# THE STATE OF DELAWARE
# DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

CONSTRUCTION PLANS FOR:

# SILVERSIDE ROAD ADA IMPROVEMENTS, VEALE ROAD TO WINDYBUSH DRIVE

CONTRACT NUMBER: T201701104
FEDERAL AID PROJECT NUMBER: N/A

COUNTY: NEW CASTLE M.R. #: N212

## DESIGN DESIGNATION

| | | | |
|---|---|---|---|
| MRD #: N212 | ROAD NAME: SILVERSIDE ROAD | | |
| FUNCTIONAL CLASS: MINOR ARTERIAL | | D.H.V. PROJECTED: | YEAR: |
| TYPE OF CONSTRUCTION: PAR | | DESIGN SPEED: 40 M.P.H. | |
| A.A.D.T. CURRENT: 10,072 | YEAR: 2016 | TRUCKS: 9 % | |
| A.A.D.T. PROJECTED: | YEAR: | DIRECTION OF DISTRIBUTION: 51 % | |

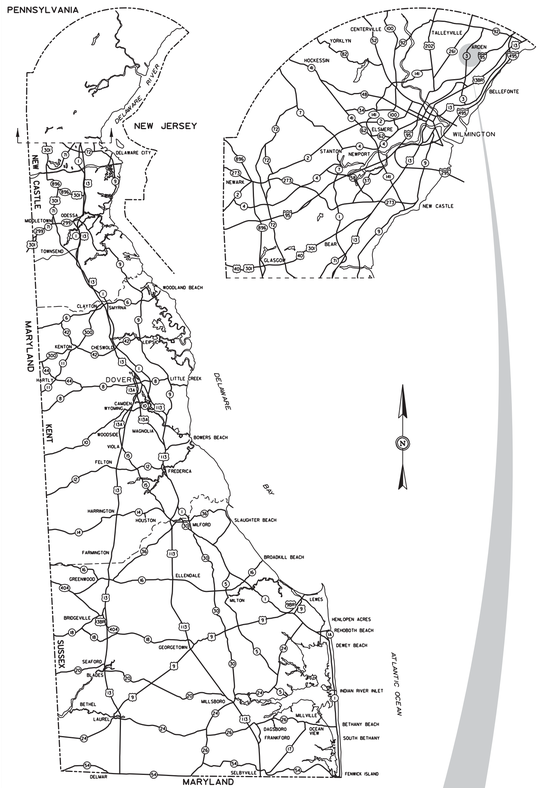
## APPROVED DESIGN EXCEPTIONS

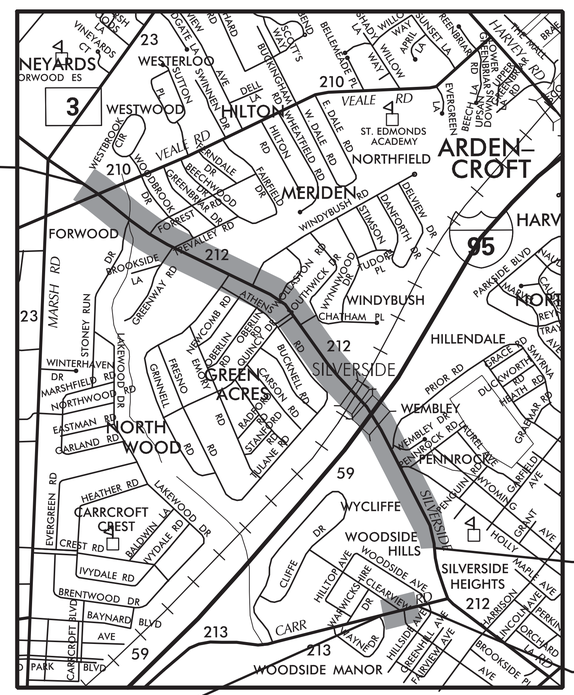
| DESIGN PARAMETER | REQUIRED | PROVIDED | DATE |
|---|---|---|---|
| | | | |

## ADDENDA / REVISIONS

## ASSOCIATED CONTRACTS

| CONTRACT NO. | CONTRACT NAME |
|---|---|
| 68-08-004 | SILVERSIDE ROAD (PHILADELPHIA PIKE TO MARSH ROAD) |
| 68-08-004 | SILVERSIDE ROAD (PHILADELPHIA PIKE TO MARSH ROAD) ROW |




LOCATION MAP
SCALE: 1" = 2000'

PREPARED BY
AECOM TECHNICAL SERVICES, INC.

11/18/2019
DATE

THIS SEAL APPLIES TO ALL SHEETS BEARING THE "AEC" SECTION DESIGNATION.

JOSEPH A. HOFSTETTER REGISTERED No. 14581 DELAWARE PROFESSIONAL ENGINEER

SEAL

APPROVED FOR ADVERTISEMENT

DIRECTOR OF TRANSPORTATION SOLUTIONS

11/20/2019
DATE

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| INDEX OF SHEETS | | |
|---|---|---|
| **SECTION** | **SHEET DESCRIPTION** | **SHEET NO(S)** |
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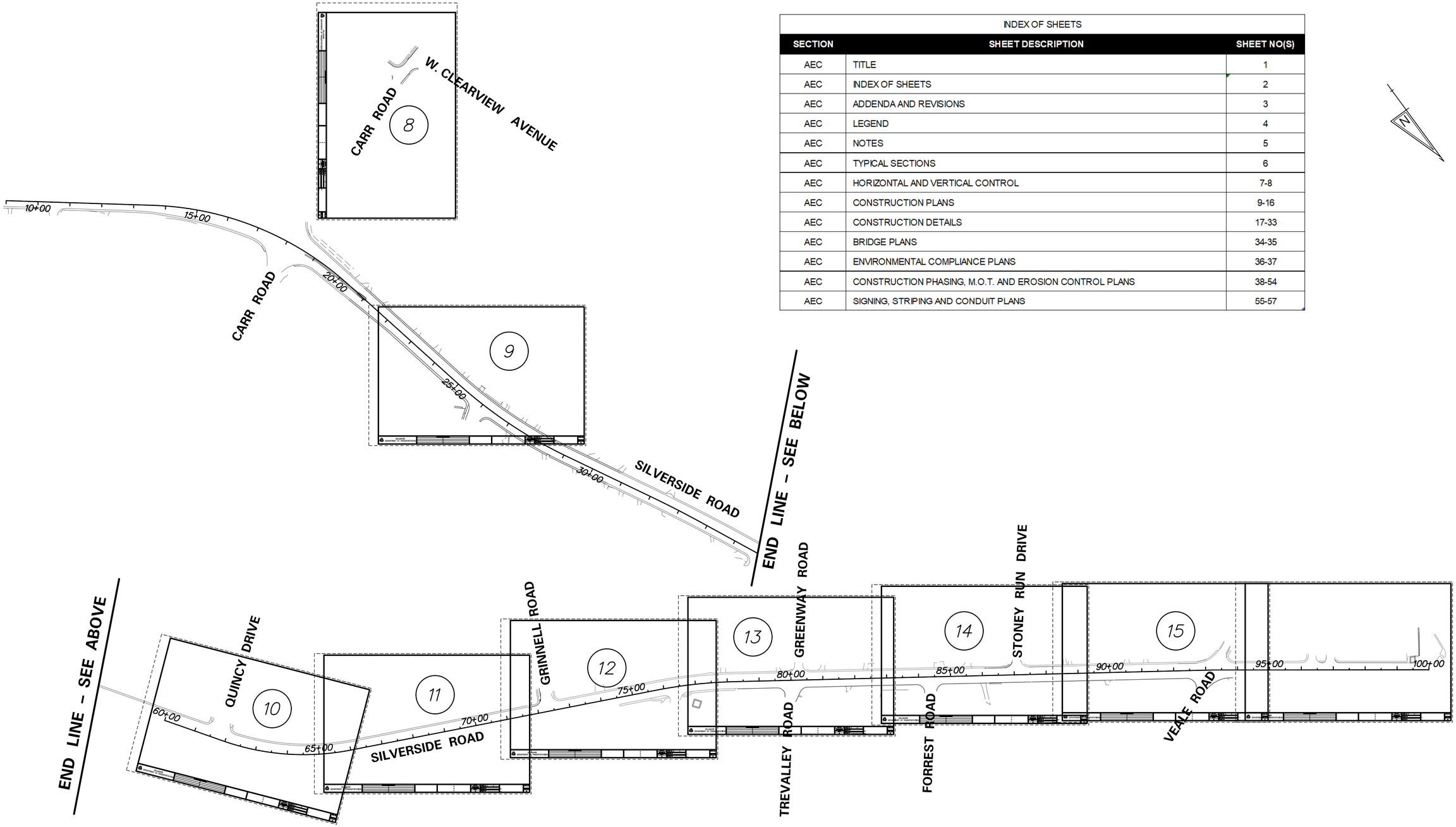


| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE
0 150 300 450
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: | P. SCOTT |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: | B. SENGER |

PLAN SHEET INDEX

| SECTION |
|---|
| AEC |
| SHEET NO. |
| 2 |

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| ADDENDA / REVISIONS | |
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**NOT TO SCALE**

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: | P. SCOTT |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: | B. SENGER |

ADDENDA AND REVISIONS

| SECTION |
|---|
| AEC |
| SHEET NO. |
| 3 |

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# EXISTING SYMBOLS

## DRAINAGE

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

## MANMADE ROADSIDE FEATURES

| | |
|---|---|
| | BOLLARD - STEEL POLE |
| | BOLLARD - WOOD POST |
| (TYPE LABEL) | CURB |
| (TYPE LABEL) | CURB AND GUTTER |
| | FENCE - CHAINLINK OR STRANDED |
| | FENCE - STOCKADE OR SPLIT RAIL |
| FP | FLAG POLE |
| | GUARDRAIL - STEEL BEAM |
| | GUARDRAIL - WIRE ROPE |
| LAMP | LAMP AND POST - RESIDENTIAL |
| MB | MAILBOX |
| PM | PARKING METER AND POST |
| | PAVEMENT - FLEXIBLE |
| | PAVEMENT - RIGID |
| | PILE - BRIDGE |
| | PILLAR OR MISCELLANEOUS POST |
| | TRAFFIC SIGN AND POST |
| | WALL - BRICK OR BLOCK |
| | WALL - STONE |

## NATURAL ROADSIDE FEATURES

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

## RIGHT-OF-WAY SYMBOLS

| | |
|---|---|
| C.M. | PROPERTY MARKER - CONCRETE MON. |
| I.P. | PROPERTY MARKER - IRON PIPE |
| 100+00 | HISTORIC RIGHT-OF-WAY BASELINE |
| | EXISTING RIGHT-OF-WAY |
| | EXISTING PROPERTY LINE |
| EASEMENT TYPE | EXISTING EASEMENT |
| DA | EXISTING DENIAL OF ACCESS |
| R/W-DA | EXISTING R/W & DENIAL OF ACCESS |

## SURVEY CONTROL & MONUMENTATION

| | |
|---|---|
| B.M. | SURVEY BENCHMARK LOCATION |
| T.P. | SURVEY TIE POINT LOCATION |
| | SURVEY TRAVERSE POINT |
| | POINT OF CURVATURE OR TANGENCY |
| | POINT OF INTERSECTING TANGENTS |

## UTILITY

| | |
|---|---|
| | SOIL BORING LOCATION |
| | UTILITY TEST HOLE LOCATION |
| TV | CABLE TV DISTRIBUTION BOX |
| E | ELECTRIC MANHOLE |
| EM | ELECTRIC METER |
| E | ELECTRIC TRANSFORMER |
| | POLE MOUNTED LUMINAIRE |
| G | GAS MANHOLE |
| G.M. | GAS METER |
| G.V. | GAS VALVE |
| G.P. | GAS PUMP - SERVICE STATION |
| | RAILROAD TRACKS |
| S | SANITARY SEWER MANHOLE |
| S.V. | SANITARY SEWER VALVE |
| SCO | SANITARY SEWER CLEANOUT OR VENT |
| 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

| | |
|---|---|
| VER-FO(X) | VERIZON - FIBER OPTIC |
| DP-GAS(X) | DELMARVA POWER - GAS |
| DP-E(X) | DELMARVA POWER - ELECTRIC |
| SZ-W(X) | SUEZ - WATER |

(X) REPRESENTS ASCE DEFINED SUE QUALITY LEVEL

# PROPOSED SYMBOLS

## CONSTRUCTION

| | |
|---|---|
| | CONCRETE SAFETY BARRIER - PERMANENT |
| BFS | BIOFILTRATION SWALE |
| | BRICK PATTERNED SURFACE |
| | BUTT JOINT |
| CZ | CLEAR ZONE |
| 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 |
| | CURB OPENING |
| | 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 |
| MB | MAILBOX |
| | MANHOLE |
| | PAVEMENT PATCH |
| | PAVEMENT REMOVAL - TOPSOIL, SEED AND MULCH |
| | DETECTABLE WARNING SURFACE |
| | PIPE & DIRECTIONAL FLOW ARROW |
| | RIPRAP |
| | P.C.C. SIDEWALK - 4" |
| | P.C.C. SIDEWALK - 6" (USE 8" DEPTH FOR CHANNELIZATION ISLANDS.) |
| | UNDERDRAIN |
| | UNDERDRAIN OUTLET |

## RIGHT-OF-WAY SYMBOLS

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

## IDENTIFIERS

| | |
|---|---|
| A/C | ADJUST BY CONTRACTOR |
| A/O | ADJUST BY OTHERS |
| B | CONCRETE SAFETY BARRIER |
| C | CURB OR CURB & GUTTER |
| C.J.B. | CONVERT TO JUNCTION BOX |
| C.M.H. | CONVERT TO DRAINAGE MANHOLE |
| C/O | CURB OPENING |
| CR | CURB RAMP / TYPE |
| CR-N | CURB RAMP / TYPE - WITHOUT SIDEWALK SURFACE DETECTABLE WARNING SYSTEM |
| CSF | CONSTRUCTION SAFETY FENCE |
| DI | DRAINAGE INLET |
| DND | DO NOT DISTURB |
| ED | ENERGY DISSIPATOR |
| F | FENCE |
| FES | FLARED END SECTION |
| FF/C | FILL WITH FLOWABLE FILL |
| FS | FILTRATION STRUCTURE |
| GR | GUARDRAIL |
| JB | JUNCTION BOX |
| MH | MANHOLE |
| M | MONUMENT - RIGHT-OF-WAY |
| P | PIPE |
| RL/C | RELOCATE BY CONTRACTOR |
| RL/O | RELOCATE BY OTHERS |
| RL/PO | RELOCATE BY PROPERTY OWNER |
| RM/C | REMOVE BY CONTRACTOR |
| RM/TC | REMOVE BY TRAFFIC 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)

| | |
|---|---|
| | BITUMINOUS CONCRETE - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS |
| | DRIVEWAY AND ENTRANCE PAVEMENT - SEE TYPICAL SECTIONS FOR MATERIALS AND DEPTHS |

ADDENDA / REVISIONS

NOT TO SCALE

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| | | | |
|---|---|---|---|
| CONTRACT T201701104 | BRIDGE NO. | 1-036 | LEGEND |
| COUNTY NEW CASTLE | DESIGNED BY: | P. SCOTT | SECTION AEC |
| | CHECKED BY: | B. SENGER | SHEET NO. 4 |

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# GENERAL NOTES

1. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", DATED AUGUST 2016 AND THE DELAWARE DEPARTMENT OF TRANSPORTATION "STANDARD CONSTRUCTION DETAILS", DATED 2014, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT.

2.

| EROSION POTENTIAL FOR THIS PROJECT | CONTRACTOR ESC SUPERVISOR REQUIREMENT |
|---|---|
| ( ) INSIGNIFICANT | NONE |
| ( X ) MINOR | CONTRACTOR TRAINING PROGRAM, AS DEFINED IN SECTION 6.2 OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS. |
| ( ) 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. THE DISTURBED AREA FOR THIS PROJECT IS 0.367 ACRES.

6. THE ADDITIONAL IMPERVIOUS AREA FOR THIS PROJECT IS 1449 SQUARE FEET.

# 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.

2. THE CONTRACTOR WILL CONTACT THE DELAWARE TMC AT 302-659-4600 PRIOR TO ANY UNMANNED AIRCRAFT VEHICLE (UAV) FLIGHTS. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE THE FOLLOWING INFORMATION: THE REGISTRATION NUMBER OF THE UAV, THE FLIGHT TIME, LOCATION OF THE FLIGHT, THE PILOT'S NAME AND THE PILOT'S CONTACT NUMBER DURING THE FLIGHT.

## SECTION 200

3. 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. ACCEPTABLE POST SHALL BE 4 INCH X 4 INCH WOOD POST OR 4 INCH DIAMETER WOOD POST. FOR RELOCATING MULTIPLE MAILBOXES TOGETHER ALL POST SHALL BE SEPARATED BY A DISTANCE OF NO LESS THAN ¾ OF THEIR FULL HEIGHT ABOVE THE GROUND. MULTIPLE MAILBOXES ATTACHED TO A SINGLE HORIZONTAL BOARD SHALL NOT BE LOCATED INSIDE THE CLEARZONE. EACH MAIL BOX SHALL BE PLACED ON AN INDIVIDUAL POST MEETING THE CRITERIA ABOVE. ALL MAILBOXES SHALL BE SET NOT TO IMPEDE THE MINIMUM PAR (PEDESTRIAN ACCESS ROUTE) WIDTH AS DETERMINED BY THE CURRENT EDITION OF THE PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY. IF MAILBOXES ARE NOT SET IN ACCORDANCE WITH THE ABOVE DIRECTIONS, RESETTING OF THE MAILBOXES WILL BE AT THE COST OF THE CONTRACTOR. COST FOR ALL WORK AND MATERIALS SHALL BE PAID UNDER ITEM 201000 CLEARING AND GRUBBING.

4. THE RELOCATION OF DECORATIVE ROCKS BY THE CONTRACTOR SHALL BE INCIDENTAL TO ITEM 202000 - EXCAVATION AND EMBANKMENT.

## SECTION 400

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

## SECTION 600

6. CENTRIFUGALLY CAST PIPE SPECIFICATIONS
   - THE CONTRACTOR SHALL ADHERE TO ALL REQUIRED OSHA STANDARDS.
   - PRIOR TO THE PLACEMENT OF THE PIPE LINER, EACH PIPE SHALL BE INSPECTED BY EXPERIENCED PERSONNEL TO ENSURE THERE ARE NO LOCATIONS THAT WILL PREVENT PROPER INSTALLATION. SEE SPECIFICATIONS FOR REQUIRED QUALIFICATIONS OF PERSONNEL.
   - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL OBSTRUCTIONS WITHIN THE PIPE INCLUDING, BUT NOT LIMITED TO, SEDIMENT, PLANT LIFE, ROCKS, AND DEBRIS, PRIOR TO PLACING THE LINER THE PIPE SHALL BE CLEANED WITH A HIGH-PRESSURE WATER-BLAST TO REMOVE ALL LOOSE MATERIAL AND FLUSH DEBRIS FROM THE PIPE.
   - MATERIAL USED IN THE REPAIR OF THE PIPE SHALL BE ULTRA-HIGH STRENGTH, ABRASION RESISTANT, SELF-CONSOLIDATING, AND BASED ON ADVANCED CEMENTS WITH RUST INHIBITORS.
   - FINAL SET TIME WILL BE COMPLETE WITHIN 4 HOURS OF PLACEMENT WITH A 24 HR COMPRESSIVE STRENGTH OF 3000 PSI(MIN.) AND 28 DAY STRENGTH OF 8000 PSI(MIN.)
   - REFER TO THE SPECIFICATIONS UNDER SECTION 612553 FOR MORE INFORMATION ON MATERIAL REQUIRMENTS.

7. DRAINAGE INLET GRATES ADJACENT TO THE ROAD, WITHIN THE PROJECT LIMITS, WHICH ARE NOT TYPE 1 OR TYPE 4, SHALL BE REPLACED. THE ACTUAL LOCATIONS, THE NEED FOR ANY GRATE MODIFICATIONS OR FOR NEW FRAMES SHALL BE DETERMINED BY THE ENGINEER. ALL REPLACED GRATES/FRAMES SHALL BE DELIVERED TO THE NEAREST DISTRICT MAINTENANCE YARD WITH THE COST OF DELIVERY INCIDENTAL TO ITEM 602100 - REPLACING DRAINAGE INLET GRATE(S). FINAL PAYMENT FOR REPLACED GRATES/FRAMES SHALL NOT BE MADE UNTIL RECEIPT OF DELIVERED MATERIALS IS PRODUCED, SIGNED BY A DELDOT MAINTENANCE YARD SUPERVISOR.

## SECTION 700

8. 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.

9. WHERE PROPOSED CONCRETE SIDEWALK IS CONSTRUCTED TO MEET EXISTING SIDEWALK, THE EXISTING 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 762001 - SAWCUTTING, CONCRETE, FULL DEPTH.

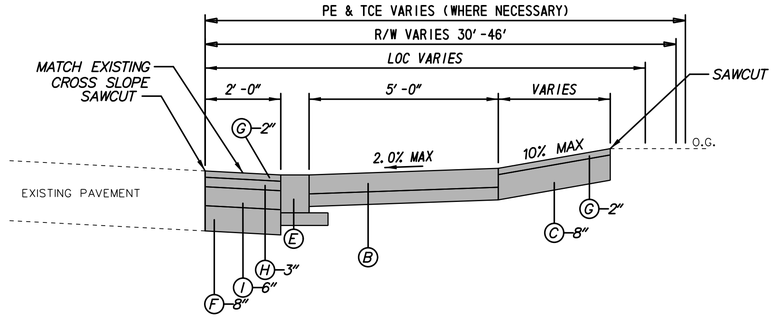
10. ALL PAVED AREAS TO BE RECONSTRUCTED OR WIDENED SHALL BE SAWCUT AT THE POINT WHERE THE NEW PAVEMENT IS TO TIE INTO THE EXISTING PAVEMENT.

## MISCELLANEOUS

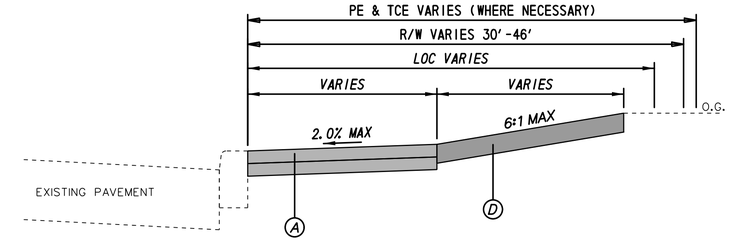
12. THE CONTRACTOR SHALL NOTIFY DART FIRST STATE AT DOT_DETOURS@DELAWARE.GOV AT LEAST 14 DAYS PRIOR TO THE START OF ANY DETOURS OR CONSTRUCTION, AND DOT_DTC_PROJECTDEVELOPMENT@DELAWARE.GOV AT SUCH TIME THE FACILITY IS COMPLETED AND OPERABLE FOR TRANSIT OPERATIONS. FOR EMERGENCY DETOUR INFORMATION ONLY, PLEASE CONTACT DTC'S CHIEF SCHEDULER AT 302-576-6019.

13. HYDRAULIC DATA:

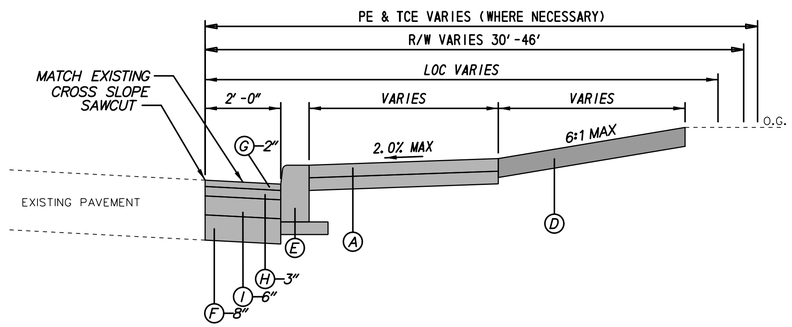
| | | | |
|---|---|---|---|
| DRAINAGE AREA: | 0.30 sq. miles | DESIGN FREQ.: | 50 YEARS |
| DESIGN DISCHARGE: | 485 cfs | 100-YEAR DISCHARGE: | 648 cfs |
| EXISTING (DESIGN STORM) WSE: | 279.81 ft | PROPOSED (DESIGN STORM) WSE: | 280.13 ft |
| EXISTING (DESIGN STORM) VELOCITY: | 7.16 fps | PROPOSED (DESIGN STORM) VELOCITY: | 6.47 fps |
| EXISTING 100-YEAR WSE: | 280.46 ft | PROPOSED 100-YEAR WSE: | 280.76 ft |
| EXISTING 100-YEAR VELOCITY: | 6.57 fps | PROPOSED 100-YEAR VELOCITY: | 6.06 fps |
| EXISTING WATERWAY OPENING: | 62.06 sq. ft | PROPOSED WATERWAY OPENING: | 59.32 sq. ft |



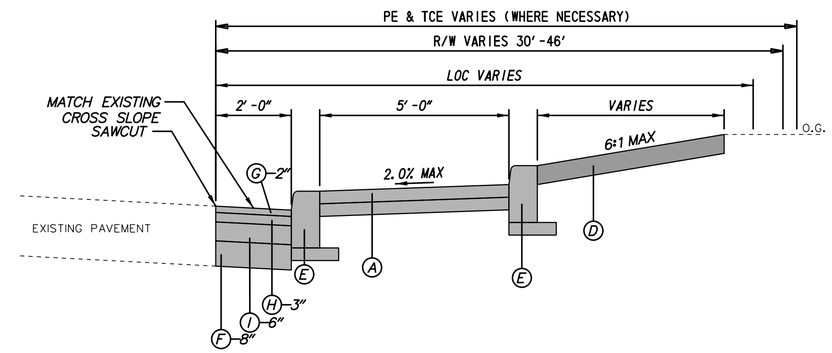

## DRIVEWAY
## NOT TO SCALE



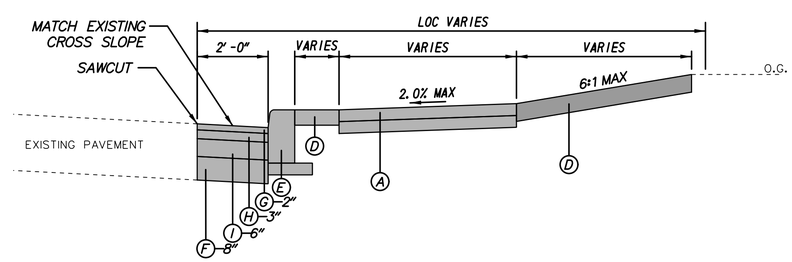

## SIDEWALK
## NOT TO SCALE




## SIDEWALK WITH CURB REPLACEMENT
## NOT TO SCALE




## SIDEWALK WITH CHEEKWALL
## NOT TO SCALE




## SIDEWALK WITH CURB REPLACEMENT (WITH GRASS BUFFER)
## NOT TO SCALE

| MATERIAL | LIFT THICKNESS | |
|---|---|---|
| | MINIMUM | MAXIMUM |
| BITUMINOUS CONCRETE, TYPE 'C' | 1.25" | 2" |
| BITUMINOUS CONCRETE, TYPE 'B' | 2.25" | 4" |
| BITUMINOUS CONCRETE BASE COURSE | 3" | 6" |
| GRADED AGGREGATE BASE COURSE | 4" | 8" |

### LEGEND

- (A) ITEM 705001 - P.C.C. SIDEWALK, 4" ON 4" GRADED AGGREGATE BASE COURSE, TYPE B
- (B) ITEM 705002 - P.C.C. SIDEWALK, 6" ON 6" GRADED AGGREGATE BASE COURSE, TYPE B
- (C) ITEM 301001 - GRADED AGGREGATE BASE COURSE, TYPE B
- (D) ITEM 908004 - TOPSOIL, 6" DEPTH
  ITEM 908016 - PERMANENT GRASS SEEDING, SUBDIVISION
- (E) ITEM 701XXX - P.C.C. CURB, TYPE 1 MODIFIED ON 4" GRADED AGGREGATE BASE COURSE, TYPE B (SEE CP SHEETS FOR CURB TYPE)
- (F) ITEM 301002 - GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING
- (G) ITEM 401029- SUPERPAVE TYPE C, PG 64-22, PATCHING
- (H) ITEM 401030- SUPERPAVE TYPE B, PG 64-22, PATCHING
- (I) ITEM 401031- SUPERPAVE BCBC, PG 64-22, PATCHING

### TYPICAL SECTION NOTES

1. DRIVEWAY: REMOVE EXISTING SIDEWALK, CURB AND PAVEMENT WITHIN THE LIMITS SHOWN. EXTEND LIMITS OF RECONSTRUCTION TO NEAREST SIDEWALK JOINT. SAW CUT CURB AND PAVEMENT AS NECESSARY.
2. SIDEWALK BUMPOUT: REMOVE EXISTING SIDEWALK WITHIN THE LIMITS SHOWN. MAINTAIN EXISTING CURB. EXTEND SIDEWALK REMOVAL AND RECONSTRUCTION LIMITS TO NEAREST JOINT.
3. SIDEWALK WITH CURB REPLACEMENT: REMOVE EXISTING SIDEWALK AND CURB WITH THE LIMITS SHOWN. EXTEND SIDEWALK REMOVAL AND RECONSTRUCTION LIMITS TO THE NEAREST JOINT.

| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

NOT TO SCALE

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 | TYPICAL SECTIONS | SECTION |
|---|---|---|---|---|
| T201701104 | DESIGNED BY: | P. SCOTT | | AEC |
| COUNTY | | | | SHEET NO. |
| NEW CASTLE | CHECKED BY: | B. SENGER | | 6 |

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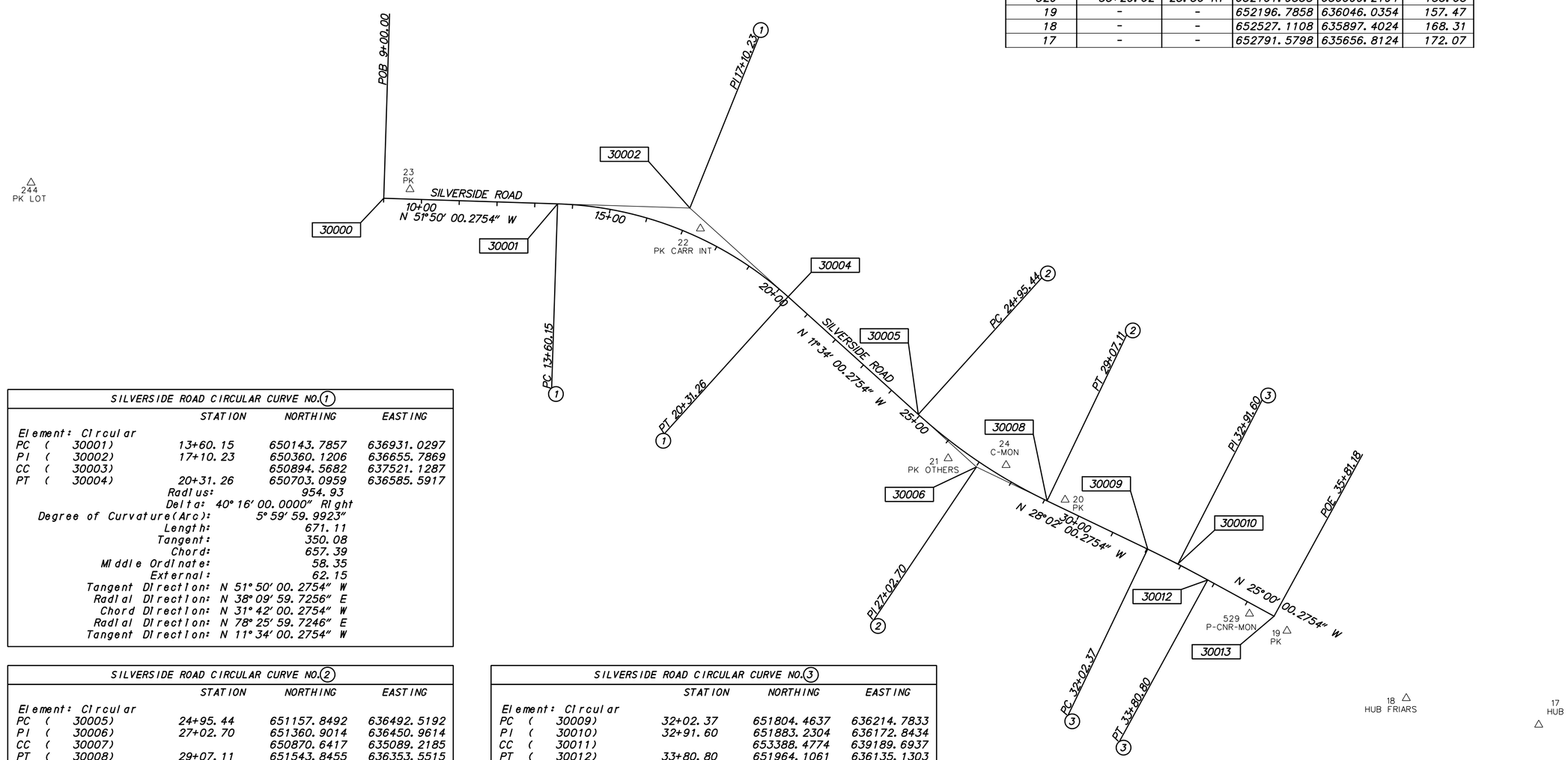
## CONSTRUCTION ALIGNMENT CONTROL

| POINT | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 30000 | 9+00.00 | 0.00 | 649859.4360 | 637292.8076 |
| 30013 | 35+81.18 | 0.00 | 652145.7120 | 631415.1164 |

## HORIZONTAL / VERTICAL CONTROL DATA

| POINT | STATION | OFFSET | NORTHING | EASTING | ELEVATION |
|---|---|---|---|---|---|
| 244 | - | - | 649273.6978 | 638019.9174 | 95.23 |
| 23 | 9+68.66 | 25.91 LT | 649881.4948 | 637222.8194 | 93.32 |
| 22 | 17+40.81 | 23.29 LT | 650420.4138 | 636665.5044 | 94.28 |
| 21 | 26+28.56 | 39.52 RT | 651298.3238 | 636497.6244 | 124.22 |
| 24 | 27+65.09 | 31.39 LT | 645103.2308 | 636385.1634 | 124.29 |
| 20 | 29+48.98 | 23.11 LT | 651569.9428 | 636313.4764 | 127.16 |
| 529 | 35+20.62 | 25.56 RT | 652101.9358 | 636099.2194 | 153.05 |
| 19 | - | - | 652196.7858 | 636046.0354 | 157.47 |
| 18 | - | - | 652527.1108 | 635897.4024 | 168.31 |
| 17 | - | - | 652791.5798 | 635656.8124 | 172.07 |




### SILVERSIDE ROAD CIRCULAR CURVE NO. 1

| | STATION | NORTHING | EASTING |
|---|---|---|---|
| Element: Circular | | | |
| PC ( 30001) | 13+60.15 | 650143.7857 | 636931.0297 |
| PI ( 30002) | 17+10.23 | 650360.1206 | 636655.7869 |
| CC ( 30003) | | 650894.5682 | 637521.1287 |
| PT ( 30004) | 20+31.26 | 650703.0959 | 636585.5917 |
| Radius: | | 954.93 | |
| Delta: | 40° 16′ 00.0000″ Right | | |
| Degree of Curvature(Arc): | | 5° 59′ 59.9923″ | |
| Length: | | 671.11 | |
| Tangent: | | 350.08 | |
| Chord: | | 657.39 | |
| Middle Ordinate: | | 58.35 | |
| External: | | 62.15 | |
| Tangent Direction: | N 51° 50′ 00.2754″ W | | |
| Radial Direction: | N 38° 09′ 59.7256″ E | | |
| Chord Direction: | N 31° 42′ 00.2754″ W | | |
| Radial Direction: | N 78° 25′ 59.7246″ E | | |
| Tangent Direction: | N 11° 34′ 00.2754″ W | | |

### SILVERSIDE ROAD CIRCULAR CURVE NO. 2

| | STATION | NORTHING | EASTING |
|---|---|---|---|
| Element: Circular | | | |
| PC ( 30005) | 24+95.44 | 651157.8492 | 636492.5192 |
| PI ( 30006) | 27+02.70 | 651360.9014 | 636450.9614 |
| CC ( 30007) | | 650870.6417 | 635089.2185 |
| PT ( 30008) | 29+07.11 | 651543.8455 | 636353.5515 |
| Radius: | | 1432.39 | |
| Delta: | 16° 28′ 00.0000″ Left | | |
| Degree of Curvature(Arc): | | 4° 00′ 00.0451″ | |
| Length: | | 411.67 | |
| Tangent: | | 207.26 | |
| Chord: | | 410.25 | |
| Middle Ordinate: | | 14.76 | |
| External: | | 14.92 | |
| Tangent Direction: | N 11° 34′ 00.2754″ W | | |
| Radial Direction: | N 78° 25′ 59.7246″ E | | |
| Chord Direction: | N 19° 48′ 00.2754″ W | | |
| Radial Direction: | N 61° 57′ 59.7246″ E | | |
| Tangent Direction: | N 28° 02′ 00.2754″ W | | |

### SILVERSIDE ROAD CIRCULAR CURVE NO. 3

| | STATION | NORTHING | EASTING |
|---|---|---|---|
| Element: Circular | | | |
| PC ( 30009) | 32+02.37 | 651804.4637 | 636214.7833 |
| PI ( 30010) | 32+91.60 | 651883.2304 | 636172.8434 |
| CC ( 30011) | | 653388.4774 | 639189.6937 |
| PT ( 30012) | 33+80.80 | 651964.1061 | 636135.1303 |
| Radius: | | 3370.34 | |
| Delta: | 3° 02′ 00.0000″ Right | | |
| Degree of Curvature(Arc): | | 1° 41′ 59.9999″ | |
| Length: | | 178.43 | |
| Tangent: | | 89.24 | |
| Chord: | | 178.41 | |
| Middle Ordinate: | | 1.18 | |
| External: | | 1.18 | |
| Tangent Direction: | N 28° 02′ 00.2754″ W | | |
| Radial Direction: | N 61° 57′ 59.7246″ E | | |
| Chord Direction: | N 26° 31′ 00.2754″ W | | |
| Radial Direction: | N 64° 59′ 59.7246″ E | | |
| Tangent Direction: | N 25° 00′ 00.2754″ W | | |

