

MD 851 - MAIN STREET
ROAD IMPROVEMENT PLANS FOR THE DEVELOPMENT OF
MAIN STREET IMPROVEMENTS,
TOWN OF SYKESVILLE

SHA TRACKING NO. 24APCLOO3XX

TAX MAP# N/A GRID# N/A PARCEL # N/A LOT# N/A
ELECTION DISTRICT: 13 CARROLL COUNTY, MD

OWNER/DEVELOPER ADDRESS
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

SITE ADDRESS
MAIN STREET
SYKESVILLE, MD 21784

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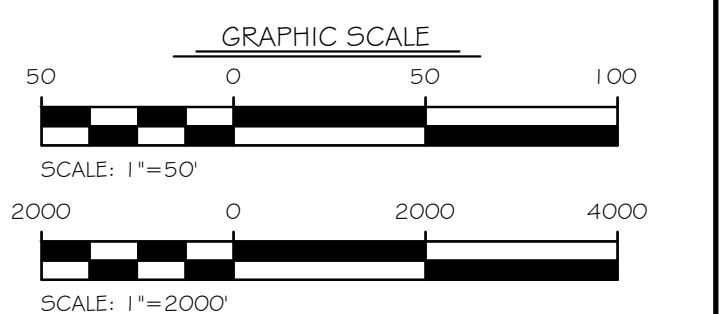


SITE OVERVIEW
SCALE 1" = 50'

RESPONSIBILITY NOTE

THE PERMITEE FOR THIS PROJECT ASSUMES ALL RESPONSIBILITY FOR THE INFORMATION CONTAINED WITHIN THESE PLANS AND ASSUMES ALL RISK ASSOCIATED WITH SUCH. ANY AGREEMENT BETWEEN THE PERMITEE AND CONTRACTOR DOES NOT RELIEVE THE PERMITEE OF THEIR RESPONSIBILITIES ASSOCIATED WITH THE ACCESS PERMIT AND THE APPROVED PLANS.

SURVEY CONTROL POINTS	
CONTROL POINT NO.	COORDINATES
#1 - DOXZEN	N: 619,009.0580 E: 1,321,863.1672
#2 - SCHOOL HOUSE	N: 618,248.55 E: 1,320,220.44
#3	N: 618,197.0174 E: 1,321,110.9639



BID SET

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

TITLE SHEET

FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

RAWING NO.
C-01
SHEET 1 OF 30
CI JOB NUMBER
272206100.03

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. 28935 EXPIRATION DATE: 1/15/25



REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/202
				SCALE
				AS SHOWN
				DESIGNED BY
				TM
				DRAWN BY
				SC

CARROLL COUNTY, MD

ELECTION DISTRICT 13

GENERAL NOTES

1. THE PERMITTEE FOR THIS PROJECT ASSUMES ALL RESPONSIBILITY FOR THE INFORMATION CONTAINED WITHIN THESE PLANS AND ASSUMES ALL RISK ASSOCIATED WITH SUCH. ANY AGREEMENT BETWEEN THE PERMITTEE AND CONTRACTOR DOES NOT RELIEVE THE PERMITTEE OF THEIR RESPONSIBILITIES ASSOCIATED WITH THE ACCESS PERMIT AND THE APPROVED PLANS.
2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING ANY WORK.
3. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED BY FINK WHITTEN ASSOCIATES IN 2022/2023, AND SUPPLEMENTAL DATA FROM CARROLL COUNTY GIS INFORMATION. NEITHER KCI TECHNOLOGIES, INC. OR CARROLL COUNTY CAN GUARANTEE THE ACCURACY OF THE SHOWN GIS DATA.
5. THE COURSES & COORDINATE SHOWN HEREON ARE REFERRED TO THE SYSTEM OF COORDINATE ESTABLISHED IN THE MARYLAND COORDINATE SYSTEM - NAD 83 (1991) AND ARE BASED UPON THE FOLLOWING NATIONAL SPATIAL REFERENCE SYSTEM CONTROL STATIONS PROVIDED BY THE NATIONAL GEODETIC SURVEY:

DESIGNATION	NORTH	EAST
#1 DOXZEN	619,009.06	1,321,863.17
#2 SCHOOL HOUSE	618,248.55	1,320,220.44
#3	618,198.02	1,321,110.96

6. ELEVATIONS SHOWN HEREON ARE REFERRED TO THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88), THE ELEVATIONS OF THE FOLLOWING CARROLL COUNTY MONUMENTS HAVE BEEN PROVIDED IN NAVD 88.

DESIGNATION	ELEVATION
DOXZEN	427.12
SCHOOL HOUSE	436.55
#3	377.43

7. EXISTING UTILITY INFORMATION SHOWN HEREON IS BASED ON THE BEST AVAILABLE INFORMATION. UNDERGROUND UTILITIES MUST BE LOCATED, AND CLEARANCES DETERMINED PRIOR TO SUBMISSION AND APPROVAL OF THE FINAL DESIGN PLANS USING APPROPRIATE ENGINEERING METHODS SUCH AS TEST PITTING. THIS IS A CONDITION AS NOTED IN ALL ACCESS PERMITS. FINAL PLANS WILL NOT BE APPROVED, AND AN ACCESS PERMIT WILL NOT BE ISSUED UNTIL THE ENGINEER CAN PROVIDE DOCUMENTATION OF THE HORIZONTAL AND VERTICAL LOCATIONS/ELEVATIONS OF ALL UTILITIES WITHIN THE SCOPE OF THE PROJECT. VERIFICATION WILL BE NEEDED FROM EACH UTILITY COMPANY THAT THEY HAVE APPROVED THE PROPOSED CLEARANCES.
8. CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR THE COST OF ANY AND ALL DAMAGES WHICH OCCUR AS A RESULT OF A FAILURE TO PRESERVE ANY AND ALL EXISTING UTILITIES INDICATED TO REMAIN.

9. REMOVAL OF ANY SIDEWALK AND/OR CURB AND GUTTER SHALL BE TO THE NEAREST JOINT. NO PATCHING SHALL BE PERMITTED.

10. SAWCUT EXISTING PAVING AS NEEDED TO INSTALL NEW CONSTRUCTION.

11. MILL AND RESURFACE EXISTING PAVING AS NEEDED TO PROVIDE SMOOTH TRANSITION TO EXISTING SURFACE.

12. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

13. THE CONTRACTOR SHALL NOTE THAT IN CASE OF ANY DISCREPANCY BETWEEN THE SCALED AND FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSION SHALL GOVERN.

14. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES AT ALL TIMES.

15. CONTRACTOR SHALL INSTALL SEDIMENT CONTROLS PRIOR TO BEGINNING ANY WORK AND MAINTAIN SEDIMENT CONTROLS THROUGHOUT THE ENTIRE DURATION OF DEMOLITION AND CONSTRUCTION ACTIVITIES.

16. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THIS PROJECT SHALL NOT RELIEVE THE PERMITTEE OF HIS RESPONSIBILITY TO COMPLETE SUCH WORK.

17. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION FROM THIS PLAN PRIOR TO ANY CHANGE BEING MADE. ANY DEVIATION FROM THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

18. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.

19. ALL CONSTRUCTION DEBRIS WILL BE REMOVED FROM THE SITE AND TAKEN TO AN APPROVED, PERMITTED DISPOSAL FACILITY. NO RUBBLE IS TO BE LEFT ON SITE.

20. CONTRACTOR SHALL PROVIDE THE NECESSARY MEANS TO CONTROL DUST AND MAINTAIN CARROLL COUNTY AIR QUALITY STANDARDS DURING THE DEMOLITION AND REMOVAL OF SITE DEBRIS AND THE NEW CONSTRUCTION.

21. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST CARROLL COUNTY STANDARD DETAILS AND SPECIFICATIONS AND/OR ALL MD STATE HIGHWAY ADMINISTRATION STANDARD DETAILS AND SPECIFICATIONS WITH ALL REVISIONS THERETO, UNLESS OTHERWISE NOTED.

22. THE FOLLOWING STANDARDS (CONSTRUCTION AND TEMPORARY TRAFFIC CONTROL) ARE REQUIRED FOR THIS PROJECT:
- a. MD-354.01 - STANDARD CONCRETE END WALL
 - b. MD-368.01 - STANDARD CONCRETE END SECTION
 - c. MD-374.68 - COG OPENING
 - d. MD-378.11 - TYPE "K" DOUBLE OPENING
 - e. SADDLE - CONC SADDLE
 - f. MD-379.03 - TYPE "S" DOUBLE GRATE
 - g. MD-578.01 REPAIRING PAVEMENT OPENINGS FOR UTILITY TRENCHES.
 - h. MD-578.03 PERMANENT PATCHING FOR FLEXIBLE PAVEMENT USING HOT MIX ASPHALT.
 - i. MD-578.03-01 PERMANENT PATCHING FOR COMPOSITE PAVEMENT.
 - j. MD-580.03 NEW COMBINATION CURB & GUTTER PLACEMENT ALONG EXISTING PAVEMENT (OPTION 2).
 - k. MD-620.02 STANDARD TYPES A & B CONC. CURB.
 - l. MD-655.40 DETECTABLE WARNING SURFACES

FOR ALL STANDARDS REFERRED TO ON THESE CONTRACT PLANS, THE CONTRACTOR MUST REFERENCE THE BOOK OF STANDARDS WHICH WILL HAVE THE MOST CURRENT VERSION. THE BOOK OF STANDARDS CAN BE ACCESSED AT:
<http://apps.roads.maryland.gov/BusinessWithSHA/bizstdsSpecs/desManualStdPub/publicationsonline/ohd/bookstd/index.asp>
ALL ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF THE REFERENCED STANDARD AT THE TIME OF CONSTRUCTION.

23. ANY TEST PITS REQUIRED BY THE CONTRACTOR IN THE SHA RIGHT OF WAY WILL REQUIRE A SEPARATE SHA DISTRICT PERMIT.

24. ALL PAVEMENT MARKINGS WITHIN SHA RIGHT OF WAY DISTURBED OR REMOVED BY OPERATIONS SHALL BE REPLACED IN-KIND ACCORDING TO THE LATEST MDSHA AND MUTCD SPECIFICATIONS AND DETAILS.

