GENERAL NOTES

1. This site has been addressed by the Prince William County Mapping Office as: _____ (addresses for subdivision lots shall appear on the approved plat for recordation).
2. Addresses assigned are for the layout of individual businesses or dwelling units and are for exterior doors as shown on this plan only. Any deviation in design or layout will require that a revised plan be submitted to the Office of Mapping for re-addressing. It is the responsibility of the developer to inform the County Office of Mapping before a change in layout occurs and to submit complete and accurate information for re-addressing. Prince William County does not assume any responsibility where re-addressing is required even though tenants have already occupied a portion of the building.
3. Methods and materials used in the construction of the improvements herein shall conform to the current County construction standards and specifications and/or current VDOT standards and specifications.
4. The contractor or developer is required to notify the Prince William County Department of Public Works in writing three (3) days prior to the beginning of the construction and specifically request inspection before beginning 703- 792-7070.
   - A. Installation of approved erosion control devices.
   - B. Clearing and Grading
   - C. Subgrade excavation.
   - D. Installing storm sewers or culverts.
   - E. Setting curb and gutter forms.
   - F. Placing curb and gutter.
   - G. Placing other concrete.
   - H. Placing gravel base.
   - I. Placing any bituminous surfacing.
   - *J. Installing water mains outside the Service Authority's boundaries.
   - *K. Installing sanitary sewer outside the Service Authority's boundaries.
5. Measures to control erosion and siltation, including detention ponds serving as silt basins during construction, must be provided prior to issuance of the site development permit. The approval of these plans in no way relieves the developer or his agent of the responsibilities contained in the Virginia Erosion and sediment Control Handbook.
6. A permit must be obtained from the Office of the Resident Engineer, Virginia Department of Transportation (VDOT) Prince William County, prior to construction in existing State right-of-way, 707-366-1900.
7. Approval of this plan does not guarantee issuance of an entrance permit by VDOT when such permit is required under State law.
8. The exact location of all guard rails will be determined by VDOT personnel. "A joint inspection will be held with the Developer, County Representatives, and Representatives, of the Virginia Department of Transportation (VDOT) to determine if and where guard rail and/or paved ditches will be needed. The developer will be responsible for providing guardrail and paved ditches as determined by this joint inspection." Refer to Virginia Department of Transportation (VDOT) Guard Rail and Paved Ditch Specifications.
9. An approved set of plans and all applicable permits must be available at the construction site. Also, a representative of the developer must be available at all times.
10. Warning signs, markers, barricades or flagmen should be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).
11. All unsuitable material shall be removed from the construction limits of the roadway before placing embankment.
12. All pavement sections on the approved plans are based on a minimum CBR value of 10. CBR tests are to be performed by the engineer and submitted to the Prince William County Planning Office for review prior to placement of base material. CBR values less than 10 will require submittal of revised pavement section.
13. ~~All roadside ditches at grades of more than 5% shall be paved with cement concrete to the limits indicated on the plans and as required at the field inspection.~~
14. All springs shall be capped and piped to the nearest storm sewer manholes or curb inlet. The pipe shall be minimum 6" diameter and conform to VDOT standard SB-1.
15. All standard street name signs, traffic control devices, and street lights shall be installed by the developer when the first building unit is occupied.
16. Construction debris shall be containerized in accordance with the Virginia Litter Control Act; no less than one litter receptacle shall be provided at the construction site
17. The contractor shall provide adequate means of cleaning mud from trucks and/or other equipment prior to entering public streets, and it is the contractors responsibility to clean streets, allay dust, and to take whatever measures are necessary to insure that the streets are maintained in a clean, mud and dust free condition at all times.
18. * Notification shall be given to the appropriate utility Company (Service Authority, Virginia-American Water Company, or Dale Service Corporation) prior to construction of water and/or sanitary sewer lines. Information should also be obtained from the appropriate authority concerning permits, cut sheets, and connections to existing lines.
19. All sanitary sewers and water mains and appurtenances shall be constructed in accordance with the current standards and specifications of Prince William County and/or the Service Authority.
20. The developer and/or contractor shall be responsible to supply all utility companies with copies of plans that have been approved by Prince William County and advising them that all grading shall conform to the approved plans, and further that the utility companies shall be responsible for honoring these plans and the finished grades in the installation of their utility lines.
21. Contractors shall notify operators who maintain underground utility lines in the area of proposed excavating or blasting at least two (2) working days, but not more than ten (10) working days, prior to commencement of excavation or demolition. Names and telephone numbers of theoperators underground utility lines in Prince William County appear below. These numbers shall also be used to serve in an emergency condition.

    Washington Gas Light Co.
    Virginia Power Co.
    Northern Virginia Electric Co-op
    Columbia Gas of Virginia
    Continental Telephone of VA
    Colonial Pipeline Co.
    Transcontinental Gas Pipe Line Corp.

    MISS UTILITY 1-800-552-7001

    Service Authority **703-335-7900**
    (After hours-Emergency 335-7990)
    Virginia-American Water **703-491-2136**
    Dale Service Corporation **703-494-4161**

22. The service Authority requires that a clean-out be placed within one foot (0.3 meters) of the property line.
23. The location of existing utilities shown in these plans are taken from existing records. It shall be the contractors responsibility to verify the exact horizontal and vertical location of all existing utilities as needed prior to construction. The contractor shall inform the engineer of any conflicts arising from his existing utility verification and the proposed construction.
24. The developer will be responsible for any damage to the existing streets and utilities which occurs as a result of his construction project within or contiguous to the existing right-of-way.
25. All utilities placed under existing streets shall be bored or jacked.
26. When grading is proposed within easements of utilities, letters of permission from all involved companies must be provided to Prince William County Planning Office prior to issuance of grading and/or site development permits.
27. The developer will be responsible for the relocation of any utilities which is required as a result of his project.The relocation should be done prior to construction.
28. Before burning, blasting, transportation or storage of explosives in Prince William County, a permit shall be obtained from the Fire Marshal's Office, 703-792-6360.
29. Fire and Rescue Services must be notified immediately (703-792-6810) in the event that unusual items such as tanks, cylinders, unidentified containers, etc. which could contain potentially hazardous materials are discovered or observed. All activities must cease and not be resumed until authorization to proceed is given by the Fire Marshal's Office.
30. Sidewalk underdrains shall be installed per Section 650.65 of the Design and Construction Standards Manual.
31. All walkways outside of the right-of-way limits will be maintained by the homeowners association.
32. Maintenance of the Storm Drainage or Storm Water Management facilities located therein shall be pursuant to Section 700 of the Prince William County Design and Construction Standards Manual.
33. If units shown on this plan will be occupied in phases, a phasing plan must be approved by the engineering inspection branch prior to the issuance of any occupancy permits. (Detached single family subdivision exempt.)
34. These plans identify the location of all known gravesites. Gravesites shown on this plan will be protected in accordance with state law. In the event gravesites are discovered during construction, the County's Archaeologist must be notified immediately (703-792-6830). All activities must cease and not be resumed until authorization to proceed is given by the County Archaeologist.
35. Roof top mechanical equipment, if any, must be enclosed within a wall or similar screening barrier, designed in harmony with the building.
36. Individual sign permits will be required from the Zoning Office for all free standing and facade signs prior to erecting the signs.
37. All buffer areas shall be screened according to the Design and Construction Standards Manual.
38. For proffer statements and proffer analyses, see project booklet.
39. For waivers see sheet(s) N/A of _____ .
40. Anticipated sewage flows: N/A
41. Anticipated fire flows: N/A
42. Distance to nearest existing school or proposed school site: 0.44 MILES TO OCCOQUAN ELEMENTARY SCHOOL

LEGEND

EXISTING INTERMEDIATE CONTOUR — 32
EXISTING INDEX CONTOUR — 230
PROPOSED CONTOUR — 32
EXISTING EDGE OF PAVEMENT — EX. E/P
PROPOSED EDGE OF PAVEMENT — PROP. E/P
EXISTING CURB AND GUTTER — EX. C & G
PROPOSED CURB AND GUTTER — CG-6
TRANSITION FROM CG-6 TO CG-6R — CG-6 CG-6R
EXISTING TELEPHONE LINE — T
PROPOSED TELEPHONE LINE — T
EXISTING STORM SEWER — EX. 15" RCP
PROPOSED STORM SEWER — PROP. 15" RCP
EXISTING SANITARY SEWER
PROPOSED SANITARY SEWER
EXISTING ELECTRIC SERVICE — E
PROPOSED ELECTRIC SERVICE — E
EXISTING GAS LINE — G
PROPOSED GAS LINE — G
PROPERTY LINE
EASEMENT LINE
CENTERLINE
LIMITS OF CLEARING AND GRADING
EXISTING SPOT ELEVATION — 12.0
PROPOSED SPOT ELEVATION — 12
EXISTING TREE DRIP LINE
EXISTING TREE — 15" OAK QA
PROPOSED TREE

FLOW LINE
FENCELINE — x
EXISTING UTILITY POLE
PROPOSED UTILITY POLE
EXISTING WATERLINE W/ TEE — W T
PROPOSED WATERLINE W/ TEE — W T
EXISTING FIRE HYDRANT
PROPOSED FIRE HYDRANT
EXISTING WATER VALVE — W
PROPOSED WATER VALVE — W
PROPOSED WATER METER
EXISTING REDUCER — W
PROPOSED REDUCER — W
STOP SIGN
HANDICAP RAMP (CG-12)
DENOTES LOCATION OF STD VDOT CG-12 AND/OR JURISDICTIONAL STANDARD RAMP CONSTRUCTION
PARKING INDICATOR — 12
INDICATES THE NUMBER OF TYPICAL PARKING SPACES
TEST PIT LOCATION
CRITICAL SLOPE
SLOPES TO BE SEEDED, MULCHED & TACKED PURSUANT TO SECTION 1100.00 PRINCE WILLIAM COUNTY DESIGN & CONSTRUCTION STANDARDS MANUAL
VEHICLES PER DAY COUNT — VPD
PROPOSED BUILDING ENTRANCE
EXISTING STREET LIGHT
PROPOSED STREET LIGHT
PROPOSED STREET NAME SIGN
PROPOSED SANITARY LATERAL CLEANOUT
SANITARY MANHOLE INDENTIFIER — 12
STORM DRAIN STRUCTURE IDENTIFIER — 12

SURVEY AND TOPOGRAPHIC INFORMATION

1. Horizontal and vertical control surveys were performed by Rinker Design Associates , in Nov. 2021 .
2. All elevations must be referenced to the National Geodetic Vertical Datum of 1929 (NAVD88).
3. Source of topographic mapping is aerial imagery dated 10/19
4. Boundary survey was performed by RDA dated 11/21
5. The application of the professional's seal and signature as required by Section 1.14 of the STATE BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS AND CERTIFIED LANDSCAPE ARCHITECTS RULES AND REGULATIONS shall be evidence that: the boundary data is correct to the best of the land surveyor's knowledge, and complies with the minimum standards and procedures of the said Board; the topographic information is accurate to within one-half of the contour interval, as shown. Application of the seal and signature indicates acceptance of responsibility for the work shown hereon.

DESIGNATED PLANS EXAMINER CERTIFICATE

1ST SUBMISSION REVIEWED AND RECOMMENDED FOR SUBMISSION

DESIGNATED PLANS EXAMINER | REG. NUMBER | DATE

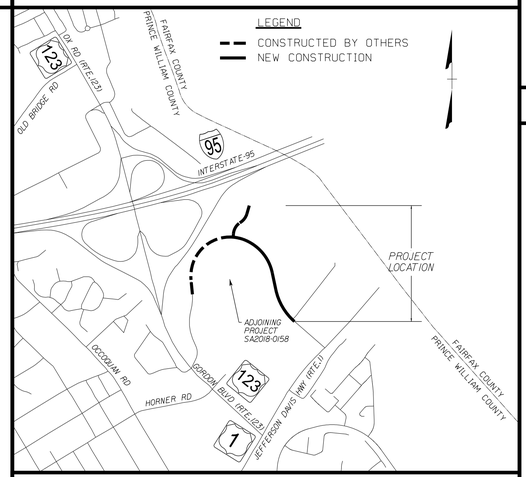
2ND SUBMISSION REVIEWED AND RECOMMENDED FOR SUBMISSION

DESIGNATED PLANS EXAMINER | REG. NUMBER | DATE

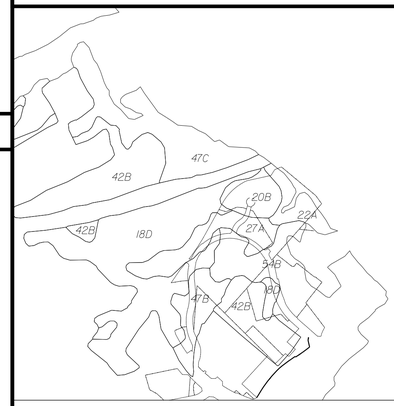
BOND ESTIMATE

VICINITY MAP

1" = 1000'



SOILS MAP



SOILS INFORMATION WAS OBTAINED FROM THE "SOIL SURVEY OF PRINCE WILLIAM COUNTY, VIRGINIA" ISSUED AUGUST 1989.

SCALE 1"=1000'

SOILS DATA

20B	Elsinboro Sandy Loam
27A	Hatboro-Codorus complex
42B	Neabsco-Quantico complex
47B	Quantico sandy loam
54B	Urban land-Undorthents complex
18D	Dumfries sandy loam
18E	Dumfries sandy loam

REVIEWED BY: _____ APPROVED BY: _____

This plan has been reviewed and has been found to be in general conformance with the requirements of Prince William County. The developer is hereby authorized to obtain all necessary land development permits, subject to all designs, procedures, materials and workmanship being in compliance with lawful requirements. If not bonded or permitted (if applicable) within five (5) years of the authorized date or lawfully extended, this authorization will expire. A valid agreement and bond with Prince William County must be maintained to assure plan and permit validity.

SHEET INDEX

SHEET NUMBER	DESCRIPTION
*	SHEETS NOT INCLUDED IN THIS SUBMISSION
1	COVER SHEET
1A	RIGHT OF WAY DATA SHEET
1B	REVISION DATA SHEET
1C	SURVEY ALIGNMENT DATA SHEET
1D	CONSTRUCTION ALIGNMENT DATA SHEET
1J-1J(2)	TMP/SOC NOTES AND DETAILS
1K-1K(1)	TMP/SOC PLAN
1Q	EROSION AND SEDIMENT CONTROL NARRATIVE
1Q(2)	VESCH NARRATIVE AND CHECKLIST
1Q(3)	NURTIENT CREDIT LETTER,WETLAND PERMIT, AND PWC APPROVAL
2	VDOT GENERAL NOTES
2A	TYPICAL SECTIONS
2E	EXISTING DRAINAGE DESCRIPTIONS
2H	UNDERDRAIN SUMMARY
2J	DITCH TYPICALS
2K	DRAINAGE DESCRIPTIONS
2K(2)-2K(4)	STORM SEWER PROFILES
2N-2N(3)	STORM WATER POLLUTION PREVENTION PLAN
3	PLAN SHEET
3A	PROFILE SHEET
3B	EROSION & SEDIMENT CONTROL PHASE I
3C	EROSION & SEDIMENT CONTROL PHASE II
4	PLAN SHEET
4A	PROFILE SHEET
4B	EROSION & SEDIMENT CONTROL PHASE I
4C	EROSION & SEDIMENT CONTROL PHASE II
5	PLAN SHEET
5A	PROFILE SHEET
5B	EROSION & SEDIMENT CONTROL PHASE I
5C	EROSION & SEDIMENT CONTROL PHASE II
6	PLAN SHEET
6A	PROFILE SHEET
6B	EROSION & SEDIMENT CONTROL PHASE I
6C	EROSION & SEDIMENT CONTROL PHASE II
7	PLAN SHEET
7A	NOT USED
7B	EROSION & SEDIMENT CONTROL PHASE I
7C	EROSION & SEDIMENT CONTROL PHASE II
8	PROFILE SHEET - DESTINATION PLACE
9(1) - 9(2)	SIGNAGE AND PAVEMENT MARKING PLAN
X1-X29	CROSS SECTIONS

REVISIONS

DATE	DESIGNER	NO.	DESCRIPTION

PROFESSIONAL SEAL & SIGNATURE

THESE PLANS ARE IN CONFORMANCE WITH PRINCE WILLIAM COUNTY STANDARDS AND ORDINANCES. ANY DEVIATION OR CHANGE IN THESE PLANS SHALL BE APPROVED BY THE DIRECTOR OF PLANNING PRIOR TO CONSTRUCTION.

PRINCE WILLIAM COUNTY

COVER SHEET

PROJECT NAME: NORTH WOODBRIDGE MOBILITY IMPROVEMENTS
PROJECT NUMBER:
SUBDIVISION or SITE PLAN NAME: NORTH WOODBRIDGE MOBILITY IMPROVEMENTS
MARKET NAME:
PLAN NUMBER:
PLAN TYPE:
MAGISTERIAL DISTRICT: WOODBRIDGE
PRESENT ZONING & USE:
DATE OF PLAN: (MM/DD/YYYY)
OWNER: OWNER ADDRESS: OWNER PHONE#: OWNER FAX#:
DEVELOPER: DEVELOPER ADDRESS: DEVELOPER PHONE#: DEVELOPER FAX#:
NAME, ADDRESS, & TELEPHONE NO. of ENGINEER:
ARCHITECT or SURVEYOR CERTIFYING PLAN: RINKER DESIGN ASSOCIATES 11100 ENDEAVOR CT. SUITE 200, MANASSAS, VA 20109
PARCEL INDENTIFICATION NUMBERS:
TOTAL AREA: PROJECT AREA: DISTURBED AREA: IMPERVIOUS AREA: BMP STORAGE:
RELATED PLANS TRACKING NUMBERS (Including Rez. & S.U.P.):

Subdivision/Site Plan Name: NORTH WOODBRIDGE MOBILITY IMPROVEMENTS

PWC File Number:

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER, 2019 _____.

Preliminary Right of Way Data Sheet

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		1A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

City/County: Prince William
UPC No.: N/A

PARCEL NO.	LANDOWNER	SHEET NO.	AREA							EASEMENTS								PROFFERS
			TOTAL	FEE TAKING		PRESCRIPTIVE R/W		FEE REMAINDER		PERMANENT		UTILITY		TEMPORARY		TEMPORARY(ENTRANCES)		
			ACRES	SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	ACRES	HECTARES/ OR SQ. METERS	SQ. FEET	HECTARES/ OR SQ. METERS	ACRES OR SQ. FEET	HECTARES/ OR SQ. METERS	SQ. FEET	HECTARES/ OR SQ. METERS	SQ. FEET	HECTARES/ OR SQ. METERS	YES / NO
001	THE LANDING AT MASON'S BRIDGE, LP	3,4,5	14.81	902.33				14.79		2079.81				20626.74				NO
002	THE LANDING AT MASON'S BRIDGE, LP	3,4,5	3.13	4355.13				3.04		43336.30				10924.84				NO
003	THE LANDING AT MASON'S BRIDGE, LP	5,6	2.70	8554.38				2.50		3968.15				15330.87				NO
004	BUSH CONSTRUCTION CORPORATION	5,6	17.57	644.16				17.56		-				4484.64				NO
005	991 ANNAPOLIS WAY, LLC	5,6	4.64	449.91				4.63		1765.01				952.50				NO
006	RIVERGATE PHASE II, LLC	5,6	6.45	2524.17				6.39		-				5594.62				NO

	PROJECT	SHEET NO.
		1A

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

PROJECT MANAGER PWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Revision Data Sheet

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IB

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

PWC Project: North Woodbridge Mobility Improvements
PWC Project Number: TBD
From: 95/123 Park & Ride
To: 0.17 Mi. North of US 1 Jefferson Davis Hwy

	PROJECT	SHEET NO.
		IB

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Survey Alignment Data

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IC

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer

HORIZONTAL DATUM: VA State Plane North Zone NAD83, US Survey Foot
VERTICAL DATUM: NAVD 1988, US Survey Foot

SURVEY CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
2	6927801.982	11841491.853	66.76	TRAV
3	6927461.673	11841234.977	73.65	TRAV
4	6927197.753	11840921.410	85.72	TRAV
5	6926839.740	11840753.667	79.32	TRAV
6	6926867.018	11840197.058	78.58	TRAV
7	6927210.115	11840033.558	80.83	TRAV
8	6927382.692	11839821.004	75.95	TRAV
100	6928420.734	11840839.080	73.87	TRAV
101	6928078.387	11841047.340	74.56	TRAV
102	6927656.680	11839772.893	76.34	TRAV

SCALE	PROJECT	SHEET NO.
0 100' 200'		IC

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Construction Alignment Data

IT IS UNDERSTOOD THAT THE INTENT OF THIS PROJECT IS TO MAINTAIN THE ALIGNMENTS FROM THE PIP PLAN AND NOT PERFORM ANY MODIFICATIONS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		ID

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer

ANNAPOLIS WAY CONSTR. B.L.

Chain ANNAPOLIS_WAY contains:
AW1 CUR CUR_AW1 CUR CUR_AW2 CUR CUR_AW3 CUR CUR_AW4 CUR CUR_AW5 CUR CUR_AW6 AW-10

Beginning chain ANNAPOLIS_WAY description

Point AW1 N 6,928,470.76 E 11,839,741.81 Sta 21+00.00

Course from AW1 to PC CUR_AW1 N 5° 39' 23.80" W Dist 117.24

Curve Data

Curve CUR_AW1
P.I. Station = 23+11.20 N 6,928,680.93 E 11,839,720.99
Delta = 17° 48' 02.53" (RT)
Degree = 9° 32' 57.47"
Tangent = 93.96
Length = 186.41
Radius = 600.00
External = 7.31
Long Chord = 185.66
Mid.Ord. = 7.22
P.C. Station 22+17.24 N 6,928,587.42 E 11,839,730.25
P.T. Station 24+03.65 N 6,928,772.79 E 11,839,740.76
C.C. N 6,928,646.56 E 11,840,327.33
Back = N 5° 39' 23.80" W
Ahead = N 12° 08' 38.73" E
Chord Bear = N 3° 14' 37.47" E

Course from PT CUR_AW1 to PC CUR_AW2 N 12° 08' 38.73" E Dist 14.48

Curve Data

Curve CUR_AW2
P.I. Station 24+96.49 N 6,928,863.55 E 11,839,760.29
Delta = 22° 10' 08.19" (RT)
Degree = 14° 19' 26.20"
Tangent = 78.36
Length = 154.77
Radius = 400.00
External = 7.60
Long Chord = 153.80
Mid.Ord. = 7.46
P.C. Station 24+18.13 N 6,928,786.94 E 11,839,743.80
P.T. Station 25+72.90 N 6,928,928.28 E 11,839,804.46
C.C. N 6,928,702.80 E 11,840,134.85
Back = N 12° 08' 38.73" E
Ahead = N 34° 18' 46.92" E
Chord Bear = N 23° 13' 42.83" E

Course from PT CUR_AW2 to PC CUR_AW3 N 34° 18' 46.93" E Dist 62.06

Curve Data

Curve CUR_AW3
P.I. Station 30+10.03 N 6,929,280.67 E 11,840,063.06
Delta = 71° 42' 36.29" (RT)
Degree = 11° 02' 22.74"
Tangent = 375.07
Length = 649.57
Radius = 519.00
External = 121.34
Long Chord = 607.99
Mid.Ord. = 98.35
P.C. Station 26+34.95 N 6,928,979.54 E 11,839,839.45
P.T. Station 32+84.52 N 6,929,162.85 E 11,840,419.15
C.C. N 6,928,670.12 E 11,840,256.13
Back = N 36° 35' 48.32" E
Ahead = S 71° 41' 35.39" E
Chord Bear = N 72° 27' 06.47" E

Course from PT CUR_AW3 to PC CUR_AW4 S 71° 41' 35.39" E Dist 51.02

Curve Data

Curve CUR_AW4
P.I. Station 33+82.58 N 6,929,132.05 E 11,840,512.24
Delta = 13° 24' 49.86" (RT)
Degree = 14° 19' 26.20"
Tangent = 47.04
Length = 93.65
Radius = 400.00
External = 2.76
Long Chord = 93.43
Mid.Ord. = 2.74
P.C. Station 33+35.54 N 6,929,146.83 E 11,840,467.58
P.T. Station 34+29.18 N 6,929,107.32 E 11,840,552.25
C.C. N 6,928,767.07 E 11,840,341.94
Back = S 71° 41' 35.39" E
Ahead = S 58° 16' 45.53" E
Chord Bear = S 64° 59' 10.46" E

ANNAPOLIS WAY CONSTR. B.L. CONT'D.

Curve Data

Curve CUR_AW5
P.I. Station 36+96.00 N 6,928,967.04 E 11,840,779.21
Delta = 46° 34' 21.35" (RT)
Degree = 9° 14' 31.74"
Tangent = 266.81
Length = 503.92
Radius = 619.94
External = 54.98
Long Chord = 490.16
Mid.Ord. = 50.50
P.C. Station 34+29.18 N 6,929,107.32 E 11,840,552.25
P.T. Station 39+33.10 N 6,928,705.77 E 11,840,833.34
C.C. N 6,928,579.99 E 11,840,226.30
Back = S 58° 16' 45.53" E
Ahead = S 11° 42' 24.18" E
Chord Bear = S 34° 59' 34.86" E

Course from PT CUR_AW5 to PC CUR_AW6 S 11° 42' 24.18" E Dist 227.07

Curve Data

Curve CUR_AW6
P.I. Station 44+40.42 N 6,928,209.01 E 11,840,936.28
Delta = 38° 45' 39.13" (LT)
Degree = 7° 11' 30.22"
Tangent = 280.25
Length = 538.96
Radius = 796.69
External = 47.86
Long Chord = 528.75
Mid.Ord. = 45.14
P.C. Station 41+60.17 N 6,928,483.43 E 11,840,879.42
P.T. Station 46+99.13 N 6,928,030.62 E 11,841,152.43
C.C. N 6,928,645.08 E 11,841,659.53
Back = S 11° 42' 24.18" E
Ahead = S 50° 28' 03.31" E
Chord Bear = S 31° 05' 13.75" E

Course from PT CUR_AW6 to AW10 S 50° 28' 03.31" E Dist 0.87

Point AW10 N 6,928,030.07 E 11,841,153.10 Sta 47+00.00

Ending chain ANNAPOLIS_WAY description

DESTINATION PLACE CONSTR. B.L.

Chain DESTIN_PLACE contains:
DP1 CUR CUR_DP1 CUR CUR_DP2 DP4

Beginning chain DESTIN_PLACE description

Point DP1 N 6,929,186.64 E 11,840,306.77 Sta 10+00.00

Course from DP1 to PC CUR_DP1 N 5° 35' 58.16" E Dist 46.58

Curve Data

Curve CUR_DP1
P.I. Station 11+39.86 N 6,929,325.84 E 11,840,320.41
Delta = 50° 00' 38.10" (RT)
Degree = 28° 38' 52.40"
Tangent = 93.28
Length = 174.57
Radius = 200.00
External = 20.69
Long Chord = 169.08
Mid.Ord. = 18.75
P.C. Station 10+46.58 N 6,929,233.00 E 11,840,311.31
P.T. Station 12+21.15 N 6,929,378.53 E 11,840,397.39
C.C. N 6,929,213.48 E 11,840,510.36
Back = N 5° 35' 58.16" E
Ahead = N 55° 36' 36.26" E
Chord Bear = N 30° 36' 17.21" E

Course from PT CUR_DP1 to PC CUR_DP2 N 55° 36' 36.26" E Dist 17.91

Curve Data

Curve CUR_DP2
P.I. Station 13+09.57 N 6,929,428.47 E 11,840,470.36
Delta = 38° 50' 37.59" (LT)
Degree = 28° 38' 52.40"
Tangent = 70.52
Length = 135.59
Radius = 200.00
External = 12.07
Long Chord = 133.01
Mid.Ord. = 11.38
P.C. Station 12+39.05 N 6,929,388.64 E 11,840,412.17
P.T. Station 13+74.65 N 6,929,495.99 E 11,840,490.70
C.C. N 6,929,553.68 E 11,840,299.21
Back = N 55° 36' 36.26" E
Ahead = N 16° 45' 58.66" E
Chord Bear = N 36° 11' 17.46" E

Course from PT CUR_DP2 to DP4 N 16° 45' 58.66" E Dist 425.36

Point DP4 N 6,929,903.26 E 11,840,613.41 Sta 18+00.00

Ending chain DESTIN_PLACE description

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
ROLLING - GS-8 URBAN LOCAL STREET SYSTEM, ANNAPOLIS WAY (ROUTE 673)	
	FROM: DEAD END TO: US 1 JEFFERSON DAVIS HWY
ADT (2021)	1200
ADT (2045)	-
DHV	-
D (%) (design hour)	-
T (%) (design hour)	-
V (MPH)	30 MPH
TC ST'D.	TC-5.11 ULS

5/5/2022

	PROJECT	SHEET NO.
		ID

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019 _____.

TMP/SOC General Notes

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IJ

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Temporary Traffic Control Plan

General Notes:

1 Transportation Management Plan/Sequence of Construction Type B Project Information:

a Identify the project's TMP Type:
This project's TMP/SOC has been designed in conformance with a Type B, Category III TMP/SOC.

b Identify the work zone location, length, and widths:
The project location is as shown on Sheet 1. The work zone areas have been delineated as shown on the TMP/SOC Sheet IK series. The work zone lengths and widths vary by location as shown in these plans.

c Note the hours the Construction Area will be active:
Construction Area shall be considered active when any impact to traffic occurs (1st Cone in Road). Construction Area hours have the following limitations, unless otherwise approved or directed by the engineer and Prince William County:

Single Lane Closures will be restricted to the hours:

Monday through Thursday	9:30 AM to 3:00 PM Daily, 10:00 PM to 5:00 AM Nightly
Friday	9:30 AM to 2:00 PM, 10:00 PM to 9:00 AM (Fri-Sat Night)
Saturday	10:00 PM to 8:00 AM (Sat-Sun Night)
Sunday	10:00 PM to 5:00 AM (Sun-Mon Night)

Weekend work requires approval by the Prince William County Project Manager.

No lane closures will be allowed from noon on the day before a holiday until noon on the workday following the holiday. Holidays include all State and Federal holidays.

d The TMP/SOC, during construction, shall be in accordance with the Virginia Department of Transportation Road and Bridge Specifications, dated 2020; the 2011 Virginia Work Area Protection Manual, Revision 2J; the Manual on Uniform Traffic Control Devices (MUTCD), Revision 1 & 2, 2009 Edition; and the Virginia Supplement to the MUTCD, dated 2011.

e Note any existing entrances, existing intersections, or existing pedestrian access points that will be affected by the Construction Area or by the traffic control devices:

Existing Intersections:
There are two intersections/entrances within the project limits:
An unsignalized intersection of Annapolis Way and entrance of Landing at Mason's Bridge approximate station 24+75.00. This intersection shall remain operational for the duration of the project.
An entrance at Rivergate at approximate station 40+25.00. This entrance shall remain operational for the duration of the project.

Existing Pedestrian Access Points:
There are no existing pedestrain access points within the project limits.

Existing Bus Stops:
There are no bus stops in the vicinity of this project.

Identify the major types of travelers:
The roadway carries diverse types of travelers. In the peak hours, daily commuters are the prevailing traveler type for these roadways.

f The Contractor shall:

Designate a person assigned to the project who will have the primary responsibility, with sufficient authority, for implementing the TMP/SOC and other safety and mobility aspects of the permit work. This person shall be designated the "Project Safety Officer."

Ensure that personnel assigned to the project are trained in traffic control to a level commensurate with their responsibilities in accordance with VDOT's work zone traffic control training guidelines.

Inform the VDOT, Prince William County, and/or the Engineer of any work requiring lane shifts, lane closures, and/or phase changes a minimum of one week prior to implementing this activity. Prince William County may use various media publications to announce changes in traffic conditions for which the Contractor shall provide information as needed at no additional cost to the project.

Perform reviews of the Construction Area to ensure compliance with contract documents at regularly scheduled intervals at the direction of the Engineer. Contractor shall maintain a copy of the temporary traffic control plan at the work site at all times.

Coordinate with the Prince William County Police Department, Prince William County Fire/Rescue Department, and Virginia State Police for any lane closures and any detours of any nature at no additional cost to the project.

Notify the Regional Transportation Operations Center (TOC) 1 week in advance in order to place lane closure information on the 511 System and VA-Traffic.

Schedule all phases of construction in such a manner that water, sanitary sewer, cable, fiber cable/optic cable, any overhanging utilities, and any underground utilities services will not be interrupted.

g During non-working hours, all construction equipment is to stay outside of the construction area clear zone as designated in the VWAPM, Appendix A. Construction equipment (including temporary concrete traffic barrier service) is not to block or obstruct sight distance at any intersection or private entrance along the project when the construction work zone is active.

2 It is understood that the work is to be done utilizing the TTC plaques from the Virginia Work Area Protection Manual (2011 Rev 2J). However, if there is any significant deviation from the TTC Plaques then a revision shall be submitted for review. Work will only be allowed to proceed under existing TTC Plaques until the review is complete.

3 This TMP/SOC plan is intended as a guide. It is not to enumerate every detail which must be considered in the construction of each phase, but only to show the general handling of existing traffic. Any deviation will require a signed and sealed plan to be submitted for approval PRIOR to work at the proposed location. The contractor may modify the distance requirements for the advance warning signs in TTC examples in the Virginia Work Area Protection Manual only slightly. Contractor to ensure modifications to sign spacing do not impact sight distance and shall not inhibit crosswalks.

4 Contractor is to maintain all lanes of traffic each of the roadways, during peak hours, throughout construction of this project with a minimum clear zone width in accordance with VDOT Work Area Protection Manual, Rev. 2J, Appendix A, unless otherwise approved by the Engineer. For street intersections, commercial connections, or private entrances, a minimum width no less than existing width shall be maintained at all times unless otherwise approved by the Engineer. When construction zone is not active, the Contractor shall ensure all street connections/entrances maintain a minimum of two lanes of traffic (one in each direction).

5 Existing surface, aggregate base, and sub base material which will be demolished or obliterated during construction, and which are suitable for maintenance of traffic, should be utilized prior to the use of commercial material.

6 Each phase of construction shall be completed to the installation of intermediate course asphalt prior to the start of the next phase unless otherwise directed by the Engineer.

7 Contractor shall ensure positive drainage for the duration of the project. Contractor shall add any additional temporary measures necessary to facilitate proper, positive drainage for the duration of construction.

8 Where Group 2 Channelizing Devices are used to separate the Construction Area and traffic, a minimum clear zone area as defined in the VWAPM, Appendix A is to be maintained.

9 All areas excavated below the existing pavement surface and within the clear zone at the conclusion of each workday, shall be backfilled to form an approximate 6:1 wedge against the existing pavement or newly constructed pavement surface for the safety and protection of vehicular traffic. All costs for placing, maintaining, and removing 6:1 wedge shall be included in the price bid for other items in the contract and no additional compensation shall be allowed.

10 IMPLEMENTING THE TRANSPORTATION MANAGEMENT PLAN
During the first day of the new work zone traffic pattern, the project's Manager and project's Maintenance of Traffic Coordinator shall inspect the work zone to ensure compliance with the TMP. On the third to fifth day of implementation of the TMP's new work zone traffic pattern, the District Work Zone Safety Coordinator and the project's Maintenance of Traffic Coordinator shall conduct an on-site review of the work zone's performance and recommend to the Contractor any required changes to the TMP to enhance the work zone's safety and mobility. All such changes shall be documented. An on-site review of the project's work zone traffic control by the District Work Zone Safety Coordinator, project's Manager/Maintenance of Traffic Coordinator, District Safety Engineer, and the Contractor shall be conducted within 48 hours of any fatal incident/crash within the work zone.

11 EVALUATION OF THE TRANSPORTATION MANAGEMENT PLAN
A performance assessment of the TMP including area-wide impacts on adjacent roadways shall be performed by the Regional Traffic Engineering and Operations sections during construction. As circumstances dictate, a review of the overall effectiveness of the project's TMP shall be completed during the Post-Construction Meeting and included with the Post-Construction Report. A copy of the specific information on the effectiveness of the TMP will be forwarded to the State Traffic Engineer for review. A copy of the TMP Interim/Post-Construction Report Form can be obtained from the Regional Traffic Engineer.

12 PUBLIC COMMUNICATIONS PLAN
The Contractor shall be responsible for:

a Notifying the Project Manager/Residency Administrator two weeks in advance of any scheduled work plans and traffic delays.

b Notifying the Project Manager/Residency Administrator, Regional Operations Manager, and the Public Affairs Staff of any unscheduled traffic delays.

13 TRANSPORTATION OPERATIONS
The Contractor shall be responsible for implementing and providing the following:

a Notify the Northern Region Transportation Operations Center (TOC) at (571) 350-2100 at least one week in advance or the Wednesday before scheduled work in order to place lane closure information on the 511 System and VA-Traffic.

b The Contractor shall be responsible for maintaining project lane closure information on LCAMS and VA-Traffic throughout the duration of the project. It is suggested that an individual should be designated as the point of contact and receive training on how to enter the necessary information into LCAMS.

c Post a list of local emergency response agencies inside the project's construction office/trailer.

d Immediately report any traffic incidents that may occur in the work zone.

e Notify the project's Maintenance of Traffic Coordinator, Project Manager, Resident Administrator, District Work Zone Safety Coordinator, District Traffic Engineer, the Regional Operations Manager, and Public Affairs Manager of any incidents and expected traffic delays.

f Within 24 hours of any incidents within the construction work zone, a review of the traffic controls shall be completed and necessary adjustments made to reduce the frequency and severity of any future incidents.

g The contractor shall contact the VDOT TOC 15-45 minutes prior to executing all lane and/or shoulder closures and contact TOC 15-45 minutes after the work has been completed and lane and/or shoulder closures have been removed.

5/5/2022

	PROJECT	SHEET NO.
		IJ

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RW PLAN

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION:SHERRY DJOUHARIAN (703)792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

TMP/SOC TTC Notes & Details

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IJ(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Typical Traffic Control
Work Beyond the Shoulder Operation
(Figure TTC-1.1)
NOTES

Guidance:

1. *The minimum distance between the sign and work vehicle should be 1300'-1500' on Limited Access highways, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limited is 45 mph or less.*

Option:

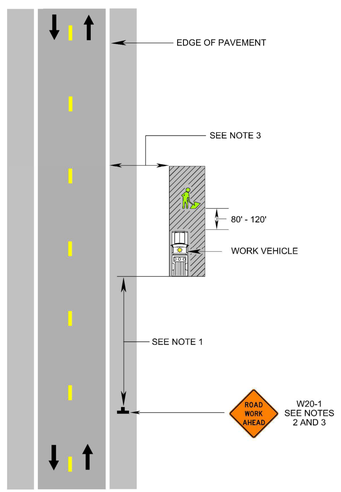
2. The ROAD WORK AHEAD (W20-1) sign may be replaced with other appropriate signs such as the SHOULDER WORK (W21-5) sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
3. The ROAD WORK AHEAD sign may be omitted where the work space is behind a barrier, more than 4 feet behind vertical curb (Standard CG-2 and CG-6) on urban roadways, or outside of the clear zone for all other roadways. For clear zone values see Page A-4 of Appendix A.
4. For short-term, short duration or mobile operations[1], all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity amber rotating, flashing, or[2] oscillating lights is used.

Standard:

5. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[2] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating lights.**
6. **If the work space is in the median of a divided highway, an advance warning sign shall also be placed on the left side of the directional roadway.**

1: Revision 1 – 4/1/2015

Work Beyond the Shoulder Operation
(Figure TTC-1.1)



1: Revision 1 – 4/1/2015

Typical Traffic Control
Shoulder Operation with Minor Encroachment
(Figure TTC-5.2)
NOTES

Standard

1. **For required sign assemblies for multi-lane roadways see Note 1, TTC-4.**[1]

Guidance

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
3. *When work takes up part of a lane on a high volume roadway; vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.*

Option:

4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.

