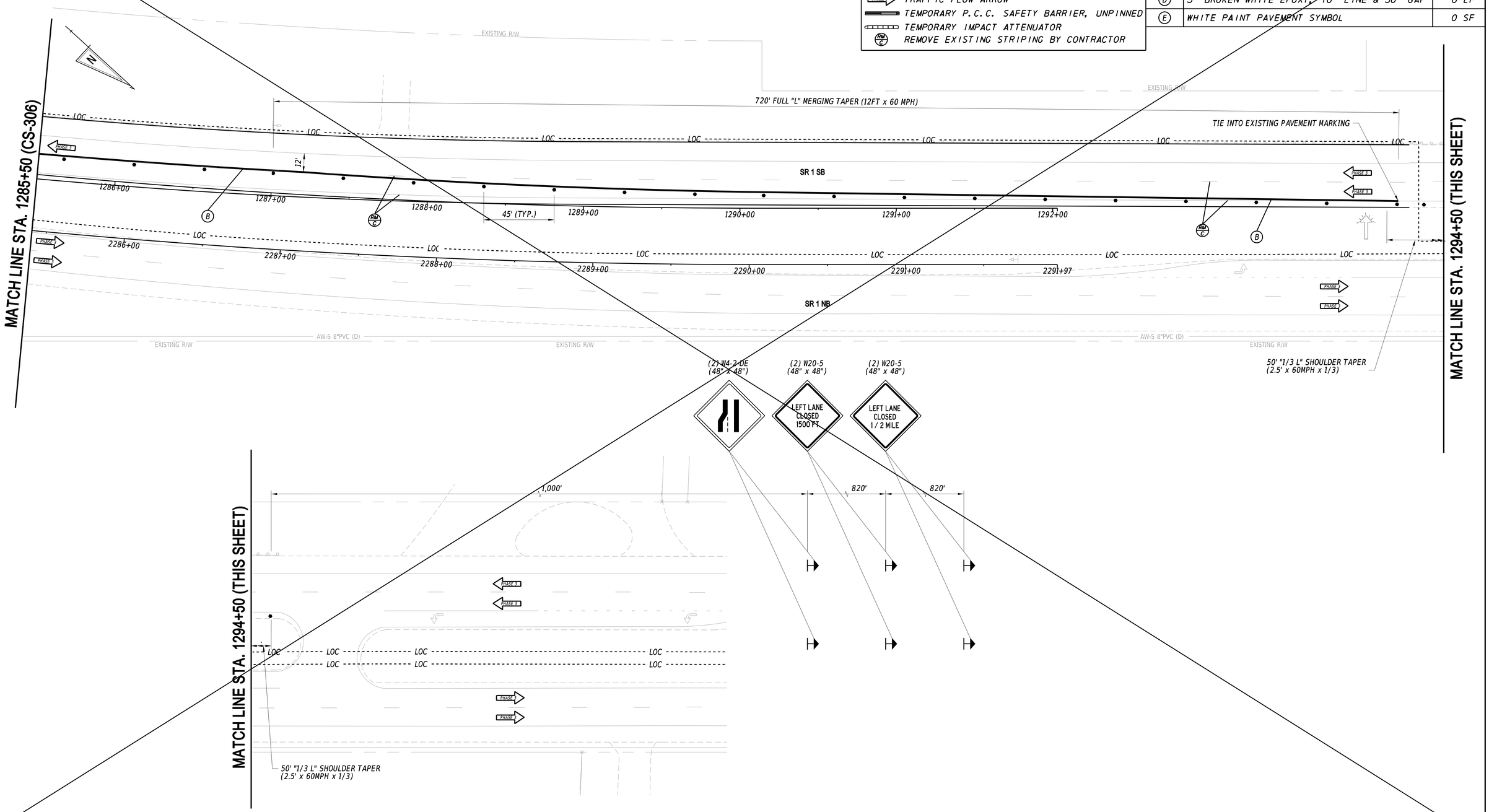
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- (RM/C) REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY	0 LF
(B)	5" SOLID YELLOW EPOXY	870 LF
(C)	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
(D)	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
(E)	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-307

SECTION
WRA
SHEET NO.
187

9/17/2020
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SEQUENCE OF CONSTRUCTION

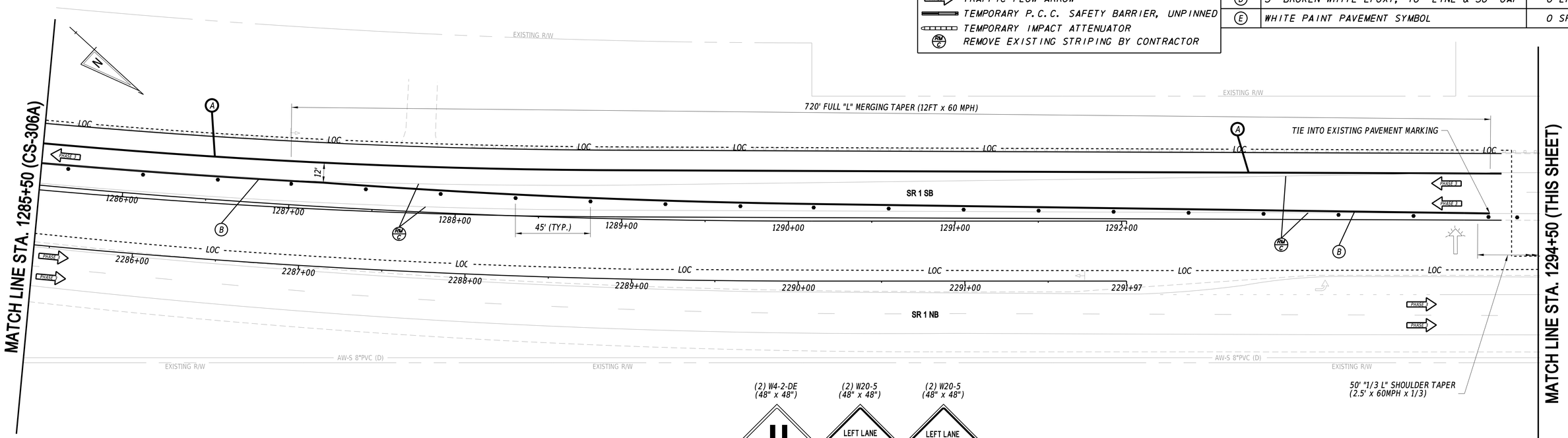
(I) INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 3 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.

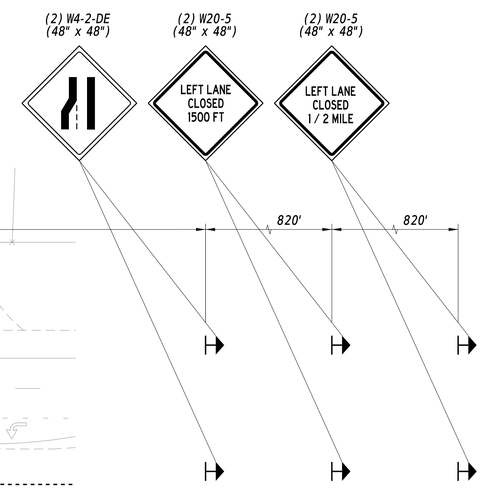
CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	875 LF
B	5" SOLID YELLOW EPOXY	870 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF





ADDENDA / REVISIONS

3	ADDED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 3

CS-307A

SECTION: WRA

SHEET NO. 187A

9/18/2020
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SEQUENCE OF CONSTRUCTION

