THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

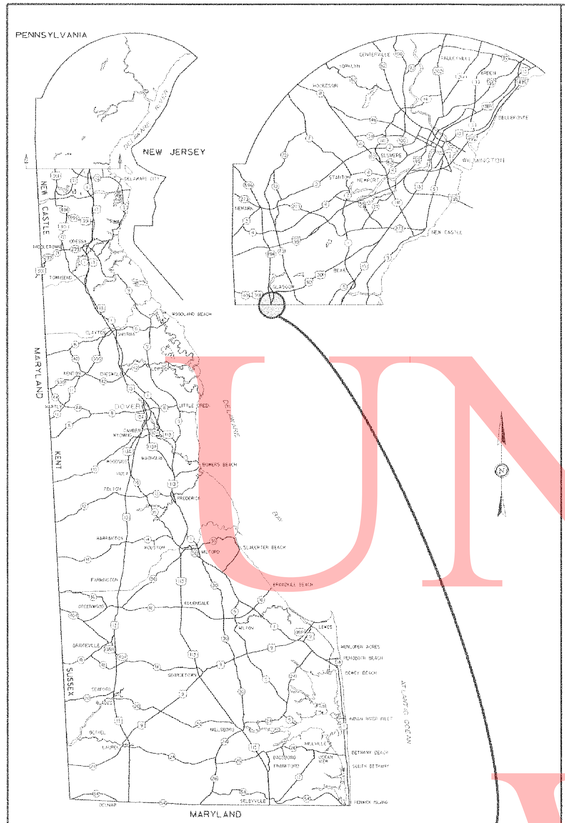
FINAL PLANS

CONSTRUCTION PLANS FOR:

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT NUMBER: T201200107
FEDERAL AID PROJECT NUMBER: ESTP-N387 (15)

COUNTY: NEW CASTLE M.R. #: N387



GENERAL LOCATION OF CONTRACT

END CONTRACT STATION 150+30

LIMIT OF CONTRACT STATION 3+50

BEGIN CONTRACT STATION 125+50

LIMIT OF CONTRACT STATION 12+50

DESIGN DESIGNATION

FUNCTIONAL CLASS: MAJOR COLLECTOR		D.H.V. PROJECTED: 2714	YEAR: 2040
TYPE OF CONSTRUCTION: SAFETY IMPROVEMENTS		DESIGN SPEED: 60 M.P.H.	
A.A.D.T. CURRENT: 38941	YEAR: 2012	TRUCKS: 10 %	
A.A.D.T. PROJECTED: 52000	YEAR: 2040	DIRECTION OF DISTRIBUTION: 58 %	

INDEX OF SHEETS

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TOTAL SHEETS: 32

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
88-108-04	SR896, PORTER ROAD TO NORTH OF SR40 (GLASGOW BYPASS)
91-061-10	PORTER ROAD, SR 896 TO SR 72

RECOMMENDED

SQUAD MANAGER, CONSTRUCTION — DATE 10/17/13

GROUP ENGINEER, CONSTRUCTION — DATE 10/17/13

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) — DATE

RECOMMENDED

STORMWATER ENGINEER

DATE 16 OCT 2013

VINCENT W. DAVIS REGISTERED No. 12898 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED

SQUAD MANAGER, TRANSPORTATION SOLUTIONS (PROJECT DEVELOPMENT OR BRIDGE DESIGN)

DATE 10/15/13

JERRY L. HOWELL LICENSED No. 10126 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED

BRIDGE DESIGN ENGINEER

DATE

SEAL

RECOMMENDED

GROUP ENGINEER, PROJECT DEVELOPMENT

DATE 10/15/13

DAMEN M. O'NEILL REGISTERED No. 10857 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS

DATE 10/17/13

MARK CHRISTOPHER TUCH REGISTERED No. 10803 DELAWARE PROFESSIONAL ENGINEER — SEAL

APPROVED

CHIEF ENGINEER, ACTING

DATE 10/17/13

MARK CHRISTOPHER TUCH REGISTERED No. 10803 DELAWARE PROFESSIONAL ENGINEER — SEAL

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LAST REVISED: 8/7/2008
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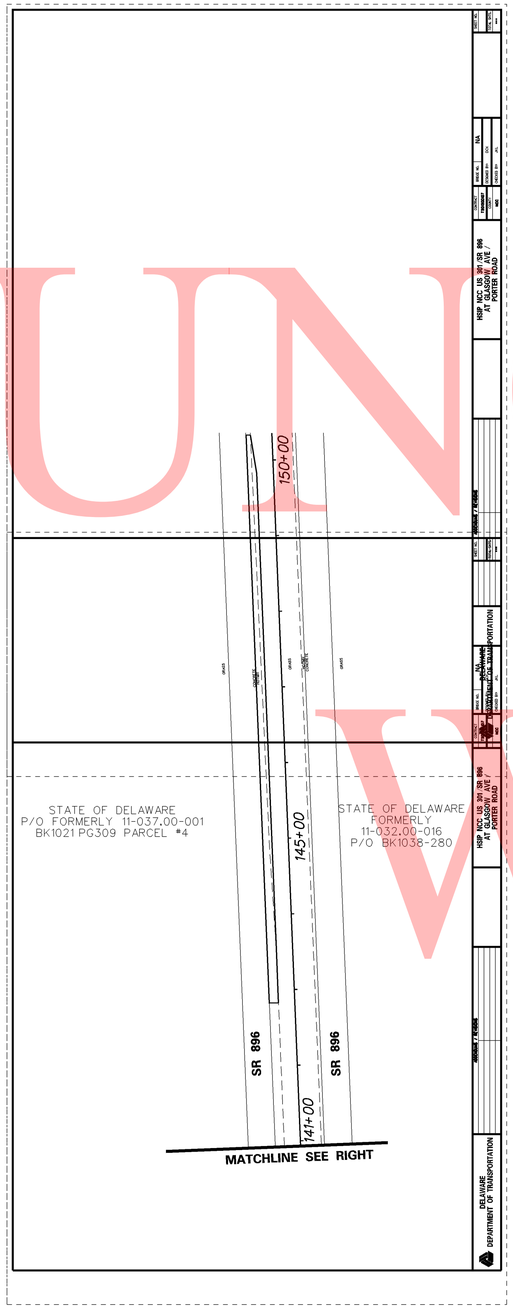

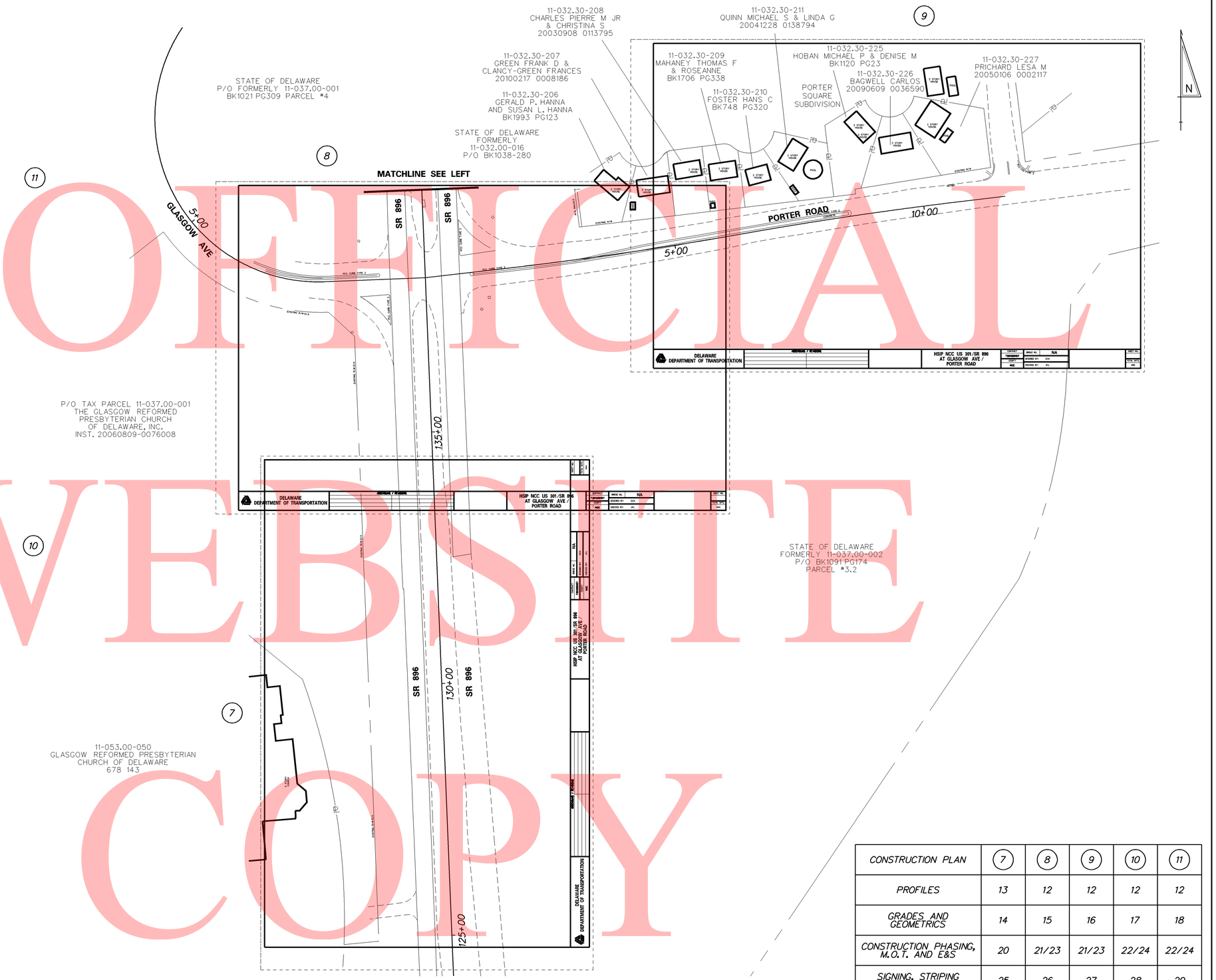

CONSTRUCTION PLAN	7	8	9	10	11
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SIGNING, STRIPING AND CONDUIT PLAN	25	26	27	28	29

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 100 200 300
FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY	CHECKED BY: JKL	
NEW CASTLE		

PLAN SHEET INDEX

SHEET NO. 2
TOTAL SHTS. 32

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EXISTING SYMBOLS

DRAINAGE	
	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
C.B. / D.I.	DRAINAGE INLET
J.B.	DRAINAGE JUNCTION BOX
D	DRAINAGE MANHOLE
SIZE/TYPE LABEL	DRAINAGE PIPE AND FLOW ARROW
	DRAINAGE PIPE HEADWALL
	RIPRAP - AREA FEATURE
	RIPRAP - LINEAR FEATURE

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

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

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

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

UTILITY	
	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
TV	CABLE TV DISTRIBUTION BOX
E	ELECTRIC MANHOLE
EM	ELECTRIC METER
E	ELECTRIC TRANSFORMER
	POLE MOUNTED LUMINAIRE
G	GAS MANHOLE
G.M.	GAS METER
G.V.	GAS VALVE
G.P.	GAS PUMP - SERVICE STATION
	RAILROAD TRACKS
S	SANITARY SEWER MANHOLE
S.V.	SANITARY SEWER VALVE
VENT	SANITARY SEWER VENT OR CLEANOUT
S.D.F.	SEPTIC DRAIN FIELD
B	TELEPHONE BOOTH
T	TELEPHONE MANHOLE
T	TELEPHONE TEST POINT
J.W.	TRAFFIC - CONDUIT JUNCTION WELL
	TRAFFIC - LIGHT POLE AND BASE
	TRAFFIC - PEDESTRIAN POLE & BASE
	TRAFFIC - SIGNAL CABINET & BASE
	TRAFFIC - SIGNAL POLE AND BASE
U	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

UTILITY COMPANY FACILITIES	
AW-W	ARTESIAN UNDERGROUND WATER
ESNG-G	EASTERN SHORE UNDERGROUND GAS
COM-C	COMCAST UNDERGROUND CABLE
COM-FO	COMCAST UNDERGROUND FIBER OPTIC
NCC-FM	NEW CASTLE COUNTY FORCE MAIN

PROPOSED SYMBOLS

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
BFS	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
	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
MB	MAILBOX
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK - 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN OUTLET

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

IDENTIFIERS	
A/C	ADJUST BY CONTRACTOR
A/O	ADJUST BY OTHERS
B	CONCRETE SAFETY BARRIER
C	CURB OR CURB & GUTTER
CJB	CONVERT TO JUNCTION BOX
CMH	CONVERT TO DRAINAGE MANHOLE
C/O	CURB OPENING
CR	CURB RAMP / TYPE
CR-W	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
CSF	CONSTRUCTION SAFETY FENCE
DI	DRAINAGE INLET
DND	DO NOT DISTURB
ED	ENERGY DISSIPATOR
F	FENCE
FES	FLARED END SECTION
FF/C	FILL WITH FLOWABLE FILL
FS	FILTRATION STRUCTURE
GR	GUARDRAIL
JB	JUNCTION BOX
MH	MANHOLE
M	MONUMENT - RIGHT-OF-WAY
P	PIPE
RL/C	RELOCATE BY CONTRACTOR
RL/O	RELOCATE BY OTHERS
RM/C	REMOVE BY CONTRACTOR
RM/O	REMOVE BY OTHERS
UD	UNDERDRAIN / LENGTH
UDO	UNDERDRAIN OUTLET PIPE

LANDSCAPING	
LS	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)	
	MILL AND 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

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LAST REVISED: 01/30/2012
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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

LEGEND

SHEET NO. 3
TOTAL SHTS. 32

GENERAL NOTES

1. 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.

2. 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.

3. 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.

4. 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.

5. 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, SEEDED 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.

6. 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.

7. 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.
( )	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

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.

8. 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. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 743000.
( )	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. PAYMENT FOR ATSSA SUPERVISOR SHALL BE PAID FOR UNDER ITEM 743031.

9. THE DISTURBED AREA FOR THIS PROJECT IS __0.19__ ACRES.

10. 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.

11. 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

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.

SECTION 200

2. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO EXCAVATE TEST PITS ALONG PROPOSED DRAINAGE RUNS, 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, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.

3. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - DRAINAGE INLETS
   - DECORATIVE POLES
   - GUARDRAIL

4. 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 TEAM SUPPORT 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.

SECTION 300

5. A. THE CONTRACTOR MAY ELECT TO USE ANY OF THE FOLLOWING MATERIALS TO MEET THE REQUIREMENTS OF ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B':
   a. CRUSHED STONE (PER STANDARD SPECIFICATION 821)
   b. CRUSHED CONCRETE (PER STANDARD SPECIFICATION 821)
   c. 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.

   B. 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'.

   C. 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.

   D. HOT-MIX MILLINGS MAY BE GENERATED FROM THE FOLLOWING SOURCES:
   a. MATERIAL MADE AVAILABLE WHEN MILLED ON THIS CONTRACT UNDER ITEM 760000.
   b. MATERIAL MILLED ON THIS CONTRACT AT THE CONTRACTOR'S CHOICE UNDER ITEM 202000.
   c. MILLED MATERIAL FURNISHED ON THE JOB FROM THE CONTRACTOR'S YARD OR OTHER OUTSIDE SOURCE.
   ALL MILLED MATERIALS SHALL MEET THE MATERIAL REQUIREMENTS OF ITEM 302514 - MILLED HOT-MIX BASE COURSE.

   E. PAYMENT CLARIFICATION:
   a. 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.

   b. 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.

   c. 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 AT THE UNIT BID PRICE FOR ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE 'B'.

   d. 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.

   e. 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.

SECTION 700

6. 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.

7. 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.

8. 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

9. 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.

