



GENERAL LOCATION OF CONTRACT

THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION



U.S. CUSTOMARY
UNITS

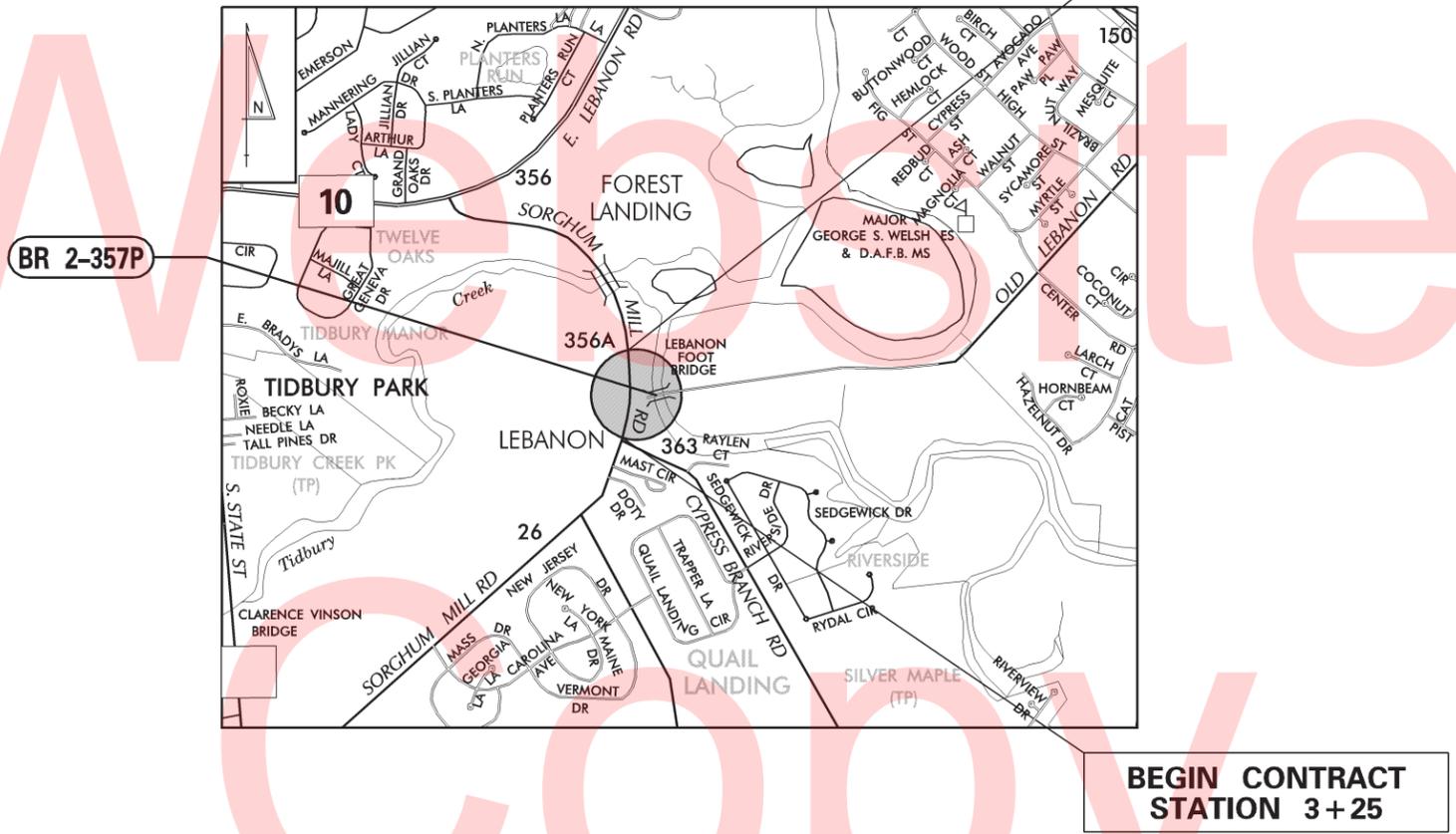
CONSTRUCTION AND RIGHT-OF-WAY PLANS FOR:
**REMOVAL OF BR 2-357P PEDESTRIAN
BRIDGE OVER ST. JONES RIVER**

CONTRACT NUMBER: T201407501
FEDERAL AID PROJECT NUMBER: NA

COUNTY: KENT M.R. #: NA

DESIGN DESIGNATION		
FUNCTIONAL CLASS: N/A	D.H.V. PROJECTED: N/A	YEAR: N/A
TYPE OF CONSTRUCTION: BRIDGE DEMOLITION	DESIGN SPEED: N/A	
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 SHEET
2	LEGEND
3	NOTES
4	HORIZONTAL & VERTICAL CONTROL
5	CONSTRUCTION PLAN
6	EXISTING BRIDGE PLAN AND ELEVATION
7	ENVIRONMENTAL COMPLIANCE NOTES
8	ENVIRONMENTAL COMPLIANCE PLAN
9	DEMOLITION PLAN
10	CONSTRUCTION SEQUENCE & EROSION CONTROL PLAN
11	SIGNING PLAN
12	RIGHT-OF-WAY PLAN
13	RIGHT-OF-WAY DATA AND TABULATION SHEET
A.1	EXISTING BRIDGE PLAN & ELEVATION (SHEET 1 OF 3)
A.2	EXISTING BRIDGE PLAN, SECTION, & ELEVATION (SHEET 2 OF 3)
A.3	EXISTING BRIDGE DETAILS (SHEET 3 OF 3)



END CONTRACT
STATION 5+95

BEGIN CONTRACT
STATION 3+25

TOTAL SHEETS: 13 + APPENDIX

APPROVED DESIGN EXCEPTIONS

DESIGN PARAMETER	REQUIRED	PROVIDED	DATE

ADDENDA & REVISIONS

DESCRIPTION	NAME & DATE

ASSOCIATED CONTRACTS

CONTRACT NO.	CONTRACT NAME
76-07-012	BICYCLE PEDESTRIAN BRIDGE ACROSS ST. JONES RIVER AT LEBANON
85-072-02	BRIDGE 356A ON KENT 356A OVER TIDBURY CREEK, LEBANON

RECOMMENDED

Mary Ann
SQUAD MANAGER, CONSTRUCTION 03/21/2016
DATE

Brachman
GROUP ENGINEER, CONSTRUCTION 03/22/2016
DATE

Jim A. J...
ASSISTANT DIRECTOR, CONSTRUCTION 03/22/2016
DATE

RECOMMENDED

Vincent W. Davis
STORMWATER ENGINEER
DATE 03/18/2016

Vincent W. Davis
REGISTERED PROFESSIONAL ENGINEER
No. 12898
DELAWARE

RECOMMENDED

[Signature]
SQUAD MANAGER, BRIDGE DESIGN
DATE 03/16/2016

Craig A. Stevens
REGISTERED PROFESSIONAL ENGINEER
No. 12850
DELAWARE

RECOMMENDED

[Signature]
BRIDGE DESIGN ENGINEER
DATE 03/22/2016

Jason W. Hastings
REGISTERED PROFESSIONAL ENGINEER
No. 13846
DELAWARE

RECOMMENDED

[Signature]
ASSISTANT DIRECTOR, BRIDGE
DATE 03/23/2016

Barry A. Benton
REGISTERED PROFESSIONAL ENGINEER
No. 10774
DELAWARE

APPROVED

Robert Brian McCleary
CHIEF ENGINEER
DATE 03/24/2016

Robert Brian McCleary
REGISTERED PROFESSIONAL ENGINEER
No. 8567
DELAWARE

LAST REVISED: 03/03/2011
Y:\KENT\357 BRIDGE\T201407501\PLANS\TC01.DGN

EXISTING SYMBOLS

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

MANMADE ROADSIDE FEATURES	
	BOLLARD - STEEL POLE
	BOLLARD - WOOD POST
	CURB
	CURB AND GUTTER
	FENCE - CHAINLINK OR STRANDED
	FENCE - STOCKADE OR SPLIT RAIL
	FLAG POLE
	GUARDRAIL - STEEL BEAM
	GUARDRAIL - WIRE ROPE
	LAMP AND POST - RESIDENTIAL
	MAILBOX
	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
	DELINEATED WETLAND BOUNDARY LINE
	WOODS LINE BOUNDARY

RIGHT-OF-WAY SYMBOLS	
	PROPERTY MARKER - CONCRETE MON.
	PROPERTY MARKER - IRON PIPE
	HISTORIC RIGHT-OF-WAY BASELINE
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING DENIAL OF ACCESS
	EXISTING R/W & DENIAL OF ACCESS

SURVEY CONTROL & MONUMENTATION	
	SURVEY BENCHMARK LOCATION
	SURVEY TIE POINT LOCATION
	SURVEY TRAVERSE POINT
	POINT OF CURVATURE OR TANGENCY
	POINT OF INTERSECTING TANGENTS

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

UTILITY COMPANY FACILITIES	
	CHESAPEAKE UTILITY - GAS
	COMCAST CABLE
	DELMARVA POWER - ELECTRIC

CONSTRUCTION	
	CONCRETE SAFETY BARRIER - PERMANENT
	BIOFILTRATION SWALE
	BRICK PATTERNED SURFACE
	BUTT JOINT
	CONSTRUCTION BASELINE
	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
	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
	HORIZONTAL CLEARANCE
	IMPACT ATTENUATOR
	JUNCTION BOX - DRAINAGE
	LIMIT OF CONSTRUCTION
	MAILBOX
	MANHOLE
	PAVEMENT PATCH
	PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH
	PIPE & DIRECTIONAL FLOW ARROW
	RIPRAP
	P.C.C. SIDEWALK - 4"
	P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.)
	UNDERDRAIN
	UNDERDRAIN OUTLET

RIGHT-OF-WAY SYMBOLS	
	PROPOSED RIGHT-OF-WAY MONUMENT
	PROPOSED DENIAL OF ACCESS
	PROPOSED PERMANENT EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED R/W & DENIAL OF ACCESS
	TEMPORARY CONSTRUCTION EASEMENT
	PROPOSED RIGHT-OF-WAY BASELINE

PROPOSED SYMBOLS

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

LANDSCAPING	
	LANDSCAPE PLANTINGS
	SHRUBBERY
	CONIFEROUS TREE
	DECIDUOUS TREE

TRAFFIC	
	ITMS CONDUIT
	SIGNAL CONDUIT
	CONDUIT JUNCTION WELL
	LUMINAIRE
	PAVEMENT MARKINGS
	PAVEMENT STRIPING
	TRAFFIC SIGN

PAVEMENT SECTION(S)	
	REMOVAL OF EXISTING HOT-MIX (DEPTH VARIES), INSTALL TOPSOIL (6" DEPTH), PERMANENT SEED, AND MULCH

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

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.

