

## MARYLAND DEPARTMENT OF TRANSPORTATION MARYLAND TRANSIT ADMINISTRATION



FACILITIES ENGINEERING, ADA & SUSTAINABILITY DIVISION

# PURPLE LINE LIGHT RAIL TRANSIT SYSTEM PRELIMINARY ENGINEERING

VOLUME 3 - MAINTENANCE OF TRAFFIC & TRAFFIC SIGNALS

CONTRACT NO. T-1042-0220

#### ADA DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE

DESIGNER'S SIGNATURE

MD. REGISTRATION NO. P.E. R.L.S. OR R.L.A. (CIRCLE)

PRINTED NAME

#### DESIGN CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II INCLUDING SUPPLEMENTS, THE ENVIRONMENT ARTICLE SECTIONS 4-101 THROUGH 116 AND SECTIONS 4-201 AND 215, AND THE CODE OF MARYLAND REGULATIONS (COMAR) 26.17.01 AND 26.17.02 FOR EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT, RESPECTIVELY"

DATE

DESIGNER'S SIGNATURE

SCALE: AS NOTED

MD. REGISTRATION NO. P.E. R.L.S. OR R.L.A. (CIRCLE)

PRINTED NAME

#### OWNERS / DEVELOPER CERTIFICATION

"I/WE HEREBY CERTIFY THAT ALL CLEARING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT, COMPLIANCE INSPECTORS."

> ROBERT L. BURRIS, ASSISTANT MANAGER, Facilities Engineering, ADA & Sustainability

43667

DATE

CERT. NO. PRINTED NAME AND TITLE

OWNER/DEVELOPER SIGNATURES

VICINITY

GRAPHIC SCALE

DRAFT: Information shown is based on 30 percent preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

## PRELIMINARY ENGINEERING SUBMISSION DECEMBER 2013

MARYLAND TRANSIT ADMINISTRATION

DATE:

MONTGOMERY / PRINCE GEORGE'S COUNTIES

**General Engineering Consultant Team** 100 North Charles Street, 8th Floor ■ Baltimore, MD 21202

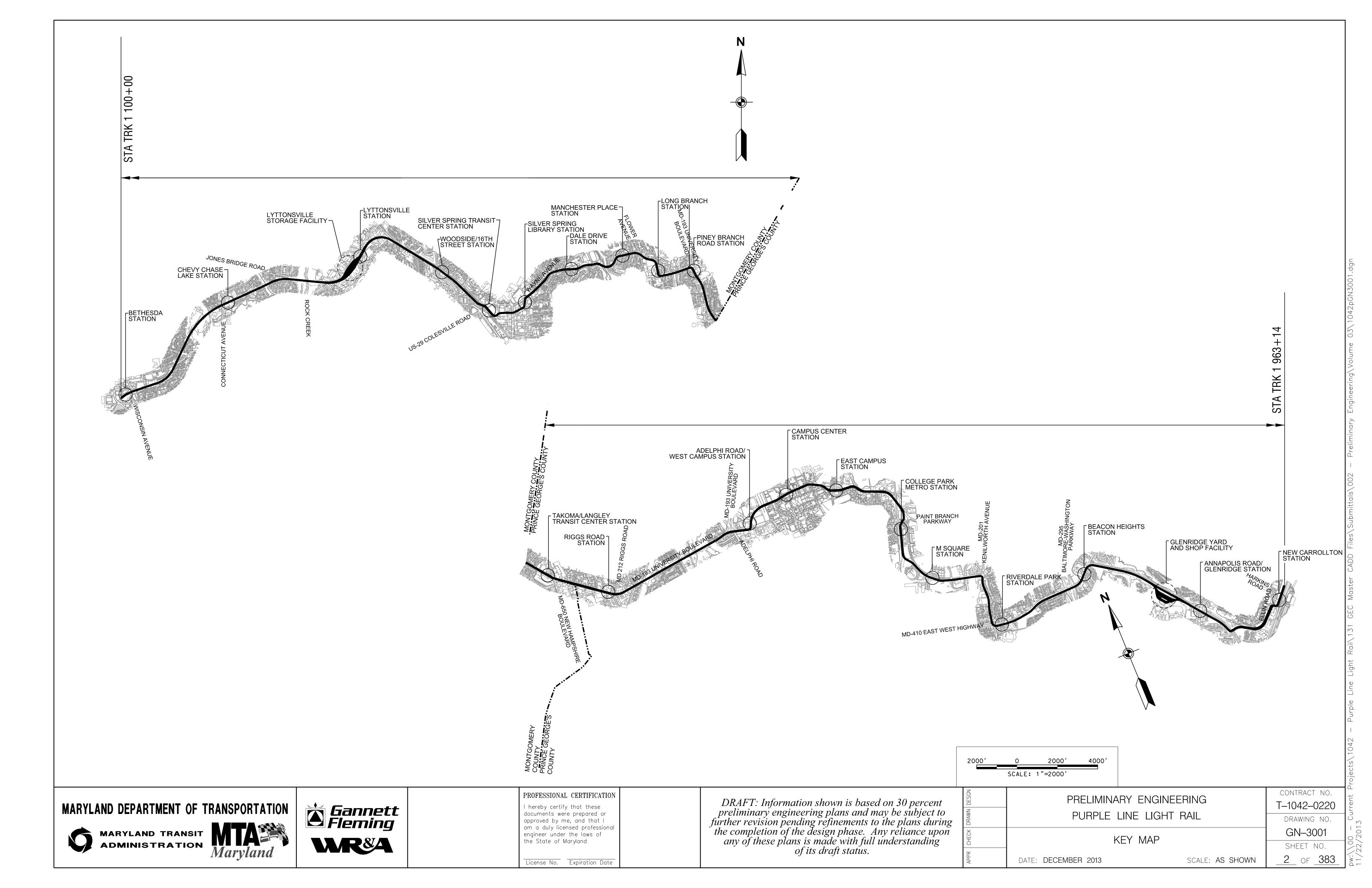
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DCN: 2013.12.20.PE.01.P3 Draft RFP Reference Drawings-Vol. 3-00

CONTRACT NO. T-1042-0220

DRAWING NO.

TI-3001 SHEET NO.



#### GENERAL NOTES

- 1. HORIZONTAL CONTROL: THIS PROJECT IS ORIENTATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM NAD 83/91.
- 2. VERTICAL CONTROL: THE LOCATION AND ELEVATION OF BENCH MARKS ARE SHOWN ON THE PLANS. ALL ELEVATIONS ARE IN FEET AND ARE BASED ON NAVD 1988 DATUM.
- 3. BASE TOPOGRAPHIC SURVEY INFORMATION FOR THIS CONTRACT WAS ESTABLISHED FROM AERIAL PHOTOGRAMMETRIC MAPPING IN MARCH OF 2007, SUPPLEMENTAL FIELD SURVEYS WERE PERFORMED AND PLOTTED BY PINNACLE MAPPING TECHNOLOGIES IN MARCH OF 2007.
- 4. ALL INVERT ELEVATIONS ARE APPROXIMATE. INVERT ELEVATIONS OF DRAINAGE INLETS AND PIPES MAY BE MODIFIED AS DIRECTED BY THE ENGINEER TO MEET CONDITIONS ENCOUNTERED DURING INSTALLATION OF DRAINAGE STRUCTURES.
- 5. ALL DRAINAGE PIPES AND DITCHES SHALL BE CONSTRUCTED ON A UNIFORM GRADE BETWEEN INVERT ELEVATIONS NOTED ON THE PLANS, UNLESS INDICATED OTHERWISE ON THE PLANS OR DETAILS.
- 6. THE LOCATION AND LENGTH OF DRAINAGE PIPE SHALL BE VERIFIED BY THE CONTRACTOR BEFORE ORDERING.
- 7. TYPE AND INVERT OF DITCHES ARE NOTED ON THE PLANS. DITCHES WILL BE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO GRADE FOR POSITIVE DRAINAGE WITHIN THE PARKING LOT, AT ALL ENTRANCES, AND ALONG ALL CURB LINES IN ACCORDANCE WITH THE PROPOSED DRAINAGE PATTERNS AS SHOWN ON THE PLANS, AND THOSE EXISTING WHERE APPLICABLE. IN NO CASE SHALL THIS REQUIREMENT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY TO CONSTRUCT ALL FACILITIES WITHIN ADA REGULATIONS.
- 9. ALL EXISTING STORM DRAIN STRUCTURES, SEWER MANHOLES, UTILITY MANHOLES, INLETS, VALVE BOXES, VAULTS, ETC. SHALL BE ADJUSTED BY THE CONTRACTOR TO MEET THE FINISHED GRADE ELEVATION AS NOTED ON THE PLANS, UNLESS THESE APPURTENANCES ARE ABANDONED UNDER THIS CONTRACT.
- 10. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL CONCERNED UTILITY OWNERS PRIOR TO GRADING OPERATIONS.
- 11. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION SHALL BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
- 12.ANY DISTURBED AREAS NOT PAVED OR LANDSCAPED SHALL RECEIVE 4" TOPSOIL, SEEDING AND MULCH, UNLESS OTHERWISE NOTED ON THE PLANS.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR STAGING CONSTRUCTION SUCH THAT A SOIL STOCKPILE SUITABLE FOR FILL MATERIAL AND TOPSOIL CAN BE MAINTAINED
- 14. MATERIAL REMOVED DURING CONSTRUCTION INCLUDING ASPHALT, SIGNS, LIGHT POLES, ETC. SHALL BECOME THE CONTRACTOR'S PROPERTY UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESET ANY SIGN POST OR OTHER APPURTENANCES REMOVED DURING THE CONSTRUCTION TO FACILITATE HIS WORK, EXCEPT WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 16. THE CONTRACTOR SHALL PERFORM ALL WORK IN A MANNER THAT WILL INSURE THE SAFETY OF THE GENERAL PUBLIC, COMMUTERS, AND EMPLOYEES OF THE CONTRACTOR, MTA, ETC.
- 17.ANY DAMAGE TO EXISTING CURBING ADJACENT TO NEW PAVING SHALL BE REPAIRED OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- 18. UNLESS OTHERWISE NOTED, ALL SAW CUTTING SHALL BE FULL DEPTH.
- 19. PRIOR TO PERFORMING EXCAVATION OR GRADING AT ANY LOCATION, CONTACT "MISS UTILITY", 1-800-257-7777 AT LEAST 48 HOURS IN ADVANCE OF THE PROPOSED WORK.
- 20. THE CONTRACTOR SHALL NOTE THE HISTORIC NATURE OF THE SURROUNDING COMMUNITY. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE NOISE FROM CONSTRUCTION ACTIVITY ON-SITE.
- 21.A COPY OF THE CONTRACTOR'S SITE SPECIFIC PROJECT SAFETY PLAN SHOULD BE SUBMITTED TO THE OFFICE OF SAFETY & RISK MANAGEMENT (OSRM) FOR REVIEW AND COMMENT. A COPY SHOULD BE FORWARDED TO DENNIS RAFFERTY/DAVID AUCHU IN THE OFFICE OF SAFETY & RISK MANAGEMENT. THE CONTRACTOR SHALL NOT BEGIN ANY WORK ACTIVITIES ON SITE UNTIL THE PROJECT SAFETY PLAN HAS BEEN REVIEWED AND FOUND TO BE ACCEPTABLE BY REPRESENTATIVES FROM THE OSRM.

#### ADA SUMMARY

REFER TO ADA GENERAL NOTES SHEET

#### MAINTENANCE OF TRAFFIC LEGEND



TEMPORARY SIGN

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TEMPORARY CONCRETE BARRIER

CHANNELIZING DEVICE

222 TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED) CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

ARROW PANEL

EXISTING TRAFFIC FLOW ARROW TEMPORARY TRAFFIC FLOW ARROW

TYPE III BARRICADE  $\bullet$ 

IMPACT ATTENUATOR

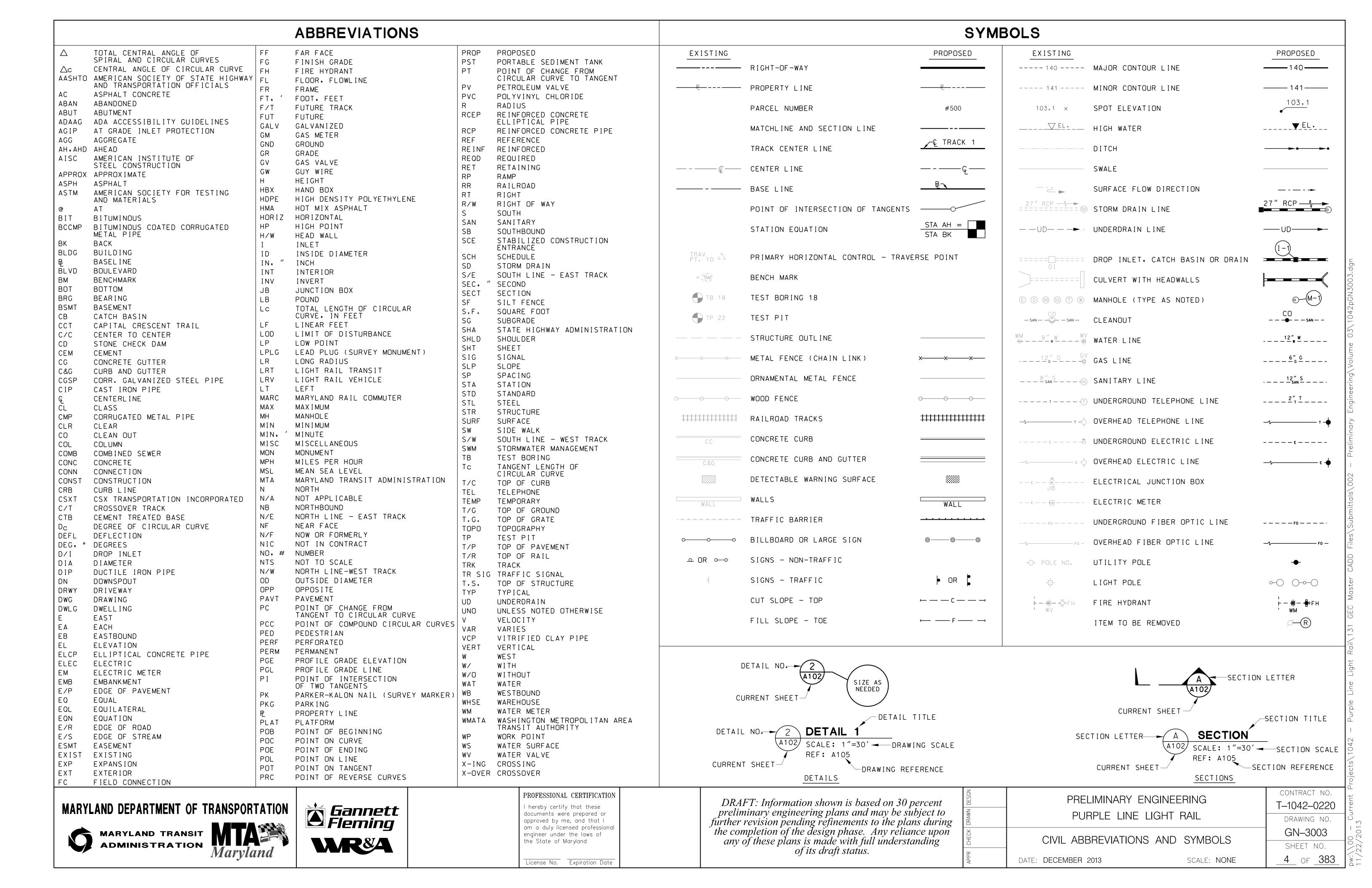
MARYLAND DEPARTMENT OF TRANSPORTATION



PROFESSIONAL CERTIFICATION hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

License No. Expiration Date

PRELIMINARY ENGINEERING	CONTRACT NO.
	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
GENERAL NOTES AND LEGEND	GN-3002
GENERAL NOTES AND LEGEND	SHEET NO.
DATE: DECEMBER 2013 SCALE: NONE	_3_ of <u>383</u>



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		MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE - STAGE 5A MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE - STAGE 5B	282 283	SG-101B SG-101C	TEMPORARY SIGNALIZATION PLAN SHEET JONES MILL ROAD AND JONES BRIDGE ROAD STAGE TEMPORARY SIGNALIZATION PLAN SHEET JONES MILL ROAD AND JONES BRIDGE ROAD STAGE	766	SG-617 SG-618	SIGNALIZATION PLAN SHEET MD 193 AND WEST PARK DRIVE
87-88	MT-342 TO MT-343	MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE - STAGE 5C	284	SG-101	SIGNALIZATION PLAN SHEET JONES MILL ROAD AND JONES BRIDGE ROAD	356	SG-619	SIGNALIZATION PLAN SHEET MD 193B AND ADELPHI ROAD
		MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE - STAGE 5D	285	SG-201	SIGNALIZATION PLAN SHEET BROOKVILLE ROAD AND STEWART AVENUE	357 358	SG-701A SG-701B	TEMPORARY SIGNALIZATION PLAN SHEET CAMPUS DR AND PRESIDENTIAL DR STAGE 1 TEMPORARY SIGNALIZATION PLAN SHEET CAMPUS DR AND PRESIDENTIAL DR STAGE 2
		MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE - STAGE 6A MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE - STAGE 6B	286 287	SG-202 SG-203A	SIGNALIZATION PLAN SHEET MD 390 AND SUBURBAN TOWER APTS. PEDESTRIAN HIB TEMPORARY SIGNALIZATION PLAN SHEET MD 390 AND SPRING STREET STAGE 1	359	SG-701	SIGNALIZATION PLAN SHEET CAMPUS DRIVE AND PRESIDENTIAL DRIVE
95-96	MT-501 TO MT-502	MAINTENANCE OF TRAFFIC PLAN ARLISS STREET - STAGE 1	288	SG-203B	TEMPORARY SIGNALIZATION PLAN SHEET MD 390 AND SPRING STREET STAGE 2	360 361	SG-702	SIGNALIZATION PLAN SHEET UNION DRIVE AND VALLEY DRIVE
		MAINTENANCE OF TRAFFIC PLAN ARLISS STREET - STAGE 2 MAINTENANCE OF TRAFFIC PLAN ARLISS STREET - STAGE 3	289 290	SG-203 SG-301	SIGNALIZATION PLAN SHEET MD 390 AND SPRING STREET SIGNALIZATION PLAN SHEET BONIFANT STREET AND DIXON AVENUE	362	SG-703 SG-704	SIGNALIZATION PLAN SHEET CAMPUS DRIVE AND REGENTS DRIVE SIGNALIZATION PLAN SHEET US 1 AND ROSSBOROUGH LANE
		MAINTENANCE OF TRAFFIC PLAN ARLISS STREET - STAGE 4	291	SG-302A	TEMPORARY SIGNALIZATION PLAN SHEET US 29 AND BONIFANT STREET STAGE 1	363	SG-705	SIGNALIZATION PLAN SHEET PAINT BRANCH PARKWAY AND ROSSBOROUGH LANE
			DDOF	 ESSIONAL CERTIFICATI	ON	N <sub>O</sub>		CONTRACT NO.
MADVIAND	) DEDADTMEN	T OF TRANSPORTATION		eby certify that these	DRAFT: Information shown is based on 30 p	ercent Sa		PRELIMINARY ENGINEERING T-1042-0220

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License No. Expiration Date

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	CONTRACT NO.	]
PRELIMINARY ENGINEERING	T-1042-0220	ren
PURPLE LINE LIGHT RAIL	DRAWING NO.	Cur
	GL_3101	1
		100
SHEET 1		
DATE: <b>DECEMBER 2013</b> SCALE: <b>NONE</b>	5_ of <u>383</u>	) ⊗ Ω
	INDEX OF SHEETS – VOLUME 3 SHEET 1	PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL  INDEX OF SHEETS – VOLUME 3 SHEET 1  T-1042-0220 DRAWING NO.  GI-3101 SHEET NO.

## INDEX OF DRAWINGS - VOLUME 3

SHEET DWG. NO. NO.	DESCRIPTION	SHEET DWG. NO. NO.	DESCRIPTION	SHEET NO.	DWG. NO.	DESCRIPTION
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#### TRAFFIC SIGNALS (CONTINUED)

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	364	SG-706	SIGNALIZATION PLAN SHEET PAINT BRANCH PARKWAY AND PAINT BRANCH PARK TRAIL
	365	SG-707	SIGNALIZATION PLAN SHEET PAINT BRANCH PARKWAY AND U.M./MFRI ENTRANCE
	366	SG-708	SIGNALIZATION PLAN SHEET PAINT BRANCH PARKWAY AND METRO PARKING
	367	SG-801	SIGNALIZATION PLAN SHEET RIVER ROAD AND RIVERTECH COURT
	368	SG-802	SIGNALIZATION PLAN SHEET RIVER ROAD AND HAIG ROAD
	369	SG-803	SIGNALIZATION PLAN SHEET MD 201 AND RIVER RD/TUCKERMAN STREET
	370	SG-804	SIGNALIZATION PLAN SHEET MD 201 AND RITTENHOUSE STREET
	371	SG-805	SIGNALIZATION PLAN SHEET MD 201 AND MD 410
	372	SG-806	SIGNALIZATION PLAN SHEET MD 410 HIB BETWEEN MD 201 AND 58TH AVENUE
	373	SG-807	SIGNALIZATION PLAN SHEET MD 410 AND 62ND PLACE / MUSTANG DRIVE
	374	SG-808	SIGNALIZATION PLAN SHEET MD 410 AND 64TH AVENUE / EAST PINE DRIVE
	375	SG-809	SIGNALIZATION PLAN SHEET MD 410 AND MD 295 - WEST RAMP
	376	SG-810	SIGNALIZATION PLAN SHEET MD 410 AND MD 295 - EAST RAMP
	377	SG-811	SIGNALIZATION PLAN SHEET MD 410 AND 67TH COURT / 67TH AVENUE
	378	SG-901	SIGNALIZATION PLAN SHEET MD 410 AND VETERANS PARKWAY
	379	SG-902	SIGNALIZATION PLAN SHEET MD 410 AND GLENRIDGE ACCESS ROAD
	380	SG-903	SIGNALIZATION PLAN SHEET MD 450 AND MD 410
	381	SG-904	SIGNALIZATION PLAN SHEET MD 410 AND ELLIN ROAD
	382	SG-905	SIGNALIZATION PLAN SHEET ELLIN ROAD AND NEW CARROLLTON METRO ENTRANCE
	383	SG-906	SIGNALIZATION PLAN SHEET ELLIN ROAD AND HARKINS ROAD

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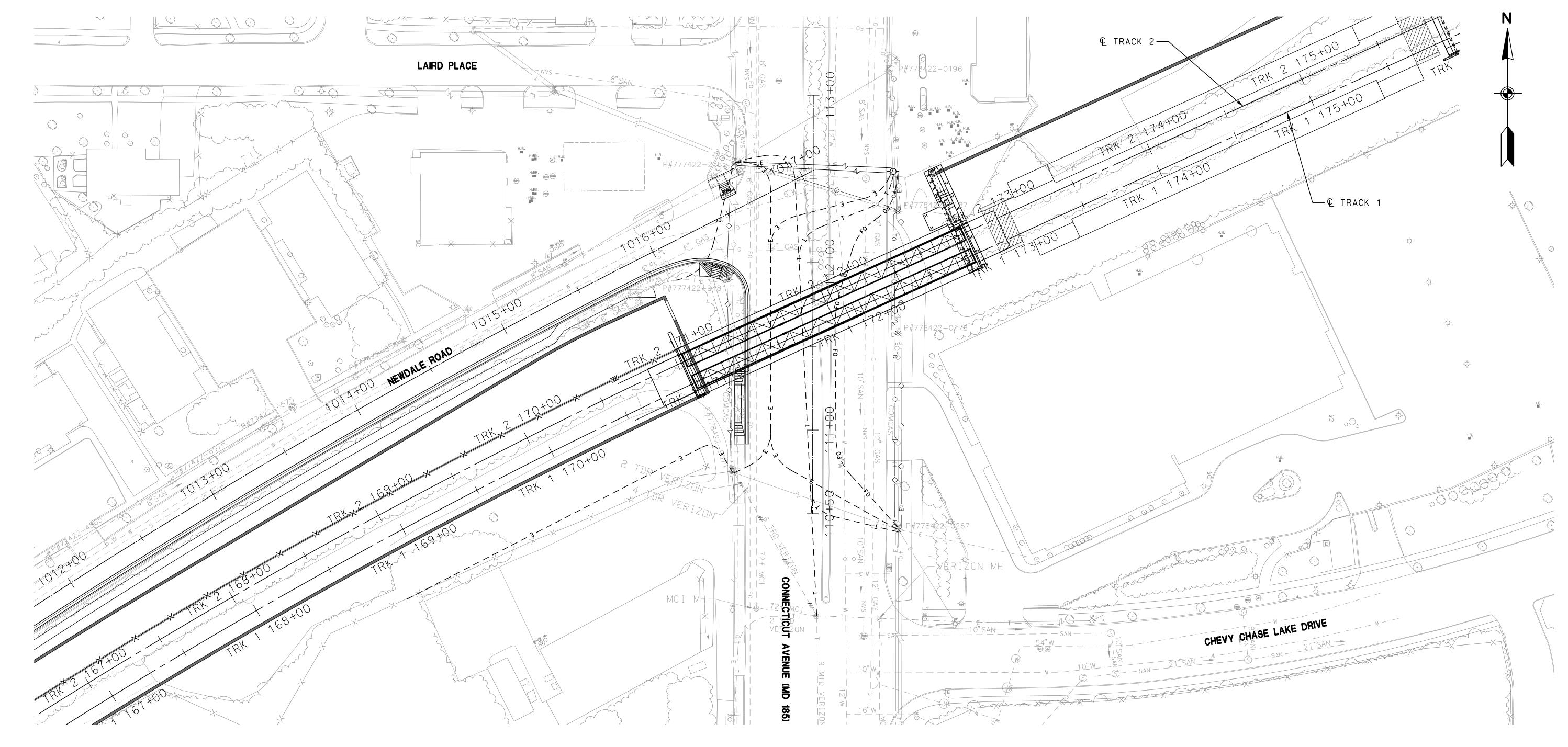




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		CONTRACT NO.	+
PRELIMINARY ENGINI	EERING	T-1042-0220	ren
PURPLE LINE LIGHT	ΓRAIL	DRAWING NO.	
		GI-3102	
INDEX OF SHEETS – V	OLUME 3		00
SHEET 2		SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE: <b>NONE</b>	6 of 383	



#### GENERAL NOTES:

- 1. THE CONTRACTOR SHALL USE LEFT LANE COSURES (STD. NO. MD 104.04-04), CENTER LANE CLOSURES (STD. NO. MD 104.04-06) TO CONSTRUCT UTILITY CONDUITS AND NEW CURB AND GUTTER ALONG MD 185. LANE CLOSURES SHALL BE USED DURING OFF-PEAK HOURS AND ONLY ONE LANE CLOSURE PER DIRECTION SHALL BE ALLOWED AT ANY GIVEN TIME. ALL EXISTING TRAVEL LANES SHALL BE RESTORED TO TRAFFIC DURING NON-WORKING HOURS.
- 2. THE CONTRACTOR SHALL EXCAVATE AND INSTALL CONDUIT IN SECTIONS NOT EXCEEDING 50 FEET IN LENGTH. OPEN EXCAVATIONS SHALL BE STEEL PLATED PRIOR TO OPENING THE TRAVEL LANE TO TRAFFIC.
- 3. THE CONTRACTOR SHALL USE SHORT TERM ROAD CLOSURES (STD. MD 104.06-12) WHEN INSTALLING THE BRIDGE SUPERSTRUCTURE OVER CONNECTICUT AVENUE.
- 4. CONSTRUCT CURB AND GUTTER ALONG NEWDALE ROAD USING FLAGGING OPERATION (STD. NO. MD 104.02-10).

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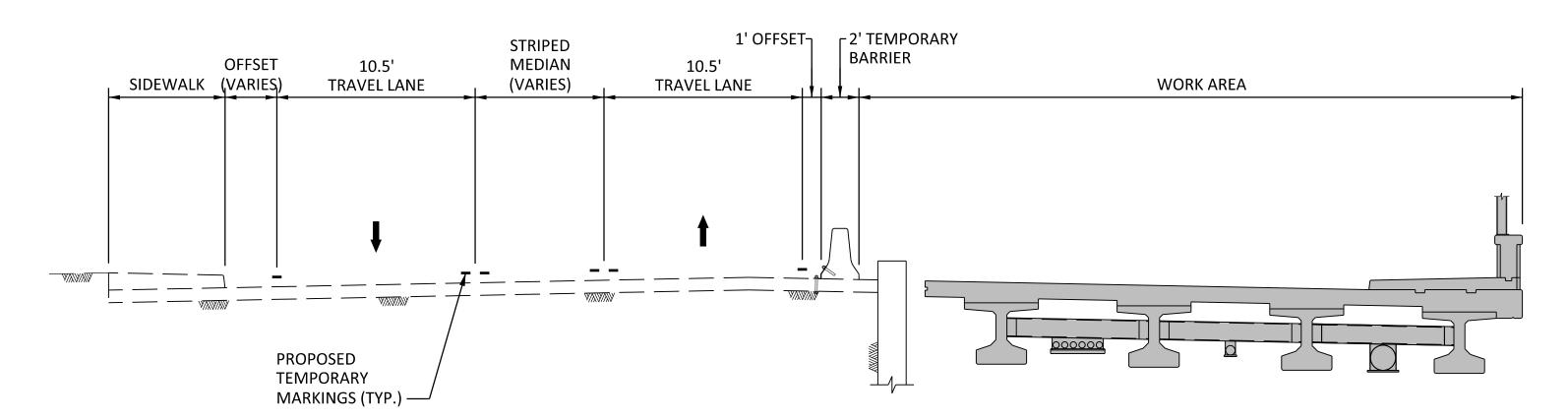
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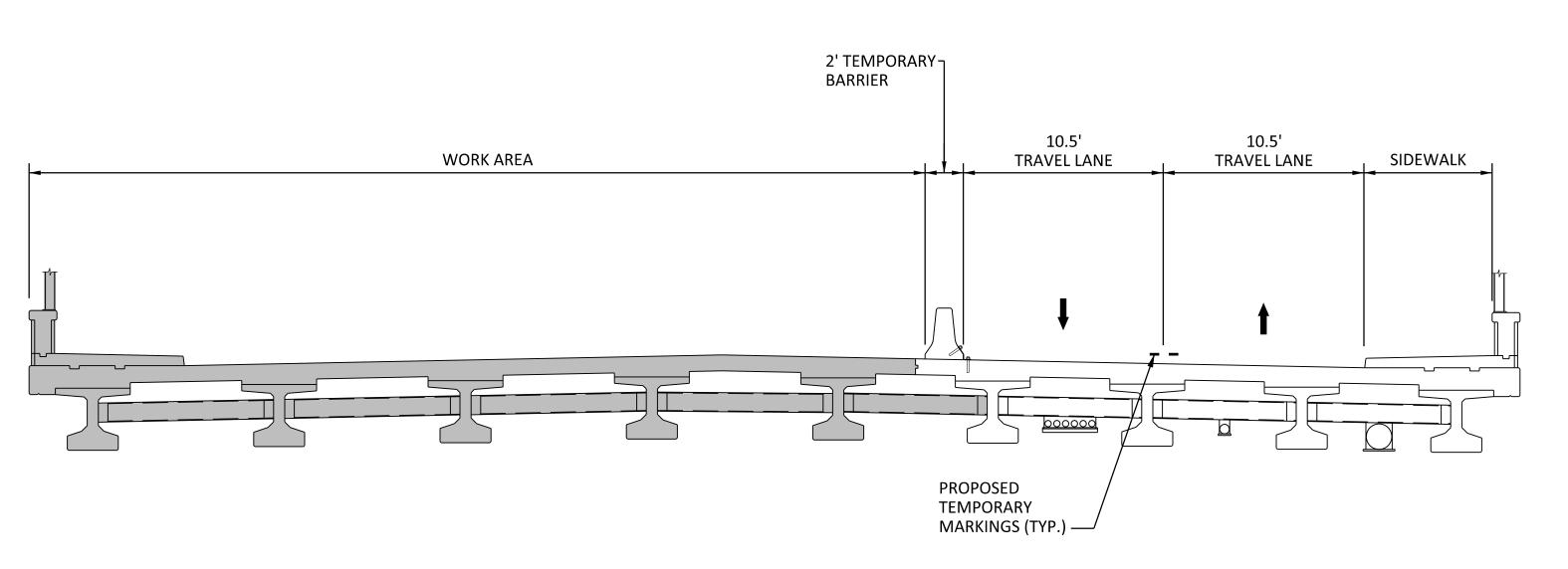
	CON
PRELIMINARY ENGINEERING	T-10
PURPLE LINE LIGHT RAIL	DR
	D I V
MAINTENANCE OF TRAFFIC PLAN	<u> </u>
CONNECTICUT AVENUE	SH
DATE: DECEMBED 2012	7

ONTRACT NO. 1042-0220 DRAWING NO. MT-101 SHEET NO. 7 OF <u>383</u> SCALE: **AS SHOWN** DATE: DECEMBER 2013

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AT COMPLETION OF THE CURRENT STAGE OF CONSTRUCTION AND PRIOR TO BEGINNING THE SUBSEQUENT STAGE UNLESS OTHERWISE NOTED ON PLANS.



#### SECTION A'-A' - STAGE 1



### SECTION B'-B' - STAGE 2

#### MOT CROSS SECTION LEGEND



- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

**-**

- TEMPORARY TRAFFIC FLOW ARROW

- PROPOSED TEMPORARY PAVEMENT MARKING

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SCALE: 1"=5"				
PRELIMINA	RY ENGINEERING		CONTRACT NO. T-1042-0220	
PURPLE	LINE LIGHT RAIL		DRAWING NO.	
MAINTENANCI	E OF TRAFFIC PL	_AN [	MT-102	
JONES MILL ROA	AD – CROSS SEC	CTIONS	SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE	E: AS SHOWN	_8_ of _383	3

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION 

- TEMPORARY PAVING

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW - TYPE III BARRICADE (6 FOOT WIDTH)

- FLAGGER

- IMPACT ATTENUATOR (40 MPH DESIGN SPEED)

- 5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SKIP WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

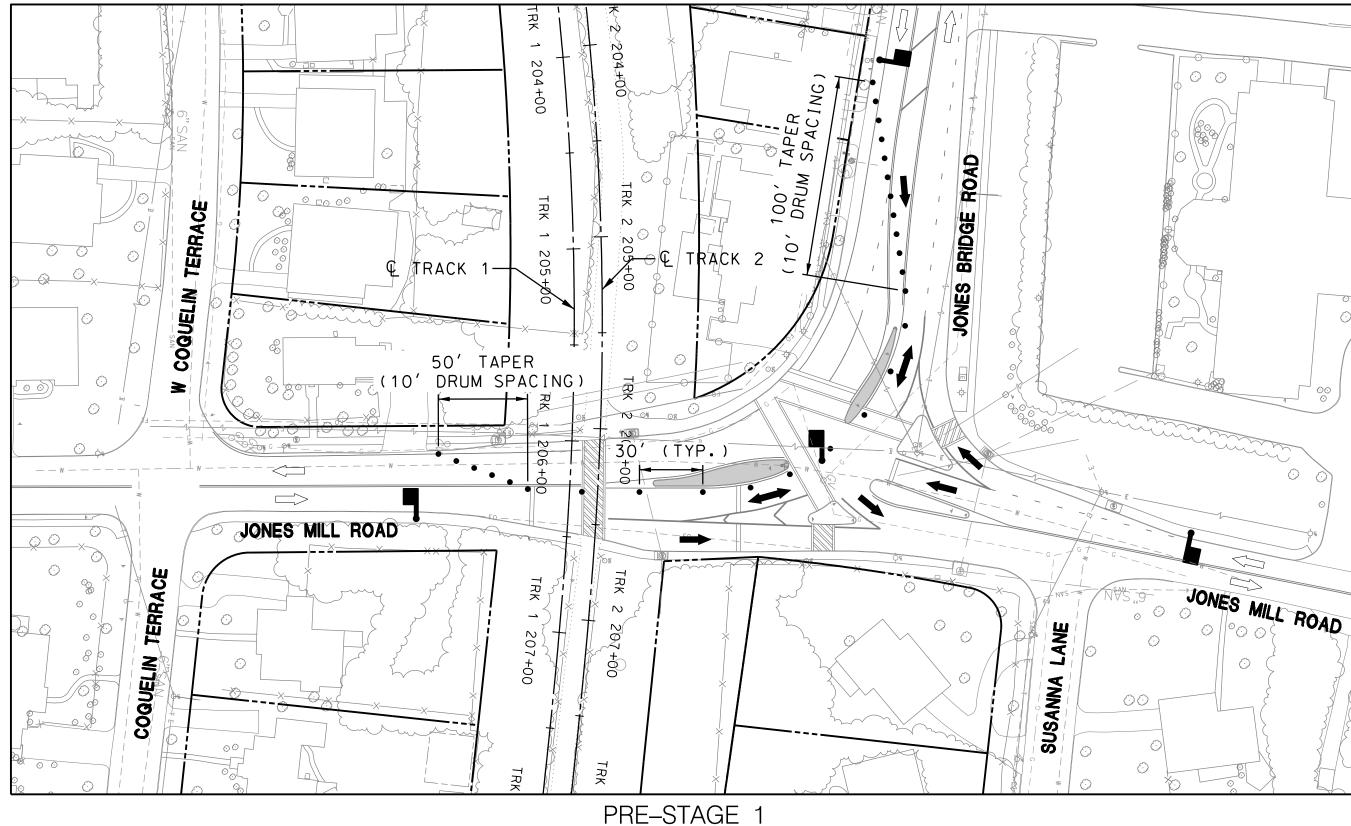
10 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

12 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

- REMOVE EXISTING PAVEMENT MARKING

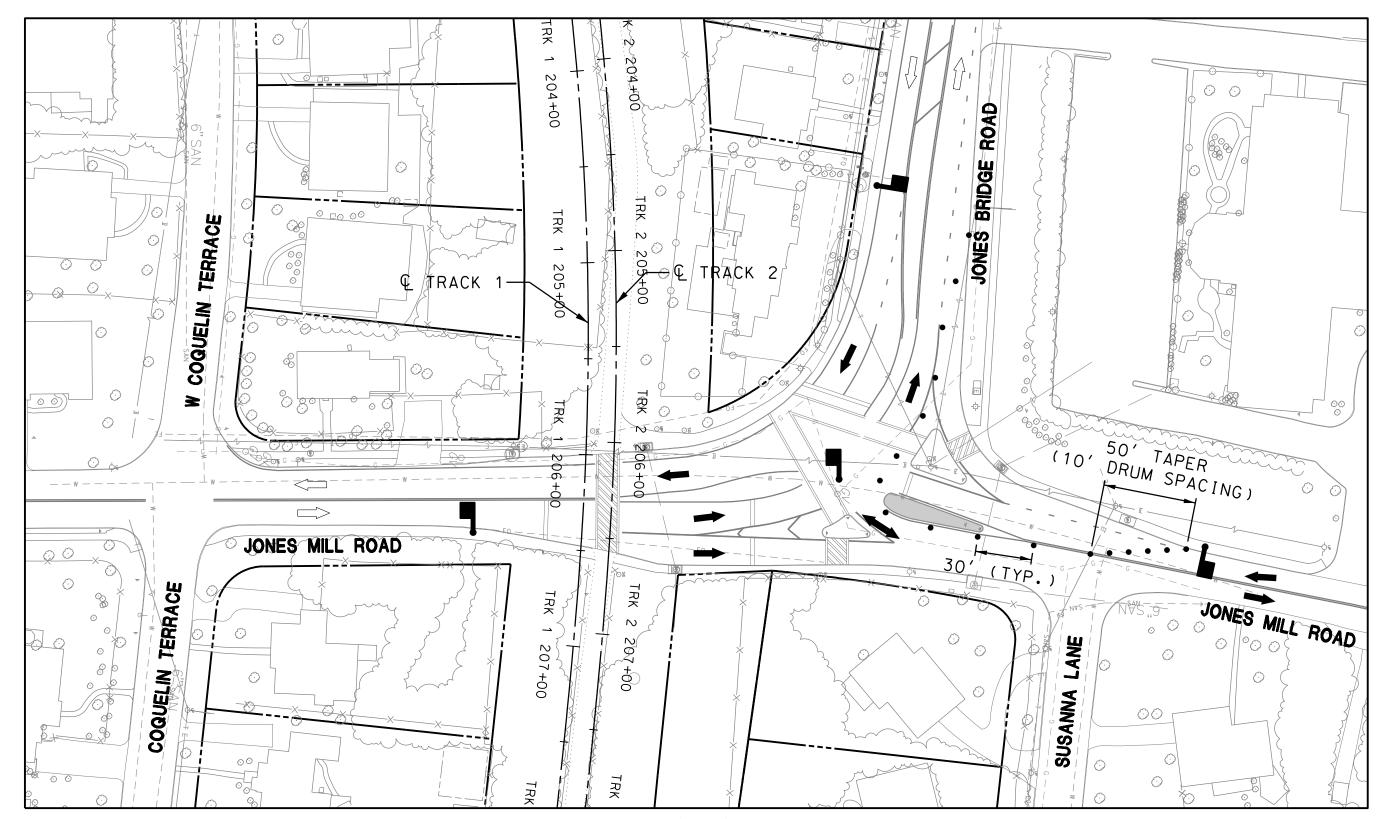


#### GENERAL NOTES:

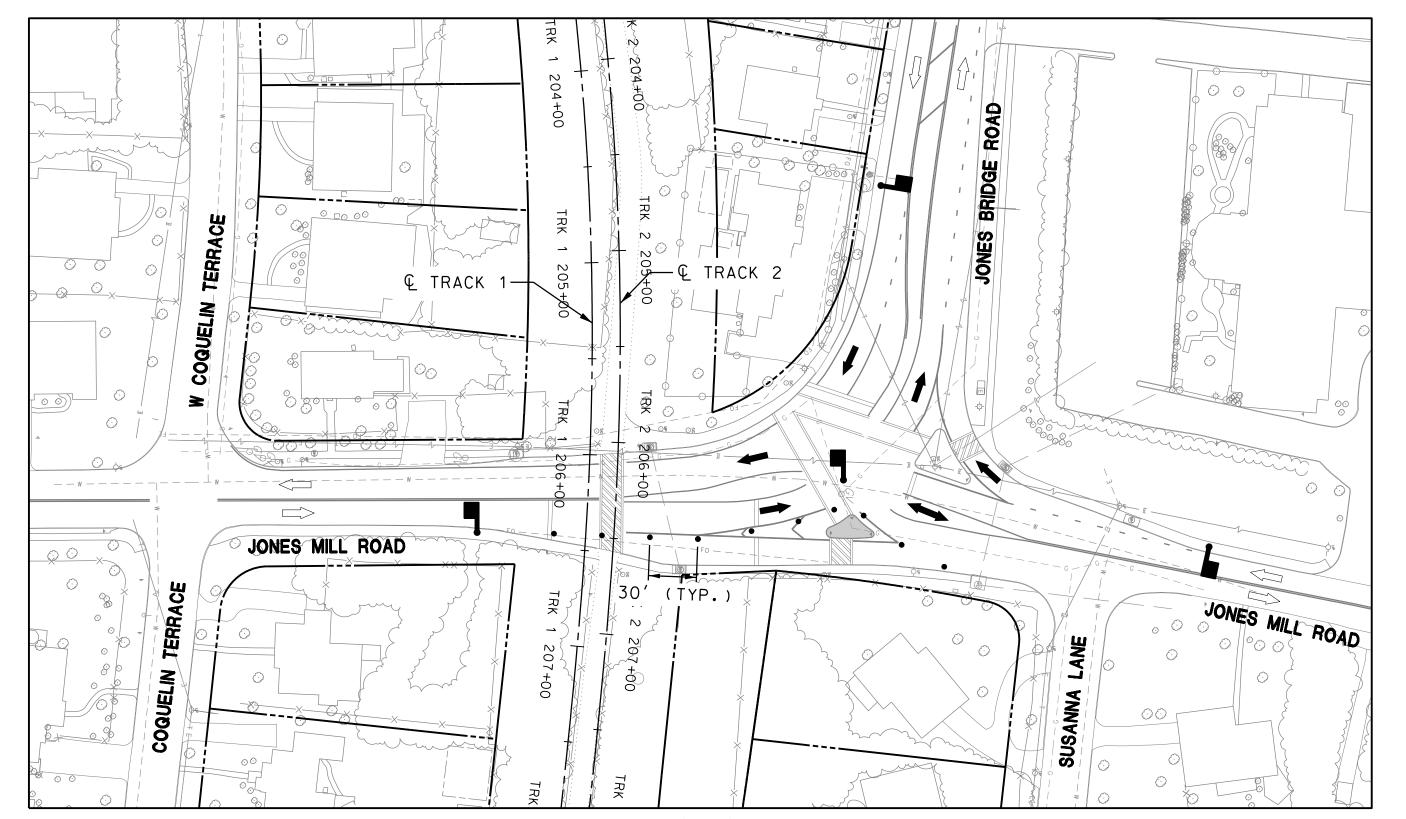
- 1. THE CONTRACTOR SHALL CORRECT ALL PAVEMENT DROP-OFFS RESULTING FROM THE REMOVAL OF THE EXISTING CURB ISLANDS IN ACCORDANCE WITH STANDARD NO. MD 104.01-28 AT THE END OF EACH WORK DAY. DURING NON- WORKING HOURS, DRUMS SHALL BE PLACED TO DELINEATE PAVEMENT DROP-OFFS.
- 2. COORDINATE WITH MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION TO PLACE THE TRAFFIC SIGNAL IN DARK MODE DURING FLAGGING OPERATION.

#### SEQUENCE OF CONSTRUCTION NOTES - PRE-STAGES 1-3:

- 1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH STD. NO. MD 104.02-14 AND MAINTAIN TRAFFIC UNDER FLAGGING OPERATIONS AS SHOWN ON PLANS.
- 2. REMOVE EXISTING CONCRETE ISLANDS AND TEMPORARILY PAVE.



PRE-STAGE 2



PRE-STAGE 3

_				
	30 <i>′</i>	0	30 <i>′</i>	60′
		SCALE:	1 "=30'	_

DATE: DECEMBER 2013

MARYLAND DEPARTMENT OF TRANSPORTATION





<b>Sannett Fleming</b>	
WR84	

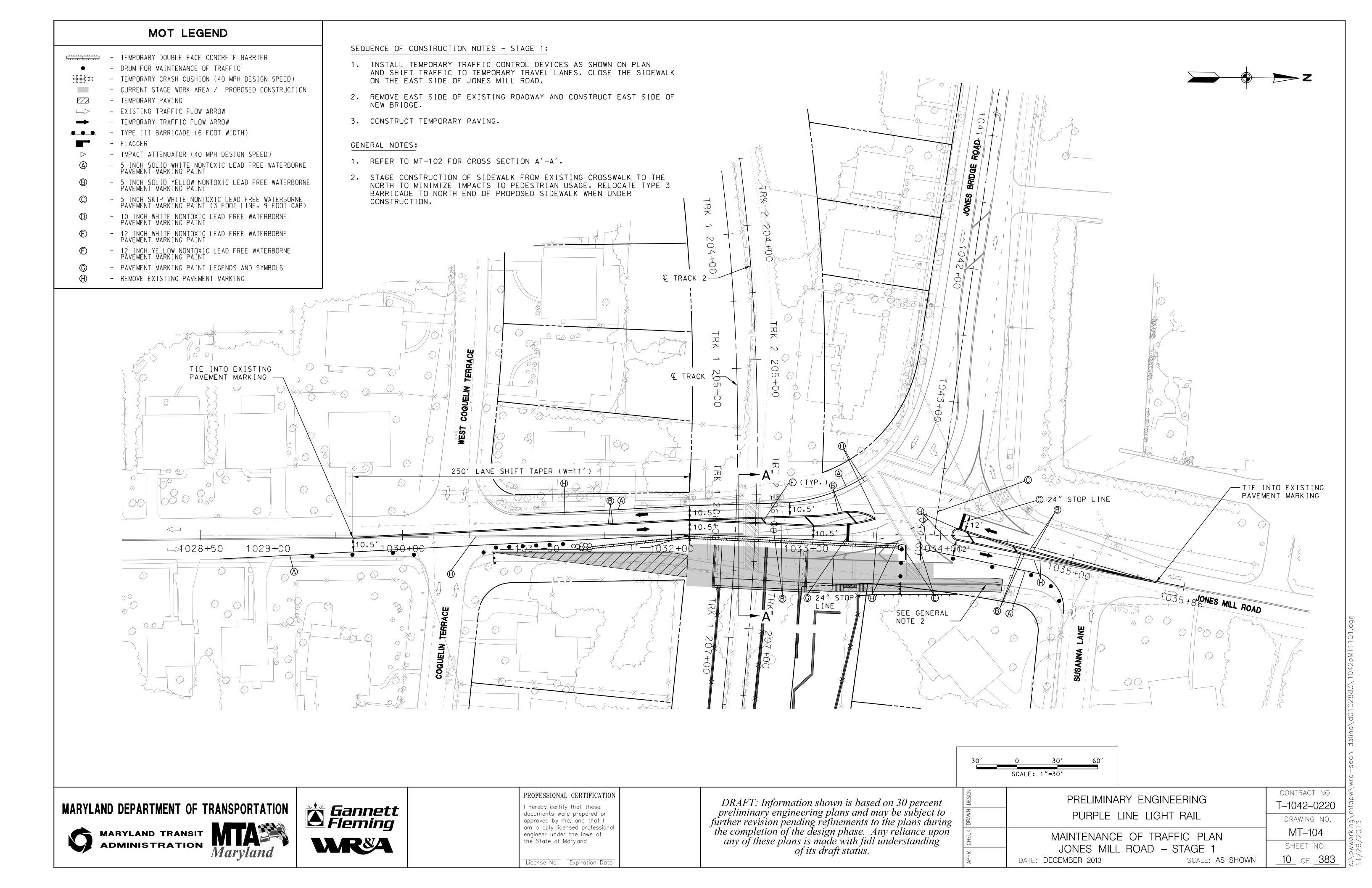
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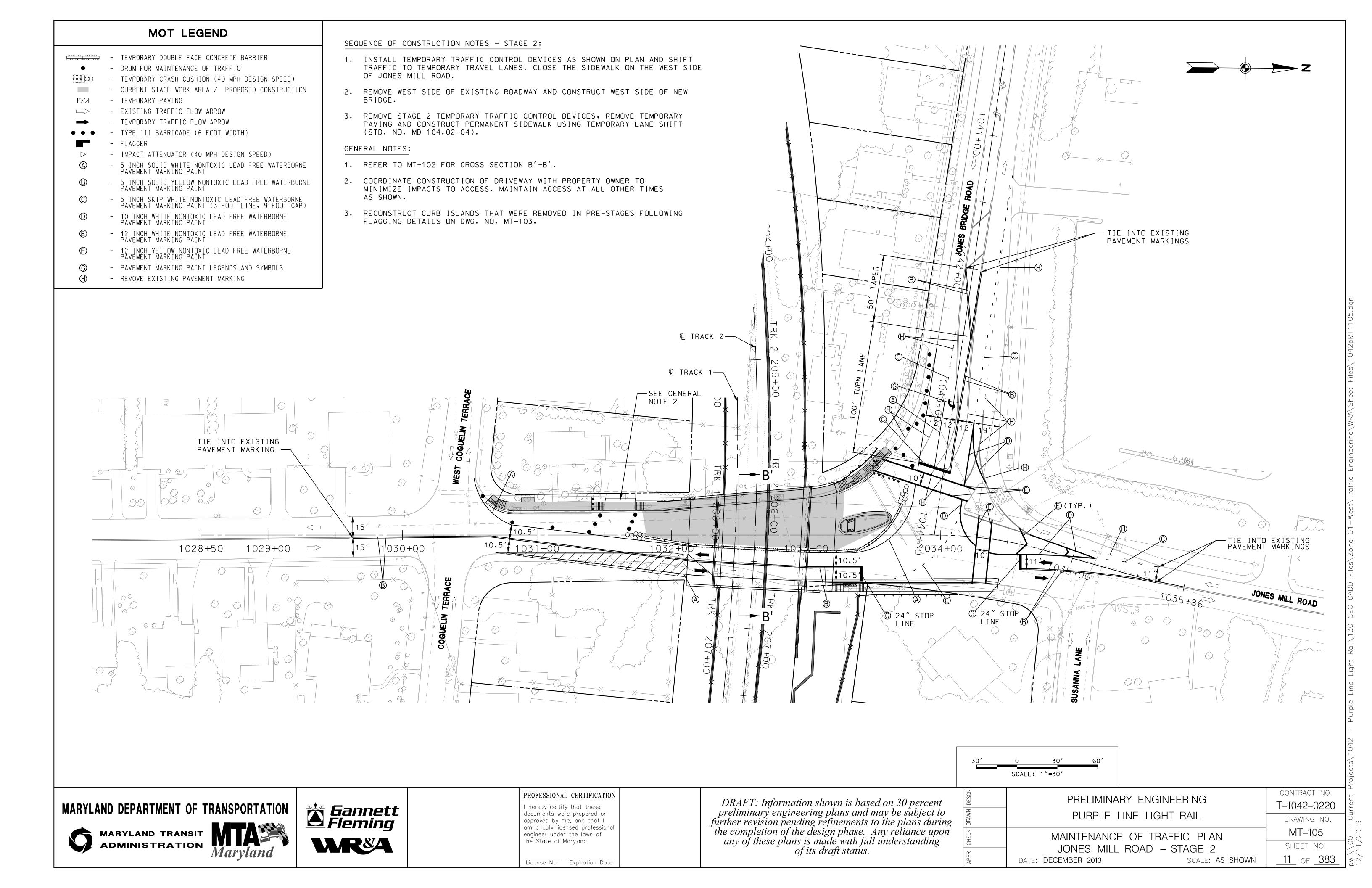
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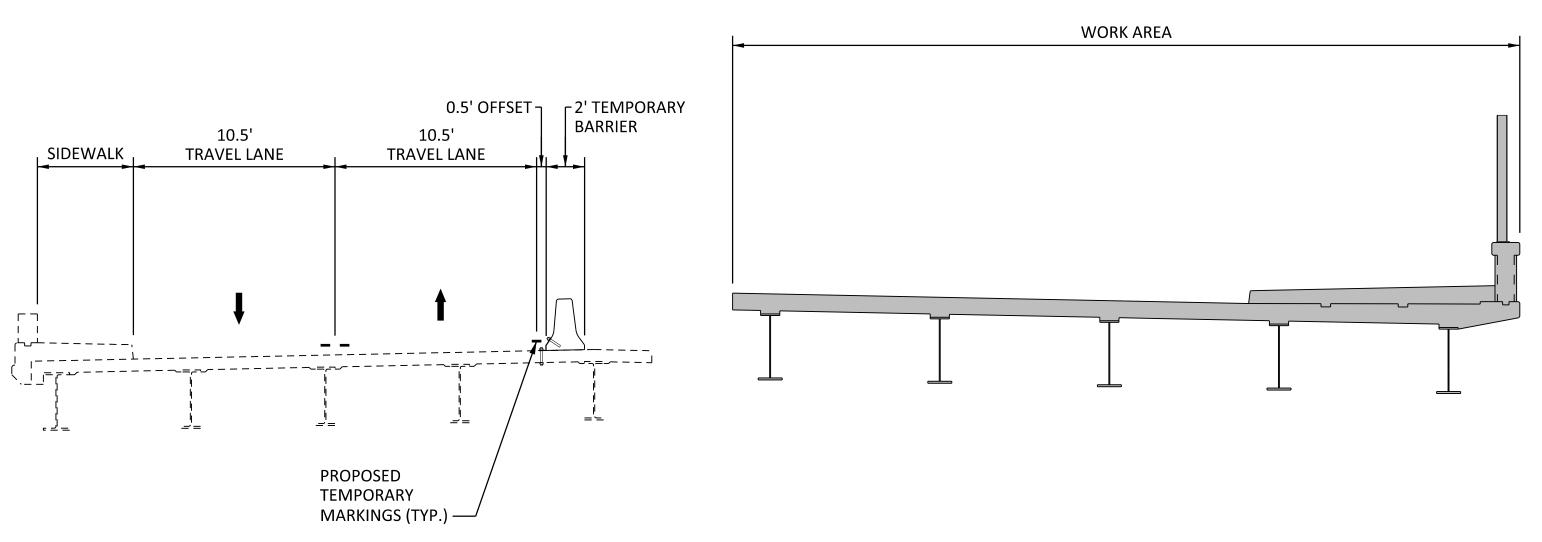
PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN JONES MILL ROAD – PRE-STAGES 1-3

CONTRACT NO. T-1042-0220 DRAWING NO. MT-103 SHEET NO. 9 OF <u>383</u> SCALE: AS SHOWN

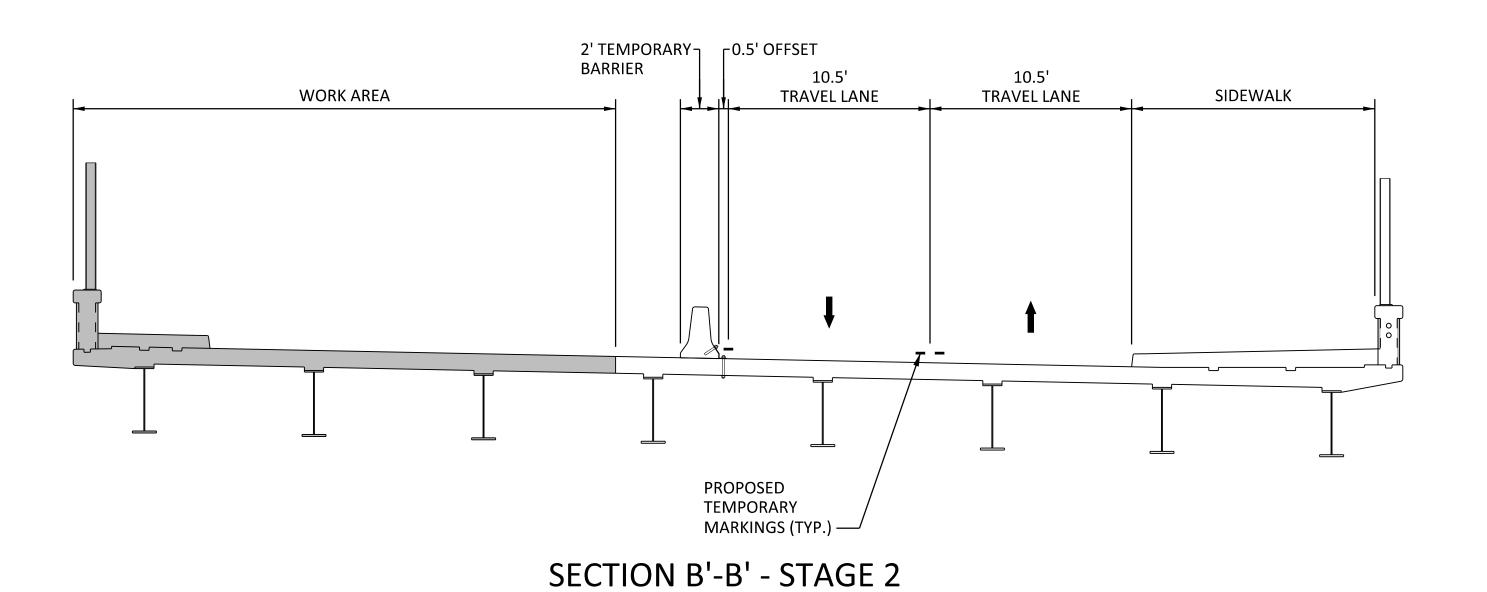




1. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AT COMPLETION OF THE CURRENT STAGE OF CONSTRUCTION AND PRIOR TO BEGINNING THE SUBSEQUENT STAGE UNLESS OTHERWISE NOTED ON PLANS.



#### SECTION A'-A' - STAGE 1



#### MOT CROSS SECTION LEGEND



- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- TEMPORARY TRAFFIC FLOW ARROW

- PROPOSED TEMPORARY PAVEMENT MARKING

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SCALE: 1"=5"			
	ARY ENGINEERING		contract no. T-1042-0220
PURPLE	LINE LIGHT RAIL	-	DRAWING NO.
MAINTENANCI	E OF TRAFFIC PLAN		MT-106
LYTTONSVILLE PL	ACE - CROSS SECTIONS		SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOV</b>	VN	_12_ of _383

## MARYLAND DEPARTMENT OF TRANSPORTATION





**Sannett Fleming** WR84

- TEMPORARY DOUBLE FACE CONCRETE BARRIER

DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

 EXISTING TRAFFIC FLOW ARROW - TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR (40 MPH DESIGN SPEED)

5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH DOTTED WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

- 5 INCH SKIP YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP) - PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

- REMOVE EXISTING PAVEMENT MARKING

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 1:

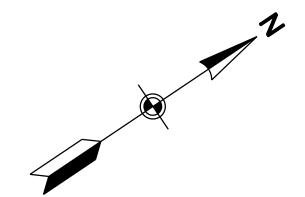
- 1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES.
- 2. CONSTRUCT RETAINING WALL FOR MAINTENANCE YARD.

#### GENERAL NOTES:

**Sannett Fleming** 

WR&A

1. SET FACE OF TEMPORARY CONCRETE BARRIER AT FACE OF EXISTING CURB/ EDGE OF EXISTING PAVEMENT.



CONTRACT NO.

T-1042-0220

DRAWING NO.

MT-107

SHEET NO.

13 OF 383

SCALE: AS SHOWN

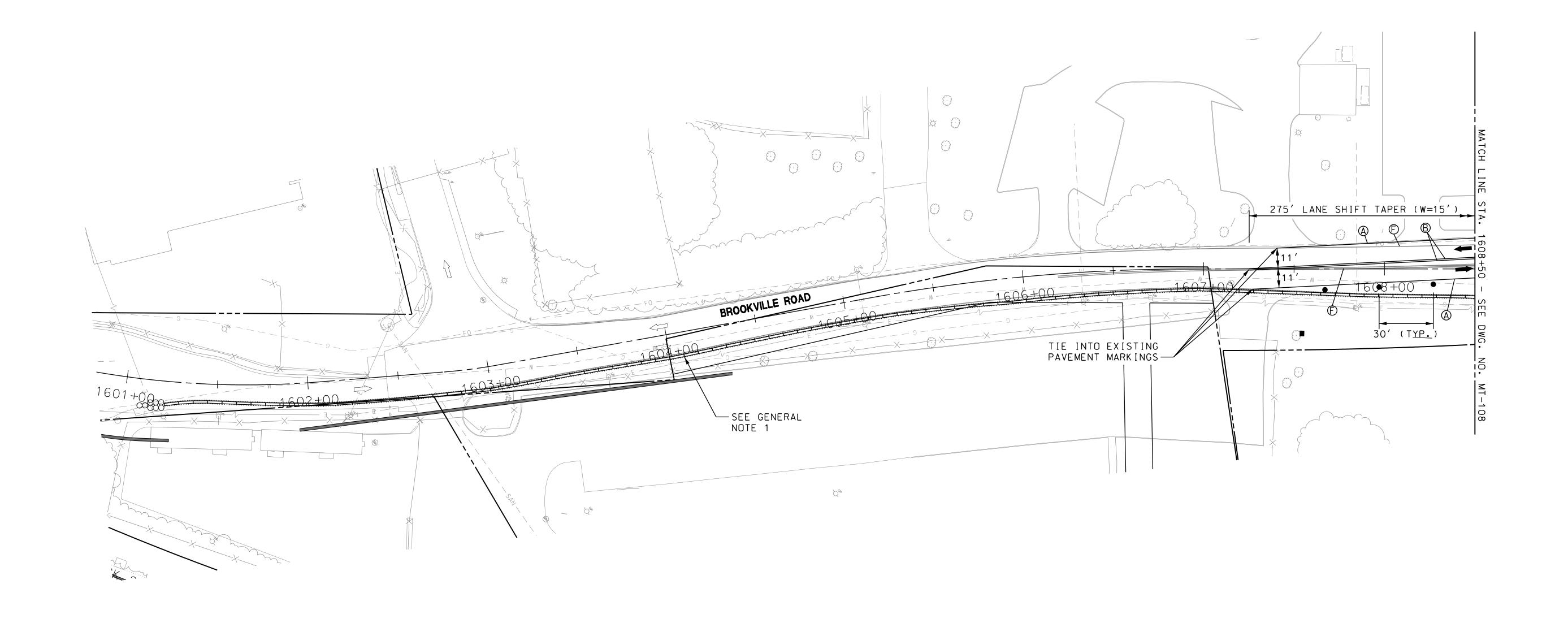
PRELIMINARY ENGINEERING

PURPLE LINE LIGHT RAIL

MAINTENANCE OF TRAFFIC PLAN

LYTTONSVILLE PLACE - STAGE 1

DATE: DECEMBER 2013



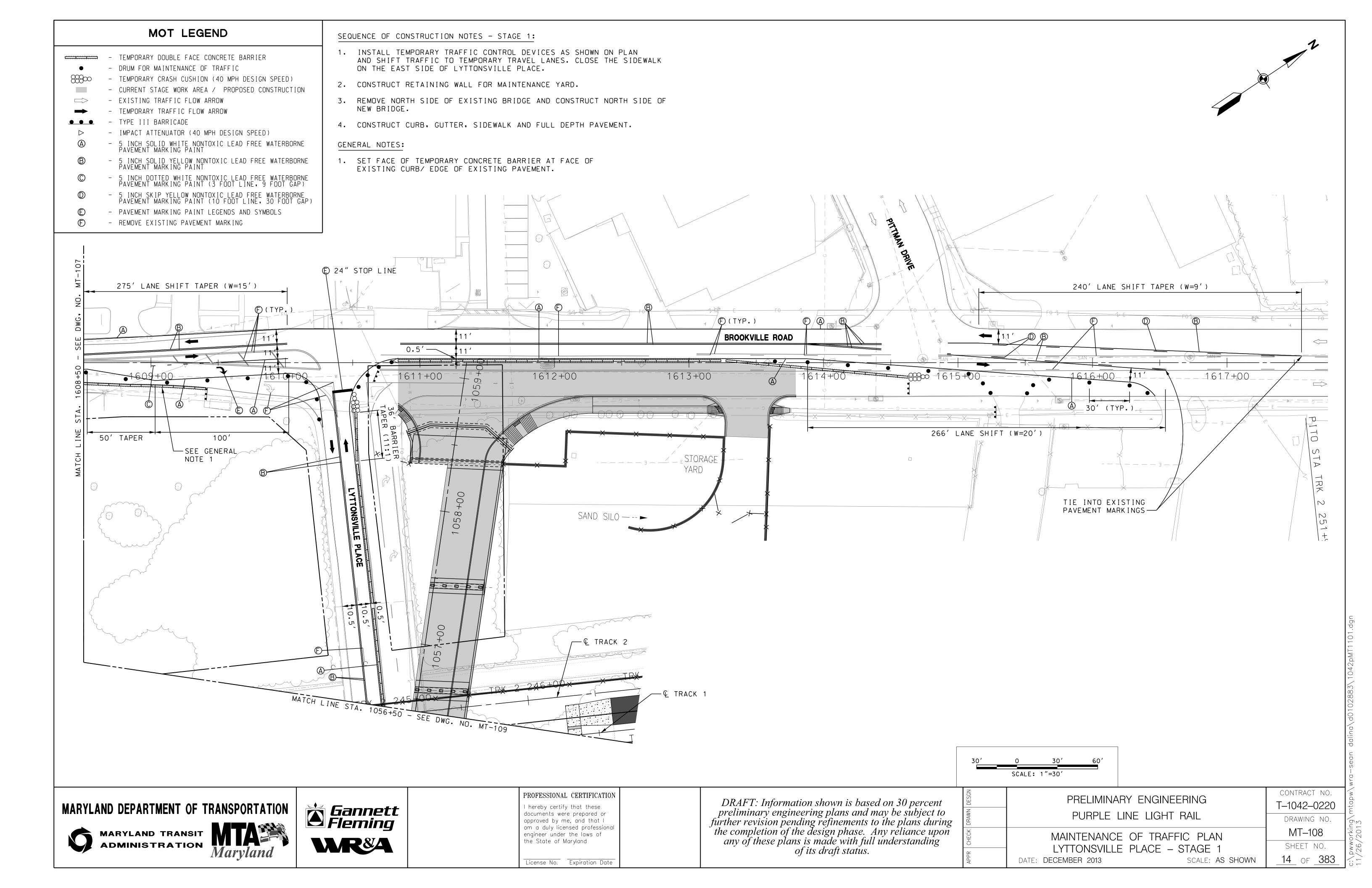
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- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR (40 MPH DESIGN SPEED)

5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH DOTTED WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

- 5 INCH SKIP YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP)

- PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

- REMOVE EXISTING PAVEMENT MARKING

SEQUENCE OF CONSTRUCTION NOTES - STAGE 1:

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES. CLOSE THE SIDEWALK ON THE EAST SIDE OF LYTTONSVILLE PLACE.

2. REMOVE NORTH SIDE OF EXISTING BRIDGE AND CONSTRUCT NORTH SIDE OF NEW BRIDGE.

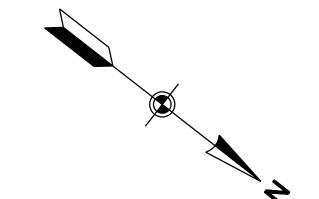
3. CONSTRUCT CURB, GUTTER, SIDEWALK AND FULL DEPTH PAVEMENT.

#### GENERAL NOTES.

**Sannett Fleming** 

WR&A

1. REFER TO MT-106 FOR CROSS SECTION A'-A'.



CONTRACT NO.

T-1042-0220

DRAWING NO.

MT-109

SHEET NO.

15 OF 383

SCALE: AS SHOWN

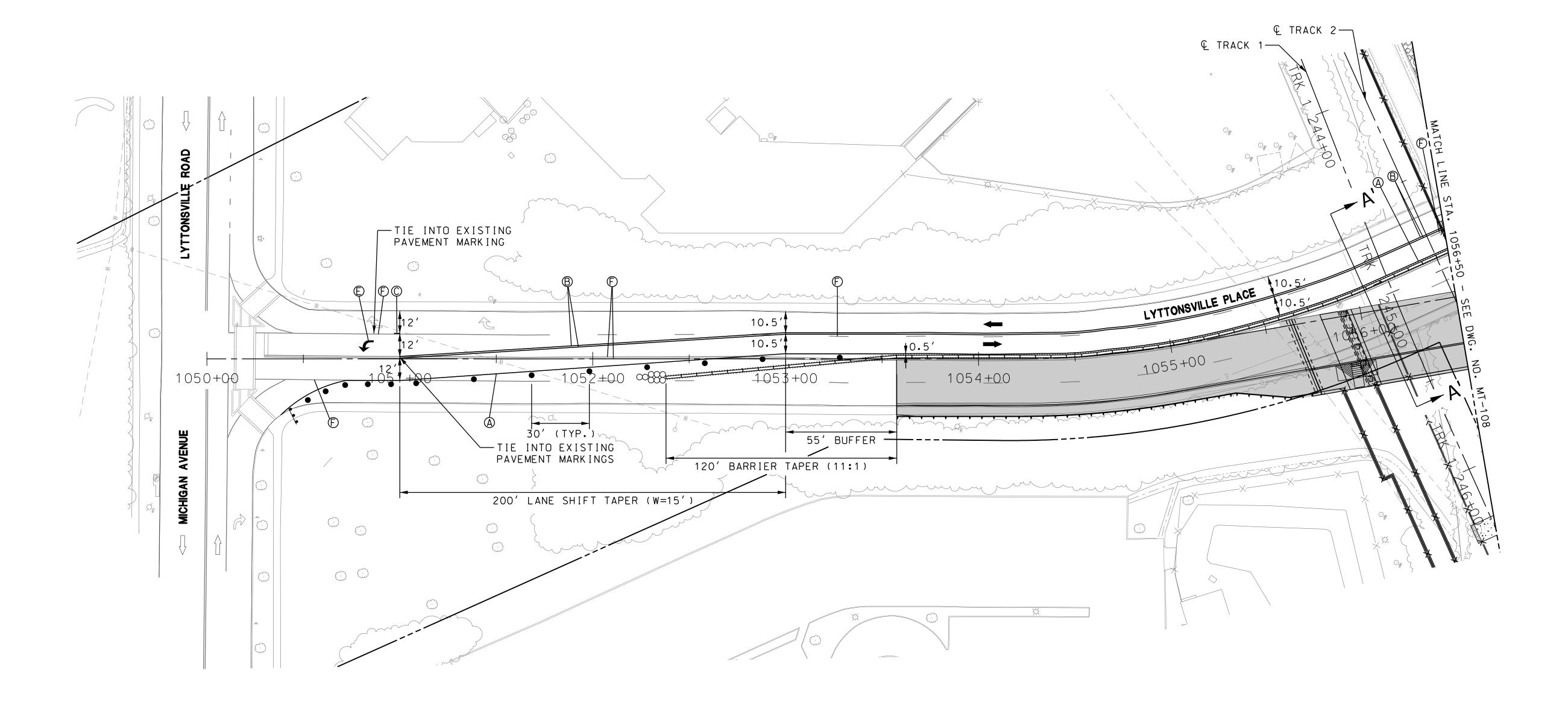
PRELIMINARY ENGINEERING

PURPLE LINE LIGHT RAIL

MAINTENANCE OF TRAFFIC PLAN

LYTTONSVILLE PLACE - STAGE 1

DATE: DECEMBER 2013



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- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- EXISTING TRAFFIC FLOW ARROW

→ TEMPORARY TRAFFIC FLOW ARROW

● ● ● - TYPE III BARRICADE

IMPACT ATTENUATOR (40 MPH DESIGN SPEED)

) - 5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

B - 5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH DOTTED WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

- 5 INCH SKIP YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP)

PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

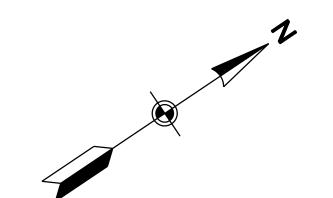
) - REMOVE EXISTING PAVEMENT MARKING

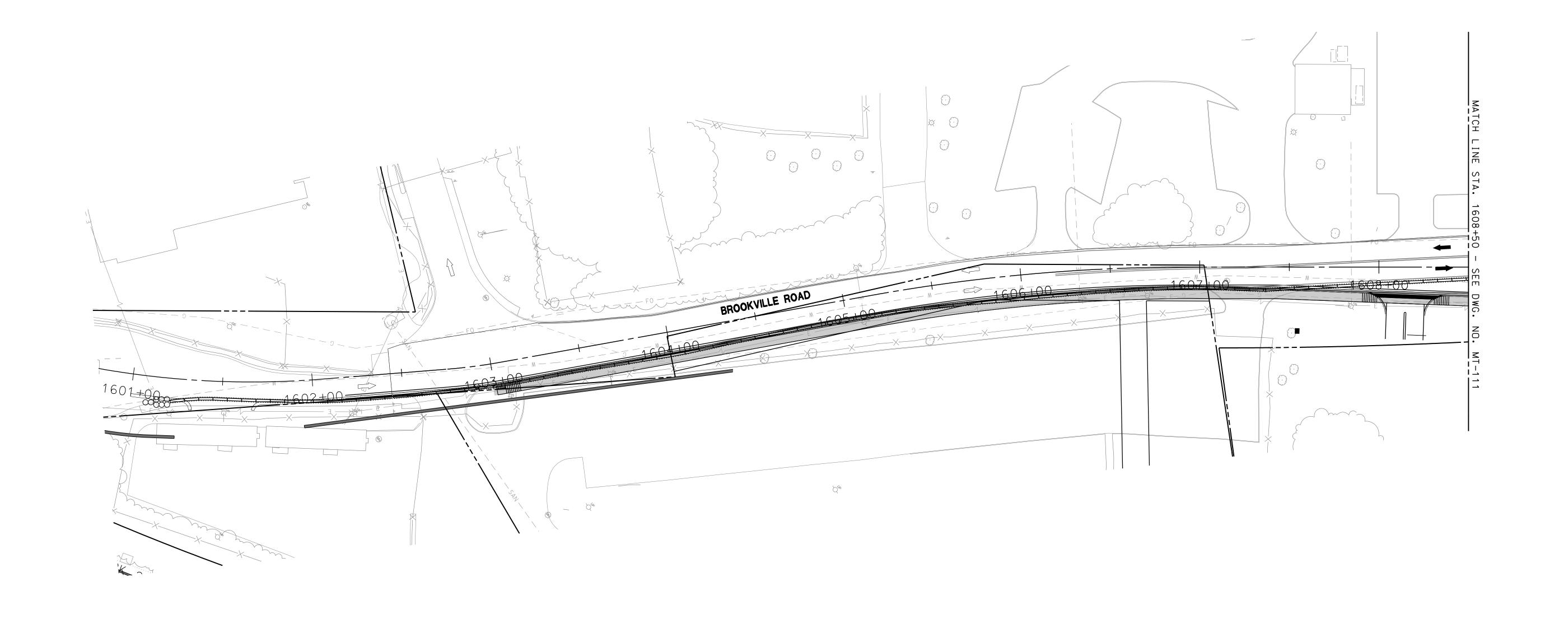
SEQUENCE OF CONSTRUCTION NOTES - STAGE 2:

1. MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES INSTALLED IN STAGE 1 ALONG BROOKVILLE ROAD PRIOR TO STA. 1607+37. INSTALL ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN FROM STA. 1607+37 TO STA. 1616+50. MAINTAIN TRAFFIC IN STAGE 1 TEMPORARY TRAVEL LANES.

2. CONTINUE CONSTRUCTION OF RETAINING WALL FOR MAINTENANCE YARD AND CONSTRUCT CURB, GUTTER AND SIDEWALK FROM STA. 1607+78 TO LYTTONSVILLE ROAD.

3. AFTER COMPLETION OF RETAINING WALL CONSTRUCTION REMOVE TEMPORARY CONCRETE TRAFFIC BARRIER ALONG SOUTH SIDE OF BROOKVILLE ROAD AND CONSTRUCT CURB, GUTTER AND SIDEWALK PRIOR TO STA. 1607+78 UNDER A FLAGGING OPERATION IN ACCORDANCE WITH STANDARD NO. MD 104.02-10. WHEN NOT WORKING MOVE DRUMS USED IN FLAGGING OPERATION TO SOUTH SIDE OF BROOKVILLE ROAD SO THAT TWO TRAVEL LANES ARE MAINTAINED.











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	CONT
PRELIMINARY ENGINEERING	T_10
PURPLE LINE LIGHT RAIL	DRA
	_
MAINTENANCE OF TRAFFIC PLAN	М
LYTTONSVILLE PLACE - STAGE 2	SHE

SCALE: AS SHOWN

DATE: DECEMBER 2013

CONTRACT NO.

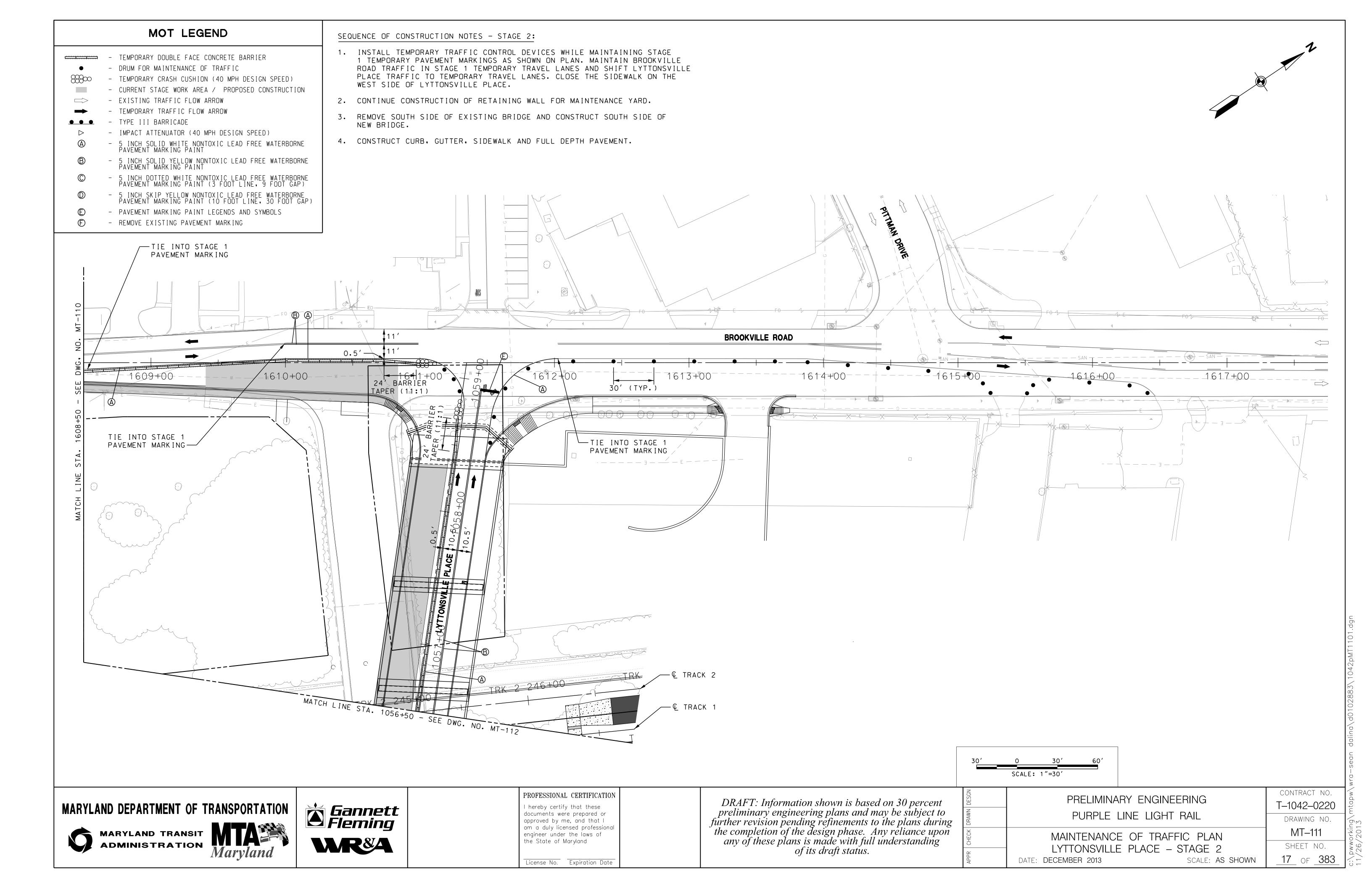
T-1042-0220

DRAWING NO.

MT-110

SHEET NO.

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- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR (40 MPH DESIGN SPEED)

5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH DOTTED WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

- 5 INCH SKIP YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP)

- PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

- REMOVE EXISTING PAVEMENT MARKING

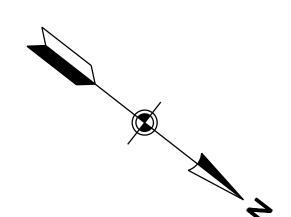
#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 2:

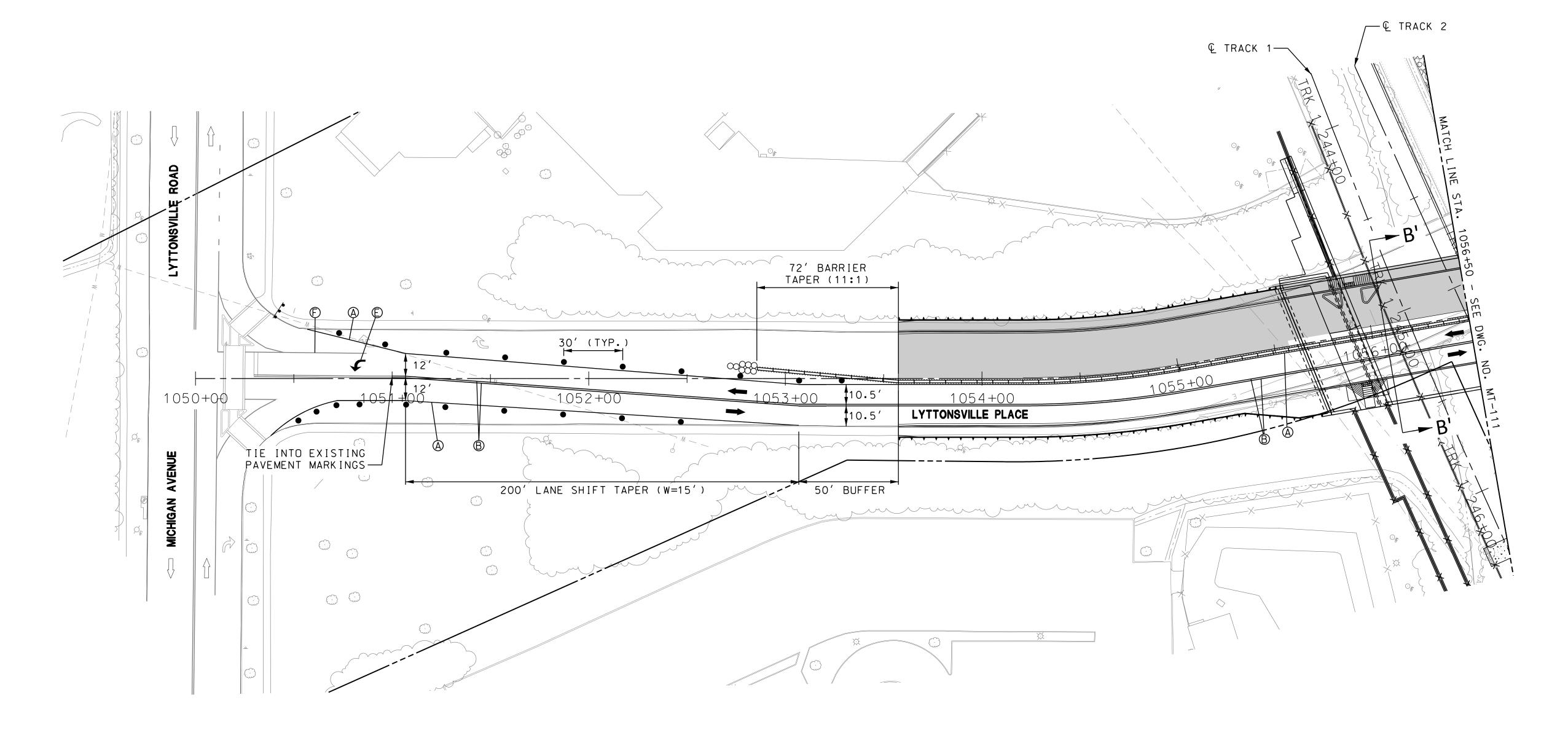
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES. CLOSE SIDEWALK ON THE WEST SIDE OF LYTTONSVILLE PLACE.

- 2. REMOVE SOUTH SIDE OF EXISTING BRIDGE AND CONSTRUCT SOUTH SIDE OF NEW BRIDGE.
- 3. CONSTRUCT CURB, GUTTER, SIDEWALK AND FULL DEPTH PAVEMENT.

#### GENERAL NOTES:

1. REFER TO MT-106 FOR CROSS SECTION B'-B'.













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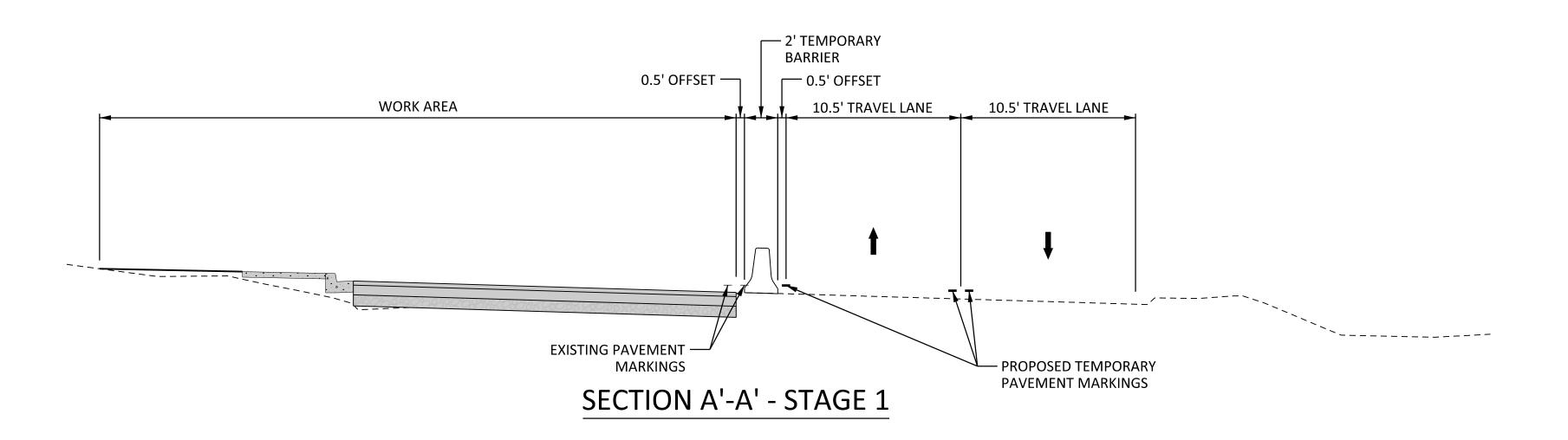
License No. Expiration Date

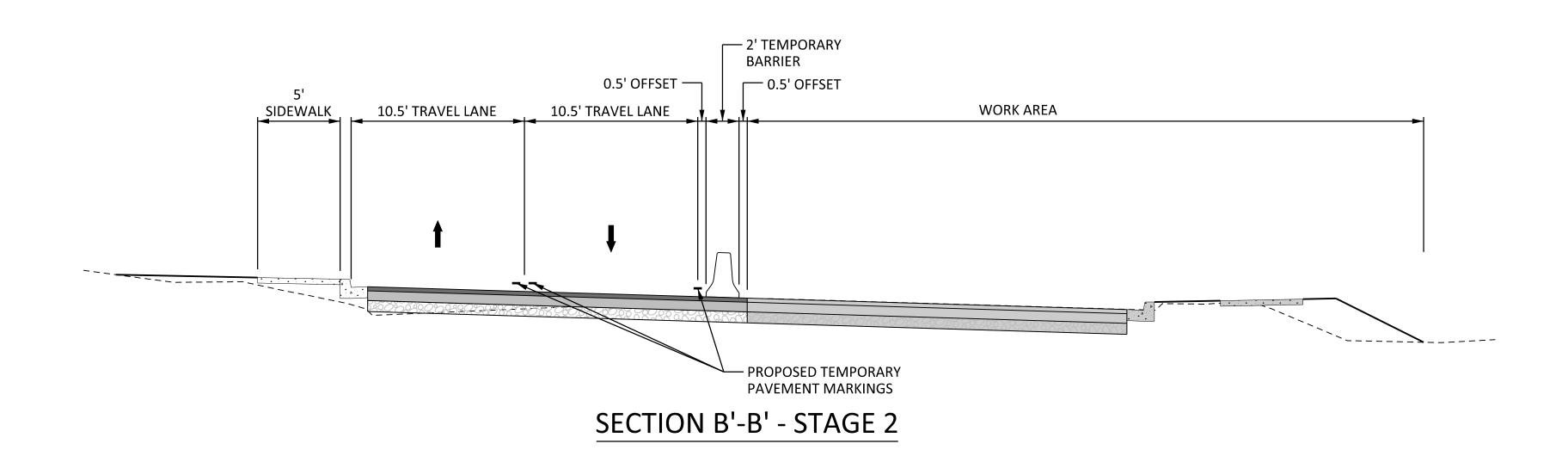
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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	
1 OTTI EE EINE EIOTTI TUNE	drawing no.
MAINTENANCE OF TRAFFIC PLAN	MT-112
LYTTONSVILLE PLACE - STAGE 2	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	<u>18</u> of <u>383</u>

SCALE: 1"=30'

1. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AT COMPLETION OF THE CURRENT STAGE OF CONSTRUCTION AND PRIOR TO BEGINNING THE SUBSEQUENT STAGE UNLESS OTHERWISE NOTED ON PLANS.





#### MOT CROSS SECTION LEGEND

- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- TEMPORARY TRAFFIC FLOW ARROW

- PROPOSED TEMPORARY PAVEMENT MARKING

EXISTING PAVEMENT MARKING / EXISTING TEMPORARY PAVEMENT MARKING

PROFESSIONAL CERTIFICATION

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<u>.</u> )	PRELIMINARY ENGINEERING	CONTRACT NO.
7	PRELIMINARY ENGINEERING	T-1042-0220
	PURPLE LINE LIGHT RAIL	DRAWING NO.
)	MAINTENANCE OF TRAFFIC PLAN	MT-201
,	STEWART AVENUE - CROSS SECTIONS	SHEET NO.

DATE: DECEMBER 2013

19 OF 383

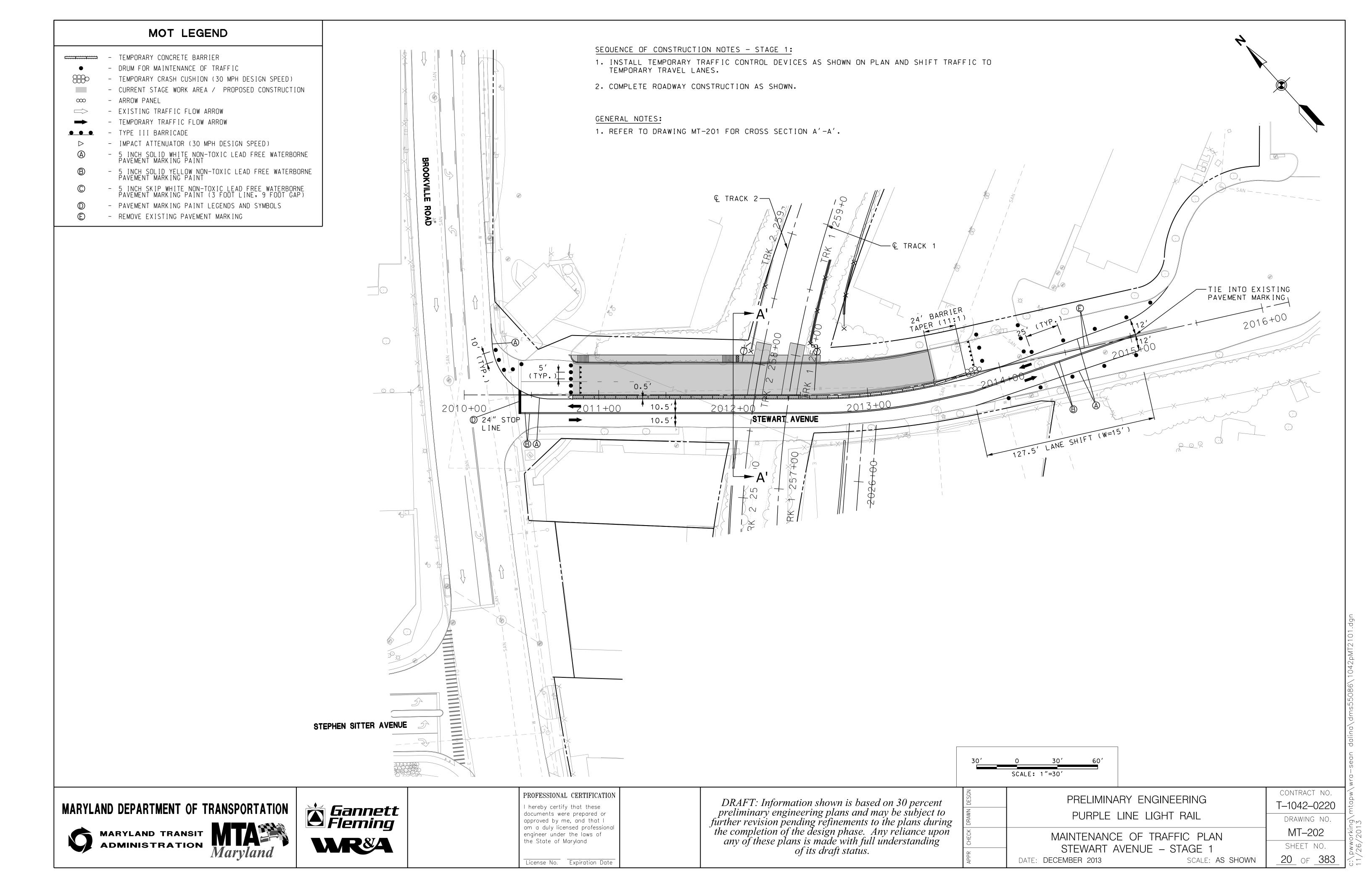
SCALE: AS SHOWN

### MARYLAND DEPARTMENT OF TRANSPORTATION









- TEMPORARY CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (30 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL  $\infty$ 

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR (30 MPH DESIGN SPEED)

5 INCH SOLID WHITE NON-TOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH SOLID YELLOW NON-TOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH SKIP WHITE NON-TOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

- PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

- REMOVE EXISTING PAVEMENT MARKING

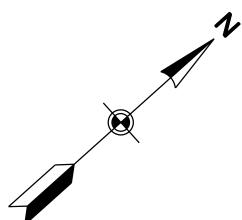
#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 1A:

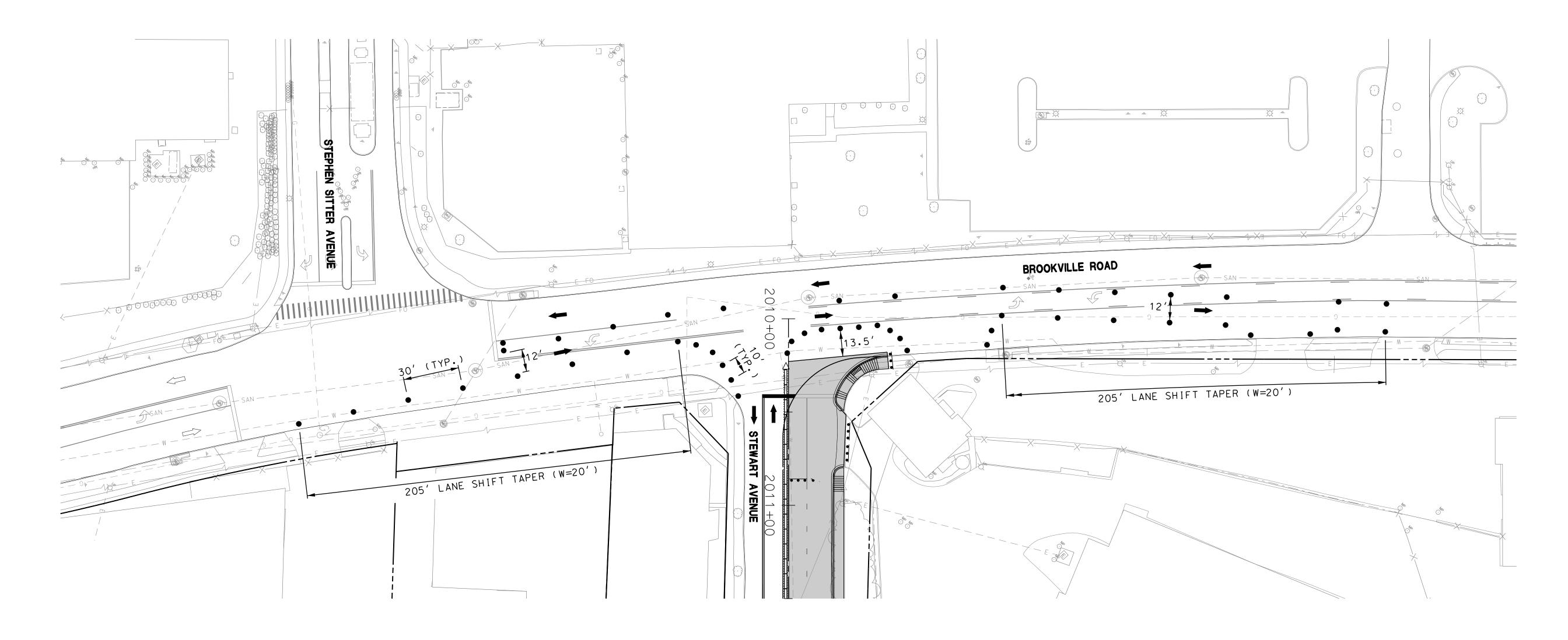
1. MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES INSTALLED IN STAGE 1 ALONG STEWART AVE.

2. DURING OFF PEAK HOURS INSTALL ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND IN ACCORDANCE WITH STANDARD NO. MD 104.02-04 AND COMPLETE ROADWAY CONSTRUCTION IN FRONT OF DRIVEWAY AND AT STEWART AVENUE AND BROOKVILLE ROAD INTERSECTION.

#### GENERAL NOTES:

1. THE CONTRACTOR SHALL CORRECT ALL PAVEMENT DROP-OFFS RESULTING FROM THE REMOVAL OF PAVEMENT IN ACCORDANCE WITH STANDARD NO. MD 104.01-28 AT THE END OF EACH WORK DAY. DURING NON-WORKING HOURS, DRUMS SHALL BE PLACED TO DELINEATE PAVEMENT DROP-OFFS.













