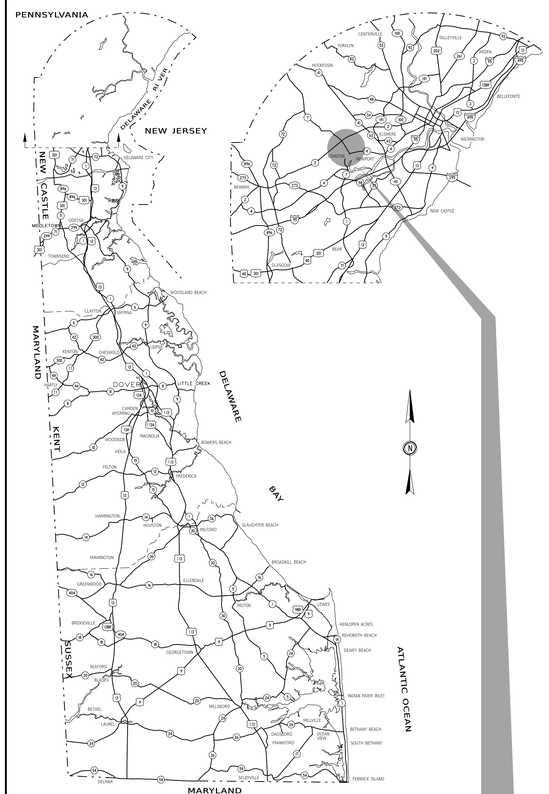


GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

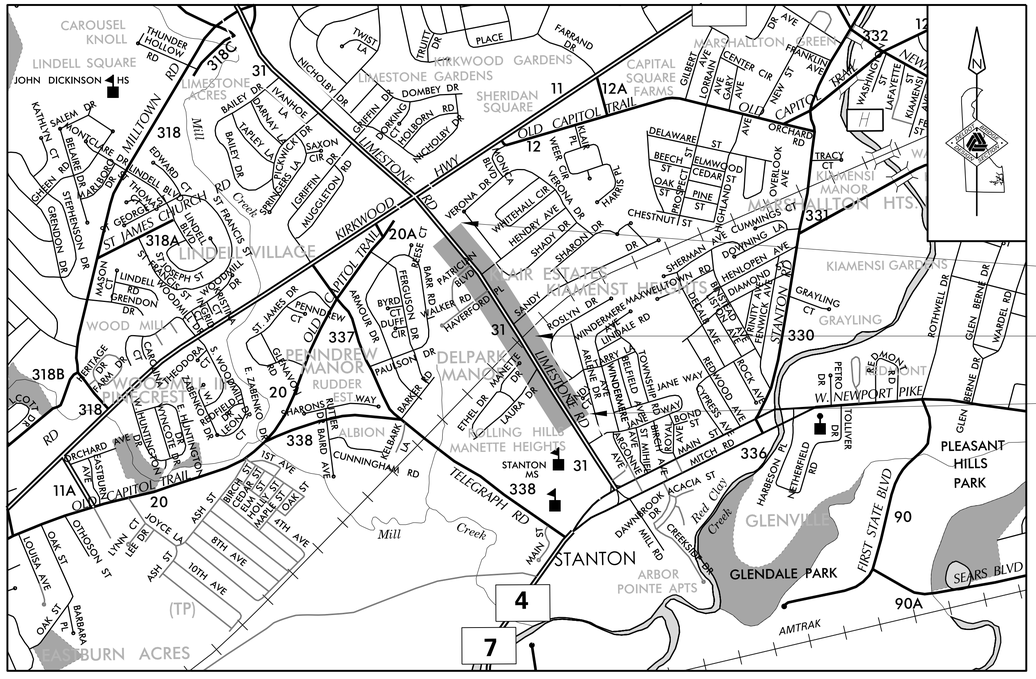
CONSTRUCTION AND RIGHT-OF-WAY PLANS FOR:

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT NUMBER: T201807402

FEDERAL AID PROJECT NUMBER: EBHN-N031(09)

COUNTY: NEW CASTLE M.R. #: N031



DESIGN DESIGNATION

MRD #: N031	ROAD NAME: LIMESTONE ROAD		
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL		D.H.V. PROJECTED: 5800	YEAR: 2050
TYPE OF CONSTRUCTION: BRIDGE REHABILITATION		DESIGN SPEED: 40 M.P.H.	
A.A.D.T. CURRENT: 48800	YEAR: 2018	TRUCKS: 6.00 %	
A.A.D.T. PROJECTED: 58100	YEAR: 2050	DIRECTION OF DISTRIBUTION: 55.00 %	

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA / REVISIONS

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
1553	STANTON TO KIRKWOOD HIGHWAY
20-111-02	S.R.2 / S.R.7 INTERSECTION IMPROVEMENTS
SNR0770	LIMESTONE MEDICAL CENTER

APPROVED FOR ADVERTISEMENT

DIRECTOR OF TRANSPORTATION SOLUTIONS — DATE 11/19/2024

PREPARED BY
DELDOT - TRANSPORTATION SOLUTIONS
BRIDGE DESIGN

Sean W. Weaver — 11/15/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "BR" SECTION DESIGNATION. — DATE

SEAN WILLIAM WEAVER — No. 24550 — DELAWARE PROFESSIONAL ENGINEER — SEAL

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/15/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION. — DATE

TERESA M. SCROCCA — No. 24274 — DELAWARE PROFESSIONAL ENGINEER — SEAL

LAST REVISED: 01/25/2021
15-NOV-2024
11:01
Y:\NEWCASTL\U031Bridge\T201807402\500_CADD\530_PLANS_DGN\TI00.dgn

INDEX OF SHEETS	
SHEET DESCRIPTION	SHEET NO(S)
TITLE	1
INDEX OF SHEETS & ADDENDA AND REVISIONS	2
LEGEND	3
NOTES	4
TYPICAL SECTIONS	5
HORIZONTAL AND VERTICAL CONTROL	6-8
CONSTRUCTION PLANS	9-11
PROFILES	12-14
EXISTING BRIDGE PLAN AND ELEVATION	15
GRADES AND GEOMETRICS	16-18
BRIDGE EXISTING AND PROPOSED SECTION SPAN 2	19
ABUTMENT REHABILITATION	20
SOUTH PIER REHABILITATION	21-22
NORTH PIER REHABILITATION	23-24
CONCRETE REPAIR DETAILS	25
DECK DEMOLITION DETAILS	26
EXPANSION JOINT DETAILS	27
PEDESTRIAN CONNECTION, PERVIOUS P.C.C. SIDEWALK, AND ITMS CONDUIT DETAILS	28
OVERHANG AND NATURE STAIRS DETAILS	29
FIBER REINFORCED POLYMER DETAILS	30
JACKING DETAILS	31-32
FRAMING PLAN	33
BORING LOG	34-35
CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS	36-56
DETOUR PLANS - VEHICULAR	57-58
DETOUR PLANS - PEDESTRIAN	59-60
TEMPORARY SIGNAL PLAN	61-64
SIGNAL PLAN	65-71
UTILITY RELOCATION PLANS	72-74
SIGNING, STRIPING AND CONDUIT PLANS	75-78
RIGHT-OF-WAY PLANS	79-81
RIGHT-OF-WAY DATA	82

13-DEC-2024
12:00
Y:\NEWCASTL\031Bridge\T201807402\500_CADD\530_PLANS_DGN\IS00.dgn

ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO.	1-655	INDEX OF SHEETS & ADDENDA AND REVISIONS	SECTION
				T201807402				BR
				COUNTY	DESIGNED BY:	S.WEAVER		SHEET NO.
				NEW CASTLE	CHECKED BY:	S.WALLS		2

MANMADE ROADSIDE FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED	ID
BOLLARD - STEEL POLE			
BOLLARD - WOOD POST			
CURB, TYPE 1 AND TYPE 3	CURB, TYPE "X"		C XXX
CURB, TYPE 2			
CURB & GUTTER, TYPE 1	C&G, TYPE "X"		
CURB & GUTTER, TYPE 2			
CURB & GUTTER, TYPE 3			
CURB OPENING - SUMP / ON GRADE			C O
CURB OPENING WITH SIDEWALK			CO SW
FENCE - CHAINLINK OR STRANDED			F XXX
FENCE - STOCKADE OR SPLIT RAIL			
FLAG POLE	F.P.		
GUARDRAIL - STEEL BEAM, TYPE 1			
GUARDRAIL - STEEL BEAM, TYPE 2			
GUARDRAIL - STEEL BEAM, TYPE 3			
GUARDRAIL - WIRE ROPE			
GUARDRAIL - END ANCHORAGE			GR XXX
GUARDRAIL - END TREATMENT, TYPE 1			
GUARDRAIL - END TREATMENT, TYPE 2			
GUARDRAIL - END TREATMENT, TYPE 3			
GUARDRAIL - IMPACT ATTENUATOR			
LAMP AND POST - RESIDENTIAL	LAMP		
MAILBOX	MB	MB	
PARKING METER AND POST	P.M.		
PAVEMENT - FLEXIBLE			
PAVEMENT - RIGID			
PILE - BRIDGE			
PILLAR OR MISCELLANEOUS POST			
TRAFFIC SIGN AND POST			
WALL - BRICK OR BLOCK			
WALL - STONE			

DRAINAGE FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED	ID
BIOFILTRATION SWALE		BFS	
DITCH OR STREAM CENTERLINE			
DIRECTIONAL STREAM FLOW ARROW			
DRAINAGE INLET	C.B. / D.I.		DI XXX
DRAINAGE JUNCTION BOX	J.B.		JB XXX
DRAINAGE MANHOLE	Ⓓ		MH XXX
DRAINAGE PIPE AND FLOW ARROW	SIZE/TYPE LABEL		P XXX
DRAINAGE PIPE HEADWALL			
FLARED END SECTION			FES XXX
RIPRAP - AREA FEATURE			RR XXX
RIPRAP - LINEAR FEATURE			
SAFETY END SECTION			SES XXX
UNDERDRAIN			UD XXX
UNDERDRAIN OUTLET			UDO XXX

UTILITY FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED
CABLE TV DISTRIBUTION BOX	TV	
COMMUNICATIONS - UNDERGROUND	COMM(A)	COMM
ELECTRIC - UNDERGROUND	E(A)	E
ELECTRIC MANHOLE	Ⓔ	
ELECTRIC METER	EM	
ELECTRIC TRANSFORMER	E	
GAS - UNDERGROUND	G(A)	G
GAS MANHOLE	Ⓖ	
GAS METER	G.M.	
GAS VALVE	G.V.	
GAS PUMP - SERVICE STATION	G.P.	
IRRIGATION - UNDERGROUND	IR(A)	IR
ITMS - UNDERGROUND	ITMS(A)	ITMS
LIGHTING - UNDERGROUND	LI(A)	LI
LUMINAIRE - POLE MOUNTED		
MANHOLE - UNDETERMINED OWNER	?	
RAILROAD TRACKS		
SANITARY - UNDERGROUND	S(A)	S
SANITARY SEWER MANHOLE	Ⓢ	
SANITARY SEWER VALVE	S.V.	
SANITARY SEWER CLEANOUT OR VENT	S.C.O.	
SEPTIC DRAIN FIELD	S.D.F.	
SIGNALIZATION - UNDERGROUND	SIG(A)	SIG
SOIL BORING LOCATION		
TELEPHONE BOOTH	B	
TELEPHONE MANHOLE	Ⓣ	
TELEPHONE TEST POINT	T	
TRAFFIC - CONDUIT JUNCTION WELL	J.W.	
TRAFFIC - LIGHT POLE AND BASE	◎	
TRAFFIC - PEDESTRIAN POLE & BASE		
TRAFFIC - SIGNAL CABINET & BASE		
TRAFFIC - SIGNAL POLE AND BASE	⊗	⊙
UTILITY BOX	U	
UTILITY POLE GUY WIRE ANCHOR		
UTILITY POLE		
UTILITY TEST HOLE LOCATION		
WATER - UNDERGROUND	W(A)	W
WATER - FIRE HYDRANT	F.H.	F.H.
WATER METER	W.M.	
WATER VALVE	WV	W.V.
WELL HEAD	WELL	

PAVEMENT SECTION(S)

N/A	
MILL HOT-MIX TO EXISTING CONCRETE BASE OVERLAY WITH SUPERPAVE, TYPE C, TO PROPOSED GRADE	
2" SUPERPAVE, TYPE C HOT-MIX, PG 64-22 (CARB STONE) 8" GRADED AGGREGATE BASE COURSE, TYPE B	

NATURAL ROADSIDE FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED
HEDGEROW OR THICKET		
MARSH BOUNDARY LINE		
TREE - CONIFEROUS		
TREE - DECIDUOUS		
TREE STUMP		
SHRUBBERY		
WETLAND BOUNDARY - DELINEATED	WL	
WOODS LINE BOUNDARY		

RIGHT-OF-WAY FEATURES

FEATURE DESCRIPTION	EXISTING	PROPOSED
DENIAL OF ACCESS	DA	DA
EASEMENT - OTHERS	EASEMENT TYPE	
PERMANENT EASEMENT	PE	PE
PROPERTY LINE		
PROPERTY MARKER - CONCRETE	C.M.	
PROPERTY MARKER - IRON PIPE	I.P.	
RIGHT-OF-WAY BASELINE	100+00	100+00
RIGHT-OF-WAY LINE		R/W
RIGHT-OF-WAY & DENIAL OF ACCESS	R/W-DA	R/W-DA
RIGHT-TO-ENTER		RTE
TEMPORARY CONSTRUCTION EASEMENT		TCE

SURVEY CONTROL & MONUMENTATION

FEATURE DESCRIPTION	EXISTING
POINT OF CURVATURE OR TANGENCY	
POINT OF INTERSECTING TANGENTS	
SURVEY BENCHMARK LOCATION	B.M.
SURVEY NGS POINT LOCATION	
SURVEY TIE POINT LOCATION	T.P.
SURVEY TRAVERSE POINT	

MISCELLANEOUS FEATURES

FEATURE DESCRIPTION	PROPOSED
BARRIER, DOUBLE-FACED, PERMANENT	
BARRIER, SINGLE-FACED, PERMANENT, TEST LEVEL 4 / TEST LEVEL 5	
BRICK PATTERNED SURFACE	
BUTT JOINT	
CLEAR ZONE	CZ
CONSTRUCTION BASELINE	100+00
LATERAL OFFSET	LO
LIMIT OF CONSTRUCTION	LOC
PAVEMENT PATCH	
PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH	
P.C.C. SIDEWALK - 4"	
P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)	

IDENTIFIERS

FEATURE DESCRIPTION	ID
ABANDON BY CONTRACTOR	AB C
ABANDON BY OTHERS	AB O
ADJUST BY CONTRACTOR	A C
ADJUST BY OTHERS	A O
BEST MANAGEMENT PRACTICE	BMP XXXX
BUS STOP PAD / TYPE	BSP X
BUS STOP WITH SHELTER PAD / TYPE	BSSP X
CONCRETE SAFETY BARRIER	B XXX
CONVERT TO JUNCTION BOX	C/JB XXX
CONVERT TO DRAINAGE MANHOLE	C/MH XXX
DO NOT DISTURB	DND
ENERGY DISSIPATOR	ED XXX
FILL WITH FLOWABLE FILL	FF C
LANDSCAPE PLANTINGS	LS XXX
PEDESTRIAN CONNECTION / TYPE	PC YX
PEDESTRIAN CONNECTION / TYPE WITHOUT DETECTABLE WARNING SYSTEM	PC-W YXX
RELOCATE BY CONTRACTOR	RL C
RELOCATE BY OTHERS	RL O
RELOCATE BY PROPERTY OWNER	RL PO
REMOVE BY CONTRACTOR	RM C
REMOVE BY OTHERS	RM O
REMOVE BY TRAFFIC CONTRACTOR	RM TC
RIGHT-OF-WAY MONUMENT	M YXX

LAST REVISED: 04/29/2020
13-DEC-2024
12:00
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\LG00.dgn

ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	T201807402	BRIDGE NO.	1-655	LEGEND	SECTION	BR
				COUNTY	NEW CASTLE	DESIGNED BY:	S.WEAVER		SHEET NO.	3
						CHECKED BY:	S.WALLS			

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED JUNE 2022, AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2021, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.
2. ELECTRONIC DESIGN DATA FILES THAT WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR, INCLUDE:

( )	NONE
(X)	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
(X)	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
(X)	DESIGN FILE, IN .DGN FILE FORMAT, THAT CONTAINS 3D FEATURE LINES FOR THE PROPOSED DESIGN. 3D FEATURE LINES ARE FOR THE PROPOSED TOP SURFACE ELEVATION ONLY.

NOTE: THE DOCUMENT ENTITLED "RELEASE FOR DELIVERY OF DOCUMENTS IN ELECTRONIC FORM TO A CONTRACTOR" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

NOTE: THERE MAY BE SOME AREAS OF THE PROJECT NOT INCLUDED IN THE ELECTRONIC DESIGN DATA FILE(S). IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE DESIGN DATA FILE AND DETERMINE THE LIMITS OF THE PROJECT INCLUDED.

3. PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR, INCLUDE:

( )	CROSS SECTIONS
(X)	RIGHT-OF-WAY PLANS (WILL BE MADE AVAILABLE TO THE AWARDED CONTRACTOR)

PROJECT NOTES

SECTION 100

1. ANY DAMAGE TO ITEMS NOTED TO BE RELOCATED OR RESET BY THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
2. THE CONTRACTOR WILL CONTACT THE DELAWARE TMC AT 302-659-4600 PRIOR TO ANY UNMANNED AIRCRAFT VEHICLE (UAV) FLIGHTS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE FOLLOWING INFORMATION: THE REGISTRATION NUMBER OF THE UAV, THE FLIGHT TIME, LOCATION OF THE FLIGHT, THE PILOT'S NAME AND THE PILOT'S CONTACT NUMBER DURING THE FLIGHT.
3. A NIGHT WORK SURVEY OF ADJACENT PROPERTY OWNERS WAS COMPLETED RELATED TO PHASED CONSTRUCTION AND TRAFFIC SHIFT PREPARATION. PLACING AND PINNING BARRIER, REMOVAL OF EXISTING STRIPING, AND INSTALLATION OF STRIPING RELATED TO PHASED CONSTRUCTION IS PERMITTED BETWEEN 7:00PM - 6:00AM, CONSISTENT WITH THE LANE CLOSURE MATRIX. ALL OTHER NIGHT WORK IS NOT PERMITTED ON THIS PROJECT UNLESS THE CONTRACTOR OBTAINS: APPROVAL FROM THE ENGINEER, ACCEPTABLE RESPONSES ON NIGHT WORK SURVEYS, AND ACCEPTANCE FROM THE MUNICIPALITY. METHOD AND FORMAT OF NIGHT WORK SURVEYS WILL BE PROVIDED BY THE ENGINEER UPON REQUEST. NIGHT WORK, SURVEYS, AND COORDINATION WITH MUNICIPALITIES IS NOT COMPENSABLE AND THE TIME TO COMPLETE THE SURVEYS IS NOT EXCUSABLE.

SECTION 200

4. ITEMS TO BE REMOVED UNDER ITEM #211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - EXISTING BRIDGE RAILING, EXISTING CONCRETE MEDIAN, EXISTING GUARDRAIL, EXISTING DECK JOINTS, EXISTING BEARINGS
5. SIGNING:
   TO AVOID DAMAGE, SIGNS WITHIN PROJECT LIMITS MAY BE REMOVED DURING CONSTRUCTION IF NEEDED, BUT MUST BE REPLACED TO MATCH EXISTING CONDITIONS BEFORE REOPENING THE ROADWAY. ALL WORK RELATED TO MOVING AND REINSTALLING THE SIGN SHALL BE INCIDENTAL TO ITEM #211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS. IF THE SIGN IS DAMAGED DURING CONSTRUCTION, THE SIGN MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE.

SECTION 600

6. DRAINAGE INLET GRATES ADJACENT TO THE CURB OR EDGE PAVING, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE 1 OR TYPE 4, SHALL BE REPLACED WITH TYPE 1. INLET GRATES WITHIN THE PAVING, NOT ADJACENT TO THE CURB OR EDGE OF PAVING SHALL BE REPLACED WITH TYPE 3. THE ACTUAL LOCATIONS, THE NEED FOR ANY GRATE MODIFICATIONS OR FOR NEW FRAMES SHALL BE DETERMINED BY THE ENGINEER. ALL REPLACED GRATES/FRAMES SHALL BE DELIVERED TO THE NEAREST DISTRICT MAINTENANCE YARD WITH THE COST OF DELIVERY INCIDENTAL TO ITEM #602100 - DRAINAGE INLET GRATE(S) & ITEM #602101 - DRAINAGE INLET FRAME(S). FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.
7. ONLY EXISTING FEATURES WITHIN THE LOC IDENTIFIED WITH REMOVE BY CONTRACTOR OR BY OTHER METHODS ARE TO BE REMOVED OR DISTURBED.
   ALL TREES WITHIN AREA OF PROPOSED PAVEMENT AND CROSSOVERS ARE TO BE REMOVED BY THE CONTRACTOR. ALL TRESS WITHIN THE LOC OUTSIDE THE AREA OF PROPOSED PAVEMENT WORK ARE NOT TO BE DISTURBED.
8. STATION AND ELEVATION DATA GIVEN FOR DRAINAGE STRUCTURES ARE TO BE APPLIED TO THE CENTER OF THE GRATE FOR INLETS AND TO THE CENTER OF THE STRUCTURE FOR JUNCTION BOXES AND MANHOLES.
9. PORTLAND CEMENT CONCRETE:
   USE PORTLAND CEMENT CONCRETE FOR CAST-IN-PLACE ELEMENTS AS FOLLOWS:
   (f'c = 28-DAY COMPRESSIVE STRENGTH)
   CLASS A - ABUTMENT PEDESTALS, PIER PEDESTALS, AND SUBSTRUCTURE REPAIRS (f'c = 4.5 ksi)
   CLASS D - BRIDGE DECK (f'c = 4.5 ksi)
   CHAMFER ALL EXPOSED EDGES $\frac{3}{4}$" X $\frac{3}{4}$" UNLESS OTHERWISE NOTED.

   SUPPLY THE CONCRETE FOR THE BRIDGE DECK THAT INCLUDES A SHRINKAGE-REDUCING/COMPENSATING ADMIXTURE. THE ADMIXTURE MAY BE SUPPLIED BY ONE PRODUCT THAT PROVIDES BOTH EXPANSION AND PORE WATER SURFACE TENSION OR TWO SEPARATE PRODUCTS EACH ADDED AT DOSAGE RECOMMENDED BY MANUFACTURER'S TECHNICAL DATA SHEETS AND HAVING THE FOLLOWING CHARACTERISTICS:
   (a.) DESIGNED TO PROVIDE BOTH OF THE FOLLOWING CHARACTERISTICS:
   (i.) EXPANDS AT A RATE THAT CLOSELY COMPENSATES FOR THE SHRINKAGE OF THE CONCRETE MIX.
   (ii.) REDUCES THE CAPILLARY SURFACE TENSION OF THE CONCRETE PORE WATER.
   (b.) PROVIDES AT LEAST 80% SHRINKAGE REDUCTION AS MEASURED AND DOCUMENTED BY FIELD PERFORMANCE.
   (c.) FORMULATED FOR USE IN FREEZING AND THAWING WEATHER.

   ALL ADMIXTURES MUST BE COMPATIBLE WITH ALL OTHER CONCRETE-MIX DESIGN CONSTITUENTS. CALCIUM CHLORIDE IS NOT PERMITTED; NO CHEMICAL ADMIXTURES WHICH CONTAIN MORE THAN 0.1% CHLORIDE BY WEIGHT, WILL BE PERMITTED FOR USE. DOSAGE RATE AND MIXING SEQUENCE WILL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
10. BAR REINFORCEMENT:
    - REINFORCING STEEL SHALL CONFORM TO AASHTO M31 (ASTM A615), GRADE 60.
    - REINFORCING STEEL SHALL HAVE A 3" CLEAR COVER IF CAST AGAINST EARTH OR A 2" CLEAR COVER ELSEWHERE, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
    - ALL REINFORCING STEEL SHALL BE PROTECTED WITH FUSION BONDED EPOXY. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A775.
    - ANY FIELD CUTTING OR FIELD BENDING MUST BE APPROVED BY THE ENGINEER. PAYMENT SHALL BE INCIDENTAL TO THE BAR REINFORCEMENT ITEM.
    - GALVANIZED REINFORCING STEEL MAY BE SUBSTITUTED FOR EPOXY-COATED REINFORCING STEEL AT NO ADDITIONAL COST TO DELDOT WITH APPROVAL OF THE BRIDGE DESIGN ENGINEER.
    - WELDING OF REINFORCEMENT DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED.
11. CONCRETE SEALER:
    REFER TO DIAGRAMS CONTAINING CONCRETE SEALER LIMITS ON ABUTMENT REHABILITATION, PIER REHABILITATION, AND CONSTRUCTION PHASING DETAIL SHEETS. PAYMENT SHALL BE INCIDENTAL TO ITEM #613000 - EPOXY CONCRETE SEALER, ITEM #613001 - SILICONE-BASED ACRYLIC CONCRETE SEALER, OR ITEM #613002 SILANE-BASED CONCRETE SEALER.
12. BEARINGS:
    ALL ELASTOMERIC BEARINGS SHALL BE STEEL LAMINATED ELASTOMERIC DESIGNED AS PER AASHTO 14.7.5, METHOD B, AND SHALL CONFORM TO SECTION 623 OF THE STANDARD SPECIFICATIONS. PAYMENT SHALL BE INCIDENTAL TO ITEM #623005 - STEEL REINFORCED ELASTOMERIC BEARINGS.

SECTION 700

13. IN AREAS WHERE PROPOSED CURB MEETS EXISTING CURB AND THE TWO CURB TYPES ARE NOT SIMILAR, THE PROPOSED CURB SHALL BE TRANSITIONED IN 10 LINEAR FEET, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE TRANSITIONED CURB WORK SHALL BE MEASURED AND PAID FOR UNDER THE PROPOSED CURB ITEM. SAW CUTTING OF THE EXISTING CURB SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.
14. ALL CONCRETE SIDEWALK SHALL BE ITEM #705512 - PERVIOUS P.C.C. SIDEWALK, PLEASE REFER TO SHEET 27 FOR DETAIL AND FURTHER INFORMATION.

    WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, THE EXISTING SIDEWALK SHALL BE SAWCUT AT THE TIE-IN POINT OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 762001 - SAWCUTTING, CONCRETE, FULL DEPTH.

    EXISTING 4 FOOT WIDE SIDEWALK IS TO BE SAW CUT AT LOCATIONS INDICATED ON PLANS, OR MEET THE NEAREST EXISTING SIDEWALK JOINT, AND TRANSITIONED TO PROPOSED 5 FOOT WIDE SIDEWALK IN A DISTANCE OF 5 FEET.
15. PORTLAND CEMENT CONCRETE CHANNELIZING ISLANDS THAT ARE LESS THAN 75 SQ FT MAY BE POURED MONOLITHICALLY, OR AS DIRECTED BY THE ENGINEER.
16. THE NEW CASTLE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL SUPPLY AND THE STATE'S CONTRACTOR SHALL INSTALL NEW SELF SEALING MANHOLE FRAMES AND COVERS ON ALL COUNTY SEWER MANHOLES THAT ARE NOT BEING RELOCATED, WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE COUNTY'S STANDARD SPECIFICATIONS. THE EXISTING MANHOLE FRAMES AND COVERS THAT ARE REMOVED SHALL BECOME THE PROPERTY OF THE STATE'S CONTRACTOR. PAYMENT SHALL BE INCIDENTAL TO ITEM 711500 - ADJUST AND REPAIR EXISTING SANITARY SEWER MANHOLE.
17. THE CONTRACTOR SHALL DELIVER ALL EXCESS MILLED MATERIAL TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S NORTH DISTRICT MAINTENANCE YARD. THE MATERIAL SHALL BE NEATLY STOCKPILED AT THE YARD. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO THE MILLING ITEM UTILIZED FOR PAYMENT ON THE CONTRACT.
18. ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.

SECTION 900

19. THIS PROJECT IS COVERED UNDER AN NPDES GENERAL PERMIT FOR CONSTRUCTION. UNDER THE GENERAL PERMIT, COMPLIANCE WITH DELDOT'S APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS WILL CONSTITUTE COMPLIANCE WITH THE NPDES INDUSTRIAL PERMITTING REQUIREMENTS FOR THIS CONSTRUCTION PROJECT. A COPY OF THE NPDES GENERAL PERMIT AND NOI IS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S STORMWATER SECTION. A COPY OF THE GENERAL PERMIT OR THE NOI CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

MISCELLANEOUS

20. THE CONTRACTOR SHALL NOTIFY DART FIRST STATE AT DOT_DETOURS@DELAWARE.GOV AT LEAST 14 DAYS PRIOR TO THE START OF ANY DETOURS OR CONSTRUCTION, AND DOT_DTC_PROJECTDEVELOPMENT@DELAWARE.GOV AT SUCH TIME THE FACILITY IS COMPLETED AND OPERABLE FOR TRANSIT OPERATIONS. FOR EMERGENCY DETOUR INFORMATION ONLY, PLEASE CONTACT DTC'S CHIEF SCHEDULER AT 302-576-6019.
21. ALL DART SIGNS HAVE BEEN UPDATED TO A NEW DESIGN. THE DELDOT SIGN SHOP DOES NOT FABRICATE THE UPDATED SIGN OR ANY SUPPLEMENTAL PLAQUES TO ALLOW FOR ADDITIONAL ROUTE NUMBERS. ALL REQUESTS FOR FABRICATION OF THESE SIGNS MUST BE MADE THROUGH DART TRANSIT AT 302-576-6132.
22. DESIGN SPECIFICATIONS:
    (A) DELDOT BRIDGE DESIGN MANUAL, 2021 EDITION
    (B) AASHTO LRFD BRIDGE SPECIFICATIONS, 2017, 8TH EDITION, CUSTOMARY U.S. UNITS.
23. LOADING:
    - DEAD LOADS DO NOT INCLUDE FUTURE WEARING SURFACE OR STAY-IN-PLACE FORMS.
      - BARRIER LOADS:
        - GIRDERS 1 & 14: 281 PLF (75% OF BARRIER LOAD)
        - GIRDERS 2 & 13: 94 PLF (25% OF BARRIER LOAD)
        - GIRDERS 6 & 9: 195 PLF (25% OF BARRIER LOAD)
        - GIRDERS 7 & 8: 585 PLF (75% OF BARRIER LOAD)
      - WATER MAIN LOAD:
        - GIRDER 7: 163 PLF
      - GAS MAIN LOADS:
        - GIRDERS 13 & 14: 9.5 PLF (50% GAS MAIN LOAD)
    - DESIGN LIVE LOADS INCLUDE HL-93 LOADING.
    - FATIGUE DESIGN IS BASED ON THE FOLLOWING ONE DIRECTIONAL TRAFFIC VOLUMES: ADTT = 58100
    - LIVE LOAD DISTRIBUTION TO THE GIRDERS IS BASED ON THE GRILLAGE METHOD.
    - THERMAL LOADS AND MOVEMENTS ARE BASED ON THE MODERATE TEMPERATURE RANGE AS STIPULATED IN THE AASHTO LRFD DESIGN SPECIFICATIONS AS 0°F - 120°F . THE NORMAL TEMPERATURE SHALL BE CONSIDERED TO BE 68° F.
    - LIVE LOAD DEFLECTION SHALL BE LIMITED TO L/1000.
    - FOR REINFORCEMENT DISTRIBUTION REQUIREMENTS, CONSIDER CLASS 1 EXPOSURE CRITERIA FOR DECKS.
    - BARRIERS HAVE BEEN DESIGNED FOR MASH TEST LEVEL 2 & 5 (TL-2 EXTERIOR, TL-5 INTERIOR).
24. EXISTING CONDITIONS:
    - ALL EXISTING DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, GEOMETRY, AND ELEVATIONS AS NECESSARY PRIOR TO ORDERING ANY MATERIALS AND COMMENCING CONSTRUCTION TO ENSURE PROPER FIT OF THE PROPOSED CONSTRUCTION. PAYMENT SHALL BE INCIDENTAL TO ITEM #763501 - CONSTRUCTION ENGINEERING.
    - THE CONTRACTOR SHALL NOT CONSIDER ANY OF THE DATA ON THE EXISTING STRUCTURE SUPPLIED IN THE ORIGINAL DESIGN DRAWINGS OR MADE AVAILABLE BY THE DEPARTMENT OR ITS AUTHORIZED AGENTS AS POSITIVE REPRESENTATIONS OF ANY OF THE CONDITIONS THAT WILL BE ENCOUNTERED IN THE FIELD.
25. MILLINGS WILL NOT BE ACCEPTED AS A SUBSTITUTION FOR GABC.
26. ALL WORK WITHIN CSXT RIGHT-OF-WAY WILL BE SUBJECT TO CSXT'S SPECIAL PROVISIONS AND CONSTRUCTION SUBMISSION CRITERIA.
27. THE STATE'S CONTRACTOR WILL NOT BE ALLOWED TO PERFORM ANY WORK ON, OVER, OR ADJACENT TO THE RAILWAY'S RIGHT-OF-WAY UNTIL:
    - CONTRACTOR OBTAINS INSURANCE MEETING CSXT REQUIREMENTS, INCLUDING RAILROAD PROTECTIVE LIABILITY INSURANCE
    - CONTRACTOR HOLDS A PRECONSTRUCTION MEETING WITH CSXT REPRESENTATIVES
    - CONTRACTOR SIGNS AND SUBMITS A CONTRACTOR RIGHT-OF-ENTRY AGREEMENT WITH CSXT
    - CONTRACTOR RECEIVES THE EXECUTED CONTRACTOR RIGHT-OF-ENTRY AGREEMENT FROM CSXT AND CSXT ISSUES A LETTER OF AUTHORIZATION TO PROCEED
    - AS NEEDED, CONTRACTOR SUBMITS AND OBTAINS APPROVAL FOR CSXT REQUIRED ENGINEERING DRAWINGS - INCLUDING BUT NOT LIMITED TO SHIELDING, DEMOLITION, STRUCTURE ERECTION, BALLAST PROTECTION, TEMPORARY ACCESS, ETC. DELDOT RAILROAD SECTION MAY ASSIST WITH THE ACTUAL SUBMISSION TO CSXT. STORAGE OF MATERIAL ON CSXT PROPERTY OUTSIDE OF THE AGREED UPON LIMITS WILL NOT BE ALLOWED.
    - CONTRACTOR SCHEDULES AND GETS APPROVAL FOR RAILROAD FLAG PROTECTION, INITIAL DISCUSSION WILL BE HELD DURING PRECONSTRUCTION MEETING NOTED ABOVE
28. IF FIELD CONDITIONS DETERMINE SOIL ADJACENT TO CSX RAILROAD NEEDS TO BE REMOVED FROM PROJECT LIMITS COORDINATION WITH DELDOT HAZMAT SECTION IS REQUIRED AND MATERIAL WILL BE TESTED.
29. CONTRACTOR WILL MAINTAIN ACCESS TO ALL DRIVEWAYS THROUGHOUT THE DURATION OF THE PROJECT. DURING PAVEMENT WORK THE CONTRACTOR WILL NOTIFY THE PROPERTY OWNERS OF THE ASSOCIATED TEMPORARY LIMITED ACCESS AT LEAST A WEEK PRIOR. PEDESTRIAN ACCESS TO PROPERTIES WILL BE MAINTAINED UNIMPEDED THROUGHOUT THE DURATION OF THE PROJECT. MATERIAL AND EQUIPMENT MAY NOT BE STORED ON NEBRASKA ROAD AND THROUGH TRAFFIC MUST BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
30. MIGRATORY BIRDS:
    IF BRIDGE WORK IS PROPOSED DURING THE BREEDING SEASON (APRIL 15 TO AUGUST 1), CONTACT DELDOT ENVIRONMENTAL STUDIES VIA EMAIL AT DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV NO MORE THAN 14 DAYS PRIOR TO THE START OF WORK FOR A SURVEY TO DETERMINE IF ACTIVE NESTS ARE PRESENT. IF THE SURVEY DETECTS NESTING ACTIVITY, THE FOLLOWING STEPS MUST BE TAKEN TO AVOID NEST DESTRUCTION AND TAKE, WHICH IS A VIOLATION OF STATE LAW:
    1. ONLY PERFORM CONSTRUCTION ACTIVITIES FROM AUGUST 2 TO APRIL 14.
    2. OR IF CONSTRUCTION CANNOT BE PERFORMED FROM AUGUST 2 TO APRIL 14, A DETERRENT SUCH AS MESH NETTING MUST BE USED TO BLOCK ACCESS TO NESTING SITES ON THE UNDERSIDE OF THE BRIDGE(S) IN ACCORDANCE WITH SPECIAL PROVISION #763623 - NETTING MIGRATORY BIRD EXCLUSION. THE MATERIAL WOULD NEED TO BE IN PLACE NO LATER THAN APRIL 14, THE UNDERSIDE OF THE BRIDGE(S) WOULD NEED TO BE FULLY ENCAPSULATED, AND THE MATERIAL MUST BE LEFT IN PLACE UNTIL CONSTRUCTION BEGINS.
31. CULTURAL RESOURCE ISSUES:
    BASED ON CURRENT COORDINATION, THIS PROJECT IS CONSISTENT WITH STIPULATION II OF DELDOT'S PROGRAMMATIC AGREEMENT WITH THE DE STATE HISTORIC PRESERVATION OFFICE (DE SHPO), FEDERAL HIGHWAY ADMINISTRATION (FHWA) AND ADVICSORY COUNCIL ON HISTORIC PRESERVATION (ACHP). THERE ARE NO CULTURAL RESOURCE CONCERNS AS LONG AS THE PROJECT SCOPE IS NOT MODIFIED AND ALL STAGING AND STOCKPILING REMAIN WITHIN THE EXISTING ROADWAY FOOTPRINT. SHOULD IT BE NECESSARY TO ADD ADDITIONAL ACCESS LOCATIONS, OTHER STOCKPILING/STAGING AREAS, OR OTHERWISE ALTER THE SCOPE OF THE PROJECT, DELDOT ENVIRONMENTAL STUDIES STAFF WILL NEED TO BE CONTACTED AT DOT_ENVIRONMENTALSTUDIES@DELAWARE.GOV OR 302-760-2282 IN ORDER TO REVIEW THESE CHANGES FOR POTENTIAL CULTURAL RESOURCES CONCERNS.

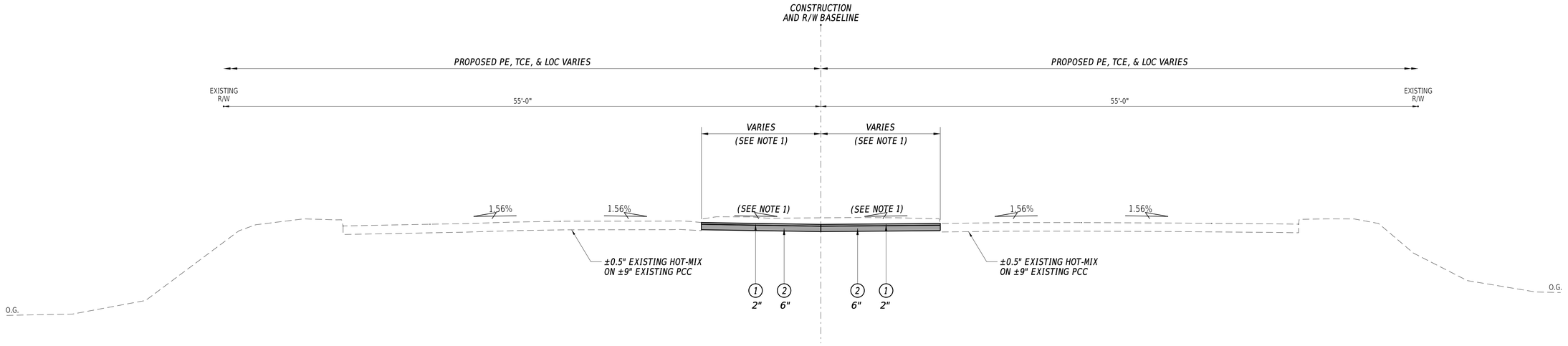
LOAD RATING SUMMARY

DESIGN VEHICLE	RATING FACTOR	RATING WEIGHT (TON)	CONTROLLING MEMBER	CONTROLLING POINT	LOAD EFFECT
HL-93 TRUCK (INVENTORY)	1.35	N/A	SPAN 2: INTERIOR BEAM	106	SERVICE II
HL-93 TANDEM (INVENTORY)	1.46	N/A	SPAN 2: INTERIOR BEAM	106	SERVICE II
HL-93 TRUCK TRAIN (INVENTORY)	N/A	N/A	SPAN 2: INTERIOR BEAM	106	SERVICE II
HS-20 (INVENTORY)	1.67	60.12	SPAN 2: INTERIOR BEAM	106	SERVICE II
HL-93 TRUCK (OPERATING)	1.75	N/A	SPAN 2: INTERIOR BEAM	106	SERVICE II
HL-93 TANDEM (OPERATING)	1.90	N/A	SPAN 2: INTERIOR BEAM	106	SERVICE II
HL-93 TRUCK TRAIN (OPERATING)	N/A	N/A	SPAN 2: INTERIOR BEAM	106	SERVICE II
HS-20 (OPERATING)	2.17	78.12	SPAN 2: INTERIOR BEAM	106	SERVICE II
DE S220 & LEGAL-LANE (LEGAL)	2.68	53.60	SPAN 2: INTERIOR BEAM	106	SERVICE II
DE S335 & LEGAL-LANE (LEGAL)	1.51	52.85	SPAN 2: INTERIOR BEAM	106	SERVICE II
DE S437 & LEGAL-LANE (LEGAL)	1.44	52.76	SPAN 2: INTERIOR BEAM	106	SERVICE II
DE T330 & LEGAL-LANE (LEGAL)	2.41	72.30	SPAN 2: INTERIOR BEAM	106	SERVICE II
DE T435 & LEGAL-LANE (LEGAL)	2.04	71.40	SPAN 2: INTERIOR BEAM	106	SERVICE II
DE T540 & LEGAL-LANE (LEGAL)	1.9	76.00	SPAN 2: INTERIOR BEAM	106	SERVICE II

NOTE: LOAD RATING DOES NOT INCLUDE FUTURE WEARING SURFACE.

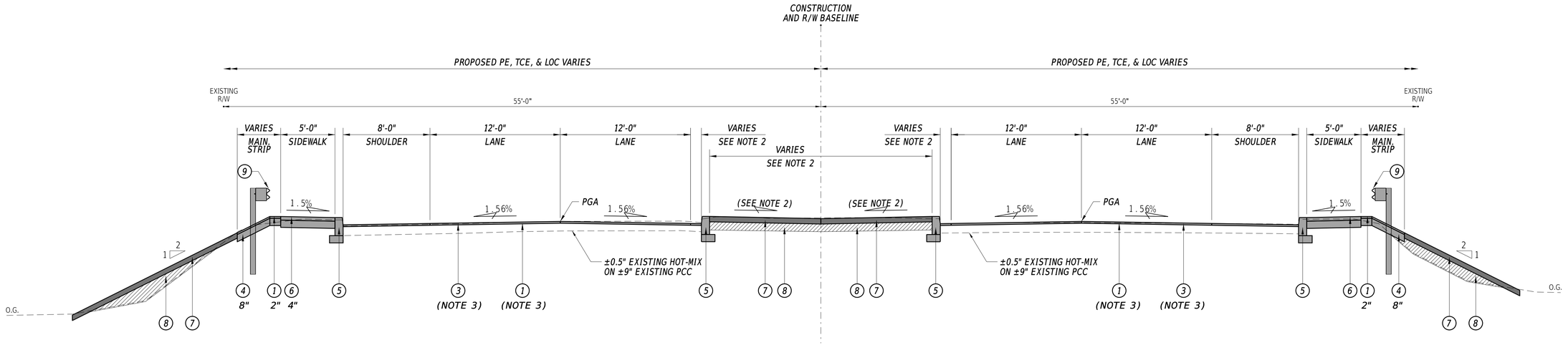
ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	NOTES	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 4
					CHECKED BY: S.WALLS		

13-DEC-2024
12:00
Y:\NEWCASTL\0131\Bridge\T201807402\500_CADD\530_PLANS_DGN\PN00.dgn



TEMPORARY CROSSOVERS

LOCATION VARIES BASED ON M.O.T. PLANS



PROPOSED LIMESTONE ROAD (SR7)

STATION 16+84.00 TO STATION 23+66.16
STATION 25+04.16 TO STATION 30+34.00

LEGEND

1. ITEM #401007 - SUPERPAVE TYPE C, PG 76-22 (CARBONATE STONE)
2. ITEM #401014 - SUPERPAVE TYPE B, PG 64-22
3. ITEM #760010 - PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT
4. ITEM #301001 - GABC
5. ITEM #701013 - P.C.C. CURB, TYPE 1-8
   6" GRADED AGGREGATE BASE COURSE, TYPE B
6. ITEM #705512 - PERVIOUS P.C.C. SIDEWALK
   8" DELAWARE NO. 57 STONE
7. ITEM #908004 - TOPSOIL, 6" DEPTH AND
   ITEM #908014 - PERMANENT GRASS SEEDING, DRY GROUND AND
   ITEM #908020 - EROSION CONTROL BLANKET MULCH
8. ITEM #209006 - BORROW, TYPE F
9. ITEM #720037 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31, STEEP SLOPE

MATERIAL TYPE	BINDER GRADE	LIFT THICKNESS (IN)	
		MINIMUM	MAXIMUM
TYPE C (4.75 MM MIX)	ALL	0.5	1.0
TYPE C (9.5 MM MIX)	ALL	1.25	2.0
TYPE C (12.5 MM MIX)	ALL	1.5	2.0
TYPE B (19 MM MIX)	76-22, 70-22	2.25	4.0
TYPE B (19 MM MIX)	64-22	2.25	6.0
TYPE BCBC (25 MM MIX)	64-22	3.0	6.0
GABC	-	4.0	8.0

TYPICAL SECTION NOTES:

1. WIDTH OF EXISTING RAISED MEDIAN VARIES WITHIN LOCATIONS OF TEMPORARY CROSSOVERS. REFER TO CONSTRUCTION PHASING, M.O.T. AND EROSION PLANS FOR FURTHER INFORMATION REGARDING LOCATIONS OF RAISED MEDIANS AND HORIZONTAL LIMITS OF REMOVAL. SLOPE OF TEMPORARY CROSSOVERS SHALL MATCH EXISTING CROSS SLOPE BUT MAY VARY AS NEEDED TO INTERSECT.
2. PAVEMENT ASSOCIATED WITH TEMPORARY CROSSOVER AREAS SHALL BE REMOVED AND REPLACED WITH RAISED MEDIANS IN LOCATIONS MATCHING EXISTING CONFIGURATION. IN AREAS WHERE MILL AND OVERLAY IS PROPOSED OUTSIDE OF LIMITS OF TEMPORARY CROSSOVERS, NORTHBOUND AND SOUTHBOUND LANES SHALL BE MILLED AND OVERLAYED LEAVING EXISTING MEDIANS.
3. THE DEPTH OF EXISTING HOT-MIX OVERLAY VARIES. MILL EXISTING HOT-MIX TO THE UNDERLYING PCC PAVEMENT.

ADDENDA / REVISIONS		SCALE 0 5 10 15 FEET	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	TYPICAL SECTIONS	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 5
					CHECKED BY: S.WALLS		

13-DEC-2024
12:01
Y:\NEWCASTL\03\1Bridge\T201807402\500_CADD\530_PLANS_DGN\TS00.dgn

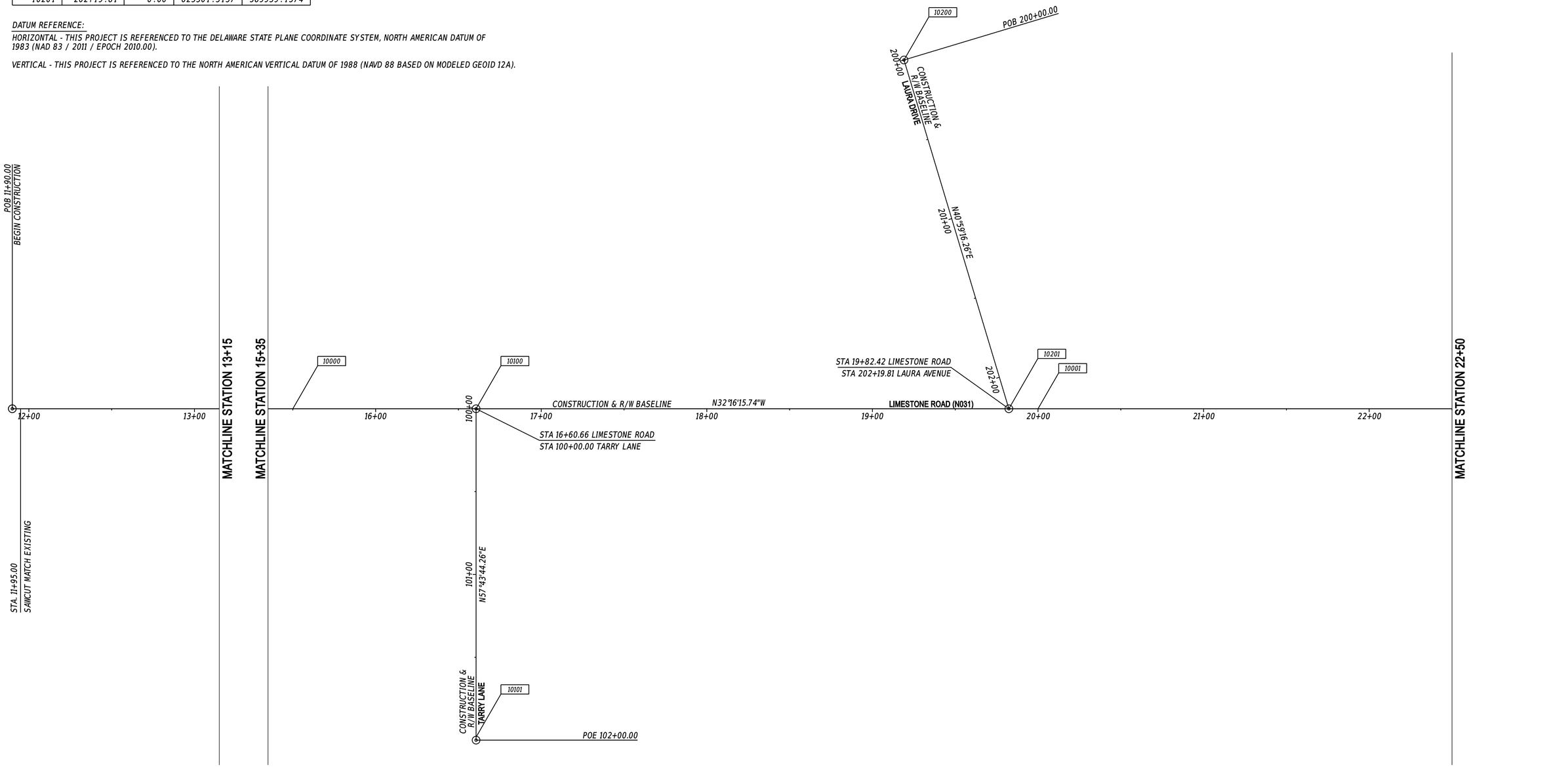
CONSTRUCTION ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10000	15+50.00	0.00	625093.6386	590196.7181
10001	20+00.00	0.00	625516.4046	589929.7556
10100	100+00.00	0.00	625229.4849	590110.9357
10101	102+00.00	0.00	625336.2699	590280.0421
10200	200+00.00	0.00	625335.5916	589794.9835
10201	202+19.81	0.00	625501.5157	589939.1574

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83 / 2011 / EPOCH 2010.00).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88 BASED ON MODELED GEOID 12A).



HORIZONTAL AND VERTICAL CONTROL PLAN NOTES:

1. *WORK BETWEEN STA. 13+15.00 AND 15+35.00 IS ASSOCIATED WITH MILL AND OVERLAY. NO CONTROL POINTS ARE WITHIN THIS LIMIT, THUS THE OMMISION OF THIS PORTION OF THE PLAN WILL HAVE NO IMPACT ON THIS SHEET.*

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

HORIZONTAL AND VERTICAL CONTROL

SECTION	BR
SHEET NO.	6

13-DEC-2024
12:01
\\Dotfs08\cadd\Active_Designs\NEWCASTL\031\Bridge\T201807402\500_CADD\530_PLANS_DGN\HV00.dgn

CONSTRUCTION ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10004	28+00.00	0.00	626193.6910	589503.9872
10005	31+00.00	0.00	626448.2243	589345.2018
10300	300+00.00	0.00	626147.8315	589532.5957
10303	302+50.00	0.00	626288.8364	589739.6057

HORIZONTAL / VERTICAL CONTROL DATA

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEV.
SR7 1	27+30.50	-5.66	626131.7279	589535.9720	81.96
SR7A	29+57.07	-5.37	626324.1094	589416.2937	76.96

ELEMENT: CIRCULAR CURVE #1

	STATION	NORTHING	EASTING
PC (10002)	24+88.62	625929.5457	589668.8708
PI (11000)	25+04.38	625942.8763	589660.4529
CC (11001)		629002.6314	594535.4560
PT (10003)	25+20.15	625956.2528	589652.1082
RADIUS:	5755.65'		
DELTA:	00°18'50.0000" RIGHT		
DEGREE OF CURVATURE (ARC):	00°59'43.6927"		
LENGTH:	31.53'		
TANGENT:	15.77'		
CHORD:	31.53'		
MIDDLE ORDINATE:	0.02'		
EXTERNAL:	0.02'		
TANGENT DIRECTION:	N 32°16'15.7407" W		
RADIAL DIRECTION:	N 57°43'44.2593" E		
CHORD DIRECTION:	N 32°06'50.7407" W		
RADIAL DIRECTION:	N 58°02'34.2593" E		
TANGENT DIRECTION:	N 31°57'25.7407" W		

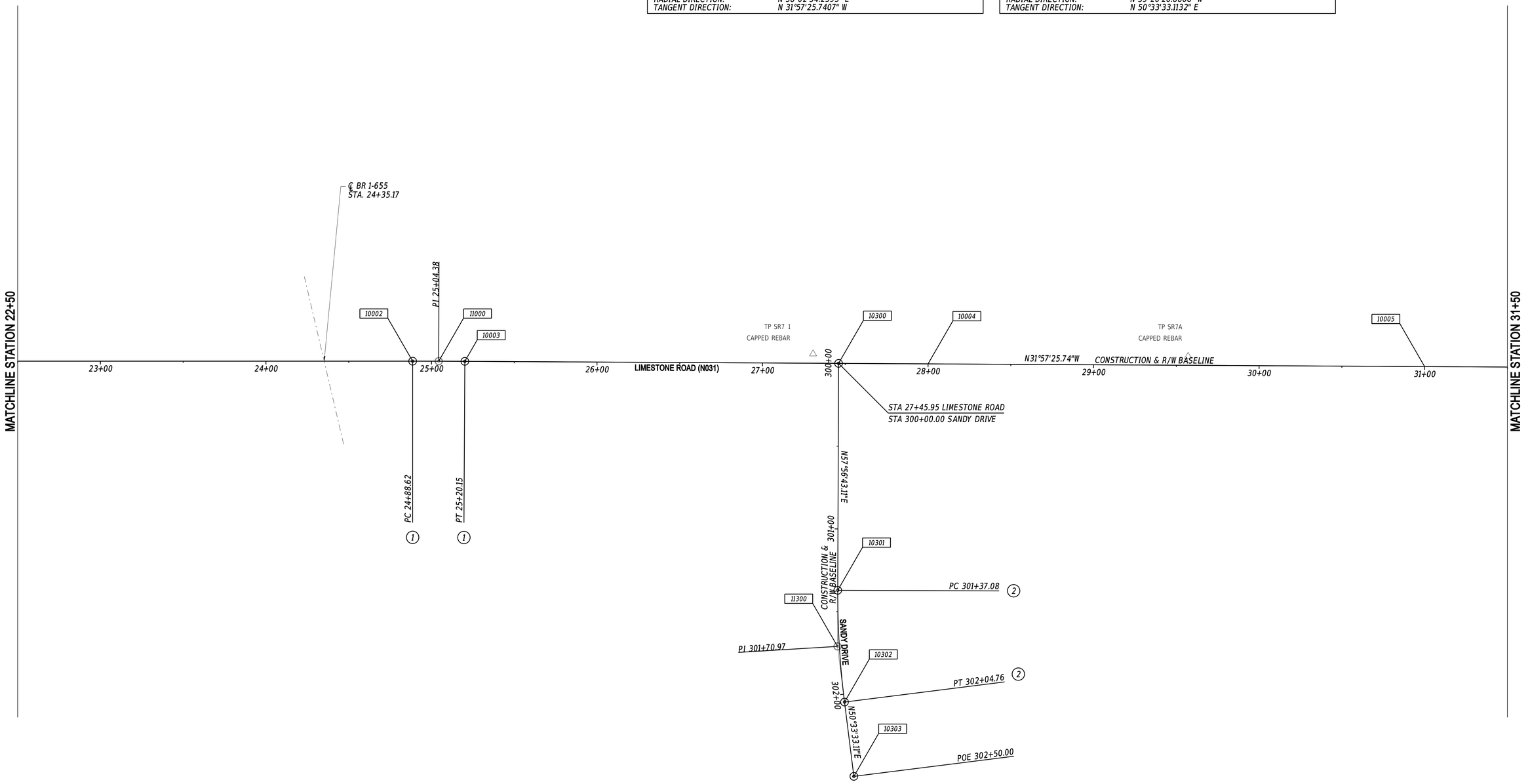
ELEMENT: CIRCULAR CURVE #2

	STATION	NORTHING	EASTING
PC (10301)	301+37.08	626220.5831	589648.7757
PI (11300)	301+70.97	626238.5686	589677.4975
CC (11301)		626665.5690	589370.1267
PT (10302)	302+04.76	626260.0972	589703.6688
RADIUS:	525.03'		
DELTA:	07°23'10.00" LEFT		
DEGREE OF CURVATURE (ARC):	10°54'46.20"		
LENGTH:	67.68'		
TANGENT:	33.89'		
CHORD:	67.64'		
MIDDLE ORDINATE:	1.09'		
EXTERNAL:	1.09'		
TANGENT DIRECTION:	N 57°56'43.1132" E		
RADIAL DIRECTION:	N 32°03'16.8868" W		
CHORD DIRECTION:	N 54°15'08.1132" E		
RADIAL DIRECTION:	N 39°26'26.8868" W		
TANGENT DIRECTION:	N 50°33'33.1132" E		

DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83 / 2011 / EPOCH 2010.00).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88 BASED ON MODELED GEOID 12A).



ADDENDA / REVISIONS		SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	HORIZONTAL AND VERTICAL CONTROL	SECTION
		0 30 60 90		T201807402	DESIGNED BY: S.WEAVER		BR
		FEET		COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			7

13-DEC-2024
12:01
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\HV01.dgn

CONSTRUCTION ALIGNMENT CONTROL

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10008	38+00.00	0.00	627018.9801	588941.1373
10400	400+00.00	0.00	626814.6846	589101.6174
10401	401+60.00	0.00	626916.1161	589225.3578

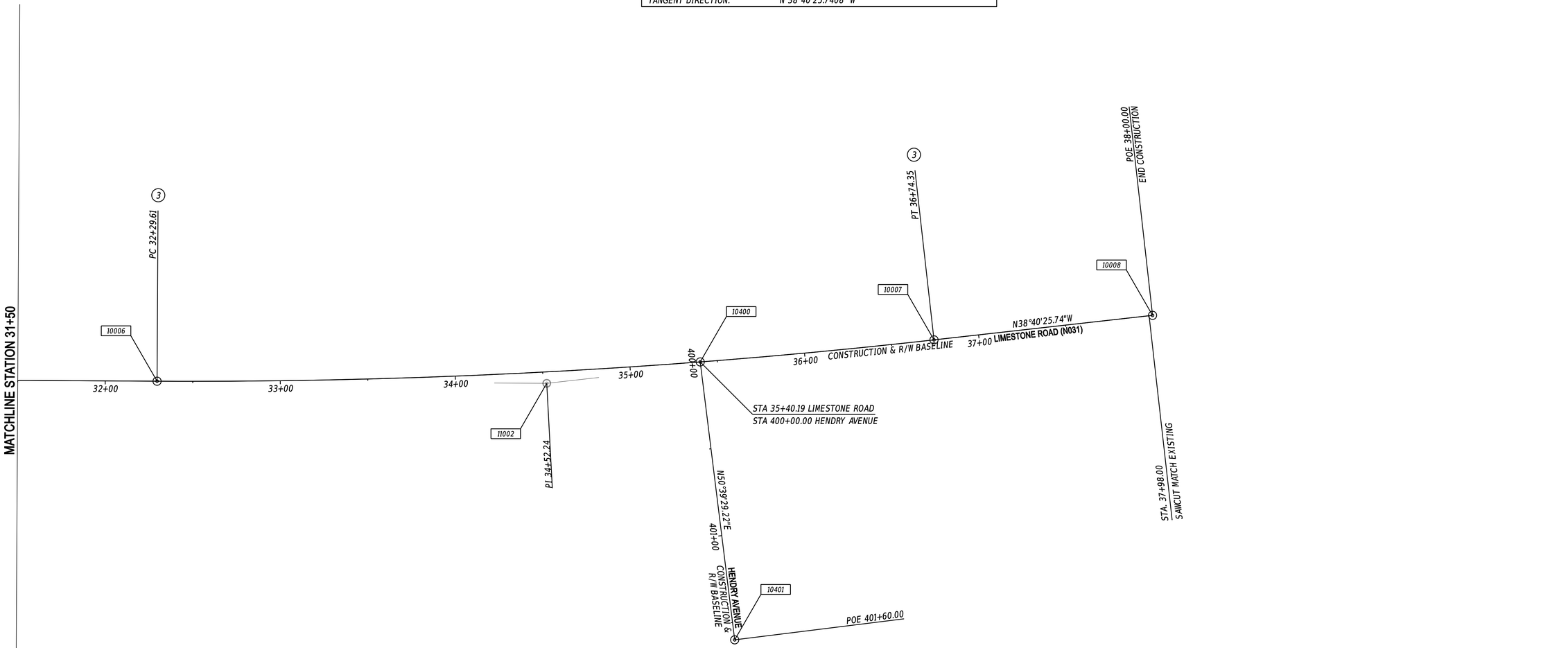
DATUM REFERENCE:

HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83 / 2011 / EPOCH 2010.00).

VERTICAL - THIS PROJECT IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88 BASED ON MODELED GEOID 12A).

ELEMENT: CIRCULAR CURVE #3

	STATION	NORTHING	EASTING
PC (10006)	32+29.61	626558.1927	589276.6002
PI (11002)	34+52.24	626747.0788	589158.7673
CC (10009)		624550.1758	586057.7472
PT (10007)	36+74.35	626920.8869	589019.6512
RADIUS:	3793.83'		
DELTA:	06°43'00.0000" RIGHT		
DEGREE OF CURVATURE (ARC):	01°30'36.8489"		
LENGTH:	444.74'		
TANGENT:	222.63'		
CHORD:	444.49'		
MIDDLE ORDINATE:	6.52'		
EXTERNAL:	6.53'		
TANGENT DIRECTION:	N 31°57'25.7408" W		
RADIAL DIRECTION:	N 58°02'34.2592" E		
CHORD DIRECTION:	N 35°18'55.7408" W		
RADIAL DIRECTION:	N 51°19'34.2592" E		
TANGENT DIRECTION:	N 38°40'25.7408" W		



ADDENDA / REVISIONS		SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	HORIZONTAL AND VERTICAL CONTROL	SECTION
		0 30 60 90		T201807402	DESIGNED BY: S.WEAVER		BR
		FEET		COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			8

13-DEC-2024
12:01
Y:\NEWCASTL\0331Bridge\T201807402\500_CADD\530_PLANS_DGN\HV02.dgn

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C-1	19+29.66	40.24	0.5" HMA, 9" PCC
C-2	20+23.66	31.28	0.75" HMA, 8.75" PCC
C-3	21+33.66	40.82	0.5" HMA, 8.75" PCC

RIGHT-OF-WAY MONUMENT SCHEDULE

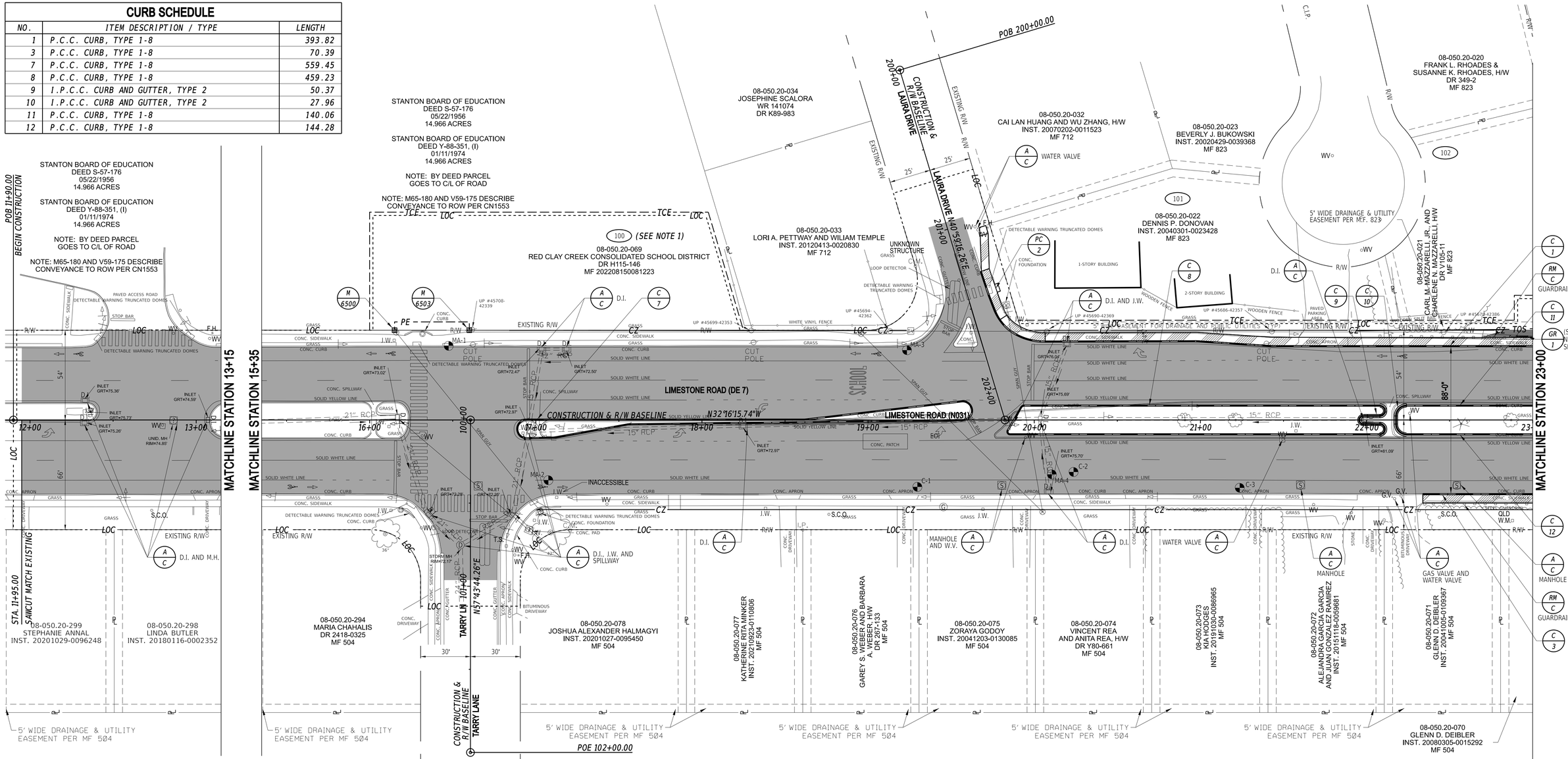
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
6500	CAPPED REBAR	16+15.00	-54.00	625162.0429	590089.6580
6503	CAPPED REBAR	16+60.00	-54.00	625200.0918	590065.6314

SOIL BORING SCHEDULE

NO.	STATION	OFFSET
MA-1	16+47.52	-44.55
MA-2	17+07.55	36.23
MA-3	19+23.37	-41.98
MA-4	20+10.55	32.72

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	P.C.C. CURB, TYPE 1-8	393.82
3	P.C.C. CURB, TYPE 1-8	70.39
7	P.C.C. CURB, TYPE 1-8	559.45
8	P.C.C. CURB, TYPE 1-8	459.23
9	I.P.C.C. CURB AND GUTTER, TYPE 2	50.37
10	I.P.C.C. CURB AND GUTTER, TYPE 2	27.96
11	P.C.C. CURB, TYPE 1-8	140.06
12	P.C.C. CURB, TYPE 1-8	144.28



CONSTRUCTION PLAN NOTES:

1. AREA TO BE USED FOR CONSTRUCTION STAGING. PLEASE NOTE LOW OVERHEAD UTILITIES ARE PRESENT ADJACENT TO PARCEL. MATERIAL WILL NOT BE ALLOWED TO BE STORED ON CSX PROPERTY OUTSIDE OF AGREED UPON LIMITS.
2. ALL TREES WITHIN THE LOC OUTSIDE THE AREA OF PROPOSED PAVEMENT WORK ARE NOT TO BE DISTURBED.
3. UTILITIES NOT SHOW FOR CLARITY. PLEASE REFER TO UTILITY RELOCATION SHEETS FOR FOR FURTHER INFORMATION.
4. MILL AND OVERLAY EXTENDS PAST INTERSECTION WITH TARRY LANE AND LAURA AVE, FROM CURB TO CURB, TO REPAIR SURFACE FROM STRIPING ASSOCIATED WITH MOT. ALL ITEMS (SIGNAGE, WATER VALVES, DRAINAGE INLETS, ETC.) BETWEEN STATION 13+15 AND 15+35 SHALL NOT BE DISTURBED. TO BE VERIFIED BY ENGINEER IN THE FIELD.
5. ANY CURB OR SPILLWAY IMPACTED BY ADJUSTING DRAINAGE INLETS SHALL BE PAID INCIDENTAL TO THE DRAINAGE INLET.
6. ITEMS LABELED ADJUST BY CONTRACTOR WITHIN MILL AND OVERLAY ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO ADJUSTING. PAYMENT INCIDENTAL TO ITEM #760010.

