THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

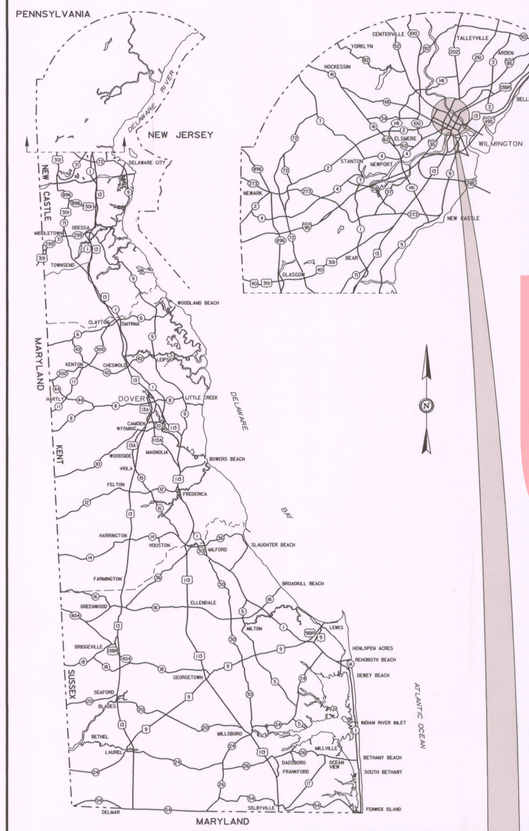
U.S. CUSTOMARY UNITS

CONSTRUCTION PLANS FOR:

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

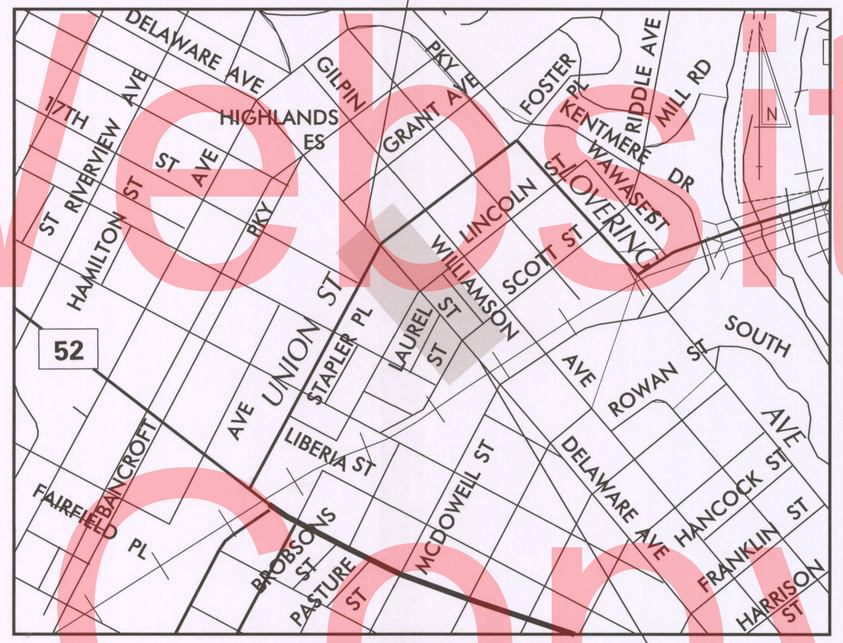
CONTRACT NUMBER: T201120004
FEDERAL AID PROJECT NUMBER: ETEA-N510(01)

COUNTY: NEW CASTLE M.R. #: N/A



GENERAL LOCATION OF CONTRACT

END STATION 22+50



LOCATION MAP
NOT TO SCALE

BEGIN STATION 10+75

PREPARED BY THE CONSULTING FIRM OF
WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
ENGINEERS · ARCHITECTS · PLANNERS EST. 1915

JEFFREY R. RIEGNER REGISTERED No. 9840 DELAWARE PROFESSIONAL ENGINEER
SEAL

RECOMMENDED — 4/30/14 DATE

RECOMMENDED

SQUAD MANAGER, CONSTRUCTION — DATE 9-24-14

GROUP ENGINEER, CONSTRUCTION — DATE 9/24/14

ASSISTANT DIRECTOR, TRANSPORTATION SOLUTIONS (CONSTRUCTION) — DATE 9/29/14

COMMUNITY SPONSOR — DATE 4/30/14

CITY OF WILMINGTON — DATE 5/30/14

RECOMMENDED
STORMWATER ENGINEER
DATE
SEAL

RECOMMENDED AS TO PROCESS
TRANSPORTATION ALTERNATIVES PROGRAM MANAGER
DATE 9-30-14
SEAL

APPROVED AS TO PROCESS
CHIEF ENGINEER
DATE 10/01/14
SEAL

DESIGN DESIGNATION

FUNCTIONAL CLASS: MAJOR COLLECTOR	D.H.V. PROJECTED: N/A	YEAR: N/A
TYPE OF CONSTRUCTION: SIDEWALKS/ENHANCEMENT	DESIGN SPEED: 30 M.P.H.	
A.A.D.T. CURRENT: N/A YEAR: N/A	TRUCKS: N/A %	
A.A.D.T. PROJECTED: N/A YEAR: N/A	DIRECTION OF DISTRIBUTION: N/A %	

INDEX OF SHEETS

SHEET Nº	TABLE OF CONTENTS
1	TITLE
2	PLAN SHEET INDEX
3	LEGEND
4	NOTES
5-6	TYPICAL SECTIONS
7	HORIZONTAL AND VERTICAL CONTROL
8-10	CONSTRUCTION PLANS
11-13	PROFILES
14-19	GRADES AND GEOMETRICS
20-22	CONSTRUCTION DETAILS
23-24	STORMWATER MANAGEMENT PLANS
25-29	CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS
30-31	DETOUR PLANS
32-36	LANDSCAPING PLANS
37-42	SIGNING AND STRIPING
43-45	RIGHT OF WAY PLANS

TOTAL SHEETS: 45

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME

Unofficial Website Copy

N:\31678-029\CADD\TC01_DEAV.DGN

PLAN SHEET INDEX CROSS REFERENCE			
CONSTRUCTION PLAN	8	9	10
PROFILES	11	12	13
GRADES AND GEOMETRICS	14-15	16-17	18-19
STORMWATER MANAGEMENT PLAN	-	23	-
CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL	27	29	28
LANDSCAPING PLAN	32	33, 35	34
SIGNING & STRIPING PLAN	37	38	39
RIGHT OF WAY PLAN	43	44	-

Unofficial Website Copy

N:\31678-029\CADD\IS01_DEAV.dgn
5/22/2014 2:55:54 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

PLAN SHEET INDEX

IS-01

SHEET NO. 2

TOTAL SHTS. 45

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
PP	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

CW-S	CITY OF WILMINGTON - SEWER
CW-W	CITY OF WILMINGTON - WATER
DP-G	DELMARVA POWER - GAS
CW-SIG	CITY OF WILMINGTON - SIGNAL CONDUIT
VER	VERIZON

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
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
LO	LATERAL OFFSET
LOC	LIMIT OF CONSTRUCTION
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK @ 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN OUTLET

RIGHT-OF-WAY SYMBOLS

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

IDENTIFIERS

A C	ADJUST BY CONTRACTOR
A O	ADJUST BY OTHERS
B	CONCRETE SAFETY BARRIER
C	CURB OR CURB & GUTTER
CJB	CONVERT TO JUNCTION BOX
CMH	CONVERT TO DRAINAGE MANHOLE
C O	CURB OPENING
CR	CURB RAMP / TYPE
CR-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
UDO	UNDERDRAIN OUTLET PIPE

LANDSCAPING

LS	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC

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

PAVEMENT SECTION(S)

	MILL AND OVERLAY - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS
	2" SUPERPAVE, TYPE C WMA 3" SUPERPAVE, TYPE B WMA 5" SUPERPAVE, BCBC 8" GRADED AGGREGATE BASE COURSE, TYPE B

Unofficial Website Copy

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. 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. THE SITE REVIEWER REQUIREMENTS IN EFFECT ON THIS PROJECT SHALL BE MARKED WITH AN "X" BELOW:

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

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

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

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

(X)	THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT.
( )	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 THE ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 743000.
( )	THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE ATSSA SUPERVISOR'S SOLE JOB SHALL BE SUPERVISION OF THE INSTALLATION, OPERATION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES FOR THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT SHALL NOT BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR SHALL BE PAID FOR UNDER ITEM 743031.

9. THE DISTURBED AREA FOR THIS PROJECT IS 0.07 ACRES.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO THE CONSTRUCTION SITE POLLUTION PREVENTION SPECIFICATIONS AS DETAILED IN SECTION 3.6 OF THE "DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK." ALL COSTS ASSOCIATED WITH ADHERING TO THE STANDARDS SHALL BE INCIDENTAL TO THE OVERALL CONTRACT COSTS.

11. THE EROSION AND SEDIMENT CONTROL PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE EROSION AND SEDIMENT CONTROL PLANS ARE VALID FOR A THREE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR SHALL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE EROSION AND SEDIMENT CONTROL PLAN APPROVAL. DELDOT WILL REVIEW THE CURRENT EROSION AND SEDIMENT CONTROL PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

1. ANY DAMAGE TO ITEMS NOTED TO BE RELOCATED OR RESET BY THE CONTRACTOR, AT THE DISCRETION OF THE ENGINEER, SHALL BE REPAIRED AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

SECTION 200

2. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE DAMAGE TO EXISTING TREES NOTED AS DO NOT DISTURB (DND) ON THE PLANS. ONLY TREES AND SHRUBS NOTED ON THE PLANS FOR REMOVAL MAY BE DISTURBED. THE CONTRACTOR SHALL CONTACT DELDOT'S ROADSIDE ENVIRONMENTAL ADMINISTRATOR, EUGENE "CHIP" R. ROSAN, JR. (302) 760-2185 AND/OR HIS DESIGNEE, AND THE CITY OF WILMINGTON'S URBAN FOREST ADMINISTRATOR, HERB WHITE, (302) 576-2582 OR HWWHITE@WILMINGTONDE.GOV AT LEAST TWO (2) DAYS PRIOR TO EXCAVATION IN THE VICINITY OF THE TREE IN ORDER THAT THE CONDITION OF ANY OF THE ROOT SYSTEM EXPOSED DURING THE EXCAVATION MAY BE EXAMINED. IF THE TREE IS TO BE REMOVED, AS DETERMINED BY DELDOT'S ROADSIDE ENVIRONMENTAL SPECIALIST OR WILMINGTON'S URBAN FOREST ADMINISTRATOR, REMOVAL SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING. ALL ROOTS IMPACTED BY CONSTRUCTION SHALL BE PRUNED TO CORRECT ANY SUBSTANTIAL DAMAGE IN ACCORDANCE WITH I.S.A. STANDARDS BY AN I.S.A. CERTIFIED ARBORIST. UPON COMPLETION OF ALL CONSTRUCTION IN THE IMMEDIATE AREA OF THE TREE, THE AREA SHALL BE RESTORED TO ITS ORIGINAL APPEARANCE. THIS WORK SHALL BE DIRECTED BY DELDOT'S ROADSIDE ENVIRONMENTAL ADMINISTRATOR AND 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, AND THE CITY OF WILMINGTON'S URBAN FOREST ADMINISTRATOR, HERB WHITE, (302) 576-2582 OR HWWHITE@WILMINGTONDE.GOV, AT LEAST TWO (2) DAYS PRIOR TO THE PRUNING OPERATION. ANY TOOL USED FOR PRUNING TREES SHALL BE CLEANED AND DISINFECTED PRIOR TO ITS USE ON ANOTHER TREE TO PREVENT THE SPREAD OF DISEASE. 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 AT POINTS OF POSSIBLE UTILITY CONFLICTS WITH PROPOSED CONSTRUCTION, TO DETERMINE IF A CONFLICT EXISTS. ANY CONFLICTS SHALL BE COORDINATED BY THE CONTRACTOR, WITH THE ENGINEER AND THE UTILITY COMPANY INVOLVED. THE ENGINEER SHALL ULTIMATELY DETERMINE THE SOLUTION TO THE UTILITY CONFLICT. TEST HOLES SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH ITEM 202000 - EXCAVATION AND EMBANKMENT, BUT ONLY TO THE ACTUAL DEPTH EXCAVATED.

5. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - EXISTING HARDSCAPING FEATURES AND FENCING
   - EXISTING CONCRETE FENCE FOOTINGS ALONG THE SOUTH SIDE OF SCOTT STREET

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.

7. THE CONTRACTOR SHALL REMOVE THE MAILBOX ON LINCOLN STREET LOCATED AT STATION 202+33, 19' LT AND RELOCATE IT TO THE APPROVED LOCATION AS DIRECTED BY THE POST OFFICE MANAGER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND POST OFFICE MANAGER DENNIS MONEY WITH THE LANCASTER AVENUE POST OFFICE AT (302) 653-7376 THREE WEEKS PRIOR TO PERFORMING ANY CONSTRUCTION ACTIVITY THAT PROHIBITS PEDESTRIAN ACCESS TO THE MAILBOX. THE CONTRACTOR SHALL MEET ON-SITE WITH THE ENGINEER AND DENNIS MONEY AT LEAST ONE WEEK PRIOR TO THE REMOVAL OF THE MAILBOX TO DETERMINE THE EXACT LOCATION AND ROTATION OF WHICH TO RESET THE MAILBOX. THE MAILBOX SHALL BE BOLTED TO THE CONCRETE AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETE AND PEDESTRIAN ACCESS IS ALLOWED, THE CONTRACTOR SHALL RELOCATE IT TO ITS ORIGINAL LOCATION OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND DENNIS MONEY AT LEAST ONE WEEK PRIOR TO THE RELOCATION OF THE MAILBOX. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO THE RELOCATED MAILBOX AT ALL TIMES. THE CONTRACTOR SHALL PROTECT THE MAILBOX DURING RELOCATION AND SHALL BE RESPONSIBLE FOR ANY DAMAGE. ALL COSTS FOR WORK AND MATERIALS SHALL BE INCIDENTAL TO ITEM 201000 - CLEARING AND GRUBBING.

8. THE CONTRACTOR SHALL REMOVE AND RELOCATE ALL EXISTING FREESTANDING PLANTERS WITHIN THE PROJECT LIMITS. RELOCATION AREAS WILL BE OUTSIDE THE LIMITS OF CONSTRUCTION IN FRONT OF THE ADJACENT PROPERTIES AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROTECT THE PLANTERS DURING RELOCATION AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED DURING RELOCATION OR FROM CONSTRUCTION ACTIVITIES. PLANTERS ARE THE PROPERTY OF ADJACENT PROPERTY OWNERS AND SHALL NOT BE OTHERWISE DISTURBED. ALL COSTS FOR WORK AND MATERIALS SHALL BE INCIDENTAL TO ITEM 201000 - CLEARING AND GRUBBING.

9. THE CONTRACTOR SHALL REMOVE AND RELOCATE ALL EXISTING FREESTANDING TRASH RECEPTACLES WITHIN THE PROJECT LIMITS DURING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT THE TRASH RECEPTACLES DURING RELOCATION AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED DURING RELOCATION OR FROM CONSTRUCTION ACTIVITIES. ALL COSTS FOR WORK AND MATERIALS SHALL BE INCIDENTAL TO ITEM 201000 - CLEARING AND GRUBBING.

SECTION 600

10. 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.

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. WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING CONCRETE SIDEWALK, THE EXISTING CONCRETE SIDEWALK SHALL BE SAWCUT AT THE TIE-IN POINT OR MEET THE NEAREST EXISTING SIDEWALK JOINT. ALL SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER AND SHALL BE PAID FOR UNDER ITEM 762002 - SAWCUTTING, CONCRETE, FULL DEPTH.

13. WHERE PROPOSED CONCRETE OR BRICK SIDEWALK IS CONSTRUCTED TO MEET EXISTING BRICK SIDEWALK, A MINIMUM OF TWO COURSES OF THE EXISTING BRICK SIDEWALK SHALL BE REMOVED AND RESET AT THE TIE-IN POINT. ALL SAW CUTTING REQUIRED SHALL BE PAID FOR UNDER ITEM 705505 - RESET STONE/BRICK SIDEWALK AND/OR STONE/BRICK ROADWAY.

14. 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.

15. THE CONTRACTOR SHALL REMOVE AND INSTALL ALL REGULATORY, WARNING, AND SPECIAL SIGNS AND POSTS WITHIN CONTRACT LIMITS UNLESS OTHERWISE NOTED. DELDOT TO FURNISH ALL REGULATORY, WARNING, AND SPECIAL SIGNS AND POSTS TO CONTRACTOR FOR INSTALLATION. FOR COORDINATION AND PICK UP OF SIGNS AND POSTS THE CONTRACTOR SHALL CONTACT DELDOT'S TRANSPORTATION SYSTEM SPECIALIST AT (302) 760-2581. THE CONTRACTOR SHALL ALLOW FOUR (4) WEEKS FOR THE DELIVERY OF SIGNS.

16. THE CONTRACTOR SHALL ONLY EXCAVATE AN AREA FOR SIDEWALK CONSTRUCTION THAT CAN BE BACKFILLED WITH APPROVED PEDESTRIAN MATERIAL AT THE END OF EACH WORK DAY. NO BARE SOIL WITHIN THE PROPOSED SIDEWALK LIMITS SHALL BE EXPOSED AT THE END OF EACH WORK DAY. PAYMENT FOR PLACEMENT AND/OR REMOVAL OF MATERIAL WILL BE INCIDENTAL TO ITEM 743000 - MAINTENANCE OF TRAFFIC.

17. DURING CONCRETE PLACEMENT, ALL ADJOINING SURFACES SHALL BE PROTECTED WITH PLASTIC SHEETING OR APPROVED EQUAL. COST TO BE INCLUDED IN CONCRETE ITEM.

18. REMOVAL OF EXISTING BRICK AND AGGREGATE SUBBASE SHALL BE PAID FOR UNDER ITEM 758000 - REMOVAL OF EXISTING P.C.C. PAVEMENT, CURB, SIDEWALK, ETC.

19. 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.

20. ALL CURB RAMPS SHALL BE PAID FOR BY INDIVIDUAL MATERIAL PAY ITEMS UNLESS OTHERWISE NOTED ON THE PLANS AND DETAILS.

MISCELLANEOUS

21. PRIOR TO THE CONSTRUCTION OF THE PROJECT AND WITHIN 20 DAYS OF EXECUTION OF THE CONTRACT, A VIDEO SHALL BE TAKEN OF THE SITE BY THE CONTRACTOR AND COPY (DVD) GIVEN TO THE DELDOT PROJECT ENGINEER. THE VIDEO SHALL CLEARLY SHOW THE PRECONSTRUCTION CONDITIONS OF THE WORKSITE AND ADJOINING AREAS. THE VIDEO WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF THE VIDEO SHALL BE INCIDENTAL TO ITEM 763501 - CONSTRUCTION ENGINEERING.

22. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL EXISTING CONDITIONS, LAYOUT DIMENSIONS AND CLEARANCES THAT ARE SHOWN ON THE DRAWINGS PRIOR TO ANY CONSTRUCTION WORK. THE COST OF THIS ITEM SHALL BE INCIDENTAL TO ITEM 763501 - CONSTRUCTION ENGINEERING. THE CONTRACTOR SHALL PROVIDE A PRECONSTRUCTION AND POST CONSTRUCTION SURVEY OF LOCATIONS WHERE CURB HEIGHTS ARE UNCHANGED SHOWING PRE AND POST STATIONS AND ELEVATIONS OF THE CURB.

23. THE CONTRACTOR SHALL MARK THEIR NAME IN THE SIDEWALK. EITHER BY STAMPING OR BY IN LAYING AN APPROVED METAL PLATE. THE STAMPED LETTERS SHALL BE ONE INCH AND ONE QUARTER INCH DEPTH. IF A METAL PLATE IS USED, THE TOP PLATE SHALL BE FLUSH WITH THE TOP OF THE SIDEWALK. THE CONTRACTORS NAME SHALL BE PLACED AT EACH END OF THE FINISHED SIDEWALK UP TO 100 FEET IN LENGTH. BEYOND THE 100 FEET LENGTH, THE CONTRACTOR'S NAME SHALL BE PLACED AT THE ENDS OF THE FINISHED SIDEWALK AND MIDDISTANT BETWEEN THE ENDS IN ACCORDANCE WITH THE WILMINGTON CODE OF ORDINANCES.

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

25. THE CONTRACTOR IS PROHIBITED FROM STORING MATERIALS, PARKING, OR DRIVING VEHICLES WITHIN THE DRIPLINE OF EXISTING TREES IN THE PROJECT LIMITS. THE CONTRACTOR SHALL REFER TO WILMINGTON CITY CODE SECTION 46-32 FOR MORE DETAILS ABOUT TREE PROTECTION.

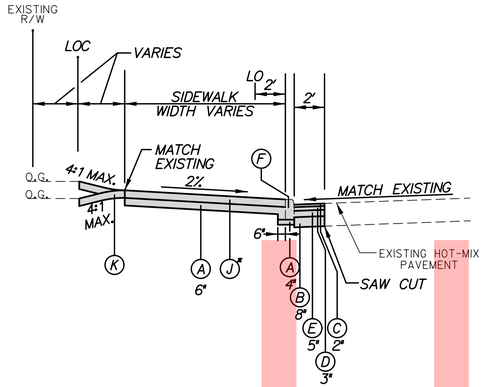
26. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO ALL RESIDENTS AND BUSINESSES WHERE CONSTRUCTION WILL IMPACT THEIR ACCESS TO THEIR PROPERTY AT LEAST TWO (2) WEEKS PRIOR TO THE BEGINNING OF THE CONSTRUCTION PHASE.

27. THE CONTRACTOR SHALL SALVAGE ANY GRANITE OR STONE CURB WITHIN THE LIMITS OF CONSTRUCTION AND TRANSPORT SAID SALVAGED ITEMS TO THE CITY OF WILMINGTON'S DEPARTMENT OF PUBLIC WORKS CITY YARD ON CHRISTIANA AVENUE OR A LOCATION DESIGNATED BY THE ENGINEER WITHIN FIVE (5) MILES OF THE PROJECT. CONTACT DAVE BLANKENSHIP, P.E., DIRECTOR OF TRANSPORTATION (302) 576-3084 TO COORDINATE DELIVERIES. THE SALVAGING, STOCKPILING, LOADING, TRANSPORTING, UNLOADING, AND ANY OTHER WORK ASSOCIATED WITH THE SALVAGING OPERATIONS SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT. EXISTING GRANITE CURB MAY BE ENCASED IN CONCRETE AND THERE WILL BE NO ADDITIONAL PAYMENT FOR REMOVAL OF THIS ENCASED MATERIAL.

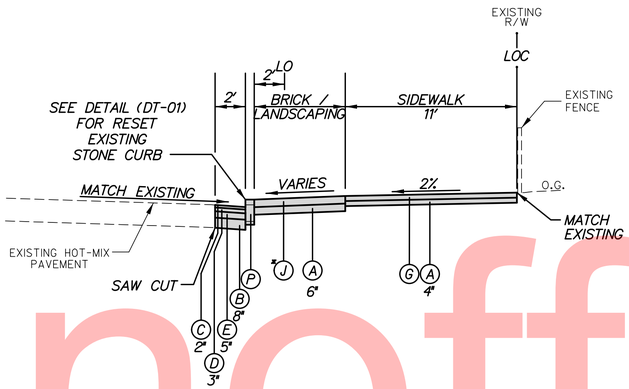
28. THE CONTRACTOR SHALL CONTACT MICHAEL ELLER, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6061.

29. THE BOTTOM RISER HEIGHT OF A STAIRWAY CONNECTING TO THE PROPOSED SIDEWALK SHALL BE BETWEEN 7 INCHES MAXIMUM TO 4 INCHES MINIMUM OR AS SHOWN ON THE PLAN, OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL VERIFY IF THE BOTTOM RISER HEIGHT OF ALL STAIRWAYS WITHIN THE PROJECT LIMIT IS WITHIN THIS RANGE UNDER EXISTING CONDITIONS. IF THE EXISTING BOTTOM RISER IS HEIGHT IS OUTSIDE OF THIS RANGE, THE PROPOSED SIDEWALK SHALL BE PLACED SUCH THAT THE RISER HEIGHT UNDER PROPOSED CONDITIONS IS NOT FURTHER FROM THIS RANGE THAN UNDER EXISTING CONDITIONS.

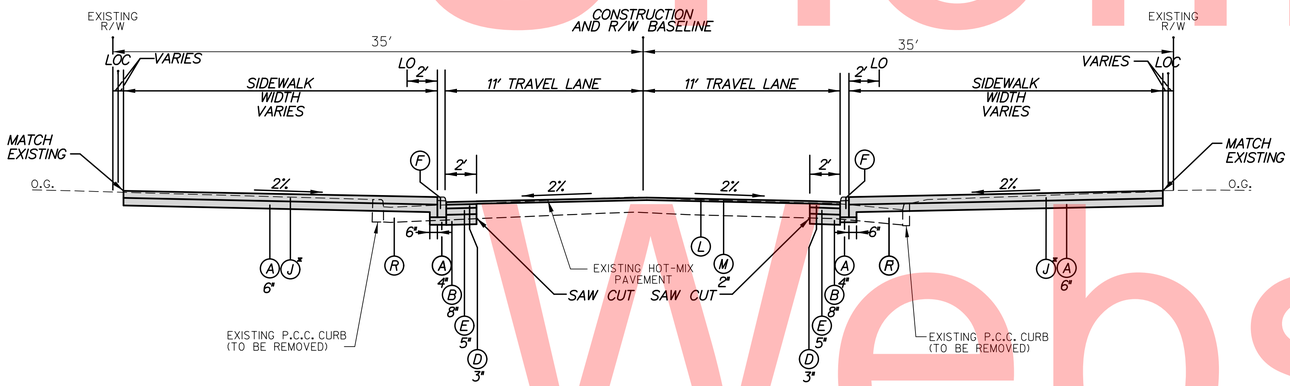
Unofficial Web Copy



STATION 15+17 TO STATION 15+86
STATION 20+26 TO STATION 20+81

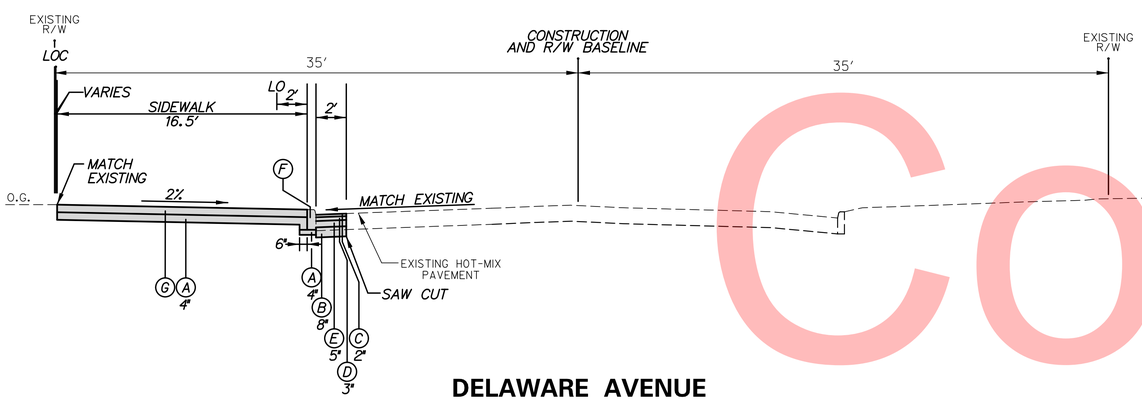


STATION 15+22 TO STATION 16+34



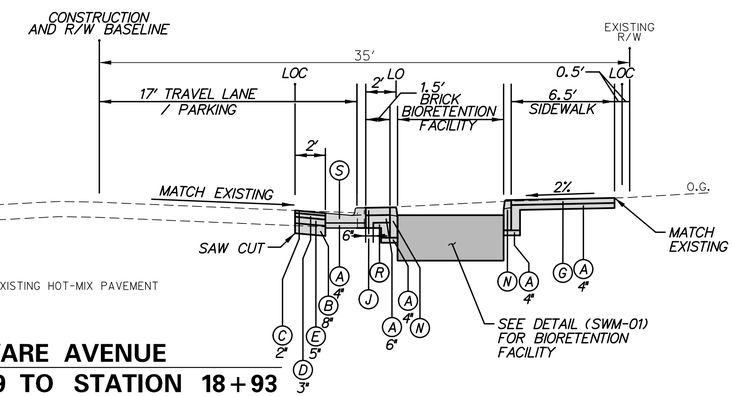
DELAWARE AVENUE
STATION 12+94 TO STATION 14+10
STATION 16+82 TO STATION 18+31

SEE CP AND GG SHEETS FOR EXACT LOCATIONS OF SIDEWALK
*SEE CONSTRUCTION DETAILS (DT-01) FOR CONSTRUCTION MATERIALS



DELAWARE AVENUE
STATION 12+41 TO STATION 12+94

SEE CP AND GG SHEETS FOR EXACT LOCATIONS OF SIDEWALK



DELAWARE AVENUE
STATION 17+89 TO STATION 18+93

SEE CP AND GG SHEETS FOR EXACT LOCATIONS OF SIDEWALK

LEGEND

- (A) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (B) ITEM 302008 - GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING
- (C) ITEM 401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING
- (D) ITEM 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING
- (E) ITEM 401823 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASECOURSE, 160 GYRATIONS, PG 64-22, PATCHING
- (F) ITEM 701014 - P.C.C. CURB, TYPE 1-6
- (G) ITEM 705001 - P.C.C. SIDEWALK, 4" DEPTH
- (H) ITEM 705002 - P.C.C. SIDEWALK, 6" DEPTH
- (J) ITEM 705504 - BRICK AND/OR BLOCK SIDEWALK
- (K) SLOPES FLATTER THAN 3:1:
  ITEM 732002 - TOPSOIL, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (L) ITEM 760006 - PAVEMENT - MILLING, HOT-MIX, 2" DEPTH
- (M) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (N) ITEM 701027 - P.C.C. CURB, TYPE 1-2 MODIFIED
- (P) ITEM 701501 - RESET EXISTING STONE CURB
- (R) ITEM 209006 - BORROW, TYPE F
- (S) ITEM 701017 - INTEGRAL P.C.C CURB AND GUTTER, TYPE 1-6

NOTES:
1. THE LATERAL OFFSET (LO) IS SHOWN AT 2 FEET BEHIND THE FACE OF CURB UNLESS OTHERWISE NOTED.

Unofficial Website Copy

N:\31678-029\CADD\TS01_DEAV.dgn
8/13/2014 10:42:52 AM

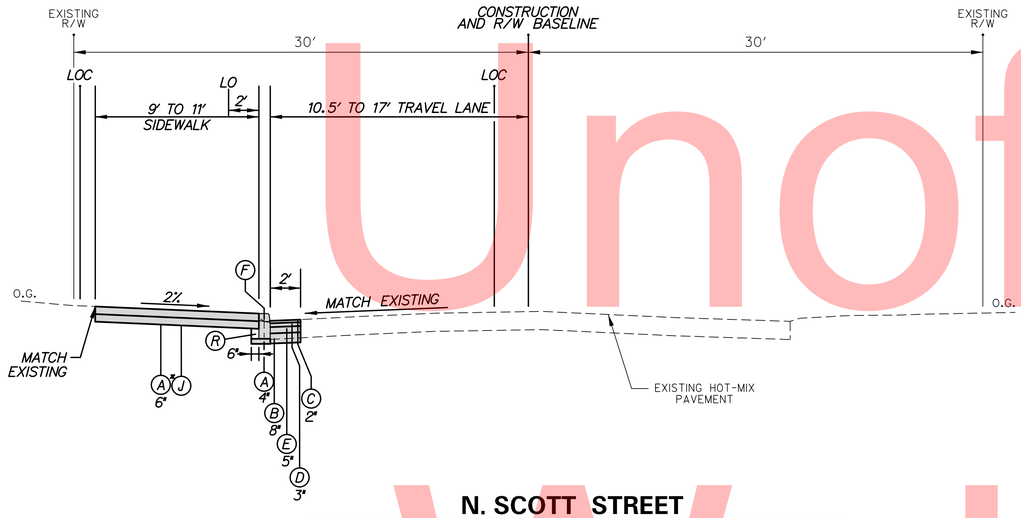
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 5 10 15 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	TYPICAL SECTIONS	TS-01
				COUNTY NEW CASTLE	DESIGNED BY: JJO		SHEET NO. 5
					CHECKED BY: TAO		TOTAL SHTS. 45

LEGEND

- (A) ITEM 302007 - GRADED AGGREGATE BASE COURSE, TYPE B
- (B) ITEM 302008 - GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING
- (C) ITEM 401821 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING
- (D) ITEM 401822 - WMA, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING
- (E) ITEM 401823 - WMA, SUPERPAVE, BITUMINOUS CONCRETE BASECOURSE, 160 GYRATIONS, PG 64-22, PATCHING
- (F) ITEM 701014 - P.C.C. CURB, TYPE 1-6
- (G) ITEM 705001 - P.C.C. SIDEWALK, 4" DEPTH
- (H) ITEM 705002 - P.C.C. SIDEWALK, 6" DEPTH
- (J) ITEM 705504 - BRICK AND/OR BLOCK SIDEWALK
- (K) SLOPES FLATTER THAN 3:1:
  ITEM 732002 - TOPSOIL, 6" DEPTH
  ITEM 734013 - PERMANENT GRASS SEEDING, DRY GROUND
- (L) ITEM 760006 - PAVEMENT - MILLING, HOT-MIX, 2" DEPTH
- (M) ITEM 401801 - WMA, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (CARBONATE STONE)
- (N) ITEM 701027 - P.C.C. CURB, TYPE 1-2 MODIFIED
- (P) ITEM 701501 - RESET EXISTING STONE CURB
- (R) ITEM 209006 - BORROW, TYPE F

NOTES:

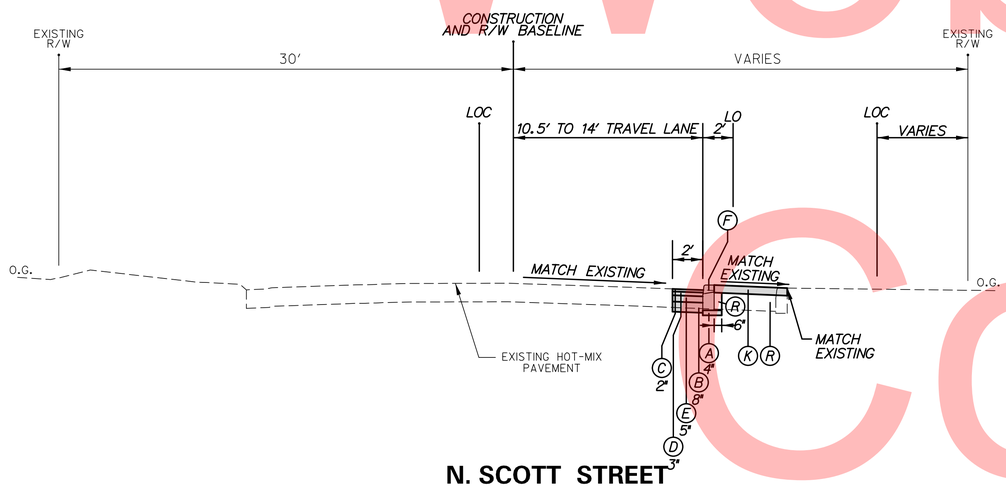
1. THE LATERAL OFFSET (LO) IS SHOWN AT 2 FEET BEHIND THE FACE OF CURB UNLESS OTHERWISE NOTED.



