

GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY
UNITS



CONSTRUCTION PLANS FOR:
**HSIP NCC,
SR92 NAAMANS
ROAD AT I-95**

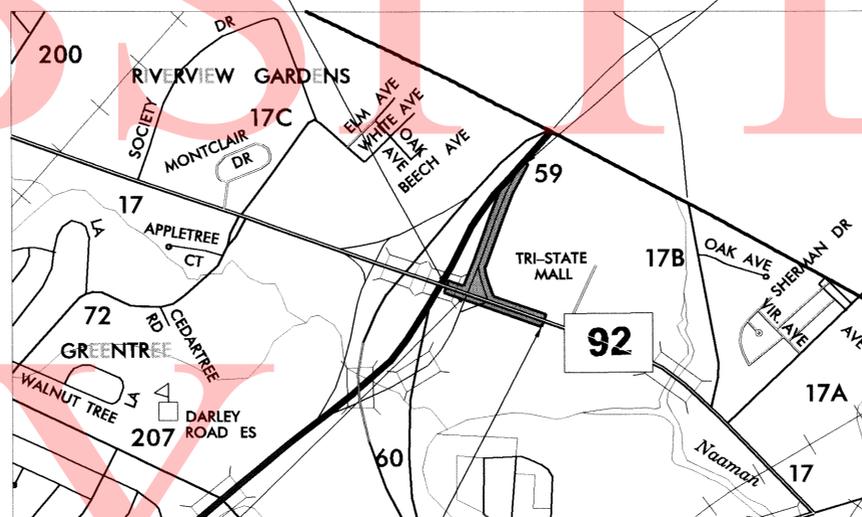
CONTRACT NUMBER: **T201100701**
FEDERAL AID PROJECT NUMBER: **ESTP-N092(01)**

COUNTY: New Castle M.R. #: N017

DESIGN DESIGNATION			
FUNCTIONAL CLASS: PRINCIPAL ARTERIAL	D.H.V. PROJECTED: 690	YEAR: 2040	
TYPE OF CONSTRUCTION: SAFETY	DESIGN SPEED: 45 M.P.H.		
A.A.D.T. CURRENT: 8,600	YEAR: 2010	TRUCKS: 8.00 %	
A.A.D.T. PROJECTED: 11,500	YEAR: 2040	DIRECTION OF DISTRIBUTION: 100.00 %	
INDEX OF SHEETS			
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SHEET NO	TITLE		
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21-22	SIGNING, STRIPING AND CONDUIT PLANS		
23	SIGNALIZATION PLANS		
TOTAL SHEETS: 23			

BEGIN CONTRACT STATION 263 + 88.34

LIMIT OF CONTRACT STATION 911 + 50



LIMIT OF CONTRACT STATION 1903 + 63.32

END CONTRACT STATION 267 + 64.19

DESIGN DESIGNATION			
NAAMANS ROAD			
FUNCTIONAL CLASS: Principal Arterial	D.H.V. PROJECTED: 18,000	YEAR: 2040	
TYPE OF CONSTRUCTION: SAFETY	DESIGN SPEED: 50 M.P.H.		
A.A.D.T. CURRENT: 22,100	YEAR: 2010	TRUCKS: 8.00 %	
A.A.D.T. PROJECTED: 30,000	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60.00 %	

APPROVED DESIGN EXCEPTIONS			
DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS	
DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS	
CONTRACT NO.	CONTRACT NAME
98-091-01	I-95 PAVEMENT RECONSTRUCTION (NORTH SECTION)
85-102-02	NAAMANS ROAD - SECTION 2
64-04-024	I-495

RECOMMENDED

Vern J. Linton 7/25/11
SQUAD MANAGER, CONSTRUCTION DATE

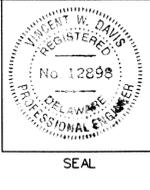
Shamuel Clements 7-25-11
GROUP ENGINEER, CONSTRUCTION DATE

Shamuel Clements 7-25-11
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) DATE

RECOMMENDED

Vincent W. Davis
STORMWATER ENGINEER

DATE 8 AUG 2011



RECOMMENDED

Joseph A. Hooper
SQUAD MANAGER, TRANSPORTATION SOLUTIONS (PROJECT DEVELOPMENT OR BRIDGE DESIGN)

DATE August 8, 2011



RECOMMENDED

BRIDGE DESIGN ENGINEER

DATE _____

RECOMMENDED

Dawn M. O'Neil
GROUP ENGINEER, PROJECT DEVELOPMENT

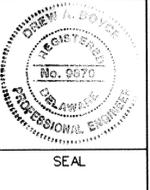
DATE 8/8/11



RECOMMENDED

D. A. B.
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS

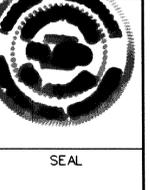
DATE 8/9/11



APPROVED

Natalie Bankhart
CHIEF ENGINEER

DATE 8/11/11



LAST REVISED: 8/7/2008
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EXISTING SYMBOLS

DRAINAGE	
	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
	DRAINAGE INLET
	DRAINAGE JUNCTION BOX
	DRAINAGE MANHOLE
	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

SURVEY CONTROL & MONUMENTATION	
B.M.	SURVEY BENCHMARK LOCATION
T.P.	SURVEY TIE POINT LOCATION
△	SURVEY TRAVERSE POINT
	POINT OF CURVATURE OR TANGENCY
	POINT OF INTERSECTING TANGENTS

MANMADE ROADSIDE FEATURES	
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
(TYPE LABEL)	CURB
(TYPE LABEL)	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
FP	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
LAMP	LAMP AND POST - RESIDENTIAL
MB	MAILBOX
PM	PARKING METER AND POST
---	PAVEMENT - FLEXIBLE
---	PAVEMENT - RIGID
□	PILE - BRIDGE
○	PILLAR OR MISCELLANEOUS POST
	TRAFFIC SIGN AND POST
○○○○	WALL - BRICK OR BLOCK
○○○○	WALL - STONE

UTILITY	
	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
	CABLE TV DISTRIBUTION BOX
	ELECTRIC MANHOLE
	ELECTRIC METER
	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
⊙	GAS MANHOLE
G.M.	GAS METER
G.V.	GAS VALVE
G.P.	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
⊙	SANITARY SEWER MANHOLE
S.V.	SANITARY SEWER VALVE
VENT	SANITARY SEWER VENT OR CLEANOUT
S.D.F.	SEPTIC DRAIN FIELD
	TELEPHONE BOOTH
⊙	TELEPHONE MANHOLE
	TELEPHONE TEST POINT
W.J.	TRAFFIC - CONDUIT JUNCTION WELL
⊙	TRAFFIC - LIGHT POLE AND BASE
⊙	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
⊙	TRAFFIC - SIGNAL POLE AND BASE
	UTILITY BOX
	UTILITY POLE GUY WIRE ANCHOR
	UTILITY POLE
F.H.	WATER - FIRE HYDRANT
W.M.	WATER METER
W.V.	WATER VALVE
WELL	WELL HEAD
⊙	MANHOLE - UNDETERMINED OWNER

NATURAL ROADSIDE FEATURES	
	GRASS LAWN
	HEDGEROW OR THICKET
	MARSH BOUNDARY LINE
	TREE - CONIFEROUS
	TREE - DECIDUOUS
	TREE STUMP
	SHRUBBERY
	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY

UTILITY COMPANY FACILITIES	
—DP-G—	DELMARVA POWER - GAS
—VER-C—	VERIZON

RIGHT-OF-WAY SYMBOLS	
C.M.	PROPERTY MARKER - CONCRETE MON.
I.P.	PROPERTY MARKER - IRON PIPE
100+00	HISTORIC RIGHT-OF-WAY BASELINE
---	EXISTING RIGHT-OF-WAY
---	EXISTING PROPERTY LINE
—EASEMENT TYPE—	EXISTING EASEMENT
—DA—	EXISTING DENIAL OF ACCESS
—R/W-DA—	EXISTING R/W & DENIAL OF ACCESS

PROPOSED SYMBOLS

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	BRICK PATTERNED SURFACE
	BUTT JOINT
100+00	CONSTRUCTION BASELINE
—CSF—	CONSTRUCTION SAFETY FENCE
	CURB, TYPE 1 & TYPE 3
	CURB, TYPE 2
	CURB & GUTTER, TYPE 1
	CURB & GUTTER, TYPE 2
	CURB & GUTTER, TYPE 3
	CURB & GUTTER, TYPE 4
—CZ—	CLEAR ZONE
	DRAINAGE INLET
X—X—X	DITCH
	FENCE - METAL
	FENCE - WOOD
	FLARED END SECTION
	GUARDRAIL, TYPE 1
	GUARDRAIL, TYPE 2
	GUARDRAIL, TYPE 3
	GUARDRAIL END ANCHORAGE
	GUARDRAIL END TREATMENT, TYPE 1
	GUARDRAIL END TREATMENT, TYPE 2
	GUARDRAIL END TREATMENT, TYPE 3
—HC—	HORIZONTAL CLEARANCE
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
-----LOC-----	LIMIT OF CONSTRUCTION
●	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK @ 4"
	P.C.C. SIDEWALK @ 6"
	UNDERDRAIN
	UNDERDRAIN OUTLET

IDENTIFIERS	
	ADJUST BY CONTRACTOR
	ADJUST BY OTHERS
	CONCRETE SAFETY BARRIER
	CURB OR CURB & GUTTER
	CONVERT TO JUNCTION BOX
	CONVERT TO DRAINAGE MANHOLE
	CURB OPENING
	CURB RAMP / TYPE
	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
	CONSTRUCTION SAFETY FENCE
	DRAINAGE INLET
	DO NOT DISTURB
	ENERGY DISSIPATOR
	FENCE
	FLARED END SECTION
	FILL WITH FLOWABLE FILL
	FILTRATION STRUCTURE
	GUARDRAIL
	JUNCTION BOX
	MANHOLE
	MONUMENT - RIGHT-OF-WAY
	PIPE
	RELOCATE BY CONTRACTOR
	RELOCATE BY OTHERS
	REMOVE BY CONTRACTOR
	REMOVE BY OTHERS
	UNDERDRAIN / LENGTH
	UNDERDRAIN OUTLET PIPE

LANDSCAPING	
	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC	
—ITMS-CON—	ITMS CONDUIT
—SIG-CON—	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
---	PAVEMENT STRIPING
	TRAFFIC SIGN

PAVEMENT SECTION(S)	
	OVERLAY PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	DRIVEWAY AND ENTRANCE PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS

RIGHT-OF-WAY SYMBOLS	
	PROPOSED RIGHT-OF-WAY MONUMENT
—DA—	PROPOSED DENIAL OF ACCESS
---PE---	PROPOSED PERMANENT EASEMENT
—R/W—	PROPOSED RIGHT-OF-WAY
—R/W-DA—	PROPOSED R/W & DENIAL OF ACCESS
---TCE---	TEMPORARY CONSTRUCTION EASEMENT
100+00	PROPOSED RIGHT-OF-WAY BASELINE

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GENERAL NOTES

- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2001 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2001, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.
- THE CONTRACTOR SHALL GIVE TWO (2) WEEKS NOTICE TO THE PROPERTY OWNER WHEN ANY FIXTURE, SHRUB OR OTHER OBJECT MUST BE REMOVED FROM THE RIGHT OF WAY OR EASEMENT AREA. IF THE OWNER HAS NOT ATTEMPTED TO SALVAGE THIS PROPERTY, THE CONTRACTOR SHALL REMOVE IT WITHOUT OBLIGATION. COMPENSATION SHALL BE INCIDENTAL TO THE CONTRACT.
- THE ENDS OF ALL CURBS SHALL BE DEPRESSED FLUSH WITH THE PAVEMENT AT A RATIO OF TWELVE TO ONE (12:1) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" INSIDE MINIMUM DIAMETER, 6" INSIDE MAXIMUM DIAMETER) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL SIT ON THE TOP OF THE SUBBASE MATERIAL. THE COST SHALL BE INCIDENTAL TO THE CONTRACT.
- STAGING AREAS - PROPER EROSION AND SEDIMENT CONTROL MEASURES AS DETERMINED BY THE ENGINEER SHALL BE INSTALLED IN ALL STAGING AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE CONTRACT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDING AND MULCHED IN ACCORDANCE WITH DELAWARE STANDARD SPECIFICATIONS 732, 734 AND 735, FOR TOPSOIL, SEED AND MULCH RESPECTIVELY, TO THE SATISFACTION OF THE ENGINEER. THE SEED SHALL ADHERE TO THE SPECIFICATIONS OF SECTION 734 FOR PERMANENT GRASS SEEDING - DRY GROUND. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH REESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- SITE REVIEWER - AN EROSION CONTROL SITE REVIEWER SHALL BE A PERSON FROM THE CONTRACTOR'S STAFF ASSIGNED TO EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE AND SHALL BE REQUIRED ON SPECIFIC PROJECTS. THE NAME AND DNREC CERTIFICATION NUMBER OF EACH SITE REVIEWER SO REQUIRED SHALL BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE NAME OF THE DELAWARE REGISTERED PROFESSIONAL ENGINEER PROVIDING DIRECTION AND SUPERVISION OF THE SITE REVIEWER, AS REQUIRED IN SECTION 12.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, SHALL ALSO BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

EROSION POTENTIAL FOR THIS PROJECT	SITE REVIEWER REQUIREMENT
() INSIGNIFICANT	NONE
(X) MINOR	CONTRACTOR CERTIFICATION COURSE TRAINING ONLY, AS DEFINED IN SECTION 13 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
() MEDIUM	AT THE TIME OF BID OF THE CONTRACT, EITHER THE SUPERINTENDENT OR A SEPARATE INDIVIDUAL FROM THE CONTRACTOR'S STAFF SHALL BE A CERTIFIED CONSTRUCTION REVIEWER (CCR), AS DEFINED IN SECTION 12 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
() MAJOR	SUPERINTENDENT AND AN INDIVIDUAL FROM CONTRACTOR'S STAFF SHALL BE CCR. ONE INDIVIDUAL FROM THE CONTRACTOR'S STAFF MUST BE A CCR AT THE TIME OF BID OF THE CONTRACT. THE SUPERINTENDENT MUST BECOME A CCR WITHIN ONE YEAR AFTER THE AWARD OF CONTRACT.

- ELECTRONIC PROJECT FILES THAT WILL BE MADE AVAILABLE TO THE CONTRACTOR INCLUDE:

()	NONE
(X)	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	RASTER FILES, IN .CAL FILE FORMAT, FOR ALL PLAN SHEETS.
(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, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

NOTES: 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.

- 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. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR.
()	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR.

- THE DISTURBED AREA FOR THIS PROJECT IS .7630 ACRES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK". ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.
- THE EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE EROSION AND SEDIMENT CONTROL PLANS ARE VALID FOR A THREE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR SHALL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVAL. DELDOT WILL REVIEW THE CURRENT EROSION AND SEDIMENT CONTROL PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

- 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.
- UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL, AS PART OF HIS PROJECT SCHEDULE, SUBMIT TO THE ENGINEER AN ESTIMATE OF THE MONTHLY PAYMENTS EXPECTED TO BE RECEIVED ON THE CONTRACT. THIS WILL BE REFERENCED AS THE "MONTHLY PAYMENT CHART".

A CHART IN MICROSOFT EXCEL, MICROSOFT WORD, OR HAND WRITTEN FORMAT WILL BE ACCEPTABLE FOR THIS PURPOSE. THE CHART SHOULD INCLUDE, AS A MINIMUM, COLUMNS FOR THE MONTH, YEAR AND ESTIMATED MONTHLY PAYMENTS. THE TOTAL OF ALL ESTIMATED MONTHLY PAYMENTS SHOULD EQUAL THE AWARDED CONTRACT TOTAL BID PRICE.

THE ENGINEER MAY REQUEST AN UPDATED "MONTHLY PAYMENT CHART" AT HIS DISCRETION, DEPENDING ON THE ACCURACY OF THE INITIAL ESTIMATES AND ACCORDING TO THE OVERALL NEEDS OF THE DEPARTMENT.

THE "MONTHLY PAYMENT CHART" WILL NOT BE CONSIDERED A BINDING DOCUMENT BY EITHER THE CONTRACTOR OR THE DEPARTMENT AND IS CONSIDERED SOLELY INFORMATIONAL.