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

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

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

NOTE: THE DOCUMENT ENTITLED "RELEASE FOR DELIVERY OF DOCUMENTS IN ELECTRONIC FORM TO A CONTRACTOR" MUST BE SIGNED BY ALL PARTIES PRIOR TO THE DELIVERY OF ANY ELECTRONIC PROJECT FILES.

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

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

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

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

6. THE DISTURBED AREA FOR THIS PROJECT IS 0.552 ACRES.
7. THE ADDITIONAL IMPERVIOUS AREA FOR THIS PROJECT IS -1782.44 SQ FEET.
8. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS HAVE BEEN APPROVED BY DELDOT'S STORMWATER ENGINEER UNDER DELDOT'S DELEGATED AUTHORITY. THE SEDIMENT AND STORMWATER MANAGEMENT PLANS ARE VALID FOR A THREE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED TO EXTEND BEYOND THE THREE YEARS, THE CONTRACTOR WILL INFORM THE ENGINEER THREE MONTHS PRIOR TO THE EXPIRATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLANS. THE STORMWATER ENGINEER WILL REVIEW THE CURRENT SEDIMENT AND STORMWATER MANAGEMENT PLAN AND ISSUE AN EXTENSION WITH ANY APPROPRIATE MODIFICATIONS.

PROJECT NOTES

SECTION 100

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

SECTION 200

2. THE CONTRACTOR SHALL REMOVE AND RESET ALL MAILBOXES TO MAINTAIN MAIL SERVICE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL RELOCATE MAILBOXES AS REQUIRED BY THE PROPOSED GEOMETRICS AND AS DIRECTED BY THE ENGINEER. WHEN RELOCATING MAILBOXES IN CURBED SECTIONS, THE FACE OF THE MAILBOX SHALL BE FLUSH WITH THE BACK EDGE OF CURB. WHEN RELOCATING MAILBOXES IN OPEN SECTIONS, THE FACE OF THE MAILBOX SHALL SET BACK 8 INCHES FROM THE EDGE OF THE PAVED SHOULDER. THE BOTTOM OF THE MAILBOX SHALL BE SET 46 INCHES ABOVE THE ROADWAY SURFACE. MAILBOXES LOCATED AT DRIVEWAY ENTRANCES SHALL BE PLACED ON THE FAR SIDE OF THE DRIVEWAY IN THE DIRECTION OF TRAVEL. POSTS BEING RESET IN CONCRETE SIDEWALK SHALL BE PLACED IN AN APPROPRIATE SIZE PVC SLEEVE. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 - CLEARING AND GRUBBING.
3. REMOVAL OF CREOSOTE SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION *202560 - CONTAMINATED MATERIAL.
4. ITEMS TO BE REMOVED UNDER ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
- THE EXISTING PEDESTRIAN BRIDGE SUPERSTRUCTURE IN ITS ENTIRETY.
 - THE EXISTING TIMBER SUBSTRUCTURE ON THE WEST SIDE OF THE ST. JONES RIVER.
 - (25) 1'-2" DIAMETER TIMBER PILES 24'-0" LONG SUPPORTING THE TIMBER PIER ON THE WEST SIDE OF THE ST. JONES RIVER SHALL BE SAWCUT 1'-0" BELOW THE EXISTING GRADE OF THE MOST EXPOSED PILE AND REMOVED. THE CONTRACTOR SHALL ALSO HAVE THE OPTION TO REMOVE THE PILES IN THEIR ENTIRETY IN LIEU OF SAWCUTTING.
 - THE EXISTING CONCRETE APRON UNDERNEATH THE WEST END OF BRIDGE 2-357P IN ITS ENTIRETY.
 - THE EXISTING CONCRETE AND STONE SUBSTRUCTURE ON THE EAST SIDE OF THE ST. JONES RIVER IN ACCORDANCE WITH THE DEMOLITION PLANS.
 - THE EXISTING CONCRETE ABUTMENTS ON THE EAST AND WEST ENDS OF BRIDGE 2-357P IN THEIR ENTIRETY.
 - THE EXISTING CONCRETE RAMP AT THE EAST END OF BRIDGE 2-357P IN ITS ENTIRETY.
 - THE EXPOSED OUTLET OF THE EXISTING CORRUGATED METAL PIPE LOCATED SOUTHWEST OF BRIDGE 2-357P. THE BURIED PORTION OF THE CORRUGATED METAL PIPE SHALL NOT BE DISTURBED.
 - THREE WOODEN POSTS LOCATED SOUTHWEST OF BRIDGE 2-357P. THE CONTRACTOR SHALL RESET OR REPLACE THE THREE WOODEN POSTS AT THE END OF CONSTRUCTION.
 - APPROXIMATELY 112' OF EXISTING GUARDRAIL IN THE PULL-OFF AREA EAST OF SORGHUM MILL ROAD AND WEST OF BRIDGE 2-357P. THE GUARDRAIL SHALL BE REMOVED AT THE END OF A FULL SECTION OF RAIL AT A POST LOCATION.
 - EXISTING WOODEN POSTS AND RAIL BEHIND EXISTING SECTION OF GUARDRAIL BEING REMOVED.

SECTION 600

5. REMOVAL AND DISPOSAL OF THE LEAD-BASED PAINT SYSTEM ON THE EXISTING STEEL BEAMS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION *605533 - CLEANING EXISTING STEEL STRUCTURES, HAZARDOUS BASE PRIOR TO OFF SITE TRANSPORT AND DISPOSAL

SECTION 900

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 NOIS KEPT ON FILE IN EACH OF THE CONSTRUCTION OFFICES AND THE DEPARTMENT'S STORMWATER SECTION. A COPY OF THE GENERAL PERMIT OR THE NOIS CAN BE OBTAINED UPON REQUEST FROM EITHER THE DEPARTMENT'S STORMWATER ENGINEER OR THE APPROPRIATE CONSTRUCTION ENGINEER.

MISCELLANEOUS

7. THE CONTRACTOR SHALL CONTACT WILLIAM LOTHARP, THE CHIEF OF SCHEDULING FOR DART FIRST STATE, 14 DAYS PRIOR TO THE START OF CONSTRUCTION AT 302-576-6006.
8. ALL PAVED AREAS TO BE REMOVED SHALL BE SAWCUT AT POINTS SHOWN ON THE PLANS. ALL HOT-MIX AND CONCRETE SAW CUTTING SHALL BE FULL DEPTH, UNLESS OTHERWISE NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL REPAIR ANY DAMAGE DONE TO SORGHUM MILL ROAD AND THE ADJACENT PULL-OFF AREA DURING CONSTRUCTION AT HIS/HER OWN EXPENSE. THE CONTRACTOR SHALL USE APPROPRIATE EQUIPMENT TO AVOID DAMAGING SORGHUM MILL ROAD AND THE ADJACENT ROADWAY (I.E. RUBBER TIRES FOR EQUIPMENT).
10. ENVIRONMENTAL COMPLIANCE: PLEASE SEE ENVIRONMENTAL COMPLIANCE PLAN FOR FURTHER RESTRICTIONS AND GUIDANCE ASSOCIATED WITH THIS PROJECT.
11. PLEASE REFER TO THE UTILITY STATEMENT FOR ANY UTILITY INFORMATION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE BRIDGE ELEMENT LOCATIONS AND DIMENSIONS PROVIDED BY THE PLANS AND ARCHIVED PLANS IN THE APPENDIX FOR THIS PROJECT. DIMENSIONS AND LOCATIONS OF EXISTING BRIDGE ELEMENTS MAY VARY FROM ARCHIVED PLANS DUE TO MAINTENANCE AND REHABILITATION ACTIONS TAKEN.
13. SHOULD THE CONTRACTOR REQUIRE ACCESS TO THE EAST BANK OF THE ST. JONES RIVER VIA THE DOVER AIR FORCE BASE, IT IS HIS/HER RESPONSIBILITY TO COORDINATE WITH JASON HALPIN, PE, CHIEF, PORTFOLIO OPTIMIZATION ELEMENT AT 302-677-4712 OR JASON.HALPIN@US.AF.MIL.
14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH JEREMY SHEPPARD OF KENT COUNTY PARKS AND RECREATION IN REGARDS TO THE USE OF LEBANON LANDING PARK. THE CONTRACTOR SHALL ALSO NOTIFY KENT COUNTY PARKS AND RECREATION THREE WEEKS PRIOR TO ANY DEMOLITION WORK. JEREMY SHEPPARD CAN BE CONTACTED AT 302-744-2494 OR JEREMY.SHEPPARD@CO.KENT.DE.US.