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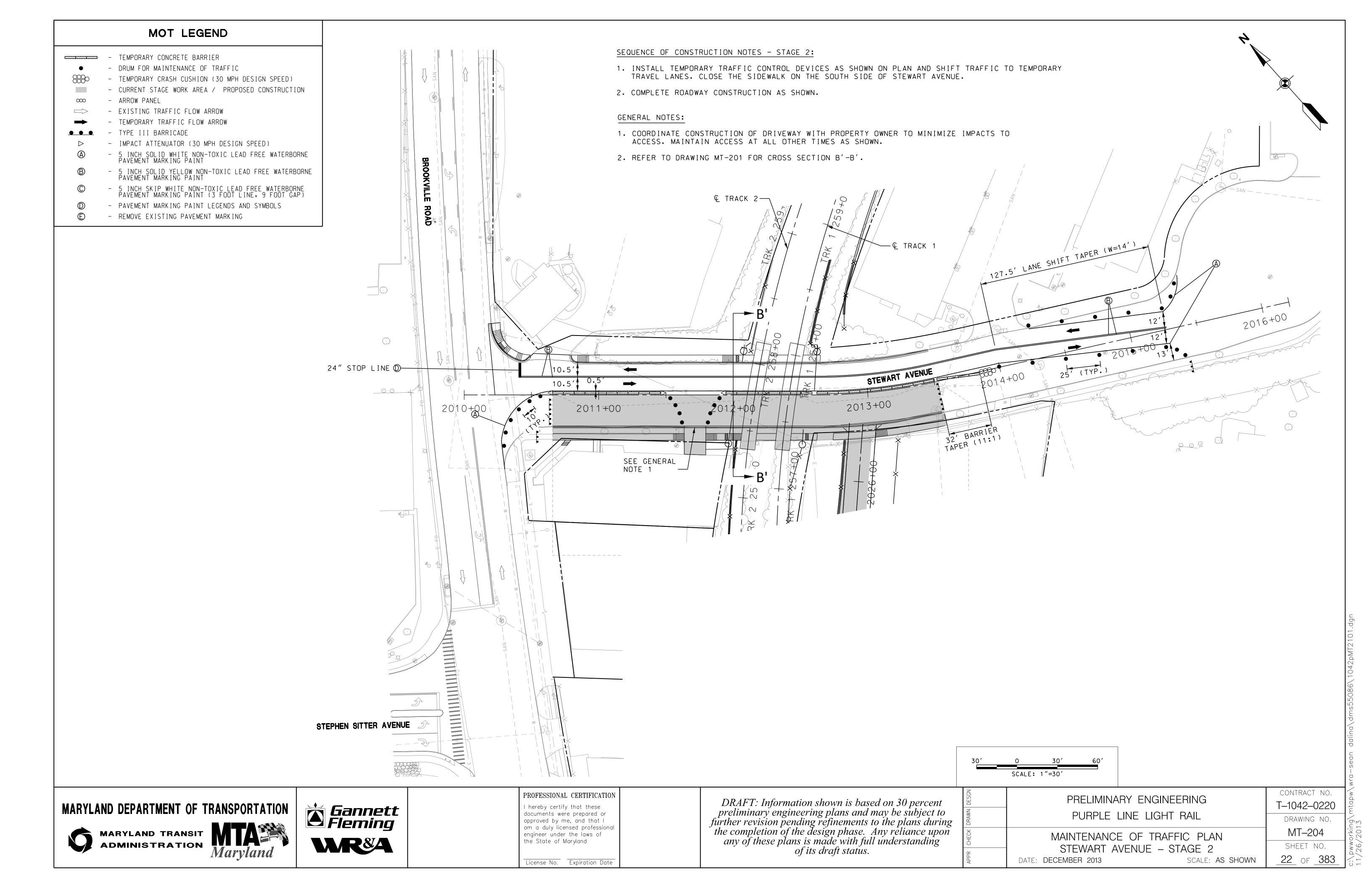
PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN

DATE: DECEMBER 2013

STEWART AVENUE - STAGE 1A

SCALE: AS SHOWN

CONTRACT NO. T-1042-0220 DRAWING NO. MT-203 SHEET NO. 21 OF 383



- TEMPORARY CONCRETE BARRIER
  - DRUM FOR MAINTENANCE OF TRAFFIC
  - O TEMPORARY CRASH CUSHION (30 MPH DESIGN SPEED)
- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION
- ∞ ARROW PANEL
  - EXISTING TRAFFIC FLOW ARROW
- TEMPORARY TRAFFIC FLOW ARROW
- ◆ ◆ ◆ 

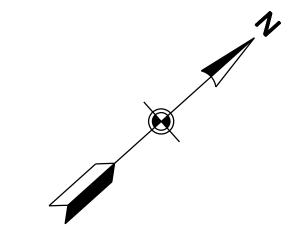
   TYPE III BARRICADE
- → IMPACT ATTENUATOR (30 MPH DESIGN SPEED)
- OF THE SOLID YELLOW NON-TOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT
- 5 INCH SKIP WHITE NON-TOXIC LEAD FREE WATERBORNE
  PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)
- PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS
- REMOVE EXISTING PAVEMENT MARKING

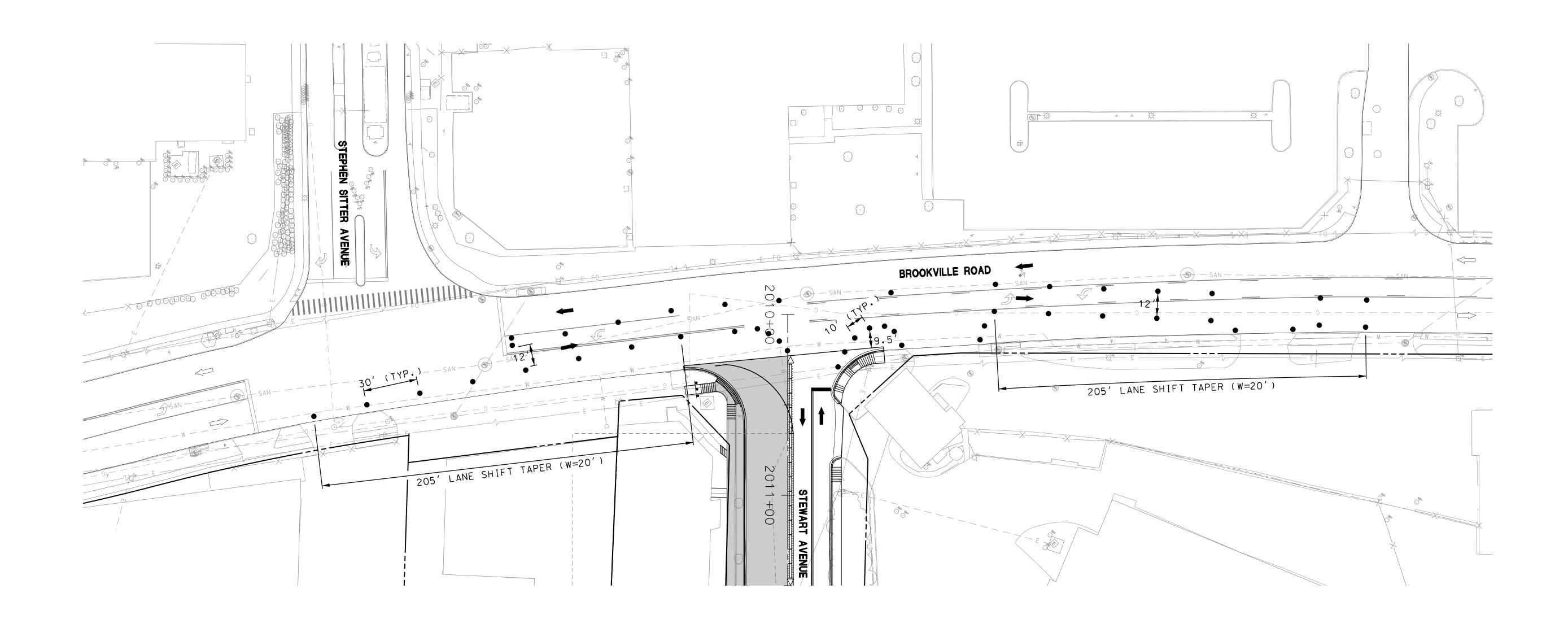
#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 2A:

- 1. MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES INSTALLED IN STAGE 2 ALONG STEWART AVENUE.
- 2. DURING OFF PEAK HOURS INSTALL ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND IN ACCORDANCE WITH STANDARD NO. MD 104.02-04 AND COMPLETE ROADWAY CONSTRUCTION AT THE STEWART AVENUE AND BROOKVILLE ROAD INTERSECTION.

#### GENERAL NOTES:

1. THE CONTRACTOR SHALL CORRECT ALL PAVEMENT DROP-OFFS RESULTING FROM THE REMOVAL OF PAVEMENT IN ACCORDANCE WITH STANDARD NO. MD 104.01-28 AT THE END OF EACH WORK DAY. DURING NON- WORKING HOURS, DRUMS SHALL BE PLACED TO DELINEATE PAVEMENT DROP-OFFS.





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PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN STEWART AVENUE – STAGE 2A

SCALE: 1"=30'

DATE: DECEMBER 2013

C PLAN

GE 2A

SCALE: AS SHOWN

CONTRACT NO.

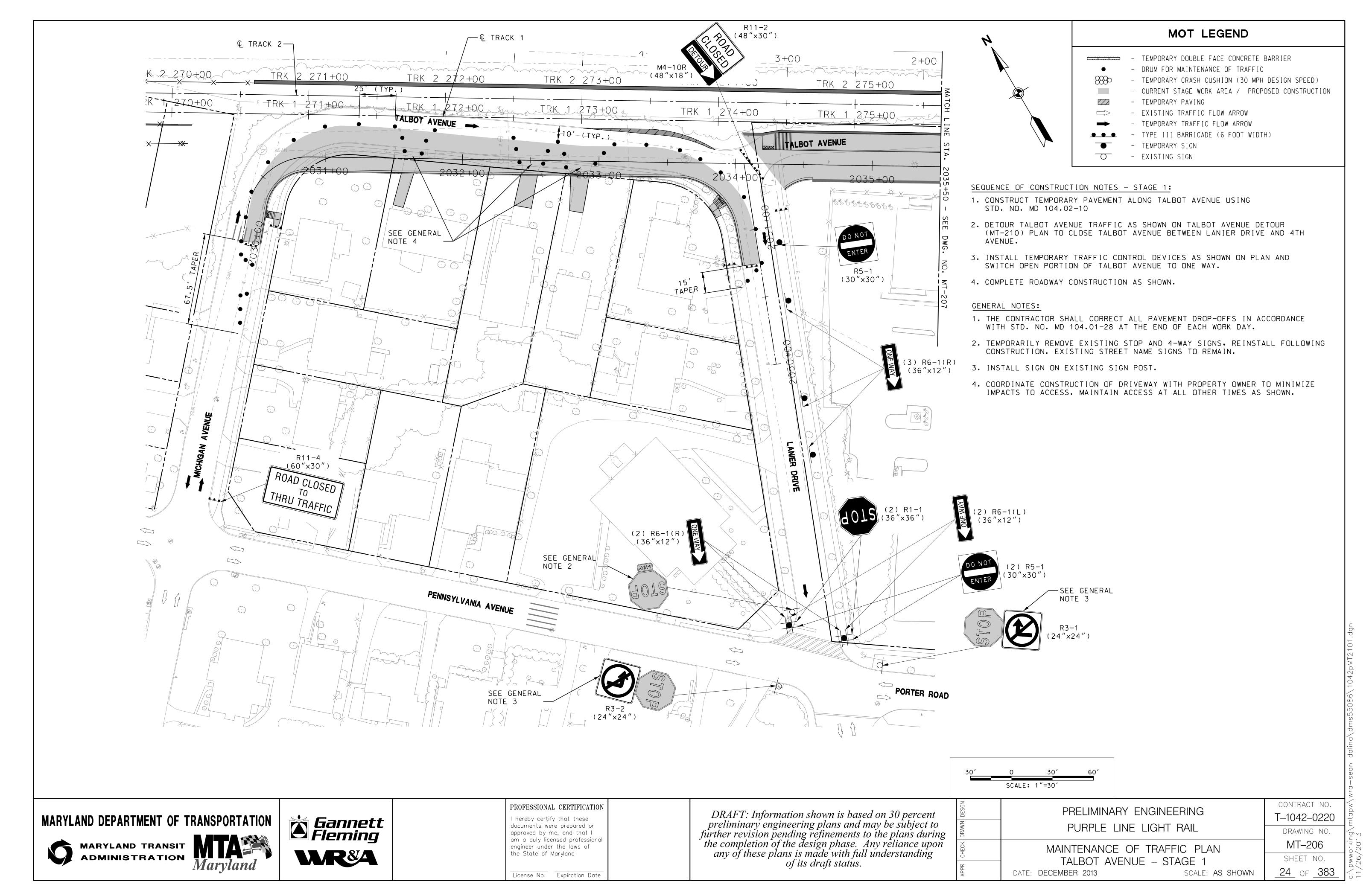
T-1042-0220

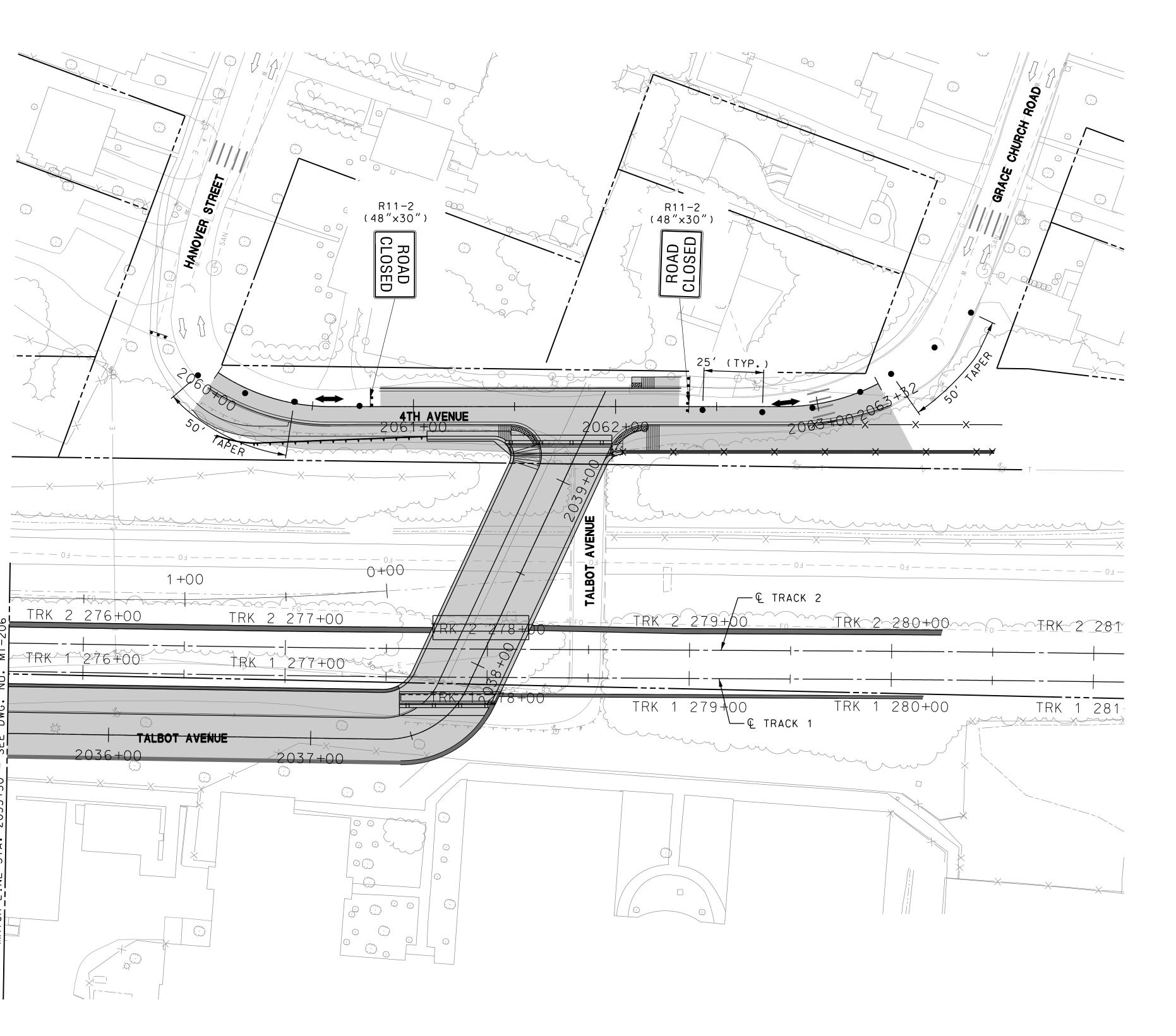
DRAWING NO.

MT-205

SHEET NO.

23 OF 383





- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC - TEMPORARY CRASH CUSHION (30 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION - TEMPORARY PAVING

EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW - TYPE III BARRICADE (6 FOOT WIDTH)

- TEMPORARY SIGN - EXISTING SIGN

#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 1:

- 1. DETOUR TALBOT AVENUE TRAFFIC AS SHOWN ON TALBOT AVENUE DETOUR PLAN (MT-210) TO CLOSE TALBOT AVENUE BETWEEN LANIER DRIVE AND 4TH AVENUE.
- 2. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN.
- 3. COMPLETE ROADWAY AND BRIDGE CONSTRUCTION AS SHOWN

#### GENERAL NOTES:

1. THE CONTRACTOR SHALL CORRECT ALL PAVEMENT DROP OFFS IN ACCORDANCE WITH STD. NO. MD 104.01-28 AT THE END OF EACH WORK DAY.

SCALE: 1"=30'

MARYLAND DEPARTMENT OF TRANSPORTATION

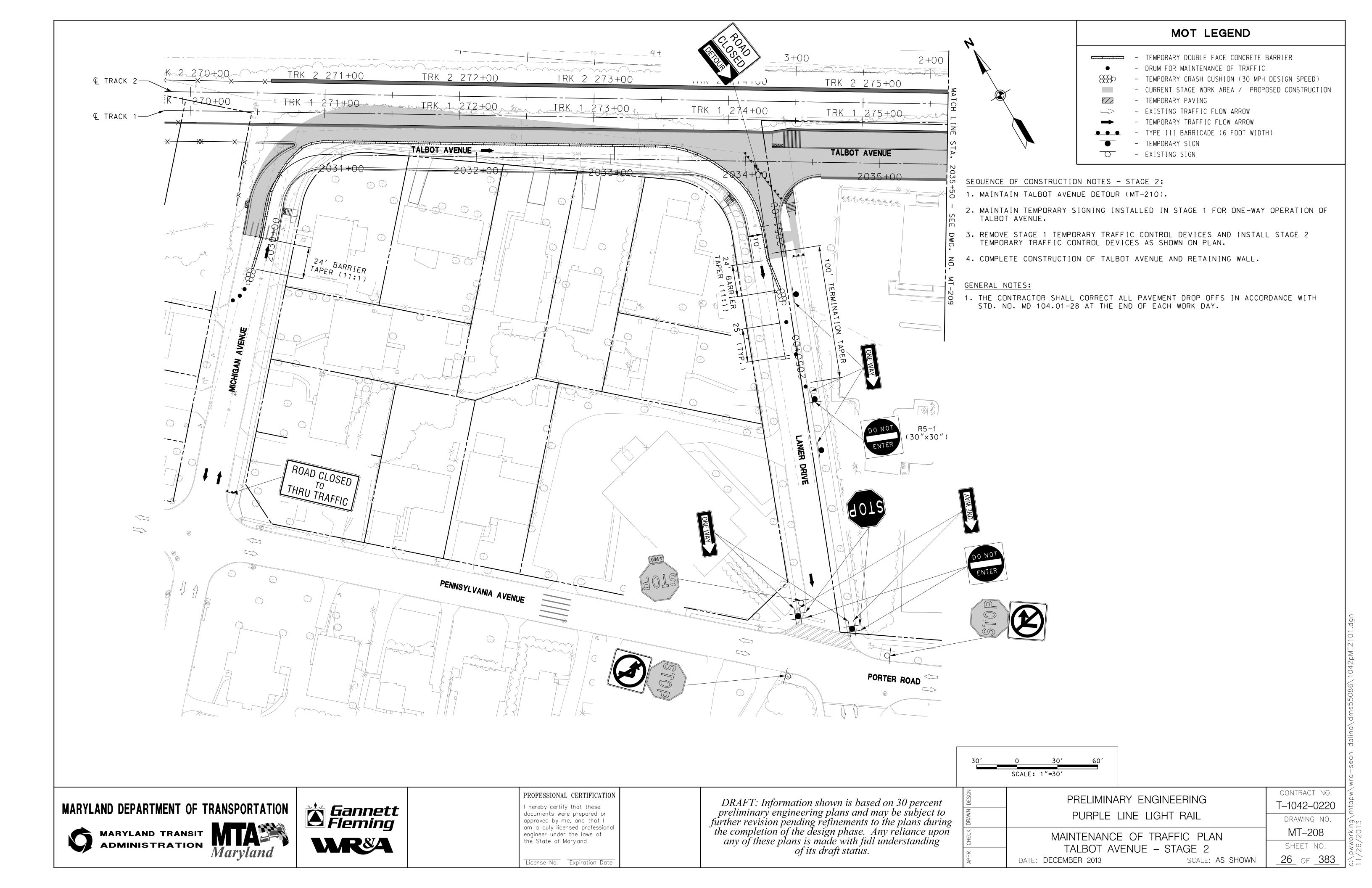


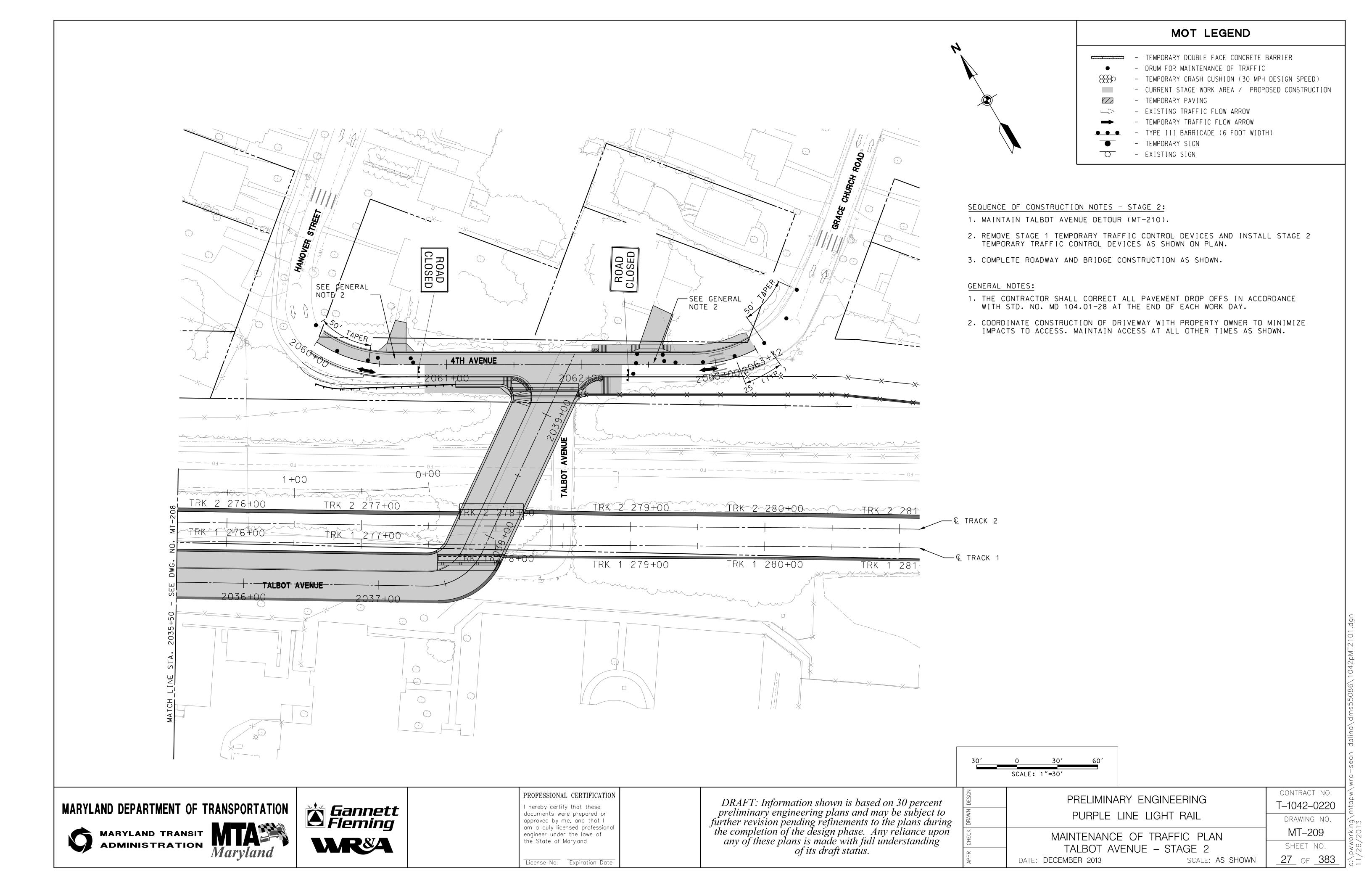


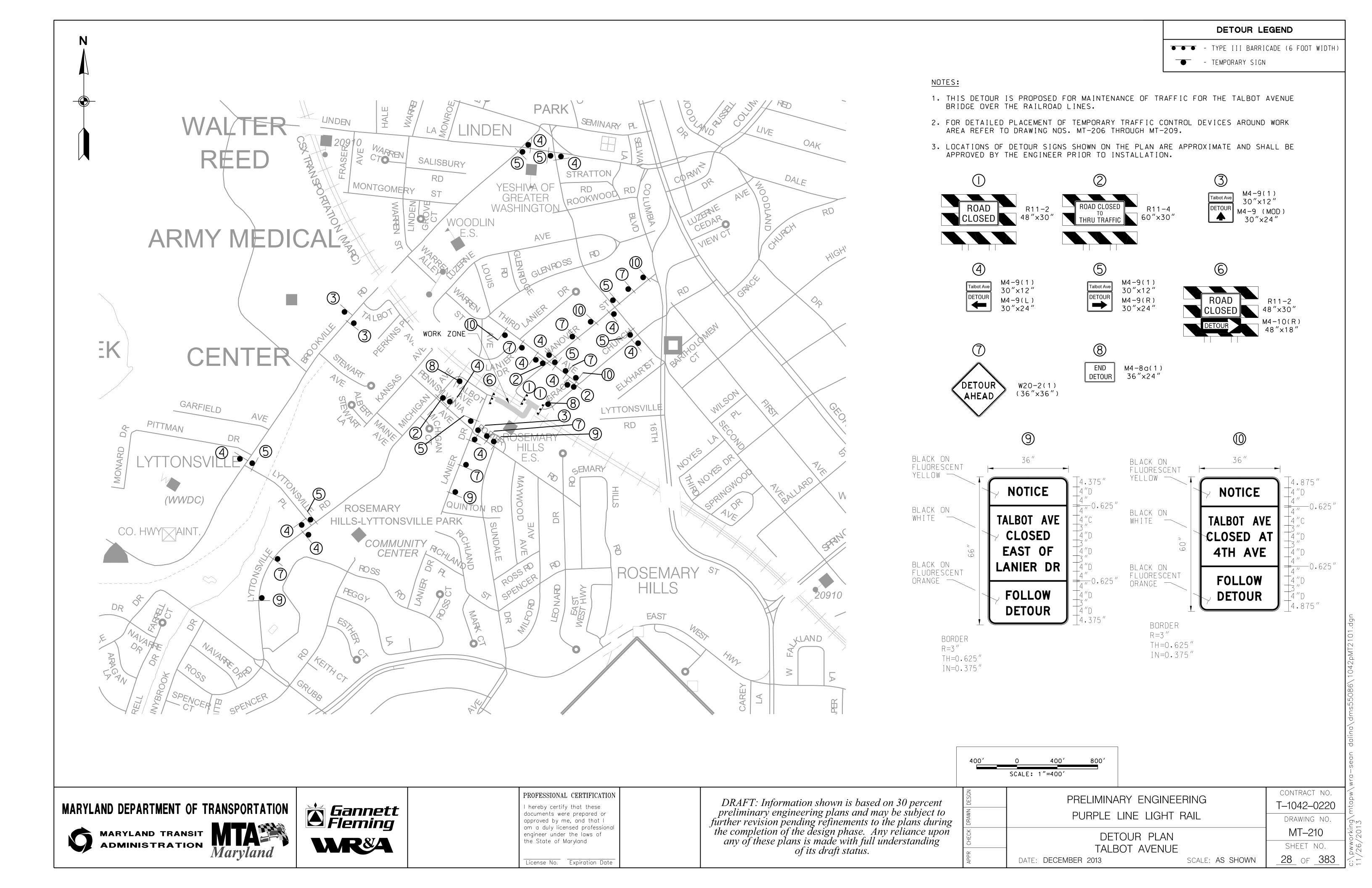
PROFESSIONAL CERTIFICATION I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

License No. Expiration Date

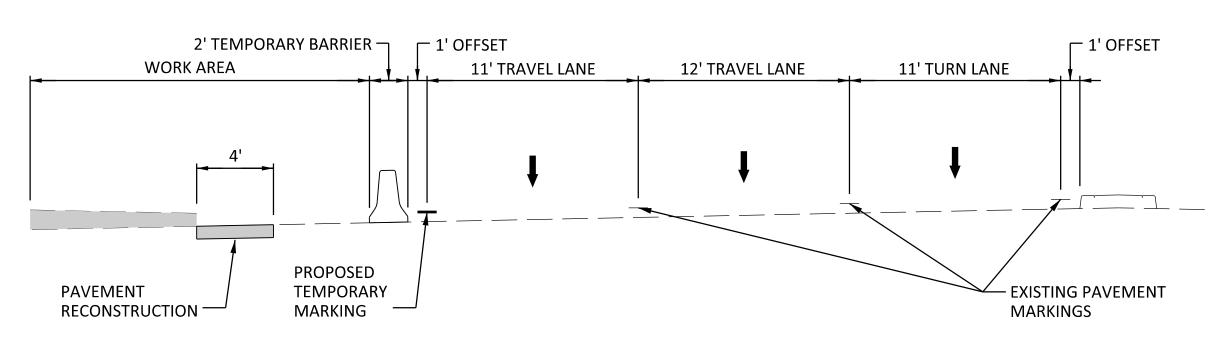
	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-207
TALBOT AVENUE - STAGE 1	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SHOWN	_25_ of _383_







1. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AT COMPLETION OF THE CURRENT STAGE OF CONSTRUCTION AND PRIOR TO BEGINNING THE SUBSEQUENT STAGE UNLESS OTHERWISE NOTED ON PLANS.



SECTION A'-A'

#### MOT CROSS SECTION LEGEND



- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- CURRENT STAGE WORK AREA/ PROPOSED CONSTRUCTION

- TEMPORARY TRAFFIC FLOW ARROW

- PROPOSED TEMPORARY PAVEMENT MARKING

EXISTING PAVEMENT MARKING/ EXISTING TEMPORARY PAVEMENT MARKING

MARYLAND DEPARTMENT OF TRANSPORTATION



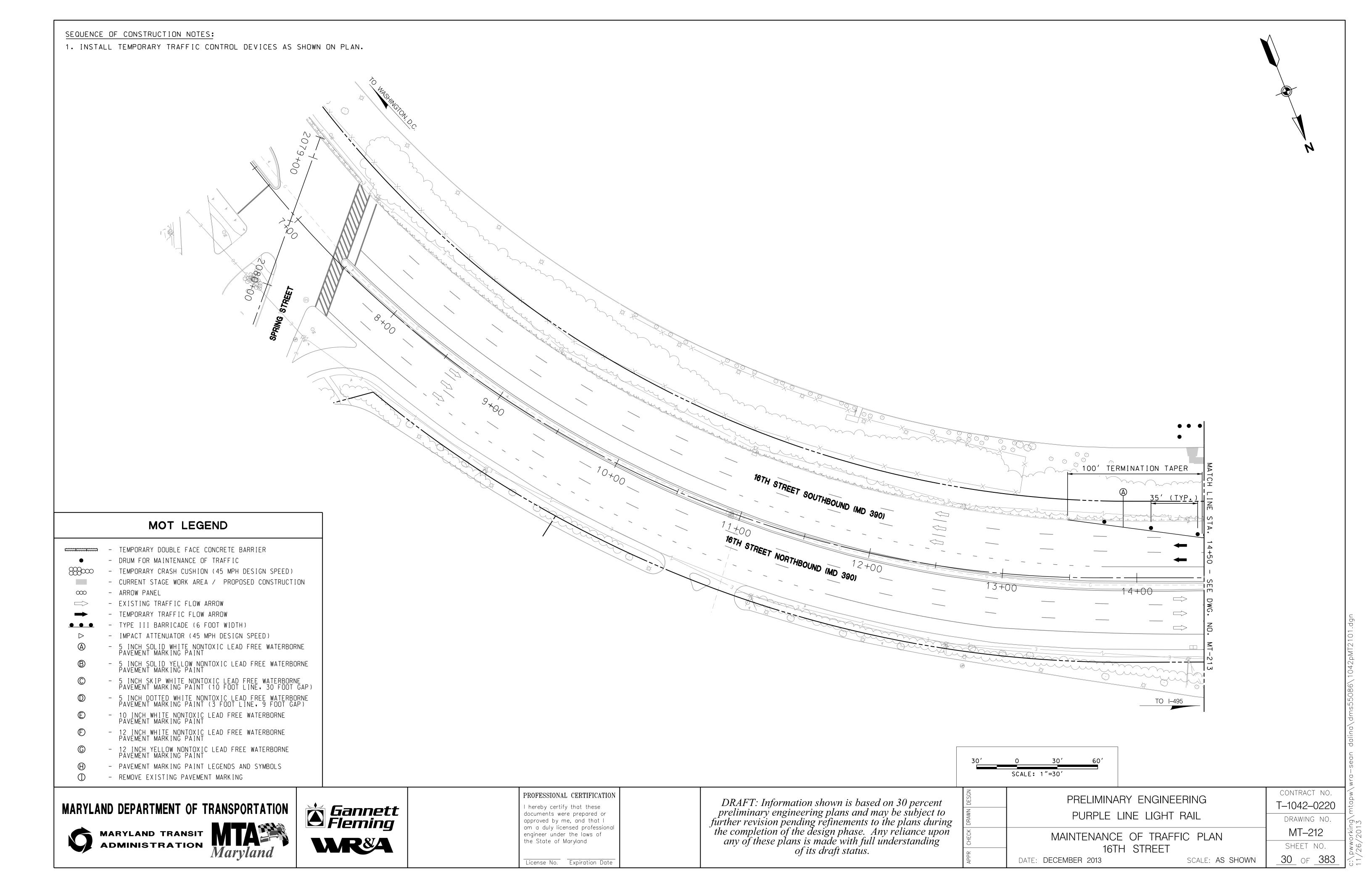


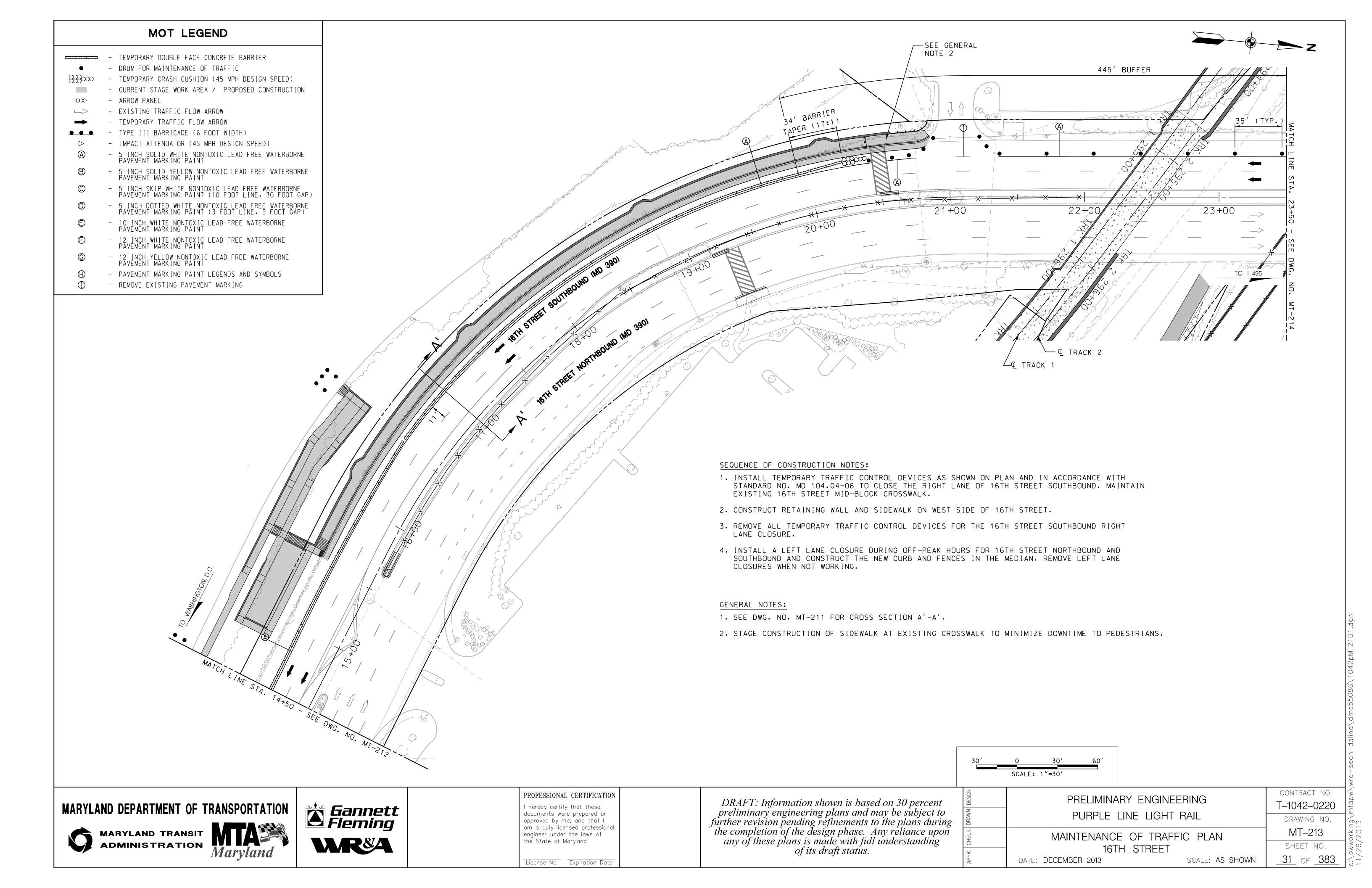


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License No. Expiration Date

	DV ENGINEEDING	CONTRACT NO.	
PRELIIVIINAI	RY ENGINEERING	T-1042-0220	l.
PURPLE LINE LIGHT RAIL		DRAWING NO.	-
MAINTENANCE	OF TRAFFIC PLAN	MT-211	
	- CROSS SECTIONS	SHEET NO.	1
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	_ <b>29</b> _ of _ <b>383</b> _	-





- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL  $\infty$ 

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE (6 FOOT WIDTH)

- IMPACT ATTENUATOR (45 MPH DESIGN SPEED)

5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

5 INCH SKIP WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP)

- 5 INCH DOTTED WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

10 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

12 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

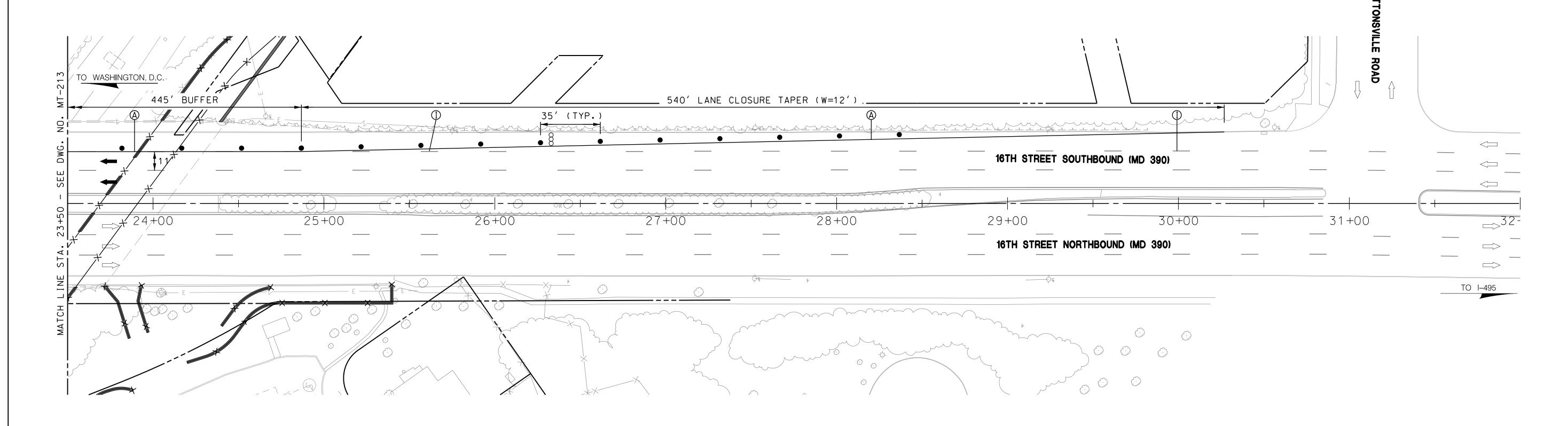
- PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS

- REMOVE EXISTING PAVEMENT MARKING

SEQUENCE OF CONSTRUCTION NOTES:

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND IN ACCORDANCE WITH STANDARD NO. MD 104.04-06 TO CLOSE THE RIGHT LANE OF 16TH STREET SOUTHBOUND.





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License No. Expiration Date

	DV ENGINEEDING	CONTRACT NO.
PRELIMINAI	RY ENGINEERING	T-1042-0220
PURPLE L	INE LIGHT RAIL	DRAWING NO.
MAINTENANCE	OF TRAFFIC PLAN	MT-214
16Th	H STREET	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	_32_ OF _383_

## MOT LEGEND SEQUENCE OF CONSTRUCTION NOTES - STAGE 1: 1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN. - TEMPORARY DOUBLE FACE CONCRETE BARRIER - DRUM FOR MAINTENANCE OF TRAFFIC 2. CONSTRUCT RETAINING WALLS, CURB AND GUTTER AND FULL DEPTH PAVEMENT. - TEMPORARY CRASH CUSHION (30 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION EXISTING TRAFFIC FLOW ARROW - TEMPOARY TRAFFIC FLOW ARROW - TYPE III BARRICADE (6 FOOT WIDTH) - IMPACT ATTENUATOR (30 MPH DESIGN SPEED) 5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS 16TH STREET SB (MD 390) - REMOVE EXISTING PAVEMENT MARKING 0 0 € TRACK 2— 20×00× € TRACK 1-







<b>Sannett Fleming</b>	Ľ
WR84	

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PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN 8600 PARKING LOT – STAGE 1

SCALE: 1"=30'

DATE: DECEMBER 2013

CONTRACT NO. T-1042-0220 DRAWING NO. MT-215 SHEET NO. <u>33</u> of <u>383</u>

SCALE: AS SHOWN

- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (30 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

EXISTING TRAFFIC FLOW ARROW

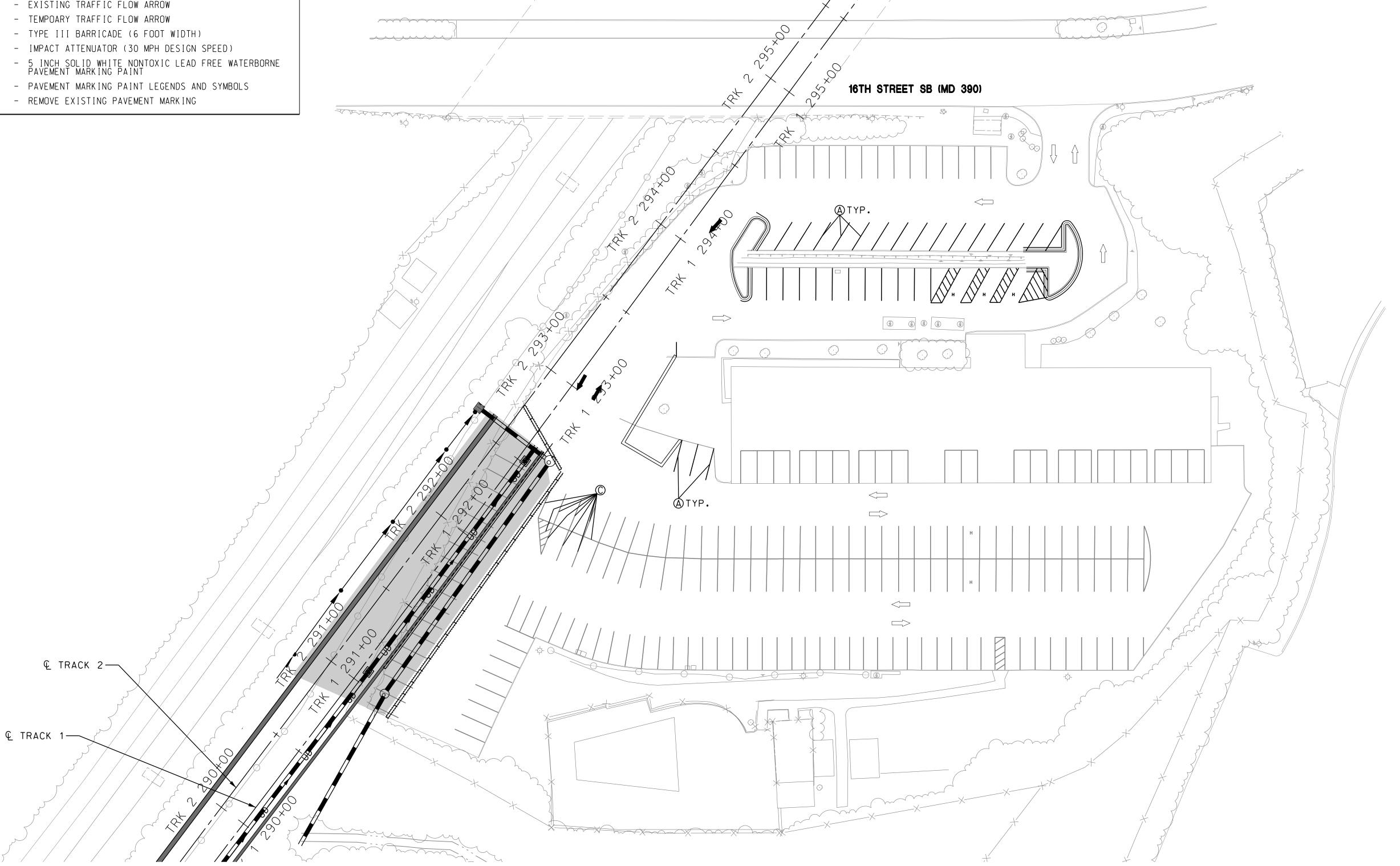
- TYPE III BARRICADE (6 FOOT WIDTH)

SEQUENCE OF CONSTRUCTION NOTES - STAGE 2:

1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN.

2. CONSTRUCT DRAINAGE FACILITIES, RETAINING WALL AND FULL DEPTH PAVEMENT.





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PRELIMINARY ENGINEERING	
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN	
8600 PARKING LOT – STAGE 2	

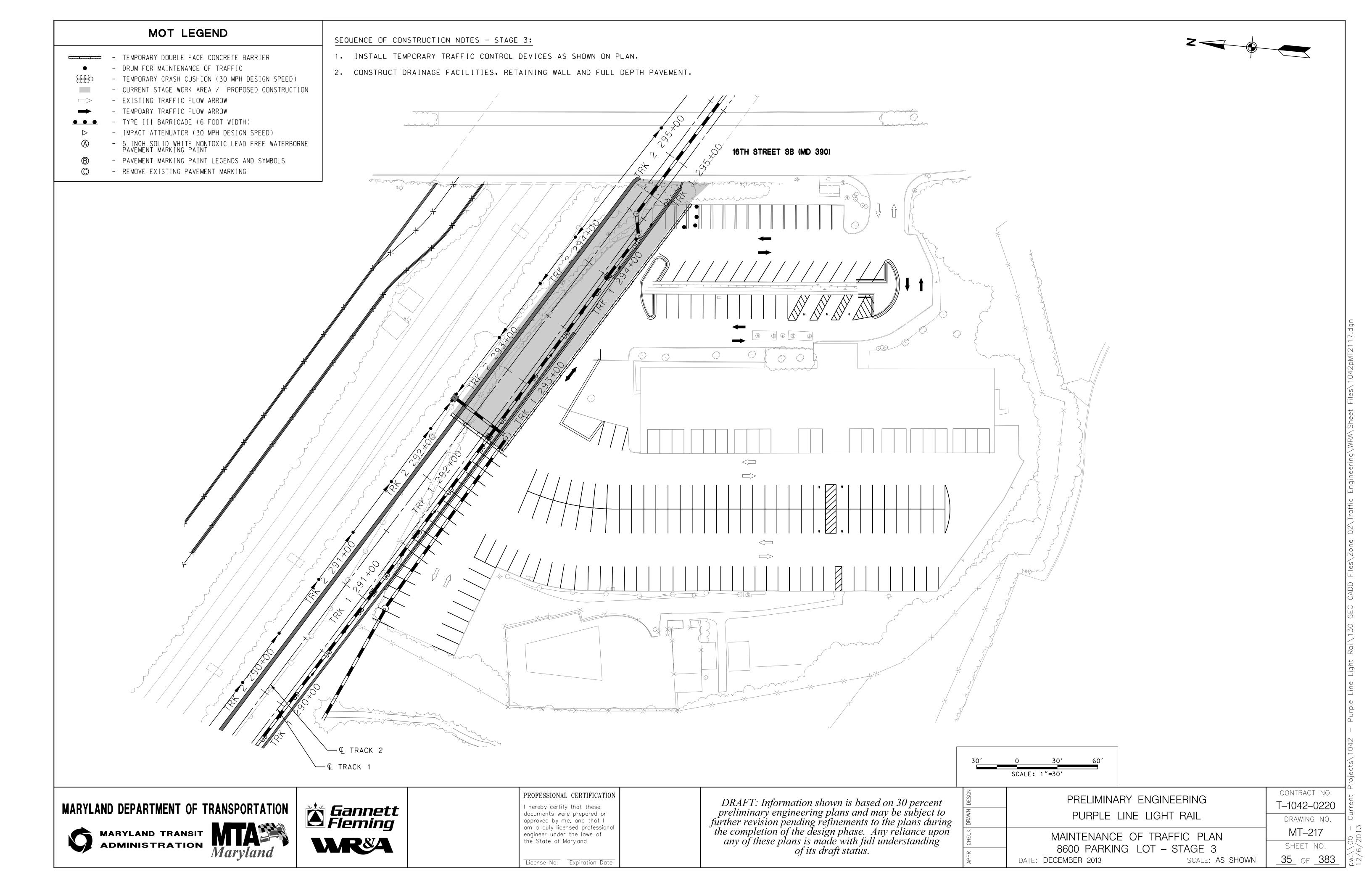
SCALE: 1"=30'

DATE: DECEMBER 2013

CONTRACT NO. T-1042-0220 DRAWING NO. SHEET NO. <u>34</u> of <u>383</u>

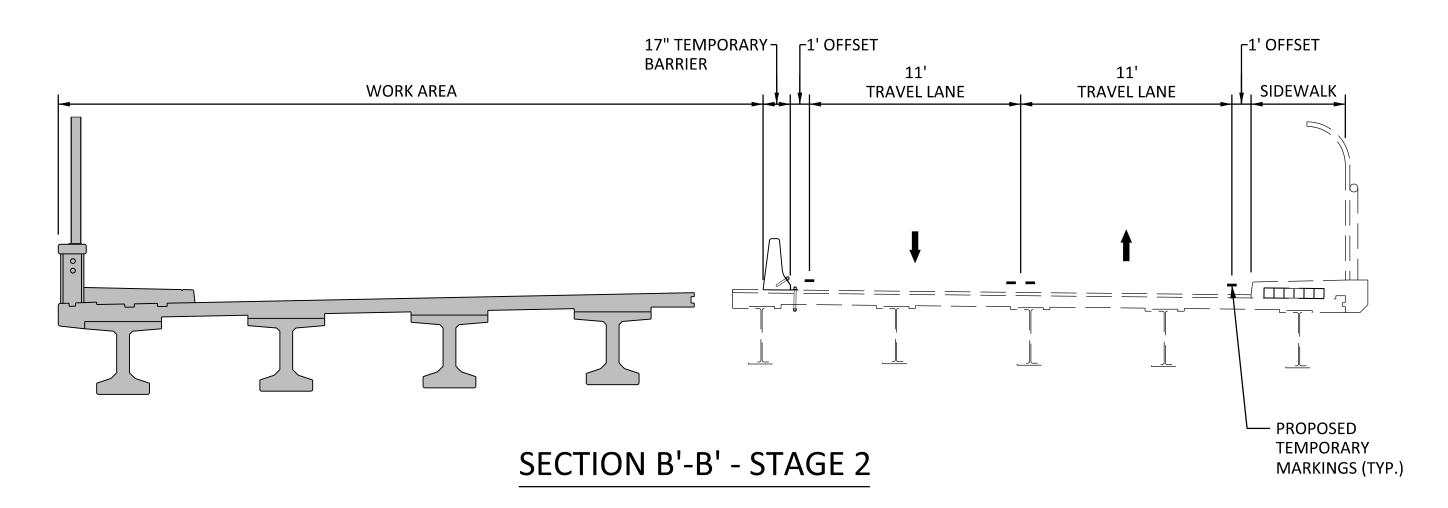
MT-216

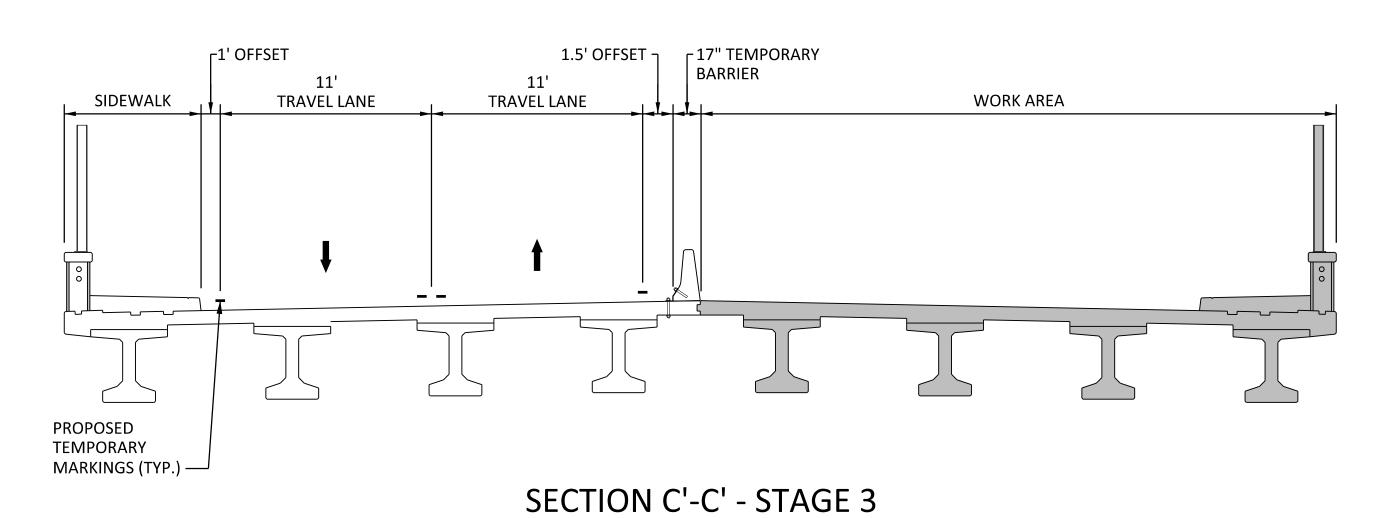
SCALE: AS SHOWN



1. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AT COMPLETION OF THE CURRENT STAGE OF CONSTRUCTION AND PRIOR TO BEGINNING THE SUBSEQUENT STAGE UNLESS OTHERWISE NOTED ON PLANS.

#### ┌2' TEMPORARY 2' TEMPORARY 7 L1' OFFSET 1' OFFSET<sub>7</sub> BARRIER **BARRIER** 11' TRAVEL LANE SIDEWALK **WORK AREA** 8' SHOULDER , SIDEWALK , TRAVEL LANE PROPOSED **TEMPORARY** SECTION A'-A' - STAGE 1 MARKINGS (TYP.) —





#### MOT CROSS SECTION LEGEND

- TEMPORARY SINGLE FACE CONCRETE BARRIER

- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- TEMPORARY TRAFFIC FLOW ARROW

- PROPOSED TEMPORARY PAVEMENT MARKING

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION

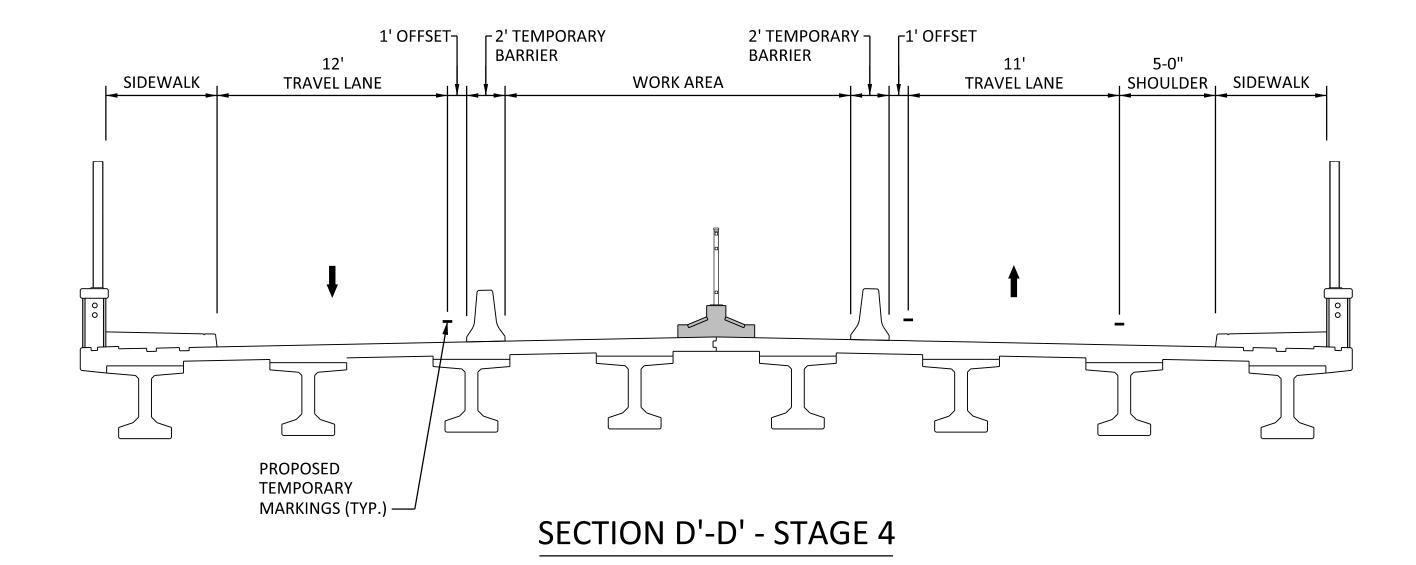


	<i>Gannett Fleming</i>
V	

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	DV ENCINEEDING	CONTRACT NO. 7
PRELIVIINA	ARY ENGINEERING	T-1042-0220
PURPLE	LINE LIGHT RAIL	DRAWING NO.
MAINTENANC	E OF TRAFFIC PLAN	MT–218
	T - CROSS SECTIONS	SHEET NO.
DATE: DECEMBER 2013	SCALE: <b>AS SHOWN</b>	_36_ OF _383



#### MOT CROSS SECTION LEGEND



- TEMPORARY SINGLE FACE CONCRETE BARRIER

- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- TEMPORARY TRAFFIC FLOW ARROW

- PROPOSED TEMPORARY PAVEMENT MARKING

MARYLAND DEPARTMENT OF TRANSPORTATION



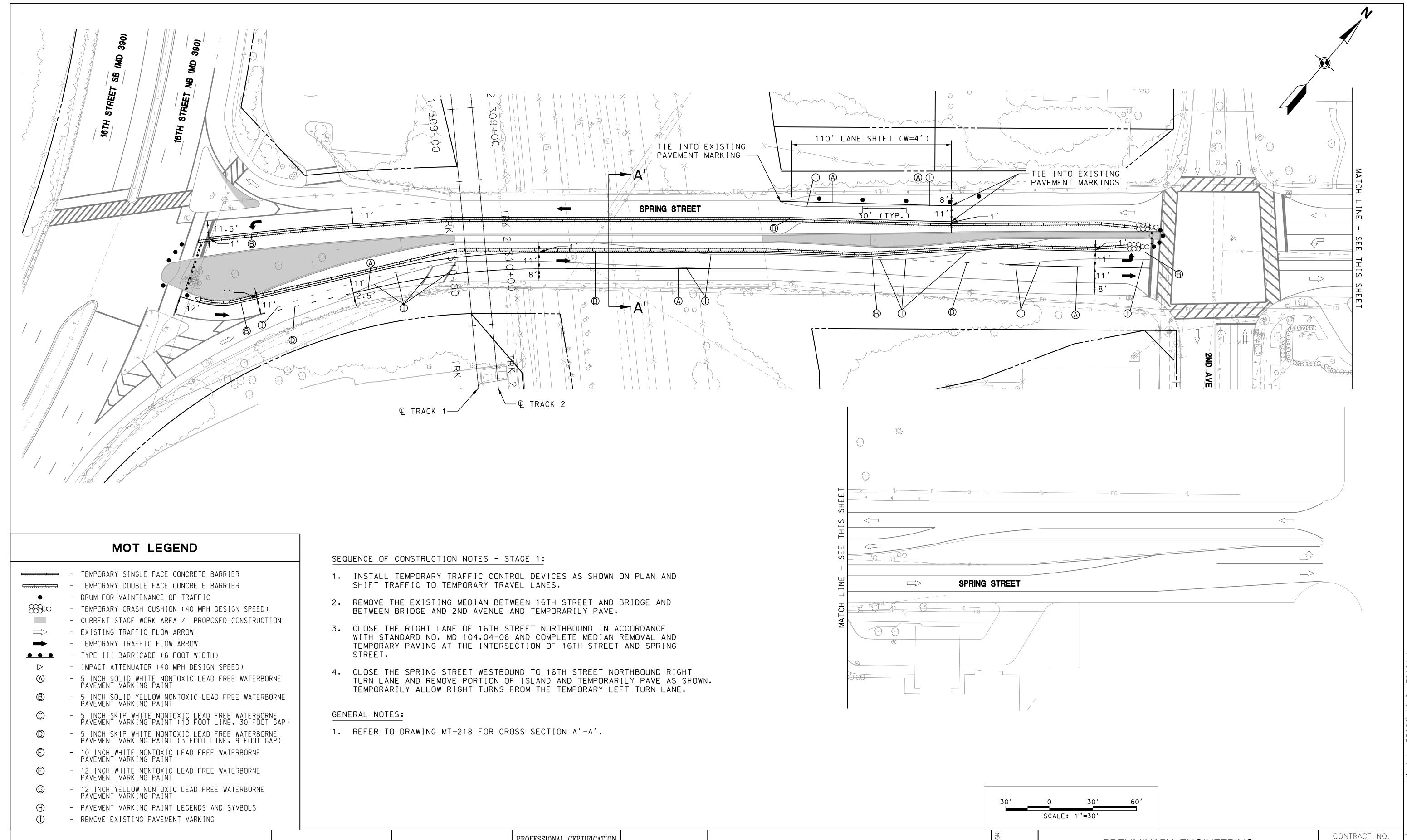




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License No. Expiration Date

SCALE: 1"=5"			
PRELIMINA	RY ENGINE	ERING	CONTRACT NO.
PURPLE LINE LIGHT RAIL		T-1042-0220  DRAWING NO.	
MAINTENANCI	E OF TRAFF	IC PLAN	MT-219
SPRING STREE			SHEET NO.
DATE: <b>DECEMBER 2013</b>		scale: <b>as shown</b>	_37_ of _383_









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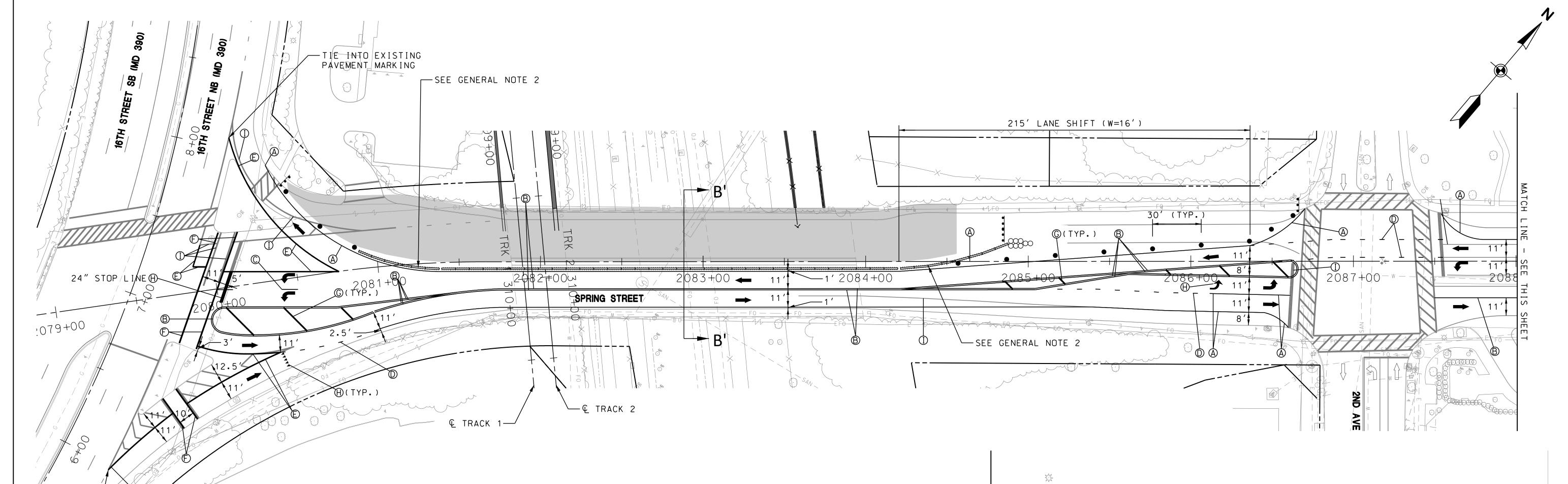
License No. Expiration Date

PROFESSIONAL CERTIFICATION

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## PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL

T-1042-0220 DRAWING NO. MT-220 MAINTENANCE OF TRAFFIC PLAN SHEET NO. SPRING STREET - STAGE 1 38 OF 383 DATE: DECEMBER 2013 SCALE: AS SHOWN



- TEMPORARY SINGLE FACE CONCRETE BARRIER

- TEMPORARY DOUBLE FACE CONCRETE BARRIER

- DRUM FOR MAINTENANCE OF TRAFFIC

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION 

- EXISTING TRAFFIC FLOW ARROW

EXISTING PAVEMENT MARK (NG)/

- TEMPORARY TRAFFIC FLOW ARROW

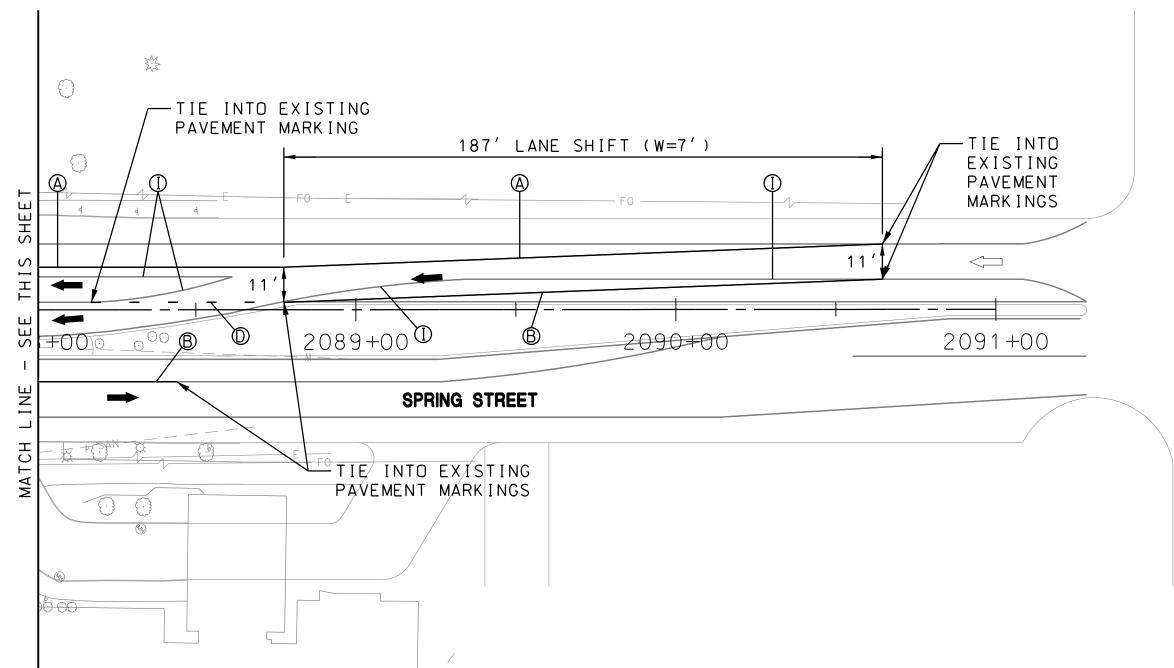
- TYPE III BARRICADE (6 FOOT WIDTH) - IMPACT ATTENUATOR (40 MPH DESIGN SPEED)
- 5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT
- 5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT
- 5 INCH SKIP WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP)
- 5 INCH SKIP WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)
- 10 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT
- 12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT
- 12 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - PAVEMENT MARKING PAINT LEGENDS AND SYMBOLS
- REMOVE EXISTING PAVEMENT MARKING

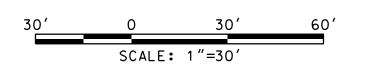
#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 2:

- 1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN AND SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES. CLOSE THE SIDEWALK ON THE NORTH SIDE OF SPRING STREET BETWEEN 16TH STREET AND 2ND AVENUE.
- 2. REMOVE NORTH SIDE OF EXISTING BRIDGE AND CONSTRUCT NORTH SIDE OF NEW

#### GENERAL NOTES:

- 1. REFER TO DRAWING MT-218 FOR CROSS SECTION B'-B'.
- 2. BOLT TEMPORARY CONCRETE BARRIER BETWEEN STA. 2081+25 AND STA. 2084+40.
- 3. RELOCATE THE WESTBOUND SPRING STREET AT 16TH STREET SIGNAL HEADS SO THAT THE TWO SIGNAL HEADS ARE CENTERED ABOUT THE TEMPORARY TRAVEL LANES WITH A MINIMUM OF 8 FEET OF SEPARATION IN BETWEEN EACH SIGNAL





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<b>Sannett Fleming</b>
WR84

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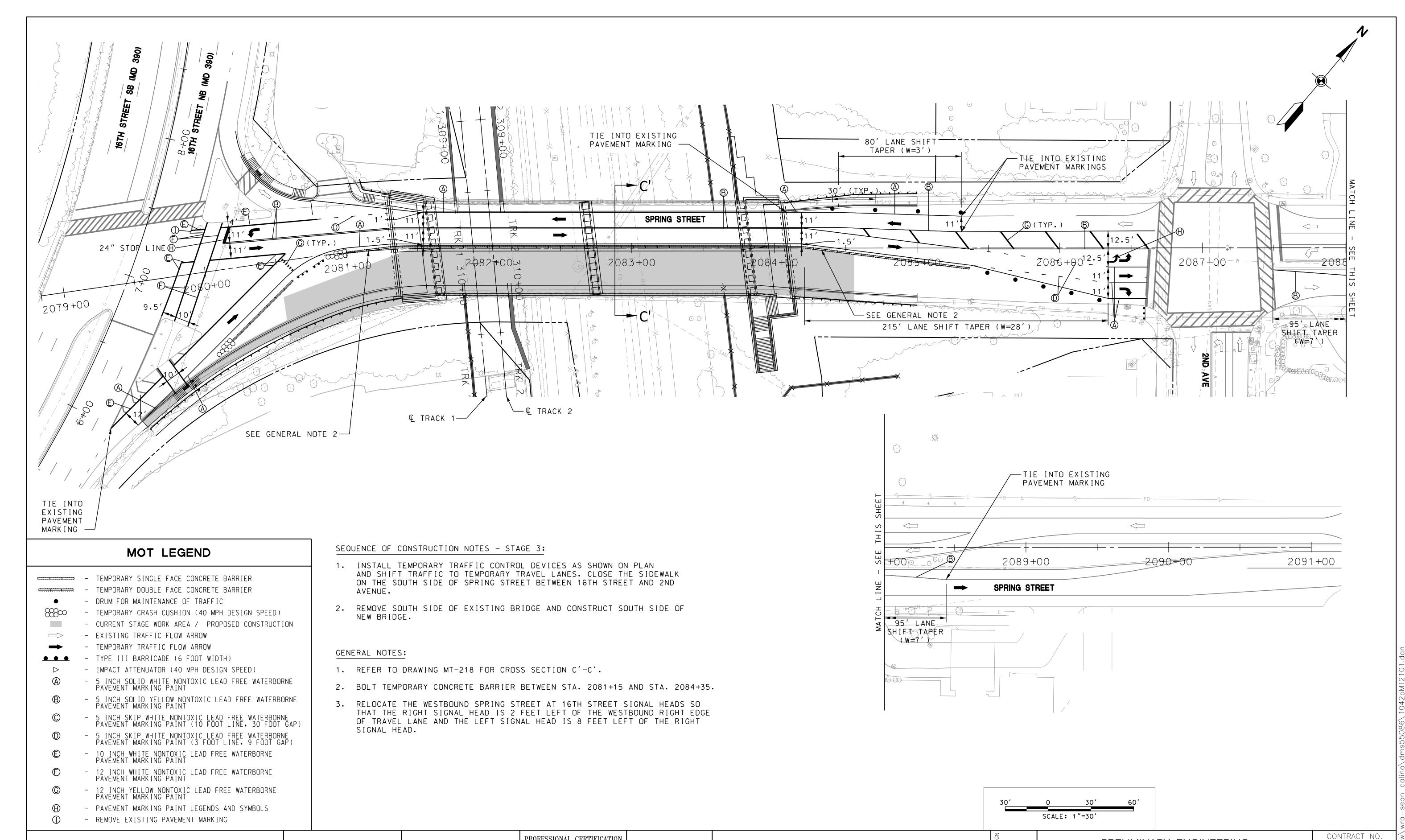
License No. Expiration Date

DRAFT: Information shown is based on 30 percent preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINITENIANIOE OF TRAFFIO DI AN

T-1042-0220 DRAWING NO. MT-221 MAINTENANCE OF TRAFFIC PLAN SHEET NO. SPRING STREET - STAGE 2 39 OF 383 DATE: DECEMBER 2013 SCALE: AS SHOWN

CONTRACT NO.



MARYLAND TRANSIT ADMINISTRATION **ADMINISTRATION** 





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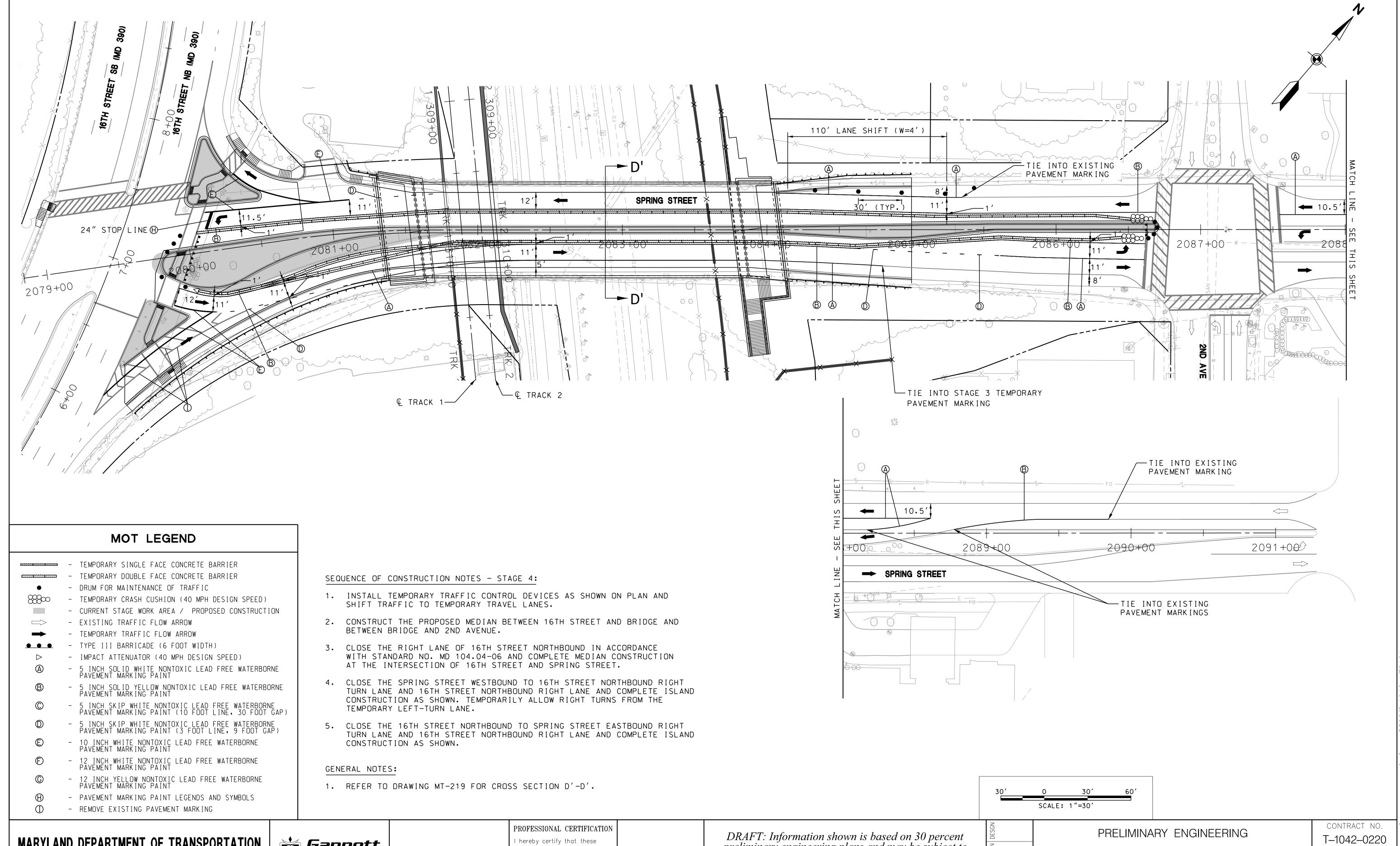
am a duly licensed professional engineer under the laws of the State of Maryland

License No. Expiration Date

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## PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL

T-1042-0220 DRAWING NO. MT-222 MAINTENANCE OF TRAFFIC PLAN SHEET NO. SPRING STREET - STAGE 3 40 OF 383 DATE: DECEMBER 2013 SCALE: AS SHOWN









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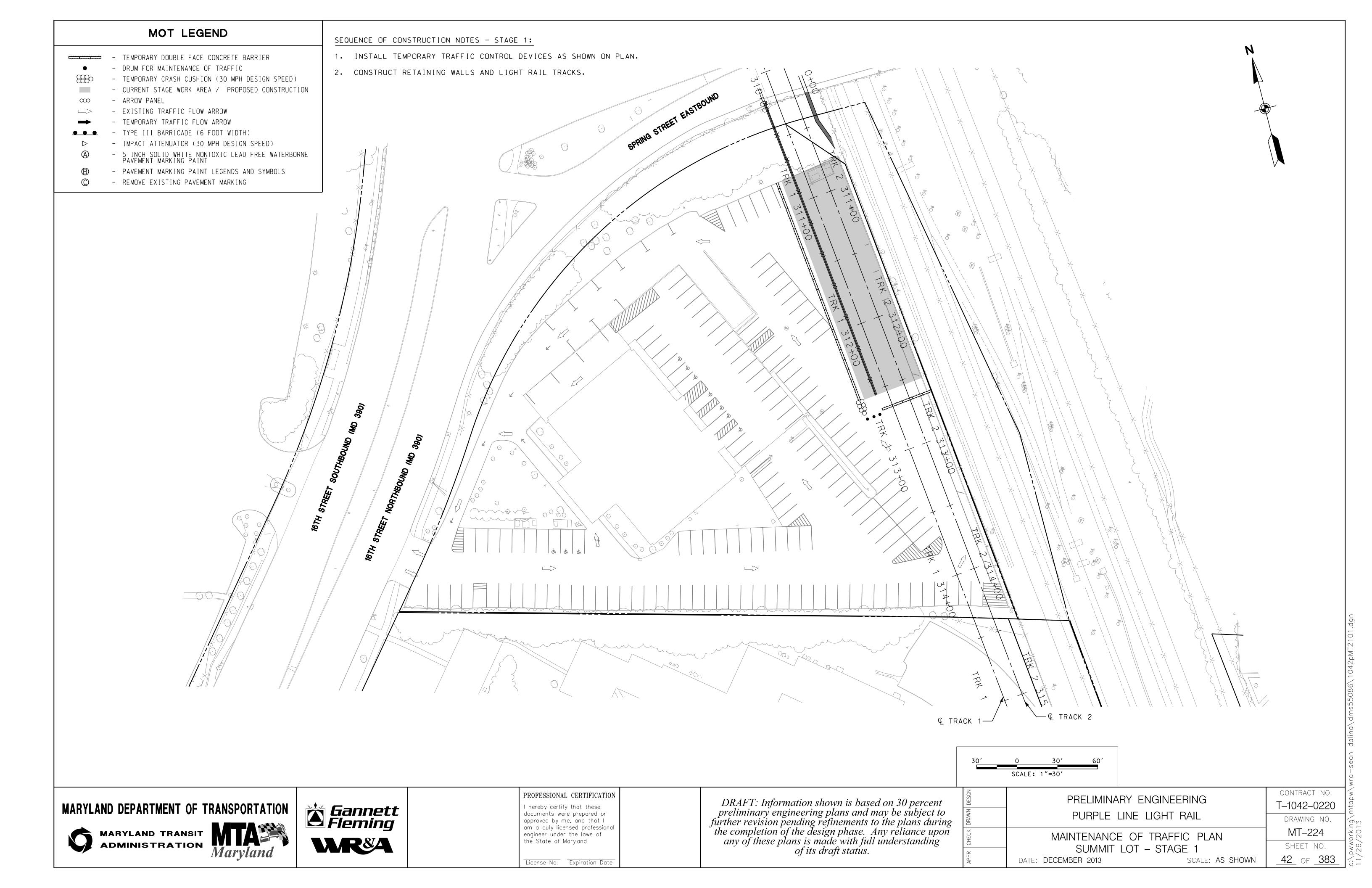
preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

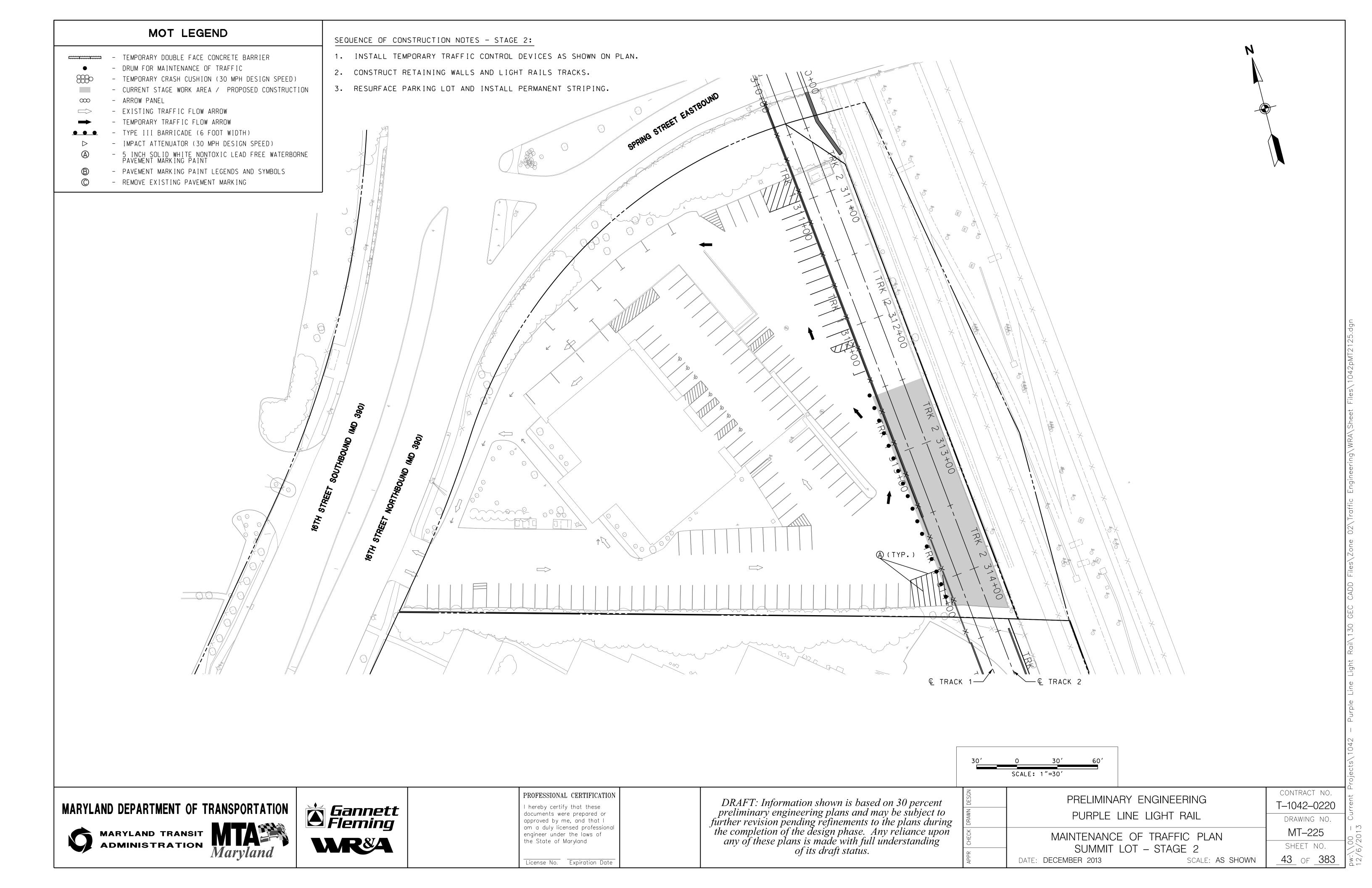
## PURPLE LINE LIGHT RAIL MAINTENANCE OF TRAFFIC PLAN

DATE: DECEMBER 2013

SPRING STREET - STAGE 4

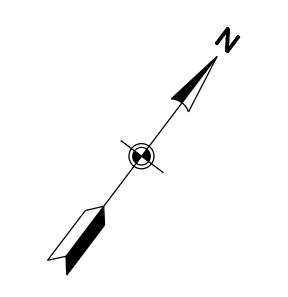
DRAWING NO. MT-223 SHEET NO. 41 OF 383 SCALE: AS SHOWN

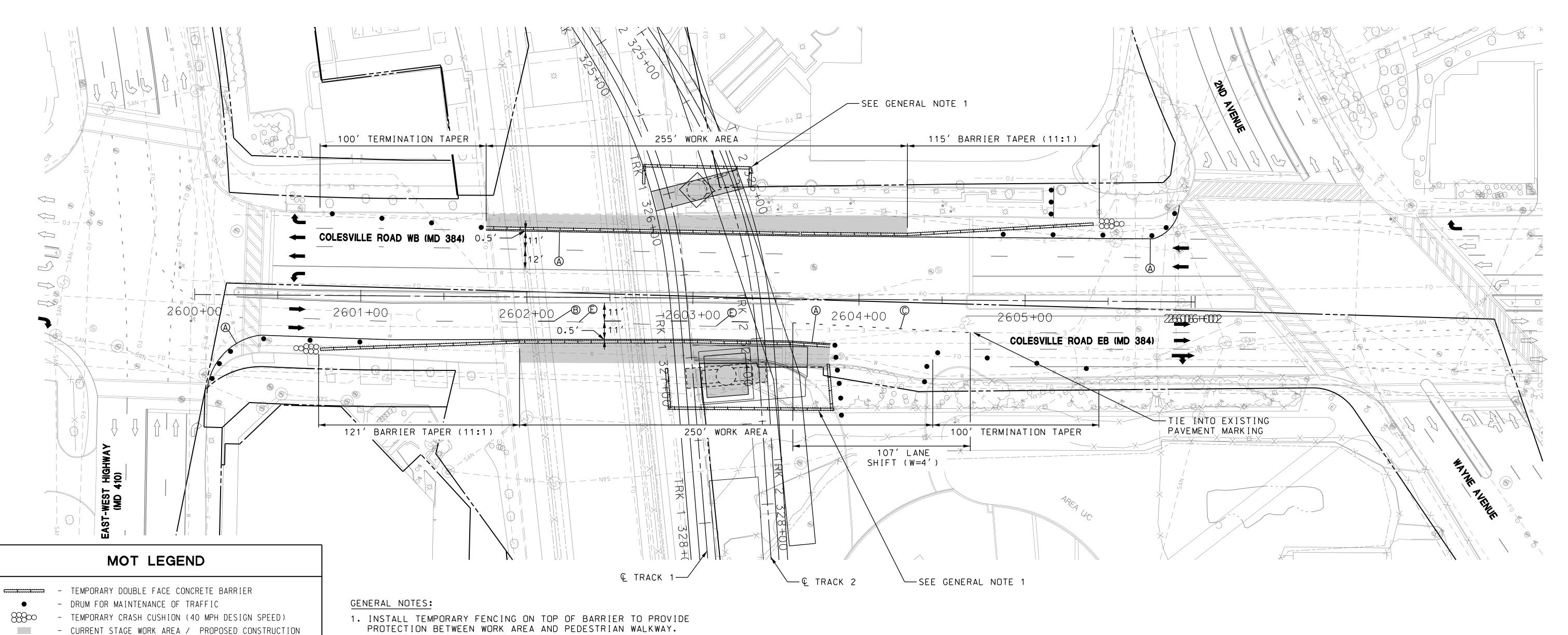




#### SEQUENCE OF CONSTRUCTION NOTES - STAGE 1:

- 1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGE 1 AS SHOWN ON PLAN. RIGHT LANE OF COLESVILLE ROAD EASTBOUND APPROACHING EAST-WEST HIGHWAY SHALL BECOME A MANDATORY RIGHT-TURN LANE AND RIGHT LANE OF COLESVILLE ROAD WESTBOUND APPROACHING 2ND AVENUE SHALL BECOME A MANDATORY RIGHT-TURN LANE.
- 2. CONSTRUCT BRIDGE PIERS ON EACH SIDE OF COLESVILLE ROAD AND RECONSTRUCT ROADWAY AND SIDEWALK ALONG COLESVILLE ROAD NORTHBOUND.
- 3. REMOVE TEMPORARY TRAFFIC CONTROL DEVICES FOR STAGE 1.