10. AS DESIGNED, THERE ARE NO ENVIRONMENTAL PERMITS ASSOCIATED WITH THS PROJECT. AS SUCH, AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED. THE STATE OF DELAWARE PARCEL LOCATED IN THE SOUTHEAST CORNER OF THE SR896 AND PORTER ROAD INTERSECTION CONTAINS A DELDOT WETLAND MITIGATION SITE. ORANGE CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED AT THE LOC ALONG SR896 FROM STA 126+00 TO STA 137+50 RCL AND ALONG PORTER ROAD FROM STA 1+00 TO STA 11+25 RCL TO PROTECT THE MITIGATION SITE. ACCESS TO THIS PARCEL BY THE CONTRACTOR FOR STOCKPILING, STAGING, OR ANY OTHER USE IS STRICTLY PROHIBITED. ANY CHANGES TO THE LOC MUST BE COORDINATED WITH THE DELDOT ENVIRONMENTAL STUDIES SECTION (302) 760-2264

EARTHWORK SUMMARY

EXCAVATION	
EXCAVATION FROM CROSS SECTIONS	2,958 C.Y.
ROCK EXCAVATION FOR ROADWAY AND TRENCHES	0 C.Y.
TOPSOIL STRIPPING	579 C.Y.
TOTAL EXCAVATION	2,379 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	579 C.Y.
EMBANKMENT REQUIREMENTS	
BORROW TYPE 'A' REQUIRED (INCLUDING UNDERCUT)	0 C.Y.
BORROW TYPE 'F' REQUIRED	0 C.Y.
TOPSOIL REQUIRED	0 C.Y.
MATERIAL BALANCE ("+"= EXCESS, "-"= NEED)	
BORROW TYPE 'A'	0 C.Y.
BORROW TYPE 'F'	0 C.Y.
TOPSOIL	186 C.Y.
UNSUITABLE MATERIAL	0 C.Y.

NOTES:
1) 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.

2) 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.

3) UNSUITABLE MATERIALS INCLUDE UNDERCUT SOILS, BITUMINOUS PAVEMENT, ETC.

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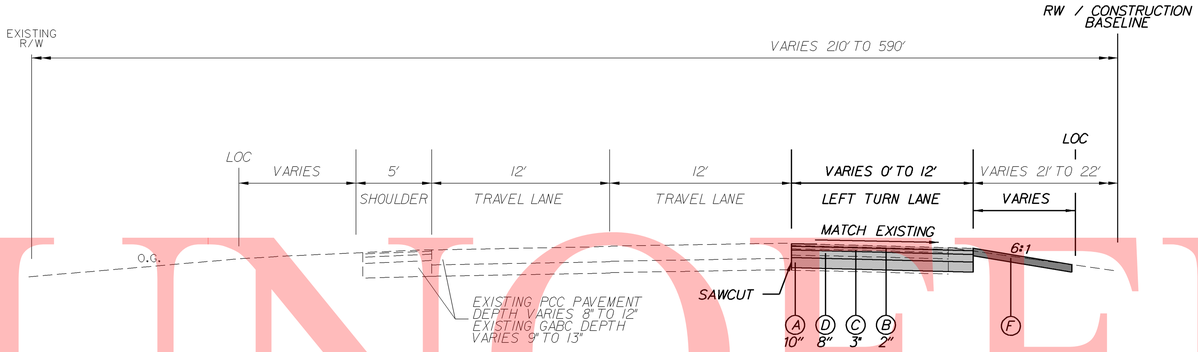
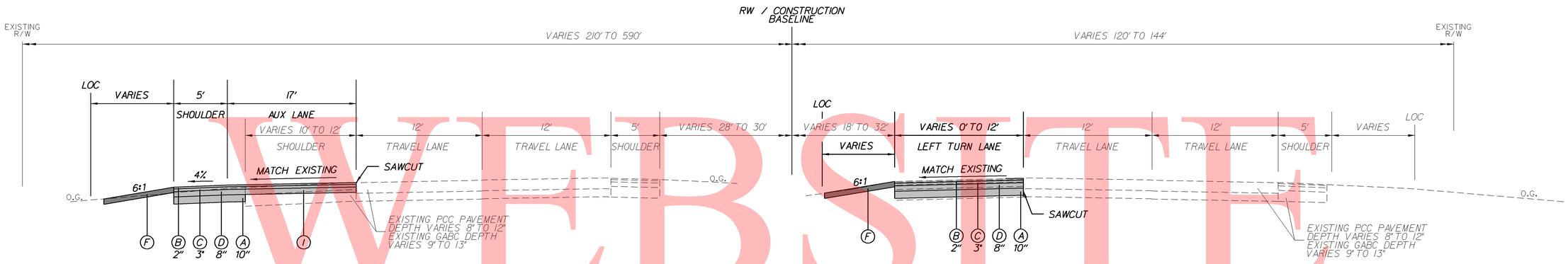
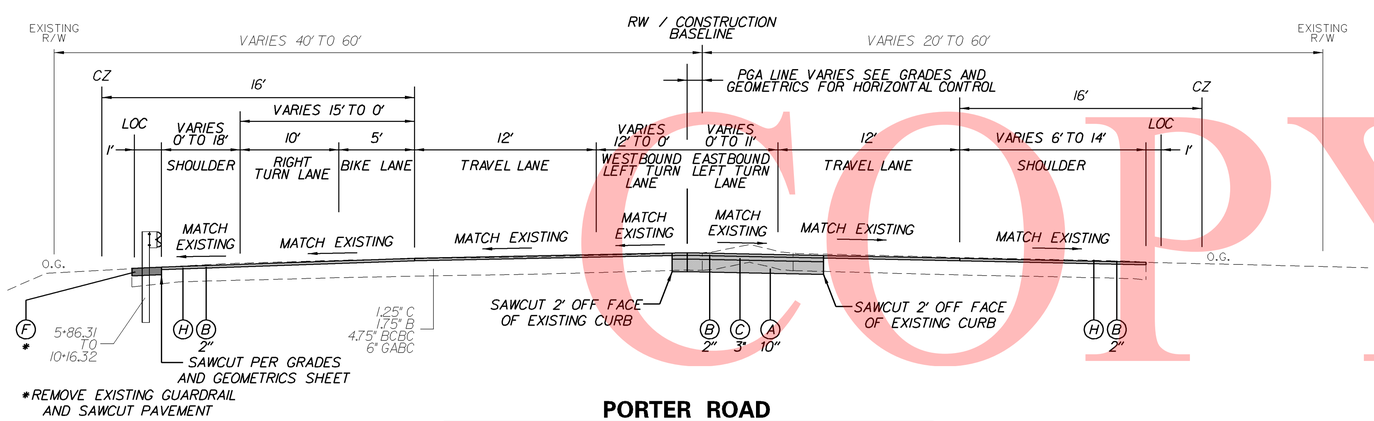


SR 896 SOUTHBOUND
STATION 142+83.37 TO 150+34.27



SR 896 SOUTHBOUND
STATION 125+20 TO 137+13

SR 896 NORTHBOUND
STATION 130+55.33 TO 134+16.01



*REMOVE EXISTING GUARDRAIL AND SAWCUT PAVEMENT

PORTER ROAD
STATION 0+85 TO 11+22

MATERIAL	LIFT THICKNESS	
	MINIMUM	MAXIMUM
WMA, TYPE 'C'	1.25"	2"
WMA, TYPE 'B'	2.25"	3"
BITUMINOUS CONCRETE BASE COURSE	3"	6"
GRADED AGGREGATE BASE COURSE	3"	8"

LEGEND

- (A) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (B) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (C) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (D) ITEM 401819 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE,160 GYRATIONS, PG 64-22
- (F) ITEM 732002 - TOPSOIL, 6" DEPTH OR
  ITEM 733002 - TOPSOILING, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (H) ITEM 760000 - MILLING, HOT-MIX
- (I) ITEM 758000 - REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT

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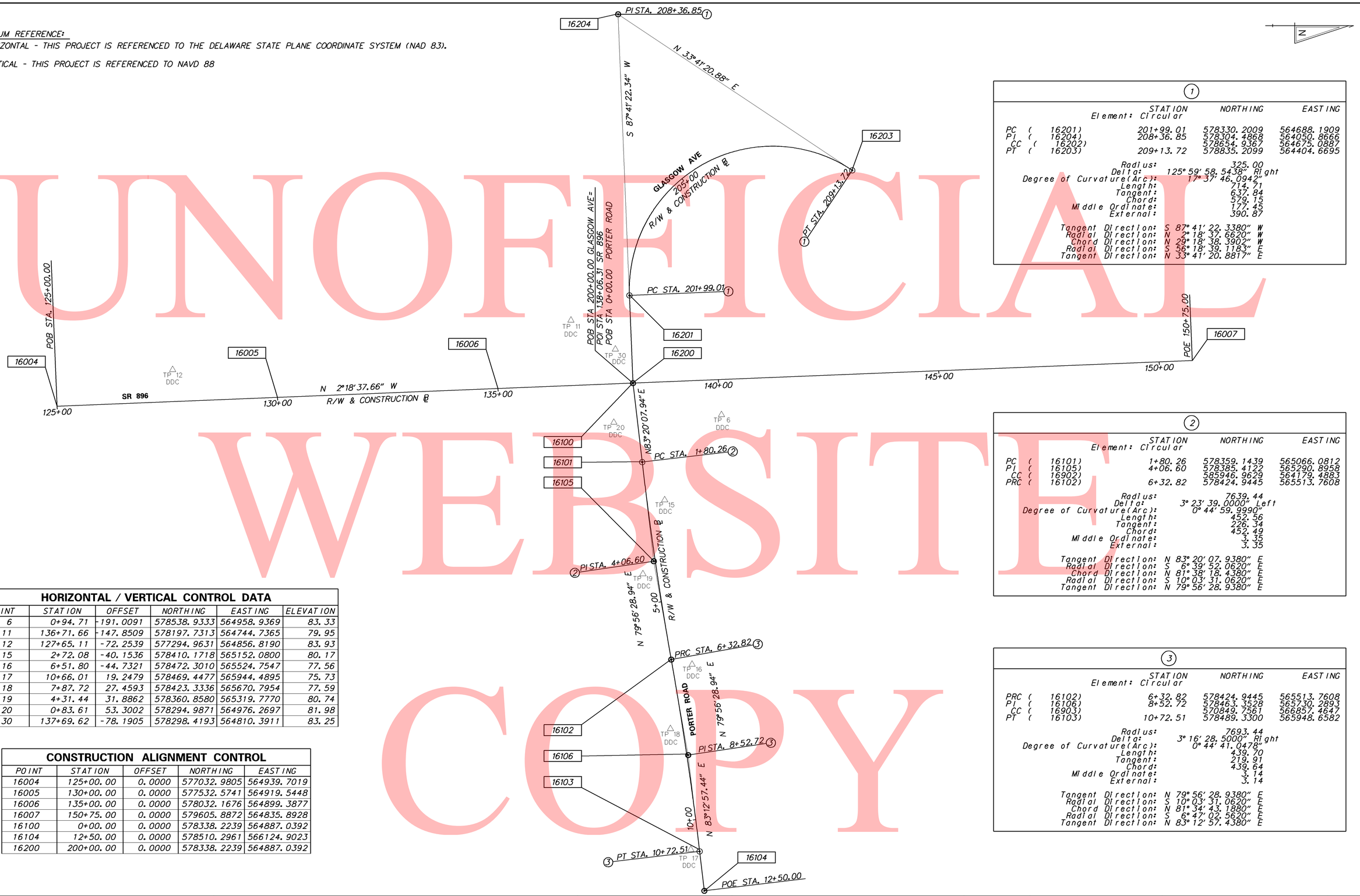
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	TYPICAL SECTIONS	SHEET NO. 5
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		

DATUM REFERENCE:
HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88



(1)	STATION	NORTHING	EASTING
Element: Circular			
PC (16201)	201+99.01	578330.2009	564688.1909
PI (16204)	208+36.85	578304.4868	564050.8666
CC (16202)		578654.9367	564675.0887
PT (16203)	209+13.72	578835.2099	564404.6695

Radius:	325.00
Delta:	125° 59' 58.5438" Right
Degree of Curvature(Arc):	17° 37' 46.0942"
Length:	714.71
Tangent:	637.84
Chord:	579.15
Middle Ordinate:	177.45
External:	390.87
Tangent Direction:	S 87° 41' 22.3380" W
Radial Direction:	N 2° 18' 37.6620" W
Chord Direction:	N 29° 18' 38.3902" W
Radial Direction:	S 56° 18' 39.1183" E
Tangent Direction:	N 33° 41' 20.8817" E

(2)	STATION	NORTHING	EASTING
Element: Circular			
PC (16101)	1+80.26	578359.1439	565066.0812
PI (16105)	4+06.60	578385.4122	565290.8958
CC (16902)		585946.9629	564179.4883
PRC (16102)	6+32.82	578424.9445	565513.7608

Radius:	7639.44
Delta:	3° 23' 39.0000" Left
Degree of Curvature(Arc):	0° 44' 59.9990"
Length:	452.56
Tangent:	226.34
Chord:	452.49
Middle Ordinate:	3.35
External:	3.35
Tangent Direction:	N 83° 20' 07.9380" E
Radial Direction:	S 6° 39' 52.0620" E
Chord Direction:	N 81° 38' 18.4380" E
Radial Direction:	S 10° 03' 31.0620" E
Tangent Direction:	N 79° 56' 28.9380" E

(3)	STATION	NORTHING	EASTING
Element: Circular			
PRC (16102)	6+32.82	578424.9445	565513.7608
PI (16106)	8+52.72	578463.3528	565730.2893
CC (16903)		570849.7561	566857.4647
PT (16103)	10+72.51	578489.3300	565948.6582

Radius:	7693.44
Delta:	3° 16' 28.5000" Right
Degree of Curvature(Arc):	0° 44' 41.0478"
Length:	439.70
Tangent:	219.91
Chord:	439.64
Middle Ordinate:	3.14
External:	3.14
Tangent Direction:	N 79° 56' 28.9380" E
Radial Direction:	S 10° 03' 31.0620" E
Chord Direction:	N 81° 34' 43.1880" E
Radial Direction:	S 6° 47' 02.5620" E
Tangent Direction:	N 83° 12' 57.4380" E

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
6	0+94.71	-191.0091	578538.9333	564958.9369	83.33
11	136+71.66	-147.8509	578197.7313	564744.7365	79.95
12	127+65.11	-72.2539	577294.9631	564856.8190	83.93
15	2+72.08	-40.1536	578410.1718	565152.0800	80.17
16	6+51.80	-44.7321	578472.3010	565524.7547	77.56
17	10+66.01	19.2479	578469.4477	565944.4895	75.73
18	7+87.72	27.4593	578423.3336	565670.7954	77.59
19	4+31.44	31.8862	578360.8580	565319.7770	80.74
20	0+83.61	53.3002	578294.9871	564976.2697	81.98
30	137+69.62	-78.1905	578298.4193	564810.3911	83.25

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
16004	125+00.00	0.0000	577032.9805	564939.7019
16005	130+00.00	0.0000	577532.5741	564919.5448
16006	135+00.00	0.0000	578032.1676	564899.3877
16007	150+75.00	0.0000	579605.8872	564835.8928
16100	0+00.00	0.0000	578338.2239	564887.0392
16104	12+50.00	0.0000	578510.2961	566124.9023
16200	200+00.00	0.0000	578338.2239	564887.0392