ON PROJECTS REQUIRING CPM SCHEDULES, THE CONTRACTOR MAY, BUT IS NOT REQUIRED TO, "COST LOAD" THE CPM SCHEDULE IN ORDER TO GENERATE THE MONTHLY SPEND PAYMENT CHART.

COSTS TO PREPARE AND/OR UPDATE THE "MONTHLY PAYMENT CHART" ARE ADDRESSED AS FOLLOWS:

- ON CONTRACTS REQUIRING CPM SCHEDULES AND UPDATES, PREPARATION OF THE INITIAL CHART SHALL BE INCIDENTAL TO ITEM 763508. UPDATES SHALL BE INCIDENTAL TO ITEM 763509.
- ON CONTRACTS NOT REQUIRING CPM SCHEDULES, THE COST TO PREPARE AND UPDATE THE "MONTHLY PAYMENT CHART" SHALL BE INCLUDED IN ITEM 763000 - INITIAL EXPENSE.

SECTION 200

- THE ENGINEER MAY REQUIRE THE CONTRACTOR TO EXCAVATE TEST PITS ALONG PROPOSED DRAINAGE RUNS AT APPROXIMATELY STATION 906+00, AT POINTS OF POSSIBLE UTILITY CONFLICTS, TO DETERMINE IF A CONFLICT EXISTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR, WITH THE ENGINEER AND THE UTILITY COMPANY INVOLVED. THE ENGINEER SHALL ULTIMATELY DETERMINE THE SOLUTION TO THE UTILITY CONFLICT. TEST HOLES SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 202000 - EXCAVATION AND EMBANKMENT.

SECTION 300

- THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B':
 - CRUSHED STONE (PER STANDARD SPECIFICATION 821)
 - CRUSHED CONCRETE (PER STANDARD SPECIFICATION 821)
 - HOT-MIX MILLINGS (PER SPECIAL PROVISION 302514 MILLED HOT-MIX BASE COURSE)

THE CONTRACTOR WILL NOT BE ALLOWED TO MIX DIFFERENT MATERIALS (OR SIMILAR MATERIALS FROM DIFFERENT SOURCES) TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

ALL OF THE ABOVE LISTED MATERIALS ARE PERMITTED FOR USE ON THE JOB, PROVIDED THEY ARE SEPARATED INTO APPROVED AREAS. EACH AREA OF BASE COURSE MUST BE CONSTRUCTED USING MATERIALS FROM A SINGULAR SOURCE, FULL DEPTH, IN ORDER THAT PROPER TESTING MAY BE ACCOMPLISHED. THE CONTRACTOR AND DELDOT'S PROJECT ENGINEER SHALL AGREE ON THE LIMITS OF EACH SOURCE OF MATERIAL PRIOR TO PLACEMENT.

- THE QUANTITY USED FOR BASE OF EACH OF THE ABOVE LISTED MATERIALS WILL BE THE CONTRACTOR'S CHOICE, WITH THE TOTAL MEETING THE ADVERTISED QUANTITY OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.
- THE CONTRACTOR MAY ALSO ELECT TO RECYCLE MILLINGS FOR USE IN HOT-MIX AS PERMITTED BY THE STANDARD SPECIFICATIONS. THE CHOICE OF THE QUANTITY OF MILLINGS USED FOR THIS PURPOSE, OR FOR BASE COURSE, LIES WITH THE CONTRACTOR. ALL MILLING MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR.
- HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:
 - MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEM 760006.
 - MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000. ALL MILLED MATERIALS SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 302514 - MILLED HOT-MIX BASE COURSE.
- PAYMENT CLARIFICATION:
 - SHOULD THE CONTRACTOR ELECT TO MILL PORTIONS OF HOT-MIX SHOWN ON THE PLANS TO BE REMOVED UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT THE COST OF MILLING THIS HOT-MIX WILL BE PAID AS ITEM 202000 - EXCAVATION AND EMBANKMENT. THE MILLINGS GENERATED MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE, OR DISPOSED OF TO AN APPROVED SITE. HAULING COSTS FOR DISPOSAL AND/OR RECYCLING ARE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.
 - MILLINGS GENERATED UNDER ITEM 760502 - PAVEMENT MILLINGS, TAPER CUT MAY BE RECYCLED INTO HOT-MIX, UTILIZED FOR BASE COURSE OR DISPOSED OF BY THE CONTRACTOR TO AN APPROVED SITE. NO SEPARATE PAYMENT WILL BE MADE FOR TRANSPORTING MILLINGS ON SITE OR TO AN APPROVED DISPOSAL SITE.
 - SHOULD THE CONTRACTOR ELECT TO TEMPORARILY STOCKPILE MILLINGS ON THE JOB SITE FOR LATER USE, ALL COSTS FOR STOCKPILING AND SUBSEQUENT REHANDLING SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.
 - MILLINGS USED FOR BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE. NO SEPARATE PAYMENT WILL BE MADE TO FURNISH MILLINGS FROM AN OUTSIDE SOURCE OR TRANSPORT MILLINGS WITHIN THE PROJECT LIMITS. MILLINGS USED FOR BASE COURSE WILL BE PAID IN PLACE AT THE UNIT BID PRICE FOR ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.
 - ALL COSTS TO UTILIZE MILLINGS IN RECYCLED HOT-MIX WILL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE HOT-MIX ITEM USING THE RECYCLED MATERIAL.

PROJECT NOTES

- SPECIAL PROVISION 302514 - MILLED HOT-MIX BASE COURSE IS PROVIDED TO SPECIFY THE MEANS OF LAY DOWN AND COMPACTION AS WELL AS THE MATERIAL REQUIREMENTS FOR MILLINGS USED AS BASE COURSE. ALL COSTS TO BRING THE MILLINGS INTO COMPLIANCE WITH THE REQUIREMENTS OF ITEM - 302514 MILLED HOT-MIX BASE COURSE ARE INCIDENTAL TO ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'. NO PAYMENT WILL BE MADE FOR ITEM 302514 - MILLED HOT-MIX BASE COURSE. THE QUANTITY OF MILLINGS USED FOR BASE COURSE WILL BE PAID FOR UNDER ITEM 302007 - GRADED AGGREGATE BASE COURSE.
- MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE.

SECTION 600

- THE DEPARTMENT AND THE CONTRACTOR SHALL INSPECT ALL EXISTING PIPES AND DRAINAGE STRUCTURES TO BE USED IN THE FINAL DRAINAGE SYSTEM AND AGREE ON THE CONDITION PRIOR TO THE START OF CONSTRUCTION. EXISTING PIPES AND DRAINAGE STRUCTURES DAMAGED DUE TO CONTRACTOR OPERATIONS SHALL BE REPAIRED OR REPLACED IN-KIND AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS REQUIRED TO VIDEO INSPECT NEW PIPE RUNS TO CONFIRM CONDITION PRIOR TO ACCEPTANCE. PAYMENT FOR VIDEO INSPECTION OF NEW PIPES WILL BE MADE UNDER ITEM 612529 - VIDEO INSPECTION.

SECTION 700

- 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. PAYMENT FOR THIS WORK, INCLUDING SAW CUTTING EXISTING CURB SHALL BE INCIDENTAL TO THE PROPOSED CURB ITEM.
- 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 762002 - SAWCUTTING, CONCRETE, FULL DEPTH.
- PORTLAND CEMENT CONCRETE CHANNELIZING ISLANDS THAT ARE LESS THAN 75 SQ FT MAY BE POURED MONOLITHICALLY, OR AS DIRECTED BY THE ENGINEER.
- 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.
- 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.

MISCELLANEOUS

- THE CONTRACTOR SHALL CONTACT MICHAEL ELLER, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6061
- THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT. AS SUCH, AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED.
- THE CONTRACTOR SHALL CONTACT MEL PETERS (302-760-2565) OR MIKE HARVEL (302-760-2568) AT LEAST ONE WEEK PRIOR TO CONSTRUCTION IN THE VICINITY OF THE STATION 1904+00 TO COORDINATE ON POSSIBLE DISRUPTION OF DELDOT FIBER PATHWAY.

EARTHWORK SUMMARY

EXCAVATION	
EXCAVATION FROM CROSS SECTIONS	696.62 C. Y.
ROCK EXCAVATION FOR ROADWAY AND TRENCHES	0 C. Y.
TOPSOIL STRIPPING	0 C. Y.
TOTAL EXCAVATION	696.62 C. Y.
EXCAVATION AVAILABLE FOR EMBANKMENT	
EXCAVATION MEETING BORROW TYPE 'A'	0 C. Y.
EXCAVATION MEETING BORROW TYPE 'F'	0 C. Y.
EXCAVATION MEETING TOPSOIL	0 C. Y.
EMBANKMENT REQUIREMENTS	
BORROW TYPE 'A' REQUIRED (INCLUDING UNDERCUT)	17.67 C. Y.
BORROW TYPE 'F' REQUIRED	837.47 C. Y.
TOPSOIL REQUIRED	418.68 C. Y.
MATERIAL BALANCE ("+" = EXCESS, "-" = NEED)	
BORROW TYPE 'A'	-17.67 C. Y.
BORROW TYPE 'F'	-837.47 C. Y.
TOPSOIL	-418.68 C. Y.
UNSUITABLE MATERIAL	+696.62 C. Y.

- NOTES:
- THE VALUES LISTED IN THE EARTHWORK SUMMARY ARE APPROXIMATE AND ARE NOT TO BE USED AS A BASIS OF PAYMENT. THE EARTHWORK SUMMARY IS CONSIDERED FOR INFORMATIONAL PURPOSES ONLY.
 - OTHER SOURCES OF EXCAVATION MAY INCLUDE PIPE TRENCH EXCAVATION, STRUCTURE EXCAVATION, UNDERCUT EXCAVATION, STORMWATER MANAGEMENT POND EXCAVATION, ENVIRONMENTAL SITE EXCAVATION, MAINTENANCE OF TRAFFIC EXCAVATION, ETC.
 - UNSUITABLE MATERIALS INCLUDE UNDERCUT SOILS, BITUMINOUS PAVEMENT, ETC.



ADDENDUMS / REVISIONS

NOT TO SCALE

HSIP NCC,
SR92 NAAMANS
ROAD AT I-95

CONTRACT

T201100701

COUNTY

NC

BRIDGE NO.

DESIGNED BY: MCN

CHECKED BY: JAH

NOTES

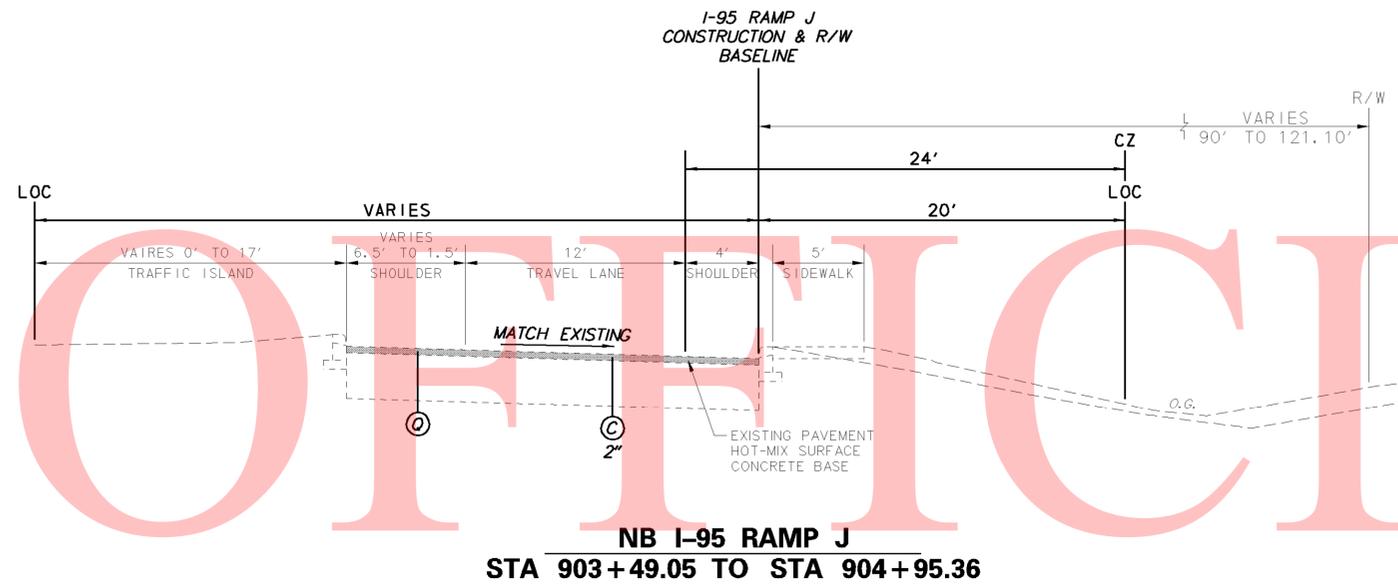
SHEET NO.

3

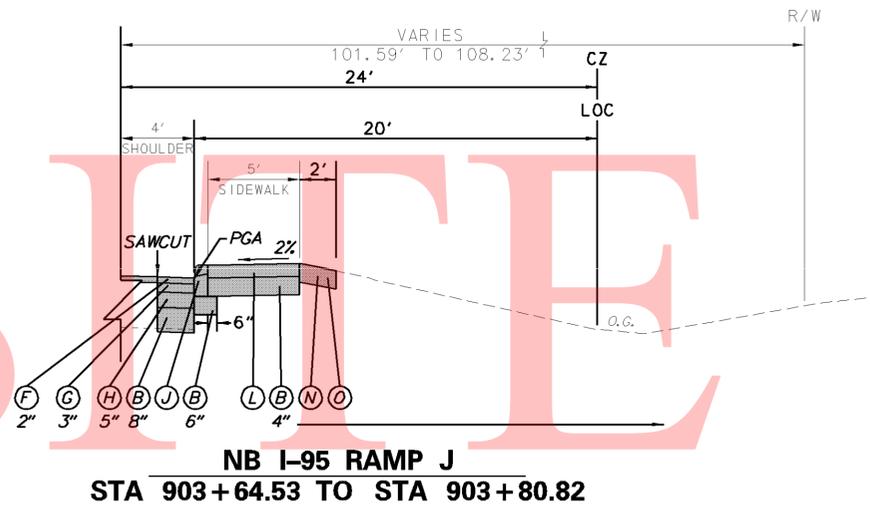
TOTAL SHTS.