Standard:

5. **A shadow vehicle with either an arrow board operating in the caution mode, or at least one high-intensity amber rotating, flashing, or[3] oscillating light shall be parked 80' - 120' in advance of the first work crew.**
6. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or[2] oscillating lights.**
7. **Taper length (L) and channelizing device spacing shall be at the following:**

Taper Length L

Speed Limit (mph)	Lane Width (Feet) 9	10	11	12	Remarks	Speed Limit (mph)	Lane Width (Feet) 9	10	11	12	Remarks
25	95	105	115	125	$L=S^2W/60$	50	450	500	550	600	L=SW
30	135	150	165	180	$L=S^2W/60$	55	495	550	605	660	L= SW
35	185	205	225	245	$L=S^2W/60$	60	540	600	660	720	L=SW
40	240	270	295	320	$L=S^2W/60$	65	585	650	715	780	L=SW
45	405	450	495	540	L=SW	70	630	700	770	840	L=SW

Limited Access highways shall use a 1000' merging taper regardless of the posted speed, a 750' shifting taper for posted speeds < 65 mph and a 1000' shifting taper for posted speeds > 65 mph.[2]

Shoulder Taper = ½ L Minimum

8. **Channelizing device spacing shall be at the following:**

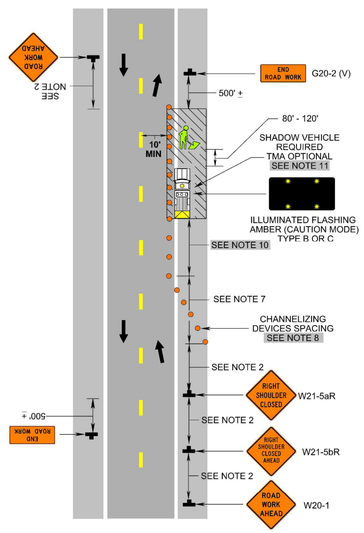
Channelizing Device Spacing							
Location Spacing	Speed Limit (mph) 0 -35	36 +	Location Spacing	Speed Limit (mph) 0 -35	36 +	Location Spacing	Speed Limit (mph) 0 -35	36 +
Transition	20'	40'	Travelway	40'	80'	*Construction Access	80'	120'

*Construction access spacing may be increased to this distance, but shall not exceed one access per ¼ mile.

9. **On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.[2]**
10. **The buffer space length The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
11. **A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.**
12. **When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.**

1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Shoulder Operation with Minor Encroachment
(Figure TTC-5.2)



1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Typical Traffic Control
Lane Closure Operation in an Intersection
(Figure TTC-28.2)
NOTES

Guidance:

1. *The control of traffic through the intersection in order of preference should be:*
   a. *Obtain the services of law enforcement personnel.*
   b. *Detour the effective routes to other roads and streets as approved and directed by the District[2] Traffic Engineer.*
   c. *Place a state certified flagger on each leg of the intersection controlling a single lane of traffic.*

   Appropriate signing as shown should be used for law enforcement and flagging operations. For detour signs see Figure TTC-34.
2. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.*
3. *To maintain efficient traffic flow in a flagging operation on a two-lane roadway the maximum time motorist should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.*[1]

Standard:

4. **Channelizing device spacing shall be on 20' centers or less.**
5. **PTRS shall be used as noted in Section 6F.99.**

Guidance:

6. *If room permits, a shadow vehicle with at least one rotating amber light or high intensity amber flashing or oscillating[1] light should be parked 80'-120' in advance of the first work crew.*

Standard:

7. **For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or high intensity amber flashing or oscillating[1] lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used.**

Guidance:

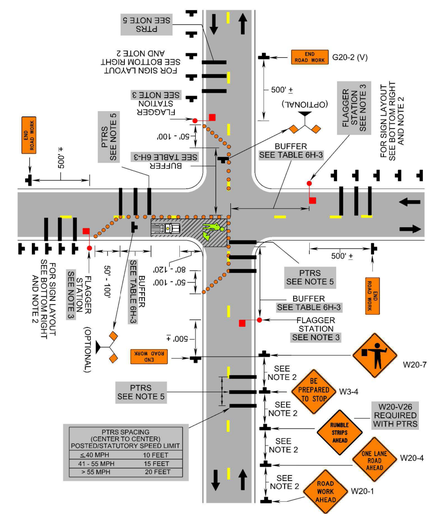
8. *If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36.*

Support:

9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Lane Closure Operation in an Intersection
(Figure TTC-28.2)



2: Revision 2 – 9/1/2019

	PROJECT	SHEET NO.
		IJ(1)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC_DEPT.OF_TRANSPORTATION:SHERRY_DJOUHARIAN (703)792-6822
SURVEYED BY, DATE RINKER_DESIGN_ASSOCIATES,P.C.(703)368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER_DESIGN_ASSOCIATES,P.C.(703)368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019 _____.

TMP/SOC TTC Notes & Details

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IJ(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Typical Traffic Control
Road Closure Operation with a Detour
(Figure TTC-48.2)
NOTES

Guidance:

1. *Regulatory traffic control devices should be modified as needed for the duration of the detour.*
2. *Sign spacing distance should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less. The directional sign should be placed at the intersection.*
3. *If the road is opened for some distance beyond the intersection and/or there are significant origin/destination points beyond the intersection, the ROAD CLOSED LOCAL TRAFFIC ONLY (R11-3a) and DETOUR (M4-10) signs on Type 3 Barricades should be located at the corners of intersecting closed roadway or the traveled way.*

Option:

4. If the road is open for some distance beyond the intersection the Route Sign Directional assembly may be placed in the travelway as shown to augment or replace the one shown on the corners.
5. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
6. Cardinal direction plaques, W16-5pl, may be used with route (M4-V5a) and closure (R11-V2) signs.[2]

Standard:

7. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**
8. **For short-term duration work the M4-9 or M4-V4 series of signs shall be used. For long-term duration work the route shield assembly shall be used with the detour sign.**

Option:

9. Long-term detours may be signed with a street name (M4-VP1a or M4-Vp1b) plaque above the DETOUR (M4-9 or M4-V4 series) sign (see Figure TTC-34).

Support:

10. See Chapter 6I for additional information on incident management traffic control.

Guidance:

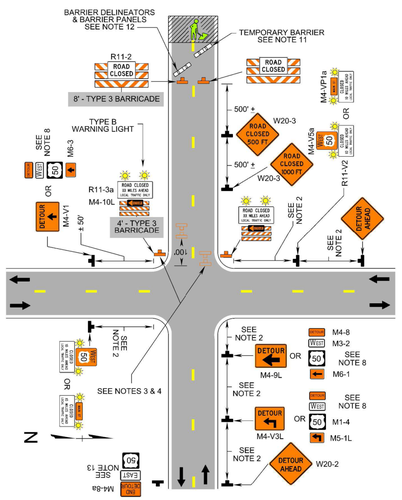
11. *Temporary barrier should be placed at a 45° angle to the travelway a sufficient distance beyond the Type 3 Barricade but before the work space while providing equipment access to the work space.*

Standard:

12. **Barrier panels 8 inches in width and 12 inches in height shall be placed on top of the temporary concrete barrier, facing traffic, and spaced on 10[2] centers along the taper sections. Reflectorized surface shall be fluorescent orange prismatic lens sheeting. Barrier delinators shall be spaced on 10' centers along the transition or taper sections and centered[2] in-between the barrier panels along the parrallel or tangent sections[2] approximately 24 inches up from the roadway surface.**
13. **An END DETOUR (M4-8a) sign shall be used with a Cardinal Route shield and a Cardinal Directional sign to terminate the detour route.**

2: Revision 2 – 9/1/2019

Road Closure Operation with a Detour
(Figure TTC-48.2)



1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Typical Traffic Control
Signing for Project Limits
(Figure TTC-53.0)
NOTES

Support:

1. This layout depicts signing requirements for notifying motorist when they are entering and exiting a potential construction/maintenance area with a duration equal to or greater than 60 days.

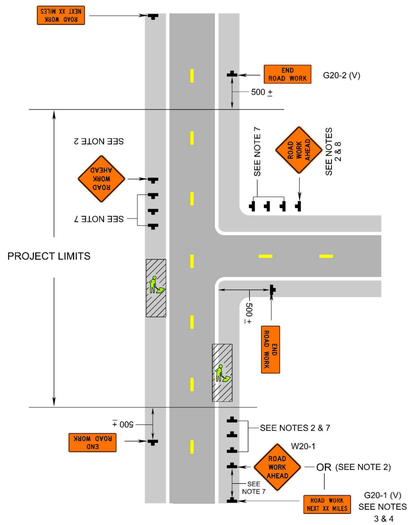
Standard:

2. **The ROAD WORK AHEAD (W20-1) sign or the ROAD WORK NEXT XX MILES (G20-1 (V)) sign shall be placed far enough in advance of the project limits so that other warning signs in a series may be adequately placed prior to the condition they are warning about.**
3. **The ROAD WORK NEXT XX MILES sign shall be used for projects with activity areas greater than 2 miles in length, or when multiple work activities (such as pavement patching, guardrail installations, shoulder restoration, etc.) occur along a highway.**
4. **The distance displayed on the ROAD WORK NEXT XX MILES sign shall be stated to the nearest whole mile from the point of installation to the END ROAD WORK (G20-2 (V)) sign.**
5. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**

Guidance:

6. *For projects with activity areas 2 miles or less in length, the ROAD WORK AHEAD sign should be the first sign motorist encounter.*
7. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
8. *All connections within the project limits should be identified with signs indicating to motorist they are entering or exiting a potential construction/maintenance area.*

Signing for Project Limits
(Figure TTC-53.0)



	PROJECT	SHEET NO.
		IJ(2)

5/5/2022

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RW PLAN

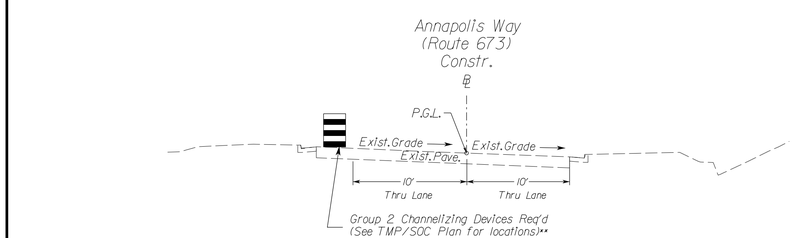
PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019

TMP/SOC Plan: Annapolis Way

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IK

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Manassas, Virginia
Roadway Engineer



LOCATION	STATION	TO	STATION
Annapolis Way (Route 673)	24+75		31+50

Implement VWAPM TTC-5.2 (Shoulder Operation with Minor Encroachment)

Implement VWAPM TTC-48.2 (Road Closure Operation)

Implement VWAPM TTC-28.2 (Lane Closure Operation In an Intersection)

Type III Barricade

Traffic Barrier with Barrier Delineators and Panels

Match Line Sheet 1K(1) - Annapolis Way C.B.L. Sta. 33+50.00

Contractor to maintain access/exit to all entrances during all phases of construction.

Any existing condition that does not reflect the pavement markings shown on this sheet shall be completely eradicated per VDOT standards.

TMP/SOC Legend

- Denotes Full Depth Pavement
- Denotes Clearing/Staging/Work Area This Phase
- Denotes Temp. Pavement Construction This Phase
- Denotes Traffic Flow
- Denotes Group II Channelizing Devices
- Denotes Temporary Concrete Barrier
- Denotes Impact Attenuator, TL-3
- LOD — Denotes Limits of Disturbance (See E&S Plans)

SCALE 0 50' 100'

PROJECT	SHEET NO.
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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHEBBY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC. DECEMBER 2019

TMP/SOC Plan: Annapolis Way

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		IK(I)

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Rinker Design Associates, P.C.
Manassas, Virginia
Roadway Engineer

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RW PLAN

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DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Erosion and Sediment Control Notes and Narrative

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		10

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS:

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.

4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.

6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.

   a. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.

   b. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.

7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.

8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.

9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.

11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.

13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.

14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.

15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.

16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

   a. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

   b. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

   c. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

   d. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

   e. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.

   f. APPLICABLE SAFETY REQUIREMENTS SHALL BE COMPLIED WITH.

17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.

18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS:

   a. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.

   b. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:

      (1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION;

      (2) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.

      ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND

      PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.

   c. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:

   (1) IMPROVE THE CHANNELS TO A CONDITION WHERE A 10-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS;

   (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE 10-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;

   (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A 10-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR

   (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.

   d. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.

   e. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT PROJECT.

   f. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.

   g. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.

   h. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.

   i. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.

   j. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.

   k. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.

   l. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (I) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (II) DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24-HOUR STORM; AND (III) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62J-44J.5:54 OR 62J-44J.5:65 OF THE ACT.

   m. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62J-44J.5:52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (§ 62J-44J.5:24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES (I) ARE IN ACCORDANCE WITH PROVISIONS FOR TIME LIMITS ON APPLICABILITY OF APPROVED DESIGN CRITERIA IN 9VAC25-870-47 OR GRANDFATHERING IN 9VAC25-870-48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION, IN WHICH CASE THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62J-44J.5:52 A OF THE ACT SHALL APPLY, OR (II) ARE EXEMPT PURSUANT TO § 62J-44J.5:34 C 7 OF THE ACT.

   n. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF THIS SUBDIVISION 19.

   o. TEMPORARY STONE CONSTRUCTION ENTRANCE;
   A STABILIZED STONE PAD WITH A FILTER FABRIC UNDERLINER LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE. (PER VDOT STANDARD EC-11 AND STD & SPEC 3.02 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK)

   p. SAFETY FENCE TO BE INSTALLED AROUND ALL SEDIMENT BASINS AND WHERE DEEMED NECESSARY (STD & SPEC. 3.01 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK).

	PROJECT	SHEET NO.
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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019 _____.

Erosion and Sediment Control Plan
VESCH Narrative and Checklist

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		10(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE WIDENING OF ANNAPOLIS WAY TO DESTINATION PLACE AND NEW ROADWAY CONNECTING ANNAPOLIST WAY TO ITSELF IN THE EAST. THE PROJECT IS APPROXIMATELY 0.35 MILES. THE PROJECT WILL DISTURB APPROXIMATELY 4.61 ACRES.

EXISTING SITE CONDITIONS

*TOPOGRAPHY FOR THIS PROJECT IS MOSTLY STEEP WITH FOREST, EXISTING RESIDENTIAL APARTMENT BUILDINGS AND EXISTING ROADWAY. THE PROJECT IS WITHIN THE LIMITS OF A SINGLE WATERSHED OF THE PRINCE WILLIAM COUNTY OCCOQUAN RIVER WATERSHED (HUC12 *.VAHU6 PL48).*

ADJACENT AREAS:

AREAS ADJACENT TO THE PROJECT LIMITS ARE AGRICULTURAL, LIGHT INDUSTRIAL AND RESIDENTIAL USES.

OFFSITE AREAS:

THERE IS NO ANTICIPATION THAT BORROW MATERIAL WILL BE NECESSARY FOR THIS PROJECT. IF DURING CONSTRUCTION THE CONTRACTOR REQUIRES OFFSITE BORROW MATERIAL, THIS EROSION CONTROL PLAN DOES NOT ADDRESS THESE AREAS AND THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING INDEPENDENT EROSION AND SEDIMENT CONTROL PLANS TO COVER OFFSITE.

SOILS:

THE SOILS ON THE SITE ARE PRIMARILY SANDY LOAM, A, B, AND D SOILS. SEE SHEET I FOR COMPLETE SOILS INFORMATION PROVIDED FROM PRINCE WILLIAM COUNTY GIS.

CRITICAL AREAS:

CRITICAL EROSION AREAS WITHIN THE PROJECT ARE LIMITED TO AREAS OF STEEP SLOPE AND WETLANDS. THE CONTRACTOR IS TO BE EXTRA DILIGENT WITH EROSION AND SEDIMENT CONTROL MEASURES AROUND THE FLOODPLAIN AND ANY EXISTING STORMWATER MANAGEMENT FACILITES LOCATED ON ADJACENT PROPERTIES, PROPOSED FACILITIES AND ADJACENT PROPERTIES. THE CONTRACTOR IS TO INSPECT AFTER EVERY RAIN AND RESTORE TO PROPOSED CONDITIONS.

EROSION AND SEDIMENT CONTROL MEASURES:

UNLESS OTHERWISE DIRECTED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION. DIVERSION DIKES, FILTER BARRIER, AND SILT FENCE FOR EXISTING STORM DRAINAGE STRUCTURES SHALL BE PLACED PRIOR TO EARTH MOVING OPERATIONS. THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

MAINTENANCE PROGRAM:

THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (IE. SEEDED, MULCHED, OR SODDED AREAS) ON A DAILY BASIS AND AFTER EACH RAINFALL EVENT TO ENSURE THAT ALL CONTROLS ARE FUNCTIONING PROPERLY. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR. INLET PROTECTION. SEDIMENT TRAPS. SILT FENCE AND CHECK DAMS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE. AND IF THE GRAVEL IS CLOGGED BY SEDIMENT. IT SHALL BE REMOVED AND CLEANED OR REPLACED. THE SITE FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. AND SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALFWAY TO THE TOP OF THE BARRIER. AND THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AND AREAS SHALL BE FERTILIZED AND RESEEDED AS NEEDED. ANY DAMAGED CONTROLS SHALL BE REPAIRED BY THE END OF THE WORK DAY. INCLUDING RESEEDING AND MULCHING IF NECESSARY AT THE INSPECTOR'S APPROVAL.

TEMPORARY AND PERMANENT STABILIZATION:

TEMPORARY AND PERMANENT STABILIZATION SHALL BE APPLIED TO ALL DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADING IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS LEFT DORMANT FOR MORE THAN ONE YEAR. DISTURBED AREAS WITHIN 100 FEET OF DELINEATED WETLANDS SHALL BE CONTINUOUSLY PROSECUTED UNTIL COMPLETED AND STABILIZED IMMEDIATELY UPON COMPLETION OF THE WORK IN EACH IMPACTED AREA.

STORMWATER RUNOFF CONSIDERATIONS:

THE PROJECT PROPOSES ONE STORMWATER MANAGEMENT FACILITY FOR WATER QUANTITY PURPOSES. WATER QUALITY WILL BE MET WITH THE PURCHASE OF ALL REQUIRED NUTRIENT CREDITS. OUTFALLS AND MODIFICATIONS TO EXISTING FACILITIES WILL MEET THE MS-19 AND VDOT REGULATIONS.

CALCULATIONS

ALL PERMANENT FACILITY CALCULATIONS, AS WELL AS OUTFALL AND RUNOFF CALCULATIONS CAN BE FOUND IN THE DRAINAGE REPORT.

PHASE I LAND DISTURBING/ CONSTRUCTION SEQUENCE:

1. FLAG LIMITS OF CLEARING
2. INSTALL TEMPORARY CONTROLS INCLUDING SILT FENCE. ROCK CHECK DAMS AND INLET PROTECTION.
3. OBTAIN SITE INSPECTOR'S APPROVAL OF PERIMETER EROSION AND SEDIMENT CONTROLS.
4. AFTER INSPECTOR'S APPROVAL OF INITIAL CONTROLS. CLEAR AND GRUB REMAINDER OF THE SITE AS NECESSARY.
5. STABILIZE ALL DENUDED AREAS ACCORDING TO THE SECTION TEMPORARY AND PERMANENT STABILIZATION.

PHASE II LAND DISTURBING SEQUENCE:

1. CONSTRUCT PROPOSED STORM SEWER SYSTEM AND PROPOSED CULVERTS.
INSTALL INLET PROTECTIONS AT ALL APPLICABLE LOCATIONS. CONSTRUCT DITCH AND LINING AT ALL APPLICABLE LOCATIONS.
2. ROUGH GRADE THE REMAINDER OF THE SITE.
3. INSTALL ALL CURB AND GUTTER AND PLACE BASE STONE PAVEMENT.
4. FINE GRADE SITE AND INSTALL ALL PERMANENT SEEDING AND FERTILIZE ALL GRASSED AREAS.
5. REMOVE ALL EROSION CONTROL MEASURES.
6. CLEAN SITE OF ALL TRASH AND DEBRIS.
7. HAVE THE INSPECTOR INSPECT ALL AREAS TO DETERMINE IF THEY AREA ADEQUATELY STABILIZED.

STORAGE YARD/LAY DOWN YARD

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF THE EQUIPMENT STORAGE AREA. THIS AREA MUST STAY WITHIN THE PROJECT'S LIMITS OF CONSTRUCTION. UNLESS AN OFF-SITE AREA IS COORDINATED AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INDEPENDENT E&S CONTROL PERMITS TO COVER ANY OFF-SITE IMPACTS.

EROSION AND SEDIMENT CONTROL STRUCTURES

- SAFETY FENCE (3.01):
A protective barrier installed to prevent access to an erosion control measure.

- TEMPORARY STONE CONSTRUCTION ENTRANCE (3.02):
A stabilized stone pad with a filter fabric underliner located at points of vehicular ingress and egress on a construction site. (Per VDOT Standard EC-11)

- CONSTRUCTION ROAD STABILIZATION (3.03):
The temporary stabilization of access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes with stone immediately after grading. (Per VDOT Standard EC-11)

- TEMPORARY SILT FENCE (3.05):
A temporary sediment barrier consisting of a synthetic filter fabric stretched across and attached to supporting posts and entrenched. (Per VDOT Standard EC-5)

- STORM DRAIN INLET PROTECTION (3.07):
A sediment filter or an excavated impounding area around a storm drain drop inlet or curb inlet. (Per VDOT Standard EC-6 Type A and B)

- CULVERT INLET PROTECTION (3.08):
A sediment filter located at the inlet to storm sewer culverts. (Per VDOT Standard EC-6 Type C)

- TEMPORARY DIVERSION DIKE (3.09):
A temporary ridge of compacted soil constructed at the top or base of a sloping disturbed area. (Per VDOT Standard EC-9)

- DIVERSION (3.12):
A channel constructed across a slope with a supporting earthen ridge on the lower side. (Per VDOT Standard EC-12)

- TEMPORARY SEDIMENT TRAP (3.13):
A temporary ponding area formed by constructing an earthen embankment with a stone outlet. (Per VDOT Standard EC-7)

- TEMPORARY SEDIMENT BASIN (3.14):
A temporary barrier or dam with a controlled stormwater release structure formed by constructing an embankment of compacted soil across a drainway.

- STORMWATER CONVEYANCE CHANNEL (3.17):
A permanent, designed waterway, shaped, sized, and lined with appropriate vegetation or structural material used to safely convey stormwater runoff within or away from a developing area.

- OUTLET PROTECTION (3.18):
Structurally lined aprons or other acceptable energy dissipating devices placed at the outlets of pipes or paved channel sections. (Per VDOT Standard EC-1)

- ROCK CHECK DAMS (3.20):
Small temporary stone dams constructed across a swale or drainage ditch. (Per VDOT Standard EC-4)

-TEMPORARY VEHICULAR STREAM CROSSING (3.24):
A temporary structural span installed across a flowing watercourse for use by construction traffic. (Per VDOT Standard EC-14)

- TEMPORARY SEEDING (3.31):
The establishment of a temporary vegetative cover on disturbed areas by seeding with appropriate rapidly growing annual plants. Temporary seeding shall be done in accordance with Virginia Erosion and Sediment Control Handbook standard and specification 3.31.

- PERMANENT SEEDING (3.32):
All areas disturbed by construction shall be stabilized with permanent seeding immediately following finished grading. Seeding shall be done according to Virginia Erosion and Sediment Control Handbook standard and specification 3.32, PERMANENT SEEDING.

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CHECKLIST

FOR EROSION AND SEDIMENT CONTROL PLANS

✓ Minimum Standards - All applicable Minimum Standards must be addressed.

NARRATIVE

✓ Project description - Briefly describes the nature and purpose of the land-disturbing activity, and the area (acres) to be disturbed.

✓ Existing site conditions - A description of the existing topography, vegetation and drainage.

✓ Adjacent areas - A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.

✓ Off-site areas - Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.). Will any other areas be disturbed?

✓ Soils - A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil structure.

✓ Critical areas - A description of areas on the site which have potentially serious erosion problems (e.g., steep slopes, channels, wet weather/ underground springs, etc.).

✓ Erosion and sediment control measures - A description of the methods which will be used to control erosion and sedimentation on the site. (Controls should meet the specifications in Chapter 3.)

✓ Permanent stabilization - A brief description, including specifications, of how the site will be stabilized after construction is completed.

✓ Stormwater runoff considerations - Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff.

✓ Calculations - Detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc. Include calculations for pre- and post-development runoff.

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Checklist (continued)

SITE PLAN

✓ Vicinity map - A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site.

✓ Indicate north - The direction of north in relation to the site.

✓ Limits of clearing and grading - Areas which are to be cleared and graded.

✓ Existing contours - The existing contours of the site.

✓ Final contours - Changes to the existing contours, including final drainage patterns.

✓ Existing vegetation - The existing tree lines, grassed areas, or unique vegetation.

✓ Soils - The boundaries of different soil types.

✓ Existing drainage patterns - The dividing lines and the direction of flow for the different drainage areas. Include the size (acreage) of each drainage area.

✓ Critical erosion areas - Areas with potentially serious erosion problems. (See Chapter 6 for criteria.)

✓ Site Development - Show all improvements such as buildings, parking lots, access roads, utility construction, etc.

✓ Location of practices - The locations of erosion and sediment controls and stormwater management practices used on the site. Use the standard symbols and abbreviations in Chapter 3 of this handbook.

N/A Off-site areas - Identify any off-site land-disturbing activities (e.g., borrow sites, waste areas, etc.). Show location of erosion controls. (Is there sufficient information to assure adequate protection and stabilization?)

N/A Detail drawings - Any structural practices used that are not referenced to the E&S handbook or local handbooks should be explained and illustrated with detail drawings.

✓ Maintenance - A schedule of regular inspections and repair of erosion and sediment control structures should be set forth.

SCALE	PROJECT	SHEET NO.
0 25' 50'		10(2)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC. DECEMBER 2019 _____.

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

GENERAL NOTES

GRADING

G-1 The grade line denotes top of finished pavement unless shown otherwise on typical sections or plans.

G-3 Earthwork quantities on this project are based on anticipated settlement and may require adjusting during construction. Payment will be made only for quantities actually moved.

G-4 The cost of removal of all existing concrete items located in the area to be graded, including, but not limited to the following, shall be included in the price bid for regular excavation: _____

G-5 The excavation of unsuitable material as specified on these plans is based on previously conducted subsurface soil investigation. If, during construction, it is deemed necessary to change the depth more than one foot, or the limits of such excavation, such change is to be made at the direction of the Engineer and measurement and payment shall be made in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications.

G-6 The borrow material for this project shall be a minimum CBR_____ or as approved by the Materials Engineer.

DRAINAGE

D-1 The horizontal location of all drainage structures shown on these plans is approximate only, with the exception of structures showing specific stations, special design bridges and storm sewer systems.

D-2 The horizontal location and invert elevations shown for proposed culverts and storm sewer outfall pipes are based on existing survey data and required design criteria. If during construction, it is found that the horizontal location or invert elevations shown on the plans differ significantly from the horizontal location or elevations of the stream or swale in which the culvert or storm sewer outfall pipe is to be placed, the Engineer shall confer with, and get approval from, the applicable District Drainage Engineer before installing the culvert or storm sewer outfall pipe.

D-3 The "H" dimensions shown on plans for drop inlets and junction boxes and the "L.F." dimensions shown for manholes are for estimating purposes and are based on the proposed invert elevations shown for the structure and the anticipated top (rim) elevation based on existing or proposed finished grade. The actual "H" or "L.F." dimensions are to be determined by the contractor from field conditions.

D-6 Pipes shall conform to any of the allowable types shown on sheet number 2K, within the applicable height of cover limitations.
For strength, sheet thickness, or class designation; available sizes; height of cover limitations;and other restrictions for a particular pipe type or height of cover, see the VDOT Road and Bridge Standard PC-1. Structural plate pipe may be substituted for corrugated pipe of the same size, provided the substitution complies with the applicable sections of the VDOT Road and Bridge Standards PC-1.

D-8 Where open joint pipe is to be used, no joint shall be opened a distance exceeding 25% of the spigot length. Sealing of the pipe joint shall be in accordance with Section 302 of the applicable VDOT Road and Bridge Specifications.

D-12 All existing drainage facilities labeled "To Be Abandoned" shall be left in place, backfilled and plugged in accordance with the VDOT Road and Bridge Standard PP-1. Basis of Payment will be C.Y. of Flowable Backfill.

D-13 Existing drainage facilities being utilized as a part of the drainage system, and designated on the plans "To Be Cleaned Out" shall be cleaned as directed by the Engineer. The cost incidental to this shall be included in the contract price for other items.

D-14 Proposed drop inlets with a height (H) less than the standard minimum shown in the VDOT Road and Bridge Standards shall be considered and paid for as Standard Drop Inlets for the type specified. Pipes with less than standard minimum finished height of cover shall be noted as such in the drainage description for the pipe. Specific pipe bedding and cover requirements are provided in the applicable PB-1 and PC-1 standard drawings of the VDOT Road and Bridge Standards.

D-16 When CG-6 or CG-7 is specified on a radius (such as at a street intersection), the Engineer may approve a decrease in the cross slope of the gutter to facilitate proper drainage.

D-17 St'd. SL-1 Safety Slab locations are based on the assumed use of precast structures. If cast-in-place structures are utilized, and the interior chamber dimensions (length and width, or diameter) are less than 4 feet, the safety slabs shall not be installed.

PAVEMENT

P-2 The pavement materials on this project will be paid for on a tonnage basis. The weight will vary in accordance with the specific gravity of the aggregates and the asphaltic content of the mix actually used to secure the design depth. The weight of the asphalt concrete is based on 95% of the theoretical maximum density.

INCIDENTALS

I-5 That portion of the right of way lying within the Clear Zone or within a minimum of 10 feet from the edge of pavement or surfacing or within the limits of the construction slopes beyond 10 feet, shall be cleared and grubbed in accordance with the applicable VDOT Road and Bridge Specifications, Section 301, where sufficient right of way or construction easement is provided.

I-9 When no centerline alignment is shown for a proposed entrance, the entrance shall be constructed in the same location as the existing entrance.

I-10 St'd. RM-1 Right of Way monuments shall be set by the Contractor.

I-12 St'd. RM-2 right of way monuments shall be set by the Contractor.

I-16 The "underground utilities" survey data on this project has been provided by consultant and copies are available from the Department.

I-17 For method of constructing Straight-Line Taper Lanes in curb and/or curb and gutter sections, see typical details on Sheet 2A.

I-18 All pavement markings and traffic flow arrows shown on the roadway construction plans are schematic only. The actual location and application of pavement markings shall be in accordance with Section 704 of the applicable VDOT Road and Bridge Specifications, MUTCD, sequence of construction/ traffic control plans, pavement marking plan sheets 9(1) thru 9(2) and as directed by the Engineer.

I-19 The following outside sources, under contract with VDOT, have provided information on this project.

Hydraulic Design	- Rinker Design Associates, P.C.
Roadway Design	- Rinker Design Associates, P.C.
Utility Design	- Rinker Design Associates, P.C.
Utility Designation	- Accumark
Utility Location	- Accumark
Survey	- Rinker Design Associates, P.C.
Bridge Design	- N/A
Traffic Design	- Rinker Design Associates, P.C.
Landscape Design	- N/A

If questions or problems arise during construction, please contact the Area Construction Engineer. DO NOT CONTACT THE OUTSIDE SOURCES.

I-20 The Official Electronic PDF Version of the plans will override the paper copies or prints of specific layers.

Portions of this plan assembly have been CADD generated. To assist in the preparation of the bid and construction of the project, Microstation format (.dgn) files will be made available to the prime contractor during bids and after award of the contract.

I-21 All electronic plan assemblies will include the construction plans in two formats: PDF files and MicroStation format (.dgn) files. Only the PDF files will be considered as part of the official plan assembly.

The MicroStation format (.dgn) files are furnished only as information for the contractor. These plans are developed in layers (levels) to aid in readability. (See the VDOT CADD Manual for CADD Level Structure). However, the construction items may or may not be in the proper layering scheme as described in the VDOT CADD Manual. The Microstation files will only match the scanned files if all required levels are turned on. A Microstation Software license is required to be able to read these files.

STORMWATER MANAGEMENT

S-1 CLEARING AND GRUBBING OF SWM BASIN SITE - The area where the dam is to be constructed and the area upstream of the dam, to an elevation equal to the crest of the dam (maximum ponded water elevation), shall be cleared and grubbed in accordance with Section 301 of the applicable VDOT Road and Bridge Specifications.

S-2 SWM BASIN DAM CONSTRUCTION - The dam for detention basins (no permanent pool) shall conform to the details contained in the plans and shall be constructed in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications. The native material on which the dam will set shall meet the specifications for AASHTO Type A-4 or finer material. Where the native material does not meet this requirement, the area beneath the dam is to be excavated a minimum of 4' and backfilled with a material meeting the AASHTO Type A-4 or finer classification unless otherwise specified in the plans. The material used for the embankment of the dam shall be AASHTO Type A-4 or finer or otherwise specified in the plans. Dams with foundation and embankment material not meeting the above requirements or dams greater than 15' in height, or dams for retention basins (permanent pool) shall incorporate a membrane-lined trench, a homogenous embankment with seepage controls, a zoned embankment or other such approved designs as specified in the plans.

S-3 SWM BASIN OUTLET PIPE - The pipe culvert under or through the dam for detention basins (no permanent pool) shall be reinforced concrete pipe with rubber gaskets in accordance with Section 232 and 212 of the applicable VDOT Road and Bridge Specifications. A concrete cradle shall extend the full length of the pipe culvert in accordance with the Standard Drawings. The connection between the pipe culvert and the SWM-1 Drainage Structure (or other control structure) shall be made watertight as approved by the Engineer and the cost shall be included in the price bid for pipe.

S-4 The SWM-1 Drainage Structure (or other control structure) shall have 4" high numbers and 1" wide stripes painted at 1' intervals as shown on the Standard Drawings or detail sheets. The numbers and stripes are to be installed at the time of the initial installation of the SWM-1 Drainage Structure (or other control structure). Paint and application shall be in accordance with Section 231 and 411 of the applicable VDOT Road and Bridge Specifications and the cost is to be included in the price bid for the applicable structure.

S-5 All SWM Basins designated for use as temporary sediment basins shall be constructed during the initial phase of earth moving activities or as specified by the plans or directed by the Engineer. During project construction, the SWM-1 Drainage Structure (or other control structure) shall be modified in accordance with the Standard Drawings or plan details in order to provide a temporary sediment basin with both a "wet" storage volume (permanent pool) and a "dry" storage volume. Sediment accumulated in the basin shall be removed when the volume of the "wet" storage (permanent pool) has been reduced by 50%. Sediment shall be disposed of in accordance with Section 106.04 of the applicable VDOT Road and Bridge Specifications. When project construction is complete to a stage where no additional sediment from the project is expected to enter the basin, as determined by the Engineer, the basin shall be cleaned out and restored to the original design elevations, the area stabilized and all temporary modifications to the SWM-1 Drainage Structure (or other control structure) removed.

EROSION AND SEDIMENT CONTROL (ESC)

E-1 If the removal of Brush Silt Barrier is specified by the plans or required by the Engineer, the cost of removal and disposal of brush shall be in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.

E-2 Rock for Check Dams, Inlet Protection, Erosion Control Stone and Riprap shall be in accordance with Section 203 and Section 414 of the applicable VDOT Road and Bridge Specifications.

E-3 The following symbols are used to depict Erosion Control items in the plan assembly:

EC-2, Ty. 1 / EC-2, Ty. 2 / EC-2, Ty. 3 / EC-2, Ty. 4	Denotes Rolled Erosion Control Product, Temporary, St'd. EC-2 Type 1, 2, 3 or 4
EC-3, Ty. 1 / EC-3, Ty. 2 / EC-3, Ty. 3	Denotes Rolled Erosion Control Product, Permanent, St'd. EC-3 Type 1, 2 or 3
TSF-A / TSF-B	Denotes Temporary Silt Fence, St'd EC-5 Type A or B
TCD	Denotes Temporary Check Dam, St'd EC-16
TDC	Denotes Temporary Diversion Channel, St'd EC-12
DD	Denotes Temporary Diversion Dike, St'd EC-9
TC-I	Denotes Turbidity Curtain, Type - Impervious
TC-P	Denotes Turbidity Curtain, Type - Pervious
RCD-1	Denotes Rock Check Dam, Type I; St'd EC-4
RCD-2	Denotes Rock Check Dam, Type II; St'd EC-4
IP-A	Denotes Inlet Protection, Type A; St'd EC-6
IP-B	Denotes Inlet Protection, Type B; St'd EC-6
TSI	Denotes Slope Interrupter; St'd EC-15
CE	Denotes Temporary Stone Construction Entrance

E-4 Permanent vegetation shall be established on all denuded areas not otherwise stabilized with non-erodible materials. See the E&S notes/details sheet for details on permanent vegetation establishment.

5/5/2022

	PROJECT	SHEET NO.
		2

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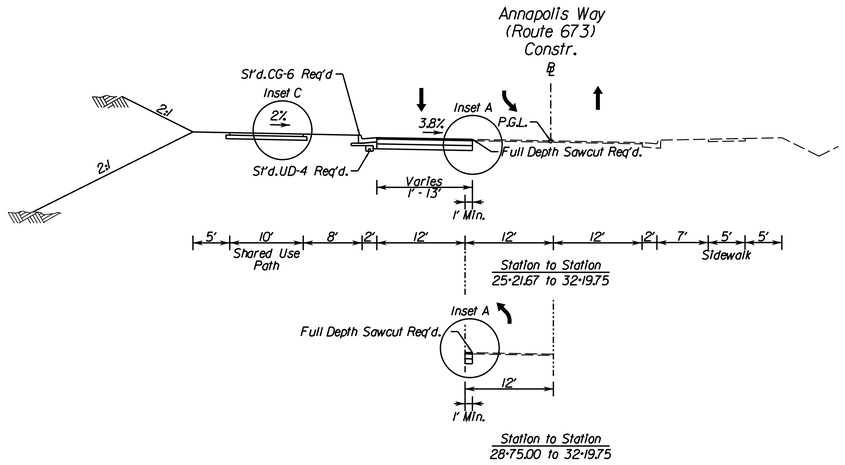
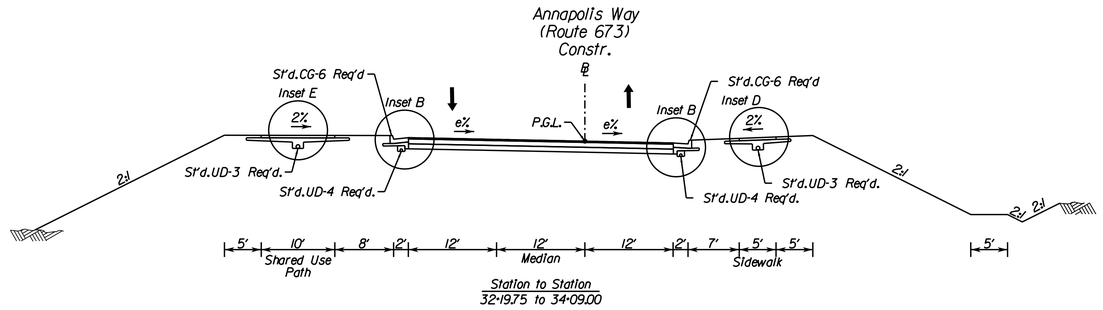
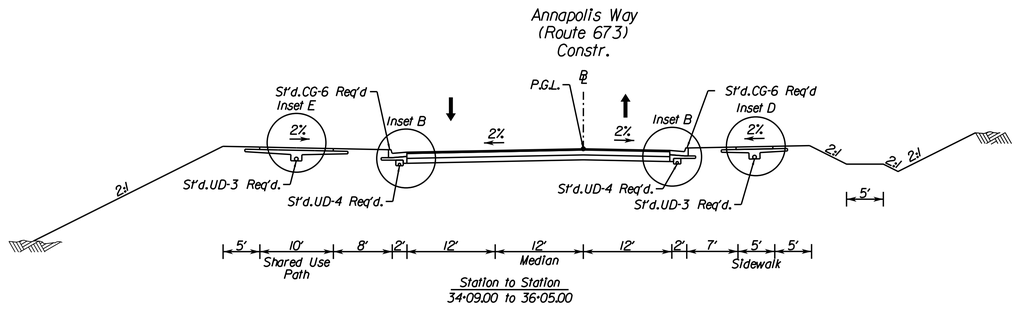
RW PLAN

PROJECT MANAGER PWC_DEPT.OF_TRANSPORTATION:SHERRY. DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER_DESIGN_ASSOCIATES,P.C.(703) 368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER_DESIGN_ASSOCIATES,P.C.(703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC._DECEMBER_2019 _____.