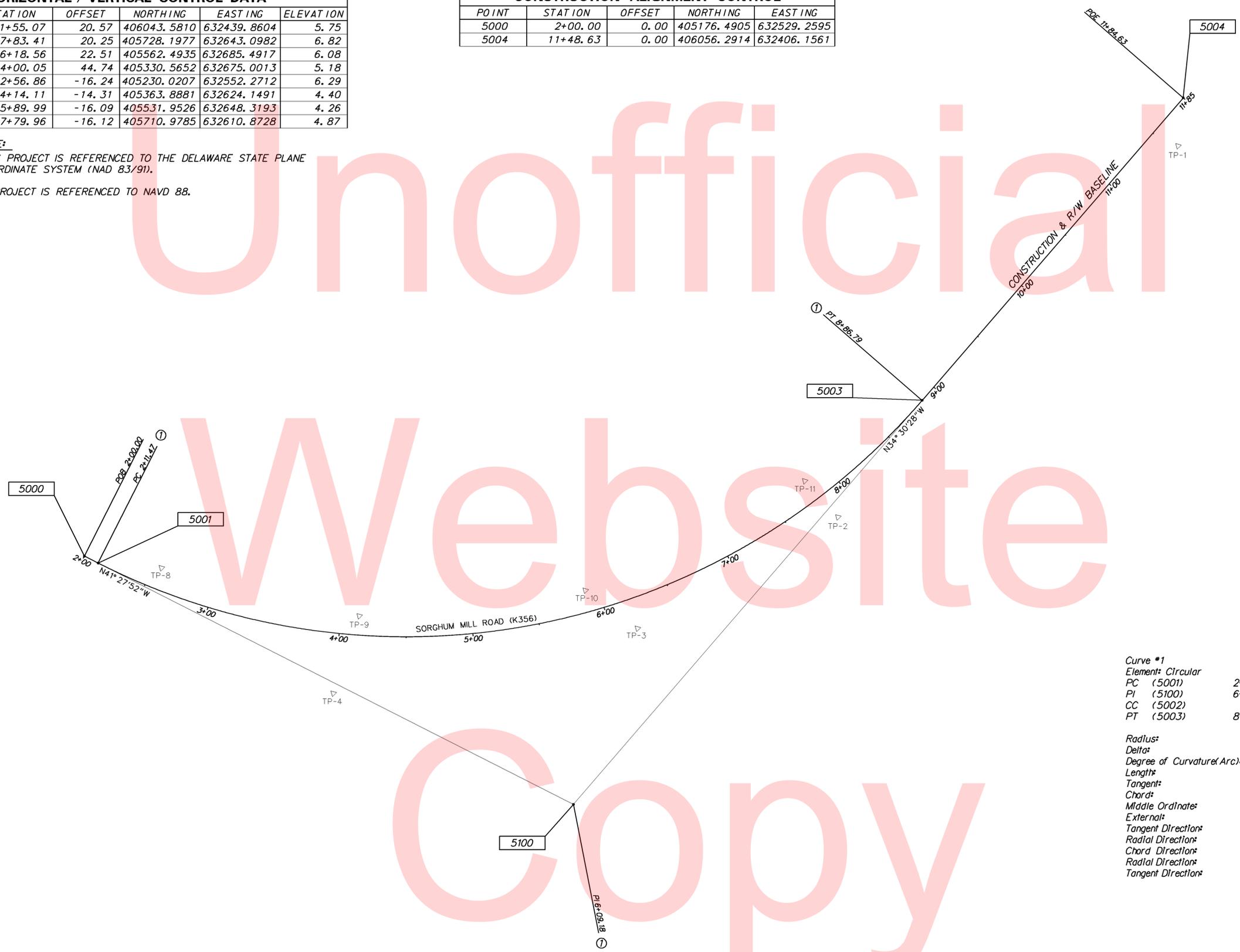
HORIZONTAL / VERTICAL CONTROL DATA					
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION
TP-1	11+55.07	20.57	406043.5810	632439.8604	5.75
TP-2	7+83.41	20.25	405728.1977	632643.0982	6.82
TP-3	6+18.56	22.51	405562.4935	632685.4917	6.08
TP-4	4+00.05	44.74	405330.5652	632675.0013	5.18
TP-8	2+56.86	-16.24	405230.0207	632552.2712	6.29
TP-9	4+14.11	-14.31	405363.8881	632624.1491	4.40
TP-10	5+89.99	-16.09	405531.9526	632648.3193	4.26
TP-11	7+79.96	-16.12	405710.9785	632610.8728	4.87

CONSTRUCTION ALIGNMENT CONTROL					
POINT	STATION	OFFSET	NORTHING	EASTING	
5000	2+00.00	0.00	405176.4905	632529.2595	
5004	11+48.63	0.00	406056.2914	632406.1561	

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.



Curve #1			
Element: Circular			
PC (5001)	2+11.47	405185.0882	632536.8565
PI (5100)	6+09.18	405483.1190	632800.2017
CC (5002)		405522.3233	632155.2036
PT (5003)	8+86.79	405810.8513	632574.8917
Radius:	509.30		
Delta:	75°58'19.8567"	Left	
Degree of Curvature (Arc):	11°14'59.6674"		
Length:	675.31		
Tangent:	397.71		
Chord:	626.92		
Middle Ordinate:	107.89		
External:	136.89		
Tangent Direction:	N 41°27'51.7237"	E	
Radial Direction:	S 48°32'08.2763"	E	
Chord Direction:	N 3°28'41.7954"	E	
Radial Direction:	N 55°29'31.8671"	E	
Tangent Direction:	N 34°30'28.1329"	W	

W:\MS\8\CELLS\PROVIDE\SB.CEL

<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS	<p>SCALE</p> <p>FEET</p>	<p>REMOVAL OF BR 2-357P PEDESTRIAN BRIDGE OVER ST. JONES RIVER</p>	CONTRACT	BRIDGE NO.	2-357P	<p>HORIZONTAL & VERTICAL CONTROL</p>	SHEET NO.
					T201407501	DESIGNED BY: NED		4
				KENT	CHECKED BY: CAS		TOTAL SHTS.	13

GUARDRAIL SCHEDULE				
NO.	ITEM DESCRIPTION / TYPE	BEGIN STA.	OFFSET	LENGTH
1	END ANCHORAGE, TYPE 31	3+64.04	47' / 43'	12.50'
2	GUARDRAIL, TYPE 1-31	4+41.43	43' / 23'	84.375'
3	W-BEAM, TYPE 1-27 TO TYPE 1-31 TRANSITION SECTION	4+68.06	23' / 20'	28.125'

NOTE: W-BEAM, TYPE 1-27 TO TYPE 1-31 TRANSITION SECTION WILL BE PAID FOR UNDER GUARDRAIL, TYPE 1-31.

7-00-09511-01-0200-00001
PAUL A. VITANZA SR. & SANDRA JO VITANZA, H&W
D.R. D5090 330 D120 101

7-00-09500-01-1400-00001
KENT COUNTY
D.R. Q54 328

7-00-09511-01-0100-00001
ROSANNE STRANG
D.R. D173 87

NOTE: ACCESS TO DRIVEWAY ON PARCEL 1-R SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. MAILBOX SHALL BE RELOCATED OUTSIDE OF THE WORK ZONE AND RESET AT ITS ORIGINAL LOCATION BY THE CONTRACTOR AT THE COMPLETION OF THIS PROJECT.

NOTE: THE EXISTING UTILITY POLES LOCATED WITHIN THE LIMITS OF THE PROPOSED RIPRAP AREA AND MARKED "DO NOT DISTURB" ON THE CONSTRUCTION PLANS, SHALL NOT BE RELOCATED OR DAMAGED BY THE CONTRACTOR IN ANY WAY. RIPRAP SHALL BE PLACED AROUND THE EXISTING UTILITY POLES. ANY DAMAGE TO THE EXISTING UTILITY POLES SHALL BE PAID FOR AT THE CONTRACTOR'S EXPENSE.

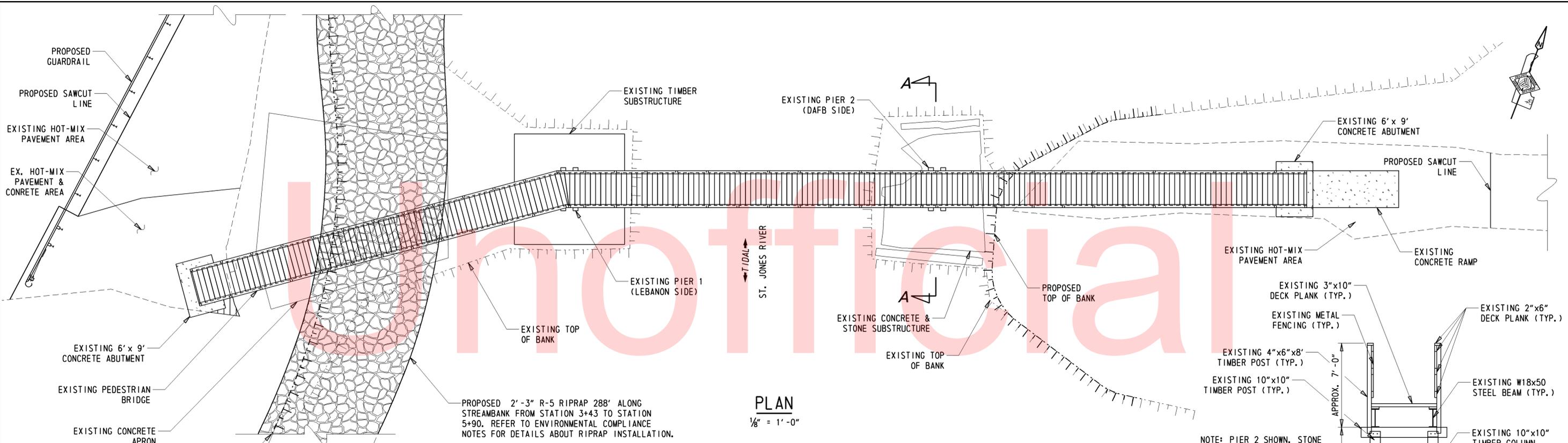
2'-3" R-5 RIPRAP 288' ALONG STREAM BANK FROM STATION 3+43 TO STATION 5+90. RIPRAP SHALL BE PLACED IN A HORIZONTAL DIRECTION (PERPENDICULAR TO THE STREAM BANK) INTO THE RIVER FROM THE TOP OF BANK. SEE RIPRAP PLACEMENT CHART BELOW FOR RIPRAP DIMENSIONS AND LIMITS. THE RIPRAP AREA SHALL NOT BE DEWATERED DURING INSTALLATION. AS SUCH, THERE WILL BE NO GEOTEXTILE LAYER USED AS PART OF THE RIPRAP APRON AND NO EXCAVATION FOR THE RIPRAP APRON WILL OCCUR. REFER TO ENVIRONMENTAL COMPLIANCE NOTES FOR DETAILS ABOUT RIPRAP INSTALLATION.

