# **Appendix G2.** DEIS Drawings

Materials Provided by the Project Sponsor

# BALTIMORE-WASHINGTON SUPERCONDUCTING MAGLEV PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT AND SECTION 4(f) EVALUATION



U.S. Department of Transportation Federal Railroad Administration



- DETAILED SURVEY WILL BE CONDUCTED AS PART OF FINAL DESIGN.
- SUBJECT TO CHANGE UPON COORDINATION WITH UTILITY AGENCIES.
- APPROXIMATE. ESPECIALLY AT WATER CROSSING LOCATIONS.
- THE VERTICAL PROFILES IS NAVD88.
- METERS.
- WAYSIDE FACILITIES FOR SYSTEM OPERATIONS.





E: 2000 4000 8000	VERTICAL SCALE:	BALTIMORE-WASHINGTON SCMAGLEV	DATE: 6/15/2020
			DRAWING NO. 01
10000 20000		LOCATION MAP, INDEX AND LEGEND	SHEET NO OF

N LEGEND	
	EXISTING ROW LINE
	DEEP TUNNEL OUTSIDE DIAMETER
	ELEVATED STRUCTURE EDGE OF GUIDEWAY
$\sim$	SCMAGLEV TURNOUTS AND CROSSOVERS
-	PIER
00	STRADDLE BENT
	PROPOSED RETAINING WALL
— x —	LOW-CLEARANCE VIADUCT SECURITY FENCE
$\bigcirc$	GEOTECHNICAL BORING LOCATION
®	UNDERGROUND PARKING ENTRANCE
	CAVERN WALL/STATION FOOTPRINT
	PRELIMINARY FACILITY FOOTPRINT
	PRELIMINARY ROW ELEVATED STRUCTURE
	PRELIMINARY ROW TUNNEL PORTAL
·	PRELIMINARY LOD FOR CUT-AND-COVER TUNNEL
	PRELIMINARY LOD FOR CONSTRUCTION
	PRELIMINARY LOD FOR CONSTRUCTION AT WATER CROSSINGS
— OE ———	PRELIMINARY OVERHEAD SCMAGLEV POWER SUPPLY
- ε	PRELIMINARY UNDERGROUND SCMAGLEV POWER SUPPLY

PROFILE LEGEND

	EXISTING	GROUND	ALONG	PROPOSED	ALIGNMENT
	PROPOSE	D GUIDEW	VAY PRO	OFILE	
$\nabla$	VERTICAL	CURVE H	IIGH PO	NINT	
	VERTICAL	CURVE L	OW POI	NT	

LOCATION MAP, INDEX AND LEGEND STRUCTURAL TYPICAL SECTIONS AND DETAILS J1 ALIGNMENT PLAN AND PROFILE SHEETS J ALIGNMENT PLAN AND PROFILE SHEETS CAMDEN YARDS PLAN AND PROFILE SHEETS MISCELLANEOUS ROADWAY PROFILES DC MAGLEV STATION (MOUNT VERNON SQUARE EAST) SITE CIVIL PLANS BWI AIRPORT MAGLEV STATION SITE CIVIL PLANS BALTIMORE MAGLEV STATION (CHERRY HILL ALTERNATIVE) SITE CIVIL PLANS BALTIMORE MAGLEV STATION (CAMDEN YARDS ALTERNATIVE) SITE CIVIL PLANS TRAIN MAINTENANCE FACILITY (TMF) & MAINTENANCE-OF-WAY (MOW) CONNECTIONS KEY MAP TMF PLAN AND PROFILE SHEETS BARC OPTION 1 (WEST) TMF PLAN AND PROFILE SHEETS BARC OPTION 2 (AIRSTRIP) TMF & MOW PLAN AND PROFILE SHEETS MD RTE 198 OPTION MOW CONNECTIONS PROFILES (CHERRY HILL AND WESTPORT) FACILITIES PLANS TEMPORARY LOD FOR CONSTRUCTION TRAFFIC CONTROL PLANS (WASHINGTON DC STATION) TRAFFIC CONTROL PLANS (J & J1 ALIGNMENTS ELEVATED VIADUCTS) TRAFFIC CONTROL PLANS (BALTIMORE CHERRY HILL STATION) TRAFFIC CONTROL PLANS (BALTIMORE CAMDEN YARDS STATION)



ELEVATED VIADUCT PLAN (38m APPROX. TYPICAL SPANS)