Typical Sections



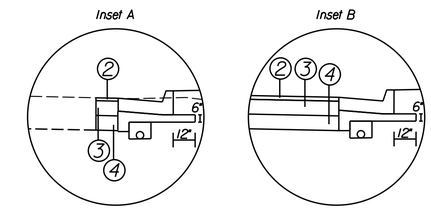


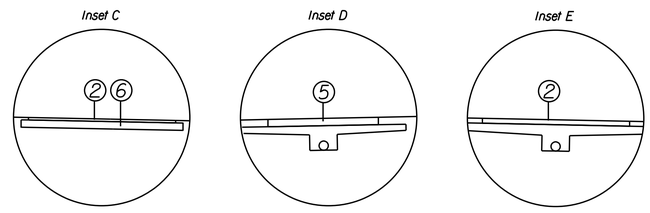


REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer





① Mill 2" and replace with 2" SM-9.5A

② 2" Asphalt Concrete,Type SM-9.5A estimated at 220 lbs/yd2

③ 8" Asphalt Concrete,Type BM-25.0A

④ 8" Aggregate Base Material,Type I,Size No.21B

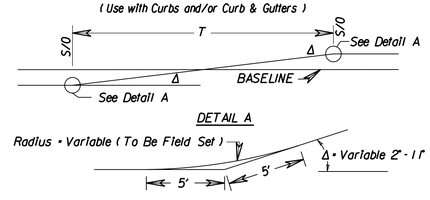
⑤ 4" Hydraulic Cement Concrete Sidewalk (Class A3)

⑥ 6.0" Aggregate Base Material,Type I,Size 21B, extended 6" beyond the the edge of the asphalt concrete pavement on both sides

⑦ 4" Aggregate Base Material,Type I,Size No.21B extended 4" on either side of the surface

TYPICAL STRAIGHT - LINE TAPER LANE

(Use with Curbs and/or Curb & Gutters)



T - See plans for Length of T.

S/O - See plans for Stations and Offsets.

	PROJECT	SHEET NO.
		2A

5/5/2022

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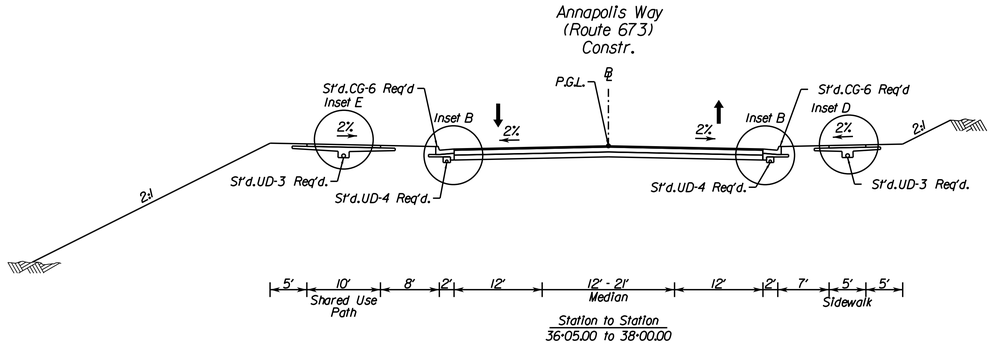
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

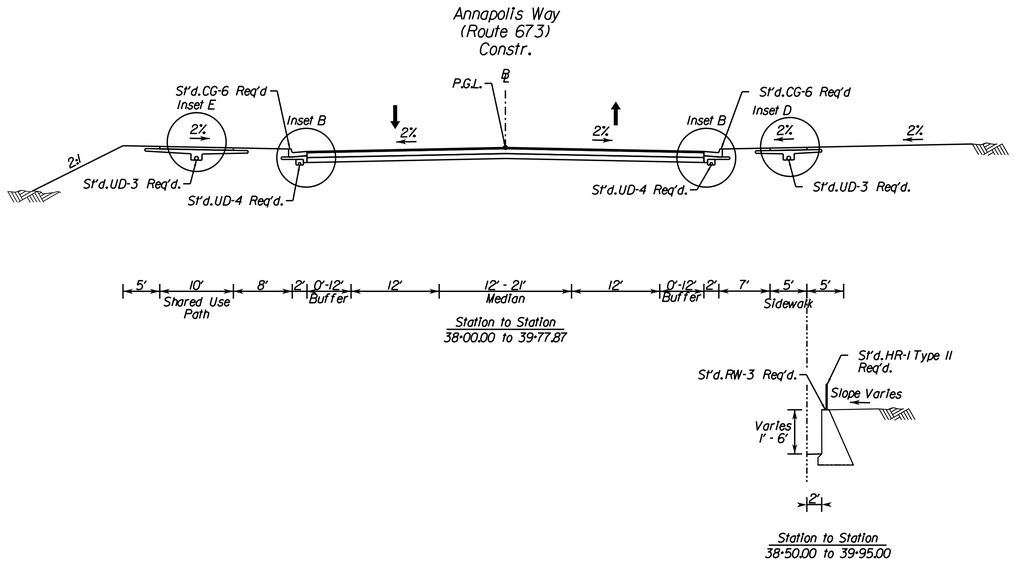
Typical Sections

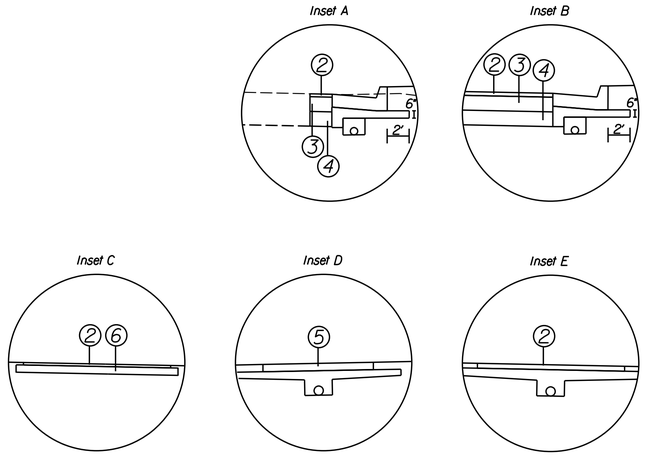
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2A(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer







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④ 8" Aggregate Base Material, Type I, Size No. 21B
⑤ 4" Hydraulic Cement Concrete Sidewalk (Class A3)
⑥ 6.0" Aggregate Base Material, Type I, SIze 21B, extended 6" beyond the the edge of the asphalt concrete pavement on both sides

	PROJECT	SHEET NO.
		2A(1)

5/5/2022

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2E

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

EXISTING DRAINAGE DESCRIPTION

Structures A001 to A055

Note:
Inaccessible(1) - Structure Is Not Accessible Due to Traffic
Inaccessible(2) - Structure Is Full of Silt and Debris
Inaccessible(3) - Invert cannot be confirmed, possible Blind Connection
Pipe(4) - Inaccessible Pipe, Type & Size Cannot be Determined, possibly recessed, can't remove grate, etc.

A001 *In Pl. DI Grate*
Top = 86.10'
Inv. Out = 81.10'

A001 to A002 *In Pl. 289LF- 18" RCP*
Inv. In = 81.10'
Inv. Out = 76.38'

A002 *In Pl. CDI*
Top = 79.01'
Inv. In = 76.38' (From Str. A001)
Inv. Out = 76.23'

A002 to A004 *In Pl. 225LF- 18" RCP*
Inv. In = 76.23'
Inv. Out = 74.17'

A003 *In Pl. CDI*
Top = 76.50'
Inv. Out = 74.39

A003 to A004 *In Pl. 21LF- 18" RCP*
Inv. In = 74.39'
Inv. Out = 74.28'

A004 *In Pl. CDI*
Top = 78.80'
Inv. In = 74.17' (From Str. A002)
Inv. In = 74.28' (From Str. A003)
Inv. Out = 74.07'

A004 to A005 *In Pl. 58LF- 27" RCP*
Inv. In = 74.07'
Inv. Out = 73.40'

A005 *In Pl. CDI*
Top = 78.62'
Inv. In = 73.40' (From Str. A004)
Inv. Out = 73.27'

A005 to A006 *In Pl. 277LF- 27" RCP*
Inv. In = 73.27'
Inv. Out = Pipe(4)

A006 *In Pl. CDI*
Top = 77.16'
Inv. In = Pipe(4) (From Str. A005)
Inv. Out = Pipe(4)

A007 *In Pl. CDI*
Top = 75.35'
Inv. Out = 71.80'

A008 *In Pl. CDI*
Top = 78.47'
Inv. Out = Inaccessible(2)

A009 *In Pl. CDI*
Top = 78.08'
Inv. Out = 72.62'

A009 to A011 *In Pl. 125LF- 15" RCP*
Inv. In = 72.62'
Inv. Out = 71.24'

A010 *In Pl. DI Grate*
Top = 73.60'
Inv. Out = 69.70'

A010 to A011 *In Pl. 76LF- 24" RCP*
Inv. In = 69.70'
Inv. Out = 70.64'

A011 *In Pl. Storm MH*
Top = 77.64'
Inv. In = 71.24' (From Str. A009)
Inv. In = 70.64' (From Str. A010)
Inv. Out = 70.24'

A011 to A012 *In Pl. 142LF- 27" RCP*
Inv. In = 70.24'
Inv. Out = 69.86'

A012 *In Pl. CDI*
Top = 76.46'
Inv. In = 69.86' (From Str. A011)
Inv. Out = 69.86'

A012 to A013 *In Pl. 233LF- RCP*
Inv. In = 69.86'
Inv. Out = 69.01'

A013 *In Pl. CDI*
Top = 74.69'
Inv. In = 69.01' (From Str. A012)
Inv. Out = 69.00'

A014 *In Pl. CDI*
Top = 76.22'
Inv. Out = Vacated

A015 *In Pl. DI Grate*
Top = 79.91'
Inv. Out = 75.04'

A016 *Conc.End Section*
Inv.= 75.43'

A016 to A017 *In Pl. 96LF- 15" RCP*
Inv. In = 75.43'
Inv. Out = 74.89'

A017 *In Pl. Storm MH*
Top = 78.31'
Inv. In = 74.89' (From Str. A016)
Inv. Out = 74.72'

A017 to A018 *In Pl. 166LF- 18" RCP*
Inv. In = 74.72'
Inv. Out = 74.48'

A018 *Conc.End Section*
Inv.= 74.48'

A019 *Conc.End Section*
Inv.= 74.25'

A019 to A020 *In Pl. 38LF- 24" RCP*
Inv. In = 74.25'
Inv. Out = 72.39'

A020 *In Pl. CDI*
Top = 77.02'
Inv. In = 72.39' (From Str. A019)
Inv. Out = 72.21'

A020 to A021 *In Pl. 50LF- 24" RCP*
Inv. In = 72.21'
Inv. Out = 69.71'

A021 *In Pl. CDI*
Top = 75.11'
Inv. In = 69.71' (From Str. A020)
Inv. Out = 69.63'

A021 to A023 *In Pl. 30LF- 24" RCP*
Inv. In = 69.63'
Inv. Out = 66.41'

A022 *In Pl. CDI*
Top = 72.62'
Inv. Out = 68.82'

A022 to A023 *In Pl. 41LF- 18" RCP*
Inv. In = 68.82'
Inv. Out = 66.41'

A023 *In Pl. Storm MH*
Top = 76.07'
Inv. In = 66.41' (From Str. A021)
Inv. In = 66.41' (From Str. A022)
Inv. Out = 66.41'

A023 to A029 *In Pl. 128LF- RCP*
Inv. In = 66.41'
Inv. Out = 65.65'

A024 *In Pl. DI Grate*
Top = 75.12'
Inv. Out = 70.52'

A024 to A025 *In Pl. 60LF- 15" RCP*
Inv. In = 70.52'
Inv. Out = 69.53'

A025 *In Pl. DI Grate*
Top = 74.23'
Inv. In = 69.53' (From Str. A024)
Inv. Out = 69.47'

A025 to A029 *In Pl. 66LF- 18" RCP*
Inv. In = 69.47'
Inv. Out = 65.65'

A026 *In Pl. DI Grate*
Top = 78.69'
Inv. Out = 71.69'

A026 to A028 *In Pl. 138LF- 18" RCP*
Inv. In = 71.69'
Inv. Out = 70.03'

A027 *In Pl. DI Grate*
Top = 76.21'
Inv. Out = 71.41'

A027 to A028 *In Pl. 62LF- 18" RCP*
Inv. In = 71.41'
Inv. Out = 70.06'

A028 *In Pl. DI Grate*
Top = 76.08'
Inv. In = 70.03' (From Str. A026)
Inv. In = 70.06' (From Str. A027)
Inv. Out = 69.28'

A028 to A029 *In Pl. 127LF- 30" RCP*
Inv. In = 69.28'
Inv. Out = 65.65'

A029 *In Pl. Storm MH*
Top = 75.57'
Inv. In = 65.65' (From Str. A023)
Inv. In = 65.65' (From Str. A025)
Inv. In = 65.65' (From Str. A028)
Inv. Out = 65.65'

A029 to A030 *In Pl. 241LF- 48" RCP*
Inv. In = 65.65'
Inv. Out = 64.17'

A030 *In Pl. Storm MH*
Top = 77.19'
Inv. In = 64.17 (From Str. A029)
Inv. Out = 64.13'

A030 to A031 *In Pl. 205LF- 48" RCP*
Inv. In = 64.13'
Inv. Out = 62.26'

A031 *In Pl. DI Grate*
Top = 78.57'
Inv. In = 62.26' (From Str. A030)
Inv. Out = 61.44'

A031 to A032 *In Pl. 98LF- 48" RCP*
Inv. In = 61.44'
Inv. Out = 58.50'

A032 *Conc.End Section*
Inv.= 58.50' (From Str. A031)

A033 *In Pl. CDI*
Top = 72.96'
Inv. Out = Pipe(4)

A034 *In Pl. CDI*
Top = 75.67'
Inv. Out = 71.75'

A034 to A035 *In Pl. 125LF- 15" RCP*
Inv. In = 71.75'
Inv. Out =

A035 *In Pl. DI Grate*
Top = 75.75'
Inv. In = (From Str. A034)
Inv. Out =

A035 to A037 *In Pl. 25LF- ?" RCP*
Inv. In =
Inv. Out = 66.92'

A036 *In Pl. CDI*
Top = 76.64'
Inv. Out = 70.16'

A036 to A037 *In Pl. 50LF- 15" RCP*
Inv. In = 70.16'
Inv. Out = 66.36'

A037 *In Pl. CDI*
Top = 75.55'
Inv. In = 66.92' (From Str. A035)
Inv. In = 66.36' (From Str. A036)
Inv. Out = 66.18'

A037 to A038 *In Pl. 28LF- 15" RCP*
Inv. In = 66.18'
Inv. Out = 65.87'

A038 *In Pl. CDI*
Top = 74.50'
Inv. In = 65.87' (From Str. A037)
Inv. Out = 65.85'

A038 to A039 *In Pl. 43LF- 15" RCP*
Inv. In = 65.85'
Inv. Out = 65.23'

A039 *In Pl. CDI*
Top = 72.97'
Inv. In = 65.23' (From Str. A038)
Inv. Out = 65.16'

A039 to A040 *In Pl. 71LF- 15" RCP*
Inv. In = 65.16'
Inv. Out = 63.34'

A040 *In Pl. CDI*
Top = 71.78'
Inv. In = 63.34' (From Str. A039)
Inv. Out = 63.14'

A040 to A041 *In Pl. 107LF- 15" RCP*
Inv. In = 63.14'
Inv. Out = 60.97'

A041 *In Pl. CDI*
Top = 66.28'
Inv. In = 60.97' (From Str. A040)
Inv. Out = 60.30'

A042 *In Pl. DI Grate*
Top = 81.92'
Inv. In = 72.27'
Inv. Out = 72.25'

A042 to A044 *In Pl. 193LF- 24" RCP*
Inv. In = 72.25'
Inv. Out = 70.68'

A043 *In Pl. DI Grate*
Top = 81.77'
Inv. Out = 78.27'

A043 to A044 *In Pl. 19LF- 15" RCP*
Inv. In = 78.27'
Inv. Out = 78.11'

A044 *In Pl. Strom MH*
Top = 83.44'
Inv. In = 70.68' (From Str. A042)
Inv. In = 78.11' (From Str. A043)
Inv. Out = 70.66'

A044 to A045 *In Pl. 100LF- 24" RCP*
Inv. In = 70.66'
Inv. Out = 70.29'

A045 *In Pl. DI Grate*
Top = 83.29'
Inv. In = 70.29' (From Str. A044)
Inv. Out = 69.99'

A045 to A046 *In Pl. 419LF- 24" RCP*
Inv. In = 69.99'
Inv. Out = 68.62'

A046 *In Pl. DI Grate*
Top = 79.92'
Inv. In = 68.62' (From Str. A045)
Inv. Out = 68.42'

A046 to A047 *In Pl. 200LF- 30" RCP*
Inv. In = 68.42'
Inv. Out = 65.56'

A047 *In Pl. Storm MH*
Top = 82.86'
Inv. In = 65.56' (From Str. A046)
Inv. Out = 61.66'

A047 to A048 *In Pl. 59LF- 30" RCP*
Inv. In = 61.66'
Inv. Out = 59.13'

A048 *Conc.End Section*
Inv.= 59.13' (From Str. A047)

A049 *Conc.End Section*
Inv.= 71.43'

A049 to A050 *In Pl. 143LF- 18" RCP*
Inv. In = 71.43'
Inv. Out = 68.90'

A050 *In Pl. CDI*
Top = 72.96'
Inv.= 68.90' (From Str. A049)
Inv. Out = 68.36'

A050 to A051 *In Pl. 40LF- 24" RCP*
Inv. In = 68.36'
Inv. Out = 67.94'

A051 *In Pl. Storm MH*
Top = 73.25'
Inv.= 67.94' (From Str. A050)
Inv.= 68.43'
Inv. Out = 67.83'

A052 *In Pl. CDI*
Top = 72.65'
Inv. Out = 68.88'

A052 to A053 *In Pl. 88LF- 18" RCP*
Inv. In = 68.88'
Inv. Out = 67.95'

A053 *In Pl. CDI*
Top = 72.91'
Inv. In = 67.95' (From Str. A052)
Inv. Out = 67.62'

A053 to A054 *In Pl. 169LF- 21" RCP*
Inv. In = 67.62'
Inv. Out = 66.07'

A054 *In Pl. CDI*
Top = 72.93'
Inv. In = 66.07' (From Str.A053)
Inv. Out = 65.69'

A054 to A055 *In Pl. 269LF- 24" RCP*
Inv. In = 65.69'
Inv. Out = 62.98'

A055 *Conc.End Section*
Inv.= 62.98' (From Str.A054)

AI01 *In Pl. 72LF - 33" RCP*
Inv. In Headwall = 18.60'
Inv. Out = Buried

AI02 *In Pl. 92LF - 30" RCP*
Inv. In = 21.91'
Inv. Out = 21.07'

AI03 *In Pl. CDI*
Top = 27.78'
Inv. Out = 23.29'

AI03 to AI04 *In Pl. 28LF- 15" RCP*
Inv. In = 23.29'
Inv. Out = 22.68'

AI04 *In Pl. CDI*
Top = 26.69'
Inv. In = 22.68'
Inv. Out = 22.55'

AI04 to AI05 *In Pl. 40LF- 15" RCP*
Inv. In = 22.55'
Inv. Out = 22.45'

AI06 *In Pl. DI*
Top = 37.18'
Inv. Out = 34.98'

AI06 to AI07 *In Pl. 21LF- 15" RCP*
Inv. In = 34.98'
Inv. Out = 34.58'

AI07 *In Pl. CDI*
Top = 39.55'
Inv. In (AI06) = 34.58'
Inv. In (SE) = 34.05'
Inv. Out = 33.82'

AI07 to AI08 *In Pl. 70LF- 15" RCP*
Inv. In = 33.82'
Inv. Out = 32.71'

AI08 *In Pl. CDI*
Top = 38.31'
Inv. In (AI07) = 32.71'
Inv. In (S) = 31.70
Inv. Out = 30.14'

AI08 to AI09 *In Pl. 114LF- 27" RCP*
Inv. In = 30.14'
Inv. Out = 24.76'

	PROJECT	SHEET NO.
		2E

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Underdrain Summary

ROADWAY BASELINE	STATION		LOCATION	UD-1	UD-2	UD-3	UD-4		CD-1	CD-2	OUTLET PIPE	EW-12	REMARKS
	FROM	TO		6 INCH	6 INCH	6 INCH	4 INCH	6 INCH					
Annapolis Way	25+10	26+94	Left				191				2		Tie to 4-3
Annapolis Way	26+96	27+99	Left				107				2		Tie to 4-5
Annapolis Way	28+00	29+99	Left				208				2		Tie to 4-10
Annapolis Way	30+00	31+01	Left				106				2		Tie to 4-12
Annapolis Way	31+53	31+04	Left				64				2		Tie to 4-12
Annapolis Way	32+30	31+88	Left				74				2		Tie to Existing UD
Annapolis Way	34+13	32+32	Left				189				2		Tie to 4-15
Annapolis Way	35+25	34+14	Left				115				2		Tie to 5-2
Annapolis Way	37+22	35+27	Left				204				2		Tie to 5-10
Annapolis Way	37+98	37+24	Left				77				2		Tie to 5-9
Annapolis Way	38+76	38+00	Left				71				2		Tie to 5-6
Annapolis Way	39+78	38+80	Left				100				2		Tie to 5-7
Annapolis Way	32+30	31+06	Right				120				2		Tie to EX 3
Annapolis Way	34+13	32+32	Right				178				2		Tie to 4-14
Annapolis Way	36+01	34+15	Right				181				2		Tie to 5-1
Annapolis Way	38+03	36+03	Right				193				2		Tie to 5-3
Annapolis Way	39+78	38+04	Right				168				2		Tie to 5-5
Annapolis Way	31+03	31+03	Left							16			Tie to 4-12
Annapolis Way	39+78	32+36	Right			711					8		Tie to 4-14
Annapolis Way	39+97	32+39	Left			805					13		Tie to 4-15
Annapolis Way	38+70	38+36	Right						43		30		Tie to 5-5
Annapolis Way	38+70	38+42	Left						39		46		Tie to 5-6

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2H

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

5/5/2022

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SCALE 0 25' 50'	PROJECT	SHEET NO. 2H

RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019 _____.

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	673		2J

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

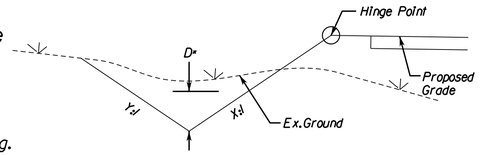
Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

Ditch Typicals

Typical Ditch "A" Roadside							
Annapolis Way	Station	to	Station	D* (ft)	X (ft)	Y (ft)	Lining
Right							
Ditch 1	32+36		33+89	2	2:1	2:1	N/A
Ditch 2	36+25		33+89	2	2:1	2:1	EC-2 Type I
Left							
Ditch 3	10+00		10+26	1	2:1	2:1	EC-2 Type I

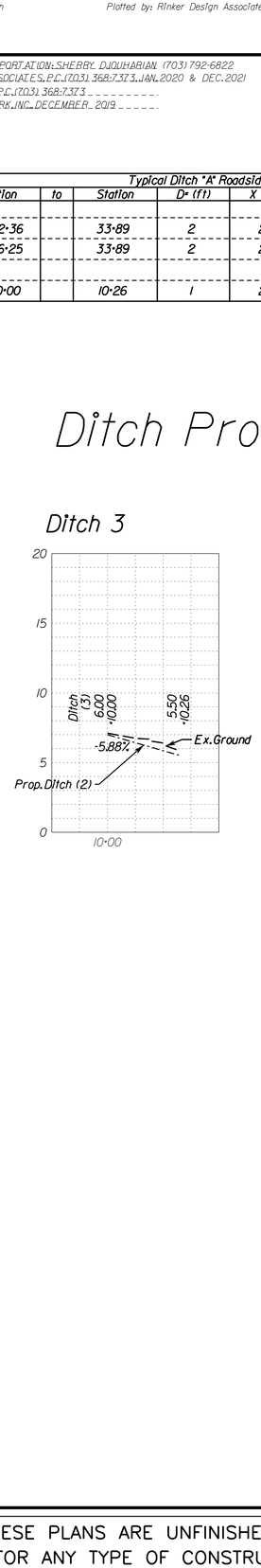
Typical Ditch "A" Roadside
Proposed Ditch

Note: Dimension "D" denotes minimum depth of ditch lining.



Ditch Profiles

Ditch 3



5/5/2022

	PROJECT	SHEET NO.
		2J

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RW PLAN

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION:SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019 _____.

Proposed Drainage Descriptions

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2K(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

Sheet 4

EX 3 — Modify Existing Drop Inlet
Modify to Accept Proposed 24" Pipe

4-3 — I-Std DI-3B Req'd.
L=4' H=5.8' Inv.=14.95 Top=20.70
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

4-3 to EX 7 — Existing Pipe to be Extended with 13' - 15" Conc Pipe Req'd (4' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)14.95 Inv(out)14.74

4-5 — I-Std DI-3B Req'd.
L=4' H=5.2' Inv.=13.95 Top=19.16
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

4-5 to EX 6 — Existing Pipe to be Extended with 13' - 15" Conc Pipe Req'd (4' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)13.95 Inv(out)13.73

4-10 — I-Std DI-3B Req'd.
L=4' H=3.9' Inv.=12.30 Top=16.23
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

4-10 to EX 4 — Existing Pipe to be Extended with 12' - 15" Conc Pipe Req'd (2' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)12.30 Inv(out)12.08

4-12 — I-Std DI-4C Req'd.
L=8' H=6.2' Inv.=9.31 Top=15.51
I-Std.IS-1 Req'd.
Dog House structure
Connect UD-4 to Structure

4-14 — I-Std DI-3B Req'd.
L=8' H=5.6' Inv.=10.20 Top=15.81
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

4-14 to EX 3 — 120' - 24" Storm Sewer Pipe Req'd (4' Cover)
(505' Radius with open joints - using 8' pipe joint lengths with full bevel)
Joints are to be opened a maximum of 25% of the spigot or tongue length.
Slit-Tight Joint Type Req'd.
Inv(In)10.20 Inv(out)9.73

4-15 — I-Std DI-3B Req'd.
L=6' H=6.0' Inv.=10.52 Top=16.53
I-Std.IS-1 Req'd.

4-15 to 4-14 — 44' - 15" Storm Sewer Pipe Req'd (5' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)10.52 Inv(out)10.30

4-16 — Modify Existing Curb Inlet
Convert to MH
I St'd MH-1 Frame and Cover Req'd
Adjust to Grade
Prop.Top Elev.= 15.03

Sheet 5

5-1 — I-Std DI-3B Req'd.
L=6' H=6.9' Inv.=14.00 Top=20.87
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

5-1 to 4-14 — 176' - 18" Storm Sewer Pipe Req'd (5' Cover)
(840' Radius with open joints - using 8' pipe joint lengths with full bevel)
Joints are to be opened a maximum of 25% of the spigot or tongue length.
Slit-Tight Joint Type Req'd.
Inv(In)14.00 Inv(out)10.30

5-2 — I-Std DI-3B Req'd.
L=10' H=4.8' Inv.=16.75 Top=21.56
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

5-2 to 5-1 — 41' - 15" Storm Sewer Pipe Req'd (3' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)16.75 Inv(out)16.50

5-3 — I-Std DI-3BB Req'd.
L=8' H=10' Inv.=20.50 Top=30.54
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

5-3 to 5-1 — 180' - 18" Storm Sewer Pipe Req'd (3' Cover)
(605' Radius with open joints - using 8' pipe joint lengths with full bevel)
Joints are to be opened a maximum of 25% of the spigot or tongue length.
Slit-Tight Joint Type Req'd.
Inv(In)20.50 Inv(out)16.25

5-5 — I-Std DI-3B Req'd.
L=10' H=4.8' Inv.=40.50 Top=45.25
I-Std.IS-1 Req'd.
Connect UD-4 to Structure

5-5 to 5-6 — 55' - 24" Storm Sewer Pipe Req'd (2' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)40.50 Inv(out)39.50

5-6 — I-Std DI-3BB Req'd.
L=8' H=10.7' Inv.=34.30 Top=45.00
I-Std.IS-1 Req'd.
0.5" Steel Plate Req'd.at Invert
Connect UD-4 to Structure

5-6 to 5-9 — 77' - 30" Storm Sewer Pipe Req'd (3' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)34.30 Inv(out)33.30

5-7 — I-Std DI-3BB Req'd.
L=6' H=9.8' Inv.=41.50 Top=51.29
I-Std.IS-1 Req'd.
Connect UD-4 to Structure
Connect to Existing 24" Pipe

5-7 to 5-6 — 81' - 24" Storm Sewer Pipe Req'd (3' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)41.50 Inv(out)40.00

5-8 — I-Std.ES-1 (24")
Inv.=44.76

5-8 to 5-5 — 32' - 24" Storm Sewer Pipe Req'd (2' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)44.76 Inv(out)41.25

5-9 — I-Std DI-3BB Req'd.
L=6' H=15.9' Inv.=23.00 Top=38.87
I-Std.IS-1 Req'd.
0.5" Steel Plate Req'd.at Invert
Connect UD-4 to Structure

5-9 to 5-10 — 203' - 30" Storm Sewer Pipe Req'd (2' Cover)
(645' Radius with open joints - using 8' pipe joint lengths with full bevel)
Joints are to be opened a maximum of 25% of the spigot or tongue length.
Slit-Tight Joint Type Req'd.
Inv(In)23.00 Inv(out)20.50

5-10 — I-Std DI-3BB Req'd.
L=10' H=18.1' Inv.=7.75 Top=25.88
I-Std.IS-1 Req'd.
0.5" Steel Plate Req'd.at Invert
Connect UD-4 to Structure

5-10 to 5-12 — 61' - 30" Storm Sewer Pipe Req'd (2' Cover)
Slit-Tight Joint Type Req'd.
Inv(In)7.75 Inv(out)7.00

5-12 — I-Std.ES-1 (30")
Inv.=7.00
5 CY St'd.EC-1 Class A1 Req'd.
Type A Installation Req'd.

EX 32 — Existing Manhole to be Modified
Top=59.00

5-11 — 120' - 72" Storm Sewer Pipe Class III Req'd.(8.4' Cover) (0 Degree Skew)
Inv(In) 6.20 Inv(out) 2.83
2-St'd.EW-2 Req'd.

Any Structure Labeled 'EX' Is from Bowman Plan #SPR2018-00412,#SPR2020-00004,and The Engineering Groupe Inc.Plan #SPR2019-00023

ALLOWABLE TYPE OF PIPE CULVERT (UNLESS OTHERWISE SHOWN ON PLANS)
(SEE ROAD AND BRIDGE STANDARD PC-1 FOR HEIGHT OF COVER LIMITATIONS FOR EACH TYPE)

LOCATION	CONCRETE	ALUMINUM COATED TYPE 2 CORRUGATED STEEL	POLYMER COATED (10/10) CORRUGATED STEEL	UNCOATED GALVANIZED CORRUGATED STEEL	GALVANIZED STEEL STRUCTURAL PLATE	GALVANIZED STEEL STRUCTURAL PLATE WITH THICKENED INVERT	CORRUGATED ALUMINUM ALLOY	CORRUGATED ALUMINUM ALLOY STRUCTURAL PLATE	POLYVINYLCHLORIDE (PVC) RIBBED WALL PIPE (SMOOTH INTERIOR)	POLYETHYLENE (PE) CORRUGATED TYPE C	POLYETHYLENE (PE) CORRUGATED TYPE S	POLYPROPYLENE (PP) TYPE D OR S
Entire Project	X		X				X	X	X	X	X	X
Entrances	X	X	X	X	X	X	X	X	X		X	X

ALLOWABLE TYPE OF STORM SEWER PIPE (UNLESS OTHERWISE SHOWN IN DRAINAGE DESCRIPTIONS)
(SEE ROAD AND BRIDGE STANDARD PC-1 FOR HEIGHT OF COVER LIMITATIONS FOR EACH TYPE)

LOCATION	CONCRETE	ALUMINUM COATED TYPE 2 STEEL SPIRAL RIB	POLYMER COATED (10/10) CORRUGATED STEEL SPIRAL RIB	POLYMER COATED (10/10) CORRUGATED STEEL DOUBLE WALL (SMOOTH INTERIOR)	ALUMINUM SPIRAL RIB	POLYVINYLCHLORIDE (PVC) RIBBED PIPE (SMOOTH INTERIOR)	POLYETHYLENE (PE) CORRUGATED TYPE S	POLYPROPYLENE (PP) TYPE D OR S
ENTIRE PROJECT	X		X	X	X	X	X	X

NOTE:PIPES LISTED ABOVE ARE IN ACCORDANCE WITH THE VDOT ROAD AND BRIDGE STANDARDS PC-1. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR ANY ADDITIONAL RESTRICTIONS ON USE OF PIPE FOR THIS SEGMENT.

	PROJECT	SHEET NO.
		2K(2)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

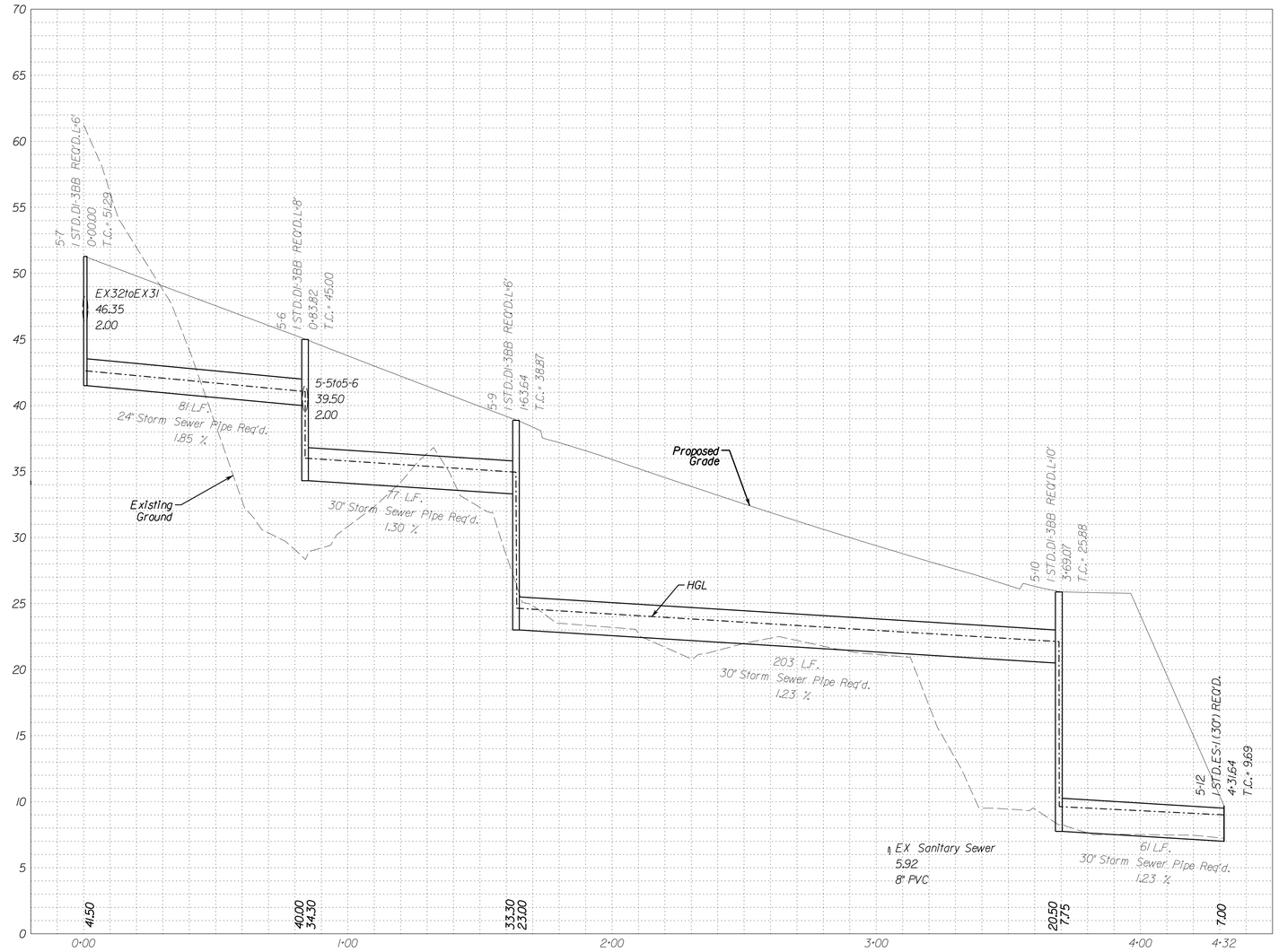
Storm Profiles

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2K(2)

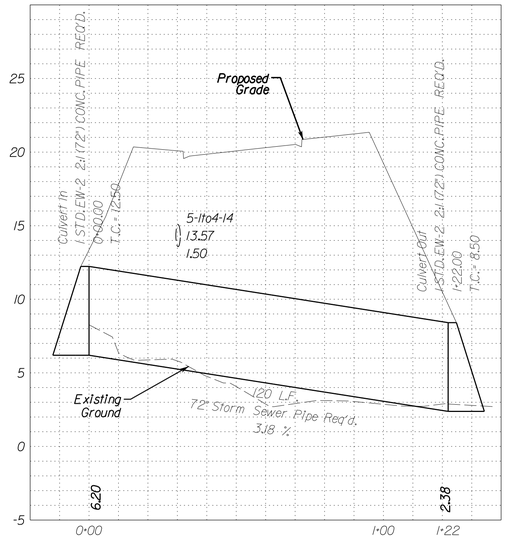
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Glen Allen, Virginia
Hydraulics Engineer

5-7 to 5-12



Culvert 5-11



REFERENCES
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE
V: 1"=5'
H: 1"=25'

Legend
- DENOTES PROP. GRADE
- DENOTES EXIST. GROUND
- DENOTES HGL
- DENOTES EX. STR. OR PIPE

PROJECT	SHEET NO.
	2K(2)

5/5/2022

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RW PLAN

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SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

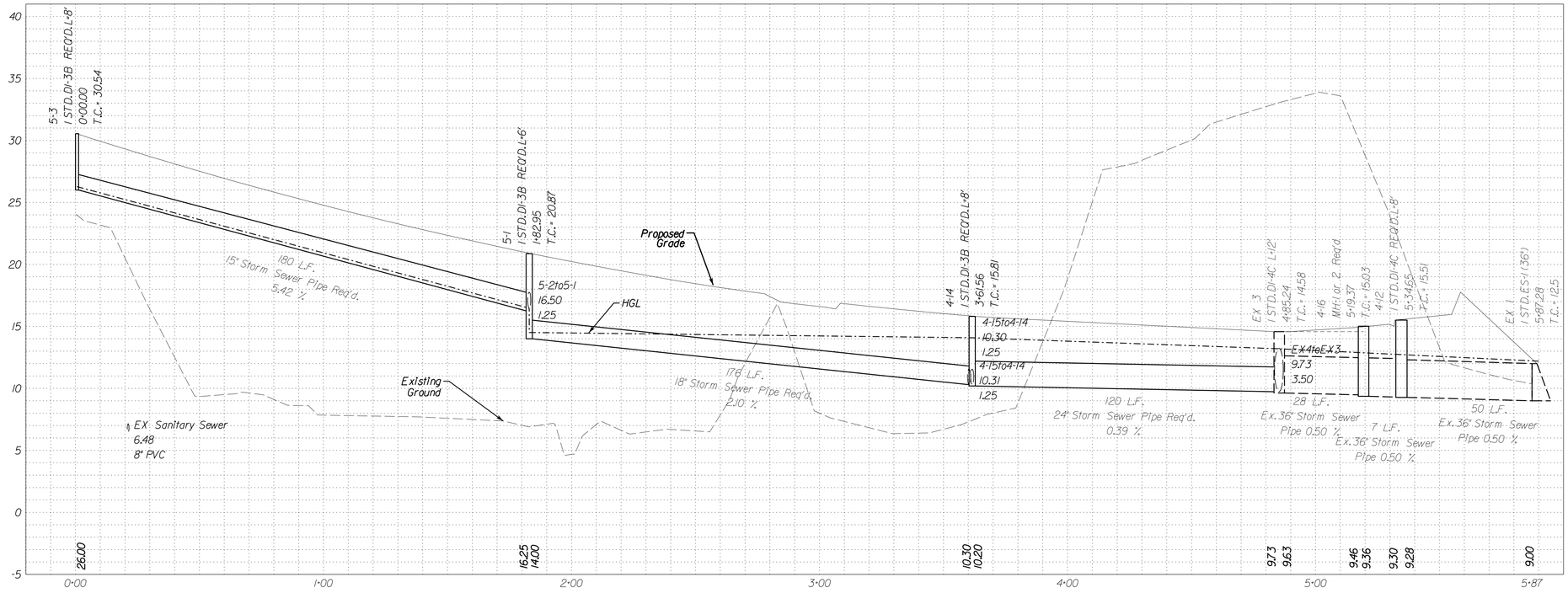
Storm Profiles

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2K(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Glen Allen, Virginia
Hydraulics Engineer

5-3 to 4-13



REFERENCES
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE
V: 1"=5'
H: 1"=25'
0
5'
0
25'
50'

Legend
- DENOTES PROP.GRADE
- DENOTES EXIST.GROUND
- DENOTES HGL
- DENOTES EX.STR.OR PIPE

PROJECT	SHEET NO.
	2K(3)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER, 2019 _____.