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	CONSTRUCTION PLAN	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 9
					CHECKED BY: S.WALLS		

6-APR-2025
11:26
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\CP00.dgn

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C-4	23+48.98	39.33	2.75" HMA, 8"+ PCC
C-5	23+90.07	34.83	5.5" PCC, PARTIAL DEPTH DECK CORE
C-6	24+31.65	34.49	7" PCC, PARTIAL DEPTH DECK CORE
C-7	24+98.60	39.57	PARTIAL DEPTH DECK CORE
C-8	25+41.12	40.81	0.75" HMA, 9" PCC, 8"+ FILL

ROADWAY CORE SCHEDULE

NO.	STATION	OFFSET	DESCRIPTION
C-9	26+00.17	-39.48	0.5" HMA, 8.75" PCC
C-10	25+06.38	-39.43	3" HMA, 7.5" PCC
C-11	24+74.75	-39.44	6.5" PCC, PARTIAL DEPTH DECK CORE
C-12	24+12.97	-33.03	6" PCC, PARTIAL DEPTH DECK CORE
C-13	23+69.55	-38.58	6" PCC, PARTIAL DEPTH DECK CORE
C-14	23+33.33	-40.58	1" HMA, 10+ PCC

CURB SCHEDULE

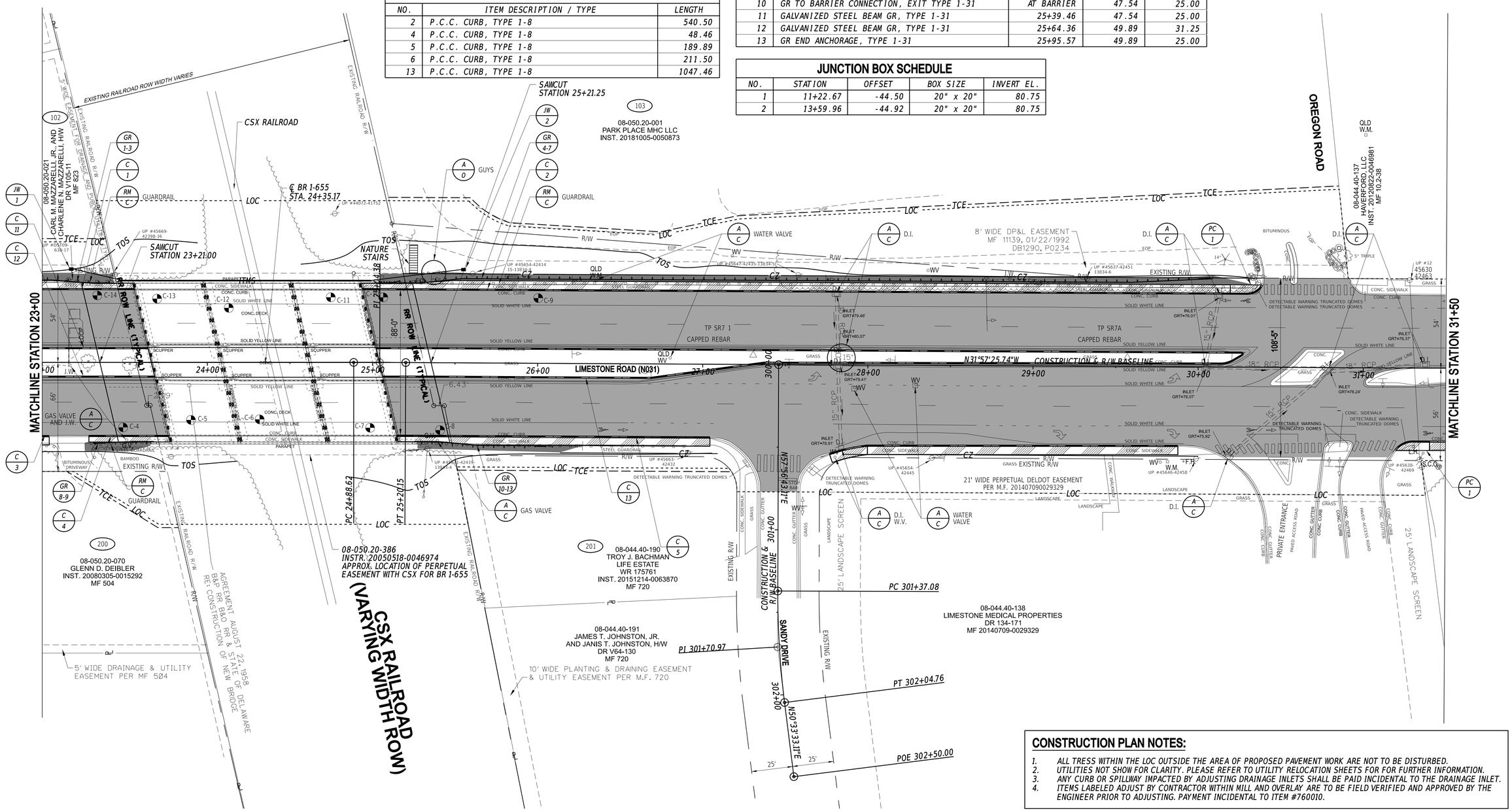
NO.	ITEM DESCRIPTION / TYPE	LENGTH
2	P.C.C. CURB, TYPE 1-8	540.50
4	P.C.C. CURB, TYPE 1-8	48.46
5	P.C.C. CURB, TYPE 1-8	189.89
6	P.C.C. CURB, TYPE 1-8	211.50
13	P.C.C. CURB, TYPE 1-8	1047.46

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	GR END ANCHORAGE, TYPE 1-31	22+86.59	-49.73	13.50
2	GALVANIZED STEEL BEAM GR, TYPE 1-31	23+00.00	-49.75	31.25
3	GR TO BARRIER CONNECTION, EXIT TYPE 1-31	23+31.18	-47.54	12.50
4	GR TO BARRIER CONNECTION, APPROACH TYPE 1-31	AT BARRIER	-47.54	25.00
5	GALVANIZED STEEL BEAM GR, TYPE 1-31	25+28.79	-47.54	25.00
6	GALVANIZED STEEL BEAM GR, TYPE 1-31	25+53.63	50.66	400.00
7	GR END TREATMENT, TYPE 1-31, TL-3	29+53.51	50.66	50.00
8	GR END TREATMENT, TYPE 1-31, TL-2	23+29.11	48.26	25.00
9	GR TO BARRIER CONNECTION, EXIT TYPE 1-31	23+53.74	47.89	25.00
10	GR TO BARRIER CONNECTION, EXIT TYPE 1-31	AT BARRIER	47.54	25.00
11	GALVANIZED STEEL BEAM GR, TYPE 1-31	25+39.46	47.54	25.00
12	GALVANIZED STEEL BEAM GR, TYPE 1-31	25+64.36	49.89	31.25
13	GR END ANCHORAGE, TYPE 1-31	25+95.57	49.89	25.00

JUNCTION BOX SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	INVERT EL.
1	11+22.67	-44.50	20" x 20"	80.75
2	13+59.96	-44.92	20" x 20"	80.75



CONSTRUCTION PLAN NOTES:

1. ALL TRESS WITHIN THE LOC OUTSIDE THE AREA OF PROPOSED PAVEMENT WORK ARE NOT TO BE DISTURBED.
2. UTILITIES NOT SHOW FOR CLARITY. PLEASE REFER TO UTILITY RELOCATION SHEETS FOR FOR FURTHER INFORMATION.
3. ANY CURB OR SPILLWAY IMPACTED BY ADJUSTING DRAINAGE INLETS SHALL BE PAID INCIDENTAL TO THE DRAINAGE INLET.
4. ITEMS LABELED ADJUST BY CONTRACTOR WITHIN MILL AND OVERLAY ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO ADJUSTING. PAYMENT INCIDENTAL TO ITEM #760010.

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

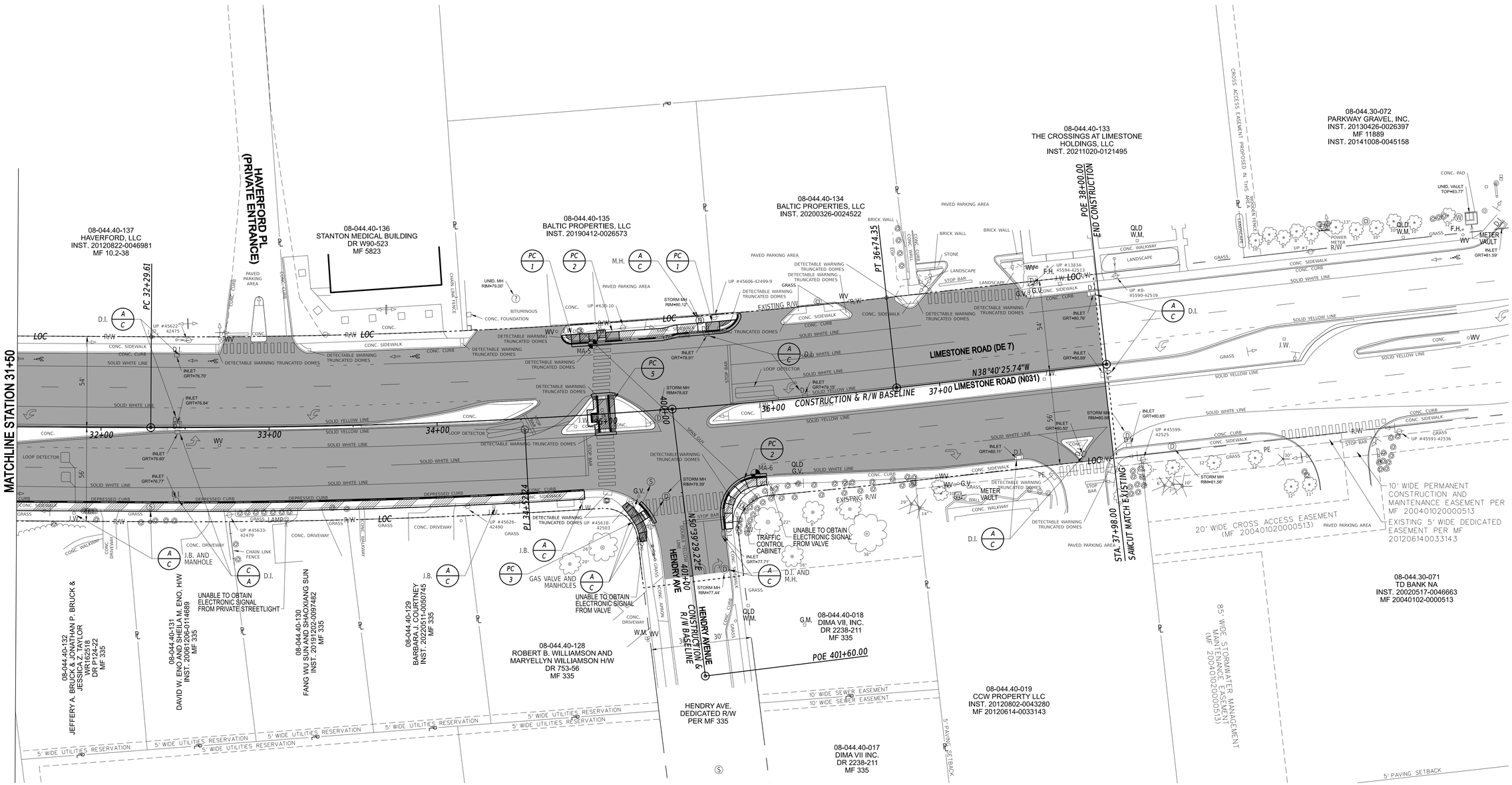
CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

CONSTRUCTION PLAN

SECTION
BR
SHEET NO.
10

6-APR-2025
11:26
Y:\NEWCASTLU031\Bridge\T201807402\500_CADD\530_PLANS_DGN\CP01.dgn

SOIL BORING SCHEDULE		
NO.	STATION	OFFSET
MA-5	34+95.51	-41.88
MA-6	35+86.16	42.48



CONSTRUCTION PLAN NOTES:

1. ALL TREES WITHIN THE LOC OUTSIDE THE AREA OF PROPOSED PAVEMENT WORK ARE NOT TO BE DISTURBED.
2. UTILITIES NOT SHOW FOR CLARITY. PLEASE REFER TO UTILITY RELOCATION SHEETS FOR FOR FURTHER INFORMATION.
3. ANY CURB OR SPILLWAY IMPACTED BY ADJUSTING DRAINAGE INLETS SHALL BE PAID INCIDENTAL TO THE DRAINAGE INLET.
4. ITEMS LABELED ADJUST BY CONTRACTOR WITHIN MILL AND OVERLAY ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO ADJUSTING. PAYMENT INCIDENTAL TO ITEM #760010.

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

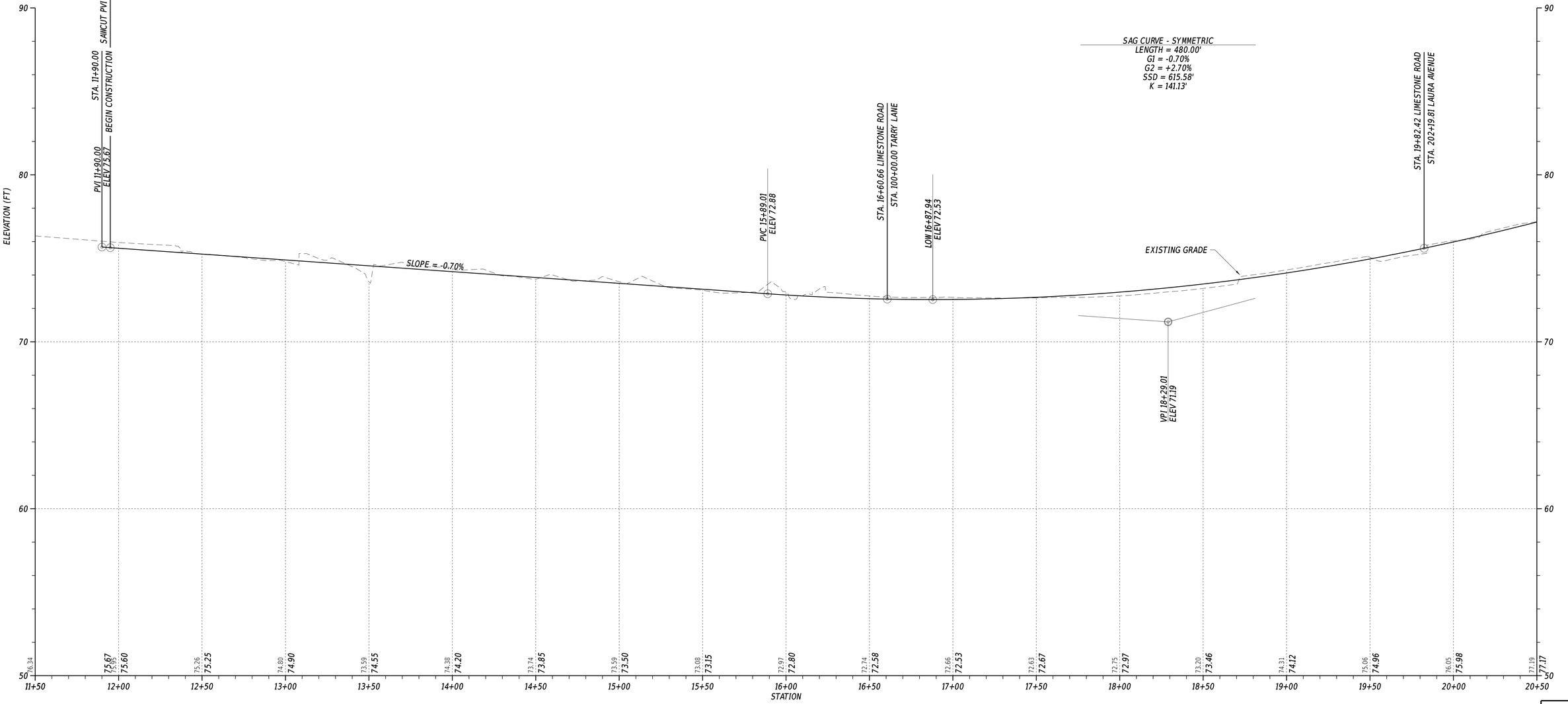
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

CONSTRUCTION PLAN

SECTION	
BR	
SHEET NO.	
11	

6-APR-2025
11:27
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\CP02.dgn

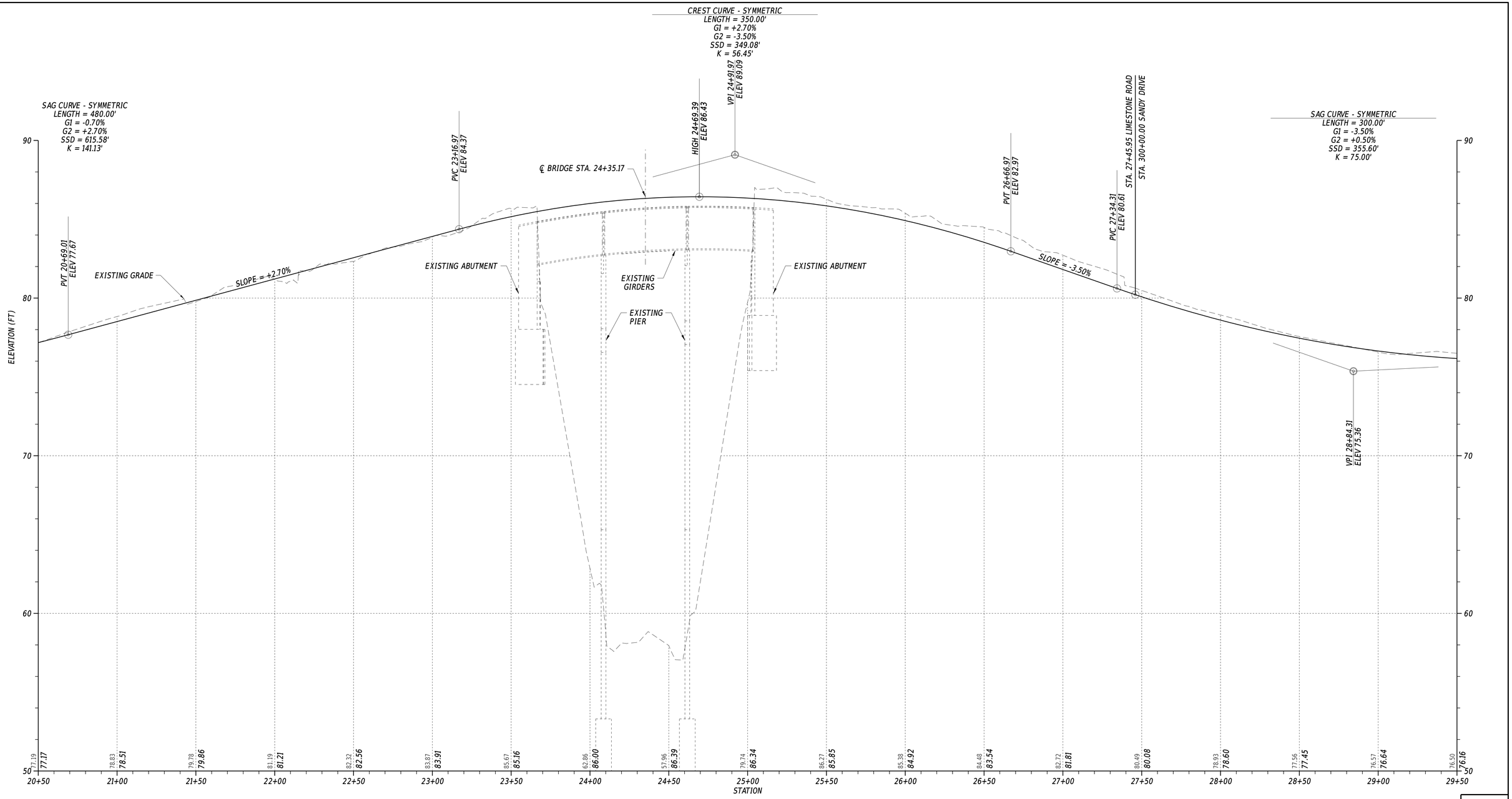


LIMESTONE ROAD (N031)

VERTICAL SCALE FEET: 0, 3, 6, 9

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	PROFILES	SECTION
	0 30 60 90 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
			COUNTY	CHECKED BY: S.WALLS		SHEET NO.
			NEW CASTLE			12

13-DEC-2024
12:02
Y:\NEWCASTL\031Bridge\T201807402\500_CADD\530_PLANS_DGN\PF00.dgn



LIMESTONE ROAD (N031)

VERTICAL SCALE FEET
9
6
3
0

ADDENDA / REVISIONS		SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	PROFILES	SECTION
		0 30 60 90 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			13

13-DEC-2024
12:02
Y:\NEWCASTL\031\Bridge\T201807402\1500_CADD\530_PLANS_DGN\PF01.dgn

SAG CURVE - SYMMETRIC
LENGTH = 300.00'
G1 = -3.50%
G2 = +0.50%
SSD = 355.60'
K = 75.00'

SAG CURVE - SYMMETRIC
LENGTH = 150.00'
G1 = +0.50%
G2 = +0.78%
SSD = INF'
K = 537.63'

LOW 29+96.81
ELEV 76.02

PVT 30+34.31
ELEV 76.11

PVC 32+60.35
ELEV 77.24

VPI 33+35.35
ELEV 77.62

PVT 34+10.35
ELEV 78.20

STA. 35+40.19 LIMESTONE ROAD
STA. 400+00.00 HENDRY AVENUE

SAWCUT PVI STA. 37+98.00
ELEV 81.22

PVI 38+00.00
ELEV 81.24

STA. 38+00.00
END CONSTRUCTION

EXISTING GRADE

SLOPE = +0.50%

SLOPE = +0.78%

ELEVATION (FT)

90
80
70
60
50

29+50	30+00	30+50	31+00	31+50	32+00	32+50	33+00	33+50	34+00	34+50	35+00	35+50	36+00	36+50	37+00	37+50	38+00
76.50	76.10	76.25	76.43	76.94	77.13	77.33	77.63	77.90	78.34	78.10	78.53	78.83	79.27	79.60	79.96	80.58	81.15
76.16	76.02	76.19	76.44	76.69	76.94	77.19	77.45	77.76	78.12	78.51	78.90	79.29	79.68	80.07	80.46	80.85	

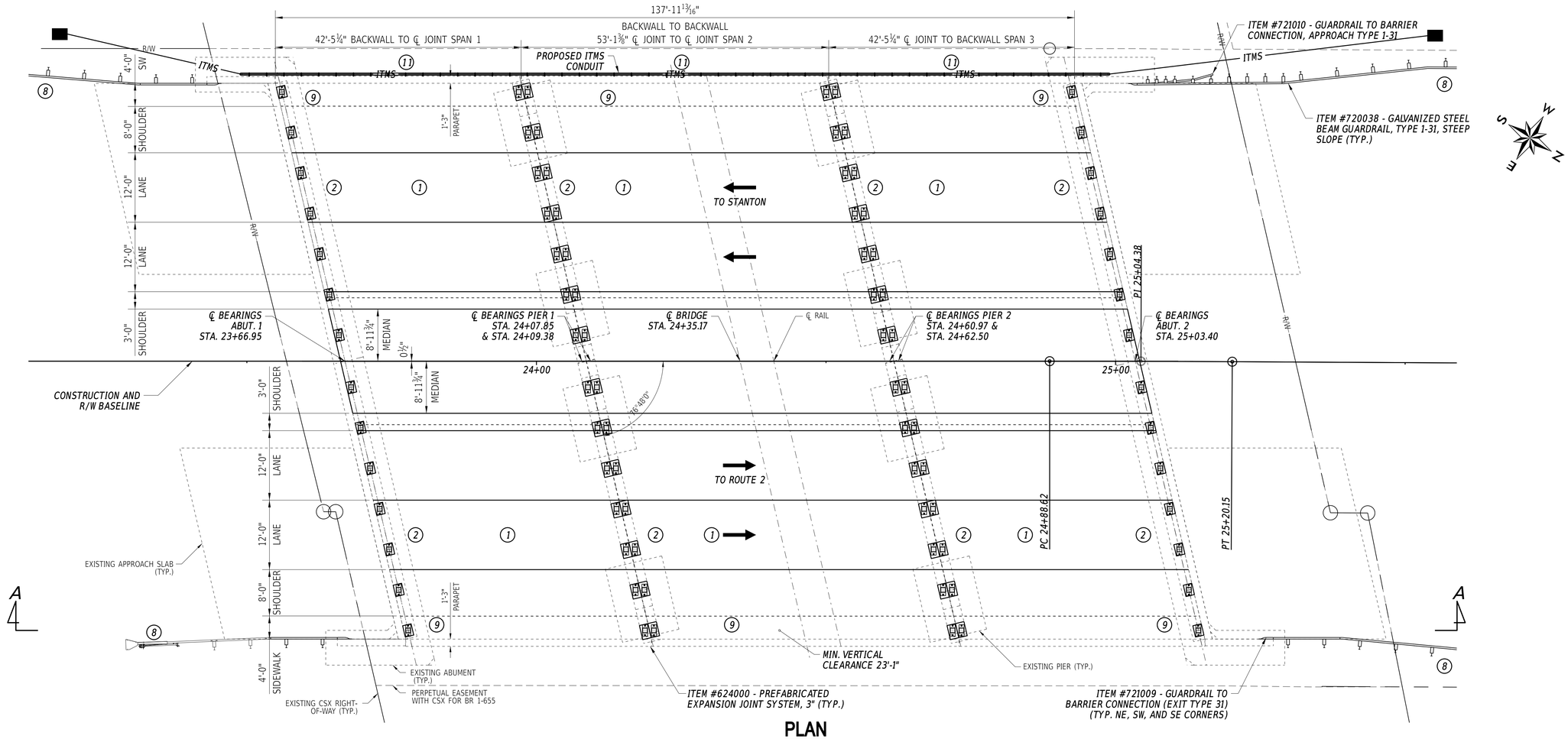
STATION

LIMESTONE ROAD (N031)

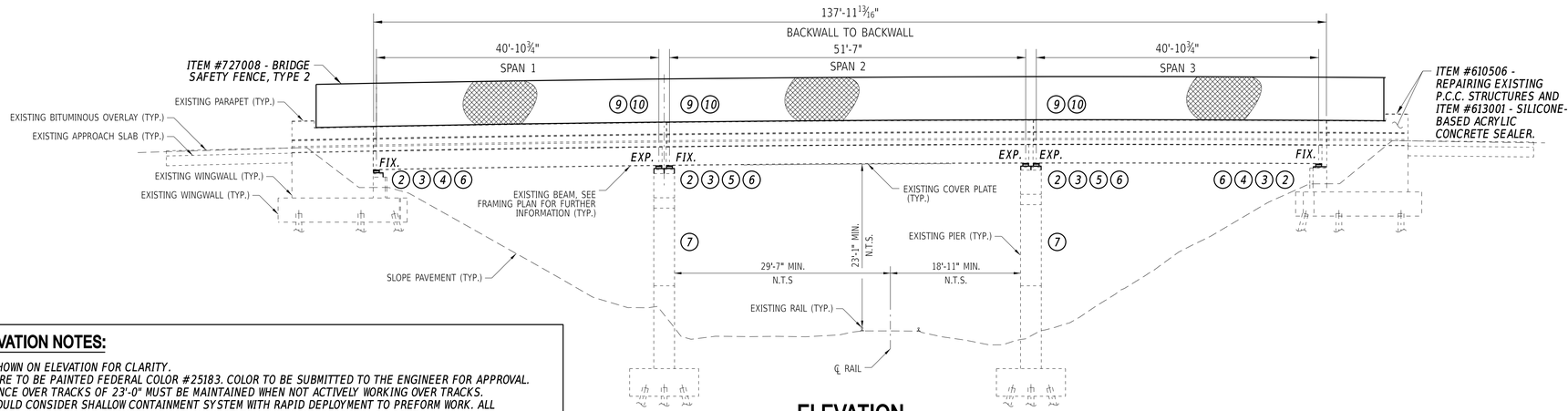
VERTICAL SCALE FEET
9
6
3
0

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO.	1-655	PROFILES	SECTION
	0 30 60 90 FEET		T201807402	DESIGNED BY:	S.WEAVER		BR
			COUNTY	CHECKED BY:	S.WALLS		SHEET NO.
			NEW CASTLE				14

13-DEC-2024
12:02
Y:\NEWCASTL\L031\Bridge\T201807402\500_CADD\530_PLANS_DGN\PF02.dgn



PLAN



ELEVATION

(A-A)

PLAN AND ELEVATION NOTES:

1. UTILITIES NOT SHOWN ON ELEVATION FOR CLARITY.
2. BRIDGE BEAMS ARE TO BE PAINTED FEDERAL COLOR #25183. COLOR TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
3. MINIMUM CLEARANCE OVER TRACKS OF 23'-0" MUST BE MAINTAINED WHEN NOT ACTIVELY WORKING OVER TRACKS. CONTRACTOR SHOULD CONSIDER SHALLOW CONTAINMENT SYSTEM WITH RAPID DEPLOYMENT TO PREFORM WORK. ALL SYSTEMS, METHODS, AND SCHEDULE SUBMITTALS ARE SUBJECT TO REVIEW AND APPROVAL BY CSXT.
4. INSTALL PROPOSED ITMS CONDUIT FROM BACKWALL TO BACKWALL ALONG THE OUTSIDE FACE OF THE WEST PARAPET. REFER TO ITMS CONDUIT SHEET FOR DETAILS.

CONSTRUCTION LEGEND

SYM	DESCRIPTION
(1)	HYDRODEMOLITION BRIDGE DECK TO BELOW FIRST LAYER OF REINFORCEMENT TO SOUND CONCRETE AND REMOVE MEDIAN
(2)	REMOVE AND REPLACE EXPANSION JOINTS
(3)	JACK GIRDERS, BUILD UP PEDESTALS, & REPLACE EXISTING BEARINGS WITH ELASTOMERIC BEARINGS AT ALL ABUTMENTS & PIERS
(4)	CLEAN, REPAIR SURFACE, CRACKS, SPALLS, AND DELAMINATIONS IN THE ABUTMENTS.
(5)	CLEAN, REPAIR SURFACE, CRACKS, SPALLS, AND DELAMINATIONS IN THE PIERS.
(6)	REPAIR AND PAINT STEEL GIRDERS
(7)	INSTALL FIBER REINFORCED POLYMER
(8)	INSTALL APPROACH GUARDRAIL
(9)	CLEAN, REPAIR, AND SEAL EXISITING SIDEWALK AND PARAPET
(10)	REMOVE HANDRAIL AND INSTALL BRIDGE SAFETY FENCE
(11)	INSTALL ITMS CONDUIT FOR FUTURE PROJECTS

ADDENDA / REVISIONS

SCALE 0 10 20 30 FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

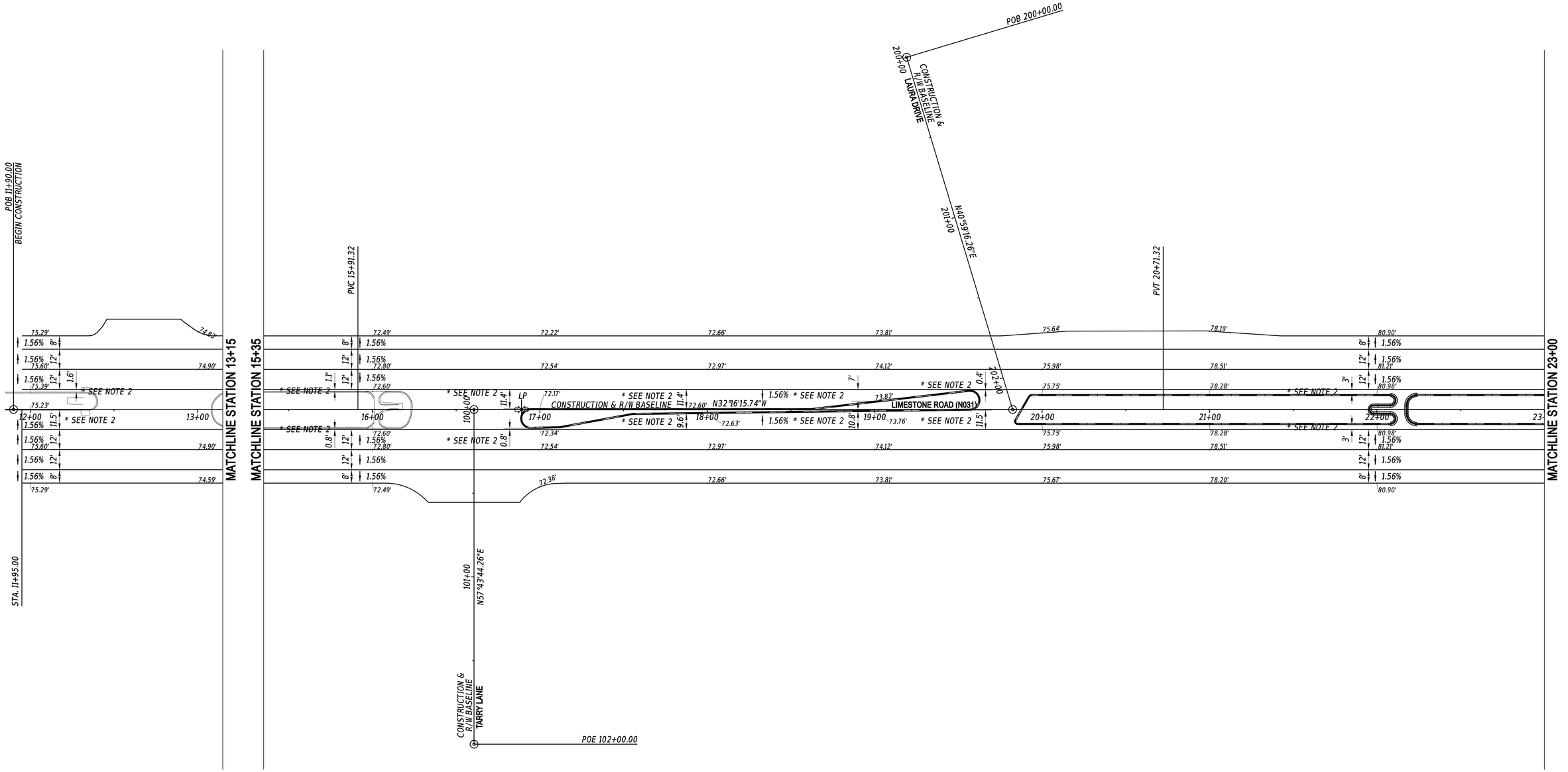
CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

EXISTING BRIDGE PLAN AND ELEVATION

SECTION BR

SHEET NO. 15

10-JAN-2025
16:17
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\PE00.dgn

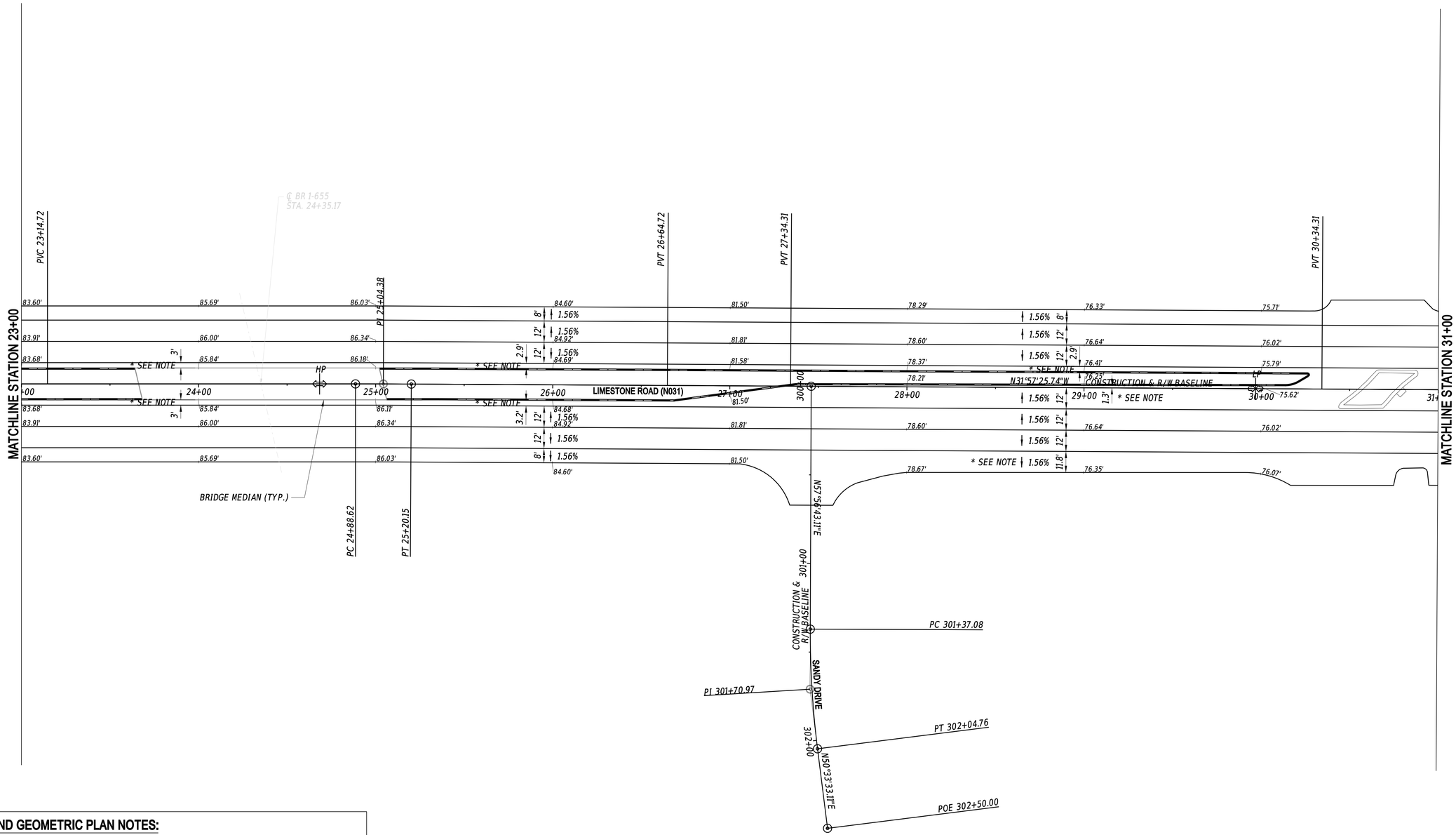


GRADES AND GEOMETRIC PLAN NOTES:

1. WORK BETWEEN STA. 13+50.00 AND 15+35.00 IS ASSOCIATED WITH MILL AND OVERLAY. GRADES AND GEOMETRICS WITHIN THIS LIMIT SHALL MATCH EXISTING.
2. DISTANCE AND ELEVATION SHOWN ARE APPROXIMATE AND TO FRONT FACE OF GUTTER. OFFSET AND ELEVATION SHALL MATCH EXISTING, TO BE VERIFIED IN THE FIELD.

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	GRADES AND GEOMETRICS	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 16
					CHECKED BY: S.WALLS		

13-DEC-2024
12:02
Y:\NEWCASTL\031Bridge\T201807402\S00_CADD\S30_PLANS_DGN\GG00.dgn

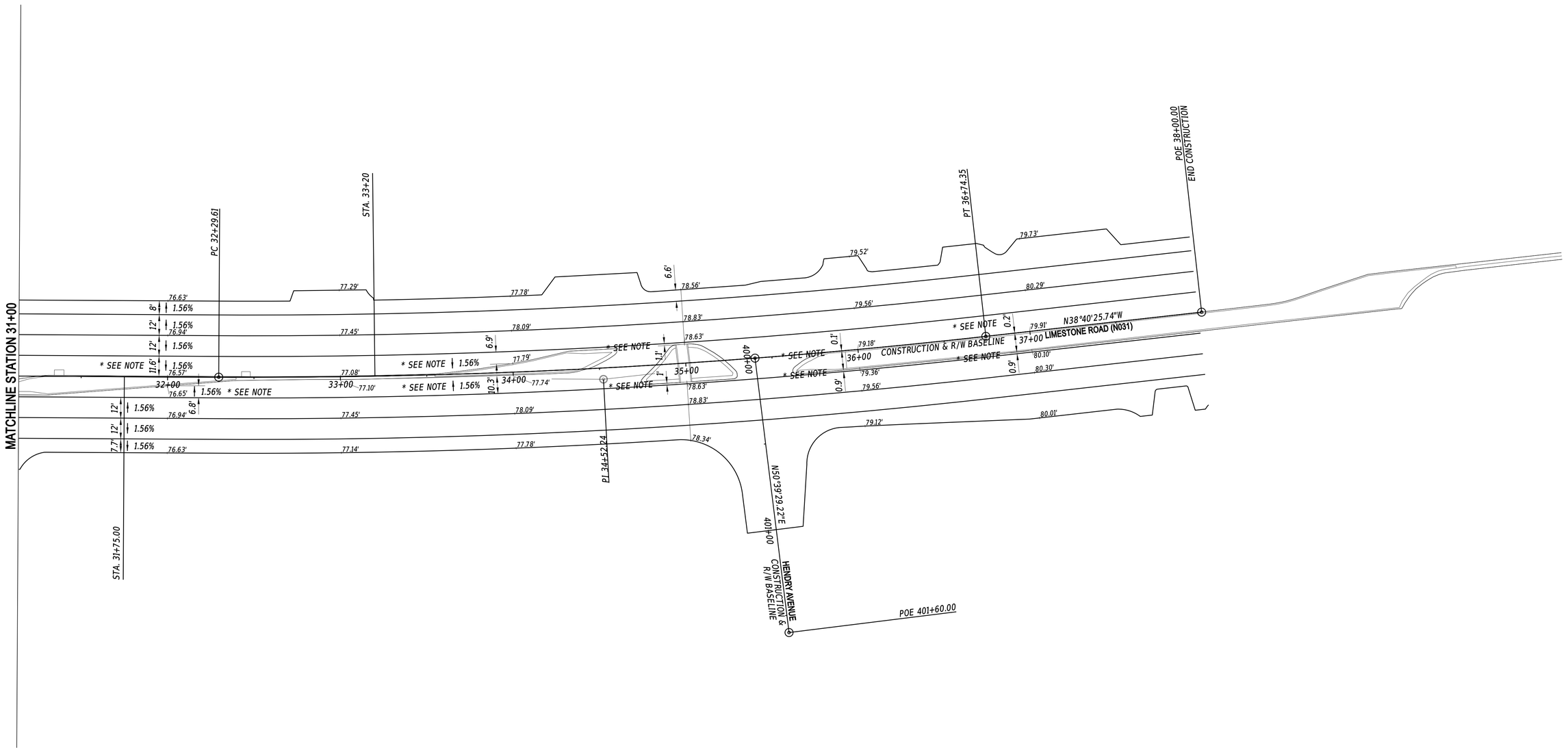


GRADES AND GEOMETRIC PLAN NOTES:

1. DISTANCE AND ELEVATION SHOWN ARE APPROXIMATE AND TO FRONT FACE OF GUTTER. OFFSET AND ELEVATION SHALL MATCH EXISTING, TO BE VARIFIED IN THE FIELD.

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	GRADES AND GEOMETRICS	SECTION
	0 30 60 90 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
			COUNTY	CHECKED BY: S.WALLS		SHEET NO.
			NEW CASTLE			17

13-DEC-2024
12:02
Y:\NEWCASTL\031\Bridge\T201807402\500_CADD\530_PLANS_DGN\GG01.dgn

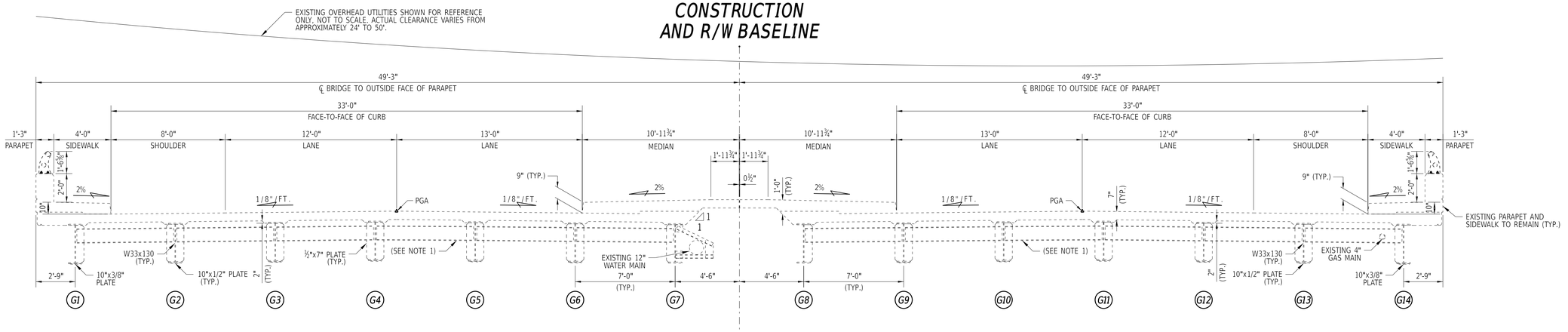


GRADES AND GEOMETRIC PLAN NOTES:

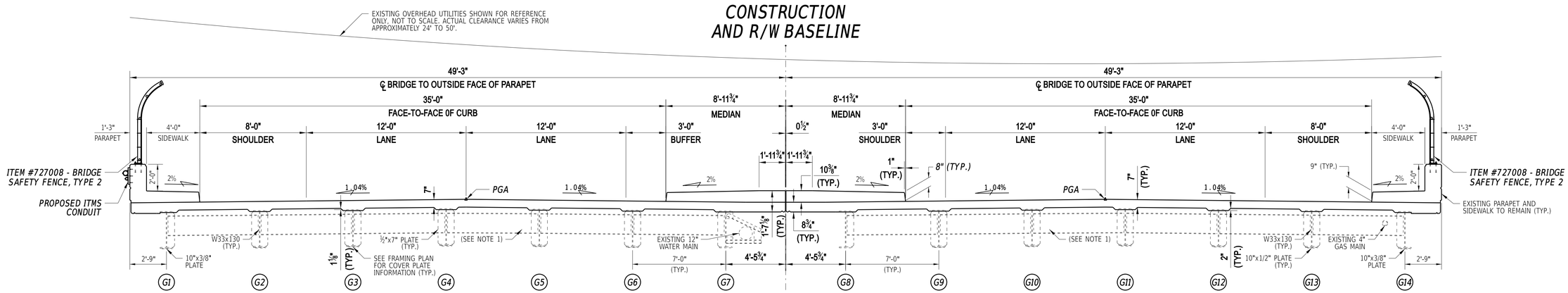
1. *DISTANCE AND ELEVATION SHOWN ARE APPROXIMATE AND TO FRONT FACE OF GUTTER. OFFSET AND ELEVATION SHALL MATCH EXISTING, TO BE VARIFIED IN THE FIELD.*

ADDENDA / REVISIONS		SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	GRADES AND GEOMETRICS	SECTION
		0 30 60 90		T201807402	DESIGNED BY: S.WEAVER		BR
		FEET		COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			18

13-DEC-2024
12:02
Y:\NEWCASTLU031\Bridge\T201807402\500_CADD\530_PLANS_DGN\GG02.dgn



EXISTING SECTION - SPAN 2



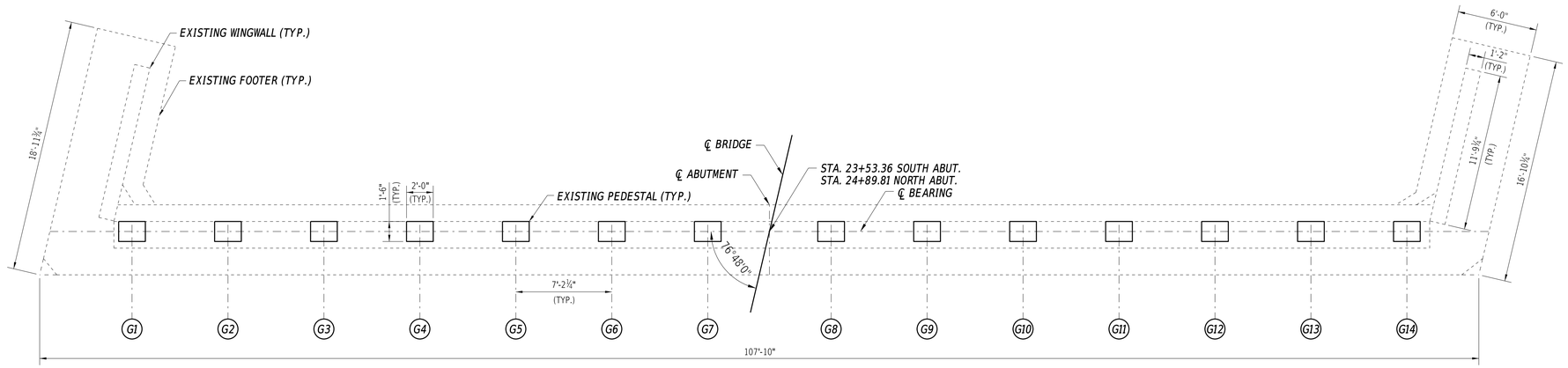
PROPOSED SECTION - SPAN 2

BRIDGE SECTION NOTES:

1. *INTERMEDIATE DIAGRAMS ARE C18x42.7 AND END DIAPHRAGMS ARE C12x20.7.*
2. *SPANS ONE AND THREE ARE NOT SHOWN AS SPAN TWO IS REPRESENTATIVE OF TYPICAL WORK ALONG LENGTH OF STRUCTURE. PLEASE REFER TO FRAMING PLAN FOR FURTHER INFORMATION REGARDING GIRDER CONFIGURATION.*

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	BRIDGE EXISTING AND PROPOSED SECTION SPAN 2	SECTION
	0 4 8 12 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
			COUNTY	CHECKED BY: S.WALLS		SHEET NO.
			NEW CASTLE			19

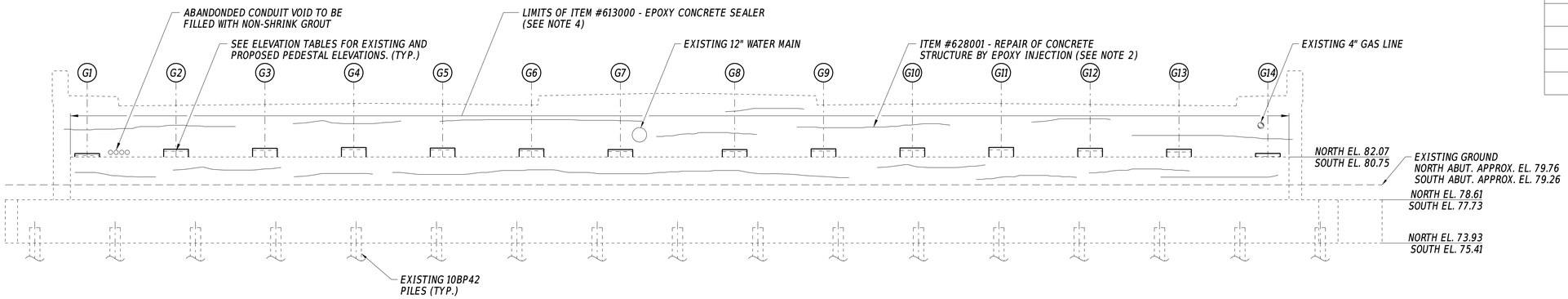
13-DEC-2024
12:03
Y:\NEWCASTL\03\1Bridge\T201807402\500_CADD\530_PLANS_DGN\B500.dgn



NORTH ABUTMENT PLAN

NORTH ABUTMENT ELEVATIONS		
GIRDER	EXISTING	PROPOSED
G1	82.187	82.346
G2	82.536	82.695
G3	82.610	82.769
G4	82.678	82.837
G5	82.632	82.791
G6	82.568	82.727
G7	82.348	82.507
G8	82.340	82.499
G9	82.549	82.708
G10	82.601	82.760
G11	82.635	82.794
G12	82.555	82.714
G13	82.470	82.629
G14	82.109	82.268

SOUTH ABUTMENT ELEVATIONS		
GIRDER	EXISTING	PROPOSED
G1	80.765	80.924
G2	81.154	81.313
G3	81.264	81.423
G4	81.375	81.534
G5	81.369	81.528
G6	81.344	81.503
G7	81.164	81.323
G8	81.207	81.366
G9	81.456	81.615
G10	81.548	81.707
G11	81.622	81.781
G12	81.581	81.740
G13	81.534	81.693
G14	81.214	81.373



NORTH ABUTMENT ELEVATION

LEGEND

ITEM #628001 - REPAIR OF CONCRETE STRUCTURE BY EPOXY INJECTION (FOR QUANTITY PURPOSES - 256 LF)

ABUTMENT REHABILITATION NOTES:

1. NORTH ABUTMENT IS REPRESENTATIVE OF NORTH AND SOUTH ABUTMENTS DIMENSIONS AND SCOPE OF WORK.
2. CRACKS, SPALLS, AND DELAMINATED AREAS ARE APPROXIMATE LOCATIONS FOR ESTIMATE PURPOSES ONLY. QUANTITY INCLUDED IS FOR ESTIMATE PURPOSES ONLY, IS BASED ON 2018 FIELD MEASUREMENTS OF THE NORTH ABUTMENT, AND INCLUDES A 30% CONTINGENCY. ALL AREAS ALONG EACH ABUTMENT SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN ½" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN ½" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.
3. EXISTING ELEVATIONS ARE BASED ON ARCHIVED PLANS AND CALIBRATED BASED ON SCANNED SURVEY DATA. ELEVATIONS SHOULD BE VERIFIED IN FIELD.
4. ITEM #613000 - EPOXY CONCRETE SEALER WILL BE APPLIED TO PEDESTALS AND TOP OF ABUTMENT STEM. ALL OTHER EXPOSED SURFACES OF ABUTMENT TO BE COATED WITH ITEM #613001 - SILICONE-BASED ACRYLIC SEALER AFTER COMPLETION OF REPAIRS.

ADDENDA / REVISIONS	

SCALE
0 5 10 15
FEET

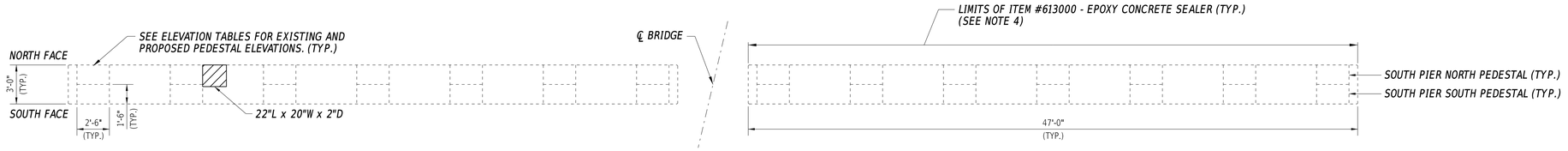
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

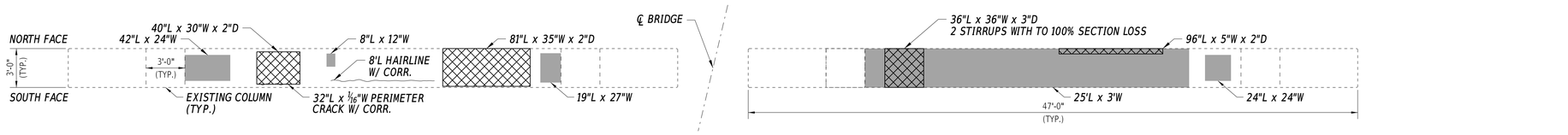
ABUTMENT REHABILITATION

SECTION
BR
SHEET NO.
20

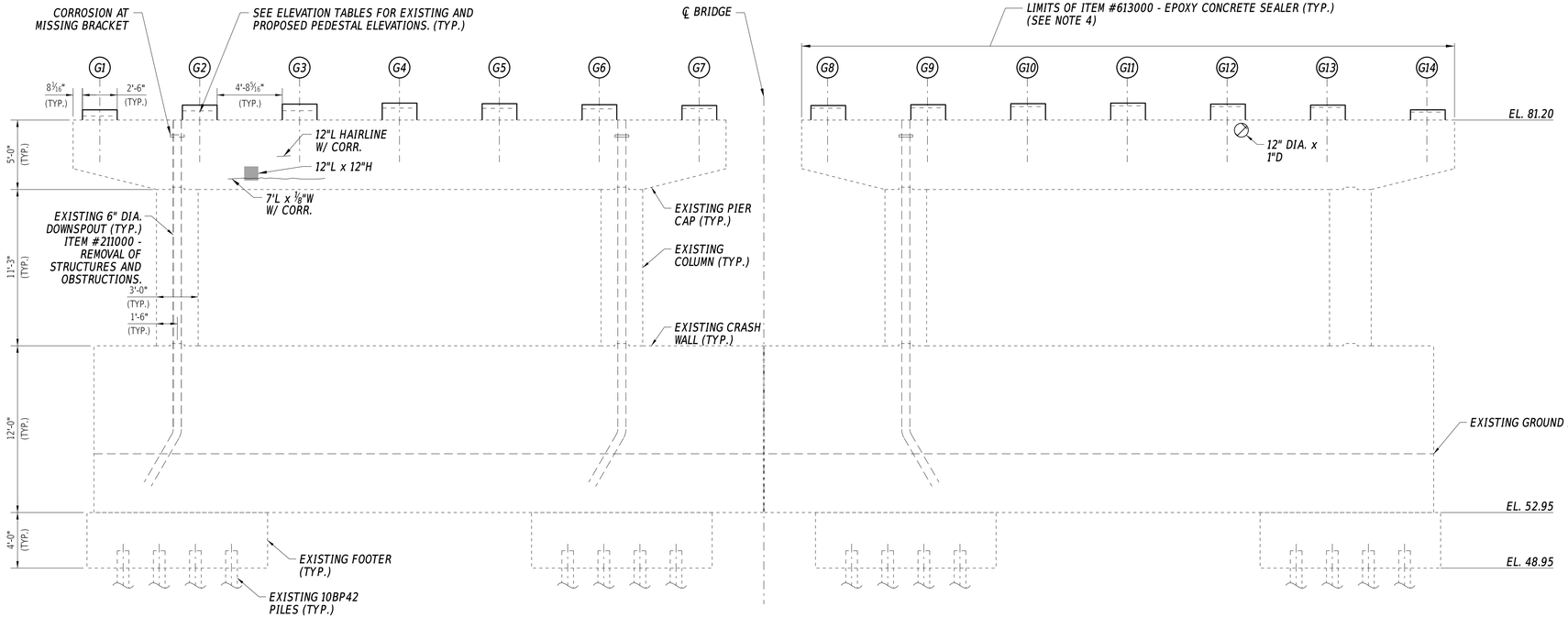
10-JAN-2025
16:18
Y:\NEWCASTL\0311Bridge\T201807402\500_CADD\530_PLANS_DGN\RH00.dgn



SOUTH PIER CAP - TOPSIDE PLAN



SOUTH PIER CAP - UNDERSIDE PLAN



SOUTH PIER - SOUTH ELEVATION

SOUTH PIER NORTH ELEVATIONS		
GIRDER	EXISTING	PROPOSED
G1	81.561	81.720
G2	81.670	81.829
G3	81.780	81.939
G4	81.876	82.035
G5	81.858	82.017
G6	81.808	81.967
G7	81.825	81.984
G8	81.853	82.012
G9	81.878	82.037
G10	81.971	82.130
G11	82.033	82.192
G12	81.979	82.138
G13	81.912	82.071
G14	81.845	82.004

SOUTH PIER SOUTH ELEVATIONS		
GIRDER	EXISTING	PROPOSED
G1	81.537	81.696
G2	81.914	82.073
G3	82.015	82.174
G4	82.112	82.271
G5	82.094	82.253
G6	82.054	82.213
G7	82.072	82.231
G8	82.100	82.259
G9	82.126	82.285
G10	82.210	82.369
G11	82.272	82.431
G12	82.219	82.378
G13	82.161	82.320
G14	81.828	81.987

LEGEND

- DELAMINATION, SEE NOTE 3.
- ITEM #628041 - DEEP SPALL REPAIR (FOR QUANTITY PURPOSES - 54 CF)
- ITEM #628040 - SHALLOW SPALL REPAIR (FOR QUANTITY PURPOSES - 26 CF)
- ITEM #628001 - REPAIR OF CONCRETE STRUCTURE BY EPOXY INJECTION (FOR QUANTITY PURPOSES - 25 LF)

PIER REHABILITATION NOTES:

1. CRACKS, SPALLS, AND DELAMINATED AREAS ARE APPROXIMATE LOCATIONS FOR ESTIMATE PURPOSES ONLY. QUANTITY INCLUDED IS FOR ESTIMATE PURPOSES ONLY, IS BASED ON 2018 FIELD MEASUREMENTS, AND INCLUDES A 30% CONTINGENCY. ALL AREAS ALONG EACH PIER SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN ½" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN ½" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.
2. EXISTING ELEVATIONS ARE BASED ON ARCHIVED PLANS AND CALIBRATED BASED ON SCANNED SURVEY DATA. ELEVATIONS SHOULD BE VERIFIED IN FIELD.
3. ITEM #613000 - EPOXY CONCRETE SEALER WILL BE APPLIED TO PEDESTALS AND TOP OF PIER CAP. ALL OTHER EXPOSED SURFACES OF PIER TO BE COATED WITH ITEM #613001 - SILICONE-BASED ACRYLIC SEALER AFTER COMPLETION OF REPAIRS.

ADDENDA / REVISIONS

SCALE
0 5 10 15
FEET

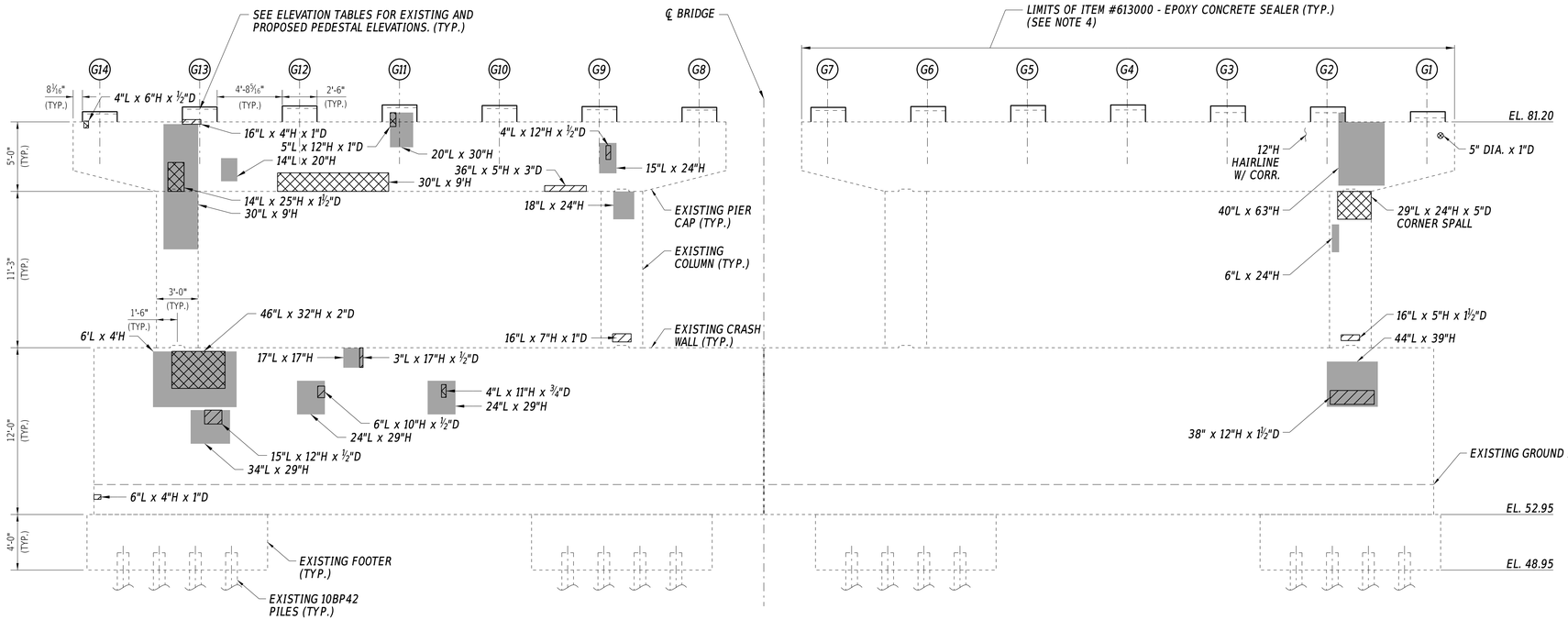
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

SOUTH PIER REHABILITATION - 1

SECTION
BR
SHEET NO.
21

10-JAN-2025
16:18
Y:\NEWCAST\L\0311Bridge\T201807402\S00_CADD\S30_PLANS_DGN\RH01.dgn



SOUTH PIER - NORTH ELEVATION

LEGEND

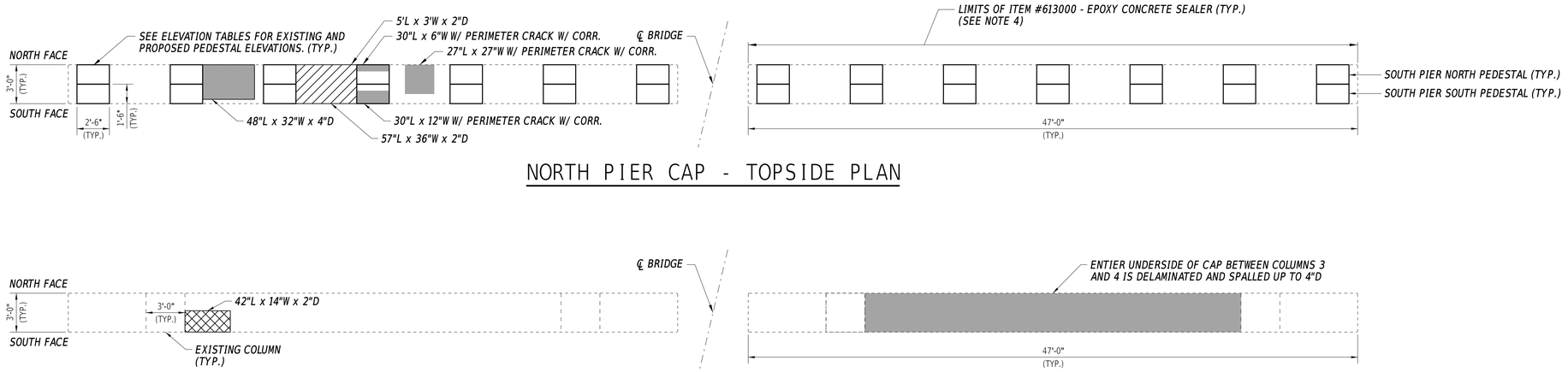
- DELAMINATION, SEE NOTE 3.
- ITEM #628041 - DEEP SPALL REPAIR (FOR QUANTITY PUPRPOSES - 54 CF)
- ITEM #628040 - SHALLOW SPALL REPAIR (FOR QUANTITY PURPOSES - 30 CF)
- ITEM #628001 - REPAIR OF CONCRETE STRUCTURE BY EPXOY INJECTION (FOR QUANTITY PURPOSES - 2 LF)

PIER REHABILITATION NOTES:

1. CRACKS, SPALLS, AND DELAMINATED AREAS ARE APPROXIMATE LOCATIONS FOR ESTIMATE PURPOSES ONLY. QUANTITY INCLUDED IS FOR ESTIMATE PURPOSES ONLY, IS BASED ON 2018 FIELD MEASUREMENTS, AND INCLUDES A 30% CONTINGENCY. ALL AREAS ALONG EACH PIER SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN 1/2" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN 1/2" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.
2. EXISTING ELEVATIONS ARE BASED ON ARCHIVED PLANS AND CALIBRATED BASED ON SCANNED SURVEY DATA. ELEVATIONS SHOULD BE VERIFIED IN FIELD.
3. ITEM #613000 - EPOXY CONCRETE SEALER WILL BE APPLIED TO PEDESTALS AND TOP OF PIER CAP. ALL OTHER EXPOSED SURFACES OF PIER TO BE COATED WITH ITEM #613001 - SILICONE-BASED ACRYLIC SEALER AFTER COMPLETION OF REPAIRS.