23

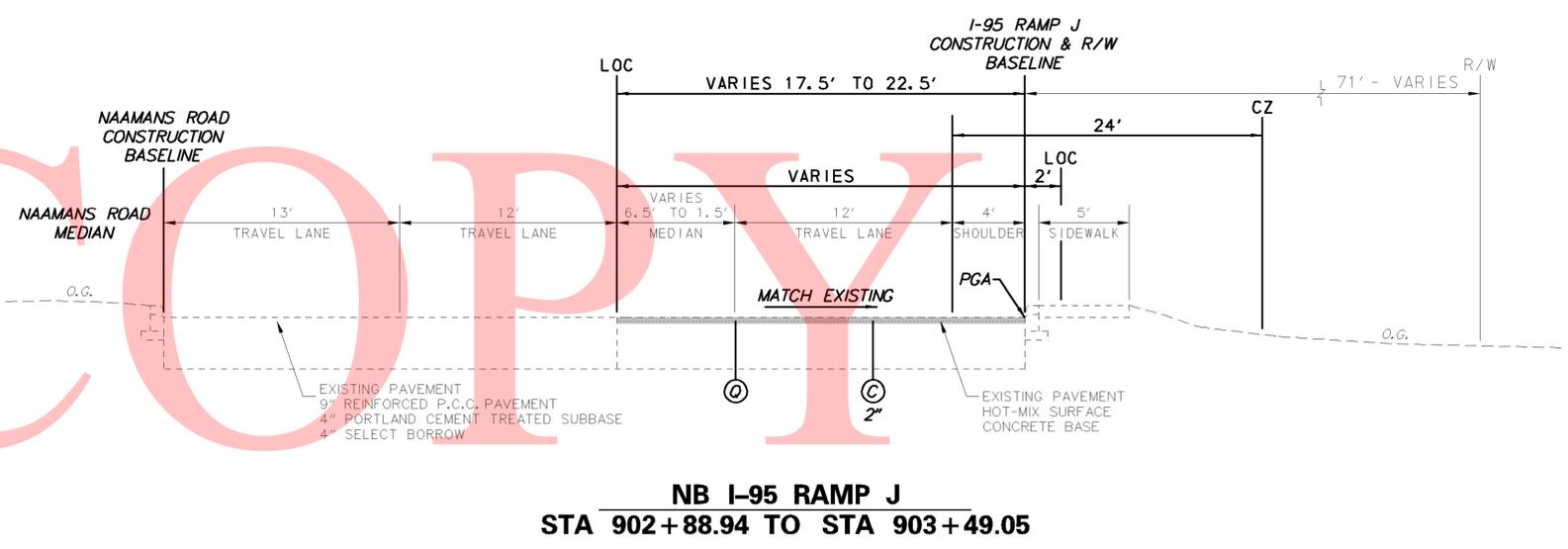
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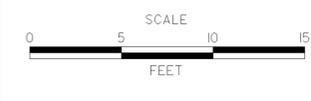


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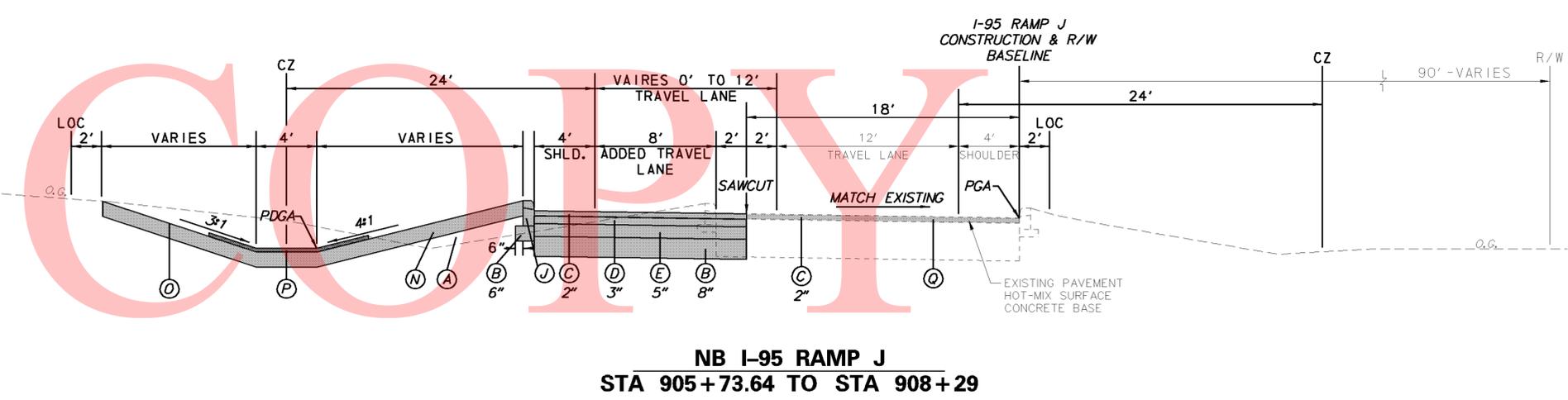
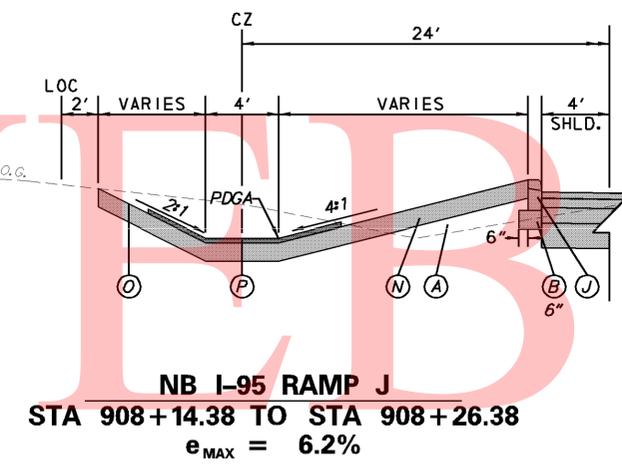
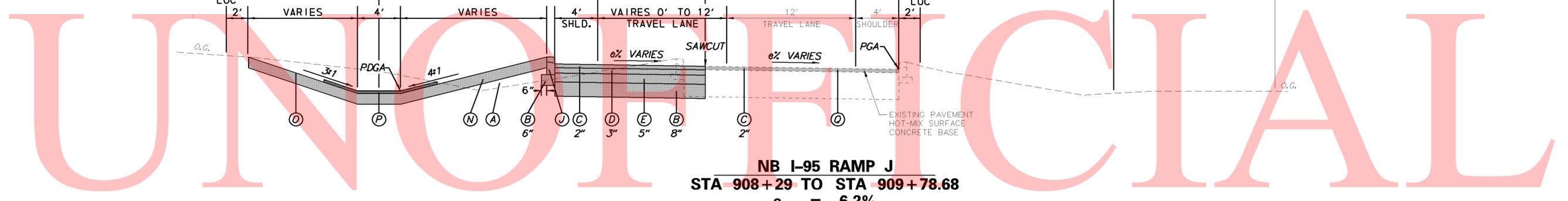
LEGEND	
(A)	ITEM 209006 - BORROW, TYPE F
(B)	ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
(C)	ITEM 401833 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONES)
(D)	ITEM 401816 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 76-22
(E)	ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG64-22
(F)	ITEM 401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING
(G)	ITEM 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING
(H)	ITEM 401823 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG64-22, PATCHING
(I)	ITEM 503008 - P.C.C. PATCHING, EARLY STRENGTH
(J)	ITEM 701010 - PORTLAND CEMENT CONCRETE CURB, TYPE 1
(K)	ITEM 720050 - GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1
(L)	ITEM 705001 - P.C.C. SIDEWALK, 4"
(M)	ITEM 705002 - P.C.C. SIDEWALK, 6"
(N)	ITEM 732002 - TOPSOIL, 6" DEPTH
(O)	ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(P)	ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
(Q)	ITEM 760006 - PAVEMENT - MILLING, HOT-MIX, 2" DEPTH

ADDENDUMS / REVISIONS

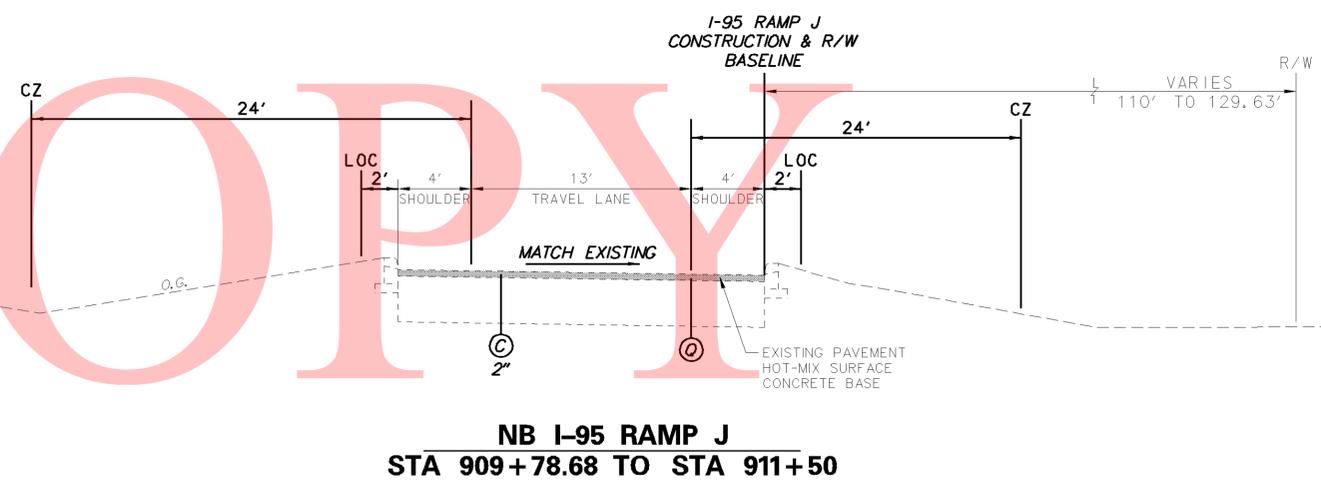
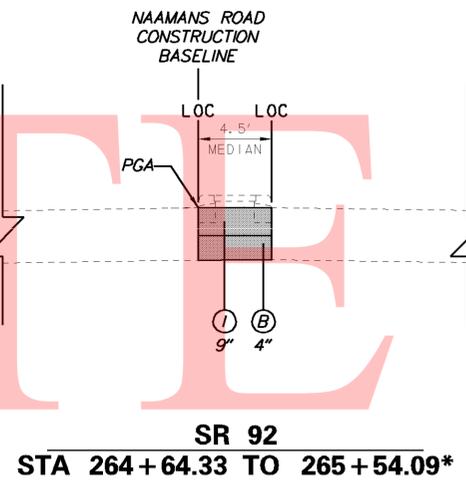
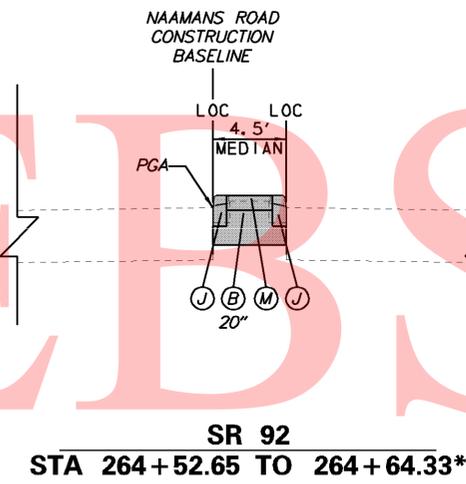
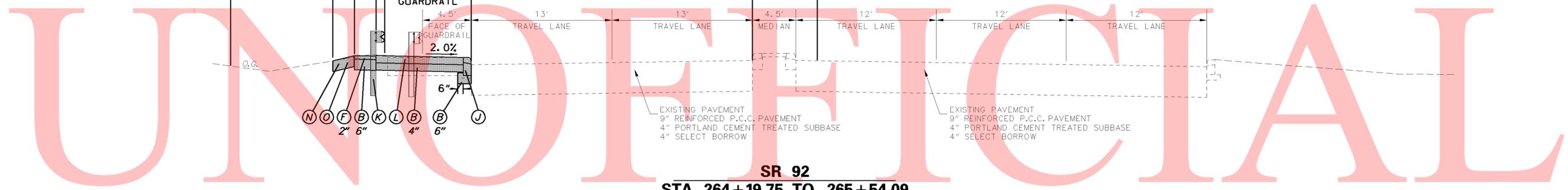


CONTRACT T201100701	BRIDGE NO.
COUNTY NC	DESIGNED BY: MCN CHECKED BY: JAH

TYPICAL SECTIONS
SHEET NO. 4
TOTAL SHTS. 23



LEGEND	
(A)	ITEM 209006 - BORROW, TYPE F
(B)	ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
(C)	ITEM 401833 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONES)
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(N)	ITEM 732002 - TOPSOIL, 6" DEPTH
(O)	ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(P)	ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
(Q)	ITEM 760006 - PAVEMENT - MILLING, HOT-MIX, 2" DEPTH

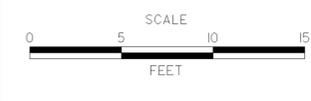


LEGEND	
(A)	ITEM 209006 - BORROW, TYPE F
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(P)	ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
(Q)	ITEM 760006 - PAVEMENT - MILLING, HOT-MIX, 2" DEPTH

*EXISTING PAVEMENT AND CURB SHALL BE REMOVED AT EXISTING JOINT. NO SAW CUTTING SHALL BE REQUIRED.



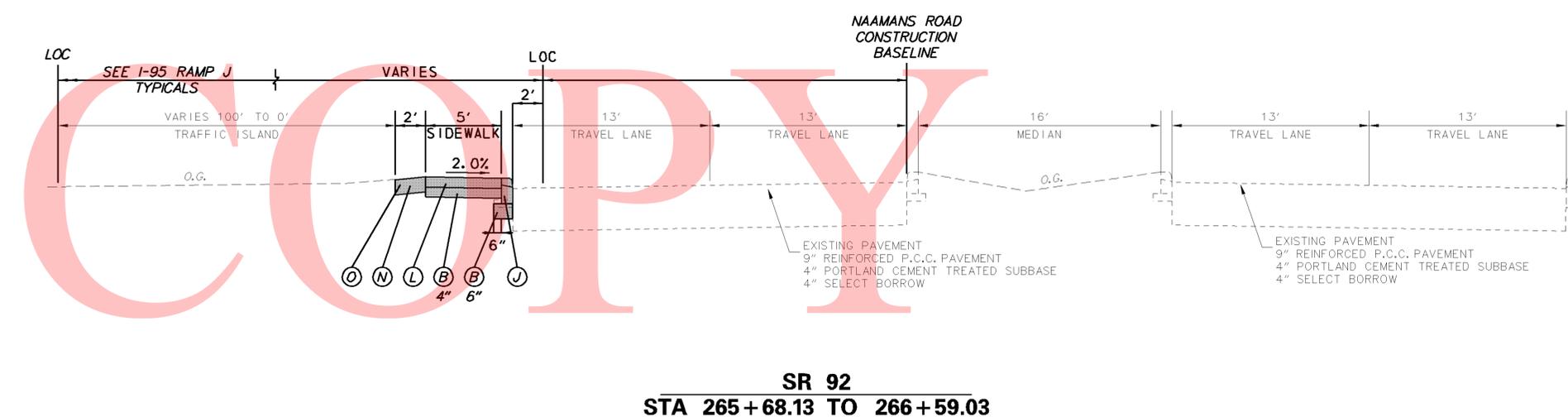
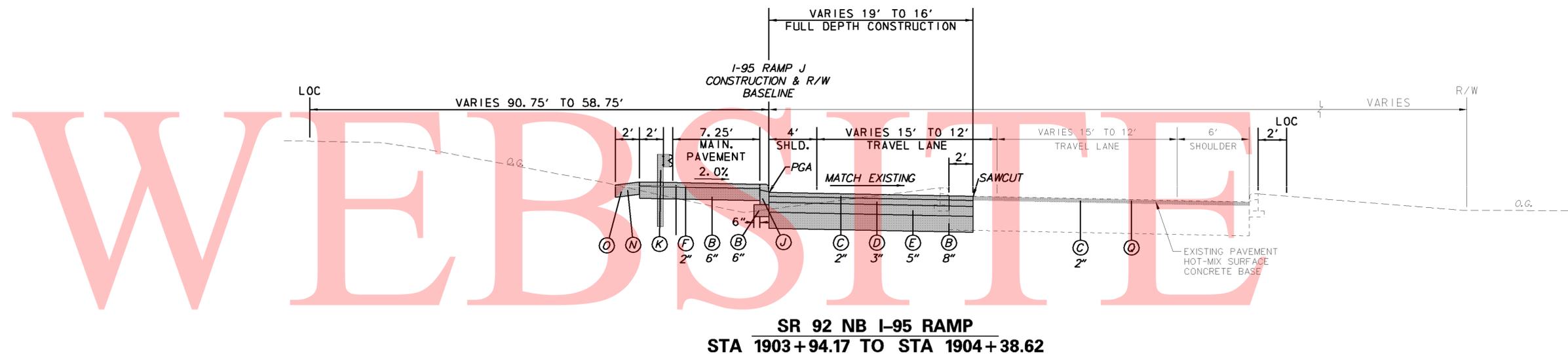
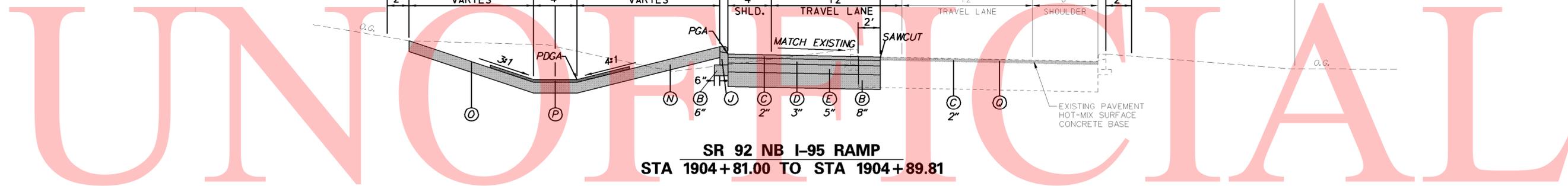
ADDENDUMS / REVISIONS