*DATUM REFERENCE:*

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

*VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.*

ADDENDA / REVISIONS

SCALE 0 150 300 450 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: | P. SCOTT |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: | B. SENGER |

HORIZONTAL AND VERTICAL CONTROL

HV-01

SECTION: AEC

SHEET NO. 7

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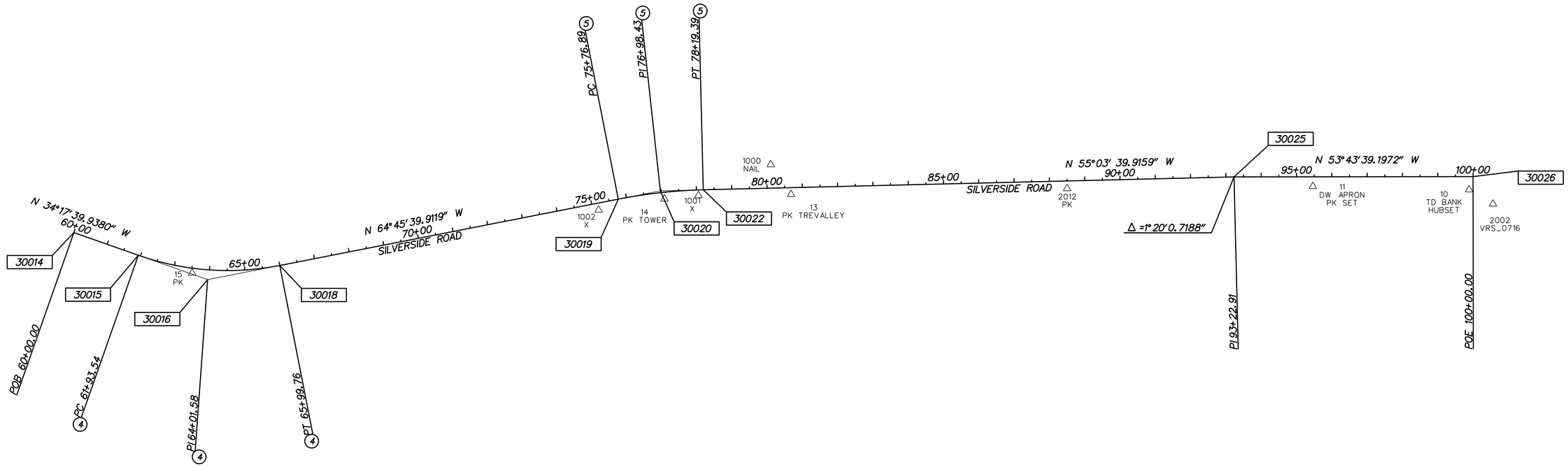
| SILVERSIDE ROAD CIRCULAR CURVE NO.4 | STATION | NORTHING | EASTING |
|---|---|---|---|
| Element: Circular | | | |
| PC ( 30015) | 61+93.54 | 654259.9042 | 634592.3413 |
| PI ( 30016) | 64+01.58 | 654431.7724 | 634475.1252 |
| CC ( 30017) | | 653829.4671 | 633961.2123 |
| PT ( 30018) | 65+99.76 | 654520.4770 | 634286.9503 |
| Radius: | | 763.94 | |
| Delta: | 30° 27′ 59.9739″ Left | | |
| Degree of Curvature(Arc): | 7° 30′ 00.2348″ | | |
| Length: | | 406.22 | |
| Tangent: | | 208.03 | |
| Chord: | | 401.45 | |
| Middle Ordinate: | | 26.84 | |
| External: | | 27.82 | |
| Tangent Direction: | N 34° 17′ 39.9380″ W | | |
| Radial Direction: | N 55° 42′ 20.0619″ E | | |
| Chord Direction: | N 49° 31′ 39.9251″ W | | |
| Radial Direction: | N 25° 14′ 20.0879″ E | | |
| Tangent Direction: | N 64° 45′ 39.9119″ W | | |

| SILVERSIDE ROAD CIRCULAR CURVE NO.5 | STATION | NORTHING | EASTING |
|---|---|---|---|
| Element: Circular | | | |
| PC ( 30019) | 75+76.89 | 654937.1192 | 633403.0991 |
| PI ( 30020) | 76+98.43 | 654988.9431 | 633293.1616 |
| CC ( 30021) | | 656232.7699 | 634013.8612 |
| PT ( 30022) | 78+19.39 | 655058.5494 | 633193.5275 |
| Radius: | | 1432.39 | |
| Delta: | 9° 41′ 59.9960″ Right | | |
| Degree of Curvature(Arc): | 4° 00′ 00.0454″ | | |
| Length: | | 242.50 | |
| Tangent: | | 121.54 | |
| Chord: | | 242.21 | |
| Middle Ordinate: | | 5.13 | |
| External: | | 5.15 | |
| Tangent Direction: | N 64° 45′ 39.9119″ W | | |
| Radial Direction: | N 25° 14′ 20.0879″ E | | |
| Chord Direction: | N 59° 54′ 39.9139″ W | | |
| Radial Direction: | N 34° 56′ 20.0839″ E | | |
| Tangent Direction: | N 55° 03′ 39.9159″ W | | |




| CONSTRUCTION ALIGNMENT CONTROL | | | | |
|---|---|---|---|---|
| POINT | STATION | OFFSET | NORTHING | EASTING |
| 30014 | 60+00.00 | 0.00 | 654100.0097 | 634701.3911 |
| 30023 | 85+00.00 | 0.00 | 655448.3372 | 632635.5878 |
| 30024 | 90+00.00 | 0.00 | 655734.6886 | 632225.7062 |
| 30025 | 93+22.91 | 0.00 | 655919.6208 | 631960.9954 |
| 30026 | 100+00.00 | 0.00 | 656320.2018 | 631415.1164 |

| HORIZONTAL / VERTICAL CONTROL DATA | | | | | |
|---|---|---|---|---|---|
| POINT | STATION | OFFSET | NORTHING | EASTING | ELEVATION |
| 15 | 63+53.01 | 13.88 RT | 654391.6228 | 634499.2174 | 257.67 |
| 1002 | 75+16.99 | 20.20 RT | 654929.8318 | 633466.1994 | 271.47 |
| 14 | 77+07.97 | 19.28 RT | 655014.9748 | 633297.0314 | 273.38 |
| 1001 | 78+06.15 | 16.33 RT | 655064.4788 | 633213.8464 | 274.67 |
| 1000 | 80+13.00 | 66.14 LT | 655115.2128 | 632996.9334 | 277.96 |
| 13 | 80+68.27 | 19.42 RT | 655217.0028 | 633000.6274 | 277.44 |
| 2012 | 88+50.43 | 22.01 RT | 655667.0748 | 632360.9194 | 286.87 |
| 11 | 95+47.02 | 27.76 RT | 656074.5818 | 631796.7434 | 304.29 |
| 10 | 99+89.62 | 37.61 RT | 656344.3608 | 631445.7514 | 312.58 |
| 2002 | - | - | 656416.8038 | 631415.4874 | 308.47 |

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

VERTICAL - THIS PROJECT IS REFERENCED TO NAVD 88.

ADDENDA / REVISIONS

SCALE
0 150 300 450
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: | P. SCOTT |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: | B. SENGER |

HORIZONTAL AND VERTICAL CONTROL

HV-02
SECTION AEC
SHEET NO. 8

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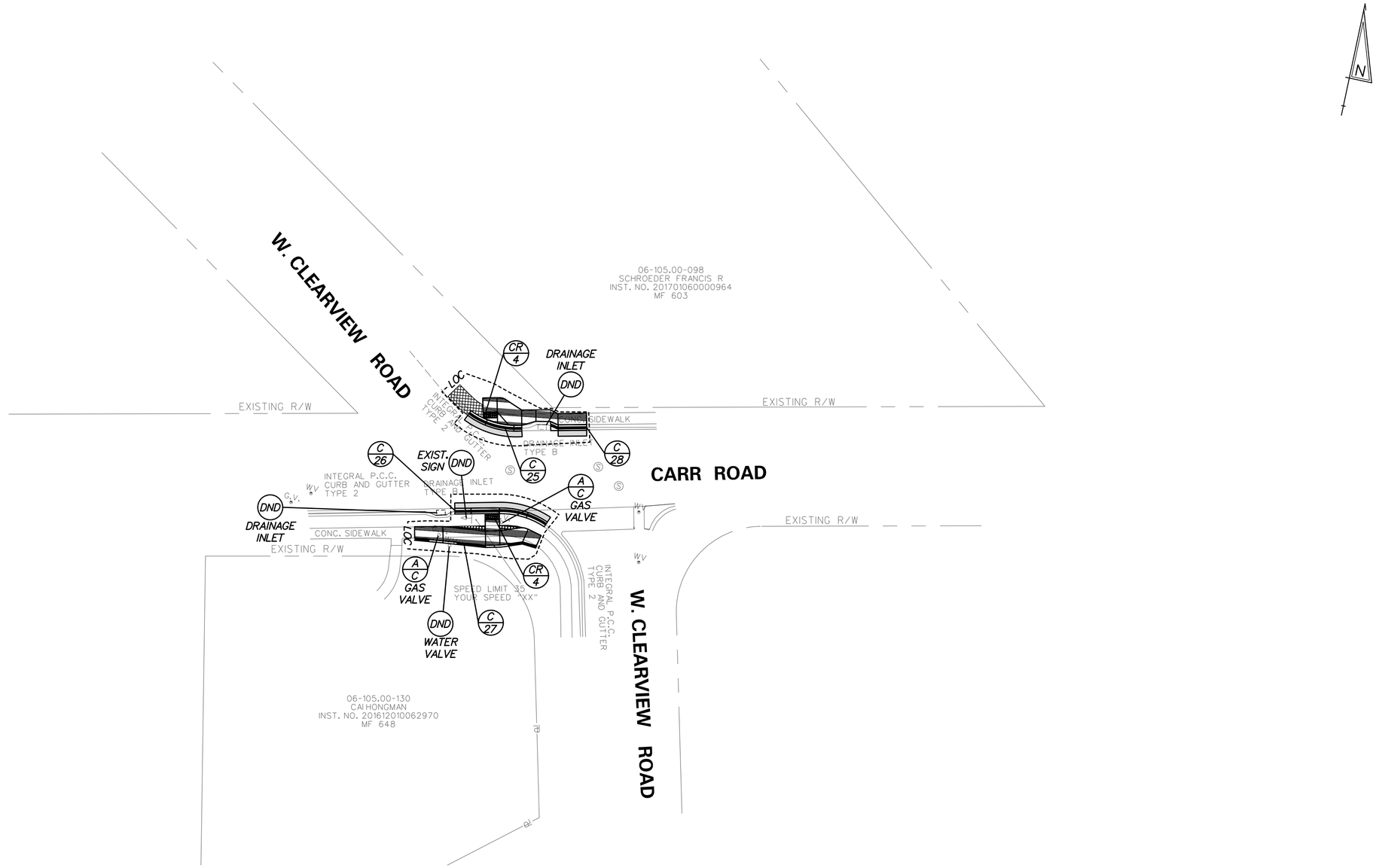


## NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY.
3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."
4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.
5. EXISTING RIGHT-OF-WAY IS SHOWN FOR INFORMATIONAL PURPOSE ONLY. RIGHT-OF-WAY AS SHOWN IS BASED ON MF'S 296, 603, AND 648.

**CURB SCHEDULE**

| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
|---|---|---|
| 25 | I.P.C.C. CURB AND GUTTER TYPE 2 | 19.00 |
| 26 | I.P.C.C. CURB AND GUTTER TYPE 2 | 32.50 |
| 27 | P.C.C. CURB TYPE 1-8 | 43.00 |
| 28 | I.P.C.C. CURB AND GUTTER TYPE 2 | 10.00 |

ADDENDA / REVISIONS

SCALE
0 20 40 60
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: | P. SCOTT |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: | B. SENGER |

CONSTRUCTION PLAN

CP-01
SECTION
AEC
SHEET NO.
9

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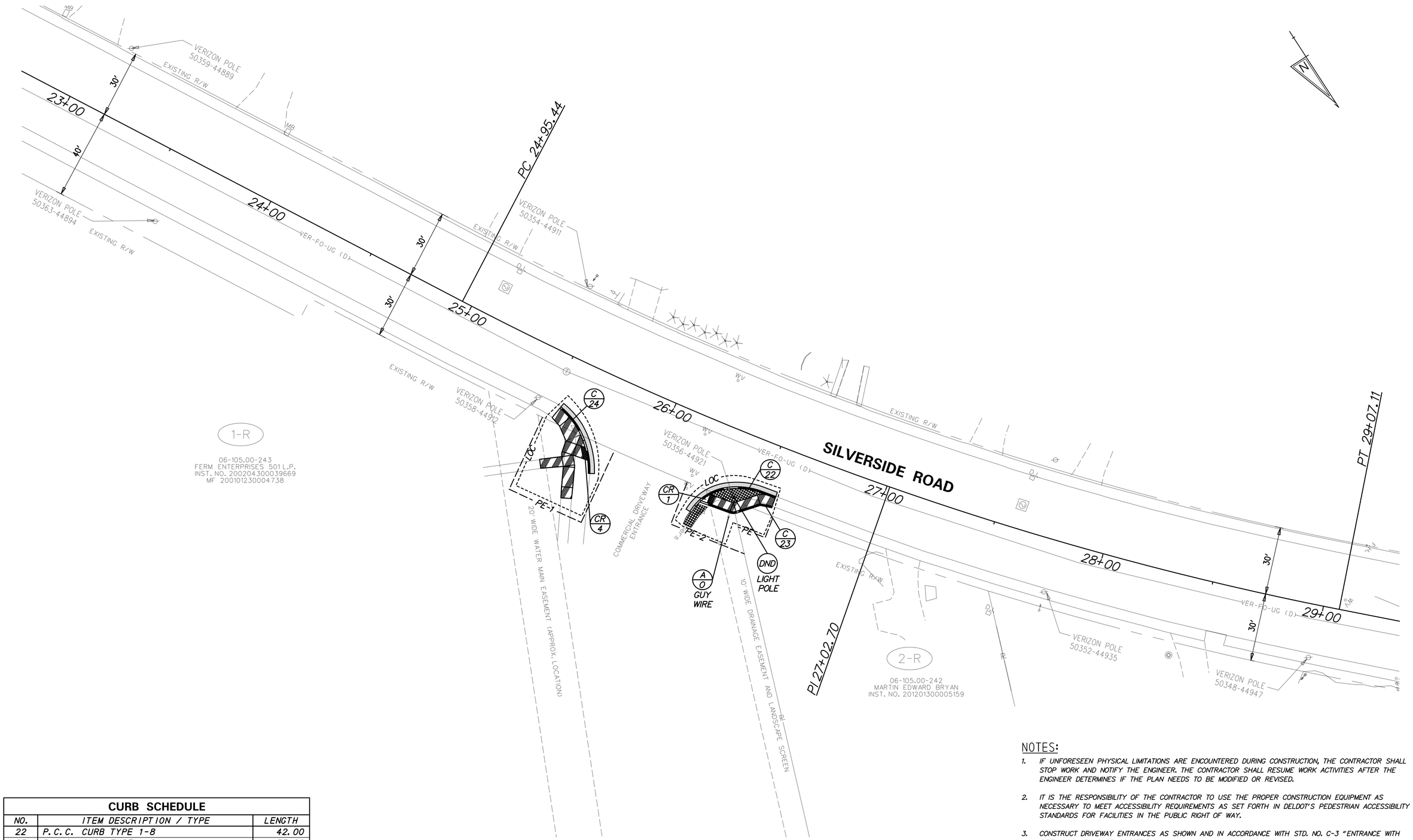


## CURB SCHEDULE

| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
|---|---|---|
| 22 | P.C.C. CURB TYPE 1-8 | 42.00 |
| 23 | P.C.C. CURB TYPE 1-8 | 33.00 |
| 24 | P.C.C. CURB TYPE 1-8 | 33.00 |

## NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY.
3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."
4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PLAN

CP-02

| SECTION | SHEET NO. |
|---|---|
| AEC | 10 |

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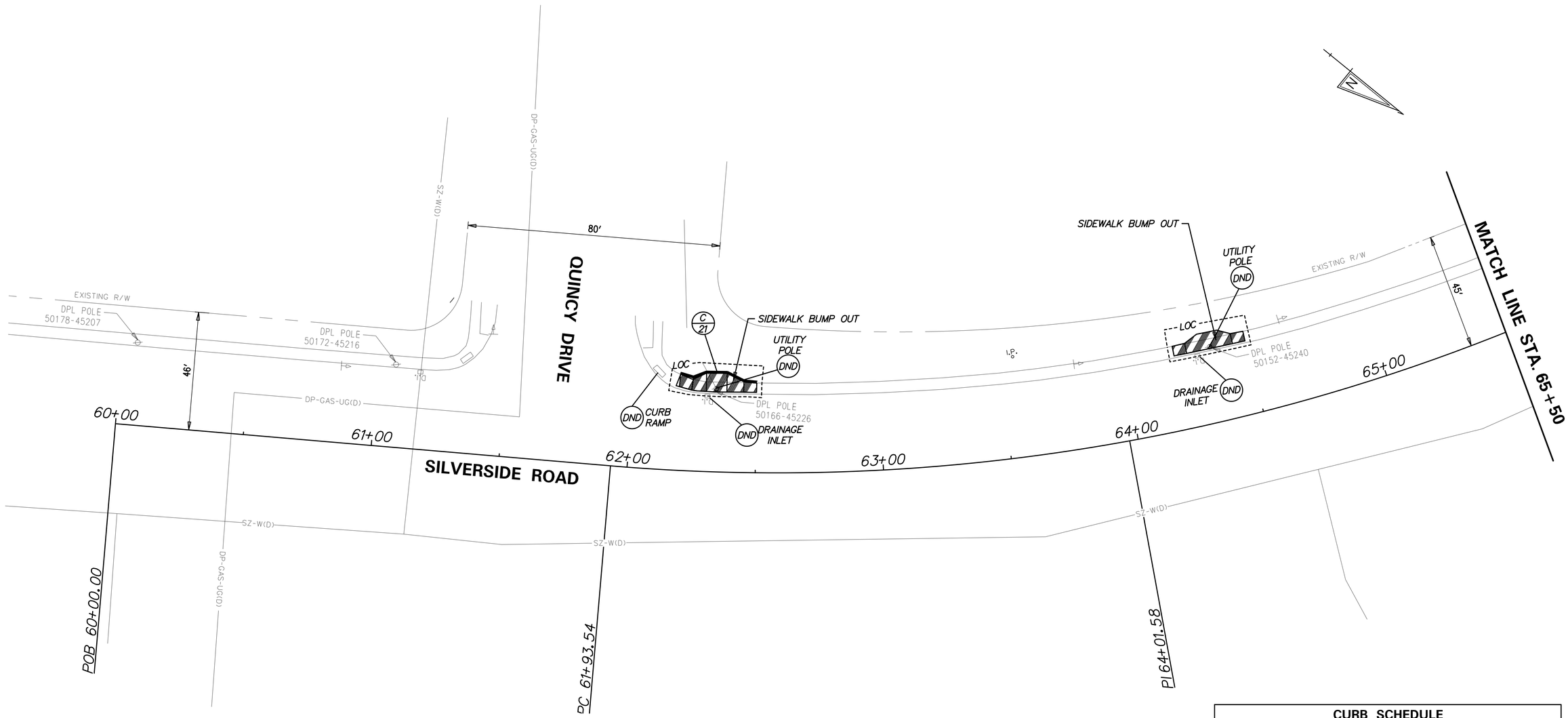


| CURB SCHEDULE | | |
|---|---|---|
| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
| 21 | P.C.C. CURB TYPE 1-8 | 31.00 |

NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY.
3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."
4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.

ADDENDA / REVISIONS

SCALE
0 20 40 60
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PLAN

CP-03
SECTION
AEC
SHEET NO.
11

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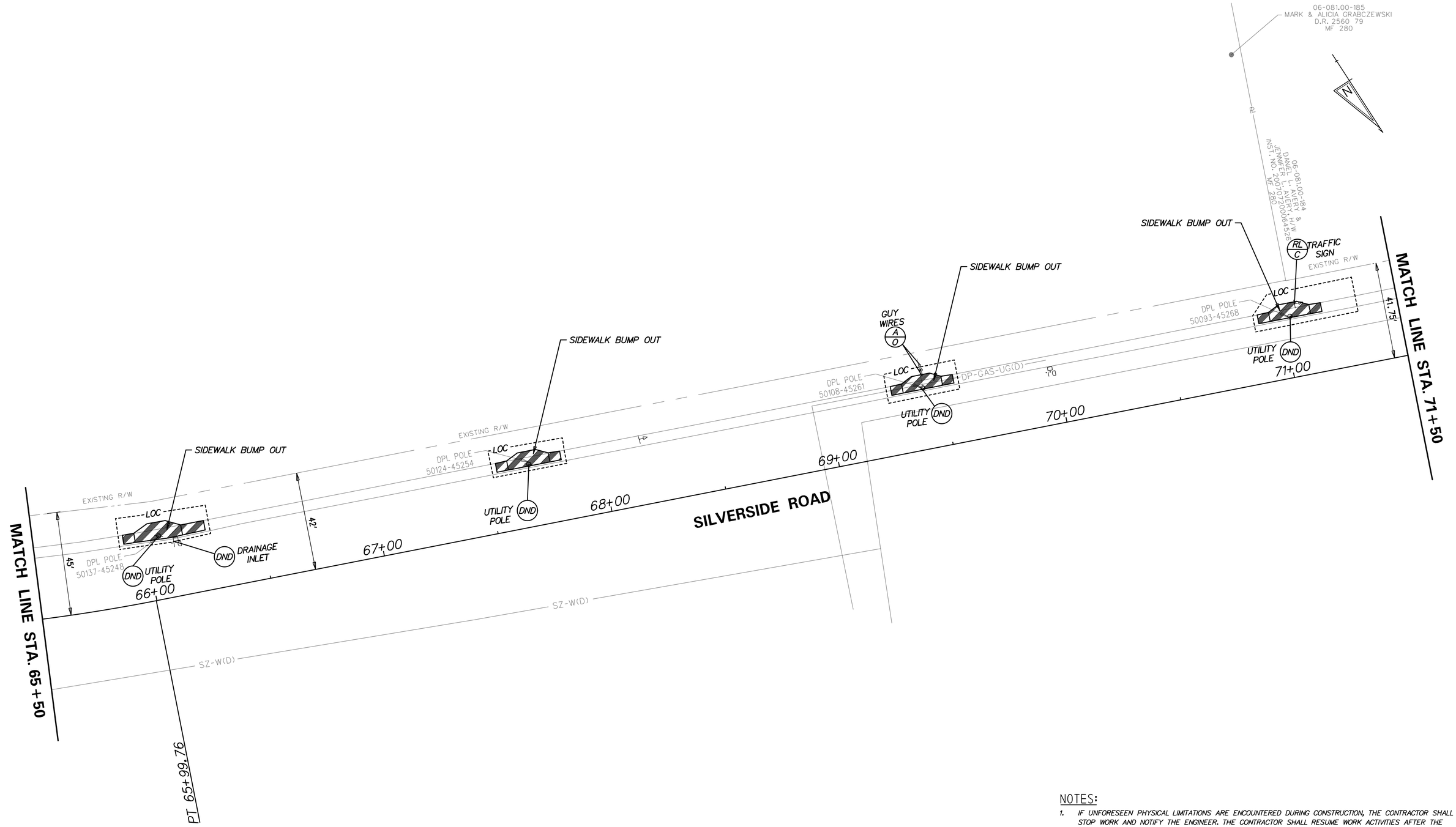


NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.

2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY.

3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."

4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.

| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE
0 20 40 60
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PLAN

| CP-04 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 12 |

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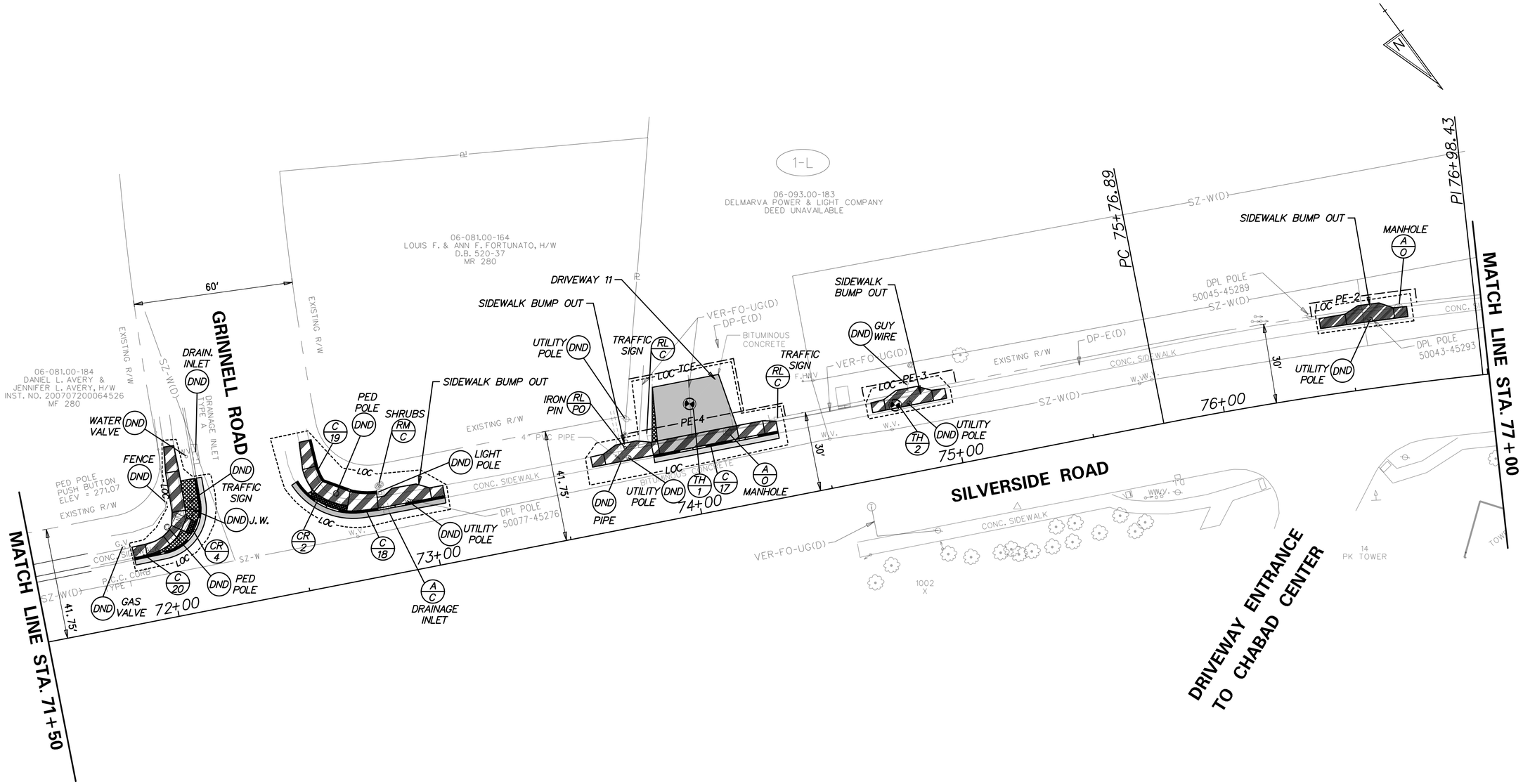



## CURB SCHEDULE

| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
|---|---|---|
| 17 | P.C.C. CURB TYPE 1-8 | 48.00 |
| 18 | P.C.C. CURB TYPE 1-8 | 61.00 |
| 19 | P.C.C. CURB TYPE 1-8 | 37.50 |
| 20 | P.C.C. CURB TYPE 1-8 | 47.00 |

## UTILITY TEST HOLE SCHEDULE

| NO. | UTILITY | STATION | OFFSET | GRND EL. | COVER | O.D. & MATERIAL |
|---|---|---|---|---|---|---|
| TH-1 | VER-C | 74+03.51 | -41.45 | 271.44 | 1.09 | 4" PVC |
| TH-1 | VER-C | 74+03.51 | -41.45 | 271.44 | 1.47 | 1.5" DBC |
| TH-2 | VERIZON | 74+79.20 | -26.11 | 271.95 | 2.33 | (3) 4.5" PVC |

## NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY.
3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."
4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

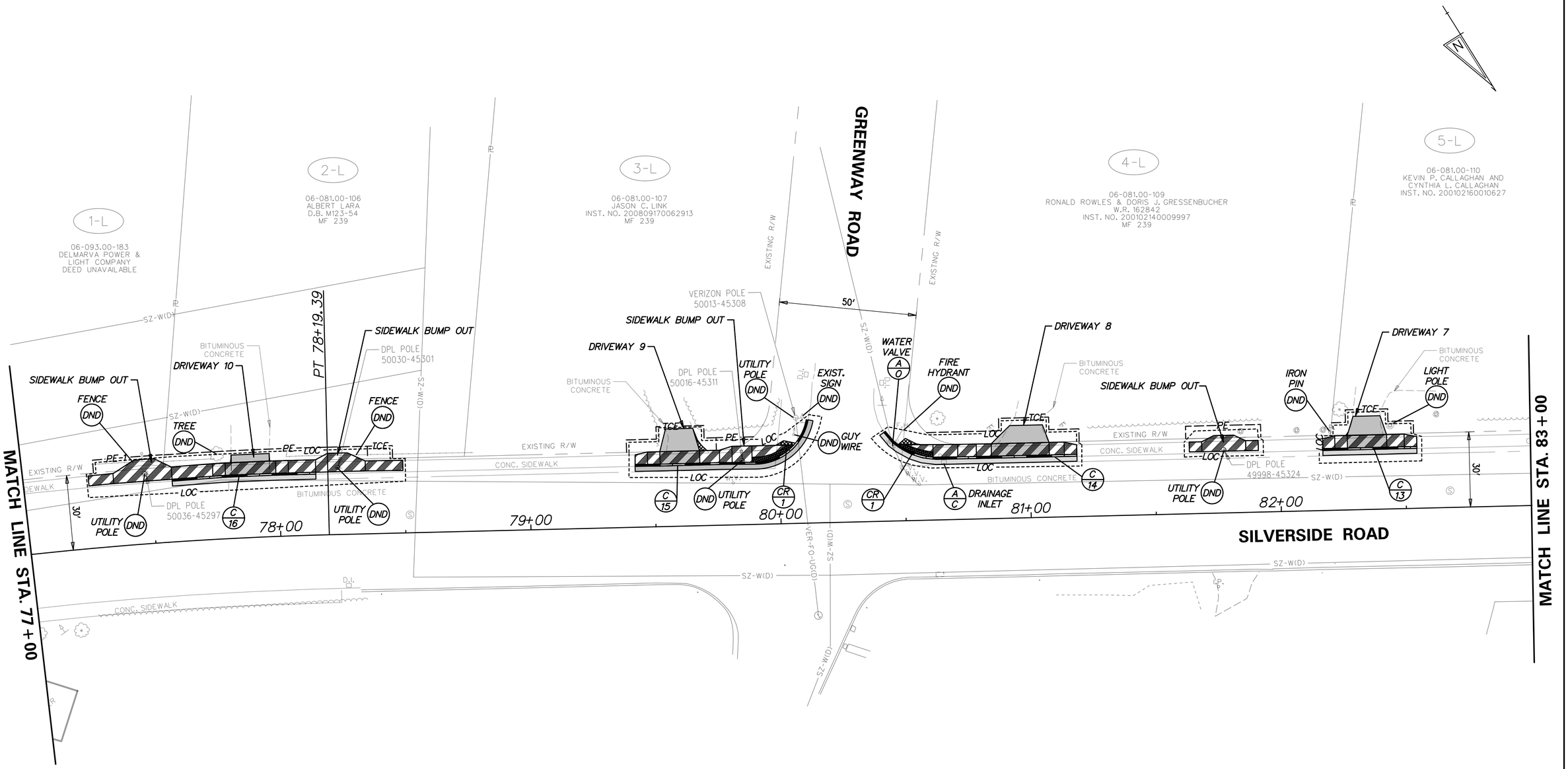
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PLAN

CP-05
SECTION AEC
SHEET NO. 13

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP05.DGN




## NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS IN THE PUBLIC RIGHT OF WAY.
3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."
4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.

