THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

FINAL PLANS

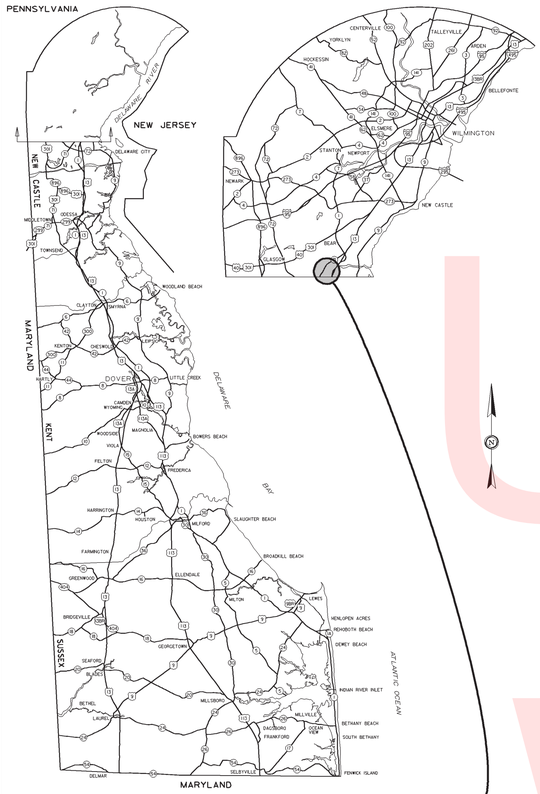
CONSTRUCTION PLANS FOR:

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT NUMBER: T201000701

FEDERAL AID PROJECT NUMBER: ESTP-N035(4)

COUNTY: NEW CASTLE M.R. #: N035



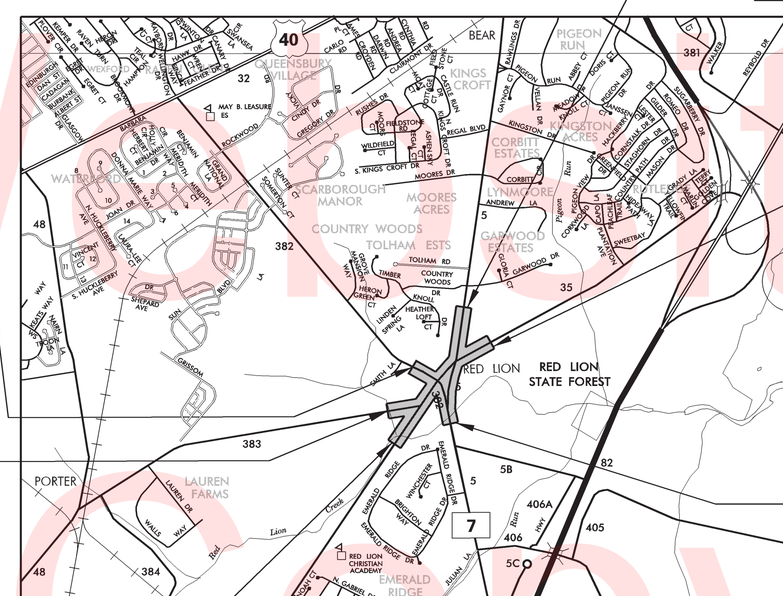
GENERAL LOCATION OF CONTRACT

LIMIT OF CONTRACT STATION 228+50

END CONTRACT STATION 31+50

LIMIT OF CONTRACT STATION 410+50

LIMIT OF CONTRACT STATION 301+98



PROJECT LOCATION

BEGIN CONTRACT STATION 7+10

LIMIT OF CONTRACT STATION 208+00

DESIGN DESIGNATION

FUNCTIONAL CLASS: MAJOR COLLECTOR		D.H.V. PROJECTED: 1,644 (SR7) 736 (SR71)	YEAR: 2040
TYPE OF CONSTRUCTION: RECONSTRUCTION		DESIGN SPEED: 45 M.P.H.	
A.A.D.T. CURRENT: 19,478 (SR7) 8,960 (SR71)	YEAR: 2012	TRUCKS: 9% (SR7) 7% (SR71)	
A.A.D.T. PROJECTED: 27,400 (SR7) 12,900 (SR71)	YEAR: 2040	DIRECTION OF DISTRIBUTION: 60%	

INDEX OF SHEETS

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TOTAL SHEETS: 64

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
459	MT. PLEASANT TO TYBOUT CORNER - WIDENING
990	SUMMIT BRIDGE - TYBOUT'S CORNER
1160	SUMMIT BRIDGE - TYBOUTS COR.
22-074-66	BRIDGE 299 ON RED LION ROAD (N035) OVER RED LION CREEK

RECOMMENDED

Susan Maldonado — 05/02/2016
SQUAD MANAGER, CONSTRUCTION — DATE

Christopher Castillo — 05/03/2016
GROUP ENGINEER, CONSTRUCTION — DATE

05/03/2016
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) — DATE

RECOMMENDED
Vincent W. Davis
STORMWATER ENGINEER
DATE 04/27/2016
VINCENT W. DAVIS REGISTERED No. 12898 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED
SQUAD MANAGER, TRANSPORTATION SOLUTIONS (PROJECT/DEVELOPMENT OR BRIDGE DESIGN)
DATE 05/06/2016
JERRY K. LOVELL LICENSE No. 16257 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED
BRIDGE DESIGN ENGINEER
DATE
SEAL

RECOMMENDED
Darren M. O'Neill
GROUP ENGINEER, PROJECT DEVELOPMENT
DATE 05/19/2016
DARREN M. O'NEILL REGISTERED No. 10857 DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED
Mark C. Tudor
ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS
DATE 05/19/2016
MARK CHRISTOPHER TUDOR REGISTERED No. 10803 DELAWARE PROFESSIONAL ENGINEER — SEAL

APPROVED
Robert Brian McCleary
CHIEF ENGINEER
DATE 09/12/2016
ROBERT BRIAN McCLEARY REGISTERED No. 8567 DELAWARE PROFESSIONAL ENGINEER — SEAL

LAST REVISED: 8/7/2008
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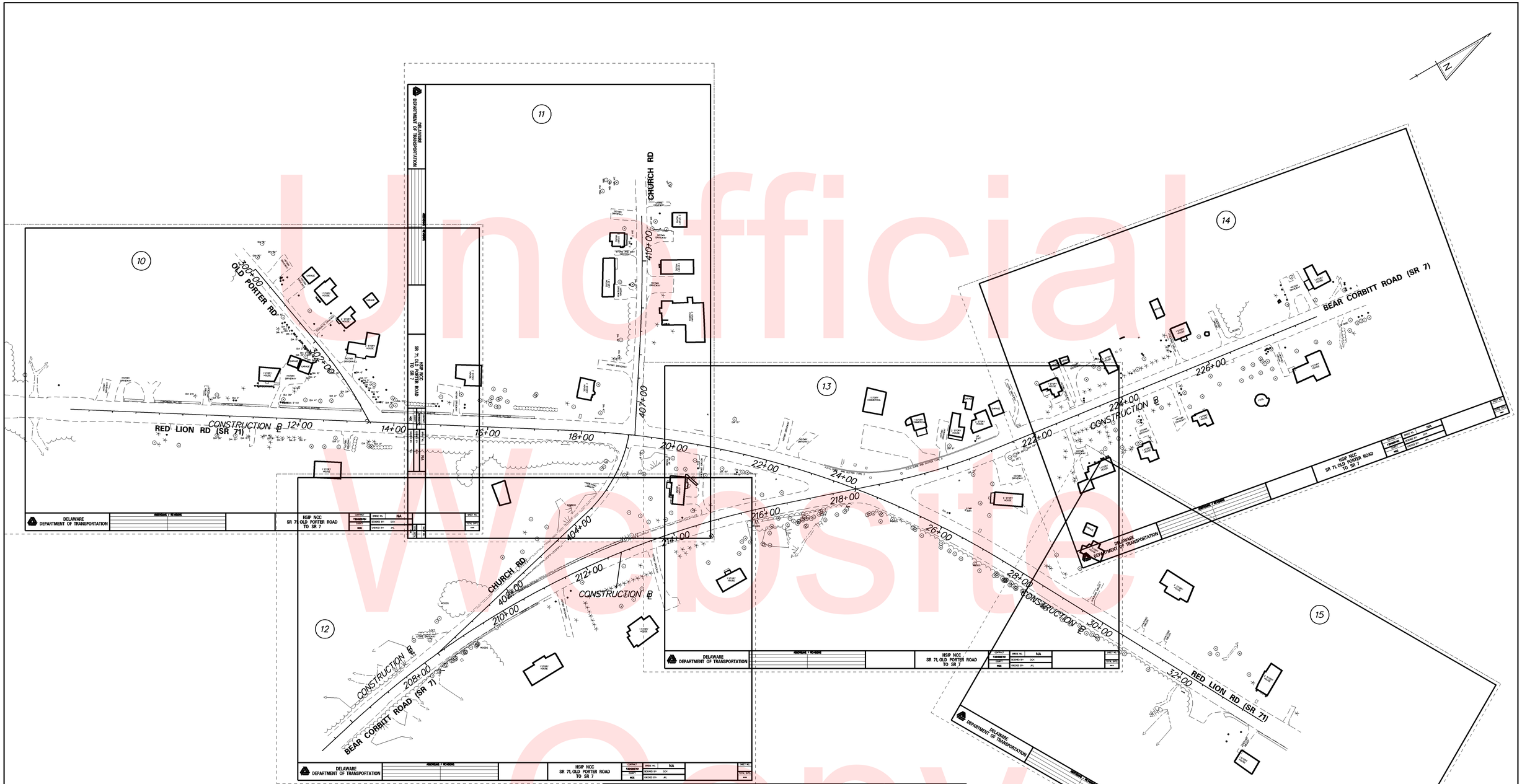

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 100 200 300 FEET

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

PLAN SHEET INDEX

SHEET NO. 2
TOTAL SHTS. 64

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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
PB	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

UW-W	UNITED WATER
DP-G	DELMARVA POWER - GAS
DP-E	DELMARVA POWER - ELECTRIC
COM-FO	COMCAST - FIBER OPTIC
COM-C	COMCAST - CABLE
NCC-S	NEW CASTLE COUNTY - SEWER

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
C.J.B.	CONVERT TO JUNCTION BOX
C.M.H.	CONVERT TO DRAINAGE MANHOLE
C/O	CURB OPENING
CR	CURB RAMP / TYPE
CR-N	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
UOP	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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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.

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

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

( )	NONE
(X)	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(X)	ALL PLAN SHEETS, IN PDF FORMAT.
( )	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.

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

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

5. 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.

6. THE DISTURBED AREA FOR THIS PROJECT IS 2.0 ACRES.

7. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A 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 WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

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 CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE SET 46 INCHES ABOVE THE ROADWAY SURFACE. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE PLACED IN AN APPROPRIATE SIZE PVC SLEEVE. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

3. IN AREAS WHERE TREES OR SHRUBS WILL BE OVERHANGING THE PROPOSED SIDEWALK, PRUNING MAY BE NECESSARY TO ACHIEVE A VERTICAL CLEAR SPACE OF 10 FEET ABOVE THE PROPOSED SIDEWALK ELEVATION. THE CONTRACTOR SHALL PRUNE EXISTING TREE AND SHRUB BRANCHES, WHICH OVERHANG THE SIDEWALK, IN ACCORDANCE WITH I.S.A. STANDARDS. THE CONTRACTOR SHALL NOTIFY DELDOT'S ROADSIDE ENVIRONMENTALIST ADMINISTRATOR, EUGENE 'CHIP' ROSAN, JR. AT (302) 760-2185 AND/OR HIS DESIGNEE, AT LEAST TWO (2) DAYS PRIOR TO THE PRUNING OPERATION. ALL COSTS ASSOCIATED WITH THE ABOVE WORK TO BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.

4. 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 208000 - EXCAVATION AND BACKFILL FOR PIPE TRENCHES, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.

5. 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

6. 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

7. 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 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 BEING EQUAL TO THE ACTUAL QUANTITY USED UNDER 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 EXCESS 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. MILLINGS GENERATED UNDER ITEM 760000 - PAVEMENT MILLINGS, TAPERCUT 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.

   c. 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.

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

SECTION 300

7. E. (CONTINUED)

   e. 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.

   f. 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 400

8. THE PAVEMENT SECTION FOR FLEXIBLE PAVEMENT RESIDENTIAL DRIVEWAYS SHALL BE 2" WARM-MIX, TYPE 'C' OVER 8" GRADED AGGREGATE BASE COURSE, TYPE 'B', UNLESS OTHERWISE NOTED ON THE PLANS.

SECTION 600

9. 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 DEPARTMENT WILL VIDEO INSPECT NEW PIPE RUNS TO CONFIRM CONDITION PRIOR TO ACCEPTANCE. PIPE CLEANING PRIOR TO VIDEO INSPECTION AND MAINTENANCE OF TRAFFIC DURING THE VIDEO INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND INCIDENTAL TO THE PIPE ITEM THAT IS BEING VIDEO INSPECTED.

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SECTION 700

11. 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.

12. 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.

13. DRAINAGE INLET GRATES ADJACENT TO THE ROAD, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE 1 SHALL BE REPLACED. THE ACTUAL LOCATIONS, THE NEED FOR ANY GRATE MODIFICATIONS OR FOR NEW FRAMES SHALL BE DETERMINED BY THE ENGINEER. ALL REPLACED GRATES/FRAMES SHALL BE DELIVERED TO THE NEAREST DISTRICT MAINTENANCE YARD WITH THE COST OF DELIVERY INCIDENTAL TO ITEM 708060 - REPLACING DRAINAGE INLET GRATE(S). FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.

14. THE NEW CASTLE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL SUPPLY AND THE STATE'S CONTRACTOR SHALL INSTALL NEW SELF SEALING MANHOLE FRAMES AND COVERS ON ALL COUNTY SEWER MANHOLES THAT ARE NOT BEING RELOCATED, WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH THE COUNTY'S STANDARD SPECIFICATIONS. THE EXISTING MANHOLE FRAMES AND COVERS THAT ARE REMOVED SHALL BECOME THE PROPERTY OF THE STATE'S CONTRACTOR. PAYMENT SHALL BE INCIDENTAL TO ITEM 710506 - ADJUST AND REPAIR EXISTING SANITARY SEWER MANHOLE.

15. THE CONTRACTOR SHALL DELIVER ALL EXCESS MILLED MATERIAL TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S NEAREST MAINTENANCE YARD. THE MATERIAL SHALL BE NEATLY STOCKPILED AT THE YARD. COSTS FOR THIS WORK SHALL BE INCIDENTAL TO ITEM 760000 - PAVEMENT MILLING, HOT-MIX.

16. 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.

17. PORTLAND CEMENT CONCRETE CHANNELIZING ISLANDS THAT ARE LESS THAN 75 SQ FT MAY BE POURED MONOLITHICALLY, OR AS DIRECTED BY THE ENGINEER.

MISCELLANEOUS

18. 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.

19. RIGHT-OF-WAY PLANS FOR RIGHT-OF-WAY OR EASEMENT STAKEOUT PURPOSES ARE AVAILABLE FROM THE DEPARTMENT.

20. SEE ENVIRONMENTAL COMPLIANCE SHEETS FOR FURTHER RESTRICTIONS AND GUIDANCE ASSOCIATED WITH THIS PROJECT.

21. CROSS SECTIONS USED IN THE PREPARATION OF THIS CONTRACT ARE AVAILABLE FROM THE DEPARTMENT.

22. REFER TO THE CONSTRUCTION PLAN SHEETS FOR THE LOCATION OF THE CLEAR ZONE AREA LIMITS.

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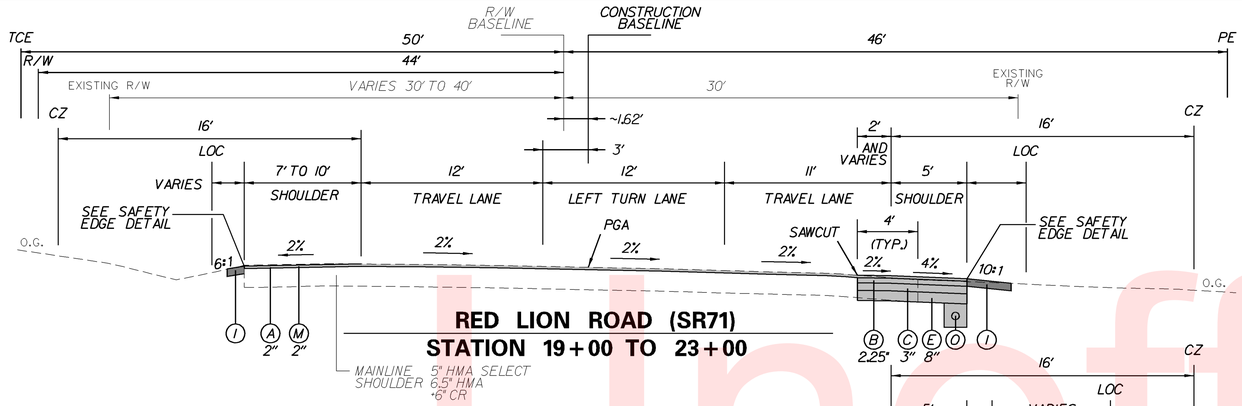
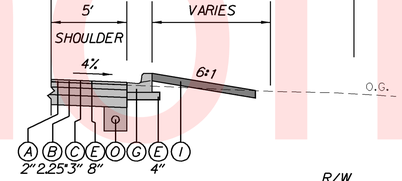
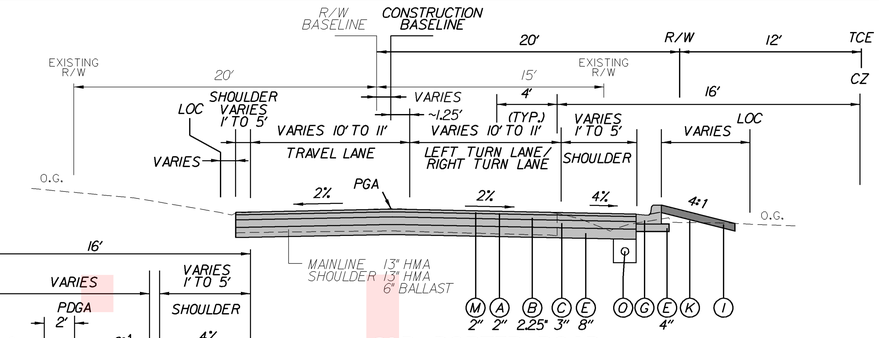


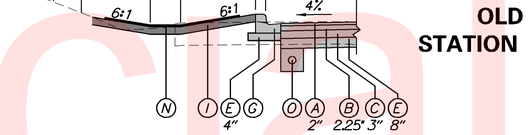
RED LION ROAD (SR71)
STATION 19+00 TO 23+00



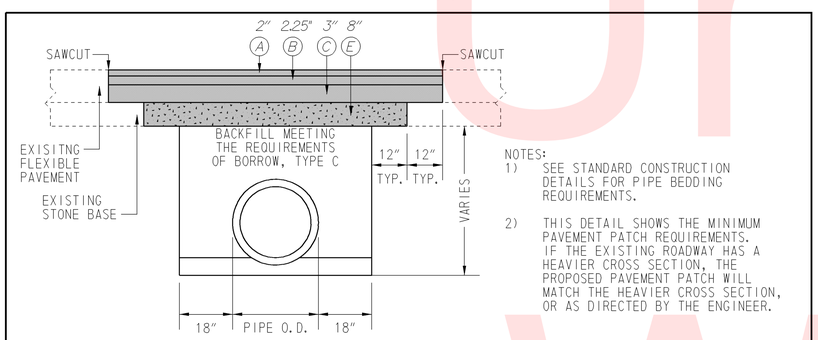
RED LION ROAD (SR71)
STATION 22+50 TO 23+00



OLD PORTER ROAD
STATION 302+00 TO 304+00

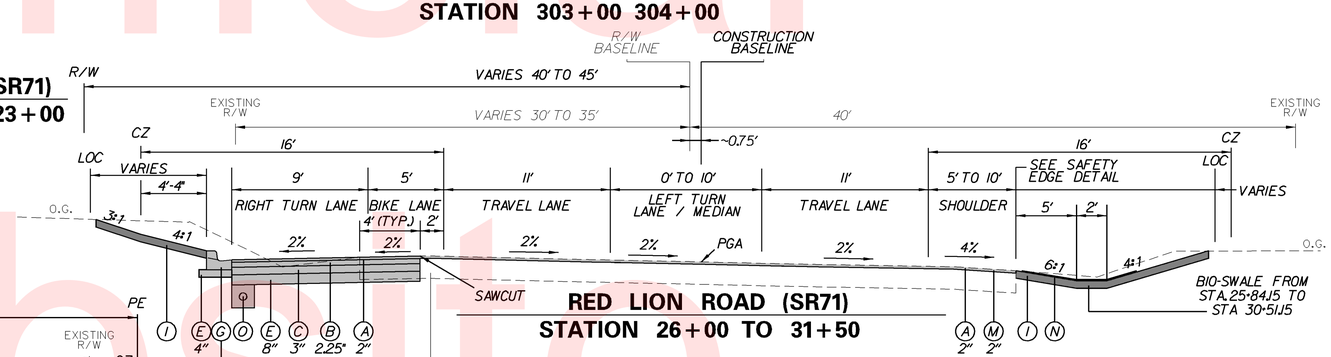


OLD PORTER ROAD
STATION 303+00 304+00



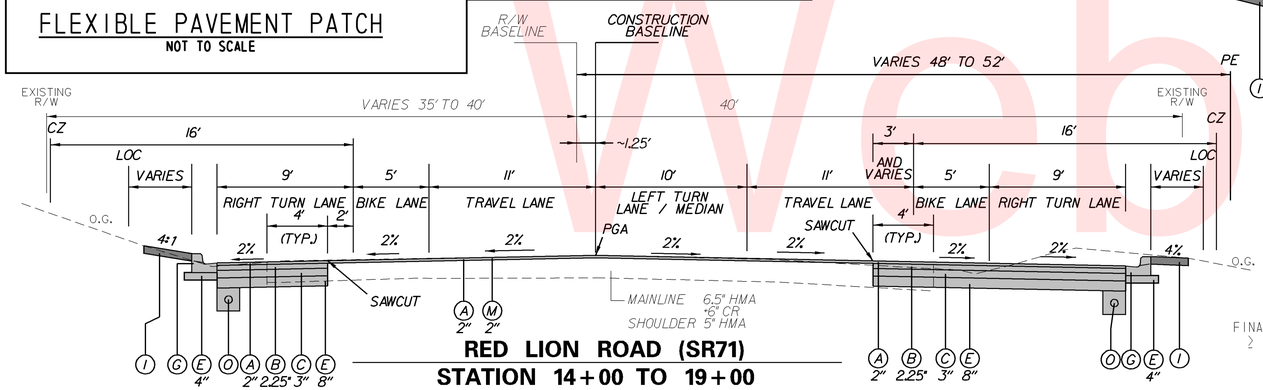
NOTES:
1) SEE STANDARD CONSTRUCTION DETAILS FOR PIPE BEDDING REQUIREMENTS.
2) THIS DETAIL SHOWS THE MINIMUM PAVEMENT PATCH REQUIREMENTS. IF THE EXISTING ROADWAY HAS A HEAVIER CROSS SECTION, THE PROPOSED PAVEMENT PATCH WILL MATCH THE HEAVIER CROSS SECTION, OR AS DIRECTED BY THE ENGINEER.

FLEXIBLE PAVEMENT PATCH
NOT TO SCALE

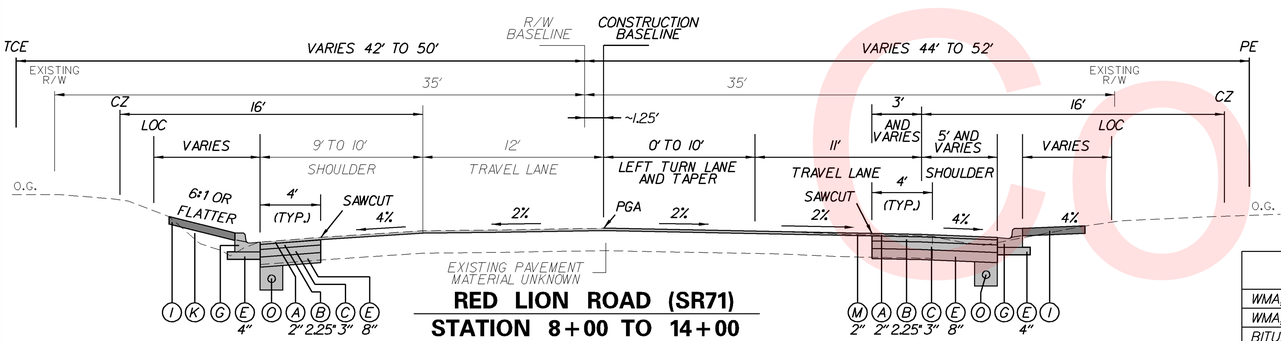


RED LION ROAD (SR71)
STATION 26+00 TO 31+50

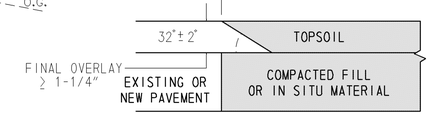
MAINLINE 5.5" HMA
9" PCC
6" SELECT
SHOULDER 7" HMA
+6" CR



RED LION ROAD (SR71)
STATION 14+00 TO 19+00



RED LION ROAD (SR71)
STATION 8+00 TO 14+00



HOT-MIX PAVEMENTS AND OVERLAYS
NOT TO SCALE

SAFETY EDGE DETAIL
NOT TO SCALE

* OR PROJECT EXCAVATION MEETING THE REQUIREMENTS OF BORROW, TYPE F

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 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (B) ITEM 401810 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22
- (C) ITEM 401819 - SUPERPAVE, BITUMINOUS BASE COURSE, 160 GYRATIONS, PG 64-22
- (E) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (G) ITEM 701019 - P.C.C. INTERGRAL CURB AND GUTTER, TYPE 3
- (H) ITEM 705002 - P.C.C. SIDEWALK, 6"
- (I) ITEM 908010 - TOPSOILING, 6" DEPTH
  ITEM 908014 - PERMANENT GRASS SEEDING, DRY GROUND
- (J) ITEM 209001 - BORROW, TYPE A
- (K) ITEM 209006 - BORROW, TYPE F *
- (M) ITEM 760000 - MILLING, HOT-MIX
- (N) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6" - WHERE NOTED ON PLANS

Unofficial Website Copy

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	TYPICAL SECTIONS	SHEET NO. 6
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 64
					CHECKED BY: JKL		

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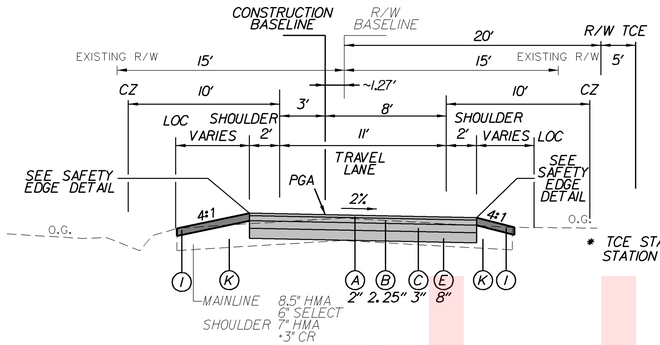
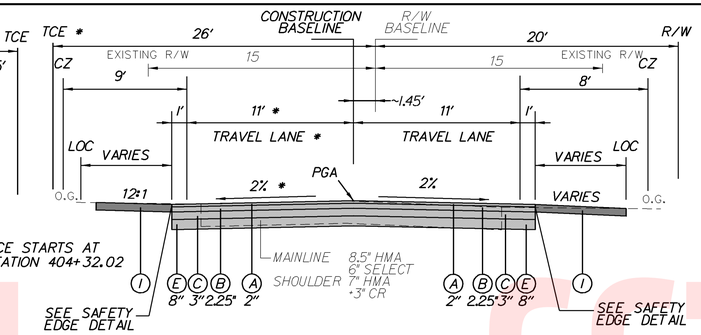
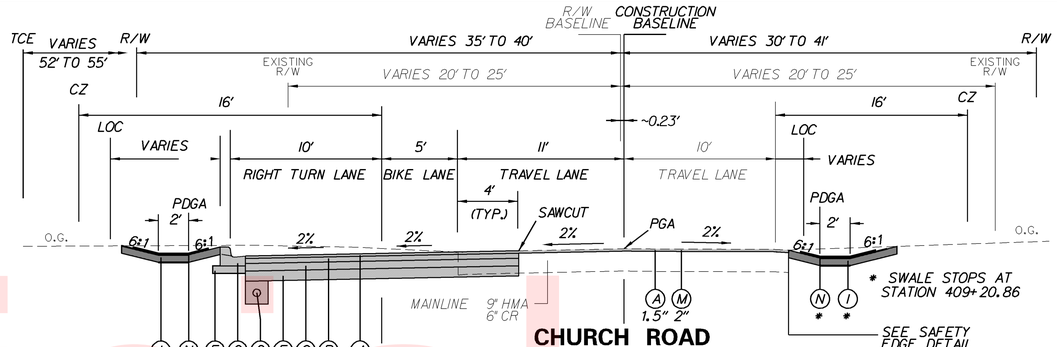


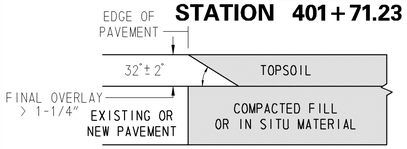
CHURCH ROAD
STATION 401+71.23 TO 404+09.54



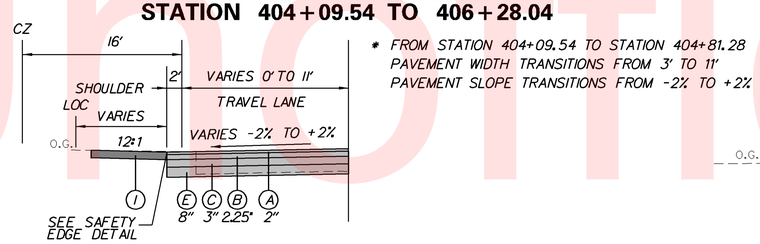
CHURCH ROAD
STATION 404+09.54 TO 406+28.04



CHURCH ROAD
STATION 406+28.04 TO 410+15

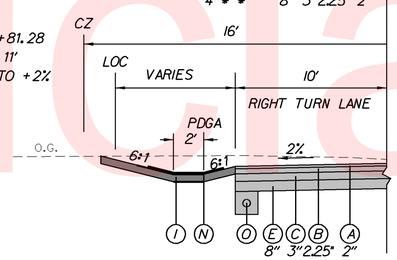


HOT-MIX PAVEMENTS AND OVERLAYS
NOT TO SCALE

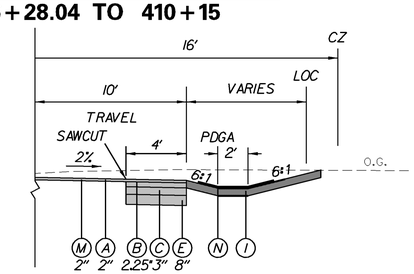


* FROM STATION 404+09.54 TO STATION 404+81.28
PAVEMENT WIDTH TRANSITIONS FROM 3' TO 11'
PAVEMENT SLOPE TRANSITIONS FROM -2% TO +2%

CHURCH ROAD
STATION 404+09.54 TO 405+08

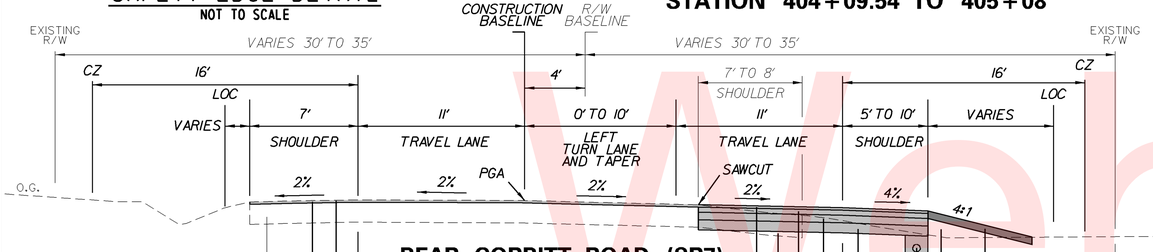


CHURCH ROAD
STATION 408+00 TO 409+20.86

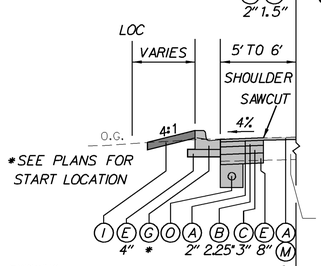


CHURCH ROAD
STATION 406+28.04 TO 407+15

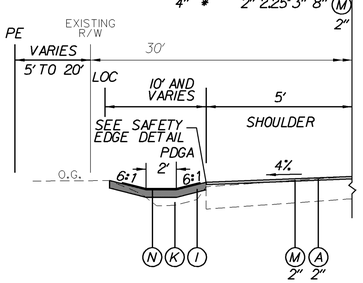
SAFETY EDGE DETAIL
NOT TO SCALE



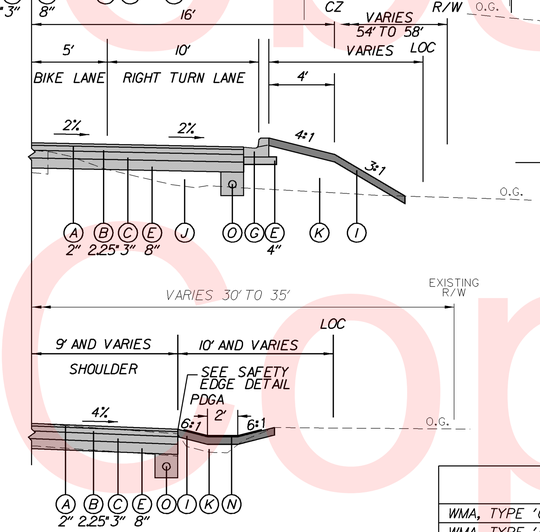
BEAR CORBITT ROAD (SR7)
STATION 208+00 TO 217+00



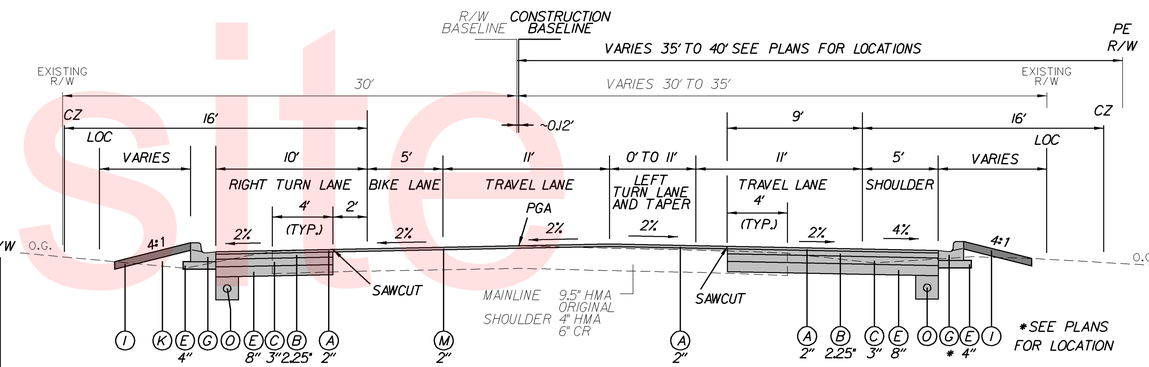
BEAR CORBITT ROAD (SR7)
STATION 215+50 TO 217+00



BEAR CORBITT ROAD (SR7)
STATION 211+00 TO 216+00



BEAR CORBITT ROAD (SR7)
STATION 209+06 TO 211+10



BEAR CORBITT ROAD (SR7)
STATION 221+78.55 TO 223+84.91

BEAR CORBITT ROAD (SR7)
STATION 219+25 TO 227+60

* OR PROJECT EXCAVATION MEETING THE REQUIREMENTS OF BORROW, TYPE F

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

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- (N) ITEM 908020 - EROSION CONTROL BLANKET MULCH
- (O) ITEM 715001 - PERFORATED PIPE UNDERDRAINS, 6" - WHERE NOTED ON PLANS

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	TYPICAL SECTIONS
				COUNTY NCC	DESIGNED BY: DCK	SHEET NO. 7
					CHECKED BY: JKL	TOTAL SHTS. 64

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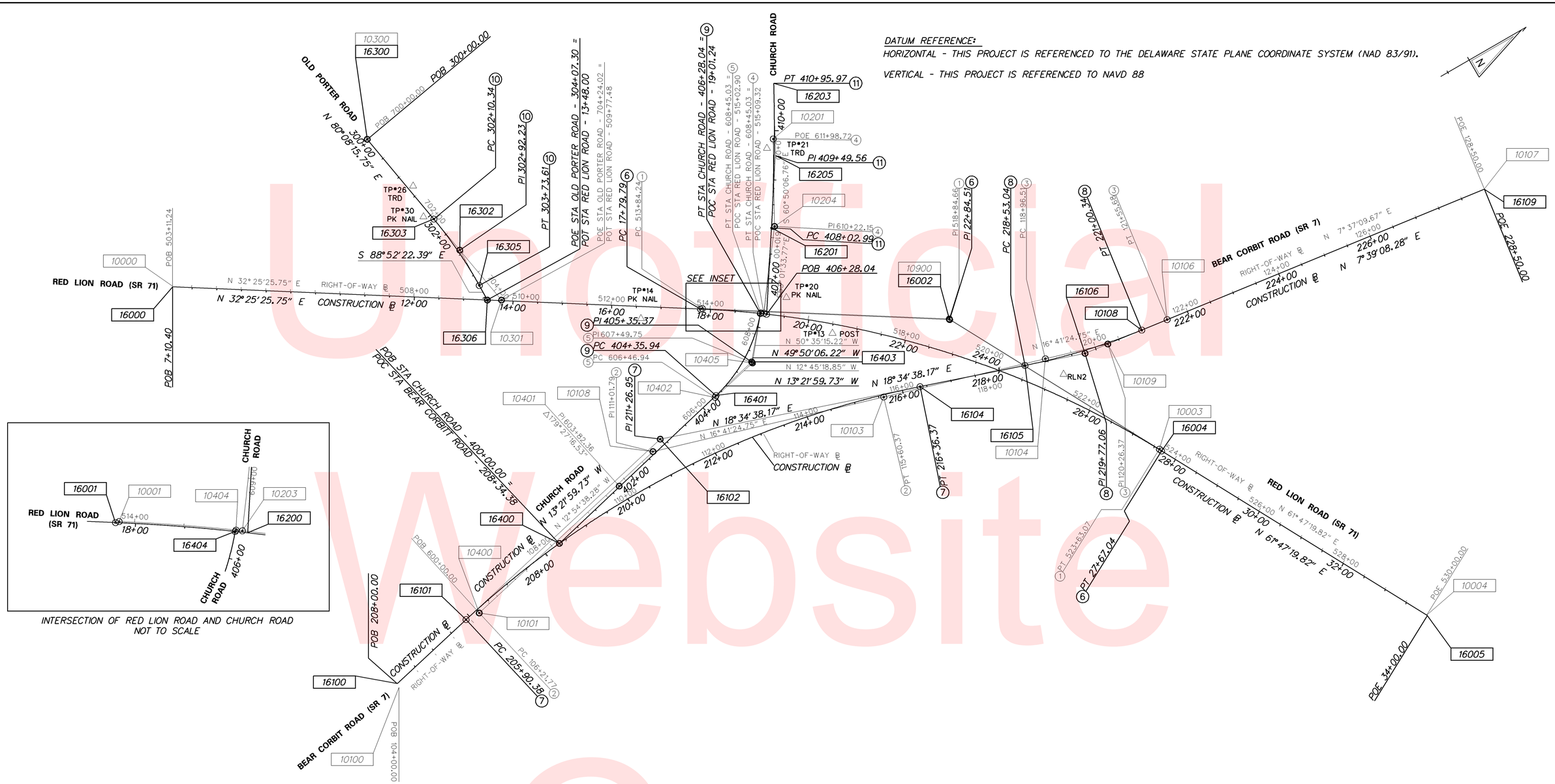
DATUM REFERENCE:
HORIZONTAL - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD 83/91).