N. SCOTT STREET

STATION 102+20 TO STATION 103+03

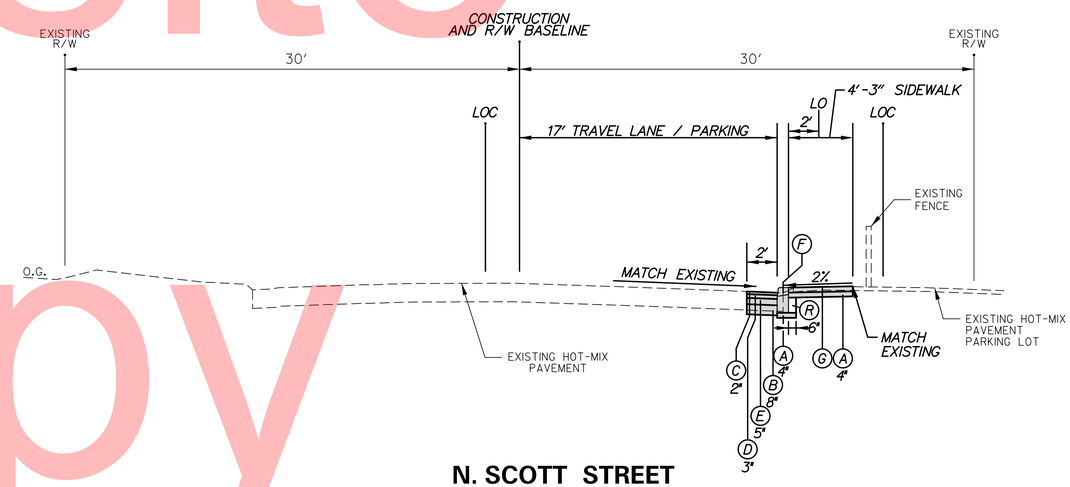
SEE CP AND GG SHEETS FOR EXACT LOCATIONS OF SIDEWALK



N. SCOTT STREET

STATION 100+99 TO STATION 101+73

SEE CP AND GG SHEETS FOR EXACT LOCATIONS OF SIDEWALK



N. SCOTT STREET

STATION 103+92 TO STATION 105+70

SEE CP AND GG SHEETS FOR EXACT LOCATIONS OF SIDEWALK

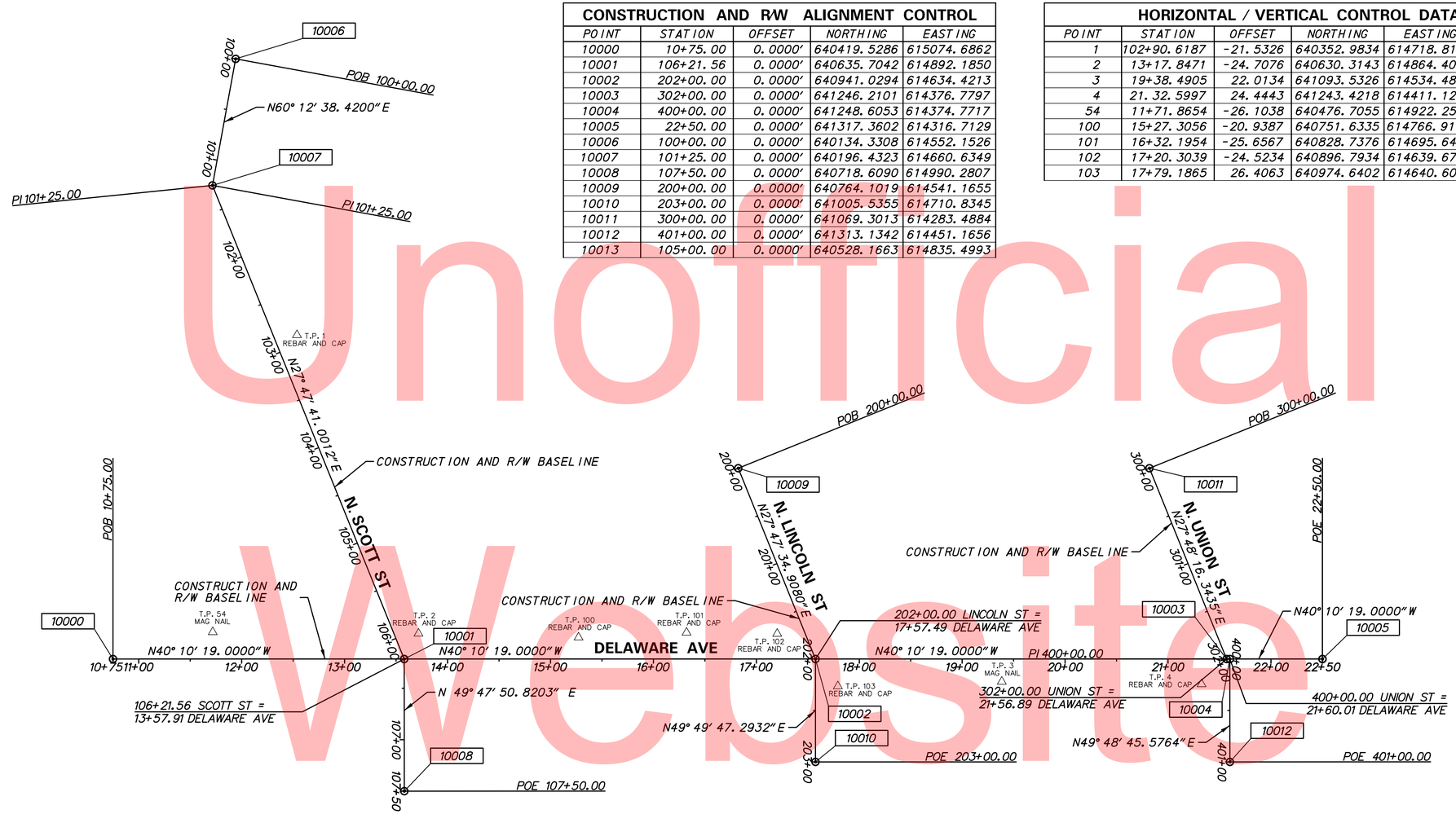
Unofficial Website Copy

N:\31678-028\CADD\TS02_DEAV.dgn
5/2/2014 1:19:57 PM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 5 10 15 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	TYPICAL SECTIONS	TS-02
				COUNTY NEW CASTLE	DESIGNED BY: JJO		SHEET NO. 6
					CHECKED BY: TAO		TOTAL SHTS. 45

CONSTRUCTION AND R/W ALIGNMENT CONTROL				
POINT	STATION	OFFSET	NORTHING	EASTING
10000	10+75.00	0.0000′	640419.5286	615074.6862
10001	106+21.56	0.0000′	640635.7042	614892.1850
10002	202+00.00	0.0000′	640941.0294	614634.4213
10003	302+00.00	0.0000′	641246.2101	614376.7797
10004	400+00.00	0.0000′	641248.6053	614374.7717
10005	22+50.00	0.0000′	641317.3602	614316.7129
10006	100+00.00	0.0000′	640134.3308	614552.1526
10007	101+25.00	0.0000′	640196.4323	614660.6349
10008	107+50.00	0.0000′	640718.6090	614990.2807
10009	200+00.00	0.0000′	640764.1019	614541.1655
10010	203+00.00	0.0000′	641005.5355	614710.8345
10011	300+00.00	0.0000′	641069.3013	614283.4884
10012	401+00.00	0.0000′	641313.1342	614451.1656
10013	105+00.00	0.0000′	640528.1663	614835.4993

HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
1	102+90.6187	-21.5326	640352.9834	614718.8155	123.33
2	13+17.8471	-24.7076	640630.3143	614864.4003	126.42
3	19+38.4905	22.0134	641093.5326	614534.4833	145.50
4	21.32.5997	24.4443	641243.4218	614411.1241	152.01
54	11+71.8654	-26.1038	640476.7055	614922.2536	120.03
100	15+27.3056	-20.9387	640751.6335	614766.9117	131.86
101	16+32.1954	-25.6567	640828.7376	614695.6439	135.38
102	17+20.3039	-24.5234	640896.7934	614639.6726	138.42
103	17+79.1865	26.4063	640974.6402	614640.6044	140.48



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, BASED ON STATE OF DELAWARE BENCHMARK JU2197 - ELEV. 27.71 FEET.

Unofficial Website Copy

N:\31678-029\CADD\HV01_DEAV.dgn
5/2/2014 11:18:16 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 60 120 180 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

HORIZONTAL AND VERTICAL CONTROL

HV-01

SHEET NO. 7

TOTAL SHTS. 45

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	P.C.C. CURB, TYPE 1-6	222′
2	P.C.C. CURB, TYPE 1-6	78′
3	P.C.C. CURB, TYPE 1-6	37′
4	P.C.C. CURB, TYPE 1-6	40′
5**	RESET STONE CURB	113′
6	P.C.C. CURB, TYPE 1-6	59′
7	P.C.C. CURB, TYPE 1-6	73′

** SEE DETAIL (DT-01) FOR RESET STONE CURB DETAIL

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
1	8″ CPP, S	IV	16′	0.005	124.45	124.37
2	8″ CPP, S	IV	11′	0.005	124.10	124.04
3	8″ CPP, S	IV	22′	0.005	123.84	123.73

CONVERT TO MANHOLE SCHEDULE

NO.	STATION	OFFSET	T.C. EL.	INV. EL.
1	13+87	16.00′ LT	++	124.17

++ MATCH PROPOSED GRADE

DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
1	14+05	16.00′ LT	34″ x 24″	1	+	124.45
2	14+04	15.81′ RT	34″ x 24″	1	+	124.10
3 *	13+73	18.21′ RT	34″ x 24″	1	+	123.53

+ MATCH FLOWLINE OF PROPOSED CURB AND GUTTER

* DRAINAGE INLET SHALL BE CAST IN PLACE AS A DOGHOUSE INLET IN ACCORDANCE WITH DELDOT STANDARD CONSTRUCTION DETAIL D-5

NOTES:

1. SEE DETAIL SHEET DT-01, DT-02, DT-03 FOR LOCATIONS OF FLEXIBLE DELINEATORS.
2. EXISTING HOT-MIX SIDEWALK CONTAINS PCC FENCE POST FOOTINGS. REMOVAL OF PCC FOOTINGS SHALL BE PAID FOR UNDER ITEM NO. 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS. HOLES SHALL BE FILLED WITH BORROW, TYPE F.
3. P.C.C. CURB, TYPE 1-6 SHALL BE DEPRESSED BEGINNING AT STA. 105+25, 17′ RT. AND CONTINUING THROUGH THE FIRST CURB RAMP ON THE SOUTHEAST CORNER OF DELAWARE AVENUE AND SCOTT STREET.

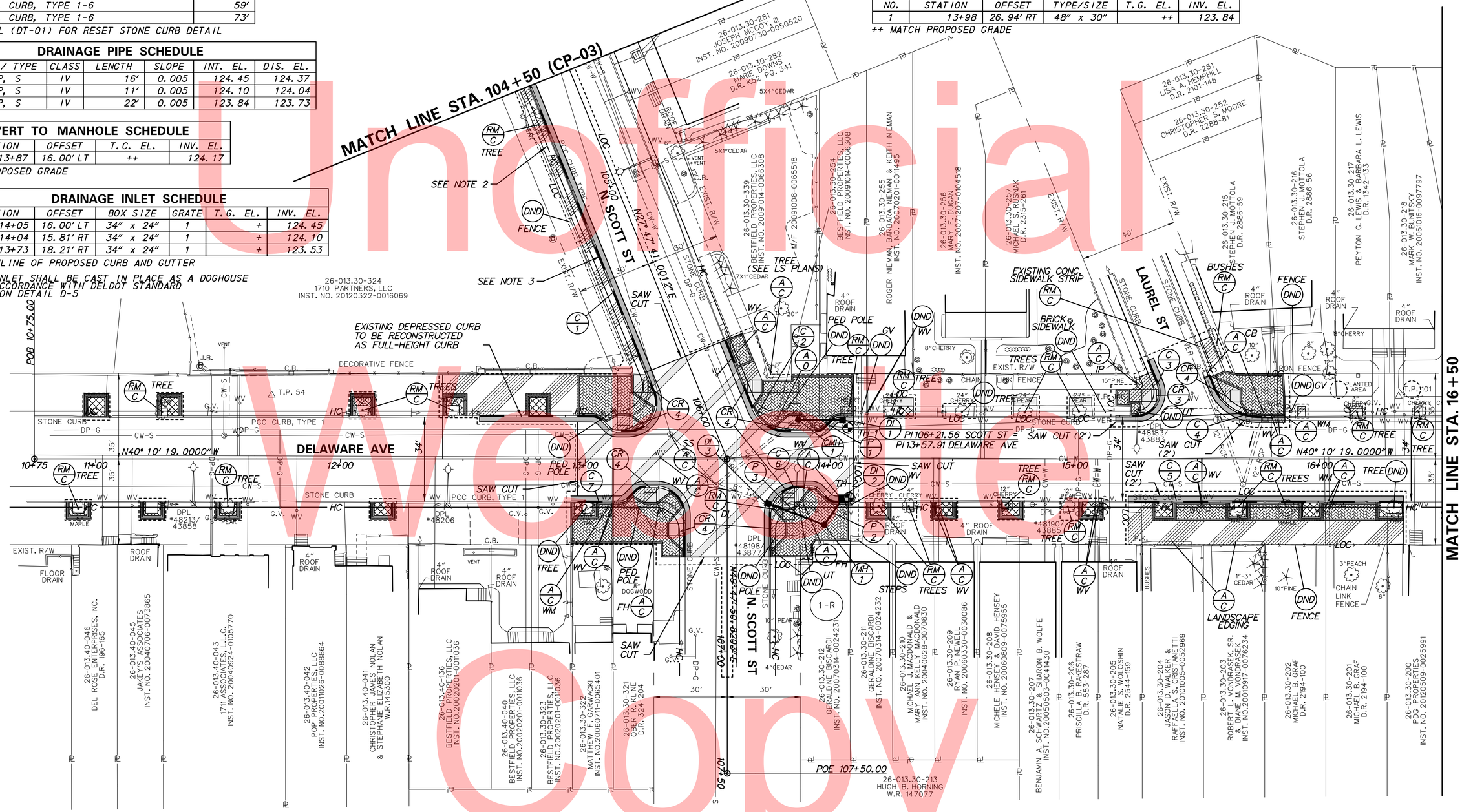
UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
1	VER-C	14+07.22	-12.76	127.56	3.00	6″ CONDUIT
2	CW-W	14+07.80	15.88	127.14	3.14	1.5″ DIP

MANHOLE SCHEDULE

NO.	STATION	OFFSET	TYPE/SIZE	T.G. EL.	INV. EL.
1	13+98	26.94′ RT	48″ x 30″	++	123.84

++ MATCH PROPOSED GRADE



Unofficial Web Copy

N:\31678-029\CADD\CP01_DEAV.dgn
8/13/2014 10:41:21 AM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 20 40 60 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	CONSTRUCTION PLAN	CP-01
				COUNTY NEW CASTLE	DESIGNED BY: JJO		SHEET NO. 8
					CHECKED BY: TAO		TOTAL SHTS. 45

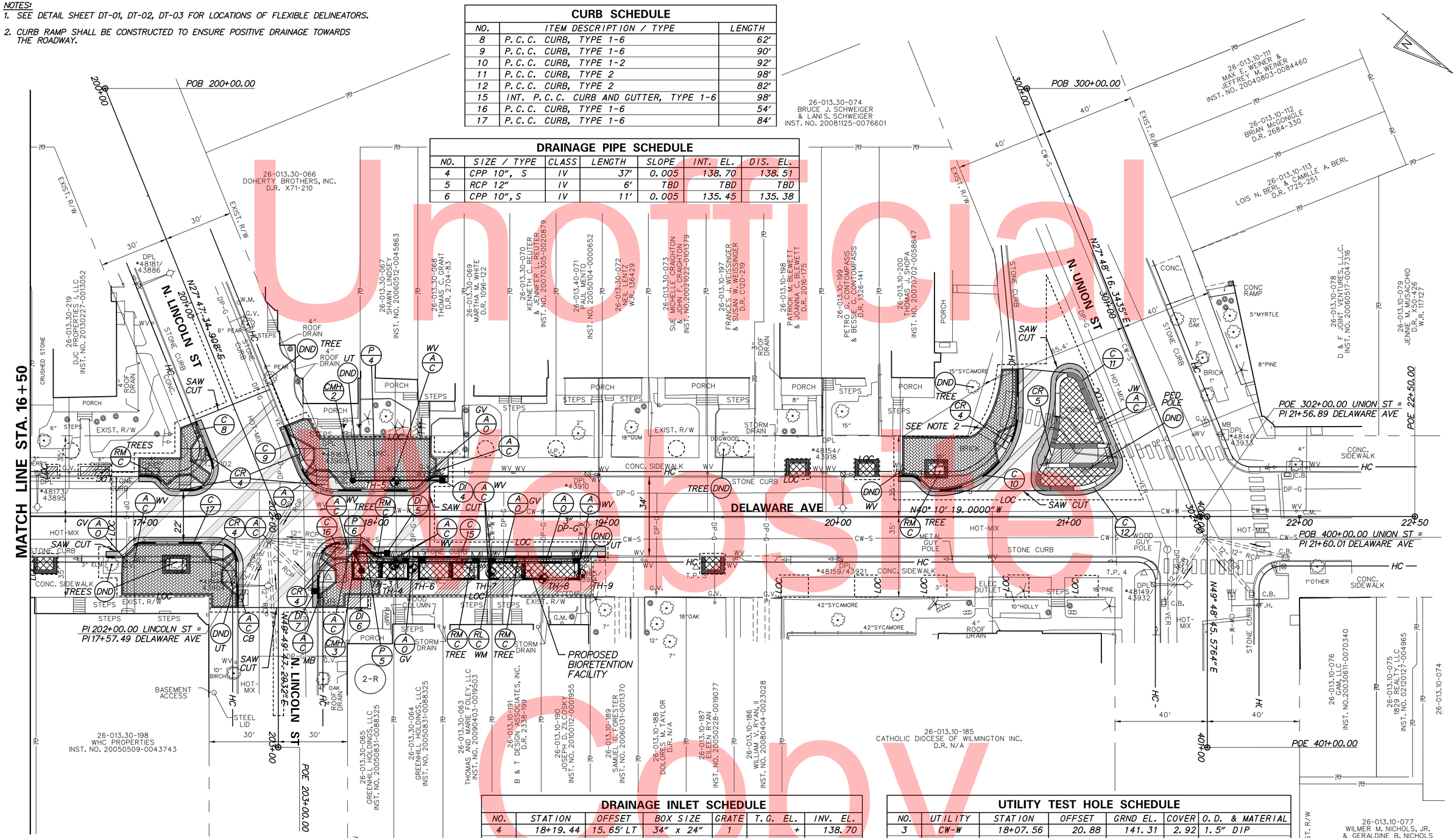
NOTES:
1. SEE DETAIL SHEET DT-01, DT-02, DT-03 FOR LOCATIONS OF FLEXIBLE DELINEATORS.
2. CURB RAMP SHALL BE CONSTRUCTED TO ENSURE POSITIVE DRAINAGE TOWARDS THE ROADWAY.

CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
8	P.C.C. CURB, TYPE 1-6	62′
9	P.C.C. CURB, TYPE 1-6	90′
10	P.C.C. CURB, TYPE 1-2	92′
11	P.C.C. CURB, TYPE 2	98′
12	P.C.C. CURB, TYPE 2	82′
15	INT. P.C.C. CURB AND GUTTER, TYPE 1-6	98′
16	P.C.C. CURB, TYPE 1-6	54′
17	P.C.C. CURB, TYPE 1-6	84′

DRAINAGE PIPE SCHEDULE

NO.	SIZE / TYPE	CLASS	LENGTH	SLOPE	INT. EL.	DIS. EL.
4	CPP 10″, S	IV	37′	0.005	138.70	138.51
5	RCP 12″	IV	6′	TBD	TBD	TBD
6	CPP 10″, S	IV	11′	0.005	135.45	135.38



DRAINAGE INLET SCHEDULE

NO.	STATION	OFFSET	BOX SIZE	GRATE	T.G. EL.	INV. EL.
4	18+19.44	15.65′ LT	34″ x 24″	1	+	138.70
5	18+04.57	15.81′ RT	34″ x 24″	1	+	135.45
6	17+93.57	23.42′ RT	**	**	**	135.50
*7	202+32.29	15.92′ LT	34″ x 24″	1	+	136.45

\+ MATCH FLOWLINE OF PROPOSED CURB AND GUTTER

* DRAINAGE INLET SHALL BE CAST IN PLACE AS A DOGHOUSE INLET IN ACCORDANCE WITH DELDOT STANDARD CONSTRUCTION DETAIL D-5

**SEE SHEET SWM-01 FOR DETAILS

UTILITY TEST HOLE SCHEDULE

NO.	UTILITY	STATION	OFFSET	GRND EL.	COVER	O.D. & MATERIAL
3	CW-W	18+07.56	20.88	141.31	2.92	1.5″ DIP
4	CW-W	18+08.25	20.74	141.26	2.90	1.5″ DIP
5	CW-W	18+08.07	-15.12	140.88	3.60	1.25″ DIP
6	DP-G	18+15.68	22.55	141.52	2.75	2″ METALLIC
7	CW-W	18+49.53	24.24	142.77	3.34	1.25″ DIP
8	DP-G	18+72.17	26.73	143.47	0.65	3″ METALLIC
9	CW-W	18+88.73	24.99	143.99	3.40	2″ DIP

CONVERT TO MANHOLE SCHEDULE

NO.	STATION	OFFSET	T.C. EL.	INV. EL.
2	17+89.73	15.40′ LT	++	138.31
3	17+91.05	15.84′ RT	++	135.18

\++ MATCH PROPOSED GRADE

Unofficial Website Copy

N:\33678-029\CADD\CP02_DEAV.dgn
8/13/2014 10:45:26 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

CONSTRUCTION PLAN

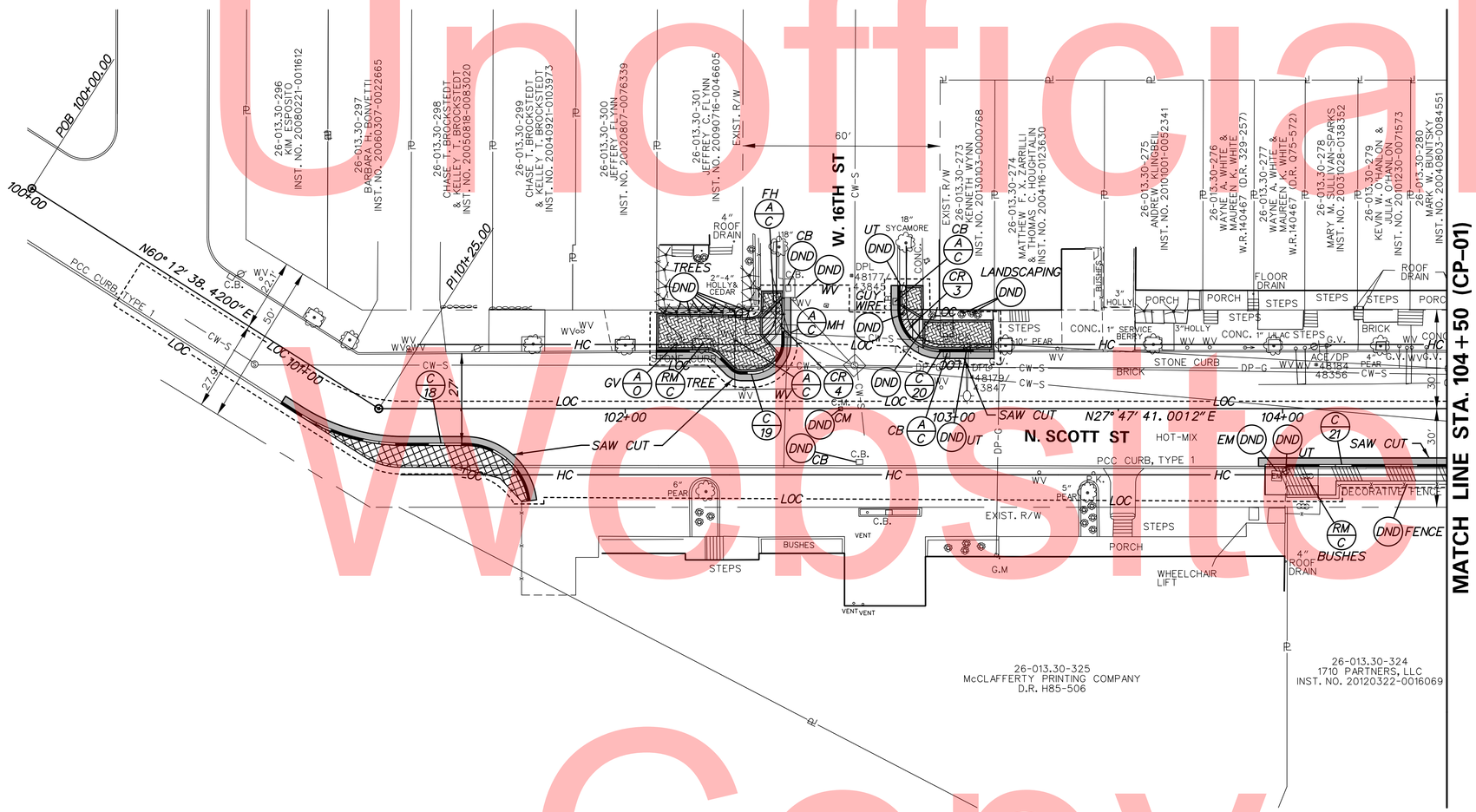
CP-02

SHEET NO. 9

TOTAL SHTS. 45

CURB SCHEDULE		
NO.	ITEM DESCRIPTION / TYPE	LENGTH
18	P.C.C. CURB, TYPE 1-6	88′
19	P.C.C. CURB, TYPE 1-6	61′
20	P.C.C. CURB, TYPE 1-6	44′
21	P.C.C. CURB, TYPE 1-6	56′

NOTES:
1. SEE DETAIL SHEET DT-01, DT-02, DT-03 FOR LOCATIONS OF FLEXIBLE DELINEATORS.



Unofficial Website Copy

N:\31678-028\CADD\CP03_DEAV.dgn
5/2/2014 10:05:20 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: JJO	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

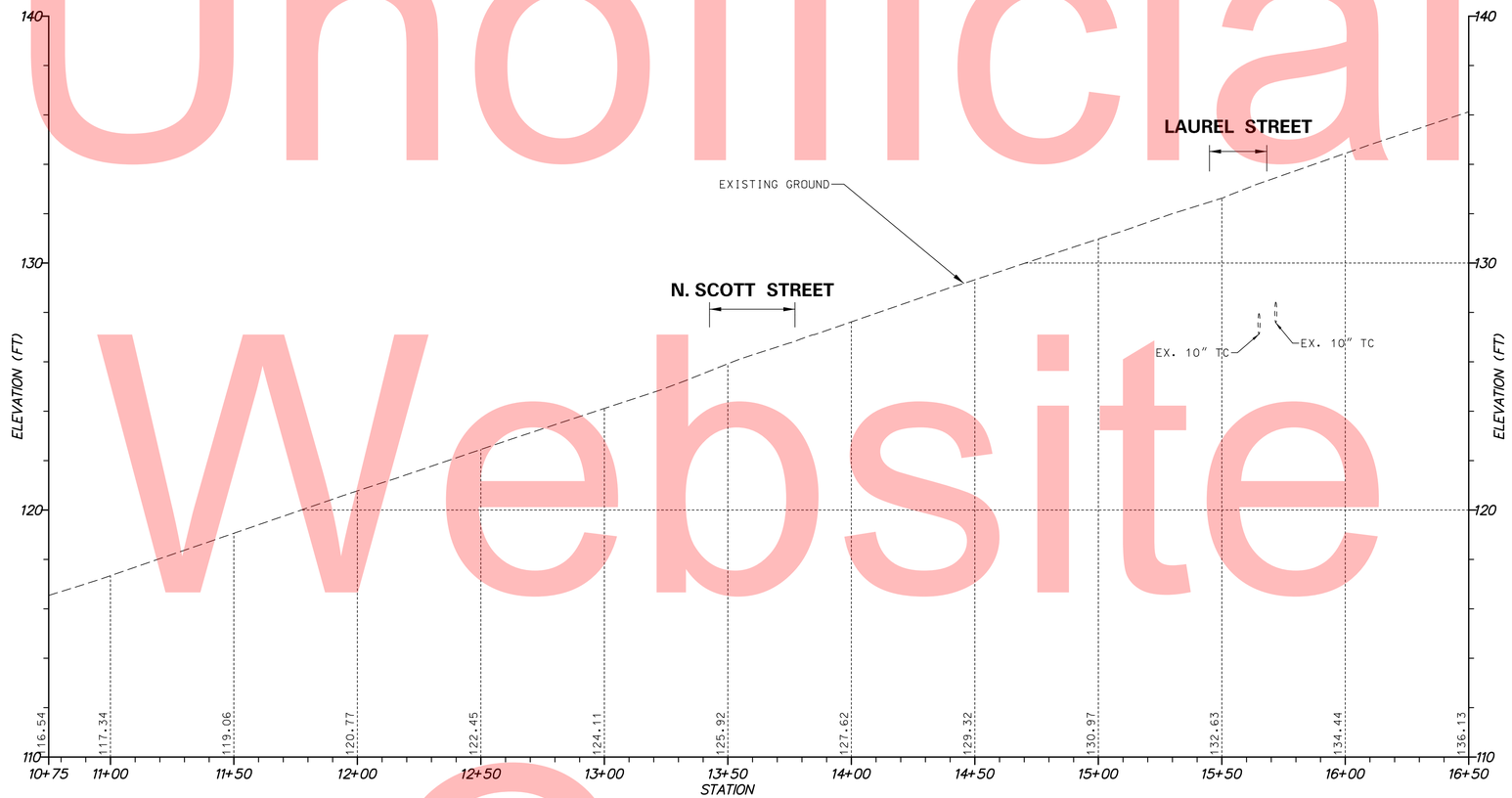
CONSTRUCTION PLAN

CP-03

SHEET NO. 10

TOTAL SHTS. 45

Unofficial Website Copy



DELAWARE AVENUE

VERTICAL SCALE FEET 9 6 3 0

PF-01

N:\31678-029\CADD\PF01_DEAV.dgn
5/2/2014 2:38:13 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS	

SCALE 0 30 60 90 FEET

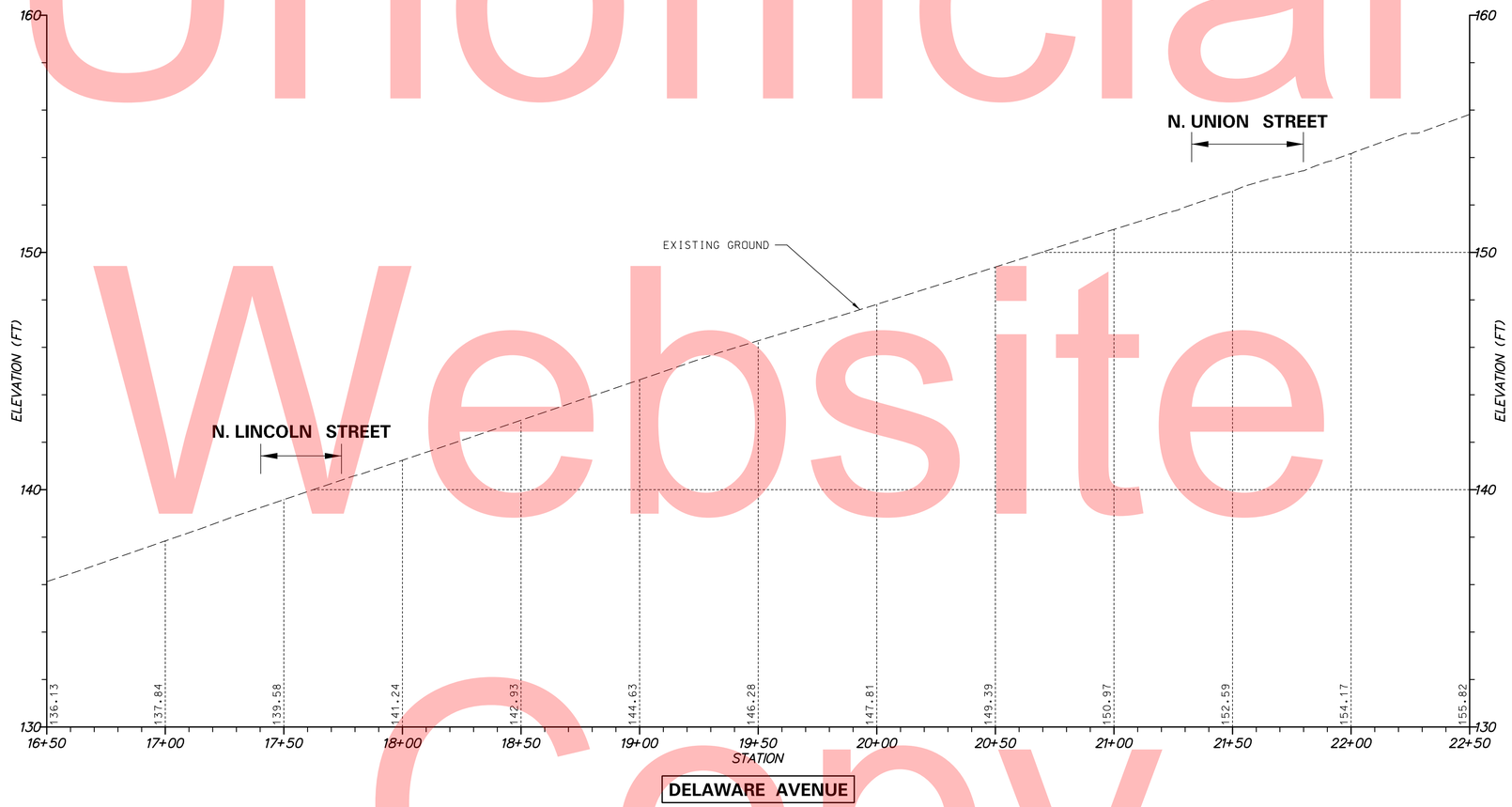
DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