25. EXISTING PAVEMENT SHALL BE PROTECTED DURING CONSTRUCTION. DAMAGE TO THE EXISTING PAVEMENT, AND UNDERDRAIN IF PRESENT, DUE TO CONSTRUCTION EQUIPMENT AND MATERIAL STAGING OR ANY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE HIGHWAY ADMINISTRATION OR THE DEVELOPER. THE EXTENT OF PAVEMENT REPAIRS INCLUDING: PATCHING, GRINDING AND RESURFACING SHALL BE COORDINATED WITH AND APPROVED BY SHA REPRESENTATIVES.

26. ALL PAVEMENT WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION'S SPECIFICATIONS ENTITLED "STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS-JULY 2022, BOOK OF STANDARDS-FOR HIGHWAY AND INCIDENTAL STRUCTURES-2019, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS AND PERTINENT PAVEMENT DETAILS PROVIDED ON THE PLAN SHEETS.

27. ALL NEW TRAFFIC SIGNS SHOWN HEREON SHALL CONFORM TO STANDARD No. MD 812.01.

28. ALL UTILITY PATCHING SHALL CONFORM TO STANDARD No. MD 578.01.

29. NEW PAVEMENT JOINTS SHALL BE TO THE NEAREST PAVEMENT JOINT.

SUBGRADE IMPROVEMENT SPECIFICATIONS

UNDER PROP. PAVEMENT STRUCTURE:

- UNDERCUT A MINIMUM OF 1-FOOT BELOW PROPOSED SUBGRADE, AND PROOF ROLL COMPACT THE EXPOSED SUBGRADE
- PLACE MDOT SHA CLASS ST GEOTEXTILE (OR MIRAFI 600X OR EQUIVALENT) OVER THE EXPOSED SUBGRADE
- PLACE AND COMPACT SELECT BORROW MATERIAL
- CONSTRUCT PAVEMENT SECTION ON THE PREPARED SUBGRADE

FILL MATERIALS, PLACEMENT AND COMPACTION REQUIREMENTS:

- THE MAJORITY OF EXISTING FILL MATERIALS ARE NOT SUITABLE FOR RE-USE AS COMPACTED STRUCTURAL FILL
- IF ENCOUNTERED, EXCAVATED ON-SITE MATERIALS CLASSIFIED AS SM OR ML WITH PI LESS THAN 10% CAN BE REUSED AS BACKFILL OR SELECT FILL IF THEY ARE:
 - A. UNDISTURBED (I.E., NOT WET, SATURATED OR PUMPING),
 - B. FREE OF CONTAMINATION AND DELETERIOUS MATERIALS (TOPSOIL, ROOTLETS, WOOD AND ORGANICS, BRICKS, ETC.), AND
 - C. UNDER MOISTURE CONTROL
- PRIOR TO PLACING NEW FILL, THE EXPOSED SUBGRADE SHALL BE PROOF-ROLLED COMPACTED WITH APPROPRIATE CONSTRUCTION EQUIPMENT.

SHA NOTES

- THE DEVELOPER IS REQUIRED TO HIRE A THIRD-PARTY FIRM, APPROVED BY THE MDOT SHA, FOR TESTING AND INSPECTION OF ALL WORK PERFORMED WITHIN THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION RIGHT OF WAY.
- THE DISTRICT UTILITY SECTION WILL NEED TO REVIEW THE SOURCE OF SUPPLY LIST PRIOR TO SENDING TO THE OFFICE OF MATERIAL & TECHNOLOGY (OMT).
- THE DEVELOPER IS REQUIRED TO CONTACT MR. MARVIN COBLE FROM THE OFFICE OF MATERIAL & TECHNOLOGY (OMT) AT (443) 572-5167 OR VIA EMAIL AT MCoble@MDOT.MARYLAND.GOV FOR SOURCE OF SUPPLY & MATERIALS CLEARANCE PRIOR TO SETTING UP PRE-CONSTRUCTION MEETING WITH THE DISTRICT UTILITY OFFICE.
- A DISTRICT 7 UTILITY PERMIT WILL BE REQUIRED FOR ANY PRELIMINARY ENGINEERING (I.E. TEST PITS, UTILITY DESIGNATION, ETC.) THAT MUST BE COMPLETED PRIOR TO THE ACCESS PERMIT BEING ISSUED.
- A SEPARATE UTILITY PERMIT WILL BE REQUIRED FOR ALL UTILITY WORK COVERED UNDER THIS PERMIT.
- THE DEVELOPER WILL BE REQUIRED TO MILL AND OVERLAY A MINIMUM OF 4' ON EACH SIDE OF THE UTILITY PATCHES.
- WORKING HOURS FOR THIS PROJECT WILL BE BETWEEN 9 AM AND 3 PM.
- SEE TRAFFIC CONTROL PLANS SHEETS 22 THROUGH 30 FOR TEMPORARY TRAFFIC CONTROL STANDARDS THAT ARE REQUIRED FOR THIS PROJECT.
- LANE CLOSURE PERMITS MUST BE SUBMITTED FOR APPROVAL AT LEAST 2 WORKING DAYS (48 HOURS) IN ADVANCE OF WORK. TO OBTAIN A LANE CLOSURE PERMIT OR FOR MORE INFORMATION REGARDING LANE CLOSURES CONTACT THE DISTRICT 7 MAINTENANCE OF TRAFFIC INSPECTOR, MR. JOE MANNING, DISTRICT 7 MAINTENANCE OF TRAFFIC INSPECTOR - OFFICE: 410-677-4046, EMAIL: JMANNING.CONSULTANT@MDOT.MARYLAND.GOV. DESIGN, FABRICATION, AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE MOST RECENT VERSION OF THE MARYLAND STANDARD SIGN BOOK, FOUND AT: http://apps.roads.maryland.gov/BUSINESSWITHSHA/BIZSTDSSPECS/DESMANUALSTD PUB/PUBLICATIONSONLINE/OOTS/INTERNET_SIGNBOOK.AS
- AN ADDITIONAL NOTE SHOULD BE PLACED ON THE DRAWINGS WHICH CLEARLY DENOTES THAT "THE PERMITTEE FOR THIS PROJECT ASSUMES ALL RESPONSIBILITY FOR THE INFORMATION CONTAINED WITHIN THESE PLANS AND ASSUMES ALL RISK ASSOCIATED WITH SUCH. ANY AGREEMENT BETWEEN THE PERMITTEE AND CONTRACTOR DOES NOT RELIEVE THE PERMITTEE OF THEIR RESPONSIBILITIES ASSOCIATED WITH THE ACCESS PERMIT AND THE APPROVED PLANS."
- IF EXISTING PAVEMENT MARKINGS ARE TEMPORARILY OR PERMANENTLY ALTERED, PERFORM MILL AND OVERLAY AT THOSE LOCATIONS. ALSO SHOW THESE RESURFACING ON THE TYPICAL SECTIONS AND OTHER APPLICABLE SHEETS.
- FOR ALL STANDARDS REFERRED TO ON THE PLANS THE CONTRACTOR MUST GO TO THE BOOK OF STANDARDS WHICH WILL HAVE THE MOST CURRENT VERSION. THE BOOK OF STANDARDS CAN BE ACCESSED AT:<http://apps.roads.maryland.gov/BUSINESSWITHSHA/BIZSTDSSPECS/DESMANUALSTD PUB/PUBLICATIONSONLINE/CHD/BOOKSTD/INDEX.ASP>

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. 28935 EXPIRATION DATE: 1/15/25