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88



INTERSECTION OF RED LION ROAD AND CHURCH ROAD
NOT TO SCALE

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
RLN2	219+24.23	35.0407	585992.3254	586431.0483	36.63
13	20+52.37	18.5976	585628.7610	586125.2250	37.54
14	16+60.32	24.1685	585308.0490	585905.5180	32.72
20	406+64.08	38.1842	585584.2330	586015.8170	40.27
21	409+64.10	-14.5584	585701.1850	585734.5970	46.46
26	301+32.23	-10.7394	585042.8290	585442.6380	27.45
30	301+93.59	13.1415	585029.8110	585507.1830	27.46

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
16000	7+10.40	0.0000	585375.7909	584519.1748
16005	34+00.00	0.0000	586385.6982	587222.3330
16100	204+00.00	0.0000	584511.0166	586298.9087
16109	228+50.00	0.0000	586532.3063	586917.0473
16200	406+28.04	0.0000	585532.5415	586025.0211
16300	300+00.00	0.0000	585009.6000	585314.2027
16306	304+07.30	0.0000	585057.3802	585717.6604
16400	400+00.00	0.0000	584937.2499	586217.2281

R/W ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
10000	503+11.24	0.0000	585374.7363	584519.8484
10004	530+00.00	0.0000	586385.6273	587220.6110
10100	104+00.00	0.0000	584510.2272	586307.7071
10107	128+50.00	0.0000	586531.8866	586917.4050
10201	611+98.72	0.0000	585724.3672	585721.7264
10300	700+00.00	0.0000	585009.6000	585314.2027
10301	704+24.02	0.0000	585082.2272	585731.9608
10400	600+00.00	0.0000	584726.3904	586258.1569
10401	603+82.36	0.0000	585100.1011	586177.2907

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 100 200 300 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

HORIZONTAL AND VERTICAL CONTROL

SHEET NO. 8
TOTAL SHTS. 64

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1

Element: Circular

		STATION	NORTHING	EASTING
PC (	10001)	513+84.24	585425.5712	585950.0538
PI (	10900)	518+84.66	585847.9777	586218.3675
CC (	10002)		584401.5468	587562.1764
PT (	10003)	523+63.07	586084.5371	586659.3427

Radius: 1909.8600
Delta: 29° 21' 54.0648" Right
Degree of Curvature(Arc): 2° 59' 59.9961"
Length: 978.8343
Tangent: 500.4193
Chord: 968.1564
Middle Ordinate: 62.3661
External: 64.4715

Tangent Direction: N 32° 25' 25.7533" E
Radial Direction: S 57° 34' 34.2467" E
Chord Direction: N 47° 06' 22.7857" E
Radial Direction: S 28° 12' 40.1819" E
Tangent Direction: N 61° 47' 19.8181" E

2

Element: Circular

		STATION	NORTHING	EASTING
PC (	10101)	106+21.77	584726.3903	586258.1569
PI (	10108)	111+01.79	585194.2782	586150.9049
CC (	10102)		585132.3108	588028.9888
PT (	10103)	115+60.37	585654.0785	586288.7660

Radius: 1816.7600
Delta: 29° 36' 03.0325" Right
Degree of Curvature(Arc): 3° 09' 13.4427"
Length: 938.5966
Tangent: 480.0230
Chord: 928.1931
Middle Ordinate: 60.2774
External: 62.3459

Tangent Direction: N 12° 54' 38.2802" W
Radial Direction: N 77° 05' 21.7198" E
Chord Direction: N 1° 53' 23.2361" E
Radial Direction: S 73° 18' 35.2477" E
Tangent Direction: N 16° 41' 24.7523" E

3

Element: Circular

		STATION	NORTHING	EASTING
PC (	10104)	118+96.51	585976.0653	586385.3067
PI (	10109)	120+26.37	586100.4496	586422.6006
CC (	10105)		586446.2123	584817.2518
PT (	10106)	121+55.68	586229.1579	586439.8182

Radius: 1637.0200
Delta: 9° 04' 15.0872" Left
Degree of Curvature(Arc): 3° 30' 00.0175"
Length: 259.1670
Tangent: 129.8548
Chord: 258.8964
Middle Ordinate: 5.1261
External: 5.1422

Tangent Direction: N 16° 41' 24.7523" E
Radial Direction: S 73° 18' 35.2477" E
Chord Direction: N 12° 09' 17.2087" E
Radial Direction: S 82° 22' 50.3349" E
Tangent Direction: N 7° 37' 09.6651" E

4

Element: Circular

		STATION	NORTHING	EASTING
PC (	10203)	608+45.03	585528.8849	586020.5313
PI (	10204)	610+22.15	585635.4128	585879.0303
CC (	10202)		583455.7160	584459.7636
PT (	10201)	611+98.72	585721.7264	585724.3672

Radius: 2595.0000
Delta: 7° 48' 32.9826" Left
Degree of Curvature(Arc): 2° 12' 28.5474"
Length: 353.6870
Tangent: 177.1178
Chord: 353.4133
Middle Ordinate: 6.0234
External: 6.0374

Tangent Direction: N 53° 01' 33.7727" W
Radial Direction: N 36° 58' 26.2273" E
Chord Direction: N 56° 55' 50.2640" W
Radial Direction: N 29° 09' 53.2447" E
Tangent Direction: N 60° 50' 06.7553" W

5

Element: Circular

		STATION	NORTHING	EASTING
PC (	10402)	606+46.94	585358.1518	586118.8750
PI (	10405)	607+49.75	585458.4222	586096.1765
CC (	10403)		585291.9158	585826.2784
PT (	10404)	608+45.03	585523.6945	586016.7478

Radius: 300.0000
Delta: 37° 49' 56.3750" Left
Degree of Curvature(Arc): 19° 05' 54.9354"
Length: 198.0896
Tangent: 102.8075
Chord: 194.5106
Middle Ordinate: 16.2018
External: 17.1268

Tangent Direction: N 12° 45' 18.8481" W
Radial Direction: N 77° 14' 41.1519" E
Chord Direction: N 31° 40' 17.0356" W
Radial Direction: N 39° 24' 44.7770" E
Tangent Direction: N 50° 35' 15.2230" W

6

Element: Circular

		STATION	NORTHING	EASTING
PC (	16001)	17+79.79	585421.8488	585949.1719
PI (	16002)	22+84.51	585847.8903	586219.7945
CC (	16003)		584389.0122	587575.1675
PT (	16004)	27+67.04	586086.4854	586664.5645

Radius: 1926.2952
Delta: 29° 21' 54.0648" Right
Degree of Curvature(Arc): 2° 58' 27.8503"
Length: 987.2576
Tangent: 504.7256
Chord: 976.4878
Middle Ordinate: 62.9028
External: 65.0263

Tangent Direction: N 32° 25' 25.7533" E
Radial Direction: S 57° 34' 34.2467" E
Chord Direction: N 47° 06' 22.7857" E
Radial Direction: S 28° 12' 40.1819" E
Tangent Direction: N 61° 47' 19.8181" E

7

Element: Circular

		STATION	NORTHING	EASTING
PC (	16101)	205+90.38	584696.5851	586256.3716
PI (	16102)	211+26.95	585219.5902	586136.4853
CC (	16103)		585121.8417	588111.5575
PT (	16104)	216+36.37	585728.2019	586307.4274

Radius: 1903.3018
Delta: 31° 29' 16.4496" Right
Degree of Curvature(Arc): 3° 00' 37.2096"
Length: 1045.9930
Tangent: 536.5697
Chord: 1032.8794
Middle Ordinate: 71.4045
External: 74.1877

Tangent Direction: N 12° 54' 38.2802" W
Radial Direction: N 77° 05' 21.7198" E
Chord Direction: N 2° 49' 59.9447" E
Radial Direction: S 71° 25' 21.8305" E
Tangent Direction: N 18° 34' 38.1695" E

8

Element: Circular

		STATION	NORTHING	EASTING
PC (	16105)	218+53.04	585933.5737	586376.4520
PI (	16109)	219+77.06	586051.1377	586415.9647
CC (	16107)		586346.7648	585147.0664
PT (	16108)	221+00.34	586174.0596	586432.4802

Radius: 1296.9641
Delta: 10° 55' 29.8908" Left
Degree of Curvature(Arc): 4° 25' 03.6635"
Length: 247.3008
Tangent: 124.0264
Chord: 246.9264
Middle Ordinate: 5.8898
External: 5.9167

Tangent Direction: N 18° 34' 38.1695" E
Radial Direction: S 71° 25' 21.8305" E
Chord Direction: N 13° 06' 53.2241" E
Radial Direction: S 82° 20' 51.7213" E
Tangent Direction: N 7° 39' 08.2787" E

9

Element: Circular

		STATION	NORTHING	EASTING
PC (	16401)	404+35.94	585361.3828	586116.4467
PI (	16403)	405+35.37	585458.1172	586093.4609
CC (	16402)		585291.6117	585822.8188
PT (	16404)	406+28.04	585522.2472	586017.4791

Radius: 301.8035
Delta: 36° 28' 06.4850" Left
Degree of Curvature(Arc): 18° 59' 04.0736"
Length: 192.0964
Tangent: 99.4278
Chord: 188.8701
Middle Ordinate: 15.1550
External: 15.9562

Tangent Direction: N 13° 21' 59.7345" W
Radial Direction: N 76° 38' 00.2655" E
Chord Direction: N 31° 36' 02.9770" W
Radial Direction: N 40° 09' 53.7805" E
Tangent Direction: N 49° 50' 06.2195" W

10

Element: Circular

		STATION	NORTHING	EASTING
PC (	16303)	302+10.34	585045.6279	585521.4382
PI (	16302)	302+92.23	585059.6535	585602.1145
CC (	16304)		584206.9592	585667.2406
PT (	16305)	303+73.61	585058.0427	585683.9851

Radius: 851.2482
Delta: 10° 59' 21.8526" Right
Degree of Curvature(Arc): 6° 43' 50.8655"
Length: 163.2705
Tangent: 81.8864
Chord: 163.0203
Middle Ordinate: 3.9114
External: 3.9295

Tangent Direction: N 80° 08' 15.7533" E
Radial Direction: S 9° 51' 44.2467" E
Chord Direction: N 85° 37' 56.6796" E
Radial Direction: S 1° 07' 37.6059" W
Tangent Direction: S 88° 52' 22.3941" E

11

Element: Circular

		STATION	NORTHING	EASTING
PC (	16201)	408+02.99	585628.4557	585878.7110
PI (	16205)	409+49.56	585708.8148	585756.1291
CC (	16202)		582649.0399	583925.5418
PT (	16203)	410+95.97	585778.8326	585627.3602

Radius: 3562.55
Delta: 4° 42' 43.1127" Left
Degree of Curvature(Arc): 1° 36' 29.8022"
Length: 292.98
Tangent: 146.57
Chord: 292.90
Middle Ordinate: 3.01
External: 3.01

Tangent Direction: N 56° 45' 10.7203" W
Radial Direction: N 33° 14' 49.2797" E
Chord Direction: N 59° 06' 32.2766" W
Radial Direction: N 28° 32' 06.1671" E
Tangent Direction: N 61° 27' 53.8329" W

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

HORIZONTAL AND VERTICAL CONTROL

SHEET NO. 9
TOTAL SHTS. 64

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	P.C.C. CURB AND GUTTER TYPE 3-4	670'
2	P.C.C. CURB AND GUTTER TYPE 3-4	237'
3	P.C.C. CURB AND GUTTER TYPE 3-4	750'
4	P.C.C. CURB TYPE 2 **	91'

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTAL TO ITEM 705530 - TRIANGULAR CHANNELIZING ISLANDS.

ROADWAY CORE SUMMARY

NO.	STATION	OFFSET	DESCRIPTION
7	303+20	-13	12" HMA 6" BALLAST
8	302+45	6	13" HMA ORIGINAL
9	14+15	16	5" HMA ORIGINAL
10	14+65	7	6.5" HMA +6" CR

HMA - Hot Mix, PCC - Concrete, CR - Crusher Run

DRAINAGE INLET SCHEDULE

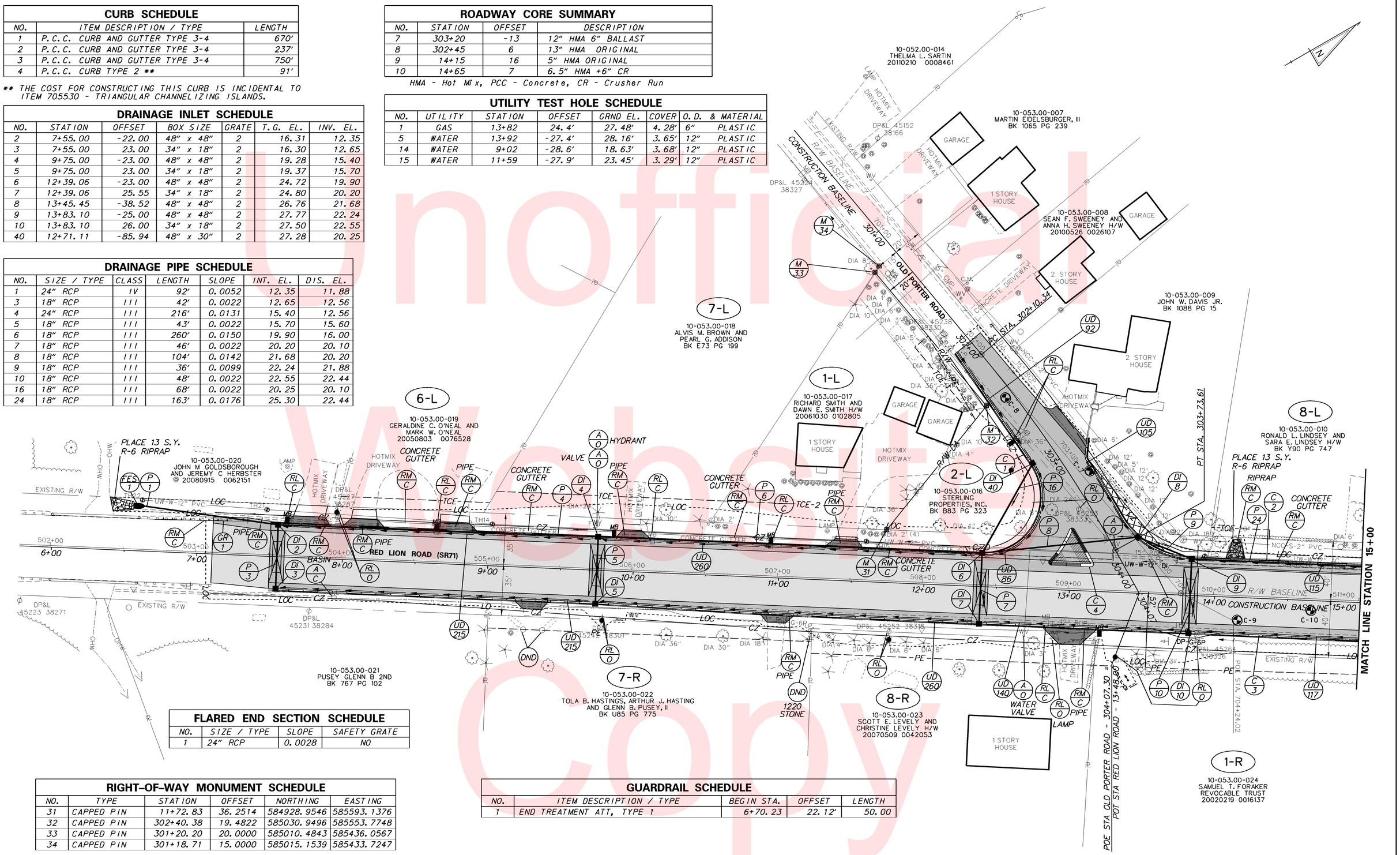
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
2	7+55.00	-22.00	48" x 48"	2	16.31	12.35
3	7+55.00	23.00	34" x 18"	2	16.30	12.65
4	9+75.00	-23.00	48" x 48"	2	19.28	15.40
5	9+75.00	23.00	34" x 18"	2	19.37	15.70
6	12+39.06	-23.00	48" x 48"	2	24.72	19.90
7	12+39.06	25.55	34" x 18"	2	24.80	20.20
8	13+45.45	-38.52	48" x 48"	2	26.76	21.68
9	13+83.10	-25.00	48" x 48"	2	27.77	22.24
10	13+83.10	26.00	34" x 18"	2	27.50	22.55
40	12+71.11	-85.94	48" x 30"	2	27.28	20.25

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
1	GAS	13+82	24.4'	27.48'	4.28'	6" PLASTIC
5	WATER	13+92	-27.4'	28.16'	3.65'	12" PLASTIC
14	WATER	9+02	-28.6'	18.63'	3.68'	12" PLASTIC
15	WATER	11+59	-27.9'	23.45'	3.29'	12" PLASTIC

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	24" RCP	IV	92'	0.0052	12.35	11.88
3	18" RCP	III	42'	0.0022	12.65	12.56
4	24" RCP	III	216'	0.0131	15.40	12.56
5	18" RCP	III	43'	0.0022	15.70	15.60
6	18" RCP	III	260'	0.0150	19.90	16.00
7	18" RCP	III	46'	0.0022	20.20	20.10
8	18" RCP	III	104'	0.0142	21.68	20.20
9	18" RCP	III	36'	0.0099	22.24	21.88
10	18" RCP	III	48'	0.0022	22.55	22.44
16	18" RCP	III	68'	0.0022	20.25	20.10
24	18" RCP	III	163'	0.0176	25.30	22.44



FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
1	24" RCP	0.0028	NO

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
31	CAPPED PIN	11+72.83	36.2514	584928.9546	585593.1376
32	CAPPED PIN	302+40.38	19.4822	585030.9496	585553.7748
33	CAPPED PIN	301+20.20	20.0000	585010.4843	585436.0567
34	CAPPED PIN	301+18.71	15.0000	585015.1539	585433.7247

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	END TREATMENT ATT, TYPE 1	6+70.23	22.12'	50.00

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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

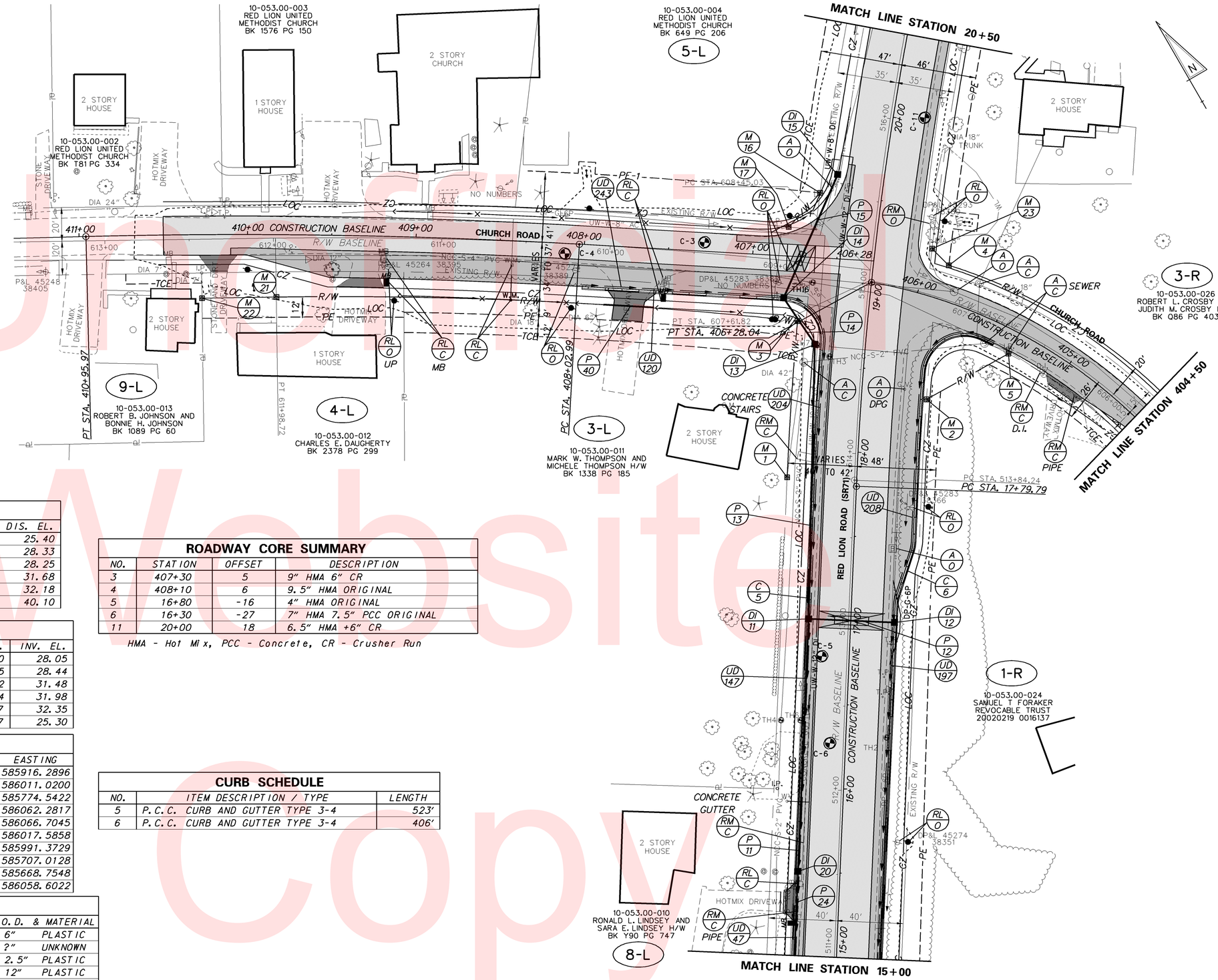
SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

CONSTRUCTION PLAN

SHEET NO. 10
TOTAL SHTS. 64



DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
11	18" RCP	III	146'	0.0182	28.05	25.40
12	18" RCP	III	49'	0.0022	28.44	28.33
13	18" RCP	III	160'	0.0202	31.48	28.25
14	18" RCP	III	32'	0.0100	31.98	31.68
15	18" RCP	III	79'	0.0022	32.35	32.18
40	15" RCP	III	30'	0.0333	41.10	40.10

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
11	17+00.00	-25.00'	48" x 30"	2	34.40	28.05
12	17+00.00	26.00'	34" x 18"	2	34.35	28.44
13	18+61.82	-30.00'	48" x 30"	1	37.32	31.48
14	406+80.18	25.00'	48" x 30"	2	39.44	31.98
15	19+61.90	-27.64	34" x 18"	1	37.07	32.35
20	15+50.00	-25.00	48" x 30"	2	31.27	25.30

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
1	CONCRETE	17+83.33	-41.2548	585447.0183	585916.2896
2	CAPPED PIN	18+34.19	38.6561	585445.7164	586011.0200
3	CAPPED PIN	18+74.85	-43.6496	585074.6610	585774.5422
4	CAPPED PIN	19+16.44	44.5383	585508.0232	586062.2817
5	CAPPED PIN	405+34.93	-13.7173	585444.9526	586066.7045
16	CAPPED PIN	19+49.82	-36.5002	585583.3761	586017.5858
17	CAPPED PIN	406+79.59	17.2648	585575.2368	585991.3729
21	CONCRETE	409+82.64	-37.0441	585691.3299	585707.0128
22	CAPPED PIN	410+27.27	-37.6876	585712.6808	585668.7548
23	CAPPED PIN	19+25.27	33.5276	585521.5310	586058.6022

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL	
2	GAS	16+31	24.3'	32.18'	4.55'	6"	PLASTIC
3	FM	18+55	-20.6'	37.61'	8.00'	?"	UNKNOWN
4	SEWER	16+39	-38.8'	37.83'	6.05'	2.5"	PLASTIC
6	WATER	16+54	-27.3'	33.27'	3.49'	12"	PLASTIC
7	WATER	18+61	-28.4'	37.58'	2.81'	12"	PLASTIC
16	FM	18+97	-34.6	38.51'	5.91	4"	PLASTIC

ROADWAY CORE SUMMARY

NO.	STATION	OFFSET	DESCRIPTION
3	407+30	5	9" HMA 6" CR
4	408+10	6	9.5" HMA ORIGINAL
5	16+80	-16	4" HMA ORIGINAL
6	16+30	-27	7" HMA 7.5" PCC ORIGINAL
11	20+00	18	6.5" HMA +6" CR

HMA - Hot Mix, PCC - Concrete, CR - Crusher Run

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
5	P.C.C. CURB AND GUTTER TYPE 3-4	523'
6	P.C.C. CURB AND GUTTER TYPE 3-4	406'

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

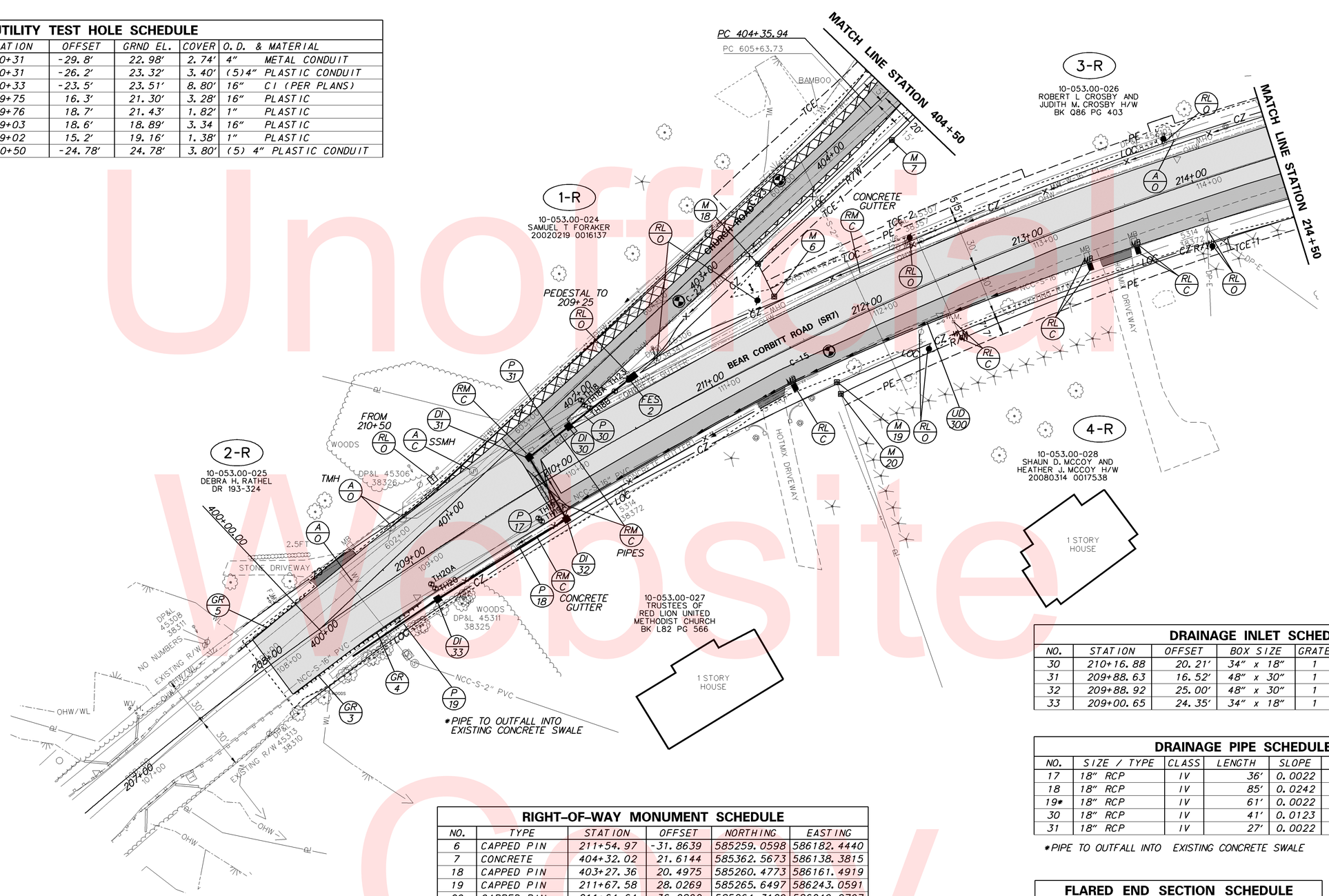
HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

CONSTRUCTION PLAN

SHEET NO. 11
TOTAL SHTS. 64

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
18	TELE	210+31	-29.8'	22.98'	2.74'	4" METAL CONDUIT
18A	TELE	210+31	-26.2'	23.32'	3.40'	(5)4" PLASTIC CONDUIT
18B	WATER	210+33	-23.5'	23.51'	8.80'	16" CI (PER PLANS)
19	FM	209+75	16.3'	21.30'	3.28'	16" PLASTIC
19A	TELE	209+76	18.7'	21.43'	1.82'	1" PLASTIC
20	FM	209+03	18.6'	18.89'	3.34	16" PLASTIC
20A	TELE	209+02	15.2'	19.16'	1.38'	1" PLASTIC
23	TELE	210+50	-24.78'	24.78'	3.80'	(5) 4" PLASTIC CONDUIT



DRAINAGE INLET SCHEDULE						
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
30	210+16.88	20.21'	34" x 18"	1	22.77	17.89
31	209+88.63	16.52'	48" x 30"	1	21.95	17.63
32	209+88.92	25.00'	48" x 30"	1	21.18	17.35
33	209+00.65	24.35'	34" x 18"	1	18.16	15.09

DRAINAGE PIPE SCHEDULE						
NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
17	18" RCP	IV	36'	0.0022	17.63	17.55
18	18" RCP	IV	85'	0.0242	17.35	15.29
19*	18" RCP	IV	61'	0.0022	15.09	14.96
30	18" RCP	IV	41'	0.0123	20.42	19.93
31	18" RCP	IV	27'	0.0022	17.89	17.83

*PIPE TO OUTFALL INTO EXISTING CONCRETE SWALE

FLARED END SECTION SCHEDULE			
NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
2	18" RCP	0.0022	YES

RIGHT-OF-WAY MONUMENT SCHEDULE					
NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
6	CAPPED PIN	211+54.97	-31.8639	585259.0598	586182.4440
7	CONCRETE	404+32.02	21.6144	585362.5673	586138.3815
18	CAPPED PIN	403+27.36	20.4975	585260.4773	586161.4919
19	CAPPED PIN	211+67.58	28.0269	585265.6497	586243.0591
20	CAPPED PIN	211+64.64	36.2802	585264.3129	586249.9797

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
3	GUARDRAIL TYPE 1-31	208+00.00	21.51'	40'
4	END TREATMENT ATT, TYPE 1	208+41.00	20.38'	50'
5	END TREATMENT ATT, TYPE 1	207+89.31	-17.00	50'

ROADWAY CORE SUMMARY			
NO.	STATION	OFFSET	DESCRIPTION
15	211+70	69	5.5" HMA 7.5" PCC SELECT
22	402+80	-6	8.5" HMA 6" SELECT
23	403+70	5	7" HMA +3" CR

HMA - Hot Mix, PCC - Concrete, CR - Crusher Run

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

CONSTRUCTION PLAN

SHEET NO. 12
TOTAL SHTS. 64

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DRAINAGE INLET SCHEDULE

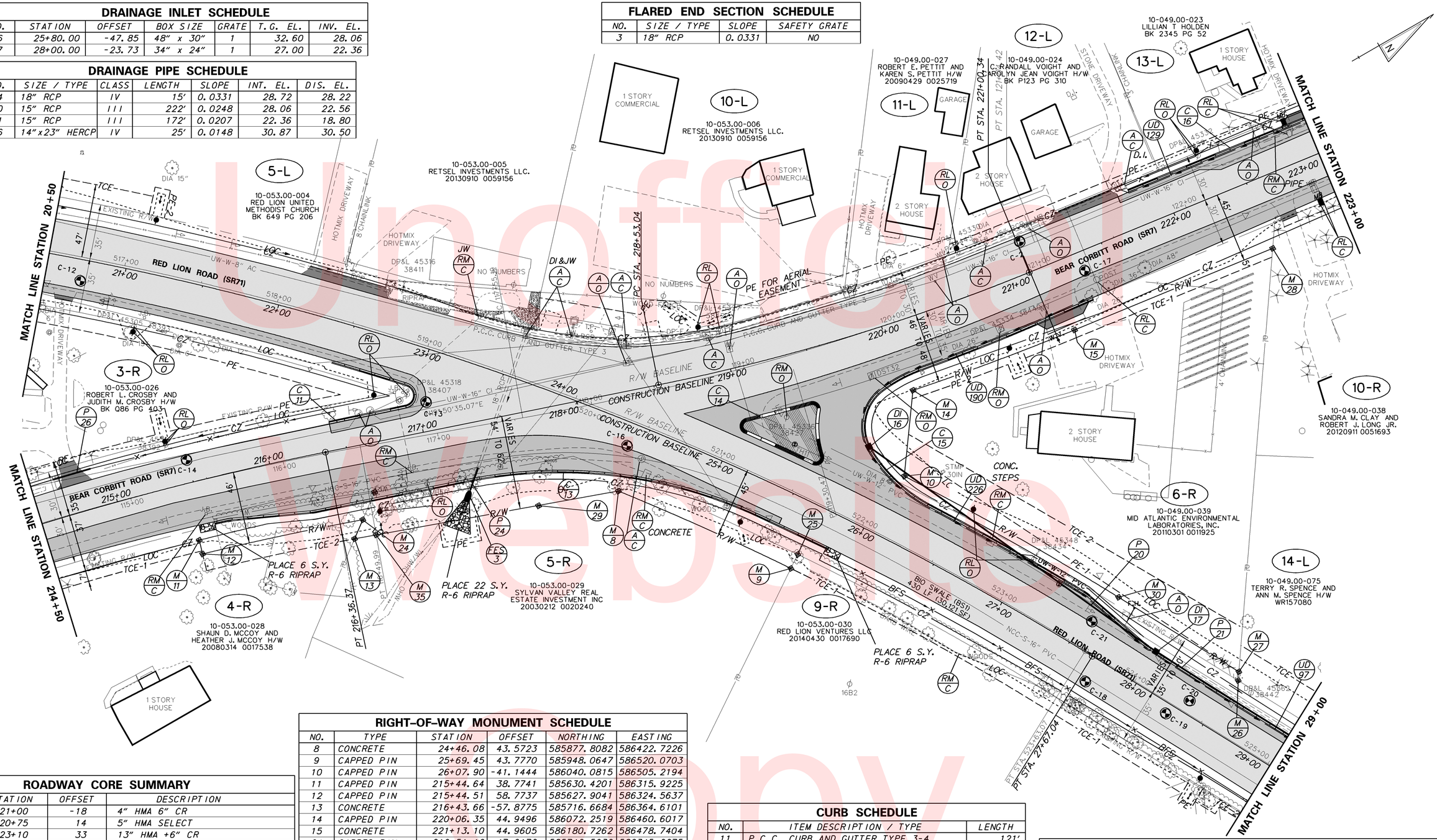
NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
16	25+80.00	-47.85	48" x 30"	1	32.60	28.06
17	28+00.00	-23.73	34" x 24"	1	27.00	22.36

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
24	18" RCP	IV	15'	0.0331	28.72	28.22
20	15" RCP	III	222'	0.0248	28.06	22.56
21	15" RCP	III	172'	0.0207	22.36	18.80
26	14"x23" HERCP	IV	25'	0.0148	30.87	30.50

FLARED END SECTION SCHEDULE

NO.	SIZE / TYPE	SLOPE	SAFETY GRATE
3	18" RCP	0.0331	NO



ROADWAY CORE SUMMARY

NO.	STATION	OFFSET	DESCRIPTION
2	221+00	-18	4" HMA 6" CR
12	20+75	14	5" HMA SELECT
13	23+10	33	13" HMA +6" CR
14	215+50	15	8" HMA +8" SELECT
16	24+40	15	6.5" HMA
17	221+35	13	9.5" HMA ORIGINAL
18	27+70	16	7" HMA +6" CR
19	28+25	6	5.5" HMA 9" PCC 6" SELECT
20	28+35	-9	6" HMA 8.5" PCC 6" SELECT
21	27+55	-19	7" HMA 6" SELECT

HMA - Hot Mix, PCC - Concrete, CR - Crusher Run

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	TYPE	STATION	OFFSET	NORTHING	EASTING
8	CONCRETE	24+46.08	43.5723	585877.8082	586422.7226
9	CAPPED PIN	25+69.45	43.7770	585948.0647	586520.0703
10	CAPPED PIN	26+07.90	-41.1444	586040.0815	586505.2194
11	CAPPED PIN	215+44.64	38.7741	585630.4201	586315.9225
12	CAPPED PIN	215+44.51	58.7737	585627.9041	586324.5637
13	CONCRETE	216+43.66	-57.8775	585716.6684	586364.6101
14	CAPPED PIN	220+06.35	44.9496	586072.2519	586460.6017
15	CONCRETE	221+13.10	44.9605	586180.7262	586478.7404
24	CAPPED PIN	216+51.16	47.0172	585742.5932	586345.2275
25	CAPPED PIN	25+69.47	33.7770	585956.3567	586514.4807
26	CAPPED PIN	28+54.30	-35.7516	586159.2374	586724.5538
27	CAPPED PIN	28+51.73	-40.7516	586162.4273	586719.9231
28	CAPPED PIN	222+49.68	44.8819	586316.0951	586496.8490
29	CONCRETE	217+62.76	60.4732	585828.7385	586405.0147
30	CONCRETE	27+61.64	-40.7594	586119.7856	586640.4338
35	CONCRETE	216+57.59	58.1605	585729.7859	586369.3055

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
11	P.C.C. CURB AND GUTTER TYPE 3-4	121'
13	P.C.C. CURB AND GUTTER TYPE 3-4	402'
14	P.C.C. CURB TYPE 2 **	153'
15	P.C.C. CURB AND GUTTER TYPE 3-4	516'
16	P.C.C. CURB AND GUTTER TYPE 3-4	121'

** THE COST FOR CONSTRUCTING THIS CURB IS INCIDENTAL TO ITEM 705530 - TRIANGULAR CHANNELIZING ISLANDS.

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
10	WATER	27+26	-28.3'	29.48'	3.51'	12" PLASTIC
11	WATER	25+38	-28.8'	33.45'	4.61'	12" PLASTIC

DELDOT SWM FACILITY SCHEDULE

NO.	TYPE / DESCRIPTION	LOCATION
539	BIOFILTRATION SWALE	STA 25+84.10 RT TO STA 30+16.50 RT

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

CONSTRUCTION PLAN

SHEET NO. 13
TOTAL SHTS. 64

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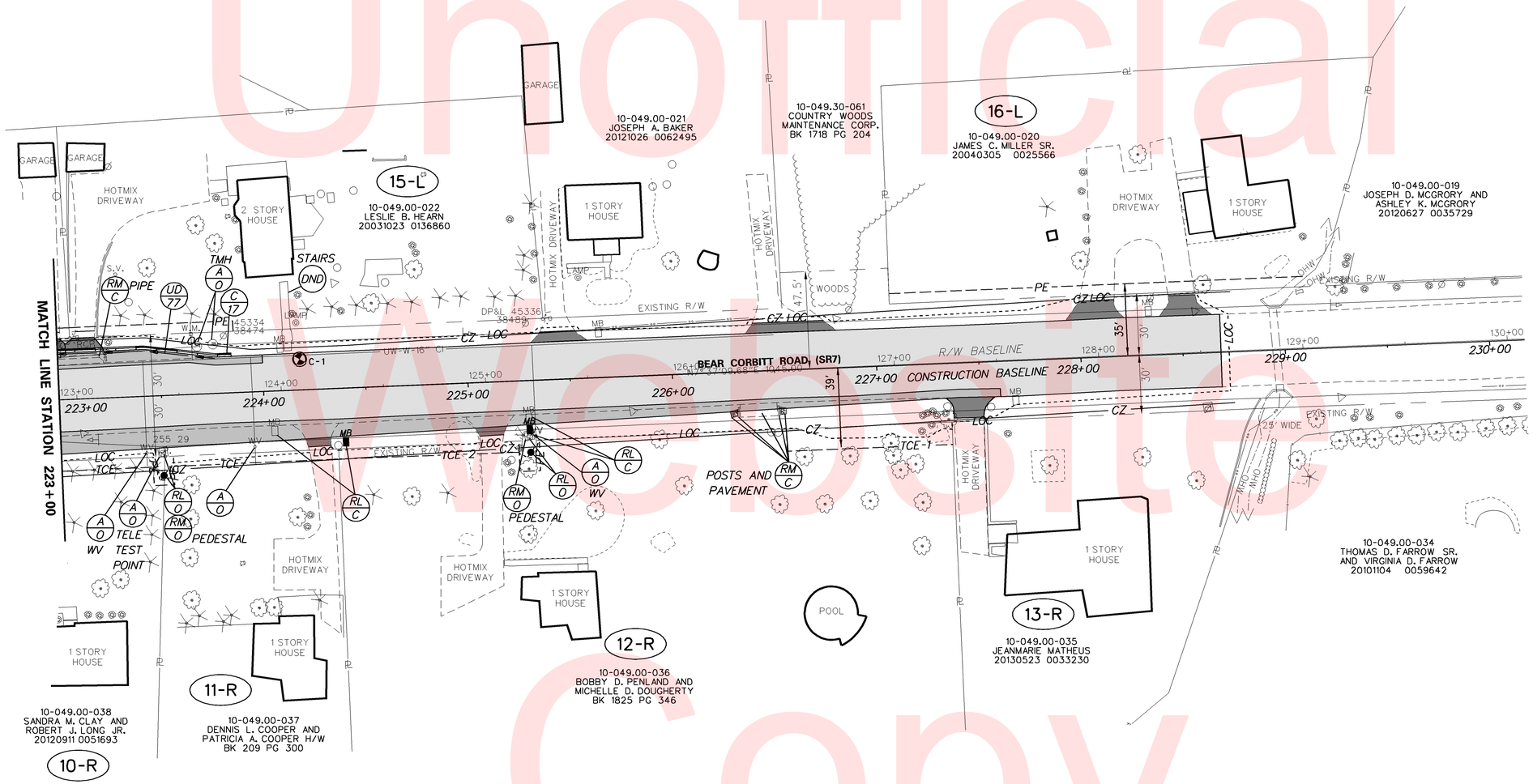
CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
17	P.C.C. CURB AND GUTTER TYPE 3-4	85'

ROADWAY CORE SUMMARY			
NO.	STATION	OFFSET	DESCRIPTION
1	224+20	-15	7.5" HMA 4" SELECT ON ORIGINAL

HMA - Hot Mix, PCC - Concrete, CR - Crusher Run



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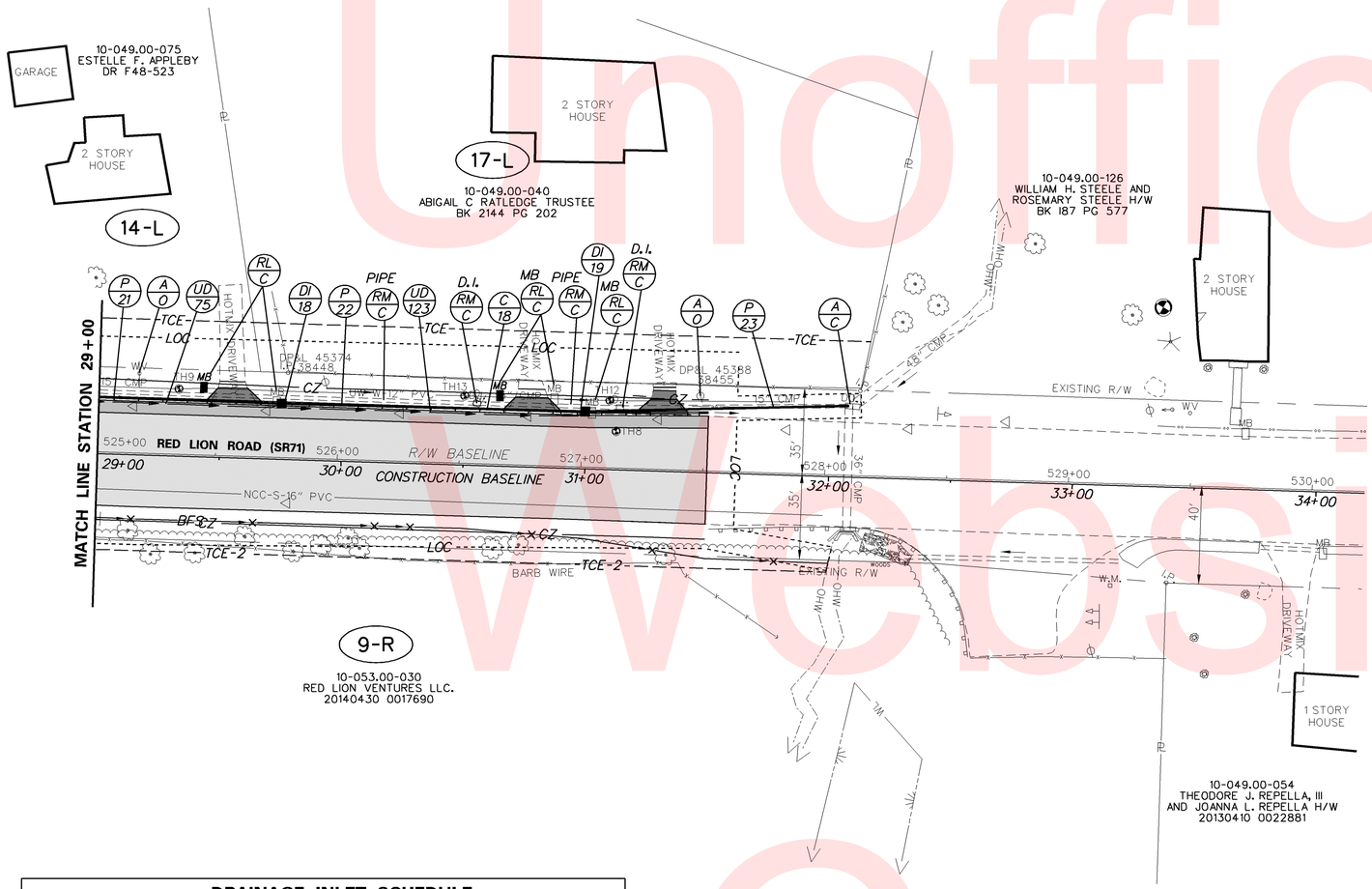
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	CONSTRUCTION PLAN	SHEET NO. 14
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 64
					CHECKED BY: JKL		



DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
18	25+75.00	-23.00	34" x 24"	1	23.24	18.60
19	31+00.00	-23.56	34" x 24"	1	22.59	17.10

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
22	15" RCP	III	122'	0.0107	18.60	17.30
23	15" RCP	III	107'	0.0113	17.10	15.89

