

EXECUTION VERSION

Seminary Road Ramp Project

Exhibit C-7

Technical Requirements

Attachment 1.0

Seminary Project Scope of Work



STATE	FEDERAL AID		STATE		SHEET NO.
	PROJECT	ROUTE	PROJECT		
VA.		395	SEMINARY ROAD SIGNING RETROFIT		1

INDEX OF SHEETS:

- 1 - TITLE SHEET
- 1A - KEY MAP
- 2 - GENERAL NOTES AND LEGEND
- 2A - SIGN DETAILS
- 2B - SIGN SCHEDULE
- 3 THRU 12 - SIGNING PLAN & ELEVATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

SEMINARY ROAD SIGNING RETROFIT S&S SUBMITTAL

FAIRFAX COUNTY AND CITY OF ALEXANDRIA
395 EXPRESS LANES
From: 0.3 Mi. North of Interstate 495
To: Seminary Road

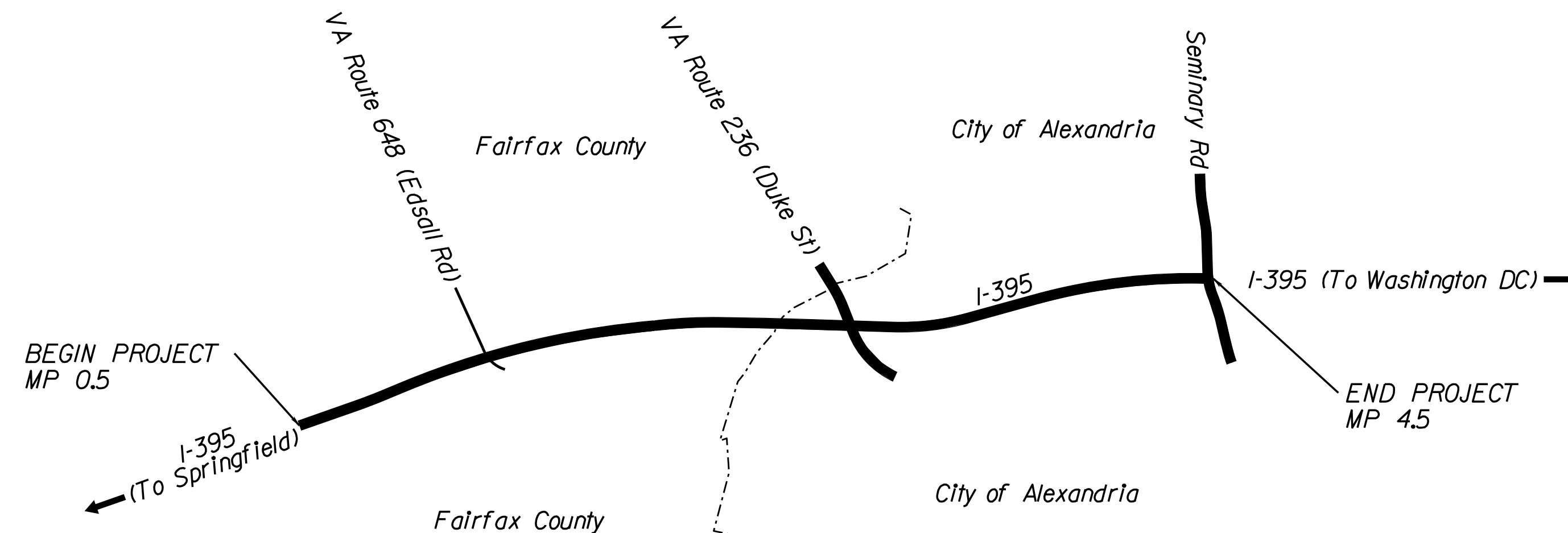
THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. _____

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

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL REV. 2 AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CONSTRUCTION IS TO BE PERFORMED WITHIN EXISTING RIGHT OF WAY.

PROJECT MANAGER: Jordan Pitt, Transurban
SURVEYED BY: DATE N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY: DATE N/A

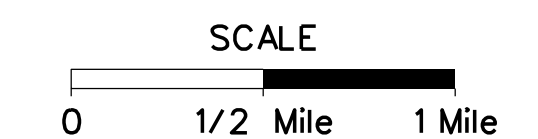


CONVENTIONAL SIGNS

STATE LINE	---
COUNTY LINE	----
CITY, TOWN OR VILLAGE	-----
RIGHT OF WAY LINE	-----
FENCE LINE	-----
UNFENCED PROPERTY LINE	-----
FENCED PROPERTY LINE	-----
WATER LINE	-----
SANITARY SEWER LINE	-----
GAS LINE	-----
ELECTRIC UNDERGROUND CABLE	-----
TRAVELED WAY	-----
GUARD RAIL	-----
RETAINING WALL	-----
RAILROADS	-----
BASE OR SURVEY LINE	-----
LEVEE OR EMBANKMENT	-----
BRIDGES	-----
CULVERTS	-----
DROP INLET	-----
POWER POLES	-----
TELEPHONE OR TELEGRAPH POLES	-----
TELEPHONE OR TELEGRAPH LINES	-----
HEDGE	-----
TREES	-----
HEAVY WOODS	-----
GROUND ELEVATION	-----
GRADE ELEVATION	-----

Fairfax County Population 1,150,309 (2020 Census)
City of Alexandria Population 159,467 (2020 Census)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		BRIDGE PLAN NO.	TYPE PROJECT	DESCRIPTION
					FEET	MILES	FEET	MILES			
XXXX-XXX-XXX				XXXXXX	21,500	4.07	20,370	3.86			From: 0.3 Mi. North of Interstate 495 To: Seminary Road



Project Lengths are based on 395 Express Lanes Construction Baseline

Copyright 2020, Transurban Holdings Limited, LLC

PROJECT MANAGER: Jordan Pitt, Inc./Urban
 SURVEYED BY, DATE: N/A
 DESIGN BY: HDR Engineering, Inc.
 SUBSURFACE UTILITY BY, DATE: N/A

KEY MAP

REVISED	STATE		PROJECT		SHEET NO.
	STATE	ROUTE	PROJECT		
	VA.	395	SEMINARY ROAD SIGNING RETROFIT		1A

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



PROJECT MANAGER Jordan Pitt, Inc./Urban
SURVEYED BY, DATE N/A
DESIGN BY HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE N/A

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2

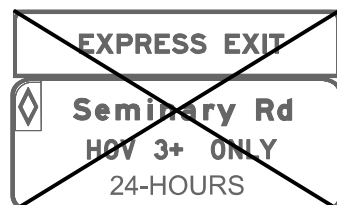


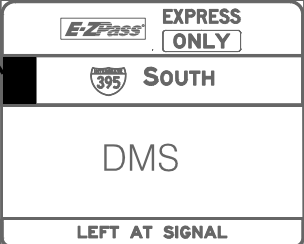







DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

GENERAL NOTES AND LEGEND

GENERAL NOTES - SIGNING

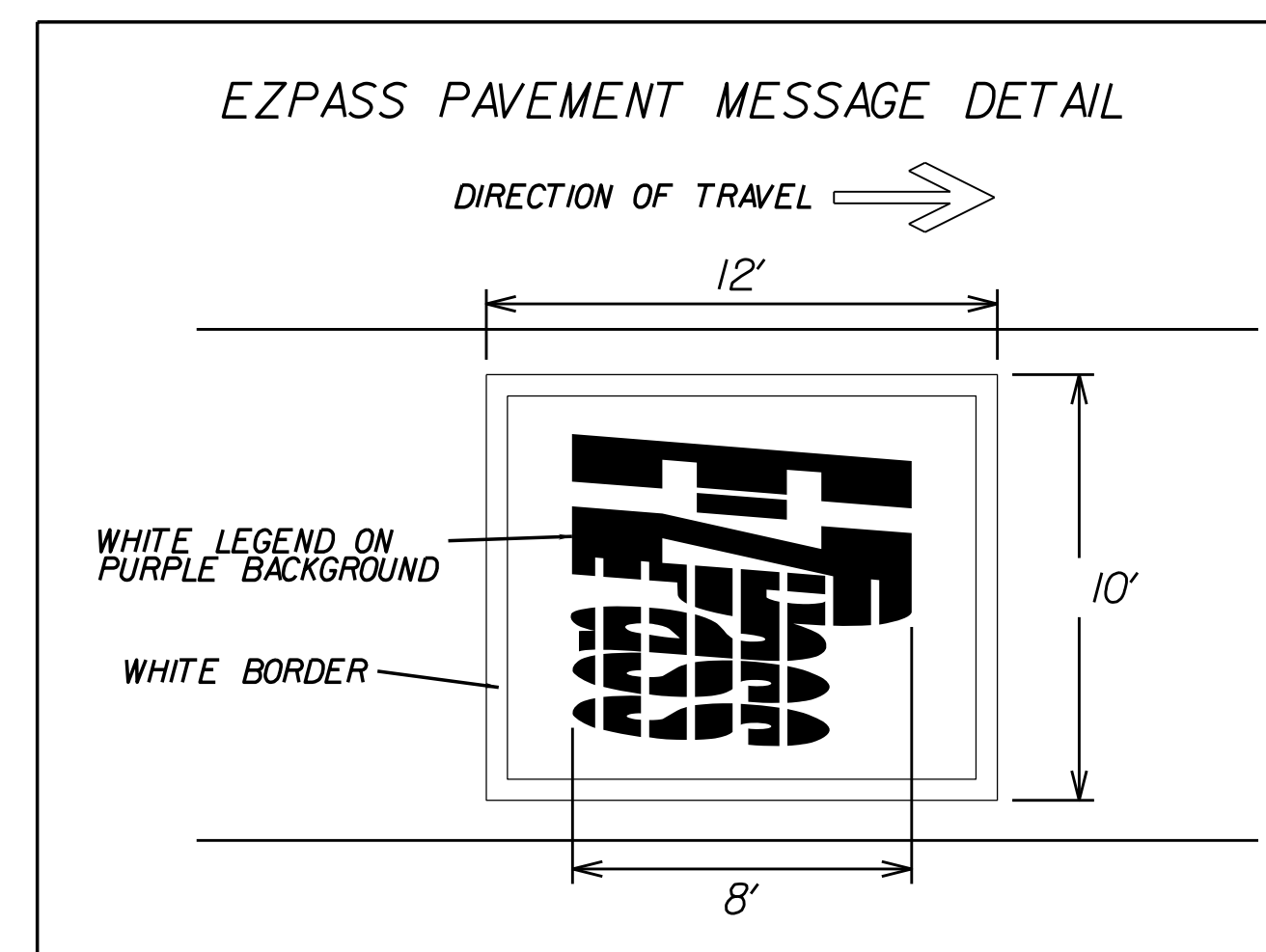
1. ALL SIGNING SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITIONS AND REVISIONS OF THE 2009 MUTCD, THE 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, AND VDOT'S IIM-LD-2417.
 2. THIS PROJECT IS TYPE A, CATEGORY M BASED UPON VDOT'S IIM-LD-2417.
 3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE 2019 VIRGINIA WORK AREA PROTECTION MANUAL, REVISION 1.
 4. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO THE INSTALLATION OF ANY CLOSURE MEASURES.
 5. A 42' CLEAR ZONE SHALL BE MAINTAINED FREE OF PARKED EQUIPMENT AND STORED MATERIAL PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL.
 6. TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNS SHALL BE INSTALLED PRIOR TO THE BEGINNING OF CONSTRUCTION.
 7. UPON COMPLETION OF CONSTRUCTION, REMOVE TEMPORARY SIGNAGE.
 8. SIGN SPACING DISTANCE SHOULD BE 1300'-1500' ALONG LIMITED ACCESS HIGHWAYS AND RAMPS.
 9. ALL EXISTING AND PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL STAKE ALL PROPOSED SIGN LOCATIONS FOR REVIEW AND APPROVAL BY TRANSURBAN PRIOR TO ANY INSTALLATION OR RELOCATION.
 10. REMOVAL OF EXISTING OVERHEAD SIGN LUMINAIRES SHALL BE PERFORMED PER SPECIAL PROVISION INCLUDED IN THE CONTRACT DOCUMENTS, AND SHALL BE CONSIDERED INCIDENTAL TO OVERHEAD SIGN PANEL REMOVAL. ELECTRICAL SERVICE FOR SIGN LIGHTING SHALL BE DISENGAGED AT NEAREST JUNCTION BOX AND ALL CONDUCTORS CAPPED AND SEALED IN PLACE. LOCATIONS OF SIGN LUMINAIRE REMOVAL ARE IDENTIFIED IN THE PLANS.
- TRANSPORTATION OPERATIONS PLAN:**
1. THE COMMUNICATION SECTION AND TRANSPORTATION OPERATIONS CENTER SHALL BE NOTIFIED BY THE CONSTRUCTION PROJECT MANAGER OF ROAD CLOSURE AND DETOUR INFORMATION FOR DISTRIBUTION ON THE 511 SYSTEM AND VOIS. EMERGENCY RESPONSE PROFESSIONALS SHALL RESPOND TO TRAFFIC INCIDENTS IN THE WORK ZONE AS SOON AS POSSIBLE.
 2. THE FOLLOWING IS THE CONTACT LIST OF EMERGENCY RESPONSE AGENCIES IN CASE AN INCIDENT OCCURS IN THE WORK ZONE:
POLICE / AMBULANCE / FIRE SAFETY / HAZMAT SPILLS - 911
TRANSURBAN TRAFFIC CONTROL ROOM - (571) 419-6046
 3. FOLLOWING ANY TRAFFIC INCIDENTS, THE SITE SHALL BE CLEARED AND RESTORED FOR NORMAL TRAFFIC OPERATIONS AS SOON AS POSSIBLE.
 4. TRAFFIC INCIDENTS WILL BE INVESTIGATED AND MEASURES INTRODUCED TO REDUCE OCCURRENCES. IF NECESSARY THE MAINTENANCE OF TRAFFIC PLANS MAY BE REVISED IN CONSULTATION WITH THE ENGINEER.
- PUBLIC COMMUNICATIONS PLAN:**
1. THE PUBLIC SHALL BE NOTIFIED OF THE EXPECTED SCHEDULE ON VDOT'S WEB SITE FOR THIS PROJECT. INFORMATION OF THE POTENTIAL FOR BACK-UPS DURING THE PEAK HOURS OF OPERATION SHALL BE PROVIDED TO THE COMMUNICATIONS SECTION AND TRANSPORTATION OPERATIONS CENTER BY THE CONSTRUCTION PROJECT MANAGER.