# STANDARD GENERAL ABBREVIATIONS

TYP LOD © C.I.P PGI		TYPICAL LIMIT OF DISTURBANCE CENTERLINE CAST-IN-PLACE PROFILE GRADE LINE
PGL	-	PROFILE GRADE LINE

# **ELEVATED VIADUCT ELEVATION** (38m APPROX. TYPICAL SPANS)

	SC	SCALE:					BALTIMORE-WASH
	m	0	10	5	10	20	GENERAL PLAN
BALTIMORE-WASHINGTON RAPID RAIL	ft	0	10	20	30	50	FOR 38m APPRO

### **GENERAL NOTES**

- 1. TYPICAL SECTIONS WERE DEVELOPED TO IDENTIFY GENERAL ARRANGEMENTS AND ALLOWANCES FOR ACCESS ROADS FOR CONSTRUCTION. TYPICAL SECTIONS WERE USED AS THE BASIS FOR DEVELOPMENT OF LIMIT OF DISTURBANCE (L.O.D) FOR ENVIRONMENTAL ANALYSIS. AN ADDITIONAL WIDTH OF 6m WILL BE NEEDED ALONG ONE SIDE OF THE ELEVATED VIADUCTS TO PROVIDE ROOM FOR CONSTRUCTION EQUIPMENT.
- 2. VIADUCT AND TMF RAMPS SPAN LENGTHS VARY BETWEEN APPROX. 38m AND APPROX. 50m.
- 3. MINIMUM REQUIRED VERTICAL CLEARANCE FOR VIADUCT STRUCTURES:
  - OVER ROADWAYS: 10m MINIMUM FROM PROFILE GRADE LINE
  - OVER RAILROADS: 10m MINIMUM FROM PROFILE GRADE LINE
- 4. LOW-CLEARANCE VIADUCT SECURITY FENCE WILL BE INSTALLED PER DRAWINGS TY-06 AND TY-07 AS FOLLOWS:
  - IN LOCATIONS WHERE THE PROFILE GRADE LINE IS LESS THAN 10m FROM THE GROUND.
  - AROUND SCMAGLEV FACILITIES AND EQUIPMENT LOCATED UNDER OR ADJACENT TO THE VIADUCT AND PORTAL STRUCTURES.
- 5. LIMITS OF DEEP TUNNEL:
  - FOR THE J ALIGNMENT ALTERNATIVE, SEE PLAN AND PROFILE DRAWINGS.
  - FOR THE J1 ALIGNMENT ALTERNATIVE, SEE PLAN AND PROFILE DRAWINGS
- 6. ALL DIMENSIONS ARE IN METRIC UNITS.
- 7. "EXISTING GRADE" REFERS TO THE APPROXIMATE EXISTING GROUND LINE AT CENTERLINE OF EACH ALIGNMENT ALTERNATIVE. FOR ACTUAL EXISTING GRADE AND PROPOSED VERTICAL PROFILE FOR THE DEEP TUNNEL, CUT-AND-COVER TUNNEL, TUNNEL PORTAL, ELEVATED STRUCTURES, AND RSD RAMP STRUCTURES, SEE PLAN AND PROFILE DWG. NOS. PP-01 THROUGH PP-83, AND TMF-01 THROUGH TMF-47.
- 8. ALL PROPOSED STRUCTURAL ELEMENTS SHOWN ARE BASED ON PRELIMINARY ENGINEERING DESIGN AND AERIAL IMAGERY, AND MAY BE REVISED BASED ON MORE ADVANCED SURVEY AND DESIGNS.
- 9. CENTERLINE OF ALIGNMENT IS CENTERLINE OF TWO GUIDEWAY ALIGNMENT.
- 10. SEE PLAN AND PROFILE DRAWINGS FOR LOCATIONS OF CONSTRUCTION ACCESS AND LAYDOWN AREAS.
- 11. FOUNDATION REQUIREMENT MAY VARY BASED ON SITE SPECIFIC CONDITIONS INCLUDING VIADUCT HEIGHT, LIMITS OF ACCESS, AND GEOTECHNICAL CONDITION.
- 12. VIADUCT STAIRCASES (NOT SHOWN IN THIS SUBMISSION) WOULD BE PROVIDED AS REQUIRED TO SATISFY EMERGENCY ACCESS/EGRESS REQUIREMENTS. STAIRCASE LOCATIONS AND CONFIGURATIONS WILL BE DEVELOPED IN NEXT PHASE DESIGN IN CLOSE COORDINATION WITH MAINTENANCE AND SAFETY REQUIREMENTS.

