THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

FINAL PLANS

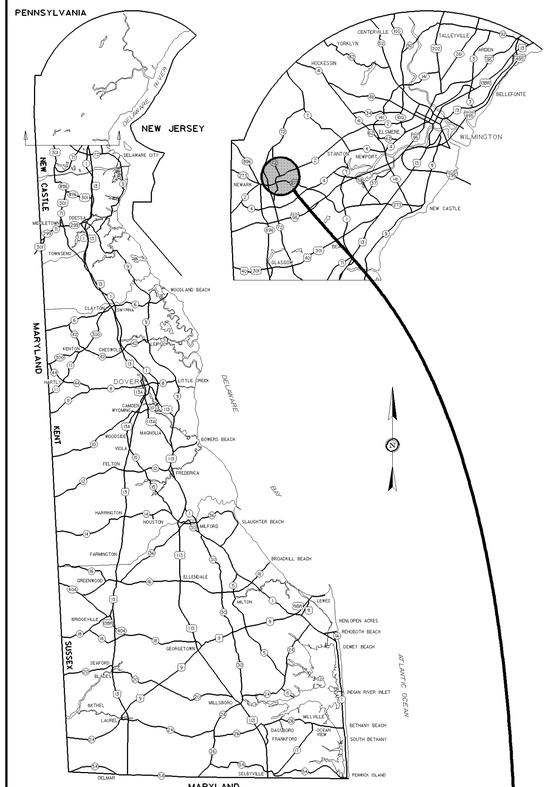
CONSTRUCTION PLANS FOR:

HSIP - SR2 AND SR72 INTERSECTION IMPROVEMENTS

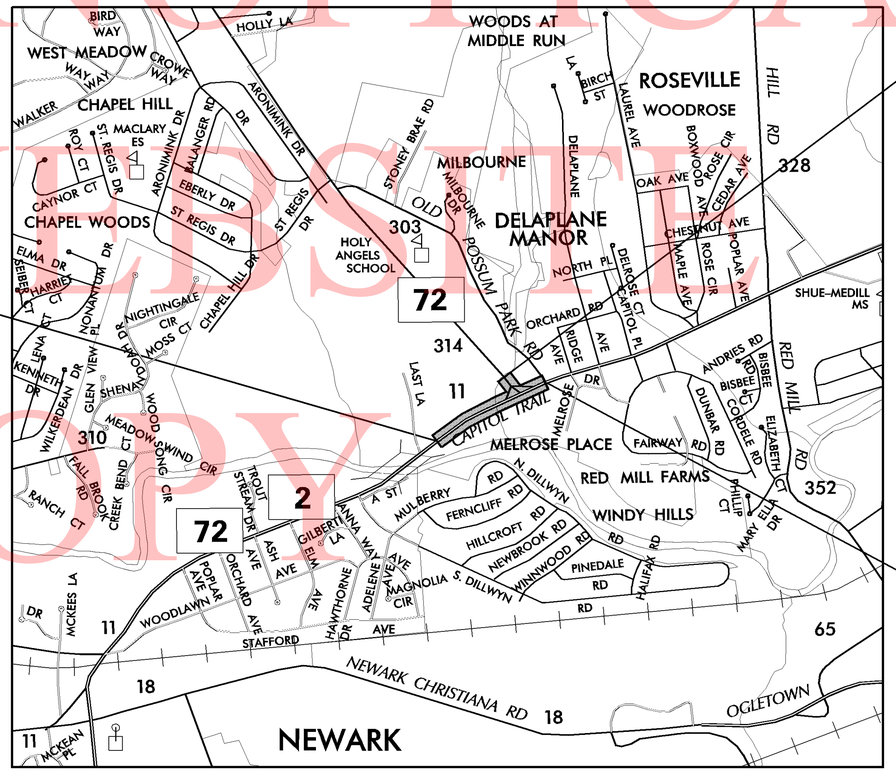
CONTRACT NUMBER: T200800705

FEDERAL AID PROJECT NUMBER: ESTP-N011(26)

COUNTY: NEWCASTLE **M.R. #: 011**



GENERAL LOCATION OF CONTRACT



LIMITS OF CONSTRUCTION
STATION 202+54.00

BEGIN
CONTRACT T200800705
STATION 1+00

END
CONTRACT T200800705
STATION 12+46.33

DESIGN DESIGNATION

FUNCTIONAL CLASS: MAJOR COLLECTOR		D.H.V. PROJECTED: 2,520	YEAR: 2030
TYPE OF CONSTRUCTION: SAFETY IMPROVEMENTS		DESIGN SPEED: 45 M.P.H.	
A.A.D.T. CURRENT: 31,838	YEAR: 2006	TRUCKS: 6 %	
A.A.D.T. PROJECTED: 42,000	YEAR: 2030	DIRECTION OF DISTRIBUTION: 60 %	

INDEX OF SHEETS

SHEET NO	TABLE OF CONTENTS
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17-18	SIGNING AND STRIPING
19-21	RIGHT OF WAY SHEETS
22	SIGNALIZATION PLAN

TOTAL SHEETS: 22

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
89-116-01	SR2,POSSUM PARK ROAD, INTERSECTION IMPROVEMENTS

PREPARED BY
THE CONSULTING FIRM OF

SEAL

RECOMMENDED _____ DATE _____

RECOMMENDED

SQUAD MANAGER, CONSTRUCTION _____ DATE _____

GROUP ENGINEER, CONSTRUCTION _____ DATE _____

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) _____ DATE _____

RECOMMENDED

STORMWATER ENGINEER

DATE _____ SEAL

RECOMMENDED

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

DATE _____ SEAL

RECOMMENDED

BRIDGE DESIGN ENGINEER

DATE _____ SEAL

RECOMMENDED

GROUP ENGINEER, PROJECT DEVELOPMENT

DATE _____ SEAL

RECOMMENDED

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS

DATE _____ SEAL

APPROVED

CHIEF ENGINEER

DATE _____ SEAL

LAST REVISED: 8/7/2008
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EXISTING SYMBOLS

DRAINAGE

	DITCH OR STREAM CENTERLINE
	DIRECTIONAL STREAM FLOW ARROW
C.B.	DRAINAGE CATCH BASIN
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

(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

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
C.M.	PROPERTY MARKER - CONCRETE MON.
I.P.	PROPERTY MARKER - IRON PIPE

UTILITY

	SOIL BORING LOCATION
	UTILITY TEST HOLE LOCATION
TV	CABLE TV DISTRIBUTION BOX
E	ELECTRIC MANHOLE
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
T	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

UTILITY COMPANY FACILITIES

CNW	CITY OF NEWARK WATER LINE
VER	VERIZON LINE UNDERGROUND
DP-GAS	DELMRVA POWER GAS

PROPOSED SYMBOLS

CONSTRUCTION

	CONCRETE SAFETY BARRIER - PERMANENT
BFS	BIOFILTRATION SWALE
	BUTT JOINT
100+00	CONSTRUCTION BASELINE
	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, TYPES 1 & 3
	GUARDRAIL, TYPE 2
	GUARDRAIL END TREATMENT - PARALLEL
	GUARDRAIL END TREATMENT - PARABOLIC
HC	HORIZONTAL CLEARANCE
	JUNCTION BOX - DRAINAGE
LOC	LIMIT OF CONSTRUCTION
	MANHOLE
	PAVEMENT PATCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK @ 4"
	P.C.C. SIDEWALK @ 6"
	UNDERDRAIN
	UNDERDRAIN OUTLET

CONSTRUCTION PHASING SYMBOLS

	BARRICADE, TYPE 3
	CONCRETE SAFETY BARRIER - PORTABLE
	CONSTRUCTION WARNING SIGN LOCATION
END ROAD WORK	CONSTRUCTION WARNING SIGN
	CRASH CUSHION ARRAY
	DRUM - TRAFFIC CONTROL
	PHASING TRAFFIC FLOW ARROW

LANDSCAPING

	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

EROSION & SEDIMENT CONTROL

DWB	DEWATERING BASIN
	EROSION CONTROL BLANKET
ED	EARTH DIKE
	INLET SEDIMENT CONTROL
	PERIMETER DIKE/SWALE
PST	PORTABLE SEDIMENT TANK
RSF	REINFORCED SILT FENCE
SBD	SANDBAG DIKE
SB	SANDBAG DIVERSION
SCD	STONE CHECK DAM
SCE	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE
SP-1	SUMP PIT, TYPE 1
SP-2	SUMP PIT, TYPE 2
ST	SEDIMENT TRAP
ST	SEDIMENT TRAP WITH INLET AS OUTLET
ST	SEDIMENT TRAP PIPE OUTLET
SW	STILLING WELL
	TEMPORARY SWALE
TSD	TEMPORARY SLOPE DRAIN

IDENTIFIERS

A C	ADJUST BY CONTRACTOR
A O	ADJUST BY OTHERS
B	CONCRETE SAFETY BARRIER
C	CURB OR CURB & GUTTER
CJB	CONVERT TO JUNCTION BOX
CMH	CONVERT TO DRAINAGE MANHOLE
C O	CURB OPENING
CR	CURB RAMP / TYPE
CR-N	CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM
DI	DRAINAGE INLET
DND	DO NOT DISTURB
FES	FLARED END SECTION
FS	FILTRATION STRUCTURE
GR	GUARDRAIL
JB	JUNCTION BOX
LS	LANDSCAPE PLANTINGS
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
SI	SEDIMENT TRAP
SF	SILT FENCE
UD	UNDERDRAIN

PAVEMENT SECTION(S)

	RECONSTRUCTED PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	ENTRANCE PAVEMENT 2" SUPERPAVE TYPE C HOT-MIX, OVER 6" GRADED AGGREGATE, TYPE B.

RIGHT-OF-WAY SYMBOLS

	PROPOSED RIGHT-OF-WAY MONUMENT
PD	EXISTING PROPERTY LINE
EASEMENT TYPE	EXISTING EASEMENT
	EXISTING RIGHT-OF-WAY
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
100+00	HISTORIC RIGHT-OF-WAY BASELINE

TRAFFIC

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

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LAST REVISED: 3/12/2008
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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

SR2 AND SR72
INTERSECTION
IMPROVEMENTS

CONTRACT	T200800705
COUNTY	N.C.
BRIDGE NO.	N/A
DESIGNED BY:	M.R.
CHECKED BY:	T.B.

LEGEND

SHEET NO. 2
TOTAL SHTS. 22

GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2001 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2001, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2. THE CONTRACTOR SHALL GIVE TWO (2) WEEKS NOTICE TO THE PROPERTY OWNER WHEN ANY FIXTURE, SHRUB OR OTHER OBJECT MUST BE REMOVED FROM THE RIGHT OF WAY OR EASEMENT AREA. IF THE OWNER HAS NOT ATTEMPTED TO SALVAGE THIS PROPERTY, THE CONTRACTOR SHALL REMOVE IT WITHOUT OBLIGATION. COMPENSATION SHALL BE INCIDENTAL TO THE CONTRACT.

3. THE ENDS OF ALL CURBS SHALL BE DEPRESSED FLUSH WITH THE PAVEMENT AT A RATIO OF TWELVE TO ONE (12:1) UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

4. THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" INSIDE MINIMUM DIAMETER, 6" INSIDE MAXIMUM DIAMETER) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL SIT ON THE TOP OF THE SUBBASE MATERIAL. THE COST SHALL BE INCIDENTAL TO THE CONTRACT.

5. STAGING AREAS - PROPER EROSION AND SEDIMENT CONTROL MEASURES AS DETERMINED BY THE ENGINEER SHALL BE INSTALLED IN ALL STAGING AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE CONTRACT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF THE AREA IS UNPAVED, IT SHALL BE RE-GRADED, TOPSOILED, SEEDED AND MULCHED IN ACCORDANCE WITH DELAWARE STANDARD SPECIFICATIONS 732, 734 AND 735, FOR TOPSOIL, SEED AND MULCH RESPECTIVELY, TO THE SATISFACTION OF THE ENGINEER. THE SEED SHALL ADHERE TO THE SPECIFICATIONS OF SECTION 734 FOR PERMANENT GRASS SEEDING - DRY GROUND. ALL COSTS ASSOCIATED WITH RESTORATION OF THE STAGING AREA SHALL BE AT THE CONTRACTOR'S EXPENSE. IF THE ENGINEER DETERMINES THAT A SATISFACTORY STAND OF GRASS DOES NOT EXIST AT THE TIME OF FINAL INSPECTION, ALL COSTS ASSOCIATED WITH REESTABLISHING A SATISFACTORY STAND OF GRASS SHALL BE AT THE CONTRACTOR'S EXPENSE.

6. SITE REVIEWER - AN EROSION CONTROL SITE REVIEWER SHALL BE A PERSON FROM THE CONTRACTOR'S STAFF ASSIGNED TO EROSION AND SEDIMENT CONTROL IMPLEMENTATION AND MAINTENANCE AND SHALL BE REQUIRED ON SPECIFIC PROJECTS. THE NAME AND DNREC CERTIFICATION NUMBER OF EACH SITE REVIEWER SO REQUIRED SHALL BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE NAME OF THE DELAWARE REGISTERED PROFESSIONAL ENGINEER PROVIDING DIRECTION AND SUPERVISION OF THE SITE REVIEWER, AS REQUIRED IN SECTION 12.3 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, SHALL ALSO BE SUBMITTED TO THE DEPARTMENT AT THE TIME OF BID. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

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

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

( )	NONE
(x)	ASCII DATA FILES WITH COORDINATES AND ELEVATIONS FOR PROPOSED POINTS AS SELECTED BY THE ENGINEER.
(x)	RASTER FILES, IN .CAL FILE FORMAT, FOR ALL PLAN SHEETS.
( )	EXISTING DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	PROPOSED DIGITAL TERRAIN MODEL, IN .DTM FILE FORMAT, COMPATIBLE WITH SOFTWARE CURRENTLY USED BY DELDOT.
( )	DESIGN FILE, IN .DGN FILE FORMAT, CONTAINING ONLY THE PROPOSED 3D TRIANGLES OF THE PROPOSED DIGITAL TERRAIN MODEL (DTM).

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

( )	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
(x)	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR.
( )	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.

9. THE DISTURBED AREA FOR THIS PROJECT IS 0.180 ACRES.

PROJECT NOTES

LOCATION:
INTERSECTION OF SR2 (KIRKWOOD HIGHWAY), SR72 (POSSUM PARK ROAD) AND LIBERTY PLAZA.

DESCRIPTION:
THE PROJECT CONSISTS OF MODIFYING THE EAST BOUND LEFT-TURN PHASING ON THE SR2 APPROACHES TO POSSUM PARK ROAD, FROM PROTECTED-PERMISSIVE TO PROTECTED. EXTEND THE EASTBOUND LEFT-TURN LANE TO ACCOMMODATE THE LEFT-TURN QUEUE.

SECTION 700

1. UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, ALL PAVED AREAS TO BE RECONSTRUCTED SHALL BE SAWCUT FULL DEPTH AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO EXISTING PAVEMENT.

2. PAYMENT FOR THE REMOVAL OF THE EXISTING CONCRETE MEDIAN SHALL BE PAID FOR UNDER ITEM 758000 REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT,CURB, SIDEWAK, ETC.

3. 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.

4. FOR SIDEWALK CONSTRUCTION,NO BARE SOIL SHALL BE PERMITTED TO SHOW AT THE END OF THE WORK DAY, ALL BARE SOIL SHALL BE COVERED WITH GABC OR A METHOD APPROVED BY THE ENGINEER.

MISCELLANEOUS

5. 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.

6. THERE ARE NO EVIRONMENTAL PERMITS ASSOCIATED WITH THIS PROJECT. AS SUCH,AN ENVIRONMENTAL COMPLIANCE SHEET WAS NOT PREPARED.