SIGNING AND PAVEMENT MARKING LEGEND

EXISTING	PROPOSED	DESCRIPTION
 <p>TO BE REMOVED</p>	 <p>TO REMAIN</p>	SIGN PANEL
		SIGN PANEL
		SIGN PANEL OVERLAY
	NOT USED	OVERHEAD SPAN SIGN STRUCTURE
	NOT USED	OVERHEAD CANTILEVER SIGN STRUCTURE
	NOT USED	OVERHEAD BUTTERFLY SIGN STRUCTURE
	NOT USED	GROUND MOUNTED MULTI-POST STRUCTURE
	NOT USED	GROUND MOUNTED SINGLE POST STRUCTURE
		PAVEMENT MESSAGE (TYPICAL)

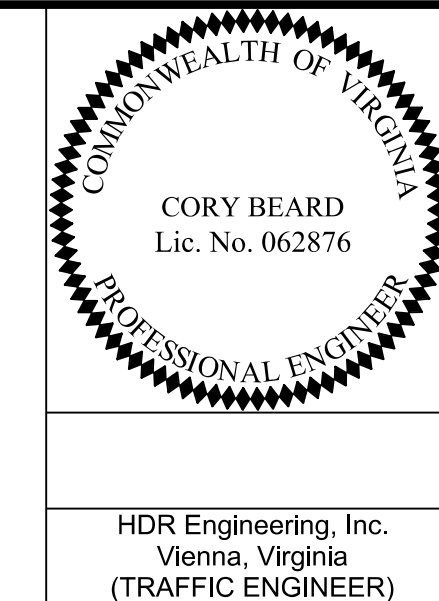
PAVEMENT MARKING CALLOUT LEGEND

- (A) ERADICATION OF EXISTING PAVEMENT MARKING SYMBOL, "HOV" DIAMOND
- (B) TYPE B, CLASS VI, PAVEMENT MARKING SYMBOL, "E-Z PASS" LOGO



PROJECT MANAGER: Jordan Pitt, Inc./Urban
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

SIGN SCHEDULE



REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	2B

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

HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

TEXT NO.	SIGN ASSEMBLY NO(s).	TEXT	MUTCD ST'D.	SIGN ASSEMBLY COMPONENTS		QTY.	SIGN PANEL AREA (s.f.)		PROP. SIGN STRUCTURE ST'D.	REMARKS
				W	H		per ASSEMBLY	ALL ASSEMBLIES		
1	601		SPECIAL	156"	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE NO. 029-1267	SEE DETAIL SHEET 2A
2	701		SPECIAL	156"	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE NO. 000-0233	SEE DETAIL SHEET 2A
3	801		SPECIAL	156"	30"	1	32.5	32.5	EXIST. OVERHEAD SIGN STRUCTURE	SEE DETAIL SHEET 2A
4	1001, 1002		SPECIAL	156"	24"	2	26	52	EXIST. SIGNAL MAST ARMS NO. 02903593 & 02903594	SEE DETAIL SHEET 2A

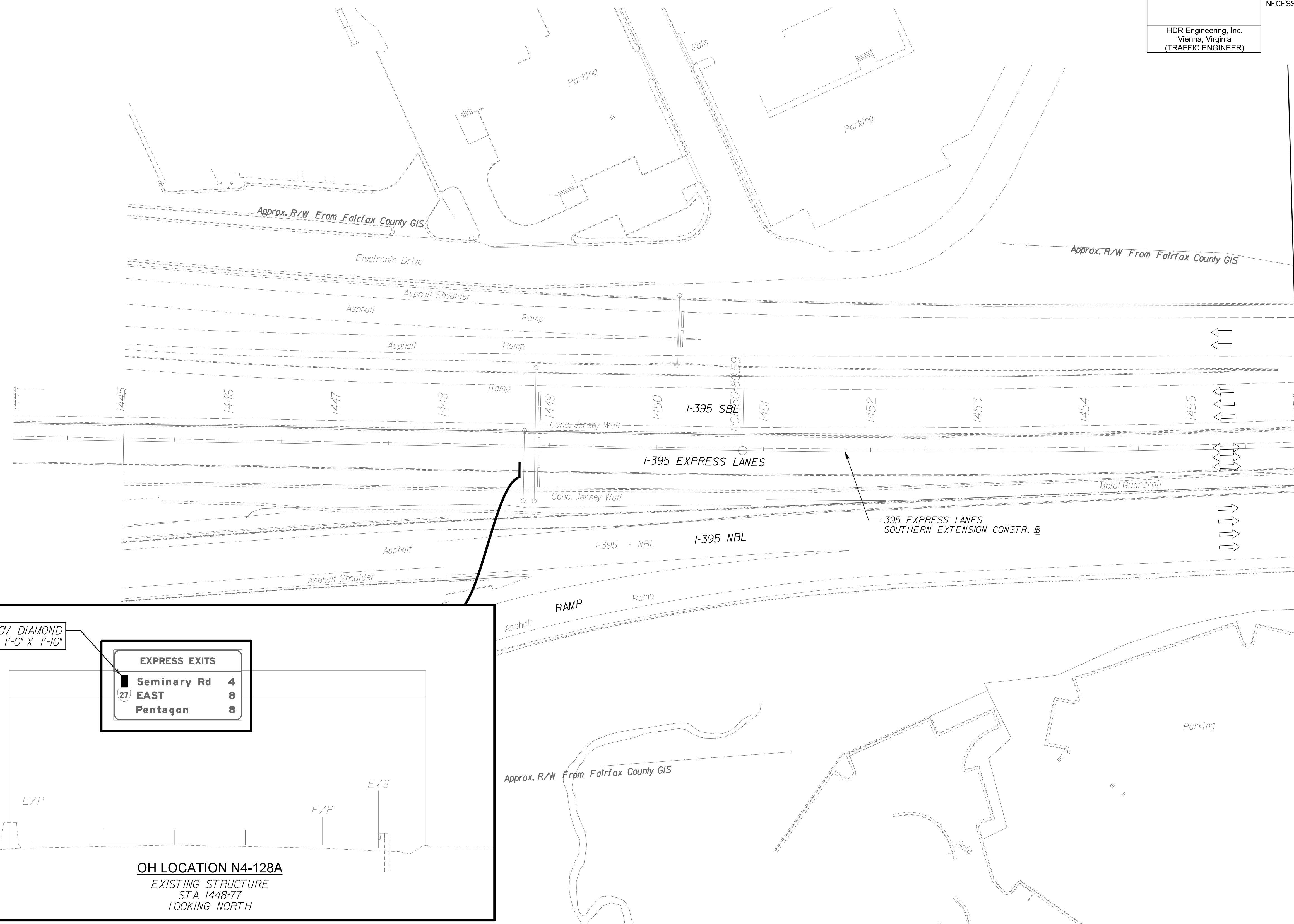
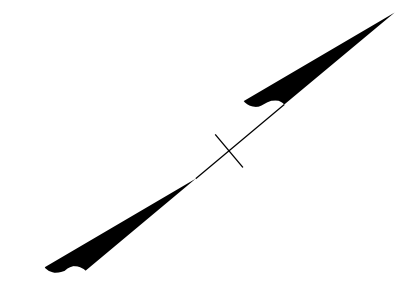
PROJECT MANAGER Jordan Pitt, Inc./Urban
SURVEYED BY, DATE N/A
DESIGN BY HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER

HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	3

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



OVERLAY HOV DIAMOND
1'-0" X 1'-10"