INGTON SCMAGLEV	DATE: 10/09/2020
AND ELEVATION	DRAWING NO. TY-01
X. TYPICAL SPANS	SHEET NO. OF









# **ELEVATION** ALIGNMENT J1 SHOWN (ALIGNMENT J SIMILAR) 1 HORIZ. METER = 5 VERT. METERS





# NOTE:

1. FOR SECTIONS A, B, C AND D, SEE DWG. NO. TY-06.



ABUTMENT

BALTIMORE-WASHINGTON SCMAGLEV	DATE: 10/09/2020
CUT-AND-COVER TUNNEL, OPEN CUT PORTAL AND	DRAWING NO. TY-03
IUNNEL PORTAL ELEVATION	SHEET NO.

## NOTES:

- 1. FOR MINIMUM REQUIRED VERTICAL UNDER CLEARANCE, SEE NOTE 3 ON DWG NO. TY-01.
- 2. MAINTENANCE ACCESS MAY BE PROVIDED ALONG THE ELEVATED VIADUCT. THIS MAINTENANCE ACCESS WILL BE CONSTRUCTED WITH GRAVEL OR OTHER PERMEABLE MATERIALS. THIS MAINTENANCE ACCESS WILL BE DISCONTINUED ACROSS WETLANDS OR RELOCATED AROUND THE WETLANDS IN ORDER TO MINIMIZE ENVIRONMENTAL IMPACTS. ACCESS POINTS TO THE EXISTING ROADWAY NETWORK WILL BE PROVIDED.
- 3. DETAILED ROW FENCING REQUIREMENTS AROUND VARIOUS SCMAGLEV SITES AND STRUCTURES WILL BE DETERMINED AS PROJECT PLANNING ADVANCES.









# TYPICAL STRADD

Ν	10-	ΓE	S:

- 1. LOCATIONS OF STRADDLE BENTS ARE IDENTIFIED ON THE PLAN AND PROFILE DRAWINGS.
- 2. THE RIGHT OF WAY AT STRADDLE BENT LOCATIONS WILL VARY AND WILL BE 3m MINIMUM FROM THE EDGE OF FOOTINGS.
- 3. DETAILED ROW FENCING REQUIREMENTS AROUND VARIOUS SCMAGLEV SITES AND STRUCTURES WILL BE DETERMINED AS PROJECT PLANNING ADVANCES.

— DRILLED SHAFTS (TYP.)

IINGTON SCMAGLEV	DATE: 10/09/2020
DLE BENT SECTION	DRAWING NO. TY-05
	SHEET NO. OF



Stru
Viaduct
pw//Cutsheets/
printed by: mic
-

7**\*\*\*\***\*\*\*\*

![](_page_8_Figure_4.jpeg)

# <u>TYPICAL SECTION</u> WHEN PROFILE GRADE LINE IS LESS THAN 10m FROM THE GROUND

	SC	CALE: 0			5		10	BALTIMORE-WASH
	m ∎ 0	0	5	10		25		TYPICAL S
BALTIMORE-WASHINGTON RAPID RAIL	ft					 ]		LOW UNDE

# NOTES:

LOW-CLEARANCE VIADUCT SECURITY FENCE WILL BE INSTALLED PER NOTE 4 ON DRAWING TY-01.

HINGTON SCMAGLEV	DATE: 10/09/2020		
ECTION WITH	DRAWING NO. TY-07		
R CLEARANCE	SHEET NO. OF		

![](_page_9_Figure_0.jpeg)

![](_page_9_Figure_1.jpeg)

printed by:

![](_page_9_Figure_3.jpeg)

TYPICAL SECTION AT THE TMF RAMPS

![](_page_9_Picture_5.jpeg)

![](_page_9_Figure_6.jpeg)

BALTIMORE-WASHI TYPICAL TMF R

### NOTES:

- 1. FOR TRAIN MAINTENANCE FACILITY (TMF) RAMPS PLAN AND PROFILE, SEE DWG. NOS. TMF-01 THROUGH TMF-47.
- 2. MAINTENANCE ACCESS MAY BE PROVIDED ALONG THE ELEVATED VIADUCT. THIS MAINTENANCE ACCESS WILL BE CONSTRUCTED WITH GRAVEL OR OTHER PERMEABLE MATERIALS. THIS MAINTENANCE ACCESS WILL BE DISCONTINUED ACROSS WETLANDS OR RELOCATED AROUND THE WETLANDS IN ORDER TO MINIMIZE ENVIRONMENTAL IMPACTS. ACCESS POINTS TO THE EXISTING ROADWAY NETWORK WILL BE PROVIDED.
- 3. DETAILED ROW FENCING REQUIREMENTS AROUND VARIOUS SCMAGLEV SITES AND STRUCTURES WILL BE DETERMINED AS PROJECT PLANNING ADVANCES.