7. THE CURB RAMP AND SIDEWALK CONSTRUCTION ADJACENT TO THE ENTRANCE FOR PARCEL 1-R SHALL BE COMPLETED DURING A SINGLE OPERATION.THE RAMP AND SIDEWALK SHALL BE RECONSTRUCTED AND OPEN TO PEDESTRIAN TRAFFIC IN FIVE WORKING DAYS.THE CONTRACTOR MUST PROVIDE AND MAINTAIN TEMPORARY PEDESTRIAN ACCESS AROUND THE WORK ZONE.THE MAINTENANCE OF PEDESTRIAN TRAFFIC FOR THIS OPERATION SHALL BE INCIDENTAL TO ITEM 763500 MAINTENANCE OF TRAFFIC. FLAGGERS WILL BE PAID UNDER THE APPROPRIATE FLAGGER ITEM.
THE CURB AND SIDEWALK AT THIS LOCATION SHALL BE CONSTRUCTED WITH HIGH EARLY CONCRETE.THE HIGH EARLY CONCRETE SHALL ATTAIN A 24 HOUR STRNGTH (fc) OF 4,500 psi. ALL CONCRETE SHALL BE KEPT CONSTANTLY MOIST AND PROTECTED AGAINST DRYING ACTION AND CURED UNTIL THE STRENGTH OF THE CONCRETE REACHES 4,500 psi OR UNTIL JUST PRIOR TO OPENING TO TRAFFIC.

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LAST REVISED: 5/5/2009
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DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

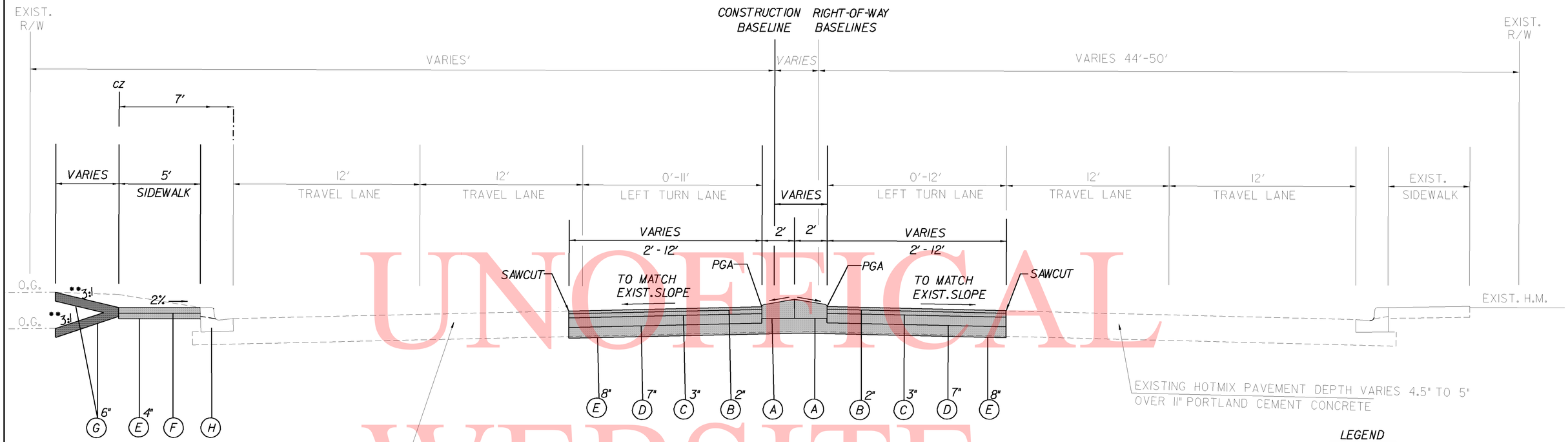
NOT TO SCALE

SR2 AND SR72
INTERSECTION
IMPROVEMENTS

CONTRACT	T200800705
COUNTY	N.C.
BRIDGE NO.	N/A
DESIGNED BY:	M.R.
CHECKED BY:	T.B.

NOTES

SHEET NO.	3
TOTAL SHTS.	22



SR2 (KIRKWOOD HWY.)

STA. 1+00 TO STA. 6+26

** 2 1/2 :1 SLOPE STA. 3+50 TO STA. 4+50 LT.

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LEGEND

(A) ITEM 701011 - PORTLAND CEMENT CONCRETE CURB, TYPE 2

(B) ITEM 401665 SUPERPAVE, TYPE C HOT-MIX, 160 GYRATIONS, PG 64-22 PATCHING

(C) ITEM 401666 SUPERPAVE, TYPE B HOT-MIX, 160 GYRATIONS, PG 64-22

(D) ITEM 401663-BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS PG 64-22 (TWO EQUAL LIFTS)

(E) ITEM 302007- GRADED AGGREGATE BASE COURSE, TYPE B

(F) ITEM 705001 - P.C.C. SIDEWALK, 4" DEPTH

(G) SLOPES 3:1 AND FLATTER
ITEM 732002 - TOPSOIL 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND

SLOPES STEEPER THAN 3:1
ITEM 732002 - TOPSOIL 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735533 - SOIL RETENTION BLANKET MULCH, TYPE 5

(H) EXISTING CONCRETE CURB

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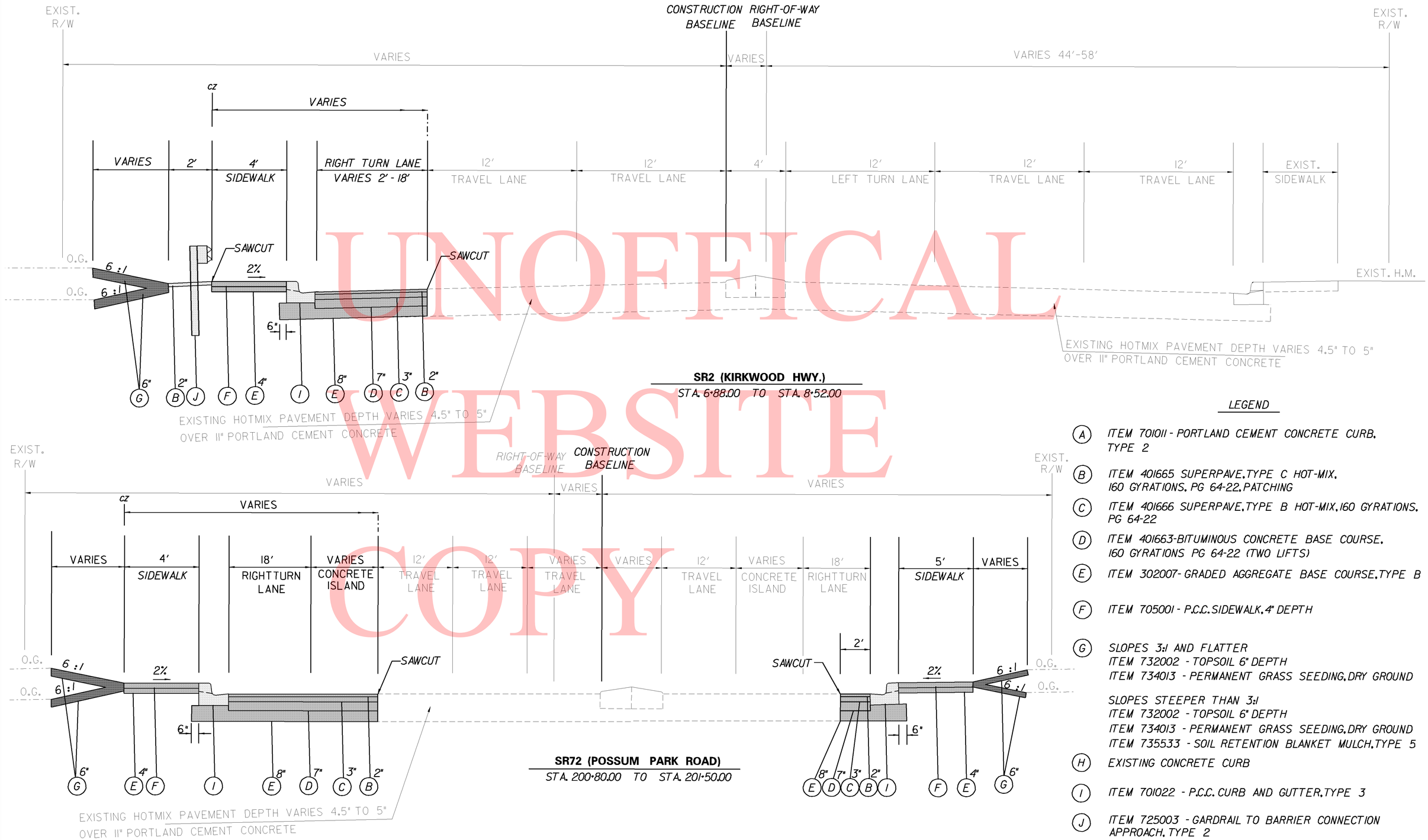
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	TYPICAL SECTIONS	SHEET NO. 4
				COUNTY N.C.	DESIGNED BY: M.R.		TOTAL SHTS. 22
					CHECKED BY: T.B.		



LEGEND

(A) ITEM 701011 - PORTLAND CEMENT CONCRETE CURB, TYPE 2

(B) ITEM 401665 SUPERPAVE, TYPE C HOT-MIX, 160 GYRATIONS, PG 64-22, PATCHING

(C) ITEM 401666 SUPERPAVE, TYPE B HOT-MIX, 160 GYRATIONS, PG 64-22

(D) ITEM 401663-BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS PG 64-22 (TWO LIFTS)

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(F) ITEM 705001 - P.C.C. SIDEWALK, 4" DEPTH

(G) SLOPES 3:1 AND FLATTER
ITEM 732002 - TOPSOIL 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND

SLOPES STEEPER THAN 3:1
ITEM 732002 - TOPSOIL 6" DEPTH
ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
ITEM 735533 - SOIL RETENTION BLANKET MULCH, TYPE 5

(H) EXISTING CONCRETE CURB

(I) ITEM 701022 - P.C.C. CURB AND GUTTER, TYPE 3

(J) ITEM 725003 - GARDRAIL TO BARRIER CONNECTION APPROACH, TYPE 2

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	TYPICAL SECTIONS	SHEET NO. 5
				COUNTY N.C.	DESIGNED BY: M.R.		TOTAL SHTS. 22
					CHECKED BY: T.B.		

CIRCULAR CURVE NO. ②

		STATION	NORTHING	EASTING
POB	(20030)	R-0+00.00	616868.0447	570030.8487
PC	(20038)	R-0+20.10	616879.8154	570047.1358
PI	(20036)	R-3+69.96	617085.3196	570331.4912
CC	(20039)		613783.9608	572284.5156
PT	(20040)	R-7+19.82	617235.5860	570648.5243

Radius: 3819.7100
Delta: 10° 29' 44.9835" RIght
Degree of Curvature(Arc): 1° 30' 00.0122"
Length: 699.7203
Tangent Length: 20.0952
Chord: 698.7424
Middle Ordinate: 16.0112
External: 16.0786
Tangent Direction: N 54° 08' 39.4493" E
Radial Direction: S 35° 51' 20.5507" E
Chord Direction: N 59° 23' 31.9411" E
Radial Direction: S 25° 21' 35.5672" E
Tangent: 350.8418
Tangent Direction: N 64° 38' 24.4328" E

CIRCULAR CURVE NO. ①

		STATION	NORTHING	EASTING
PC	(10110)	1+26.74	617014.2061	570246.5340
PI	(10109)	6+83.63	617303.6473	570724.3495
CC	(10111)		612113.6272	573215.1048
PT	(10112)	12+40.51	617495.3387	571249.0763

Radius: 5729.5800
Delta: 11 08 15.6610 RIght
Degree of Curvature: (Arc): 0 59 59.9987
Length: of Curvature 1113.7688
Tangent: 558.6446
Chord: 1112.0160
Middle Ordinate: 27.1700
External: 27.1700
Tangent Direction: N 58 47' 39.2252" E 27.1700
Radial Direction: S 20 04' 05.1138" E 27.1700
Chord Direction: N 64 21' 47.0557" E 27.1700
Radial Direction: S 31 12' 20.7748" E 27.1700
Tangent Direction: N 69 55' 54.8862" E 27.1700

CIRCULAR CURVE NO. ③

		STATION	NORTHING	EASTING
PC	(20041)	R-8+45.20	617289.2864	570761.8218
PI	(20037)	R-13+11.24	617489.3348	571183.8851
CC	(20042)		612111.8350	573215.8152
PT	(20043)	R-17+77.28	617618.3833	571632.7763

Radius: 5729.5800
Delta: 9°19'15.0153" RIght
Degree of Curvature(Arc): 0°59'59.9987"
Length: 932.0841
Tangent: 467.0726
Chord: 931.0566
External: 19.0062
Middle Ordinate: 18.9434
Tangent Direction: N 64°38'24.4328" E
Radial Direction: S 25°21'35.5672" E
Chord Direction: N 69°18'01.9405" E
Radial Direction: S 16°02'20.5519" E
Tangent Direction: N 73°57'39.4481" E

HORIZONTAL / VERTICAL CONTROL DATA

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
PPR1			618722.6503	579678.8049	116.320
PPR3			616191.3824	568902.3760	79.1698
PPR4			615723.8539	567901.3937	96.9099
5	4+02.774	43.710	617113.0440	570506.7970	54.6300
6	10+16.610	-43.070	617454.2660	571023.9780	60.9500

CONSTRUCTION ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
10100	1+00.000	0.000	617000.3500	570223.6600
10103	12+46.330	0.000	617497.3363	571254.5445
10109	6+83.630	-27.170	617303.6473	570724.3495
10110	1+26.740	0.000	617014.2061	570246.5340
10111	1+26.740	5729.58	612113.6272	573215.1048
10112	12+40.510	0.000	617495.3387	571249.0763
10115	8+43.370	-241.59	617566.8927	570782.6518
10117	9+21.660	0.000	617377.6548	570952.7830

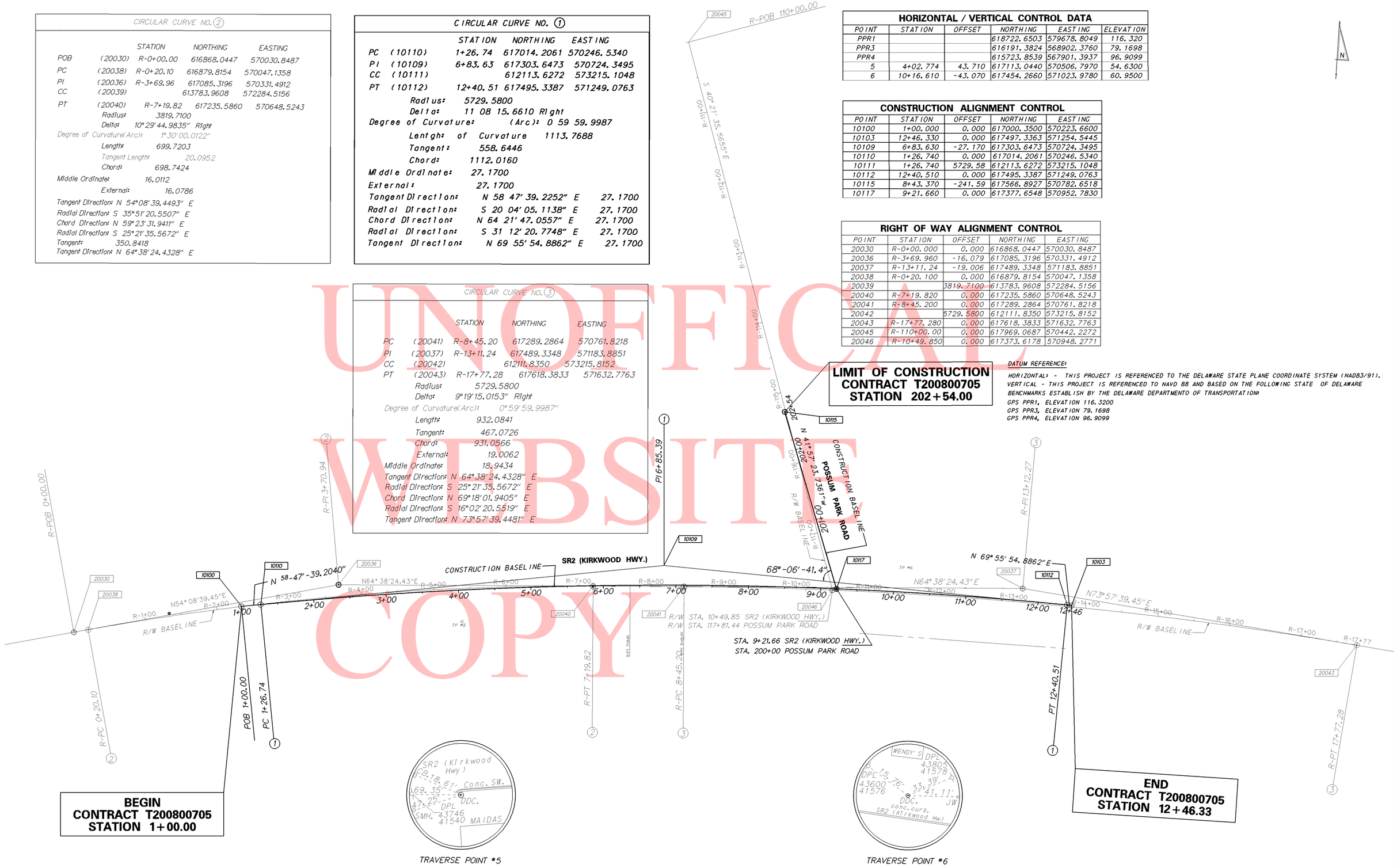
RIGHT OF WAY ALIGNMENT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
20030	R-0+00.000	0.000	616868.0447	570030.8487
20036	R-3+69.960	-16.079	617085.3196	570331.4912
20037	R-13+11.24	-19.006	617489.3348	571183.8851
20038	R-0+20.100	0.000	616879.8154	570047.1358
20039		3819.7100	613783.9608	572284.5156
20040	R-7+19.820	0.000	617235.5860	570648.5243
20041	R-8+45.200	0.000	617289.2864	570761.8218
20042		5729.5800	612111.8350	573215.8152
20043	R-17+77.280	0.000	617618.3833	571632.7763
20045	R-110+00.00	0.000	617969.0687	570442.2272
20046	R-10+49.850	0.000	617373.6178	570948.2771