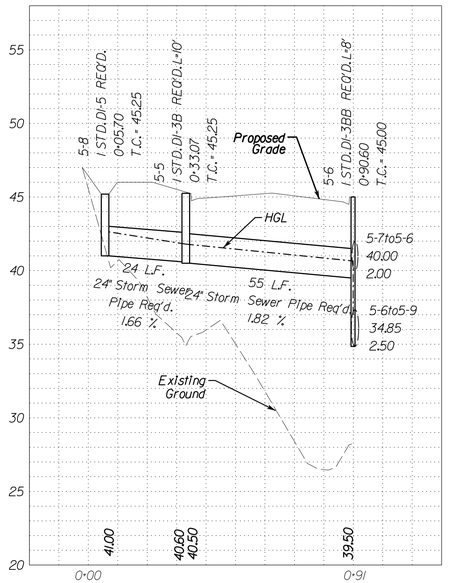
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2K(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

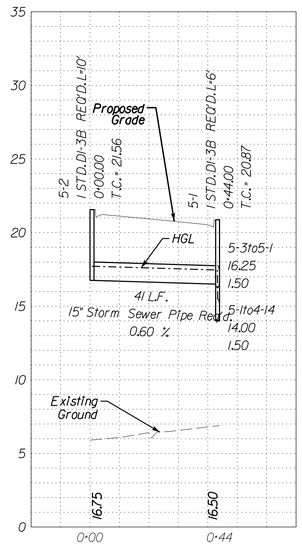
Rinker Design Associates, P.C.
Glen Allen, Virginia
Hydraulics Engineer

Storm Profiles

5-8 to 5-6



5-2 to 5-1



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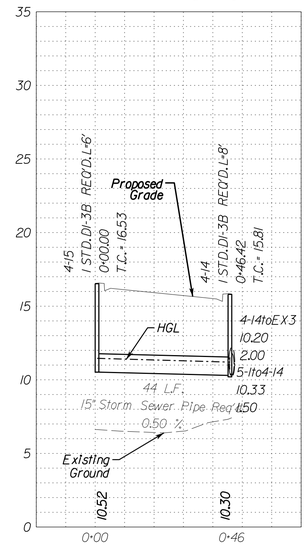
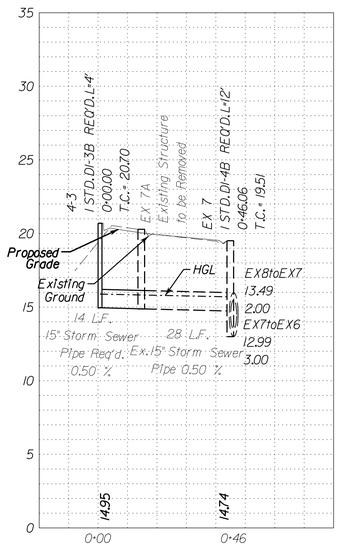
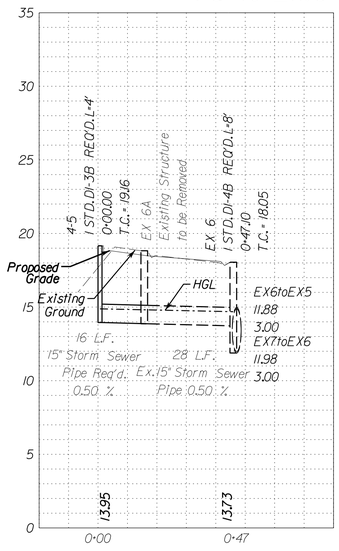


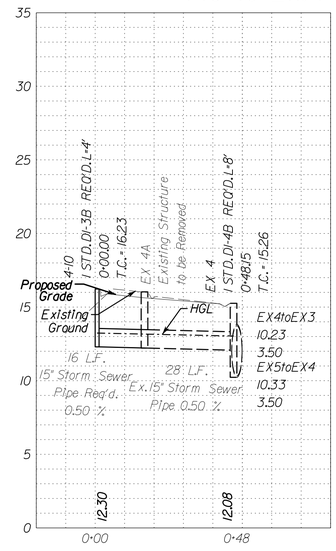
4-3 to Ex.7



4-5 to Ex.6



4-10 to Ex.4



REFERENCES
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE
V: 1"=5'
H: 1"=25'
0 25' 50'

Legend
- DENOTES PROP.GRADE
- DENOTES EXIST.GROUND
- DENOTES HGL
- DENOTES EX.STR.OR PIPE

PROJECT	SHEET NO.
	2K(4)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DUQUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER, 2019 _____.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	673		2N

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2019 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance activities that disturb an area equal to or greater than 10,000 square feet outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD (as defined in the latest IIM 242) will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents)for the land disturbance (construction) activity.

I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that this document and all other documents related to the SWPPP, as identified on the SWPPP General Information Sheets, are maintained at the activity site, or at a location convenient to the activity site where no on-site facilities are available, and such documents will be made available for review upon request in accordance with the provisions of the General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10) when applicable. Where the SWPPP documents are not stored on-site, a copy of such documents shall be in the possession of those with day to day operational control over the implementation of the SWPPP whenever they are on site.

* or ** Delegated Authority Signature"

Signature: _____
Printed Name: _____
Date:_____

(1) See Section 1, Item 11 relating to delegation of authority, and form LD-445H (Delegation of Authority).

ACRONYMS

CBPA - Chesapeake Bay Preservation Act
BMP - Best Management Practice
DEQ - Department of Environmental Quality
EPA - U.S. Environmental Protection Agency
ESC - Erosion and Sediment Control
IIM - Instructional and Informational Memorandum
R&B - Road and Bridge
RLD - Responsible Land Disturber
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
VDOT - Virginia Department of Transportation
VPDES - Virginia Pollutant Discharge Elimination System
VSMP - Virginia Stormwater Management Program
VESCP - Virginia Erosion and Sediment Control Program
WLA - Waste Load Allocation
SWM - Stormwater Management

SECTION I GENERAL INFORMATION

1. Activity Description - Construction

2. This land disturbance (construction) activity site is located in (Prince William County) and approximately 4.61 acres will be disturbed by excavation, grading or other construction activities.

3. This proposed activity disturbs one acre or greater and requires coverage under the VPDES General Permit for Discharges Of Stormwater from Construction Activities (the VPDES Construction Permit) as issued by the DEQ. A copy of the VPDES Construction Permit (VAR10), the registration information (LD-445 & LD-445C forms) and the permit coverage letter received from DEQ shall be maintained with other SWPPP documents for this land disturbing activity.

** 4. The location of on-site support facilities that will be covered under the VPDES Construction Permit coverage for this land disturbance (construction) activity shall be provided by the contractor and identified on the record set of plans or in other appropriate contract documents. Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.

** 5. Written Evidence of permit coverage shall be provided by the contractor for all support activities located outside of VDOT right of way or easement in the form of the Construction General Permit coverage letter: (List VPDES Permit * or Letter from VSMP Authority stating coverage not needed)

6. List the surface waters that have been identified as impaired in the DEQ 2012 305(b)/303(d) Water Quality Assessment Integrated Report for sediment, total suspended solids, turbidity, Nitrogen or Phosphorus. These pollutants are considered benthic impairments: Not Applicable

7. Identify the TMDL's where stormwater from construction activities discharges into a watershed with a TMDL waste load allocation established and approved by the State Water Control Board prior to July 1, 2016 for sediment, total suspended solids, turbidity, nitrogen or phosphorus: Not Applicable

8. This land disturbance activity discharges stormwater to the following surface waters that have been identified as exceptional in Section 9VAC25-260-30 A 3 c of the Virginia Administrative Code: (List name of surface waters) or not applicable (N/A).

9. Locations of surface waters and locations where concentrated stormwater is discharged from this land disturbance (construction) activity are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity. (List name of surface waters and locations here if not shown in construction plan or other such documents).

10. The ESC and SWM plans (where applicable) for this land disturbance (construction) activity have been developed in accordance with VDOT's Approved Annual Erosion and Sediment Control and Stormwater Management Standards and Specifications as approved by the DEQ.

11. List the RLD and other responsible parties for the land disturbance activity: (required for erosion and sediment control). The following individual(s) have "delegated authority" to sign all reports required by the construction permit including the SWPPP General Information Sheets and Inspection Reports (C-107). Reference form LD-445H for delegation of authority (form 445H for the project is hereby incorporated by reference into this SWPPP). These individual(s) has/have overall responsibility or the environmental matters for the project: (required only for permitted projects):

Name	Position	Responsibility
	RLD	Certify the SWPPP (with date & sig.)
	Certified Inspector	Sign (C-107) Inspection Form Part 1
	Certified Inspector	Sign (C-107) Inspection Form Part 2

* 12. The name of the VDOT individual(s) responsible for the oversight inspection in accordance with IIM-LD-256 on these land disturbance construction activities as identified on these SWPPP General Information Sheets. The names will be updated and maintained with the other SWPPP documents for this land disturbance activity.

VDOT Individuals	Position	Responsibility
	NPDES	NPDES coordinator responsible for the oversight inspection in accordance with IIM-LD-256
	Dist. Hyd. Engineer	District Hydraulic Engineer or designee(s) responsible for the review & the coordination approval of ESC SWM plan modification(s).

* 13. The ESC and P2 inspections for this land disturbing (construction) activity shall follow Schedule 1 as defined in 2016 R&B Specifications except for Section 107.16(e) 4.an Inspection Requirements Rain gauge notes apply only to Inspection Schedule 1.

** 14. The location of the on-site rain gage that will be used to determine the occurrence of a measurable storm event for the purposes of ESC and Pollution Prevention inspections will be provided by the contractor and identified on the record set of plans or in other appropriate SWPPP documents for this land disturbance activity:
Rain Guage Located at Sta. 32+00 adjacent to Shared Use Path

The rain gage shall be observed daily at "9am" to determine the occurrence of a measurable storm event (i.e., 0.25 inches of rainfall or greater in a 24 hour period). A log book shall be maintained to record observation information which shall include (1) the date, (2) the time, (3) whether or not rainfall is occurring at the time of the observation, (4) the amount of accumulated rainfall in the gage, if any, and (5) whether or not an inspection is required based on the amount of accumulated rainfall in the gage.
If there is no rainfall occurring at the time of the observation, the observation information shall be noted in the log book and the rain gage emptied and replaced. An inspection is required if there is 0.25 inches or more accumulation noted in the rain gage.
If there is rainfall occurring at the time of the observation, the observation information is to be noted in the log book. The rain gage is not to be emptied but left to accumulate additional rainfall until the conclusion of the rainfall event. At the conclusion of the rainfall event, an observation of the rain gage shall be made and the observation information shall be noted in the log book and the rain gage emptied and replaced. An inspection is required if there is 0.25 inches or more accumulation noted in the rain gage.

15. The following VDOT documents are applicable to a) permitted projects b) non-permitted projects in Chesapeake Bay Preservation Areas (CBPA) with 2,500 S.F. to 1.0 acre of land disturbance c) non-permitted projects requiring a SWPPP and d) Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP:

VDOT LD-445: Permitted projects, CBPA projects and Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP and ESC projects > 10,000 s.f. but <1 acre.
VDOT LD-445A: Permitted projects only.
VDOT LD-445C: Projects that require a permit, ESC Plan, or SWPPP.
VDOT LD-445D: Permitted projects, CBPA projects and Non-permitted, Non-CBPA with BMP projects that have a water quantity BMP.
VDOT LD-445F: Emergency work projects (when applicable).
Water Quality Requirement (when applicable)
VDOT LD-445H: Permitted projects only.
VDOT C-107 Part I and Part II. All projects that require a permit or SWPPP.
VDOT LD-445I: AS&S Approval Form (when applicable)

16. If there is an excessive loading of sediment from the project (i.e. more than to be expected from the project with an implemented ESC plan) that is discovered within a local watershed with a sediment TMDL that allocates a WLA to VDOT's MS4, (see note *7) the contractor shall investigate the area of concern at the site within 24 hours of discovery and ensure all erosion and sediment control best management practices are being implemented in accordance with the permits approved standards and specifications required by Part I.B of the current Construction General Permit. If corrective action is necessary, the contractor shall initiate corrective actions no later than 5 business days after the initial investigation.

17. If excessive loading of sediment from a land disturbing activity that is not the responsibility of the contractor is discovered discharging into a MS-4, the contractor shall notify the municipality with jurisdiction over erosion and sediment control activities.

* Denotes information that is to be provided/completed by the RLD.

** Denotes information that is to be provided/completed by the contractor.

Revised 5/1/19

	PROJECT	SHEET NO.
		2N

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER, 2019 _____.

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	673		2N(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SECTION II EROSION AND SEDIMENT CONTROL

✱✱ 1. The intended sequence and timing of activities that disturb soils at the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.) shall be provided by the contractor in accordance with the current edition of Section 108.03 of the VDOT R&B Specifications and shall be included with the other SWPPP documents for this land disturbance (construction) activity.

2. Directions of stormwater flow and approximate slopes anticipated after major grading activities are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.

3. Areas of soil disturbance and areas of the site which will not be disturbed are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.

4. Locations of major structural and nonstructural ESC measures intended to filter, settle or similarly remove sediment are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.

5. Locations where stabilization practices are expected to occur are identified in the construction plan set (or other such documents) for this land disturbance (construction) activity.

6. A description of interim and permanent stabilization practices for the site are identified in the applicable sections of the documents identified in the Note 1 of Section IV.

✱✱ 7. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated will be provided by the contractor and maintained with the record set of plans or other SWPPP documents for this land disturbance (construction) activity: (List how this will be tracked and the location)

8. A description and schedule of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good and effective operating conditions are identified in the current edition of Sections 107.16 and 303.03 of the VDOT R&B Specifications.

9. Nutrients shall be applied in accordance with the current edition of Sections 603 and 604 of the VDOT Road and Bridge Specifications. Nutrients shall not be applied during rainfall events. Top soil shall be applied in accordance with the current edition of section 602 of the latest Road and Bridge Specifications.

10. All engineering calculations supporting the design of erosion and sediment control measures proposed for this land disturbance (construction) activity are contained in the project drainage file located in the VDOT Prince William Residency Office and will be made available for review upon request during normal business hours.

11. The temporary erosion and siltation control items shown on the ESC Plan for this land disturbing (construction) activity are intended to provide a general plan for controlling erosion and sediment within the project limits. The ESC Plan is based on field conditions at the time of plan development and an assumed sequence of construction for the project. The contractor, in conjunction with the VDOT Project Engineer and/or ESC Inspector, shall adjust the location, quantity and type of erosion and sediment control items required based on the actual field conditions encountered at the time of construction and the actual scheduling and sequencing of the construction activities. Significant changes to the proposed ESC Plan (e.g., those that require an engineering analysis, elimination of a perimeter control, change to ESC concept that would affect the quantity or direction of flow of water) shall be submitted to the applicable District Hydraulics Engineer for review and approval. Any changes to the proposed ESC Plan must be noted on the designated record set of plans which shall be retained on the project site and made available upon request during normal business hours.

12. The areas beyond the project's construction limits are to be protected from siltation. Perimeter controls such as silt fence, diversion dikes, turbidity curtains, etc. shall be installed prior to any grubbing operations or other earth moving activities.

13. Temporary earthen structures such as dikes and berms are to be stabilized immediately upon installation. Stabilization may include temporary or permanent seeding, riprap, aggregate, sod, mulching, and/or soil stabilization blankets and matting in conjunction with seeding.

14. All channel relocations are to be constructed during the earliest stage of construction and shall be constructed in accordance with all applicable permit requirements and shall be constructed in the dry wherever possible. Stabilization or vegetation shall be established before flow is redirected through the constructed area as directed by the Engineer.

15. The contractor shall plan and implement his land disturbance operations in order to:
- a. Control the volume and velocity of stormwater runoff within the site to minimize erosion.
- b. Control the peak flow rates, volume and velocity of stormwater discharges to minimize erosion at outlets and in downstream channels.
- c. Minimize the amount of soil exposed.
- d. Minimize the disturbance of steep slopes.
- e. Minimize sediment discharge from the site.
- f. Provide and maintain natural buffers around surface waters, direct stormwater runoff to vegetated areas and maximize stormwater infiltration, unless infeasible.
- g. Minimize soil compaction (except in those areas where compaction is required by the contract documents) and preserve topsoil where feasible.

✱✱ 16. The name of the individual(s) or contractor(s) responsible for the installation and maintenance of the erosion and sediment control measures shall be supplied by the contractor and maintained with the other SWPPP documents for this land disturbance (construction) activity.

17. Soil stockpiles temporarily placed within the project area or on VDOT right of way or easement shall be identified, stabilized, and protected with sediment trapping measures.

18. A construction entrance or other approved measure shall be installed at all locations where construction vehicular traffic access routes intersect a paved or a public road in order to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or a public road surface, the road shall be cleaned thoroughly at the end of each work day by shoveling or sweeping. Removed sediment shall be disposed of in accordance with Section 106.04 of the R&B Specifications.

19. Any variance, exception or deviation approved by DEQ must be listed below and supporting documentation (exception/variance/deviation request and DEQ approval) must be maintained with the SWPPP.

The following exceptions to the Water Quantity criteria of the VSMP Regulation have been approved by the DEQ for this land disturbance (construction) activity: (list all approved exceptions and include a brief description of the exception, the date approved and the approving DEQ Office)

Type(1)	Regulation Modified(2)	Approval Date(3)	Description of Variance

(1) Type of modification (Variance from ESC regulations, or Deviation from published guidance)
(2) Section of Regulation or Guidance Document Modified (e.g. ESC Min. Std. 15)
(3) Date that variance/exception/deviation was approved by DEQ.

SECTION III POST CONSTRUCTION STORMWATER MANAGEMENT

1. This land disturbance activity utilizes the Part IIB technical criteria (i.e., Runoff Reduction Method, Energy Balance Equation, etc.) in Section 9VAC25-870-62 et seq. of the VSMP Regulations.

2. Any variance, exception or deviation approved by DEQ must be listed below and supporting documentation(exception/variance/deviation request and DEQ approval) must be maintained with the SWPPP.

The following exceptions to the Water Quantity criteria of the VSMP Regulation have been approved by the DEQ for this land disturbance activity: (list all approved exceptions and include a brief description of the exception, the date approved and the approving DEQ Office)

Type(1)	Regulation Modified(2)	Approval Date(3)	Description of Waiver

(1) Type of modification (Variance, or Exception from SWM Regulations or Deviation from published guidance)
(2) Section of Regulation or Guidance Document Modified (e.g. ESC Min. Std. 15)
(3) Date that variance/exception/deviation was approved by DEQ.

3. The permanent onsite SWM facilities or offsite strategies proposed to meet the water quality/quantity requirements for this land disturbance (construction) activity are listed in Section VI.

5. A description of all post-construction stormwater management measures that will be installed during the construction process to control pollutants in stormwater discharges after construction operations have been completed is included in the construction plan set (or other such documents) for this land disturbance (construction) activity.

6. All engineering calculations supporting the design of the post-construction stormwater management measures for this land disturbance (construction) activity, including an explanation of the technical basis used to select the practices, are contained in the project drainage file located in the VDOT Central Office Hydraulics Section and will be made available for review upon request during normal working business hours.

ACRONYMS

CBPA - Chesapeake Bay Preservation Act
BMP - Best Management Practice
DEQ - Department of Environmental Quality
EPA - U.S. Environmental Protection Agency
ESC - Erosion and Sediment Control
IIM - Instructional and Informational Memorandum
R&B - Road and Bridge
RLD - Responsible Land Disturber
SWPPP - Stormwater Pollution Prevention Plan
TMDL - Total Maximum Daily Load
VDOT - Virginia Department of Transportation
VPDES - Virginia Pollutant Discharge Elimination System
VSMP - Virginia Stormwater Management Program
VESCP - Virginia Erosion and Sediment Control Program
WLA - Waste Load Allocation
SWM - Stormwater Management

✱ Denotes information that is to be provided/ completed by the RLD.

✱✱ Denotes information that is to be provided/completed by the contractor.

Revised 5/1/19

	PROJECT	SHEET NO.
		2N(1)

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		2N(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2019 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance (construction) activities that disturb an area equal to or greater than 10,000 square feet outside the Chesapeake Bay Preservation Area, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

SECTION IV SWPPP

1. All documents related to the SWPPP for this land disturbance (construction) activity shall be maintained at the activity site and shall be readily available for review upon request during normal business hours. Such documents include, but are not limited to, the construction plans (or other such documents), the ESC Plan, the Pollution Prevention Plan, the post construction SWM Plan (if applicable), the VDOT R&B Standards and Specifications, Supplemental Specifications, Special Provisions and Special Provision Copied Notes. Documents related to stormwater pollution prevention which are not a part of those documents referenced above, such as copies of the VPDES Construction Permit coverage letter (when applicable) and the VPDES General Permit For Discharges Of Stormwater From Construction Activities (when applicable) and those required to be developed by the contractor for pollution prevention associated with any on-site support facilities being included in the VPDES Construction Permit coverage for this land disturbance (construction) activity are to be maintained at the activity site with the other SWPPP documents for this land disturbance (construction) activity. Where no facilities are available at the activity site to maintain the SWPPP documents, they are to be kept by or with the designated RLD at a location convenient to the activity site where they would be made available for review upon request during normal business hours.

2. The SWPPP and any subsequent amendments, modifications and updates shall be implemented from commencement of land disturbance until termination of VPDES Construction Permit coverage or completion of land disturbance (construction) activities where no VPDES Construction Permit coverage is required.

✱✱ 3. For all on-site support facilities that will be included in the VPDES Construction Permit coverage for this land disturbance (construction) activity, the contractor shall develop a SWPPP in accordance with, but not limited to, Section 106.08, 107.02 and 107.16 of the VDOT Road and Bridge Specifications. The SWPPP for the on-site support facilities shall be maintained with and become a component of the SWPPP for this land disturbance (construction) activity. Support facilities shall include, but not be limited to, borrow and disposal areas, construction and waste material storage areas, equipment and vehicle washing, maintenance, storage and fueling areas, storage areas for fertilizers, fuels or chemicals, concrete wash out areas, sanitary waste facilities and any other areas that may generate a stormwater or non-stormwater discharge directly related to the construction site.

4. For those land disturbing (construction) activities requiring coverage under the VPDES Construction Permit, the SWPPP shall be made available for review upon the request of the DEQ, the EPA, the VSMP Authority, the VESCP Authority, local government officials or the operator of a municipal separate storm sewer system (MS4) receiving discharge from the construction site.

✱ 5. For those land disturbing (construction) activities requiring coverage under the VPDES Construction Permit, the VDOT RLD shall post, or have posted, a copy of the General Permit coverage letter and a copy of a completed LD-445A form, noting the name and contact information for the VDOT person responsible for the land disturbing (construction) activity and its SWPPP, outside the project's construction office along with other Federal and State mandated information. Where there is no construction office (e.g., a maintenance activity), the permit coverage letter and the LD-445A form are to be maintained with the other SWPPP documents for the land disturbing (construction) activity.

6. The SWPPP shall be made available for review by the public upon request. Such reviews shall be at a time and publicly accessible location convenient to the VDOT and shall be scheduled during normal business hours and no less than once per month.

SECTION V - POLLUTION PREVENTION PLAN

1. The following non-stormwater discharges from this land disturbing (construction) activity and any on-site support facilities are prohibited:
   a. Wastewater from concrete washouts.
   b. Wastewater from the washout and cleanout of stucco, paint, from release oils, curing compounds and other construction materials.
   c. Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance.
   d. Oils, toxic substances or hazardous substances from spills or other releases.
   e. Soaps, solvents or detergents used in equipment and vehicle washing.
   f. There shall be no discharge of floating solids or visible foam in other than trace amounts

2. The following non-stormwater discharges from this land disturbing (construction) activity and any on-site support facilities are allowed when discharged in compliance with the VPDES Construction Permit:
   a. Discharges from firefighting activities.
   b. Fire hydrant flushings.
   c. Waters used to wash vehicles or equipment where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
   d. Water used to control dust that has been filtered, settled or similarly treated prior to discharge.
   e. Potable water sources including uncontaminated waterline flushings managed in a manner to avoid stream impacts.
   f. Routine external building wash down where soaps, solvents or detergents have not been used and the wash water has been filtered, settled or similarly treated prior to discharge.
   g. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (or where all spilled or leaked material has been removed prior to washing), where soaps, solvents or detergents have not been used and where the wash water has been filtered, settled or similarly treated prior to discharge.
   h. Uncontaminated air conditioning or compressor condensate.
   i. Uncontaminated ground water or spring water.
   j. Foundation or footing drains where flows are not contaminated with process materials such as solvents.
   k. Uncontaminated excavation dewatering, including dewatering trenches and excavations that have been filtered, settled or similarly treated prior to discharge.
   l. Landscape irrigation.

✱✱ 3. The contractor shall develop a Pollution Prevention Plan to address any of his on-site operations that have a potential to generate a pollutant that may reasonably be expected to affect the quality of stormwater discharges from this land disturbance (construction) activity. The Pollution Prevention Plan shall be developed in accordance with, but not limited to, Sections 106.08, 107.02 and 107.16 of the VDOT Road and Bridge Specifications and shall include a narrative with appropriate plan detail and shall be provided on standard 8.5 x 11 inch paper or larger and shall:
   a. Identify the potential pollutant-generating activities and the pollutant that is expected to be exposed to stormwater.
   b. Describe the location where the potential pollutant-generating activities will occur, or if identified on the record set of plans, reference the record set of plans.
   c. Identify all non-stormwater discharges, as described in note two of this section, that are or will be commingled with stormwater discharges from the construction activity, including any on-site support activities.
   d. Identify the person(s) or contractor(s) responsible for implementing and maintaining the pollution prevention practice or practices for each pollutant-generating activity.
   e. Describe the pollution prevention practices and procedures that will be implemented to:
      1) Prevent and respond to leaks, spills, and other releases, including procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases, and procedures for reporting leaks, spills, and other releases in accordance with Section 107.16 of the VDOT Road and Bridge Specifications and the requirements within the VPDES Construction Permit.
      2) Prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities.
      3) Prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including procedures for the clean-up of stucco, paint, form release oils, and curing compounds.
      4) Minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water, and other types of washing.
      5) Direct concrete wash water into a leak-proof container or leak-proof settling basin. The container or basin shall be designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wash waters and shall not be discharged to surface waters.
      6) Minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials, and wastes including building products (such as asphalt sealants, copper flashing, roofing materials, adhesives, and concrete admixtures), pesticides, herbicides, insecticides, fertilizers, landscape materials, construction and domestic wastes (such as packaging materials), scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.
      7) Prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, waste concrete and sanitary wastes.
      8) Address any other discharge from any potential pollutant-generating activity not listed herein.
      9) Minimize the exposure of waste materials to precipitation by closing or covering waste containers during precipitation events and at the end of the business day, or implementing other similarly effective practices. Minimization of exposure is not required in case where the exposure to precipitation will not result in a discharge of pollutants.
      10) Describe and implement procedures for providing pollution prevention awareness (including but not limited to prevention practices, disposal practices and appropriate disposal locations) for all applicable wastes (including any wash water), to appropriate personnel.

✱ Denotes information that is to be provided/completed by the RLD.

✱✱ Denotes information that is to be provided/completed by the contractor.

Revised 5/1/19

	PROJECT	SHEET NO.
		2N(2)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER, 2019 _____.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) GENERAL INFORMATION SHEET

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	0073		2N(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

The information contained in the SWPPP General Information sheets is intended to comply with the requirements of the VPDES General Permit For Discharges Of Stormwater From Construction Activities (the VPDES Construction Permit) issued July 1, 2019 and VDOT's approved Annual ESC and SWM Standards and Specifications.

The SWPPP General Information sheets are to be completed and included in the construction plan set (or other such documents) for land disturbance (construction) activities that disturb an area equal to or greater than 10,000 square feet, or equal to or greater than 2,500 square feet in the area defined as Tidewater, Virginia in the Virginia Chesapeake Bay Preservation Act.

The VDOT RLD will ensure that the information shown on the SWPPP General Information sheets is updated/revised as necessary in order to reflect changes that may occur during the construction phase of the land disturbing (construction) activity. The updated/revised sheets shall be maintained with the designated record set of plans (or other such documents) for the land disturbance (construction) activity.

SECTION VI - PERMANENT BMP INFORMATION △

✱ Denotes information that is to be completed by the RLD.
( ) See note referenced by number in parentheses.

INSTALLED BMP INFORMATION
(VDOT Owned/Operated)

Plan Sheet(s)	Date BMP Made Functional	Type of BMP Installed (See Table A and C)	Geographic Location (County or City)	Latitude/Longitude (1) LAT	Latitude/Longitude (1) LONG	VA 6th Order HUC (7)	Receiving Water (2)	Name of Impaired Water (9)	Acres Treated Per BMP (3) Impervious	Acres Treated Per BMP (3) Pervious	Acres Treated Per BMP (3) TOTAL	✱ BMP Maintenance ID Number (10)	BMP Maintenance Manual (11) SECTION	BMP Inspection Manual (11) SECTION

ALTERNATIVE BMP INFORMATION

Plan Sheet(s)	Date	Type of BMP Installed (See Table B)	Geographic Location (County or City) (5)	Latitude/Longitude (1) (5) LAT	Latitude/Longitude (1) (5) LONG	VA 6th Order HUC (5) (7)	Receiving Water (2)	Name of Impaired Water (9)

Perpetual Nutrient Credits Acquired for Project

Name of Nutrient Credit Generating Entity (6)	Nutrient Credits (lbs./TP./year) Acquired (6) (12)
TBD	3.23

△ Any changes to the proposed SWM Plan or BMPs necessitated during the construction phase of the project that affects the proposed construction details or potentially affects the informationshown in the BMP Tables A and/or B shall be coordinated by the VDOT RLD with the appropriate VDOT District Hydraulics Engineer. The construction plans and the BMP Tables A and/or B are to be formally revised to reflect any authorized/ approved changes to the proposed SWM Plan and/or the proposed BMP construction details. All plan revisions shall be completed in accordance with the Road Design Manual and the Construction Division IIM-CD-2013-12.01, signed and sealed in accordance with Department's sealing and signing policy IIM-LD-243 and filed with the construction record drawings maintained in the VDOT Central Office Plan File Room (ProjectWise). Prior to submitting for termination of coverage under the VPDES General Permit For The Discharge Of Stormwater From Construction Activities, the RLD shall have the District Maintenance Division review the BMPs installed with the project (BMP Table A) for acceptance of maintenance responsibility and to obtain a Maintenance ID number for each BMP listed in BMP Table A. The RLD shall use the informationin BMP Tables A and B along with the assigned Maintenance ID number and the date that the BMP became functional as a permanent control measure (for BMPs in Table A only) to complete the LD-445D form when certifying the construction of the BMPs and submitting for termination of coverage under the VPDES General Permit For The Discharge Of Stormwater From Construction Activities.

Table A: Permanent BMP Types (1999 Va. SWM Handbook)
Bio-retention Basin
Bio-retention Filter
Constructed Stormwater Wetlands
Extended Detention Basin
Extended Detention Basin Enhanced
Grassed Swale
Infiltration Basin
Infiltration Trench
Manufactured Treatment Device (MTD) (8)
Retention Basin I
Retention Basin II
Retention Basin III
Sand Filter
Vegetated Filter Strip
Other Approved Types (List Type)
Detention Basin

Table B: Alternative BMP Types
Comprehensive SWM Plan (Regional) Facility
Pollutant Loading Pro Rata Share Program
Other Approved Options (List Type) (4)

Table C: Permanent BMP Types (BMP Clearing House)
Sheet Flow to Vegetated Filter Strip
Grass Channel
Soil Compost Amendment
Permeable Pavement (Level 1)
Permeable Pavement (Level 2)
Infiltration Practice (Level 1)
Infiltration Practice (Level 2)
Bioretention (Level 1)
Bioretention (Level 2)
Dry Swale (Level 1)
Dry Swale (Level 2)
Wet Swale (Level 1)
Wet Swale (Level 2)
Filtering Practice (Level 1)
Filtering Practice (Level 2)
Constructed Wetlands (Level 1)
Constructed Wetlands (Level 2)
Extended Detention Pond (Level 1)
Extended Detention Pond (Level 2)
Wet Pond (Level 1)
Wet Pond (Level 2)
Manufactured Treatment Device (MTD)(8)
Other Approved Types (List Type)

NOTES:
(1) In decimal degrees to the nearest one ten-thousandth of a degree.

(2) For streams with no names, list "(Unnamed Tributary to downstream name)".

(3) Show acres treated to the nearest one hundreths acre.

(4) Include agreements with off-site BMP owners.

(5) Information pertains to the alternative BMP option location, where applicable. Exception - Not required for nutrient credit purchase option.

(6) Applies to the purchase of nutrient credits only.

(7) Virginia 6th Order HUC (VAHU6) Example - YO30.

(8) Final approved shop drawings of Manufactured Treatment Devices (MTDs) are to be included with the BMP information submitted with the LD-445D form.

(9) List the name of any impaired water to which the BMP discharges. The determination of impaired water shall be based on those streams listed as impaired in the DEQ 2012 305(b)/303(d) Water Quality Assessment Integrated Report and shall be the first named waterbody to which the BMP discharges. The impaired waters are those impaired by sediment, total suspended solids, turbidity, nitrogen or phosphorus.

(10) BMP Maintenance ID Number is to be assigned by the District Maintenance Division at permit termination or project completion. This ID number shall be assigned prior to the permit close out process and entered by the area construction engineer under this column, per IIM-LD-95

(11) Provide the section of each Maintenance manual that pertains to the type of BMP. Both manuals can be found at www.vdot.virginia.gov/ business/manuals in the Maintenance selections. Example: Section 4 would be noted for both the maintenance and inspection manuals for a Bioretention I infiltration BMP.

(12) Nutrient credits purchased to the nearest one hundredth pound.

Revised 5/1/19

	PROJECT	SHEET NO.
		2N(3)

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION-SHEBBY DJOUHABIAN (703)792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

REVISED	STATE	STATE ROUTE	PROJECT	SHEET NO.
	VA.	673		3

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer

THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8392-98-6267
0.74149 Ac.
C1
Annapolis Way Constr. ℄
Curve CUR_AW1
PI = 23+11.20
DELTA = 17° 48' 02.53" (RT)
D = 9° 32' 57"
T = 93.96'
L = 186.41'
R = 600.00'
PC = 22+17.24
PT = 24+03.65
V = 30 mph
E = Match Existing
N 5° 39' 24" W
Annapolis Way Constr. ℄
Annapolis Way Rte.673
N 12° 08' 39" E
PC22+17.24
PT24+03.65
PC24+18.13
THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-09-1636
3.13021 Ac.
002
PROP.TEMP. CONSTR.EASE.
Saw Cut Req'd.
10' Shared Use Path
Std.CG-6 Req'd.
Replace Fence
Pipe to be Removed by Others
N 34° 18' 47" E
162' Turn Lane
PT25+72.90
PC26+34.95
Match Line Sheet 4 - Annapolis Way C.B.L Sta.26+75.00
001
THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-08-2272
14.80726 Ac.
Begin Construction:
Annapolis Way Constr. ℄
Sta.24+82.84
C2
Annapolis Way Constr. ℄
Curve CUR_AW2
PI = 24+96.49
DELTA = 22° 10' 08.19" (RT)
D = 14° 19' 26"
T = 78.36'
L = 154.77'
R = 400.00'
PC = 24+18.13
PT = 25+72.90
V = 30 mph
E = Match Existing
C3
Annapolis Way Constr. ℄
Curve CUR_AW3
PI = 30+10.03
DELTA = 71° 42' 36.29" (RT)
D = 11° 02' 23"
T = 375.07'
L = 649.57'
R = 519.00'
PC = 26+34.95
PT = 32+84.52
V = 30 mph
E = Match Existing

Drainage Design Legend

4 → Denotes UD-4 Req'd.