RIPRAP PLACEMENT DIMENSIONS		
HORIZONTAL DISTANCE INTO RIVER	BEGIN STATION	END STATION
15' - 0"	3+43.00	4+00.00
TRANSITION 15' TO 20'	4+00.00	4+25.00
20' - 0"	4+25.00	4+60.00
TRANSITION 20' TO 15'	4+60.00	5+00.00
15' - 0"	5+00.00	5+90.00

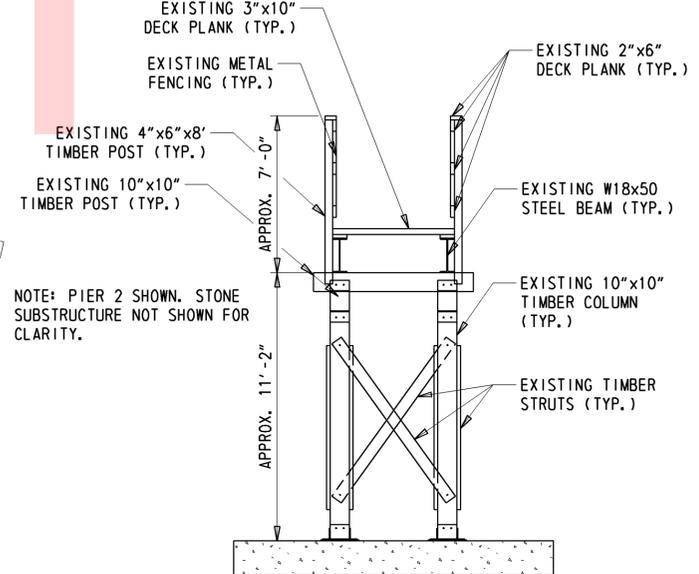
SAWCUT CORNER LOCATIONS			
NO.	LOCATION DESCRIPTION	STATION	OFFSET
1	W. BANK - IN FRONT OF PROP. GUARDRAIL	3+48.76	47.02'
2	W. BANK - IN FRONT OF PROP. GUARDRAIL	3+63.77	41.59'
3	W. BANK - BEHIND PROP. GUARDRAIL	3+64.74	44.96'
4	WEST BANK - BEHIND EX. GUARDRAIL	4+63.82	22.67'
5	EAST BANK - SOUTH SIDE OF ROADWAY	4+80.17	231.64'
6	EAST BANK - NORTH SIDE OF ROADWAY	4+87.32	225.19'

2-00-09500-01-0100-00001
ROBERT PATTERSON & WILLARD F. PATTERSON
D.R. WT3 148 014 483

Y:\KENT\357 BRIDGE\T201407501\PLANS\CP01.DGN

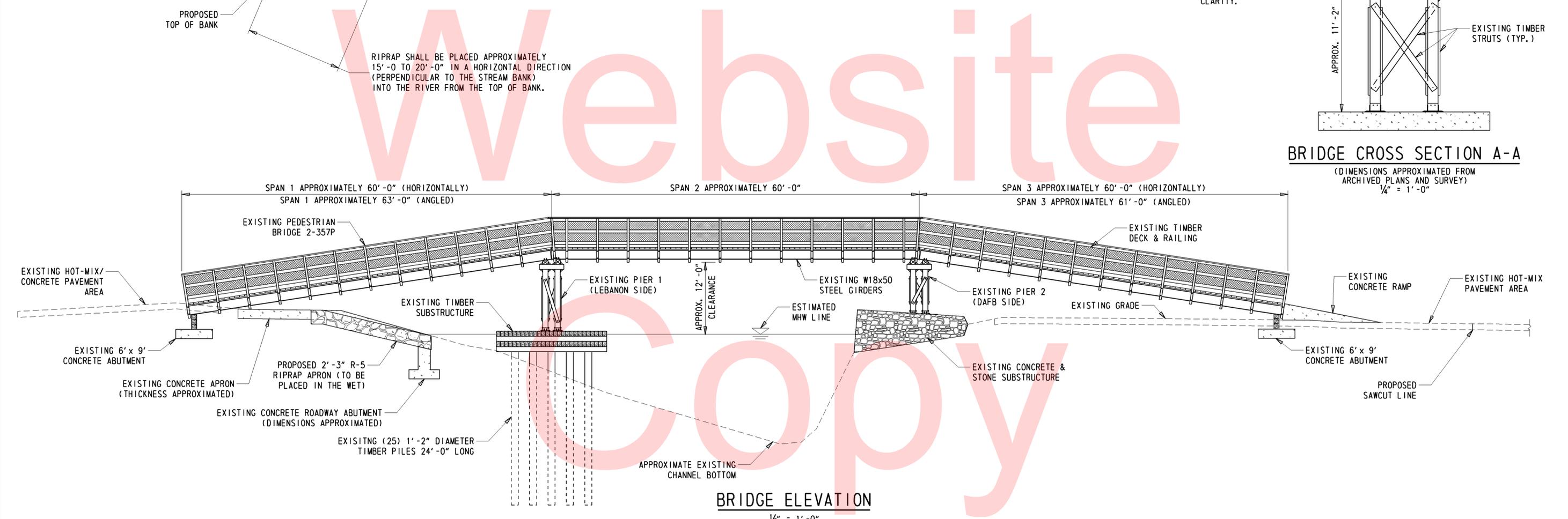


PLAN
1/8" = 1'-0"



BRIDGE CROSS SECTION A-A

(DIMENSIONS APPROXIMATED FROM ARCHIVED PLANS AND SURVEY)
1/4" = 1'-0"



BRIDGE ELEVATION

1/8" = 1'-0"

Y:\KENT\357\BRIDGE\T201407501\PLANS\VFRO1.DGN

<p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	ADDENDUMS / REVISIONS		SCALE AS NOTED	REMOVAL OF BR 2-357P PEDESTRIAN BRIDGE OVER ST. JONES RIVER	CONTRACT	BRIDGE NO.	2-357P	EXISTING BRIDGE PLAN, SECTION, AND ELEVATION	SHEET NO.
					T201407501	DESIGNED BY: NED	6		
					COUNTY	CHECKED BY: CAS	TOTAL SHTS.		
					KENT		13		

ENVIRONMENTAL COMPLIANCE NOTES

1. GENERAL NOTES:

- A. THE PURPOSE OF THESE SHEETS IS TO IDENTIFY THOSE ITEMS ASSOCIATED WITH ENVIRONMENTAL COMPLIANCE. IMPACT CALCULATIONS ARE FOR THE AGENCY PERMIT REPORTING PURPOSES ONLY AND ARE NOT TO BE USED FOR BIDDING PURPOSES.
- B. IF A DEPARTURE FROM THE APPROVED PLANS (WHICH WOULD AFFECT ANY NATURAL AND/OR CULTURAL RESOURCES) IS NECESSARY, THE ENVIRONMENTAL STUDIES SECTION SHALL BE CONTACTED AT (302)760-2264 TO ALLOW FOR COORDINATION WITH THE APPROPRIATE RESOURCE AGENCIES AND APPROVAL.
- C. USE OF THESE SHEETS DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL CONDITIONS SET FORTH IN THE ENVIRONMENTAL STATEMENT AND PERMITS.

2. NATURAL RESOURCE ISSUES:

- A. PERMIT REQUIREMENTS/APPROVALS:
 - U.S. ARMY CORPS OF ENGINEERS (COE): NWP #13 & 27**
 - DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): SUBAQUEOUS LANDS & WETLANDS PERMIT**
 - DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): ISSUED
 - USCG - PERMIT & ADVANCED NOTIFICATION -- SEE USCG LETTER DATED 10/06/14 FOR GUIDANCE/DETAILS.**
 - * THE PERMITS/APPROVALS LISTED ARE THOSE REQUIRED FOR THIS PROJECT. THE ENVIRONMENTAL STUDIES SECTION IS RESPONSIBLE FOR COORDINATING AND/OR OBTAINING THIS APPROVAL.
 - ** THE CONTRACTOR MUST ENSURE THAT THESE PERMITS/APPROVALS ARE IN THEIR POSSESSION PRIOR TO BEGINNING CONSTRUCTION IN THE PERMITTED AREA(S) AND ENSURE THEY ARE DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.
- B. CONSTRUCTION RESTRICTIONS: THERE ARE SEVERAL TIME OF YEAR RESTRICTIONS IN EFFECT BETWEEN 3/1-9/30, AS FOLLOWS:
 - FISHERIES - NO IN-WATER WORK OR NOISE INTRODUCED IN TO THE WATER COLUMN BETWEEN MARCH 15-JUNE 30, ANY YEAR
 - ENDANGERED SPECIES - NONE
 - MIGRATORY BIRDS - APRIL 15 - AUGUST 1 (INCLUSIVE). EITHER BEGIN WORK ON THE UNDERSIDE OF THE STRUCTURE PRIOR TO 4/15 (TO PREVENT BIRDS FROM NESTING) OR WAIT UNTIL AFTER 8/1 (AFTER HATCHLINGS HAVE LEFT) TO BEGIN WORK TO UNDERSIDE. IF NEITHER OF THESE OPTIONS IS PRACTICABLE, THEN DETERRENT NETTING OR SIMILAR DEVICE SHALL BE INSTALLED PRIOR TO 4/15.
 - OSPREY - AND OSPREY NEST EXISTS ADJACENT TO THE PROJECT SITE (APPROXIMATELY 100' NORTHEAST OF THE CONCRETE PIER). WORK AT THIS SITE SHALL BE AVOIDED FROM 3/1-9/30.

3. CULTURAL RESOURCE ISSUES: NONE

4. STREAM RESTORATION AND SLOPE RIPRAP TREATMENT

- A. AREAS OF THE CHANNEL BOTTOM AFFECTED BY CONSTRUCTION (INCLUDING, BUT NOT LIMITED TO, THE LOCATION OF SUMP PITS, COFFERDAMS, AND DIVERSIONS) SHALL BE RESTORED TO EXISTING CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH BORROW, TYPE 'B'. PAYMENT UNDER ITEM #209002 - BORROW, TYPE 'B'.
- B. ALL RIPRAP ON THE STREAM BANK (ABOVE MEAN HIGH WATER LINE) SHALL BE CHOKED WITH DELAWARE #57 STONE. PLACE JUST ENOUGH CHOKE MATERIAL TO PREVENT THE LOSS OF TOPSOIL THROUGH THE RIPRAP, AND THEN FINISH FILLING THE VOIDS WITH TOPSOIL SO THAT THE RIPRAP PEAKS ARE BARELY VISIBLE. AN ADDITIONAL 4-INCH TOPSOIL LAYER SHALL BE PLACED ON TOP OF THE RIPRAP. SLOPE SEEDING SHALL BE PAID FOR UNDER ITEM #908019 - STREAMBANK SEED MIX, SEEDING. FOLLOWING THE SEEDING OPERATION, ITEM #908020 - EROSION CONTROL BLANKET MULCH, OR OTHER BLANKET AS SHOWN ON THE PLANS SHALL BE INSTALLED. ALL WORK, STARTING WITH THE INITIAL CHOKING WITH TOPSOIL THROUGH THE SEEDING, SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. DELAWARE #57 STONE SHALL BE INCIDENTAL TO THE RIPRAP ITEM. ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

5. PROTECTION OF RESOURCES

- A. CLEARING IN WETLAND AREAS SHALL BE KEPT TO A MINIMUM ABSOLUTELY NECESSARY FOR CONSTRUCTION ACCESS. ALL EQUIPMENT TRAVERSING WETLANDS AND SUBAQUEOUS LAND SHALL BE SUPPORTED ON MATS. IN WETLAND AREAS THAT ARE CLEARED, THERE SHALL BE NO GRUBBING EXCEPT WHERE NECESSARY TO CONSTRUCT PROJECT COMPONENTS SUCH AS RIPRAP PROTECTION. VEGETATION SHALL BE CUT FLUSH WITH THE GROUND (I.E. NO DISTURBANCE OF THE ROOT MAT. TEMPORARILY DISTURBED WETLAND AREAS SHALL BE RESTORED TO GRADE AND SEEDED WITH TEMPORARY GRASS SEEDING, PAYMENT UNDER ITEM #908017).
- B. SILT FENCE OR CONSTRUCTION SAFETY FENCE SHALL BE USED ALONG THE LIMITS OF CONSTRUCTION IN ALL AREAS WHERE WATER/WETLANDS ARE BEING IMPACTED (AS SHOWN ON ENVIRONMENTAL COMPLIANCE SHEETS), AND ALSO IN ANY AREA WHERE WATER/WETLANDS EXIST WITHIN 20 FEET OF THE LOC (AS SHOWN ON CONSTRUCTION PLANS). CONTRACTOR ACCESS BEYOND THE LOC IS STRICTLY PROHIBITED.