INGTON SCMAGLEV	DATE: 10/09/2020
RAMP SECTIONS	DRAWING NO. TY-08
	SHEET NO. OF

![](_page_10_Figure_0.jpeg)

![](_page_11_Figure_0.jpeg)

-AND-COVER CONSTRUCTION)			
1st ST NW		NORTH CAPITOL ST NE	
PVI 100+849.073 Elev -9.130 m PVT 100+904.547 PVT 100+904.547 Elev -9.296 m PVI 100+945.840 Elev -9.420 m	.30%	אַר דעאאנע איז דעאאנע איז דעאאנע איז דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע דעאאנע	JEL
PVC 100+837.077 = Elev -9.854 m = PVI 100+870.840 Elev -9.195 m PVT 100+904.610 Elev -9.296 m	PVC 101+087.559 Elev -9.845 m	PVI 101+295.840 Elev -10.470 m	
0     +900     101+0       ALE:     VERTIC       40     80     160       200     400     METE	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 10 \\ 10 \\ 20 \\ 10 \\ 1$	+200 +300 BALT	+400 IMORE-WASH J1 ALIG TA 100+300 T

![](_page_12_Figure_0.jpeg)

0 40 FEET

			BH SI NE			CONSTRUCTION SCMAGLEV PO UNDERGROUN	DN LOD FOR DWER SUPPLY		NO. PP-04
					MT OLNET PO NE				MATCHLINE SEE DRAWING
DEEP	TUNNEL			/ and and					
			9th ST NE						40 
	[							/	20
									- - 10 -
									- 0 
			, TOP OF	OM OF TUNNEL			53.208 38 m		- 
-0.9	99%						C 103+1 V -28.93		- 
								R = 60000m	- - - - - -
+400	+500	+600	+700	+800	+900	103+000	+100	+200	▶ -40 +300
ALE: 40 80 160 200 400	VERTICAL SCALE:	10 20 40 80	30	BALTIN	MORE-WASI J1 ALIC A. 101+800 7	HINGTON SC GNMENT FO STA. 103+:	MAGLEV 300	DATE: DRAWING SHEET NO	6/10/2020 NO. PP-03 D OF

![](_page_13_Picture_0.jpeg)

![](_page_14_Picture_0.jpeg)

![](_page_14_Figure_1.jpeg)

	DEEP TI	JNNEL				
		SOUTH DAKOTA AVE NE				
		-0.00%			TUNNEL	
O CALE: 40 80	+400	+500 VERTICAL SCALE: METERS 10 10	+600 20 30	+700	+800 BALTIMO	+900 RE-WASH J1 ALIG
200	400	0 20 4 FEET <b>1 1</b> 1	0 80		STA. 1	04+800 T

![](_page_14_Figure_4.jpeg)

![](_page_15_Figure_0.jpeg)

![](_page_15_Figure_1.jpeg)

		DEEP 1	UNNEL			
·						
· · ·						
					· 	
 				TO		
					P OF TUNNEL	-1
· ·			0.00%			·
+800	+900		+100	+200	+300	+400
	0 160		10 20 30		BALTIMO	
200	400	0 20	40 80		ςτα 1	
		FEET				

![](_page_15_Figure_4.jpeg)

![](_page_16_Figure_0.jpeg)

![](_page_17_Figure_0.jpeg)

	DEEP TU	NNEL				
				TH AVE		
F TUNNEL		-0.00%				
ALE: 40 80	+900 1	10+000 VERTICAL SCALE:	+100	+200	+300 BALT	+400 TIMORE-WASH J1 ALIG
200	400	0 20 FEET	40 80		S	TA. 109+300 T

![](_page_18_Figure_0.jpeg)

![](_page_19_Figure_0.jpeg)