PROFILES

SHEET NO. 11
TOTAL SHTS. 45

Unofficial Website Copy



VERTICAL SCALE FEET 9 6 3 0

PF-02

N:\33678-029\CADD\PF02_DEAV.dgn
5/27/2014 2:52:18 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 30 60 90 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

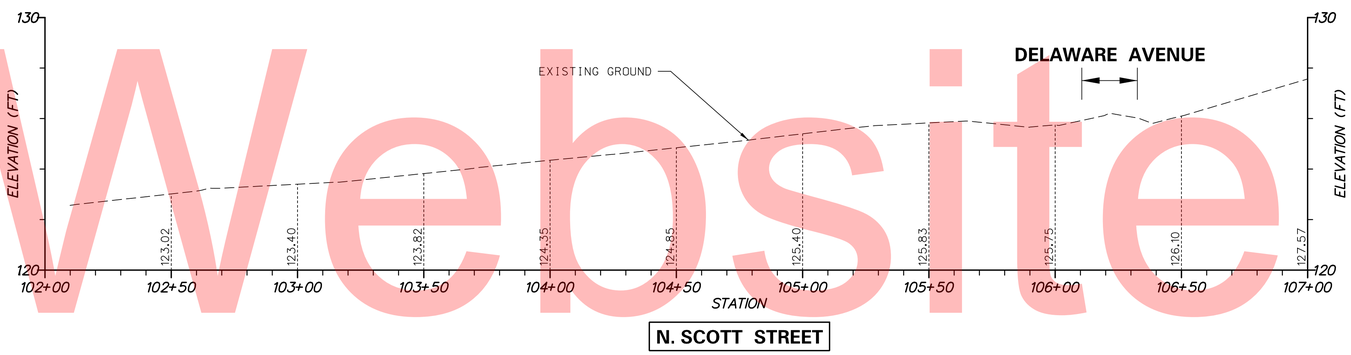
CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

PROFILES

SHEET NO. 12

TOTAL SHTS. 45

Unofficial Website Copy



VERTICAL SCALE FEET 9 6 3 0

PF-03

N:\31678-029\CADD\PF03_DEAV.dgn
5/2/2014 3:06:42 PM

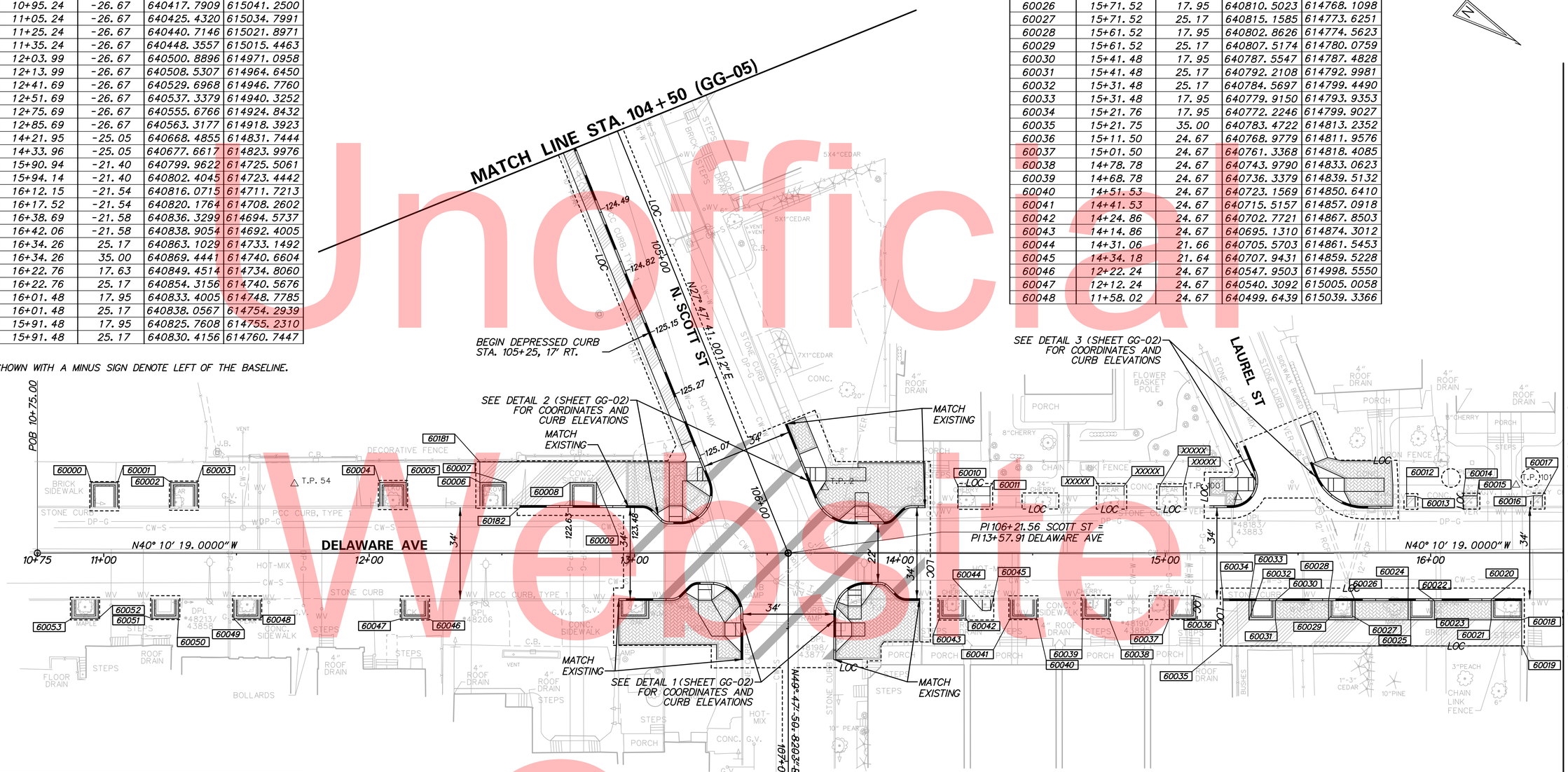
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 30 60 90 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	PROFILES
				COUNTY NEW CASTLE	DESIGNED BY: SJB	
					CHECKED BY: TAO	

SHEET NO. 13
TOTAL SHTS. 45

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60000	10+95.24	-26.67	640417.7909	615041.2500
60001	11+05.24	-26.67	640425.4320	615034.7991
60002	11+25.24	-26.67	640440.7146	615021.8971
60003	11+35.24	-26.67	640448.3557	615015.4463
60004	12+03.99	-26.67	640500.8896	614971.0958
60005	12+13.99	-26.67	640508.5307	614964.6450
60006	12+41.69	-26.67	640529.6968	614946.7760
60007	12+51.69	-26.67	640537.3379	614940.3252
60008	12+75.69	-26.67	640555.6766	614924.8432
60009	12+85.69	-26.67	640563.3177	614918.3923
60010	14+21.95	-25.05	640668.4855	614831.7444
60011	14+33.96	-25.05	640677.6617	614823.9976
60012	15+90.94	-21.40	640799.9622	614725.5061
60013	15+94.14	-21.40	640802.4045	614723.4442
60014	16+12.15	-21.54	640816.0715	614711.7213
60015	16+17.52	-21.54	640820.1764	614708.2602
60016	16+38.69	-21.58	640836.3299	614694.5737
60017	16+42.06	-21.58	640838.9054	614692.4005
60018	16+34.26	25.17	640863.1029	614733.1492
60019	16+34.26	35.00	640869.4441	614740.6604
60020	16+22.76	17.63	640849.4514	614734.8060
60021	16+22.76	25.17	640854.3156	614740.5676
60022	16+01.48	17.95	640833.4005	614748.7785
60023	16+01.48	25.17	640838.0567	614754.2939
60024	15+91.48	17.95	640825.7608	614755.2310
60025	15+91.48	25.17	640830.4156	614760.7447

NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60026	15+71.52	17.95	640810.5023	614768.1098
60027	15+71.52	25.17	640815.1585	614773.6251
60028	15+61.52	17.95	640802.8626	614774.5623
60029	15+61.52	25.17	640807.5174	614780.0759
60030	15+41.48	17.95	640787.5547	614787.4828
60031	15+41.48	25.17	640792.2108	614792.9981
60032	15+31.48	25.17	640784.5697	614799.4490
60033	15+31.48	17.95	640779.9150	614793.9353
60034	15+21.76	17.95	640772.2246	614799.9027
60035	15+21.75	35.00	640783.4722	614813.2352
60036	15+11.50	24.67	640768.9779	614811.9576
60037	15+01.50	24.67	640761.3368	614818.4085
60038	14+78.78	24.67	640743.9790	614833.0623
60039	14+68.78	24.67	640736.3379	614839.5132
60040	14+51.53	24.67	640723.1569	614850.6410
60041	14+41.53	24.67	640715.5157	614857.0918
60042	14+24.86	24.67	640702.7721	614867.8503
60043	14+14.86	24.67	640695.1310	614874.3012
60044	14+31.06	21.66	640705.5703	614861.5453
60045	14+34.18	21.64	640707.9431	614859.5228
60046	12+22.24	24.67	640547.9503	614998.5550
60047	12+12.24	24.67	640540.3092	615005.0058
60048	11+58.02	24.67	640499.6439	615039.3366



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60049	11+49.02	24.67	640492.0027	615045.7874
60050	11+28.18	24.67	640476.0777	615059.2318
60051	11+18.18	24.67	640468.4365	615065.6826
60052	10+97.93	24.67	640452.9644	615078.7446
60053	10+87.93	24.67	640445.3233	615085.1954
60181	12+41.69	-34.32	640524.7629	614940.9318
60182	12+56.79	-17.19	640547.3448	614944.2788
60402	14+75.02	-25.24	640708.9109	614797.3542
60403	14+84.45	-25.42	640716.1129	614791.2740
60404	14+97.78	-25.05	640726.4148	614782.8156
60405	15+06.84	-25.05	640733.4518	614776.9677

Unofficial Website Copy

N:\33678-029\CADD\GG01_DEAV.dgn
8/13/2014 10:46:47 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: JJO	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

GRADES AND GEOMETRICS

GG-01

SHEET NO. 14

TOTAL SHTS. 45

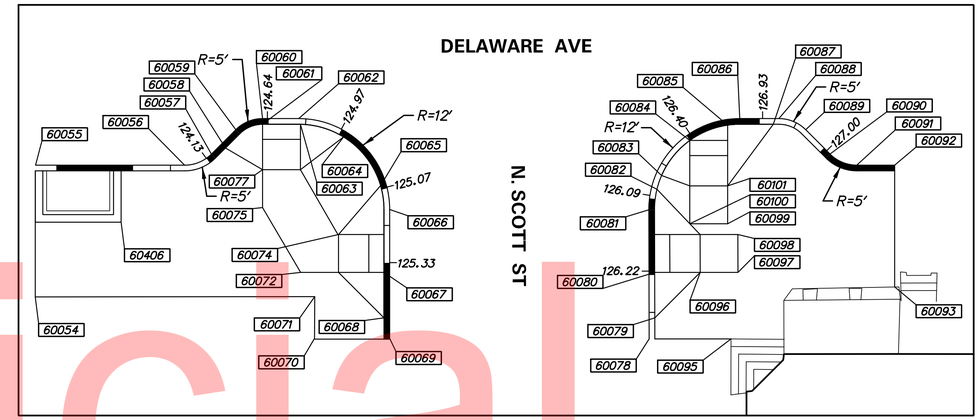
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60054	12+94.05	34.53	640609.1813	614959.7679
60055	12+94.09	17.15	640597.9983	614946.4615
60056	13+13.76	17.15	640613.0290	614933.7722
60057	13+17.29	15.69	640614.7859	614930.3725
60058	13+19.16	14.88	640615.6925	614928.5493
60059	13+20.51	12.46	640615.1692	614925.8335
60060	13+24.05	11.00	640616.9261	614922.4338
60061	13+28.83	11.00	640620.5778	614919.3509
60062	13+28.83	11.00	640620.5778	614919.3509
60063	13+29.05	11.75	640621.2318	614919.7831
60064	13+34.74	13.43	640626.6581	614917.3935
60065	106+41.40	18.30	640634.5326	614919.1420
60066	106+44.55	17.09	640637.4882	614920.7792
60067	106+52.85	17.85	640642.2689	614927.6047
60068	106+58.85	17.85	640646.1394	614932.1894
60069	106+61.56	17.10	640648.4594	614933.7748
60070	106+61.56	27.02	640640.8787	614940.1747
60071	106+56.05	27.00	640637.3433	614935.9480
60072	106+52.85	28.85	640633.8636	614934.7006
60074	106+47.85	23.85	640634.4567	614927.6564
60075	13+24.05	22.75	640624.5058	614931.4121
60077	13+24.05	17.75	640621.2804	614927.5915
60078	106+61.66	-17.15	640674.6872	614911.7357
60079	106+58.87	-17.90	640673.4564	614909.1276
60080	106+52.87	-17.88	640669.5716	614904.5550
60081	106+44.61	-17.11	640663.6499	614898.7379
60082	106+41.90	-18.19	640662.7217	614895.9758
60083	13+76.72	18.51	640662.0180	614894.1918
60084	13+80.44	13.89	640661.8773	614888.2643
60085	13+85.44	11.86	640664.3923	614883.4924
60086	13+87.04	11.00	640665.0560	614881.8013
60087	13+91.48	11.75	640668.9310	614879.5114
60088	13+92.21	11.00	640669.0056	614878.4668
60089	13+95.74	12.46	640672.6519	614877.3051
60090	13+98.96	15.68	640677.1801	614877.6876
60091	14+02.49	17.14	640680.8272	614876.5251
60092	14+07.49	17.14	640684.6478	614873.2997
60093	14+07.49	33.22	640695.0187	614885.5843
60095	106+61.66	-27.96	640682.9372	614904.7610
60096	106+52.88	-23.88	640674.1583	614900.6828
60097	106+52.88	-28.87	640677.9679	614897.4666
60098	106+47.88	-28.87	640674.7404	614893.6478
60099	13+85.44	24.89	640672.7938	614893.4441
60100	13+80.44	24.89	640668.9732	614896.6696
60101	13+85.44	19.89	640669.5684	614889.6236
60102	12+96.84	-17.13	640577.9927	614918.4932
60103	12+96.84	-34.32	640566.9038	614905.3554
60104	13+16.03	-34.32	640581.5669	614892.9763
60105	105+69.57	22.00	640579.4500	614887.4014
60106	105+68.75	22.00	640578.7240	614887.0187
60107	105+68.75	17.75	640580.7058	614883.2591
60108	105+79.62	17.75	640590.3240	614888.3291
60109	105+85.03	17.72	640595.1219	614890.8221
60110	105+85.01	17.00	640595.4453	614890.1808
60111	105+90.73	19.31	640599.4267	614894.8935
60112	13+23.68	-13.72	640600.6970	614903.7793
60113	13+17.32	-11.00	640597.5907	614909.9656
60114	13+13.08	-11.00	640594.3539	614912.6982
60115	13+09.55	-12.46	640590.7077	614913.8599
60116	13+08.19	-14.88	640588.1181	614912.8885
60117	13+06.37	-15.65	640586.2251	614913.4813
60118	13+02.84	-17.11	640582.5894	614914.6341
60119	13+13.08	-11.75	640593.8701	614912.1251
60120	13+13.08	-17.78	640589.9828	614907.5206
60123	105+72.93	28.68	640579.3116	614894.8803
60124	105+75.43	22.52	640584.3859	614890.5964
60125	105+81.39	26.71	640587.7110	614897.0786
60126	13+18.08	-11.78	640597.6739	614908.8798
60127	106+06.49	-17.09	640630.3365	614870.0355
60128	105+99.43	-17.85	640624.4444	614866.0735

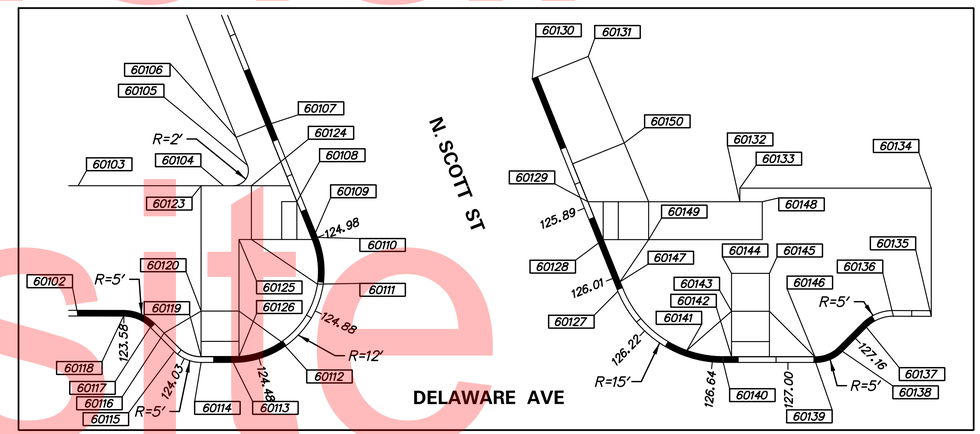
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60129	105+94.04	-17.85	640619.6774	614863.5543
60130	105+76.26	-17.12	640603.6143	614855.9139
60131	105+76.27	-25.09	640607.3382	614848.8673
60132	13+84.19	-32.22	640635.0028	614850.6162
60133	13+84.19	-34.00	640633.8518	614849.2528
60134	14+09.46	-34.00	640653.1602	614832.9521
60135	14+09.46	-17.09	640664.0686	614845.8732
60136	14+04.46	-17.10	640660.2400	614849.0892
60137	14+00.91	-15.64	640658.4737	614852.4969
60138	13+97.74	-12.46	640658.0960	614856.9689
60139	13+94.20	-11.00	640656.3391	614860.3687
60140	13+82.01	-11.00	640647.0212	614868.2351
60141	13+77.19	-12.59	640642.3174	614870.1277
60142	13+83.10	-11.75	640647.3689	614866.9601
60143	13+83.10	-17.75	640643.4983	614862.3754
60144	13+83.10	-22.75	640640.2729	614858.5548
60145	13+88.10	-22.75	640644.0935	614855.3294
60146	13+94.10	-11.75	640655.7741	614859.8641
60147	106+05.43	-17.84	640629.7492	614868.8768
60148	13+87.15	-32.22	640637.2653	614848.7061
60149	106+01.68	-23.41	640629.0291	614862.2030
60150	105+88.65	-25.21	640618.3437	614854.5384
60151	15+16.68	-17.08	640746.0055	614776.7168
60152	15+16.69	-28.47	640738.6777	614768.0150
60153	15+25.55	-28.45	640745.4456	614762.3014
60154	15+27.40	-31.20	640745.0872	614759.0034
60155	15+26.45	-33.55	640742.8469	614757.8240
60156	15+33.99	-28.45	640751.8913	614756.8597
60157	15+31.40	-35.55	640745.3314	614753.1050
60158	15+30.21	-40.47	640741.2566	614750.1120
60159	15+34.10	-30.88	640750.4151	614754.9340
60160	15+33.33	-23.45	640754.6111	614761.1072
60161	15+24.89	-17.12	640752.2482	614771.3888
60162	15+25.97	-17.94	640752.5491	614770.0611
60163	15+27.33	-23.45	640750.0264	614764.9777
60164	15+22.34	-23.45	640746.2140	614768.1962
60165	15+22.33	-28.45	640742.9804	614764.3825
60166	15+69.87	-18.32	640785.8433	614741.4557
60167	15+61.40	-23.24	640776.2045	614743.1591
60168	15+56.42	-29.44	640768.3946	614741.6330
60169	15+54.60	-33.99	640764.0697	614739.3335
60170	15+55.57	-49.87	640754.5689	614726.5700
60171	15+66.49	-34.74	640772.6755	614731.0911
60172	15+85.25	-34.70	640787.0334	614719.0126
60173	15+85.73	-25.66	640793.2338	614725.6145
60174	15+85.73	-16.92	640798.8718	614732.2928
60175	15+75.06	-16.88	640790.7428	614739.2079
60176	15+82.40	-23.24	640792.2509	614729.6123
60177	15+82.40	-28.24	640789.0255	614725.7918
60178	15+67.40	-28.24	640777.5638	614735.4680
60179	15+57.78	-28.24	640770.2138	614741.6731
60180	15+61.22	-35.97	640767.8478	614733.5468
60406	13+05.38	-24.67	640611.4798	614944.9217

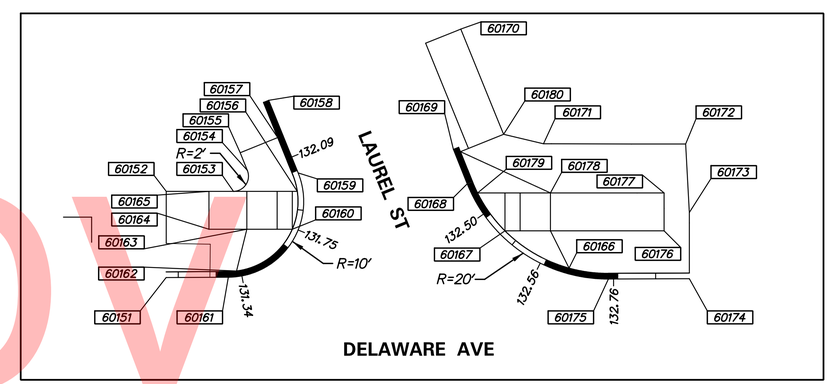
NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.



CURB ELEVATION AND COORDINATE DETAIL 1



CURB ELEVATION AND COORDINATE DETAIL 2



CURB ELEVATION AND COORDINATE DETAIL 3

Website Copy
Unofficial

NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.

N:\31678-028\CAD\GG02_DEAV.dgn
8/13/2014 5:47:24 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 10 20 30 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: JJO	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

GRADES AND GEOMETRICS

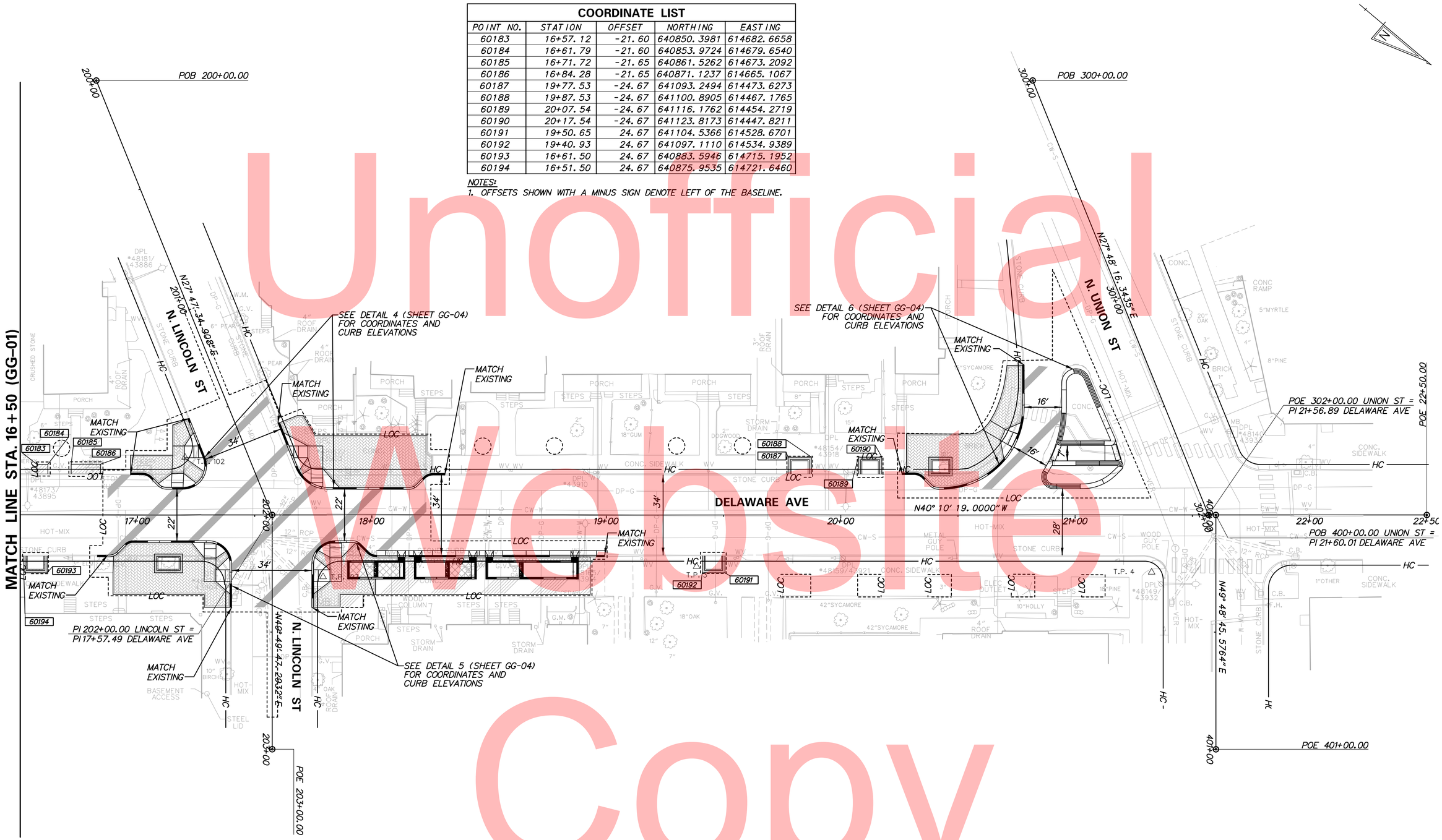
GG-02

SHEET NO. 15

TOTAL SHTS. 45

COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60183	16+57.12	-21.60	640850.3981	614682.6658
60184	16+61.79	-21.60	640853.9724	614679.6540
60185	16+71.72	-21.65	640861.5262	614673.2092
60186	16+84.28	-21.65	640871.1237	614665.1067
60187	19+77.53	-24.67	641093.2494	614473.6273
60188	19+87.53	-24.67	641100.8905	614467.1765
60189	20+07.54	-24.67	641116.1762	614454.2719
60190	20+17.54	-24.67	641123.8173	614447.8211
60191	19+50.65	24.67	641104.5366	614528.6701
60192	19+40.93	24.67	641097.1110	614534.9389
60193	16+61.50	24.67	640883.5946	614715.1952
60194	16+51.50	24.67	640875.9535	614721.6460

NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.



Unofficial Website Copy

N:\31678-029\CADD\GG03_DEAV.dgn
5/27/2014 2:53:57 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

GRADES AND GEOMETRICS

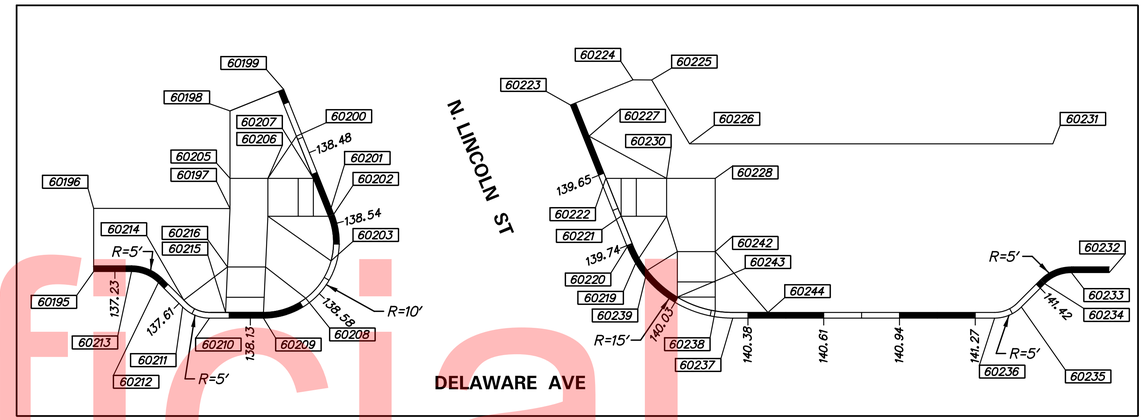
GG-03
SHEET NO. 16
TOTAL SHTS. 45

COORDINATE LIST

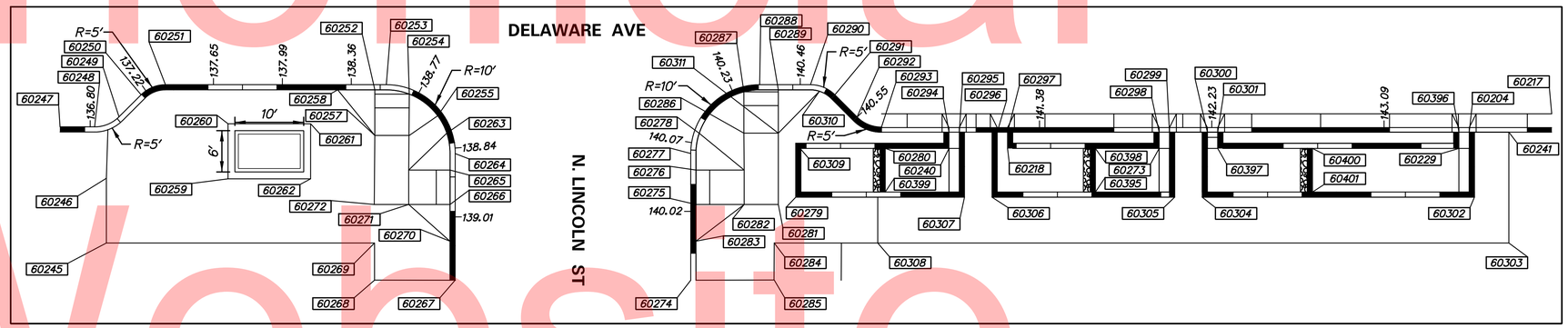
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60195	16+97.03	-17.15	640883.7716	614660.3203
60196	16+97.03	-25.48	640878.3951	614653.9517
60197	17+15.03	-25.45	640892.1637	614642.3647
60198	201+48.52	24.97	640883.8453	614632.5114
60199	201+48.55	17.33	640887.4302	614625.7602
60200	201+54.90	18.10	640892.6951	614629.4051
60201	201+66.29	18.13	640902.7524	614634.7457
60202	201+66.29	17.38	640903.1042	614634.0833
60203	201+71.87	20.03	640906.8067	614639.0256
60204	18+87.37	17.90	641051.8167	614564.3219
60205	201+56.78	28.31	640889.5891	614639.3150
60206	201+58.65	23.68	640893.4096	614636.0896
60207	201+60.90	18.12	640897.9943	614632.2191
60208	17+25.04	-13.63	640907.4393	614644.9431
60209	17+19.45	-11.00	640904.8651	614650.5564
60210	17+12.32	-11.00	640899.4187	614655.1544
60211	17+08.79	-12.46	640895.7724	614656.3161
60212	17+05.57	-15.68	640891.2384	614655.9332
60213	17+02.03	-17.15	640887.5922	614657.0949
60214	17+08.94	-13.37	640895.3055	614655.5240
60215	17+14.45	-11.75	640900.5607	614653.2088
60216	17+14.70	-17.75	640896.8840	614648.4605
60217	18+99.34	15.24	641059.2466	614554.5596
60218	18+20.37	20.25	641002.1372	614609.3382
60219	201+86.78	-17.79	640937.6283	614612.5175
60220	201+84.82	-16.91	640935.4857	614612.3813
60221	201+80.78	-17.68	640932.2720	614609.8245
60222	201+75.40	-17.69	640927.5144	614607.2974
60223	201+64.66	-16.98	640917.6830	614602.9243
60224	201+64.69	-25.88	640921.8609	614595.0596
60225	201+65.62	-28.16	640923.7466	614593.4832
60226	201+75.31	-29.62	640933.0021	614596.7021
60227	201+69.40	-17.71	640922.2156	614604.4828
60228	201+80.81	-31.06	640938.5305	614597.9974
60229	18+85.87	20.25	641052.1865	614567.0852
60230	201+78.40	-25.11	640933.6313	614602.1334
60231	18+23.64	-34.00	640969.6444	614565.7677
60232	18+31.08	-17.01	640986.2846	614573.9535
60233	18+26.10	-17.01	640982.4805	614577.1714
60234	18+22.57	-15.54	640980.7273	614580.5680
60235	18+19.49	-12.46	640980.3611	614584.9041
60236	18+15.95	-11.00	640978.5986	614588.3086
60237	17+81.40	-11.00	640952.1989	614610.5960
60238	17+79.08	-11.94	640949.8222	614611.3727
60239	17+70.11	-17.31	640939.5048	614613.0611
60240	18+11.87	20.25	640995.6422	614614.8214
60241	18+93.12	17.90	641056.2104	614560.6127
60242	17+79.08	-19.77	640944.7697	614605.3878
60243	17+74.08	-13.77	640944.8196	614613.1979
60244	17+86.04	-11.75	640955.2605	614607.0298
60245	16+89.73	34.00	640911.1871	614704.1111
60246	16+89.57	24.59	640904.9903	614697.0269
60247	16+82.85	17.12	640895.0352	614695.6575
60248	16+87.87	17.13	640898.8774	614692.4202
60249	16+91.41	15.66	640900.6380	614689.0173
60250	16+94.61	12.46	640901.0185	614684.5120
60251	16+98.14	11.00	640902.7754	614681.1122
60252	17+28.53	11.75	640926.4800	614662.0817
60253	17+30.21	11.00	640927.2756	614660.4285
60254	17+33.53	12.37	640930.6995	614659.3289
60255	17+37.66	15.52	640935.8860	614659.0752
60257	17+28.53	18.37	640930.7495	614667.1390
60258	17+23.14	11.75	640922.3620	614665.5582
60259	17+07.22	24.67	640918.5298	614685.7019
60260	17+07.22	16.67	640913.3691	614679.5891
60261	17+19.22	16.67	640922.5385	614671.8480
60262	17+19.22	24.67	640927.6992	614677.9609
60263	202+18.06	18.52	640938.5264	614660.1625
60264	202+21.01	17.29	640941.3749	614661.6275
60265	202+23.40	18.04	640942.3432	614663.9413
60266	202+28.40	18.04	640945.5642	614667.7655
60267	202+39.40	17.31	640953.2237	614675.6950
60268	202+39.39	29.00	640944.2796	614683.2285
60269	202+34.00	29.00	640940.8022	614679.1092