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
8	CABLE	31+12	-15.9'	23.04'	2.02'	0.5" UNKNOWN
9	WATER	29+33	-27.6'	25.05'	4.36'	12" PLASTIC
12	WATER	31+09	-28.4'	23.47'	3.24'	12" PLASTIC
13	WATER	30+50	-28.5'	23.99'	3.96'	12" PLASTIC

DELDOT SWM FACILITY SCHEDULE

NO.	TYPE / DESCRIPTION	LOCATION
BSF	BIO-SWALE	STA 25+84.10 RT TO STA 30+16.50 RT

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
18	P.C.C. CURB AND GUTTER TYPE 3-4	250'

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

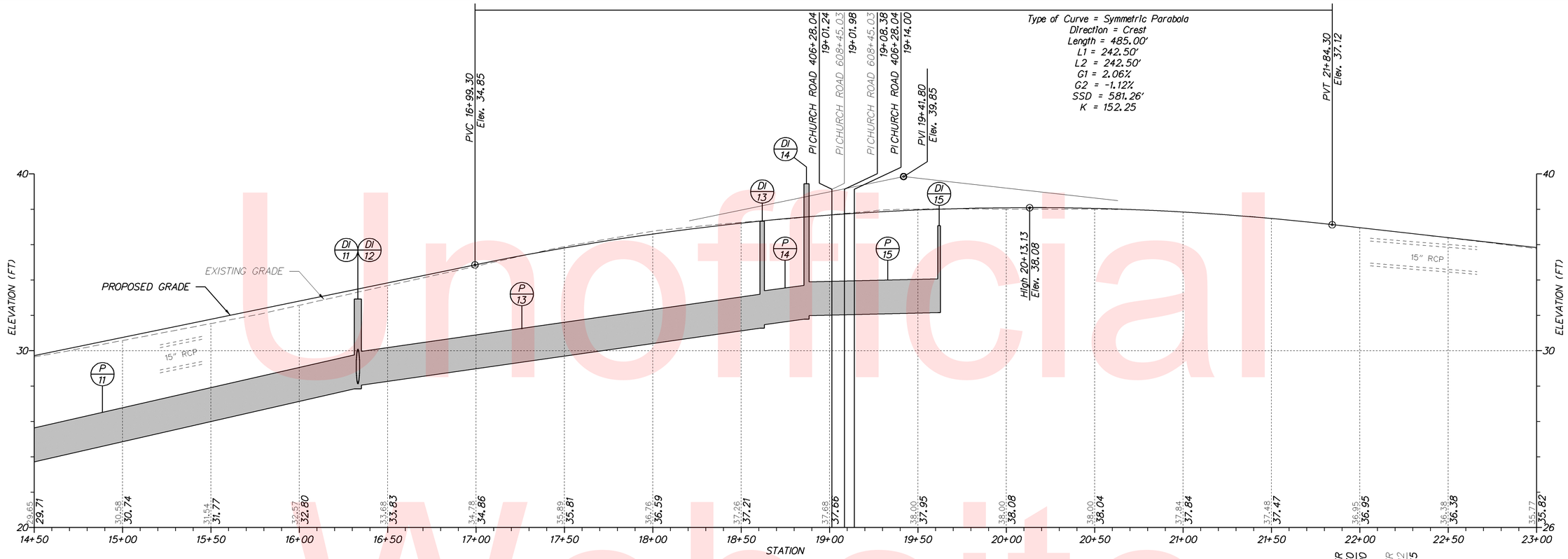
SCALE 0 30 60 90 FEET

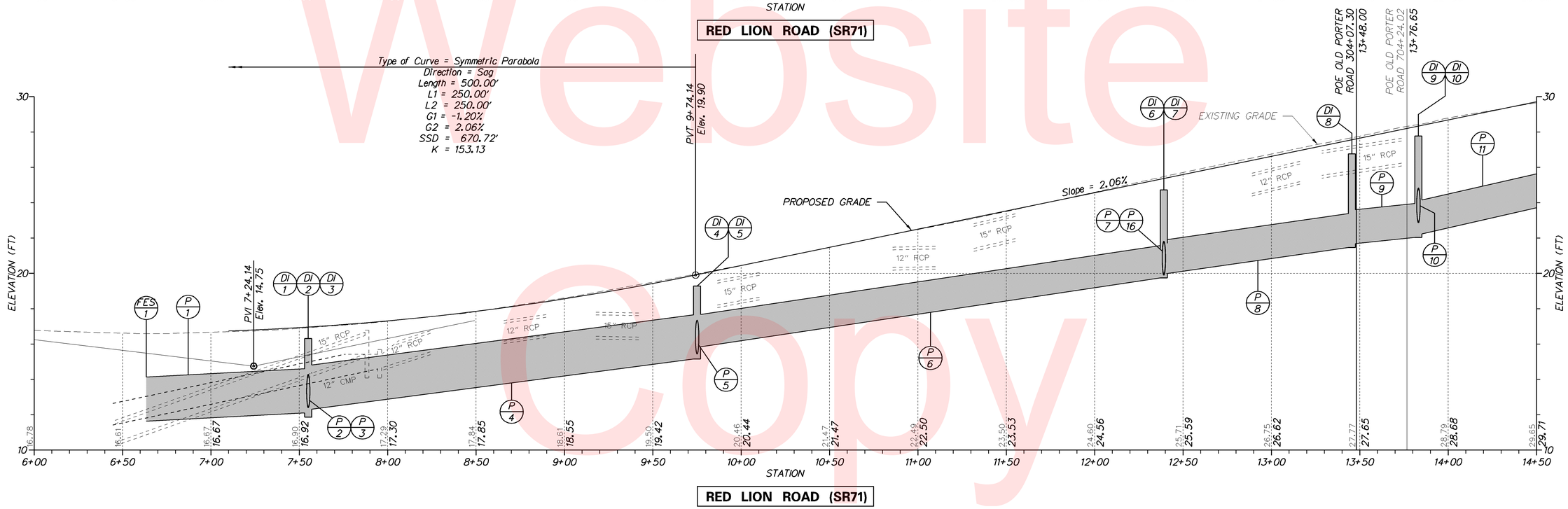
HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

CONSTRUCTION PLAN

SHEET NO. 15
TOTAL SHTS. 64





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VERTICAL SCALE FEET 0 30 60 90

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

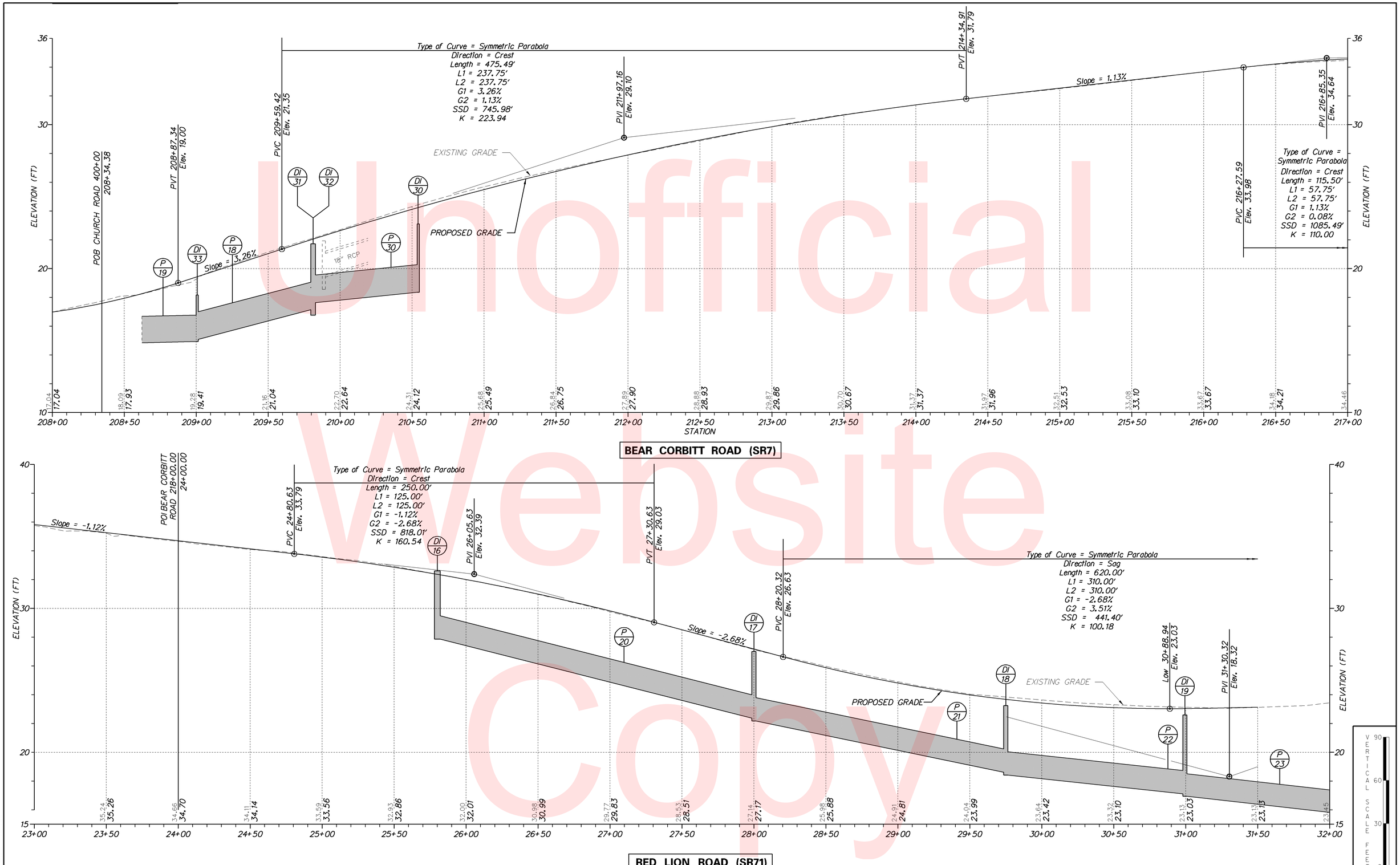
SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	NA
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

PROFILES

SHEET NO. 16
TOTAL SHTS. 35



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	NA
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

PROFILES

SHEET NO. 17
TOTAL SHTS. 35

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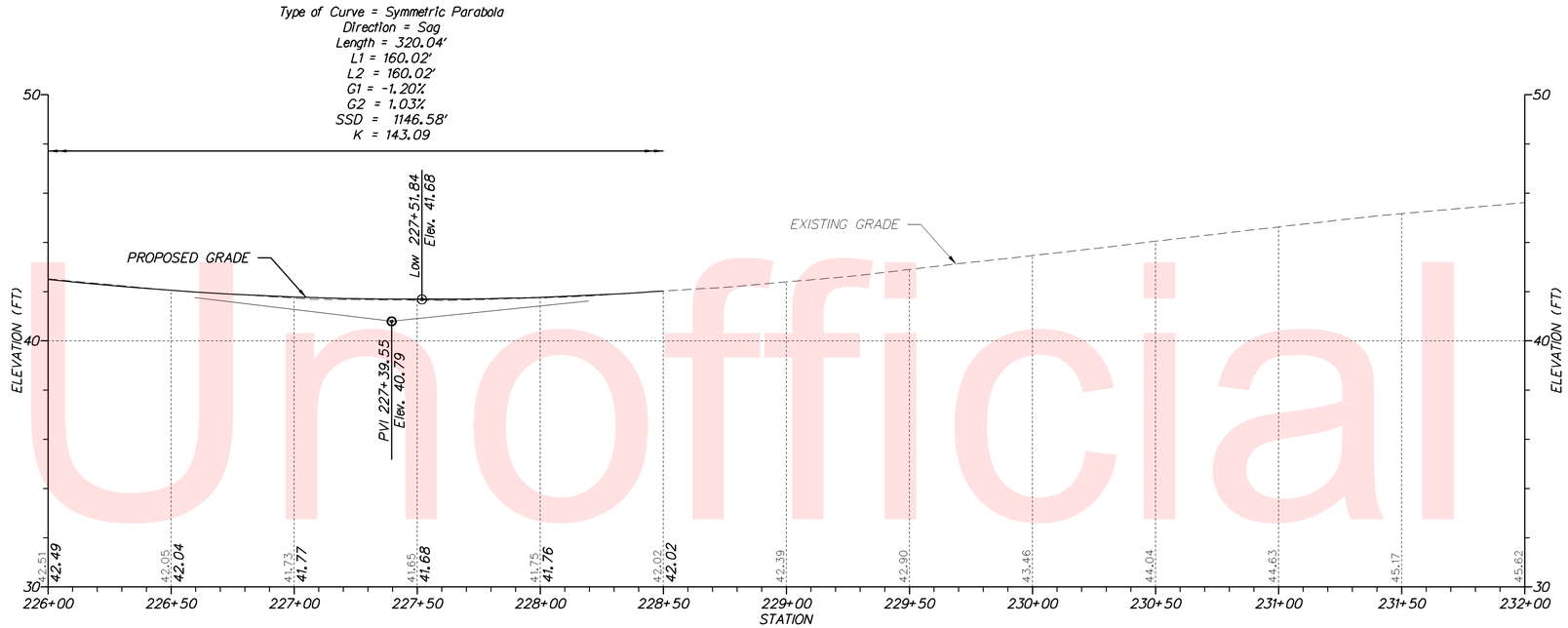
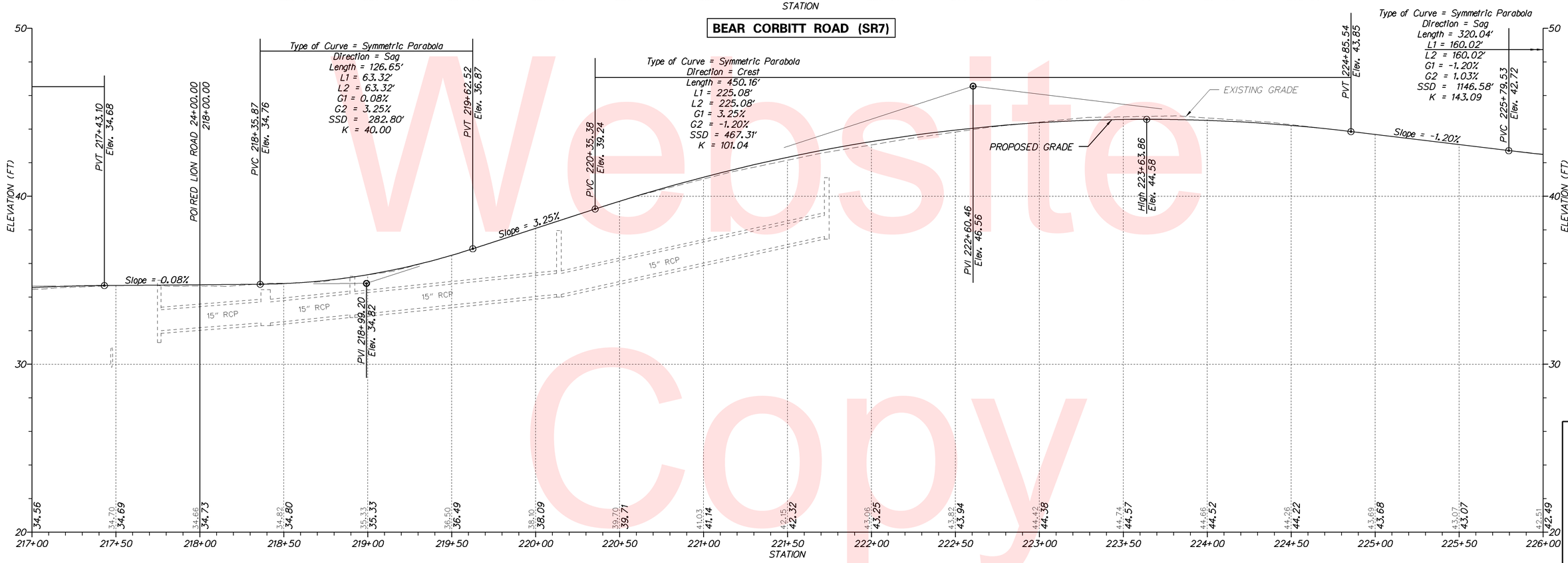


BEAR CORBITT ROAD (SR7)



BEAR CORBITT ROAD (SR7)

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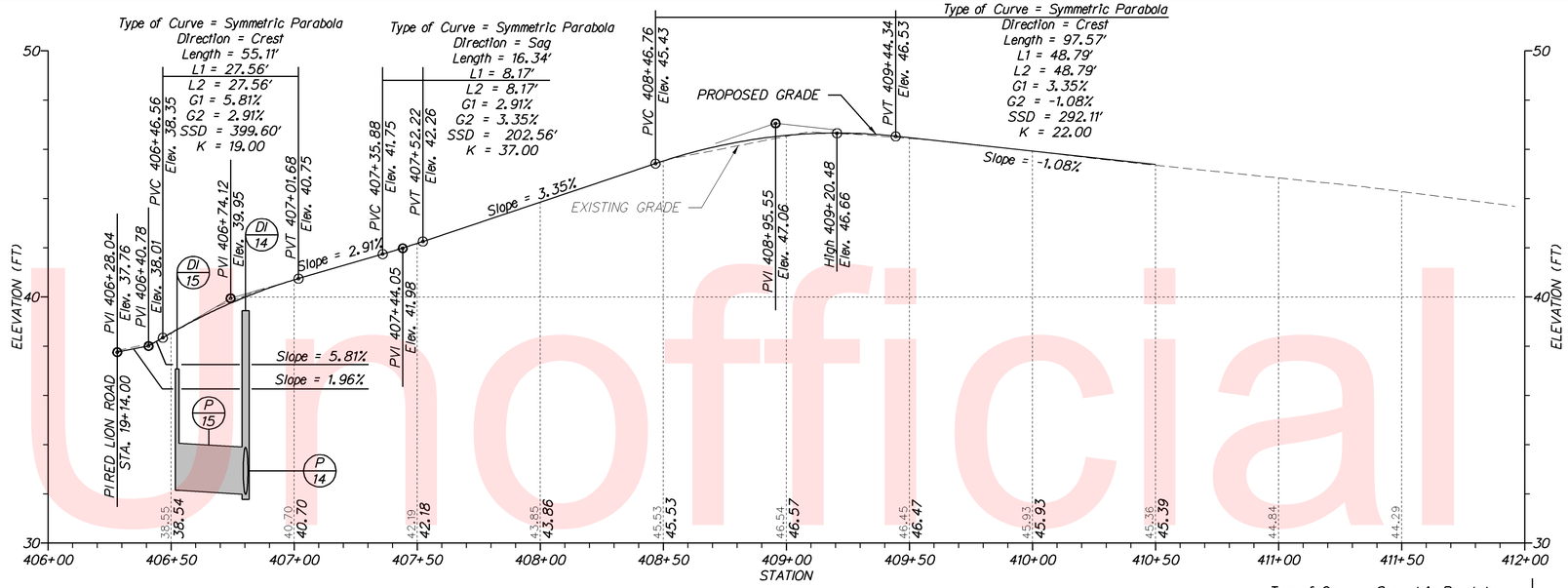
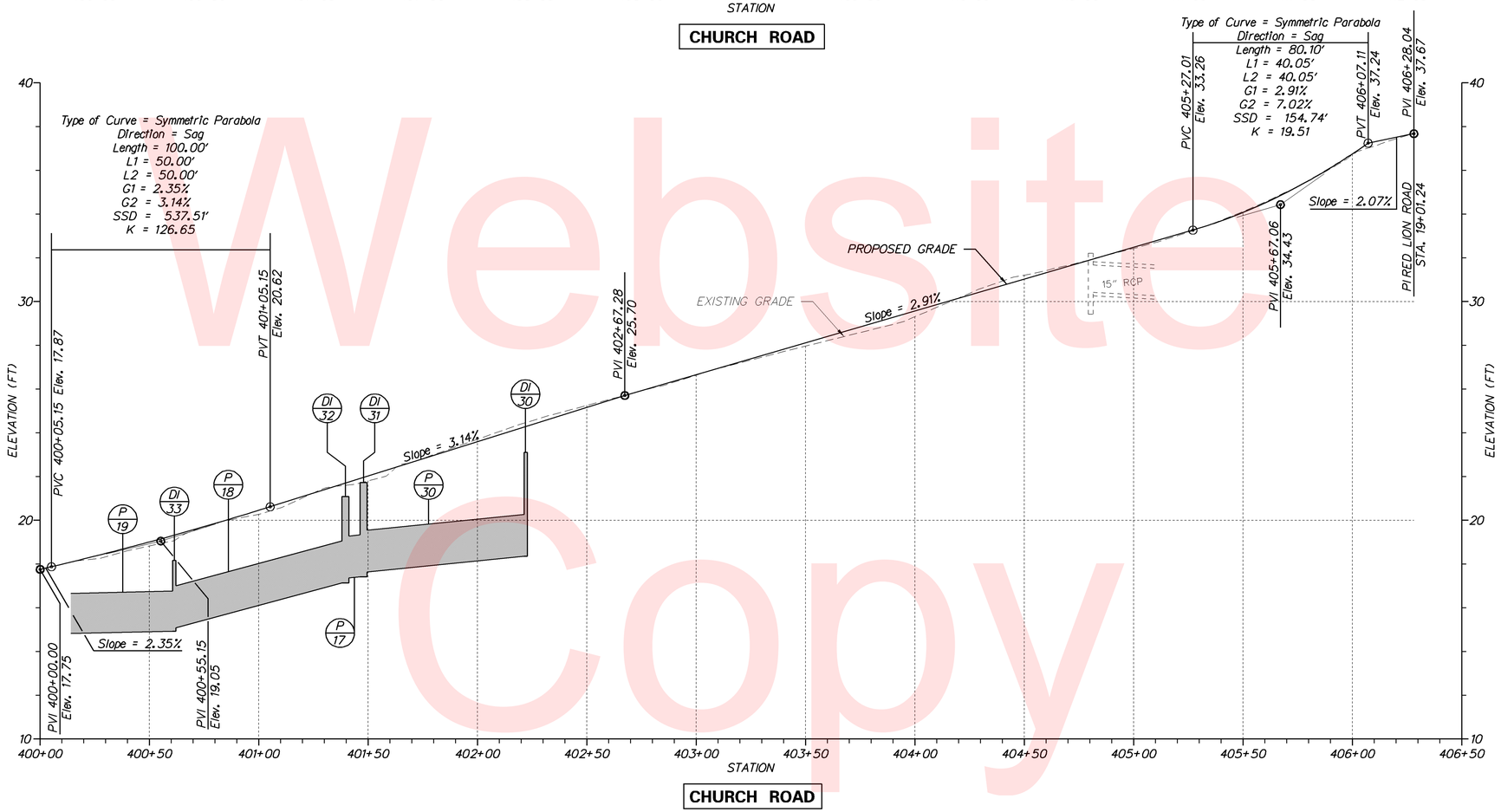
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	**HSIP NCC SR 71, OLD PORTER ROAD TO SR 7**	CONTRACT T201000701	BRIDGE NO. NA	**PROFILES**	SHEET NO. 18
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 35
					CHECKED BY: JKL		





VERTICAL SCALE FEET 0 30 60 90

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. NA	PROFILES	SHEET NO. 19
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 35
					CHECKED BY: JKL		

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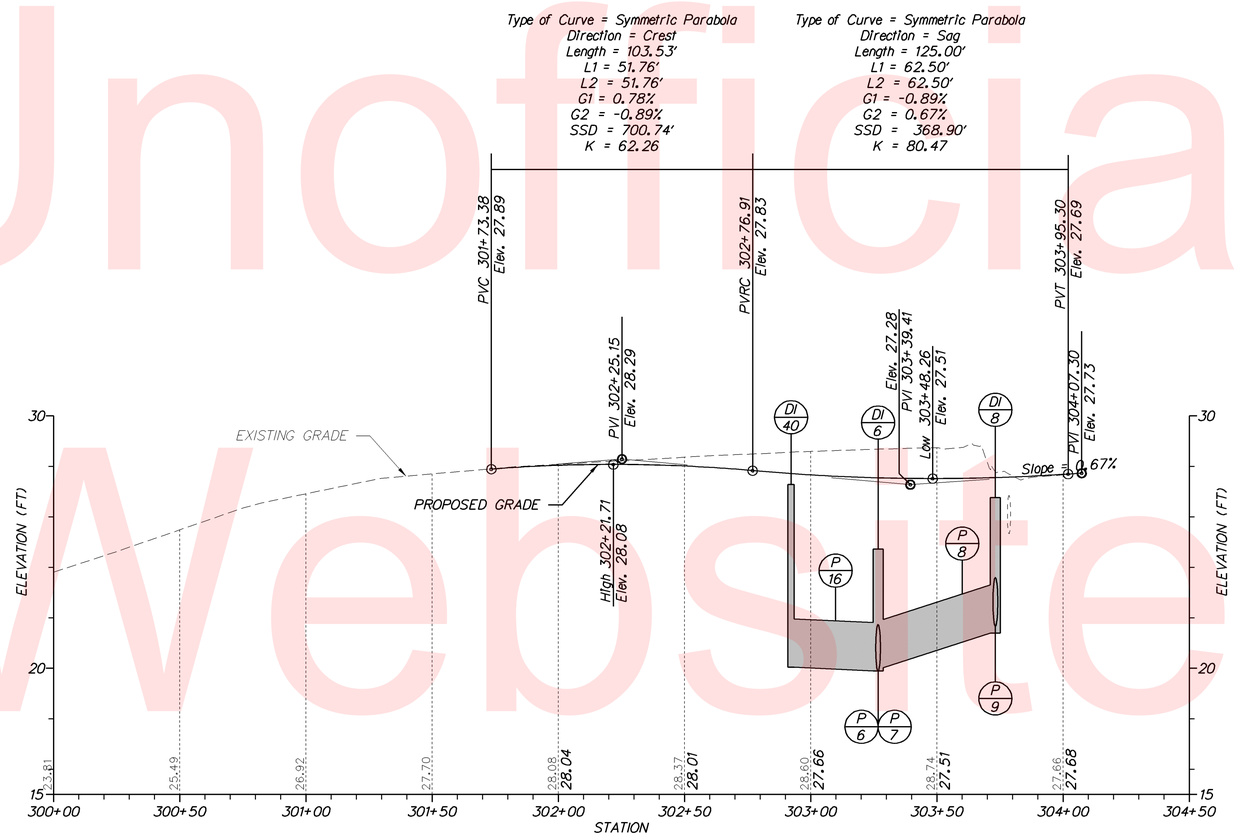

OLD PORTER ROAD

VERTICAL SCALE FEET 0 30 60 90

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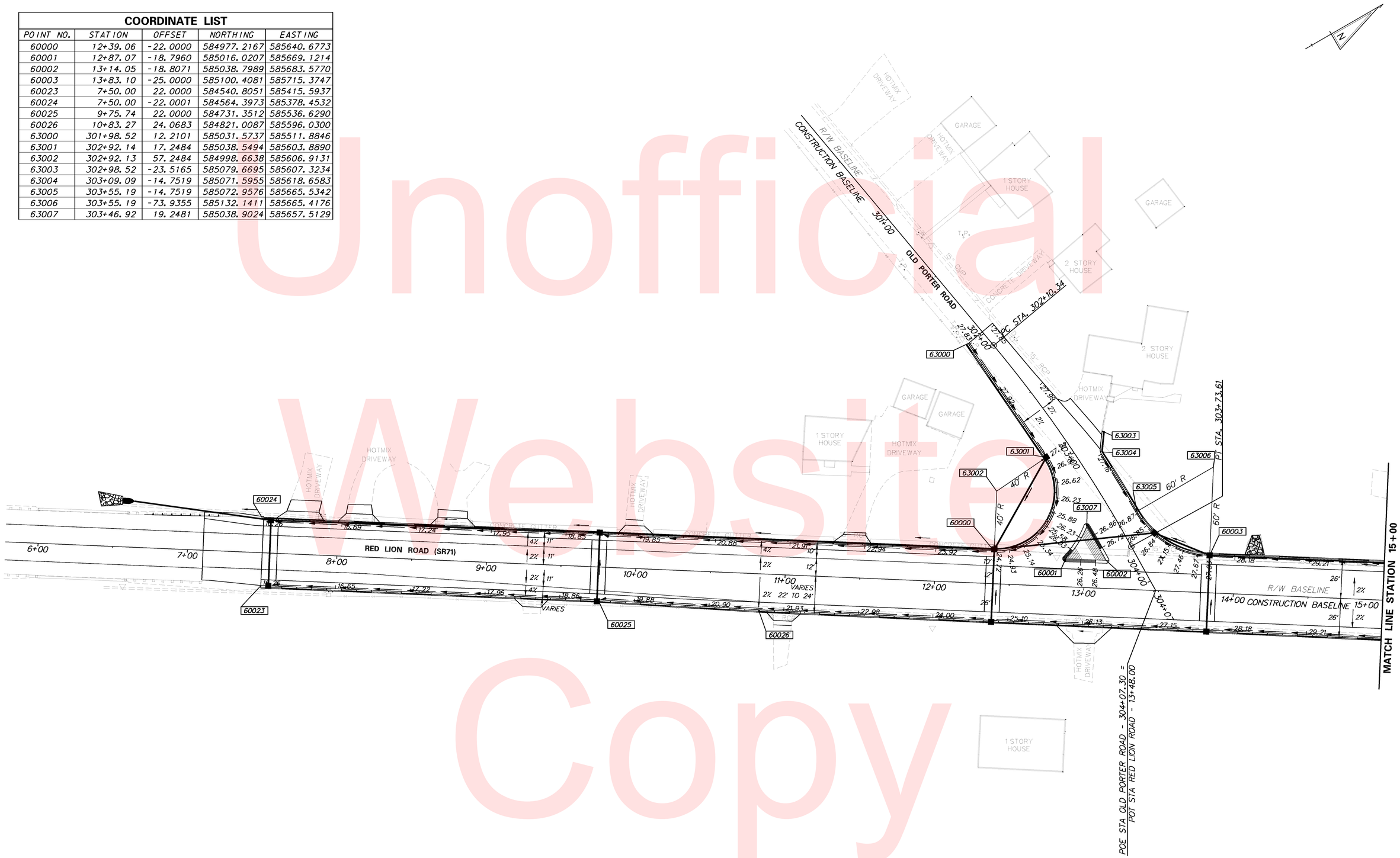
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. NA	PROFILES	SHEET NO. 20
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 35
					CHECKED BY: JKL		

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60000	12+39.06	-22.0000	584977.2167	585640.6773
60001	12+87.07	-18.7960	585016.0207	585669.1214
60002	13+14.05	-18.8071	585038.7989	585683.5770
60003	13+83.10	-25.0000	585100.4081	585715.3747
60023	7+50.00	22.0000	584540.8051	585415.5937
60024	7+50.00	-22.0001	584564.3973	585378.4532
60025	9+75.74	22.0000	584731.3512	585536.6290
60026	10+83.27	24.0683	584821.0087	585596.0300
63000	301+98.52	12.2101	585031.5737	585511.8846
63001	302+92.14	17.2484	585038.5494	585603.8890
63002	302+92.13	57.2484	584998.6638	585606.9131
63003	302+98.52	-23.5165	585079.6695	585607.3234
63004	303+09.09	-14.7519	585071.5955	585618.6583
63005	303+55.19	-14.7519	585072.9576	585665.5342
63006	303+55.19	-73.9355	585132.1411	585665.4176
63007	303+46.92	19.2481	585038.9024	585657.5129



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

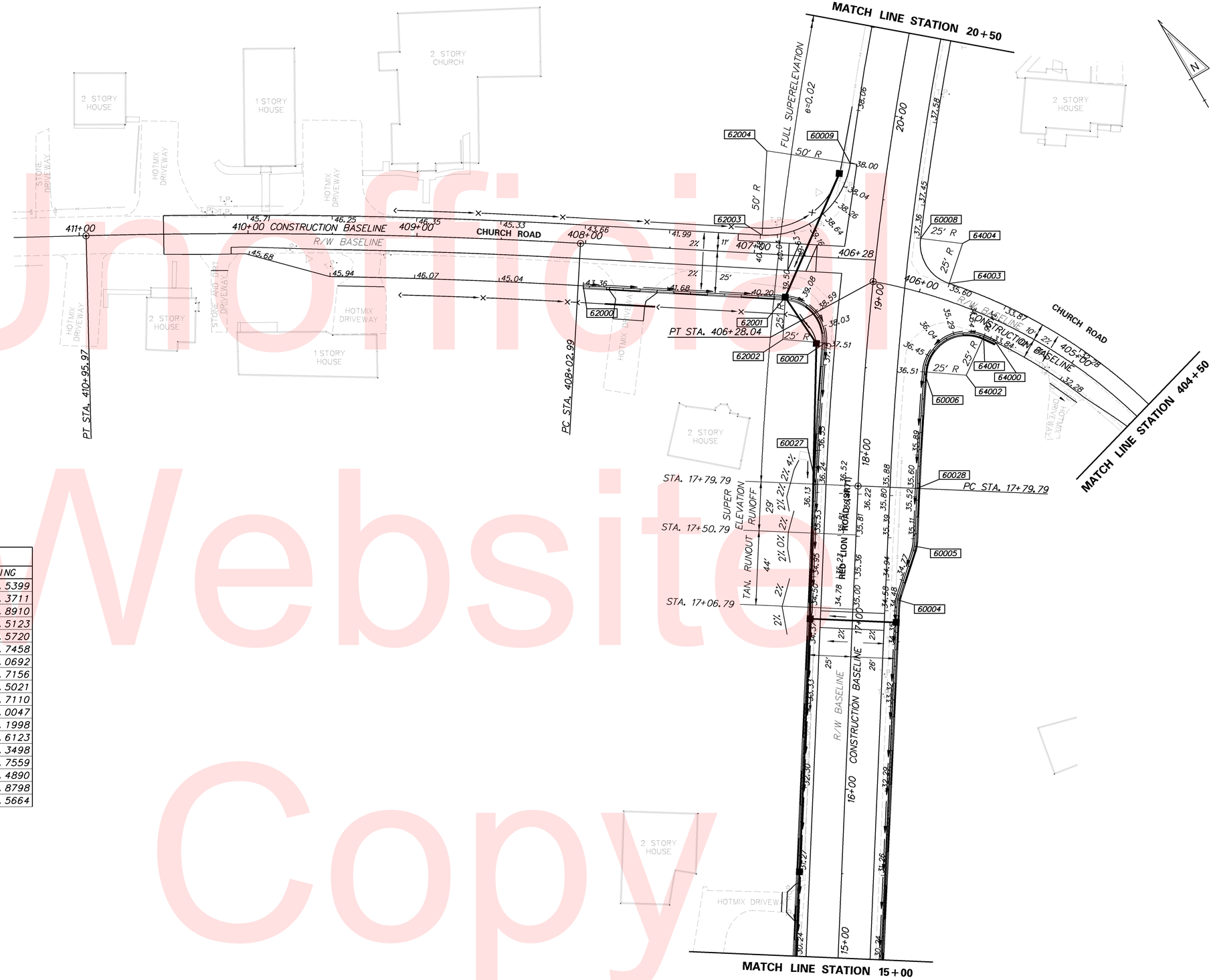
SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

GRADES AND GEOMETRICS

SHEET NO. 21
TOTAL SHTS. 64



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60004	17+13.43	26.0000	585351.8966	585935.5399
60005	17+45.57	35.0000	585374.2030	585960.3711
60006	18+50.29	35.0000	585460.8200	586016.8910
60007	18+62.52	-25.0000	585505.0123	585974.5123
60008	19+29.99	25.0102	585530.3597	586054.5720
60009	19+68.72	-22.0661	585589.7045	586040.7458
60027	17+79.79	-25.0000	585435.2533	585928.0692
60028	17+79.79	35.0000	585403.0826	585978.7156
62000	408+00.00	-25.0000	585605.9107	585867.5021
62001	406+80.18	-25.0000	585540.2183	585967.7110
62002	406+80.18	-50.0000	585519.3104	585954.0047
62003	406+96.02	11.0000	585579.0105	585974.1998
62004	406+96.02	61.0000	585620.8263	586001.6123
64000	405+45.98	-12.0000	585454.7404	586062.3498
64001	405+54.31	-12.0000	585461.2897	586057.7559
64002	405+54.31	-37.0000	585446.6523	586037.4890
64003	405+84.81	10.0000	585498.7445	586055.8798
64004	405+84.81	35.0000	585515.3521	586074.5664

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

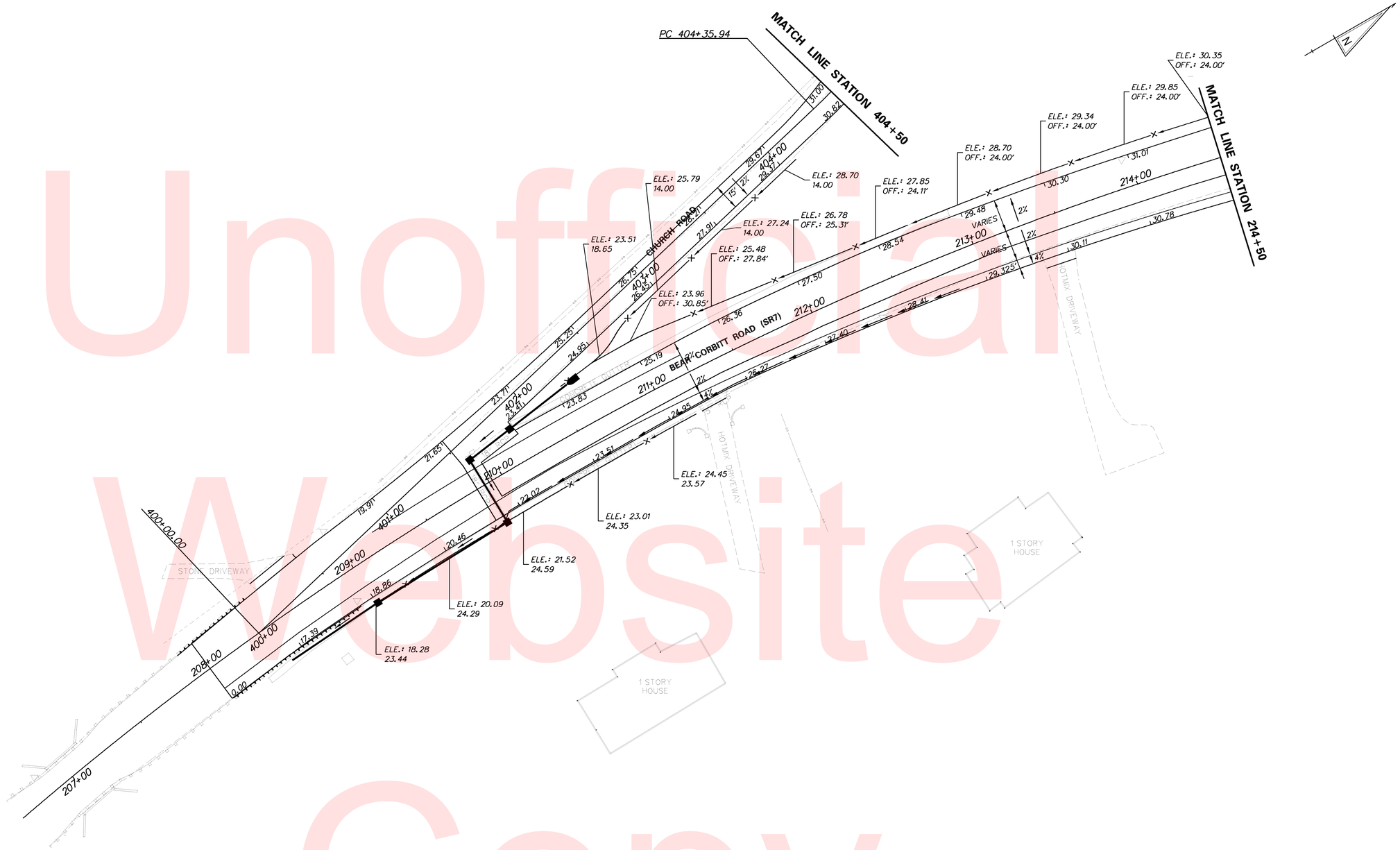
SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

GRADES AND GEOMETRICS

SHEET NO. 22
TOTAL SHTS. 64



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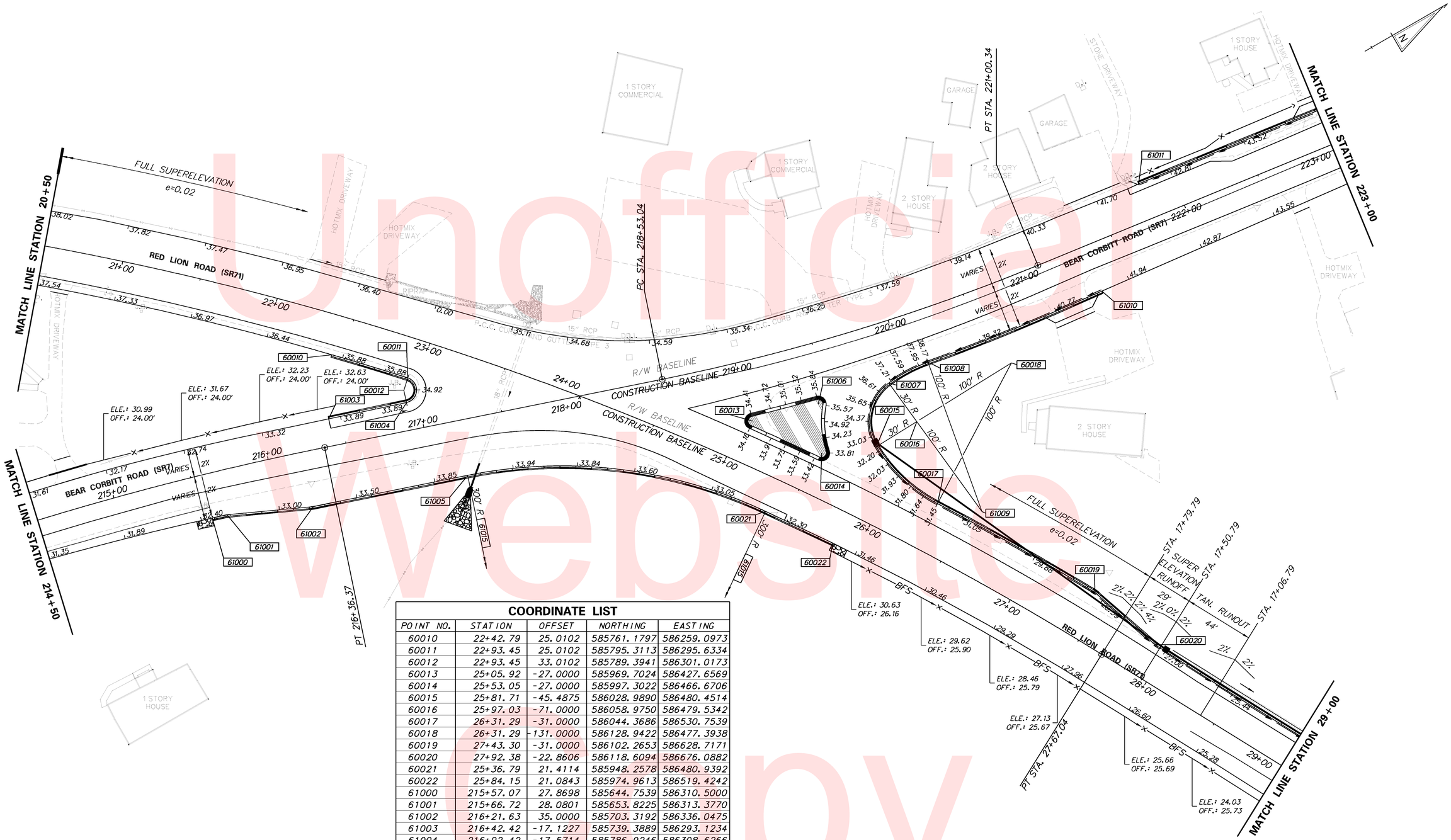
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	GRADES AND GEOMETRICS	SHEET NO. 23
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 64
					CHECKED BY: JKL		



COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60010	22+42.79	25.0102	585761.1797	586259.0973
60011	22+93.45	25.0102	585795.3113	586295.6334
60012	22+93.45	33.0102	585789.3941	586301.0173
60013	25+05.92	-27.0000	585969.7024	586427.6569
60014	25+53.05	-27.0000	585997.3022	586466.6706
60015	25+81.71	-45.4875	586028.9890	586480.4514
60016	25+97.03	-71.0000	586058.9750	586479.5342
60017	26+31.29	-31.0000	586044.3686	586530.7539
60018	26+31.29	-131.0000	586128.9422	586477.3938
60019	27+43.30	-31.0000	586102.2653	586628.7171
60020	27+92.38	-22.8606	586118.6094	586676.0882
60021	25+36.79	21.4114	585948.2578	586480.9392
60022	25+84.15	21.0843	585974.9613	586519.4242
61000	215+57.07	27.8698	585644.7539	586310.5000
61001	215+66.72	28.0801	585653.8225	586313.3770
61002	216+21.63	35.0000	585703.3192	586336.0475
61003	216+42.42	-17.1227	585739.3889	586293.1234
61004	216+92.42	-17.5714	585786.9246	586308.6266
61005	217+21.09	35.0000	585797.3552	586367.5935
61006	219+43.53	37.9717	586010.7324	586439.0168
61007	219+88.62	37.7445	586055.8874	586449.6935
61008	220+15.40	32.9539	586083.7963	586450.7265
61009	220+17.39	132.9315	586066.1793	586549.1624
61010	221+31.45	30.3459	586200.8594	586466.6996
61011	221+78.55	-23.3024	586254.6801	586419.8005
61015	217+21.09	335.0000	585701.7802	586651.9619

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

GRADES AND GEOMETRICS

SHEET NO. 24
TOTAL SHTS. 64

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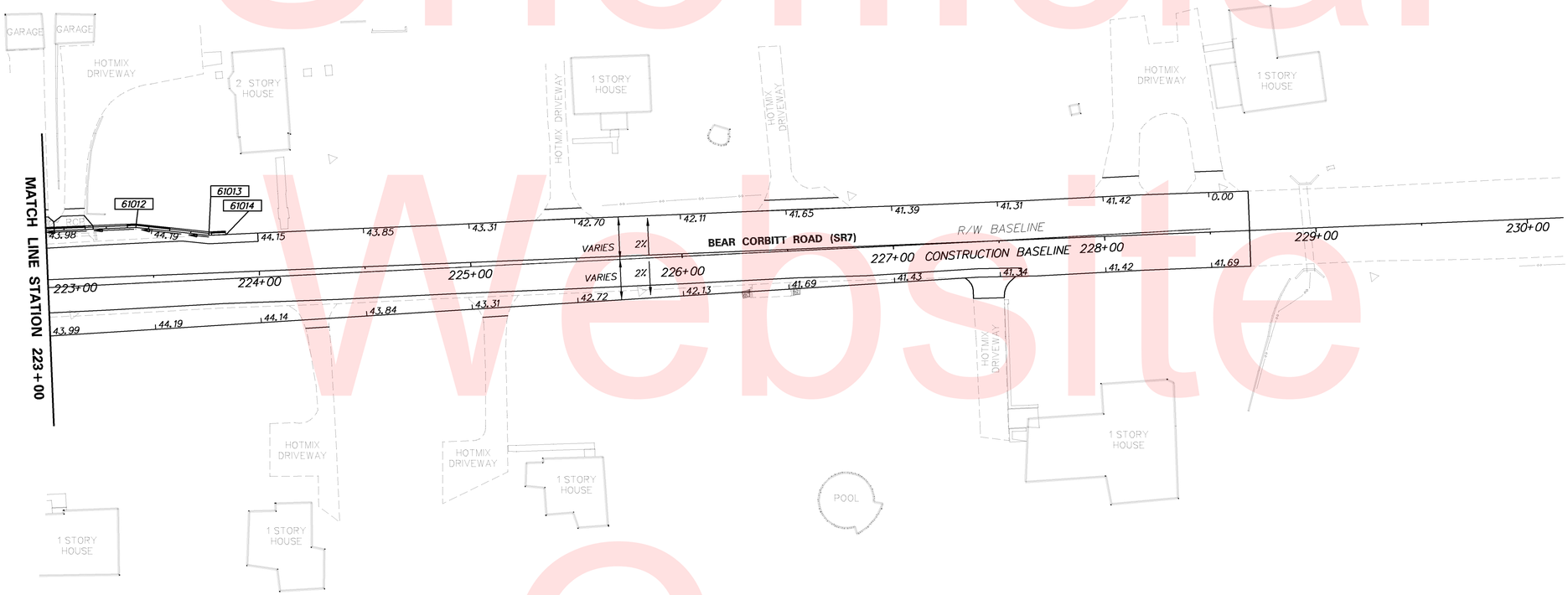
COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
61012	223+42.55	-23.0000	586417.1839	586441.9392
61013	223+76.89	-17.8490	586450.5322	586451.6171
61014	223+84.91	-17.9103	586458.4798	586452.6231



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

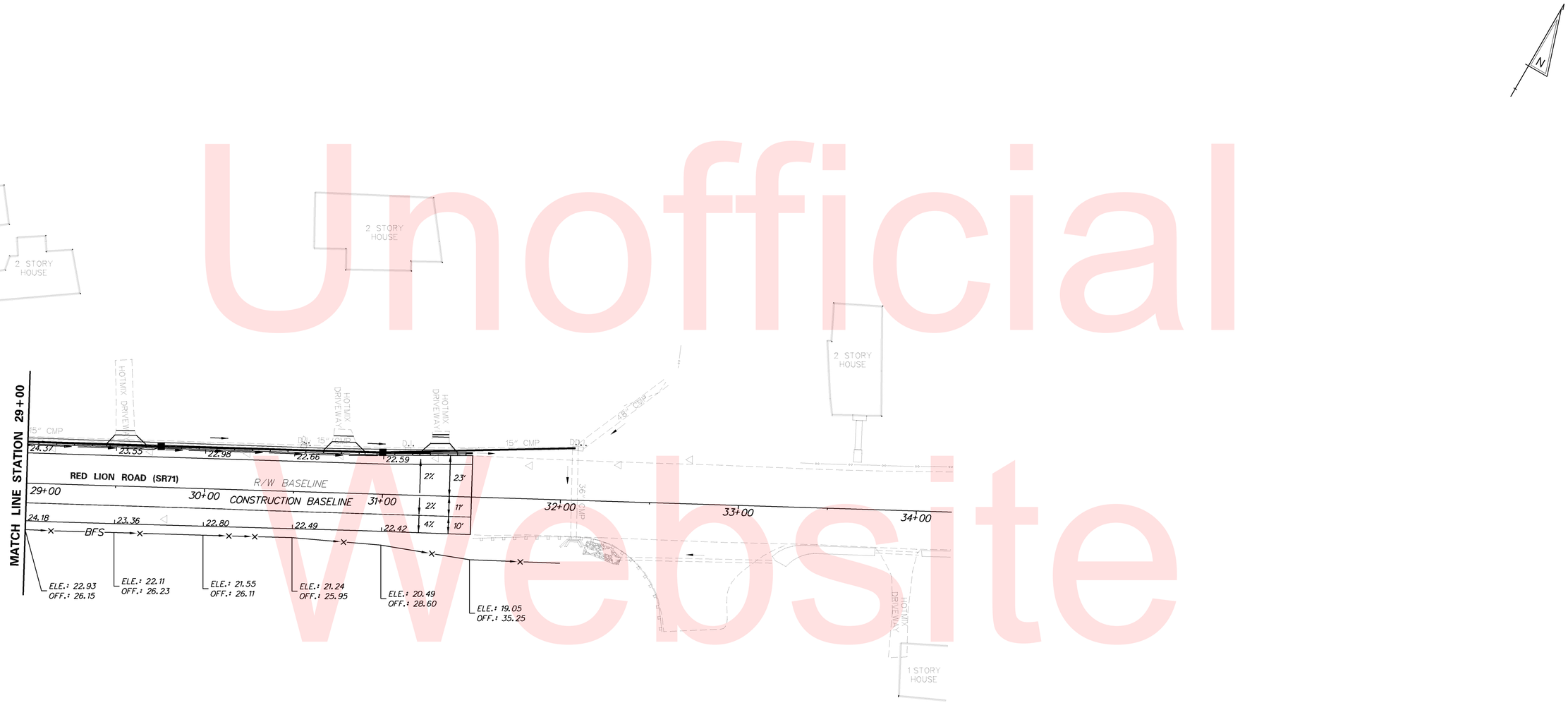
SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

GRADES AND GEOMETRICS

SHEET NO. 25
TOTAL SHTS. 64



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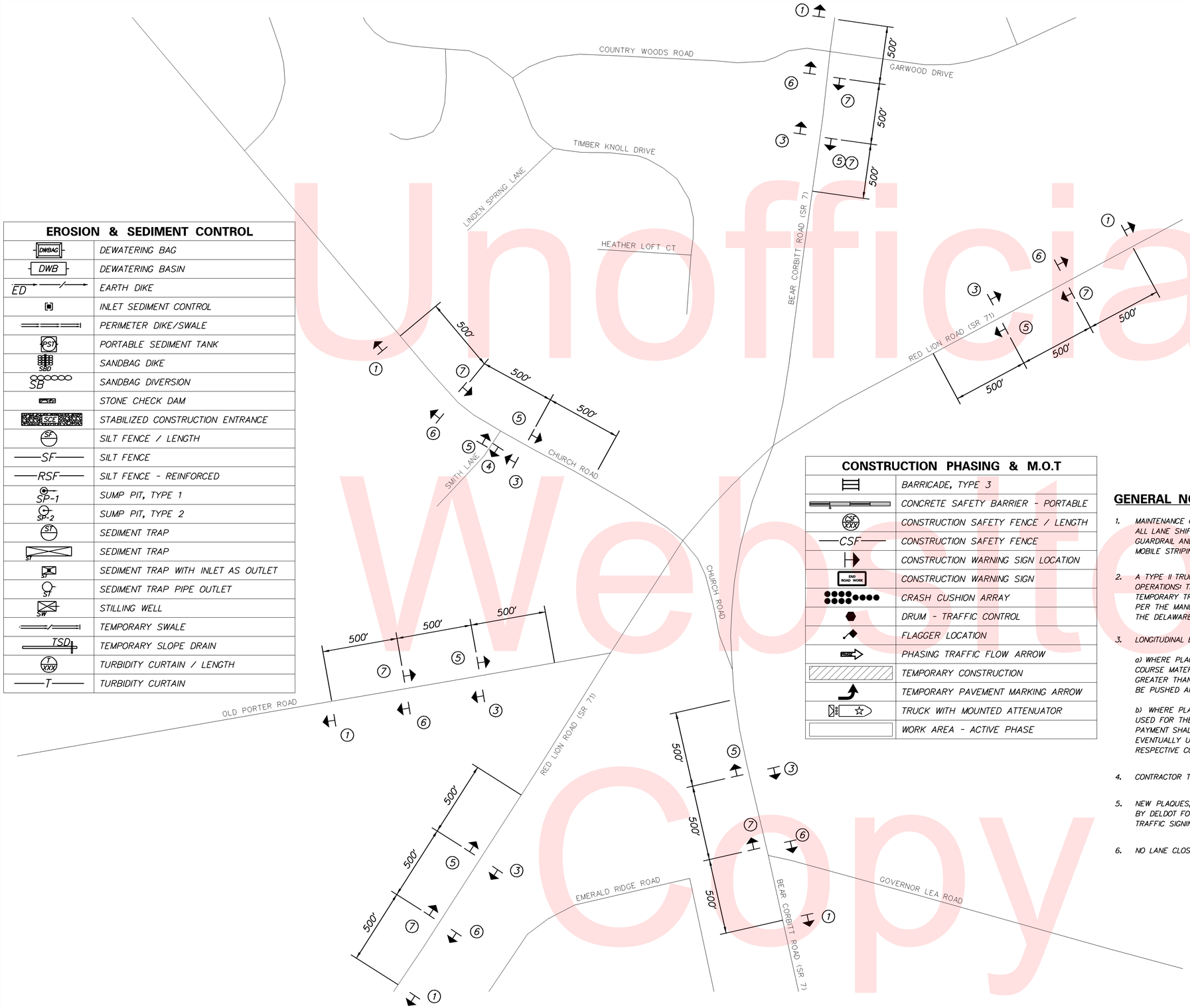
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	GRADES AND GEOMETRICS	SHEET NO. 26
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 64
					CHECKED BY: JKL		



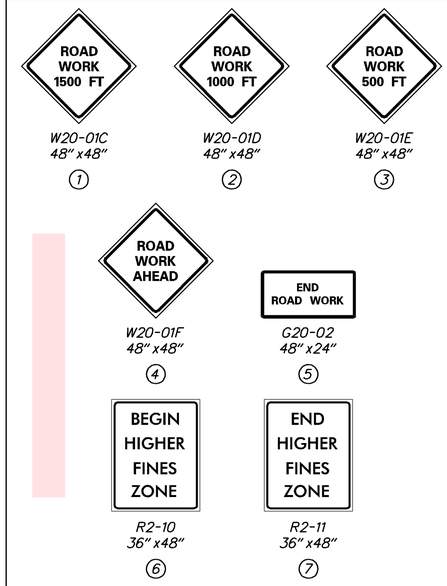
EROSION & SEDIMENT CONTROL

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

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
STAGE 1	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	TEMPORARY PAVEMENT MARKING ARROW
	TRUCK WITH MOUNTED ATTENUATOR
	WORK AREA - ACTIVE PHASE

WARNING SIGN LEGEND



GENERAL NOTES:

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES SHALL CONFORM TO TYPICAL APPLICATION 10 OF THE DELAWARE MUTCD. ALL LANE SHIFTS AND DIVERSIONS SHALL CONFORM TO TYPICAL APPLICATION 11B OF THE DELAWARE MUTCD. GUARDRAIL AND ALL OTHER SHOULDER WORK SHALL CONFORM TO TYPICAL APPLICATION 3 OF THE DELAWARE MUTCD. MOBILE STRIPING OPERATIONS SHALL CONFORM TO TYPICAL APPLICATION 17A OF THE DELAWARE MUTCD.

2. A TYPE II TRUCK MOUNTED ATTENUATOR (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.82 OF THE DELAWARE MUTCD.

3. LONGITUDINAL EDGE DROP-OFFS SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

   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.

   b) WHERE PLACEMENT OF A WEDGE/FILLET AT THE EDGE OF THE ROADWAY IS REQUIRED, PAVEMENT MILLINGS SHALL BE USED FOR THE FILLET MATERIAL. PAYMENT FOR PAVEMENT MILLINGS SHALL BE INCIDENTAL TO ITEM 743000. NO SEPARATE PAYMENT SHALL BE MADE FOR PAVEMENT MILLINGS TO CORRECT PAVEMENT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY USED AS PART OF A PERMANENT ROADWAY, AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT BID ITEM.

4. CONTRACTOR TO MAINTAIN RESIDENTIAL AND COMMERCIAL ACCSS AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT.

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

6. NO LANE CLOSURES FROM 6AM TO 8AM AND 4PM TO 7PM, OTHERWISE LANE CLOSURES ARE PERMITTED.

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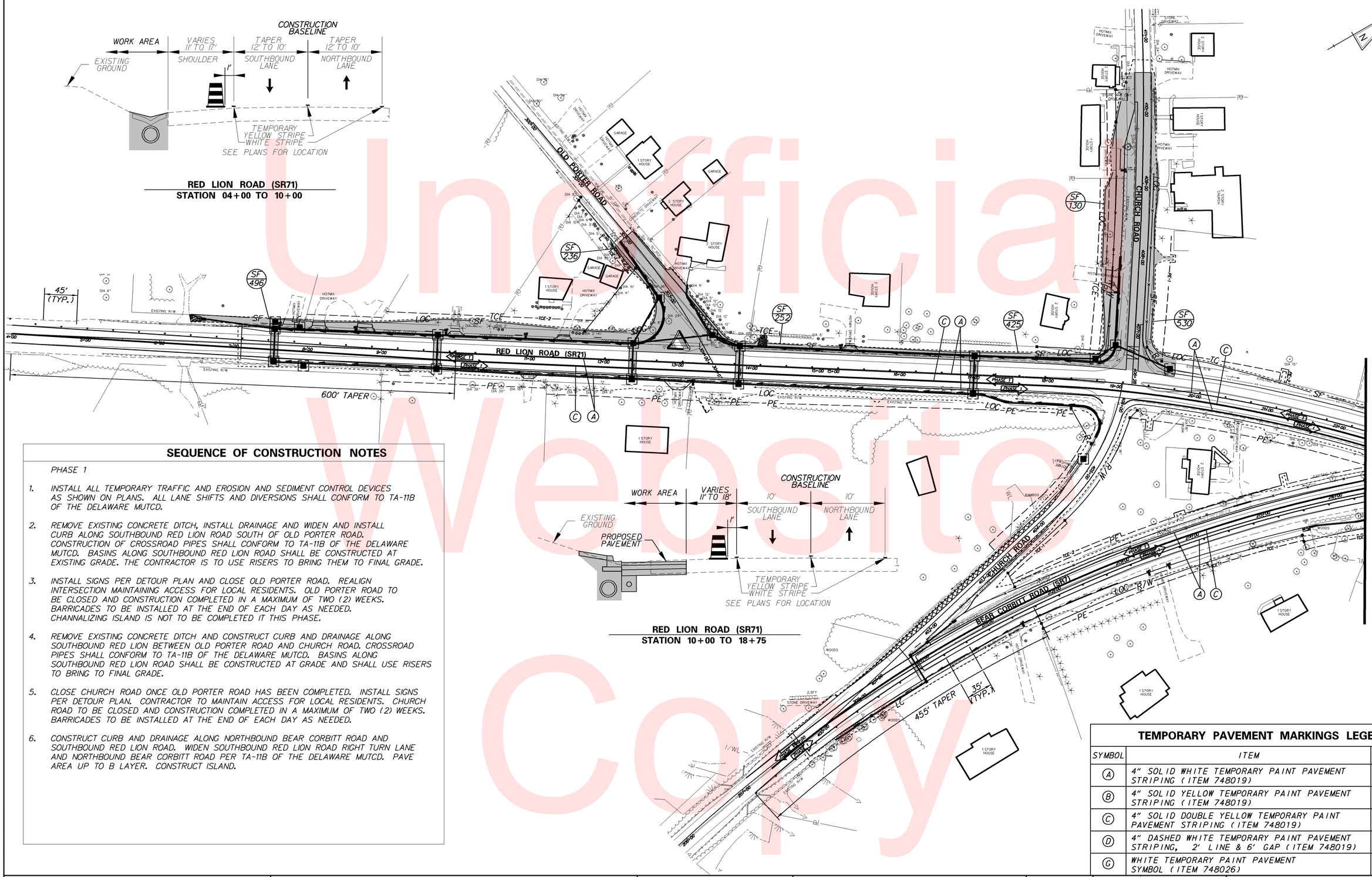
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 200 400 600 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701 / COUNTY NCC	BRIDGE NO. N/A / DESIGNED BY: DCK / CHECKED BY: JKL	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN	SHEET NO. 27 / TOTAL SHTS. 64

RED LION ROAD (SR71)
STATION 04+00 TO 10+00



RED LION ROAD (SR71)
STATION 10+00 TO 18+75

SEQUENCE OF CONSTRUCTION NOTES

PHASE 1

1. INSTALL ALL TEMPORARY TRAFFIC AND EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON PLANS. ALL LANE SHIFTS AND DIVERSIONS SHALL CONFORM TO TA-11B OF THE DELAWARE MUTCD.

2. REMOVE EXISTING CONCRETE DITCH, INSTALL DRAINAGE AND WIDEN AND INSTALL CURB ALONG SOUTHBOUND RED LION ROAD SOUTH OF OLD PORTER ROAD. CONSTRUCTION OF CROSSROAD PIPES SHALL CONFORM TO TA-11B OF THE DELAWARE MUTCD. BASINS ALONG SOUTHBOUND RED LION ROAD SHALL BE CONSTRUCTED AT EXISTING GRADE. THE CONTRACTOR IS TO USE RISERS TO BRING THEM TO FINAL GRADE.

3. INSTALL SIGNS PER DETOUR PLAN AND CLOSE OLD PORTER ROAD. REALIGN INTERSECTION MAINTAINING ACCESS FOR LOCAL RESIDENTS. OLD PORTER ROAD TO BE CLOSED AND CONSTRUCTION COMPLETED IN A MAXIMUM OF TWO (2) WEEKS. BARRICADES TO BE INSTALLED AT THE END OF EACH DAY AS NEEDED. CHANNALIZING ISLAND IS NOT TO BE COMPLETED IT THIS PHASE.

4. REMOVE EXISTING CONCRETE DITCH AND CONSTRUCT CURB AND DRAINAGE ALONG SOUTHBOUND RED LION BETWEEN OLD PORTER ROAD AND CHURCH ROAD. CROSSROAD PIPES SHALL CONFORM TO TA-11B OF THE DELAWARE MUTCD. BASINS ALONG SOUTHBOUND RED LION ROAD SHALL BE CONSTRUCTED AT GRADE AND SHALL USE RISERS TO BRING TO FINAL GRADE.

5. CLOSE CHURCH ROAD ONCE OLD PORTER ROAD HAS BEEN COMPLETED. INSTALL SIGNS PER DETOUR PLAN. CONTRACTOR TO MAINTAIN ACCESS FOR LOCAL RESIDENTS. CHURCH ROAD TO BE CLOSED AND CONSTRUCTION COMPLETED IN A MAXIMUM OF TWO (2) WEEKS. BARRICADES TO BE INSTALLED AT THE END OF EACH DAY AS NEEDED.

6. CONSTRUCT CURB AND DRAINAGE ALONG NORTHBOUND BEAR CORBITT ROAD AND SOUTHBOUND RED LION ROAD. WIDEN SOUTHBOUND RED LION ROAD RIGHT TURN LANE AND NORTHBOUND BEAR CORBITT ROAD PER TA-11B OF THE DELAWARE MUTCD. PAVE AREA UP TO B LAYER. CONSTRUCT ISLAND.

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	5,512 LF
(B)	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
(C)	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	5,462 LF
(D)	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	0 LF
(G)	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	0 SF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

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

SHEET NO. 28
TOTAL SHTS. 64

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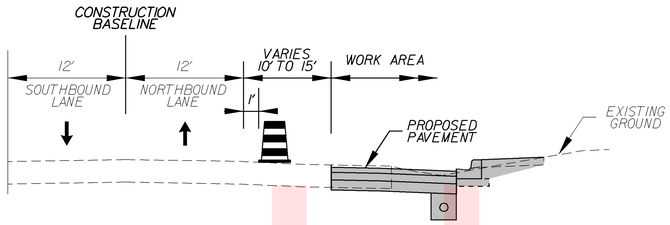
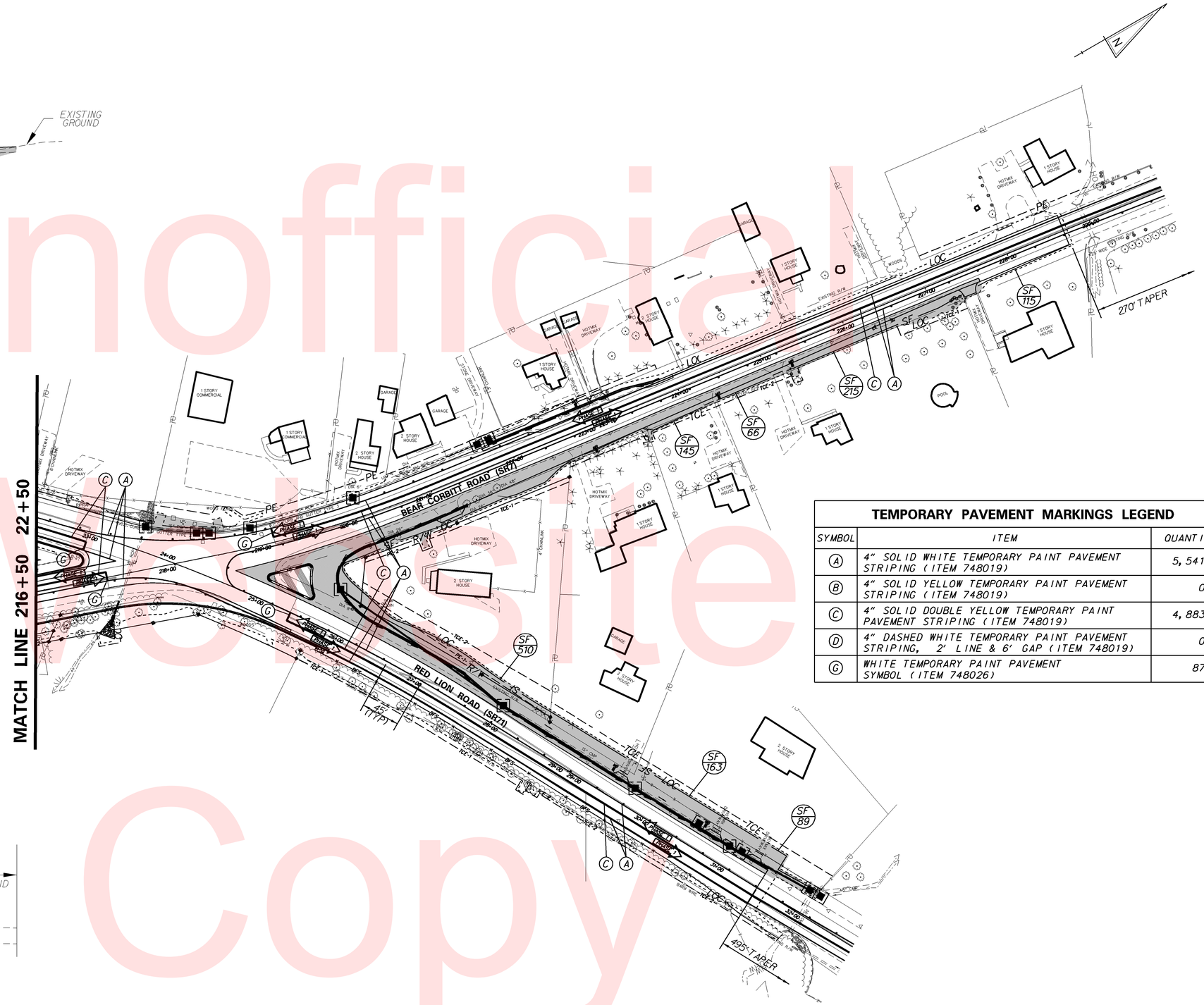
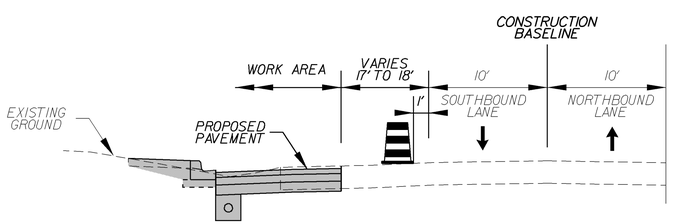


BEAR CORBITT ROAD (SR71)
STATION 218+65 TO 227+60



TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	5,541 LF
(B)	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
(C)	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	4,883 LF
(D)	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	0 LF
(G)	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	87 SF



RED LION ROAD (SR71)
STATION 24+65 TO 31+50

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

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

SHEET NO. 29
TOTAL SHTS. 64

SEQUENCE OF CONSTRUCTION NOTES

PHASE 2

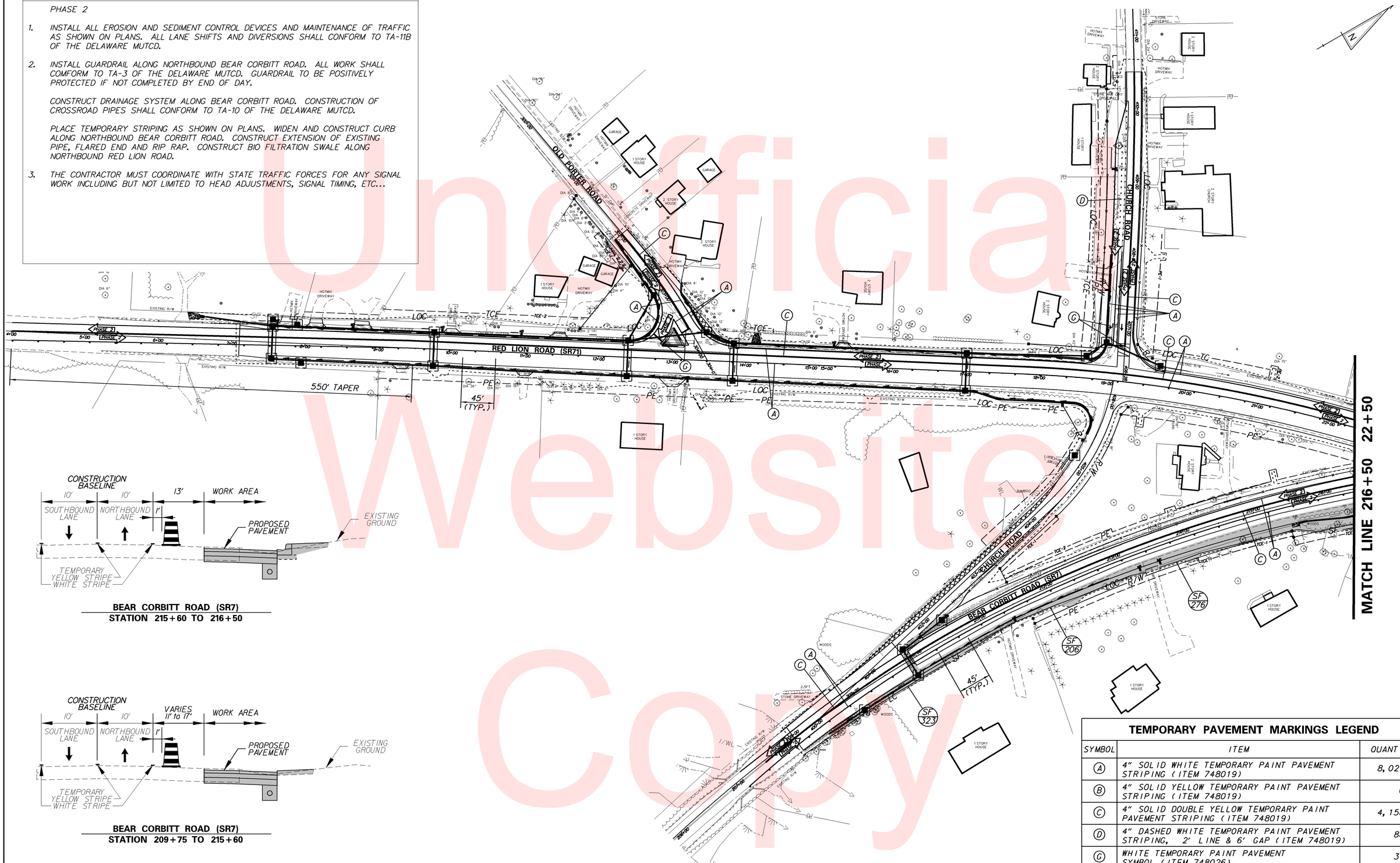
1. *INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND MAINTENANCE OF TRAFFIC AS SHOWN ON PLANS. ALL LANE SHIFTS AND DIVERSIONS SHALL CONFORM TO TA-11B OF THE DELAWARE MUTCD.*

2. *INSTALL GUARDRAIL ALONG NORTHBOUND BEAR CORBITT ROAD. ALL WORK SHALL COMFORM TO TA-3 OF THE DELAWARE MUTCD. GUARDRAIL TO BE POSITIVELY PROTECTED IF NOT COMPLETED BY END OF DAY.*

   CONSTRUCT DRAINAGE SYSTEM ALONG BEAR CORBITT ROAD. CONSTRUCTION OF CROSSROAD PIPES SHALL CONFORM TO TA-10 OF THE DELAWARE MUTCD.

   PLACE TEMPORARY STRIPING AS SHOWN ON PLANS. WIDEN AND CONSTRUCT CURB ALONG NORTHBOUND BEAR CORBITT ROAD. CONSTRUCT EXTENSION OF EXISTING PIPE, FLARED END AND RIP RAP. CONSTRUCT BIO FILTRATION SWALE ALONG NORTHBOUND RED LION ROAD.

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



BEAR CORBITT ROAD (SR7)
STATION 215+60 TO 216+50

BEAR CORBITT ROAD (SR7)
STATION 209+75 TO 215+60

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	8,027 LF
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
C	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	4,158 LF
D	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	88 LF
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	31 SF

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

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

SHEET NO. 30
TOTAL SHTS. 64

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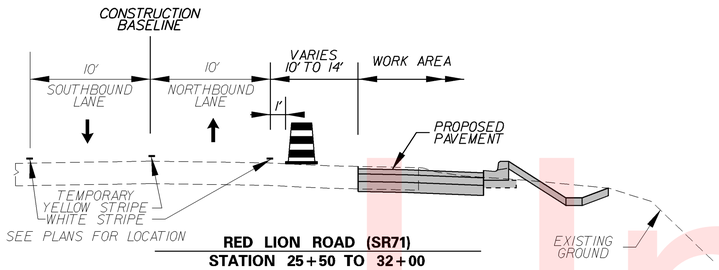
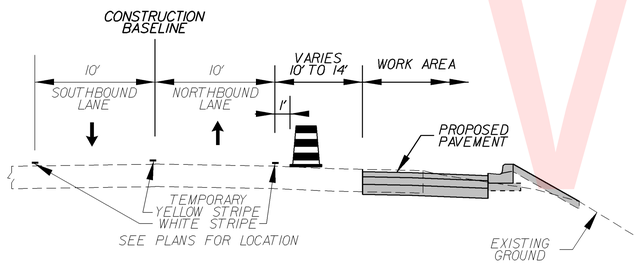
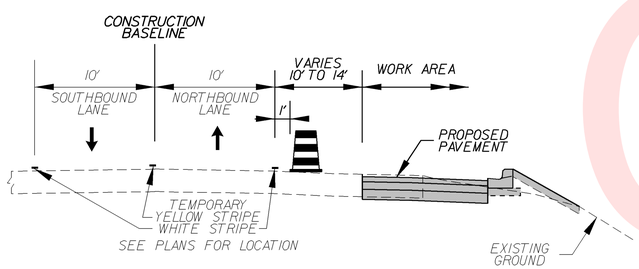


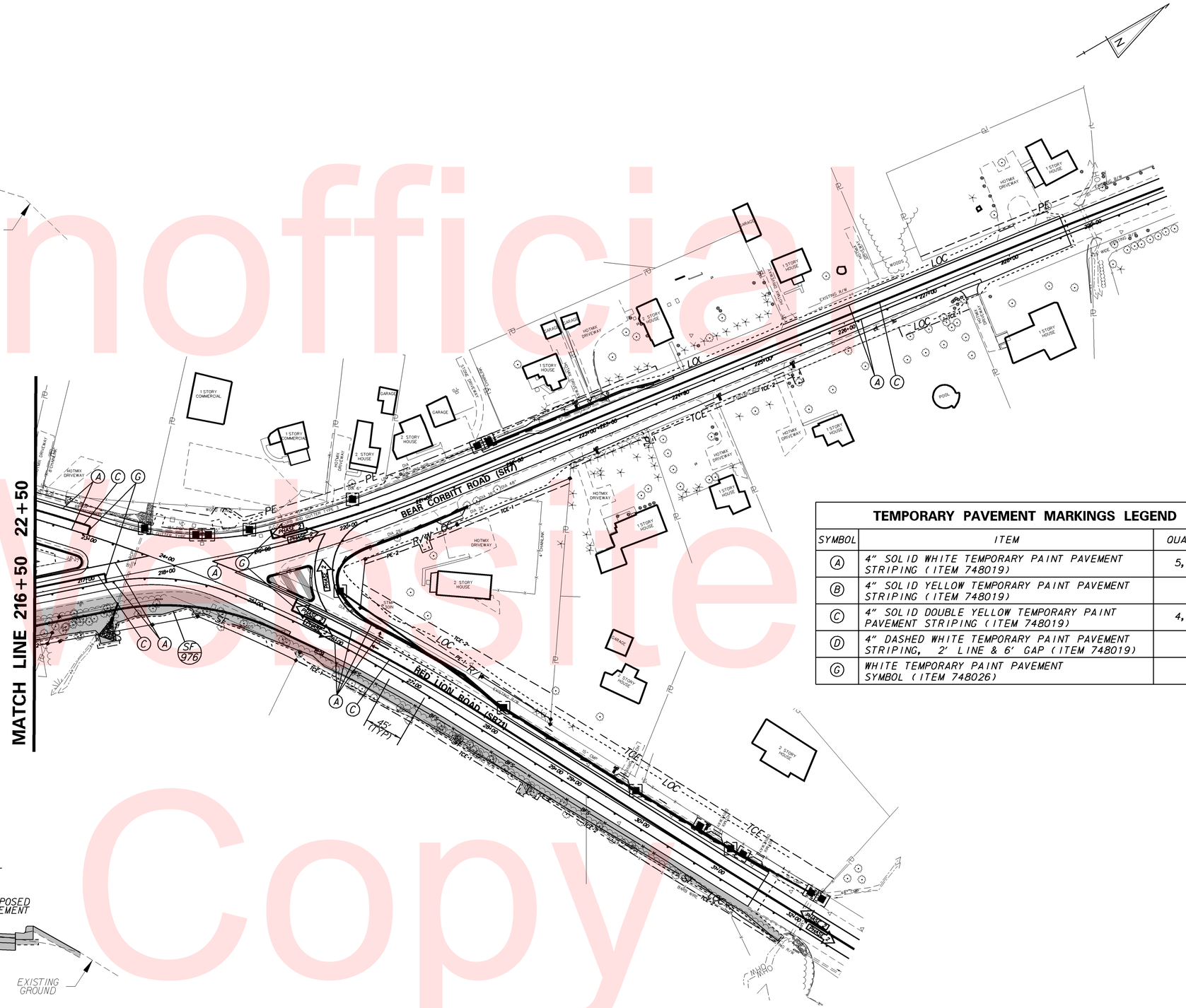
RED LION ROAD (SR71)
STATION 25+50 TO 32+00



RED LION ROAD (SR71)
STATION 24+00 TO 25+50



BEAR CORBITT ROAD (SR7)
STATION 216+50 TO 218+00



TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	5,996 LF
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
C	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	4,899 LF
D	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	60 LF
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	31 SF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

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

SHEET NO. 31
TOTAL SHTS. 64

SEQUENCE OF CONSTRUCTION NOTES

PHASE 3

1. *INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND TEMPORARY STRIPING AS SHOWN ON PLANS.*

2. *WIDEN AND CONSTRUCT CURB ALONG NORTHBOUND RED LION ROAD. LANE SHIFTS SHALL CONFORM TO TA-11B OF THE DELAWARE MUTCD. THE CONTRACTOR SHALL USE RISERS TO BRING THE BASINS TO FINAL GRADE.*

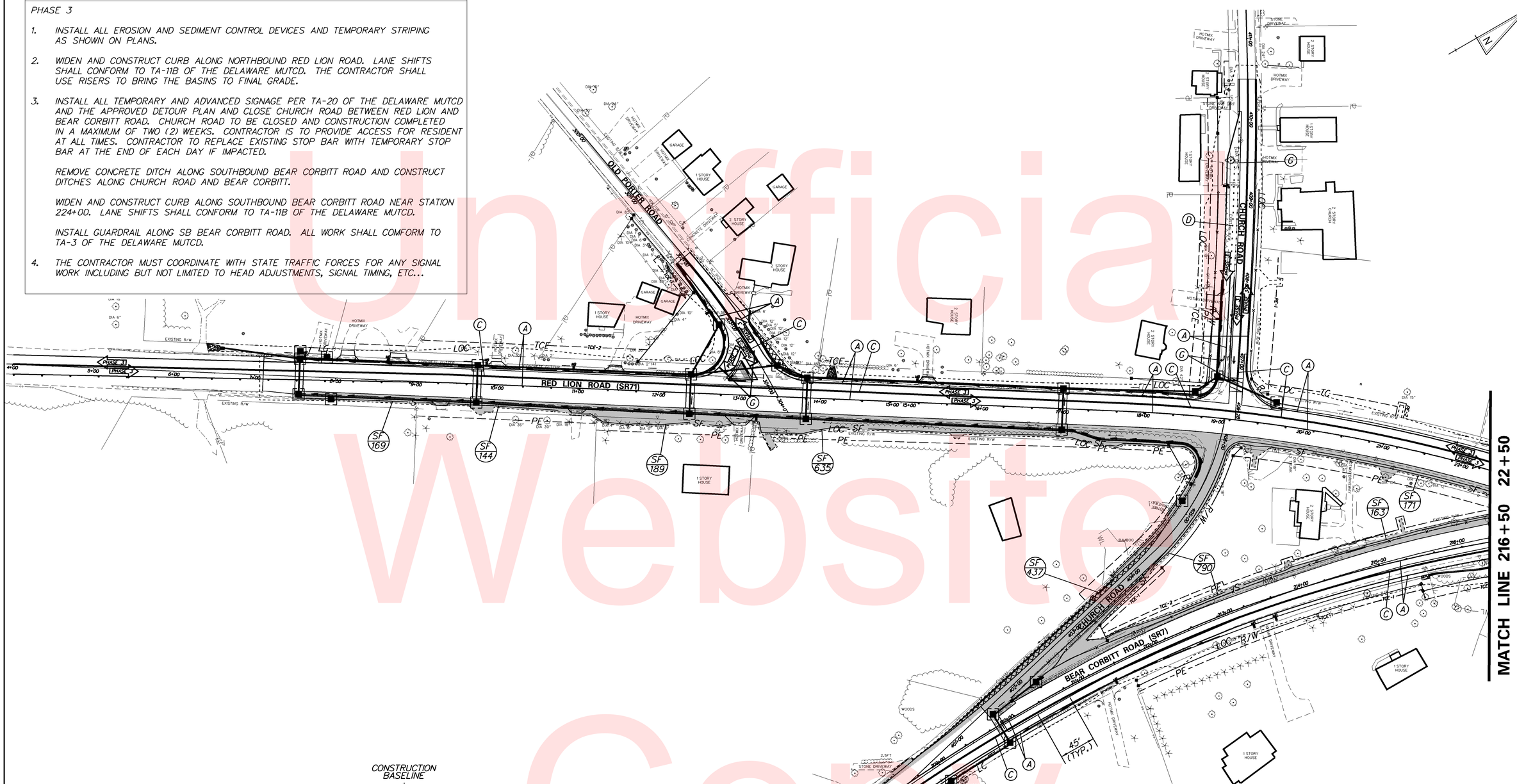
3. *INSTALL ALL TEMPORARY AND ADVANCED SIGNAGE PER TA-20 OF THE DELAWARE MUTCD AND THE APPROVED DETOUR PLAN AND CLOSE CHURCH ROAD BETWEEN RED LION AND BEAR CORBITT ROAD. CHURCH ROAD TO BE CLOSED AND CONSTRUCTION COMPLETED IN A MAXIMUM OF TWO (2) WEEKS. CONTRACTOR IS TO PROVIDE ACCESS FOR RESIDENT AT ALL TIMES. CONTRACTOR TO REPLACE EXISTING STOP BAR WITH TEMPORARY STOP BAR AT THE END OF EACH DAY IF IMPACTED.*

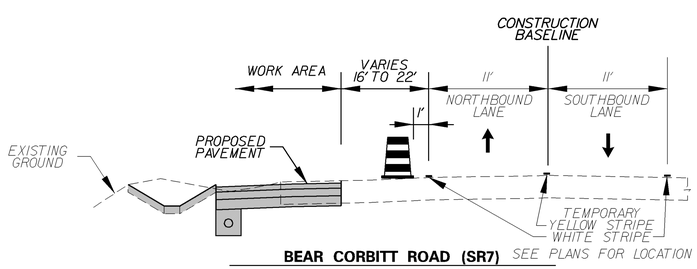
   REMOVE CONCRETE DITCH ALONG SOUTHBOUND BEAR CORBITT ROAD AND CONSTRUCT DITCHES ALONG CHURCH ROAD AND BEAR CORBITT.