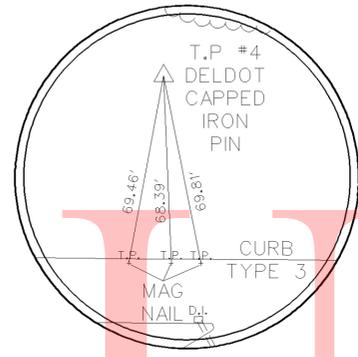
HSIP NCC,
SR92 NAAMANS
ROAD AT I-95

CONTRACT T201100701	BRIDGE NO.
COUNTY NC	DESIGNED BY: MCN
	CHECKED BY: JAH

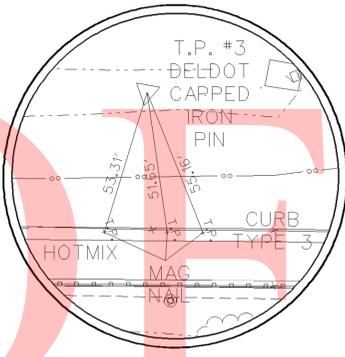
TYPICAL SECTIONS	SHEET NO. 6
	TOTAL SHTS. 23



LEGEND	
(A)	ITEM 209006 - BORROW, TYPE F
(B)	ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
(C)	ITEM 401833 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONES)
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(O)	ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
(P)	ITEM 735535 - SOIL RETENTION BLANKET MULCH, TYPE 5
(Q)	ITEM 760006 - PAVEMENT - MILLING, HOT-MIX, 2" DEPTH



TRAVERSE POINT #4



TRAVERSE POINT #3

**LIMIT OF CONSTRUCTION
CONTRACT T201100701
STATION 1903 + 63.32**

**END OF CONSTRUCTION
CONTRACT T201100701
STATION 267 + 64.19**

**LIMIT OF CONSTRUCTION
CONTRACT T201100701
STATION 902 + 88.94**

**LIMIT OF CONSTRUCTION
CONTRACT T201100701
STATION 911 + 50**

CIRCULAR CURVE NO. ①

STATION	NORTHING	EASTING
Element: Circular		
PC (20105)	903+50.74	661153.4661
PI (20104)	904+88.18	661213.5149
CC (20106)	905+73.64	661289.0935
PT (20107)	905+73.64	661342.1610
Radius:	150.7800	
Delta:	84° 41' 59.8551" Right	
Degree of Curvature(Arc):	37° 59' 58.5185"	
Length:	222.8970	
Tangent:	137.4399	
Chord:	203.1481	
Middle Ordinate:	39.3470	
External:	53.2404	
Tangent Direction:	N 64° 05' 35.3040" W	
Radial Direction:	N 25° 54' 24.6960" E	
Chord Direction:	N 21° 44' 35.3765" W	
Radial Direction:	S 69° 23' 35.4490" E	
Tangent Direction:	N 20° 36' 24.5510" E	

CIRCULAR CURVE NO. ②

STATION	NORTHING	EASTING
Element: Circular		
PC (20110)	909+80.18	661722.6897
PI (20108)	911+79.70	661909.4439
CC (20111)	913+75.26	661319.3796
PT (20112)	913+75.26	662061.4746
Radius:	1145.9200	
Delta:	19° 45' 14.0000" Right	
Degree of Curvature(Arc):	4° 59' 59.9307"	
Length:	395.0793	
Tangent:	199.5199	
Chord:	393.1255	
Middle Ordinate:	16.9843	
External:	17.2399	
Tangent Direction:	N 20° 36' 24.5510" E	
Radial Direction:	S 69° 23' 35.4490" E	
Chord Direction:	N 30° 29' 01.5510" E	
Radial Direction:	S 49° 38' 21.4490" E	
Tangent Direction:	N 40° 21' 38.5510" E	

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
3	907+67.39	70.47	661548.3219	646269.5767	87.11
4	1904+70.24	-67.4011	661276.1996	646149.1704	93.60
5	269+20.09	74.5249	660956.1430	646500.3783	73.35

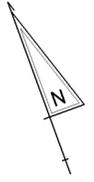
CIRCULAR CURVE NO. ③

STATION	NORTHING	EASTING
Element: Circular		
PC (20207)	265+63.84	661146.4473
PI (20202)	267+89.99	661076.2478
CC (20206)	270+15.92	655699.8712
PT (20205)	270+15.92	660989.3211
Radius:	5729.5800	
Delta:	4° 31' 15.0000" Right	
Degree of Curvature(Arc):	0° 59' 59.9987"	
Length:	452.0835	
Tangent:	226.1591	
Chord:	451.9662	
Middle Ordinate:	4.4583	
External:	4.4618	
Tangent Direction:	S 71° 55' 00.3040" E	
Radial Direction:	S 18° 04' 59.6960" W	
Chord Direction:	S 69° 39' 22.8040" E	
Radial Direction:	S 22° 36' 14.6960" W	
Tangent Direction:	S 67° 23' 45.3040" E	

CONSTRUCTION ALIGNMENT CONTROL

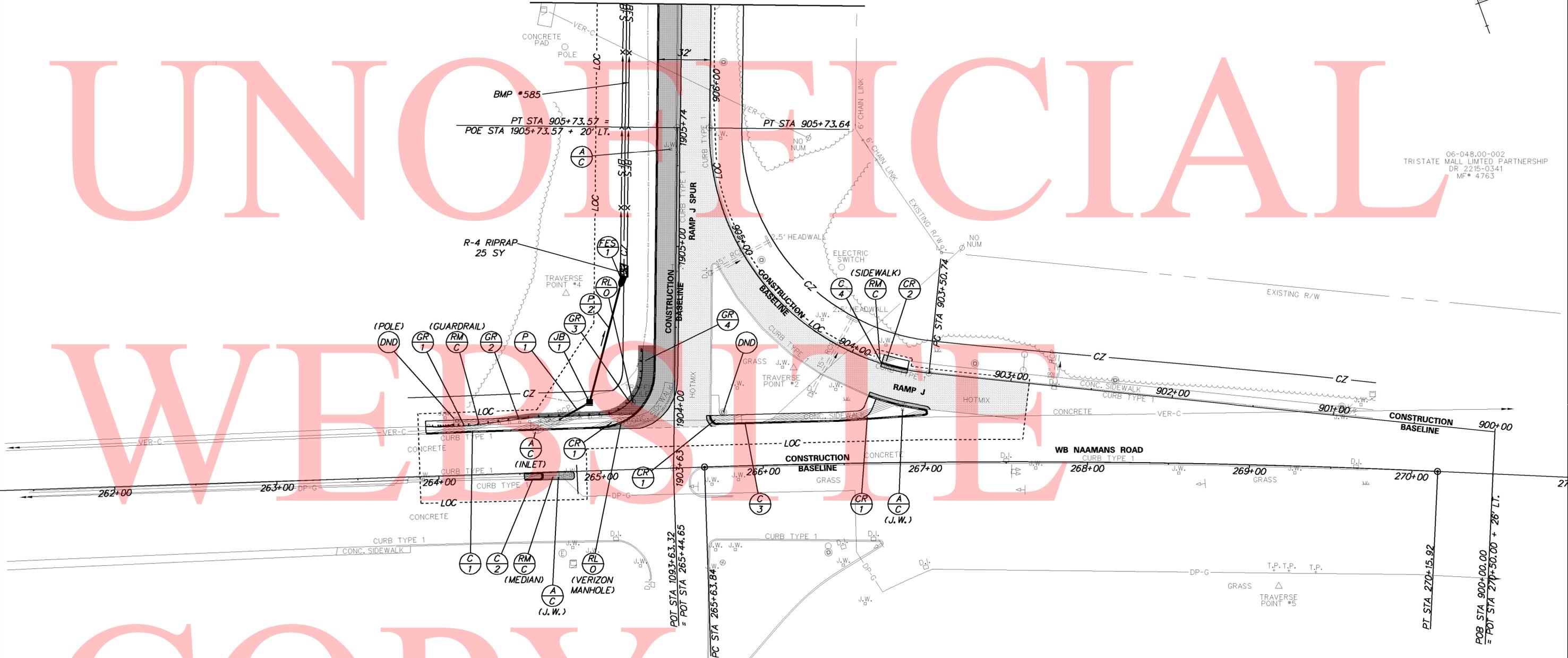
POINT	STATION	OFFSET	NORTHING	EASTING
20113	900+00.00	0.0000	661000.2245	646658.0962
20200	270+50.00	0.0000	660976.2217	646648.1028
20205	270+15.92	0.0000	660989.3211	646616.6399
20201	280+00.00	0.0000	660611.0787	647525.1265
20208	258+14.61	0.0000	661379.0061	645480.6456
20300	1905+73.57	0.0000	661349.2001	646248.6278
20302	1903+63.32	0.0000	661152.4018	646174.6294

DATUM REFERENCE:
 HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).
 VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88 AND BASED ON THE FOLLOWING STATE OF DELAWARE BENCHMARKS ESTABLISHED BY THE DELAWARE DEPARTMENT OF TRANSPORTATION:
 GPS *NMR1, ELEVATION 85.6133
 GPS *NMR2, ELEVATION 48.5399



06-048.00-002
 TRISTATE MALL LIMITED PARTNERSHIP
 DR. 2215-0341
 MF# 4763

MATCH LINE STA 906+50



CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	PCC CURB, TYPE 1	388.18'
2	PCC CURB, TYPE 1	26.19'
3	PCC CURB, TYPE 1	177.63'
4	PCC CURB, TYPE 1	16.36'

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	15" RCP	III	17.75'	0.0113	87.40	87.20
2	15" RCP	III	73.03'	0.0100	87.00	86.27

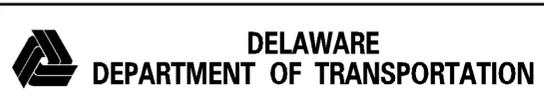
FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
1	15" RCP	0.0140	NO

*REMOVE EXISTING PIPE TO NEAREST JOINT AND CONNECT NEW SECTION

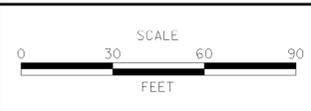
GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	GUARDRAIL TO BARRIER CONNECTION APPROACH, TYPE 1	263+92.94	30.00'	25.00'
2	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1	264+19.76	34.27'	81.18'
3	CURVED GUARDRAIL SECTION	265+00.33	34.18'	41.20'
4	END ANCHORAGE	1904+36.62	20.00'	12.50'

JUNCTION BOX SCHEDULE				
NO.	STATION	OFFSET	BOX SIZE	INV. EL.
1	264+94.34	42.06	34" x 24"	87.00

DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
1	264+94.34	42.06	34" x 24"	A	89.31	87.00



ADDENDUMS / REVISIONS	



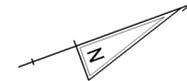
HSIP NCC,
 SR92 NAAMANS
 ROAD AT I-95

CONTRACT T201100701	BRIDGE NO.
COUNTY NC	DESIGNED BY: MCN
	CHECKED BY: JAH

CONSTRUCTION PLAN

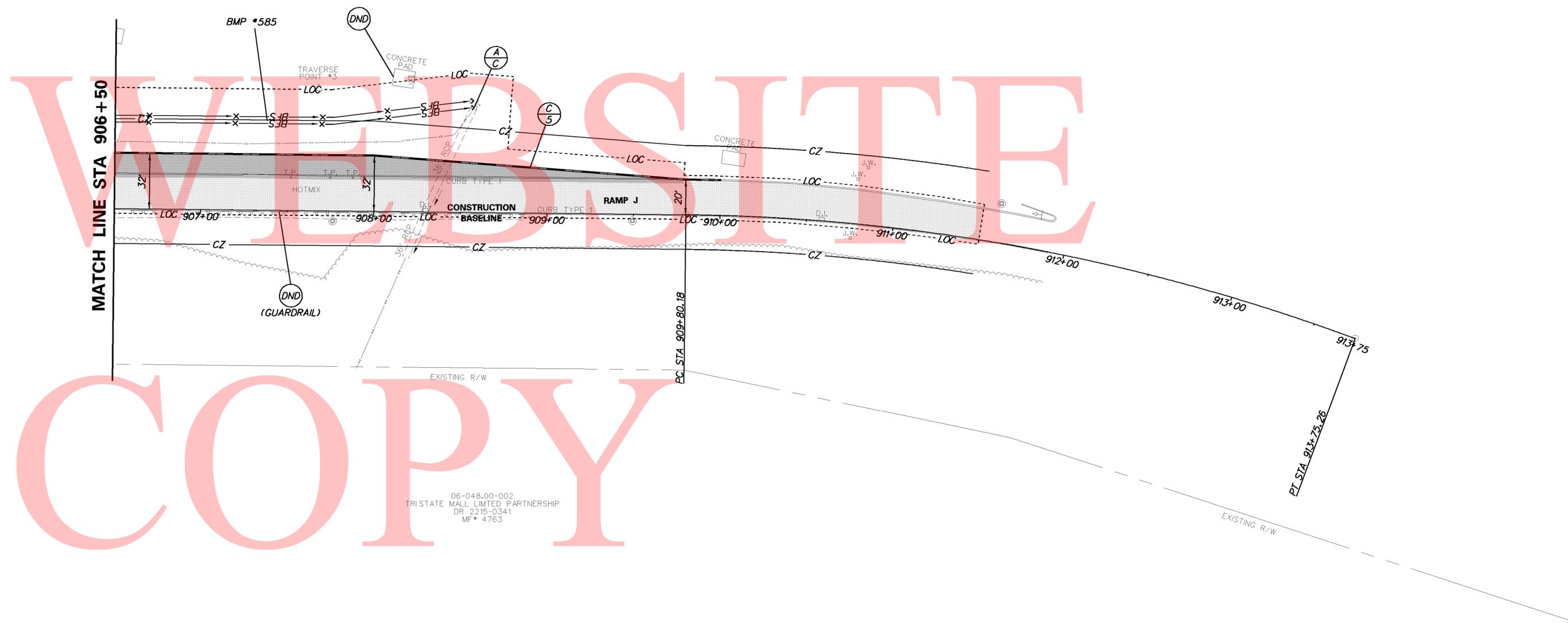
SHEET NO.	9
TOTAL SHTS.	23

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CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
5	PCC CURB, TYPE 1	350.74'

UNOFFICIAL

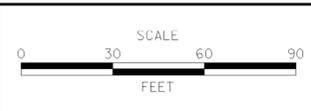


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06-048.00-002
 TRISTATE MALL LIMITED PARTNERSHIP
 DR 2215-0341
 MF# 4763

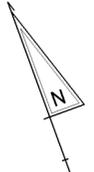
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ADDENDUMS / REVISIONS