## MARYLAND DEPARTMENT OF TRANSPORTATION

- REMOVE EXISTING PAVEMENT MARKING

- EXISTING TRAFFIC FLOW ARROW - TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE (6 FOOT WIDTH)

- 5 INCH SOLID WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT

- 5 INCH SKIP WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (10 FOOT LINE, 30 FOOT GAP)

- 5 INCH DOTTED WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT (3 FOOT LINE, 9 FOOT GAP)

5 INCH SOLID YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT







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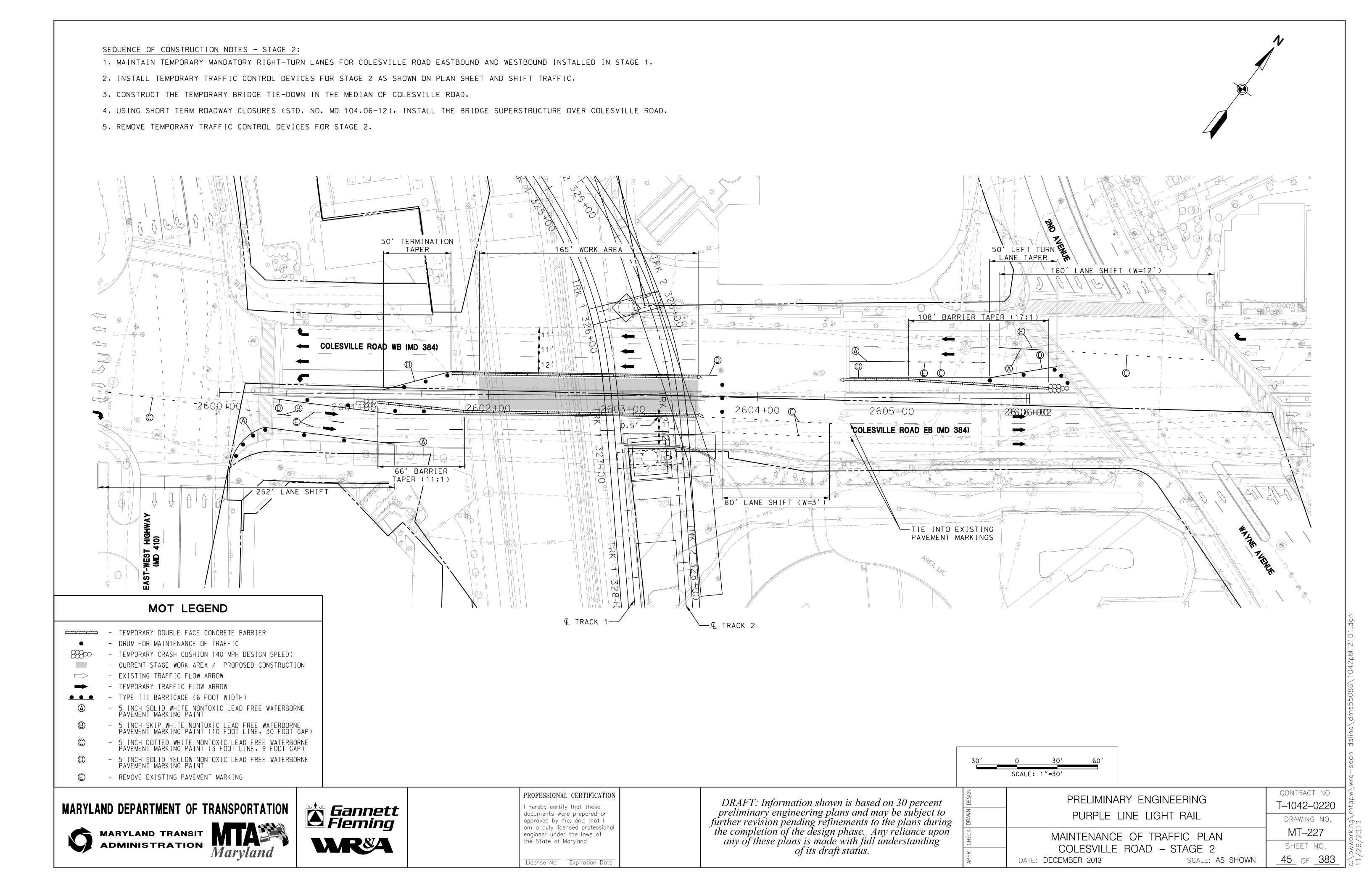
License No. Expiration Date

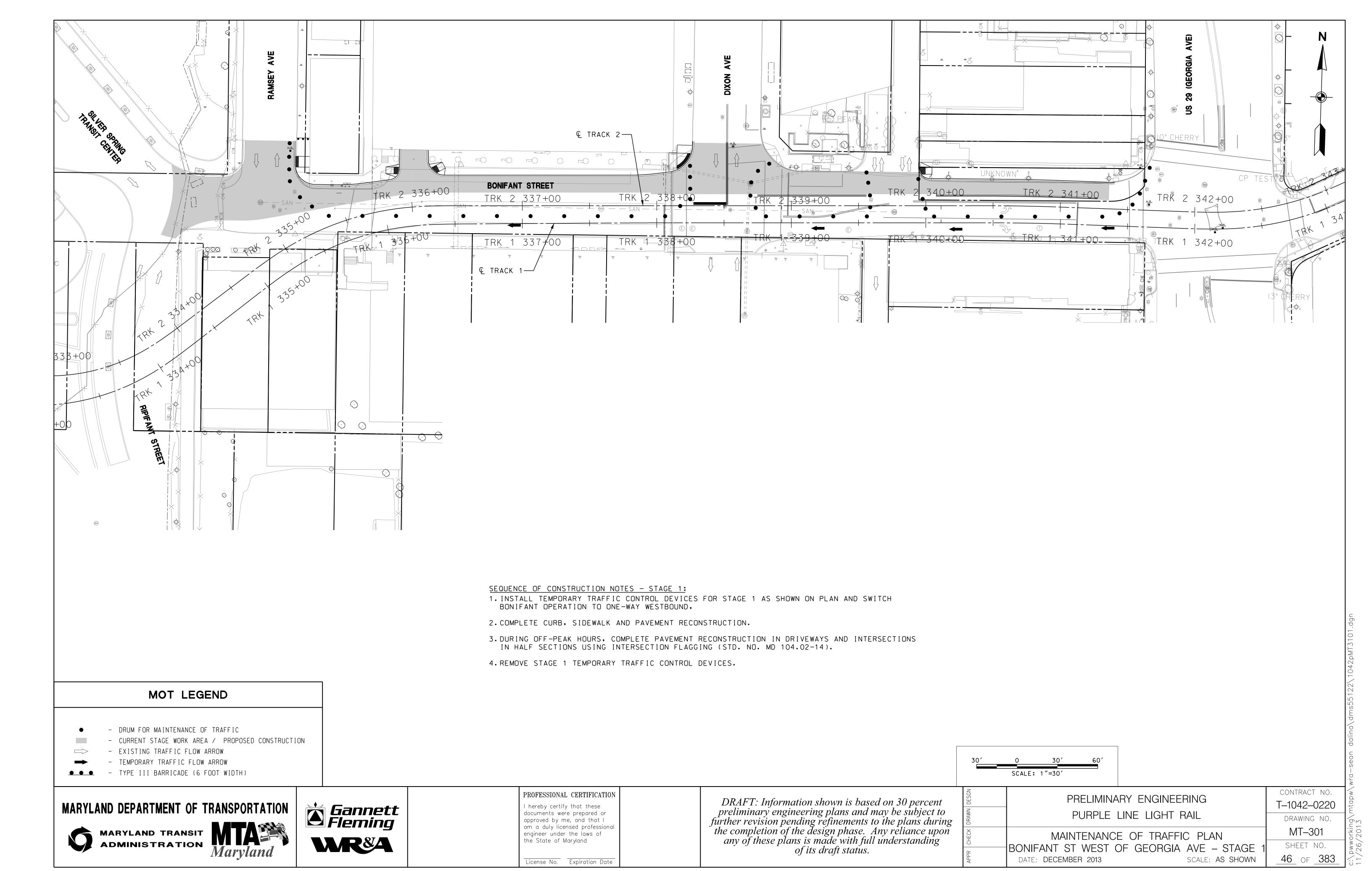
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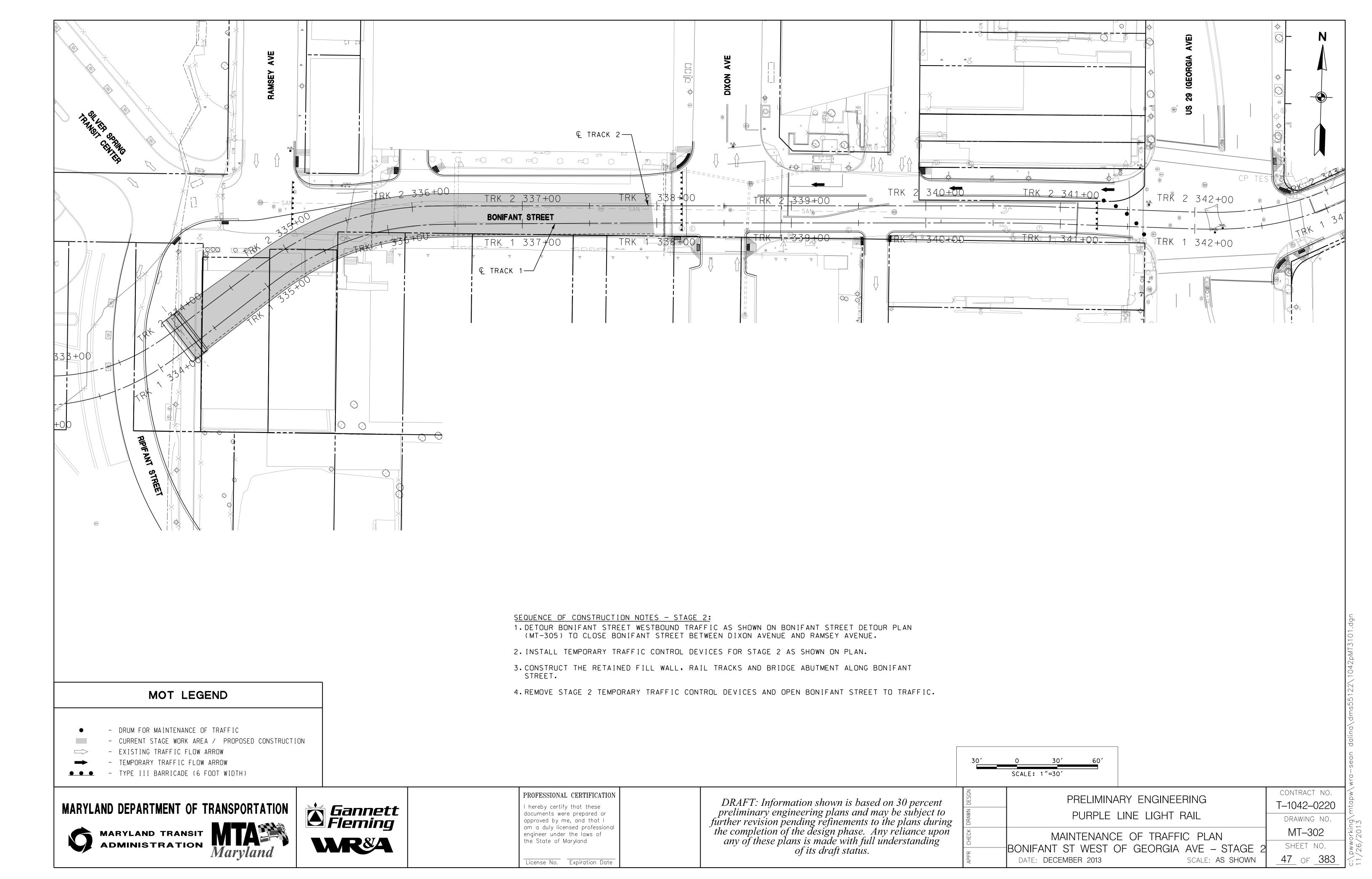
PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN

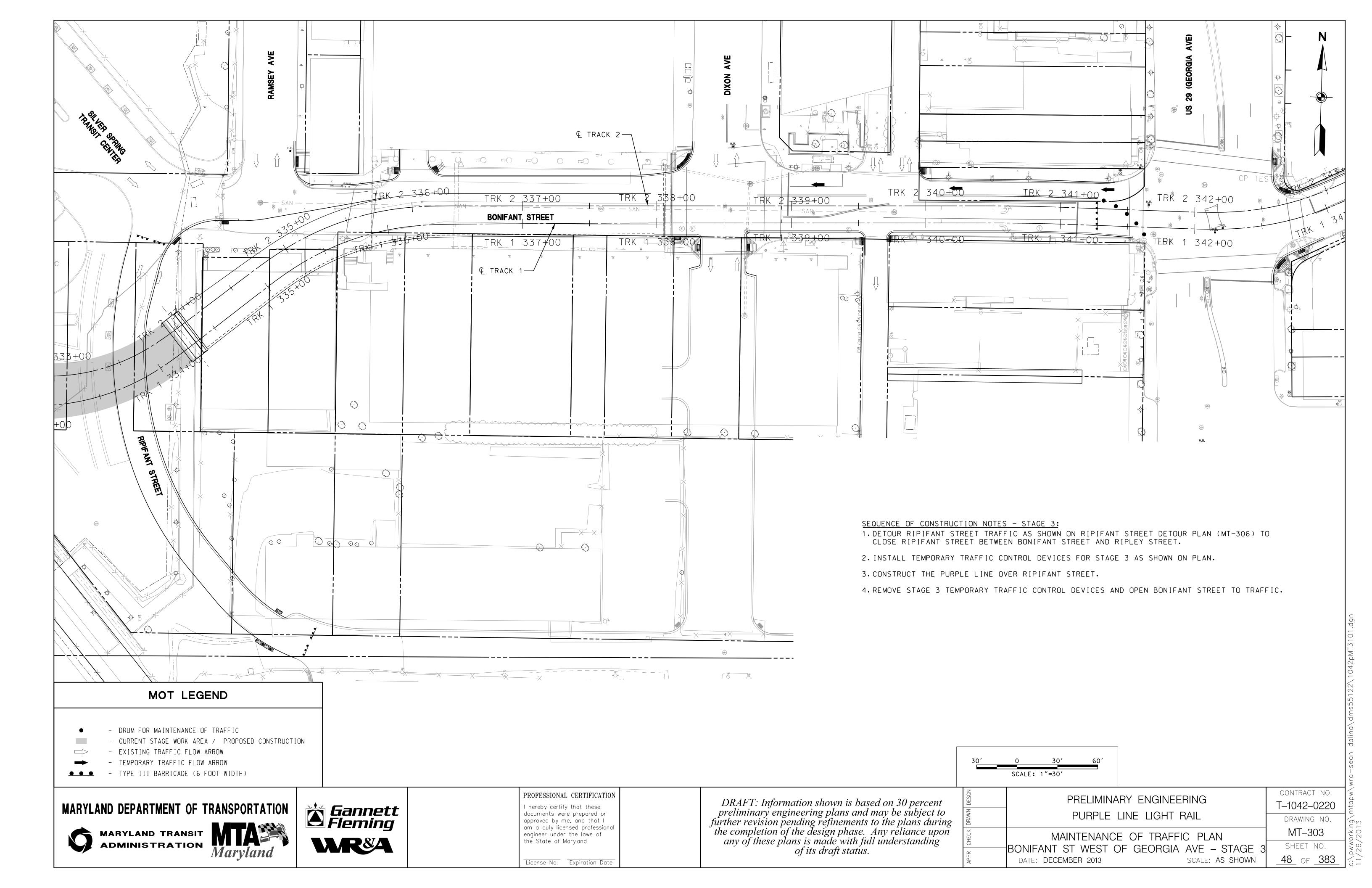
SCALE: 1"=30'

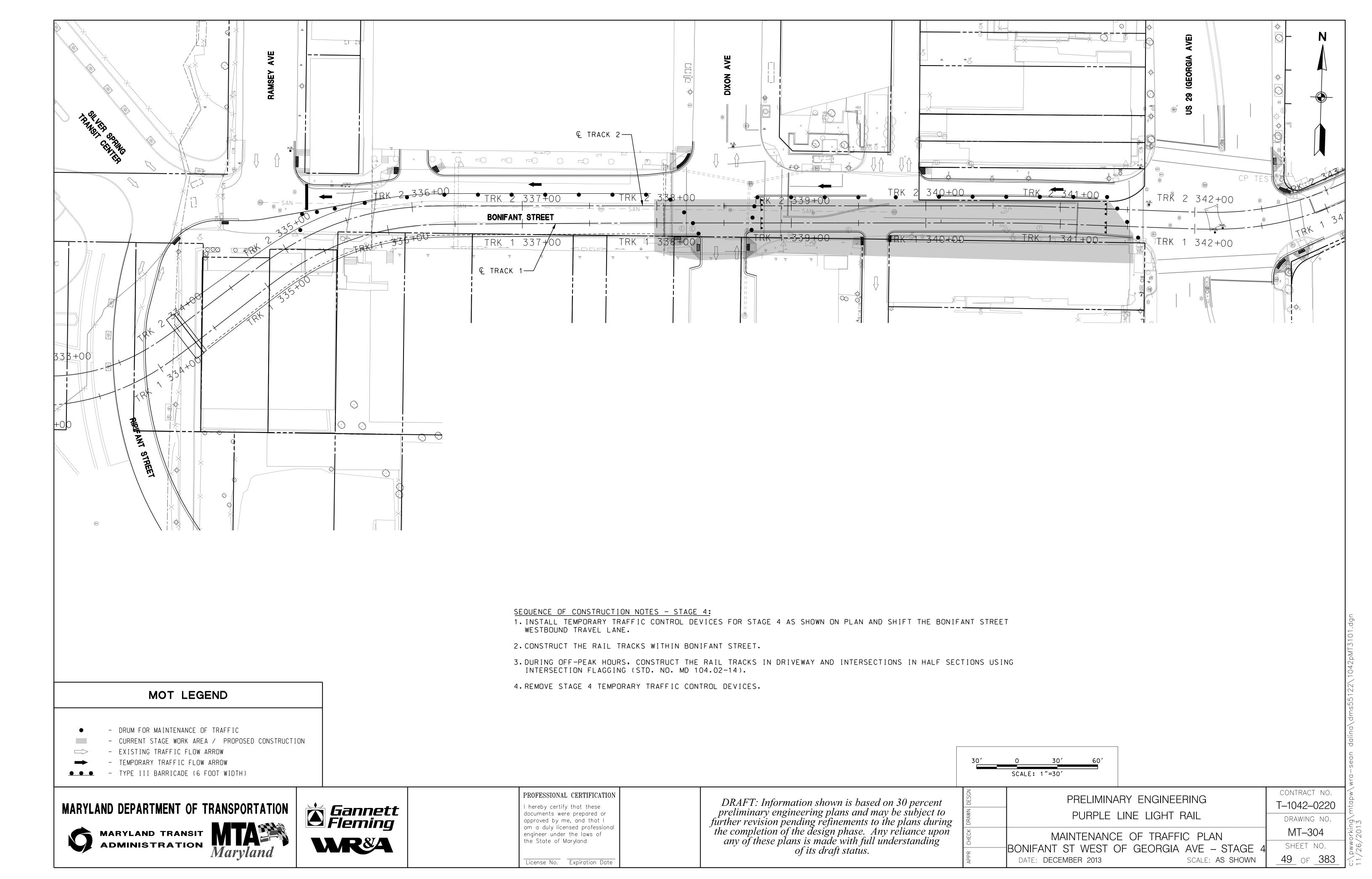
		CONTRACT NO.
PRELIMINARY ENG	INEERING	T-1042-0220
PURPLE LINE LIG	HT RAIL	DRAWING NO.
MAINTENANCE OF TE	AFFIC PLAN	MT-226
COLESVILLE ROAD	– STAGE 1	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	44 OF 383

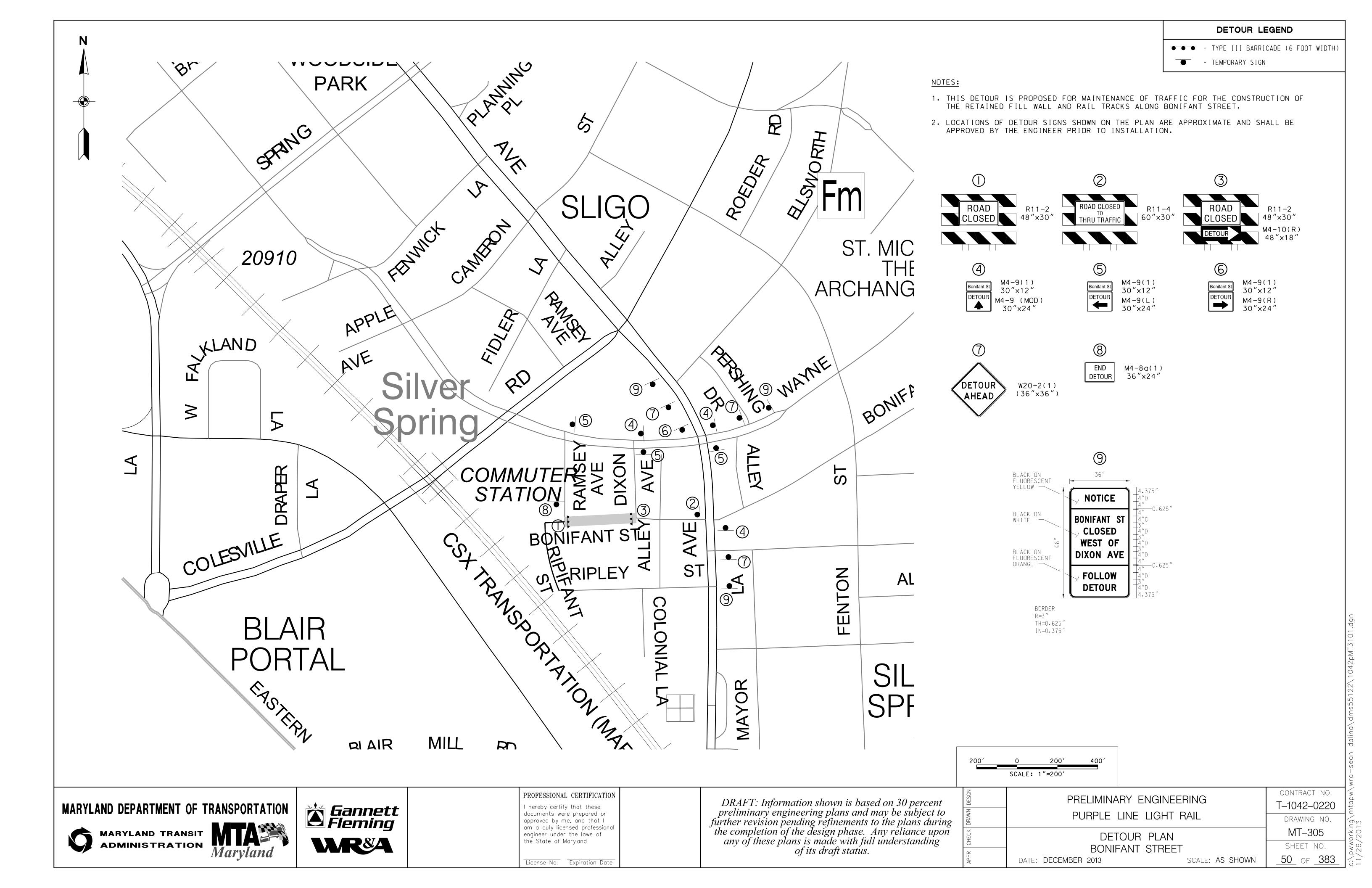


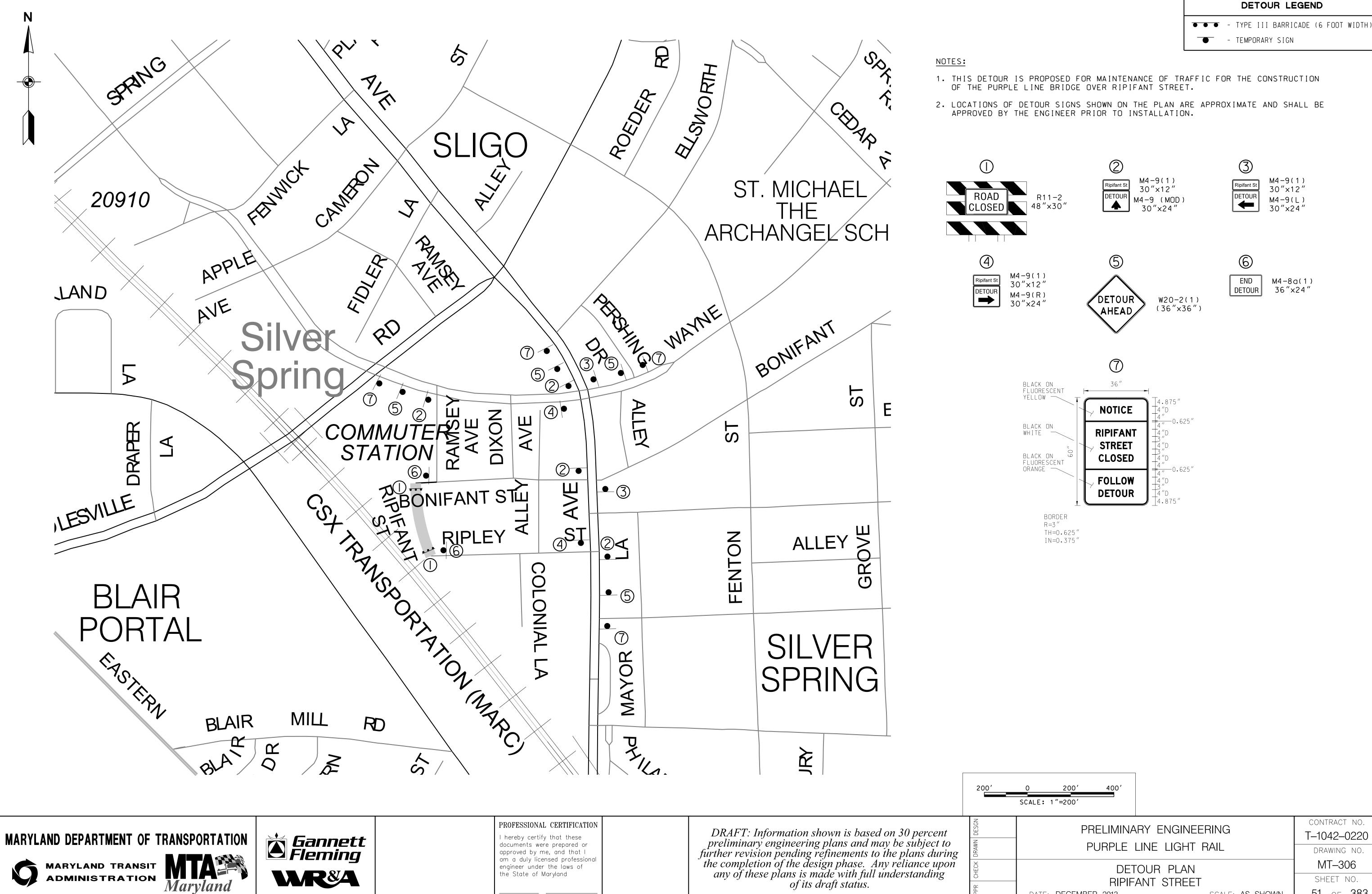












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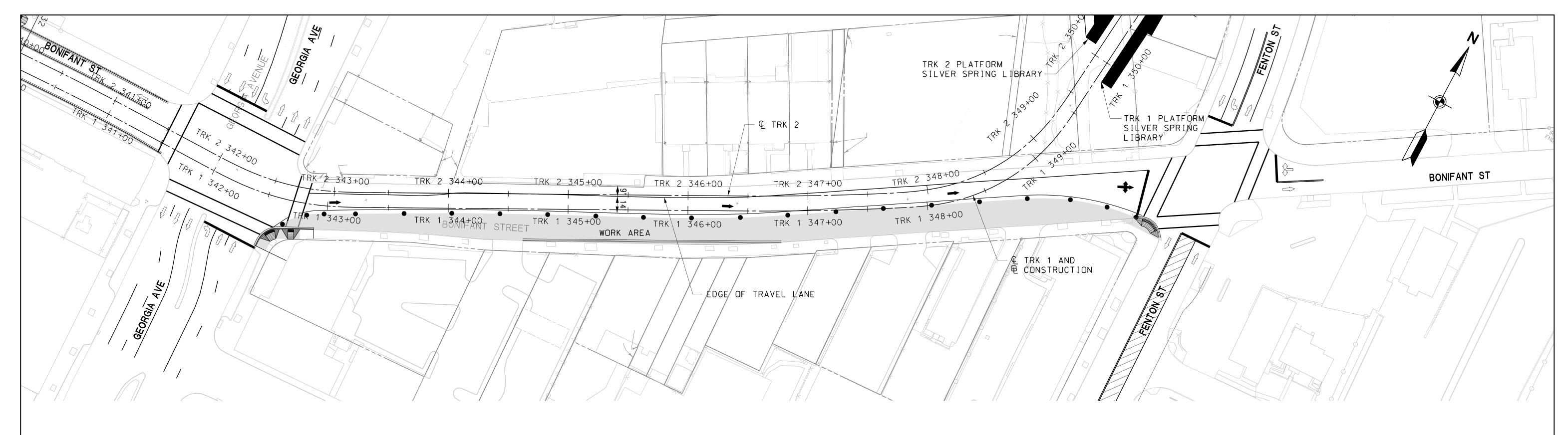
51 OF 383

SHEET NO.

SCALE: AS SHOWN

RIPIFANT STREET

DATE: **DECEMBER 2013** 



© TRK 1 AND 囤 CONSTRUCTION

#### GENERAL NOTES

- 1. INSTALL ALL NECESSARY CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES. CONSTRUCTION SIGNING MUST CONFORM TO MDSHA AND MONTGOMERY COUNTY TEMPORARY TRAFFIC CONTROL MANUAL (TTCM).
- 2. INTERSECTION SIGHT DISTANCE MUST BE MAINTAINED PER MDSHA STANDARD 104.01-29.
- 3. MAINTAIN ACCESS AND ADEQUATE SIGHT DISTANCES DURING CONSTRUCTION AT ENTRANCES ON ALL PARCELS. ACCESS MAY INCLUDE MOVEMENT THRU PERMANENT AND TEMPORARY CONSTRUCTION.
- 4. CONTRACTOR TO UTILIZE MDSHA STANDARD 104.01-28 'STAGED ROADWAY CONSTRUCTION TYPICAL TO PROTECT PAVEMENT DROP-OFF AT THE END OF EACH WORK DAY.
- 5. THE CONTRACTOR SHALL REMOVE, RELOCATE OR COVER ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXIST, RESTORE THE SIGNS TO THEIR ORIGINAL POSITION.
- 6. ARROWS ON THE TRAFFIC MANAGEMENT PLANS DENOTE THE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS UNLESS SPECIFICALLY
- 7. ACCESS TO BUSINESS ON BONIFANT STREET MUST BE MAINTAINED AT ALL TIMES.

SEQUENCE OF CONSTRUCTION - STAGE 1A

- 1. WORK ALONG BONIFANT STREET MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME.
- 2. REMOVE EXISTING PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NORTH SIDE OF BONIFANT STREET. PROVIDE ONE 14' WIDE MINIMUM TRAVEL / BIKE SHARE LANE AND 9' WIDE PARALLEL PARKING LANE. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES ALONG BONIFANT STREET. INCLUDING ONE WAY SIGNS AT GEORGIA AVENUE AND FENTON STREET INTERSECTIONS. MODIFY EXISTING TRAFFIC SIGNALS AT GEORGIA AVENUE FENTON STREET INTERSECTIONS TO ACCOMODATE ONE WAY TRAFFIC.
- 3. INSTALL ALL NECESSARY CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES. CONSTRUCTION SIGNING MUST CONFORM TO MDSHA AND MONTGOMERY COUNTY TEMPORARY TRAFFIC CONTROL MANUAL (TTCM).
- 4. CONSTRUCT PERMANENT DRAINAGE SYSTEM, RELOCATE UTILITIES AND ROADWAY CURB BUMP OUT ALONG BONIFANT STREET SOUTH SIDE BETWEEN GEORGIA AVENUE AND FENTON STREET INTERSECTIONS AND CONSTRUCT FULL DEPTH PAVEMENT PER ROADWAY PLAN.

#### MOT LEGEND

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

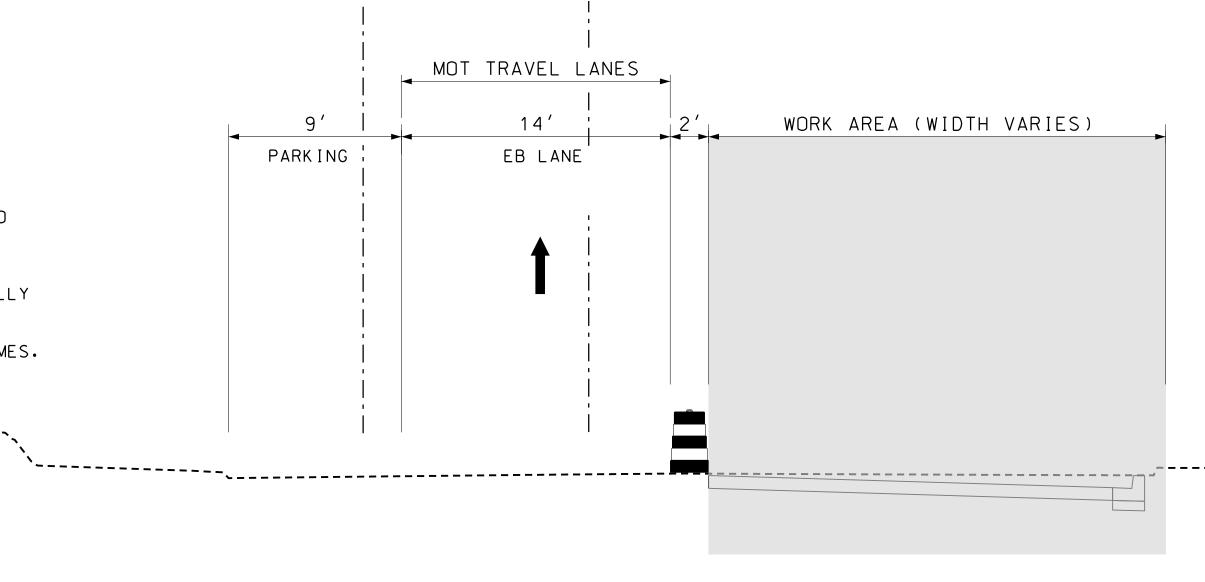
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

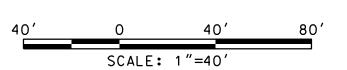
- TYPE III BARRICADE

- IMPACT ATTENUATOR



#### TYPICAL SECTION

STA TRK 1 343+00 TO STA TRK 1 348+50 SCALE: NTS



#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION



**Sannett Fleming** WR84

**JACOBS**°

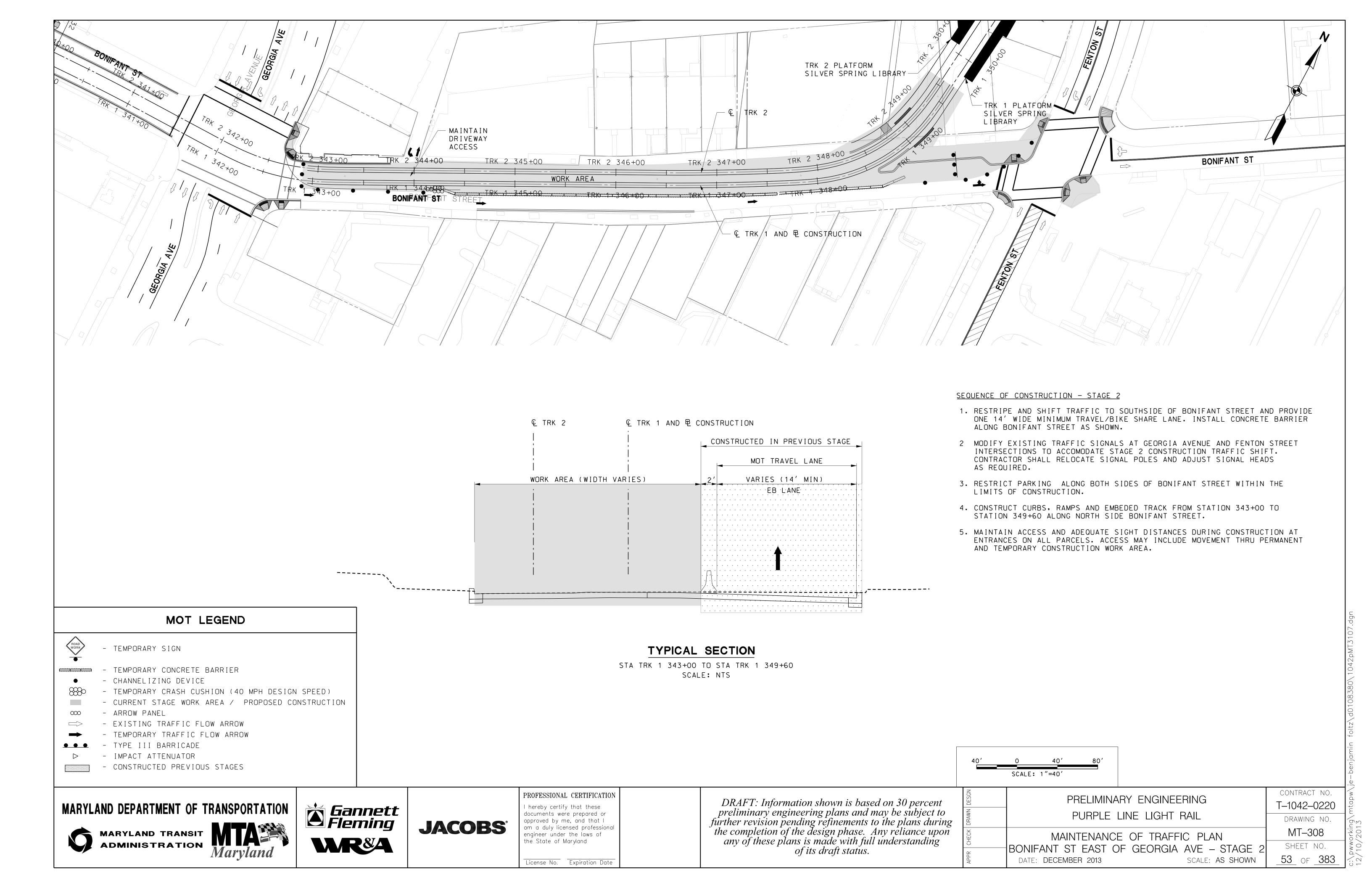
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PROFESSIONAL CERTIFICATION

License No. Expiration Date

₽ TRK 2

				. !
	PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL		CONTRACT NO.	1
			T-1042-0220	1 1
			DRAWING NO.	_
	MAINTENANCE OF TR	AFFIC PLAN	MT-307	
	BONIFANT ST EAST OF GEOF	RGIA AVE - STAGE 1	SHEET NO.	
	DATE: <b>DECEMBER 2013</b>	SCALE: AS SHOWN	_52_ of <u>383</u>	/



- 3. MAINTAIN PEDESTRIAN ACCESS ALONG THE NORTH SIDE OF WAYNE AVENUE THROUGHOUT CONSTRUCTION OF STAGE 1. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD NO. MD-104.06-09A, MD-104.06-09B, MD-104.06-09C AND MD-104.06-09D. PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 4. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES.
- 5. CONSTRUCT FULL DEPTH PAVEMENT, CURBS & GUTTER, SIDEWALK RETAINING WALL & DRAINAGE STRUCTURES ALONG NORTH SIDE OF WAYNE AVENUE FROM MANCHESTER ROAD INTERSECTION TO END OF ROAD WORK ON EAST WAYNE AVENUE.

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

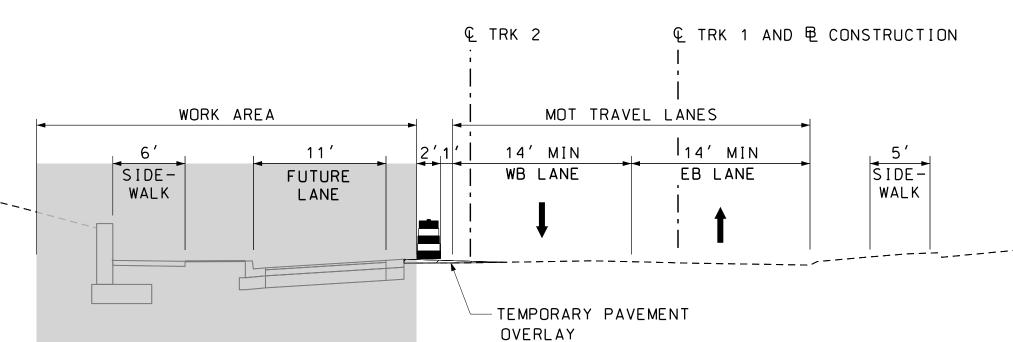
- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

STA TRK 1 401+25 TO STA TRK 1 406+00 SCALE: NTS

- 2. PARKING SHALL BE RESTRICTED ALONG BOTH SIDES OF WAYNE AVENUE WITHIN THE LIMITS OF CONSTRUCTION.
- 3. INTERSECTION SIGHT DISTANCE MUST BE MAINTAINED PER MDSHA STANDARD 104.01-29.
- 4. MAINTAIN ACCESS AND ADEQUATE SIGHT DISTANCES DURING CONSTRUCTION AT ENTRANCES ON ALL PARCELS. ACCESS MAY INCLUDE MOVEMENT THRU PERMANENT AND TEMPORARY CONSTRUCTION.
- 5. CONTRACTOR TO UTILIZE MDSHA STANDARD 104.01-28 'STAGED ROADWAY CONSTRUCTION' TYPICAL TO PROTECT PAVEMENT DROP-OFF AT THE END OF EACH WORK DAY.
- 6. THE CONTRACTOR SHALL REMOVE, RELOCATE OR COVER ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXIST, RESTORE THE SIGNS TO THEIR ORIGINAL POSITION.
- 7. ARROWS ON THE TRAFFIC MANAGEMENT PLANS DENOTE THE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS UNLESS SPECIFICALLY NOTED.

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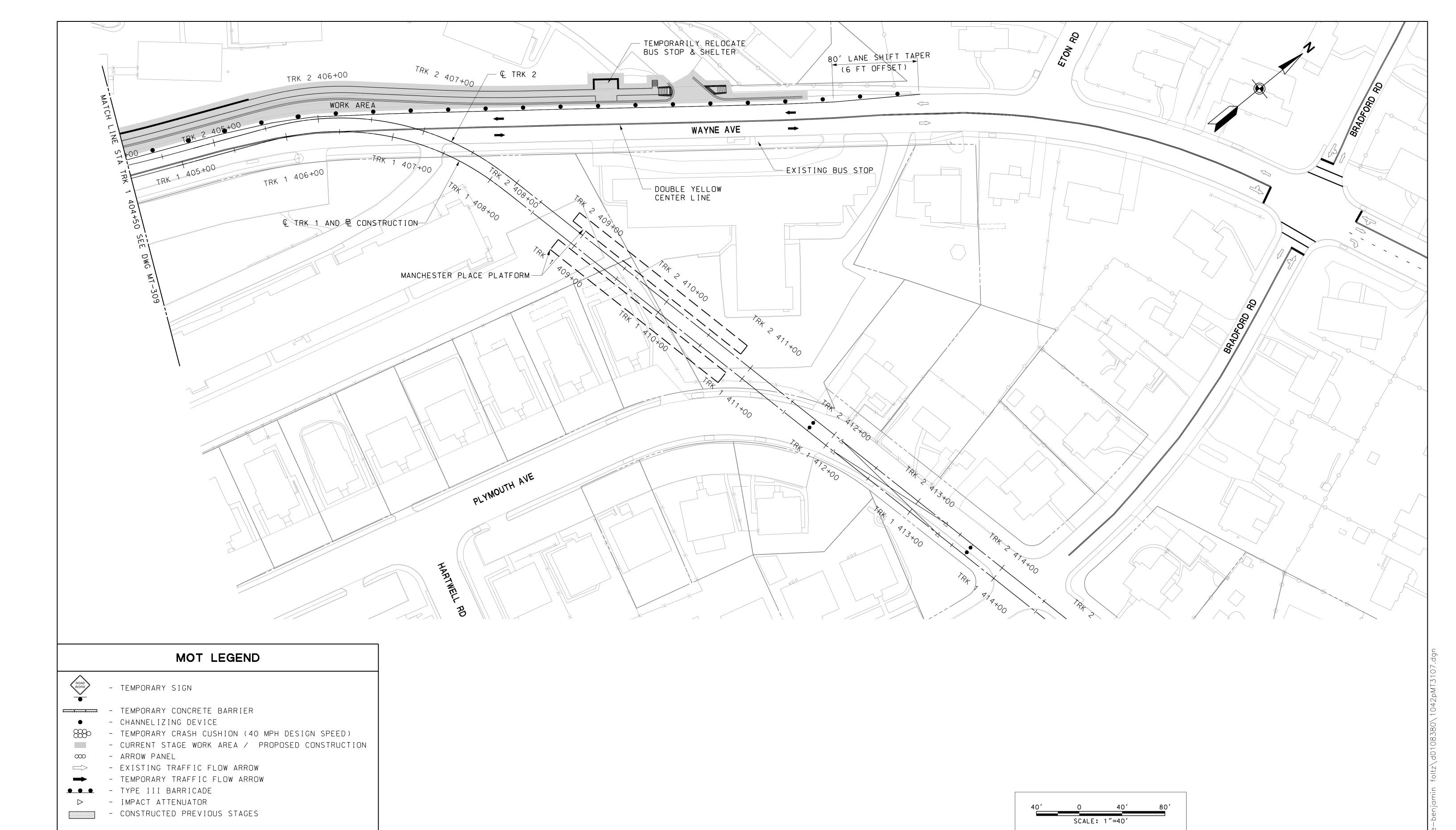
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PRELIMINARY ENGINEERING	CONTRACT NO.
PURPLE LINE LIGHT RAIL	T-1042-0220  DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-309
WAYNE AVENUE – STAGE 1A  DATE: DECEMBER 2013 SCALE: AS SHOWN	SHEET NO. 54 of 383







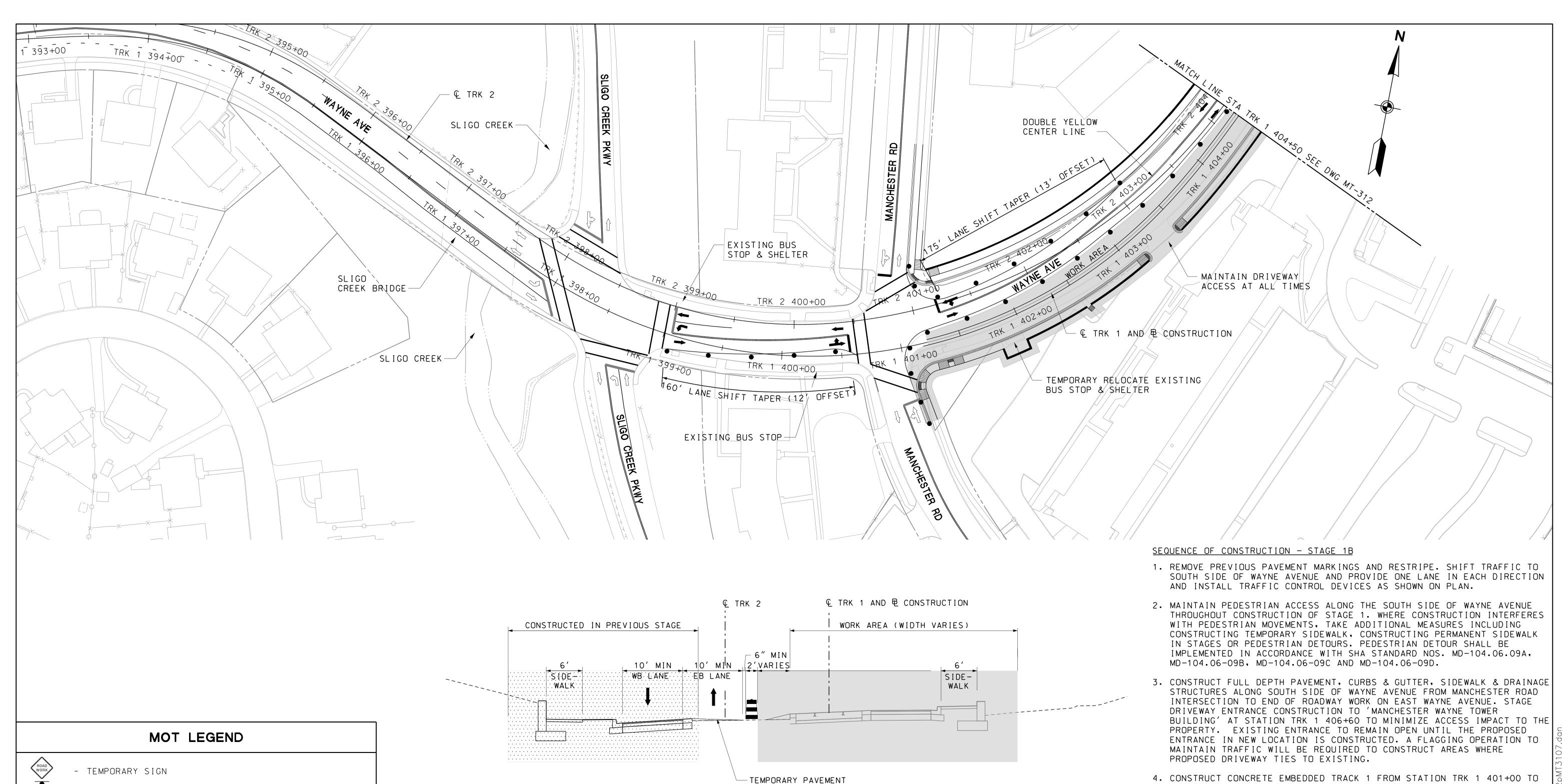


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License No. Expiration Date

	PRELIMINARY ENGINEERING		CONTRACT	NO.
			T-1042-0	)220
	PURPLE LINE LI	GHT RAIL	DRAWING	NO.
	MAINTENANCE OF T	RAFFIC PLAN	MT-31	0
	WAYNE AVENUE – STAGE 1A		SHEET N	10.
	DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	<u>55</u> of _	383



- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

# -TEMPORARY PAVEMENT OVERLAY

#### TYPICAL SECTION

STA TRK 1 401+00 TO STA TRK 1 405+70 SCALE: NTS

- STATION TRK 1 411+50. CONSTRUCT TRACK 2 FROM STATION TRK 2 407+00 TO STATION TRK 2 411+50. CONSTRUCT PLYMOUTH TUNNEL AND STATION PLATFORM. THE EMBEDDED TRACK WORK AT MANCHESTER WAYNE TOWER DRIVEWAY SHALL BE STAGED TO PROVIDE A MINIMUM OF ONE 10' LANE WIDE DRIVEWAY ACCESS TO THE PROPERTY. PROVIDE FLAGGING OPERATION TO MAINTAIN TRAFFIC.
- 5. CONSTRUCT TRAFFIC SIGNAL AT THE VICINITY OF STATION TRK 1 406+70 PER TRAFFIC SIGNAL PLANS.

# SCALE: 1"=40

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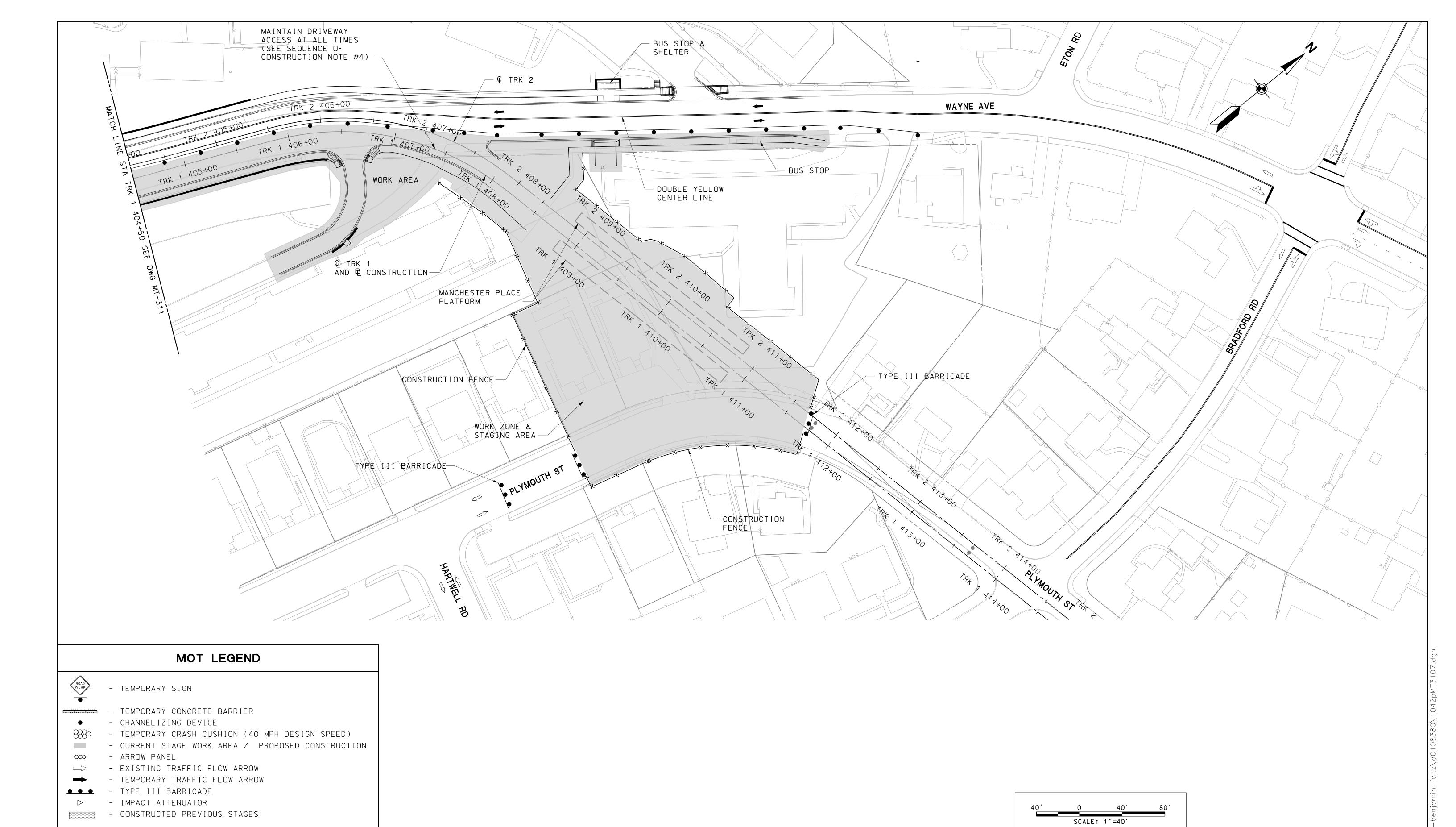
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	PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL		CONTRACT NO.
			T-1042-0220
			DRAWING NO.
	MAINTENANCE OF TRAFF	IC PLAN	MT-311
	WAYNE AVENUE - STAGE 1B		SHEET NO.
	DATE: <b>DECEMBER 2013</b>	SCALE: AS SHOWN	_56_ of <u>383</u>

pwworking /10/2013

**Sannett Fleming** 









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	CONT
PRELIMINARY ENGINEERING	T–104
PURPLE LINE LIGHT RAIL	DRA
	M
MAINTENANCE OF TRAFFIC PLAN	
WAYNE AVENUE – STAGE 1B	SHE

DATE: DECEMBER 2013

ITRACT NO. 042-0220 AWING NO. 1T-312 HEET NO. \_57\_ of \_383 SCALE: AS SHOWN

#### SEQUENCE OF CONSTRUCTION - PLYMOUTH AVENUE DETOUR

- 1. CLOSE PLYMOUTH AVENUE AT HARTWELL ROAD AND BRADFORD ROAD INTERSECTIONS. PLACE TYPE III BARRICADE AS SHOWN ON PLANS.
- 2. DETOUR NORTH PLYMOUTH AVENUE TRAFFIC THROUGH HARTWELL ROAD AND BRADFORD ROAD ONTO PLYMOUTH AVENUE EASTBOUND. SEE DETOUR MAP.
- 3. DETOUR WESTBOUND PLYMOUTH AVENUE TRAFFIC THROUGH BRADFORD ROAD AND HARTWELL ROAD ONTO SOUTHBOUND PLYMOUTH AVENUE AS SHOWN ON THE DETOUR MAP.
- 4. MAINTAIN PEDESTRIAN ACCESS ALONG THE PLYMOUTH AVENUE SIDEWALKS THROUGHOUT CONSTRUCTION OF PHASE 1B. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, TAKE ADDITIONAL MEASURES INCLUDING PEDESTRIAN DETOURS, PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD NO. MD-104.06-09A, MD-104.06-09B, MD-104.06-09C AND MD-10406-09D. PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 5. CONTINUE CONSTRUCTION OF PLYMOUTH TUNNEL AND EMBEDDED TRACK PER STRUCTURAL AND TRACK WORK PLANS, COORDINATE MAINTENANCE OF TRAFFIC AND PEDESTRIAN ACCESS AND SAFETY WITH WAYNE AVENUE CONSTRUCTION AND MAINTENANCE OF TRAFFIC.
- 6. COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS.

#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

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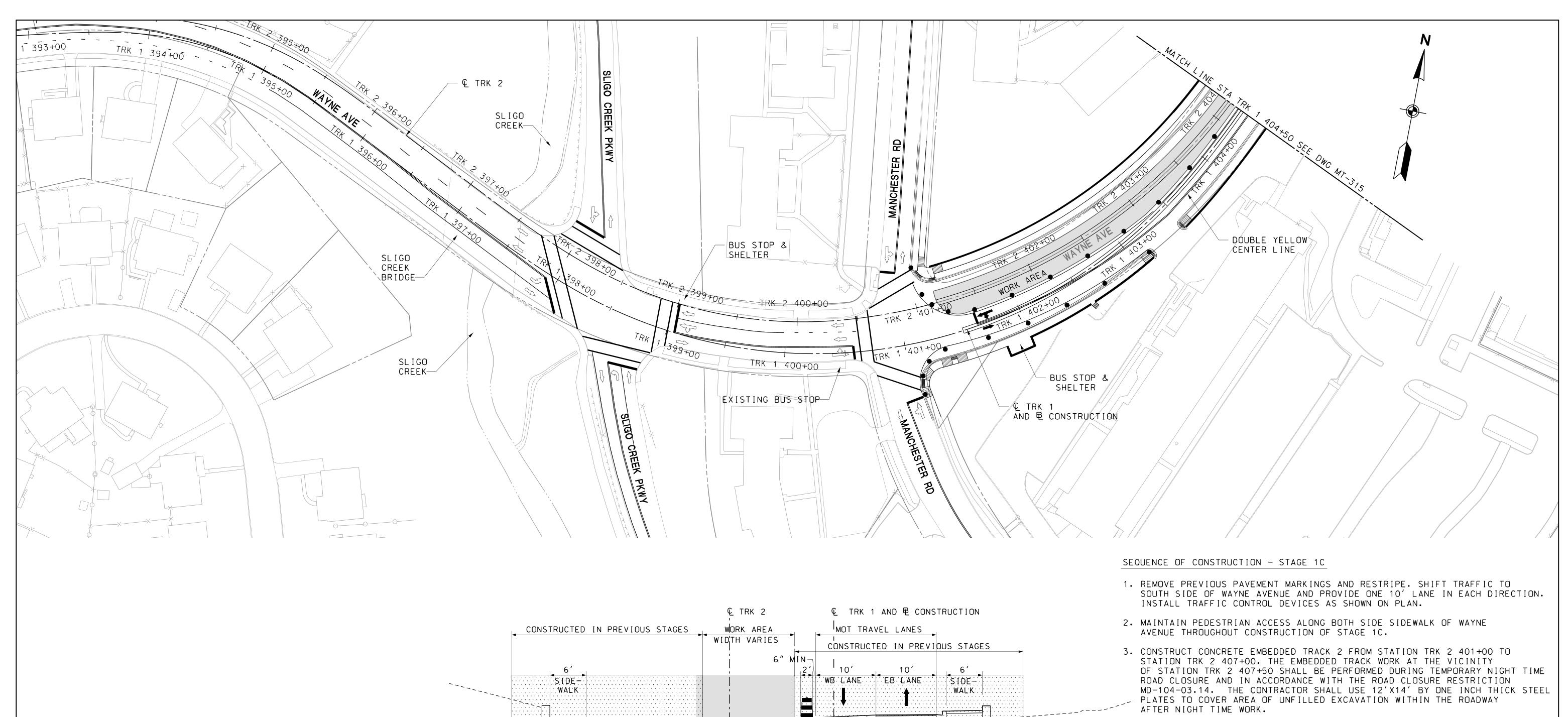
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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-313
WAYNE AVENUE – STAGE 1B	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	58 OF 383

PLYMOUTH AVE DETOUR

> PLYMOUTH AVENUE DETOUR SCALE: NTS

PLYMOUTH ST



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

SCALE: NTS

4. FOR THE NIGHT TIME WAYNE AVENUE ROAD CLOSURE, DETOUR WESTBOUND TRAFFIC THRU BRADFORD ROAD AND MANCHESTER ROAD TO WAYNE AVENUE. FOR TRAFFIC HEADING ON EASTBOUND WAYNE AVENUE DETOUR TRAFFIC AT MANCHESTER ROAD INTERSECTION TO BRADFORD ROAD ONTO WAYNE AVENUE AS SHOWN ON THE DETOUR MAP.

STA TRK 1 401+00 TO STA TRK 1 405+70

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	SCALE: I =40	
DESGN	PRELIMINARY ENGINEERING	
DRAWN	PURPLE LINE LIGHT RAIL	
R CHECK	MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE – STAGE 1C	

DATE: DECEMBER 2013

59 OF 383

CONTRACT NO.

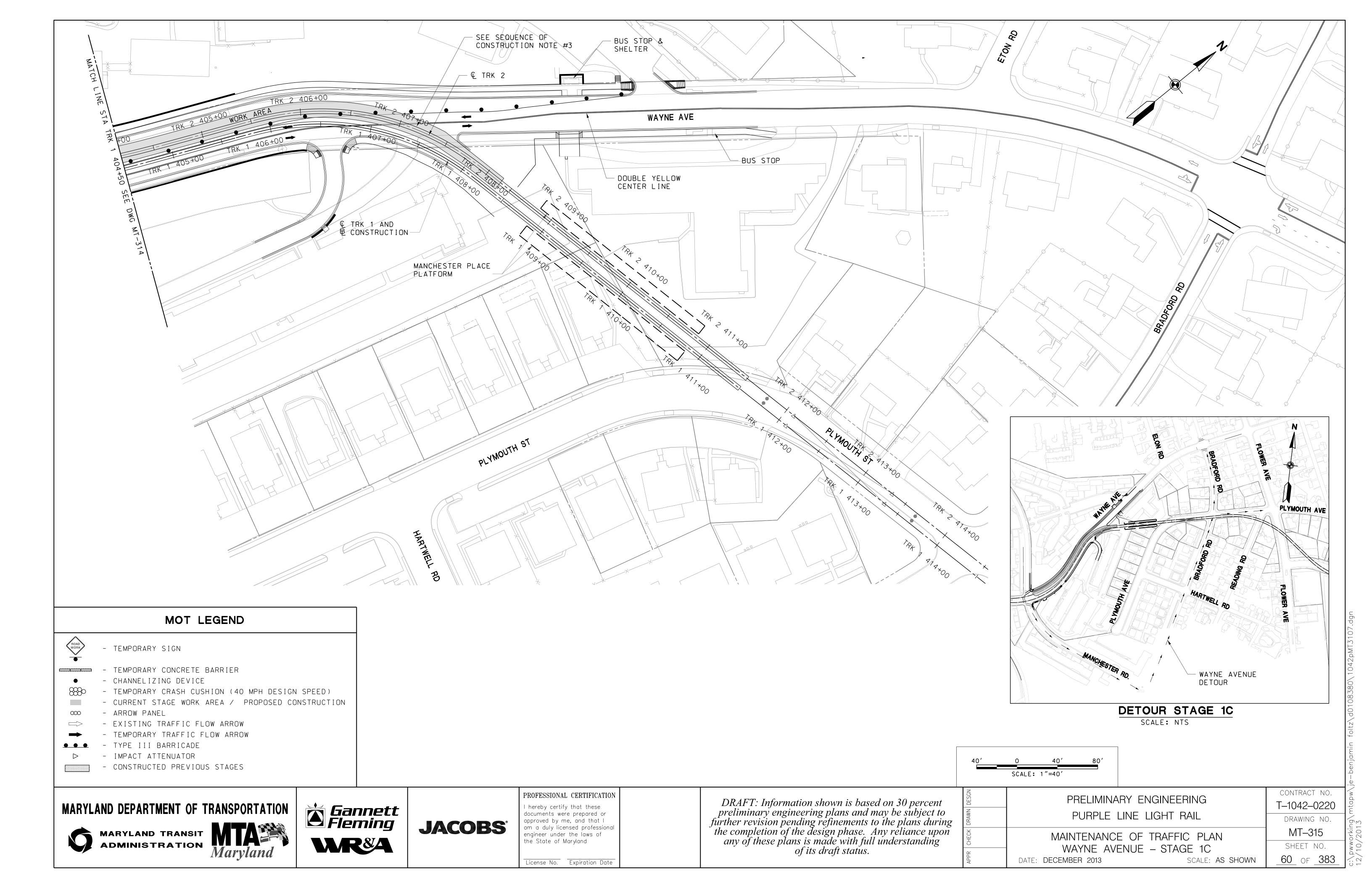
T-1042-0220

DRAWING NO.

MT-314

SHEET NO.

SCALE: AS SHOWN



#### TYPICAL SECTION

STA TRK 1 353+50 TO STA TRK 1 363+00 SCALE: NTS

#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE - IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

- NO. MD-104.06-09A, MD-104.06-09B, MD-104.06-09C AND MD-104.06.09D. PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 4. CONSTRUCT WIDENING OF WAYNE AVENUE NORTH SIDE INCLUDING THE GREEN TRAIL FROM FENTON STREET TO CEDAR STREET INTERSECTION. TO MAINTAIN PEDESTRIAN MOVEMENT ON BOTH SIDES OF THE WAYNE AVENUE SIDEWALKS. CONSIDER CONSTRUCTING THE GREEN TRAIL FROM FENTON STREET TO SLIGO CREEK PARKWAY PRIOR TO OTHER ROADWAY FEAURES IN EACH STAGES TO FACILITATE PEDESTRIAN USE. TRAIL WORK ACROSS WHOLE FOOD STORE PARKING ENTRANCE WILL REQUIRE FLAGGING OPERATION TO MAINTAIN ACCESS DURING CONSTRUCTION.
- 5. PROVIDE / MAINTAIN CURB RAMPS ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 6. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF/PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 7. MODIFY EXISTING TRAFFIC SIGNAL AT FENTON STREET INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY. THE CONTRACTOR SHALL COORDINATE SIGNAL HEAD RELOCATION WITH THE PROJECT ENGINEER.
- 8. COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH BUSINESS OWNERS. FOR DRIVEWAY WIDER THAN 12 FEET CONSIDER CONSTRUCTING IN STAGES.

# SCALE: 1"=40

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT **ADMINISTRATION** 

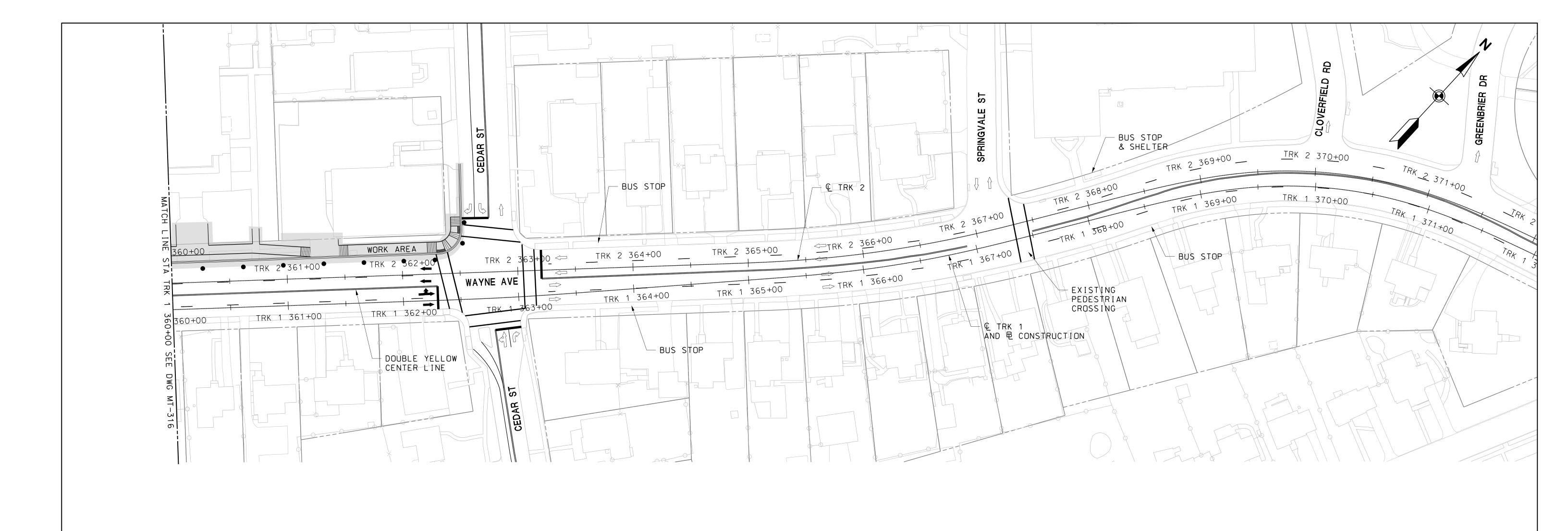


**JACOBS**°

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\_icense No. Expiration Date

	.	$\stackrel{\cdot}{-}$
	CONTRACT NO.	<b>X</b>
PRELIMINARY ENGINEERING	T-1042-0220	ntap
PURPLE LINE LIGHT RAIL	DRAWING NO.	E /
		king 013
MAINTENANCE OF TRAFFIC PLAN	MT–316	ork /20
WAYNE AVENUE - STAGE 2A	SHEET NO.	:\pwwo 2/10/2
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	_61_ OF _383	c:\F





- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

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SCALL. 1 -10			
PRFLIMIN/	ARY ENGINEERING	CONTRACT NO	
-		T-1042-022	20
PURPLE	LINE LIGHT RAIL	DRAWING NO	).
MAINTENANC	E OF TRAFFIC PLAN	MT-317	
- WAYNE AV	ENUE – STAGE 2A	SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS S</b> H	10WN 62 OF 38	33_
WAYNE AV	ENUE – STAGE 2A		-

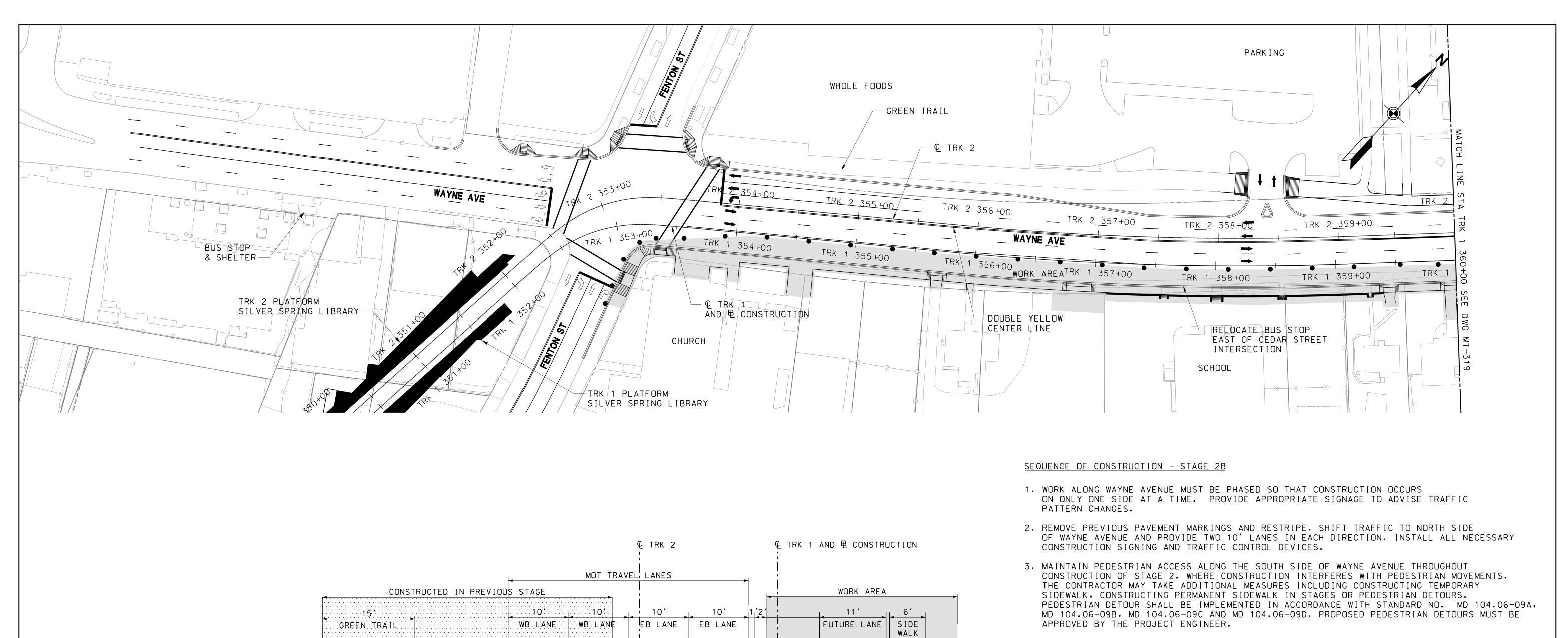
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MARYLAND TRANSIT ADMINISTRATION Maryland



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ROAD

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

• - CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

∞ - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

TYPE III BARRICADEIMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

STA TRK 1 353+50 TO STA TRK 1 363+00 SCALE: NTS

TYPICAL SECTION

- 4. CONSTRUCT WIDENING OF WAYNE AVENUE SOUTH SIDE INCLUDING FULL DEPTH PAVEMENT, CURBS & GUTTER, SIDEWALK AND ACCESS DRIVEWAYS TO ADJACENT PROPERTIES FROM FENTON STREET TO CEDAR STREET INTERSECTION.
- 5. PROVIDE / MAINTAIN CURB RAMP ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 6. TEMPORARY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF/PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 7. MODIFY EXISTING TRAFFIC SIGNAL AT FENTON STREET INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY. THE CONTRACTOR SHALL COORDINATE SIGNAL HEAD RELOCATION WITH THE PROJECT ENGINEER.
- 8. CONTRACTOR TO COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS. FOR DRIVEWAY WIDER THAN 12 FEET CONSIDER PAVING IN PHASES.

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT
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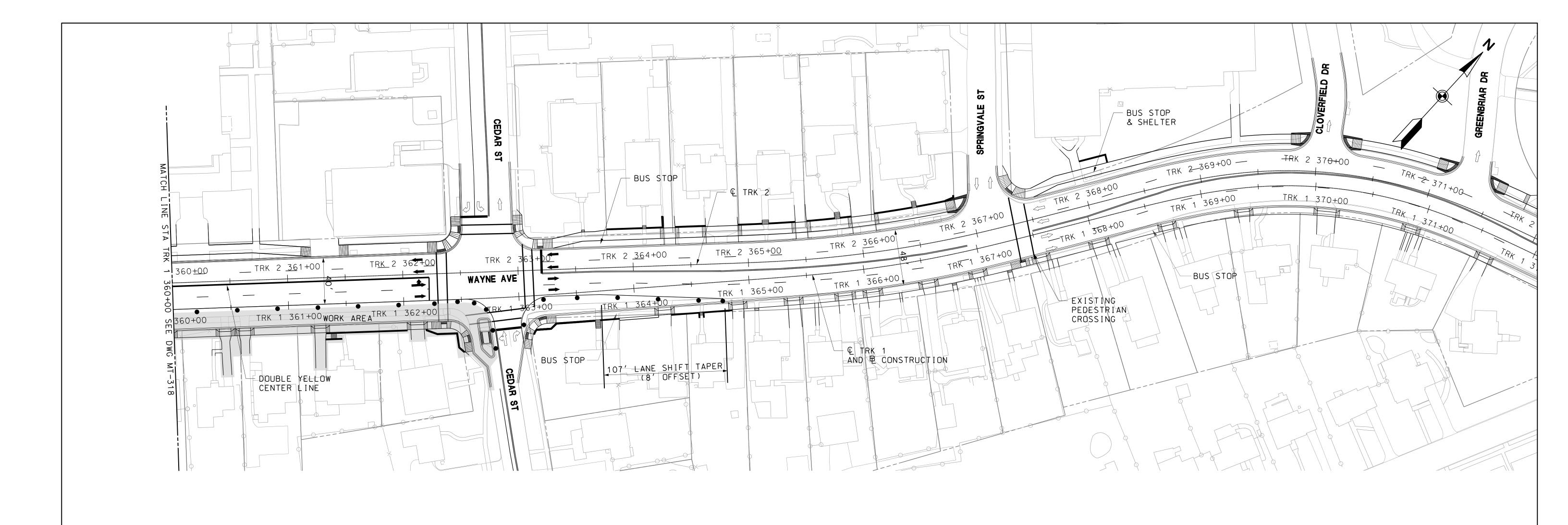
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TEMPORARY

PAVEMENT OVERLAY

SCALL: 1 -40	
PRELIMINARY ENGINEERING	CONTRACT NO.
	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-318
WAYNE AVENUE – STAGE 2B	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	<u>63</u> of <u>383</u>

c:\pwworking\mtapw\je-benjamin foltz\d0108380\1042pMT3107 12/10/2013





- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

MARYLAND DEPARTMENT OF TRANSPORTATION



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SCALE: 1 =40			
	ARY ENGINEERING	CONTRACT NO.	/ ⊗
		T-1042-0220	mtap
PURPLE	LINE LIGHT RAIL	DRAWING NO.	7
MAINTENANC	E OF TRAFFIC PLAN	MT-319	orkir
WAYNE AV	ENUE – STAGE 2B	SHEET NO.	W W
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	64 OF 383 -	<u> </u>



**Sannett Fleming** 

- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO TEMPORARY TRAVE LANES AND INSTALL DRUMS ALONG WAYNE AVENUE AS SHOWN, PROVIDE ONE 12' LANE IN EACH DIRECTION,
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES.
- 4. PROVIDE TEMPORARY WALKWAY THROUGH THE WORK AREA FOR SCHOOL CROSSING AT STATION TRK 1 359+60 +/-. WHEN CONSTRUCTION INTERFERE WITH PEDESTRIAN MOVEMENT, TEMPORARILY DETOUR PEDESTRIAN CROSSING TO FENTON STREET INTERSECTION.
- 5. CONSTRUCT TRACK 2 CONCRETE EMBEDDED TRACK FROM STATION TRK 2 352+50 TO STATION TRK 2 362+00. THE EMBEDDED TRACK WORK AT FENTON STREET AND WAYNE AVENUE INTERSECTION WILL OCCUR DURING NIGHT TIME TEMPORARY LANE CLOSURES IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE SHA STANDARD MD-104.03-14. THE CONTRACTOR SHALL USE 12 FT X 14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 6. FOR NIGHT TIME CONSTRUCTION 1.) DETOUR NORTHBOUND FENTON STREET TRAFFIC THRU EASTBOUND WAYNE AVENUE, NORTHBOUND CEDAR STREET, WESTBOUND ELLSWORTH DR TO FENTON STREET. 2.) DETOUR SOUTHBOUND FENTON AVENUE TRAFFIC THRU WESTBOUND WAYNE AVENUE, SOUTHBOUND GEORGIA AVE, EASTBOUND BONIFANT STREET TO FENTON STREET. 3.) DETOUR WESTBOUND WAYNE AVENUE TRAFFIC THRU SOUTHBOUND FENTON STREET, WESTBOUND BONIFANT STREET, NORTHBOUND GEORGIA AVENUE TO FENTON STREET. 4. DETOUR EASTBOUND WAYNE AVENUE TRAFFIC THRU SOUTHBOUND FENTON STREET, WESTBOUND BONIFANT STREET, NORTHBOUND GEORGIA AVENUE TO WAYNE AVENUE.

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

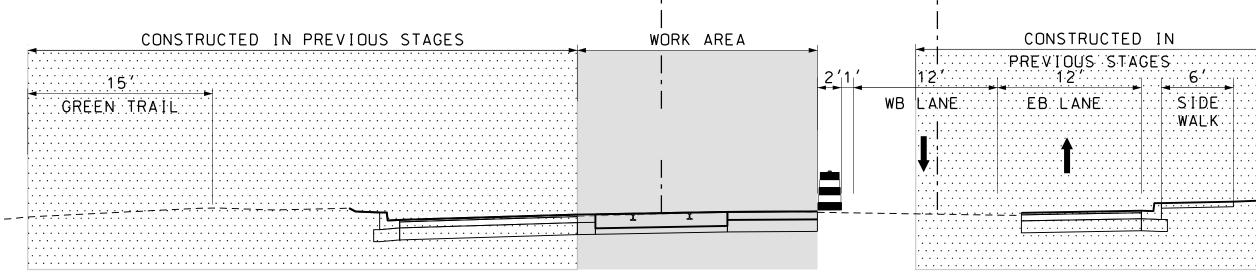
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

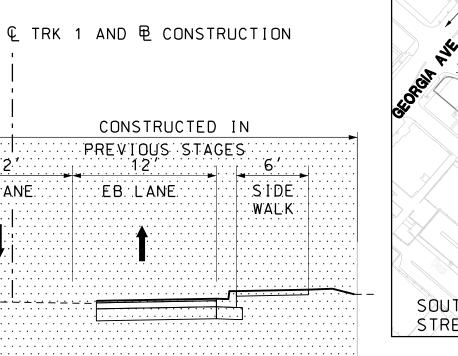
- TEMPORARY TRAFFIC FLOW ARROW

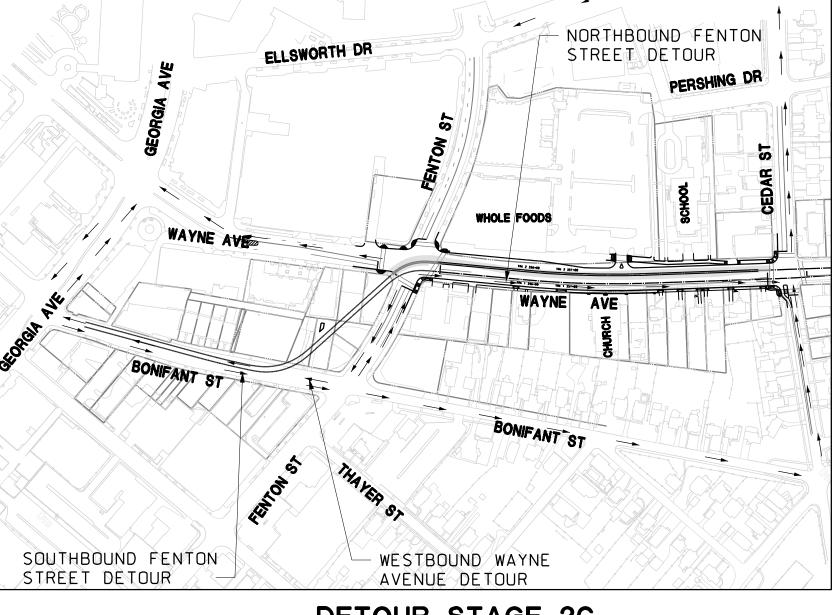
- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES



© TRK 2





#### **DETOUR STAGE 2C**

SCALE: NTS

#### TYPICAL SECTION

STA TRK 1 353+50 TO STA TRK 1 363+00 SCALE: NTS

40′	0	40′	80′
	SCALE:	1 "=40'	

DATE: DECEMBER 2013

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT **ADMINISTRATION** 



**JACOBS**°

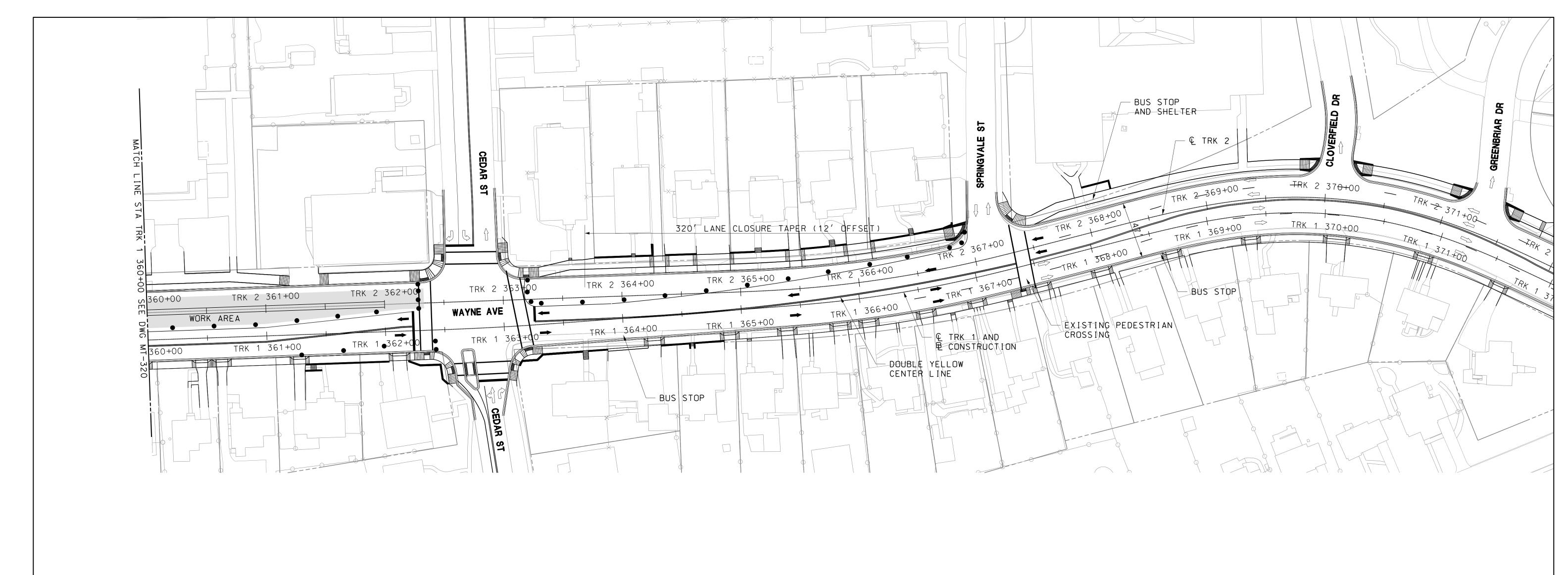
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PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE – STAGE 2C

CONTRACT NO. T-1042-0220 DRAWING NO. MT-320 SHEET NO. 65 OF 383 SCALE: AS SHOWN





•

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

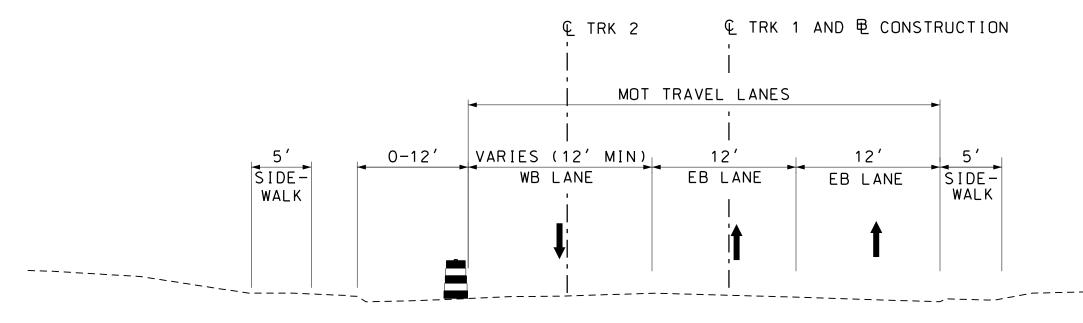
- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

STA TRK 1 363+00 TO STA TRK 1 367+00 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION

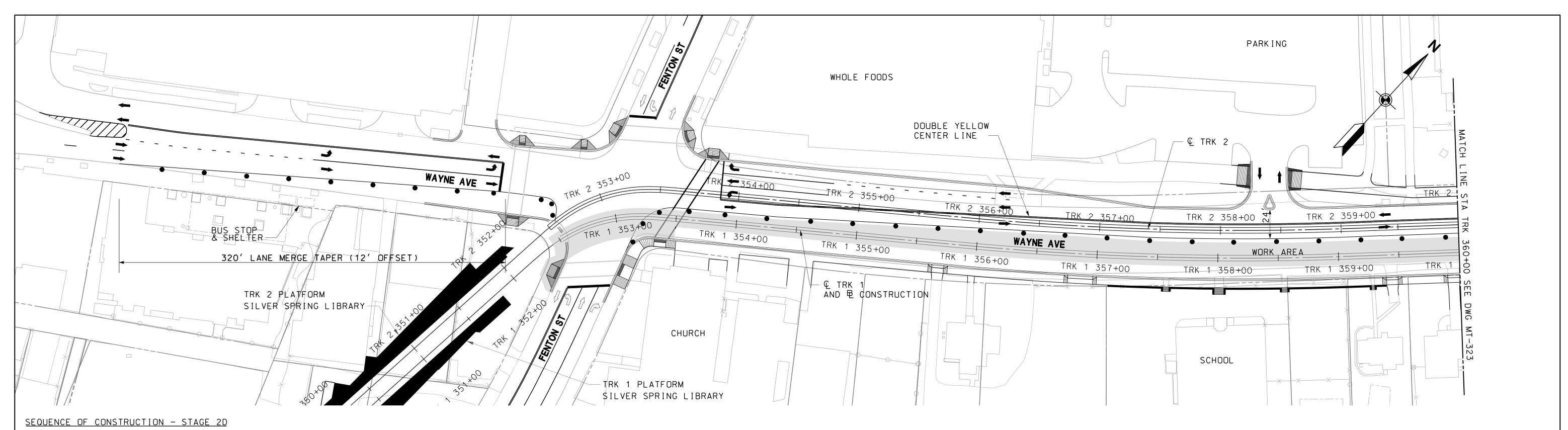


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License No. Expiration Date

			].
	DV ENGINEEDING	CONTRACT NO.	
PRELIIVIINA 	ARY ENGINEERING	T-1042-0220	١.
PURPLE	LINE LIGHT RAIL	DRAWING NO.	/
MAINTENANCI	E OF TRAFFIC PLAN	MT-321	
	ENUE – STAGE 2C	SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE: AS SHOWN	<u>66</u> of <u>383</u>	-



- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES AND INSTALL DRUMS ALONG WAYNE AVENUE AS SHOWN. PROVIDE ONE 12' LANE IN EACH DIRECTION.
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES.
- 4. CONSTRUCT TRACK 1 CONCRETE EMBEDDED TRACK FROM STATION TRK 1 352+50TO STATION TRK 1 362+00. THE EMBEDDED TRACK WORK AT FENTON STREET AND WAYNE AVENUE INTERSECTION WILL OCCUR DURING NIGHT TIME TEMPORARY LANE CLOSURES IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE SHA STANDARD MD-104.03-14. THE CONTRACTOR SHALL USE 12 FT X 14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 5. FOR NIGHT TIME CONSTRUCTION 1.) DETOUR NORTHBOUND FENTON STREET TRAFFIC AT FENTON AND BONIFANT STREET INTERSECTION TO WESTBOUND BONIFANT, NORTHBOUND GEORGIA AVE AND EASTBOUND ELLSWORTH DRIVE TO FENTON STREET, 2) DETOUR SOUTHBOUND FENTON AVENUE TRAFFIC THRU WESTBOUND WAYNE AVENUE, SOUTHBOUND GEORGIA AVE, EASTBOUND BONIFANT STREET TO FENTON STREET. 3) RESTRICT WESTBOUND WAYNE AVENUE LEFT TURN AND EASTBOUND WAYNE AVENUE RIGHT TURN DURING NIGHT TIME CONSTRUCTION.
- 6. COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS. FOR DRIVEWAY WIDER THAN 12 FEET CONSIDER CONSTRUCTING IN STAGES.

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

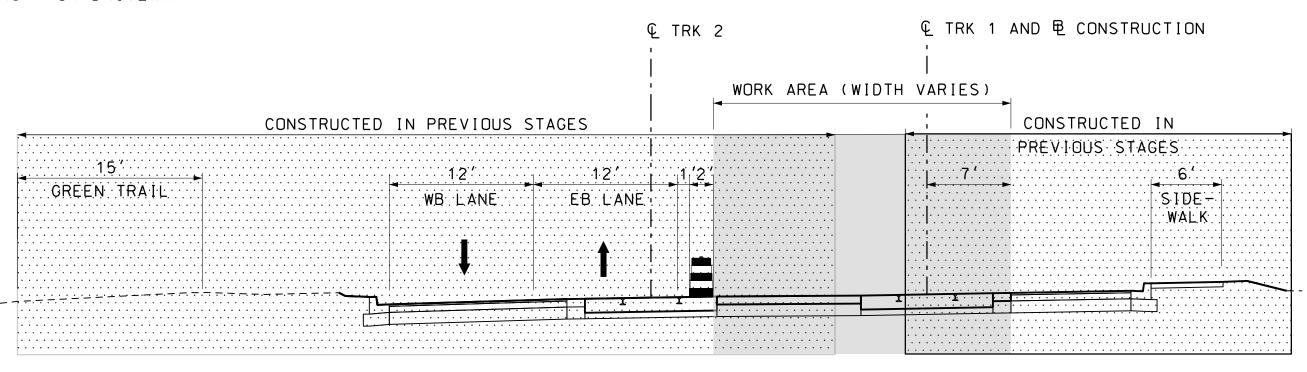
- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

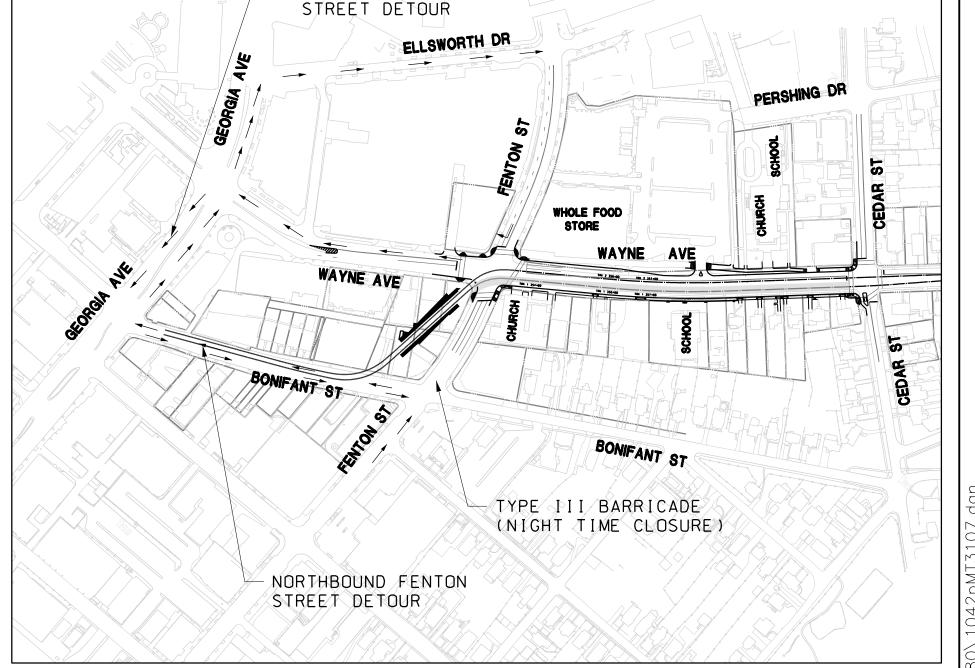
- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

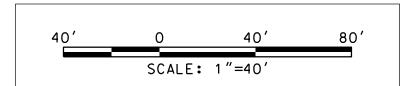
STA TRK 1 353+50 TO STA TRK 1 363+00 SCALE: NTS



SOUTHBOUND FENTON

#### **DETOUR STAGE 2D**

SCALE: NTS



DATE: **DECEMBER 2013** 

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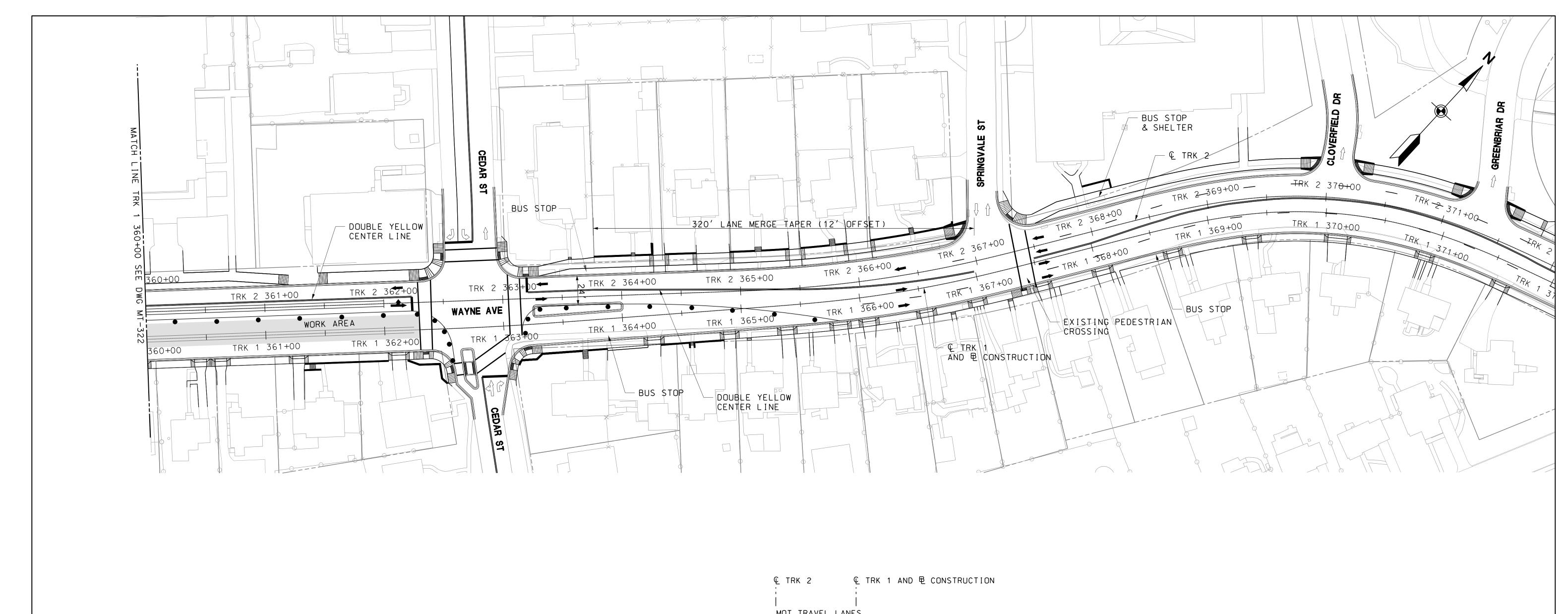
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PRELIMINARY ENGINEERING	
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN	
WAYNE AVENUE – STAGE 2D	

CONTRACT NO. T-1042-0220 DRAWING NO. MT-322 SHEET NO. 67 OF 383 SCALE: AS SHOWN



•

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

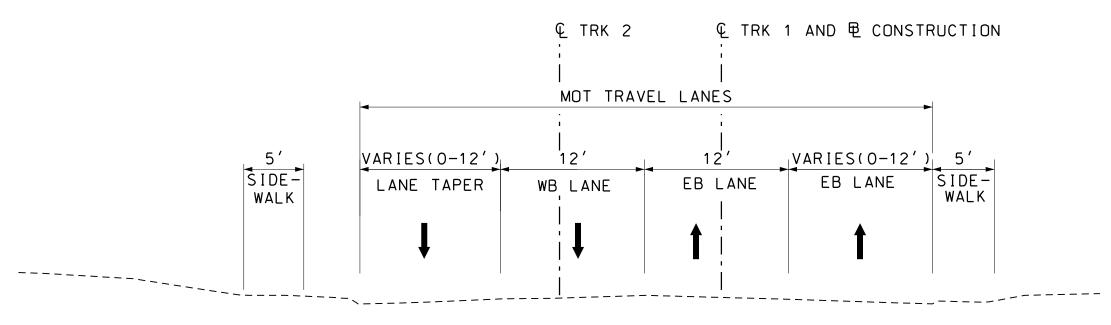
- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

STA TRK 1 363+0000 TO STA TRK 1 367=00 SCALE: NTS

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION

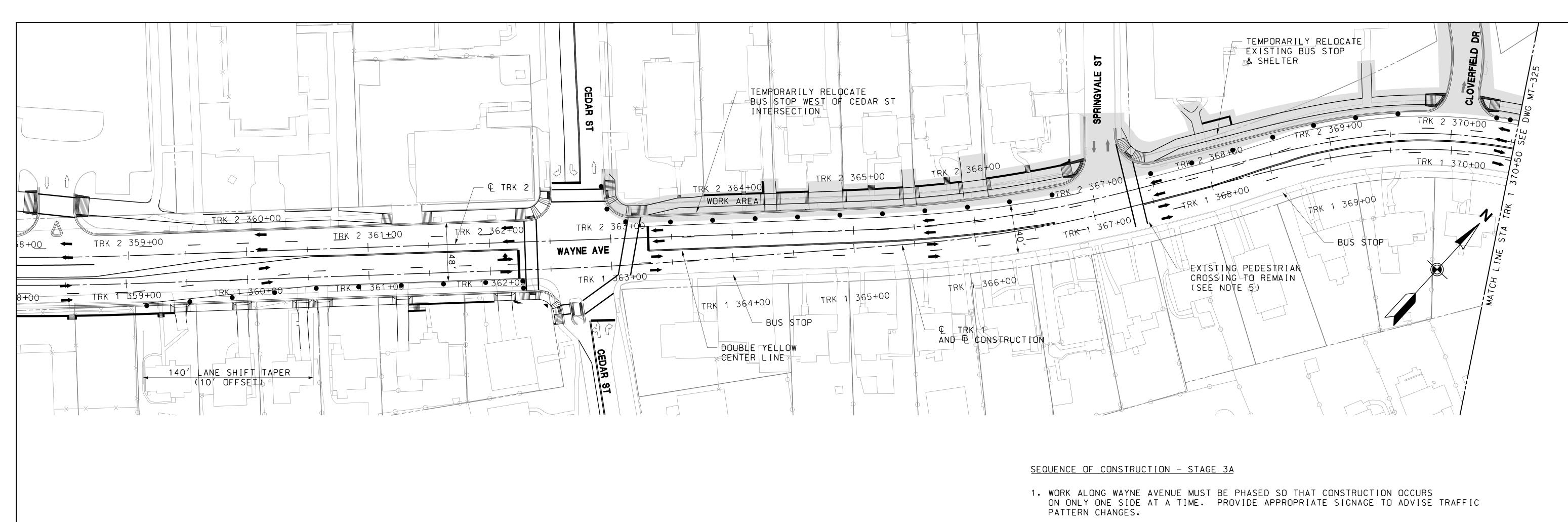


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License No. Expiration Date

SCALE: 1 =40			
	RY ENGINEERING	CONTRACT NO.	/
FNELIIVIIINAN 	NI ENGINEENING	T-1042-0220	1
PURPLE LI	INE LIGHT RAIL	DRAWING NO.	/
MAINTENANCE	OF TRAFFIC PLAN	MT-323	.
WAYNE AVE	NUE – STAGE 2D	SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	68 OF 383	/



#### € TRK 1 AND € CONSTRUCTION ⊈ TRK 2 MOT TRAVEL LANES WORK AREA WIDTH VARIES WB LANE WB LANE EB LANE SIDE-GREEN TRAIL

#### TYPICAL SECTION

STA TRK 1 363+00+00 TO STA TRK 1 371+20 SCALE: NTS

- 2. REMOVE PREVIOUS OR EXISTING PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO SOUTH SIDE OF WAYNE AVENUE AND PROVIDE TWO 10' LANES IN EACH DIRECTION.
- 3. MAINTAIN PEDESTRIAN ACCESS ALONG THE NORTH SIDE OF WAYNE AVENUE THROUGHOUT CONSTRUCTION OF STAGE 3. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD NO. MD 104.06-09A, MD 104.06-09B, MD 104.06-09C AND MD 104.06.09D.
- 4. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER, SIDEWALK & DRAINAGE STRUCTURES ALONG NORTH SIDE OF WAYNE AVENUE FROM CEDAR STREET TO GREENBRIER ROAD INTERSECTION.
- STATION TRK 1 367+45.
  - 6. ACCESS TO SPRINGVALE STREET AND CLOVERFIELD ROAD MUST BE MAINTAINED AT ALL TIMES. WORK AT THE INTERSECTIONS MAY REQUIRE FLAGGING OPERATION. IN ACCORDANCE WITH STANDARD MD 104-02-14, STAGED CONSTRUCTION MAY BE REQUIRED TO MAINTAIN ONE 10' LANE ON THESE CROSS ROADS / STREETS.
  - 7. CONTRACTOR TO COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS FOR DRIVEWAYS WIDER THAN 12 FEET, CONSIDER CONSTRUCTING IN STAGES.
  - 8. PROVIDE / MAINTAIN CURB RAMPS ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
  - 9. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF/PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.

#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER - CHANNELIZING DEVICE

> - TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW - TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE - IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### PROFESSIONAL CERTIFICATION



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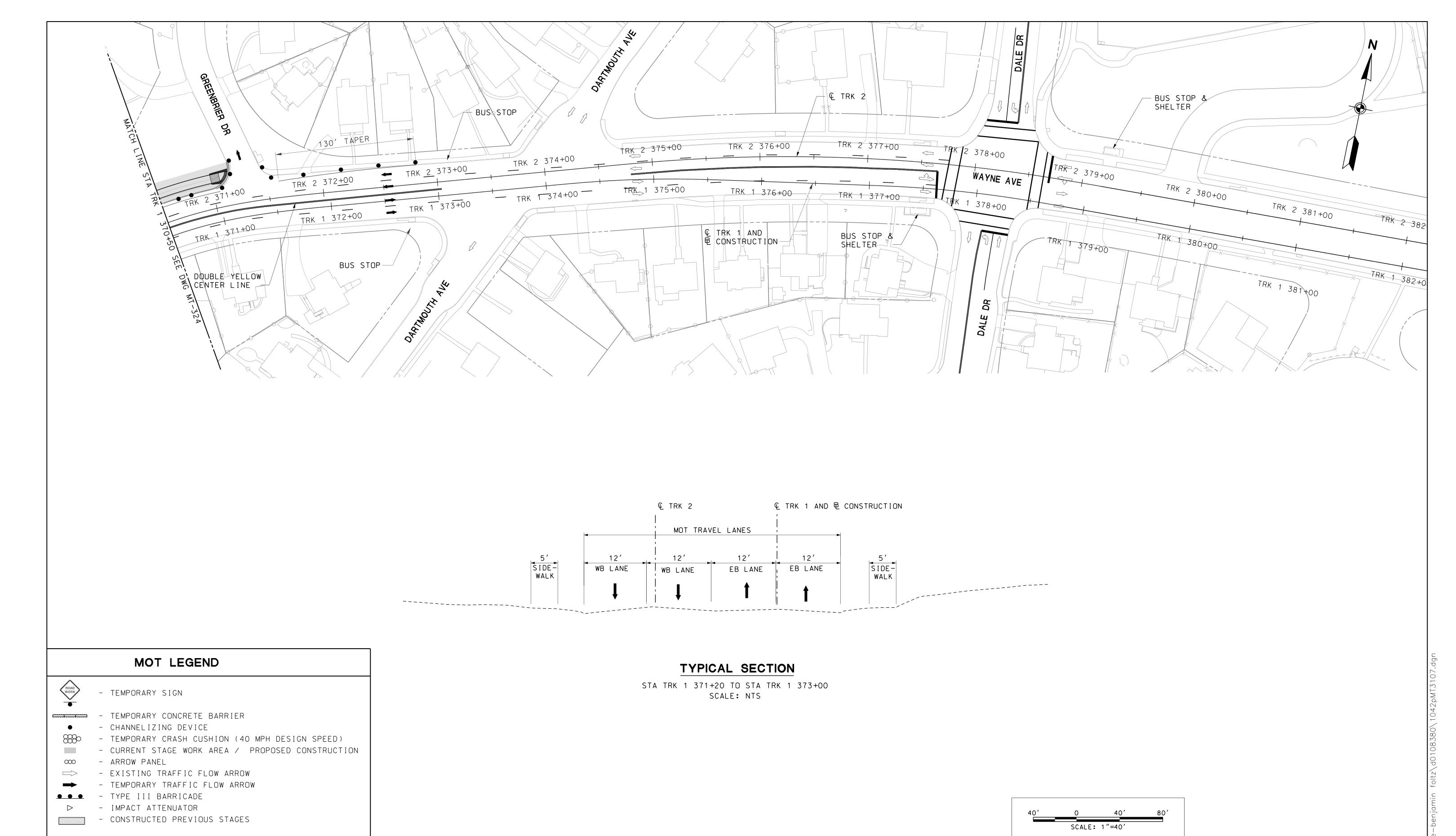
JUNE 1 -40		
DREI IMINIA	RY ENGINEERING	CONTRACT NO.
PURPLE	LINE LIGHT RAIL	DRAWING NO.
MAINTENANC	E OF TRAFFIC PLAN	MT-324
WAYNE AVE	ENUE – STAGE 3A	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	_69_ of <u>383</u>

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION











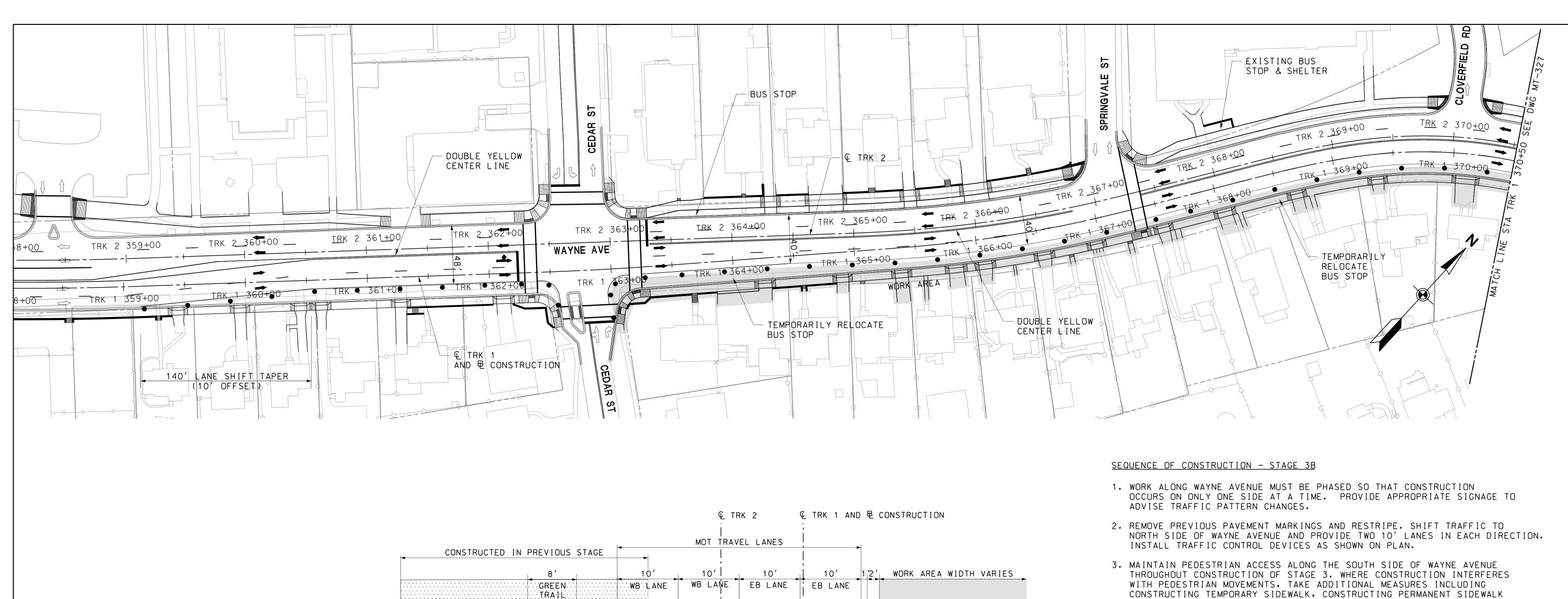
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License No. Expiration Date

	NICCOINC	CONTRACT NO.
PRELIMINARY ENGI	NEERING	T-1042-0220
PURPLE LINE LIG	HT RAIL	DRAWING NO.
MAINTENANCE OF TR	AFFIC PLAN	MT-325
WAYNE AVENUE – S		SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: AS SHOWN	_70_ of <u>383</u>



#### TYPICAL SECTION

STA TRK 1 363+00 TO STA TRK 1 371=20 SCALE: NTS

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

MOT LEGEND

- ARROW PANEL

•

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE - IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

- CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD NOS. MD 104.06-09A. MD 104.06-09B, MD104.06-09C AND MD-104.06.09D.
- 4. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER, SIDEWALK AND DRAINAGE STRUCTURES ALONG SOUTH SIDE OF WAYNE AVENUE FROM CEDAR STREET TO GREENBRIER ROAD INTERSECTION.
- 5. PROVIDE TEMPORARY WALKWAY THROUGH THE WORK AREA FOR PEDESTRIAN CROSSING AT STATION TRK 367+45.
- 6. CONTRACTOR TO COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS FOR DRIVEWAYS WIDER THAN 12 FEET, CONSIDER PAVING IN PHASES.
- 7. PROVIDE / MAINTAIN CURB RAMPS ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 8. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES, SCHOOL BUS DROP-OFF/PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.

# SCALE: 1"=40

#### MARYLAND DEPARTMENT OF TRANSPORTATION





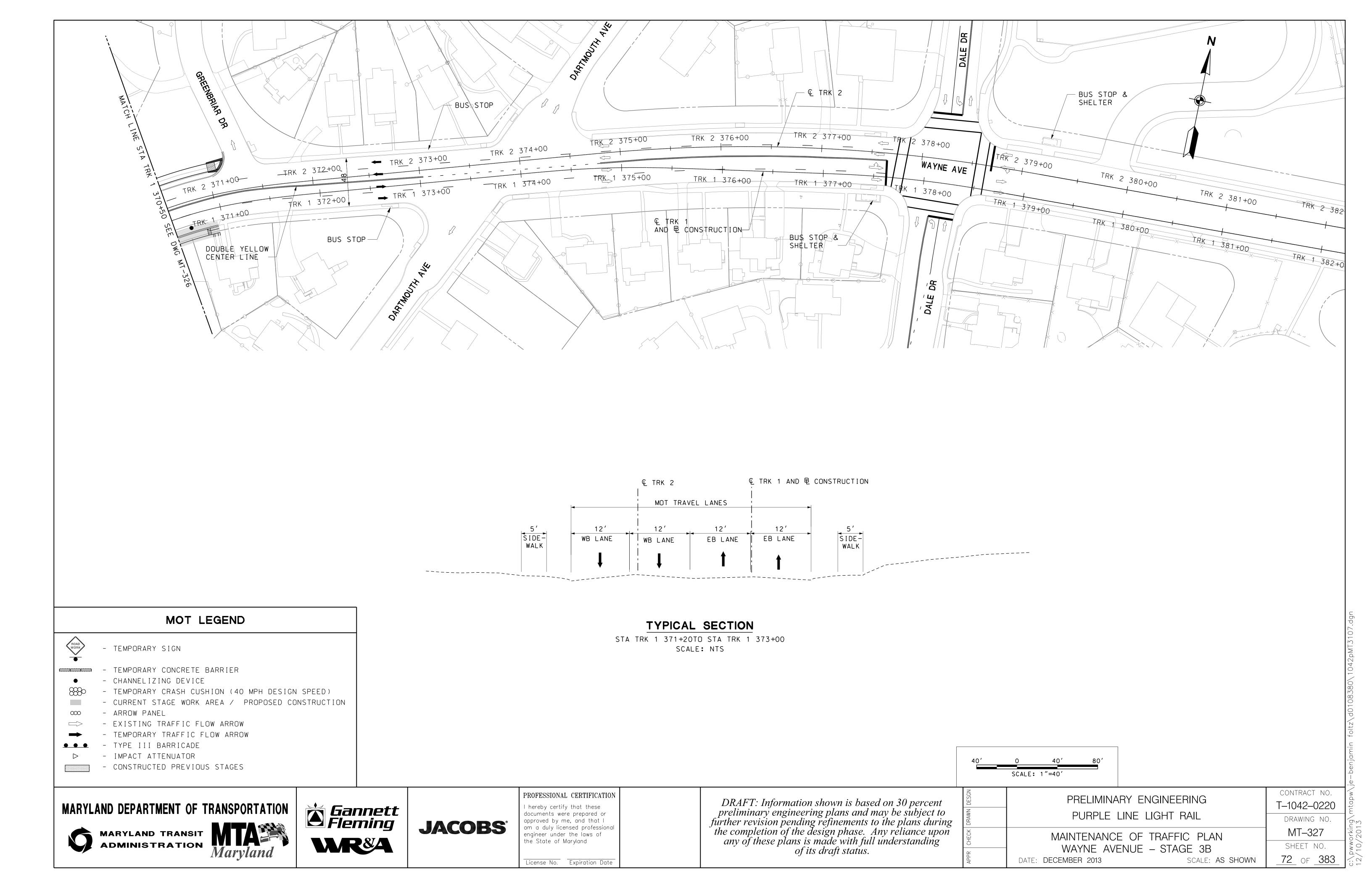


**JACOBS**°

PROFESSIONAL CERTIFICATION hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

License No. Expiration Date

	CINIEEDING	CONTRACT NO.
PRELIMINARY EN	GINEERING	T-1042-0220
PURPLE LINE LI	GHT RAIL	DRAWING NO.
		MT-326
MAINTENANCE OF 1	RAFFIC PLAN	
WAYNE AVENUE -	- STAGE 3B	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	<u>71</u> of <u>383</u>



- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES ON NORTH SIDE OF WAYNE AVENUE. PROVIDE ONE 11' LANES IN EACH DIRECTION. INSTALL DRUMS ALONG WAYNE AVENUE AS SHOWN.
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES.
- 4. MODIFY EXISTING TRAFFIC SIGNAL AT CEDAR STREET INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY.
- 5. CONSTRUCT EASTBOUND CONCRETE EMBEDDED TRACK 1 FROM STATION TRK 1 362+00 TO STATION TRK 1 370+50.
- 6. THE EMBEDDED TRACK WORK AT CEDAR STREET AND WAYNE AVENUE INTERSECTION WILL OCCUR DURING NIGHT TIME. TEMPORARY LANE CLOSURES WILL BE IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE SHA STANDARD MD-104.03-14. THE CONTRACTOR SHALL USE 12 FT X14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.