LIMIT OF CONSTRUCTION
CONTRACT T200800705
STATION 202+54.00

DATUM REFERENCE:

HORIZONTAL: - THIS PROJECT IS REFERENCED TO THE DELAWARE STATE PLANE COORDINATE SYSTEM (NAD83/91).
VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88 AND BASED ON THE FOLLOWING STATE OF DELAWARE BENCHMARKS ESTABLISH BY THE DELAWARE DEPARTMENTO OF TRANSPORTATION:
GPS PPR1, ELEVATION 116.3200
GPS PPR3, ELEVATION 79.1698
GPS PPR4, ELEVATION 96.9099



TRAVERSE POINT #5

TRAVERSE POINT #6

UNOFFICIAL WEBSITE COPY

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	HORIZONTAL AND VERTICAL CONTROL
				COUNTY N.C.	DESIGNED BY: M.R.	SHEET NO. 6
					CHECKED BY: T.B.	TOTAL SHTS. 22

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	PCC CURB, TYPE 2	526'
2	PCC CURB, TYPE 2	526'

UTILITY TEST HOLE SCHEDULE						
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
1	DP-GAS	4+68.93	5.8697	54.25	51.61	2" PE GAS
2	DP-GAS	4+68.98	-1.7334	54.25	51.80	2" PE GAS
9	DP-GAS	4+69.28	-29.6907	54.30	51.90	2" PE GAS

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	GUARDRAIL END TREATMENT ATT, TYPE 2	5+25.70.00	*	50'

NOTE: ALL BEGINNING STATIONS ARE APPROXIMATE, EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
* OFFSETS ATTENUATORS AS PER STANDARD DETAIL.

N

08-059.20-02
FRANK E. ACIERNO
D.R. 248-295

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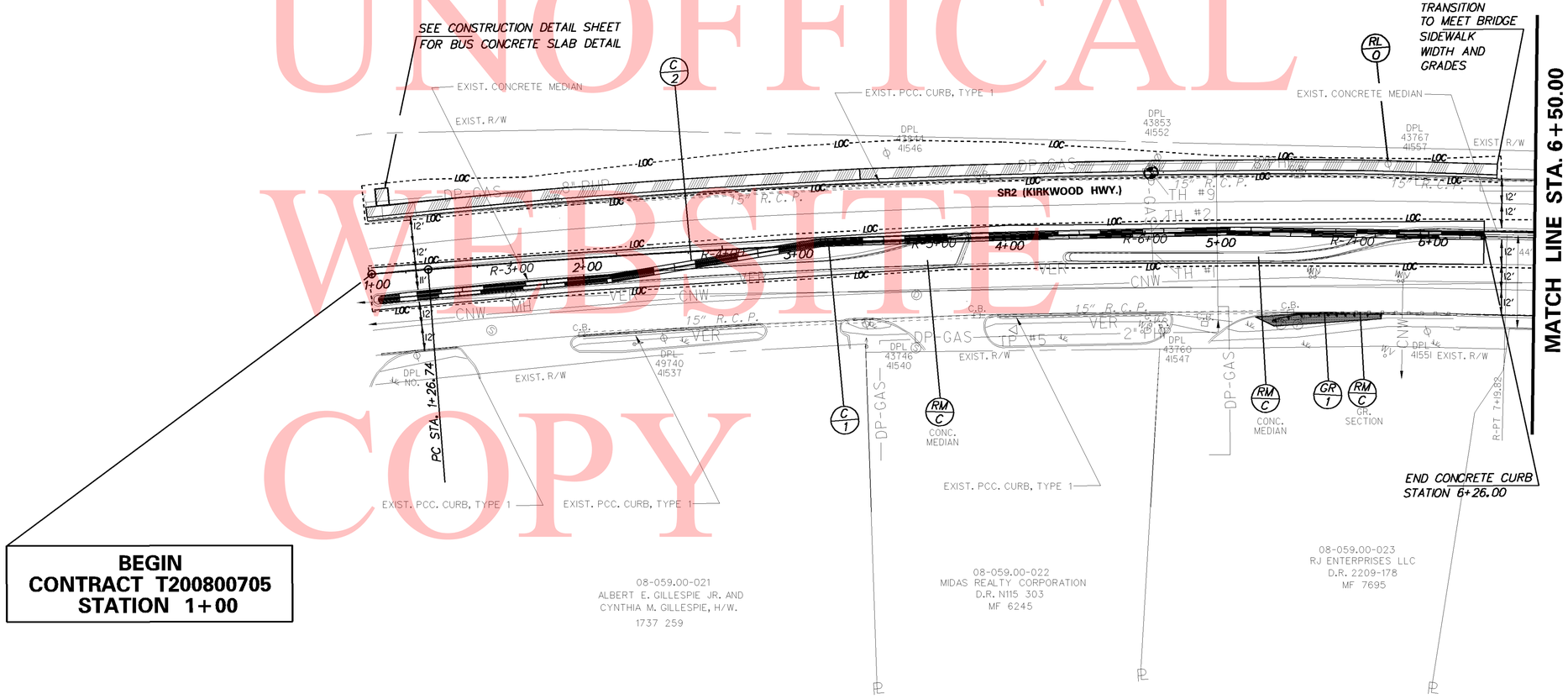


DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	CONSTRUCTION	SHEET NO. 7
				COUNTY N.C.	DESIGNED BY: M.R		TOTAL SHTS. 22
					CHECKED BY: T.B.		

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
3	PCC CURB AND GUTTER, TYPE 3	263′
4	PCC CURB, TYPE 2	80′
5	PCC CURB, TYPE 2	32′
6	PCC CURB, TYPE 2	74
7	PCC CURB AND GUTTER, TYPE 3	120′
8	PCC CURB AND GUTTER, TYPE 3	25′
9	PCC CURB, TYPE 3	59′
10	PCC CURB, TYPE 3	6′
11	PCC CURB, TYPE 3	79′

RIGHT-OF-WAY MONUMENT SCHEDULE

NO.	STATION	OFFSET	NORTHING	EASTING
1	R-8+47.90	-40.0000	617326.5974	570747.1489
2	R-115+75.00	40.0000	617505.0200	570784.1099
3	R-13+30.56	-54.8013	617529.6850	571189.4962
4	R-116+34.00	-60.0000	617524.8211	570898.5167

UTILITY TEST HOLE SCHEDULE

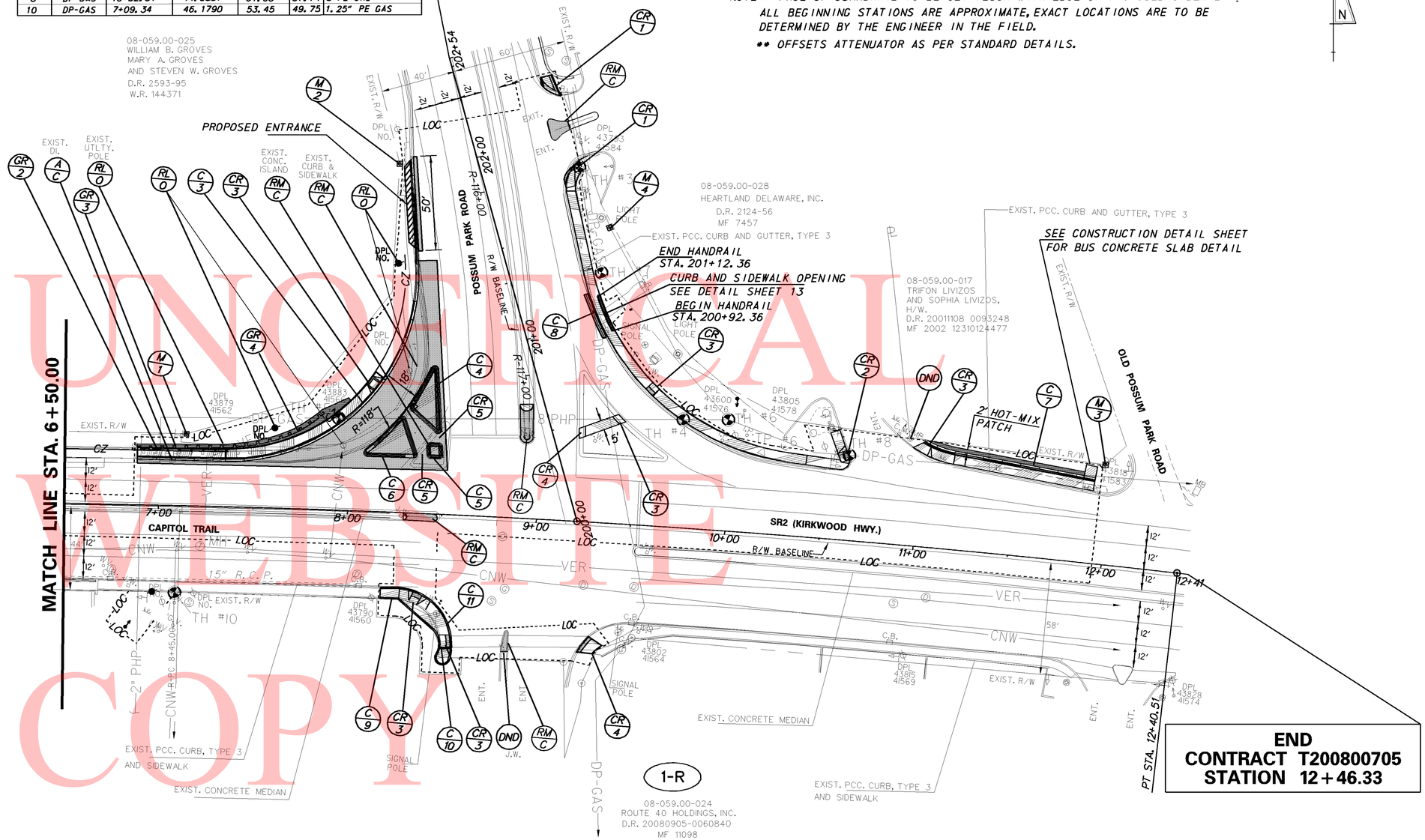
NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
3	DP-GAS	201+80.68	50.9793	58.13	53.66	16"STEEL GAS MAIN
4	DP-GAS	200+37.05	68.5458	59.07	53.69	12"PE GAS MAIN
5	DP-GAS	7+93.68	-48.6352	55.79	52.10	8"PE GAS MAIN
6	DP-GAS	200+30.64	91.5953	59.15	54.47	8"PE GAS
7	DP-GAS	201+23.60	47.4183	58.10	51.06	16"STEEL GAS
8	DP-GAS	10+62.51	44.9397	61.65	57.74	8"PE GAS
10	DP-GAS	7+09.34	46.1790	53.45	49.75	1.25" PE GAS

LIMIT OF CONSTRUCTION
CONTRACT T200800705
STATION 202+54.00

GUARDRAIL SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
2	GUARDRAIL TO BARRIER CONNECT., TYPE 2	6+85.00	*	25′
3	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1	7+10.00	*	25′
4	GUARDRAIL END TREATMENT ATT., TYPE 2	7+60.00	**	50′

NOTE: * FACE OF GUARDRAIL TO BE SET FLUSH WITH EDGE OF PROPOSED SIDEWALK.
ALL BEGINNING STATIONS ARE APPROXIMATE, EXACT LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
** OFFSETS ATTENUATOR AS PER STANDARD DETAILS.



END
CONTRACT T200800705
STATION 12+46.33

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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	T200800705	BRIDGE NO. N/A	CONSTRUCTION	SHEET NO. 8
				COUNTY N.C.	DESIGNED BY: M.R.		TOTAL SHTS. 22
					CHECKED BY: T.B.		

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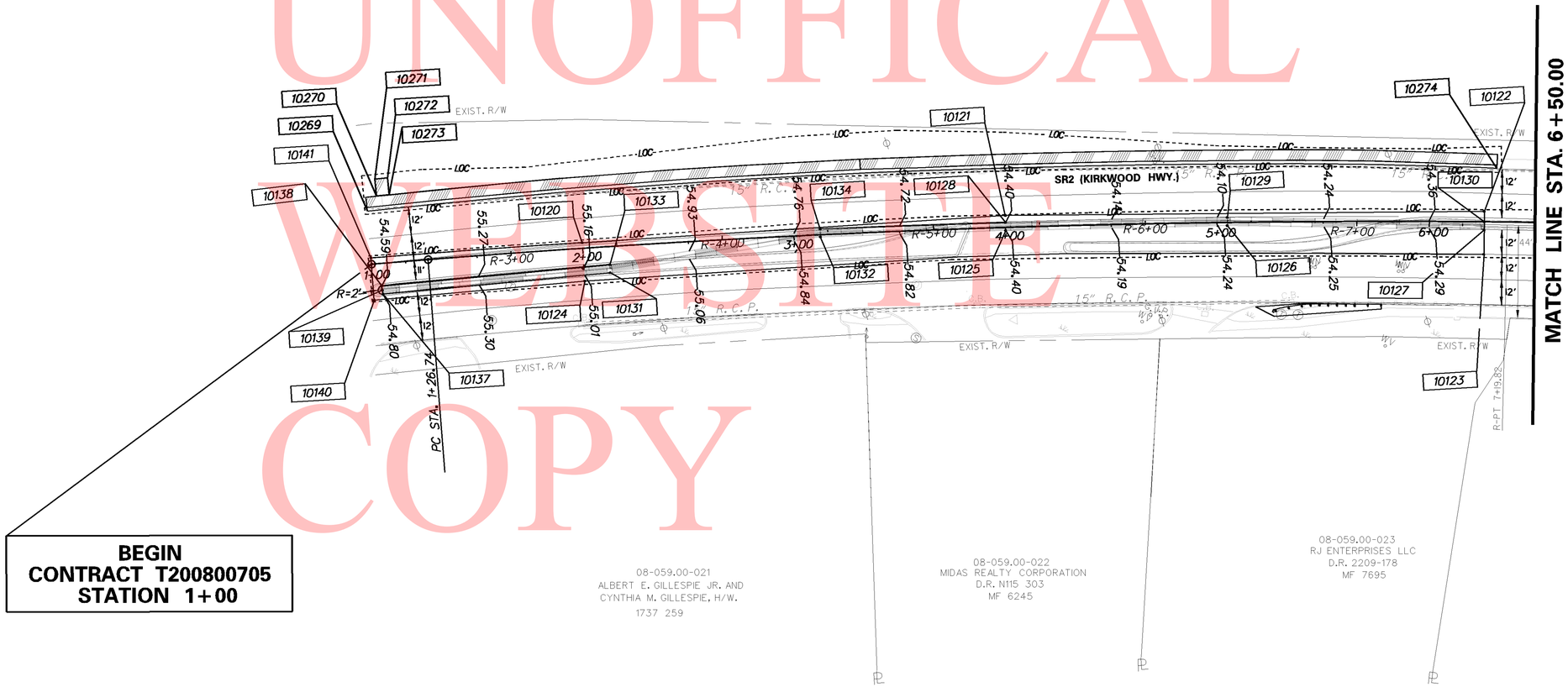
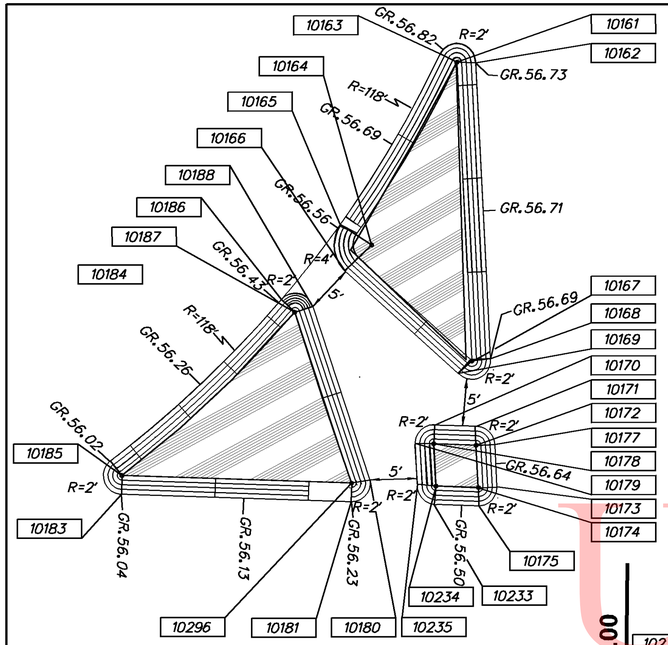