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 100 200 300 FEET

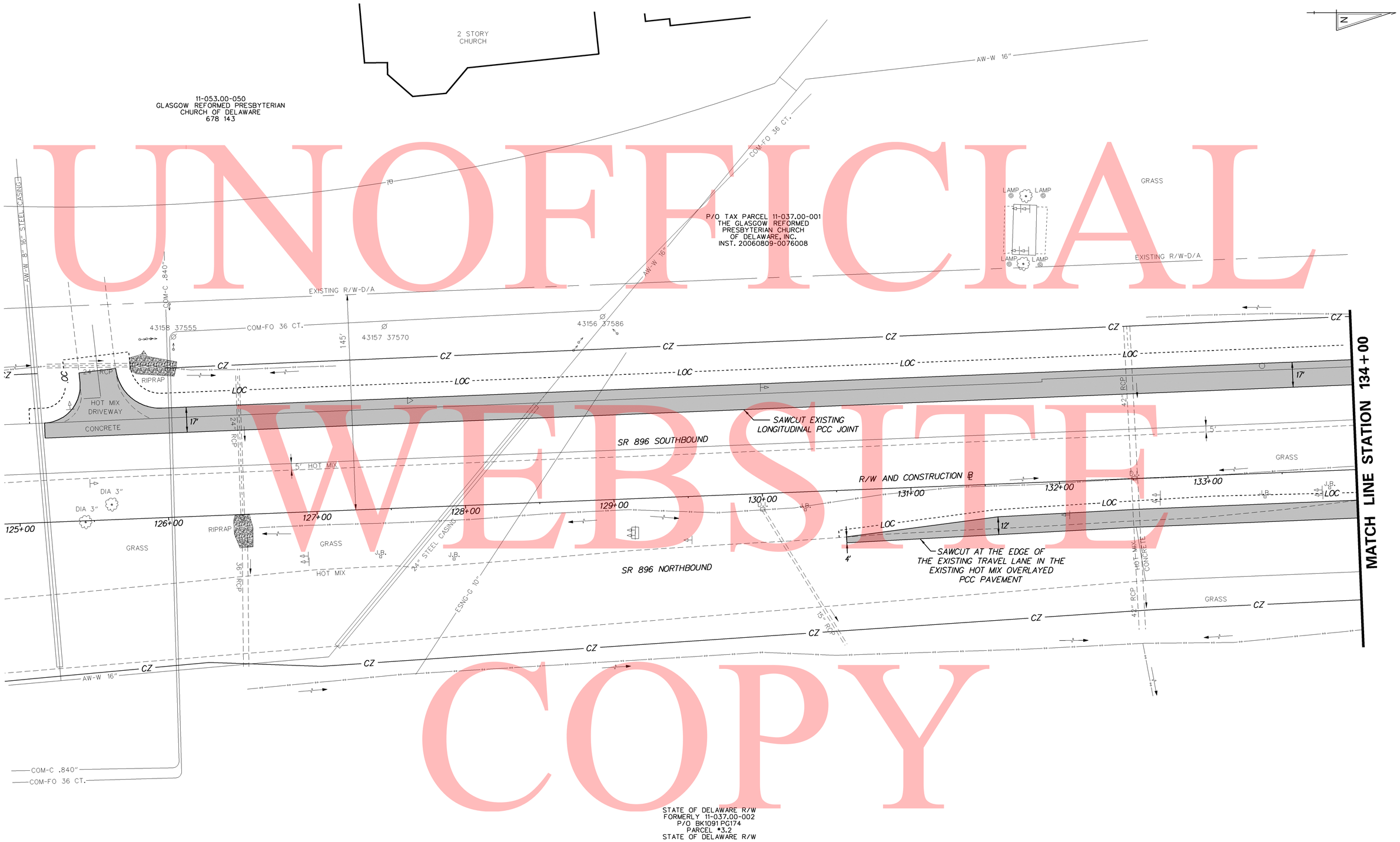
HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

HORIZONTAL AND VERTICAL CONTROL

SHEET NO. 6

TOTAL SHTS. 32



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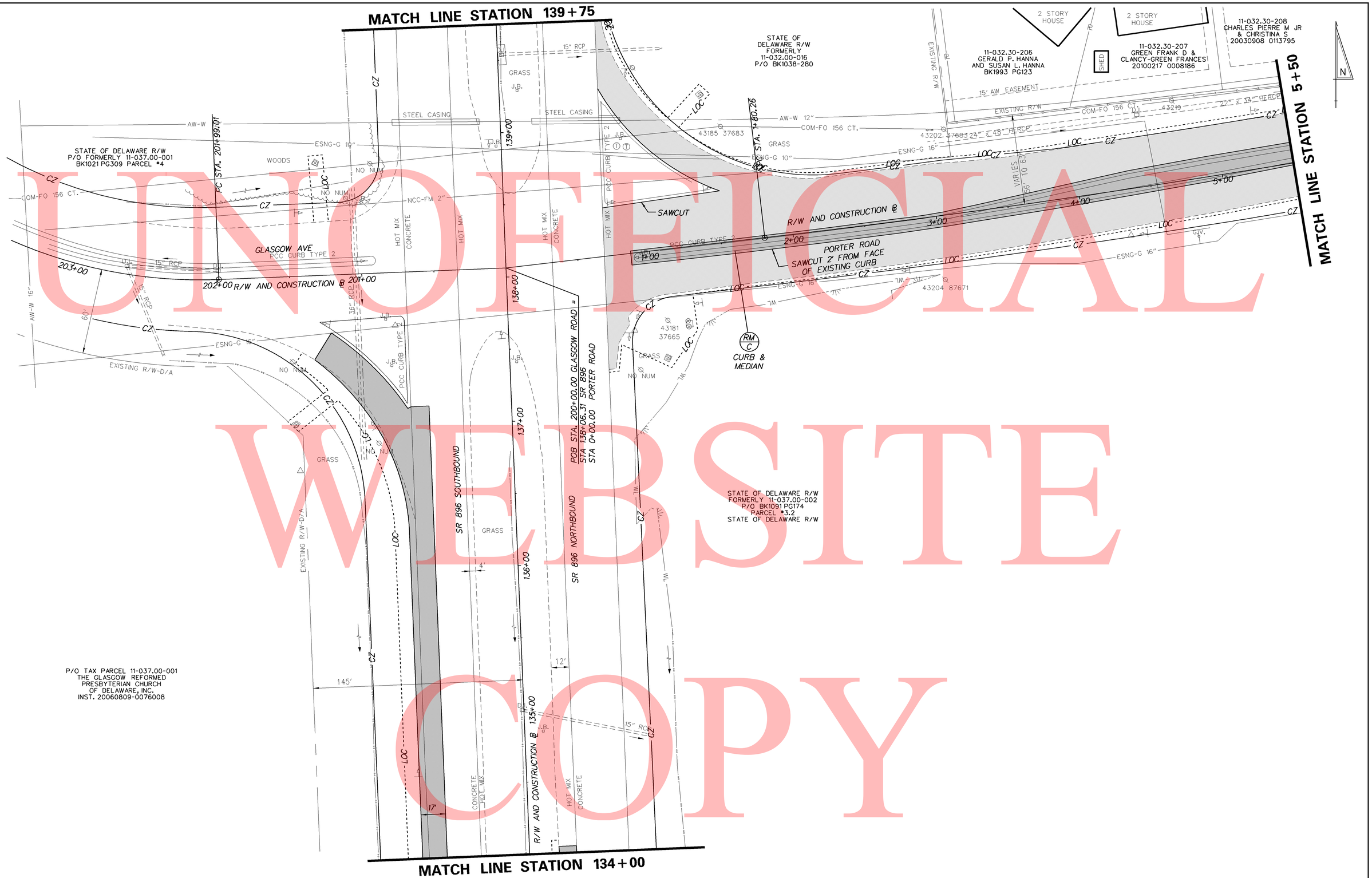
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS**	CONTRACT T201200107	BRIDGE NO. N/A	**CONSTRUCTION PLAN**	SHEET NO. 7
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		



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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	CONSTRUCTION PLAN	SHEET NO. 8
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		

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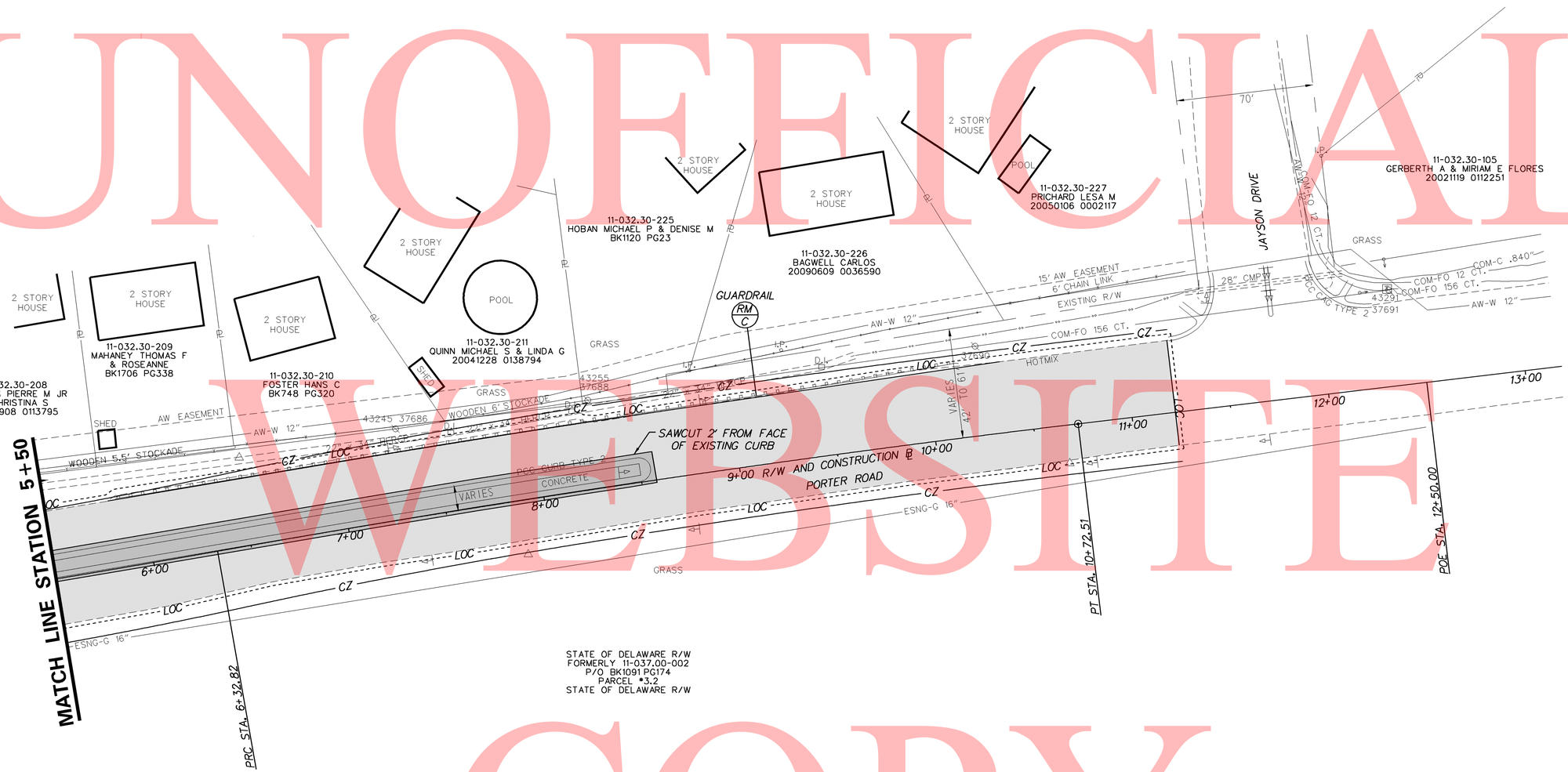

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	CONSTRUCTION PLAN	SHEET NO. 9
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		

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STATE OF
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FORMERLY
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P/O BK1038-280

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	CONSTRUCTION PLAN	SHEET NO. 10
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		

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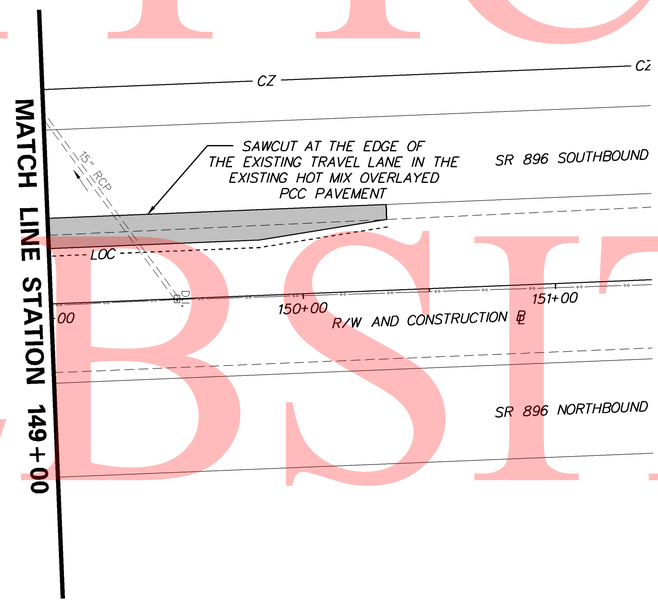

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	CONSTRUCTION PLAN	SHEET NO. 11
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		

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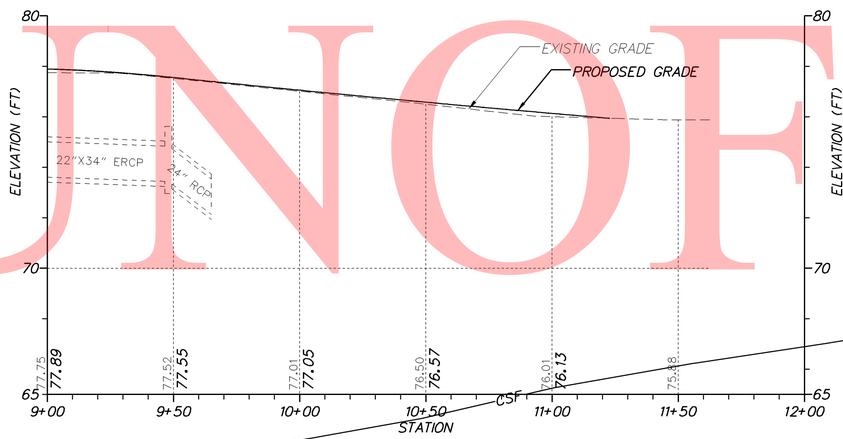
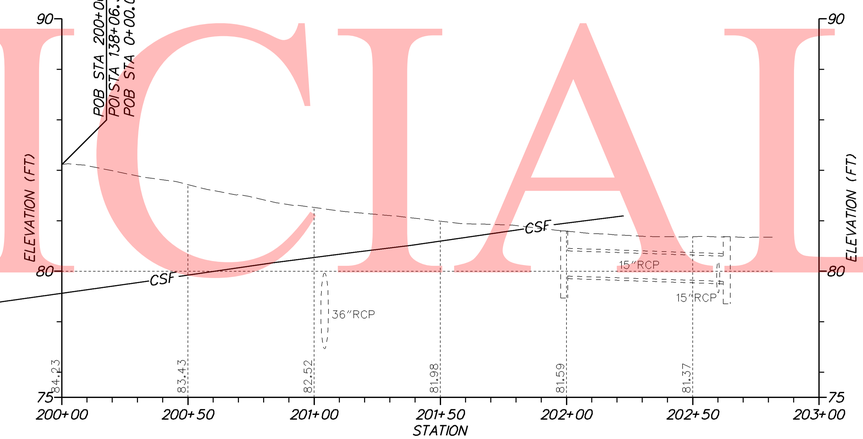
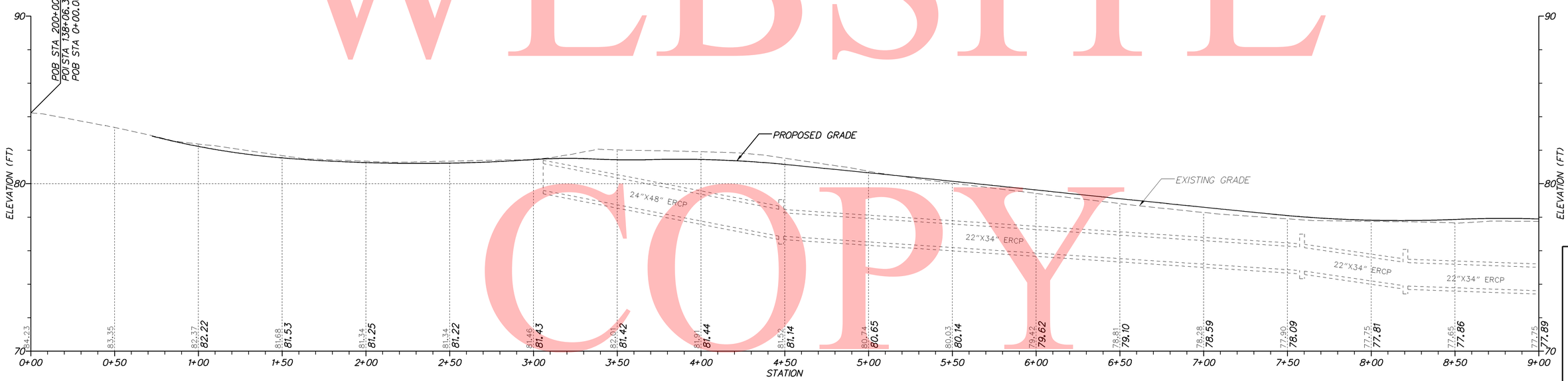