# CONSTRUCTED IN PREVIOUS STAGES 8' 11' 11' 2' GREEN WB LANE B LANE B LANE B LANE B LANE CONSTRUCTED IN WORK AREA CONSTRUCTED IN PREVIOUS STAGES PREVIOUS STAGES 5' WALK WALK

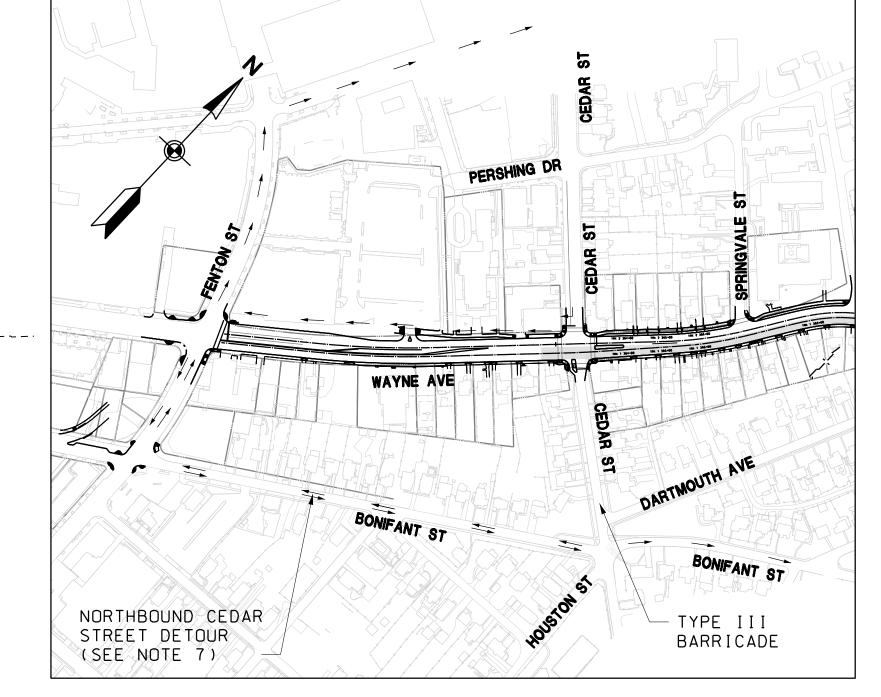
#### TYPICAL SECTION

STA TRK 1 362+00 TO STA TRK 1 370+50 SCALE: NTS

#### MOT LEGEND

- ROAD WORK
  - TEMPORARY SIGN
  - TEMPORARY CONCRETE BARRIER
- CHANNELIZING DEVICE
  - TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)
  - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION
- ∞ ARROW PANEL
- EXISTING TRAFFIC FLOW ARROW
  - TEMPORARY TRAFFIC FLOW ARROW
- TYPE III BARRICADE
- → IMPACT ATTENUATOR
- CONSTRUCTED PREVIOUS STAGES

- 7. FOR THE NIGHT TIME CONSTRUCTION, CLOSE CEDAR STREET NORTHBOUND AT BONIFANT STREET INTERSECTION EXCEPT FOR LOCAL TRAFFIC, DETOUR NORTHBOUND TRAFFIC TO WESTBOUND BONIFANT STREET, NORTHBOUND FENTON STREET, EASTBOUND WAYNE AVENUE ONTO CEDAR STREET. FOR NORTHBOUND CEDAR STREET TRAFFIC HEADING TO WAYNE AVENUE, DETOUR TO WESTBOUND BONIFANT STREET, NORTHBOUND FENTON STREET ONTO WAYNE AVENUE.
- 8. PROVIDE / MAINTAIN CURB RAMPS ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 9. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES.



DETOUR STAGE 3C
SCALE: NTS

#### 40' 0 40' 80' SCALE: 1"=40'

#### MARYLAND DEPARTMENT OF TRANSPORTATION







## **JACOBS**°

PROFESSIONAL CERTIFICATION

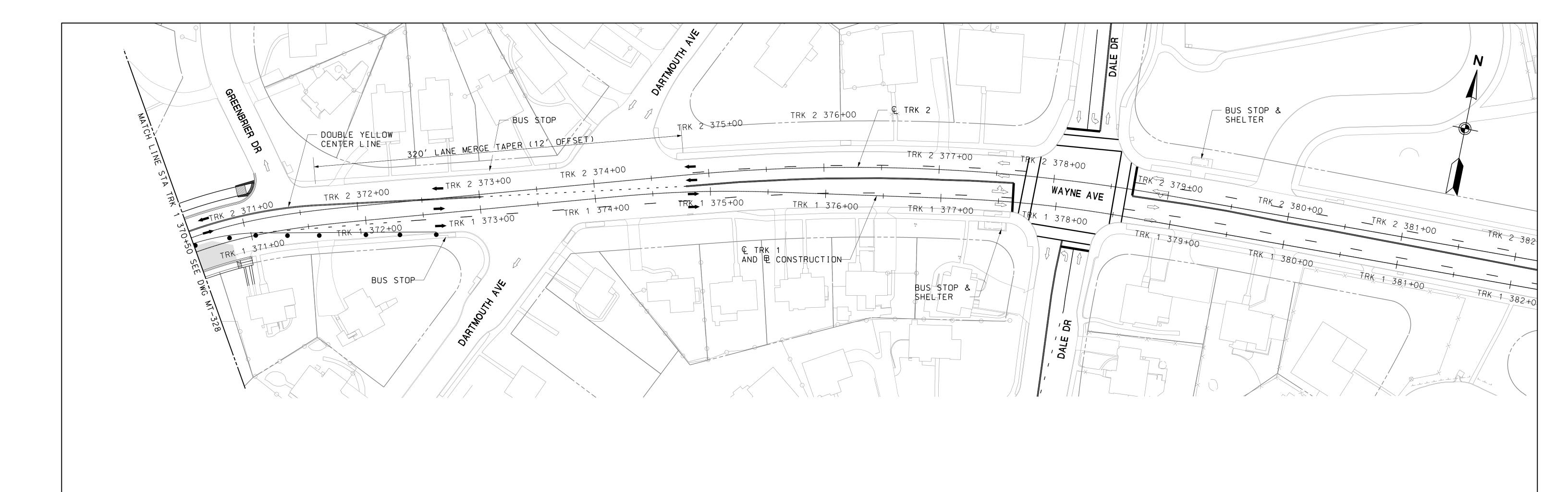
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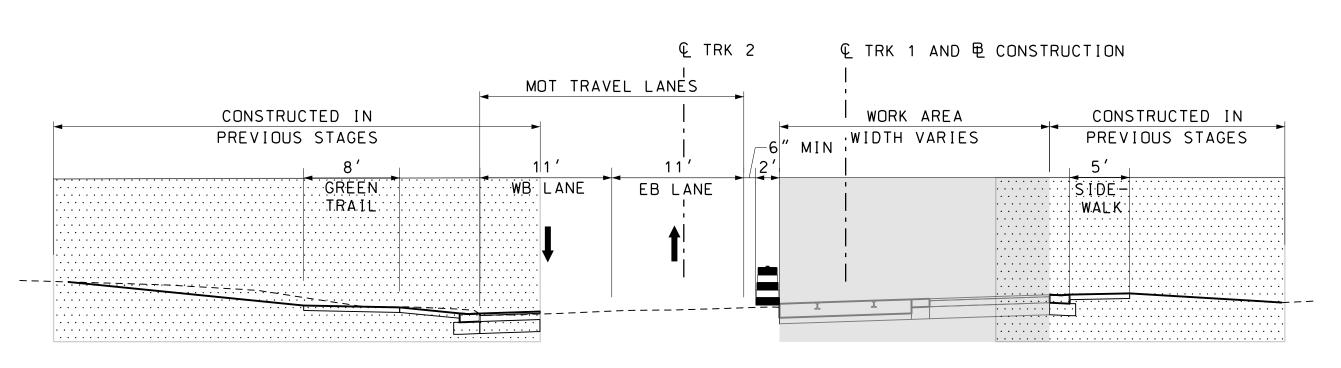
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	ALLDINO.	CONTRACT NO.
PRELIMINARY ENGIN	NEERING	T-1042-0220
PURPLE LINE LIGH	HT RAIL	DRAWING NO.
NAAINITENIANIOE OF TO	AFFIC DI ANI	MT-328
I MAINTENANCE OF TRA	AFFIC PLAIN	1011 020
WAYNE AVENUE - S		SHEET NO.

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- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 370+50 TO STA TRK 1 371+00 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION





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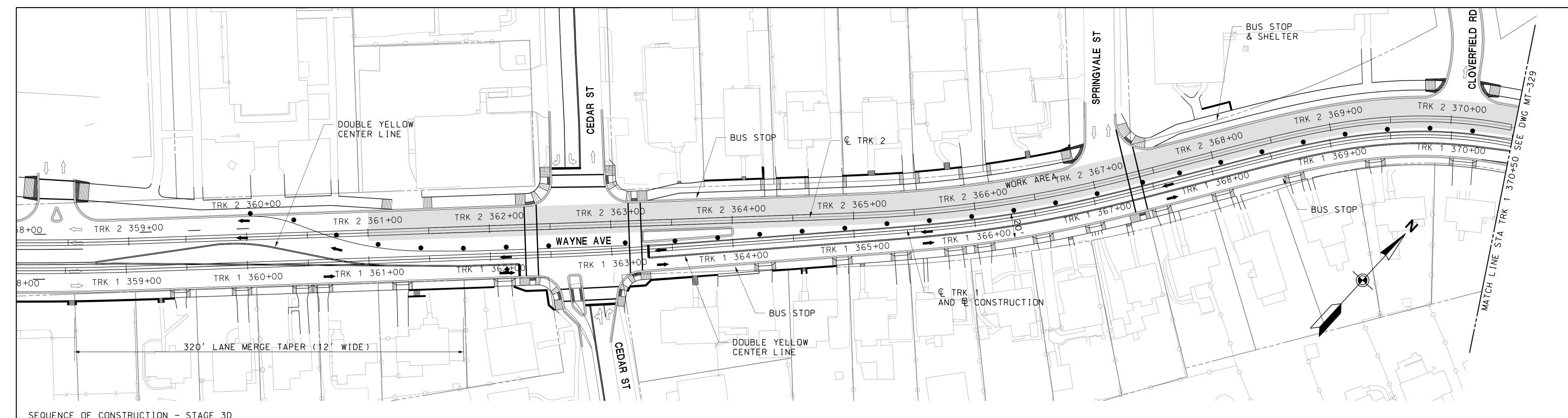
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	CONT
PRELIMINARY ENGINEERING	T_10
PURPLE LINE LIGHT RAIL	DRA
MAINTENANCE OF TRAFFIC PLAN	M
WAYNE AVENUE - STAGE 3C	SHI
DATE: DECEMBER 2013 SCALE: AS SHOWN	_74

NTRACT NO. 042-0220 RAWING NO. MT-329 HEET NO. 74 OF 383



#### SEQUENCE OF CONSTRUCTION - STAGE 3D

- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO TEMPORARY TRAVEL LANES ON SOUTH SIDE OF WAYNE AVENUE. PROVIDE ONE 10' LANES IN EACH DIRECTION. INSTALL DRUMS ALONG WAYNE AVENUE AS SHOWN.
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES.
- 4. MODIFY EXISTING TRAFFIC SIGNAL AT CEDAR STREET INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY.
- 5. CONSTRUCT WESTBOUND CONCRETE EMBEDDED TRACK FROM STATION TRK 2 361+50 TO STATION TRK 2 370+50.
- 6. THE EMBEDDED TRACK WORK AT CEDAR STREET AND WAYNE AVENUE INTERSECTION WILL OCCUR DURING NIGHT TIME. TEMPORARY LANE CLOSURES WILL BE IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE SHA STANDARD MD-104.03-14. THE CONTRACTOR SHALL USE 12 FT X14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.

#### © TRK 2 € TRK 1 AND 邑 CONSTRUCTION MOT TRAVEL LANES CONSTRUCTED IN WORK AREA CONSTRUCTED IN WIDTH VARIES PREVIOUS STAGES PREVIOUS STAGES ⊢6"'MIN EB LANE SIDE GREEN TRAIL

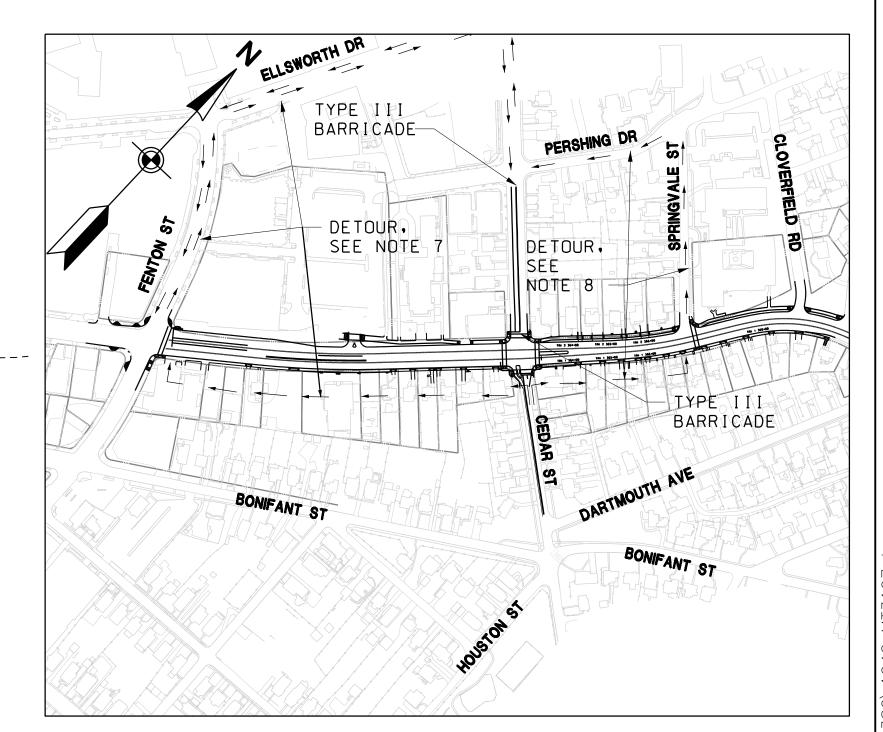
#### TYPICAL SECTION

STA TRK 1 363+50 TO STA TRK 1 370+50 SCALE: NTS

## MOT LEGEND

- TEMPORARY SIGN
  - TEMPORARY CONCRETE BARRIER - CHANNELIZING DEVICE
- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)
- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION
- ARROW PANEL
- EXISTING TRAFFIC FLOW ARROW
  - TEMPORARY TRAFFIC FLOW ARROW
- TYPE III BARRICADE
- IMPACT ATTENUATOR
- CONSTRUCTED PREVIOUS STAGES

- 7. FOR NIGHT TIME CONSTRUCTION, CLOSE CEDAR STREET SOUTHBOUND AT PERSHING DR INTERSECTION EXCEPT FOR LOCAL TRAFFIC. DETOUR SOUTHBOUND CEDAR STREET TRAFFIC HEADING TO WAYNE AVENUE TO WESTBOUND ELLSWORTH DR. TO SOUTHBOUND FENTON STREET ONTO WAYNE AVENUE. THE CLOSURE OF CEDAR STREET AT PERSHING DR WILL REQUIRE FLAGGING OPERATION. (SEE DETOUR MAP)
- 8. FOR CEDAR STREET TRAFFIC SOUTH OF WAYNE AVENUE INTERSECTION HEADING NORTHBOUND WILL DETOUR THRU EASTBOUND WAYNE AVENUE, NORTHBOUND SPRINGVALE STREET, WESTBOUND PERISHING DR ONTO CEDAR STREET. (SEE DETOUR MAP)



**DETOUR STAGE 3D** SCALE: NTS

SCALE: AS SHOWN

# SCALE: 1"=40

DATE: DECEMBER 2013

#### MARYLAND DEPARTMENT OF TRANSPORTATION







## **JACOBS**°

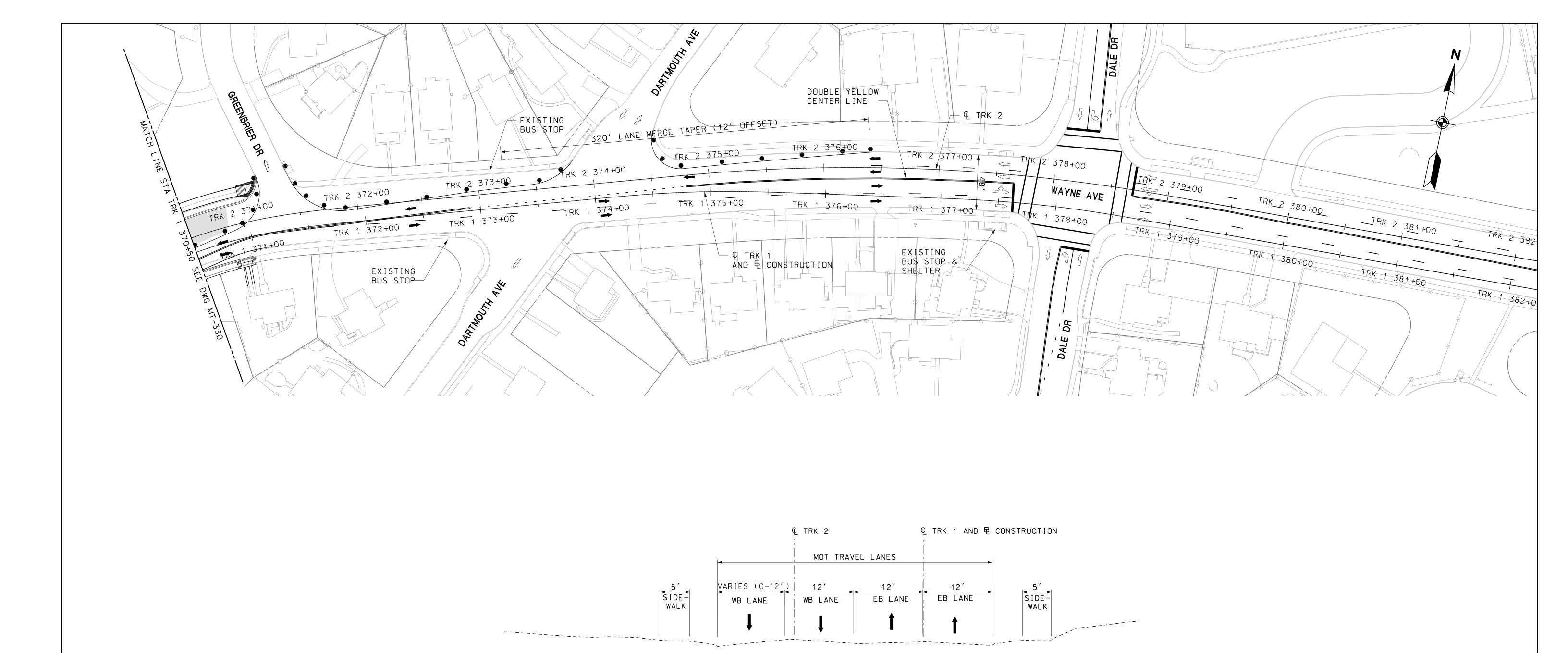
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	CONTR
PRELIMINARY ENGINEERING	T-104
PURPLE LINE LIGHT RAIL	DRAV
	DRAV
MAINTENANCE OF TRAFFIC PLAN	MT
WAYNE AVENUE – STAGE 3D	SHE

TRACT NO. )42–0220 AWING NO. IT-330 EET NO. 75 OF 383



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 371+00 TRK 1 376+50 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION



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PRELIMINARY ENGINEERING	cc <b>T</b>
PURPLE LINE LIGHT RAIL	D
MAINTENANCE OF TRAFFIC PLAN	
WAYNE AVENUE – STAGE 3D	

CONTRACT NO. -1042-0220 DRAWING NO. MT-331 SHEET NO. 76 OF 383 SCALE: AS SHOWN DATE: **DECEMBER 2013** 

#### SEQUENCE OF CONSTRUCTION - STAGE 4A

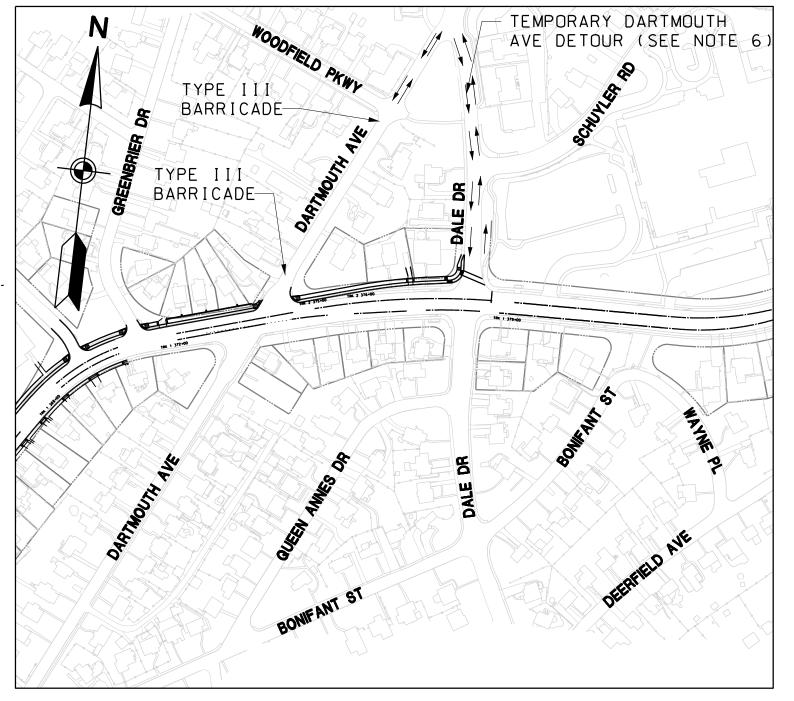
- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO SOUTH SIDE OF WAYNE AVENUE AND PROVIDE TWO 10' LANES IN EACH DIRECTION. INSTALL DRUMS ALONG AVENUE AS SHOWN AND INSTALL ALL NECESSARY CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES.
- 3. MAINTAIN PEDESTRIAN ACCESS ALONG THE NORTH SIDE OF WAYNE AVENUE THROUGHOUT CONSTRUCTION OF STAGE 4. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, THE CONTRACTOR MAY TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH SHA STANDARD NOS. MD 014.06-09A, 104.06-09B, 104.06-09C AND MD 104.06-09D. PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 4. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES, SCHOOL BUS DROP-OFF / PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 5. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER, SIDEWALK AND DRAINAGE STRUCTURE ON NORTH SIDE OF WAYNE AVENUE FROM STATION TRK 1 371+00 TO STATION TRK 1 378+00

#### © TRK 1 AND ® CONSTRUCTION © TRK 2 MOT TRAVEL LANES WORK AREA (WIDTH VARIES) WB LANE WB LANE EB LANE EB LANE GREEN TRAIL WALK- TEMPORARY PAVEMENT OVERLAY

#### TYPICAL SECTION

STA TRK 1 371+00 TO STA TRK 1 378+00 SCALE: NTS

- 6. MAINTAIN DARTMOUTH AVENUE AND GREENBRIER DRIVE ACCESS OPEN THROUGH THE WORK AREA. STAGE CONSTRUCTION AT THESE INTERSECTIONS BY PROVIDING ONE 10' LANE ON THESE ROADS. IF TEMPORARY CLOSURE OF DARTMOUTH AVENUE AT WAYNE AVENUE INTERSECTION IS REQUIRED, PLACE TYPE III BARRICADE AT WOODFIELD INTERSECTION AND DETOUR TRAFFIC THROUGH DALE DRIVE TO WAYNE AVENUE AS SHOWN ON THE DETOUR MAP.
- 7. CONTRACTOR TO COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS. FOR DRIVEWAY WIDER THAN 12 FEET CONSIDER PAVING IN STAGES.



**DETOUR STAGE 4A** SCALE: NTS

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

MOT LEGEND

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES SCALE: 1"=40

#### MARYLAND DEPARTMENT OF TRANSPORTATION





**Sannett Fleming** WR&A

**JACOBS**°

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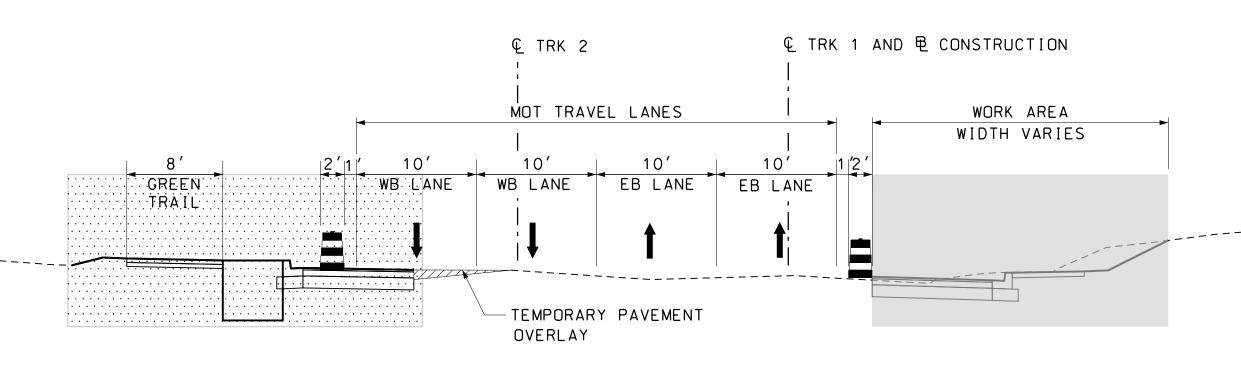
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PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENIANCE OF TRAFFIC DI AI

T-1042-0220 DRAWING NO. MT-332 MAINTENANCE OF TRAFFIC PLAN SHEET NO. WAYNE AVENUE - STAGE 4A 77 OF 383 DATE: DECEMBER 2013 SCALE: AS SHOWN

CONTRACT NO.





- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 370+90 TO STA TRK 1 378+00 SCALE: NTS

#### SEQUENCE OF CONSTRUCTION - STAGE 4B

- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NORTH SIDE OF WAYNE AVENUE AND PROVIDE TWO 10' LANES IN EACH DIRECTION. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES ALONG WAYNE AVENUE AS SHOWN.
- 3. MAINTAIN PEDESTRIAN ACCESS ALONG THE SOUTH SIDE OF WAYNE AVENUE THROUGHOUT CONSTRUCTION OF STAGE 4. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH SHA STANDARD NOS. MD 014.06-09A, 104.06-09B, 104.06-09C AND MD 104.06-09D, PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 4. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER, SIDEWALK AND DRAINAGE STRUCTURE ON SOUTH SIDE OF WAYNE AVENUE FROM STATION TRK 1 370+90 TO STATION TRK 1 378+00.
- 5. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF\* PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 6. MAINTAIN DARTMOUTH AVENUE ACCESS OPEN THROUGH THE WORK AREA. STAGE CONSTRUCTION AT THIS INTERSECTION BY PROVIDING ONE 10' LANE OPEN. DARTMOUTH AVENUE WILL REQUIRE FLAGGING OPERATION IN ACCORDANCE WITH MDSHA STANDARD NO. MD 104.02-10.
- 7. CONTRACTOR TO COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS. FOR DRIVEWAY WIDER THAN 12 FEET CONSIDER PAVING IN STAGES.

## PROFESSIONAL CERTIFICATION

MARYLAND TRANSIT **ADMINISTRATION** 



**Sannett Fleming** WR&A

**JACOBS**°

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	ADV ENCINEEDING	CONTRACT NO.
PRELIMINARY ENGINEERING		T-1042-0220
PURPLE	LINE LIGHT RAIL	DRAWING NO.
MAINTENANC	E OF TRAFFIC PLAN	MT-333
WAYNE AVI	ENUE – STAGE 4B	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	<u>78</u> of <u>383</u>

c:\pwworking\r 12/10/2013

#### SEQUENCE OF CONSTRUCTION - STAGE 4C

- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO SOUTH SIDE OF WAYNE AVENUE AND PROVIDE ONE 10' LANE IN EACH DIRECTION. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES ALONG WAYNE AVENUE AS SHOWN ON PLAN.
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING WORK ZONE TRAFFIC CONTROL DETAILS: SHA STD. NOS. MD 014.06-09A, 104.06-09B, 104.06-09C AND 104.06-09D.
- 4. CONSTRUCT EMBEDDED TRACK 2 FROM STATION TRK 2 370+50 TO STATION TRK 2 377+50. THE TRACK WORK AT DARTMOUTH AVENUE AND GREENBRIER DRIVE INTERSECTION WITH WAYNE AVENUE WILL OCCUR DURING TEMPORARY ROAD CLOSURES AND IN ACCORDANCE WITH MDSHA STANDARD MD-104.03-08. THE CONTRACTOR SHALL USE 12'X14' BY ONE INCH THICK STEEL PLATES TO COVER AREA OF UNFILLED EXCAVATION WITHIN ROADWAY AFTER ROAD CLOSURE WORK.
- 5. MAINTAIN DARTMOUTH AVENUE AND GREENBRIER DRIVE ACCESS OPEN THROUGH THE WORK AREA. STAGE CONSTRUCTION AT THESE INTERSECTIONS BY PROVIDING FLAGGING OPERATION IN ACCORDANCE WITH MDSHA STANDARD NO. MD 104.02-14. IF TEMPORARY CLOSURE OF DARTMOUTH AVENUE AT WAYNE AVENUE INTERSECTION IS REQUIRED, PLACE TYPE III BARRICADE AT WOODFIELD PKWY INTERSECTION AND DETOUR TRAFFIC THROUGH DALE DRIVE TO WAYNE AVENUE AS SHOWN ON THE DETOUR MAP. PROVIDE A THRU ACCESS FOR LOCAL TRAFFIC AT WOODFIELD PKWY INTERSECTION. THE DARTMOUTH AVENUE AND GREENBRIER DRIVE DETOUR THROUGH DALE DRIVE WILL ONLY BE ALLOWED DURING THESE ROAD CLOSURE.
- 6. RESTRICT EASTBOUND WAYNE AVENUE LEFT TURN AND WESTBOUND WAYNE AVENUE RIGHT TURN AT GREENBRIER DR AND DARTMOUTH AVE INTERSECTIONS DURING NIGHT TIME CONSTRUCTION.

#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

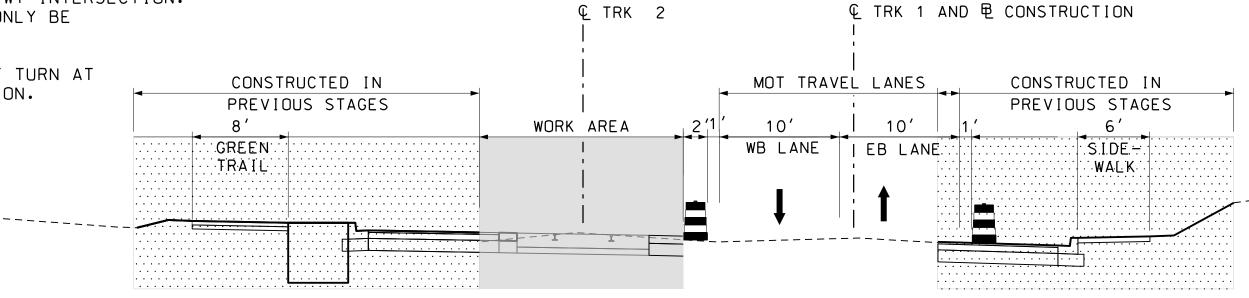
∞ - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

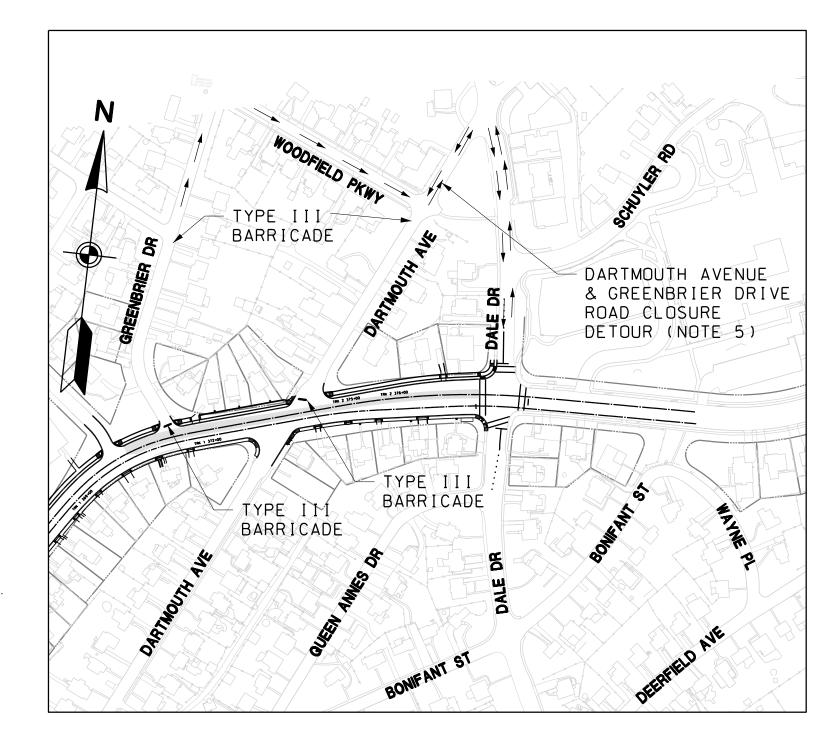
TYPE III BARRICADE

- IMPACT ATTENUATOR- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

STA TRK 1 370+50 TO STA TRK 1 377+50 SCALE: NTS



DETOUR STAGE 4C

SCALE: NTS

SCALE: AS SHOWN

### MARYLAND DEPARTMENT OF TRANSPORTATION







## **JACOBS**°

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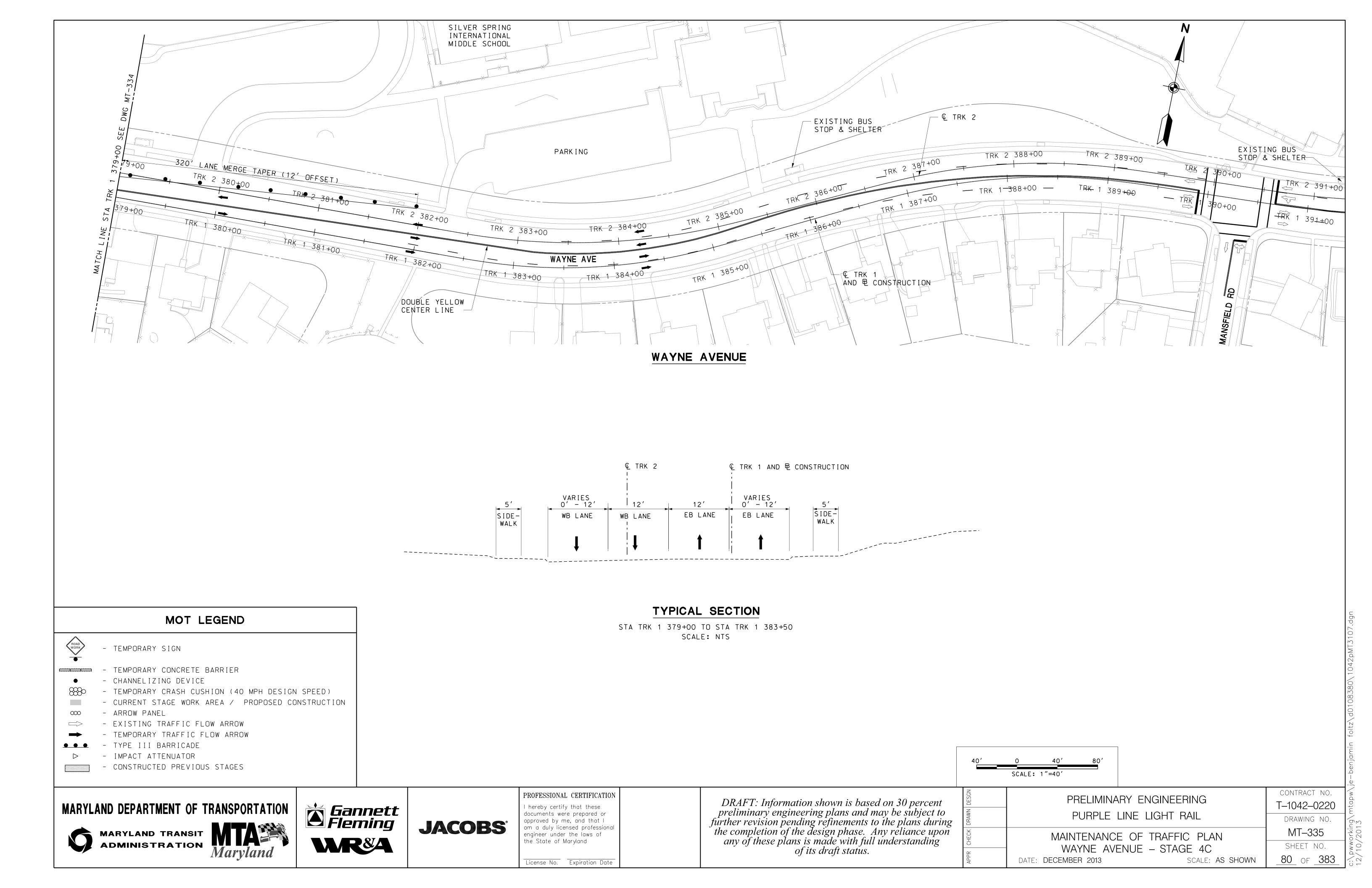
PRELIMINARY ENGINEERING	CO <b>T</b> -
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN	
WAYNE AVENUE – STAGE 4C	S

DATE: **DECEMBER 2013** 

CONTRACT NO.
T-1042-0220

DRAWING NO.
MT-334

SHEET NO.
79 OF 383



#### SEQUENCE OF CONSTRUCTION - STAGE 4D

- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NORTH SIDE OF WAYNE AVENUE AND PROVIDE ONE 10' LANE IN EACH DIRECTION. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES ALONG WAYNE AVENUE AS SHOWN.
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH EASTBOUND AND WESTBOUND SIDEWALK CONSTRUCTED IN PREVIOUS STAGES. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING WORK ZONE TRAFFIC CONTROL DETAILS: SHA STD. NOS. MD 104.06-09A, 104.06-09B, 104.06-09C AND 104.06-09D.
- 4. CONSTRUCT EMBEDDED TRACK FORM STATION TRK 1 370+50 TO STATION TRK 1 377+50. THE TRACK WORK AT DARTMOUTH AVENUE INTERSECTION WILL OCCUR DURING TEMPORARY SOUTH DARTMOUTH AVENUE ROAD CLOSURE AND IN ACCORDANCE WITH SHA STANDARD MD 104.03-08. THE CONTRACTOR SHALL USE 12'X14' BY ONE INCH THICK STEEL PLATES TO COVER AREA OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER ROAD CLOSURE WORK.
- 5. DETOUR WAYNE AVE. TRAFFIC HEADING TO SOUTH DARTMOUTH AVE THROUGH SOUTHBOUND DALE DRIVE AND WESTBOUND BONIFANT STREET. PROVIDE TWO WAY TRAFFIC ON DARTMOUTH AVENUE FROM BONIFANT STREET INTERSECTION TO WAYNE AVENUE FOR LOCAL TRAFFIC ACCESS TO PROPERTIES. THE DARTMOUTH AVENUE DETOUR THROUGH DALE DRIVE AND BONIFANT STREET WILL ONLY BE ALLOWED DURING SOUTH DARTMOUTH AVENUE ROAD CLOSURE.
- 6. RESTRICT EASTBOUND WAYNE AVENUE RIGHT TURN AND WESTBOUND WAYNE AVENUE LEFT TURN AT DARTMOUTH AVE INTERSECTION DURING NIGHT TIME CONSTRUCTION.
- 7. COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS. FOR DRIVEWAYS WIDER THAN 12 FEET, CONSIDER CONSTRUCTING IN STAGES.

#### MOT LEGEND

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

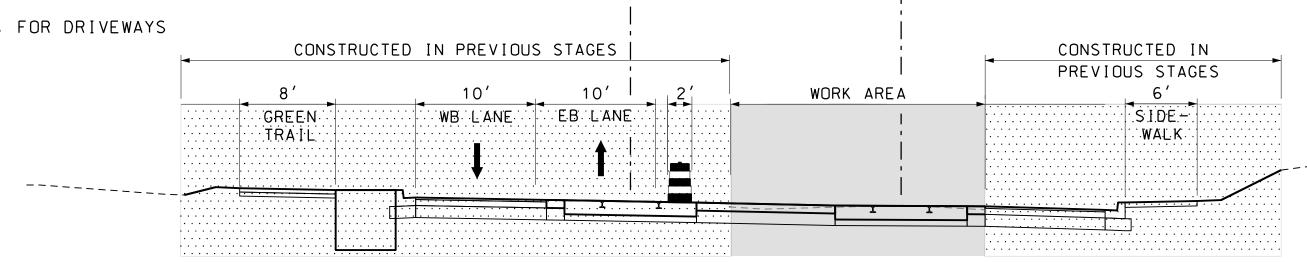
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

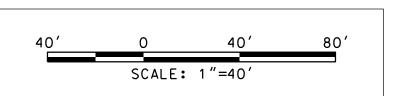
- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES



© TRK 2

SCALE: NTS



DATE: DECEMBER 2013

#### TYPICAL SECTION

STA TRK 1 370+50 TO STA TRK 1 377+50

## MARYLAND DEPARTMENT OF TRANSPORTATION







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© TRK 1 AND ₺ CONSTRUCTION

PRELIMINARY ENGINEERING	_
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN WAYNE AVENUE – STAGE 4D	

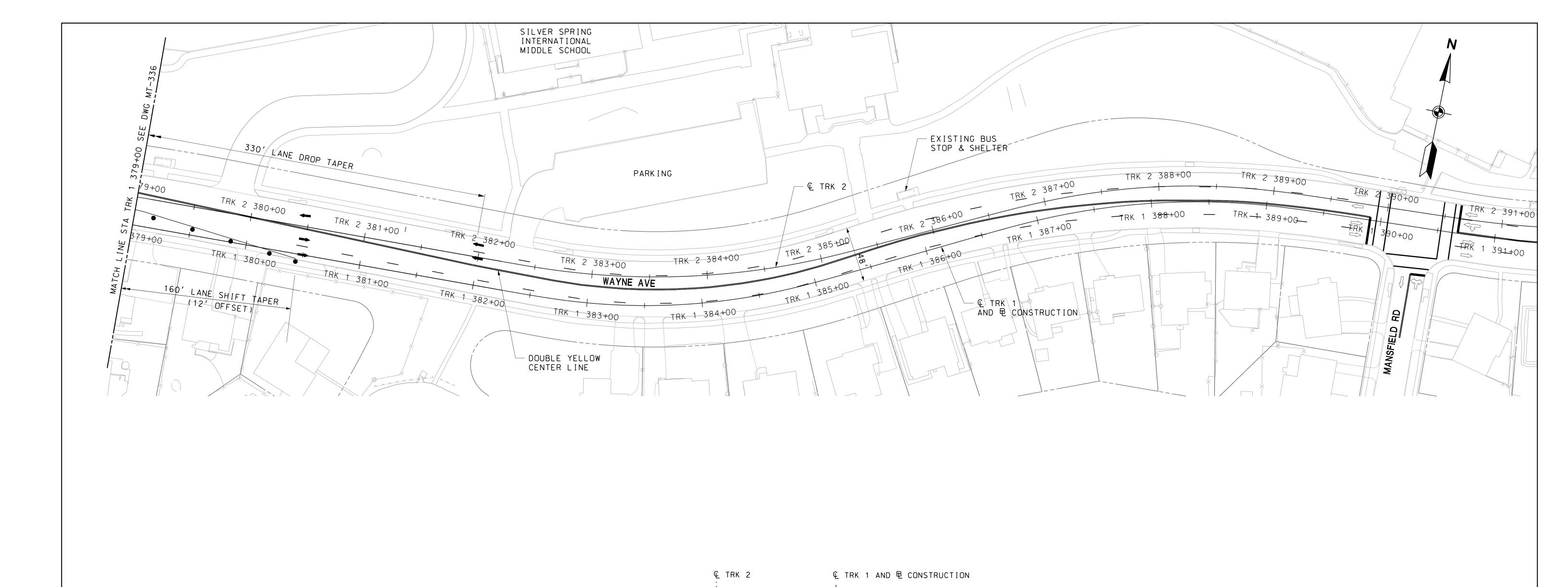
**DETOUR STAGE 4D** 

SCALE: NTS

	CONTRACT NO.	
RING	T-1042-0220	
RAIL	DRAWING NO.	
C PLAN	MT-336	
SCALE: AS SHOWN	SHEET NO.	
	<u>81</u> of <u>383</u>	
	<u> </u>	

DARTMOUTH AVENUE NIGHT TIME DETOUR

(NOTE 5)



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

EB LANE

EB LANE

STA TRK 1 379+00 TO STA TRK 1 382+50 SCALE: NTS

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MARYLAND TRANSIT ATAMA



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VARIES O' - 12'

WB LANE

SIDE-

WALK

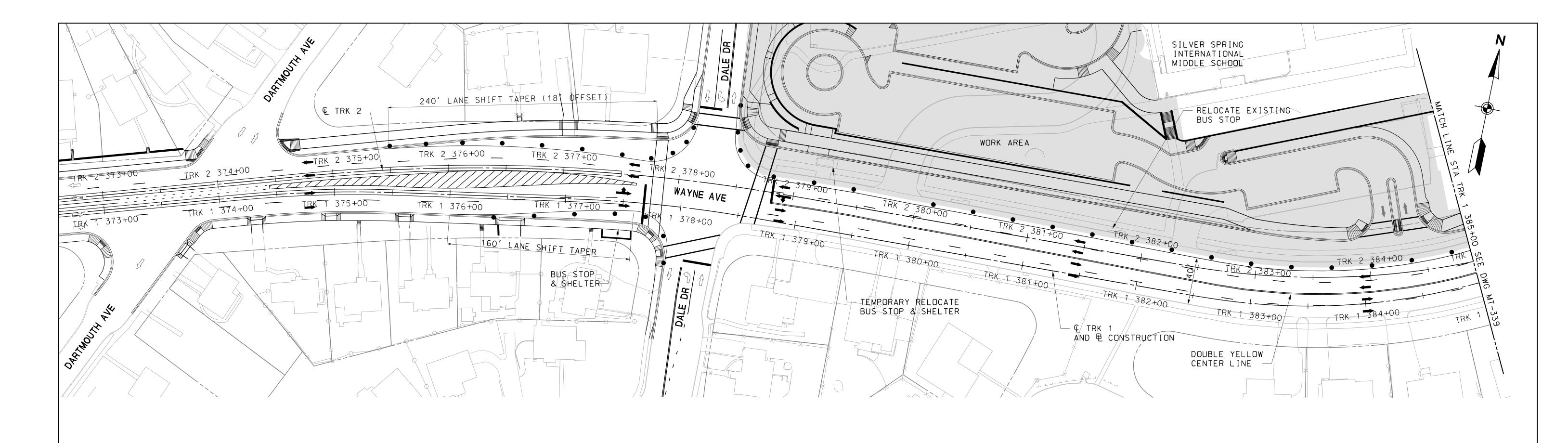
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5' SIDE-

WALK

\_-----

		CONTRACT NO.
PRELIMINARY	ENGINEERING	T-1042-0220
PURPLE LINE	: LIGHT RAIL	DRAWING NO.
MAINTENANCE O	F TRAFFIC PLAN	MT-337
WAYNE AVENU	E – STAGE 4D	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	<u>82</u> of <u>383</u>



#### **Q** TRK 1 AND **B** CONSTRUCTION © TRK 2 WORK AREA (WIDTH VARIES) MOT TRAVEL LANES SIDE-GREEN WB LANE | WB LANE | EB LANE | EB LANE TRAIL WALK

#### TYPICAL SECTION

STA TRK 1 378+00 TO STA TRK 1 389+50 SCALE: NTS

SEQUENCE OF CONSTRUCTION - STAGE 5A

- 1. REMOVE EXISTING PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO SOUTH SIDE OF WAYNE AVENUE AND PROVIDE TWO 10' LANES IN EACH DIRECTION. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN.
- 2. MAINTAIN PEDESTRIAN ACCESS ALONG THE NORTH SIDE OF WAYNE AVENUE THROUGHOUT CONSTRUCTION OF STAGE 5. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD NO. MD 104.06-09A, MD 104.06-09B, MD 104.06-09C AND MD 104.06-09D. PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 3. PROVIDE / MAINTAIN CURB RAMP ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 4. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF / PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 5. SCHOOL HIB WITH SPEED REDUCTION ON THE NORTH SIDE OF WAYNE AVENUE WITHIN THE WORK AREA WILL BE REMOVED THROUGHOUT DURATION OF CONSTRUCTION DURING SCHOOL CLOSURE.
- 6. MODIFY EXISTING TRAFFIC SIGNAL AT DALE DRIVE INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY. THE CONTRACTOR SHALL COORDINATE SIGNAL HEAD RELOCATION WITH THE PROJECT ENGINEER.
- 7. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER, SIDEWALK / GREEN TRAIL ON WAYNE AVENUE NORTH SIDE FROM DALE DRIVE INTERSECTION TO MANSFIELD ROAD INTERSECTION (STATION TRK 1 389+40). CONSTRUCT SILVER SPRING INTERNATIONAL MIDDLE SCHOOL PARKING LOT AND ENTRANCE. CONSTRUCTION OF THE PARKING LOT & ENTRANCE MUST BE SCHEDULED DURING THE SCHOOL OFF SEASON. MAINTAIN ACCESS TO THE SCHOOL PARKING LOT AT ALL TIMES. CONSTRUCT FUTURE PERMANENT ENTRANCE BEFORE CLOSING EXISTING ENTRANCE. FLAGGING OPERATION AT THE EXISTING ENTRANCE WILL BE REQUIRED PER MDSHA STANDARD MD 104.02.14.

#### - TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

MOT LEGEND

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

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SCALL. 1 -40	
PRELIMINARY ENGINEERING	CONTRACT NO.
	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-338
WAYNE AVENUE – STAGE 5A	SHEET NO.

DATE: **DECEMBER 2013** 

SCALE: AS SHOWN

### MARYLAND DEPARTMENT OF TRANSPORTATION

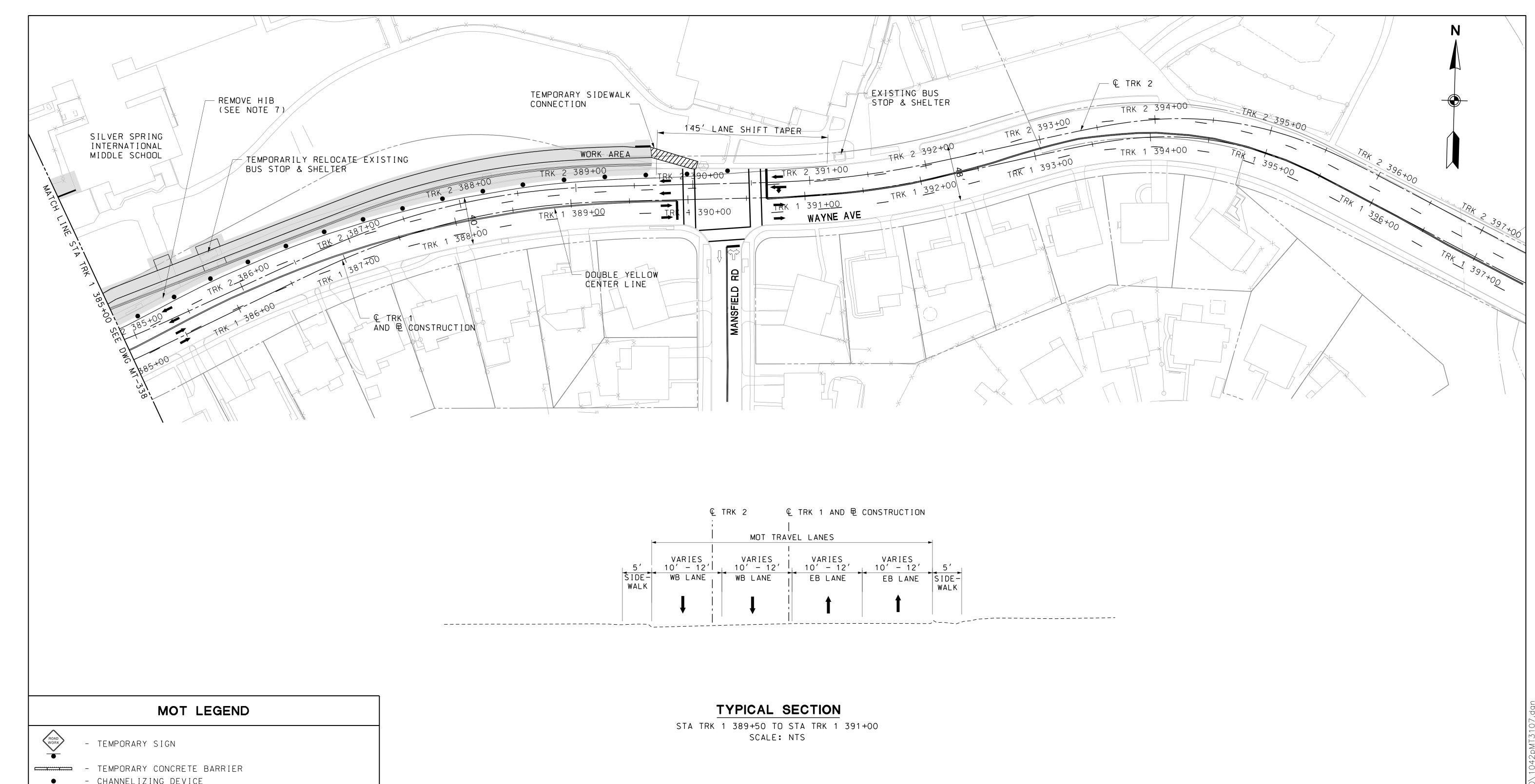






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- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

## MARYLAND DEPARTMENT OF TRANSPORTATION





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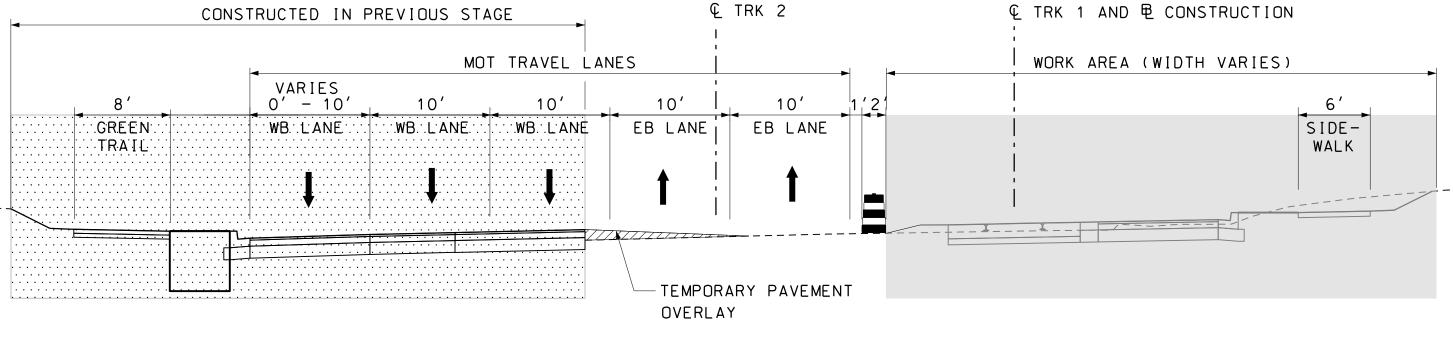
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	ADV ENGINEEDING	CONTRACT NO.	).
PRELIIVIIIN <i>A</i>	ARY ENGINEERING	T-1042-0220	<u>'</u> O
PURPLE	LINE LIGHT RAIL	DRAWING NO.	•
		MT-339	
MAINTENANC	CE OF TRAFFIC PLAN		
H WAYNE AV	'ENUE – STAGE 5A	SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE: AS	SHOWN <u>84</u> OF <u>383</u>	3_

PROFESSIONAL CERTIFICATION hereby certify that these

#### SEQUENCE OF CONSTRUCTION - STAGE 5B

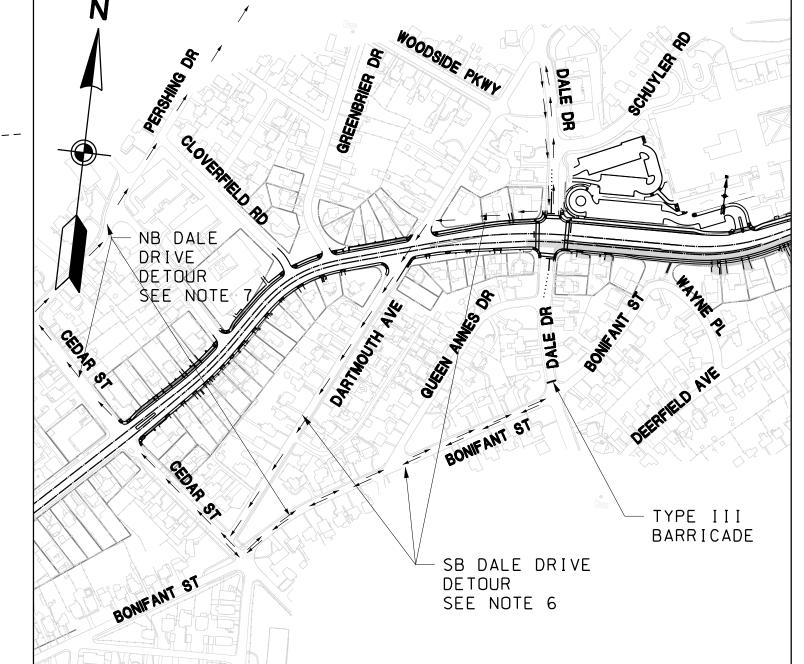
- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE.
  SHIFT TRAFFIC TO NORTH SIDE OF WAYNE AVENUE AND PROVIDE
  TWO 10' LANES IN EACH DIRECTION. INSTALL TEMPORARY TRAFFIC
  CONTROL DEVICES AS SHOWN ON PLAN.
- 2. MAINTAIN PEDESTRIAN ACCESS ALONG THE SOUTH SIDE OF WAYNE AVENUE THROUGHOUT CONSTRUCTION OF STAGE 5. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING TEMPORARY SIDEWALK, CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOURS. PEDESTRIAN DETOUR SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD NOS. MD 104.06-09A, MD 104.06-09B, MD 104.06-09C AND MD 104.06-09D. PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 3. PROVIDE / MAINTAIN CURB RAMPS ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 4. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF / PICK-UP MAY REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.



#### TYPICAL SECTION

STA TRK 1 377+50 TO STA TRK 1 390+00 SCALE: NTS

- 5. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER AND SIDEWALK ON WAYNE AVENUE SOUTH SIDE FROM DALE DRIVE INTERSECTION TO MANSFIELD ROAD INTERSECTION (STATION TRK 1 390+00). CONSTRUCT EASTBOUND EMBEDDED TRACK FROM STATION TRK 1 377+50 TO STATION TRK 1 385+00. CONSTRUCTION OF FULL DEPTH PAVEMENT AND EMBEDDED TRACK AT DALE DRIVE INTERSECTION ALONG WAYNE AVENUE SHALL BE PERFORMED DURING TEMPORARY NIGHT TIME LANE CLOSURE AND IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTION MD-104.03-14. THE CONTRACTOR SHALL USE 12'X14' BY ONE INCH THICK STEEL PLATES TO COVER AREA OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 6. FOR NIGHT TIME CONSTRUCTION, DETOUR SOUTHBOUND DALE DRIVE TRAFFIC TO WESTBOUND WAYNE AVENUE, TO SOUTHBOUND DARTMOUTH AVENUE TO EASTBOUND BONIFANT STREET ONTO DALE DRIVE.
- 7. DETOUR NORTHBOUND DALE DRIVE TRAFFIC TO WESTBOUND BONIFANT STREET TO NORTHBOUND CEDAR STREET TO EASTBOUND PERSHING DRIVE ONTO DALE DRIVE.
- 8. RESTRICT EASTBOUND WAYNE AVENUE RIGHT TURN AND WESTBOUND WAYNE AVENUE LEFT TURN AT DALE INTERSECTION DURING NIGHT TIME CONSTRUCTION.
- 9. CONTRACTOR TO COORDINATE DRIVEWAY ACCESS DURING CONSTRUCTION WITH PROPERTY OWNERS. FOR DRIVEWAY WIDER THAN 12 FEET CONSIDER PAVING IN STAGES.
- 10. MODIFY EXISTING TRAFFIC SIGNAL AT DALE DRIVE INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY.



DETOUR STAGE 5B
SCALE: NTS

#### MOT LEGEND



- TEMPORARY SIGN

TEMI ONANT STON

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

∞ - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

TYPE III BARRICADEIMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

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**Sannett Fleming SAR&A** 

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40′	0	40′	80′
	SCALE:	1 "=40'	
Z			

DATE: **DECEMBER 2013** 

PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL

MAINTENANCE OF TRAFFIC PLAN
WAYNE AVENUE – STAGE 5B

CONTRACT NO.
T-1042-0220
DRAWING NO.

MT-340
SHEET NO.

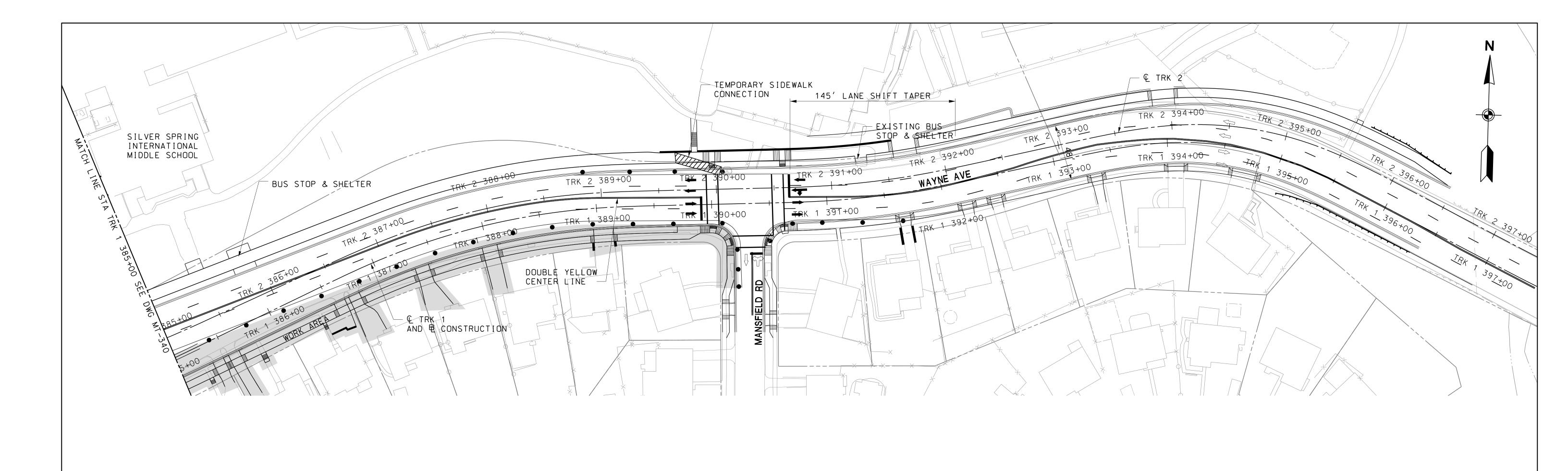
SCALE: AS SHOWN

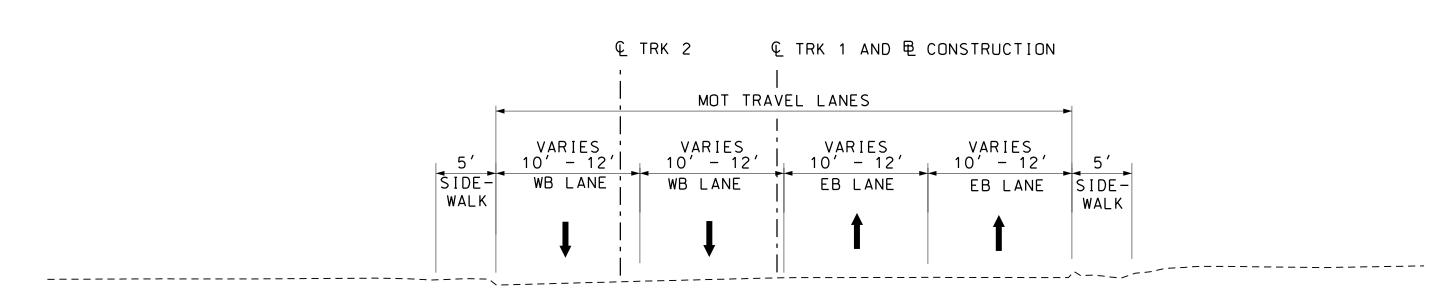
PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or

DRAFT: Information shown preliminary engineering plants.

-benjamin foltz\d0108380\1042pMT3107

85 OF 383





- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 390+50 TO STA TRK 1 392+00 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION Maryland



**JACOBS**°

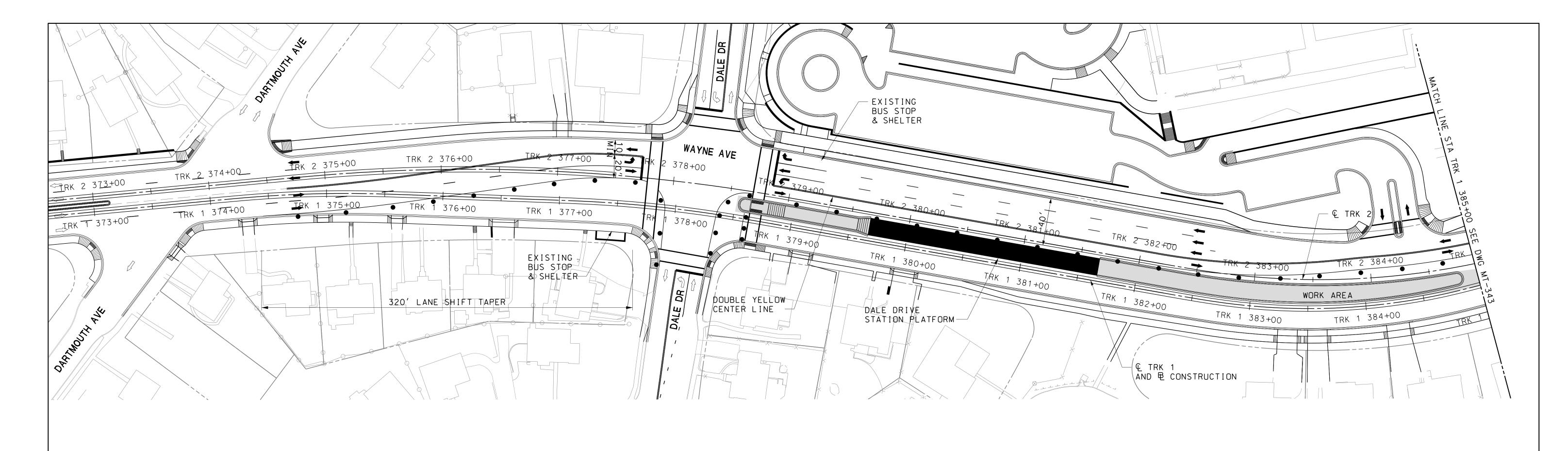
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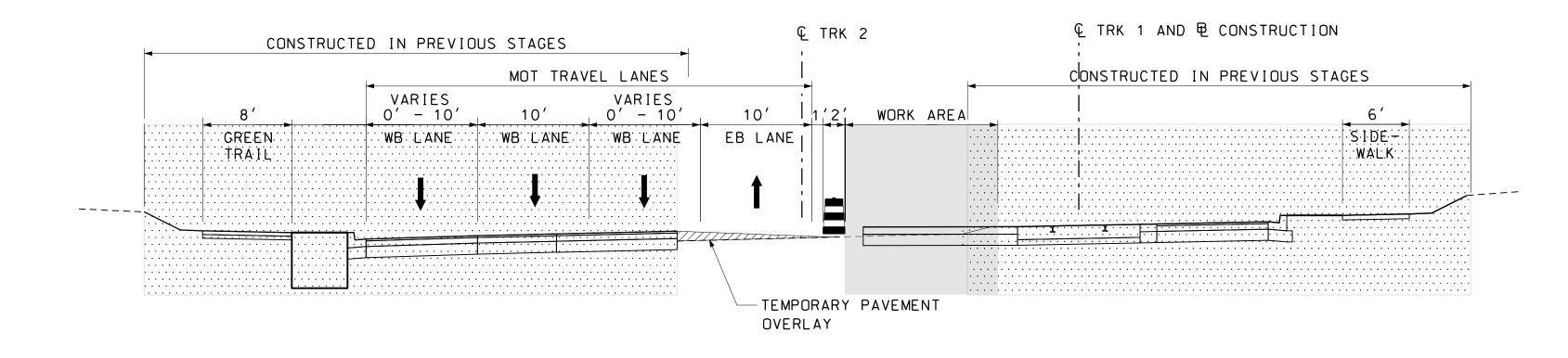
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	CONT
PRELIMINARY ENGINEERING	T-10
PURPLE LINE LIGHT RAIL	DRA
MAINTENANCE OF TRAFFIC PLAN	M
WAYNE AVENUE – STAGE 5B	SHI
	00

NTRACT NO. 042-0220 RAWING NO. MT-341 HEET NO. 86 OF 383 SCALE: AS SHOWN DATE: DECEMBER 2013





ROAD

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

∞ - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 378+50 TO STA TRK 1 389+50 SCALE: NTS

#### SEQUENCE OF CONSTRUCTION - STAGE 5C

- 1. WORK ALONG WAYNE AVENUE MUST BE PHASED SO THAT CONSTRUCTION OCCURS ON ONLY ONE SIDE AT A TIME. PROVIDE APPROPRIATE SIGNAGE TO ADVISE TRAFFIC PATTERN CHANGES.
- 2. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NORTH SIDE OF WAYNE AVENUE AND PROVIDE TWO 10' LANES IN EACH DIRECTION. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON PLAN
- 3. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES.
- 4. CONSTRUCT STATION PLATFORM, APPROACH RAMPS, INTERIOR FULL DEPTH ROADWAY PAVEMENT AND EASTBOUND EMBEDDED TRACK FROM STATION TRK 1 378+50 TO STATION TRK 1 389+50
- 5. PROVIDE / MAINTAIN CURB RAMP ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 6. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF / PICK-UP REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 7. MODIFY EXISTING TRAFFIC SIGNAL AT DALE DRIVE INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY.

40' 0 40' 80' SCALE: 1"=40'

#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION



**JACOBS**°

PROFESSIONAL CERTIFICATION

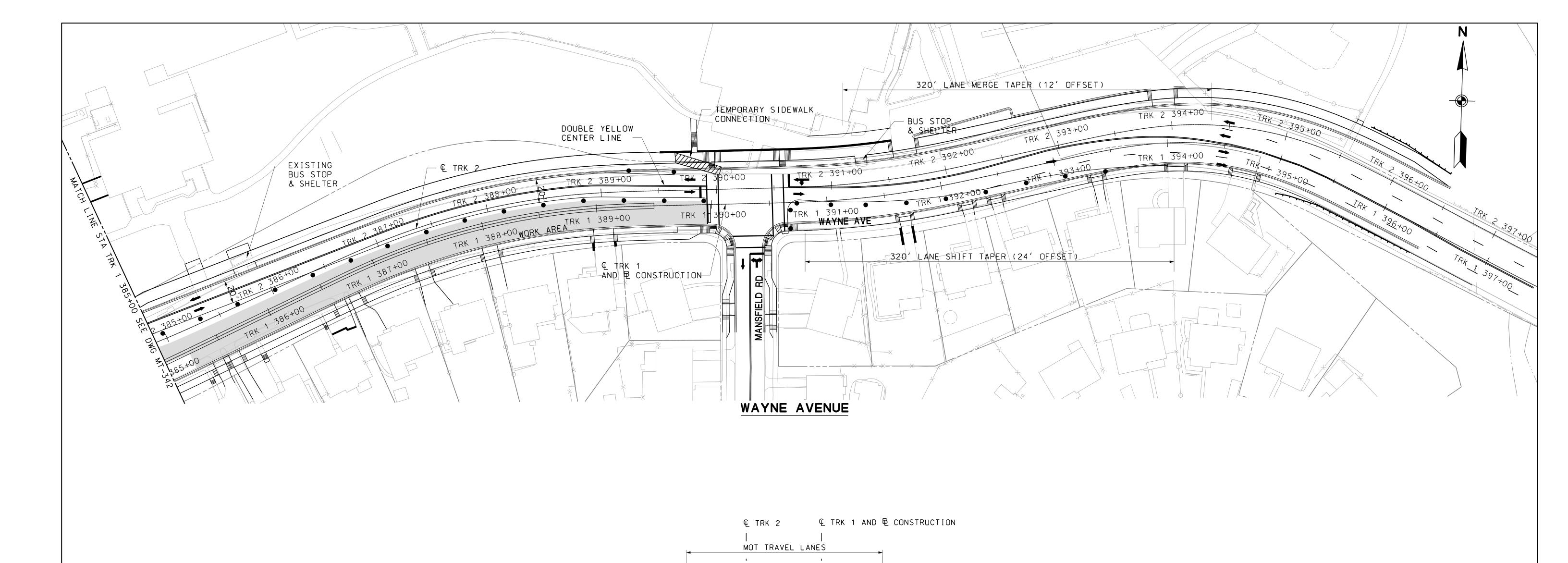
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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-342
WAYNE AVENUE – STAGE 5C	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	_87_ OF _383_

c:\pwworking\ 12/10/2013



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

11' MIN (VARIES) 11' MIN (VARIES) 12'

STA TRK 1 390+50 TO STA TRK 1 394+00 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION Maryland



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SIDE-WALK

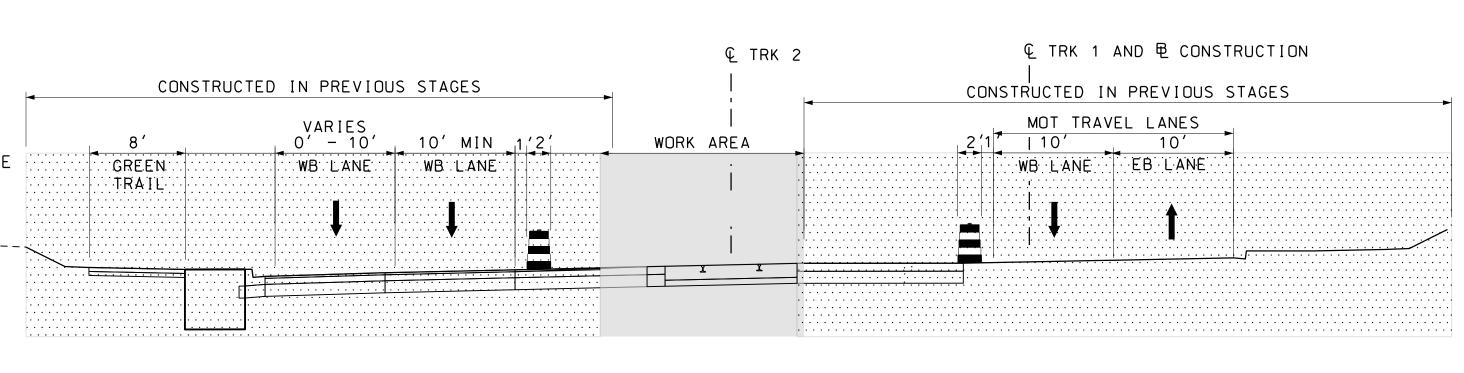
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SIDE-

\_\_\_\_\_

	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
	MT-343
MAINTENANCE OF TRAFFIC PLAN	
WAYNE AVENUE – STAGE 5C	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	88 OF 383

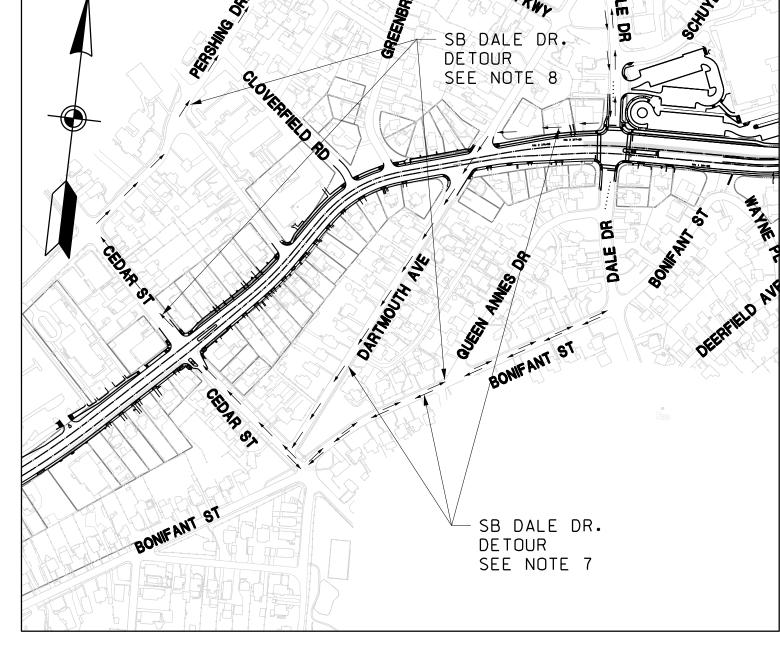
- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO SOUTH SIDE OF WAYNE AVENUE AND INSTALL TEMPORARY TRAFFIC CONTROL DEVICES. PROVIDE MAINTENANCE OF TRAFFIC (MOT) LANES AS SHOWN ON PLAN.
- 2. MAINTAIN PEDESTRIAN ACCESS ON BOTH SIDEWALK CONSTRUCTED IN PREVIOUS STAGES.
- 3. MAINTAIN CURB RAMP ACCESS AT PEDESTRIAN CROSSING AT ALL TIMES.
- 4. TEMPORARILY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES. SCHOOL BUS DROP-OFF / PICK-UP REQUIRE TEMPORARY RELOCATION AND WOULD REQUIRE COORDINATION WITH MONTGOMERY COUNTY PUBLIC SCHOOL.
- 5. CONSTRUCT WESTBOUND EMBEDDED TRACK FROM STATION TRK 2 377+50 TO STATION TRK 2 389+50. CONSTRUCTION OF EMBEDDED TRACK AT DALE DRIVE INTERSECTION ALONG WAYNE AVENUE SHALL BE PERFORMED DURING TEMPORARY NIGHT TIME LANE CLOSURE AND IN ACCORDANCE WITH ROAD CLOSURE RESTRICTION MD 104.03-08. THE CONTRACTOR SHALL USE 12 FT X 14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREA OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 7. FOR NIGHT TIME CONSTRUCTION, DETOUR SOUTHBOUND DALE DRIVE TRAFFIC AT WAYNE AVENUE INTERSECTION TO WESTBOUND WAYNE AVENUE. SOUTHBOUND DARTMOUTH AVENUE, EASTBOUND BONIFANT STREET ONTO DALE DRIVE (SEE DETOUR MAP). (SEE DETOUR MAP)



#### TYPICAL SECTION

STA TRK 1 377+00 TO STA TRK 1 389+50 SCALE: NTS

- 8. FOR DALE DRIVE TRAFFIC HEADING NORTHBOUND DETOUR TRAFFIC AT BONIFANT STREET INTERSECTION TO WESTBOUND BONIFANT STREET TO NORTHBOUND CEDAR STREET TO WESTBOUND PERSHING DRIVE TO DALE DRIVE. (SEE DETOUR MAP)
- 9. RESTRICT EASTBOUND WAYNE AVENUE LEFT TURN AND WESTBOUND WAYNE AVENUE RIGHT TURN AT DALE INTERSECTION DURING NIGHT TIME CONSTRUCTION.
- 10. MODIFY EXISTING TRAFFIC SIGNAL AT DALE DRIVE INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT. THE CONTRACTOR SHALL RELOCATE SIGNAL HEADS FOR MAINTENANCE OF TRAFFIC THROUGHOUT CONSTRUCTION AS NECESSARY.



**DETOUR STAGE 5D** SCALE: NTS

#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT **ADMINISTRATION** 



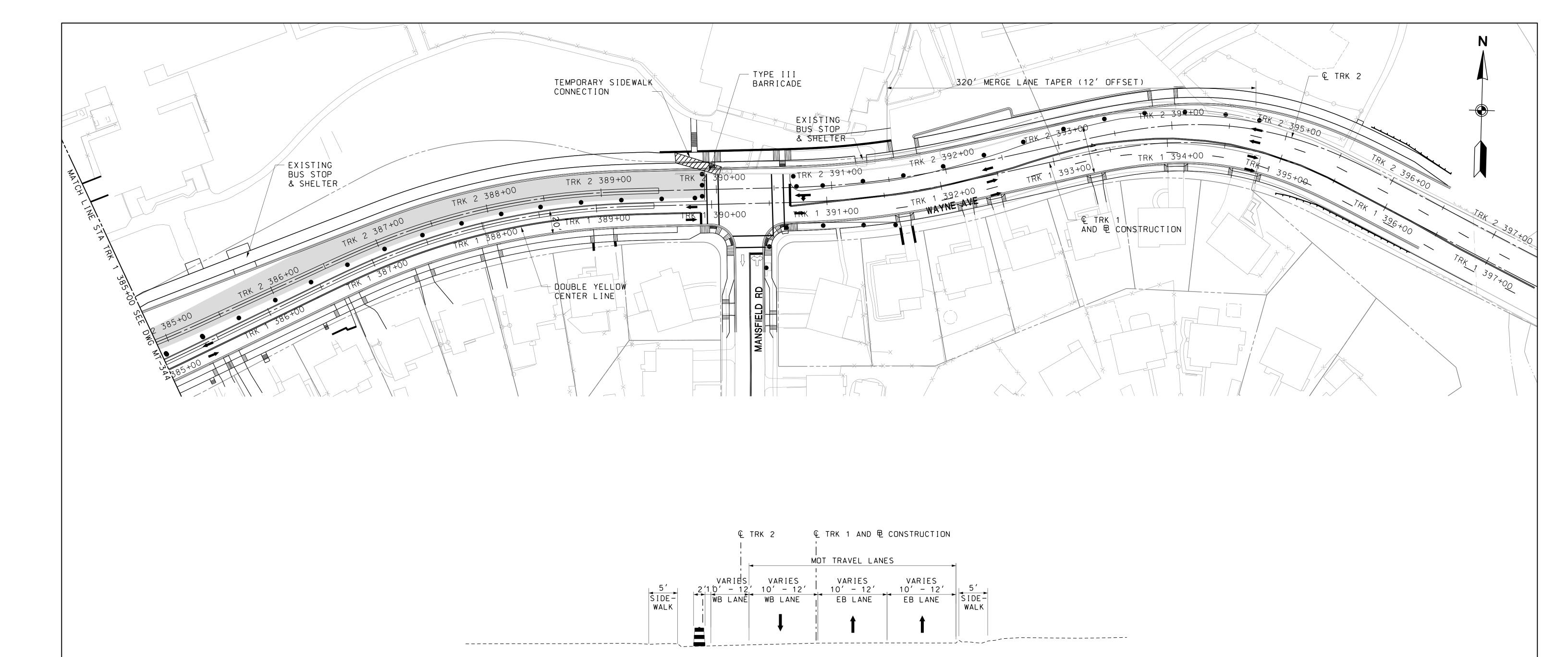
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SCALE: 1 =40			
DDELIMINIA	ARY ENGINEERING	CONTRACT NO.	
		T-1042-0220	)
PURPLE	LINE LIGHT RAIL	DRAWING NO.	
MAINTENANC	E OF TRAFFIC PLAN	MT-344	
WAYNE AVI	ENUE – STAGE 5D	SHEET NO.	
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	89 of 383	; •



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- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



STA TRK 1 390+50 TO STA TRK 1 394+50 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION



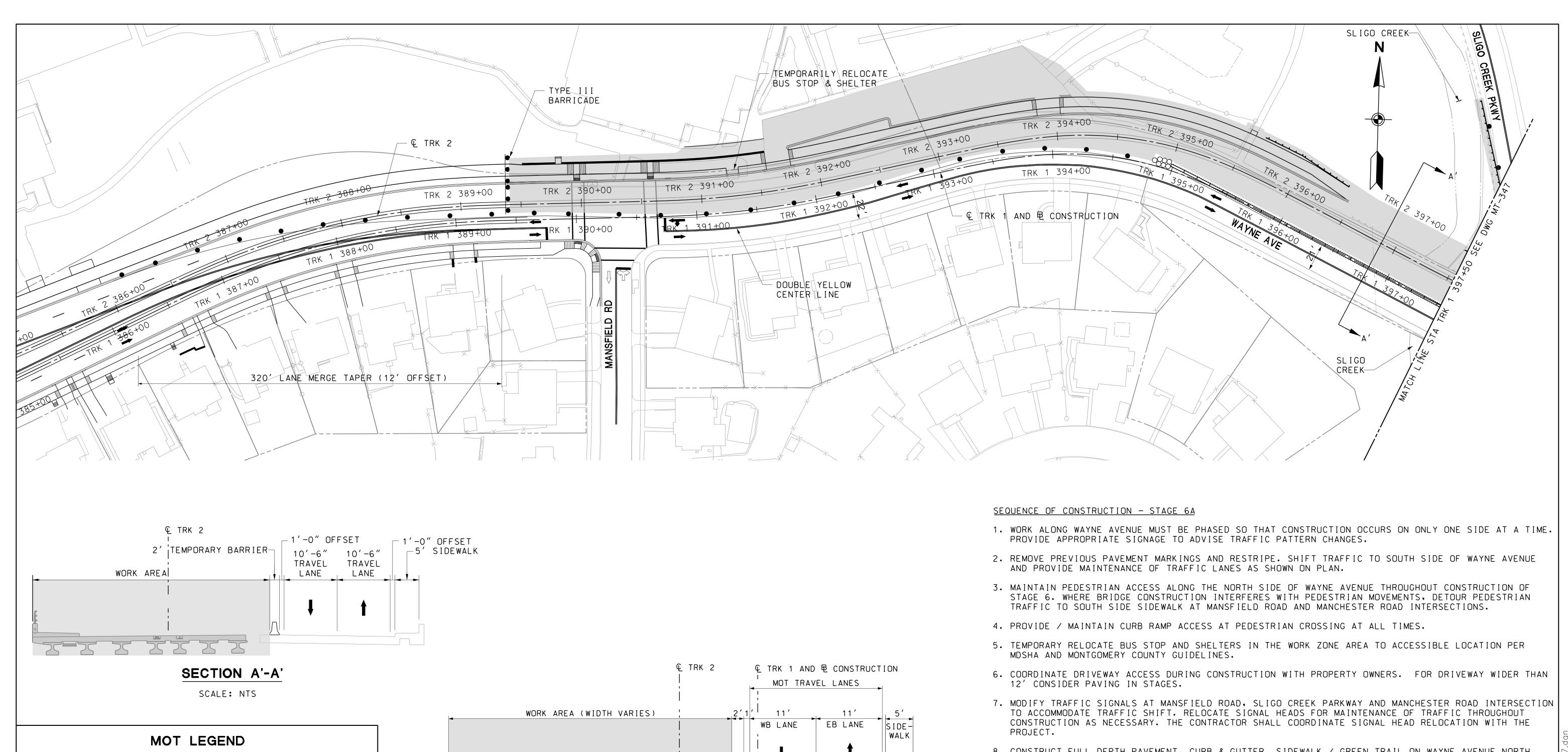
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		CONTRACT NO.
PRELIMINARY ENGINEERING		T-1042-0220
PURPLE LINE LIGHT RAIL		DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN		MT-345
WAYNE AVENUE - STAGE 5D		SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHO</b>	WN	90 of 383



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

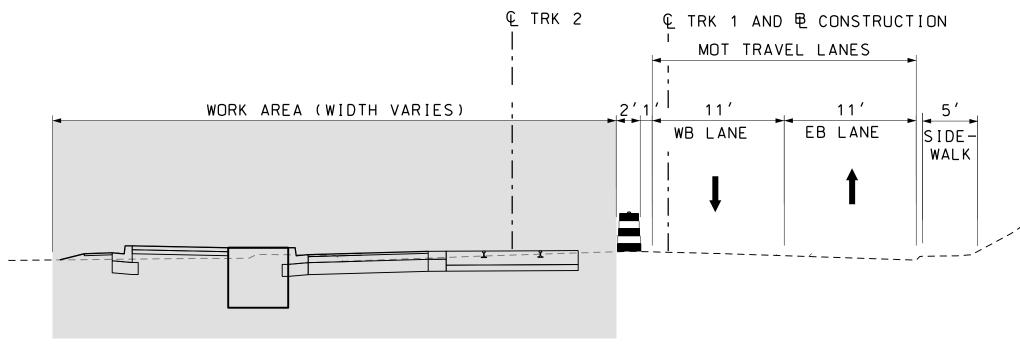
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW - TYPE III BARRICADE

- IMPACT ATTENUATOR

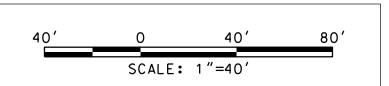
- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

STA TRK 1 390+00 TO STA TRK 1 401+00 SCALE: NTS

- 8. CONSTRUCT FULL DEPTH PAVEMENT, CURB & GUTTER, SIDEWALK / GREEN TRAIL ON WAYNE AVENUE NORTH SIDE FROM MANSFIELD ROAD INTERSECTION (STATION TRK 1 390+00) TO MANCHESTER ROAD INTERSECTION (STATION TRK 1 401+00). CONSTRUCT NORTH SIDE SLIGO CREEK BRIDGE PER BRIDGE PLAN.
- 9. CONSTRUCT WESTBOUND EMBEDDED TRACK FROM STATION TRK 2 390+00 TO STATION TRK 2 401+00. THE EMBEDDED TRACKWORK AT SLIGO CREEK AND MANCHESTER ROAD INTERSECTIONS WITH WAYNE AVENUE WILL OCCUR AT NIGHT TIME. TEMPORARY LANE AND ROAD CLOSURES WILL BE IN ACCORDANCE WITH LANE AND ROAD CLOSURE RESTRICTION IN SHA STANDARDS MD104.03-14 AND MD 104.03-08. THE CONTRACTOR SHALL USE 12 FT X 14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 10.RESTRICT LEFT TURN FROM EASTBOUND WAYNE AVENUE AND RIGHT TURN FROM WESTBOUND WAYNE AVENUE TO NORTHBOUND SLIGO CREEK PARKWAY DURING NIGHT TIME CONSTRUCTION.



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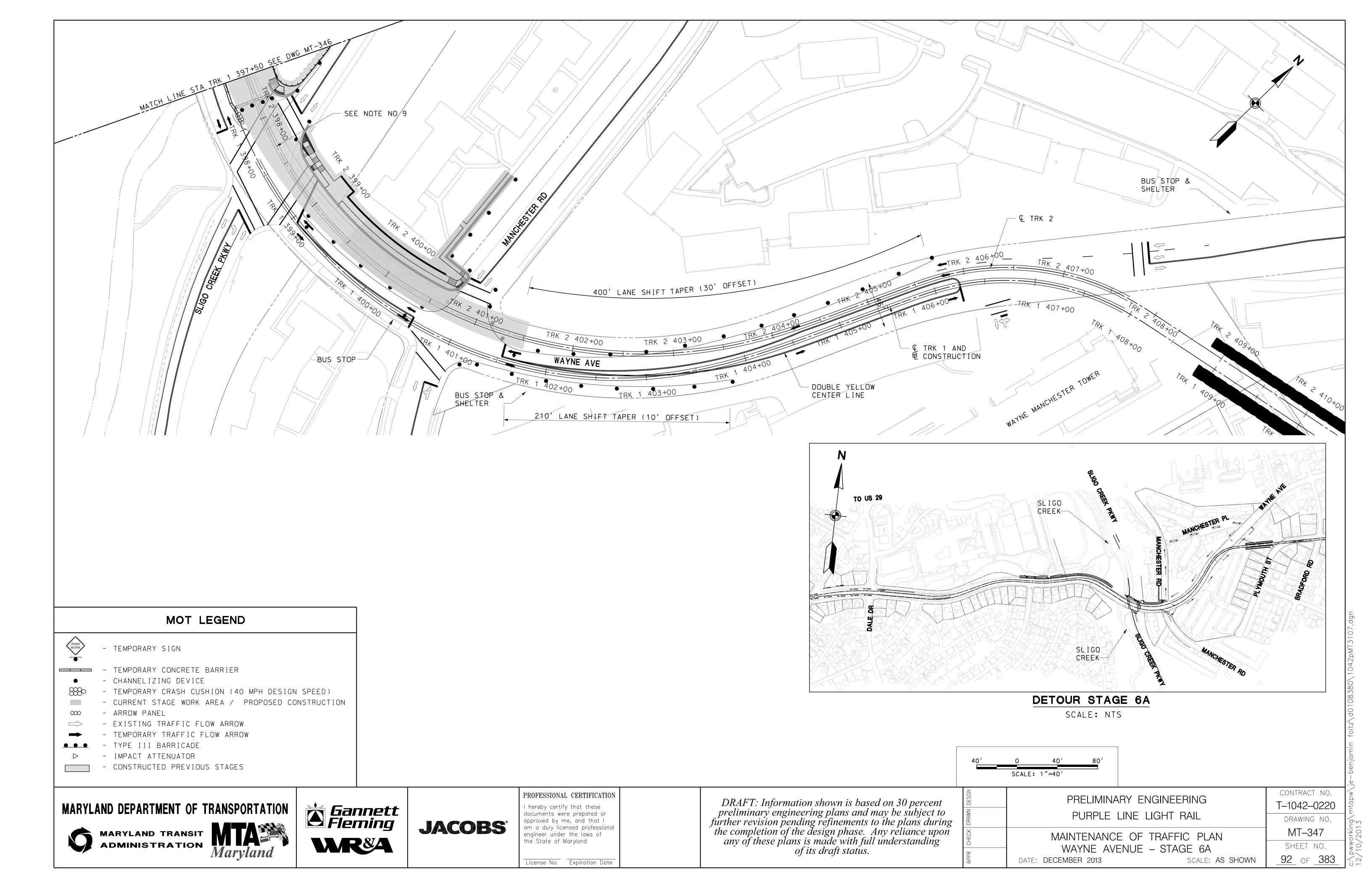
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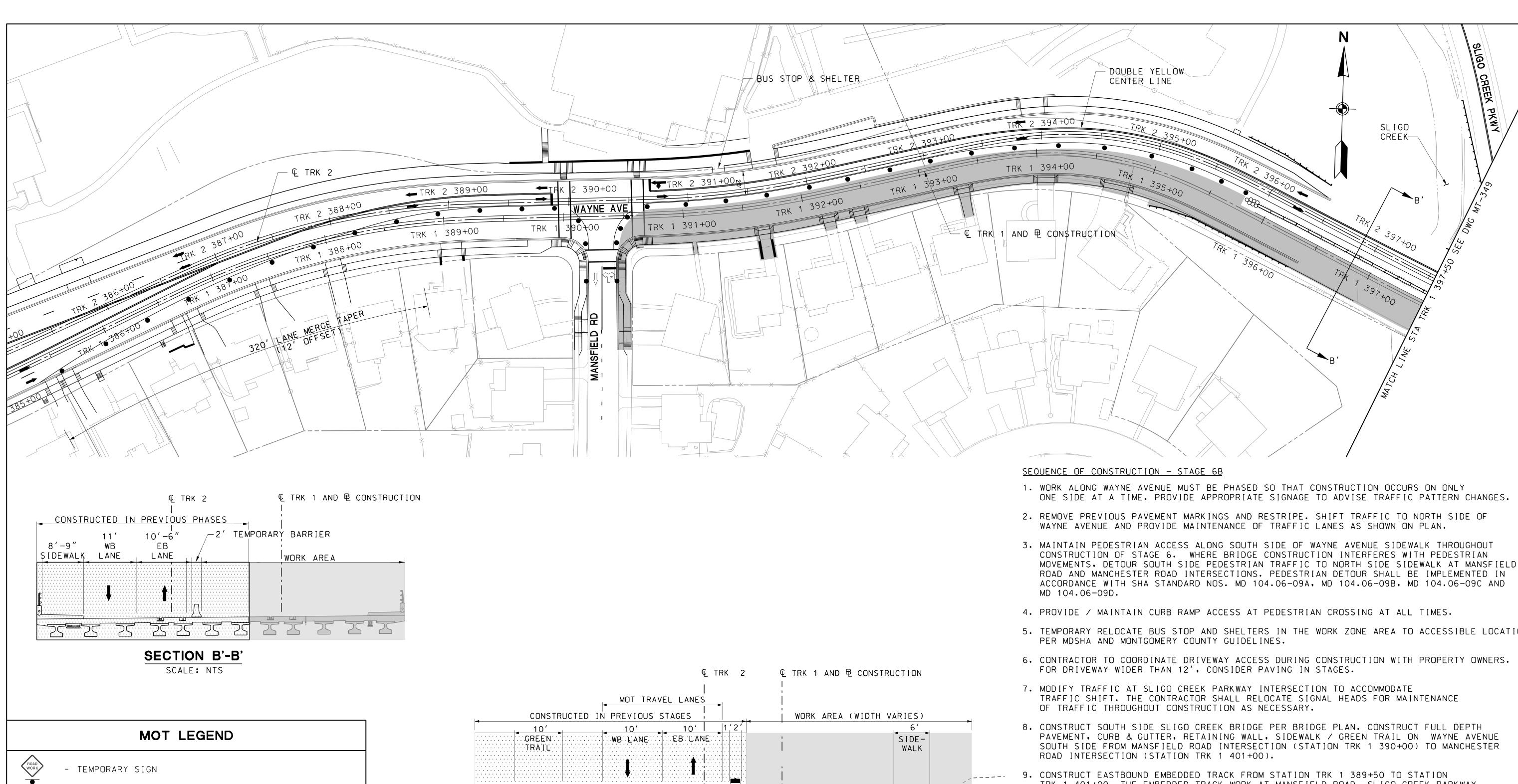
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		CONTRACT NO.	/ M C
PRELIMINARY ENGINEERING		T-1042-0220	ntap
PURPLE LINE LIGHT RAIL		DRAWING NO.	д/п 2
MAINTENANCE OF TRAFFIC PL	ΛNI	MT-346	rkino 2013
WAYNE AVENUE - STAGE 6		SHEET NO.	0/0
	H E: AS SHOWN	91 of 383	2/1
JAME. DECEMBER 2010	/\o \o\\\\\\		Ŭ <b>←</b>





- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

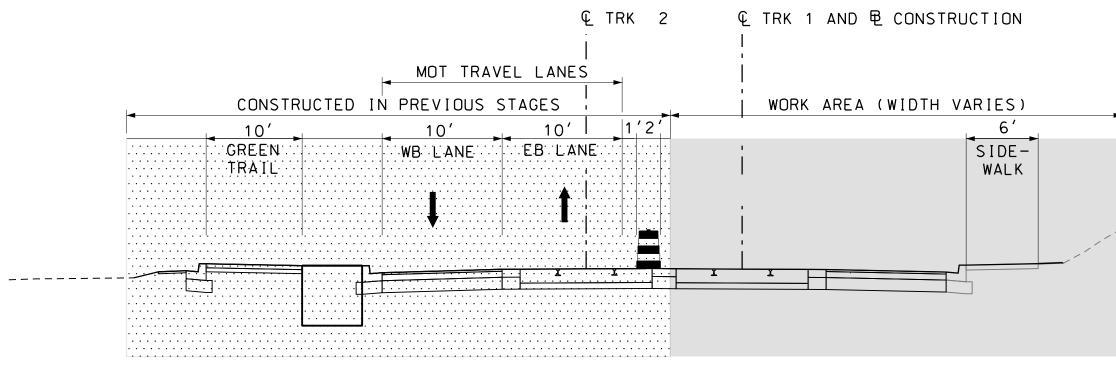
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE - IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



#### TYPICAL SECTION

STA TRK 1 390+00+00 TO STA TRK 1 401+00 SCALE: NTS

5. TEMPORARY RELOCATE BUS STOP AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION

- TRK 1 401+00. THE EMBEDDED TRACK WORK AT MANSFIELD ROAD, SLIGO CREEK PARKWAY AND MANCHESTER ROAD INTERSECTIONS WITH WAYNE AVENUE WILL OCCUR AT NIGHT TIME TEMPORARY LANE AND ROAD CLOSURES LANE AND ROAD CLOSURES WILL BE IN ACCORDANCE WITH LANE AND ROAD CLOSURE RESTRICTION IN SHA STANDARD MD-104.03-14. THE CONTRACTOR SHALL USE 12 FT X 14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 10. RESTRICT LEFT TURN FROM EASTBOUND WAYNE AVENUE AND RIGHT TURN FROM WESTBOUND WAYNE AVENUE TO NORTHBOUND SLIGO CREEK PARKWAY DURING NIGHT TIME CONSTRUCTION.