**CURB SCHEDULE**

| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
|---|---|---|
| 13 | P.C.C. CURB TYPE 1-8 | 38.00 |
| 14 | P.C.C. CURB TYPE 1-8 | 80.00 |
| 15 | P.C.C. CURB TYPE 1-8 | 79.00 |
| 16 | P.C.C. CURB TYPE 1-8 | 57.00 |

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

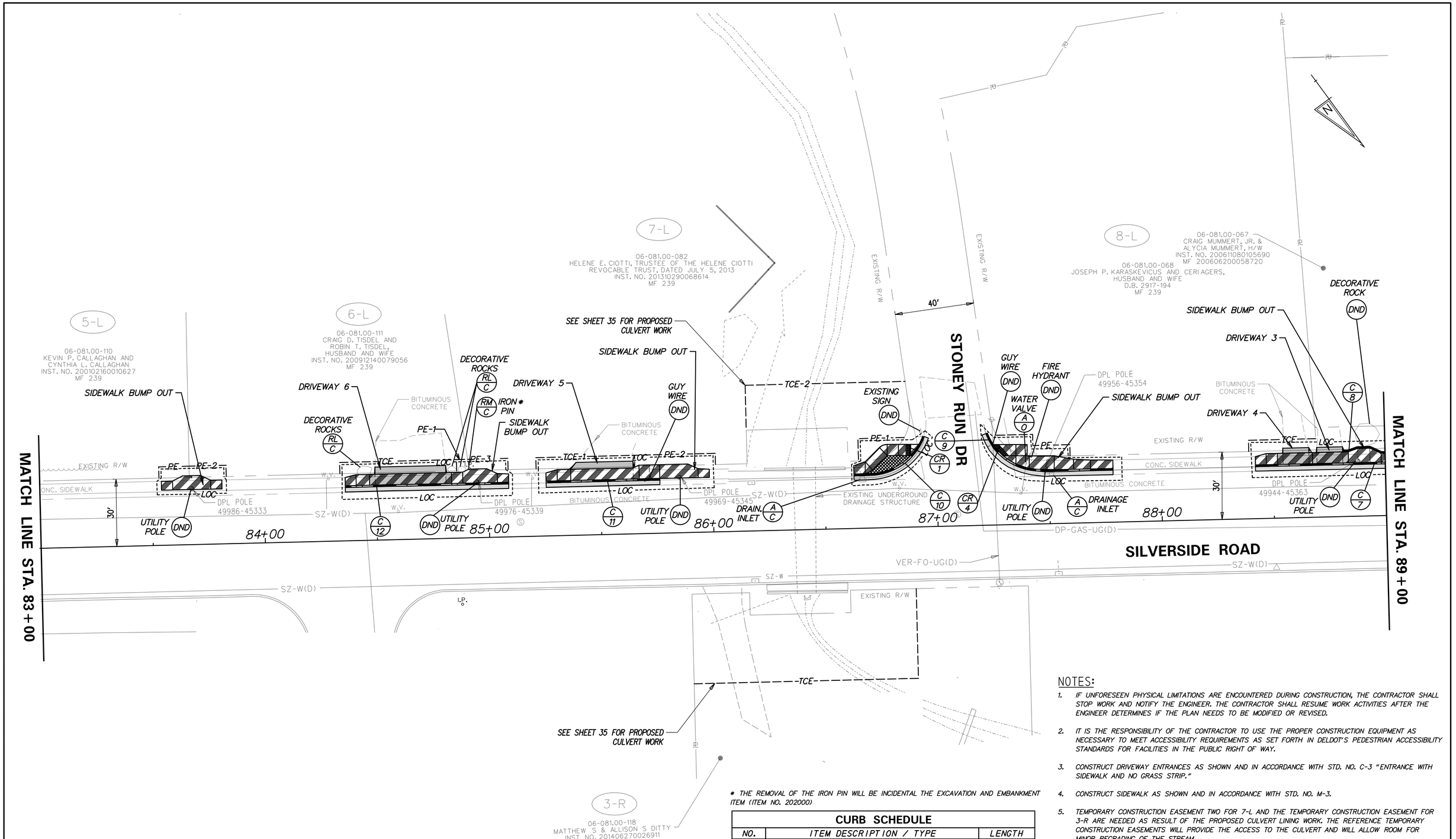
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PLAN

CP-06
SECTION AEC
SHEET NO. 14

\\USPHLFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP04.DGN




* THE REMOVAL OF THE IRON PIN WILL BE INCIDENTAL THE EXCAVATION AND EMBANKMENT ITEM (ITEM NO. 202000)

## CURB SCHEDULE

| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
|---|---|---|
| 7 | P.C.C. CURB TYPE 1-8 | 66.00 |
| 8 | P.C.C. CURB TYPE 1-8 | 20.00 |
| 9 | P.C.C. CURB TYPE 1-8 | 64.00 |
| 10 | P.C.C. CURB TYPE 1-8 | 39.00 |
| 11 | P.C.C. CURB TYPE 1-8 | 51.00 |
| 12 | P.C.C. CURB TYPE 1-8 | 73.00 |

## NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO USE THE PROPER CONSTRUCTION EQUIPMENT AS NECESSARY TO MEET ACCESSIBILITY REQUIREMENTS AS SET FORTH IN DELDOT'S PEDESTRIAN ACCESSIBILITY STANDARDS FOR FACILITIES IN THE PUBLIC RIGHT OF WAY.
3. CONSTRUCT DRIVEWAY ENTRANCES AS SHOWN AND IN ACCORDANCE WITH STD. NO. C-3 "ENTRANCE WITH SIDEWALK AND NO GRASS STRIP."
4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.
5. TEMPORARY CONSTRUCTION EASEMENT TWO FOR 7-L AND THE TEMPORARY CONSTRUCTION EASEMENT FOR 3-R ARE NEEDED AS RESULT OF THE PROPOSED CULVERT LINING WORK. THE REFERENCE TEMPORARY CONSTRUCTION EASEMENTS WILL PROVIDE THE ACCESS TO THE CULVERT AND WILL ALLOW ROOM FOR MINOR REGRADING OF THE STREAM.
6. FOR THE PROPERTY AT PARCEL NUMBER 7-L, THERE IS AN EXISTING SPRINKLER SYSTEM AT THE BACK OF THE EXISTING SIDEWALK THAT MAY BE IMPACTED AS PART OF THE CONSTRUCTION OF THE PROPOSED PAR. PROPERTY OWNER HAS AGREED TO RELOCATE SYSTEM PRIOR TO CONSTRUCTION. PAYMENT FOR POTENTIAL IMPACTS WILL BE INCIDENTAL TO ITEM NUMBER 202000 - EXCAVATION AND EMBANKMENT.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

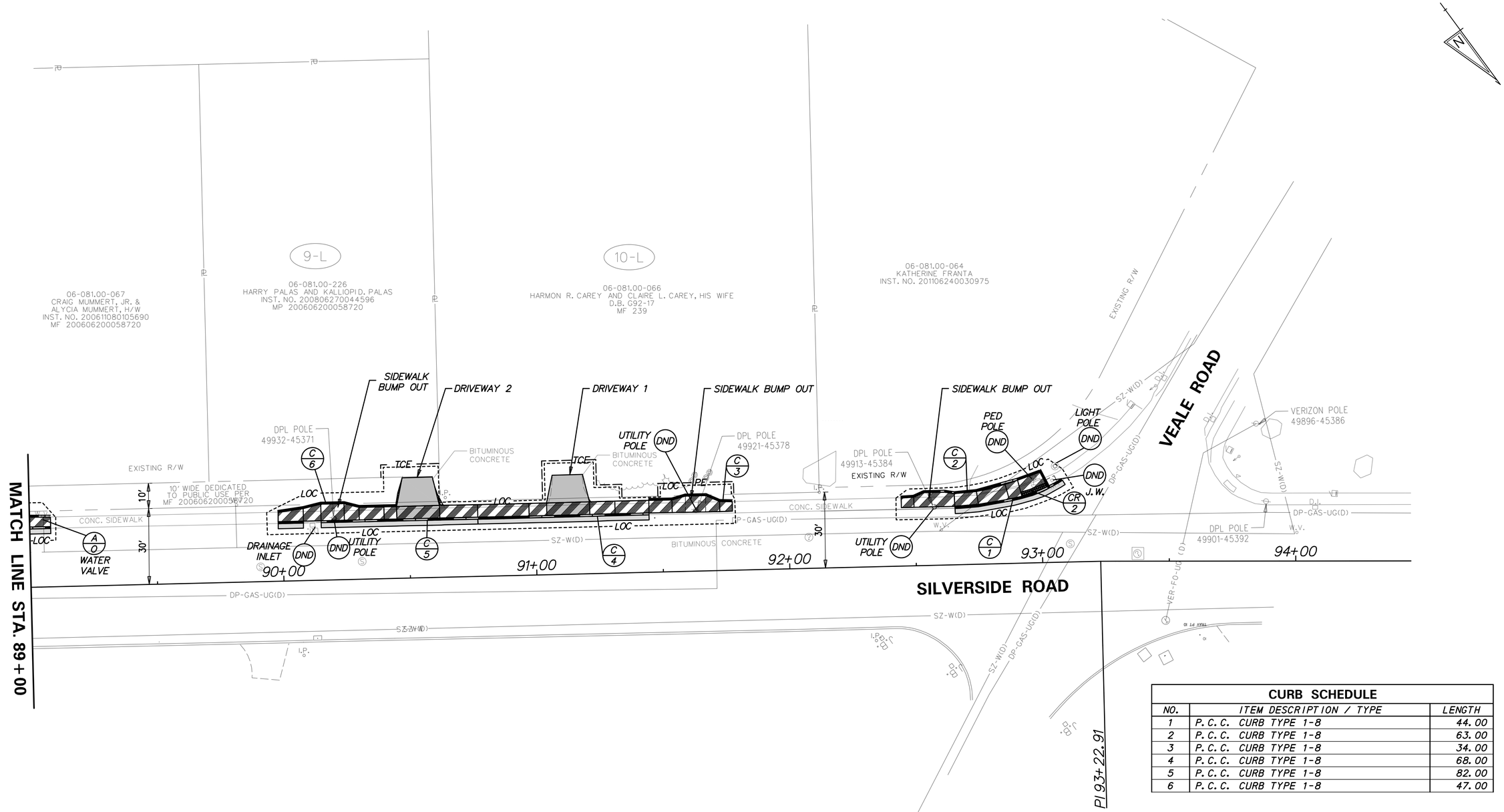
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PLAN

CP-07
SECTION AEC
SHEET NO. 15

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP03.DGN




## CURB SCHEDULE

| NO. | ITEM DESCRIPTION / TYPE | LENGTH |
|---|---|---|
| 1 | P.C.C. CURB TYPE 1-8 | 44.00 |
| 2 | P.C.C. CURB TYPE 1-8 | 63.00 |
| 3 | P.C.C. CURB TYPE 1-8 | 34.00 |
| 4 | P.C.C. CURB TYPE 1-8 | 68.00 |
| 5 | P.C.C. CURB TYPE 1-8 | 82.00 |
| 6 | P.C.C. CURB TYPE 1-8 | 47.00 |

## NOTES:

1. IF UNFORESEEN PHYSICAL LIMITATIONS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL STOP WORK AND NOTIFY THE ENGINEER. THE CONTRACTOR SHALL RESUME WORK ACTIVITIES AFTER THE ENGINEER DETERMINES IF THE PLAN NEEDS TO BE MODIFIED OR REVISED.
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4. CONSTRUCT SIDEWALK AS SHOWN AND IN ACCORDANCE WITH STD. NO. M-3.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

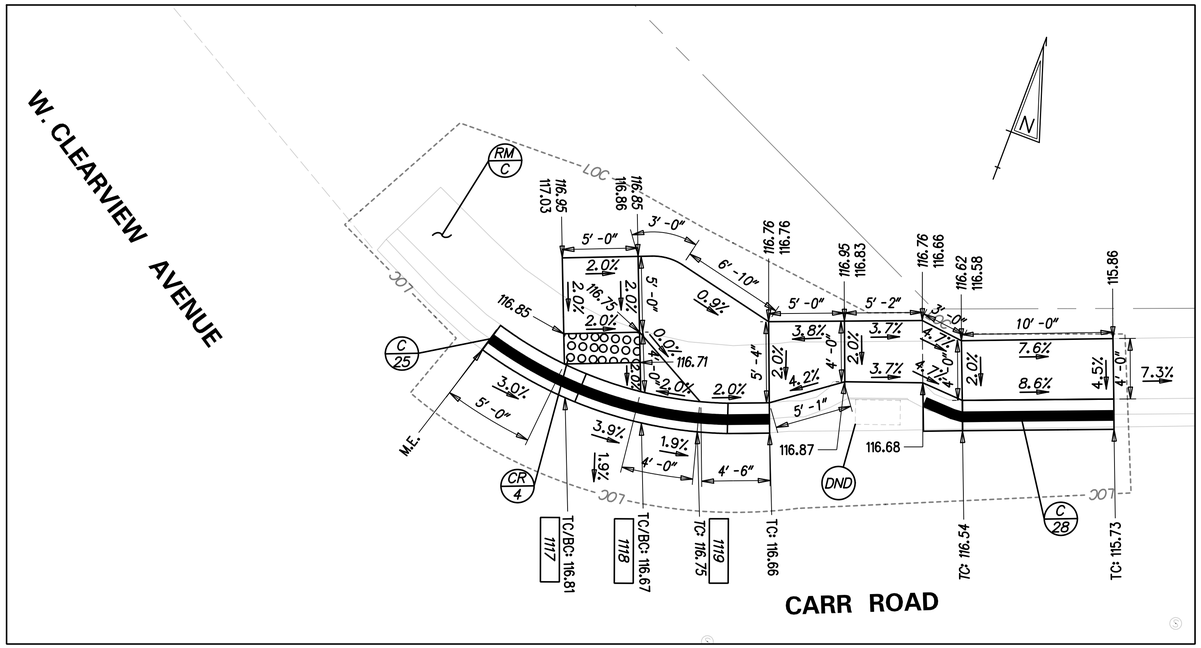
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

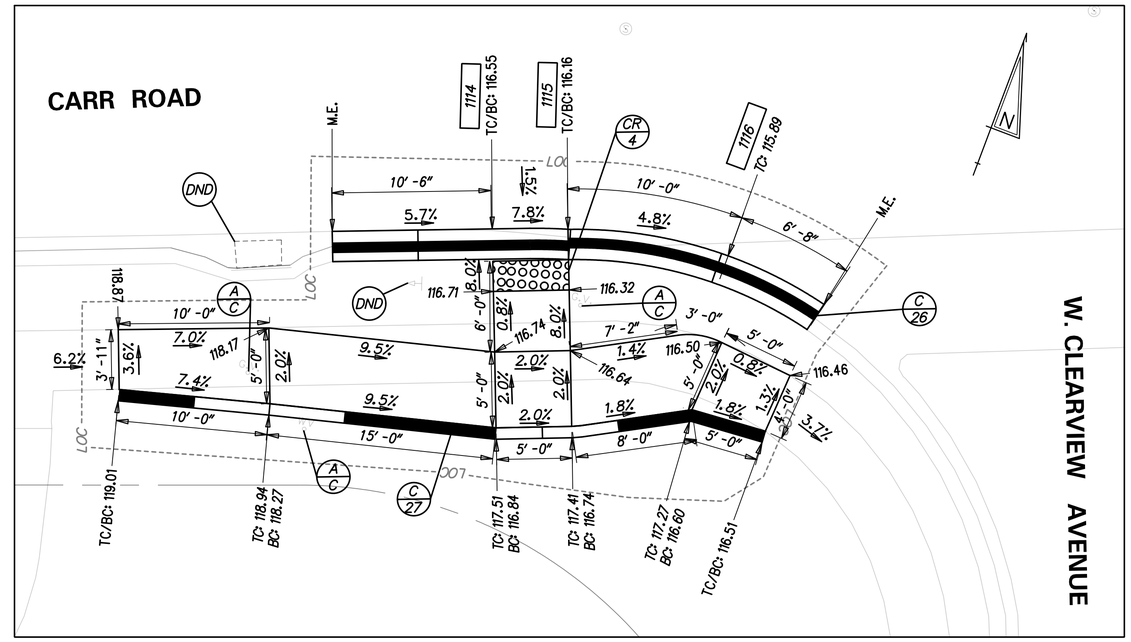
CONSTRUCTION PLAN

CP-08
SECTION AEC
SHEET NO. 16

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP02.DGN




NORTHEAST CORNER OF CARR ROAD
AND W. CLEARVIEW AVENUE




SOUTHWEST CORNER OF CARR ROAD
AND W. CLEARVIEW AVENUE

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1114 | NA | NA | 650253.9986 | 636028.0499 |
| 1115 | NA | NA | 650255.1599 | 636032.9135 |
| 1116 | NA | NA | 650255.9572 | 636043.5965 |
| 1117 | NA | NA | 650282.3168 | 636020.5563 |
| 1118 | NA | NA | 650281.8690 | 636025.8533 |
| 1119 | NA | NA | 650282.1475 | 636029.5673 |

DT-01

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

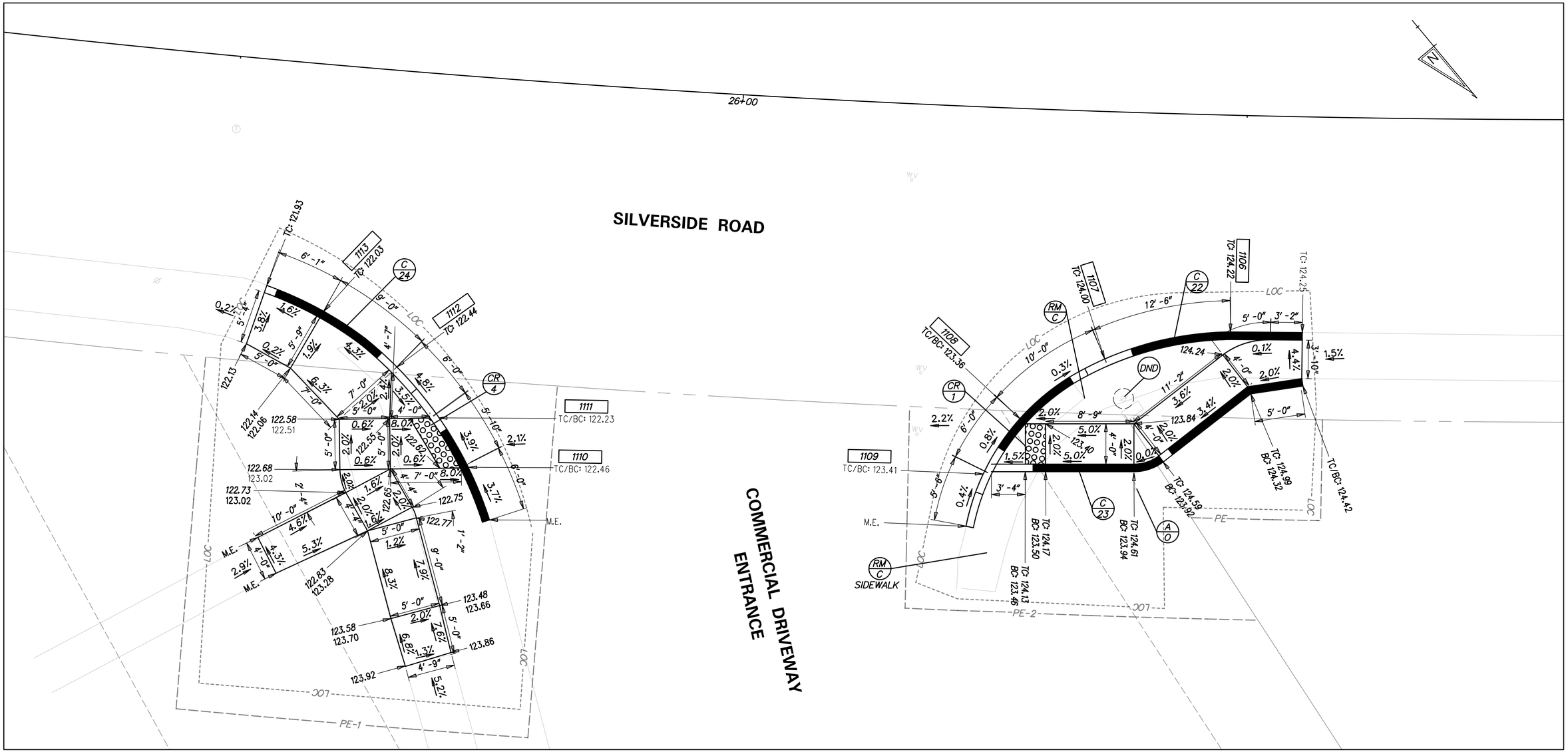
| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | CHECKED BY: B. SENGER | |
| NEW CASTLE | | |

CONSTRUCTION DETAILS

SECTION AEC

SHEET NO. 17

\\USPHLTFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP25.DGN




## NORTHWEST AND NORTHEAST CORNERS OF SILVERSIDE ROAD AND DRIVEWAY ENTRANCE TO SEND TELEGRAM

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1106 | 26+48.86 | 21.48 RT | 651312.7556 | 636474.2396 |
| 1107 | 26+36.67 | 24.53 RT | 651301.8528 | 636480.8632 |
| 1108 | 26+28.64 | 30.74 RT | 651295.8475 | 636489.1974 |
| 1109 | 26+25.29 | 36.37 RT | 651294.2009 | 636495.5841 |
| 1110 | 25+75.59 | 38.69 RT | 651245.7445 | 636511.6735 |
| 1111 | 25+72.41 | 34.02 RT | 651241.4072 | 636507.9861 |
| 1112 | 25+67.93 | 29.33 RT | 651235.7914 | 636504.5911 |
| 1113 | 25+60.39 | 24.43 RT | 651227.1371 | 636501.7491 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

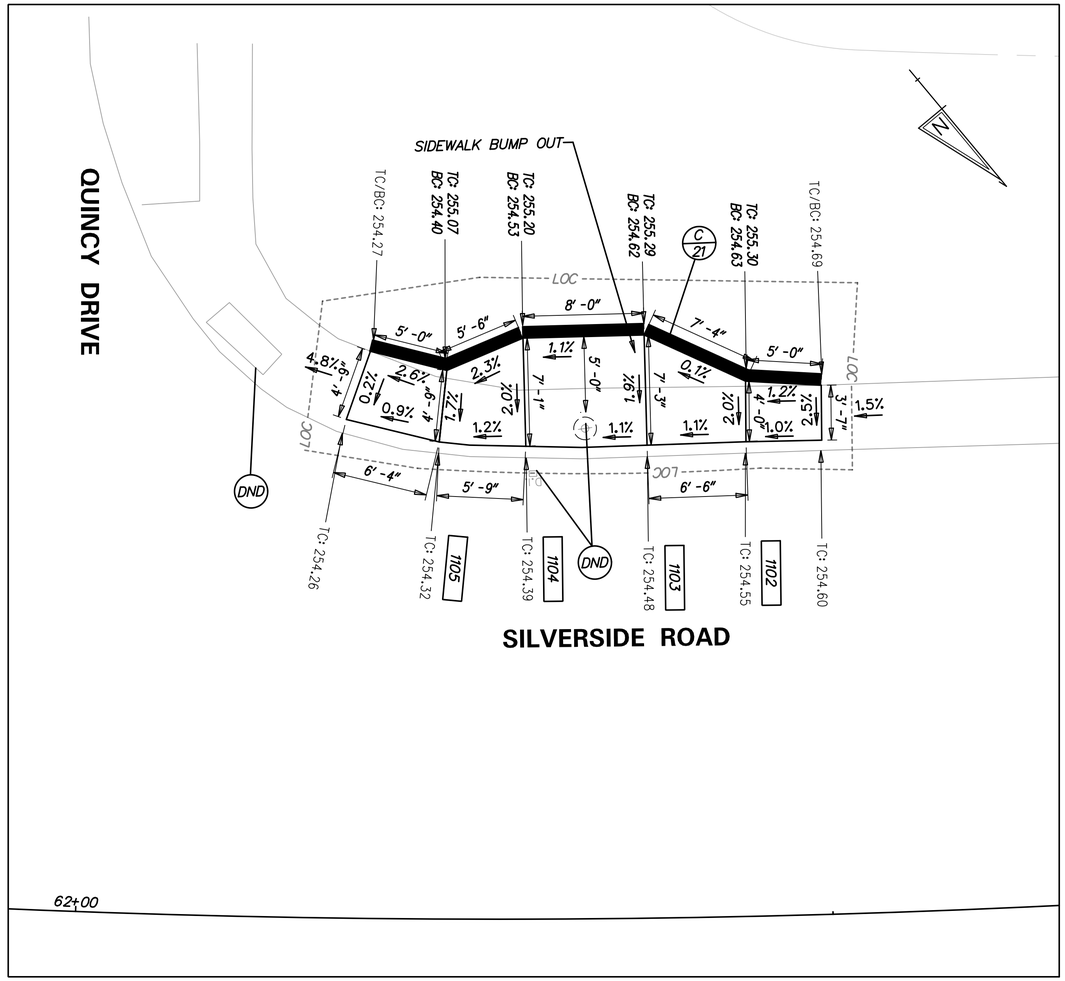
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION DETAILS

DT-02
SECTION AEC
SHEET NO. 18

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP23.DGN




SIDEWALK BUMP OUT - STA 62+21.18, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1102 | 62+44.90 | 30.57' LT | 654282.4473 | 634537.9611 |
| 1103 | 62+38.15 | 30.46' LT | 654277.4027 | 634542.0280 |
| 1104 | 62+29.83 | 30.44' LT | 654271.0565 | 634546.8834 |
| 1105 | 62+23.80 | 30.73' LT | 654266.2579 | 634550.1097 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

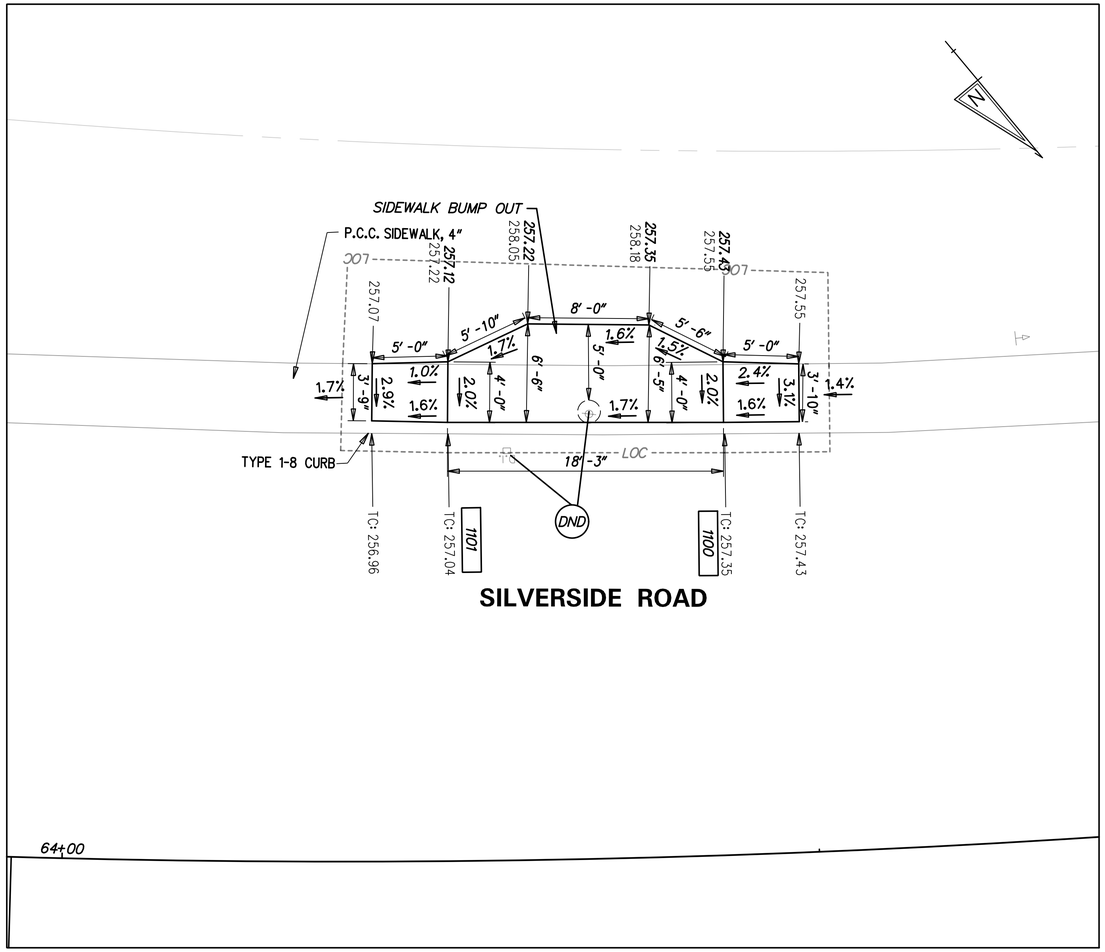
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

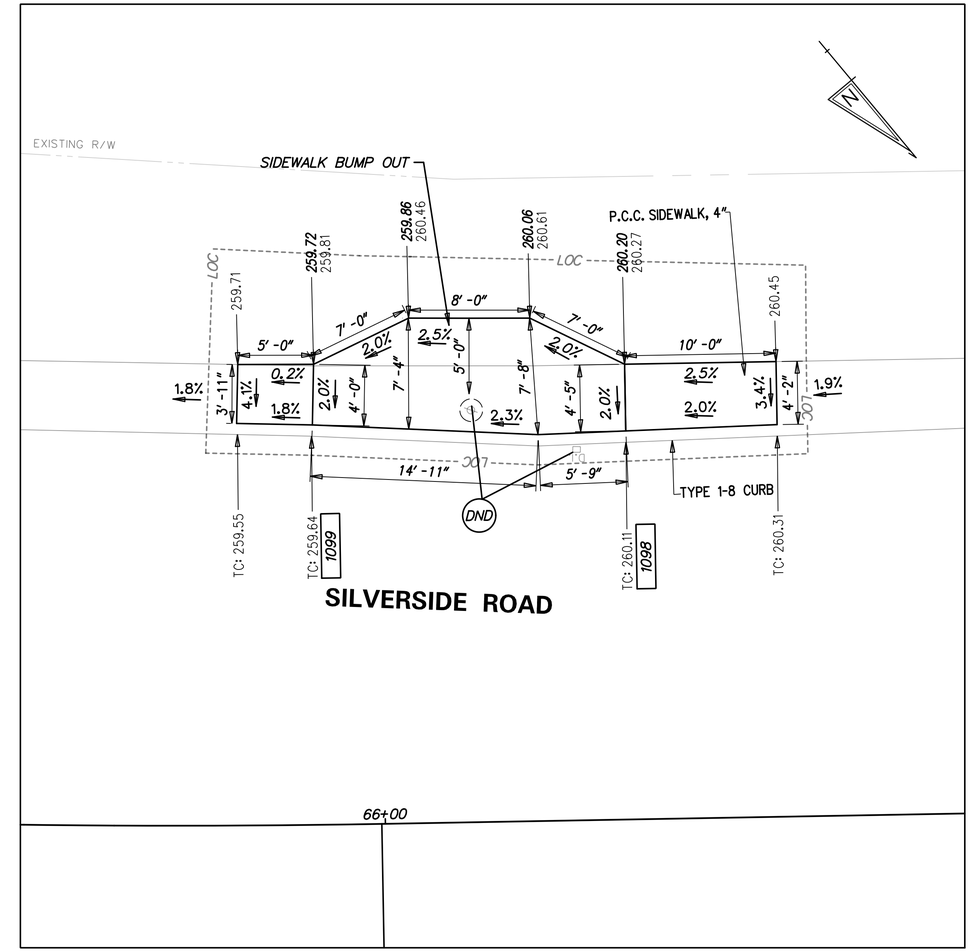
CONSTRUCTION DETAILS

DT-03
SECTION AEC
SHEET NO. 19

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP22.DGN




SIDEWALK BUMP OUT - STA 64+20.61, LT




SIDEWALK BUMP OUT - STA 65+90.56, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1098 | 66+16.32 | 24.89' LT | 654505.0246 | 634261.3563 |
| 1099 | 65+95.44 | 25.64' LT | 654495.4895 | 634279.7885 |
| 1100 | 64+44.69 | 27.80' LT | 654418.3810 | 634402.8905 |
| 1101 | 64+25.74 | 28.20' LT | 654406.9342 | 634417.1130 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

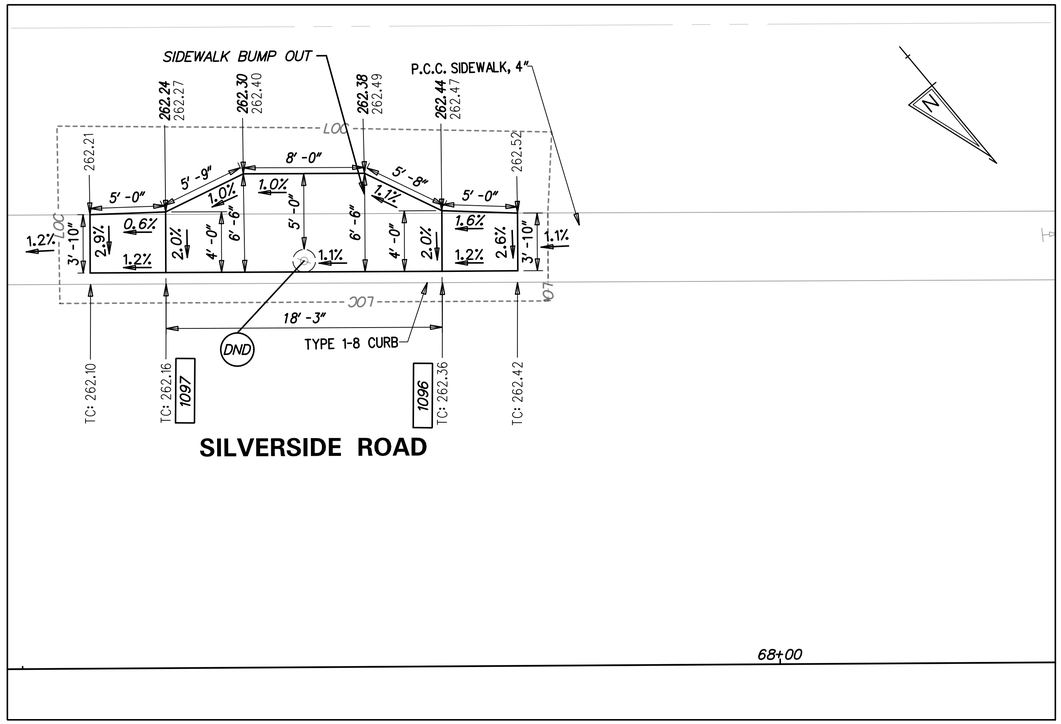
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

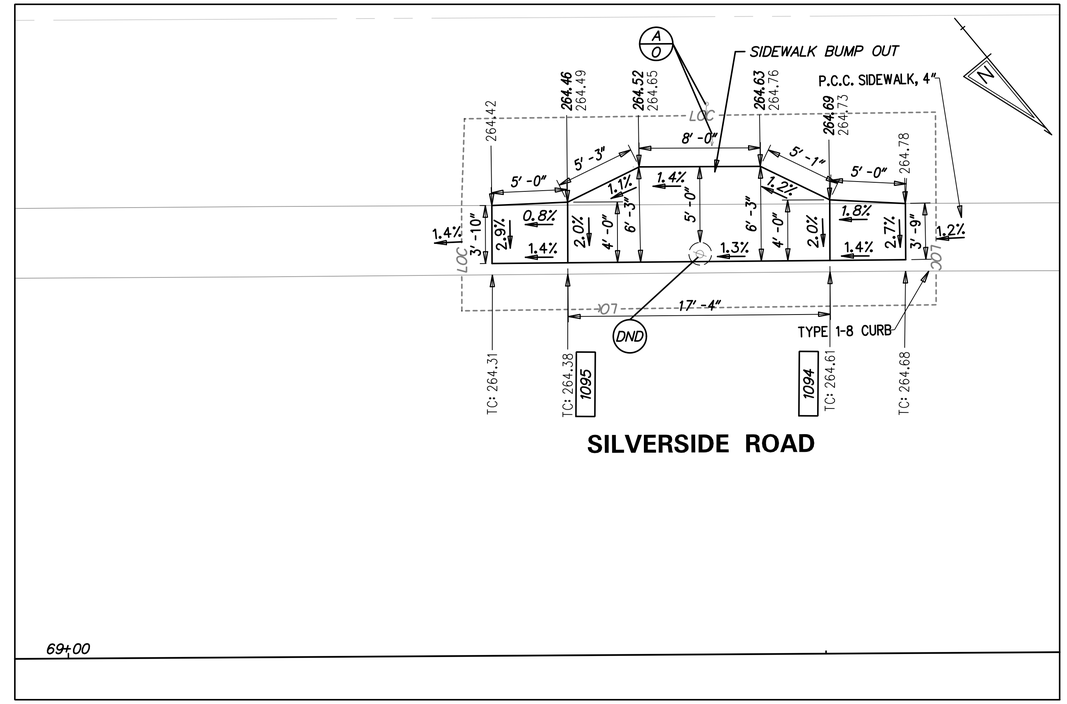
CONSTRUCTION DETAILS

DT-04
SECTION AEC
SHEET NO. 20

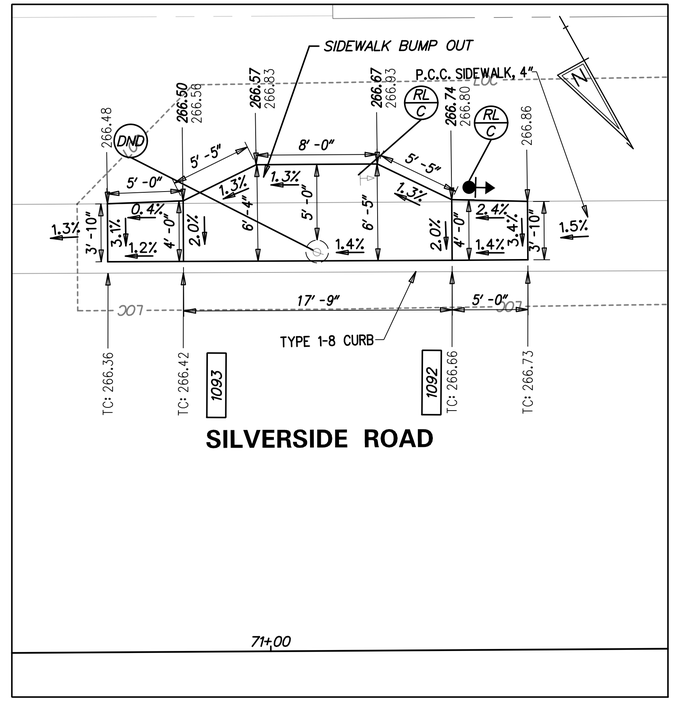
\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP21.DGN




SIDEWALK BUMP OUT - STA 67+53.50, LT




SIDEWALK BUMP OUT - STA 69+26.58, LT




SIDEWALK BUMP OUT - STA 70+87.95, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1092 | 71+12.13 | 24.97' LT | 654716.3618 | 633812.8511 |
| 1093 | 70+94.39 | 25.01' LT | 654708.7659 | 633828.8768 |
| 1094 | 69+50.43 | 25.19' LT | 654647.2106 | 633959.0133 |
| 1095 | 69+33.12 | 25.15' LT | 654639.8712 | 633974.6861 |
| 1096 | 67+77.87 | 25.32' LT | 654573.5204 | 634115.0441 |
| 1097 | 67+59.64 | 25.35' LT | 654565.7175 | 634131.5251 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

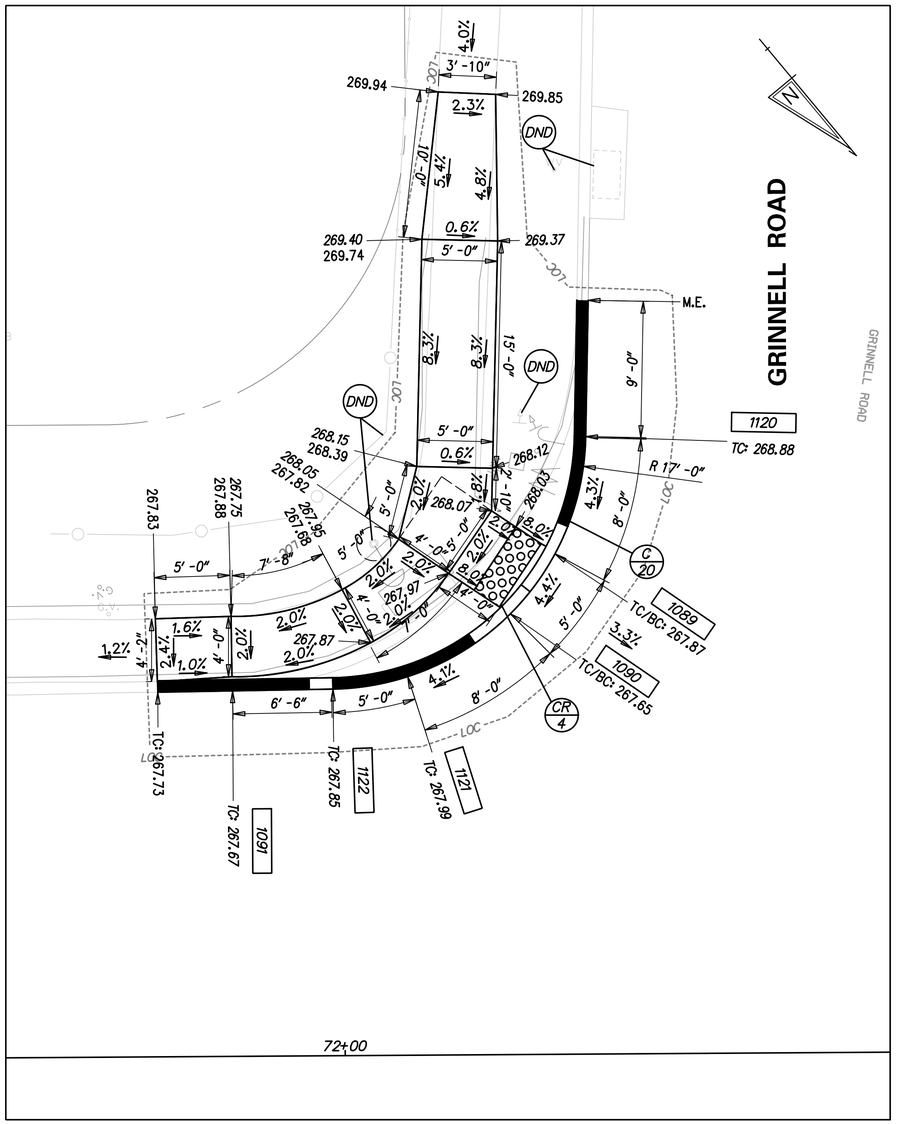
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