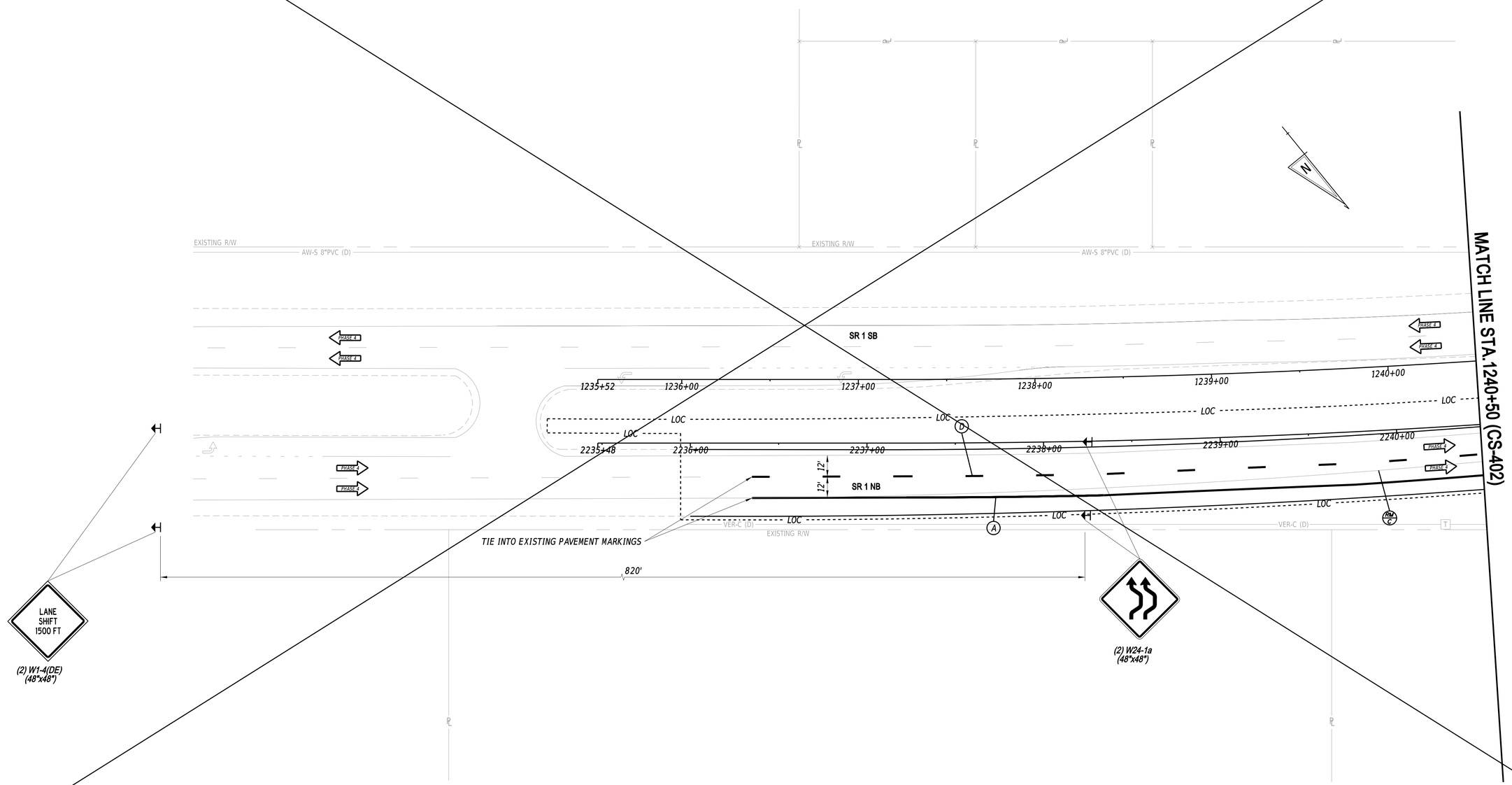
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	415 LF
B	5" SOLID YELLOW EPOXY	0 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	104 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-401
SECTION WRA
SHEET NO. 188

9/17/2020
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SEQUENCE OF CONSTRUCTION

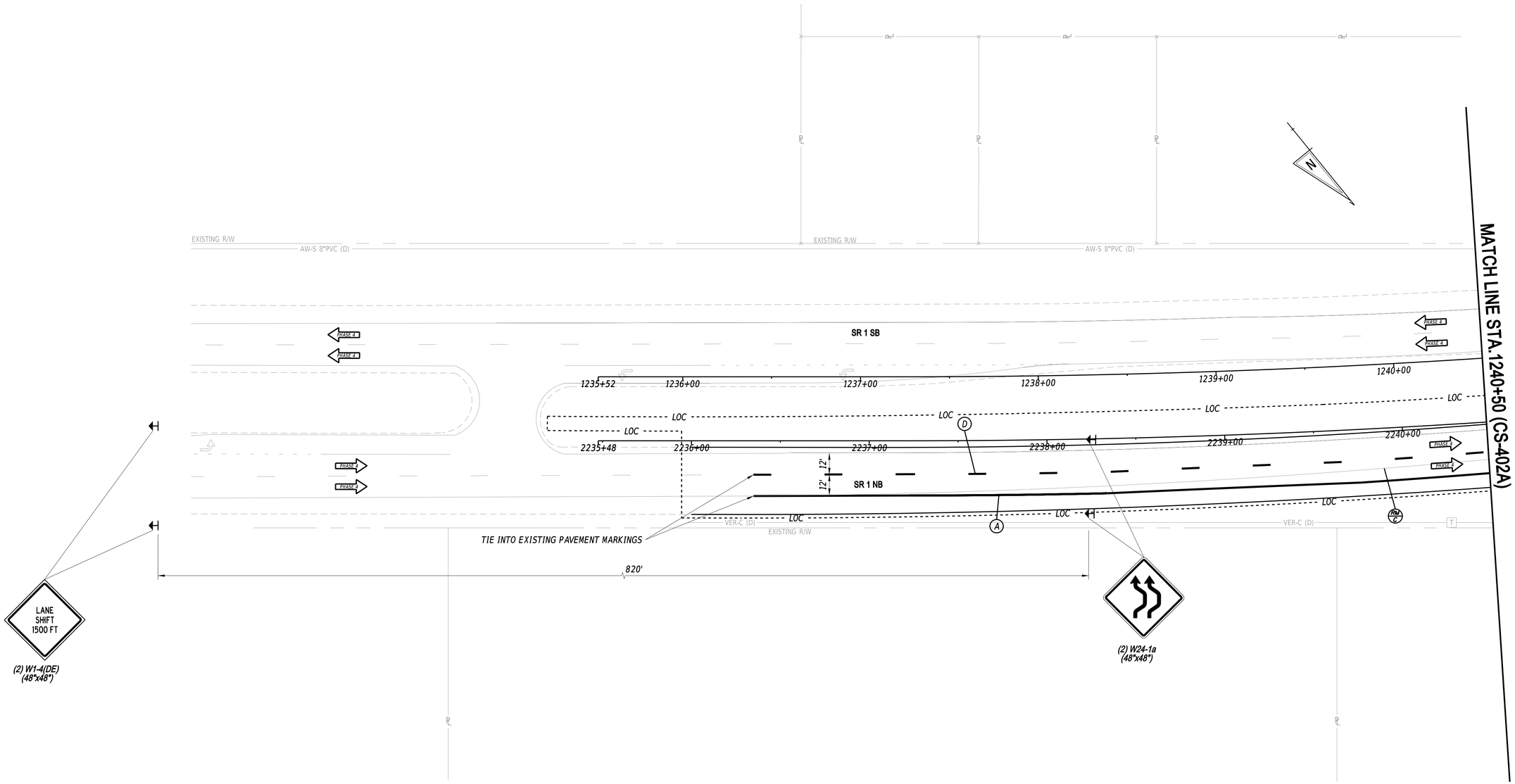
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	415 LF
B	5" SOLID YELLOW EPOXY	0 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	104 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-401A

SECTION	SHEET NO.
WRA	188A

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SEQUENCE OF CONSTRUCTION

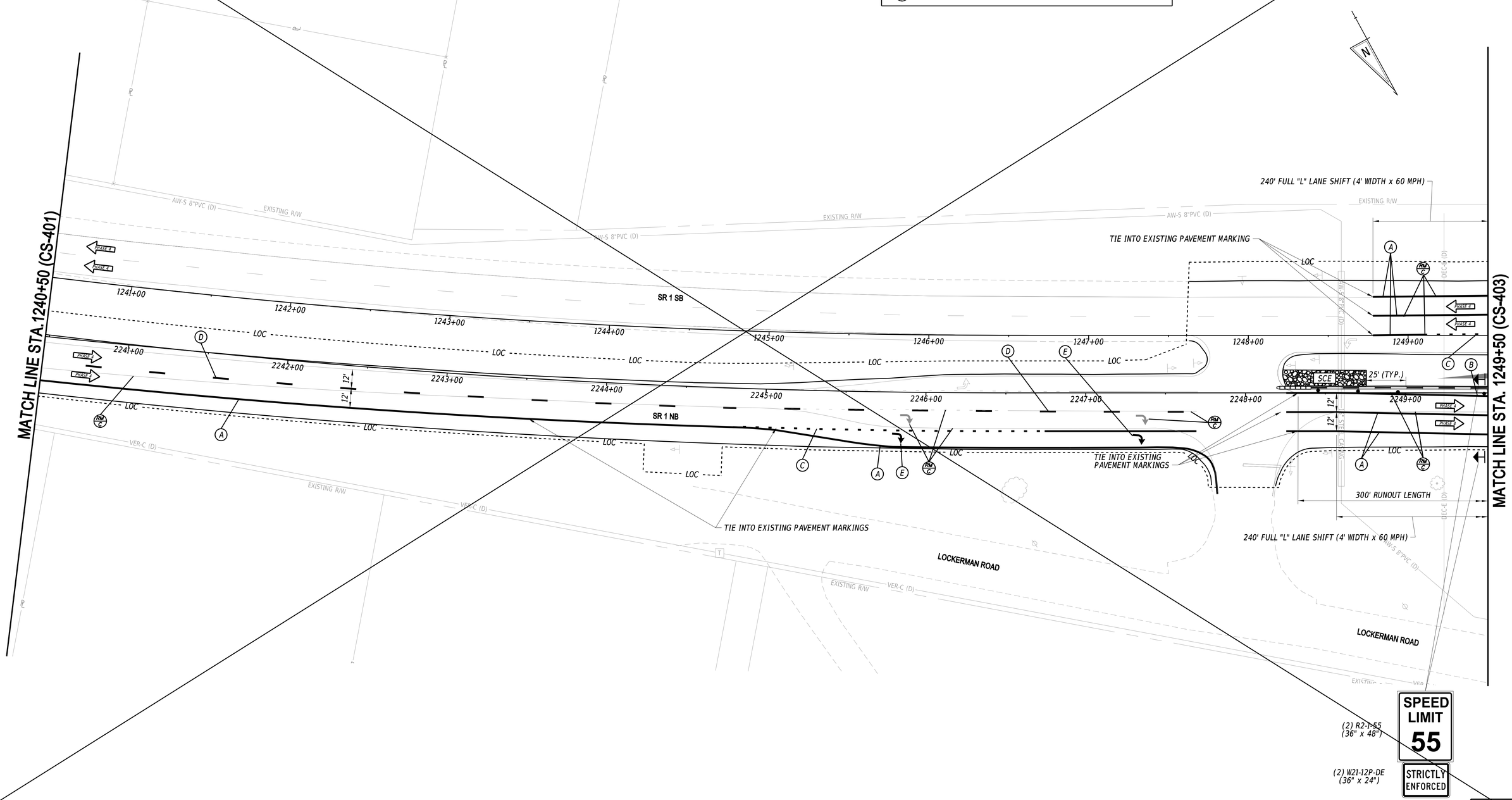
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
3. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,192 LF
B	5" SOLID YELLOW EPOXY	119 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	54 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	182 LF
E	WHITE PAINT PAVEMENT SYMBOL	31 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-402