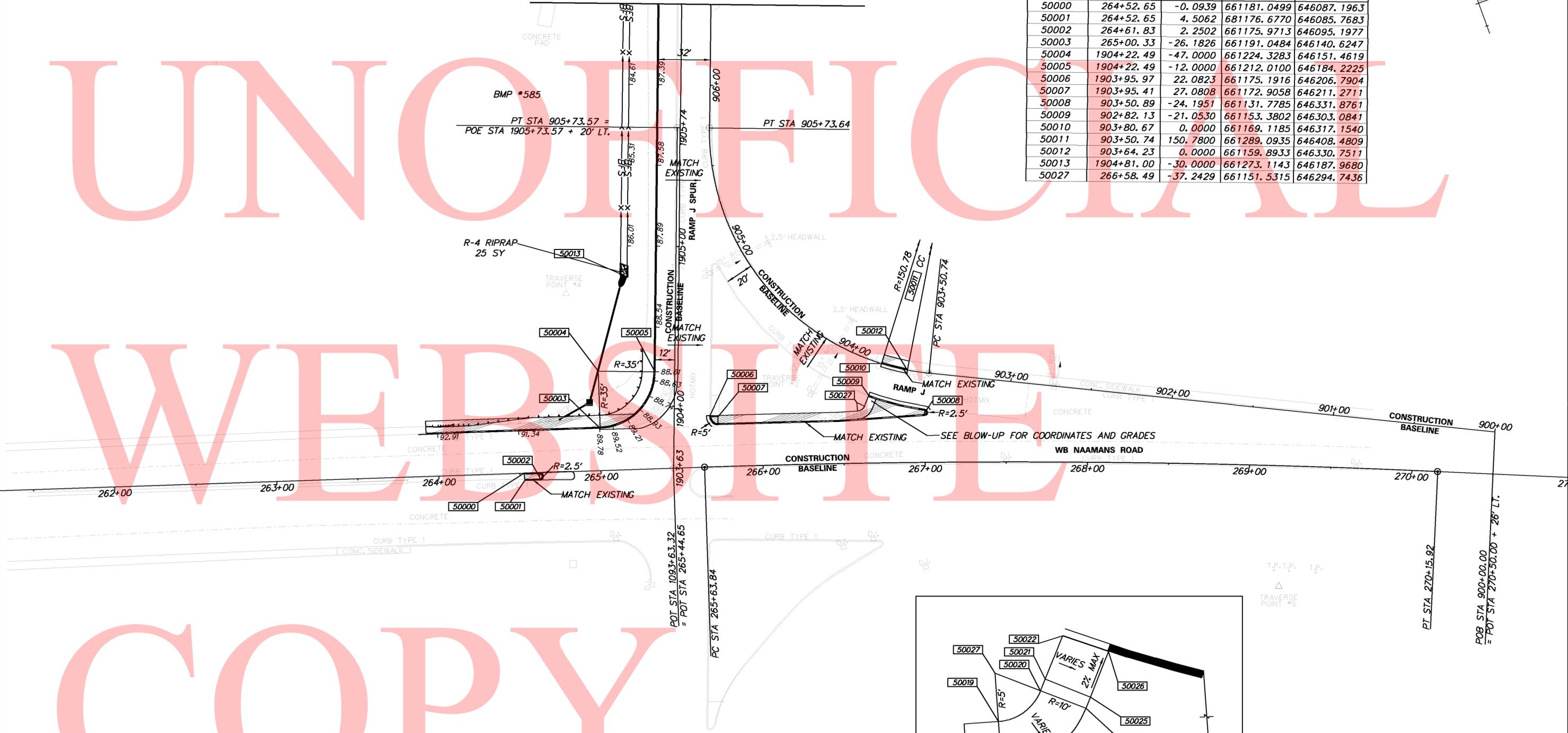
CONTRACT T201100701	BRIDGE NO.
COUNTY NC	DESIGNED BY: MCN
	CHECKED BY: JAH

SHEET NO.	10
TOTAL SHTS.	23

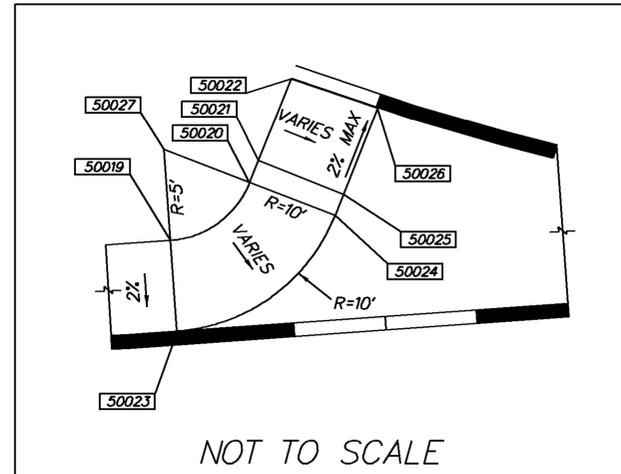


COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
50000	264+52.65	-0.0939	661181.0499	646087.1963
50001	264+52.65	4.5062	681176.6770	646085.7683
50002	264+61.83	2.2502	661175.9713	646095.1977
50003	265+00.33	-26.1826	661191.0484	646140.6247
50004	1904+22.49	-47.0000	661224.3283	646151.4619
50005	1904+22.49	-12.0000	661212.0100	646184.2225
50006	1903+95.97	22.0823	661175.1916	646206.7904
50007	1903+95.41	27.0808	661172.9058	646211.2711
50008	903+50.89	-24.1951	661131.7785	646331.8761
50009	902+82.13	-21.0530	661153.3802	646303.0841
50010	903+80.67	0.0000	661169.1185	646317.1540
50011	903+50.74	150.7800	661289.0935	646408.4809
50012	903+64.23	0.0000	661159.8933	646330.7511
50013	1904+81.00	-30.0000	661273.1143	646187.9680
50027	266+58.49	-37.2429	661151.5315	646294.7436

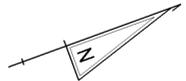
MATCH LINE STA 906+50



COORDINATE LIST					
POINT NO.	STATION	OFFSET	NORTHING	EASTING	ELEVATION
50019	266+58.76	-32.2503	661146.7230	646293.3729	85.13
50020	903+82.52	-27.9364	661148.2281	646298.4970	84.56
50021	903+82.44	-26.6325	661149.2039	646299.3658	84.49
50022	903+82.17	-21.7385	661152.8671	646302.6273	84.23
50023	265+59.03	-27.2105	661141.8699	646291.9868	85.03
50024	903+78.27	-28.3039	661144.8935	646302.2857	84.37
50025	903+78.17	-27.0318	661145.8478	646303.1353	84.30
50026	903+77.76	-21.9611	661149.6250	646306.5223	84.00

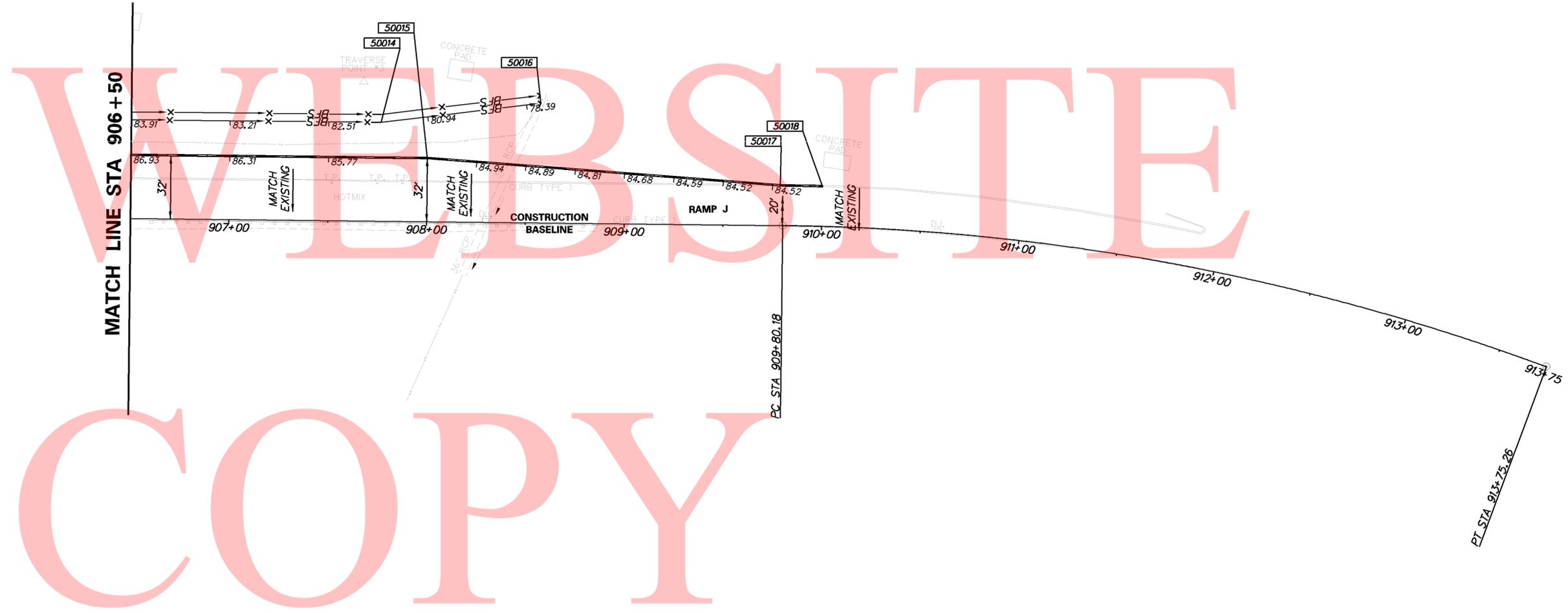


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UNOFFICIAL

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
50014	907+76.37	-50.0000	661549.5235	646291.9010
50015	908+00.13	-32.00	661565.4281	646317.1117
50016	908+57.31	-60.5017	661628.9732	646310.5553
50017	909+78.70	-20.0986	661728.3841	646381.0998
50018	910+00.00	-20.0000	661748.5420	646398.9711



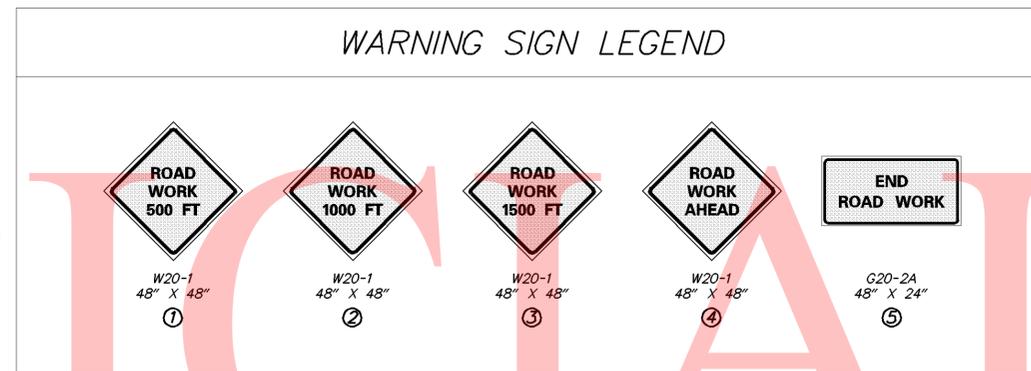
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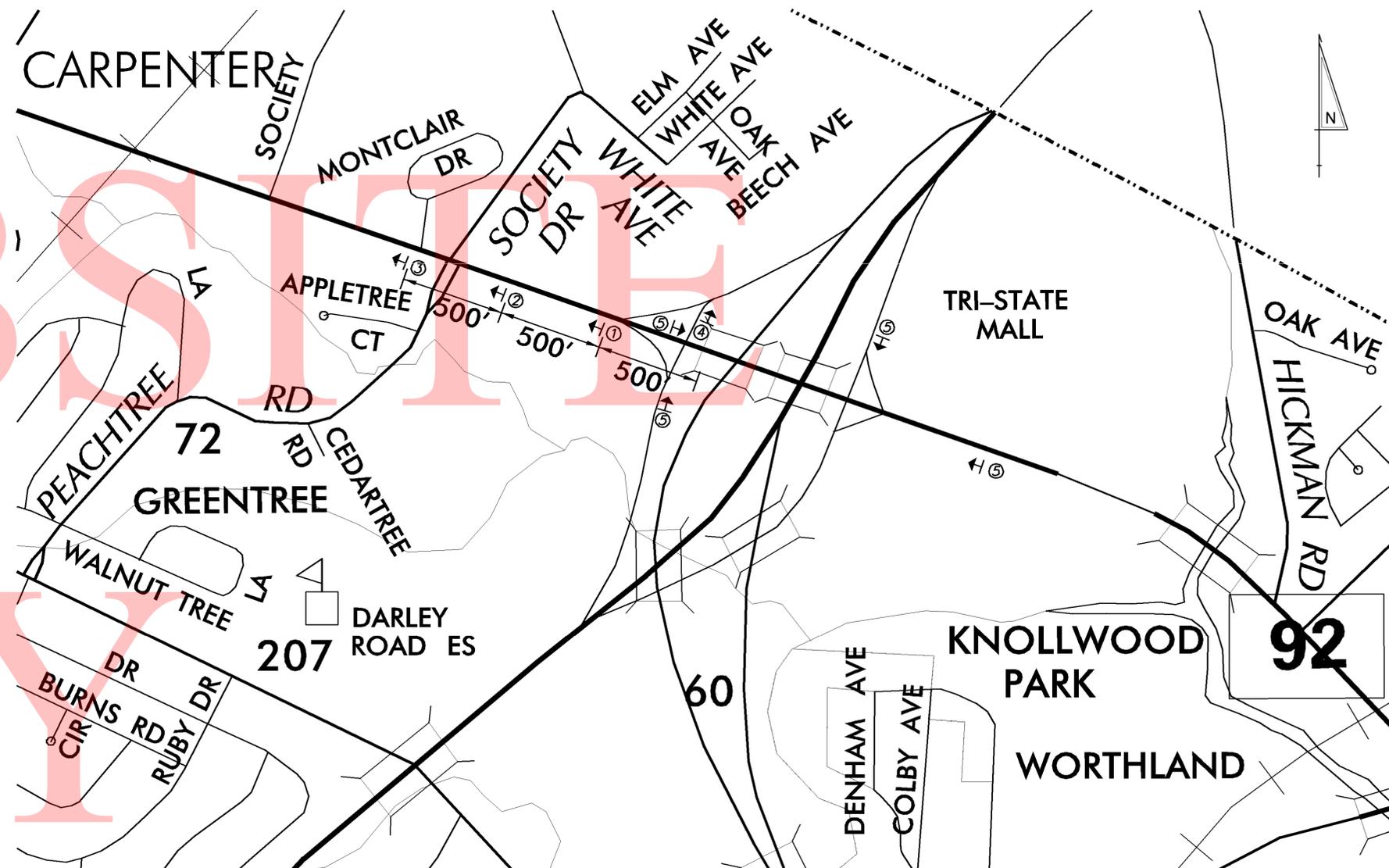
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		HSIP NCC, SR92 NAAMANS ROAD AT I-95	CONTRACT T201100701	BRIDGE NO.	GRADES AND GEOMETRICS	SHEET NO. 12	
				COUNTY NC	DESIGNED BY: MCN		TOTAL SHTS. 23	
				CHECKED BY: JAH				

MOT NOTES

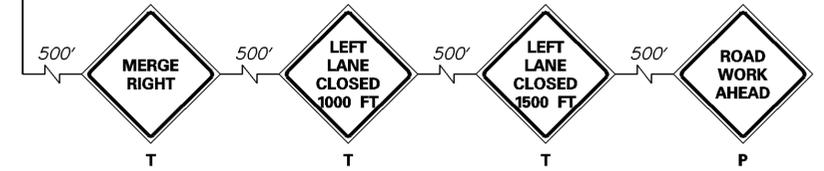
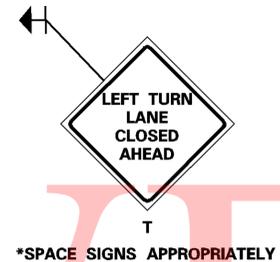
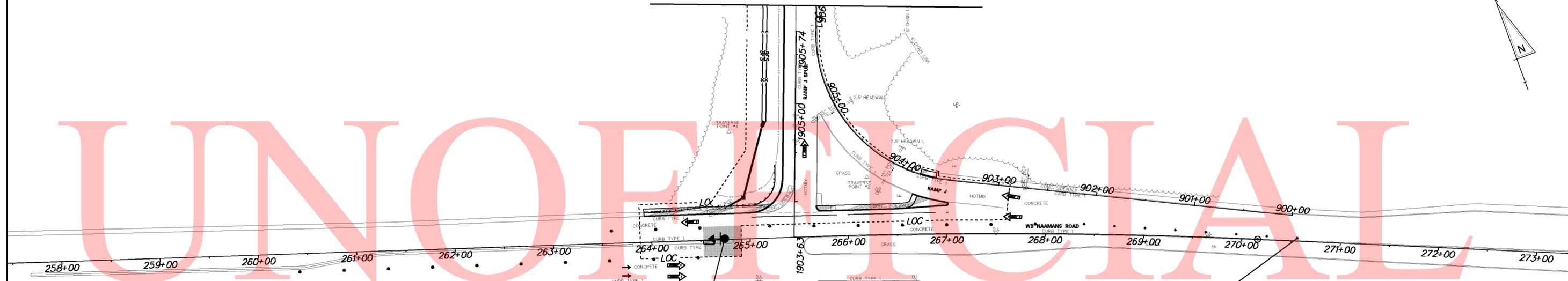
- ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL REASONABLY PROVIDE THE LEAST PRACTICABLE OBSTRUCTION TO ALL ROAD USERS, INCLUDING VEHICULAR, PEDESTRIAN, AND BICYCLE TRAFFIC, AND SHALL CONFORM TO THE REQUIREMENTS OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART 6, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT FOR BIDS.
- GRADING AND MAINTAINING HOT MIX TEMPORARY ROADWAY MATERIAL THAT IS BEING USED AS A TRAVELWAY, DRIVEWAY, ACCESS RAMP, ETC. SHALL BE INCIDENTAL TO ITEM 763500 - MAINTENANCE OF TRAFFIC. 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 TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM. CONSTRUCTION OF A PLANNED RUNAROUND OR DETOUR WOULD BE ELIGIBLE FOR PAYMENT AS SPECIFIED IN THE CONTRACT.
- A TYPE II TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE REQUIRED ON THIS PROJECT DURING THE FOLLOWING OPERATIONS: TEMPORARY/PERMANENT PAVEMENT MARKINGS, ROADSIDE SPRAYING, PATCHING, MILLING, SWEEPING, TEMPORARY TRAFFIC BARRIER PLACEMENT OR AS DIRECTED BY THE ENGINEER. THE ROLL AHEAD DISTANCE SHALL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS. THE TMA SHALL CONFORM TO THE REQUIREMENTS OF SECTION 6F.82 OF THE DELAWARE MUTCD.