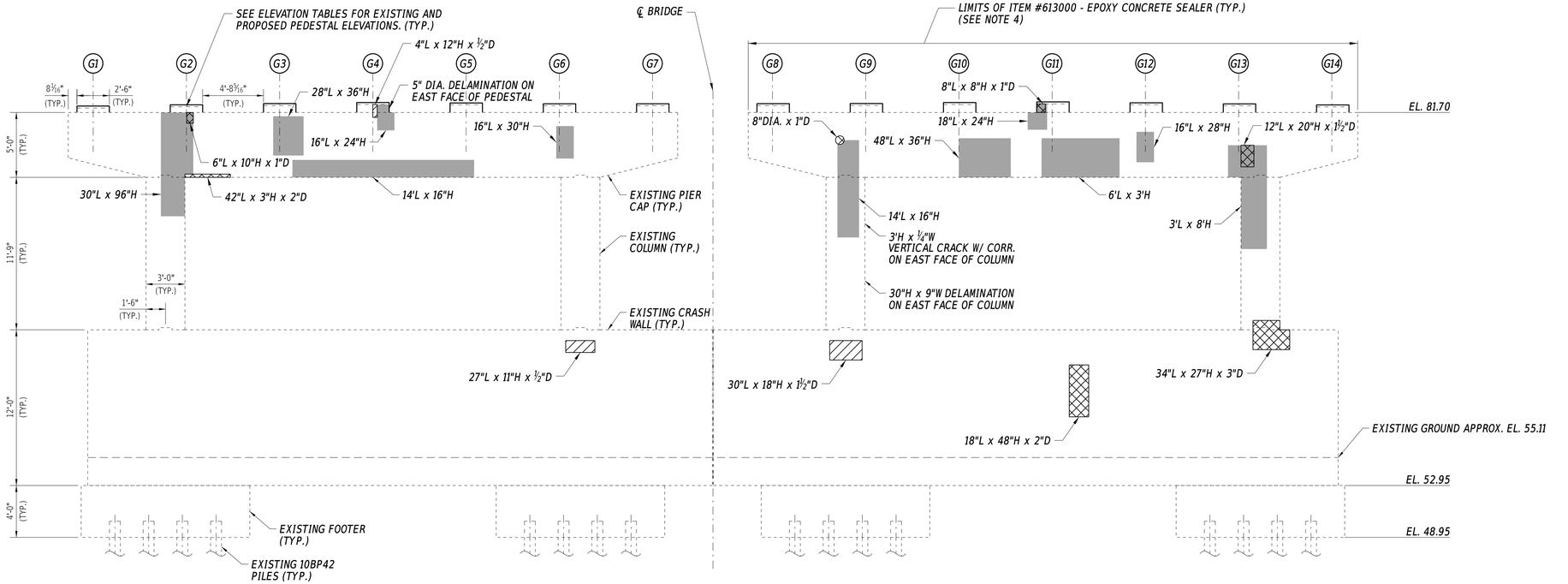
ADDENDA / REVISIONS		SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	SOUTH PIER REHABILITATION - 2	SECTION
		0 5 10 15 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY			SHEET NO.
				NEW CASTLE	CHECKED BY: S.WALLS		22

10-JAN-2025
16:19
Y:\NEWCASTL\0331\Bridge\T201807402\S00_CADD\S30_PLANS_DGN\RH02.dgn



NORTH PIER CAP - TOPSIDE PLAN

NORTH PIER CAP - UNDERSIDE PLAN



NORTH PIER - SOUTH ELEVATION

NORTH PIER NORTH ELEVATIONS		
GIRDER	EXISTING	PROPOSED
G1	82.107	82.266
G2	82.468	82.627
G3	82.553	82.712
G4	82.634	82.793
G5	82.600	82.759
G6	82.544	82.703
G7	82.548	82.707
G8	82.554	82.713
G9	82.564	82.723
G10	82.632	82.791
G11	82.678	82.837
G12	82.609	82.768
G13	82.534	82.693
G14	82.186	82.345

NORTH PIER SOUTH ELEVATIONS		
GIRDER	EXISTING	PROPOSED
G1	82.098	82.257
G2	82.192	82.351
G3	82.288	82.447
G4	82.369	82.528
G5	82.335	82.494
G6	82.271	82.430
G7	82.273	82.432
G8	82.281	82.440
G9	82.292	82.451
G10	82.369	82.528
G11	82.420	82.579
G12	82.348	82.507
G13	82.265	82.424
G14	82.184	82.343

LEGEND

- DELAMINATION, SEE NOTE 3.
- ITEM #628041 - DEEP SPALL REPAIR (FOR QUANTITY PURPOSES - 28 CF)
- ITEM #628040 - SHALLOW SPALL REPAIR (FOR QUANTITY PURPOSES - 38 CF)
- ITEM #628001 - REPAIR OF CONCRETE STRUCTURE BY EPOXY INJECTION (FOR QUANTITY PURPOSES - 21 LF)

PIER REHABILITATION NOTES:

1. CRACKS, SPALLS, AND DELAMINATED AREAS ARE APPROXIMATE LOCATIONS FOR ESTIMATE PURPOSES ONLY. QUANTITY INCLUDED IS FOR ESTIMATE PURPOSES ONLY, IS BASED ON 2018 FIELD MEASUREMENTS, AND INCLUDES A 30% CONTINGENCY. ALL AREAS ALONG EACH PIER SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN 1/2" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN 1/2" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.
2. EXISTING ELEVATIONS ARE BASED ON ARCHIVED PLANS AND CALIBRATED BASED ON SCANNED SURVEY DATA. ELEVATIONS SHOULD BE VERIFIED IN FIELD.
3. ITEM #613000 - EPOXY CONCRETE SEALER WILL BE APPLIED TO PEDESTALS AND TOP OF PIER CAP. ALL OTHER EXPOSED SURFACES OF PIER TO BE COATED WITH ITEM #613001 - SILICONE-BASED ACRYLIC SEALER AFTER COMPLETION OF REPAIRS.

ADDENDA / REVISIONS

SCALE
0 5 10 15
FEET

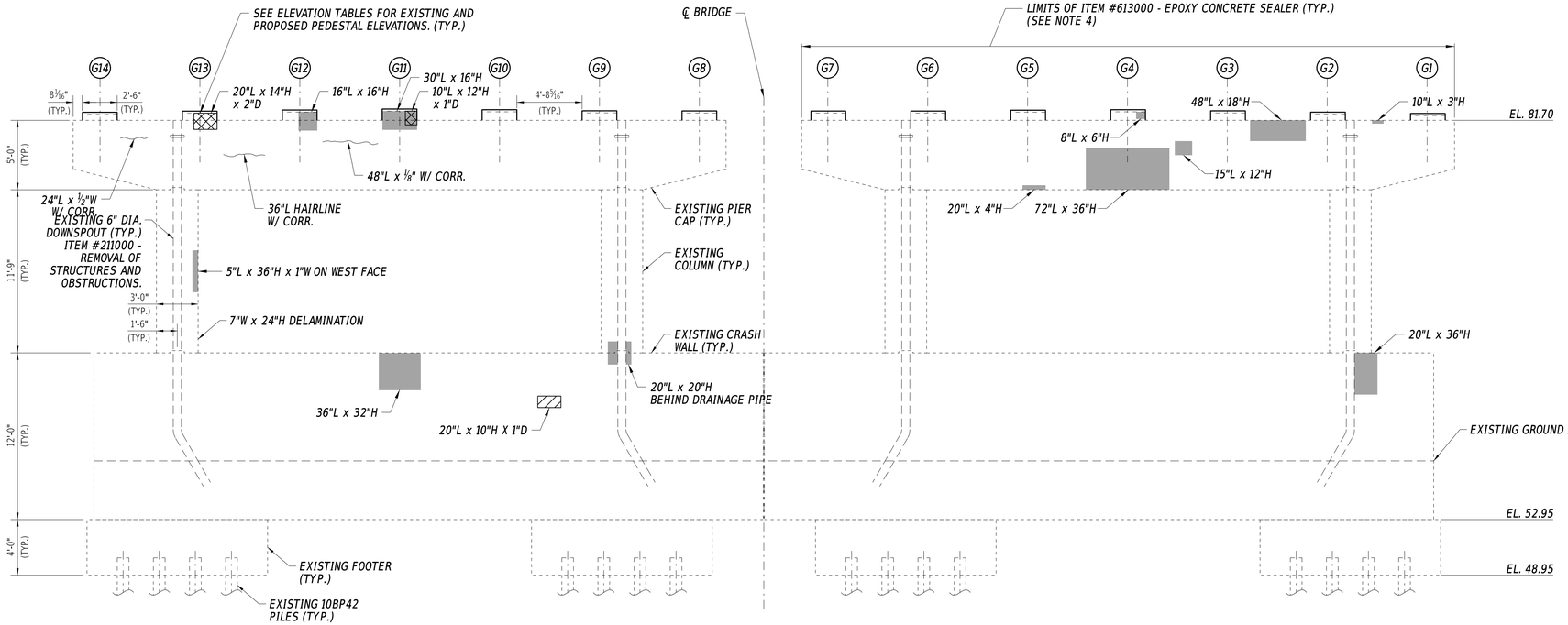
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

NORTH PIER REHABILITATION - 1

SECTION
BR
SHEET NO.
23

10-JAN-2025
16:19
Y:\NEWCAST\L\0311\Bridge\T201807402\500_CADD\530_PLANS_DGN\REH03.dgn



NORTH PIER - NORTH ELEVATION

LEGEND

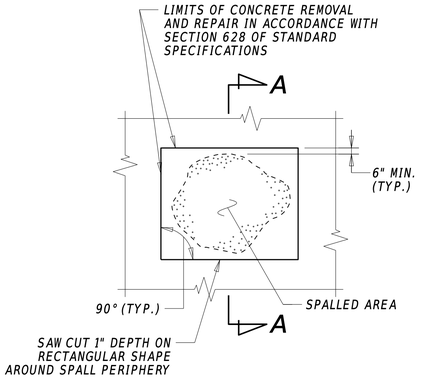
- DELAMINATION, SEE NOTE 3.
- ITEM #628041 - DEEP SPALL REPAIR (FOR QUANTITY PURPOSES - 4 CF)
- ITEM #628040 - SHALLOW SPALL REPAIR (FOR QUANTITY PURPOSES - 14 CF)
- ITEM #628001 - REPAIR OF CONCRETE STRUCTURE BY EPOXY INJECTION (FOR QUANTITY PURPOSES - 12 LF)

PIER REHABILITATION NOTES:

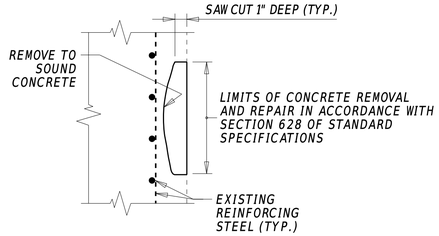
1. CRACKS, SPALLS, AND DELAMINATED AREAS ARE APPROXIMATE LOCATIONS FOR ESTIMATE PURPOSES ONLY. QUANTITY INCLUDED IS FOR ESTIMATE PURPOSES ONLY, IS BASED ON 2018 FIELD MEASUREMENTS, AND INCLUDES A 30% CONTINGENCY. ALL AREAS ALONG EACH PIER SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN 1/2" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN 1/2" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.
2. EXISTING ELEVATIONS ARE BASED ON ARCHIVED PLANS AND CALIBRATED BASED ON SCANNED SURVEY DATA. ELEVATIONS SHOULD BE VERIFIED IN FIELD.
3. ITEM #613000 - EPOXY CONCRETE SEALER WILL BE APPLIED TO PEDESTALS AND TOP OF PIER CAP. ALL OTHER EXPOSED SURFACES OF PIER TO BE COATED WITH ITEM #613001 - SILICONE-BASED ACRYLIC SEALER AFTER COMPLETION OF REPAIRS.

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	NORTH PIER REHABILITATION - 2	SECTION
	0 5 10 15 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
			COUNTY	CHECKED BY: S.WALLS		SHEET NO.
			NEW CASTLE			24

10-JAN-2025
16:19
Y:\NEWCASTL\0331Bridge\T201807402\500_CADD\530_PLANS_DGN\RH04.dgn

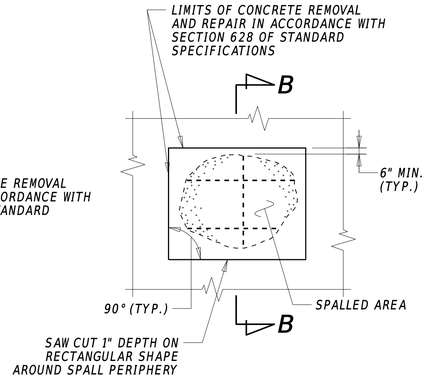


PLAN

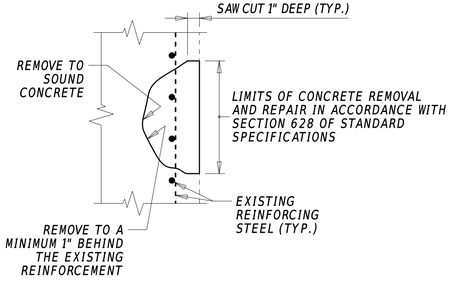


SECTION A-A

SHALLOW SPALL REPAIR (628040)

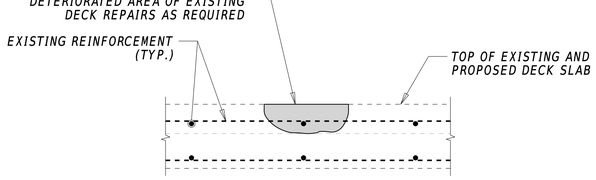


PLAN

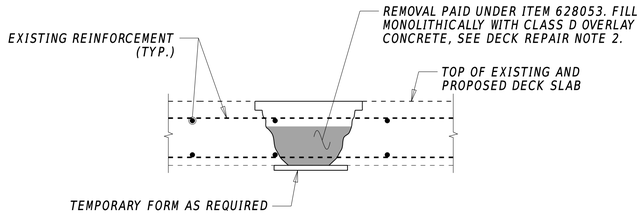


SECTION B-B

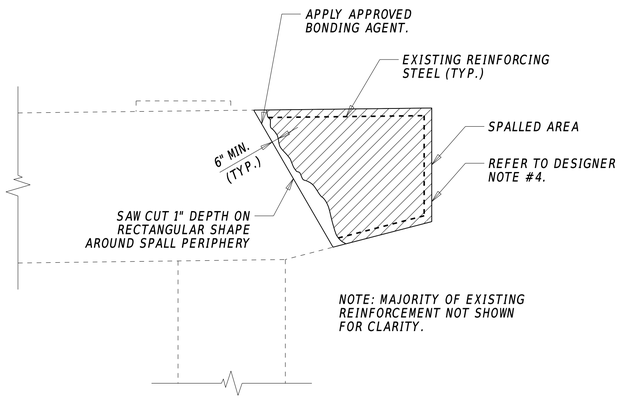
DEEP SPALL REPAIR (628041)



REMOVAL OF EXISTING DECK REPAIRS (ITEM 628502)



FULL DEPTH DECK REPAIR (ITEM 628053)



REHABILITATION OF PCC MASONRY

SHALLOW SPALL REPAIR NOTES

1. SHALLOW SPALLS ARE DEFINED AS PATCHES THAT DO NOT EXTEND BELOW THE TOP MAT OF REBAR.
2. ALL WORK INVOLVING METHODS OF CONCRETE REMOVAL, CLEANING OF CONCRETE SURFACE, SURFACE PREPARATION, AND CONCRETE PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 628.3.4 OF THE STANDARD SPECIFICATIONS. PAYMENT INCIDENTAL TO 628040 - SHALLOW SPALL REPAIR.
3. FOR ANY SHALLOW SPALL REPAIR TO TAKE PLACE WITHIN THE SPLASH ZONE OR UNDERWATER, THE CONTRACTOR SHALL SUBMIT A WORKING DRAWING FOR APPROVAL IN ACCORDANCE WITH SECTION 628 OF THE STANDARD SPECIFICATIONS.

DEEP SPALL REPAIR NOTES

1. DEEP SPALLS ARE DEFINED AS PATCHES THAT EXTEND BELOW THE TOP MAT OF REINFORCEMENT.
2. ALL WORK INVOLVING METHODS OF CONCRETE REMOVAL, CLEANING OF CONCRETE SURFACE AND EXISTING REINFORCEMENT, REPAIRING OR REPLACING DAMAGED REINFORCEMENT AS RESULT OF CONSTRUCTION ACTIVITIES OR SECTION LOSS, PRESENCE OF CONTRACTION OR EXPANSION JOINTS, SURFACE PREPARATION, AND CONCRETE PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 628.3.4 OF THE STANDARD SPECIFICATIONS. PAYMENT INCIDENTAL TO 628041 - DEEP SPALL REPAIR.
3. FOR ANY DEEP SPALL REPAIR TO TAKE PLACE WITHIN THE SPLASH ZONE OR UNDERWATER, THE CONTRACTOR SHALL SUBMIT A WORKING DRAWING IN ACCORDANCE WITH SECTION 628 OF THE STANDARD SPECIFICATIONS.

REHABILITATION OF PCC MASONRY

1. REHABILITATION OF PCC MASONRY IS DEFINED AS DEEP SPALL PATCHES THAT EXCEED THE 0.5 C.Y. THRESHOLD IN A SINGLE AREA.
2. ALL WORK INVOLVING METHODS OF CONCRETE REMOVAL, CLEANING OF CONCRETE SURFACE AND EXISTING REINFORCEMENT, REPAIRING OR REPLACING DAMAGED REINFORCEMENT AS RESULT OF CONSTRUCTION ACTIVITIES OR SECTION LOSS, PRESENCE OF CONTRACTION OR EXPANSION JOINTS, SURFACE PREPARATION, AND CONCRETE PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 628.3.4 OF THE STANDARD SPECIFICATIONS. PAYMENT INCIDENTAL TO ITEM 628001 - REPAIR OF CONCRETE STRUCTURE BY EPOXY INJECTION, ITEM 628040 - SHALLOW SPALL REPAIR, AND ITEM 628041 - DEEP SPALL REPAIR.

REMOVAL OF EXISTING DECK REPAIR NOTES

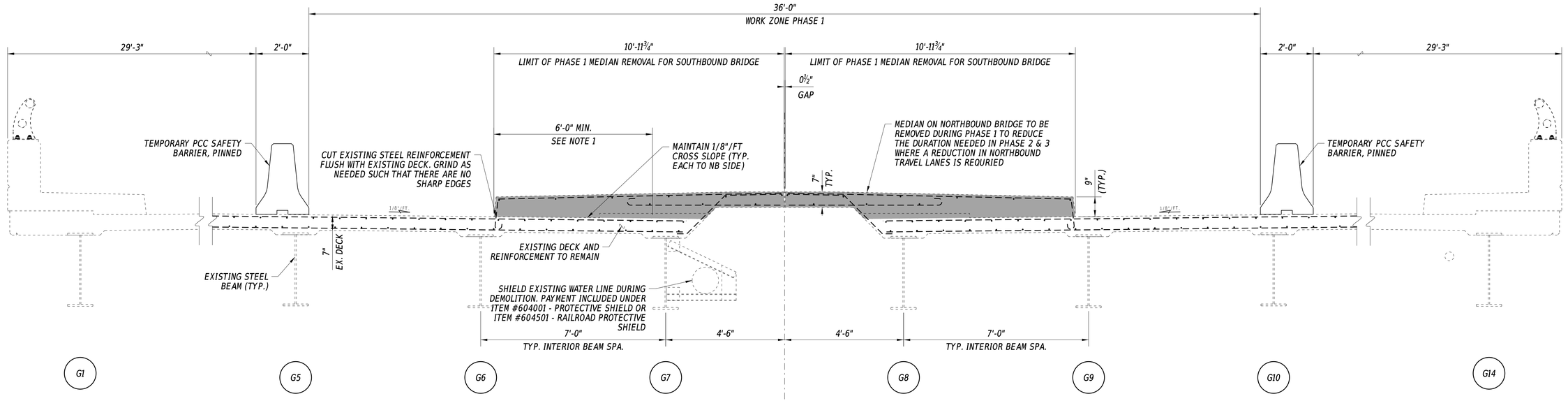
1. PRIOR TO HYDRODEMOLITION, ANY EXISTING DECK REPAIRS THAT ARE LOOSE, PARTIALLY DELAMINATED, OR OTHERWISE UNSOUND, WILL BE MEASURED BY THE ENGINEER AND MARKED FOR REMOVAL.
2. THE CONTRACTOR SHALL REMOVE THE EXISTING DECK REPAIRS IN ACCORDANCE WITH SECTION 628.3.5.
3. REMOVAL FOR THIS ITEM DOES NOT INCLUDE ANY UNSOUND AREAS OF THE ORIGINAL BRIDGE DECK CONCRETE.
4. REFER TO ITEM 628502 - REMOVAL OF EXISTING DECK REPAIR FOR PAYMENT AND ADDITIONAL INFORMATION.
5. IF REMOVAL OF EXISTING DECK REPAIR REACHES FULL DEPTH, REPAIR AREA SHALL BE REPAIRED IN ACCORDANCE WITH SECTION 628.3.5 AND PAID FOR UNDER ITEM 628053 - DECK REPAIR, FULL DEPTH. REMOVAL OF EXISTING DECK REPAIRS THAT ARE CHANGED TO DECK REPAIR, FULL DEPTH, ARE CONTINGENT ON ENGINEER APPROVAL AND WILL ONLY BE PAID FOR ONCE UNDER ITEM 628053.

DECK REPAIR NOTES

1. ALL WORK INVOLVING METHODS OF CONCRETE REMOVAL, CLEANING OF CONCRETE SURFACE AND EXISTING REINFORCEMENT, REPAIRING OR REPLACING DAMAGED REINFORCEMENT AS RESULT OF CONSTRUCTION ACTIVITIES OR SECTION LOSS, PRESENCE OF CONTRACTION OR EXPANSION JOINTS, SURFACE PREPARATION, AND CONCRETE PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 628.3.5 OF THE STANDARD SPECIFICATIONS, ITEM 760500 - TOTAL SURFACE HYDRODEMOLITION. PAYMENT FOR FULL DEPTH REPAIRS MADE AFTER HYDRODEMOLITION WILL BE MADE UNDER ITEM 628053 - DECK REPAIRS, FULL DEPTH.
2. HYDRODEMOLITION AND PCC CLASS D SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.
3. FOR ESTIMATE PURPOSES THE FOLLOWING QUANTITIES ARE ASSUMED:
   ITEM 628502 - 644 SF (10% OF THE TOTAL DECK AREA)
   ITEM 628053 - 966 SF (15% OF THE TOTAL DECK AREA)

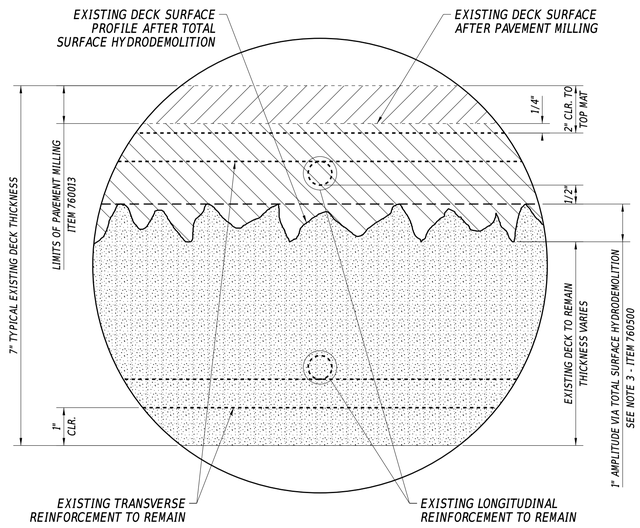
ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	CONCRETE REPAIR DETAILS	SECTION
				T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY			SHEET NO.
				NEW CASTLE	CHECKED BY: S.WALLS		25

10-JAN-2025
16:20
Y:\NEWCASTL\0331\Bridge\T201807402\500_CADD\530_PLANS_DGN\DT01.dgn



LIMITS OF DEMOLITION SPANS 1,2,3 - PHASE 1

NOT TO SCALE



TOTAL SURFACE HYDRODEMOLITION DETAIL

NOT TO SCALE

LEGEND

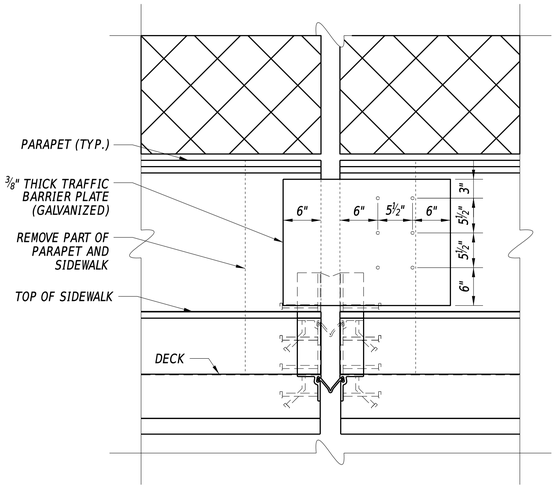
LIMITS OF REMOVAL (ITEM #211000)

DECK DEMOLITION NOTES:

1. DURING MAINTENANCE OF TRAFFIC PHASE 1, USE A HORIZONTAL SAWCUT TO REMOVE EXISTING MEDIAN THROUGHOUT THIS IDENTIFIED AREA. THIS SURFACE WILL BE USED AS A TRAVEL WAY IN MOT PHASE 2 & 3. GRIND CONCRETE AND PROTRUDING REINFORCEMENT FLUSH TO CREATE A SMOOTH RIDING SURFACE. MAINTAIN CROSS SLOPE OF EXISTING DECK AS SHOWN. PAYMENT FOR SAWCUT, DEMOLITION, AND GRINDING UNDER ITEM #211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
2. FOR MAINTENANCE OF TRAFFIC PHASE 2 & 3, USE MILLING (ITEM #760013) AND HYDRODEMOLITION (ITEM #760500) TO REMOVE TOP SURFACE ON CONCRETE CONCRETE. FOR LIMITS OF DEMOLITION REFER TO TOTAL SURFACE HYDRODEOMOLITION DETAIL. LIMITS OF DEMOLITION INCLUDE BRIDGE SPANS 1, 2, AND 3.
3. TOLERANCE FOR 1" AMPLITUDE DETAIL IS PLUS OR MINUS 1/4".
4. IF EQUIPMENT AND/OR VEHICLES ARE TO BE PLACED ON AREAS OF THE DECK THAT HAVE RECEIVED TOTAL SURFACE HYDRODEMOLITION, THE CONTRACTOR SHALL FIRST SUBMIT A LIST OF ALL PROPOSED EQUIPMENT AND/OR VEHICLES TO THE ENGINEER FOR APPROVAL. DRIVING ON EXPOSED REBAR IS PROHIBITED.

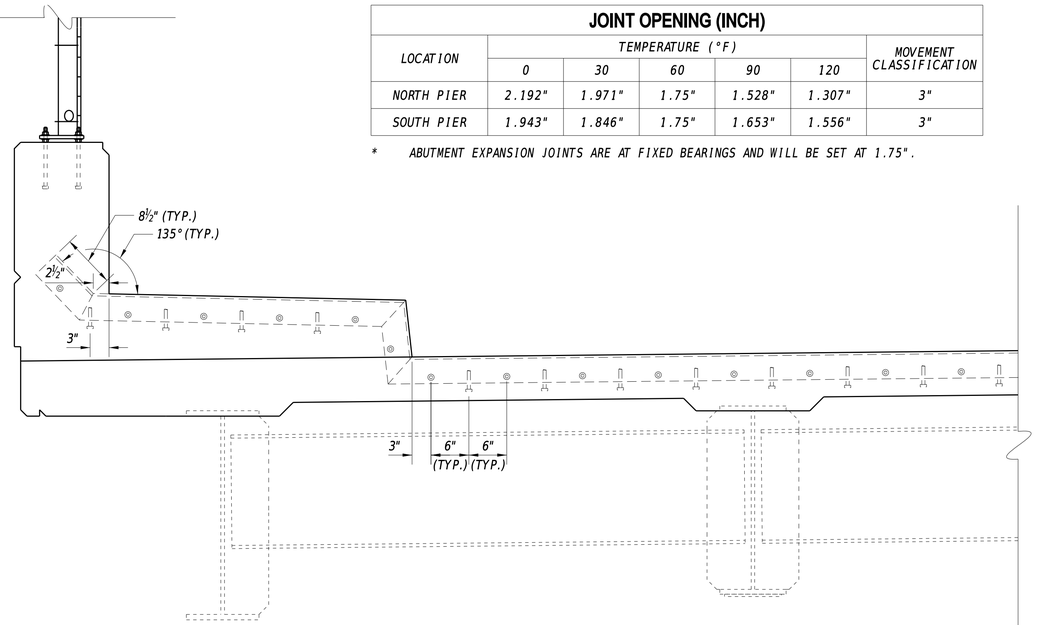
ADDENDA / REVISIONS	SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	DECK DEMOLITION DETAILS	SECTION BR
			COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 26
				CHECKED BY: S.WALLS		

13-DEC-2024
12:03
Y:\NEWCASTL\03\1Bridge\T201807402\500_CADD\530_PLANS_DGN\DM00.dgn



PARAPET DETAIL - ELEVATION

1" = 1'-0"

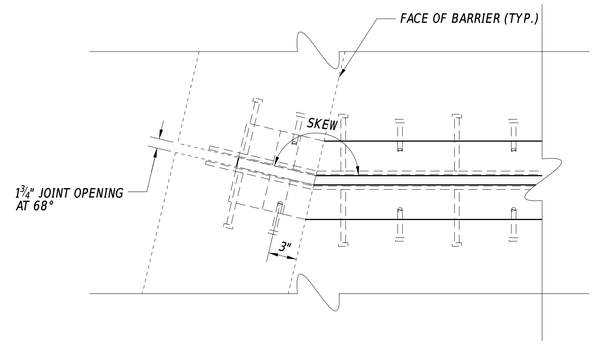


DECK PARAPET SECTION

1" = 1'-0"

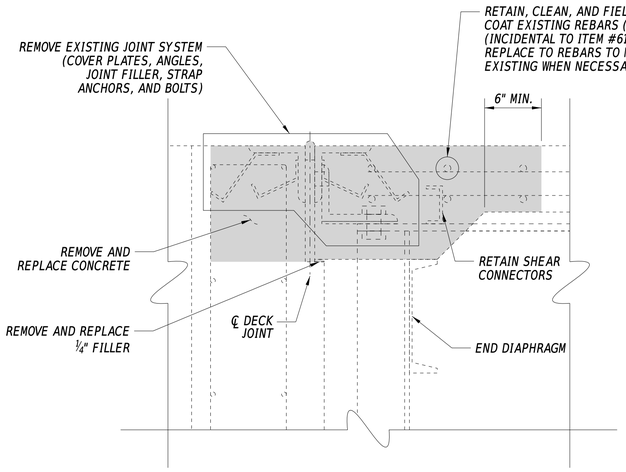
JOINT OPENING (INCH)						
LOCATION	TEMPERATURE (°F)					MOVEMENT CLASSIFICATION
	0	30	60	90	120	
NORTH PIER	2.192"	1.971"	1.75"	1.528"	1.307"	3"
SOUTH PIER	1.943"	1.846"	1.75"	1.653"	1.556"	3"

* ABUTMENT EXPANSION JOINTS ARE AT FIXED BEARINGS AND WILL BE SET AT 1.75".



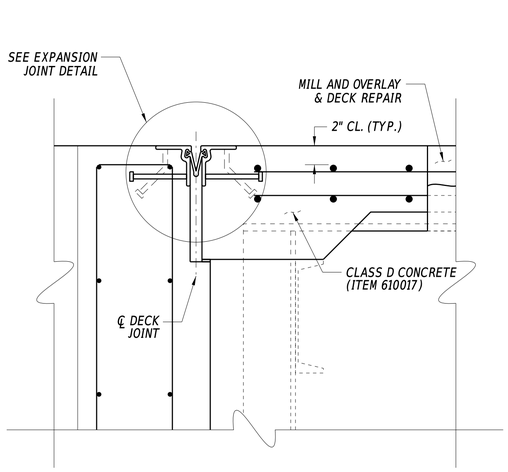
PARAPET DETAIL - PLAN

X" = 1'-0"



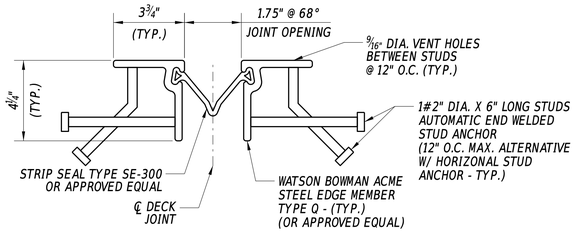
EXISTING / REMOVALS

1½" = 1'-0"



PROPOSED

1½" = 1'-0"



EXPANSION JOINT DETAIL

3" = 1'-0"

EXPANSION JOINT NOTES

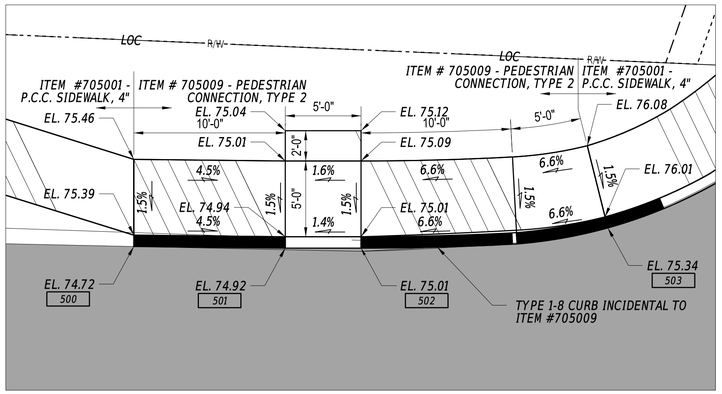
1. STEEL FOR DECK JOINTS SHALL BE AASHTO M270, GR. 36 AT MINIMUM.
2. NEOPRENE EXTRUSIONS TO MEET ASTM D2628-91 MODIFIED, (RECOVERY TESTS EXCLUDED).
3. THE STRIP SEAL JOINT SHALL BE CAPABLE OF SEALING THE DECK TO PREVENT MOISTURE AND OTHER CONTAMINANTS FROM DESCENTING THROUGH THE JOINT AND IN ACCORDANCE WITH SECTION 624 OF OF THE STANDARD SPECIFICATIONS.
4. THE STRIP SEAL JOINT STEEL SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SECTION 1039 OF THE STANDARD SPECIFICATIONS.
5. THE STRIP SEAL JOINTS SHALL BE SET TO MATCH THE EXISTING ELEVATION AND CROSS SLOPE OF THE BRIDGE DECK.
6. THE CONTACTOR SHALL ADJUST THE OPEN JOINT BETWEEN DECK ENDS AS REQUIRED BY THE WIDTH OF THE STEEL EXTRUSION USED SO AS TO PROVIDE A 1¾" JOINT OPENING AT 68°F.
7. THE STRIP SEAL SHALL BE INSTALLED IN ONE PIECE ACROSS THE BRIDGE DECK. SPLICING OF THE STRIP SEAL IS NOT PERMITTED.
8. THE CONTRACTOR SHALL SUBMIT A WORKING PLAN FOR PLACEMENT OF STRIP SEAL DUE TO PHASING.
9. AT AREAS WHERE STEEL MEMBERS ARE TO BE SPLICED, USE OF COMPLETE JOINT PENETRATION (CJP) AND PARTIAL JOINT PENETRAION (PJP) WELD ARE BOTH PERMITTED. THE THICKNESS OF PJP WELD SHALL BE MINIMUM HALF OF THE STEEL MEMBER THICKNESS. THE TOP OF THE STEEL MEMBER THAT THE TRAFFIC WILL BE RIDING SHALL BE GRINDED SMOOTHE AFTER THE WELDING.
10. LUBRICANT-ADHESIVE FOR USE IN INSTALLING AND BONDING NEOPRENE SEAL ELEMENTS TO STEEL JOINT COMPONENTS SHALL BE A ONE QUART MOISTURE-CURING POLYURETHANE AND HYDROCARBON SOLVENT MIXTURE HAVING THE FOLLOWING PHYSICAL PROPERTIES.

AVERAGE WEIGHT, POUND PER GALLON	8±10%
SOLID CONTENT	65%
ADHESIVE SHALL REMAIN LIQUID FORM	5°F TO 120°F
FILM STRENGTH, AS PER ASTM D-412	2,000 PSI
ELONGATION	250%

11. TRAFFIC BARRIER PLATES:
    - USE TYPE 316 STAINLESS STEEL COUNTER SUNK FLAT HEAD SCREWS WITH ASTM A108 CONCRETE THREADED ANCHOR OR THREADED INSERTS.
    - THE HEAD OF SCREWS SHALL BE FLUSH WITH FACE OF STEEL PLATE.
    - THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS OF TRAFFIC BARRIER PLATES FOR APPROVAL.
12. EXISTING REINFORCEMENT SHALL BE ACCOMMODATE NEW EXPANSION JOINT ASSEMBLY.
13. BAR REINFORCEMENT WHICH IS DESIGNED TO REMAIN SHALL BE CLEANED BY GRIT BLASTING AND SHALL BE FIELD EPOXY COATED.
14. ALL BEAM ENDS SURFACES EXPOSED DURING REMOVAL DECK ENDS AND HAUNCHES SHALL BE CLEANED TO MEET SSPC-SP10 NEAR WHITE BLASTING CLEANING AND PRIMED PRIOR TO CONCRETE PLACEMENT IN ACCORDANCE WITH SECTION 616 OF THE STANDARD SPECIFICATIONS.
15. REMOVAL AND REPAIR OF CONCRETE SHALL BE PAID FOR UNDER ITEM #628053 - DECK REPAIR - FULL DEPTH.
16. THE CLASS D CONCRETE SHALL BE CURED WITH A MIN. 14 DAY WET CURE PROCESS. CONTRACTOR SHALL SUBMIT OVERLAY PLACEMENT AND CURING PLAN.

ADDENDA / REVISIONS		SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	EXPANSION JOINT DETAILS	SECTION
				T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			27

13-DEC-2024
12:03
\\Dotfs08\cadd\Active_Designs\NEWCASTL\031Bridge\T201807402\500_CADD\530_PLANS_DGN\E100.dgn

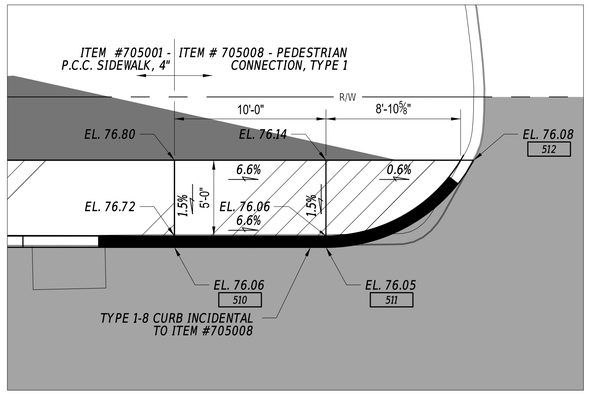


LAURA AVENUE PEDESTRIAN CONNECTION

1" = 5'-0"

NOTE: SIDEWALK SURFACE DETECTABLE WARNING SYSTEM NOT SHOWN FOR CLARITY

COORDINATE LIST				
PT.	STATION	OFFSET	NORTHING	EASTING
500	19+67.47	-89.17	625441.29	589871.73
501	19+70.65	-79.69	625449.04	589878.07
502	19+72.29	-74.97	625452.95	589881.16
503	19+78.91	-60.03	625466.52	589890.26

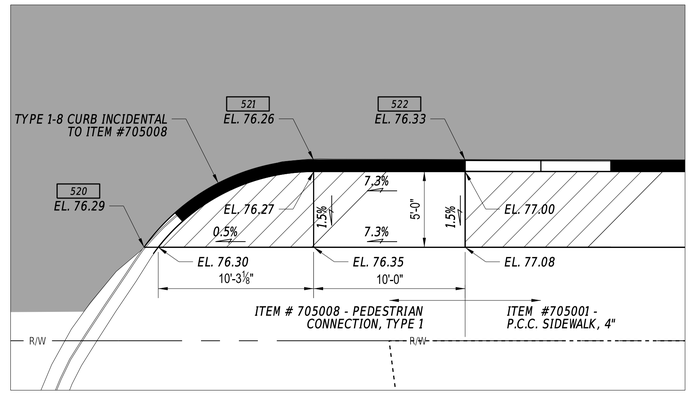


OREGON ROAD PEDESTRIAN CONNECTION

1" = 5'-0"

NOTE: SIDEWALK SURFACE DETECTABLE WARNING SYSTEM NOT SHOWN FOR CLARITY

COORDINATE LIST				
PT.	STATION	OFFSET	NORTHING	EASTING
510	30+29.23	-44.07	626364.85	589345.27
511	30+33.24	-44.82	626367.86	589342.51
512	30+38.98	-49.82	626370.08	589335.22

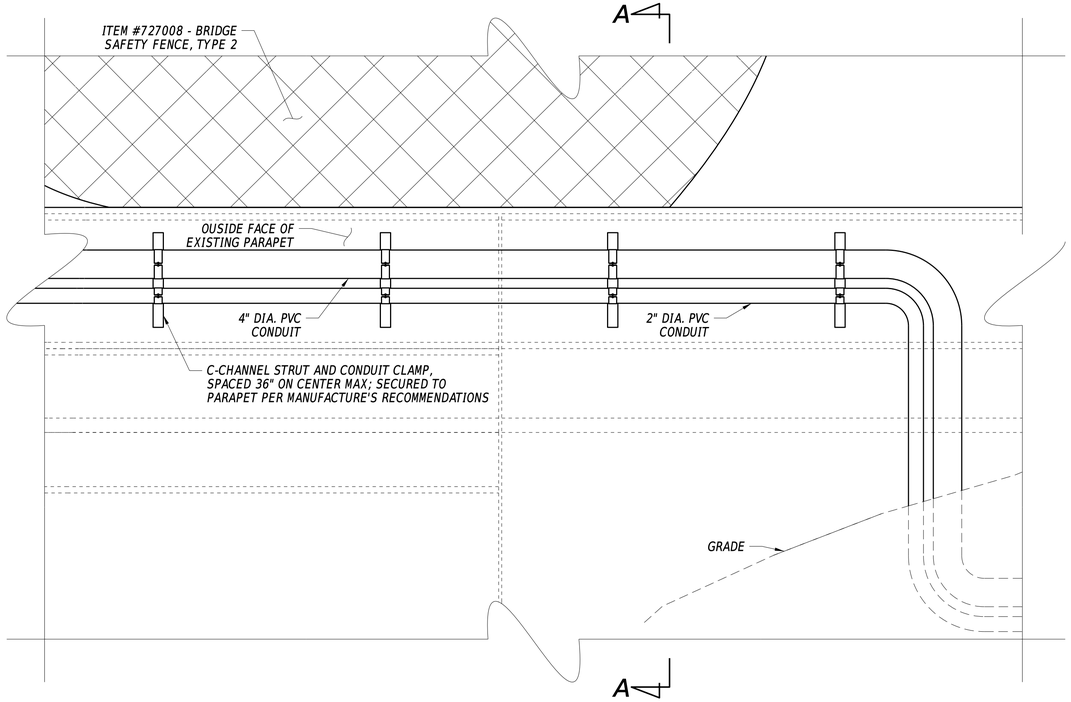


STA. 31+30 PEDESTRIAN CONNECTION

1" = 5'-0"

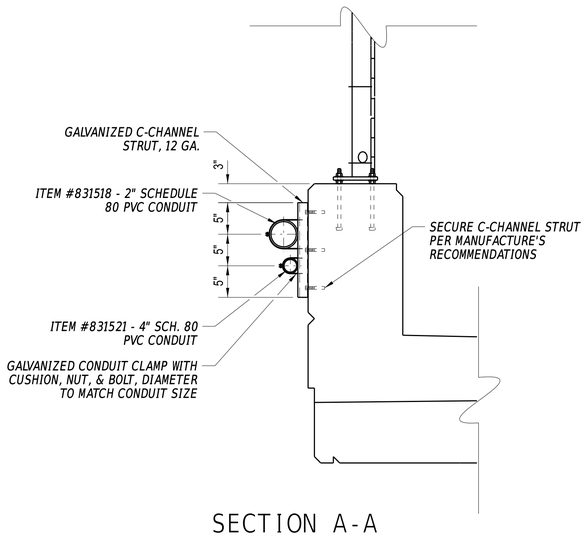
NOTE: SIDEWALK SURFACE DETECTABLE WARNING SYSTEM NOT SHOWN FOR CLARITY

COORDINATE LIST				
PT.	STATION	OFFSET	NORTHING	EASTING
520	31+19.15	49.83	626490.85	589377.34
521	31+30.34	44.08	626497.30	589366.54
522	31+40.34	44.08	626505.78	589361.25



ITMS CONDUIT ELEVATION

1" = 1'-0"

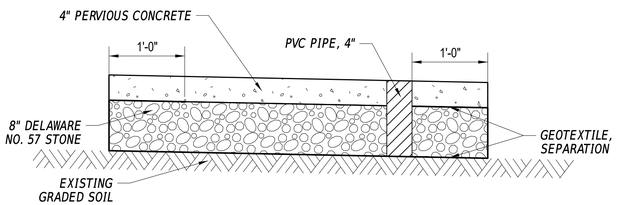


SECTION A-A

1" = 1'-0"

ITMS CONDUIT NOTES

1. REFER TO EXISTING BRIDGE PLAN AND ELEVATION SHEET FOR FOR LOCATION OF PROPOSED ITMS CONDUIT.
2. CONDUIT AND FITTINGS WILL BE SCH. 80 PVC IN ACCORDANCE WITH DELDOT SPECIFICATION 831 AND 1062.
3. PROVIDE #10 GALVANIZED PULL WIRE FOR FULL LENGTH OF CONDUIT AND LEAVE IN PLACE FOR FUTURE ITMS INSTALLATION.
4. CONDUIT ENDS SHALL BE CAPPED FOR FUTURE ITMS PROJECTS.
5. ALL CONDUITS, FITTINGS, CAPS, BRACKETS, AND ANY OTHER MATERIALS AND INCIDENTALS USED TO INSTALL THE ITEM SYSTEM ON THE PARAPET WILL BE INCIDENTAL TO ITEM #831518 AND #831521.



PERVIOUS P.C.C. SIDEWALK

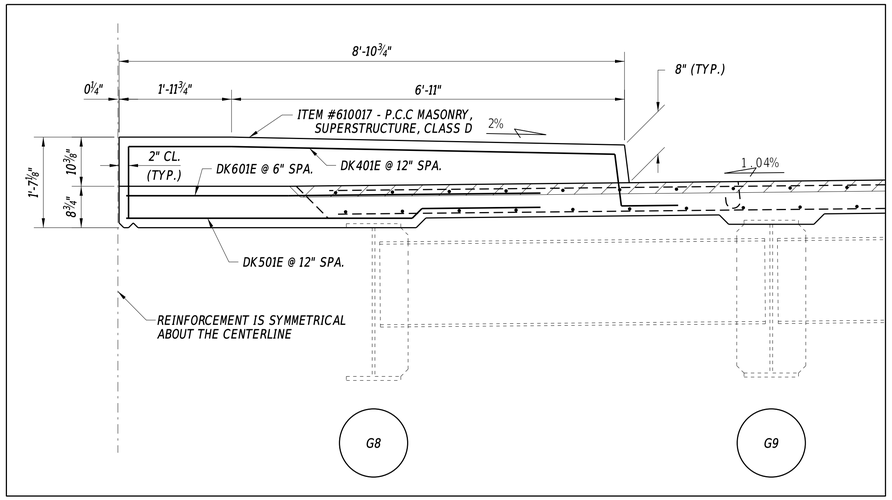
1" = 1'-0"

PERVIOUS PCC SIDEWALK NOTES

1. ALL SIDEWALK TO BE PERVIOUS. REFER TO CONSTRUCTION PLAN FOR FURTHER INFORMATION.
2. ALL MATERIALS AND WORK ASSOCIATED WITH PERVIOUS PCC SIDEWALK SHALL BE PAID UNDER ITEM #705512.

ADDENDA / REVISIONS		SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	PEDESTRIAN CONNECTION, PERVIOUS P.C.C. SIDEWALK, AND ITMS CONDUIT DETAILS	SECTION
				T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY			SHEET NO.
				NEW CASTLE	CHECKED BY: S.WALLS		28

13-DEC-2024
12:04
Y:\NEWCASTL\0031Bridge\T201807402\S00_CADD\S30_PLANS_DGN\PED1.dgn



PROPOSED OVERHANG DETAILS

¾" = 1'-0"

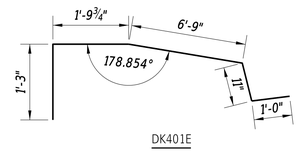
REINFORCING BAR LIST

BENT BARS

MARK	SIZE	QTY.	LENGTH
DK401E	4	SPAN 1 - 44 SPAN 2 - 54 SPAN 3 - 44	11'-8¾"
DK501E	5	SPAN 1 - 44 SPAN 2 - 54 SPAN 3 - 44	7'-3"
DK601E	6	SPAN 1 - 86 SPAN 2 - 107 SPAN 3 - 86	7'-3"

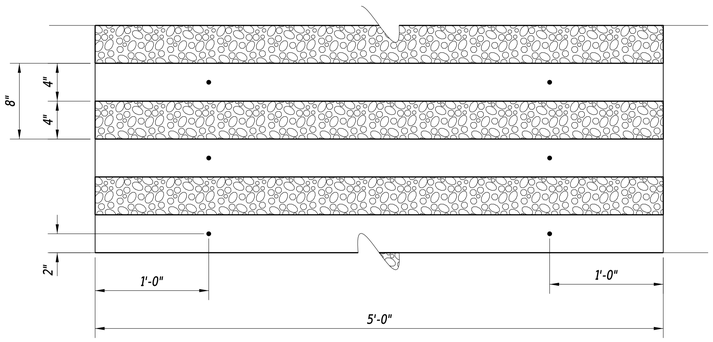
BENDING DIAGRAMS

ALL DIMENSIONS ARE FROM OUT TO OUT.



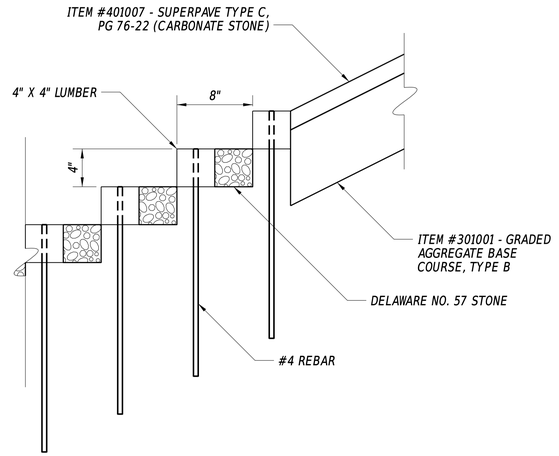
DK401E

DIAGRAMS ARE NOT TO SCALE.



PLAN

1½" = 1'-0"



SECTION

1½" = 1'-0"

NATURE STAIRS

APPROXIMATELY STATION 25+22 TO STATION 25+27

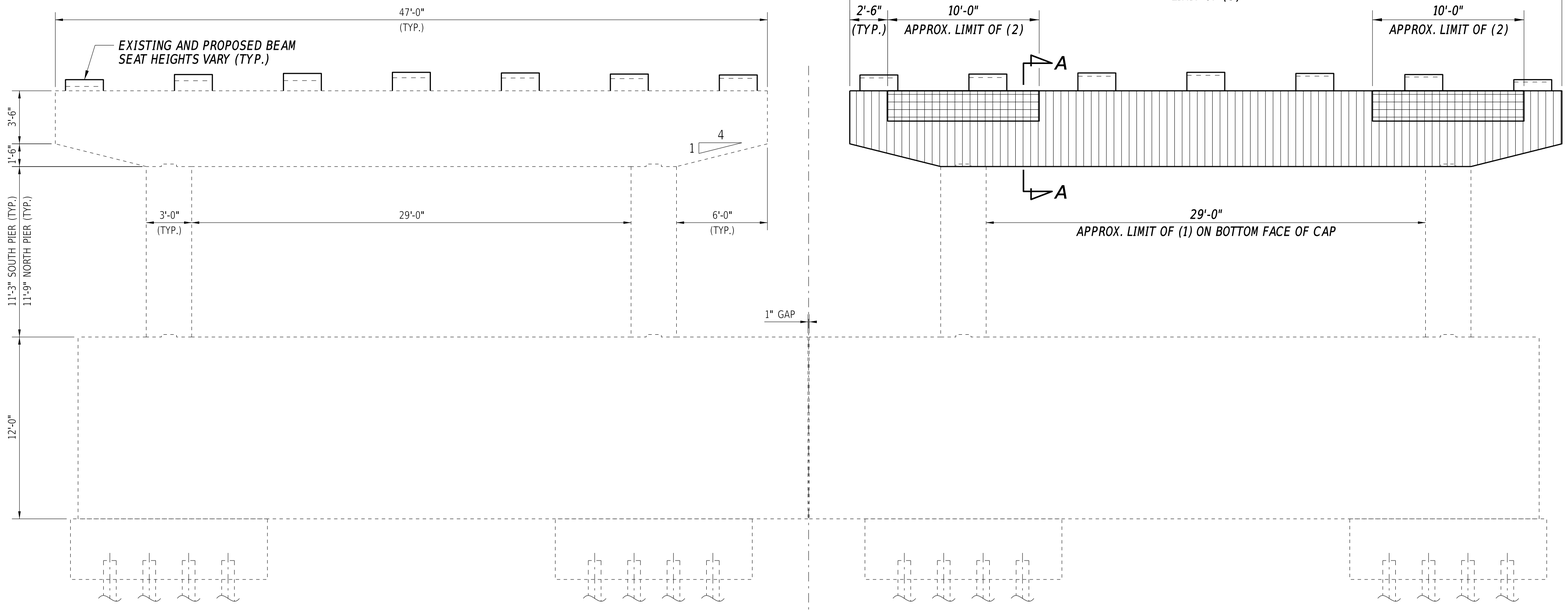
1½" = 1'-0"

NATURE STAIRS NOTES:

1. REFER TO CONSTRUCTION PLAN FOR APPROXIMATE LOCATION OF NATURE STAIRS.
2. EXACT LOCATION AND NUMBER OF STAIRS SHALL BE DETERMINED IN THE FIELD.
3. ALL MATERIAL AND WORK ASSOCIATED WITH NATURE STAIRS SHALL BE PAID UNDER ITEM #763521 - NATURE STAIRS.

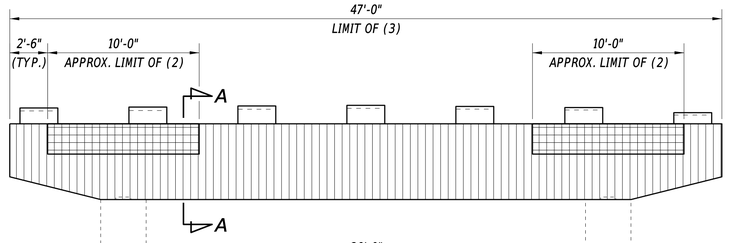
ADDENDA / REVISIONS	SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	OVERHANG AND NATURE STAIRS DETAILS	SECTION BR
			COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 29
				CHECKED BY: S.WALLS		

13-DEC-2024
12:04
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\DT03.dgn



HALF PIER GEOMETRY

(SOUTHBOUND OF SOUTH PIER SHOWN, ALL OTHERS SIMILAR)



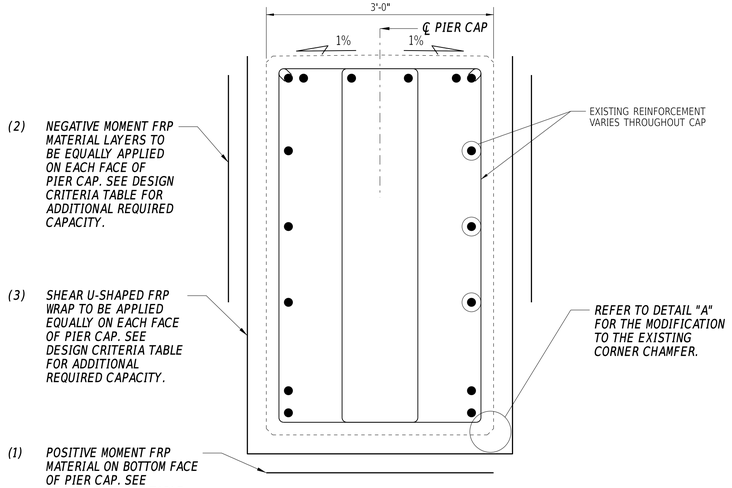
HALF FRP PLACEMENT

(NORTHBOUND OF SOUTH PIER SHOWN, ALL OTHERS SIMILAR)

ELEVATION

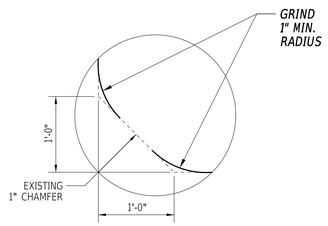
1/5" = 1'-0"

(LOOKING STATIONS AHEAD)



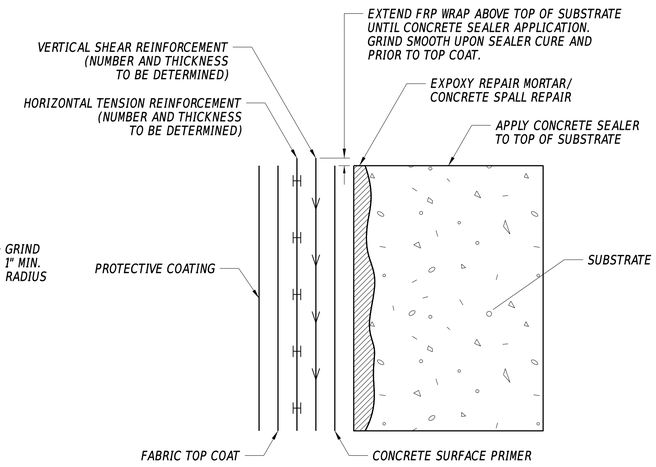
SECTION A-A

NOT TO SCALE



DETAIL "A"

NOT TO SCALE



FRP WRAPPING DIAGRAM

NOT TO SCALE

FRP NOTES:

1. *THE DRAWING ON THIS SHEET SHOULD SERVE AS THE BASIS FOR A PRELIMINARY DESIGN. DEVIATIONS DUE TO MANUFACTURE SPECIFIC DETAILING ARE EXPECTED.*
2. *SUBMIT A FRP STRENGTHENING SYSTEM TO PROVIDE THE NECESSARY CAP STRENGTHENING SHOWN ON THIS SHEET. THE FRP STRENGTHENING SYSTEM DESIGN SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF DELAWARE WITH EXPERIENCE IN BRIDGE DESIGN, IN ACCORDANCE WITH THE AASHTO "GUIDE SPECIFICATIONS FOR THE DESIGN OF BONDED FRP SYSTEMS FOR REPAIR AND STRENGTHENING OF CONCRETE BRIDGE ELEMENTS", AND SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER.*
3. *DO NOT BEGIN WORK UNTIL ALL SUBMITTALS REQUIRED IN SPECIAL PROVISION 628504 HAVE BEEN RECEIVED AND APPROVED BY THE ENGINEER.*
4. *ALL CONCRETE SURFACES SHALL BE REPAIRED AND CLEANED IN ACCORDANCE WITH SPECIAL PROVISION 628504 AND THE MANUFACTURER'S RECOMMENDATIONS.*
5. *UNLESS OTHERWISE SPECIFIED, FRP PLACEMENT CAN ONLY OCCUR WHEN CONCRETE TEMPERATURES ARE IN EXCESS OF 45°F, BUT DO NOT EXCEED 100°F.*
6. *INSTALLATION OF THE FRP SYSTEM SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 628504 AND THE MANUFACTURER'S RECOMMENDATIONS.*
7. *IF THE DESIGN REQUIRES THE FRP TO WRAP AROUND AN EDGE, THEN THE EDGE SHALL BE ROUNDED TO A MINIMUM 1" RADIUS. REFER TO DETAIL 'A' ON THIS SHEET.*
8. *A TECHNICAL REPRESENTATIVE FROM THE MANUFACTURER SHALL BE PRESENT DURING THE INITIAL INSTALLATION TO APPROVE WITH THE ENGINEER THE DEGREE OF PREPARATION AND THE APPLICATION OF THE FRP WRAP SYSTEM. THE REPRESENTATIVE SHALL REMAIN ON-SITE UNTIL THE ENGINEER DETERMINES THAT THE CONTRACTOR IS FAMILIAR WITH THE CORRECT INSTALLATION PROCEDURES.*

EXTERNALLY BONDED FRP STRENGTHENING SYSTEM DESIGN CRITERIA:

1. *ANALYSIS METHOD:*
   THE EXISTING PIER WAS ANALYZED USING AASHTO LFD (LOAD FACTOR DESIGN) METHODOLOGY. THE CONTROLLING LOAD CONFIGURATION WAS FOUND TO BE DURING CONSTRUCTION WHEN PHASE 3 UTILIZES THREE TRAVEL LANES ON THE NORTHBOUND SUPERSTRUCTURE.
2. *PIER LOAD CARRYING CAPACITY PROVIDED IN THE DESIGN CRITERIA SCHEDULE HAS BEEN REDUCED FROM ITS AS-BUILT CONDITION TO ACCOUNT FOR PIER DETERIORATION. A HANDS ON INSPECTION WAS PERFORMED IN 2018 FOLLOWED BY SUBSEQUENT INSPECTIONS TO PRESENT DATE. INSPECTIONS REVEALED CONCRETE DELAMINATION AND SPALLS WITH CORROSION OF EXPOSED REINFORCEMENT AT VARIOUS LOCATIONS THROUGHOUT THE PIER, BUT CONCENTRATED ON THE BOTTOM FACE OF THE PIER CAPS. ISOLATED PRIMARY LOAD CARRYING BARS IN THE POSITIVE MOMENT REGION OF THE PIER CAP HAVE 50% SECTION LOSS. RANDOM PRIMARY SHEAR RESISTANCE REINFORCEMENT HAS UP TO 100% SECTION LOSS.*
3. *EXISTING PIER CONCRETE MATERIAL PROPERTIES:*
   CLEAR COVER = 2.0"
   F'c = 3.0 KSI
   fy = 33.0 KSI
4. *THE TOTAL REQUIRED (FACTORED) STRENGTH AFTER STRENGTHENING SHALL BE COMPUTED BY THE FOLLOWING FORMULAS:*

   Fu < Fr = Φ Fst + Φ Ffrp
   Vu < Vr = Φ Fst + Φ Ffrp

   WHERE,
   Fu = TOTAL FACTORED FLEXURE DEMAND
   Vu = TOTAL FACTORED SHEAR DEMAND
   Fr = TOTAL REQUIRED (FACTORED) FLEXURE CAPACITY
   Vr = TOTAL REQUIRED (FACTORED) SHEAR CAPACITY
   Φ Fst = ASSUMED EXISTING (FACTORED) STRENGTH
   Φ Ffrp = ASSUMED REQUIRED (FACTORED) STRENGTH OF FRP WRAP (MINIMUM)

DESIGN TEAM NOTE: THE EXISTING RESISTANCE VALUES BELOW HAVE NOT BEEN REDUCED FOR PIER DETERIORATION.