SECTION	SHEET NO.
WRA	189

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SEQUENCE OF CONSTRUCTION

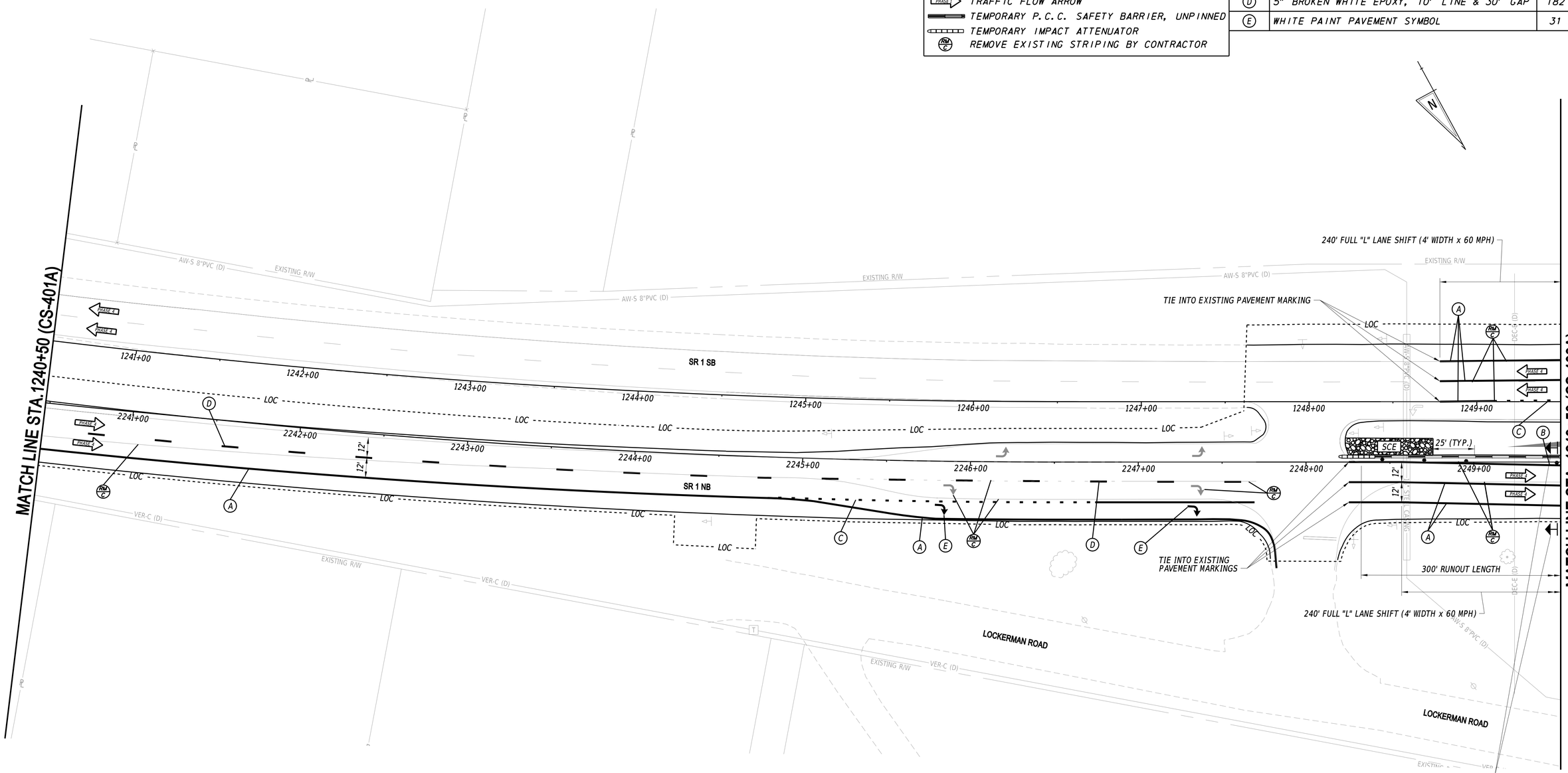
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
3. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	1,192 LF
B	5" SOLID YELLOW EPOXY	119 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	54 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	182 LF
E	WHITE PAINT PAVEMENT SYMBOL	31 SF



(2) R2-1-55 (36" x 48")

SPEED LIMIT 55

(2) W21-12P-DE (36" x 24")

STRICTLY ENFORCED

ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-402A

SECTION	SHEET NO.
WRA	189A

9/18/2020
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SEQUENCE OF CONSTRUCTION

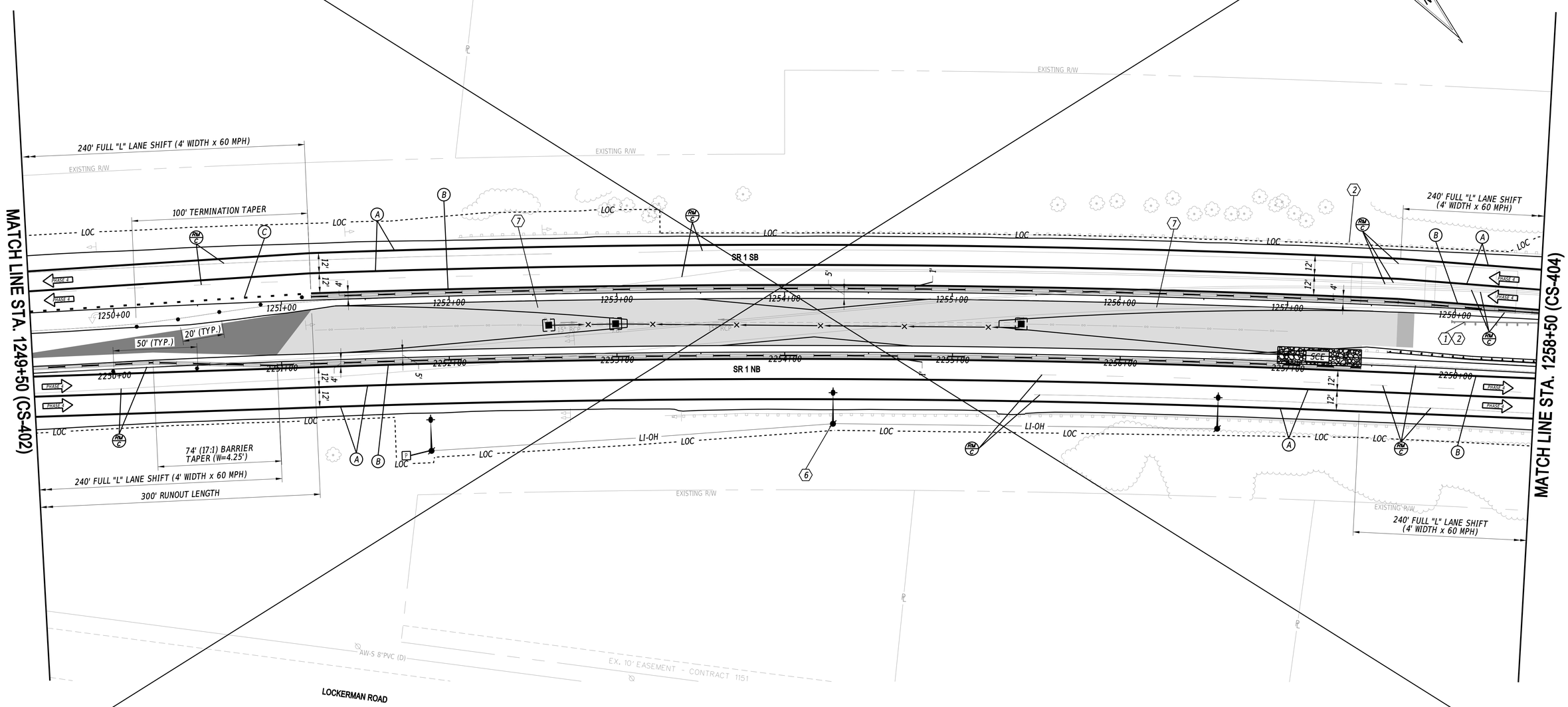
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 1 PLANS, OPEN SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. REMOVE TEMPORARY CROSSOVERS AND CONSTRUCT PERMANENT MEDIAN.
6. REMOVE TEMPORARY ROADWAY LIGHTING.
7. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	3,600 LF
B	5" SOLID YELLOW EPOXY	1,632 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	42 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