EROSION & SEDIMENT CONTROL	
	DEWATERING BAG
	DEWATERING BASIN
	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
	PORTABLE SEDIMENT TANK
	SANDBAG DIKE
	SANDBAG DIVERSION
	STONE CHECK DAM
	STABILIZED CONSTRUCTION ENTRANCE
	SILT FENCE / LENGTH
	SILT FENCE
	SILT FENCE - REINFORCED
	SUMP PIT, TYPE 1
	SUMP PIT, TYPE 2
	SEDIMENT TRAP
	SEDIMENT TRAP WITH INLET AS OUTLET
	SEDIMENT TRAP PIPE OUTLET
	STILLING WELL
	TEMPORARY SWALE
	TEMPORARY SLOPE DRAIN
	TURBIDITY CURTAIN / LENGTH
	TURBIDITY CURTAIN



MATCH LINE STA 906+00



UNOFFICIAL
WEBSITE

CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION SAFETY FENCE / LENGTH
	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	IMPACT ATTENUATOR

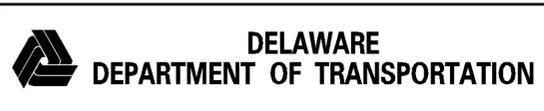
- CONSTRUCTION PHASING NOTES**
- PHASE 1
- PLACE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) 10 DAYS PRIOR TO BEGINNING OF WORK ON ALL 3 APPROACHES. THE MESSAGE SHALL READ "ROADWORK BEGINS XX/XX/XX EXPECT DELAYS"
 - NIGHT WORK ONLY: 8PM TO 6AM SUN-THURS. BAG LEFT TURN SIGNALS UPON IMPLEMENTATION OF DETOUR
 - INSTALL MAINTENANCE OF TRAFFIC ADVANCED SIGNAGE AS SHOWN FOR WB NAAMANS ROAD. INSTALL MAINTENANCE OF TRAFFIC ADVANCED SIGNAGE AS SHOWN FOR NB I-95 OFF-RAMP. INSTALL DRUMS AS SHOWN FOR EB NAAMANS LEFT-TURN ONTO NB I-95.
 - IMPLEMENT DETOUR.
 - REMOVE EXISTING MEDIAN AS SHOWN ON THE PLANS.
 - INSTALL NEW MEDIAN AND PATCH EXISTING PAVEMENT AS SHOWN ON THE PLANS.
 - REMOVE TRAFFIC CONTROL AND ADVANCED WARNING SIGNAGE AS REQUIRED.

*CONTRACTOR AT THE END OF WORK DAY WILL BRING ROADWAY AREA BACK TO PROPOSED GRADE BY ADDING STONE IF NECESSARY

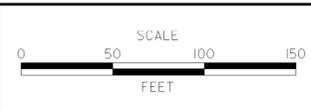
*T SIGNIFIES TEMPORARY WARNING SIGNS WHICH ARE PHASE SPECIFIC.

P SIGNIFIES PERMANENT WARNING SIGNS WHICH ARE PHASE SPECIFIC.

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ADDENDUMS / REVISIONS

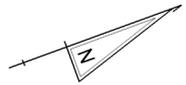


**HSIP NCC,
SR92 NAAMANS
ROAD AT I-95**

CONTRACT T201100701	BRIDGE NO.
COUNTY NC	DESIGNED BY: MCN
	CHECKED BY: JAH

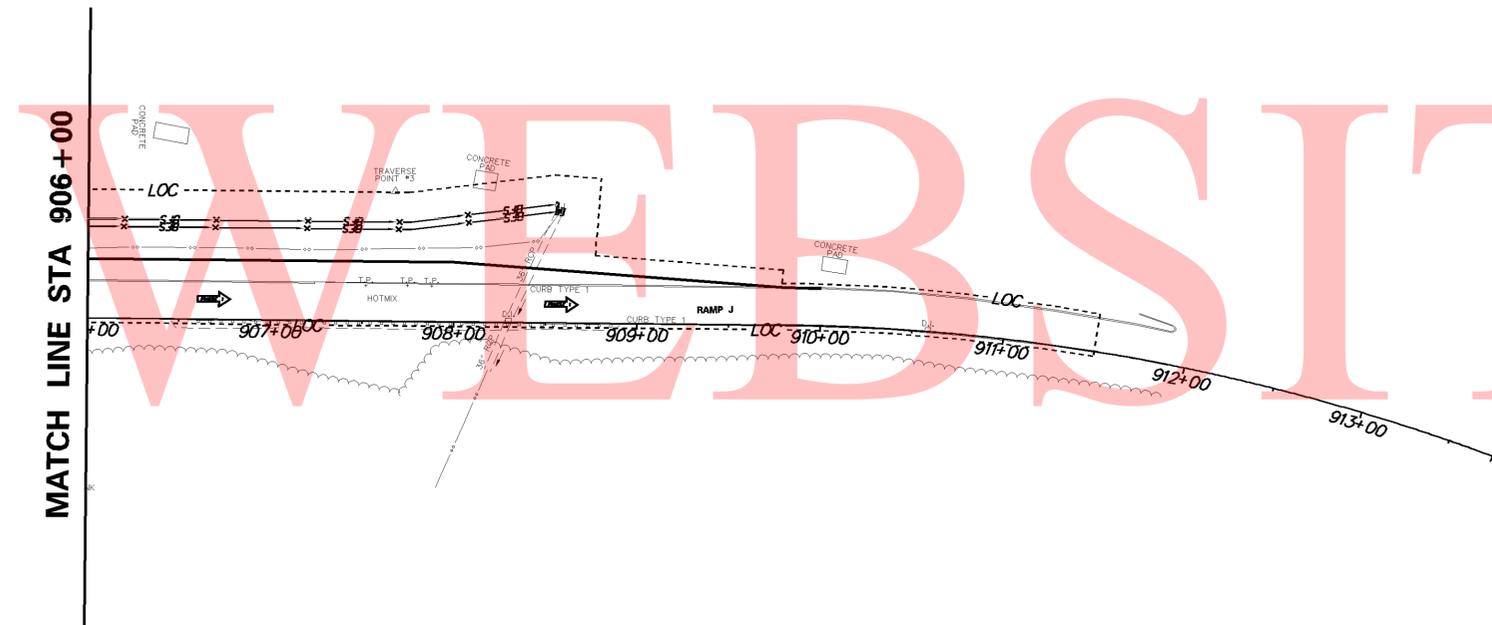
**CONSTRUCTION PHASING,
M.O.T., AND EROSION
CONTROL PLAN - PHASE 1**

SHEET NO.	15
TOTAL SHTS.	23



CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION SAFETY FENCE / LENGTH
	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	IMPACT ATTENUATOR

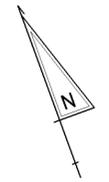
CONSTRUCTION PHASING NOTES	
PHASE 1	
1.	PLACE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) 10 DAYS PRIOR TO BEGINNING OF WORK ON ALL 3 APPROACHES. THE MESSAGE SHALL READ "ROADWORK BEGINS XX/XX; EXPECT DELAYS"
2.	NIGHT WORK ONLY: 8PM TO 6AM SUN-THURS. BAG LEFT TURN SIGNALS UPON IMPLEMENTATION OF DETOUR
3.	INSTALL MAINTENANCE OF TRAFFIC ADVANCED SIGNAGE AS SHOWN FOR WB NAAMANS ROAD. INSTALL MAINTENANCE OF TRAFFIC ADVANCED SIGNAGE AS SHOWN FOR NB I-95 OFF-RAMP. INSTALL DRUMS AS SHOWN FOR EB NAAMANS LEFT-TURN ONTO NB I-95.
4.	IMPLEMENT DETOUR.
5.	REMOVE EXISTING MEDIAN AS SHOWN ON THE PLANS.
6.	INSTALL NEW MEDIAN AND PATCH EXISTING PAVEMENT AS SHOWN ON THE PLANS.
7.	REMOVE TRAFFIC CONTROL AND ADVANCED WARNING SIGNAGE AS REQUIRED.



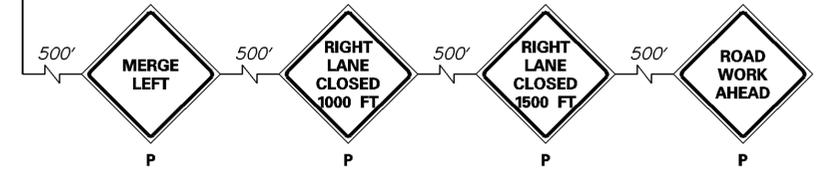
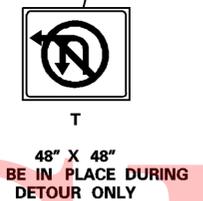
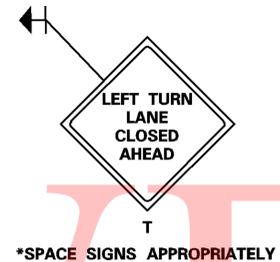
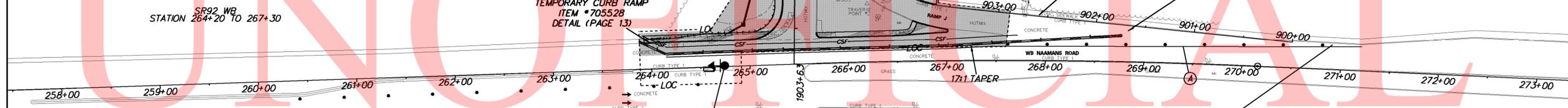
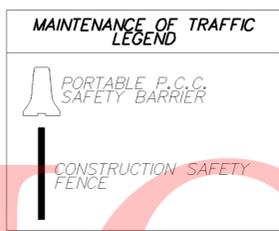
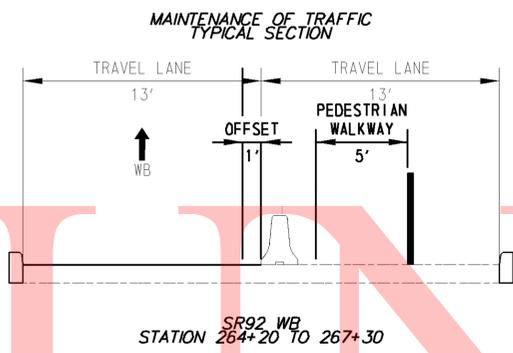
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WEBSITE
COPY

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MATCH LINE STA 906+00



TEMPORARY PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	5" TEMPORARY MARKINGS, TAPE (ITEM 748570)	748 LF



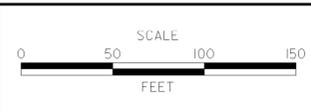
CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION SAFETY FENCE / LENGTH
	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	IMPACT ATTENUATOR

- CONSTRUCTION PHASING NOTES**
- PHASE 2
- IMPLEMENT DETOUR
 - INSTALL MAINTENANCE OF TRAFFIC ADVANCED SIGNAGE IN ACCORDANCE WITH THE PLANS.
 - PLACE PEDESTRIAN DETOUR MEASURES AS ACCORDING TO PLANS.
 - INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
 - GRADE PROPOSED DRAINAGE DITCH IN ACCORDANCE TO THE PLANS.
 - INSTALL CURB AS SHOWN ON THE PLANS.
 - PATCH HOTMIX WHERE NECESSARY TO THE TOP OF THE TYPE B LAYER.
 - PATCH CONCRETE SECTION OF ROADWAY UP TO PROPOSED GRADE.
 - REMOVE AND REPLACE GUARDRAIL AS PROPOSED ON PLANS ALONG SR92.
 - GRADE AND BOX OUT FOR PROPOSED SIDEWALK WITH CURB RAMPS AS SHOWN ON THE PLANS.
 - GRADE AND BOX OUT FOR PROPOSED ON-RAMP WIDENING PLACING UP TO THE TOP OF THE TYPE B HOTMIX.
 - MILL AND OVERLAY THE ROADWAY WITH TYPE C HOTMIX AS ACCORDING TO THE PLANS.
 - STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES.
 - REMOVE TRAFFIC CONTROL AND ADVANCED WARNING SIGNAGE AS REQUIRED.
 - REMOVE/ RELOCATE PEDESTRIAN DETOUR MEASURES AS NEEDED.
 - REMOVE/ RELOCATE PORTABLE PCC BARRIER AS NEEDED. REMOVE BOLTS FROM ROADWAY AND FILL WITH EPOXY.
 - UPON IMPLEMENTATION OF NEW SIGNAL PATTERN, ACTIVATE PCMS ON EB AND WB NAAMANS ROAD TO READ "CAUTION NEW TRAFFIC PATTERN" FOR 5 DAYS.

*T SIGNIFIES TEMPORARY WARNING SIGNS WHICH ARE PHASE SPECIFIC.
P SIGNIFIES PERMANENT WARNING SIGNS WHICH ARE PHASE SPECIFIC.

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ADDENDUMS / REVISIONS

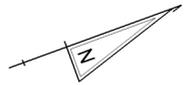


HSIP NCC,
SR92 NAAMANS
ROAD AT I-95

CONTRACT T201100701	BRIDGE NO.
COUNTY NC	DESIGNED BY: MCN
	CHECKED BY: JAH

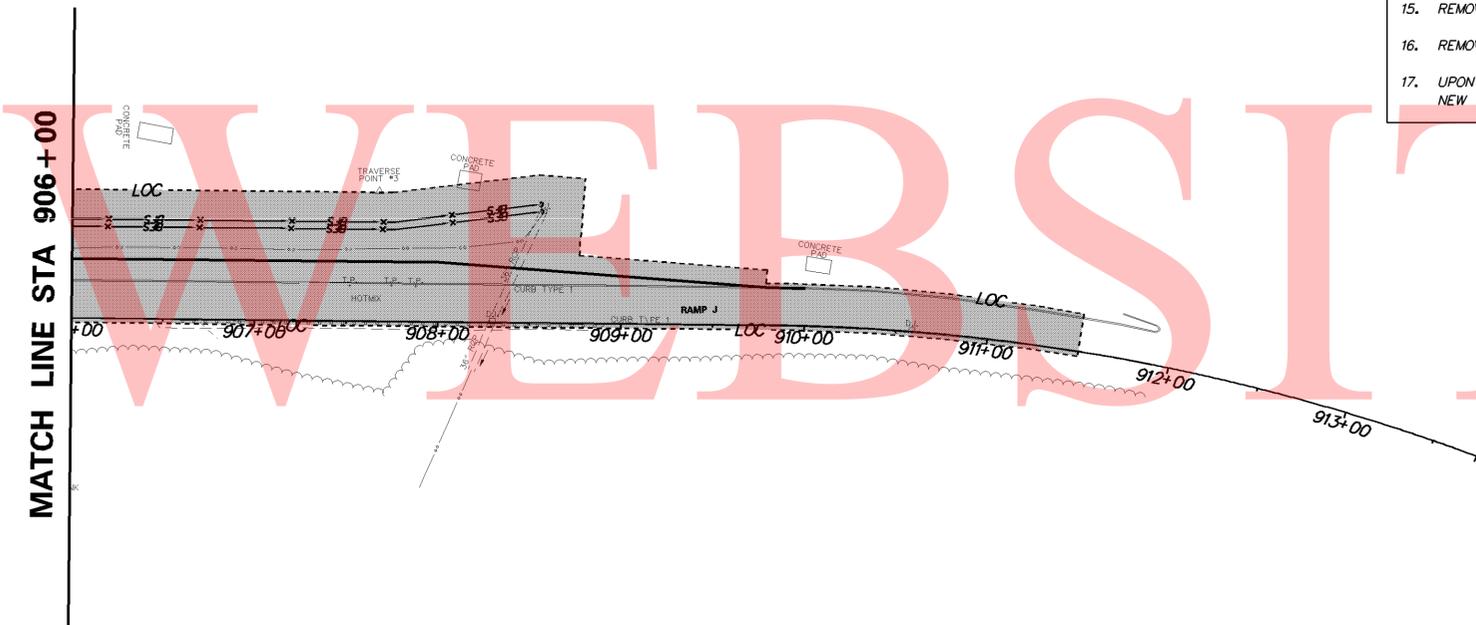
CONSTRUCTION PHASING,
M.O.T., AND EROSION
CONTROL PLAN - PHASE 2

SHEET NO.	17
TOTAL SHTS.	23



CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION SAFETY FENCE / LENGTH
	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE
	IMPACT ATTENUATOR