PORTER ROAD



GLASGOW AVE



PORTER ROAD

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: DCK / CHECKED BY: JKL	PROFILES	SHEET NO. 12 / TOTAL SHTS. 32

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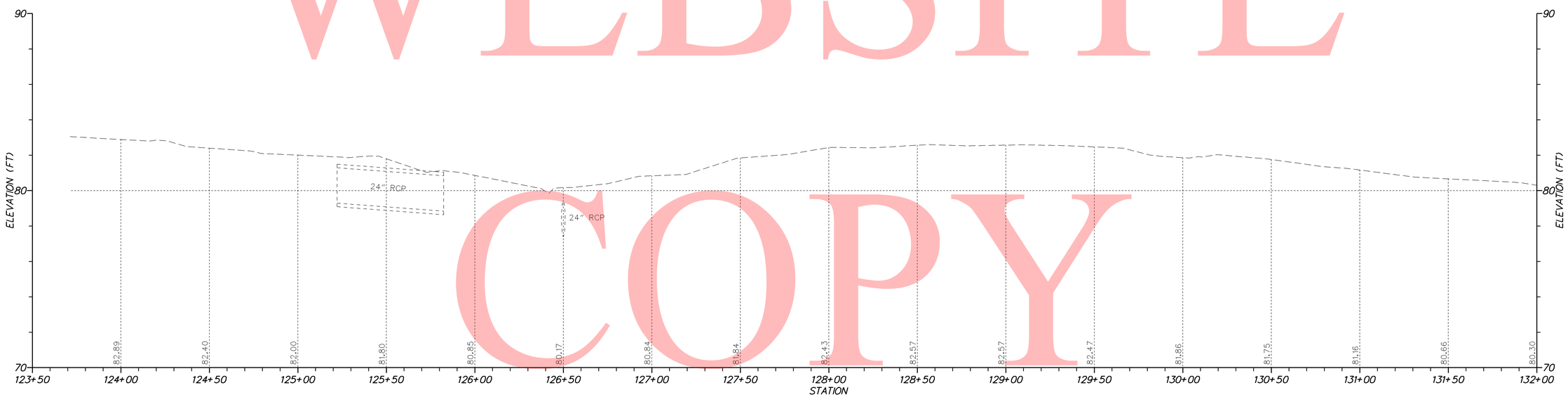
SR 896



SR 896

VERTICAL SCALE FEET 90 60 30 0

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

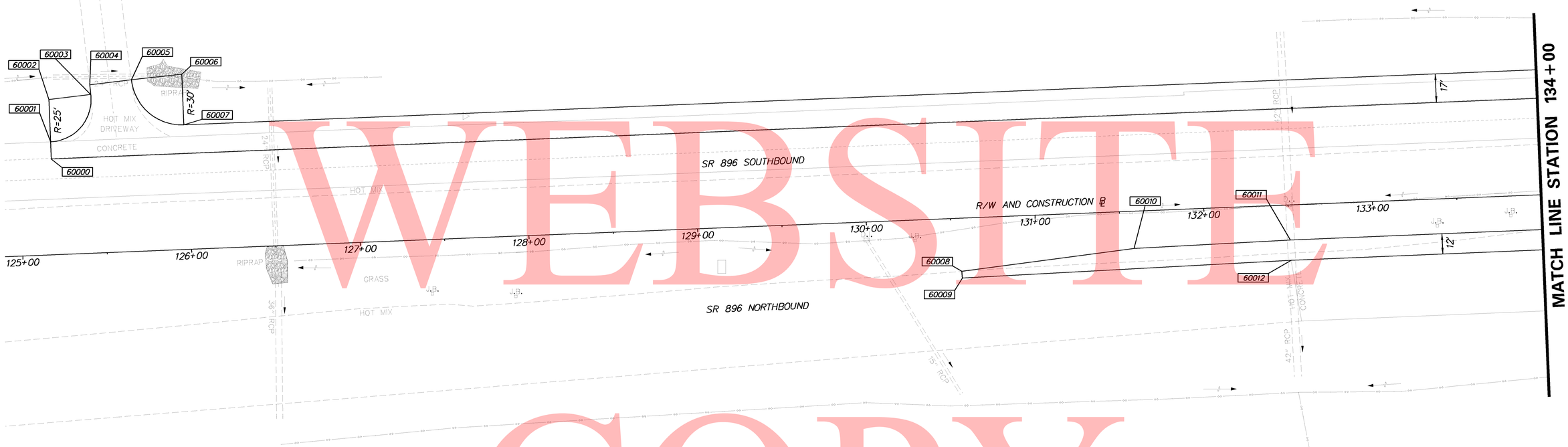
CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

PROFILES

SHEET NO. 13

TOTAL SHTS. 32

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60000	125+19.13	-56.7092	577049.8048	564882.2678
60001	125+19.12	-66.9159	577049.3835	564872.0698
60002	125+19.12	-91.9159	577048.3812	564847.0899
60003	125+44.04	-93.9584	577073.1950	564844.0445
60004	125+43.67	-99.6663	577072.5998	564838.3560
60005	125+68.49	-101.7005	577097.3122	564835.3231
60006	125+98.42	-103.7395	577127.1363	564832.0791
60007	125+98.43	-73.7395	577128.3572	564862.0543
60008	130+55.33	31.4850	577589.1242	564948.7738
60009	130+55.45	35.4829	577589.4137	564952.7633
60010	131+57.77	22.0919	577691.1060	564935.2584
60011	132+50.47	20.8326	577783.6803	564930.2629
60012	132+50.56	32.8325	577784.2526	564942.2495



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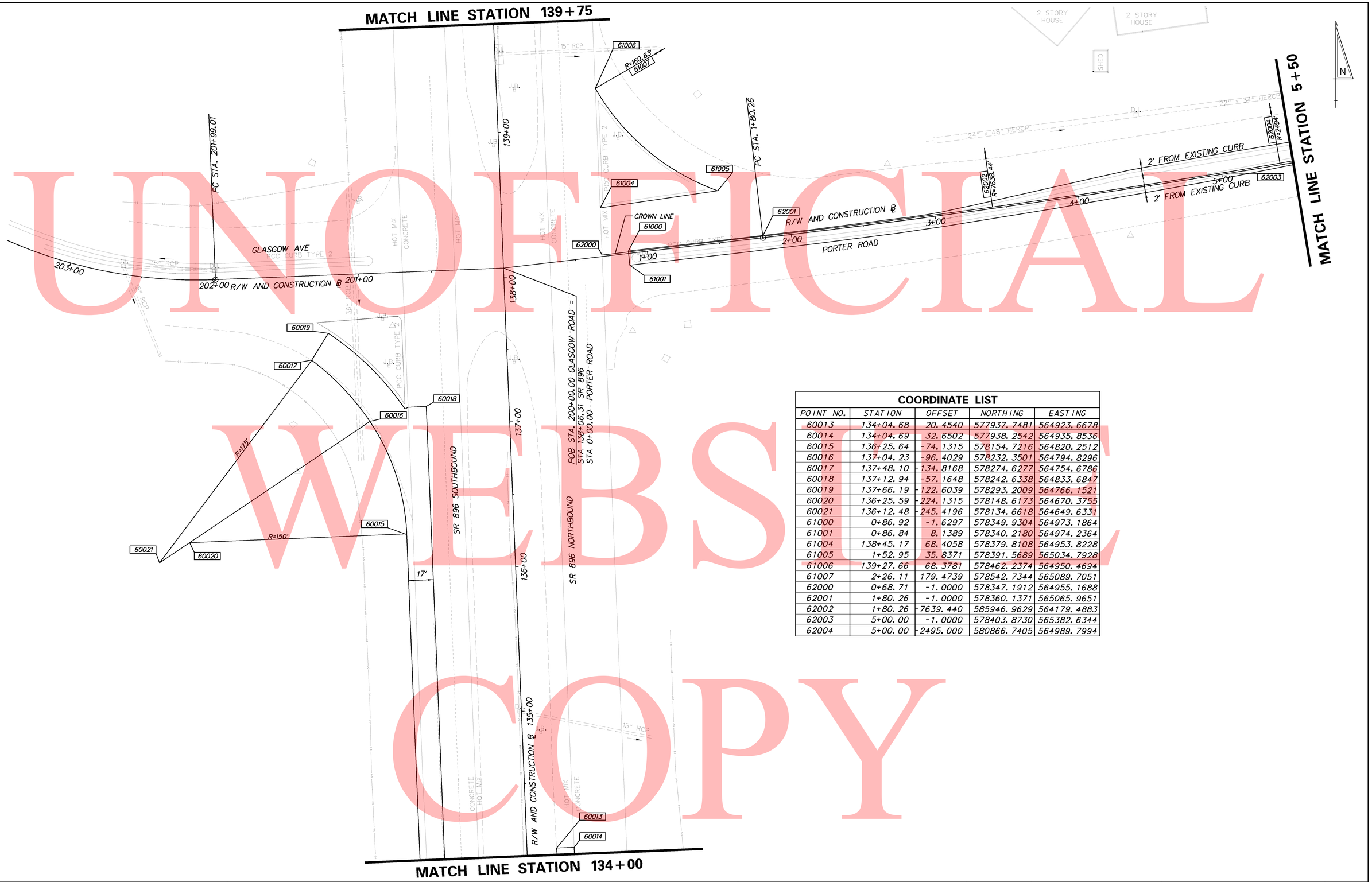
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	GRADES AND GEOMETRICS	SHEET NO. 14
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60013	134+04.68	20.4540	577937.7481	564923.6678
60014	134+04.69	32.6502	577938.2542	564935.8536
60015	136+25.64	-74.1315	578154.7216	564820.2512
60016	137+04.23	-96.4029	578232.3501	564794.8296
60017	137+48.10	-134.8168	578274.6277	564754.6786
60018	137+12.94	-57.1648	578242.6338	564833.6847
60019	137+66.19	-122.6039	578293.2009	564766.1521
60020	136+25.59	-224.1315	578148.6173	564670.3755
60021	136+12.48	-245.4196	578134.6618	564649.6331
61000	0+86.92	-1.6297	578349.9304	564973.1864
61001	0+86.84	8.1389	578340.2180	564974.2364
61004	138+45.17	68.4058	578379.8108	564953.8228
61005	1+52.95	35.8371	578391.5689	565034.7928
61006	139+27.66	68.3781	578462.2374	564950.4694
61007	2+26.11	179.4739	578542.7344	565089.7051
62000	0+68.71	-1.0000	578347.1912	564955.1688
62001	1+80.26	-1.0000	578360.1371	565065.9651
62002	1+80.26	-7639.440	585946.9629	564179.4883
62003	5+00.00	-1.0000	578403.8730	565382.6344
62004	5+00.00	-2495.000	580866.7405	564989.7994

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT T201200107 | COUNTY NEW CASTLE | BRIDGE NO. N/A | DESIGNED BY: DCK | CHECKED BY: JKL

GRADES AND GEOMETRICS

SHEET NO. 15 | TOTAL SHTS. 32

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COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
61002	8+57.30	-14.5014	578475.2681	565733.2195
61003	8+57.70	1.2942	578459.6993	565735.9163
61008	5+82.24	34.520	578450.3054	565458.1335
61009	6+96.85	34.000	578469.3916	565571.1975
61010	7+30.60	7693.440	570849.7561	566857.4647
61011	8+64.87	34.000	578495.6642	565737.9028
61012	10+36.85	35.930	578520.6946	565908.8448
62005	6+06.94	-2.5439	578422.9751	565487.8419
62006	7+30.60	3234.228	575249.9718	566134.5040
62007	7+30.60	-4.0000	578445.3576	565609.4982
62008	10+72.51	7693.440	570849.7561	566857.4647
62009	10+72.51	-4.0000	578493.3020	565948.1857
62010	11+22.74	-4.0000	578499.2353	565998.0615

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

GRADES AND GEOMETRICS

SHEET NO. 16

TOTAL SHTS. 32

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60022	142+83.37	21.41	578814.0406	564846.4160
60023	142+83.37	33.38	578813.5471	564834.4510

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT T201200107

COUNTY NEW CASTLE

BRIDGE NO. N/A

DESIGNED BY: DCK

CHECKED BY: JKL

GRADES AND GEOMETRICS

SHEET NO. 17

TOTAL SHTS. 32

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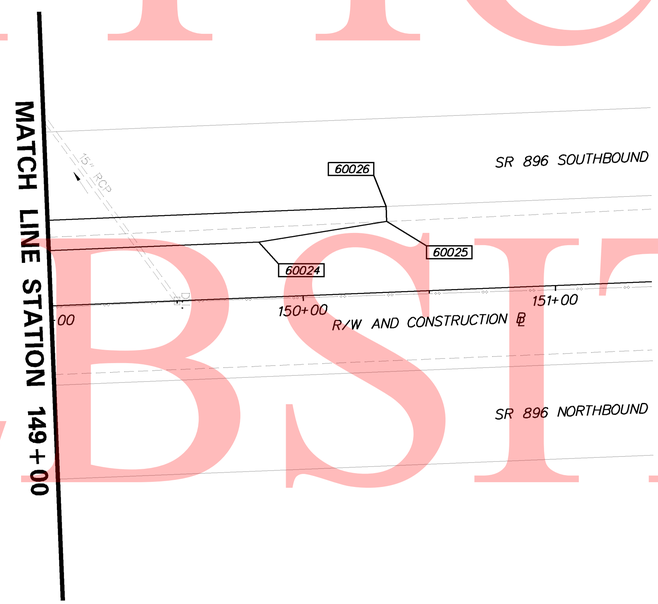

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60024	149+83.36	22.01	579513.4330	564817.5905
60025	150+34.27	28.17	579564.0565	564809.3868
60026	150+34.27	34.06	579563.8137	564803.5020

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

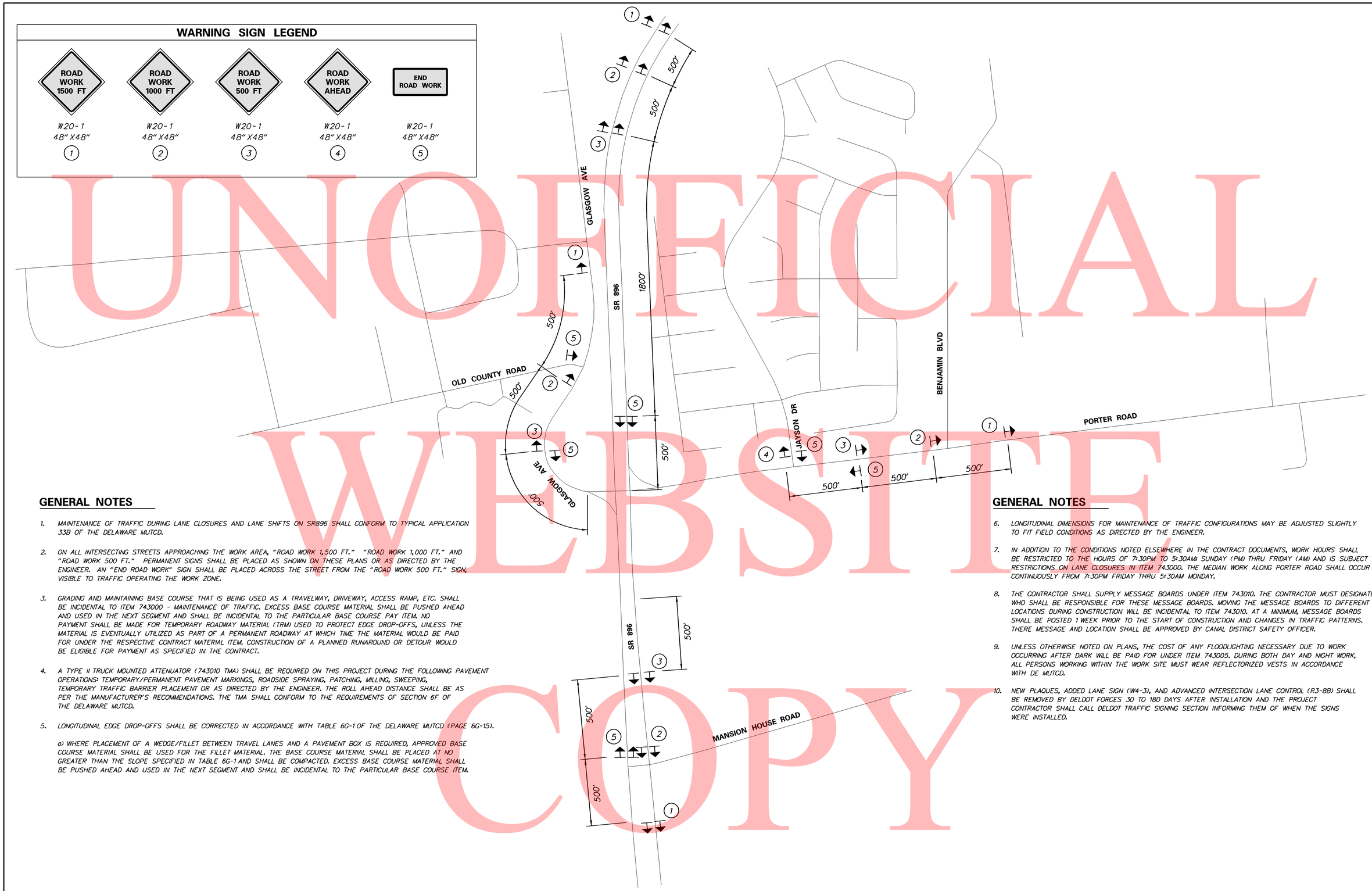
CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

GRADES AND GEOMETRICS

SHEET NO. 18
TOTAL SHTS. 32

WARNING SIGN LEGEND

ROAD WORK 1500 FT	ROAD WORK 1000 FT	ROAD WORK 500 FT	ROAD WORK AHEAD	END ROAD WORK
W20-1 48"X48"	W20-1 48"X48"	W20-1 48"X48"	W20-1 48"X48"	W20-1 48"X48"
1	2	3	4	5



GENERAL NOTES

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS ON SR896 SHALL CONFORM TO TYPICAL APPLICATION 33B OF THE DELAWARE MUTCD.