FRP STRENGTHENING SYSTEM DESIGN CRITERIA

PIER	(1) POSITIVE MOMENT CAPACITY (BOTTOM HORIZONTAL)			(2) NEGATIVE MOMENT CAPACITY (TOP HORIZONTAL)			(3) SHEAR CAPACITY (VERTICAL WRAP)		
	Fu	Φ Fst	Φ Ffrp	Fu	Φ Fst	Φ Ffrp	Vu	Φ Fst	Φ Ffrp
	[K|P-FT]	[K|P-FT]	[K|P-FT]	[K|P-FT]	[K|P-FT]	[K|P-FT]	[KIPS]	[KIPS]	[KIPS]
ALL PIERS	1058.00	3858.00	--	-520.00	-1390.00	--	270.00	207.00	63.00

ADDENDA / REVISIONS		SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	FIBER REINFORCED POLYMER DETAILS	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 30
					CHECKED BY: S.WALLS		

13-DEC-2024
12:04
Y:\NEWCASTL\0311Bridge\T201807402\500_CADD\530_PLANS_DGN\FRP00.dgn

GENERAL JACKING NOTES:

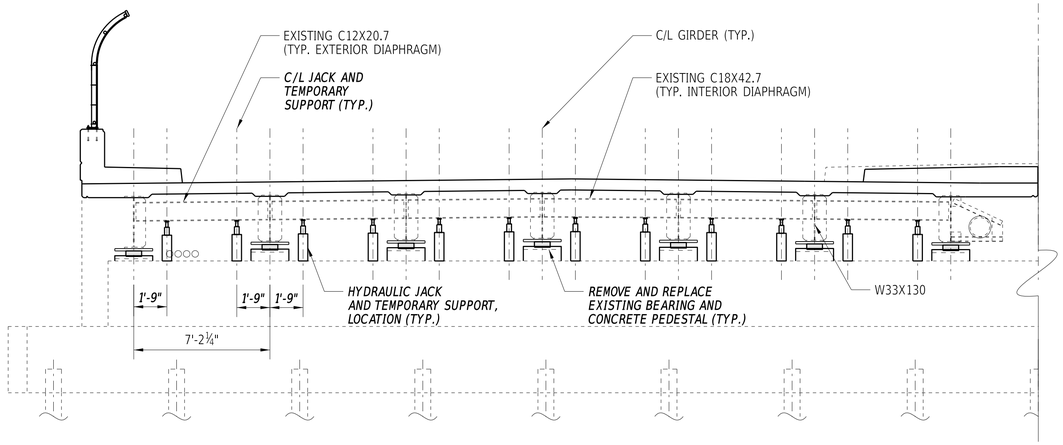
1. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS AND NOTIFY THE DEPARTMENT OF ANY DISCREPANCIES. DO NOT PROCEED WITH REHABILITATION WORK UNTIL ALL DISCREPANCIES ARE RESOLVED TO THE SATISFACTION OF THE ENGINEER.
2. JACKING CONCEPTS SHOWN ON JACKING DETAILS SHEETS FOR BEARING REPLACEMENT AND FOR TEMPORARY SUPPORT FOR PIER AND ABUTMENT PARTIAL RECONSTRUCTION WILL BE DESIGNED AND CONSTRUCTED BY THE CONTRACTOR. THE CONTRACTOR MAY DESIGN AND CONSTRUCT ALTERNATIVE JACKING AND TEMPORARY SUPPORT SCHEMES. SUBMIT DRAWINGS INDICATING ALL DIMENSIONS AND JACKING PROCEDURE FOR APPROVAL PRIOR TO WORK, IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATION, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF DELAWARE.
3. INSTALL THE NEW BEARING ASSEMBLIES FOLLOWING THE SEQUENCE OF WORK PROVIDED ON THE FRAMING PLAN AND IN ACCORDANCE WITH THE OVERALL SEQUENCE OF WORK PROVIDED ON CONSTRUCTION SEQUENCE SHEETS.
4. THE CAPACITY OF THE JACK IS TO BE 165% (INCLUDES STICKY FORCE) OF THE TOTAL ANTICIPATED JACKING LOAD. THE ANTICIPATED JACKING LOADS SHOWN ON THESE JACKING PLANS INCLUDE THE FULL DEAD LOAD OF THE EXISTING SUPERSTRUCTURE.
5. DO NOT LIFT OR LOWER ANY GIRDER GREATER THAN 1/8" DURING JACKING OPERATIONS.
6. PROVIDE TEMPORARY LOAD PLATES BELOW JACKS TO ENDURE DISTRIBUTION OF LOAD SO AS NOT TO OVERSTRESS CONCRETE.
7. USE SAME TWO BOLT (EXISTING 3/4" BOLTS) HOLE LOCATIONS FROM EXISTING DIAPHRAGM CONNECTION PLATE AND REAM OR DRILL 15/16" BOLT HOLES FOR 7/8" DIAMETER BOLTS AND CENTER THE 3RD BOLT AT EQUAL SPACING BETWEEN THE TWO EXISTING BOLTS.
8. ALL JACKING, TEMPORARY SUPPORT SYSTEMS AND ALL ASSOCIATED TEMPORARY WORKS FOR BEARING REPLACEMENT AND FOR PARTIAL PIER 1 RECONSTRUCTION SHALL BE PAID FOR UNDER ITEM 604000, UNLESS NOTED OTHERWISE.

SUGGESTED JACKING SEQUENCE FOR BEARING REPLACEMENT:

1. INSTALL JACKING ANGLES AND JACKING PLATES ON EXISTING STEEL DIAPHRAGMS AND NEW BOLTS FOR DIAPHRAGM TO GIRDER CONNECTION.
2. LOCATE THE JACKS UNDER THE JACKING DIAPHRAGM AS SHOWN IN THIS PLAN.
3. REPLACE THE BEARINGS AT NORTH AND SOUTH ABUTMENTS AND PIERS FOR ALL GIRDERS AS FOLLOWS:
   - A. REMOVE WELD CONNECTION BEARINGS TO EXISTING GIRDERS.
   - B. JACK GIRDERS ALONG A GIVEN BEARING LINE SIMUTANEOUSLY, WITHIN LIMITS OF STAGED CONSTRUCTION.
   - C. REMOVE THE EXISTING BEARING AS SHOWN ON THESE PLANS. CUT THE EXISTING ANCHOR BOLTS FLUSH WIHT THE TOP SURFACE OF THE EXISTING CONCRETE PEDESTAL, OR AS NOTED OTHERWISE.
   - D. REMOVE THE EXISTING CONCRETE PEDESTALS. (ITEM #211000)
   - E. CORE DRILL ANCHOR BOLT HOLES IN THE EXISTING CONCRETE ABUTMENT SEAT OR PIER CAP. (ITEM #623003)
   - F. CONSTRUCT NEW PEDESTALS. (ITEM #610004 AT PIERS & ITEM #610002 AT ABUTMENTS)
   - G. GRIND SMOOTH THE UNDERSIDE OF THE EXISTING GIRDER BOTTOM FLANGES IN PREPARATION FOR THE INSTALLATION OF THE NEW SOLE PLATES. (ITEM #623005)
   - H. INSTALL NEW ELASTOMERIC BEARINGS. (ITEM #623000)
   - I. LOWER THE SUPERSTRUCTURE ONTO THE NEW BEARING ASSEMBLIES AND REMOVE THE JACK.
   - J. FIELD WELD THE SOLE PLATE TO THE GIRDER BOTTOM FLANGE (ABUTMENTS) OR TO THE BOLSTER BOTTOM FLANGES (PIERS). (ITEM #623005)
   - K. INSTALL AND GROUT ANCHOR BOLTS. (ITEM 623003)

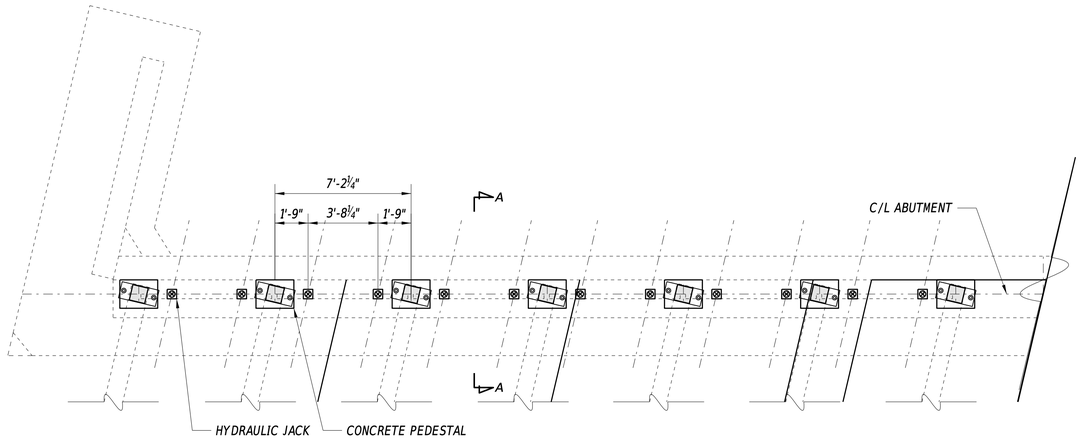
JACKING AND TEMPORARY SUPPORT LOADS ON STEEL DIAPHRAGMS:

1. UNFACTORED DEAD LOAD (DL) = 53.7 K AND UNFACTORED LIVED LOAD (LL) = 60.4 K. LOAD REFLECTS MAX GIRDER DEAD AND LIVE LOAD REACTION.
2. FACTORED LOAD = 1.65*DL + 1.75*LL. A FACTOR OF 1.65 FOR DEAD LOAD (1.5 FACTOR OF SAFETY * 1.10 "STICKY FORCE") AND 1.75 FOR LIVE LOAD SHALL BE USED TO DETERMINE MINIMUM JACK CAPACITY FOR HYDRAULIC JACKS.



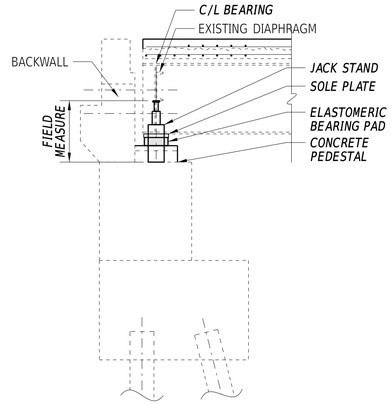
HALF ELEVATION - SOUTH ABUTMENT (NORTH ABUTMENT SIMILAR)

¼" = 1'-0"



HALF PLAN - SOUTH ABUTMENT (NORTH ABUTMENT SIMILAR)

¼" = 1'-0"

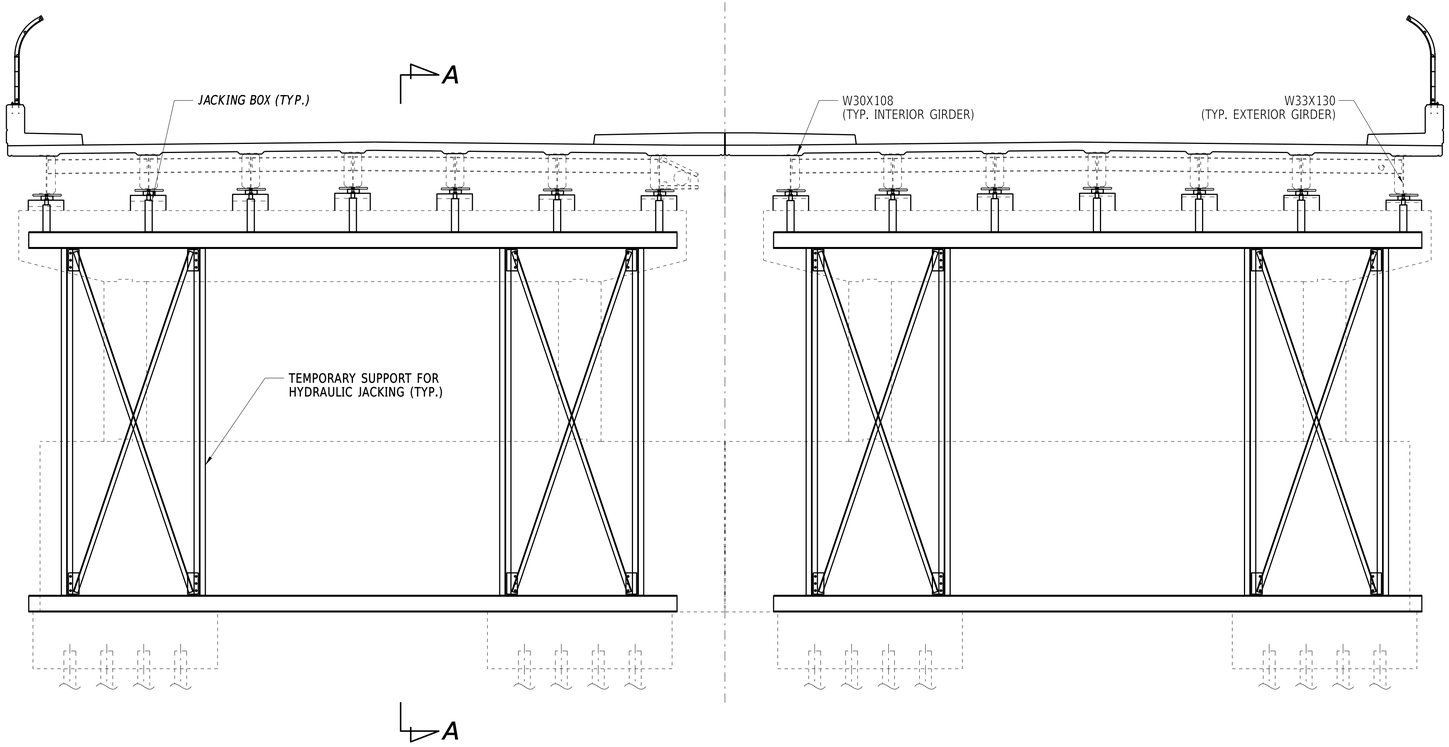


SECTION A-A

⅜" = 1'-0"

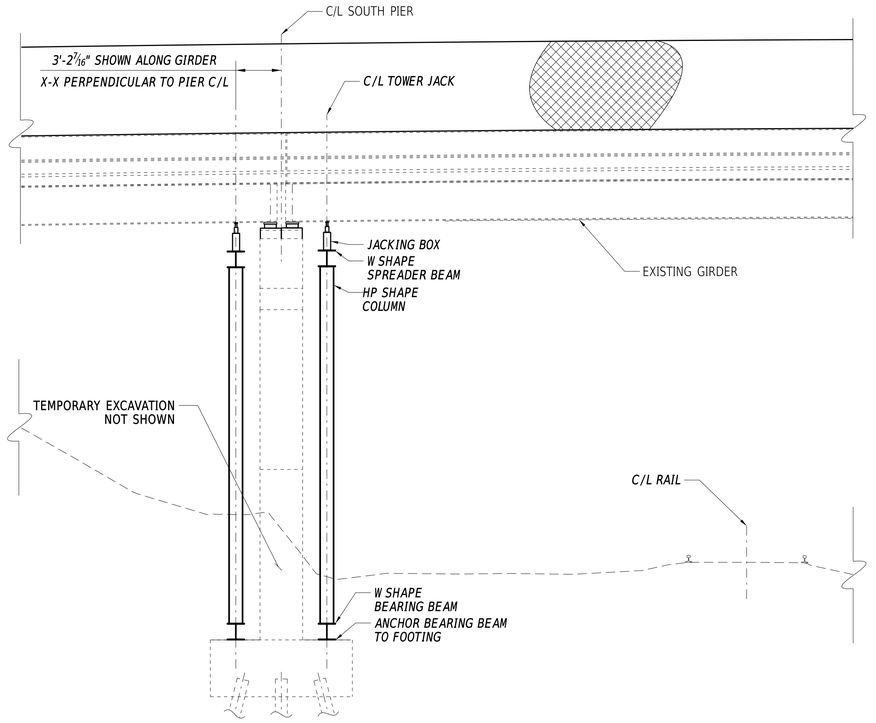
ADDENDA / REVISIONS	SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	JACKING DETAILS	SECTION BR
			COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 31
				CHECKED BY: S.WALLS		

13-DEC-2024
12:04
Y:\NEWCASTL\03\1Bridge\T201807402\500_CADD\530_PLANS_DGN\JK00.dgn



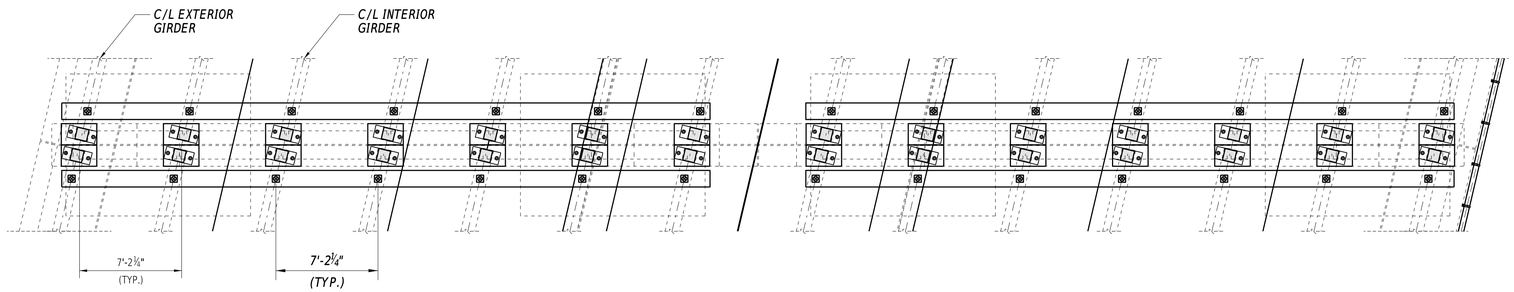
ELEVATION - SOUTH PIER

3/16" = 1'-0"



SECTION A-A

3/16" = 1'-0"



PLAN - SOUTH PIER

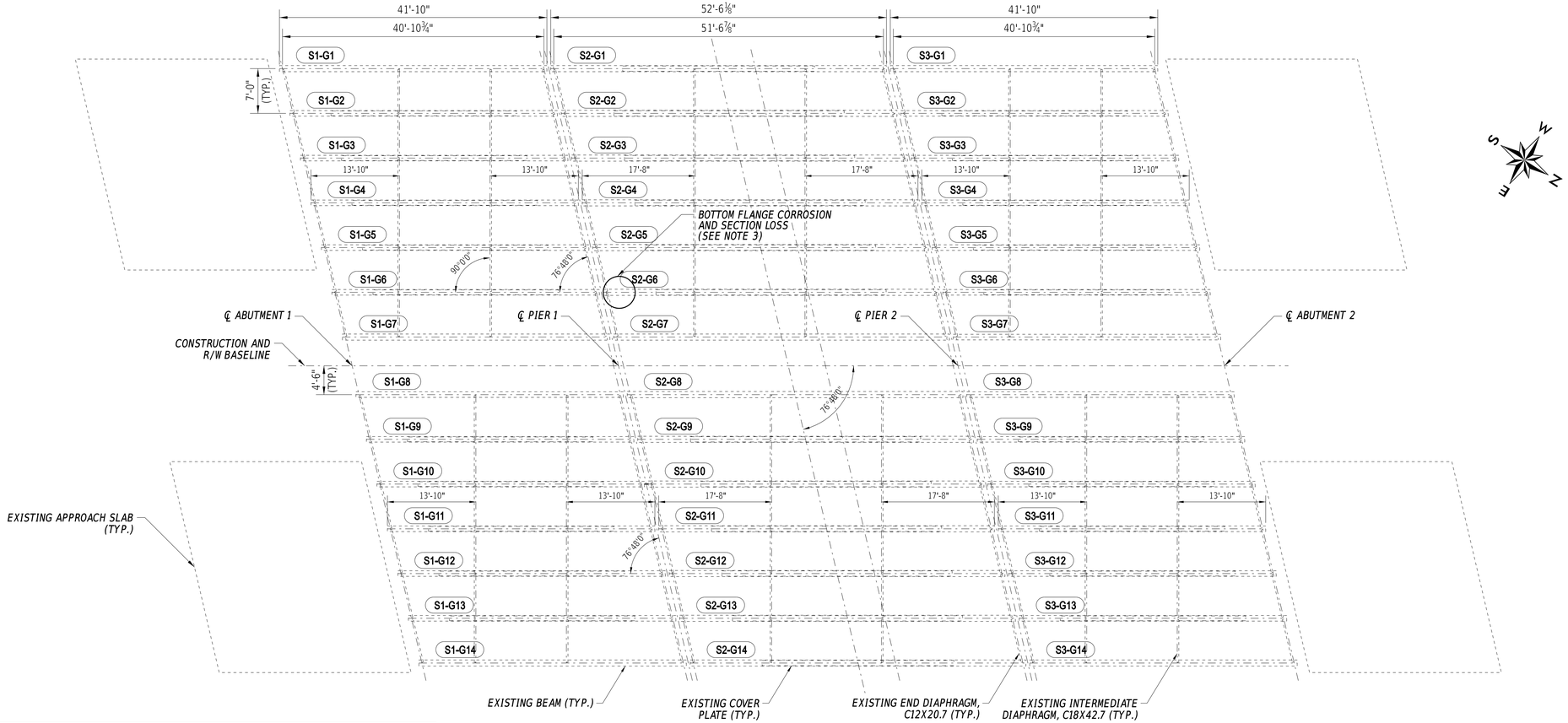
3/16" = 1'-0"

MAX JACKING LOADS			
JACKING LOCATION FROM C/L OF PIER 1 ALONG GIRDER	LOAD COMBINATION	FACTORED LOAD * (KIPS, EA JACK LOCATION)	UNFACTORED LOAD (KIPS, EA JACK LOCATION)
LESS THAN OR EQUAL TO 6FT	1.65*DL + 1.75*LL	194.3	DL = 53.7 LL = 60.4

* LOAD COMBINATION OF 1.65*DL AND 1.75*LL WAS USED. THE DEAD LOAD FACTOR OF 1.65 IS THE PRODUCT OF A LOAD FACTOR OF 1.5 AND A STICKY FORCE FACTOR OF 1.1

ADDENDA / REVISIONS	SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	JACKING DETAILS	SECTION BR
			COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 32
				CHECKED BY: S.WALLS		

13-DEC-2024
12:05
Y:\NEWCASTL\U031Bridge\T201807402\500_CADD\530_PLANS_DGN\JK01.dgn



PLAN

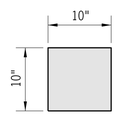
1/10"=1'-0"

STEEL REPAIR NOTES

1. STEEL REPAIRS AND LOCATIONS ARE BASED OFF 2018 INSPECTION REPORT AND SHALL BE VERFIED BY FIELD ENGINEER. ADDITIONAL FINDINGS SHALL BE REPORTED TO THE ENGINEER FOR REPAIR DECISIONS.
2. ALL STEEL MEMBERS (GIRDERS, STIFFENERS, DIAPHRAGMS) SHALL BE CLEANED AND PAINTED IN ACCORDANCE TO DELDOT STANDARD SPECIFICATIONS SECTION 616 AND PAID UNDER ITEM #616000.
3. BOTTOM FLANGE CORROSION AND SECTION LOSS TO BE REPORTED TO ENGINEER AFTER CLEANING AND PRIOR TO APPLYING PROTECTIVE COATING. BOTTOM FLANGE WITH CORROSION AND SECTION LOSS SHALL BE PROTECTED WITH A RUST PREVENTIVE COATING AND EPOXY PATCHING COMPOUND. PRODUCT TO BE STEEL-SEAM FT910 OR SIMILAR, TO BE APPROVED BY ENGINEER. PAYMENT IS INCIDENTAL TO ITEM #615006 - STEEL STRUCTURE REPAIR .
4. SOLE PLATES ON SOUTH ABUTMENT WILL BE BEVELED. ALL OTHER SOLE PLATES WILL BE 1½" THICK.

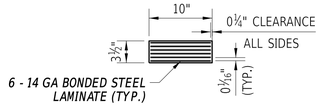
GIRDER INFORMATION

	SPAN 1		SPAN 2		SPAN 3	
GIRDER	W-SHAPE	COVER PLATE	W-SHAPE	COVER PLATE	W-SHAPE	COVER PLATE
G1	W33x130	N/A	W33x130	10"x⅜"x30'	W33x130	N/A
G2	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G3	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G4	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G5	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G6	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G7	W30x108	N/A	W33x130	N/A	W30x108	N/A
G8	W30x108	N/A	W33x130	N/A	W30x108	N/A
G9	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G10	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G11	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G12	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G13	W30x108	9"x⅜"x29'	W33x130	10"x½"x36'	W30x108	9"x⅜"x29'
G14	W33x130	N/A	W33x130	10"x⅜"x30'	W33x130	N/A



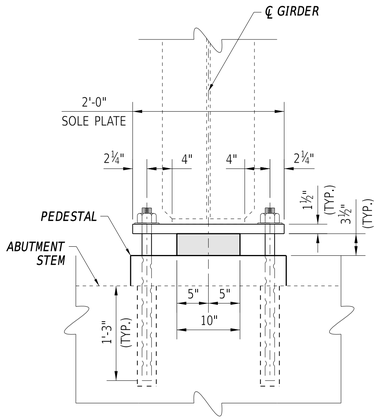
BEARING PLAN

1"=1'-0"



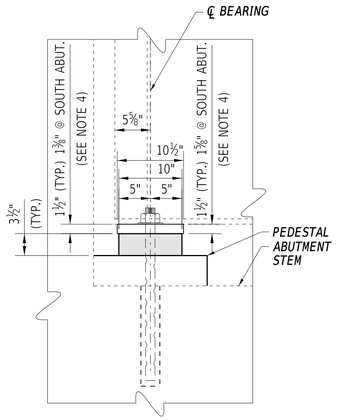
BEARING ELEVATION

1"=1'-0"



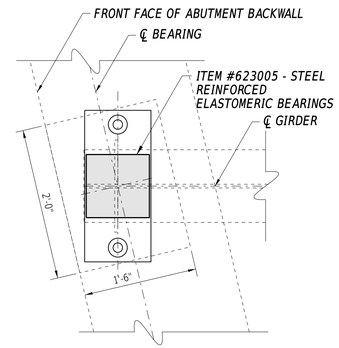
BEARING ELEVATION

1"=1'-0"



BEARING SIDE ELEVATION

1"=1'-0"



BEARING DETAIL

1"=1'-0"

ADDENDA / REVISIONS		SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	FRAMING PLAN	SECTION
				T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			33

13-DEC-2024
12:05
Y:\NEWCAST\L\031\Bridge\T201807402\500_CADD\530_PLANS_DGN\FR00.dgn

BORING: MA-1 | **DATE DRILLED:** 1/30/23
STATION: 16+47.52 | **OFFSET:** -44.55 | **ELEVATION:** 73.16 | **NORTHING:** 625194.585 | **EASTING:** 590080.280
COMMENTS: N/A

SAMPLE INFORMATION

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
1	0.0 1.0	6 3	MOIST LOOSE BROWN COARSE SAND W/SOME FINE SAND, FINE GRAVEL AND SILT.	A-1-B	
2	1.0 2.0	5 9 7 9	WET STIFF BROWN CLAYEY SILT W/SOME FINE TO COARSE SAND.	A-4(5)	
3	2.0 4.0	5 6 7 8	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-B	
4	4.0 6.0	5 9 6 9	WET MEDIUM DENSE BROWN COARSE TO FINE SAND AND FINE GRAVEL W/SOME SILT.	A-1-B	
5	6.0 8.0	6 7 9 8	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND, FINE GRAVEL AND SILT.	A-1-B	
6	8.0 10.0	5 9 16 14	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-B	
7	10.0 12.0	14 14 8 8	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND, TRACE OF SILT.	A-1-B	
8	12.0 14.0	8 10 13 14	WET MEDIUM DENSE BROWN FINE GRAVELLY COARSE SAND W/SOME FINE SAND AND SILT.	A-1-B	
9	14.0 16.0	16 11 9 9	WET MEDIUM DENSE BROWN COARSE TO FINE SAND AND FINE GRAVEL W/SOME SILT.	A-1-B	
10	16.0 18.0	14 13 13 12	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-B	
11	18.0 24.0	17 16 17 19	WET DENSE BROWN SILTY COARSE SAND AND FINE GRAVEL W/SOME FINE SAND.	A-2-4(0)	
12	24.0 29.0	16 16 15 16	WET DENSE BROWN SILTY FINE TO COARSE SAND AND FINE GRAVEL W/SOME CLAY.	A-1-B	DEPTH TO WATER 28.3FT
13	29.0 33.0	10 15 14 11	WET MEDIUM DENSE BROWN CLAYEY FINE SAND AND FINE GRAVEL W/SOME COARSE SAND AND SILT.	A-2-4(0)	
	33.0 35.0		END BORING		

BORING: MA-2 | **DATE DRILLED:** 1/27/23
STATION: 17+07.55 | **OFFSET:** 36.23 | **ELEVATION:** 72.64 | **NORTHING:** 625288.472 | **EASTING:** 590116.535
COMMENTS: N/A

SAMPLE INFORMATION

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
1	0.0 1.0	7 11	MOIST MEDIUM DENSE BROWN SILTY COARSE SAND AND FINE GRAVEL W/SOME FINE SAND.	A-1-B	
2	1.0 2.0	8 6 5 7	WET STIFF BROWN CLAYEY SILT W/SOME COARSE SAND AND FINE GRAVEL, TRACE OF FINE SAND.	A-4(3)	
3	2.0 4.0	3 4 7 7	WET STIFF BROWN CLAYEY COARSE SANDY SILT W/SOME FINE SAND, TRACE OF FINE GRAVEL.	A-4(0)	
4	4.0 6.0	7 8 9 9	WET MEDIUM DENSE BROWN FINE GRAVEL AND COARSE SAND W/SOME FINE SAND AND SILT.	A-1-B	
5	6.0 8.0	9 10 9 8	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-B	
6	8.0 10.0	5 4 7 7	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-B	
7	10.0 12.0	18 11 11 14	WET MEDIUM DENSE BROWN COARSE SANDY FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-A	

BORING: MA-2 CONT.

SAMPLE INFORMATION

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
8	12.0 14.0	8 10 10 11	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND, FINE GRAVEL AND SILT.	A-1-B	
9	14.0 16.0	6 9 10 13	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE GRAVEL AND SILT, TRACE OF FINE SAND.	A-1-B	
10	16.0 18.0	12 15 15 17	WET HARD BROWN CLAYEY COARSE SANDY SILT W/SOME FINE SAND AND FINE GRAVEL.	A-4(1)	
11	18.0 24.0	4 7 10 15	WET VERY STIFF BROWN FINE SANDY SILT W/ TRACE COARSE SAND.	A-4(0)	
12	24.0 29.0	5 9 10 13	WET MEDIUM DENSE BROWN SILTY COARSE TO FINE SAND.	A-1-B	DEPTH TO WATER 27.7FT
13	29.0 33.0	4 4 3 4		A-2-4(0)	
	33.0 35.0		END BORING		

BORING: MA-3 | **DATE DRILLED:** 1/30/23
STATION: 19+23.37 | **OFFSET:** -41.98 | **ELEVATION:** 74.23 | **NORTHING:** 625429.191 | **EASTING:** 589935.173
COMMENTS: N/A

SAMPLE INFORMATION

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
1	0.0 1.0	5 6	MOIST MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL AND SILT.	A-2-4(0)	
2	1.0 2.0	5 7 6 8	WET STIFF BROWN COARSE SANDY SILT W/SOME FINE SAND AND CLAY.	A-4(0)	
3	2.0 4.0	3 4 5 11	WET STIFF BROWN FINE SANDY CLAY W/SOME COARSE SAND AND SILT.	A-6(5)	
4	4.0 6.0	6 7 8 9	WET MEDIUM DENSE BROWN SILTY COARSE TO FINE SAND.	A-2-4(0)	
5	6.0 8.0	6 8 8 9	WET MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND AND FINE GRAVEL W/SOME CLAY.	A-2-4(0)	
6	8.0 10.0	5 6 5 6	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND AND SILT, TRACE OF FINE GRAVEL.	A-1-B	
7	10.0 12.0	7 11 10 15	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND AND SILT, TRACE OF FINE GRAVEL.	A-1-B	
8	12.0 14.0	7 10 14 16	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND, TRACE OF SILT.	A-1-B	
9	14.0 16.0	8 8 13 13	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL AND SILT.	A-1-B	
10	16.0 18.0	13 14 13 17	WET MEDIUM DENSE BROWN COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-1-B	
11	18.0 24.0	7 13 14 15	WET MEDIUM DENSE BROWN SILTY FINE SAND AND FINE GRAVEL W/SOME COARSE SAND.	A-1-B	
12	24.0 29.0	9 12 13 12	WET VERY STIFF BROWN CLAYEY SILT W/SOME FINE TO COARSE SAND AND FINE GRAVEL.	A-4(2)	DEPTH TO WATER 27.6FT
13	29.0 33.0	6 11 11 15	WET MEDIUM DENSE BROWN CLAYEY COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND SILT.	A-2-6(1)	
	33.0 35.0		END BORING		

ADDENDA / REVISIONS

NOT TO SCALE

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY: S.WEAVER	
COUNTY	CHECKED BY: S.WALLS	
NEW CASTLE		

BORING LOG

SECTION	
BR	
SHEET NO.	
34	

13-DEC-2024
12:05
Y:\NEW\CAST\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\B000.dgn

BORING: MA-4 | **DATE DRILLED:** 1/27/23
STATION: 20+10.55 | **OFFSET:** 32.72 | **ELEVATION:** 76.01 | **NORTHING:** 625542.799 | **EASTING:** 589951.787
COMMENTS: N/A

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
1	0.0	4	MOIST MEDIUM DENSE BROWN SILTY FINE GRAVELLY COARSE SAND W/SOME FINE SAND.	A-1-B	
	1.0	7			
2	1.0	9	MOIST MEDIUM DENSE BROWN SILTY COARSE SAND AND FINE GRAVEL W/SOME FINE SAND AND CLAY.	A-1-B	
		12			
		13			
	2.0	15			
3	2.0	4	WET STIFF BROWN CLAYEY SILT W/SOME FINE TO COARSE SAND.	A-4(3)	
		5			
		6			
	4.0	6			
4	4.0	4	WET STIFF BROWN SILTY CLAY W/SOME COARSE SAND, TRACE OF FINE SAND.	A-6(9)	
		5			
		5			
	6.0	10			
5	6.0	6	WET STIFF BROWN SILTY COARSE SANDY CLAY W/SOME FINE SAND.	A-6(7)	
		6			
		6			
	8.0	6			
6	8.0	2	WET SOFT BROWN COARSE SANDY CLAY W/SOME FINE SAND AND SILT, TRACE OF FINE GRAVEL.	A-6(4)	
		2			
		2			
	10.0	2			
7	10.0	13	WET MEDIUM DENSE BROWN SILTY COARSE SAND W/SOME FINE GRAVEL, TRACE OF FINE SAND.	A-2-4(0)	
		14			
		13			
	12.0	17			
8	12.0	7	WET MEDIUM DENSE BROWN COARSE SAND W/SOME FINE SAND, FINE GRAVEL AND SILT.	A-1-B	
		8			
		10			
	14.0	11			
9	14.0	10	WET MEDIUM DENSE BROWN COARSE TO FINE SAND W/SOME FINE GRAVEL AND SILT.	A-1-B	
		10			
		17			
	16.0	18			
10	16.0	13	WET DENSE BROWN COARSE TO FINE SANDY FINE GRAVEL W/SOME SILT.	A-1-B	
		16			
		18			
	18.0	23			
11	18.0	16	WET MEDIUM DENSE BROWN FINE GRAVEL W/SOME COARSE TO FINE SAND AND SILT.	A-1-A	
		16			
		11			
	24.0	13			
12	24.0	9	WET MEDIUM DENSE BROWN SILTY FINE GRAVELLY COARSE SAND W/SOME FINE SAND.	A-1-B	DEPTH TO WATER 28.2
		11			
		13			
	29.0	17			
13	29.0	5	WET MEDIUM DENSE BROWN SILTY FINE GRAVEL W/SOME COARSE TO FINE SAND.	A-2-4(0)	
		8			
		11			
	33.0	18			
	33.0		END BORING		
	35.0				

BORING: MA-5 | **DATE DRILLED:** 1/30/23
STATION: 34+95.51 | **OFFSET:** -41.88 | **ELEVATION:** 78.55 | **NORTHING:** 626754.077 | **EASTING:** 589094.182
COMMENTS: N/A

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
1	0.0	5	WET LOOSE BROWN COARSE TO FINE SAND W/SOME SILT.	A-1-B	
	1.0	5			
2	1.0	6	WET MEDIUM DENSE BROWN SILTY COARSE TO FINE SAND W/SOME FINE GRAVEL.	A-2-4(0)	
		6			
		7			
	2.0	8			
3	2.0	6	WET LOOSE BROWN FINE TO COARSE SAND W/SOME SILT.	A-2-4(0)	
		5			
		4			
	4.0	4			
4	4.0	4	WET LOOSE BROWN COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-1-B	
		4			
		3			
	6.0	3			
5	6.0	3	WET LOOSE BROWN COARSE TO FINE SAND W/SOME SILT.	A-1-B	
		3			
		5			
	8.0	5			
6	8.0	5	WET LOOSE BROWN COARSE TO FINE SAND W/SOME SILT, TRACE OF FINE GRAVEL.	A-1-B	
		4			
		5			
	10.0	5			

BORING: MA-5 CONT.

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
7	10.0	5	WET LOOSE BROWN COARSE SAND W/SOME FINE SAND AND SILT.	A-1-B	DEPTH TO WATER 11.7
		5			
		5			
	12.0	5			
8	12.0	2	WET LOOSE BROWN COARSE TO FINE SAND W/TRACE SILT.	A-1-B	
		2			
		4			
	14.0	4			
9	14.0	2	WET LOOSE BROWN COARSE SAND W/SOME FINE SAND, TRACE OF SILT.	A-1-B	
		4			
		5			
	16.0	6			
10	16.0	5	SATURATED VERY STIFF BROWN FINE TO COARSE SANDY SILT.	A-4(0)	
		10			
		12			
	18.0	12			
11	18.0	9	SATURATED HARD BROWN COARSE TO FINE SANDY CLAY W/SOME FINE GRAVEL AND SILT.	A-7-5(6)	
		17			
		15			
	24.0	16			
12	24.0	23	SATURATED HARD BROWN FINE SANDY CLAY W/ SOME COARSE SAND AND SILT.	A-7-5(9)	
		25			
	29.0	50/4			
13	29.0	50/2	SATURATED HARD GRAY CLAYEY FINE SANDY SILT W/SOME COARSE SAND.	A-4(2)	
	33.0				
	33.0		END BORING		
	35.0				

BORING: MA-6 | **DATE DRILLED:** 1/27/23
STATION: 35+86.16 | **OFFSET:** 42.48 | **ELEVATION:** 79.01 | **NORTHING:** 626877.164 | **EASTING:** 589107.730
COMMENTS: N/A

NO.	DEPTH	BLOWS / 6"	DESCRIPTION	CLASS / G.I.	REMARKS
1	0.0	6	WET FIRM BROWN FINE TO COARSE SANDY SILT W/TRACE FINE GRAVEL.	A-4(0)	
	1.0	2			
2	1.0	3	WET LOOSE BROWN SILTY COARSE SAND W/SOME FINE SAND, TRACE OF FINE GRAVEL.	A-1-B	
		4			
		6			
	2.0	9			
3	2.0	4	WET VERY STIFF BROWN COARSE TO FINE SANDY SILT.	A-4(0)	
		12			
		10			
	4.0	8			
4	4.0	7	WET MEDIUM DENSE BROWN SILTY FINE SAND AND FINE GRAVEL W/SOME COARSE SAND.	A-2-4(0)	
		8			
		9			
	6.0	9			
5	6.0	6	WET MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND.	A-2-4(0)	
		5			
		6			
	8.0	7			
6	8.0	4	WET LOOSE BROWN COARSE TO FINE SAND W/SOME SILT.	A-2-4(0)	
		4			
		4			
	10.0	4			
7	10.0	4	WET LOOSE BROWN COARSE TO FINE SAND W/TRACE SILT.	A-1-B	
		4			
		5			
	12.0	6			
8	12.0	3	SATURATED MEDIUM DENSE BROWN SILTY FINE TO COARSE SAND.	A-2-5(0)	
		6			
		7			
	14.0	10			
9	14.0	21	SATURATED HARD BROWN FINE SANDY SILT W/ TRACE COARSE SAND.	A-4(0)	
		31			
	16.0	50/5			
10	16.0	20	SATURATED HARD BROWN FINE SANDY SILT W/ TRACE COARSE SAND.	A-4(0)	
	18.0	50/3			
11	18.0	50/4	SATURATED HARD BROWN FINE SANDY SILT W/ TRACE COARSE SAND.	A-4(0)	
	24.0				
12	24.0	8	SATURATED DENSE BROWN SILTY FINE SAND W/SOME COARSE SAND.	A-2-4(0)	
		14			
		18			
	29.0	24			
13	29.0	15	SATURATED MEDIUM DENSE BROWN SILTY FINE SAND W/SOME COARSE SAND.	A-2-4(0)	
		14			
		15			
	33.0	16			
	33.0		END BORING		
	35.0				

ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	BORING LOG	SECTION
				T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY	CHECKED BY: S.WALLS		SHEET NO.
				NEW CASTLE			35

13-DEC-2024
12:05
Y:\NEWCASTLU031\Bridget\T201807402\500_CADD\530_PLANS_DGN\BO01.dgn

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. PLAN APPROVAL IS VALID FOR A FIVE-YEAR PERIOD BEGINNING ON THE DATE OF THE STORMWATER ENGINEER'S SIGNATURE. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE FIVE YEARS, NOTIFY THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION. ANY DEVIATIONS TO THE SWPPP NEED APPROVAL FROM THE ENGINEER.

Steven Sisson — 10/29/2024

DELDOT STORMWATER ENGINEER — DATE

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS MEET THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.

AMOUNT OF DISTURBED AREA FOR THE PROJECT	2.71 AC
ADDED IMPERVIOUS FOR THE PROJECT	-3859 SF
HUC-10 WATERSHED	WHITE CLAY CREEK

2. ASSIGN A RESPONSIBLE PERSON TO BE ON SITE DURING ALL EARTH DISTURBING ACTIVITIES AND BE AN ACTIVE DNREC BLUE CARD HOLDER AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS (DSSR). BE FAMILIAR WITH AND COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT.

3. FILE AS A CO-PERMITTEE IN ACCORDANCE WITH SECTION 901 OF THE STANDARD SPECIFICATIONS. POSTING AND MAINTENANCE OF THE NOI PERMIT COVERAGE IS INCIDENTAL TO THE CONTRACT.

4. REVISIONS TO THE SWPPP OR ENVIRONMENTAL COMPLIANCE PLAN SHEET(S) SHALL BE APPROVED PRIOR TO INITIATION IN THE FIELD. THE ENGINEER IS RESPONSIBLE FOR APPROVING ALL REDLINES AND REVISIONS TO THE SWPPP.

5. IMPLEMENTING AND MAINTAINING POLLUTION PREVENTION DEVICES AND PRACTICES IS REQUIRED UNDER THE DELAWARE CONSTRUCTION GENERAL PERMIT AND THE DSSR AND ARE INCIDENTAL TO THE CONTRACT.

6. A SOIL STOCKPILE, AS DESCRIBED IN DELDOT STANDARD SPECIFICATIONS AND DEFINED IN THE DELAWARE EROSION & SEDIMENT CONTROL HANDBOOK, IS ANY LOCATION WITHIN THE LIMITS OF CONSTRUCTION WHERE A TEMPORARY DEPOSIT OF EXCAVATED SOIL IS BEING RESERVED FOR FUTURE USE. A SOIL STOCKPILE SHALL BE LOCATED A MINIMUM OF 50 FEET FROM A STORM DRAIN INLET, OPEN CHANNEL, WETLAND, OR WATERBODY. A REQUEST MAY BE MADE TO THE ENGINEER TO PERMIT LOCATING A SOIL STOCKPILE LESS THAN 50 FEET FROM A STORM DRAIN INLET OR OPEN CHANNEL. UPON APPROVAL, IF ANY PART OF A SOIL STOCKPILE IS LESS THAN 50 FEET FROM A STORM DRAIN INLET OR OPEN CHANNEL, INSTALL A SUPER SILT FENCE PERIMETER TO PROTECT THE SOIL STOCKPILE. THE SUPER SILT FENCE MUST BE CONSTRUCTED IN ACCORDANCE WITH 905.3.B.3 OF THE STANDARD SPECIFICATIONS. THE COST FOR INSTALLATION AND MAINTENANCE OF THE STOCKPILE SUPER SILT FENCE IS INCIDENTAL TO THE CONTRACT.

7. PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF FROM LEAVING THE SITE. CHECK PERIMETER CONTROLS DAILY AND ADJUST OR REPAIR TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. REMOVE ACCUMULATED SEDIMENT BEFORE IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE ENGINEER.

8. ANY SEDIMENT LADEN DISCHARGE LEAVING THE LIMIT OF CONSTRUCTION SHALL IMMEDIATELY BE ADDRESSED THROUGH BEST AVAILABLE TECHNOLOGIES TO CONTROL ANY FURTHER SEDIMENT LADEN DISCHARGE. REMEDIATION MAY INCLUDE STANDARD E&S PRACTICES OR OTHER METHODS AS APPROVED BY THE ENGINEER.

9. ALL TEMPORARY CONCENTRATED FLOW AREAS INCLUDING CHANNEL SIDE SLOPES SHALL HAVE EROSION CONTROL BLANKET MULCH AS DIRECTED BY THE ENGINEER. INSTALL WITHIN SEVEN CALENDAR DAYS UPON CONSTRUCTION INITIATION. A TEMPORARY CONCENTRATED FLOW AREA MAY INCLUDE DITCHES, SWALES, BERMS, CONCENTRATED RUNOFF AREAS, ETC.

10. PER DNREC GENERAL PERMIT, NO MORE THAN 20.0 ACRES MAY BE DISTURBED AT ANY TIME. FURTHER DISTURBANCE MAY NOT PROCEED UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE PREVIOUSLY DISTURBED AREA IS COMPLETED TO THE SATISFACTION OF AND AS APPROVED BY THE ENGINEER.

11. MAINTAIN POSITIVE DRAINAGE IN EXISTING AND PROPOSED DRAINAGE SYSTEMS BY EXECUTING CONSTRUCTION, CLEANING EXISTING DRAINAGE SYSTEMS, AND PROPERLY DISPOSING OF SEDIMENT THROUGHOUT THE DURATION OF THE PROJECT.

SEQUENCE OF CONSTRUCTION

GENERAL SEQUENCE:

1. INSTALL TRAFFIC CONTROL AND E&S DEVICES IN ACCORDANCE WITH THE PLANS, STANDARD SPECIFICATIONS, AND THE EROSION AND SEDIMENT CONTROL PLAN.
2. INSTALL SHORING SYSTEM REQUIRED FOR BRIDGE DEMOLITION OVER CSXT RAILROAD AND APPROACH SPANS. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING SHORING INSTALLATION.
3. CONSTRUCT CROSSOVERS BOTH NORTH AND SOUTH OF THE BRIDGE.
4. CONSTRUCT REQUIRED ACCESS ROAD FOR PROJECT ADJACENT PROPERTIES.
5. PERFORM BRIDGE WORK ACCORDING TO ASSOCIATED PHASES.

PHASE 1:

1. CLEAN AND REPAIR ABUTMENTS, PIERS, AND WINGWALLS. APPLY CONCRETE SEALERS IN ACCORDANCE WITH THE PLANS.
2. INSTALL FIBER REINFORCED POLYMER.
3. REPAIR, CLEAN, AND PAINT STEEL.
4. INSTALL TEMPORARY SHORING SYSTEM AND JACK BRIDGE.
5. REMOVE EXISTING BEARINGS, PERFORM PEDESTAL REPAIRS INCLUDING INCREASED ELEVATIONS, INSTALL ANCHOR RODS, INSTALL PROPOSED BEARINGS.
6. INSTALL PHASE I TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE PLANS.
7. SAWCUT AND REMOVE CONCRETE MEDIAN.
8. CREATE A SMOOTH RIDING SURFACE IN LOCATION WHERE MEDIAN IS REMOVED ON SOUTHBOUND STRUCTURE.
9. ADEQUATELY STABILIZE ALL DISTURBED AREAS PRIOR TO PROCEEDING TO THE NEXT PHASE.

PHASE 2:

1. INSTALL PHASE 2 TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE PLANS. REMOVE PAVEMENT MARKINGS THAT CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS.
2. PERFORM PARTIAL DEPTH DECK REMOVAL AND REINFORCEMENT REPAIRS INCLUDING REMOVAL OF EXISTING EXPANSION JOINT AND INSTALLATION OF PROPOSED EXPANSION JOINT. APPLY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS
3. INSTALL MEDIAN OVERHANG IN PREPARATION FOR PHASE 3.
4. CLEAN AND REPAIR NORTHBOUND SIDEWALK AND BARRIER. APPLY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS.
5. INSTALL BRIDGE SAFETY FENCE.
6. ADEQUATELY STABILIZE ALL DISTURBED AREAS PRIOR TO PROCEEDING TO THE NEXT PHASE.

PHASE 3:

1. INSTALL PHASE 3 TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE PLANS. REMOVE PAVEMENT MARKINGS THAT CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS.
2. PERFORM PARTIAL DEPTH DECK REMOVAL AND REINFORCEMENT REPAIRS INCLUDING REMOVAL OF EXISTING EXPANSION JOINT AND INSTALLATION OF PROPOSED EXPANSION JOINT. APPLY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS
3. INSTALL MEDIAN OVERHANG IN PREPARATION FOR PHASE 4.
4. CLEAN AND REPAIR SOUTHBOUND SIDEWALK AND BARRIER. APPLY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS.
5. INSTALL BRIDGE SAFETY FENCE.
6. ADEQUATELY STABILIZE ALL DISTURBED AREAS PRIOR TO PROCEEDING TO THE NEXT PHASE.

PHASE 4:

1. INSTALL PHASE 4 TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE PLANS. REMOVE PAVEMENT MARKINGS THAT CONFLICT WITH THE TEMPORARY PAVEMENT MARKINGS.
2. INSTALL APPROACH SIDEWALK, CURB, AND GUARDRAIL IN ACCORDANCE WITH THE PLANS.
2. INSTALL APPROACH MAINTENANCE STRIPS, GUARDRAIL, GUARDRAIL TO BARRIER CONNECTIONS AND END TREATMENTS IN ACCORDANCE WITH THE PLANS.
4. REMOVE TEMPORARY PAVEMENT MARKINGS AND INSTALL FINAL CONFIGURATION IN ACCORDANCE WITH PLANS.
6. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER VEGETATION HAS STABILIZED ON ALL DISTURBED ARES IN ACCORDANCE WITH THESE PLANS AND AS DIRECTED BY THE ENGINEER.
7. REMOVE ALL MOT DEVICES. REMOVAL OF MOT DEVICES MAY OCCUR PRIOR TO REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.

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		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 36
					CHECKED BY: S.WALLS		

25-OCT-2024
09:05
Y:\NEWCASTL\03\Bridge\T201807402\500_CADD\530_PLANS_DGN\CS00.dgn

GENERAL MAINTENANCE OF TRAFFIC NOTES:

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO TYPICAL APPLICATIONS 3A, 10, AND 33 THE DELAWARE MUTCD.

2. AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR REQUIREMENT FOR THIS PROJECT.

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
(X)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT AND THAT PERSON'S SOLE RESPONSIBILITY SHALL BE THE MANAGEMENT AND SUPERVISION OF THE PROJECT'S TEMPORARY TRAFFIC CONTROL ACTIVITIES. THIS PERSON SHALL NOT HAVE ANY OTHER ROLE ON THE PROJECT. RESPONSIBILITIES AND REQUIREMENTS OF THE ATSSA SUPERVISOR ARE DEFINED IN SECTION 812 OF THE STANDARD SPECIFICATIONS. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 801500.

3. THIS PROJECT IS CONSIDERED A SIGNIFICANT PROJECT AS DEFINED BY DELDOT'S WORK ZONE MOBILITY PROCEDURES AND GUIDELINES. A TYPE B TRANSPORTATION MANAGEMENT PLAN (TMP) HAS BEEN PREPARED AND IS AVAILABLE FOR VIEWING BY CONTACTING THE DEPARTMENT'S SAFETY PROGRAMS MANAGER AT (302)659-4060. ALL MONITORING REQUIREMENTS OF THE TMP SHALL BE CONDUCTED BY DELDOT FORCES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MODIFICATIONS TO THE TMP SHALL BE COMPLETED BY THE CONTRACTOR IF CHANGES TO THE TIME RESTRICTIONS OR THE TRAFFIC CONTROL PLAN ARE DESIRED. THE MODIFIED TMP SHALL BE PREPARED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF DELAWARE.

4. THE USE OF MILLINGS AND GABC IN THE TRAVEL WAY, TEMPORARY TRAVEL WAY, HIGH VOLUME ENTRANCES AND ACCESS RAMP FOR THE PURPOSE OF PROVIDING A TEMPORARY ROADWAY SURFACE, POTHOLE REPAIR, TAPERED EDGE FOR UTILITIES, BUTT JOINTS, AND LONGITUDINAL DROP-OFFS (MILLING AND PAVING OPERATIONS) IS PROHIBITED UNLESS IT IS OTHERWISE DESIGNATED TO BE USED IN THE CONTRACT PLANS. USE COLD PATCH, BITUMINOUS CONCRETE, BITUMINOUS CONCRETE WEDGE, OR TAPER MILL, AS NOTED IN THE CONTRACT DOCUMENTS OR APPROVED BY THE ENGINEER. PAYMENT FOR COLD PATCH, BITUMINOUS CONCRETE, OR BITUMINOUS CONCRETE WEDGE SHALL BE PAID AS NOTED IN THE CONTRACT DOCUMENTS. TAPER MILL BITUMINOUS CONCRETE SHALL BE PAID UNDER THE BITUMINOUS CONCRETE MILLING ITEM.

   MILLINGS OR GABC SHALL BE USED AT THE FOLLOWING LOCATIONS WHERE ACCESS TO A BUSINESS, RESIDENCE, OR EDGE DROP-OFF NEEDS TO BE MAINTAINED UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER TO USE BITUMINOUS CONCRETE OR COLD PATCH. ALL MILLINGS AND GABC WILL BE ROLLED AND COMPACTED TO HELP PREVENT THE MATERIAL FROM UNRAVELING:

   A. DRIVEWAYS
   B. ENTRANCES
   C. LOW VOLUME ACCESS RAMPS (IDENTIFIED IN THE CONTRACTS DOCUMENT)
   D. EDGE DROP-OFFS ADJACENT TO LIVE ROADWAY (LANE, SHOULDER, OR TURN LANE) AND THE PROPOSED ROAD CONSTRUCTION
   E. EDGE OF ROADWAY DROP-OFF

   GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED FOR ROADWAY WEDGE/FILLET BETWEEN TRAVEL LANES AND PAVEMENT BOX, EDGE OF TRAVEL WAY, DRIVEWAY OR ENTRANCE ACCESS SHALL BE INCIDENTAL TO ITEM NO. 801500 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE (~20% OF TOTAL). THE BASE COURSE MATERIAL SHALL BE PLACED AT NO GREATER THAN THE SLOPE SPECIFIED IN TABLE 6G-1 AND SHALL BE COMPACTED. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE PAY ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR MILLINGS OR GABC TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZIED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM. VERTICAL DIFFERENCES SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

5. THE FOLLOWING MATRIX PROVIDES TIME RESTRICTIONS FOR LANE CLOSURES RELATED TO MAINTENANCE OF TRAFFIC SETUP:

SR 7 - Allowable Lane Closure Hours (Through & Turn Lanes)

	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
SUNDAY	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
MONDAY	■	■	■	■	■	■														■	■	■	■	■
TUESDAY	■	■	■	■	■	■														■	■	■	■	■
WEDNESDAY	■	■	■	■	■	■														■	■	■	■	■
THURSDAY	■	■	■	■	■	■														■	■	■	■	■
FRIDAY	■	■	■	■	■	■														■	■	■	■	■
SATURDAY	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

■ One Lane Closure Allowed
□ No Lane Closure

CONSTRUCTION PHASING & M.O.T

	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
CSF XXX	CONSTRUCTION SAFETY FENCE / LENGTH
CSF	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	TRAFFIC IMPACT ATTENUATOR
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
FLOW	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

PENNONI ASSOCIATES INC. — PEN TABLE: $PRNTBL$$
FILE NAME: $FILE$ — PLOT DRIVER: $PLTDRV$$
MICROSTATION VERSION: $VERSION$ — DATE PLOTTED: 28-OCT-2024 16:35
MICROSTATION WORKSPACE: $WORKSPACE$ — USER NAME: $USER$ — OFFICE LOCATION: $OFFICENAME$

ADDENDA / REVISIONS	

NOT TO SCALE

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

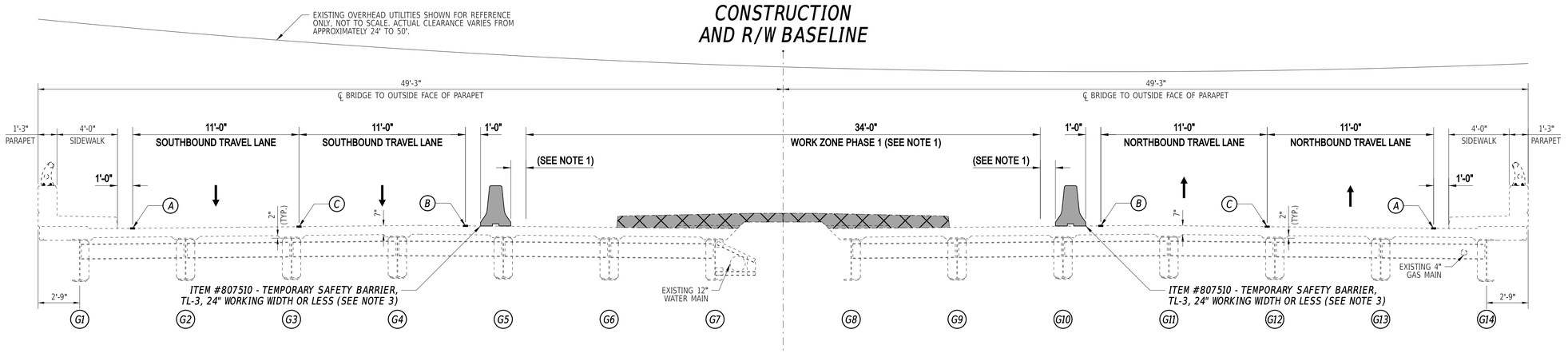
CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN

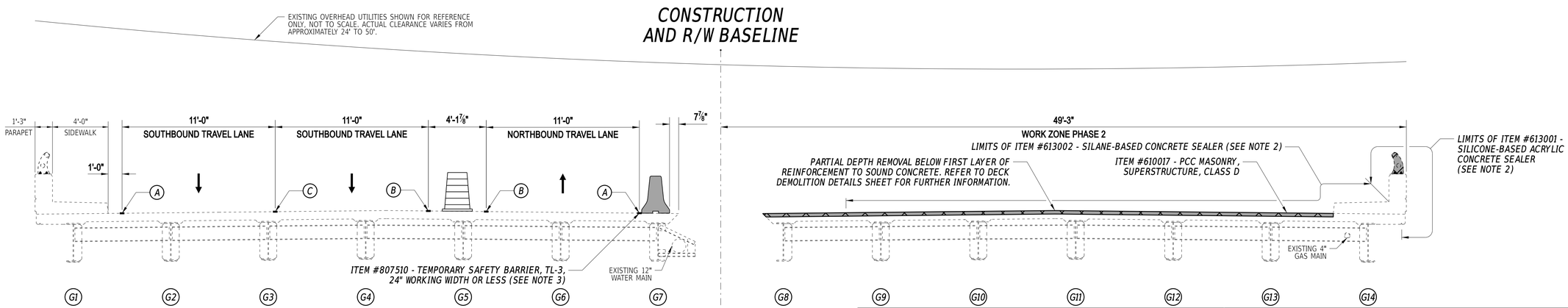
SECTION	
PAI	
SHEET NO.	
37	

LEGEND

DENOTES AREA TO REMOVED UNDER ITEM #211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS



CONSTRUCTION PHASE 1



CONSTRUCTION PHASE 2

NOTE:

1. *1'-0" OFFSET BETWEEN WORKING WIDTH OF BARRIER SYSTEM AND WORK ZONE SHALL BE MAINTAINED.*
2. *ALL AREAS ALONG EACH PARAPET AND SIDEWALK SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN ½" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN ½" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.*
3. *ITEM #807510 APPLIES TO THE BARRIER ON THE BRIDGE DECK, PLEASE REFER TO CONSTRUCTION PHASING AND M.O.T. SHEETS FOR FURTHER INFORMATION ABOUT APPROACH BARRIER. RELOCATION OF BARRIER ON BRIDGE TO BE PAID UNDER ITEM #807524 - RELOCATE TEMPORARY SAFETY BARRIER.*

TEMPORARY PAVEMENT MARKINGS LEGEND (< 30 DAYS)

SYM	ITEM
A	*4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING, TEMPORARY MARKINGS, PAINT, 4" (ITEM #817003)*
B	*4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING, TEMPORARY MARKINGS, PAINT, 4" (ITEM #817003)*
C	*4" BROKEN WHITE TEMPORARY PAINT PAVEMENT STRIPING, 10' LINE & 30' GAP, TEMPORARY MARKINGS, PAINT, 4" (ITEM #817003)*

TEMPORARY PAVEMENT MARKINGS LEGEND (> 30 DAYS)

SYM	ITEM
A	*EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM #817042)*
B	*EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM #817042)*
C	*EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" AND BLACK 6" BROKEN - 10' LINE & 30' GAP (ITEM #817042)*

ADDENDA / REVISIONS

SCALE
0 4 8 12
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	T201807402
COUNTY	NEW CASTLE
BRIDGE NO.	1-655
DESIGNED BY:	S.WEAVER
CHECKED BY:	S.WALLS

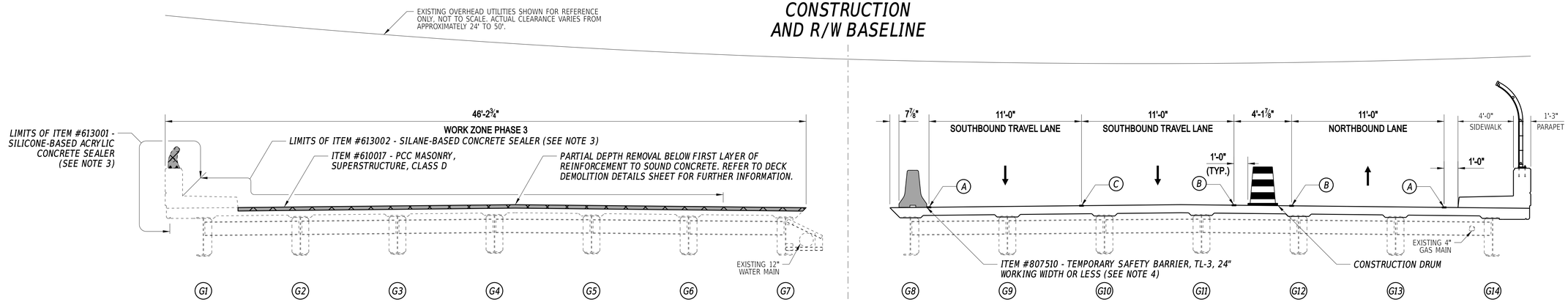
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN

SECTION	
	BR
SHEET NO.	
	38

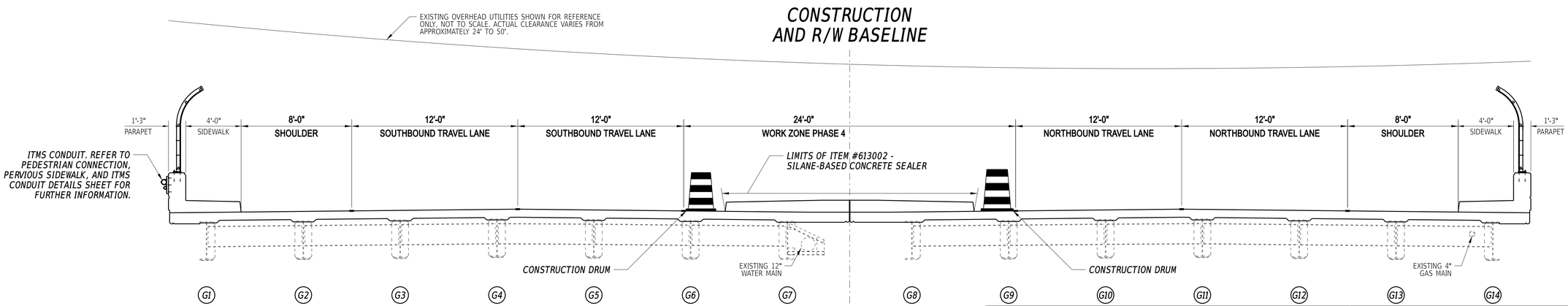
4-MAR-2025
16:22
Y:\NEWCASTL\03\1Bridge\T201807402\500_CADD\530_PLANS_DGN\CS01.dgn

LEGEND

DENOTES AREA TO REMOVED UNDER ITEM #211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS



CONSTRUCTION PHASE 3



CONSTRUCTION PHASE 4

NOTE:
1. PHASE 4 CONSTRUCTION CONSISTS OF APPROACH MEDIAN WORK AND CONNECTION OF GUARDRAIL TO PROPOSED VERTICAL BARRIER.
2. FINAL STRIPING CONFIGURATION WILL BE INSTALLED FOR CONSTRUCTION PHASE 4. REFER TO SIGNING AND STRIPING SHEET FOR FURTHER INFORMATION.
3. ALL AREAS ALONG EACH PARAPET AND SIDEWALK SHALL BE CLEANED, SOUNDED, AND DELINEATED AT THE TIME OF CONSTRUCTION WITH THE APPROVAL OF THE ENGINEER TO DETERMINE REPAIR LIMITS. REPAIRS WITH DEPTHS LESS THAN ½" WILL BE REPAIRED USING AN EPOXY GROUT, PAID UNDER ITEM #610506 - REPAIRING EXISTING PCC STRUCTURES. REPAIRS DEEPER THAN ½" WILL BE REPAIRED USING DETAILS ON CONCRETE REPAIR DETAILS SHEET.
4. ITEM #807510 APPLIES TO THE BARRIER ON THE BRIDGE DECK, PLEASE REFER TO CONSTRUCTION PHASING AND M.O.T. SHEETS FOR FURTHER INFORMATION ABOUT APPROACH BARRIER. RELOCATION OF BARRIER ON BRIDGE TO BE PAID UNDER ITEM #807524 - RELOCATE TEMPORARY SAFETY BARRIER.

TEMPORARY PAVEMENT MARKINGS LEGEND (< 30 DAYS)		TEMPORARY PAVEMENT MARKINGS LEGEND (> 30 DAYS)	
SYM	ITEM	SYM	ITEM
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING, TEMPORARY MARKINGS, PAINT, 4" (ITEM #817003)	A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM #817042)
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING, TEMPORARY MARKINGS, PAINT, 4" (ITEM #817003)	B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM #817042)
C	4" BROKEN WHITE TEMPORARY PAINT PAVEMENT STRIPING, 10' LINE & 30' GAP, TEMPORARY MARKINGS, PAINT, 4" (ITEM #817003)	C	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" AND BLACK 6" BROKEN - 10' LINE & 30' GAP (ITEM #817042)

ADDENDA / REVISIONS

SCALE 0 4 8 12 FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN

SECTION BR

SHEET NO. 39

4-MAR-2025
16:22
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\CS02.dgn

WARNING SIGN LEGEND

ROAD WORK AHEAD	END ROAD WORK	BEGIN HIGHER FINES ZONE	END HIGHER FINES ZONE
W20-1 48" X 48" (1)	G20-2 48" X 24" (2)	R2-10 24" X 30" (3A)	R2-11 24" X 30" (3B)

PROJECT FUNDED BY THE Bipartisan Infrastructure Law
BUILDING A BETTER AMERICA
BUILD.GOV

BIPARTISAN INFRASTRUCTURE LAW SIGN 72" X 48" (4)

NOTES:

1. ALL WARNING SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED UNTIL SUBSTANTIAL COMPLETION OF THE CONTRACT AND ARE TO BE PAID FOR UNDER ITEM 810001 - TEMPORARY WARNING SIGNS AND PLAQUES.
2. ANY EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION WARNING SIGNS SHALL BE COVERED AS NEEDED, AS DIRECTED BY THE ENGINEER.
3. SIGN LOCATIONS ARE APPROXIMATE. LOCATE SIGNS TO ALLOW FOR VISIBILITY OF EXISTING AND TEMPORARY SIGNS.
4. PLACE CHANGEABLE MESSAGE SIGNS TEN (10) CALENDAR DAYS IN ADVANCE OF THE START OF CONSTRUCTION AND FOR FIVE (5) CALENDAR DAYS AFTER THE START OF CONSTRUCTION. PCMS SHALL BE APPROVED BY TRAFFIC SAFETY PRIOR TO USE.
5. THE BIPARTISAN INFRASTRUCTURE LAW SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED UNTIL SUBSTANTIAL COMPLETION OF THE CONTRACT. THESE SIGNS SHALL BE PAID FOR UNDER ITEMS 818001, 819011, AND 819019.