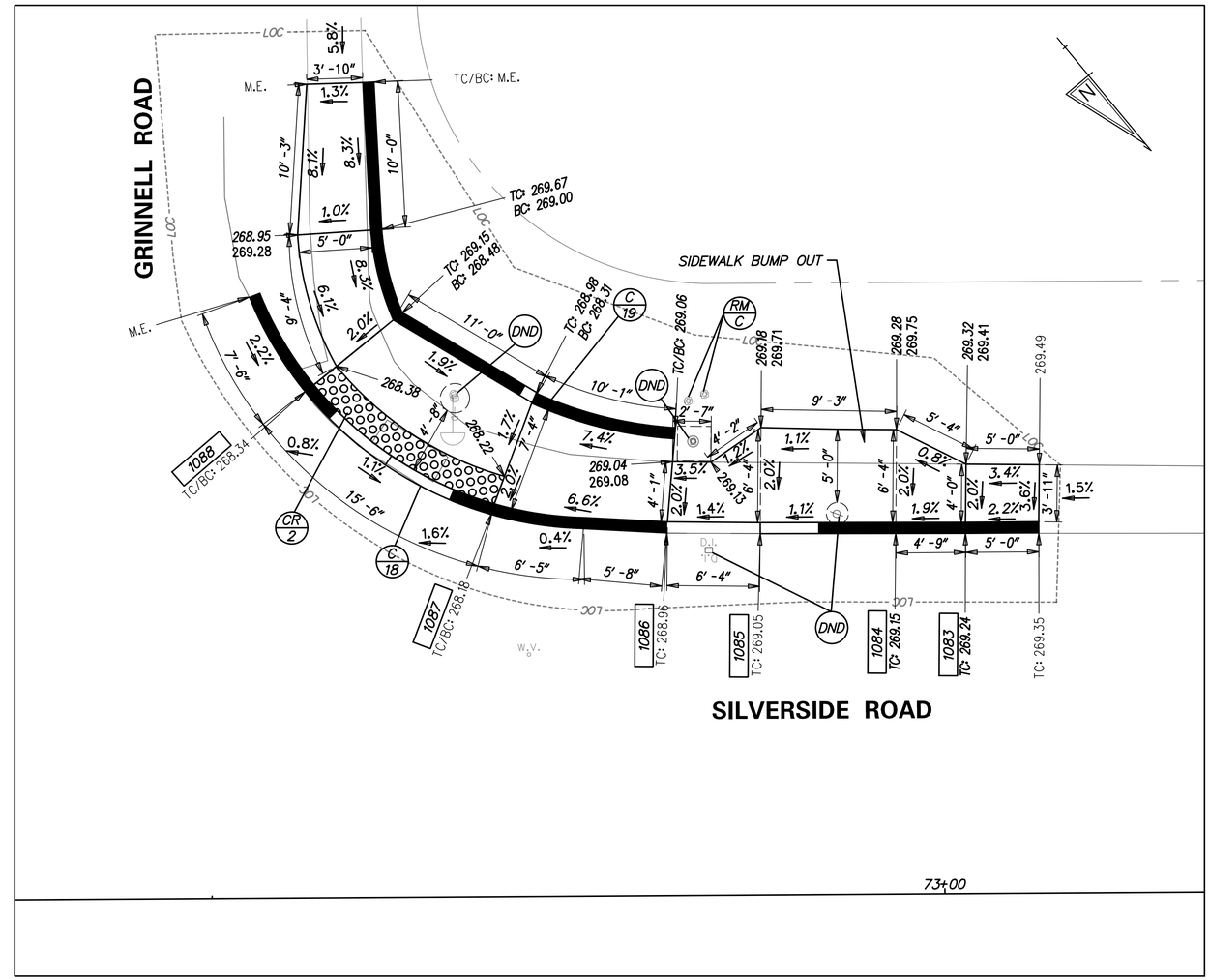
CONSTRUCTION DETAILS

DT-05
SECTION AEC
SHEET NO. 21

\\USPHLFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP20.DGN




CURB RAMP AT SOUTHEAST CORNER OF SILVERSIDE ROAD AND GRINNELL ROAD




SIDEWALK BUMP OUT - STA 72+77.52, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1083 | 73+01.56 | 24.57' LT | 654797.4936 | 633641.6650 |
| 1084 | 72+96.80 | 24.60' LT | 654795.4386 | 633645.9602 |
| 1085 | 72+87.56 | 24.65' LT | 654791.4495 | 633654.2978 |
| 1086 | 72+81.19 | 24.73' LT | 654788.6774 | 633660.0351 |
| 1087 | 72+69.23 | 26.07' LT | 654782.2848 | 633670.2178 |
| 1088 | 72+56.57 | 34.54' LT | 654769.2986 | 633678.1190 |
| 1089 | 72+14.05 | 33.02' LT | 654752.5365 | 633717.2178 |
| 1090 | 72+11.08 | 29.08' LT | 654754.8342 | 633721.5891 |
| 1091 | 71+92.72 | 24.12' LT | 654751.4965 | 633740.3129 |

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1120 | 72+16.13 | 40.71' LT | 654746.4656 | 633712.0631 |
| 1121 | 72+04.25 | 24.97' LT | 654755.6376 | 633729.5218 |
| 1122 | 71+99.33 | 24.19' LT | 654754.2427 | 633734.3129 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

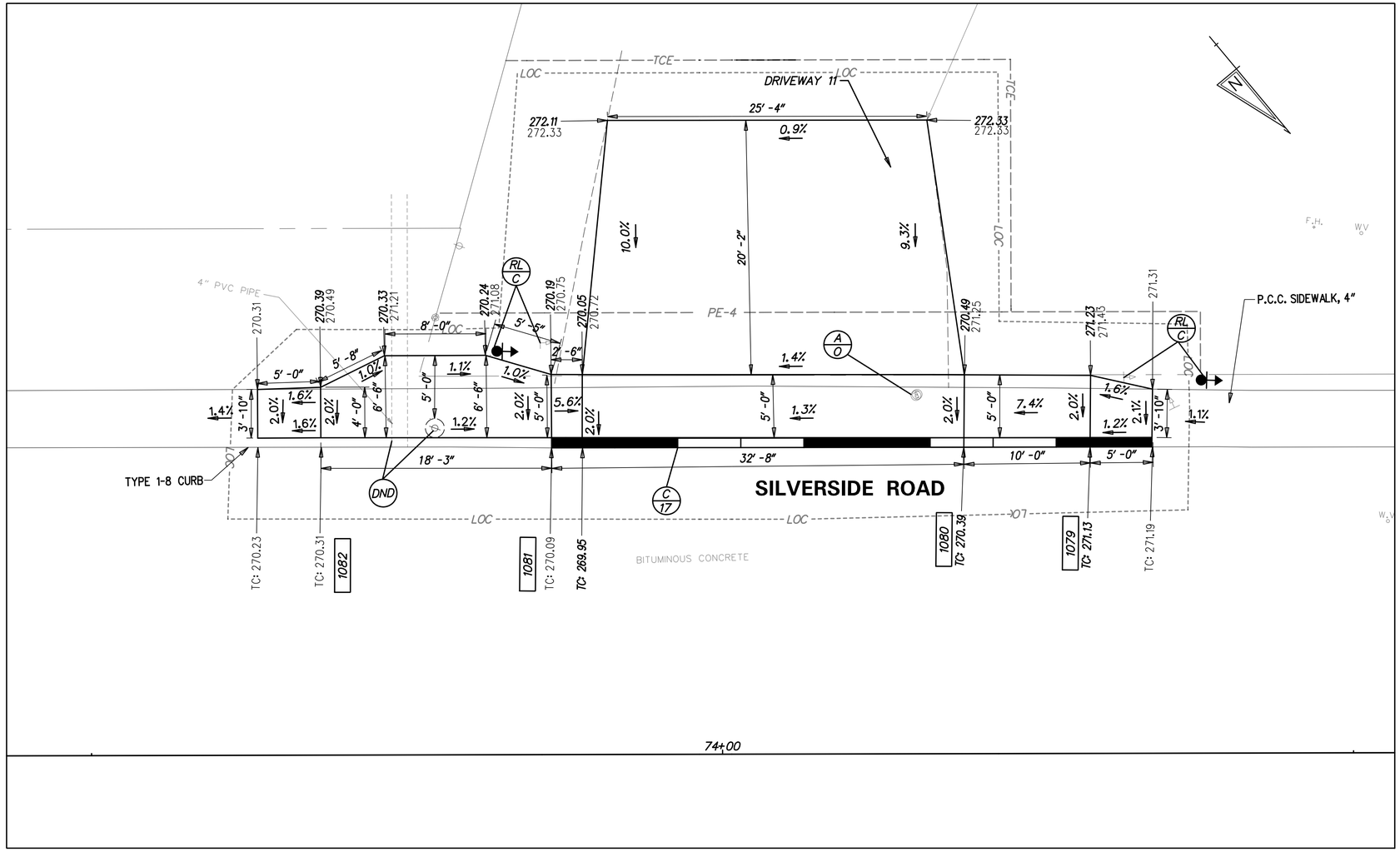
CONSTRUCTION DETAILS

DT-06

SECTION AEC

SHEET NO. 22

\\USPHLIFP002\DATA\PROJECTS\6031855\TASK 02-SILVERSIDE RD\900.WORK\910_CAD\02-SHEETS\003_CIVIL\CP19.DGN




## DRIVEWAY 11 - STA 73+71.24, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1079 | 74+29.18 | 24.27' LT | 654852.1795 | 633526.3537 |
| 1080 | 74+19.17 | 24.26' LT | 654847.9206 | 633535.4174 |
| 1081 | 73+86.50 | 24.31' LT | 654833.9534 | 633564.9482 |
| 1082 | 73+68.25 | 24.40' LT | 654826.0899 | 633581.4170 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

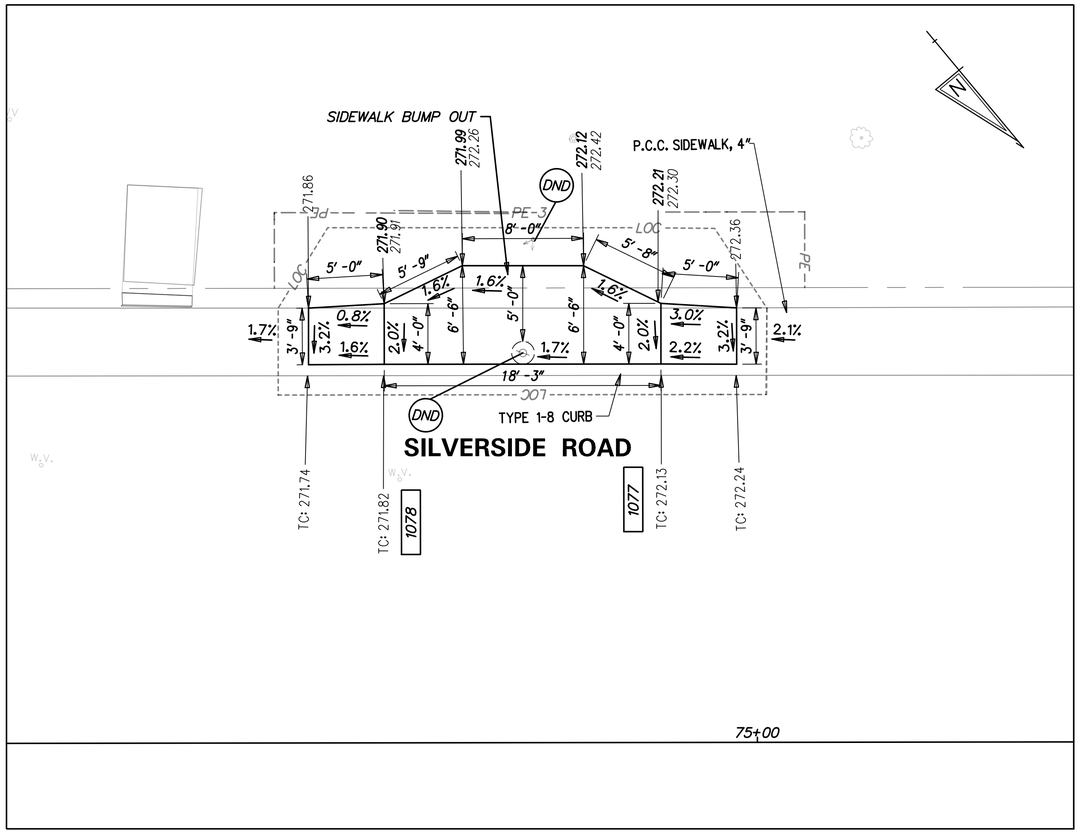
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

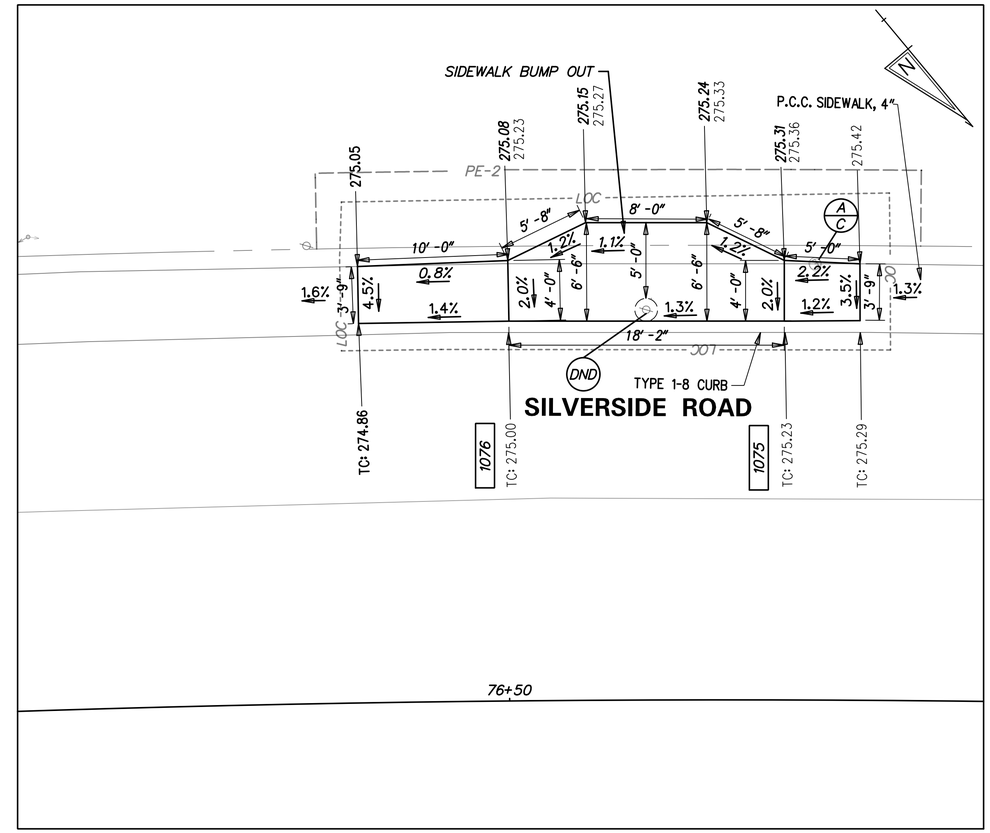
CONSTRUCTION DETAILS

DT-07
SECTION AEC
SHEET NO. 23

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP18.DGN




SIDEWALK BUMP OUT - STA 74+69.30, LT




SIDEWALK BUMP OUT - STA 76+44.02, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1075 | 76+68.10 | 24.25' LT | 654957.3809 | 633310.1722 |
| 1076 | 76+50.17 | 24.31' LT | 654948.6140 | 633326.1683 |
| 1077 | 74+93.68 | 24.22' LT | 654879.7307 | 633468.0333 |
| 1078 | 74+75.36 | 24.23' LT | 654871.9133 | 633484.6026 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

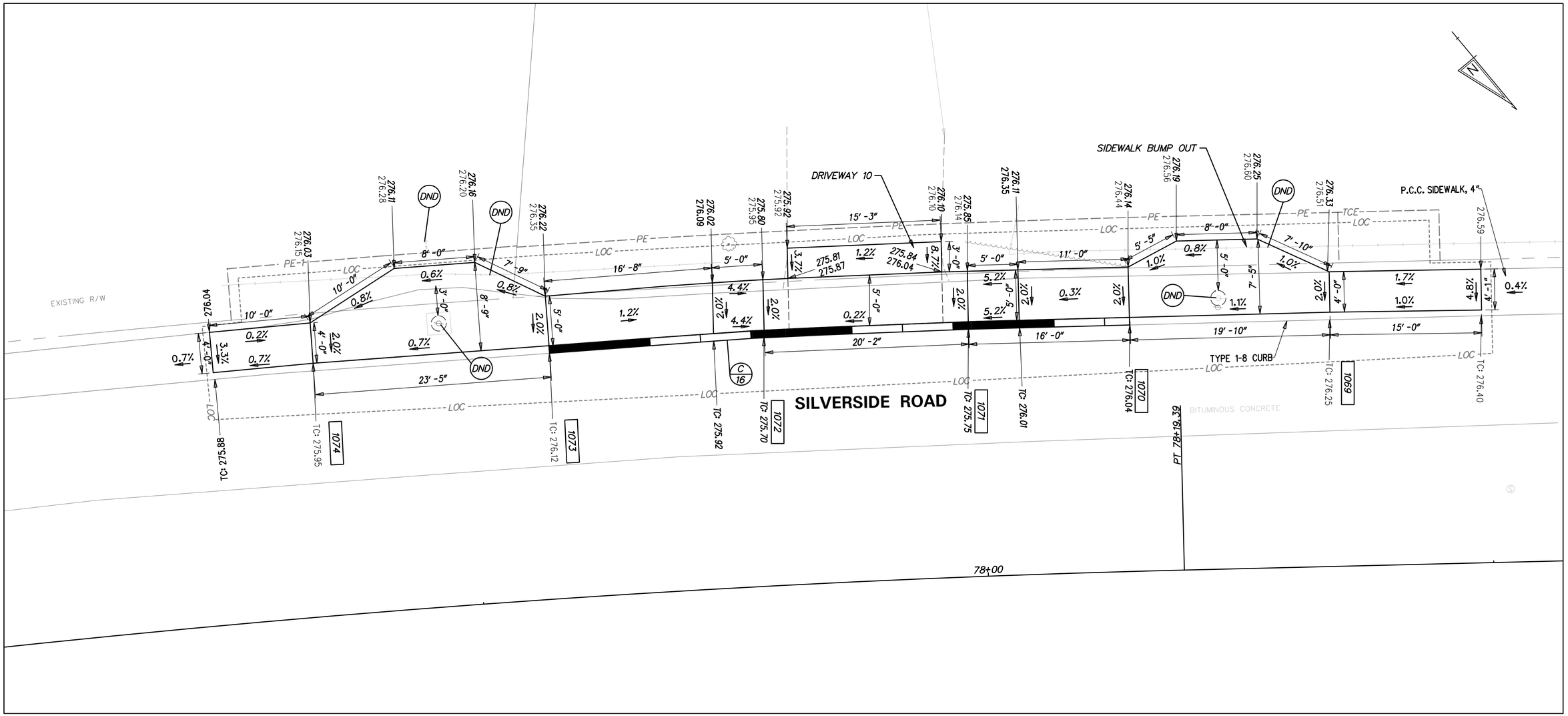
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. 1-036 |
|---|---|
| T201701104 | DESIGNED BY: P. SCOTT |
| COUNTY | CHECKED BY: B. SENGER |
| NEW CASTLE | |

CONSTRUCTION DETAILS

DT-08
SECTION AEC
SHEET NO. 24

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP17.DGN




## DRIVEWAY 10 - STA 77+52.37, LT

| COORDINATE LIST | | | | |
|---|---|---|---|---|
| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
| 1069 | 78+34.37 | 24.40' LT | 655047.1291 | 633167.2755 |
| 1070 | 78+14.64 | 24.37' LT | 655035.8292 | 633183.5156 |
| 1071 | 77+98.96 | 24.47' LT | 655026.7110 | 633196.6263 |
| 1072 | 77+79.06 | 24.55' LT | 655015.4084 | 633213.4159 |
| 1073 | 77+58.15 | 24.30' LT | 655004.0657 | 633231.4170 |
| 1074 | 77+35.14 | 24.31' LT | 654991.6416 | 633251.2442 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

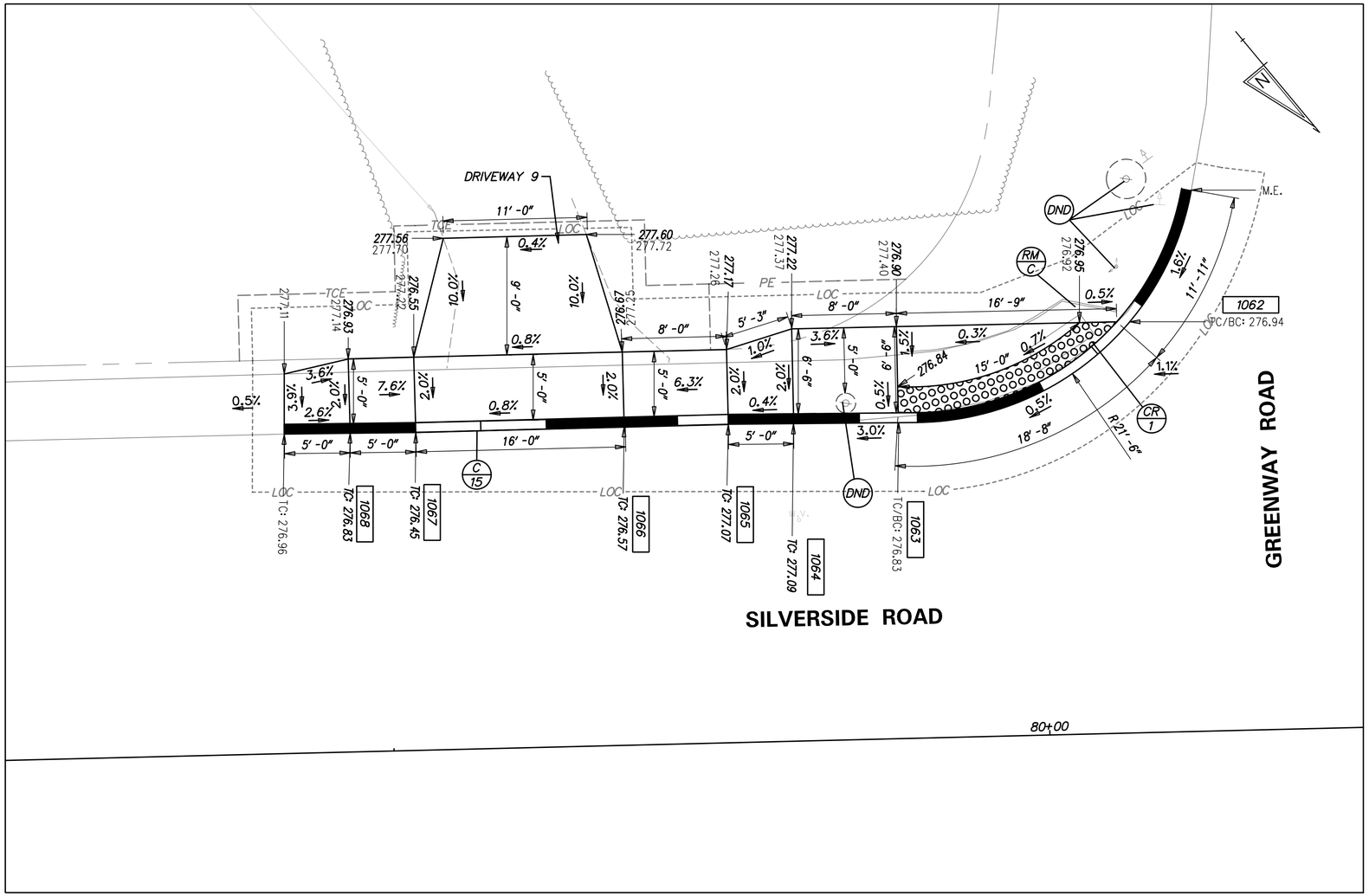
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION DETAILS

DT-09
SECTION AEC
SHEET NO. 25

\\USPHLTFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP16.DGN




DRIVEWAY 9 - STA 79+29.30, LT

| COORDINATE LIST | | | | |
|---|---|---|---|---|
| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
| 1062 | 80+06.85 | 31.34' LT | 655140.2195 | 633021.9107 |
| 1063 | 79+89.06 | 24.08' LT | 655135.9841 | 633040.6475 |
| 1064 | 79+81.04 | 24.20' LT | 655131.2926 | 633047.1516 |
| 1065 | 79+76.05 | 24.25' LT | 655128.3894 | 633051.1764 |
| 1066 | 79+69.43 | 24.25' LT | 655123.8285 | 633057.6846 |
| 1067 | 79+52.24 | 24.22' LT | 655114.7822 | 633070.7408 |
| 1068 | 79+47.24 | 24.29' LT | 655111.8602 | 633074.8093 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

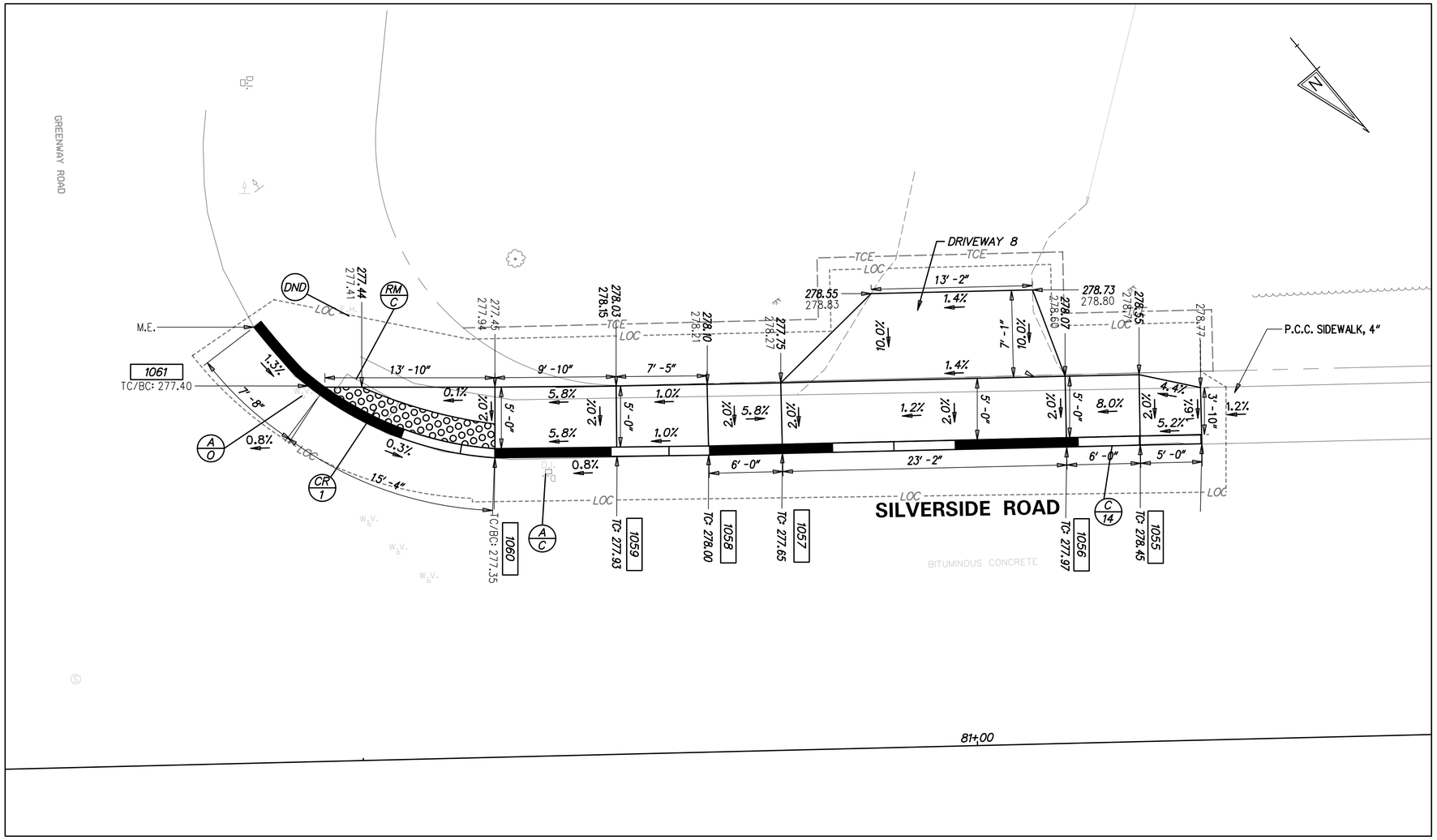
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. 1-036 |
|---|---|
| T201701104 | DESIGNED BY: P. SCOTT |
| COUNTY | |
| NEW CASTLE | CHECKED BY: B. SENGER |

CONSTRUCTION DETAILS

DT-10
SECTION AEC
SHEET NO. 26

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP15A.DGN




DRIVEWAY 8 - STA 80+70.81, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1055 | 81+14.50 | 24.12' LT | 655207.4072 | 632938.3390 |
| 1056 | 81+07.84 | 24.09' LT | 655204.0059 | 632943.2645 |
| 1057 | 80+84.71 | 24.15' LT | 655190.7019 | 632962.1951 |
| 1058 | 80+78.71 | 24.16' LT | 655187.2541 | 632967.1093 |
| 1059 | 80+71.26 | 24.18' LT | 655182.9060 | 632973.1762 |
| 1060 | 80+61.31 | 24.37' LT | 655177.1177 | 632981.2546 |
| 1061 | 80+46.25 | 30.58' LT | 655163.3920 | 632990.0470 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

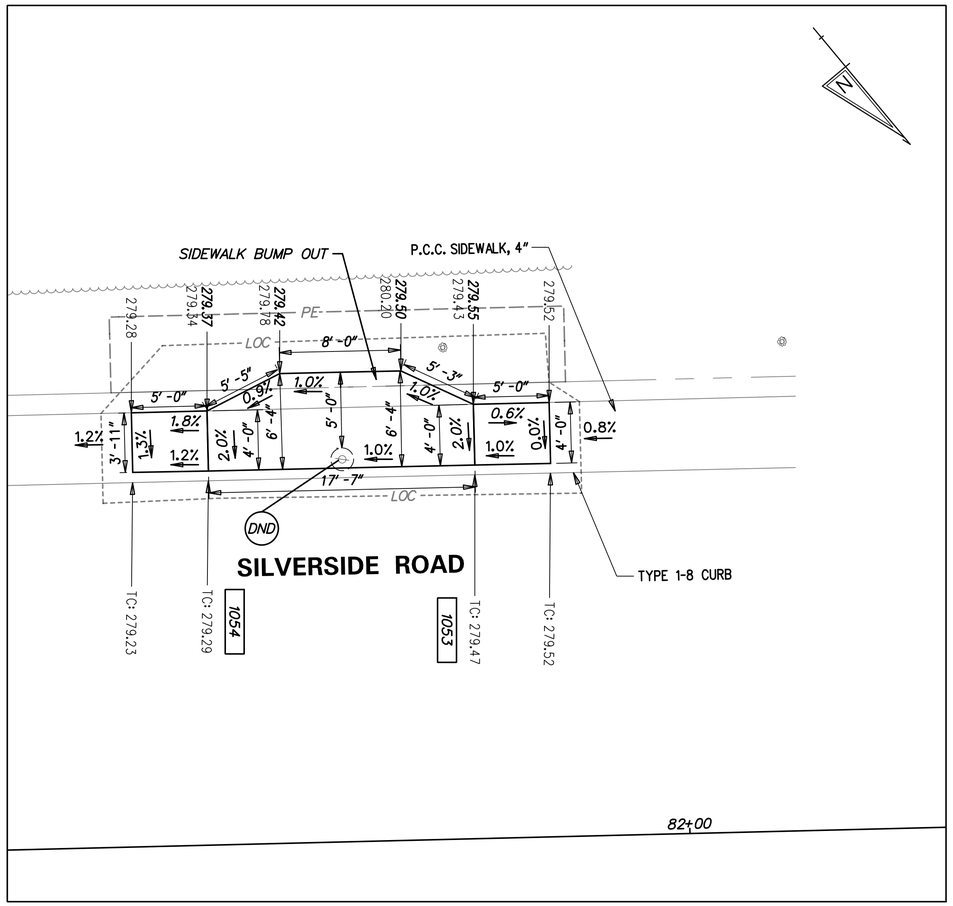
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

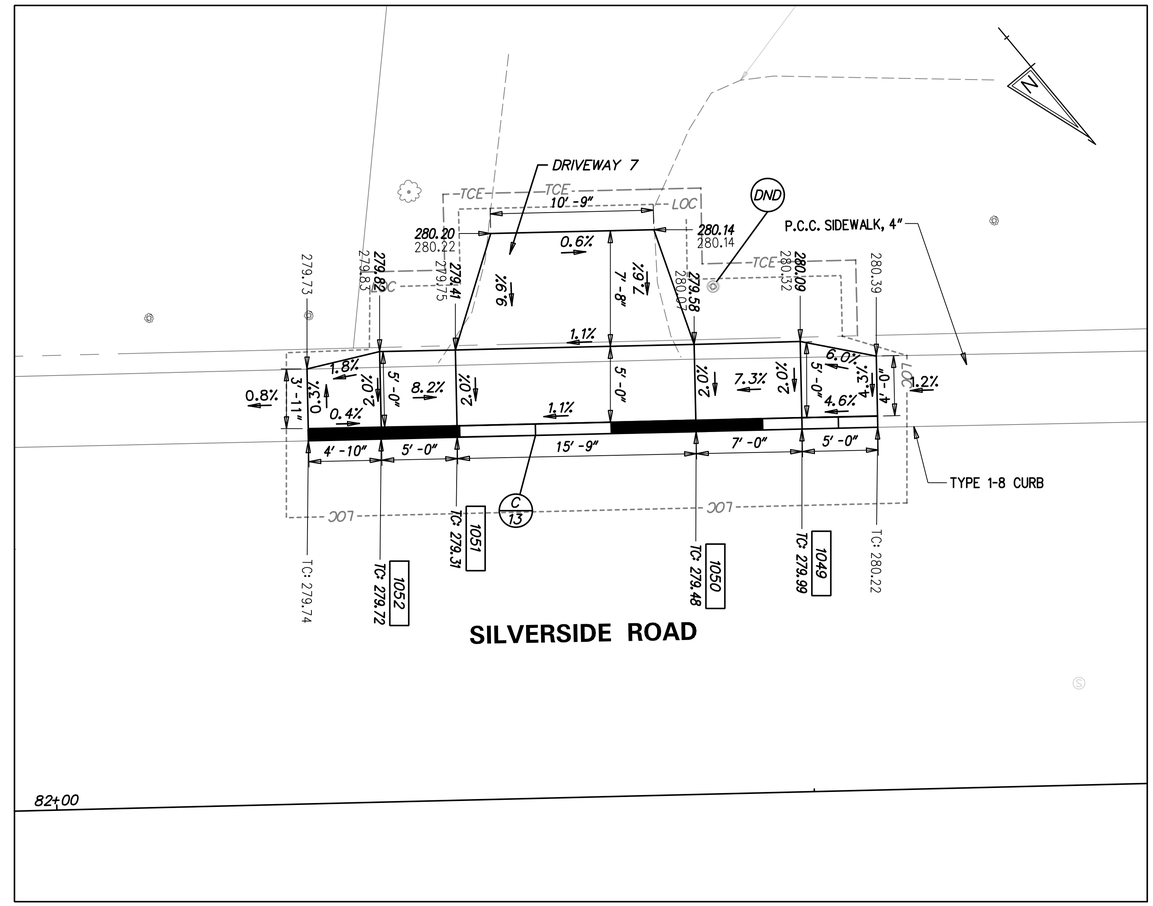
CONSTRUCTION DETAILS

DT-11
SECTION AEC
SHEET NO. 27

\\USPHLTFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP15.DGN




SIDEWALK BUMP OUT - STA 81+62.69, LT




DRIVEWAY 7 - STA 82+21.99, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1049 | 82+49.77 | 23.94' LT | 655285.4074 | 632827.0066 |
| 1050 | 82+42.78 | 23.91' LT | 655281.4017 | 632832.7339 |
| 1051 | 82+27.01 | 23.95' LT | 655272.3646 | 632845.6549 |
| 1052 | 82+21.99 | 23.95' LT | 655269.4848 | 632849.7724 |
| 1053 | 81+86.38 | 24.01' LT | 655249.0457 | 632878.9269 |
| 1054 | 81+68.79 | 24.04' LT | 655238.9450 | 632893.3283 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

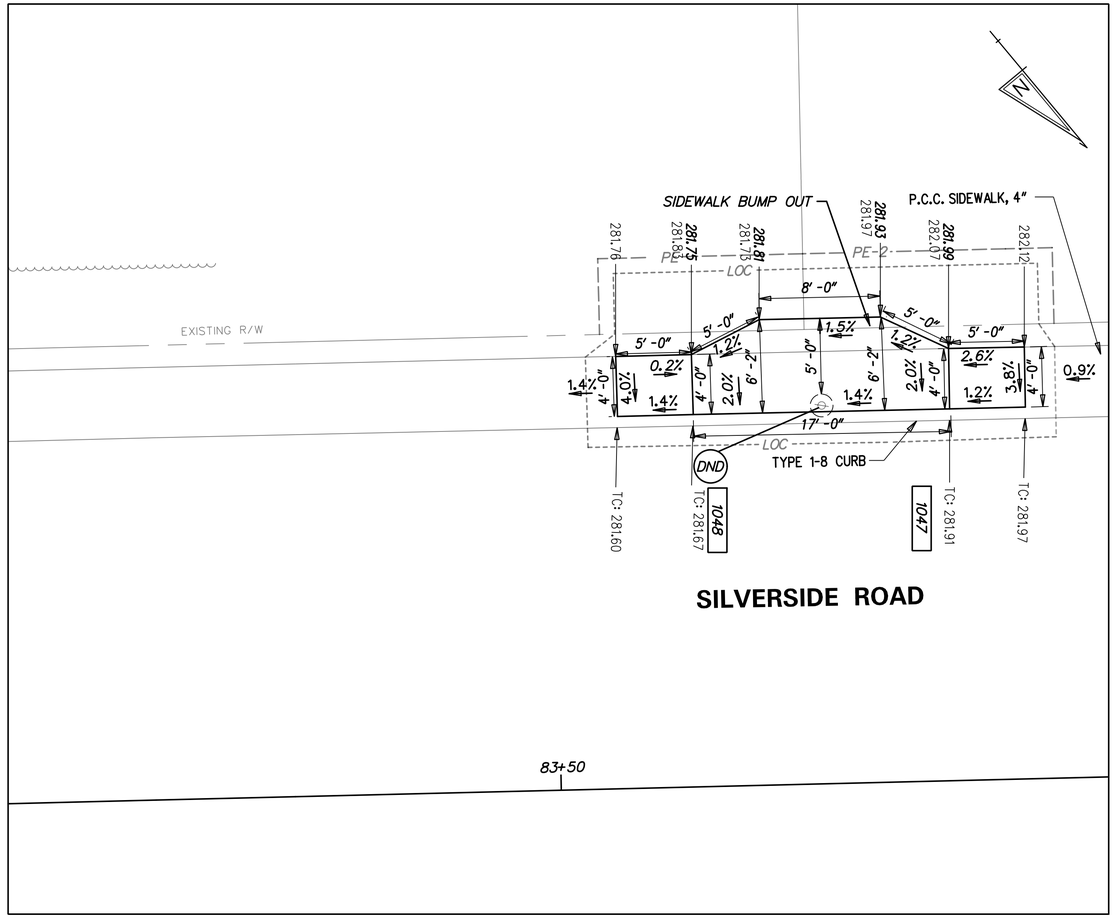
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