   WIDEN AND CONSTRUCT CURB ALONG SOUTHBOUND BEAR CORBITT ROAD NEAR STATION 224+00. LANE SHIFTS SHALL CONFORM TO TA-11B OF THE DELAWARE MUTCD.

   INSTALL GUARDRAIL ALONG SB BEAR CORBITT ROAD. ALL WORK SHALL COMFORM TO TA-3 OF THE DELAWARE MUTCD.

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





BEAR CORBITT ROAD (SR7)
STATION 210+20 TO 216+50

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	8,134 LF
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
C	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	6,638 LF
D	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	88 LF
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	31 SF

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

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

SHEET NO. 32
TOTAL SHTS. 64

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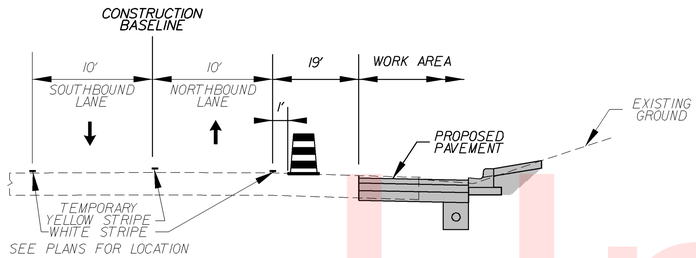
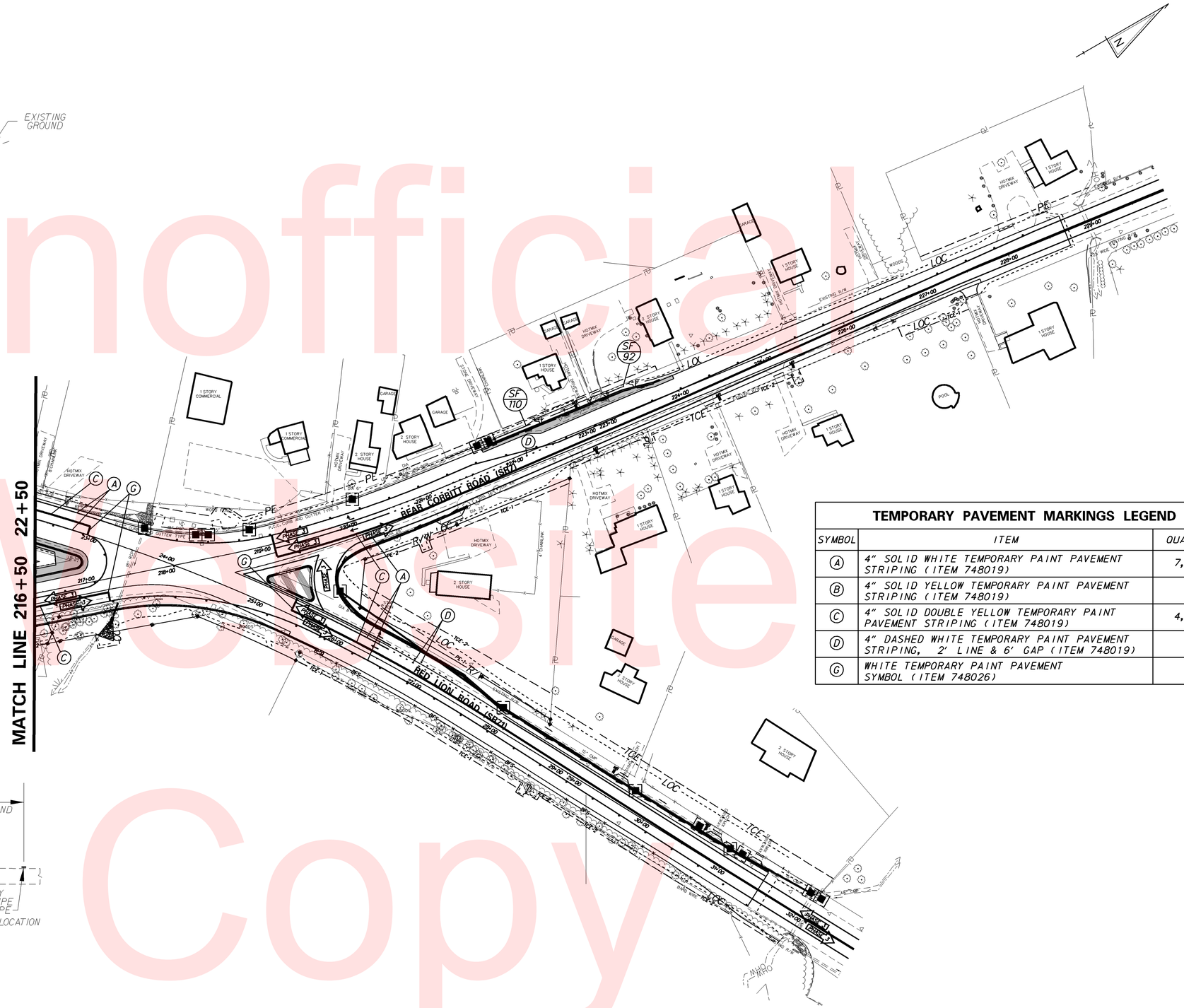
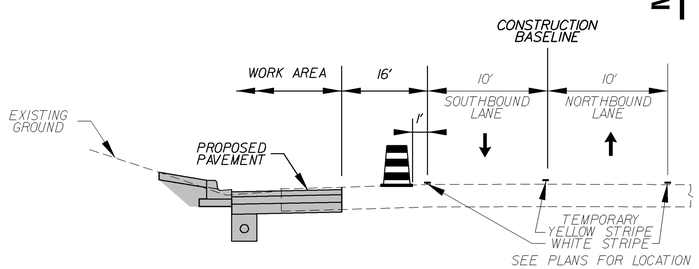


RED LION ROAD
STATION 22+50 TO 23+10



TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	7,353 LF
(B)	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
(C)	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	4,915 LF
(D)	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	140 LF
(G)	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	62 SF



BEAR CORBITT ROAD
STATION 216+50 TO 217+10
STATION 221+50 TO 224+00

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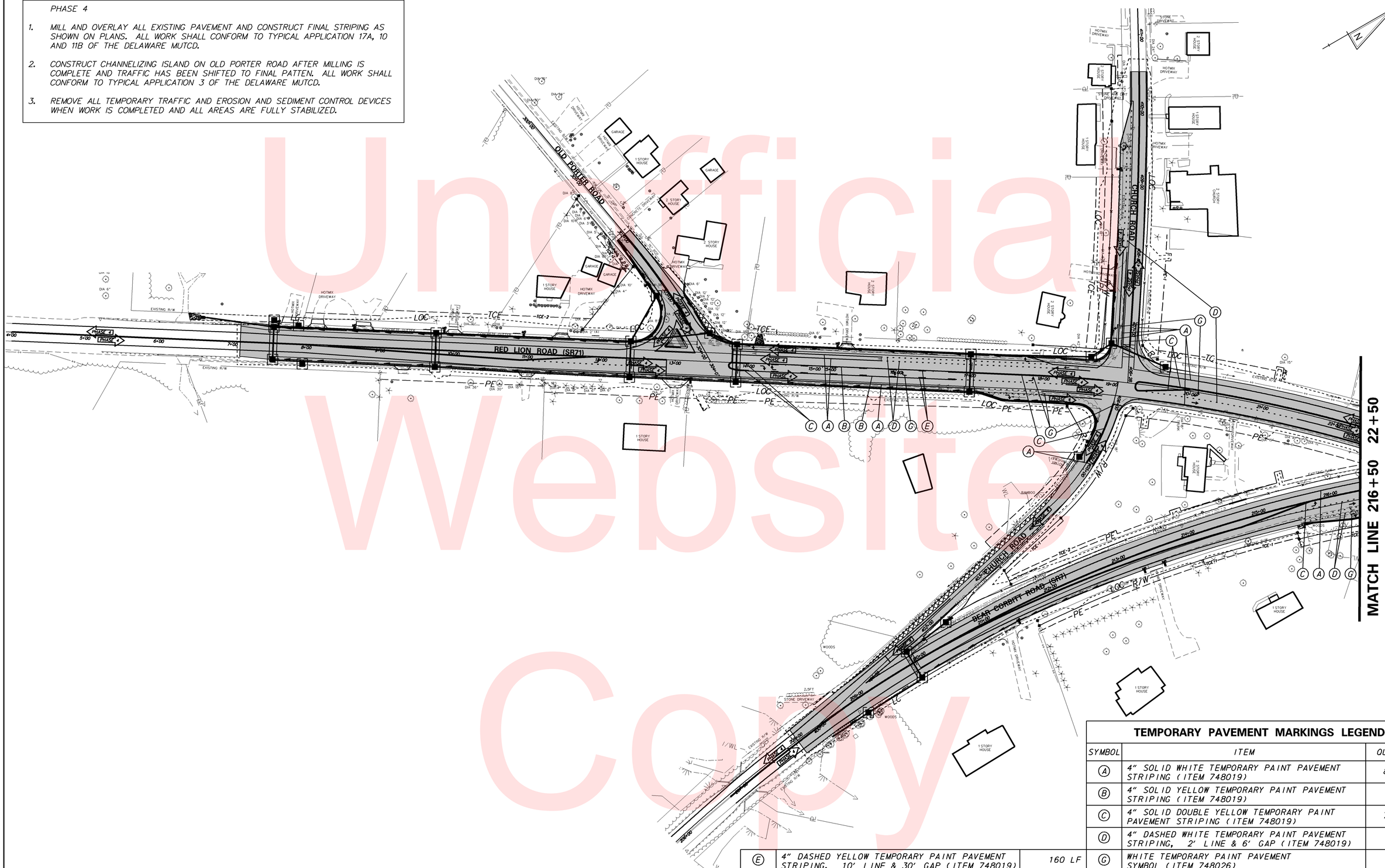
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 60 120 180 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 3	SHEET NO. 33
				COUNTY NCC	DESIGNED BY: DCK		TOTAL SHTS. 64
					CHECKED BY: JKL		

SEQUENCE OF CONSTRUCTION NOTES

PHASE 4

1. MILL AND OVERLAY ALL EXISTING PAVEMENT AND CONSTRUCT FINAL STRIPING AS SHOWN ON PLANS. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION 17A, 10 AND 11B OF THE DELAWARE MUTCD.
2. CONSTRUCT CHANNELIZING ISLAND ON OLD PORTER ROAD AFTER MILLING IS COMPLETE AND TRAFFIC HAS BEEN SHIFTED TO FINAL PATTEN. ALL WORK SHALL CONFORM TO TYPICAL APPLICATION 3 OF THE DELAWARE MUTCD.
3. REMOVE ALL TEMPORARY TRAFFIC AND EROSION AND SEDIMENT CONTROL DEVICES WHEN WORK IS COMPLETED AND ALL AREAS ARE FULLY STABILIZED.



TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	8,488 LF
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	580 LF
C	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	7,984 LF
D	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	456 LF
E	4" DASHED YELLOW TEMPORARY PAINT PAVEMENT STRIPING, 10' LINE & 30' GAP (ITEM 748019)	160 LF
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	355 SF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

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

SHEET NO. 34
TOTAL SHTS. 64

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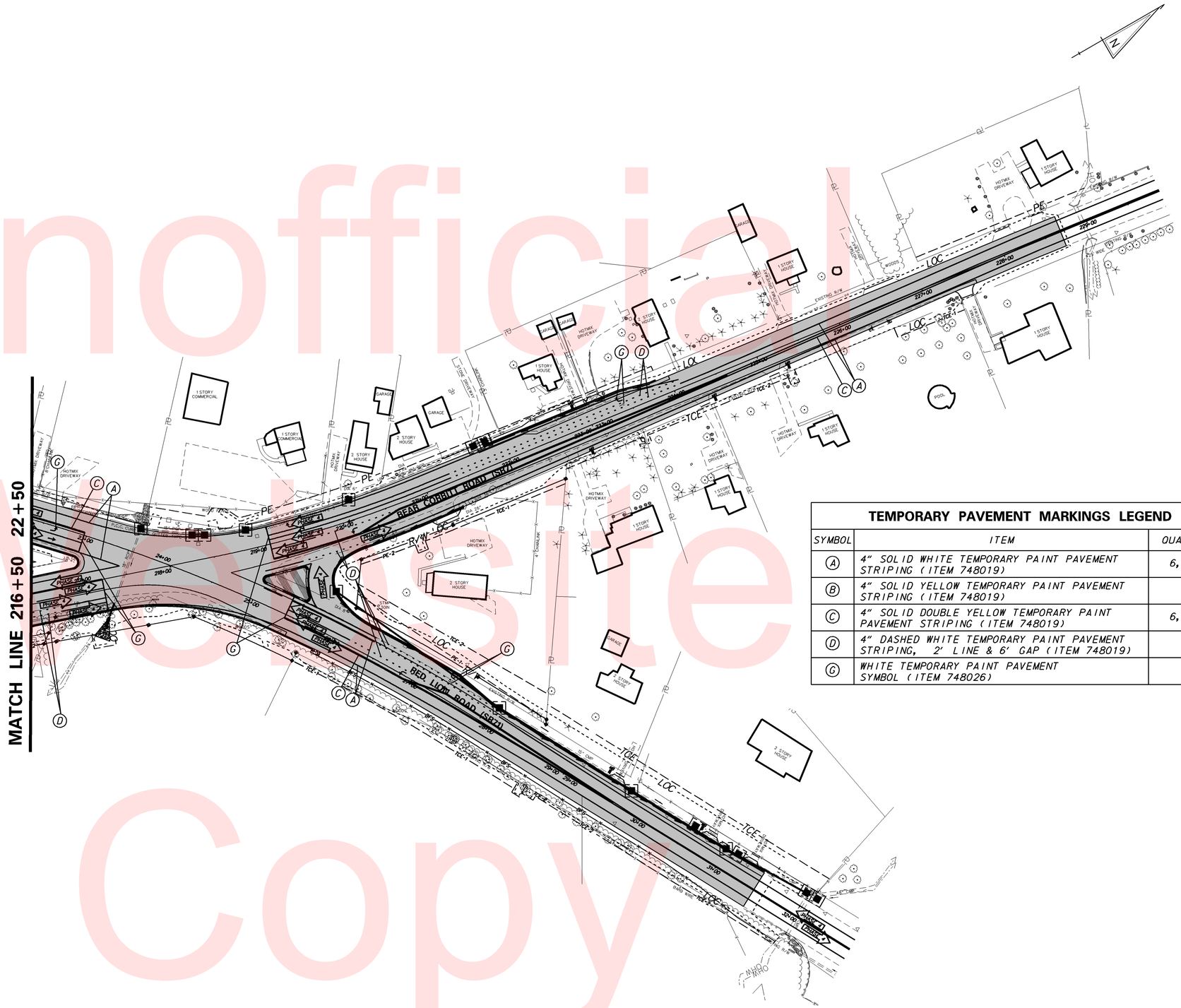

TEMPORARY PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	4" SOLID WHITE TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	6,669 LF
B	4" SOLID YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	0 LF
C	4" SOLID DOUBLE YELLOW TEMPORARY PAINT PAVEMENT STRIPING (ITEM 748019)	6,330 LF
D	4" DASHED WHITE TEMPORARY PAINT PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748019)	360 LF
G	WHITE TEMPORARY PAINT PAVEMENT SYMBOL (ITEM 748026)	140 SF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

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

SHEET NO. 35
TOTAL SHTS. 64

ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

A. THE PURPOSE OF THESE SHEETS IS TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR THE AGENCY PERMIT REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.

B. IF A DEPARTURE FROM THE APPROVED PLANS (WHICH WOULD AFFECT ANY OF THE NATURAL AND/OR CULTURAL RESOURCE ISSUES) IS NECESSARY, THE ENVIRONMENTAL STUDIES SECTION SHALL BE CONTACTED AT (302) 760-2264 TO ALLOW FOR COORDINATION WITH THE APPROPRIATE RESOURCE AGENCIES AND APPROVAL.

C. USE OF THESE SHEETS DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.

2. NATURAL RESOURCE ISSUES:

A. PERMIT REQUIREMENTS/APPROVALS*:
U.S. ARMY CORPS OF ENGINEERS (COE): NATIONWIDE PERMIT (NWP) *23**
DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): PROJECT IS CONSISTENT WITH DEL. CODE CH72, SECTION 7217, SPECIAL EXEMPTION (A)
DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): ISSUED (PROJECT IS NOT LOCATED IN CRITICAL RESOURCE WATERS)
NEW CASTLE COUNTY FLOODPLAIN (NCC): NONE (MAINTENANCE)

* THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING AND/OR OBTAINING THIS APPROVAL.
** THE CONTRACTOR MUST ENSURE THAT THIS PERMIT/APPROVAL (COE) IS IN THEIR POSSESSION PRIOR TO BEGINNING CONSTRUCTION IN THE PERMITTED AREA(S) AND ENSURE IT IS DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.
NOTE: THE ABSENCE OF ASTERISKS AFTER A PERMIT (NCC, WLSL, WQC, CZM) INDICATES THAT COORDINATION HAS BEEN DONE WITH THAT AGENCY BUT NO WRITTEN AUTHORIZATION WAS REQUIRED. AS SUCH, NO PAPERWORK FROM THAT AGENCY SHOULD BE ANTICIPATED.

B. CONSTRUCTION RESTRICTIONS:
FISHERIES - NONE
ENDANGERED SPECIES - NONE
MIGRATORY BIRDS - NONE

3. CULTURAL RESOURCE ISSUES: COORDINATION ONGOING

4. STREAM RESTORATION AND RIPRAP TREATMENTS

A. THE CONTRACTOR SHALL FOLLOW THE SPECIAL PROVISIONS OF ITEM *712531 CHANNEL BED FILL IN REGARDS TO THE SALVAGING OF ON-SITE NATURAL STREAM BOTTOM MATERIAL OR THE FURNISHING OF OFF-SITE MATERIAL. IF SUFFICIENT SOURCES FOR CHANNEL BED FILL DO NOT EXIST ON-SITE, ANY NEW MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ITEM *712531 CHANNEL BED FILL. ALL RIPRAP IN THE CHANNEL BOTTOM (I.E. BELOW THE WATER LINE) SHALL BE RECESSED ONE FOOT BELOW STREAM BED ELEVATION AND CHOKED WITH BORROW TYPE 'B' SO THAT ALL OF THE VOIDS IN THE RIPRAP ARE FILLED WITH MATERIAL. PAYMENT UNDER ITEM *209002 BORROW TYPE 'B'. THE RIPRAP SHALL THEN BE COVERED WITH A MINIMUM OF 12" CHANNEL BED FILL. FINAL CHANNEL ELEVATIONS SHALL MATCH EXISTING ELEVATIONS AT THE UPSTREAM AND DOWNSTREAM PROJECT LIMITS. THROUGH THE STRUCTURE, ELEVATIONS SHALL BE AS NOTED ON THE PLANS. PAYMENT UNDER ITEM *712531 CHANNEL BED FILL.

B. OTHER AREAS OF THE CHANNEL BOTTOM AFFECTED BY CONSTRUCTION (INCLUDING, BUT NOT LIMITED TO, THE LOCATION OF SUMP PITS, STABILIZED OUTFALLS, TEMPORARY PIPES AND/OR SANDBAG DIKES AND DIVERSIONS) SHALL BE RESTORED TO EXISTING CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH CHANNEL BED FILL. PAYMENT UNDER ITEM *712531 CHANNEL BED FILL.

C. WHEN ALL EROSION AND SEDIMENT CONTROL MEASURES ARE REMOVED AND THE STREAM RETURNS TO ITS NATURAL FLOW CONDITIONS, THE FLOW MUST REMAIN ABOVE GROUND AND ABOVE THE RIPRAP (I.E. THE FLOW CANNOT BE "LOST" IN THE RIPRAP OR BENEATH THE STRUCTURE). IF THIS IS NOT ACHIEVED, THE CONTRACTOR WILL BE REQUIRED TO TAKE CORRECTIVE ACTION AT THE CONTRACTOR'S EXPENSE.

D. ALL RIPRAP ON THE STREAM BANK, OUTSIDE THE CHANNEL BED, SHALL BE CHOKED WITH DELAWARE *57 STONE, FILLED WITH TOPSOIL, AND SEEDED. PLACE JUST ENOUGH CHOKE MATERIAL TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP, AND THEN FINISH FILLING THE VOIDS WITH TOPSOIL SO THAT THE RIPRAP PEAKS ARE BARELY VISIBLE. AN ADDITIONAL 4-INCH TOPSOIL LAYER SHALL BE PLACED ON TOP OF THE RIPRAP. SLOPE SEEDING SHALL BE WITH ITEM *908019 STREAMBANK SEED MIX, SEEDING. FOLLOWING THE SEEDING OPERATION, ITEM *908020 EROSION CONTROL BLANKET MULCH, OR OTHER BLANKET AS SHOWN ON THE PLANS SHALL BE INSTALLED. ALL WORK, STARTING WITH THE INITIAL CHOKING WITH TOPSOIL THROUGH THE SEEDING AND MULCHING SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. DELAWARE *57 STONE SHALL BE INCIDENTAL TO THE RIPRAP ITEM. ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

E. THE TOPSOIL/SEED/MULCH CAN BE PLACED BEFORE OR AFTER THE REMOVAL OF THE STREAM DIVERSION. IF IT OCCURS AFTER STREAM DIVERSION REMOVAL, A TURBIDITY CURTAIN SHALL BE USED TO MINIMIZE IN-STREAM SEDIMENTATION. PAYMENT SHALL BE INCIDENTAL TO ITEM *909005 STREAM DIVERSION.

5. PROTECTION OF RESOURCES:

A. CLEARING IN WETLAND AREAS SHALL BE KEPT TO A MINIMUM ABSOLUTELY NECESSARY FOR CONSTRUCTION ACCESS. ALL EQUIPMENT TRAVERSING WETLANDS AND SUBAQUEOUS LAND SHALL BE SUPPORTED ON MATS. PAYMENT FOR MATS SHALL BE MADE UNDER 601520 TIMBER MAT. IN WETLAND AREAS THAT ARE CLEARED, THERE SHALL BE NO GRUBBING EXCEPT WHERE NECESSARY TO CONSTRUCT PROJECT COMPONENTS SUCH AS FOUNDATIONS AND RIPRAP PROTECTION. VEGETATION SHALL BE CUT FLUSH WITH THE GROUND (I.E. NO DISTURBANCE OF THE ROOT MAT). TEMPORARILY DISTURBED WETLAND AREAS SHALL BE RESTORED TO GRADE AND SEEDED WITH TEMPORARY GRASS SEEDING DRY GROUND (PAYMENT UNDER ITEM 908017).

B. SILT FENCE OR CONSTRUCTION SAFETY FENCE SHALL BE USED ALONG THE LIMITS OF CONSTRUCTION IN ALL AREAS WHERE WATER/WETLANDS ARE BEING IMPACTED (AS SHOWN ON EC SHEETS), AND ALSO IN ANY AREA WHERE WATER/WETLANDS EXIST WITHIN 20 FEET OF THE LOC (AS SHOWN ON CONSTRUCTION PLANS). CONTRACTOR ACCESS BEYOND THE LOC IS STRICTLY PROHIBITED.

C. SILT FENCE INSTALLATION ADJACENT TO WOODED UPLANDS/ALL WETLANDS: SANDBAGS SHALL BE USED TO SECURE SILT FENCE IN LIEU OF TRENCHING PROVIDED PROPER EROSION & SEDIMENT CONTROL CAN BE MAINTAINED. SANDBAGS USED TO SECURE SILT FENCE SHALL BE INCIDENTAL TO ITEM NUMBER 905001 SILT FENCE. THE ENVIRONMENTAL STUDIES SECTION (CAROL SULLIVAN, 302-760-2129) CAN PROVIDE FURTHER GUIDANCE REGARDING THIS METHOD OF INSTALLATION.

D. ALL TREES TO BE REMOVED SHALL BE CLEARLY MARKED WITH PAINT PRIOR TO THE E&S SEDIMENT CONTROL/ENVIRONMENTAL MEETING.

6. PLANTING GUIDANCE (INFORMATIONAL ONLY, WORK TO BE DONE BY OTHERS. THERE SHALL BE NO PAYMENT FOR PLANTING ON THIS CONTRACT.): UPON FINAL ACCEPTANCE OF THE CONTRACT, THE ENVIRONMENTAL STUDIES SECTION (CAROL SULLIVAN) AND ROADSIDE ENVIRONMENTAL SHALL BE NOTIFIED OF COMPLETION. APPROPRIATE TREES AND/OR SHRUBS SHALL BE PLANTED IN A NATURALIZED PATTERN (MINIMUM 8', MAXIMUM 12' CENTERS) IN TEMPORARILY DISTURBED WOODED WETLAND AREAS WITHIN THE LOC. FINAL PLANT COUNTS WILL BE BASED ON FIELD CONDITIONS AND DETERMINED BY THE ROADSIDE ENVIRONMENTAL ADMINISTRATOR OR HIS DESIGNEE. SPECIFIC PLANT SELECTION IS ALSO AT HIS DISCRETION BUT SHALL BE A NATIVE SPECIES APPROVED BY THE DELAWARE DEPARTMENT OF NATURAL RESOURCES. ON THIS PROJECT, DNREC WSLS REQUIRES THAT A PLANTING PLAN BE SUBMITTED TO THEM FOR APPROVAL PRIOR TO ACTUAL WORK.

TEMPORARY WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-T1	UTILITY GUY WIRE	43.50	0.0010	N/A	USACE
TOTAL TEMPORARY WETLAND IMPACT AREAS		43.50	0.0010	N/A	USACE

PERMANENT WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-W1	GRADING	68.12	0.0016	N/A	USACE
3-W1	GRADING	121.91	0.0028	N/A	USACE
4-W1	GRADING	3,351.47	0.0769	N/A	USACE
4-W2	PIPE (FILL)	82.84	0.0019	N/A	USACE
4-W3	PIPE (RIPRAP)	11.61	0.0003	N/A	USACE
TOTAL PERMANENT WETLAND IMPACT AREAS		3,635.95	0.0835	N/A	

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-01	GRADING	57.82	0.0013	1.07	USACE/DNREC
3-01	GRADING	140.76	0.0032	2.61	USACE/DNREC
3-02	GRADING	208.51	0.0048	3.86	USACE/DNREC
3-03	GRADING	1,541.50	0.0354	28.55	USACE/DNREC
3-04	GRADING	468.39	0.0108	8.67	USACE/DNREC
4-01	GRADING	22.08	0.0005	0.41	USACE/DNREC
4-02	PIPE (FILL)	92.25	0.0021	1.71	USACE/DNREC
4-03	PIPE (RIPRAP)	69.27	0.0016	1.28	USACE/DNREC
TOTAL PERMANENT OPEN WATER IMPACTS		2,600.58	0.0597	48.16	

PROJECT AREA DELINEATED BY MCCORMICK TAYLOR, INC. IN JANUARY 2012 AND JUNE 2012 IN ACCORDANCE WITH THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE ATLANTIC AND GULF COAST REGIONAL SUPPLEMENT (VERSION 2.0).

SHEETS PREPARED BY DCK ON 01/2012

SHEETS LAST UPDATED 08/2016

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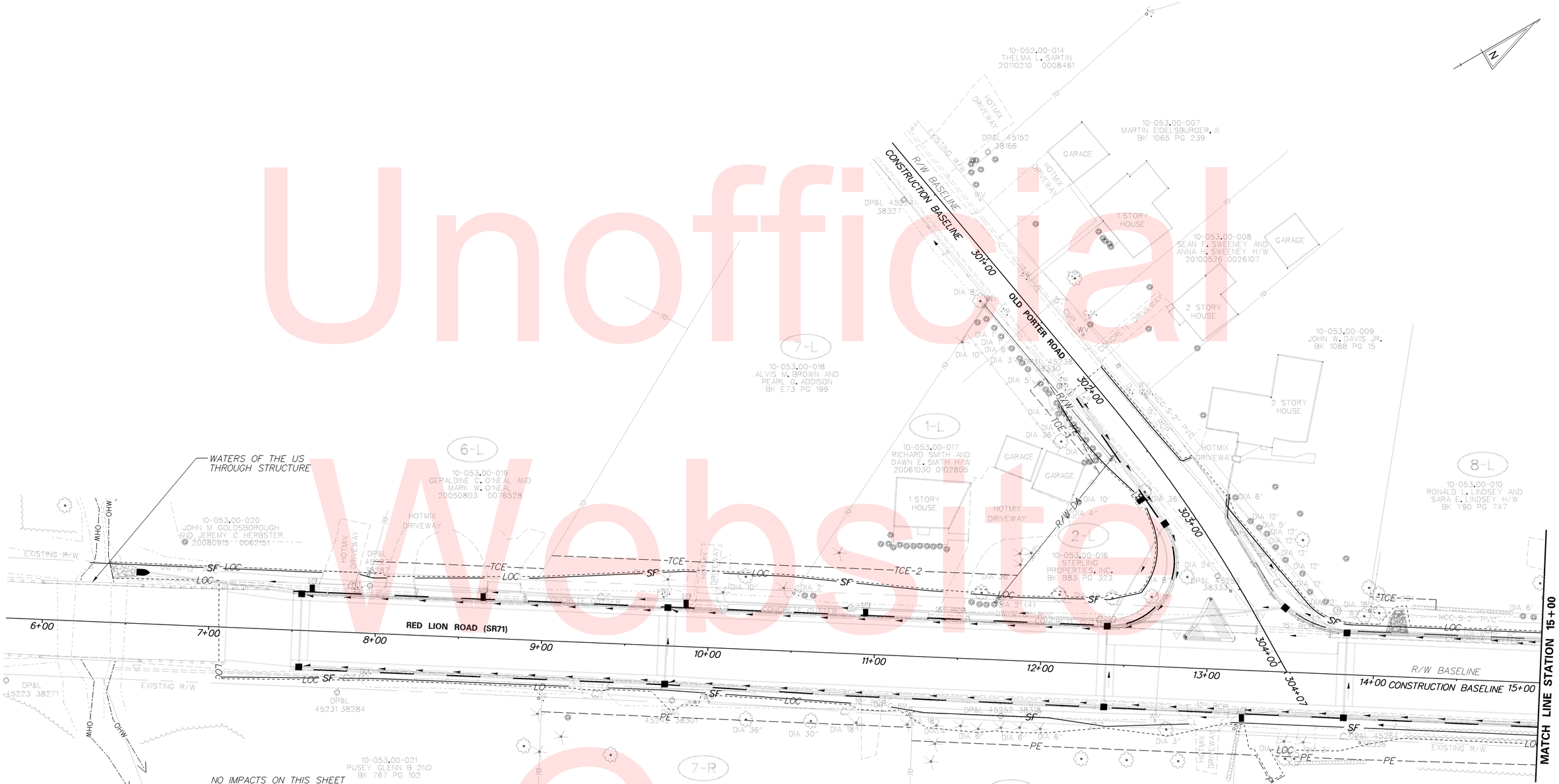
Unofficial Website Copy



LEGEND

	PERMANENT IMPACT AREA
WL	WETLAND BOUNDARY
PWL	PROPOSED WETLAND BOUNDARY
OHW	ORDINARY HIGH WATER
OHW/WL	ORD. HIGH WATER / WETLAND

XX / 2X — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

EC-02

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A	
T201000701	DESIGNED BY:	DCK	
COUNTY	CHECKED BY:	JKL	
NCC			

ENVIRONMENTAL COMPLIANCE PLAN

SHEET NO. 37
TOTAL SHTS. 64

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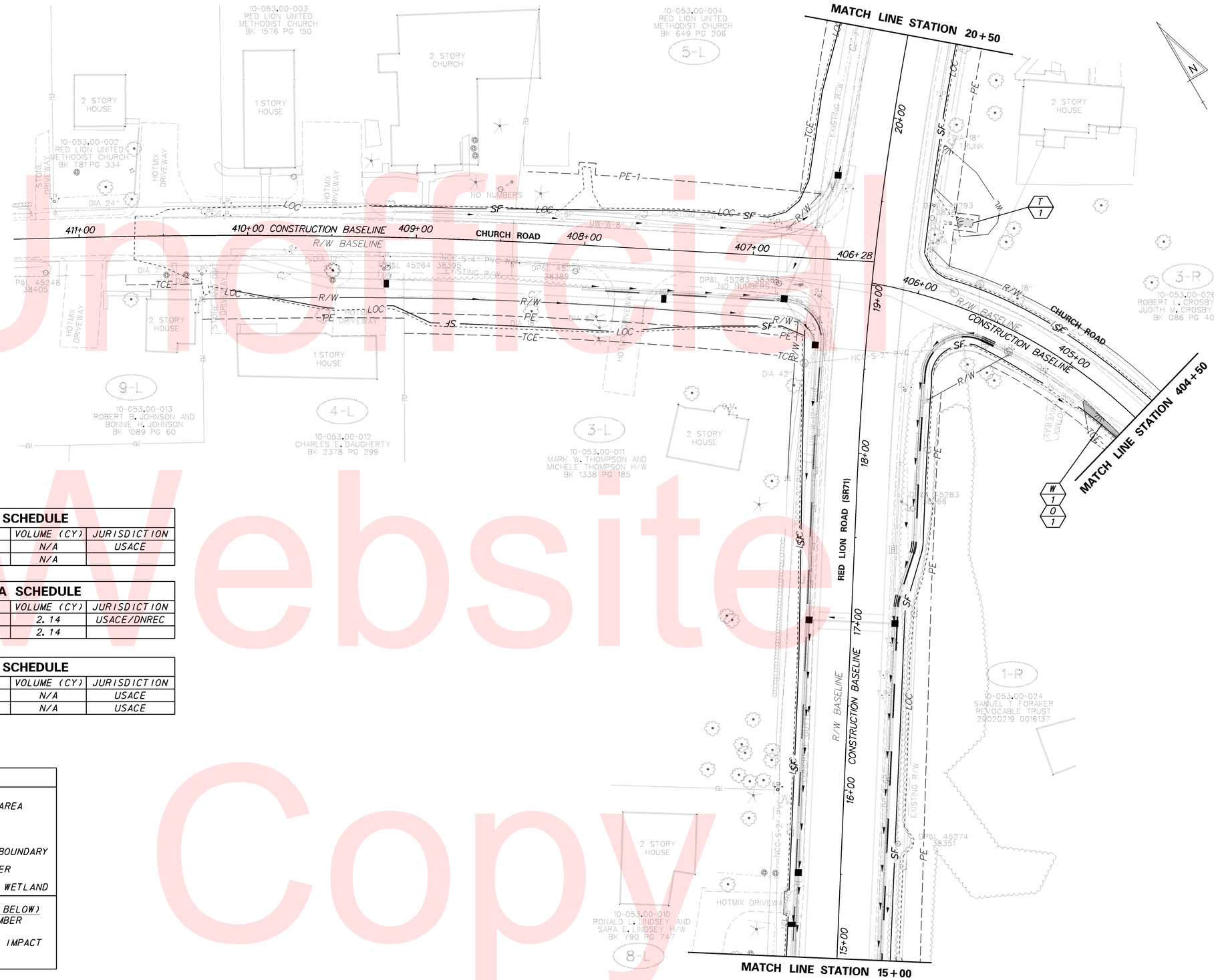

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-W1	GRADING, DITCH	68.12	0.0016	N/A	USACE
TOTAL FOR THIS SHEET		68.12	0.0016	N/A	

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-O1	GRADING, DITCH	57.82	0.0013	2.14	USACE/DNREC
TOTAL FOR THIS SHEET		57.82	0.0013	2.14	

TEMPORARY WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
2-T1	UTILITY GUY WIRE	43.50	0.0010	N/A	USACE
TOTAL FOR THIS SHEET		43.50	0.0010	N/A	

LEGEND

- PERMANENT IMPACT AREA
- WL — WETLAND BOUNDARY
- PWL — PROPOSED WETLAND BOUNDARY
- OHW — ORDINARY HIGH WATER
- OHW/WL — ORD. HIGH WATER / WETLAND
- XX / 2X — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

ENVIRONMENTAL COMPLIANCE PLAN

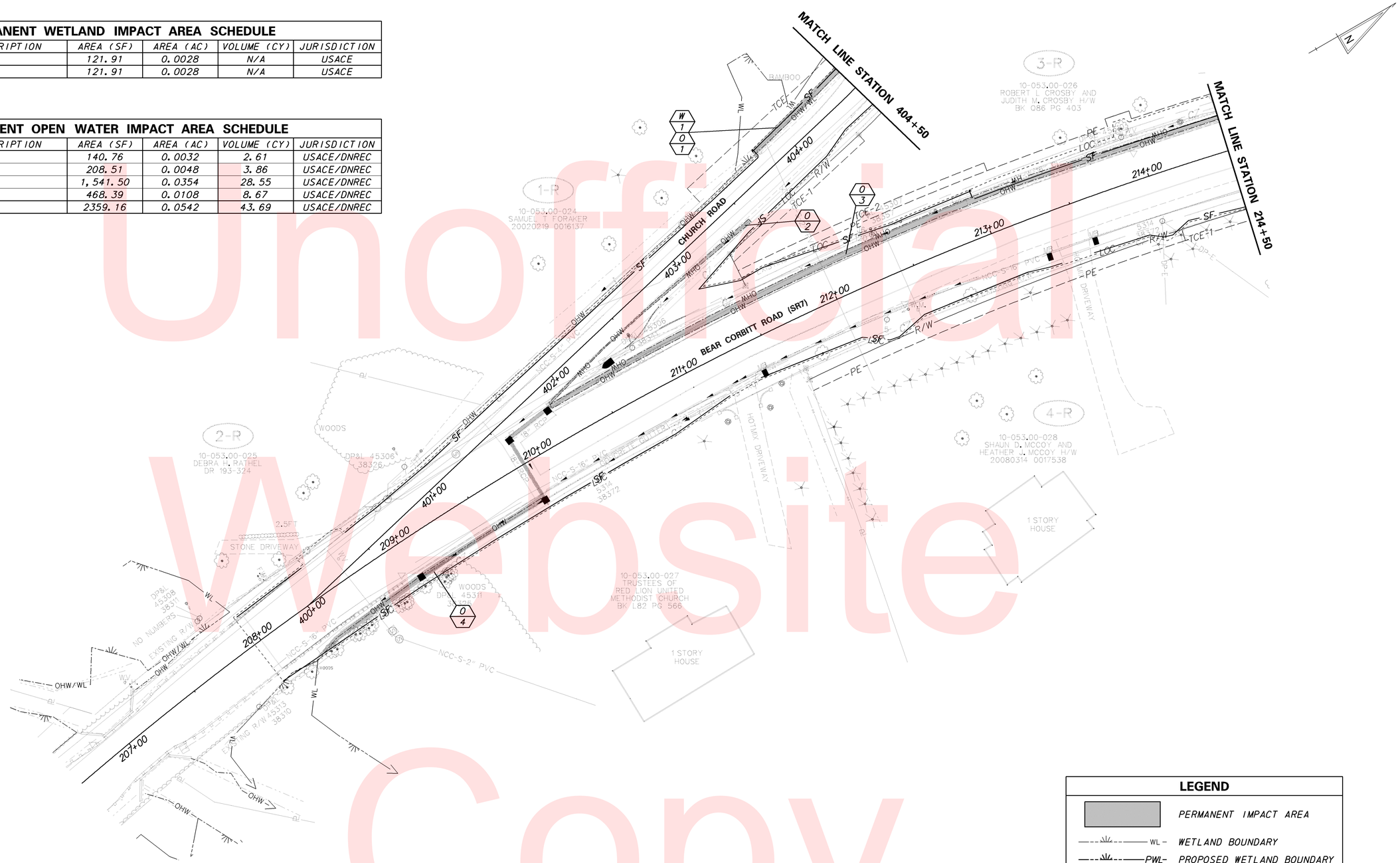
EC-03

SHEET NO. 38

TOTAL SHTS. 64

PERMANENT WETLAND IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
3-W1	GRADING	121.91	0.0028	N/A	USACE
TOTAL FOR THIS SHEET		121.91	0.0028	N/A	USACE

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
3-01	GRADING	140.76	0.0032	2.61	USACE/DNREC
3-02	GRADING	208.51	0.0048	3.86	USACE/DNREC
3-03	GRADING	1,541.50	0.0354	28.55	USACE/DNREC
3-04	GRADING	468.39	0.0108	8.67	USACE/DNREC
TOTAL FOR THIS SHEET		2359.16	0.0542	43.69	USACE/DNREC



LEGEND

	PERMANENT IMPACT AREA
WL	WETLAND BOUNDARY
PWL	PROPOSED WETLAND BOUNDARY
OHW	ORDINARY HIGH WATER
OHW/WL	ORD. HIGH WATER / WETLAND

XX / ?X — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

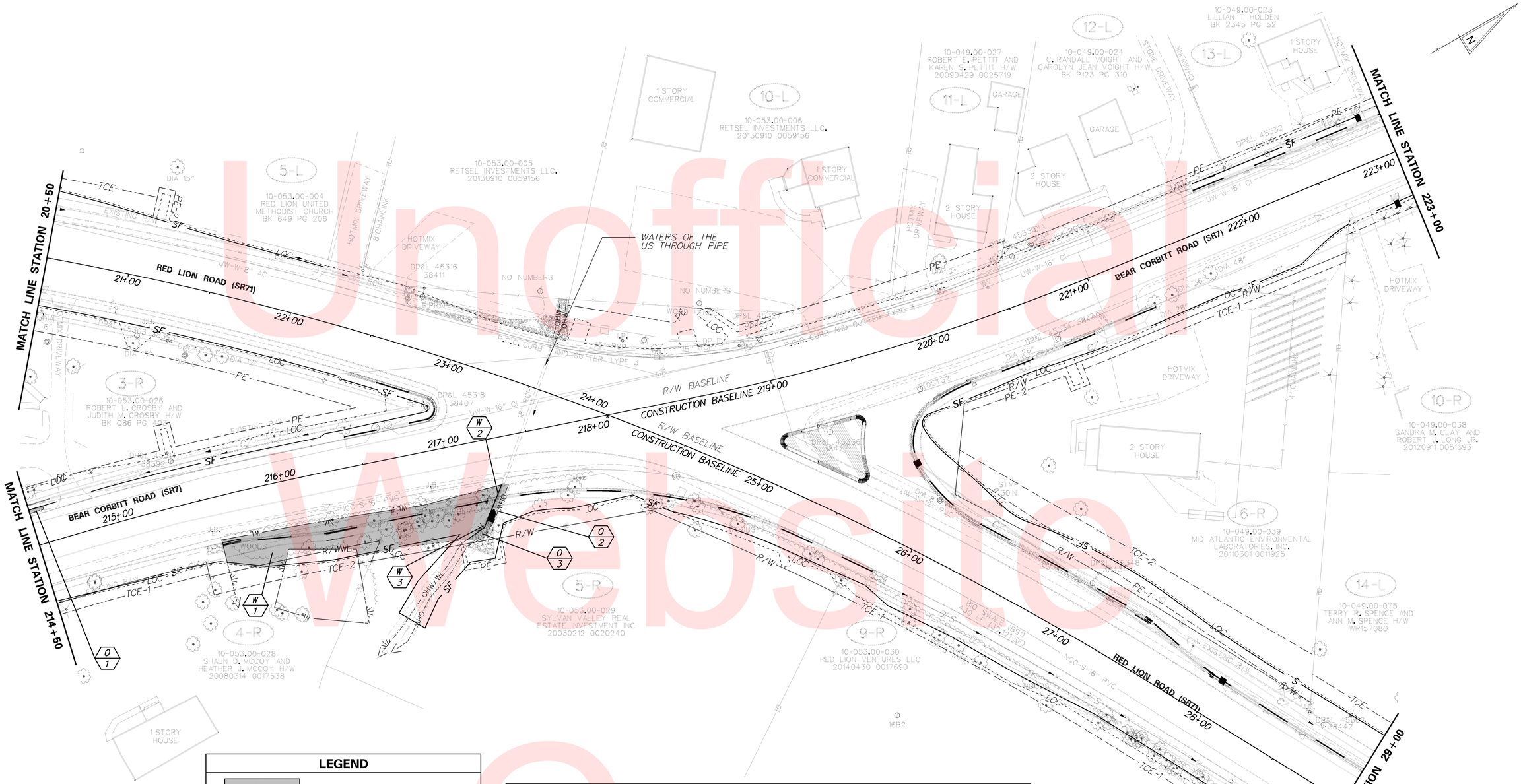
CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