6. STABILIZATION UPON COMPLETION OF HOT-MIX REMOVAL

AFTER REMOVAL OF THE EXISTING PAVEMENT, PLACE A MINIMUM OF 2 INCHES OF TOPSOIL SUCH THAT THE AREA IS LEVEL WITH ADJACENT, UNDISTURBED GROUND - NOT RAISED OR IN A DEPRESSION. THE AREA SHALL THEN BE SEEDED WITH ITEM #908019 - STREAMBANK SEED MIX. FOLLOWING THE SEEDING OPERATION, ITEM #908020 - EROSION CONTROL BLANKET MULCH, OR OTHER BLANKET AS SHOWN ON THE PLANS SHALL BE INSTALLED. ALL WORK, ONCE BARE SOIL IS EXPOSED, SHALL BE COMPLETED WITHIN 2 DAYS AND PRIOR TO ANY RAIN EVENT.

ORIGINAL SHEETS PREPARED BY NICHOLAS DEAN, DELDOT ON 10-06-2014. SHEETS LAST UPDATED ON 10-12-2015.

WETLANDS DELINEATED BY ENVIRONMENTAL RESOURCES, INC. ON 08-25-2014 IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND REGIONAL SUPPLEMENTS.

Unofficial
Website
Copy

LAST REVISED: 10/22/2013
Y:\KENT_357\BRIDGE\T201407501\PLANS\PN01.DGN

E.C. SHEET 1 OF 2

 DELAWARE DEPARTMENT OF TRANSPORTATION	ADDENDUMS / REVISIONS		NOT TO SCALE	REMOVAL OF BR 2-357P PEDESTRIAN BRIDGE OVER ST. JONES RIVER	CONTRACT	BRIDGE NO.	2-357P	ENVIRONMENTAL COMPLIANCE NOTES	SHEET NO.	7
					T201407501	DESIGNED BY: NED			TOTAL SHTS.	13
					COUNTY	CHECKED BY: CAS				
					KENT					

OPEN WATER CREATION AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OC-1	ABUTMENT REMOVAL-W. BANK	640.04	0.0147	71.12	COE / DNREC
OC-2	TIMB. PIER REMOVAL-W. BANK	384.73	0.0088	142.49	COE / DNREC
OC-3	CONC. PIER REMOVAL-E. BANK	391.64	0.0090	87.03	COE / DNREC
TOTAL OPEN WATER CREATION AREAS		1416.41	0.0325	300.64	COE / DNREC

PERMANENT OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
O-1	RIPRAP ON SOUTHWEST BANK	621.38	0.0143	51.78	COE / DNREC
O-2	RIPRAP ON NORTHWEST BANK	2028.42	0.0466	169.04	COE / DNREC
TOTAL PERMANENT OPEN WATER IMPACTS		2649.80	0.0609	220.82	COE / DNREC



TEMPORARY OPEN WATER IMPACT AREA SCHEDULE					
ID	IMPACT DESCRIPTION	AREA (SF)	AREA (AC)	VOLUME (CY)	JURISDICTION
OT-1	S. W. TURBIDITY CURTAIN	933.11	0.0214	345.60	COE / DNREC
OT-2	W. STREAMBANK COFFERDAM	1247.48	0.0286	462.03	COE / DNREC
OT-3	N. W. TURBIDITY CURTAIN	2405.41	0.0552	890.89	COE / DNREC
OT-4	E. STREAMBANK COFFERDAM	627.78	0.0144	139.51	COE / DNREC
OT-5	N. E. TURBIDITY CURTAIN	167.17	0.0038	37.15	COE / DNREC
TOTAL TEMPORARY OPEN WATER IMPACTS		5380.95	0.1234	1875.18	COE / DNREC

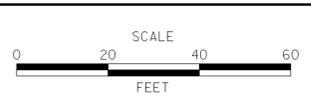
LEGEND

- CREATION AREA
- PERMANENT IMPACT AREA
- TEMPORARY IMPACT AREA
- MHW/TW/SMW - MEAN HIGH WATER / TIDAL WETLAND / STATE MAPPED WETLAND
- MHW - MEAN HIGH WATER
- SMW - STATE MAPPED WETLAND
- PMHW - PROPOSED MEAN HIGH WATER
- IMPACT AREA TYPE ID. (SEE BELOW)
- IMPACT AREA ID. AND/OR NUMBER

C = CREATION AREA T = TEMPORARY IMPACT
O = OPEN WATER IMPACT W = WETLAND IMPACT

E.C. SHEET 2 OF 2

ADDENDUMS / REVISIONS

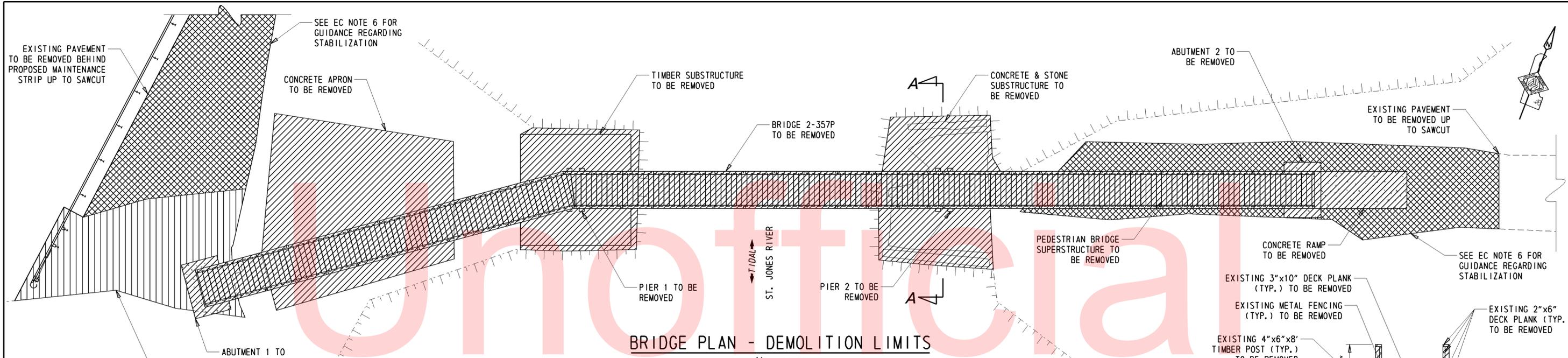


**REMOVAL OF BR 2-357P
PEDESTRIAN BRIDGE OVER
ST. JONES RIVER**

CONTRACT	BRIDGE NO.	2-357P
T201407501	DESIGNED BY:	NED
COUNTY	CHECKED BY:	CAS
KENT		

ENVIRONMENTAL COMPLIANCE PLAN	SHEET NO.	8
	TOTAL SHTS.	13

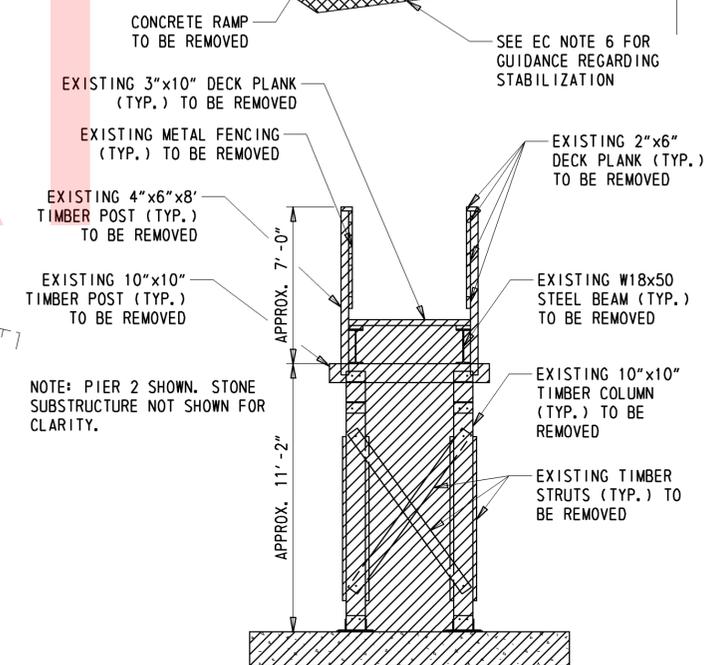
Y:\KENT\357 BRIDGE\T201407501\PLANS\CP01.DGN



BRIDGE PLAN - DEMOLITION LIMITS

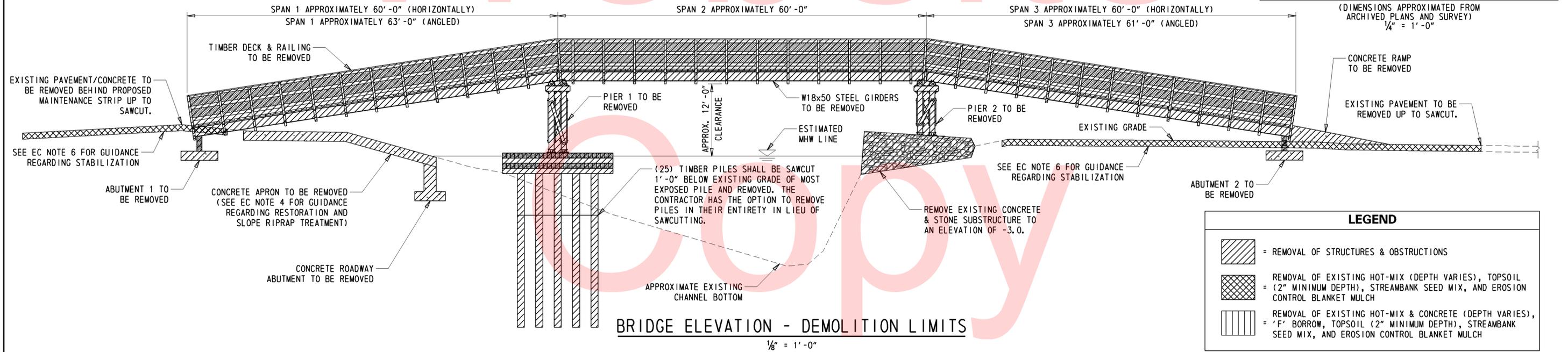
1/8" = 1'-0"

