

Appendix A

Figure A-1a Project Location Map

Figure A-1b Boring Location Composite Plan

Figure A-2a through A-2q Boring Location Plan

Figure A-3a Soil Profile – S1 Ramp A over I-95

Figure A-3b Soil Profile – S2 Ramp A over SR 7

Figure A-3c Soil Profile – S3 Ramp B over SR 7

Figure A-3d Soil Profile – S4 Ramp C over SR 7

Figure A-3e Soil Profile – S5 Ramp G1 over SR 7

Figure A-4a S6: Ramp B over I-95

Figure A-4b S6: Ramp B over I-95

Figure A-4c S7: Ramp R1 over SR 7 – Abutment A

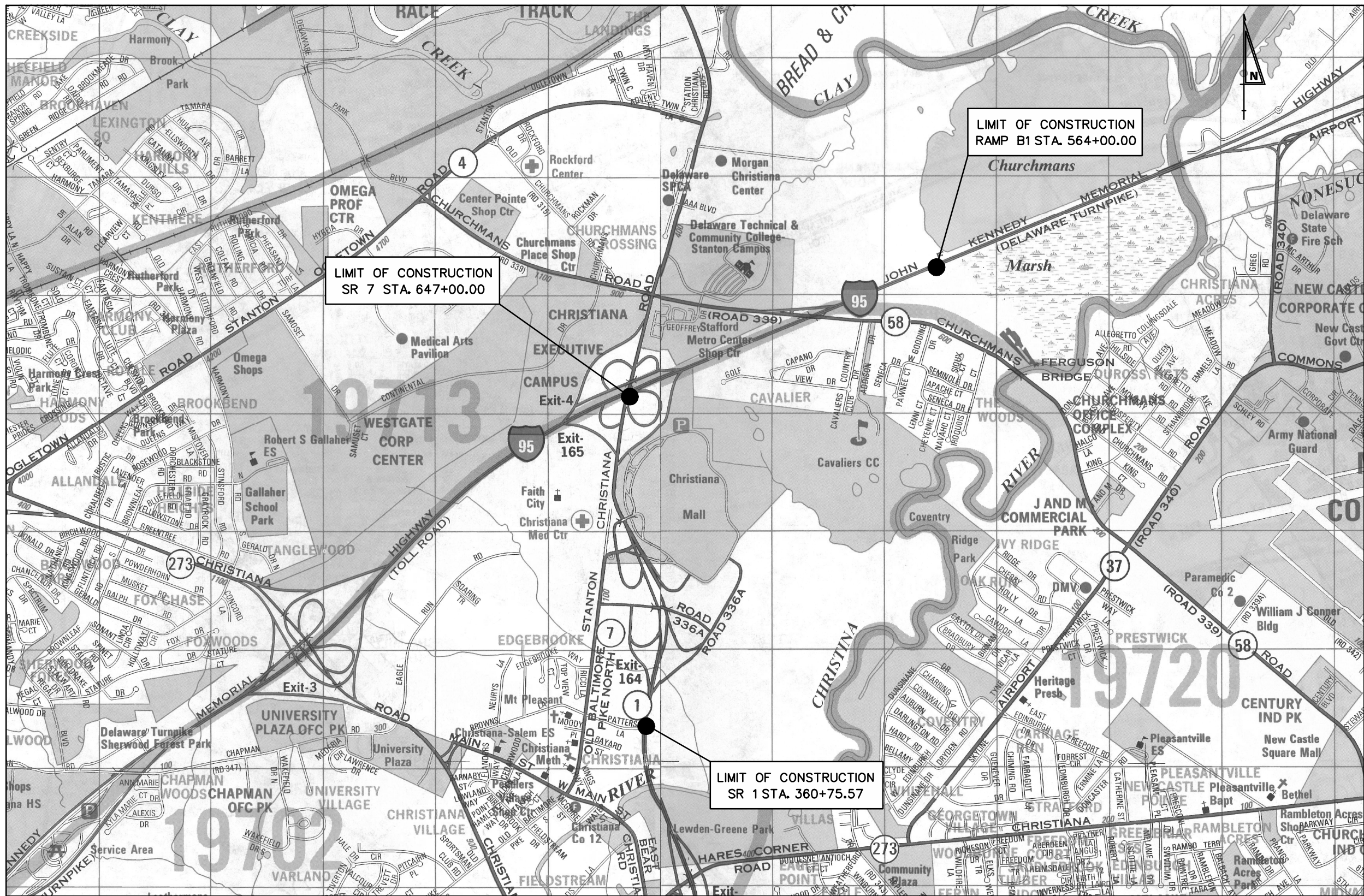
Figure A-4d S7: Ramp R1 over SR 7 – Pier

Figure A-4e S7: Ramp R1 over SR 7 – Abutment B

Figure A-4f S7: Ramp R1 over SR 7

Figure A-5: Abutment Reinforcement Zone Detail (Plan View)

Figure A-6: Composite LWEF and No. 57 Stone or Select Fill Detail (Cross Section)



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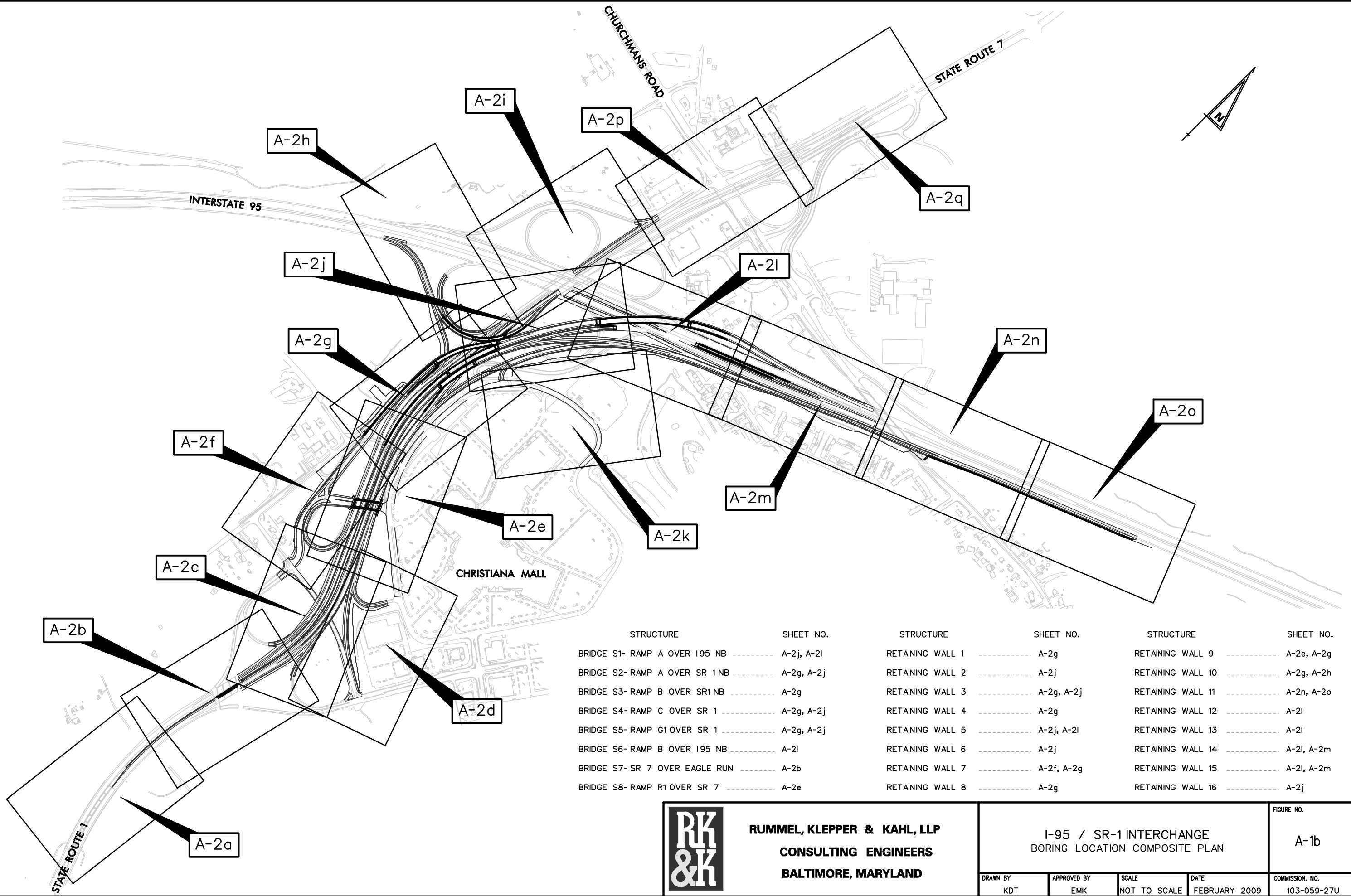
I-95 / SR-1 INTERCHANGE
 PROJECT LOCATION MAP

FIGURE NO.

A-1a

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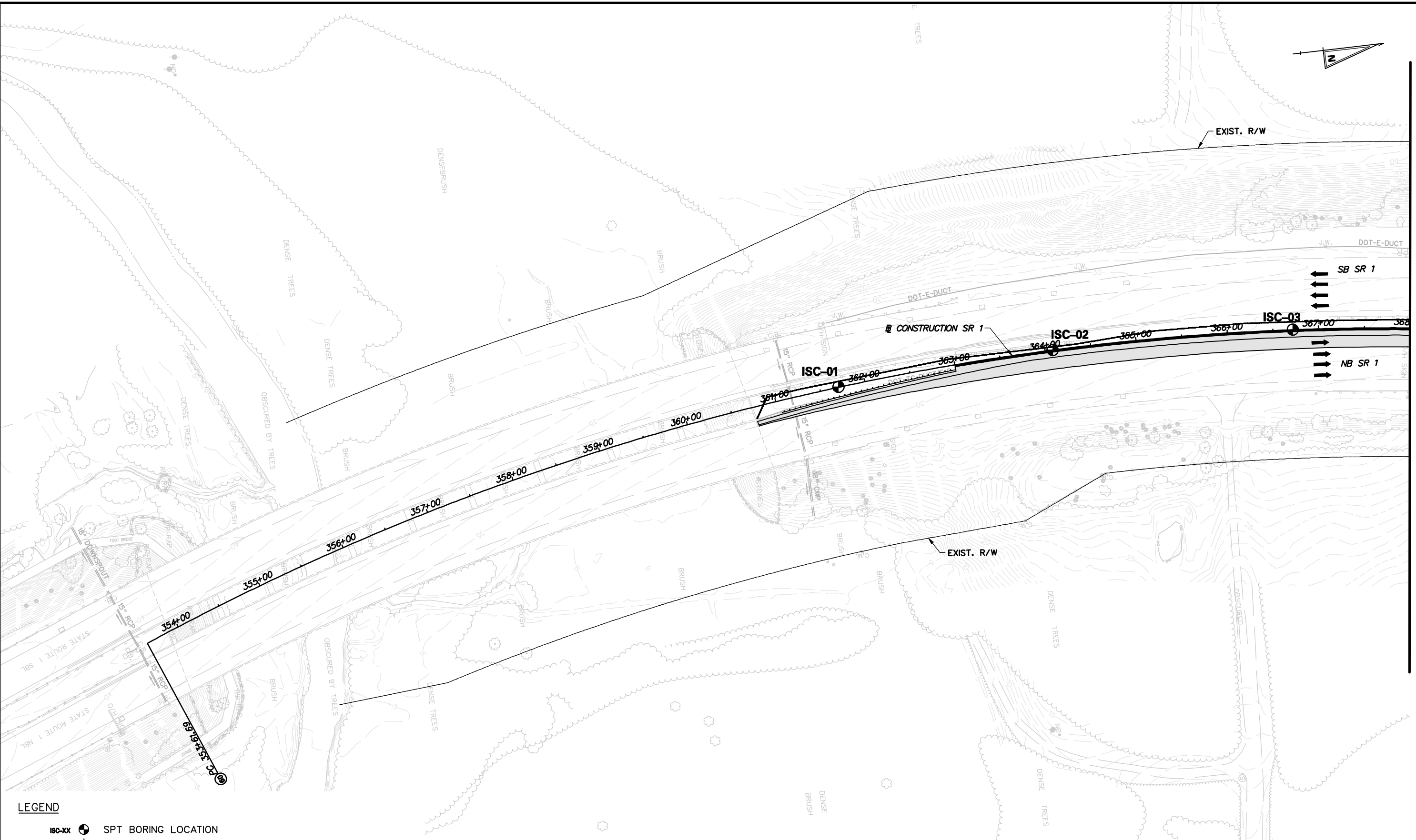
STRUCTURE	SHEET NO.	STRUCTURE	SHEET NO.	STRUCTURE	SHEET NO.
BRIDGE S1- RAMP A OVER I95 NB	A-2j, A-2l	RETAINING WALL 1	A-2g	RETAINING WALL 9	A-2e, A-2g
BRIDGE S2- RAMP A OVER SR 1 NB	A-2g, A-2j	RETAINING WALL 2	A-2j	RETAINING WALL 10	A-2g, A-2h
BRIDGE S3- RAMP B OVER SR1 NB	A-2g	RETAINING WALL 3	A-2g, A-2j	RETAINING WALL 11	A-2n, A-2o
BRIDGE S4- RAMP C OVER SR 1	A-2g, A-2j	RETAINING WALL 4	A-2g	RETAINING WALL 12	A-2l
BRIDGE S5- RAMP G1 OVER SR 1	A-2g, A-2j	RETAINING WALL 5	A-2j, A-2l	RETAINING WALL 13	A-2l
BRIDGE S6- RAMP B OVER I95 NB	A-2l	RETAINING WALL 6	A-2j	RETAINING WALL 14	A-2l, A-2m
BRIDGE S7- SR 7 OVER EAGLE RUN	A-2b	RETAINING WALL 7	A-2f, A-2g	RETAINING WALL 15	A-2l, A-2m
BRIDGE S8- RAMP R1 OVER SR 7	A-2e	RETAINING WALL 8	A-2g	RETAINING WALL 16	A-2j



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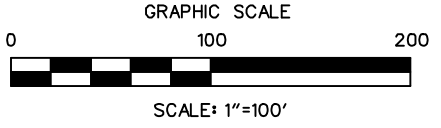
I-95 / SR-1 INTERCHANGE BORING LOCATION COMPOSITE PLAN				FIGURE NO. A-1b
DRAWN BY KDT	APPROVED BY EMK	SCALE NOT TO SCALE	DATE FEBRUARY 2009	COMMISSION NO. 103-059-27U

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 PLOT - 03059_SRI.dwg



MATCH LINE SR 1 STA. 368+00, SEE FIGURE A-2b

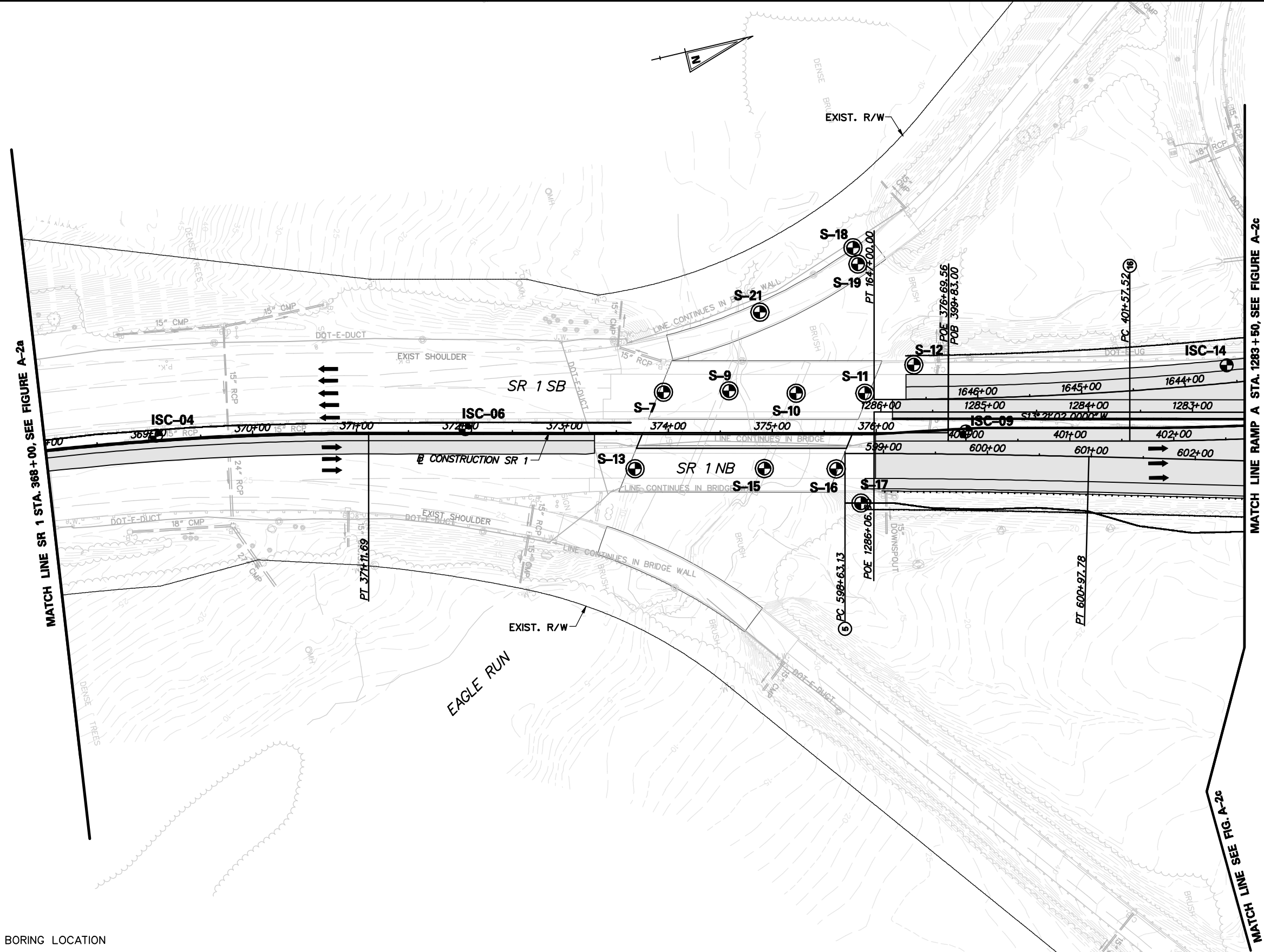
- LEGEND**
- ISC-XX SPT BORING LOCATION
 - IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / H-X HISTORIC BORING LOCATION
 - ITP-XX TESTPIT LOCATIONS
 - ICPT-XX CPT PROBES
 - DCX-XX DMT PROBES
 - WR-XX (WELL) WELL LOCATION



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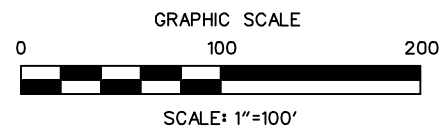
I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN				FIGURE NO. A-2a
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION. NO. 103-059-27U

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 PLOT - 03059_SRMWALL



LEGEND

- ISC-XX SPT BORING LOCATION
- IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X HISTORIC BORING LOCATION
- ITP-XX TESTPIT LOCATIONS
- ICPT-XX CPT PROBES
- DMT-XX DMT PROBES
- BR-XX (WELL) WELL LOCATION