Water & Sewer:	Prince William County Service Authority Engineering P.O. Box 2266 4 County Complex Court Woodbridge, VA 22195-2266 Maureen Knight (703) 335-7930 FAX (703) 335-8933.	
Power:	Dominion Virginia Power 701 E. Cary St. Andrew Brooks Underground Damage Prevention Manager Dominion Emergency Preparedness Center 804-771-3655 804-514-2277 cell Andrew.J.Brooks@dominionenergy.com	
Gas:	Washington Gas 6801 Industrial Road Springfield, VA 703-750-1000 Maps Administrator 703-750-4745 Plantation Pipeline 1000 Windward Concourse Suite 450 Alpharetta, GA 30005 Quintin Frazier Phone: (770) 751-4240 Fax: (770) 751-4783 Email: quintin_frazier@kindermorgan.com Thomas Jackson 703-819-4918	
Telecomm:	Verizon William (Bill) Lacy Verizon Project Designer / Highway Relocations 9401 Peabody Street Manassas, VA 20110 office 703/369-9571 fax 703/330-7323 cell 540/520-1905 william.lacy@verizon.com Comcast Planning & Design 324 W MAIN ST CHARLOTTESVILLE, VA 22901 Doug Wright 434-951-3843 DOUGLAS_WRIGHT@comcast.com NED-BLT_BeltwayRegionDesignRequests@cable.comcast.com Cox Communications Michael Harrington, (CBS-Virginia) Construction Services Support Specialist Michael.Harrington@cox.com MCI Verizon Business 2400 N. Glenville Dr. Richardson, TX 75082 Attn: Investigations Phone #: 800-624-9675 Fax #: 972-729-6240 investigations@Verizon.com	

REFERENCES
(PROFILES,DETAIL & DRAINAGE DESCRIPTION SHEETS,ETC.)

Survey Control Data	1C
Construction Alignment Data	1D
Typical Sections	2A
Drainage Descriptions	2K,2K(1)
Storm Sewer Pipe Profiles	2K(2)
Profile	3A
Erosion & Sediment Control Phase I	3B
Erosion & Sediment Control Phase II	3C

LEGEND

- Denotes Proposed Pavement
- Denotes Mill and Overlay
- Denotes Demolition of Pavement
- Denotes Temporary Easement
- Denotes Permanent Easement
- Denotes Proposed R/W
- C Denotes Construction Limits In Cuts
- F Denotes Construction Limits In Fills

SCALE 0 25' 50'

PROJECT	SHEET NO.
	3

5/5/2022

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RW PLAN

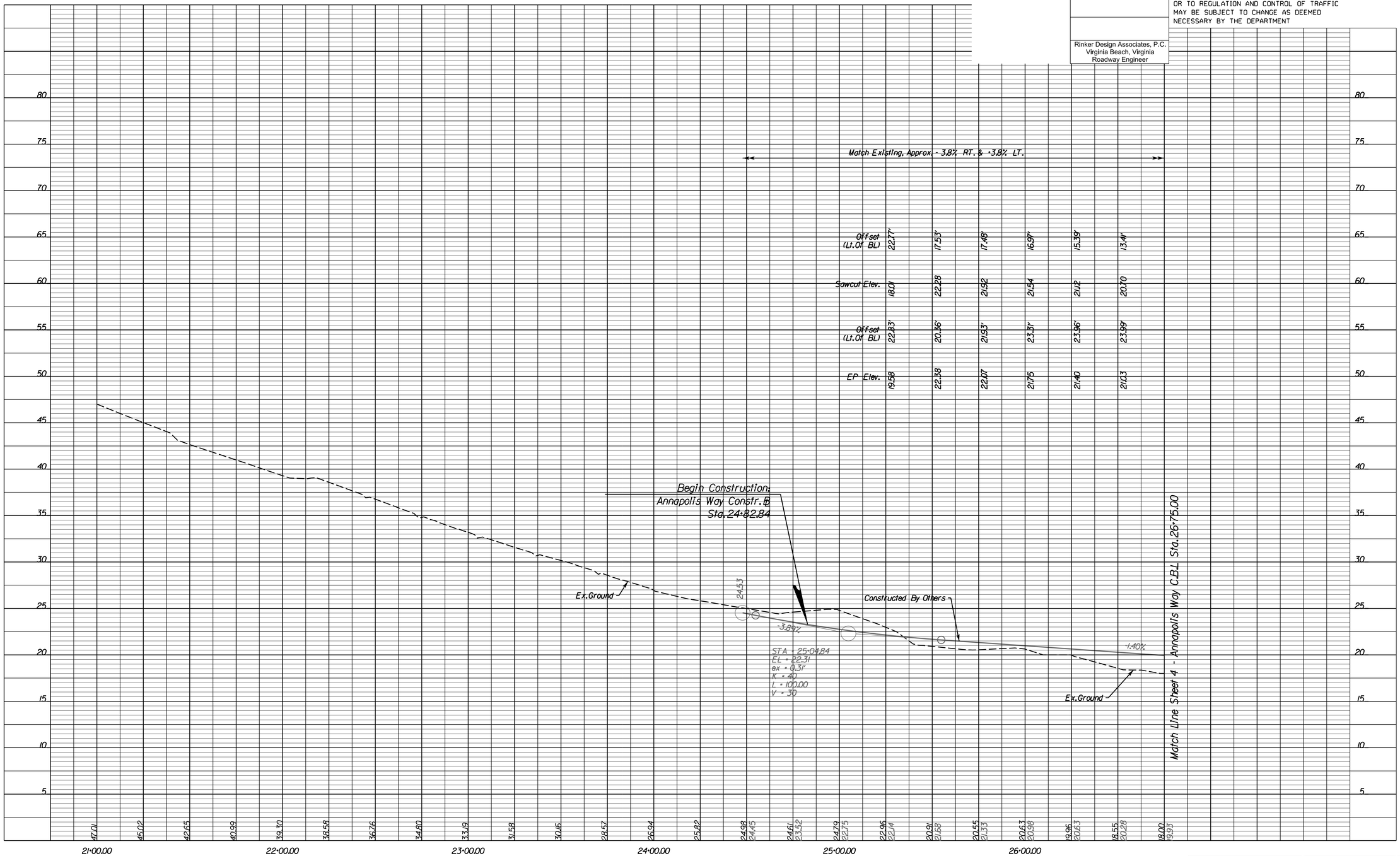
PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Annapolis Way Profile

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		3A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer



SCALE HORIZ: 1"=25' 0 10' 25' VERT: 1"=5' 0 1" 2"

PROJECT	SHEET NO.
	3A

5/5/2022

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RW PLAN

Z:\9096-008\00 Design (UPC*hd000003b.dgn Plotted by: Rinker Design Associates,P.C. 4:18:51 PM 25.00 ft / in. 35x23 (in) K:\Design Aid\Printing\Pen Tables\25 Scale.tbl K:\Design Aid\Printing\Plot Drivers\RDA LD PDF File Generator.pltcfg

PROJECT MANAGER PWC DEPT OF TRANSPORTATION-SHEBBY DJOUHABIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

Erosion & Sediment Control Phase I

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	673		3B

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SCALE 0 25' 50'

PROJECT	SHEET NO.
-	3B

5/5/2022

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RW PLAN

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SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

Erosion & Sediment Control Phase 2

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	673		3C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

SCALE	PROJECT	SHEET NO.
0 25' 50'	.	3C

RW PLAN

5/5/2022

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION-SHEBBY DJOUHABIAN (703)792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373,JAN.2020 & DEC.2021
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		4

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C. Virginia Beach, Virginia Hydraulics Engineer

Rinker Design Associates, P.C. Virginia Beach, Virginia Roadway Engineer

Match Line Sheet 3 - Annapolis Way C.B.L Sta.26+75.00
Match Line Sheet 5 - Annapolis Way C.B.L Sta.33+25.00
Match Line Sheet 7 - Destination Place C.B.L Sta.12+75.00
THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-09-1636
3.13021 Ac.
THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-08-2272
14.80726 Ac.
THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-09-5925
2.70003 Ac.
Annapolis Way Rte.673
Destination Place
Do Not Disturb Existing Wingwall
PROP.TEMP. CONSTR.EASE.
PROP.PERM. DRAIN.EASE.
Std.FE-CL Req'd.
Std.14' FE-CL Dbl.Gate Req'd.
10' Shared Use Path
Std.CG-6 Req'd.
100' Taper
350' Turn Lane
5' Conc.Sidewalk
Exist Sign to be Adjusted in Place
Exist Sign to be Relocated
Pipe to be Removed by Others
P.O.C.Sta. 31+69.42 Annapolis Way
P.O.T.Sta. 10+00.00 Destination Place
Δ = 90°22'51" Lt.
N 55° 36' 36" E
N 5° 35' 58" E
S 71° 41' 35" E
Annapolis Way Constr.℄
Curve CUR_AW3
PI = 30+10.03
DELTA = 71° 42' 36.29" (RT)
D = 11° 02' 23"
T = 375.07'
L = 649.57'
R = 519.00'
PC = 26+34.95
PT = 32+84.52
V = 30 mph
E = Match Existing
Destination Place Constr.℄
Curve CUR_DP1
PI = 11+39.86
DELTA = 50° 00' 38.10" (RT)
D = 28° 38' 52"
T = 93.28'
L = 174.57'
R = 200.00'
PC = 10+46.58
PT = 12+21.15
V = 30 mph
E = Normal Crown
Destination Place Constr.℄
Curve CUR_DP2
PI = 13+09.57
DELTA = 38° 50' 37.59" (LT)
D = 28° 38' 52"
T = 70.52'
L = 135.59'
R = 200.00'
PC = 12+39.05
PT = 13+74.65
V = 30 mph
E = Normal Crown

Drainage Design Legend

- 1 — Denotes Drainage Item to be removed/Abandoned in Place
- 3 — Retain Existing Offsite Drainage
- 4 — Denotes UD-4 Req'd.
- 5 — Denotes UD-3 Req'd.
- 6 — Std.CD-2 Req'd
- 9 — Denotes Retain Existing Onsite Drainage Pipe

LEGEND

- Denotes Proposed Pavement
- Denotes Mill and Overlay
- Denotes Demolition of Pavement
- Denotes Temporary Easement
- Denotes Permanent Easement
- Denotes Proposed R/W
- C — Denotes Construction Limits in Cuts
- F — Denotes Construction Limits in Fills

REFERENCES (PROFILES,DETAIL & DRAINAGE DESCRIPTION SHEETS,ETC.)

Survey Control Data	1C
Construction Alignment Data	1D
Typical Sections	2A
Drainage Descriptions	2K,2K(1)
Storm Sewer Pipe Profiles	2K(2)
Profile	4A
Profile - Destination Pl.	8
Erosion & Sediment Control Phase I	4B
Erosion & Sediment Control Phase II	4C

SCALE 0 25' 50'

PROJECT	SHEET NO.
	4

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

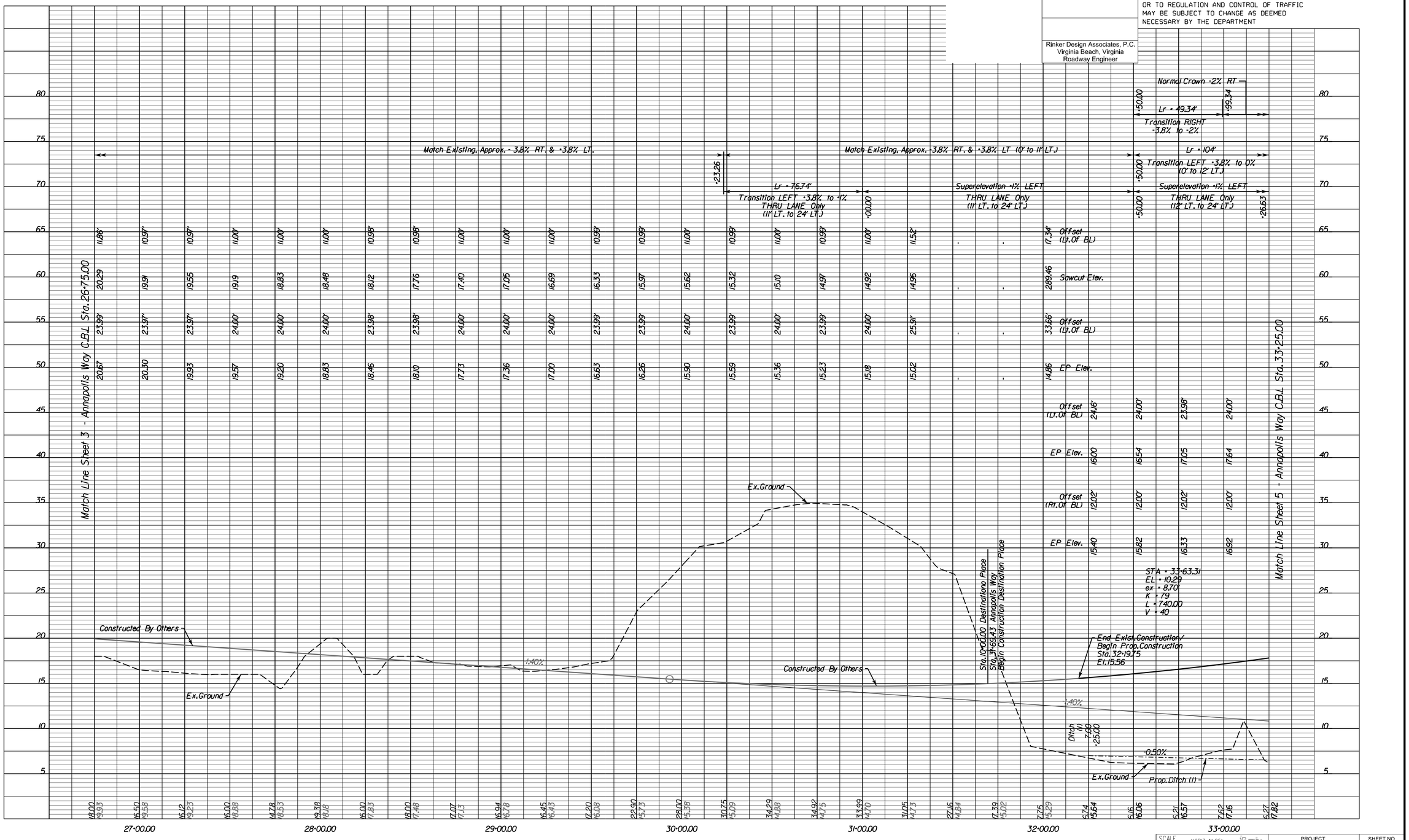
PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Annapolis Way Profile

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		4A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer



SCALE HORIZ: 1"=25' (0 10' 25') VERT: 1"=5' (0 1' 2')

PROJECT	SHEET NO.
	4A

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RW PLAN

5/5/2022

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION: SHEBBY DJOUHABIAN (703) 792-6822
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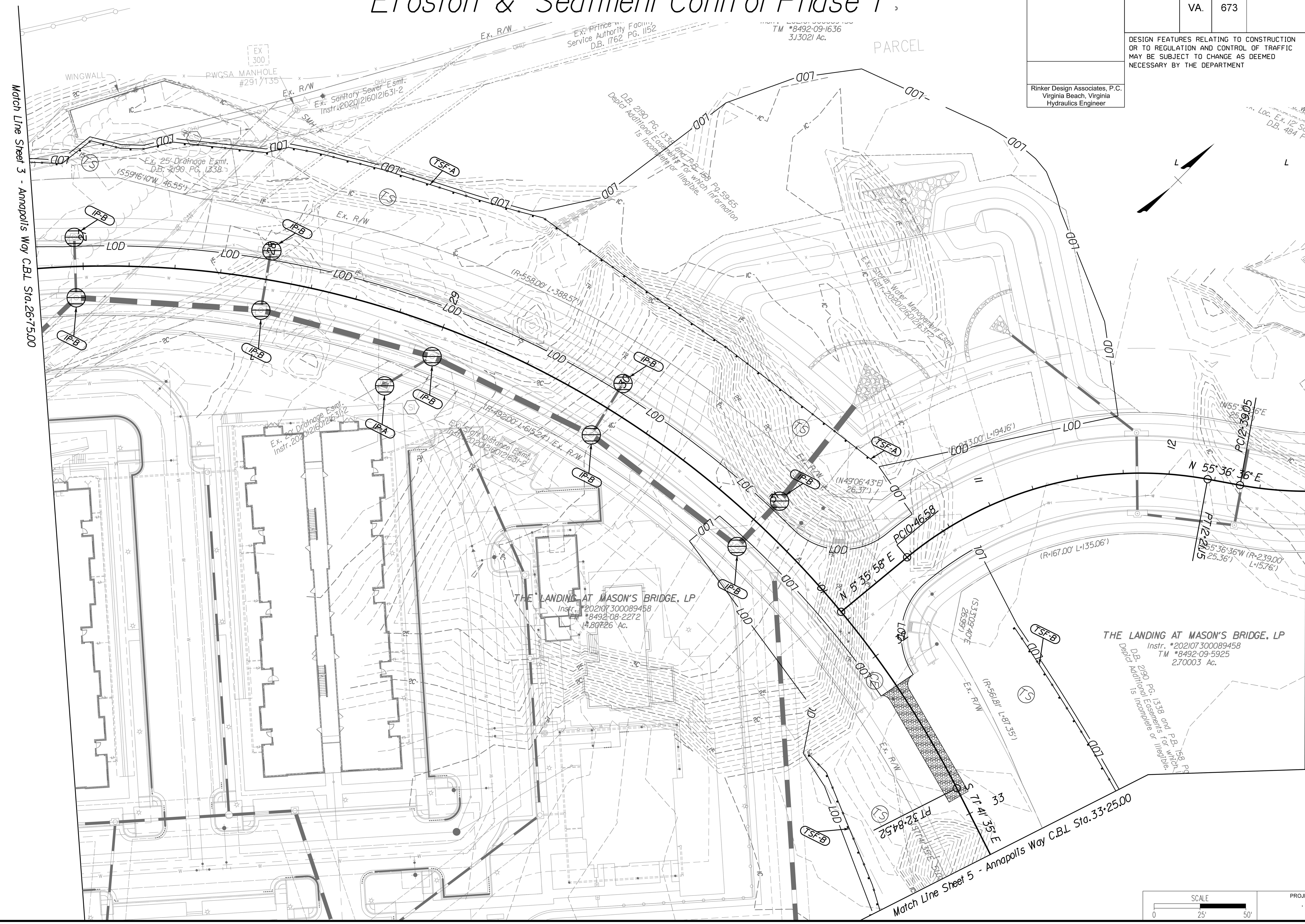
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

Erosion & Sediment Control Phase I

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		4B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer



SCALE 0 25' 50'

PROJECT	SHEET NO.
-	4B

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RW PLAN

5/5/2022

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHEBBY DJOUHABIAN (703) 792-6822
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DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Erosion & Sediment Control Phase 2

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	673		4C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHEBBY DJOUHABIAN (703) 792-6822
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SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		5

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C. Virginia Beach, Virginia Hydraulics Engineer	Rinker Design Associates, P.C. Virginia Beach, Virginia Roadway Engineer

LEGEND

- Denotes Proposed Pavement
- Denotes Mill and Overlay
- Denotes Demolition of Pavement
- Denotes Temporary Easement
- Denotes Permanent Easement
- Denotes Proposed R/W
- C Denotes Construction Limits in Cuts
- F Denotes Construction Limits in Fills

Drainage Design Legend

- 1 Denotes Drainage Item to be removed/Abandoned in Place
- 3 Retain Existing Offsite Drainage
- 4 Denotes UD-4 Req'd.
- 5 Denotes UD-3 Req'd.
- 7 Denotes CD-1 Req'd.
- 9 Denotes Retain Existing Onsite Drainage Pipe

REFERENCES
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Survey Control Data	1C
Construction Alignment Data	1D
Typical Sections	2A
Drainage Descriptions	2K,2K(1)
Storm Sewer Pipe Profiles	2K(2)
Profile	5A
Profile - Retaining Wall	5A
Erosion & Sediment Control Phase I	5B
Erosion & Sediment Control Phase II	5C

SCALE 0 25' 50'

PROJECT	SHEET NO.
	5

5/5/2022

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RW PLAN

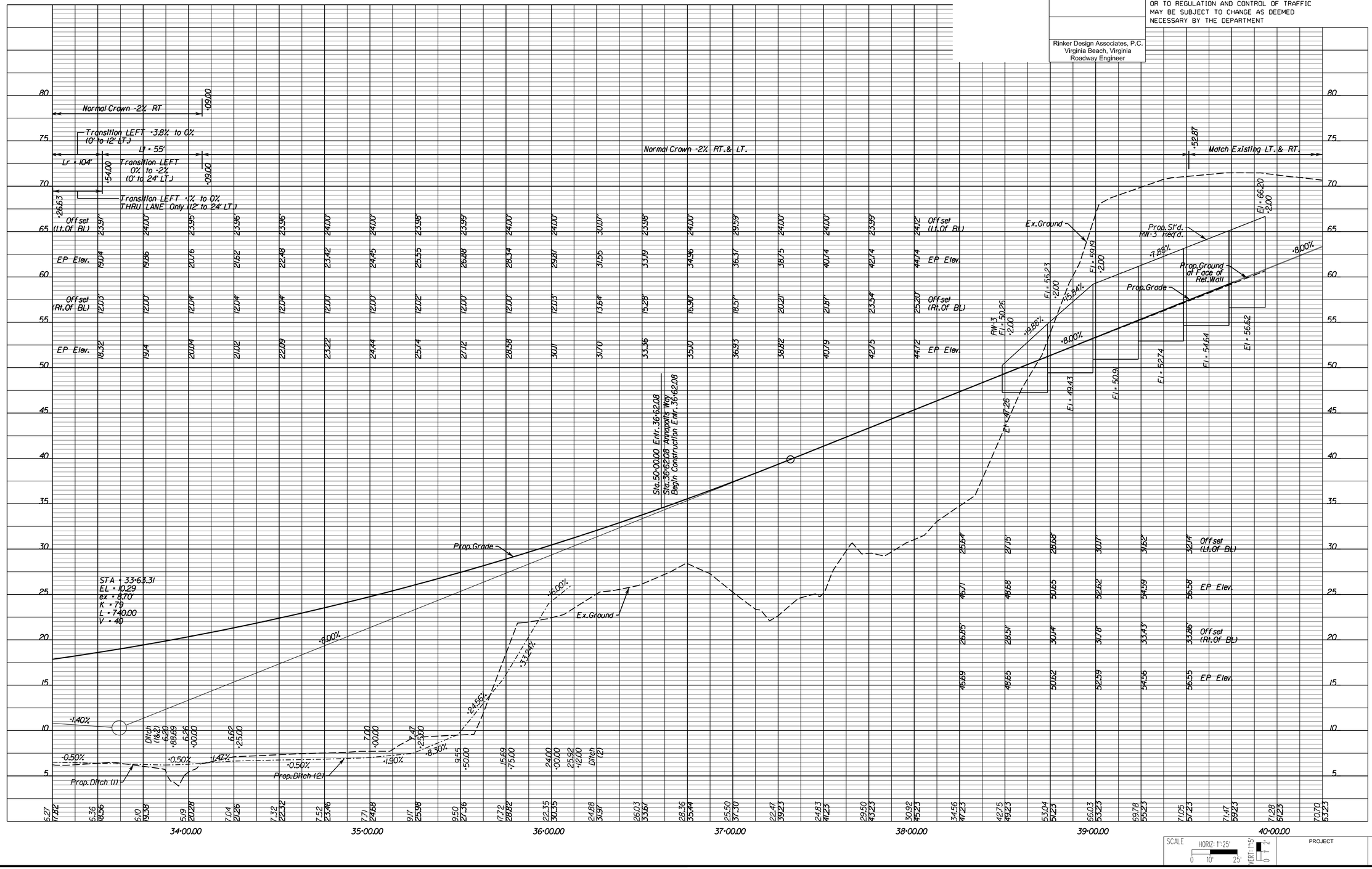
PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Annapolis Way Profile

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		5A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer



SCALE HORIZ: 1"=25' (0 10' 25') VERT: 1"=5' (0 1" 2") | PROJECT | SHEET NO. 5A

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Erosion & Sediment Control Phase I

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		5B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-09-5925
2.70003 Ac.

Instr. #20210401003969I
TM #8492-09-8760
17.5746 Ac.

THE LANDING AT MASON'S BRIDGE LP
Instr. #202107300089458
TM #8492-08-1272
14.80726 Ac.

RIVERGATE PHASE II, LLC
Instr. #20160826006806I
TM #8492-18-1453
6.4496 Ac.

991 ANNAPOLIS WAY, LLC
Instr. #201409080064675
TM #8492-08-7530
4.84461 Ac.

Match Line Sheet 4 - Annapolis Way C.B.L Sta. 33+25.00

Match Line Sheet 6 - Annapolis Way C.B.L Sta. 40+25.00

SCALE	PROJECT	SHEET NO.
0 25' 50'	.	5B

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT OF TRANSPORTATION: SHERRY DUQUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019

Erosion & Sediment Control Phase 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		5C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

BUSH CONSTRUCTION CORPORATION
Instr. #202104010039691
TM #8492-09-8760
17.5746 Ac.

THE LANDING AT MASON'S BRIDGE, LP
Instr. #202107300089458
TM #8492-09-5925
2.70003 Ac.

THE LANDING AT MASON'S BRIDGE LP
Instr. #202107300089458
TM #8492-08-2272
14.80726 Ac.

RIVERGATE PHASE II, LLC
Instr. #201608260068061
TM #8492-18-1453
6.4496 Ac.

9911 ANNAPOLIS WAY, LLC
Instr. #201409080064675
TM #8492-08-7530
4.84461 Ac.

Match Line Sheet 4 - Annapolis Way C.B.L Sta.33+25.00

Match Line Sheet 6 - Annapolis Way C.B.L Sta.40+25.00

SCALE	PROJECT	SHEET NO.
0 25' 50'	.	5C

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RW PLAN

5/5/2022

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
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SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

FOR INFORMATION ONLY

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		6

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C. Virginia Beach, Virginia Hydraulics Engineer	Rinker Design Associates, P.C. Virginia Beach, Virginia Roadway Engineer

REFERENCES
(PROFILES,DETAIL & DRAINAGE DESCRIPTION SHEETS,ETC.)

Survey Control Data	1C
Construction Alignment Data	1D
Typical Sections	2A
Drainage Descriptions	2K,2K(1)
Storm Sewer Pipe Profiles	2K(2)
Profile	6A
Erosion & Sediment Control Phase I	6B
Erosion & Sediment Control Phase II	6C

LEGEND

- Denotes Proposed Pavement
- Denotes Mill and Overlay
- Denotes Demolition of Pavement
- Denotes Temporary Easement
- Denotes Permanent Easement
- Denotes Proposed R/W
- C Denotes Construction Limits in Cuts
- F Denotes Construction Limits in Fills

SCALE 0 25' 50'

PROJECT	SHEET NO.
	6

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
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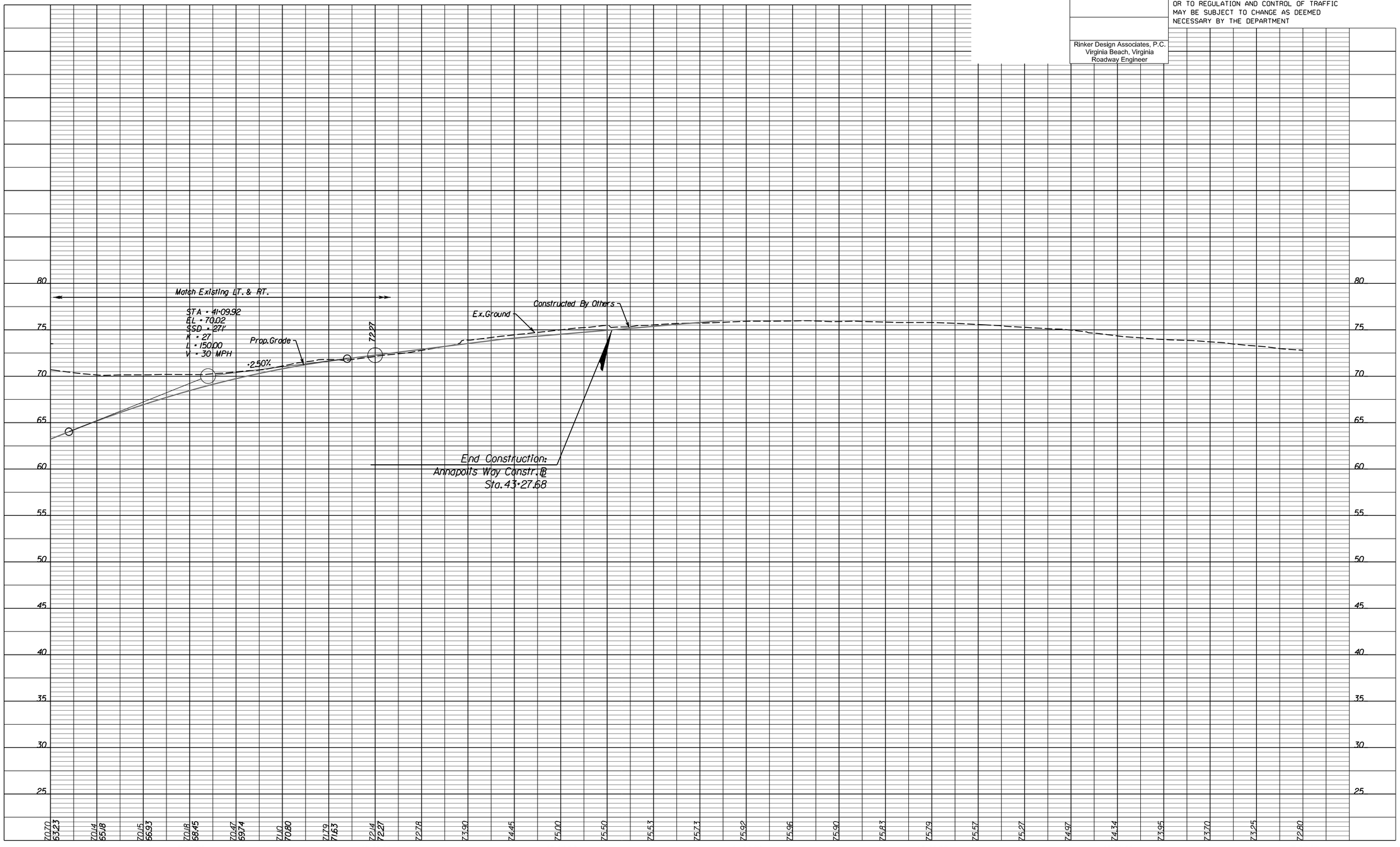
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Annapolis Way Profile

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		6A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer



SCALE	PROJECT	SHEET NO.
HORIZ: 1"=25' (0, 10', 25') VERT: 1"=5' (0, 1", 2")		6A

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RW PLAN

5/5/2022

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION-SHEBBY DJOUHABIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373, JAN.2020 & DEC.2021
DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC. DECEMBER 2019

Erosion & Sediment Control Phase I

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		6B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

SCALE	PROJECT	SHEET NO.
0 25' 50'		6B

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT OF TRANSPORTATION-SHEBBY DJOUHABIAN (703) 792-6822
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DESIGN BY RINKER DESIGN ASSOCIATES,P.C.(703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK,INC.,DECEMBER 2019

Erosion & Sediment Control Phase 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		6C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

SCALE	PROJECT	SHEET NO.
0 25' 50'	.	6C

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT.OF TRANSPORTATION-SHEBBY DJOUHABIAN (703) 792-6822
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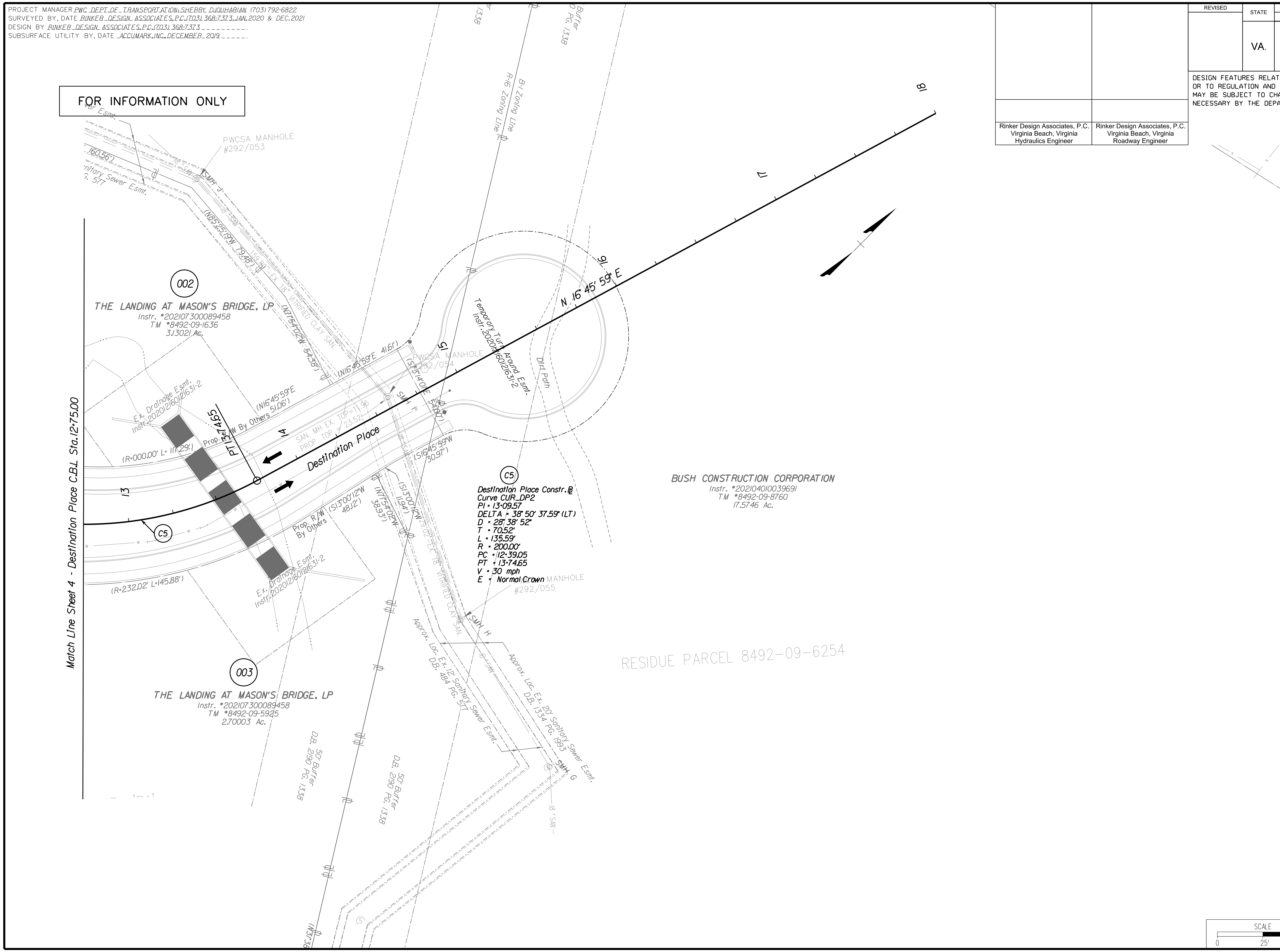
REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	673		7

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C. Virginia Beach, Virginia Hydraulics Engineer	Rinker Design Associates, P.C. Virginia Beach, Virginia Roadway Engineer

FOR INFORMATION ONLY



LEGEND

- Denotes Proposed Pavement
- Denotes Mill and Overlay
- Denotes Demolition of Pavement
- Denotes Temporary Easement
- Denotes Permanent Easement
- Denotes Proposed R/W
- C Denotes Construction Limits In Cuts
- F Denotes Construction Limits In Fills

SCALE 0 25' 50'

PROJECT	SHEET NO.
	7

5/5/2022

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RW PLAN

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHEBBY DJOUHABIAN (703) 792-6822
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SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Erosion & Sediment Control Phase I

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	673		7B

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SCALE 0 25' 50'

PROJECT	SHEET NO.
.	7B

5/5/2022

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DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Erosion & Sediment Control Phase 2

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	673		7C

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Hydraulics Engineer

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

SCALE	PROJECT	SHEET NO.
0 25' 50'	.	7C

5/5/2022

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RW PLAN

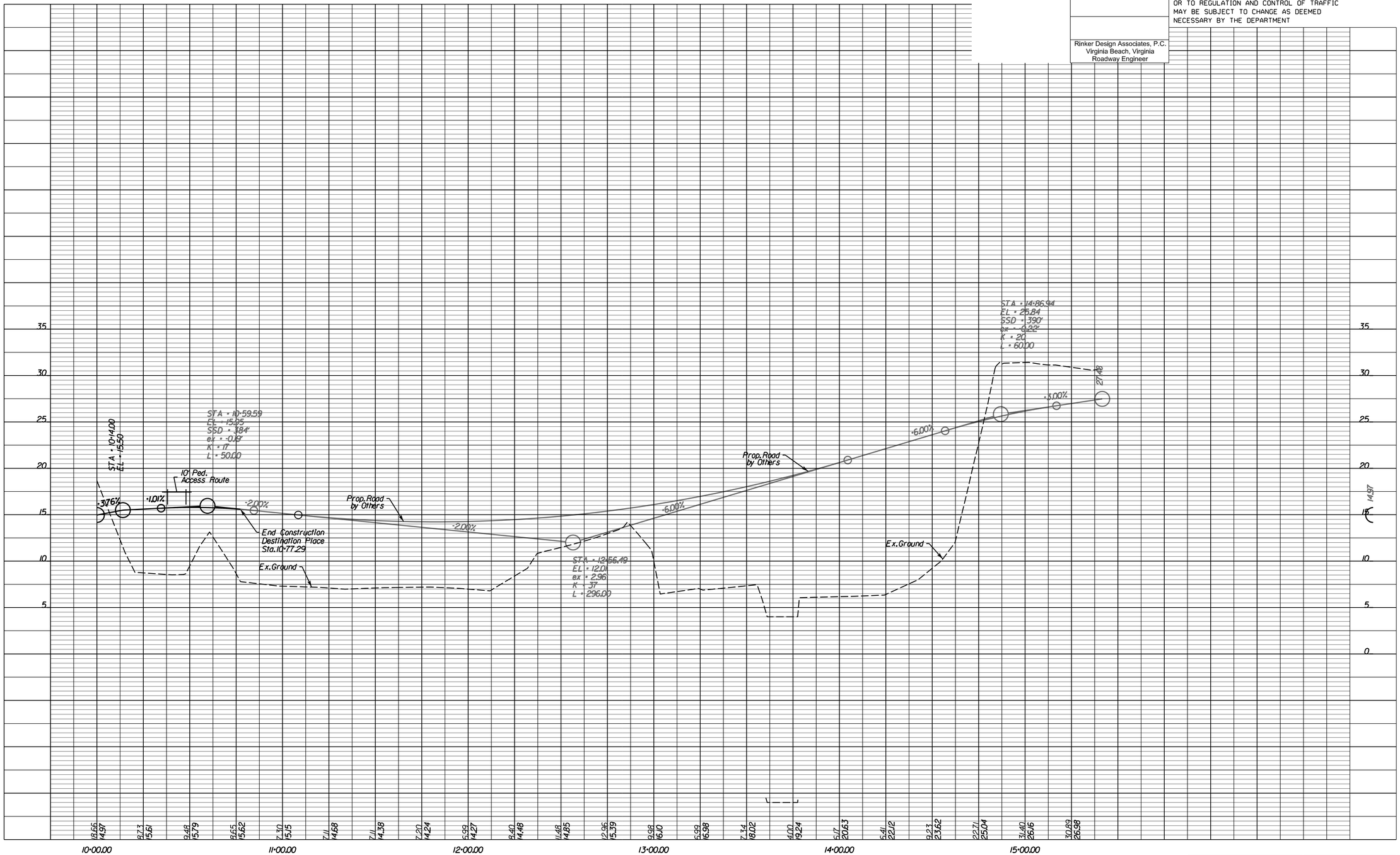
PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC., DECEMBER 2019 _____.