SHA ABBREVIATIONS

A.A.S.H.T.O. - AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS	ADT - AVERAGE DAILY TRAFFIC	AHD- AHEAD	APPROX. - APPROXIMATE	BL- BL - BASELINE	BK- BACK / BOOK	BIT. - BITUMINOUS	B.C. - BITUMINOUS CONCRETE	B.M. - BENCH MARK	BOT. - BOTTOM	C.C. - CENTER OF CURVE	CATV - CABLE TELEVISION	C.B.R. - CALIFORNIA BEARING RATIO	CL- CL - CENTERLINE	CL - CLASS	CLF - CHAINLINK FENCE	CMP - CORRUGATED METAL PIPE	C.O. - CLEANOUT	COMB. - COMBINATION	CONC. - CONCRETE	CONSTR. - CONSTRUCTION	COR. - CORNER	CORR. - CORRECTION	DC - DEGREE OF CURVE	D.H.V. - DESIGN HOURLY VOLUME	D.I. - DROP INLET	DIA. - DIAMETER	D.O. - DOUBLE OPENING	E - EAST	E - ELECTRIC	E - EXTERNAL DISTANCE	EA. - EACH	E.B. - EAST BOUND	ELEV. - ELEVATION	E.R.C.C.P. - ELLIPTICAL REINFORCED CEMENT CONCRETE PIPE	ES - END SECTION	EX. - EXIST. - EXISTING	FT. - FEET	F: FL - FLOWLINE	F.B.D. - FLAT BOTTOM DITCH	F.H. - FIRE HYDRANT	FWD. - FORWARD	G - GAS	G.V. - GAS VALVE	H.B. - HANDBOX	H.D.P. - HIGH DENSITY POLYETHYLENE	HDWL. - HEADWALL	H.E.R.C.P. - HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE	H.P. - HIGH POINT	IN. - INCH	I.S.T. - INLET SEDIMENT TRAP	INV. - INVERT	J.B. - JUNCTION BOX	K - K INLET	L - LENGTH	L.F. - LINEAR FEET	L.L. - LIQUID LIMIT	L.P. - LIGHT POLE	MAC. - MACADAM	MAX. - MAXIMUM	MOD. - MODIFIED	MIN. - MINIMUM	N - NORTH	N.B. - NORTHBOUND	N.E. - NORTHEAST	N.P. - NON-PLASTIC	O.C. - ON CENTER	OHE - OVERHEAD ELECTRIC	PAVT. - PAVEMENT	P.C. - POINT OF CURVATURE	P.C.C. - POINT OF COMPOUND CURVATURE	P/C - POINT OF CROWN	P/G. - PROFILE GRADE ELEVATION	P.G.L. - PROFILE GRADE LINE	P/GL - PROFILE GROUND LINE	P/R - POINT OF ROTATION	P.I. - POINT OF INTERSECTION	P.O.C. - POINT ON CURVATURE	P.O.T. - POINT ON TANGENT	PROP. - PROPOSED	P.R.C. - POINT OF REVERSE CURVE	PT. - POINT	P.T. - POINT OF TANGENCY	PVC - POINT OF VERTICAL CURVATURE	PVC - POLYVINYL CHLORIDE	PVI - POINT OF VERTICAL INTERSECTION	PVRC - POINT OF VERTICAL REVERSE CURVE	PVT - POINT OF VERTICAL TANGENCY	R - RADIUS	R.F. - ROCK FRAGMENTS	RT. - RIGHT	RW - RW - RIGHT OF WAY	R.C.P. - REINFORCED CONCRETE PIPE	R.C.C.P. - REINFORCED CEMENT CONCRETE PIPE	R.Q.D. - ROCK QUALITY DESIGNATION	R.M. - ROOMMATE	S - SOUTH	SAN. - SANITARY SEWER	SB - S/B - SOUTHBOUND	S.D. - STORM DRAIN	S.D.D. - SURFACE DRAIN DITCH	S/E - SUPER ELEVATION	SF - SILT FENCE	SHT. - SHEET	S.P.P. - STRUCTURAL PLATE PIPE	S.P.T. - STANDARD PENETRATION TESTING	SSD - STOPPING SIGHT DISTANCE	SSF - SUPER SILT FENCE	STD. - STANDARD	STA. - STATION	SO - SQUARE OPENING	S.Y. - SQUARE YARDS	SWM - STORMWATER MANAGEMENT	T - TANGENT	T - TELEPHONE	T.C. - TOP OF COVER	T.G. - TOP OF GRATE	TL - T/L - TRAVERSE LINE	T.M. - TOP OF MANHOLE	TRAV. - TRAVERSE	TS - TEMPORARY SWALE	T.S. - TOP OF SLAB	T.S. - TOPSOIL	TYP. - TYPICAL	U.G. - UNDERGROUND	U.P. - UTILITY POLE	U.S.D.A - UNITED STATES DEPARTMENT OF AGRICULTURE	VCL - VERTICAL CLEARANCE	V.C.L. - VERTICAL CURVE LENGTH	W - WATER	W - WEST	W.B. - WESTBOUND	WB - WETLAND BUFFER	W.M. - WATER METER	W.S. - WRAPPED STEEL	W.V. - WATER VALVE
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13. IT SHOULD BE NOTED THAT A MILL AND OVERLAY IS REQUIRED TO TIE INTO THE NEAREST PAVEMENT JOINT.

14. DESIGN, FABRICATION, AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE MARYLAND STANDARD SIGN BOOK (LATEST EDITION).

15. NO WORK IN THE MDOT SHA RIGHT OF WAY CAN BEGIN UNTIL AN APPROVED ACCESS PERMIT HAS BEEN ISSUED FROM MDOT SHA DISTRICT 7 ACCESS MANAGEMENT.

16. THE CONTRACTOR MUST HAVE A COPY OF THE APPROVED COMMERCIAL ACCESS PERMIT AND THE MDOT SHA APPROVED SITE PLANS AT ALL TIMES DURING ANY WORK BEING PERFORMED IN THE MDOT SHA RIGHT OF WAY.

17. KCI WILL PROVIDE AS-BUILT DRAWINGS OR PROFESSIONAL ENGINEERS CERTIFICATION TO MDOT SHA DISTRICT 7 ACCESS MANAGEMENT UPON COMPLETION OF THIS PROJECT, AS A CONDITION OF THE RELEASE OF THE SURETY BOND.

18. ALL WORK IN THE MDOT SHA RIGHT OF WAY SHALL CONFORM TO:- THE MDOT SHA ACCESS MANUAL (REVISED AUGUST 2016), AT [HTTPS://WWW.ROADS.MARYLAND.GOV/MDOTSHA/PAGES/INDEX.ASP?PAGEID=393](https://www.roads.maryland.gov/MDOTSHA/PAGES/INDEX.ASP?PAGEID=393)-

19. THE MARYLAND MANUAL ON THE UNIFORM TRAFFIC CONTROL DEVICES (2011 EDITION).[HTTPS://WWW.ROADS.MARYLAND.GOV/MMUTED/2011_REV122011_MDMUTCDCOMPLETE.PDF](https://www.roads.maryland.gov/MMUTED/2011_REV122011_MDMUTCDCOMPLETE.PDF)

20. ONCE THE ACCESS PERMIT HAS BEEN ISSUED, ANY REVISIONS TO THE APPROVED PLANS, DURING OR BEFORE THE CONSTRUCTION PROCESS, NEED TO BE APPROVED THROUGH THE DISTRICT 7 ACCESS MANAGEMENT OFFICE.

21. CONTRACTOR TO PROVIDE TREE PROTECTION AND ROOT PRUNING USING BEST URBAN FORESTRY PRACTICES.

ABBREVIATIONS

AHD - AHEAD
BC - BOTTOM CURB
BW - BOTTOM OF WALL
BM - BENCHMARK
BCK - BACK
CONSTR - CONSTRUCTION
COMM - COMMUNICATIONS
C&G - COMBINATION CURB & GUTTER
CONC - CONCRETE
D/W - DRIVEWAY
EOP - EDGE OF PAVEMENT
EOS - EDGE OF SHOULDER
EG - EXISTING GRADE/ GROUND
ESMNT - EASEMENT
EL - ELEVATION
FG - FINISHED GRADE
FL - FLOW LINE
G - GUTTER
HP - HIGH POINT
INV - INVERT
LT - LEFT
MBSL - MINIMUM BUILDING SETBACK LINE
MB - MAILBOX
MOD - MODIFIED
NBL - NORTHBOUND LANE (SBL, ETC.)
O/S - OFFSET
O/L - OUTLET
OH - OVERHEAD
PGL - PROFILE GRADE LINE
PED - PEDESTAL
P/C - PRECAST
P/G - PROFILE GRADE ELEVATION
P/G.L - PROFILE GROUND LINE
P/R - POINT OF ROTATION
P.I. - POINT OF INTERSECTION
P.O.C. - POINT ON CURVATURE
P.O.T. - POINT ON TANGENT
PROP. - PROPOSED
P.R.C. - POINT OF REVERSE CURVE
PT. - POINT
P.T. - POINT OF TANGENCY
PVC - POINT OF VERTICAL CURVATURE
PVC - POLYVINYL CHLORIDE
PVI - POINT OF VERTICAL INTERSECTION
PVRC - POINT OF VERTICAL REVERSE CURVE
PVT - POINT OF VERTICAL TANGENCY
R - RADIUS
R.F. - ROCK FRAGMENTS
RT. - RIGHT
RW - RW - RIGHT OF WAY
R.C.P. - REINFORCED CONCRETE PIPE
R.C.C.P. - REINFORCED CEMENT CONCRETE PIPE
R.Q.D. - ROCK QUALITY DESIGNATION
R.M. - ROOMMATE
S - SOUTH
SAN. - SANITARY SEWER
SB - S/B - SOUTHBOUND
S.D. - STORM DRAIN
S.D.D. - SURFACE DRAIN DITCH
S/E - SUPER ELEVATION
SF - SILT FENCE
SHT. - SHEET
S.P.P. - STRUCTURAL PLATE PIPE
S.P.T. - STANDARD PENETRATION TESTING
SSD - STOPPING SIGHT DISTANCE
SSF - SUPER SILT FENCE
STD. - STANDARD
STA. - STATION
SO - SQUARE OPENING
S.Y. - SQUARE YARDS
SWM - STORMWATER MANAGEMENT
T - TANGENT
T - TELEPHONE
T.C. - TOP OF COVER
T.G. - TOP OF GRATE
TL - T/L - TRAVERSE LINE
T.M. - TOP OF MANHOLE
TRAV. - TRAVERSE
TS - TEMPORARY SWALE
T.S. - TOP OF SLAB
T.S. - TOPSOIL
TYP. - TYPICAL
U.G. - UNDERGROUND
U.P. - UTILITY POLE
U.S.D.A - UNITED STATES DEPARTMENT OF AGRICULTURE
VCL - VERTICAL CLEARANCE
V.C.L. - VERTICAL CURVE LENGTH
W - WATER
W - WEST
W.B. - WESTBOUND
WB - WETLAND BUFFER
W.M. - WATER METER
W.S. - WRAPPED STEEL
W.V. - WATER VALVE

DRAWING LEGEND

	EX. MINOR CONTOUR (2' INTERVAL)
	EX. MAJOR CONTOUR (10' INTERVAL)
	ADJACENT PROPERTY LINE
	EX. PROPERTY BOUNDARY
	SURVEYED CONTROL POINT
	EX. ROAD/EDGE OF PAVING
	EX. GAS LINE
	EX. STORM DRAIN
	EX. SEWER LINE & MANHOLES,CLEAN-OUTS
	EX. UNKNOWN UNDERGROUND LINE
	EX. WATER LINE & STRUCTURES
	EX. OVERHEAD ELECTRIC & UTILITIES POLES
	EX. UNDERGROUND ELECTRIC
	EX. DOOR
	FENCE
	STREAM
	PROP. MINOR CONTOUR (2' INTERVAL)
	PROP. MAJOR CONTOUR (10' INTERVAL)
	PROP. CURB & GUTTER
	PROP. PRIVATE ROAD/DRIVE CENTERLINE
	EX. BUILDING
	PROP. BUILDING
	PROP. SPOT ELEVATION & FLOW ARROW
	PROP. ORNAMENTAL TREE
	PROP. SHADE TREE
	PROP. EVERGREEN TREE
	EX. TREELINE
	LIMIT OF DISTURBANCE
	PROP. STORM DRAIN W/ INLETS & MANHOLE
	PROP. INLET PROTECTION MEASURES
	PROP. WATER LINE & HYDRANT
	PROP. LIGHT POLE
	PROP. SILT FENCE
	PROP. SUPER SILT FENCE
	PROP. FENCE
	PROP. MILL & OVERLAY
	PROP. PAVEMENT

BID SET

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

PLAN NOTES AND LEGEND

FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

DRAWING NO.