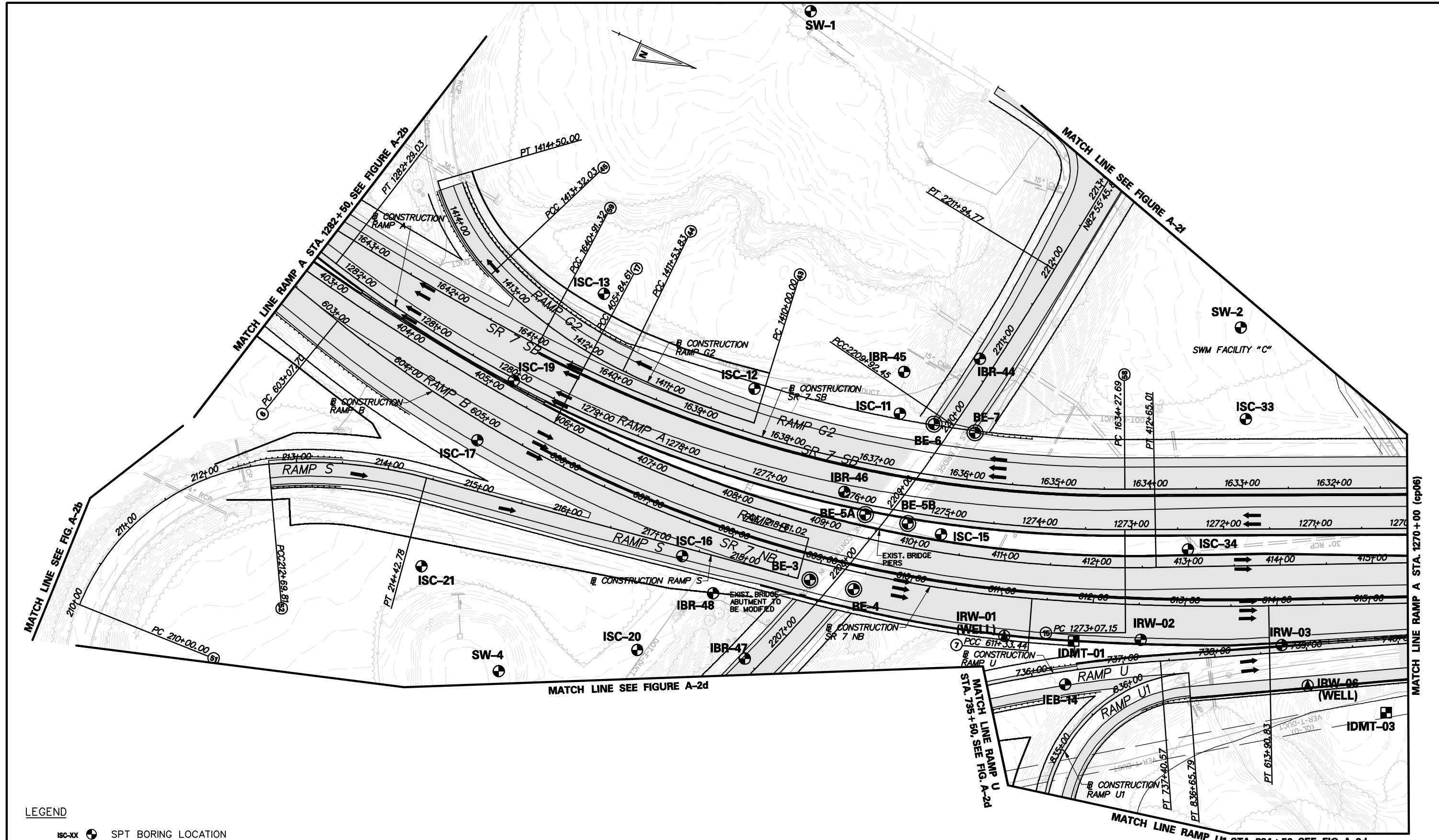
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I-95 / SR-1 INTERCHANGE
 BORING LOCATION PLAN

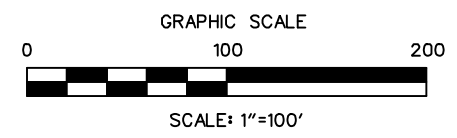
FIGURE NO.

A-2b

DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION NO. 103-059-27U
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- LEGEND**
- ISC-XX (Symbol) SPT BORING LOCATION
 - IEB-XX (Symbol) SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / H-X (Symbol) HISTORIC BORING LOCATION
 - ITP-XX (Symbol) TESTPIT LOCATIONS
 - ICPT-XX (Symbol) CPT PROBES
 - DCX-XX (Symbol) DMT PROBES
 - IBR-XX (WELL) (Symbol) WELL LOCATION

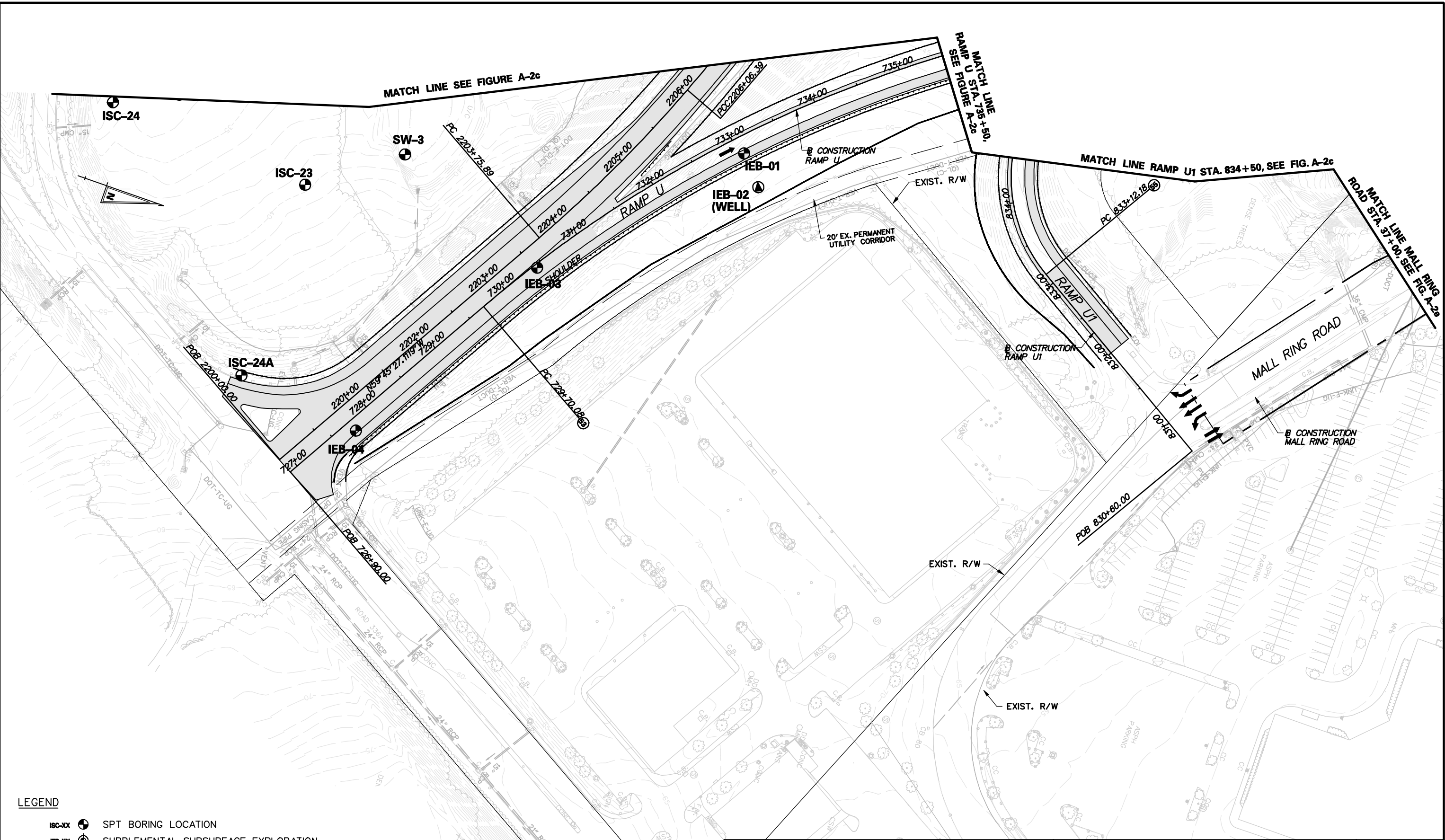


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DRAWN BY KDT		APPROVED BY EMK		SCALE 1"=100'-0"	DATE FEBRUARY 2009	FIGURE NO. A-2c
COMMISSION. NO. 103-059-27U						

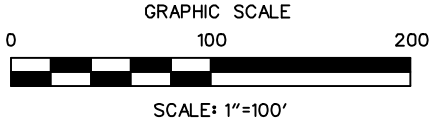
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LEGEND

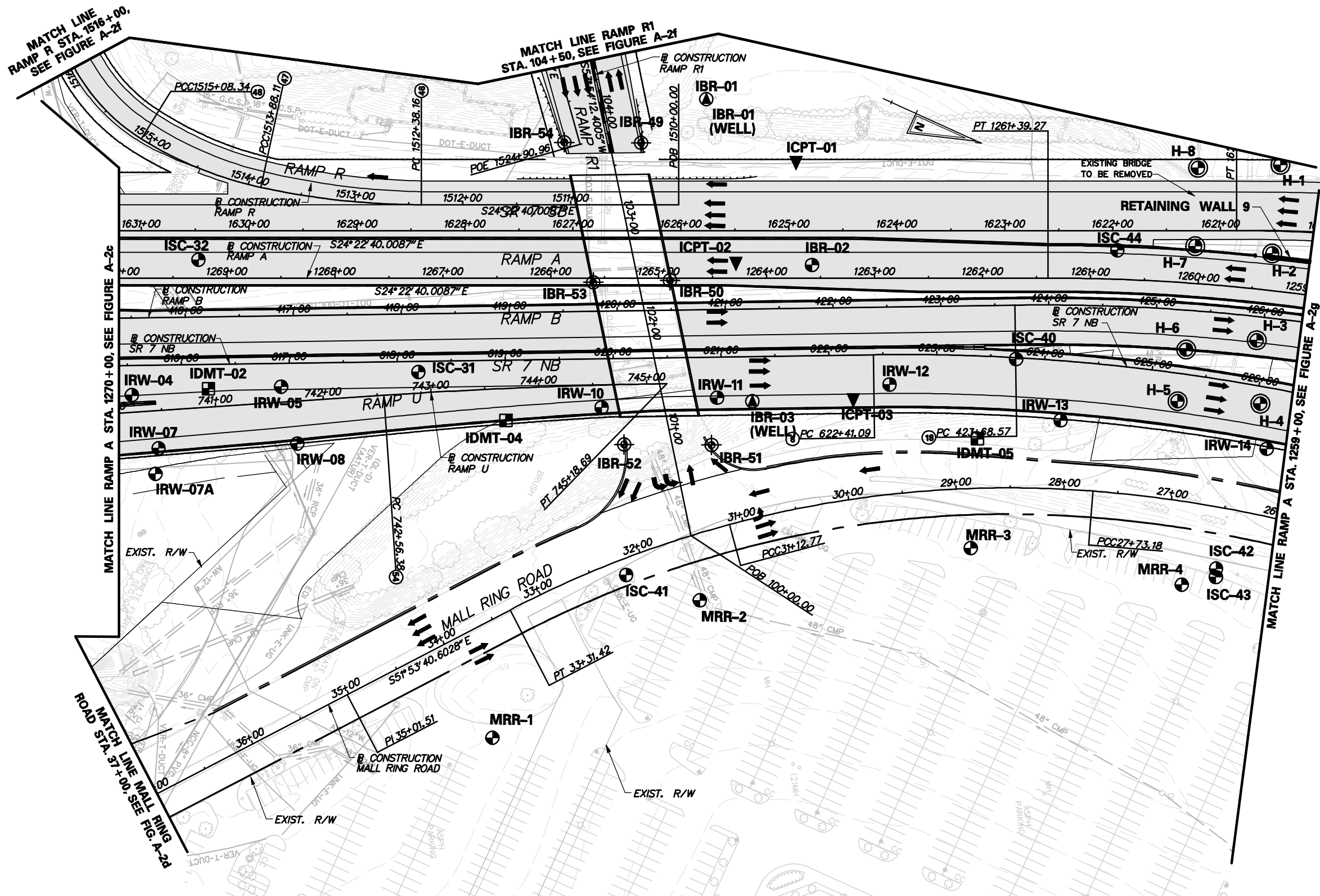
- ISC-XX SPT BORING LOCATION
- IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X HISTORIC BORING LOCATION
- ITP-XX TESTPIT LOCATIONS
- ICPT-XX CPT PROBES
- DMT-XX DMT PROBES
- WR-XX (WELL) WELL LOCATION



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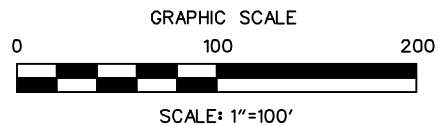
I-95 / SR-1 INTERCHANGE			BORING LOCATION PLAN		FIGURE NO. A-2d
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 PLOT - 020599-SR1-MALL



LEGEND

- ISC-XX (circle with dot) SPT BORING LOCATION
- IEB-XX (circle with cross) SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X (circle with dot) HISTORIC BORING LOCATION
- ITP-XX (circle with cross) TESTPIT LOCATIONS
- ICPT-XX (inverted triangle) CPT PROBES
- DMT-XX (square) DMT PROBES
- IBR-XX (WELL) (circle with dot) WELL LOCATION



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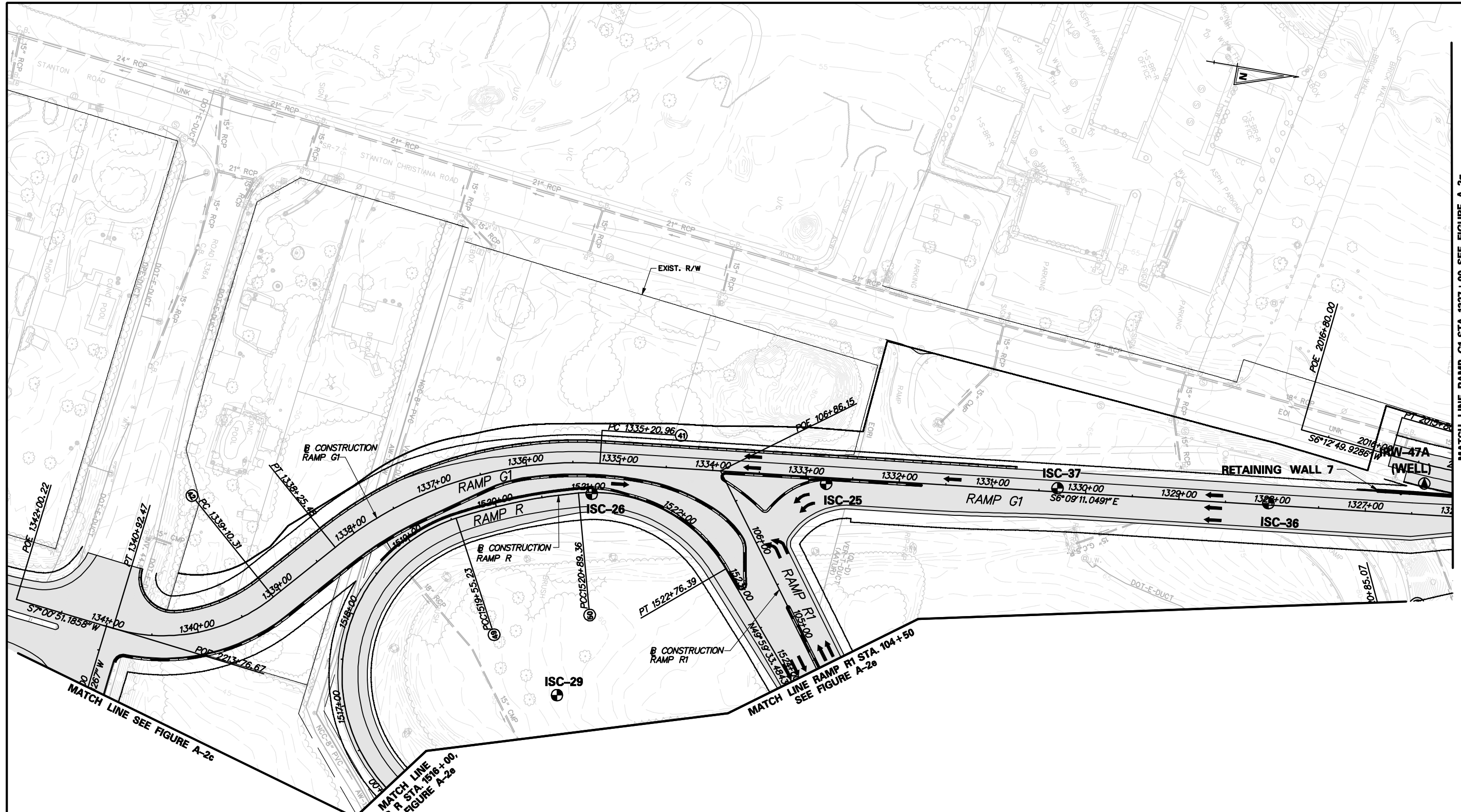
I-95 / SR-1 INTERCHANGE
 BORING LOCATION PLAN

FIGURE NO.