CONSTRUCTION PHASING NOTES	
PHASE 2	
1.	IMPLEMENT DETOUR
2.	INSTALL MAINTENANCE OF TRAFFIC ADVANCED SIGNAGE IN ACCORDANCE WITH THE PLANS.
3.	PLACE PEDESTRIAN DETOUR MEASURES AS ACCORDING TO PLANS.
4.	INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
5.	GRADE PROPOSED DRAINAGE DITCH IN ACCORDANCE TO THE PLANS.
6.	INSTALL CURB AS SHOWN ON THE PLANS.
7.	PATCH HOTMIX WHERE NECESSARY TO THE TOP OF THE TYPE B LAYER.
8.	PATCH CONCRETE SECTION OF ROADWAY UP TO PROPOSED GRADE.
9.	REMOVE AND REPLACE GUARDRAIL AS PROPOSED ON PLANS ALONG SR92.
10.	GRADE AND BOX OUT FOR PROPOSED SIDEWALK WITH CURB RAMPS AS SHOWN ON THE PLANS.
11.	GRADE AND BOX OUT FOR PROPOSED ON-RAMP WIDENING PLACING UP TO THE TOP OF THE TYPE B HOTMIX.
12.	MILL AND OVERLAY THE ROADWAY WITH TYPE C HOTMIX AS ACCORDING TO THE PLANS.
13.	STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES.
14.	REMOVE TRAFFIC CONTROL AND ADVANCED WARNING SIGNAGE AS REQUIRED.
15.	REMOVE/ RELOCATE PEDESTRIAN DETOUR MEASURES AS NEEDED.
16.	REMOVE/ RELOCATE PORTABLE POC BARRIER AS NEEDED. REMOVE BOLTS FROM ROADWAY AND FILL WITH EPOXY.
17.	UPON IMPLEMENTATION OF NEW SIGNAL PATTERN, ACTIVATE PCMS ON EB AND WB NAAMANS ROAD TO READ "CAUTION NEW TRAFFIC PATTERN" FOR 5 DAYS.



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CHANGEABLE MESSAGE BOARDS:

CMS-I PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

NO LEFT TURN TO I-95 NB

STARTING XXXX/XX 8PM-6AM

CMS-I DURING DETOUR
(REMOVED 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

NO LEFT TURN TO I-95 NB

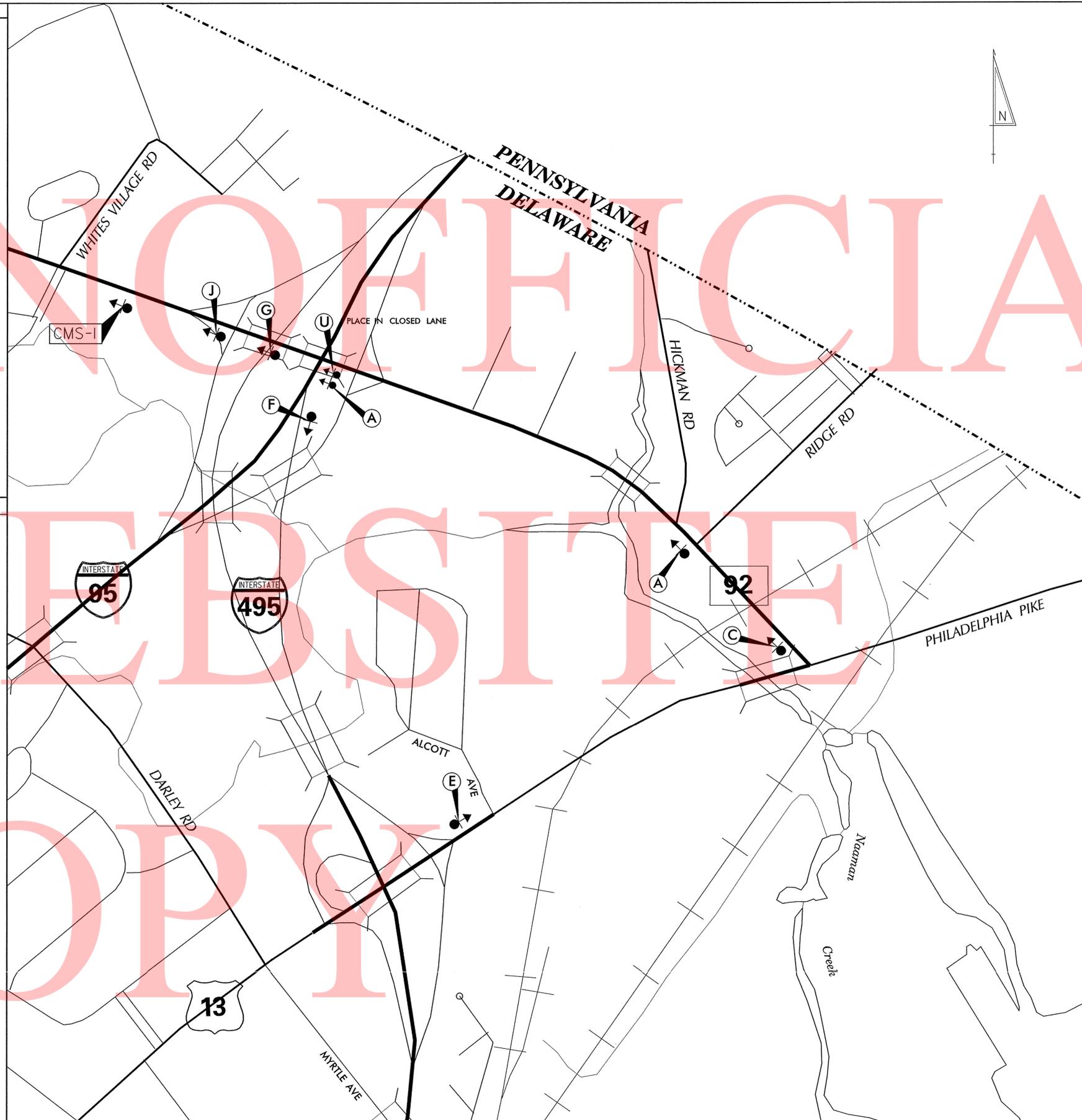
FOLLOW DETOUR I-495 NB

SPECIAL SIGNS:



R3-18
48" x 48"
TO BE IN PLACE DURING DETOUR ONLY

U



LEGEND:

A DETOUR NORTH 95 ↑	B DETOUR NORTH 95 ←	C DETOUR NORTH 95 →
D DETOUR NORTH 95 ↙	E DETOUR NORTH 95 ↘	F END DETOUR
G DETOUR AHEAD	H DETOUR 1000 FT	I DETOUR 500 FT
J RAMP CLOSED AHEAD	K RAMP CLOSED 1000 FT	L RAMP CLOSED 500 FT
M ROAD NAME	N ← DETOUR	O DETOUR →
P ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY	Q ROAD CLOSED	R ROAD CLOSED TO THRU TRAFFIC
S BARRICADE	T BARRICADE	

GENERAL NOTES:

- ALL DETOUR SIGNING INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE TO THE DE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE- MUTCD PART 6)" FOR LIGHTS, BARRICADES AND SIGNS, (AS PER LATEST REVISION)
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WILL PREVAIL.
- SIGNS J THROUGH L AND P THROUGH R, THE WORD (ROAD) SHOULD BE CHANGED TO RAMP, R/R OR BRIDGE WHERE APPLICABLE.
- WARNING SIGNS SHOULD BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT SHEETING.
- "S" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED _____ DATE: _____

RECOMMENDED *[Signature]* DATE: 7-8-11

RECOMMENDED *[Signature]* DATE: 7/8/11

APPROVED CHIEF SAFETY OFFICER *[Signature]* DATE: 7-11-11

APPROVED TRAFFIC ENGINEER *[Signature]* DATE: 7/11/11

CHANGEABLE MESSAGE BOARDS:

CMS-1
 PRIOR TO DETOUR
 (10 DAYS PRIOR TO BEGINNING OF DETOUR)

RAMP TO I-95 NB CLOSING

AT DE 92 STARTING XXXX/XX

CMS-2
 DURING DETOUR

RAMP TO I-95 NB CLOSED

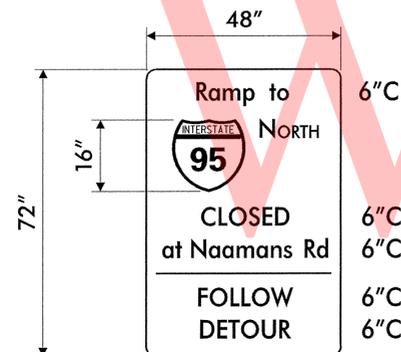
FOLLOW DETOUR I-495 NB

CMS-3
 DURING DETOUR

RAMP TO I-95 NB CLOSED

AT DE 92 USE I-495 NB

SPECIAL SIGNS:



D/G ORANGE; BLACK LEGEND

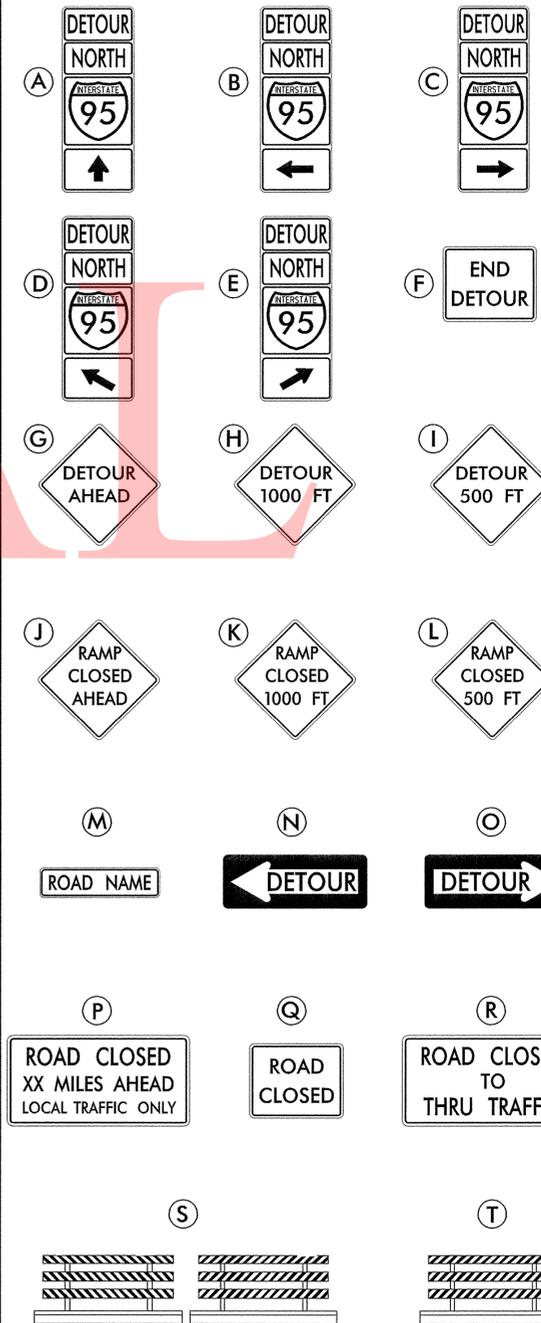
U



V



LEGEND:



GENERAL NOTES:

- ALL DETOUR SIGNING INCLUDING, TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE TO THE DE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (DE- MUTCD PART 6) FOR LIGHTS, BARRICADES AND SIGNS.(AS PER LATEST REVISION)
- FIELD CONDITIONS MAY DICTATE CHANGES AT SOME TIME DURING THE LIFE OF THE CONTRACT. IN THE EVENT OF OMISSIONS OR CORRECTIONS, THE SIGNING PROVISIONS OF THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WILL PREVAIL.
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- WARNING SIGNS SHOULD BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT SHEETING.
- *S* BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF ROADWAY.
- BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED _____ DATE: _____ RECOMMENDED *Wayne Hamilton, Jr.* DATE: 5/18/11 RECOMMENDED *Wayne Hamilton, Jr.* DATE: 5/16/11 APPROVED CHIEF SAFETY OFFICER *Wayne Hamilton, Jr.* DATE: 5-24-11 APPROVED TRAFFIC ENGINEER *Wayne Hamilton, Jr.* DATE: 5/19/11

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

**HSIP NCC,
 SR 92 NAAMANS ROAD AT I-95
 NORTHBOUND RAMP CLOSURE**

CONTRACT	ROAD NO.	N6201
T201100701	DESIGNED BY:	SWN
COUNTY	CHECKED BY:	ASW
NEW CASTLE		

**PHASE 2
 DETOUR PLAN**

SHEET NO.	20
TOTAL SHTS.	23

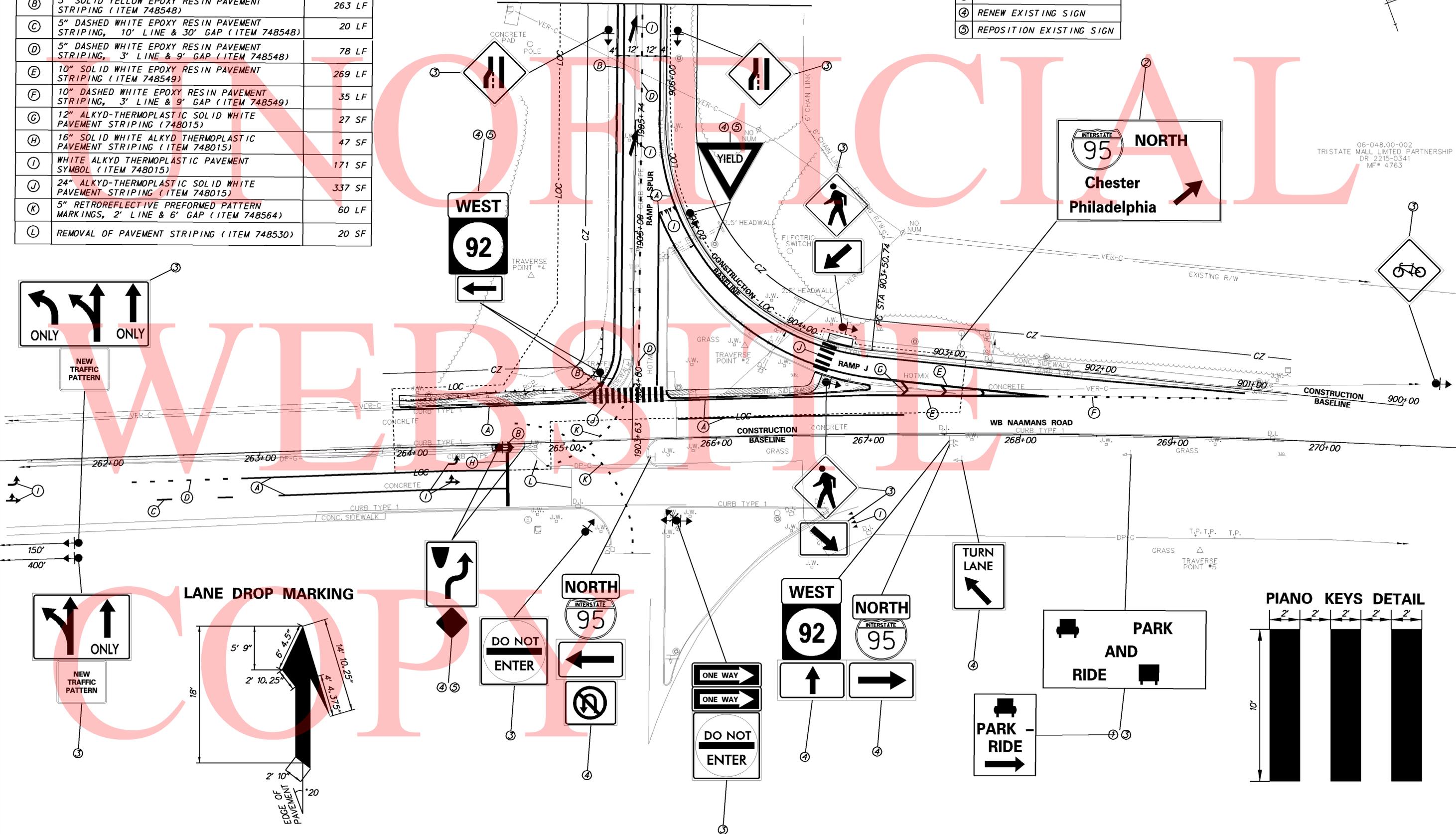
PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	1,588 LF
(B)	5" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	263 LF
(C)	5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 748548)	20 LF
(D)	5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 3' LINE & 9' GAP (ITEM 748548)	78 LF
(E)	10" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748549)	269 LF
(F)	10" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 3' LINE & 9' GAP (ITEM 748549)	35 LF
(G)	12" ALKYD-THERMOPLASTIC SOLID WHITE PAVEMENT STRIPING (748015)	27 SF
(H)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	47 SF
(I)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL (ITEM 748015)	171 SF
(J)	24" ALKYD-THERMOPLASTIC SOLID WHITE PAVEMENT STRIPING (ITEM 748015)	337 SF
(K)	5" RETROREFLECTIVE PREFORMED PATTERN MARKINGS, 2' LINE & 6' GAP (ITEM 748564)	60 LF
(L)	REMOVAL OF PAVEMENT STRIPING (ITEM 748530)	20 SF