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60270	202+33.74	18.05	640949.0001	614671.8447
60271	202+28.40	24.04	640940.9796	614671.6360
60272	202+28.40	29.04	640937.1590	614674.8614
60273	18+42.37	20.25	641018.9477	614595.1464
60274	202+39.40	-16.89	640979.3532	614653.6358
60275	202+28.40	-17.64	640972.8304	614644.7467
60276	202+23.40	-17.64	640969.6050	614640.9262
60277	202+21.00	-16.89	640967.4811	614639.5730
60278	202+18.05	-18.12	640966.5220	614636.5281
60279	17+89.62	27.34	640983.2099	614634.5867
60280	18+02.62	20.25	640988.5742	614620.7884
60281	202+28.40	-29.60	640981.9686	614637.0320
60282	202+28.40	-24.64	640978.1792	614640.2311
60283	202+33.74	-17.64	640976.2708	614648.8220
60284	202+34.00	-29.00	640985.1207	614641.6944
60285	202+39.38	-29.00	640988.5902	614645.8043
60286	17+77.14	15.24	640965.8761	614633.3926
60287	17+82.09	12.04	640967.5907	614627.7521
60288	17+84.38	11.00	640968.6714	614625.4811
60289	17+87.09	11.75	640971.2253	614624.3065
60290	17+91.76	11.00	640974.3123	614620.7188
60291	17+95.30	12.46	640977.9586	614619.5571



CURB ELEVATION AND COORDINATE DETAIL 4



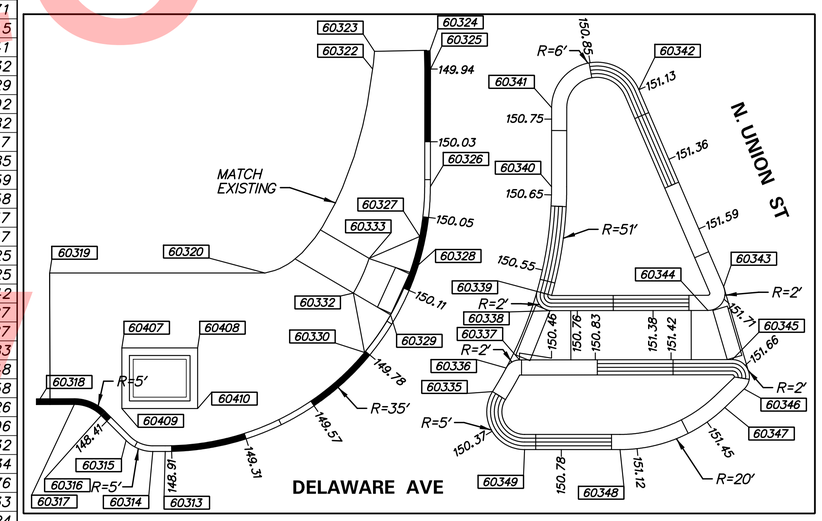
CURB ELEVATION AND COORDINATE DETAIL 5

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60292	17+98.52	15.69	640982.5023	614619.9409
60293	18+02.07	17.15	640986.1560	614618.7730
60294	18+11.87	17.90	640994.1263	614613.0258
60295	18+13.37	17.90	640995.2725	614612.0581
60296	18+18.87	17.90	640999.4751	614608.5102
60297	18+20.37	17.90	641000.6212	614607.5425
60298	18+42.37	17.90	641017.4317	614593.3507
60299	18+43.87	17.90	641018.5779	614592.3831
60300	18+49.37	17.90	641022.7805	614588.8351
60301	18+50.87	17.90	641023.9267	614587.8675
60302	18+88.12	27.34	641058.4749	614571.0460
60303	18+93.12	34.00	641066.5941	614572.9124
60304	18+48.62	27.34	641028.2925	614596.5269
60305	18+44.62	27.34	641025.2361	614599.1072
60306	18+18.12	27.34	641004.9871	614616.2019
60307	18+14.12	27.34	641001.9306	614618.7822
60308	18+01.53	34.00	640996.6118	614631.9933
60309	17+89.62	19.50	640978.1569	614628.6014
60310	17+93.07	11.96	640975.9262	614620.6068
60311	17+87.09	18.04	640975.2817	614629.1113
60313	20+43.26	-11.00	641152.2918	614441.6723
60314	20+41.63	-11.00	641151.0433	614442.7263
60315	20+38.09	-12.46	641147.3970	614443.8880
60316	20+34.81	-15.75	641142.7715	614443.4973
60317	20+31.26	-17.21	641139.1149	614444.6677
60318	20+28.06	-17.95	641136.1923	614446.1649
60319	20+28.01	-34.56	641125.4382	614433.5065
60320	20+56.43	-34.56	641147.1521	614415.1751
60322	301+10.00	56.50	641140.2428	614384.7762
60323	301+08.60	55.79	641139.3361	614383.4935
60324	301+11.22	48.94	641144.8498	614378.6526
60407	20+37.54	-24.67	641139.0997	614434.9193
60408	20+47.54	-24.67	641146.7408	614428.4685

COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60325	301+13.53	49.82	641146.4865	614380.5168
60326	301+27.90	55.65	641156.4790	614392.3756
60327	301+33.48	59.41	641159.6604	614398.3071
60328	301+37.39	62.39	641161.7299	614402.7615
60329	20+73.01	-29.03	641163.3935	614408.7041
60330	301+44.94	71.92	641163.9632	614414.7132
60332	20+68.10	-31.91	641157.7800	614409.6729
60333	301+33.68	66.72	641156.4280	614404.8592
60335	20+86.47	-18.91	641180.2074	614407.7582
60336	20+88.27	-22.02	641179.5759	614404.2147
60337	20+90.03	-23.08	641180.2386	614402.2685
60338	301+49.09	46.95	641179.2755	614394.5659
60339	301+46.01	47.79	641176.1614	614393.8658
60340	301+33.92	40.82	641168.7145	614382.0657
60341	301+24.25	36.90	641161.9912	614374.0867
60342	301+26.37	25.34	641169.2599	614364.8525
60343	301+26.37	25.34	641169.2599	614364.8525
60344	301+56.80	27.81	641195.0268	614381.2242
60345	21+18.12	-23.13	641201.6734	614384.1127
60346	21+19.68	-19.25	641205.3649	614386.0687
60347	21+17.12	-16.80	641204.9876	614389.5983
60348	21+03.29	-11.25	641198.0026	614402.7548
60349	20+90.70	-11.25	641188.3831	614410.8758
60395	18+33.12	26.59	641015.9650	614605.9526
60396	18+85.87	17.90	641050.6706	614565.2896
60397	18+50.87	20.25	641025.4426	614589.6632
60398	18+33.12	20.25	641011.8797	614601.1134
60399	18+02.62	26.59	640992.6595	614625.6276
60400	18+64.62	20.25	641035.9491	614580.7933
60401	18+64.62	26.59	641040.0345	614585.6324
60409	20+37.54	-16.67	641144.2603	614441.0322
60410	20+47.54	-16.67	641151.9015	614434.5814



CURB ELEVATION AND COORDINATE DETAIL 6

NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.

Unofficial Website

N:\31678-029\CADD\GG04_DEAV.dgn
5/2/2014 2:54:22 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 10 20 30 FEET

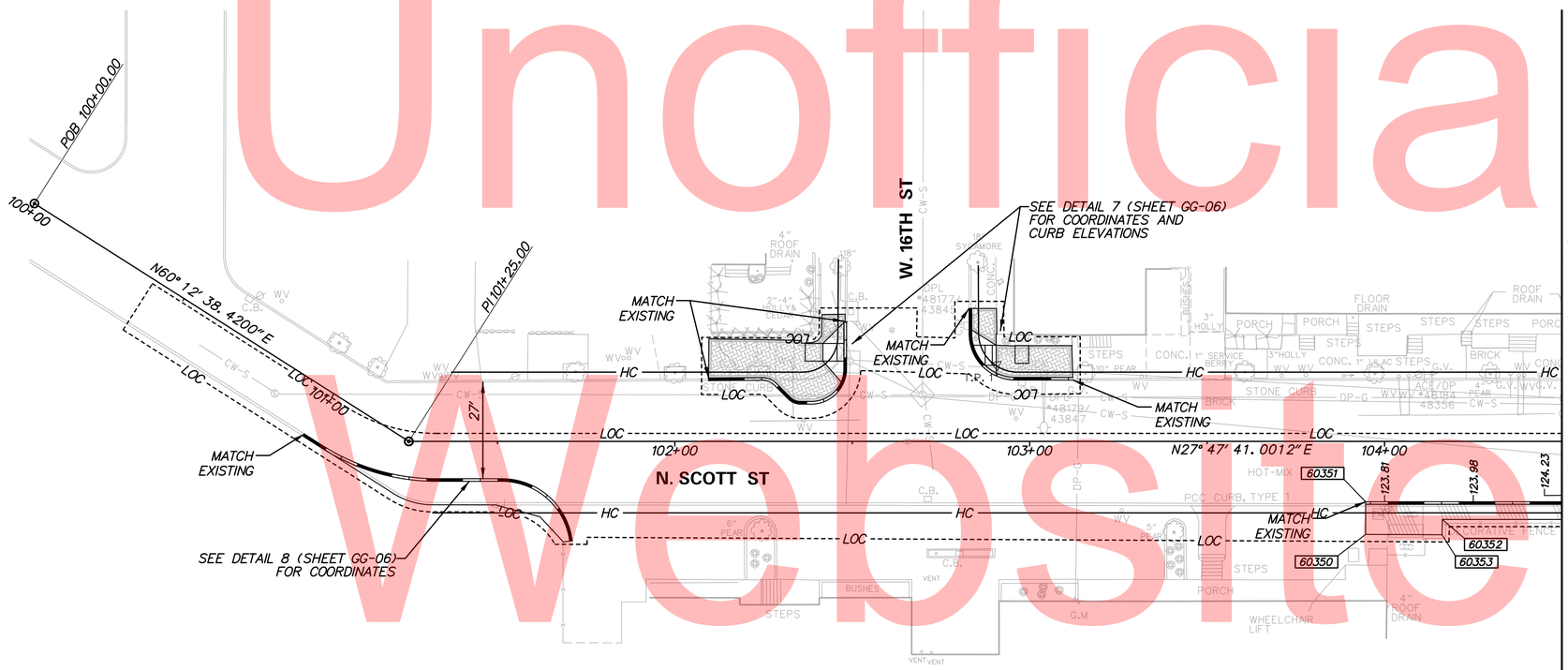
DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: SJB	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

GRADES AND GEOMETRICS

GG-04
SHEET NO. 17
TOTAL SHTS. 45

Unofficial Website Copy



COORDINATE LIST				
POINT NO.	STATION	OFFSET	NORTHING	EASTING
60350	103+94.68	26.18	640422.7845	614809.5503
60351	103+94.68	17.00	640427.0675	614801.4251
60352	104+16.28	22.00	640443.8443	614815.9206
60353	104+16.20	26.30	640441.7752	614819.6902

NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.

N:\31678-029\CADD\GG05_DEAV.dgn
5/27/2014 2:54:50 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT T201120004
COUNTY NEW CASTLE
BRIDGE NO. N/A
DESIGNED BY: JJO
CHECKED BY: TAO

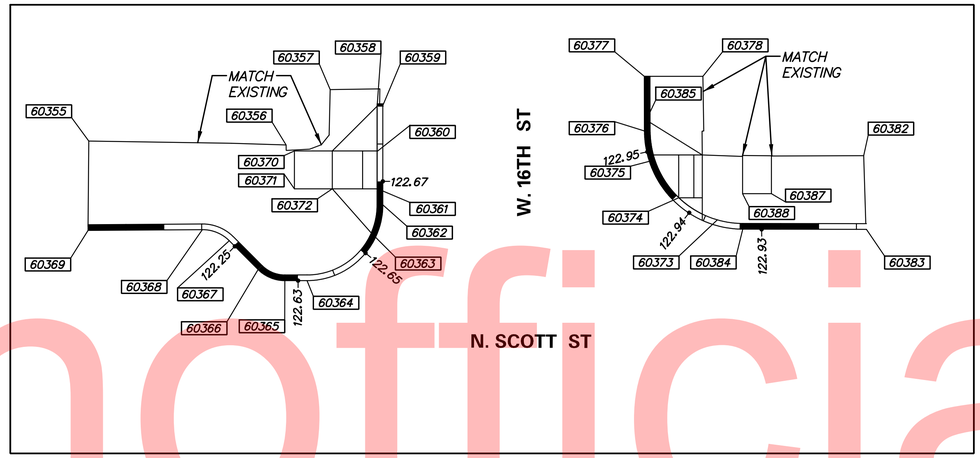
GRADES AND GEOMETRICS

GG-05
SHEET NO. 18
TOTAL SHTS. 45

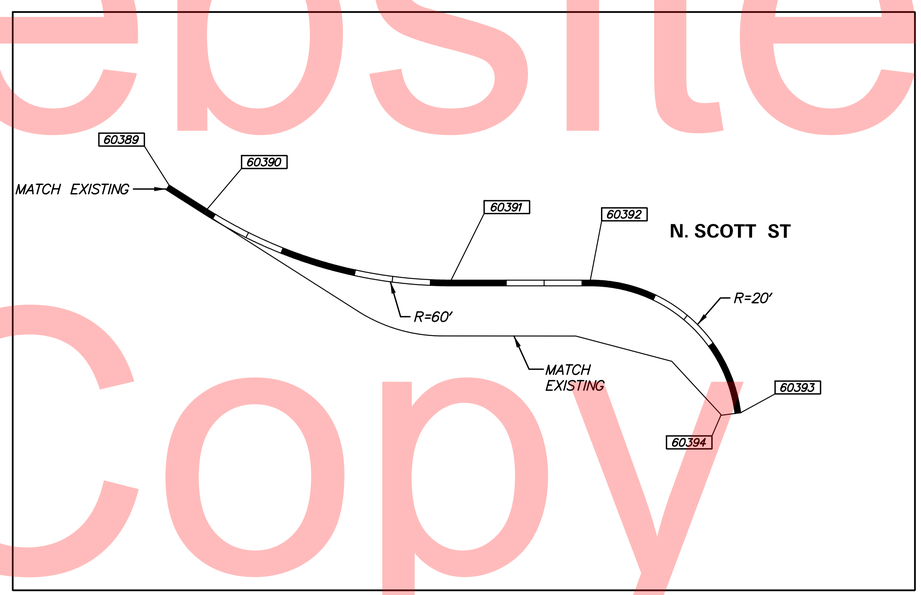
COORDINATE LIST

POINT NO.	STATION	OFFSET	NORTHING	EASTING
60355	102+09.58	-28.92	640284.7328	614674.4935
60356	102+35.62	-28.41	640307.5413	614687.0835
60357	102+41.44	-35.71	640316.0887	614683.3399
60358	102+47.64	-33.53	640320.5562	614688.1645
60359	102+48.39	-33.61	640321.2586	614688.4405
60360	102+47.72	-27.61	640317.8710	614693.4374
60361	102+47.72	-22.61	640315.5395	614697.8605
60362	102+48.39	-20.50	640315.1455	614700.0376
60363	102+46.86	-16.79	640312.0651	614702.6076
60364	102+38.39	-10.50	640301.6362	614704.2208
60365	102+35.46	-10.50	640299.0452	614702.8550
60366	102+31.93	-11.96	640296.6005	614699.9109
60367	102+28.13	-15.76	640295.0107	614694.7767
60368	102+24.56	-17.23	640292.5376	614691.8178
60369	102+09.48	-17.13	640279.1573	614684.8738
60370	102+36.72	-27.61	640308.1401	614688.3080
60371	102+36.72	-22.61	640305.8086	614692.7312
60372	102+41.72	-22.61	640310.2317	614695.0627
60373	102+92.55	-18.55	640353.3037	614722.3588
60374	102+87.45	-21.44	640350.1357	614717.4239
60375	102+84.29	-26.44	640349.6678	614711.5252
60376	102+82.92	-30.26	640350.2463	614707.5045
60377	102+82.90	-37.46	640353.5883	614701.1245
60378	102+90.64	-37.46	640360.4277	614704.7297
60382	103+11.87	-26.99	640374.3295	614723.8949
60383	103+12.22	-17.27	640370.1069	614732.6572
60384	102+95.90	-17.30	640355.6838	614725.0281
60385	102+84.29	-26.44	640349.6678	614711.5252
60387	102+99.69	-21.97	640361.2118	614722.6564
60388	102+95.88	-21.97	640357.8448	614720.8816
60389	100+99.06	14.00	640171.3934	614645.0752
60390	101+05.06	14.00	640174.3710	614650.2841
60391	101+32.85	10.50	640198.4826	614673.5851
60392	101+51.23	10.50	640214.7359	614682.1526
60393	101+73.05	27.74	640226.0038	614707.5838
60394	101+68.47	28.34	640221.6721	614705.9724

NOTES:
1. OFFSETS SHOWN WITH A MINUS SIGN DENOTE LEFT OF THE BASELINE.



CURB ELEVATION AND COORDINATE DETAIL 7



CURB ELEVATION AND COORDINATE DETAIL 8

Unofficial Website Copy

N:\31678-028\CAD\GG06_DEAV.dgn
5/2/2014 2:59:23 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 10 20 30 FEET

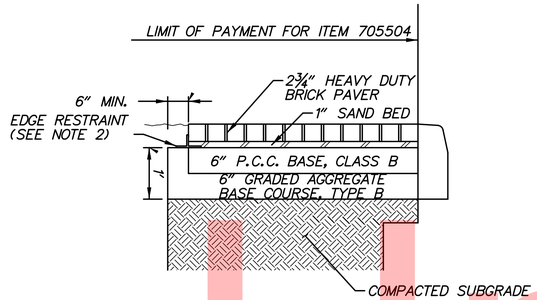
DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: JJO	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

GRADES AND GEOMETRICS

GG-06

SHEET NO.
19
TOTAL SHTS.
45

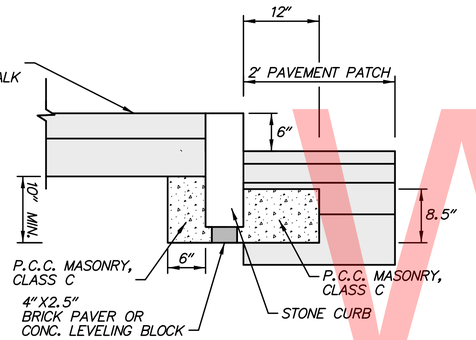


BRICK SIDEWALK DETAIL

SCALE: NONE

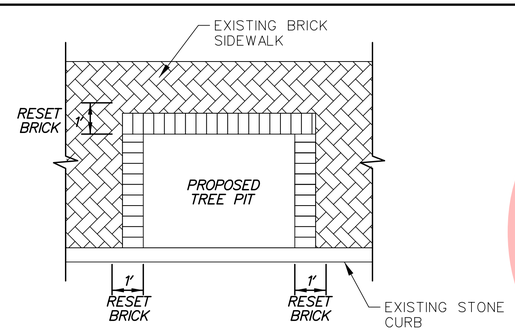
NOTES:

1. WHEN SIDEWALK IS CONFINED BY A RIGID STRUCTURE ON BOTH SIDES, EXPANSION JOINT MATERIAL SHALL BE USED FROM BOTTOM OF BRICK TO BOTTOM OF CONCRETE BASE ON AT LEAST ONE SIDE OF THE SIDEWALK.
2. EDGE RESTRAINT MUST BE APPROVED BY DELDOT'S MATERIALS AND RESEARCH DEPARTMENT PRIOR TO INSTALLATION AND SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.



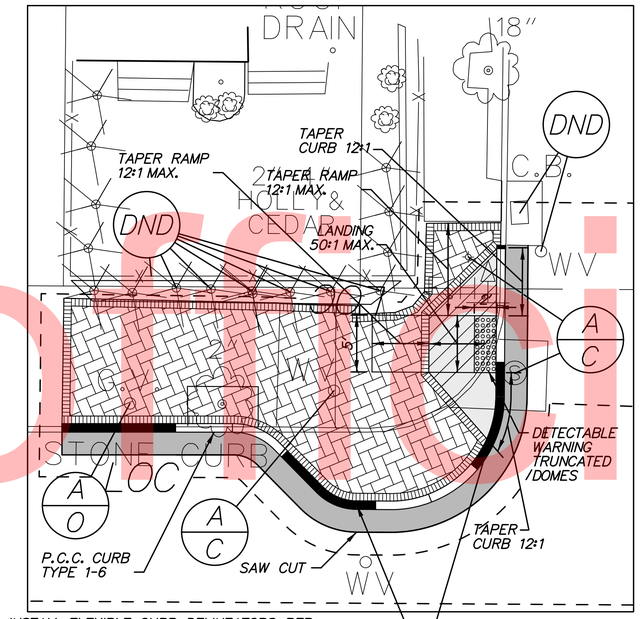
RESET EXISTING STONE CURB DETAIL

SCALE: NONE

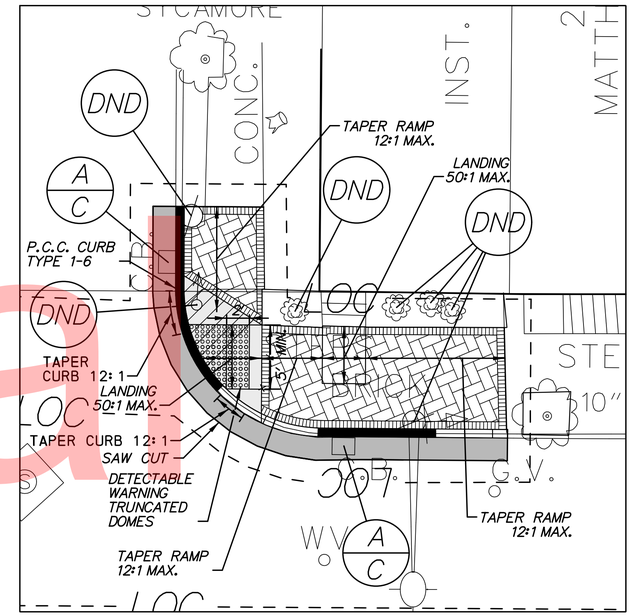


RESET BRICK - PROPOSED TREE PIT DETAIL

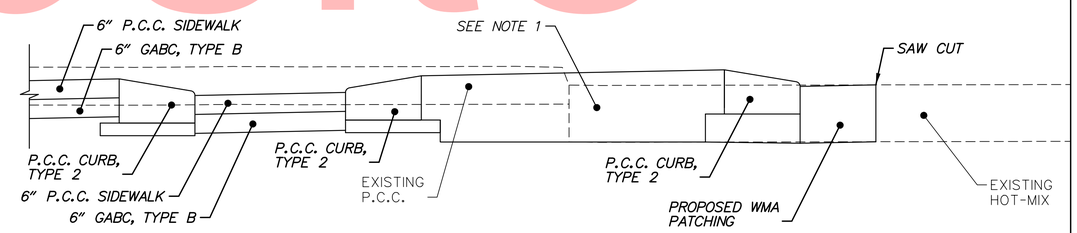
SCALE: NONE



N. SCOTT STREET AND W. 16TH STREET
CURB RAMPS, TYPE 4 - NW CORNER



N. SCOTT STREET AND W. 16TH STREET
CURB RAMPS, TYPE 3 - NE CORNER



NOTES:

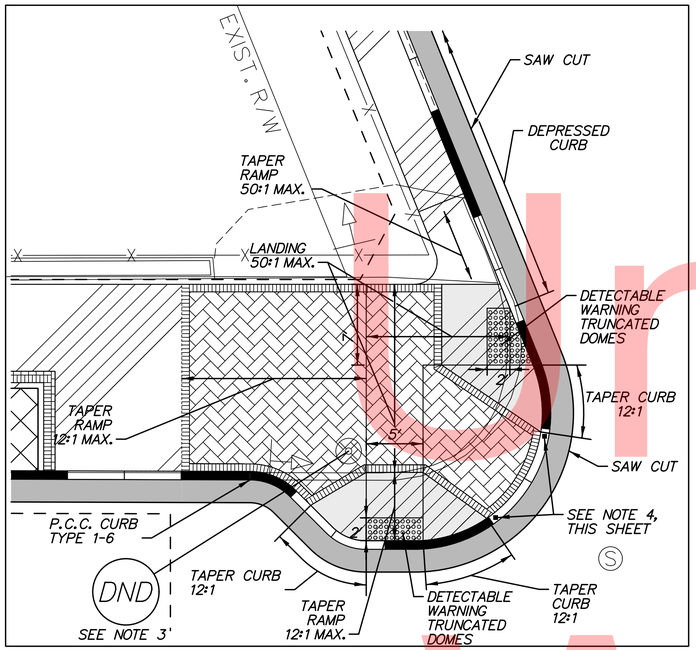
1. THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT AND SUBBASE MATERIAL DOWN TO EXISTING SOIL, PRIOR TO PLACING BACKFILL AND PLANTING SOIL FOR LANDSCAPE BEDS. REMOVAL OF HOT-MIX AND SUBBASE MATERIAL SHALL BE PAID FOR UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT.
2. SEE LS-04 FOR MORE DETAIL.

SECTION A-A (SEE DT-03)

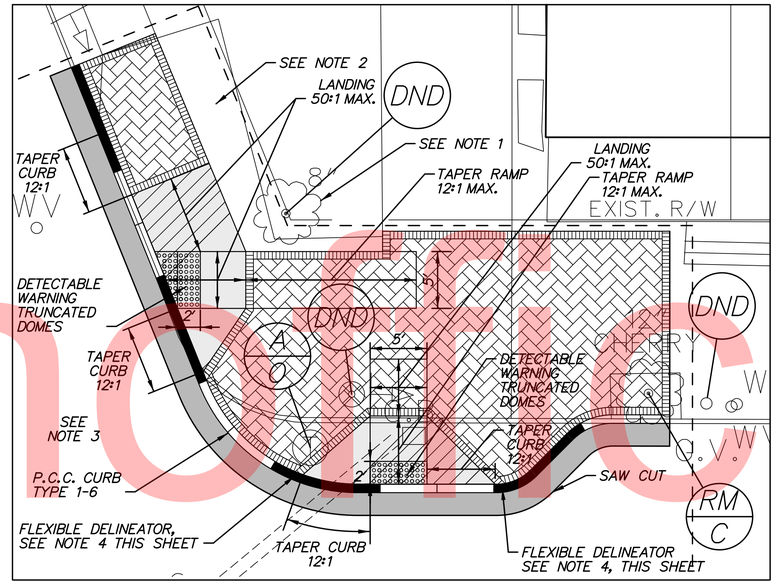
Unofficial Website Copy

N:\31678-029\CAD\DT01_DEAV.dgn
5/2/2014 3:08:53 PM

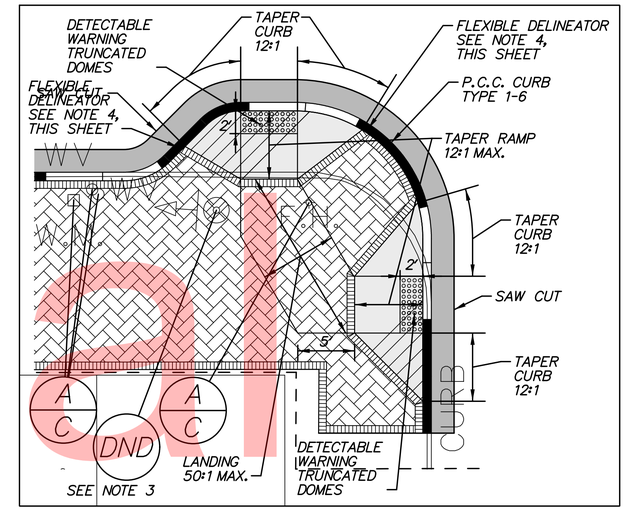
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	CONSTRUCTION DETAILS	DT-01
				COUNTY NEW CASTLE	DESIGNED BY: JJO		SHEET NO. 20
					CHECKED BY: TAO		TOTAL SHTS. 45



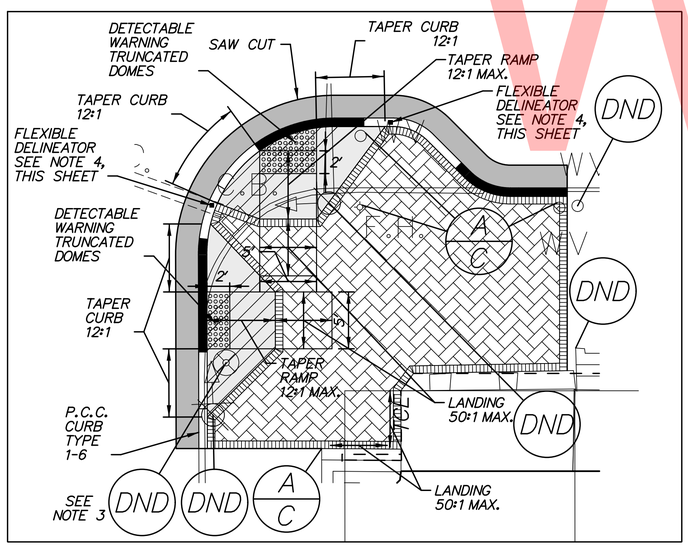
DELAWARE AVENUE AND N. SCOTT STREET
CURB RAMPS, TYPE 4 - SW CORNER



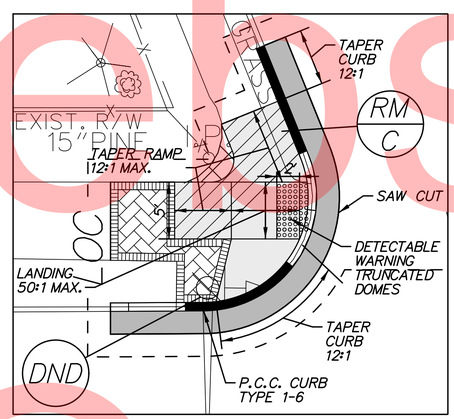
DELAWARE AVENUE AND N. SCOTT STREET
CURB RAMPS, TYPE 4 - NW CORNER



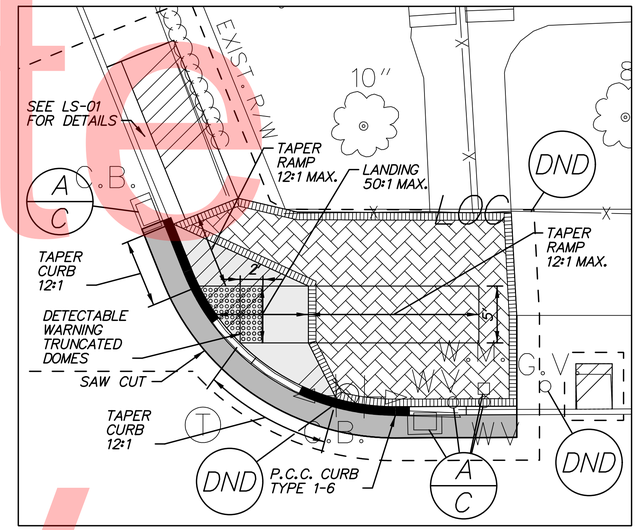
DELAWARE AVENUE AND N. SCOTT STREET
CURB RAMPS, TYPE 4 - SE CORNER



DELAWARE AVENUE AND N. SCOTT STREET
CURB RAMPS, TYPE 4 - NE CORNER



DELAWARE AVENUE AND LAUREL STREET
CURB RAMPS, TYPE 3 - SW CORNER



DELAWARE AVENUE AND LAUREL STREET
CURB RAMPS, TYPE 4 - NW CORNER

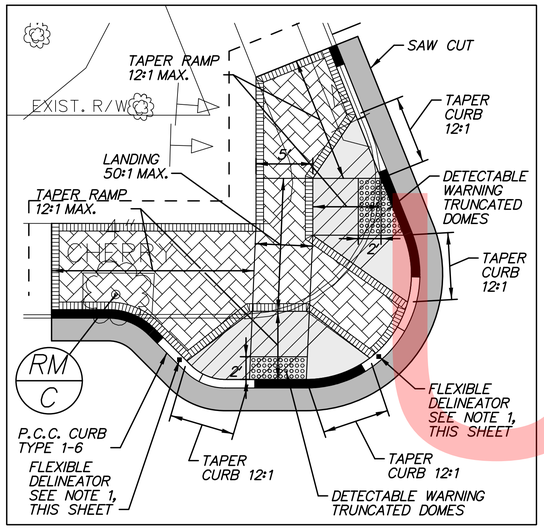
NOTES:

1. TRIM EXISTING LOW BRANCHES AND OVERHANGING VEGETATION.
2. THE EXISTING BRICK AREA, WHICH WILL BE REMOVED, SHALL BE BACKFILLED WITH MULCH.
3. THE CONTRACTOR SHALL SAW CUT AND REMOVE THE EXISTING SIDEWALK ADJACENT TO THE POLE BASE. THE CONTRACTOR SHALL TAPER THE PROPOSED SIDEWALK FROM THE LANDING AREA TO MEET THE EXISTING POLE BASE ELEVATION.
4. CONTRACTOR SHALL INSTALL CURB DELINEATORS PER ITEM NO. 720611 - FLEXIBLE DELINEATOR, PERMANENT IN THE LOCATIONS SHOWN. LOCATION OF DELINEATORS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