Destination Place Profile

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		8

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Virginia Beach, Virginia
Roadway Engineer



SCALE	PROJECT	SHEET NO.
HORIZ: 1"=25' (0, 10', 25') VERT: 1"=5' (0, 1", 2")		8

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RW PLAN

5/5/2022

PROJECT MANAGER PWC DEPT. OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
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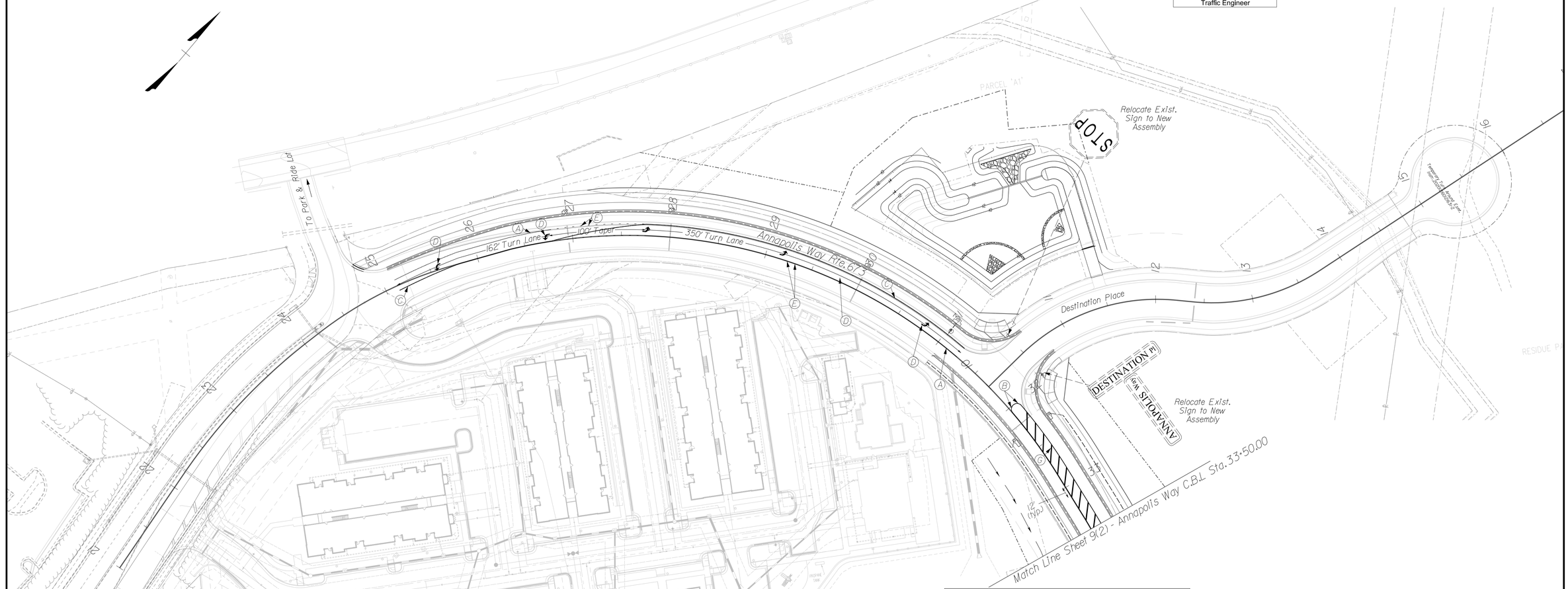
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373 _____.
SUBSURFACE UTILITY BY, DATE ACCUMARK INC. DECEMBER 2019 _____.

Signage and Pavement Marking Plan

REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	673		9(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Manassas, Virginia
Traffic Engineer



LEGEND

C _ _ _ Denotes Construction Limits in Cuts

F _ _ _ Denotes Construction Limits in Fills

Note : Dot - dashed lines denote Permanent Easements. (Exist.)

Note : Dot - dot - dashed lines denote Temporary Easements. (Exist.)

PAVEMENT MARKING LEGEND

A Type B, Class I, White, 4" Width
B Type B, Class I, Yellow, 4" Width
C Type B, Class I, Yellow, 4" Width, Double Line, 4" Spacing
D Type B, Class I, White, Turn Lane-Use Arrow
E Type B, Class I, White, 4" Width, 3' Long, 9' Spacing
F Type B, Class I, White, 24" Width
G Type B, Class I, Yellow, 24" Width

NOTES:
1. Any existing condition that does not reflect the pavement marking plan as shown on this sheet, shall be completely eradicated per VDOT Standards.
2. Unless otherwise directed by Prince William County, the Contractor shall match the widths of the existing pavement markings for all proposed restriping operations presented in this pavement marking plan.

SIGNAGE PLAN LEGEND

- Proposed Ground Mounted Sign
- Existing Ground Mounted Sign
- SIGNAGE — Existing Sign Panel
- SIGNAGE — Existing Sign to be Removed
- SIGNAGE — Proposed Sign Panel

SCALE	PROJECT	SHEET NO.
0 50' 100'		9(1)

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

PROJECT MANAGER PWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

Signage and Pavement Marking Plan

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		9(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Rinker Design Associates, P.C.
Manassas, Virginia
Traffic Engineer

PAVEMENT MARKING LEGEND

- A Type B, Class I, White, 4" Width
- B Type B, Class I, Yellow, 4" Width
- C Type B, Class I, Yellow, 4" Width, Double Line, 4" Spacing
- D Type B, Class I, White, Turn Lane-Use Arrow
- E Type B, Class I, White, 4" Width, 3' Long, 9' Spacing
- F Type B, Class I, White, 24" Width
- G Type B, Class I, Yellow, 24" Width

NOTES:
1. Any existing condition that does not reflect the pavement marking plan as shown on this sheet, shall be completely eradicated per VDOT Standards.
2. Unless otherwise directed by Prince William County, the Contractor shall match the widths of the existing pavement markings for all proposed restriping operations presented in this pavement marking plan.

LEGEND

C - - - - Denotes Construction Limits in Cuts
F — — Denotes Construction Limits in Fills

Note : Dot - dashed lines denote Permanent Easements. (Exist.)
Note : Dot - dot - dashed lines denote Temporary Easements. (Exist.)

SIGNAGE PLAN LEGEND

- Proposed Ground Mounted Sign
- Existing Ground Mounted Sign
- SIGNAGE — Existing Sign Panel
- SIGNAGE — Existing Sign to be Removed
- SIGNAGE — Proposed Sign Panel

SCALE 0 50' 100'

PROJECT	SHEET NO.
	9(2)

5/5/2022

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

RW PLAN

5/5/2022
2:37:20 PM

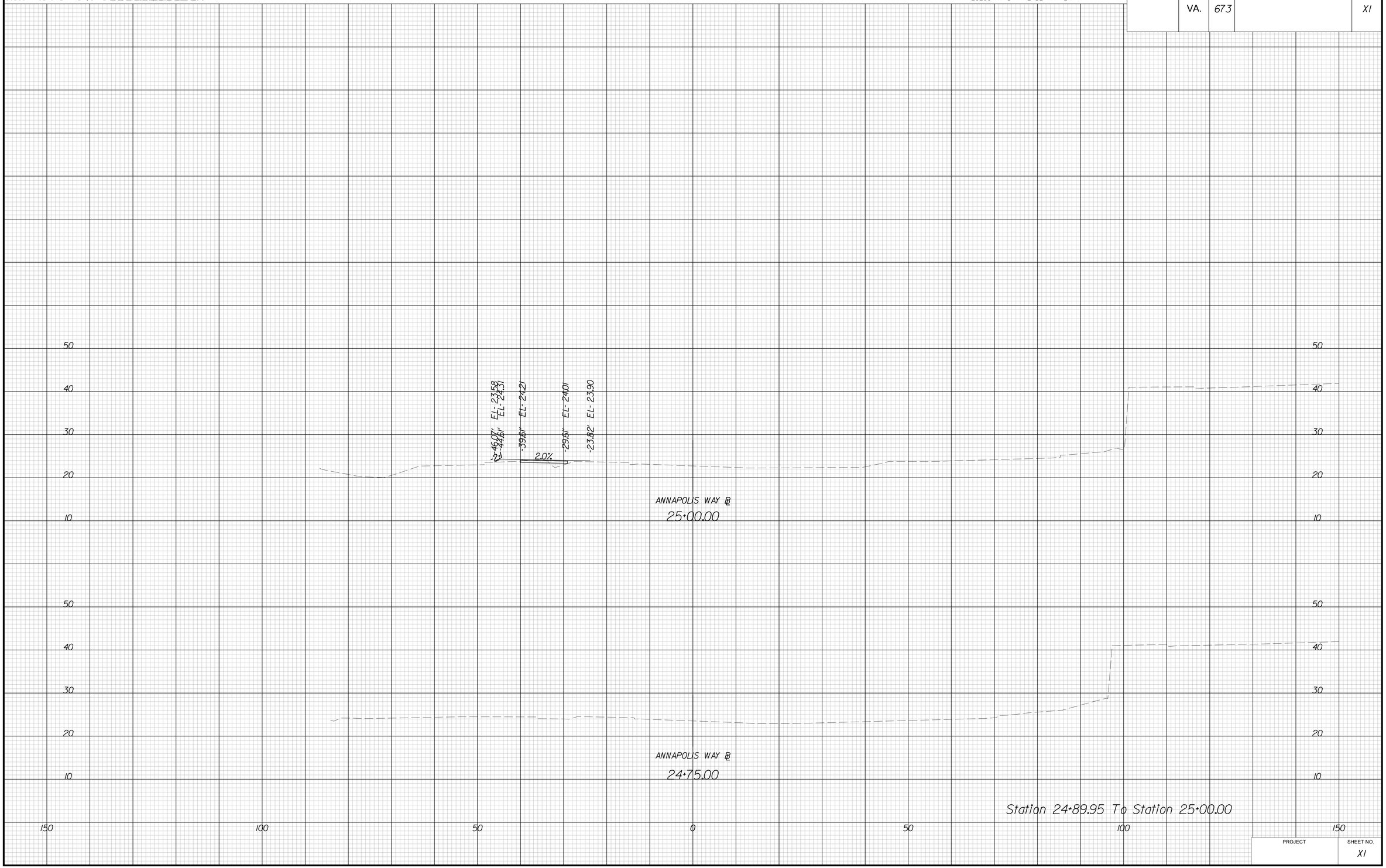
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		XI



PROJECT	SHEET NO.
	XI

5/5/2022
2:37:22 PM

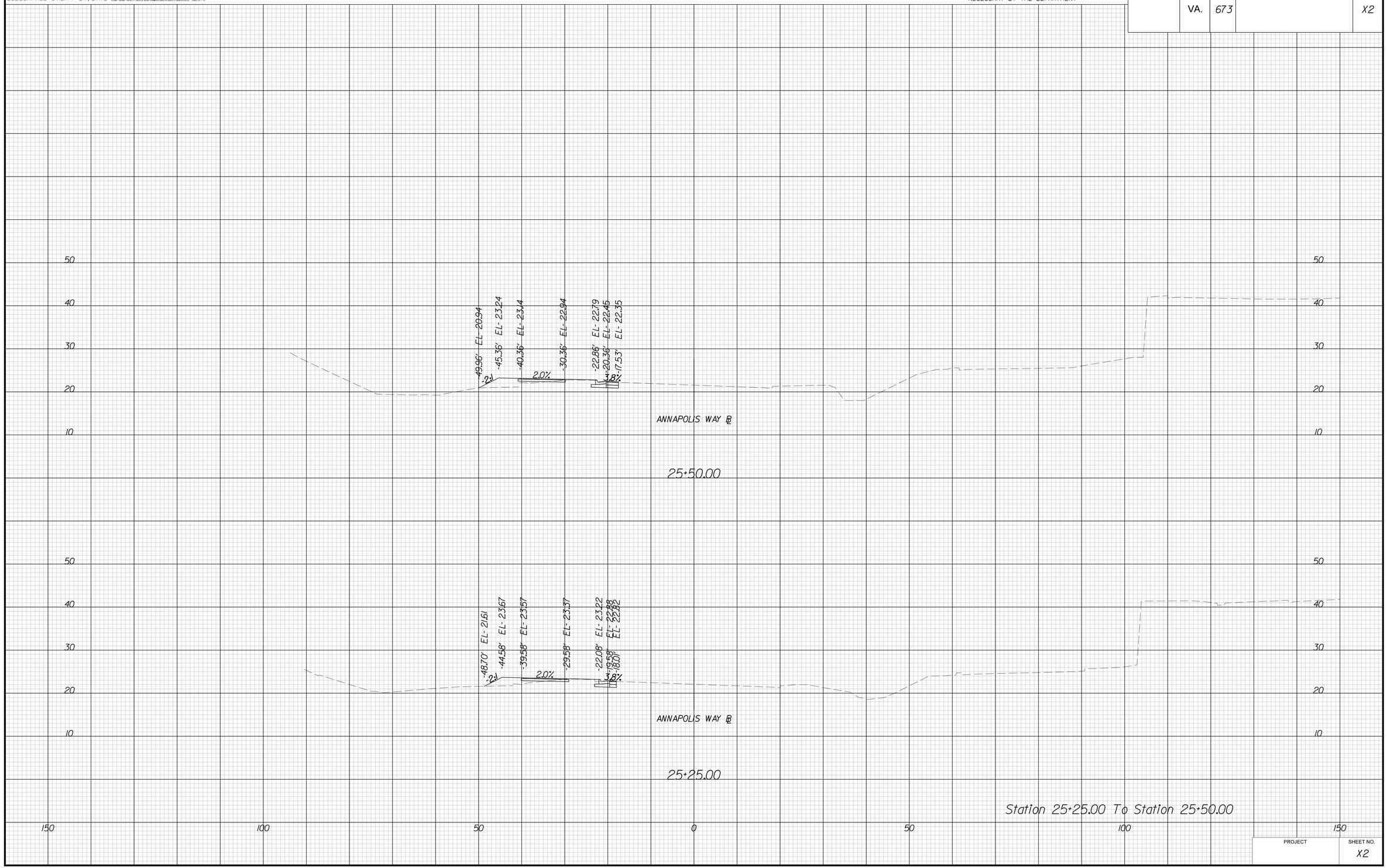
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X2



PROJECT	SHEET NO.
	X2

5/5/2022
2:37:23 PM

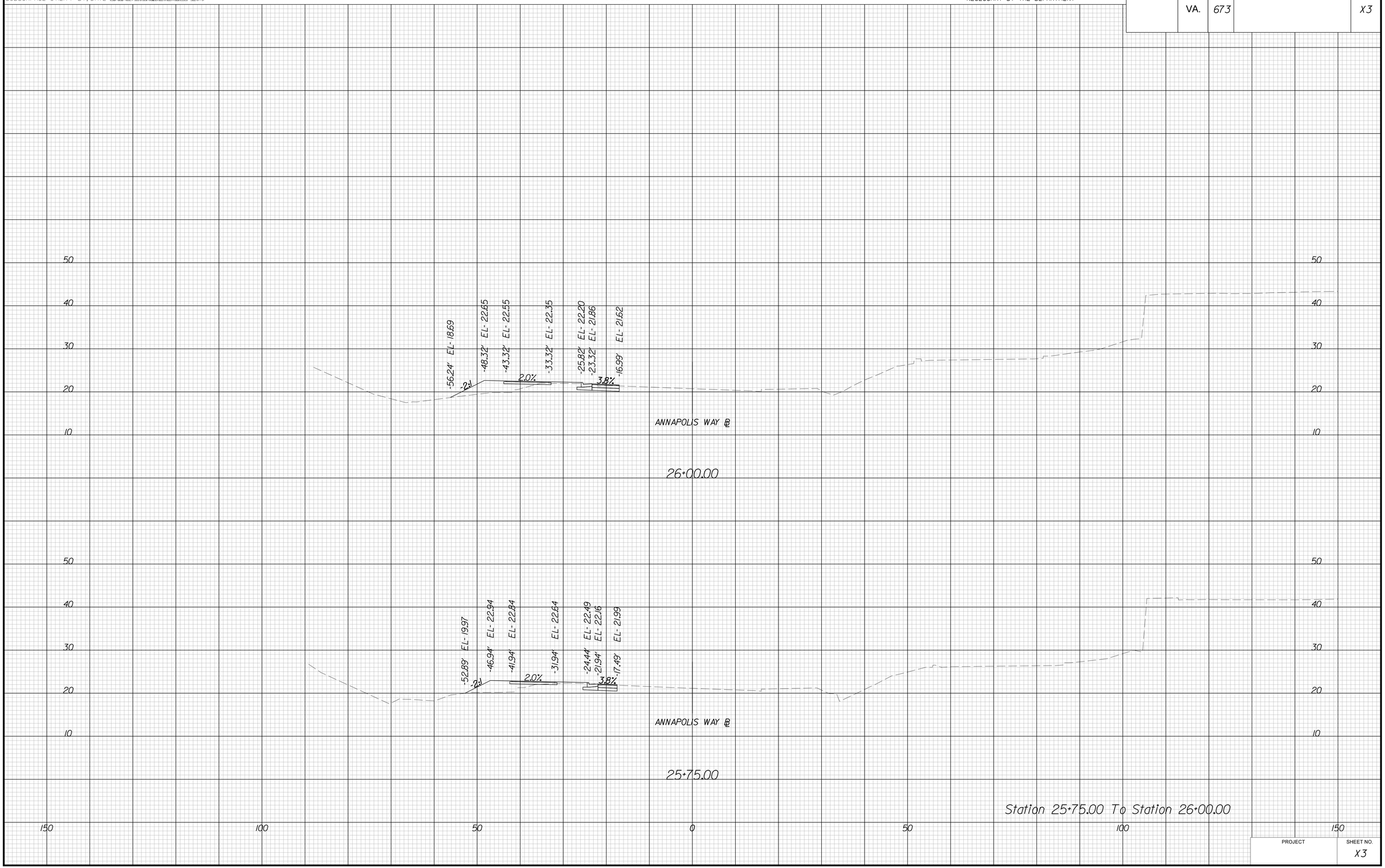
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X3



Station 25+75.00 To Station 26+00.00

PROJECT	SHEET NO.
	X3

5/5/2022
2:37:25 PM

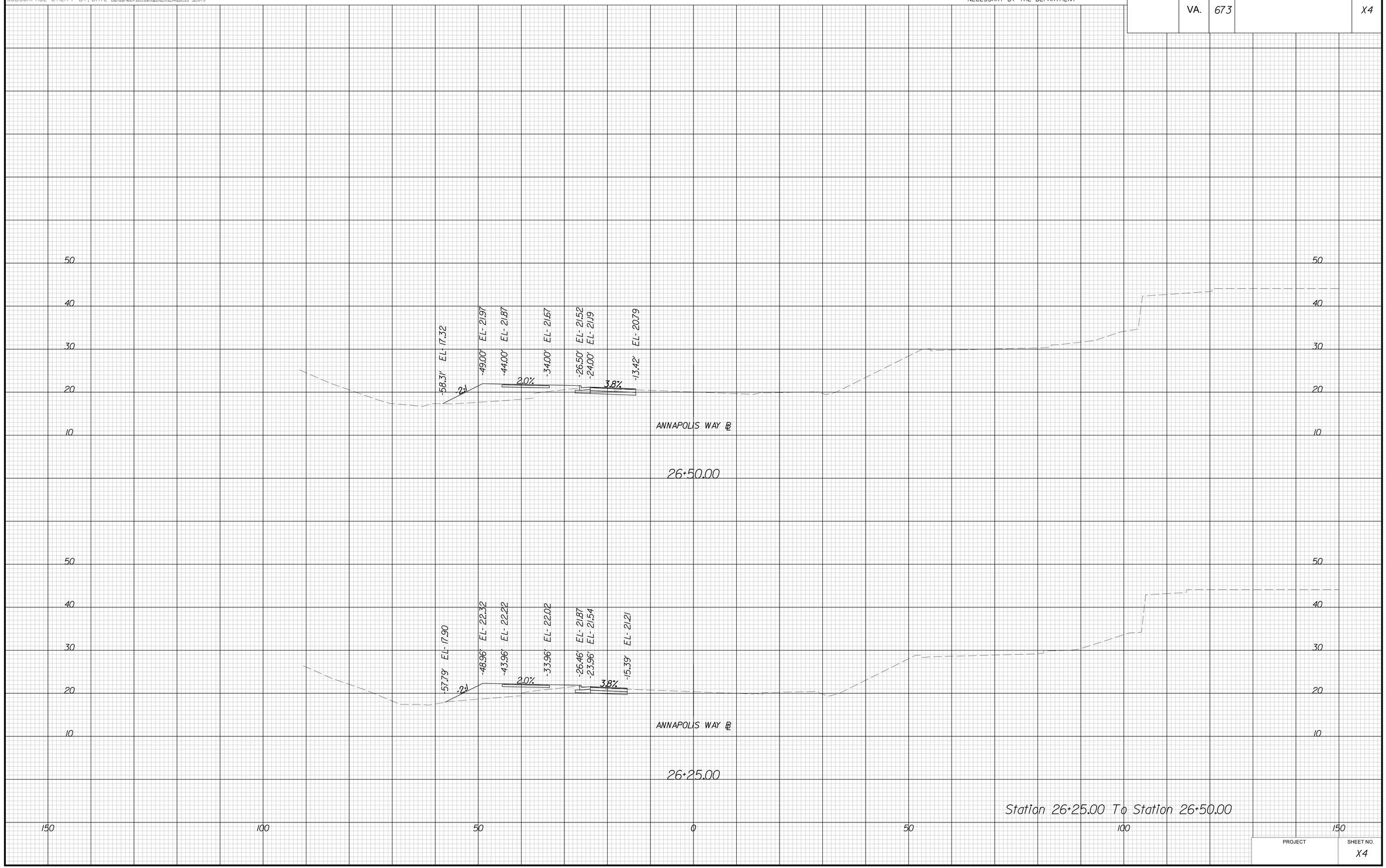
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X4



Station 26+25.00 To Station 26+50.00

PROJECT	SHEET NO.
	X4

5/5/2022
2:37:27 PM

PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
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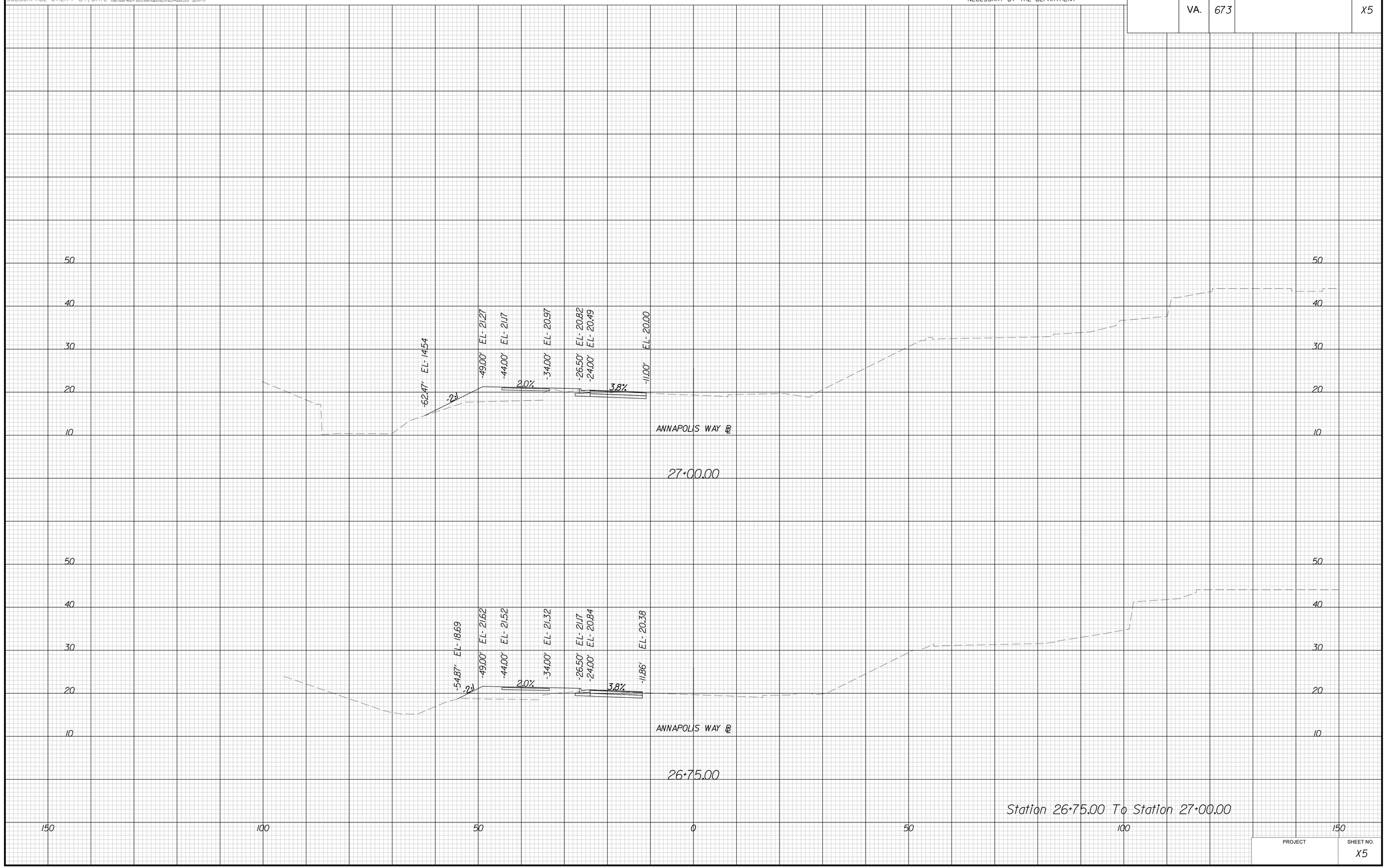
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X5



Station 26+75.00 To Station 27+00.00

PROJECT	SHEET NO.
	X5

5/5/2022
2:37:29 PM

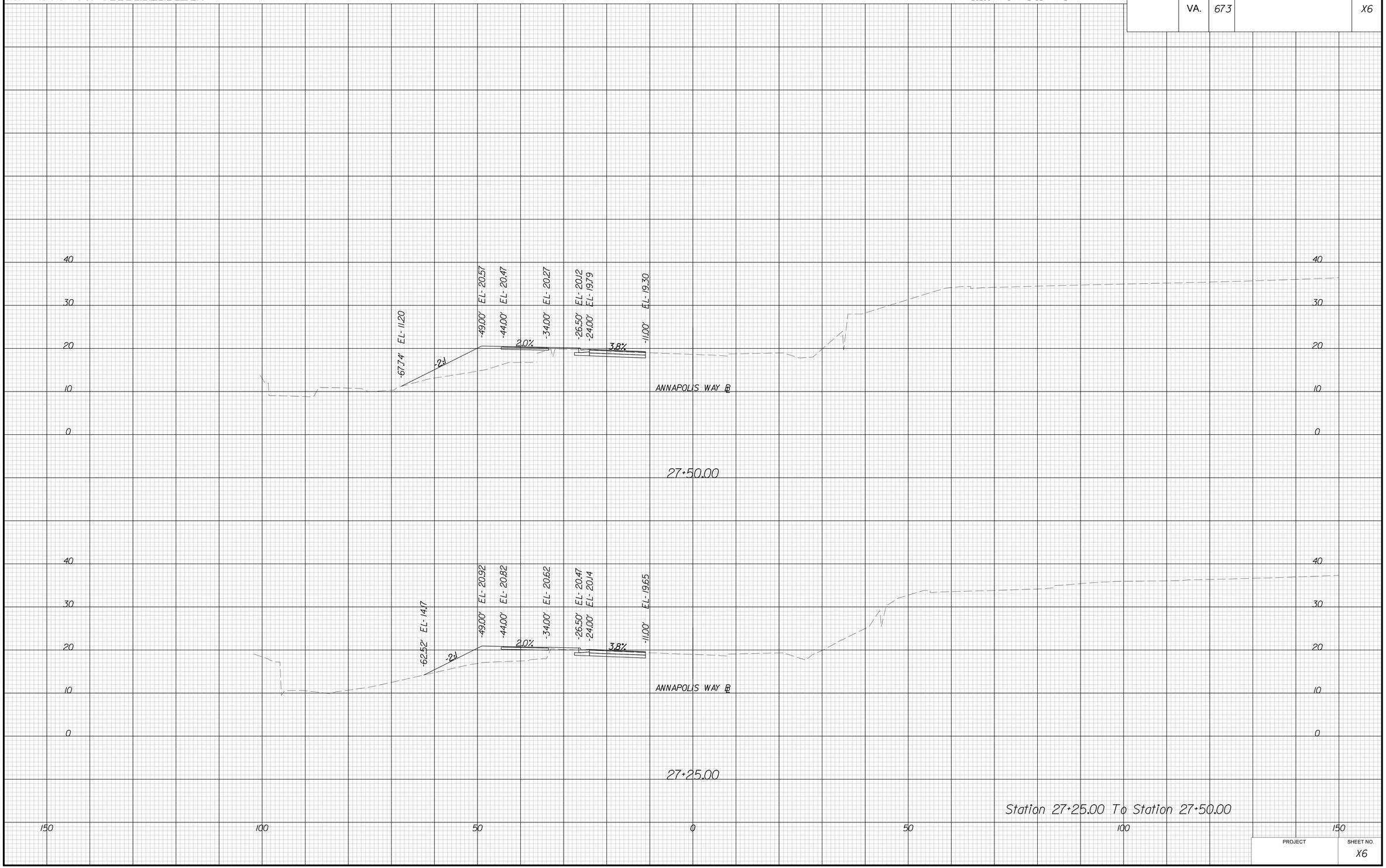
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X6



Station 27+25.00 To Station 27+50.00

PROJECT	SHEET NO.
	X6

5/5/2022
2:37:31 PM

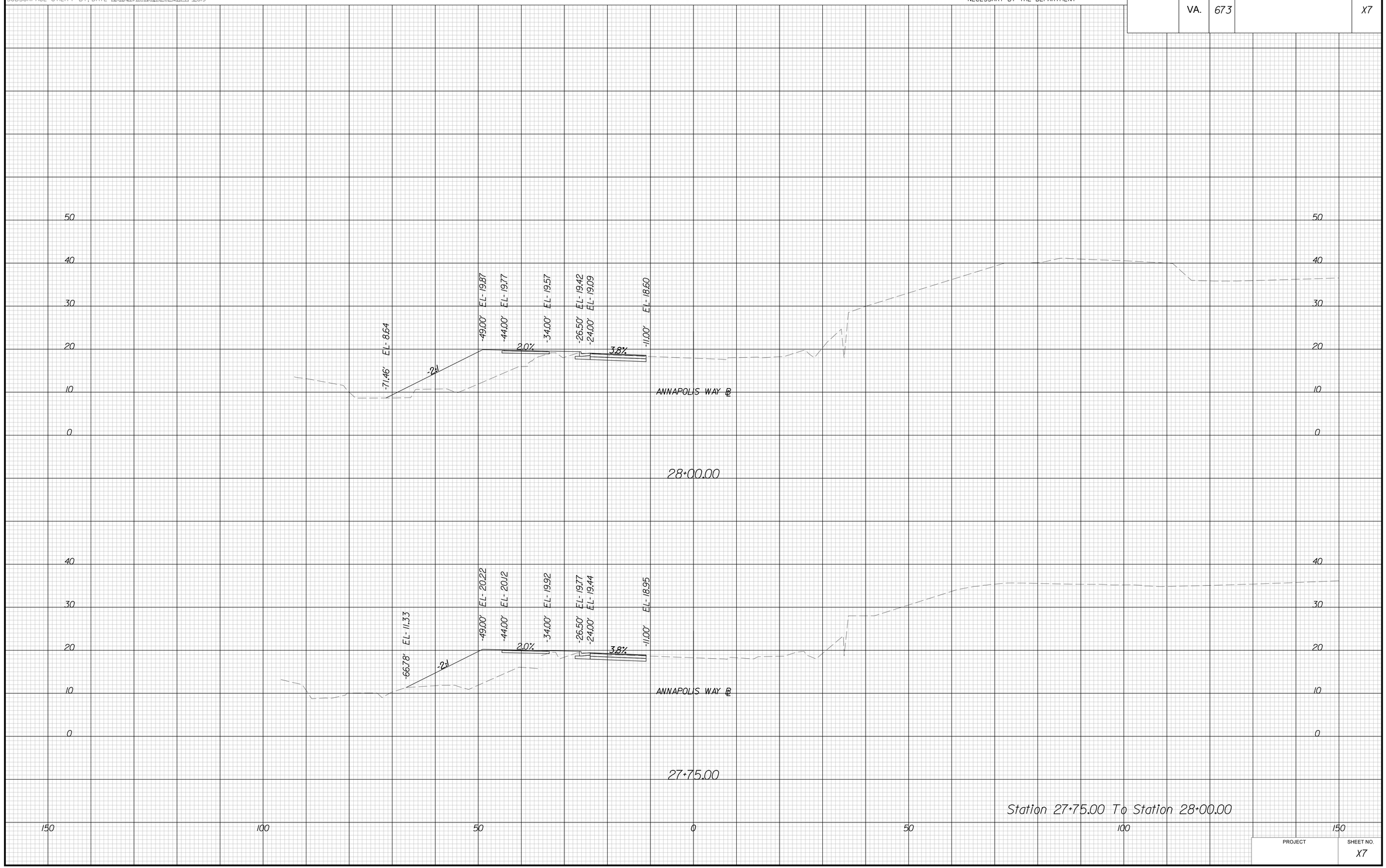
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X7



Station 27+75.00 To Station 28+00.00

PROJECT	SHEET NO.
	X7

5/5/2022
2:37:32 PM

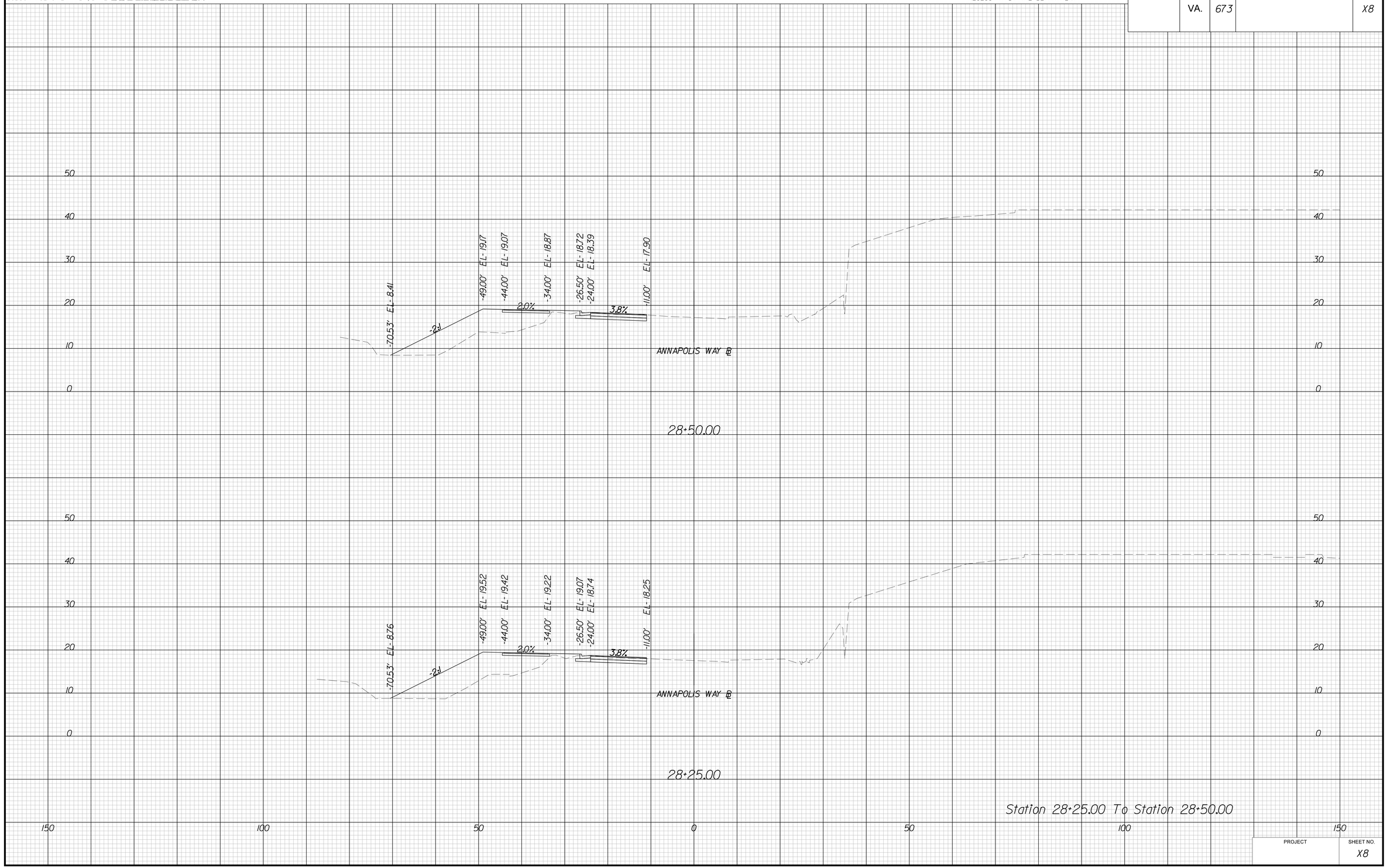
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X8



PROJECT	SHEET NO.
	X8

5/5/2022
2:37:34 PM

PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
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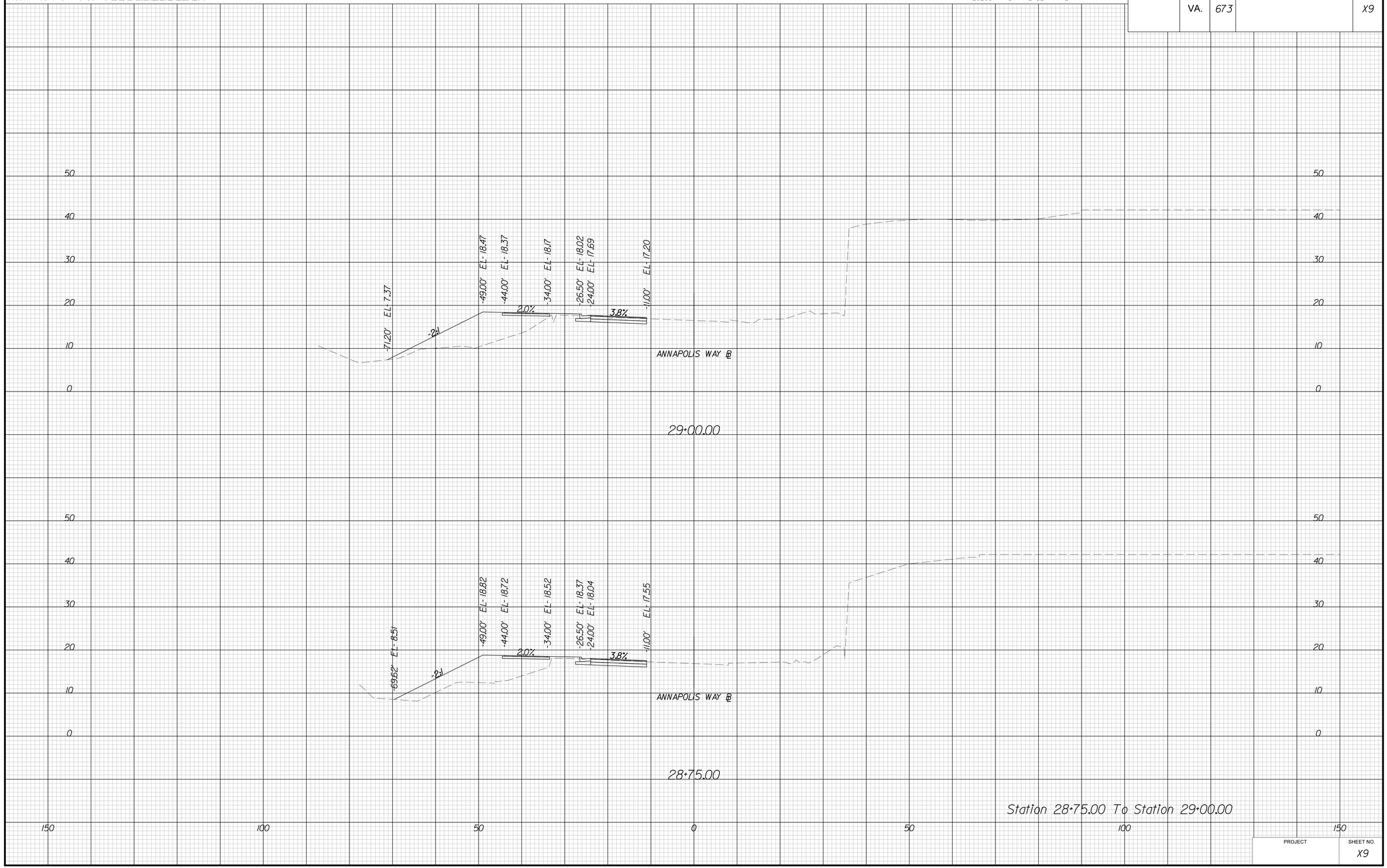
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X9