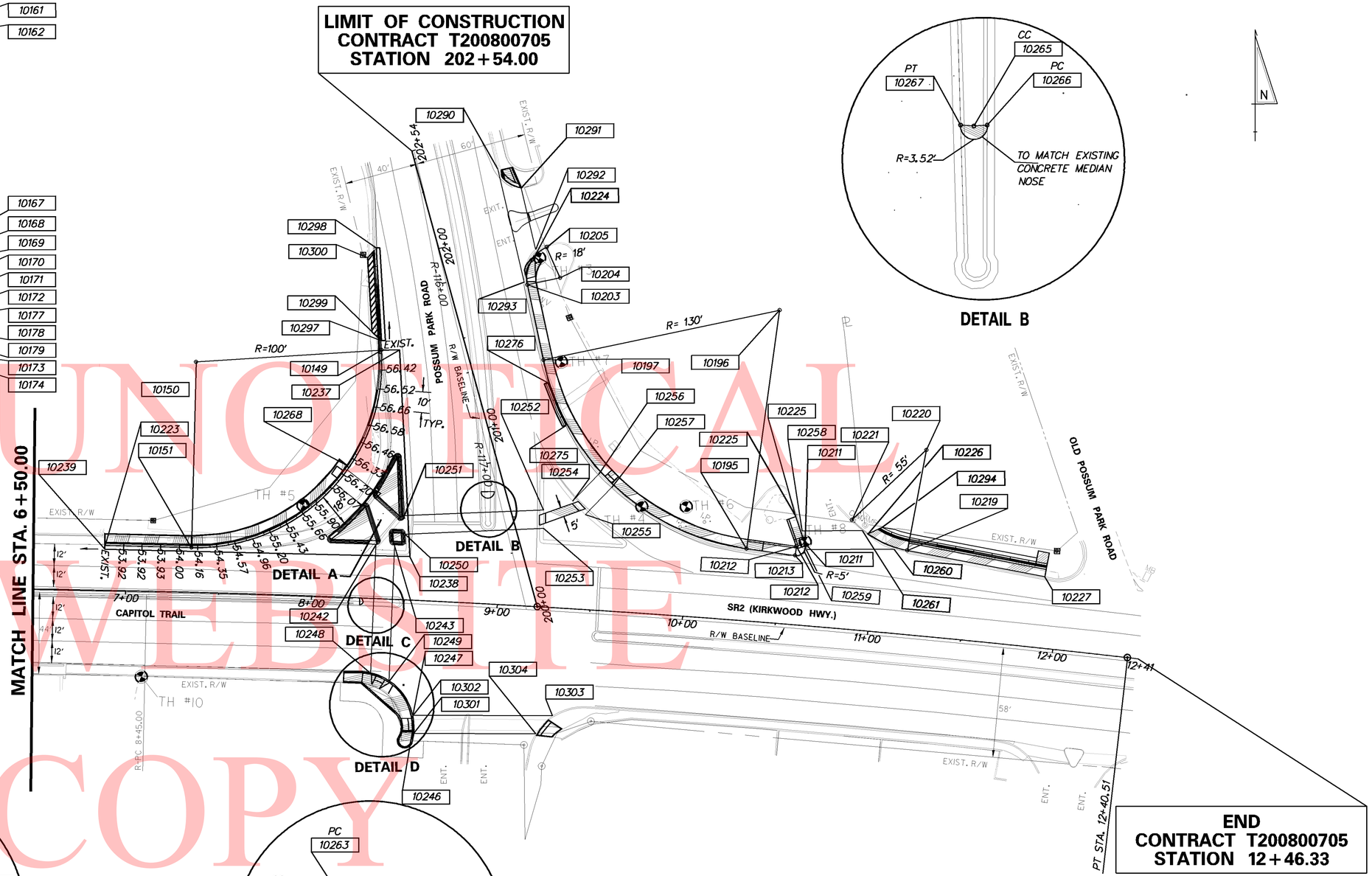
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	GRADES AND GEOMETRICS	SHEET NO. 9
				COUNTY N.C.	DESIGNED BY: M.R		TOTAL SHTS. 22
					CHECKED BY: T.B.		



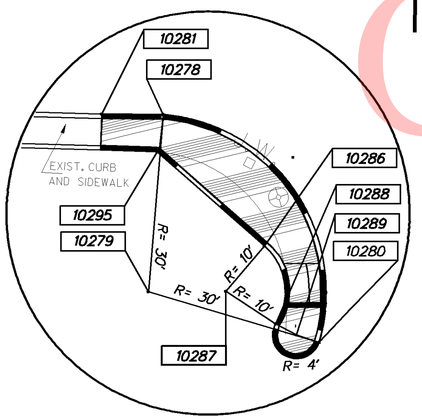
DETAIL A

LIMIT OF CONSTRUCTION
CONTRACT T200800705
STATION 202+54.00

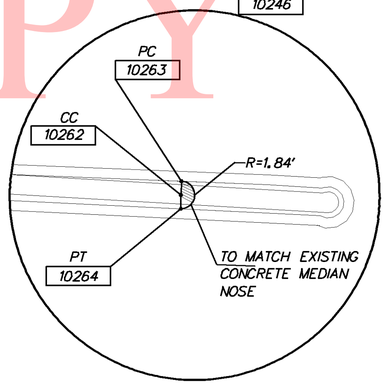
DETAIL B



END
CONTRACT T200800705
STATION 12+46.33



DETAIL D



DETAIL C

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WEBSITE
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DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	T200800705	BRIDGE NO. N/A	GRADES AND GEOMETRICS
				COUNTY N.C.	DESIGNED BY: M.R.	SHEET NO. 10
					CHECKED BY: T.B.	TOTAL SHTS. 22

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10120	2+00.01	-2.7713	617054.1519	570308.0330
10121	4+00.03	-5.7090	617155.1927	570480.8487
10122	6+26.08	-5.0748	617258.5444	570682.1042
10123	6+26.02	15.4251	617240.1273	570691.1075
10124	1+99.96	15.2287	617038.6127	570317.1178
10125	1+00.01	1.3733	617148.9541	570484.2012
10126	5+04.71	1.3599	617198.0290	570576.6653
10127	6+26.06	3.7721	617250.5977	570685.9924
10128	3+99.59	-2.4808	617152.1434	570481.9975
10129	5+04.76	-2.4904	617201.4676	570574.9323
10130	6+26.07	-0.0779	617254.0573	570684.3031
10131	2+12.18	12.007	617047.3111	570326.1526
10132	3+12.44	0.9720	617106.9784	570407.3668
10133	2+12.26	8.4713	617050.6551	570324.2848
10134	3+12.45	2.8575	617110.3216	570405.4991
10136	1+10.63	-3.0000	617008.4222	570231.1955
10137	1+04.30	14.5431	616990.1370	570234.8696
10138	1+03.94	10.5595	616993.3575	570232.4973
10139	1+04.12	12.5513	616991.7473	570233.6835
10140	0+99.88	17.0468	616985.7054	570232.3861
10141	1+00.31	-3.0000	617002.9041	570222.1052
10149	8+31.98	-133.7770	617463.6659	570815.9299
10150	7+34.65	-123.9782	617413.2687	570729.5580
10151	7+34.72	-23.9782	617322.7600	570772.0806
10161	8+42.97	-76.5550	617415.9989	570849.5061
10162	8+44.94	-76.5970	617416.8516	570851.3152
10163	8+41.16	-77.3700	617415.9989	570847.5064
10164	8+34.79	-56.6575	617394.4599	570850.0784
10165	8+31.28	-58.5026	617394.6920	570846.0852
10166	8+32.14	-53.6881	617390.6542	570848.8471
10167	8+45.97	-44.7140	617388.1528	570865.2430
10168	8+47.92	-45.0620	617389.2719	570866.9006
10169	8+44.55	-43.3110	617386.2911	570864.5123
10170	8+42.31	-37.7081	617380.2524	570864.7280
10171	8+46.69	-37.7389	617382.0777	570868.7467
10172	8+46.86	-35.7075	617380.2895	570869.7248
10173	8+49.23	-31.3801	617377.3070	570873.6660
10174	8+47.28	-31.2390	617376.3795	570871.9289
10175	8+47.42	-29.2444	617374.6155	570872.8708
10177	8+48.80	-35.8651	617381.2301	570871.4503
10178	8+42.31	-35.7081	617378.4282	570865.5480
10179	8+40.33	-35.6718	617377.5798	570863.7369
10180	8+35.72	-31.5197	617371.9002	570861.2072
10181	8+33.77	-29.1024	617368.8915	570860.4033
10183	8+09.36	-28.9136	617358.6396	570838.1123

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
10184	8+08.00	-32.3827	617361.2358	570835.4373
10185	8+09.35	-30.9136	617360.4581	570837.2799
10186	8+25.57	-50.5061	617385.0356	570844.1032
10187	8+26.99	-49.1094	617384.3484	570845.9808
10188	8+28.84	-49.8181	617385.7607	570847.3950
10195	10+31.540	-38.7895	617455.9949	570839.5144
10196	10+39.150	-168.5583	617579.1306	570997.8300
10197	9+17.360	-132.8167	617497.9414	570896.3002
10203	9+06.740	-172.7147	617530.2459	570870.4676
10204	9+23.580	-177.4724	617541.4875	570884.5255
10205	9+15.670	-193.5119	617552.9932	570870.6829
10211	10+62.510	-44.2735	617472.7654	571066.3791
10212	10+57.970	-42.2524	617469.1861	571062.8878
10213	10+57.690	-37.2601	617464.4501	571064.4911
10219	11+17.180	-45.2176	617493.9053	571117.2738
10220	11+22.400	-99.9636	617546.8360	571102.3294
10221	10+86.320	-58.8888	617495.2373	571083.2880
10223	6+88.380	-24.1347	617302.9724	570729.9631
10224	9+09.55	-188.1696	617545.5846	570866.9995
10225	10+56.440	-58.1246	617483.3386	571055.5391
10226	10+95.51	-52.1845	617492.4127	571094.3816
10227	11+91.630	-38.4427	617514.3630	571189.7313
10233	8+41.40	-29.1125	617372.0303	570867.3961
10234	8+41.09	-33.1010	617375.5482	570865.4922
10235	8+37.13	-32.8068	617373.6518	570861.9703
10237	8+41.50	-134.3553	617468.1722	570824.5850
10238	8+52.04	-23.3474	617371.1120	570879.5049
10239	6+88.39	-22.1018	617301.1445	570730.8530
10242	8+33.50	-28.9946	617368.6826	570860.2007
10243	8+43.45	-29.0141	617372.7819	570869.3219
10244	9+29.980	62.2063	617323.7455	570984.9049
10245	9+25.720	68.3111	617316.4749	570983.4371
10246	8+57.440	69.5324	617288.3970	570922.0945
10247	8+56.590	63.5421	617293.5319	570918.8965
10248	8+33.58	40.3885	617305.3968	570888.6424
10249	8+43.66	44.3148	617305.8969	570899.3812
10250	8+48.85	-35.2974	617380.7286	570871.7196
10251	8+47.92	-45.2800	617389.4699	570866.8094
10252	9+22.11	-52.1913	617425.7850	570932.5935
10253	9+22.60	-42.1913	617416.7924	570936.9955
10254	9+37.18	-57.8817	617437.0042	570944.3406
10255	9+44.47	-51.0952	617433.6413	570953.7656
10256	9+50.03	-73.0776	617456.0739	570950.3537
10257	9+57.54	-66.5719	617453.0421	570959.8831
10258	10+60.500	-48.6296	617476.0527	571062.8738

COORDINATE LIST

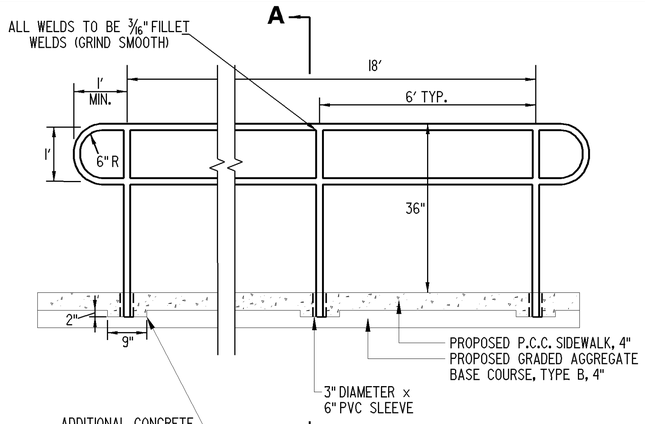
POINT NO.	STATION	OFFSET	NORTHING	EASTING
10259	10+62.950	-42.8218	617471.5828	571067.3306
10260	11+06.320	-46.7953	617491.3850	571106.4957
10261	10+96.460	-51.8887	617492.4889	571095.3816
10262	8+29.590	1.9009	617338.8882	570869.2670
10263	8+29.540	0.0617	617340.5443	570868.4652
10264	8+29.630	3.7405	617337.2243	570870.0525
10265	8+91.850	-58.2623	617419.2212	570902.1434
10266	8+93.250	-58.4442	617419.9506	570903.3617
10267	8+90.450	-58.2871	617418.6764	570900.8320
10268	8+16.120	-71.0530	617399.8435	570826.9549
10269	1+00.040	-25.0785	617021.8188	570210.6976
10270	1+04.860	-31.8719	617030.1299	570211.3060
10271	1+04.660	-31.8692	617036.8633	570206.9862
10272	1+10.650	-40.0238	617040.1032	570212.0362
10273	1+10.860	-32.0265	617033.3698	570216.3561
10274	6+31.88	-25.2605	617279.2257	570678.4179
10275	200+90.00	40.8448	617471.8909	570922.9862
10276	201+14.72	37.4950	617488.0344	570903.9681
10278	8+29.35	39.5622	617304.4334	570884.4754
10279	8+28.13	69.5377	617276.5918	570895.6490
10280	8+57.61	76.8166	617281.8026	570925.1930
10281	8+18.94	39.9392	617299.8478	570875.2058
10282	8+34.28	46.2327	617300.3473	570891.6654
10283	8+32.25	56.0293	617290.5868	570893.8409
10284	8+41.16	51.3333	617298.4792	570899.9817
10285	8+69.03	38.4632	617321.4563	570920.0392
10286	8+47.56	61.0274	617292.2049	570909.7152
10287	8+41.34	68.9079	617282.5006	570907.3015
10288	8+50.05	73.9972	617281.3553	570917.2357
10289	8+53.70	75.7339	617281.2311	570921.2337
10290	8+91.68	-228.8047	617575.4840	570833.8304
10291	202+19.63	51.3732	617575.3294	570844.1493
10292	9+09.29	-187.8924	617545.2239	570866.8637
10293	9+05.04	-181.5532	617537.6634	570865.3545
10294	11+02.65	-56.3525	617498.9302	571099.5608
10295	8+28.60	45.9033	617298.3425	570886.3911
10296	8+33.78	-31.1023	617370.7198	570859.5926
10297	8+31.87	-138.7816	617468.1852	570813.7769
10298	202+09.18	-32.4139	617511.5403	570788.8279
10299	8+26.65	-143.4138	617470.2207	570807.0015
10300	8+22.65	-183.2232	617504.8354	570786.9131
10301	8+58.34	71.6354	617286.8311	570923.7520
10302	8+57.61	61.9190	617295.4263	570919.1651
10303	201+68.51	40.8035	617328.8291	570986.4535
10304	9+25.00	68.3641	617316.1480	570982.8096