C-02

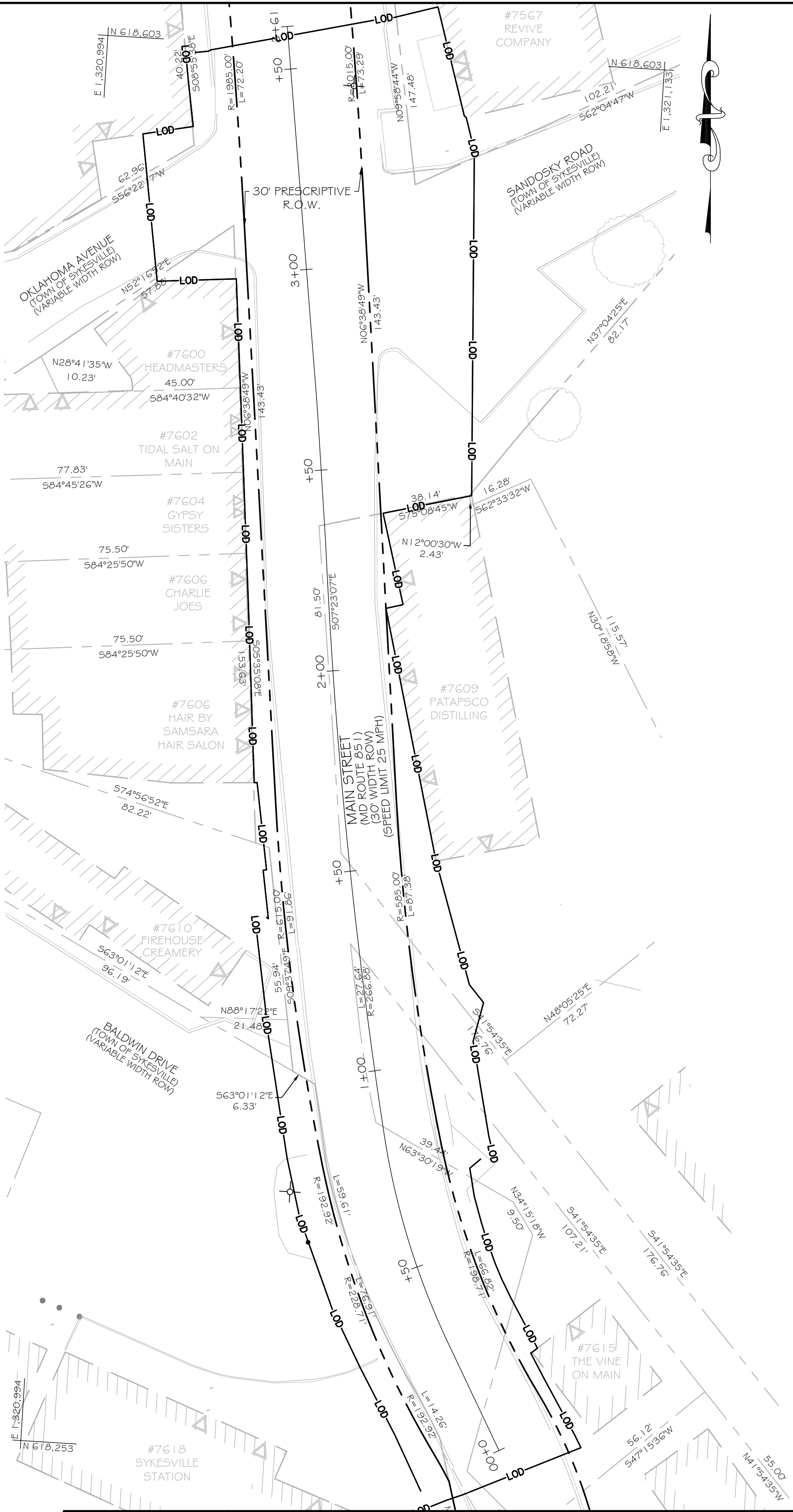
SHEET 2 OF 30

KCI JOB NUMBER
272206100.03

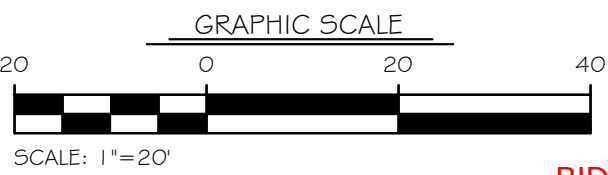
CARROLL COUNTY, MD

ELECTION DISTRICT 13

PLOTTED: \$DATE\$
BY: \$USER\$
FILE: \$FILE\$



- DRAWING LEGEND**
- 882 --- EX. MINOR CONTOUR (2' INTERVAL)
 - 880 --- EX. MAJOR CONTOUR (10' INTERVAL)
 - ADJACENT PROPERTY LINE
 - N 06°45'45" W 120.00' RIGHT OF WAY BOUNDARY
 - N 06°45'45" W 120.00' EX. PROPERTY BOUNDARY
 - △ SURVEYED CONTROL POINT
 - EX. ROAD/EDGE OF PAVING
 - G --- EX. GAS LINE
 - EX. 18" RCCP --- EX. STORM DRAIN
 - EX. 8" S --- EX. SEWER LINE # MANHOLES, CLEAN-OUTS
 - EX. UNKNOWN UNDERGROUND LINE
 - W --- EX. WATER LINE # STRUCTURES
 - OHE --- EX. OVERHEAD ELECTRIC # UTILITIES POLES
 - E --- EX. UNDERGROUND ELECTRIC
 - ▽ EX. DOOR
 - FENCE
 - STREAM
 - 882 --- PROP. MINOR CONTOUR (2' INTERVAL)
 - 880 --- PROP. MAJOR CONTOUR (10' INTERVAL)
 - == PROP. CURB & GUTTER
 - PROP. PRIVATE ROAD/DRIVE CENTERLINE
 - [] EX. BUILDING
 - [] PROP. BUILDING
 - + 862.5 → PROP. SPOT ELEVATION # FLOW ARROW
 - PROP. ORNAMENTAL TREE
 - PROP. SHADE TREE
 - PROP. EVERGREEN TREE
 - EX. TREELINE
 - LOD --- LIMIT OF DISTURBANCE
 - PROP. 18" SD --- AGIP PROP. STORM DRAIN W/ INLETS # MANHOLE
 - SIP --- PROP. INLET PROTECTION MEASURES
 - PROP. 8" WATER --- PROP. WATER LINE # HYDRANT
 - PROP. LIGHT POLE
 - SF --- PROP. SILT FENCE
 - SSF --- PROP. SUPER SILT FENCE
 - * --- PROP. FENCE



BID SET

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

EXISTING BOUNDARY PLAN
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.
C-03
SHEET 3 OF 30
KCI JOB NUMBER
272206100.03

CARROLL COUNTY, MD

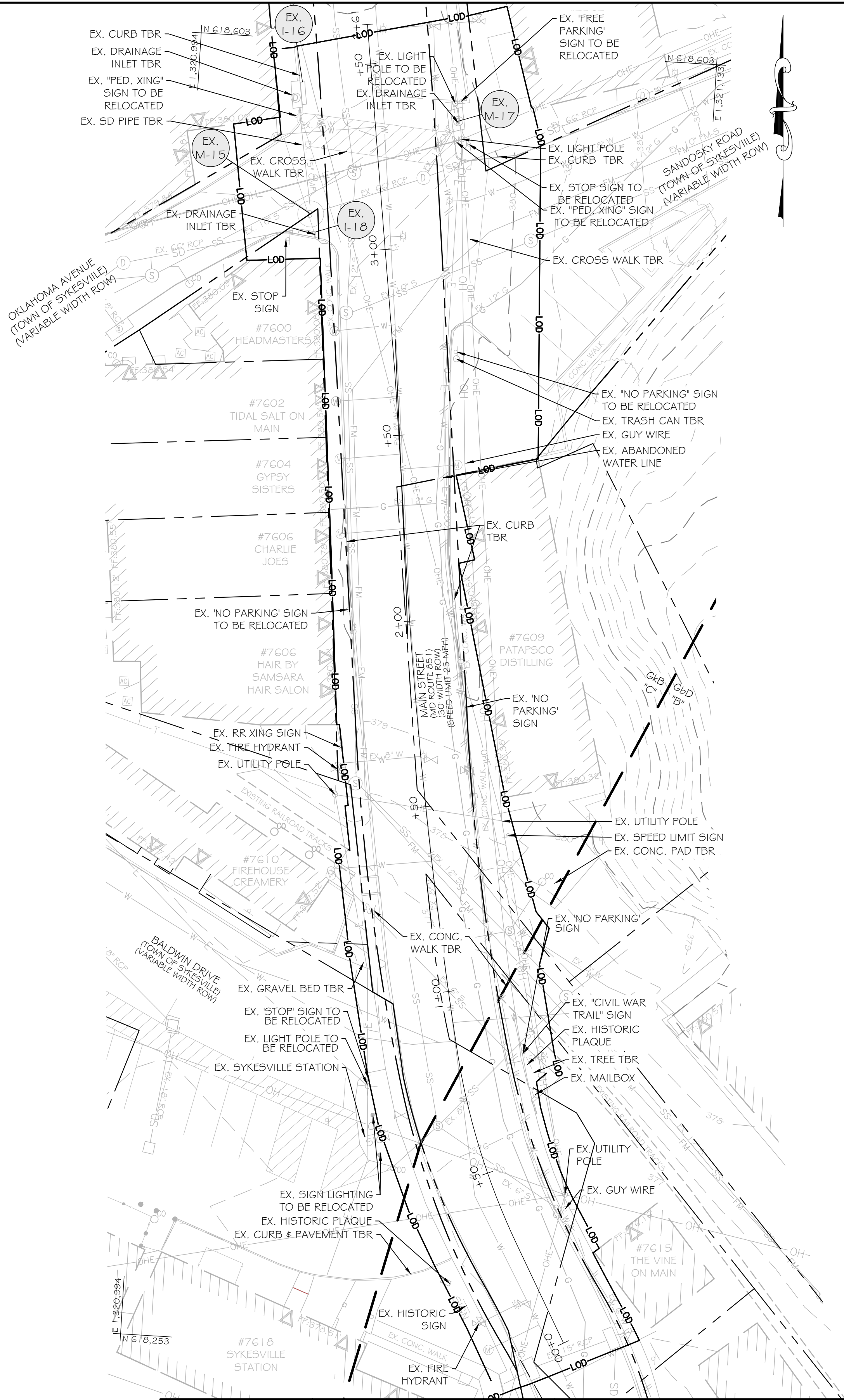
ELECTION DISTRICT 13

PROFESSIONAL CERTIFICATION
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CONSTRUCTION MANAGERS
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SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