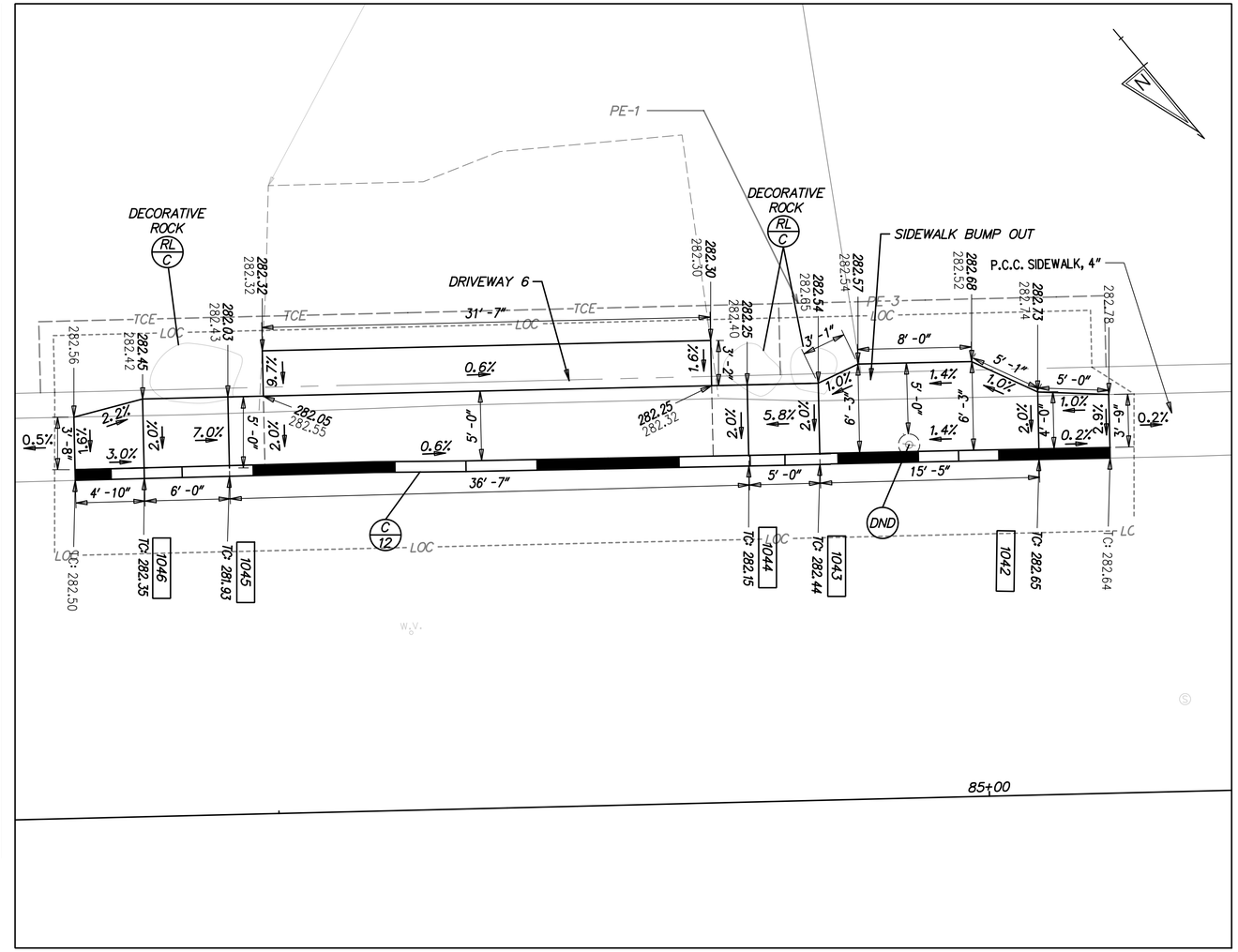
CONSTRUCTION DETAILS

DT-12
SECTION AEC
SHEET NO. 28

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP14.DGN




SIDEWALK BUMP OUT - STA 83+52.77, LT




DRIVEWAY 6 - STA 84+26.39, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1042 | 85+04.07 | 23.59' LT | 655431.3283 | 632618.7394 |
| 1043 | 84+88.65 | 23.64' LT | 655422.4589 | 632631.3550 |
| 1044 | 84+83.65 | 23.65' LT | 655419.5889 | 632635.4493 |
| 1045 | 84+47.10 | 23.81' LT | 655398.5218 | 632665.3221 |
| 1046 | 84+41.10 | 23.79' LT | 655395.1024 | 632670.2508 |
| 1047 | 83+76.21 | 23.78' LT | 655357.9512 | 632723.4466 |
| 1048 | 83+59.27 | 23.82' LT | 655348.2137 | 632737.3127 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

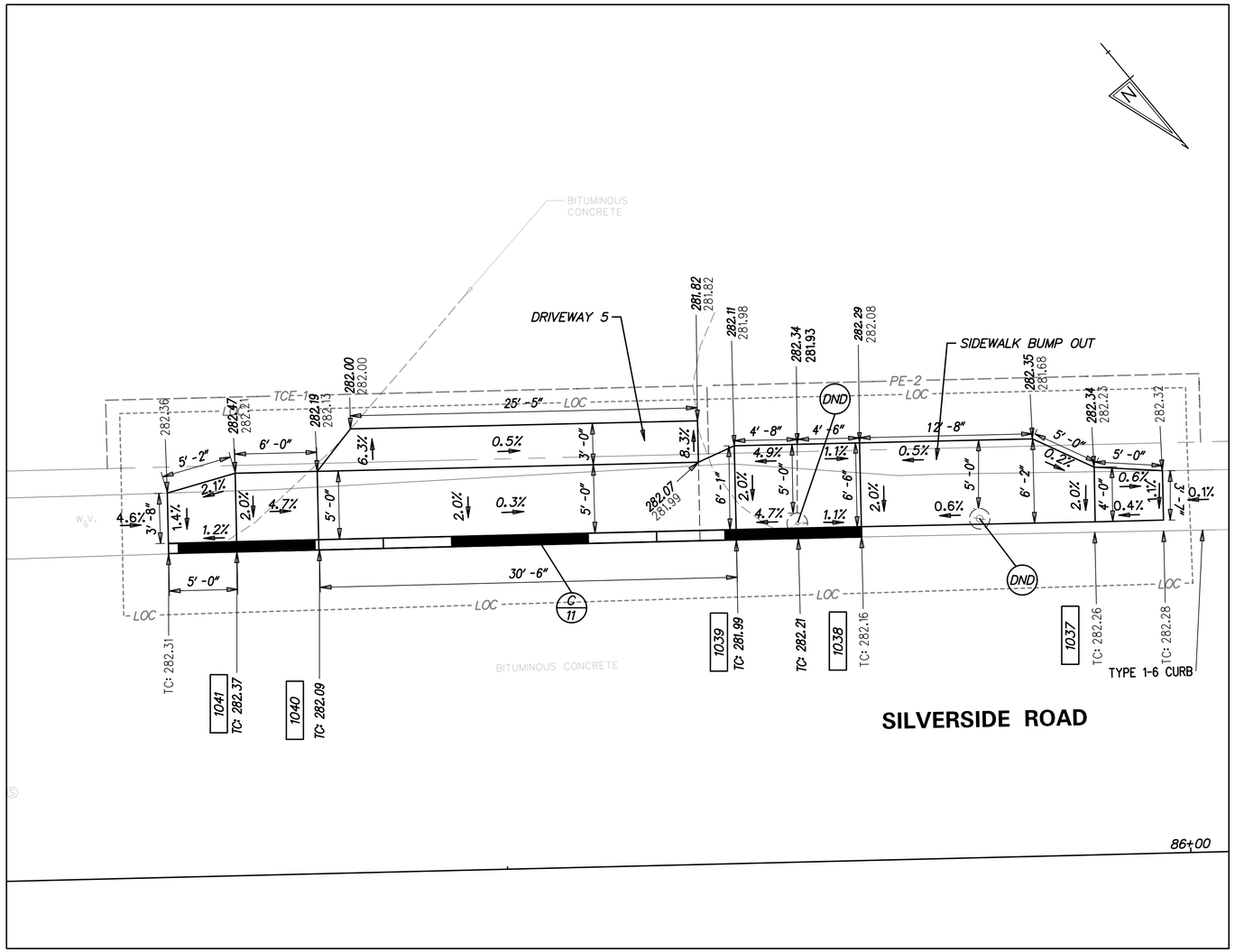
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

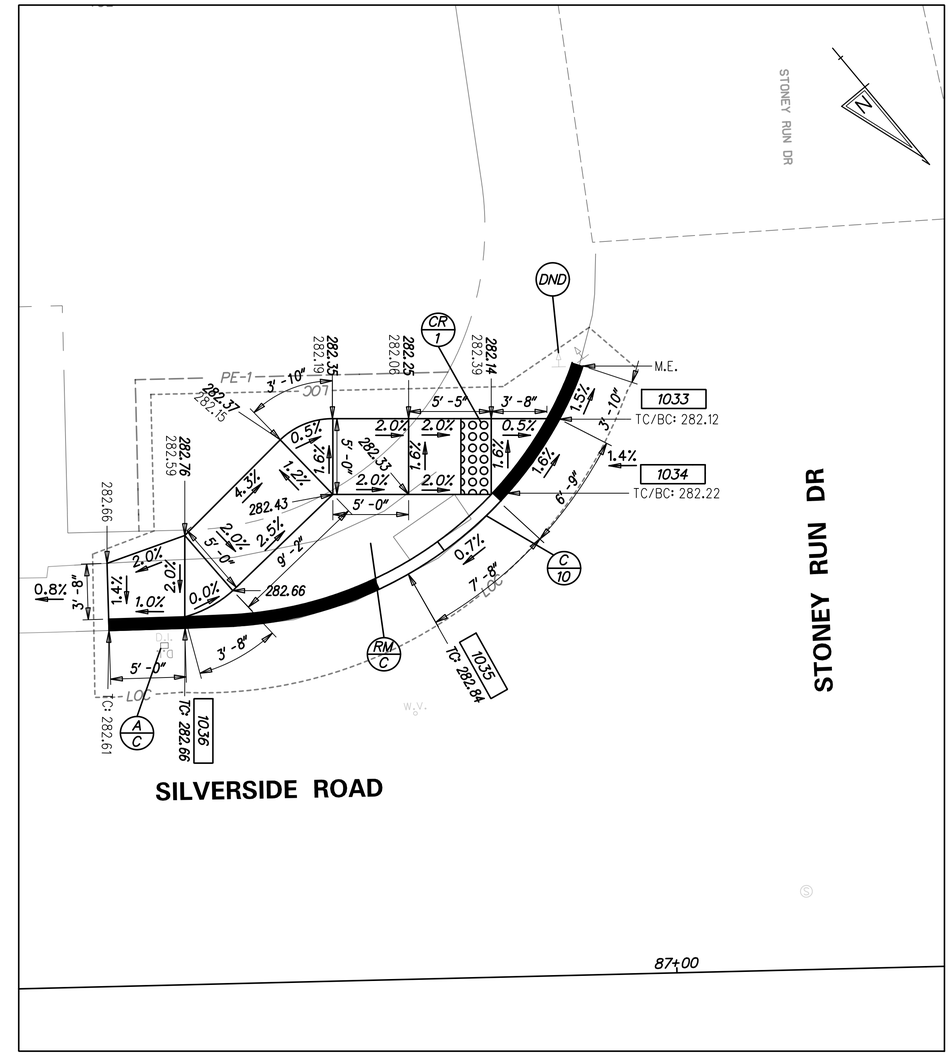
CONSTRUCTION DETAILS

DT-13
SECTION AEC
SHEET NO. 29

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP13.DGN




DRIVEWAY 5 - STA 85+14.53, LT




CURB RAMP AT NORTHEAST CORNER OF
SILVERSIDE ROAD AND STONEY RUN DRIVE

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1033 | 86+93.15 | 36.71' LT | 655528.8581 | 632456.2288 |
| 1034 | 86+89.61 | 31.91' LT | 655530.7538 | 632461.8907 |
| 1035 | 86+82.92 | 26.73' LT | 655531.1807 | 632470.3268 |
| 1036 | 86+68.11 | 23.53' LT | 655525.3248 | 632484.3047 |
| 1037 | 85+93.54 | 23.59' LT | 655482.5735 | 632545.3975 |
| 1038 | 85+76.48 | 23.62' LT | 655472.7497 | 632559.3408 |
| 1039 | 85+67.32 | 23.61' LT | 655467.4818 | 632566.8449 |
| 1040 | 85+36.77 | 23.68' LT | 655449.9917 | 632591.8837 |
| 1041 | 85+30.77 | 23.68' LT | 655446.5531 | 632596.8007 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

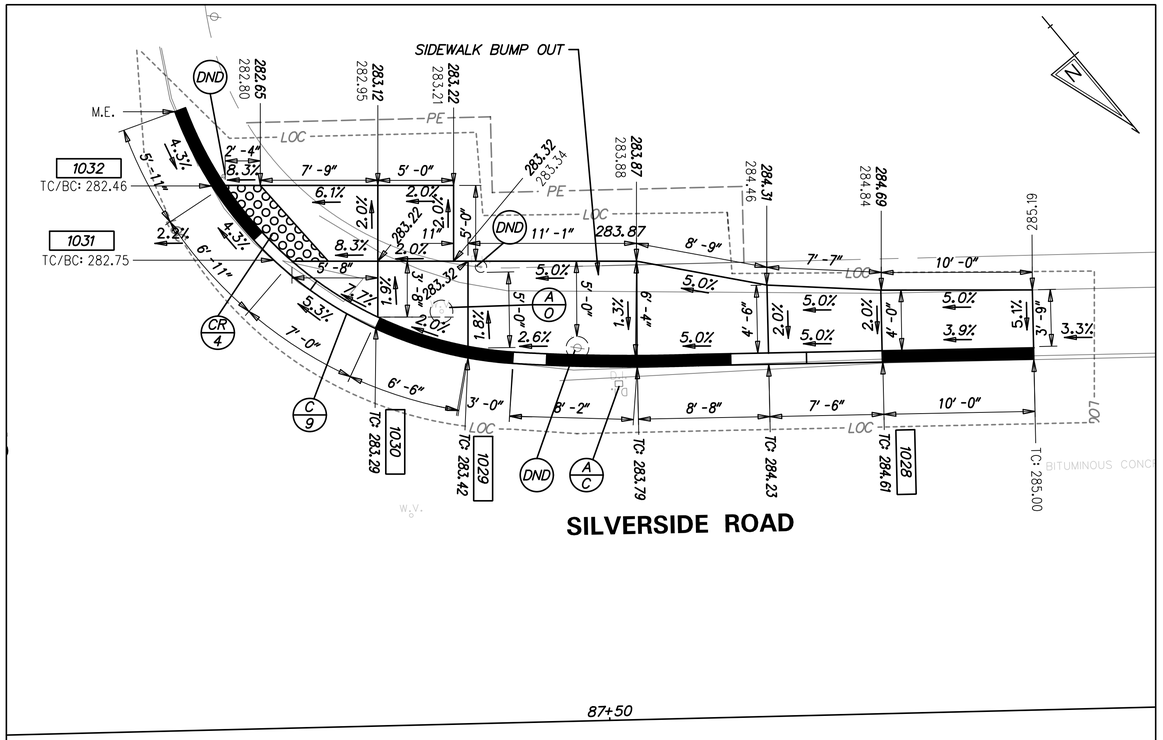
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | CHECKED BY: B. SENGER | |
| NEW CASTLE | | |

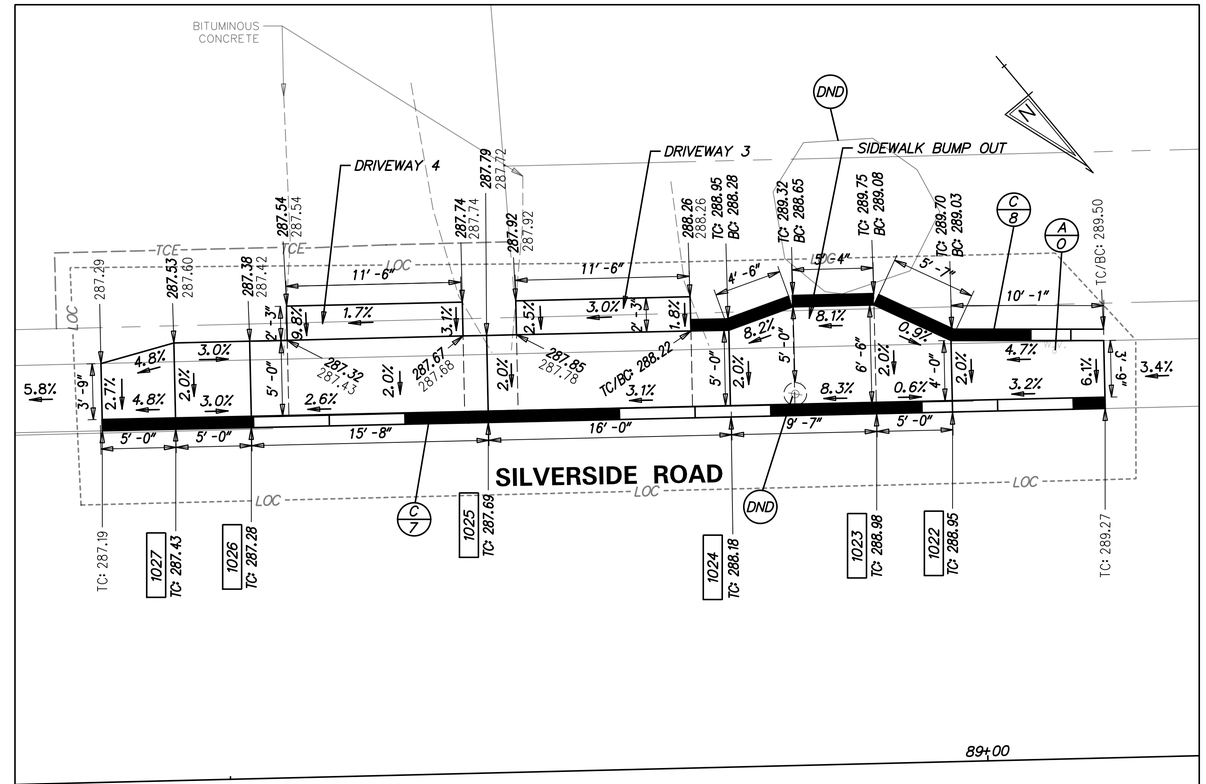
CONSTRUCTION DETAILS

DT-14
SECTION AEC
SHEET NO. 30

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP12.DGN




SIDEWALK BUMP OUT - STA 87+33.50, LT




DRIVEWAY 3 - STA 88+52.63, LT
DRIVEWAY 4 - STA 88+31.30, LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1022 | 88+98.23 | 23.04' LT | 655657.5109 | 632295.9366 |
| 1023 | 88+93.21 | 23.06' LT | 655654.6325 | 632300.0408 |
| 1024 | 88+83.61 | 23.08' LT | 655649.1079 | 632307.9033 |
| 1025 | 88+67.58 | 23.12' LT | 655639.8947 | 632321.0194 |
| 1026 | 88+51.93 | 23.17' LT | 655630.8997 | 632333.8169 |
| 1027 | 88+46.95 | 23.18' LT | 655628.0348 | 632337.8942 |
| 1028 | 57+68.59 | 23.20' LT | 655583.1423 | 632402.1251 |
| 1029 | 87+41.60 | 24.47' LT | 655566.6993 | 632424.0155 |
| 1030 | 87+35.21 | 26.31' LT | 655561.4700 | 632427.7025 |
| 1031 | 87+28.60 | 30.88' LT | 655553.8955 | 632430.5475 |
| 1032 | 87+24.57 | 35.89' LT | 655547.5258 | 632430.9356 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

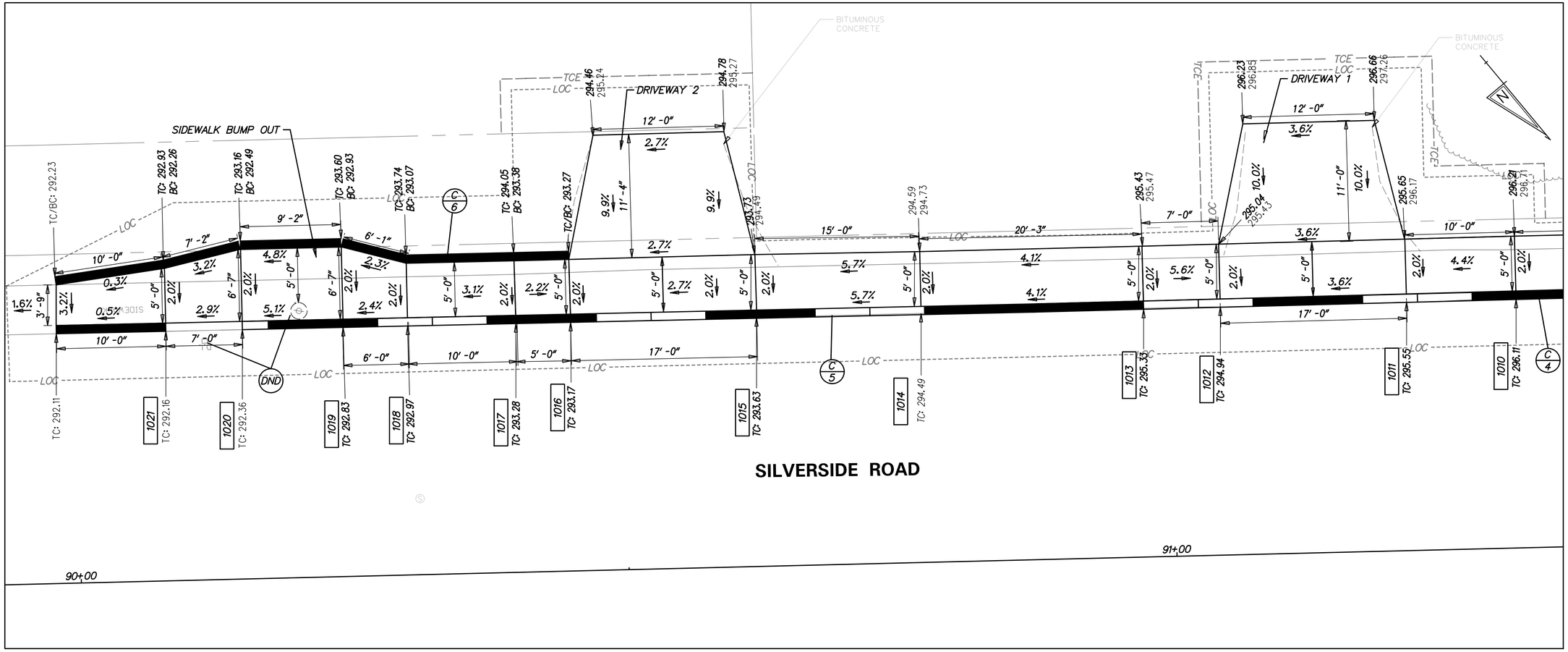
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | CHECKED BY: B. SENGER | |
| NEW CASTLE | | |

CONSTRUCTION DETAILS

DT-15
SECTION AEC
SHEET NO. 31

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP11.DGN




DRIVEWAY 1 - STA 90+82.54, LT
DRIVEWAY 2 - STA 90+25.24, LT
SIDEWALK BUMP OUT - STA 90+05.48 , LT

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1010 | 91+31.50 | 22.68' LT | 655791.4091 | 632104.9179 |
| 1011 | 91+21.50 | 22.65' LT | 655785.7016 | 632113.1294 |
| 1012 | 91+04.51 | 22.61' LT | 655776.0054 | 632127.0798 |
| 1013 | 90+97.50 | 22.60' LT | 655772.0039 | 632132.8368 |
| 1014 | 90+77.18 | 22.60' LT | 655760.3653 | 632149.4972 |
| 1015 | 90+62.16 | 22.64' LT | 655751.6708 | 632161.7281 |
| 1016 | 90+45.19 | 22.67' LT | 655741.9938 | 632175.6550 |
| 1017 | 90+40.20 | 22.68' LT | 655739.1226 | 632179.7524 |
| 1018 | 90+30.33 | 22.70' LT | 655733.4448 | 632187.8419 |
| 1019 | 90+24.44 | 22.68' LT | 655730.0603 | 632192.6640 |
| 1020 | 90+15.25 | 22.74' LT | 655724.7807 | 632200.1862 |
| 1021 | 90+08.26 | 22.75' LT | 655720.7685 | 632205.9026 |

DT-16

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

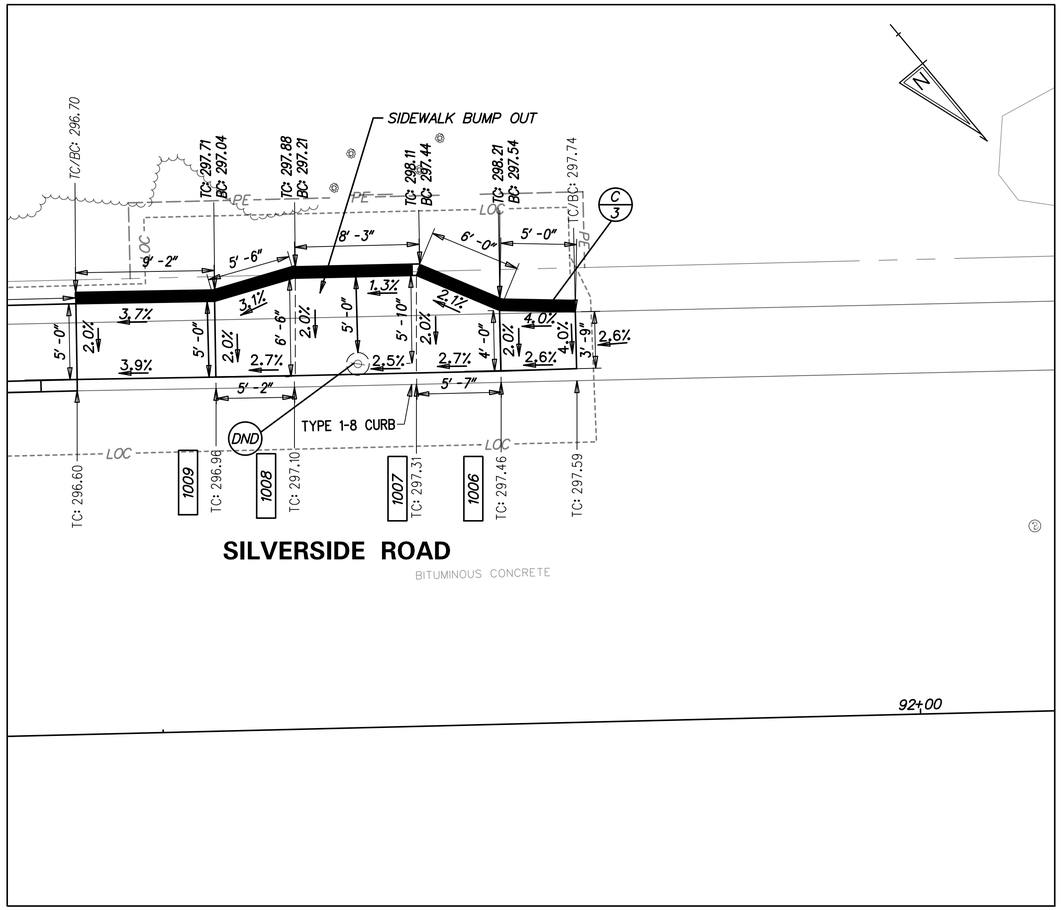
| CONTRACT | BRIDGE NO. 1-036 |
|---|---|
| T201701104 | DESIGNED BY: P. SCOTT |
| COUNTY NEW CASTLE | CHECKED BY: B. SENGER |

CONSTRUCTION DETAILS

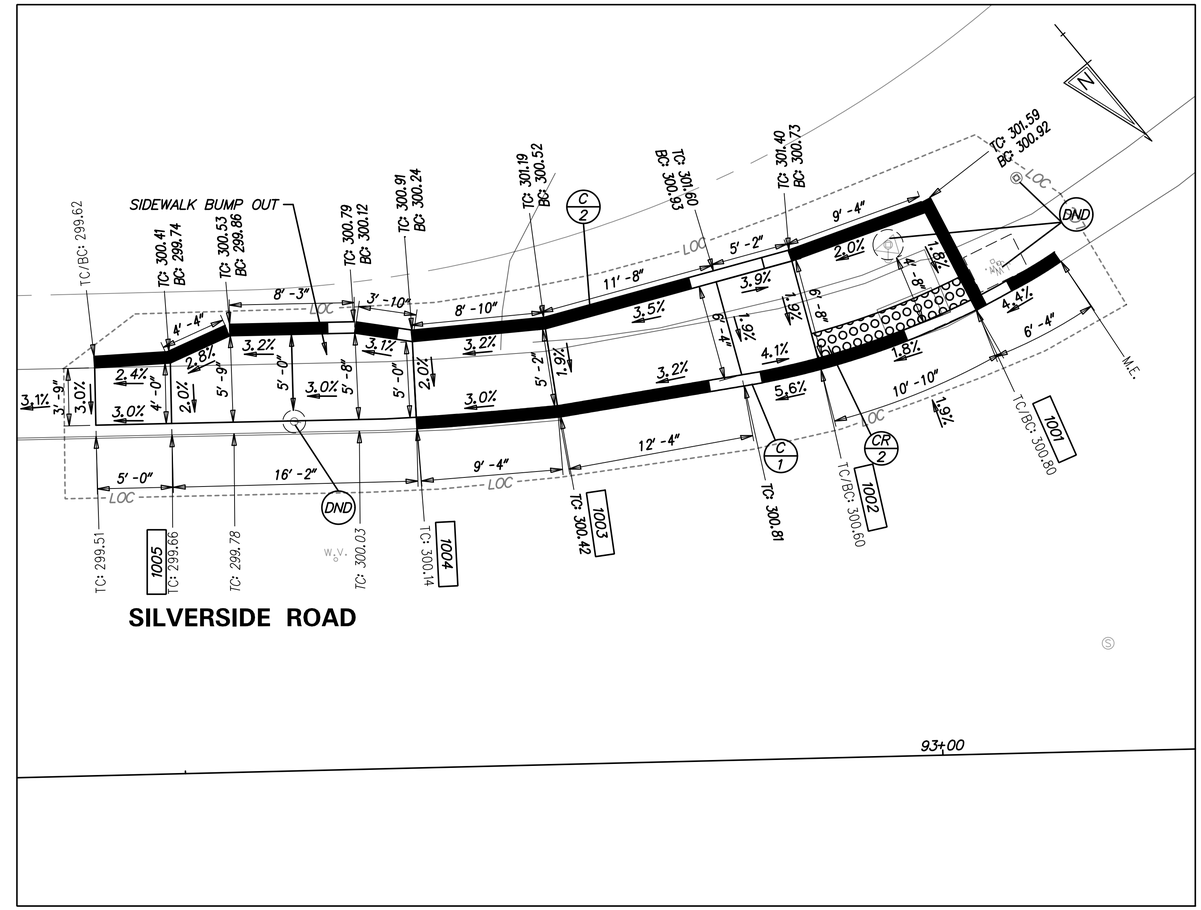
SECTION AEC

SHEET NO. 32

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP09.DGN




SIDEWALK BUMPOUT - STA 91+48.40, LT




SIDEWALK BUMP OUT AT SOUTHWEST CORNER OF SILVERSIDE ROAD AND VEALE ROAD

**COORDINATE LIST**

| POINT NO. | STATION | OFFSET | NORTHING | EASTING |
|---|---|---|---|---|
| 1001 | 93+02.91 | 29.31' LT | 655884.1351 | 631960.6031 |
| 1002 | 92+92.58 | 25.65' LT | 655881.2186 | 631971.1714 |
| 1003 | 92+75.34 | 22.93' LT | 655873.5773 | 631986.8570 |
| 1004 | 92+65.83 | 22.38' LT | 655868.5854 | 631994.9703 |
| 1005 | 92+49.66 | 22.37' LT | 655859.3306 | 632008.2371 |
| 1006 | 91+72.86 | 22.55' LT | 655815.1986 | 632071.0850 |
| 1007 | 91+67.27 | 22.56' LT | 655811.9885 | 632075.6621 |
| 1008 | 91+59.22 | 22.58' LT | 655807.3654 | 632082.2538 |
| 1009 | 91+54.04 | 22.61' LT | 655804.3719 | 632086.4753 |

ADDENDA / REVISIONS

SCALE 0 5 10 15 FEET

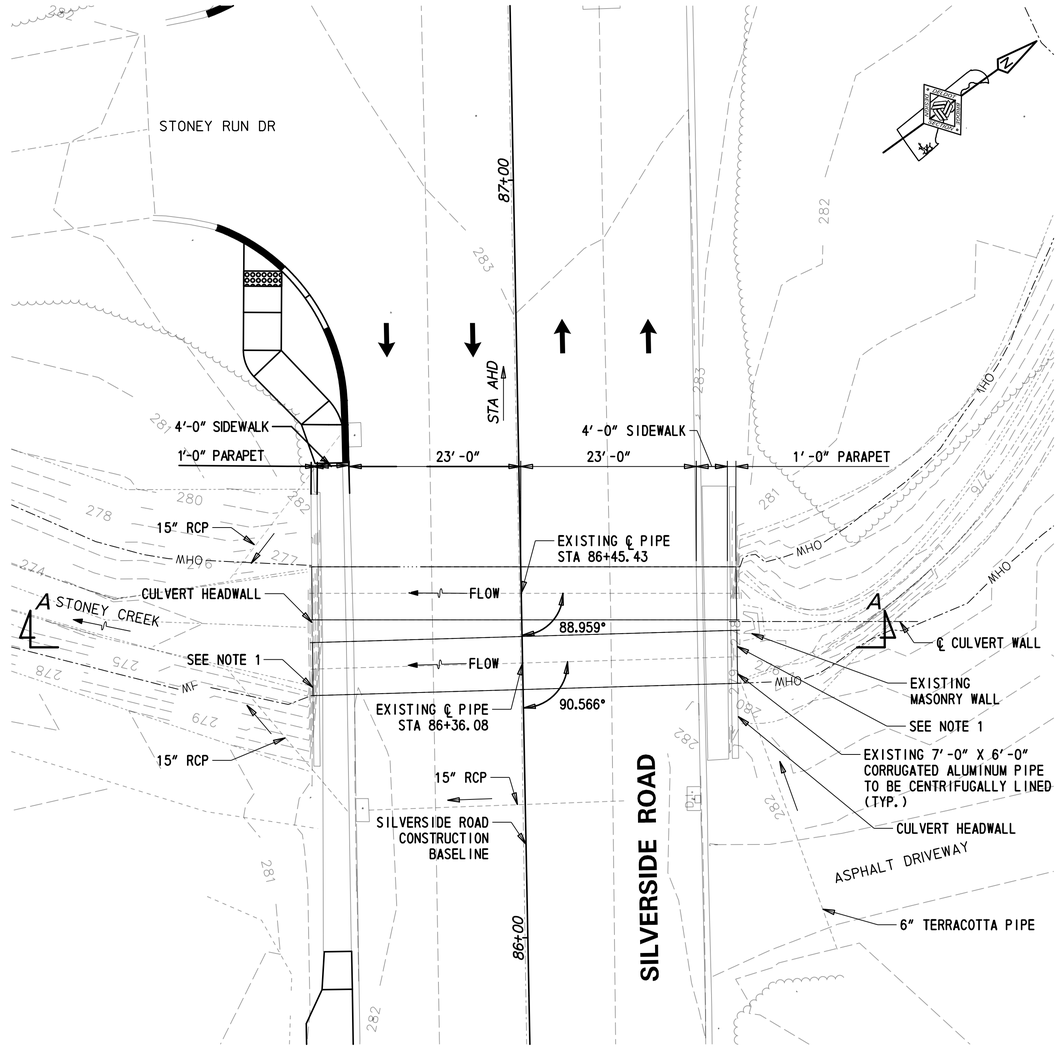
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION DETAILS

DT-17
SECTION AEC
SHEET NO. 33

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CP08.DGN




## PLAN

SCALE: 1"=10'-0"

## CROSS-REFERENCE NOTE:

1. FOR SECTION A-A, SEE SHEET 35.

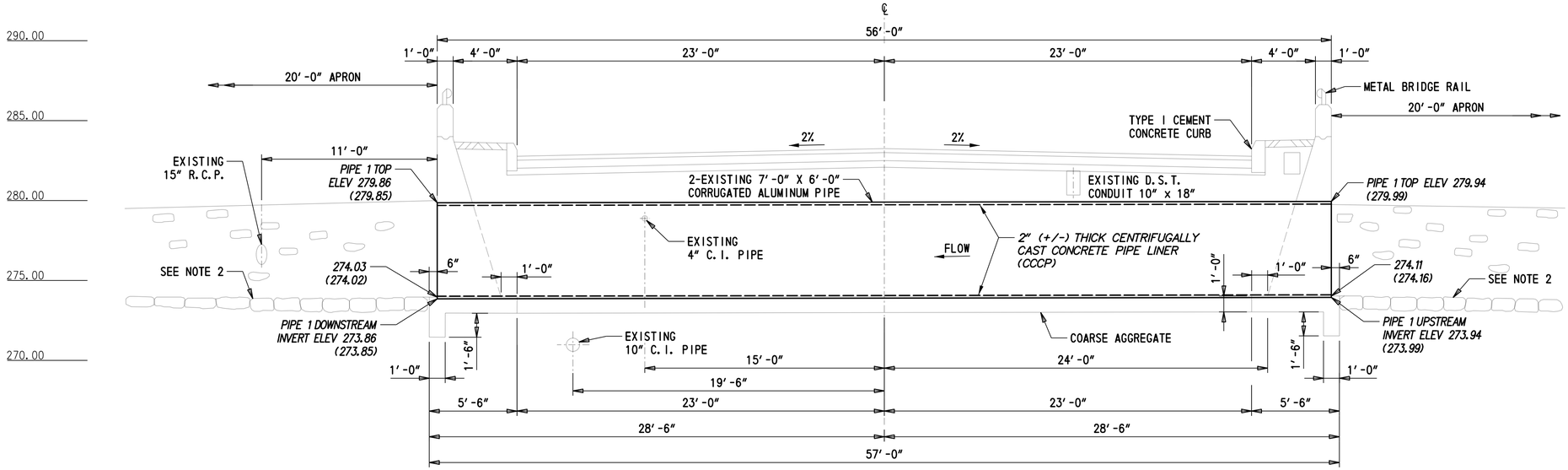
## NOTE:

1. REMOVE EXCESS RIPRAP FROM STREAMBED TO PROVIDE A CONTINUOUS BOTTOM SLOPE FROM THE PROPOSED CULVERT INVERT TO THE EXISTING BOTTOM ELEVATION TO A DISTANCE 15 LINEAR FEET UPSTREAM.