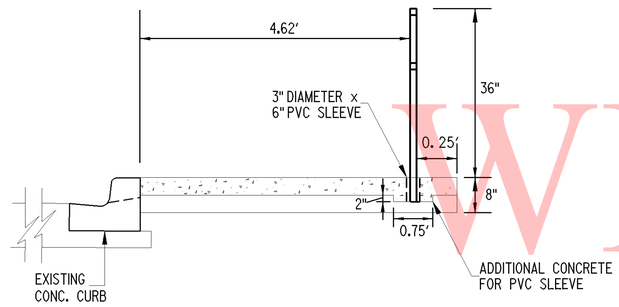
NOTES:

1. OFFSETS SHOWN IN THE COORDINATE LIST WITH A MINUS SIGN ARE TO THE LEFT OF THE SR2(KIRKWOOD HIGWAY) CONSTRUCTION AND R/W BASE LINE.
2. UNLESS OTHERWISE NOTED, POINT GEOMETRY ADJACENT TO CURB IS GIVEN TO THE EDGE OF PAVEMENT.
3. PROPOSED CURBS OR PAVEMENT THAT TIE INTO EXISTING PAVEMENT OR CURBS SHALL MATCH THE EXISTING PAVEMENT OR CURB ELEVATIONS.

ENGINEERING COPY
NOT FOR BID

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	GRADES AND GEOMETRICS
				COUNTY N.C.	DESIGNED BY: M.R.	SHEET NO. 11
					CHECKED BY: T.B.	TOTAL SHTS. 22





SECTION A–A

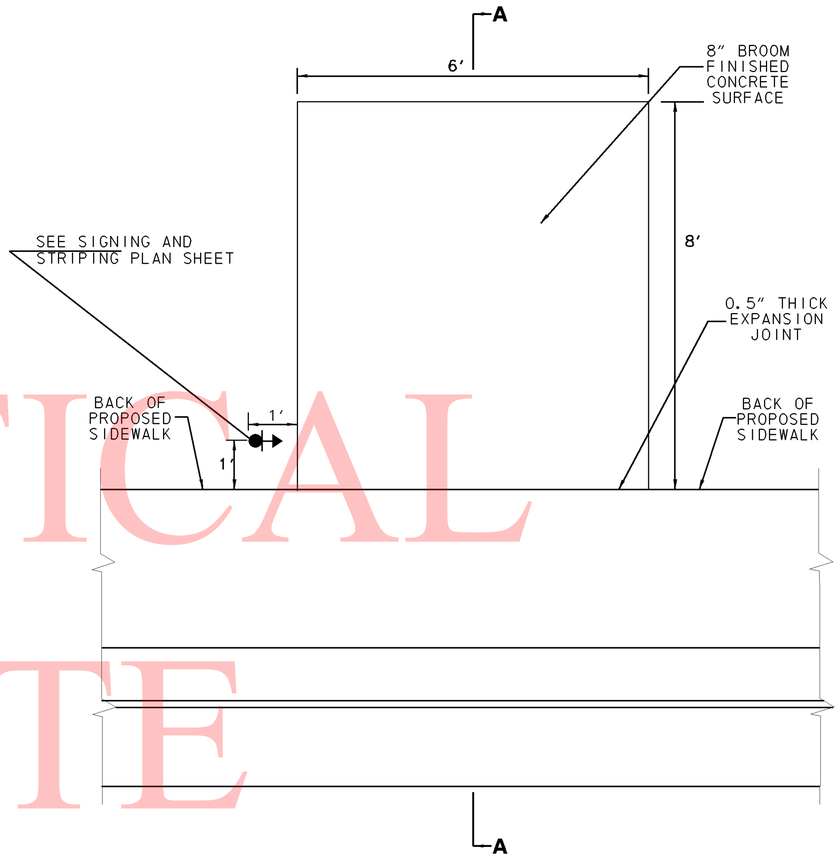
NOTES:

1) ALL WORK AND MATERIALS NECESSARY FOR THE COMPLETION OF THE HANDRAILS SHALL BE INCLUDED UNDER ITEM 606504 - ALUMINUM HANDRAIL.

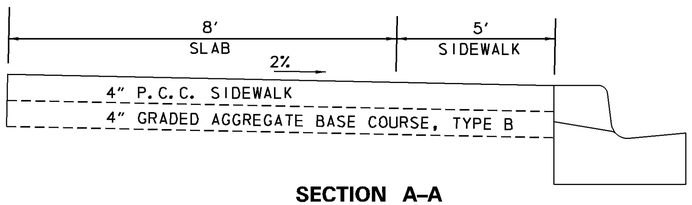
2) SHOP DRAWING SUBMITTAL REQUIRED FOR HANDRAIL.

ALUMINUM HANDRAIL DETAIL

NOT TO SCALE



PLAN REVIEW

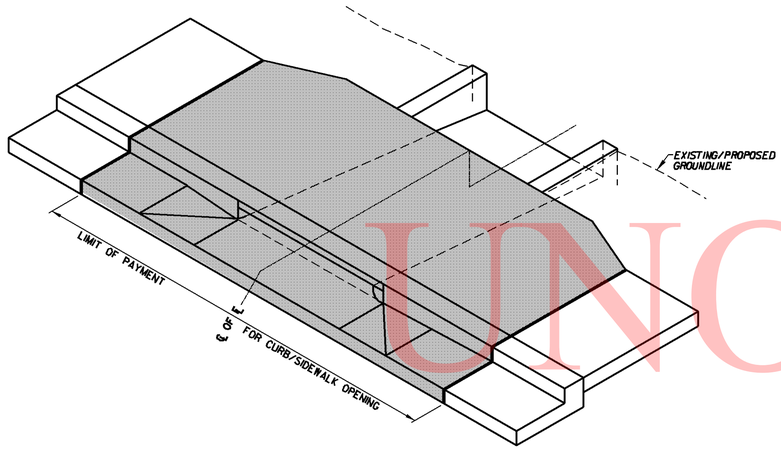


SECTION A–A

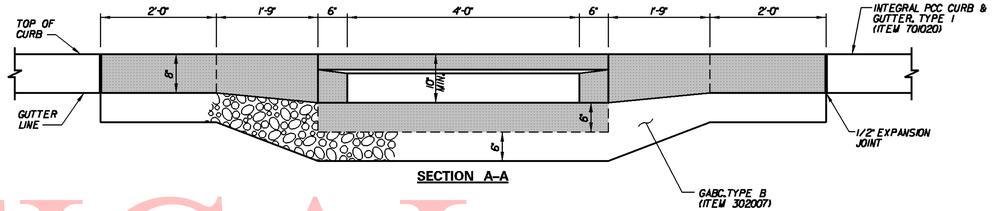
BUS PAD DETAIL

UNOFFICIAL WEBSITE COPY

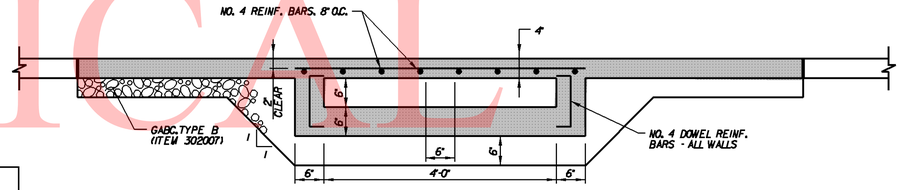
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	CONTRUCTION DETAILS	SHEET NO. 12
				COUNTY N.C.	DESIGNED BY: M.R.		TOTAL SHTS. 22
					CHECKED BY: T.B.		



ISOMETRIC

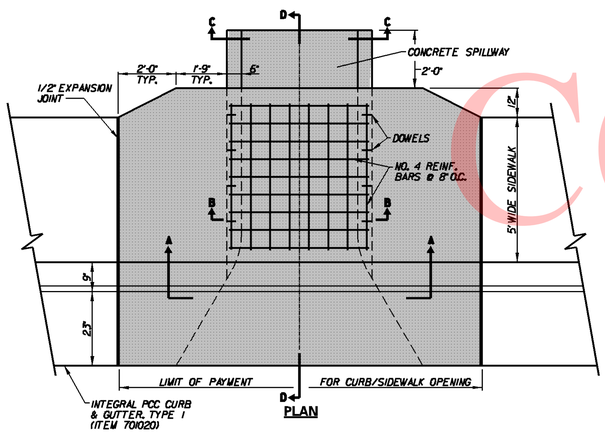


SECTION A–A

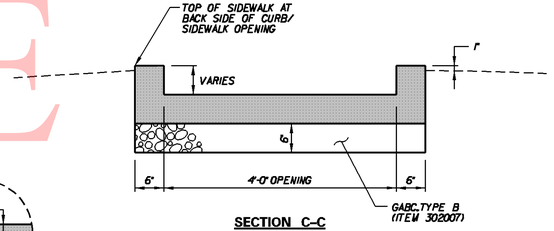


SECTION B–B

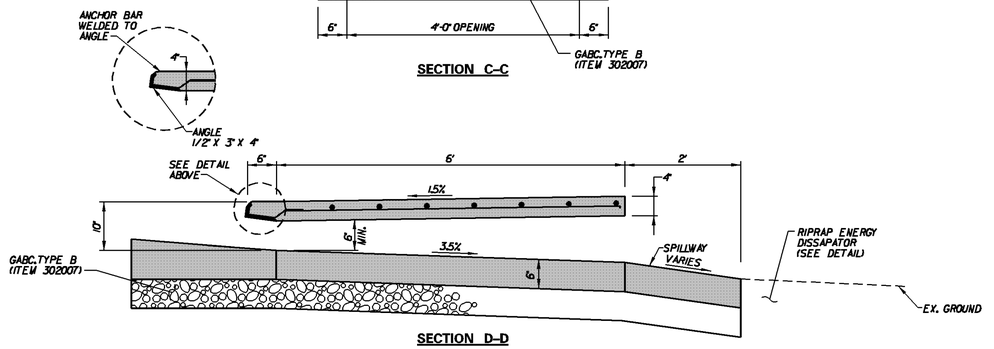
CURB/SIDEWALK OPENING LOCATION
POSSUM PARK ROAD STA.201+02.36 RT.



PLAN



SECTION C–C



SECTION D–D

CURB /SIDEWALK OPENING (ITEM 718511)

NOTE:
PAYMENT FOR ALL WORK NECESSARY TO FINISH AND INSTALL CURB/SIDEWALK OPENING SHALL BE INCIDENTAL TO ITEM 718511.

UNOFFICIAL WEBSITE COPY

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	CONSTRUCTION DETAILS	SHEET NO. 13
				COUNTY N.C.	DESIGNED BY: M.R.		TOTAL SHTS. 22
					CHECKED BY: T.B.		

WARNING SIGNS LEGEND

ROAD WORK 1500 FT	ROAD WORK 1000 FT	ROAD WORK 500 FT	ROAD WORK AHEAD	END ROAD WORK
W20 - 1 48" X 48"	W20 - 1 48" X 48"	W20 - 1 48" X 48"	W20 - 1 48" X 48"	G20 - 2 48" X 24"
(1)	(2)	(3)	(4)	(5)

NOTES:

a. SEE INDIVIDUAL PHASING PLANS FOR PLACEMENT OF TEMPORARY WARNING SIGNS. FINAL LOCATION OF ALL PERMANENT WARNING SIGNS SHALL BE COORDINATED WITH THE ENGINEER.

b. ALL WARNING SIGNS SHOWN ON THIS SHEET ARE TO BE DISPLAYED THROUGHOUT THE DURATION OF THE CONTRACT AND ARE TO BE PAID FOR UNDER ITEM 743504 - WARNING SIGNS.

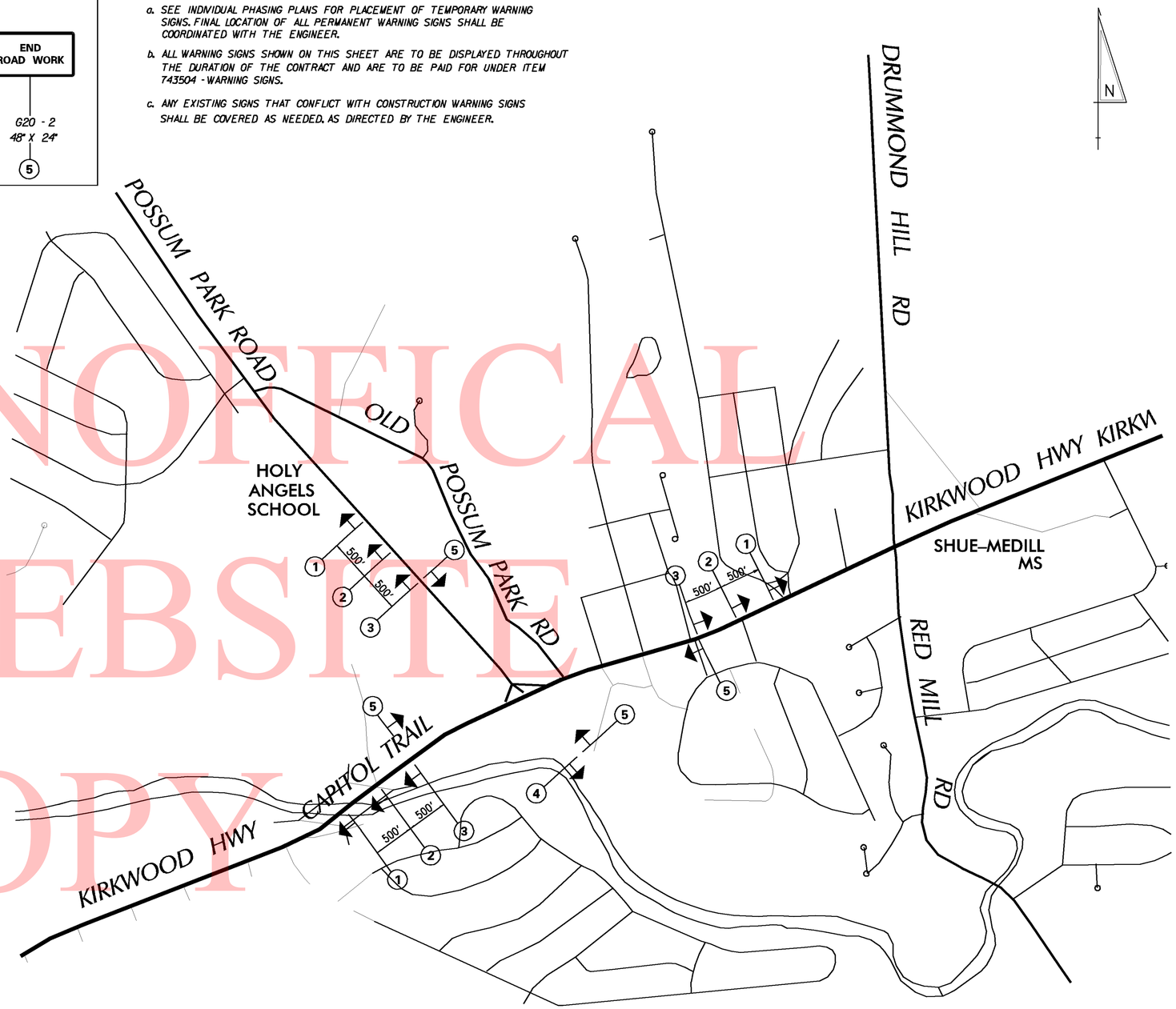
c. ANY EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION WARNING SIGNS SHALL BE COVERED AS NEEDED, AS DIRECTED BY THE ENGINEER.