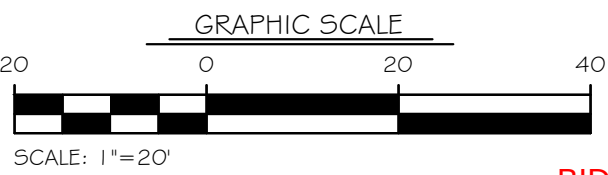
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NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				SCALE 1" = 20'
				DESIGNED BY TM
				DRAWN BY SC

PLOTTED: \$DATE\$
BY: \$USER\$
FILE: \$FILE\$



- DRAWING LEGEND**
- 882 --- EX. MINOR CONTOUR (2' INTERVAL)
 - 880 --- EX. MAJOR CONTOUR (10' INTERVAL)
 - ADJACENT PROPERTY LINE
 - N 06°45'45" W 120.00' --- EX. PROPERTY BOUNDARY
 - △ SURVEYED CONTROL POINT
 - EX. ROAD/EDGE OF PAVING
 - G --- EX. GAS LINE
 - EX. 18" RCCP --- EX. STORM DRAIN
 - EX. 8" S --- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
 - EX. UNKNOWN UNDERGROUND LINE
 - W --- EX. WATER LINE & STRUCTURES
 - OHE --- EX. OVERHEAD ELECTRIC & UTILITIES POLES
 - E --- EX. UNDERGROUND ELECTRIC
 - ▽ EX. DOOR
 - FENCE
 - STREAM
 - 882 --- PROP. MINOR CONTOUR (2' INTERVAL)
 - 880 --- PROP. MAJOR CONTOUR (10' INTERVAL)
 - === PROP. CURB & GUTTER
 - PROP. PRIVATE ROAD/DRIVE CENTERLINE
 - EX. BUILDING
 - PROP. BUILDING
 - + 862.5 → PROP. SPOT ELEVATION & FLOW ARROW
 - PROP. ORNAMENTAL TREE
 - PROP. SHADE TREE
 - PROP. EVERGREEN TREE
 - EX. TREELINE
 - LOD --- LIMIT OF DISTURBANCE
 - PROP. 18" SD --- PROP. STORM DRAIN W/ INLETS & MANHOLE
 - SIP --- PROP. INLET PROTECTION MEASURES
 - PROP. 8" WATER --- PROP. WATER LINE & HYDRANT
 - PROP. LIGHT POLE
 - SF --- PROP. SILT FENCE
 - SSF --- PROP. SUPER SILT FENCE
 - X --- PROP. FENCE

NOTE: TBR = TO BE REMOVED AND
IF AN OBJECT IS CALLED OUT
WITHOUT ACTION IT IS TO REMAIN.



BID SET

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLOO3XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

EX. CONDITIONS & DEMO PLAN
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.
C-04
SHEET 4 OF 30
KCI JOB NUMBER
272206100.03

CARROLL COUNTY, MD

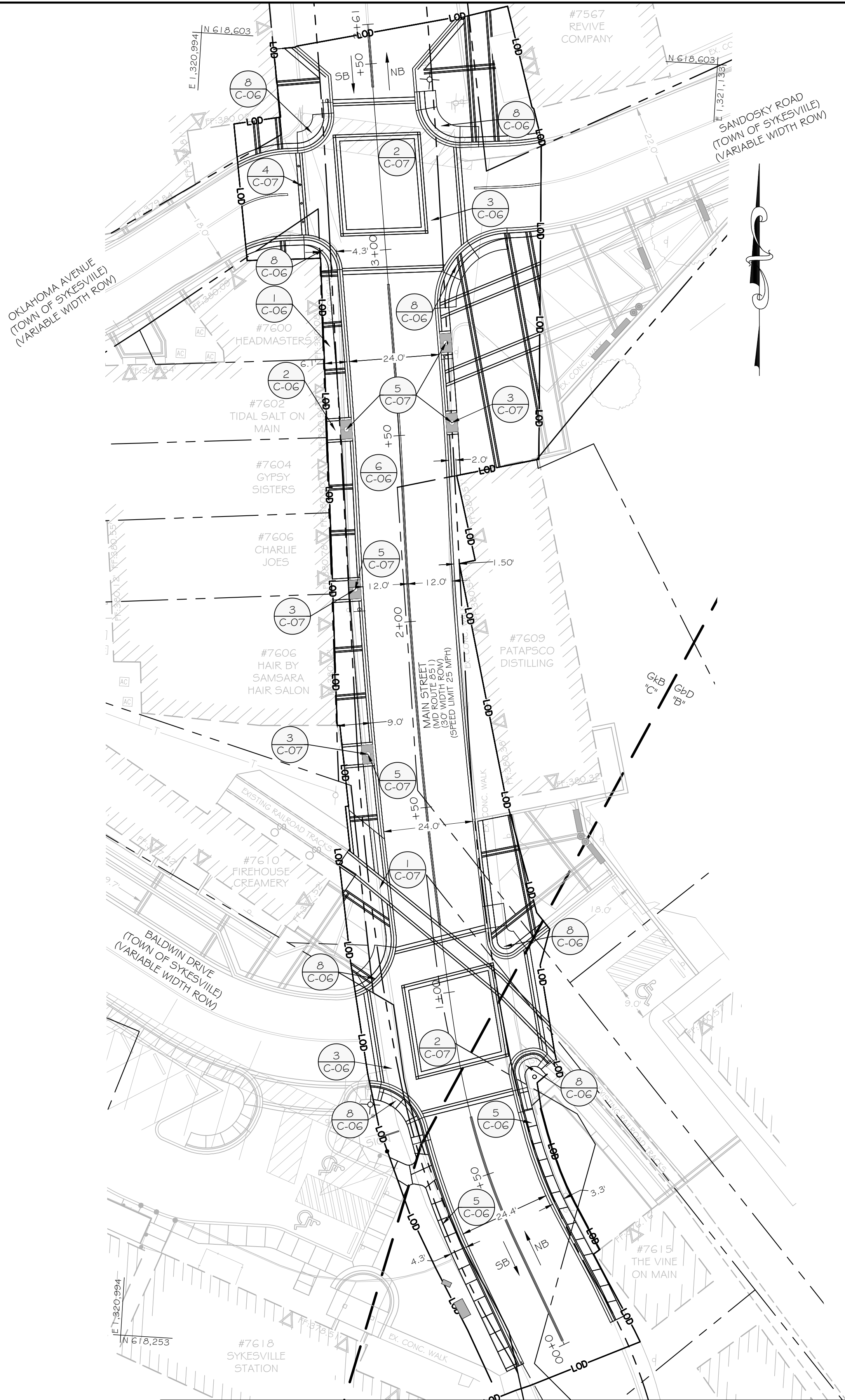
ELECTION DISTRICT 13

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CONSTRUCTION MANAGERS
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SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

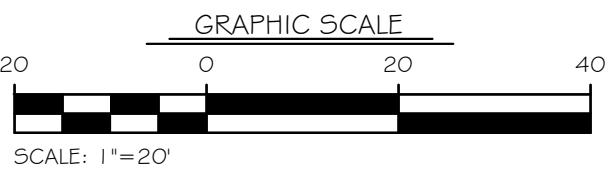
REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				SCALE 1" = 20'
				DESIGNED BY TM
				DRAWN BY SC

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BY: \$USERNAME\$
FILE: \$FILE\$



- DRAWING LEGEND**
- EX. MINOR CONTOUR (2' INTERVAL)
 - EX. MAJOR CONTOUR (10' INTERVAL)
 - ADJACENT PROPERTY LINE
 - EX. PROPERTY BOUNDARY
 - SURVEYED CONTROL POINT
 - EX. ROAD/EDGE OF PAVING
 - EX. GAS LINE
 - EX. 18" RCCP
 - EX. STORM DRAIN
 - EX. 8" S
 - EX. SEWER LINE & MANHOLES, CLEAN-OUTS
 - EX. UNKNOWN UNDERGROUND LINE
 - EX. WATER LINE & STRUCTURES
 - EX. OVERHEAD ELECTRIC & UTILITIES POLES
 - EX. UNDERGROUND ELECTRIC
 - EX. DOOR
 - FENCE
 - STREAM
 - PROP. MINOR CONTOUR (2' INTERVAL)
 - PROP. MAJOR CONTOUR (10' INTERVAL)
 - PROP. CURB & GUTTER
 - PROP. PRIVATE ROAD/DRIVE CENTERLINE
 - EX. BUILDING
 - PROP. BUILDING
 - PROP. SPOT ELEVATION & FLOW ARROW
 - PROP. ORNAMENTAL TREE
 - PROP. SHADE TREE
 - PROP. EVERGREEN TREE
 - EX. TREELINE
 - L00
 - LIMIT OF DISTURBANCE
 - PROP. 18" SD
 - PROP. STORM DRAIN W/ INLETS & MANHOLE
 - SIP
 - AGIP
 - PROP. INLET PROTECTION MEASURES
 - PROP. 8" WATER
 - PROP. WATER LINE & HYDRANT
 - PROP. LIGHT POLE
 - SF
 - PROP. SILT FENCE
 - SSF
 - PROP. SUPER SILT FENCE
 - X
 - PROP. FENCE