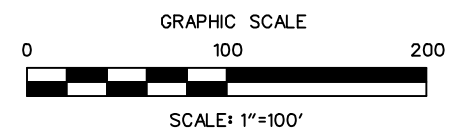
A-2e

DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION. NO. 103-059-27U
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- LEGEND**
- ISC-XX (circle with dot) SPT BORING LOCATION
 - IEB-XX (circle with cross) SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / H-X (circle with dot) HISTORIC BORING LOCATION
 - ITP-XX (circle with cross) TESTPIT LOCATIONS
 - ICPT-XX (circle with cross) CPT PROBES
 - DCX-XX (square) DMT PROBES
 - BR-XX (circle with dot) WELL LOCATION



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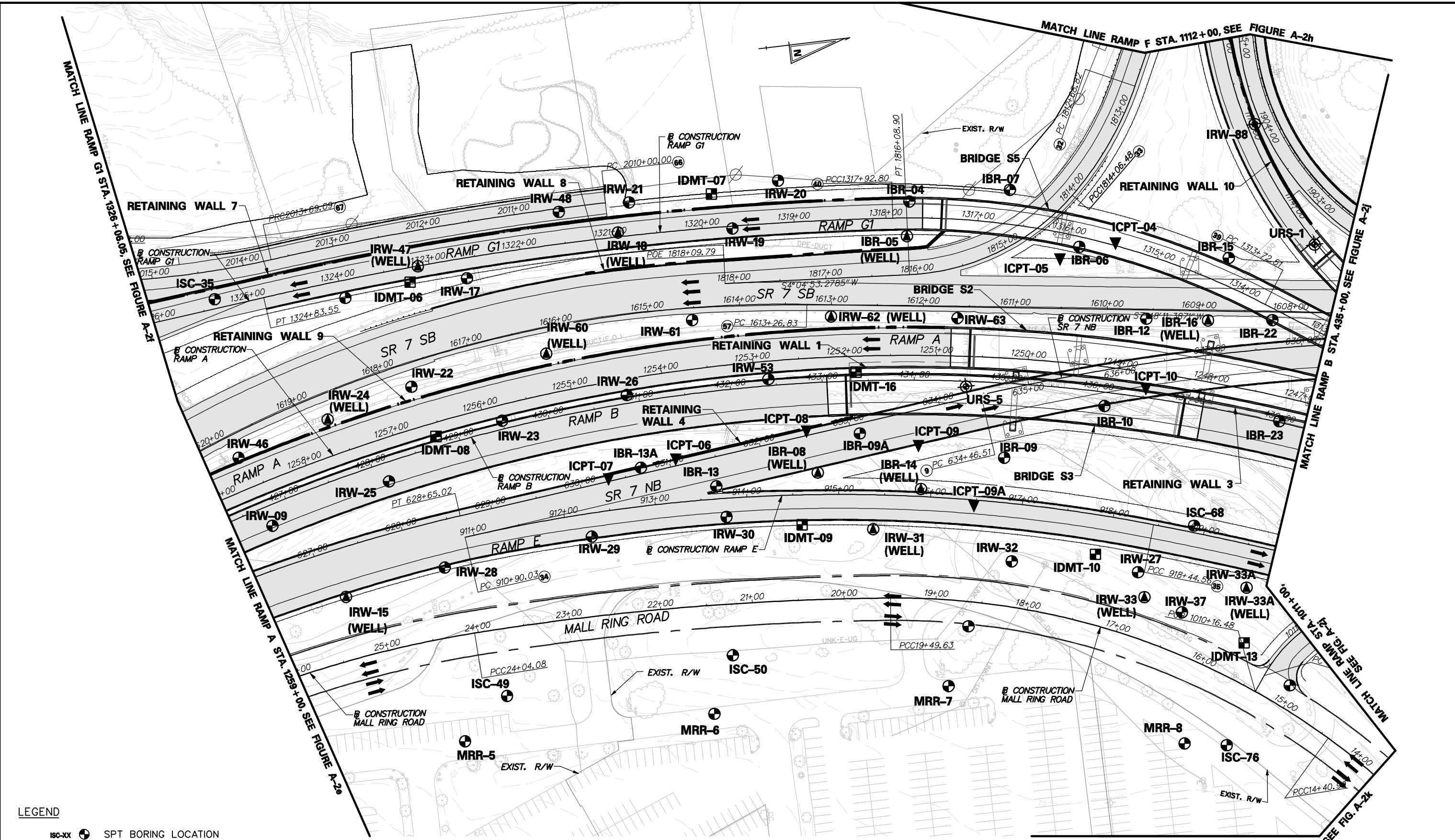
I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN				FIGURE NO. A-2f
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MATCH LINE RAMP G1 STA. 1327+00, SEE FIGURE A-2g

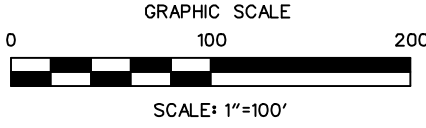
MATCH LINE
RAMP R STA. 1516+00,
SEE FIGURE A-2e

MATCH LINE RAMP R1 STA. 104+50
SEE FIGURE A-2e

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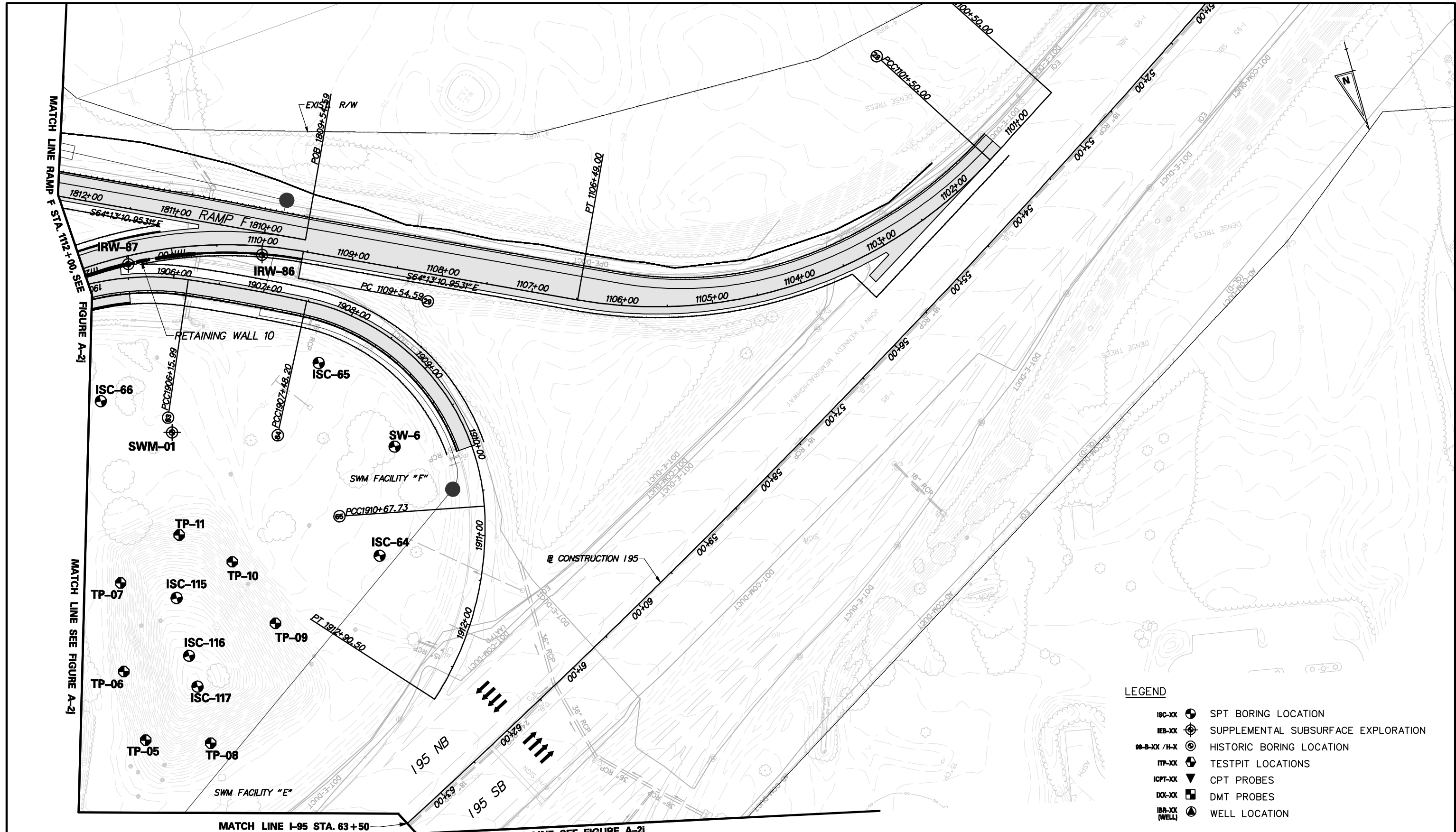
- LEGEND**
- ISC-XX (●) SPT BORING LOCATION
 - IEB-XX (⊕) SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / H-X (⊙) HISTORIC BORING LOCATION
 - ITP-XX (⊕) TESTPIT LOCATIONS
 - ICPT-XX (▼) CPT PROBES
 - DMT-XX (■) DMT PROBES
 - IBR-XX (WELL) (⊕) WELL LOCATION



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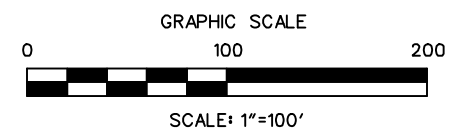
DRAWN BY KDT		APPROVED BY EMK		SCALE 1"=100'-0"	DATE FEBRUARY 2009	FIGURE NO. A-2g
						COMMISSION. NO. 103-059-27U

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LEGEND

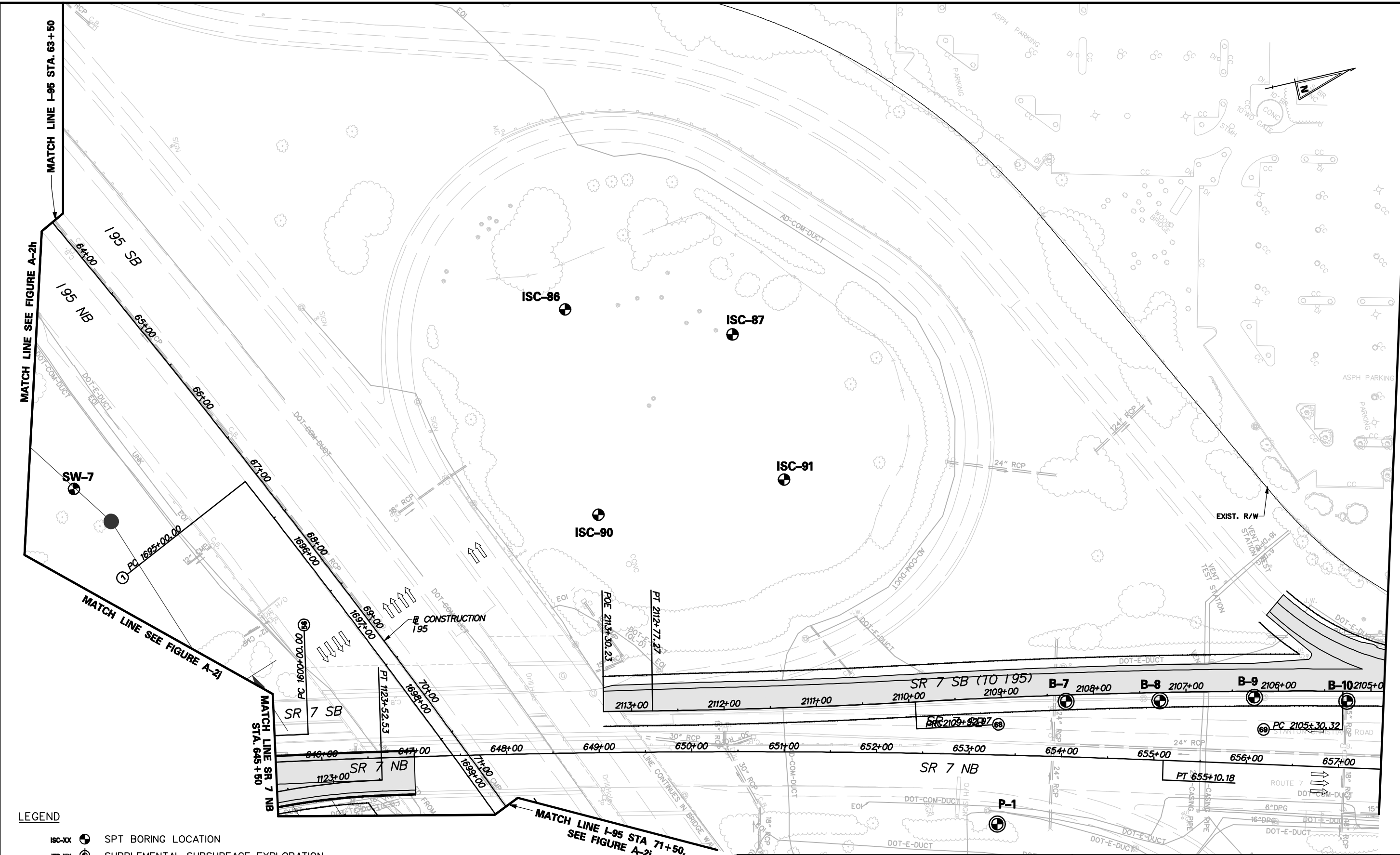
ISC-XX	⊕	SPT BORING LOCATION
IEB-XX	⊗	SUPPLEMENTAL SUBSURFACE EXPLORATION
BB-B-XX / H-X	⊙	HISTORIC BORING LOCATION
TP-XX	⊕	TESTPIT LOCATIONS
ICPT-XX	▼	CPT PROBES
IDX-XX	⊕	DMT PROBES
IBR-XX [WELL]	⊕	WELL LOCATION



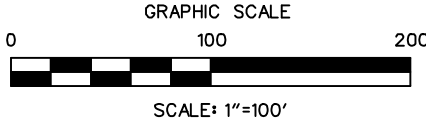

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I-95 / SR-1 INTERCHANGE				FIGURE NO. A-2h
BORING LOCATION PLAN				
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION. NO. 103-059-27U

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- LEGEND**
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 - IEB-XX (circle with cross) SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / H-X (circle with dot) HISTORIC BORING LOCATION
 - ITP-XX (circle with cross) TESTPIT LOCATIONS
 - ICPT-XX (circle with cross) CPT PROBES
 - DCX-XX (square) DMT PROBES
 - BR-XX (circle with dot) WELL LOCATION



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I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN				FIGURE NO. A-2i
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION. NO. 103-059-27U

MATCH LINE I-95 STA. 63+50

MATCH LINE SEE FIGURE A-2h

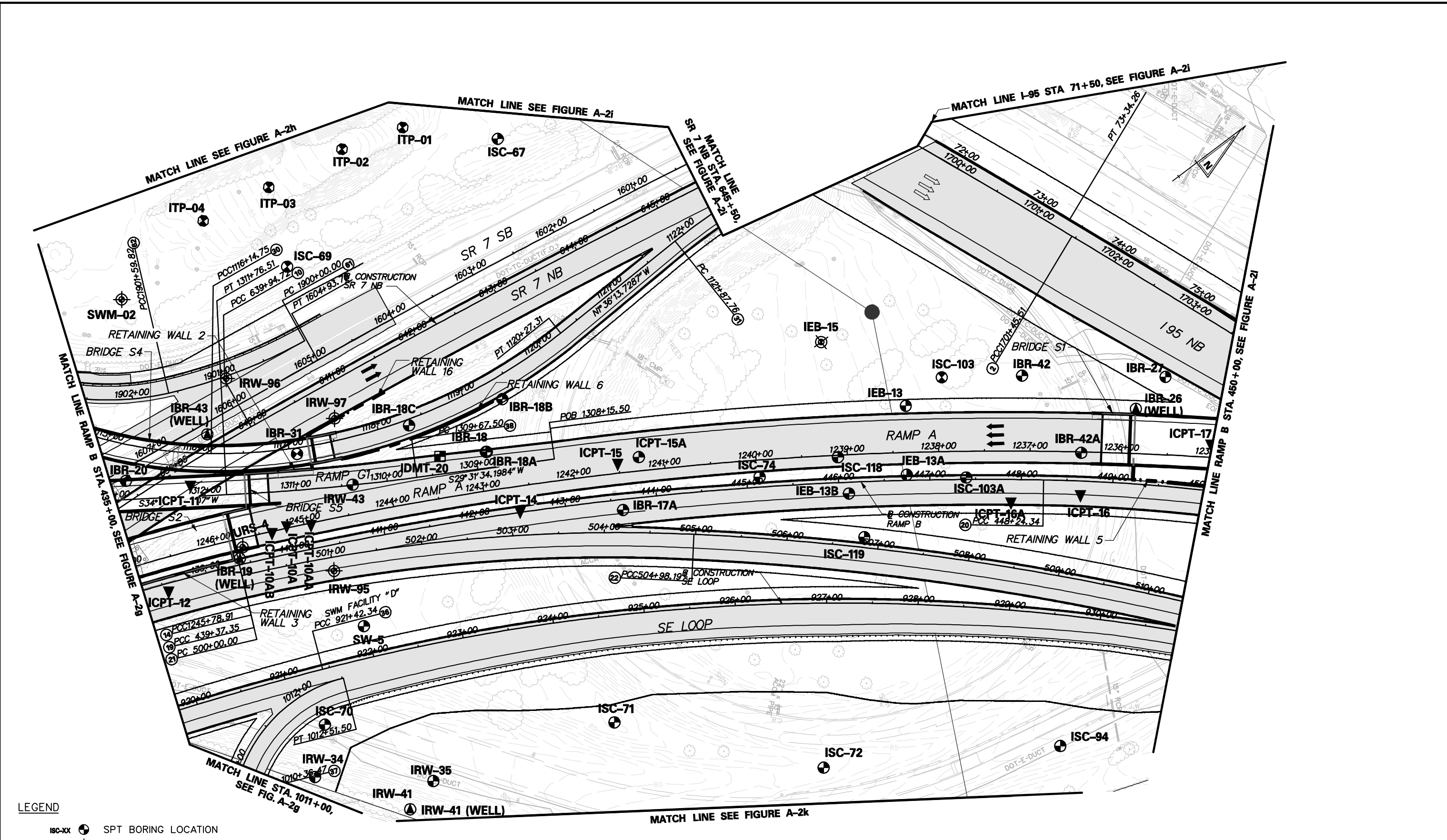
MATCH LINE SEE FIGURE A-2j

MATCH LINE STA. 645+50

MATCH LINE I-95 STA 71+50,
SEE FIGURE A-2j

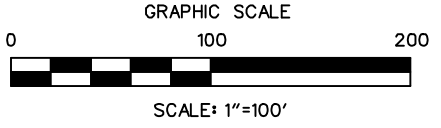
MATCH LINE SEE FIGURE A-2p

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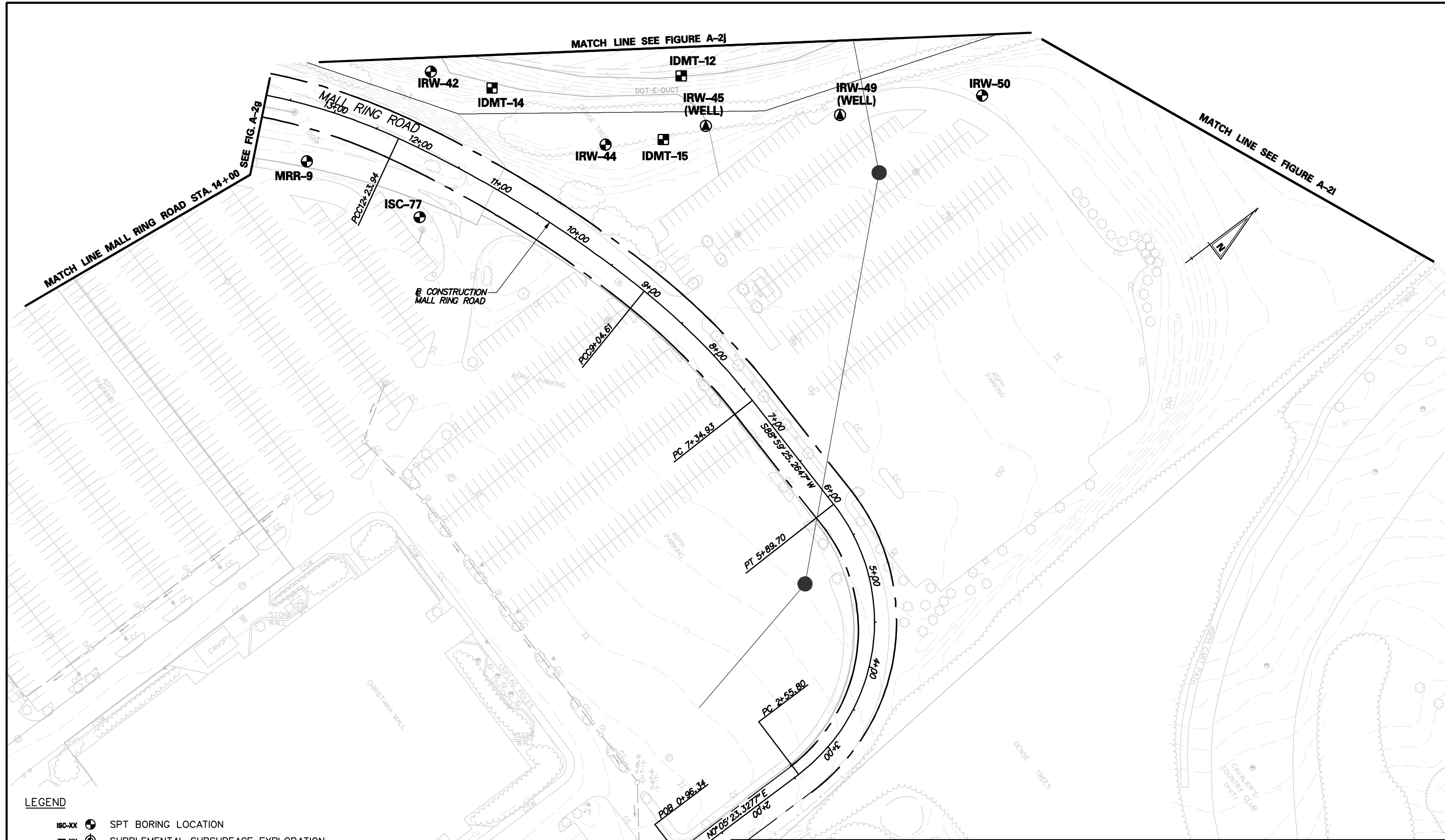
- ISC-XX (●) SPT BORING LOCATION
- IEB-XX (⊕) SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / II-X (⊙) HISTORIC BORING LOCATION
- ITP-XX (⊕) TESTPIT LOCATIONS
- ICPT-XX (▼) CPT PROBES
- DMT-XX (■) DMT PROBES
- IBR-XX (WELL) (⊕) WELL LOCATION