# SCALE: 1"=40

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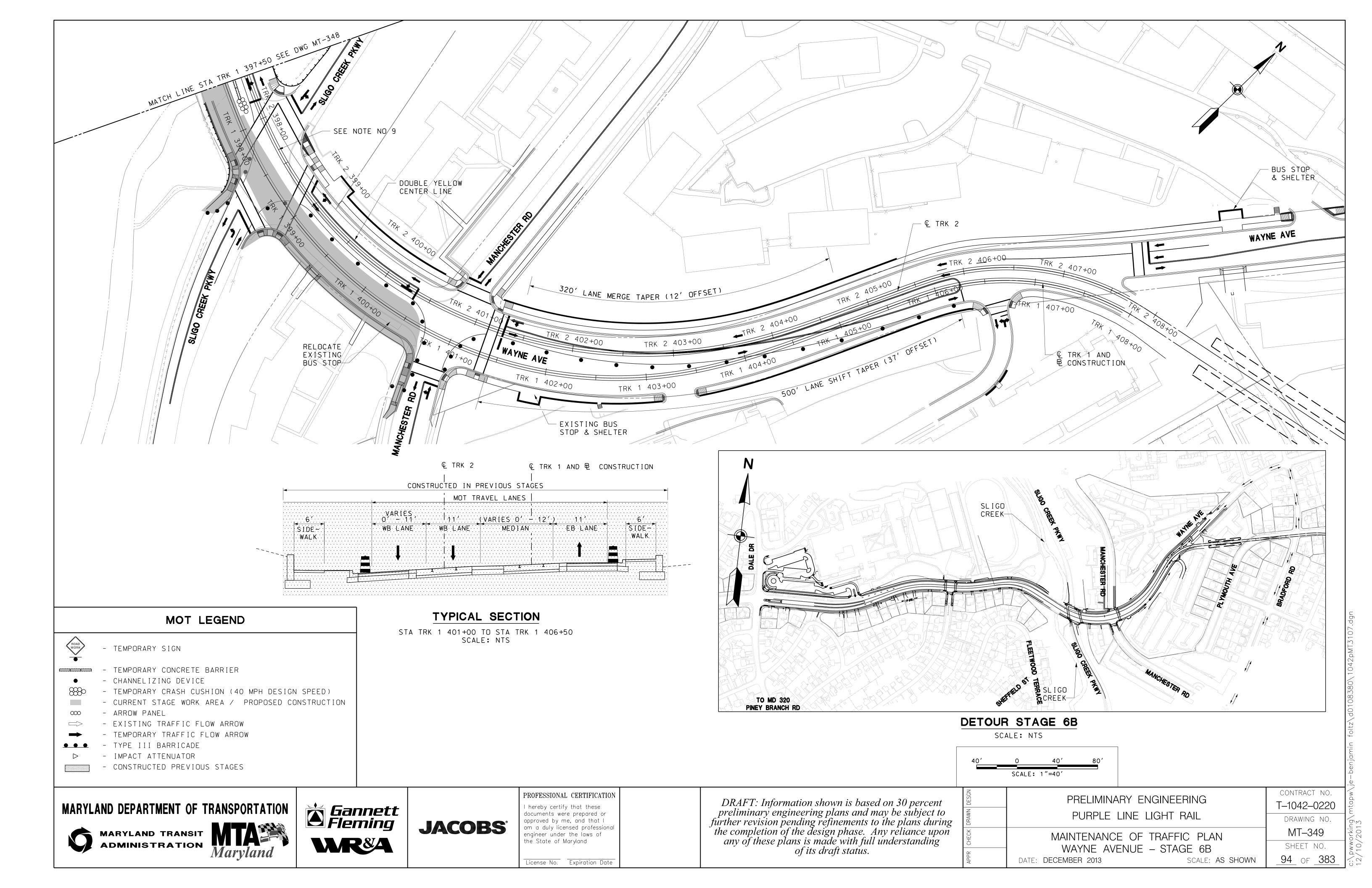
## **JACOBS**°

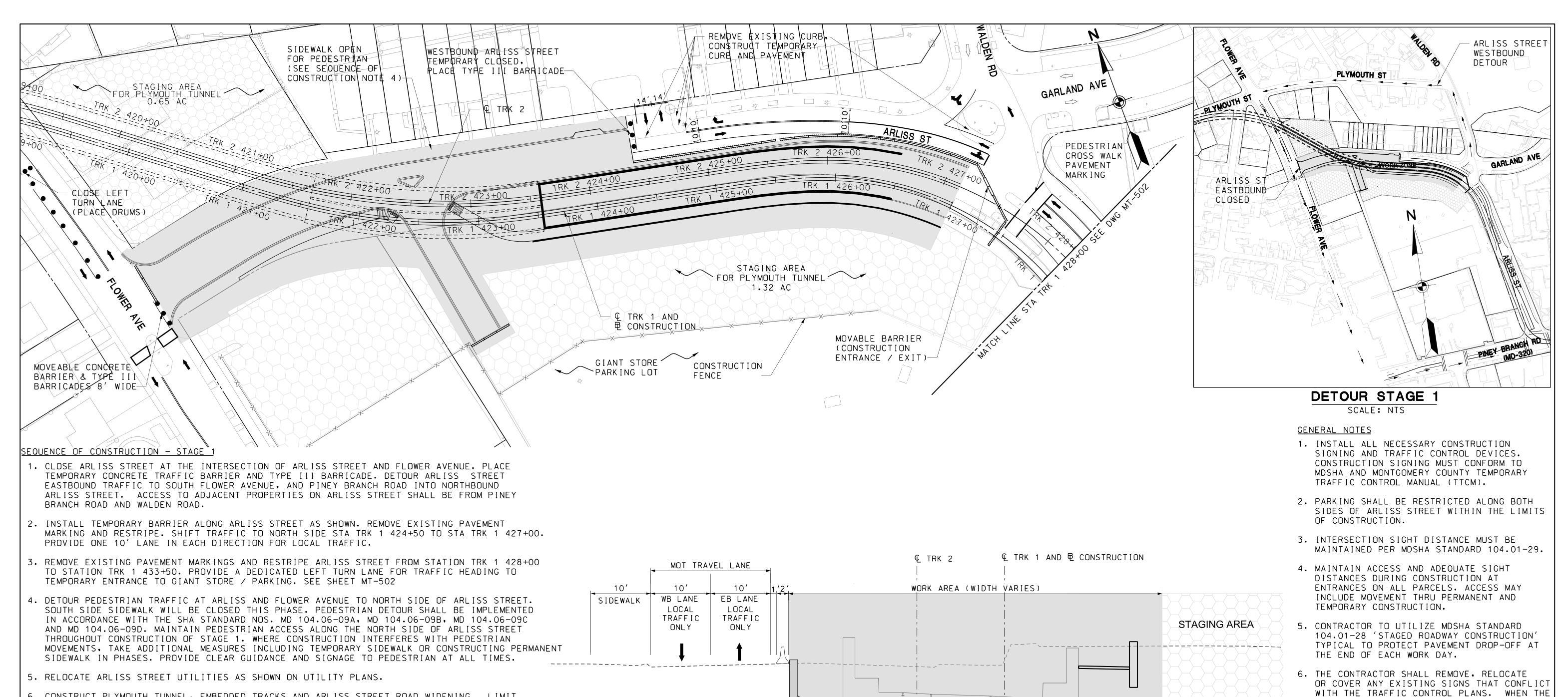
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	DV ENGINEEDING	CONTRACT NO.	× (
PRELIMINA	ARY ENGINEERING	T-1042-0220	ntap
PURPLE	LINE LIGHT RAIL	DRAWING NO.	Δ / D
	- 05 TDAEELO DI ANI	MT-348	king 01
	E OF TRAFFIC PLAN		wor )/2
WAYNE AVI	ENUE – STAGE 6B	SHEET NO.	::\pwwo
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	_ <u>93</u> _ of <u>383</u> _	c:\ 12\
			•





6. CONSTRUCT PLYMOUTH TUNNEL, EMBEDDED TRACKS AND ARLISS STREET ROAD WIDENING. LIMIT ARLISS STREET WESTBOUND ROAD WORK FROM FLOWER AVENUE TO TEMPORARY MEDIAN BARRIER AT STATION TRK 1 427+00.

#### MOT LEGEND

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

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SCALE: 1"=40

DATE: **DECEMBER 2013** 

CONTRACT NO. PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL MAINTENANCE OF TRAFFIC PLAN ARLISS STREET - STAGE 1

T-1042-0220 DRAWING NO. MT-501 SHEET NO. 95 OF 383 SCALE: AS SHOWN

CONFLICT NO LONGER EXIST, RESTORE THE

7. ARROWS ON THE TRAFFIC MANAGEMENT PLANS

DENOTE THE DIRECTION OF TRAFFIC ONLY AND

DO NOT REFLECT PAVEMENT MARKINGS UNLESS

SIGNS TO THEIR ORIGINAL POSITION.

SPECIFICALLY NOTED.

MARYLAND DEPARTMENT OF TRANSPORTATION





**Sannett Fleming** WR&A

**JACOBS**°

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License No. Expiration Date

the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

- TEMPORARY

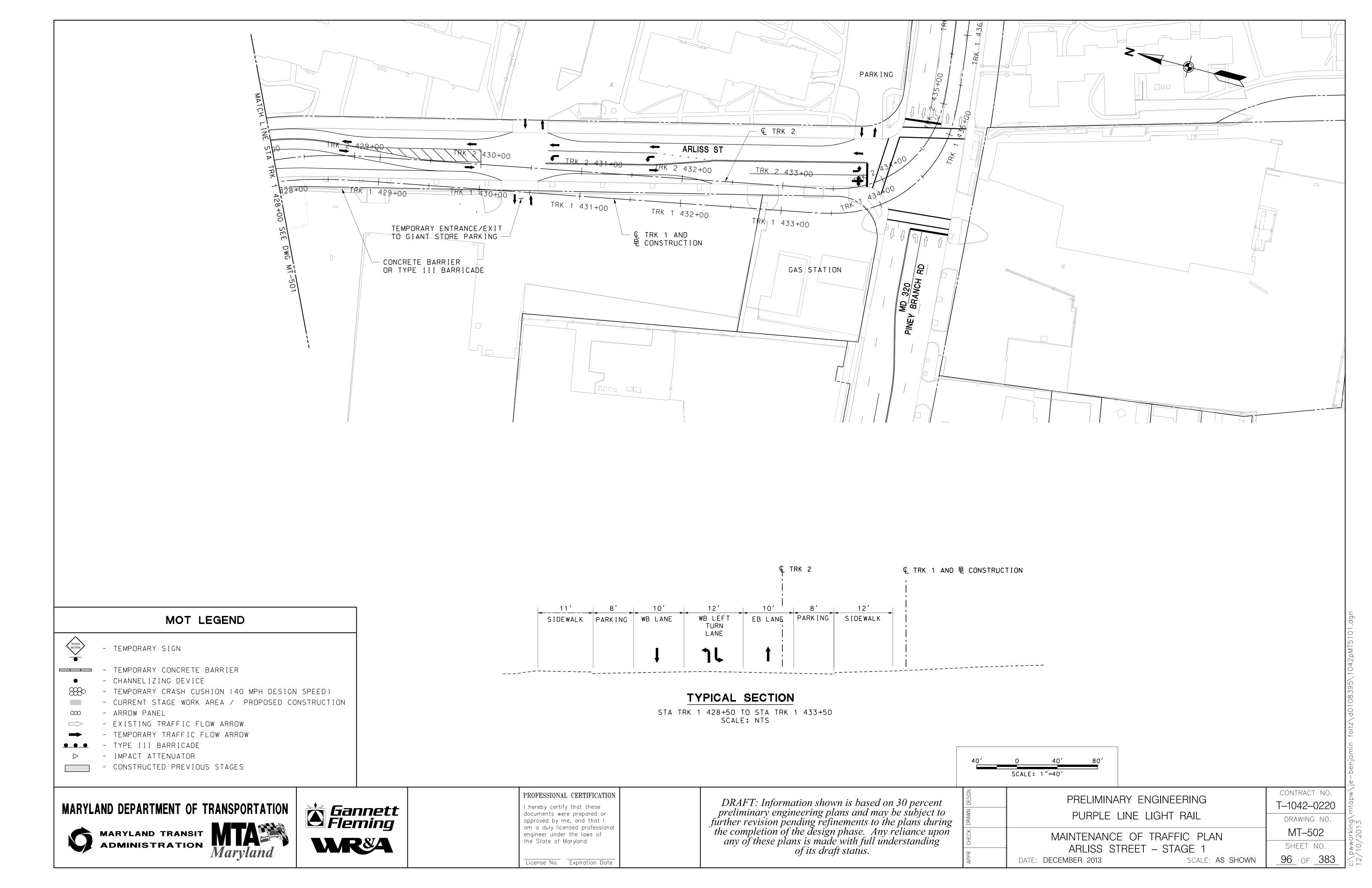
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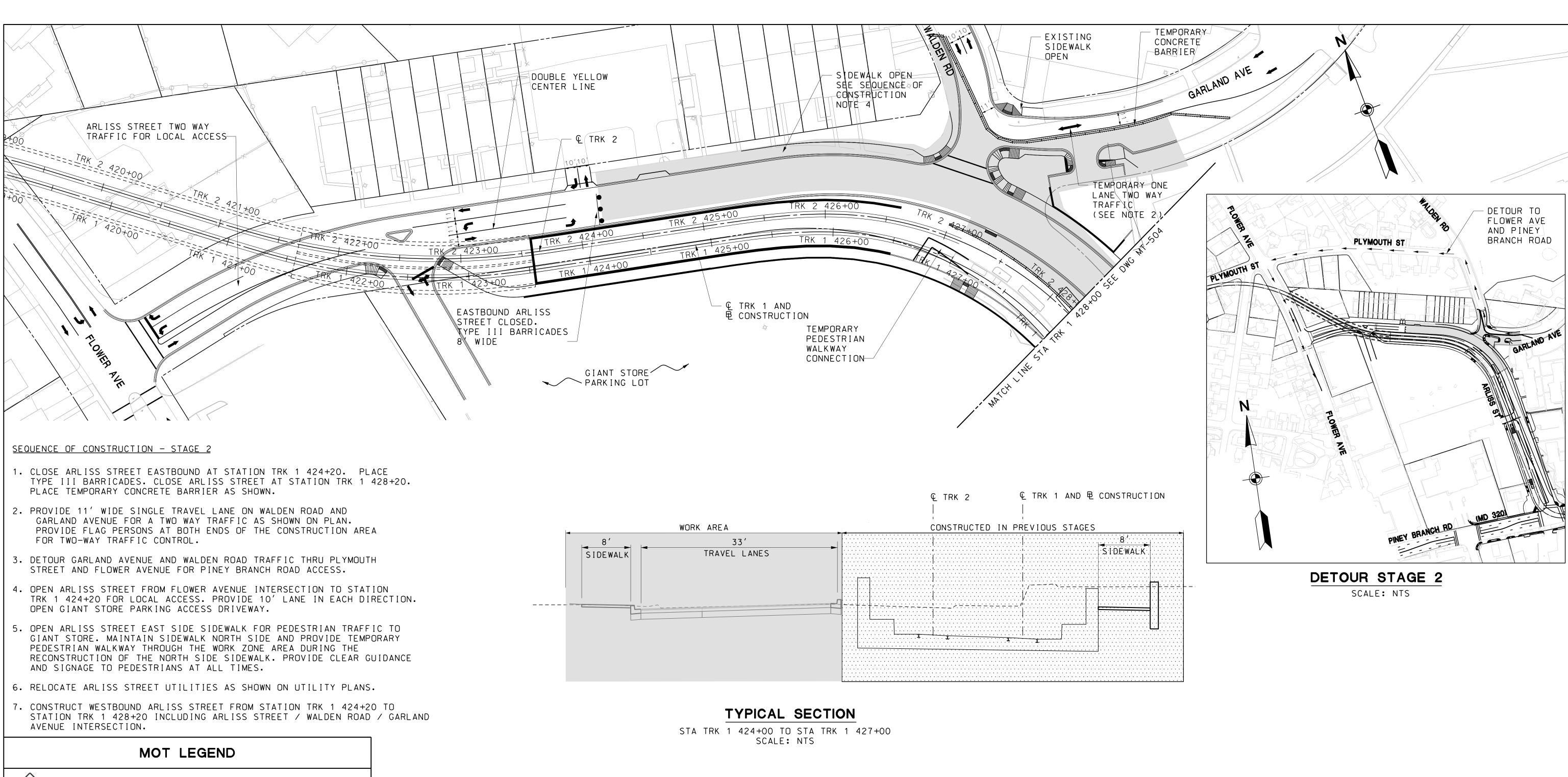
EXCAVATION

TYPICAL SECTION

STA TRK 1 424+50 TO STA TRK 1 427+00

SCALE: NTS





- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

- ARROW PANEL

MARYLAND DEPARTMENT OF TRANSPORTATION





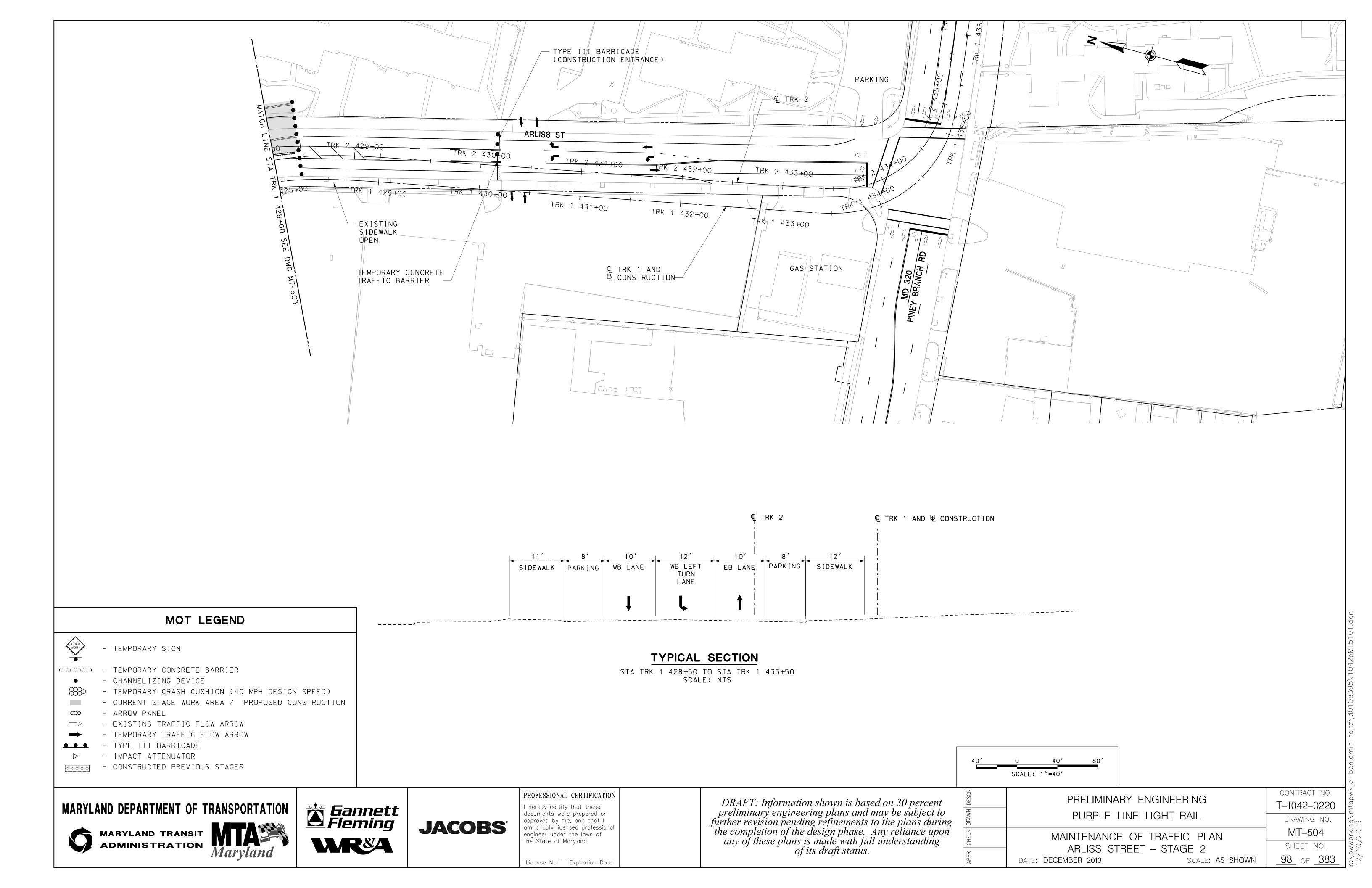


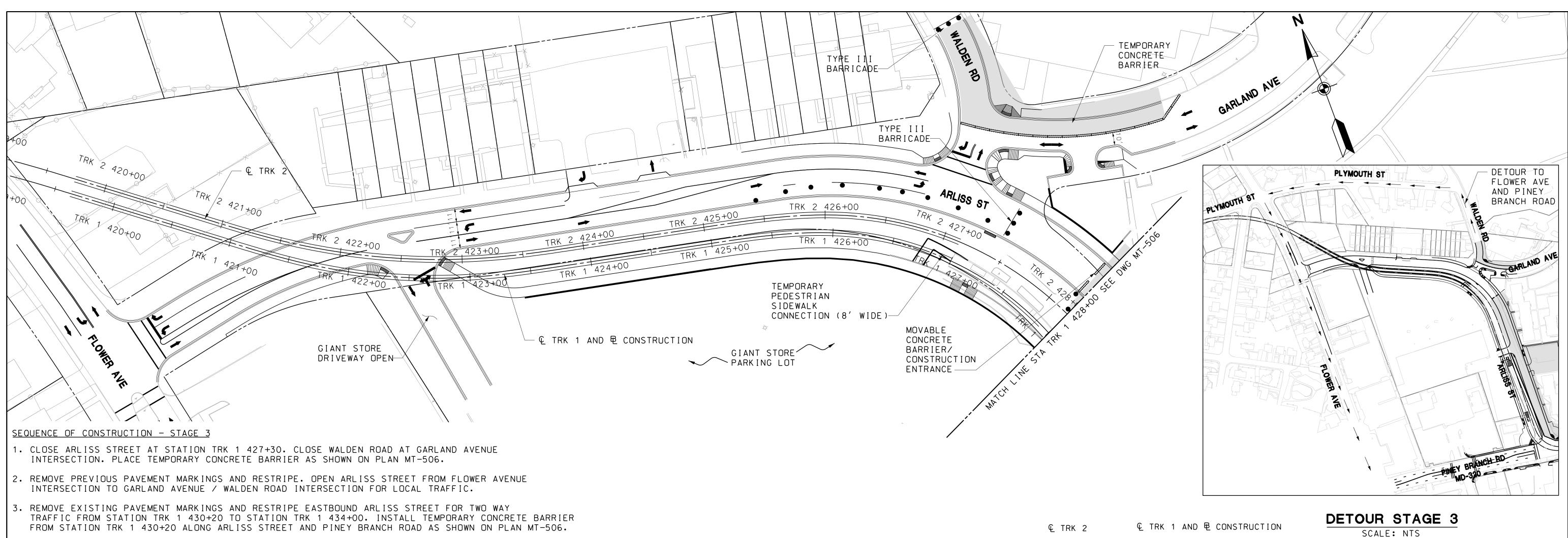
PROFESSIONAL CERTIFICATION
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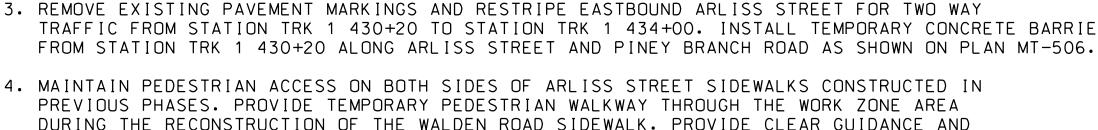
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DDELIMINIADY ENGINEEDING	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-503
ARLISS STREET - STAGE 2	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SHOWN	<u>97</u> of <u>383</u>







- DURING THE RECONSTRUCTION OF THE WALDEN ROAD SIDEWALK. PROVIDE CLEAR GUIDANCE AND SIGNAGE TO PEDESTRIAN AT ALL TIMES. 5. PROVIDE TEMPORARY SIDEWALK CONNECTION BETWEEN PREVIOUSLY CONSTRUCTED SIDEWALK
- 6. RELOCATE UTILITIES ALONG EASTBOUND ARLISS STREET FROM STATION TRK 1 427+90 TO PINEY BRANCH ROAD INTERSECTION. CONSTRUCT ARLISS STREET WESTBOUND FROM STATION TRK 1 427+90 TO PINEY BRANCH ROAD INTERSECTION AS SHOWN ON PLAN.
- 7. SHIFT GARLAND AVENUE TRAFFIC SOUTH SIDE TO PREVIOUSLY CONSTRUCTED PAVEMENT, PROVIDE SINGLE LANE TWO WAY DIRECTION ON WALDEN ROAD AS SHOWN. PROVIDE FLAG PERSON AT BOTH ENDS OF WALDEN ROAD CONSTRUCTION AREA FOR TRAFFIC CONTROL. CONSTRUCT WALDEN ROAD AND NORTH SIDE AND GARLAND AVENUE.
- 8. ARLISS STREET / GARLAND AVE / WALDEN RD INTERSECTION WILL BE STOP SIGN CONTROLLED DURING CONSTRUCTION STAGE.



- TEMPORARY CONCRETE BARRIER - CHANNELIZING DEVICE

AND EXISTING SIDEWALK AT STATION TRK 1 426+50+/-

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

PROFESSIONAL CERTIFICATION

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CONTRACT NO. PRELIMINARY ENGINEERING PURPLE LINE LIGHT RAIL MAINTENANCE OF TRAFFIC PLAN

TYPICAL SECTION

CONSTRUCTED IN PREVIOUS STAGES

:::::**:1:1::**::::::::

SIDEWALK TRAVEL LANE TURN LANE TRAVEL LANE

STA TRK 1 424+20 TO STA TRK 1 427+00 SCALE: NTS

# SCALE: 1"=40

DATE: **DECEMBER 2013** 

SIDEWALK

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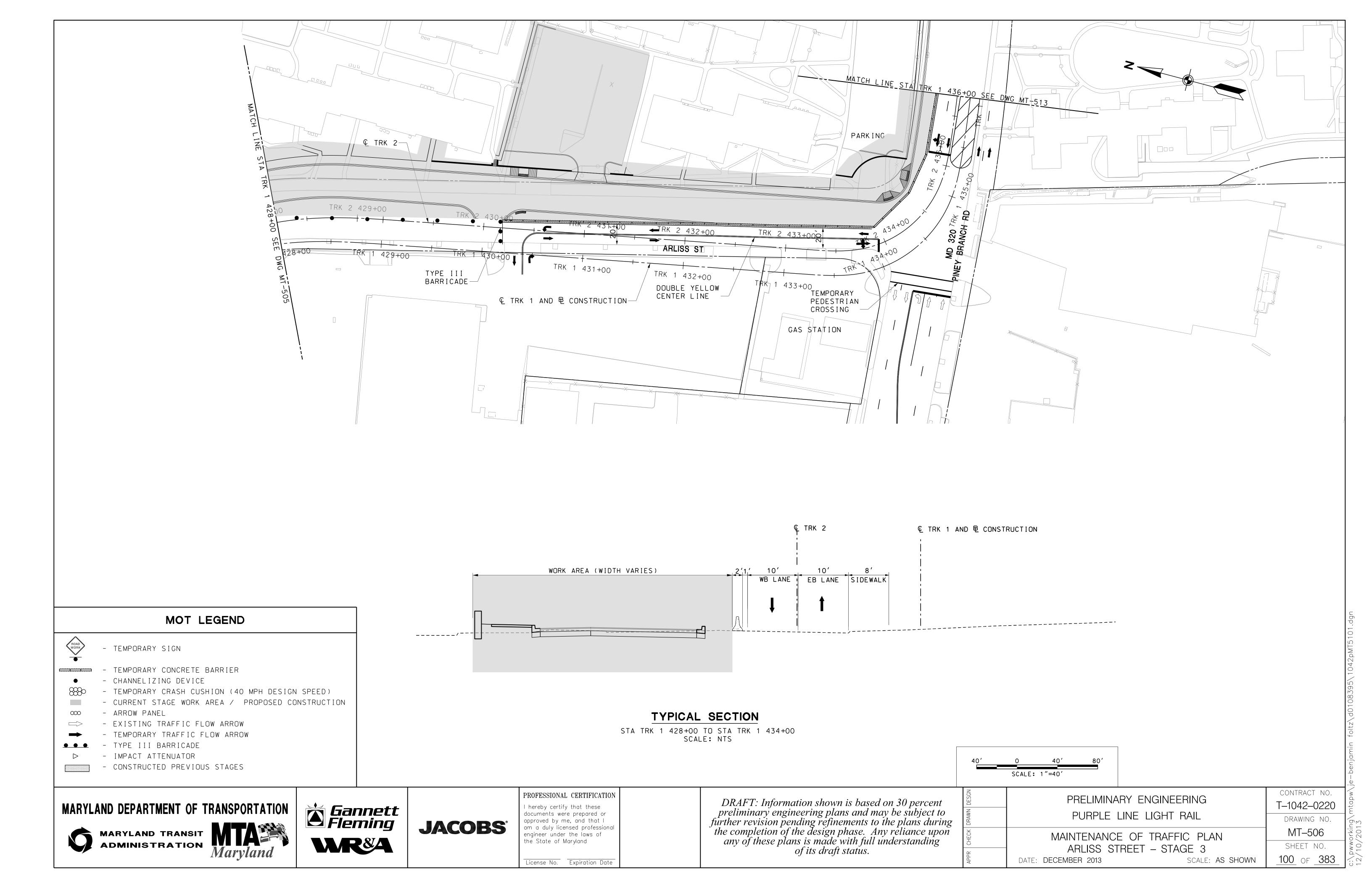
**JACOBS**°

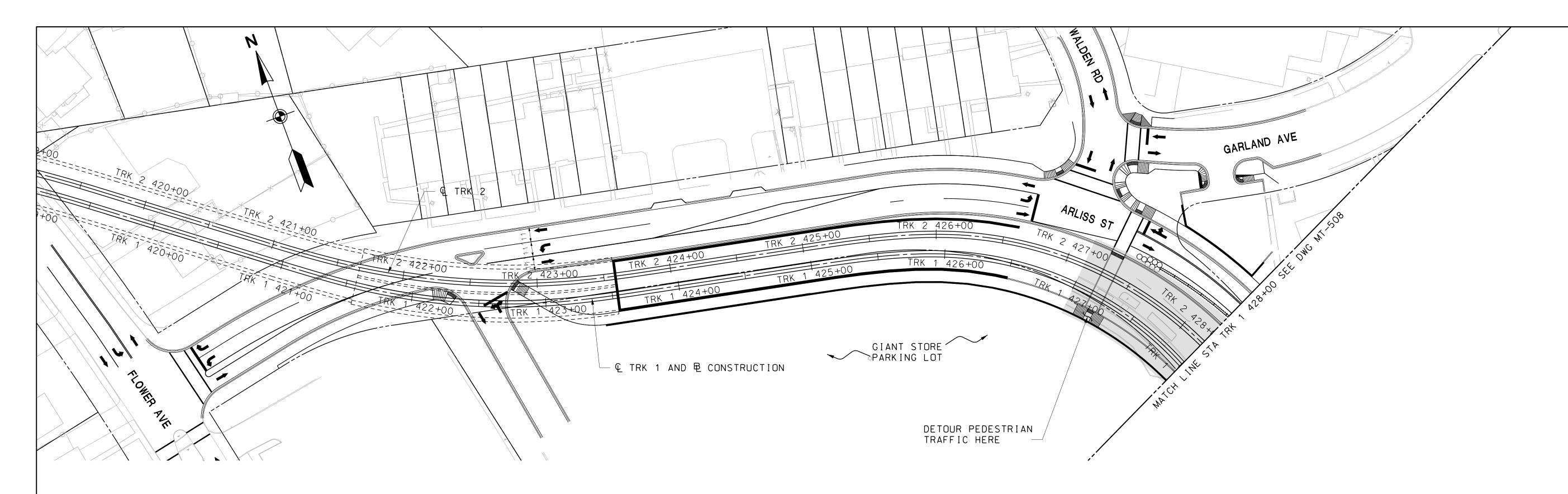
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ARLISS STREET - STAGE 3

T-1042-0220 DRAWING NO. MT-505 SHEET NO. 99 OF 383 SCALE: AS SHOWN





#### SEQUENCE OF CONSTRUCTION - STAGE 4

- 1. INSTALL TEMPORARY CONCRETE BARRIER ALONG ARLISS STREET FROM STA TRK 1 427+50 TO PINEY BRANCH ROAD INTERSECTION AS SHOWN. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO PREVIOUSLY CONSTRUCTED ARLISS STREET. PROVIDING ONE 10' LANE IN EACH DIRECTION AS SHOWN.
- 2. CONSTRUCTION WORK IN THIS PHASE INCLUDE UTILITY RELOCATION ON ARLISS STREET, TRACK WORK FROM STATION TRK 1 427+00 TO STATION TRK 1 434+00 AND STA PLATFORM.
- 3. DETOUR ARLISS STREET SOUTH SIDE PEDESTRIAN TRAFFIC TO NORTH SIDE AT THE PEDESTRIAN CROSSWALK SHOWN ON PLAN AT THE VICINITY OF STA TRK 1 427+15.

#### © TRK 2 € TRK 1 AND 閏 CONSTRUCTION CONSTRUCTED IN PREVIOUS STAGES :::**:1**:1::**:**:::: ..1.1.4. . . . . 1. 1 . ' . . . . . SIDEWALK TRAVEL LANE TURN LANE TRAVEL LANE SIDEWALK

#### MOT LEGEND

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 424+20 TO STA TRK 1 427+00 SCALE: NTS

## MARYLAND DEPARTMENT OF TRANSPORTATION





**Sannett Fleming** WR&A

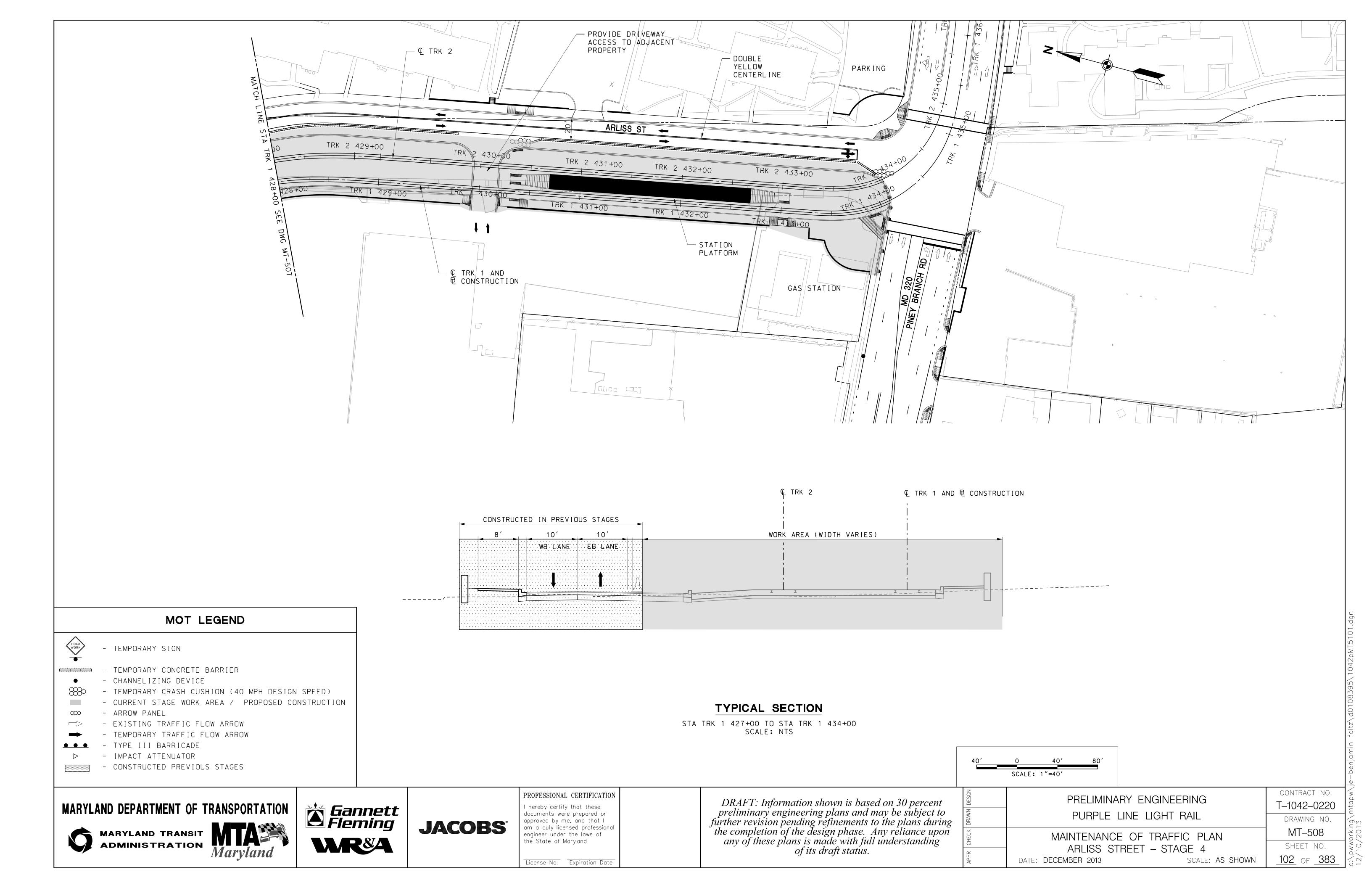
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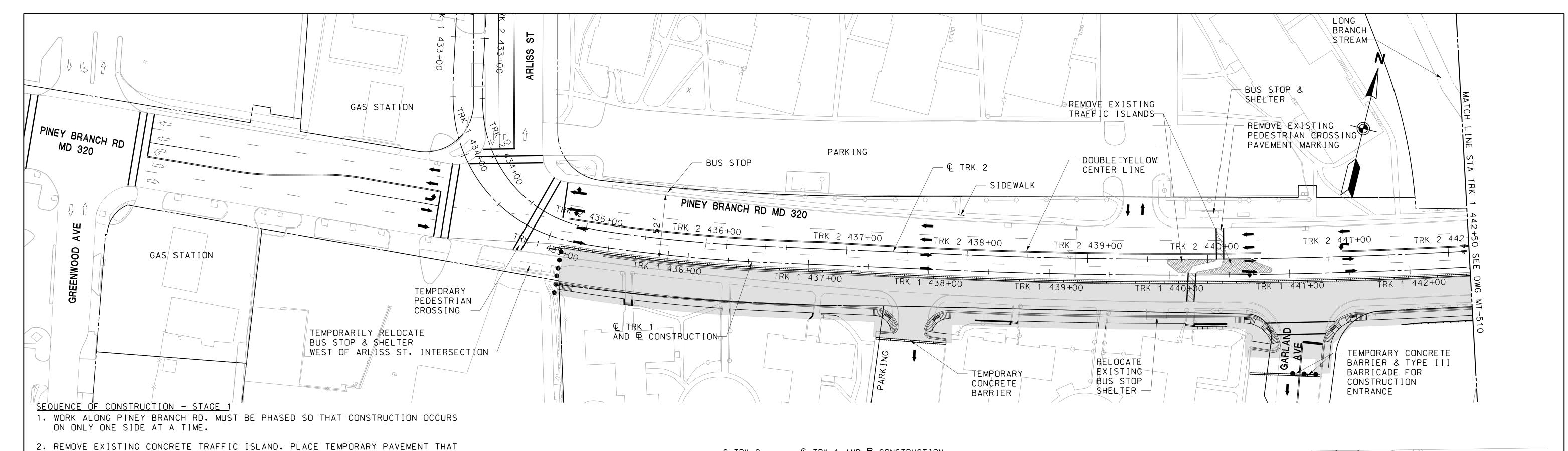
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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-507
ARLISS STREET – STAGE 4	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SHOWN	101 OF 383





- 3. INSTALL ALL NECESSARY CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES. REMOVE EXISTING PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NORTH SIDE AND PROVIDE FOUR 11' LANES. TWO IN EACH DIRECTION.
- 4. MODIFY TRAFFIC SIGNAL AT ARLISS AND PINEY BRANCH ROAD INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT.
- 5. CLOSE GARLAND AVENUE AT PINEY BRANCH ROAD INTERSECTION. CLOSE DRIVEWAY AT STATION TRK 1 437+75 TO THE PARKING LOT. PLACE TEMPORARY CONCRETE TRAFFIC BARRIER AND TYPE III BARRICADE. ACCESS TO GARLAND AVENUE AND PARKING LOT SHALL BE FROM DOMER AVENUE. DETOUR GARLAND AVENUE AND PARKING LOT TRAFFIC WITH ADEQUATE SIGNING TO GREENWOOD AVENUE.
- 6. RELOCATE UTILITIES ALONG PINEY BRANCH RD SOUTH SIDE PER UTILITY PLAN. CONSTRUCT WIDENING OF PINEY BRANCH ROAD AND DRAINAGE SYSTEM SOUTHSIDEFROM STATION TRK 1 -----435+80 TO STATION TRK 1 443+50. INSTALL PROPOSED DRAINAGE CULVERT AND EXTEND THE EXISTING CULVERT SOUTHSIDE AT LONG BRANCH STREAM CROSSING.
- 7. TEMPORARILY RELOCATE BUS STOP & SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES.
- 8. MAINTAIN EXISTING LANE CONFIGURATION ON PINEY BRANCH ROAD FROM BARRON STREET INTERSECTION TO UNIVERSITY BLVD.
- 9. MAINTAIN EXISTING SIGNAL AT BARRON STREET INTERSECTION.

#### Ç TRK 2 © TRK 1 AND ₺ CONSTRUCTION MOT TRAVEL LANES WORK AREA (WIDTH VARIES) WB LANE 11' - 19' WB LANE WB LANE EB LANE !EB LANE | WALK

#### TYPICAL SECTION

STA. TRK 1 435+00 TO STA. TRK 1 443+50 SCALE: NTS

#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER - CHANNELIZING DEVICE

MATCHES EXISTING PAVEMENT STRUCTURE DEPTH.

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

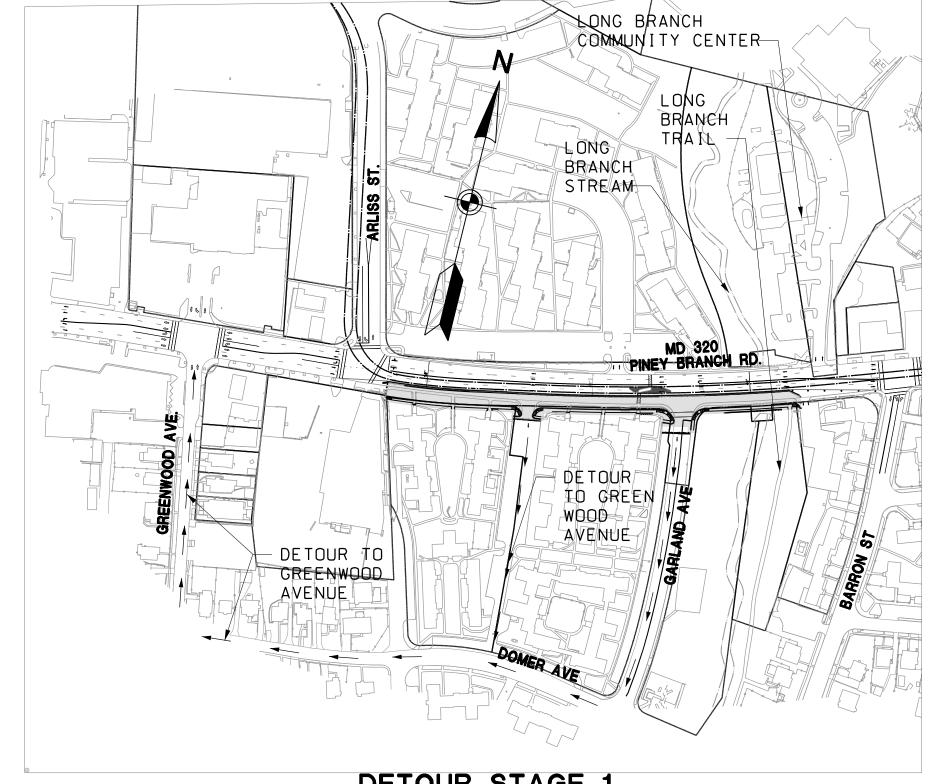
- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW - TYPE III BARRICADE

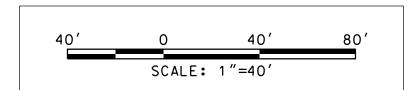
- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

#### GENERAL NOTES

- 1. INSTALL ALL NECESSARY CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES. CONSTRUCTION SIGNING MUST CONFORM TO MDSHA AND MONTGOMERY COUNTY TEMPORARY TRAFFIC CONTROL MANUAL (TTCM).
- 2. INTERSECTION SIGHT DISTANCE MUST BE MAINTAINED PER MDSHA STANDARD 104.01-29.
- 3. MAINTAIN ACCESS AND ADEQUATE SIGHT DISTANCES DURING CONSTRUCTION AT ENTRANCES ON ALL PARCELS. ACCESS MAY INCLUDE MOVEMENT THRU PERMANENT AND TEMPORARY CONSTRUCTION.
- 4. CONTRACTOR TO UTILIZE MDSHA STANDARD 104.01-28 'STAGED ROADWAY CONSTRUCTION' TYPICAL TO PROTECT PAVEMENT DROP-OFF AT THE END OF EACH WORK DAY.
- 5. THE CONTRACTOR SHALL REMOVE, RELOCATE OR COVER ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLANS. WHEN THE CONFLICT NO LONGER EXIST, RESTORE THE SIGNS TO THEIR ORIGINAL POSITION.
- 6. ARROWS ON THE TRAFFIC MANAGEMENT PLANS DENOTE THE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS UNLESS SPECIFICALLY NOTED.



DETOUR STAGE SCALE: NTS



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MARYLAND TRANSIT **ADMINISTRATION** 



**Sannett Fleming** 

**JACOBS**°

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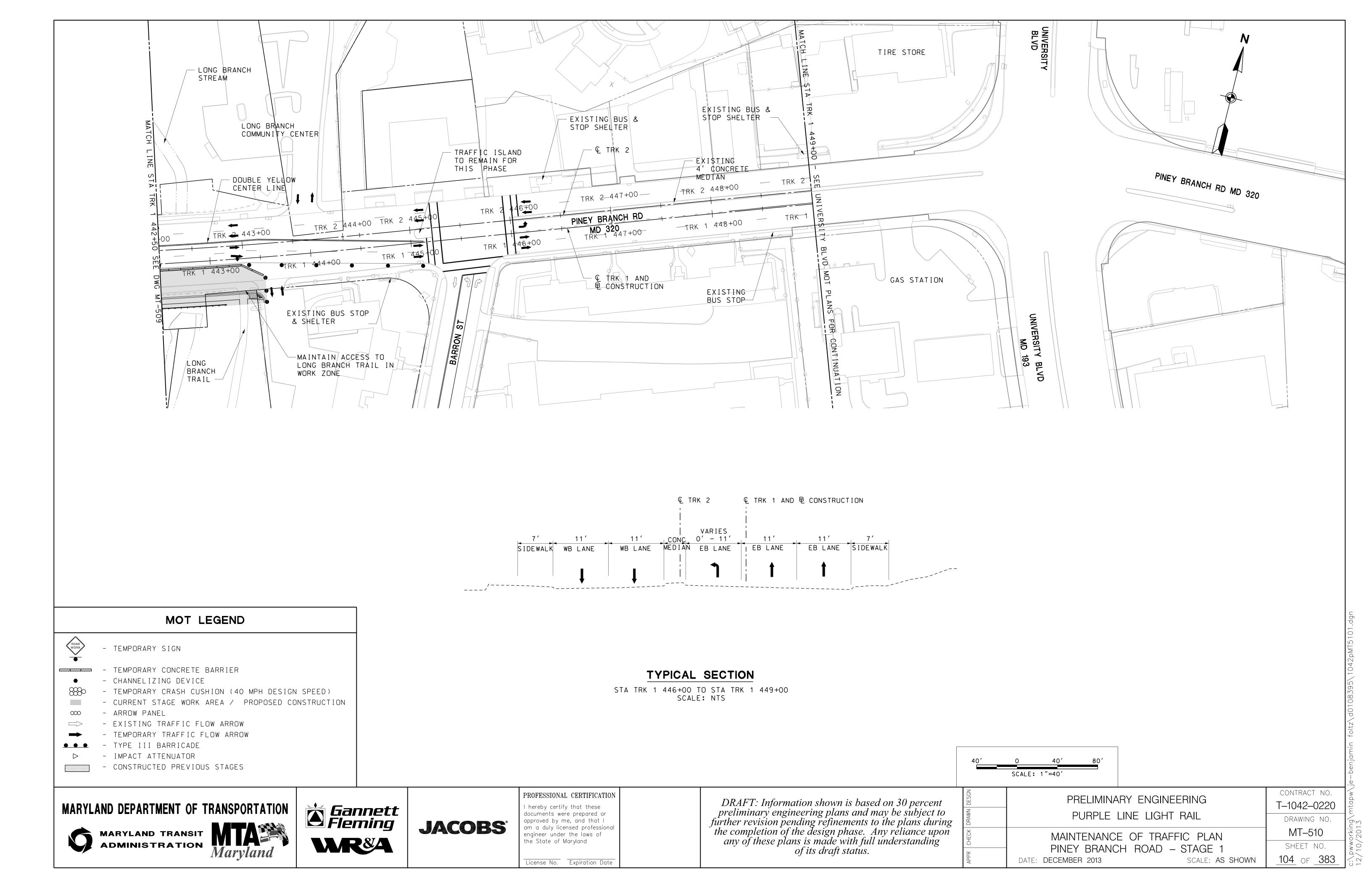
License No. Expiration Date

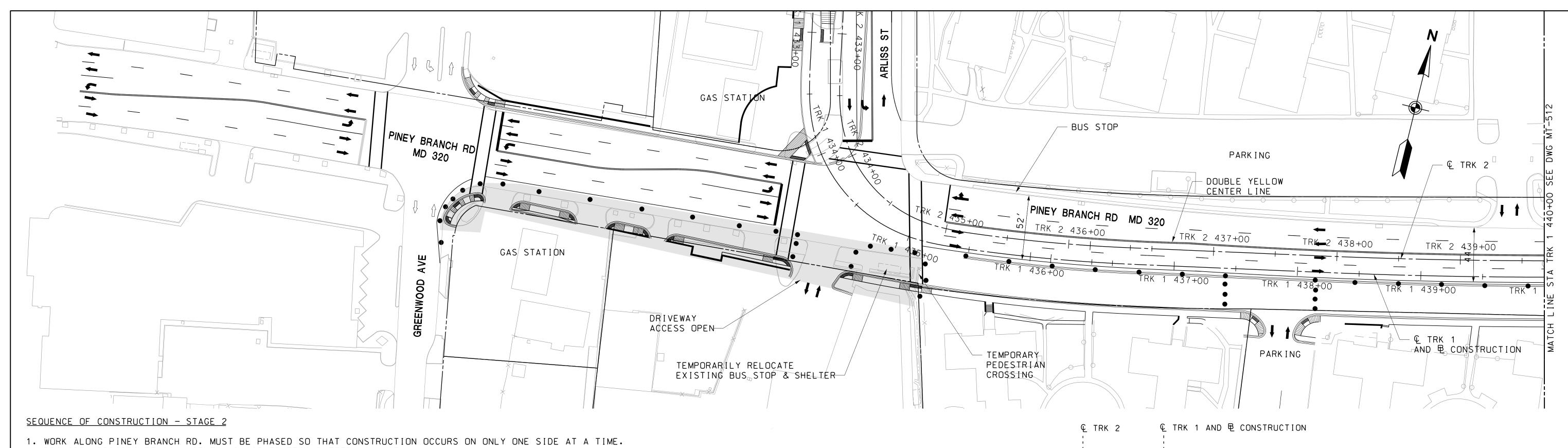
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PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN

DRAWING NO. MT-509 SHEET NO. PINEY BRANCH ROAD - STAGE 1 103 OF 383 DATE: **DECEMBER 2013** SCALE: AS SHOWN

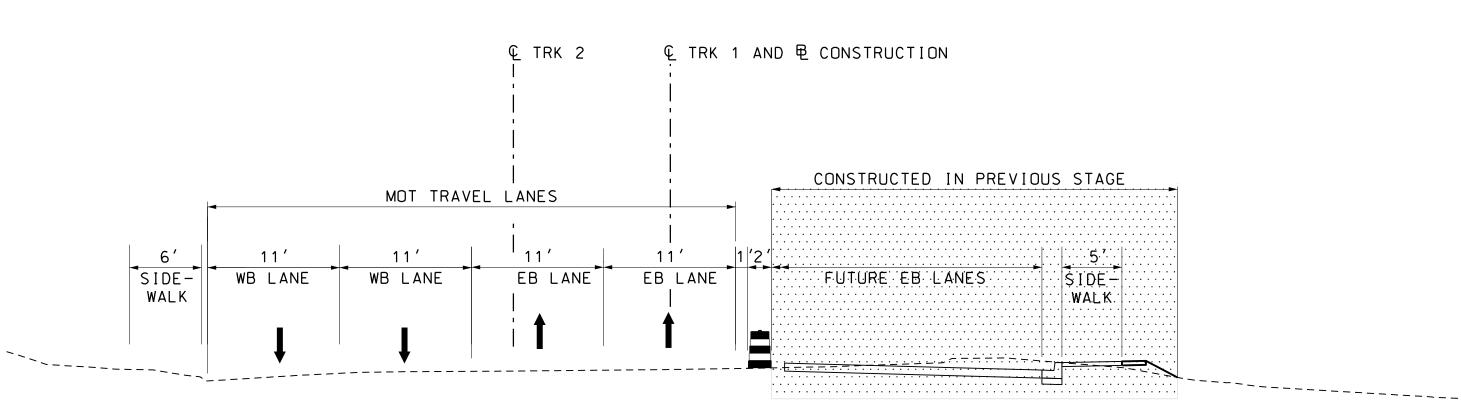
CONTRACT NO. T-1042-0220





- PROVIDE APPROPRIATE SIGNAGE TO ADVICE TRAFFIC PATTERN CHANGE
- 2. REMOVE EXISTING CONCRETE MEDIAN ( STATION TRK 1 446+00 TO STATION TRK 1 449+00). PLACE TEMPORARY PAVEMENT THAT MATCHES EXISTING PAVEMENT DEPTH AND STRUCTURE.
- 3. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NORTHSIDE PROVIDING FOUR 11' LANES, TWO IN EACH DIRECTION.
- 4. MODIFY TRAFFIC SIGNAL AT BARRON STREET AND PINEY BRANCH ROAD INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT.
- 5. TEMPORARILY RELOCATE BUS STOPS AND SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES.
- 6. DETOUR SOUTH SIDE PINEY BRANCH ROAD PEDESTRIAN TRAFFIC TO NORTHSIDE AT LONG BRANCH TRAIL INTERSECTION.
- 7. MAINTAIN BARRON STREET ACCESS THROUGH THE WORK ZONE AREA. STAGE THE CONSTRUCTION OF BARRON STREET PROVIDING MINIMUM ONE 10' LANE IN EACH DIRECTION.
- 8. RELOCATE UTILITIES ALONG PINEY BRANCH RD SOUTH SIDE PER UTILITY PLAN. CONSTRUCT WIDENING OF PINEY BRANCH ROAD AND DRAINAGE SYSTEM SOUTH SIDE FROM STATION TRK 1 443+50 TO STATION TRK 1 449+00. CONSTRUCT BARRON STREET TO THE LIMIT SHOWN ON ROADWAY PLAN. CONSTRUCT SOUTH SIDE PINEY BRANCH ROAD WIDENING WEST OF ARLISS STREET INTERSECTION. COORDINATE WITH ADJACENT PROPERTY OWNERS FOR ACCESS THROUGH WORK AREAS.
- 9. COORDINATE MAINTENANCE OF TRAFFIC (MOT) AND PEDESTRIAN ACCESS & SAFETY WITH UNIVERSITY BLVD MAINTENANCE OF TRAFFIC.

#### TYPICAL SECTION PINEY BRANCH ROAD



#### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

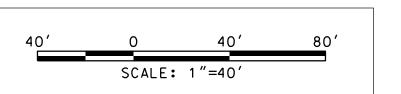
- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 435+00 TO STA TRK 1 443+50 SCALE: NTS



#### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT **ADMINISTRATION** 



**Sannett Fleming** 

**JACOBS**°

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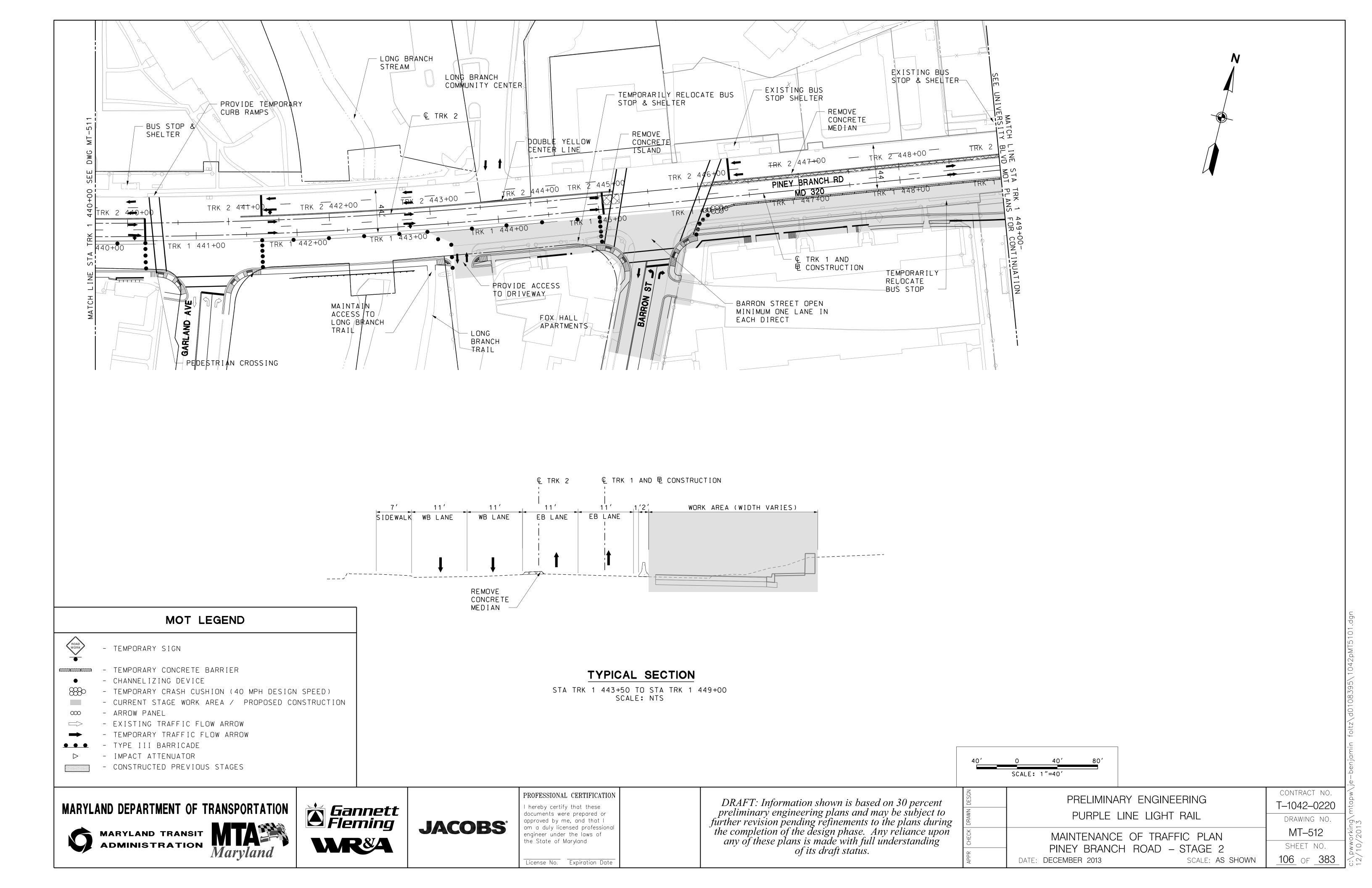
License No. Expiration Date

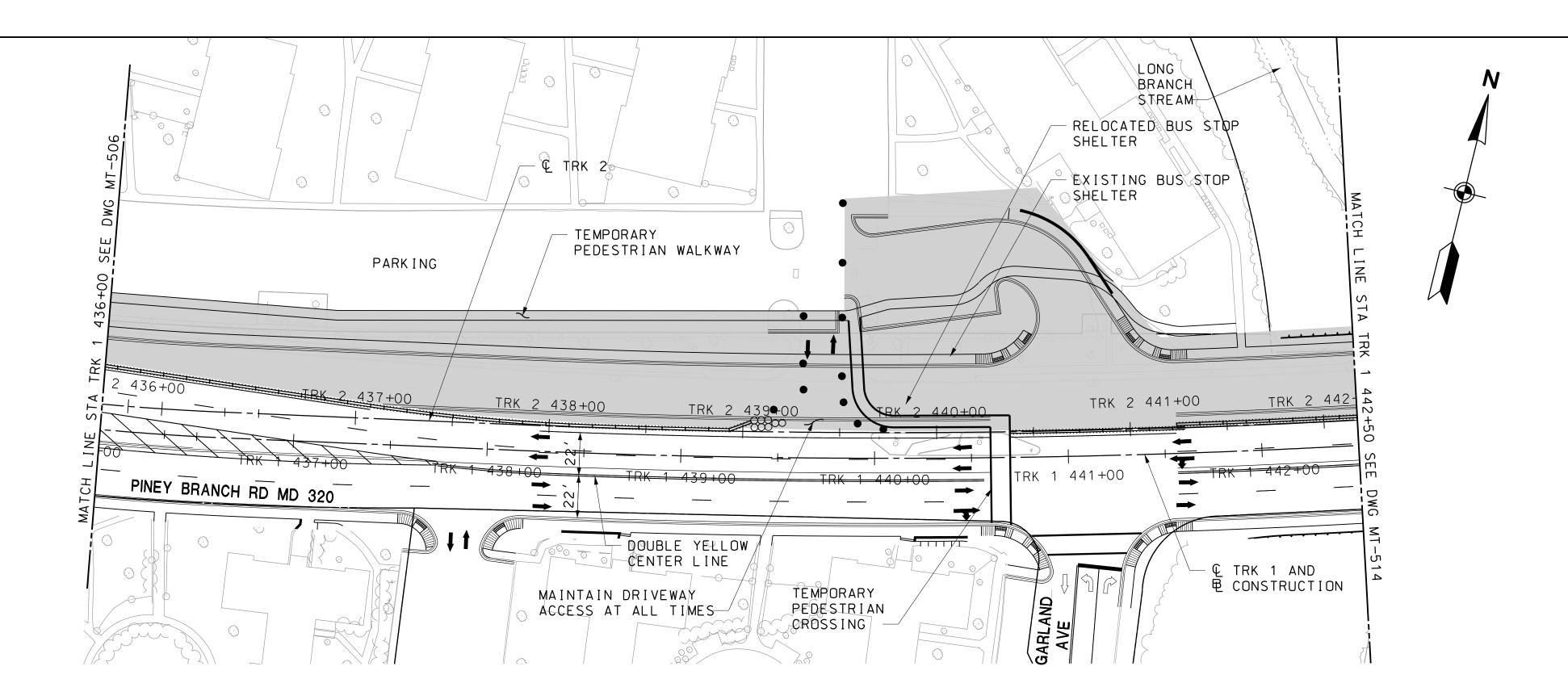
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SIDEWALK WB LANE

PRELIMINARY ENGINEERING	CONTRACT NO.
The Livilinant Englineening	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-511
PINEY BRANCH ROAD - STAGE 2	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SH	HOWN 105 OF 383

WORK AREA (WIDTH VARIES)





#### SEQUENCE OF CONSTRUCTION - STAGE 3

- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE, SHIFT TRAFFIC TO NEWLY CONSTRUCTED SOUTH SIDE OF PINEY BRANCH ROAD, PROVIDE FOUR 11' LANES, TWO IN EACH DIRECTION.
- 2. MODIFY TRAFFIC SIGNAL AT ARLISS AND PINEY BRANCH ROAD INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT.
- 3. INSTALL TEMPORARY CONCRETE BARRIER AS SHOWN ON PLAN AND SECTION.
- 4. MAINTAIN PEDESTRIAN ACCESS ALONG THE NORTH SIDE OF PINEY BRANCH ROAD THROUGHOUT CONSTRUCTION OF STAGE 3. PROVIDE TEMPORARY PEDESTRIAN WALKWAY AT THE BACK OF THE WORK AREA AS SHOWN ON PLAN. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENT, TAKE ADDITIONAL MEASURES INCLUDING CONSTRUCTING PERMANENT SIDEWALK IN STAGES OR PEDESTRIAN DETOUR.
- 5. TEMPORARILY RELOCATE BUS STOP & SHELTERS IN THE WORK ZONE AREA TO ACCESSIBLE LOCATION PER MDSHA AND MONTGOMERY COUNTY GUIDELINES.
- 6. MAINTAIN EXISTING DRIVEWAY ACCESS THROUGH THE WORK ZONE AREA AT STATION TRK 1 439+60
- 7. RELOCATE UTILITIES ON NORTHBOUND SIDE PER UTILITY PLAN, CONSTRUCT WESTBOUND PINEY BRANCH ROAD WIDENING PER ROADWAY PLAN, INSTALL PROPOSED DRAINAGE CULVERT AND EXTEND EXISTING CULVERT NORTH SIDE AT LONG BRANCH STREAM.
- 8. MODIFY TRAFFIC SIGNAL AT BARON STREET INTERSECTION TO ACCOMMODATE TRAFFIC SHIFT.

# WORK AREA (WIDTH VARIES) WORK AREA (WIDTH VARIES) CONSTRUCTED IN PREVIOUS STAGE TEMPORARY PEDESTRIAN WALKWAY (SEE NOTE 4) 11' WB LANE WB LANE WB LANE EB LANE WALK WALK

#### MOT LEGEND

ROAD

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

∞ - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

→ IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

#### TYPICAL SECTION

STA TRK 1 436+00 TO STA TRK 1 443+50 SCALE: NTS



MARYLAND TRANSIT ADMINISTRATION



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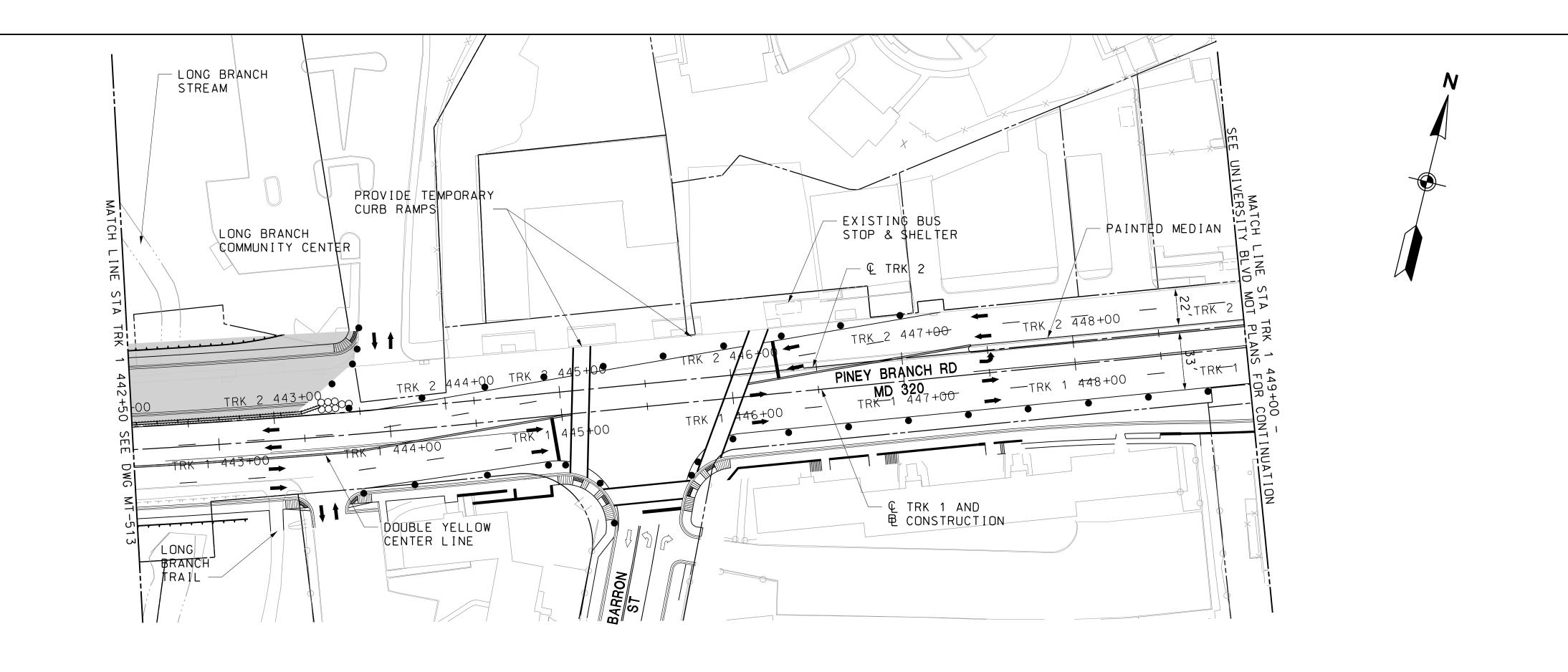
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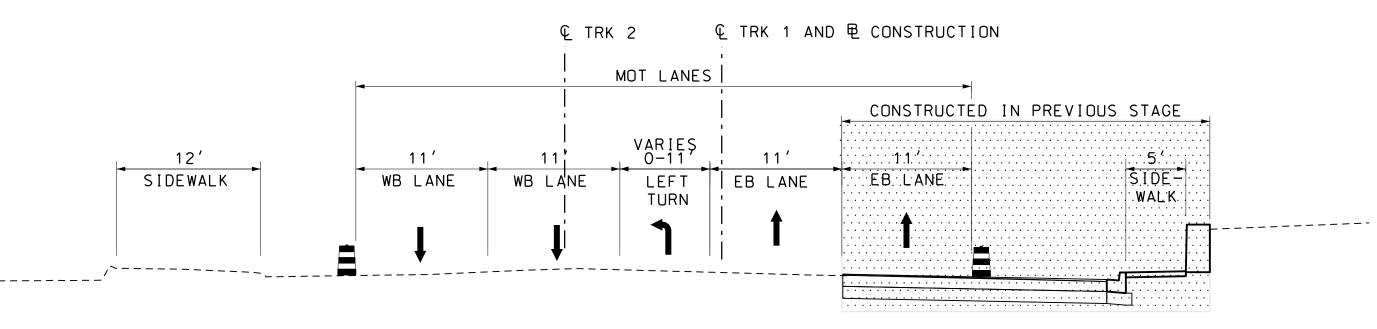
PRELIMINARY ENGINEERING	
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN	
PINEY BRANCH ROAD – STAGE 3	

DATE: DECEMBER 2013

C PLAN
STAGE 3
SCALE: AS SHOWN

CONTRACT NO.
T-1042-0220
DRAWING NO.
MT-513
SHEET NO.
107 OF 383





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- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

TYPICAL SECTION STA TRK 1 443+50 TO STA TRK 1 449+00 SCALE: NTS





MARYLAND TRANSIT ATAMA



**Sannett Fleming JACOBS**° WR&A

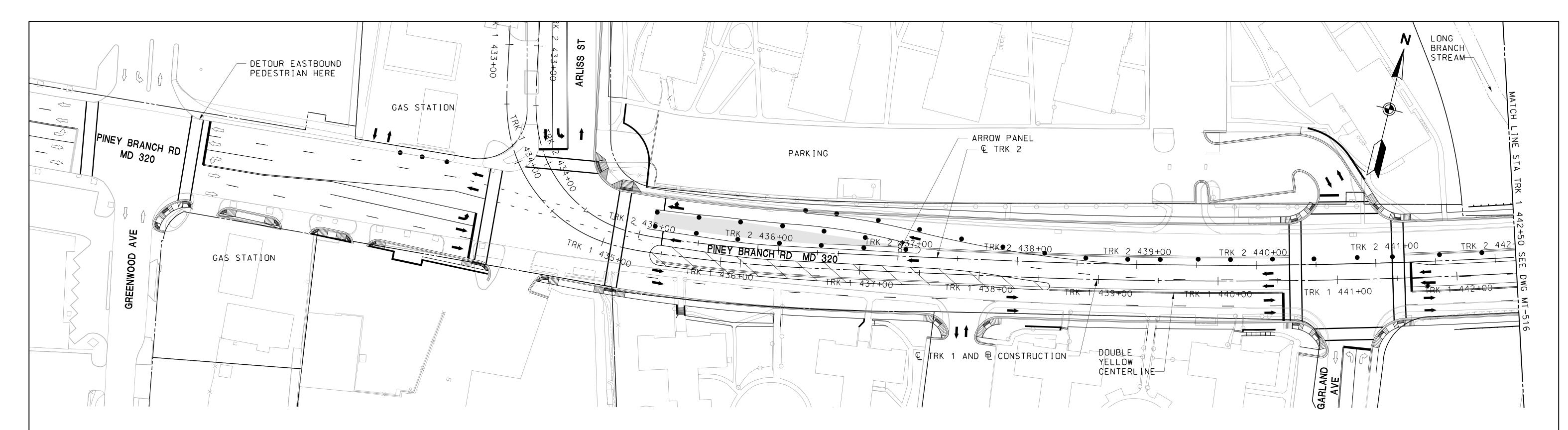
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License No. Expiration Date

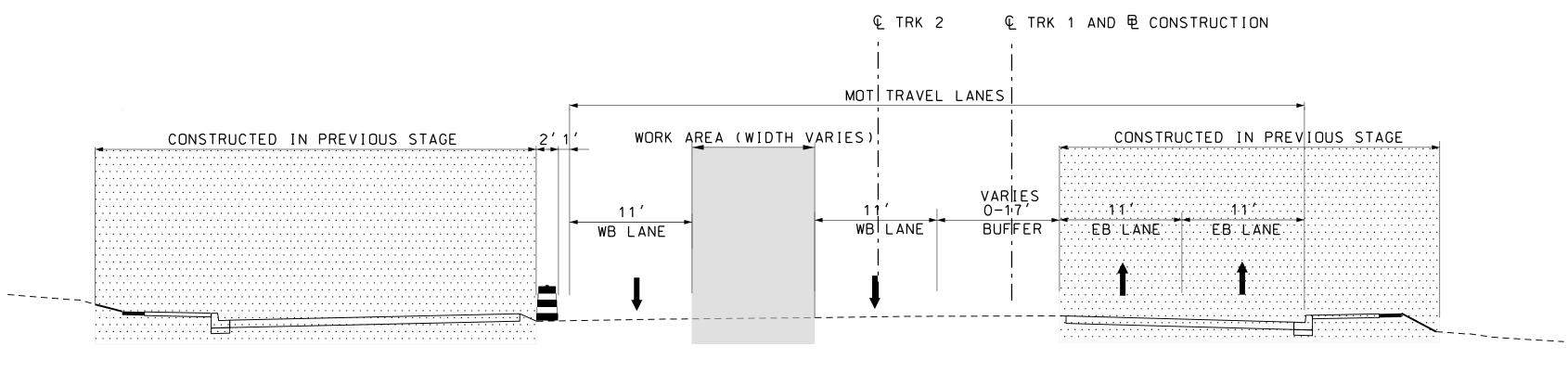
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PRELIMINARY ENGINEERING	
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN	
PINEY BRANCH ROAD - STAGE 3	()
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	10

CONTRACT NO. -1042-0220 DRAWING NO. MT-514 SHEET NO. 108 OF 383



- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE PINEY BRANCH ROAD AS SHOWN ON PLAN. SHIFT TRAFFIC TO NEWLY CONSTRUCTED ROAD. PROVIDE TWO LANES IN EACH DIRECTION. INSTALL TEMPORARYTRAFFIC CONTROL DEVICES AS SHOWN ON PLAN.
- 2. MAINTAIN PEDESTRIAN ACCESS TO LONG BRANCH COMMUNITY CENTER. DETOUR PEDESTRIAN TRAFFIC AT UNIVERSITY BLVD INTERSECTION TO SOUTH SIDE PINEY BRANCH ROAD.
- 3. MODIFY TRAFFIC SIGNALS AT ARLISS STREET AND BARRON STREET INTERSECTIONS TO ACCOMMODATE TRAFFIC SHIFT.
- 4. CONSTRUCT PINEY BRANCH ROAD SECTION SHOWN ON THIS PLAN FROM STATION TRK 1 435+00 TO STATION TRK 1 437+50.
- 5. RELOCATE UTILITIES NORTH SIDE PER UTILITY PLAN. CONSTRUCT PINEY BRANCH ROAD NORTH SIDE FROM STATION TRK 1 443+50 TO STATION TRK 1 449+00.



TYPICAL SECTION

STA TRK 1 435+00 TO ST. TRK 1 443+50 SCALE: NTS

### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

- TEMPORARY TRAFFIC FLOW ARROW



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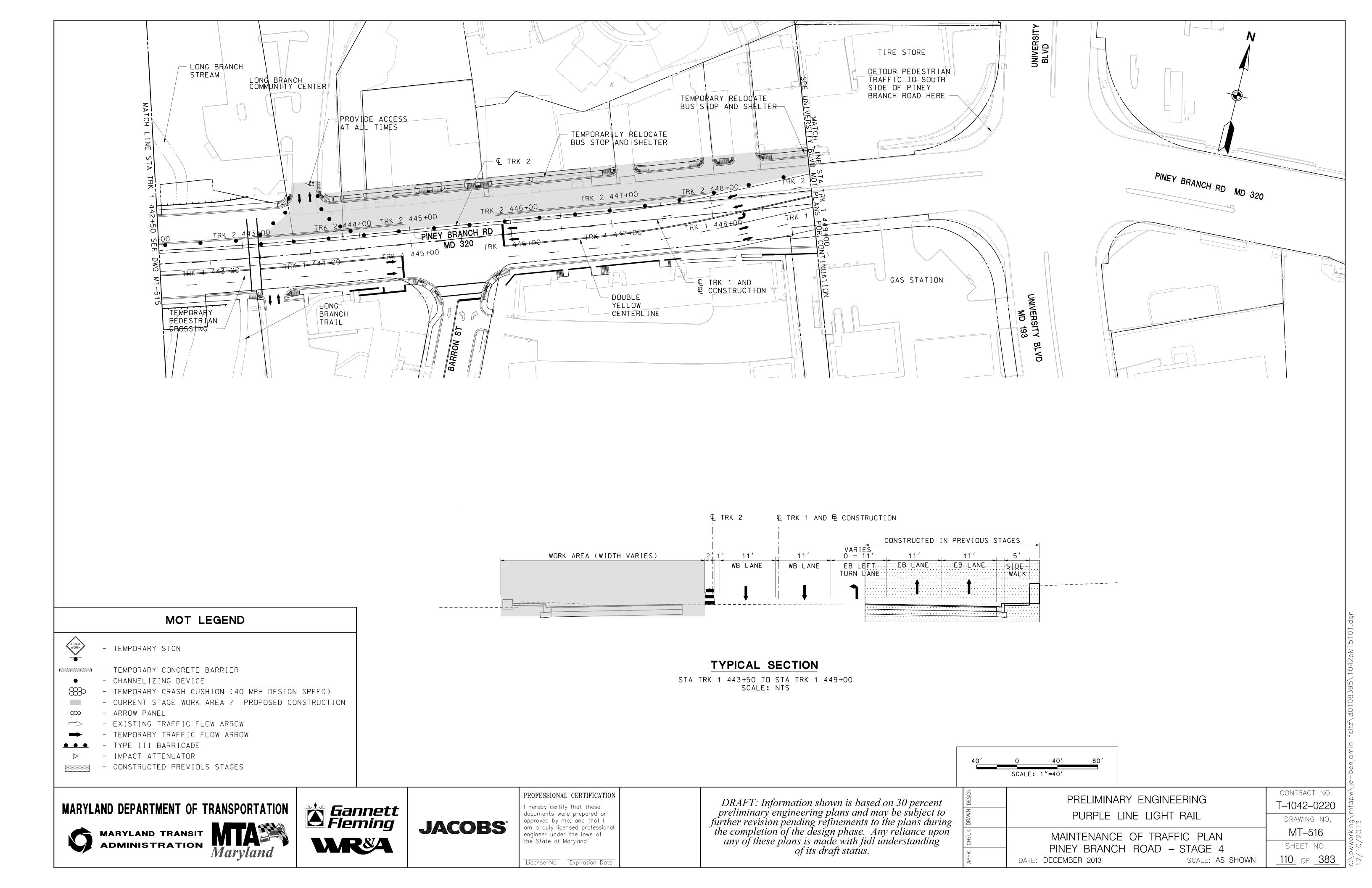
SCALE: 1"=40'			
PRELIMINA	ARY ENGINEERING		contract no. T-1042-0220
PURPLE	LINE LIGHT RAIL		DRAWING NO.
MAINTENANC	E OF TRAFFIC PLAN		MT-515
PINEY BRANC	H ROAD - STAGE 4		SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: AS	3 SHOWN	<u>109</u> of <u>383</u>

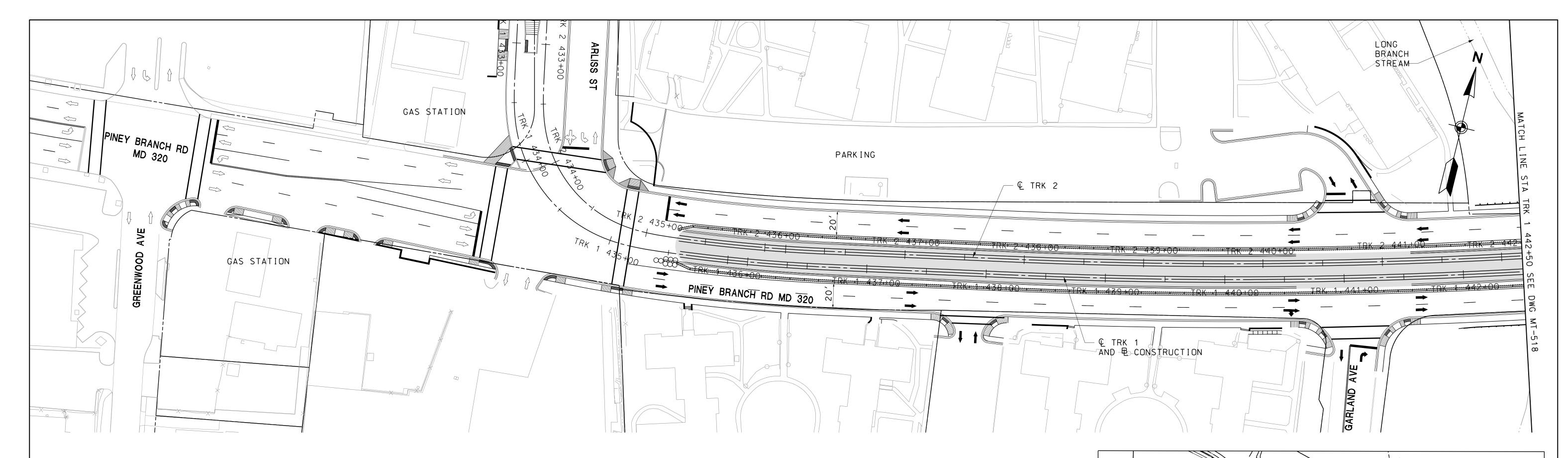
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- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE PINEY BRANCH ROAD AS SHOWN ON PLAN. PROVIDE TWO 10' LANES IN EACH DIRECTION.
- 2. DETOUR GARLAND AVENUE TRAFFIC HEADING TO WESTBOUND PINEY BRANCH ROAD THROUGH DOMER AVENUE AND GREENWOOD AVE. (SEE DETOUR PLAN)
- 3. DETOUR WESTBOUND PINEY BRANCH ROAD TRAFFIC HEADING TO SOUTH GARLAND AVENUE AT GREENWOOD AVENUE AND THROUGH DOMER AVENUE TO GARLAND AVENUE. (SEE DETOUR PLAN)
- 4. RESTORE BUS STOPS AND SHELTERS TO ITS ORIGINAL LOCATIONS PER ROADWAY TRAFFIC PLANS.
- 5. INSTALL CONCRETE BARRIER AS SHOWN AND CONSTRUCT CONCRETE EMBEDDED TRACK 1 & 2 FROM STATION TRK 1 435+55 TO STATION TRK 1 446+00.
- 6. COORDINATE MAINTENANCE OF TRAFFIC AND PEDESTRIAN ACCESS AND SAFETY WITH UNIVERSITY BLVD MAINTENANCE OF TRAFFIC PLANS.

### MOT LEGEND

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

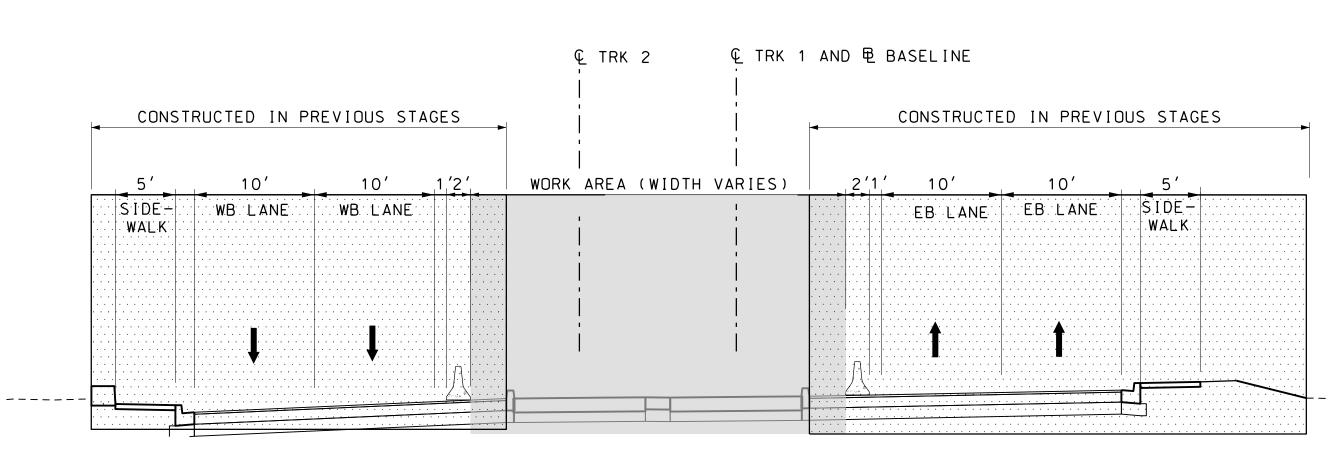
- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

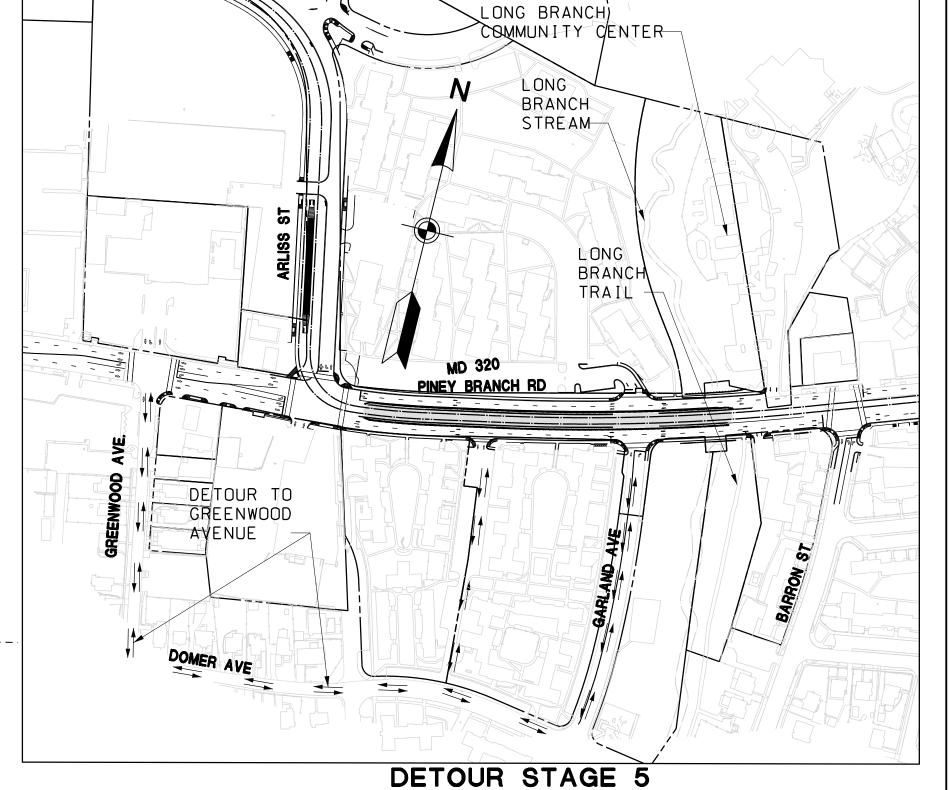
- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES



### TYPICAL SECTION

STA TRK 1 435+55 TO STA TRK 1 443+50 SCALE: NTS



SCALE: NTS

SCALE: 1"=40'

DATE: DECEMBER 2013

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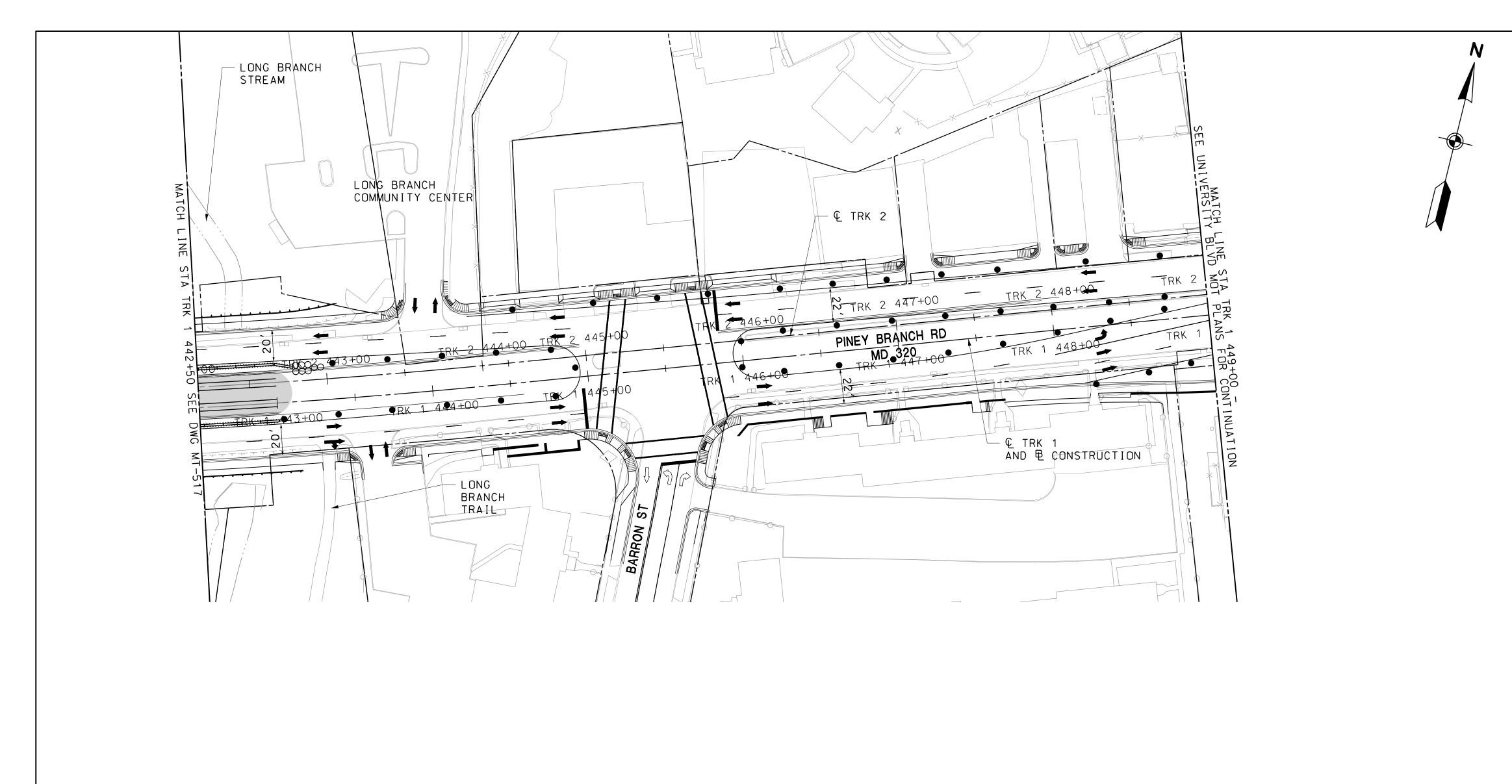
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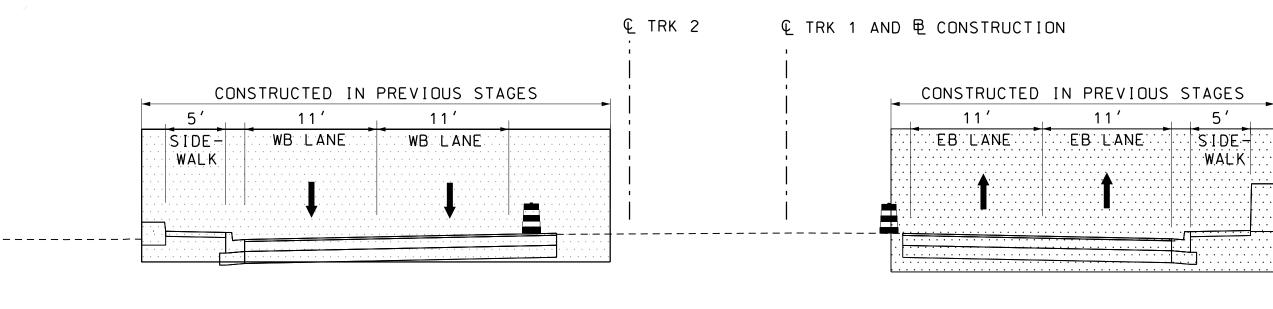
PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN

PINEY BRANCH ROAD - STAGE 5

CONTRACT NO. T-1042-0220 DRAWING NO. MT-517 SHEET NO. \_111 OF \_383 SCALE: AS SHOWN

License No. Expiration Date





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- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR - CONSTRUCTED PREVIOUS STAGES

# TYPICAL SECTION

STA TRK 1 443+00 TO STA TRK 1 449+00 SCALE: NTS

# SCALE: 1"=40' PROFESSIONAL CERTIFICATION

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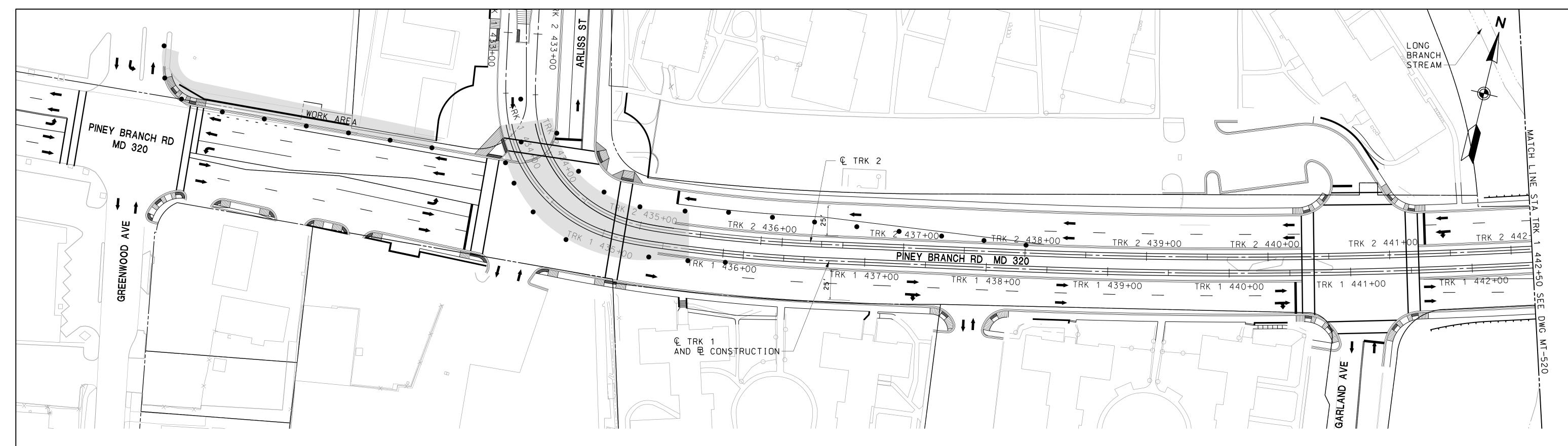
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License No. Expiration Date

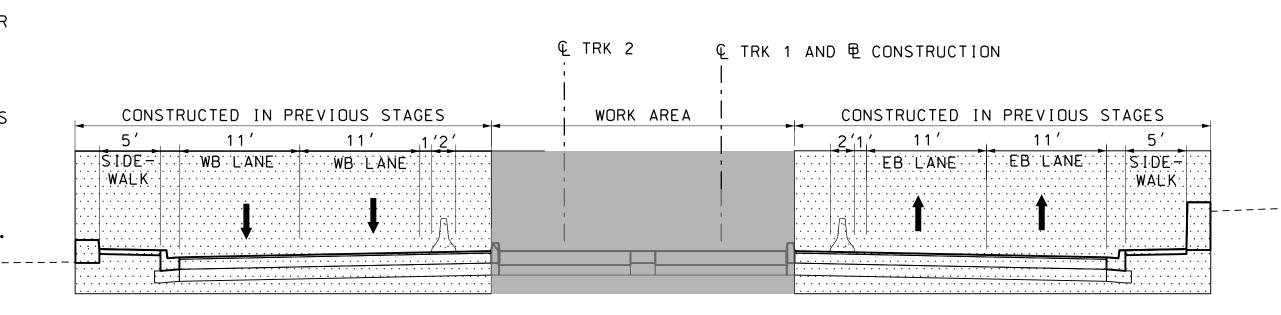
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	CONTRACT NO.	-
PRELIMINARY ENGINEERING	T-1042-0220	-
PURPLE LINE LIGHT RAIL	DRAWING NO.	_
	MT-518	
MAINTENANCE OF TRAFFIC PLAN		
PINEY BRANCH ROAD – STAGE 5	SHEET NO.	
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	112 OF 383	-



- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE. SHIFT TRAFFIC TO NEWLY CONSTRUCTED FINAL PINEY BRANCH ROAD. PROVIDE TWO LANES IN EACH DIRECTION.
- 2. INSTALL DRUMS ALONG PINEY BRANCH RD AS SHOWN ON PLAN.
- 3. CONSTRUCT TRACK 1 AND 2 AT ARLISS STREET AND PINEY BRANCH ROAD INTERSECTION. THE EMBEDDED TRACK WORK AT ARLISS AND PINEY BRANCH ROAD INTERSECTION WILL OCCUR DURING TEMPORARY NIGHT TIME LANE CLOSURES AND IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE SHA STANDARD MD-104.03-14. THE CONTRACTOR SHALL USE 12 FT X 14 FT BY ONE INCH THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY AFTER NIGHT TIME WORK.
- 4. FOR THE NIGHT TIME CONSTRUCTION DETOUR WESTBOUND PINEY BRANCH ROAD TRAFFIC AT ARLISS STREET INTERSECTION TO NORTHBOUND ARLISS STREET AND SOUTHBOUND FLOWER AVENUE BACK ONTO PINEY BRANCH ROAD. (SEE DETOUR MAP)
- 5. FOR EASTBOUND PINEY BRANCH ROAD TRAFFIC HEADING TO ARLISS STREET, DETOUR AT FLOWER AVENUE INTERSECTION. RESTRICT EASTBOUND PINEY BRANCH ROAD TRAFFIC LEFT TURN AT ARLISS STREET.



### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

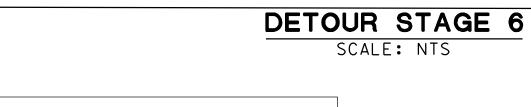
- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES

### TYPICAL SECTION

STA TRK 1 435+55 TO STA TRK 1 443+50 SCALE: NTS



DETOUR TO ARLISS ST. FOR EASTBOUND PINEY

BRANCH ROAD TRAFFIC

WESTBOUND

PINEY BRANCH

ROAD TRAFF

LONG

BRANCH

STREAM

# SCALE: 1"=40

DOMER AVE

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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
	MT–519
MAINTENANCE OF TRAFFIC PLAN	
MAINTENANCE OF THAILIC LEAN	
PINEY BRANCH ROAD - STAGE 6	SHEET NO.
	SHEET NO.  113 of 383

ACT NO. 2-0220

LONG BRANCH

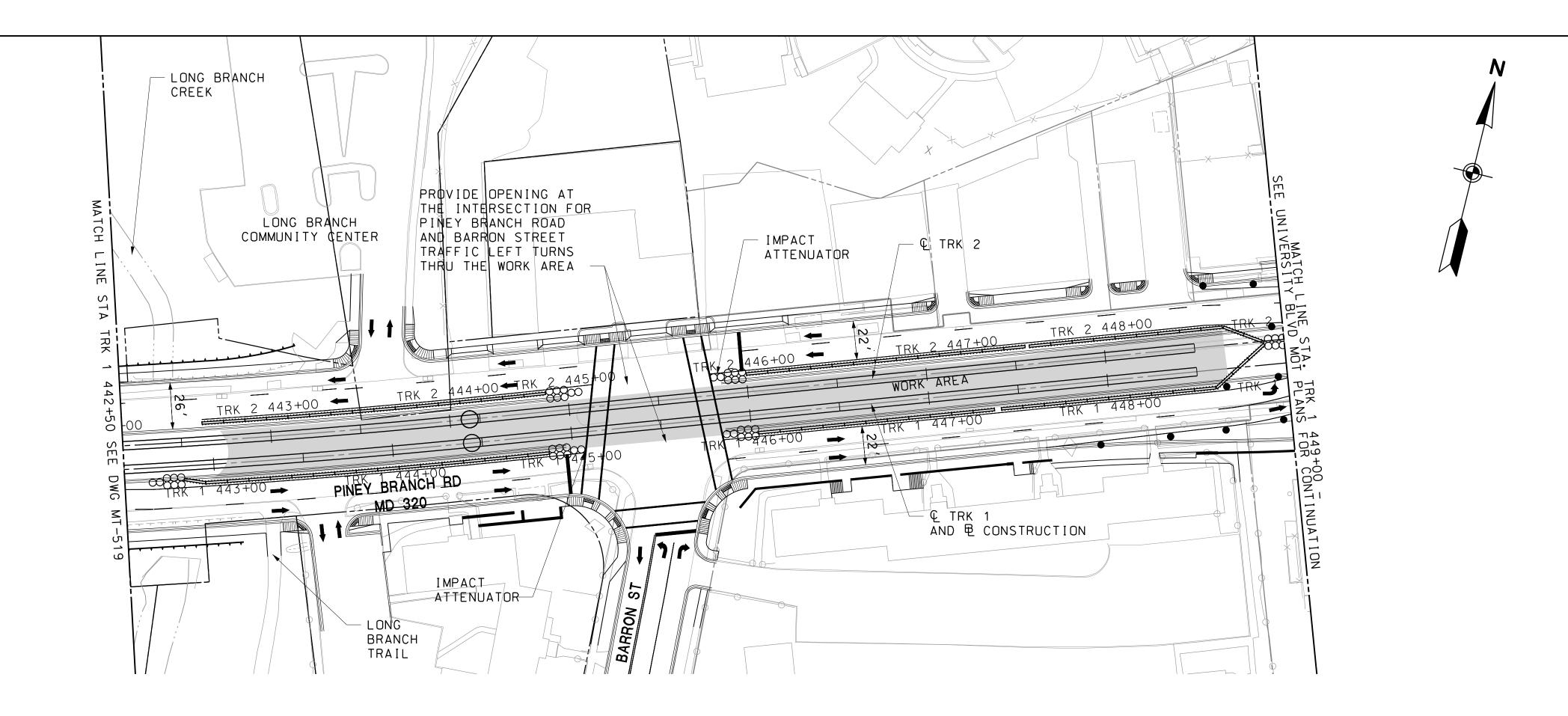
LONG

BRANCH

TRAIL

PINEY BRANCH RD MD 320

COMMUNITY CENTER



- 1. REMOVE PREVIOUS PAVEMENT MARKINGS AND RESTRIPE PINEY BRANCH AS SHOWN ON PLAN. PROVIDE TWO 11' LANES IN EACH DIRECTION.
- 2. INSTALL TEMPORARY CONCRETE BARRIER AS SHOWN IN WORK ZONE.
- 3. FOR BARRON STREET TRAFFIC HEADING TO WEST PINEY BRANCH ROAD AND FOR WESTBOUND PINEY BRANCH ROAD TRAFFIC HEADING TO SOUTH BARRON STREET, ALLOW LEFT TURNS AT THE INTERSECTION THROUGH THE WORK AREA.
- 4. CONSTRUCT CONCRETE EMBEDDED TRACK 1 & 2 ON PINEY BRANCH ROAD FROM STATION TRK 1 443+00 TO STATION TRK 1 449+60
- 5. COORDINATE MAINTENANCE OF TRAFFIC (MOT) AND PEDESTRIAN ACCESS AND SAFETY WITH UNIVERSITY MAINTENANCE OF TRAFFIC

### MOT LEGEND



- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (40 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

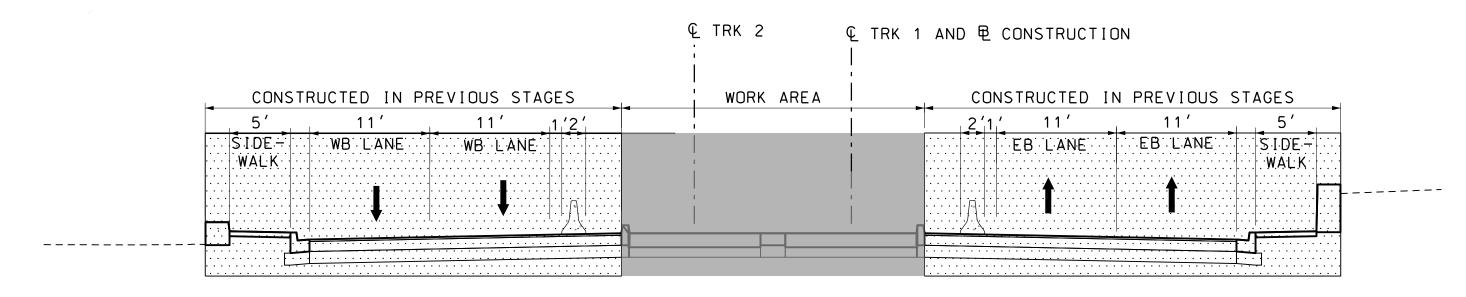
- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

- CONSTRUCTED PREVIOUS STAGES





# TYPICAL SECTION

STA TRK 1 443+50 TO STA TRK 1 449+00 SCALE: NTS

# MARYLAND DEPARTMENT OF TRANSPORTATION



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		CONTRACT NO.
PRELIMINARY ENGINE	ERING	T-1042-0220
PURPLE LINE LIGHT	Γ RAIL	DRAWING NO.
MAINTENANCE OF TRAF	FIC PLAN	MT-520
PINEY BRANCH ROAD -	- STAGE 6	SHEET NO.
DATE: DECEMBER 2013	SCALE: AS SHOWN	<u>114</u> of <u>383</u>





**888**000

- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

 $\infty$ - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW  $\qquad \qquad \Box >$ 

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

# SEQUENCE OF CONSTRUCTION

STAGE 1 WILL CONSIST OF THE CONSTRUCTION OF FULL DEPTH PAVEMENT, CURB AND GUTTER AND SIDEWALK ALONG THE NORTH SIDE OF MD 193 (UNIVERSITY BOULEVARD) FROM STA. TRK 2 451+00 TO 604+00.

- 1. CONSTRUCT NEW/TEMPORARY TRAFFIC SIGNAL AT ALL SIGNALIZED INTERSECTIONS ALONG MD 193 (UNIVERSITY BOULEVARD) PER TRAFFIC SIGNAL PLANS.
- 2. SAW CUT AND EXCAVATE FOR CONSTRUCTION OF FULL DEPTH PAVEMENT AND MEDIAN RECONSTRUCTION ALONG MD 193 (UNIVERSITY BOULEVARD) FROM STA. 6112+85 TO 6117+45. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. NO. MD 104.04-04.
- 3. SAW CUT AND EXCAVATE FOR CONSTRUCTION OF FULL DEPTH PAVEMENT, CURB AND GUTTER, AND SIDEWALK ALONG MD 193 (UNIVERSITY BOULEVARD) FROM STA, 6203+80 TO 6205+25 AND ALONG MD 320 (PINEY BRANCH ROAD) FROM STA. 6005+70 TO 6007+23. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. MD NOS. 104.04-02 AND 104.04-06.

#### SEQUENCE OF CONSTRUCTION STAGE 1 CON'T

- 4. SAW CUT AND EXCAVATE FOR CONSTRUCTION OF FULL DEPTH PAVEMENT, CURB AND GUTTER, AND SIDEWALK ALONG MD 193 FROM STA. TRK 2 451+00 TO 586+50. THIS INCLUDES THE CONSTRUCTION OF THE WB THRU LANES, BIKE LANE, AND SIDEWALK. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. NOS. MD 104.03-06. 104.04-01 AND 104.04-02. THE CONTRACTOR SHALL CONSTRUCT ALL PROPOSED RIGHT-TURN CHANNELIZATION ISLANDS AND RAMPS IN STAGES, MAINTAINING TRAFFIC ON THE EXISTING RAMP WHILE CONSTRUCTING THE PROPOSED RAMP THEN SHIFTING TRAFFIC TO THE NEW RAMP WHILE CONSTRUCTING THE PROPOSED ISLAND.
- 5. SAW CUT AND EXCAVATE FOR CONSTRUCTION OF FULL DEPTH PAVEMENT, CURB AND GUTTER, SIDEWALK, AND TRACK AS SHOWN FROM STA. TRK 2 586+50 TO 604+00. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. NOS. MD 104.02-02, 104.03-04, 104.03-06, AND 104.04-02.
- 6. SAW CUT AND EXCAVATE FOR MEDIAN RECONSTRUCTION ALONG MD 320 (PINEY BRANCH ROAD) FROM STA. 6006+10 TO 6007+15. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. NO. MD 104.04-04.

#### SEQUENCE OF CONSTRUCTION STAGE 1 CON'T

- 7. SAW CUT AND EXCAVATE FOR CONSTRUCTION OF FULL DEPTH PAVEMENT, CURB AND GUTTER, AND SIDEWALK ALONG EDWARDS PLACE FROM STA. 6090+30 TO 6093+65, 14TH AVENUE FROM STA. 6111+55 TO 6114+93, 15TH AVENUE FROM STA. 6123+10 TO 6124+93, MD 212 (RIGGS ROAD) FROM STA, 6505+00 TO 6511+50, PHELPS ROAD FROM STA. 6142+20 TO 6140+85, 24TH AVENUE FROM STA. 6172+25 TO 6171+20 AND THE ADELPHI MANOR ENTRANCE FROM STA. 6211+25 TO 6210+10. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. NOS. MD 104.03-02, 104.03-04, 104.03-06, 104.03-08, 104.04-02, 104.04-04, 104.04-06, AND 104.02-02. SEE GENERAL NOTE
- 8. SAW CUT AND EXCAVATE FOR FULL DEPTH PAVEMENT RECONSTRUCTION ALONG WB MD 193 (UNIVERSITY BOULEVARD) FROM STA. TRK 2 451+00 TO 604+00 AS SHOWN ON THE ROADWAY PLANS. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE LANE CLOSURE RESTRICTIONS IN THE I.F.B. AND SHA STD. NOS. MD 104.04-04, 104.04-06 AND 104.04-08. SEE GENERAL NOTE #5.

#### **GENERAL NOTES**

- 1. IF A DROP OFF REMAINS AT THE END OF A WORK DAY, A 4:1 WEDGE OF GRADED AGGREGATE IN ACCORDANCE WITH SHA STANDARD NO. 104.01-28 WILL BE REQUIRED.
- 2. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING WORK ZONE TRAFFIC CONTROL DETAILS: SHA STD. NOS. MD 104.06-09A, 104.06-09B, 104.06-09C, AND 104.06-09D.
- 3. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS ALONG THE ALIGNMENT THROUGHOUT CONSTRUCTION OF STAGE 1. WHERE CONSTRUCTION INTERFERES WITH PEDESTRIAN MOVEMENTS, PARTICULARLY IN AREAS THAT TRANSITION BETWEEN EXISTING. TEMPORARY AND PERMANENT SIDEWALK, THE CONTRACTOR MUST TAKE THE APPROPRIATE MEASURES TO MAINTAIN PEDESTRIAN MOVEMENT. THIS MAY REQUIRE ADDITIONAL TEMPORARY SIDEWALK CONSTRUCTION, CONSTRUCTING PERMANENT SIDEWALKS IN STAGES, OR PEDESTRIAN DETOURS, PROPOSED PEDESTRIAN DETOURS MUST BE APPROVED BY THE PROJECT ENGINEER.
- 4. THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS TO DRIVEWAYS THROUGHOUT CONSTRUCTION WHERE NECESSARY UNLESS APPROVED OTHERWISE BY THE ENGINEER.
- 5. THE CONTRACTOR SHALL USE 12 FT.x 14 FT. BY 1 IN. THICK STEEL PLATES TO COVER AREAS OF UNFILLED EXCAVATION WITHIN THE ROADWAY. REFER TO SECTION 505 OF SHA'S 2008 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS FOR DETAILS.

# SCALE: 1"=40'

# MARYLAND DEPARTMENT OF TRANSPORTATION







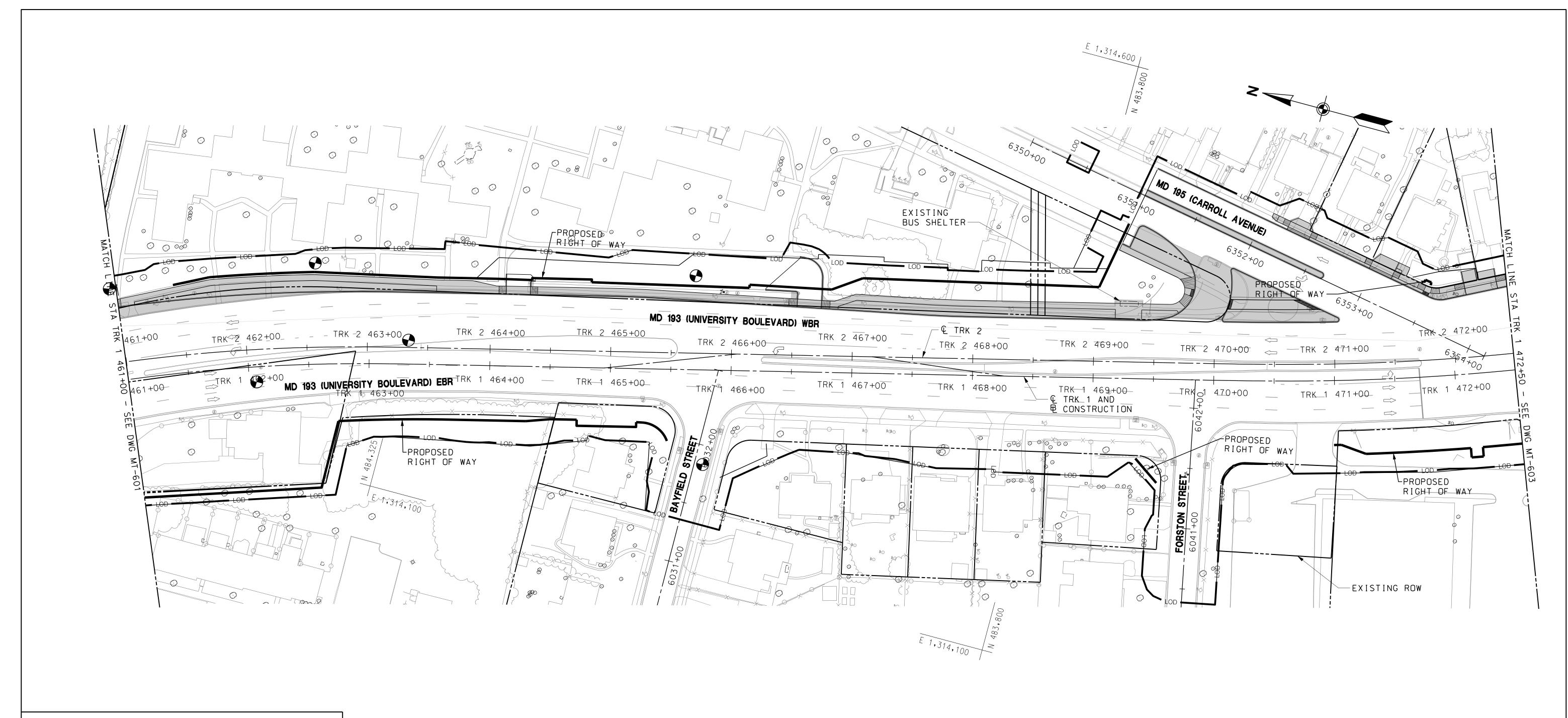


PROFESSIONAL CERTIFICATION hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

License No. Expiration Date

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	ADV ENCINEEDING	CONTRACT NO.
	ARY ENGINEERING	T-1042-0220
PURPLE	LINE LIGHT RAIL	DRAWING NO.
MAINTENANC	E OF TRAFFIC PLAN	MT-601
UNIVERSITY BO	OULEVARD - STAGE 1	SHEET NO.
DATE: <b>DECEMBER 2013</b>	SCALE: <b>AS SHOWN</b>	<u>115</u> of <u>383</u>







- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

PROFESSIONAL CERTIFICATION

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PRELIMINARY ENGINEERING	CONTRACT NO.
	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-602
UNIVERSITY BOULEVARD - STAGE 1	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	<u>116</u> of <u>383</u>

c:\pwworking\ 12/13/2013

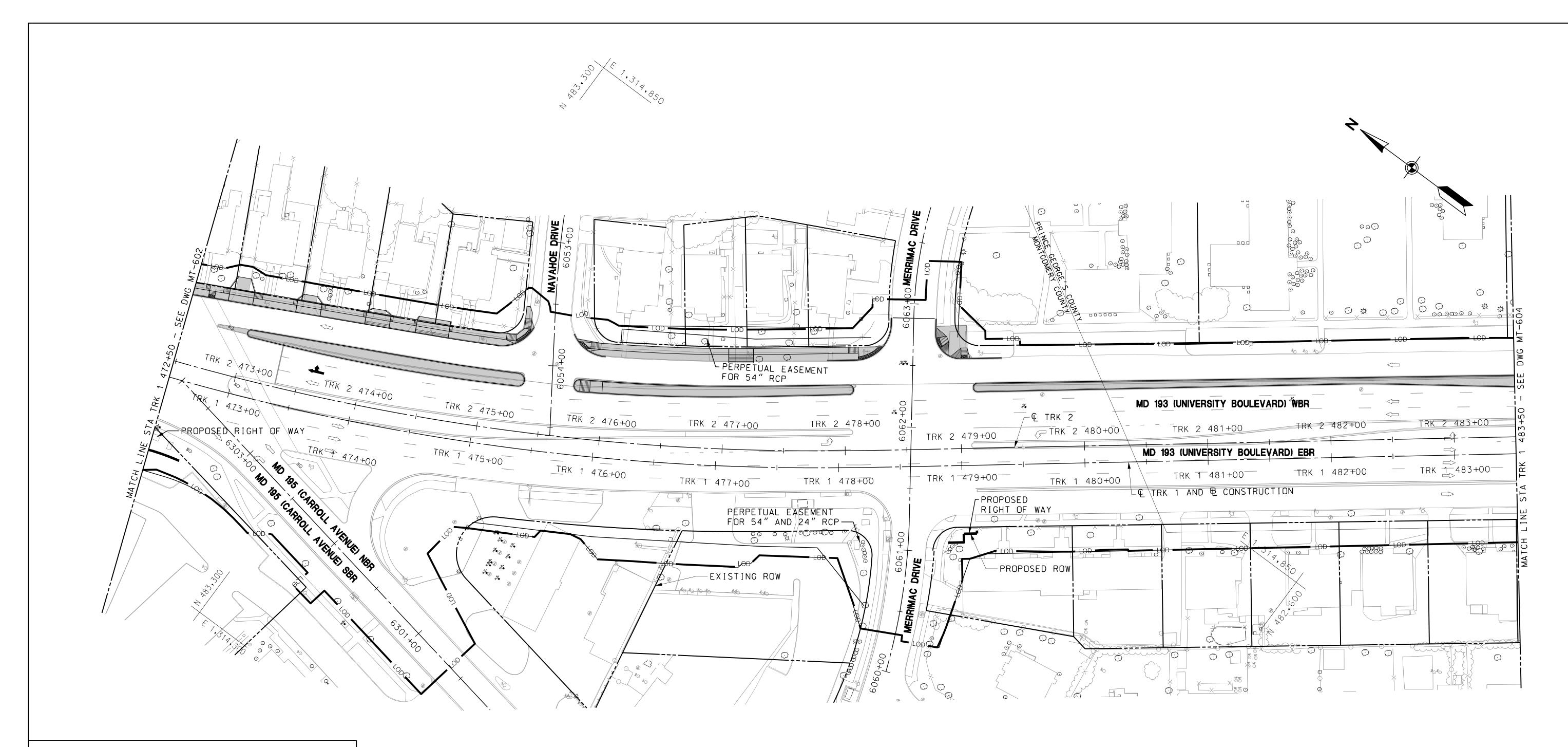
# MARYLAND DEPARTMENT OF TRANSPORTATION













- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW - TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR



# MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION





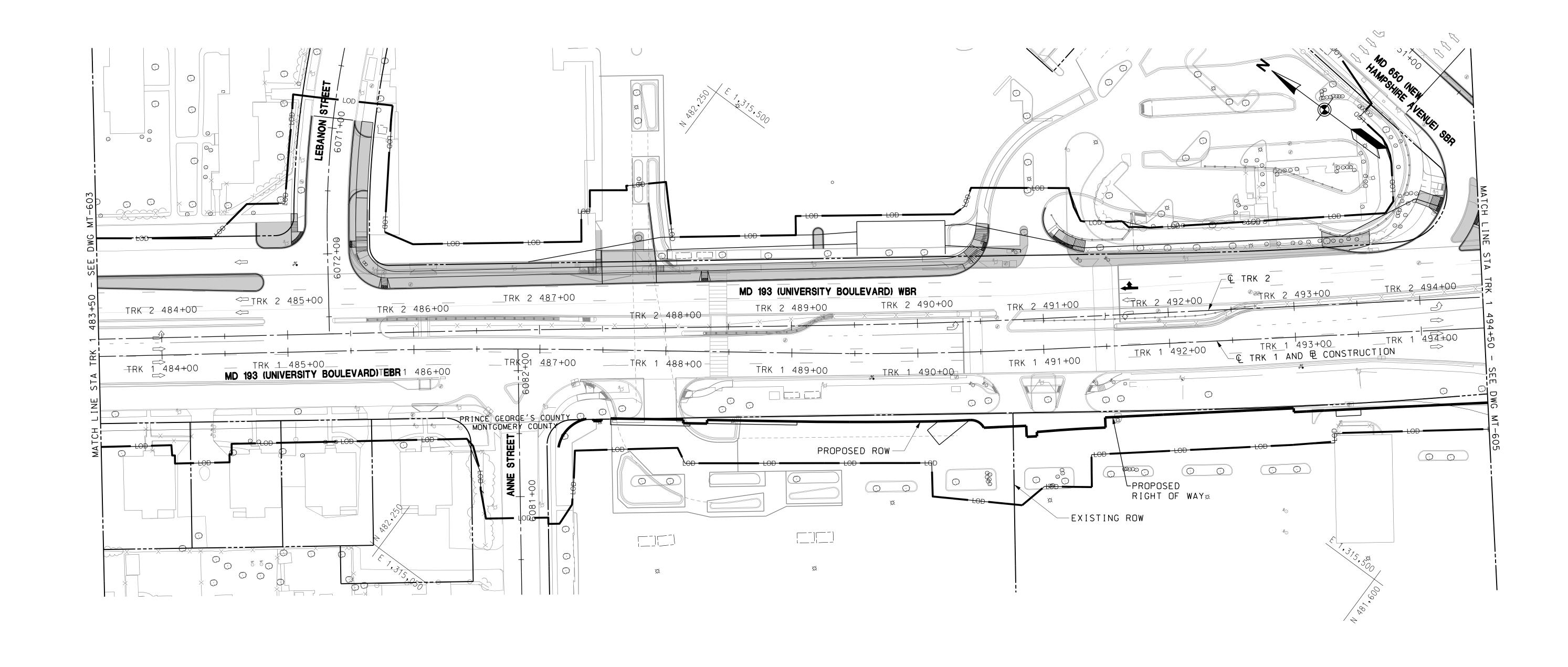
PROFESSIONAL CERTIFICATION I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-603
UNIVERSITY BOULEVARD - STAGE 1	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SHOWN	<u>117</u> of <u>383</u>

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- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

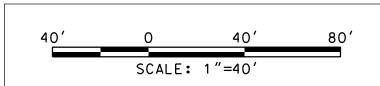
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR



### MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION Maryland





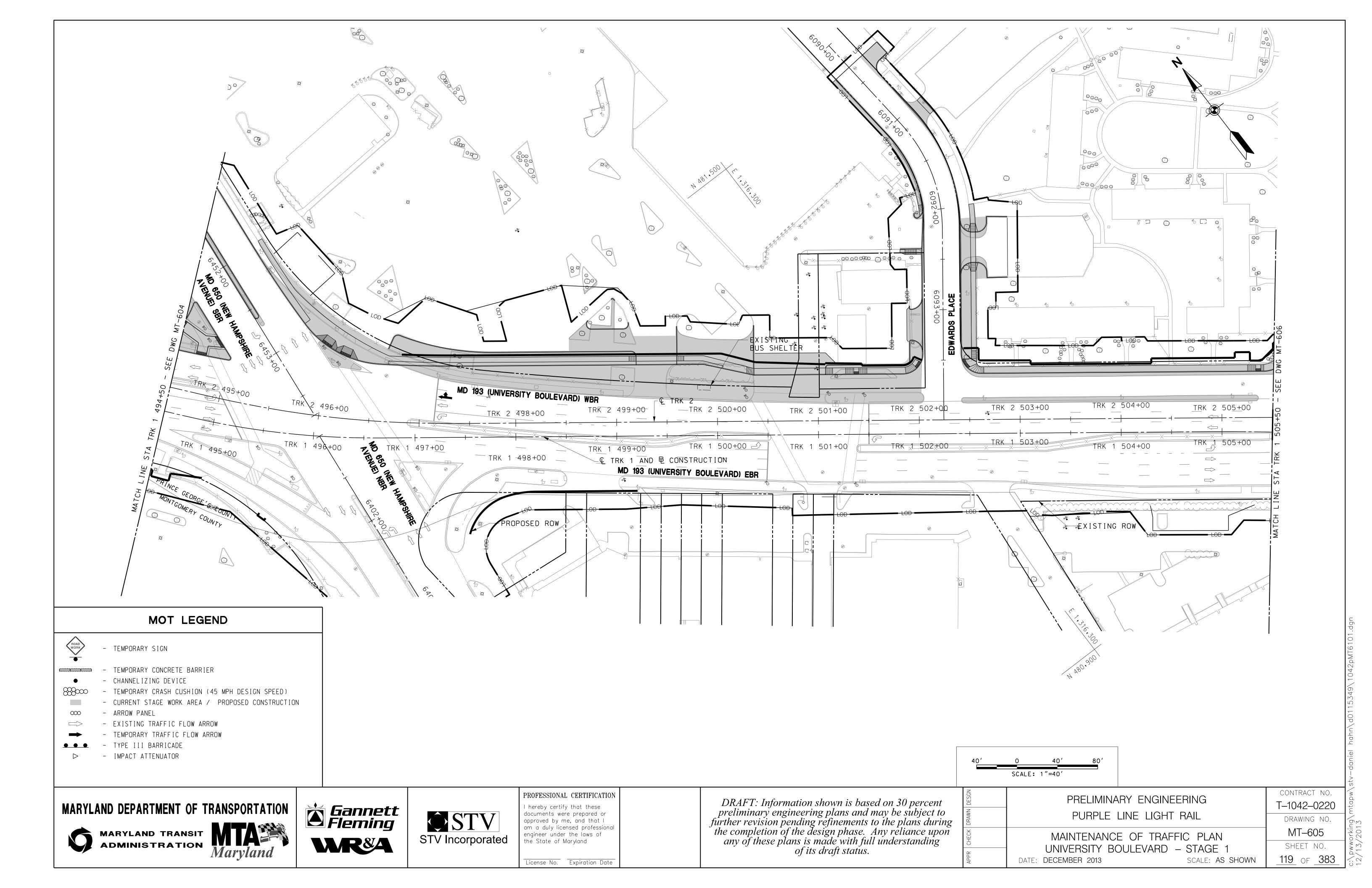
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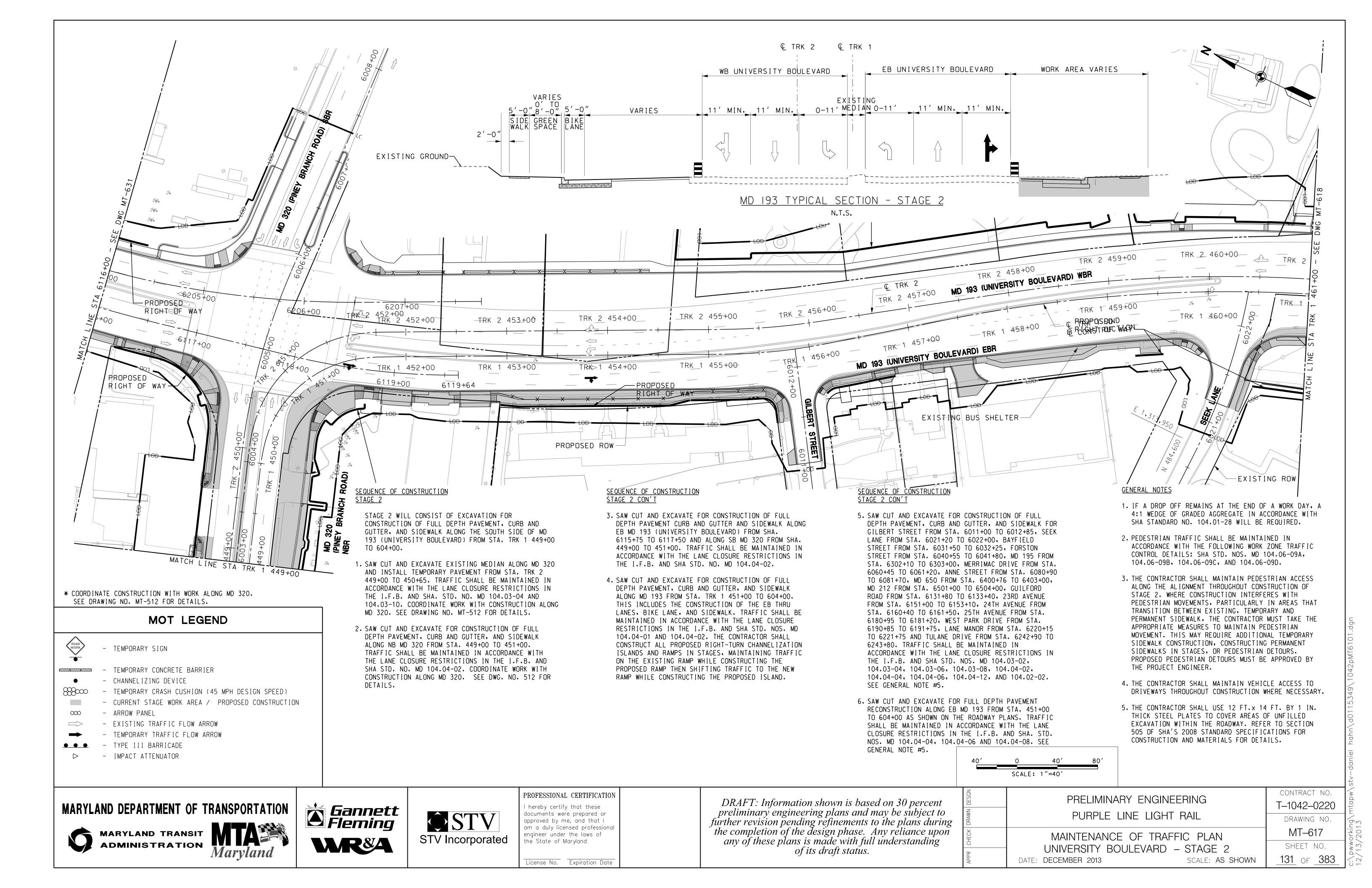
License No. Expiration Date

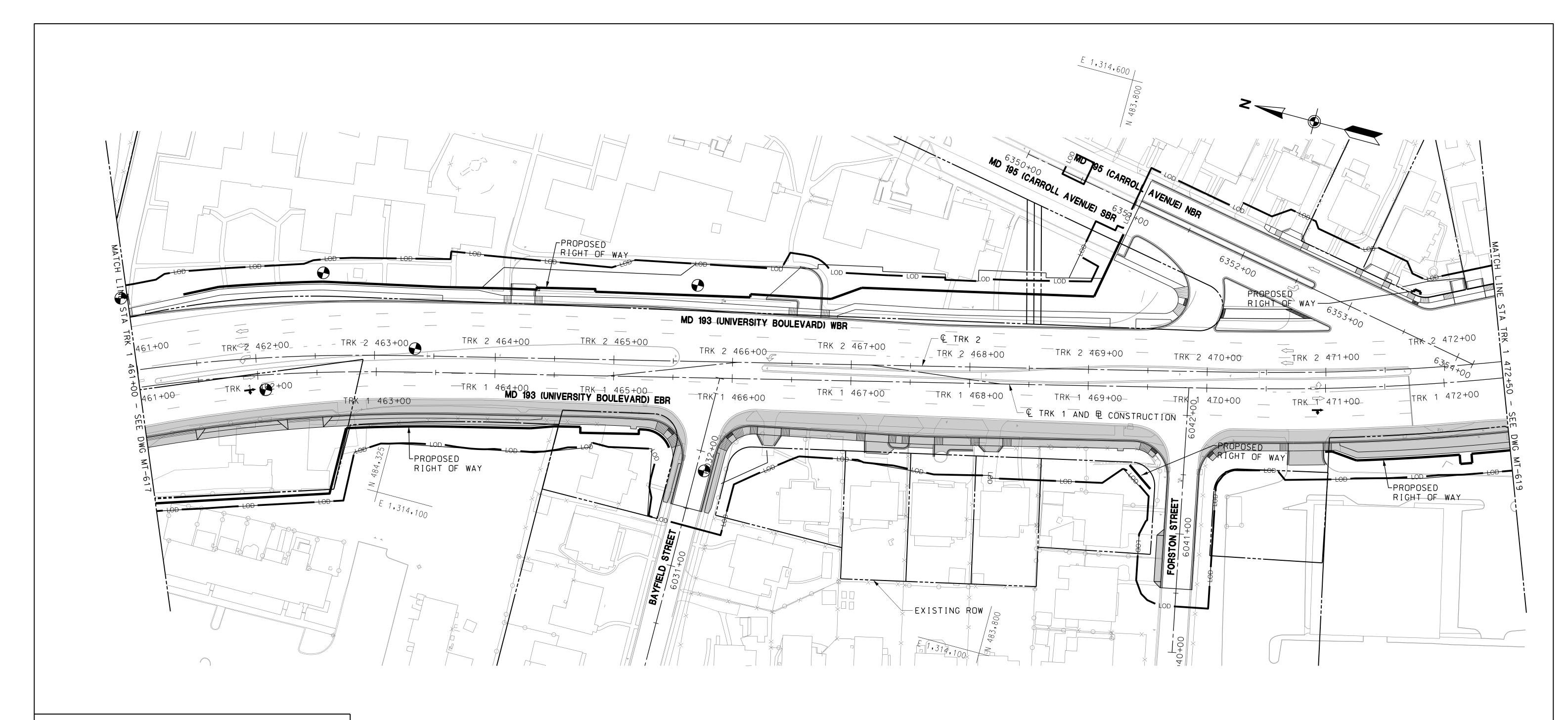
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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-604
UNIVERSITY BOULEVARD - STAGE 1	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	<u>118</u> of <u>383</u>

c:\pwworking\r 12/13/2013









- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED) - CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

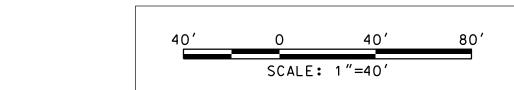
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR



# MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION





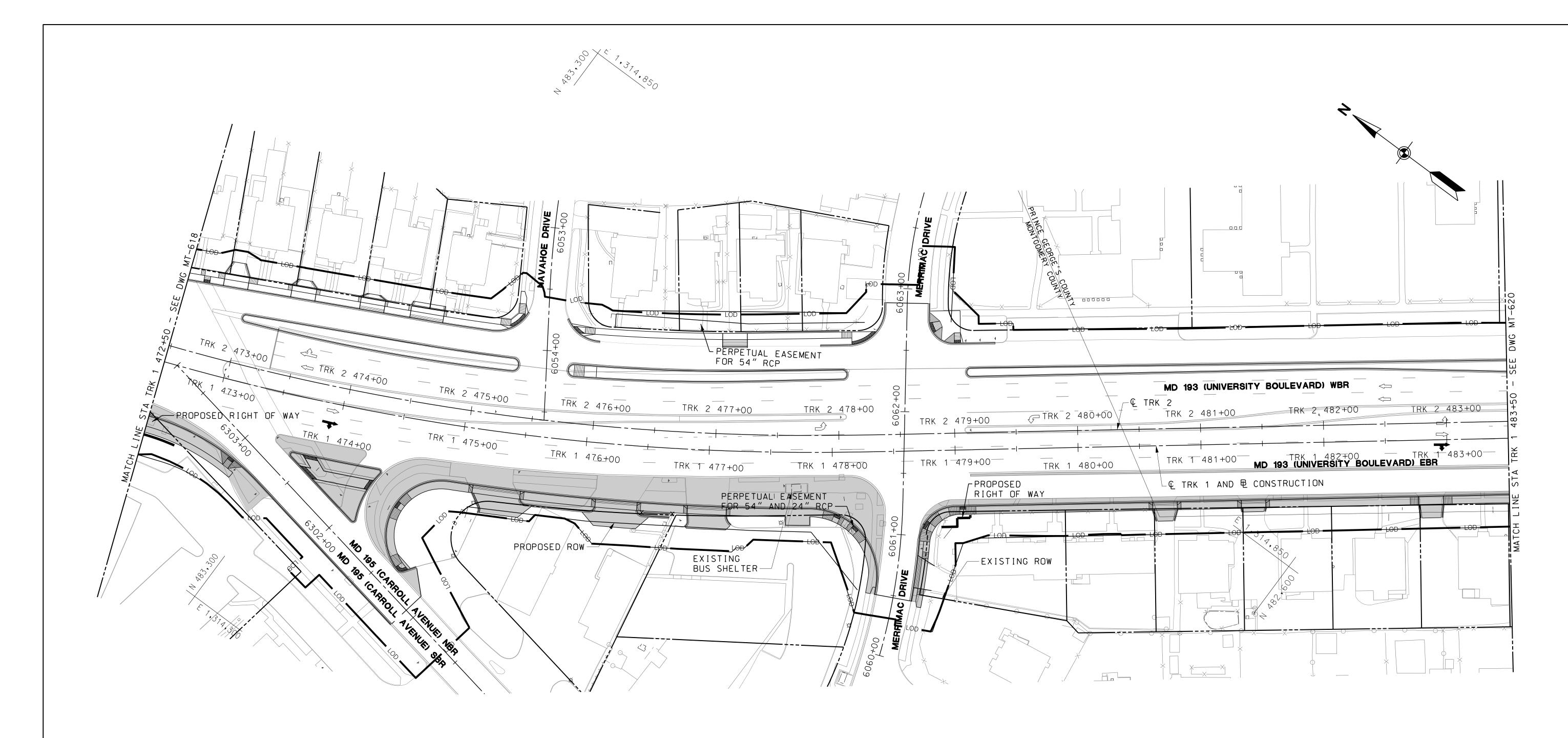
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PRELIMINARY ENGINEERING	CONTRACT NO.
	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-618
UNIVERSITY BOULEVARD - STAGE 2	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SHOWN	<u>132</u> of <u>383</u>

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- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL - EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

PROFESSIONAL CERTIFICATION

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PRELIMINARY ENGINEERING
PURPLE LINE LIGHT RAIL
MAINTENANCE OF TRAFFIC PLAN
UNIVERSITY BOULEVARD - STAGE 2

SCALE: 1"=40'

DATE: **DECEMBER 2013** 

CONTRACT NO. T-1042-0220 DRAWING NO. MT-619 SHEET NO. <u>133</u> of <u>383</u>

SCALE: AS SHOWN

# MARYLAND DEPARTMENT OF TRANSPORTATION

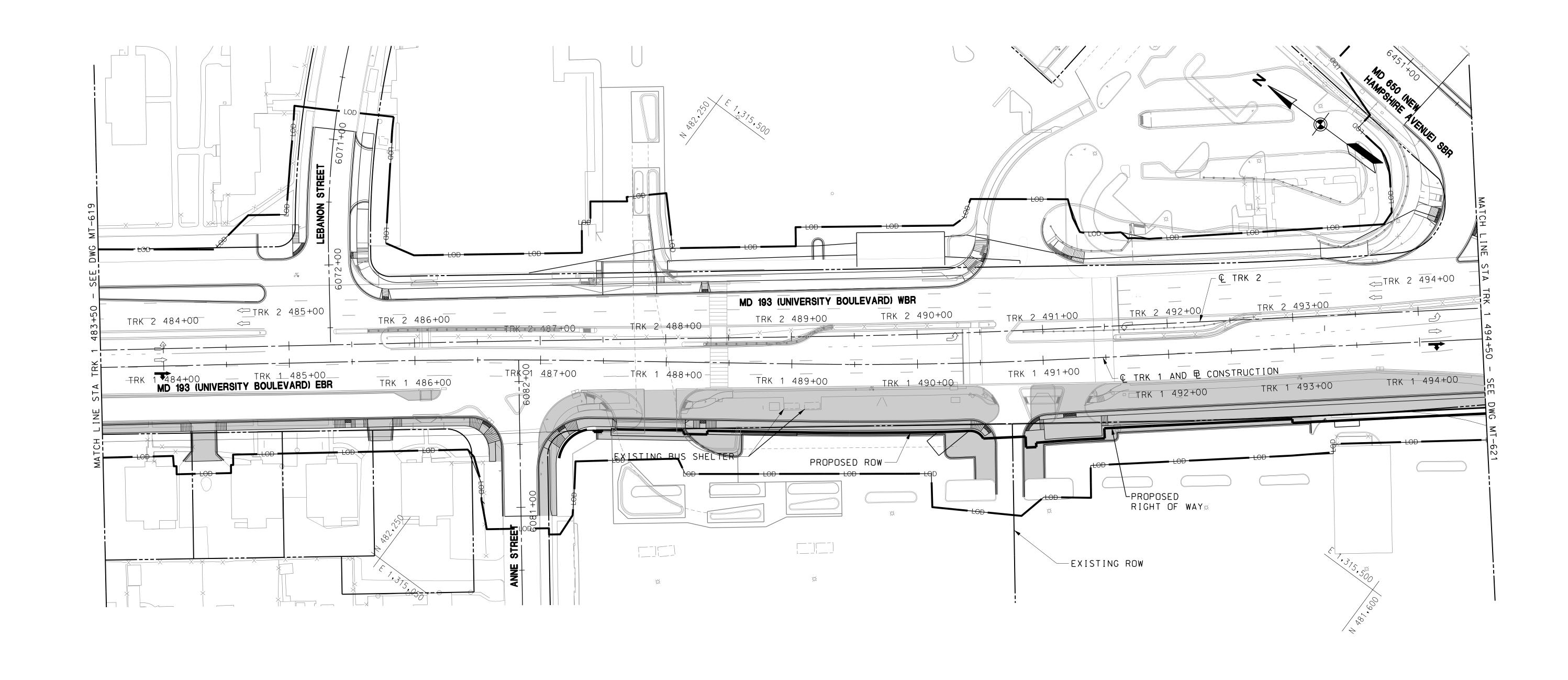


MARYLAND TRANSIT ADMINISTRATION











- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR

SCALE: 1"=40'

## MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION Maryland





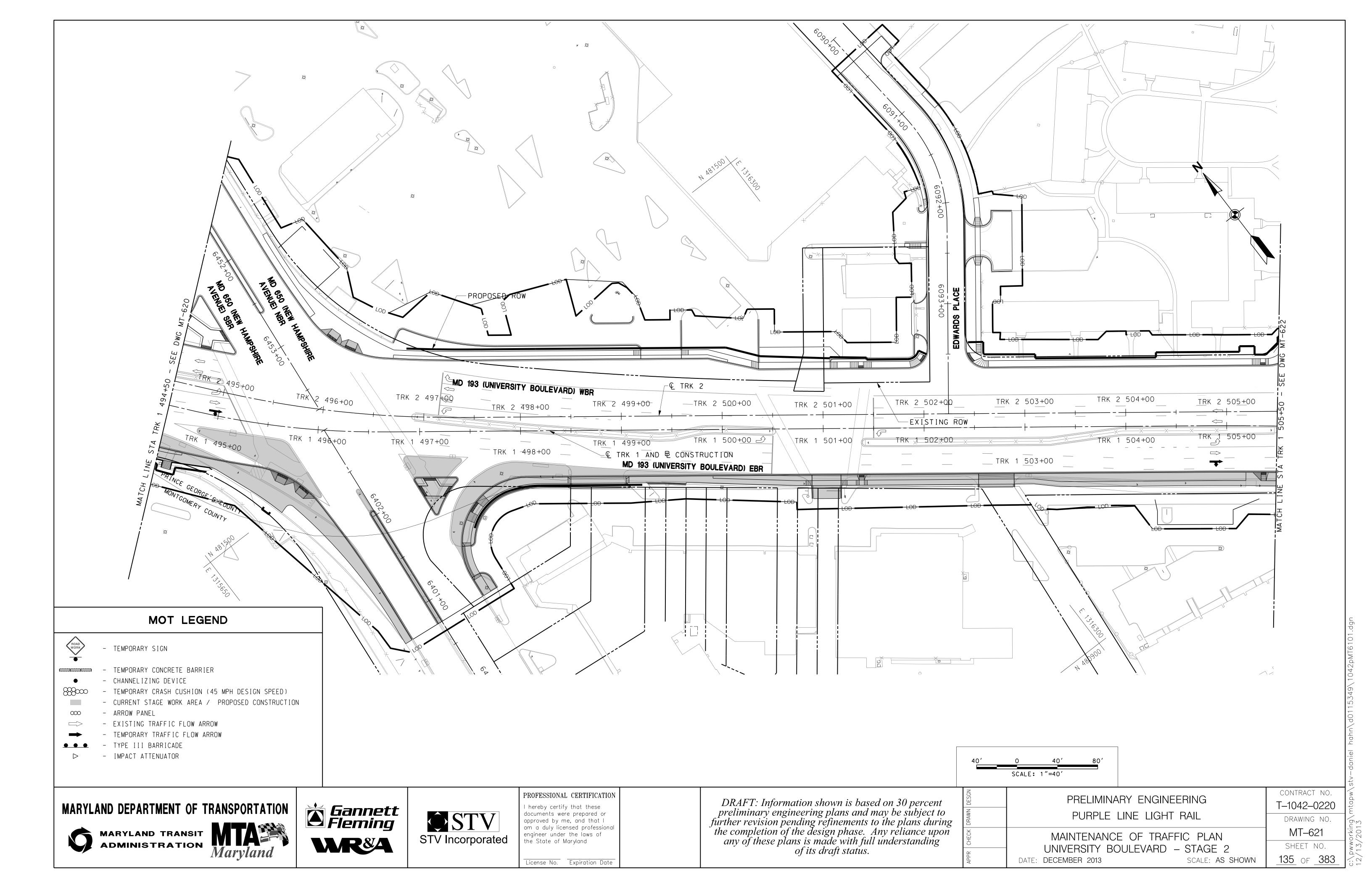
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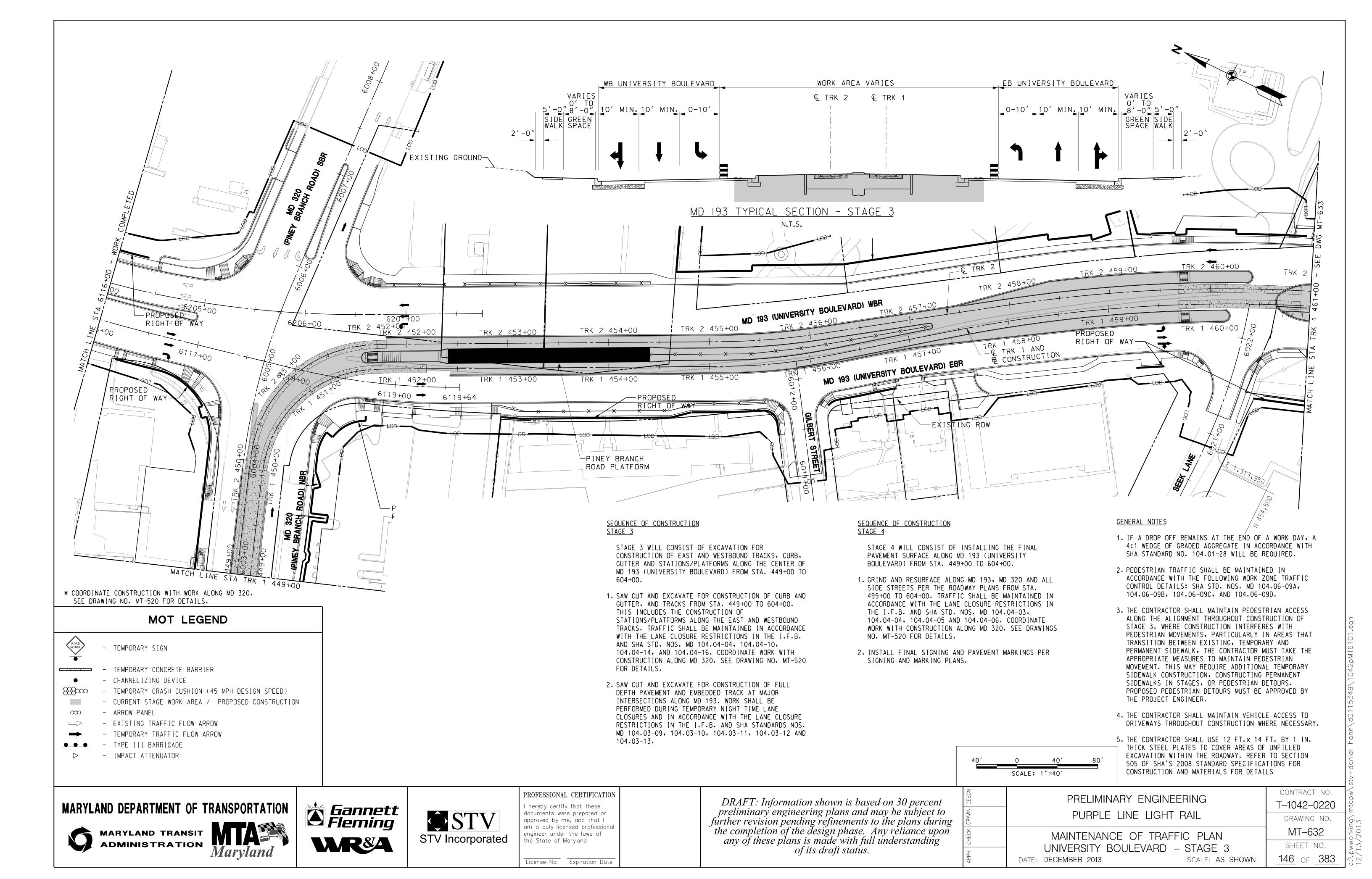
License No. Expiration Date

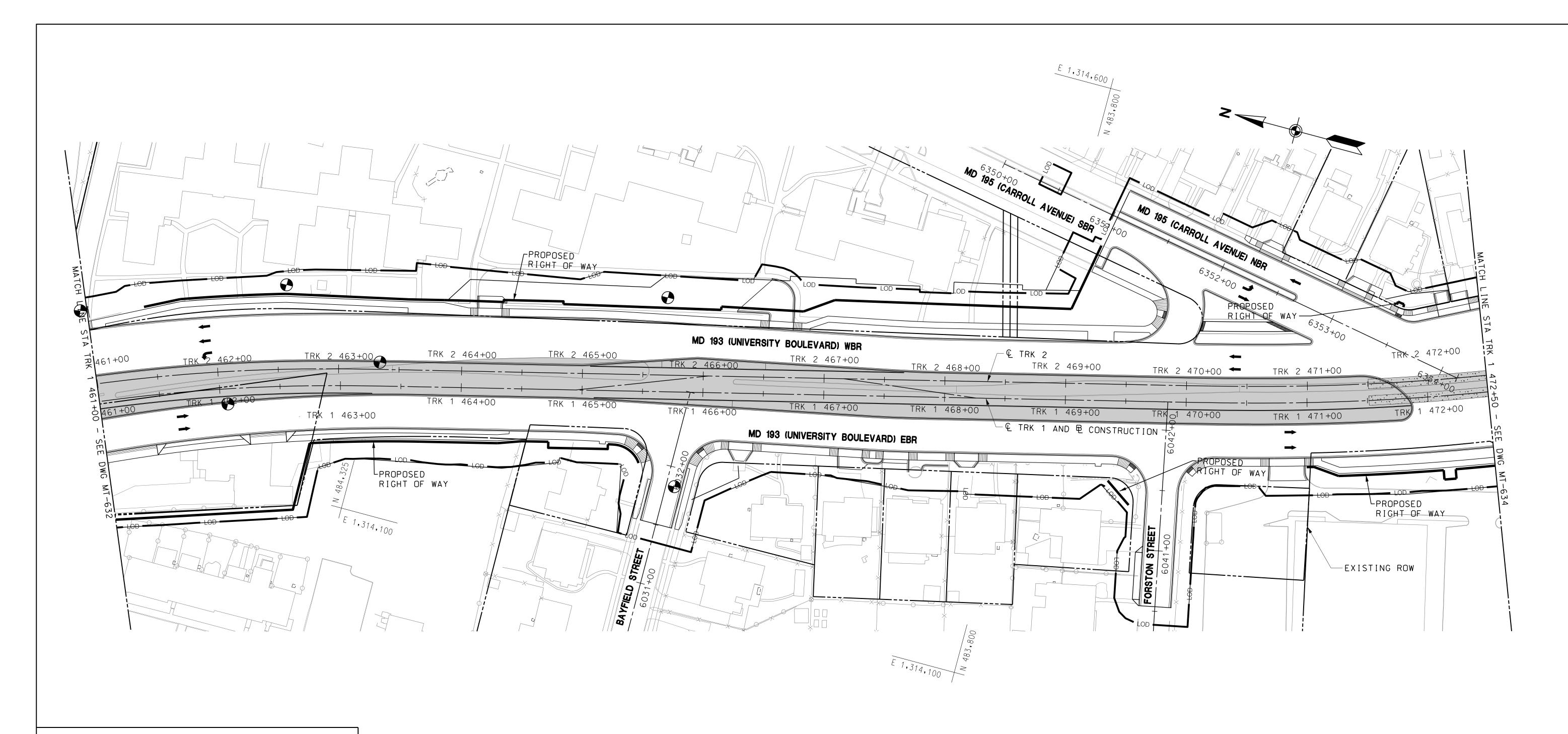
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PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-620
UNIVERSITY BOULEVARD - STAGE 2	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	<u>134</u> of <u>383</u>

CONTRACT NO. 2–0220 ING NO. -620 T NO.









- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION - ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR



MARYLAND TRANSIT ADMINISTRATION Maryland





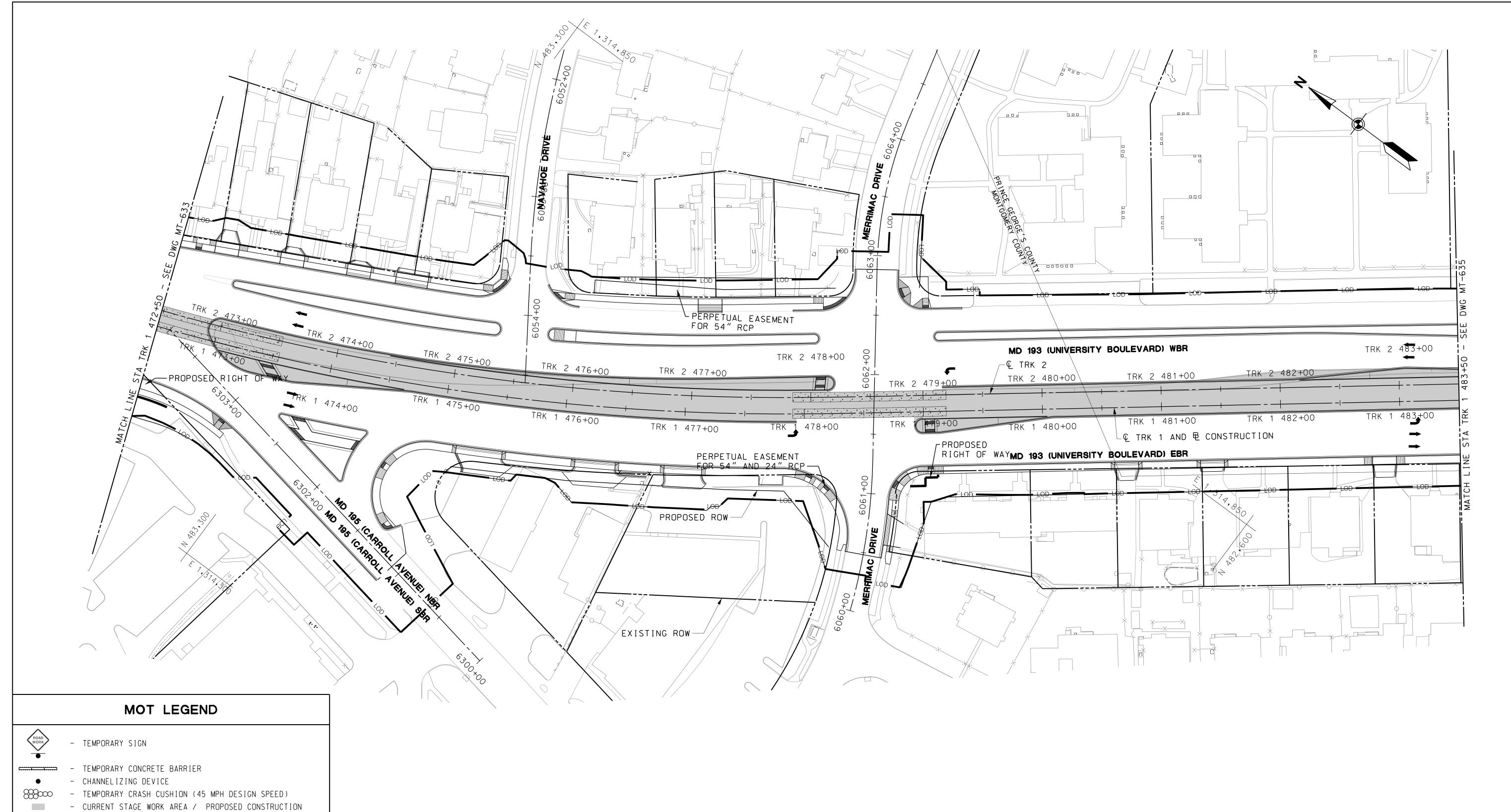
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PRELIMINARY ENGINEERING	contract no. T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-633
UNIVERSITY BOULEVARD - STAGE 3	SHEET NO.
DATE: <b>DECEMBER 2013</b> SCALE: <b>AS SHOWN</b>	<u>147</u> of <u>383</u>

MARYLAND DEPARTMENT OF TRANSPORTATION



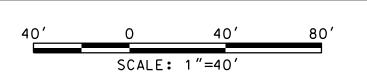
- ARROW PANEL

- EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR



# MARYLAND DEPARTMENT OF TRANSPORTATION



MARYLAND TRANSIT ADMINISTRATION



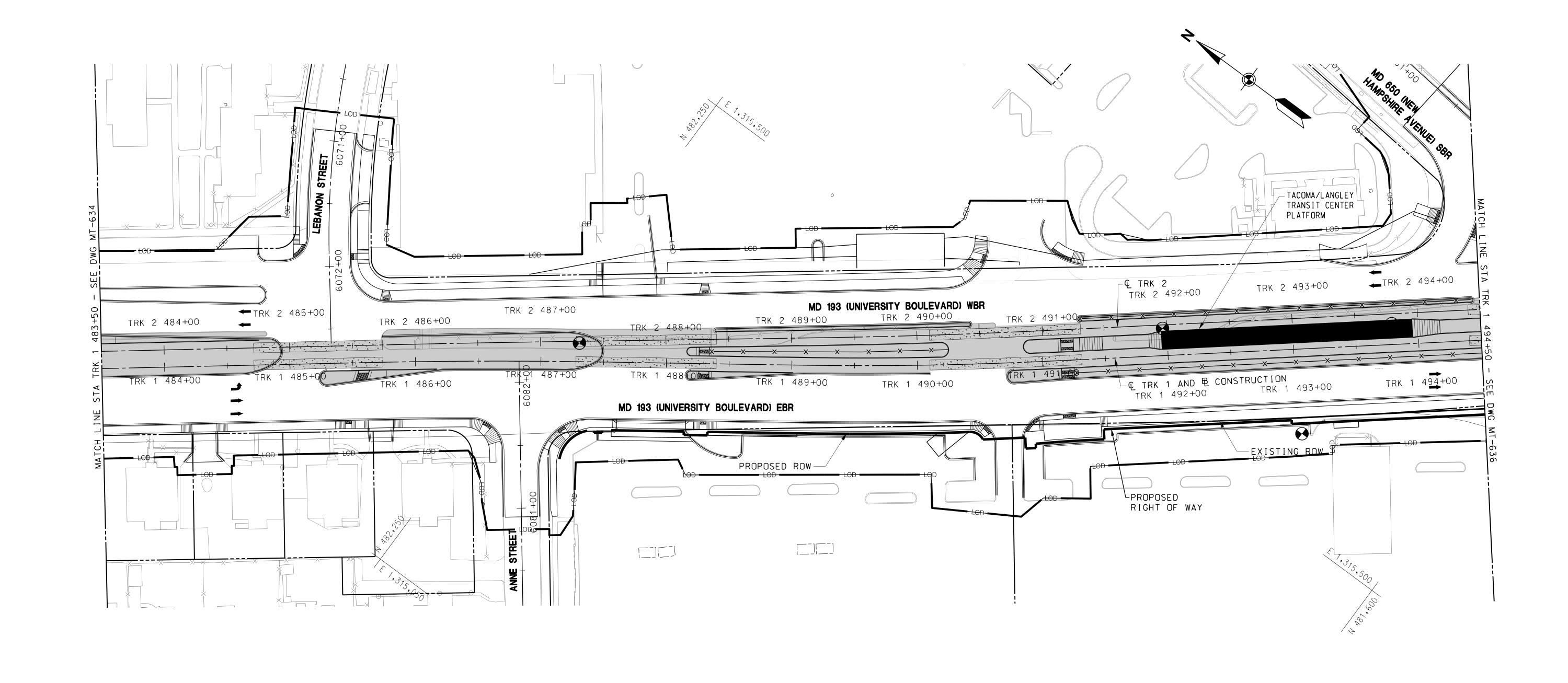


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	CONTRACT NO.
PRELIMINARY ENGINEERING	T-1042-0220
PURPLE LINE LIGHT RAIL	DRAWING NO.
MAINTENANCE OF TRAFFIC PLAN	MT-634
UNIVERSITY BOULEVARD - STAGE 3	SHEET NO.
DATE: DECEMBER 2013 SCALE: AS SHOWN	<u>148</u> of <u>383</u>





- TEMPORARY SIGN

- TEMPORARY CONCRETE BARRIER

- CHANNELIZING DEVICE

- TEMPORARY CRASH CUSHION (45 MPH DESIGN SPEED)

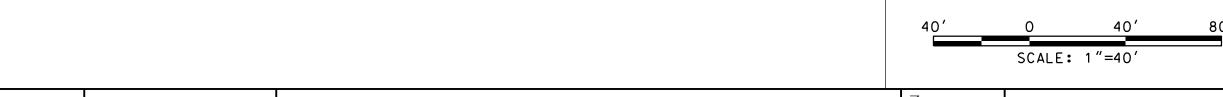
- CURRENT STAGE WORK AREA / PROPOSED CONSTRUCTION

- ARROW PANEL - EXISTING TRAFFIC FLOW ARROW

- TEMPORARY TRAFFIC FLOW ARROW

- TYPE III BARRICADE

- IMPACT ATTENUATOR



# MARYLAND DEPARTMENT OF TRANSPORTATION







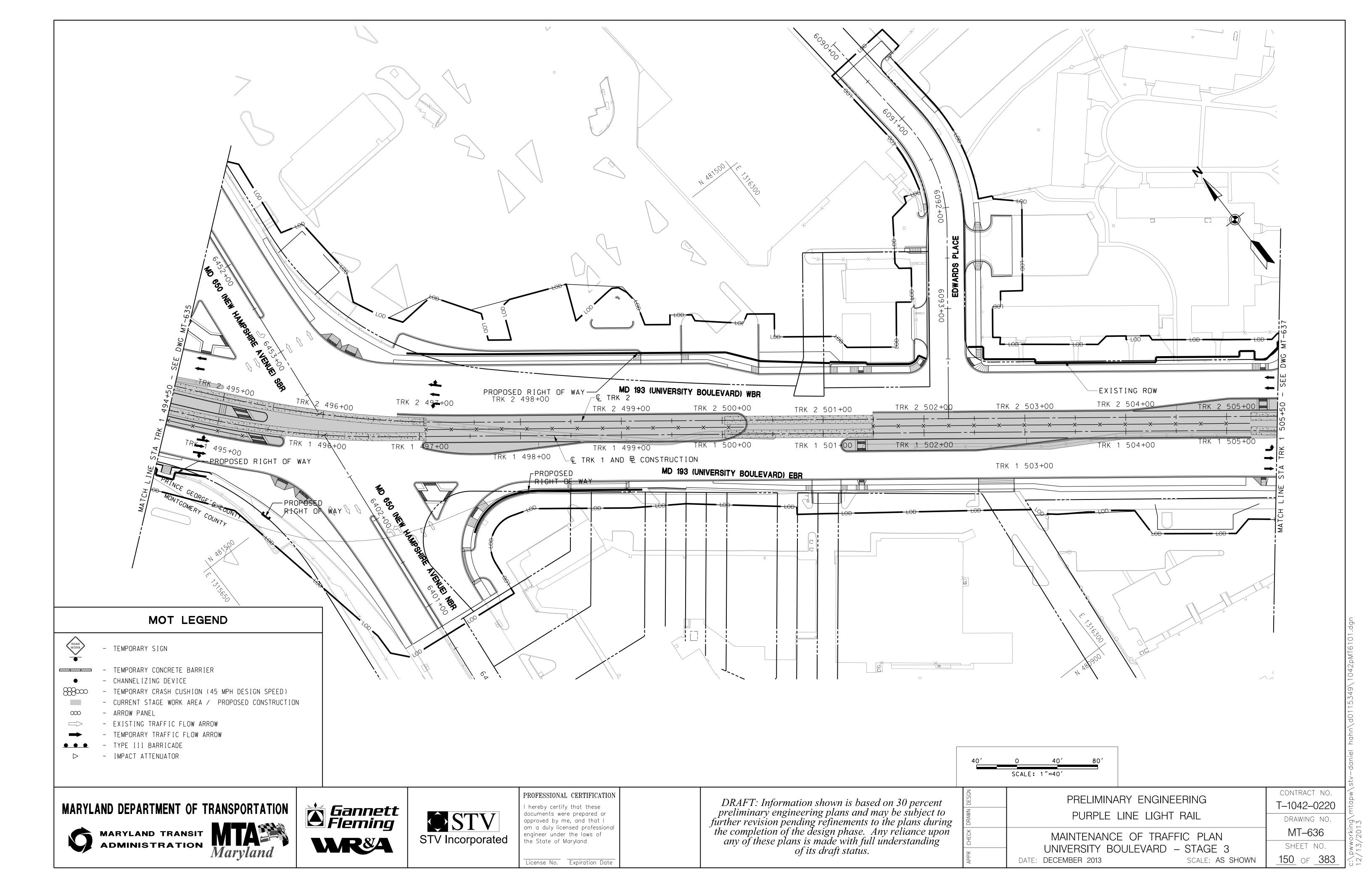
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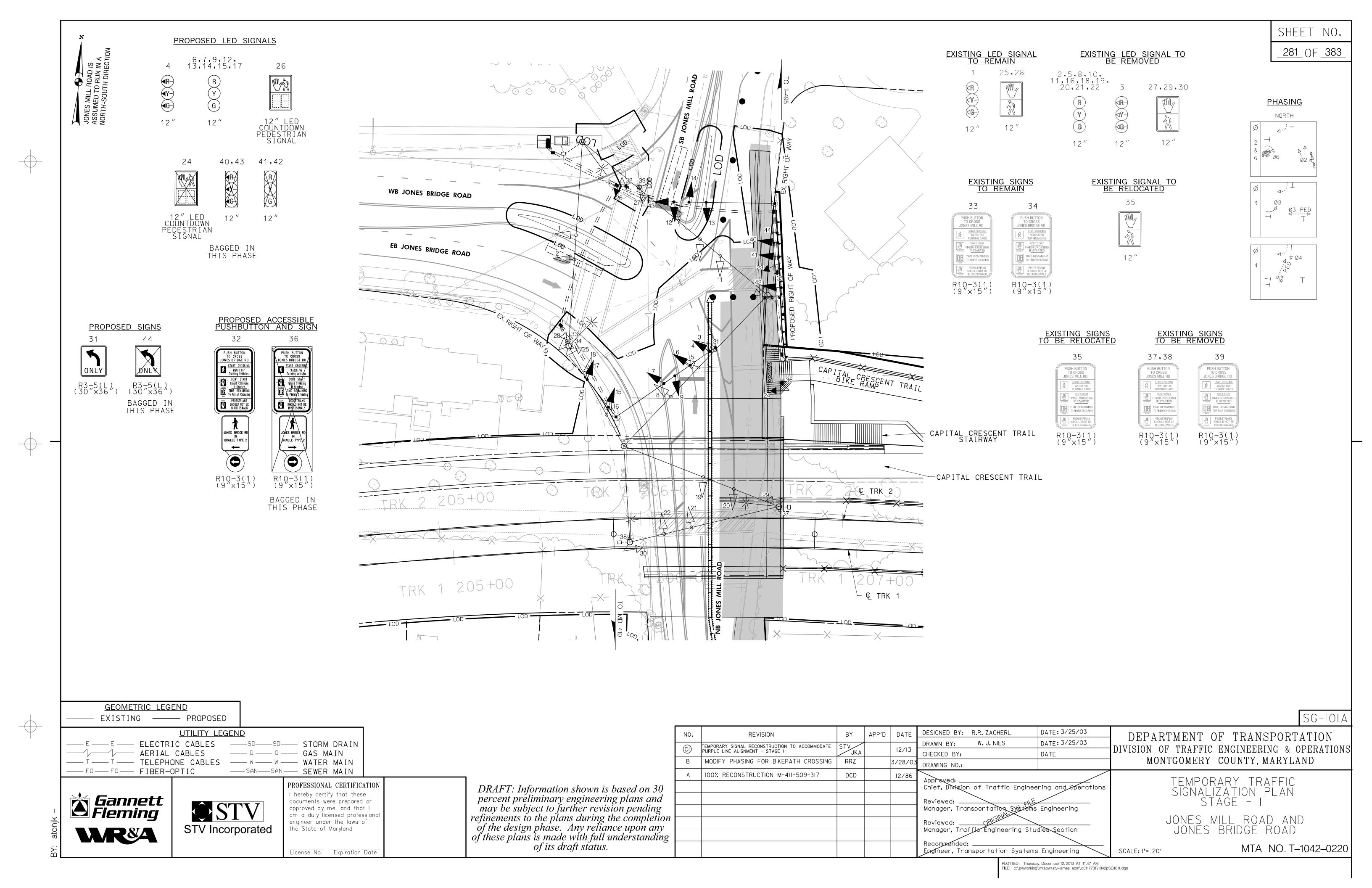
License No. Expiration Date

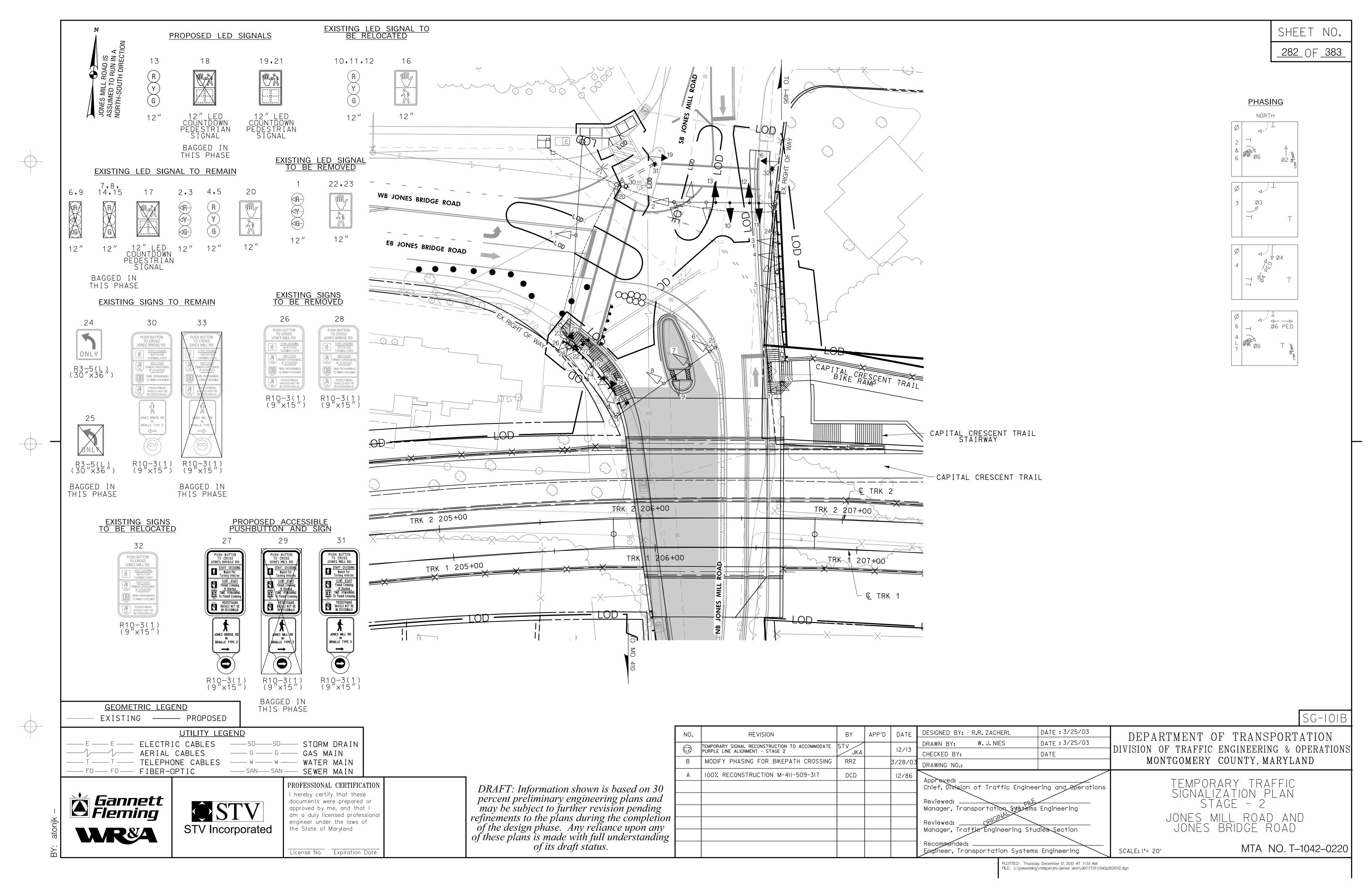
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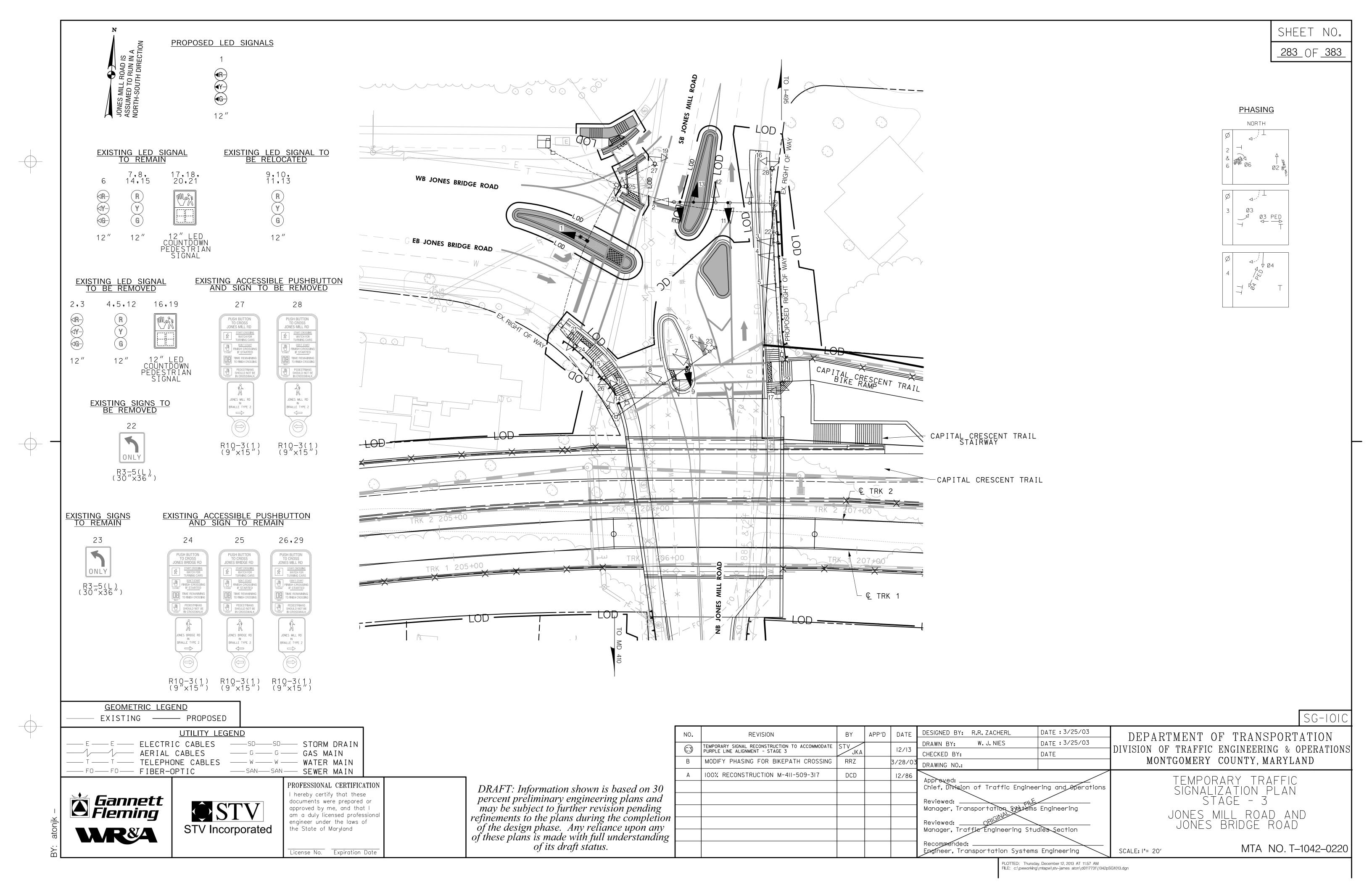
PRELIMINARY ENGINEERING	
PURPLE LINE LIGHT RAIL	
MAINTENANCE OF TRAFFIC PLAN UNIVERSITY BOULEVARD – STAGE 3  DATE: DECEMBER 2013 SCALE: AS SHOWN	

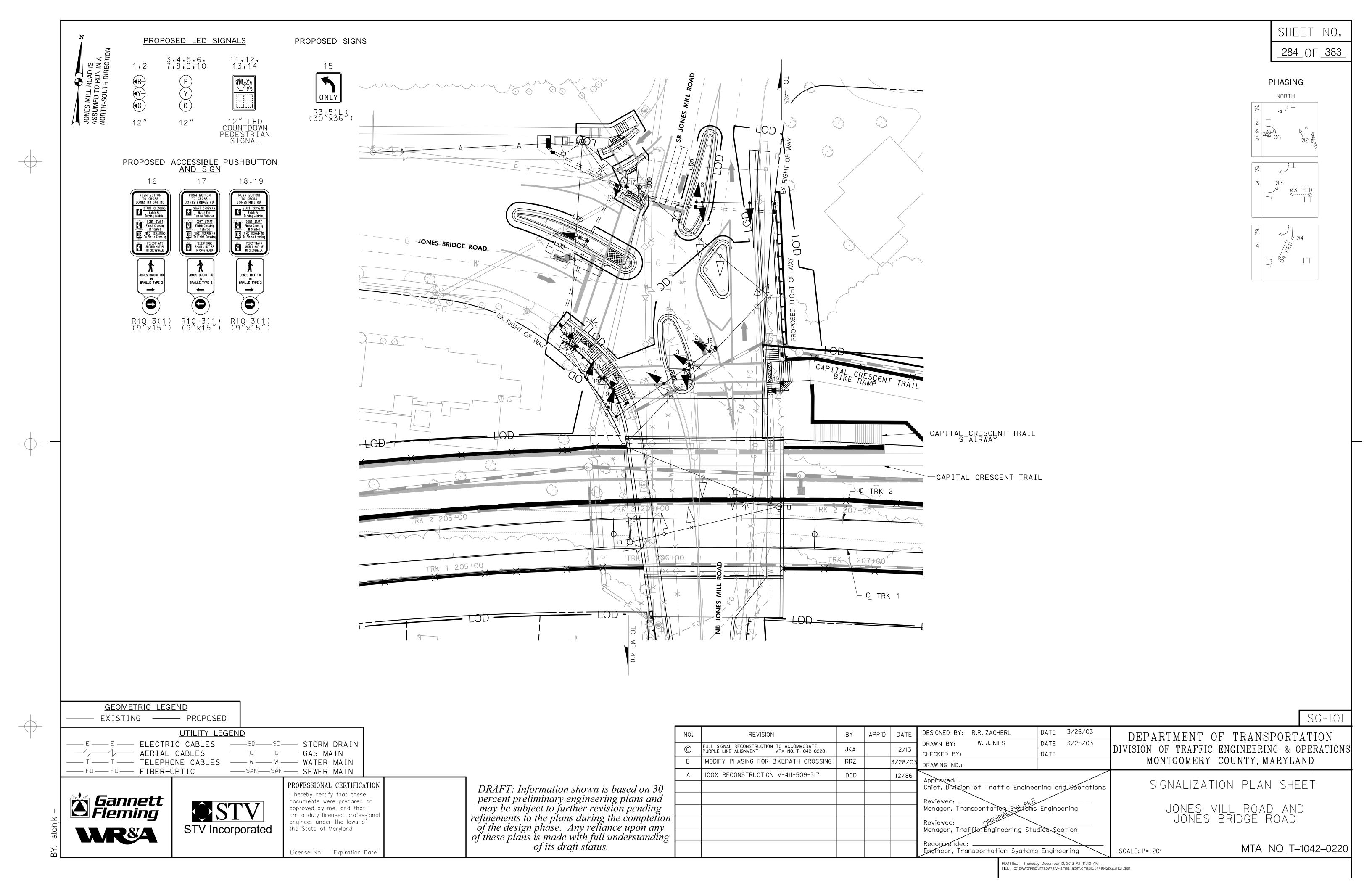
CONTRACT NO. T-1042-0220 DRAWING NO. MT-635 SHEET NO. 149 OF 383

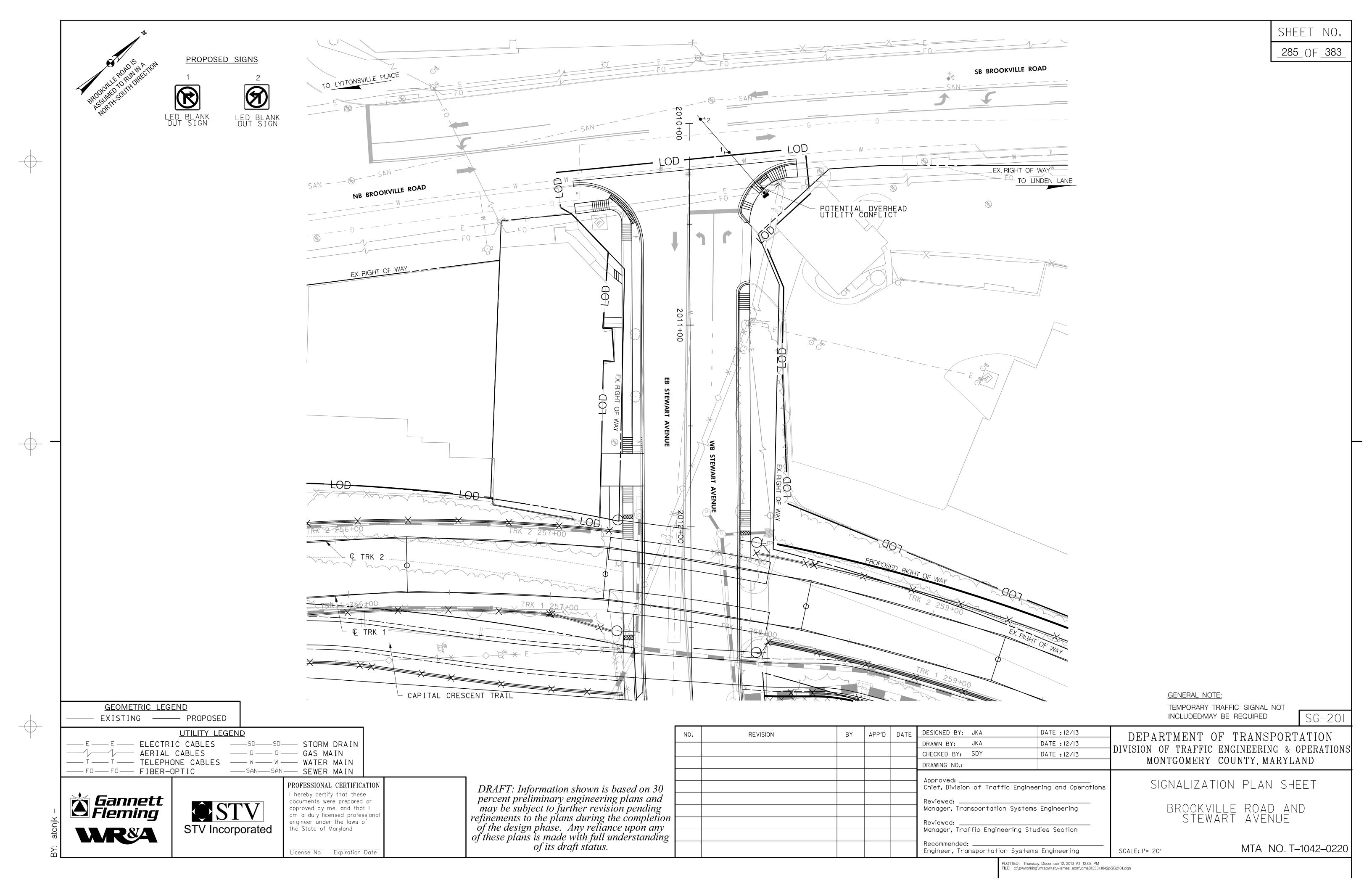


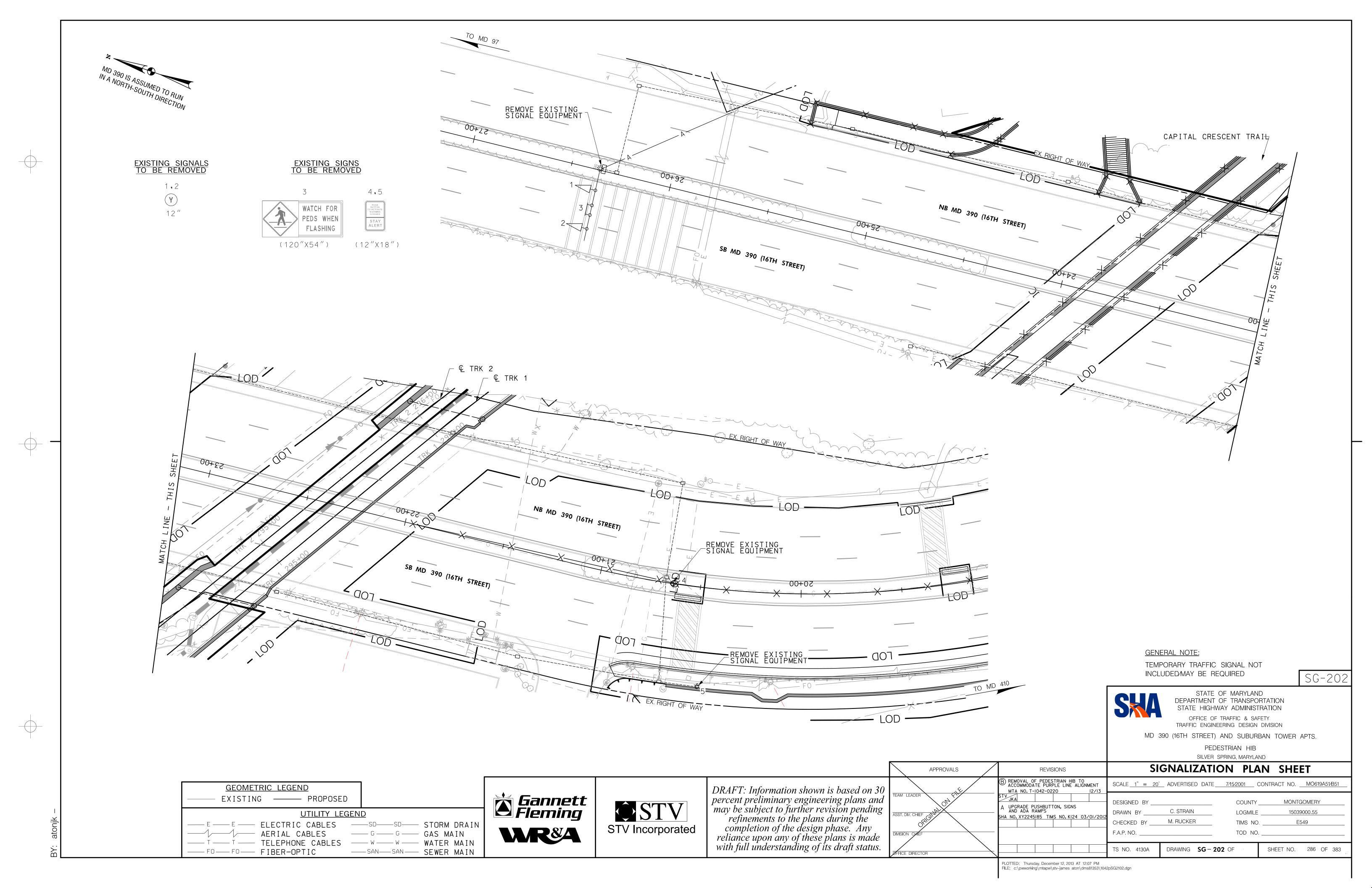


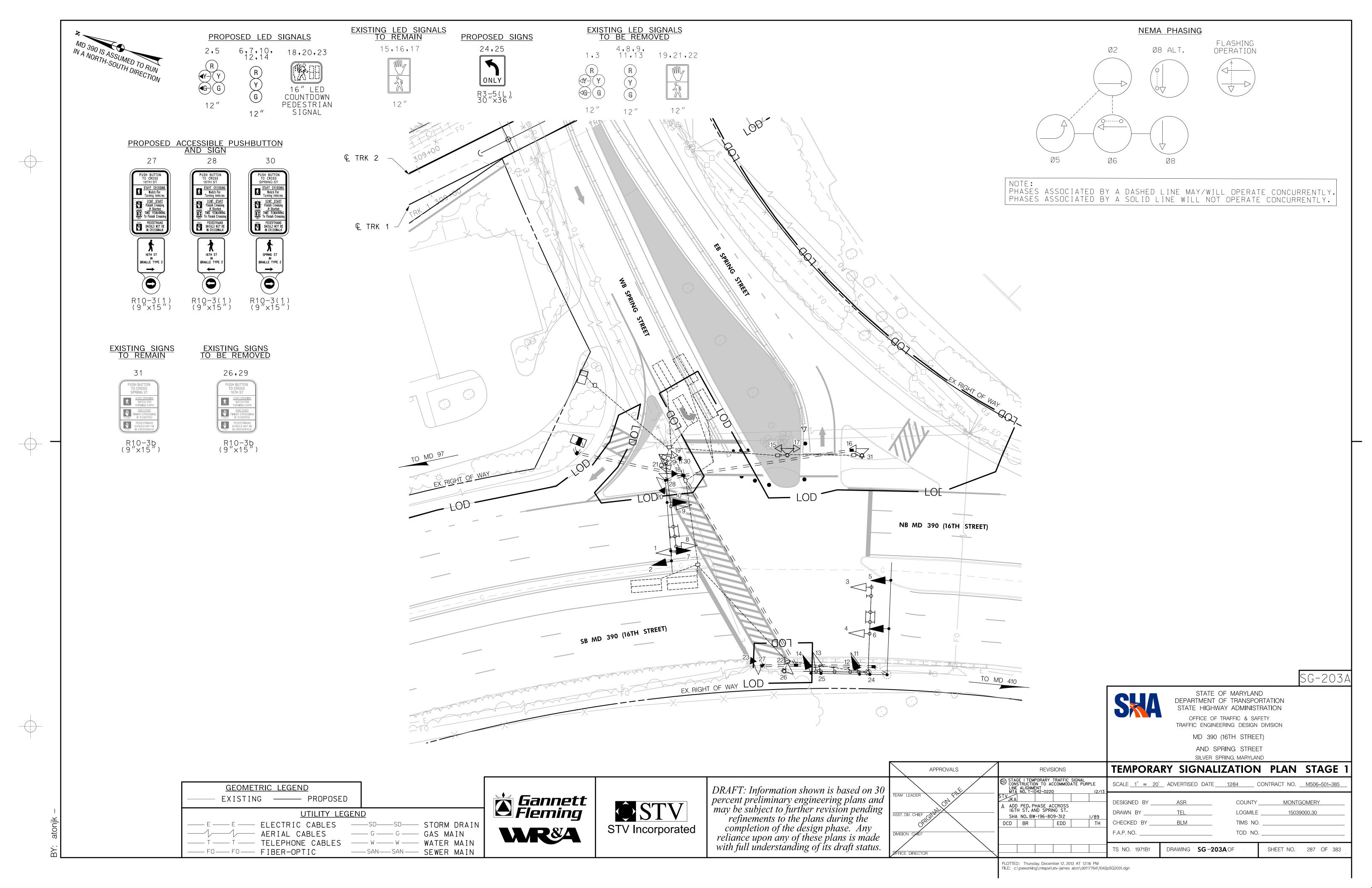


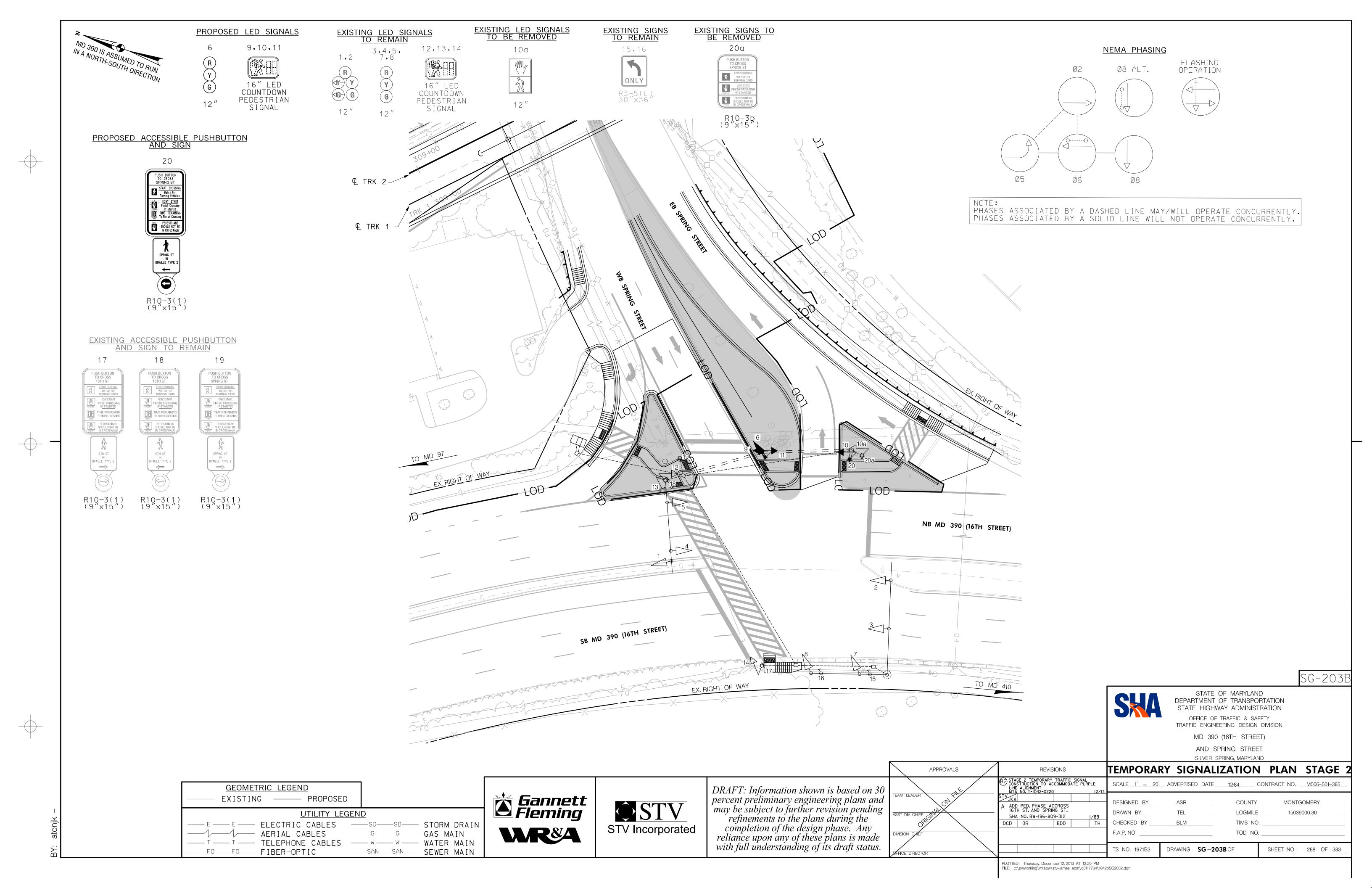


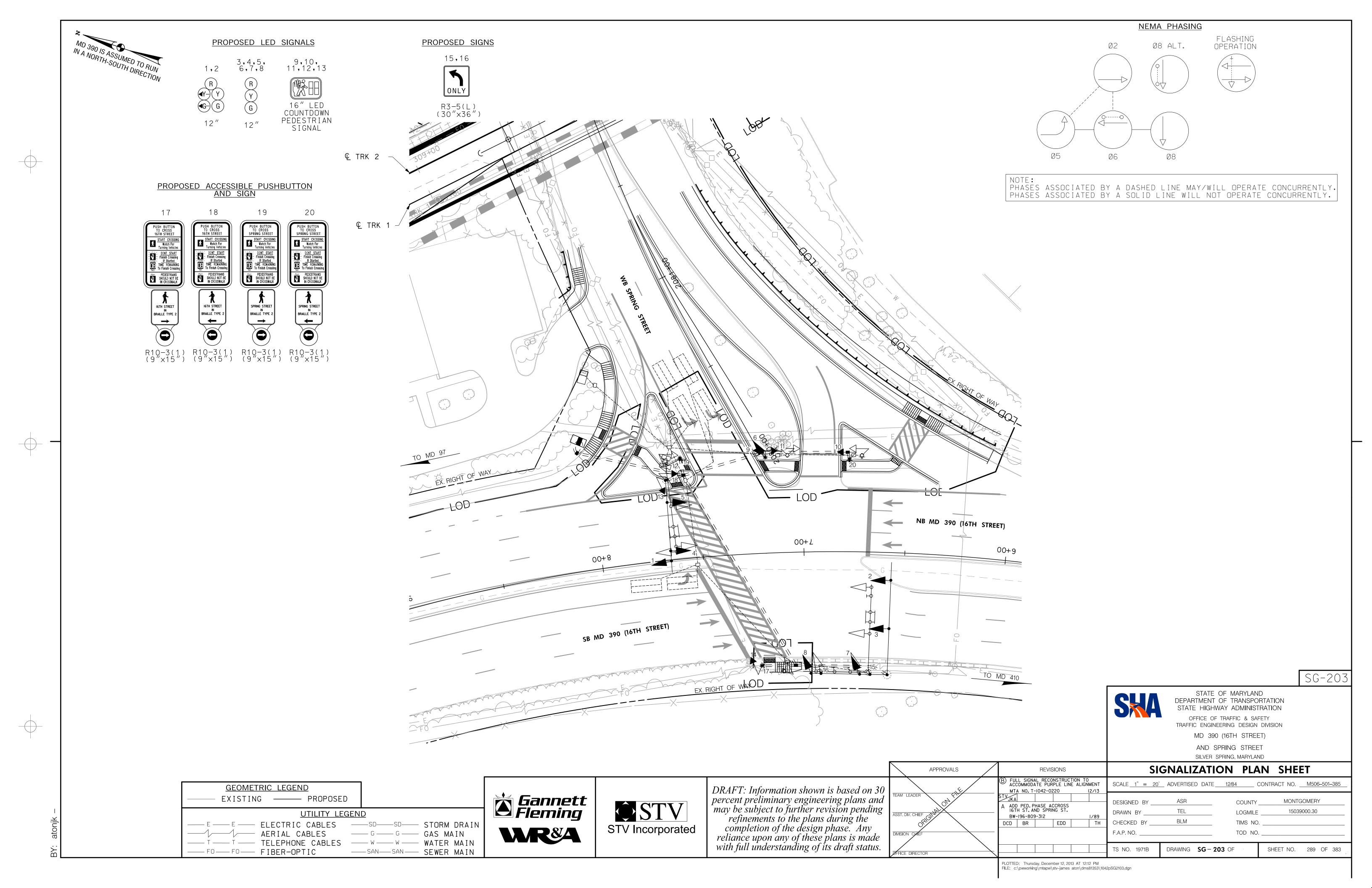


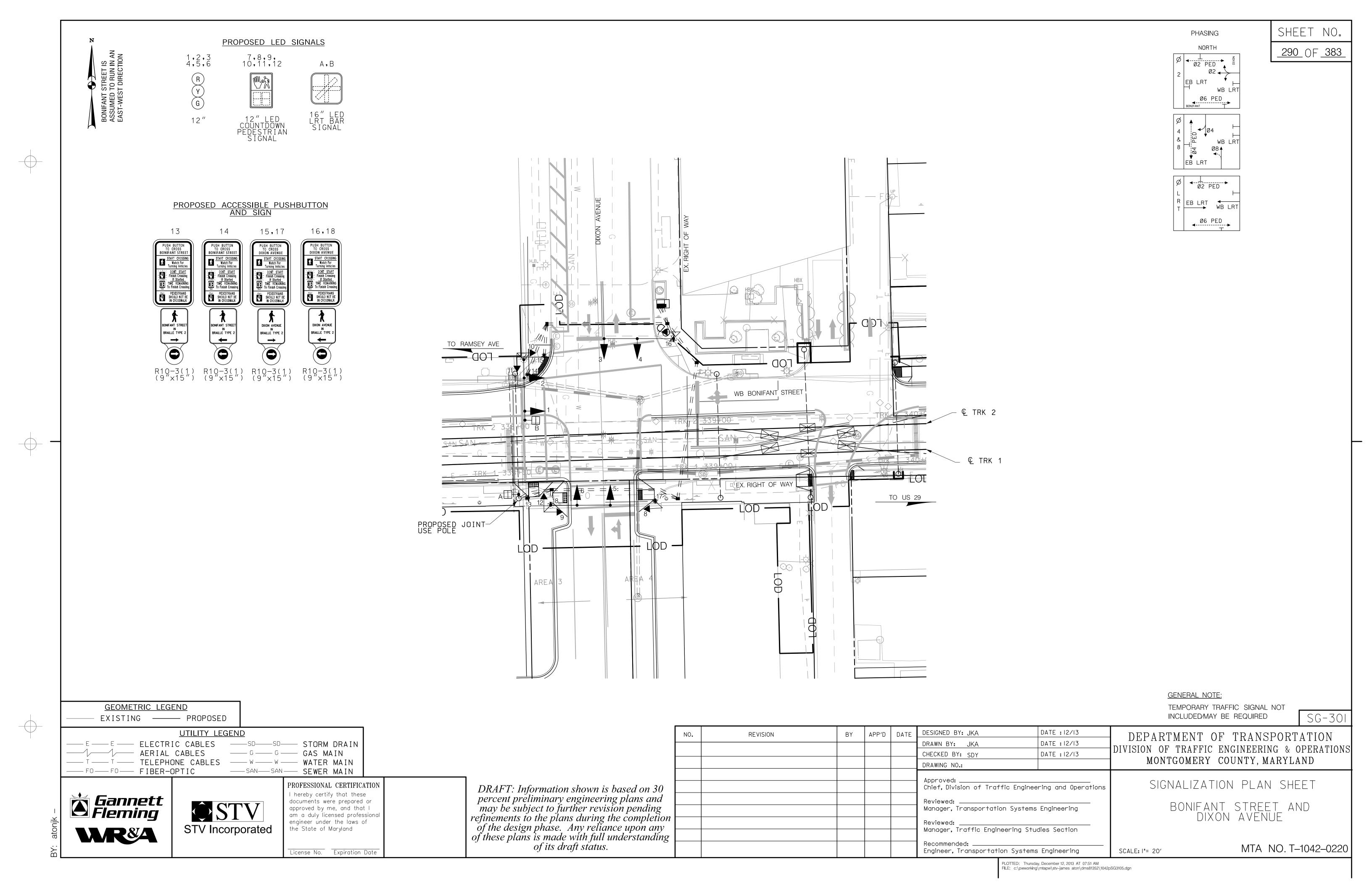


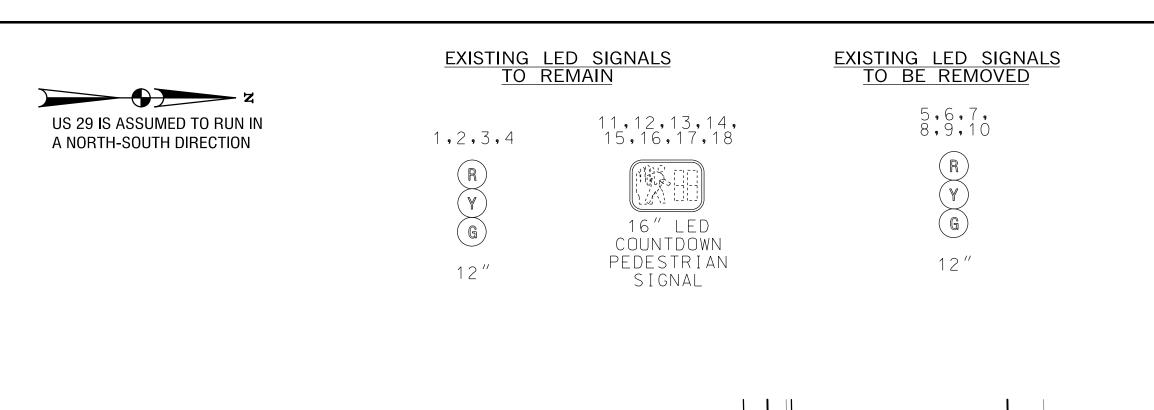


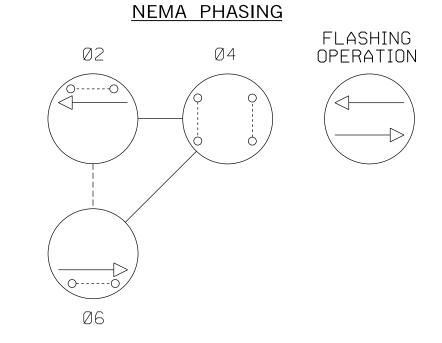






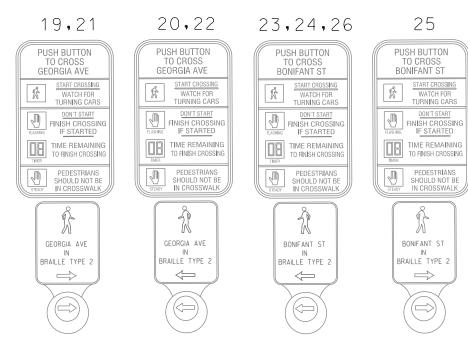




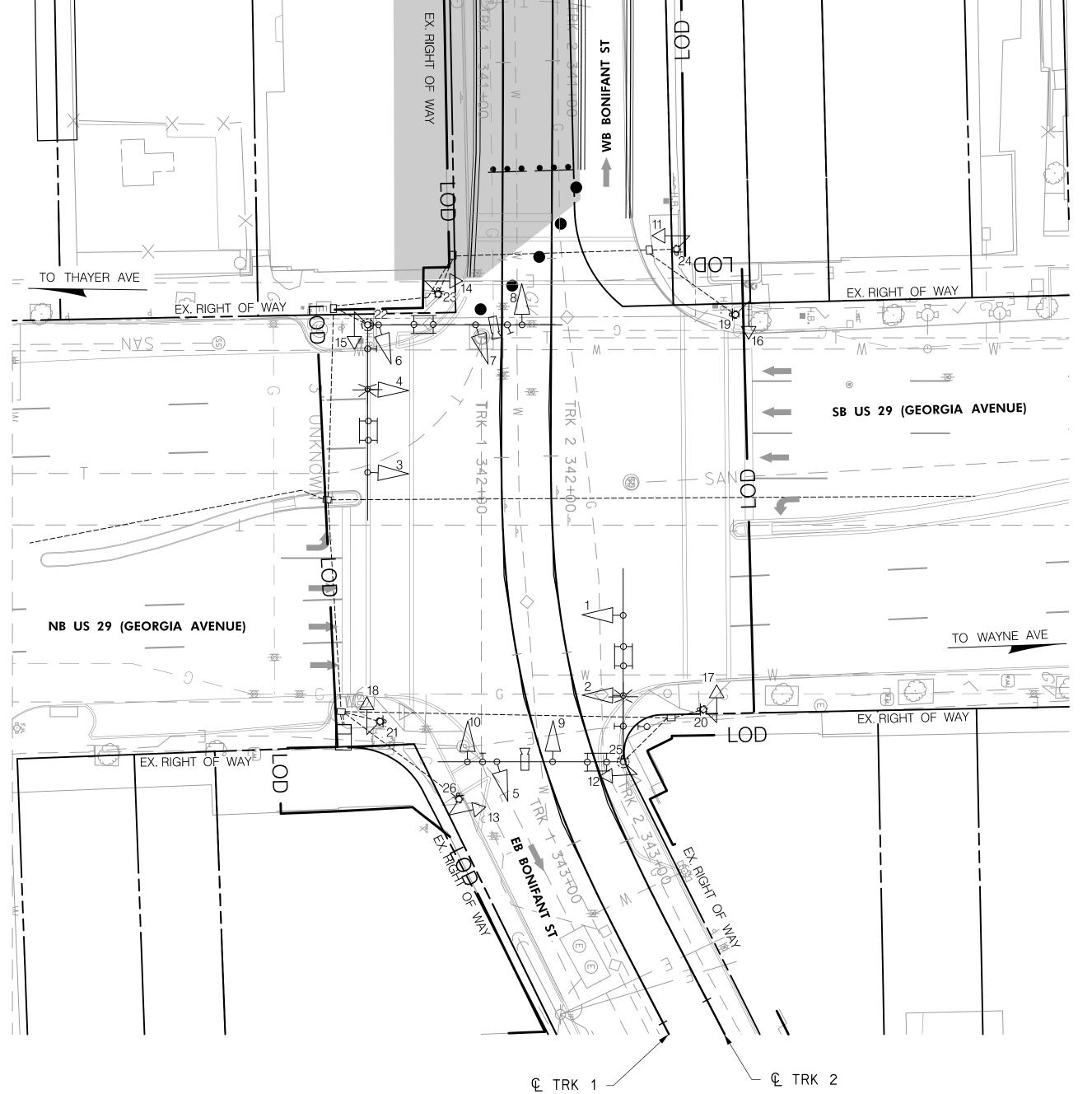


PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

# EXISTING ACCESSIBLE PUSHBUTTON AND SIGN TO REMAIN



R10-3(1) R10-3(1) R10-3(1) R10-3(1) (9"x15") (9"x15") (9"x15")