PORTABLE CHANGEABLE MESSAGE SIGNS

PRIOR TO CONSTRUCTION
(10 DAYS PRIOR TO BEGINNING OF CONSTRUCTION)

PCMS-1

BRIDGEWORK TO START MM/DD/YY	EXPECT DELAYS

DURING CONSTRUCTION
(DISPLAY FOR 5 DAYS AFTER START OF CONSTRUCTION)

PCMS-2

ROADWORK AHEAD ON SR 7	EXPECT DELAYS

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBS$
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:35
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USER$ OFFICE LOCATION: $OFFICENAMES

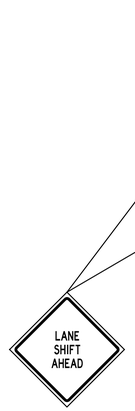
Pennoni

ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SECTION
				T201807402	DESIGNED BY: T. SCROCCA		PAI
				COUNTY			SHEET NO.
				NEW CASTLE	CHECKED BY: Z. BRANDER		40

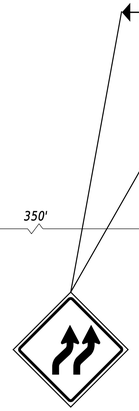
TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	525 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	426 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	82 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	424 SF

NOTES:

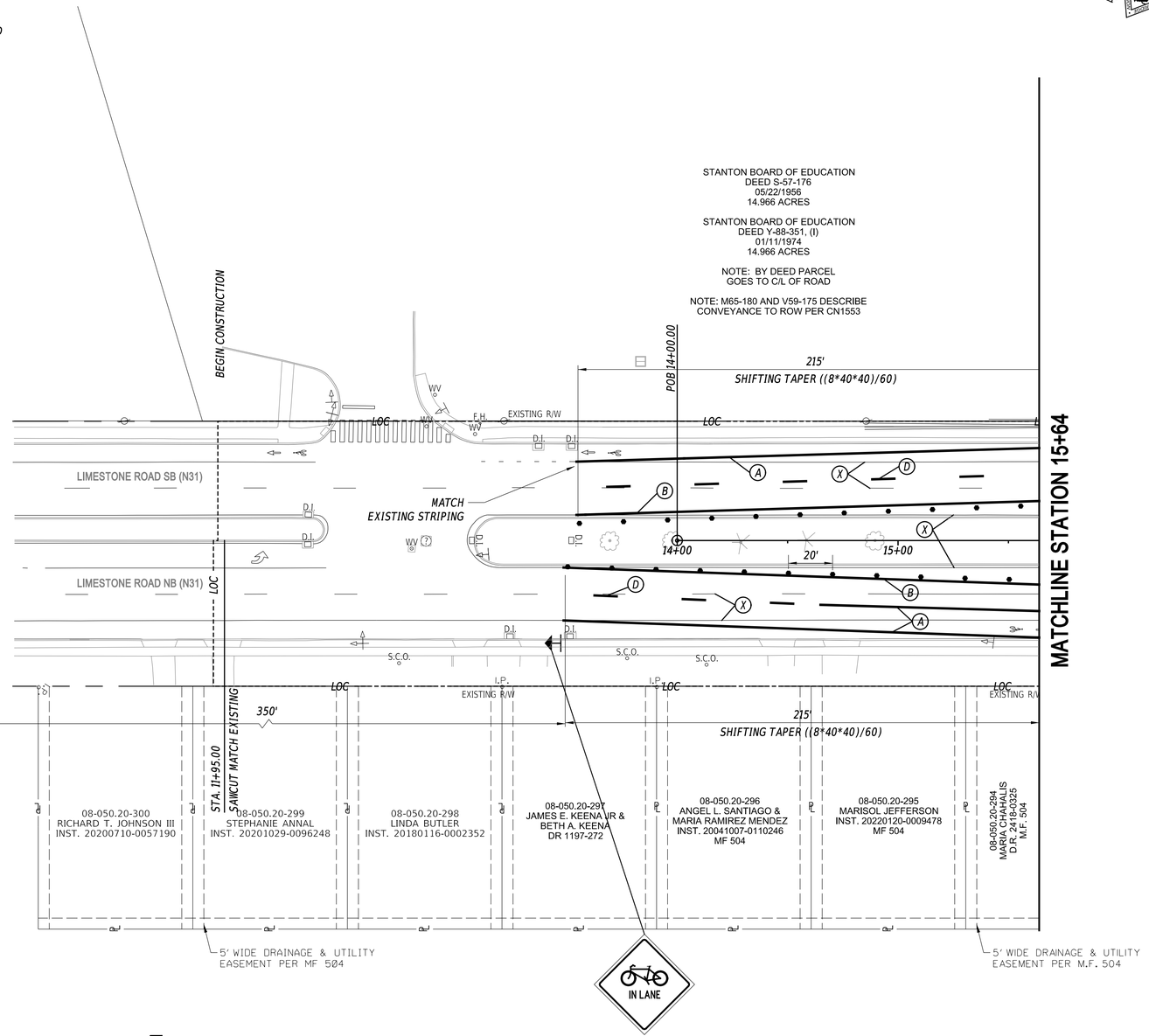
1. ALL EXISTING PAVEMENT STRIPING WITHIN AREAS OF LANE SHIFTS OR LANE CLOSURES SHALL BE REMOVED.
2. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
3. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
4. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.



WI-4-DE
48" x 48"



WI-4B (R)
48" x 48"



WI1-1-DE
48" x 48"

MATCHLINE STATION 15+64

SEQUENCE OF CONSTRUCTION:

PHASE 1

1. PLACE ALL PERMANENT WARNING SIGNS AS SHOWN ON SHEET 40.
2. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES FOR PHASE 1 AS SHOWN. FOR SHORT-TERM WORK, CONTROL TRAFFIC IN ACCORDANCE WITH TYPICAL APPLICATION 33B, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE MATRIX.
3. REMOVE THE RAISED GRASS MEDIANS ALONG SR 7 FROM APPROXIMATE STA 16+90 TO STA 30+30, AS WELL AS THE CONCRETE CENTER MEDIAN ACROSS THE BRIDGE DECK, AND MODIFY THE WESTERN BRIDGE STRUCTURE TO WIDEN THE EXISTING CARTWAY FROM 33 FEET TO 41 FEET TO MAINTAIN PEDESTRIAN TRAFFIC AND THREE TRAVEL LANES DURING PHASE 2.
4. REPLACE THE EXISTING INLETS ALONG AND WITHIN THE MEDIAN FROM APPROXIMATE STA 16+90 TO STA 30+75 TO BE FLUSH WITH THE ADJACENT TEMPORARY PAVEMENT.
5. INSTALL TEMPORARY WEARING SURFACE IN LOCATION WHERE THE MEDIAN WAS REMOVED ON THE WESTERN BRIDGE STRUCTURE.
6. SHIFT NORTHBOUND AND SOUTHBOUND SR 7 TRAVEL LANES ONTO THE EXISTING OUTSIDE SHOULDERS, MAINTAINING TWO TRAVEL LANES IN EACH DIRECTION. INSTALL SIGNS, BARRIER, TEMPORARY PAVEMENT MARKINGS AND ERADICATE EXISTING PAVEMENT MARKINGS IN ACCORDANCE WITH PHASE 1 CONSTRUCTION PHASING PLANS.
7. INSTALL THE PARTIAL DEPTH CONCRETE DECK. APPLY EPOXY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS.
8. INSTALL TEMPORARY BARRIER ALONG THE PORTION OF THE MODIFIED BRIDGE DECK AND INSTALL TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE WITH THE PHASE 2 CONSTRUCTION PHASING PLANS WITHIN THE PHASE 1 WORK AREA.
9. INSTALL TEMPORARY TRAFFIC SIGNAL FOR PHASE 2 AS SHOWN ON SHEETS 61 AND 62. SHIFT EXISTING TRAFFIC SIGNAL HEADS ALONG SPAN WIRES 1, 2, AND 3. INSTALL SPAN WIRE 12 AND TEMPORARY TRAFFIC SIGNAL HEADS TO SERVICE TRAFFIC FROM THE TEMPORARY SERVICE ROAD ALONG NORTHBOUND SR 7.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBL55
FILE NAME: SFILE45 | PLOT DRIVER: SPLTDRV55
MICROSTATION VERSION: SVERSION55 | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACE55 | USER NAME: SUSER55 | OFFICE LOCATION: SOFFICENAME55

ADDENDA / REVISIONS			

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1

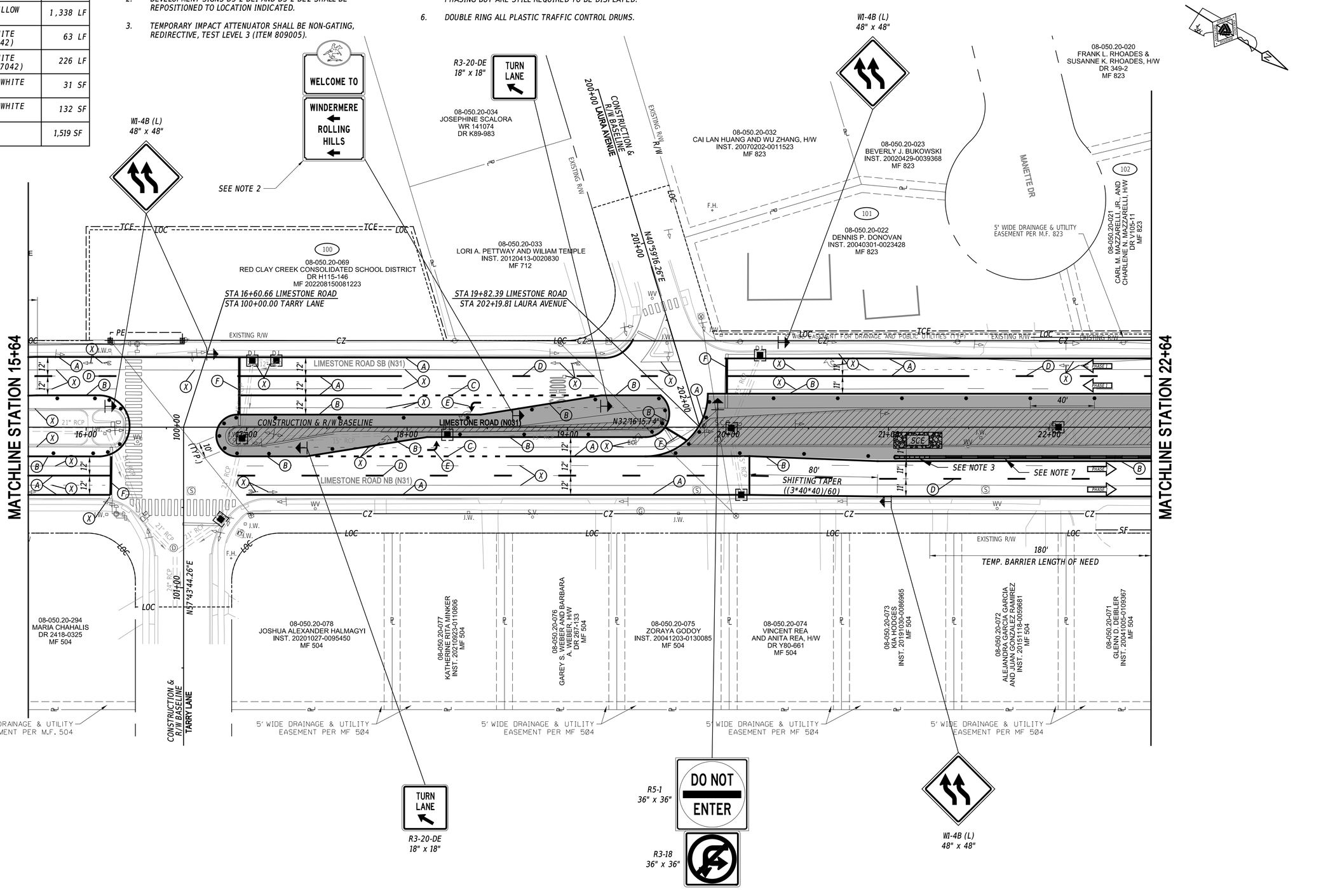
SECTION
PAI
SHEET NO.
41

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,809 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,338 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	63 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	226 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	31 SF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	132 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,519 SF

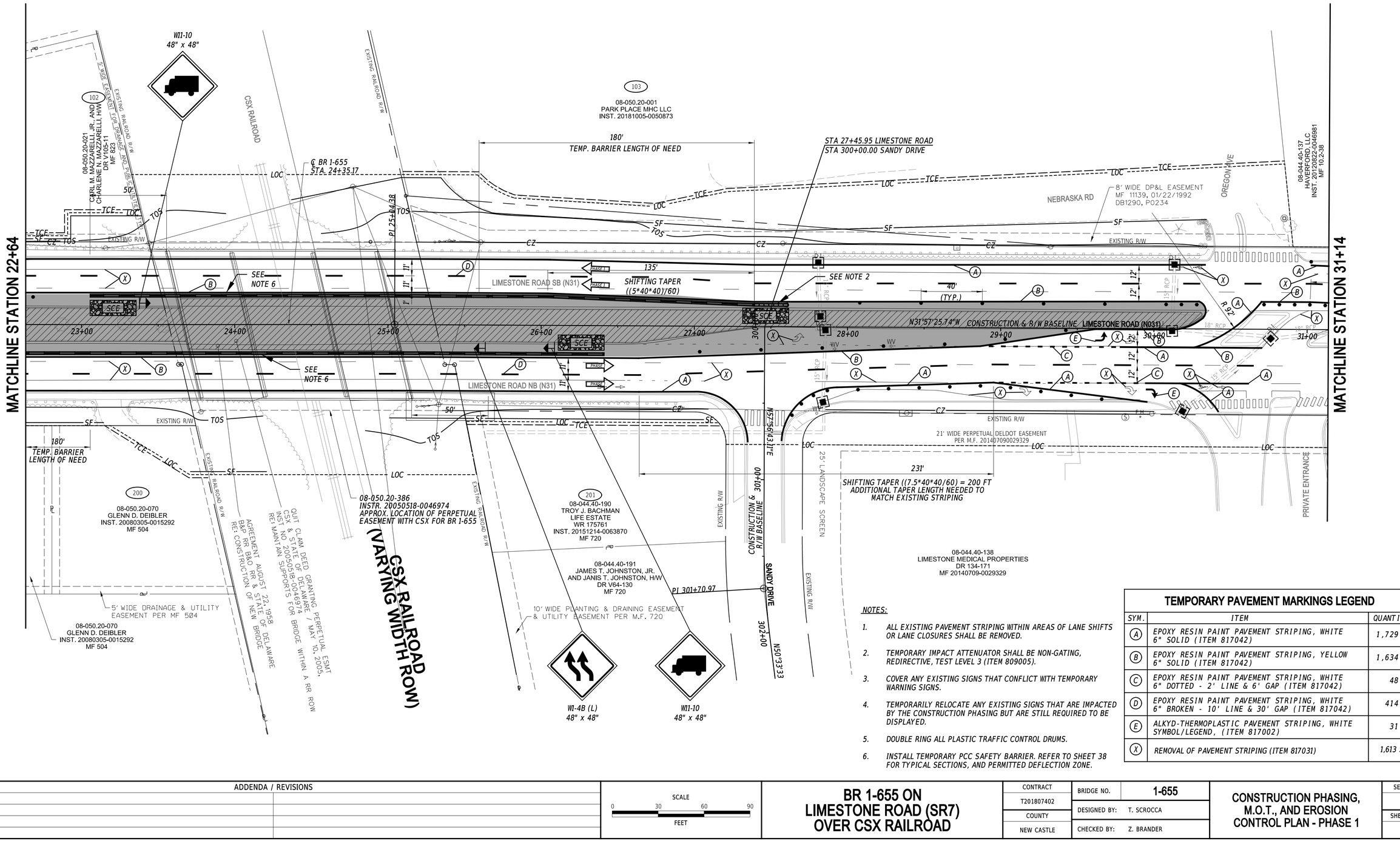
NOTES:

1. *ALL EXISTING PAVEMENT STRIPING WITHIN AREAS OF LANE SHIFTS OR LANE CLOSURES SHALL BE REMOVED.*
2. *DEVELOPMENT SIGNS D3-2-DE1 AND D3-2-DE2 SHALL BE REPOSITIONED TO LOCATION INDICATED.*
3. *TEMPORARY IMPACT ATTENUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).*
4. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
5. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
6. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*
7. *INSTALL TEMPORARY PCC SAFETY BARRIER. REFER TO SHEET 38 FOR TYPICAL SECTIONS, AND PERMITTED DEFLECTION ZONE.*



PENNONI ASSOCIATES INC. | PEN TABLE: SPENTABLES
FILE NAME: STILEAS | PLOT DRIVER: SPLTDRVS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1	SECTION PAI
				COUNTY NEW CASTLE	DESIGNED BY: T. SCROCCA		SHEET NO. 42
					CHECKED BY: Z. BRANDER		



PENNONI ASSOCIATES INC. — PEN TABLE: SPENTBL5S
FILE NAME: SFILEAS — PLOT DRIVER: SPLTDRV5S
MICROSTATION VERSION: SVERSIONS — DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES — USER NAME: SUSERS — OFFICE LOCATION: SOFFICENAMES

Pennoni

NOTES:

1. ALL EXISTING PAVEMENT STRIPING WITHIN AREAS OF LANE SHIFTS OR LANE CLOSURES SHALL BE REMOVED.
2. TEMPORARY IMPACT ATTENUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).
3. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
4. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
5. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.
6. INSTALL TEMPORARY PCC SAFETY BARRIER. REFER TO SHEET 38 FOR TYPICAL SECTIONS, AND PERMITTED DEFLECTION ZONE.

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,729 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,634 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	48 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	414 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	31 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,613 SF

ADDENDA / REVISIONS

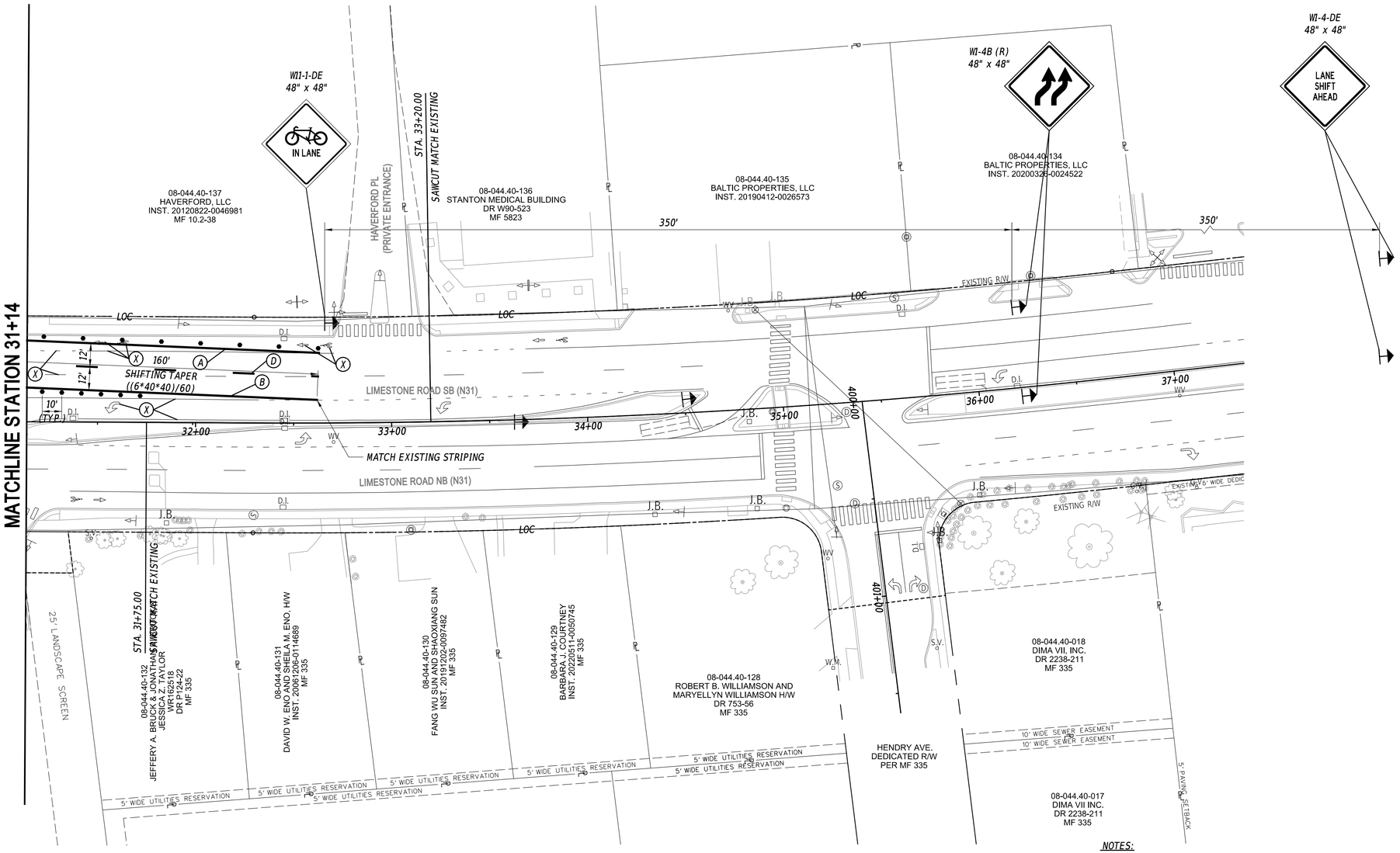
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1

SECTION: PAI
SHEET NO.: 43



NOTES:

1. *ALL EXISTING PAVEMENT STRIPING WITHIN AREAS OF LANE SHIFTS OR LANE CLOSURES SHALL BE REMOVED.*
2. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
3. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
4. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	149 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	148 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	37 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	79 SF

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655	SECTION
T201807402	DESIGNED BY:	T. SCROCCA	PAI
COUNTY	CHECKED BY:	Z. BRANDER	SHEET NO.
NEW CASTLE			44

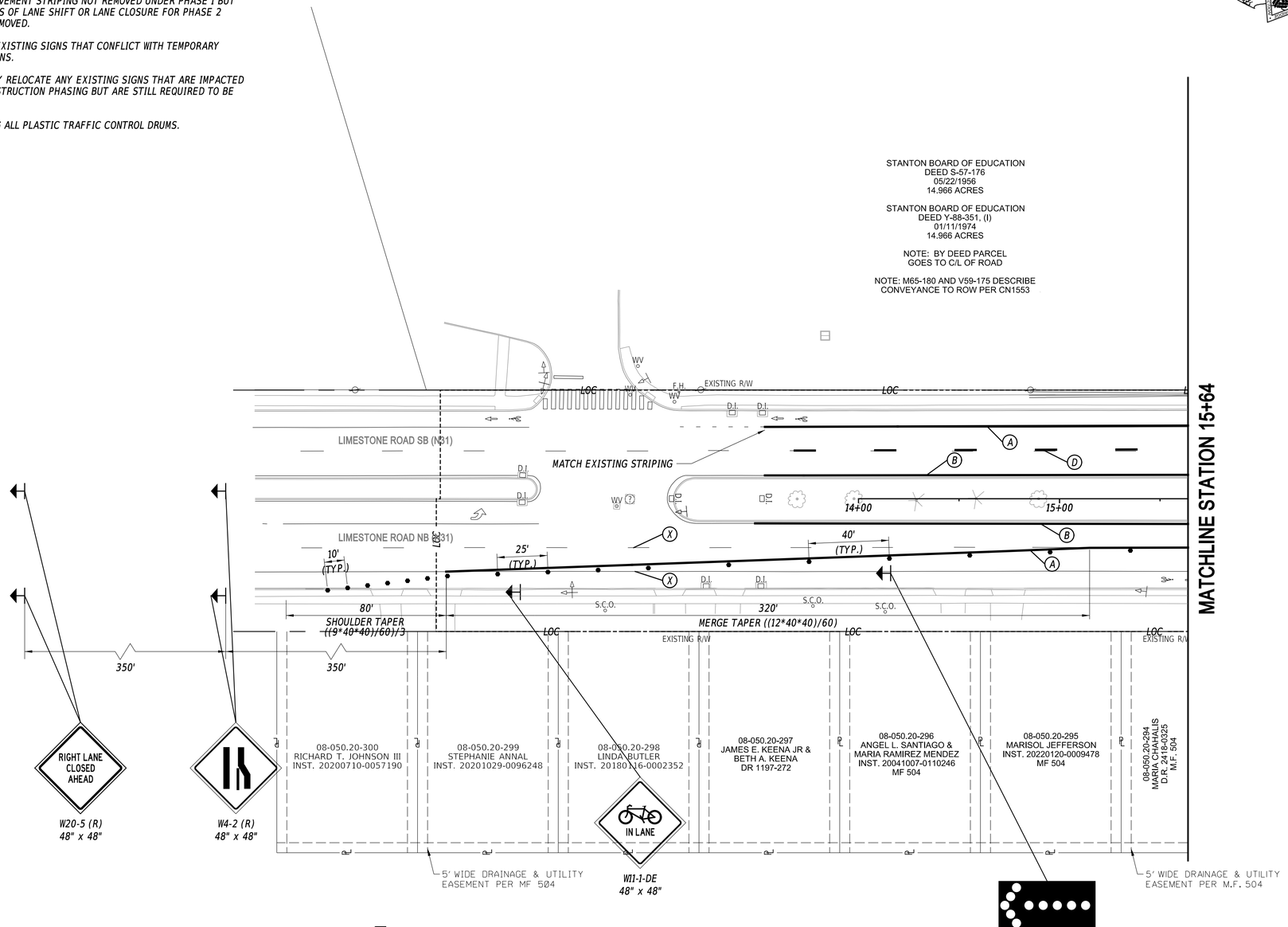
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 1

PENNONI ASSOCIATES INC.	$FILEAS	PEN TABLE:	$PENTBLS
FILE NAME:		PLOT DRIVER:	$PLTDRVRS
MICROSTATION VERSION:	$VERSIONS	DATE PLOTTED:	28-OCT-2024@ 16:36
MICROSTATION WORKSPACE:	$WORKSPACES	USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

TEMPORARY PAVEMENT MARKINGS LEGEND		
SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	579 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	456 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	53 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	410 SF

NOTES:

1. ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 1 SHALL BE REMOVED.
2. EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 1 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 2 SHALL BE REMOVED.
3. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
4. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
5. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.



SEQUENCE OF CONSTRUCTION:

PHASE 2

1. REDUCE SR 7 NORTHBOUND TO A SINGLE TRAVEL LANE AND INSTALL REMAINING PHASE 2 TEMPORARY PAVEMENT MARKINGS WITHIN THE INSIDE NORTHBOUND TRAVEL LANE AS SHOWN.
2. TRANSITION THE SR 7 NORTHBOUND TRAVEL LANE ONTO THE WESTERN BRIDGE STRUCTURE BY INSTALLING A TEMPORARY BARRIER, ERADICATING CONFLICTING PAVEMENT MARKINGS, AND INSTALLING THE REMAINING PHASE 2 PAVEMENT MARKINGS AS SHOWN.
3. SANDY DRIVE AND THE NORTHBOUND LEFT-TURN LANE AT LAURA AVENUE TO BE CLOSED DURING PHASE 2. INSTALL DETOUR SIGNING IN ACCORDANCE WITH THE VEHICULAR DETOUR PLANS ON SHEETS 57 AND 58.
4. SIDEWALK ALONG THE EASTERN BRIDGE STRUCTURE TO BE CLOSED DURING PHASE 2. INSTALL DETOUR SIGNING IN ACCORDANCE WITH THE PEDESTRIAN DETOUR PLAN ON SHEET 59.
5. RECONSTRUCT THE EASTERN BRIDGE STRUCTURE TO PROVIDE A 43'-9" to 45-FOOT CARTWAY WIDTH FOR USE IN PHASE 3. INSTALL A TEMPORARY BARRIER TO PROTECT TRAFFIC DURING PHASE 3.
6. INSTALL APPROACH GUARDRAIL, CURB, GUARDRAIL TO BARRIER CONNECTION, AND SIDEWALK IN ACCORDANCE WITH THE PLANS.
7. INSTALL THE PARTIAL DEPTH CONCRETE DECK. APPLY EPOXY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS.
8. INSTALL TEMPORARY PAVEMENT MARKINGS IN ACCORDANCE WITH PHASE 3 CONSTRUCTION PHASING PLANS WITHIN THE PHASE 2 WORK AREA.
9. INSTALL TEMPORARY TRAFFIC SIGNAL FOR PHASE 3 AS SHOWN ON SHEETS 63 AND 64. SHIFT EXISTING TRAFFIC SIGNAL HEADS ALONG SPAN WIRES 1, 2, AND 3. REMOVE SPAN WIRE 12 AND CONNECTED TEMPORARY TRAFFIC SIGNAL HEADS.

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBL$$ | PLOT DRIVER: $PLTDRV$$ | DATE PLOTTED: 28-OCT-2024@ 16:36 | USER NAME: $USER$ | OFFICE LOCATION: $OFFICENAME$
FILE NAME: $FILEA$
MICROSTATION VERSION: $VERSION$
MICROSTATION WORKSPACE: $WORKSPACE$

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

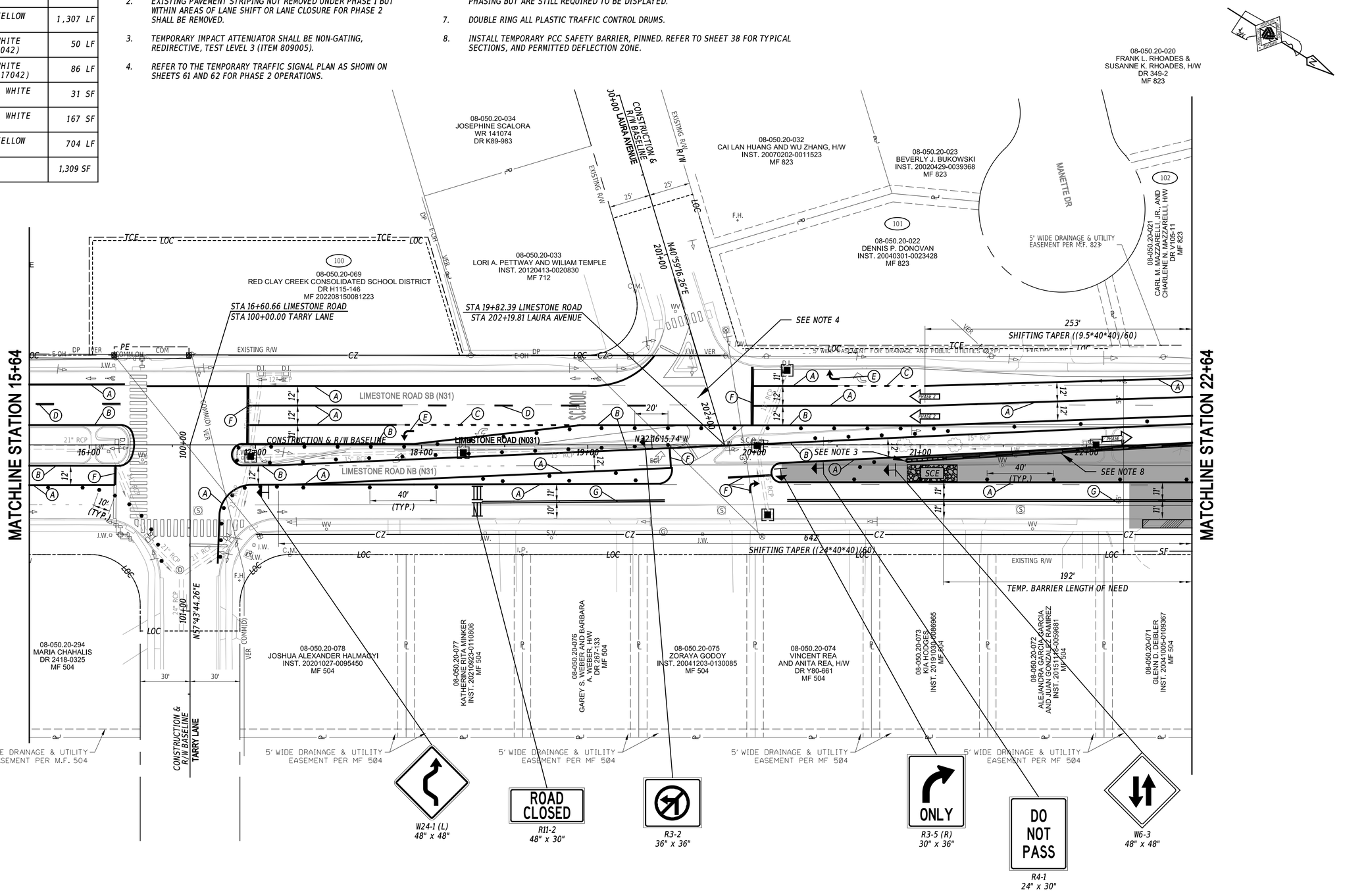
SECTION
PAI
SHEET NO.
45

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	2,003 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,307 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	50 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	86 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	31 SF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	167 SF
(G)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID DOUBLE LINE (ITEM 817042)	704 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,309 SF

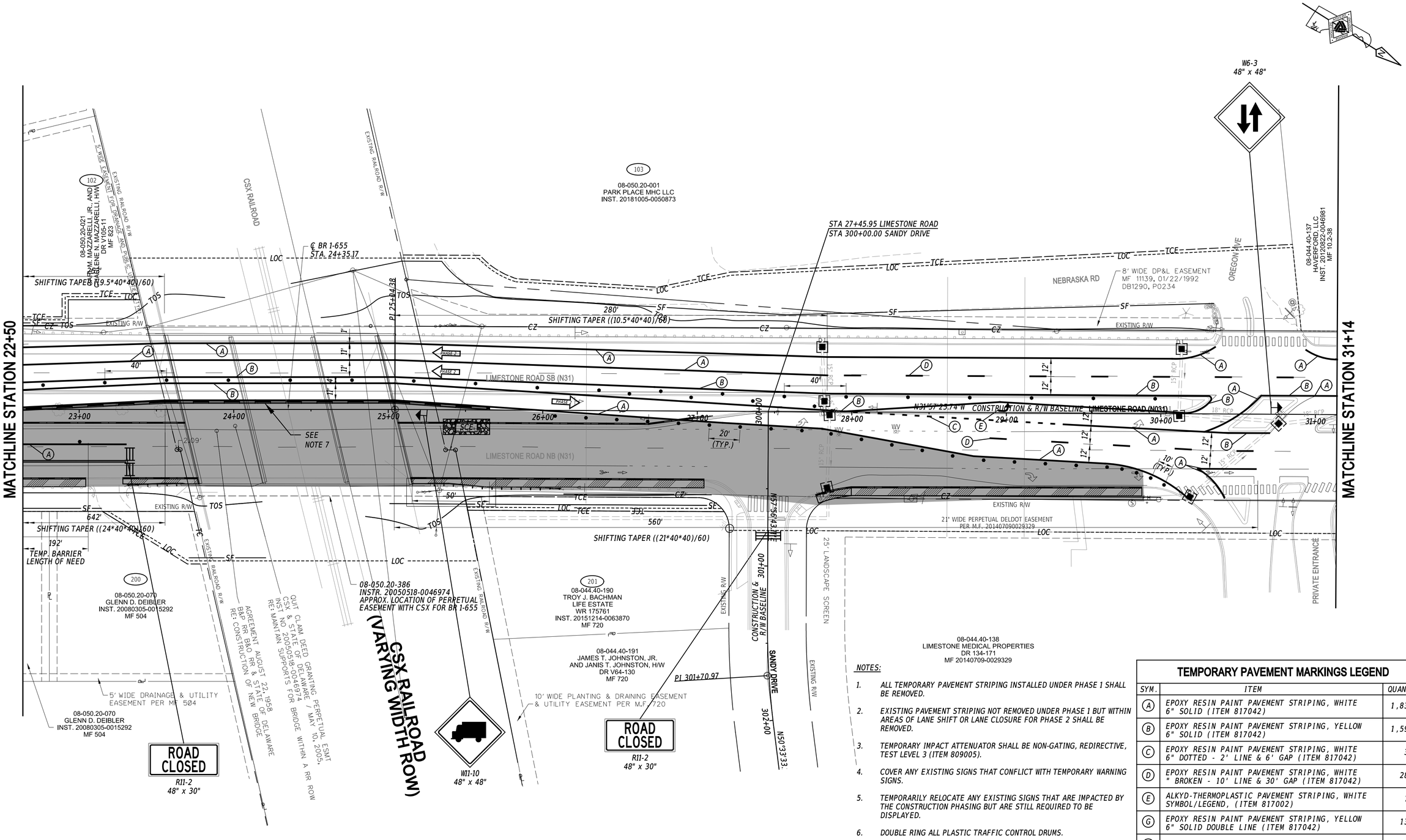
NOTES:

1. ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 1 SHALL BE REMOVED.
2. EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 1 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 2 SHALL BE REMOVED.
3. TEMPORARY IMPACT ATTENUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).
4. REFER TO THE TEMPORARY TRAFFIC SIGNAL PLAN AS SHOWN ON SHEETS 61 AND 62 FOR PHASE 2 OPERATIONS.
5. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
6. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
7. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.
8. INSTALL TEMPORARY PCC SAFETY BARRIER, PINNED. REFER TO SHEET 38 FOR TYPICAL SECTIONS, AND PERMITTED DEFLECTION ZONE.



PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBL55
FILE NAME: SFILEAS | PLOT DRIVER: SHTDRV55
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2	SECTION
	0 30 60 90 FEET		T201807402	DESIGNED BY: T. SCROCCA		PAI
			COUNTY NEW CASTLE	CHECKED BY: Z. BRANDER		SHEET NO. 46



NOTES:

1. *ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 1 SHALL BE REMOVED.*
2. *EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 1 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 2 SHALL BE REMOVED.*
3. *TEMPORARY IMPACT ATTENUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).*
4. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
5. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
6. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*
7. *INSTALL TEMPORARY PCC SAFETY BARRIER, PINNED. REFER TO SHEET 38 FOR TYPICAL SECTIONS, AND PERMITTED DEFLECTION ZONE.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,832 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,596 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	36 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE " BROKEN - 10' LINE & 30' GAP (ITEM 817042)	284 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	16 SF
(G)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID DOUBLE LINE (ITEM 817042)	132 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,307 SF

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

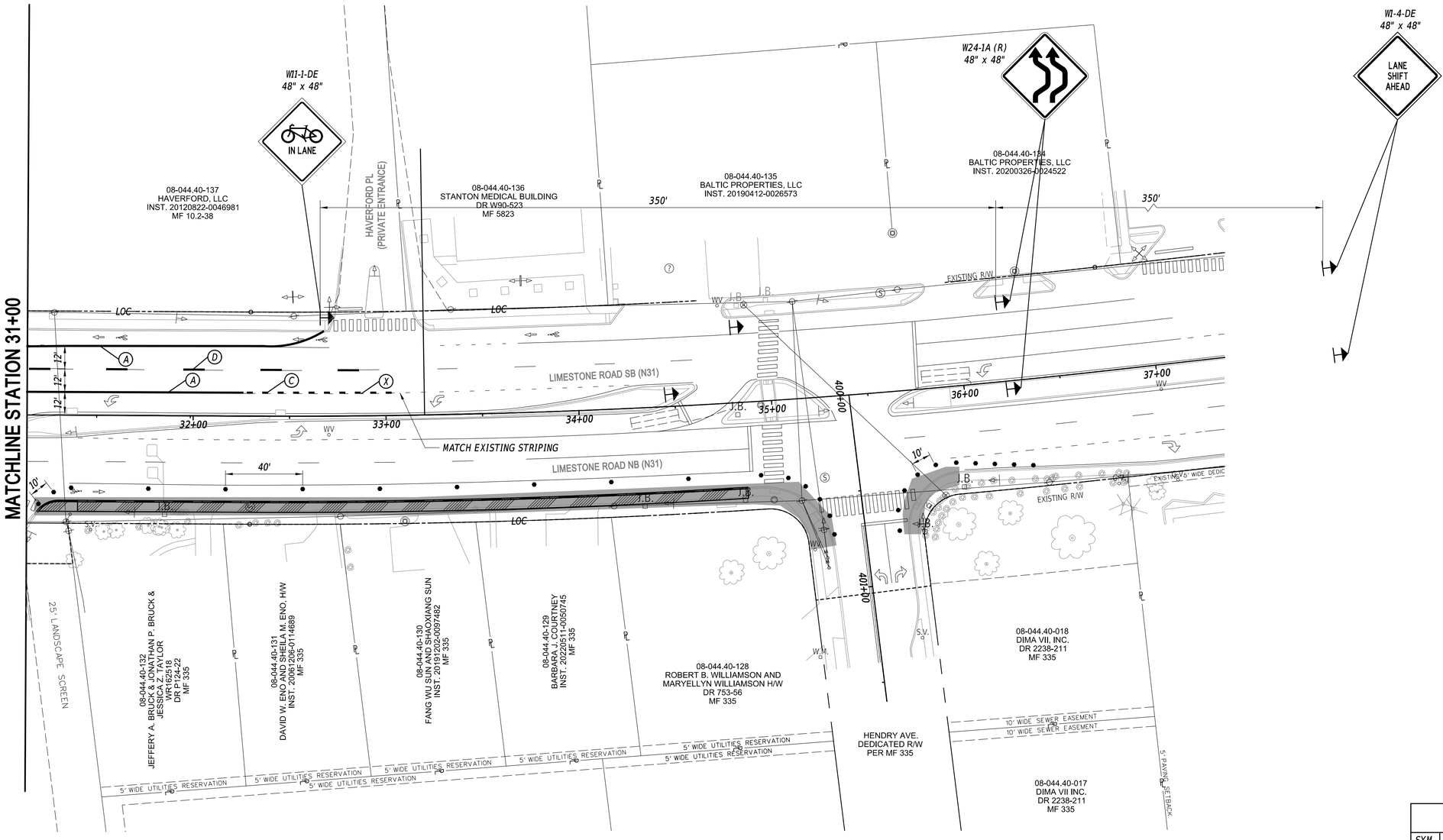
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION
PAI
SHEET NO.
47



NOTES:

1. *ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 1 SHALL BE REMOVED.*
2. *EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 1 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 2 SHALL BE REMOVED.*
3. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
4. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
5. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (817042)	266 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	21 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	49 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	113 SF

PENNONI ASSOCIATES INC:	$FILEAS
FILE NAME:	$FILEAS
MICROSTATION VERSION:	$VERSIONS
MICROSTATION WORKSPACE:	$WORKSPACES
PEN TABLE:	$PENTABLES
PLOT DRIVER:	$PLTDRVRS
DATE PLOTTED:	28-OCT-2024@ 16:36
USER NAME:	$USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

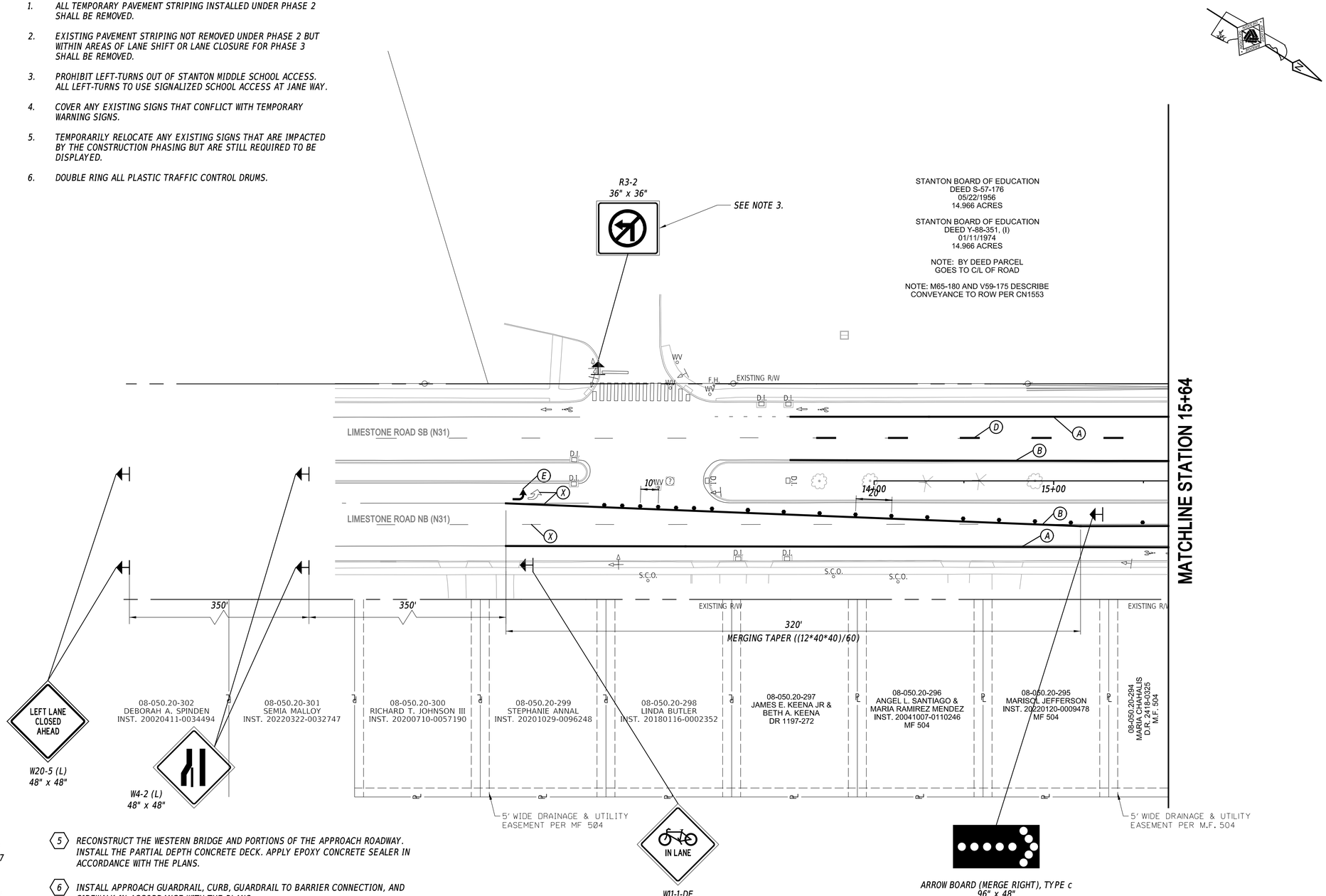
SECTION
PAI
SHEET NO.
48

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	579 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	578 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	53 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	16 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	480 SF

NOTES:

1. ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 2 SHALL BE REMOVED.
2. EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 2 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 3 SHALL BE REMOVED.
3. PROHIBIT LEFT-TURNS OUT OF STANTON MIDDLE SCHOOL ACCESS. ALL LEFT-TURNS TO USE SIGNALIZED SCHOOL ACCESS AT JANE WAY.
4. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
5. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
6. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.



SEQUENCE OF CONSTRUCTION:

PHASE 3

1. INSTALL TEMPORARY PAVEMENT MARKINGS AND ERADICATE EXISTING CONFLICING MARKINGS TO TRANSITION THE ONE NORTHBOUND LANE AND TWO SOUTHBOUND SR 7 LANES ONTO THE EASTERN BRIDGE STRUCTURE.
2. INSTALL REMAINING TEMPORARY BARRIER, TEMPORARY PAVEMENT MARKINGS, AND ERADICATE EXISTING CONFLICTING MARKINGS TO TRANSITION NORTHBOUND AND SOUTHBOUND SR 7 TRAFFIC ONTO THE EASTERN BRIDGE STRUCTURE AS SHOWN.
3. SANDY DRIVE TO REMAIN CLOSED DURING PHASE 3. MAINTAIN DETOUR SIGNING IN ACCORDANCE WITH THE VEHICULAR DETOUR PLAN ON SHEET 57
4. SIDEWALK ALONG THE WESTERN BRIDGE STRUCTURE TO BE CLOSED DURING PHASE 3. INSTALL DETOUR SIGNING IN ACCORDANCE WITH THE PEDESTRIAN DETOUR PLAN ON SHEET 60.
5. RECONSTRUCT THE WESTERN BRIDGE AND PORTIONS OF THE APPROACH ROADWAY. INSTALL THE PARTIAL DEPTH CONCRETE DECK. APPLY EPOXY CONCRETE SEALER IN ACCORDANCE WITH THE PLANS.
6. INSTALL APPROACH GUARDRAIL, CURB, GUARDRAIL TO BARRIER CONNECTION, AND SIDEWALK IN ACCORDANCE WITH THE PLANS.
7. UTILIZE TA-3A TO CLOSE THE SOUTHBOUND SHOULDER AT HENDRY AVENUE TO RECONSTRUCT THE EXISTING SIDEWALK, CURB, AND CURB RAMPS FROM APPROXIMATE STATION 34+75 TO 36+00.
8. UTILIZE TA-21 AND TA-33 TO CLOSE THE LEFTMOST NORTHBOUND AND SOUTHBOUND THROUGH LANES AT HENDRY AVENUE TO RECONSTRUCT THE EXISTING SIDEWALK, CURB, AND CURB RAMPS IN THE MEDIAN AT STATION 35+00, IN ACCORDANCE WITH THE ALLOWABLE LANE CLOSURE HOURS.

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION
PAI
SHEET NO.
49

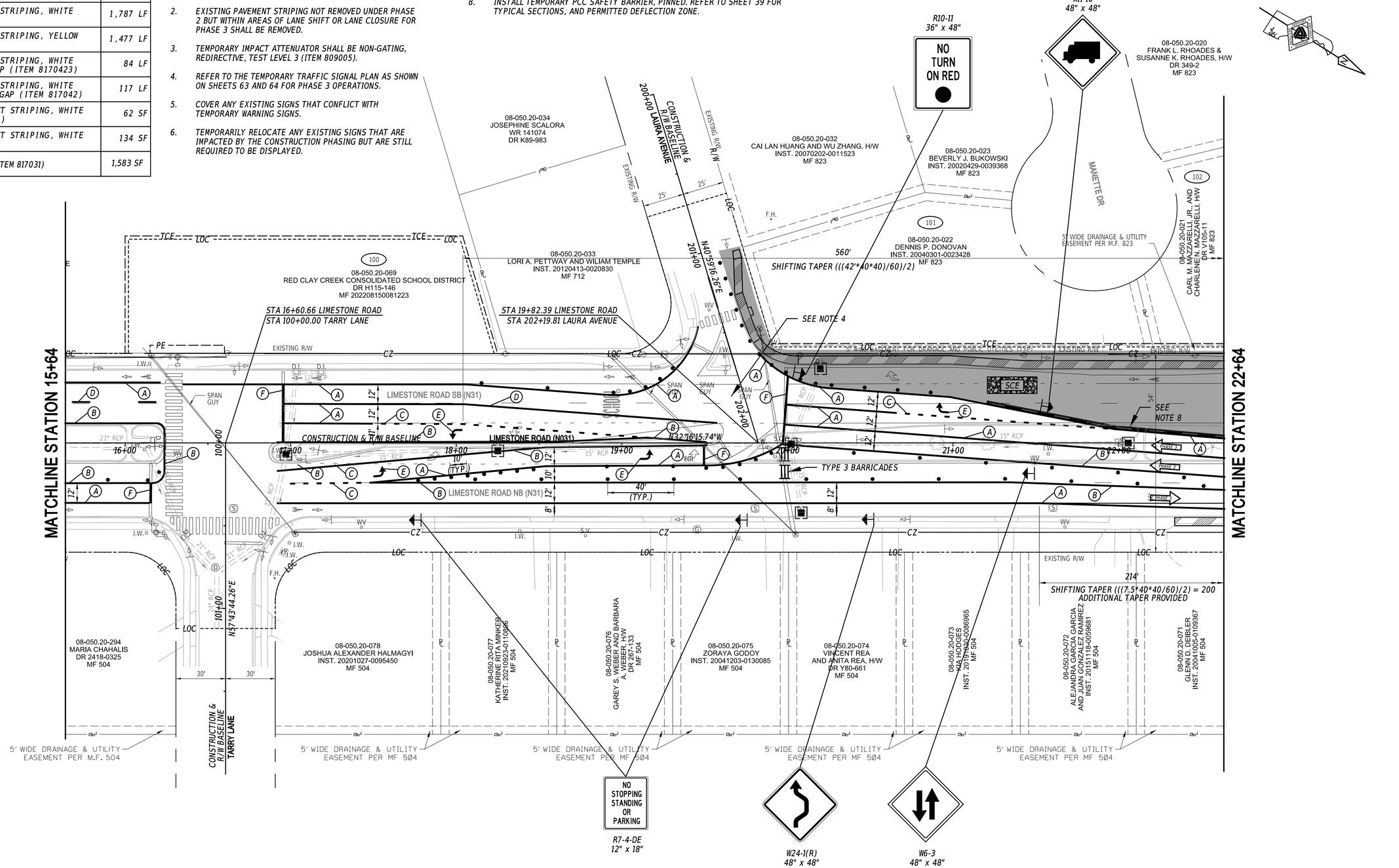
PLOTTED

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,787 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,477 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 8170423)	84 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	117 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	62 SF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	134 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,583 SF

NOTES:

1. *ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 2 SHALL BE REMOVED.*
2. *EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 2 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 3 SHALL BE REMOVED.*
3. *TEMPORARY IMPACT ATTENUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).*
4. *REFER TO THE TEMPORARY TRAFFIC SIGNAL PLAN AS SHOWN ON SHEETS 63 AND 64 FOR PHASE 3 OPERATIONS.*
5. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
6. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
7. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*
8. *INSTALL TEMPORARY PCC SAFETY BARRIER, PINNED. REFER TO SHEET 39 FOR TYPICAL SECTIONS, AND PERMITTED DEFLECTION ZONE.*



PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBSS
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS

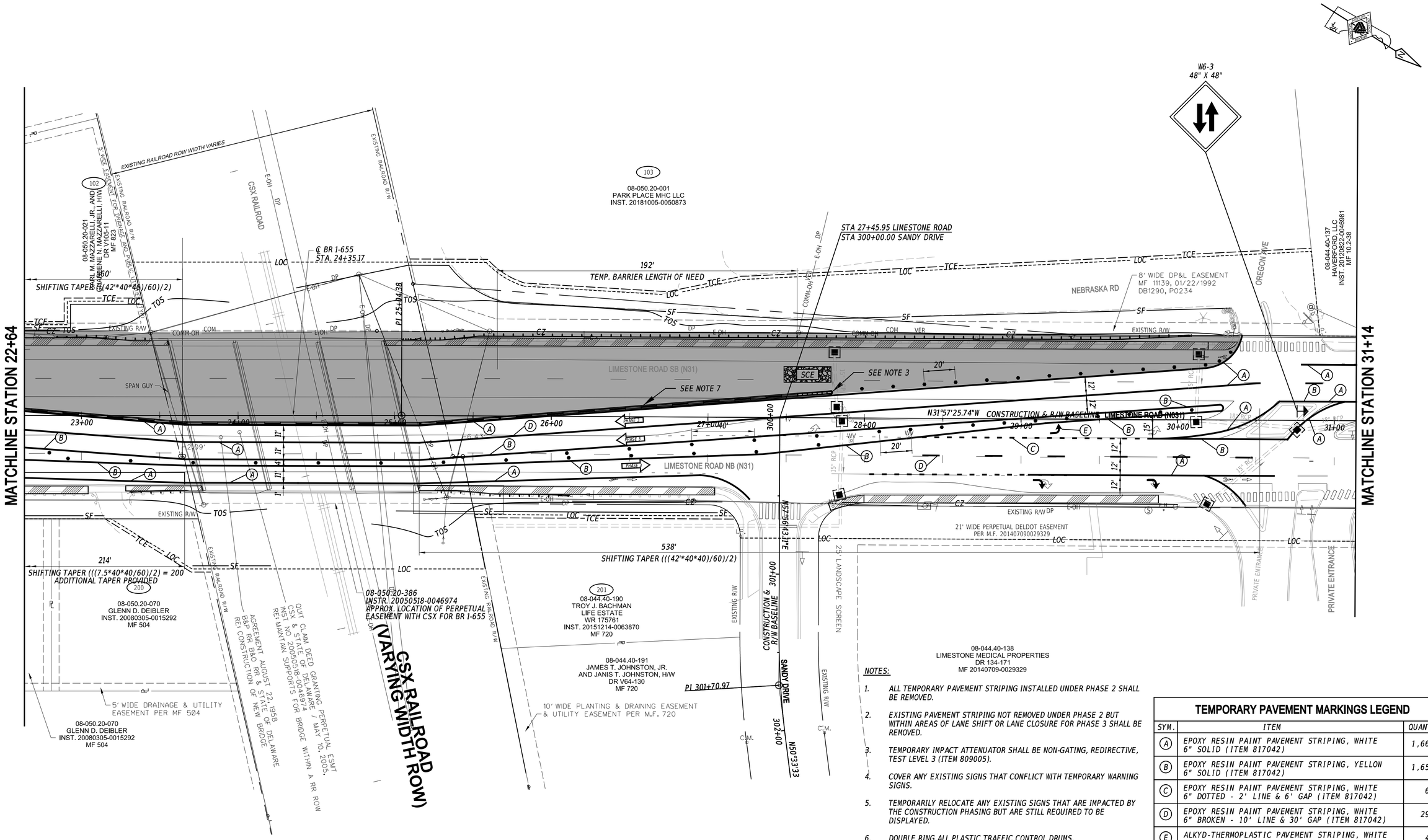
SCALE 0 30 60 90 FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION
PAI
SHEET NO.
50



NOTES:

1. ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 2 SHALL BE REMOVED.
2. EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 2 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 3 SHALL BE REMOVED.
3. TEMPORARY IMPACT ATTENUATOR SHALL BE NON-GATING, REDIRECTIVE, TEST LEVEL 3 (ITEM 809005).
4. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
5. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
6. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.
7. INSTALL TEMPORARY PCC SAFETY BARRIER, PINNED. REFER TO SHEET 39 FOR TYPICAL SECTIONS, AND PERMITTED DEFLECTION ZONE.

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,660 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,650 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	64 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	296 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	47 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,310 SF

PENNONI ASSOCIATES INC. | PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

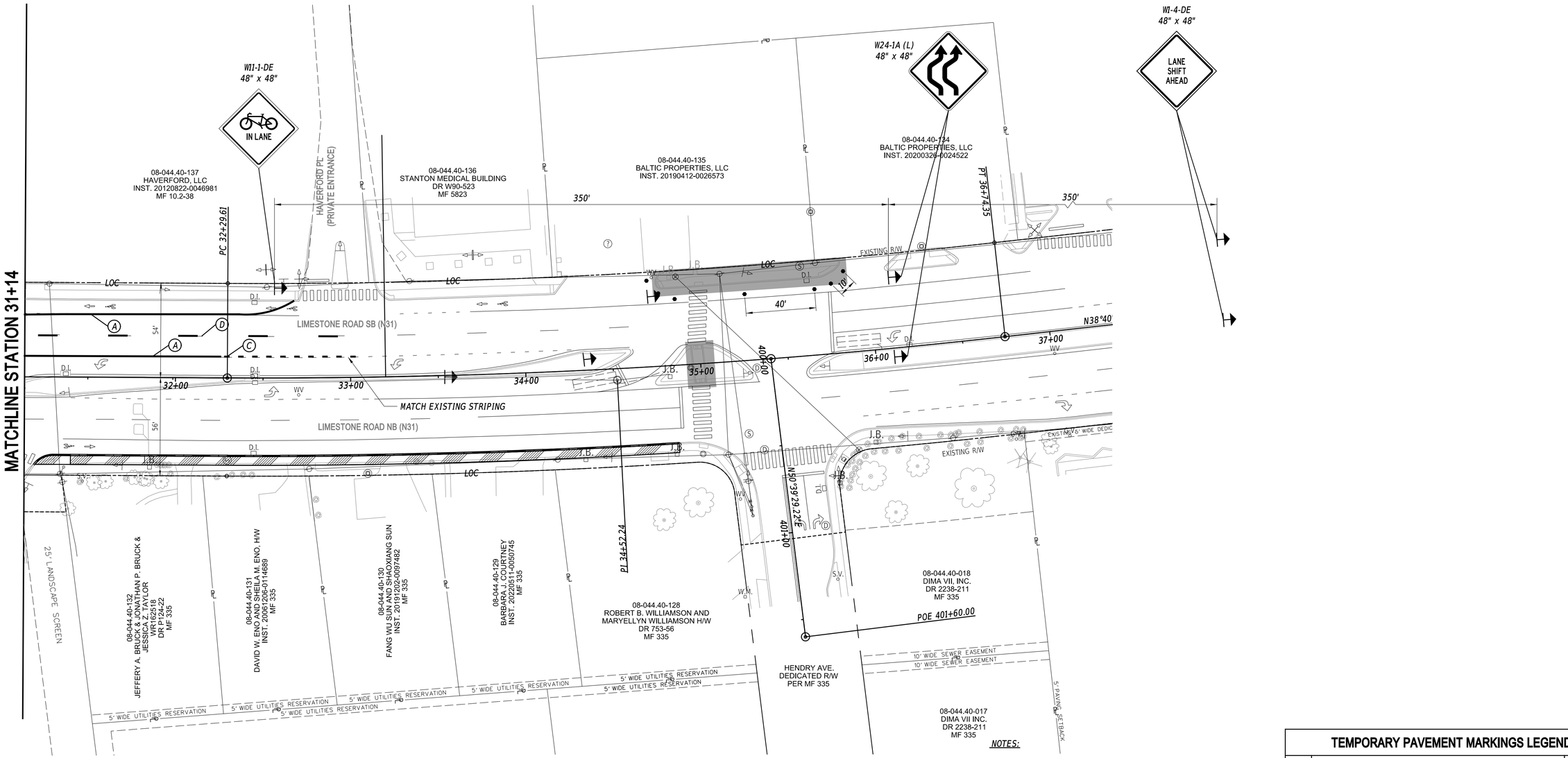
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION: PAI
SHEET NO.: 51



NOTES:

1. *ALL TEMPORARY PAVEMENT STRIPING SHOWN ON THIS SHEET AND INSTALLED UNDER PHASE 2 SHALL REMAIN FOR PHASE 3.*
2. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
3. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
4. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	266 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	21 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	49 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	113 SF

PENNONI ASSOCIATES INC. | $FILEAS
FILE NAME: | $PLTDRVRS
MICROSTATION VERSION: | $VERSIONS
MICROSTATION WORKSPACE: | $WORKSPACES
PEN TABLE: | $PENTBLES
PLOT DRIVER: | $PLTDRVRS
DATE PLOTTED: | 28-OCT-2024@ 16:36
USER NAME: | $USERN$ OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

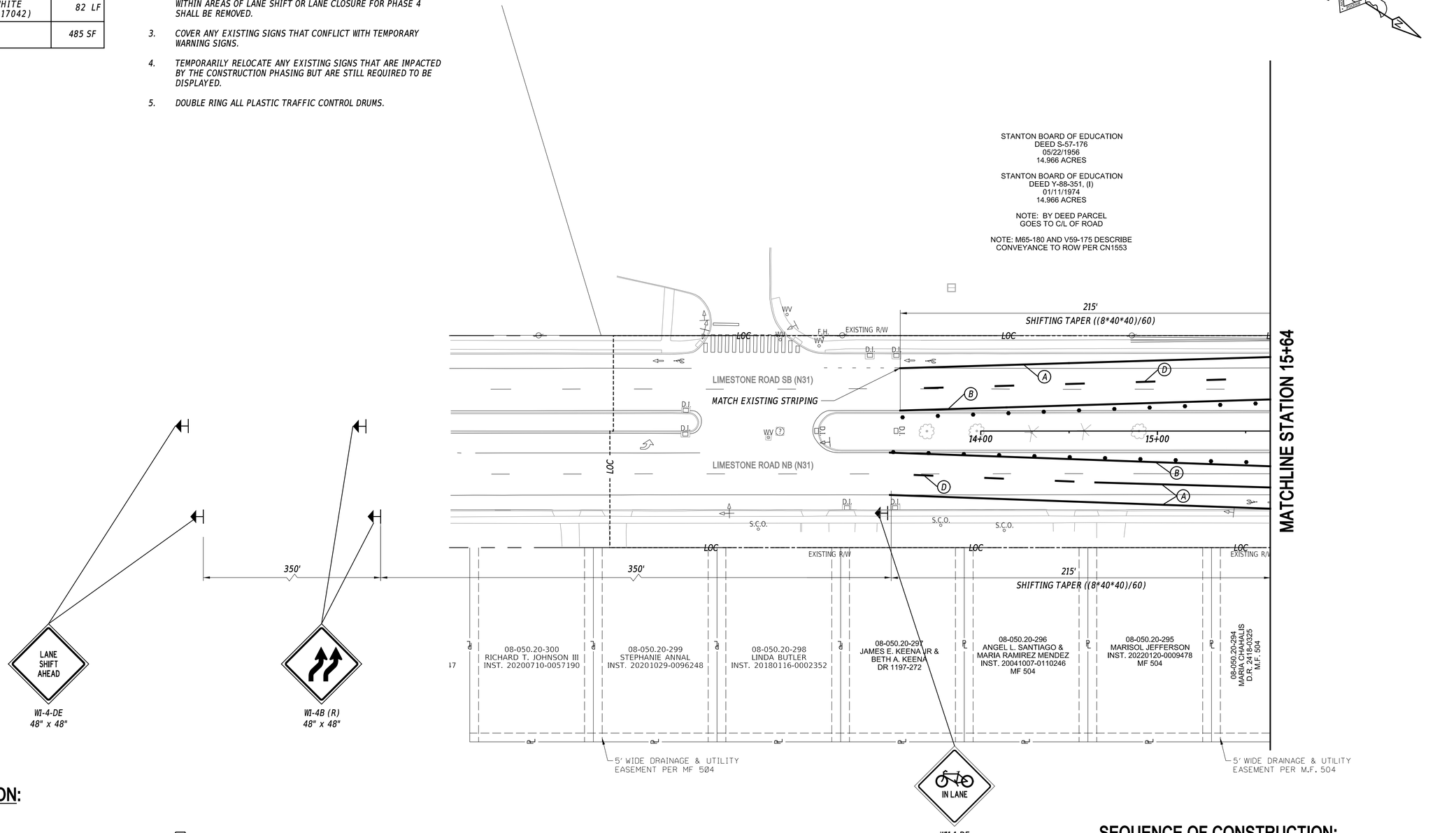
SECTION
PAI
SHEET NO.
52

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	525 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	426 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	82 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	485 SF

NOTES:

1. ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 3 SHALL BE REMOVED.
2. EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 3 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 4 SHALL BE REMOVED.
3. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
4. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
5. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.