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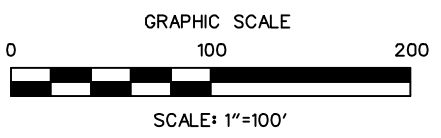
I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN				FIGURE NO. A-2j
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 PLOT - 03059-SR1MALL



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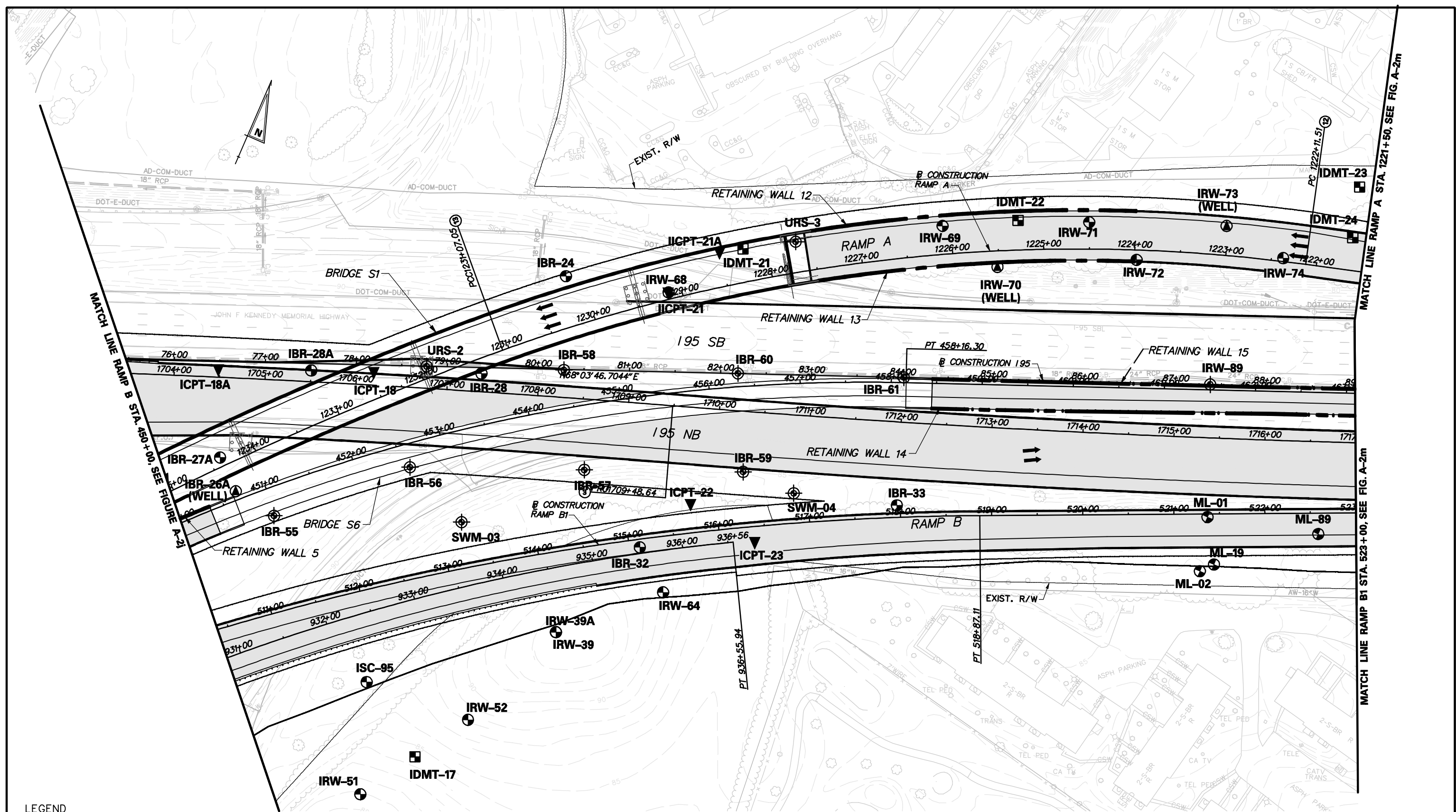
- ISC-XX SPT BORING LOCATION
- IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X HISTORIC BORING LOCATION
- ITP-XX TESTPIT LOCATIONS
- ICPT-XX CPT PROBES
- DMT-XX DMT PROBES
- IRW-XX (WELL) WELL LOCATION



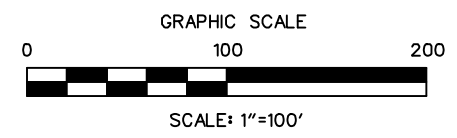
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I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN		FIGURE NO. A-2k
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"
DATE FEBRUARY 2009		COMMISSION NO. 103-059-27U

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 PLOT: 03059_SRMWALL



- LEGEND**
- ISC-XX (circle with dot) SPT BORING LOCATION
 - IEB-XX (circle with cross) SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / H-X (circle with dot) HISTORIC BORING LOCATION
 - ITP-XX (circle with cross) TESTPIT LOCATIONS
 - ICPT-XX (inverted triangle) CPT PROBES
 - DOX-XX (square) DMT PROBES
 - IBR-XX (WELL) (circle with dot) WELL LOCATION

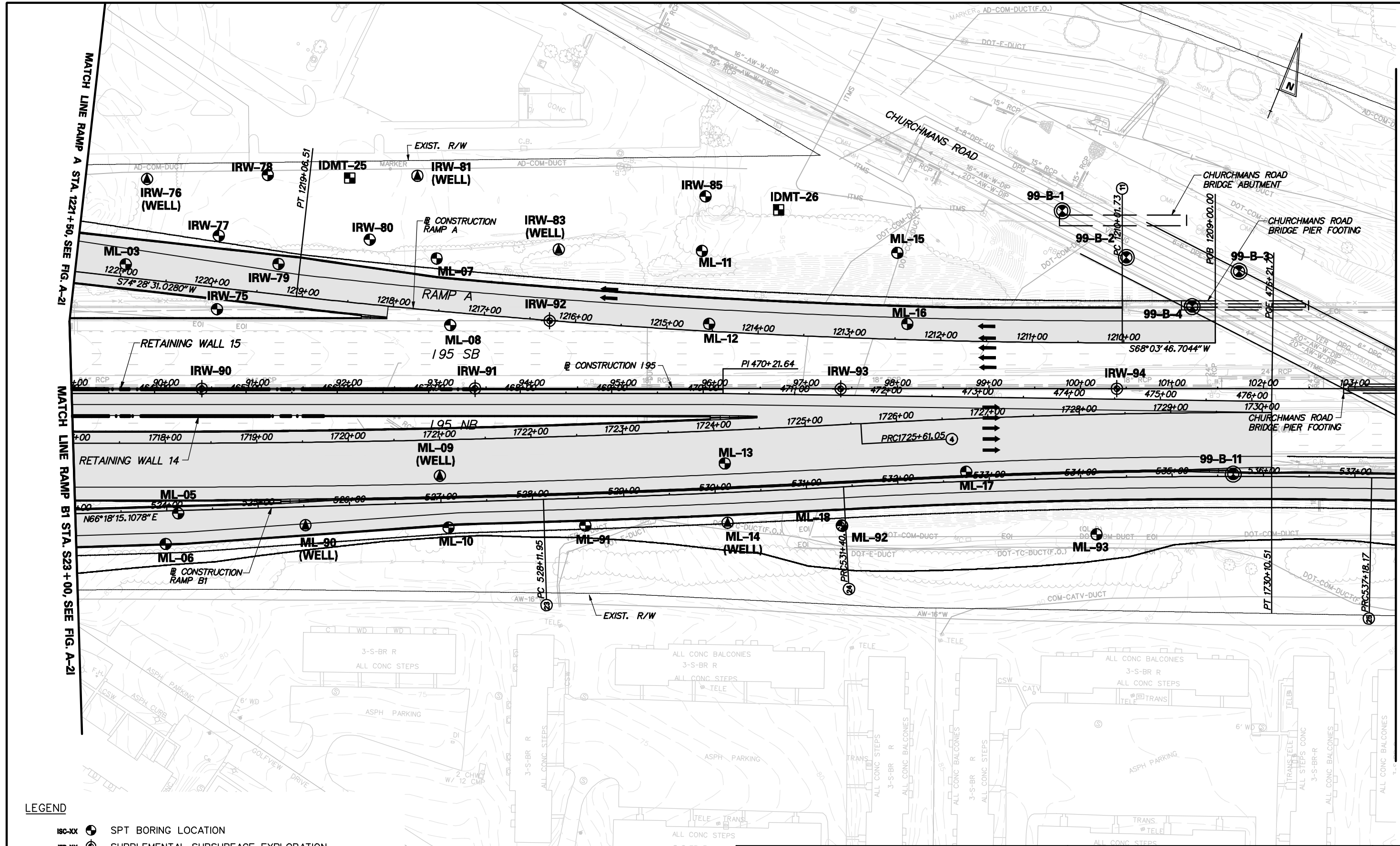


RK & K

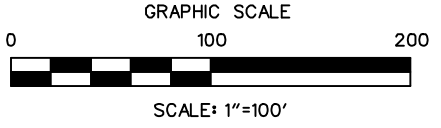
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DRAWN BY KDT		APPROVED BY EMK		SCALE 1"=100'-0"	DATE FEBRUARY 2009	FIGURE NO. A-21
COMMISSION. NO. 103-059-27U						

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 REF: 02029-SRWALL



- LEGEND**
- ISC-XX (Symbol) SPT BORING LOCATION
 - IEB-XX (Symbol) SUPPLEMENTAL SUBSURFACE EXPLORATION
 - 99-B-XX / II-X (Symbol) HISTORIC BORING LOCATION
 - ITP-XX (Symbol) TESTPIT LOCATIONS
 - ICPT-XX (Symbol) CPT PROBES
 - DCX-XX (Symbol) DMT PROBES
 - IRW-XX (WELL) (Symbol) WELL LOCATION



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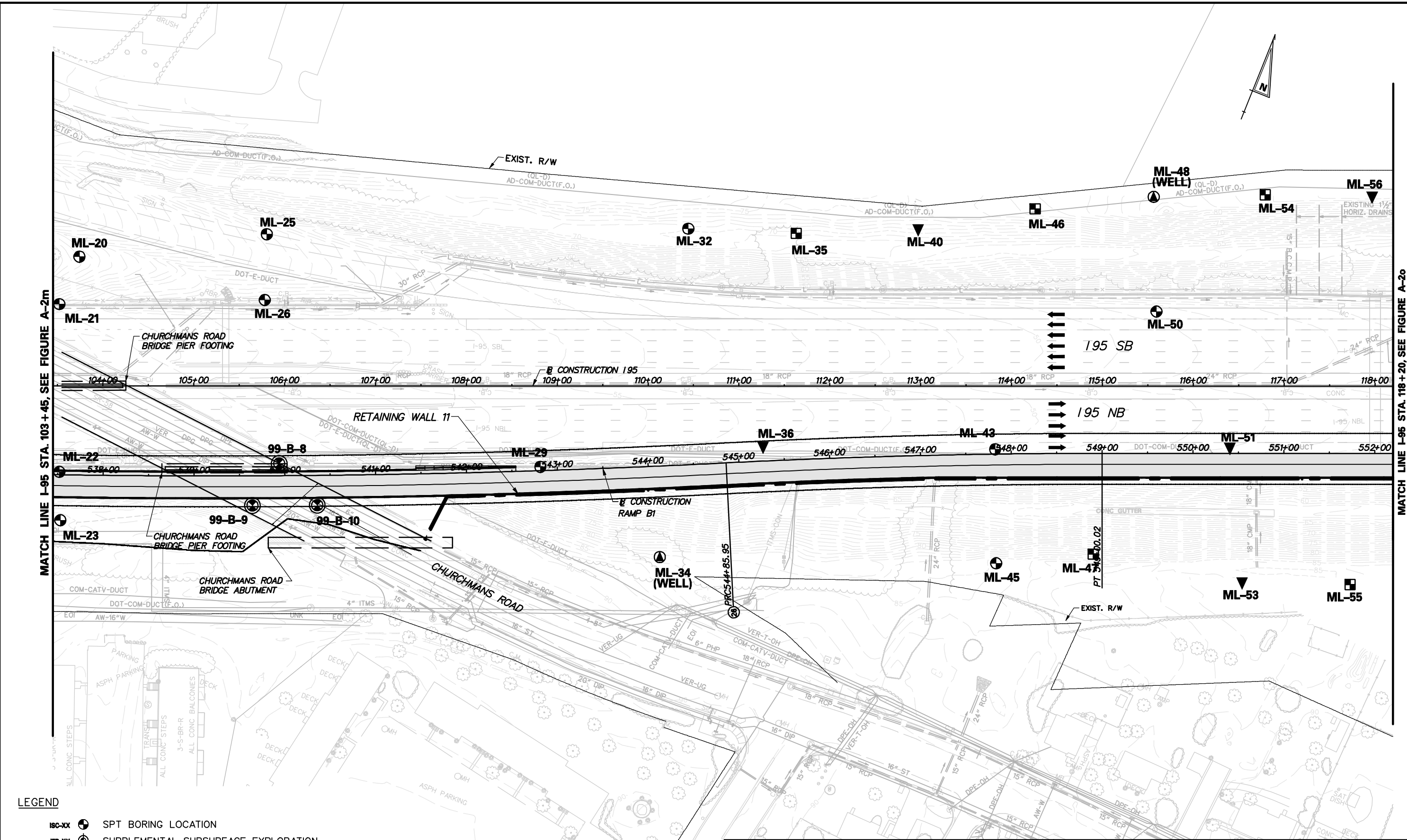
DRAWN BY KDT		APPROVED BY EMK		SCALE 1"=100'-0"	DATE FEBRUARY 2009	FIGURE NO. A-2m
						COMMISSION. NO. 103-059-27U

MATCH LINE RAMP A STA. 1221+50, SEE FIG. A-21

MATCH LINE RAMP B1 STA. S23+00, SEE FIG. A-21

MATCH LINE I-95 STA. 103+45, SEE FIGURE A-2n

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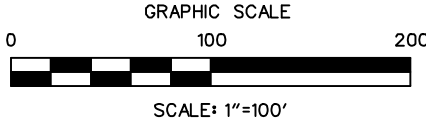


MATCH LINE I-95 STA. 103+45, SEE FIGURE A-2m

MATCH LINE I-95 STA. 118+20, SEE FIGURE A-2o

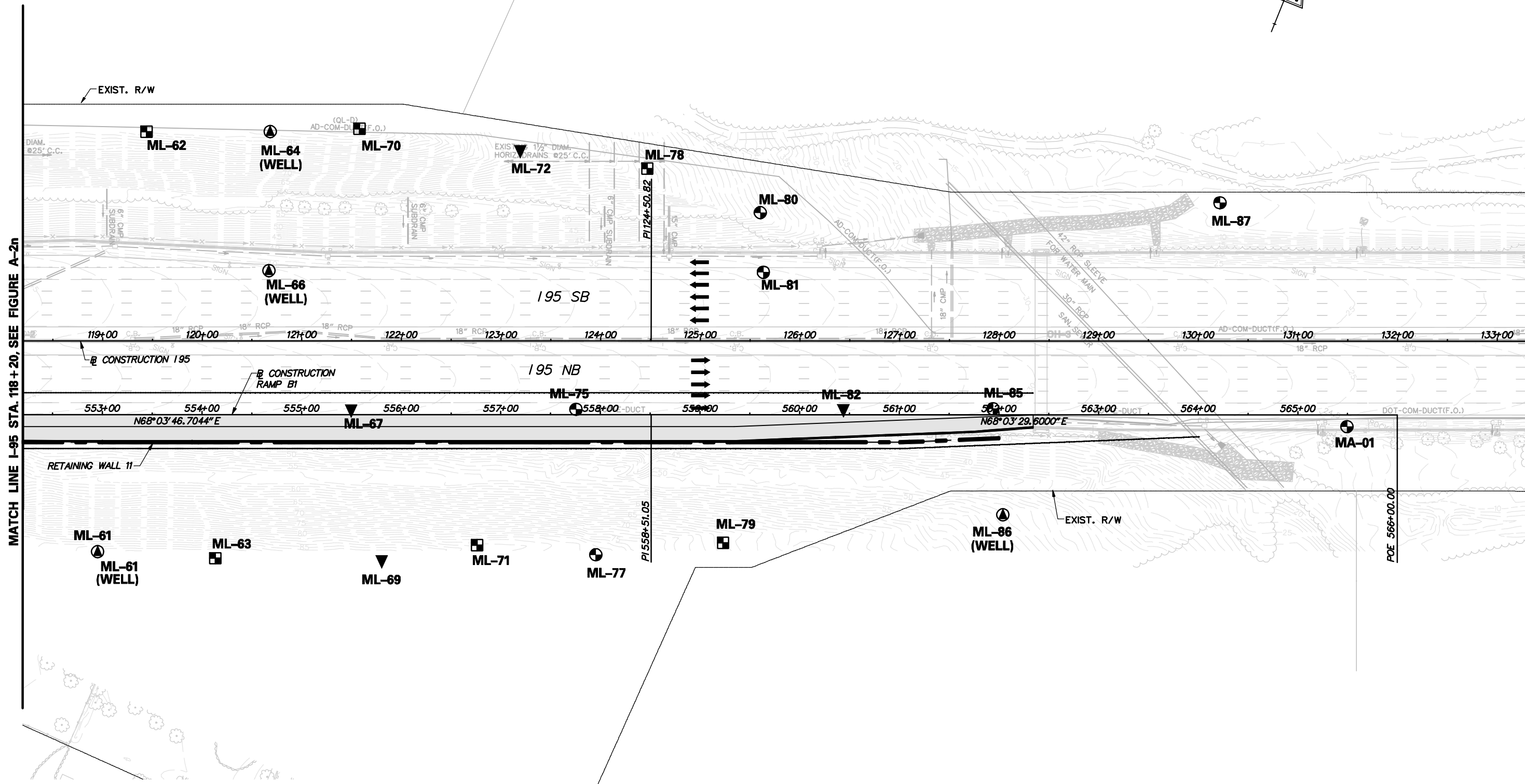
LEGEND

- ISC-XX SPT BORING LOCATION
- IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X HISTORIC BORING LOCATION
- ITP-XX TESTPIT LOCATIONS
- ICPT-XX CPT PROBES
- DDX-XX DMT PROBES
- BR-XX (WELL) WELL LOCATION