MAINTENANCE OF TRAFFIC NOTES:

1. A TRUCK MOUNTED ATTENUATOR, TYPE II - ITEM 743537 SHALL ALSO BE REQUIRED WHEN TRAFFIC IS PRESENT DURING THE FOLLOWING OPERATIONS:
   - TEMPORARY/PERMANENT PAVEMENT MARKING:
   -PATCHING:
   -PAVING:
   -FOR ALL OTHER OPERATIONS AS DIRECTED BY THE ENGINEER.

2. WHERE TYPICAL TRAFFIC CONTROL CASES FROM DELDOT'S TRAFFIC CONTROL MANUAL ARE USED. THE CONTRACTOR SHALL REVIEW THE REQUIRED SIGNING AND TRAFFIC CONTROL DEVICES WITH THE ENGINEER TO INSURE THEIR APPLICABITY PRIOR TO IMPLEMENTATION. LONGITUDINAL DIMENSIONS FOR PLACEMENT OF PERMANENT OR TEMPORARY WARNING SIGNS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. ALL PERMANENT SIGNING SHALL BE 7' HIGH AND ALL TEMPORARY SIGNING SHALL BE 5' HIGH.

3. LANES CLOSURE WILL NOT BE PERMITTED BETWEEN 6 AM. AND 8 PM. OR AS PERMITTED BY THE ENGINEER.



UNOFFICAL WEBSITE COPY

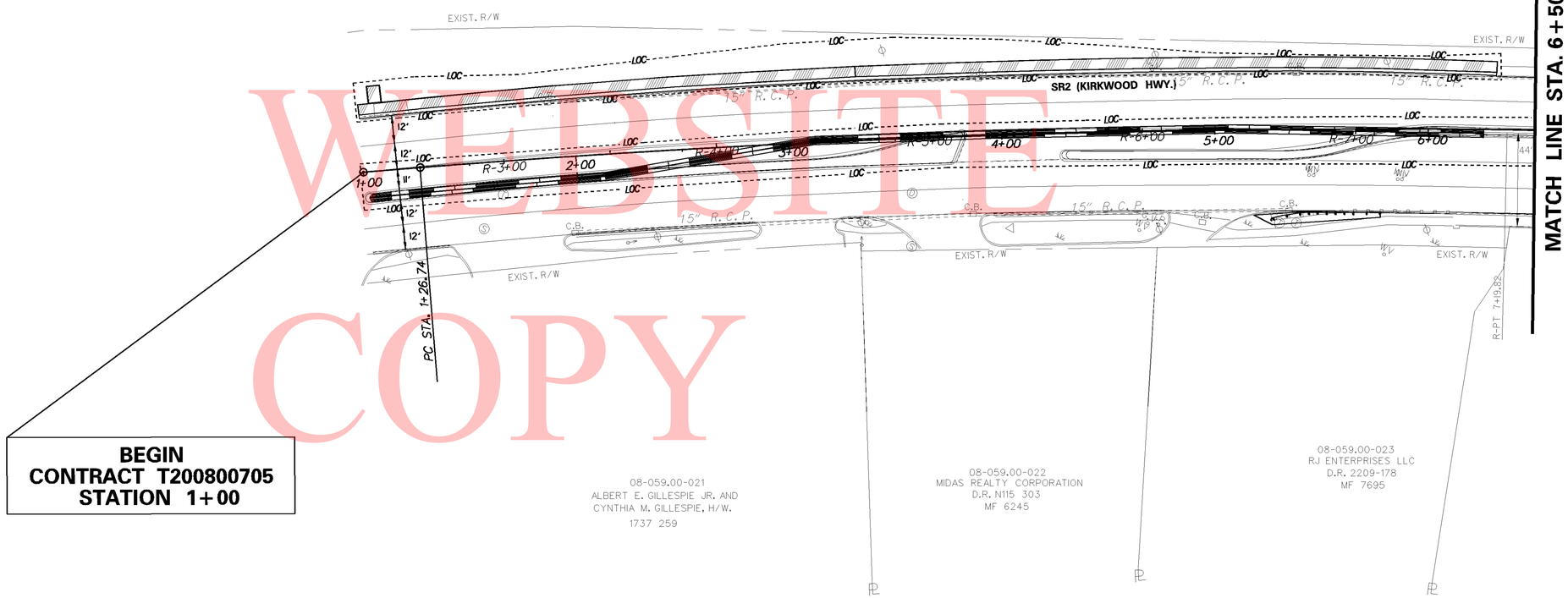
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	HSIP- SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	CONSTRUCTION PHASING, MOT AND EROSION CONTROL PLAN	SHEET NO. 14
				COUNTY N.C.	DESIGNED BY: M.R.		TOTAL SHTS. 22
					CHECKED BY: T.B.		

CONSTRUCTION SEQUENCE:

1. REFER TO THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PART 6. AND USE CASE 7 TO PERFORM SINGLE LANE CLOSURE. DURING MEDIAN RECONSTRUCTION. CASE 7 SHOULD BE USED TO CLOSE THE LEFTMOST (INSIDE) SR2 THROUGH LANE.
2. SAW-CUT EXISTING CONCRETE MEDIAN AND PAVEMENT. AS SHOWN ON THE TYPICAL SECTION AND CONSTRUCTION PLAN.
3. REMOVE EXISTING CONCRETE MEDIAN AND PAVEMENT.
4. BOX OUT AND GRADE FOR THE PROPOSED PAVEMENT SECTION AND PROPOSED CONCRETE MEDIAN.
5. CONSTRUCT PROPOSED CONCRETE MEDIAN AND CONSTRUCT PROPOSED PAVEMENT UP TO TYPE B HOT-MIX LAYER.
6. PLACE THE FINAL TYPE C HOT-MIX COURSE.
7. OPEN LEFTMOST (INSIDE) SR2 THROUH LANES TO TRAFFIC.
8. DURING SIDEWALK CONSTRUCTION. CASE 7 SHOULD BE USED TO CLOSE THE RIGHTMOST (OUTSIDE) SR2 THROUGH LANE.
9. CONSTRUCT THE PROPOSED SIDEWALK TO MEET THE BRIDGE SIDEWALK.
10. REMOVE EXISTING AND INSTALL PROPOSED GUARDRAIL SECTION.
11. REMOVE TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER.

N

08-059.20-02
FRANK E. ACIERNO
D.R. 248-295



BEGIN
CONTRACT T200800705
STATION 1+00

08-059.00-021
ALBERT E. GILLESPIE JR. AND
CYNTHIA M. GILLESPIE, H/W.
1737 259

08-059.00-022
MIDAS REALTY CORPORATION
D.R. N115 303
MF 6245

08-059.00-023
RJ ENTERPRISES LLC
D.R. 2209-178
MF 7695

UNOFFICIAL WEBSITE COPY

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE
0 30 60 90
FEET

SR2 AND SR72 INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T200800705	DESIGNED BY:	M.R
COUNTY	CHECKED BY:	T.B.
N.C.		

CONSTRUCTION PHASING MOT AND EROSION CONTROL PLAN

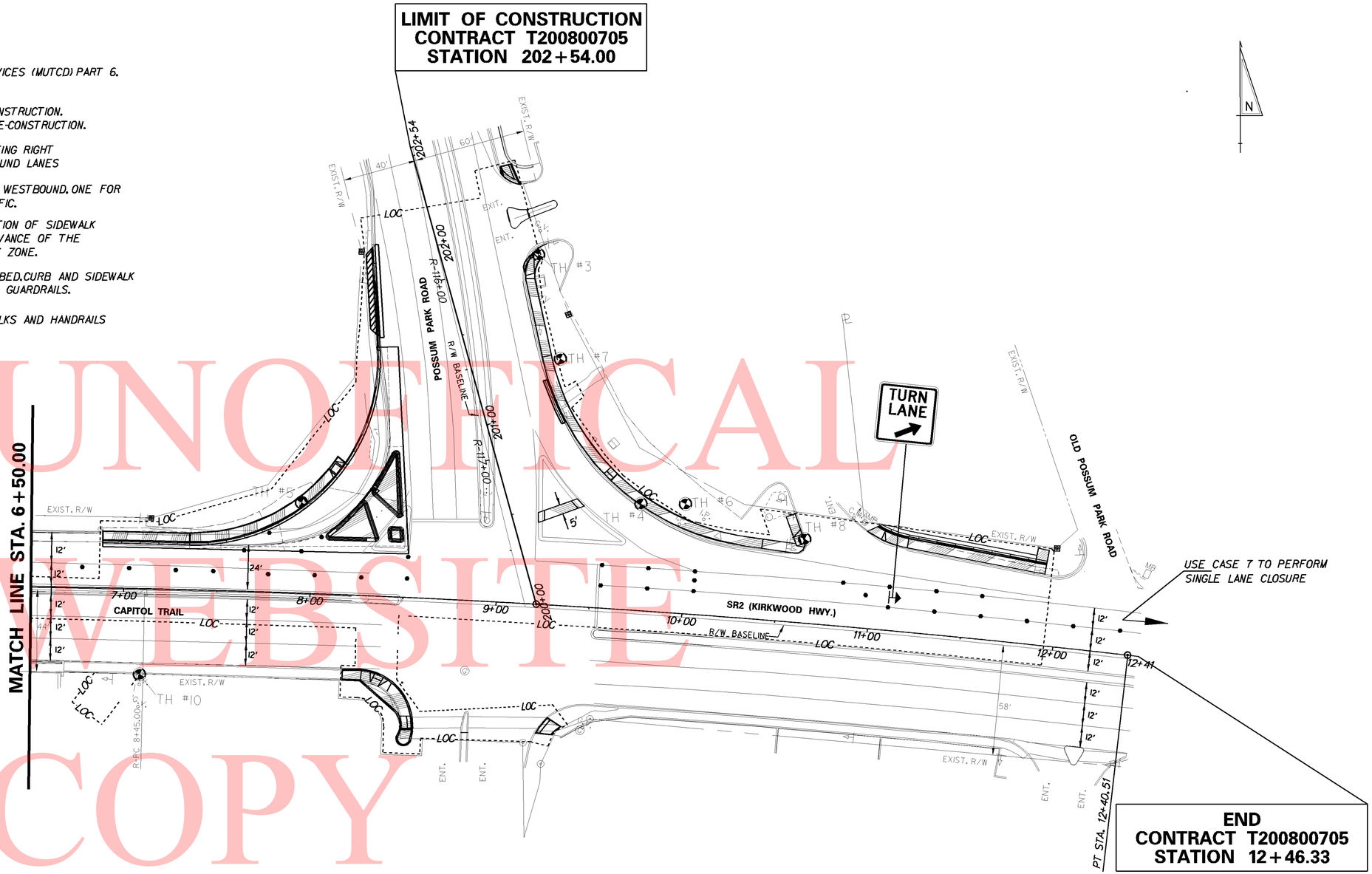
SHEET NO.	15
TOTAL SHTS.	22

CONSTRUCTION SEQUENCE:

REFER TO THE DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PART 6. AND USE CASE 7.

POSSUM PARK ROAD, STA. 200+44 TO STA. 202+09 LT. FULL DEPTH RE-CONSTRUCTION.
SR2 (KIRKWOOD HWY) STA. 6+88.39 TO STA. 8+52.00 LT. FULL DEPTH RE-CONSTRUCTION.

1. ON POSSUM PARK ROAD, SET MOT CONTROL DEVICES CLOSE THE EXISTING RIGHT TURNLANE AND SHIFT TRAFFIC ONTO THE REMAINING THREE SOUTHBOUND LANES
2. MAINTAIN THREE LANES OPEN TO TRAFFIC, ONE FOR RIGHT TURNLANE WESTBOUND, ONE FOR THRU LEFT TRAFFIC AND ONE FOR THE LEFTTURN EASTBOUND TRAFFIC.
3. ON SR2 (KIRKWOOD HWY) SET MOT CONTROL DEVICES. DURING CONSTRUCTION OF SIDEWALK CURB RAMPS AND ISLANDS, USE CASE 7 FROM DELAWARE MUTCD. IN ADVANCE OF THE INTERSECTION, AND CONTINUE THE LANE CLOSURE THROUGH THE WORK ZONE.
4. EXCAVATE BOX OUT AND GRADE FOR THE PROPOSED WIDENED ROAD BED, CURB AND SIDEWALK CONSTRUCT CURB, SIDEWALK, CONCRETE ISLANDS AND INSTALL PROPOSED GUARDRAILS.
5. NORTHEAST OF POSSUM PARK ROAD, CONSTRUCT CURB RAMPS, SIDEWAKLKS AND HANDRAILS AS DIRECTED BY THE ENGINEER.

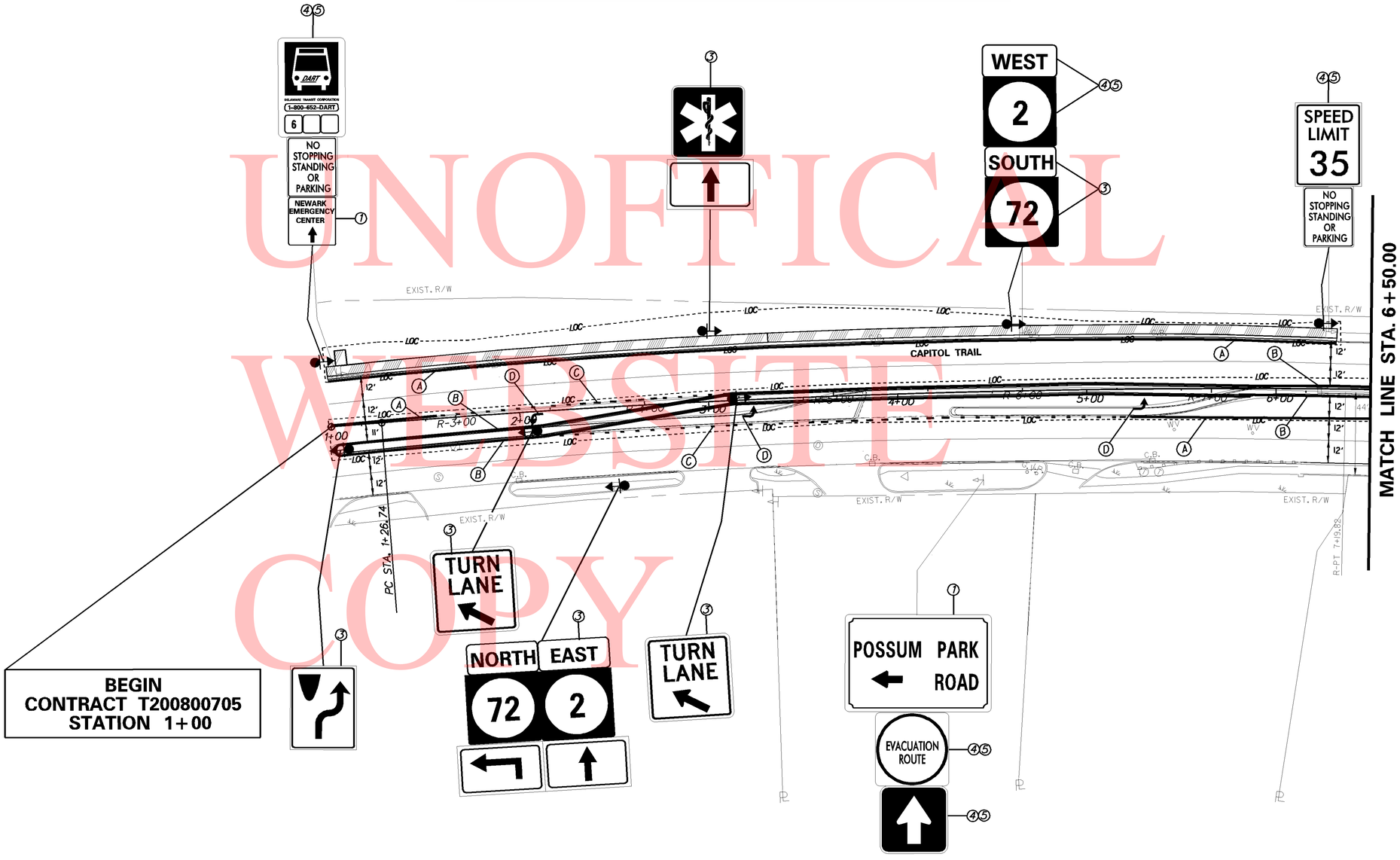


UNOFFICAL
WEBSITE
COPY

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE: 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	T200800705	BRIDGE NO. N/A	CONSTRUCTION PHASING, MOT AND EROSION CONTROL PLAN
				COUNTY N.C.	DESIGNED BY: M.R.	SHEET NO. 16
					CHECKED BY: T.B.	TOTAL SHTS. 22