SEQUENCE OF CONSTRUCTION:

PHASE 4

1. SHIFT NORTHBOUND AND SOUTHBOUND SR 7 TRAVEL LANES ONTO THE OUTSIDE SHOULDERS, MAINTAINING TWO TRAVEL LANES IN EACH DIRECTION.
2. MODIFY THE DRAINAGE STRUCTURES LOCATED WITHIN THE MEDIAN INSTALLED DURING PHASE 1. RESTORE MEDIAN CURB, TOPSOIL AND INSTALL APPROACH GUARDRAIL, MEDIAN BARRIER, AND GUARDRAIL TO BARRIER CONNECTION IN ACCORDANCE WITH THE PLANS.
3. REMOVE TEMPORARY SIGNAL CONDUIT SWEEPS BETWEEN CONDUITS 17 AND 20 AND BETWEEN CONDUITS 17 AND 18 AS SHOWN ON THE SIGNAL PLAN FOR SR 7 @ TARRY LANE/LAURA DRIVE. INSTALL JUNCTION WELL TYPE 1 AT APPROX. STA 19+75.
4. REMOVE EROSION AND SEDIMENT CONTROL DEVICES AFTER FINAL VEGETATION STABILIZATION OF ALL DISTURBED AREAS.
5. MILL, OVERLAY, AND INSTALL FINAL PAVEMENT MARKINGS AND SIGNING IN ACCORDANCE WITH THE SIGNING AND STRIPING PLANS.
6. REMOVE ALL MAINTENANCE OF TRAFFIC DEVICES PRIOR TO REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.

SEQUENCE OF CONSTRUCTION:

PHASE 5

1. UTILIZING TYPICAL APPLICATIONS 3A, 21A, 23 AND/OR AND 33, THE CONTRACTOR AND TRAFFIC CONTRACTOR SHALL INSTALL THE PERMANENT TRAFFIC SIGNAL INFRASTRUCTURE FOR THE TARRY LANE / LAURA AVENUE AND HENDRY AVENUE SIGNALS, AS SHOWN ON SHEETS 65 THROUGH 71, DURING ALLOWABLE LANE CLOSURE HOURS.

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION
PAI
SHEET NO.
53

PENNONI ASSOCIATES INC. | PEN TABLE: SPENTBL55
FILE NAME: SFILEAS | PLOT DRIVER: SPLTDRV55
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

Pennoni

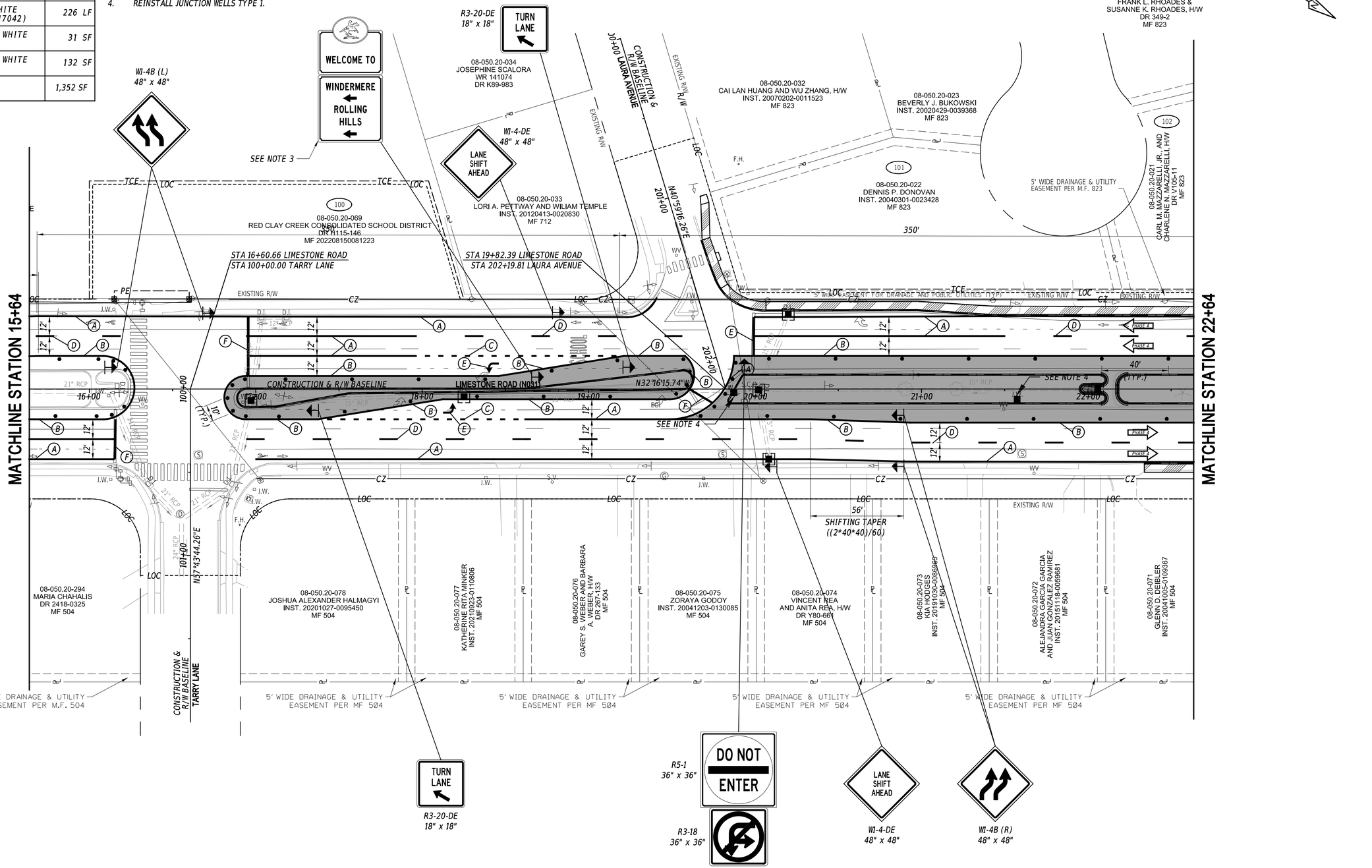
T201807402_SP1_PHASE4.DGN

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,850 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,338 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	63 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	226 LF
(E)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	31 SF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 817002)	132 SF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,352 SF

NOTES:

1. ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 3 SHALL BE REMOVED.
2. EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 3 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 4 SHALL BE REMOVED.
3. DEVELOPMENT SIGNS D3-2-DE1 AND D3-2-DE2 SHALL BE REPOSITIONED TO LOCATION INDICATED.
4. REINSTALL JUNCTION WELLS TYPE 1.
5. COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.
6. TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.
7. DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.



PENNONI ASSOCIATES INC. | FILE TABLE: SPENTBLS
FILE NAME: $FILEAS | PLOT DRIVER: $PLTDRVXS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

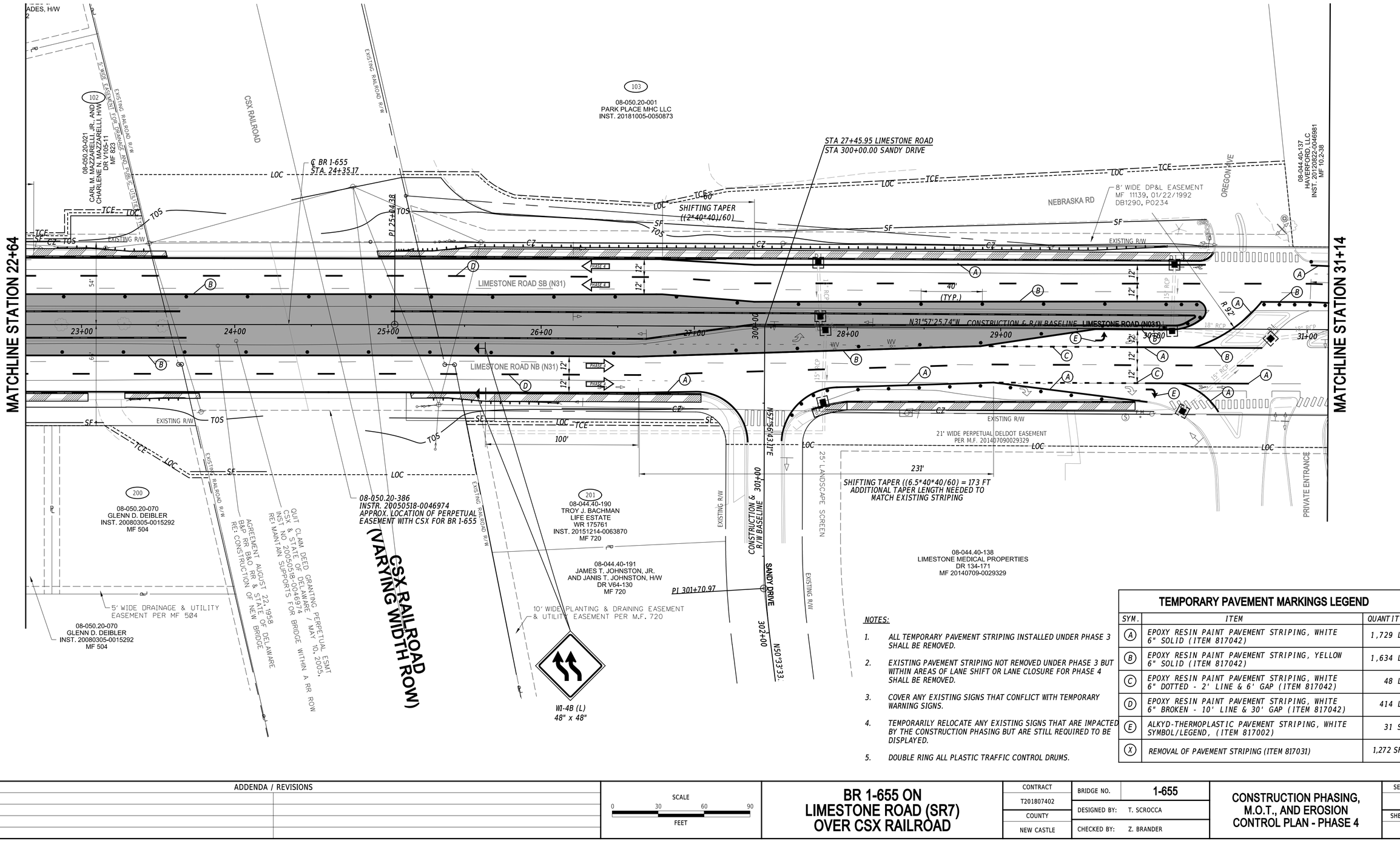
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION
PAI
SHEET NO.
54



TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	1,729 LF
B	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	1,634 LF
C	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" DOTTED - 2' LINE & 6' GAP (ITEM 817042)	48 LF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	414 LF
E	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	31 SF
X	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	1,272 SF

NOTES:

1. *ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 3 SHALL BE REMOVED.*
2. *EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 3 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 4 SHALL BE REMOVED.*
3. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
4. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
5. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*

PENNONI ASSOCIATES INC.	SFILEAS
FILE NAME:	PLOT DRIVER: SPLTDRVS
MICROSTATION VERSION:	SVERSIONS
MICROSTATION WORKSPACE:	SWORKSPACES
PEN TABLE:	SPENTBLAS
DATE PLOTTED:	28-OCT-2024@ 16:36
USER NAME:	SUSERS
OFFICE LOCATION:	SOFFICENAMES

ADDENDA / REVISIONS

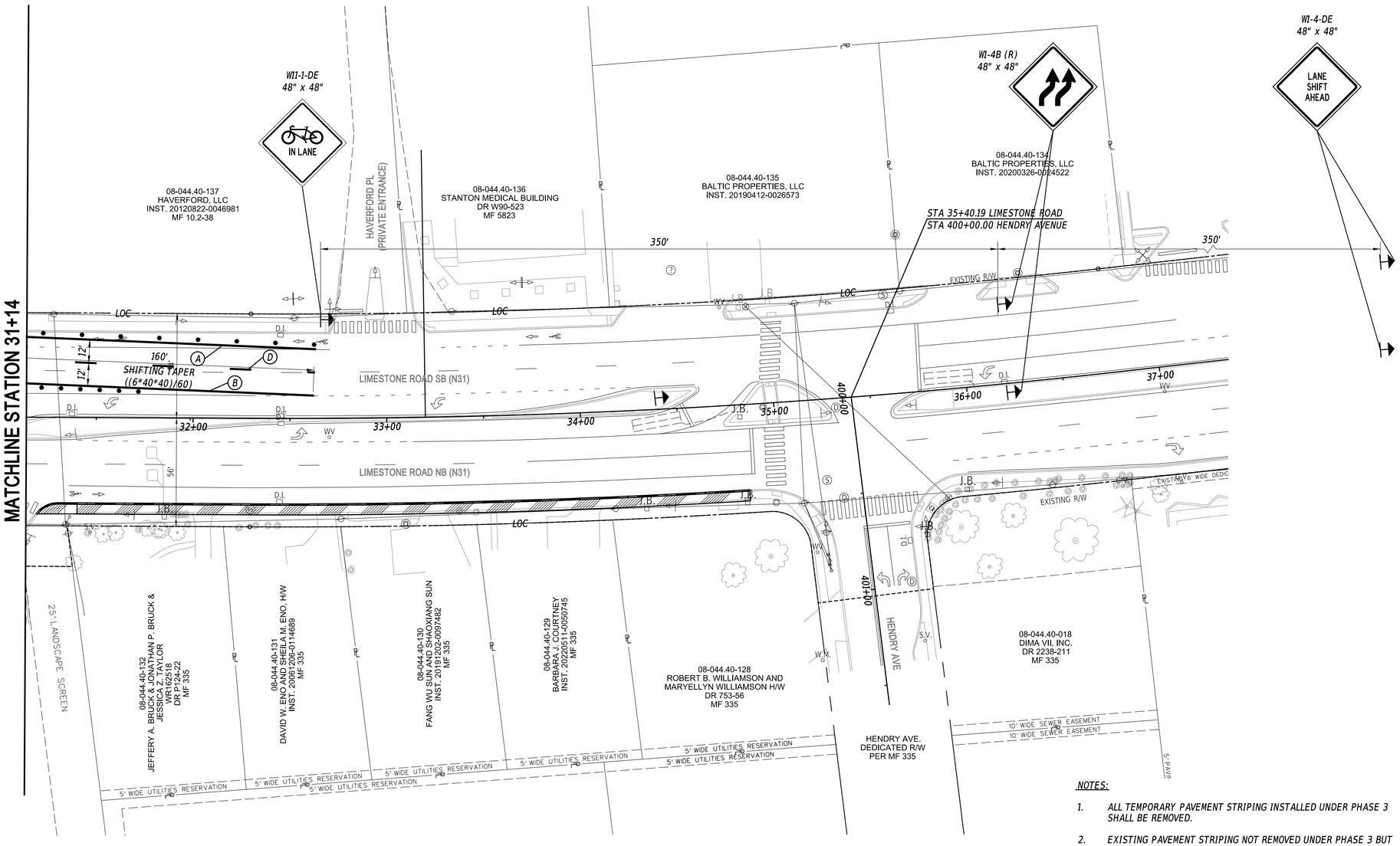
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	T201807402	BRIDGE NO.	1-655
COUNTY	NEW CASTLE	DESIGNED BY:	T. SCROCCA
		CHECKED BY:	Z. BRANDER

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

SECTION
PAI
SHEET NO.
55



NOTES:

1. *ALL TEMPORARY PAVEMENT STRIPING INSTALLED UNDER PHASE 3 SHALL BE REMOVED.*
2. *EXISTING PAVEMENT STRIPING NOT REMOVED UNDER PHASE 3 BUT WITHIN AREAS OF LANE SHIFT OR LANE CLOSURE FOR PHASE 4 SHALL BE REMOVED.*
3. *COVER ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY WARNING SIGNS.*
4. *TEMPORARILY RELOCATE ANY EXISTING SIGNS THAT ARE IMPACTED BY THE CONSTRUCTION PHASING BUT ARE STILL REQUIRED TO BE DISPLAYED.*
5. *DOUBLE RING ALL PLASTIC TRAFFIC CONTROL DRUMS.*

TEMPORARY PAVEMENT MARKINGS LEGEND

SYM.	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM 817042)	149 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM 817042)	148 LF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" BROKEN - 10' LINE & 30' GAP (ITEM 817042)	37 LF
(X)	REMOVAL OF PAVEMENT STRIPING (ITEM 817031)	113 SF

PENNONI ASSOCIATES INC.	PEN TABLE: $PENTBLSS
FILE NAME: $FILEAS	PLOT DRIVER: $PLTDRVSS
MICROSTATION VERSION: $VERSIONS	DATE PLOTTED: 28-OCT-2024@ 16:36
MICROSTATION WORKSPACE: $WORKSPACES	USER NAME: $USERS OFFICE LOCATION: $OFFICENAMES

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

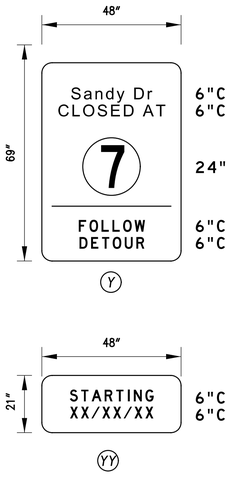
CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	T. SCROCCA
COUNTY	CHECKED BY:	Z. BRANDER
NEW CASTLE		

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

SECTION
PAI
SHEET NO.
56

PORTABLE CHANGEABLE MESSAGE SIGNS

SPECIAL SIGNS



1. DISPLAY (Y) SIGNS, ALONG WITH THE (YY) PLAQUE, FOR 10 DAYS PRIOR TO THE IMPLEMENTATION OF THE DETOUR. (YY) PLAQUE TO COMPLETELY COVER "FOLLOW DETOUR" LEGEND ON (Y) SIGNS. UPON IMPLEMENTATION OF THE DETOUR, REMOVE (YY) PLAQUE FROM (Y) SIGNS AND RELOCATE (Y) SIGNS TO A LOCATION OUTSIDE OF THE CLOSURE AREA.
2. ALL SIGNS SHALL HAVE A BLACK LEGEND ON A RETROREFLECTIVE, PRISMATIC, FLUORESCENT ORANGE BACKGROUND. DELAWARE ROUTE SYMBOL SHALL HAVE A BLACK LEGEND ON A WHITE BACKGROUND.

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

12/20/2023
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

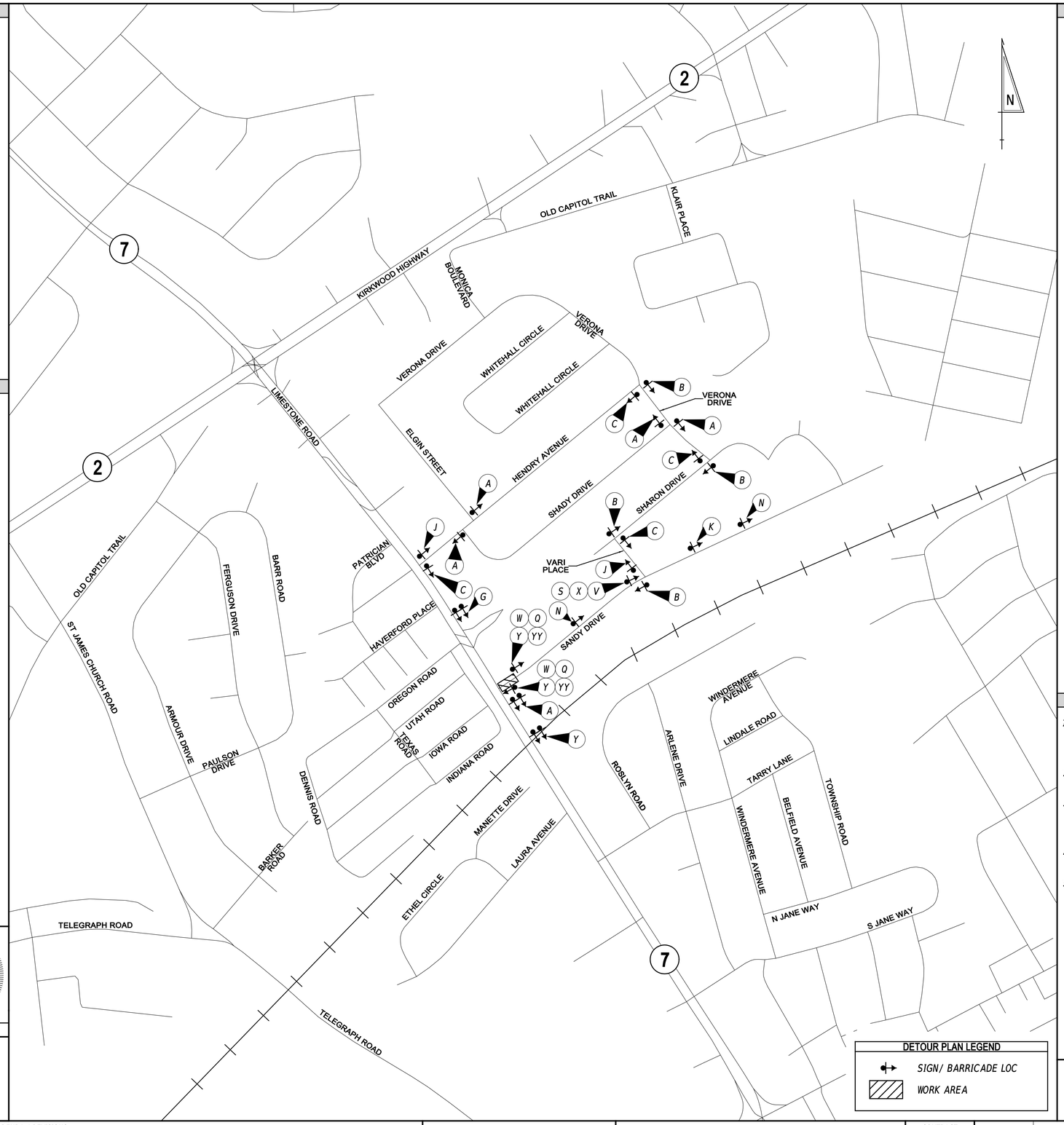
TERESA M. LORD — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER

SEAL

12/20/2023
DATE

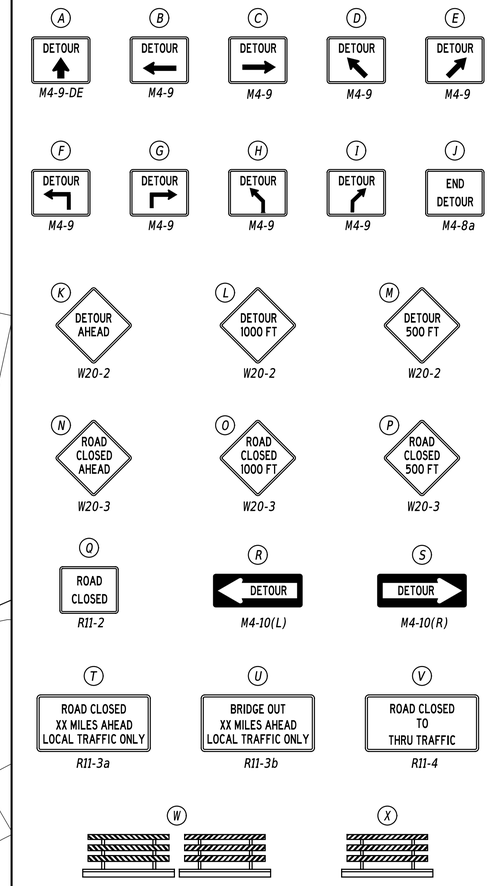
QA/QC REVIEWER

I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



DETOUR PLAN LEGEND
- SIGN/ BARRICADE LOC
- WORK AREA

LEGEND



GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
2. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
3. "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
4. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.
5. ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE THE MINIMUM ALLOWABLE SIZE PER DE MUTCD TABLE 6F-1, EXCEPT FOR SIGNS PLACED ALONG LIMESTONE ROAD (SR7).

CONCURRENCE FOR IMPLEMENTATION

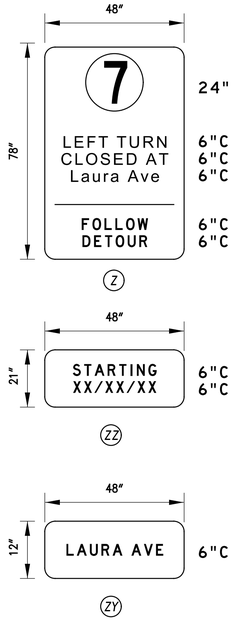
Gerald A Maggiotto Jr.
TRAFFIC SAFETY

12/27/23
DATE

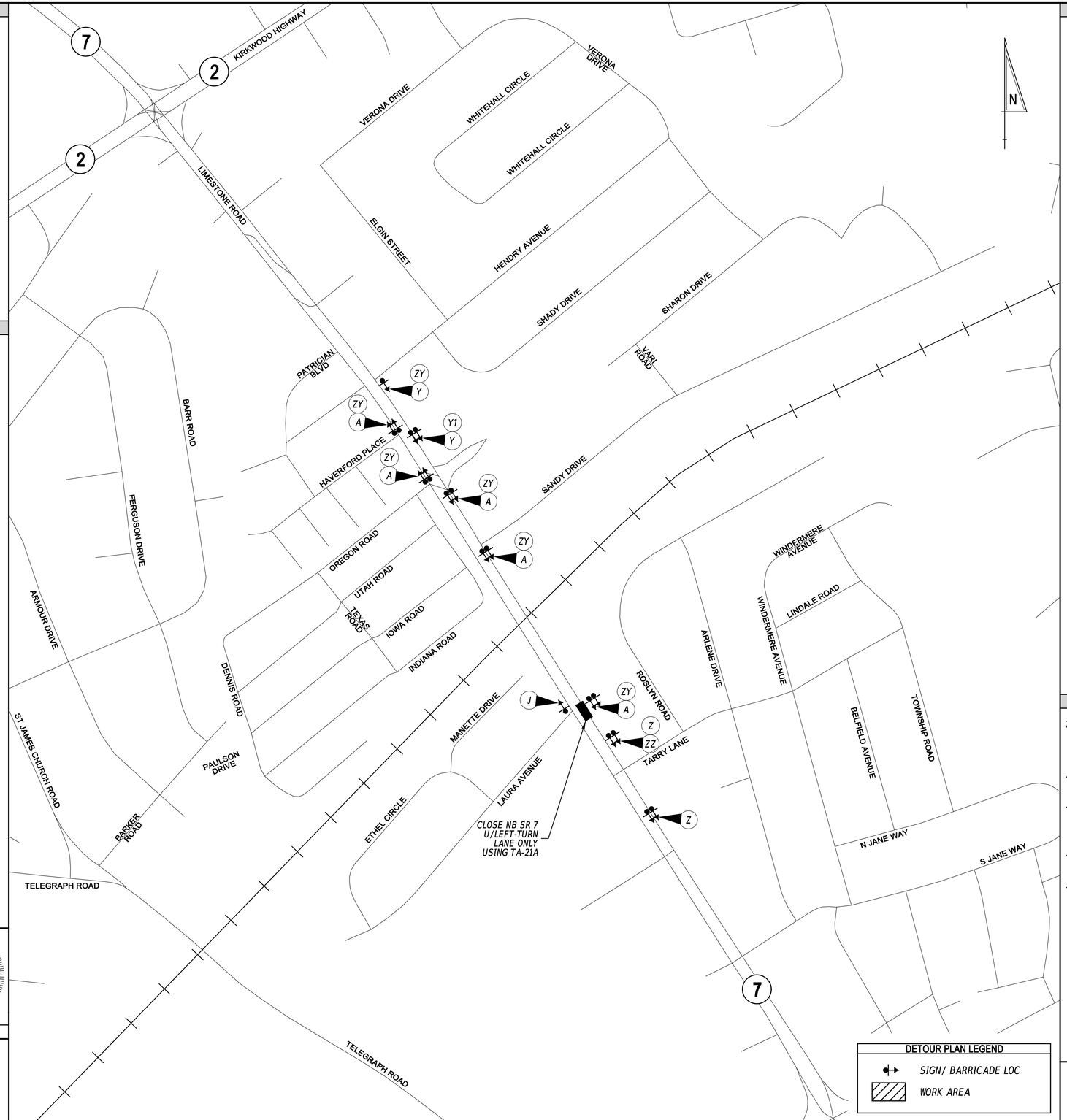
ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	PERMIT NO.	N/A	DETOUR PLAN - VEHICULAR SANDY DRIVE @ SR7	SECTION
				T201807402	DESIGNED BY: T. LORD			PAI
				COUNTY	CHECKED BY: P. WOOD			SHEET NO.
				NEW CASTLE				57

PORTABLE CHANGEABLE MESSAGE SIGNS

SPECIAL SIGNS



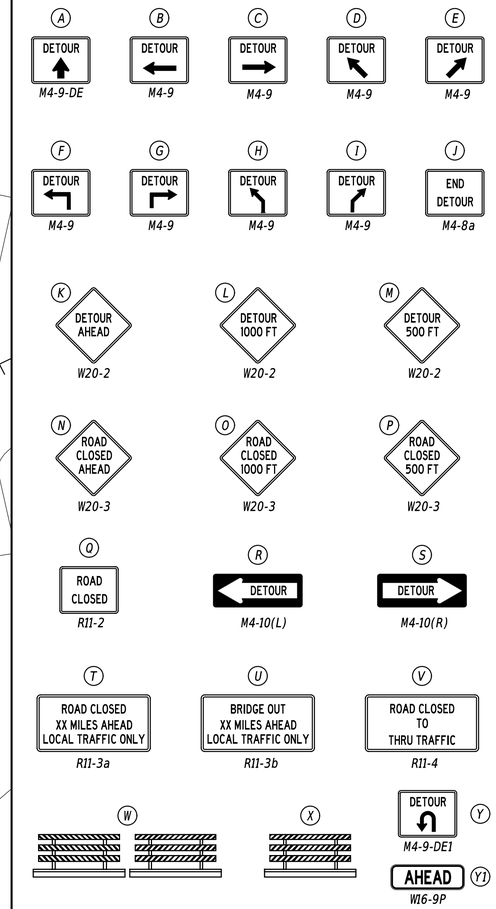
1. DISPLAY (Z) SIGNS, ALONG WITH THE (ZZ) PLAQUE, FOR 10 DAYS PRIOR TO THE IMPLEMENTATION OF THE DETOUR. (ZZ) PLAQUE TO COMPLETELY COVER "FOLLOW DETOUR" LEGEND ON (Z) SIGNS. UPON IMPLEMENTATION OF THE DETOUR, REMOVE (ZZ) PLAQUE FROM (Z) SIGNS AND RELOCATE (Z) SIGNS TO A LOCATION OUTSIDE OF THE CLOSURE AREA.
2. ALL SIGNS SHALL HAVE A BLACK LEGEND ON A RETROREFLECTIVE, PRISMATIC, FLUORESCENT ORANGE BACKGROUND. DELAWARE ROUTE SYMBOL SHALL HAVE A BLACK LEGEND ON A WHITE BACKGROUND.



DETOUR PLAN LEGEND

- SIGN/ BARRICADE LOC
- WORK AREA

LEGEND



GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
2. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHALL BE CHANGED TO "RAMP", "RR XING" OR "BRIDGE" WHERE APPLICABLE.
3. "W" TYPE 3 BARRICADES AT A ROAD CLOSURE SHALL BE PLACED COMPLETELY ACROSS THE ROADWAY, FROM CURB TO CURB, OR FROM EDGE OF ROAD TO EDGE OF ROAD, WITH THE STRIPES POSITIONED DOWNWARD TOWARD THE CENTER OF THE ROADWAY.
4. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.
5. ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE THE MINIMUM ALLOWABLE SIZE PER DE MUTCD TABLE 6F-1, EXCEPT FOR SIGNS PLACED ALONG LIMESTONE ROAD (SR7).

CONCURRENCE FOR IMPLEMENTATION

TRAFFIC SAFETY — DATE: 12/27/23

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

12/18/2023
DATE

TERESA M. LORD — LICENSE — No. 24274 — DELAWARE PROFESSIONAL ENGINEER
SEAL

QA/QC REVIEWER — DATE: 12/18/2023

I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ADDENDA / REVISIONS

NOT TO SCALE

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

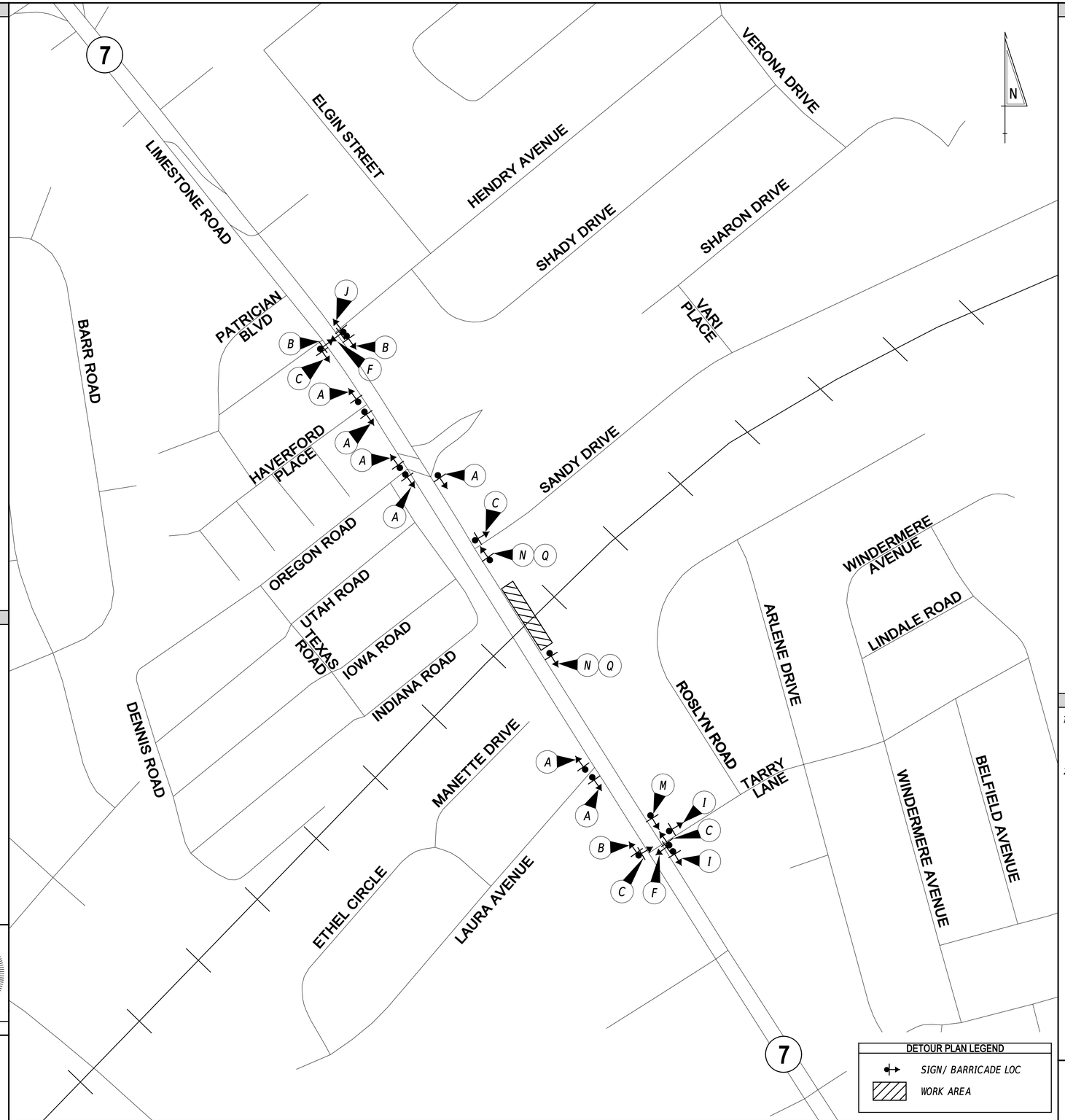
CONTRACT	PERMIT NO.	N/A
T201807402	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. WOOD
NEW CASTLE		

DETOUR PLAN - VEHICULAR
SR 7 NORTHBOUND U / LEFT-TURN @ LAURA AVENUE

SECTION	PAI
SHEET NO.	58

SPECIAL SIGNS

SPECIAL NOTES



DETOUR PLAN LEGEND

- SIGN/ BARRICADE LOC
- WORK AREA

LEGEND

A — M4-9b-DE	B — M4-9b-DE	C — M4-9b-DE
D — M4-9b-DE	E — M4-9b-DE	F — END DETOUR — M4-9b-DE1
PEDESTRIAN CROSSWALK — R9-8 — G	SIDEWALK CLOSED USE OTHER SIDE — R9-10 — H	
SIDEWALK CLOSED AHEAD CROSS HERE ← — R9-11(L) — I	SIDEWALK CLOSED AHEAD CROSS HERE → — R9-11(R) — J	
SIDEWALK CLOSED CROSS HERE ← — R9-11a(L) — K	SIDEWALK CLOSED CROSS HERE → — R9-11a(R) — L	SIDEWALK CLOSED AHEAD — R9-9(MOD) — M
SIDEWALK CLOSED — R9-9 — N	CROSSWALK CLOSED AHEAD — R9-9(MOD) — O	CROSSWALK CLOSED — R9-9(MOD) — P
Q		

GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.
2. BARRICADES SHALL BE A MINIMUM OF 4 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

Teresa Lord — 12/18/2023 (DATE)
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. LORD — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER
SEAL

Zach Baker — 12/18/2023 (DATE)
QA/QC REVIEWER

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

CONCURRENCE FOR IMPLEMENTATION

Gerald A. Hoppenstedt Jr. — 12/27/23 (DATE)
TRAFFIC SAFETY

ADDENDA / REVISIONS					

NOT TO SCALE

BR 1-655 ON
LIMESTONE ROAD (SR7)
OVER CSX RAILROAD

CONTRACT	PERMIT NO.	N/A
T201807402	DESIGNED BY:	T. LORD
COUNTY	CHECKED BY:	P. WOOD
NEW CASTLE		

DETOUR PLAN -
PEDESTRIAN
NORTHBOUND SR7

SECTION
PAI
SHEET NO.
59

SPECIAL SIGNS

SPECIAL NOTES

PREPARED BY
PENNONI ASSOCIATES INC.

Pennoni

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

12/18/2023
DATE

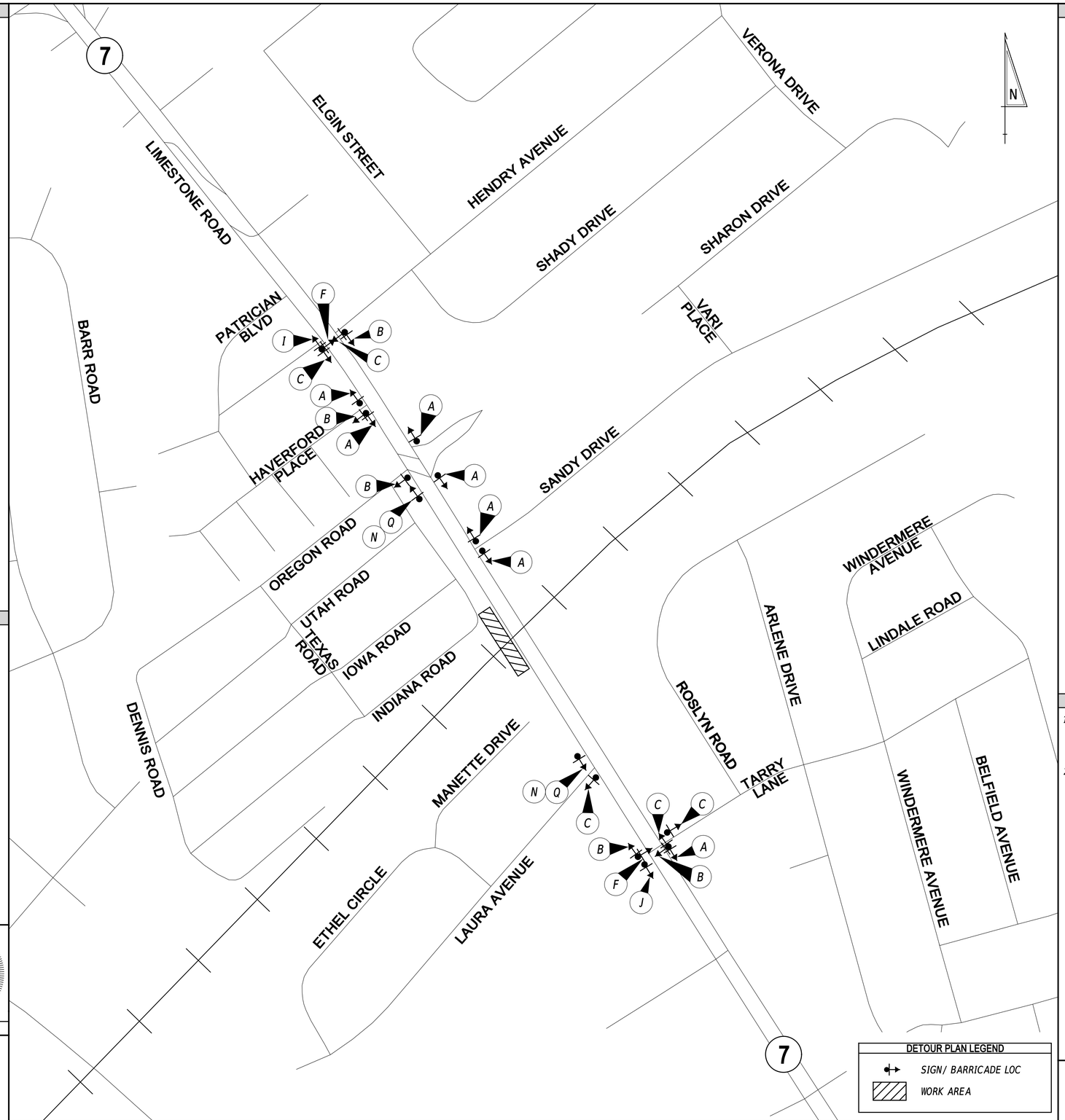
TERESA M. LORD
LICENSE
No. 24274
DELAWARE
PROFESSIONAL ENGINEER

SEAL

QA/QC REVIEWER

12/18/2023
DATE

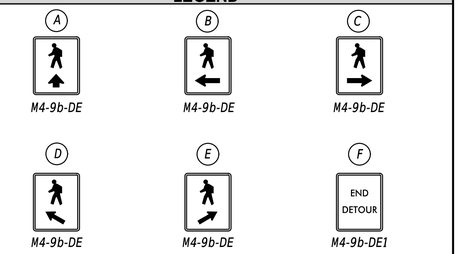
"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS DETOUR PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."



DETOUR PLAN LEGEND

- SIGN/ BARRICADE LOC
- WORK AREA

LEGEND



GENERAL NOTES

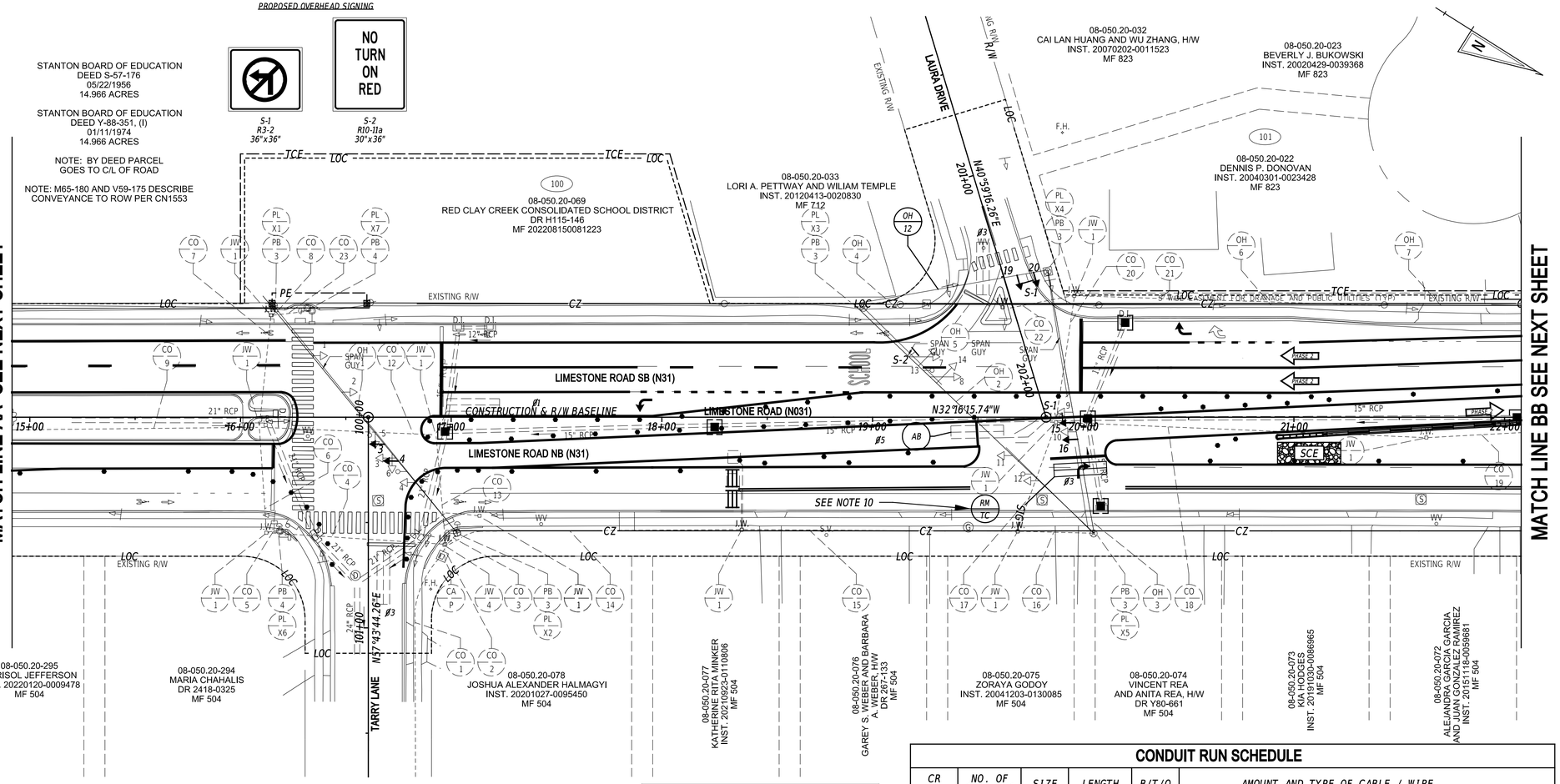
1. *ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR AND SHALL BE IN COMPLIANCE WITH THIS PLAN AND THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE MUTCD) LATEST EDITION.*
2. *BARRICADES SHALL BE A MINIMUM OF 4 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.*

CONCURRENCE FOR IMPLEMENTATION

TRAFFIC SAFETY

12/27/23
DATE

ADDENDA / REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	PERMIT NO. N/A	DETOUR PLAN - PEDESTRIAN SOUTHBOUND SR7	SECTION
				T201807402	DESIGNED BY: T. LORD		PAI
				COUNTY	CHECKED BY: P. WOOD		SHEET NO.
				NEW CASTLE			60



CONTINUED SIGNAL NOTES:

3. *TRAFFIC CONTRACTOR SHALL INSTALL SPAN WIRE 12 BETWEEN SIGNAL POLES 3 AND 4 ACROSS LAURA AVENUE. TRAFFIC CONTRACTOR SHALL PULL THE SPAN WIRE 12 BETWEEN THE COMMUNICATION CABLES AND AT THE SAME HEIGHT OF THE ATTACHMENTS AT EXISTING SIGNAL POLES 3 AND 4. TRAFFIC CONTRACTOR SHALL INSTALL SIGNAL HEADS 19 AND 20 ON SPAN WIRE 12. SIGNAL HEADS 19 AND 20 SHALL CONSIST OF RIGHT ARROWS. ONLY.*
4. *TRAFFIC CONTRACTOR SHALL BAG SIGNAL HEADS 11 AND 12 ALONG SPAN WIRE 2 AND INSTALL SIGNAL HEADS 15 AND 16 ON SPAN WIRE 3.*
5. *TRAFFIC CONTRACTOR SHALL SHIFT SIGNAL HEADS 3 AND 4 ALONG SPAN WIRE 1 TO ALIGN WITH THE NB SR 7 THROUGH MOVEMENT.*
6. *TRAFFIC CONTRACTOR SHALL BAG SIGNAL HEADS 9 AND 10 ALONG SPAN WIRE 3 AND PROHIBIT THE NORTHBOUND LEFT-TURN MOVEMENT DURING PHASE 2.*
7. *TRAFFIC CONTRACTOR SHALL INSTALL DE MUTCD SIGN R10-11a ON OVERHEAD SPAN WIRE 2 BETWEEN SIGNAL HEADS 13 AND 14 DURING CONSTRUCTION PHASES 2 & 3.*
8. *TRAFFIC CONTRACTOR SHALL DISCONNECT THE EXISTING LOOP DETECTOR FOR THE NORTHBOUND SR 7 LEFT-TURN LANE AT LAURA DRIVE.*

   ALL OTHER LOOP DETECTORS AT SR 7 AND LAURA DRIVE AND AT SR 7 AND TARRY LANE SHALL REMAIN.

   TEMPORARY LOOP DETECTOR SHALL BE INSTALLED BY THE CONTRACTOR AT THE WESTBOUND APPROACH AT LAURA DRIVE FOR TRAFFIC EXITING THE TEMPORARY SERVICE ROAD. UPON COMPLETION OF PHASE 2, THIS LOOP SHALL BE ABANDONED.
9. *DELDOT TRAFFIC SHALL MODIFY THE SIGNAL PHASING TO INCORPORATE THE WB SERVICE ROAD RIGHT TURN MOVEMENT AT LAURA DRIVE INTO EXISTING PHASE 3.*

   DELDOT TRAFFIC SHALL ALSO MODIFY THE SIGNAL PHASING TO INCORPORATE THE NB SR 7 THROUGH MOVEMENT AT LAURA DRIVE TO EXISTING PHASE 2.
10. *TRAFFIC CONTRACTOR SHALL REMOVE JUNCTION WELL TYPE 1 AND INSTALL TEMPORARY CONDUIT SWEEPS BETWEEN CONDUITS 17 AND 20 AND BETWEEN CONDUITS 17 AND 18.*
11. *OVERHEAD ADVANCED FLASHING SIGNAL NORTH OF BR 1-655 SHALL REMAIN IN OPERATION THROUGHOUT THE DURATION OF CONSTRUCTION.*

SIGNAL POLE SCHEDULE

POLE NO.	POLE TYPE	HEIGHT	MATERIAL
X1	STRAIN	28'-0"	STEEL
X2	STRAIN	28'-0"	STEEL
X3	STRAIN	28'-0"	STEEL
X4	STRAIN	28'-0"	STEEL
X5	STRAIN	28'-0"	STEEL
X6	PEDESTAL	10'-0"	ALUMINUM
X7	PEDESTAL	10'-0"	ALUMINUM
X8	MAST	21'-6"	STEEL

X - DENOTES EXISTING

OVERHEAD SCHEDULE

OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
*1	146'	EX. (1)#14/16, (2)#18/4
*2	158'	EX. (1)#14/16, (2)#18/4, (1)#14/4
*3	127'	EX. (1)#14/9, INSTALL (1)#14/16
*4	23'	EX. (1)#14/4
*5	92'	EX. (1)#14/4
*6	138'	EX. (1)#14/4
*7	103'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*8	66'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*9	249'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*10	198'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*11	175'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
12	94'	INSTALL (1)#14/16

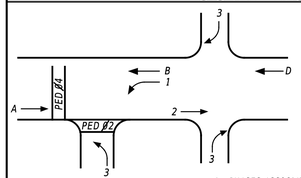
**DENOTES EXISTING*

CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5"	115'	---	EX. (1)#8/2 U.F. w/ GROUND
*2	3	2.5"	10'	---	EX. [(3)#14/5, (1)#14/4]; INSTALL [(1)#14/2]
					EX. (2)#14/16, (1)#14/9 (8)#18/4, (1)#19/6 PAIR COMM CABLE
*3	2	2.5"	10'	---	EX. (1)#14/16, (1)#14/9, (2)#18/4
*4	1	2.5"	75'	---	EX. (3)#14/5
*5	1	2.5"	10'	---	EX. (2)#14/5
*6	1	2.5"	50'	---	EX. (1)#14/5
*7	1	2.5"	55'	---	EX. (1)#14/5
*8	1	2.5"	5'	---	EMPTY
*9	1	2.5"	190'	---	EX. (2)#18/4, (1)#19/6 PAIR COMM CABLE
*10	1	2.5"	185'	---	EX. (1)#18/4, (1)#19/6 PAIR COMM CABLE
*11	1	2.5"	--	---	EX. (1)#19/6 PAIR COMM CABLE
*12	1	2.5"	85'	---	EX. (2)#18/4, (1)#19/6 PAIR COMM CABLE
*13	1	2.5"	55'	---	EX. (3)#18/4, (1)#19/6 PAIR COMM CABLE
*14	2	2.5"	130'	---	EX. [(1)#14/16, (1)#14/9, (6)#18/4, (1)#19/6 PAIR COMM CABLE, (1)#14/4]; INSTALL [(1)#14/2]
*15	2	2.5"	130'	---	EX. [(1)#14/16, (1)#14/9, (5)#18/4, (1)#19/6 PAIR COMM CABLE, (1)#14/4]; INSTALL [(1)#14/2]
*16	1	2.5"	35'	---	EX. (1)#14/16, (1)#14/9, (2)#18/4, (1)#14/4]
*17	1	2.5"	55'	---	EX. (3)#18/4, (1)#19/6 PAIR COMM CABLE
*18	1	2.5"	175'	---	EX. (1)#18/4
*19	1	2.5"	155'	---	EX. (1)#18/4
*20	1	2.5"	60'	---	EX. (1)#18/4, (1)#19/6 PAIR COMM CABLE
*21	1	2.5"	150'	---	EX. (1)#19/6 PAIR COMM CABLE
*22	1	2.5"	30'	---	EX. (1)#18/4
*23	1	3"	15'	---	EX. (1)#14/5
*24	1	2.5"	45'	---	EX. (1)#14/4
*25	1	2.5"	15'	---	EX. (1)#14/4

**DENOTES EXISTING* B=BORE, T=TRENCH, O=OPEN CUT

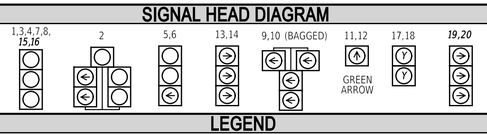
SIGNAL PHASING



PHASING NOTES

1. *PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.*
2. *PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.*

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024 DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER — SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

PENNONI ASSOCIATES INC. | PEN TABLE: SPRINTBLS
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 11-NOV-2024@ 08:12
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: $USERS | OFFICE LOCATION: $OFFICENAME

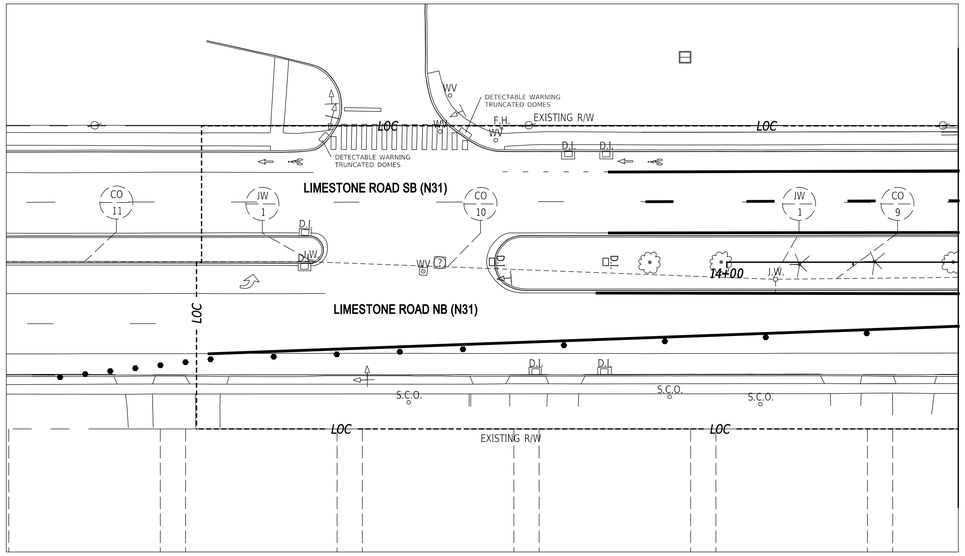
ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

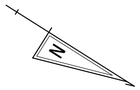
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	PERMIT NO.	N516	SECTION
T201807402	DESIGNED BY: T. SCROCCA		PAI
COUNTY	CHECKED BY: Z. BRANDER		SHEET NO.
NEW CASTLE			61

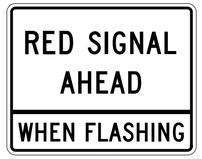
TEMPORARY SIGNAL PLAN - PHASE 2 SR 7 @ TARRY LANE/LAURA DRIVE



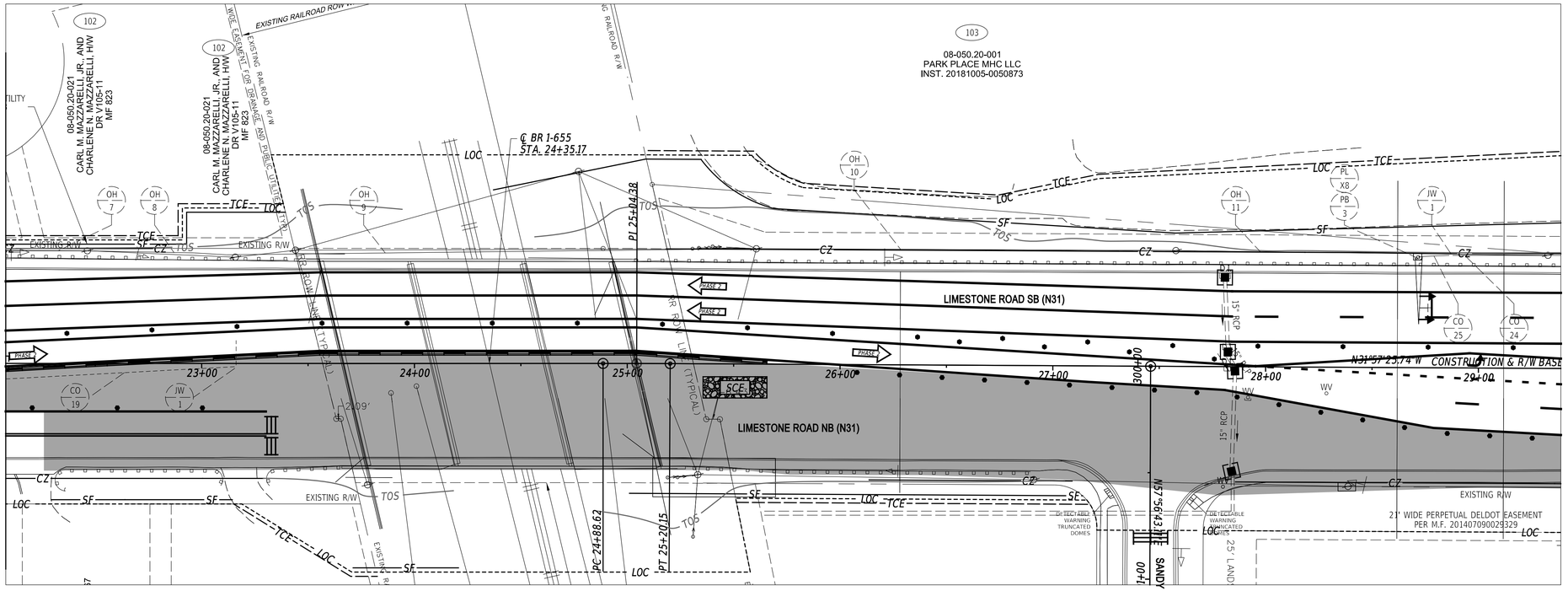
MATCH LINE AA SEE PREVIOUS SHEET



EXISTING OVERHEAD SIGNING

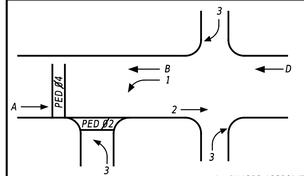


S-1
W3-3-DE
60" X 48"



MATCH LINE BB SEE PREVIOUS SHEET

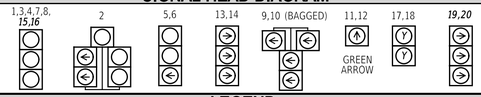
SIGNAL PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	*OH #*	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	*PB X*	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	*PL X*	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	*RM C*	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	*RM O*	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	*RM TC*	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		*R/W*
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

Pennoni

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

PENNONI ASSOCIATES INC. | PEN. TABLE: SPENTABLES
FILE NAME: STILEAS | PLOT DRIVER: SPLTDRVS
MICROSTATION VERSION: SVERSIONS | DATE PLOTTED: 11-NOV-2024@ 08:12
MICROSTATION WORKSPACE: SWORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: SOFFICENAMES

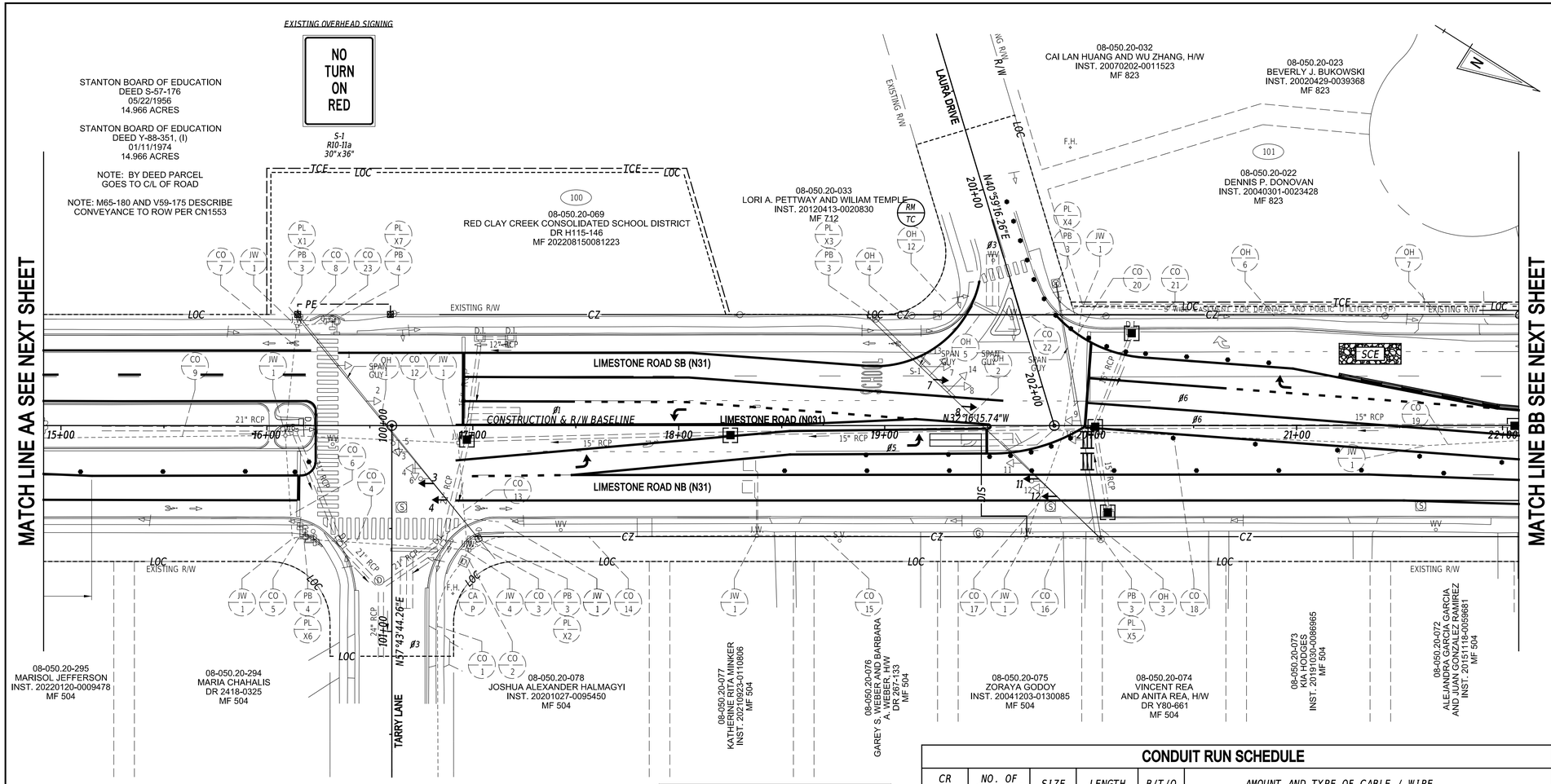
ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	PERMIT NO.	N516	SECTION
T201807402			PAI
COUNTY	DESIGNED BY:	T. SCROCCA	SHEET NO.
NEW CASTLE	CHECKED BY:	Z. BRANDER	62

TEMPORARY SIGNAL PLAN - PHASE 2
SR 7 @ TARRY LANE/LAURA DRIVE



CONTINUED SIGNAL NOTES:

3. *TRAFFIC CONTRACTOR SHALL REMOVE TEMPORARY SPAN WIRE 12, SIGNAL HEADS 19 AND 20, AND OVERHEAD SIGN S-1 LOCATED BETWEEN SIGNAL POLES 3 AND 4 ACROSS LAURA DRIVE.*
4. *TRAFFIC CONTRACTOR SHALL REMOVE SIGNAL HEADS 15 AND 16 FROM SPAN WIRE 3 INSTALLED FOR PHASE 2. REFER TO TEMPORARY SIGNAL PLAN - PHASE 2 ON SHEETS 61 AND 62. TRAFFIC CONSTRACOR SHALL UNBAG AND SHIFT SIGNAL HEADS 11 AND 12 ON SPAN WIRE 2.*
5. *TRAFFIC CONTRACTOR SHALL SHIFT SIGNAL HEADS 3 AND 4 ALONG SPAN WIRE 1 TO ALIGN WITH THE NB SR 7 THROUGH MOVEMENT.*

   TRAFFIC CONTRACTOR SHALL ALSO SHIFT SIGNAL HEADS 7 AND 8 ALONG SPAN WIRE 2 TO ALIGN WITH THE SB SR 7 THROUGH MOVEMENT.
6. *TRAFFIC CONTRACTOR SHALL UNBAG SIGNAL HEADS 9 AND 10 ON SPAN WIRE 3.*
7. *EXISTING LOOP DETECTOR FOR THE NORTHBOUND LEFT-TURN LANE AT LAURA DRIVE SHALL REMAIN DISCONNECTED. THE TRAFFIC CONTRACTOR SHALL INSTALL A NEW LOOP DETECTOR FOR THIS MOVEMENT DUE TO THE TEMPORARY RELOCATION OF THE STOP BAR.*

   ALL OTHER LOOP DETECTORS AT SR 7 AND LAURA DRIVE AND AT SR 7 AND TARRY LANE SHALL REMAIN.
8. *DELDOT TRAFFIC/TMC SHALL MODIFY THE SIGNAL PHASING TO REVERT BACK TO THE EXISTING SIGNAL PHASING CONDITION.*
9. *OVERHEAD ADVANCED FLASHING SIGNAL NORTH OF BRI-655 SHALL REMAIN IN OPERATION THROUGHOUT THE DURATION OF CONSTRUCTION.*
10. *UPON COMPLETION OF CONSTRUCTION PHASE 3, THE TRAFFIC CONTRACTOR SHALL MODIFY THE SIGNAL TO ITS EXISTING CONFIGURATION. THE REBUILD OF THE SIGNAL SHALL OCCUR FOLLOWING THE COMPLETION OF PHASE 4.*

SIGNAL POLE SCHEDULE

POLE NO.	POLE TYPE	HEIGHT	MATERIAL
X1	STRAIN	28'-0"	STEEL
X2	STRAIN	28'-0"	STEEL
X3	STRAIN	28'-0"	STEEL
X4	STRAIN	28'-0"	STEEL
X5	STRAIN	28'-0"	STEEL
X6	PEDESTAL	10'-0"	ALUMINUM
X7	PEDESTAL	10'-0"	ALUMINUM
X8	MAST	21'-6"	STEEL