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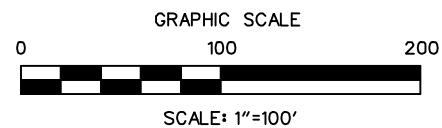
I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN			FIGURE NO. A-2n
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009
			COMMISSION NO. 103-059-27U



MATCH LINE I-95 STA. 118+20, SEE FIGURE A-2n

LEGEND

- 18C-XX SPT BORING LOCATION
- 18B-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / 11-X HISTORIC BORING LOCATION
- 11P-XX TESTPIT LOCATIONS
- 10PT-XX CPT PROBES
- 10X-XX DMT PROBES
- 18R-XX (WELL) WELL LOCATION



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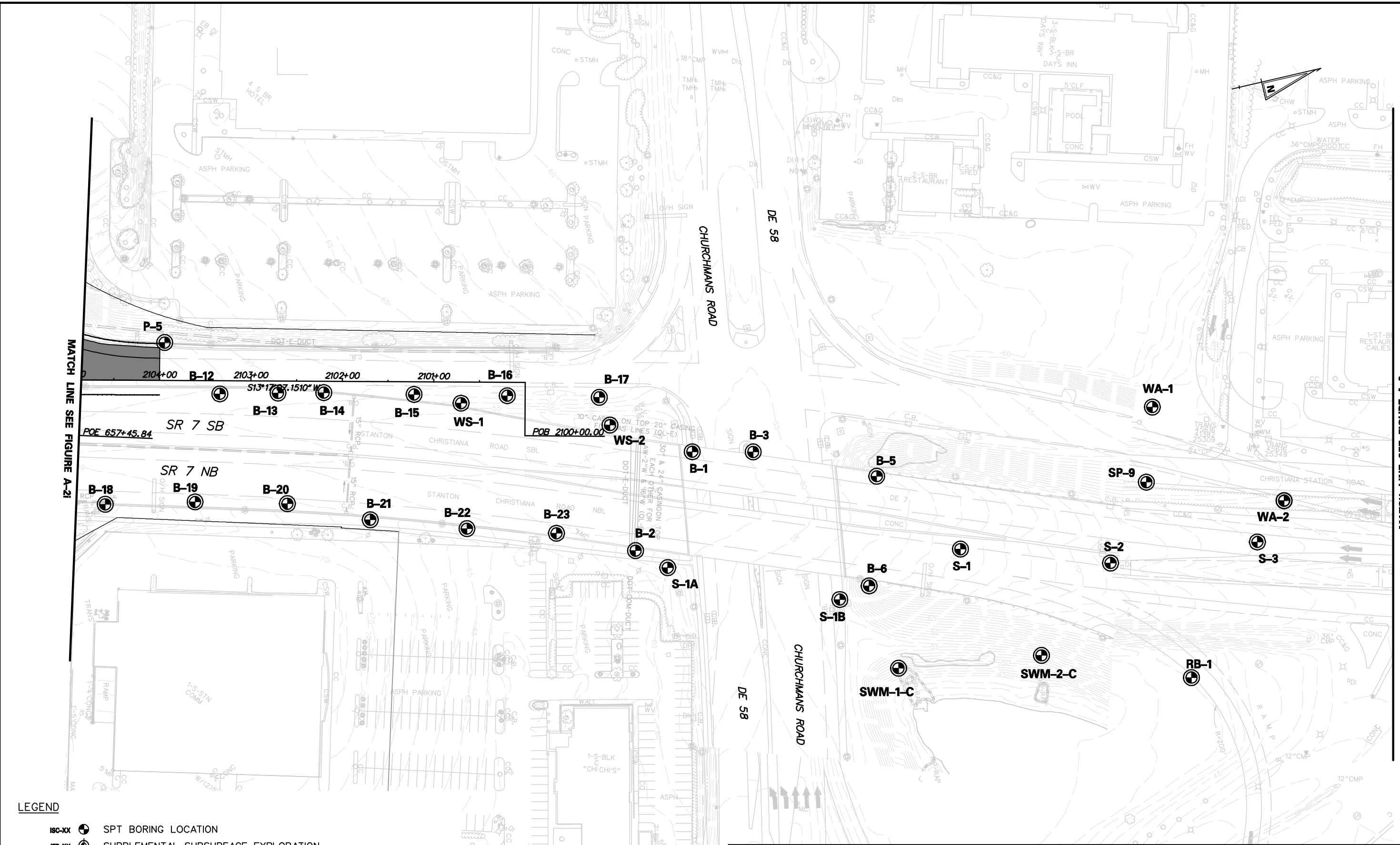
I-95 / SR-1 INTERCHANGE
 BORING LOCATION PLAN

FIGURE NO.

A-2o

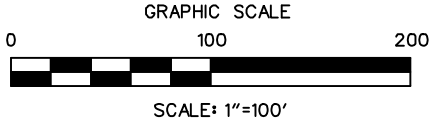
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION. NO. 103-059-27U
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2/5/2009
 m:\projects\2003\103059_deltrmpk\Geotech\INTERCHANGE FINAL DESIGN 2008\CADD\Soil_Bore_SRI.dgn
 PLOT: 0209_SRI.MAL



LEGEND

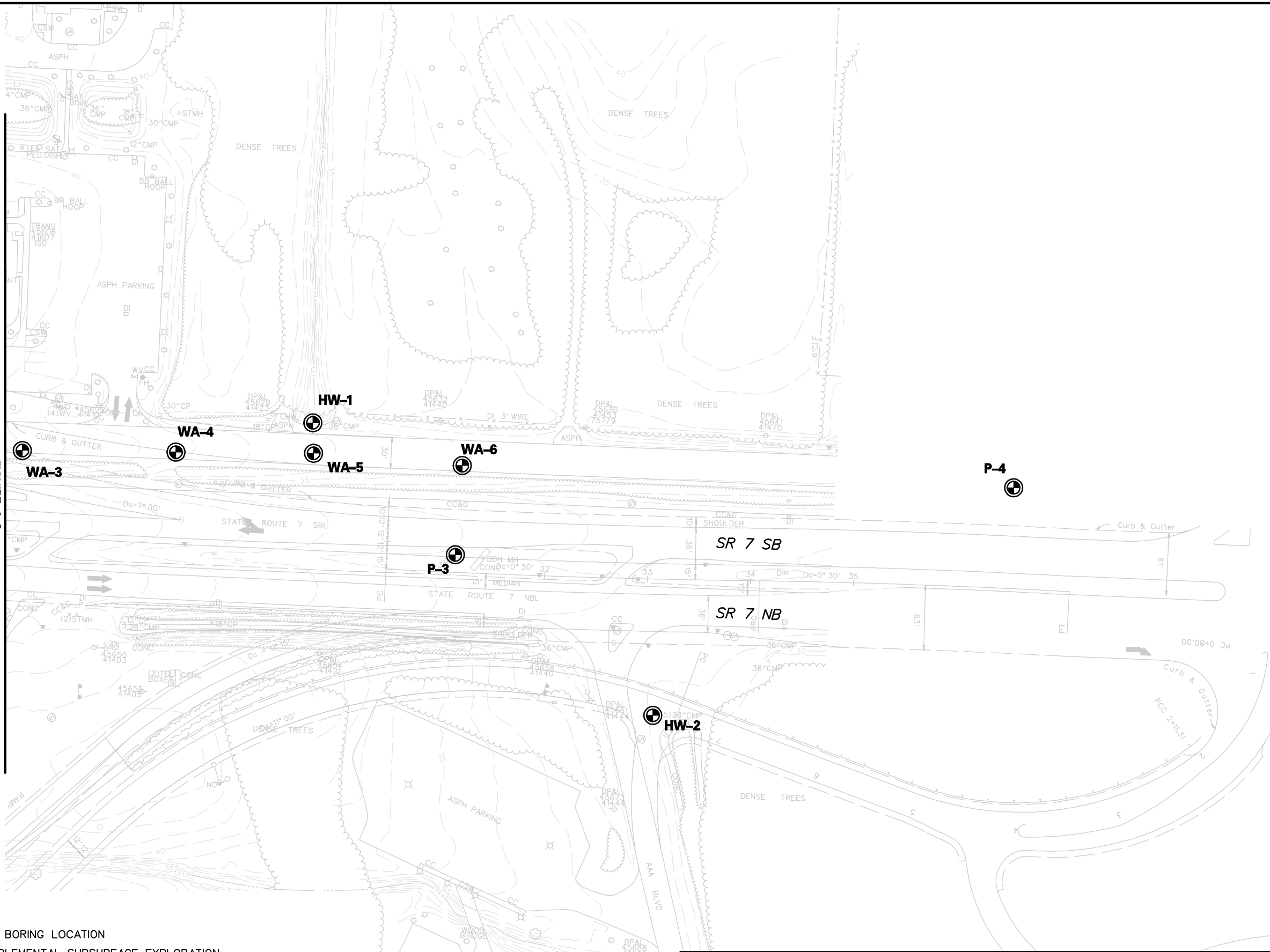
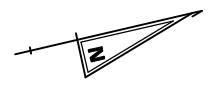
- ISC-XX SPT BORING LOCATION
- IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X HISTORIC BORING LOCATION
- ITP-XX TESTPIT LOCATIONS
- ICPT-XX CPT PROBES
- DCX-XX DMT PROBES
- BR-XX (WELL) WELL LOCATION



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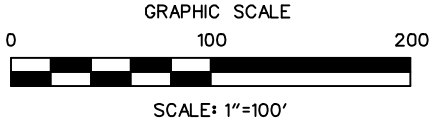
I-95 / SR-1 INTERCHANGE			BORING LOCATION PLAN		FIGURE NO. A-2p
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009	COMMISSION. NO. 103-059-27U	

MATCH LINE SEE FIGURE A-2p



LEGEND

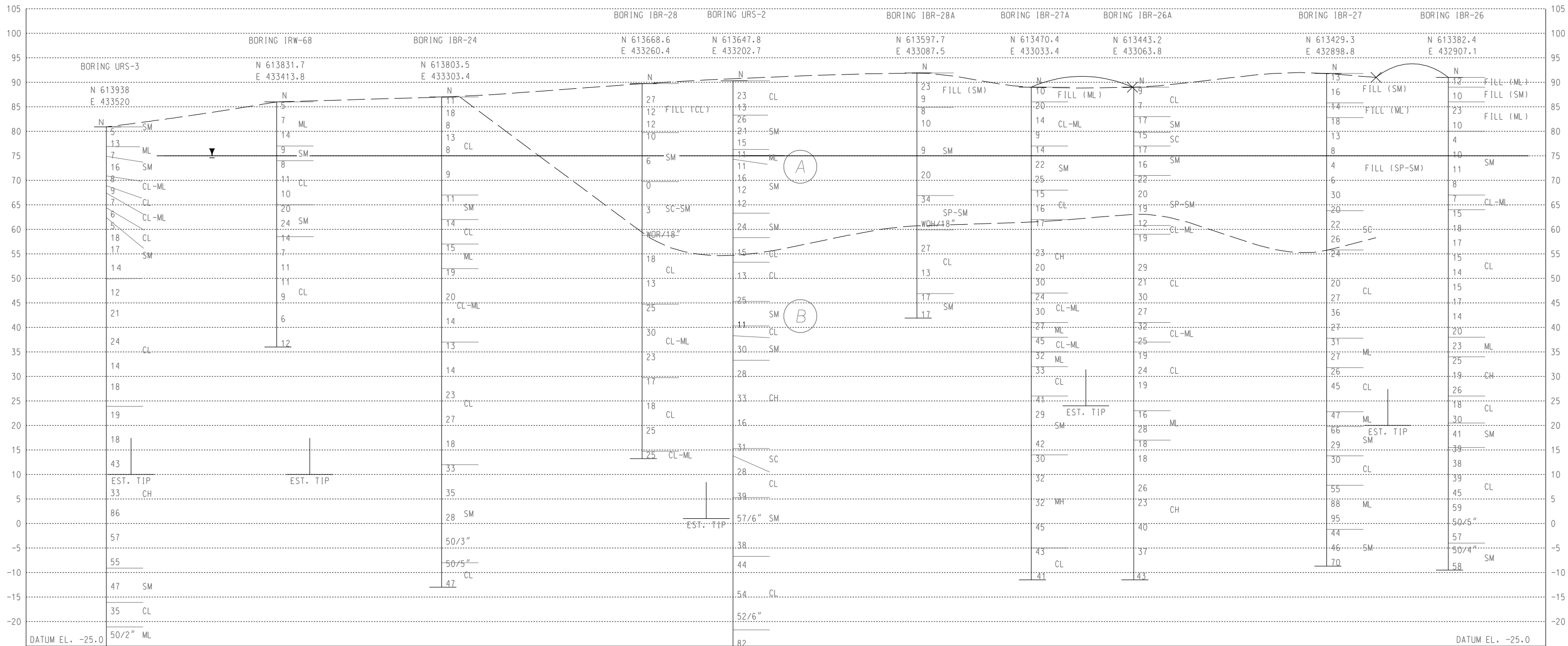
- ISC-XX SPT BORING LOCATION
- IEB-XX SUPPLEMENTAL SUBSURFACE EXPLORATION
- 99-B-XX / H-X HISTORIC BORING LOCATION
- ITP-XX TESTPIT LOCATIONS
- ICPT-XX CPT PROBES
- DDX-XX DMT PROBES
- IBR-XX (WELL) WELL LOCATION



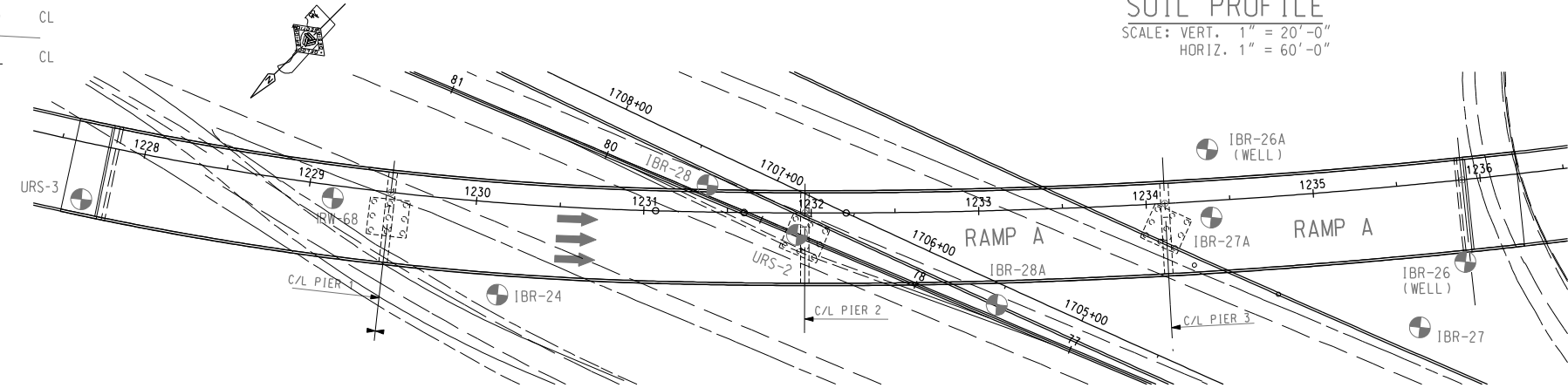
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I-95 / SR-1 INTERCHANGE BORING LOCATION PLAN			FIGURE NO. A-2q
DRAWN BY KDT	APPROVED BY EMK	SCALE 1"=100'-0"	DATE FEBRUARY 2009
			COMMISSION. NO. 103-059-27U

2/5/2009
 m:\projects\103059\deltrmpk\Geo\tech\INTERCHANGE FINAL DESIGN 2008\CADD\Soil_Bore_SRT.dgn
 PLOT: 0209_SRMWAL



SOIL PROFILE
 SCALE: VERT. 1" = 20'-0"
 HORIZ. 1" = 60'-0"



BORING LOCATION PLAN
 SCALE: 1" = 100'-0"

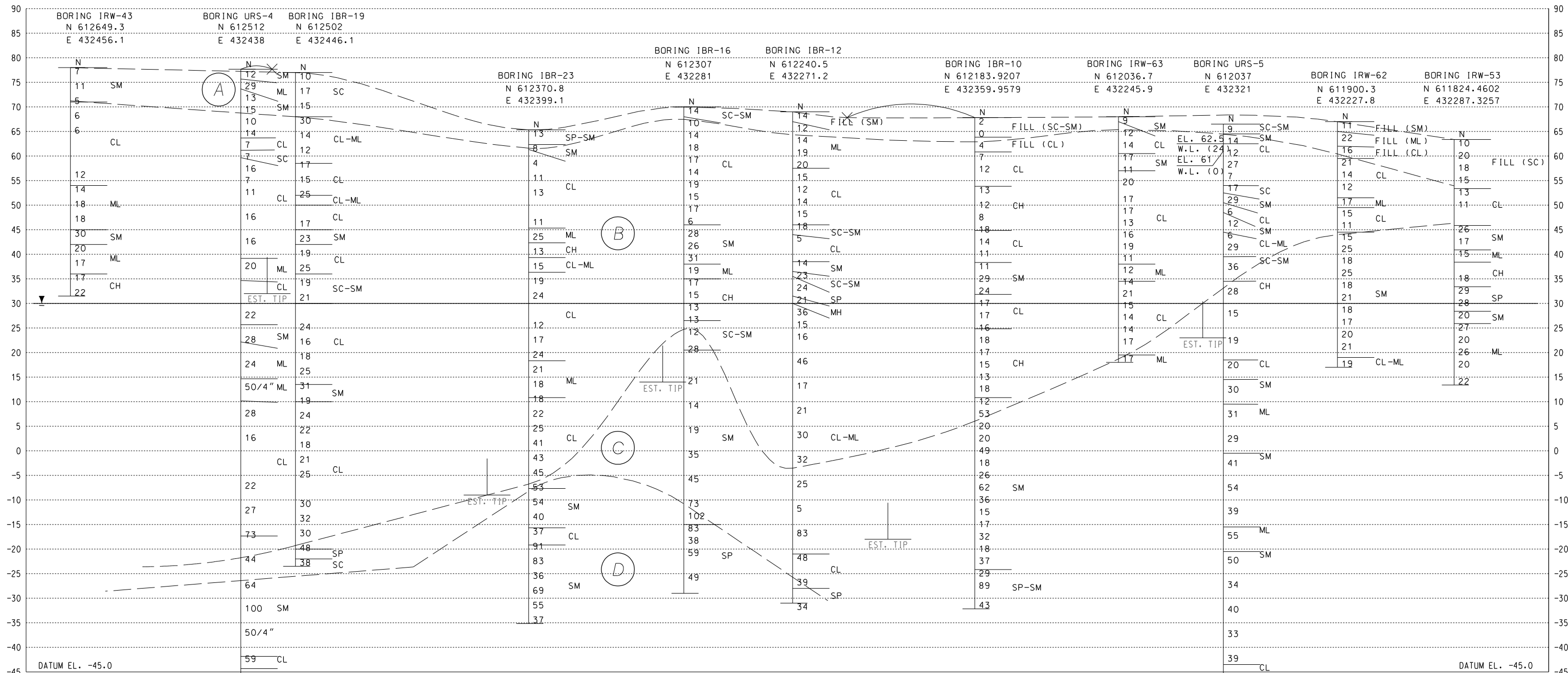
LEGEND

- ⊕ - BORING TARGET
- ✗ - DENOTES A GRAPHIC OFFSET, FOR VISUALIZATION PURPOSES
- ✗ - DENOTES THE ACTUAL LOCATION OF THE BORING ALONG THE BASELINE
- (A) - COLUMBIA FORMATION & FILL
- (B) - POTOMAC FORMATION CLAY - W/SILT & SAND SEAMS
- (C) - POTOMAC FORMATION SAND - MEDIUM DENSE TO DENSE
- (D) - POTOMAC FORMATION SAND - VERY DENSE
- ▼ - DESIGN GROUNDWATER ELEVATION

ADDENDUMS / REVISIONS	

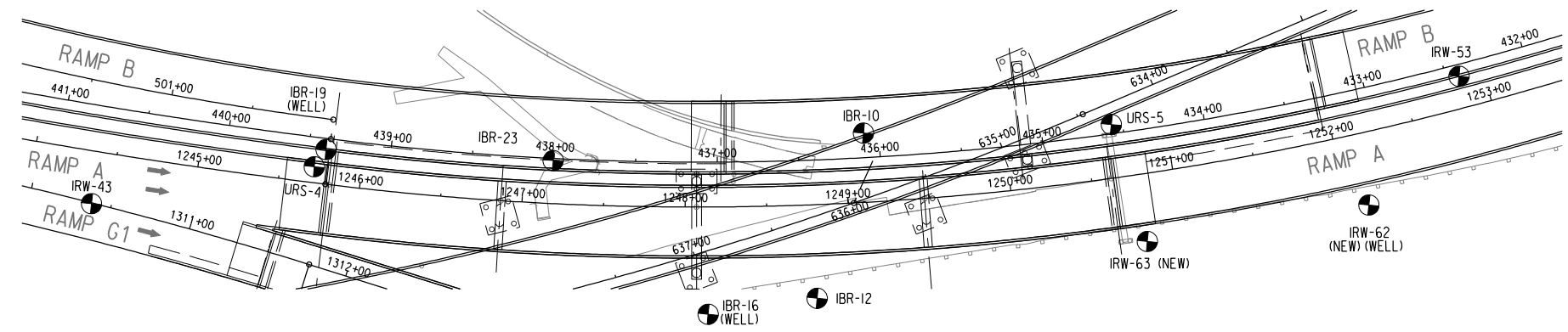
CONTRACT	BRIDGE NO.
28-090-03	
COUNTY	DESIGNED BY: URS
NEW CASTLE	CHECKED BY:

SHEET NO.
A-3a
TOTAL SHTS.