2. ON ALL INTERSECTING STREETS APPROACHING THE WORK AREA, "ROAD WORK 1,500 FT." "ROAD WORK 1,000 FT." AND "ROAD WORK 500 FT." PERMANENT SIGNS SHALL BE PLACED AS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER. AN "END ROAD WORK" SIGN SHALL BE PLACED ACROSS THE STREET FROM THE "ROAD WORK 500 FT." SIGN, VISIBLE TO TRAFFIC OPERATING THE WORK ZONE.

3. GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED AS A TRAVELWAY, DRIVEWAY, ACCESS RAMP, ETC. SHALL BE INCIDENTAL TO ITEM 743000 - 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 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.

4. A TYPE II TRUCK MOUNTED ATTENUATOR (743010 TMA) SHALL BE REQUIRED ON THIS PROJECT DURING THE FOLLOWING PAVEMENT 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 OF THE DELAWARE MUTCD.

5. LONGITUDINAL EDGE DROP-OFFS SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD (PAGE 6G-15).

   a) WHERE PLACEMENT OF A WEDGE/FILLET BETWEEN TRAVEL LANES AND A PAVEMENT BOX IS REQUIRED, APPROVED BASE COURSE MATERIAL SHALL BE USED FOR THE FILLET MATERIAL. 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 ITEM.

GENERAL NOTES

6. LONGITUDINAL DIMENSIONS FOR MAINTENANCE OF TRAFFIC CONFIGURATIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

7. IN ADDITION TO THE CONDITIONS NOTED ELSEWHERE IN THE CONTRACT DOCUMENTS, WORK HOURS SHALL BE RESTRICTED TO THE HOURS OF 7:30PM TO 5:30AM: SUNDAY (PM) THRU FRIDAY (AM) AND IS SUBJECT TO THE RESTRICTIONS ON LANE CLOSURES IN ITEM 743000. THE MEDIAN WORK ALONG PORTER ROAD SHALL OCCUR CONTINUOUSLY FROM 7:30PM FRIDAY THRU 5:30AM MONDAY.

8. THE CONTRACTOR SHALL SUPPLY MESSAGE BOARDS UNDER ITEM 743010. THE CONTRACTOR MUST DESIGNATE WHO SHALL BE RESPONSIBLE FOR THESE MESSAGE BOARDS. MOVING THE MESSAGE BOARDS TO DIFFERENT LOCATIONS DURING CONSTRUCTION WILL BE INCIDENTAL TO ITEM 743010. AT A MINIMUM, MESSAGE BOARDS SHALL BE POSTED 1 WEEK PRIOR TO THE START OF CONSTRUCTION AND CHANGES IN TRAFFIC PATTERNS. THERE MESSAGE AND LOCATION SHALL BE APPROVED BY CANAL DISTRICT SAFETY OFFICER.

9. UNLESS OTHERWISE NOTED ON PLANS, THE COST OF ANY FLOODLIGHTING NECESSARY DUE TO WORK OCCURRING AFTER DARK WILL BE PAID FOR UNDER ITEM 743005. DURING BOTH DAY AND NIGHT WORK, ALL PERSONS WORKING WITHIN THE WORK SITE MUST WEAR REFLECTORIZED VESTS IN ACCORDANCE WITH DE MUTCD.

10. NEW PLAQUES, ADDED LANE SIGN (W4-3), AND ADVANCED INTERSECTION LANE CONTROL (R3-8B) SHALL BE REMOVED BY DELDOT FORCES 30 TO 180 DAYS AFTER INSTALLATION AND THE PROJECT CONTRACTOR SHALL CALL DELDOT TRAFFIC SIGNING SECTION INFORMING THEM OF WHEN THE SIGNS WERE INSTALLED.

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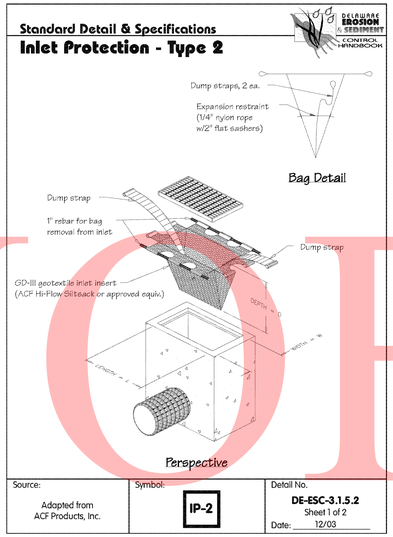
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SHEET NO. 19
				COUNTY NEW CASTLE	DESIGNED BY: DCK		TOTAL SHTS. 32
					CHECKED BY: JKL		

EROSION & SEDIMENT CONTROL

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	SILT FENCE - REINFORCED
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
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



ITEM 252000: INLET SEDIMENT CONTROL, DRAINAGE INLET - DETAIL

NOT TO SCALE

CONSTRUCTION PHASING NOTES

PHASE 1

1. INSTALL ALL TEMPORARY TRAFFIC CONTROL AND EROSION AND SEDEMENT CONTROL DEVICES AS SHOWN ON PLANS.

2. WIDEN SB AND NB SR 896 AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-33B OF THE DELAWARE MUTCD.

3. THE CONTRACTOR SHALL RESTORE LANE CONFIGURATION ALONG GLASGOW AVE AND ROUTE 896 AT THE END OF THE WORK DAY. NO TEMPORARY LANE RESTRICTIONS SHALL OCCUR OVER A 24 HOUR PERIOD.

   CONTRACTOR TO PROVIDE ACCESS TO AND FROM THE CHURCH AT ALL TIMES.

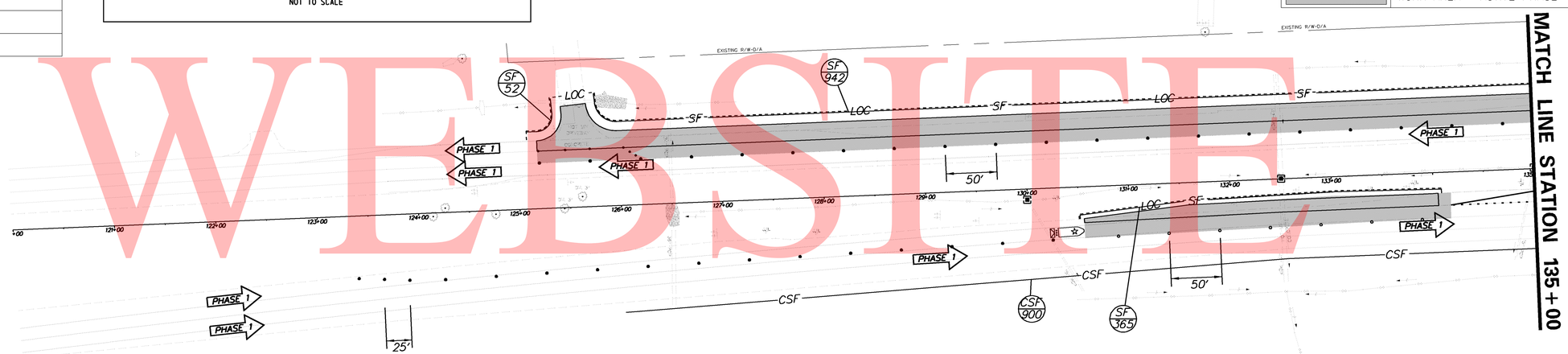
4. REMOVE MEDIAN AND PAVE TO TOP OF SUPERPAVE TYPE B ON PORTER ROAD AS SHOWN ON PLANS. ALL TEMPORARY SIGNING SHALL CONFORM TO TYPICAL APPLICATION 11B OF THE DELAWARE MUTCD.

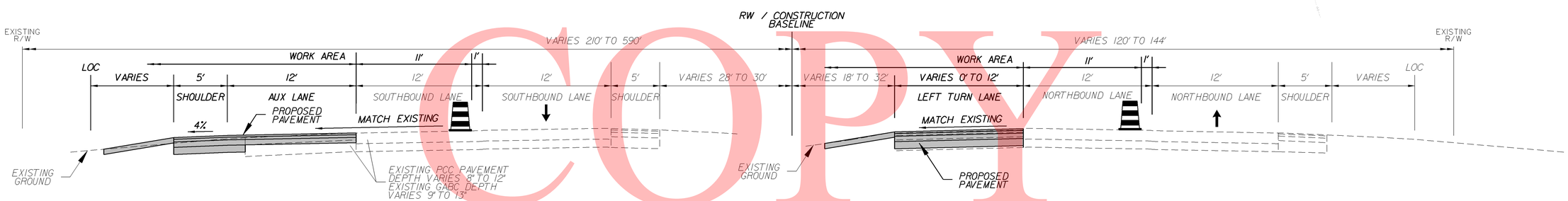
   THE CONTRACTOR MUST COORDINATE WITH STATE TRAFFIC FORCES FOR ANY SIGNAL WORK INCLUDING BUT NOT LIMITED TO HEAD ADJUSTMENTS, SIGNAL TIMING, ETC...

5. AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, REMOVE E&S DEVICES.

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
	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





SR 896
STATION 125+00 TO 137+00

SR 896
STATION 130+55.33 TO 134+16.01

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 60 120 180 FEET	HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS	CONTRACT T201200107 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: DCK / CHECKED BY: JKL	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	SHEET NO. 20 / TOTAL SHTS. 32

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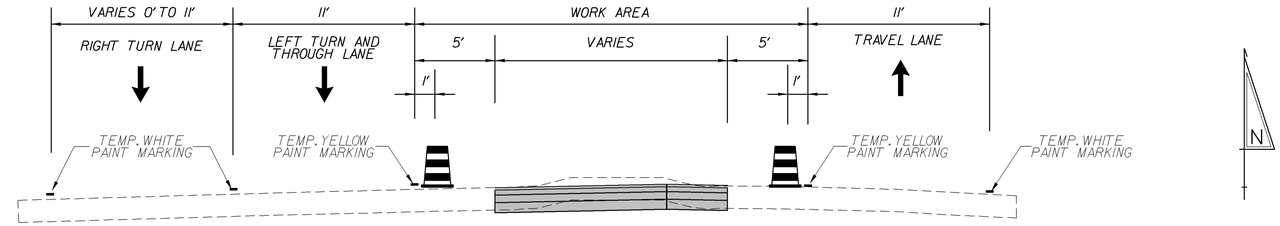
EROSION & SEDIMENT CONTROL	
DWBAG	DEWATERING BAG
DWB	DEWATERING BASIN
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE / LENGTH
SF	SILT FENCE
RSF	SILT FENCE - REINFORCED
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
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



PORTER ROAD
STATION 0+86.91 TO 8+59.54

CONSTRUCTION PHASING NOTES

PHASE 1

1. INSTALL ALL TEMPORARY TRAFFIC CONTROL AND EROSION AND SEDEMENT CONTROL DEVICES AS SHOWN ON PLANS.
2. WIDEN SB AND NB SR 896 AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-33B OF THE DELAWARE MUTCD.
3. THE CONTRACTOR SHALL RESTORE LANE CONFIGURATION ALONG GLASGOW AVE AND ROUTE 896 AT THE END OF THE WORK DAY. NO TEMPORARY LANE RESTRICTIONS SHALL OCCUR OVER A 24 HOUR PERIOD.

   CONTRACTOR TO PROVIDE ACCESS TO AND FROM THE CHURCH AT ALL TIMES.
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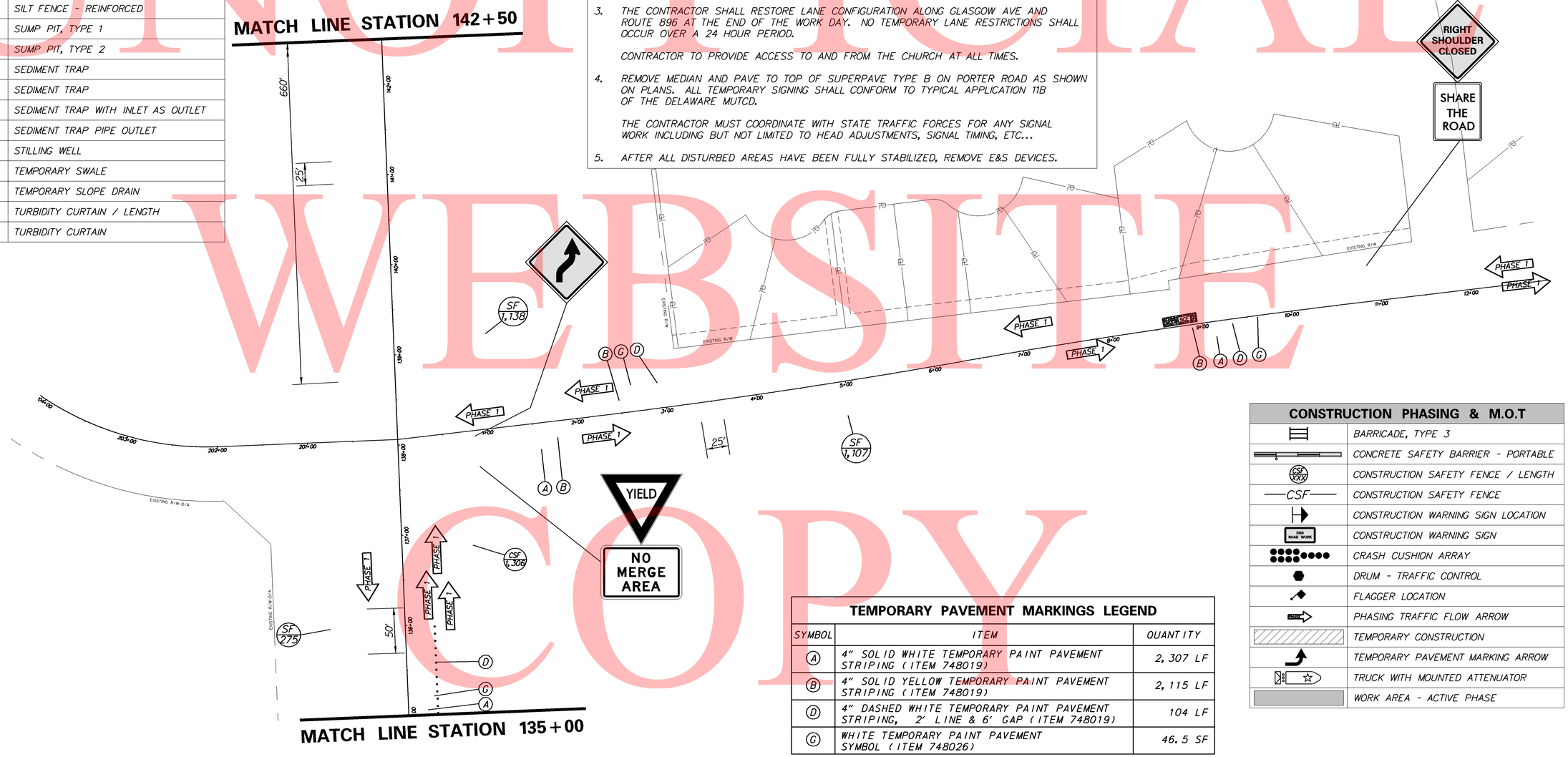
5. AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, REMOVE E&S DEVICES.



TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	2,307 LF
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	2,115 LF
D	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	104 LF
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	46.5 SF

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
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
PHASE	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

SCALE
0 60 120 180
FEET

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

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EROSION & SEDIMENT CONTROL

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	SILT FENCE - REINFORCED
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
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

CONSTRUCTION PHASING NOTES

PHASE 1

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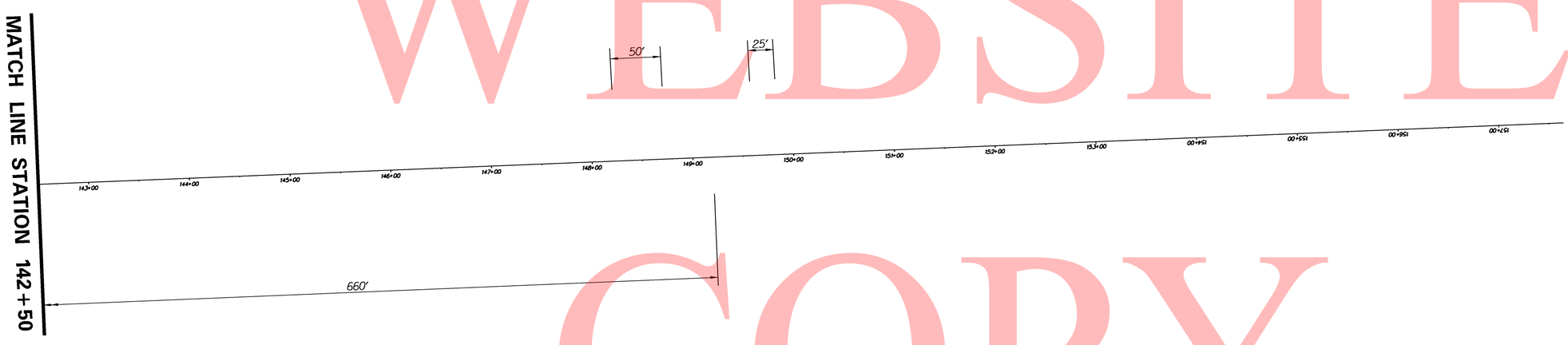
CONSTRUCTION PHASING & M.O.T

	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
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
STOP	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE



SCALE
0 60 120 180
FEET

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

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UNOFFICIAL WEBSITE COPY

EROSION & SEDIMENT CONTROL

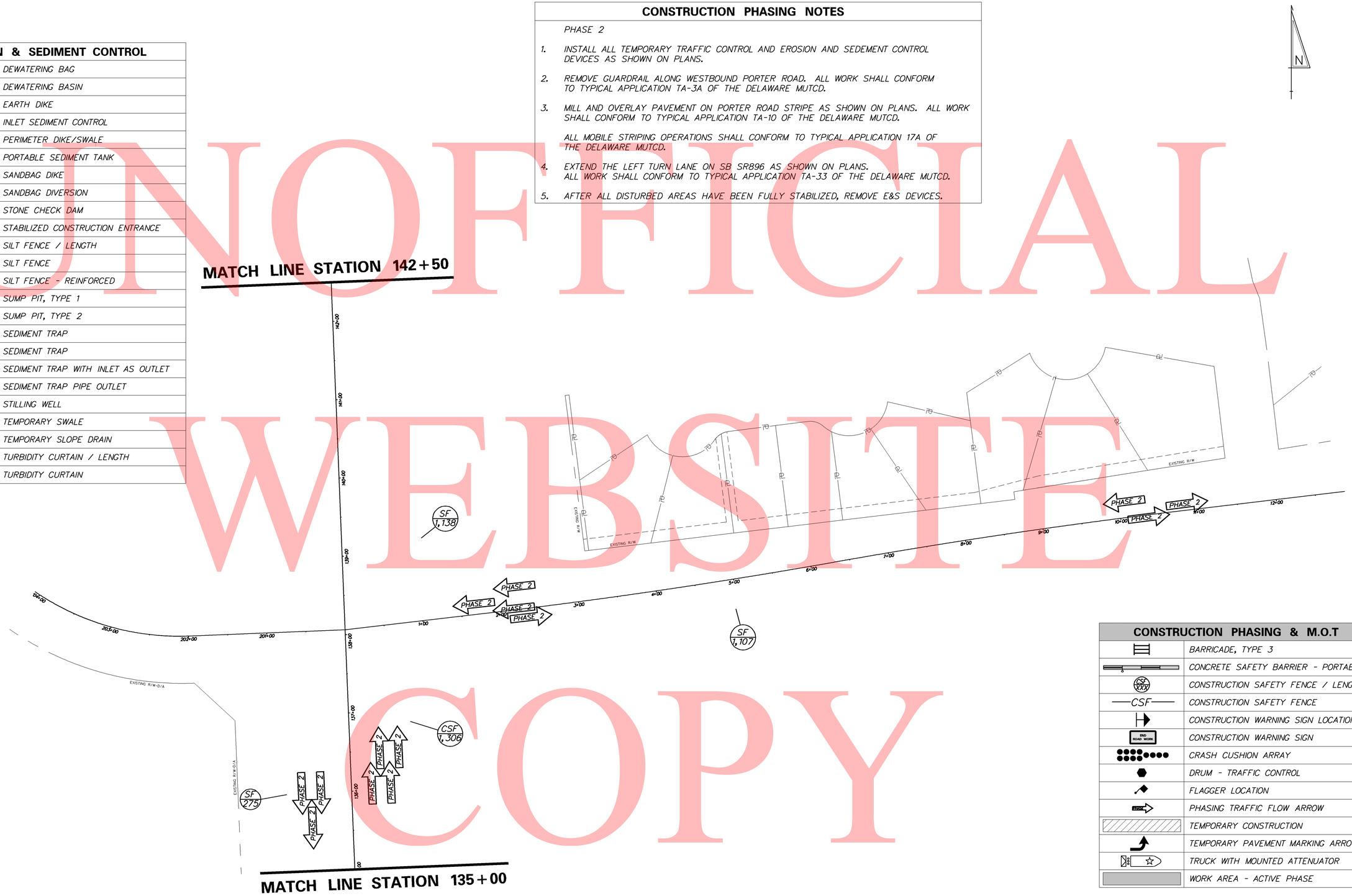
DWBAG	DEWATERING BAG
DWB	DEWATERING BASIN
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
SCD	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE / LENGTH
SF	SILT FENCE
RSF	SILT FENCE - REINFORCED
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
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

CONSTRUCTION PHASING NOTES

PHASE 2

1. INSTALL ALL TEMPORARY TRAFFIC CONTROL AND EROSION AND SEDEMENT CONTROL DEVICES AS SHOWN ON PLANS.
2. REMOVE GUARDRAIL ALONG WESTBOUND PORTER ROAD. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-3A OF THE DELAWARE MUTCD.
3. MILL AND OVERLAY PAVEMENT ON PORTER ROAD STRIPE AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-10 OF THE DELAWARE MUTCD.

   ALL MOBILE STRIPING OPERATIONS SHALL CONFORM TO TYPICAL APPLICATION 17A OF THE DELAWARE MUTCD.
4. EXTEND THE LEFT TURN LANE ON SB SR896 AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-33 OF THE DELAWARE MUTCD.
5. AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, REMOVE E&S DEVICES.



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
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
PHASE 2	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

SCALE
0 60 120 180
FEET

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

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EROSION & SEDIMENT CONTROL	
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	SILT FENCE - REINFORCED
SP-1	SUMP PIT, TYPE 1
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ST	SEDIMENT TRAP
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN
XXX	TURBIDITY CURTAIN / LENGTH
T	TURBIDITY CURTAIN

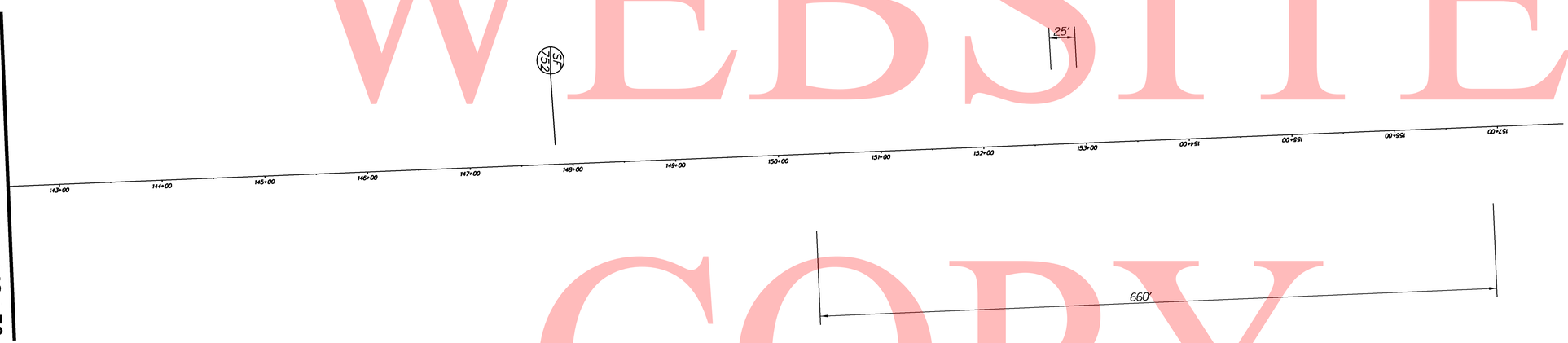
CONSTRUCTION PHASING & M.O.T	
	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
CSF XXX	CONSTRUCTION SAFETY FENCE / LENGTH
CSF	CONSTRUCTION SAFETY FENCE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING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

CONSTRUCTION PHASING NOTES

PHASE 2

1. INSTALL ALL TEMPORARY TRAFFIC CONTROL AND EROSION AND SEDEMENT CONTROL DEVICES AS SHOWN ON PLANS.
2. REMOVE GUARDRAIL ALONG WESTBOUND PORTER ROAD. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-3A OF THE DELAWARE MUTCD.
3. MILL AND OVERLAY PAVEMENT ON PORTER ROAD STRIPE AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-10 OF THE DELAWARE MUTCD.

   ALL MOBILE STRIPING OPERATIONS SHALL CONFORM TO TYPICAL APPLICATION 17A OF THE DELAWARE MUTCD.
4. EXTEND THE LEFT TURN LANE ON SB SR896 AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION TA-33 OF THE DELAWARE MUTCD.
5. AFTER ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED, REMOVE E&S DEVICES.



SCALE
0 60 120 180
FEET

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

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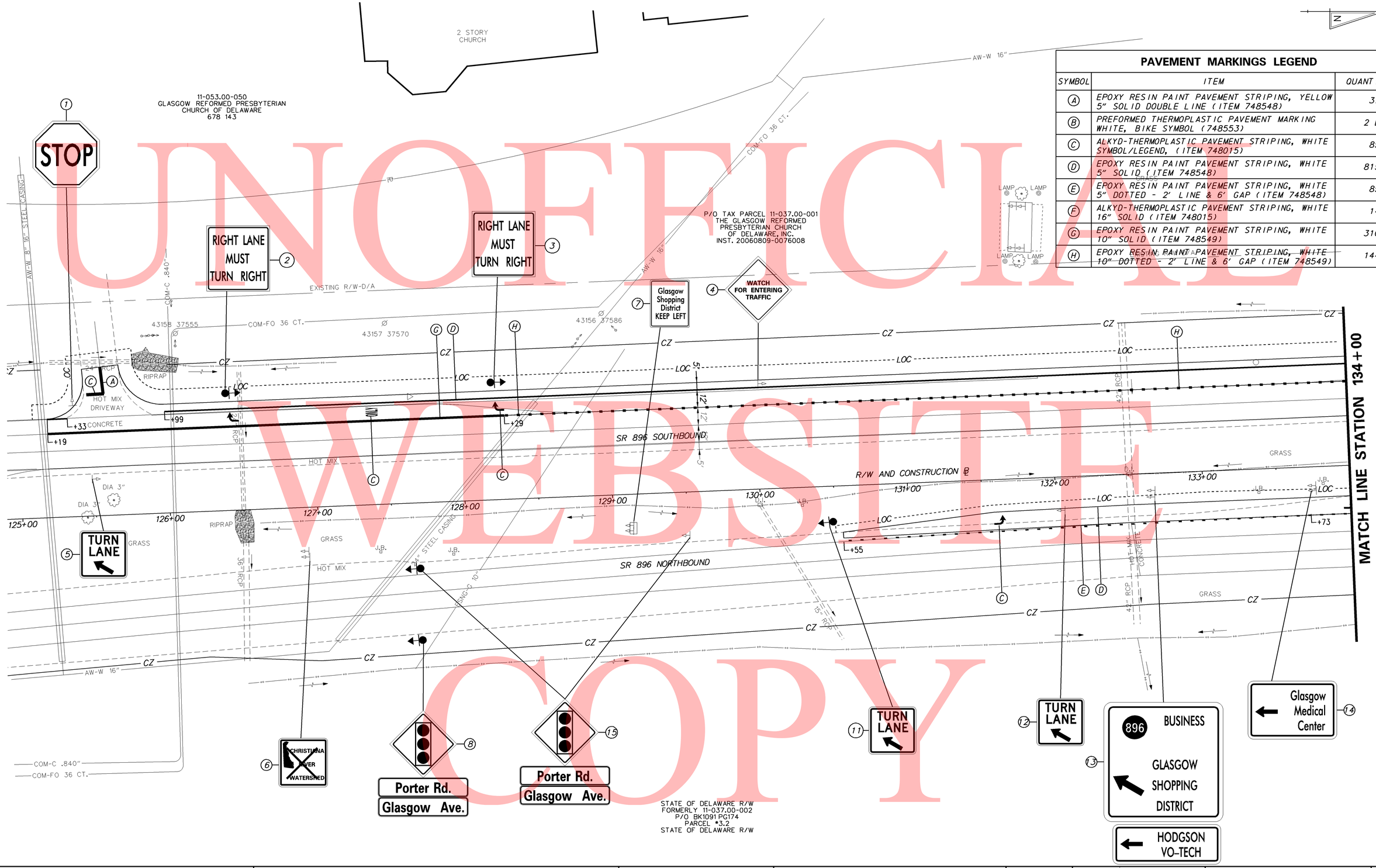

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	37 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	2 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	85 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	815 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	85 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	14 SF
G	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" SOLID (ITEM 748549)	310 LF
H	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 6' GAP (ITEM 748549)	144 LF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY	CHECKED BY: JKL	
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO. 25