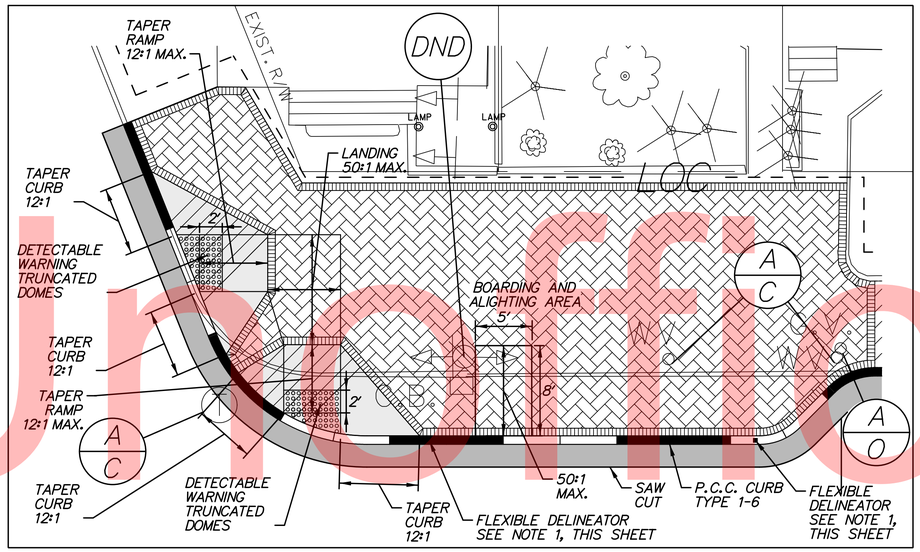
Unofficial Website Copy

N:\31678-029\CADD\DT02_DEAV.dgn
5/27/2014 3:09:18 PM

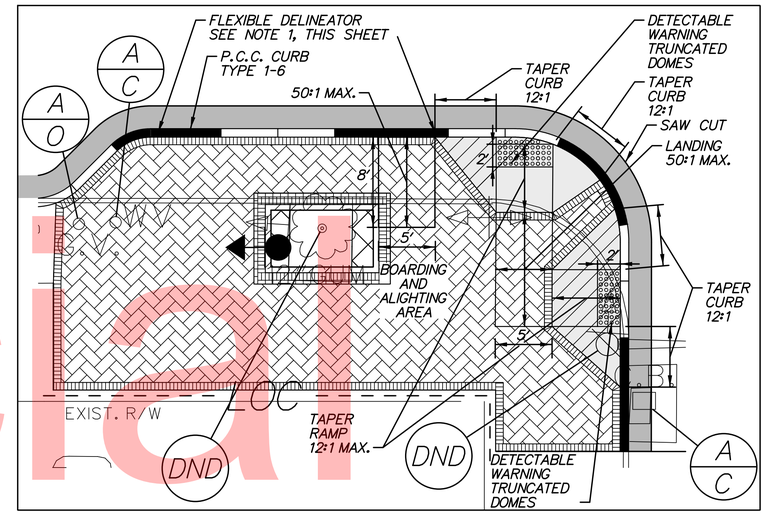
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	CONSTRUCTION DETAILS	DT-02
				COUNTY NEW CASTLE	DESIGNED BY: JJO		SHEET NO. 21
					CHECKED BY: TAO		TOTAL SHTS. 45



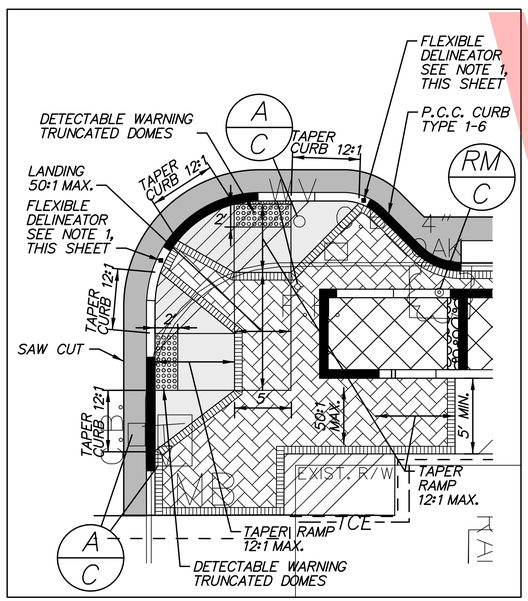
DELAWARE AVENUE AND N. LINCOLN STREET
CURB RAMPS, TYPE 4 - SW CORNER



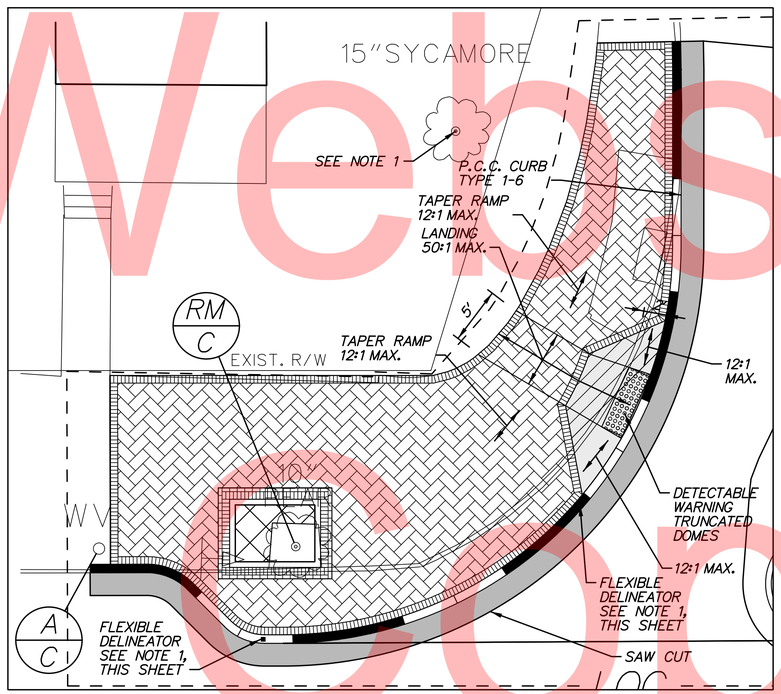
DELAWARE AVENUE AND N. LINCOLN STREET
CURB RAMPS, TYPE 4 - NW CORNER



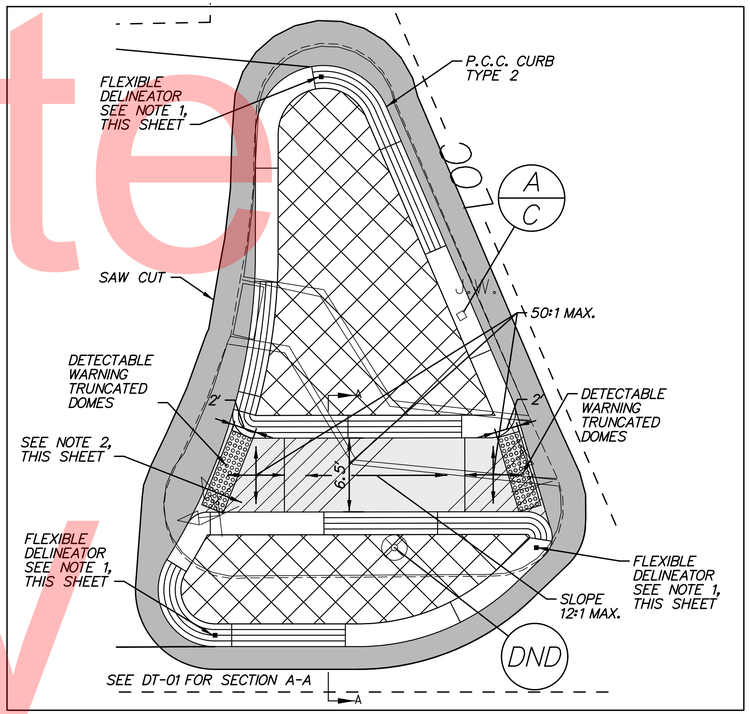
DELAWARE AVENUE AND N. LINCOLN STREET
CURB RAMPS, TYPE 4 - SE CORNER



DELAWARE AVENUE AND N. LINCOLN STREET
CURB RAMPS, TYPE 4 - NE CORNER



DELAWARE AVENUE AND N. UNION STREET
CURB RAMP, TYPE 4 - SW CORNER



DELAWARE AVENUE AND N. UNION STREET
CURB RAMP, TYPE 5 - ISLAND

NOTES:

1. CONTRACTOR SHALL INSTALL CURB DELINEATORS PER ITEM NO. 720611 - FLEXIBLE DELINEATOR, PERMANENT IN THE LOCATIONS SHOWN. LOCATION OF DELINEATORS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
2. CURB RAMPS ASSOCIATED WITH DELAWARE AVENUE AND N. UNION STREET ISLAND SHALL BE PAID FOR UNDER ITEM NO. 705010 - CURB RAMP, TYPE 5.

Unofficial Website Copy

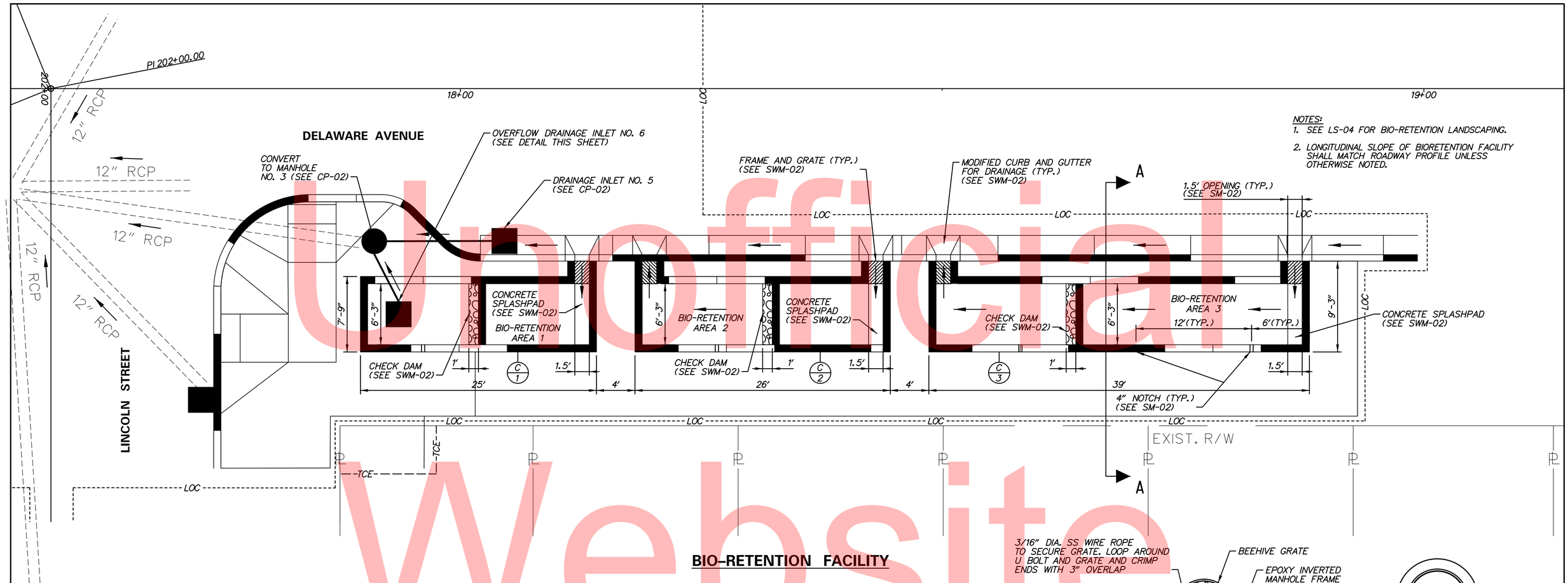
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	CONSTRUCTION DETAILS
				COUNTY NEW CASTLE	DESIGNED BY: JJO	
					CHECKED BY: TAO	

DT-03

SHEET NO. 22

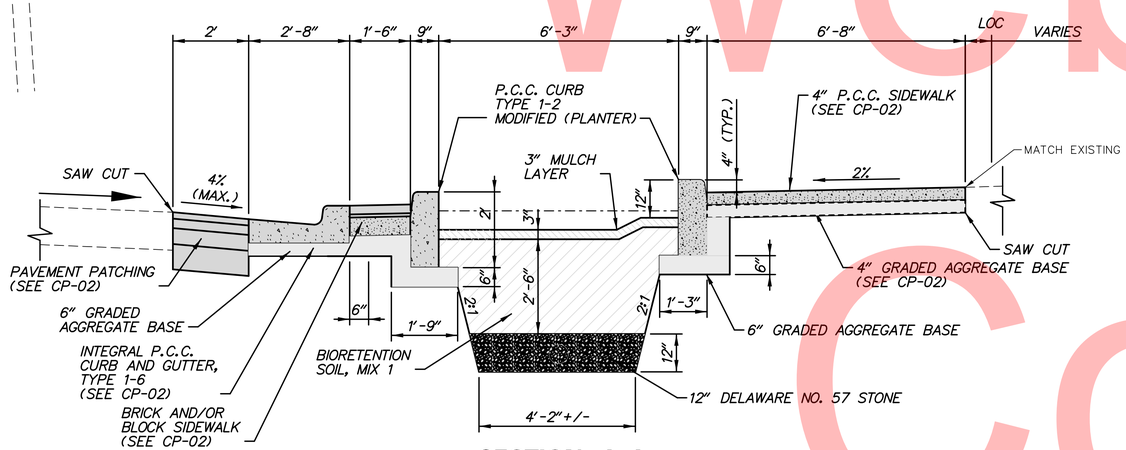
TOTAL SHTS. 45

N:\3678-029\CADD\DT03_DE.AV.dgn
5/2/2014 3:09:40 PM

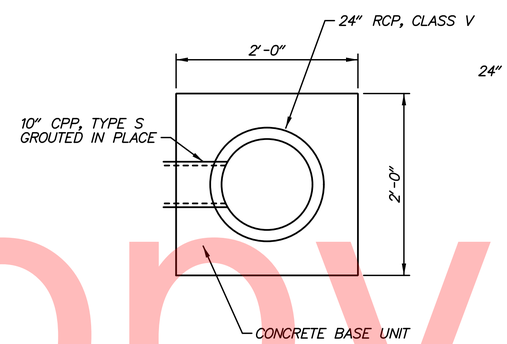


NOTES:
1. SEE LS-04 FOR BIO-RETENTION LANDSCAPING.
2. LONGITUDINAL SLOPE OF BIORETENTION FACILITY SHALL MATCH ROADWAY PROFILE UNLESS OTHERWISE NOTED.

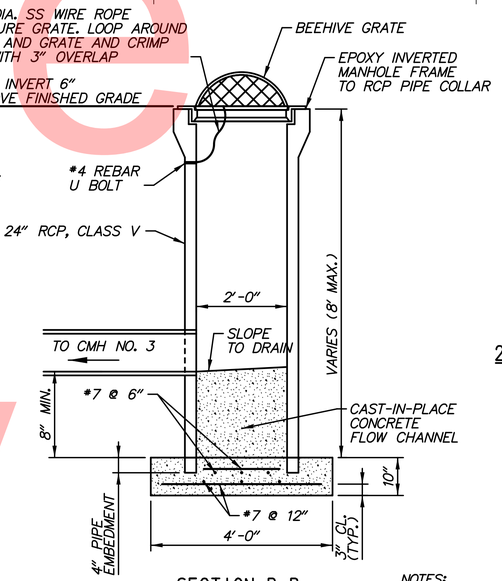
BIO-RETENTION FACILITY



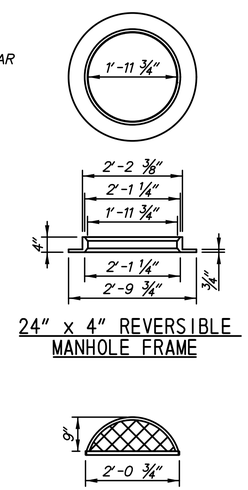
SECTION A–A



PLAN VIEW



SECTION B-B



24" x 4" REVERSIBLE MANHOLE FRAME

BEEHIVE GRATE

OVERFLOW DRAINAGE INLET NO. 6

SCALE: NONE

NOTES:
1. GRATE TO BE CAST IRON, ASTM A48 CL30.
2. ALL WORK ASSOCIATED WITH DRAINAGE INLET NO. 6 SHALL BE PAID FOR UNDER ITEM NO. 708512 - DRAINAGE INLET, SPECIAL I.

BIO-RETENTION CURB SCHEDULE

NO.	ITEM DESCRIPTION / TYPE	LENGTH
1	P.C.C. CURB, TYPE 1-2, MODIFIED	77.00
2	P.C.C. CURB, TYPE 1-2, MODIFIED	77.00
3	P.C.C. CURB, TYPE 1-2, MODIFIED	102

Unofficial Website Copy

N:\31678-029\CADD\SW01_DEAV.dgn
5/27/2014 2:38:53 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 5 10 15 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

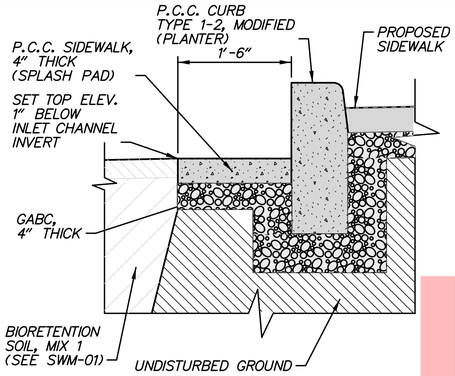
CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: MJC	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

STORMWATER MANAGEMENT PLAN

SWM-01

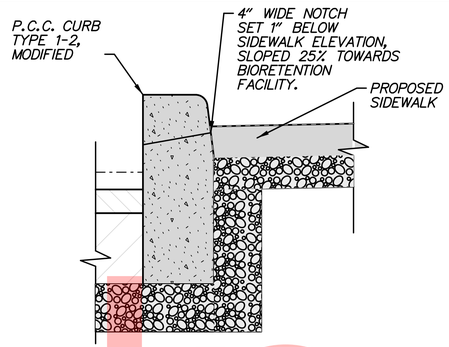
SHEET NO. 23

TOTAL SHTS. 45



CONCRETE SPLASH PAD DETAIL

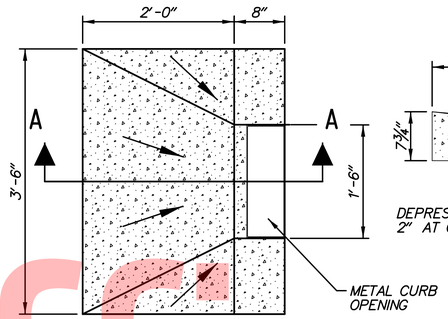
SCALE: NONE



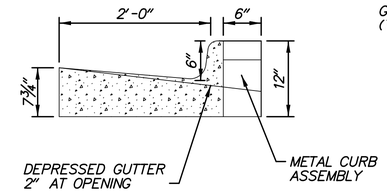
NOTES:
1. CONCRETE DRAINAGE NOTCH IS INCIDENTAL TO ITEM 701027 P.C.C. CURB, TYPE 1-2 MODIFIED

CONCRETE DRAINAGE NOTCH DETAIL

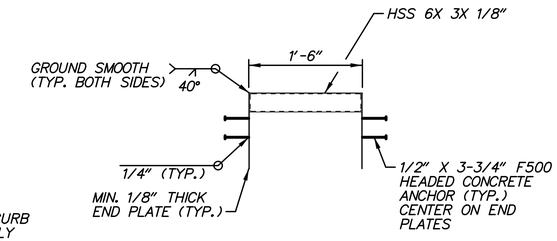
SCALE: NONE



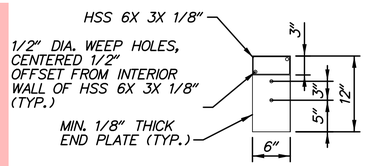
PLAN VIEW



SECTION A-A



FRONT VIEW - METAL CURB ASSEMBLY

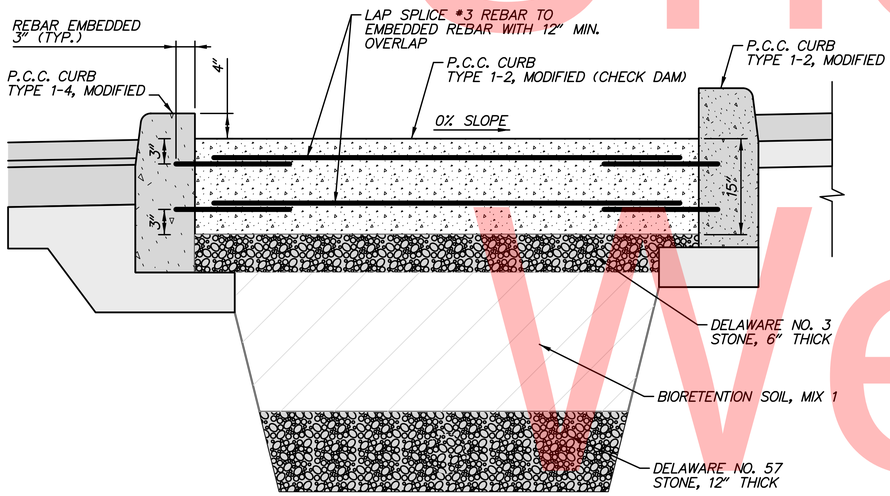


SIDE VIEW METAL CURB ASSEMBLY

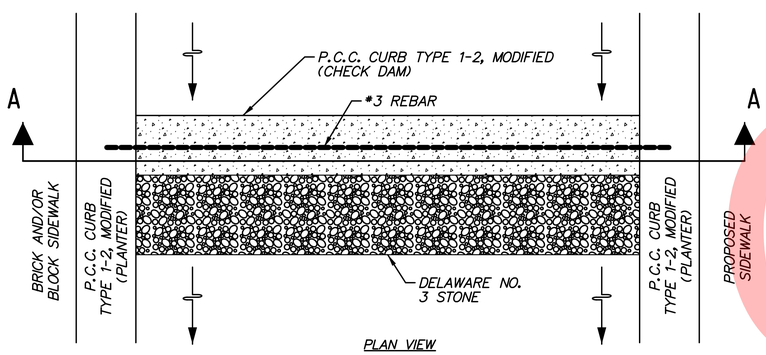
NOTES:
1. CURB OPENING IS INCIDENTAL TO ITEM 701017 - INTEGRAL P.C.C. CURB AND GUTTER, TYPE 1-6.
2. HEADED CONCRETE ANCHORS SHALL MEET THE REQUIREMENTS OF ASTM A-108
3. HSS 6 x 3 x ⅛ CHANNEL SHALL MEET THE REQUIREMENTS OF ASTM A-500 GRADE B.
4. END PLATES SHALL MEET THE REQUIREMENTS OF ASTM A-36.
5. ENTIRE ASSEMBLY SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A-123.

CURB OPENING DETAIL

SCALE: NONE



SECTION A-A

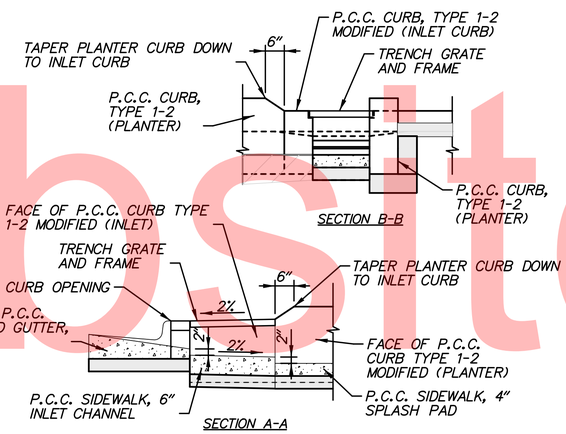


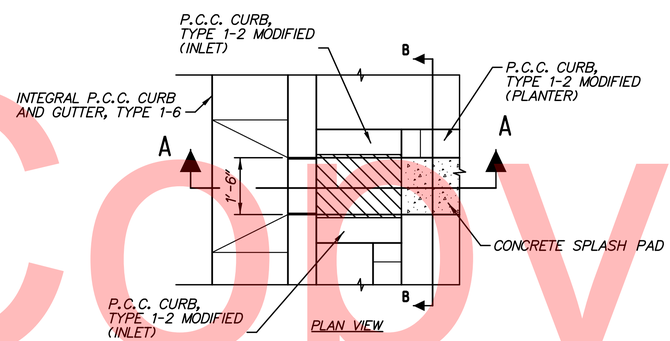
PLAN VIEW

CONCRETE CHECK DAM DETAIL

SCALE: NONE

NOTES:
1. CONCRETE CHECK DAM IS INCIDENTAL TO ITEM 701027 P.C.C. CURB, TYPE 1-2 MODIFIED

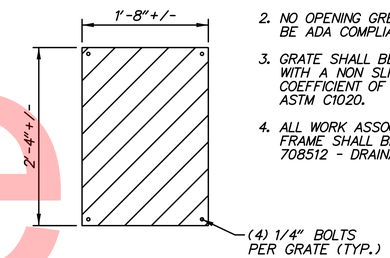




PLAN VIEW

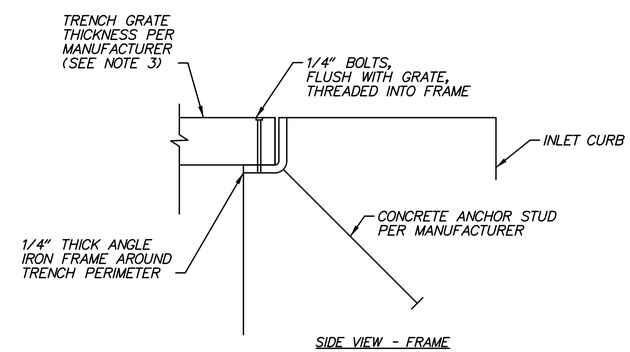
INLET CHANNEL DETAIL

SCALE: NONE



TOP VIEW - TRENCH GRATE

NOTES:
1. CAST IRON, NATURAL FINISH.
2. NO OPENING GREATER THAN 3/8" AND SHALL BE ADA COMPLIANT.
3. GRATE SHALL BE RATED FOR H-20 LOADING, WITH A NON SLIP SURFACE HAVING A STATIC COEFFICIENT OF FRICTION BETWEEN 0.60 AND 1.0 PER ASTM C1020.
4. ALL WORK ASSOCIATED WITH TRENCH GRATE AND FRAME SHALL BE PAID FOR UNDER ITEM NO. 708512 - DRAINAGE INLET, SPECIAL II.



SIDE VIEW - FRAME

TRENCH GRATE AND FRAME DETAIL

SCALE: NONE

Unofficial Website Copy

N:\31678-029\CADD\SW02_DEAV.dgn
5/2/2014 2:39:24 PM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: MJC / CHECKED BY: TAO
STORMWATER MANAGEMENT PLAN	SWM-02	SHEET NO. 24	TOTAL SHTS. 45		

GENERAL TRAFFIC CONTROL NOTES

1. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO THE FOLLOWING TYPICAL APPLICATIONS OF THE DELAWARE MUTCD:
   - TYPICAL APPLICATION 3 - WORK ON THE SHOULDER OF A TWO-LANE ROAD
   - TYPICAL APPLICATION 10 - LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS
   - TYPICAL APPLICATION 11B - LANE DIVERSION ON A TWO-LANE ROAD WITH LOW TRAFFIC VOLUMES OF THE DELAWARE MUTCD.
   - TYPICAL APPLICATION 28 - SIDEWALK DETOUR OR DIVERSION
   - TYPICAL APPLICATION 29 - CROSSWALK CLOSURES AND PEDESTRIAN DETOURS

2. ALL FIRE HYDRANTS SHALL BE CLEAR OF EQUIPMENT AT ALL TIMES.

3. ALL WORK SHALL BE PERFORMED BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M., MONDAY THROUGH FRIDAY. WORK SHALL NOT BE PERFORMED AT NIGHT OR WEEKENDS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ALL TRAVEL LANES SHALL BE RESTORED AT THE END OF EACH WORK DAY.

4. THE CONTRACTOR SHALL COORDINATE PLACEMENT OF WARNING SIGNS WITH THE ENGINEER TO ENSURE THAT SIGNS ARE PLACED IN AN APPROPRIATE LOCATION. TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING SIGNS, SHALL NOT OBSTRUCT THE SIDEWALK, UNLESS SPECIFIED ON THE CONSTRUCTION PHASING OR DETOUR PLANS.

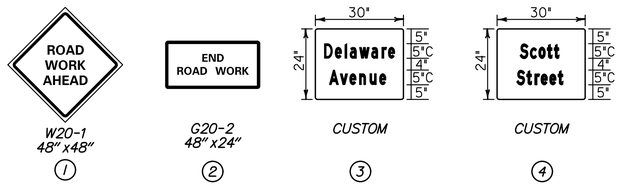
5. IF EXISTING PARKING WITHIN PROJECT LIMITS WILL BE PROHIBITED DURING NON-WORK OR OVERNIGHT HOURS PLASTIC DRUMS MUST BE USED TO DELINEATE THE WORK AREA. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO ALL RESIDENTS AND BUSINESSES WHERE PARKING RESTRICTIONS WILL OCCUR AT LEAST TWO (2) WEEKS PRIOR TO THE BEGINNING OF THE CONSTRUCTION PHASE. THE CONTRACTOR WILL ALSO BE REQUIRED TO NOTIFY THE CITY OF WILMINGTON PUBLIC WORKS DEPARTMENT AND THE CITY OF WILMINGTON POLICE DEPARTMENT AT LEAST TWO (2) WEEKS PRIOR TO PLACING THE PARKING RESTRICTIONS. THE CONTACT PERSON FOR THE CITY OF WILMINGTON PUBLIC WORKS IS DAVE BLANKENSHIP, DIRECTOR OF TRANSPORTATION, AND HE CAN BE REACHED BY PHONE AT (302) 576-3084. THE CONTACT PERSON FOR THE CITY OF WILMINGTON POLICE IS MICHAEL J SZCZERBA, CHIEF OF POLICE, AND HE CAN BE REACHED BY PHONE AT (302) 576-3940.

6. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY TRAFFIC CONTROL CHANNELIZING DEVICES FROM THE ROADWAY, INCLUDING CONES AND DRUMS. ALL TEMPORARY WARNING SIGNS ASSOCIATED WITH LANE SHIFTS SHALL ALSO BE REMOVED OR COMPLETELY COVERED AFTER REMOVAL OF THE CHANNELIZING DEVICES. TEMPORARY TRAFFIC CONTROL DEVICES, INCLUDING DRUMS, CONES, AND SIGNS, SHALL NOT BE STORED ON THE SIDEWALK OR IN AREAS WHERE ON-STREET PARKING IS PERMITTED.

7. THE CONSTRUCTION PHASING M.O.T. PLANS PERTAIN TO OVERNIGHT TRAFFIC CONFIGURATIONS. ALL OTHER WORK DEPICTED IN THE CONSTRUCTION PLANS NOT SHOWN IN PHASE 1 AND PHASE 2 SHALL BE PERFORMED IN ACCORDANCE WITH TYPICAL APPLICATIONS 10, 28, AND 29 IN THE MUTCD. THE CONTRACTOR SHALL ONLY PERFORM WORK ON ONE SIDE OF THE ROADWAY AT A TIME. PAYMENT FOR THIS WORK IS INCIDENTAL TO 743000 - MAINTENANCE OF TRAFFIC.

Unofficial Website Copy

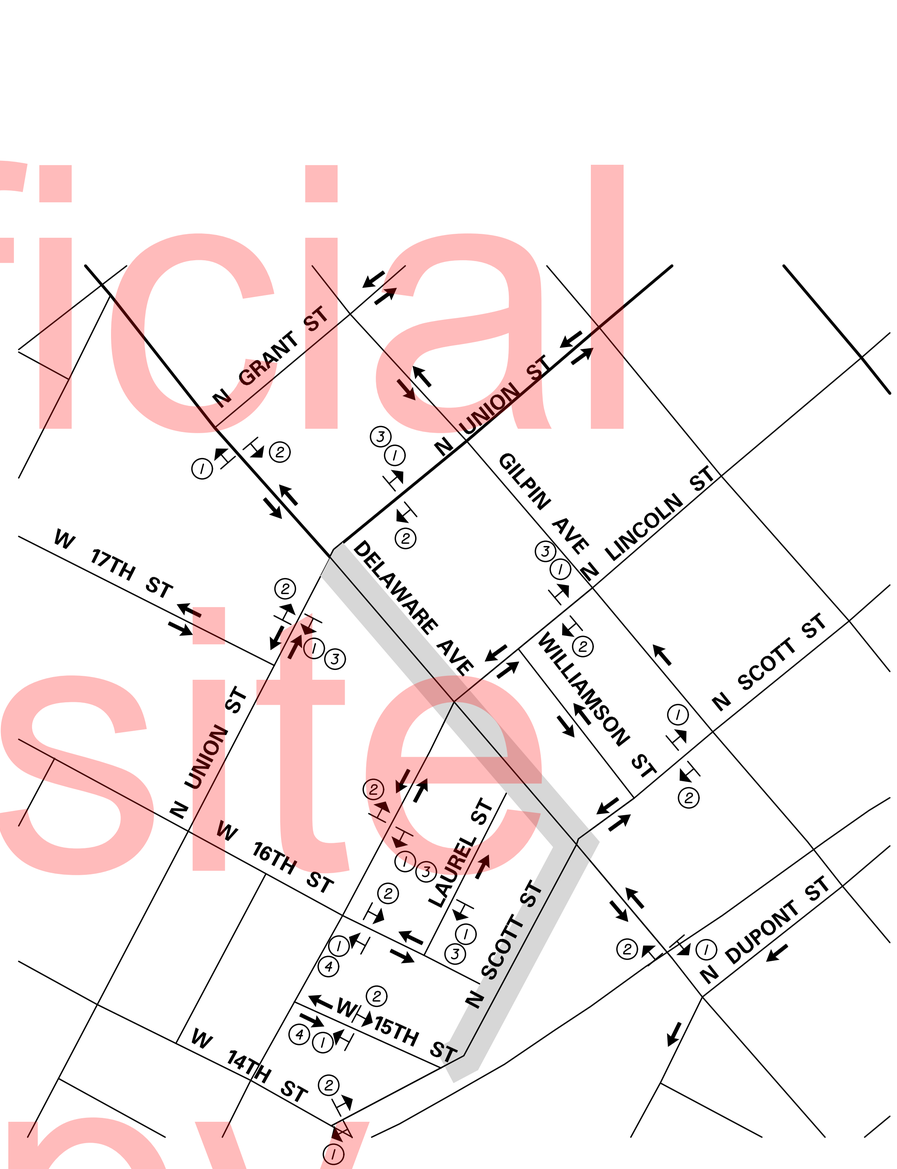
WARNING SIGN LEGEND



W20-1 48" x 48"	G20-2 48" x 24"	CUSTOM	CUSTOM
1	2	3	4

NOTES:

1. PLACE ALL WARNING SIGNS SHOWN ON THIS PLAN PRIOR TO THE BEGINNING OF CONSTRUCTION. ALL WARNING SIGNS SHALL BE PAID FOR UNDER ITEM 743024 - TEMPORARY WARNING SIGNS AND PLAQUES.
2. SEE INDIVIDUAL PHASING PLANS FOR PLACEMENT OF TEMPORARY WARNING SIGNS. LOCATION OF ALL WARNING SIGNS SHALL BE COORDINATED WITH THE ENGINEER.
3. WHERE POSSIBLE, WARNING SIGNS SHALL BE PLACED A MINIMUM OF 100' FROM THE INTERSECTION. ANY LOCATIONS WHERE THEY ARE SPACED LESS THAN 100' SHALL BE APPROVED BY THE ENGINEER.
4. ANY EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION WARNING SIGNS SHALL BE COMPLETELY COVERED, AS DIRECTED BY THE ENGINEER.