SOIL PROFILE
 SCALE: VERT: 1" = 20'-0"
 HORZ: 1" = 60'-0"

- LEGEND**
- ⊙ - BORING TARGET
 - ⊗ - DENOTES THE ACTUAL LOCATION OF THE BORING ALONG THE BASELINE
 - ⊗ - DENOTES A GRAPHIC OFFSET, FOR VISUALIZATION PURPOSES
 - (A) - COLUMBIA FORMATION & FILL
 - (B) - POTOMAC FORMATION CLAY - W/SILT & SAND SEAMS
 - (C) - POTOMAC FORMATION SAND - MEDIUM DENSE TO DENSE
 - (D) - POTOMAC FORMATION SAND - VERY DENSE
 - ▽ - DESIGN GROUNDWATER ELEVATION



BORING LOCATION PLAN
 SCALE: 1" = 100'-0"



ADDENDUMS / REVISIONS	

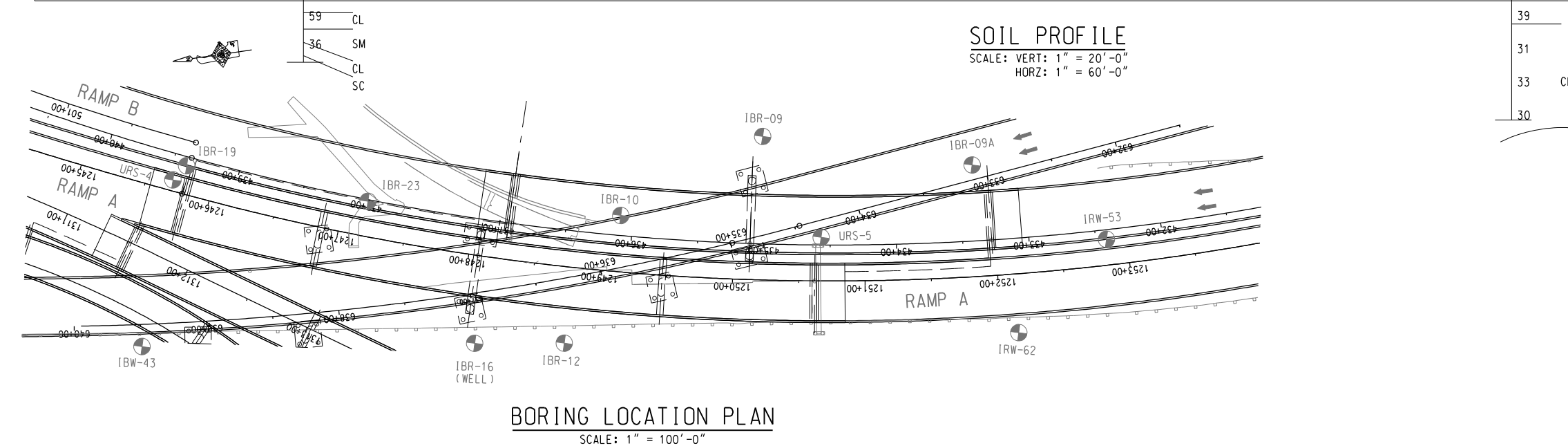
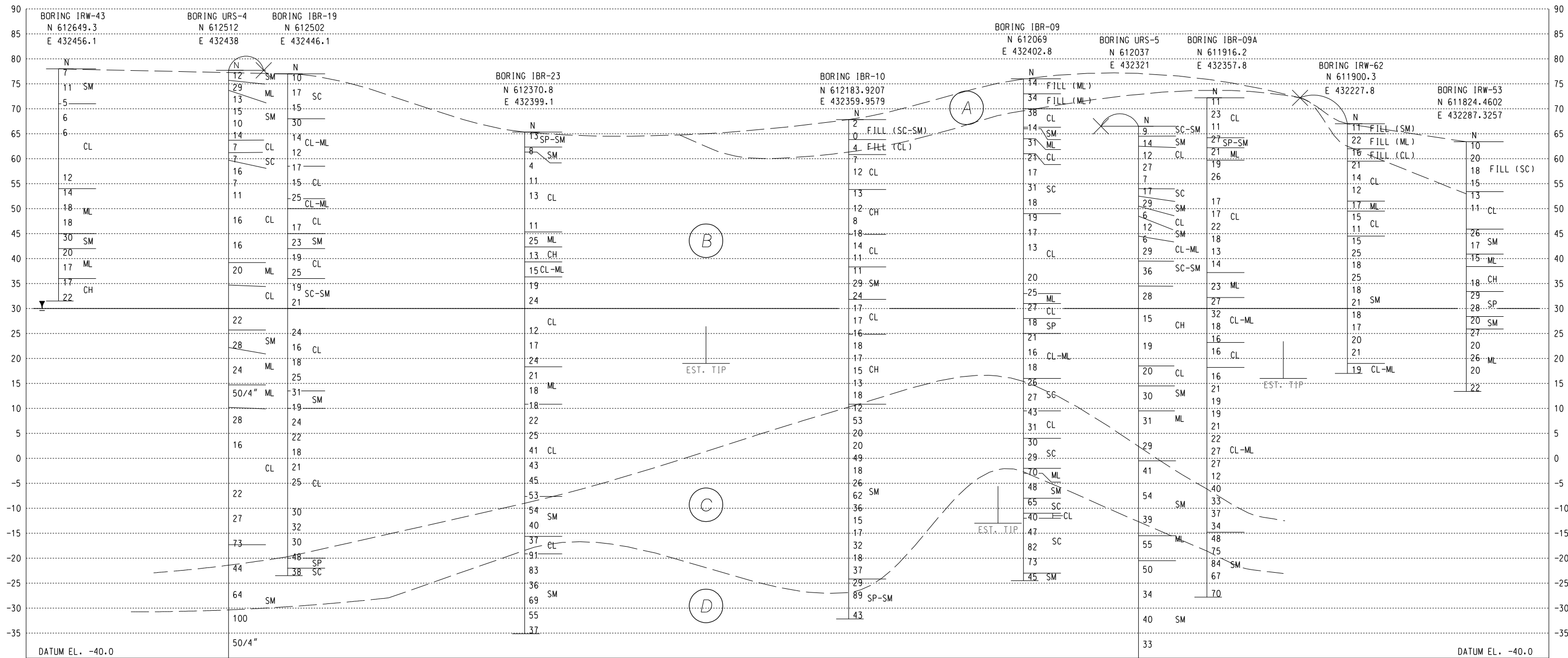
SR1 / I-95 INTERCHANGE

CONTRACT 28-090-03	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: URS
	CHECKED BY:

SOIL PROFILE
S2-RAMP A OVER SR7

SHEET NO. A-3b
TOTAL SHTS.

Feb 10, 2009 01:20:32687-XX\CAD\Bridges\bo20\dgn Jason.kotova



Feb 10, 2009 01:20832687-XM\CAD\Brdge\bo30.dgn Jason.kotava



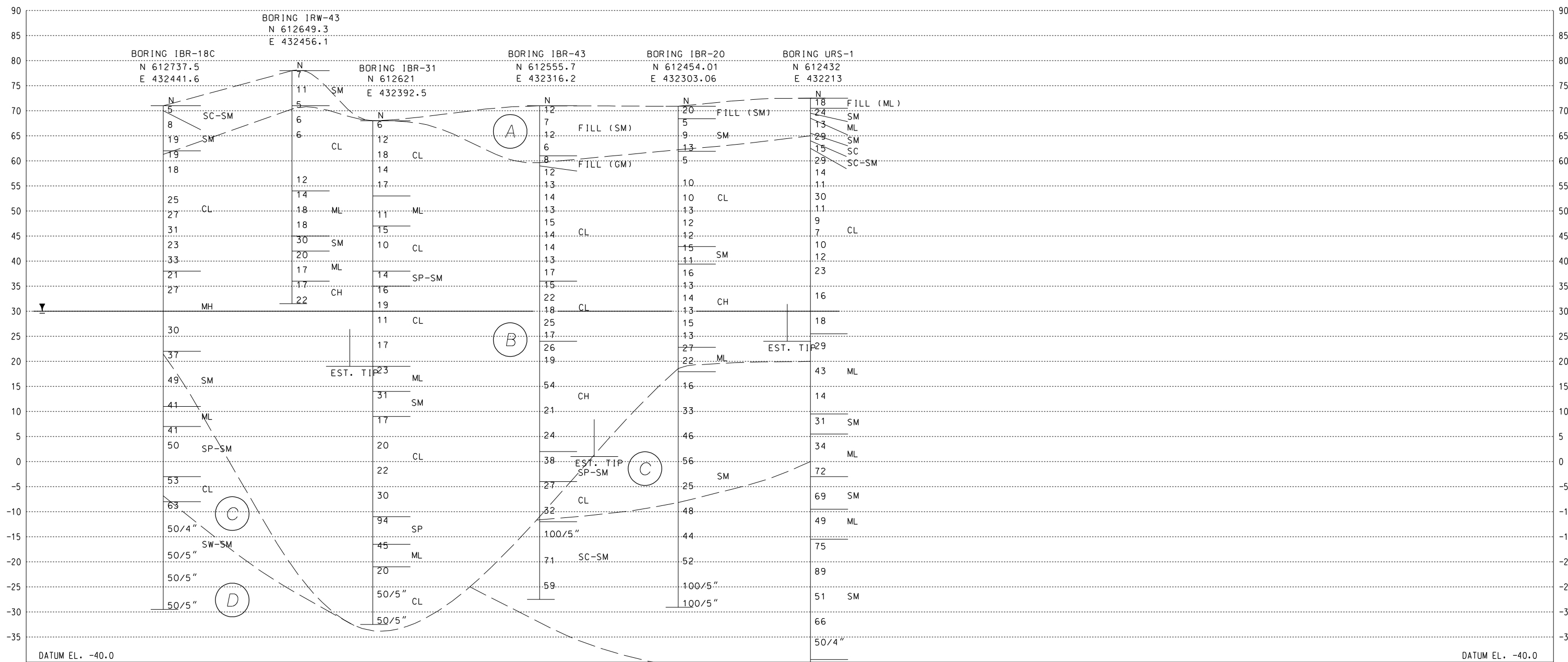
ADDENDUMS / REVISIONS	

SR1 / I-95 INTERCHANGE

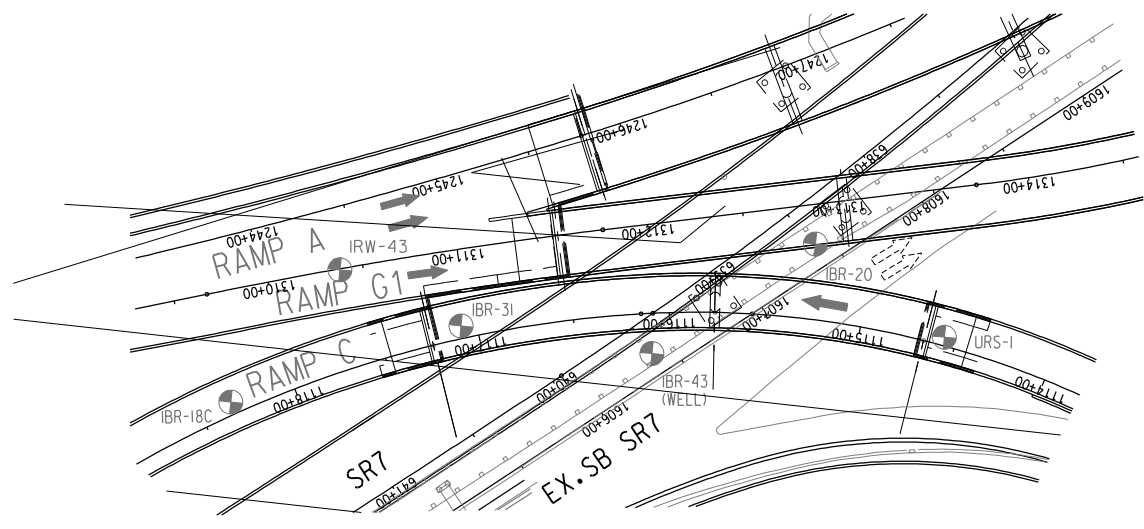
CONTRACT	BRIDGE NO.
28-090-03	
COUNTY	DESIGNED BY: URS
NEW CASTLE	CHECKED BY:

SOIL PROFILE
S3-RAMP B OVER RT.7

SHEET NO.
A-3C
TOTAL SHTS.



SOIL PROFILE
SCALE: VERT: 1" = 20'-0"
HORZ: 1" = 60'-0"



LEGEND

- ⊙ - BORING TARGET
- ⊗ - DENOTES A GRAPHIC OFFSET, FOR VISUALIZATION PURPOSES
- ⊗ - DENOTES THE ACTUAL LOCATION OF THE BORING ALONG THE BASELINE
- (A) - COLUMBIA FORMATION & FILL
- (B) - POTOMAC FORMATION CLAY - W/SILT & SAND SEAMS
- (C) - POTOMAC FORMATION SAND - MEDIUM DENSE TO DENSE
- (D) - POTOMAC FORMATION SAND - VERY DENSE
- ▼ - DESIGN GROUNDWATER ELEVATION

Feb 10, 2009 01:20832687-XM\CAD\Bridg\bo401.dgn Jason.kotava



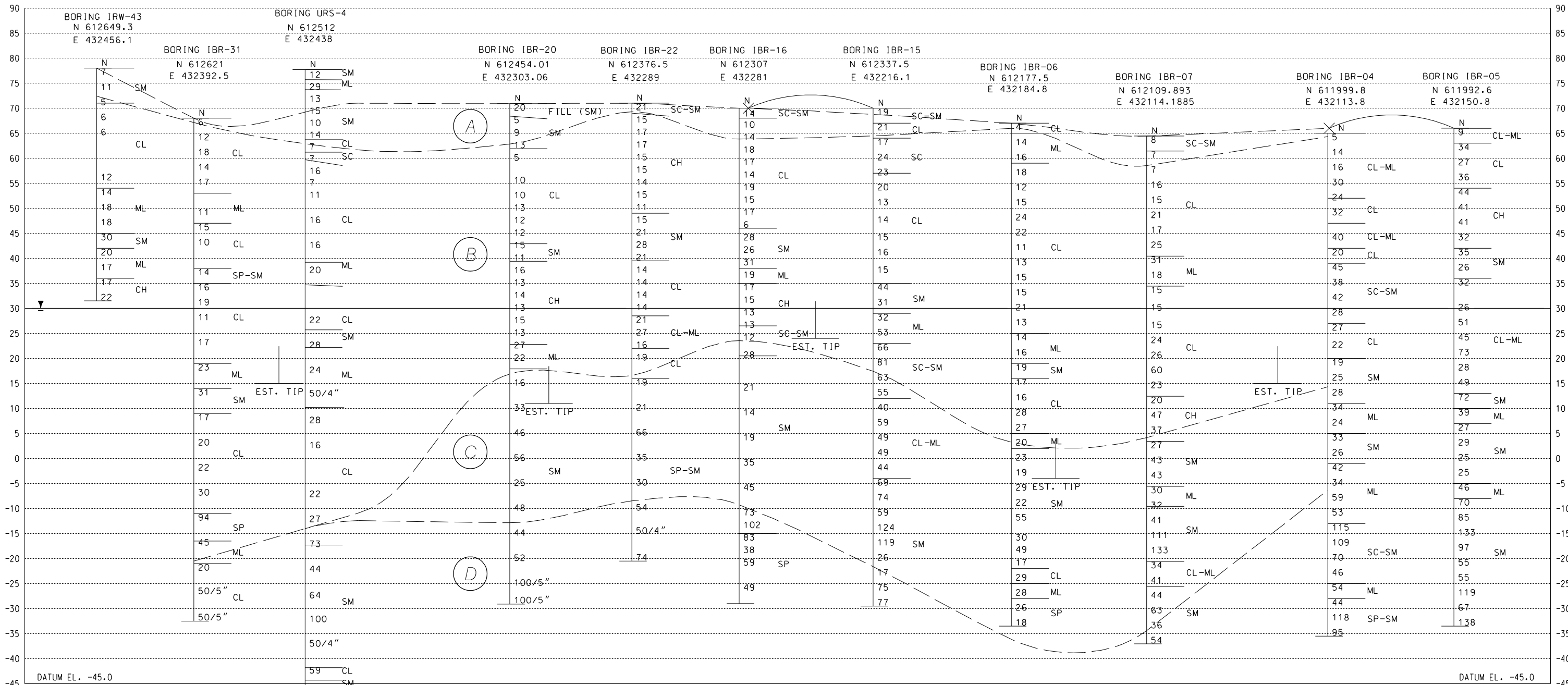
ADDENDUMS / REVISIONS	

SR1 / I-95 INTERCHANGE

CONTRACT 28-090-03	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: URS
	CHECKED BY: _____

SOIL PROFILE
S4-RAMP C OVER RT.7

SHEET NO. A-3d
TOTAL SHTS.