EXPRESS EXITS	
Seminary Rd	4
27 EAST	8
Pentagon	8

E/P E/S

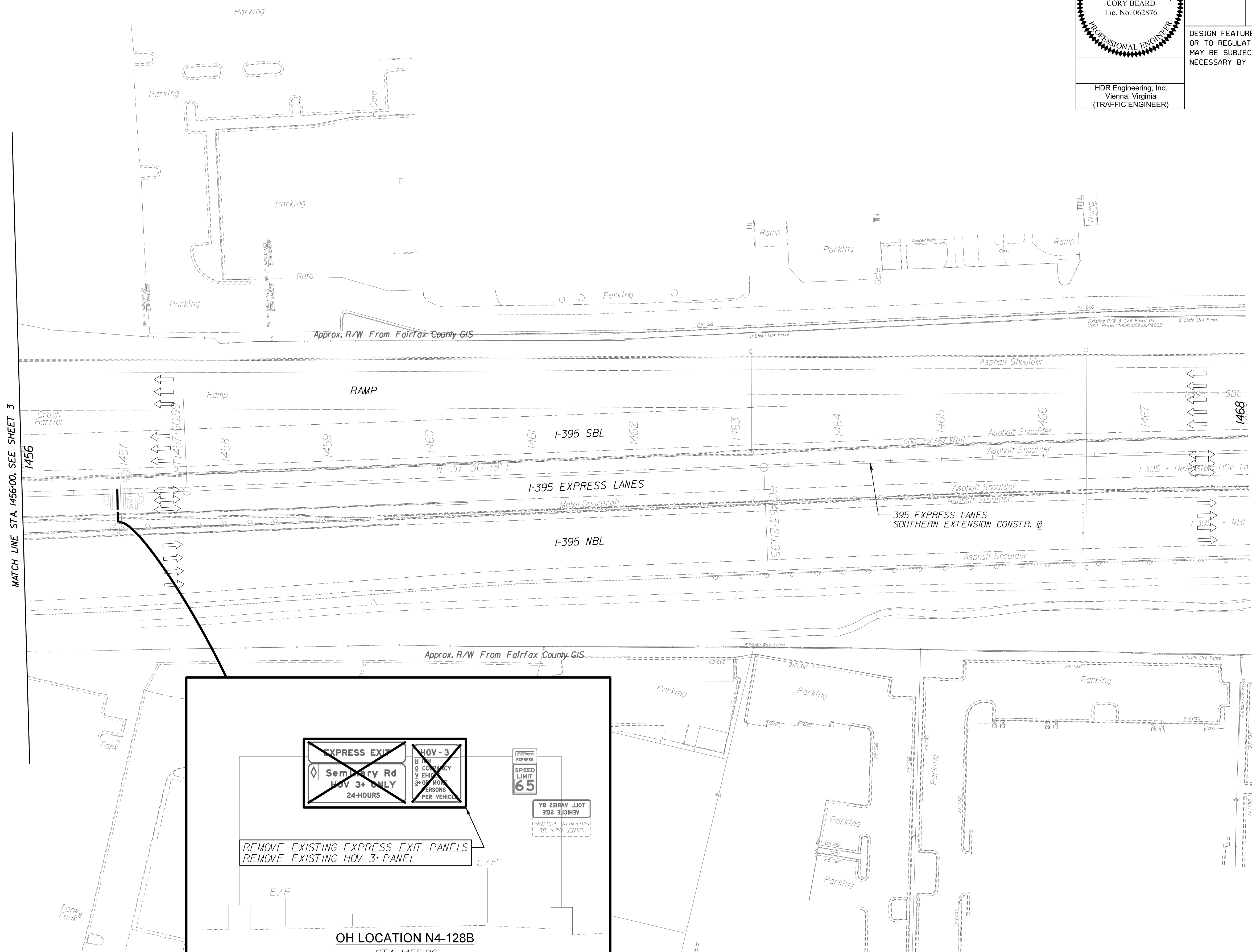
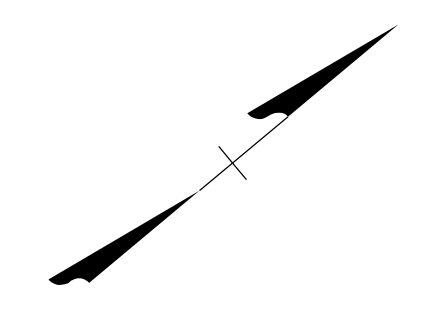
OH LOCATION N4-128A
EXISTING STRUCTURE
STA 1448+77
LOOKING NORTH

PROJECT MANAGER: Jordan Pitt, Inc. (Civil/Urban)
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	4

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



MATCH LINE STA. 1456+00. SEE SHEET 3

OH LOCATION N4-128B
STA 1456+96
LOOKING SOUTH
EXISTING STRUCTURE

REMOVE EXISTING EXPRESS EXIT PANELS
REMOVE EXISTING HOV 3+ PANEL

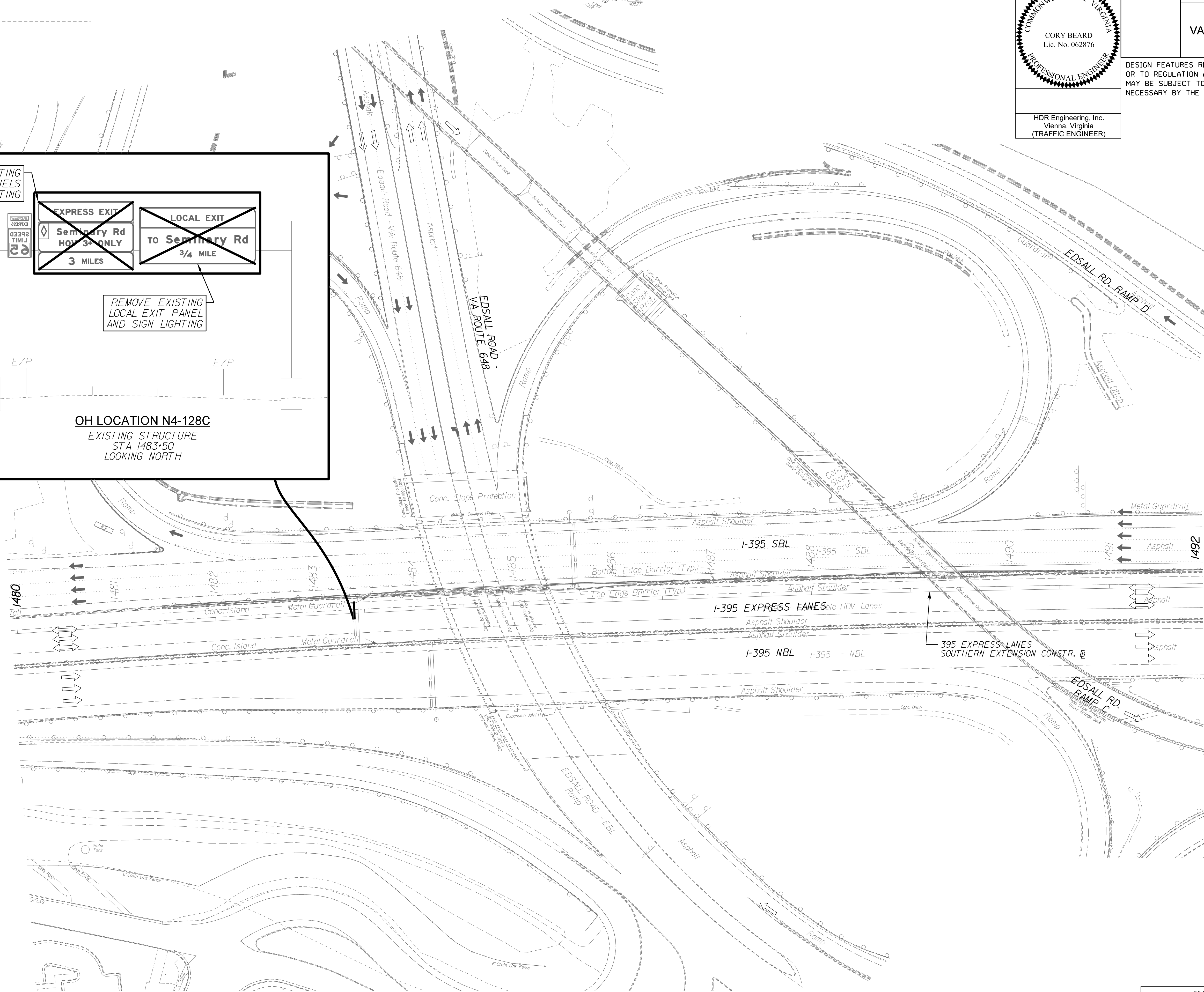
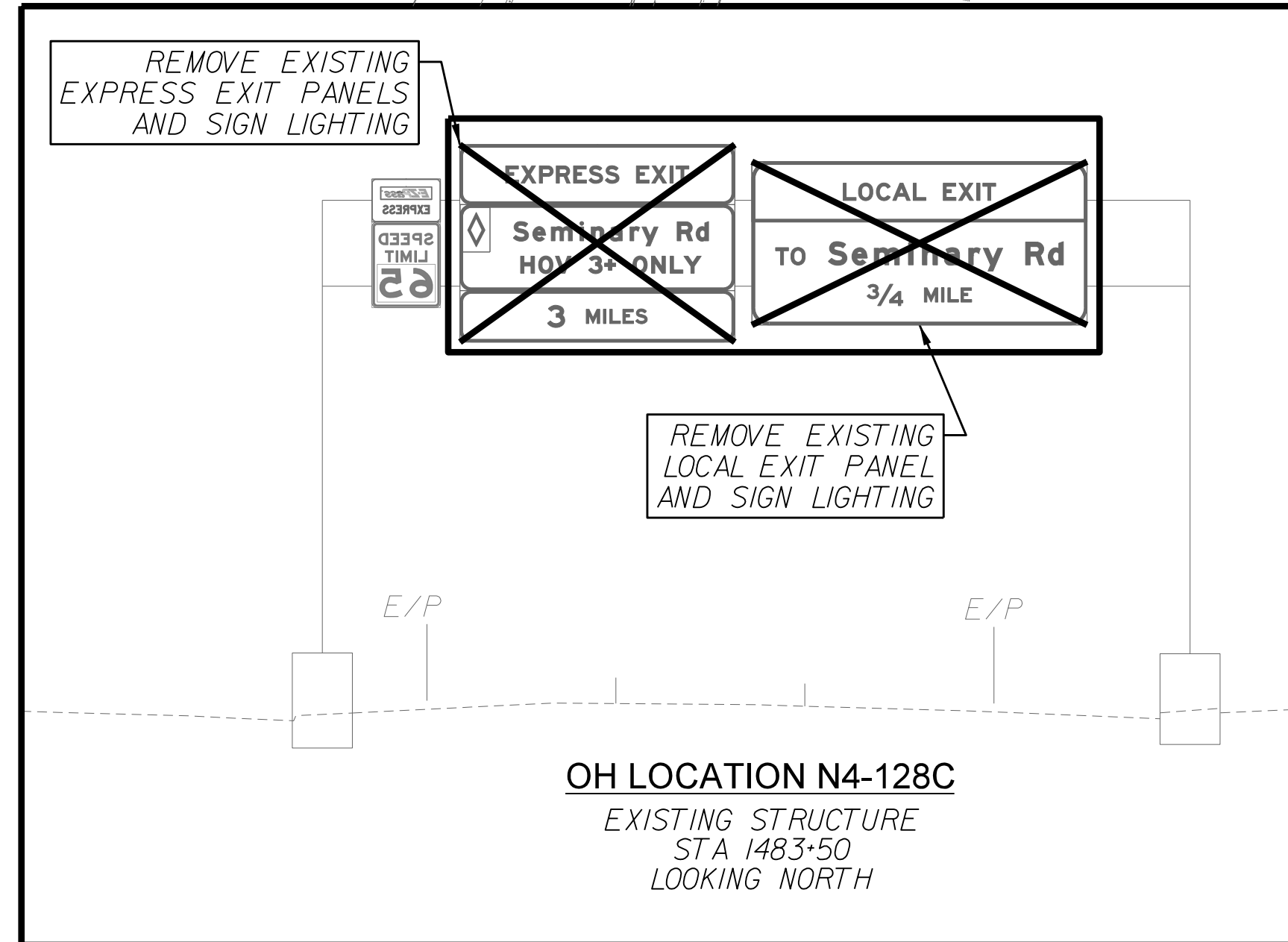
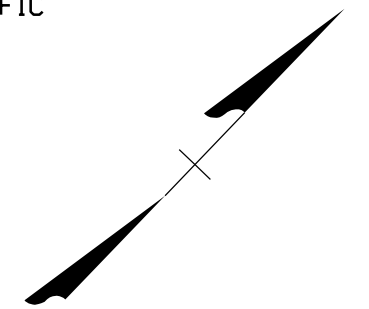
PROJECT MANAGER Jordan Pitt, I. caas@urban
SURVEYED BY, DATE N/A
DESIGN BY HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER

HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	5

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

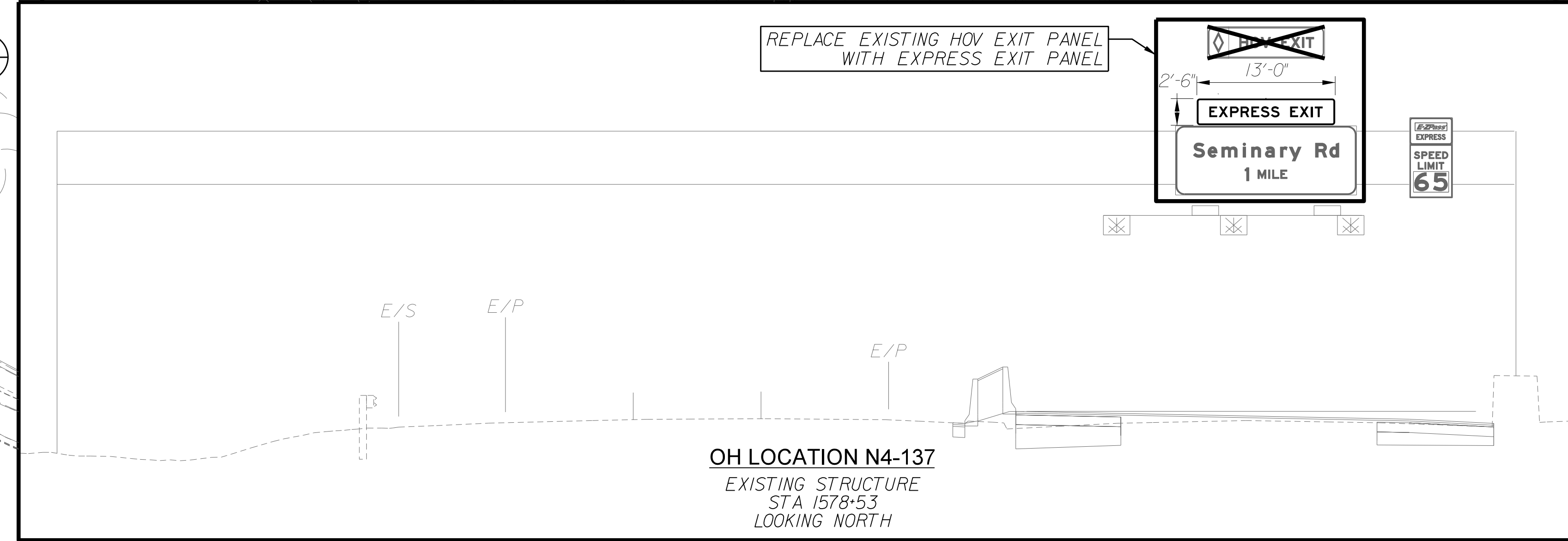
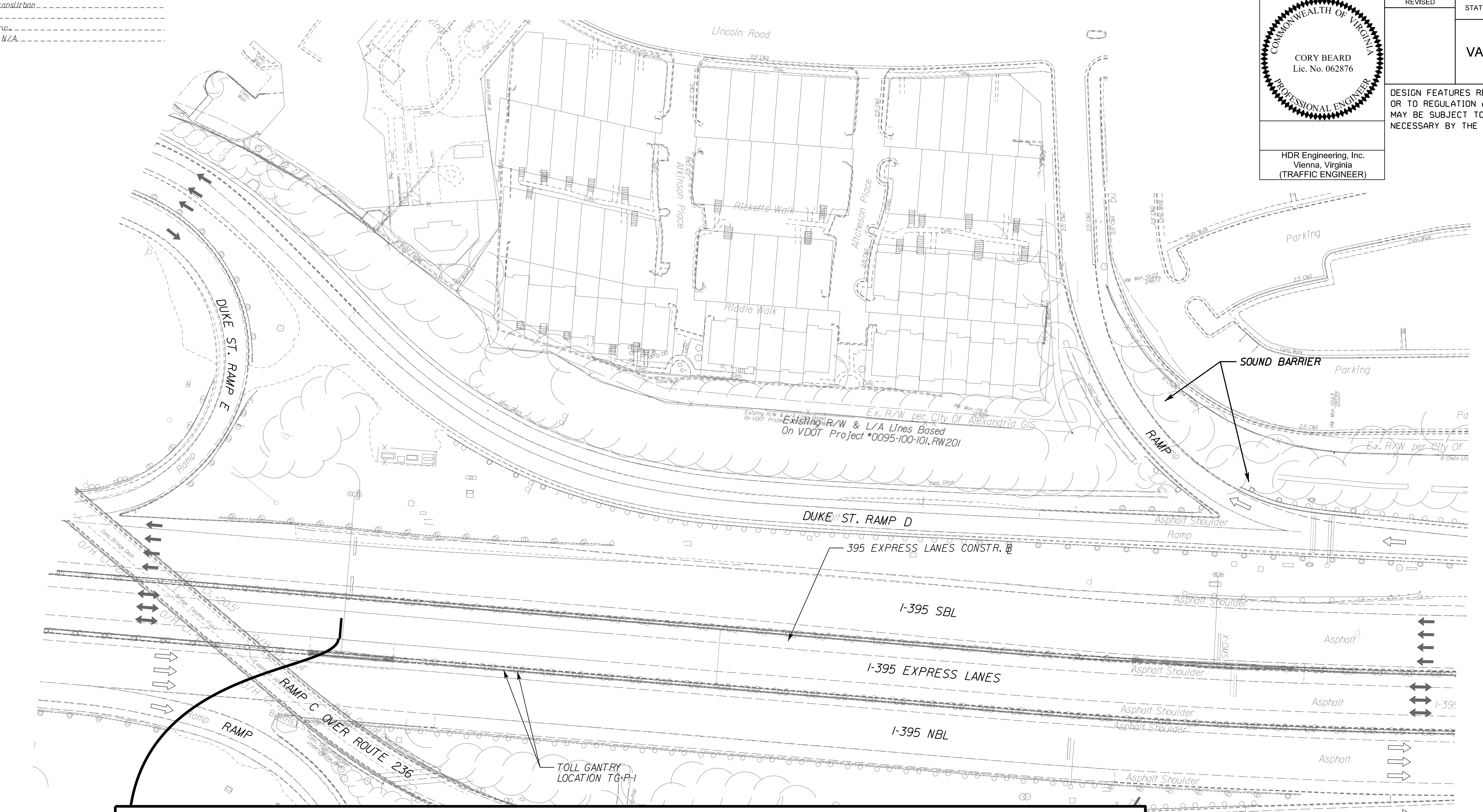
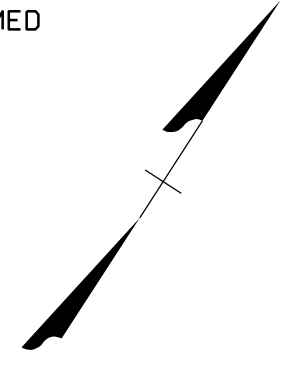


PROJECT MANAGER: Jordan Pitt, Inc./Urban
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	6

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

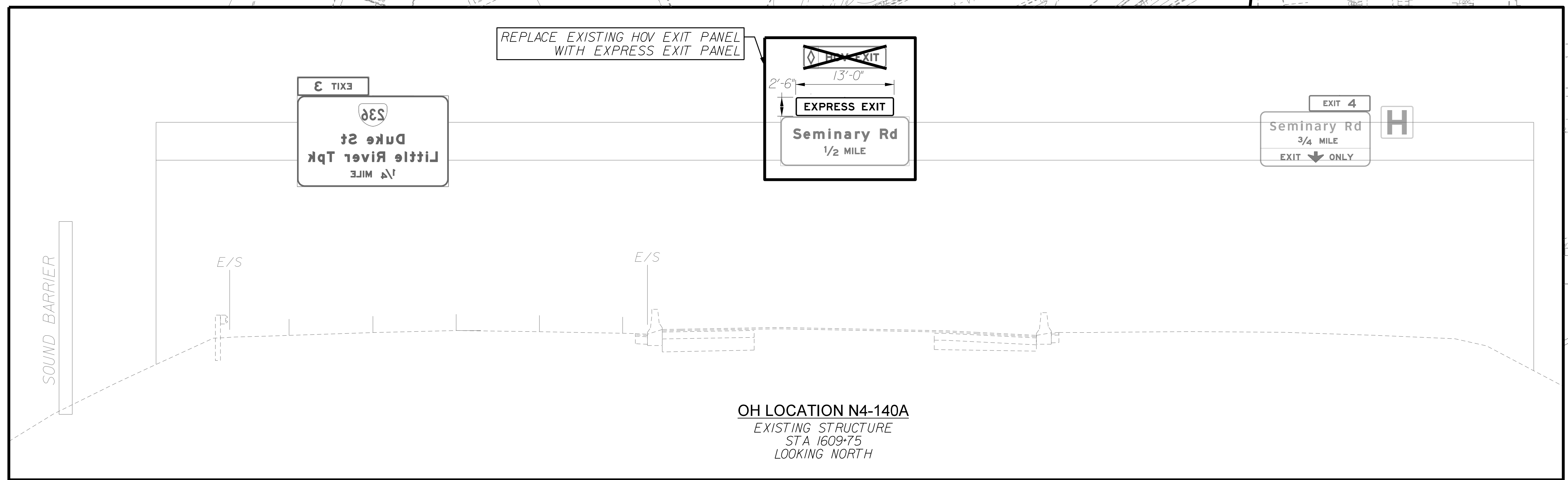
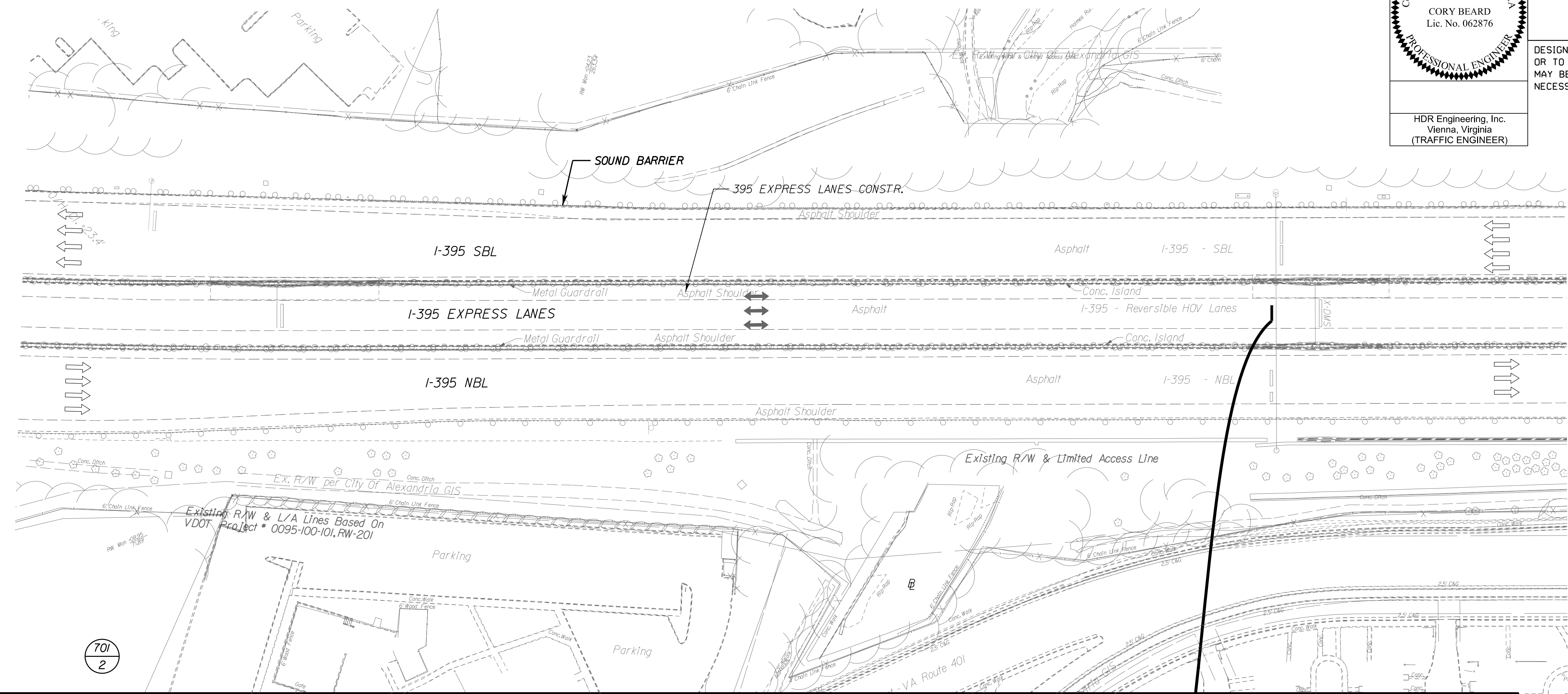