Station 28+75.00 To Station 29+00.00

PROJECT	SHEET NO.
	X9

5/5/2022
2:37:36 PM

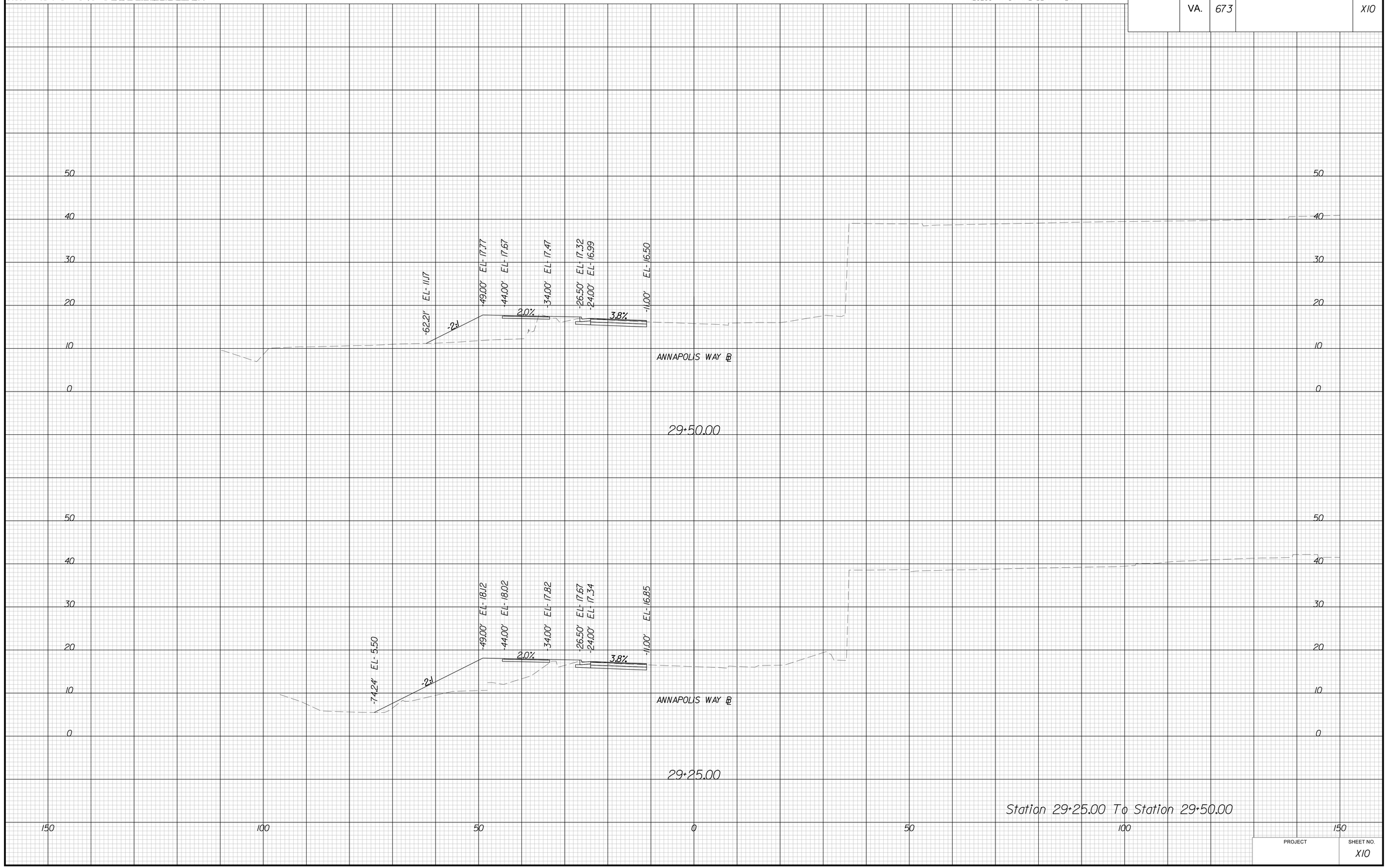
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X10



PROJECT	SHEET NO.
	X10

5/5/2022
2:37:38 PM

PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
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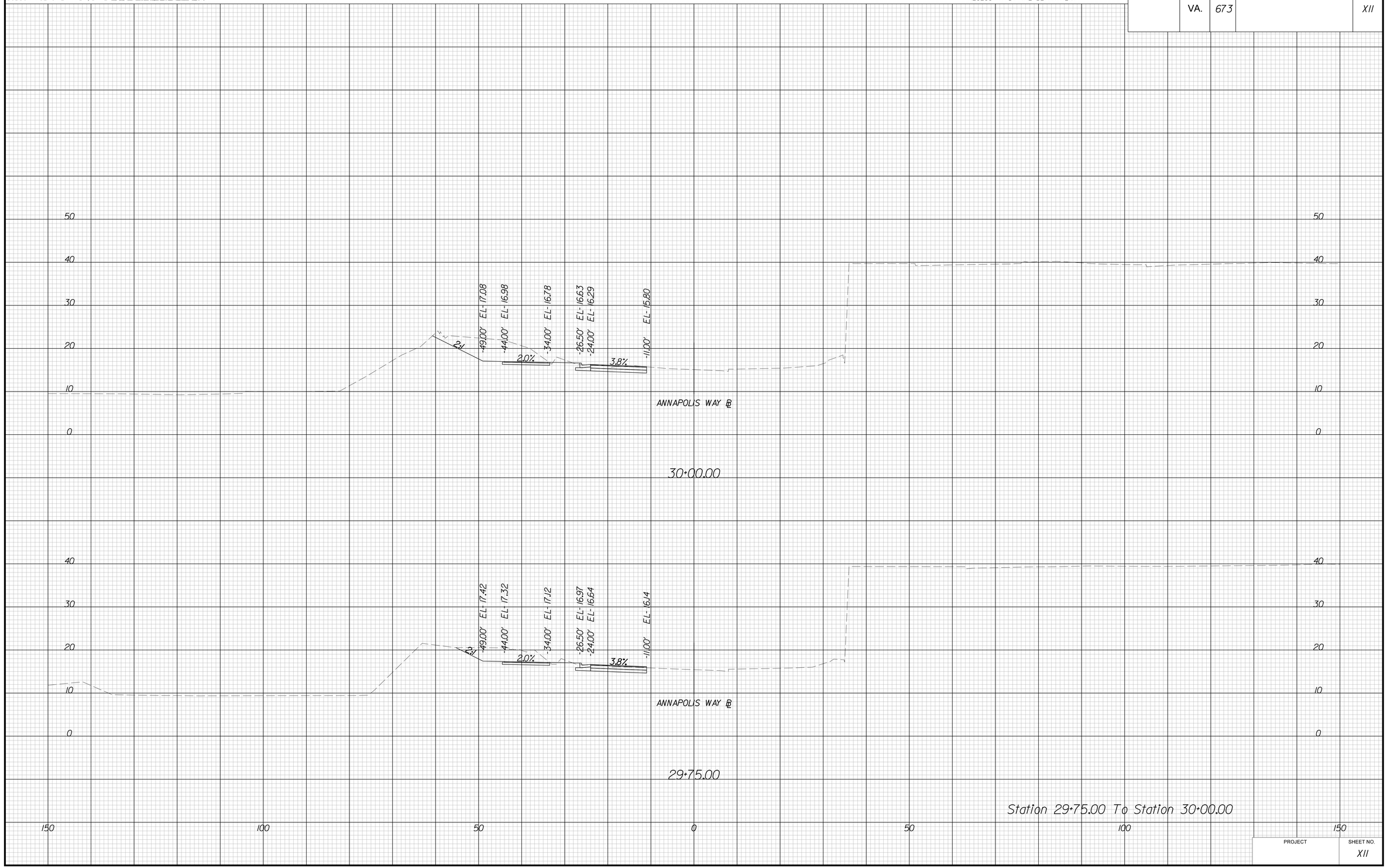
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		XII



Station 29+75.00 To Station 30+00.00

PROJECT	SHEET NO.
	XII

5/5/2022
2:37:40 PM

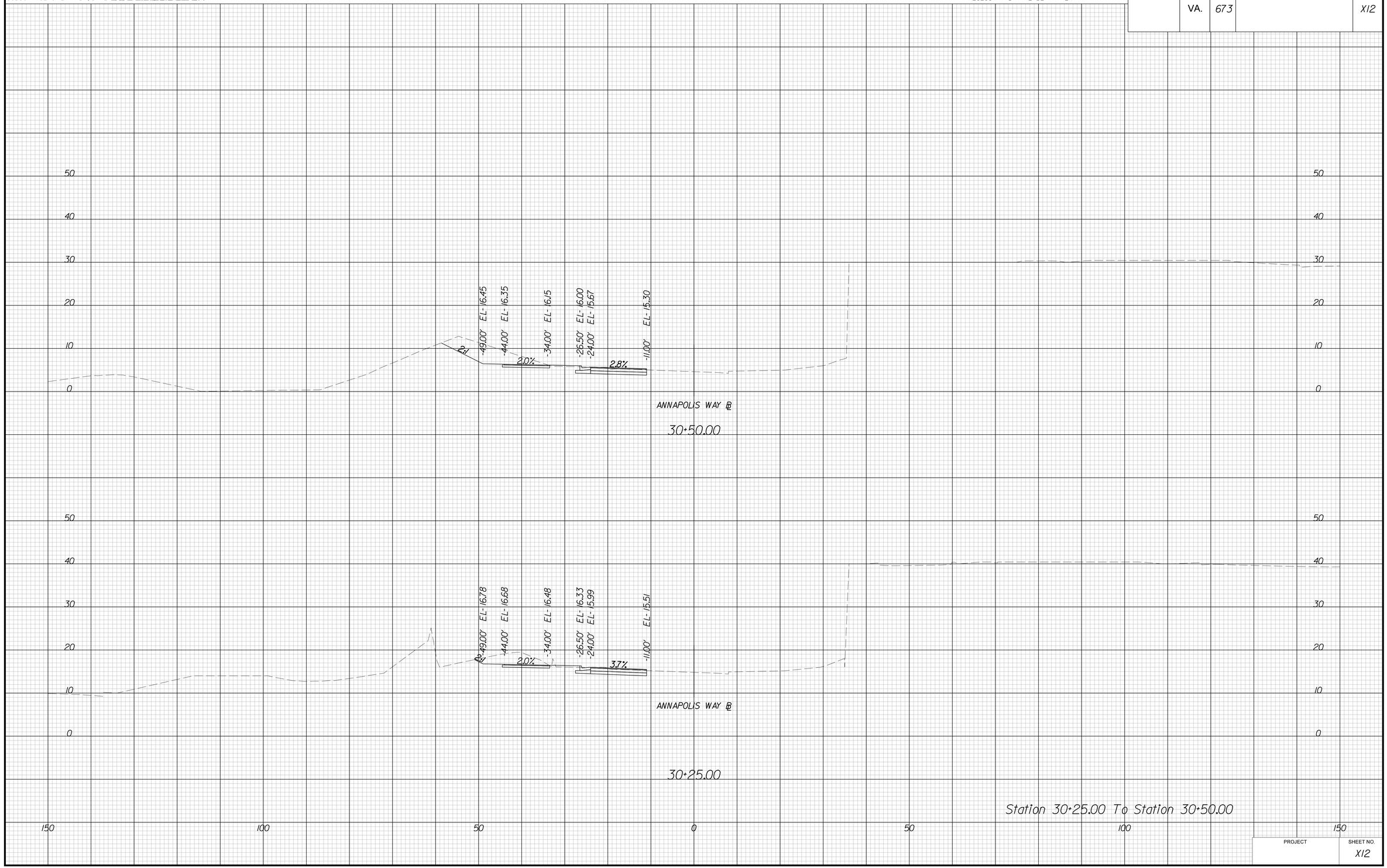
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X12



PROJECT	SHEET NO.
	X12

5/5/2022
2:37:42 PM

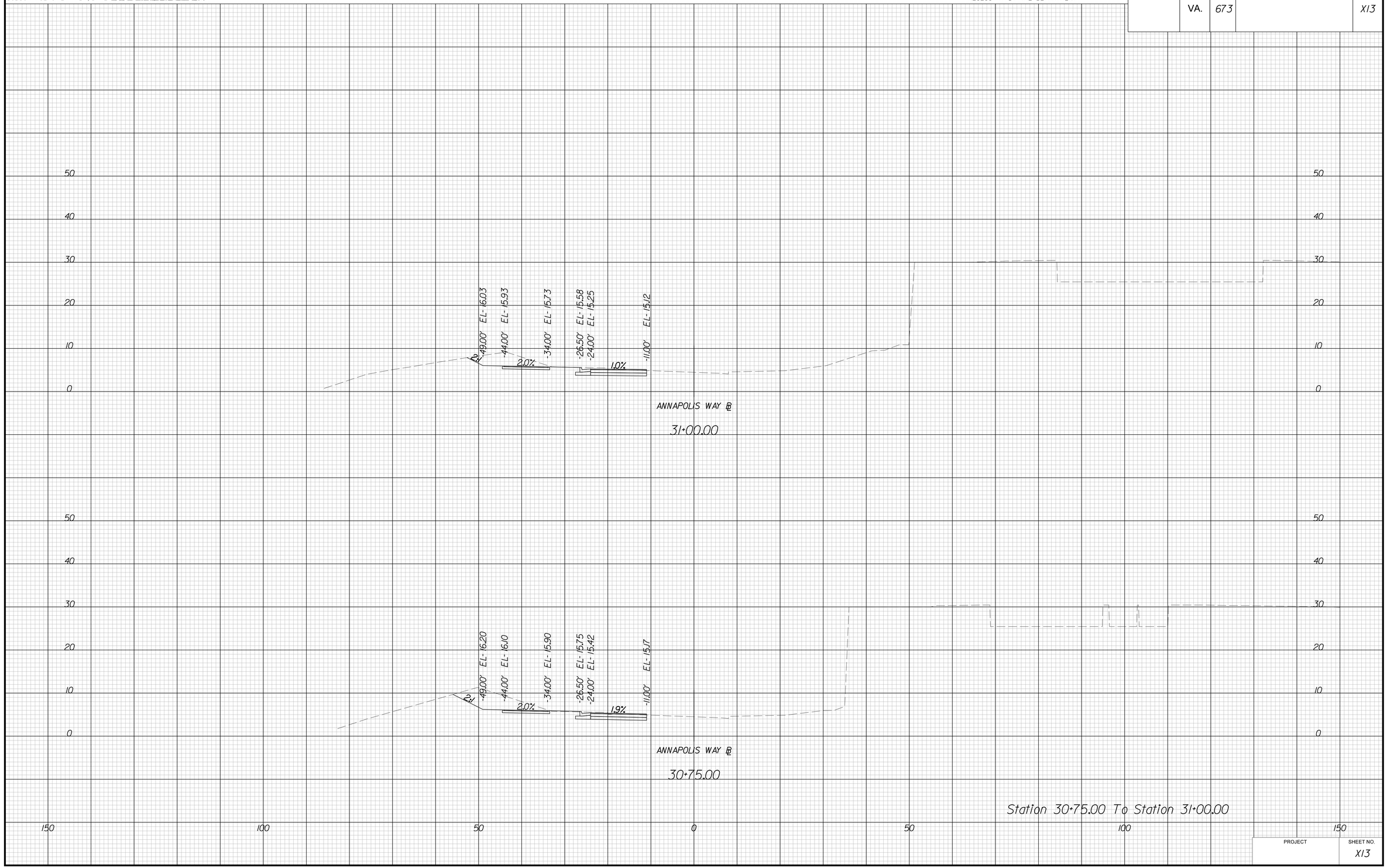
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X13



Station 30+75.00 To Station 31+00.00

PROJECT	SHEET NO.
	X13

5/5/2022
2:37:43 PM

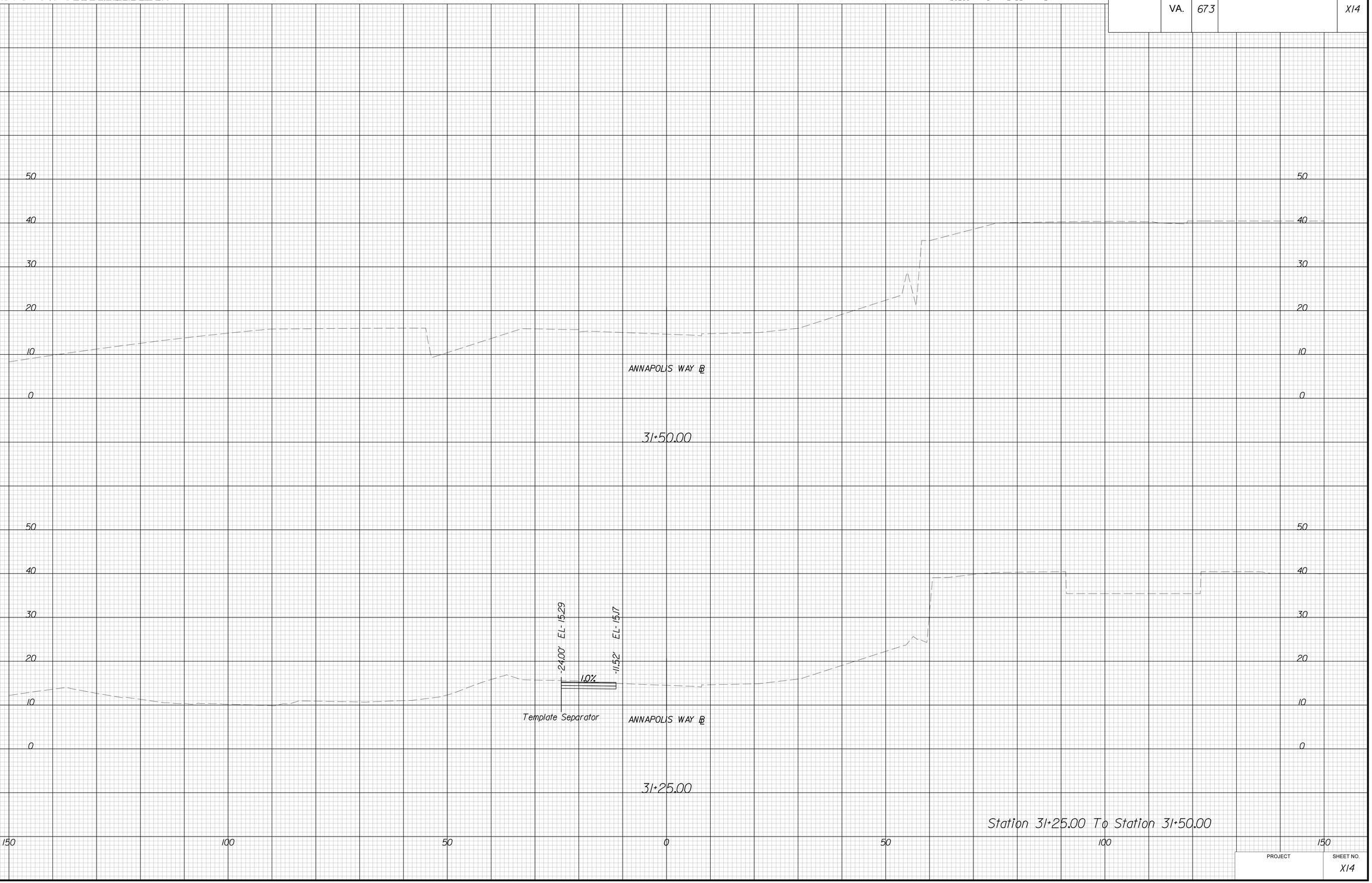
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X14



Station 31+25.00 To Station 31+50.00

PROJECT	SHEET NO.
	X14

5/5/2022
2:37:45 PM

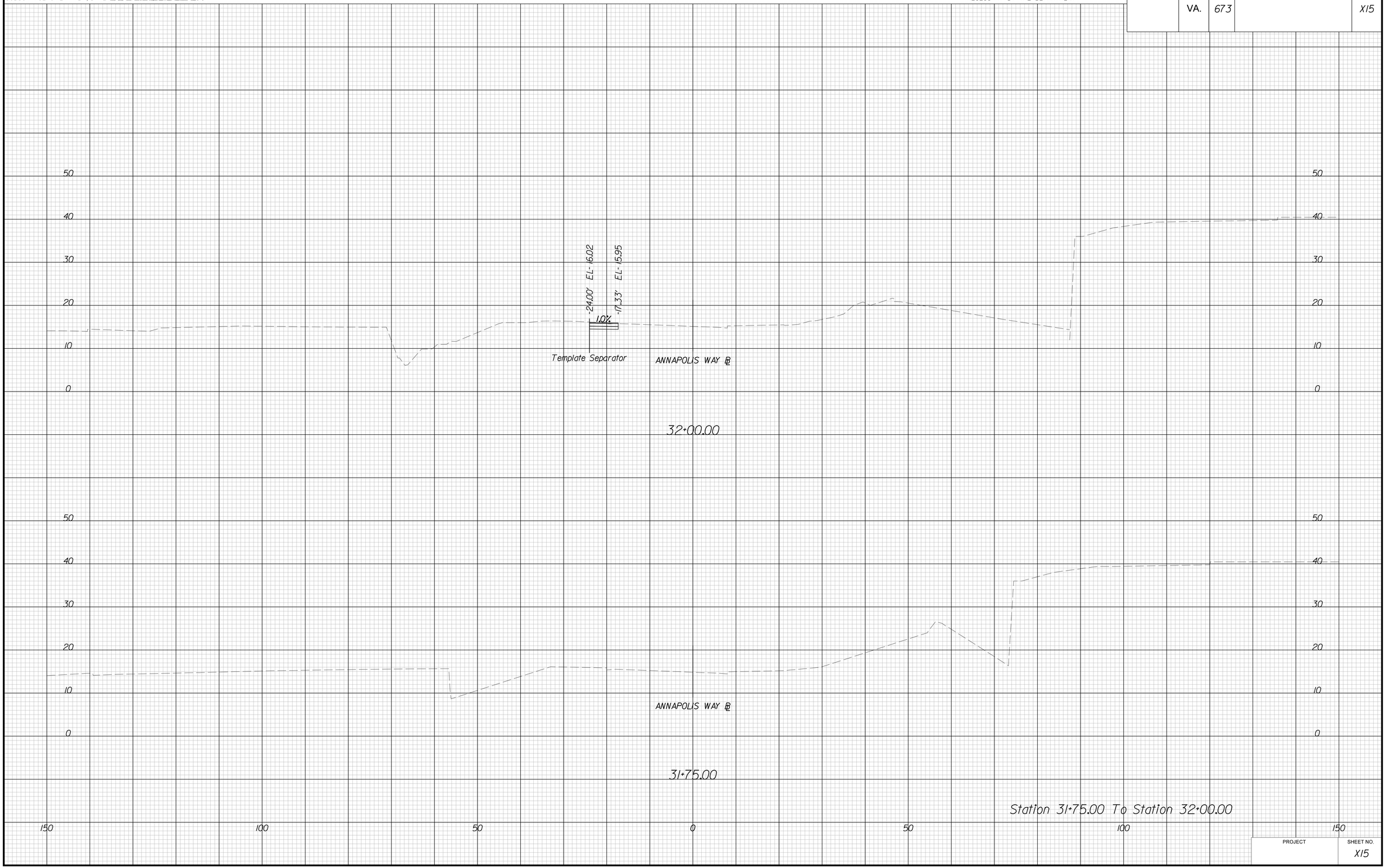
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X15



Station 31+75.00 To Station 32+00.00

PROJECT	SHEET NO.
	X15

5/5/2022
2:37:47 PM

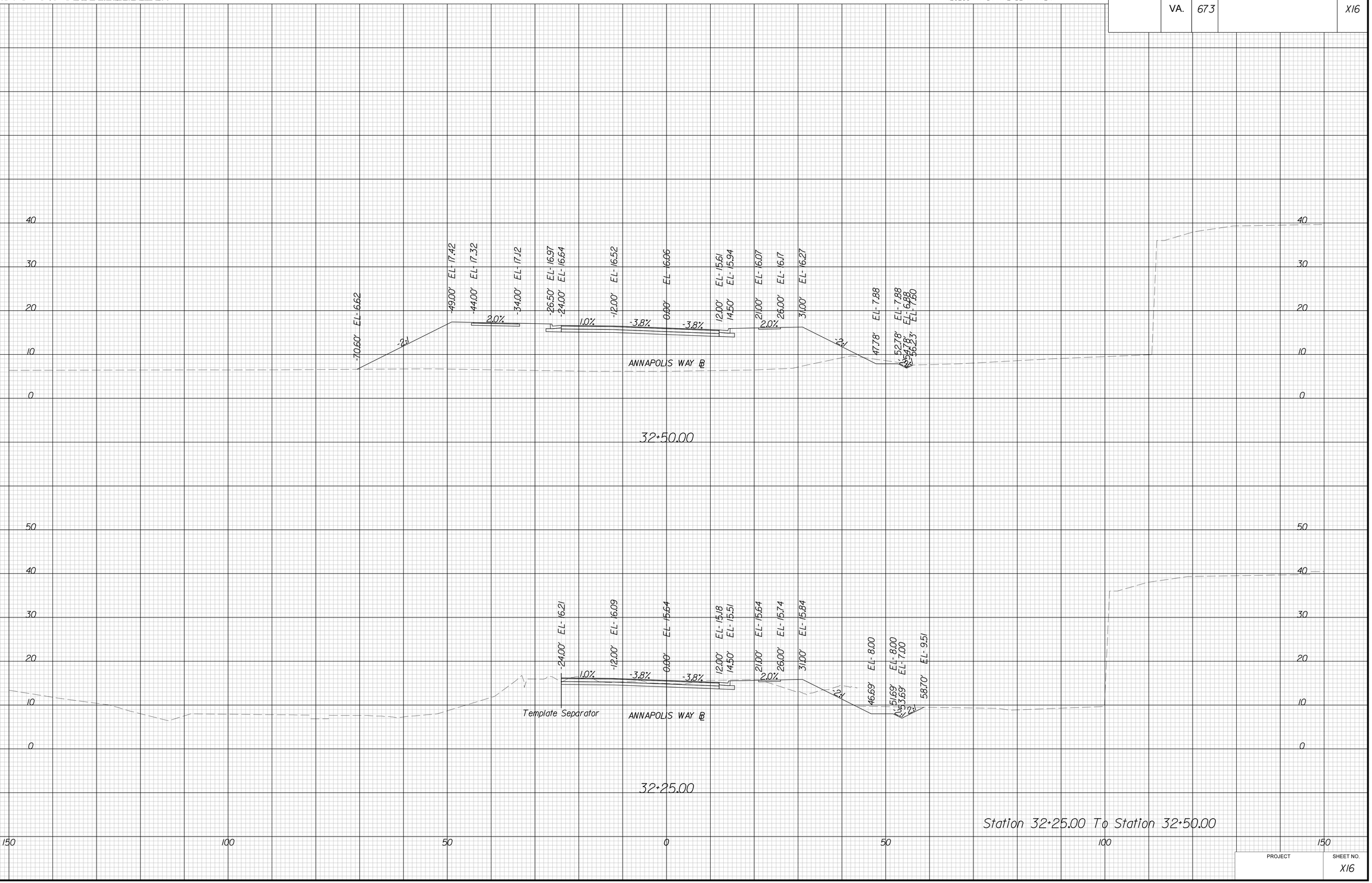
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X16



PROJECT	SHEET NO.
	X16

5/5/2022
2:37:49 PM

PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
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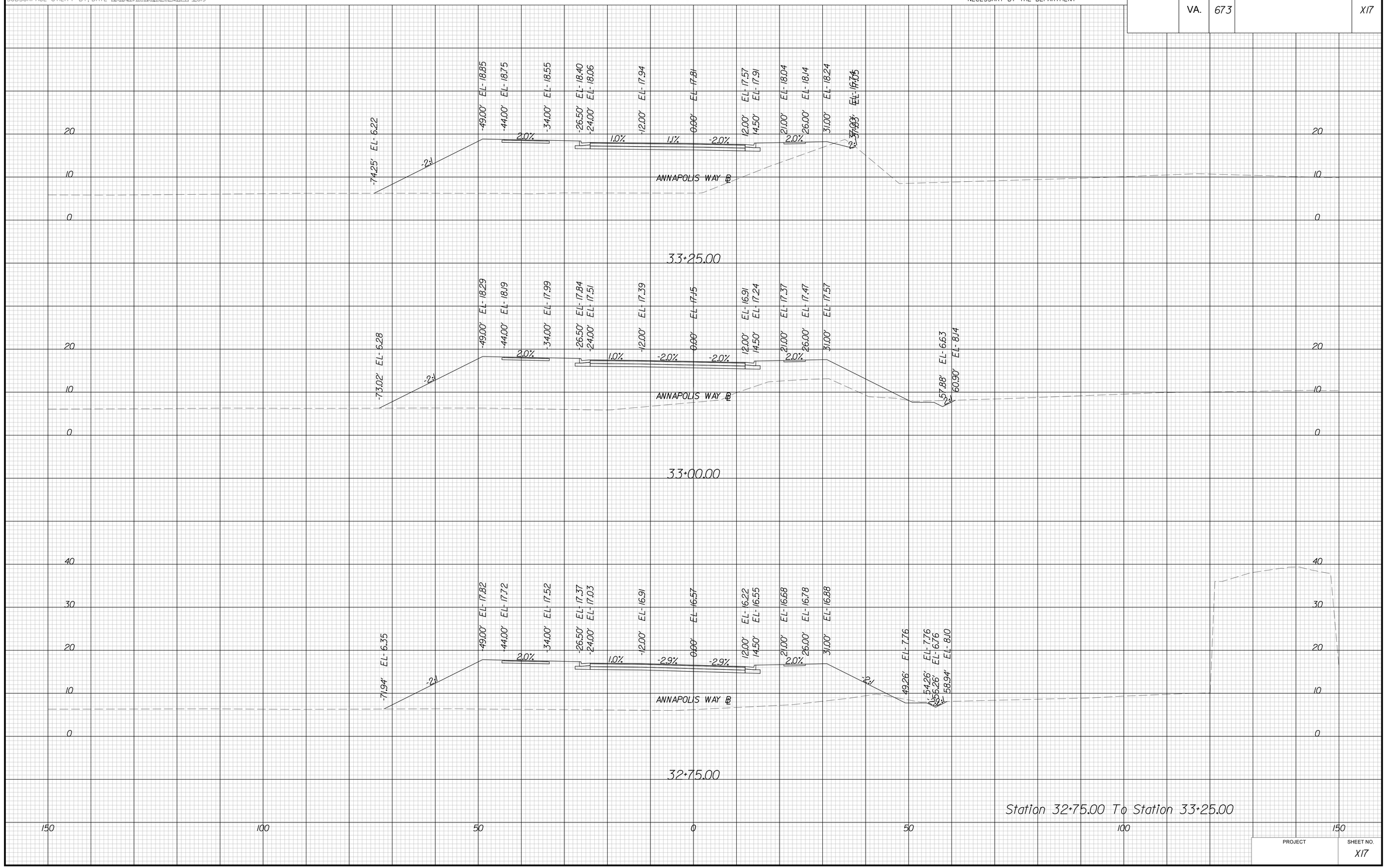
CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X17



PROJECT	SHEET NO.
	X17

5/5/2022
2:37:51 PM

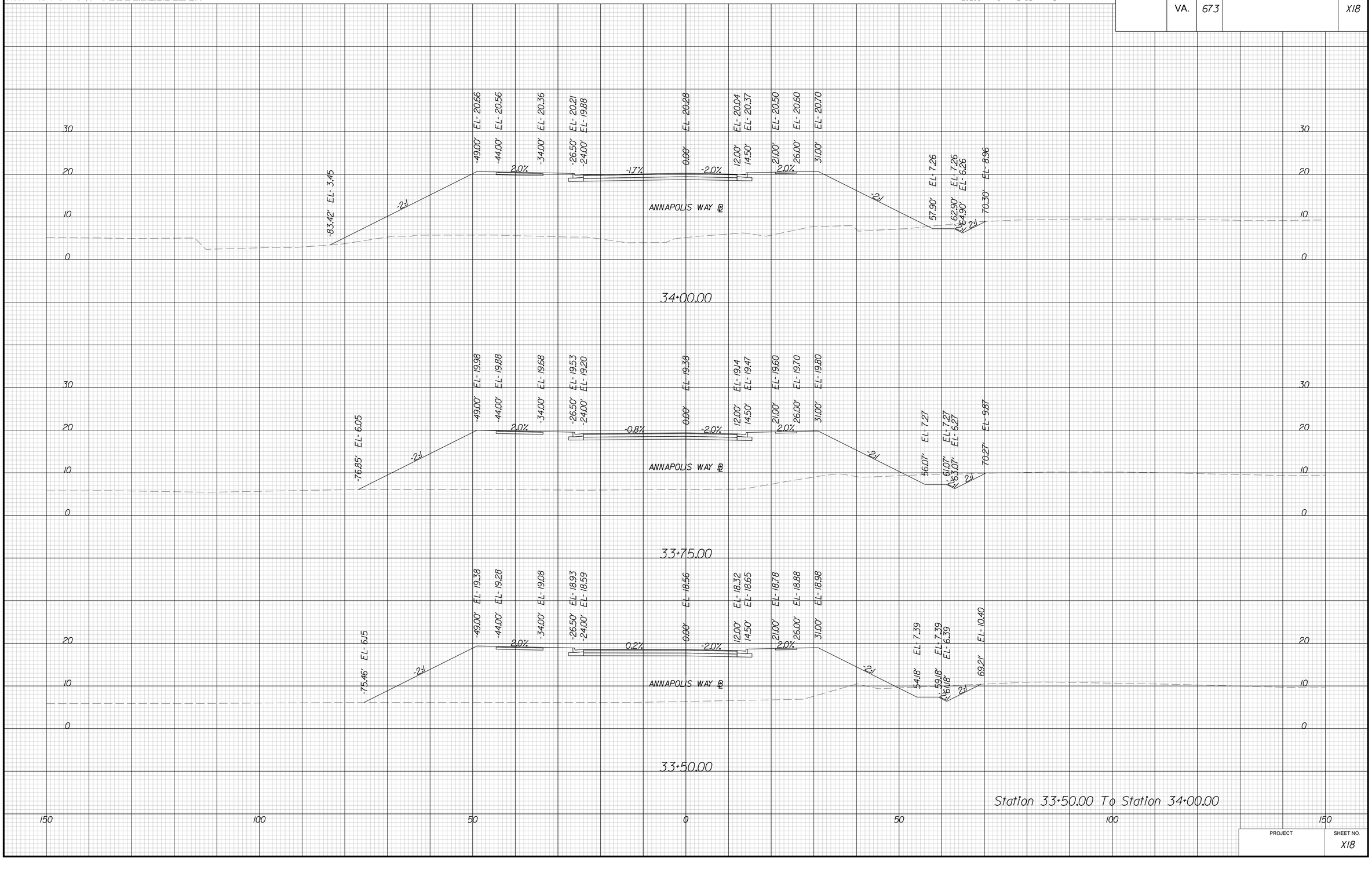
PROJECT MANAGER BWC, DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X18



PROJECT	SHEET NO.
	X18

5/5/2022
2:37:53 PM

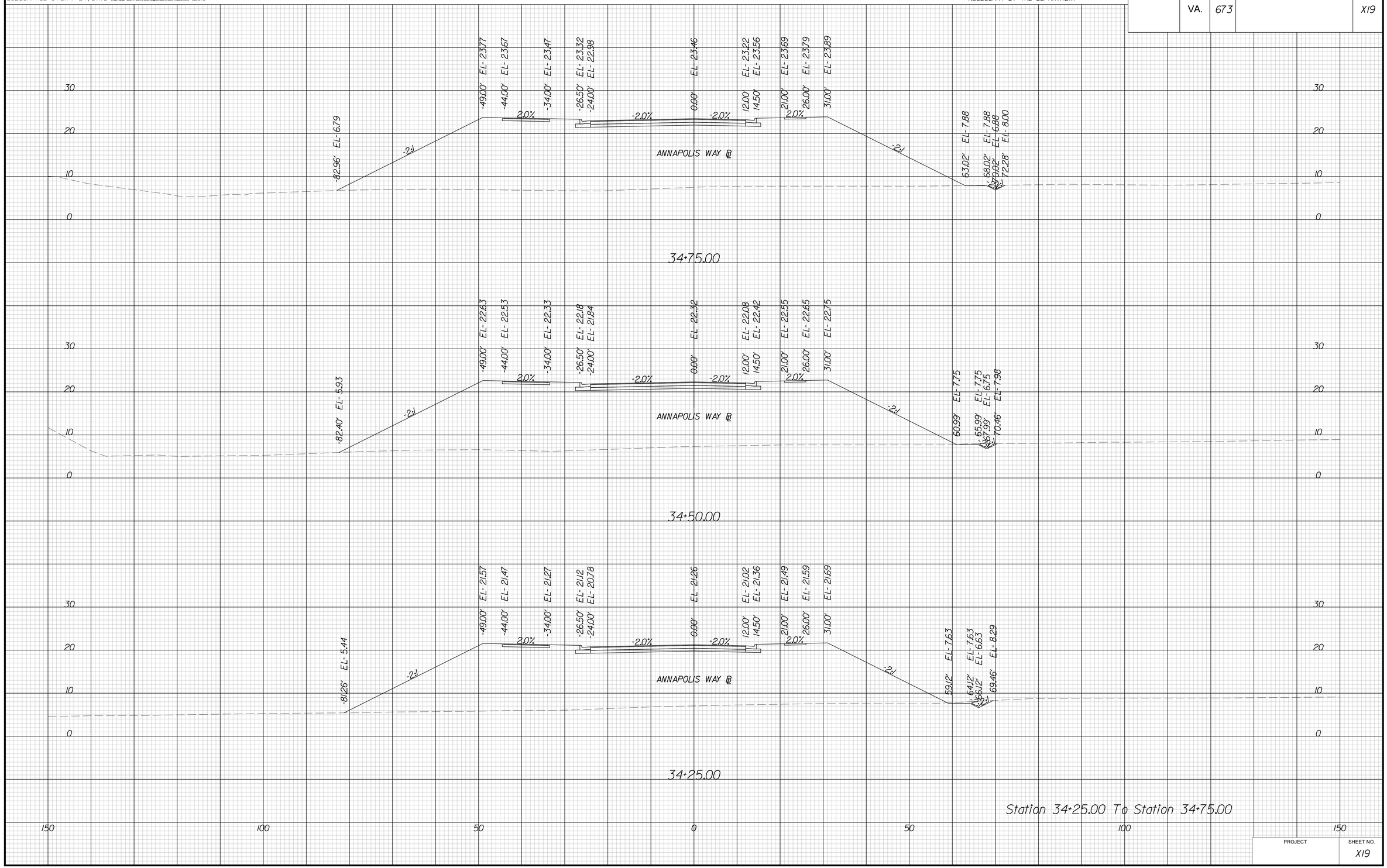
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X19