CS-403

ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

SECTION: WRA

SHEET NO. 190

9/17/2020 2:49:22 PM N:\32122-003\CADD\Traffic\CS403_SR1B_AD3.dgn

SEQUENCE OF CONSTRUCTION

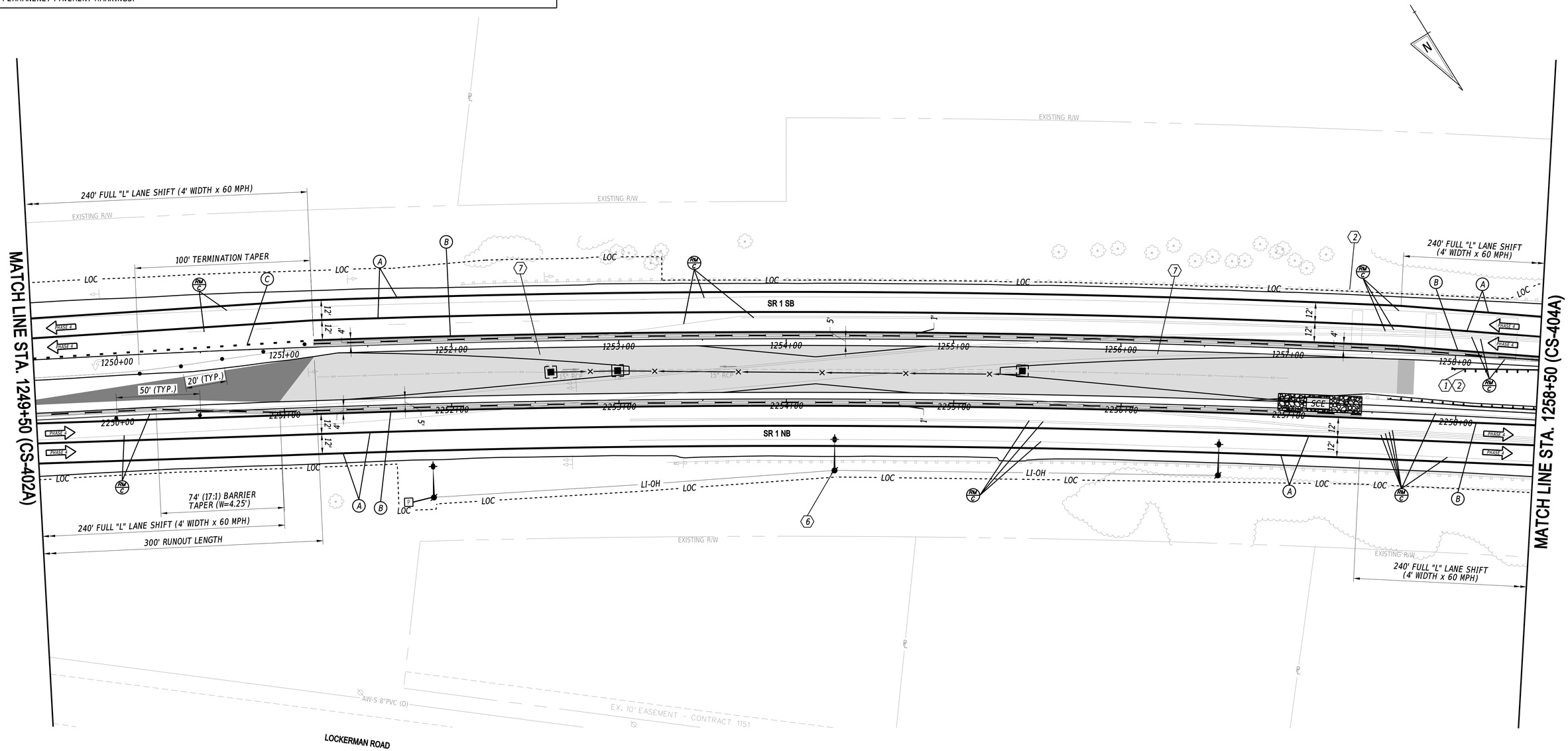
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 1 PLANS, OPEN SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. REMOVE TEMPORARY CROSSOVERS AND CONSTRUCT PERMANENT MEDIAN.
6. REMOVE TEMPORARY ROADWAY LIGHTING.
7. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	3,600 LF
B	5" SOLID YELLOW EPOXY	1,632 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	42 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-403A	
SECTION	WRA
SHEET NO.	190A

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CONSTRUCTION STAGING LEGEND

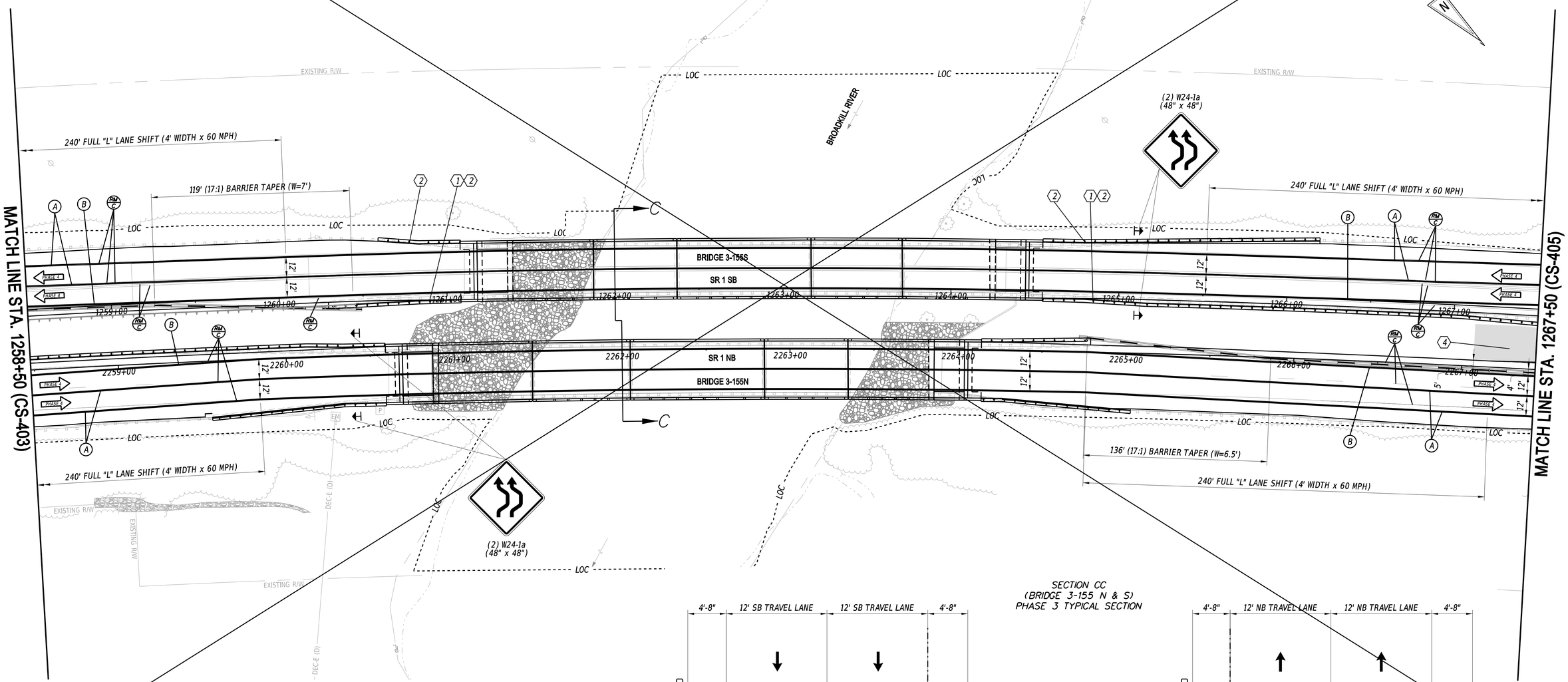
- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