2. REFERENCE CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS FOR STREAM DIVERSION. SHOULD THE CONTRACTOR CHOOSE TO DEVIATE FROM THE SPECIFIED DIVERSION THE CONTRACTOR SHALL SUBMIT A STREAM DIVERSION PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

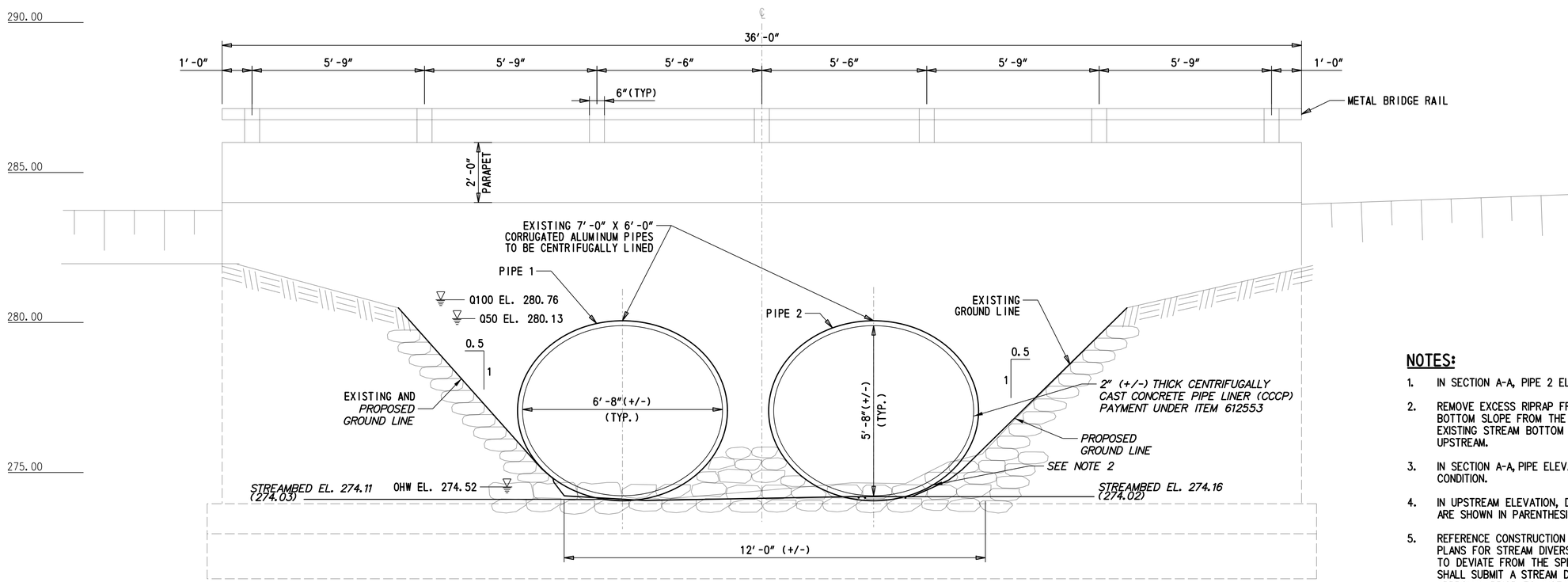
| ADDENDA / REVISIONS | | SCALE: AS NOTED | SILVERSIDE ROAD ADA IMPROVEMENTS VEALE ROAD TO WINDYBUSH DRIVE | CONTRACT T201701104 | BRIDGE NO. 1-036 | BRIDGE PLANS | BD-01 |
|---|---|---|---|---|---|---|---|
| | | | | COUNTY NEW CASTLE | DESIGNED BY: S. MUKHERJEE | | SECTION AEC |
| | | | | | CHECKED BY: G. BLACK | | SHEET NO. 34 |

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\004_STRUCTURAL\PL01.DGN




## SECTION A-A

SCALE: 1/4"=1'-0"




## UPSTREAM ELEVATION

SCALE: 1/2"=1'-0"

## NOTES:

1. IN SECTION A-A, PIPE 2 ELEVATIONS ARE SHOWN IN PARENTHESIS.
2. REMOVE EXCESS RIPRAP FROM STREAMBED TO PROVIDE A CONTINOUS BOTTOM SLOPE FROM THE PROPOSED CULVERT INVERT TO THE EXISTING STREAM BOTTOM ELEVATION TO A DISTANCE 15 LINEAR FEET UPSTREAM.
3. IN SECTION A-A, PIPE ELEVATIONS SHOWN REPRESENT EXISTING CONDITION.
4. IN UPSTREAM ELEVATION, DOWNSTREAM STREAMBED ELEVATIONS ARE SHOWN IN PARENTHESIS.
5. REFERENCE CONSTRUCTION PHASING, M.O.T. AND EROSION CONTROL PLANS FOR STREAM DIVERSION. SHOULD THE CONTRACTOR CHOOSE TO DEVIATE FROM THE SPECIFIED DIVERSION, THE CONTRACTOR SHALL SUBMIT A STREAM DIVERSION PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

| ADDENDA / REVISIONS | SCALE: AS NOTED | SILVERSIDE ROAD ADA IMPROVEMENTS VEALE ROAD TO WINDYBUSH DRIVE | CONTRACT T201701104 | BRIDGE NO. 1-036 | BRIDGE PLANS | BD-02 SECTION AEC |
|---|---|---|---|---|---|---|
| | | | COUNTY NEW CASTLE | DESIGNED BY: S. MUKHERJEE | | SHEET NO. 35 |
| | | | | CHECKED BY: G. BLACK | | |

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\004_STRUCTURAL\CU01.DGN

# 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 #3 (A) AND (C), NO PCN

DNREC - WETLANDS & SUBAQUEOUS LANDS (WLSL): * PROJECT IS CONSISTENT WITH DELAWARE CODE CHAPTER 72 SECTION 7217, SPECIAL EXEMPTION B

DNREC - WATER QUALITY (WQC) & COASTAL ZONE CONSISTENCY (CZM): * ISSUED (PROJECT IS NOT LOCATED CRW)

* 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 IT IS DISPLAYED ON-SITE DURING THE ENTIRE CONSTRUCTION PERIOD.

B. CONSTRUCTION RESTRICTIONS:

FISHERIES - NONE

ENDANGERED SPECIES - NONE

MIGRATORY BIRDS - NONE

3. CULTURAL RESOURCE ISSUES: NONE

4. STREAM RESTORATION AND SLOPE RIPRAP TREATMENT

A. THE CONTRACTOR SHALL FOLLOW THE SPECIAL PROVISIONS OF ITEM #707500 - CHANNEL BED FILL IN REGARDS TO THE SALVAGING OF ON-SITE NATURAL STREAM BOTTOM MATERIAL OR THE FURNISHING OF OFF-SITE MATERIAL. ALL RIPRAP IN THE CHANNEL BOTTOM (I.E. BELOW THE WATER LINE) SHALL BE RECESSED ONE FOOT BELOW STREAM BED ELEVATION AND CHOKED WITH BORROW TYPE 'B' SO THAT ALL OF THE VOIDS IN THE RIPRAP ARE FILLED WITH MATERIAL. PAYMENT UNDER ITEM #209002 - BORROW TYPE 'B'. THE RIPRAP SHALL THEN BE COVERED WITH 12" CHANNEL BED FILL TO MATCH EXISTING ELEVATIONS. PAYMENT UNDER ITEM #707500 - CHANNEL BED FILL.

B. OTHER AREAS OF THE CHANNEL BOTTOM AFFECTED BY CONSTRUCTION (INCLUDING, BUT NOT LIMITED TO, THE LOCATION OF SUMP PITS, STABILIZED OUTFALLS, TEMPORARY PIPES AND/OR SANDBAG DIKES AND DIVERSIONS) SHALL BE RESTORED TO EXISTING CONDITIONS. ANY CAVITIES OR SCOUR HOLES RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE FILLED WITH CHANNEL BED FILL. PAYMENT UNDER ITEM #707500 - CHANNEL BED FILL.

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

D. ALL RIPRAP ON THE STREAM BANK, OUTSIDE THE CHANNEL BED, SHALL BE CHOKED WITH DELAWARE #57 STONE, FILLED WITH TOPSOIL, SEEDED AND MULCHED WITH EROSION CONTROL BLANKET MULCH (ITEM 908020). 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" TOPSOIL LAYER SHALL BE PLACED ON TOP OF THE RIPRAP. SEEDING SHALL BE PERMANENT GRASS SEEDING STREAMBANK (ITEM NO. 908019) FROM STREAM BASE FLOW ELEVATION TO 2' UP THE SLOPE AND PERMANENT GRASS SEEDING DRY GROUND (ITEM NO. 908014) ON THE REMAINING SLOPE. ALL WORK, STARTING WITH THE INITIAL CHOKING WITH TOPSOIL THROUGH THE SEEDING AND MULCHING, SHALL BE COMPLETED PRIOR TO ANY RAIN EVENT. PAYMENT FOR RIPRAP AND DELAWARE #57 STONE SHALL BE PAID FOR UNDER THE RIPRAP ITEM. ALL OTHER ITEMS SHALL BE PAID FOR UNDER THEIR RESPECTIVE ITEMS.

NOTES:

1. NO WETLANDS EXIST WITHIN THE PROJECT LIMITS.

2. ORIGINAL SHEET PREPARED BY AECOM ON 01-22-2018. SHEET LAST UPDATED ON 11-06-2019.

**TEMPORARY OPEN WATER IMPACT AREA SCHEDULE**

| ID | IMPACT DESCRIPTION | AREA (SF) | AREA (AC) | VOLUME (CY) | JURISDICTION |
|---|---|---|---|---|---|
| 2-OT1 | SANBAG DIKE/ACCESS | 479.7257 | 0.0110 | N/A | USACE, DNREC |
| 2-OT2 | SANBAG DIKE/ACCESS | 264.8828 | 0.0061 | N/A | USACE, DNREC |
| TOTAL TEMPORARY OPEN WATER IMPACTS | | 744.6085 | 0.0171 | N/A | USACE, DNREC |

**PERMANENT OPEN WATER IMPACT AREA SCHEDULE**

| ID | IMPACT DESCRIPTION | AREA (SF) | AREA (AC) | VOLUME (CY) | JURISDICTION |
|---|---|---|---|---|---|
| 2-01 | CULVERT LINING | 4590.1296 | 0.1054 | N/A | USACE, DNREC |
| 2-02 | GRADING/RIPRAP | 588.1268 | 0.0098 | 7.2971 | USACE, DNREC |
| 2-03 | GRADING/RIPRAP | 671.3478 | 0.0154 | 26.7119 | USACE, DNREC |
| TOTAL PERMANENT OPEN WATER IMPACTS | | 5849.6042 | 0.1306 | 34.0090 | USACE, DNREC |

ADDENDA / REVISIONS

NOT TO SCALE

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

CONTRACT T201701104
COUNTY NEW CASTLE
BRIDGE NO. 1-036
DESIGNED BY: P. SCOTT
CHECKED BY: B. SENGER

ENVIRONMENTAL COMPLIANCE PLAN

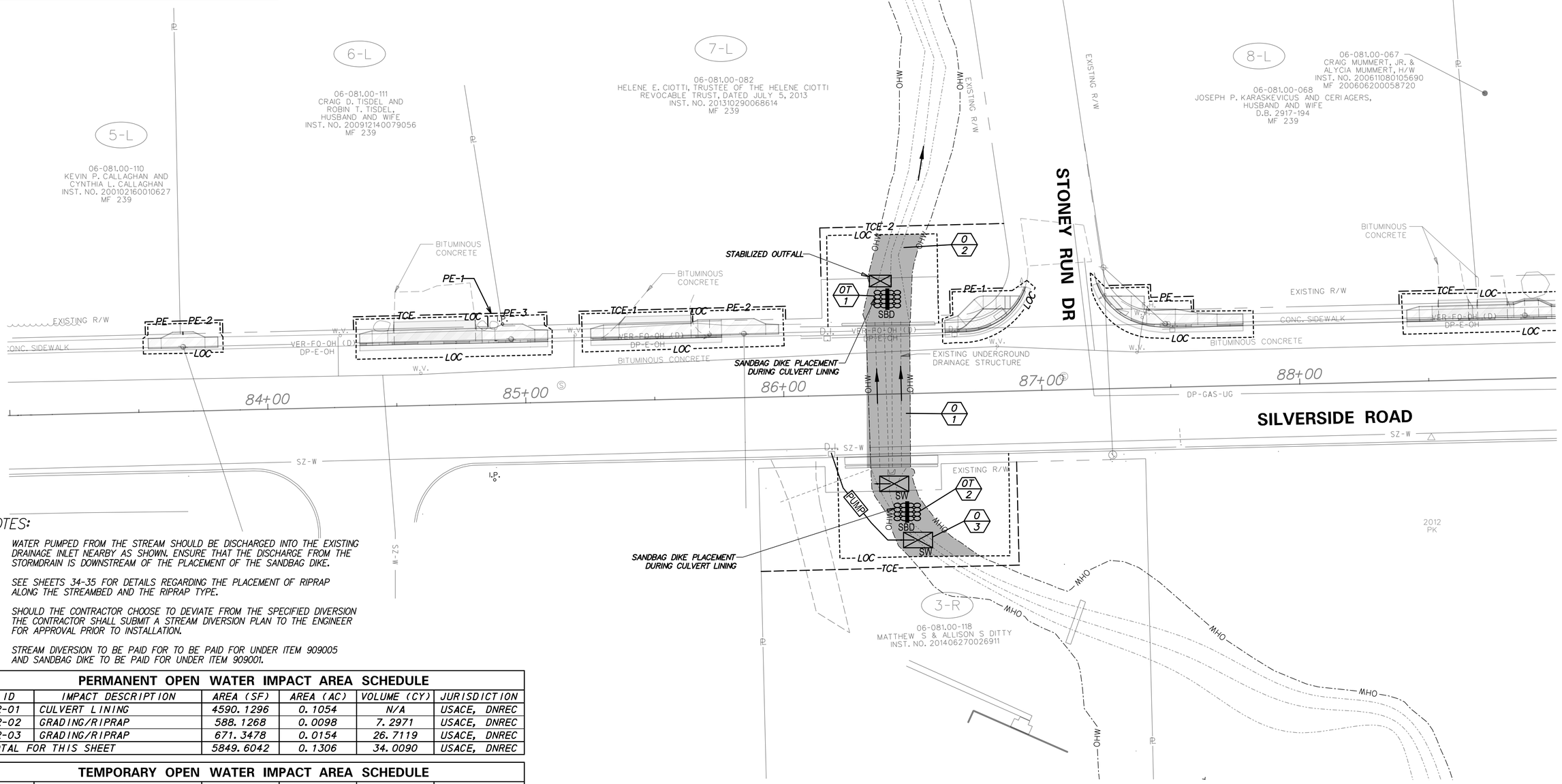
EC-01
SECTION AEC
SHEET NO. 36

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900.WORK\910.CAD\02-SHEETS\003.CIVIL\EC00.DGN

## LEGEND

| | |
|---|---|
| | TEMPORARY IMPACT AREA |
| | PERMANENT IMPACT AREA |
| -·-·-OHW-·-·- | ORDINARY HIGH WATER |
| XX / X | IMPACT AREA TYPE ID. (SEE BELOW) / IMPACT AREA ID. AND/OR NUMBER |

.O = OPEN WATER IMPACT.
.T = TEMPORARY IMPACT .




NOTES:

1. WATER PUMPED FROM THE STREAM SHOULD BE DISCHARGED INTO THE EXISTING DRAINAGE INLET NEARBY AS SHOWN. ENSURE THAT THE DISCHARGE FROM THE STORMDRAIN IS DOWNSTREAM OF THE PLACEMENT OF THE SANDBAG DIKE.
2. SEE SHEETS 34-35 FOR DETAILS REGARDING THE PLACEMENT OF RIPRAP ALONG THE STREAMBED AND THE RIPRAP TYPE.
3. SHOULD THE CONTRACTOR CHOOSE TO DEVIATE FROM THE SPECIFIED DIVERSION THE CONTRACTOR SHALL SUBMIT A STREAM DIVERSION PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
4. STREAM DIVERSION TO BE PAID FOR TO BE PAID FOR UNDER ITEM 909005 AND SANDBAG DIKE TO BE PAID FOR UNDER ITEM 909001.

**PERMANENT OPEN WATER IMPACT AREA SCHEDULE**

| ID | IMPACT DESCRIPTION | AREA (SF) | AREA (AC) | VOLUME (CY) | JURISDICTION |
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ORIGINAL SHEET PREPARED BY AECOM ON 01-22-2018. SHEET LAST UPDATED ON 11-06-2019.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

ENVIRONMENTAL COMPLIANCE PLAN

| SECTION | SHEET NO. |
|---|---|
| AEC | 37 |

EC-02

\\USPHLIFP002\DATA\PROJECTS\6031885\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\EC01.DGN

# NOTES

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

| | |
|---|---|
| ( ) | THE CONTRACTOR SHALL NOT BE REQUIRED TO HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. |
| ( X ) | THE CONTRACTOR SHALL HAVE AN ATSSA SUPERVISOR ASSIGNED TO THIS PROJECT. THE CONTRACTOR'S GENERAL SUPERINTENDENT FOR THIS PROJECT OR ANOTHER ATSSA CERTIFIED MEMBER OF THE CONTRACTOR'S PROJECT STAFF MAY BE THE ATSSA SUPERVISOR. PAYMENT FOR ATSSA SUPERVISOR IS INCIDENTAL TO ITEM 801000. |

2. MAINTENANCE OF TRAFFIC DURING LANE CLOSURES AND LANE SHIFTS SHALL CONFORM TO THE FOLLOWING TYPICAL APPLICATIONS OF THE DELAWARE MUTCD:
   - TA-3 WORK ON THE SHOULDER OF A TWO-LANE ROAD
   - TA-10 LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS
   - TA-11B LANE DIVERSION ON A TWO-LANE ROAD WITH LOW TRAFFIC VOLUMES
   - TA-27 CLOSURE AT THE SIDE OR CENTER OF AN INTERSECTION
   - TA-28 SIDEWALK DETOUR OR DIVERSION

3. ACCEPTABLE MATERIALS FOR TEMPORARY PEDESTRIAN PATHS SHALL INCLUDE CONCRETE, HOT-MIX, COMPACTED MILLINGS OR PLYWOOD WALKWAY STRUCTURE. PLYWOOD WALKWAY STRUCTURES SHALL ALSO INCLUDE DETECTABLE EDGING AND RAILINGS IN ACCORDANCE WITH ADA GUIDELINES AND THE DELAWARE MUTCD. TEMPORARY PEDESTRIAN PATHS SHALL BE INCIDENTAL TO ITEM 801500 UNLESS OTHERWISE SPECIFIED IN THE PLANS. STONE OR GRADED AGGREGATE BASE COURSE SHALL NOT BE USED FOR TEMPORARY PEDESTRIAN PATHS.

4. A. THE USE OF MILLINGS AND GRADED AGGREGATE BASE COURSE (GABC) IN THE TRAVEL WAY, TEMPORARY TRAVEL WAY, HIGH VOLUME ENTRANCES AND ACCESS RAMP FOR THE PURPOSE OF PROVIDING A TEMPORARY ROADWAY SURFACE, POTHOLE REPAIR, TAPERED EDGE FOR UTILITIES, BUTT JOINTS, AND LONGITUDINAL DROP-OFFS (MILLING AND PAVING OPERATIONS) IS PROHIBITED UNLESS IT IS OTHERWISE DESIGNATED TO BE USED IN THE CONTRACT PLANS. USE COLD PATCH, BITUMINOUS CONCRETE, BITUMINOUS CONCRETE WEDGE, OR TAPER MILL, AS NOTED IN THE CONTRACT DOCUMENTS OR APPROVED BY THE ENGINEER. PAYMENT FOR COLD PATCH, BITUMINOUS CONCRETE OR BITUMINOUS CONCRETE WEDGE SHALL BE PAID AS NOTED IN THE CONTRACT DOCUMENTS. TAPER MILL BITUMINOUS CONCRETE SHALL BE PAID UNDER THE BITUMINOUS CONCRETE MILLING ITEM.
   B. MILLINGS OR GABC SHALL BE USED AT THE FOLLOWING LOCATIONS WHERE ACCESS TO A BUSINESS, RESIDENCE, OR EDGE DROP OFF NEEDS TO BE MAINTAINED UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE ENGINEER TO USE BITUMINOUS CONCRETE OR COLD PATCH. ALL MILLINGS AND GABC WILL BE ROLLED AND COMPACTED TO HELP PREVENT THE MATERIAL FROM UNRAVELLING:
   a. DRIVEWAYS
   b. ENTRANCES
   c. LOW VOLUME ACCESS RAMPS (IDENTIFIED IN THE CONTRACT DOCUMENTS)
   d. EDGE DROP-OFFS ADJACENT TO LIVE ROADWAY(LANES AND SHOULDER) AND THE PROPOSED ROAD CONSTRUCTION
   e. EDGE OF ROADWAY DROP-OFF

   GRADING AND MAINTAINING BASE COURSE THAT IS BEING USED FOR ROADWAY WEDGE/FILLET BETWEEN TRAVEL LANES AND PAVEMENT BOX, EDGE OF TRAVELWAY, DRIVEWAY OR ENTRANCE ACCESS SHALL BE INCIDENTAL TO ITEM NO. 801500 - MAINTENANCE OF TRAFFIC. THE BASE COURSE MATERIAL SHALL BE PLACED AT NO GREATER THAN THE SLOPE SPECIFIED IN TABLE 6G-1 AND SHALL BE COMPACTED. EXCESS BASE COURSE MATERIAL SHALL BE PUSHED AHEAD AND USED IN THE NEXT SEGMENT AND SHALL BE INCIDENTAL TO THE PARTICULAR BASE COURSE PAY ITEM. NO SEPARATE PAYMENT SHALL BE MADE FOR MILLINGS OR GABC TEMPORARY ROADWAY MATERIAL (TRM) USED TO PROTECT EDGE DROP-OFFS, UNLESS THE MATERIAL IS EVENTUALLY UTILIZED AS PART OF A PERMANENT ROADWAY AT WHICH TIME THE MATERIAL WOULD BE PAID FOR UNDER THE RESPECTIVE CONTRACT MATERIAL ITEM. VERTICAL DIFFERENCES SHALL BE CORRECTED IN ACCORDANCE WITH TABLE 6G-1 OF THE DELAWARE MUTCD.

5. WITHIN THE MAINLINE WORK AREA, PERMANENT ADVANCE WARNING SIGNS WITH THE LEGENDS "ROAD WORK AHEAD" SHALL BE INSTALLED 500 FEET IN ADVANCE OF THE WORK AREA IN BOTH DIRECTIONS. AN "END ROAD WORK" SIGN SHALL BE LOCATED 500 FEET DOWNSTREAM FROM THE WORK AREA. ON INTERSECTING ROADWAYS WITHIN THE PROJECT LIMITS, A "ROAD WORK AHEAD" SIGN SHALL BE PLACED AT A DISTANCE NOT LESS THAN 500 FEET IN ADVANCE OF THE WORK AREA AND AN "END ROAD WORK" SIGN SHALL BE LOCATED 500 FEET DOWNSTREAM OF THE WORK AREA. THE USE OF SKID MOUNTED SIGN SUPPORTS IS NOT ALLOWED UNLESS THE CONTRACTOR CAN DEMONSTRATE THAT A UTILITY CONFLICT EXISTS, WHICH SHALL BE VERIFIED BY THE ENGINEER; OR CONCRETE MEDIANS PREVENT THE INSTALLATION OF THE PERMANENT SINS IN THE APPROPRIATE LOCATION.

6. PEDESTRIAN FLAGGERS SHALL BE PAID UNDER ITEM 811001 - FLAGGER, NEW CASTLE COUNTY, STATE.

7. THE CONTRACTOR SHALL PROVIDE ONE TRAFFIC OFFICER FOR ANY OPERATION WHERE AN EXISTING SIGNALIZED INTERSECTION IS PLACED IN FLASH-MODE. THE TRAFFIC OFFICER IS THE ONLY INDIVIDUAL THAT CAN PLACE A TRAFFIC SIGNAL IN FLASH-MODE AND THE TRAFFIC OFFICER MUST STAY ON LOCATION UNTIL THE SIGNAL IS PLACED BACK IN STOP-AND-GO OPERATION IN ACCORDANCE WITH DELDOT'S TEMPORARY TRAFFIC CONTROL WITHIN INTERSECTIONS MEMORANDUM (WWW.MUTCD.DELDOT.GOV).

8. FOR FULL DEPTH PAVEMENT CONSTRUCTION, CURB RAMP CONSTRUCTION, SIDEWALK CONSTRUCTION, AND/OR UTILITY RELOCATIONS, BARE SOILS SHALL BE COVERED WITHIN THREE (3) CALENDAR DAYS TO PREVENT EROSION. THIS CAN BE ACCOMPLISHED BY PLACING PROPOSED SUBBASE MATERIAL SUCH AS GRADED AGGREGATE BASE COURSE (GABC) OR GEOTEXTILE/PLASTIC SHEETING THAT IS SECURED SO AS TO NOT BLOW AWAY OR BE UNDERMINED BY RUNOFF.

9. 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 FIVE YEAR PERIOD, BEGINNING ON THE DATE THE STORMWATER ENGINEER SIGNED THE CONSTRUCTION TITLE SHEET. IF THE FINAL ACCEPTANCE OF THE PROJECT IS ANTICIPATED BEYOND THE FIVE 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.

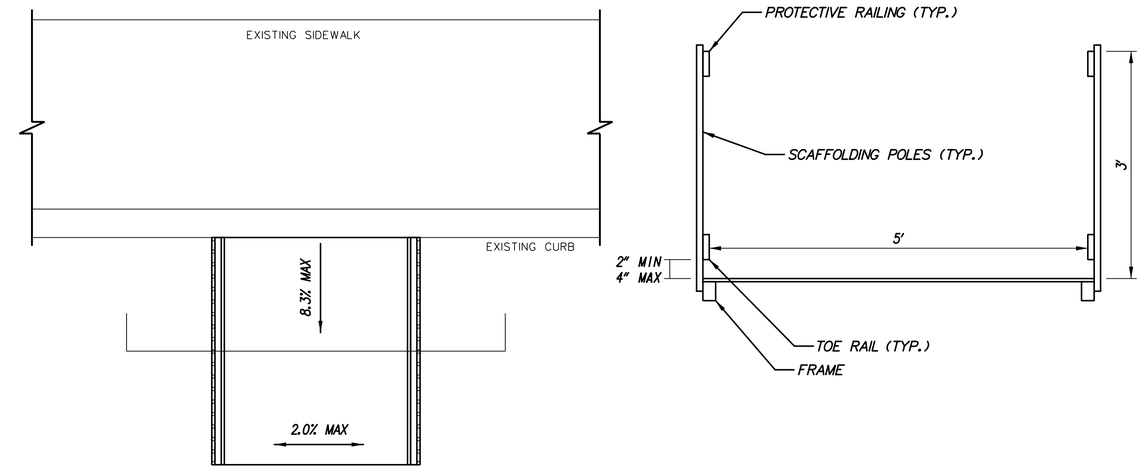
## ALLOWABLE TEMPORARY TRAVEL LANE CLOSURE TIMES

| | 12:00 AM | 1:00 AM | 2:00 AM | 3:00 AM | 4:00 AM | 5:00 AM | 6:00 AM | 7:00 AM | 8:00 AM | 9:00 AM | 10:00 AM | 11:00 AM | 12:00 PM | 1:00 PM | 2:00 PM | 3:00 PM | 4:00 PM | 5:00 PM | 6:00 PM | 7:00 PM | 8:00 PM | 9:00 PM | 10:00 PM | 11:00 PM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUNDAY | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| MONDAY | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ |
| TUESDAY | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ |
| WEDNESDAY | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ |
| THURSDAY | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ |
| FRIDAY | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | □ | □ | □ | ■ | ■ | ■ | ■ | ■ |
| SATURDAY | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

■ TEMPORARY TRAVEL LANE CLOSURES ALLOWED
□ NO TEMPORARY TRAVEL LANE CLOSURES ALLOWED

**NOTE: THE ABOVE ALLOWABLE TEMPORARY LANE CLOSURE TIMES APPLY TO ALL THROUGH LANES, AUXILLARY LANES AND TURN LANES WITHIN THE PROJECT LIMITS.**

NOTES:
1. THE ABOVE ALLOWABLE TEMPORARY LANE CLOSURE TIMES APPLY TO ALL THROUGH LANES, AUXILLARY LANES, AND TURN LANES WITHIN THE PROJECT LIMITS.
2. CONTRACTOR SHOULD ATTEMPT TO AVOID PERFORMING WORK DURING EVENING HOURS. IF NIGHT WORK IS DETERMINED TO BE NECESSARY, IT MUST BE APPROVED BY THE COUNTY PRIOR TO THE WORK BEGINNING.




## TYPICAL TEMPORARY CURB RAMP
NOT TO SCALE

NOTES:
1. RAMP SLOPE SHALL NOT EXCEED 12:1 SLOPE (8.3%), CROSS SLOPE SHALL NOT EXCEED 50:1 (2.0%).
2. RAMP SHALL BE CONSTRUCTED OF PRESSURE TREATED LUMBER, OR APPROVED EQUAL.
3. DIFFERENCE IN ELEVATION BETWEEN ROADWAY AND END OF RAMP SHALL NOT EXCEED ¼".
4. RAMPS PLACED PARALLEL TO EXISTING CURB SHALL INCLUDE LEVEL LANDING TO ALLOW FOR TURNING MOVEMENTS. IF LEVEL LANDING IS CONSTRUCTED, SLOPE SHALL NOT EXCEED 50:1 (2.0%) IN ANY DIRECTION.

Vincent W. Davis 11/20/2019
DELDOT STORMWATER ENGINEER — DATE

"I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THESE PLANS MEET THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS AND THAT ALL CLEARING, GRADING, AND CONSTRUCTION WILL BE ACCOMPLISHED PURSUANT TO THE PLAN."

| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |

NOT TO SCALE

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

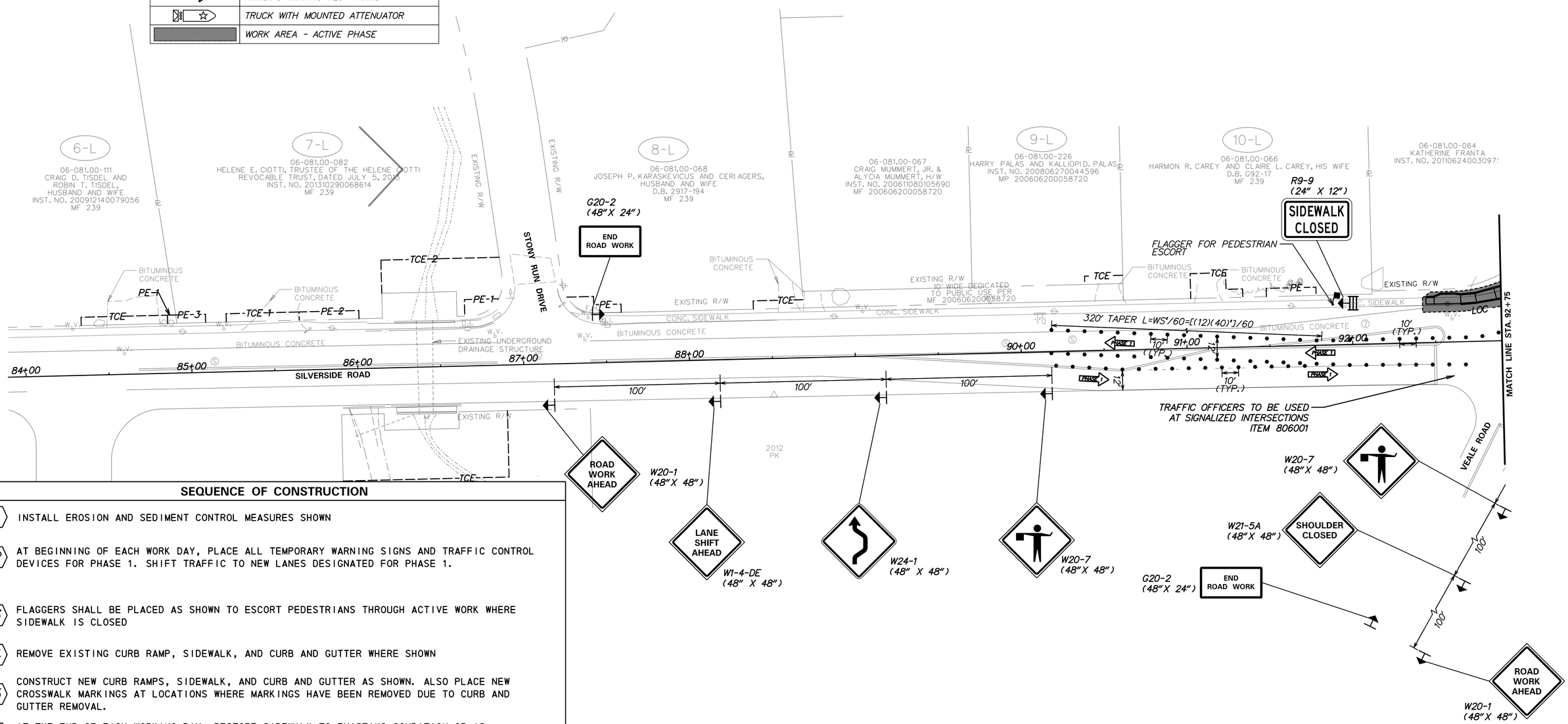
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN

CS-01
SECTION: AEC
SHEET NO. 38

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS_01.DGN

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | DRUM - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 1. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 1.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN. ALSO PLACE NEW CROSSWALK MARKINGS AT LOCATIONS WHERE MARKINGS HAVE BEEN REMOVED DUE TO CURB AND GUTTER REMOVAL.
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 2 TRAFFIC CONTROL

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

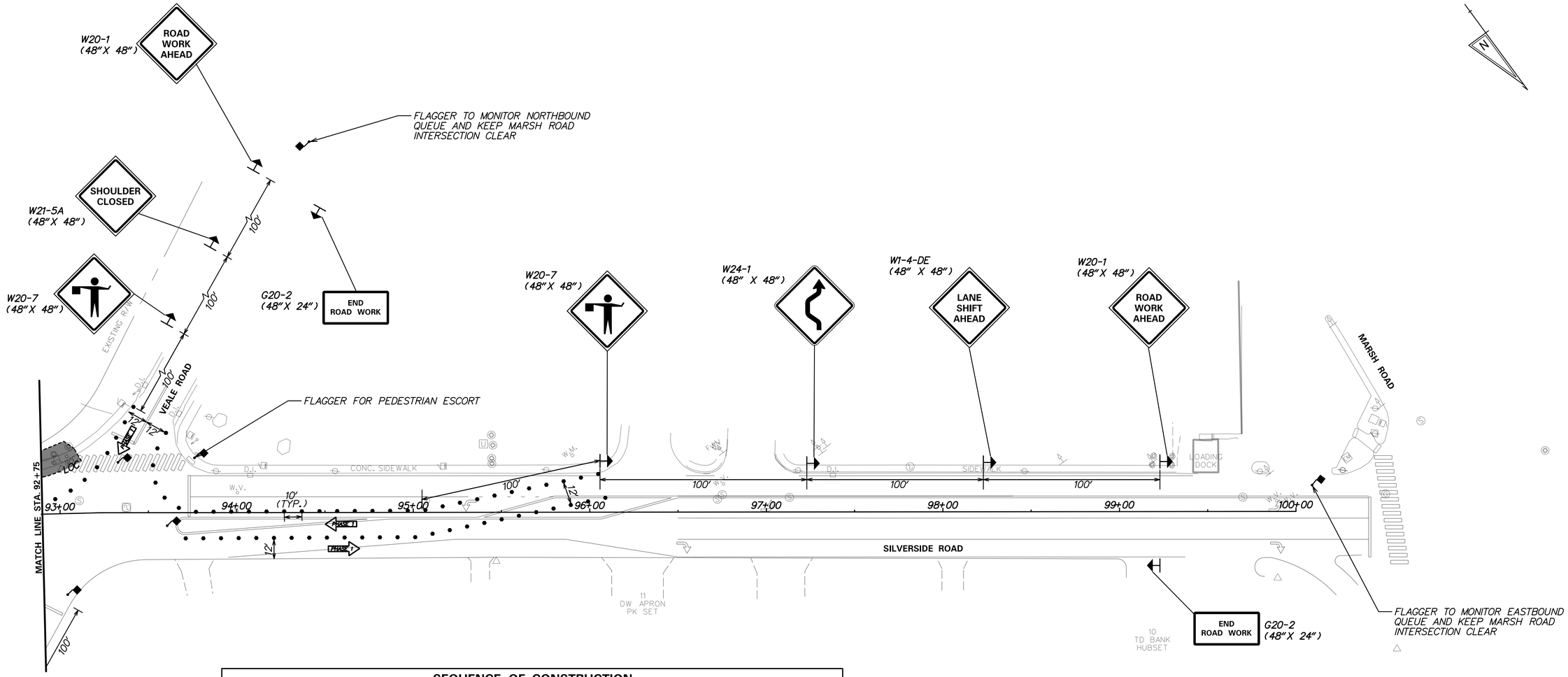
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