X - DENOTES EXISTING

OVERHEAD SCHEDULE

OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
*1	146'	EX. (1)#14/16, (2)#18/4
*2	158'	EX. (1)#14/16, (2)#18/4, (1)#14/4
*3	127'	EX. (1)#14/9, REMOVE (1)#14/16
*4	23'	EX. (1)#14/4
*5	92'	EX. (1)#14/4
*6	138'	EX. (1)#14/4
*7	103'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*8	66'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*9	249'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*10	198'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*11	175'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
*12	94'	REMOVE (1)#14/16

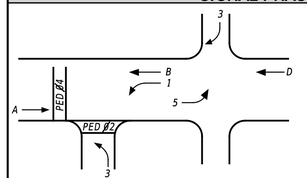
**DENOTES EXISTING*

CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5"	115'	---	EX. (1)#8/2 U.F. w/ GROUND
*2	3	2.5"	10'	---	EX. (3)#14/5, (1)#14/4, (1)#14/2
					EX. (2)#14/16, (1)#14/9 (8)#18/4, (1)#19/6 PAIR COMM CABLE
*3	2	2.5"	10'	---	EX. (1)#14/16, (1)#14/9, (2)#18/4
*4	1	2.5"	75'	---	EX. (3)#14/5
*5	1	2.5"	10'	---	EX. (2)#14/5
*6	1	2.5"	50'	---	EX. (1)#14/5
*7	1	2.5"	55'	---	EX. (1)#14/5
*8	1	2.5"	5'	---	EMPTY
*9	1	2.5"	190'	---	EX. (2)#18/4, (1)#19/6 PAIR COMM CABLE
*10	1	2.5"	185'	---	EX. (1)#18/4, (1)#19/6 PAIR COMM CABLE
*11	1	2.5"	--	---	EX. (1)#19/6 PAIR COMM CABLE
*12	1	2.5"	85'	---	EX. (2)#18/4, (1)#19/6 PAIR COMM CABLE
*13	1	2.5"	55'	---	EX. (3)#18/4, (1)#19/6 PAIR COMM CABLE
*14	2	2.5"	130'	---	EX. (1)#14/16, (1)#14/9, (6)#18/4, (1)#19/6 PAIR COMM CABLE, (1)#14/4, (1)#14/2
*15	2	2.5"	130'	---	EX. (1)#14/16, (1)#14/9, (5)#18/4, (1)#19/6 PAIR COMM CABLE, (1)#14/4, (1)#14/2
*16	1	2.5"	35'	---	EX. (1)#14/16, (1)#14/9, (2)#18/4, (1)#14/4
*17	1	2.5"	55'	---	EX. (3)#18/4, (1)#19/6 PAIR COMM CABLE
*18	1	2.5"	175'	---	EX. (1)#18/4
*19	1	2.5"	155'	---	EX. (1)#18/4
*20	1	2.5"	60'	---	EX. (1)#18/4, (1)#19/6 PAIR COMM CABLE
*21	1	2.5"	150'	---	EX. (1)#19/6 PAIR COMM CABLE
*22	1	2.5"	30'	---	EX. (1)#18/4
*23	1	3"	15'	---	EX. (1)#14/5
*24	1	2.5"	45'	---	EX. (1)#14/4
*25	1	2.5"	15'	---	EX. (1)#14/4

**DENOTES EXISTING* B=BORE, T=TRENCH, O=OPEN CUT

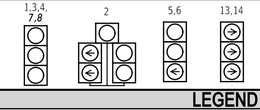
SIGNAL PHASING



PHASING NOTES

1. *PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.*
2. *PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.*

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca
11/11/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF TRAFFIC ENGINEER
11/13/2024
DATE

PENNONI ASSOCIATES INC. | PEN TABLE: SPRINTBLS
FILE NAME: $FILEAS | PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS | DATE PLOTTED: 11-NOV-2024@ 08:12
MICROSTATION WORKSPACE: $WORKSPACES | USER NAME: SUSERS | OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS	

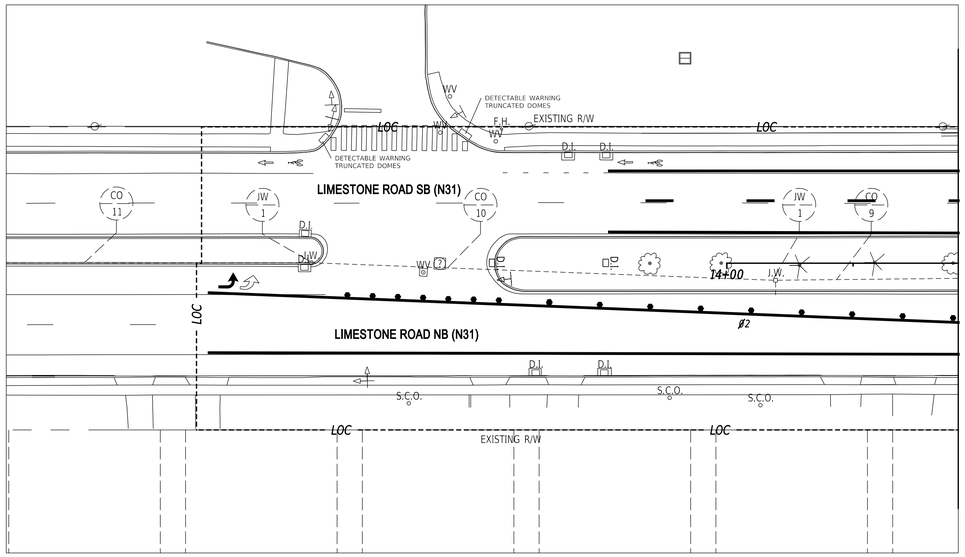
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	T201807402	PERMIT NO.	N516
COUNTY	NEW CASTLE	DESIGNED BY:	T. SCROCCA
		CHECKED BY:	Z. BRANDER

TEMPORARY SIGNAL PLAN - PHASE 3
SR 7 @ TARRY LANE/LAURA DRIVE

SECTION	PAI
SHEET NO.	63

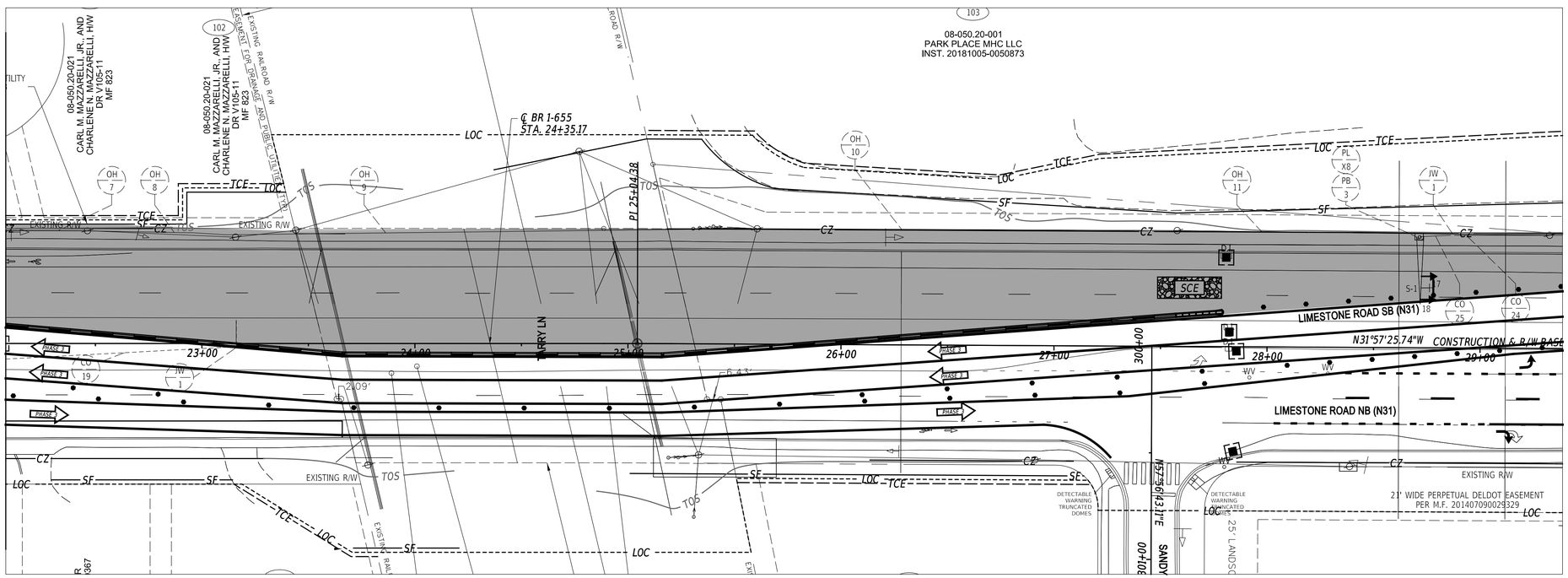


MATCH LINE AA PREVIOUS SHEET

EXISTING OVERHEAD SIGNING

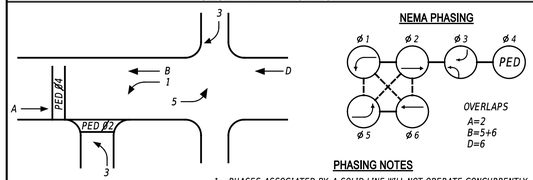
RED SIGNAL AHEAD
WHEN FLASHING

S-1
W3-3-DE
60" X 48"



MATCH LINE BB PREVIOUS SHEET

SIGNAL PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	*OH #*	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	*PB X*	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	*PL X*	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	*RM C*	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	*RM O*	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	*RM TC*	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

Pennoni

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa M. Scrocca — 11/11/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE *PAI* SECTION DESIGNATION.
DATE

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF TRAFFIC ENGINEER — 11/13/2024 DATE

PENNONI ASSOCIATES INC. — PEN TABLE: SPENTBL5S
FILE NAME: SFILEAS — PLOT DRIVER: SPLTDRV5S
MICROSTATION VERSION: SVERSIONS — DATE PLOTTED: 11-NOV-2024 08:12
MICROSTATION WORKSPACE: SWORKSPACES — USER NAME: SUSERS — OFFICE LOCATION: SOFFICENAMES

ADDENDA / REVISIONS		SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	PERMIT NO.	N516	SECTION
		0 30 60 90 FEET		T201807402	DESIGNED BY: T. SCROCCA	TEMPORARY SIGNAL PLAN - PHASE 3 SR 7 @ TARRY LANE/LAURA DRIVE	PAI
				COUNTY NEW CASTLE	CHECKED BY: Z. BRANDER		SHEET NO. 64

CONTINUED SIGNAL NOTES:

3. *THE TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES WITH A 2" RETROREFLECTIVE YELLOW STRIP ON ALL OVERHEAD SIGNAL HEADS.*
4. *POWER SOURCE: DELMARVA POLE NO. 45727-42352, LOCATED APPROXIMATELY 125 FEET EAST OF SR 7.*
5. *APPROXIMATE COMMUNICATIONS AERIAL UTILITY HEIGHT ABOVE GROUND LEVEL IS 19.5 FEET.*
6. *APPROXIMATE COMMUNICATIONS AERIAL UTILITY HEIGHT ABOVE GROUND LEVEL IS 19 FEET.*
7. *THE CONTRACTOR SHALL REMOVE EXISTING JUNCTION WELL TYPE 1 AT APPROXIMATE STATION 19+80 AND AT APPROXIMATE STATION 21+58 DURING PHASE 2 AS NOTED ON THE TEMPORARY SIGNAL PLAN ON SHEETS 61 AND 62. THE CONTRACTOR SHALL REINSTALL JUNCTION WELLS TYPE 1 DURING PHASE 4 AS NOTED ON SHEET 54.*

STANTON BOARD OF EDUCATION
DEED S-57-176
05/22/1956
14.966 ACRES

STANTON BOARD OF EDUCATION
DEED Y-88-351, (I)
01/11/1974
14.966 ACRES

NOTE: BY DEED PARCEL GOES TO C/L OF ROAD

NOTE: M65-180 AND V59-175 DESCRIBE CONVEYANCE TO ROW PER CN1553

WR 141074
DR K89-983

08-050.20-032
CAI LAN HUANG AND WU ZHANG, H/W
INST. 20070202-0011523
MF 823

08-050.20-023
BEVERLY J. BUKOWSKI
INST. 20020429-0039368
MF 823

08-050.20-022
DENNIS P. DONOVAN
INST. 20040301-0023428
MF 823

08-050.20-033
LORI A. PETTWAY AND WILIAM TEMPLE
INST. 20120413-0020830
MF 712

08-050.20-069
RED CLAY CREEK CONSOLIDATED SCHOOL DISTRICT
DR H115-146
MF 202208150081223

LAURA DRIVE

LIMESTONE ROAD (N031)

CONSTRUCTION & R/W BASELINE

TARRY LANE

SCHOOL

MATCH LINE THIS SHEET

MATCH LINE SEE NEXT SHEET

08-050.20-295
MARISOL JEFFERSON
INST. 20220120-0009478
MF 504

08-050.20-294
MARIA CHAHALIS
DR 2418-0325
MF 504

08-050.20-078
JOSHUA ALEXANDER HALMAGYI
INST. 20201027-0095450
MF 504

08-050.20-077
KATHERINE RITA MINKER
INST. 20210923-0110806
MF 504

08-050.20-076
GAREY S. WEBER AND BARBARA A. WEBER, H/W
DR 2871-133
MF 504

08-050.20-075
ZORAYA GODOY
INST. 20041203-0130085
MF 504

08-050.20-074
VINCENT REA
AND ANITA REA, H/W
DR Y80-661
MF 504

08-050.20-073
KIA HODGES
INST. 20191030-0086965
MF 504

08-050.20-072
ALEJANDRA GARCIA GARCIA
AND JUAN GONZALEZ-RAMIREZ
INST. 20220615-0059681
MF 504

SEE NOTE 6 · SEE NOTE 7 · SEE NOTE 10 · SEE NOTE 11 · SEE NOTE 12

CONTINUED SIGNAL NOTES:

8. *PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE PEDESTRIAN CONNECTION WHEN POSSIBLE. WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON ADJACENT TO A LEVEL ALL-WEATHER SURFACE, THE SURFACE SOULD BE AS LEVEL AS FEASIBLE. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE ADJOINING SIDEWALK, AND SHOULD BE LOCATED SUCH THAT THE MAXIMUM REACH DOES NOT EXCEED 10 INCHES FROM ADJOINING SIDEWALK TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE THE SIDEWALK.*
9. *THE CONTRACTOR SHALL INSTALL ACCESSIBLE PEDESTRIAN SIGNALS (APS) WITH ATTACHED COUNTDOWN PEDESTRIAN SIGNS WITH ARROWS ON PROPOSED SIGNAL POLES. PROPOSED APS PUSH BUTTONS AND ASSOCIATED COUNTDOWN SIGNS SHALL BE INSTALLED PERPENDICULAR TO THE CROSSWALK IT CONTROLS.*

   PL/13: R10-3e (R)
   PL/14: R10-3e (R)
   PL/15: R10-3e (L)

10. *THE CONTRACTOR SHALL INTERCEPT CONDUIT 1 AND INSTALL SERVICE PEDESTAL AND JUNCTION WELL TYPE 1 PER STANDARD DETAIL T-17 (2020) - 1.*
11. *THE TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING PEDESTRIAN PUSHBUTTONS AND SIGNS, CLEAN AND PLUG THE EXISTING HOLES, AND INSTALL NEW PUSHBUTTON AND SIGNS ON SIGNAL POLE 6, PER STANDARD DETAIL T-18 (2020) - 2. THE TRAFFIC CONTRACTOR SHALL ALSO INSTALL AN EXTENSION FOR THE PUSHBUTTON FOR THE CROSSING OF SR 7 TO ACHIEVE MINIMUN REACH DISTANCE.*

    THE CONTRACTOR SHALL INSTALL ACCESSIBLE PEDESTRIAN SIGNALS (APS) WITH ATTACHED COUNTDOWN PEDESTRIAN SIGNS WITH ARROWS ON SIGNAL POLE 6. PROPOSED APS PUSH BUTTONS AND ASSOCIATED COUNTDOWN SIGNS SHALL BE INSTALLED PERPENDICULAR TO THE CROSSWALK IT CONTROLS.
12. *THE TRAFFIC CONTRACTOR SHALL INSTALL AN EXTENSION FOR THE PUSHBUTTON ON SIGNAL POLE 13 TO ACHIEVE MINIMUN REACH DISTANCE.*

MAST ARM SCHEDULE

MA NO.	LENGTH OF ARM	MOUNTING HEIGHT	NO. OF HEADS	S.F. OF SIGNING
1	40'	15'	2	2.25
2	60'	17.5'	2	15
3	55'	20'	2	15
4	50'	17.0'	2	16.5
5	60'	20'	4	16.5
6	30'	17.5'	2	9.75

SIGNAL POLE SCHEDULE

POLE NO.	NORTHING	EASTING	POLE TYPE	HEIGHT	MATERIAL
1**	625163.5479	590090.2430	STRAIN	28'-0"	STEEL
2**	625294.4629	590134.8907	STRAIN	28'-0"	STEEL
3**	625400.6032	589941.5563	STRAIN	28'-0"	STEEL
4**	625465.3173	589880.4813	STRAIN	28'-0"	STEEL
5**	625550.1224	589973.8179	STRAIN	28'-0"	STEEL
6*	625222.8906	590179.0024	PEDESTAL	10'-0"	ALUMINUM
7*	625177.4029	590082.5624	PEDESTAL	10'-0"	ALUMINUM
8*	626227.5600	589422.2611	MAST	21'-6"	STEEL
9	625181.5435	590075.5669	MAST	21'-6"	STEEL
10	625301.7456	590130.4771	MAST	21'-6"	STEEL
11	625420.6567	589916.8546	MAST	21'-6"	STEEL
12	625556.0101	589968.0000	MAST	21'-6"	STEEL
13	625291.5217	590142.3622	PEDESTAL	10'-0"	ALUMINUM
14	625425.9277	589897.2365	PEDESTAL	10'-0"	ALUMINUM
15	625452.2622	589872.0000	PEDESTAL	10'-0"	ALUMINUM

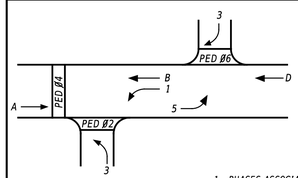
** DENOTES EXISTING*
*** DENOTES EXISTING TO BE REMOVED*

OVERHEAD SCHEDULE

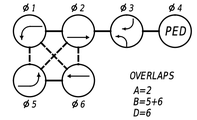
OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1**	138'	REMOVE [(1)#14/16, (2)#18/4]
2**	153'	REMOVE [(1)#14/16, (2)#18/4, (1)#14/4]
3**	123'	REMOVE [(1)#14/9]
4**	16'	REMOVE [(1)#14/4]
5**	131'	REMOVE [(1)#14/4]
6*	135'	EX. (1)#14/4
7*	104'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
8*	98'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
9*	230'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
10*	212'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4
11*	175'	EX. (1)#19/6 PAIR COMM CABLE, (1)#14/4

** DENOTES EXISTING*
*** DENOTES EXISTING TO BE REMOVED*

SIGNAL PHASING



NEMA PHASING

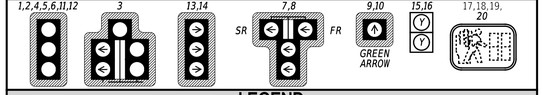


OVERLAPS
A=2
B=5+6
D=6

PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

PENNONI ASSOCIATES INC. — PEN TABLE: SPRINTBLS
FILE NAME: $FILEAS — PLOT DRIVER: SPLTDRVSS
MICROSTATION VERSION: $VERSIONS — DATE PLOTTED: 11-NOV-2024@ 08:12
MICROSTATION WORKSPACE: $WORKSPACES — USER NAME: SUSERS — OFFICE LOCATION: $OFFICENAME

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	PERMIT NO.	N516	SECTION
T201807402	DESIGNED BY: T. SCROCCA		PAI
COUNTY	CHECKED BY: Z. BRANDER		SHEET NO.
NEW CASTLE			65

ULTIMATE SIGNAL PLAN SR 7 @ TARRY LANE/LAURA DRIVE

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
1*	1	1.5"	115'	-	EX. [(1)#8/2 U.F. w/ GROUND - LINE SIDE]
1A	1	2.0" GALV	6'	T	INSTALL [(1)#8/2 U.F. w/ GROUND - LOAD SIDE]
1B	1	2.0" GALV	5'	T	INSTALL [(1)#8/2 U.F. w/ GROUND - LOAD SIDE]
2*	3	2.5"	10'	-	REMOVE [(1) 4/#14, (2) 16/#14, (1) 9/#14, (8) 4/#18, (1) 5/#14] ; INSTALL [(3) 5/#14, (13) 2/#14, (2) 9/#14, (2) 16/#14, (4) 4/#18, (1) 4/#14, (3) #6 GND] ; EX. [(3) 5/#14, (1) #19/6 PAIR COMM CABLE]
3*	2	2.5"	10'	-	REMOVE [(1) 16/#14, (1) 9/#14, (2) 4/#18] ; ABANDON
4*	1	2.5"	75'	-	INSTALL [(1) 16/#14, (2) 4/#18,(4) 2/#14. (1) #6 GND] ; EX. [(3) 5/#14]
5*	1	2.5"	4'	-	INSTALL [(1) #6 GND] ; EX. [(2) 5/#14]
6*	1	2.5"	50'	-	INSTALL [(1) 16/#14, (2) 4/#18, (4) 2/#14, (1) #6 GND] ; EX. [(1) 5/#14]
7*	1	2.5"	55'	-	INSTALL [(1) 16/#14, (2) 4/#18, (2) 2/#14, (1) #6 GND] ; EX. [(1) 5/#14]
8*	1	2.5"	5'	-	EMPTY ; ABANDON
9*	1	2.5"	190'	-	REMOVE [(2) 4/#18] ; INSTALL [(2) 2/#14, (1) #6 GND] ; EX. [(1) 6/#19 PAIR COMM CABLE]
10*	1	2.5"	185'	-	REMOVE [(1) 4/#18] ; EX. [(1) 6/#19 PAIR COMM CABLE]
11*	1	2.5"	-	-	EX. (1) 6/#19 PAIR COMM CABLE
12*	1	2.5"	85'	-	REMOVE [(2) 4/#18] ; EX. [(1) 6/#19 PAIR COMM CABLE]
13*	1	2.5"	55'	-	REMOVE [(3) 4/#18] ; INSTALL [(1) 2/#14, (1)#6 GND] ; EX. [(1) 6/#19 PAIR COMM CABLE]
14*	2	2.5"	130'	-	REMOVE [(1) 16#14, (1) 9/#14, (6) 4/#18, (1) 4/#14] ; INSTALL [(1) 16/#14, (1) 4/#18, (6) 2/#14, (1) 9/#14, (1) 4/#14, (2) 5/#14, (2) #6 GND] ; EX. [(1) 6/#19 PAIR COMM CABLE]
15*	2	2.5"	130'	-	REMOVE [(1) 16/#14, (1) 9/#14, (5) 4/#18, (1) 4/#14] ; INSTALL [(1) 16/#14, (1) 4/#18, (6) 2/#14, (1) 9/#14, (1) 4/#14, (2) 5/#14, (2) #6 GND] ; EX. [(1) 6/#19 PAIR COMM CABLE]
16*	1	2.5"	35'	-	REMOVE [(1) 16/#14, (1) 9/#14, (2) 4/#18, (1) 4/#14] ; ABANDON
17A*	1	2.5"	55'	-	REMOVE [(3) 4/#18] ; EX. [(1) 6/#19 PAIR COMM CABLE]
17B	1	4.0" HDPE	55'	B	INSTALL [(6) 2/#14, (1) 9/#14, (1) 4/#14, (2) 5/#14, (1) #6 GND] ;
18*	1	2.5"	175'	-	REMOVE [(1) 4/#18] ; INSTALL [(2) 2/#14, (1) #6 GND]
19*	1	2.5"	155'	-	REMOVE [(1) 4/#18] ; ABANDON

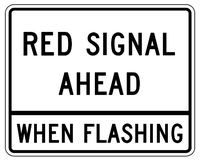
* DENOTES EXISTING CONDUIT RUN.
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
20*	1	2.5"	60'	-	REMOVE [(1) 4/#18] ; INSTALL [(1) 9/#14, (1) 2/#14, (1) 4/#14, (2) 5/#14, (1) #6 GND] ; EX. [(1) 6/#19 PAIR COMM CABLE]
21*	1	2.5"	150'	-	EX. (1) 6/#19 PAIR COMM CABLE
22*	1	2.5"	30'	-	REMOVE [(1) 4/#18] ; INSTALL [(1) 9/#14, (1) 2/#14, (2) 5/#14, (1) #6 GND]
23*	1	3.0"	15'	-	INSTALL [(1) #6 GND] ; EX. [(1) 5/#14]
24*	1	2.5"	45'	-	EXISTING [(1) 4/#14] ; INSTALL [(1) #6 GND]
25*	1	2.5"	15'	-	EXISTING [(1) 4/#14] ; INSTALL [(1) #6 GND]
26	1	3.0" PVC	27'	T	INSTALL [(1) 14/#16, (2) 4/#18, (1) #6 GND]
27	1	3.0" PVC	13'	T	INSTALL [(1) 9/#14, (1) 4/#18, (1) #6 GND]
28	1	3.0" PVC	3'	T	INSTALL [(1) 5/#14, (1) #6 GND]
29	1	3.0" PVC	6'	T	INSTALL [(1) 9/#14, (1) #6 GND]
30	1	4.0" HDPE	30'	B	INSTALL [(1) 9/#14, (1) 5/#14, (1) 2/#14, (1) #6 GND]
31	1	3.0" PVC	43'	T	INSTALL [(1) 16/#14, (1) 4/#18, (1) #6 GND]
32	1	3.0" PVC	19'	T	INSTALL [(1) 4/#14, (1) #6 GND]
33	1	1.5" GALV	11'	T	INSTALL [(1) 1/#14]
34	1	1.5" GALV	17'	T	INSTALL [(2) 1/#14]
35	1	3.0" PVC	9'	T	INSTALL [(1) 5/#14, (1) #6 GND]
36	1	4.0" HDPE	27'	B	INSTALL [(1) 5/#14, (1) #6 GND]
37	1	3.0" PVC	19'	T	INSTALL [(1) 5/#14, (1) #6 GND]

* DENOTES EXISTING CONDUIT RUN.
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

EXISTING OVERHEAD SIGNING (TO BE RENEWED)



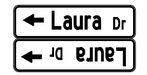
S-1
W3-3-DE
60" X 48"

PROPOSED OVERHEAD SIGNING

S-2
D3-1 (FREE-SWINGING)
60" X 18"
HWY D, 8"/6"
BACK-TO-BACK



S-3
D3-1 (FREE-SWINGING)
66" X 18"
HWY D, 8"/6"
BACK-TO-BACK



S-4
D3-1a (FREE-SWINGING)
90" X 18"
HWY D, 8"/6"



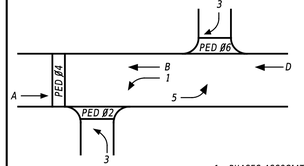


S-5
R3-5(R) (FREE-SWINGING)
30" x 36"

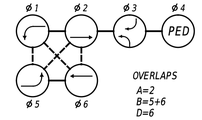


S-6
R10-27 (FREE-SWINGING)
30" x 36"

SIGNAL PHASING



NEMA PHASING

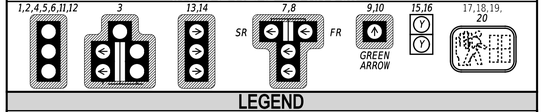


OVERLAPS
A=2
B=5+6
D=6

PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



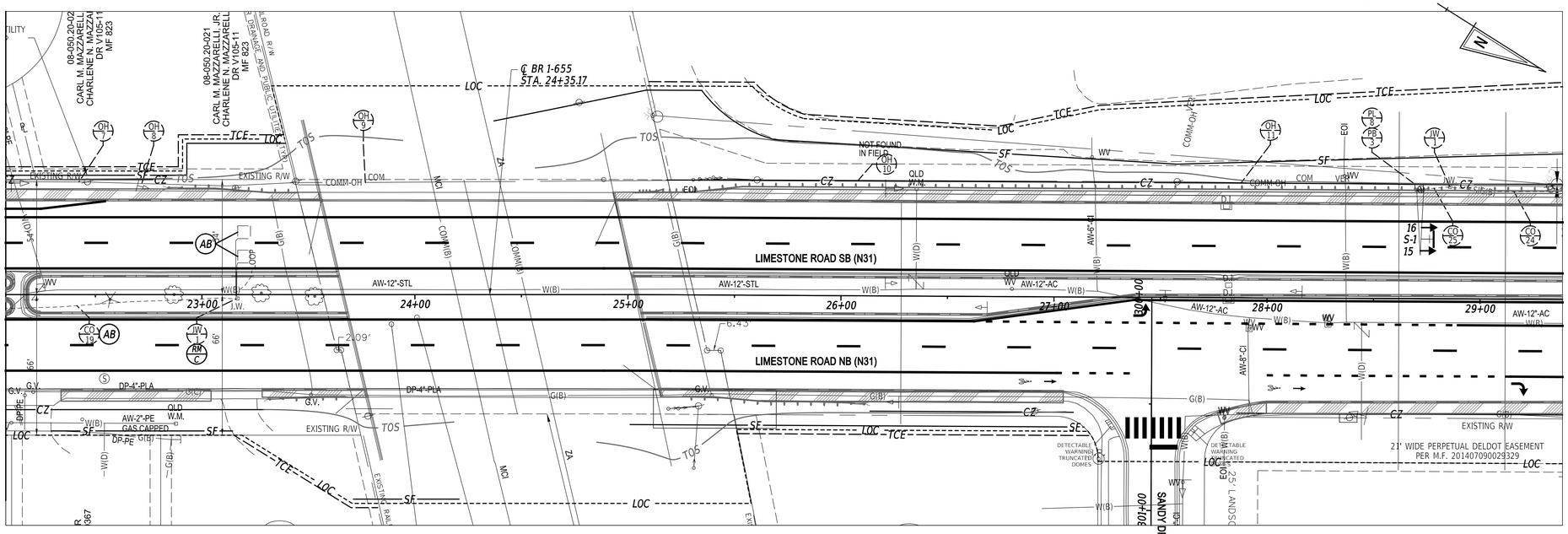
LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.



PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER

SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

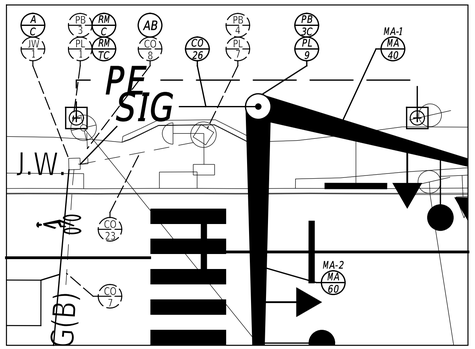
CONTRACT	T201807402	PERMIT NO.	N516
COUNTY	NEW CASTLE	DESIGNED BY:	T. SCROCCA
		CHECKED BY:	Z. BRANDER

ULTIMATE SIGNAL PLAN SR 7 @ TARRY LANE/LAURA DRIVE

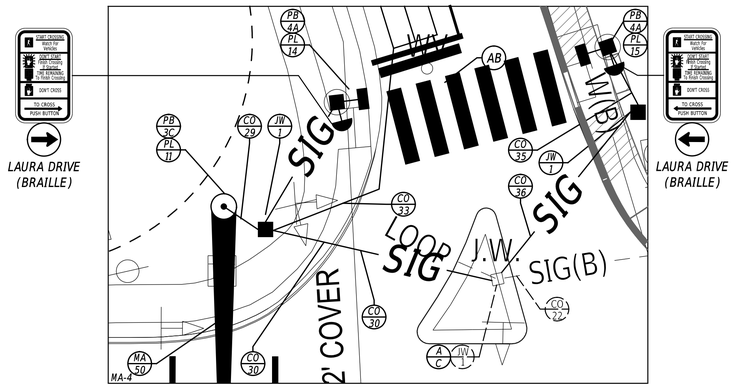
SECTION	
PAI	
SHEET NO.	
66	

PENNONI ASSOCIATES INC. — $FILEAS
FILE NAME: — $PLTDRVSS
MICROSTATION VERSION: — $VERSIONS
MICROSTATION WORKSPACE: — $WORKSPACES
PRS TABLE: — $PENTBLSS
PLOT DRIVER: — $PLTDRVSS
DATE PLOTTED: — 11-NOV-2024@ 08:12
USER NAME: — $USERS
OFFICE LOCATION: — $OFFICENAME

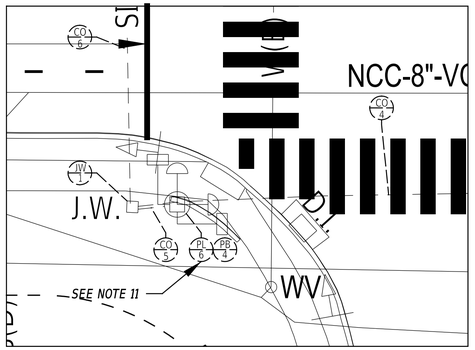
Pennoni



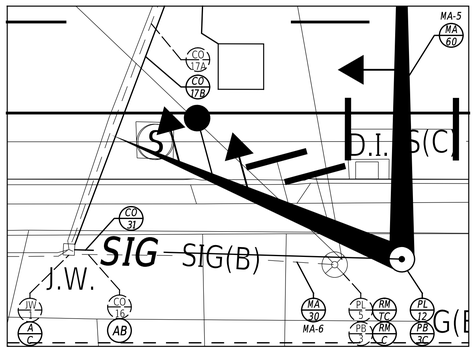
SOUTHWEST CORNER AT TARRY LANE
SCALE 1"=10"



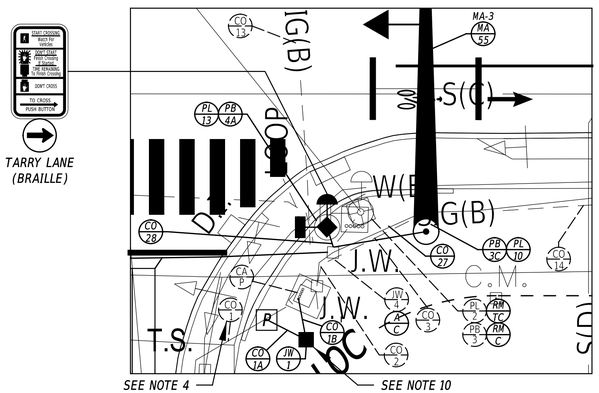
SOUTHWEST CORNER AT LAURA DRIVE
SCALE 1"=10"



SOUTHEAST CORNER AT TARRY LANE
SCALE 1"=10"

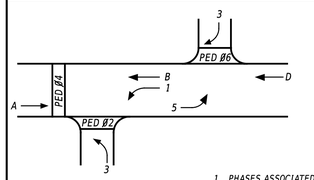


NORTHEAST CORNER AT LAURA DRIVE
SCALE 1"=10"

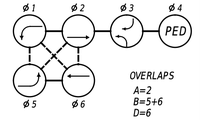


NORTHEAST CORNER AT TARRY LANE
SCALE 1"=10"

SIGNAL PHASING



NEMA PHASING

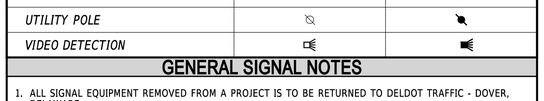


OVERLAPS
A=2
B=5+6
D=6

PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	*OH #*	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	*PB X*	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	*PL X*	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	*RM C*	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	*RM TC*	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024 DATE

THESE SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE PROFESSIONAL ENGINEER

SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

ADDENDA / REVISIONS			

SCALE 0 30 60 90 FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	T201807402	PERMIT NO.	N516
COUNTY	NEW CASTLE	DESIGNED BY:	T. SCROCCA
		CHECKED BY:	Z. BRANDER

ULTIMATE SIGNAL PLAN SR 7 @ TARRY LANE/LAURA DRIVE

SECTION	PAI
SHEET NO.	67

PENNONI ASSOCIATES INC. — PEN TABLE: SPENTBL55
FILE NAME: SFILEAS — PLOT DRIVER: SPLTDRV55
MICROSTATION VERSION: SVERSIONS — DATE PLOTTED: 11-NOV-2024@ 08:12
MICROSTATION WORKSPACE: SWORKSPACES — USER NAME: SUSERS OFFICE LOCATION: SOFFICENAMES

SIGNAL POLE SCHEDULE

POLE NO.	NORTHING	EASTING	POLE TYPE	HEIGHT
1**	625164.2708	590090.6270	STRAIN	28'-0"
2*	626779.1562	589131.1312	PEDESTAL	10'-0"
3*	626810.4882	589168.7923	PEDESTAL	10'-0"
4**	626885.4452	589118.2144	STRAIN	28'-0"
5	626756.6952	589083.0331	PEDESTAL	10'-0"
6	626830.5054	589163.7684	PEDESTAL	10'-0"
7	626879.3842	589132.4070	PEDESTAL	10'-0"
8	626751.7064	589088.3541	MAST	21'-6"
9	626878.1312	589123.4604	MAST	21'-6"

* DENOTES EXISTING

** DENOTES EXISTING TO BE REMOVED

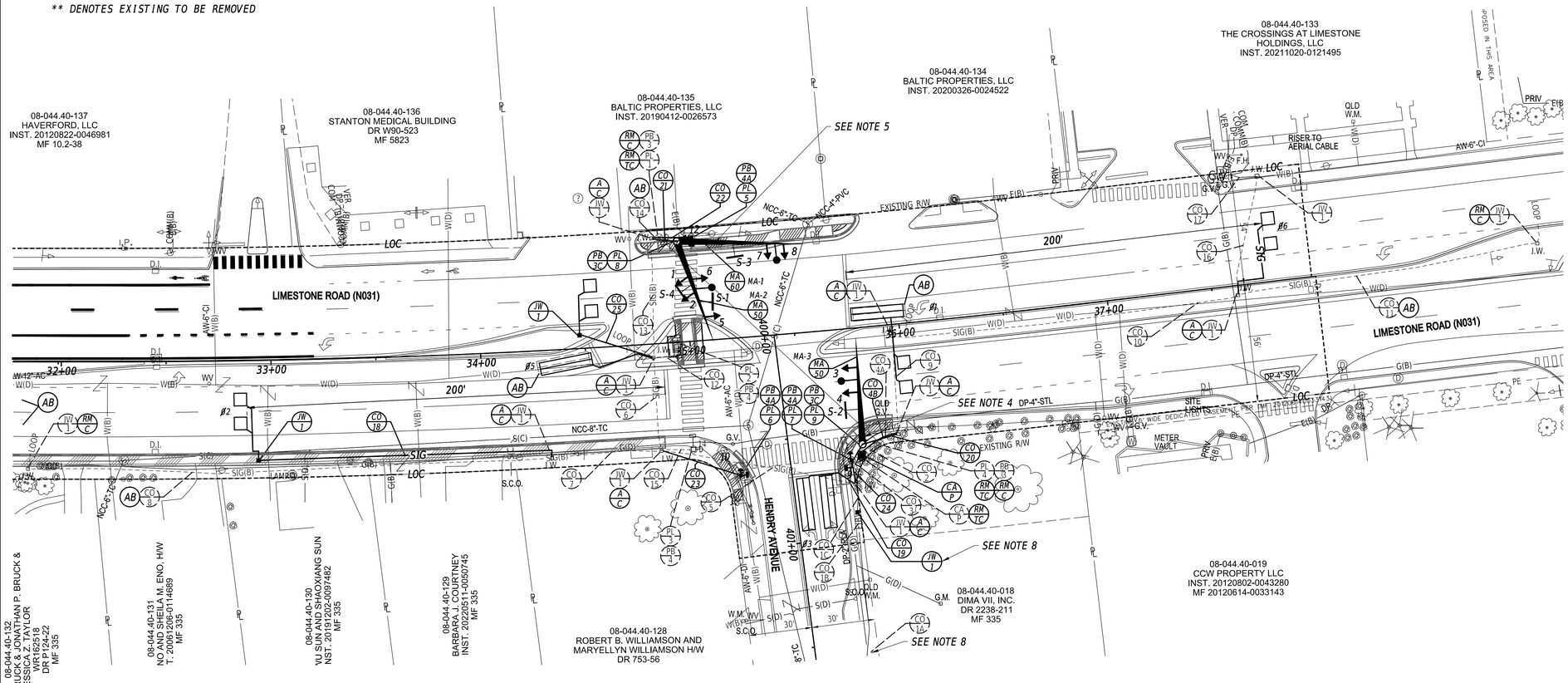
OVERHEAD SCHEDULE

OH NO.	SPAN LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1*	146'	REMOVE [(1) 16/#14, (2) 4/#18]

* DENOTES EXISTING TO BE REMOVED

MAST ARM SCHEDULE

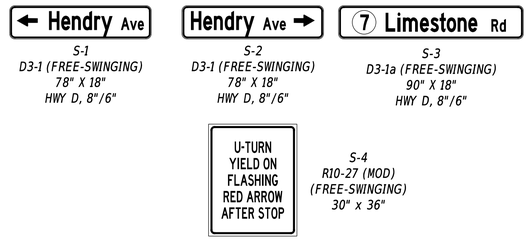
MA NO.	LENGTH OF ARM	MOUNTING HEIGHT	NO. OF HEADS	S.F. OF SIGNING
1	60'	17.5'	2	2.25
2	50'	20'	4	9.75
3	50'	18.5'	2	9.75



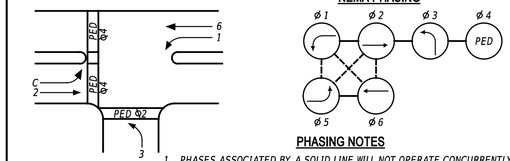
ADDITIONAL SIGNAL NOTES

3. *THE CONTRACTOR SHALL INSTALL ACCESSIBLE PEDESTRIAN SIGNALS (APS) WITH ATTACHED COUNTDOWN PEDESTRIAN SIGNS WITH ARROWS ON PROPOSED SIGNAL POLES. PROPOSED APS PUSH BUTTONS AND ASSOCIATED COUNTDOWN R10-3e (R) SIGN FOR POLES 5, 6, AND 7 SHALL BE INSTALLED PERPENDICULAR TO THE CROSSWALK IT CONTROLS.*
4. *APPROXIMATE COMMUNICATIONS AERIAL UTILITY HEIGHT ABOVE GROUND LEVEL IS 20.9 FEET.*
5. *APPROXIMATE COMMUNICATIONS AERIAL UTILITY HEIGHT ABOVE GROUND LEVEL IS 28.6 FEET.*
6. *DELDOT'S TRAFFIC CONTRACTOR SHALL INSTALL BACKPLATES WITH A 2" RETROREFLECTIVE YELLOW STRIP ON ALL SIGNAL HEADS.*
7. *POWER SOURCE: DELMARVA POLE NO. 45628-42516, LOCATED APPROX. 200 FEET EAST ON HENDRY AVENUE*
8. *THE CONTRACTOR SHALL INTERCEPT EXISTING CONDUIT 1 APPROXIMATELY 10 FEET WEST OF DELMARVA POLE 45628-42516 TO INSTALL SERVICE PEDESTAL AND JUNCTION WELL TYPE 1, PER STANDARD CONSTRUCTION DETAIL T-17 (2020) - 1. THE CONTRACTOR SHALL INSTALL SECONDARY DISCONNECT APPROXIMATELY 5 FEET FROM THE EXISTING CABINET.*
9. *PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHOULD BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE PEDESTRIAN CONNECTION WHEN POSSIBLE. WHERE THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON ADJACENT TO A LEVEL ALL-WEATHER SURFACE, THE SURFACE SOULD BE AS LEVEL AS FEASIBLE. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 38 TO 46 INCHES ABOVE THE ADJOINING SIDEWALK, AND SHOULD BE LOCATED SUCH THAT THE MAXIMUM REACH DOES NOT EXCEED 10 INCHES FROM ADJOINING SIDEWALK TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE THE SIDEWALK.*

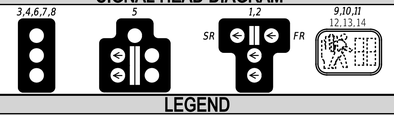
PROPOSED OVERHEAD SIGNING



SIGNAL PHASING



SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

Pennoni

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE *PAI* SECTION DESIGNATION.

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

ADDENDA / REVISIONS	

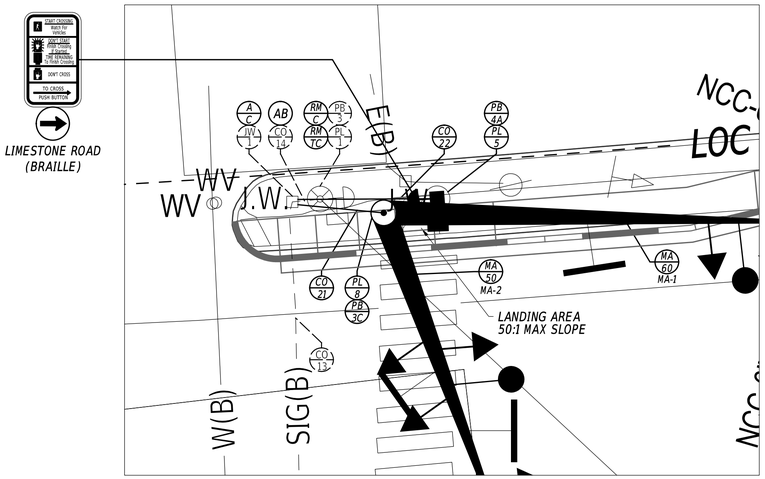
SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	PERMIT NO.	N515	SECTION
T201807402			PAI
COUNTY	DESIGNED BY: T. SCROCCA		SHEET NO.
NEW CASTLE	CHECKED BY: Z. BRANDER		68

SIGNAL PLAN SR 7 @ HENDRY AVE

LAST REVISED: 9/11/2018
11-NOV-2024
08:12
O:\PCounts\DEDOT\DEDOT17009 - Agr 1813F Task 4 - T201407003 Br 1-655\DESIGN\CTDGN\SG02.dgn

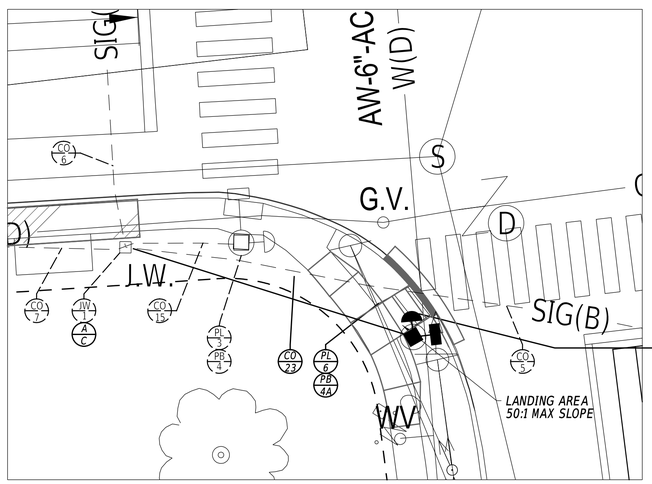


SOUTHWEST CORNER
SCALE 1"=10"

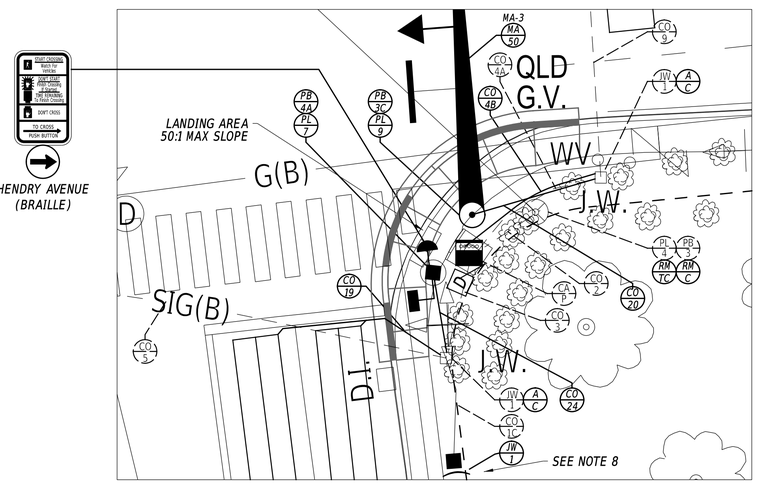
CONDUIT RUN SCHEDULE

CO NO.	NO. OF CONDUITS	SIZE/TYPE	LENGTH	INSTALL METHOD	AMOUNT AND TYPE OF CABLE / WIRE
1A*	1	1.5" GALV.	10'	-	REMOVE [(1) 2/#8 U.F. w/G] ; INSTALL [(3) #8 THHN STRANDED COPPER - LINE SIDE]
1B*	1	1.5" GALV.	155'	-	REMOVE [(1) 2/#8 U.F. w/G] ; INSTALL [(1) 2/#8 U.F. w/G - LOAD SIDE]
1C*	1	1.5" GALV.	14'	-	REMOVE [(1) 2/#8 U.F. w/G] ; INSTALL [(1) 2/#8 U.F. w/G - LOAD SIDE]
2*	1	2.5" GALV.	10'	-	REMOVE [(2) 16/#14, (3) 4/#18] ; ABANDON
3*	2	2.5" GALV.	10'	-	REMOVE [(3) 4/#18, (2) 9/#14] ; INSTALL [(1) 16/#14, (2) 4/#18, (4) 5/#14, (7) 2/#14, (2) #6 GND]
4A*	1	2.5" GALV.	15'	-	REMOVE [(2) 4/#18] ; EX. [(2) 6 PAIR/#19 COMM CABLE] ;
4B*	1	4.0" PVC	20'	T	INSTALL [(1) 9/#14, (1) 4/#18, (5) 2/#14, (1) #6 GND]
5*	1	2.5" GALV.	85'	-	REMOVE [(2) 4/#18, (2) 9/#14] ; INSTALL [(1) 16/#14, (2) 4/#18, (4) 5/#14, (5) 2/#14, (1) #6 GND]
6*	1	2.5" GALV.	50'	-	REMOVE [(2) 4/#18, (2) 9/#14] ; INSTALL [(1) 16/#14, (2) 4/#18, (2) 5/#14, (3) 2/#14, (1) #6 GND]
7*	1	2.5" GALV.	50'	-	REMOVE [(1) 4/#18] ; INSTALL [(2) 2/#14, (1) #6 GND]
8*	1	1.5" GALV.	250'	-	REMOVE [(1) 4/#18] ; ABANDON
9*	1	2.5" GALV.	50'	-	REMOVE [(2) 4/#18] ; EX.[(2) 6 PAIR/#19 COMM CABLE] INSTALL [(5) 2/#14, (1) #6 GND]
10*	1	2.5" GALV.	165'	-	REMOVE [(1) 4/#18] ; EX. [(2) 6 PAIR/#19 COMM CABLE] INSTALL [(2) 2/#14, (1) #6 GND]
11*	1	1.5" GALV.	160'	-	REMOVE [(1) 4/#18] ; ABANDON
12*	1	2.5" GALV.	10'	-	REMOVE [(2) 9/#14] ; INSTALL [(2) 5/#14, (1) #6 GND]
13*	1	2.5" GALV.	55'	-	REMOVE [(1) 9/#14] ; INSTALL [(1) 16/#14, (2) 4/#18, (1) 5/#14, (1) #6 GND]
14*	1	2.5" GALV.	5'	-	REMOVE [(1) 9/#14] ; ABANDON
15*	1	2.5" GALV.	15'	-	REMOVE [(1) 9/#14] ; INSTALL [(1) 5/#14, (1) #6 GND]
16*	1	2.5" GALV.	60'	-	(2) 6 PAIR/#19 COMM CABLE
17*	1	2.5" GALV.	35'	-	(2) 6 PAIR/#19 COMM CABLE
18	1	4.0" PVC.	141'	T	INSTALL [(2) 2#14, (1) #6 GND]
19	1	1.5" GALV.	8'	T	INSTALL [(2) 1/#14]
20	1	3.0" PVC	17'	T	INSTALL [(1) 9/#14, (1) 4/#18, (1) #6 GND]
21	1	3.0" PVC	12'	T	INSTALL [(1) 16/#14, (2) 4/#18, (1) #6 GND]
22	1	2.5" PVC	19'	T	INSTALL [(1) 5/#14, (1) #6 GND]
23	1	2.5" PVC	39'	T	INSTALL [(1) 5/#14, (1) #6 GND]
24	1	2.5" PVC	10'	T	INSTALL [(1) 5/#14, (1) #6 GND]
25	1	4.0" HDPE	35'	B	INSTALL [(2) 2/#14, (1) #6 GND]

* DENOTES EXISTING CONDUIT RUN.
TYPES: HDPE, PVC, RGS
INSTALL METHODS: B=BORE, IB=IN BARRIER, OC=OPEN CUT, OS=ON STRUCTURE, T=TRENCH

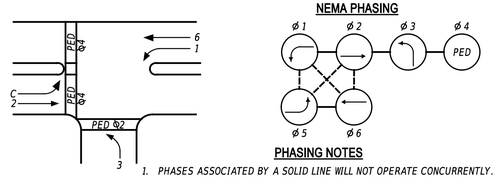


SOUTHEAST CORNER
SCALE 1"=10"

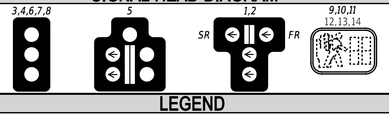


NORTHEAST CORNER
SCALE 1"=10"

SIGNAL PHASING



SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	PROPOSED POLE IDENTIFIER (# OF POLE)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	RM C	REMOVE BY CONTRACTOR
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	REMOVE BY OTHERS
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)	RM TC	REMOVE BY TRAFFIC CONTRACTOR

	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

Pennoni

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE — PROFESSIONAL ENGINEER

SEAL

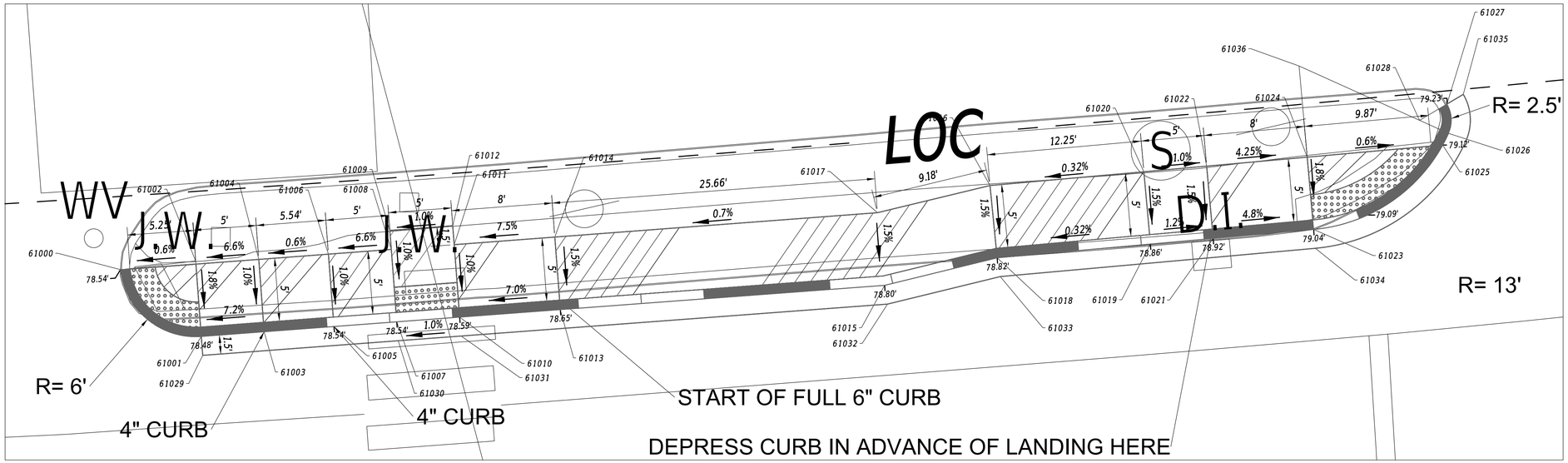
CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

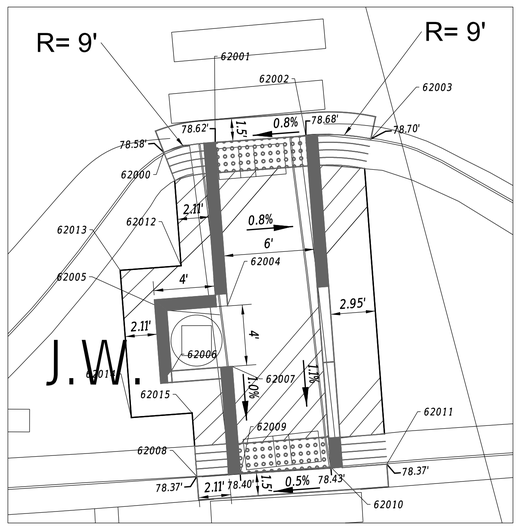
ADDENDA / REVISIONS		SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	PERMIT NO.	N515	SIGNAL PLAN SR 7 @ HENDRY AVE	SECTION
				T201807402	DESIGNED BY: T. SCROCCA			PAI
				COUNTY	CHECKED BY: Z. BRANDER			SHEET NO.
				NEW CASTLE				69

LAST REVISED: 9/11/2018
11-NOV-2024
08:12
U:\Accounts\DEDOT\DEDOT17009 - Agr 1813F Task 4 - T201407003 Br 1-655\DESIGN\CTDGN\SG028.dgn

SOUTHWEST CORNER
SCALE 1"=5"



SOUTHERN MEDIAN
SCALE 1"=5"



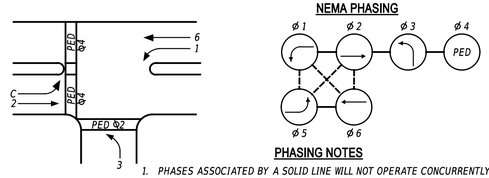
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
61000	34+76.73	-48.20	626735.3279	589099.9217	78.5400
61001	34+82.84	-42.50	626743.5656	589101.0206	78.4800
61002	34+82.80	-48.50	626740.0191	589096.1810	0.0000
61003	34+87.90	-42.54	626747.5986	589098.0651	78.5100
61004	34+87.86	-48.29	626744.1999	589093.4272	78.8900
61005	34+93.51	-42.57	626752.0741	589094.7854	78.5400
61006	34+93.47	-48.32	626748.6647	589090.1525	78.9200
61007	34+98.56	-42.59	626756.1027	589091.8331	78.5400
61008	34+98.54	-48.35	626752.6961	589087.1925	78.5900
61009	34+98.53	-49.85	626751.8076	589085.9840	78.6100
61010	35+03.62	-42.61	626760.1357	589088.8776	78.5900
61011	35+03.60	-48.37	626756.7261	589084.2352	78.6400
61012	35+03.60	-49.87	626755.8387	589083.0259	78.6600
61013	35+11.72	-42.62	626766.5919	589084.1463	78.6500
61014	35+11.71	-48.38	626763.1769	589079.5015	79.2000
61015	35+37.79	-42.54	626787.3901	589068.9047	78.8000
61016	35+46.88	-49.73	626790.2955	589057.7717	79.4000
61017	35+37.69	-48.32	626783.8614	589064.3229	79.3800
61018	35+46.97	-43.97	626793.8091	589062.3327	78.8200
61019	35+59.31	-44.02	626803.5406	589054.9768	78.8600
61020	35+59.30	-49.78	626800.0707	589050.3893	79.4400
61021	35+64.37	-44.03	626807.5293	589051.9618	78.9200
61022	35+64.36	-49.78	626804.0607	589047.3761	79.4900
61023	35+72.47	-44.04	626813.9108	589047.1383	79.0400
61024	35+72.47	-49.78	626810.4448	589042.5548	79.1500
61025	35+83.40	-49.75	626819.0535	589036.0534	79.1200
61026	35+83.96	-50.63	626818.9555	589035.0220	79.1500
61027	35+84.06	-52.96	626817.6225	589033.1104	79.2300
61028	35+81.74	-51.88	626816.4599	589035.3600	0.0000
61029	34+82.86	-41.00	626744.4523	589102.2305	78.4800
61030	34+98.57	-41.09	626756.9893	589093.0430	78.6000
61031	35+03.62	-41.11	626761.0223	589090.0875	78.6400
61032	35+37.91	-41.04	626788.3767	589070.0414	78.8100
61033	35+47.09	-42.47	626794.8035	589063.4614	78.8300
61034	35+72.46	-42.54	626814.8147	589048.3354	79.0600
61035	35+85.43	-53.60	626818.3111	589031.7778	79.2800
61036	35+72.48	-57.04	626806.0731	589036.7667	78.8200

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
62000	34+92.91	-10.51	626770.4033	589121.0933	78.5800
62001	34+96.34	-10.92	626772.9358	589118.7486	78.6200
62002	35+02.37	-10.93	626777.7882	589115.2118	78.6800
62003	35+06.64	-10.42	626781.5293	589113.1150	78.7000
62004	34+96.40	-0.12	626779.3256	589127.4546	78.5100
62005	34+92.38	-0.09	626776.0877	589129.8416	78.5500
62006	34+92.40	3.92	626778.4598	589133.0796	78.5200
62007	34+96.42	3.90	626781.7071	589130.6974	78.4800
62008	34+93.60	10.98	626783.5801	589138.0891	78.3700
62009	34+96.46	11.01	626785.9144	589136.4324	78.4000
62010	35+02.44	10.99	626790.7502	589132.8806	78.4300
62011	35+06.12	11.06	626793.7802	589130.7633	78.3700
62012	34+93.52	-2.96	626775.3300	589126.8433	78.9800
62013	34+89.49	-2.94	626772.0834	589129.2264	78.9200
62014	34+89.56	6.80	626777.8451	589137.0803	78.8500
62015	34+93.58	6.78	626781.0924	589134.6981	78.8800

SIGNAL PHASING



PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION. — DATE

TERESA M. SCROCCA LICENSE No. 24274 DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

ADDENDA / REVISIONS	

SCALE AS NOTED

BR 1-655 ON
LIMESTONE ROAD (SR7)
OVER CSX RAILROAD

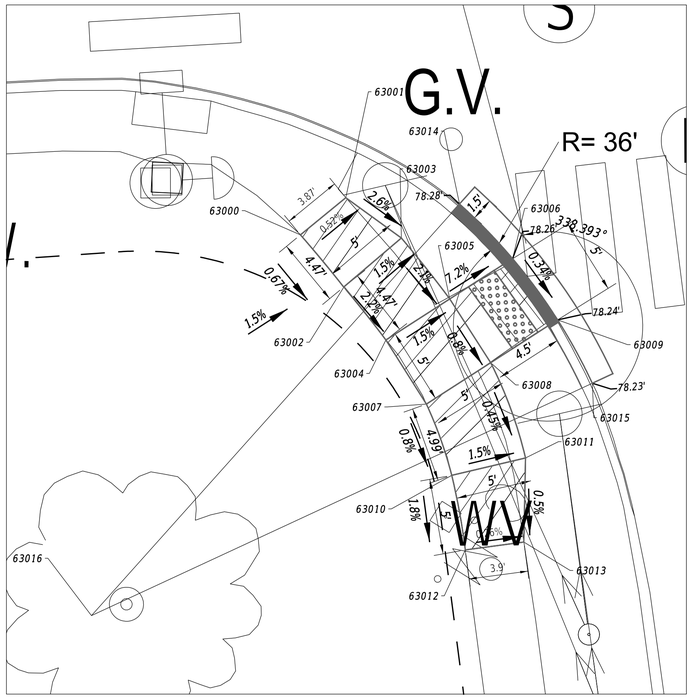
CONTRACT	T201807402	PERMIT NO.	N515
COUNTY	NEW CASTLE	DESIGNED BY:	J. BRIONES
		CHECKED BY:	O. GREEN

SIGNAL PLAN
SR 7 @ HENDRY AVE

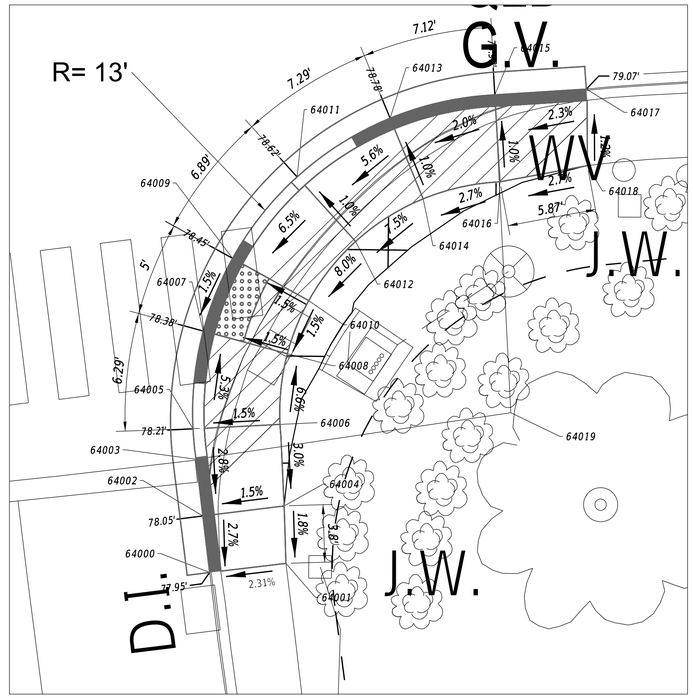
SECTION	PAI
SHEET NO.	70

LAST REVISED: 9/11/2018
11-NOV-2024
08:12
U:\Accounts\DEDOT\DEDOT17009 - Agr 1813F Task 4 - T201407003 Br 1-655\DESIGN\CTD\DGN\SG02C.dgn

SOUTHEAST CORNER
SCALE 1"=5"



NORTHEAST CORNER
SCALE 1"=5"



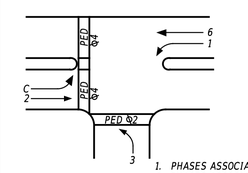
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
63000	400+53.92	-36.79	626820.4157	589166.6398	78.7700
63001	400+51.87	-33.51	626821.6546	589162.9729	78.7900
63002	400+57.69	-34.38	626824.6657	589168.0268	78.7400
63003	400+54.98	-30.21	626826.1780	589163.2910	78.6700
63004	400+61.53	-32.09	626828.8733	589169.5408	78.6400
63005	400+59.38	-27.56	626831.0143	589165.0087	78.5600
63006	400+57.28	-23.11	626833.1257	589160.5627	78.2600
63007	400+66.06	-29.98	626833.3802	589171.7131	78.6000
63008	400+63.90	-25.42	626835.5307	589167.1539	78.5200
63009	400+61.67	-20.68	626837.7847	589162.4180	78.2400
63010	400+70.94	-28.92	626837.2885	589174.8174	78.5600
63011	400+70.43	-23.95	626840.8115	589171.2694	78.4900
63012	400+75.93	-28.67	626840.6479	589178.5187	78.4700
63013	400+75.92	-24.77	626843.6555	589176.0343	78.4600
63014	400+53.25	-26.12	626828.2433	589159.3569	78.2800
63015	400+66.11	-18.95	626841.9395	589164.7534	78.2300
63016	400+77.06	-53.70	626822.0078	589195.2561	0.0000

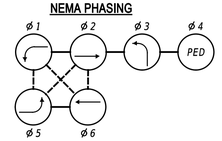
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
64000	400+74.86	-22.09	626879.2252	589145.5061	77.9500
64001	400+74.91	-27.15	626883.1742	589142.3362	78.5500
64002	400+71.10	-22.12	626876.8708	589142.5815	78.0500
64003	400+67.33	-22.16	626874.5041	589139.6417	78.0300
64004	400+71.13	-27.53	626881.0672	589139.1786	78.6200
64005	400+65.32	-22.22	626873.2748	589138.0463	78.2100
64006	400+65.77	-27.95	626877.9927	589134.7593	78.7800
64007	400+59.00	-23.72	626870.4322	589132.2119	78.3800
64008	400+61.20	-29.03	626875.9356	589130.5457	78.4700
64009	400+54.49	-26.25	626869.5330	589127.1210	78.4500
64010	400+57.91	-30.88	626875.2755	589126.8254	78.5300
64011	400+49.71	-31.17	626870.3040	589120.3047	78.6200
64012	400+54.43	-34.45	626875.8354	589121.8756	78.9300
64013	400+46.66	-37.75	626873.4600	589113.7753	78.7700
64014	400+52.22	-39.23	626878.1273	589117.1340	79.3200
64015	400+46.02	-44.80	626878.5078	589108.8060	78.9100
64016	400+51.76	-44.40	626881.8361	589113.4955	79.4600
64017	400+46.42	-50.84	626883.4344	589105.2864	79.0700
64018	400+51.44	-50.26	626886.1639	589109.5357	79.6200
64019	400+66.96	-43.15	626890.5052	589126.0415	0.0000

SIGNAL PHASING



NEMA PHASING

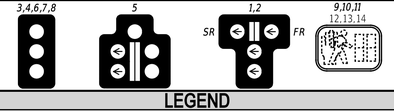


PHASING NOTES

1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

OVERLAP C = 4+5

SIGNAL HEAD DIAGRAM



LEGEND

AB	ABANDON	OH #	EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	OH #	*PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)*
CA X	*PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)*	PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
CO #	EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)	PB X	*PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)*
CO #	*PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)*	PL X	EXISTING POLE IDENTIFIER (# OF POLE)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	PL X	*PROPOSED POLE IDENTIFIER (# OF POLE)*
JW X	*PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)*	RM C	*REMOVE BY CONTRACTOR*
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)	RM O	*REMOVE BY OTHERS*
MA XX	*PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)*	RM TC	*REMOVE BY TRAFFIC CONTRACTOR*

	EXISTING SYMBOL	*PROPOSED SYMBOL*
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1		
LOOP DETECTOR, TYPE 2		
LUMINAIRE		
MAST ARM		
MICROWAVE DETECTION		
OPTICOM RECEIVER		
OVERHEAD SIGNING		
PEDESTRIAN POLE/BASE		
PEDESTRIAN PUSHBUTTON		
PEDESTRIAN SIGNAL HEAD		
RIGHT-OF-WAY		R/W
SERVICE PEDESTAL		P
SIGNAL CABINET		
SIGNAL HEAD		
SIGNAL POLE/BASE		
CCTV CAMERA		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
2. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT TRAFFIC IMMEDIATELY BEFORE CONSTRUCTION.