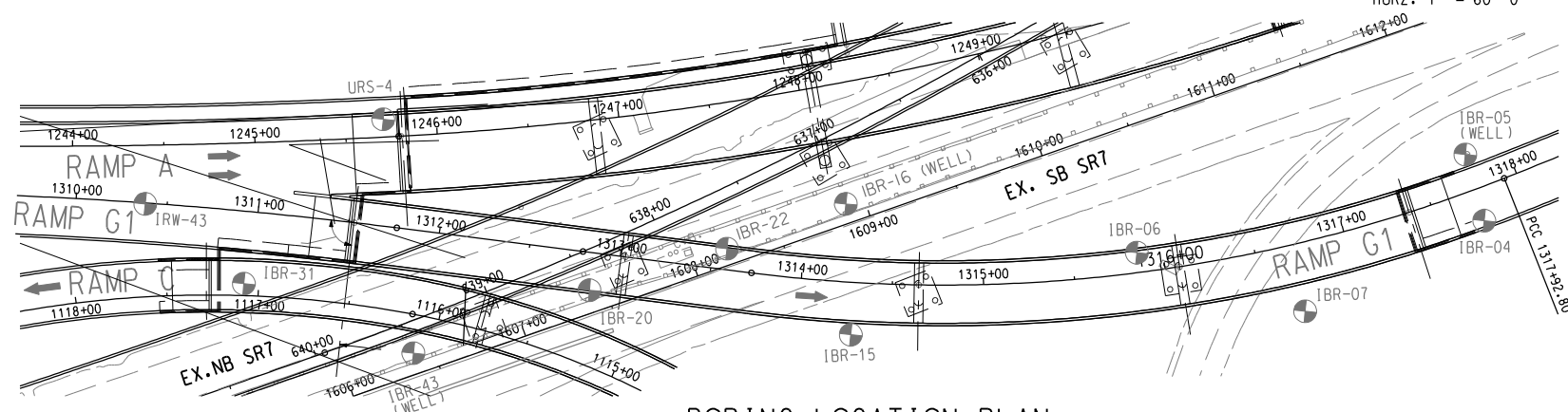


SOIL PROFILE

SCALE: VERT: 1" = 20'-0"
 HORZ: 1" = 60'-0"

LEGEND

- BORING TARGET
- DENOTES A GRAPHIC OFFSET, FOR VISUALIZATION PURPOSES
- DENOTES THE ACTUAL LOCATION OF THE BORING ALONG THE BASELINE
- COLUMBIA FORMATION & FILL
- POTOMAC FORMATION CLAY - W/SILT & SAND SEAMS
- POTOMAC FORMATION SAND - MEDIUM DENSE TO DENSE
- POTOMAC FORMATION SAND - VERY DENSE
- DESIGN GROUNDWATER ELEVATION



BORING LOCATION PLAN

SCALE: 1" = 100'-0"

ADDENDUMS / REVISIONS



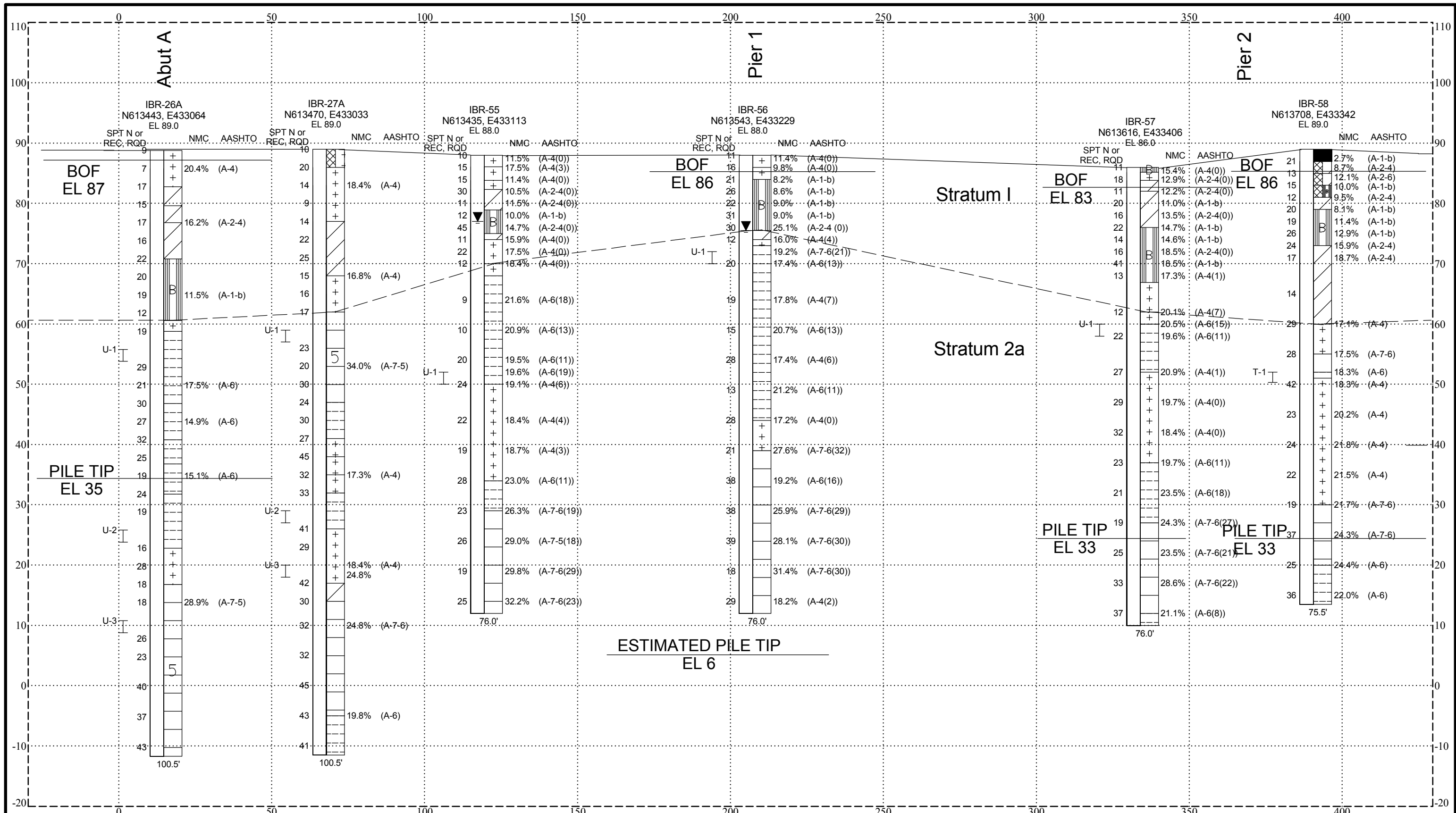
SR1 / I-95 INTERCHANGE

CONTRACT 28-090-03	BRIDGE NO.
COUNTY NEW CASTLE	DESIGNED BY: URS
	CHECKED BY:

SOIL PROFILE
S5-RAMP G1 OVER RT.7

SHEET NO. A-3e
TOTAL SHTS.

Feb 10, 2009 0:\20832687-XM\CAD\Bridges\bo50.dgn Jason.kotova



AASHTO SOIL KEY	
	A-1-a
	A-1-b
	A-3
	A-2-4
	A-2-5
	A-2-6
	A-2-7
	A-4
	A-5
	A-6
	A-7-5
	A-7-6
	A-8
	Asphalt
	FILL
	Decomposed Rock

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 81 Mosher Street,
 Baltimore, MD 21217
 (410) 728-2900

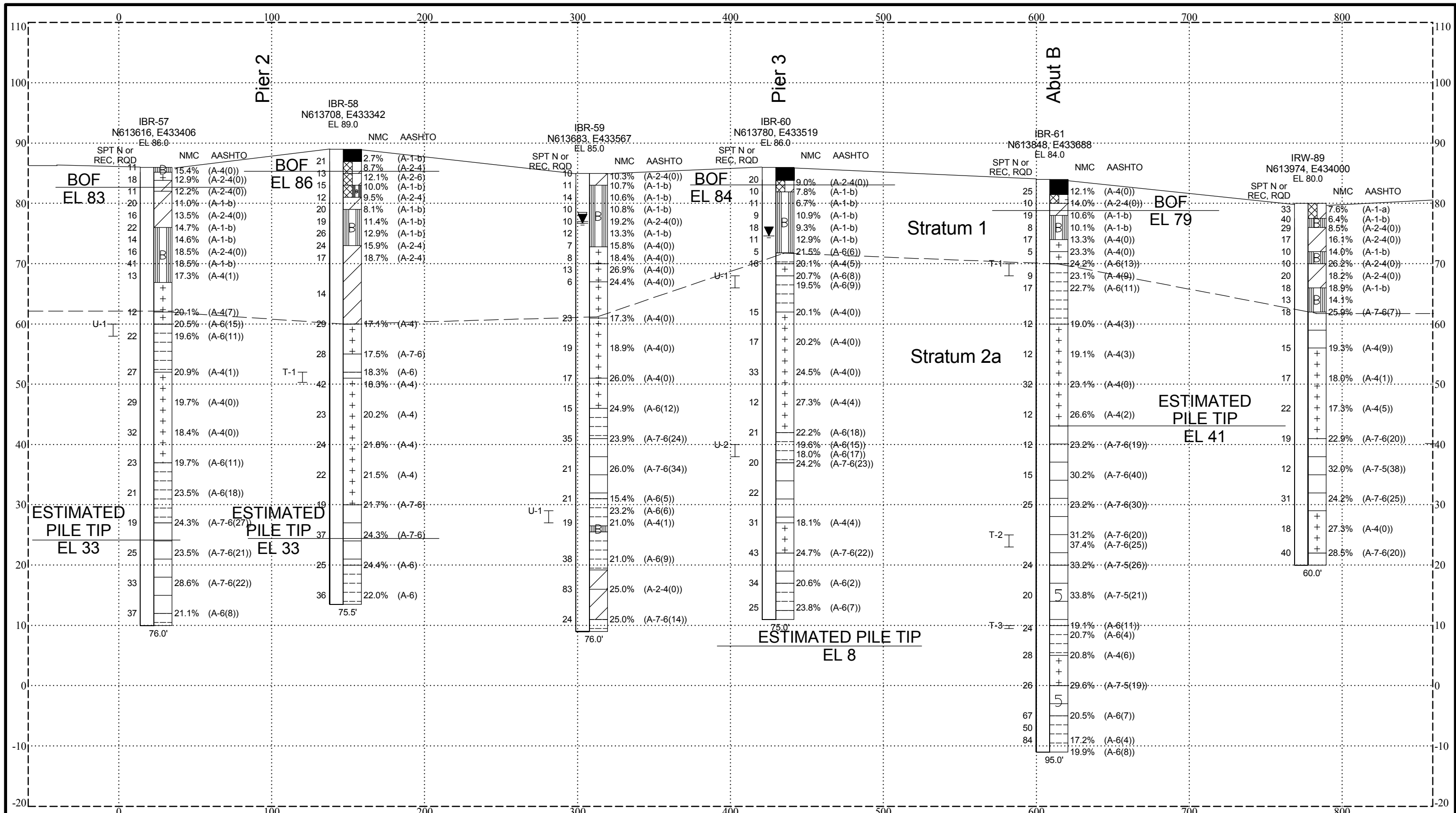
Title: **Summary of Boring Data**
S6: Ramp B Bridge Over I-95

Drawn: CLM Approved: EMK Date: 1/7/09

Figure No. **A-4a**

Comm. No. 103-059-27U

DEL.DOT.AASHTO ALL DE B65 GINT FILE.GPJ RKK_CURRENT.GDT 1/7/09



DEL.DOT.AASHTO ALL DE 05 GINT FILE.GPJ RKK_CURRENT.GDT 1/7/09

AASHTO SOIL KEY	
	A-1-a
	A-1-b
	A-3
	A-2-4
	A-2-5
	A-2-6
	A-2-7
	A-4
	A-5
	A-6
	A-7-5
	A-7-6
	Asphalt
	FILL
	Decomposed Rock

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 81 Mosher Street,
 Baltimore, MD 21217
 (410) 728-2900

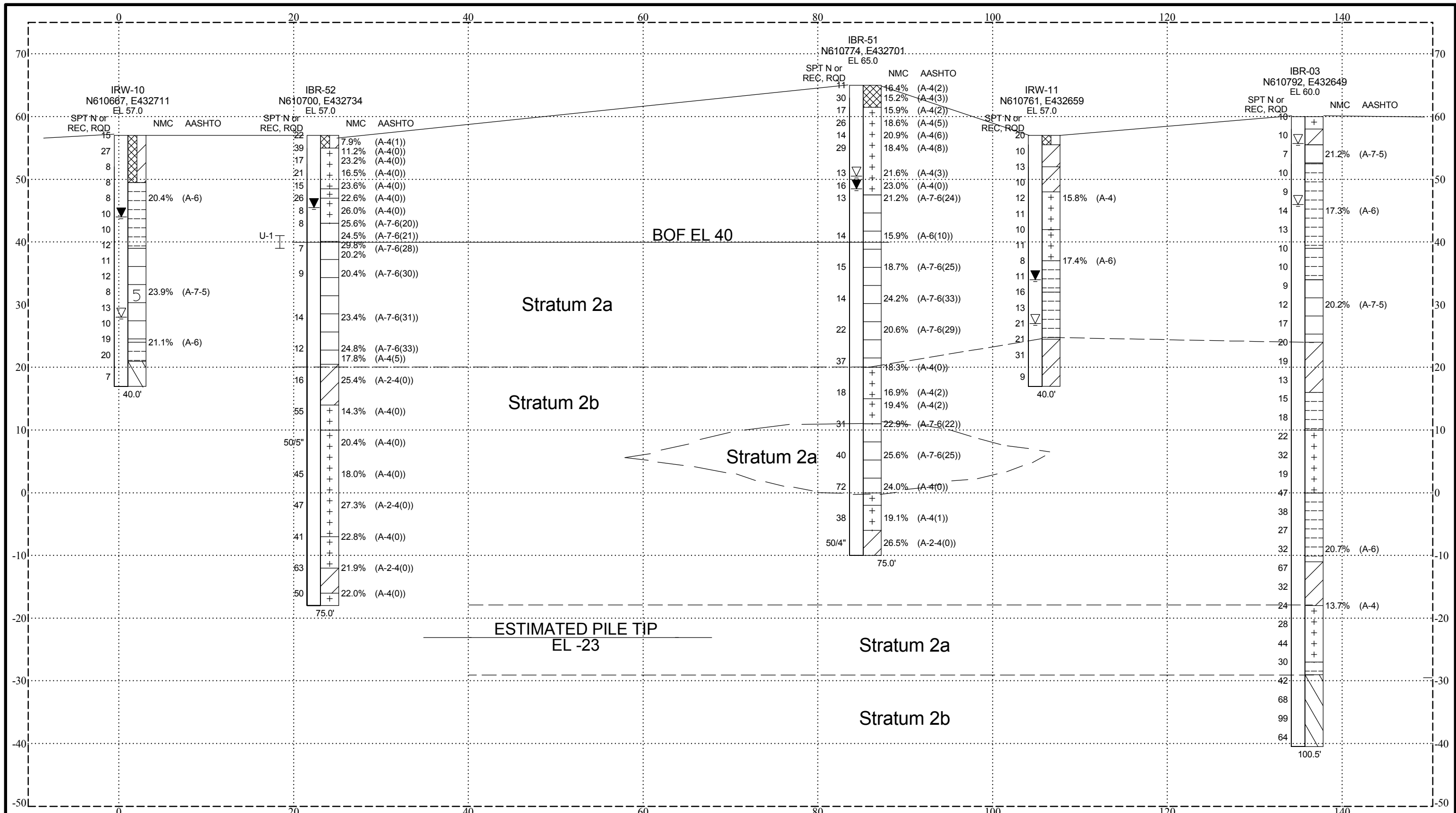
Title: **Summary of Boring Data**
S6: Ramp B Bridge Over I-95

Drawn: CLM Approved: EMK Date: 1/7/09

Figure No. **A-4b**

Comm. No. 103-059-27U

DEL.DOT.AASHTO ALL DE B65 GINT FILE.GPJ_RKK_CURRENT.GDT 12/19/08



AASHTO SOIL KEY	
	A-1-a
	A-1-b
	A-3
	A-2-4
	A-2-5
	A-2-6
	A-2-7
	A-4
	A-5
	A-6
	A-7-5
	A-7-6
	A-8
	Asphalt
	FILL
	Decomposed Rock



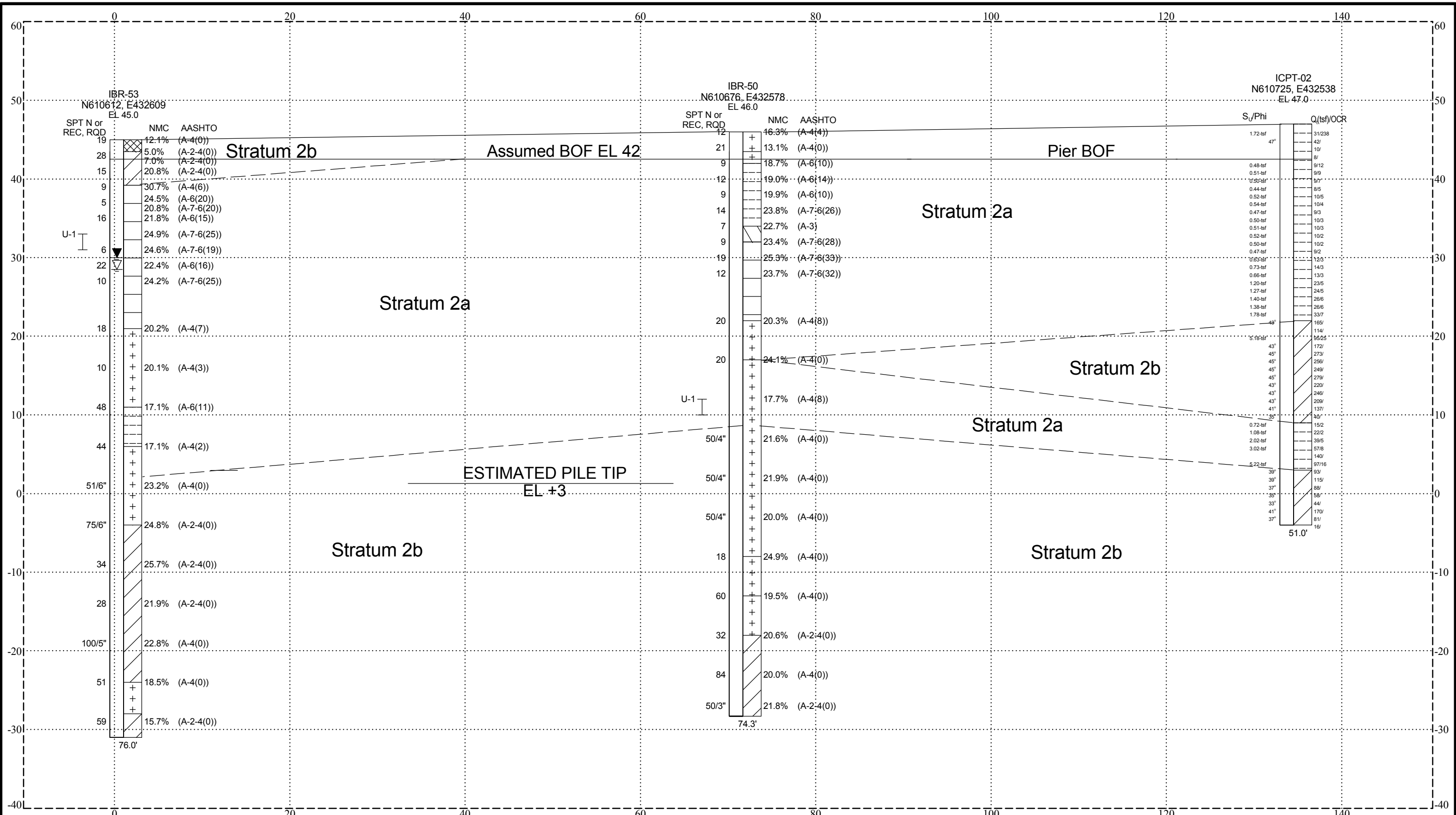
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 Baltimore, MD 21217
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Title: **Summary of Boring Data**
S7: Ramp R1 over SR 7 - Abutment A