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

| CS-02 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 39 |

\\USPHL1FP002\DATA\PROJECTS\6031885\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS102.DGN

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8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 2 TRAFFIC CONTROL

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | DRUM - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |
| **EROSION & SEDIMENT CONTROL** | |
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

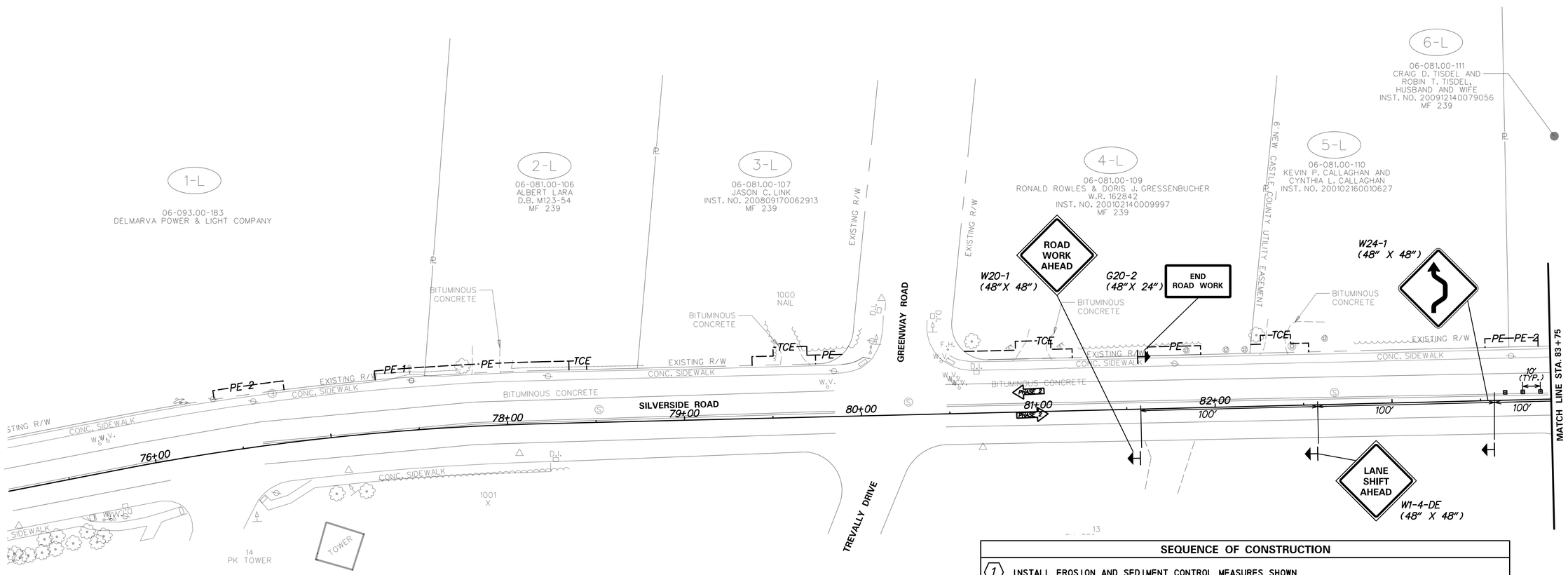
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

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

| CS-03 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 40 |

\\USPHL1FP002\DATA\PROJECTS\6031885\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS101.DGN




## CONSTRUCTION PHASING & M.O.T

| | |
|---|---|
| | *BARRICADE, TYPE 3* |
| | *CONSTRUCTION WARNING SIGN LOCATION* |
| END ROAD WORK | *CONSTRUCTION WARNING SIGN* |
| | *CONE - TRAFFIC CONTROL* |
| | *FLAGGER LOCATION* |
| | *PHASING TRAFFIC FLOW ARROW* |
| | *TRUCK WITH MOUNTED ATTENUATOR* |
| | *WORK AREA - ACTIVE PHASE* |

## EROSION & SEDIMENT CONTROL

| | |
|---|---|
| | *INLET SEDIMENT CONTROL* |
| SF | *SILT FENCE / LENGTH* |
| —SF— | *SILT FENCE* |

## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 2. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 2.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN
6. SET UP SANDBAG DIKES AND STREAM DIVERSION, INSTALLING UPSTREAM DIKE FIRST. DIVERT STREAM FLOW AND ALLOW FOR LINING OF EXISTING CULVERT AND STREAM GRADING. THE UPSTREAM DIKE SHALL BE CONSTRUCTED TO A TOP ELEVATION OF 278.00 WITH A 1' DEEP BY 7' WIDE WEIR CENTERED IN THE FLOWLINE OF STREAM (WEIR INVERT = ELEV. 277.00). THE TOP ELEVATION OF THE DOWNSTREAM DIKE SHALL BE NO HIGHER THAN THE LOWEST INVERT ELEVATION OF THE UPSTREAM DIKE (ELEV. 277.00).
7. PERFORM CULVERT LINING AND STREAM GRADING WHERE SHOWN
8. ONCE CULVERT LINING AND STREAM GRADING IS COMPLETE, REMOVE SANDBAG DIKES AND STREAM DIVERSION. RESTORE STREAM ACCESS AND REPLACE ANY REMOVED RIPRAP.
9. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
10. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
11. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 3 TRAFFIC CONTROL

ADDENDA / REVISIONS

SCALE
0 30 60 90
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

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

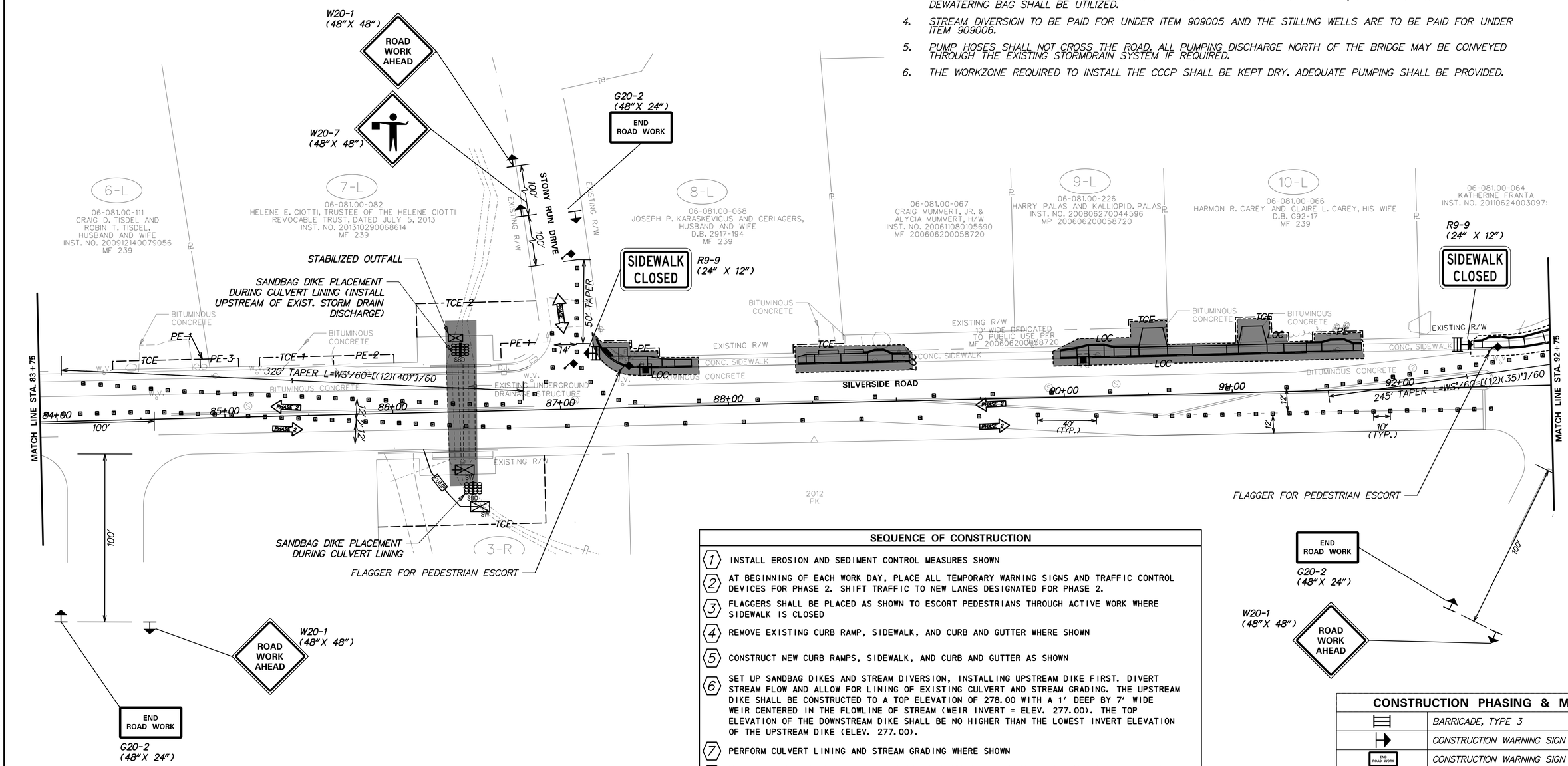
CS-04
SECTION
AEC
SHEET NO.
41

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS203.DGN

| EROSION & SEDIMENT CONTROL | |
|---|---|
| SW | STILLING WELL |
| | INLET SEDIMENT CONTROL |
| SBD | SANDBAG DIKE |

NOTES:

1. SHOULD THE CONTRACTOR CHOOSE TO DEVIATE FROM THE SPECIFIED DIVERSION THE CONTRACTOR SHALL SUBMIT A STREAM DIVERSION PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
2. THE EXISTING RIPRAP SHALL BE REMOVED/ADJUSTED SUCH THAT THE SANDBAG DIKES ARE FUNCTIONAL AND FLOW IS NOT ROUTED THROUGH THE RIPRAP. ONCE THE CONSTRUCTION IS COMPLETED THE RIPRAP CAN BE REUSED.
3. THE SIZE OF THE STILLING WELL AND STABILIZED OUTFALL SHALL BE AT LEAST 5'-0" X 5'-0". EXISTING RIPRAP CAN BE UTILIZED FOR SPECIFIED STILLING WELLS AND THE STABILIZED OUTFALL. STILLING WELLS SHALL USE GEOTEXTILE TO PREVENT SEDIMENT TRANSPORT THROUGH THE SUCTION HOSE. THE GEOTEXTILE CAN BE SECURED WITH EXISTING RIPRAP. USE OF A SEDIMENT TRAPPING DEVICE FOR WORK ZONE DEWATERING IS NOT ANTICIPATED DUE TO THE NATURE OF CONSTRUCTION. SHOULD TURBID CONDITIONS BE CREATED, A PORTABLE SEDIMENT TANK OR DEWATERING BAG SHALL BE UTILIZED.
4. STREAM DIVERSION TO BE PAID FOR UNDER ITEM 909005 AND THE STILLING WELLS ARE TO BE PAID FOR UNDER ITEM 909006.
5. PUMP HOSES SHALL NOT CROSS THE ROAD. ALL PUMPING DISCHARGE NORTH OF THE BRIDGE MAY BE CONVEYED THROUGH THE EXISTING STORMDRAIN SYSTEM IF REQUIRED.
6. THE WORKZONE REQUIRED TO INSTALL THE CCCP SHALL BE KEPT DRY. ADEQUATE PUMPING SHALL BE PROVIDED.




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 2. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 2.
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11. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 3 TRAFFIC CONTROL

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| PHASE 2 | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

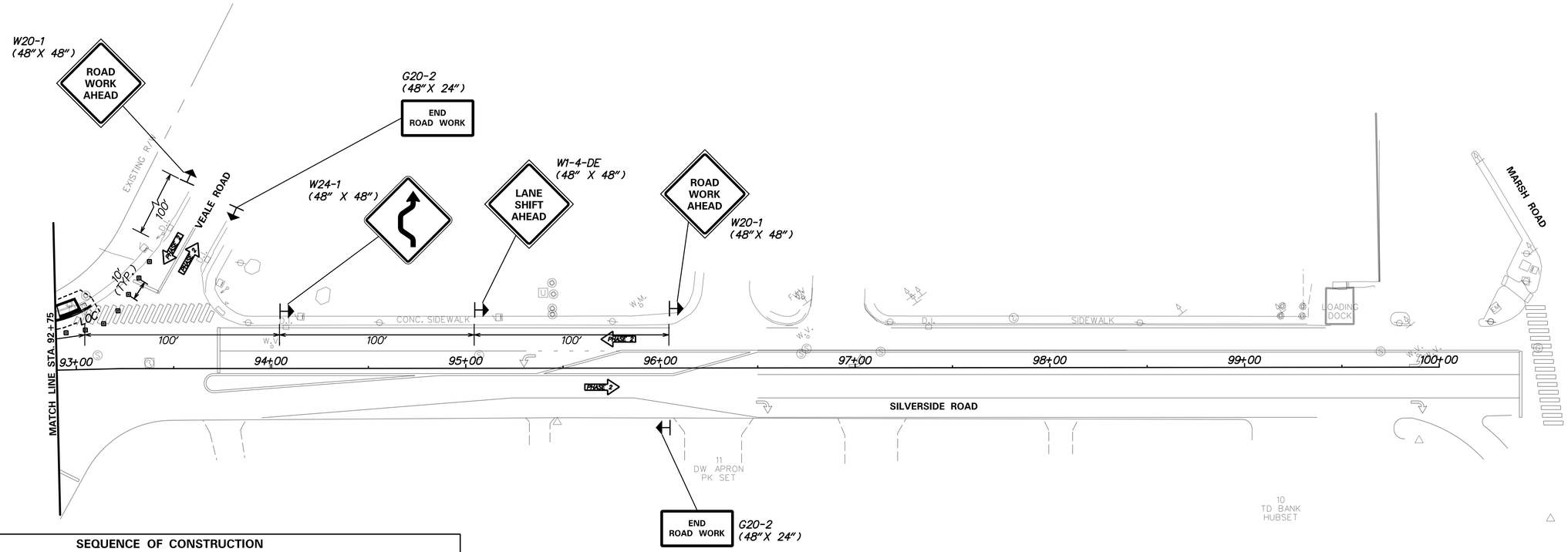
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

CS-05
SECTION AEC
SHEET NO. 42

\\USPHLIFP002\DATA\PROJECTS\6031855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS202.DGN

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
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11. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 3 TRAFFIC CONTROL

| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE
0 30 60 90
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

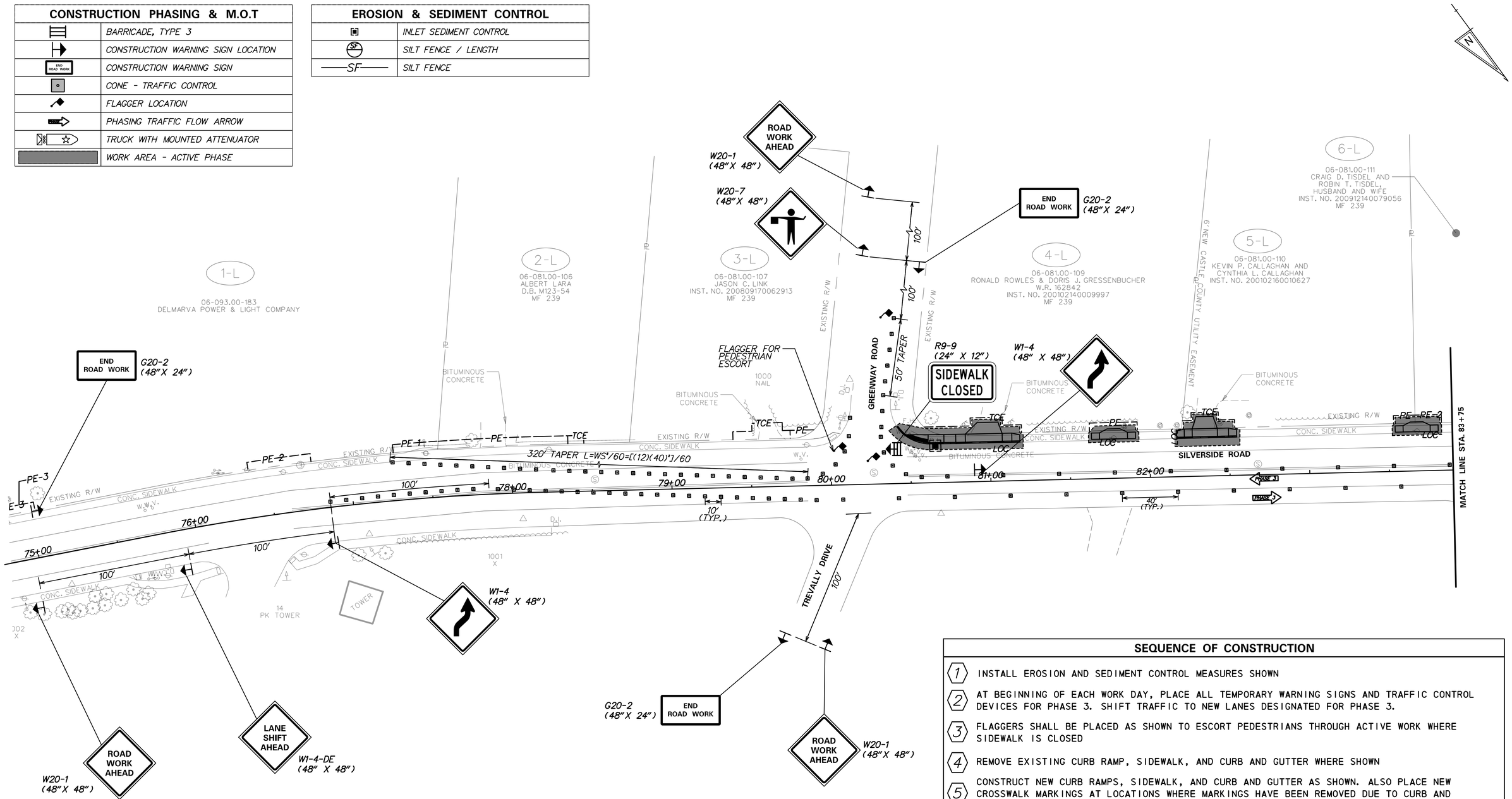
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 2

| CS-06 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 43 |

\\USPHLIFP002\DATA\PROJECTS\6031885S\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS201.DGN

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 3. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 3.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
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8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 4 TRAFFIC CONTROL

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

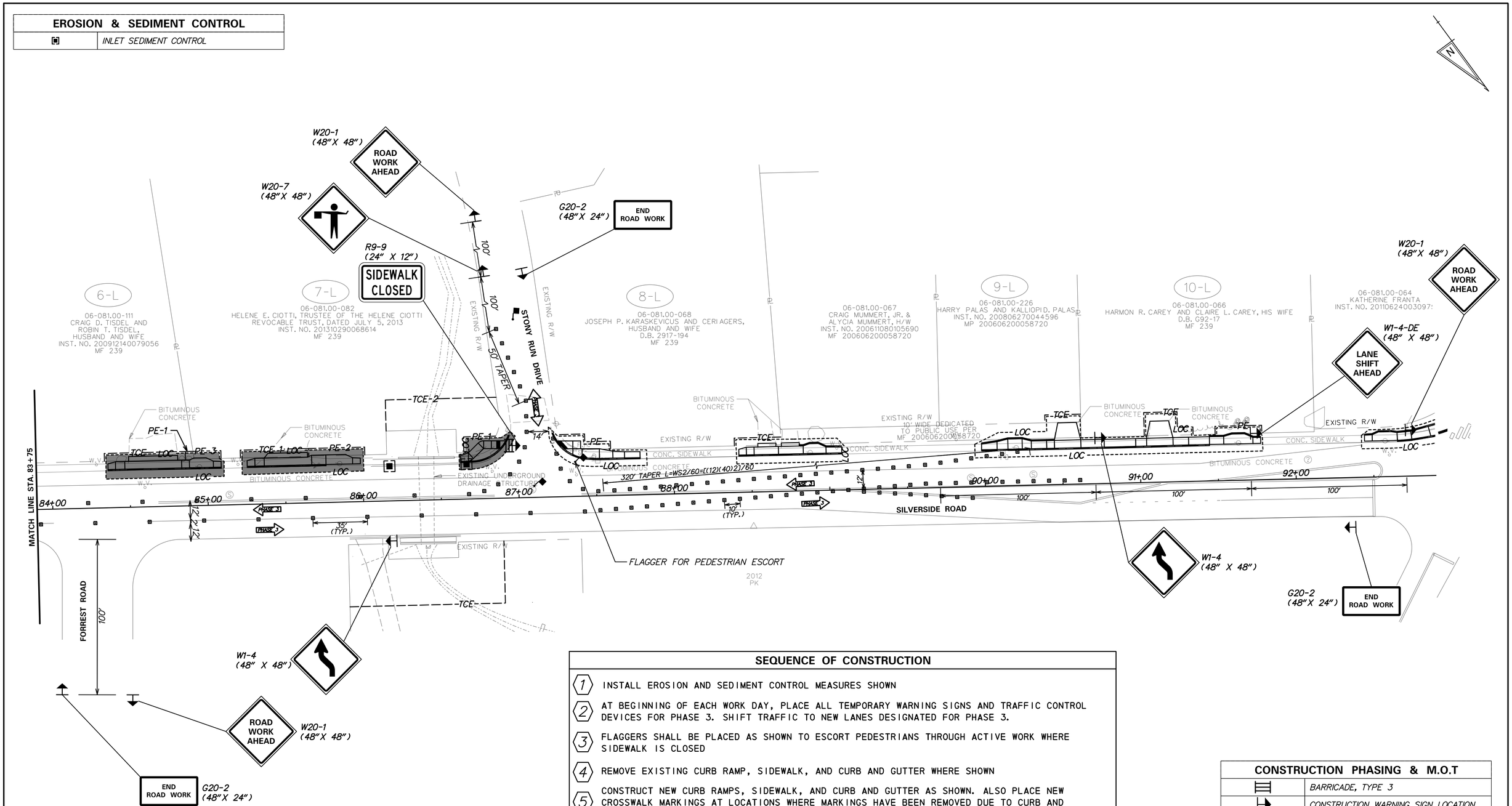
| CONTRACT | BRIDGE NO. 1-036 |
|---|---|
| T201701104 | DESIGNED BY: P. SCOTT |
| COUNTY | |
| NEW CASTLE | CHECKED BY: B. SENGER |

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

CS-07
SECTION AEC
SHEET NO. 44

\\USPHL1FP002\DATA\PROJECTS\6031885\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS303.DGN

| EROSION & SEDIMENT CONTROL | |
|---|---|
| ▣ | INLET SEDIMENT CONTROL |




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 3. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 3.
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8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 4 TRAFFIC CONTROL

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

CS-08

| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1–036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

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

SECTION: AEC
SHEET NO. 45

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS302.DGN

## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 4. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 4.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
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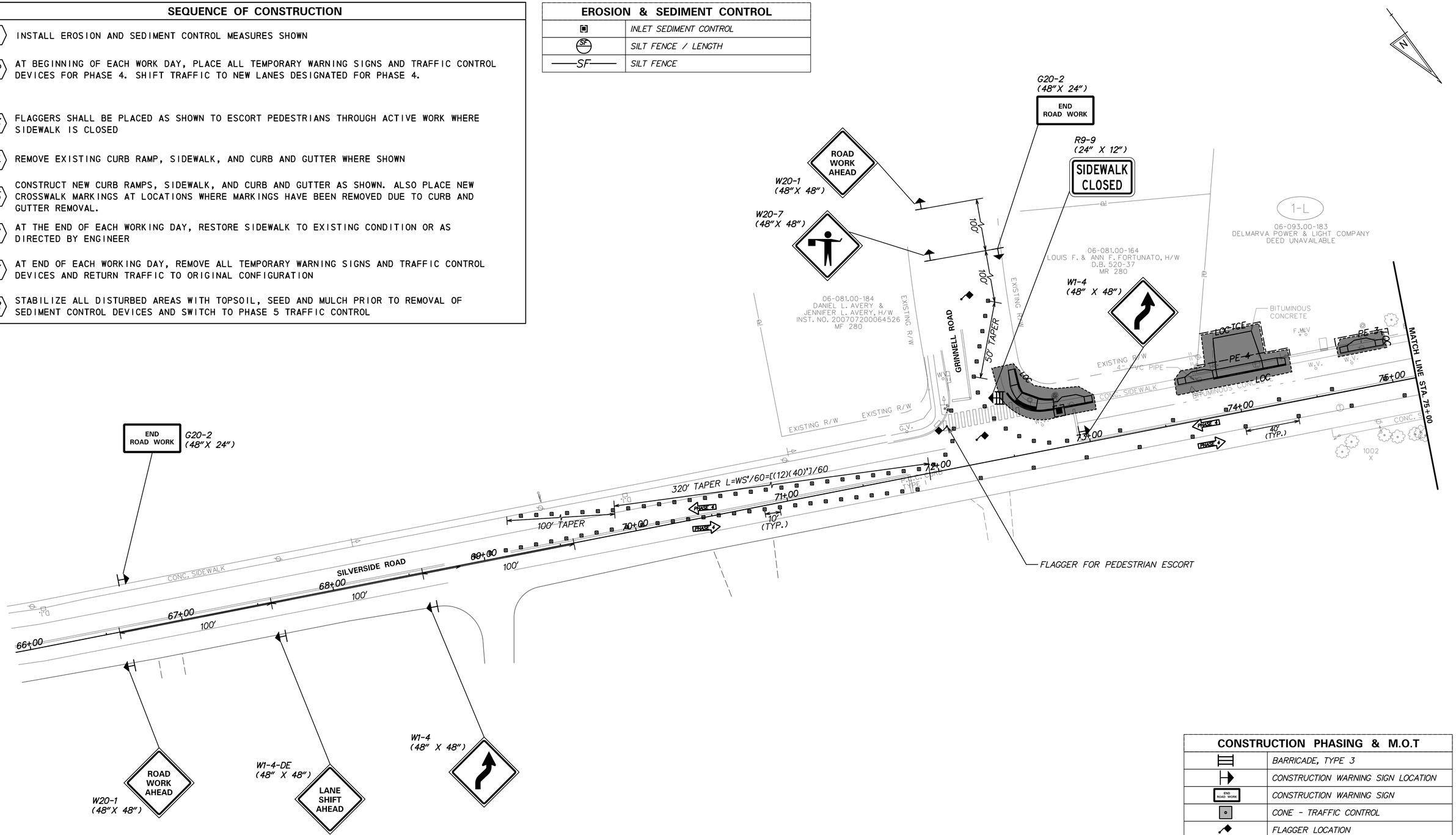
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 5 TRAFFIC CONTROL

## EROSION & SEDIMENT CONTROL

| | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




## CONSTRUCTION PHASING & M.O.T

| | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| PHASE | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

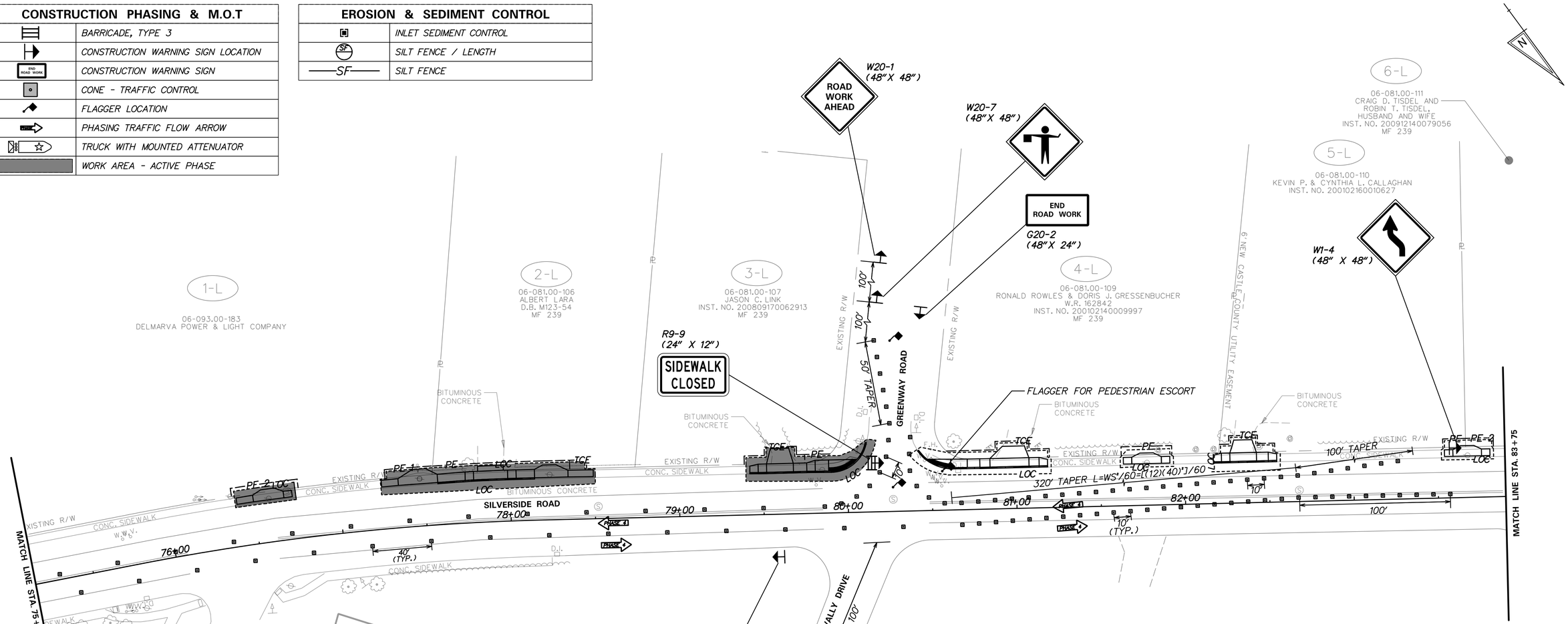
| | | |
|---|---|---|
| CONTRACT T201701104 | BRIDGE NO. 1-036 | CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4 |
| COUNTY NEW CASTLE | DESIGNED BY: P. SCOTT | SECTION AEC |
| | CHECKED BY: B. SENGER | SHEET NO. 46 |

CS-09

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS404.DGN

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




## SEQUENCE OF CONSTRUCTION

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2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 4. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 4.
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ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

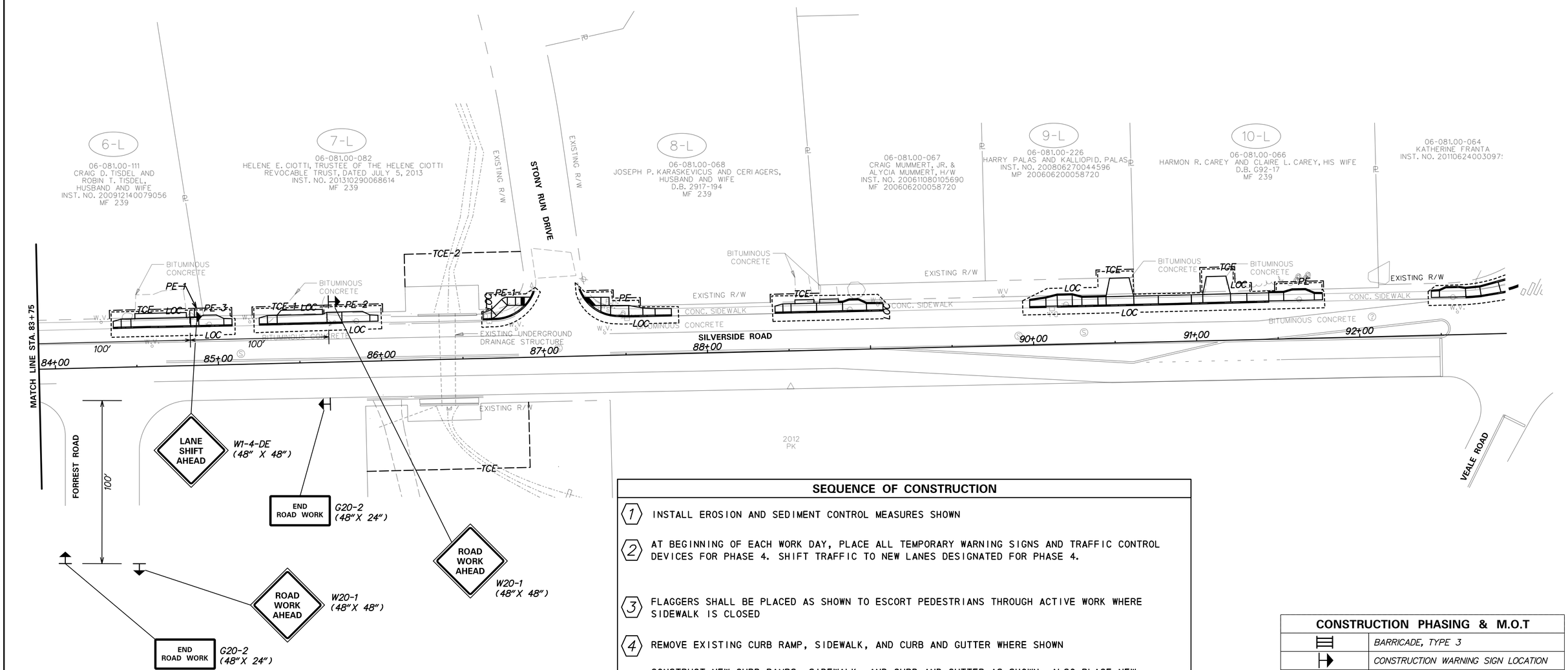
| CONTRACT | BRIDGE NO. | 1–036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

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

CS-10
SECTION AEC
SHEET NO. 47

\\USPHL1FP002\DATA\PROJECTS\6031885\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS403.DGN

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




## SEQUENCE OF CONSTRUCTION

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| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. 1–036 |
|---|---|
| T201701104 | DESIGNED BY: P. SCOTT |
| COUNTY | CHECKED BY: B. SENGER |
| NEW CASTLE | |

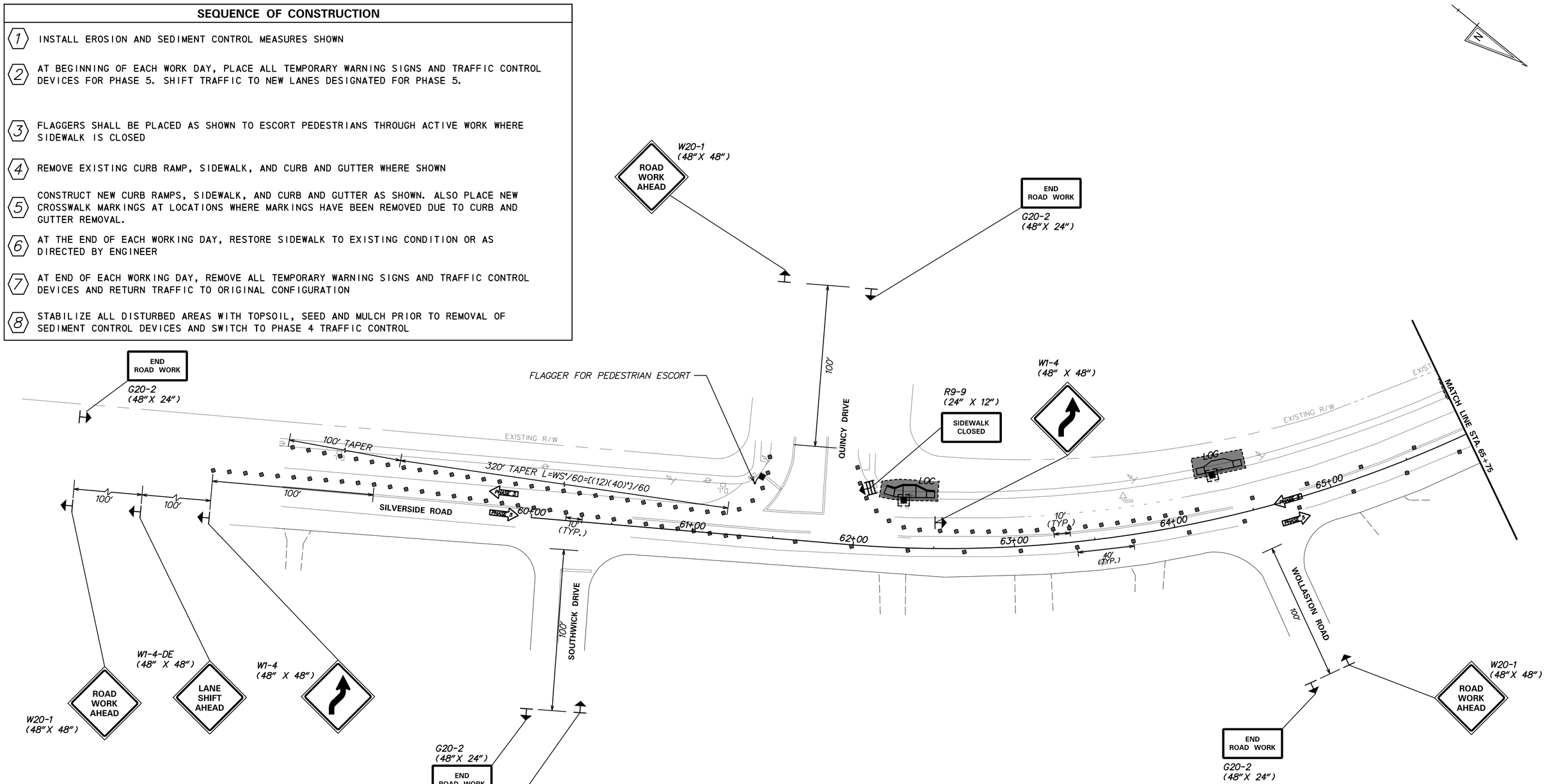
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 4