TOTAL SHTS. 32

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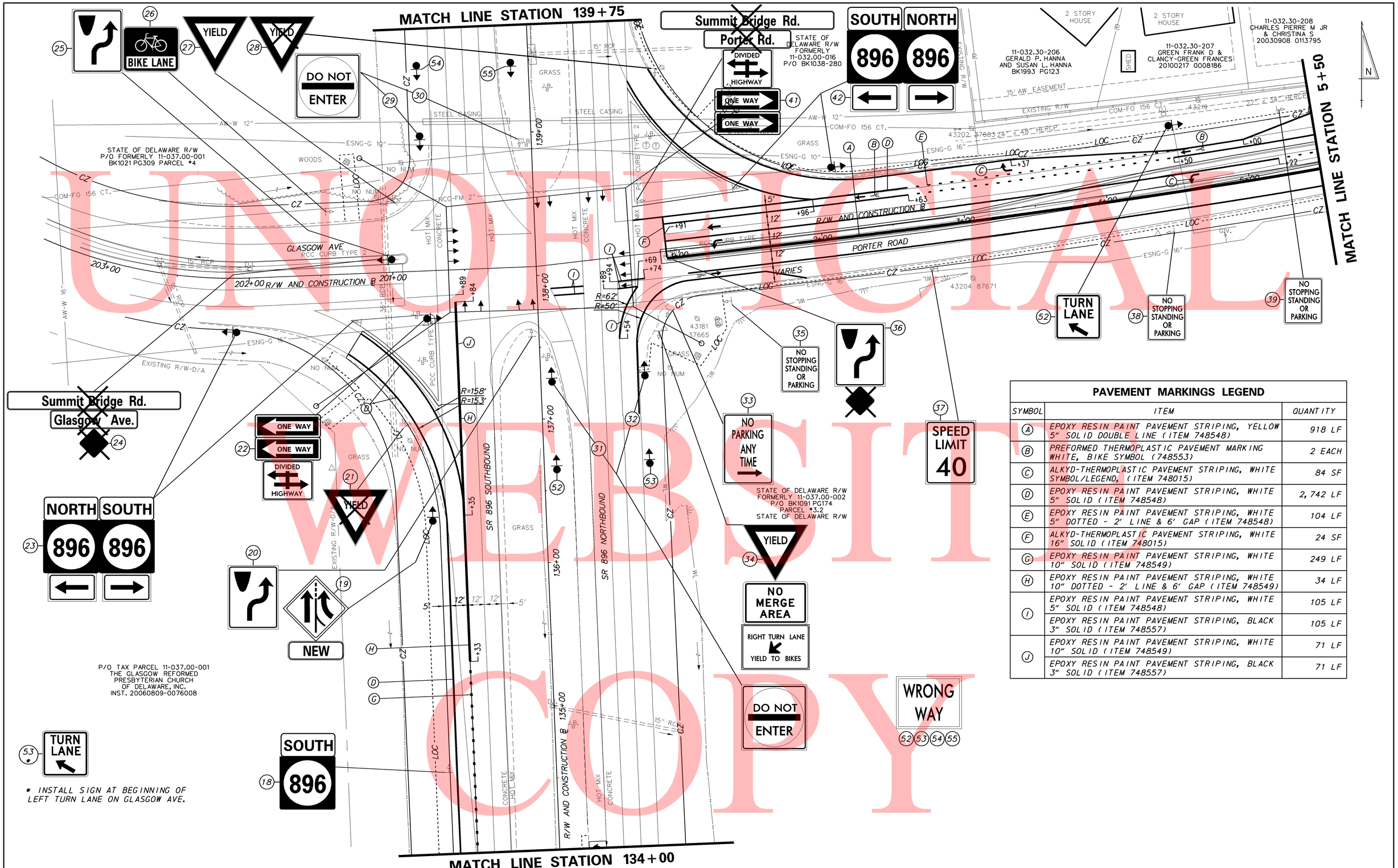

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	918 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	2 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	84 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	2,742 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	104 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	24 SF
G	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" SOLID (ITEM 748549)	249 LF
H	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 6' GAP (ITEM 748549)	34 LF
I	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	105 LF
	EPOXY RESIN PAINT PAVEMENT STRIPING, BLACK 3" SOLID (ITEM 748557)	105 LF
J	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" SOLID (ITEM 748549)	71 LF
	EPOXY RESIN PAINT PAVEMENT STRIPING, BLACK 3" SOLID (ITEM 748557)	71 LF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO. 26 TOTAL SHTS. 32

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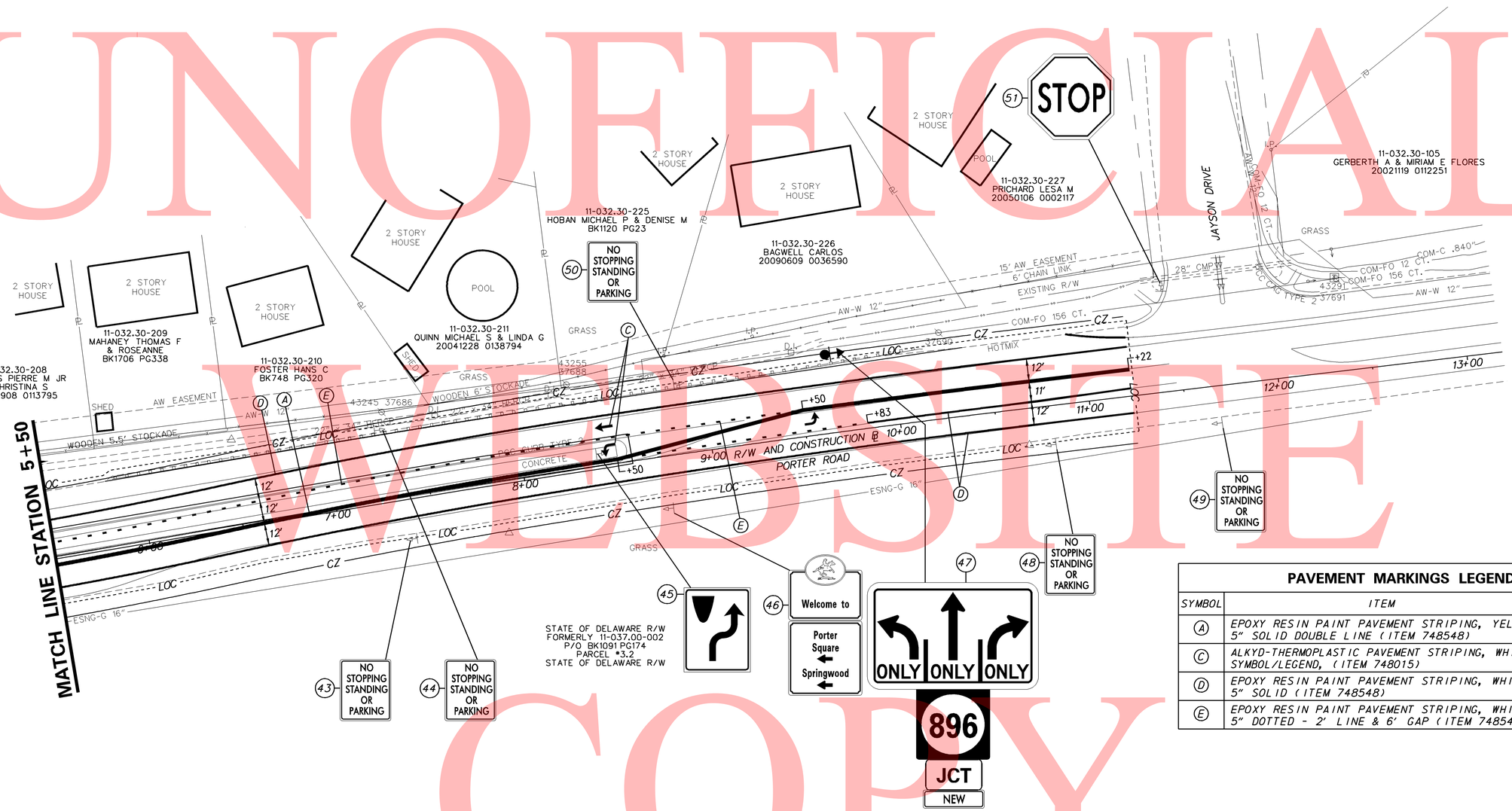

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	1,148 LF
(C)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	43.5 SF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	1,358 LF
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	134 LF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

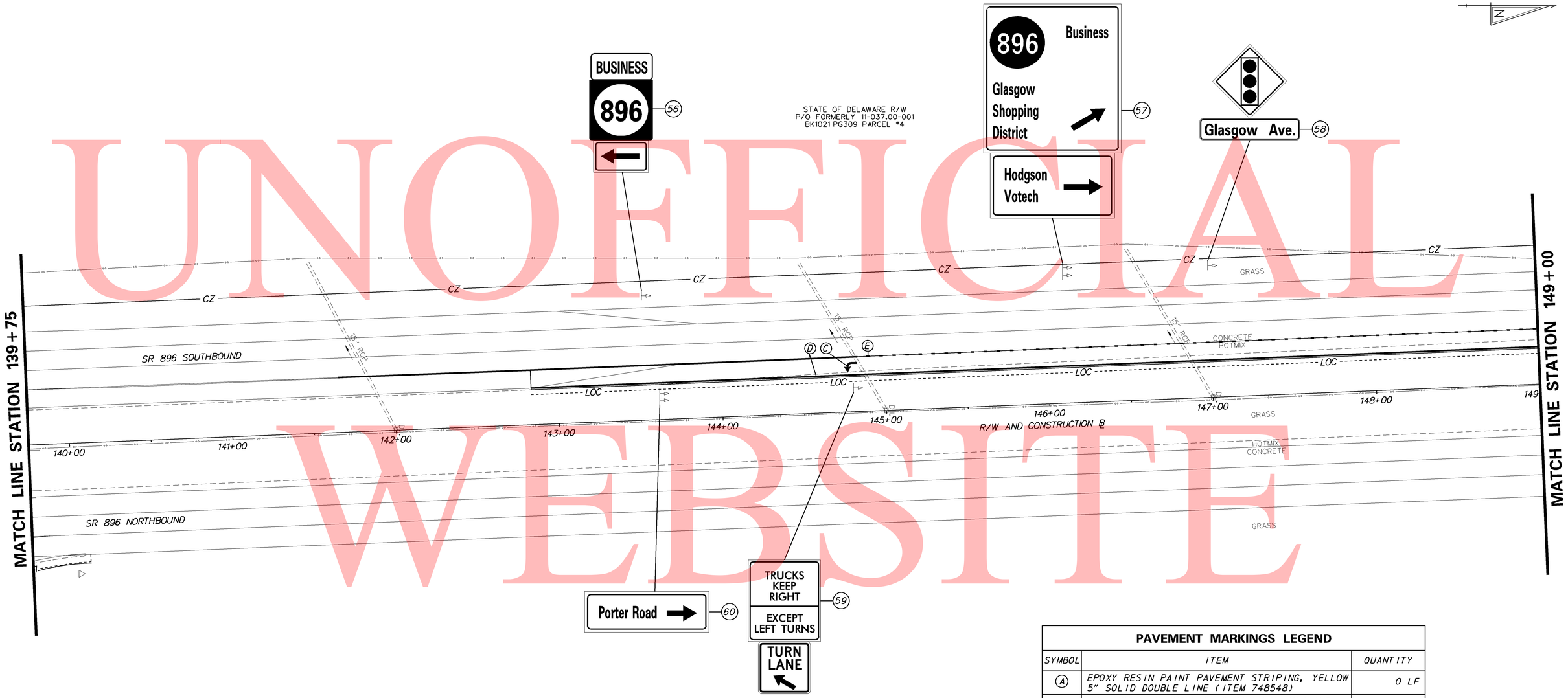
HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY	CHECKED BY: JKL	
NEW CASTLE		

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO. 27

TOTAL SHTS. 32



PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	0 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	0 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	15.5 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	935 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	104 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	0 SF
G	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" SOLID (ITEM 748549)	0 LF
H	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 6' GAP (ITEM 748549)	0 LF

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

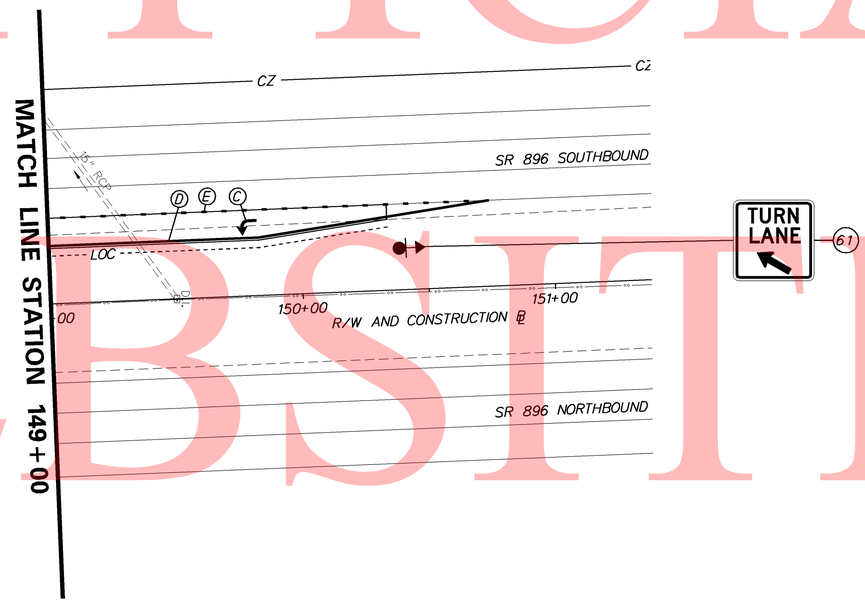
HEP NCC, SR 896
AND PORTER ROAD
INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

SIGNING, STRIPING
AND CONDUIT PLAN

SHEET NO. 28
TOTAL SHTS. 32

UNOFFICIAL WEBSITE COPY



PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	0 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	0 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	15.5 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	176 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	42 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	0 SF
G	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" SOLID (ITEM 748549)	0 LF
H	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 10" DOTTED - 2' LINE & 6' GAP (ITEM 748549)	0 LF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO. 29