ENVIRONMENTAL COMPLIANCE PLAN

EC-04

SHEET NO. 39

TOTAL SHTS. 64



LEGEND

	PERMANENT IMPACT AREA
WL	WETLAND BOUNDARY
PWL	PROPOSED WETLAND BOUNDARY
OHW	ORDINARY HIGH WATER
OHW/WL	ORD. HIGH WATER / WETLAND
XX / ?X	IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

PERMANENT WETLAND IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
4-W1	GRADING	3,351.47	0.0769	N/A	USACE
4-W2	PIPE (FILL)	82.84	0.0019	N/A	USACE
4-W3	PIPE (RIPRAP)	11.61	0.0003	N/A	USACE
TOTAL FOR THIS SHEET		3,445.92	0.0791	N/A	

PERMANENT OPEN WATER IMPACT AREA SCHEDULE

ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
4-01	GRADING	22.08	0.0005	0.41	USACE/DNREC
4-02	PIPE (FILL)	92.25	0.0021	1.71	USACE/DNREC
4-03	PIPE (RIPRAP)	69.27	0.0016	1.28	USACE/DNREC
TOTAL FOR THIS SHEET		183.60	0.0042	3.40	

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

ENVIRONMENTAL COMPLIANCE PLAN

EC-05

SHEET NO. 40

TOTAL SHTS. 64

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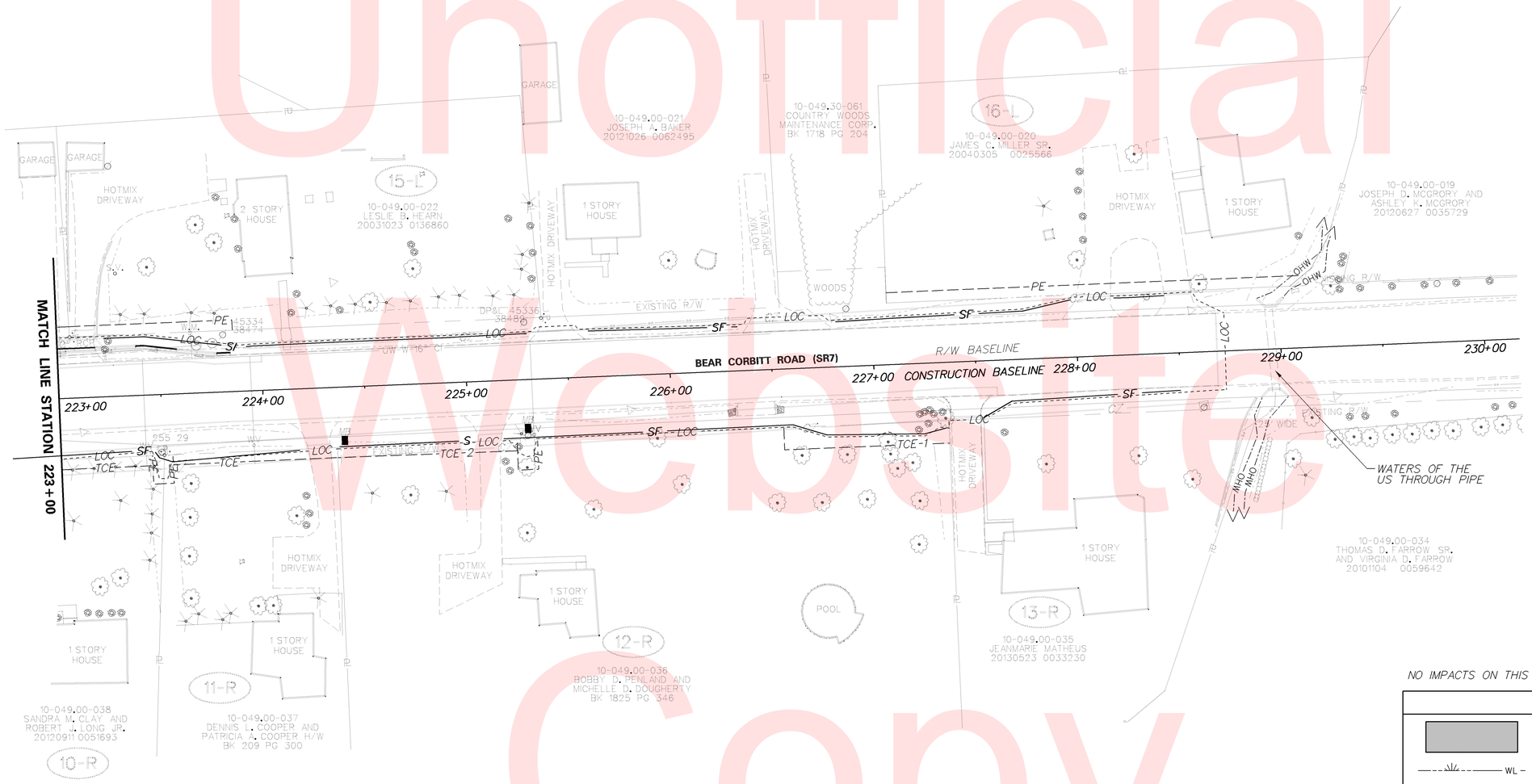

NO IMPACTS ON THIS SHEET

LEGEND

	PERMANENT IMPACT AREA
—·-·-WL-·-·—	WETLAND BOUNDARY
—·-·-PWL-·-·—	PROPOSED WETLAND BOUNDARY
-·-·-OHW-·-·-	ORDINARY HIGH WATER
-·-·-OHW/WL-·-·-	ORD. HIGH WATER / WETLAND
XX / ?X	IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

EC-06

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

ENVIRONMENTAL COMPLIANCE PLAN

SHEET NO. 41

TOTAL SHTS. 64

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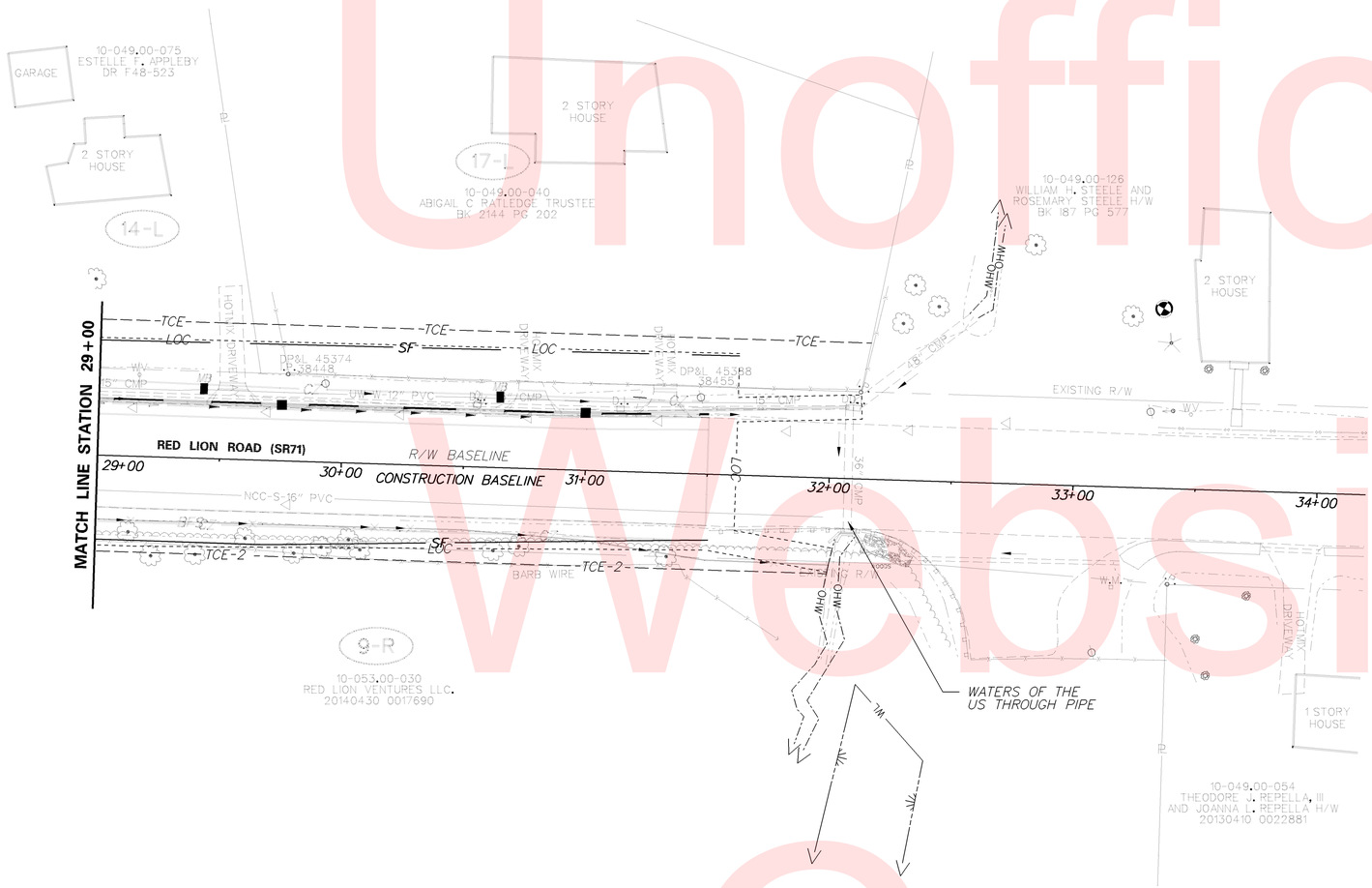

NO IMPACTS ON THIS SHEET

LEGEND

	PERMANENT IMPACT AREA
WL	WETLAND BOUNDARY
PWL	PROPOSED WETLAND BOUNDARY
OHW	ORDINARY HIGH WATER
OHW/WL	ORD. HIGH WATER / WETLAND

XX / ?X — IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER

O = OPEN WATER IMPACT W = WETLAND IMPACT

T = TEMPORARY IMPACT

EC-07

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

ENVIRONMENTAL COMPLIANCE PLAN

SHEET NO. 42
TOTAL SHTS. 64

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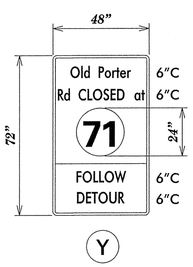
PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

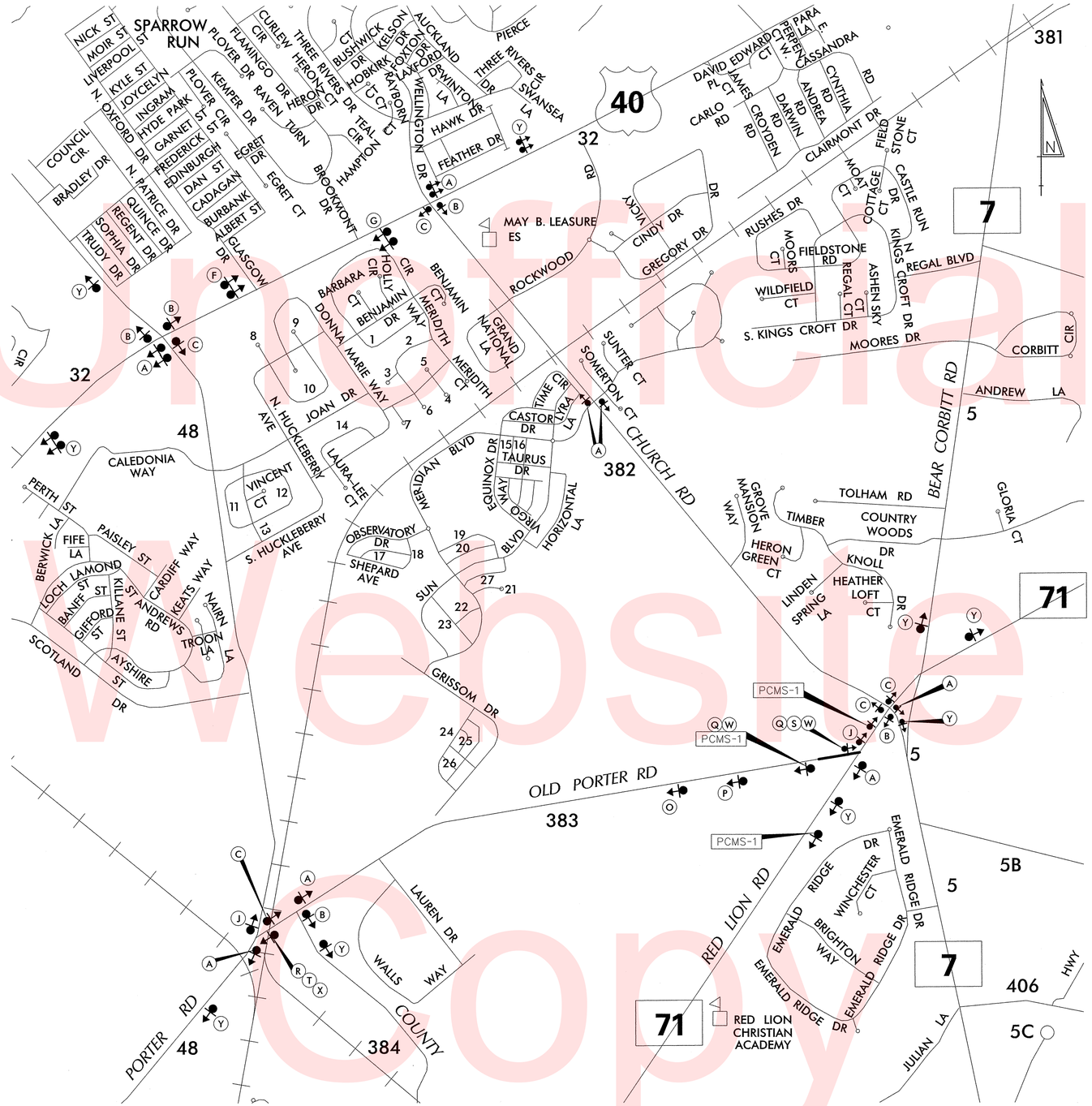
OLD PORTER ROAD	TO CLOSE STARTING XX/XX/XX

SPECIAL SIGNS



***D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**

71 – WHITE BACKGROUND; BLACK LEGEND



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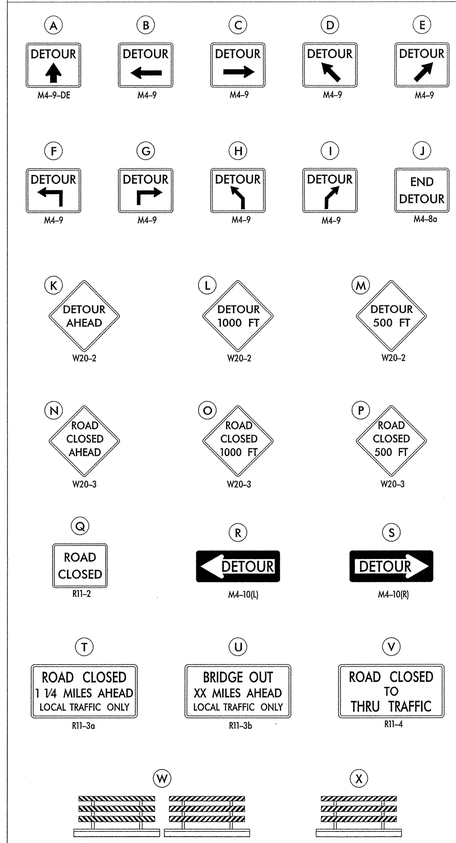

GENERAL NOTES

1. ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
2. THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
3. DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
4. SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
5. SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
6. 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" (DE MUTCD) WILL PREVAIL.
7. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
8. WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
9. "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
10. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

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RECOMMENDED	DATE: 1-24-14	RECOMMENDED	DATE: 1/24/14	RECOMMENDED	DATE:	APPROVED CHIEF SAFETY OFFICER	DATE: 1-27-14	APPROVED TRAFFIC ENGINEER	DATE: 1/27/2014

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	ROAD NO.	N383
T201000701	DESIGNED BY: MFR	
COUNTY		
NEW CASTLE	CHECKED BY: ASW	

VEHICULAR DETOUR PLAN
OLD PORTER ROAD

SHEET NO. 43
TOTAL SHTS. 62

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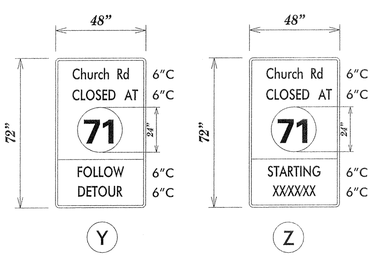
PORTABLE CHANGEABLE MESSAGE SIGNS

DURING DETOUR
(DISPLAY FOR 5 DAYS AFTER IMPLEMENTATION OF DETOUR)

PCMS-1

CHURCH RD AT DE 71	CLOSED FOLLOW DETOUR

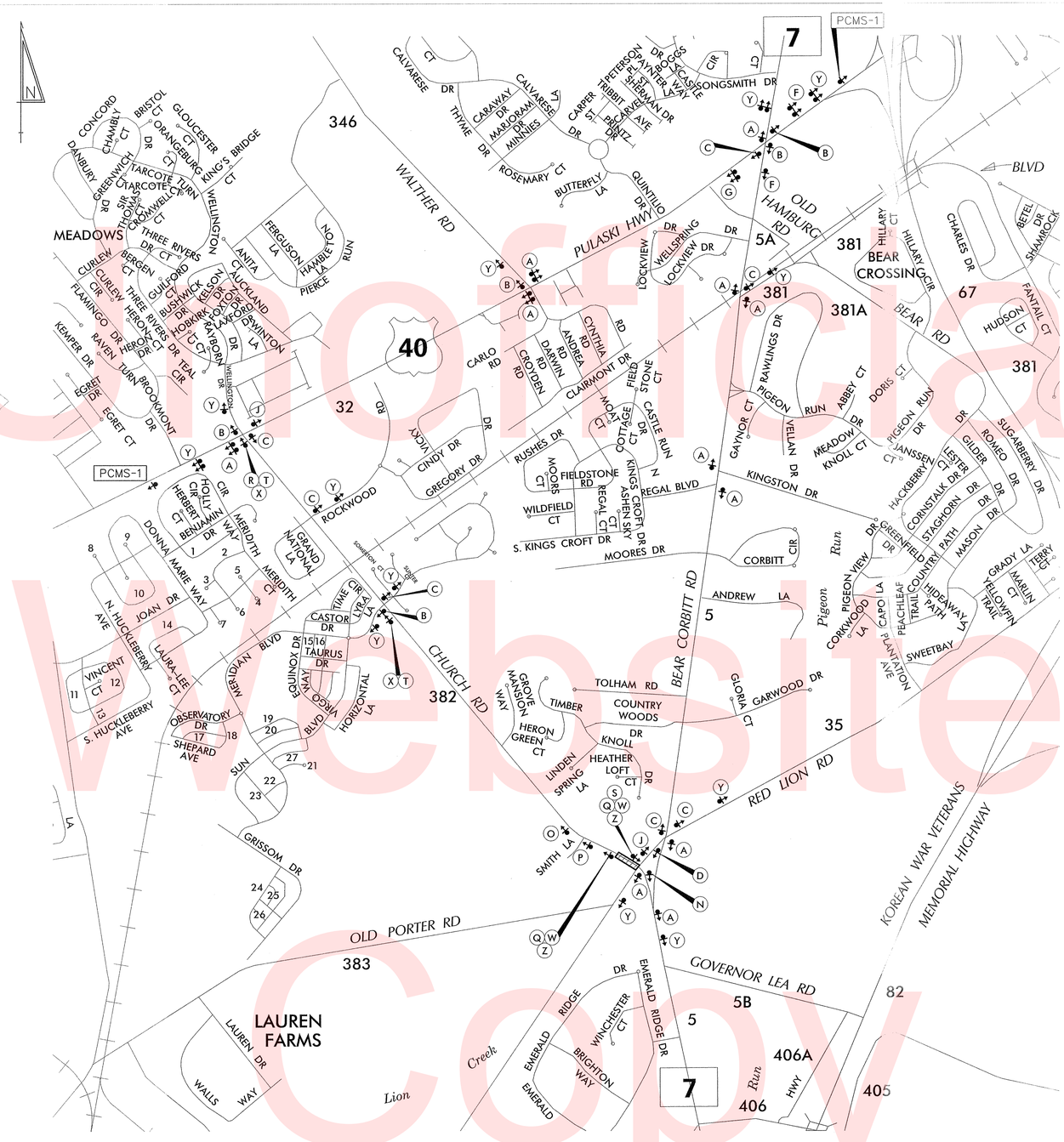
SPECIAL SIGNS



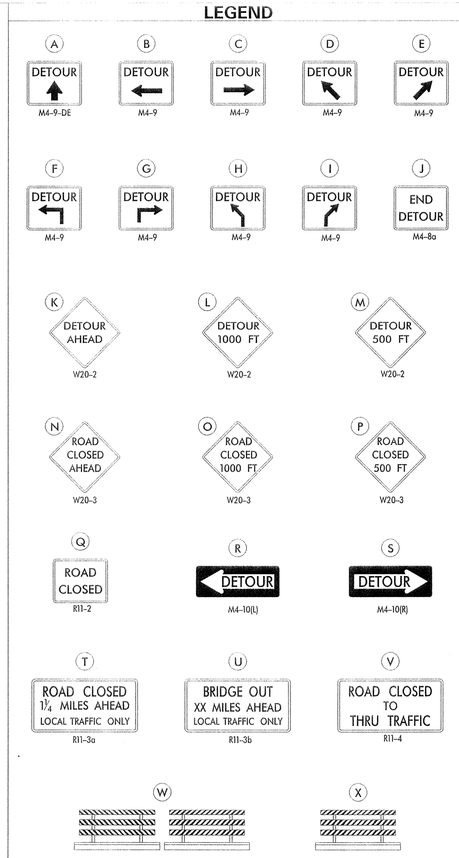
***D/G RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND; BLACK LEGEND**

71 WHITE BACKGROUND; BLACK LEGEND

(Z) SIGN SHALL BE PLACED 10 DAYS PRIOR TO DETOUR IMPLEMENTATION. UPON IMPLEMENTATION OF DETOUR, (Z) SIGN SHALL BE REMOVED.



LEGEND



GENERAL NOTES

1. ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
2. THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
3. DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
4. SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
5. SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
6. 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" (DE MUTCD) WILL PREVAIL.
7. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
8. WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
9. "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
10. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED *Michael F. Rivera* DATE: 11-7-14 | RECOMMENDED DATE: 11/14/14 | RECOMMENDED DATE: 11/14/14 | APPROVED CHIEF SAFETY OFFICER DATE: 11-14-14 | APPROVED TRAFFIC ENGINEER DATE: 11/14/2014

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS
Draft Submitted 11/7/14

NOT TO SCALE

HSIP NCC SR 71, OLD PORTER RD TO SR 7

CONTRACT	ROAD NO.	N382
T201000701	DESIGNED BY: MFR	
COUNTY		
NEW CASTLE	CHECKED BY: ASW	

VEHICULAR DETOUR PLAN
CHURCH RD

SHEET NO. 44
TOTAL SHTS. 52

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Unofficial Website Copy

PORTABLE CHANGEABLE MESSAGE SIGNS

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

PCMS-1

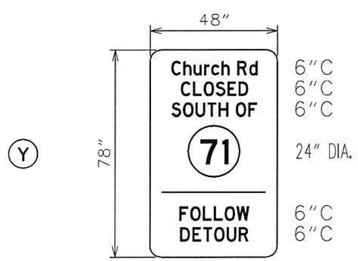
CHURCH RD SOUTH OF SR 71	TO CLOSE STARTING XX/XX/XX

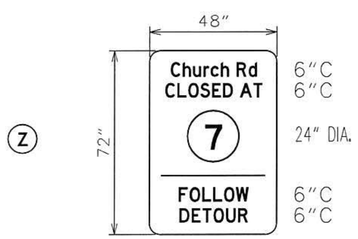
PRIOR TO DETOUR
(10 DAYS PRIOR TO BEGINNING OF DETOUR)

PCMS-2

CHURCH ROAD AT SR 7	TO CLOSE STARTING XX/XX/XX

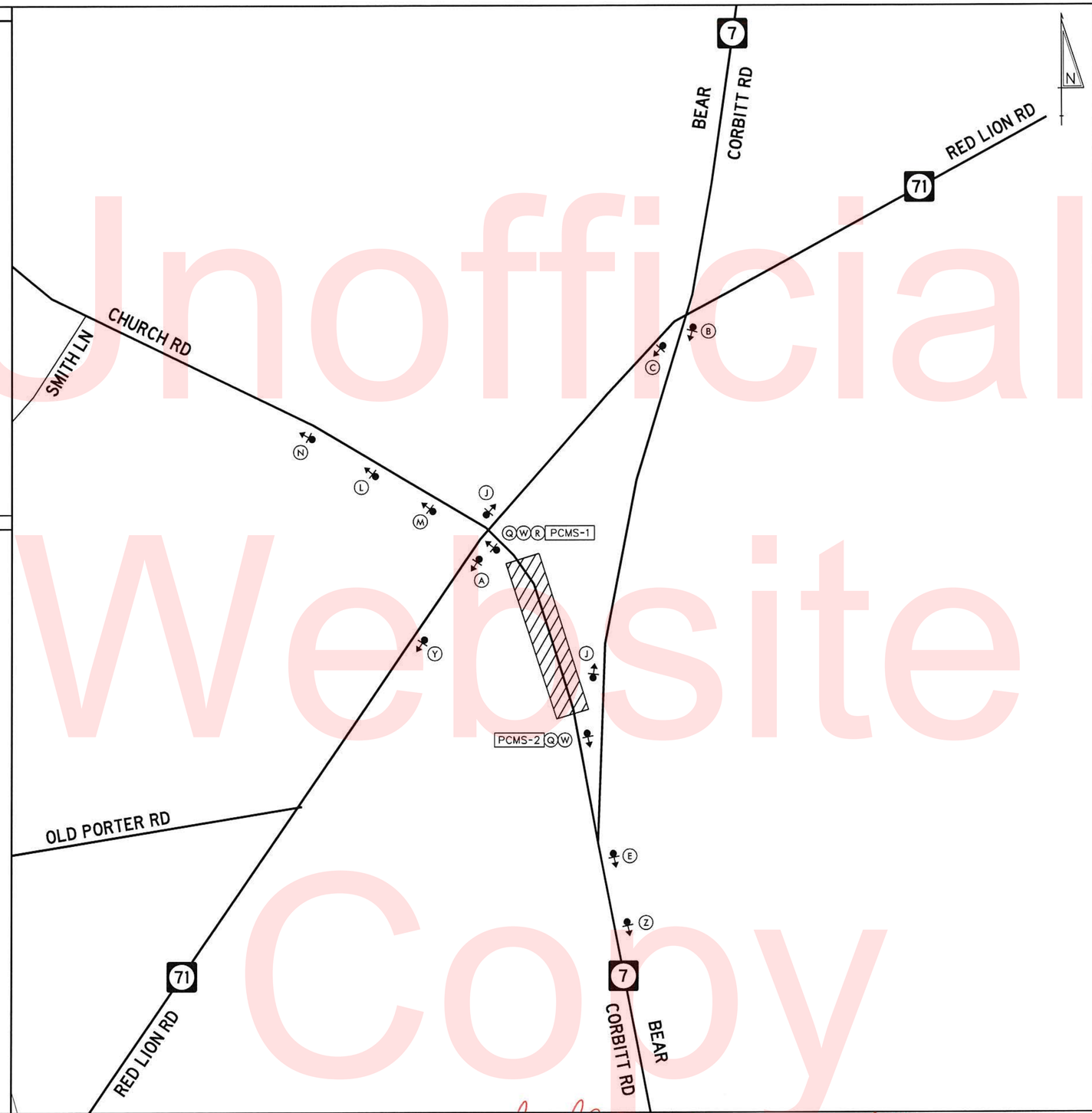
SPECIAL SIGNS



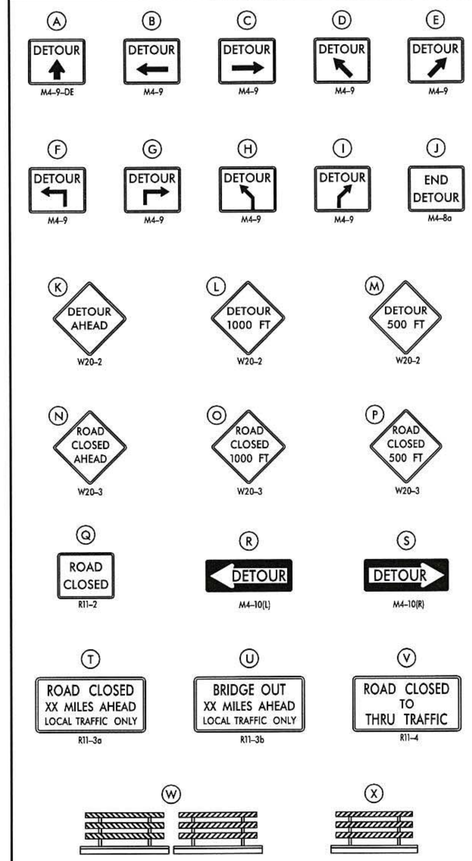


ALL SPECIAL SIGNS SHALL BE BLACK ON RETROREFLECTIVE PRISMATIC FLUORESCENT ORANGE.

ALL ROUTE SHIELDS SHALL BE BLACK ON WHITE IN ACCORDANCE WITH THE DE-MUTCD.



LEGEND



GENERAL NOTES

1. ALL DETOUR SIGNING, INCLUDING TRAILBLAZERS, ARE TO BE SUPPLIED AND MAINTAINED BY THE GENERAL CONTRACTOR IN COMPLIANCE WITH "THE DELAWARE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.)
2. THE CONTRACTOR SHALL COMPLY WITH GUIDELINES IN "THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD PART 6) FOR BARRICADES AND SIGNS (AS PER LATEST REVISION.)
3. DESIGN OF ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FHWA STANDARD HIGHWAY SIGNS BOOK.
4. SIZES OF ALL SIGNS SHALL BE IN ACCORDANCE WITH "THE DELAWARE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (DE MUTCD.) SIZE OF SIGN SHALL BE BASED ON TYPE OF ROADWAY ON WHICH THE SIGN IS INSTALLED.
5. SIGNS NO LONGER IN USE SHALL BE COMPLETELY COVERED WITH NO RETROREFLECTIVE MATERIAL SHOWING, OR SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER.
6. 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" (DE MUTCD) WILL PREVAIL.
7. SIGNS "N" THROUGH "Q" AND "T" AND "V", THE WORD "ROAD" SHOULD BE CHANGED TO "RAMP", "RR XING", OR "BRIDGE" WHERE APPLICABLE.
8. WARNING SIGNS AND DETOUR TRAILBLAZERS SHALL BE MOUNTED ON BREAKAWAY POSTS AND HAVE RETROREFLECTIVE FLUORESCENT ORANGE SHEETING.
9. "W" BARRICADES SHALL COMPLETELY RUN THE FULL WIDTH OF THE ROADWAY.
10. BARRICADES SHALL BE A MINIMUM OF 6 FEET WIDE UNLESS DIRECTED BY THE ENGINEER.

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: 9/13/16

APPROVED CHIEF SAFETY OFFICER _____ DATE: 9/13/16

APPROVED TRAFFIC ENGINEER _____ DATE: 9/13/16

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

HSIP NCC
SR 71, OLD PORTER RD TO SR 7

CONTRACT	ROAD NO.	N382
T201000701	DESIGNED BY:	SWN
COUNTY		
NEW CASTLE	CHECKED BY:	ASW

VEHICULAR DETOUR PLAN
CHURCH RD
SOUTH OF SR 71

SHEET NO. 44A
TOTAL SHTS. 52

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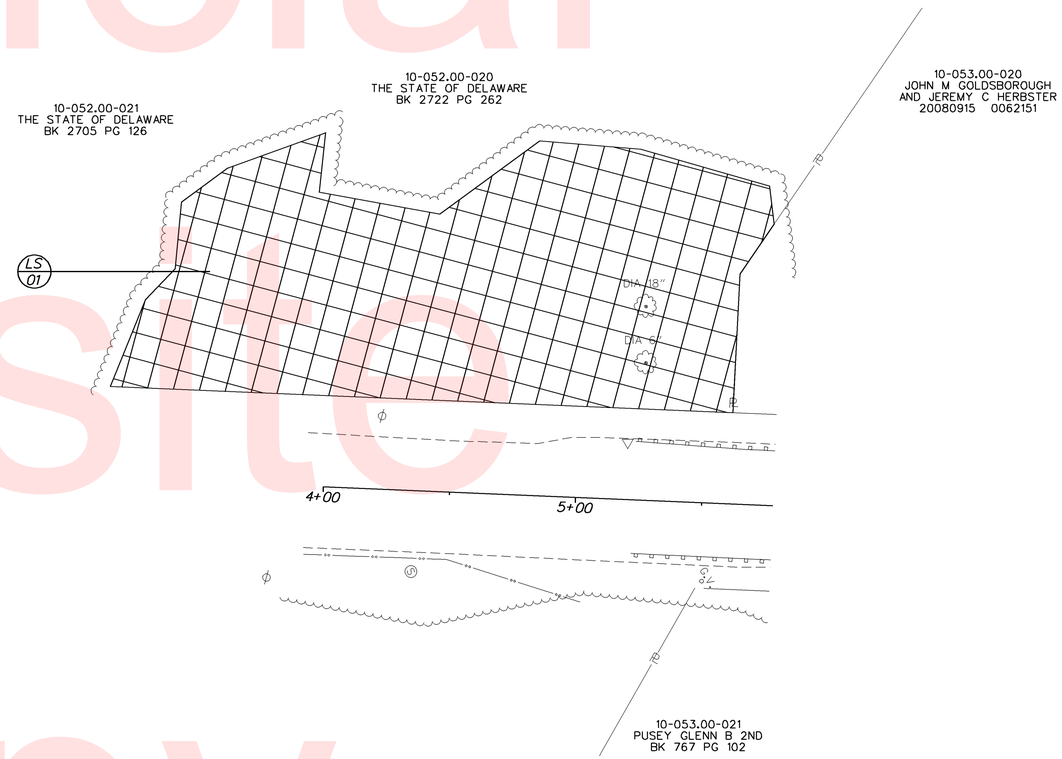
LANDSCAPE PLANTING SCHEDULE		
NO.	PLANTING DESCRIPTION	QUANTITY
01	WILLOW OAK (QUERCUS PHELLOS)	15
01	RED OAK (QUERCUS RUBRA)	15
01	WHITE OAK (QUERCUS ALBA)	15
01	TULIP POPLAR(LIRIODENDRON TULIPIFERA)	17
01	SWEETGUM (LIQUIDAMBAR STYRACIFLUA)	17
01	RED MAPLE (ACER RUBRUM)	17
01	SYCAMORE (PLATANUS OCCIDENTALIS)	17
01	REDBUD (CERCIS CANADENSIS)	20
01	SERVICEBERRY (AMELANCHIER LAEVIS)	20
01	REDOSIER DOGWOOD (CORNUS SERICEA)	20

LANDSCAPING NOTES:

1. NATURALIZE ON 12-FOOT CENTERS, MINIMUM 10-FOOT CENTERS, MAXIMUM 14-CENTERS.
2. ONE PLANT PER 144 SQUARE FEET OF PLANTABLE AREA.
3. PLANT IN RANDOM GROUPINGS OF 2-3 LIKE PLANTS PER GROUP.
4. BEYOND ADDITIONAL WATERING AS PART OF THE PLANTING OPERATION, NO ADDITIONAL WATERING OF THESE TREES/SHRUBS IS REQUIRED.
5. SECTION 737.17 PLANT ESTABLISHMENT IS WAIVED FOR THIS CONTRACT.