CS-11
SECTION AEC
SHEET NO. 48

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS402.DGN

## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 5. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 5.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN. ALSO PLACE NEW CROSSWALK MARKINGS AT LOCATIONS WHERE MARKINGS HAVE BEEN REMOVED DUE TO CURB AND GUTTER REMOVAL.
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 4 TRAFFIC CONTROL




| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 5

| CS-12 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 49 |

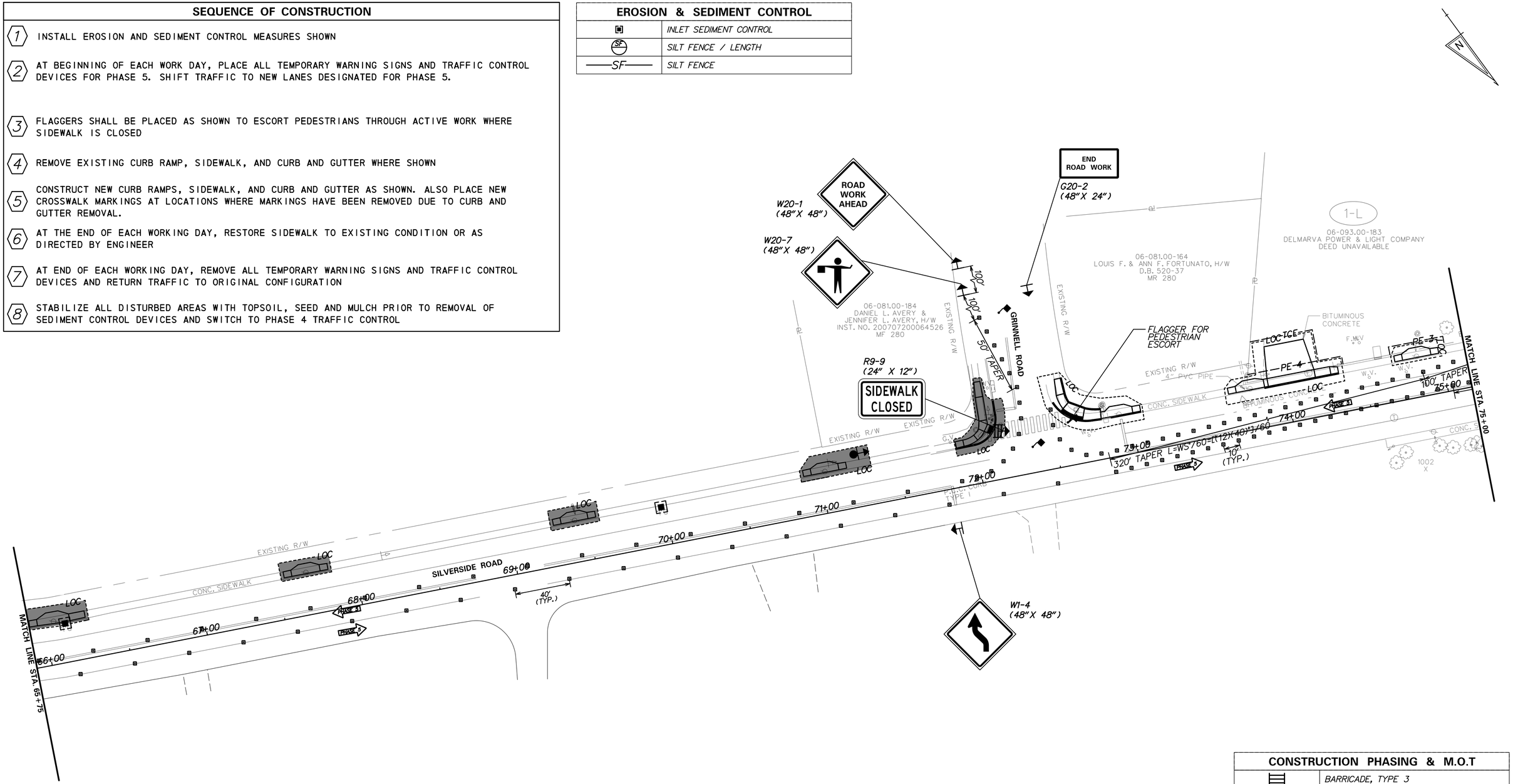
\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS505.DGN

## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 5. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 5.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN. ALSO PLACE NEW CROSSWALK MARKINGS AT LOCATIONS WHERE MARKINGS HAVE BEEN REMOVED DUE TO CURB AND GUTTER REMOVAL.
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES AND SWITCH TO PHASE 4 TRAFFIC CONTROL

## EROSION & SEDIMENT CONTROL

| | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




## CONSTRUCTION PHASING & M.O.T

| | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE
0 30 60 90
FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

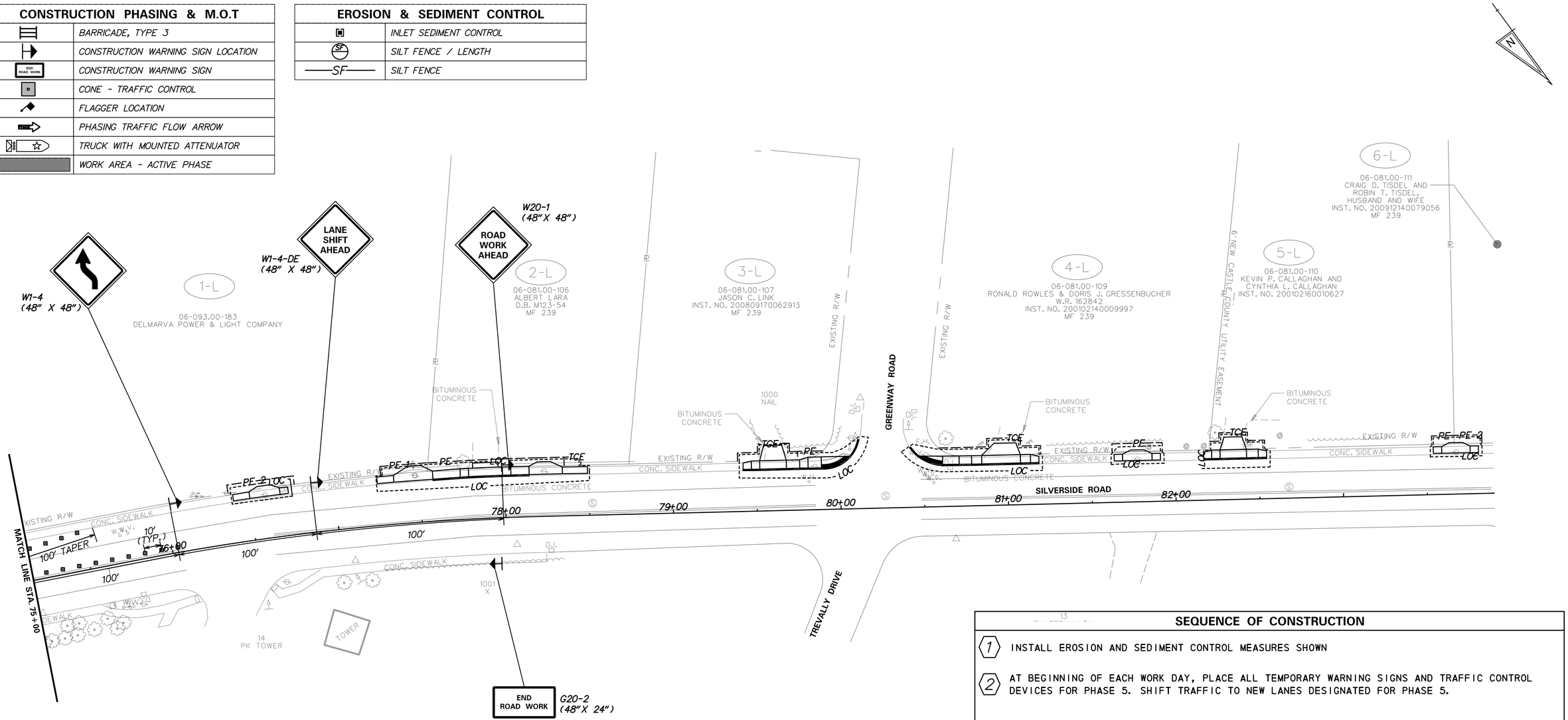
CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 5

| CS-13 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 50 |

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS504.DGN

| CONSTRUCTION PHASING & M.O.T | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

| EROSION & SEDIMENT CONTROL | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| ——SF—— | SILT FENCE |




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 5. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 5.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN. ALSO PLACE NEW CROSSWALK MARKINGS AT LOCATIONS WHERE MARKINGS HAVE BEEN REMOVED DUE TO CURB AND GUTTER REMOVAL.
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES.

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

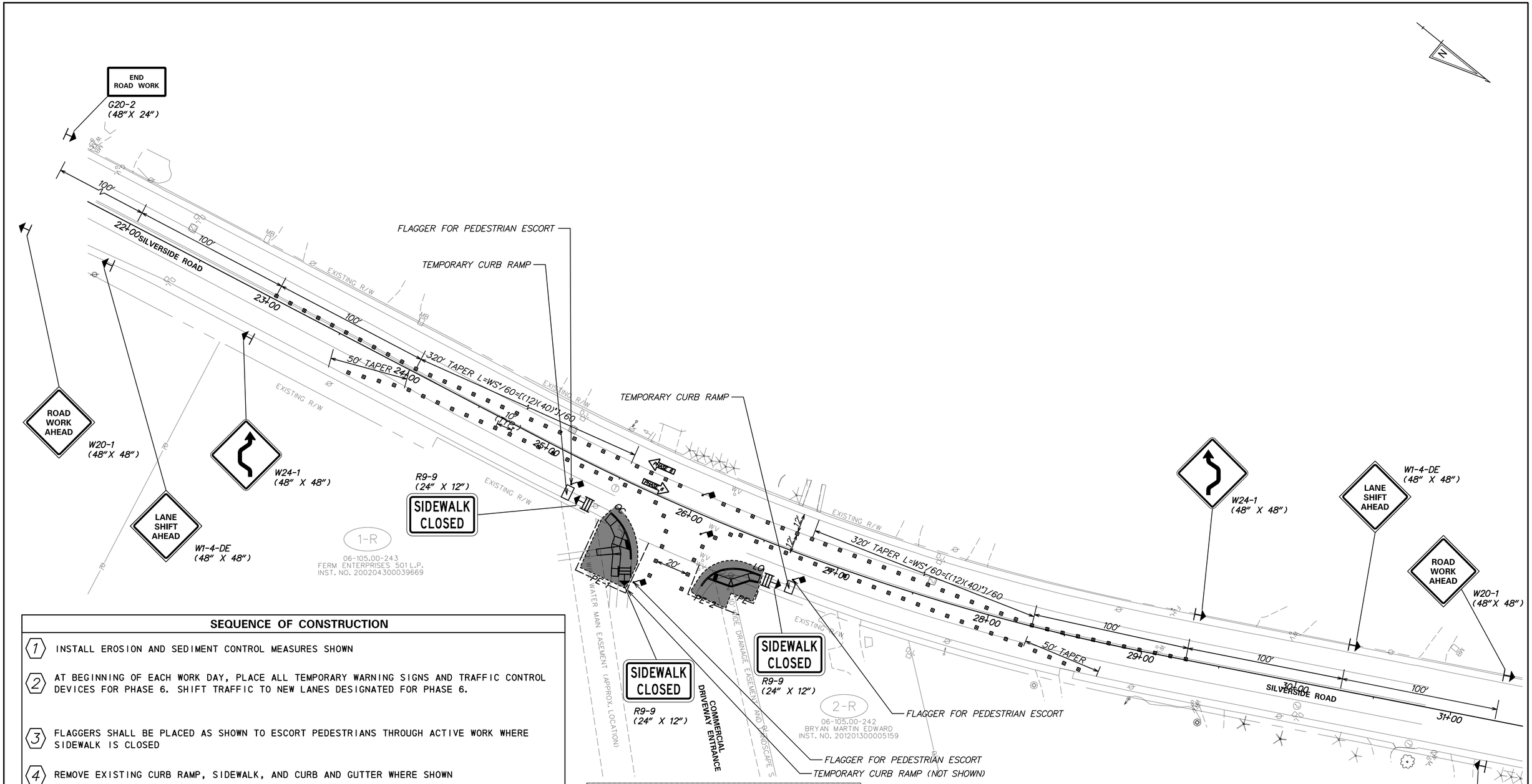
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1–036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 5

CS-14
SECTION AEC
SHEET NO. 51

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS503.DGN




## SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 6. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 6.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES

## CONSTRUCTION PHASING & M.O.T

| | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

## EROSION & SEDIMENT CONTROL

| | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |

ADDENDA / REVISIONS

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 6

CS-15
SECTION AEC
SHEET NO. 52

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS607.DGN

## SEQUENCE OF CONSTRUCTION

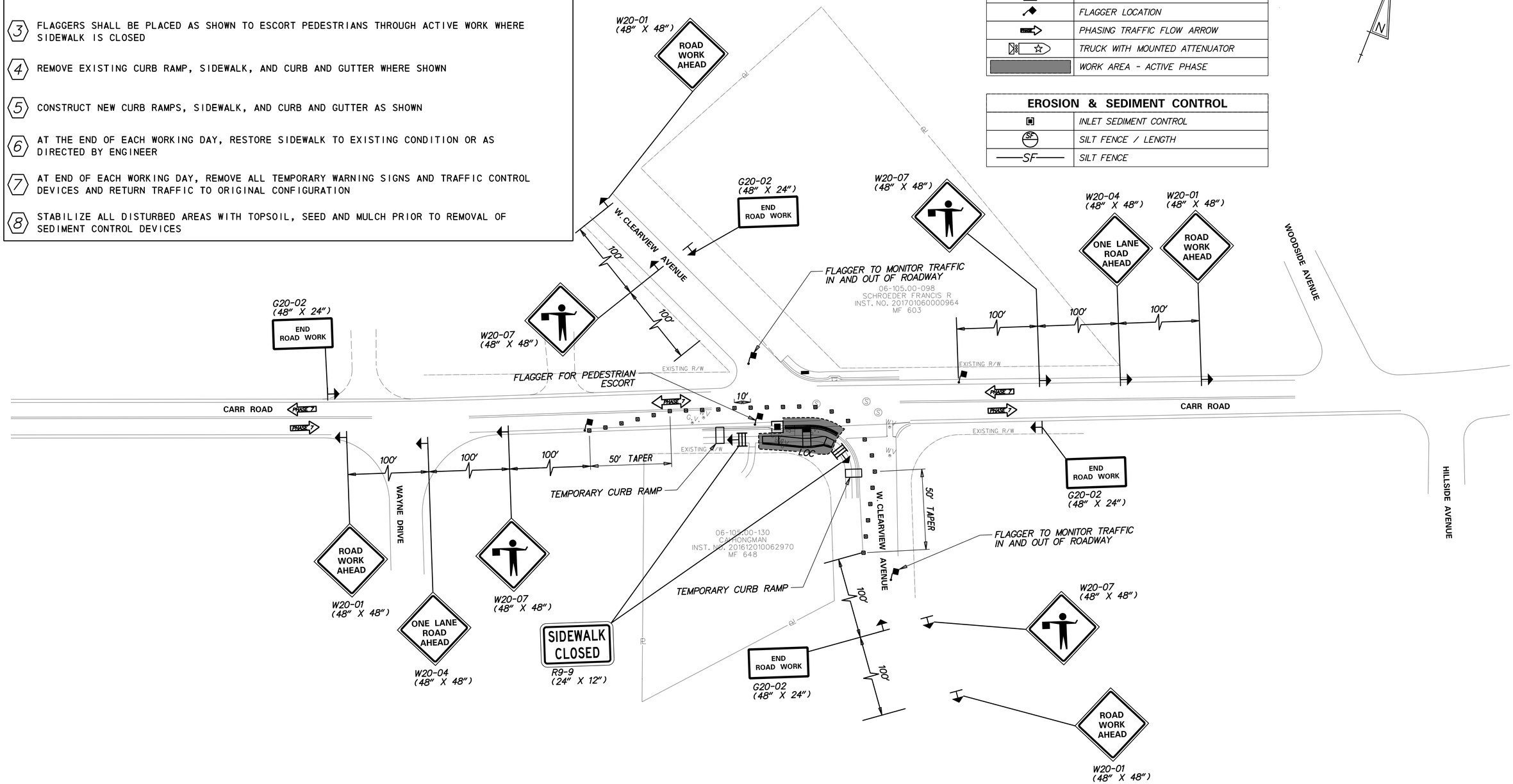
1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 7. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 7.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES

## CONSTRUCTION PHASING & M.O.T

| | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

## EROSION & SEDIMENT CONTROL

| | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE 0 30 60 90 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| | | |
|---|---|---|
| CONTRACT T201701104 | BRIDGE NO. 1-036 | CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 7 |
| COUNTY NEW CASTLE | DESIGNED BY: P. SCOTT | |
| | CHECKED BY: B. SENGER | |

CS-16

| SECTION | SHEET NO. |
|---|---|
| AEC | 53 |

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS701.DGN

## SEQUENCE OF CONSTRUCTION

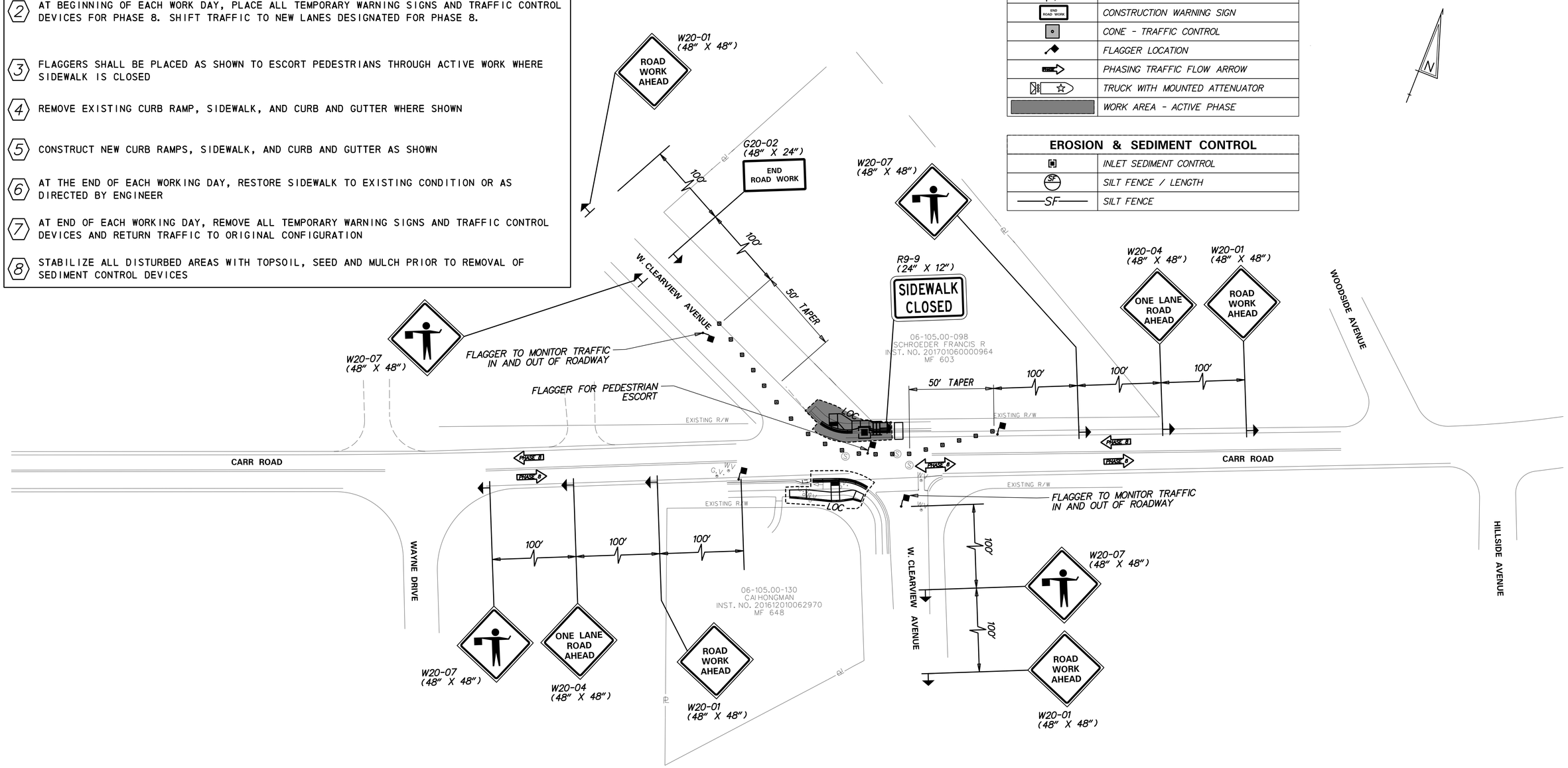
1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN
2. AT BEGINNING OF EACH WORK DAY, PLACE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES FOR PHASE 8. SHIFT TRAFFIC TO NEW LANES DESIGNATED FOR PHASE 8.
3. FLAGGERS SHALL BE PLACED AS SHOWN TO ESCORT PEDESTRIANS THROUGH ACTIVE WORK WHERE SIDEWALK IS CLOSED
4. REMOVE EXISTING CURB RAMP, SIDEWALK, AND CURB AND GUTTER WHERE SHOWN
5. CONSTRUCT NEW CURB RAMPS, SIDEWALK, AND CURB AND GUTTER AS SHOWN
6. AT THE END OF EACH WORKING DAY, RESTORE SIDEWALK TO EXISTING CONDITION OR AS DIRECTED BY ENGINEER
7. AT END OF EACH WORKING DAY, REMOVE ALL TEMPORARY WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND RETURN TRAFFIC TO ORIGINAL CONFIGURATION
8. STABILIZE ALL DISTURBED AREAS WITH TOPSOIL, SEED AND MULCH PRIOR TO REMOVAL OF SEDIMENT CONTROL DEVICES

## CONSTRUCTION PHASING & M.O.T

| | |
|---|---|
| | BARRICADE, TYPE 3 |
| | CONSTRUCTION WARNING SIGN LOCATION |
| END ROAD WORK | CONSTRUCTION WARNING SIGN |
| | CONE - TRAFFIC CONTROL |
| | FLAGGER LOCATION |
| | PHASING TRAFFIC FLOW ARROW |
| | TRUCK WITH MOUNTED ATTENUATOR |
| | WORK AREA - ACTIVE PHASE |

## EROSION & SEDIMENT CONTROL

| | |
|---|---|
| | INLET SEDIMENT CONTROL |
| SF | SILT FENCE / LENGTH |
| —SF— | SILT FENCE |




| ADDENDA / REVISIONS | |
|---|---|
| | |
| | |
| | |
| | |

SCALE 0 30 60 90 FEET

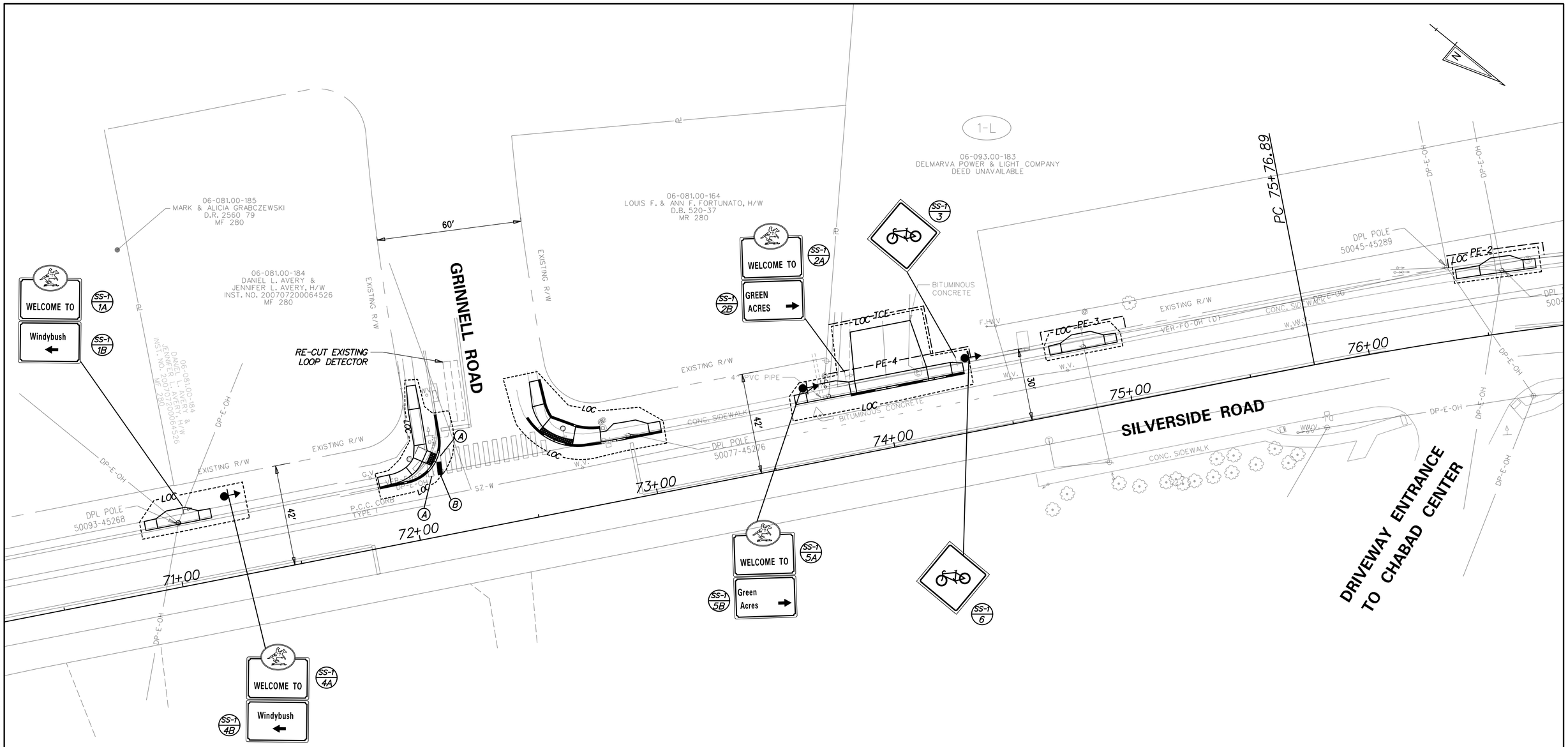
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

CONSTRUCTION PHASING, M.O.T., AND EROSION CONTROL PLAN - PHASE 8

| CS-17 |
|---|
| SECTION |
| AEC |
| SHEET NO. |
| 54 |

\\USPHLIFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\CS801.DGN




## PAVEMENT MARKINGS LEGEND

| SYMBOL | ITEM | QUANTITY |
|---|---|---|
| (A) | REMOVAL OF PAVEMENT STRIPING (ITEM 817031) | 33 SF |
| (B) | 24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING, CROSSWALK (ITEM 817002) | 11 SF |

GENERAL NOTES FOR SIGNING:

1. THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS, EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT OR THROUGH WRITTEN APPROVAL BY THE ENGINEER.

   DELDOT- "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" 2011 EDITION AND SUBSEQUENT REVISIONS (M.U.T.C.D.)

   A.A.S.H.T.O.- STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS - 6TH EDITION AND SUBSEQUENT PUBLICATIONS.

   F.H.W.A.- "STANDARD HIGHWAY SIGNS", 2004 EDITION AND SUBSEQUENT SUPPLEMENTS

2. THE CONTRACTOR SHALL INSTALL NEW POSTS WHERE ADDITIONAL SIGN HEIGHT IS WARRANTED.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

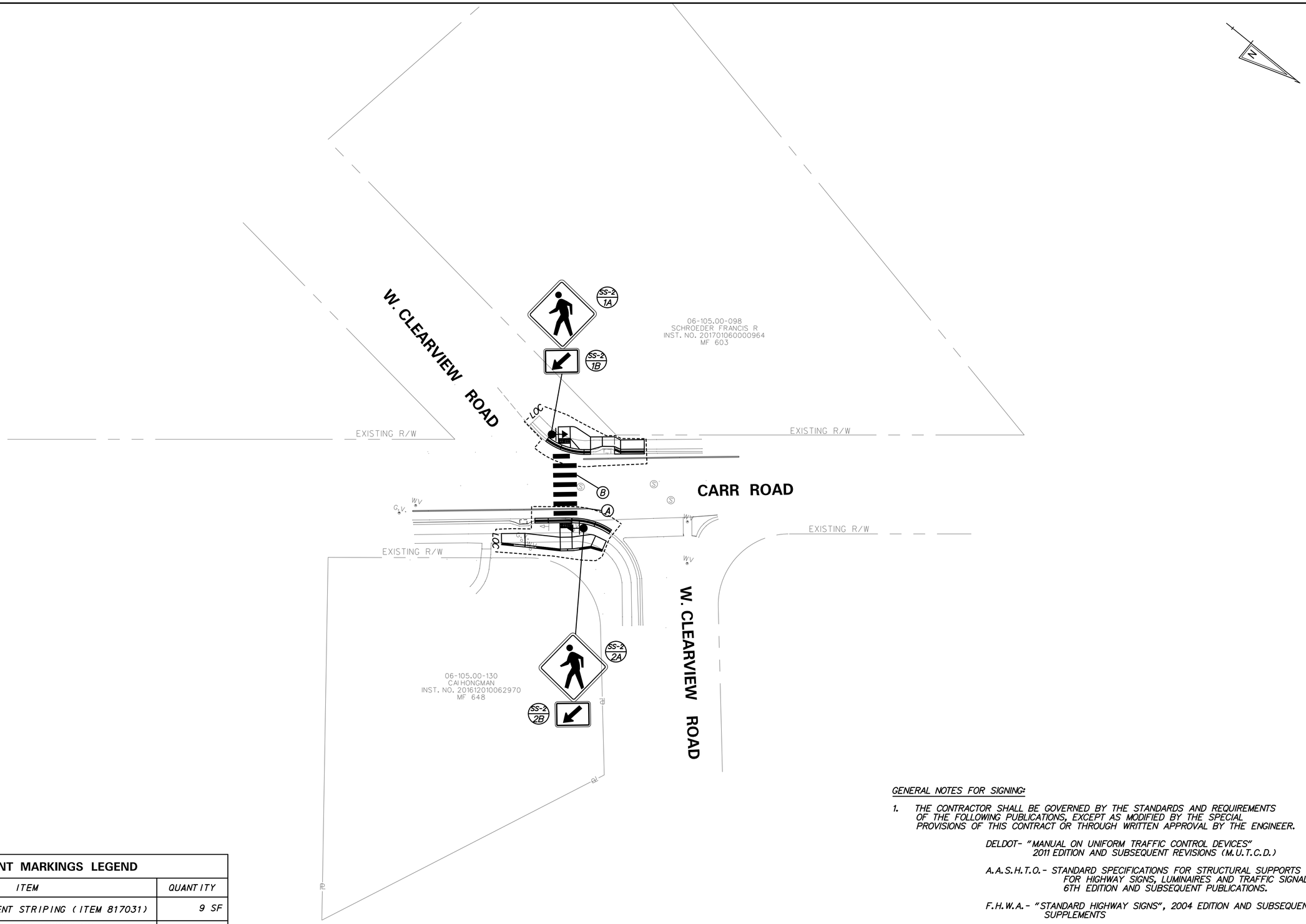
SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1-036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

SIGNING, STRIPING AND CONDUIT PLAN

SS-01
SECTION
AEC
SHEET NO.
55

\\USPHLFP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\SS01.DGN




| PAVEMENT MARKINGS LEGEND | | |
|---|---|---|
| SYMBOL | ITEM | QUANTITY |
| A | REMOVAL OF PAVEMENT STRIPING (ITEM 817031) | 9 SF |
| B | 24" SOLID WHITE ALKYD THERMOPLASTIC PAVEMENT STRIPING, CROSSWALK (ITEM 817002) | 134 SF |

GENERAL NOTES FOR SIGNING:

1. THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS, EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT OR THROUGH WRITTEN APPROVAL BY THE ENGINEER.

   DELDOT- "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" 2011 EDITION AND SUBSEQUENT REVISIONS (M.U.T.C.D.)

   A.A.S.H.T.O.- STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS - 6TH EDITION AND SUBSEQUENT PUBLICATIONS.

   F.H.W.A.- "STANDARD HIGHWAY SIGNS", 2004 EDITION AND SUBSEQUENT SUPPLEMENTS

2. THE CONTRACTOR SHALL INSTALL NEW POSTS WHERE ADDITIONAL SIGN HEIGHT IS WARRANTED.

ADDENDA / REVISIONS

SCALE 0 20 40 60 FEET

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. 1-036 |
|---|---|
| T201701104 | DESIGNED BY: P. SCOTT |
| COUNTY | |
| NEW CASTLE | CHECKED BY: B. SENGER |

SIGNING, STRIPING AND CONDUIT PLAN

SS-02
SECTION AEC
SHEET NO. 56

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\SS01.DGN

# PERMANENT SIGN SCHEDULE

| SHEET NO. | PLAN IDENTIFIER | SIGN DESIGNATION | QTY. | DESCRIPTION | SIGN WIDTH (IN) | SIGN HEIGHT (IN) | SIGN AREA (SF) | ITEM 819018 SINGLE POST (EACH) | | | ITEM 819019 INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS (SF) | | | POST INSTALLATION TYPE | Code X11 12' Post (W/ Basepost) (EACH) | ITEM 819016 4" HOLE, 0-6" (EACH) | ITEM 819017 4" HOLE, >6" (EACH) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | SIGN DISPOSITION | REMOVE | INSTALL | SIGN DISPOSITION | REMOVE | INSTALL | | | | | |
| SS-1 | 1A | D3-2-DE1 | 1 | WELCOME TO | 36 | 32 | | REMOVE | 1 | | | | | | | | | |
| SS-1 | 1B | D3-2-DE2 | 1 | DEVELOPMENT NAME | 36 | 32 | | REMOVE | 1 | | | | | | | | | "Windybush" |
| SS-1 | 2A | D3-2-DE1 | 1 | WELCOME TO | 36 | 32 | | REMOVE | 1 | | | | | | | | | |
| SS-1 | 2B | D3-2-DE2 | 1 | DEVELOPMENT NAME | 36 | 32 | | REMOVE | 1 | | | | | | | | | "Green Acres" |
| SS-1 | 3 | W11-1(48) | 1 | BICYCLE (Symbol) - 48x48 | 48 | 48 | | REMOVE | 1 | | | | | | | | | |
| SS-1 | 4A | D3-2-DE1 | 1 | WELCOME TO | 36 | 32 | 8.0 | | | | NEW | | 8.0 | SOIL | 2 | | | |
| SS-1 | 4B | D3-2-DE2 | 1 | DEVELOPMENT NAME | 36 | 32 | 8.0 | | | | ADD TO ASSEMBLY | | 8.0 | | | | | "Windybush, <-" |
| SS-1 | 5A | D3-2-DE1 | 1 | WELCOME TO | 36 | 32 | 8.0 | | | | NEW | | 8.0 | SOIL | 2 | | | |
| SS-1 | 5B | D3-2-DE2 | 1 | DEVELOPMENT NAME | 36 | 32 | 8.0 | | | | ADD TO ASSEMBLY | | 8.0 | | | | | "Green Acres, ->" |
| SS-1 | 6 | W11-1(30) | 1 | BICYCLE (Symbol) - 30x30 | 30 | 30 | 6.3 | NEW | | 1 | | | | SOIL | 1 | | | |
| SS-2 | 1A | W11-2(36) | 1 | PEDESTRIAN (Symbol) - 36x36 | 36 | 36 | 9.0 | NEW | | 1 | | | | SOIL | 1 | | | |
| SS-2 | 1B | W16-7P_L(24) | 1 | LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12 | 24 | 12 | 2.0 | ADD TO ASSEMBLY | | 1 | | | | | | | | |
| SS-2 | 2A | W11-2(36) | 1 | PEDESTRIAN (Symbol) - 36x36 | 36 | 36 | 9.0 | NEW | | 1 | | | | SOIL | 1 | | | |
| SS-2 | 2B | W16-7P_L(24) | 1 | LEFT DOWNWARD DIAGONAL ARROW (plaque) - 24x12 | 24 | 12 | 2.0 | ADD TO ASSEMBLY | | 1 | | | | | | | | |
| **PAGE TOTALS** | | | | | | | 60 | | 5 | 5 | | 0 | 32 | | 7 | 0 | 0 | |
| | | | | | | | | | | | | | | | | | | |
| **JOB TOTALS** | | | | | | | 60 | | 5 | 5 | | 0 | 32 | | 7 | 0 | 0 | |

ADDENDA / REVISIONS

**NOT TO SCALE**

SILVERSIDE ROAD
ADA IMPROVEMENTS
VEALE ROAD TO WINDYBUSH DRIVE

| CONTRACT | BRIDGE NO. | 1–036 |
|---|---|---|
| T201701104 | DESIGNED BY: P. SCOTT | |
| COUNTY | | |
| NEW CASTLE | CHECKED BY: B. SENGER | |

SIGNING, STRIPING AND CONDUIT PLAN

SS-03
SECTION
AEC
SHEET NO.
57

\\USPHL1FP002\DATA\PROJECTS\60318855\TASK 02-SILVERSIDE RD\900_WORK\910_CAD\02-SHEETS\003_CIVIL\SS02.DGN