Unofficial Website Copy

N:\31678-029\CADD\CS02_DEAV.dgn
5/27/2014 3:15:07 PM

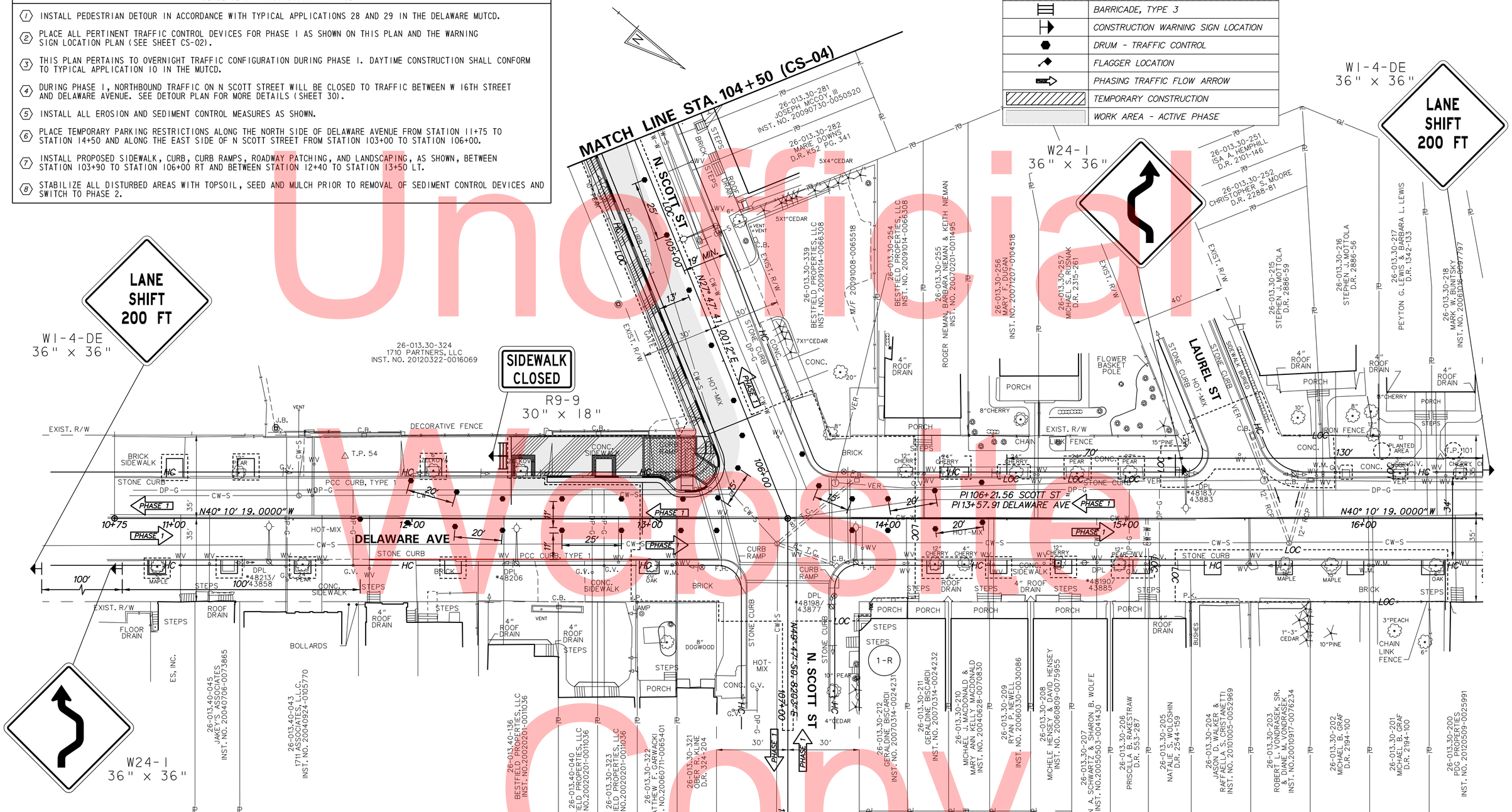
DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	WARNING SIGN LOCATION PLAN	CS-02
				COUNTY NEW CASTLE	DESIGNED BY: JJO		SHEET NO. 26
					CHECKED BY: TAO		TOTAL SHTS. 45

SEQUENCE OF CONSTRUCTION - PHASE 1

1. INSTALL PEDESTRIAN DETOUR IN ACCORDANCE WITH TYPICAL APPLICATIONS 28 AND 29 IN THE DELAWARE MUTCD.
2. PLACE ALL PERTINENT TRAFFIC CONTROL DEVICES FOR PHASE 1 AS SHOWN ON THIS PLAN AND THE WARNING SIGN LOCATION PLAN (SEE SHEET CS-02).
3. THIS PLAN PERTAINS TO OVERNIGHT TRAFFIC CONFIGURATION DURING PHASE 1. DAYTIME CONSTRUCTION SHALL CONFORM TO TYPICAL APPLICATION 10 IN THE MUTCD.
4. DURING PHASE 1, NORTHBOUND TRAFFIC ON N SCOTT STREET WILL BE CLOSED TO TRAFFIC BETWEEN W 16TH STREET AND DELAWARE AVENUE. SEE DETOUR PLAN FOR MORE DETAILS (SHEET 30).
5. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
6. PLACE TEMPORARY PARKING RESTRICTIONS ALONG THE NORTH SIDE OF DELAWARE AVENUE FROM STATION 11+75 TO STATION 14+50 AND ALONG THE EAST SIDE OF N SCOTT STREET FROM STATION 103+00 TO STATION 106+00.
7. INSTALL PROPOSED SIDEWALK, CURB, CURB RAMPS, ROADWAY PATCHING, AND LANDSCAPING, AS SHOWN, BETWEEN STATION 103+90 TO STATION 106+00 RT AND BETWEEN STATION 12+40 TO STATION 13+50 LT.
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 2.

CONSTRUCTION PHASING & M.O.T

	BARRICADE, TYPE 3
	CONSTRUCTION WARNING SIGN LOCATION
	DRUM - TRAFFIC CONTROL
	FLAGGER LOCATION
	PHASING TRAFFIC FLOW ARROW
	TEMPORARY CONSTRUCTION
	WORK AREA - ACTIVE PHASE



EROSION AND SEDIMENT CONTROL

	INLET SEDIMENT CONTROL
— SF —	SILT FENCE
—CSF—	CONSTRUCTION SAFETY FENCE
—RSF—	SILT FENCE - REINFORCED
	STONE CHECK DAM

Unofficial Website Copy

N:\31678-029\CADD\CS03_DEAV.dgn
5/2/2014 3:15:34 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

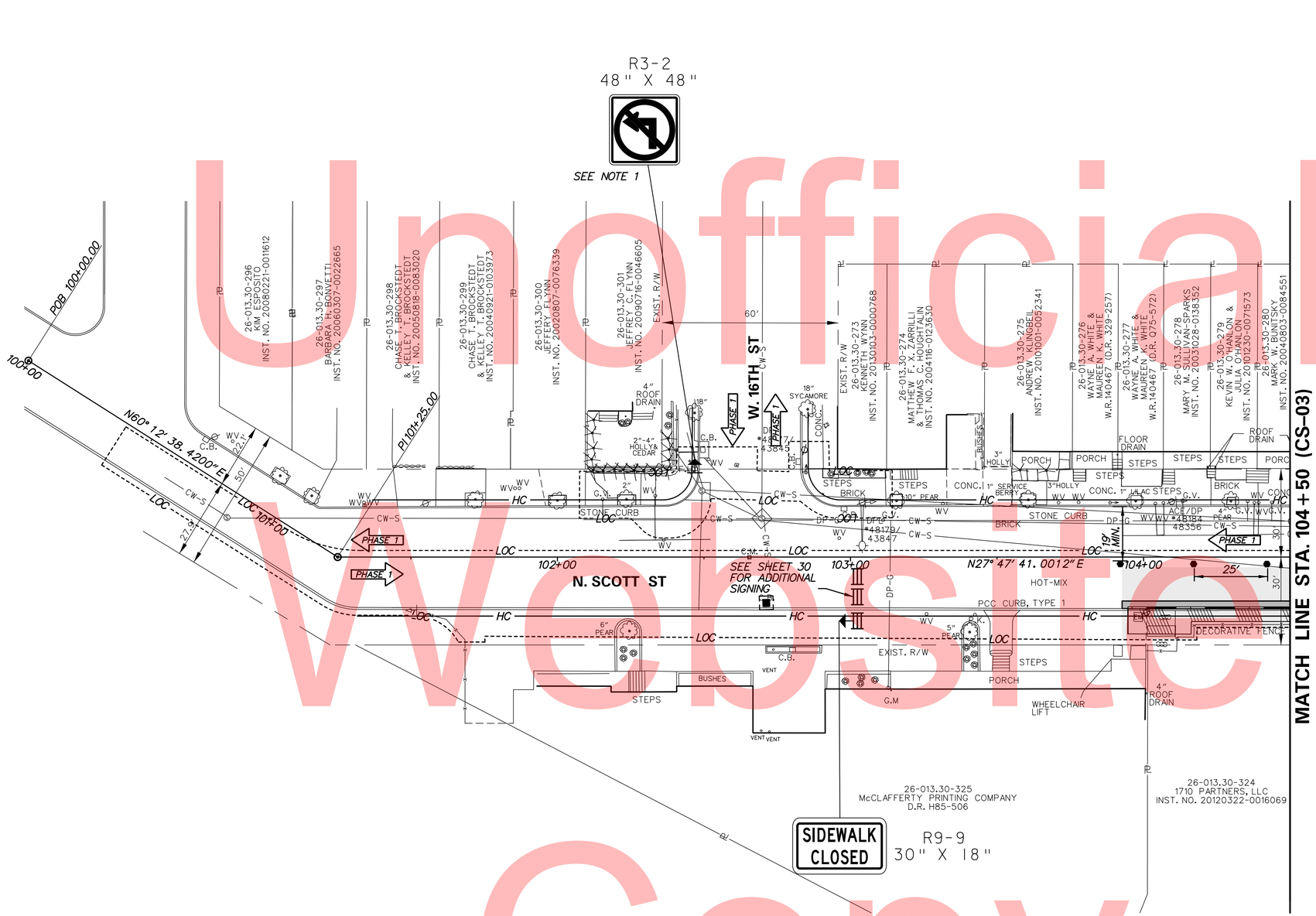
SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: DNP	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

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

CS-03
SHEET NO. 27
TOTAL SHTS. 45



Unofficial Website Copy

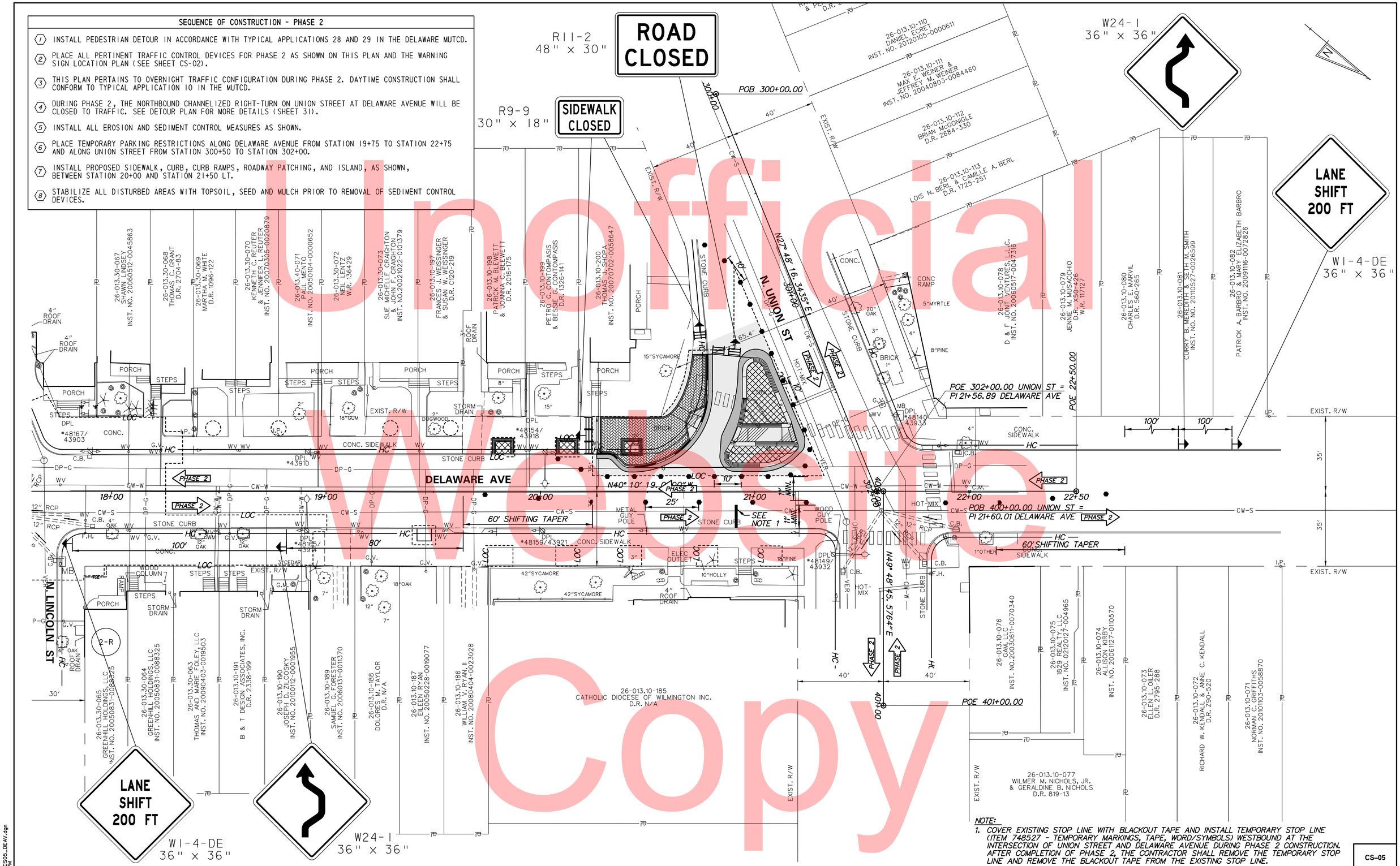
NOTE:
1. INSTALL R3-2 BELOW EXISTING STOP SIGN ON EASTBOUND W. 16TH STREET AT N. SCOTT STREET DURING PHASE 1 CONSTRUCTION.

N:\31678-028\CADD\CS04_DEAV.dgn
5/22/2014 3:15:57 PM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 20 40 60 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 1	CS-04
				COUNTY NEW CASTLE	DESIGNED BY: DNP		SHEET NO. 28
					CHECKED BY: TAO		TOTAL SHTS. 45

SEQUENCE OF CONSTRUCTION - PHASE 2

1. INSTALL PEDESTRIAN DETOUR IN ACCORDANCE WITH TYPICAL APPLICATIONS 28 AND 29 IN THE DELAWARE MUTCD.
2. PLACE ALL PERTINENT TRAFFIC CONTROL DEVICES FOR PHASE 2 AS SHOWN ON THIS PLAN AND THE WARNING SIGN LOCATION PLAN (SEE SHEET CS-02).
3. THIS PLAN PERTAINS TO OVERNIGHT TRAFFIC CONFIGURATION DURING PHASE 2. DAYTIME CONSTRUCTION SHALL CONFORM TO TYPICAL APPLICATION 10 IN THE MUTCD.
4. DURING PHASE 2, THE NORTHBOUND CHANNELIZED RIGHT-TURN ON UNION STREET AT DELAWARE AVENUE WILL BE CLOSED TO TRAFFIC. SEE DETOUR PLAN FOR MORE DETAILS (SHEET 31).
5. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN.
6. PLACE TEMPORARY PARKING RESTRICTIONS ALONG DELAWARE AVENUE FROM STATION 19+75 TO STATION 22+75 AND ALONG UNION STREET FROM STATION 300+50 TO STATION 302+00.
7. INSTALL PROPOSED SIDEWALK, CURB, CURB RAMPS, ROADWAY PATCHING, AND ISLAND, AS SHOWN, BETWEEN STATION 20+00 AND STATION 21+50 LT.
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES.



NOTE:

1. COVER EXISTING STOP LINE WITH BLACKOUT TAPE AND INSTALL TEMPORARY STOP LINE (ITEM 748527 - TEMPORARY MARKINGS, TAPE, WORD/SYMBOLS) WESTBOUND AT THE INTERSECTION OF UNION STREET AND DELAWARE AVENUE DURING PHASE 2 CONSTRUCTION. AFTER COMPLETION OF PHASE 2, THE CONTRACTOR SHALL REMOVE THE TEMPORARY STOP LINE AND REMOVE THE BLACKOUT TAPE FROM THE EXISTING STOP LINE.

Unofficial Website Copy

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 20 40 60 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: JJO / CHECKED BY: TAO
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN – PHASE 2	CS-05	SHEET NO. 29	TOTAL SHTS. 45		

N:\31678-029\CAD\CS05_DEAV.dgn 5/2/2014 3:16:27 PM

Unofficial Website

CHANGEABLE MESSAGE BOARDS

SPECIAL SIGNS

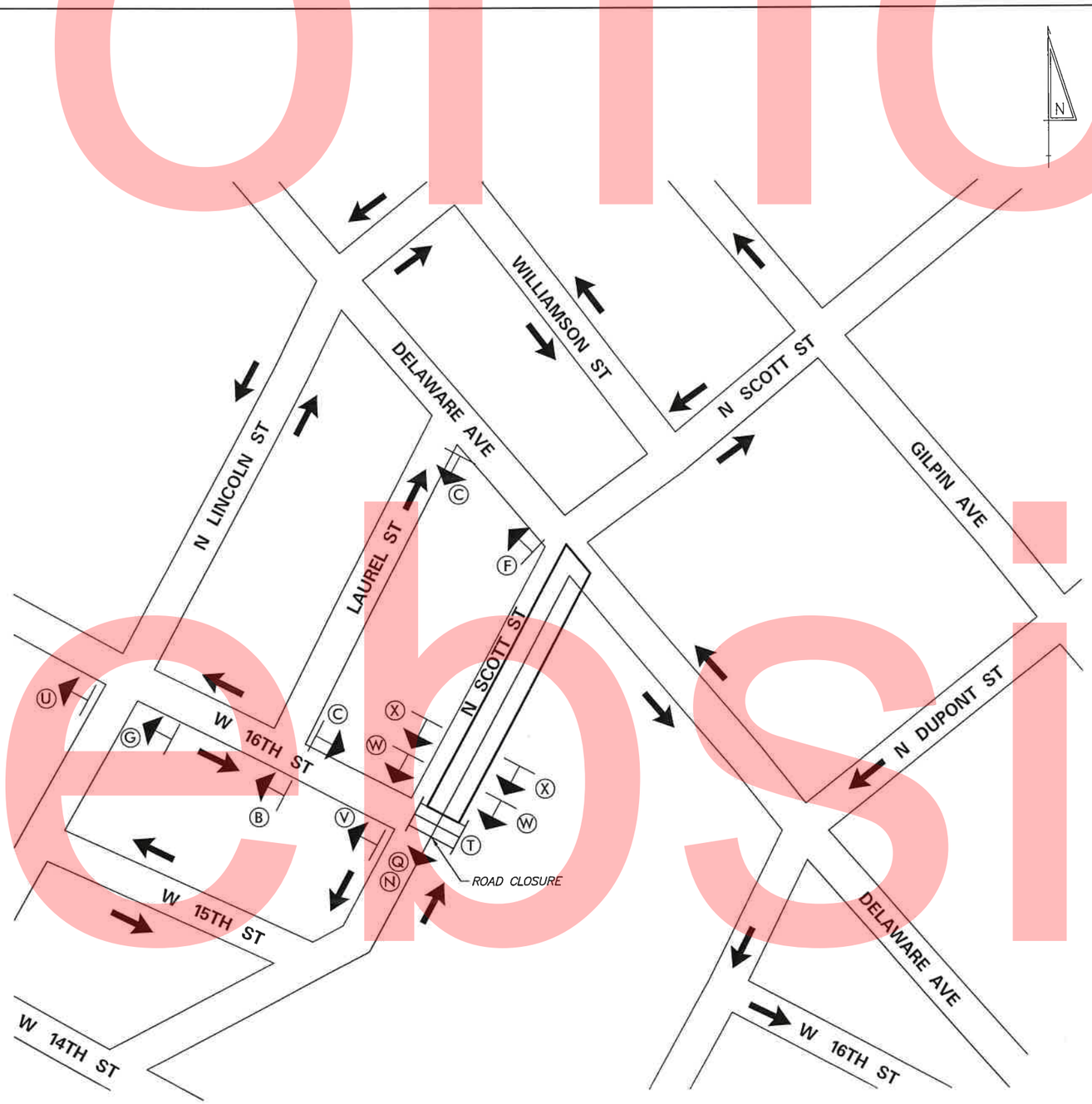
(W) DO NOT ENTER
R5-1
48" X 48"

(X) WRONG WAY
R5-1A
48" X 48"

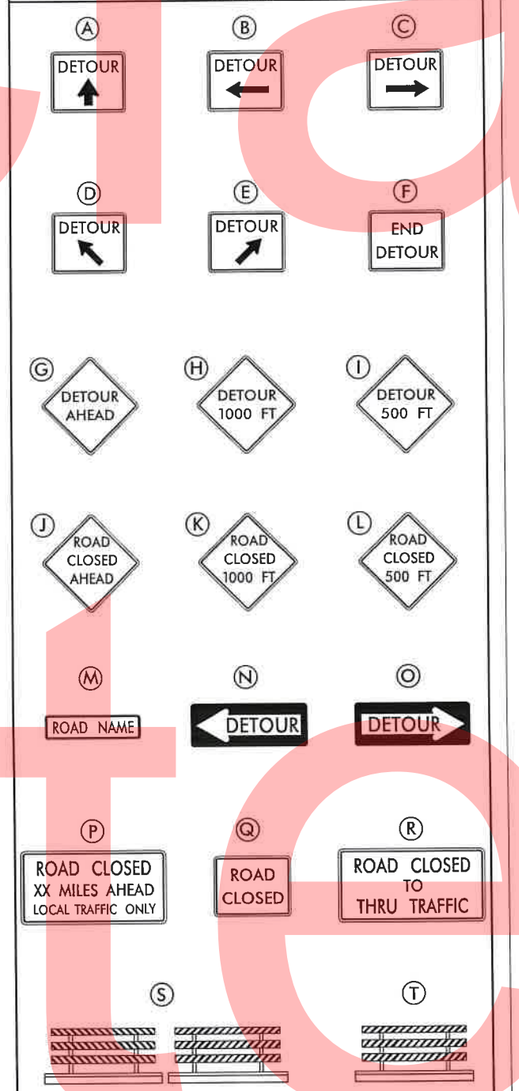
(U) 48" × 72"
NO LEFT TURN AT Scott St
FOLLOW DETOUR
6"C 4" 6"C 4" 6"C 4" 6"C 4" 6"C 4" 6"C

SIGN DETAIL
D/G FLOURESCENT ORANGE – BLACK LEGEND

(V)
R3-2
48" X 48"



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

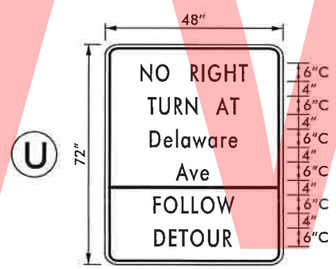
RECOMMENDED _____ DATE: _____	RECOMMENDED [signature] DATE: 9-29-2014	RECOMMENDED [signature] DATE: 9/26/14	APPROVED CHIEF SAFETY OFFICER [signature] DATE: 9-29-14
			APPROVED TRAFFIC ENGINEER [signature] DATE: 9/29/14

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUM / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201020009	PERMIT NO. N/A	DETOUR PLAN PHASE 1	SHEET NO. 30
				COUNTY NEW CASTLE	DESIGNED BY: DNP		TOTAL SHTS. 45
					CHECKED BY: TAO		

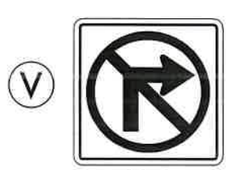
Unofficial Website

CHANGEABLE MESSAGE BOARDS

SPECIAL SIGNS

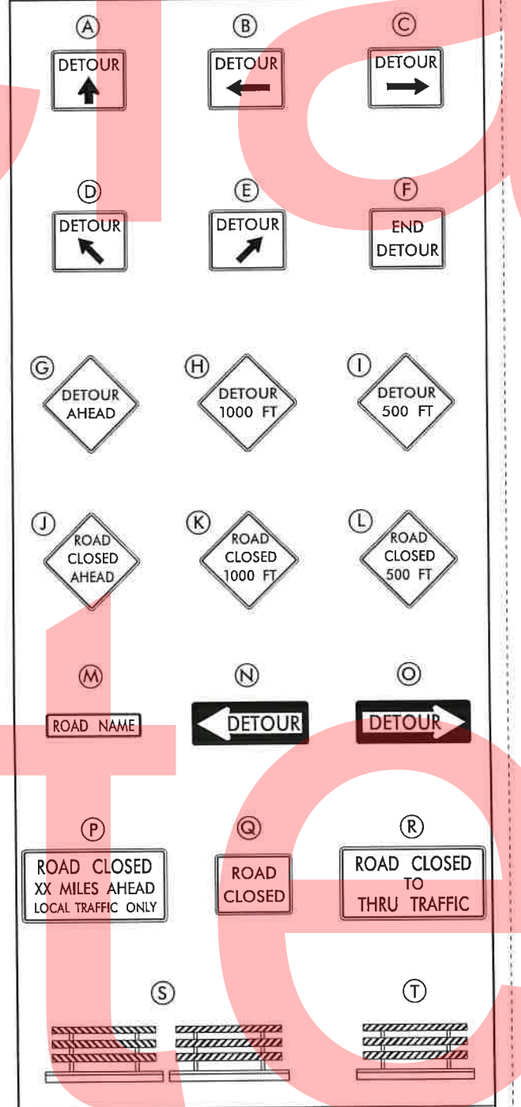


SIGN DETAIL
D/G FLOURESCENT ORANGE - BLACK LEGEND



R3-1
48" X 48"

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

RECOMMENDED _____ DATE: _____ | RECOMMENDED _____ DATE: 9-29-2014 | RECOMMENDED _____ DATE: 9/26/14 | APPROVED CHIEF SAFETY OFFICER _____ DATE: 9-29-14 | APPROVED TRAFFIC ENGINEER _____ DATE: 9/29/14

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUM / REVISIONS

NOT TO SCALE

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

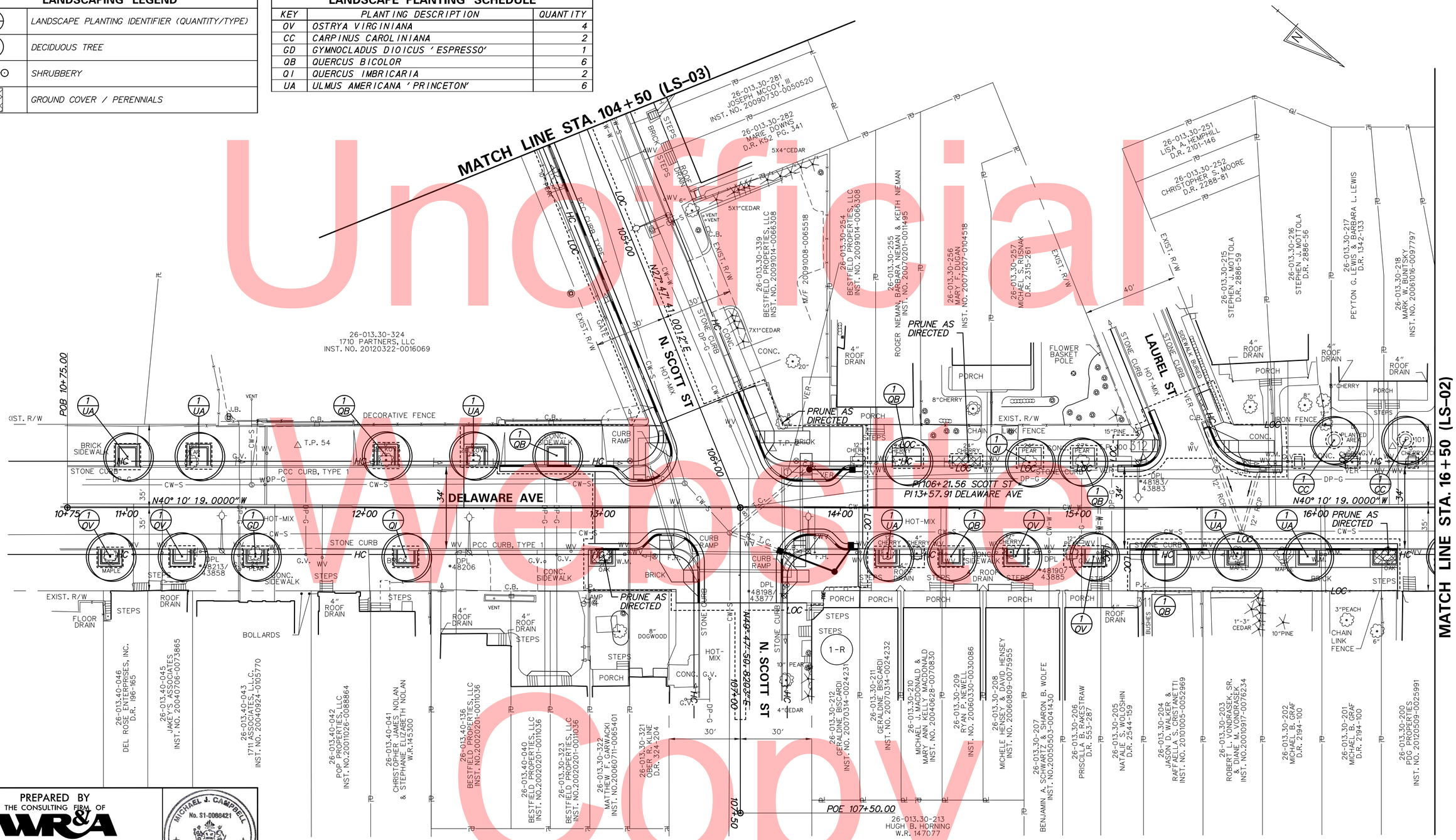
CONTRACT	PERMIT NO.	N/A
T201020009	DESIGNED BY: DNP	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

DETOUR PLAN PHASE 2

SHEET NO. 31 / TOTAL SHTS. 45

LANDSCAPING LEGEND	
# / XX	LANDSCAPE PLANTING IDENTIFIER (QUANTITY/TYPE)
	DECIDUOUS TREE
	SHRUBBERY
	GROUND COVER / PERENNIALS

LANDSCAPE PLANTING SCHEDULE		
KEY	PLANTING DESCRIPTION	QUANTITY
OV	OSTRYA VIRGINIANA	4
CC	CARPINUS CAROLINIANA	2
GD	GYMNOCLADUS DIOICUS 'ESPRESSO'	1
QB	QUERCUS BICOLOR	6
QI	QUERCUS IMBRICARIA	2
UA	ULMUS AMERICANA 'PRINCETON'	6



Unofficial Web Site Copy

PREPARED BY
THE CONSULTING FIRM OF
WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
ENGINEERS · ARCHITECTS · PLANNERS

MICHAEL J. CAMPBELL, RLA

RECOMMENDED AUGUST 22 2014

MICHAEL J. CAMPBELL
No. S1-0008421
STATE OF DELAWARE
REGISTERED LANDSCAPE ARCHITECT

SEAL

N:\33678-029\CADD\LS01_DEAV.dgn
8/24/2014 1:51:46 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

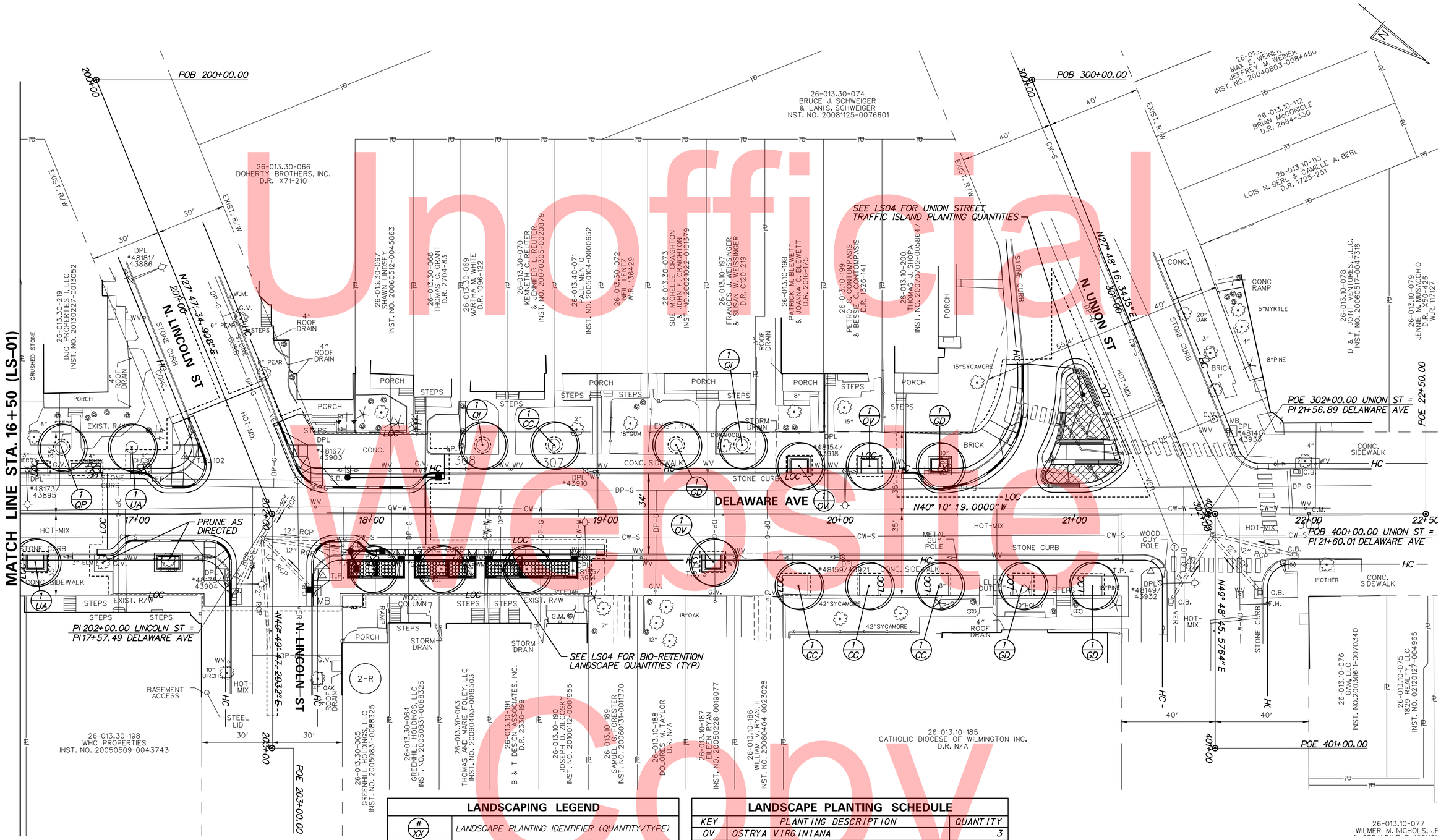
CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: MJC	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