PROJECT MANAGER: Jordan Pitt, I. caasl@rban
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	7

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



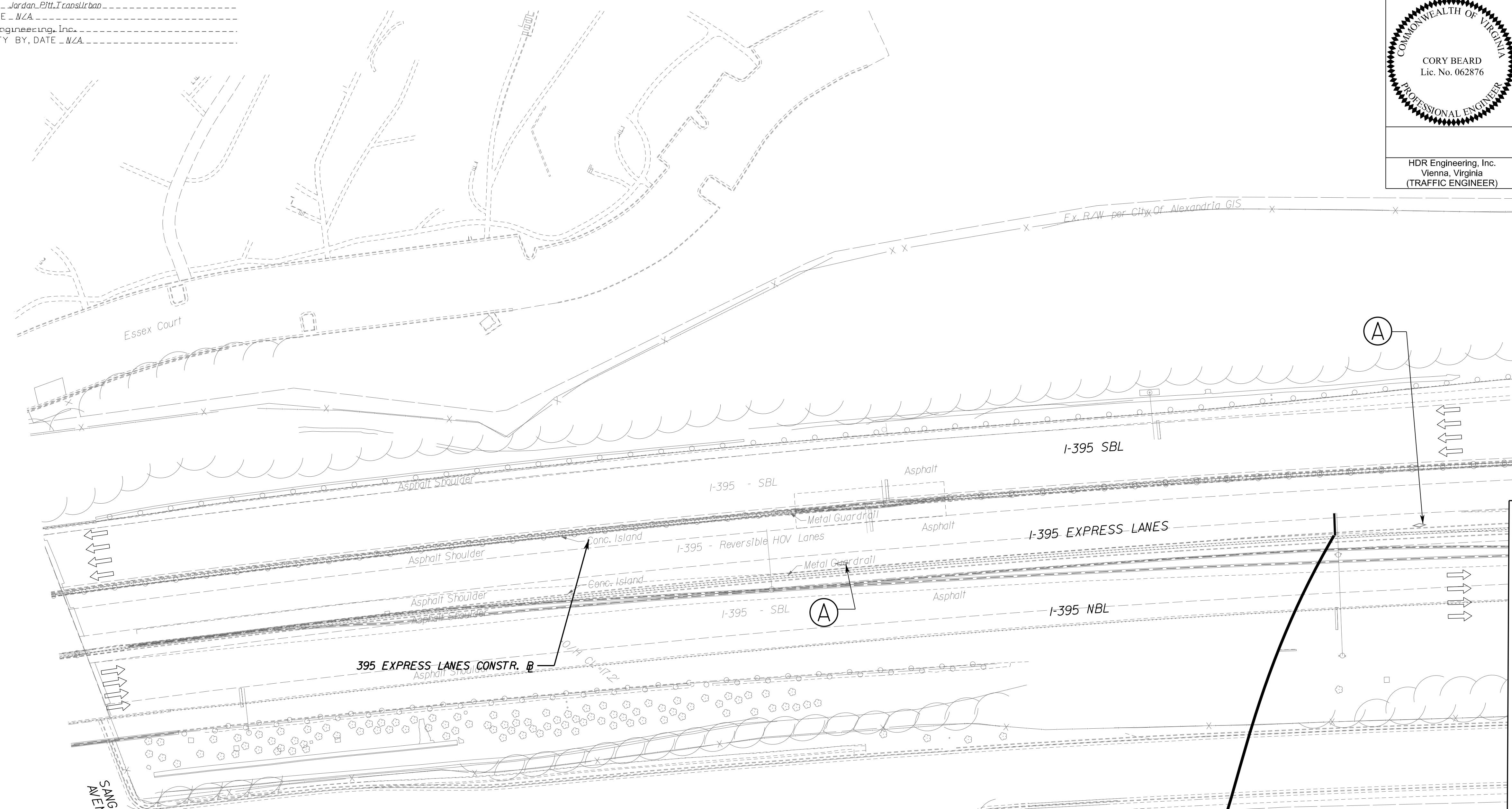
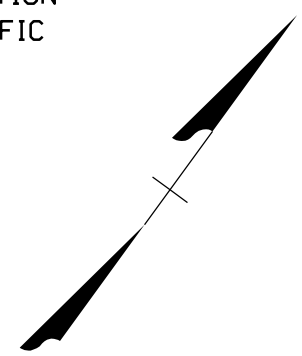
PROJECT MANAGER: Jordan Pitt, Inc./Urban
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER

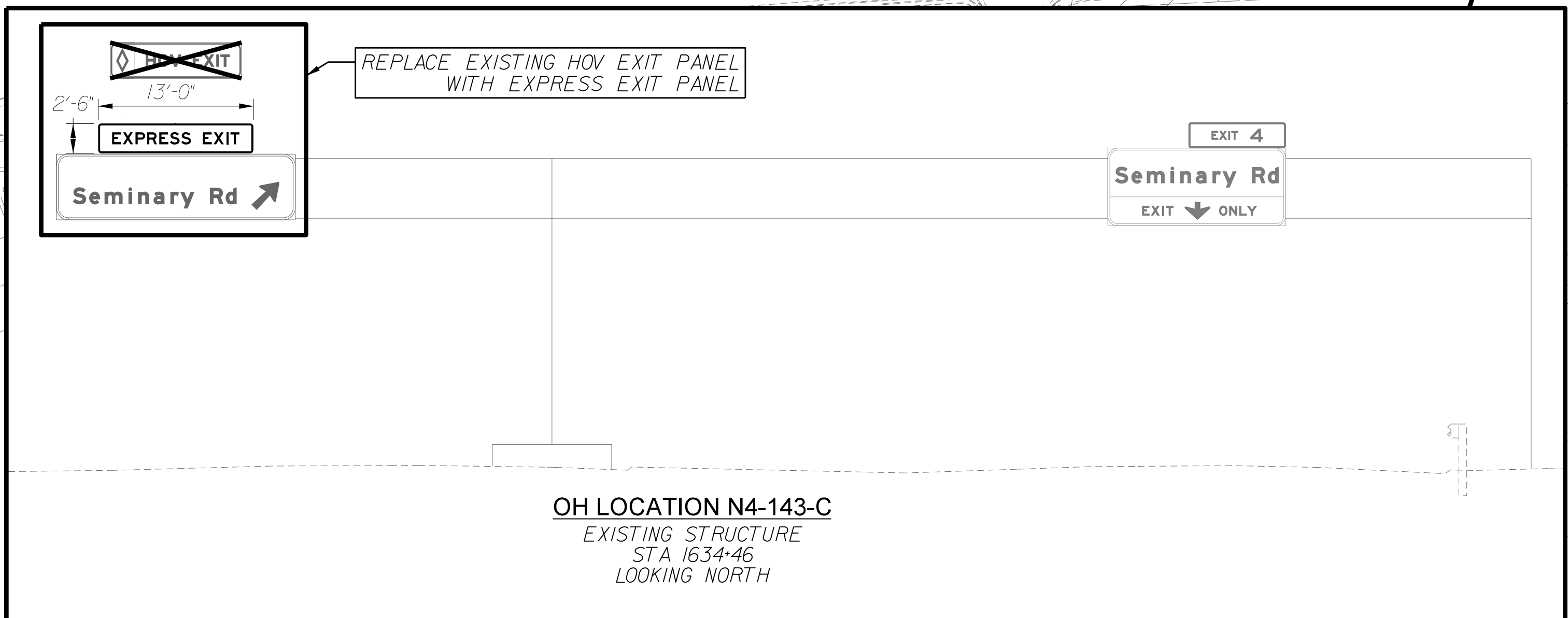
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	8