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION US 29 (GEORGIA AVENUE)

SG-302/

AT BONIFANT STREET SILVER SPRING, MD

**GEOMETRIC LEGEND** EXISTING ——— PROPOSED

UTILITY LEGEND ELECTRIC CABLES ----SD-----SD-----STORM DRAIN AERIAL CABLES ---- G---- GAS MAIN \_\_\_\_\_T\_\_\_\_T\_\_\_\_TELEPHONE CABLES \_\_\_\_W\_\_\_W\_\_\_WATER MAIN -----SAN------SEWER MAIN —— FO—— FO—— FIBER-OPTIC





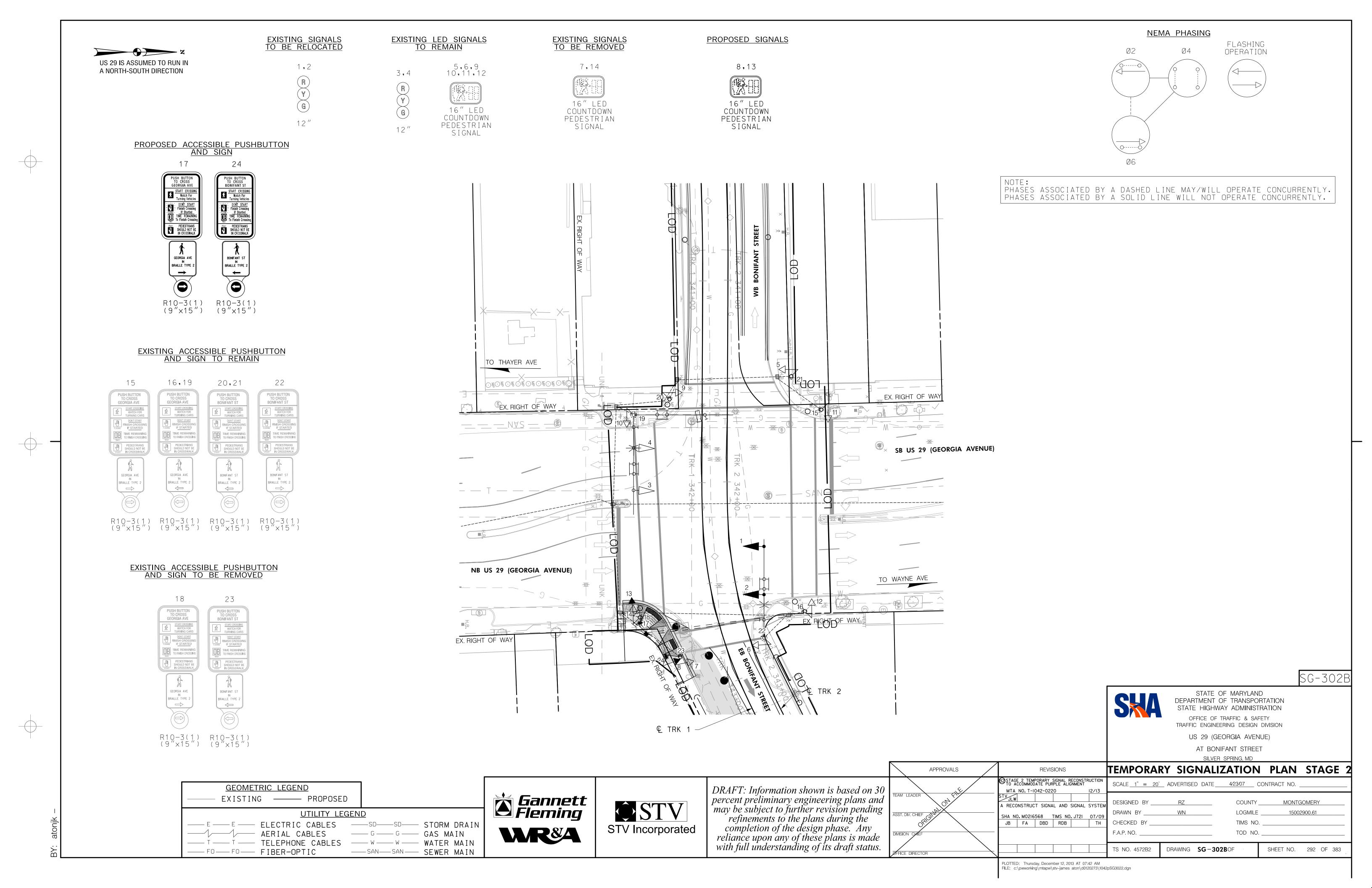
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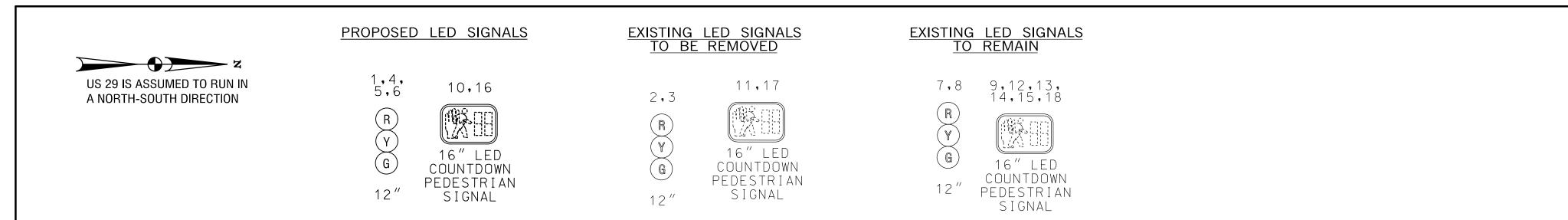
	APPROVALS	
TEAM LE	ADER OF FILE	
ASST. DIV	. CHIEF CHEF	
DIVISION  ØFFICE [	CHEF DIRECTOR	

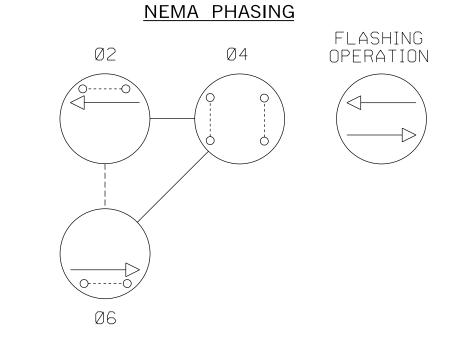
APPROVALS			REVIS	SIONS			
. /	® STAGE	E I TEMP	ORARY S ATE PUR	IGNAL RE RPLE ALIC	CONSTRU SNMENT	ICTION	
\.\.\	MTA	NO. T-	1042-02	20		12/13	
- N	STV JLW						
, or O.,	A RECC	NSTRUC	T SIGNA	AL AND	SIGNAL	SYSTEM	
Cilch	SHA NO	о. мо216	568	TIMS NO	. J72I	07/09	
	JB	FA	DBD	RDB		TH	

REVISIONS	TEMPORA	RY SIGNALI	ZATION	PLAN	STAGE
RARY SIGNAL RECONSTRUCTION TE PURPLE ALIGNMENT	SCALE <u>1" = 20'</u>	ADVERTISED DATE	<u>4/23/07</u> CO	NTRACT NO	
042-0220  2/13	-				
SIGNAL AND SIGNAL SYSTEM	DESIGNED BY	RZ	COUNTY	MONTG	OMERY
68 TIMS NO. J721 07/09	DRAWNI BY	WN	LOGMILE _	15002	900.61
DBD RDB TH	CHECKED BY		TIMS NO		
	F.A.P. NO		TOD NO		
	TS NO. 4572B1	DRAWING SG-30	<b>2A</b> OF	SHEET NO.	291 OF 383

PLOTTED: Thursday, December 12, 2013 AT 04:53 PM FILE: c:\pwworking\mtapw\stv-dylan mcandrew\d0120272\1042pSG3021.dgn

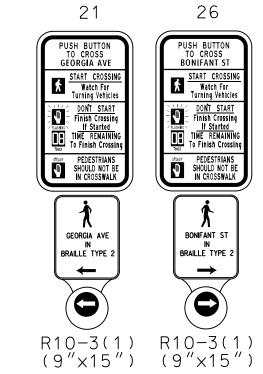




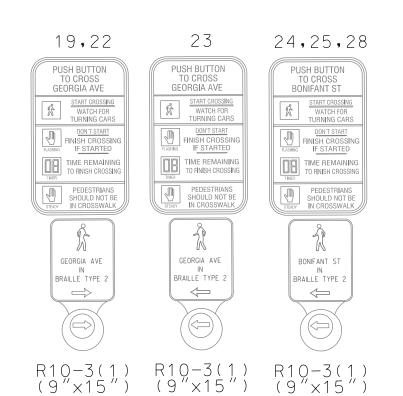


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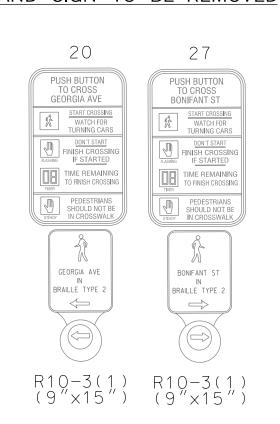
PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN

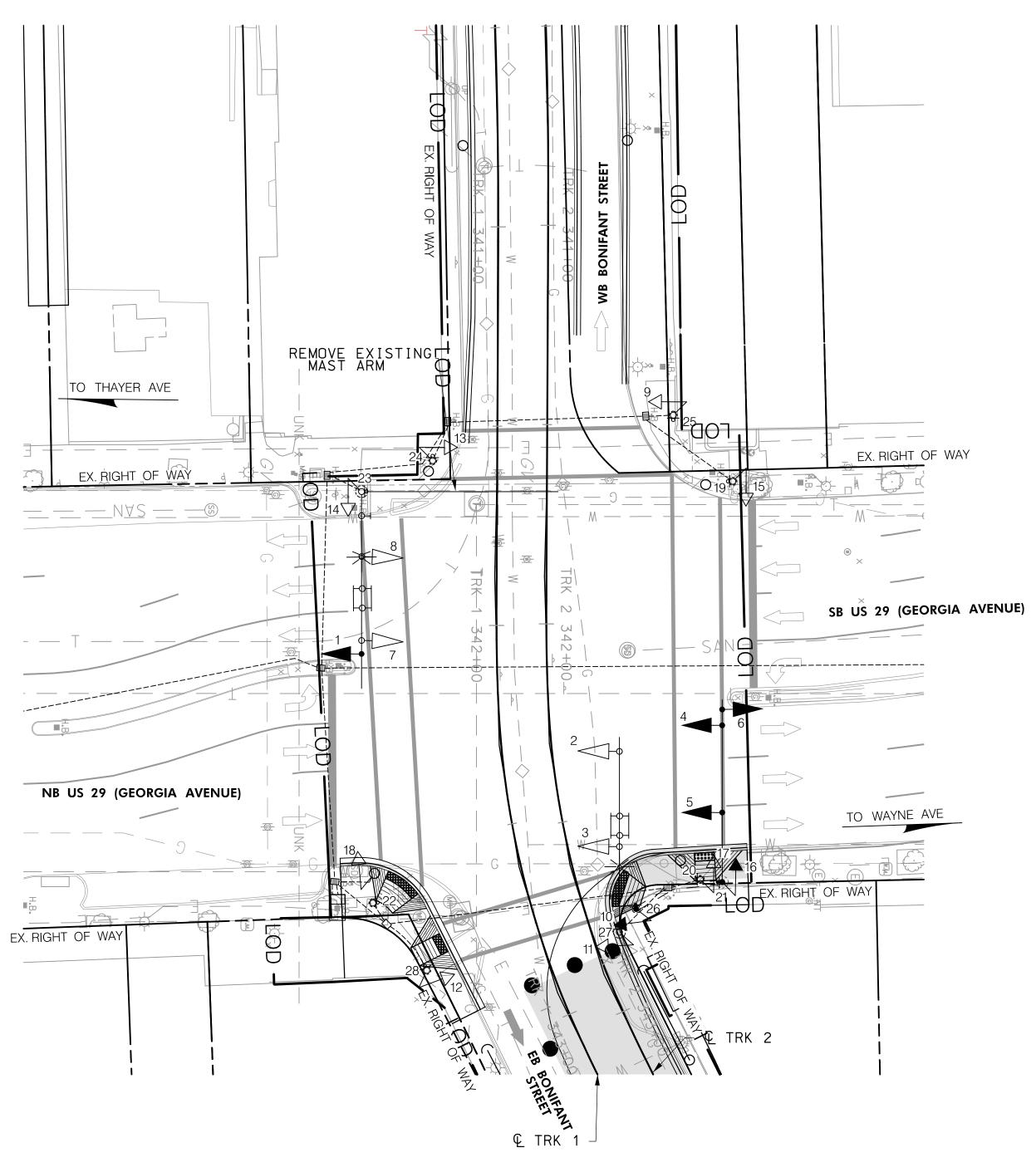


# EXISTING ACCESSIBLE PUSHBUTTON AND SIGN TO REMAIN



# EXISTING ACCESSIBLE PUSHBUTTON AND SIGN TO BE REMOVED





STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

SG-3020

SHEET NO. 293 OF 383

US 29 (GEORGIA AVENUE) AT BONIFANT STREET SILVER SPRING, MD

GEOMETRIC LEGEND EXISTING ——— PROPOSED

UTILITY LEGEND — E — E — ELECTRIC CABLES ----SD-----SD-----STORM DRAIN AERIAL CABLES ---- G---- GAS MAIN --- TELEPHONE CABLES --- W --- WATER MAIN —— FO—— FO—— FIBER-OPTIC



**\$STV** STV Incorporated

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	APPROVALS
)	TEAM LEADER
'	04
	ASST. DIV. CHIEF
	DIVISION CHIEF
	ØFFICE DIRECTOR

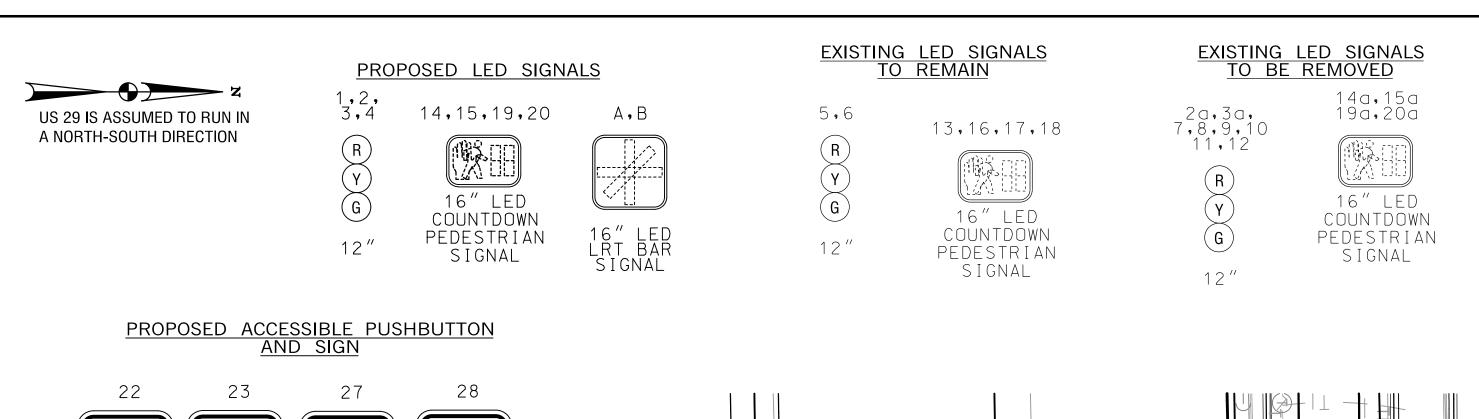
PPROVALS			REVIS	SIONS			T
4./		E 3 TEMF CCOMMOD NO.T-10				RUCTION	(
	STVJLW					SYSTEM	[
	SHA NO	о. мо216	568	TIMS NO	. J72I	07/09	l '
	JB	FA	DBD	RDB		TH	(
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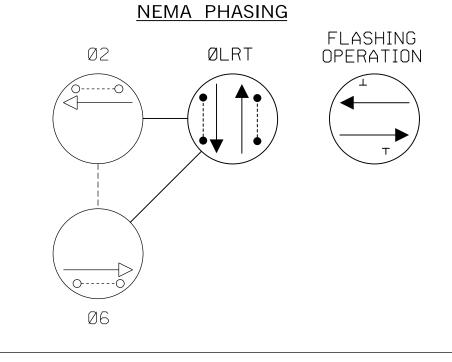
REVISIONS	TEMPORAR
TAGE 3 TEMPORARY SIGNAL RECONSTRUCTION OF ACCOMMODATE PURPLE ALIGNMENT  MTA NO.T-1042-0220 12/13	
JLW	DESIGNED BY
A NO. MO216568 TIMS NO. J721 07/0	DRAWN BY
B FA DBD RDB TH	
	F.A.P. NO
	TS NO. 4572B3

	OILVLIT	OF FINAL, IND		
TEMPORAR	RY SIGNALIZ	ZATION	PLAN	STAG
SCALE <u>1" = 20'</u>	_ ADVERTISED DATE	4/23/07 CC	NTRACT NO	
DESIGNED BY	RZ	COUNTY	MONTG	GOMERY
	WN		15002	
CHECKED BY		TIMO NIO		

DRAWING SG-302COF

PLOTTED: Thursday, December 12, 2013 AT 07:46 AM FILE: c:\pwworking\mtapw\stv-james aton\d0120274\1042pSG3023.dgn

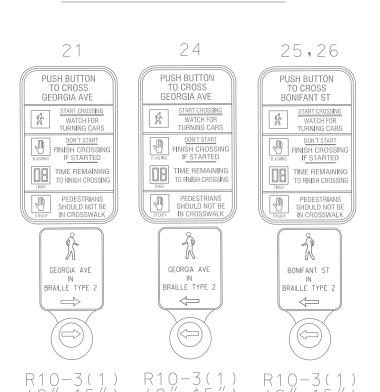


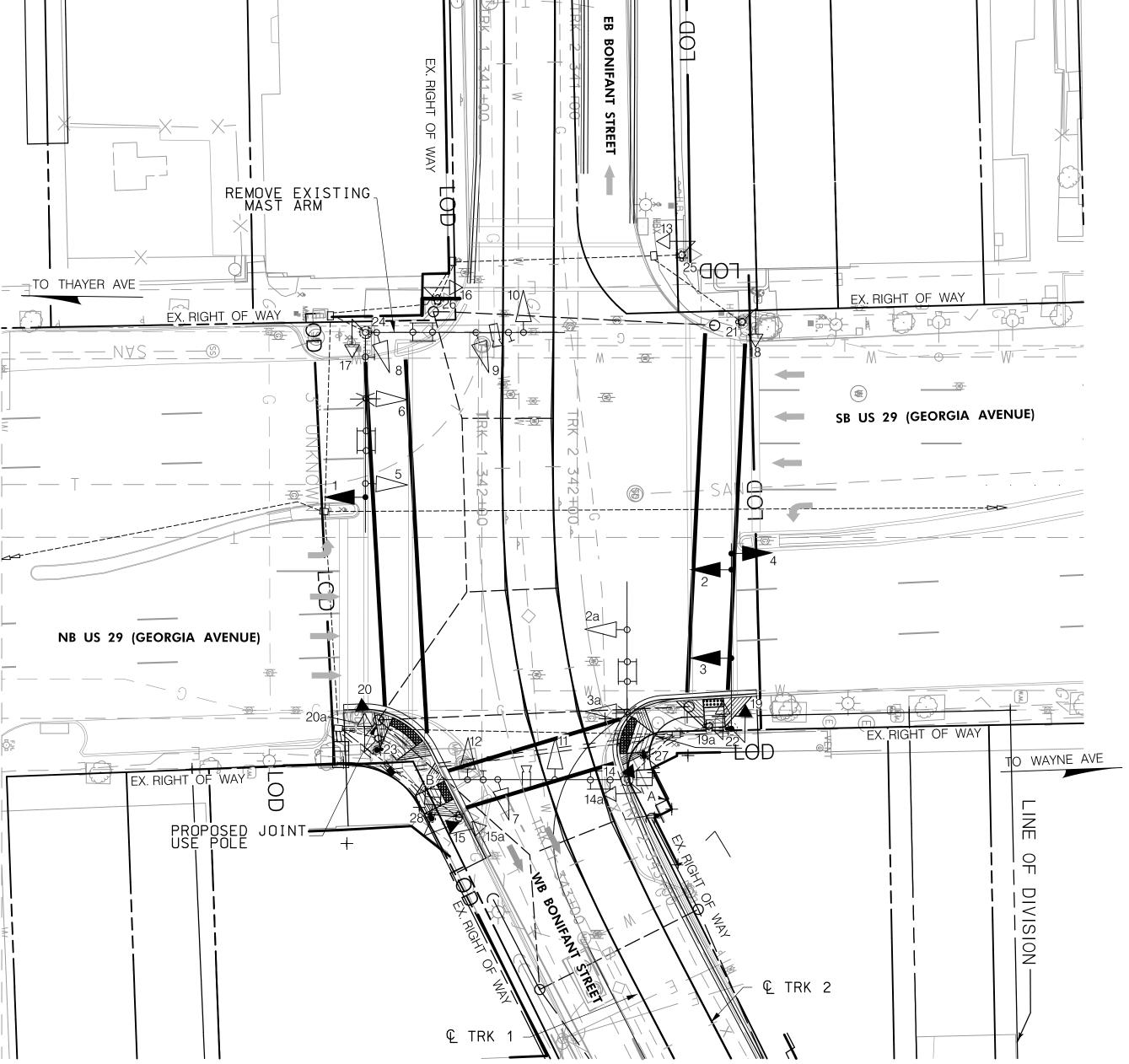


PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

DONT START
Finish Crossing
If Started
TIME REMAINING
TO Finish Crossing BONIFANT ST IN BRAILLE TYPE 2 R10-3(1) R10-3(1) R10-3(1) R10-3(1) (9"x15") (9"x15") (9"x15")

EXISTING ACCESSIBLE PUSHBUTTON AND SIGN TO REMAIN





SG-302 STATE OF MARYLAND

DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

DRAWING SG-302 OF

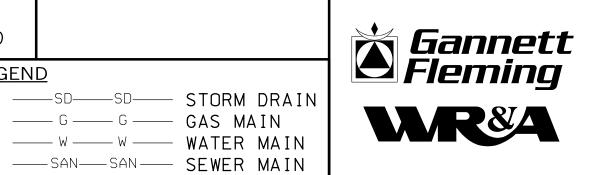
US 29 (GEORGIA AVENUE)

AND BONIFANT STREET SILVER SPRING, MARYLAND

GEOMETRIC LEGEND EXISTING ——— PROPOSED

----F0----FIBER-OPTIC

UTILITY LEGEND ----SD-----STORM DRAIN — E — E — ELECTRIC CABLES AERIAL CABLES ---- G---- GAS MAIN \_\_\_\_\_T\_\_\_\_T\_\_\_\_TELEPHONE CABLES \_\_\_\_W\_\_\_W\_\_\_WATER MAIN





DRAFT: Information shown is based on 30 percent preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

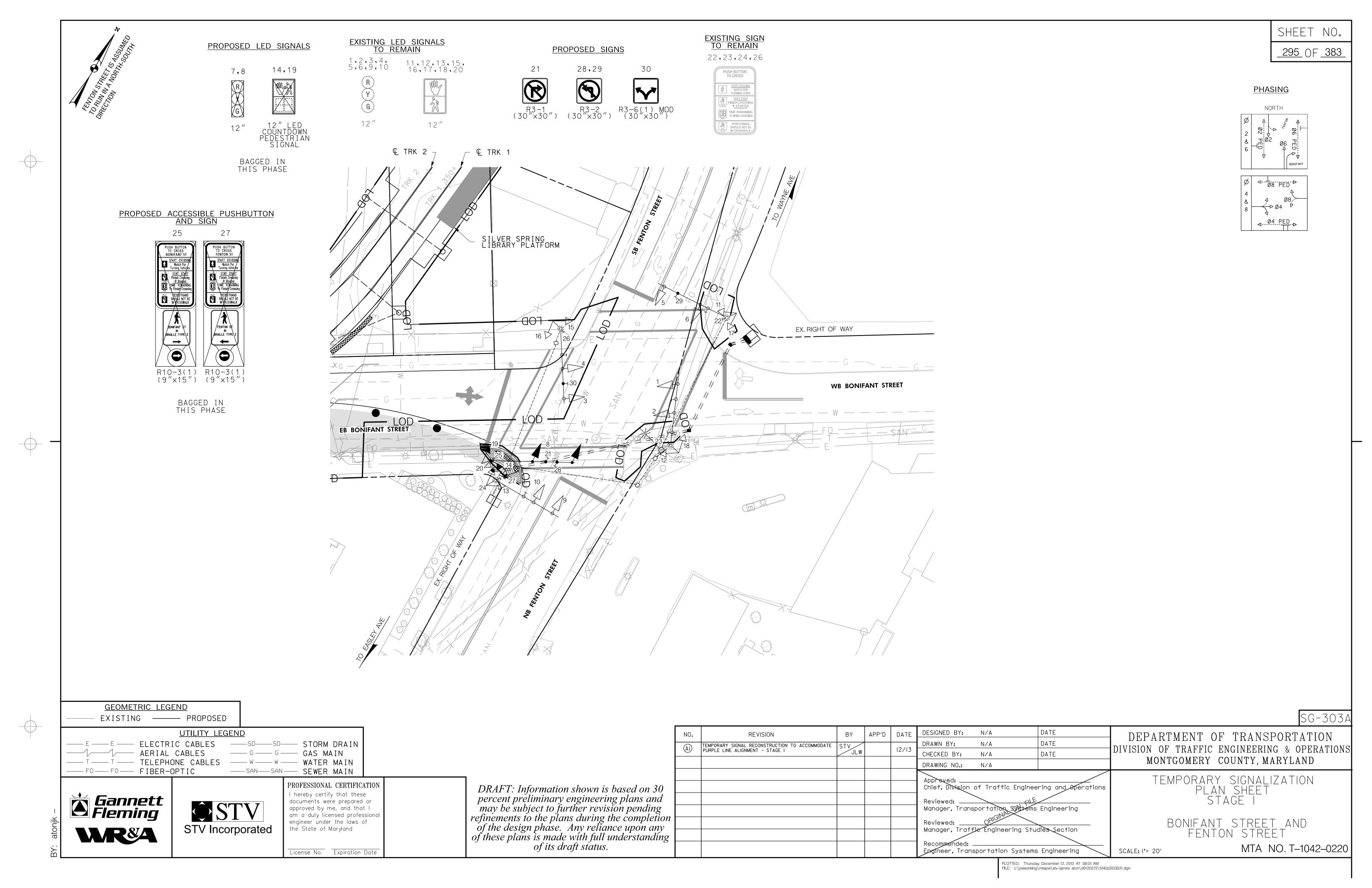
	APPRO	OVALS	
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ASST. DIV. C	CHIEF		 SHA
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DIVISION C	ENEF	$\overline{}$	
DIVISION	)/IILI		
OFFICE DIF	RECTOR		

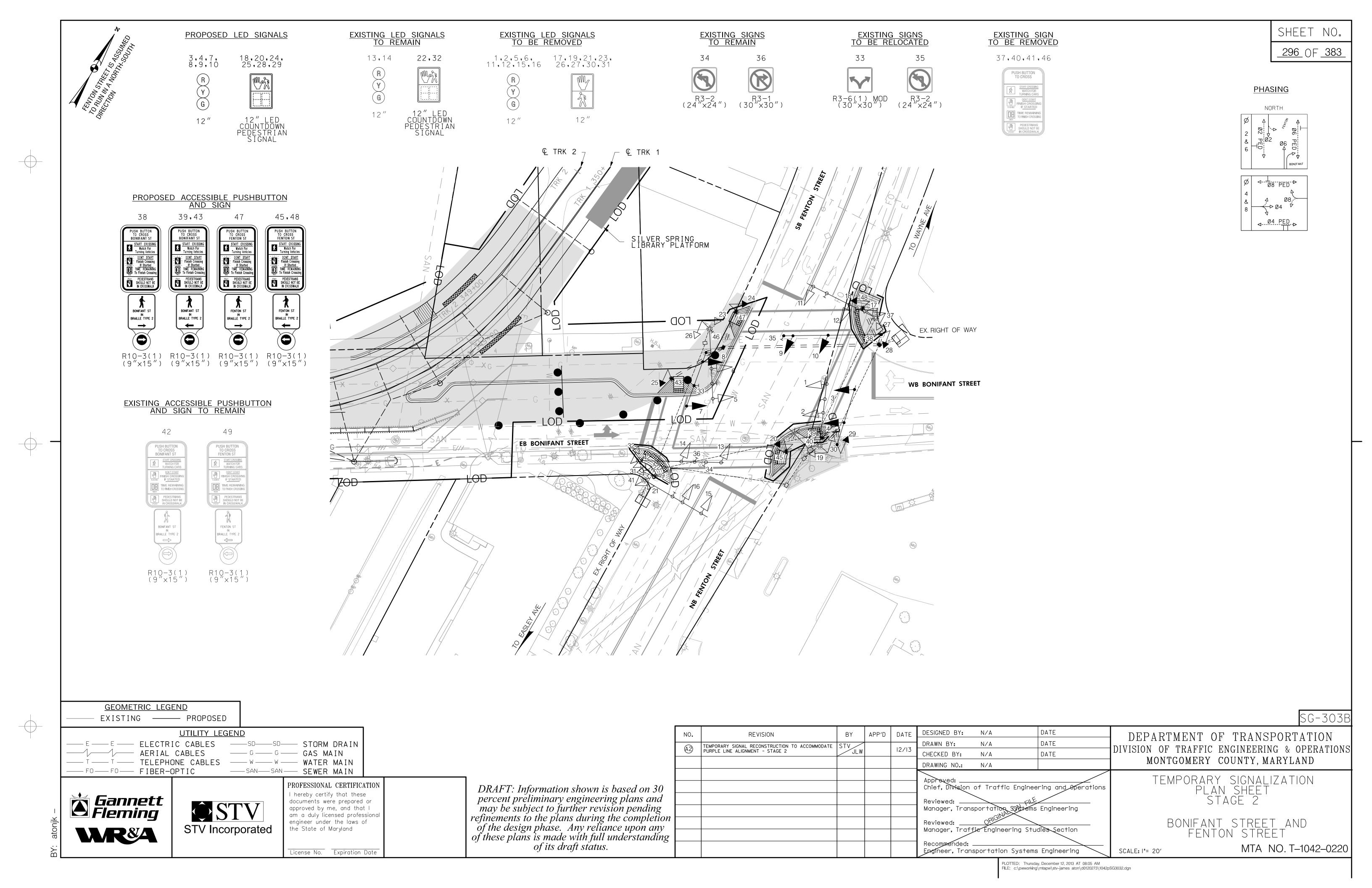
REVISIONS						
ACC	OMMODA		PLE LINE	JCTION T ALIGNM		SCALE_
	DNSTRUC D. MO216 FA		L AND :	SIGNAL :	SYSTEM 07/09 TH	DESIGNE DRAWN CHECKE
						F.A.P. NC
						TO NO

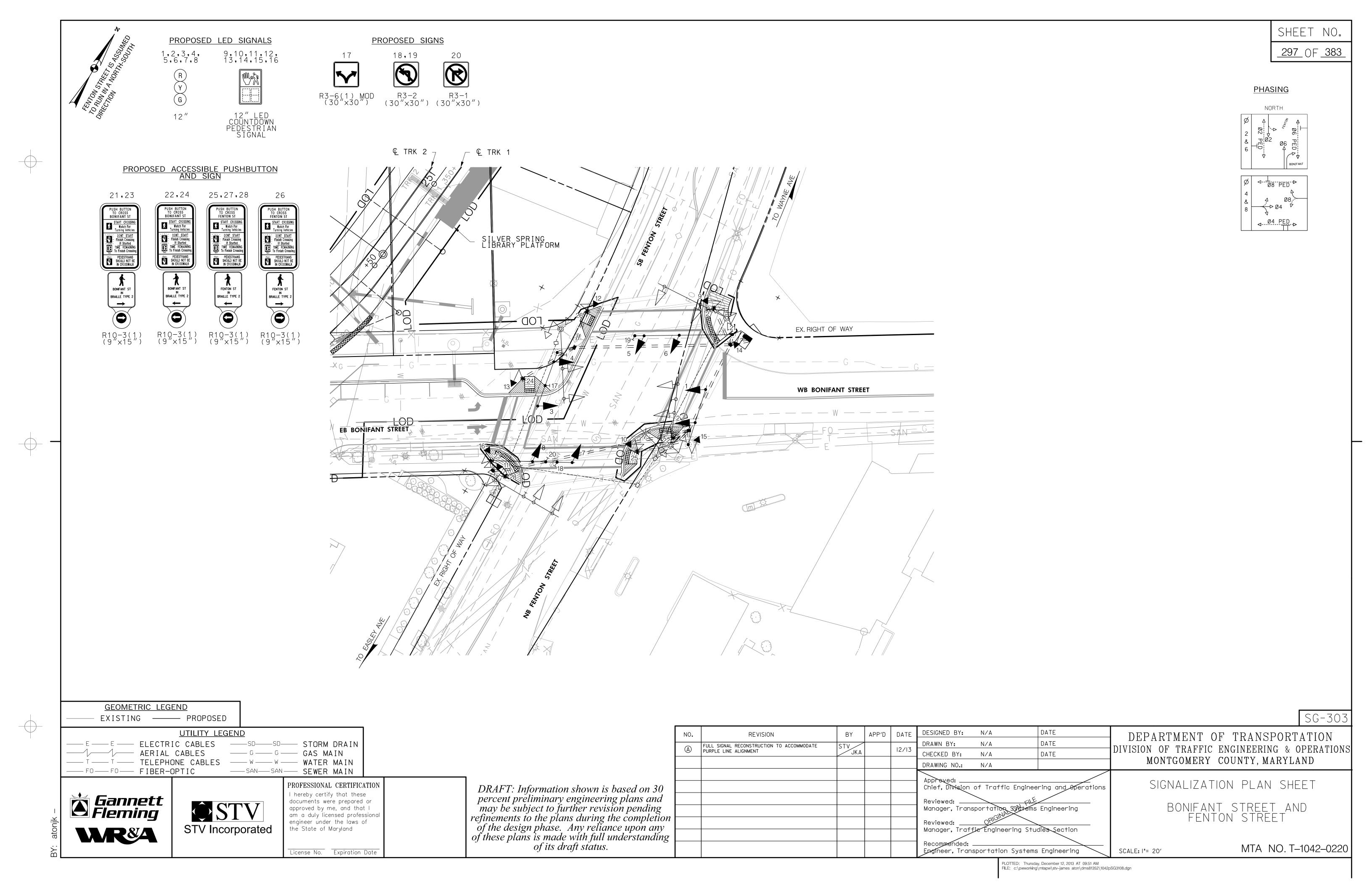
SIGNALIZATIO	N PLAN	SHEET	
ALE <u>1" = 20'</u> ADVERTISED DATE	<u>4/23/07</u> CONT	RACT NO	
			•
SIGNED BYRZ	COUNTY	MONTGOMERY	
AWN BY	LOGMILE	15002900.61	
ECKED BY	TIMS NO		

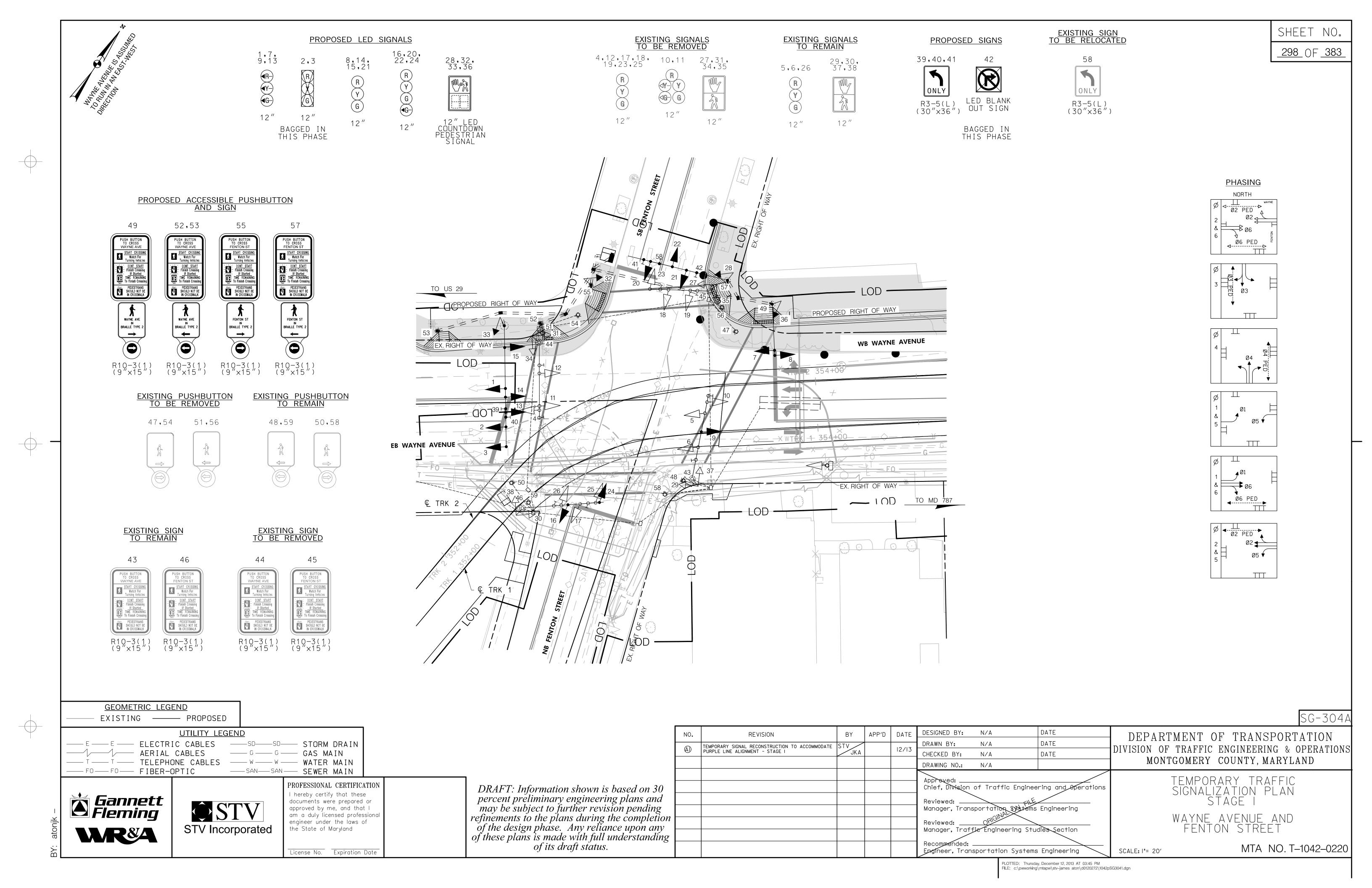
SHEET NO. 294 OF 383

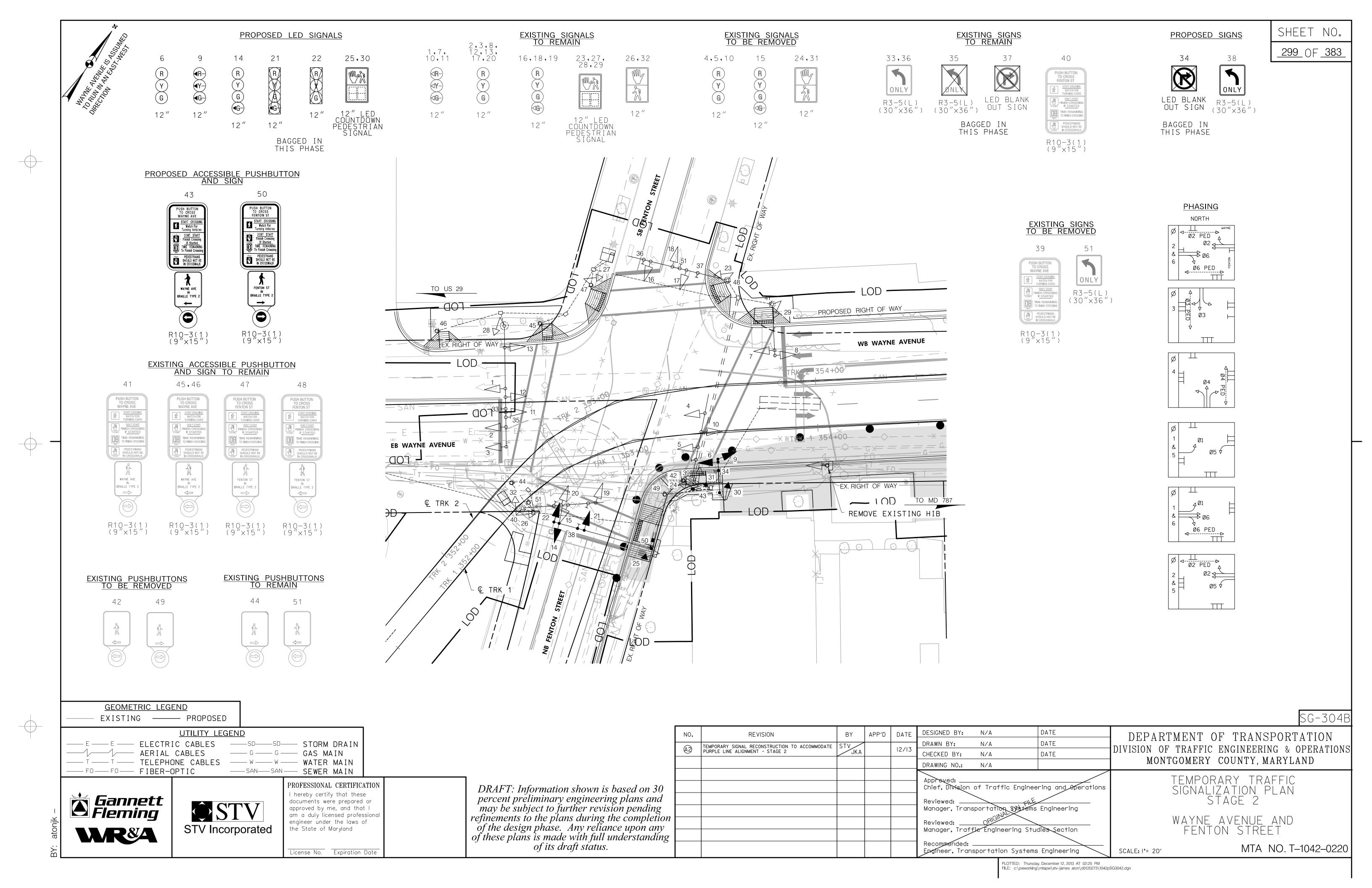
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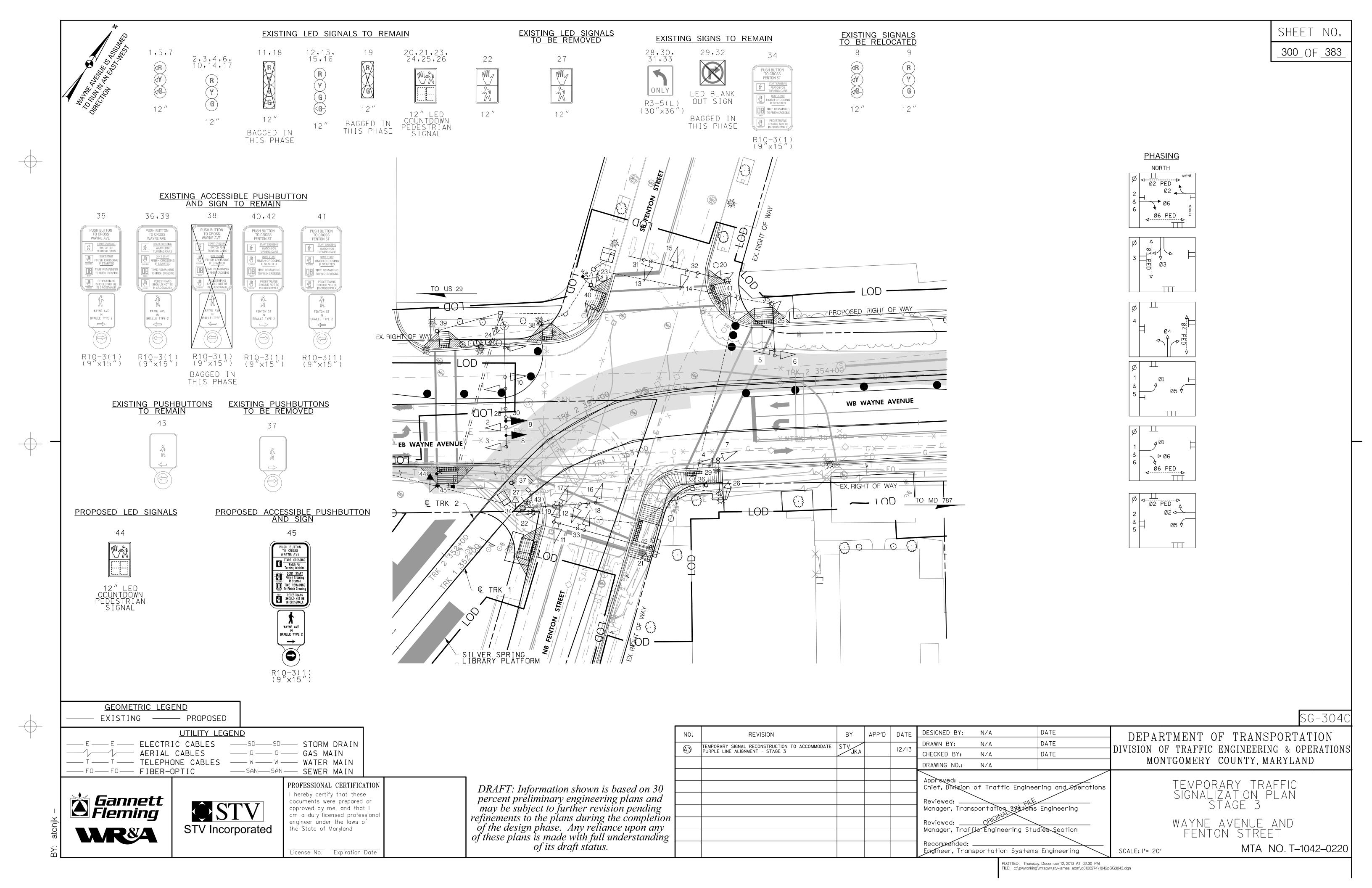