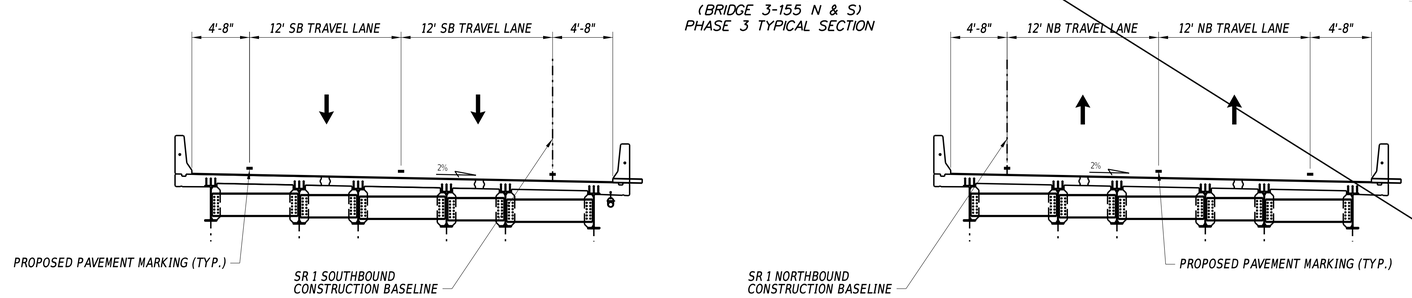
SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	3,600 LF
B	5" SOLID YELLOW EPOXY	1,800 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF

SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 1 PLANS, OPEN SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. REMOVE TEMPORARY CROSSOVERS AND CONSTRUCT PERMANENT MEDIAN.
6. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.



SECTION CC
(BRIDGE 3-155 N & S)
PHASE 3 TYPICAL SECTION



ADDENDA / REVISIONS

3	DELETED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N/3-155S
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-404

SECTION	SHEET NO.
WRA	191

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CONSTRUCTION STAGING LEGEND

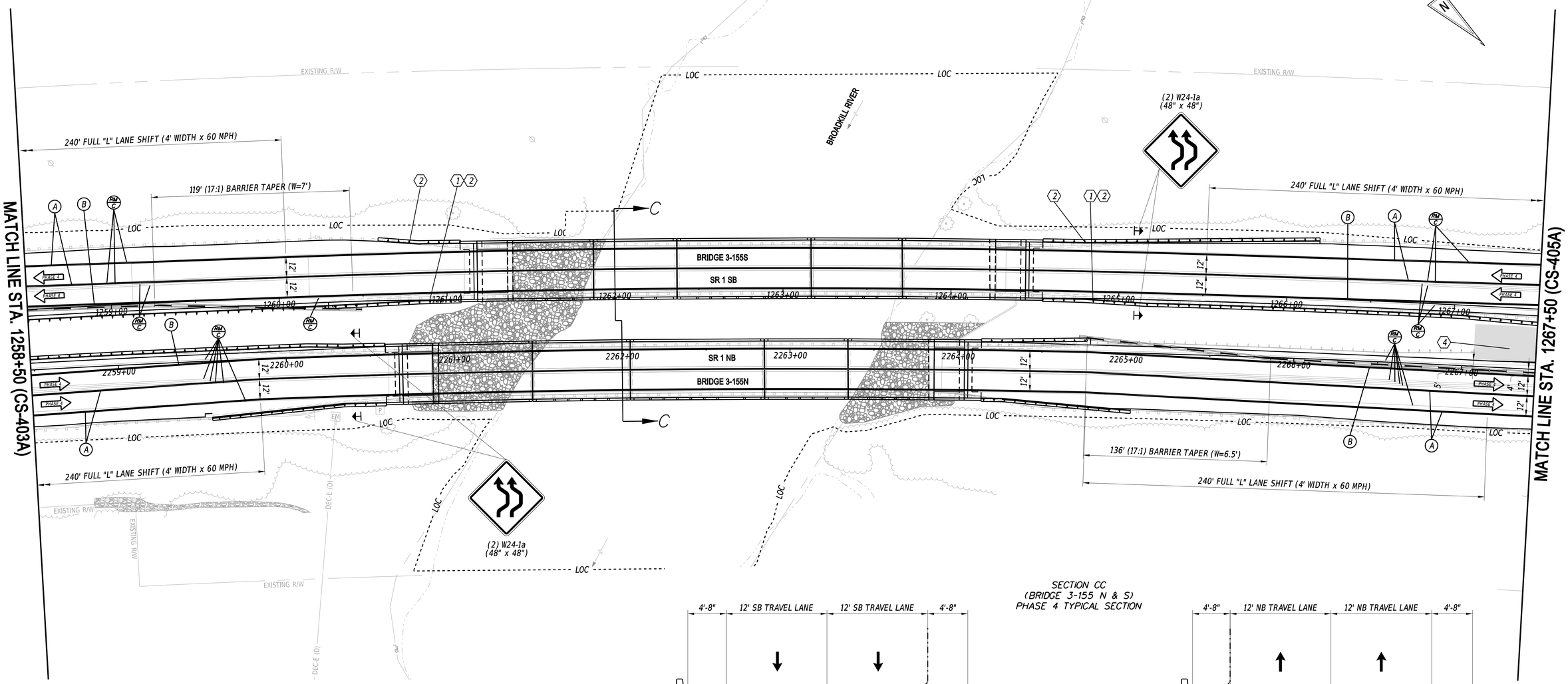
- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

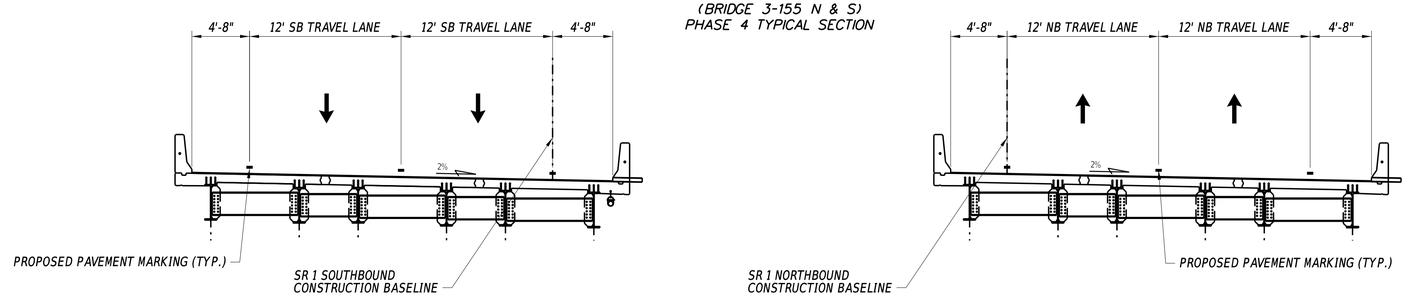
SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	3,600 LF
B	5" SOLID YELLOW EPOXY	1,800 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF

SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT NORTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANE. RE-LAP GUARDRAIL W BEAMS FOR PROPER APPROACH DIRECTION OF TRAFFIC.
2. INSTALL GUARDRAIL REFLECTORS SPACED AT 100 FEET AND AS DIRECTED IN SECTION 720 OF THE SPECIFICATIONS.
3. INSTALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 1 PLANS, OPEN SOUTHBOUND TRAFFIC TO DESIGNATED TRAVEL LANES.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES.
5. REMOVE TEMPORARY CROSSOVERS AND CONSTRUCT PERMANENT MEDIAN.
6. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.



SECTION CC
(BRIDGE 3-155 N & S)
PHASE 4 TYPICAL SECTION



ADDENDA / REVISIONS		
3 ADDED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	3-155N/3-155S
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-404A	
SECTION	WRA
SHEET NO.	191A