SIGNING LEGEND

①	REMOVE EXISTING SIGN
②	EXISTING SIGN TO REMAIN
③	PLACE NEW SIGN
④	RENEW EXISTING SIGN
⑤	REPOSITION EXISTING SIGN

MATCH LINE STA 906+50



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DR 2215-0341
MF# 4763

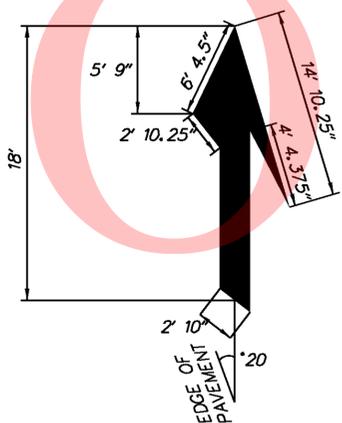


NEW TRAFFIC PATTERN

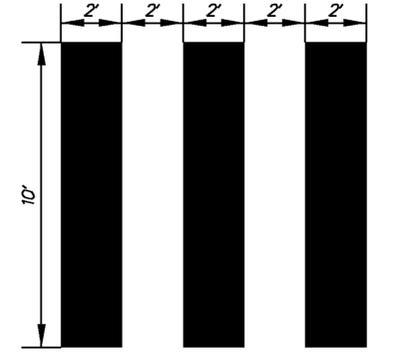
LANE DROP MARKING

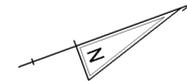


NEW TRAFFIC PATTERN



PIANO KEYS DETAIL

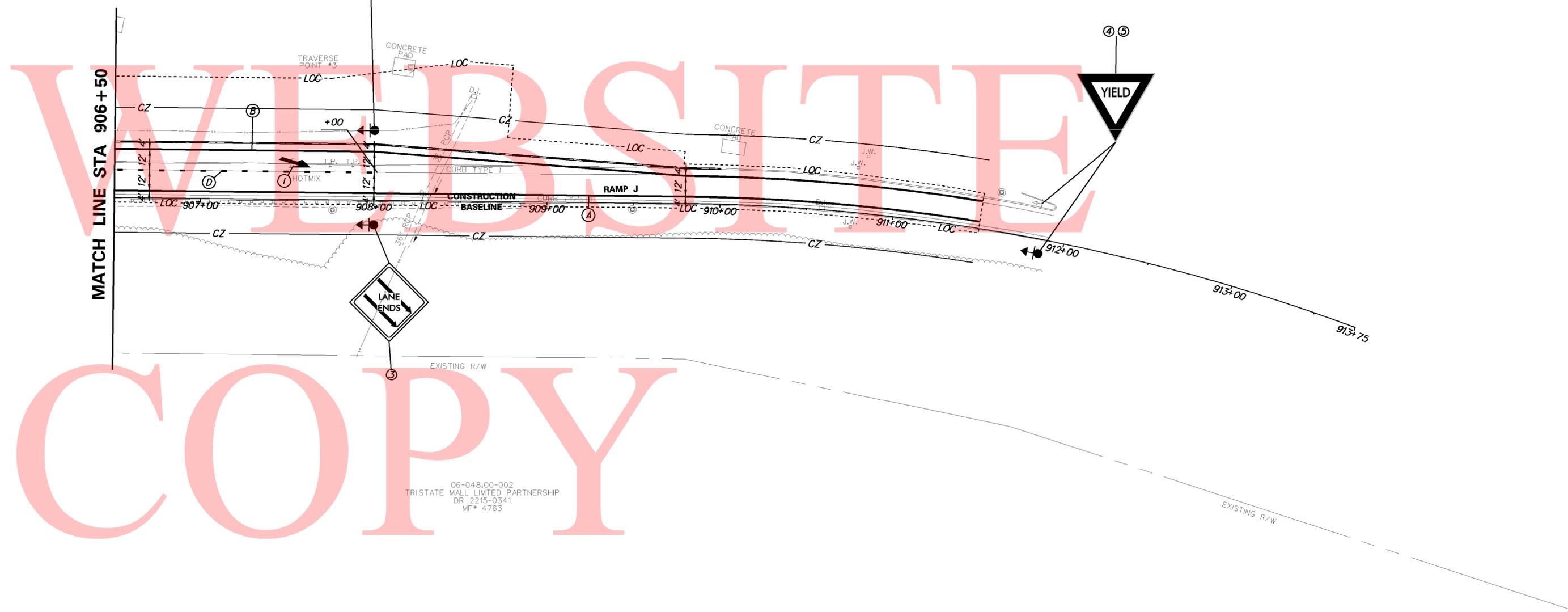




SIGNING LEGEND	
①	REMOVE EXISTING SIGN
②	EXISTING SIGN TO REMAIN
③	PLACE NEW SIGN
④	RENEW EXISTING SIGN
⑤	REPOSITION EXISTING SIGN

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	501 LF
(B)	5" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	503 LF
(C)	5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 748548)	0 LF
(D)	5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 3' LINE & 9' GAP (ITEM 748548)	38 LF
(E)	10" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748549)	0 LF
(F)	10" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 3' LINE & 9' GAP (ITEM 748549)	0 LF
(G)	12" ALKYD-THERMOPLASTIC SOLID WHITE PAVEMENT STRIPING (748015)	0 SF
(H)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	0 SF
(I)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL (ITEM 748015)	43 SF
(J)	24" ALKYD-THERMOPLASTIC SOLID WHITE PAVEMENT STRIPING (ITEM 748015)	0 SF
(K)	5" RETROREFLECTIVE PREFORMED PATTERN MARKINGS, 2' LINE & 6' GAP (ITEM 748564)	0 LF
(L)	REMOVAL OF PAVEMENT STRIPING (ITEM 748530)	0 SF

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 TRISTATE MALL LIMITED PARTNERSHIP
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 MF* 4763

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	DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		HSIP NCC, SR92 NAAMANS ROAD AT I-95	CONTRACT T201100701	BRIDGE NO. _____	SHEET NO. 22
					COUNTY NC	DESIGNED BY: MCN CHECKED BY: JAH	

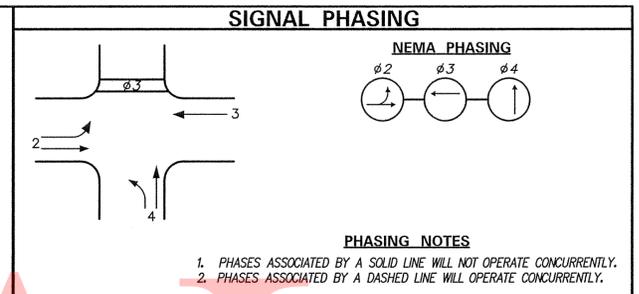
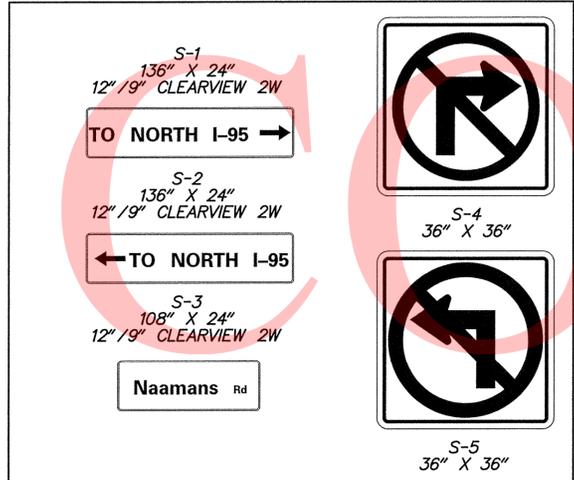
**SIGNING, STRIPING
AND CONDUIT PLAN**

CONDUIT RUN SCHEDULE				
CR#	# OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE/ WIRE
1	1	2.5"	13'	(3)*6 THWN STRANDED COPPER, FIBER <REMOVE (6) 4/*18, (2) 16/*14 [NEW (1) 4/*18, (5) 19/*14, *6 GROUND WIRE]
2	2	2.5"	17'	(2) 4/*18 *6 GROUND WIRE
3	1	2.5"	43'(40')	<REMOVE (3) 4/*18, (3) 19/*14, *6 GROUND WIRE]
4	1	2.5"	22'	(1) 19/*14 *6 GROUND WIRE
5	1	2.5"	27'	(6) 4/*18 (2) 19/*14 *6 GROUND WIRE
6	1	2.5"	87'	(6)*6 THWN STRANDED COPPER, FIBER <REMOVE (3) 4/*18, (2) 16/*14 [NEW (6) 4/*18, (2) 19/*14, *6 GROUND WIRE]
7	1	2.5"	7'(16')	<REMOVE (2) 16/*14 [NEW (1) 4/*18, (1) 19/*14, *6 GROUND WIRE]
8	1	2.5"	11'	(6)*6 THWN STRANDED COPPER, FIBER <REMOVE (2) 4/*18 [NEW (4) 4/*18, (1) 19/*14, *6 GROUND WIRE]
9	1	4.0"	42'	(6)*6 THWN STRANDED COPPER, FIBER <REMOVE (2) 4/*18 [NEW (4) 4/*18, (1) 19/*14, *6 GROUND WIRE]
10	1	4.0"	55'	(6)*6 THWN STRANDED COPPER, FIBER <REMOVE (2) 4/*18 [NEW (4) 4/*18, (1) 19/*14, *6 GROUND WIRE]
11	1	2.5"	23'	(1) 19/*14 *6 GROUND WIRE
12	1	4.0"	29'	(6)*6 THWN STRANDED COPPER [NEW (2) 4/*18 *6 GROUND WIRE]
13	1	4.0"	37'	(6)*6 THWN STRANDED COPPER [NEW *6 GROUND WIRE]
14	1	2.0"	32'	(6)*6 THWN STRANDED COPPER [NEW *6 GROUND WIRE]

* DENOTES EXISTING
() DENOTES NEW CONDUIT

MAST ARM SCHEDULE				
MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	S.F. OF SIGNING
1	21'	60'	3	32
2	21'	40'	2	32
3	21'	40'	2	18

OVERHEAD SIGN DETAILS



LEGEND		
	PROPOSED SIGNAL CABINET	RM C REMOVE BY CONTRACTOR
	EXISTING SIGNAL CABINET	RM TC REMOVE BY TRAFFIC CONTRACTOR
	PROPOSED SIGNAL POLE BASE	RM O REMOVE BY OTHERS
	EXISTING SIGNAL POLE BASE	AB ABANDON
	PROPOSED PEDESTRIAN POLE BASE	AB ABANDON
	EXISTING PEDESTRIAN POLE BASE	PB X PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
	PROPOSED WOOD POLE	PB X EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
	EXISTING UTILITY POLE	PL X PROPOSED POLE IDENTIFIER (* OF POLE)
	PROPOSED JUNCTION WELL	PL X EXISTING POLE IDENTIFIER (* OF POLE)
	EXISTING JUNCTION WELL	JW X PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
	PROPOSED SIGNAL HEAD	JW X EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
	EXISTING SIGNAL HEAD	CO X PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
	PROPOSED PEDESTRIAN SIGNAL HEAD	CO X EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
	EXISTING PEDESTRIAN SIGNAL HEAD	OH X PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
	PROPOSED PEDESTRIAN PUSHBUTTON	OH X EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
	EXISTING PEDESTRIAN PUSHBUTTON	MA X PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)
	PROPOSED VIDEO DETECTION	MA X EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)
	EXISTING VIDEO DETECTION	CA X PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)
	PROPOSED MICROWAVE DETECTION	CA X EXISTING CABINET IDENTIFIER (TYPE OF CABINET)
	EXISTING MICROWAVE DETECTION	XX PROPOSED SPAN WIRE
	OVERHEAD SIGNING	XX EXISTING SPAN WIRE
	PROPOSED OPTICOM RECEIVER	--- RIGHT-OF-WAY OR PROPERTY LINE
	EXISTING OPTICOM RECEIVER	◆ PROPOSED SPAN INSULATOR
	PROPOSED MAST ARM	◇ EXISTING SPAN INSULATOR
	EXISTING MAST ARM	□ PROPOSED LOOP DETECTOR (TYPE 1 OR 2)
	PROPOSED LUMINAIRE	□ EXISTING LOOP DETECTOR (TYPE 1 OR 2)
	EXISTING LUMINAIRE	□ SERVICE PEDESTAL

GENERAL SIGNAL NOTES (CON'T)

- CONTRACTOR SHALL REMOVE EXISTING JUNCTION WELL TYPE 1 AND LOCATE EXISTING CO*3. NEW CO*3 SHALL BE REAMED AND THREADED TO EXISTING CO*3 AND INSTALLED INTO PROPOSED JUNCTION WELL TYPE 1.
- CONTRACTOR SHALL REMOVE EXISTING POLE BASE TYPE 3 AND LOCATE EXISTING CO*7. NEW CO*7 SHALL BE REAMED AND THREADED TO EXISTING CO*7 AND INSTALLED INTO PROPOSED POLE BASE TYPE 3.
- CONTRACTOR SHALL REMOVE ALL EXISTING SIGNAL HEADS AND SPAN WIRE.
- ADD COUNTDOWN PEDESTRIAN SIGN "R10-3E" TO EACH PEDESTRIAN POLE.
- BACKPLATES SHALL BE INSTALLED ON ALL SIGNAL HEADS.
- THE TYPE 1 JUNCTION WELL WILL BE USED FOR FUTURE POWER RELOCATION.

GENERAL SIGNAL NOTES

- ALL SIGNAL POLES WILL BE 21 FEET, EXCEPT WHERE SHOWN.
- ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
- POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 201 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
- ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET SCREW, BOLTED, AND COMPRESSION FITTING ARE NOT ACCEPTABLE.
- 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.
- ALL PEDESTRIAN SIGNALS SHALL CONTAIN COUNTDOWN PEDESTRIAN HEADS.
- PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHALL BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH CURRENT ADA BEST PRACTICES. THESE POLE BASES SHALL BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 42 TO 48 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA 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 SIDEWALK LEVEL.

RECOMMENDED _____ DATE: _____	RECOMMENDED _____ DATE: _____	RECOMMENDED <i>[Signature]</i> DATE: 8/8/11	APPROVED TRAFFIC ENGINEER <i>[Signature]</i> DATE: 8/8/11	APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER <i>[Signature]</i> DATE: 8/9/11		
DELAWARE DEPARTMENT OF TRANSPORTATION		SCALE 0 30 60 90 FEET	HSIP NCC, SR 92 NAAMANS ROAD AT I-95	CONTRACT T201100701 COUNTY NEW CASTLE PERMIT NO. N335 DESIGNED BY: GG CHECKED BY:	SIGNAL PLAN NAAMANS ROAD (SR 92) @ I-95 (NB) RAMP	SHEET NO. 23 TOTAL SHTS. 23

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