LANDSCAPE PLAN

LS-01

SHEET NO. 32

TOTAL SHTS. 45



LANDSCAPING LEGEND

# / XX	LANDSCAPE PLANTING IDENTIFIER (QUANTITY/TYPE)
	DECIDUOUS TREE
	SHRUBBERY
	GROUND COVER / PERENNIALS

LANDSCAPE PLANTING SCHEDULE

KEY	PLANTING DESCRIPTION	QUANTITY
OV	OSTRYA VIRGINIANA	3
CC	CARPINUS CAROLINIANA	4
GD	GYMNOCLADUS DIOICUS 'ESPRESSO'	4
QI	QUERCUS IMBRICARIA	2
QP	QUERCUS PHELLOS	1
UA	ULMUS AMERICANA 'PRINCETON'	2

N:\31678-029\CADD\LS02_DEAV.dgn
5/27/2014 2:59:51 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: MJC	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

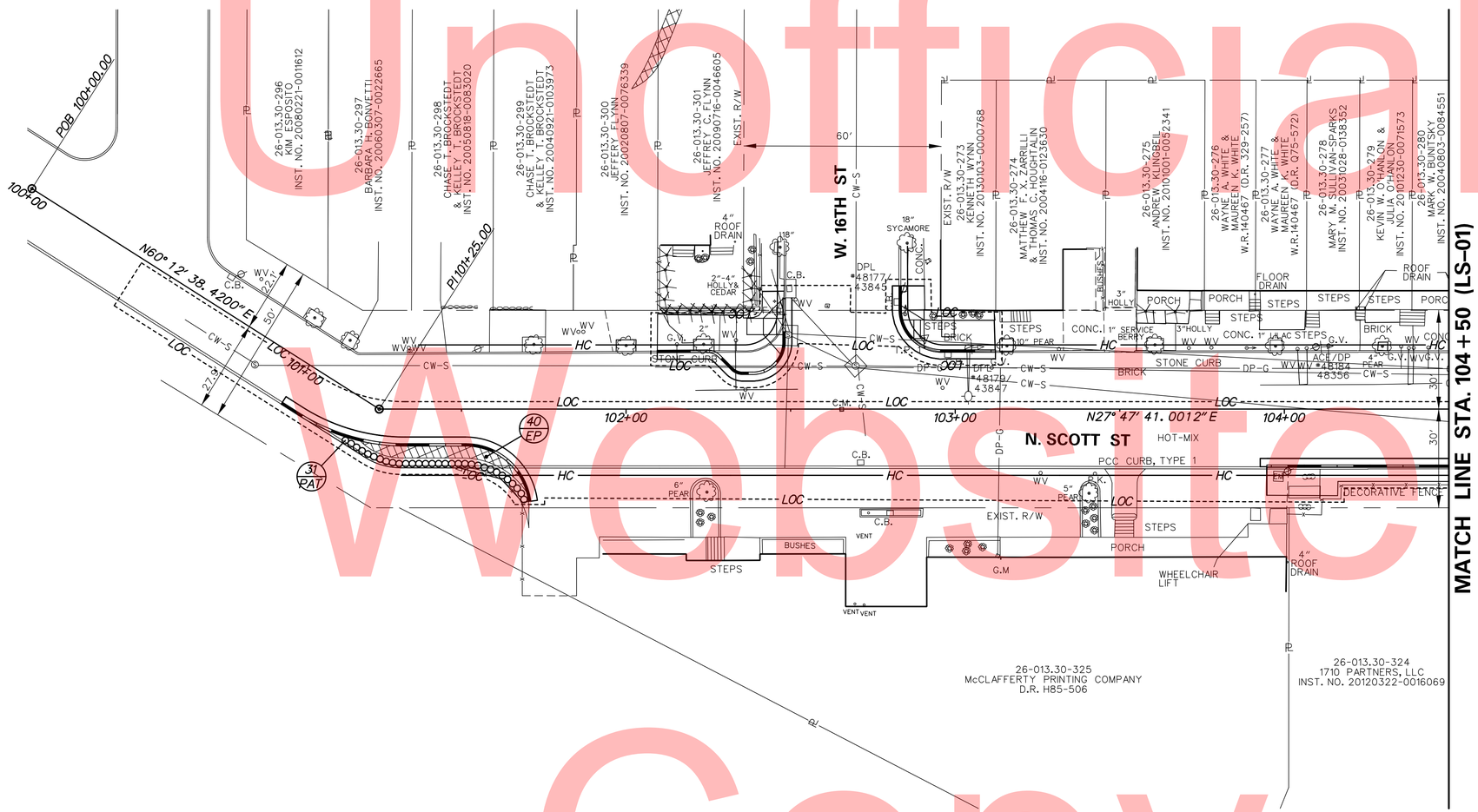
LANDSCAPE PLAN

LS-02

SHEET NO.	TOTAL SHTS.
33	45

LANDSCAPING LEGEND	
# / XX	LANDSCAPE PLANTING IDENTIFIER (QUANTITY/TYPE)
	DECIDUOUS TREE
	SHRUBBERY
	GROUND COVER / PERENNIALS

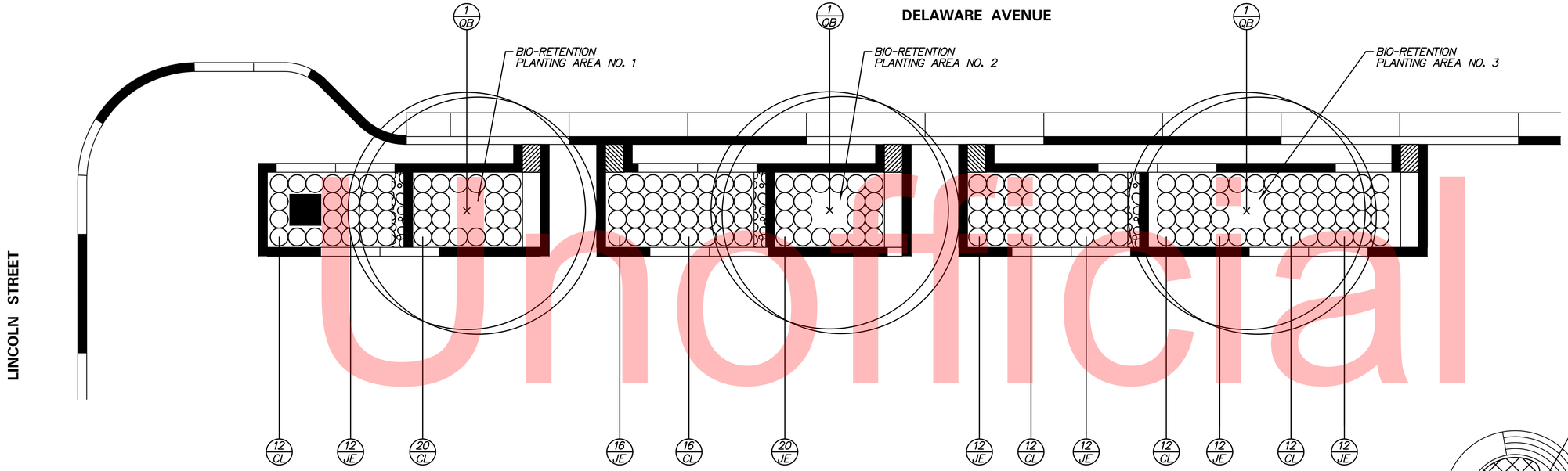
LANDSCAPE PLANTING SCHEDULE		
KEY	PLANTING DESCRIPTION	QUANTITY
EP	ECHINACEA PURPUREA	40
PAT	PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE'	31



Unofficial Website Copy

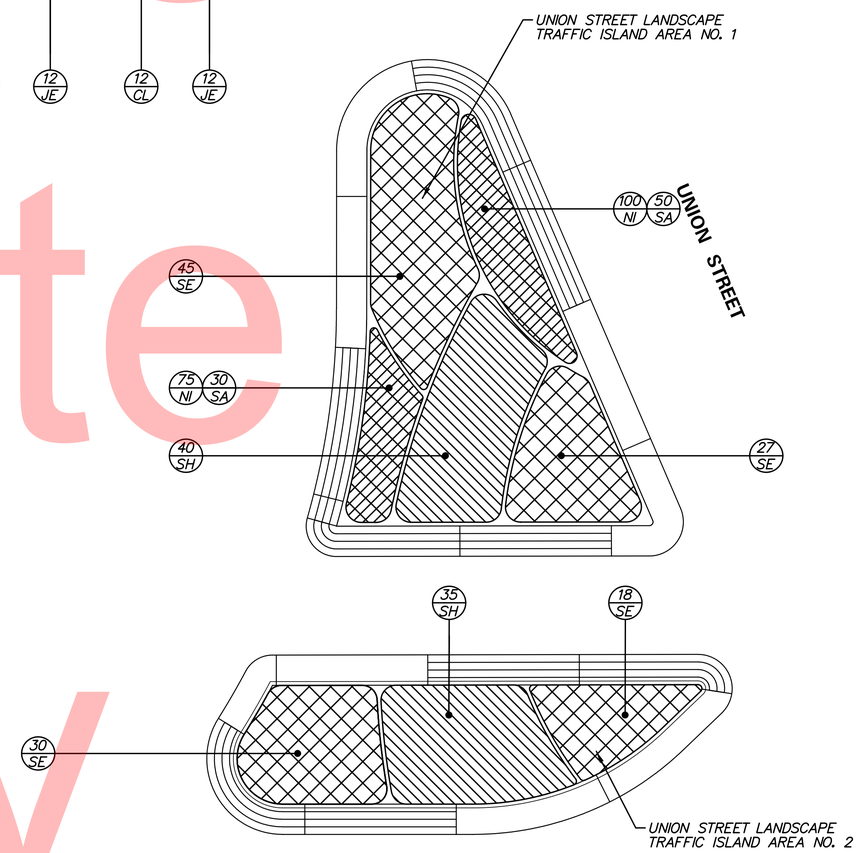
N:\31678-029\CADD\LS03_DEAV.dgn
5/22/2014 2:57:18 PM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 20 40 60 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	LANDSCAPE PLAN	LS-03 SHEET NO. 34
				COUNTY NEW CASTLE	DESIGNED BY: MJC		TOTAL SHTS. 45
					CHECKED BY: TAO		



BIORETENTION PLANTING LAYOUT

SCALE: 1" =5'



UNION STREET TRAFFIC ISLAND PLANTING LAYOUT

SCALE: 1" =5'

LANDSCAPING LEGEND	
# XX	LANDSCAPE PLANTING IDENTIFIER (QUANTITY/TYPE)
·	DECIDUOUS TREE
⊙	ORNAMENTAL GRASS/SHRUB
	GROUND COVER / PERENNIALS

LANDSCAPE PLANTING SCHEDULE		
KEY	PLANTING DESCRIPTION	QUANTITY
CL	CAREX LURIDA	84
JE	JUNCUS EFFUFUS VAR. GRACILIS	96
NI	NARCISSUS 'ICE FOLLIES'	175
SA	SEDUM 'ALBUM'	80
SE	SEDUM 'AUTUMN JOY'	120
SH	SPOROBOLUS HETEROLEPIS	75
QB	QUERCUS BICOLOR	3

Unofficial Website Copy

N:\31678-029\CADD\LS04_DEAV.dgn
5/27/2014 2:57:45 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: MJC	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

LANDSCAPE PLAN

LS-04

SHEET NO. 35

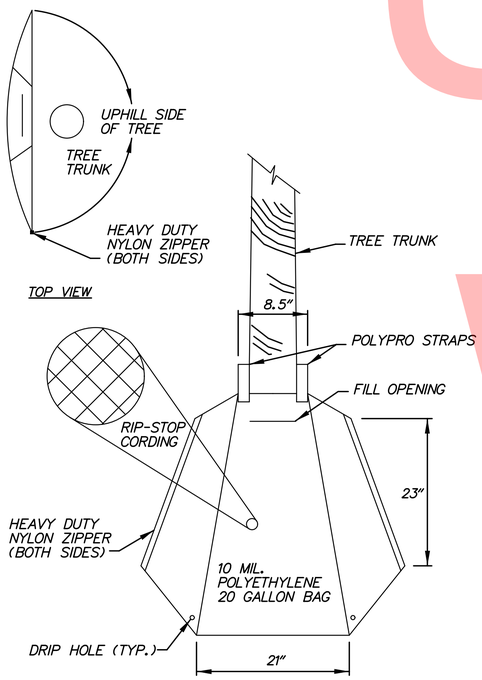
TOTAL SHTS. 45

TOTAL LANDSCAPE PLANTING SCHEDULE

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	METHOD	COMMENTS
TREES						
OV	7	OSTRYA VIRGINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B	
CC	6	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" CAL.	B&B	
GD	5	GYMNOCLADUS DIOICUS 'ESPRESSO'	ESPRESSO KENTUCKY COFFEE TREE	2.5" CAL.	B&B	
QB	9	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B	
QI	4	QUERCUS IMBRICARIA	SHINGLE OAK	2.5" CAL.	B&B	
QP	1	QUERCUS PHELLOS	WILLOW OAK	2.5" CAL.	B&B	
UA	8	ULMUS AMERICANA 'PRINCETON'	PRINCETON ELM	2.5" CAL.	B&B	
ORNAMENTAL GRASSES/PERENNIALS/ SHRUBS/ GROUNDCOVERS						
CL	84	CAREX LURIDA	SHALLOW SEDGE	1 GAL.	CONTAINER	SPACE 18" O.C.
EP	40	ECHINACEA PURPUREA	EASTERN PURPLE CONEFLOWER	1 GAL.	CONTAINER	SPACE 18" O.C.
JE	96	JUNCUS EFFUFUS	COMMON RUSH	1 GAL.	CONTAINER	SPACE 18" O.C.
NI	175	NARCISSUS 'ICE FOLLIES'	DAFFODIL	DN1	BULB	SPACE 8" O.C.
PAT	31	PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE'	RUSSIAN SAGE	1 GAL.	CONTAINER	SPACE 24" O.C.
SA	80	SEDUM 'ALBUM'	WHITE STONECROP	1 GAL.	CONTAINER	SPACE 12" O.C.
SE	120	SEDUM 'AUTMN JOY'	AUTUMN JOY SEDUM	1 GAL.	CONTAINER	SPACE 18" O.C.
SH	75	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	1 GAL.	CONTAINER	SPACE 18" O.C.

NOTES:

1. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL QUANTITIES SHOWN ON THE PLANS WITH TOTALS IN THE PLANT SCHEDULE. WHERE DISCREPANCIES OCCUR BETWEEN PLANS AND THE PLANT SCHEDULE, THE PLANS SHALL GOVERN.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY TO LOCATE ALL UNDERGROUND UTILITY LINES PRIOR TO INSTALLATION OF PLANT MATERIAL. THE CONTRACTOR SHALL ALSO BE COGNIZANT OF PROPOSED UTILITY LOCATIONS AS SHOWN ON THE PLANS.
3. ALL PLANTING OPERATIONS SHALL BE UNDER THE SUPERVISION OF A CERTIFIED LANDSCAPE PROFESSIONAL AS CERTIFIED BY A NATIONAL, STATE, OR OTHER PROFESSIONAL RECOGNIZED ORGANIZATION.
4. NO PLANT MATERIAL SHALL BE PLANTED DIRECTLY IN FRONT OF ROADWAY SIGN SIGHT LINES.
5. ALL EXISTING TREES TO REMAIN THAT ARE DISTURBED DURING CONSTRUCTION SHALL HAVE THE DAMAGE CORRECTED BY A CERTIFIED ARBORIST AT THE EXPENSE OF THE CONTRACTOR. IF DAMAGE IS DETERMINED TO BE TOO EXTENSIVE, THE TREE SHALL BE REPLACED WITH ONE OF THE SAME SPECIES, AT THE CONTRACTOR'S EXPENSE. QUANTITY AND SIZE OF SUCH REPLACEMENTS SHALL BE AT THE DISCRETION OF THE ENGINEER.
6. CONTRACTOR SHALL BE REQUIRED TO WATER ALL MAJOR AND MINOR TREES, SHRUBS AND ALL HERBACEOUS BEDS BI-WEEKLY DURING THE PERIOD FROM JUNE 15 THROUGH OCTOBER 1. WATERING, ONCE INITIATED, SHALL CONTINUE WITHOUT INTERRUPTION UNTIL ALL PLANTS ON THE PROJECT HAVE BEEN WATERED. PAYMENT SHALL BE PER 1,000 GALS OF WATER APPLIED AND SHALL BE BASED ON THE FOLLOWING SCHEDULE: MAJOR TREES - 15 GALS PER TREE, MINOR TREES - 10 GALS PER TREE, SHRUBS - 5 GALS PER SHRUB, PERENNIALS - 10 GALS PER 100 SQUARE FEET OF PLANTING BED. WATER USED FOR THIS ITEM SHALL MEET THE REQUIREMENTS OF SECTION 803 OF THE STANDARD SPECIFICATIONS. TREE WATERING BAGS, IF UTILIZED, SHALL BE FILLED AS A PART OF THE WATERING OPERATION; PAYMENT SHALL BE AS DETAILED HEREIN. TREE WATERING BAGS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED PRIOR TO FINAL INSPECTION.
7. USE DELDOT STANDARD DETAILS L1-1, L1-2 AND L1-3, AS APPROPRIATE.
8. EXISTING TREES IDENTIFIED TO BE PRUNED AS DIRECTED SHALL PRUNED BY A CERTIFIED ARBORIST IN ACCORDANCE WITH I.S.A STANDARDS. THIS WORK IS IN ADDITION TO PRUNING A VERTICAL CLEAR SPACE TO A HEIGHT OF 10 FEET AS OUTLINED IN THE PROJECT NOTES. CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY URBAN FOREST ADMINISTRATOR, AMANDA TOLINO AT (302) 576-2582 OR ATOLINO@WILMINGTON.DE.GOV, AT LEAST TWO (2) DAYS PRIOR TO THE PRUNING OPERATION. ALL COSTS ASSOCIATED WITH THE ABOVE WORK TO BE PAID UNDER CLEARING AND GRUBBING.



NOTE: DRIP IRRIGATION DEVICE IS INCIDENTAL TO ITEM 737523-PLANTING.

NOTES:

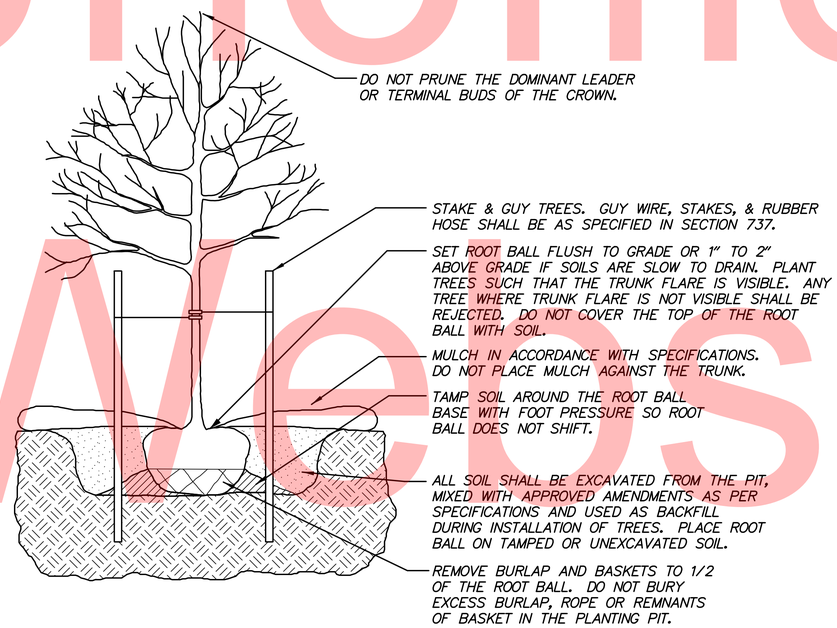
1. 10 MIL. POLYETHYLENE - UV TREATED AND REINFORCED
2. FILL OPENING ACCEPTS HOSES UP TO 3" IN DIAMETER
3. INSTALL DRIP IRRIGATION BAG OPENING ON DOWNHILL SIDE OF SLOPE
4. USE 2 HOLES FOR IRRIGATION

DRIP TIMES:

2 HOLES 6 - 10 HOURS
3 HOLES 2 - 6 HOURS
4 HOLES 1 - 2 HOURS

PORTABLE DRIP IRRIGATION BAG DETAIL

SCALE: NONE

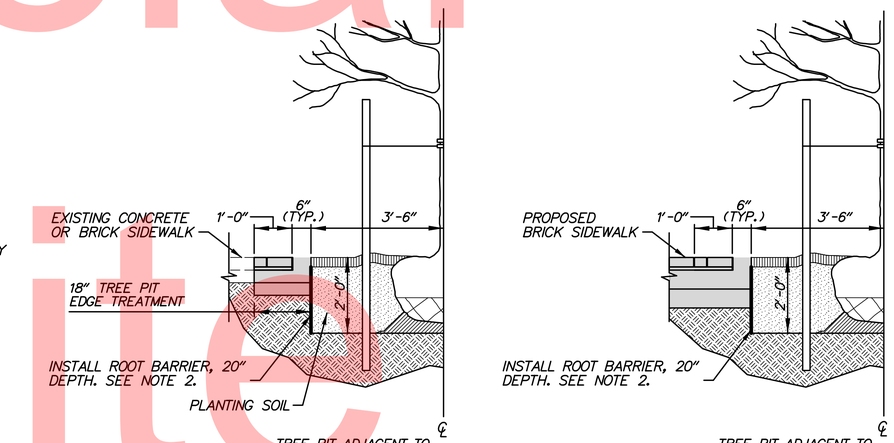


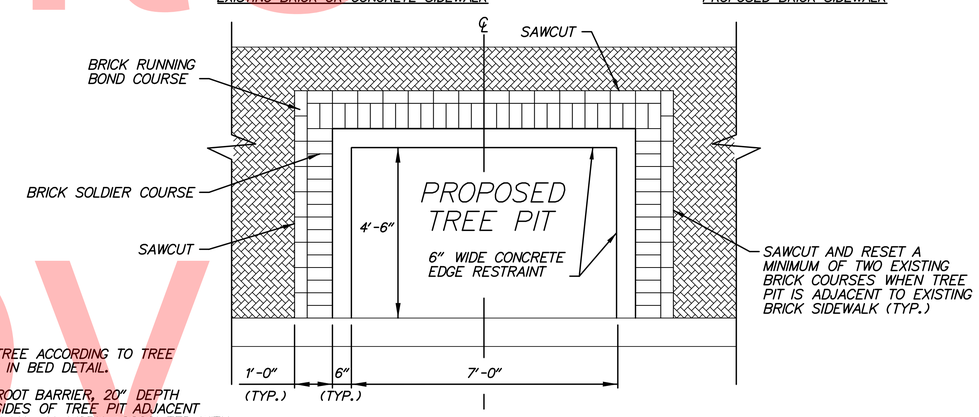
NOTES:

1). ALL PRUNING SHALL BE DONE BY OR UNDER THE DIRECTION OF, AN I.S.A. CERTIFIED ARBORIST OR CERTIFIED NURSERY PROFESSIONAL. DO NOT HEAVILY PRUNE TREES AT PLANTING.
2). ALL DEAD, BROKEN, & CROSSING BRANCHES SHALL BE PRUNED OFF FOLLOWING INSTALLATION.
3). BASE OF PLANTING PIT SIZE SHALL BE A MINIMUM WIDTH OF TWICE THE ROOT BALL SIZE AND A MAXIMUM OF THREE TIMES THE ROOT BALL SIZE.
4). WHEN PLANTING TREES ALONG SIDEWALKS, THE TREE SHALL BE LIMBED TO 7' FOR PEDESTRIAN CLEARANCE.

TREE PLANTING IN BED DETAIL

SCALE: NONE





NOTES:

1. INSTALL TREE ACCORDING TO TREE PLANTING IN BED DETAIL.
2. INSTALL ROOT BARRIER, 20" DEPTH ON ALL SIDES OF TREE PIT ADJACENT TO SIDEWALK. ALL WORK ASSOCIATED WITH ROOT BARRIER IS INCIDENTAL TO ITEM NO. 737523 - PLANTING.
4. ALL METERIALS AND WORK ASSOCIATED WITH TREE PIT EDGE TREATMENT IS INCIDENTAL TO ITEM NO. 705504 - BRICK AND/OR BLOCK SIDEWALK

TREE PLANTING IN PIT DETAIL

SCALE: NONE

Unofficial Website Copy

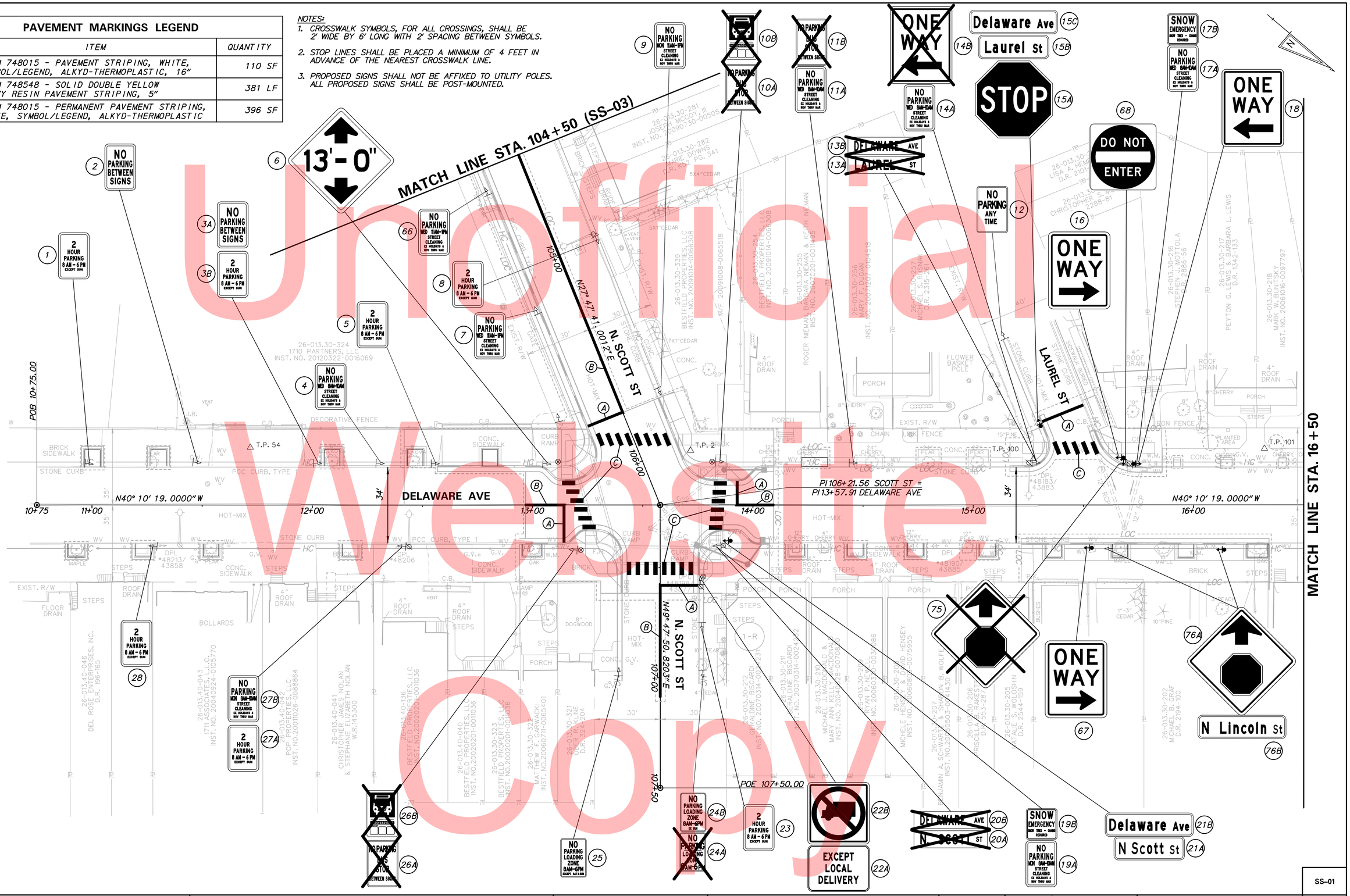
N:\31678-029\CADD\LS05_DEAV.dgn
5/27/2014 2:59:06 PM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	NOT TO SCALE	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	LANDSCAPE DETAILS
				COUNTY NEW CASTLE	DESIGNED BY: MJC	
					CHECKED BY: TAO	

LS-05	
SHEET NO.	36
TOTAL SHTS.	45

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	ITEM 748015 - PAVEMENT STRIPING, WHITE, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC, 16"	110 SF
(B)	ITEM 748548 - SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING, 5"	381 LF
(C)	ITEM 748015 - PERMANENT PAVEMENT STRIPING, WHITE, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	396 SF

NOTES:
1. CROSSWALK SYMBOLS, FOR ALL CROSSINGS, SHALL BE 2' WIDE BY 6' LONG WITH 2' SPACING BETWEEN SYMBOLS.
2. STOP LINES SHALL BE PLACED A MINIMUM OF 4 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE.
3. PROPOSED SIGNS SHALL NOT BE AFFIXED TO UTILITY POLES. ALL PROPOSED SIGNS SHALL BE POST-MOUNTED.



Unofficial Website Copy

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO. N/A
T201120004	DESIGNED BY: JJO
COUNTY	
NEW CASTLE	CHECKED BY: TAO

SIGNING & STRIPING PLAN

SS-01
SHEET NO. 37
TOTAL SHTS. 45

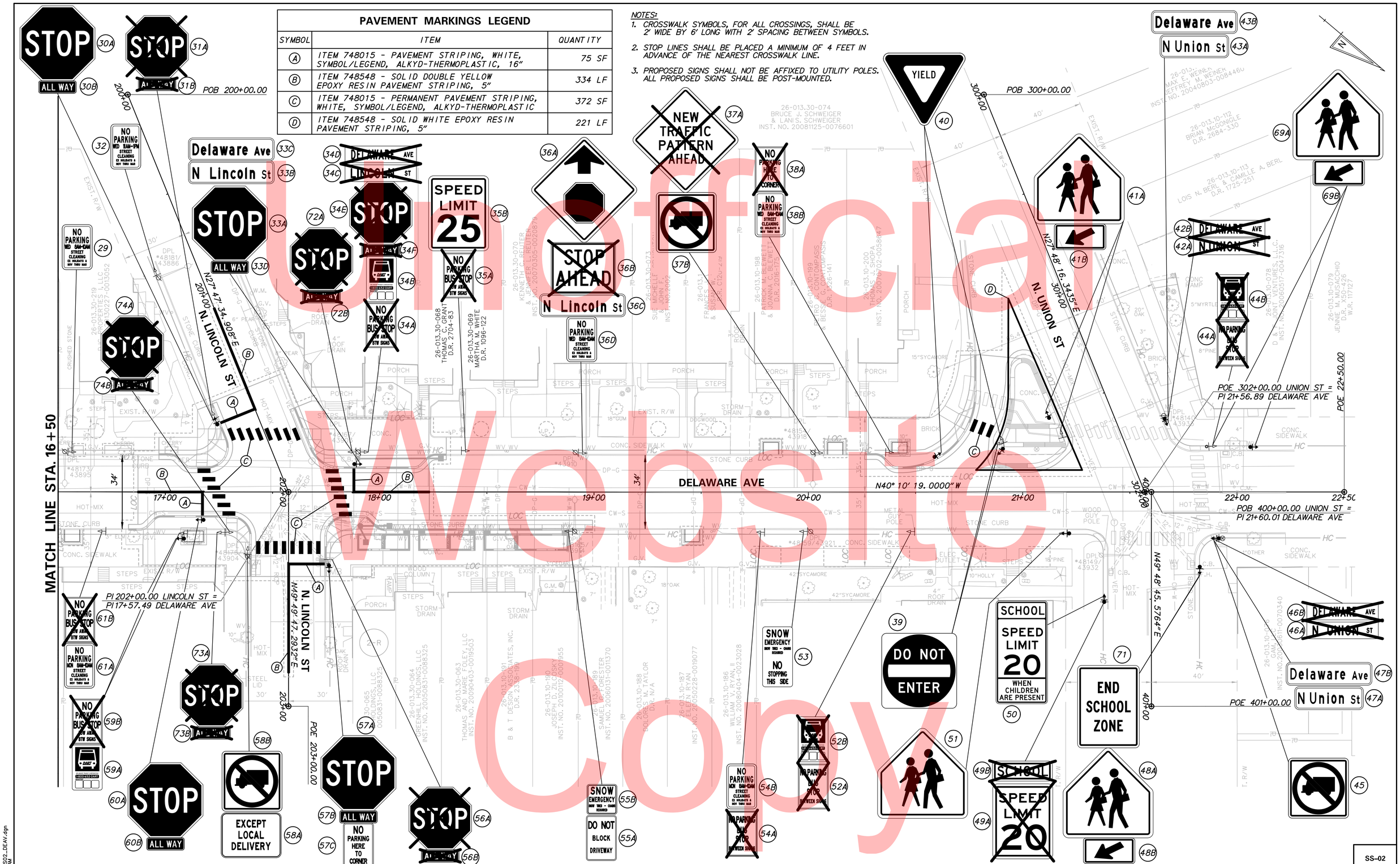
N:\31678-029\CADD\SS01_DEAV.dgn
5/2/2014 10:46:41 AM

PAVEMENT MARKINGS LEGEND

SYMBOL	ITEM	QUANTITY
A	ITEM 748015 - PAVEMENT STRIPING, WHITE, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC, 16"	75 SF
B	ITEM 748548 - SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING, 5"	334 LF
C	ITEM 748015 - PERMANENT PAVEMENT STRIPING, WHITE, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	372 SF
D	ITEM 748548 - SOLID WHITE EPOXY RESIN PAVEMENT STRIPING, 5"	221 LF

NOTES:

1. CROSSWALK SYMBOLS, FOR ALL CROSSINGS, SHALL BE 2' WIDE BY 6' LONG WITH 2' SPACING BETWEEN SYMBOLS.
2. STOP LINES SHALL BE PLACED A MINIMUM OF 4 FEET IN ADVANCE OF THE NEAREST CROSSWALK LINE.
3. PROPOSED SIGNS SHALL NOT BE AFFIXED TO UTILITY POLES. ALL PROPOSED SIGNS SHALL BE POST-MOUNTED.