BID SET

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
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COORDINATE SYSTEM
NAD-83

SITE PLAN
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.
C-05
SHEET 5 OF 30
KCI JOB NUMBER
272206100.03

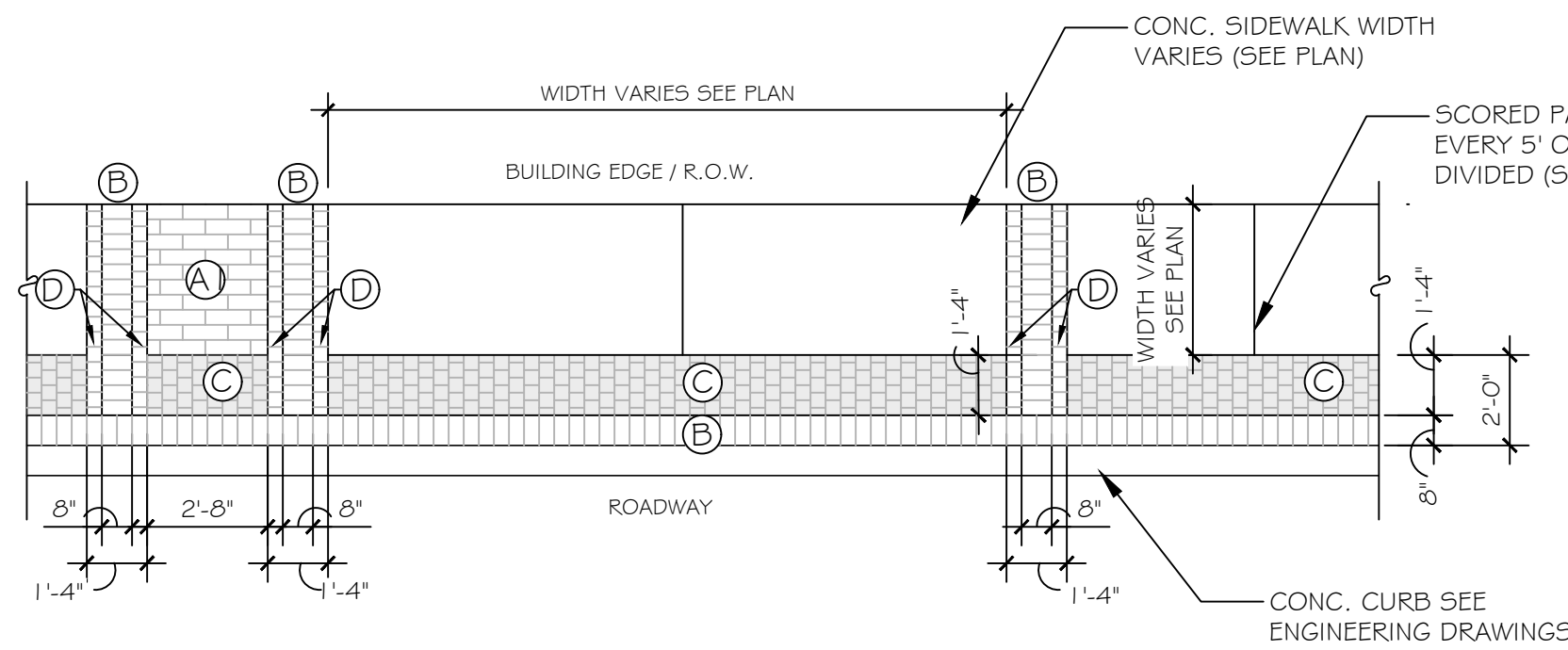
CARROLL COUNTY, MD

ELECTION DISTRICT 13

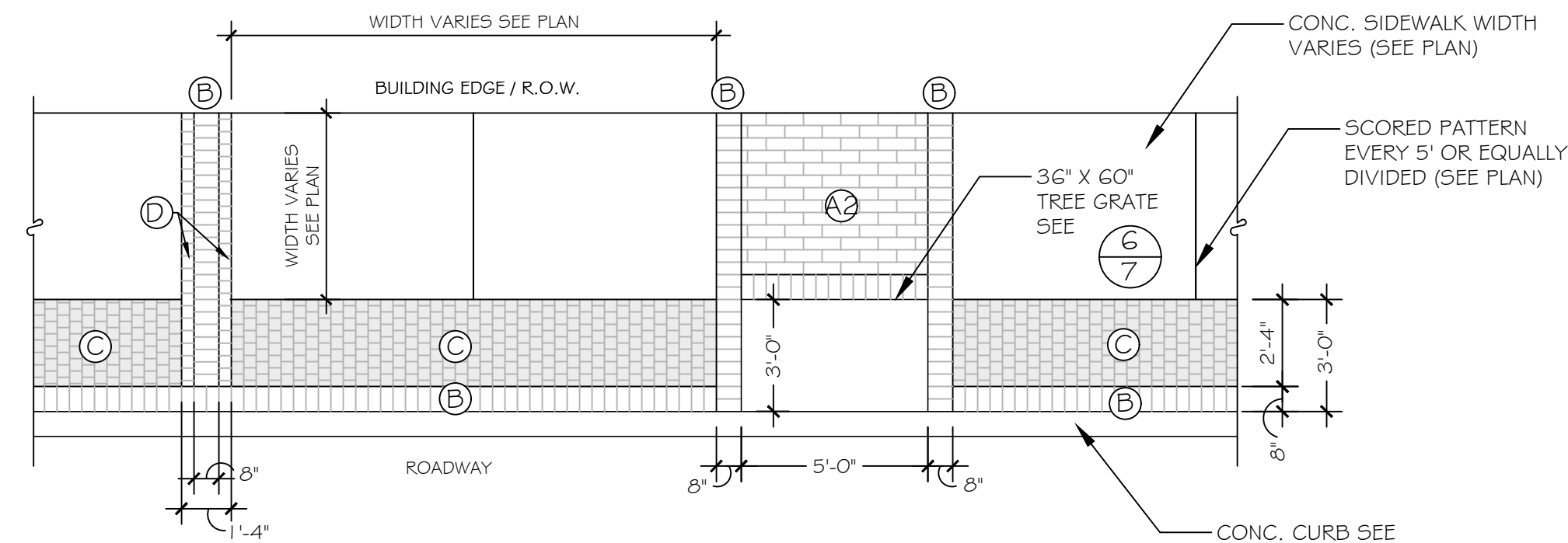
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SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

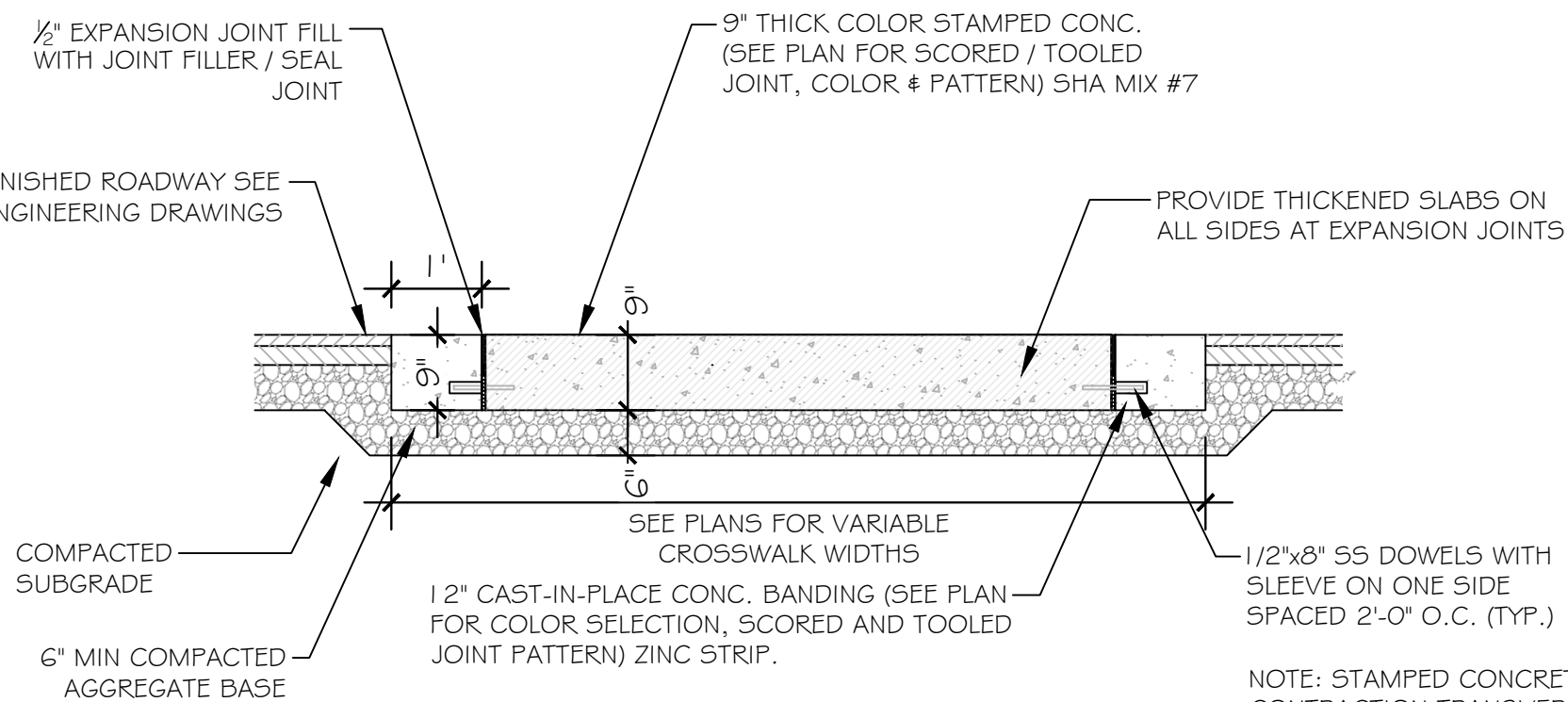
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				DRAWN BY SC