Station 34+25.00 To Station 34+75.00

PROJECT	SHEET NO.
	X19

5/5/2022
2:37:55 PM

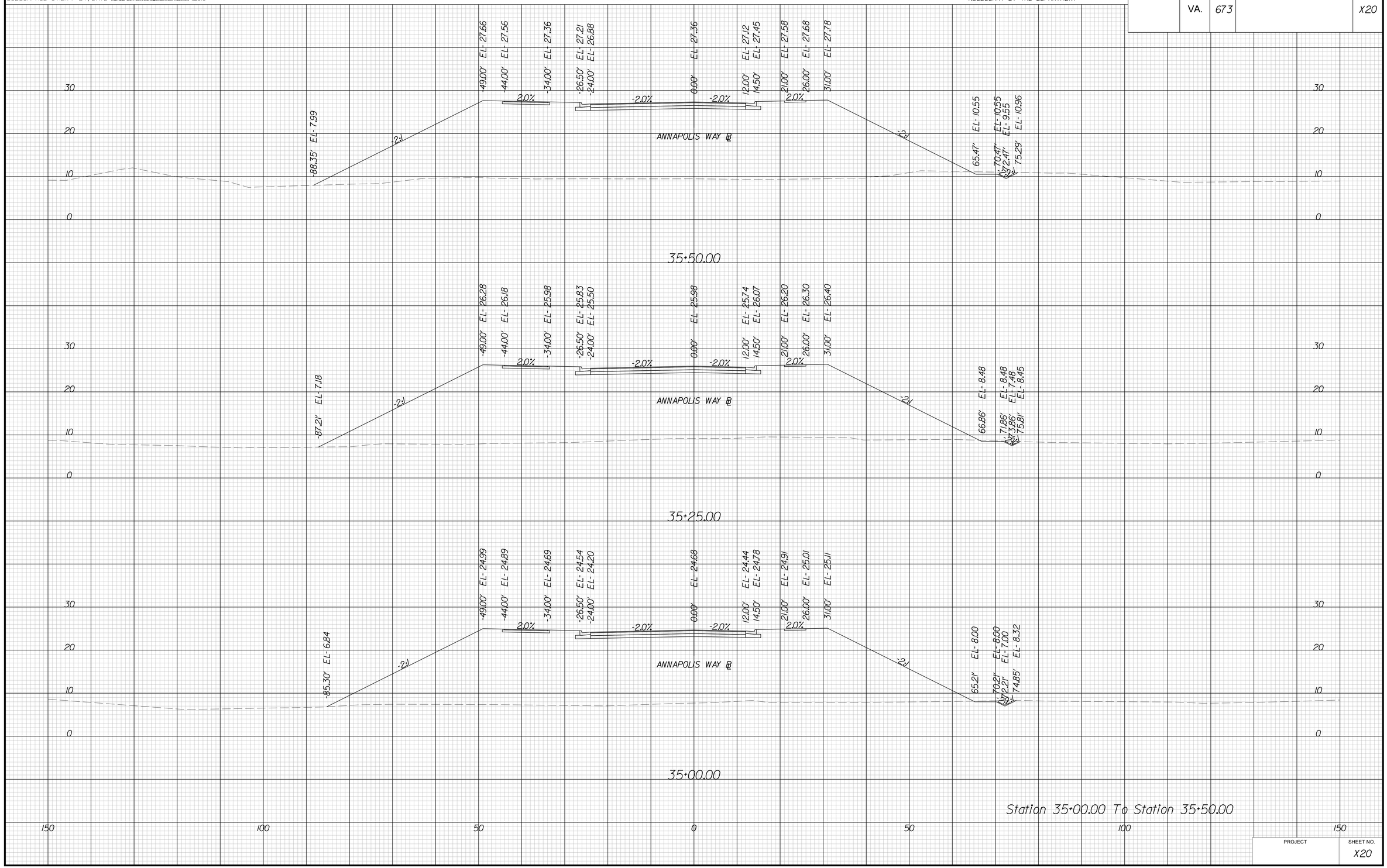
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X20



PROJECT	SHEET NO.
	X20

5/5/2022
2:37:56 PM

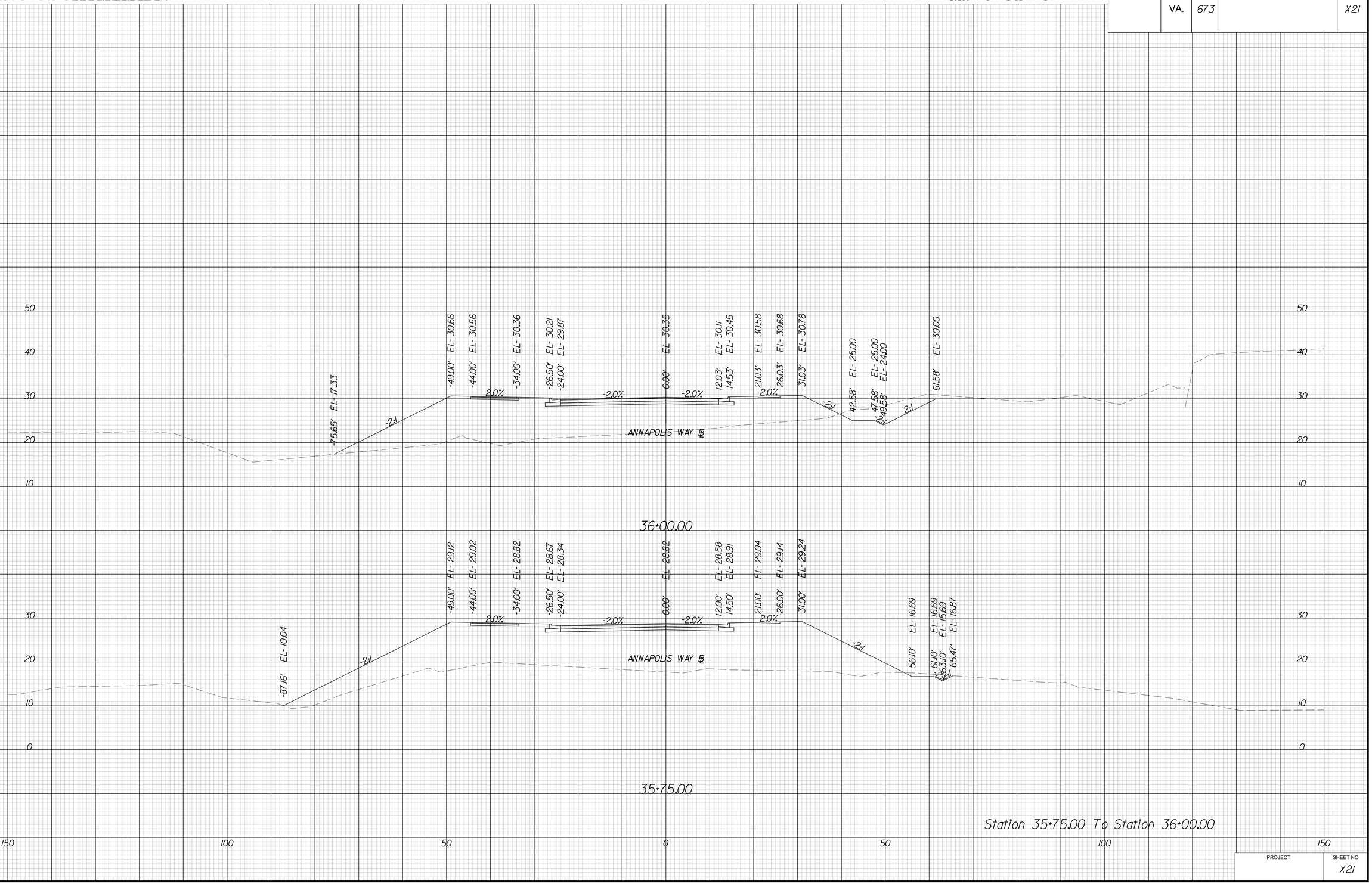
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X21



PROJECT	SHEET NO.
	X21

5/5/2022
2:37:58 PM

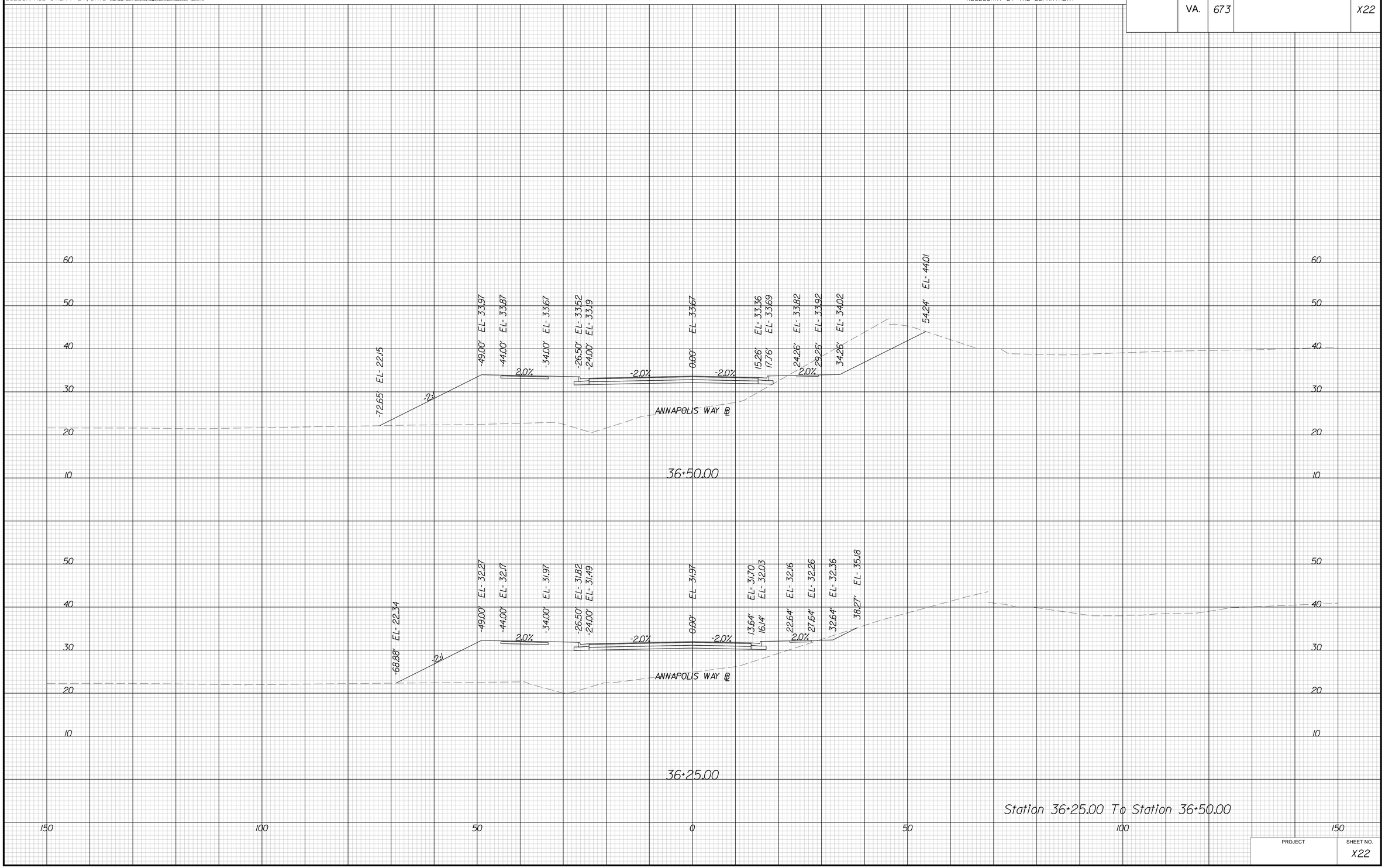
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X22



Station 36+25.00 To Station 36+50.00

PROJECT	SHEET NO.
	X22

5/5/2022
2:38:00 PM

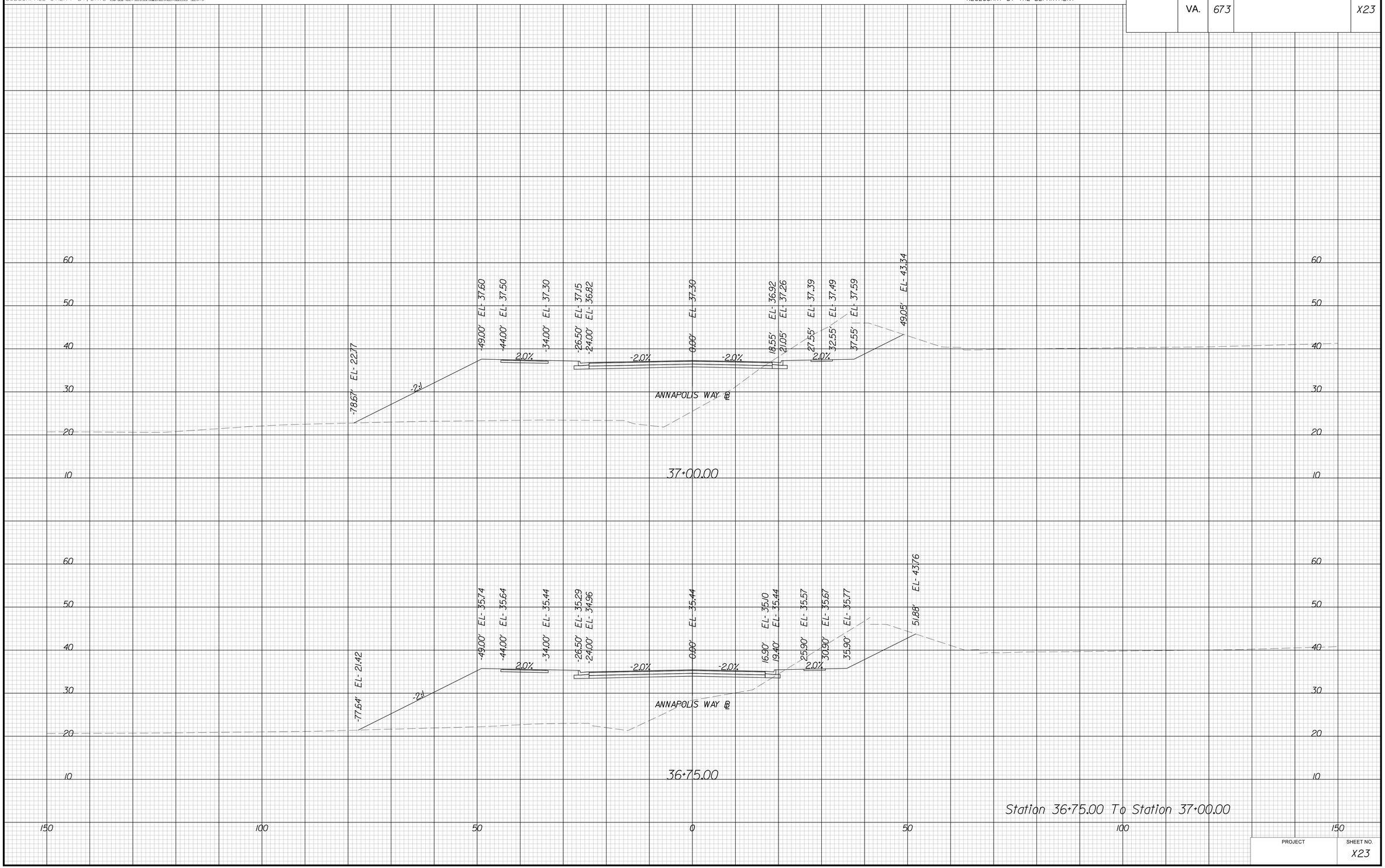
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X23



Station 36+75.00 To Station 37+00.00

PROJECT	SHEET NO.
	X23

5/5/2022
2:38:02 PM

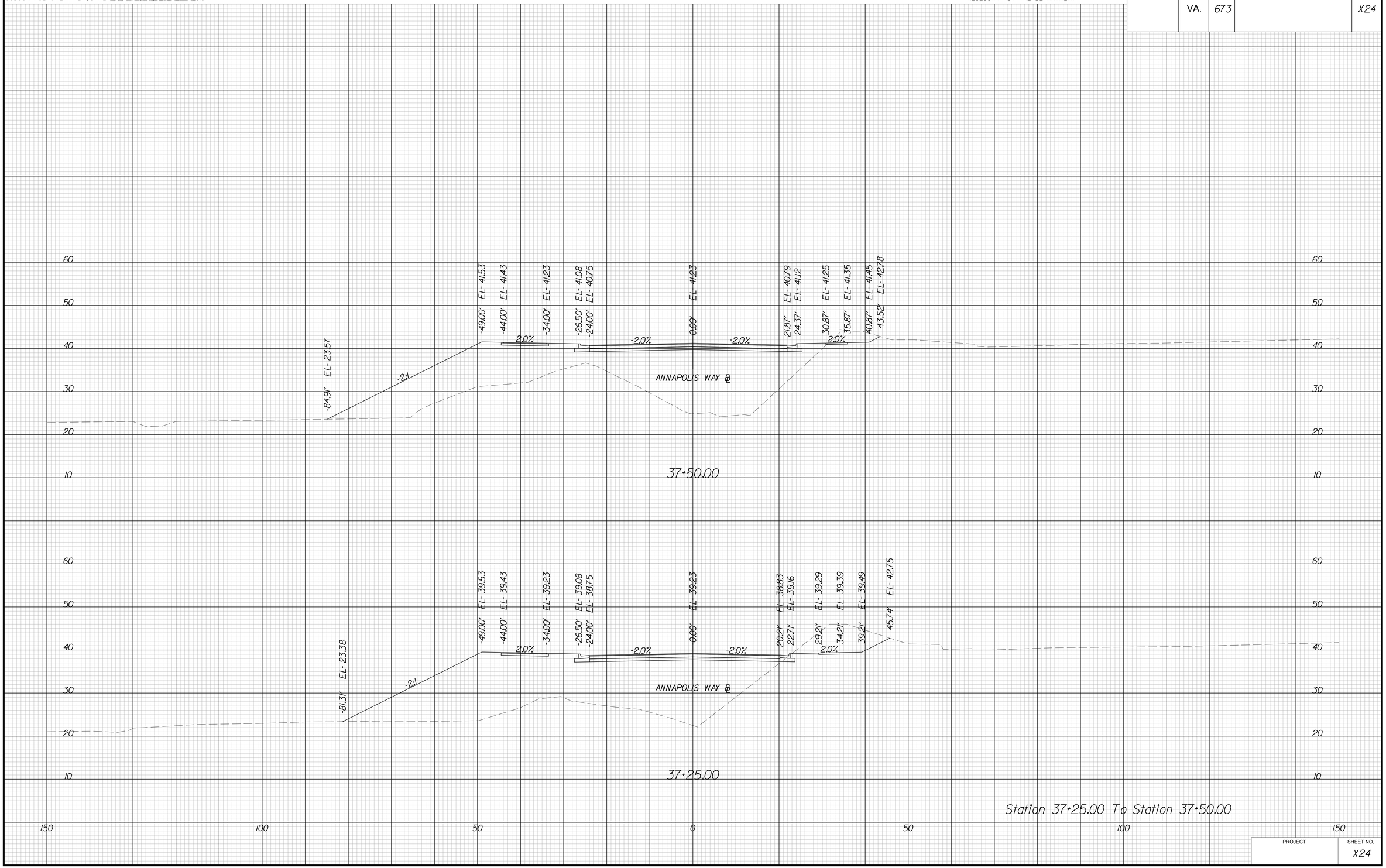
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X24



PROJECT	SHEET NO.
	X24

5/5/2022
2:38:04 PM

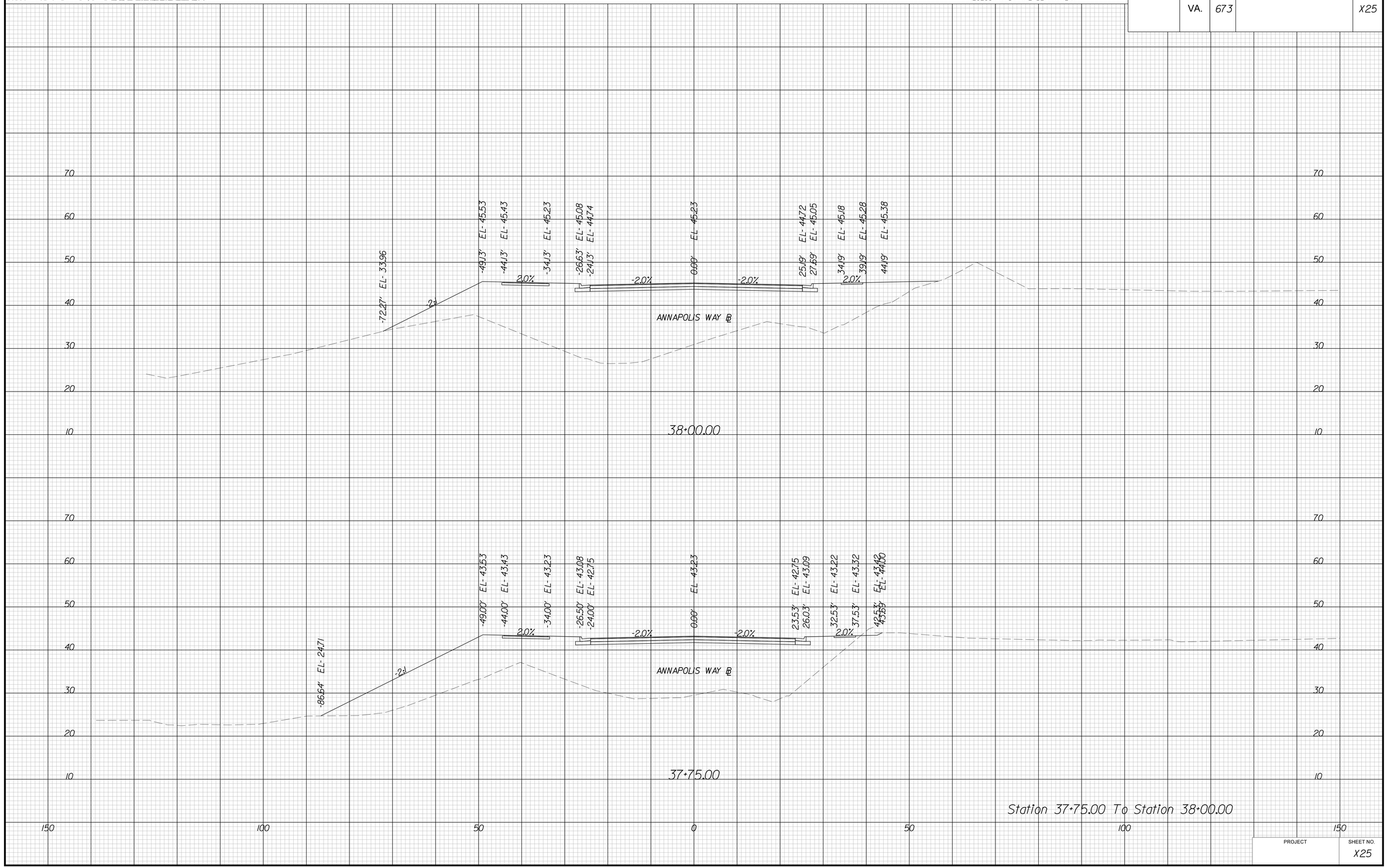
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X25



PROJECT	SHEET NO.
	X25

5/5/2022
2:38:06 PM

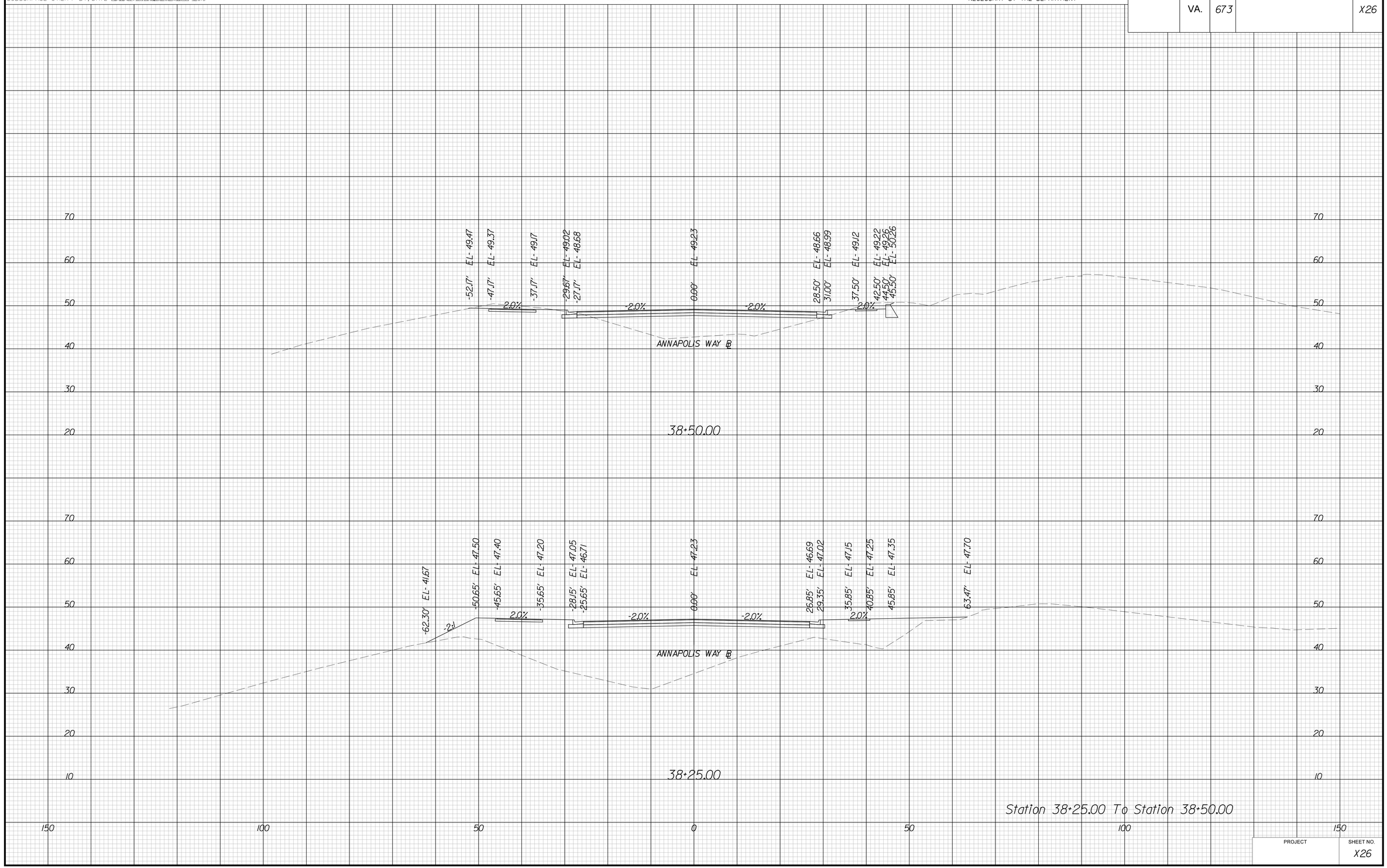
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X26



Station 38+25.00 To Station 38+50.00

PROJECT	SHEET NO.
	X26

5/5/2022
2:38:08 PM

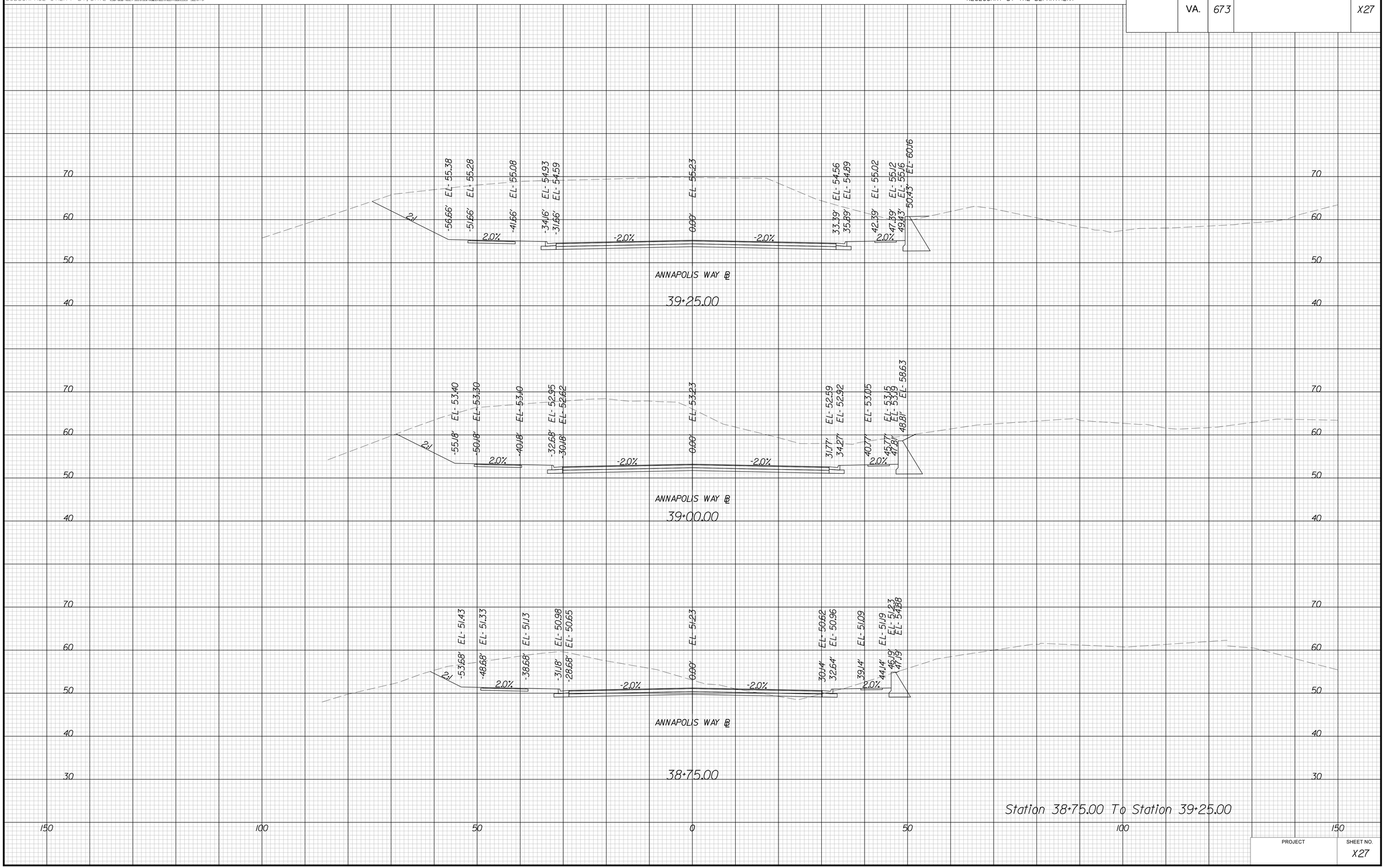
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X27



PROJECT	SHEET NO.
	X27

5/5/2022
2:38:09 PM

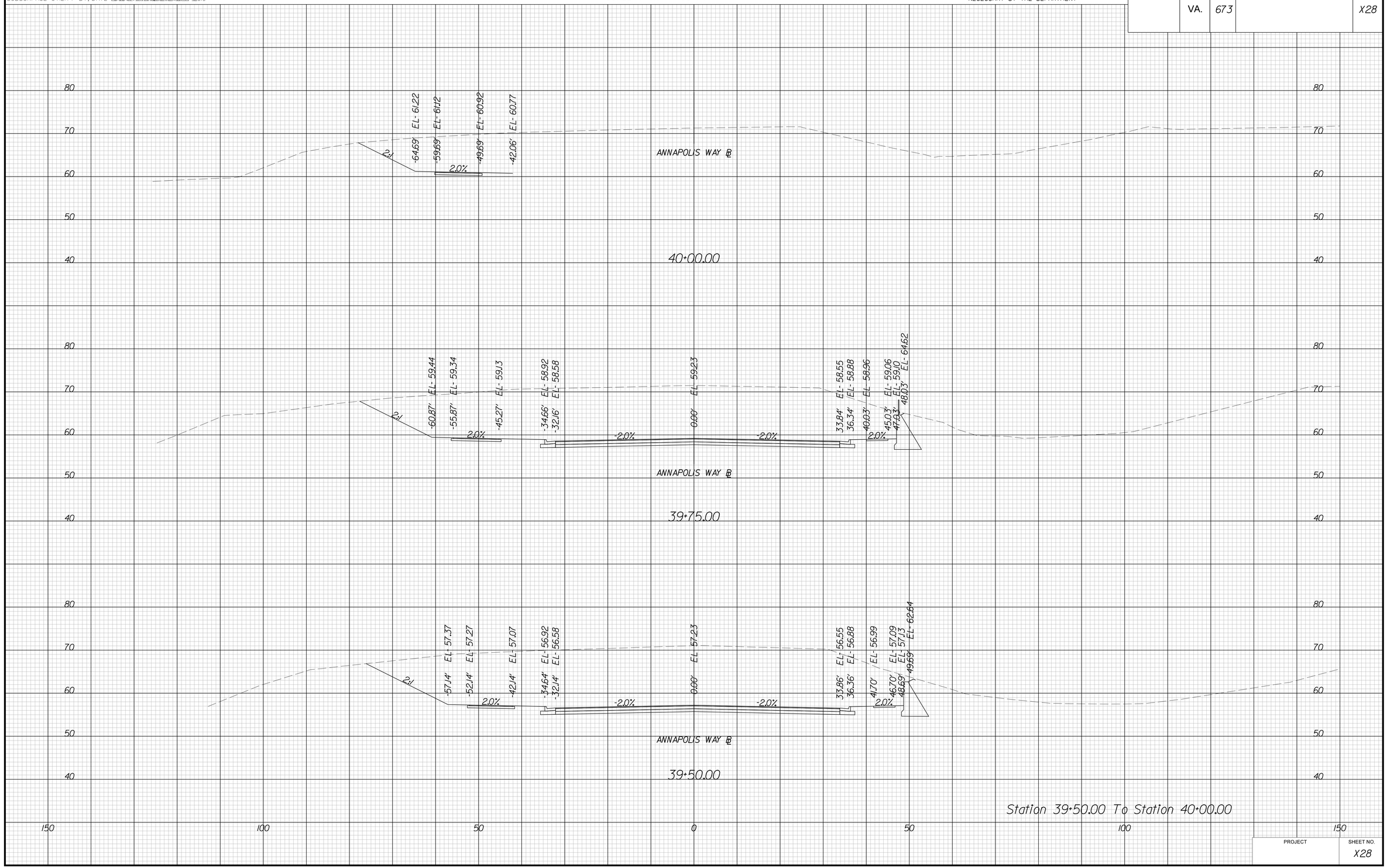
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY BINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X28



Station 39+50.00 To Station 40+00.00

PROJECT	SHEET NO.
	X28

5/5/2022
2:38:11 PM

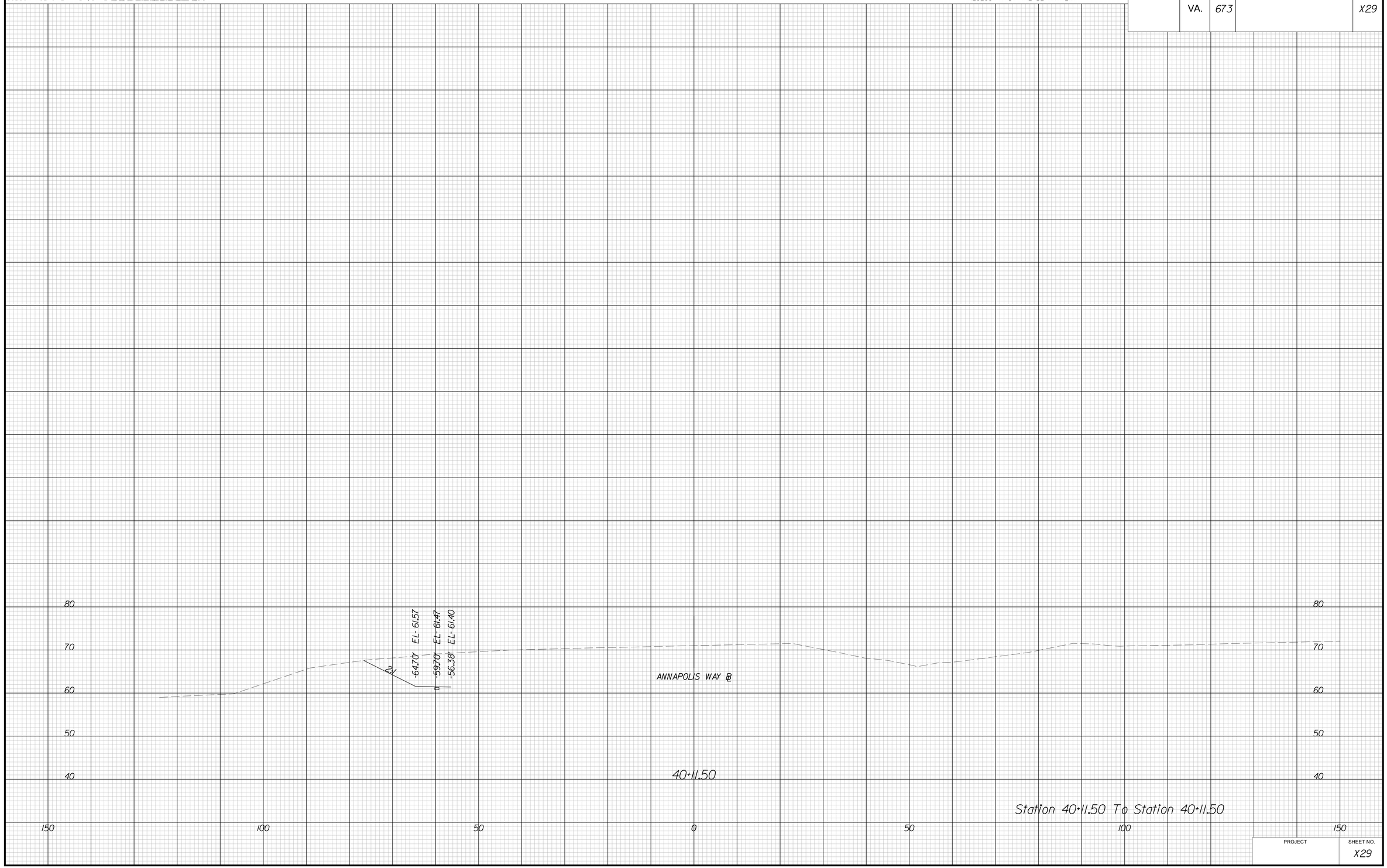
PROJECT MANAGER BWC DEPT OF TRANSPORTATION: SHERRY DJOUHARIAN (703) 792-6822
SURVEYED BY, DATE RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373, JAN. 2020 & DEC. 2021
DESIGN BY RINKER DESIGN ASSOCIATES, P.C. (703) 368-7373
SUBSURFACE UTILITY BY, DATE ACCUMARK, INC., DECEMBER 2019

CROSS SECTIONS

SCALE 1 IN. = 10 FT

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	673		X29



PROJECT	SHEET NO.
	X29