HORIZONTAL SCALE: VERTI					VERTICAL	RTICAL SCALE:					R	
METERS	0	40	80	160	METERS	0		10	20	30		
FEET	0 40	200	2	100 ]	FEET	0	20	40		80 ]		

![](_page_20_Figure_0.jpeg)

	JF I UNINEL					
BOT	OM OF TUNNEL					
/						
_/						
/		-0.0	0%			
C	+400	+500	+600	+700	+800	+900
ALE:		VERTICAL SCALE	:		BALTI	MORE-WASH
40 80	160 	0 METERS	10 20	30		J1 ALIG
200	400	0 20	0 40 80		ST	A. 113+800 T
					91	

![](_page_21_Figure_0.jpeg)

![](_page_22_Figure_0.jpeg)

![](_page_23_Figure_0.jpeg)

		TUNNEL PORTAL (TRANSITION	I)			
TUNNEL	+938.308  15 m					
	PVC 118					
	⊿				R = 9	05000m
	+900 1	I 19+000 VERTICAL SCALE:	+100	+200	+300	
40 80 	400	0 1 METERS 0 20 FEET 20	0 20 40 80	30	J1 ALIO ST/	SNMENT (BA 118+300 T

![](_page_24_Figure_0.jpeg)

		TUNNEL PORTAL (TRANSITIC	N)			
EL TUNNEL	a 308					
	PVC 118+93 Elev 25.115					
					R = 9	5000m
	1000	1 1 0 1 0 0 0	100	1200	1700	- 400
ALE: 40 80 200	+900 160 400	VERTICAL SCALE: METERS	+100 10 20 40 80	30 30	BALTIN J1 ALIC STA	MORE-WASH SNMENT (BA A. 118+300 T

![](_page_25_Picture_0.jpeg)

![](_page_25_Figure_1.jpeg)

![](_page_26_Picture_0.jpeg)

![](_page_26_Figure_1.jpeg)

![](_page_27_Figure_0.jpeg)

![](_page_28_Figure_0.jpeg)

![](_page_29_Figure_0.jpeg)

![](_page_30_Figure_0.jpeg)

	ELEVATED STR	UCTURE				
					1	4
.30%						<b>、</b>
					345	
					860	<b>7</b>
					<b>5</b>	
					VC 1	ev 1
					a	
			Q			
		×	— ⊎ છ— →— — —	 		
		SRO(	3RID			
)	+400	+500	+600	+700	+800	+900
ALE:		VERTICAL SCALE:			BAI TII	MORF-WASH
40	80 160	0 METERS	10 20	30		
200	400	0 20	40 80		ST	Δ 125+800 T

![](_page_31_Figure_0.jpeg)

TRANSIT	ON PORTAL HOOD	DEE	P TUNNEL	- 90
			- - -	- 80
TOP OF TUNNEL			- - - - -	- 70
BOTTOM OF TUN				- 60
	m 32.858 m		- - - -	- 50
-4.00%	VC 128+63		-	- 40
				— 30
	R	= 5000	0m	20
	+600 <b>F\/</b>	+100	DATE: C	+800 3/10/2020
NMENT			DRAWING NO.	PP-20
O STA. 128+800			SHEET NO.	OF

![](_page_32_Figure_0.jpeg)

	DEEP TUNNEL			
<i>▶</i>			<b>N</b>	
		/ <sup>T</sup>	OP OF TUNNEL	
			BOTTOM OF TUNNEL	
	000	Ε ∞		
	+	<u>5</u>		 
0 +400	+500 -	+600 +700	+800	+900
40 80	160 VERTICAL SCALE:	20 30	BALTIN	NORE-WASH
200 400	0 20 40	80	CT/	J1 ALIC ۲ ۱28+800 ۲
	FEET		317	רעטדטעט I

![](_page_33_Figure_0.jpeg)

![](_page_33_Picture_2.jpeg)

![](_page_33_Picture_3.jpeg)

DEEP TU	NNEL				
TOP OF TUNNEL					31+428.451 0.054 m
BOTTOM OF TUNNE	EL - <b>0.14%</b>				PVC 1
) +900	131+000	+100	+200	+300	+400
ALE: 40 80 160 200 400	0 VERTICAL SCALE: 0 METERS 0 0 20 FEET 0 20	10 20 40 80	30	BALTII ST/	MORE-WASH J1 ALIG A. 130+300 T

![](_page_34_Figure_0.jpeg)