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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

LANDSCAPING PLAN

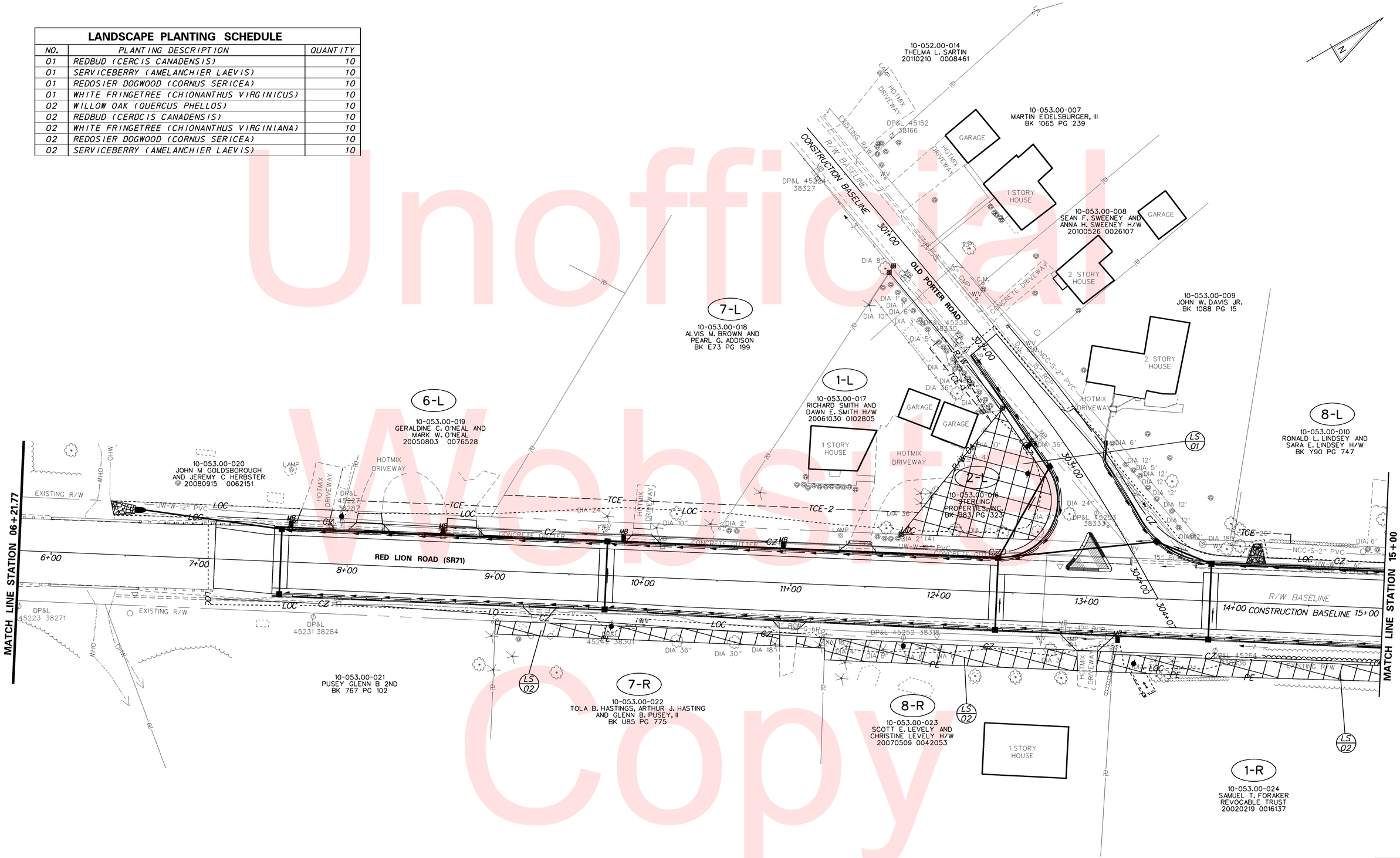
LS-01

SHEET NO. 45

TOTAL SHTS. 64

LANDSCAPE PLANTING SCHEDULE

NO.	PLANTING DESCRIPTION	QUANTITY
01	REDBUD (CERCIS CANADENSIS)	10
01	SERVICEBERRY (AMELANCHIER LAEVIS)	10
01	REDOSIER DOGWOOD (CORNUS SERICEA)	10
01	WHITE FRINGETREE (CHIONANTHUS VIRGINICUS)	10
02	WILLOW OAK (QUERCUS PHELLOS)	10
02	REDBUD (CERDCIS CANADENSIS)	10
02	WHITE FRINGETREE (CHIONANTHUS VIRGINIANA)	10
02	REDOSIER DOGWOOD (CORNUS SERICEA)	10
02	SERVICEBERRY (AMELANCHIER LAEVIS)	10



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC SR 71, OLD PORTER ROAD TO SR 7

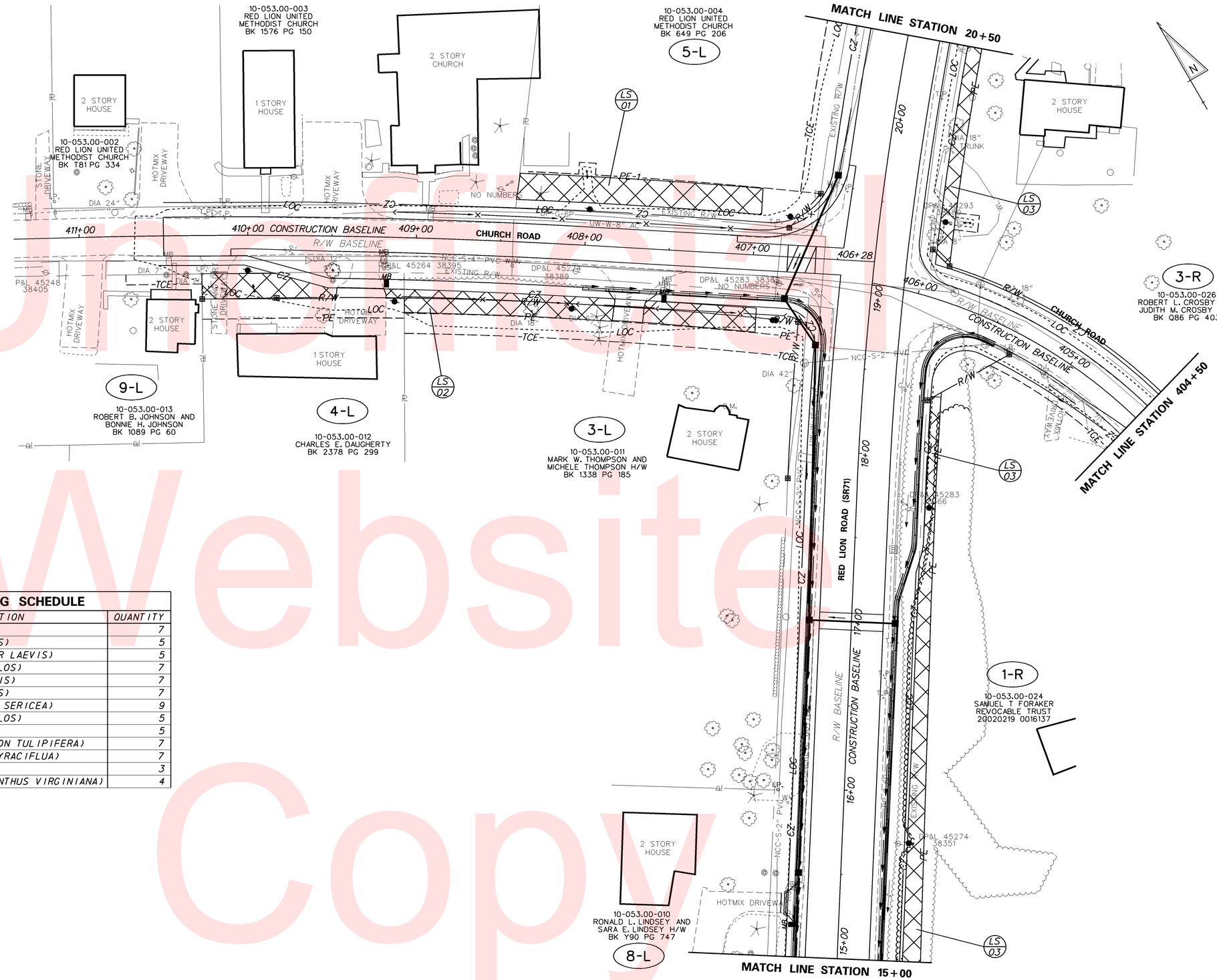
CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

LANDSCAPING PLAN

LS-02

SHEET NO. 46

TOTAL SHTS. 64



LANDSCAPE PLANTING SCHEDULE

NO.	PLANTING DESCRIPTION	QUANTITY
01	RED MAPLE (ACER RUBRUM)	7
01	REDBUD (CERCIS CANADENSIS)	5
01	SERVICEBERRY (AMELANCHIER LAEVIS)	5
02	WILLOW OAK (QUERCUS PHELLOS)	7
02	PIN OAK (QUERCUS PALUSTRIS)	7
02	REDBUD (CERCIS CANADENSIS)	7
02	REDOSIER DOGWOOD (CORNUS SERICEA)	9
03	WILLOW OAK (QUERCUS PHELLOS)	5
03	RED OAK (QUERCUS RUBRA)	5
03	TULIP POPLAR (LIRIODENDRON TULIPIFERA)	7
03	SWEETGUM (LIQUIDAMBAR STYRACIFLUA)	7
03	RED MAPLE (ACER RUBRUM)	3
03	WHITE FRINGETREE (CHIONANTHUS VIRGINIANA)	4

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LS–03

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD
TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

LANDSCAPING PLAN

SHEET NO. 47
TOTAL SHTS. 64

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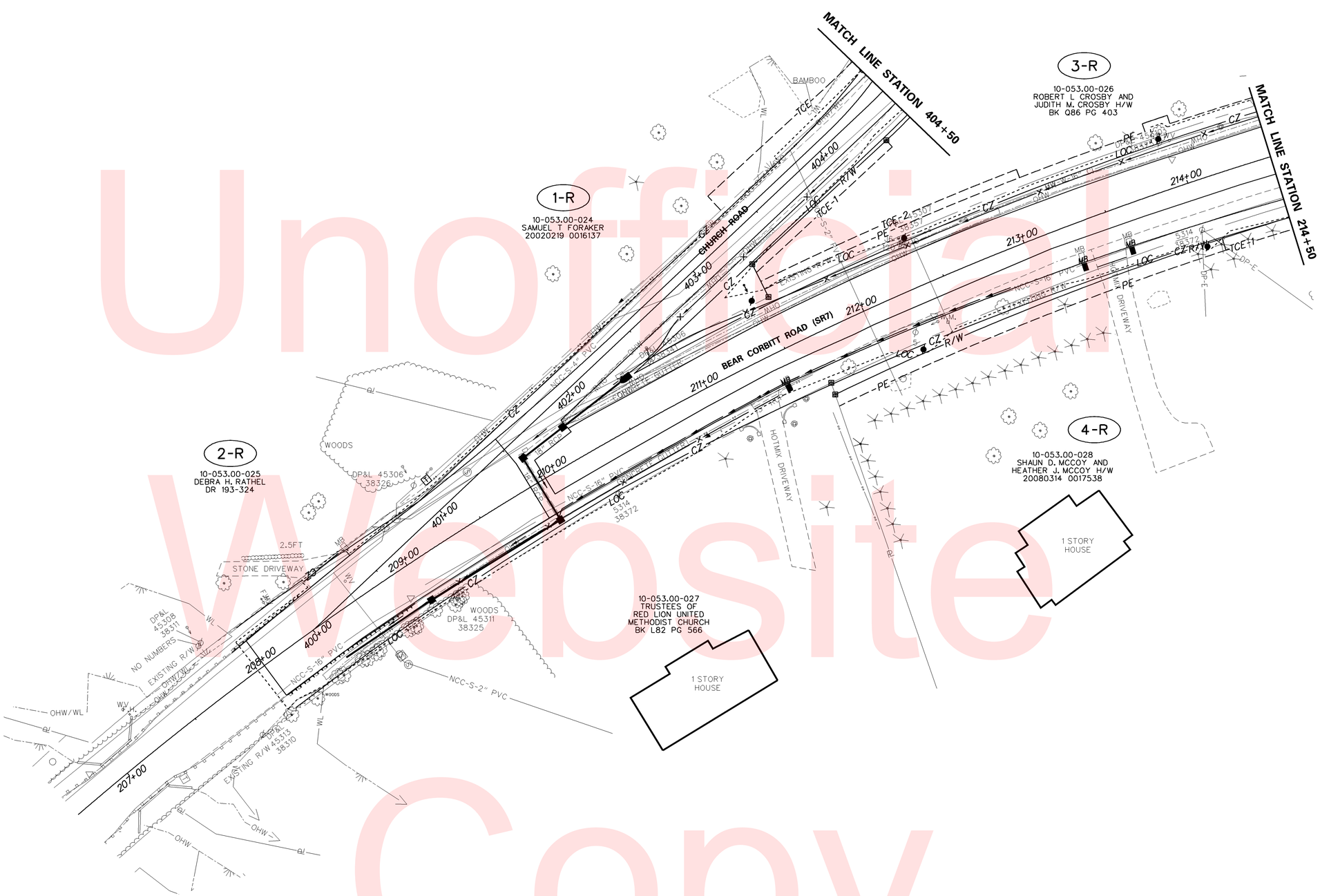

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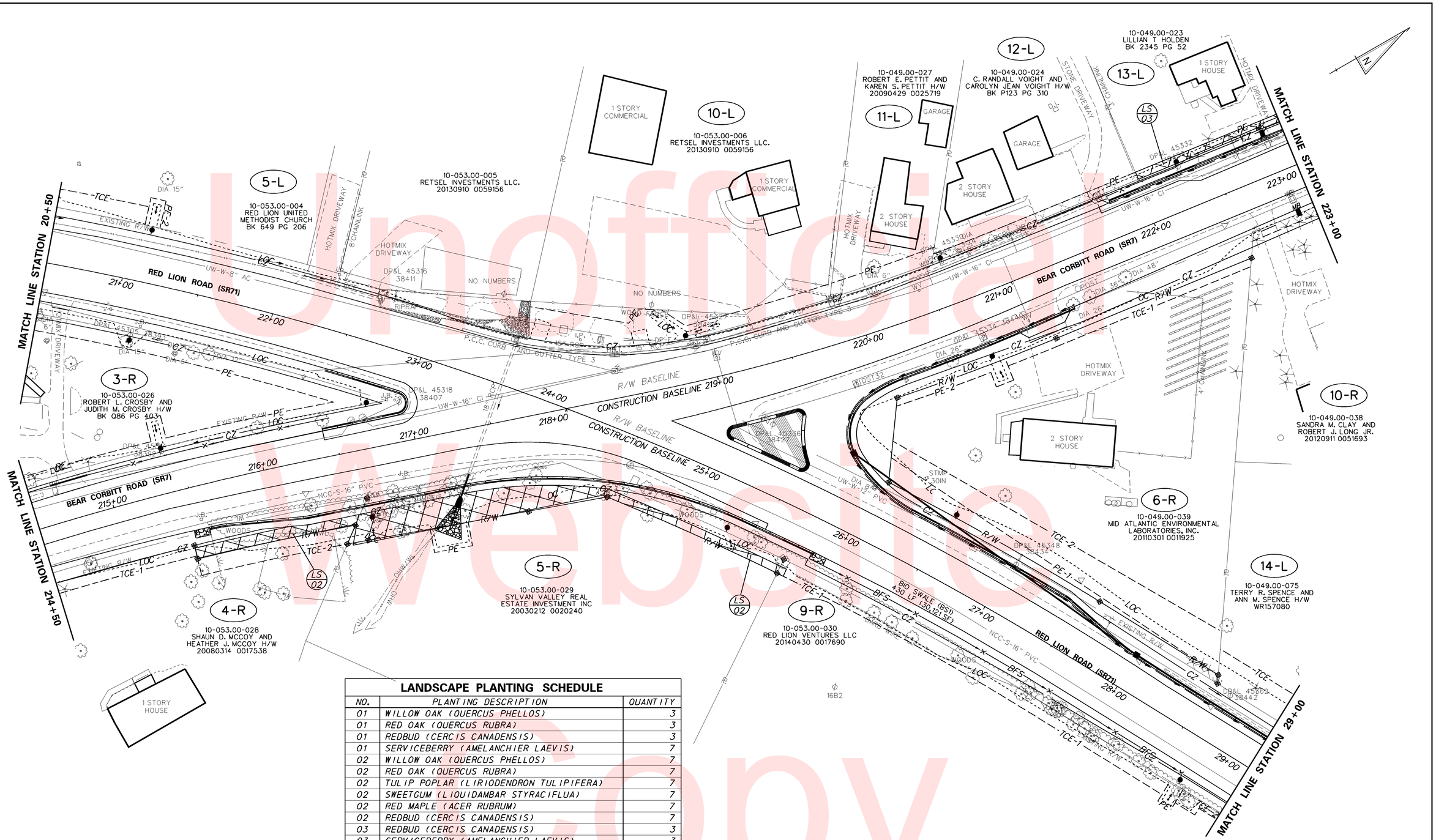
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	LANDSCAPING PLAN	LS-04
				COUNTY NCC	DESIGNED BY: DCK		SHEET NO. 48
					CHECKED BY: JKL		TOTAL SHTS. 64



LANDSCAPE PLANTING SCHEDULE

NO.	PLANTING DESCRIPTION	QUANTITY
01	WILLOW OAK (QUERCUS PHELLOS)	3
01	RED OAK (QUERCUS RUBRA)	3
01	REDBUD (CERCIS CANADENSIS)	3
01	SERVICEBERRY (AMELANCHIER LAEVIS)	7
02	WILLOW OAK (QUERCUS PHELLOS)	7
02	RED OAK (QUERCUS RUBRA)	7
02	TULIP POPLAR (LIRIODENDRON TULIPIFERA)	7
02	SWEETGUM (LIQUIDAMBAR STYRACIFLUA)	7
02	RED MAPLE (ACER RUBRUM)	7
02	REDBUD (CERCIS CANADENSIS)	7
03	REDBUD (CERCIS CANADENSIS)	3
03	SERVICEBERRY (AMELANCHIER LAEVIS)	3
03	REDOSIER DOGWOOD (CORNUS SERICEA)	3
03	WHITE FRINGETREE (CHIONANTHUS VIRGINIANA)	3

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

LANDSCAPING PLAN

LS-05

SHEET NO. 49

TOTAL SHTS. 64

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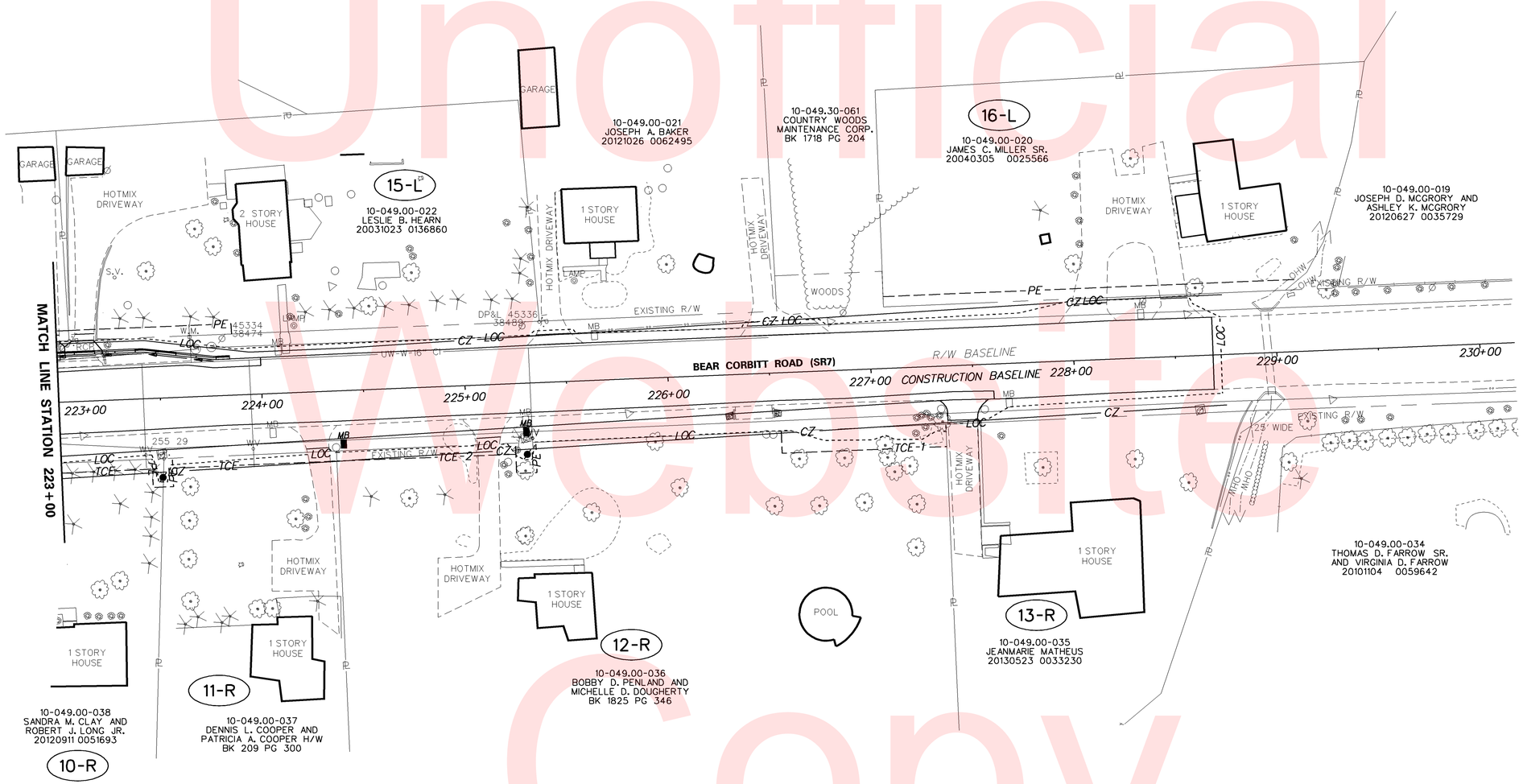

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	LANDSCAPING PLAN	LS-06
				COUNTY NCC	DESIGNED BY: DCK		SHEET NO. 50
					CHECKED BY: JKL		TOTAL SHTS. 64

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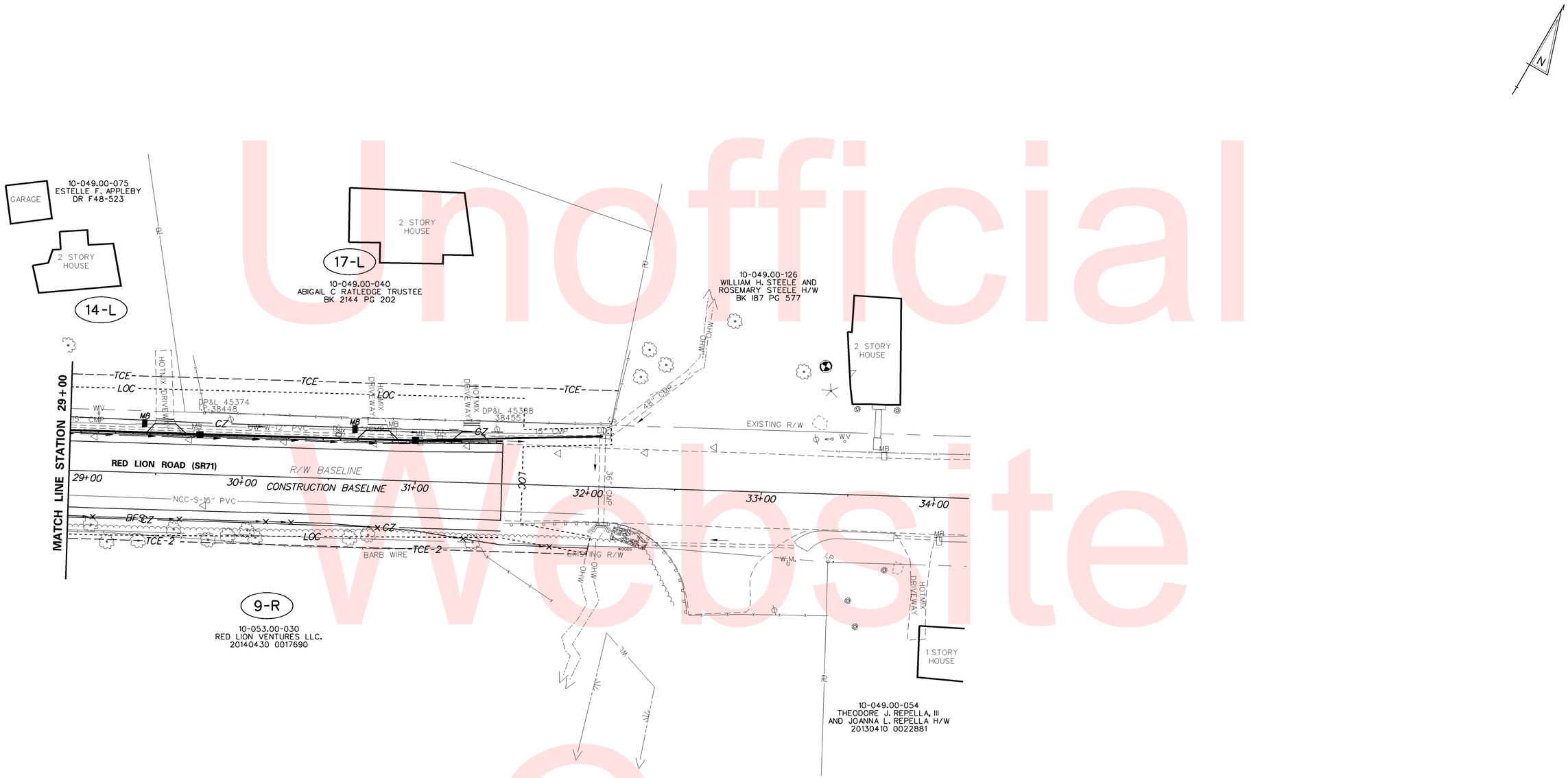

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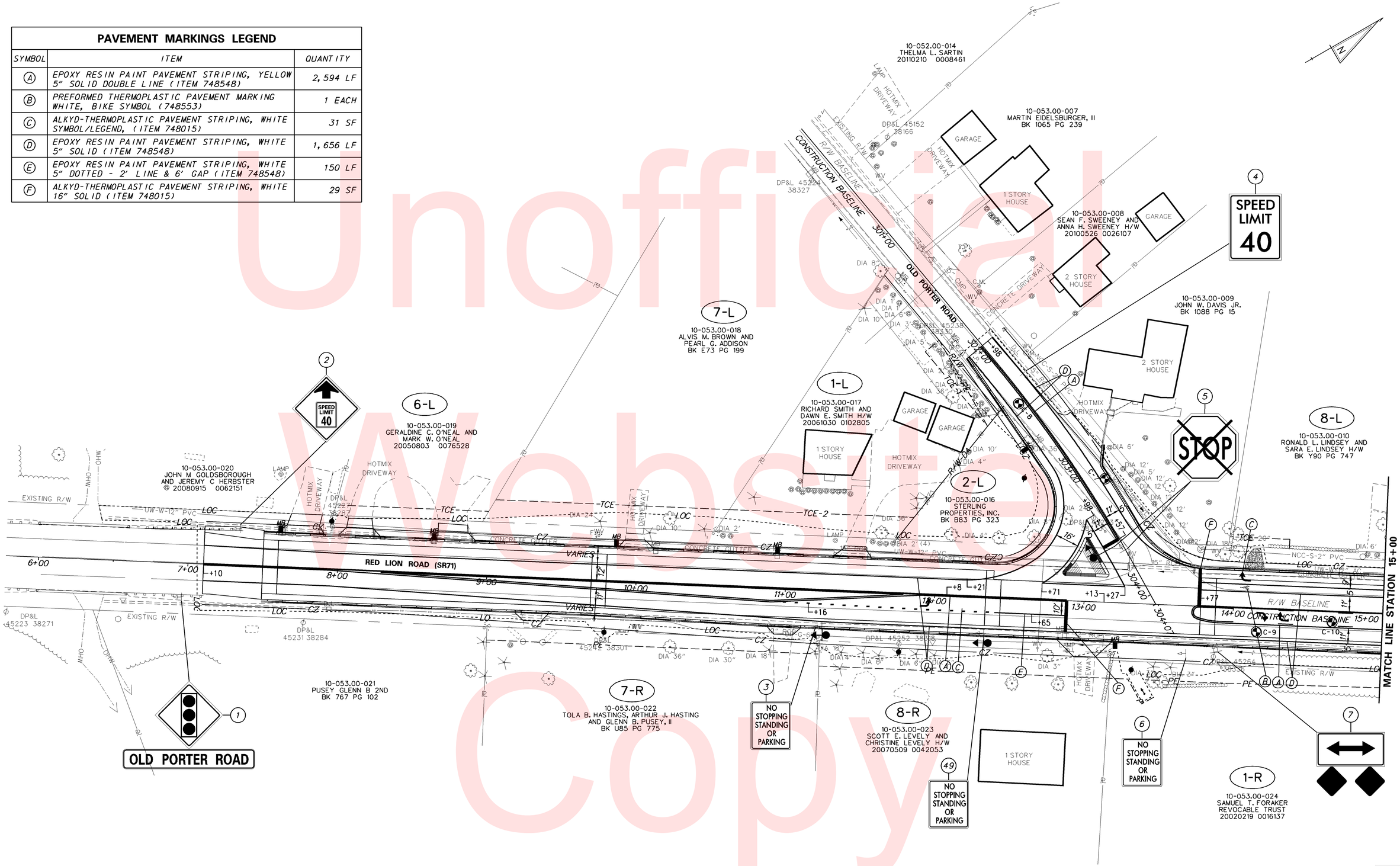
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	HSIP NCC SR 71, OLD PORTER ROAD TO SR 7	CONTRACT T201000701	BRIDGE NO. N/A	LANDSCAPING PLAN	LS-07
				COUNTY NCC	DESIGNED BY: DCK		SHEET NO. 51
					CHECKED BY: JKL		TOTAL SHTS. 64

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	2,594 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	1 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	31 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	1,656 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	150 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	29 SF



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

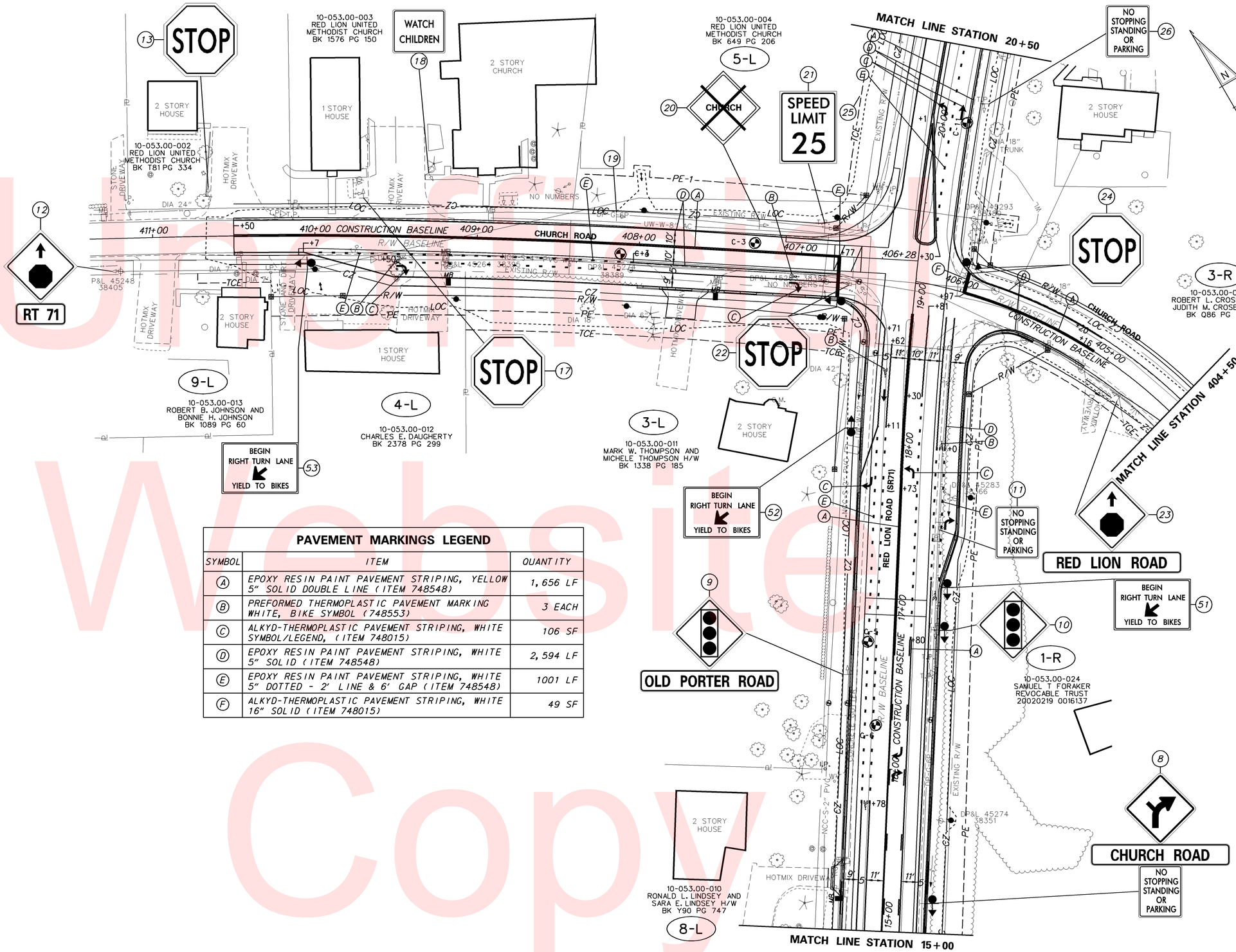
SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY	CHECKED BY:	JKL
NCC		

SIGNING, STRIPING AND CONDUIT PLAN

SS-01
SHEET NO. 52
TOTAL SHTS. 64



PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	1,656 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	3 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	106 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	2,594 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	1001 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	49 SF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

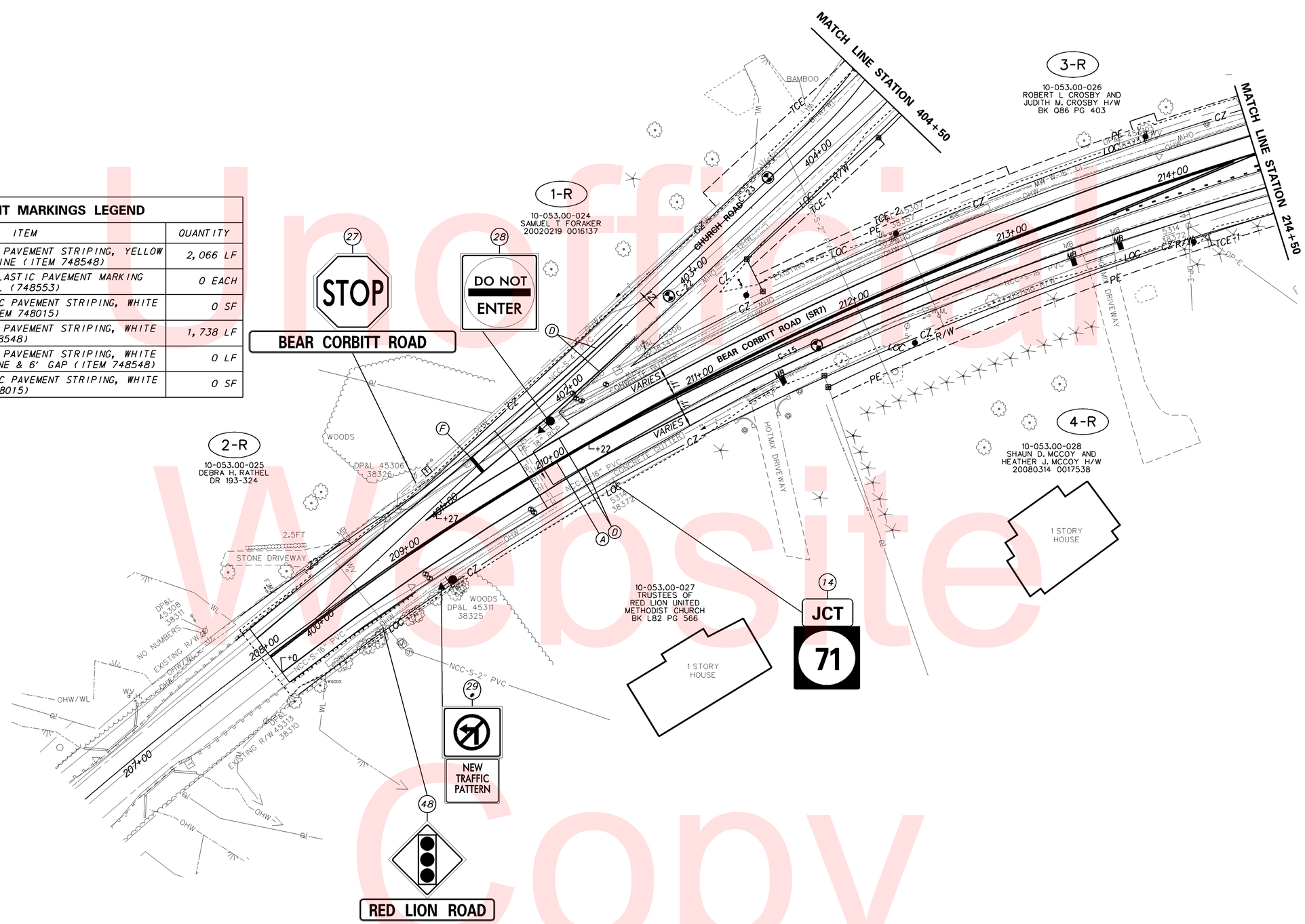
SIGNING, STRIPING AND CONDUIT PLAN

SS-02

SHEET NO. 53

TOTAL SHTS. 64

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	2,066 LF
(B)	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	0 EACH
(C)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	0 SF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	1,738 LF
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	0 LF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	0 SF



* NEW TRAFFIC PATTERN SIGN SHALL BE REMOVED AFTER 6 MONTHS. CONTRACTOR SHALL COORDINATE WITH SIGNING AND MARKING SECTION TO SCHEDULE REMOVAL.

SS-03

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

SIGNING, STRIPING AND CONDUIT PLAN

SHEET NO. 54
TOTAL SHTS. 64

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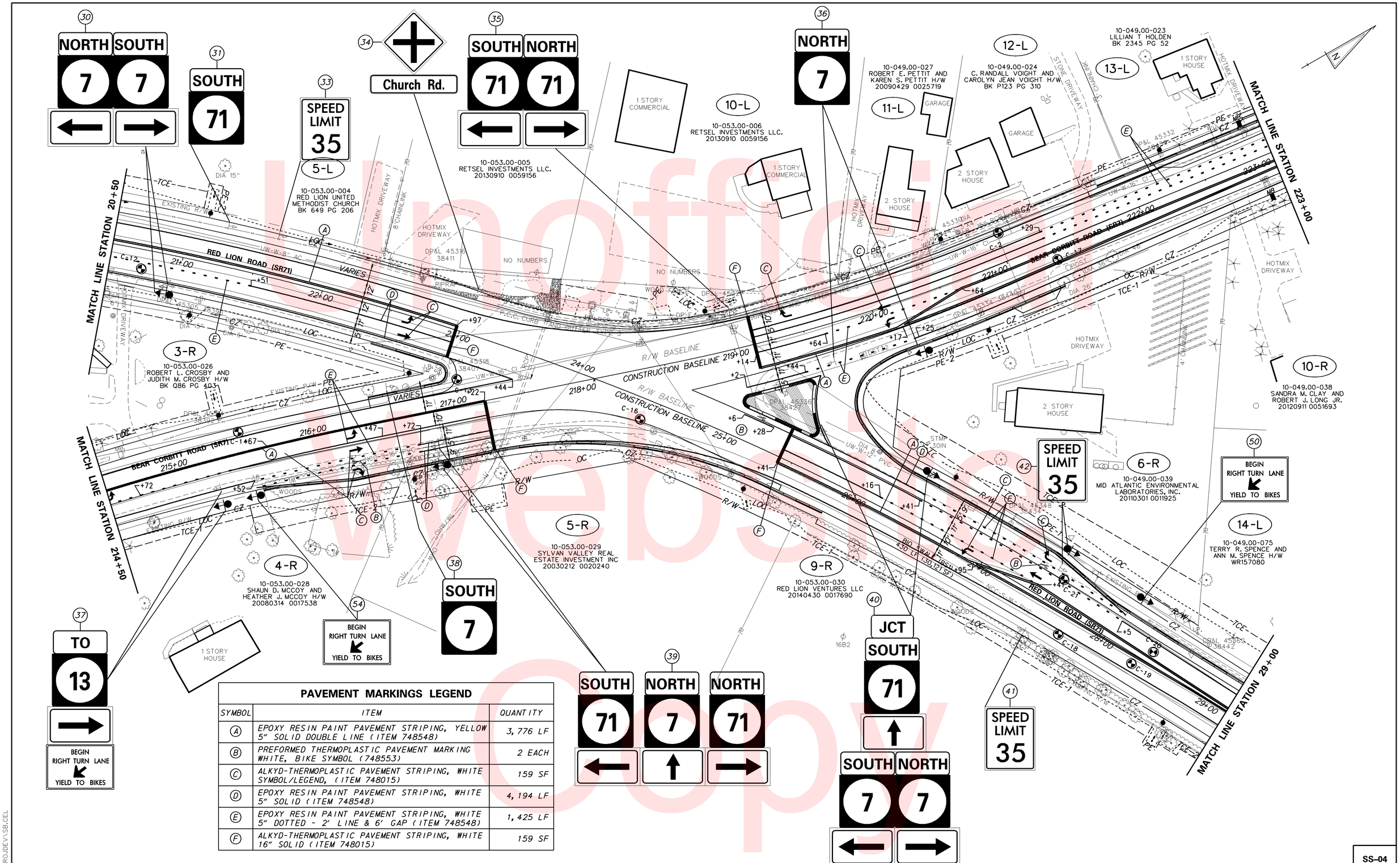

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
(A)	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	3,776 LF
(B)	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	2 EACH
(C)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	159 SF
(D)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	4,194 LF
(E)	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	1,425 LF
(F)	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	159 SF

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

SIGNING, STRIPING AND CONDUIT PLAN

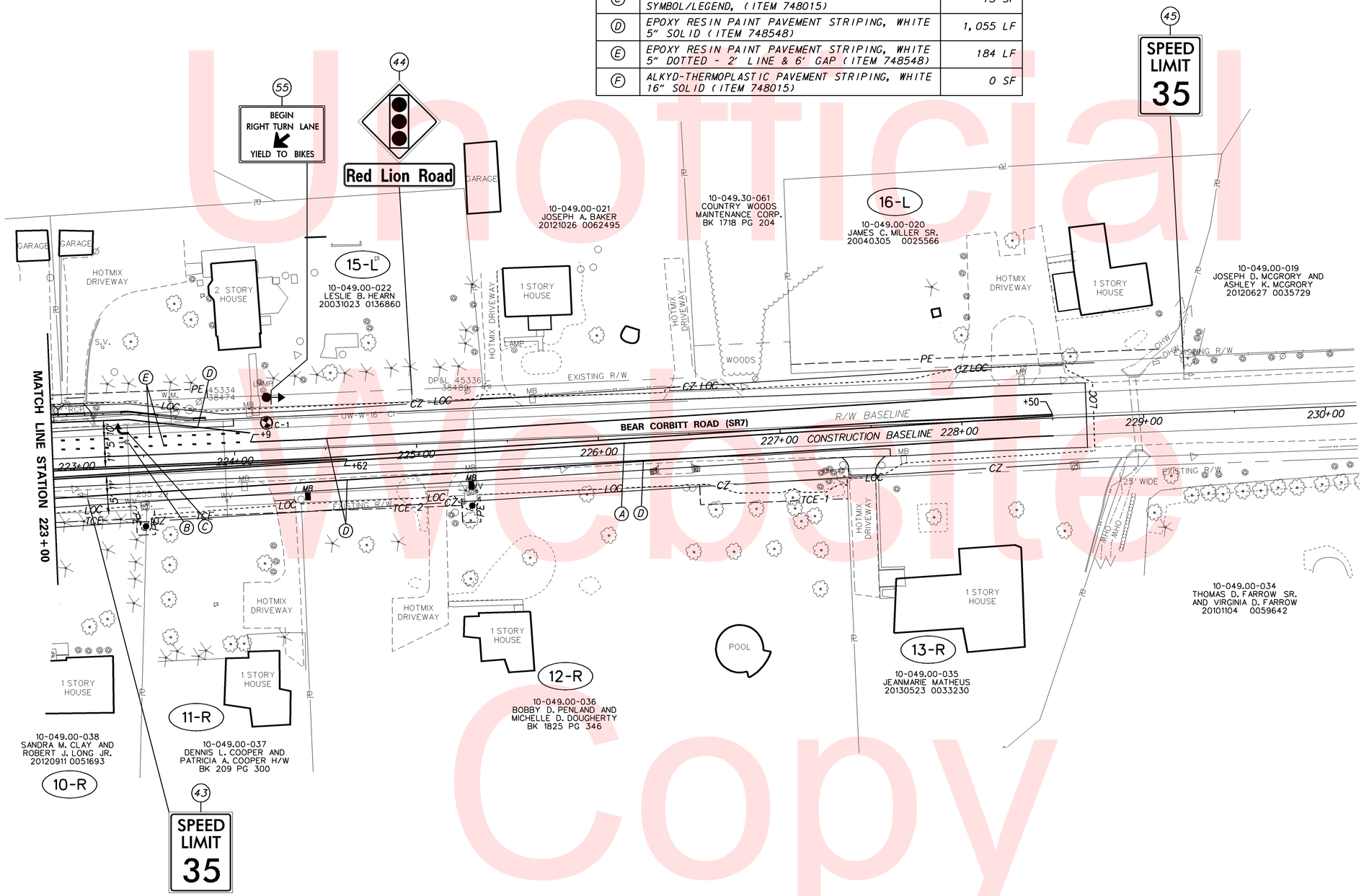
SS-04

SHEET NO. 55

TOTAL SHTS. 64

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	2,038 LF
B	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	1 EACH
C	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	13 SF
D	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	1,055 LF
E	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	184 LF
F	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	0 SF



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

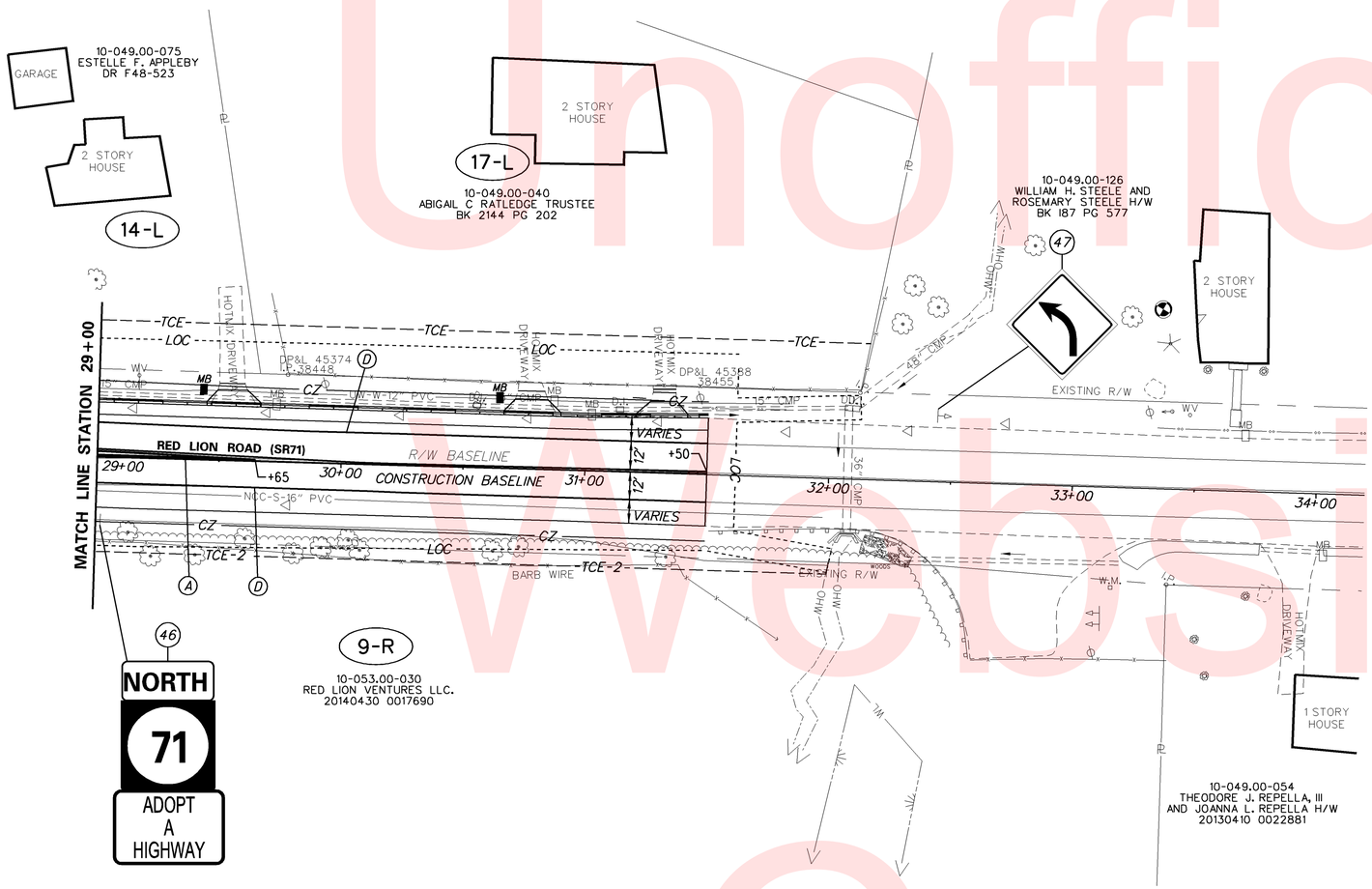
SIGNING, STRIPING AND CONDUIT PLAN

SS-05

SHEET NO. 56

TOTAL SHTS. 64

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
Ⓐ	EPOXY RESIN PAINT PAVEMENT STRIPING, YELLOW 5" SOLID DOUBLE LINE (ITEM 748548)	444 LF
Ⓑ	PREFORMED THERMOPLASTIC PAVEMENT MARKING WHITE, BIKE SYMBOL (748553)	0 EACH
Ⓒ	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE SYMBOL/LEGEND, (ITEM 748015)	0 SF
Ⓓ	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" SOLID (ITEM 748548)	185 LF
Ⓔ	EPOXY RESIN PAINT PAVEMENT STRIPING, WHITE 5" DOTTED - 2' LINE & 6' GAP (ITEM 748548)	0 LF
Ⓕ	ALKYD-THERMOPLASTIC PAVEMENT STRIPING, WHITE 16" SOLID (ITEM 748015)	0 SF