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



MATCH LINE STA. 1636+00. SEE SHEET 9

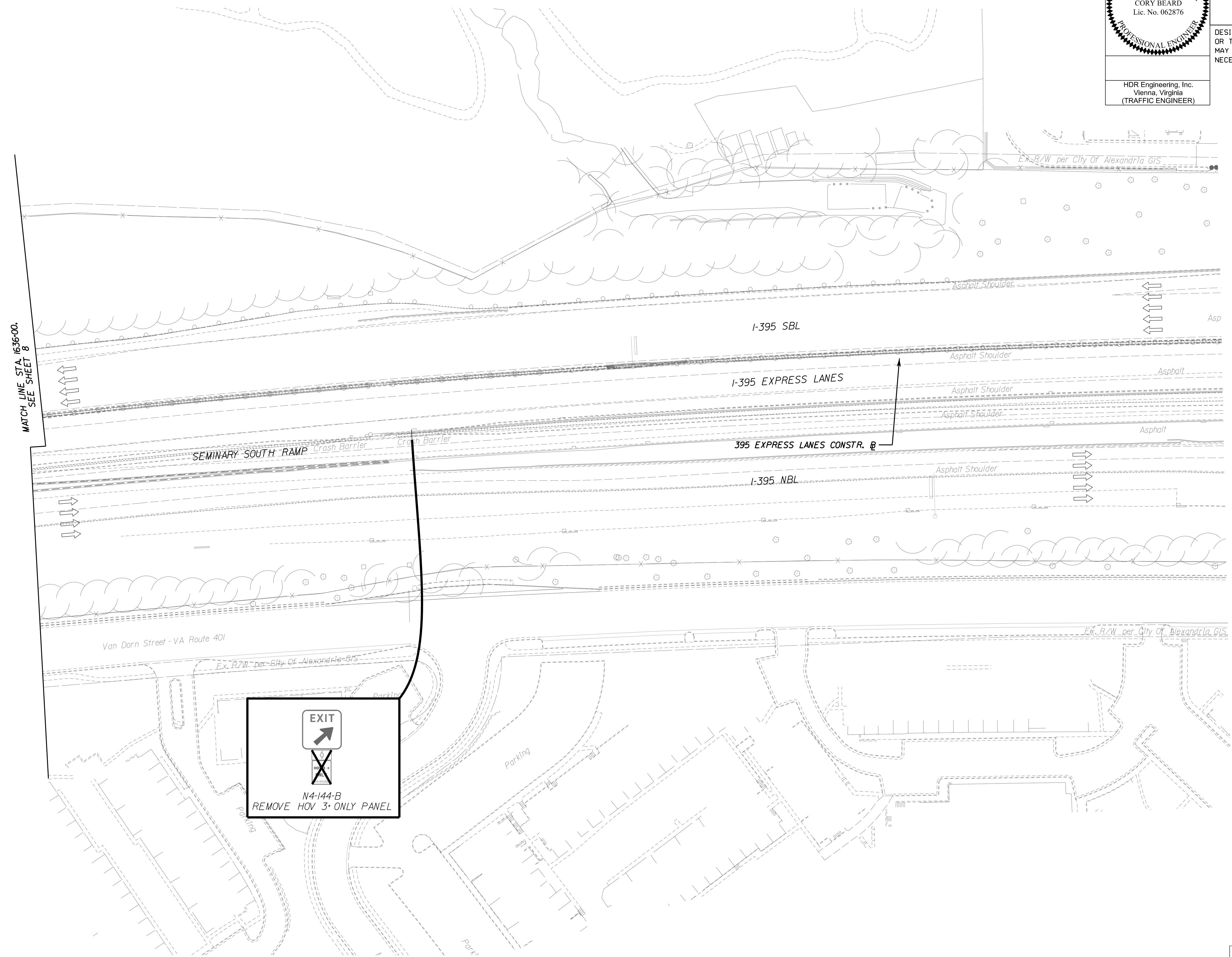
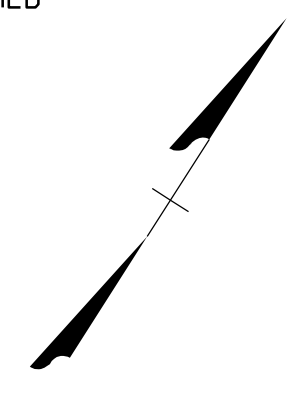


PROJECT MANAGER: Jordan Pitt, Inc./Urban
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	9

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



MATCH LINE STA. 1636+00.
SEE SHEET 8

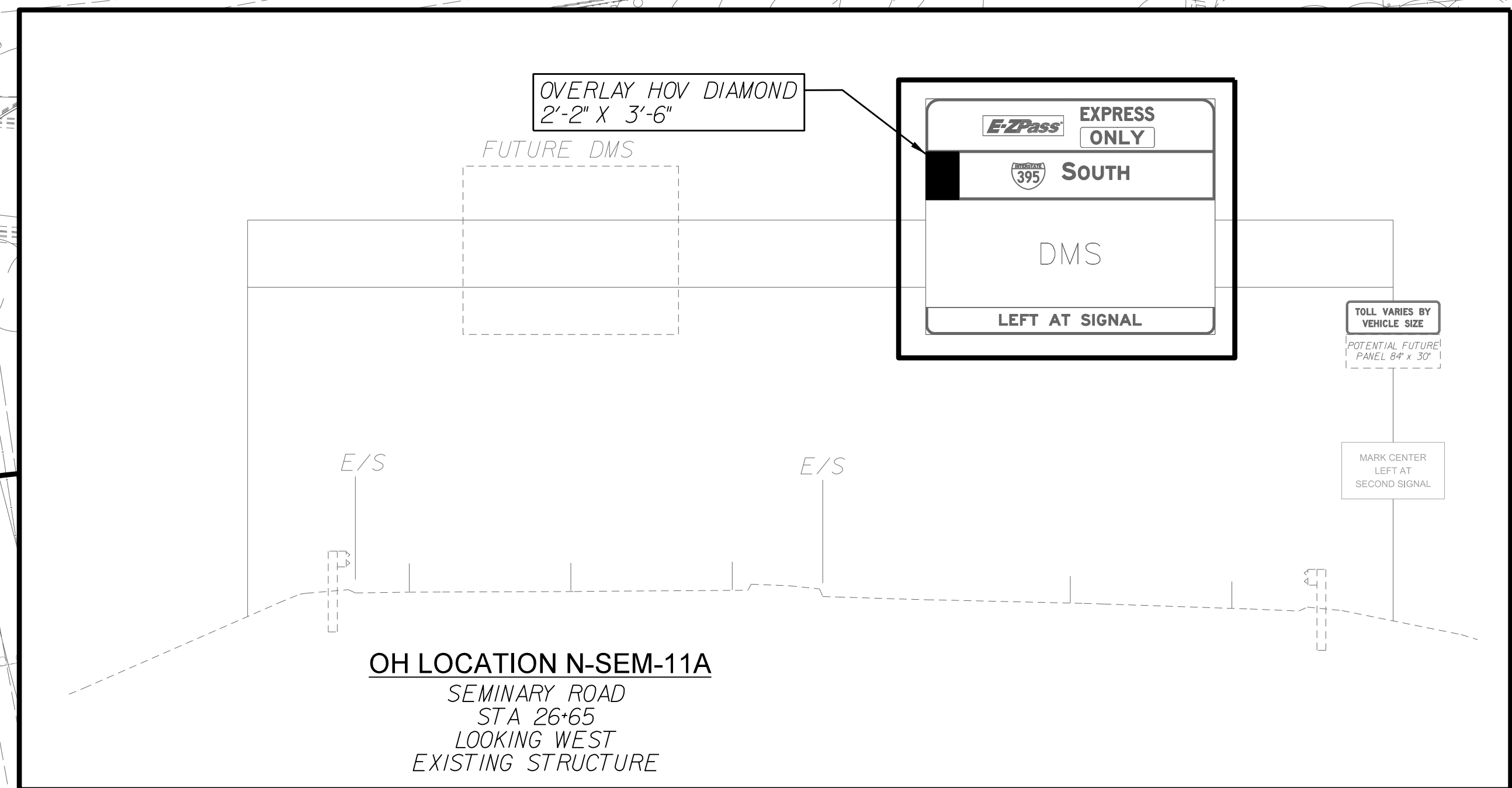
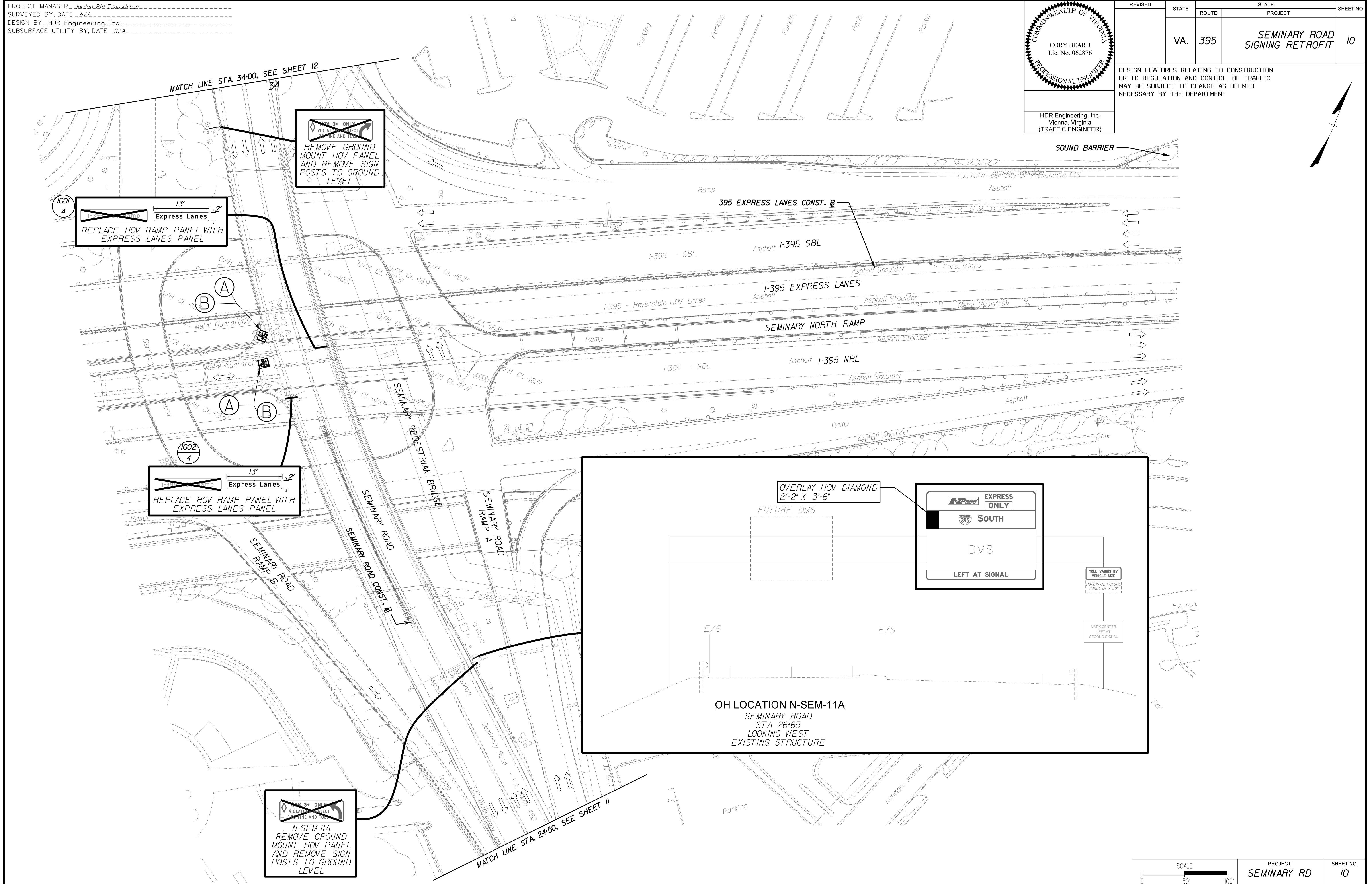
EXIT
↑
~~↓~~
N4-144-B
REMOVE HOV 3+ ONLY PANEL

PROJECT MANAGER: Jordan Pitt, I. caaslUrban
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	10