- CHANNEL BOTTOM SHOWN IS APPROXIMATE. ALL BRIDGE ELEMENT DIMENSIONS AND LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- DEMOLITION OF THE EXISTING BRIDGE SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. AREA SHOWN HATCHED TO BE REMOVED AND SALVAGED OR DISPOSED. REFERENCE SECTION 211 OF THE STANDARD SPECIFICATIONS FOR ITEM 211000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS FOR THE DISPOSITION OF VARIOUS BRIDGE COMPONENTS. REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR UNDER ITEM 202000 - EXCAVATION AND EMBANKMENT. REMOVAL OF EXISTING CONCRETE PAVEMENT WILL BE PAID FOR UNDER 758000 - REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.
- BACKFILLING OF CAVITIES SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE STANDARD SPECIFICATIONS. CAVITIES SHALL BE BACKFILLED WITH ITEM 209006 - BORROW TYPE 'F'. THE VOID LEFT BY ITEM 758000 - REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC. SHALL BE BACKFILLED WITH ITEM #209006 - BORROW TYPE 'F' UP TO THE ELEVATION REQUIRED FOR THE TOPSOIL (2" MINIMUM DEPTH).
- PRIOR TO BEGINNING ANY DEMOLITION WORK, THE CONTRACTOR SHALL PREPARE FOR APPROVAL, A WORKING DRAWING OUTLINING THE SEQUENCE OF REMOVAL, A LISTING OF THE EQUIPMENT PROPOSED FOR THE DEMOLITION, AND A DEMOLITION SCHEDULE. THE WORKING DRAWING SUBMITTAL FOR THE DEMOLITION WORK SHALL BE SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF DELAWARE.
- THE CONTRACTOR SHALL LIMIT DEBRIS FROM FALLING INTO THE ST. JONES RIVER. ANY DEBRIS THAT FALLS INTO THE ST. JONES RIVER SHALL BE COLLECTED BY THE CONTRACTOR IMMEDIATELY.
- THE EXISTING BRIDGE STRUCTURE CONTAINS HAZARDOUS MATERIALS (CREOSOTE AND LEAD PAINT). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DELAWARE DEPARTMENT OF TRANSPORTATION HAZMAT SECTION REGARDING ENVIRONMENTAL REGULATIONS FOR HAZARDOUS MATERIALS IN THE STATE OF DELAWARE, DURING THE REMOVAL AND DISPOSAL OF THE EXISTING SUPERSTRUCTURE AND SUBSTRUCTURE. ALL COSTS ASSOCIATED WITH THE REMOVAL OF CREOSOTE SHALL BE PERFORMED IN ACCORDANCE WITH SPECIAL PROVISION #202560 - CONTAMINATED MATERIAL. REMOVAL AND DISPOSAL OF THE LEAD-BASED PAINT SYSTEM ON THE EXISTING STEEL BEAMS SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION #605533 - CLEANING EXISTING STEEL STRUCTURES, HAZARDOUS BASE PRIOR TO OFF SITE TRANSPORT AND DISPOSAL. THE CONTRACTOR MAY CONTACT LATONYA GILLIAM, DELDOT ENVIRONMENTAL STUDIES, AT 302-760-2095 WITH QUESTIONS REGARDING HAZARDOUS MATERIALS ON SITE.
- PLANS OF THE EXISTING STRUCTURE FROM CONTRACT 76-07-012 ARE AVAILABLE TO THE CONTRACTOR UPON REQUEST. EXISTING PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. THE DEPARTMENT DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION PROVIDED THEREIN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCING WITH THE DEMOLITION OF THE EXISTING BRIDGE AS STIPULATED.



BRIDGE CROSS SECTION - (SECTION A-A) DEMOLITION LIMITS

(DIMENSIONS APPROXIMATED FROM ARCHIVED PLANS AND SURVEY)
1/4" = 1'-0"



BRIDGE ELEVATION - DEMOLITION LIMITS

1/8" = 1'-0"

LEGEND	
	= REMOVAL OF STRUCTURES & OBSTRUCTIONS
	= REMOVAL OF EXISTING HOT-MIX (DEPTH VARIES), TOPSOIL (2" MINIMUM DEPTH), STREAMBANK SEED MIX, AND EROSION CONTROL BLANKET MULCH
	= REMOVAL OF EXISTING HOT-MIX & CONCRETE (DEPTH VARIES), 'F' BORROW, TOPSOIL (2" MINIMUM DEPTH), STREAMBANK SEED MIX, AND EROSION CONTROL BLANKET MULCH

ADDENDUMS / REVISIONS

SCALE AS NOTED

**REMOVAL OF BR 2-357P
PEDESTRIAN BRIDGE OVER
ST. JONES RIVER**

CONTRACT T201407501	BRIDGE NO. 2-357P
COUNTY KENT	DESIGNED BY: NED
	CHECKED BY: CAS

DEMOLITION PLAN	SHEET NO. 9
	TOTAL SHTS. 13

Y:\KENT\357\BRIDGE\T201407501\PLANS\VF01.DGN

SIGN SCHEDULE - ITEM 749690 MULTI POST (SF)																	
NO.	SHEET NO.	PLAN INDICATOR	CODE	QTY.	DESCRIPTION	ASSEMBLY NO.	SIGN WIDTH (IN.)	SIGN HEIGHT (IN.)	SIGN AREA (SF)	SIGN DISPOSITION	REMOVE	INSTALL	POST INSTALLATION TYPE	CODE X11 (W/ BASEPOST)	ITEM 749688 (4" HOLE, 0-6' (EACH)	ITEM 749689 (4" HOLE, >6' (EACH)	REMARKS
774	11	4	W1-6-L(4B)	1	ONE DIRECTIONAL LARGE ARROW (LEFT)-48"x24"	-	48"	24"	8	REMOVE	1	-	SOIL	-	-	-	-

7-00-09511-01-0200-00001
PAUL A. VITANZA SR. & SANDRA JO VITANZA, H&W
D.R. D5090 330 D120 101

7-00-09500-01-1400-00001
KENT COUNTY
D.R. Q54 328

7-00-09511-01-0100-00001
ROSANNE STRANG
D.R. D173 87

7-00-09511-01-0702-00001
DOUGLAS L. SCOONS & PATRICIA ANN SCOONS
D.R. P54 8

7-00-09511-01-0700-00001
FEDERAL HOME LOAN MORTGAGE, CO.
D.R. D6454 46

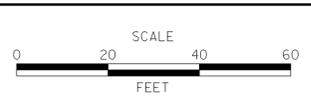
2-00-09500-01-0100-00001
ROBERT PATTERSON & WILLARD F. PATTERSON
D.R. WT3 148 014 483

SIGN SCHEDULE - ITEM 749687 SINGLE POST (EACH)														
NO.	SHEET NO.	PLAN INDICATOR	CODE	QTY.	DESCRIPTION	ASSEMBLY NO.	SIGN WIDTH (IN.)	SIGN HEIGHT (IN.)	SIGN AREA (SF)	SIGN DISPOSITION	REMOVE	INSTALL	POST INSTALLATION TYPE	REMARKS
780	11	1	W1-8(18)	2	CHEVRON ALIGNMENT - 18"x24"	1	18"	24"	3	REMAIN	-	-	SOIL	-
780	11	2	W1-8(18)	2	CHEVRON ALIGNMENT - 18"x24"	2	18"	24"	3	REMAIN	-	-	SOIL	-
780	11	3	W1-8(18)	2	CHEVRON ALIGNMENT - 18"x24"	3	18"	24"	3	NEW	-	1	SOIL	-
780	11	5	W1-8(18)	2	CHEVRON ALIGNMENT - 18"x24"	4	18"	24"	3	REPOSITION	1	1	SOIL	-
50	11	6	R2-1-35(24)	1	SPEED LIMIT (35 MPH-24"x30")	-	24"	30"	5	REPOSITION	1	1	SOIL	-
780	11	7	W1-8(18)	2	CHEVRON ALIGNMENT - 18"x24"	5	18"	24"	3	REPOSITION	1	1	SOIL	-
780	11	8	W1-8(18)	2	CHEVRON ALIGNMENT - 18"x24"	6	18"	24"	3	REMAIN	-	-	SOIL	-
42	11	9	R2-1-25(24)	1	SPEED LIMIT (25 MPH-24"x30")	-	24"	30"	5	REMAIN	-	-	SOIL	-
1445	11	10	W21-11-DE	1	WATCH CHILDREN (SYMBOL)	7	30"	30"	6.25	REMOVE	1	-	SOIL	-
1269	11	11	W11-240-DE	1	HIDDEN ENTRANCE (PLAQUE)	7	24"	12"	2	REMOVE	1	-	SOIL	-