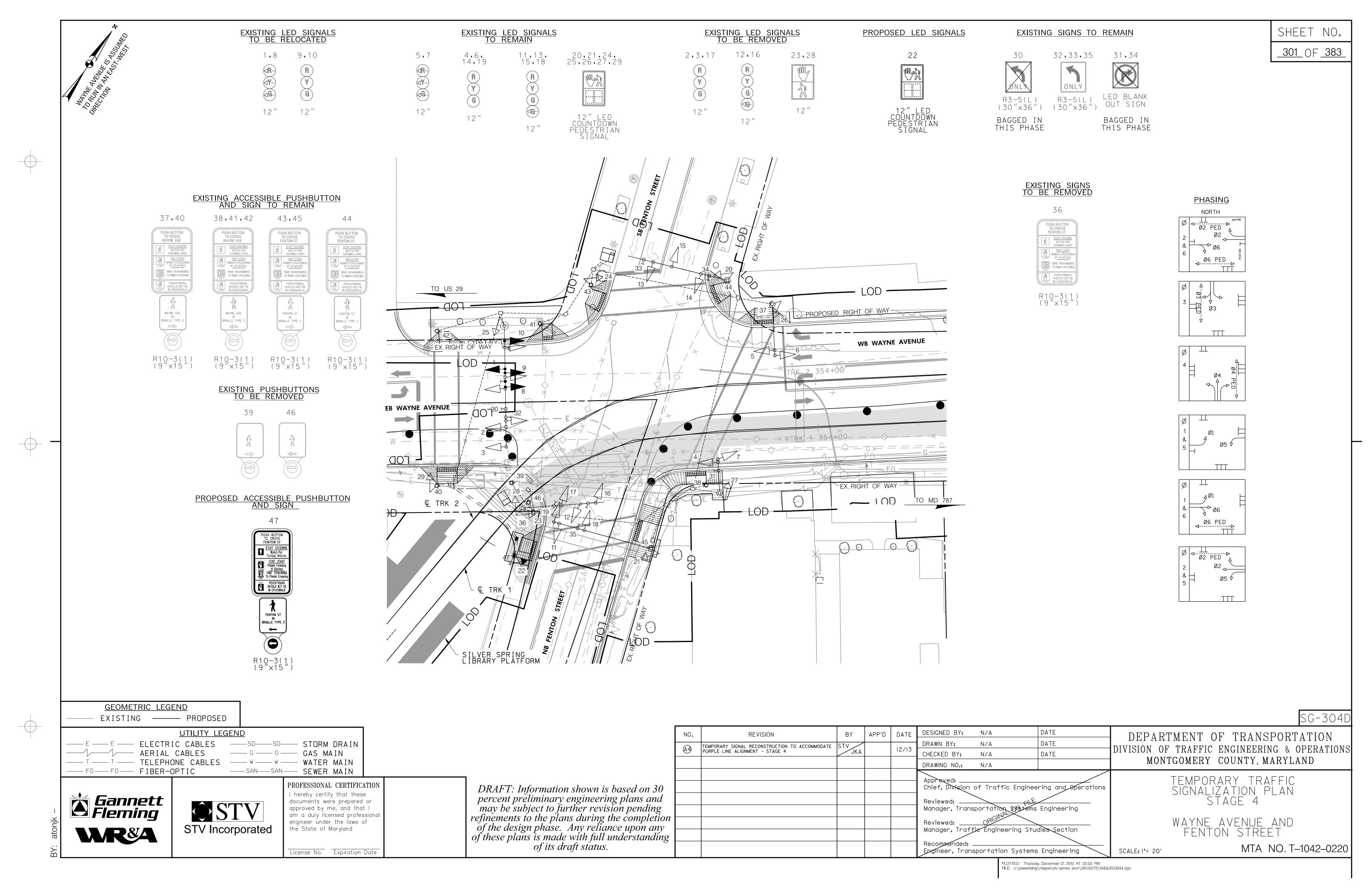


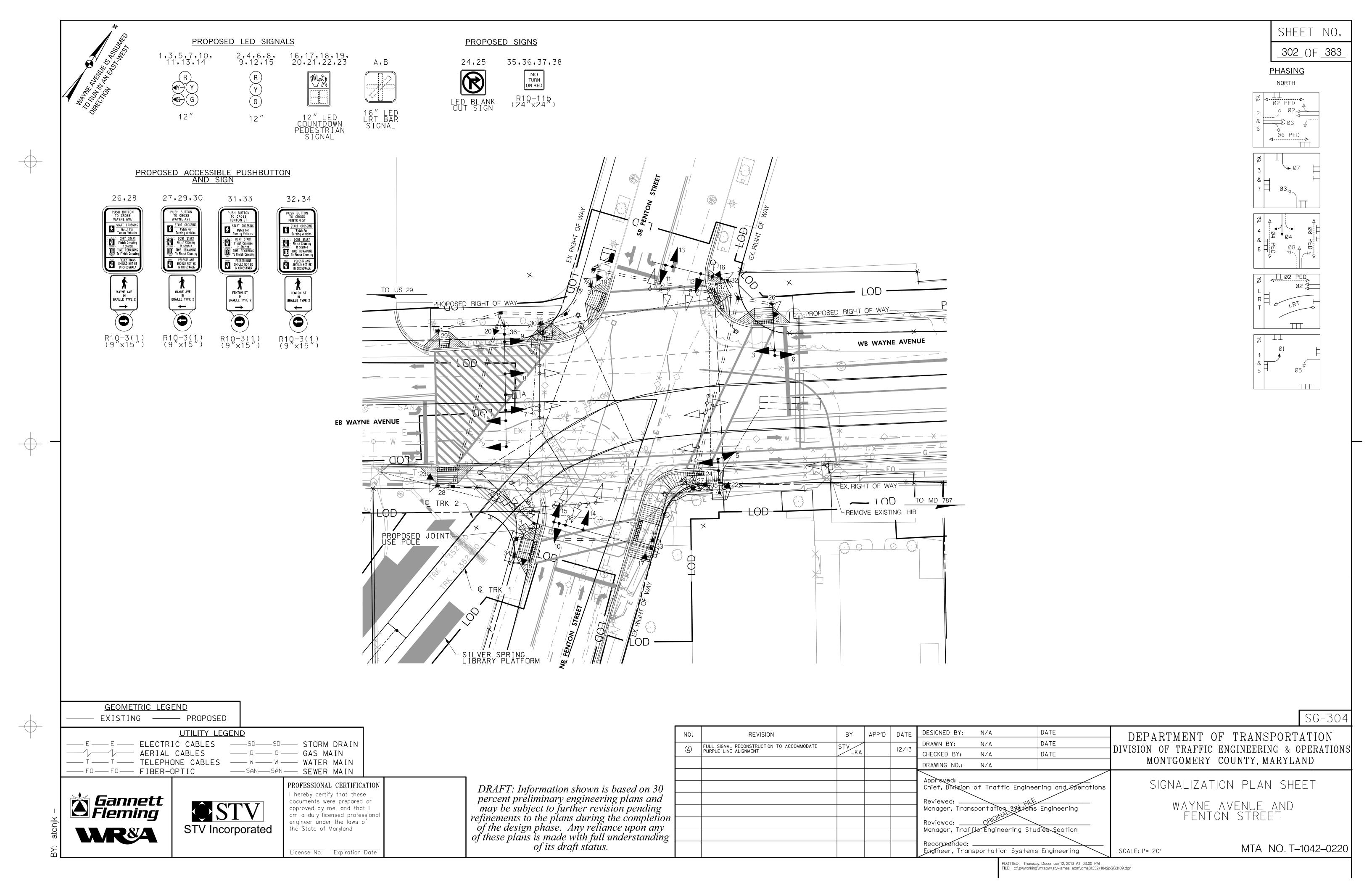


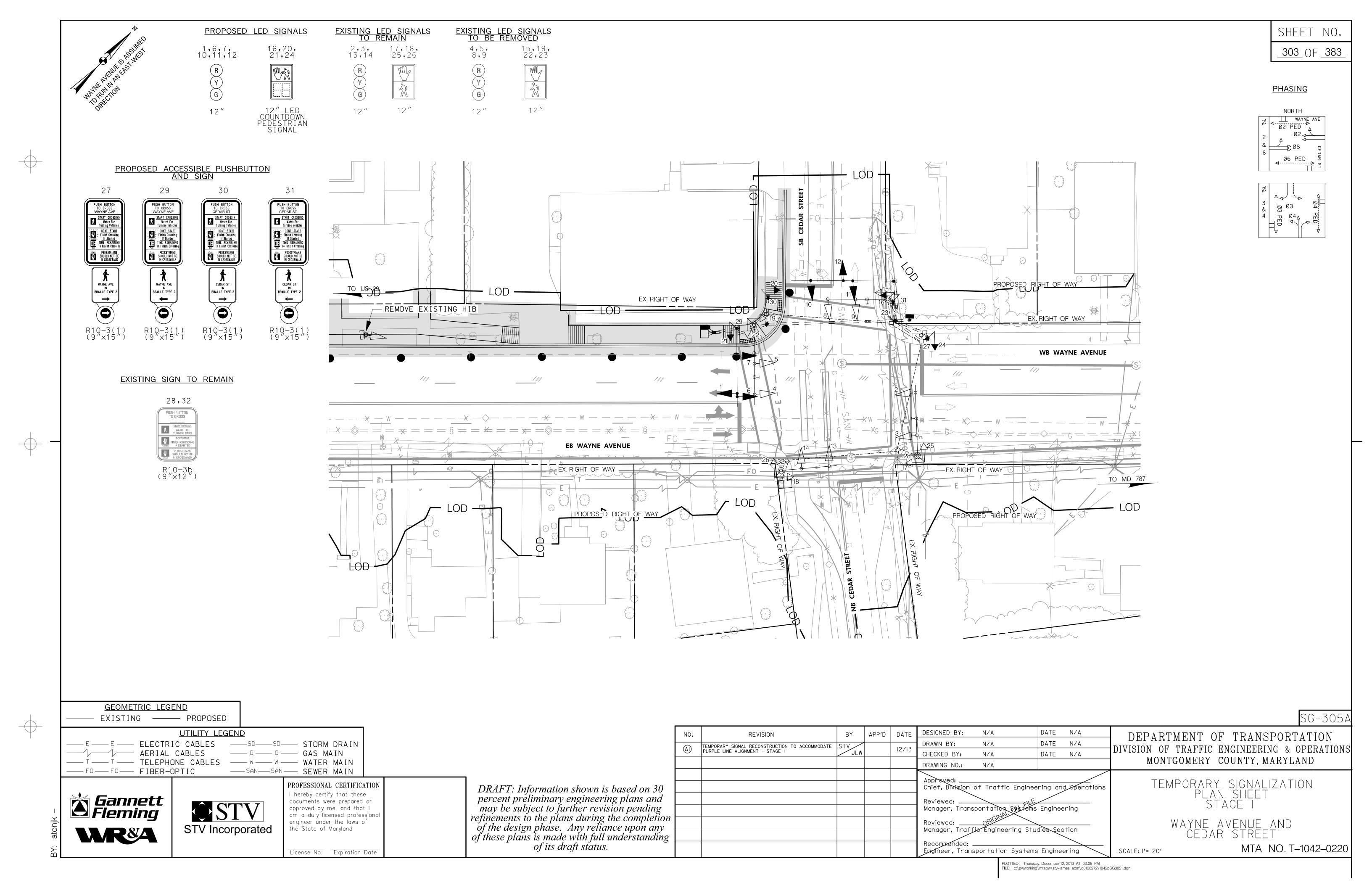


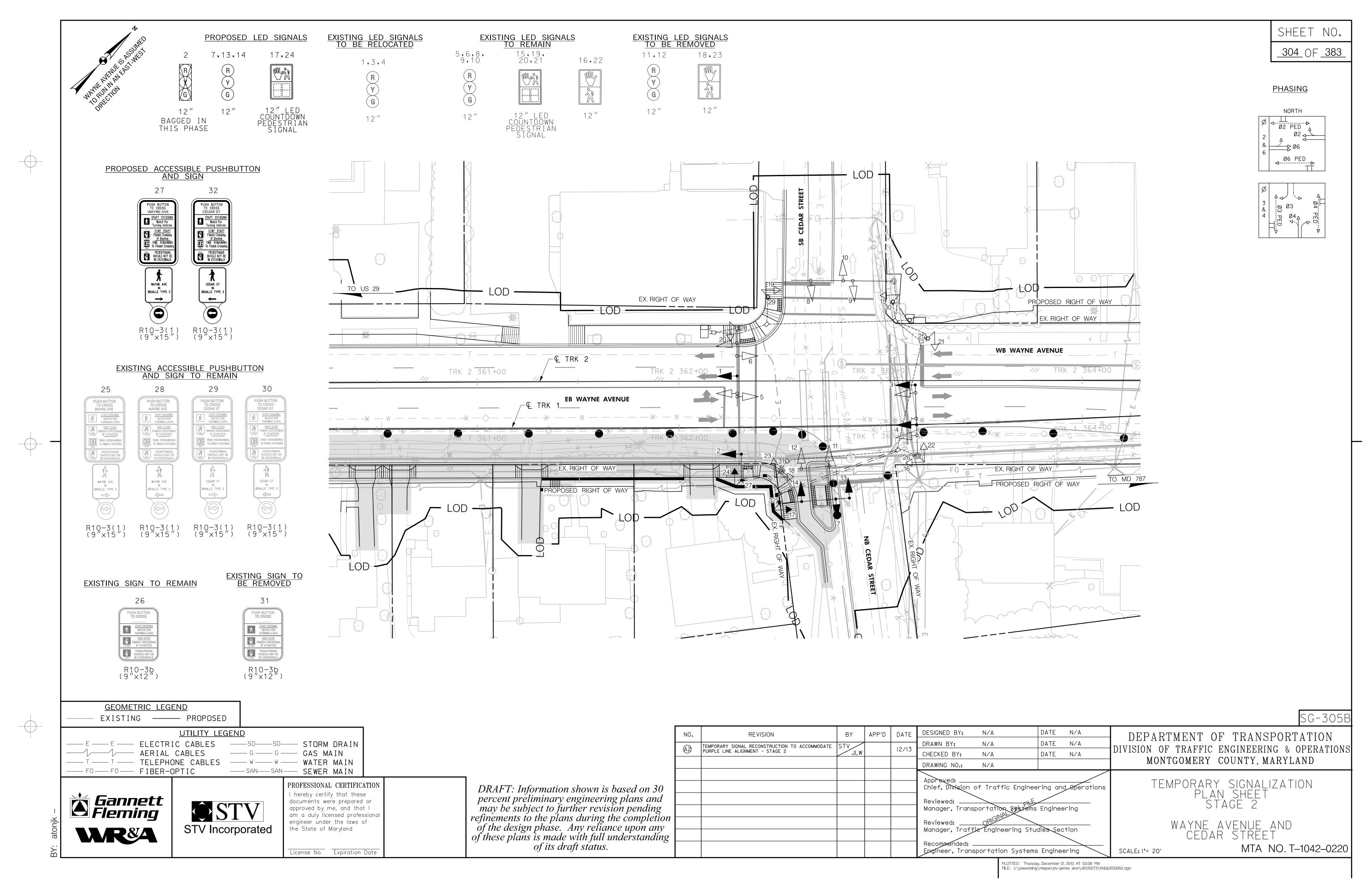


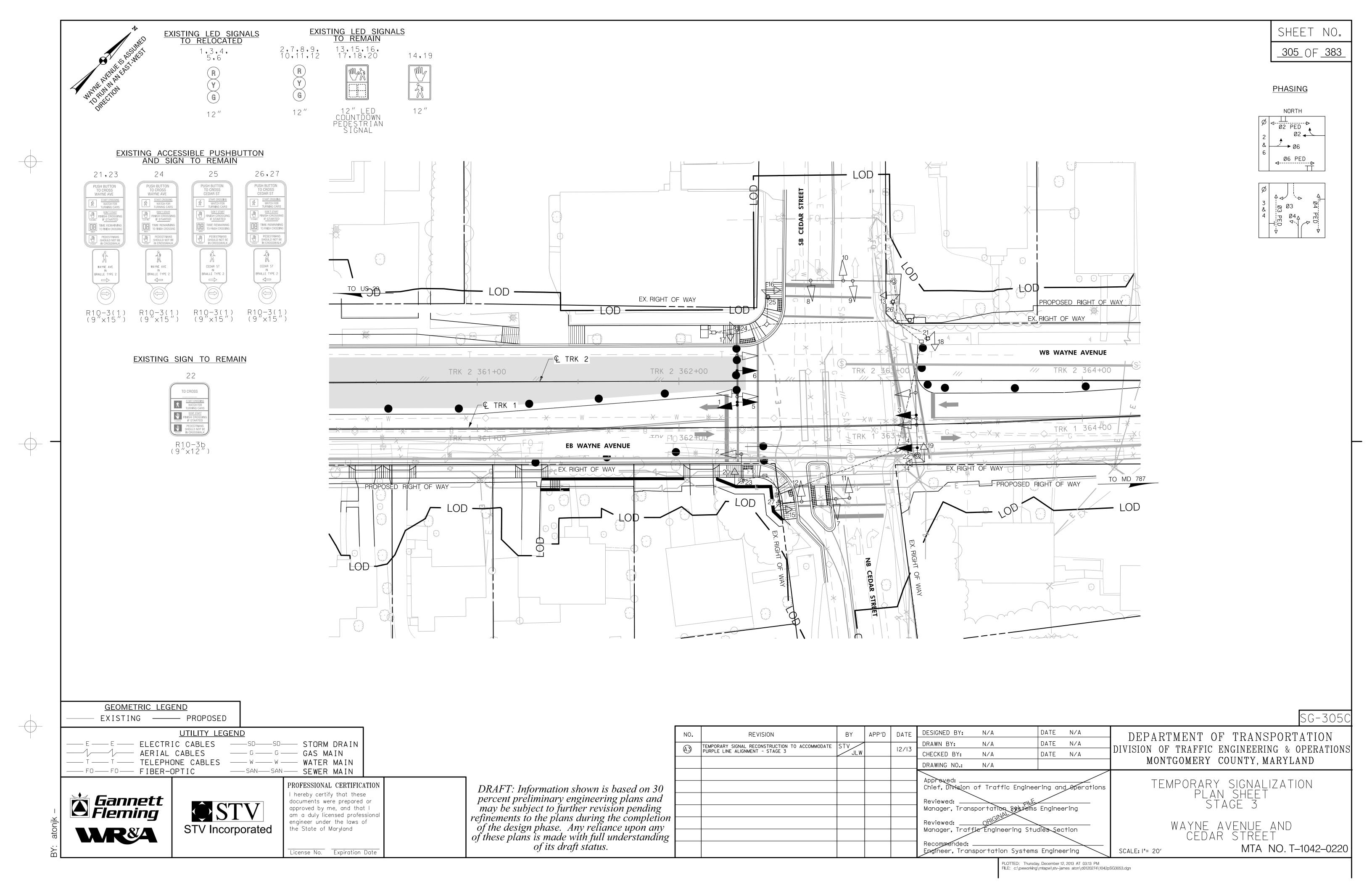


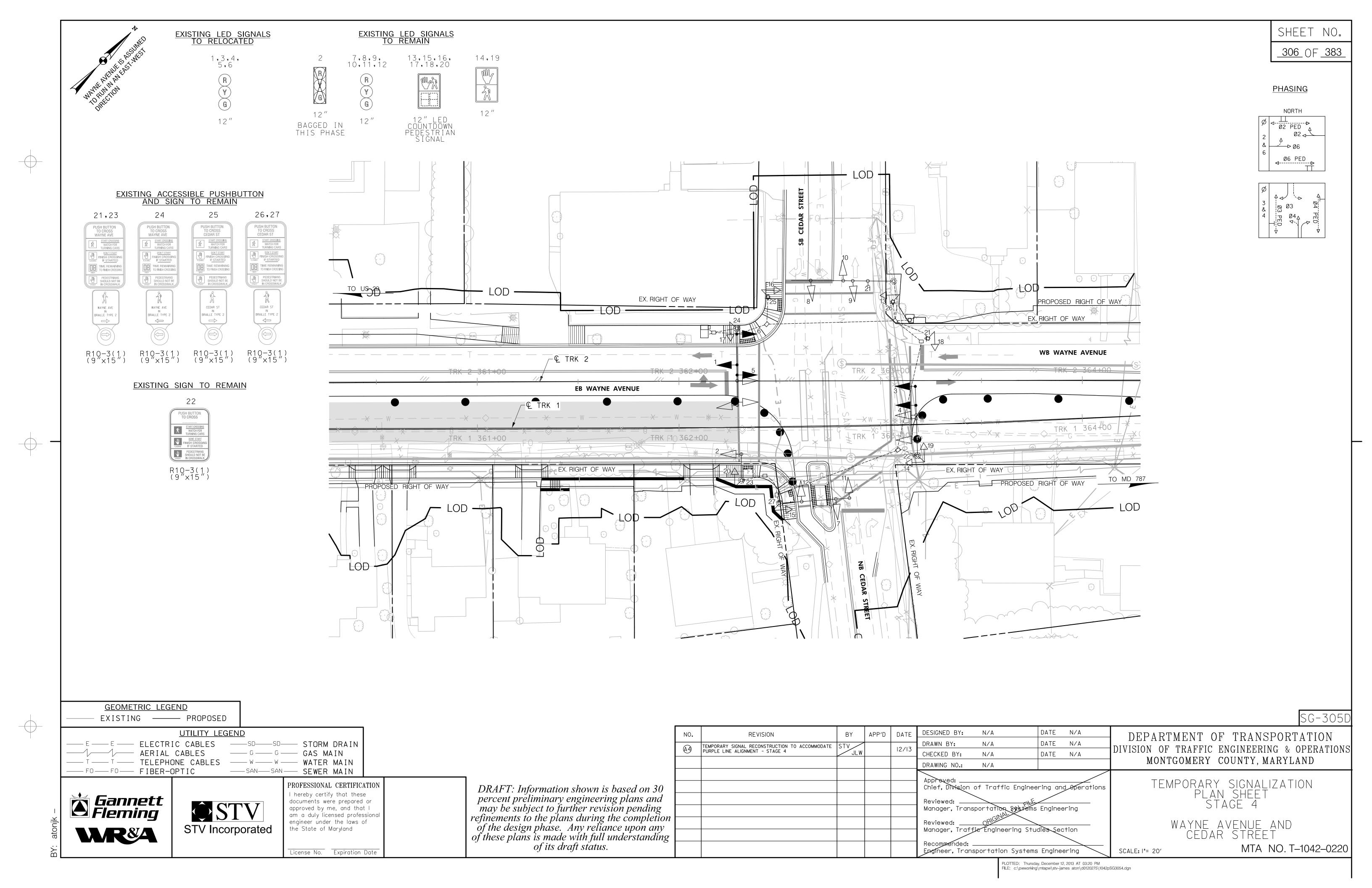


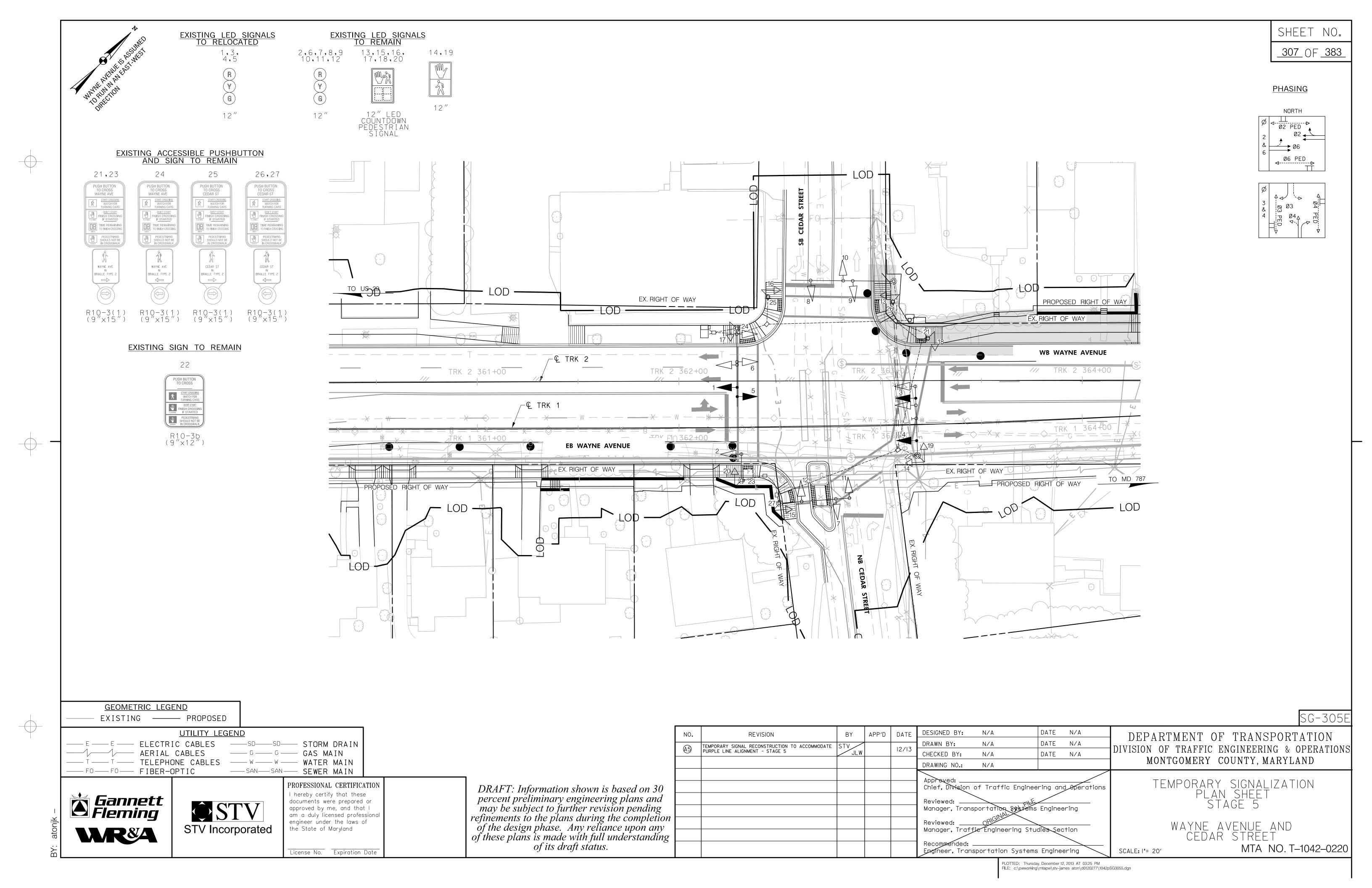


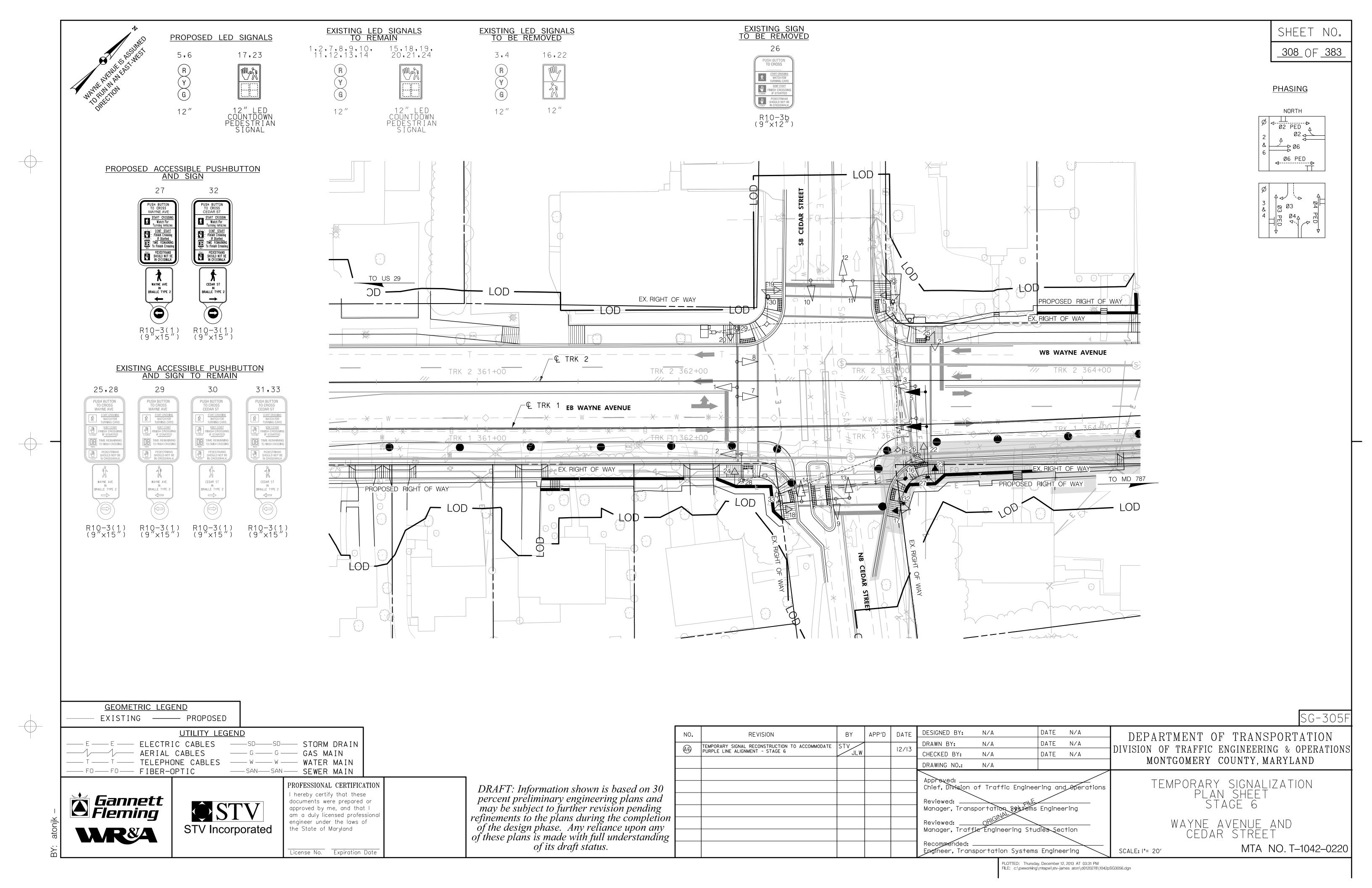


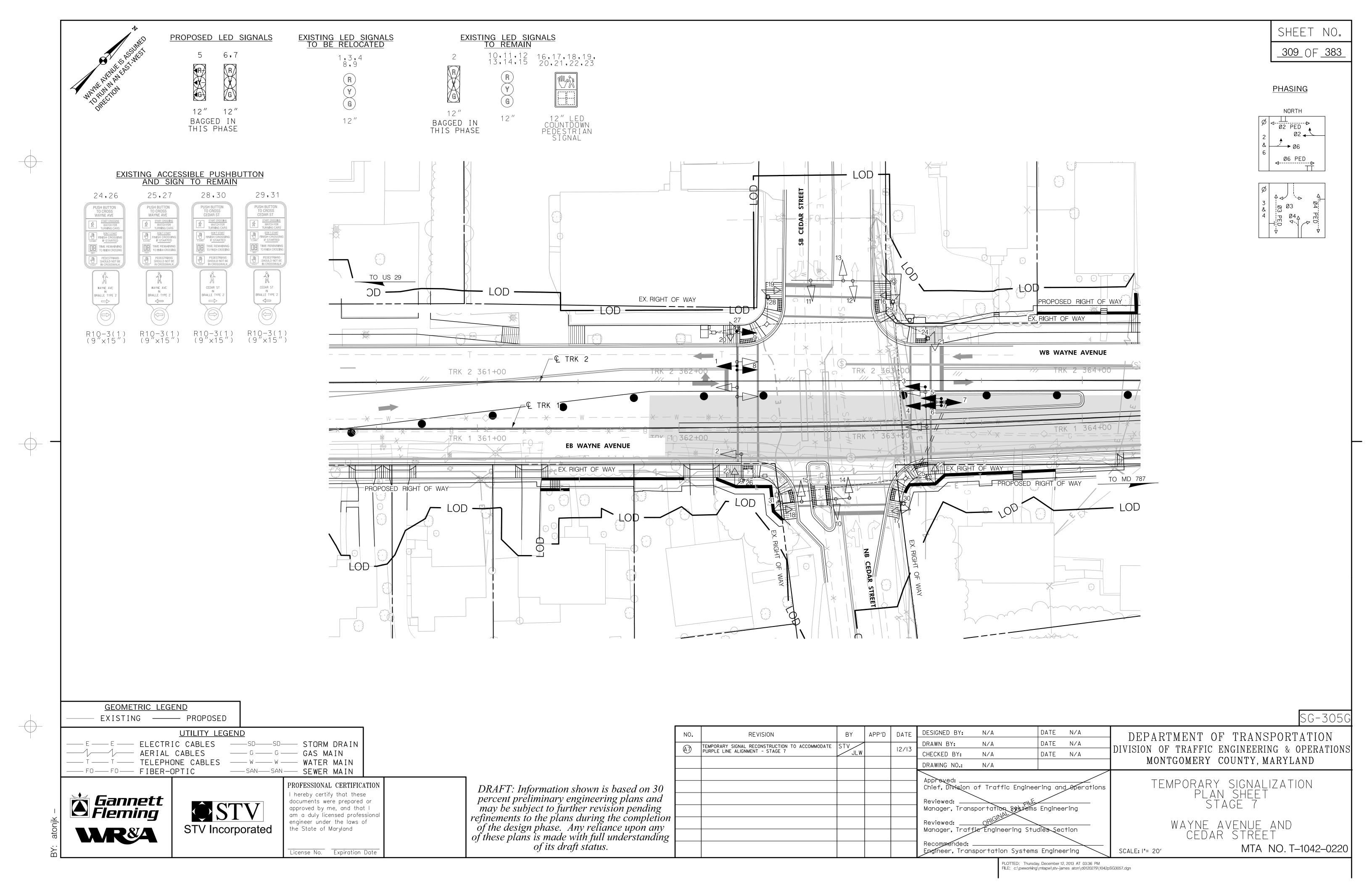


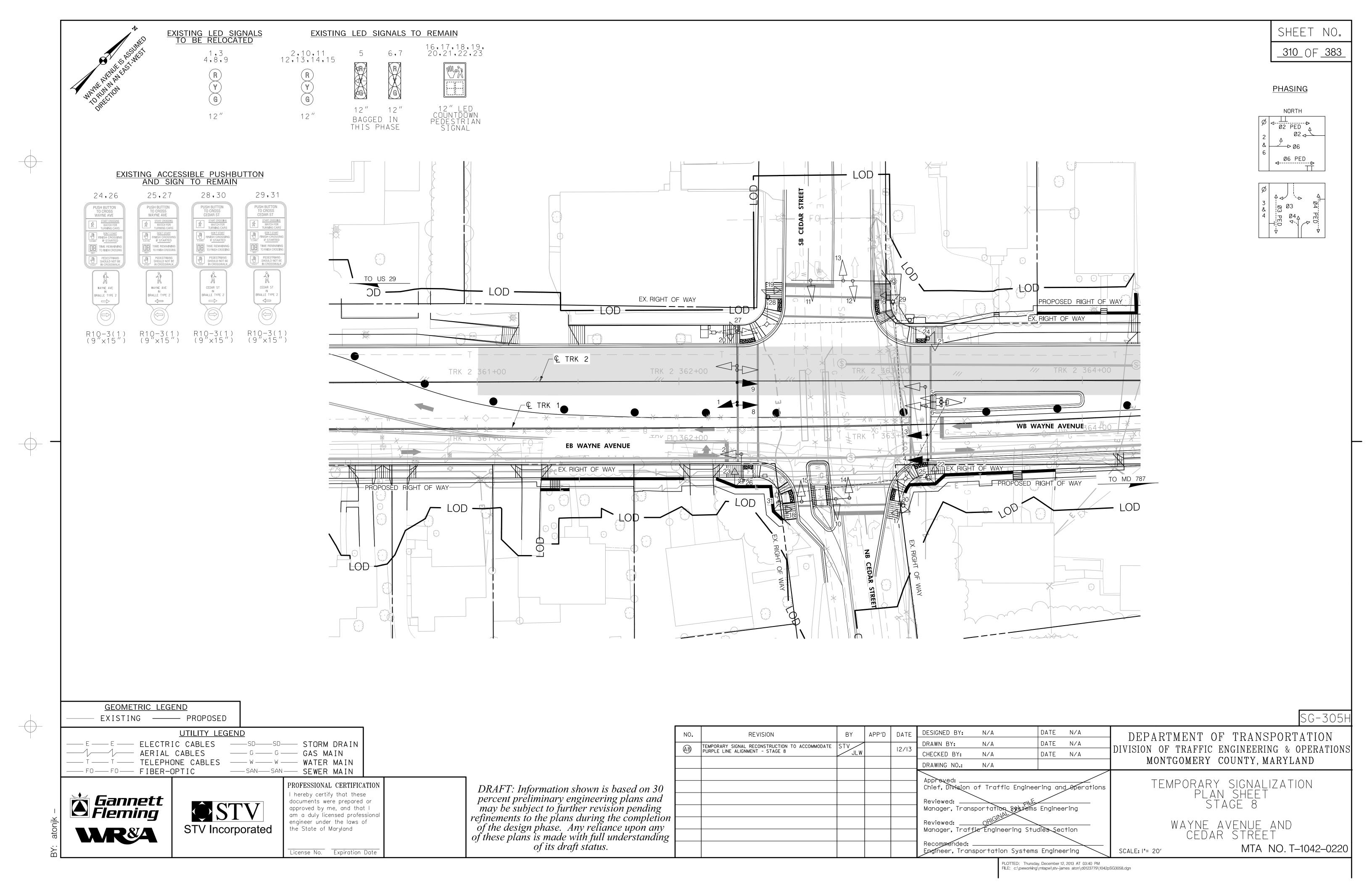


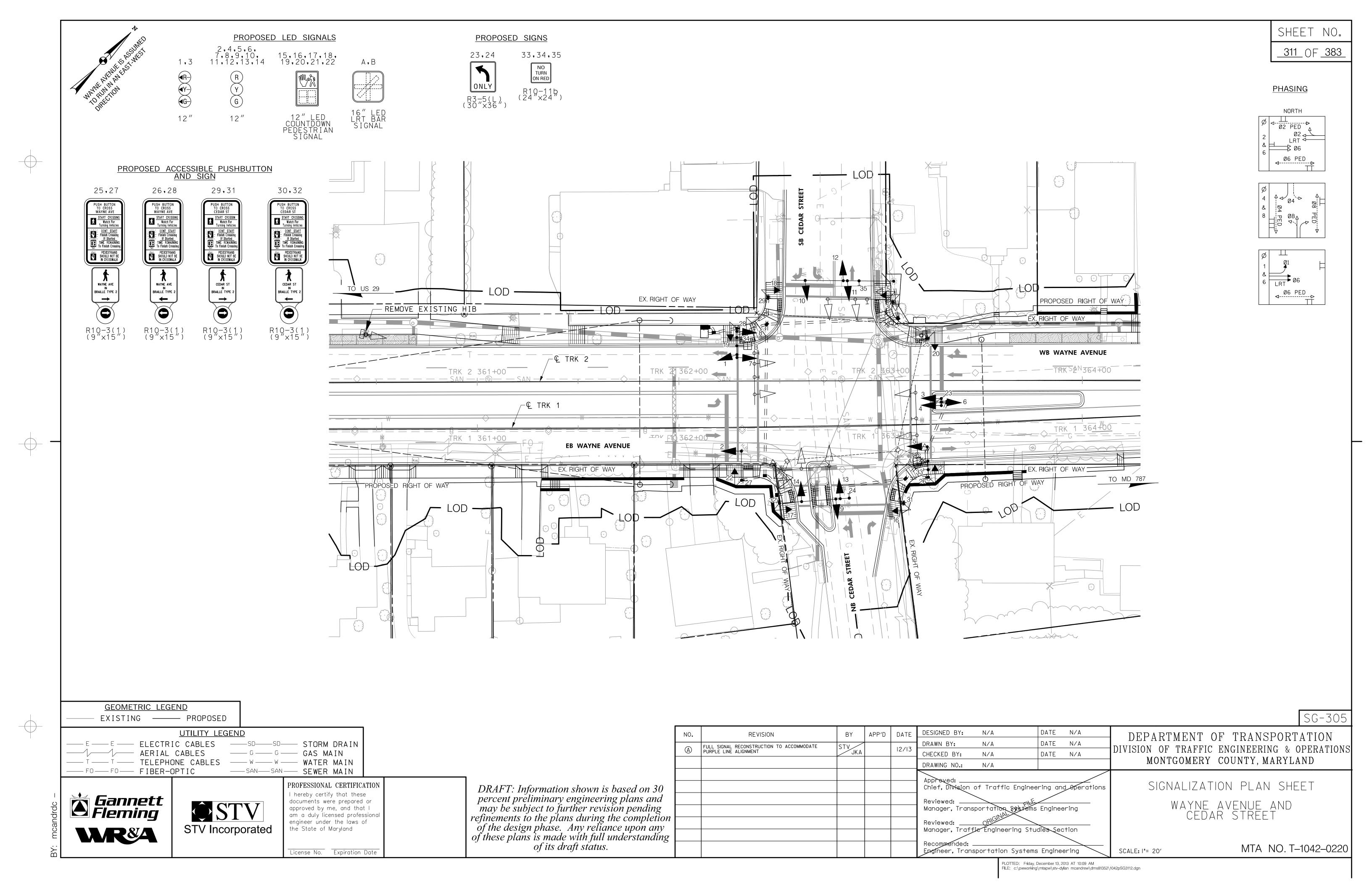


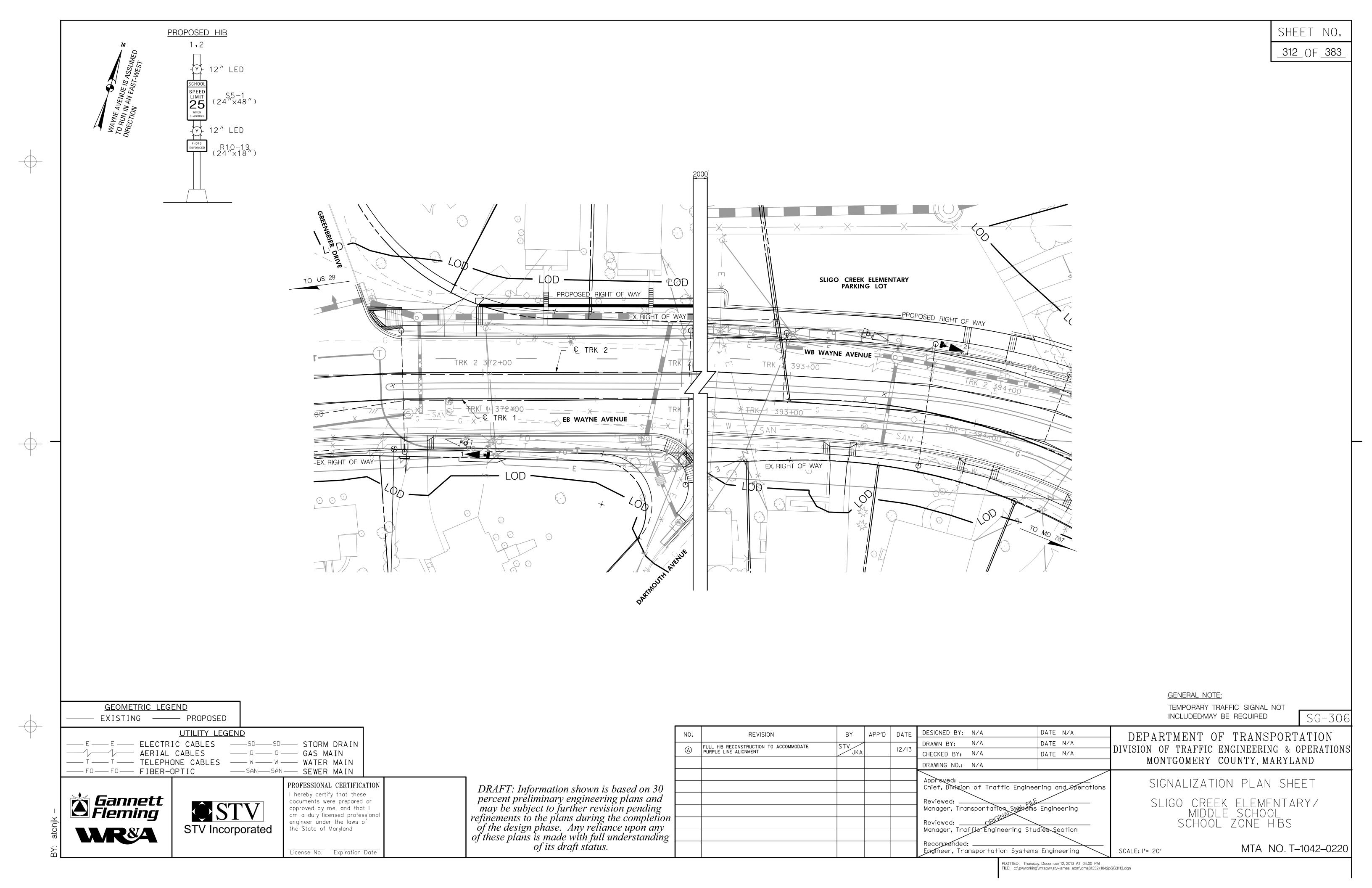


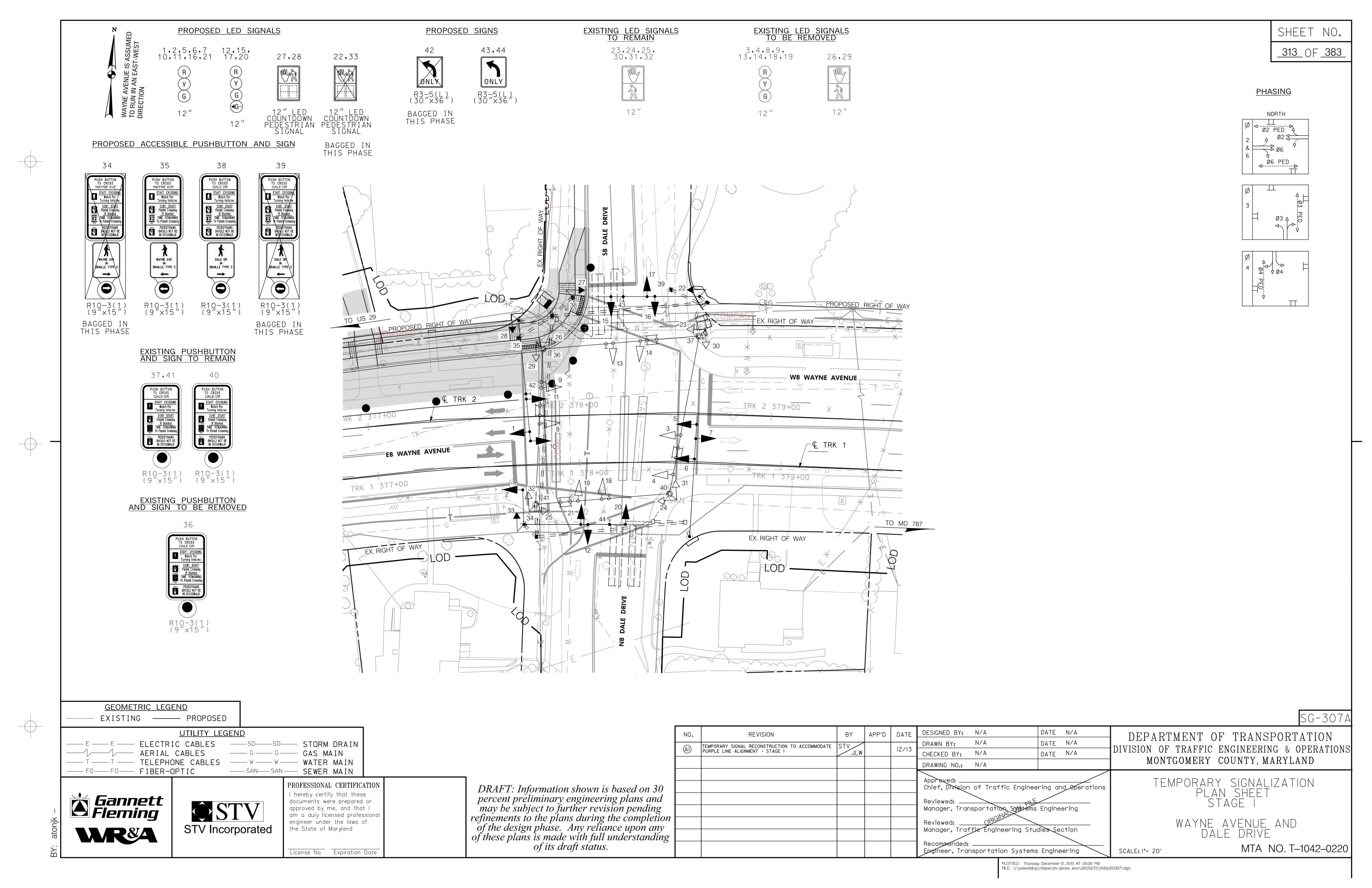


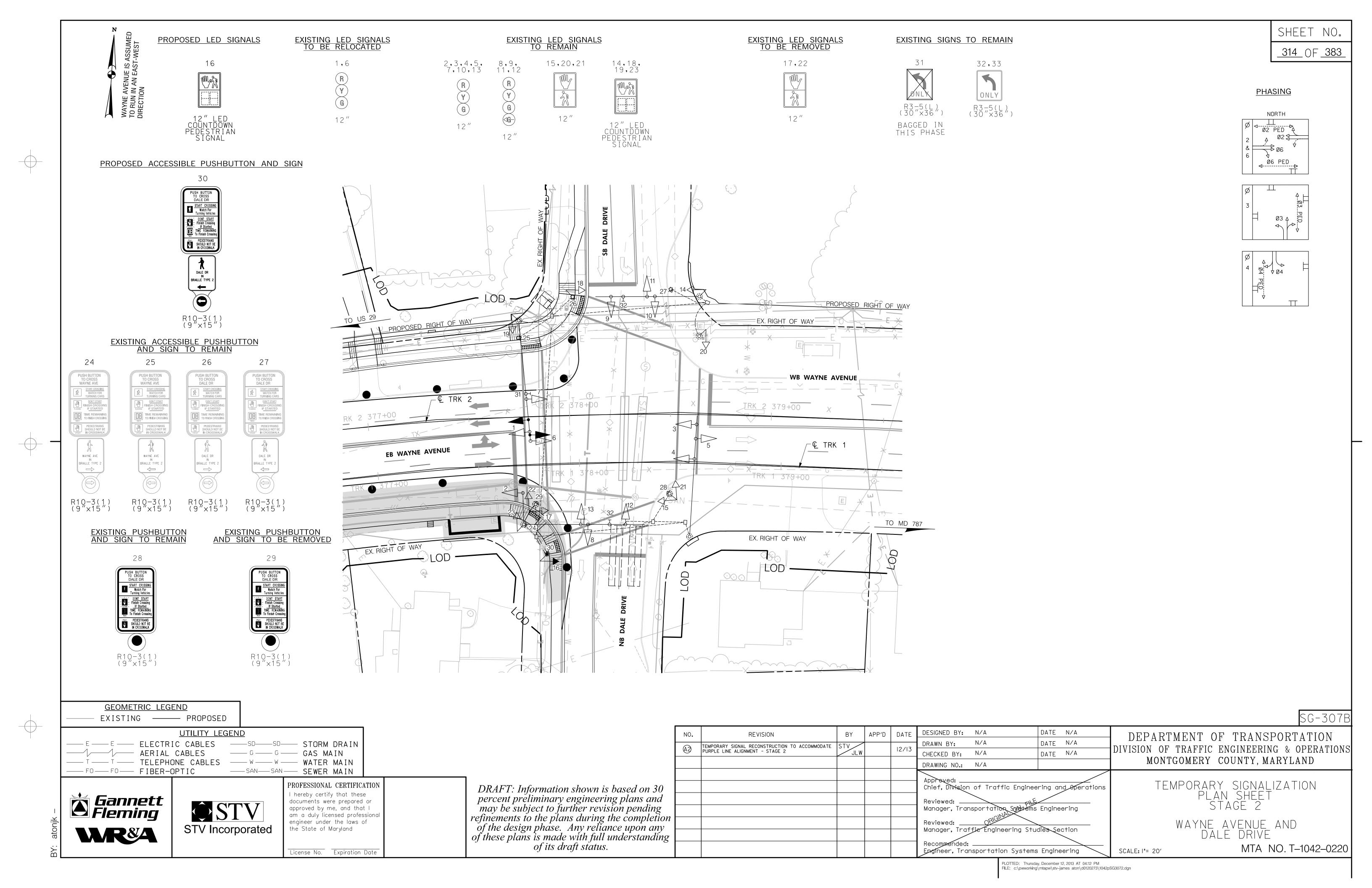


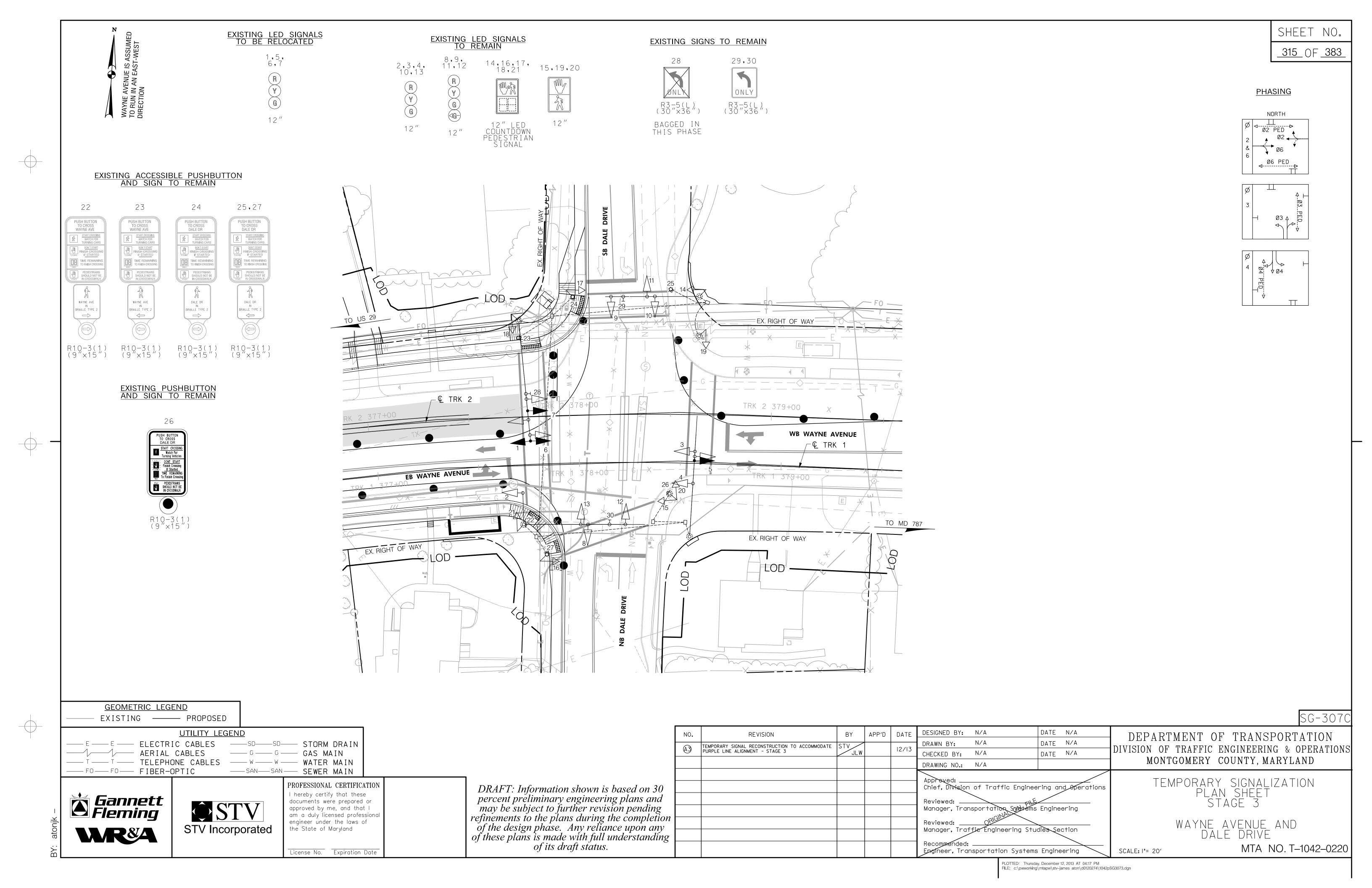


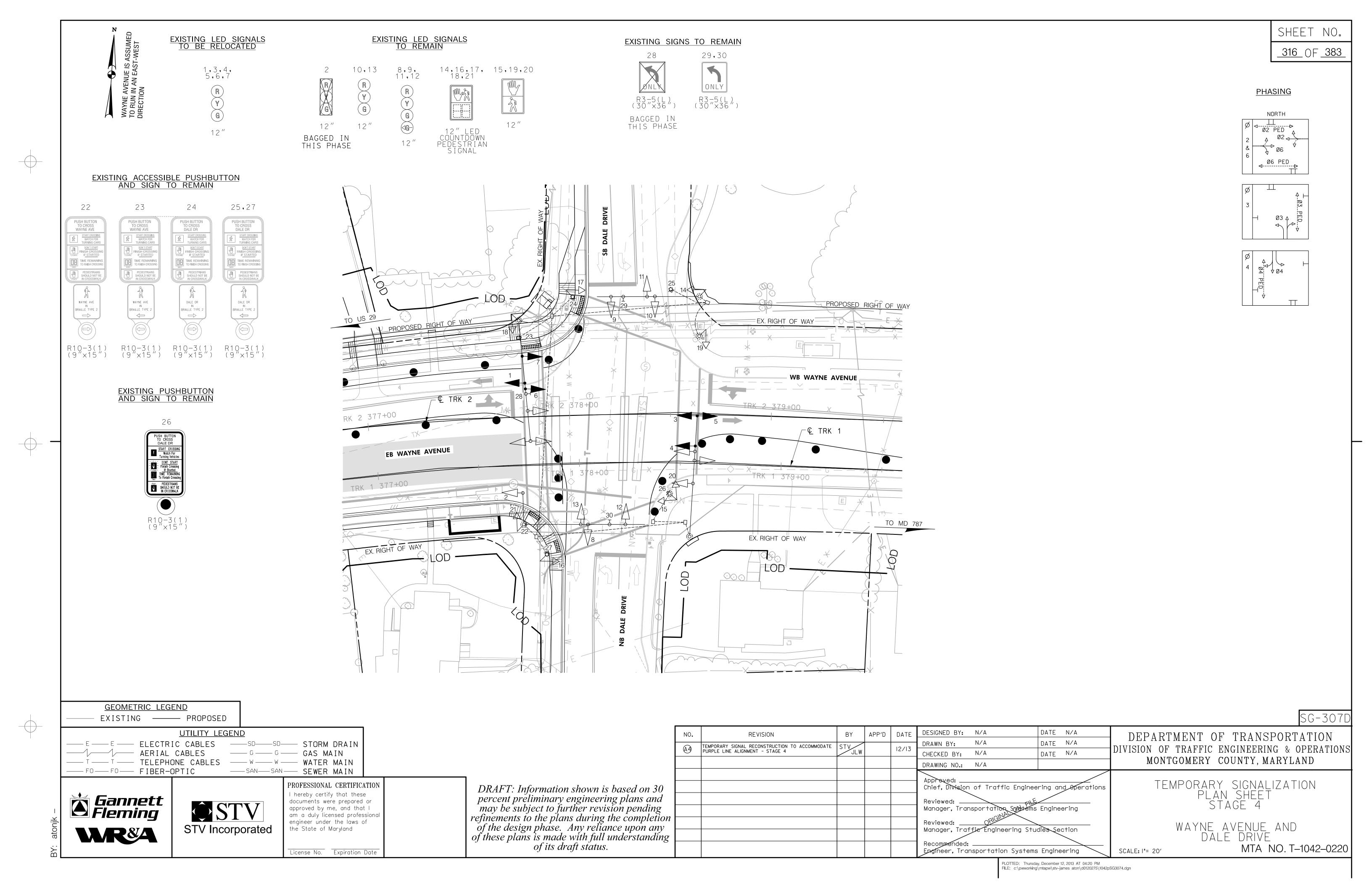


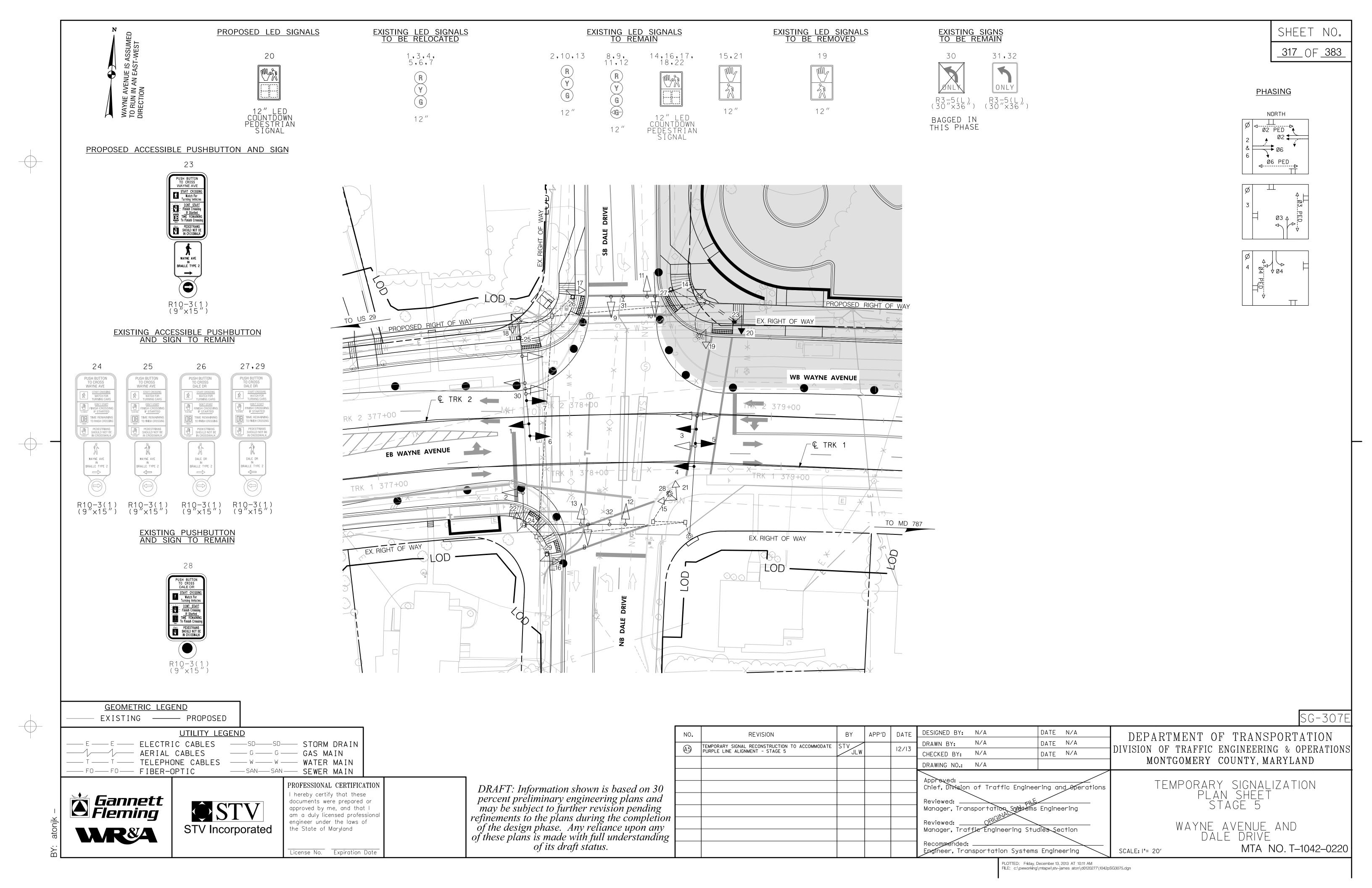


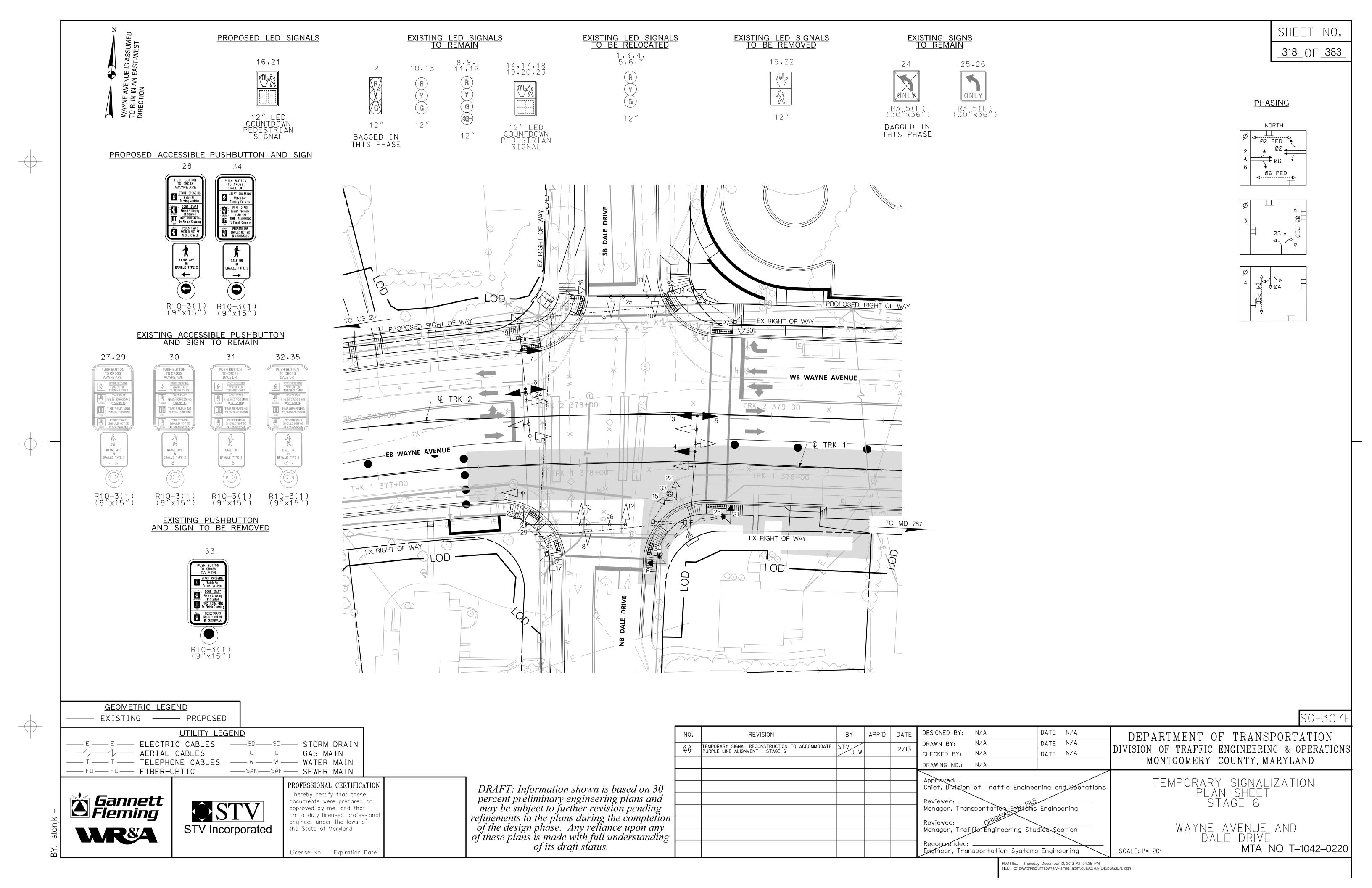


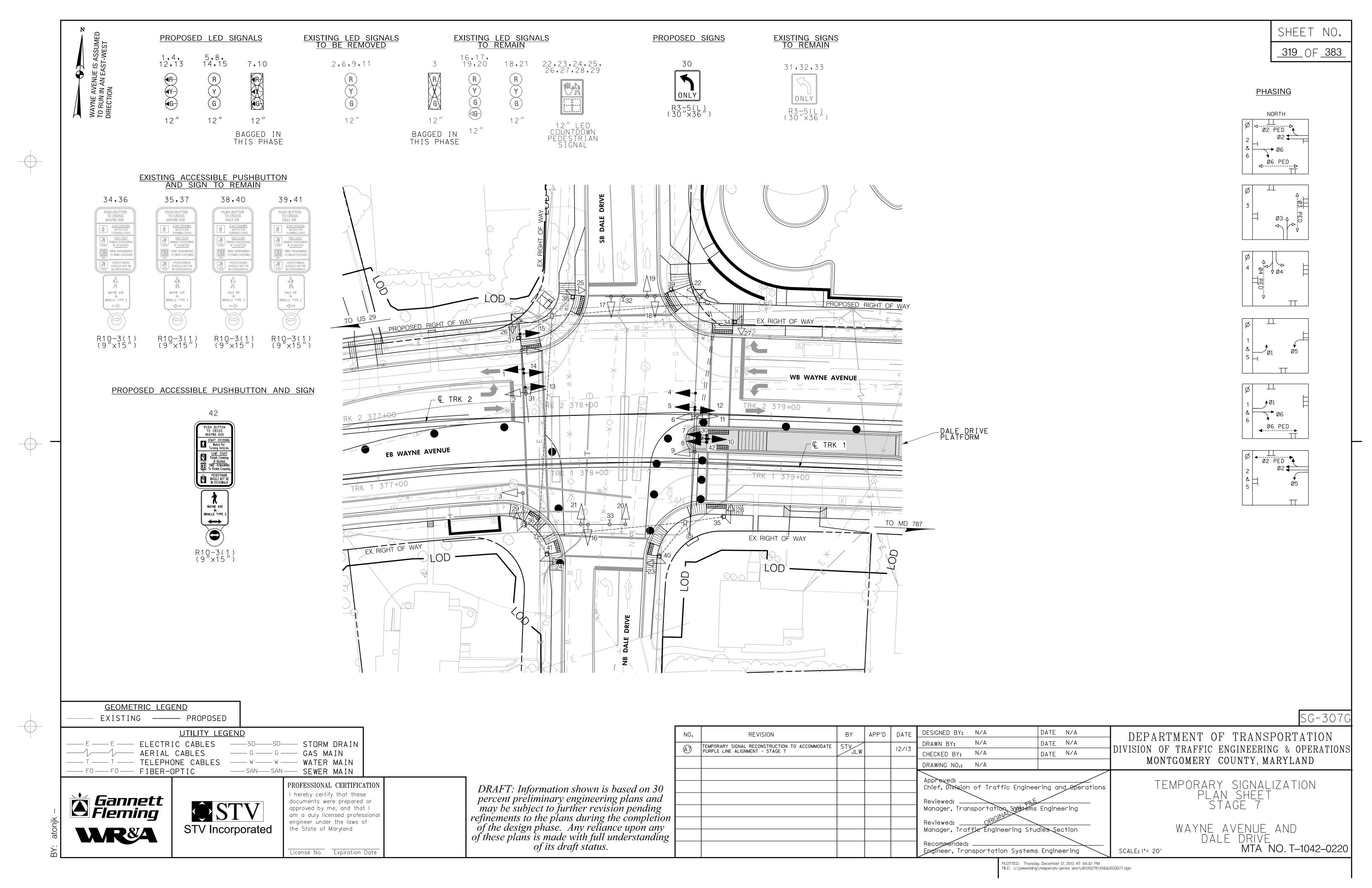


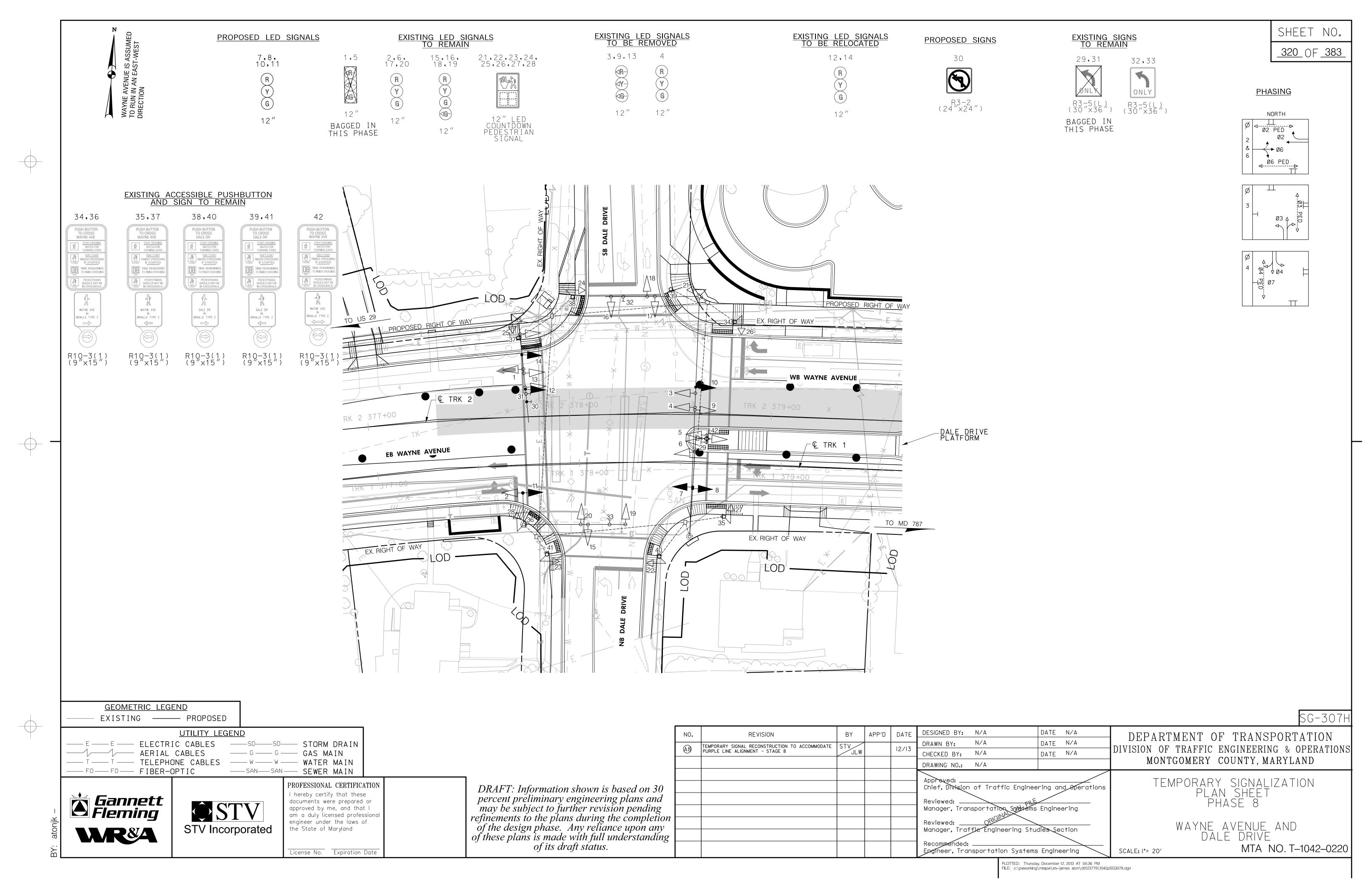


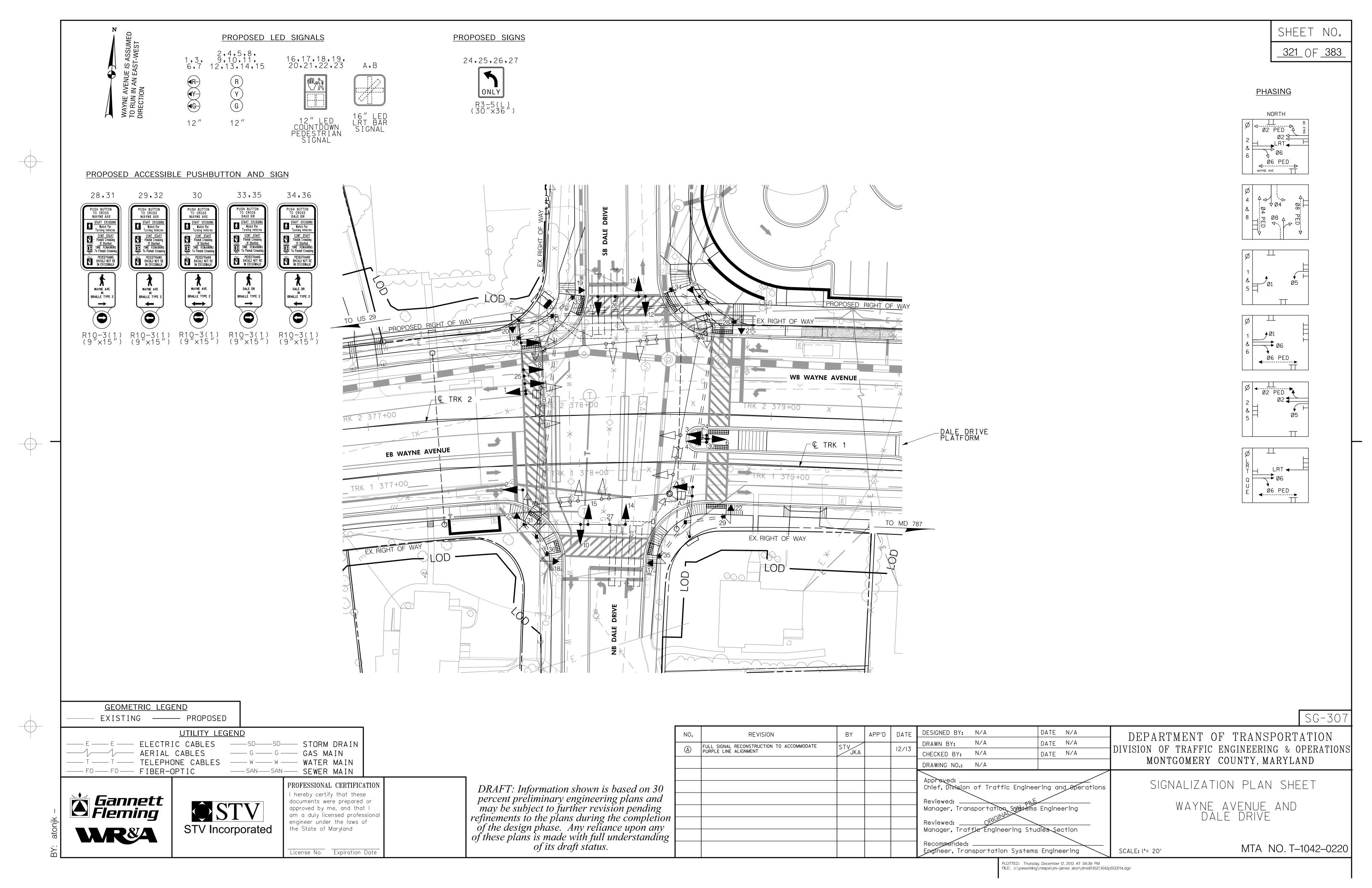


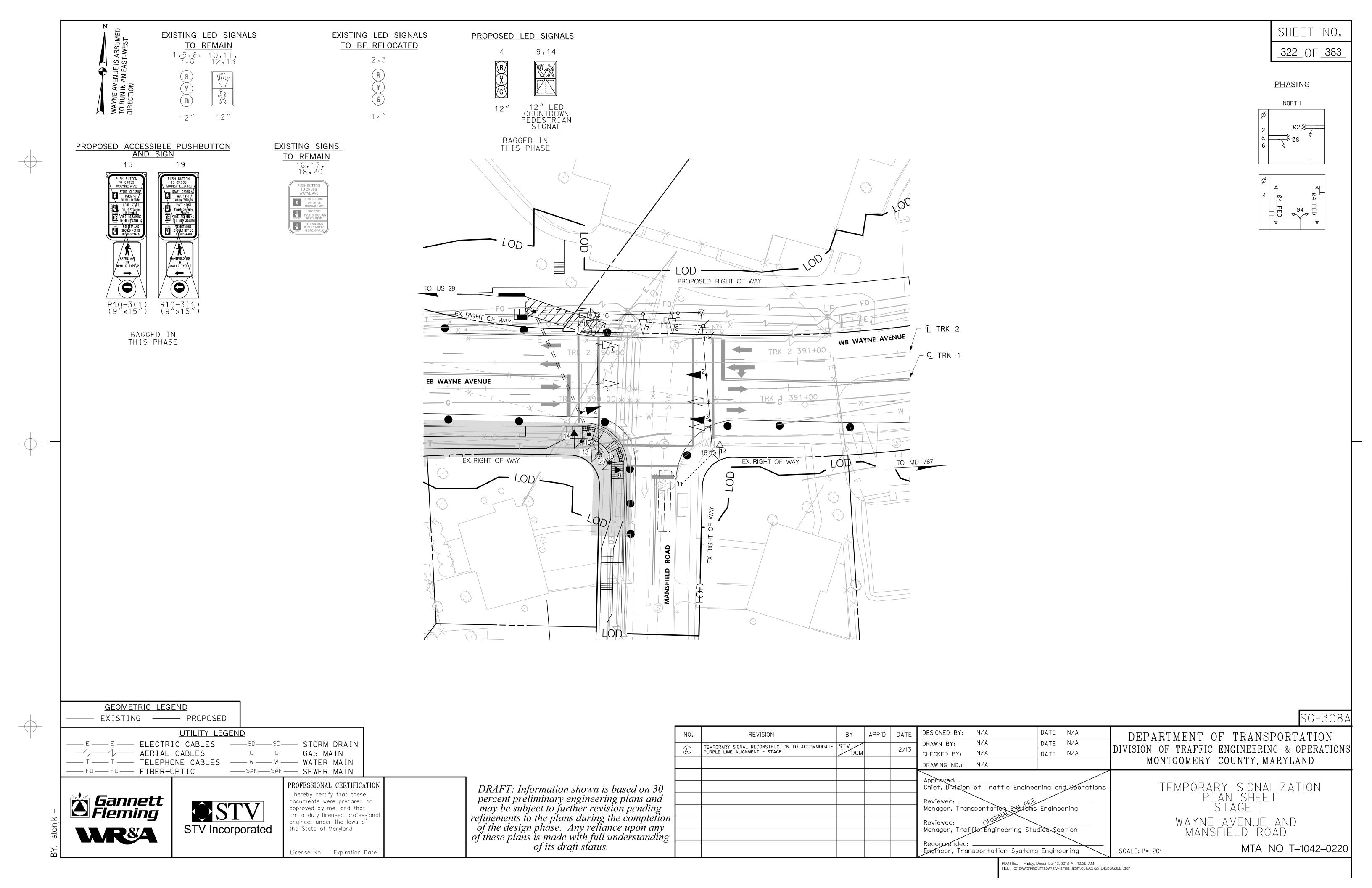


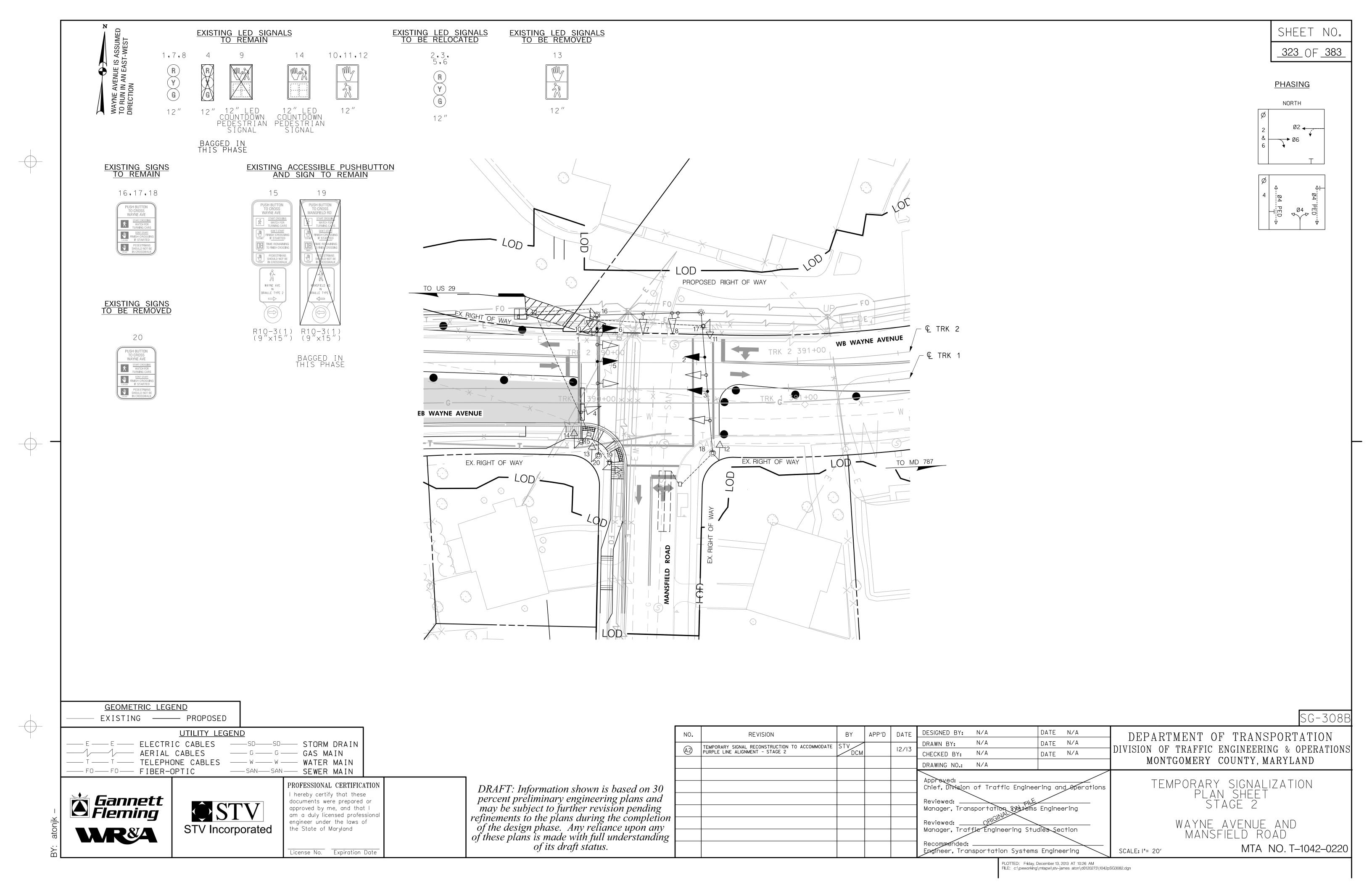


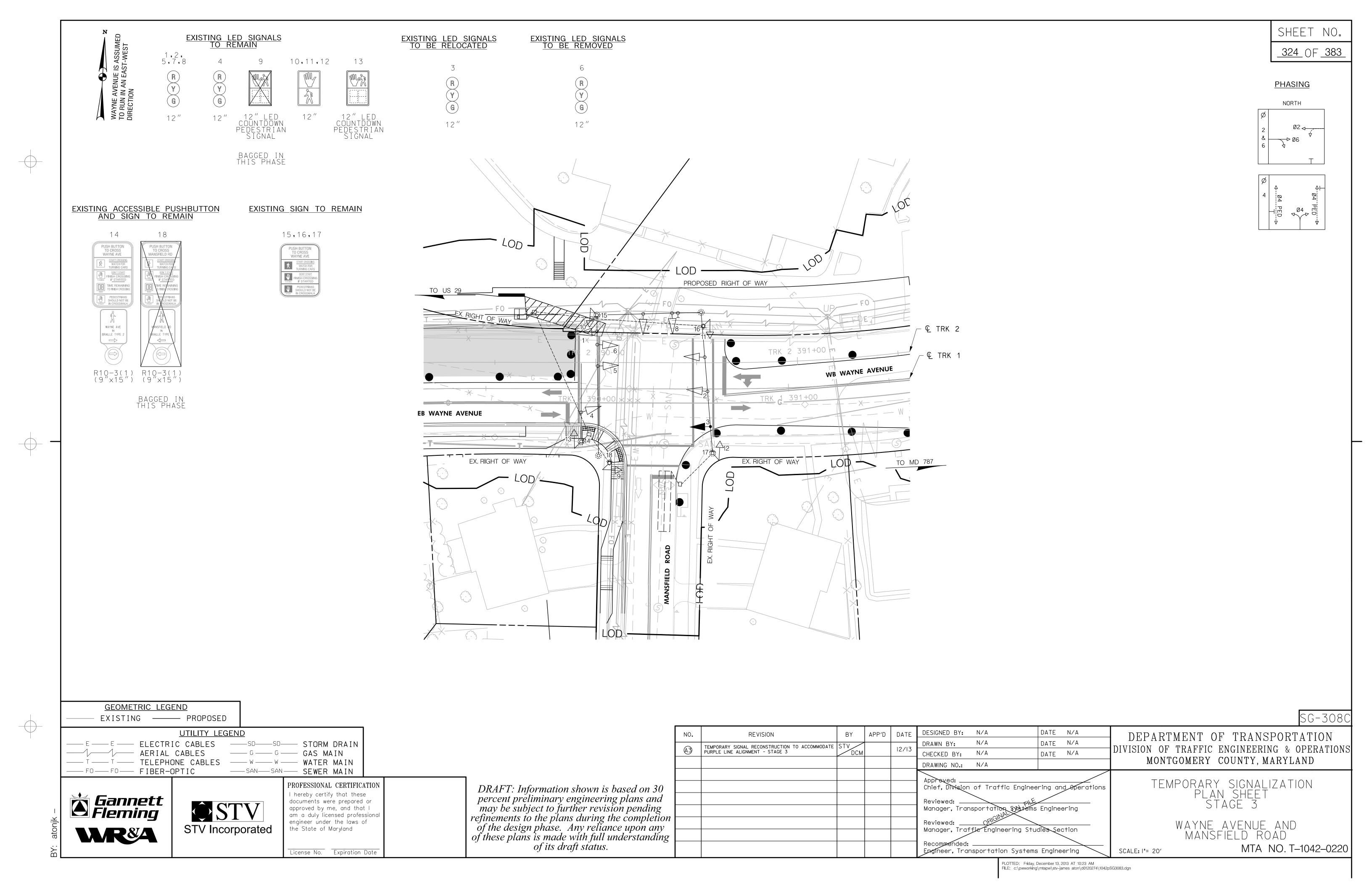


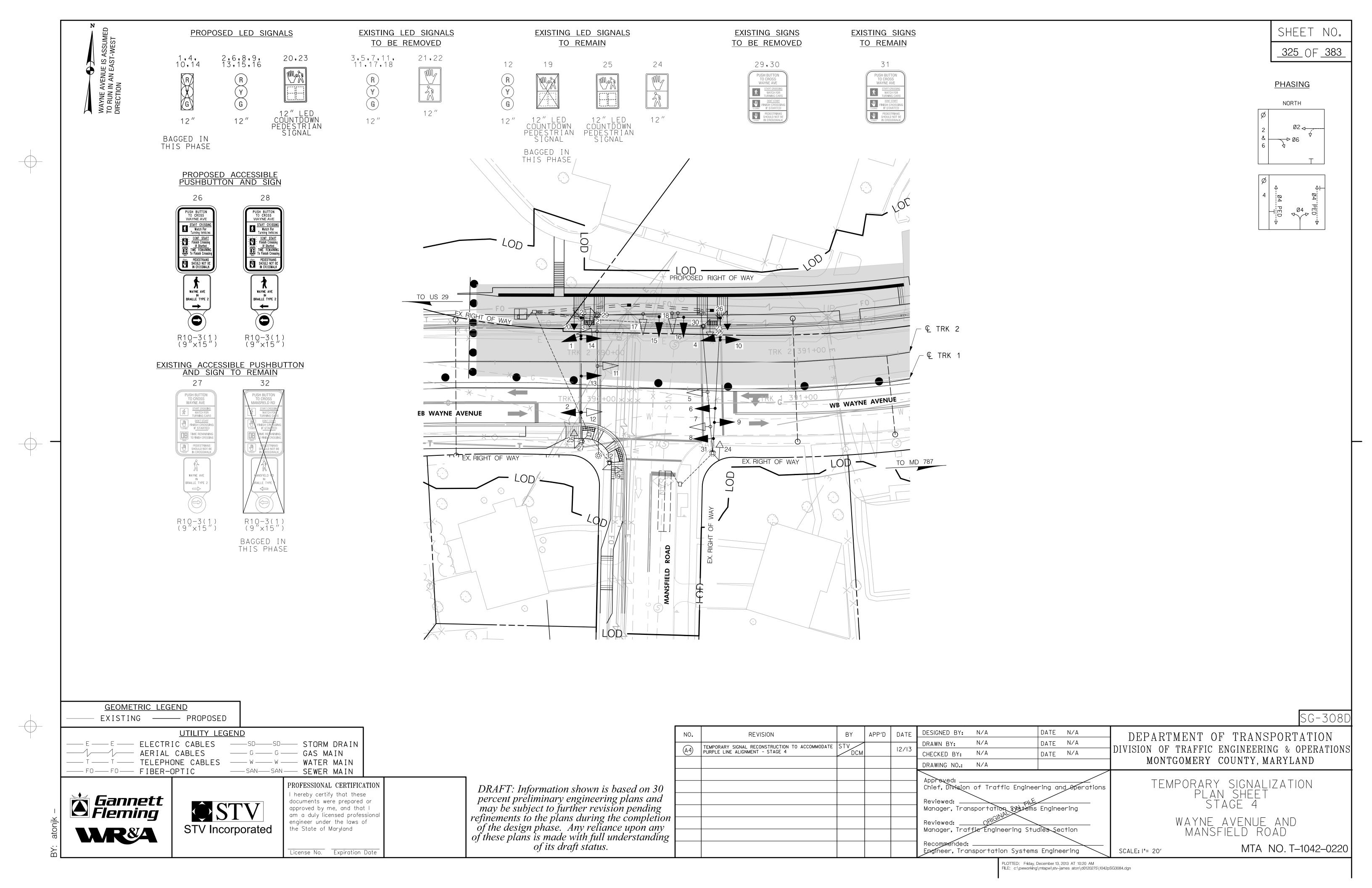


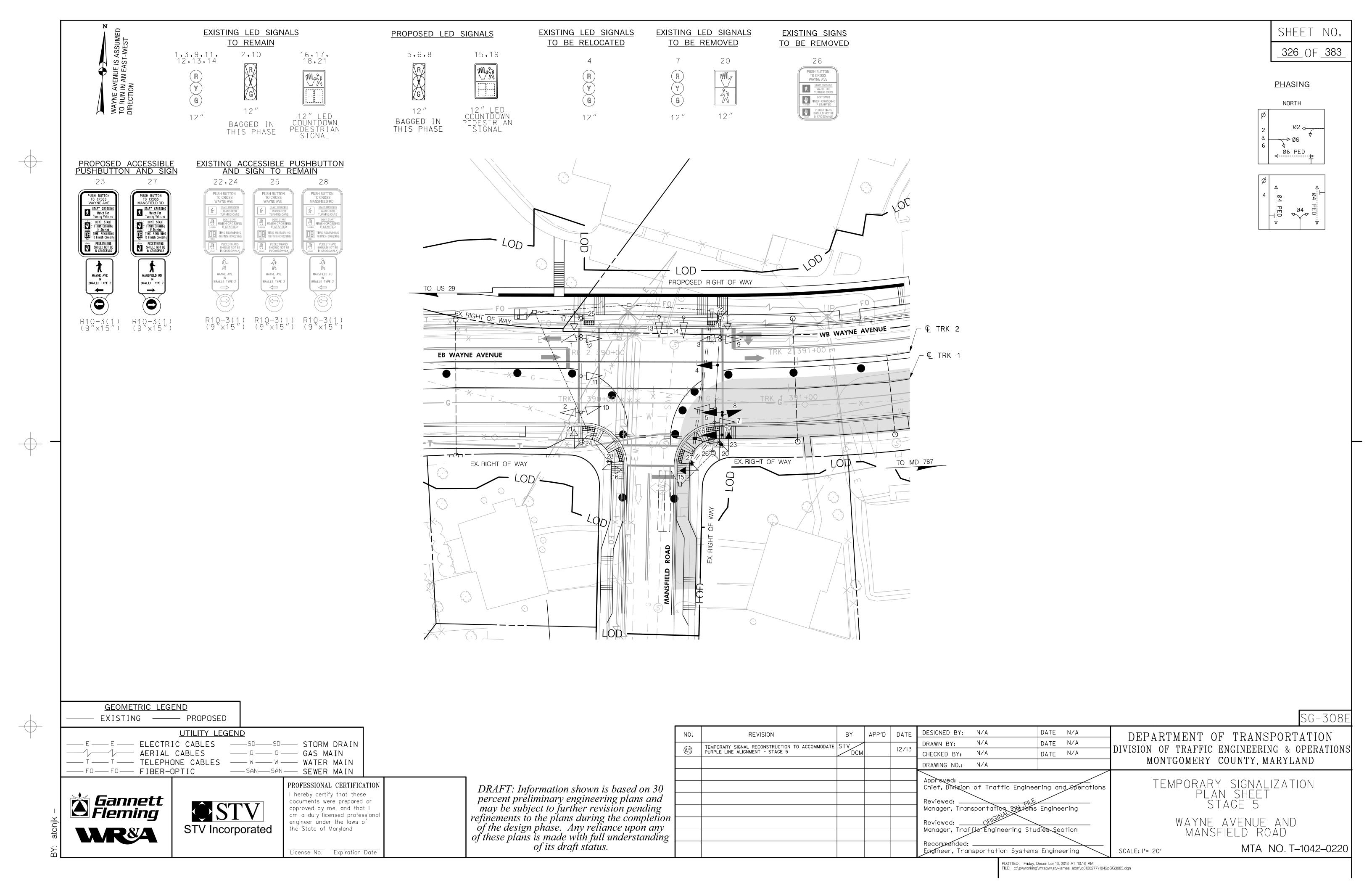


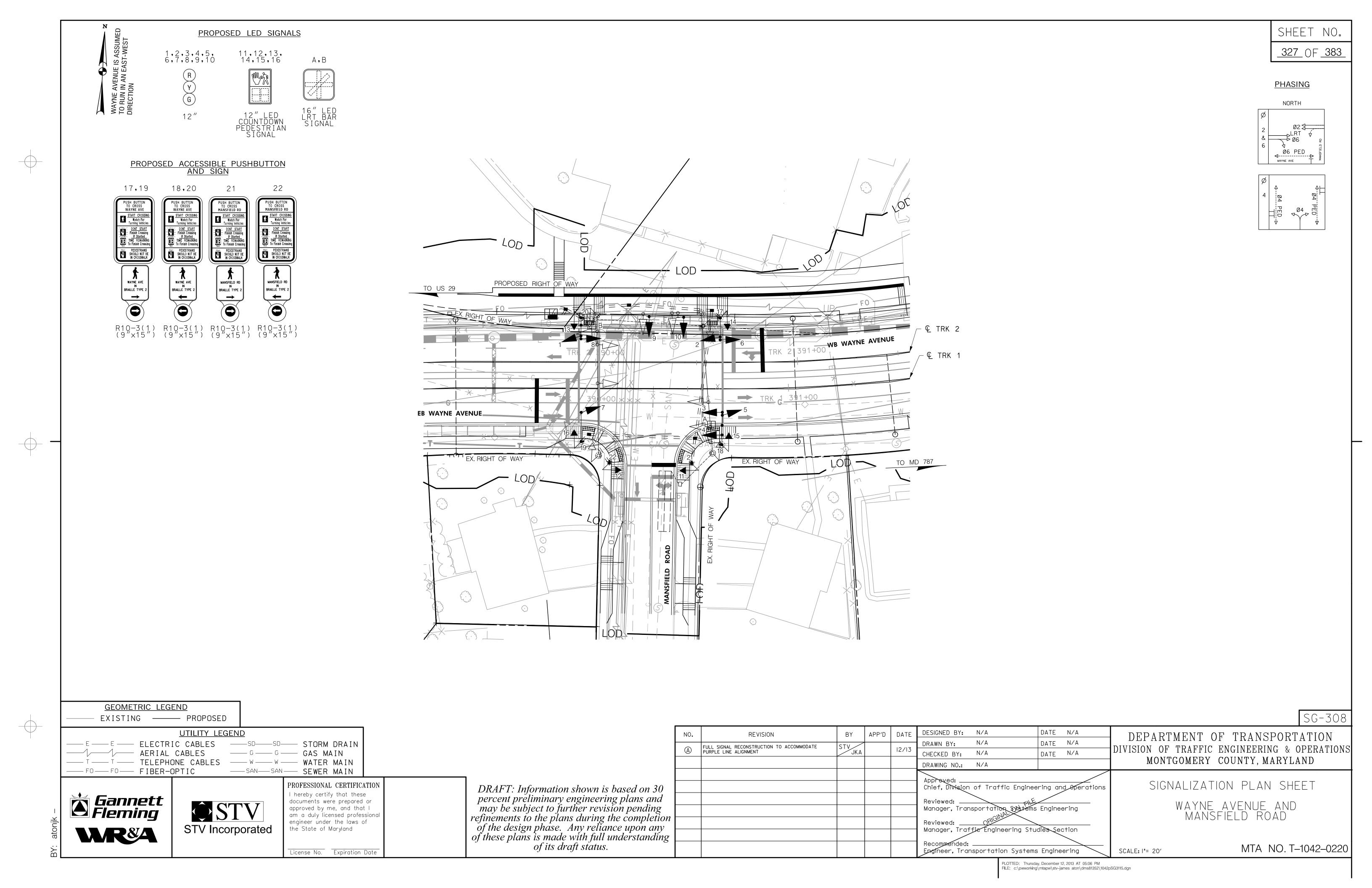


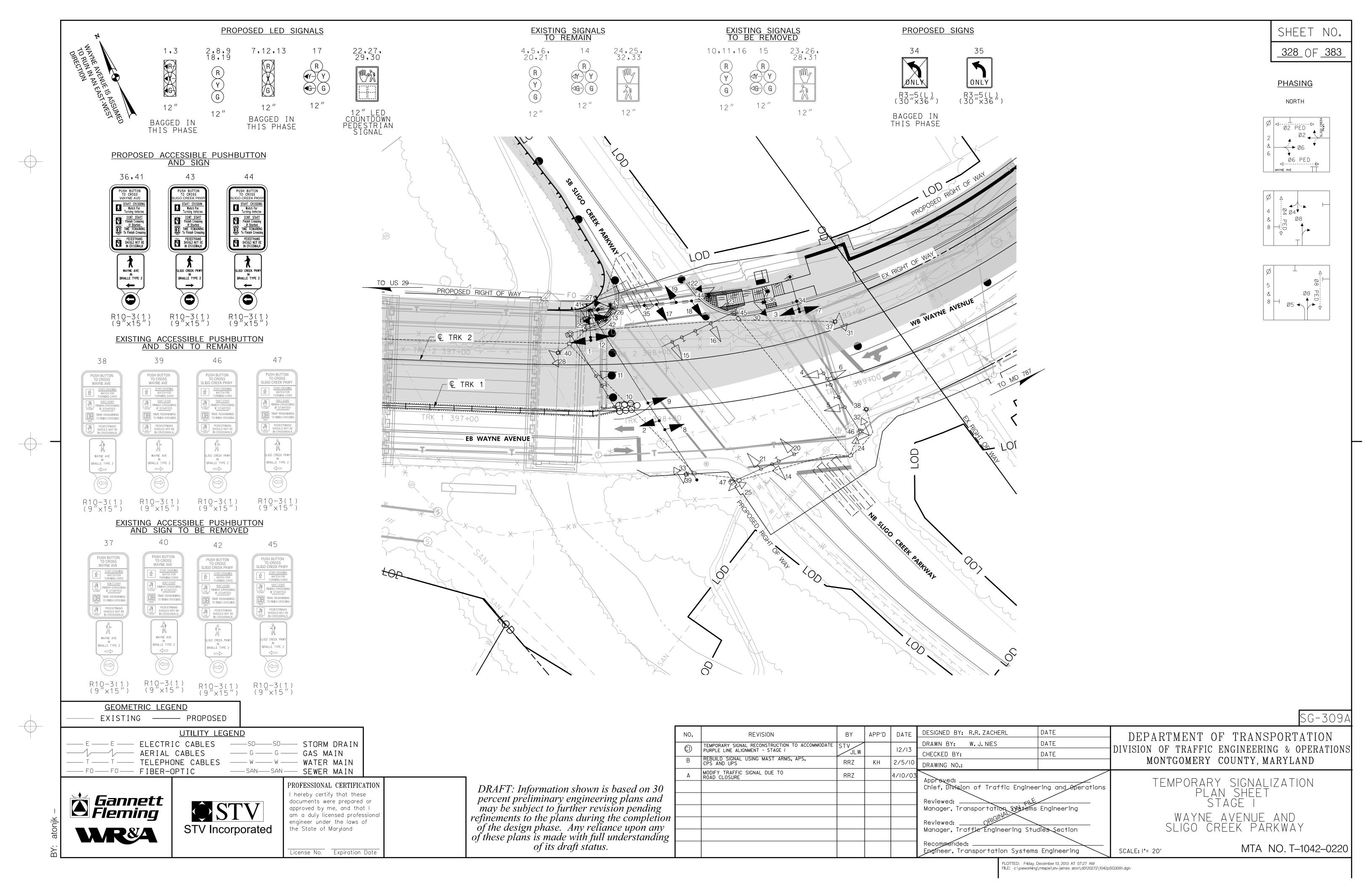


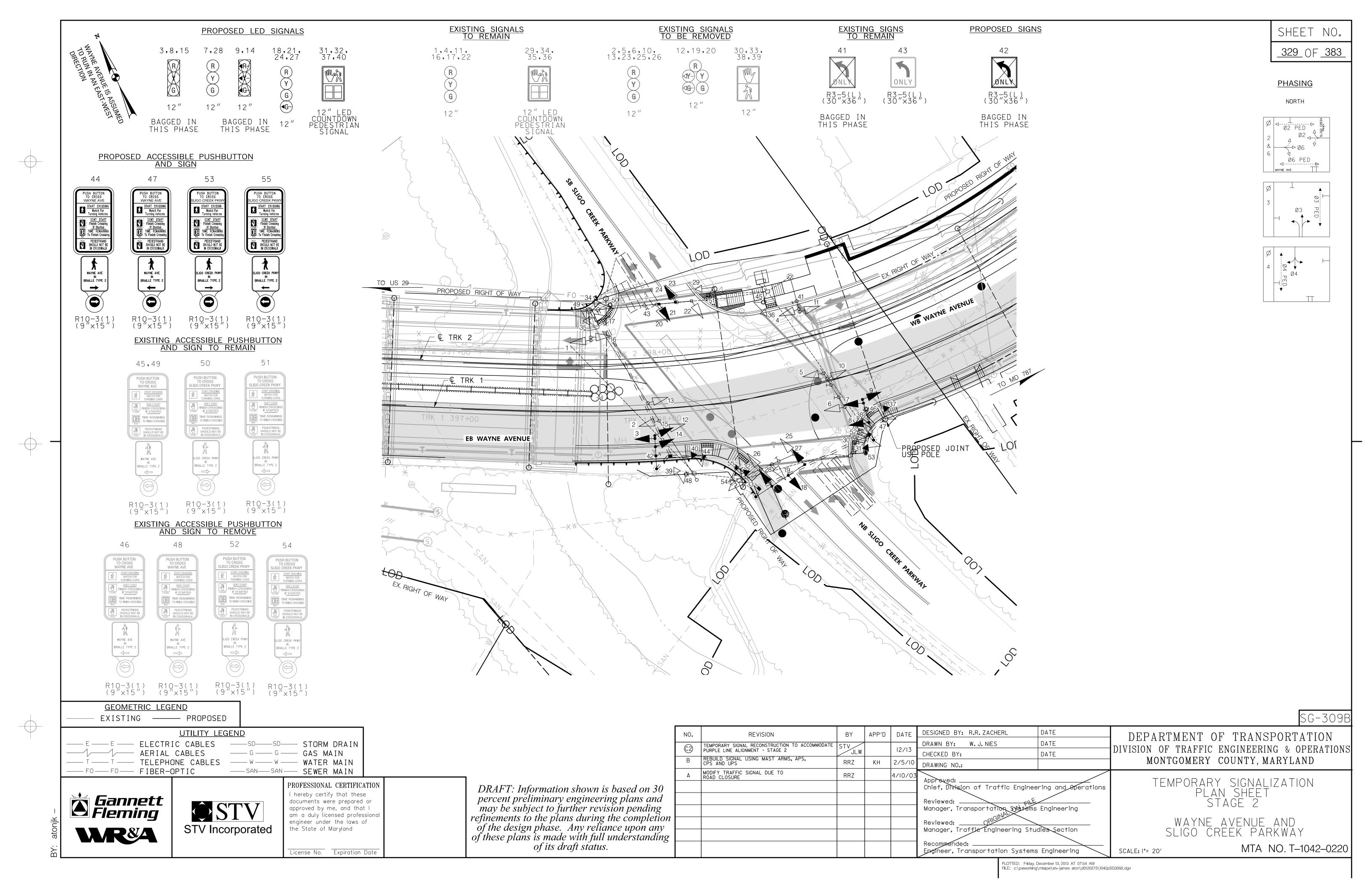


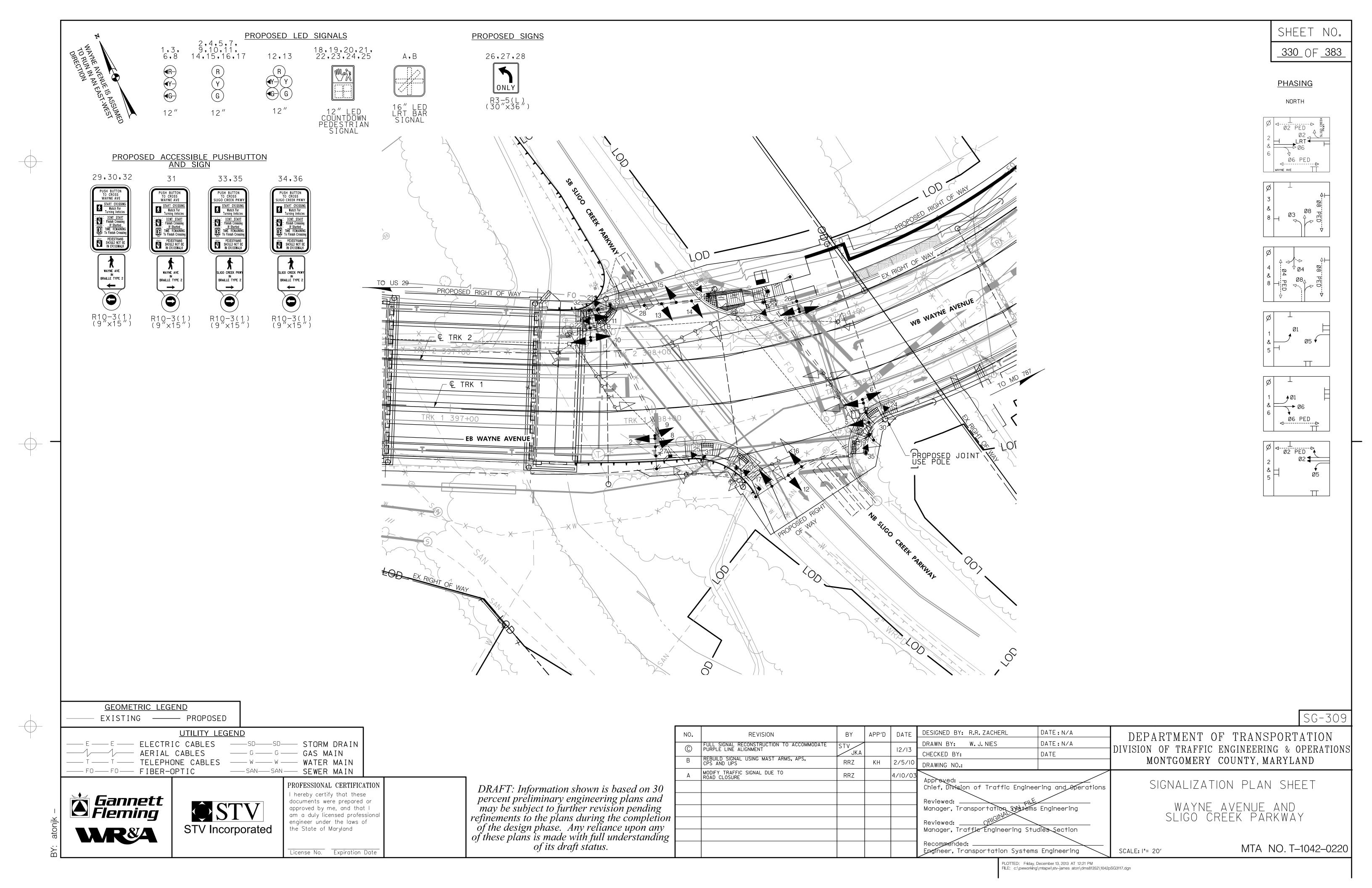


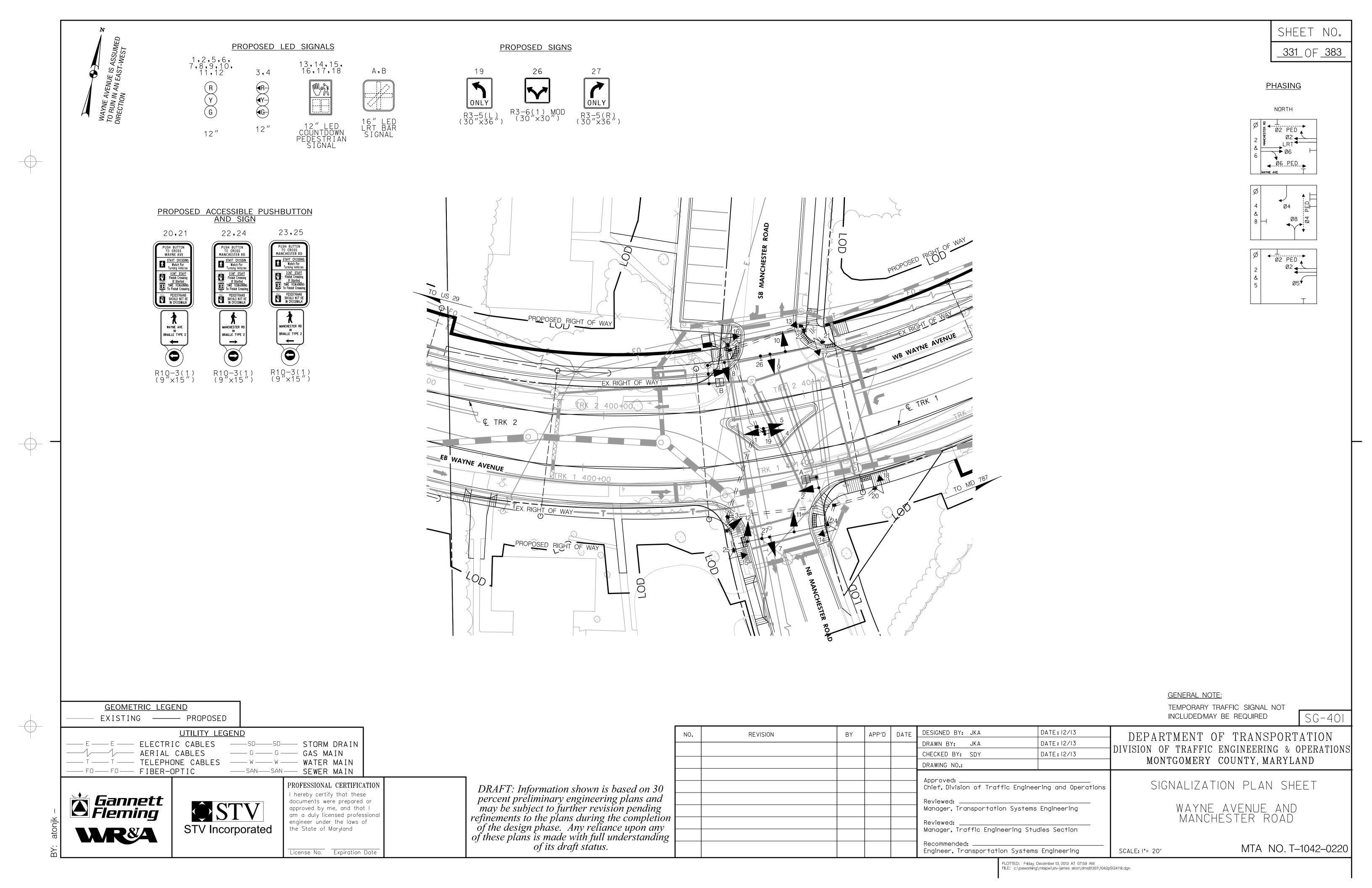


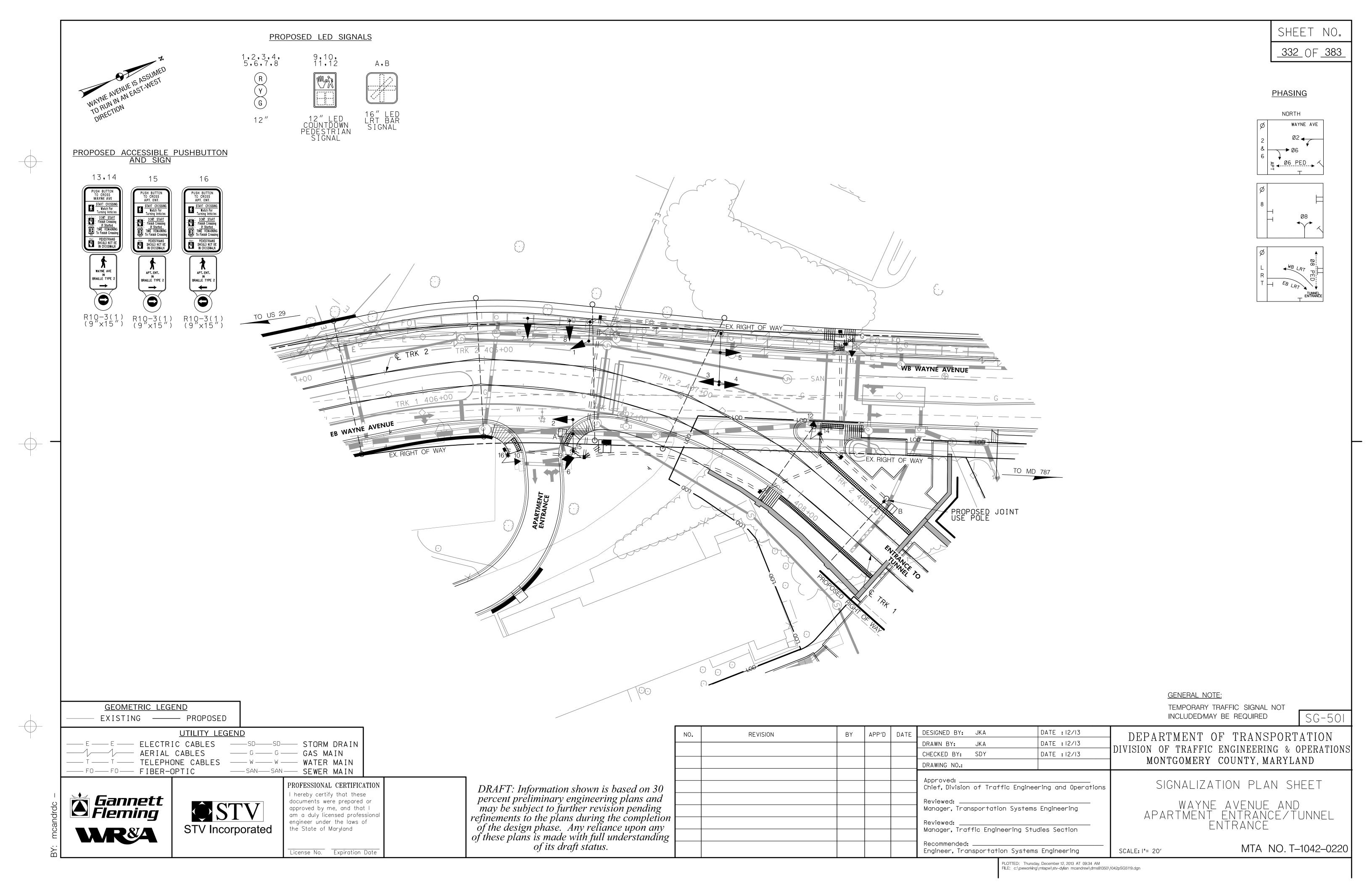


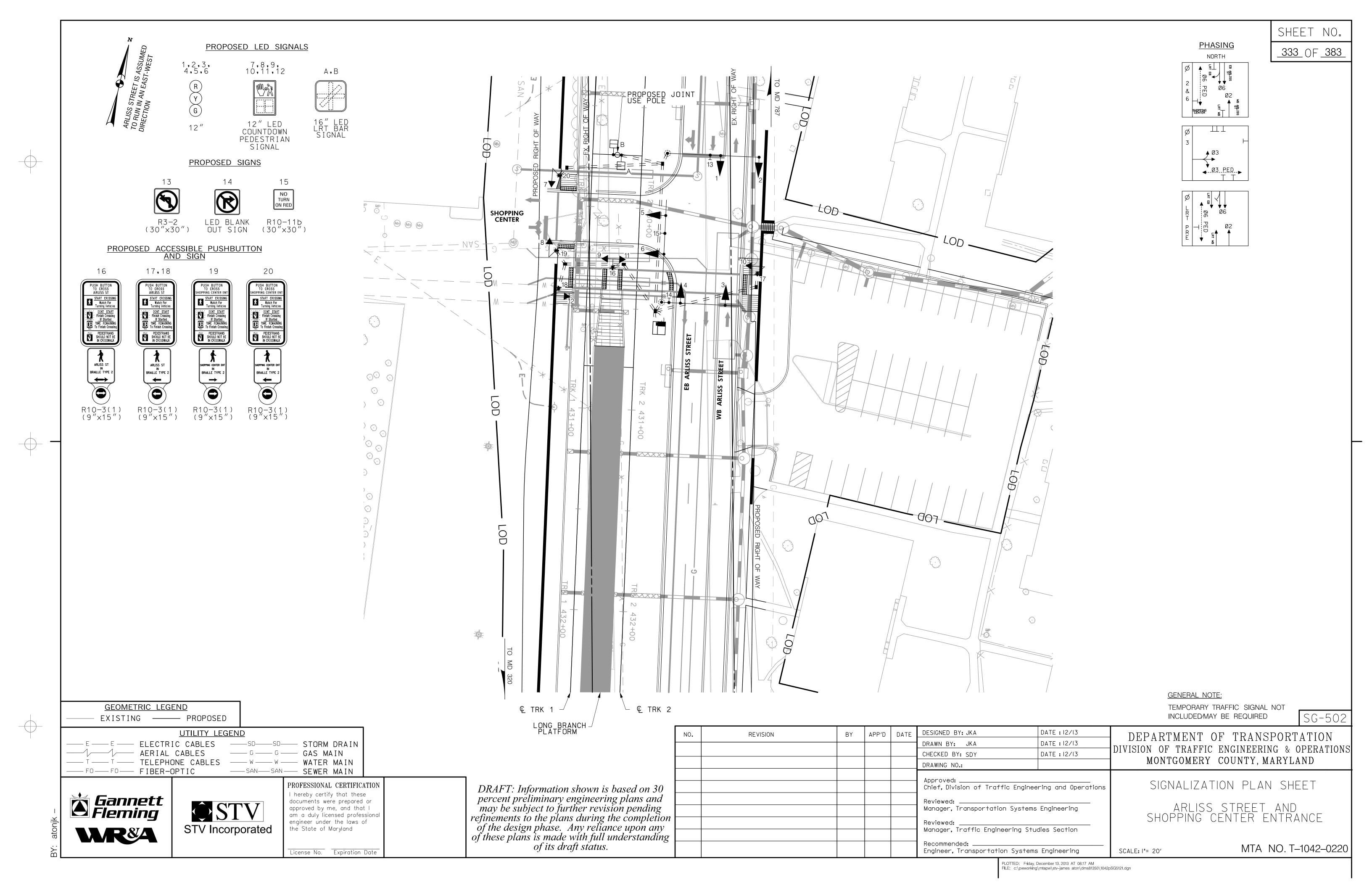


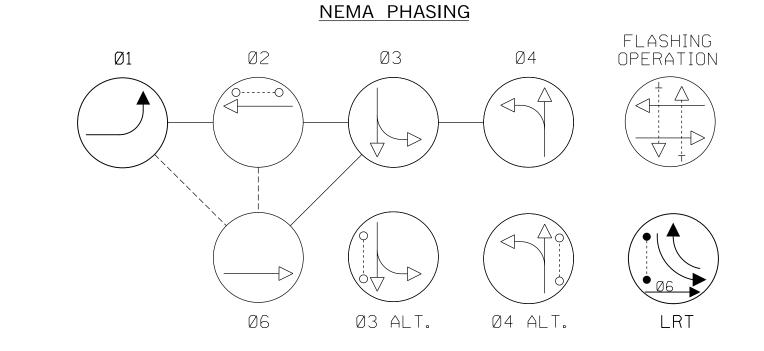




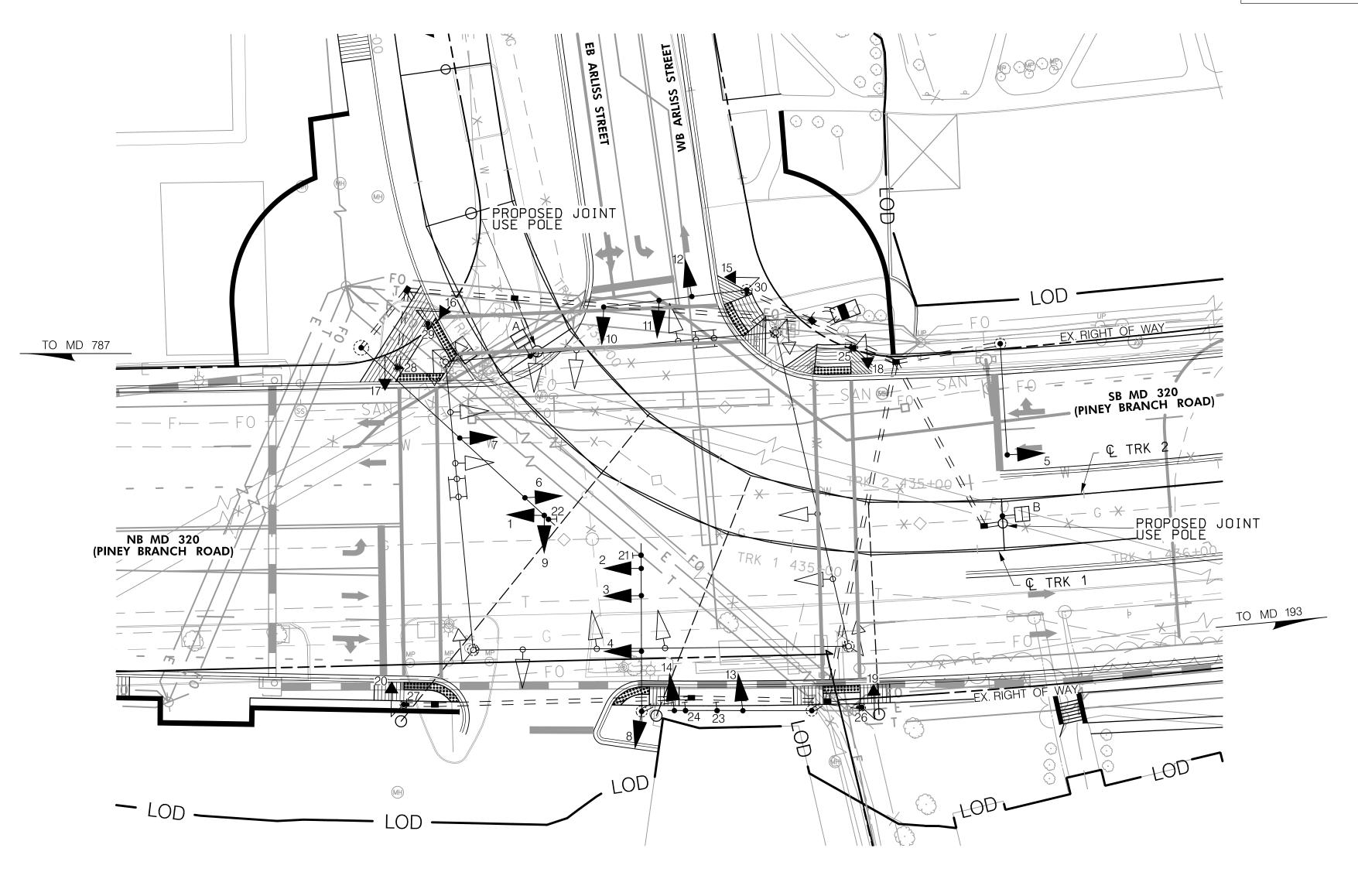








NOTE:
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



GENERAL NOTE:

TEMPORARY TRAFFIC SIGNAL NOT INCLUDED/MAY BE REQUIRED

SG-503

SHEET NO. 334 OF 383

TS NO. 341C

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 320 (PINEY BRANCH ROAD)

AND ARLISS STREET SILVER SPRING, MARYLAND

**GEOMETRIC LEGEND** EXISTING ——— PROPOSED

UTILITY LEGEND

— E — E — ELECTRIC CABLES ----SD-----STORM DRAIN AERIAL CABLES —— G—— GAS MAIN ---- T---- TELEPHONE CABLES ---- W---- WATER MAIN -----SAN------SEWER MAIN ----F0----FIBER-OPTIC





DRAFT: Information shown is based on 30 percent preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

APPROVALS	
	0
TEAM LEADER	S
ASST. DIV. CHIEF ,	
ASST. DIV. CHIEF	
DIVISION CHIEF	
ØFFICE DIRECTOR	
DITIOL DINECTOR	

VALS		REVIS	SIONS	
	FULL SIGNAL ACCOMMODAT MTA_NO.T-10			/ENT 12/13
	STYDOM			

SIGNALIZATION	PLAN	SHEET
CALE <u>1" = 20'</u> ADVERTISED DATE	CONTR	RACT NO
ESIGNED BY	COUNTY	MONTGOMERY
RAWN BY	LOGMILE	15032001.77
HECKED BY	TIMS NO	
A.P. NO	TOD NO.	

DRAWING SG-503 OF

PLOTTED: Friday, December 13, 2013 AT 08:41 AM FILE: c:\pwworking\mtapw\stv-james aton\dms81350\1042pSG5122.dgn

25,27

26,28

START CROSSIN

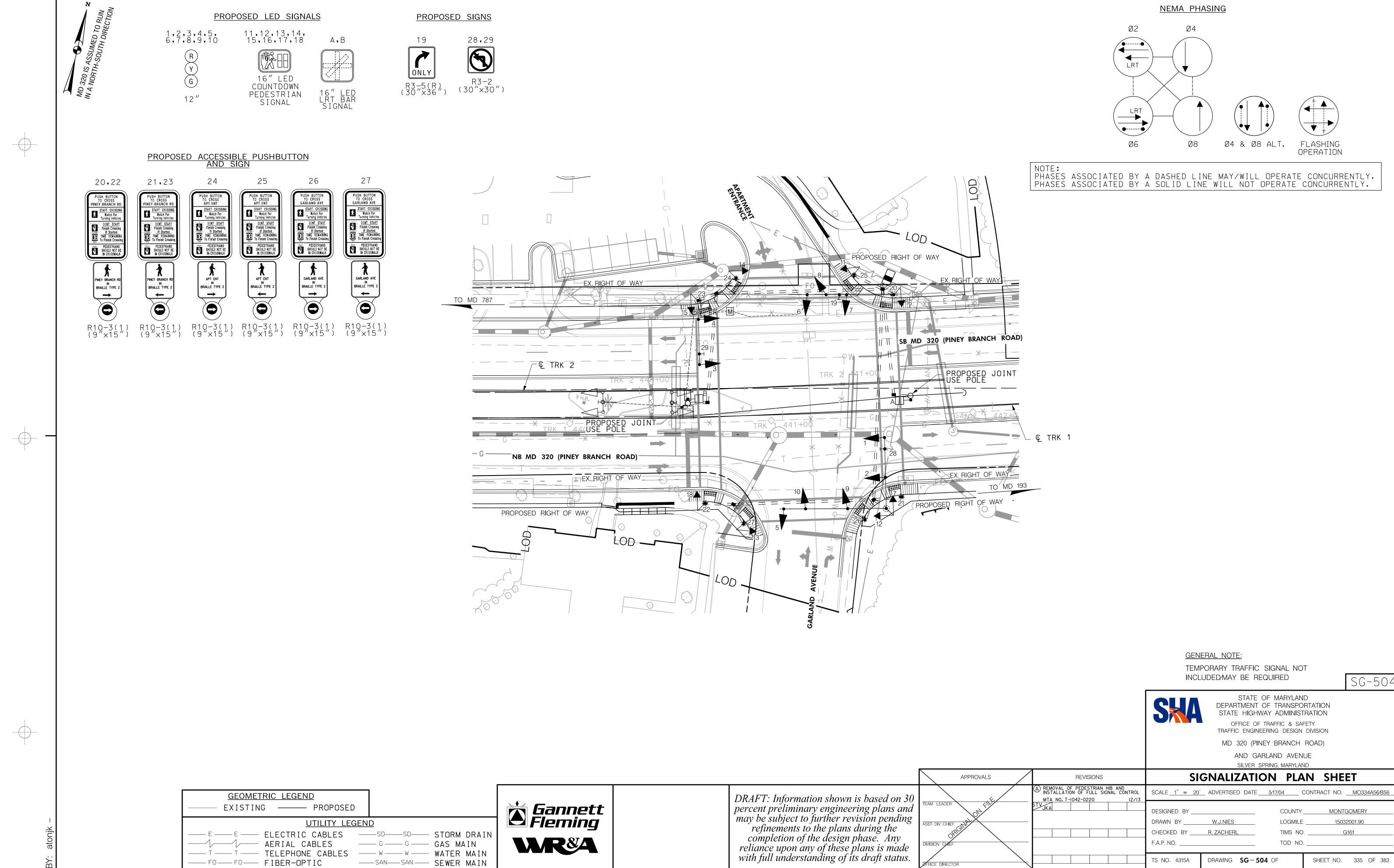
Watch For
Turning Vehicles

DONT START
Finish Crossing
If Started
IMER REMAINING
To Finish Crossiny
PEDESTRIANS
SHOULD NOT BE
IN CROSSWALK

ARLISS ST
IN
BRAILLE TYPE 2

START CROSSING
Watch For
Turning Vehicles
Finish Crossing
If Started
I Started
To Finish Crossing
STORY
PEDESTRIANS
SHOULD NOT BE
IN CROSSWALK

ARLISS ST
IN
BRAILLE TYPE 2



DRAWING SG-504 OF

LOTTED: Friday, December 13, 2013 AT 01:44 PM

FILE: c:\pwworking\mtapw\stv-james aton\dms81350\1042pSG5123.dgn

SHEET NO. 335 OF 383

----F0----FIBER-OPTIC

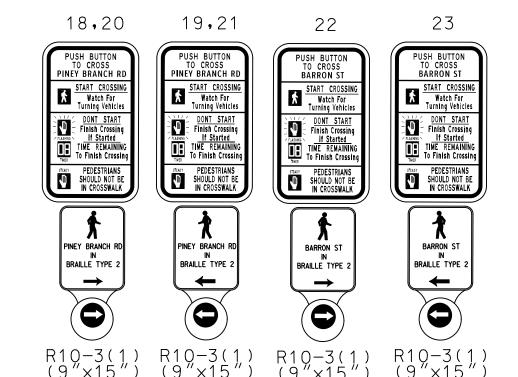
16" LED

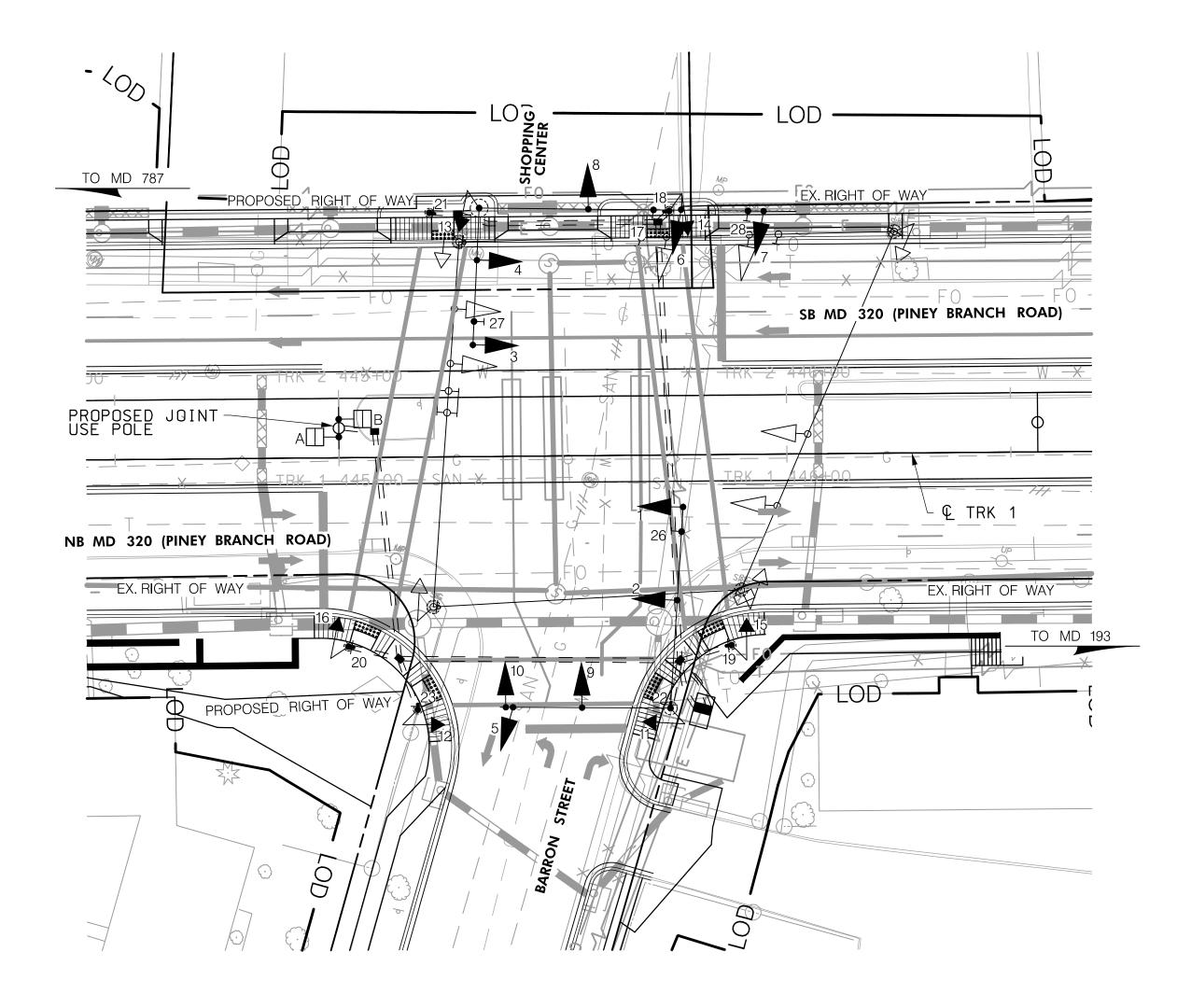
COUNTDOWN PEDESTRIAN SIGNAL

PROPOSED SIGNS

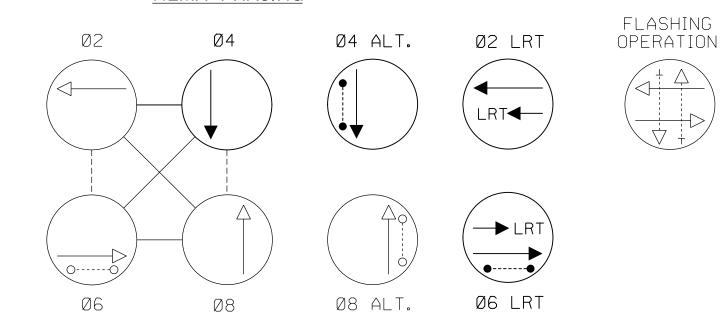
28 ONLY R3-5(L) (30"x36") (30"x30")

## PROPOSED ACCESSIBLE PUSHBUTTON AND SIGN





## NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

GENERAL NOTE:

TEMPORARY TRAFFIC SIGNAL NOT INCLUDED/MAY BE REQUIRED

SG-505



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 320 (PINEY BRANCH ROAD)

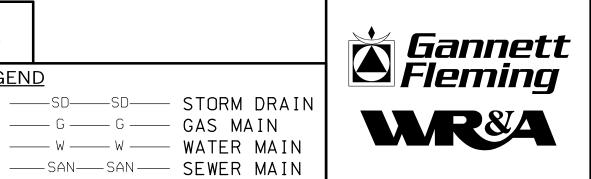
AND BARRON STREET

SILVER SPRING, MARYLAND

GEOMETRIC LEGEND	٦
EXISTING ———— PROPOSED	

—— FO—— FO—— FIBER-OPTIC

UTILITY LEGEND —— E —— ELECTRIC CABLES ----SD-----STORM DRAIN - AERIAL CABLES ---- G---- GAS MAIN \_\_\_\_\_T\_\_\_\_T\_\_\_\_TELEPHONE CABLES \_\_\_\_W\_\_\_W\_\_\_WATER MAIN



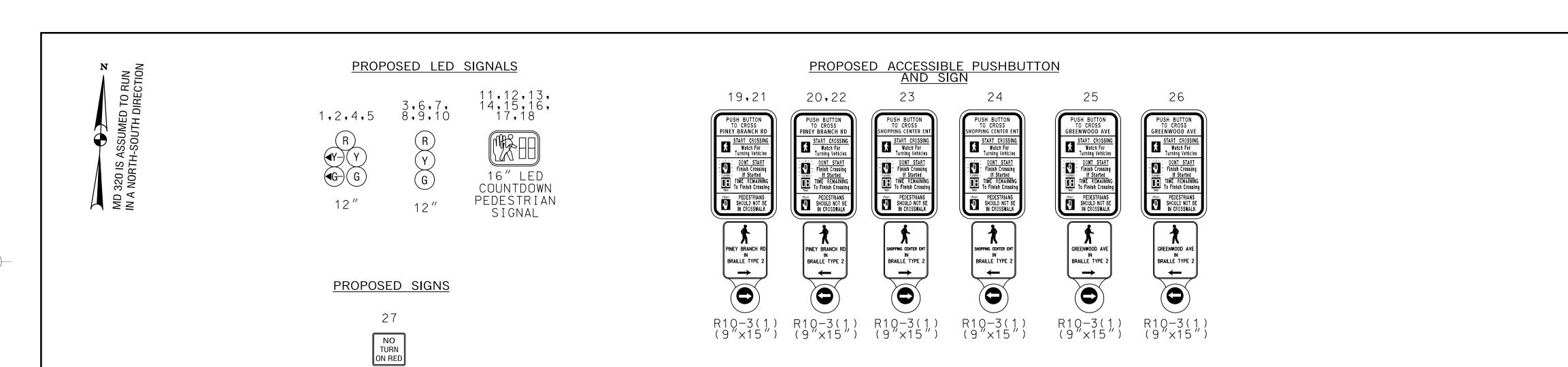


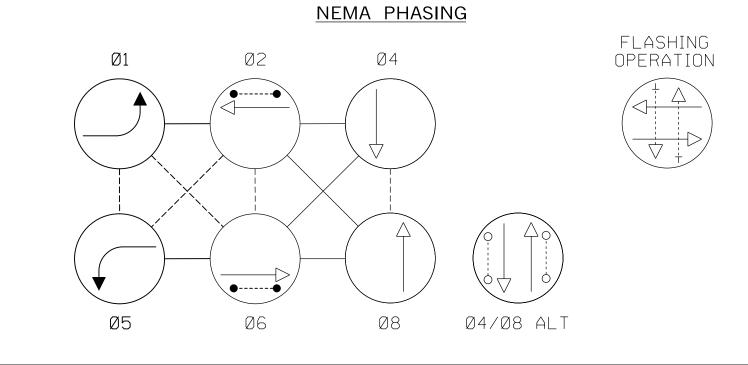
DRAFT: Information shown is based on 30 percent preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

	APPROVALS	_
)	TEAM LEADER	
	ASST. DIV. CHIEF	
	DIVISION CHIEF	
	ØFFICE DIRECTOR	_

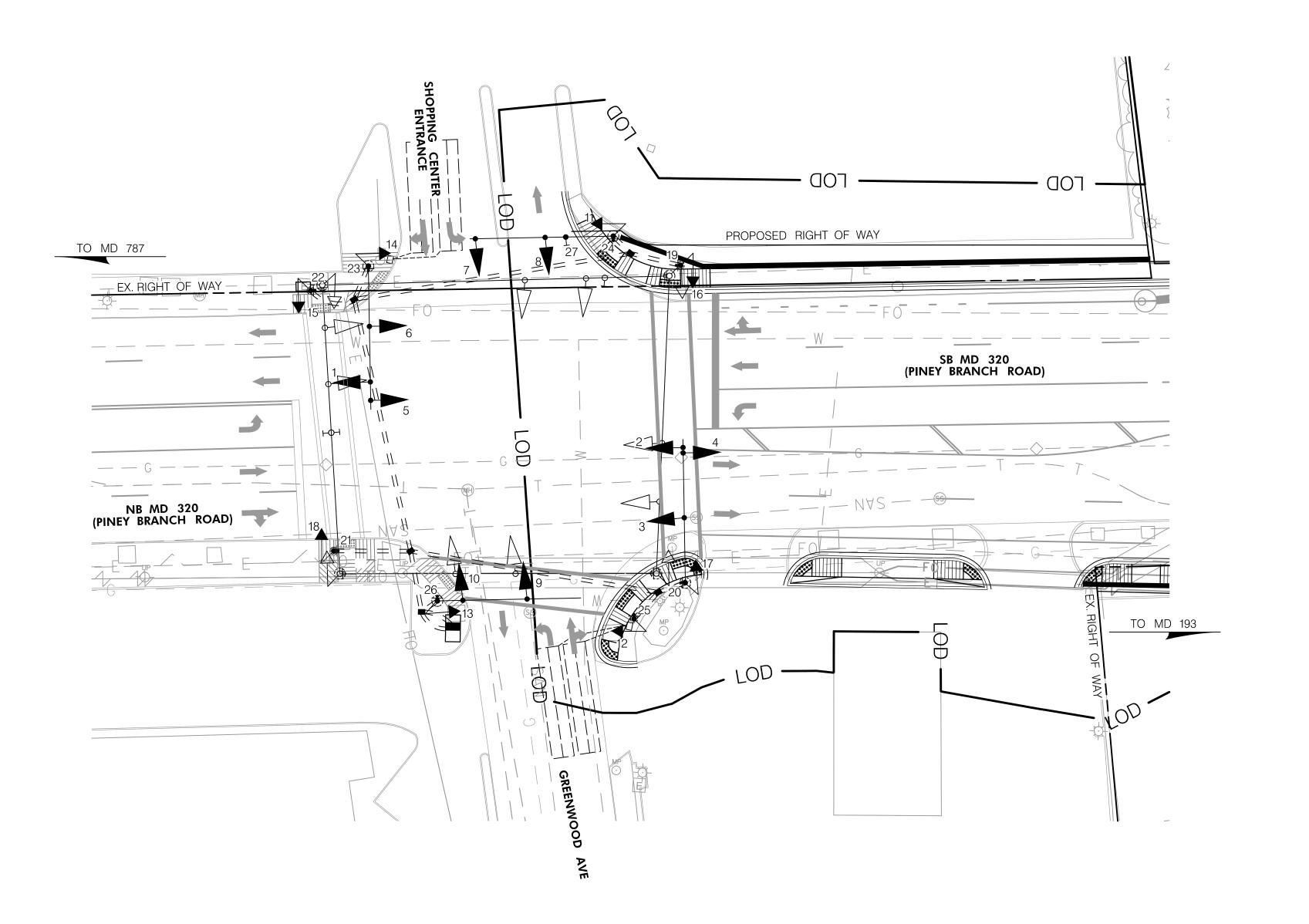
	SIEVER SETTING, MARTEAND		
REVISIONS	SIGNALIZATION PLAN SHEET		
B FULL SIGNAL RECONSTRUCTION TO ACCOMMODATE PURPLE LINE ALIGNMENT MTA NO. T-1042-0220 12/13	SCALE 1" = 20' ADVERTISED DATE 4/26/04 CONTRACT NO. MO325A5G		
A INSTALL PEDESTRIAN PHASE ACROSS EAST LEG OF MAIN LINE. SHA NO. AT2885185 2/26/04  JWA MAR TH	DESIGNED BY		
	TS NO. 4302B DRAWING <b>SG-505</b> OF SHEET NO. 336 OF 383		

LOTTED: Friday, December 13, 2013 AT 09:04 AM FILE: c:\pwworking\mtapw\stv-james aton\dms81350\1042pSG5124.dgn





PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



## GENERAL NOTE:

TEMPORARY TRAFFIC SIGNAL NOT INCLUDED/MAY BE REQUIRED

SG-506

SHEET NO. 337 OF 383



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 320 (PINEY BRANCH ROAD) AND GREENWOOD AVENUE

GEOMETRIC LEGEND EXISTING ——— PROPOSED

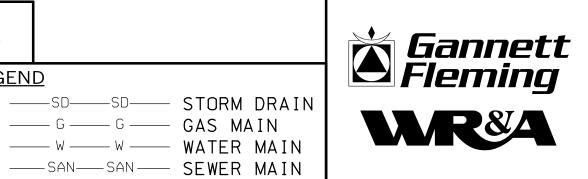
TELEPHONE CABLES

— F0 — F0 — FIBER-OPTIC

R10-11b (30"x30")

UTILITY LEGEND —— E —— ELECTRIC CABLES ----SD-----STORM DRAIN —— AERIAL CABLES ---- G ---- GAS MAIN

-----W------WATER MAIN





DRAFT: Information shown is based on 30 percent preliminary engineering plans and may be subject to further revision pending refinements to the plans during the completion of the design phase. Any reliance upon any of these plans is made with full understanding of its draft status.

APPROVALS	
TEAM LEADER OF THE STATE OF THE	B FULL SIGNA ACCOMMODA MTA NO. TO STYJKA A INSTALLAT
ASST. DIV. CHIEF  DIVISION CHIEF	SHA NO. A' HD WNH
ØFFICE DIRECTOR	

VALS			REVIS	SIONS			
4/			L RECON TE PURI 1042-02		ION TO E ALIGNN	/ENT 12/13	
	STV JKA A INS	TALLATI	ON OF C	CPS & A	APS		
	SHA	NO. AT	9105185		e	6/6/07	
	HD	WNH	DBD		WH	TH	

REVISIONS					•
L SIGNAL RECONSTRUCTION TO COMMODATE PURPLE LINE ALIGNMENT A NO.T-1042-0220 12/13					SCALE <u>1" =</u>
STALLATI	ON OF (		APS	5/6/07	DESIGNED BY
WNH	DBD		WH	TH	CHECKED BY
		F.A.P. NO			
1					

SIGNALIZATION	PLAN	SHEET
ALE <u>1" = 20'</u> ADVERTISED DATE	CONT	RACT NO
SIGNED BY	COUNTY	MONTGOMERY
AWN BY	LOGMILE	15032001.70
ECKED BY	TIMS NO.	
.P. NO		

DRAWING SG-506 OF

PLOTTED: Friday, December 13, 2013 AT 09:09 AM FILE: c:\pwworking\mtapw\stv-james aton\dms81350\1042pSG5125.dgn