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



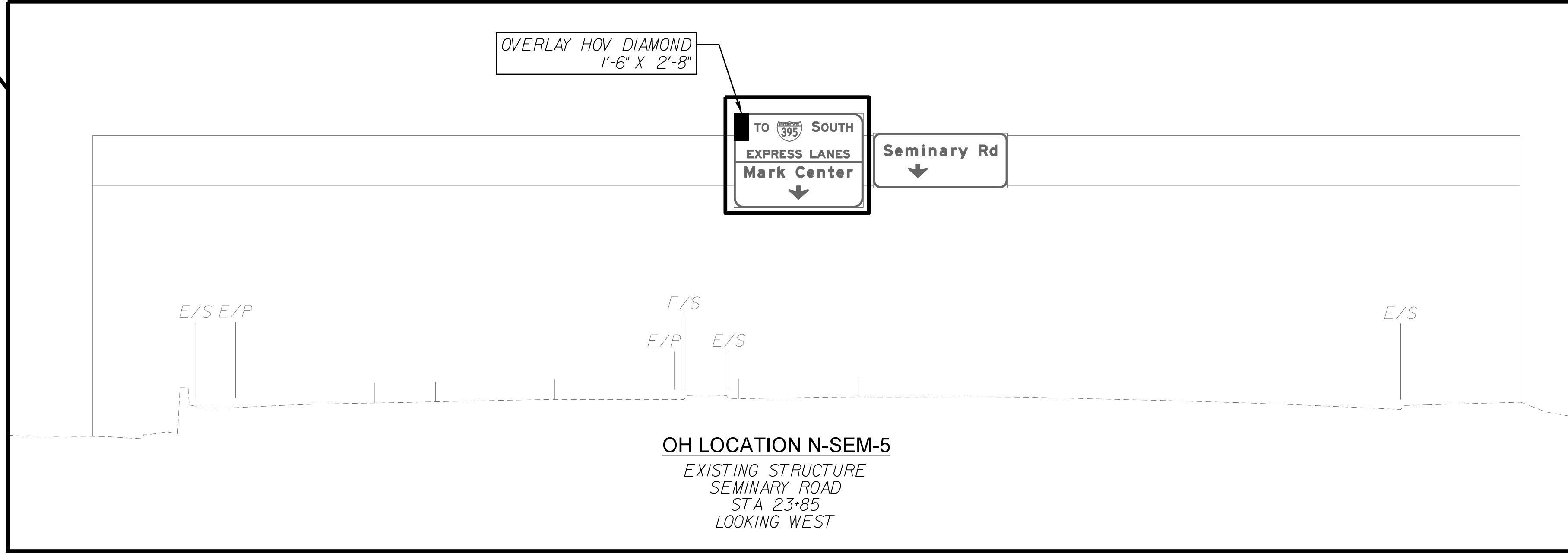
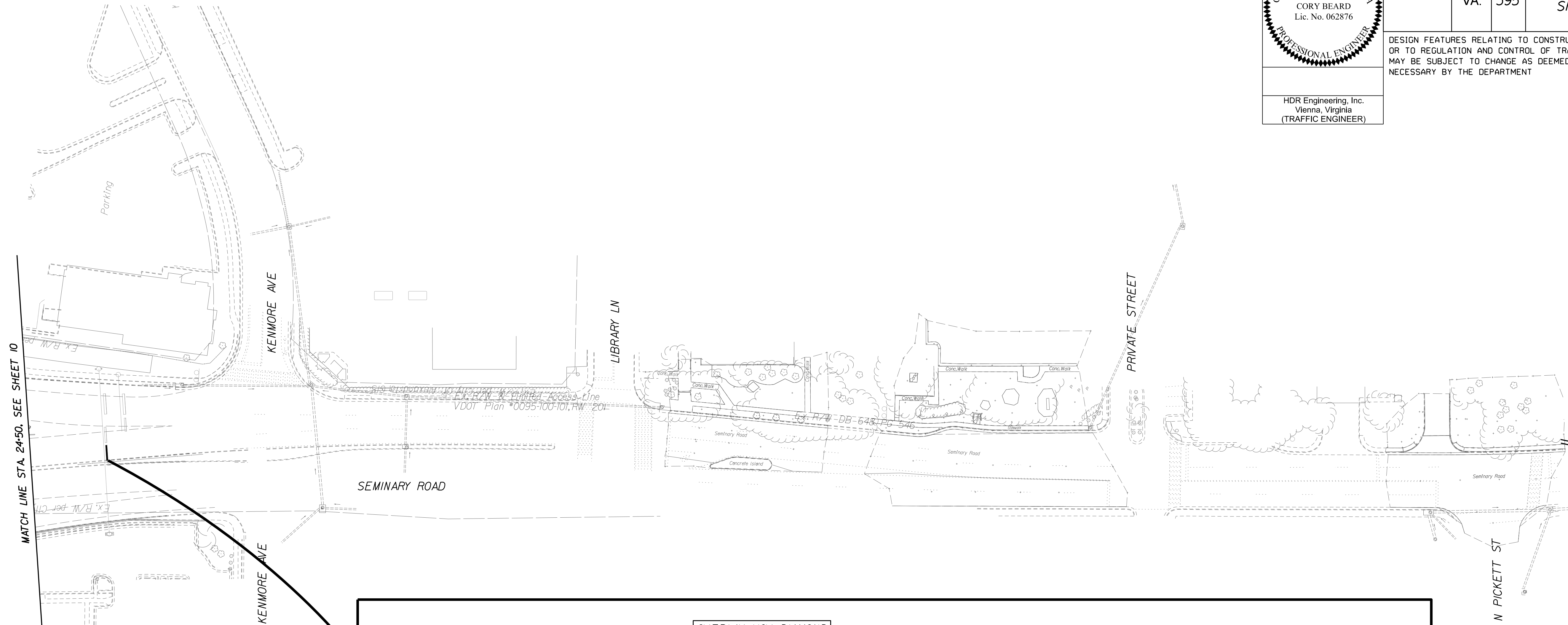
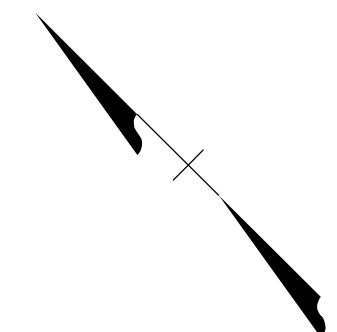
PROJECT MANAGER Jordan Pitt, Inc./Urban
SURVEYED BY, DATE N/A
DESIGN BY HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER

HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	395	SEMINARY ROAD SIGNING RETROFIT	11