TOTAL SHTS. 32

SIGN SCHEDULE

#	SHEET NO.	PLAN INDICATOR	CODE	QTY.	DESCRIPTION	ASSEMBLY NO.	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	ITEM 749687 SINGLE POST (EACH)			ITEM 749690 MULTI POST (SF)			POST INSTALLATION TYPE	Code X11 12' Post (W/ Basepost)	ITEM 749688 4" HOLE, 0-6" (EACH)	ITEM 749689 4" HOLE, >6" (EACH)	REMARKS
										SIGN DISPOSTION	REMOVE	INSTALL	SIGN DISPOSTION	REMOVE	INSTALL					
3	25	1	R1-1(30)		STOP					REMAIN							0	0	0	
134	25	2	R3-7_R(30)	1	RIGHT LANE MUST TURN RIGHT - 30"x30"		30"	30"	6.25	NEW		1					1	0	0	
134	25	3	R3-7_R(30)	1	RIGHT LANE MUST TURN RIGHT - 30"x30"		30"	30"	6.25	NEW		1					1	0	0	
1443	25	4	W21-10-DE(36)		WATCH FOR ENTERING TRAFFIC - 36x36					REMAIN							0	0	0	
252	25	5	R3-20-DE		TURN LANE					REMAIN							0	0	0	
	25	6		1	CHRISTIANA RIVER WATERSHED					REMOVE	1						0	0	0	
	25	7			GLASGOW SHOPPING DESTRICT KEEP LEFT					REMAIN							0	0	0	
877	25	8	W3-3(30)		SIGNAL AHEAD (Symbol) - 30x30					REMAIN							0	0	0	
1367	25	9	W16-8P		ADVANCE STREET NAME (1 - line plaque)	8				REMAIN							0	0	0	
1367	25	10	W16-8P		ADVANCE STREET NAME (1 - line plaque)	8	0	8"	0	REMAIN							0	0	0	
252	25	11	R3-20-DE	1	TURN LANE		18"	18"	2.25	NEW		1					1	0	0	
252	25	12	R3-20-DE		TURN LANE					REMAIN							0	0	0	
	25	13			BUSINESS GLASGOW SHOPPING DESTRICT					REMAIN							0	0	0	
	25				HODGSON VO-TECH	13				REMAIN							0	0	0	
	25	14			GLASGOW MEDICAL CENTER					REMAIN							0	0	0	
877	25	15	W3-3(30)		SIGNAL AHEAD (Symbol) - 30x30					REMAIN							0	0	0	
1367	25	16	W16-8P		ADVANCE STREET NAME (1 - line plaque)	15				REMAIN							0	0	0	
1367	25	17	W16-8P		ADVANCE STREET NAME (1 - line plaque)	15				REMAIN							0	0	0	
1473	26	18	M1-1(30)		INTERSTATE ROUTE (3 - Digit Sign) - 30x24					REMAIN							0	0	0	
1514	26		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	18				REMAIN							0	0	0	
913	26	19	W4-2-DE_L(30)	1	MERGE LEFT (text) - 30x30		30"	30"	6.25	NEW		1					1	0	0	
1383	26		W16-15P	1	NEW (plaque)	19	24"	12"	2	NEW							0	0	0	
324	26	20	R4-8(24)		KEEP LEFT (Symbol) - 24x30					REMAIN							0	0	0	
7	26	21	R1-2(30)	1	YIELD					REMOVE	1						0	0	0	
407	26	22	R6-3(36)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 36x30		36"	30"	7.5	NEW		1					1	0	0	
394	26		R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	22	36"	12"	3	NEW							0	0	0	
392	26		R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	22	36"	12"	3	NEW							0	0	0	
1473	26	23	M1-1(30)	1	INTERSTATE ROUTE (3 - Digit Sign) - 30x24					REPOSITION	1	1					0	0	0	
1514	26		M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	23				REPOSITION							0	0	0	
1604	26		M6-1_R(21)	1	DIRECTIONAL ARROW (Right) - 21x15	23				REPOSITION							0	0	0	
1473	26		M1-1(30)	1	INTERSTATE ROUTE (3 - Digit Sign) - 30x24	23	30"	24"	5	NEW		1					1	0	0	896
1508	26		M3-1(24)	1	CARDINAL DIRECTION - NORTH - 24x12	23	24"	12"	2	NEW							0	0	0	
1605	26		M6-1_L(21)	1	DIRECTIONAL ARROW (Left) - 21x15	23	21"	15"	2.2	NEW							0	0	0	
1673	26	24	D3-1(9)	2	STREET NAME (1 Line)					REMOVE	1						0	0	0	
1957	26		OM1-3	1	TYPE 1 OBJECT MARKER	24				REMOVE							0	0	0	
311	26	25	R4-7(24)		KEEP RIGHT (Symbol) - 24x30					REMAIN		1					0	0	0	
244	26	26	R3-17		BIKE LANE (Symbol)					REMAIN							0	0	0	
7	26	27	R1-2(30)		YIELD					REMAIN							0	0	0	
7	26	28	R1-2(30)	1	YIELD					REMOVE	1						0	0	0	
359	26	29	R5-1(36)	1	DO NOT ENTER - 36x36		36"	36"	9	NEW		1					1	0	0	
358	26	30	R5-1(30)		DO NOT ENTER - 30x30					REMAIN							0	0	0	
359	26	30	R5-1(36)	1	DO NOT ENTER - 36x36		36"	36"	9	NEW		1					1			
359	26	31	R5-1(36)	1	DO NOT ENTER - 36x36		36"	36"	9	NEW		1					1	0	0	
359	26	32	R5-1(36)	1	DO NOT ENTER - 36x36		36"	36"	9	NEW		1					1	0	0	
7	26	33	R1-2(30)		YIELD					REMAIN							0	0	0	
938	26		W4-5P(24)		NO MERGE AREA (plaque) - 24x30	33				REMAIN							0	0	0	
304	26		R4-4		BEGIN RIGHT TURN LANE YIELD TO BIKES	33				REMAIN							0	0	0	
418	26	34	R7-1		NO PARKING ANY TIME					REMAIN							0	0	0	
423	26	35	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
311	26	36	R4-7(24)		KEEP RIGHT (Symbol) - 24x30					REMAIN							0	0	0	
1957	26		OM1-3	1	TYPE 1 OBJECT MARKER	36				REMOVE							0	0	0	
54	26	37	R2-1-40(24)		SPEED LIMIT (40 MPH - 24x30)					REMAIN							0	0	0	
423	26	38	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
423	26	39	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
1673	26	41	D3-1(9)	2	STREET NAME (1 Line)					REMOVE							0	0	0	
407	26		R6-3(36)	1	DIVIDED HIGHWAY CROSSING (4 - Legged Intersection) - 36x30	41	36"	30"	7.5	NEW							0	0	0	
394	26		R6-1_L(36)	1	ONE WAY (ENCLOSED IN LEFT ARROW) - 36x12	41	36"	12"	3	NEW							0	0	0	
392	26		R6-1_R(36)	1	ONE WAY (ENCLOSED IN RIGHT ARROW) - 36x12	41	36"	12"	3	NEW							0	0	0	
1473	26	42	M1-1(30)		INTERSTATE ROUTE (3 - Digit Sign) - 30x24					REPOSITION							0	0	0	
1508	26		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	42				REPOSITION							0	0	0	
1604	26		M6-1_R(21)		DIRECTIONAL ARROW (Right) - 21x15	42	21"	15"	2.2	REPOSITION							0	0	0	
1473	26		M1-1(30)	1	INTERSTATE ROUTE (3 - Digit Sign) - 30x24	42	30"	24"	5	NEW		1					1	0	0	896
1514	26		M3-3(24)	1	CARDINAL DIRECTION - SOUTH - 24x12	42	24"	12"	2	NEW							0	0	0	
1605	26		M6-1_L(21)	1	DIRECTIONAL ARROW (Left) - 21x15	42	21"	15"	2.2	NEW							0	0	0	
363	26	52	R5-1a(42)	1	WRONG WAY - 42x30		42"	30"	8.75	NEW		1					1	0	0	
363	26	53	R5-1a(42)	1	WRONG WAY - 42x30		42"	30"	8.75	NEW		1					1	0	0	
363	26	54	R5-1a(42)	1	WRONG WAY - 42x30		42"	30"	8.75	NEW		1					1	0	0	
363	26	55	R5-1a(42)	1	WRONG WAY - 42x30		42"	30"	8.75	NEW		1					1	0	0	
423	27	43	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
423	27	44	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
311	27	45	R4-7(24)	1	KEEP RIGHT (Symbol) - 24x30					REMOVE	1						0	0	0	
					PAGE TOTALS				**141.6**		6	17		0	0		15	0	0	

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

SIGN SCHEDULE

SHEET NO. 30

TOTAL SHTS. 32

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SIGN SCHEDULE

NO.	SHEET NO.	PLAN INDICATOR	CODE	QTY.	DISCRIPTION	ASSEMBLY NO.	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	SIGN AREA (SF)	ITEM 749687 SINGLE POST (EACH)			ITEM 749690 MULTI POST (SF)			POST INSTALLATION TYPE	Code X11 12' Post (W/ Basepost)	ITEM 749688 4" HOLE, 0-6" (EACH)	ITEM 749689 4" HOLE, >6" (EACH)	REMARKS
										SIGN	REMOVE	INSTALL	SIGN	REMOVE	INSTALL					
1687	27	46	D3-2-DE1		WELCOME TO					REMAIN							0	0	0	
1529	28	56	M4-3(24)		BUSINESS- 24x12					REMAIN							0	0	0	
1473	28		M1-1(30)		INTERSTATE ROUTE (3 - Digit Sign) - 30x24	56				REMAIN							0	0	0	
1605	28		M6-1_L(21)		DIRECTIONAL ARROW (Left) - 21x15	56				REMAIN							0	0	0	
1662	28	57	D1-3a(42-B)		DESTINATION (3 Line)					REMAIN							0	0	0	
1653	28		D1-2		DESTINATION (2 Line)	57				REMAIN							0	0	0	
877	28	58	W3-3(30)		SIGNAL AHEAD (Symbol) - 30x30					REMAIN							0	0	0	
1367	28		W16-8P		ADVANCE STREET NAME (1 - line plaque)	57				REMAIN							0	0	0	
302	28	59	R4-3-DE		TRUCK KEEP RIGHT EXCEPT LEFT TURNS					REMAIN							0	0	0	
252	28		R3-20-DE		TURN LANE	58				REMAIN							0	0	0	
1643	28	60	D1-1		DESTINATION (1 Line)					REMAIN							0	0	0	
252	29	61	R3-20-DE	1	TURN LANE		18"	18"	2.25	NEW		1					1	0	0	
																	0	0	0	
																	0	0	0	
1676	31		D3-1(24)	1	STREET NAME (1 Line)		96	24"	32								0	0	0	Porter Rd --> (Front & Back)
1676	31		D3-1(24)	1	STREET NAME (1 Line)		126	24"	21								0	0	0	Summit Bridge Rd
1676	31		D3-1(24)	1	STREET NAME (1 Line)		78	24"	13								0	0	0	Glasgow Ave --> (Front & Back)
1676	31		D3-1(24)	1	STREET NAME (1 Line)		126	24"	21								0	0	0	Summit Bridge Rd
1688	27		D3-2-DE2		DEVELOPMENT NAME	46				REMAIN							0	0	0	
143	27	47	R3-8b(48)	1	ADVANCE INTERSECTION LANE CONTROL (Left, Ahead, Right) - 48"x30"		48"	30"	10	NEW		1					1	0	0	
1473	27		M1-1(30)	1	INTERSTATE ROUTE (3 - Digit Sign) - 30x24	47	30"	24"	5	NEW							0	0	0	896
1504	27		M2-1(21)	1	JUNCTION - 21x15	47	21"	15"	2.2	NEW							0	0	0	
1383	27		W16-15P	1	NEW (plaque)	47	24"	12"	2	NEW							0	0	0	
423	27	48	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
423	27	49	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
423	27	50	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
3	27	51	R1-1(30)		STOP					REMAIN							0	0	0	
					PAGE TOTALS				**108.45**		0	2		0	0		2	0	0	
					JOB TOTALS				**250.05**		6	19		0	0		17	0	0	

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

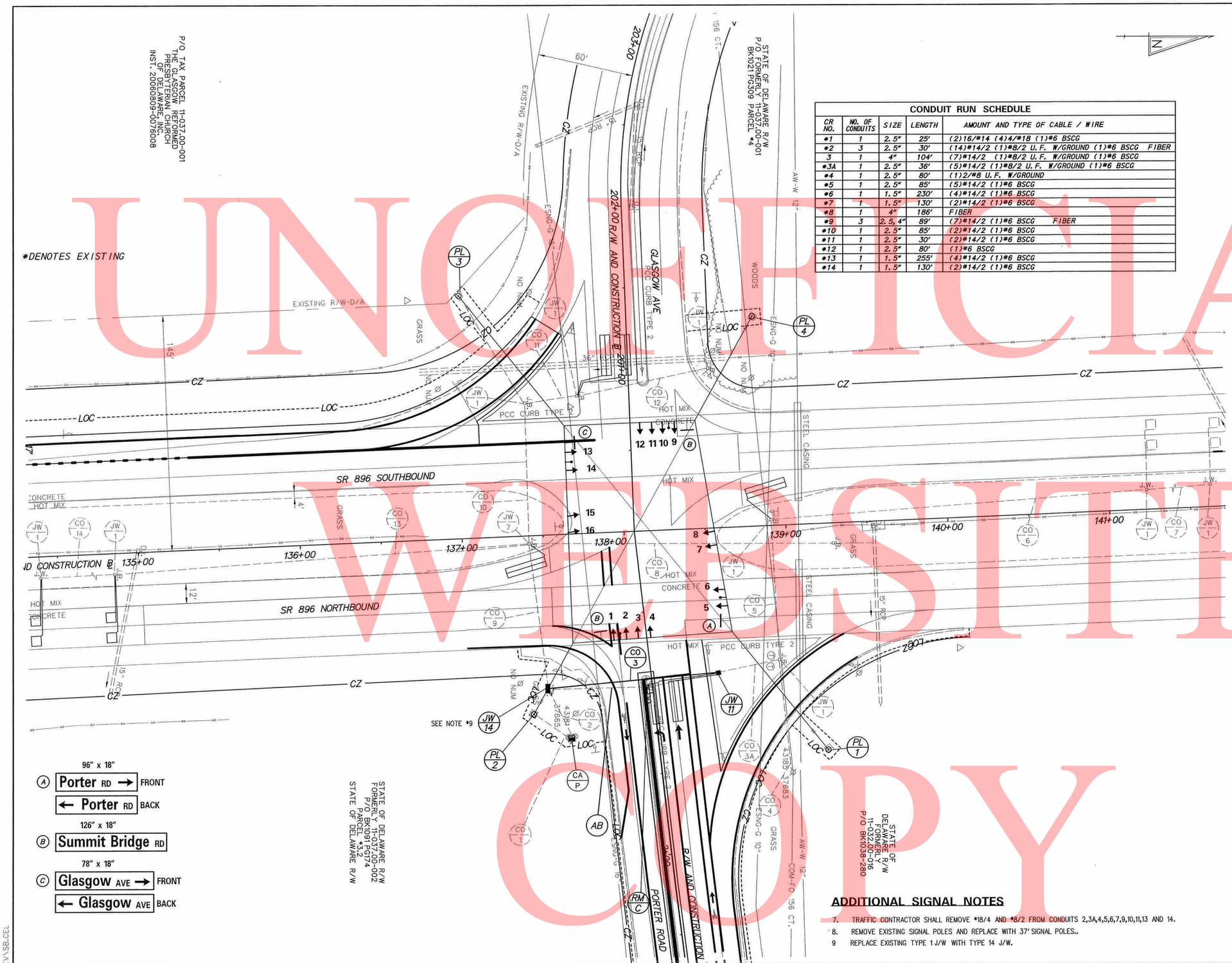
HEP NCC, SR 896 AND PORTER ROAD INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201200107	DESIGNED BY: DCK	
COUNTY		
NEW CASTLE	CHECKED BY: JKL	

SIGN SCHEDULE

SHEET NO. 31

TOTAL SHTS. 32



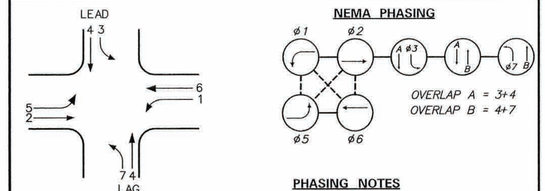
CONDUIT RUN SCHEDULE

CR. NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
#1	1	2.5"	25'	(2)16/#14 (4)4/#18 (1)#6 BSCG
#2	3	2.5"	30'	(14)#14/2 (1)#8/2 U.F. W/GROUND (1)#6 BSCG FIBER
3	1	4"	104'	(7)#14/2 (1)#8/2 U.F. W/GROUND (1)#6 BSCG
#3A	1	2.5"	36'	(5)#14/2 (1)#8/2 U.F. W/GROUND (1)#6 BSCG
#4	1	2.5"	80'	(1)2/#8 U.F. W/GROUND
#5	1	2.5"	85'	(5)#14/2 (1)#6 BSCG
#6	1	1.5"	230'	(4)#14/2 (1)#6 BSCG
#7	1	1.5"	130'	(2)#14/2 (1)#6 BSCG
#8	1	4"	186'	FIBER
#9	3	2.5, 4"	89'	(7)#14/2 (1)#6 BSCG FIBER
#10	1	2.5"	85'	(2)#14/2 (1)#6 BSCG
#11	1	2.5"	30'	(2)#14/2 (1)#6 BSCG
#12	1	2.5"	80'	(1)#6 BSCG
#13	1	1.5"	255'	(4)#14/2 (1)#6 BSCG
#14	1	1.5"	130'	(2)#14/2 (1)#6 BSCG

ADDITIONAL SIGNAL NOTES

7. TRAFFIC CONTRACTOR SHALL REMOVE *18/4 AND *8/2 FROM CONDUITS 2,3A,4,5,6,7,9,10,11,13 AND 14.
8. REMOVE EXISTING SIGNAL POLES AND REPLACE WITH 37' SIGNAL POLES..
9. REPLACE EXISTING TYPE 1 J/W WITH TYPE 14 J/W.

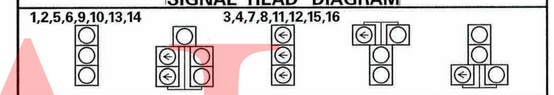
SIGNAL PHASING



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		
SPAN INSULATOR		
SPAN WIRE	XX	
UTILITY POLE		
VIDEO DETECTION		

GENERAL SIGNAL NOTES

1. ALL SIGNAL POLES WILL BE 37 FEET, EXCEPT WHERE SHOWN.
2. CO #1 IS NOT DRAWN TO SCALE, NOR IS THE DIRECTION NECESSARILY CORRECT.
3. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
4. POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS TO BE REMOVED IN ACCORDANCE WITH SECTION 211 AND 202 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
5. 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.
6. 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.

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: 10/11/13

APPROVED TRAFFIC ENGINEER _____ DATE: 10/11/13

APPROVED FOR INSTALLATION
CHIEF TRAFFIC ENGINEER _____ DATE: 10/14/13

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

SR 896 AND PORTER RD INTERSECTION IMPROVEMENTS

CONTRACT	PERMIT NO.	N454
T201200107	DESIGNED BY:	
COUNTY		
NC	CHECKED BY:	

SIGNAL PLAN
SR 896 & PORTER RD

SHEET NO. 32
TOTAL SHTS. 32

W:\MSV8\CELLS\PROJDEV\SB.CEL

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