Y:\KENT\357 BRIDGE\T201407501\PLANS\CP01.DGN



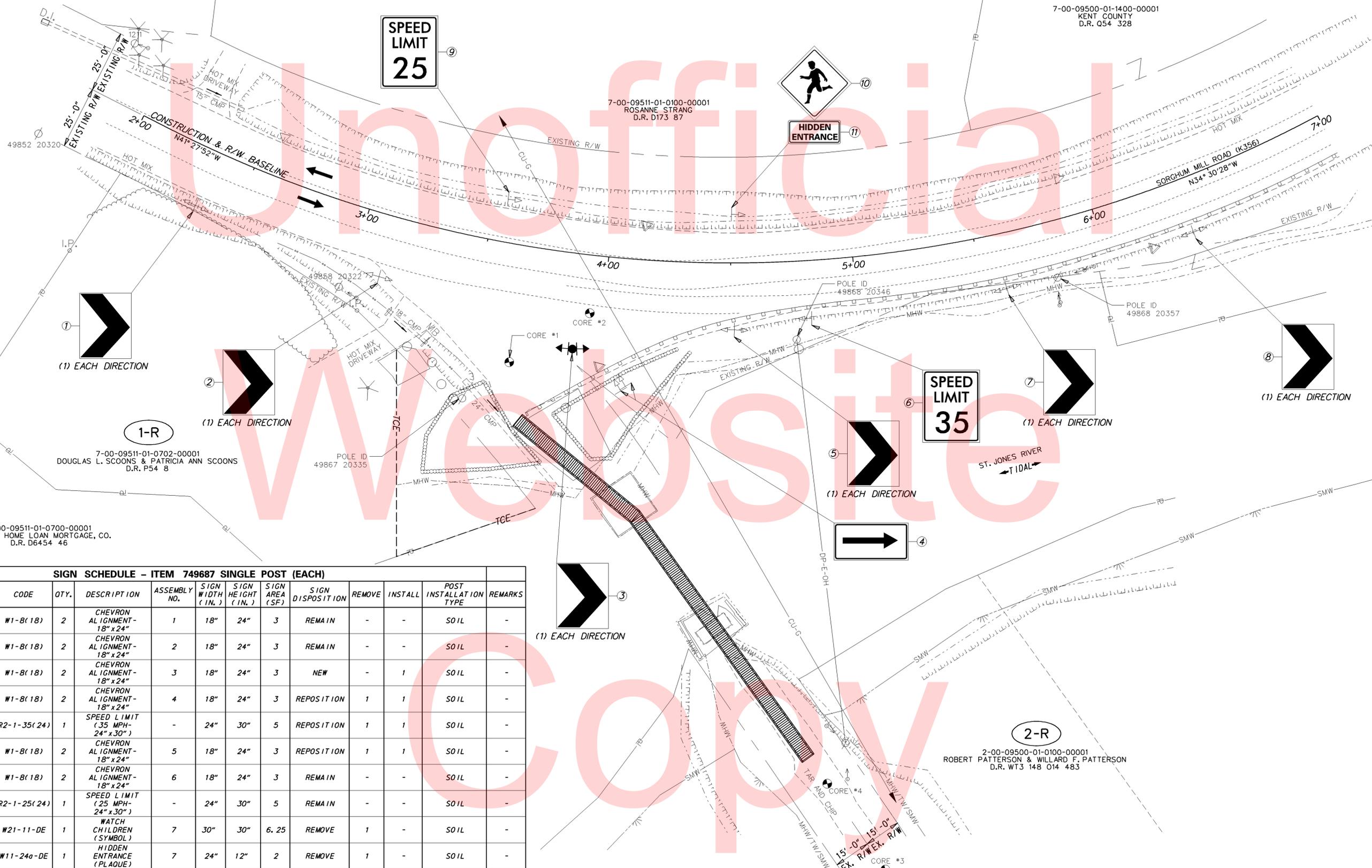
ADDENDUMS / REVISIONS	



**REMOVAL OF BR 2-357P
PEDESTRIAN BRIDGE OVER
ST. JONES RIVER**

CONTRACT T201407501	BRIDGE NO. 2-357P
COUNTY KENT	DESIGNED BY: NED
	CHECKED BY: CAS

SIGNING PLAN	SHEET NO. 11
	TOTAL SHTS. 13



7-00-09511-01-0200-00001
PAUL A. VITANZA SR. & SANDRA JO VITANZA, H&W
D.R. D5090 330 D120 101

7-00-09500-01-1400-00001
KENT COUNTY
D.R. Q54 328

7-00-09511-01-0100-00001
ROSANNE STRANG
D.R. D173 87

1-R
7-00-09511-01-0702-00001
DOUGLAS L. SCOONS & PATRICIA ANN SCOONS
D.R. P54 8

7-00-09511-01-0700-00001
FEDERAL HOME LOAN MORTGAGE, CO.
D.R. D6454 46

2-00-09500-01-0100-00001
ROBERT PATTERSON & WILLARD F. PATTERSON
D.R. WT3 148 014 483

RECOMMENDED AS TO ENGINEERING NEED	
<i>Shelby Chandi</i> MANAGER, TEAM SUPPORT, ACTING	9/9/15 DATE
TEAM SUPPORT PROGRAM MANAGER	DATE
<i>Robert A. Reed</i> TEAM SUPPORT TECHNICAL REVIEWER	9.9.15 DATE

RIGHT-OF-WAY SHEET 1 OF 2



ADDENDUMS / REVISIONS



**REMOVAL OF BR 2-357P
PEDESTRIAN BRIDGE OVER
ST. JONES RIVER**

CONTRACT T201407501	BRIDGE NO. 2-357P
COUNTY KENT	DESIGNED BY: NED
	CHECKED BY: CAS

RIGHT-OF-WAY PLAN	SHEET NO. 12
	TOTAL SHTS. 13

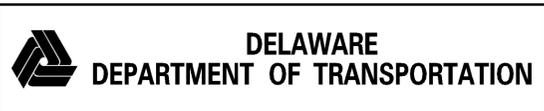
Y:\KENT\357\BRIDGE\T201407501\PLANS\CP01.DGN

ASSESSMENT NUMBER	OWNERSHIP OF RECORD					TYPE OF ACQUISITION	TITLE SOURCE	PARCEL AREA (ACRES)			
7-00-09511-01-0702-00001	(1-R) DOUGLAS L. SCOONS & PATRICIA ANN SCOONS					TCE	D.R. P54 8	0.478			
ALIGNMENT NUMBER & DESCRIPTION: 5000 - CONSTRUCTION BASELINE											
PT. NO.	ALIGN. NO.	STATION	OFFSET *	NORTH	EAST	BEARING	DISTANCE	CHORD BEARING	CHORD LENGTH	ARC LENGTH	RADIUS **
11001	5000	3+24.69	52.24	405252.4215	632647.6263	S 75°23'16.14" E	84.53				
11002	5000	3+41.00	134.55	405231.0961	632729.4244	N 4°26'42.85" W	60.21				
11003	5000	3+83.66	105.39	405291.1265	632724.7576			S 63°21'07.93" W	86.30	86.34	+765.11
11001	5000	3+24.69	52.24	405252.4215	632647.6263						
FIGURE 11001 AREA = 2475.4891 SQ. FT. (0.0568 ACRES)											

COUNTY ASSESSMENT PARCEL NUMBER	PLAN SHEET NUMBER	OWNERSHIP OF RECORD	TITLE SOURCE	PROPERTY AREA BEFORE ACQUISITION (ACRE) D=DEED C=CALCULATED A=ASSESSMENT	ACQUISITION CODE FEE, R/W, P/E, TCE	AREA TO BE ACQUIRED			PROPERTY AREA REMAINING (SQ. FEET / ACRES)	DEED RECORD OF ACQUISITION	REMARKS
						ACQUISITION (SQ. FEET / ACRES)	AREA OCCUPIED BY EXISTING RIGHT OF WAY (SQ. FEET / ACRES)	EASEMENT PERMANENT (SQ. FEET / ACRES) TEMPORARY (SQ. FEET / ACRES)			
7-00-09511-01-0702-00001	5	(1-R) DOUGLAS L. SCOONS & PATRICIA ANN SCOONS	D.R. P54 8	D - 0.48	TCE			2475.4891 / 0.06	20822.00 / 0.48		