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

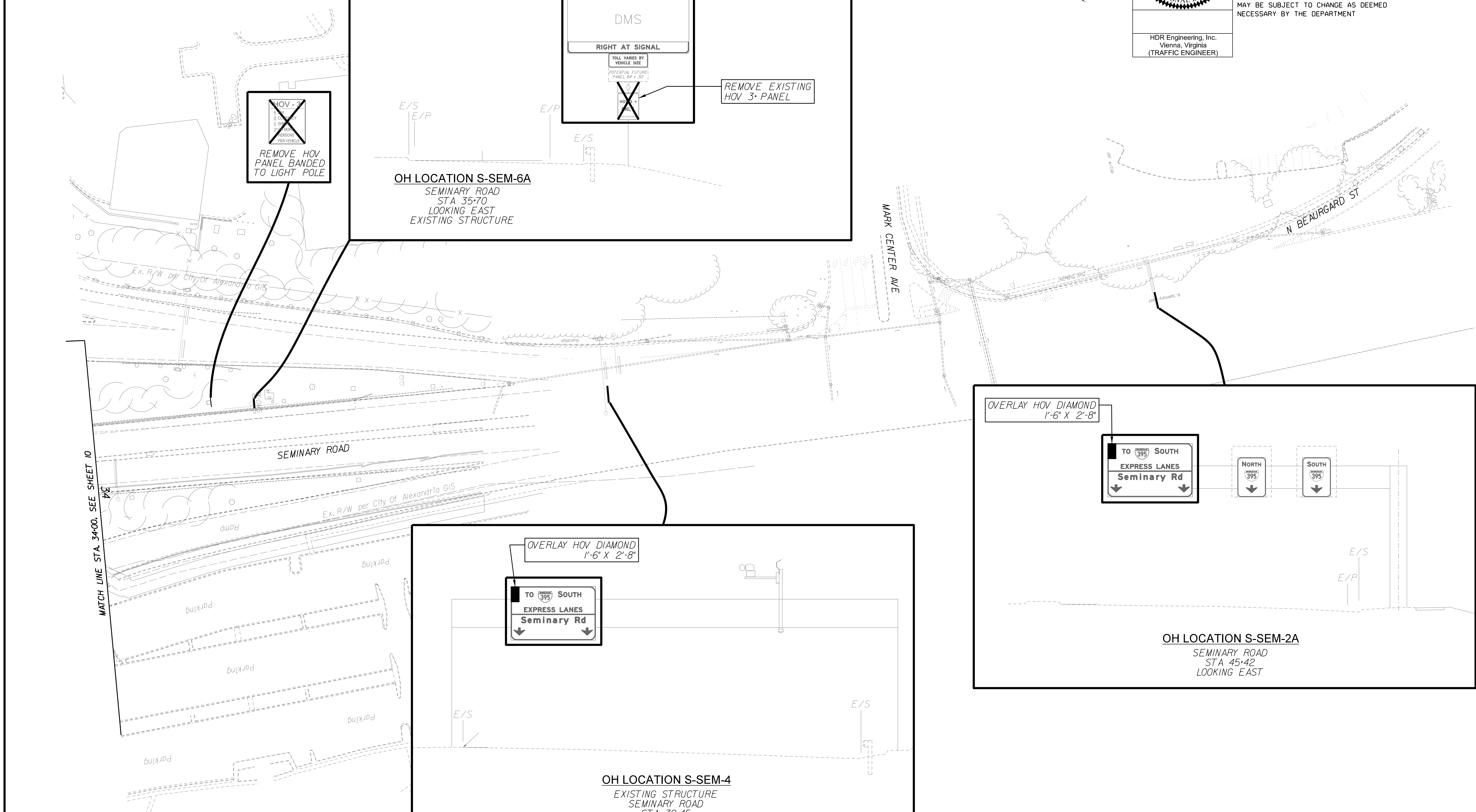
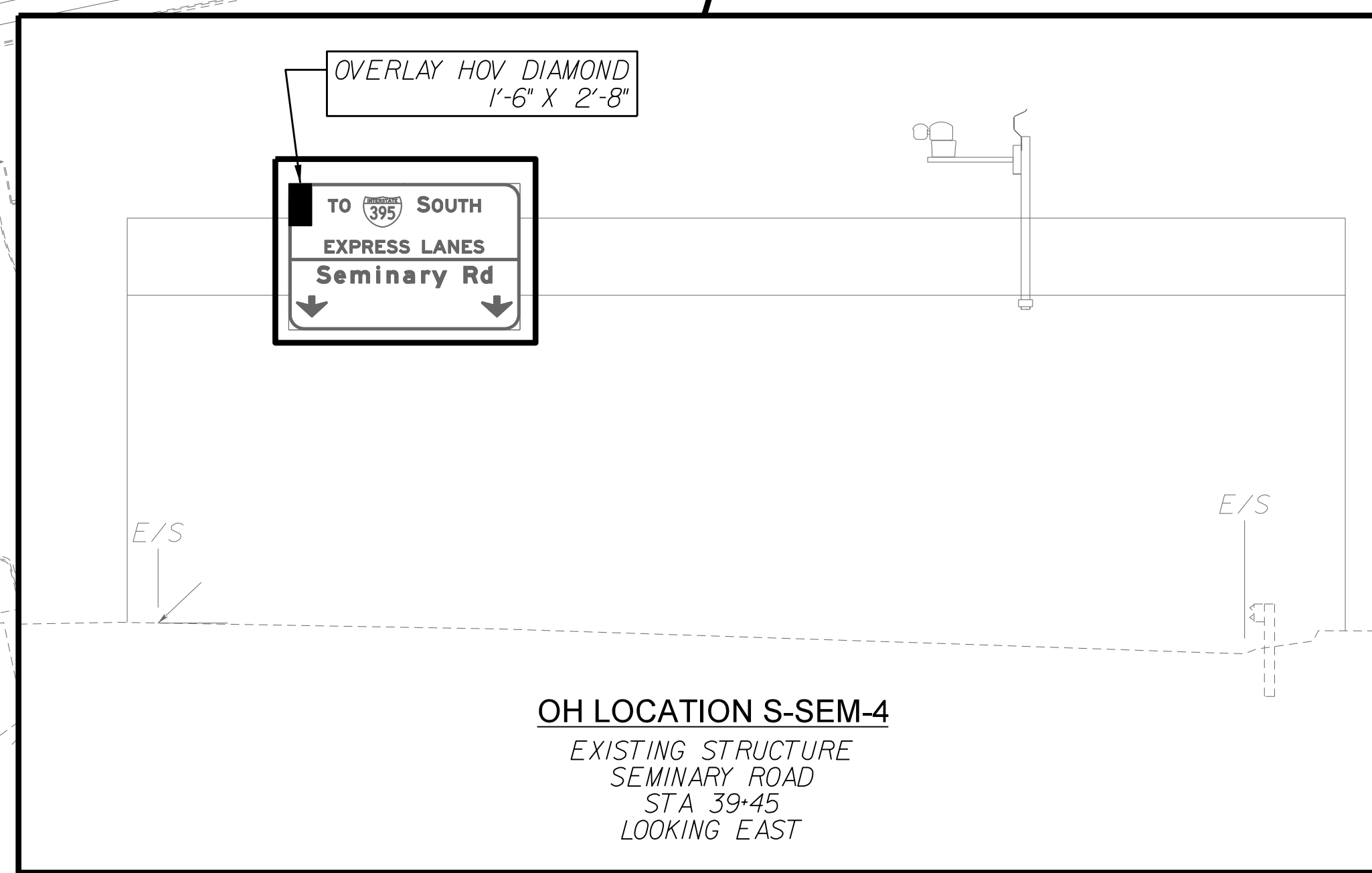
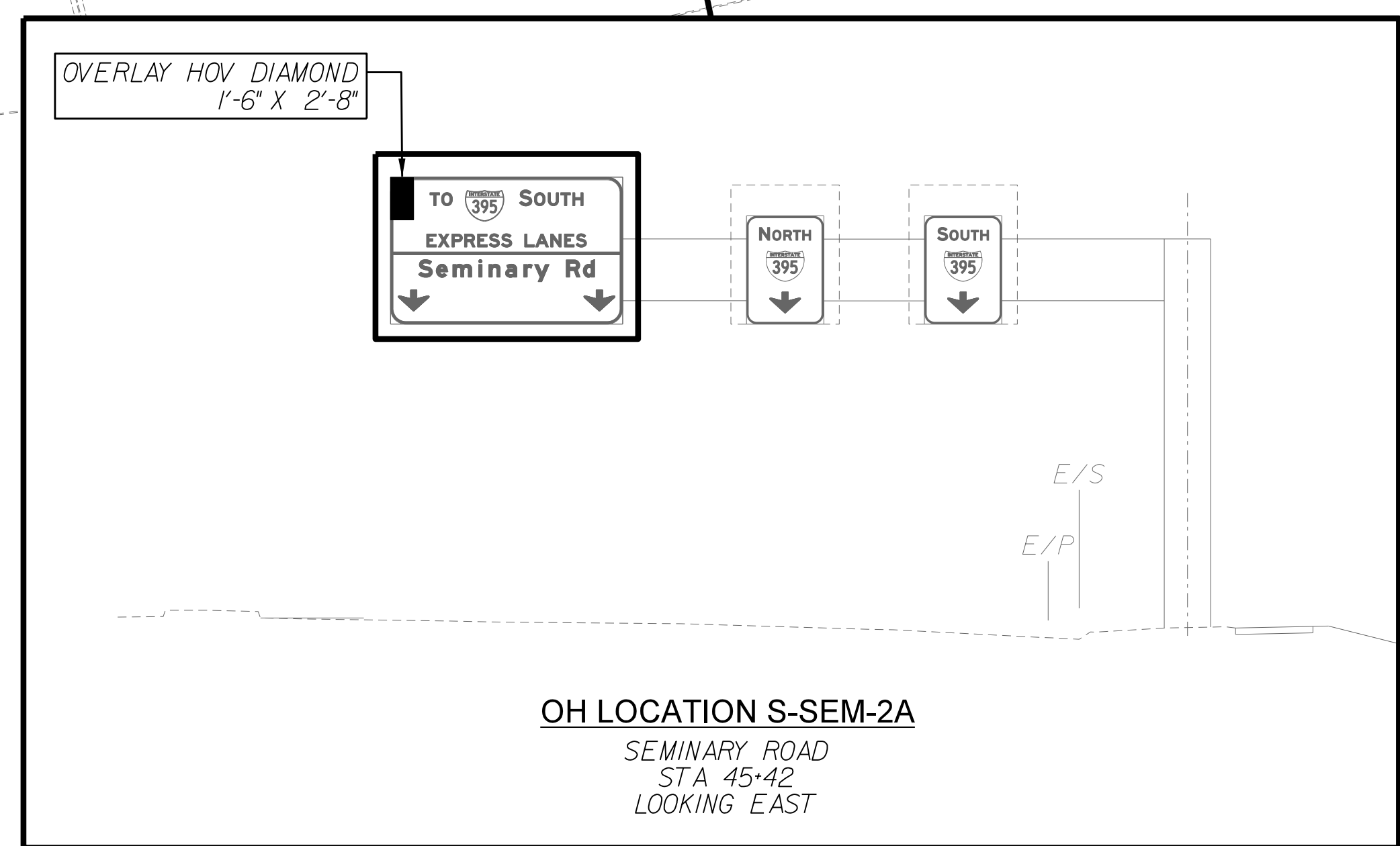
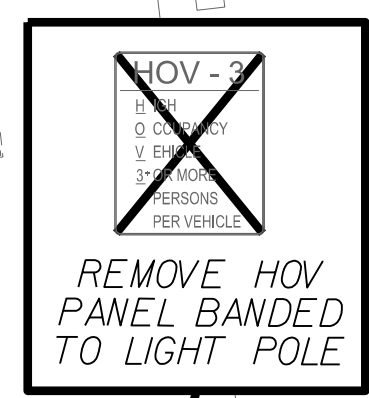
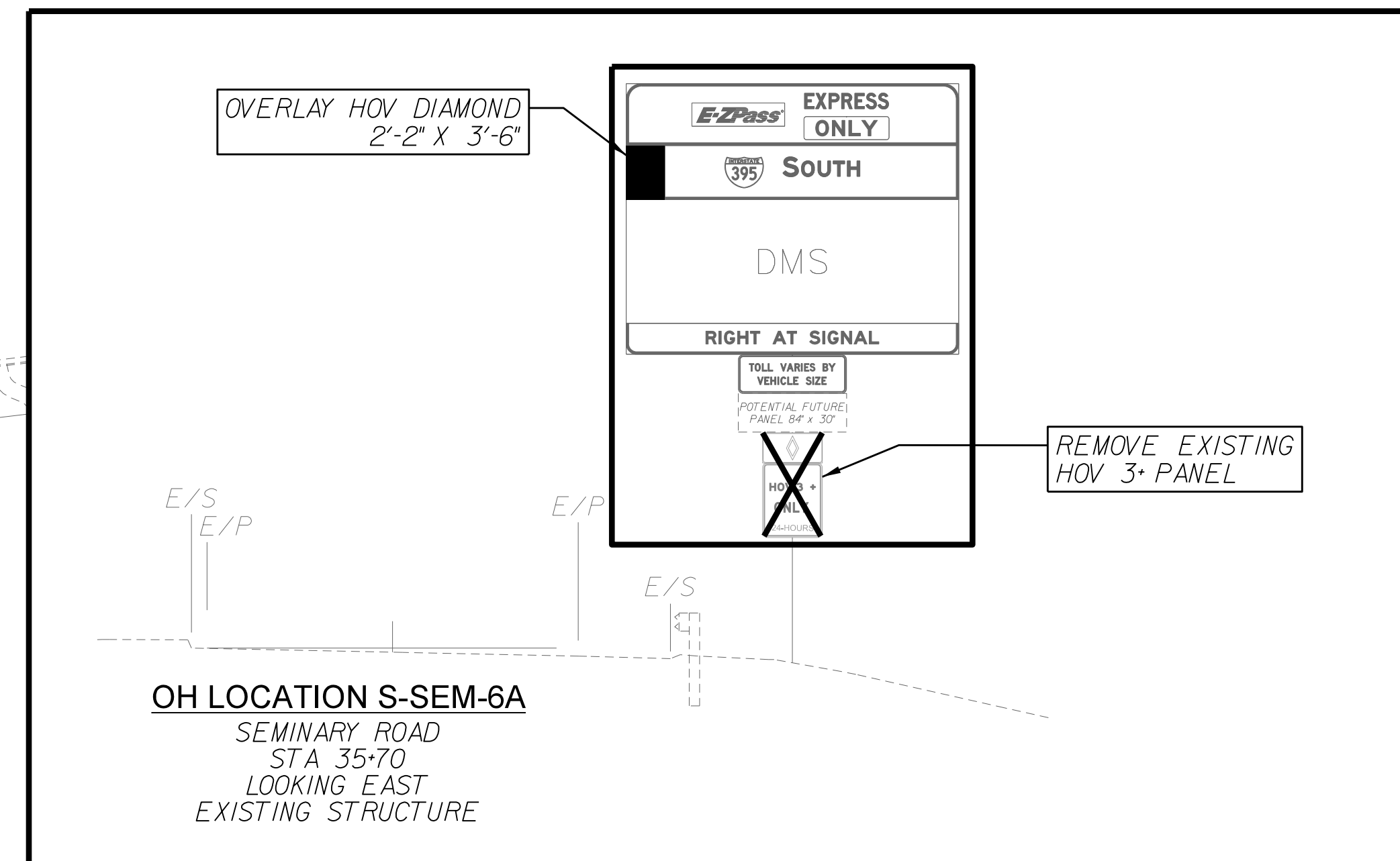


PROJECT MANAGER: Jordan Pitt, Jr. *jcpi@hdr.com*
SURVEYED BY, DATE: N/A
DESIGN BY: HDR Engineering, Inc.
SUBSURFACE UTILITY BY, DATE: N/A

COMMONWEALTH OF VIRGINIA
CORY BEARD
Lic. No. 062876
PROFESSIONAL ENGINEER
HDR Engineering, Inc.
Vienna, Virginia
(TRAFFIC ENGINEER)

REVISED	STATE	ROUTE	STATE	PROJECT	SHEET NO.
	VA.	395		SEMINARY ROAD SIGNING RETROFIT	12

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



MATCH LINE STA. 34+00. SEE SHEET 10