PREPARED BY
PENNONI ASSOCIATES INC.

Teresa Scrocca — 11/11/2024
THIS SEAL APPLIES TO ALL SHEETS BEARING THE "PAI" SECTION DESIGNATION.
DATE

TERESA M. SCROCCA — LICENSE — No. 24274 — DELAWARE PROFESSIONAL ENGINEER
SEAL

CONCURRENCE FOR INSTALLATION

CHIEF OF TRAFFIC ENGINEERING — 11/13/2024 DATE

ADDENDA / REVISIONS		SCALE AS NOTED	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	PERMIT NO.	N515	SIGNAL PLAN SR 7 @ HENDRY AVE	SECTION
				T201807402	DESIGNED BY: J. BRIONES			PAI
				COUNTY	CHECKED BY: O. GREEN			SHEET NO.
				NEW CASTLE				71

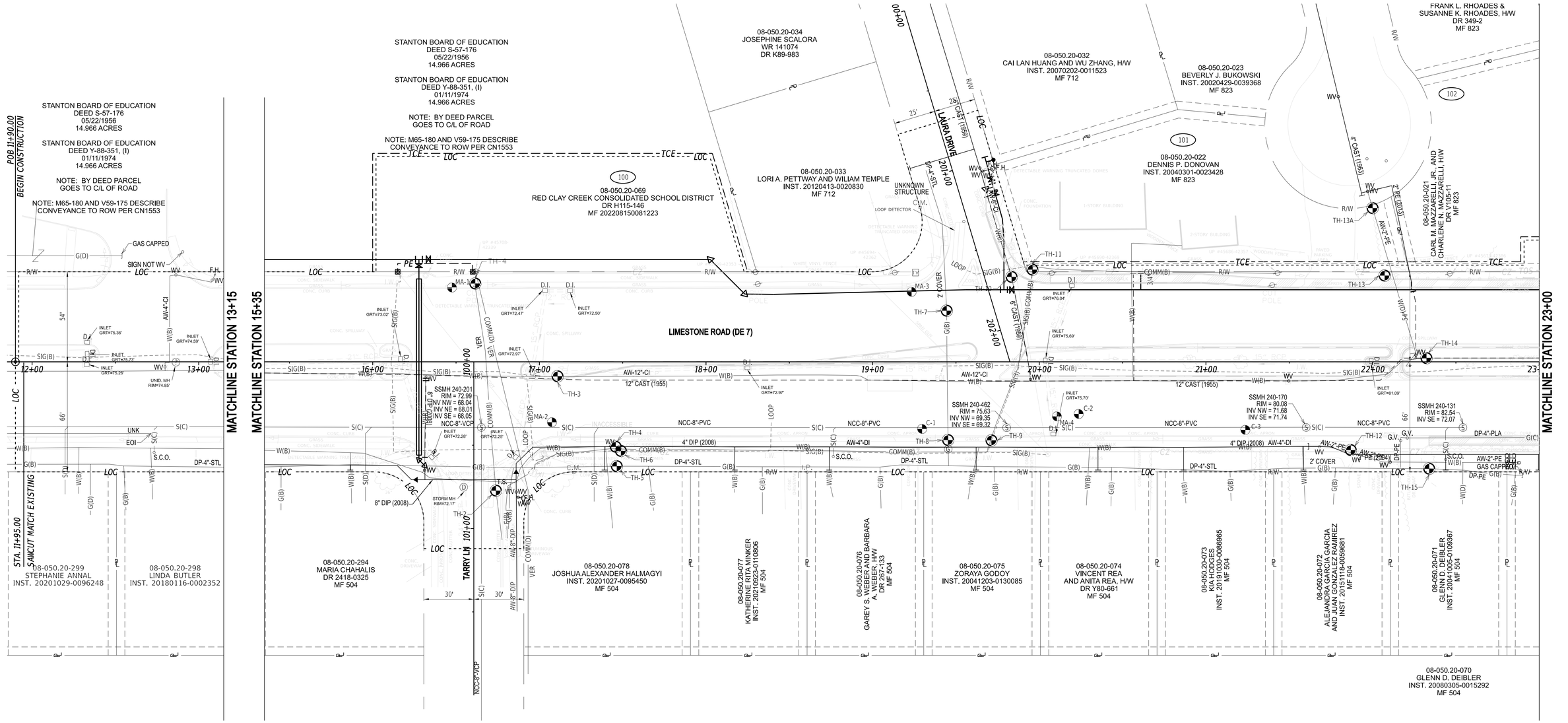
LAST REVISED: 9/11/2018
11-NOV-2024
08:12
U:\Accounts\DEDOT\DEDOT17009 - Agr 1813F Task 4 - T201407003 Br 1-655\DESIGN\CTD\DGN\SG02D.dgn

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-1	VER	625205.16	590070.77	73.14	2.84	(2) 4.5" CORR. PLA
TH-2	VER	625281.95	590169.15	72.10	3.14	CAST IN PLACE CONC.
TH-3	AW-W	625276.60	590091.43	73.11	4.30	13" CAST IRON
TH-4	AW-W	625328.69	590108.53	73.25	3.56	4.5" CAST IRON
TH-5	DP-G	625335.44	590118.07	74.10	4.81	4.75" STEEL
TH-6	VER	625332.65	590109.00	73.74	1.56	(2) 2.5" STEEL
TH-7	DP-G	625453.06	589933.50	74.77	4.24	4.5" STEEL
TH-8	DP-G	625495.17	589998.65	75.34	4.90	4.5" STEEL

UTILITY TEST HOLE SCHEDULE CONTINUED

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-9	DOT	625517.28	589984.90	75.86	2.13	3" STEEL
TH-10	AW-W	625475.17	589895.57	75.10	3.80	7" CAST IRON
TH-11	DOT	625483.41	589885.21	76.27	2.33	3" STEEL
TH-12	AW-W	625702.72	589874.71	79.19	3.83	2.5" POLYETHYLENE
TH-13	N/A	625664.02	589775.38	80.99	N/A	NO UTILITY FOUND
TH-13A	N/A	625636.30	589745.02	77.98	N/A	NO UTILITY FOUND
TH-14	AW-W	625711.66	589803.81	82.06	4.35	13" CAST IRON
TH-15	DP-G	625748.44	589859.01	79.78	3.14	2.25" HDPE



UTILITIES RELOCATION PLAN NOTES:

1. *WORK BETWEEN STA. 13+50.00 AND 15+35.00 IS ASSOCIATED WITH MILL AND OVERLAY. UTILITIES WITHIN THIS LIMIT WILL NOT BE IMPACTED.*

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

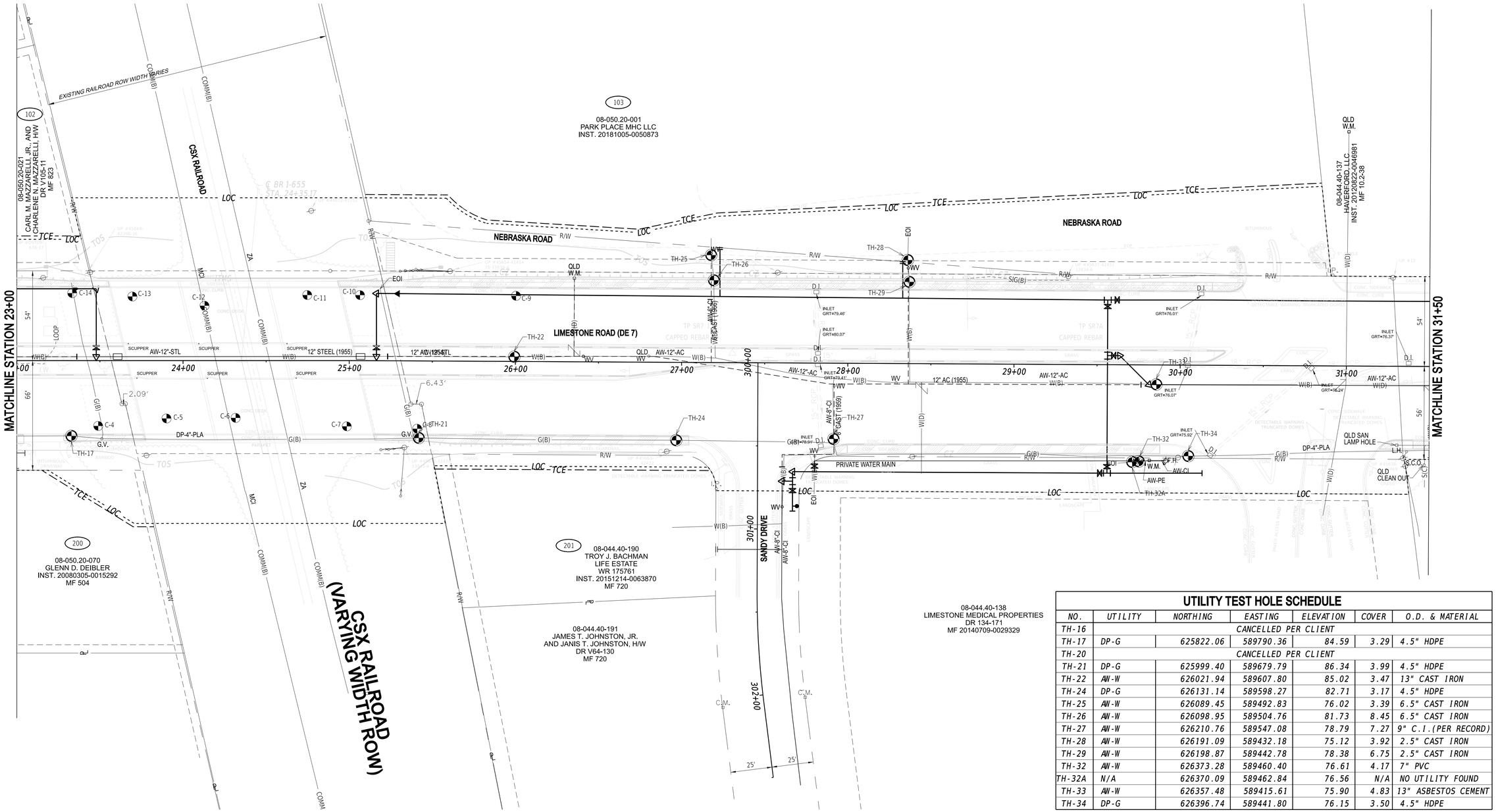
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

UTILITY RELOCATION PLAN

SECTION: BR
SHEET NO.: 72

13-DEC-2024
12:06
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\UT00.dgn



UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	NORTHING	EASTING	ELEVATION	COVER	O.D. & MATERIAL
TH-16	CANCELLED PER CLIENT					
TH-17	DP-G	625822.06	589790.36	84.59	3.29	4.5" HDPE
TH-20	CANCELLED PER CLIENT					
TH-21	DP-G	625999.40	589679.79	86.34	3.99	4.5" HDPE
TH-22	AW-W	626021.94	589607.80	85.02	3.47	13" CAST IRON
TH-24	DP-G	626131.14	589598.27	82.71	3.17	4.5" HDPE
TH-25	AW-W	626089.45	589492.83	76.02	3.39	6.5" CAST IRON
TH-26	AW-W	626098.95	589504.76	81.73	8.45	6.5" CAST IRON
TH-27	AW-W	626210.76	589547.08	78.79	7.27	9" C.I.(PER RECORD)
TH-28	AW-W	626191.09	589432.18	75.12	3.92	2.5" CAST IRON
TH-29	AW-W	626198.87	589442.78	78.38	6.75	2.5" CAST IRON
TH-32	AW-W	626373.28	589460.40	76.61	4.17	7" PVC
TH-32A	N/A	626370.09	589462.84	76.56	N/A	NO UTILITY FOUND
TH-33	AW-W	626357.48	589415.61	75.90	4.83	13" ASBESTOS CEMENT
TH-34	DP-G	626396.74	589441.80	76.15	3.50	4.5" HDPE

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

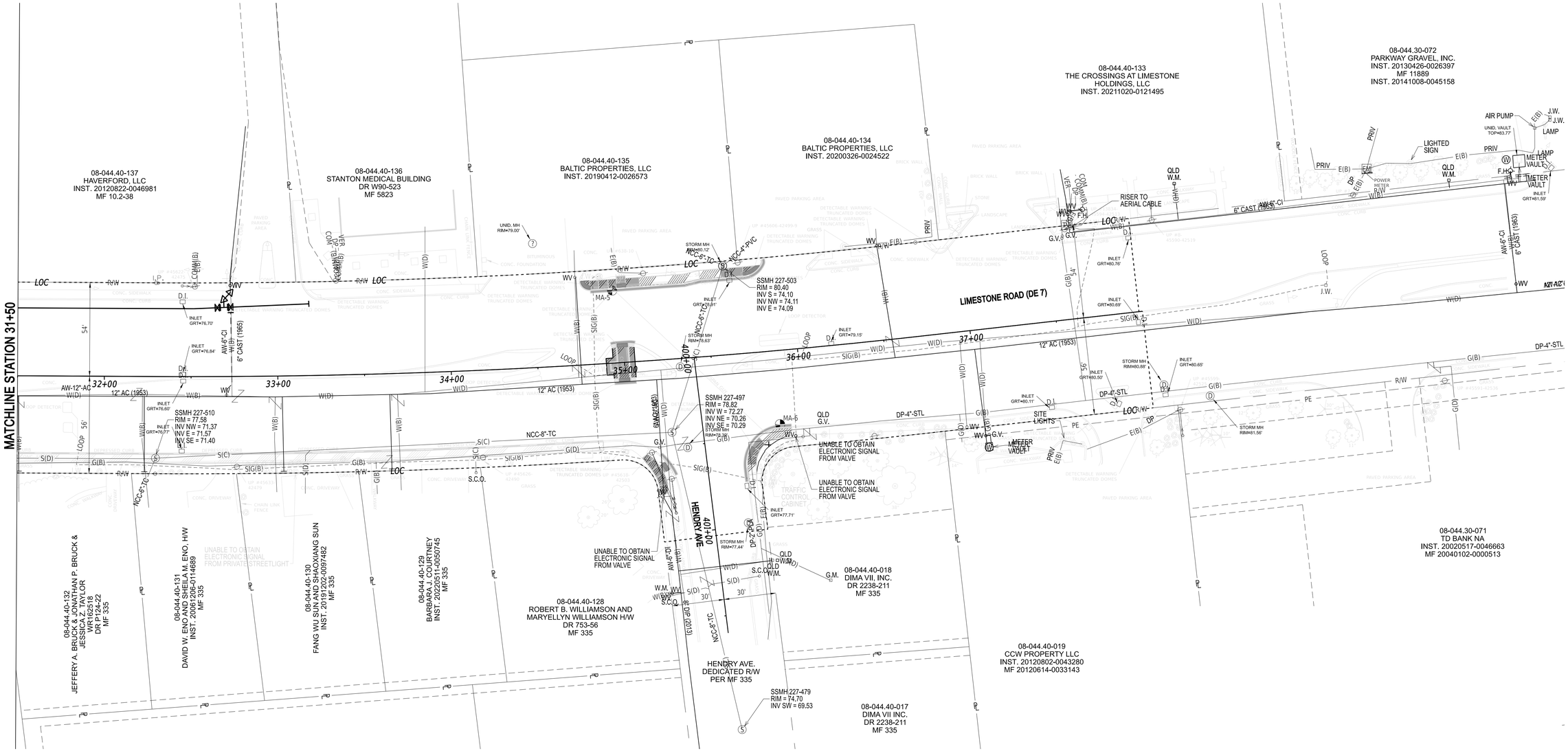
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

UTILITY RELOCATION PLAN

SECTION: BR
SHEET NO.: 73

13-DEC-2024
12:06
Y:\NEWCASTL\03\1\Bridge\T201807402\500_CADD\530_PLANS_DGN\UT01.dgn



ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	UTILITY RELOCATION PLAN	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 74
					CHECKED BY: S.WALLS		

13-DEC-2024
12:06
Y:\NEWCASTL\0031\Bridge\T201807402\S00_CADD\S30_PLANS_DGN\UT02.dgn

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY	SYM	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM #817042)	2,687 LF	(H)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID DOUBLE LINE (ITEM #817042)	144 LF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM #817042)	1,979 LF	(I)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	257 SF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" - 10' LINE & 30' GAP (ITEM #817042)	1,758 LF	(L)	TUBULAR MARKER, ORANGE, 28" (ITEM #824009)	2 EACH
	BIDIRECTIONAL WHITE/RED RAISED/RECESSED PAVEMENT MARKER, 80' GAP (ITEM #817027)	30 EACH			
(D)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM #817002)	212 SF			
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" - 2' LINE & 6' GAP (ITEM #817042)	515 LF			
(F)	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL AND ARROW (ITEM #817015)	8 EACH			
(G)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM #817002)	1,122 SF			

POB 11+90.00
BEGIN CONSTRUCTION

STANTON BOARD OF EDUCATION
DEED S-57-176
05/22/1956
14.966 ACRES

STANTON BOARD OF EDUCATION
DEED Y-88-351, (I)
01/11/1974
14.966 ACRES

NOTE: BY DEED PARCEL GOES TO C/L OF ROAD

NOTE: M65-180 AND V59-175 DESCRIBE CONVEYANCE TO ROW PER CN1553

STA. 11+95.00
SAWCUT MATCH EXISTING

08-050.20-299
STEPHANIE ANNAL
INST. 20201029-0096248

08-050.20-298
LINDA BUTLER
INST. 20180116-0002352

MATCHLINE STATION 13+15

MATCHLINE STATION 15+35

STANTON BOARD OF EDUCATION
DEED S-57-176
05/22/1956
14.966 ACRES

STANTON BOARD OF EDUCATION
DEED Y-88-351, (I)
01/11/1974
14.966 ACRES

NOTE: BY DEED PARCEL GOES TO C/L OF ROAD

NOTE: M65-180 AND V59-175 DESCRIBE CONVEYANCE TO ROW PER CN1553

08-050.20-294
MARIA CHAHALIS
DR 2418-0325
MF 504

TARRY LN 101+00

POE 102+00.00

08-050.20-069
RED CLAY CREEK CONSOLIDATED SCHOOL DISTRICT
DR H115-146
MF 202208150081223

08-050.20-034
JOSEPHINE SCALORA
WR 141074
DR K89-983

08-050.20-033
LORI A. PETTWAY AND WILIAM TEMPLE
INST. 20120413-0020830
MF 712

LAURA DRIVE

POB 200+00.00

08-050.20-032
CAI LAN HUANG AND WU ZHANG, H/W
INST. 20070202-0011523
MF 712

08-050.20-023
BEVERLY J. BUKOWSKI
INST. 20020429-0039368
MF 823

08-050.20-022
DENNIS P. DONOVAN
INST. 20040301-0023428
MF 823

08-050.20-020
FRANK L. RHOADES &
SUSANNE K. RHOADES, H/W
DR 349-2
MF 823

SIGN IS TO BE REPOSITIONED TO STA. 23+35

08-050.20-021
CARL M. MAZZARELLI JR., AND
CHARLENE M. MAZZARELLI, H/W
DR V105-71
MF 823

08-050.20-077
KATHERINE ROSE MINKER
INST. 20210923-0110806
MF 504

08-050.20-076
GAREY S. WEBER AND BARBARA
A. WEBER, H/W
DR 267-133
MF 504

08-050.20-078
JOSHUA ALEXANDER HALMAGYI
INST. 20201027-0095450
MF 504

08-050.20-075
ZORAYA GODOY
INST. 20041203-0130085
MF 504

08-050.20-074
VINCENT REA
AND ANITA REA, H/W
DR Y80-661
MF 504

08-050.20-073
KIA HODGES
INST. 20151105-0086965
MF 504

08-050.20-072
ALEJANDRA GARCIA GARCIA
AND JUAN GONZALEZ RAMIREZ
INST. 20151118-0059681
MF 504

08-050.20-071
GLENN D. DEIBLER
INST. 20080305-0015292
MF 504

MATCHLINE STATION 23+00

LIMESTONE ROAD (DE 7)

SIGNING AND STRIPING PLAN NOTES:

1. RAISED/RECESSED PAVEMENT MARKERS (RPM) SHOULD BE INSTALLED PER DE MUTCD.
2. WORK BETWEEN STA. 13+50.00 AND 15+35.00 IS ASSOCIATED WITH MILL AND OVERLAY. SIGNING AND STRIPING SHALL MATCH EXISTING WITHIN THIS LIMIT AND ALL OTHER ITEMS SHALL NOT BE DISTURBED.

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	BRIDGE NO.	1-655
T201807402	DESIGNED BY:	S.WEAVER
COUNTY	CHECKED BY:	S.WALLS
NEW CASTLE		

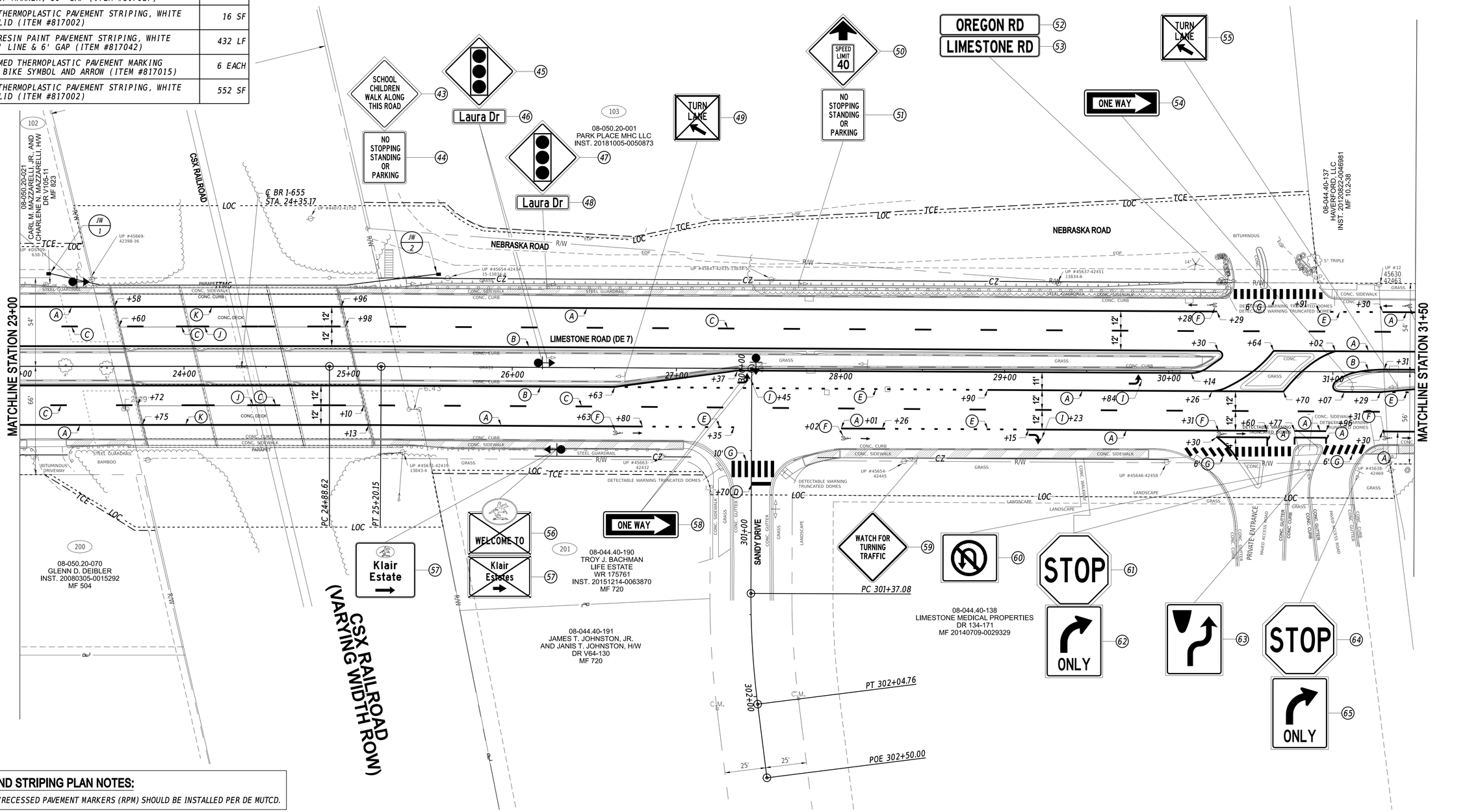
SIGNING, STRIPING AND CONDUIT PLAN

SECTION
BR
SHEET NO.
75

10-JAN-2025
16:23
Y:\NEWCASTL\0031\Bridge\T201807402\500_CADD\530_PLANS_DGN\S500.dgn

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY	SYM	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM #817042)	1,773 LF	(I)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	47 SF
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM #817042)	1,576 LF	(J)	EPOXY RESIN PAINT PAVEMENT STRIPING, BLACK 6" BROKEN - 10' LINE & 30' GAP (ITEM #817044)	276 LF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" - 10' LINE & 30' GAP (ITEM #817042)	1,700 LF	(K)	EPOXY RESIN PAINT PAVEMENT STRIPING, BLACK 3" SOLID (ITEM 817018)	276 LF
	BIDIRECTIONAL WHITE/RED RAISED/RECESSED PAVEMENT MARKER, 80' GAP (ITEM #817027)	24 EACH			
(D)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM #817002)	16 SF			
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" - 2' LINE & 6' GAP (ITEM #817042)	432 LF			
(F)	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL AND ARROW (ITEM #817015)	6 EACH			
(G)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM #817002)	552 SF			



SIGNING AND STRIPING PLAN NOTES:

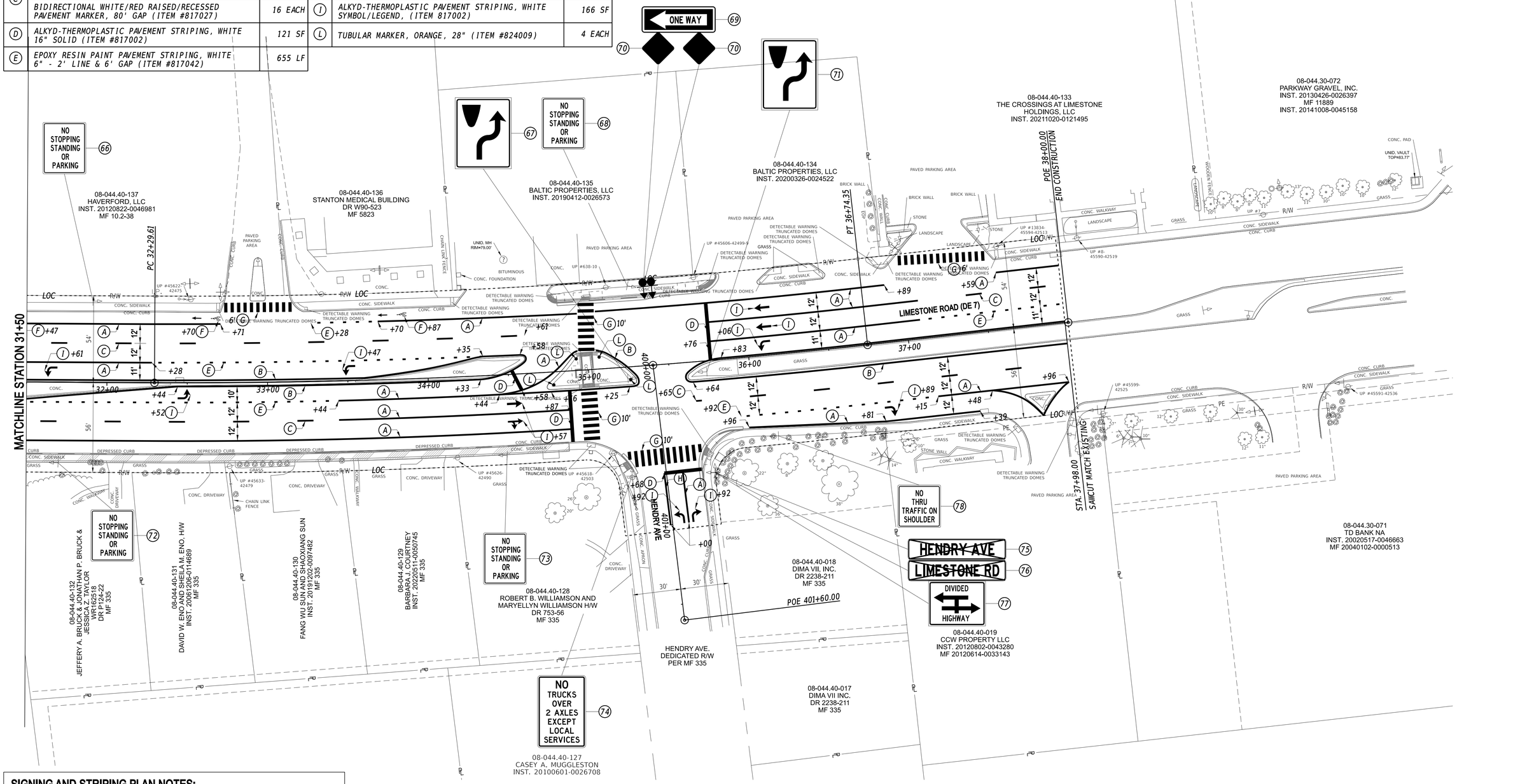
1. RAISED/RECESSED PAVEMENT MARKERS (RPM) SHOULD BE INSTALLED PER DE MUTCD.

ADDENDA / REVISIONS	SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	SIGNING, STRIPING AND CONDUIT PLAN	SECTION
	0 30 60 90 FEET		T201807402	DESIGNED BY: S.WEAVER		BR
			COUNTY NEW CASTLE	CHECKED BY: S.WALLS		SHEET NO. 76

10-JAN-2025
16:23
Y:\NEWCASTL\U031Bridge\T201807402\500_CADD\530_PLANS_DGN\SS01.dgn

PAVEMENT MARKINGS LEGEND

SYM	ITEM	QUANTITY	SYM	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" SOLID (ITEM #817042)	1,802 LF	(F)	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL AND ARROW (ITEM #817015)	2 EACH
(B)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID (ITEM #817042)	1,201 LF	(G)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 24" SOLID (ITEM #817002)	840 SF
(C)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" - 10' LINE & 30' GAP (ITEM #817042)	827 LF	(H)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 6" SOLID DOUBLE LINE (ITEM #817042)	65 LF
	BIDIRECTIONAL WHITE/RED RAISED/RECESSED PAVEMENT MARKER, 80' GAP (ITEM #817027)	16 EACH	(I)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 817002)	166 SF
(D)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM #817002)	121 SF	(L)	TUBULAR MARKER, ORANGE, 28" (ITEM #824009)	4 EACH
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 6" - 2' LINE & 6' GAP (ITEM #817042)	655 LF			



SIGNING AND STRIPING PLAN NOTES:

1. RAISED/RECESSED PAVEMENT MARKERS (RPM) SHOULD BE INSTALLED PER DE MUTCD.

ADDENDA / REVISIONS		SCALE 0 30 60 90 FEET	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT T201807402	BRIDGE NO. 1-655	SIGNING, STRIPING AND CONDUIT PLAN	SECTION BR
				COUNTY NEW CASTLE	DESIGNED BY: S.WEAVER		SHEET NO. 77
					CHECKED BY: S.WALLS		

10-JAN-2025
16:24
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\SS02.dgn

PERMANENT SIGN SCHEDULE - ROADWAY

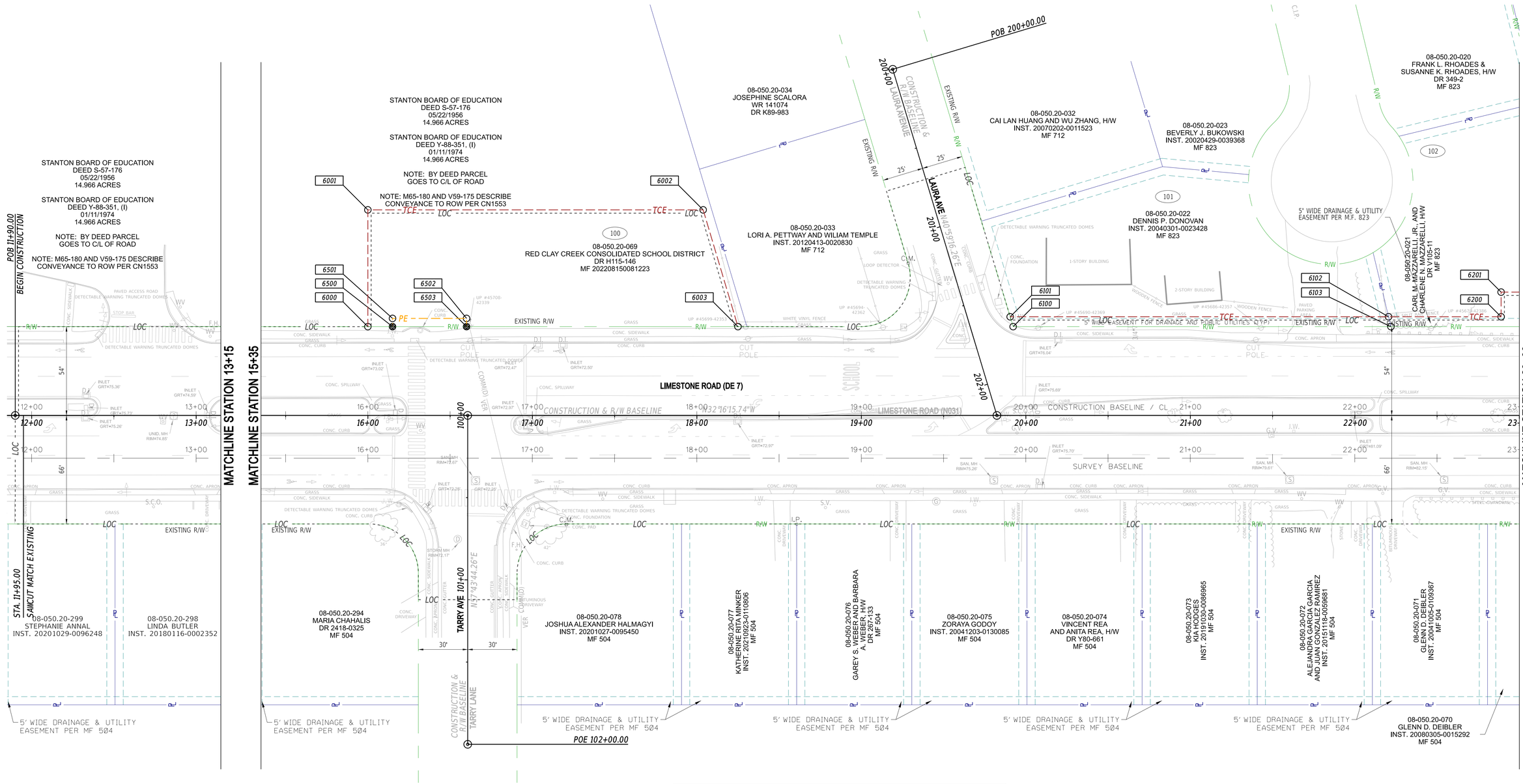
SHEET NO.	PLAN IDENTIFIER	SIGN DESIGNATION	QTY.	DESCRIPTION	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	X13 /ITEM 818001 SUPPLY OF FLAT SHEET ALUMINUM, TYPE IV, RETROREFLECTIVE SHEETING (SF)	X14 /ITEM 818003 SUPPLY OF FLAT SHEET ALUMINUM, TYPE XI, RETROREFLECTIVE SHEETING (SF)	ITEM 819018 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE POST (EACH)			ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF)			POST INSTALLATION TYPE	X16 /ITEM 819011 12' SIGNPOSTS W/ BASEPOSTS & HARDWARE (EACH)	SIGN DISPOSITION	X14A FLAT SHEET ALUMINUM SIGN PANELS (TYPE XI SHEETING) - SIGNS ON POLES, SPAN WIRES, MAST ARMS (TRAFFIC SUPPLY)	ITEM 823003 REMOVAL OF SIGN ON SPAN WIRE OR MAST ARM (EA) TRAFFIC CONTRACTOR ITEM. EXCEPT FOR PILOT PROJECTS	ITEM 823001 INSTALLATION OF SIGN ON SPAN WIRE OR MAST ARM (SF) TRAFFIC CONTRACTOR ITEM. EXCEPT FOR PILOT PROJECTS	REMARKS
									SIGN DISPOSITION	REMOVE	INSTALL	SIGN DISPOSITION	REMOVE	INSTALL							
75	1	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	2	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18			REMAIN												
75	3	R3-18(24)	1	COMBINATION U-TURN AND LEFT TURN PROHIBITION (Symbol) - 24x24	24	24			REMAIN												
75	4	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0					NEW		3.0	SOIL	2	NEW (POLE)				2 POLES
75	5	OM4-3	2	END OF ROAD OBJECT MARKER	18	18	4.5					ADD TO ASSEMBLY		4.5							ADDED ON TO THE ONE WAY SIGN
75	6	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12			REMOVE	1											
75	7	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36			REMAIN												
75	8	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12			REMAIN												
75	9	D3-2-DE1	1	WELCOME TO	36	32			REMOVE	1											
75	10	D3-2-DE2	1	DEVELOPMENT NAME	36	18	4.5		RENEW	1		RENEW	4.5	4.5	SOIL	2	NEW (POLE)				"MANETTE HEIGHTS"(2 POLES)
75	11	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	12	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMOVE	1											
75	13	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMOVE	1											
75	14	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36			NEW		1				SOIL	1	NEW (POLE)				ONE POLE
75	15	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12			ADD TO ASSEMBLY		1				SOIL	1	NEW (POLE)				
75	16	R4-7c	1	NARROW KEEP RIGHT	18	30			REMAIN												
75	17	S5-1-DE(24)	1	SCHOOL SPEED LIMIT XX WHEN CHILDREN ARE PRESENT - 24x54	24	54			REPOSITION	1	1				SOIL	1	NEW (POLE)				
75	18	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36			REMAIN												
75	19	D3-2-DE1	1	WELCOME TO	36	32			REMOVE	1											
75	20	D3-2-DE2	1	DEVELOPMENT NAME	36	18	4.5					RENEW	4.5	4.5	SOIL	2	NEW (POLE)				"MANETTE HEIGHTS"(2 POLES)
75	21	W3-5(36)	1	SPEED REDUCTION (Symbol) - 36x36	36	36			REPOSITION	1	1				SOIL		NEW (POLE)				
75	22	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	23	S1-1(30)	1	SCHOOL SIGN (Symbol) - 30x30	30	30			REPOSITION	1	1				SOIL	1	NEW (POLE)				ONE POLE
75	24	S4-3P(36)	1	SCHOOL - 36x12	36	12		3.0	ADD TO ASSEMBLY		1										
75	25	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	26	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36			REMAIN												
75	27	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12			REMAIN												
75	28	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36			REMAIN												
75	29	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMOVE	1											
75	30	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMOVE	1											
75	31	R6-3a(30)	1	DIVIDED HIGHWAY CROSSING (T - Intersection) - 30x24	30	24			REMAIN												
75	32	S1-1(36)	1	SCHOOL SIGN (Symbol) - 36x36	36	36			REMAIN												
75	33	W16-7P_L(24)	1	LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	24	12			REMAIN												
75	34	R3-20_L	1	BEGIN LEFT TURN LANE	24	36			REMOVE	1											
75	35	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	36	S5-2(24)	1	END SCHOOL ZONE - 24x30	24	30			REPOSITION	1	1				SOIL	1	NEW (POLE)				
75	37	R5-1(36)	1	DO NOT ENTER - 36x36	36	36			REPOSITION	1	1				SOIL	1	NEW (POLE)				
75	38	R3-18(24)	1	COMBINATION U-TURN AND LEFT TURN PROHIBITION (Symbol) - 24x24	24	24			REPOSITION	1	1				SOIL	1	NEW (POLE)				
75	39	D3-2-DE1	1	WELCOME TO	36	32			REMOVE	1											
75	40	D3-2-DE2	1	DEVELOPMENT NAME	36	18						REPOSITION	4.5	4.5	SOIL	2	NEW (POLE)				"WINDERMERE" & "ROLLING HILLS"(2 POLES)
75	41	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	42	R3-20_L	1	BEGIN LEFT TURN LANE	24	36			REMOVE	1											
76	43	S3-1-DE(36)	1	SCHOOL CHILDREN WALK ALONG THIS ROAD - 36x36	36	36			REMAIN												
76	44	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
76	45	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36			REPOSITION	1	1				SOIL	1	NEW (POLE)				ONE POLE
76	46	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9	1.5		ADD TO ASSEMBLY	1	1										
76	47	W3-3(36)	1	SIGNAL AHEAD (Symbol) - 36x36	36	36			REMAIN												
76	48	W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	24	9			REMAIN												
76	49	R3-20_L	1	BEGIN LEFT TURN LANE	24	36			REMOVE	1											
76	50	W3-5(36)	1	SPEED REDUCTION (Symbol) - 36x36	36	36			REMAIN												
76	51	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
76	52	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMAIN												
76	53	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMAIN												
76	54	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12			REMAIN												
76	55	R3-20_L	1	BEGIN LEFT TURN LANE	24	36			REMOVE	1											
76	56	D3-2-DE1	1	WELCOME TO	36	32			REMOVE	1											
76	57	D3-2-DE2	1	DEVELOPMENT NAME	36	18	4.5					RENEW	4.5	4.5	SOIL	2	NEW (POLE)				"KLAIR ESTATES"(2 POLES)
76	58	R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	36	12			REPOSITION	1	1				SOIL	1	NEW (POLE)				
76	59	W21-9-DE(36)	1	WATCH FOR TURNING TRAFFIC - 36x36	36	36			REMAIN												
76	60	R3-4(24)	1	U - TURN PROHIBITION (Symbol) - 24x24	24	24			REMAIN												"NO TURN AROUND" SIGN ABOVE THIS SIGN
76	61	R1-1(36)	1	STOP	36	36			REMAIN												
76	62	R3-5_R	1	MANDATORY MOVEMENT LANE CONTROL - Right	30	36			REMAIN												
76	63	R4-7c	1	NARROW KEEP RIGHT	18	30			REMAIN												
76	64	R1-1(36)	1	STOP	36	36			REMAIN												
76	65	R3-5_R	1	MANDATORY MOVEMENT LANE CONTROL - Right	30	36			REMAIN												
77	66	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
77	67	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18			REMAIN												
77	68	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
77	69	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12	3.0					NEW		3.0	SOIL	2	NEW (POLE)				2 POLES
77	70	OM4-3	2	END OF ROAD OBJECT MARKER	18	18	4.5					ADD TO ASSEMBLY		4.5	SOIL						ADDED ON TO THE ONE WAY SIGN
77	71	R4-7(12)	1	KEEP RIGHT (Symbol) - 12x18	12	18			REMAIN												
77	72	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
77	73	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
77	74	R12-3-DE	1	NO TRUCKS OVER 2 AXLES EXCEPT LOCAL SERVICES	24	36			REMAIN												
77	75	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMOVE	1											
77	76	D3-1(12)	1	STREET NAME (1 Line) Posted speed ≤ 40 MPH	24	12			REMOVE	1											
77	77	R6-3a(30)	1	DIVIDED HIGHWAY CROSSING (T - Intersection) - 30x24	30	24			REMAIN												
77	78	NA	1	NO THRU TRAFFIC ON SHOULDER	NA	NA			REMAIN												
75	79	R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	36	12			REMAIN												
75	80	R7-4-DE(12)	1	NO STOPPING, STANDING, OR PARKING - 12x18	12	18			REMAIN												
75	81	R4-7c	1	NARROW KEEP RIGHT	18	30			REMAIN												
66	S-1	W3-3-DE(60)	1	RED SIGNAL AHEAD WHEN FLASHING - 60x48	60	48											RENEW (OVERHEAD)	20.0	1.0	20.0	Traffic Supply - See signal Plan
66	S-2	D3-1(18)	2	STREET NAME (OVERHEAD) - 1 LINE	60	18											NEW (OVERHEAD)	15.0		15.0	"Tara Lane"
66	S-3	D3-1(18)	2	STREET NAME (OVERHEAD) - 1 LINE	66	18											NEW (OVERHEAD)	16.5		16.5	"Laura Dr"
66	S-4	D3-1(18)	1	STREET NAME (OVERHEAD) - 1 LINE	90	18											NEW (OVERHEAD)	11.3		11.3	"Limestone Rd"
66	S-5	R3-5_R	1	MANDATORY MOVEMENT LANE CONTROL - Right	30	36											NEW (OVERHEAD)	7.5		7.5	Traffic Supply - See signal Plan
66	S-6	R10-27	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP (OVERHEAD)	30	36											NEW (OVERHEAD)	7.5		7.5	Traffic Supply - See signal Plan
68	S-1	D3-1(18)	2	STREET NAME (OVERHEAD) - 1 LINE	78	18											NEW (OVERHEAD)	19.5		19.5	"Hendry Ave" with arrow to the Left
68	S-2	D3-1(18)	2	STREET NAME (OVERHEAD) - 1 LINE	78	18											NEW (OVERHEAD)	19.5		19.5	"Hendry Ave" with arrow to the Right
68	S-3	D3-1(18)	2	STREET NAME (OVERHEAD) - 1 LINE	90	18											NEW (OVERHEAD)	22.5		22.5	"Limestone Rd"
68	S-4	R10-27 (MOD)	1	LEFT TURN YIELD ON FLASHING RED ARROW AFTER STOP (OVERHEAD)	30	36											NEW (OVERHEAD)	7.5		7.5	Traffic Supply - See signal Plan
				PAGE TOTALS			30	3		25	12		18	33		21		147	1	147	

ADDENDA / REVISIONS				NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	T201807402	BRIDGE NO.	1-655	SIGN SCHEDULE	SECTION	BR
						COUNTY	NEW CASTLE	DESIGNED BY:	S.WEAVER		SHEET NO.	78
								CHECKED BY:	S.WALLS			

7-MAR-2025
14:33
Y:\NEWCASTL\031\Bridge\T201807402\500_CADD\530_PLANS_DGN\SS03.dgn

RIGHT-OF-WAY REVISION NOTE:

1. *REVISION 1 IS TO ADD A SECTION OF PAVEMENT REHABILITATION TO THE ROADWAY, SOUTH OF THE MAIN PROJECT, FOR BR 1-655. ALL WORK IS TO BE PERFORMED WITHIN THE ORIGINAL FOOTPRINT OF THE ROADWAY, EDGE OF GUTTER TO EDGE OF GUTTER. THERE ARE NO NEW ACQUISITIONS FROM WHAT WAS SHOWN ON THE ORIGINAL ROW PLANS, WHICH WERE SIGNED 10/05/2023.*



NOTE:
STORMWATER MANAGEMENT FACILITIES, INCLUDING BEST MANAGEMENT PRACTICE (BMP) FACILITIES, MAY BE PRESENT WITHIN THE LIMITS OF THIS PROJECT. PLEASE CONSULT THE CONSTRUCTION PLANS FOR THIS PROJECT TO DETERMINE THE TYPE AND LOCATION OF THESE FACILITIES.

PREPARED BY
PENNONI ASSOCIATES INC.

THIS SEAL APPLIES TO EXISTING RIGHT-OF-WAY. 10/05/23 DATE

MICHAEL L. ALESTRA — LICENSE — No. 20856 — DELAWARE PROFESSIONAL ENGINEER
SEAL

RECOMMENDED AS TO PROCESS

Shehnaz Chaudhuri 10/05/2023
GROUP ENGINEER, ROW ENGINEERING DATE

RIGHT-OF-WAY SHEET 1 OF 3

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

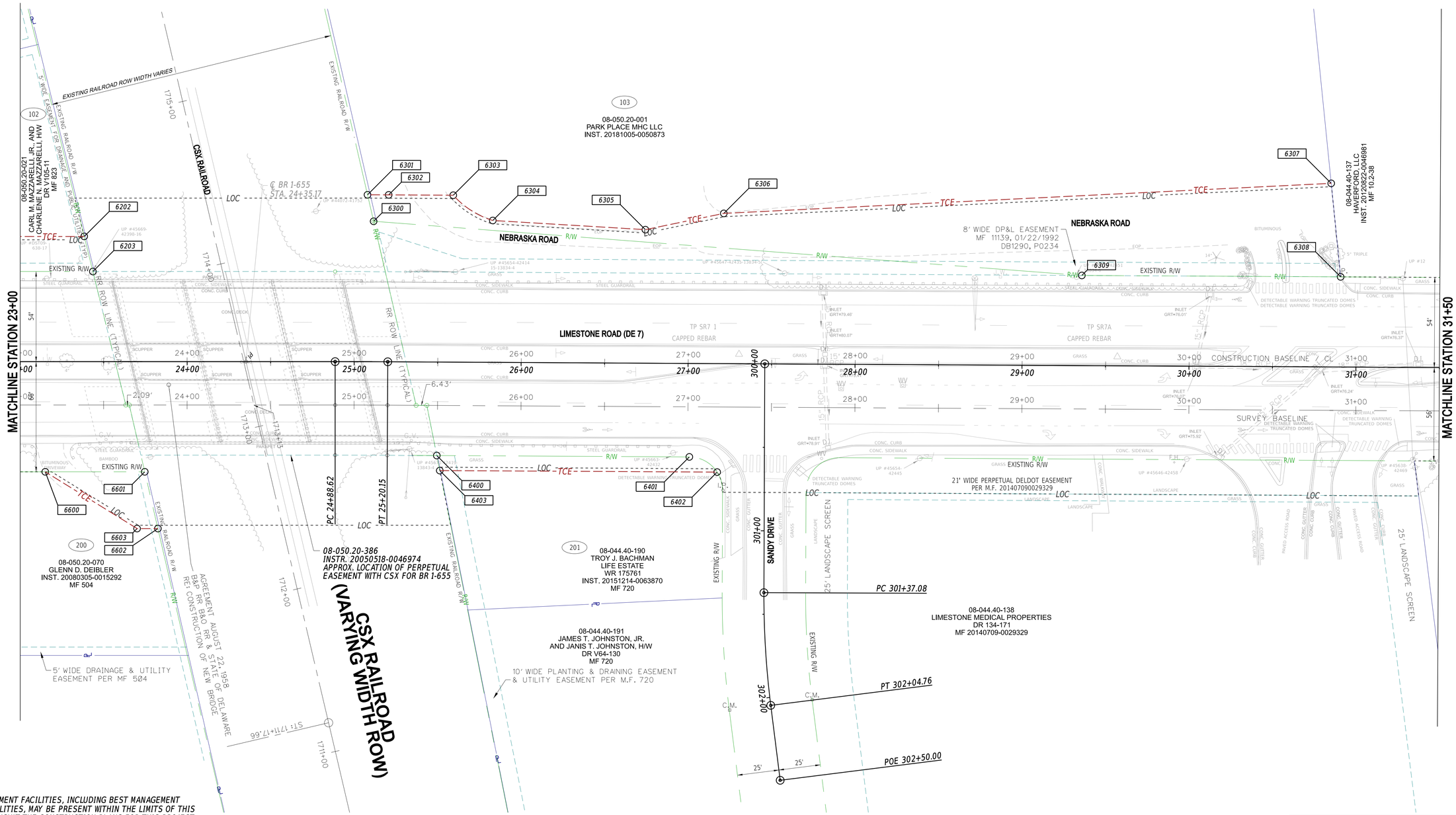
CONTRACT	T201807402
COUNTY	NEW CASTLE

BRIDGE NO.	1-655
DESIGNED BY:	S.WEAVER
CHECKED BY:	S.WALLS

RIGHT-OF-WAY PLAN

SECTION	BR
SHEET NO.	79

27-FEB-2024
12:43
Y:\NEWCASTL\U031\Bridge\T201807402\500_CADD\530_PLANS_DGN\RW00.dgn



NOTE:
STORMWATER MANAGEMENT FACILITIES, INCLUDING BEST MANAGEMENT PRACTICE (BMP) FACILITIES, MAY BE PRESENT WITHIN THE LIMITS OF THIS PROJECT. PLEASE CONSULT THE CONSTRUCTION PLANS FOR THIS PROJECT TO DETERMINE THE TYPE AND LOCATION OF THESE FACILITIES.

RIGHT-OF-WAY SHEET 2 OF 3

ADDENDA / REVISIONS			

SCALE
0 30 60 90
FEET

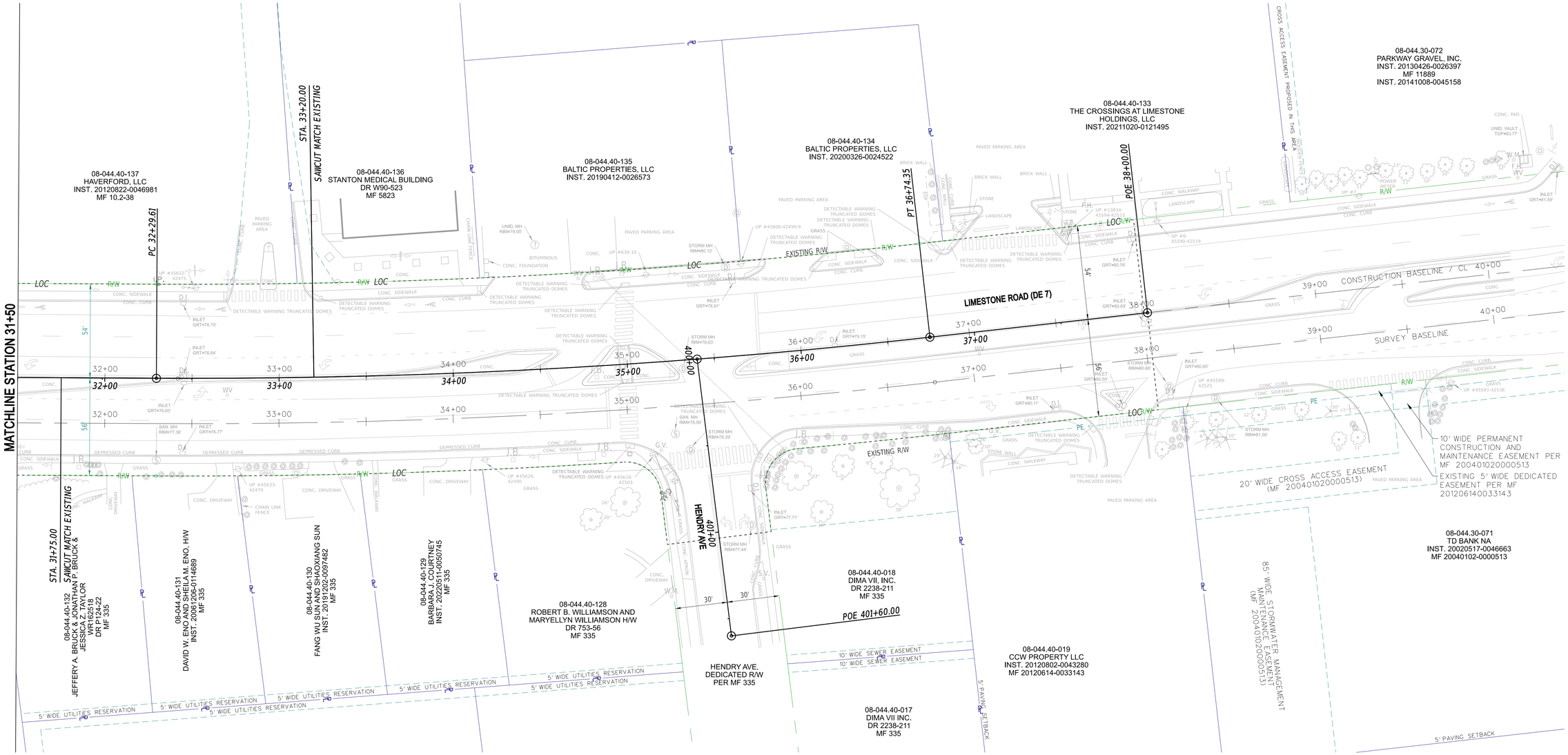
BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	T201807402	BRIDGE NO.	1-655
COUNTY	NEW CASTLE	DESIGNED BY:	S.WEAVER
		CHECKED BY:	S.WALLS

RIGHT-OF-WAY PLAN

SECTION	
BR	
SHEET NO.	
80	

29-JAN-2024
14:01
Y:\NEWCASTL\0331\Bridge\T201807402\500_CADD\530_PLANS_DGN\RW01.dgn



NOTE:
STORMWATER MANAGEMENT FACILITIES, INCLUDING BEST MANAGEMENT PRACTICE (BMP) FACILITIES, MAY BE PRESENT WITHIN THE LIMITS OF THIS PROJECT. PLEASE CONSULT THE CONSTRUCTION PLANS FOR THIS PROJECT TO DETERMINE THE TYPE AND LOCATION OF THESE FACILITIES.

ADDENDA / REVISIONS	

SCALE
0 30 60 90
FEET

BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD

CONTRACT	T201807402	
COUNTY	NEW CASTLE	
BRIDGE NO.	1-655	
DESIGNED BY:	S.WEAVER	
CHECKED BY:	S.WALLS	

RIGHT-OF-WAY SHEET 3 OF 3

RIGHT-OF-WAY PLAN

SECTION
BR
SHEET NO.
81

29-JAN-2024
14:01
Y:\NEWCASTL\03118ridge\T201807402\500_CADD\530_PLANS_DGN\RW02.dgn

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-050.20-069		(100) RED CLAY CREEK CONSOLIDATED SCHOOL DISTRICT						PE	D.R. H115-146	35.300	75
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6500	10000	16+15.00	-54.00	625162.0429	590089.6580	S 57°43'44" W	5.000				
6501	10000	16+15.00	-59.00	625159.3732	590085.4304	N 32°16'16" W	45.000				
6502	10000	16+60.00	-59.00	625197.4222	590061.4037	N 57°43'44" E	5.000				
6503	10000	16+60.00	-54.00	625200.0918	590065.6314	S 32°16'16" E	45.000				
6500	10000	16+15.00	-54.00	625162.0429	590089.6580						
FIGURE PE_100 AREA = 225.00 SQ. FT. (0.005 ACRES).											
DEED RECORD OF ACQUISITION:											

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-050.20-069		(100) RED CLAY CREEK CONSOLIDATED SCHOOL DISTRICT						TCE	D.R. H115-146	35.300	75
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6000	10000	16+00.00	-54.00	625149.3599	590097.6669	S 57°43'44" W	71.000				
6001	10000	16+00.00	-125.00	625111.4512	590037.6341	N 32°16'16" W	203.806				
6002	10000	18+03.81	-125.00	625283.7755	589928.8171	N 41°08'17" E	74.084				
6003	10000	18+24.96	-54.00	625339.5704	589977.5553	S 32°16'16" E	164.960				
6503	10000	16+60.00	-54.00	625200.0918	590065.6314	S 57°43'44" W	5.000				
6502	10000	16+60.00	-59.00	625197.4222	590061.4037	S 32°16'16" E	45.000				
6501	10000	16+15.00	-59.00	625159.3732	590085.4304	N 57°43'44" E	5.000				
6500	10000	16+15.00	-54.00	625162.0429	590089.6580	S 32°16'16" E	15.000				
6000	10000	16+00.00	-54.00	625149.3599	590097.6669						
FIGURE TCE_100 AREA = 14996.17 SQ. FT. (0.344 ACRES).											
DEED RECORD OF ACQUISITION:											

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-050.20-022		(101) DENNIS P. DONOVAN						TCE	INSTR. 20040301-0023428	0.389	75
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6100	10000	19+92.26	-54.00	625481.0292	589888.2288	S 40°59'28" W	6.265				
6101	10000	19+90.46	-60.00	625476.3000	589884.1190	N 32°16'16" W	230.029				
6102	10000	22+20.49	-60.00	625670.7972	589761.3006	N 44°11'16" E	6.172				
6103	10000	22+21.93	-54.00	625675.2225	589765.6022	S 32°16'16" E	229.670				
6100	10000	19+92.26	-54.00	625481.0292	589888.2288						
FIGURE TCE_101 AREA = 1379.10 SQ. FT. (0.032 ACRES).											
DEED RECORD OF ACQUISITION:											
REMARKS: 1159.48 SF DRAINAGE AND PUBLIC UTILITIES EASEMENT											

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-050.20-021		(102) CARL M. MAZZARELLI, JR., AND CHARLENE N. MAZZARELLI, H/W						TCE	D.R. V105-11	0.301	75
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6103	10000	22+21.93	-54.00	625675.2225	589765.6022	S 44°11'16" W	6.172				
6102	10000	22+20.49	-60.00	625670.7972	589761.3006	N 32°16'16" W	68.431				
6200	10000	22+88.92	-60.00	625728.6574	589724.7638	S 57°43'44" W	15.000				
6201	10000	22+88.92	-75.00	625720.6485	589712.0808	N 32°16'16" W	49.427				
6202	10000	23+38.34	-75.00	625762.4409	589685.6903	N 43°52'44" E	21.629				
6203	10000	23+43.52	-54.00	625778.0311	589700.6820	S 32°16'16" E	121.590				
6103	10000	22+21.93	-54.00	625675.2225	589765.6022						
FIGURE TCE_102 AREA = 1498.59 SQ. FT. (0.034 ACRES).											
DEED RECORD OF ACQUISITION:											
REMARKS: 699.74 SF DRAINAGE AND PUBLIC UTILITIES EASEMENT											

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-050.20-001		(103) PARK PLACE MHC LLC						TCE	INSTR. 20181005-0050873	17.926	76
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6300	10000	25+11.34	-84.13	625904.1484	589585.4616	S 44°44'44" W	16.299				
6301	10000	25+07.68	-100.00	625892.5721	589573.9876	N 32°01'09" W	12.681				
6302	10000	25+20.15	-100.00	625903.3243	589567.2639	N 31°57'26" W	38.673				
6303	10000	25+58.82	-100.00	625936.1364	589546.7948			N 0°18'14" E	28.102	28.449	-52.479
6304	10000	25+82.59	-85.00	625964.2376	589546.9438	N 28°49'34" W	91.542				
6305	10000	26+73.99	-80.00	626044.4361	589502.8067	N 43°59'24" W	47.968				
6306	10000	27+20.90	-90.00	626078.9468	589469.4916	N 35°06'17" W	364.248				
6307	10000	30+84.60	-110.00	626376.9393	589260.0224	N 51°58'58" E	56.315				
6308	10000	30+90.55	-54.00	626411.6234	589304.3886	S 31°57'26" E	154.989				
6309	10000	29+35.56	-54.00	626280.1237	589386.4221	S 27°53'48" E	425.411				
6300	10000	25+11.34	-84.13	625904.1484	589585.4616						
FIGURE TCE_103 AREA = 17662.94 SQ. FT. (0.405 ACRES).											
DEED RECORD OF ACQUISITION:											

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-050.20-070		(200) GLENN D. DEIBLER						TCE	INSTR. 20080305-0015292	0.269	76
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6600	10000	23+15.00	66.00	625817.9861	589817.3743	N 32°16'16" W	59.598				
6601	10000	23+74.60	66.00	625868.3777	589785.5537	N 44°41'44" E	34.899				
6602	10000	23+82.47	100.00	625893.1858	589810.0996	S 32°16'16" E	12.468				
6603	10000	23+70.00	100.00	625882.6438	589816.7565	S 0°32'51" E	64.661				
6600	10000	23+15.00	66.00	625817.9861	589817.3743						
FIGURE TCE_200 AREA = 1225.11 SQ. FT. (0.028 ACRES).											
DEED RECORD OF ACQUISITION:											

ASSESSMENT NUMBER		OWNERSHIP OF RECORD						TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)	PAGE NUMBER
08-044.40-190		(201) TROY J. BACHMAN LIFE ESTATE						TCE	WR 175761	0.326	76
PT. NO.	ALIGN. NO.	STATION	OFFSET*	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS**
6400	10000	25+49.81	56.00	626011.0596	589683.9214	N 31°57'26" W	151.267				
6401	10000	27+01.08	56.00	626139.4012	589603.8580			N 3°38'26" W	18.974	19.716	20.616
6402	10000	27+17.78	65.00	626158.3366	589602.6532	S 31°57'26" E	166.129				
6403	10000	25+51.65	65.00	626017.3857	589690.5826	S 46°28'40" W	9.187				
6400	10000	25+49.81	56.00	626011.0596	589683.9214						
FIGURE TCE_201 AREA = 1457.88 SQ. FT. (0.033 ACRES).											
DEED RECORD OF ACQUISITION:											
REMARKS: PRIOR INSTR. 20151214-0063870											

LEGEND

RW	AREA OF ACQUISITION	RW/PE	RIGHT-OF-WAY BY PE
PE	PERMANENT EASEMENT	*	"-" OFFSET IS LEFT OF BASELINE
TCE	TEMPORARY CONSTRUCTION EASEMENT	**	"-" CURVE TURNS TO THE LEFT

REVISIONS		NOT TO SCALE	BR 1-655 ON LIMESTONE ROAD (SR7) OVER CSX RAILROAD	CONTRACT	BRIDGE NO. 1-655	RIGHT-OF-WAY DATA SHEET	SECTION
				T201807402	DESIGNED BY: S.WEAVER		BR
				COUNTY			SHEET NO.
				NEW CASTLE	CHECKED BY: S.WALLS		85