C		+400		+500		+600		+700	-	+800	+900
ALE:				VERTICAL SC	ALE:					BALT	IMORE-WASH
40	80		160	0 METERS	10	20	30				J1 ALIG
20	00	400		0 FEET	20 40	80				S	TA. 131+800 T

![](_page_35_Figure_0.jpeg)

![](_page_36_Figure_0.jpeg)

	DEEP 1	UNNEL				
- ~ _						
	<u> </u>					
		TOP OF TUNNEL				
	/					
		BOTTOM OF TUN	NEL			
		/				
			-1.59%			
<u>)</u>	+400	+500	+600	+700	+800	+900
40 80	160		10 20	30	BALTI	MORE-WASH
200	400	0 20	40 80	-	CT.	JI ALIG 13/1+200 T
		FEET			517	$\neg$ . 10 $+$ 1000 I

![](_page_37_Figure_0.jpeg)

DEEP TU	JNNEL				
		<u> </u>	<u> </u>		
				<u> </u>	
				•	
					TOP OF TUNNE
					/
		0.000/			BOTTOM OF TU
		-0.30%			
) +900	137+000	+100	+200	+300	+400
ALE:	VERTICAL SCALE:			BALTI	MORE-WASH
	METERS	20	30		J1 ALIG
200 400	0 20 FEET	40 80		ST	A. 136+300 T

![](_page_38_Figure_0.jpeg)

DEEP TUNNEL	
SEVERN RD	
	TOP OF TUNNEL BOTTOM OF TUI
-0.30%	
) +400 +500 · ALE: 40 80 160 VERTICAL SCALE: 200 400 0 20 40	-600 +700 +800 +900 <u>20 30</u> BALTIMORE-WASH J1 ALIG 80 STA 137+900 T

![](_page_39_Figure_0.jpeg)

![](_page_40_Figure_0.jpeg)

![](_page_41_Figure_0.jpeg)

DEEP TUNNEL					
					I CUT-
					FRESH A EGRESS
		/ TOP	OF TUNNEL		
			OTTOM OF TUNNEL		
	-0.30%	<u>6</u>			
) +900	143+000	+100	+200	+300	+400
ALE: 40 80	160 VERTICAL SCALE:	10 20	30	BALTI	MORE-WASH
200 400	0 20	40 80		ST	J1 ALIG A. 142+300 T

![](_page_42_Figure_0.jpeg)

40 80 200	400	0 10 METERS 0 20 FEET 0 20	40 80	30		STA	J1 ALIG . 143+800 T
ALE:		VERTICAL SCALE:				BALTIM	ORE-WASH
)	+400	+500	+600	-	+700	+800	+900
		-0.30%					
F TUNNEL							
						AIKPUKI I	
							SE AND
						SCMAGLEV	STATION
<u> </u>	= $=$ $-$ .						
P TUNNEL							

![](_page_43_Figure_0.jpeg)

~		DEEP TUNNEL				
					Q	
				SHAI	BLV	
				MAF	E 16	
				SOOD ST	AVIJ (RT	
				HURC RPOI		
				F ₹		
	-+ 					
		-0.30%				
	j			I		
) ALE:	+900	<u>146+000</u> VERTICAL SCALE:	+100	+200	+300 RALTIN	+400 AORE-WASH
40 80	160	0 10 METERS	20 30			J1 ALIG
200	400	0 20 40	80		STA	A. 145+300 T

![](_page_44_Figure_0.jpeg)

![](_page_45_Figure_0.jpeg)

![](_page_46_Figure_0.jpeg)

	DEEP	TUNNEL					
		<u> </u>		<u> </u>			
	N I I					RIVER	
	115SI NG - 1	→	· · · · · · · · · · · · · · · · · · ·				
	ANSN OSSII					ATAPS	
					00 7		
					-766-039 1		
					150+		
ົ ງ	+400	+500	+600	+700	+800	+900	
ALE:		VERTICAL SCALE:	40		BAL	TIMORE-W	ASF
40 8	30 160	METERS	10 20	30		J1 A	LIG
200	400	0         20           FEET	40 80			STA. 149+80	)0 T

![](_page_47_Figure_0.jpeg)

![](_page_48_Figure_0.jpeg)

![](_page_49_Figure_0.jpeg)

		_ /	 
			PVI 15 Elev 23
			 5+402.320 2.936 m
<b>-</b>			