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	1,650 LF
(B)	5" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	1,100 LF
(C)	5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748548)	550 LF
(D)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL (ITEM 748015)	47 SF

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

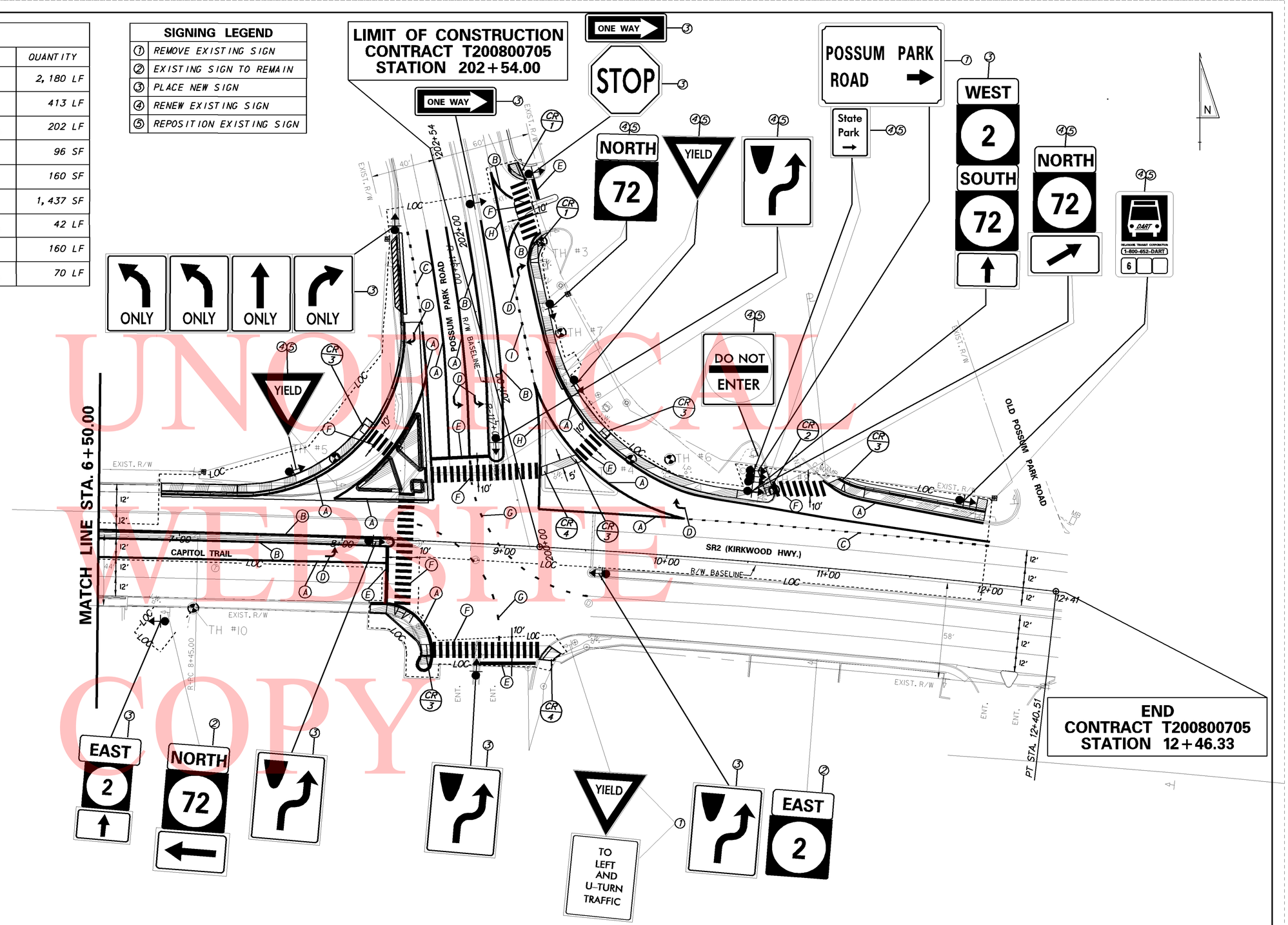


UNOFFICIAL WEBSITE COPY

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	CONTRACT T200800705	BRIDGE NO. N/A	SIGNING AND STRIPING PLAN	SHEET NO. 17
				COUNTY N.C.	DESIGNED BY: M.R		TOTAL SHTS. 22
					CHECKED BY: T.B.		

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	5" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	2,180 LF
(B)	5" SOLID YELLOW EPOXY RESIN PAVEMENT STRIPING (ITEM 748548)	413 LF
(C)	5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748548)	202 LF
(D)	WHITE ALKYD THERMOPLASTIC PAVEMENT SYMBOL (ITEM 748015)	96 SF
(E)	16" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	160 SF
(F)	24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING (ITEM 748015)	1,437 SF
(G)	5" DASHED WHITE THERMOPLASTIC PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748548)	42 LF
(H)	10" SOLID WHITE EPOXY RESIN PAVEMENT STRIPING (ITEM 748549)	160 LF
(I)	10" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 2' LINE & 6' GAP (ITEM 748549)	70 LF

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



UNOFFICIAL WEBSITE COPY

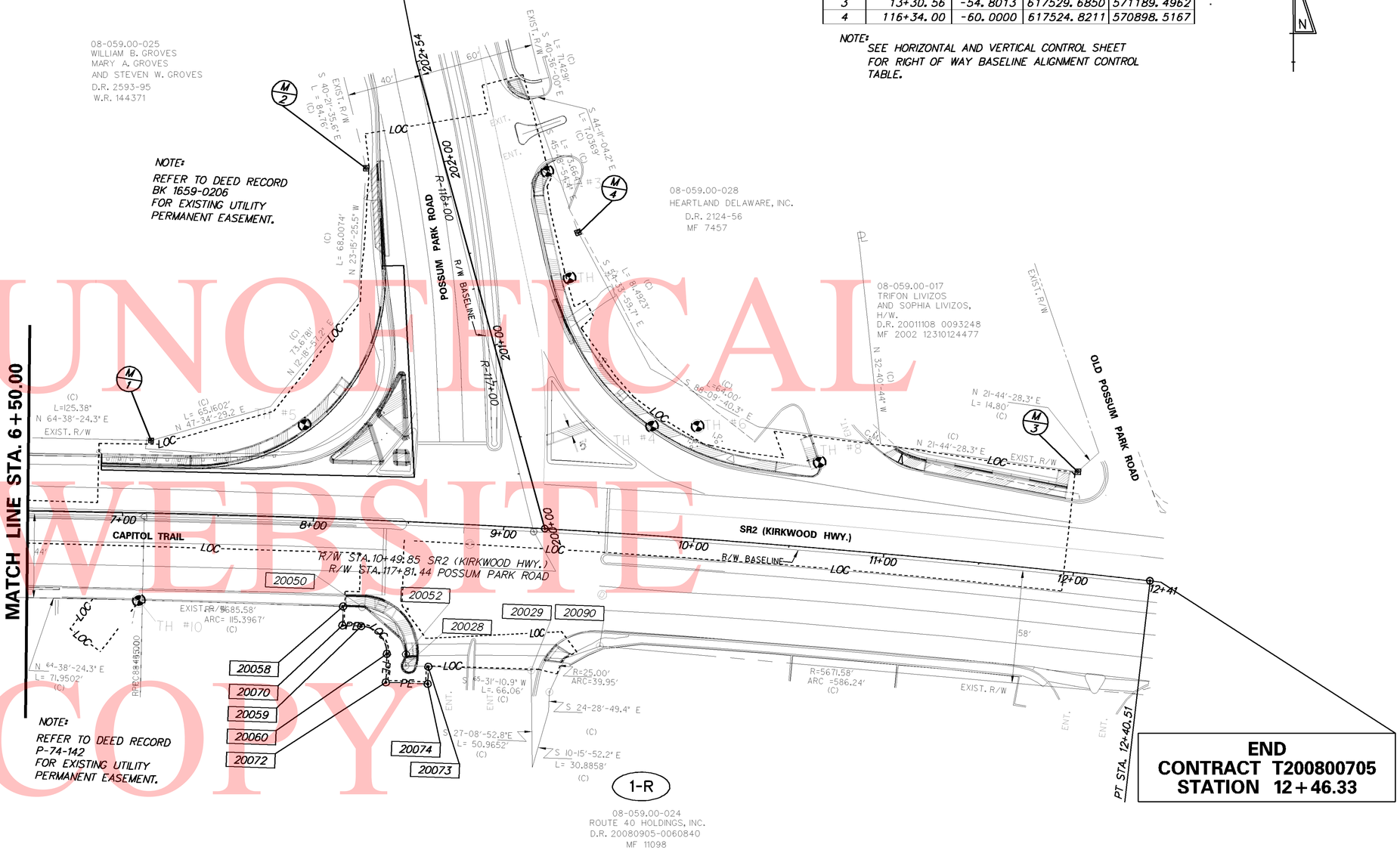
NOTE:
STOP LINES SHOULD BE PLACED A MINIMUM OF 4' IN ADVANCE OF CORRESPONDING CROSSWALK.

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	SR2 AND SR72 INTERSECTION IMPROVEMENTS	T200800705 / COUNTY N.C.	BRIDGE NO. N/A; DESIGNED BY: M.R.; CHECKED BY: T.B.	SIGNING AND STRIPING PLAN	SHEET NO. 18; TOTAL SHTS. 22

LIMIT OF CONSTRUCTION
CONTRACT T200800705
STATION 202+54.00

RIGHT-OF-WAY MONUMENT SCHEDULE				
NO.	STATION	OFFSET	NORTHING	EASTING
1	8+47.90	-40.0000	617326.5974	570747.1489
2	115+75.00	40.0000	617505.0200	570784.1099
3	13+30.56	-54.8013	617529.6850	571189.4962
4	116+34.00	-60.0000	617524.8211	570898.5167

NOTE:
SEE HORIZONTAL AND VERTICAL CONTROL SHEET FOR RIGHT OF WAY BASELINE ALIGNMENT CONTROL TABLE.



UNOFFICIAL WEBSITE COPY

RECOMMENDED

TEAM SUPPORT SQUAD MANAGER — DATE

TEAM SUPPORT ENGINEER — DATE

ASSISTANT DIRECTOR, ENGINEERING SUPPORT — DATE

"AS-ACQUIRED" PLANS

I CERTIFY THAT ALL PROPOSED RIGHT-OF-WAY HAS BEEN ACQUIRED IN THE NAME OF THE STATE OF DELAWARE AND THAT THESE PLANS ACCURATELY DEPICT THE NATURE AND EXTENT OF THE REAL ESTATE SECTION ACQUISITION UNDER THIS PROJECT.

CHIEF, REAL ESTATE — DATE

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

SR2 AND SR72 INTERSECTION IMPROVEMENTS

T200800705

COUNTY N.C.

BRIDGE NO. N/A

DESIGNED BY: M.R.

CHECKED BY: T.B.

RIGHT OF WAY PLAN

SHEET NO. 19

TOTAL SHTS. 22

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)
08-059.00-024	(1-R) ROUTE 40 HOLDINGS, INC.	P/E	20080905-0060840	8.600

ALIGNMENT NUMBER & DESCRIPTION: 2012 - R/W BASELINE

PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
20058	2012	9+51.41	44.00	617293.7828	570876.3203			N 65°45'09.76" E	10.0000	10.0000	5685.5800
20050	2012	9+61.48	44.00	617297.8896	570885.4381			S 69°12'19.81" E	33.9415	37.6996	24.0001
20052	2012	9+85.78	67.95	617285.8398	570917.1686	S 24°29'20.71" E	5.8839				
20028	2012	9+85.83	73.83	617280.4852	570919.6076	N 65°31'11.03" E	12.0000				
20073	2012	9+97.99	73.71	617285.4578	570930.5288	S 24°28'48.97" E	9.0000				
20074	2012	9+98.09	82.71	617277.2668	570934.2583	S 65°31'04.22" W	22.0006				
20072	2012	9+75.77	82.91	617268.1496	570914.2358	N 24°28'49.80" W	15.0000				
20060	2012	9+75.66	67.91	617281.8011	570908.0200			N 69°20'34.12" W	19.7514	21.9238	-14.0000
20059	2012	9+61.49	54.00	617288.7689	570889.5385	S 65°45'13.64" W	9.7989				
20070	2012	9+51.59	54.00	617284.7449	570880.6040	N 25°21'35.13" W	10.0017				
20058	2012	9+51.41	44.00	617293.7828	570876.3203						

FIGURE 2020 AREA = 654.5562 SQ. FT. (0.0150 ACRES)

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LEGEND

FEE	AREA OF ACQUISITION
RW	AREA OCCUPIED BY EXISTING RW
PE	PERMANENT EASEMENT
TCE	TEMPORARY CONSTRUCTION EASEMENT
*	"-" OFFSET IS LEFT OF BASELINE
**	"-" CURVE TURNS TO THE LEFT

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SR2 AND SR72 INTERSECTION IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T200800705	DESIGNED BY: MR	
COUNTY	CHECKED BY: TB	
NEW CASTLE		

RIGHT-OF-WAY DATA SHEET

SHEET NO.
20
TOTAL SHTS.
22

Y:\NEWCASTL\011\ROAD\2800705\PLANS\RB01.DGN

COUNTY ASSESSMENT PARCEL NUMBER	PLAN SHEET NUMBER	OWNERSHIP OF RECORD	TITLE SOURCE	PROPERTY AREA BEFORE ACQUISITION (ACRE) D=DEED C=CALCULATED A=ASSESMENT	ACQUISITION CODE FEE, R/W, P/E, TCE	AREA TO BE ACQUIRED				PROPERTY AREA REMAINING (SQ. FEET /ACRES)	DEED RECORD OF ACQUISITION	REMARKS
						ACQUISITION (SQ. FEET /ACRES)	AREA OCCUPIED BY EXISTING RIGHT OF WAY (SQ. FEET /ACRES)	EASEMENT				
								PERMANENT (SQ. FEET /ACRES)	TEMPORARY (SQ. FEET /ACRES)			
08-059.00-024	19	(1-R) ROUTE 40 HOLDINGS, INC.	20080905-0060840	A - 8.60	P/E			654.5562 / 0.02		374616.00 / 8.60		