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SEQUENCE OF CONSTRUCTION

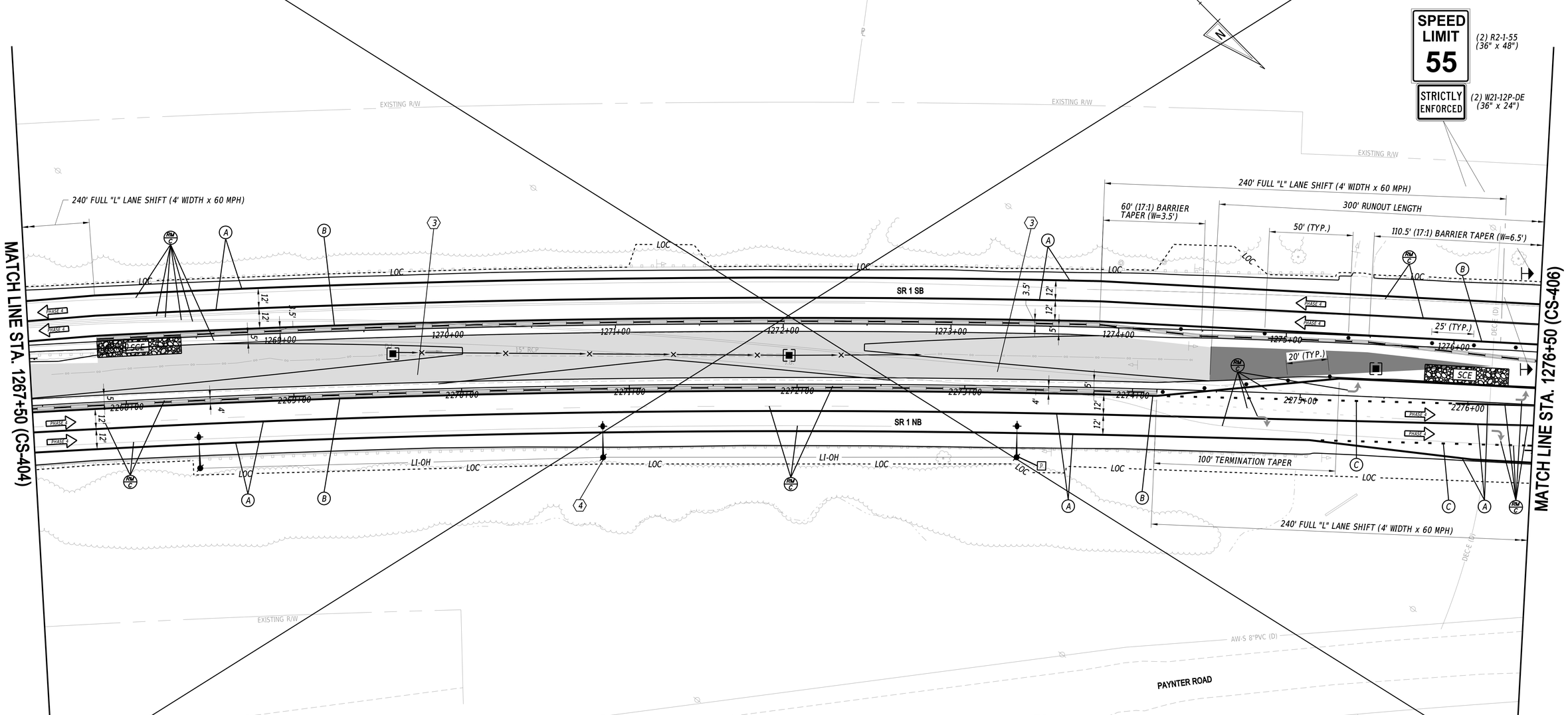
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. INSTALL EROSION AND SEDIEMNT CONTROL DEVICES.
3. REMOVE TEMPORARY CROSSOVERS AND CONSTRUCT PERMANENT MEDIAN.
4. REMOVE TEMPORARY ROADWAY LIGHTING.
5. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING. PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	3,650 LF
B	5" SOLID YELLOW EPOXY	1,800 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	100 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY		
SUSSEX	CHECKED BY: WRA	

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-405
SECTION
WRA
SHEET NO.
192

9/17/2020
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SEQUENCE OF CONSTRUCTION

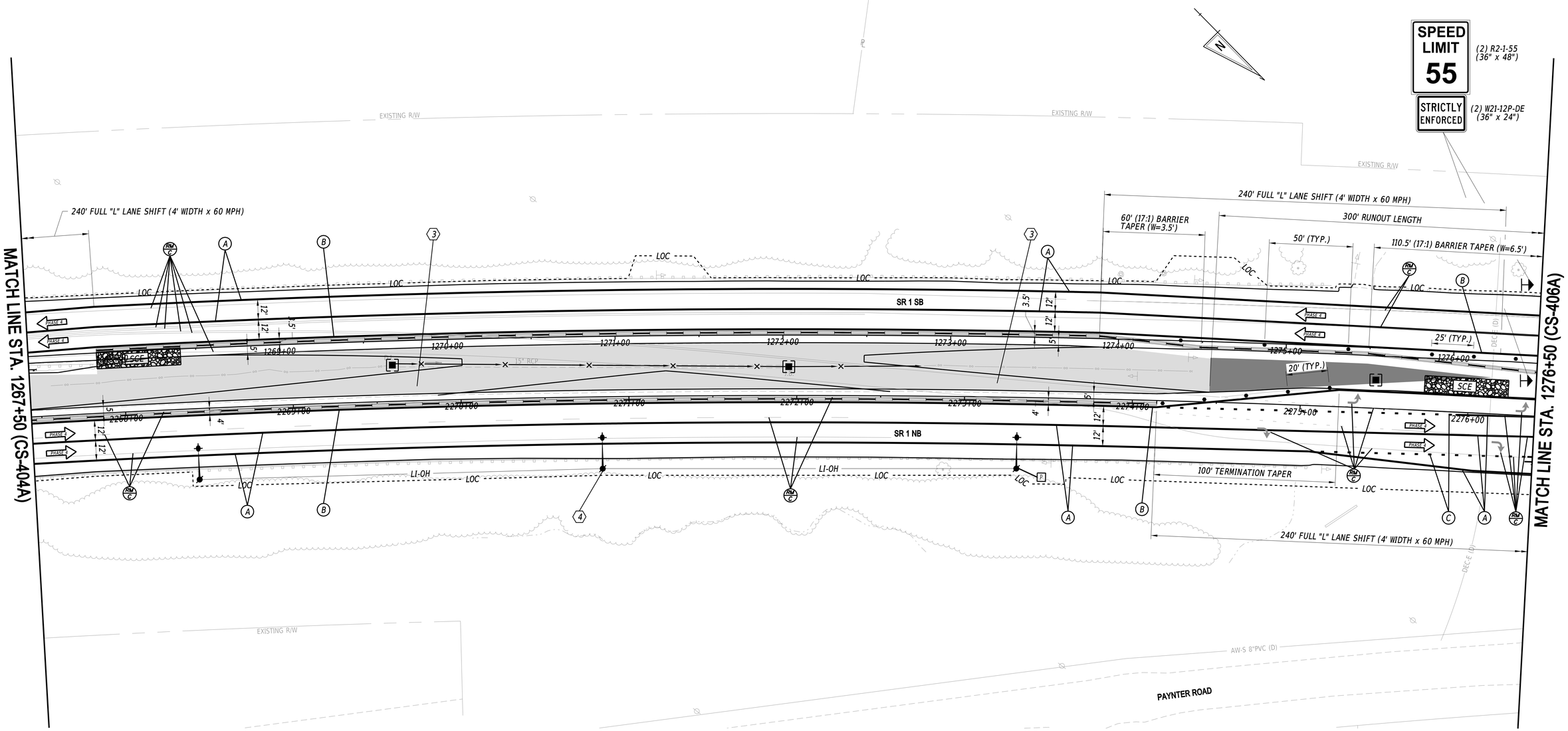
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. INSTALL EROSION AND SEDIEMNT CONTROL DEVICES.
3. REMOVE TEMPORARY CROSSOVERS AND CONSTRUCT PERMANENT MEDIAN.
4. REMOVE TEMPORARY ROADWAY LIGHTING.
5. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING. PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	3,650 LF
B	5" SOLID YELLOW EPOXY	1,800 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	100 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	0 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF



ADDENDA / REVISIONS

3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-405A
SECTION
WRA
SHEET NO.
192A