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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

SIGNING, STRIPING AND CONDUIT PLAN

SS-06

SHEET NO. 57

TOTAL SHTS. 64

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					
822	42	1	W2-2_R(30)		SIDE ROAD (Perpendicular - Right) - 30x30					REMAIN							0	0	0	
1367	42		W16-8P	1	ADVANCE STREET NAME (1 - line plaque)	1	36	8"	2	NEW							0	0	0	Old Porter Rd
54	42	2	R2-1-40(24)		SPEED LIMIT (40 MPH - 24x30)					REMAIN							0	0	0	
423	42	3	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REPOSITION	1	1				SOIL	1	0	0	
54	42	4	R2-1-40(24)		SPEED LIMIT (40 MPH - 24x30)					REMAIN							0	0	0	
3	42	5	R1-1(30)		STOP					REMOVE	1						0	0	0	
423	42	6	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN						SOIL	0	0	0	
778	42	7	W1-7(48)		TWO DIRECTIONAL LARGE ARROW - 48x24					REMAIN							0	0	0	
1964	42		OM4-3		END OF ROAD OBJECT MARKER	7				REMAIN							0	0	0	
423	42	49	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REPOSITION	1	1				SOIL	1	0	0	
718	43	8	W1-2_R(30)		CURVE (Right) - 30x30					REPOSITION	1	1				SOIL	1	0	0	
1367	43		W16-8P		ADVANCE STREET NAME (1 - line plaque)	8				REPOSITION							0	0	0	
423	43		R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18	8				REPOSITION							0	0	0	
822	43	9	W2-2_R(30)		SIDE ROAD (Perpendicular - Right) - 30x30					REMAIN							0	0	0	
1367	43		W16-8P		ADVANCE STREET NAME (1 - line plaque)	9				REMAIN							0	0	0	
877	43	10	W3-3(30)		SIGNAL AHEAD (Symbol) - 30x30					REPOSITION	1	1				SOIL	1	0	0	
423	43	11	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMOVE	1						0	0	0	
871	43	12	W3-1(30)		STOP AHEAD (Symbol) - 30x30					REMAIN							0	0	0	
3	43	13	R1-1(30)		STOP					REMAIN							0	0	0	
1445	43	14	W21-11-DE		WATCH CHILDREN (Symbol)					REMAIN							0	0	0	
3	43	17	R1-1(30)		STOP					REMAIN							0	0	0	
1445	43	18	W21-11-DE		WATCH CHILDREN					REMAIN							0	0	0	
1872	43	19	D14-3-DE		ADOPT A HIGHWAY					REMAIN							0	0	0	
	43	20			CHURCH					REMOVE	1						0	0	0	
42	43	21	R2-1-25(24)		SPEED LIMIT (25 MPH - 24x30)					REMAIN							0	0	0	
3	43	22	R1-1(30)		STOP					REPOSITION	1	1					1	0	0	
871	43	23	W3-1(30)		STOP AHEAD (Symbol) - 30x30					REMAIN							0	0	0	
3	43	24	R1-1(30)		STOP					REPOSITION	1	1					1	0	0	
423	43	26	R7-4-DE(12)		NO STOPPING, STANDING, OR PARKING - 12x18					REMAIN							0	0	0	
3	44	27	R1-1(30)		STOP					REMAIN							0	0	0	
358	44	28	R5-1(30)	1	DO NOT ENTER - 30x30		30"	30"	6.25	NEW		1				SOIL	1	0	0	
110	44	29	R3-2(24)	1	LEFT TURN PROHIBITION (Symbol) - 24x24		24"	24"	4	NEW		1				SOIL	1	0	0	
1458	44		W23-2	1	NEW TRAFFIC PATTERN AHEAD	29	36"	36"	9	NEW							0	0	0	
1488	45	30	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1508	45		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	30				REPOSITION							0	0	0	
1605	45		M6-1_L(21)		DIRECTIONAL ARROW (Left) - 21x15	30				REPOSITION							0	0	0	
1488	45	30	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1514	45		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	30				REPOSITION							0	0	0	
1604	45		M6-1_R(21)		DIRECTIONAL ARROW (Right) - 21x15	30				REPOSITION							0	0	0	
1488	45	31	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1514	45		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	31				REPOSITION							0	0	0	
					PAGE TOTALS				**21.25**		12	11		0	0		11	0	0	

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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 DISPOSTION	REMOVE	INSTALL	SIGN DISPOSTION	REMOVE	INSTALL					
50	45	33	R2-1-35(24)		SPEED LIMIT (35 MPH - 24x30)					REMAIN							0	0	0	
817	45	34	W2-1(30)		CROSS ROAD - 30x30					REMAIN							0	0	0	
1367	45		W16-8P		ADVANCE STREET NAME (1 - line plaque)	34				REMAIN							0	0	0	
1488	45	35	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REMAIN							0	0	0	
1508	45		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	35				REMAIN							0	0	0	
1604	45		M6-1_R(21)		DIRECTIONAL ARROW (Right) - 21x15	35				REMAIN							0	0	0	
1488	45	35	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REMAIN							0	0	0	
1514	45		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	35				REMAIN							0	0	0	
1605	45		M6-1_L(21)		DIRECTIONAL ARROW (Left) - 21x15	35				REMAIN							0	0	0	
1488	45	36	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1508	45		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	36				REPOSITION							0	0	0	
1484	45	37	M1-4(24)		US ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1534	45		M4-5(24)		TO - 24x12	37				REPOSITION							0	0	0	
1604	45		M6-1_R(21)		DIRECTIONAL ARROW (Right) - 21x15	37				REPOSITION							0	0	0	
1488	45	38	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REMAIN							0	0	0	
1514	45		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	38				REMAIN							0	0	0	
1488	45	39	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1508	45		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	39				REPOSITION							0	0	0	
1604	45		M6-1_R(21)		DIRECTIONAL ARROW (Right) - 21x15	39				REPOSITION							0	0	0	
1488	45	39	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1514	45		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	39				REPOSITION							0	0	0	
1605	45		M6-1_L(21)		DIRECTIONAL ARROW (Left) - 21x15	39				REPOSITION							0	0	0	
1488	45	39	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1508	45		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	39				REPOSITION							0	0	0	
1619	45		M6-3(21)		DIRECTIONAL ARROW (Up) - 21x15	39				REPOSITION							0	0	0	
1488	45	40	M1-5(24)	1	STATE ROUTE (2 - Digit Sign) - 24x24		24"	24"	2	NEW		1				SOIL	1	0	0	
1619	45		M6-3(21)	1	DIRECTIONAL ARROW (Up) - 21x15	40	21"	15"	2.2	NEW							0	0	0	
1488	45	40	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1514	45		M3-3(24)		CARDINAL DIRECTION - SOUTH - 24x12	40				REPOSITION							0	0	0	
1604	45		M6-1_R(21)		DIRECTIONAL ARROW (Right) - 21x15	40				REPOSITION							0	0	0	
1488	45	40	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REPOSITION	1	1				SOIL	1	0	0	
1508	45		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	40				REPOSITION							0	0	0	
1605	45		M6-1_L(21)		DIRECTIONAL ARROW (Left) - 21x15	40				REPOSITION							0	0	0	
50	45	41	R2-1-35(24)		SPEED LIMIT (35 MPH - 24x30)					REMAIN							0	0	0	
50	45	42	R2-1-35(24)		SPEED LIMIT (35 MPH - 24x30)					REPOSITION	1	1				SOIL	1	0	0	
50	46	43	R2-1-35(24)		SPEED LIMIT (35 MPH - 24x30)					REMAIN							0	0	0	
877	46	44	W3-3(30)		SIGNAL AHEAD (Symbol) - 30x30					REMAIN							0	0	0	
50	46	45	R2-1-35(24)		SPEED LIMIT (35 MPH - 24x30)		24"	30"	5	REMAIN							0	0	0	
1488	47	46	M1-5(24)		STATE ROUTE (2 - Digit Sign) - 24x24					REMAIN							0	0	0	
1508	47		M3-1(24)		CARDINAL DIRECTION - NORTH - 24x12	46				REMAIN							0	0	0	
1872	47		D14-3-DE		ADOPT A HIGHWAY	46				REMAIN							0	0	0	
723	47	47	W1-2_L(30)		CURVE (Left) - 30x30					REMAIN							0	0	0	
1675	50,54		D3-1(18)	3	STREET NAME (1 Line)		84"	18"	31.5	NEW										Red Lion Rd
1675	50		D3-1(18)	2	STREET NAME (1 Line)		96"	18"	24	NEW										Old Porter Rd
1675	54		D3-1(18)	2	STREET NAME (1 Line)		108"	18"	27	NEW										Bear Corbitt Rd
					PAGE TOTALS				**91.7**		8	9		0	0		9	0	0	

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DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

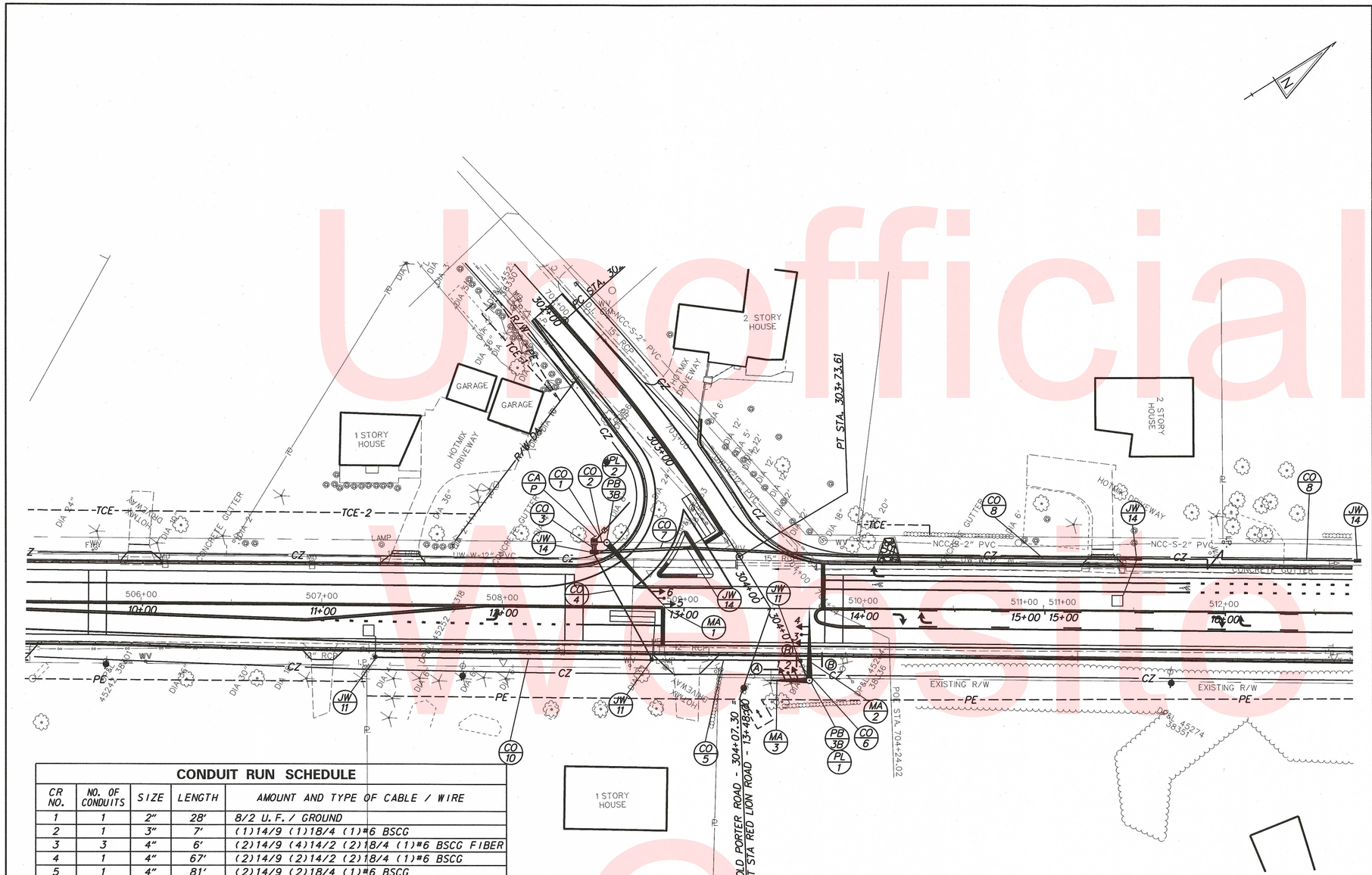
SCALE 0 1 2 3 FEET

HSIP NCC
SR 71, OLD PORTER ROAD TO SR 7

CONTRACT	BRIDGE NO.	N/A
T201000701	DESIGNED BY:	DCK
COUNTY		
NCC	CHECKED BY:	JKL

SIGN SCHEDULE

SHEET NO. 59
TOTAL SHTS. 64



CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
1	1	2"	28'	8/2 U.F. / GROUND
2	1	3"	7'	(1)14/9 (1)18/4 (1)#6 BSCG
3	3	4"	6'	(2)14/9 (4)14/2 (2)18/4 (1)#6 BSCG FIBER
4	1	4"	67'	(2)14/9 (2)14/2 (2)18/4 (1)#6 BSCG
5	1	4"	81'	(2)14/9 (2)18/4 (1)#6 BSCG
6	1	3"	11'	(2)14/9 (2)18/4 (1)#6 BSCG
7	2	4"	48'	(2)14/2 FIBER
8	2	4"	248'	(1)14/2 FIBER
9	1	4"	312'	FIBER
10	1	4"	153'	(1)14/2

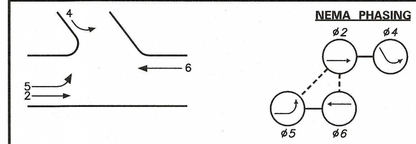
MAST ARM SCHEDULE

MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	S.F. OF SIGNING
1	21'	50'	2	-
2	21'	40'	2	24 SF
3		25'	2	10.5 SF

(A) Red Lion Rd — 84" × 18"

(B) Old Porter Rd — 96" × 18" — Front & Back

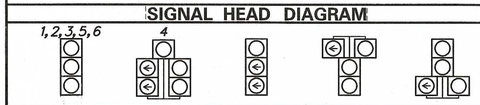
SIGNAL PHASING



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 MAST ARM.
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 201 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: _____

APPROVED TRAFFIC ENGINEER _____ DATE: 9/12/16

APPROVED FOR INSTALLATION
CHIEF TRAFFIC ENGINEER _____ DATE: 9/12/16

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER RD TO SR 7

CONTRACT	PERMIT NO.	N781
T201000701	DESIGNED BY: MG	
COUNTY		
NC	CHECKED BY: MH	

SIGNAL PLAN
SR 71 & OLD PORTER RD

SHEET NO. 60
TOTAL SHTS. 64

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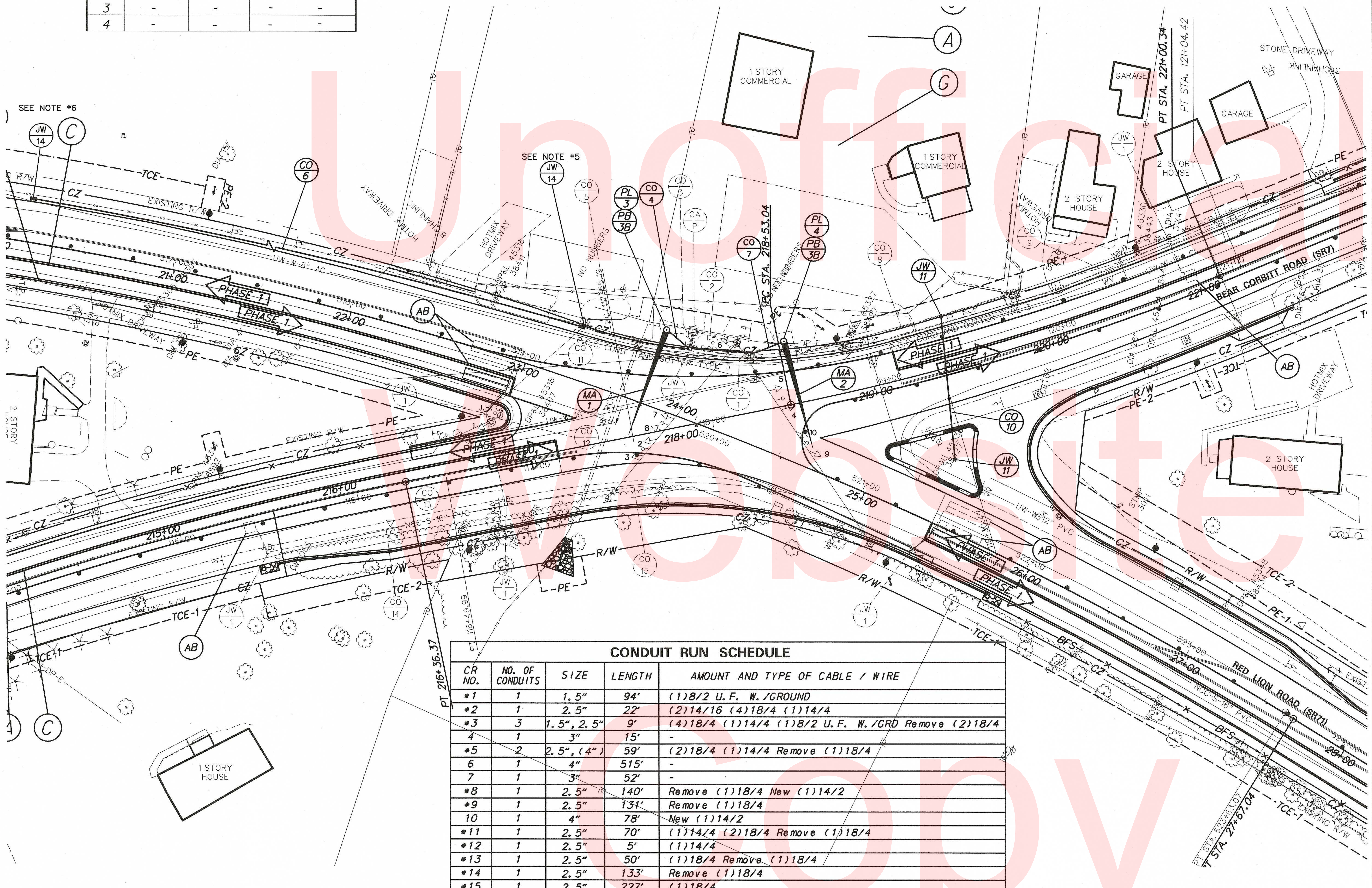
MAST ARM SCHEDULE				
MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	S.F. OF SIGNING
1	21'	60'	-	-
2	21'	60'	-	-
3	-	-	-	-
4	-	-	-	-



CONDUIT RUN SCHEDULE

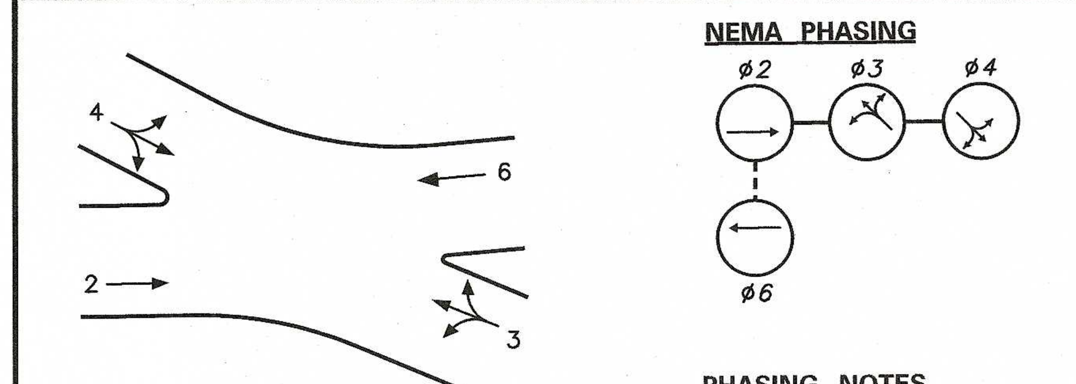
CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5"	94'	(1)8/2 U.F. W./GROUND
*2	1	2.5"	22'	(2)14/16 (4)18/4 (1)14/4
*3	3	1.5", 2.5"	9'	(4)18/4 (1)14/4 (1)8/2 U.F. W./GRD Remove (2)18/4
4	1	3"	15'	-
*5	2	2.5", (4")	59'	(2)18/4 (1)14/4 Remove (1)18/4
6	1	4"	515'	-
7	1	3"	52'	-
*8	1	2.5"	140'	Remove (1)18/4 New (1)14/2
*9	1	2.5"	131'	Remove (1)18/4
10	1	4"	78'	New (1)14/2
*11	1	2.5"	70'	(1)14/4 (2)18/4 Remove (1)18/4
*12	1	2.5"	5'	(1)14/4
*13	1	2.5"	50'	(1)18/4 Remove (1)18/4
*14	1	2.5"	133'	Remove (1)18/4
*15	1	2.5"	227'	(1)18/4

* DENOTES EXISTING
( ) DENOTES NEW CONDUIT

ADDITIONAL SIGNAL NOTES

5. REMOVE EXISTING JUNCTION WELL TYPE 1 AND REPLACE WITH JUNCTION WELL TYPE 14.
6. THE JUNCTION WELL TYPE 14 IS THE SAME JUNCTION WELL ON SIGNAL PLAN N718 AT STA 18+00.

SIGNAL PHASING

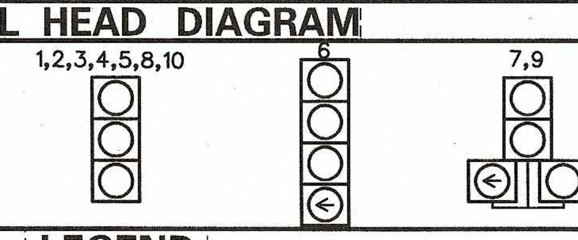


PHASING NOTES

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

SIGNAL HEAD DIAGRAM

EXISTING SIGNAL HEADS 2,3,7, AND 8 ARE OPTICALLY PROGRAMMED



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 EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

2. 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.

3. 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.

4. 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: ______

APPROVED TRAFFIC ENGINEER [signature] DATE: 9/12/16

APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER [signature] DATE: 9/12/16

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC SR 71, OLD PORTER RD TO SR 7

CONTRACT	PERMIT NO.	N137
T201000701	DESIGNED BY: MG	
COUNTY		
NC	CHECKED BY: MH	

SIGNAL PLAN
SR 7 & SR 71
PHASE 1

SHEET NO. 61
TOTAL SHTS. 64

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

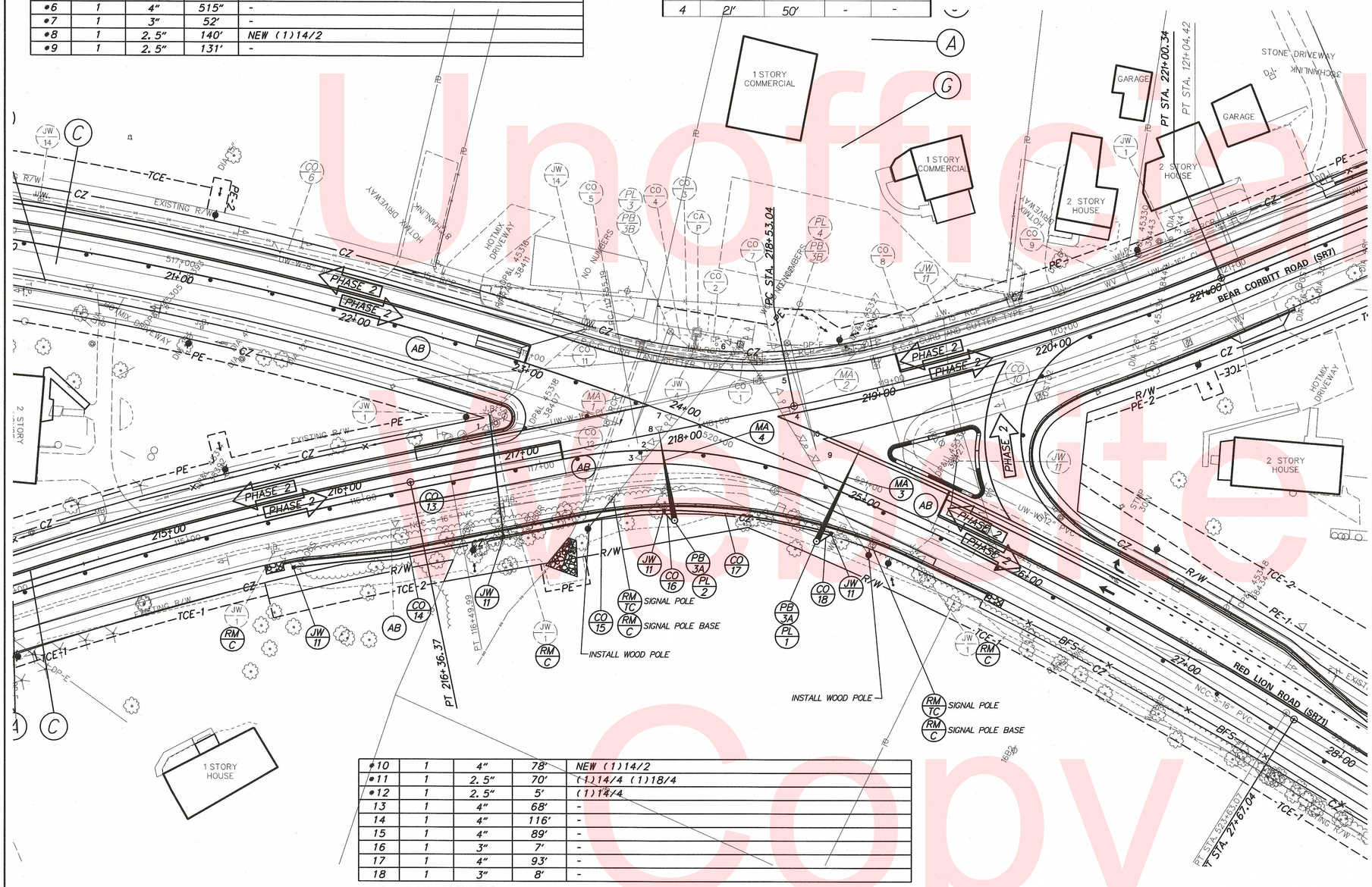
CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5"	94'	(1)8/2 U.F. W./GROUND
*2	1	2.5"	22'	(2)14/16 (4)18/4 (1)14/4
*3	3	1.5", 2.5"	9'	(4)18/4 (1)14/4 (1)8/2 U.F. W./GRD NEW (1)14/2
*4	1	3"	15'	-
*5	2	2.5", 4"	59'	(3)18/4 (1)14/4
*6	1	4"	515"	-
*7	1	3"	52'	-
*8	1	2.5"	140'	NEW (1)14/2
*9	1	2.5"	131'	-
*10	1	4"	78'	NEW (1)14/2
*11	1	2.5"	70'	(1)14/4 (1)18/4
*12	1	2.5"	5'	(1)14/4
13	1	4"	68'	-
14	1	4"	116'	-
15	1	4"	89'	-
16	1	3"	7'	-
17	1	4"	93'	-
18	1	3"	8'	-

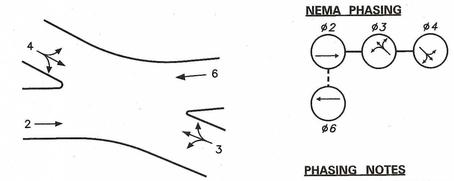
* DENOTES EXISTING
( ) DENOTES NEW CONDUIT

MAST ARM SCHEDULE

MA*	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	S.F. OF SIGNING
1	21'	60'	-	-
2	21'	60'	-	-
3	21'	60'	-	-
4	21'	50'	-	-



SIGNAL PHASING

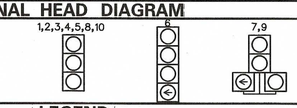


PHASING NOTES

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

SIGNAL HEAD DIAGRAM

EXISTING SIGNAL HEADS 2,3,7, AND 8 ARE OPTICALLY PROGRAMMED



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. d	■
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 EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

2. 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.

3. 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.

4. 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: _____ | APPROVED TRAFFIC ENGINEER _____ DATE: 9/12/16 | APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 9/12/16

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC SR 71, OLD PORTER RD TO SR 7

CONTRACT	PERMIT NO.	N137
T201000701	DESIGNED BY: MG	
COUNTY		
NC	CHECKED BY: MH	

SIGNAL PLAN
SR 7 & SR 71
PHASE 2

SHEET NO. 62
TOTAL SHTS. 64

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

Unofficial Web Copy

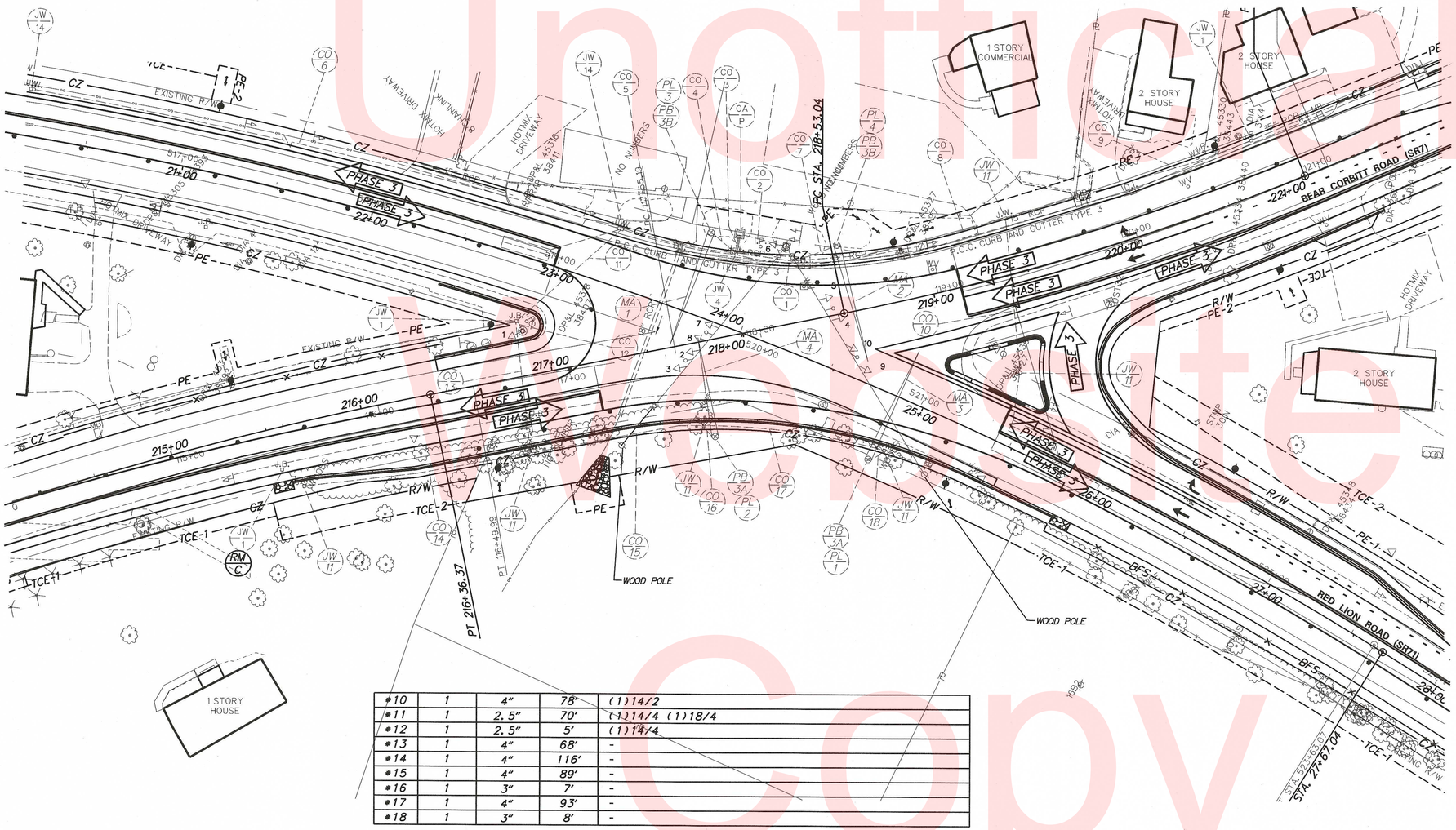
CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
#1	1	1.5"	94'	(1)8/2 U.F. W./GROUND
#2	1	2.5"	22'	(2)14/16 (4)18/4 (1)14/4
#3	3	1.5", 2.5"	9'	(4)18/4 (1)14/4 (1)8/2 U.F. W./GRD
#4	1	3"	15'	-
#5	2	2.5", 4"	59'	(3)18/4 (1)14/4
#6	1	4"	515"	-
#7	1	3"	52'	-
#8	1	2.5"	140'	(1)14/2
#9	1	2.5"	131'	-
#10	1	4"	78'	(1)14/2
#11	1	2.5"	70'	(1)14/4 (1)18/4
#12	1	2.5"	5'	(1)14/4
#13	1	4"	68'	-
#14	1	4"	116'	-
#15	1	4"	89'	-
#16	1	3"	7'	-
#17	1	4"	93'	-
#18	1	3"	8'	-

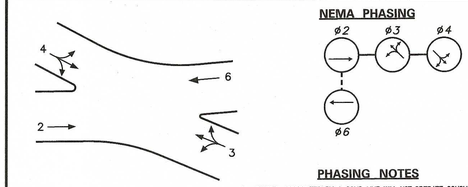
* DENOTES EXISTING
( ) DENOTES NEW CONDUIT

MAST ARM SCHEDULE

MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	S.F. OF SIGNING
1	21'	60'	-	-
2	21'	60'	-	-
3	21'	60'	-	-
4	21'	50'	-	-



SIGNAL PHASING

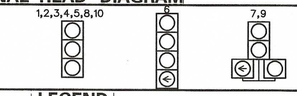


PHASING NOTES

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

SIGNAL HEAD DIAGRAM

EXISTING SIGNAL HEADS 2,3,7, AND 8 ARE OPTICALLY PROGRAMMED



LEGEND

AB	ABANDON
CA X	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)
CA X	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)
CO *	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
CO *	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)
JW X	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
JW X	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
MA XX	EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)
MA XX	PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)
OH *	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
OH *	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
PB X	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
PB X	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
PL X	EXISTING POLE IDENTIFIER (* OF POLE)
PL X	PROPOSED POLE IDENTIFIER (* OF POLE)
RM C	REMOVE BY CONTRACTOR
RM O	REMOVE BY OTHERS
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 EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

2. 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.

3. 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.

4. 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: _____ | APPROVED TRAFFIC ENGINEER _____ DATE: 9/12/16 | APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 9/12/16

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER RD TO SR 7

CONTRACT: T201000701
COUNTY: NC
PERMIT NO.: N137
DESIGNED BY: MG
CHECKED BY: MH

SIGNAL PLAN
SR 7 & SR 71
PHASE 3

SHEET NO. 63
TOTAL SHTS. 64

Unofficial Web Site Copy

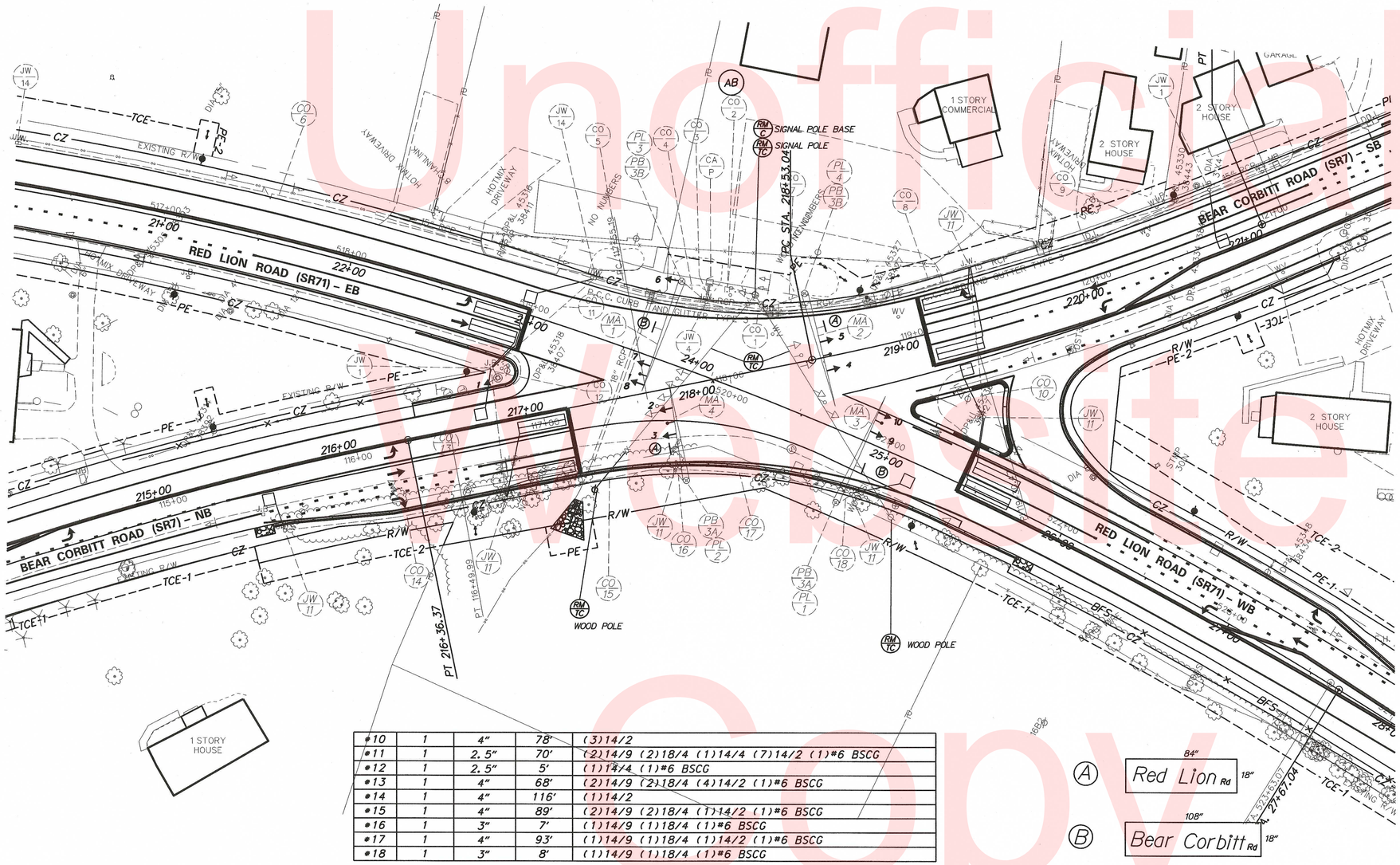
CONDUIT RUN SCHEDULE

CR NO.	NO. OF CONDUITS	SIZE	LENGTH	AMOUNT AND TYPE OF CABLE / WIRE
*1	1	1.5"	94'	(1)8/2 U.F. W./GROUND
*2				Conduit Abandoned
*3	3	1.5", 2.5"	9'	(4)14/9 (4)18/4 (1)14/4 (14)14/2 (1)8/2 U.F. W./GRD (1)#6 BSCG (1)Fiber
*4	1	3"	15'	(1)14/9 (1)18/4 (1)#6 BSCG
*5	2	2.5", 4"	59'	(2)14/9 (2)18/4 (1)14/4 (8)14/2 (1)#6 BSCG (1)Fiber
*6	1	4"	515"	(1)Fiber
*7	1	3"	52'	(1)14/9 (1)18/4 (1)#6 BSCG
*8	1	2.5"	140'	(6)14/2
*9	1	2.5"	131'	(1)14/2
*10	1	4"	78'	(3)14/2
*11	1	2.5"	70'	(2)14/9 (2)18/4 (1)14/4 (7)14/2 (1)#6 BSCG
*12	1	2.5"	5'	(1)14/4 (1)#6 BSCG
*13	1	4"	68'	(2)14/9 (2)18/4 (4)14/2 (1)#6 BSCG
*14	1	4"	116'	(1)14/2
*15	1	4"	89'	(2)14/9 (2)18/4 (1)14/2 (1)#6 BSCG
*16	1	3"	7'	(1)14/9 (1)18/4 (1)#6 BSCG
*17	1	4"	93'	(1)14/9 (1)18/4 (1)14/2 (1)#6 BSCG
*18	1	3"	8'	(1)14/9 (1)18/4 (1)#6 BSCG

* DENOTES EXISTING
( ) DENOTES NEW CONDUIT

MAST ARM SCHEDULE

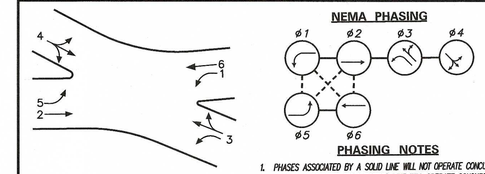
MA#	HEIGHT OF POLE	LENGTH OF ARM	# OF HEADS	S.F. OF SIGNING
1	21'	60'	4	13.5 SF
2	21'	60'	4	10.5 SF
3	21'	60'	4	13.5 SF
4	21'	50'	4	10.5 SF



ADDITIONAL SIGNAL NOTES

5. REPLACE ALL EXISTING CABLE WIRE WITH NEW.

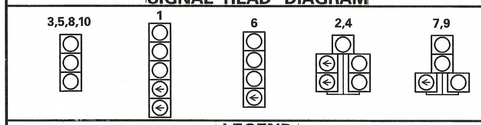
SIGNAL PHASING



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 EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.

2. 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.

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RECOMMENDED _____ DATE: _____ | RECOMMENDED _____ DATE: _____ | RECOMMENDED _____ DATE: _____ | APPROVED TRAFFIC ENGINEER _____ DATE: 9/20/16 | APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 9/20/16

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

HSIP NCC
SR 71, OLD PORTER RD TO SR 7

CONTRACT	PERMIT NO.	N137
T201000701	DESIGNED BY: MG	
COUNTY	CHECKED BY: MH	
NC		

SIGNAL PLAN
SR 7 & SR 71
PHASE 4

SHEET NO. 64
TOTAL SHTS. 64

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

Unofficial Website Copy