Drawn: CLM Approved: EMK Date: 1/8/09

Figure No. **A-4c**

Comm. No. 103-059-27U



AASHTO SOIL KEY	
	A-1-a
	A-1-b
	A-3
	A-2-4
	A-2-5
	A-2-6
	A-2-7
	A-4
	A-5
	A-6
	A-7-5
	A-7-6
	A-8
	Asphalt
	FILL
	Decomposed Rock

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 81 Mosher Street,
 Baltimore, MD 21217
 (410) 728-2900

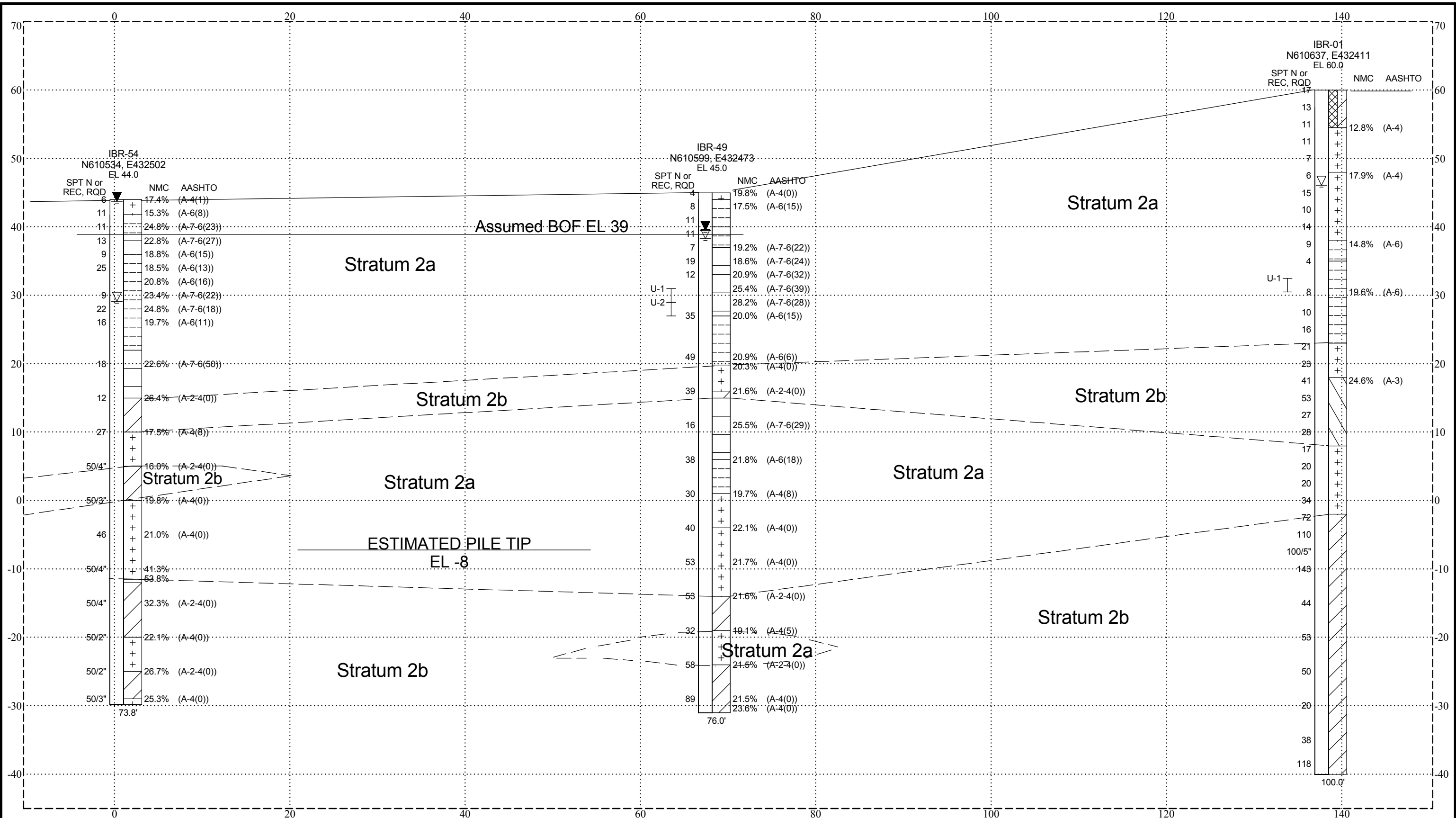
Title: **Summary of Boring Data**
S7: Ramp R1 over SR 7 - Pier

Drawn: CLM Approved: EMK Date: 1/8/09

Figure No. **A-4d**

Comm. No. 103-059-27U

DEL.DOT.AASHTO ALL DE 05 GINT FILE.GPJ_RKK_CURRENT.GDT 1/5/09



DEL.DOT.AASHTO ALL DE B65 GINT FILE.GPJ RKK_CURRENT.GDT 1/7/09

AASHTO SOIL KEY			
	A-1-a		A-2-5
	A-1-b		A-2-6
	A-3		A-2-7
	A-2-4		A-4
	A-5		A-7-5
	A-6		A-7-6
	A-8		Asphalt
	FILL		Decomposed Rock

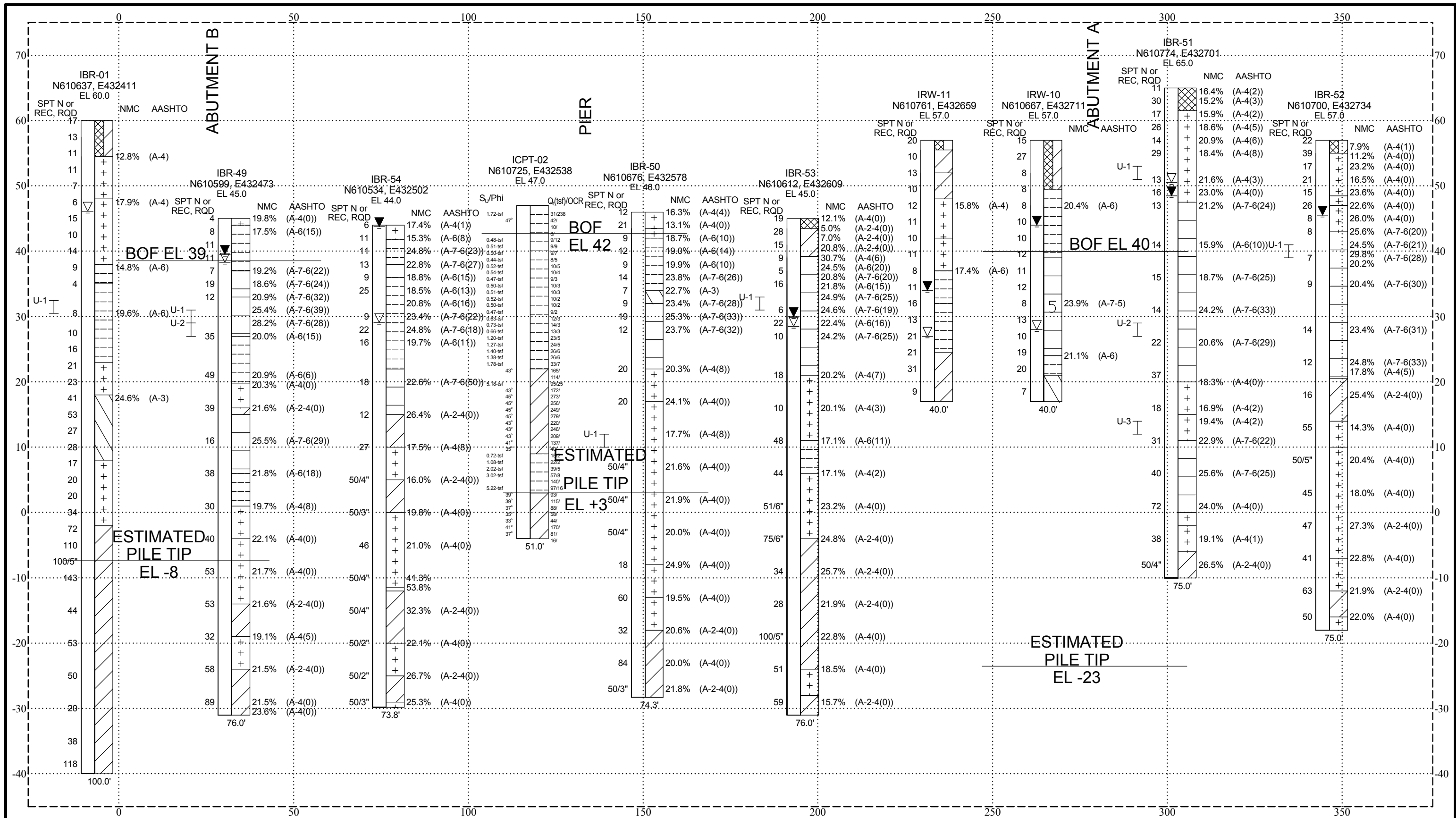
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 Baltimore, MD 21217
 (410) 728-2900

Title: **Summary of Boring Data**
S7: Ramp R1 over SR 7 - Abutment B

Drawn: CLM	Approved: EMK	Date: 1/7/09
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Figure No.
A-4e
 Comm. No. 103-059-27U

DEL.DOT.AASHTO ALL DE 05 GINT FILE.GPJ_RKK_CURRENT.GDT 1/29/09



AASHTO SOIL KEY	
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	A-1-b
	A-3
	A-2-4
	A-2-5
	A-2-6
	A-2-7
	A-4
	A-5
	A-6
	A-7-5
	A-7-6
	Asphalt
	FILL
	Decomposed Rock
	A-8

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 (410) 728-2900

Title: **Summary of Boring Data**
S7: Ramp R1 Bridge over SR 7

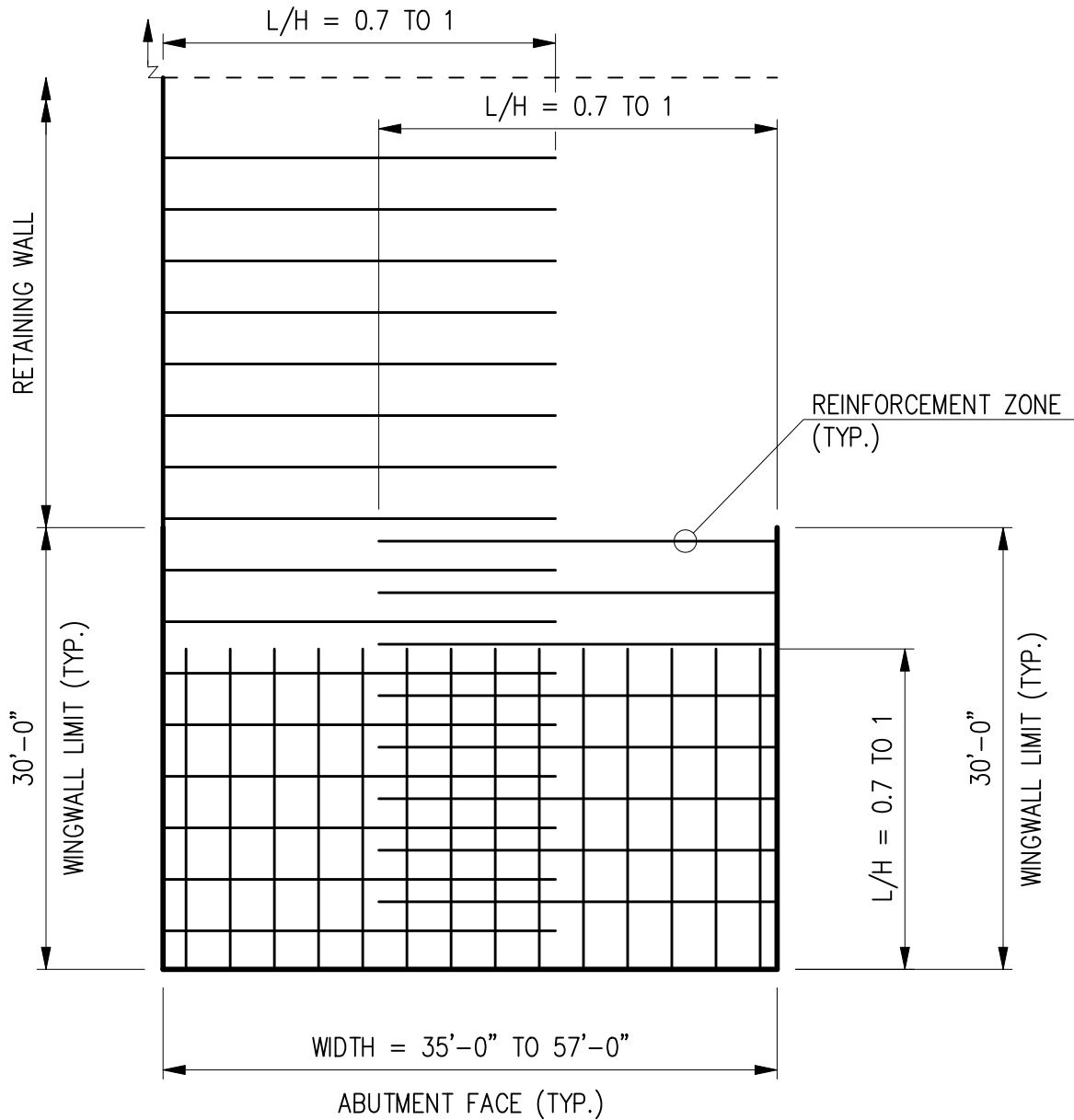
Drawn: SAB Approved: EMK Date: 1/29/09

Figure No. **A-4f**

Comm. No. 103-059-27U

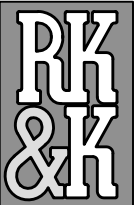
PLOTTED: 24/2009

FILE: m:\projects\2009\09089_deltmpk\Geotech\INTERCHANGE FINAL DESIGN 2008\CADD\reinforcement detail_ar1.dgn



NOTES:

1. ABUTMENT HEIGHTS (H) FROM LEVELING PAD ELEVATION TO FLOW LINE RANGES FROM 30 FT TO 45 FT.
2. L = LENGTH OF REINFORCEMENT ZONE
3. H = HEIGHT OF MSE WALL
4. REINFORCEMENT ZONES OF WINGWALLS AND RETAINING WALL DO NOT OVERLAP IN ALL AREA.



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**ABUTMENT REINFORCEMENT ZONE DETAIL
PLAN VIEW**

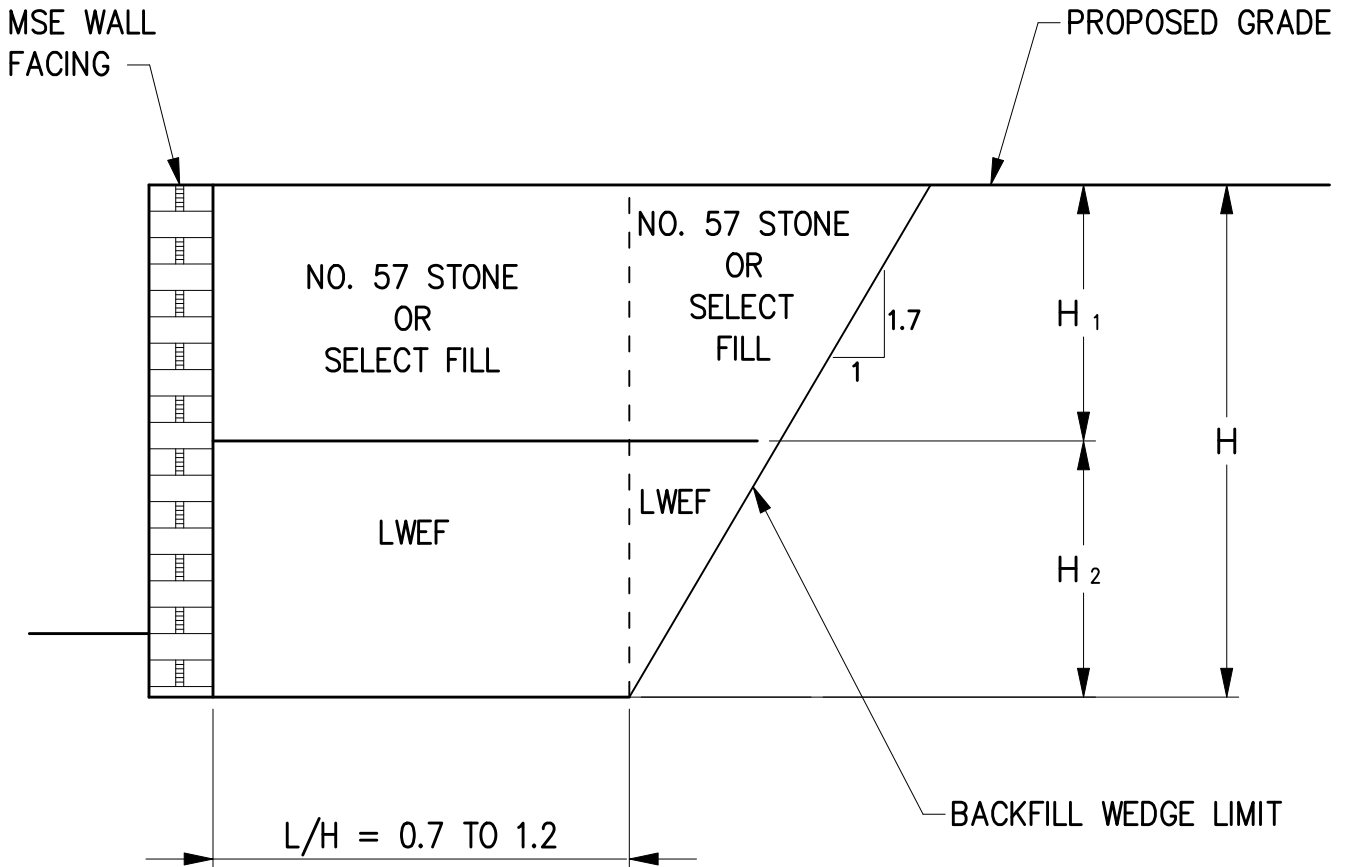
FIGURE NO.

A-5

DRAWN BY KDT	APPROVED BY EMK	SCALE NOT TO SCALE	DATE FEBRUARY 2009	COMMISSION NO. 103-059-27
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PLOTTED: 2/4/2009

FILE: m:\projects\2003\03059_definpk\Geotech\INTERCHANGE FINAL DESIGN 2008\CADD\CLWEF_SRI.dgn



NOTES:

TRANSITION FROM COMPOSITE LWEF AND NO. 57 STONE TO ALL NO. 57 STONE WHEN $H < H_1$.

LWEF = LIGHT WEIGHT ENGINEERED FILL

H_1 = HEIGHT OF NO. 57 STONE OR SELECT FILL

H_2 = HEIGHT OF LWEF

L = LENGTH OF REINFORCEMENT ZONE



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COMPOSITE LWEF AND NO. 57 STONE
OR SELECT FILL DETAIL
CROSS SECTION

FIGURE NO.

A-6

DRAWN BY
KDT

APPROVED BY
EMK

SCALE
NOT TO SCALE

DATE
FEBRUARY 2009

COMMISSION NO.
103-059-27