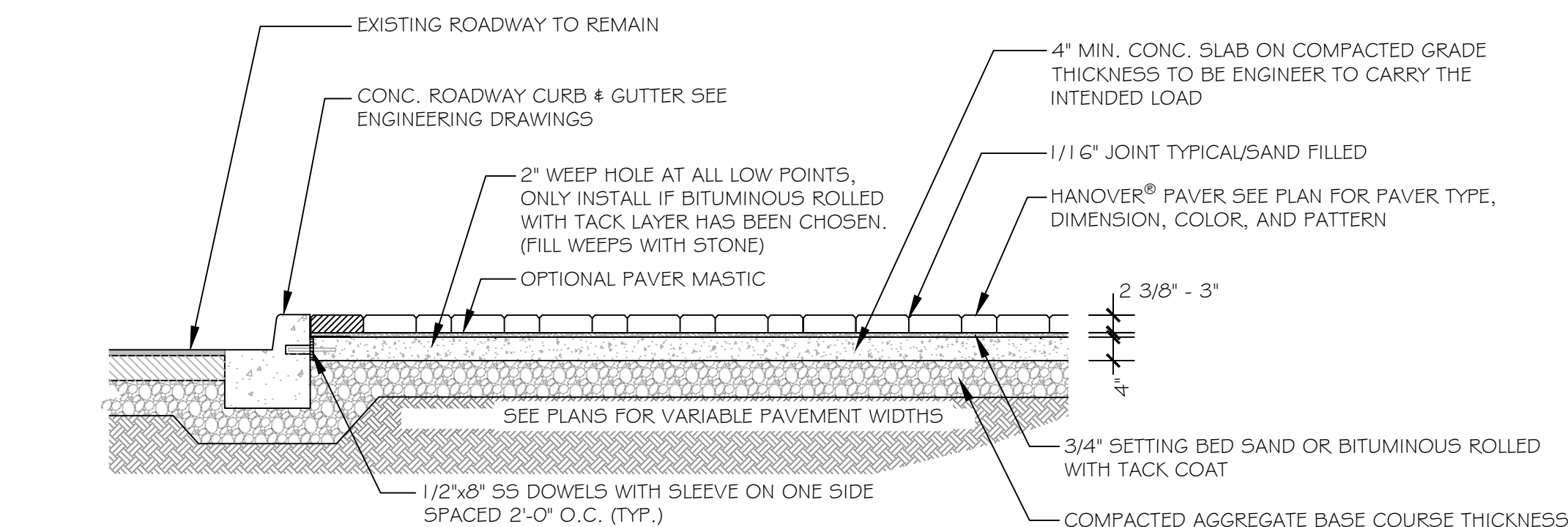
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6 CONC. SIDEWALK 'A' (TYP.)
1/4" = 1'



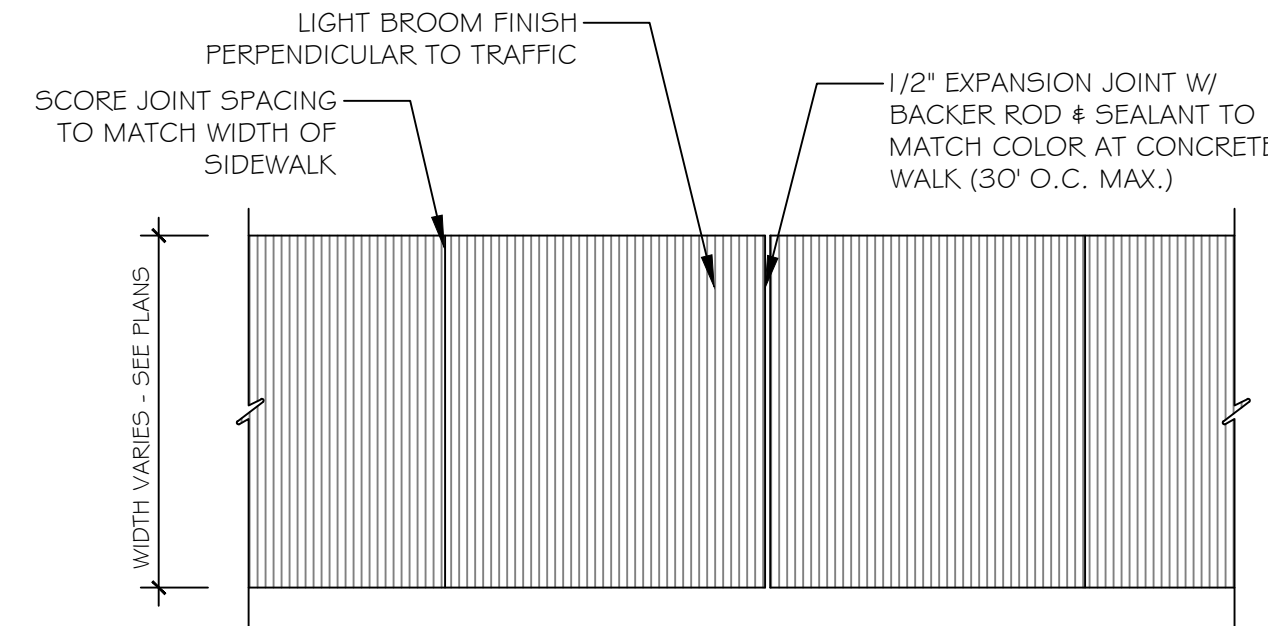
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6 CONC. SIDEWALK WITH TREE GRATE (TYP.)
1/4" = 1'



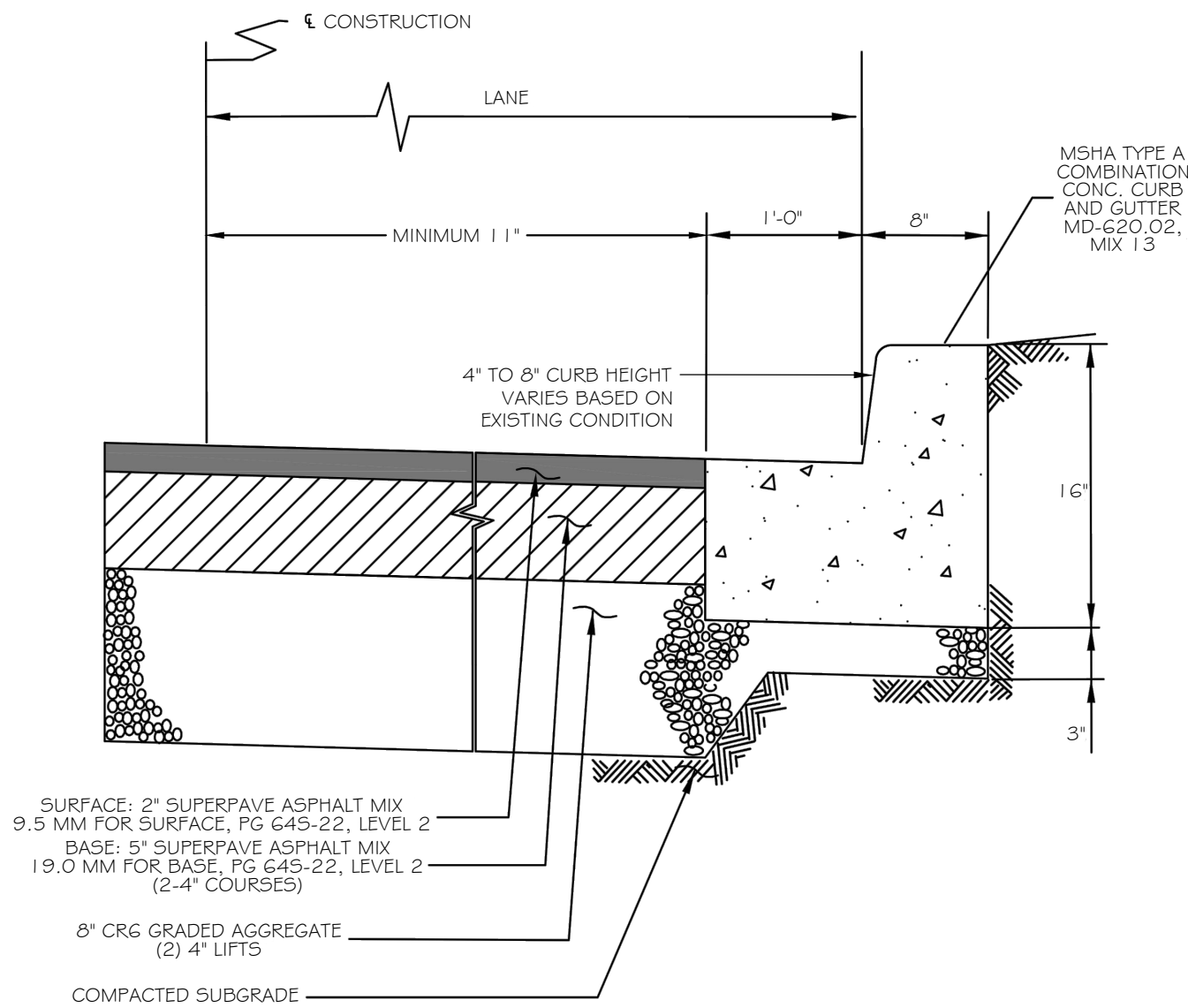
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6 STAMP CONC. - VEHICULAR (CROSSWALK)
1/2" = 1'