Unofficial Website Copy

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: JJO	
COUNTY	CHECKED BY: TAO	
NEW CASTLE		

SIGNING & STRIPING PLAN

SS-02

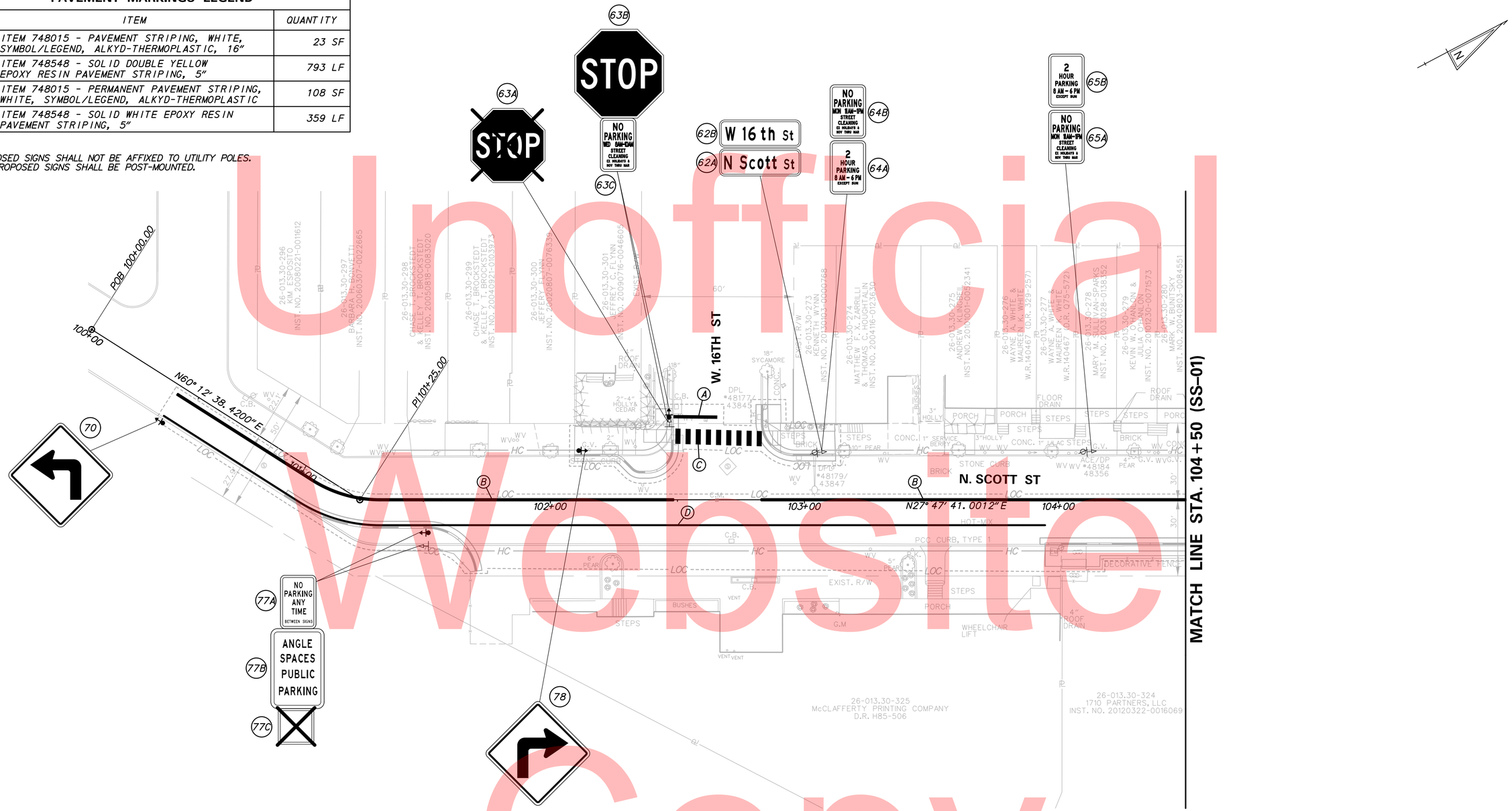
SHEET NO. 38

TOTAL SHTS. 45

N:\31678-029\CADD\SS02_DEAV.dgn 5/27/2014 10:47:59 AM

PAVEMENT MARKINGS LEGEND		
SYMBOL	ITEM	QUANTITY
(A)	ITEM 748015 - PAVEMENT STRIPING, WHITE, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC, 16"	23 SF
(B)	ITEM 748548 - SOLID DOUBLE YELLOW EPOXY RESIN PAVEMENT STRIPING, 5"	793 LF
(C)	ITEM 748015 - PERMANENT PAVEMENT STRIPING, WHITE, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	108 SF
(D)	ITEM 748548 - SOLID WHITE EPOXY RESIN PAVEMENT STRIPING, 5"	359 LF

NOTES:
1. PROPOSED SIGNS SHALL NOT BE AFFIXED TO UTILITY POLES. ALL PROPOSED SIGNS SHALL BE POST-MOUNTED.



Unofficial Website Copy

N:\31678-028\CADD\SS03_DEAV.dgn
5/27/2014 10:48:06 AM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 20 40 60 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004	BRIDGE NO. N/A	SIGNING & STRIPING PLAN
				COUNTY NEW CASTLE	DESIGNED BY: JJO	
					CHECKED BY: TAO	

SS-03
SHEET NO. 39
TOTAL SHTS. 45

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					
	SS-01	1			2 HOUR PARKING	1				REMAIN							0	0	0	
	SS-01	2			NO PARKING BETWEEN SIGNS	2				REMAIN							0	0	0	
	SS-01	3A			NO PARKING BETWEEN SIGNS	3				REMAIN							0	0	0	
	SS-01	3B			2 HOUR PARKING	3				REMAIN							0	0	0	
	SS-01	4			NO PARKING - STREET CLEANING	4				REMAIN							0	0	0	
	SS-01	5			2 HOUR PARKING	5				REMAIN							0	0	0	
	SS-01	6			Low Clearance	6				REMAIN							0	0	0	
	SS-01	7			NO PARKING - STREET CLEANING	7				REPOSITION	1	1				CONCRETE	0	1	0	
	SS-01	8			2 HOUR PARKING	8				REMAIN							0	0	0	
	SS-01	9			NO PARKING - STREET CLEANING	9				REMAIN							0	0	0	
	SS-01	10A			NO PARKING - BUS STOP	10				REMOVE	1						0	0	0	
	SS-01	10B			Bus Stop (DART)	10				REMOVE	1						0	0	0	
	SS-01	11A			NO PARKING - STREET CLEANING	11				REMAIN							0	0	0	
	SS-01	11B			NO PARKING - BUS STOP	11				REMOVE	1						0	0	0	
	SS-01	12			NO PARKING ANY TIME	12				REMAIN							0	0	0	
	SS-01	13A			"LAUREL ST"	13				REMOVE	1						0	0	0	
	SS-01	13B			"DELAWARE AVE"	13				REMOVE	1						0	0	0	
	SS-01	14A			NO PARKING - STREET CLEANING	14				REMAIN							0	0	0	
	SS-01	14B			ONE WAY (Left Arrow)	14				REMOVE	1						0	0	0	
4	SS-01	15A	R1-1(36)		STOP	15	36"	36"	9	NEW		1				SOIL	1	0	0	
1673	SS-01	15B	D3-1(9)		STREET NAME (1 Line)	15	30"	9"	1.875	NEW		1					1	0	0	"Laurel St" 6" C / 3" C
1673	SS-01	15C	D3-1(9)		STREET NAME (1 Line)	15	42"	9"	2.625	NEW		1					1	0	0	"Delaware Ave" 6" C / 3" C
396	SS-01	16	R6-2_R(18)		ONE WAY (RIGHT ARROW) - 18x24	16	18"	24"	3	NEW		1					1	1	0	
	SS-01	17A			NO PARKING - STREET CLEANING	17				REMAIN							0	0	0	
	SS-01	17B			SNOW EMERGENCY	17				REMAIN							0	0	0	
401	SS-01	18	R6-2_L(18)		ONE WAY (LEFT ARROW) - 18x24	18	18"	24"	3	NEW		1					1	1	0	
	SS-01	19A			NO PARKING - STREET CLEANING	19				REMAIN							0	0	0	
	SS-01	19B			SNOW EMERGENCY	19				REMAIN							0	0	0	
	SS-01	20A			"N. SCOTT ST"	20				REMOVE	1						0	0	0	
	SS-01	20B			"DELAWARE AVE"	20				REMOVE	1						0	0	0	
1673	SS-01	21A	D3-1(9)		STREET NAME (1 Line)	21	36"	9"	2.25	NEW		1					1	1	0	"N Scott St" 6" C / 3" C
1673	SS-01	21B	D3-1(9)		STREET NAME (1 Line)	21	42"	9"	2.625	NEW		1					1	0	0	"Delaware Ave" 6" C / 3" C
	SS-01	22A			EXCEPT LOCAL DELIVERY	22				REMAIN							0	0	0	
	SS-01	22B			No Trucks (Symbol)	22				REMAIN							0	0	0	
	SS-01	23			2 HOUR PARKING	23				REMAIN							0	0	0	
	SS-01	24A			NO PARKING - LOADING ZONE	24				REMOVE	1						0	0	0	
	SS-01	24B			NO PARKING - LOADING ZONE	24				REMAIN							0	0	0	
	SS-01	25			NO PARKING - LOADING ZONE	25				REMAIN							0	0	0	
	SS-01	26A			NO PARKING - BUS STOP	26				REMOVE	1						0	0	0	
	SS-01	26B			Bus Stop (DART)	26				REMOVE	1						0	0	0	
	SS-01	27A			2 HOUR PARKING	27				REMAIN							0	0	0	
	SS-01	27B			NO PARKING - STREET CLEANING	27				REMAIN							0	0	0	
	SS-01	28			2 HOUR PARKING	28				REMAIN							0	0	0	
	SS-02	29			NO PARKING - STREET CLEANING	29				REMAIN							0	0	0	
4	SS-02	30A	R1-1(36)		STOP	30	36"	36"	9	NEW		1				CONCRETE	1	1	0	
18	SS-02	30B	R1-3P(18)		ALL WAY(plaque)	30	18"	6"	0.75	NEW		1					1	0	0	
	SS-02	31A			STOP	31				REMOVE	1						0	0	0	
	SS-02	31B			ALL WAY (Plaque)	31				REMOVE	1						0	0	0	
	SS-02	32			NO PARKING - STREET CLEANING	32				REMAIN							0	0	0	
4	SS-02	33A	R1-1(36)		STOP	33	36"	36"	9	NEW		1				CONCRETE	1	1	0	
					PAGE TOTALS				43.125		14	11		0	0		10	6	0	

Unofficial Website Copy

N:\3678-029\CADD\SS04_DE.AV.dgn
5/2/2014 10:48:41 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: JJO	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

SIGNING SCHEDULE

SS-04

SHEET NO. 40

TOTAL SHTS. 45

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					
1673	SS-02	33B	D3-1(9)		STREET NAME (1 Line)	33	42"	9"	2.625	NEW		1					1	0	0	"N Lincoln St" 6" C / 3" C
1673	SS-02	33C	D3-1(9)		STREET NAME (1 Line)	33	42"	9"	2.625	NEW		1					1	0	0	"Delaware Ave" 6" C / 3" C
18	SS-02	33D	R1-3P(18)		ALL WAY(plaque)	33	18"	6"	0.75	NEW		1					1	0	0	
	SS-02	34A			NO PARKING - BUS STOP	34				REMOVE	1						0	0	0	
	SS-02	34B			Bus Stop (DART)	34				REMAIN							0	0	0	
	SS-02	34C			"LINCOLN ST"	34				REMOVE	1						0	0	0	
	SS-02	34D			"DELAWARE AVE"	34				REMOVE	1						0	0	0	
	SS-02	34E			STOP	34				REMOVE	1						0	0	0	
	SS-02	34F			ALL WAY (Plaque)	34				REMOVE	1						0	0	0	
	SS-02	35A			NO PARKING - BUS STOP	35				REMOVE	1						0	0	0	
	SS-02	35B			Speed Limit (25 MPH)	35				REMAIN							0	0	0	
	SS-02	36A			Stop Ahead (Symbol)	36				REMAIN							0	0	0	
	SS-02	36B			Stop Ahead Plaque	36				REMOVE	1						0	0	0	
	SS-02	36C			Advance Street Name Plaque	36				REMAIN							0	0	0	
	SS-02	36D			NO PARKING - STREET CLEANING	36				REMAIN							0	0	0	
	SS-02	37A			NEW TRAFFIC PATTERN AHEAD	37				REMOVE	1						0	0	0	
	SS-02	37B			No Trucks (Symbol)	37				REMAIN							0	0	0	
	SS-02	38A			No Parking Here to Corner	38				REMOVE	1						0	0	0	
	SS-02	38B			NO PARKING - STREET CLEANING	38				REMAIN							0	0	0	
	SS-02	39			DO NOT ENTER	39				REPOSITION	1	1				SOIL	0	0	0	
	SS-02	40			YIELD	40				REPOSITION	1	1				CONCRETE	0	1	0	
	SS-02	41A			School Sign (Symbol)	41				REPOSITION	1	1				SOIL	0	0	0	
1359	SS-02	41B	W16-7P_L(24)		LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	41	24"	18"	3	NEW		1					1	0	0	Fluorescent Yellow Green
	SS-02	42A			"N. UNION ST"	42				REMOVE	1						0	0	0	
	SS-02	42B			"DELAWARE AVE"	42				REMOVE	1						0	0	0	
1673	SS-02	43A	D3-1(9)		STREET NAME (1 Line)	43	36"	9"	2.25	NEW		1					1	1	0	"N Union St" 6" C / 3" C
1673	SS-02	43B	D3-1(9)		STREET NAME (1 Line)	43	42"	9"	2.625	NEW		1					1	0	0	"Delaware Ave" 6" C / 3" C
	SS-02	44A			NO PARKING - BUS STOP	44				REMOVE	1						0	0	0	
	SS-02	44B			Bus Stop (DART)	44				REMOVE	1						0	0	0	
	SS-02	45			No Trucks (Symbol)	45				REMAIN							0	0	0	
	SS-02	46A			"N. UNION ST"	46				REMOVE	1						0	0	0	
	SS-02	46B			"DELAWARE AVE"	46				REMOVE	1						0	0	0	
1673	SS-02	47A	D3-1(9)		STREET NAME (1 Line)	47	36"	9"	2.25	NEW		1					1	1	0	"N Union St" 6" C / 3" C
1673	SS-02	47B	D3-1(9)		STREET NAME (1 Line)	47	42"	9"	2.625	NEW		1					1	0	0	"Delaware Ave" 6" C / 3" C
	SS-02	48A			School Sign (Symbol)	48				REMAIN							0	0	0	
1359	SS-02	48B	W16-7P_L(24)		LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	48	24"	18"	3	NEW		1					1	0	0	Fluorescent Yellow Green
	SS-02	49A			Speed Limit (20 MPH)	49				REMOVE	1						0	0	0	
	SS-02	49B			SCHOOL	49				REMOVE	1						0	0	0	
1997	SS-02	50	S5-1-DE(24)		SCHOOL SPEED LIMIT XX WHEN FLASHIG - 24x54	50	24"	54"	9	NEW		1					1	0	0	"SPEED LIMIT 20" FYG
	SS-02	51			School Sign (Symbol)	51				REMAIN							0	0	0	
	SS-02	52A			NO PARKING - BUS STOP	52				REMOVE	1						0	0	0	
	SS-02	52B			Bus Stop (DART)	52				REMOVE	1						0	0	0	
	SS-02	53			SNOW EMERGENCY	53				REMAIN							0	0	0	
	SS-02	54A			NO PARKING - BUS STOP	54				REMOVE	1						0	0	0	
	SS-02	54B			NO PARKING - STREET CLEANING	54				REMAIN							0	0	0	
	SS-02	55A			DO NOT BLOCK DRIVEWAY	55				REMAIN							0	0	0	
	SS-02	55B			SNOW EMERGENCY	55				REMAIN							0	0	0	
	SS-02	56A			STOP	56				REMOVE	1						0	0	0	
	SS-02	56B			ALL WAY (Plaque)	56				REMOVE	1						0	0	0	
4	SS-02	57A	R1-1(36)		STOP	57	36"	36"	9	NEW		1				CONCRETE	1	1	0	
PAGE TOTALS									39.75		25	14		0	0		11	4	0	

Unofficial Website Copy

N:\31678-029\CADD\SS05_DEAV.dgn
5/2/2014 10:14:10 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT T201120004
COUNTY NEW CASTLE
BRIDGE NO. N/A
DESIGNED BY: JJO
CHECKED BY: TAO

SIGNING SCHEDULE

SS-05
SHEET NO. 41
TOTAL SHTS. 45

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					
18	SS-02	57B	R1-3P(18)		ALL WAY(plaque)	57	18"	6"	0.75	NEW		1					1	0	0	
440	SS-02	57C	R7-107-DE(12)		NO PARKING (Blank) - 12"x18"	57	12"	18"	1.5"	NEW		1					1	0	0	"HERE TO CORNER"
	SS-02	58A			EXCEPT LOCAL DELIVERY	58				REMAIN							0	0	0	
	SS-02	58B			No Trucks (Symbol)	58				REMAIN							0	0	0	
	SS-02	59A			Bus Stop (DART)	59				REPOSITION	1	1				CONCRETE	0	1	0	
	SS-02	59B			NO PARKING - BUS STOP	59				REMOVE	1						0	0	0	
4	SS-02	60A	R1-1(36)		STOP	60	36"	36"	9	NEW		1				CONCRETE	1	1	0	
18	SS-02	60B	R1-3P(18)		ALL WAY(plaque)	60	18"	6"	0.75	NEW		1					1	0	0	
	SS-02	61A			NO PARKING - STREET CLEANING	61				REMAIN							0	0	0	
	SS-02	61B			NO PARKING - BUS STOP	61				REMOVE	1						0	0	0	
	SS-03	62A			"N Scott St"	62				REMAIN							0	0	0	
	SS-03	62B			"W 16th St"	62				REMAIN							0	0	0	
	SS-03	63A			STOP	63				REMOVE	1						0	0	0	
4	SS-03	63B	R1-1(36)		STOP	63	36"	36"	9	NEW		1				CONCRETE	1	1	0	
	SS-03	63C			NO PARKING - STREET CLEANING	63				REPOSITION	1	1					0	0	0	
	SS-03	64A			2 HOUR PARKING	64				REMAIN							0	0	0	
	SS-03	64B			NO PARKING - STREET CLEANING	64				REMAIN							0	0	0	
	SS-03	65A			NO PARKING - STREET CLEANING	65				REMAIN							0	0	0	
	SS-03	65B			2 HOUR PARKING	65				REMAIN							0	0	0	
	SS-01	66			NO PARKING - STREET CLEANING	66				REPOSITION	1	1				CONCRETE	0	1	0	
396	SS-01	67	R6-2_R(18)		ONE WAY (RIGHT ARROW) - 18x24	67	18"	24"	3	NEW		1				CONCRETE	1	1	0	
358	SS-01	68	R5-1(30)		DO NOT ENTER - 30x30	68	30"	30"	6.25	NEW		1					1	0	0	
	SS-02	69A			School Sign (Symbol)	69				REPOSITION	1	1				CONCRETE	0	1	0	
1359	SS-02	69B	W16-7P_L(24)		LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12	69	24"	18"	3	NEW		1					1	0	0	Fluorescent Yellow Green
709	SS-03	70	W1-1_L(30)		TURN (Left) - 30x30	70	30"	30"	6.25	NEW		1				SOIL	1	0	0	
1999	SS-02	71	S5-2(24)		END SCHOOL ZONE - 24x30	71	24"	30"	5	NEW		1					1	0	0	
	SS-02	72A			STOP	72				REMOVE	1						0	0	0	
	SS-02	72B			ALL WAY (Plaque)	72				REMOVE	1						0	0	0	
	SS-02	73A			STOP	73				REMOVE	1						0	0	0	
	SS-02	73B			ALL WAY (Plaque)	73				REMOVE	1						0	0	0	
	SS-02	74A			STOP	74				REMOVE	1						0	0	0	
	SS-02	74B			ALL WAY (Plaque)	74				REMOVE	1						0	0	0	
	SS-01	75			Stop Ahead (Symbol)	75				REMOVE	1						0	0	0	
	SS-01	76A			Stop Ahead (Symbol)	76				REPOSITION	1	1				CONCRETE	0	1	0	
1367	SS-01	76B	W16-8P		ADVANCE STREET NAME (1 - line plaque)	76	36"	9"	2.25	RENEW	1	1					0	0	0	"N Lincoln St" 5" C / 3" C
	SS-03	77A			NO PARKING ANY TIME BETWEEN SIGNS	77				REPOSITION	1	1				SOIL	0	0	0	
	SS-03	77B			ANGLE SPACES PUBLIC PARKING	77				REPOSITION	1	1					0	0	0	
	SS-03	77C			UNKNOWN	77				REMOVE	1						0	0	0	
704	SS-03	78	W1-1_R(30)		TURN (Right) - 30x30	78	30"	30"	6.25	NEW		1				CONCRETE	1	1	0	
PAGE TOTALS									51.5		19	19		0	0		11	8	0	

Unofficial Website Copy

N:\31678-028\CADD\SS06_DEAV.dgn
5/27/2014 10:49:39 AM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT T201120004
COUNTY NEW CASTLE
BRIDGE NO. N/A
DESIGNED BY: JJO
CHECKED BY: TAO

SIGNING SCHEDULE

SS-06
SHEET NO. 42
TOTAL SHTS. 45

RECOMMENDED – AS TO PROCESS FOR ENGINEERING NEED

TEAM SUPPORT ~~SQUAD~~ MANAGER PROJECT — DATE Mar 25, 2014

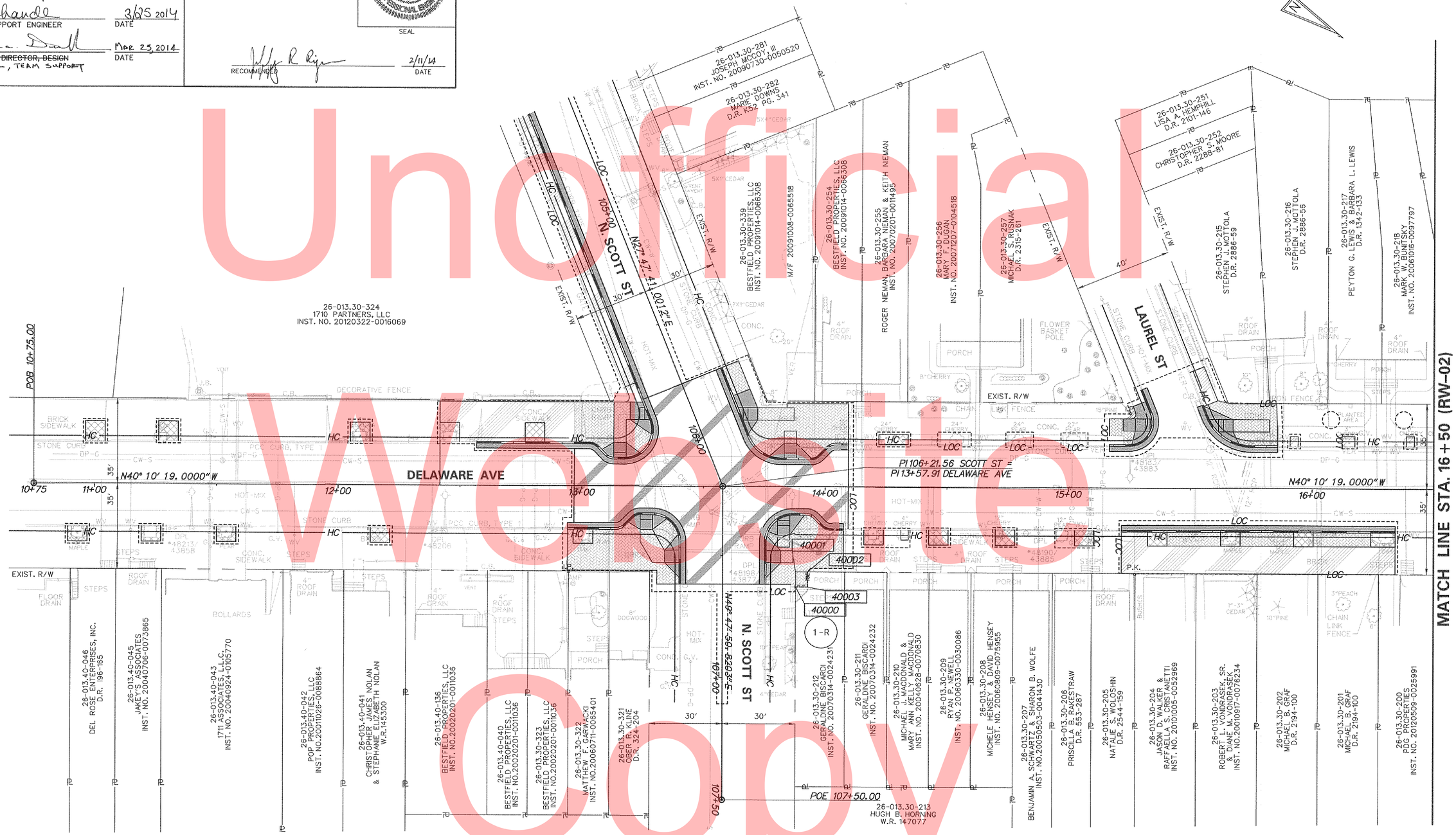
TEAM SUPPORT ENGINEER — DATE 3/25 2014

~~ASSISTANT DIRECTOR, DESIGN~~ MANAGER, TEAM SUPPORT — DATE Mar 25, 2014

PREPARED BY THE CONSULTING FIRM OF WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
ENGINEERS · ARCHITECTS · PLANNERS EST. 1913

RECOMMENDED — DATE 2/11/14

SEAL: JEFFREY R. RIGGINS — REGISTERED No. 9640 — DELAWARE PROFESSIONAL ENGINEER



Unofficial Website Copy

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

SCALE 0 20 40 60 FEET

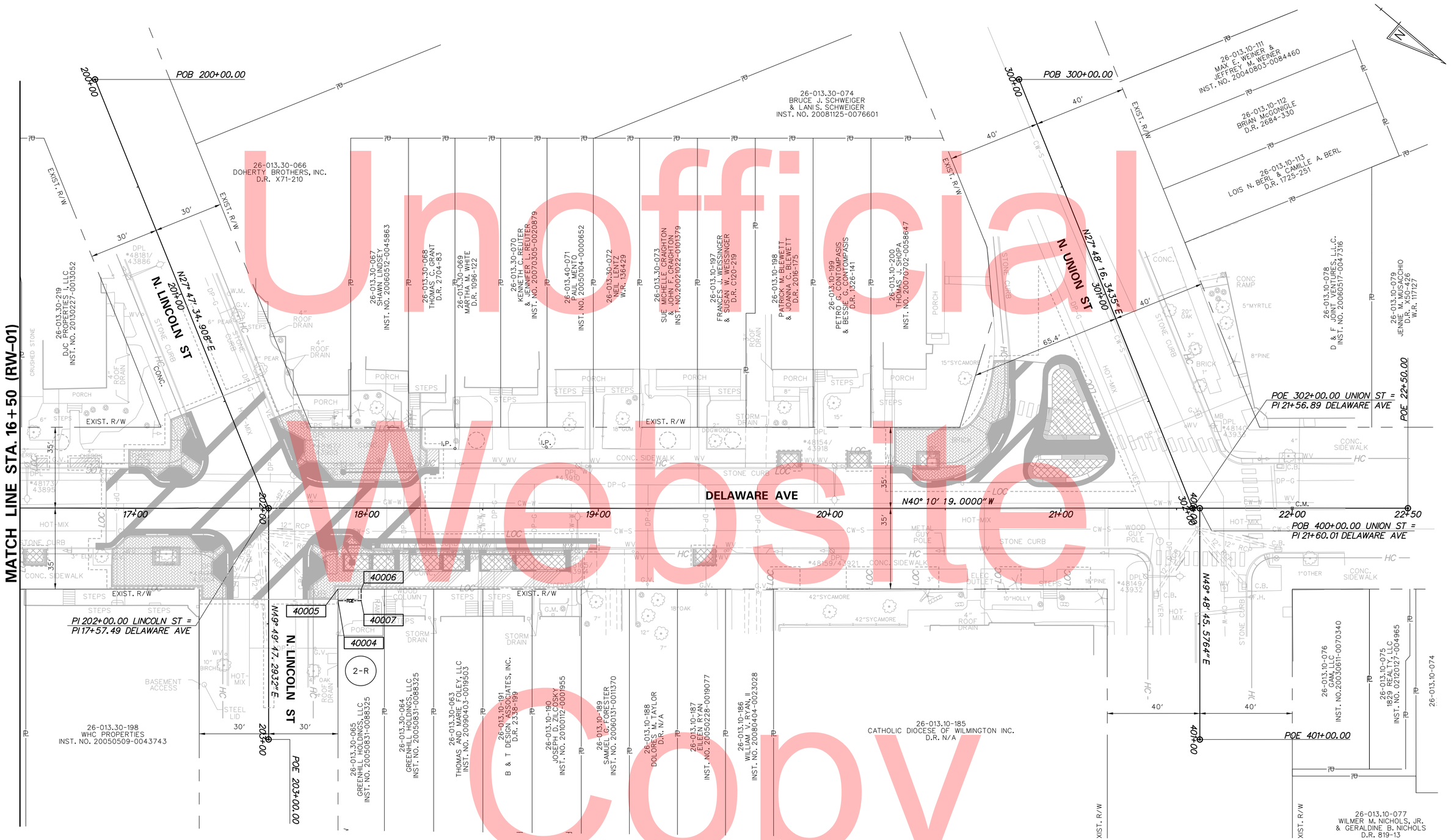
DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT	BRIDGE NO.	N/A
T201120004	DESIGNED BY: DNP	
COUNTY		
NEW CASTLE	CHECKED BY: TAO	

RIGHT OF WAY PLAN SHEET 1 OF 3

RW-01
SHEET NO. 43
TOTAL SHTS. 45

N:\3673-020\CADD\RW01-DEAV.dgn
2/11/2014 10:42:22 AM



Unofficial Website Copy

N:\31678-029\CADD\RW02_DEAV.dgn
5/22/2014 3:00:52 PM

DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS	SCALE 0 20 40 60 FEET	DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS	CONTRACT T201120004 / COUNTY NEW CASTLE	BRIDGE NO. N/A / DESIGNED BY: DNP / CHECKED BY: TAO	RIGHT OF WAY PLAN SHEET 2 OF 3	RW-02 / SHEET NO. 44 / TOTAL SHTS. 45

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)
26-013.30-212	(1-R) GERALDINE BISCARDI	TCE	20070314-0024231	0.041

ALIGNMENT NUMBER & DESCRIPTION: **

PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
40000	DelAve	13+87.93	41.09	640685.1532	614904.2184	S 49°47′50.82″ W	6.09				
40001	DelAve	13+87.93	35.00	640681.2198	614899.5643	N 40°09′30.45″ W	4.93				
40002	DelAve	13+92.86	35.00	640684.9883	614896.3844	N 49°24′47.12″ E	6.13				
40003	DelAve	13+92.90	41.13	640688.9756	614901.0386	S 39°45′21.93″ E	4.97				
40000	DelAve	13+87.93	41.09	640685.1532	614904.2184						

FIGURE RW_1R_TCE AREA = 30.2580 SQ. FT. (0.0007 ACRES)

ASSESSMENT NUMBER	OWNERSHIP OF RECORD	TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)
26-013.30-065	(2-R) GREENHILL HOLDINGS, LLC	TCE	20050831-0088325	0.049

ALIGNMENT NUMBER & DESCRIPTION: **

PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
40004	DelAve	17+87.49	40.00	640989.7553	614645.6340	S 49°49′41.00″ W	5.00				
40005	DelAve	17+87.49	35.00	640986.5299	614641.8134	N 40°10′12.71″ W	10.00				
40006	DelAve	17+97.49	35.00	640994.1712	614635.3628	N 49°49′47.29″ E	5.00				
40007	DelAve	17+97.49	40.00	640997.3963	614639.1833	S 40°10′19.00″ E	10.00				
40004	DelAve	17+87.49	40.00	640989.7553	614645.6340						

FIGURE RW_2R_TCE AREA = 49.9981 SQ. FT. (0.0011 ACRES)

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: ACQUISITION (SQ. FEET /ACRES)	AREA TO BE ACQUIRED: AREA OCCUPIED BY EXISTING RIGHT OF WAY (SQ. FEET /ACRES)	AREA TO BE ACQUIRED: EASEMENT: PERMANENT (SQ. FEET /ACRES)	AREA TO BE ACQUIRED: EASEMENT: TEMPORARY (SQ. FEET /ACRES)	PROPERTY AREA REMAINING (SQ. FEET /ACRES)	DEED RECORD OF ACQUISITION	REMARKS
26-013.30-212	52	(1-R) GERALDINE BISCARDI	20070314-0024231	C - 0.04	TCE				30.258 / 0.00	1781.2952 / 0.04		
26-013.30-065	53	(2-R) GREENHILL HOLDINGS, LLC	20050831-0088325	C - 0.05	TCE				49.9981 / 0.00	2125.0677 / 0.05		

ACQUISITION CODES

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

LEGEND

FEE AREA OF ACQUISITION
R/W AREA OCCUPIED BY EXISTING RW
P/E PERMANENT EASEMENT
TCE TEMPORARY CONSTRUCTION EASEMENT

* "-" OFFSET IS LEFT OF BASELINE
** "-" CURVE TURNS TO THE LEFT

N:\31678-028\CAD\RW03_DEAV.dgn
5/2/2014 3:01:20 PM

DELAWARE DEPARTMENT OF TRANSPORTATION

ADDENDUMS / REVISIONS

NOT TO SCALE

DELAWARE AVENUE PEDESTRIAN IMPROVEMENTS

CONTRACT T201120004
COUNTY NEW CASTLE
BRIDGE NO. N/A
DESIGNED BY: DNP
CHECKED BY: TAO

RIGHT OF WAY DATA AND TABULATION SHEET SHEET 3 OF 3

RW-03
SHEET NO. 45
TOTAL SHTS. 45

Unofficial Website Copy