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ACQUISITION CODES

FEE – ACQUISITION
R/W – AREA OCCUPIED BY EXISTING R/W
P/E – PERMANENT EASEMENT
TCE – TEMPORARY EASEMENT

DELAWARE
DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SR2 AND SR72
INTERSECTION
IMPROVEMENTS

CONTRACT: T200800705
COUNTY: NEW CASTLE
BRIDGE NO.: N/A
DESIGNED BY: MR
CHECKED BY: TB

RIGHT–OF–WAY
TABULATION SHEET

SHEET NO. 21
TOTAL SHTS. 22

Y:\NEWCASTL\011\ROAD\2800705\PLANS\RT01.DGN

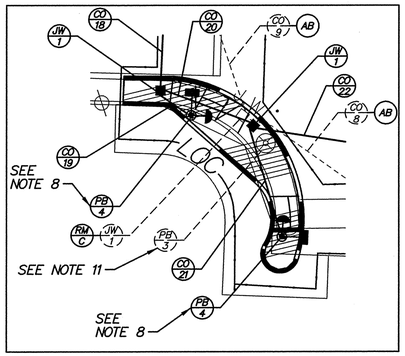
CONDUIT RUN SCHEDULE

CO*	# OF CONDUITS	SIZE	LENGTH	B/T/O	AMOUNT AND TYPE OF CABLE/ WIRE
1*	1	2.0 IN	XX FT	-	EX. (1) 2/*8 U.F. W/GROUND
2*	1	2.5 IN	6 FT	-	<REMOVE EX. (2) 16/*14, EX. (2) 4/*18>, [NEW (2) 16/*14], [NEW (4) 4/*18]
3*	2	2.5 IN	7 FT	-	EX. (2) 4/*18- TO REMAIN, <REMOVE EX. (5) 4/*18>, [NEW (4) 9/*14], [NEW (6) 4/*18]
4*	2	2.5 IN	44 FT	-	EX. (2) 4/*18- TO REMAIN, <REMOVE EX. (5) 4/*18>, [NEW (1) 9/*14]
5*	1	2.5 IN	63 FT	-	EX. (2) 4/*18- TO REMAIN, <REMOVE EX. (3) 4/*18>
6*	1	2.5 IN	41 FT	-	<REMOVE EX. (3) 4/*18>
7*	1	2.5 IN	70 FT	-	<REMOVE EX. (3) 4/*18>
8*	1	2.5 IN	47 FT	-	<REMOVE EX. (2) 4/*18>
9*	1	1.5 IN	47 FT	-	<REMOVE EX. (2) 4/*18>
10*	1	2.5 IN	34 FT	-	<REMOVE EX. (2) 4/*18>
11	1	2.5 IN	9 FT	T	[NEW (1) 9/*14]
12	1	2.5 IN	65 FT	B	[NEW (3) 9/*14], [NEW (6) 4/*18]
13	1	2.5 IN	69 FT	B	[NEW (3) 9/*14], [NEW (4) 4/*18]
14	1	2.5 IN	16 FT	T	[NEW (1) 9/*14]
15	1	2.5 IN	31 FT	T	EMPTY
16	1	2.5 IN	18 FT	T	EMPTY
17	1	2.5 IN	41 FT	B	[NEW (2) 9/*14], [NEW (4) 4/*18]
18	1	2.5 IN	39 FT	B	[NEW (2) 9/*14], [NEW (2) 4/*18]
19	1	2.5 IN	7 FT	T	[NEW (2) 9/*14]
20	1	2.5 IN	19 FT	T	[NEW (2) 9/*14], [NEW (2) 4/*18]
21	1	2.5 IN	23 FT	T	[NEW (1) 9/*14]
22	1	2.5 IN	89 FT	B	[NEW (1) 9/*14], [NEW (2) 4/*18]
23	1	2.5 IN	11 FT	T	[NEW (1) 9/*14]

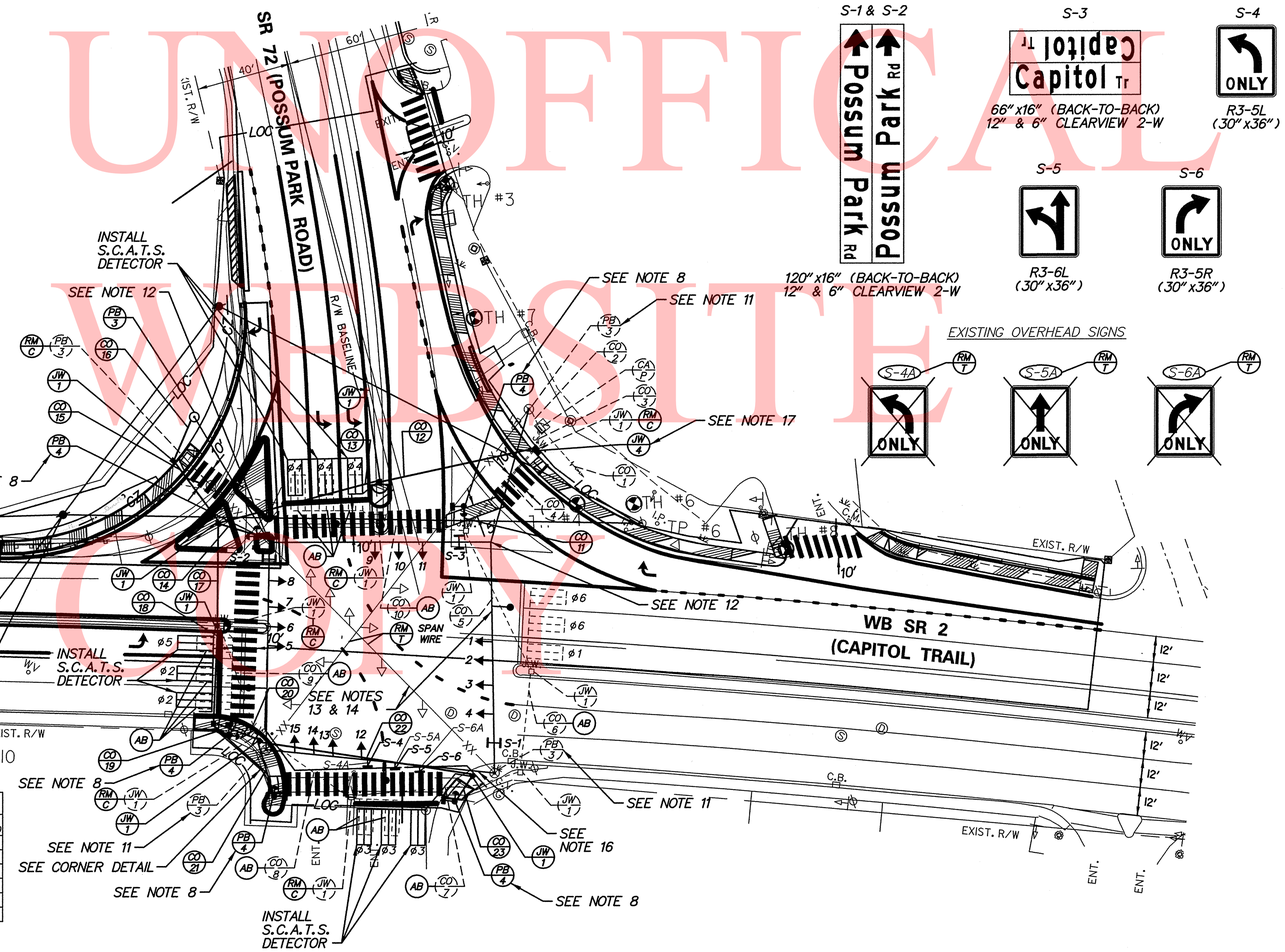
* DENOTES EXISTING CONDUIT — B = BORE, T = TRENCH, O = OPEN CUT

NOTES:

8. PROPOSED POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHALL BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (5:1 FLATTER) LANDING AREA OF THE CURB RAMP OR SIDEWALK IN ACCORDANCE WITH CURRENT ADA BEST PRACTICES. THESE POLE BASES SHALL BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 42 TO 48 INCHES ABOVE THE LANDING AREA/SIDEWALK, AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE IS 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAT 7 FEET OR MORE THAN 10 FEET ABOVE SIDEWALK LEVEL.
9. DELDOT TRAFFIC/TMC SHALL MODIFY THE SIGNAL PHASING, AS SHOWN, AND SO THAT PHASES 1 AND 5 OPERATE PROTECTED-ONLY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL UNDERGROUND SIGNAL EQUIPMENT - E.G., JUNCTION WELLS, POLE BASES, AND CONDUIT. DELDOT'S TRAFFIC CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND REMOVAL OF ALL ELECTRICAL CABLES AND ABOVE GROUND SIGNAL EQUIPMENT - E.G., HEADS, OPTICOM RECEIVERS, SPAN WIRES, AND POLES.
11. THE TRAFFIC CONTRACTOR SHALL INSTALL BACK GUYS, IN ACCORDANCE WITH ITEM 746501, ON THE EXISTING SIGNAL POLES PRIOR TO INSTALLING THE PROPOSED SPAN WIRES. THE BACK GUYS SHALL BE REMOVED, IN ACCORDANCE WITH ITEM 746710, WHEN THE EXISTING SPAN WIRES ARE REMOVED FROM THE EXISTING SIGNAL POLES.
12. THE TRAFFIC CONTRACTOR SHALL ATTACH THE PROPOSED SPAN WIRES USING A GALVANIZED STEEL BULL RING. THE BULL RING SHALL HAVE A 4-INCH INSIDE DIAMETER AND BE FABRICATED FROM STEEL CONFORMING TO A668, QUENCHED AND TEMPERED. THE BAR DIAMETER SHALL NOT BE LESS THAN 7/8 INCHES. THE WELDLESS RINGS SHALL MEET FEDERAL SPECIFICATION RR-C271B TYPE VI. THE RINGS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH A153 SPECIFICATIONS. TWO GALVANIZED J-BOLT GUY CLAMPS AND A SERVICE SLEEVE SHALL BE INSTALLED FOR EACH SPAN WIRE ATTACHMENT IN ACCORDANCE WITH STANDARD NO. T-12 (2005).
13. THE TRAFFIC CONTRACTOR SHALL REMOVE THE EXISTING SPAN WIRES, SIGNAL HEADS, AND ELECTRICAL CABLES.
14. THE TRAFFIC CONTRACTOR SHALL INSTALL THE PROPOSED SPAN WIRES, (2) 16/*14 HEAD CABLES, (4) 4/*18 OPTICOM CABLES, SIGNAL HEADS, OPTICOM RECEIVERS, AND OVERHEAD SIGNS, AS SHOWN.
15. ALL PEDESTRIAN SIGNALS SHALL CONTAIN PEDESTRIAN COUNTDOWN DISPLAYS.
16. THE TRAFFIC CONTRACTOR SHALL REMOVE EXISTING OVERHEAD SIGNS S-4A, S-5A, AND S-6A AND TETHER SPAN WIRES AND INSTALL THE PROPOSED OVERHEAD SIGNS ON THE PROPOSED SPAN WIRE, AS SHOWN.
17. THE CONTRACTOR SHALL REMOVE THE EXISTING JUNCTION WELL, TYPE 1, AND INSTALL THE PROPOSED JUNCTION WELL, TYPE 4 SO THAT IT INTERCEPTS CONDUIT RUNS NOS. 3 AND 4 AND PROPOSED CONDUIT RUN NO. 12.



CORNER DETAIL
SCALE: 1" = 15'



SPAN WIRE SCHEDULE

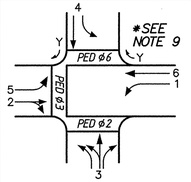
SPAN	LENGTH	SPAN MOUNT HEIGHT	5% DROP	BULL RING HEIGHT	SAG	SPAN LOW POINT	BOTTOM OF LOWEST HEAD
NORTHWEST	62 FT	27.2 FT	3.1 FT	24.1 FT	-	-	-
NORTHEAST	58 FT	27.0 FT	2.9 FT	24.1 FT	-	-	-
NORTH	93 FT	-	-	24.1 FT	2.8 FT @ 3%	21.3 FT	17.3 FT
SOUTH	97 FT	23.9 FT	-	-	2.9 FT @ 3%	21.0 FT	17.0 FT
EAST	97 FT	24.1 FT	-	24.1 FT	2.9 FT @ 3%	21.2 FT	17.2 FT
WEST	87 FT	24.1 FT	-	24.1 FT	2.6 FT @ 3%	21.5 FT	17.5 FT

* FIELD ADJUSTMENTS AS REQUIRED
** EXISTING NE SIGNAL POLE IS 28 FEET
*** EXISTING SW AND SE SIGNAL POLES ARE 25 FEET
**** PROPOSED NW SIGNAL POLE IS 28 FEET

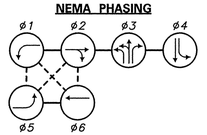
PROPOSED OVERHEAD SIGNS

EXISTING OVERHEAD SIGNS

SIGNAL PHASING



NEMA PHASING

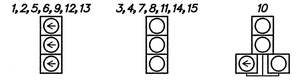


PHASING NOTES

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

SIGNAL HEAD DIAGRAM

*ALL EXISTING SIGNAL HEADS SHALL BE REMOVED



LEGEND

- PROPOSED SIGNAL CABINET
- EXISTING SIGNAL CABINET
- PROPOSED SIGNAL POLE BASE
- EXISTING SIGNAL POLE BASE
- PROPOSED PEDESTRIAN POLE BASE
- EXISTING PEDESTRIAN POLE BASE
- PROPOSED WOOD POLE
- EXISTING UTILITY POLE
- PROPOSED JUNCTION WELL
- EXISTING JUNCTION WELL
- PROPOSED SIGNAL HEAD
- EXISTING SIGNAL HEAD
- PROPOSED PEDESTRIAN SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- PROPOSED PEDESTRIAN PUSHBUTTON
- EXISTING PEDESTRIAN PUSHBUTTON
- PROPOSED VIDEO DETECTION
- EXISTING VIDEO DETECTION
- PROPOSED MICROWAVE DETECTION
- EXISTING MICROWAVE DETECTION
- OVERHEAD SIGNING
- PROPOSED OPTICOM RECEIVER
- EXISTING OPTICOM RECEIVER
- PROPOSED MAST ARM
- EXISTING MAST ARM
- PROPOSED LUMINAIRE
- EXISTING LUMINAIRE
- PROPOSED LOOP DETECTOR (TYPE 1 OR 2)
- EXISTING LOOP DETECTOR (TYPE 1 OR 2)
- REMOVE BY CONTRACTOR
- REMOVE BY DELDOT TRAFFIC
- ABANDON
- PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
- EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
- PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
- EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)
- PROPOSED CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
- EXISTING CONDUIT RUN IDENTIFIER (# OF CONDUIT RUN)
- PROPOSED OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
- EXISTING OVERHEAD RUN IDENTIFIER (# OF OVERHEAD RUN)
- PROPOSED MAST ARM IDENTIFIER (LENGTH OF ARM)
- EXISTING MAST ARM IDENTIFIER (LENGTH OF ARM)
- PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)
- EXISTING CABINET IDENTIFIER (TYPE OF CABINET)
- PROPOSED SPAN WIRE
- EXISTING SPAN WIRE
- RIGHT-OF-WAY OR PROPERTY LINE
- PROPOSED SPAN INSULATOR
- EXISTING SPAN INSULATOR
- SERVICE PEDESTAL

GENERAL SIGNAL NOTES

1. EXISTING LOOP DETECTORS - (TO REMAIN):
   S.C.A.T.S. - 6'x 15'- WB SR 2 ALL MOVEMENTS.

   PROPOSED LOOP DETECTORS:
   S.C.A.T.S. - 6'x 15'- TO BE INSTALLED ON EB SR 2 AND SB POSSUM PARK RD MOVEMENTS.
   S.C.A.T.S. - 6'x 15'- TO BE INSTALLED ON NB SHOPPING CENTER ALL MOVEMENTS.
2. PROPOSED NW SIGNAL POLE IS 28 FEET.
3. CO #1 IS NOT DRAWN TO SCALE, NOR IS THE DIRECTION NECESSARILY CORRECT.
4. ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC - DOVER, DELAWARE.
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.
7. POLE BASES AND CONDUIT JUNCTION WELLS ARE 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.

UNOFFICIAL WEBSITE COPY

RECOMMENDED _____ DATE: _____
RECOMMENDED _____ DATE: _____
RECOMMENDED _____ DATE: 3/24/11
APPROVED TRAFFIC ENGINEER _____ DATE: 3/24/11
APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: 3/29/11

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

SCALE 0 30 60 90 FEET

SR 2 AND SR 72 INTERSECTION IMPROVEMENTS

CONTRACT	PERMIT NO.	N166
T200800705	DESIGNED BY: D.W.C. (WR&A)	
COUNTY	CHECKED BY: M.J.B. (WR&A)	
NEW CASTLE		

SIGNAL PLAN
SR 2 @ SR 72
(POSSUM PARK ROAD)

SHEET NO. 22
TOTAL SHTS. 22

N:\3776-003\CADD\SIG01_SR 2 @ SR 72.dgn
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