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SEQUENCE OF CONSTRUCTION

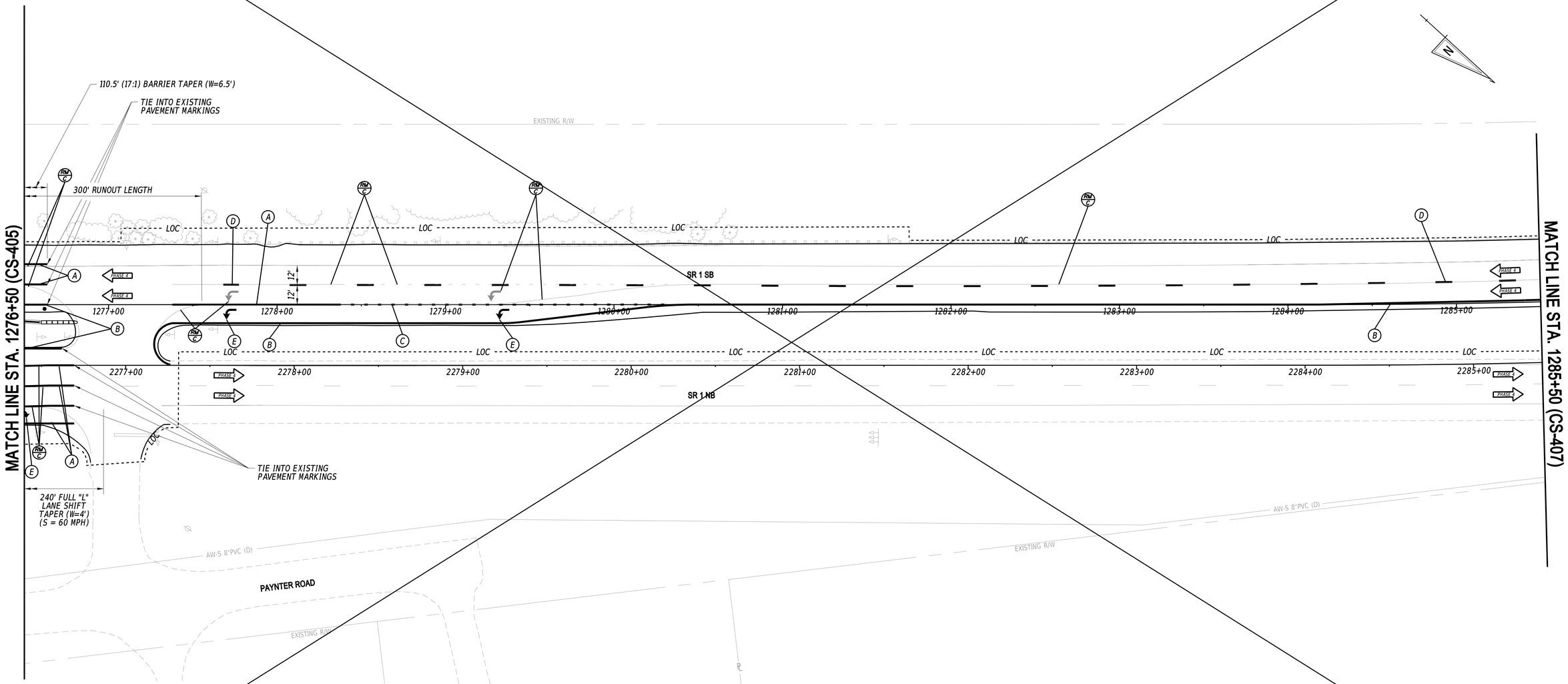
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	189 LF
B	5" SOLID YELLOW EPOXY	865 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	6 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	195 LF
E	WHITE PAINT PAVEMENT SYMBOL	46.5 SF



CS-406

ADDENDA / REVISIONS			
3	DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

SECTION	SHEET NO.
WRA	193

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SEQUENCE OF CONSTRUCTION

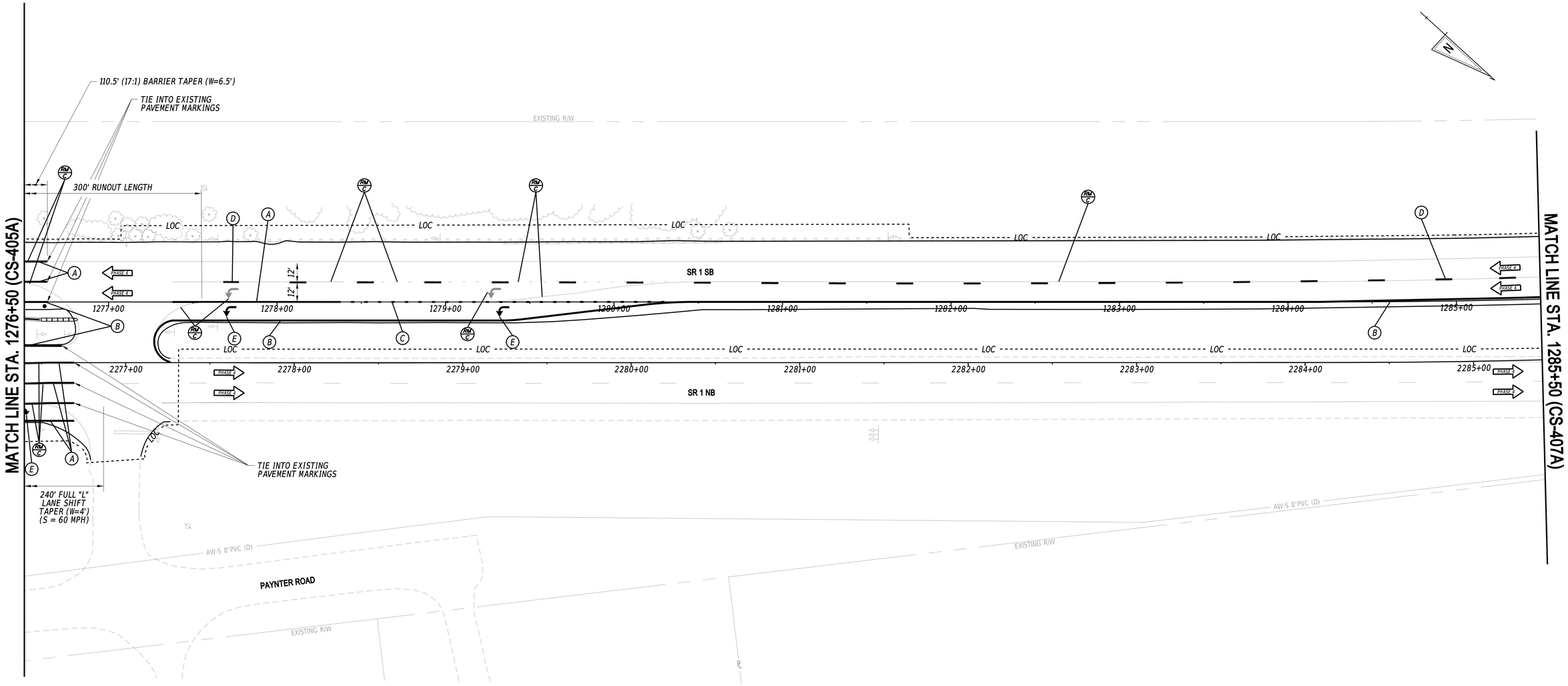
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. FOLLOWING REMOVAL OF TEMPORARY CROSSOVER ROADWAY, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENET PAVEMENT MARKINGS.

CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	189 LF
B	5" SOLID YELLOW EPOXY	865 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	6 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	195 LF
E	WHITE PAINT PAVEMENT SYMBOL	46.5 SF



ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE: 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-406A
SECTION
WRA
SHEET NO.
193A

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SEQUENCE OF CONSTRUCTION

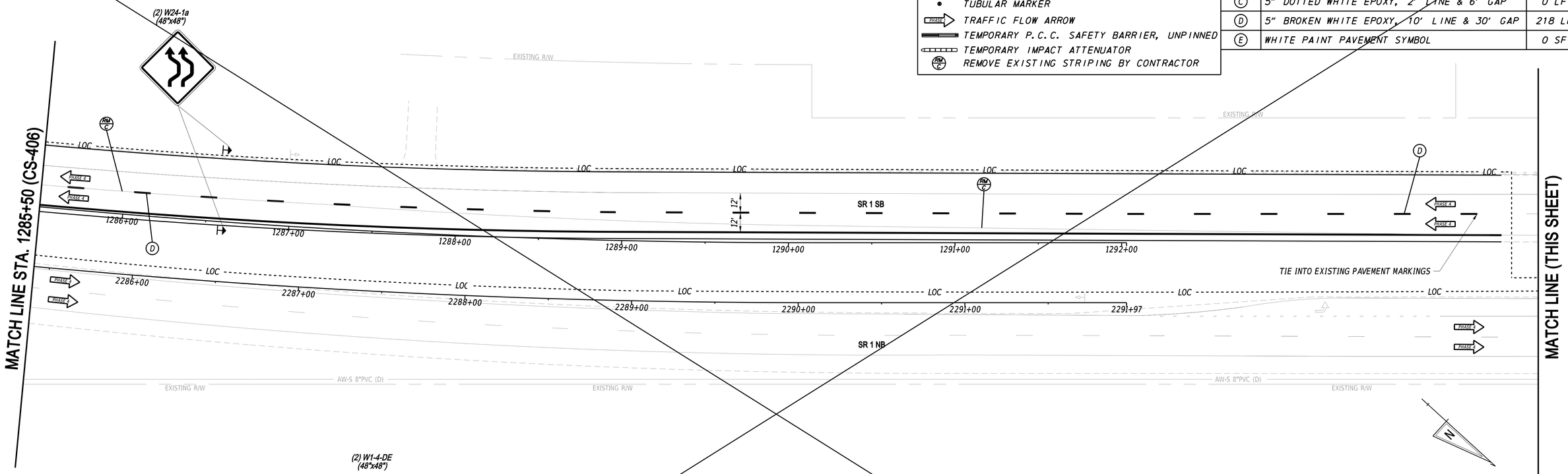
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. FOLLOWING THE REMOVAL OF THE TEMPORARY CROSSOVER ROADWAYS, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENT PAVEMENT MARKINGS.