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

RIGHT-OF-WAY SHEET 2 OF 2



ADDENDUMS / REVISIONS

**REMOVAL OF BR 2-357P
PEDESTRIAN BRIDGE OVER
ST. JONES RIVER**

CONTRACT T201407501	BRIDGE NO. 2-357P
COUNTY KENT	DESIGNED BY: NED
	CHECKED BY: CAS

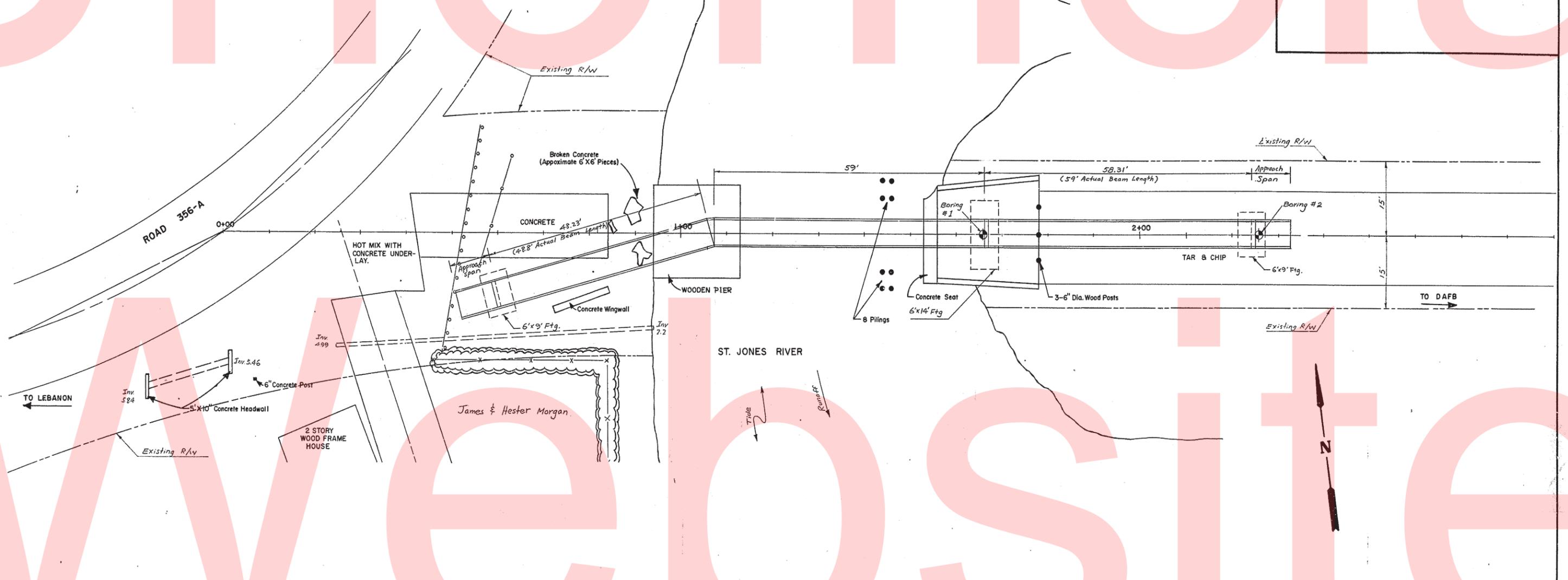
RIGHT-OF-WAY DATA AND TABULATION SHEET	
SHEET NO.	13
TOTAL SHTS.	13

Y:\KENT\357\BRIDGE\T201407501\PLANS\RB01.DGN

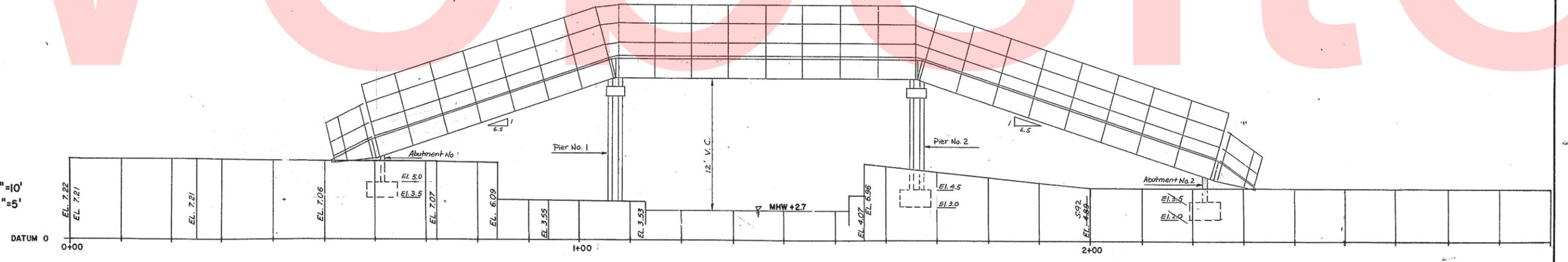
INFORMATION ONLY

COUNTY	CONTRACT	P. & A. RES. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
Kent	76-07-012	2	DEL		1	3
Bicycle Pedestrian Bridge Across St. Jones River at Lebanon						
PREL. TRACING		DESIGN		CHKD.		
REVISIONS						

BM#1 Sta 0+02 N-E Cor. Headwall
24' R+. El. 7.79

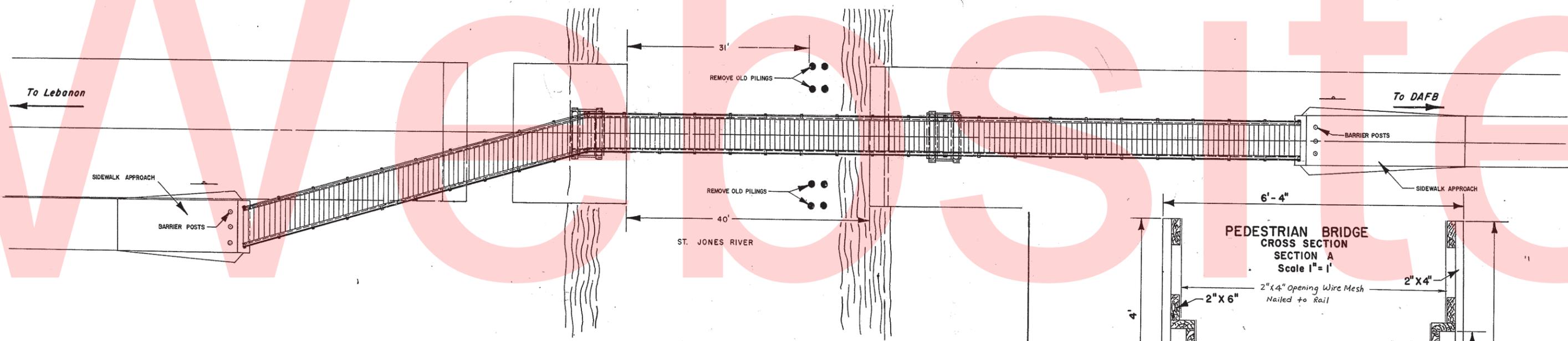
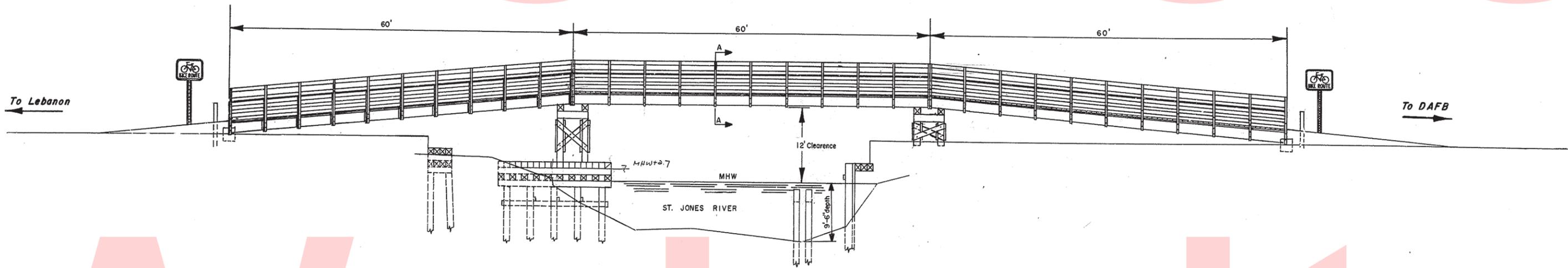


Horizontal Scale 1"=10'
Vertical Scale 1"=5'

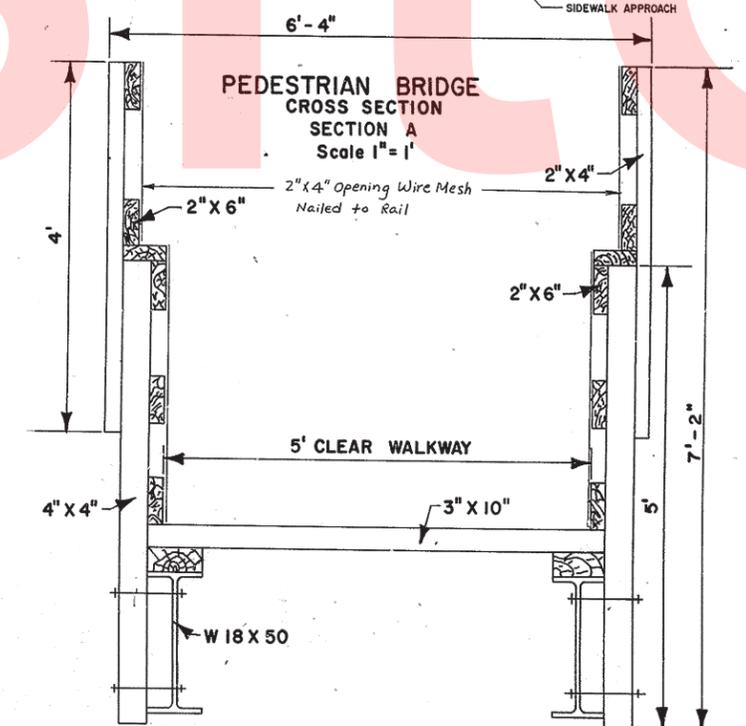


INFORMATION ONLY

COUNTY	CONTRACT	P. E. L. REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
KENT	2	DEL.			2	23
LEBANON BICYCLE BRIDGE (OVER THE ST. JONES RIVER)						
PREL. TRACING <i>2/22</i>		DESIGN		CHKD.		
REVISIONS						



PEDESTRIAN BRIDGE
Scale 1/8" = 1'



INFORMATION ONLY

COUNTY	CONTRACT	P.E.A. REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
KENT	76-07-012	2	DEL.		3	3

LEBANON BICYCLE BRIDGE			
NO.	REVISIONS	BY	DATE

REINFORCIN BAR SCHEDULE			
MARK	SIZE	NUMBER	LENGTH
F801	8	6	13'-6"
F802	8	32	5'-6"
F503	5	6	13'-6"
F504	5	32	5'-6"
F805	8	12	8'-6"
F506	5	12	8'-6"

Estimated Weight = 1533 Lbs.

TREATED TIMBER				
LOCATION	SIZE	LENGTH	NO. REQD.	REFERENCE
Abut. 1	10' x 10'	6'-0"	1	Blocks
	10' x 10'	1'-0"	4	
Abut. 2	10' x 10'	6'-0"	1	Blocks
	10' x 10'	1'-0"	4	
PIER 1	10' x 10'	10'-0"	4	Columns
	10' x 10'	7'-0"	2	
	10' x 10'	4'-0"	1	
	10' x 10'	6'-0"	1	
PIER 2	2' x 6'	10'-0"	2	X-Braces
	10' x 10'	10'-0"	4	
	10' x 10'	7'-0"	2	Columns
	2' x 6'	10'-0"	2	
2' x 6'	10'-0"	8	X-Braces	

UNTREATED TIMBER				
LOCATION	SIZE	LENGTH	NO. REQD.	REFERENCE
RAILING	2' x 4"	4'-0"	73	Posts
FORMS	2' x 6"	12'-0"	70	Rails
	5/8" x 10"	9'-0"	4	Plywood
	5/8" x 18"	6'-0"	6	Plywood
	5/8" x 18"	14'-0"	2	Plywood
2' x 4"	5'-0"	120	Stakes for forming	

HARDWARE				
LOCATION	SIZE	LENGTH	NO. REQD.	REFERENCE
ABUT. 1 & 2	1" ø	4'-0"	18	Anchor Bolts
PIER 1	1" ø	1'-4"	34	Log Bolts
PIER 2	1" ø	1'-6"	34	Anchor Bolts
PIER 1 & 2	1" ø	1'-1"	194	Bolts
Piers & Abut.	1 1/2" x 1 3/4"	7 1/2"	246	NUTS FOR BOLTS
Piers 1 & 2	1/2" x 2"	4"	300	Washers
Piers 1 & 2	1/8" x 1/2"	7'-8"	8	Base Plates
Piers 1 & 2	L 8" x 4" x 1/2"	0'-10"	16	Base Angles
"	L 6" x 4" x 1/2"	0'-10"	16	Base Angles
"	L 6" x 6" x 1/2"	0'-10"	32	Top Angles
Ø 1/4" dia x 20d	Ø 1/4"	0'-4"	90 Lbs	Common Wire Nails

P.C.C. MASONRY = 12 C.Y.

NOTE: All Nails to be Galvanized

DELAWARE
DEPARTMENT OF HIGHWAYS & TRANSPORTATION
DIVISION OF HIGHWAYS

ABUTMENT & PIER
DETAILS

D.M.T.C.	SCALE	APPROVED BY:
T.	3/8" = 1'-0"	
C.		BRIDGE ENGINEER