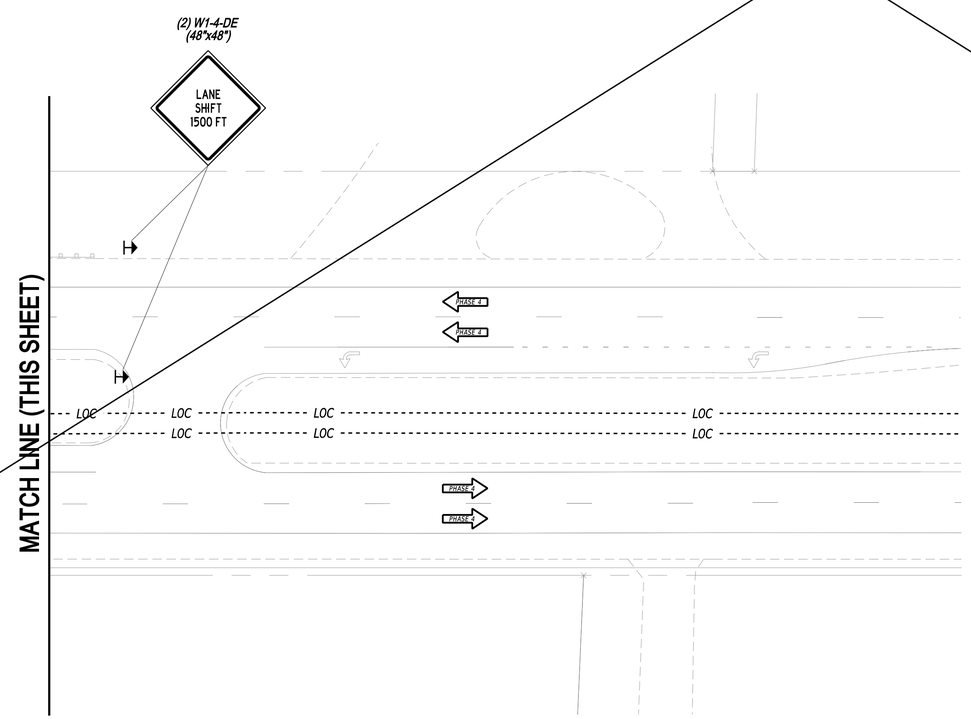
CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	0 LF
B	5" SOLID YELLOW EPOXY	721 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	218 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF





ADDENDA / REVISIONS		
3 DELETED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-407

SECTION
WRA
SHEET NO.
194

9/17/2020
2:49:33 PM
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SEQUENCE OF CONSTRUCTION

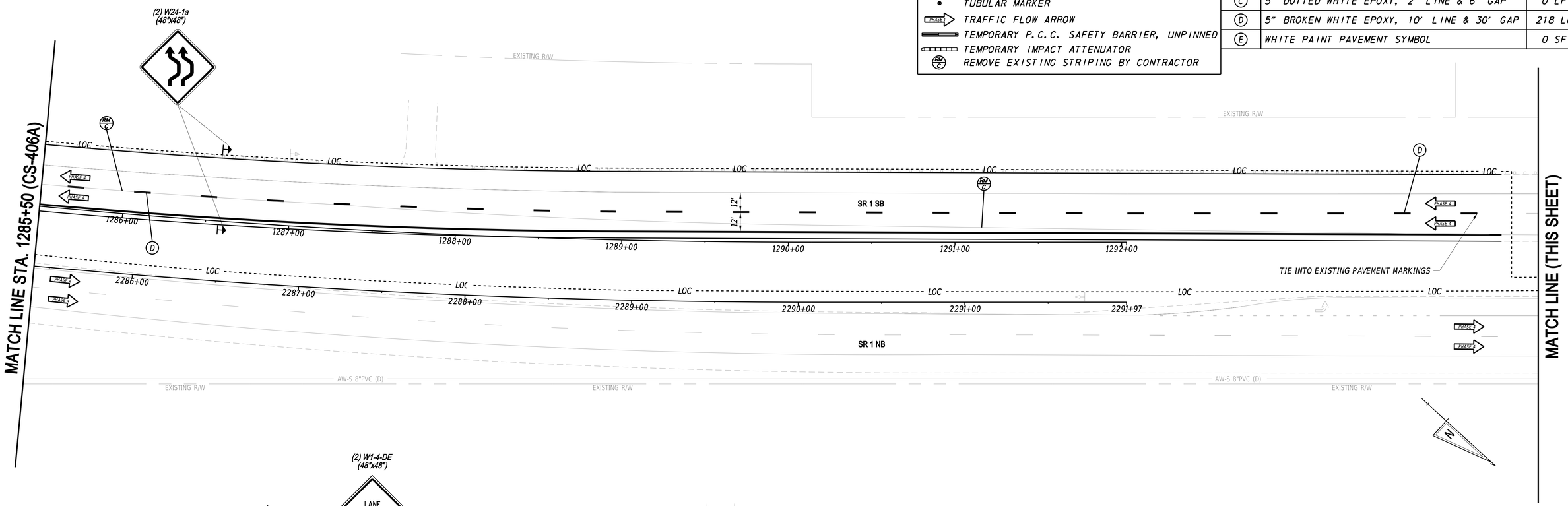
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON THE PERMANENT WARNING SIGN PLAN AND PHASE 4 PLANS, SHIFT TRAFFIC TO DESIGNATED TRAVEL LANES.
2. FOLLOWING THE REMOVAL OF THE TEMPORARY CROSSOVER ROADWAYS, PERFORM PAVEMENT MILLING, PLACE FINAL SURFACE PAVEMENT, AND INSTALL PERMANENT PAVEMENT MARKINGS.

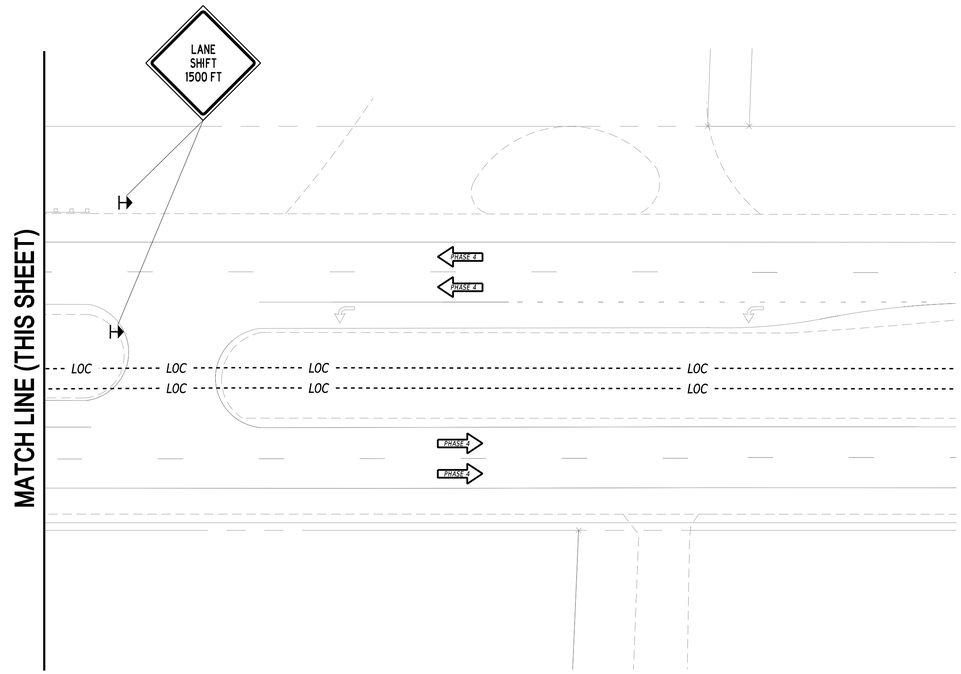
CONSTRUCTION STAGING LEGEND

- PROPOSED CONSTRUCTION THIS STAGE
- RUNOUT LENGTH SHADING
- EXISTING SIGN/PROPOSED TEMPORARY SIGN
- TYPE III BARRICADE
- PLASTIC DRUM
- TUBULAR MARKER
- TRAFFIC FLOW ARROW
- TEMPORARY P.C.C. SAFETY BARRIER, UNPINNED
- TEMPORARY IMPACT ATTENUATOR
- REMOVE EXISTING STRIPING BY CONTRACTOR

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	5" SOLID WHITE EPOXY	0 LF
B	5" SOLID YELLOW EPOXY	721 LF
C	5" DOTTED WHITE EPOXY, 2' LINE & 6' GAP	0 LF
D	5" BROKEN WHITE EPOXY, 10' LINE & 30' GAP	218 LF
E	WHITE PAINT PAVEMENT SYMBOL	0 SF





ADDENDA / REVISIONS			
3	ADDED SHEET	J.CHENG	9/16/2020

SCALE 0 30 60 90 FEET

BR 3-155 N&S ON SR 1 OVER BROADKILL RIVER

CONTRACT	BRIDGE NO.	N/A
T201907601	DESIGNED BY: WRA	
COUNTY	CHECKED BY: WRA	
SUSSEX		

CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLAN - PHASE 4

CS-407A
SECTION
WRA
SHEET NO.
194A

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