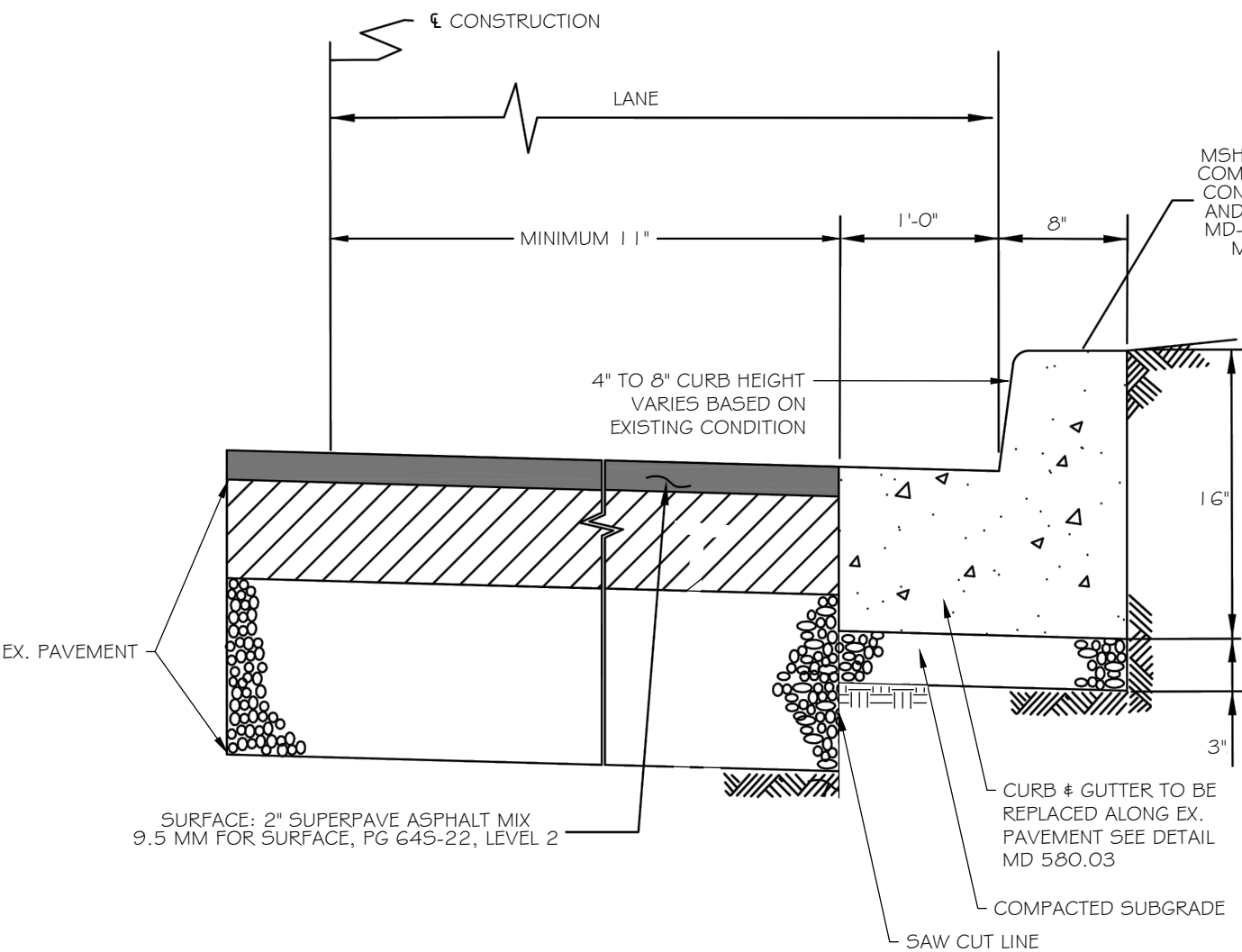
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6 PAVERS - PEDESTRIAN
1/2" = 1'



5
6 CONC. SIDEWALK
1/4" = 1'



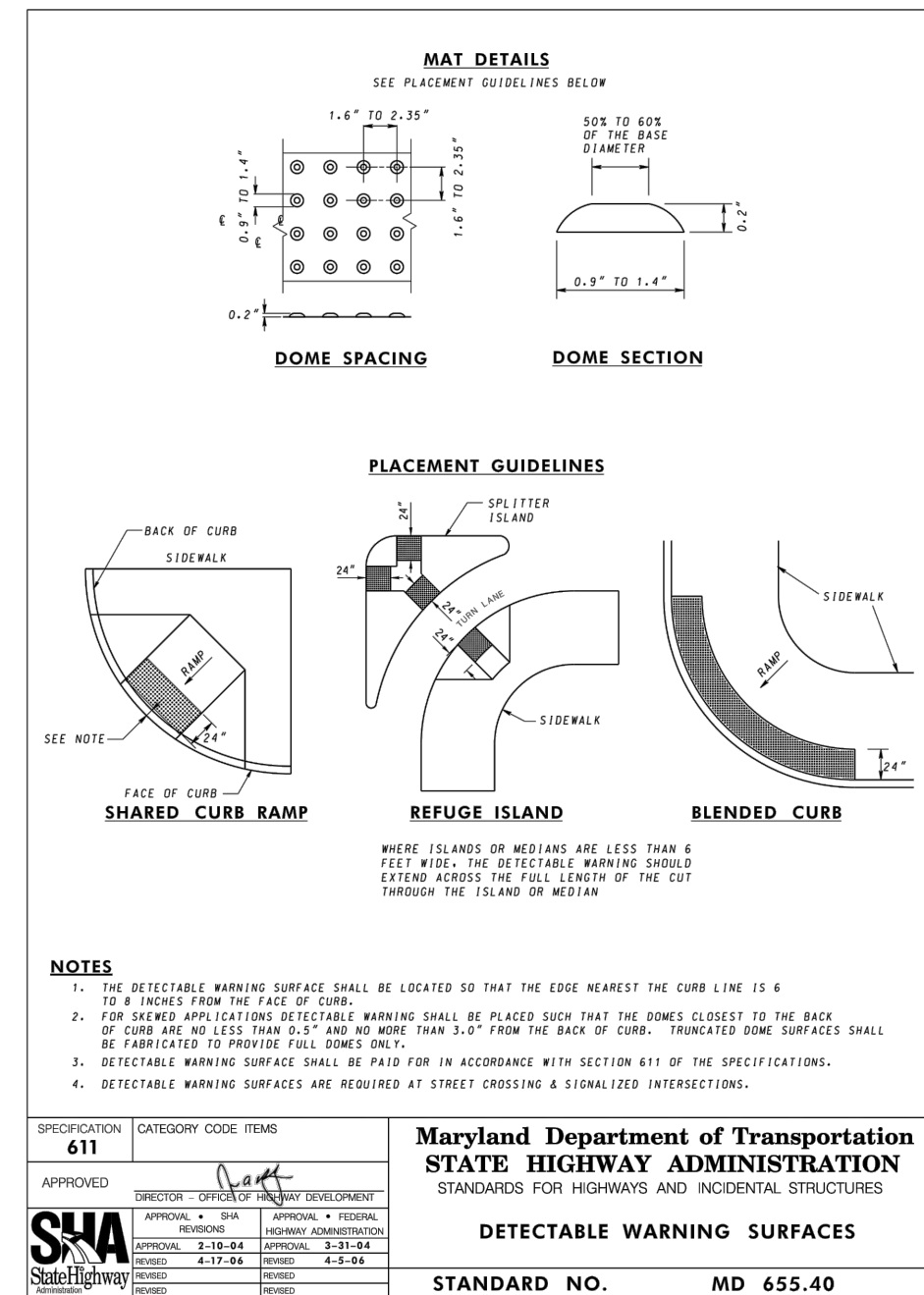
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6 TYPICAL FULL DEPTH PAVEMENT/ROAD SECTION
N.T.S.



7
6 TYPICAL MILL & OVERLAY/ROAD SECTION
N.T.S.

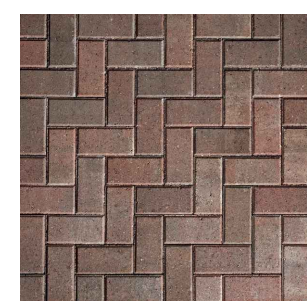
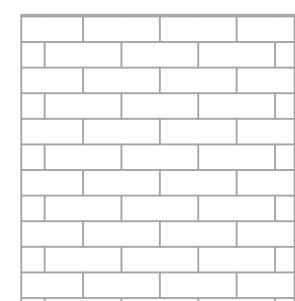
NOTE

1. FORM WEAKENED PLANE JOIN.T.S. (CONTRACTION JOIN.T.S.) IN FRESH CONCRETE BY GROOVING TOP PORTION WITH A RECOMMENDED CUTTING TOOL AND FINISHING EDGES WITH A JOINTER. FORM OUTSIDE EDGES AND JOIN.T.S. WITH A SMOOTH MAGNESIUM 1/4" RADIUS EDGING TOOL.
2. ALL CONTRACTION JOIN.T.S. SHALL BE MADE AT 90° TO CONCRETE SURFACE (PERPENDICULAR).
3. ALL EXPANSION JOIN.T.S. SHALL EXTEND THE FULL WIDTH OF PAVEMENT LIMITS AND/OR TO ALL VERTICAL SURFACES (UNLESS OTHERWISE NOTED).
4. CONTRACTOR TO PROVIDE MOCK-UP PANEL OF CONCRETE FINISH WORK FOR APPROVAL BY THE OWNER'S REPRESENTATIVE. CONCRETE FINISH WORK SHALL MEET THE STANDARDS OF THE APPROVED MOCK-UP PANEL. CONCRETE SECTIONS NOT MEETING MOCK-UP PANEL STANDARD WILL BE REJECTED.
5. ALL SITE CONCRETE SHALL BE AIR ENTRAINED PER SPECIFICATIONS INSTITUTE STANDARDS AND LOCAL CLIMATE CONDITIONS TO PREVENT FREEZE-THAW DAMAGE AND SPALLING.



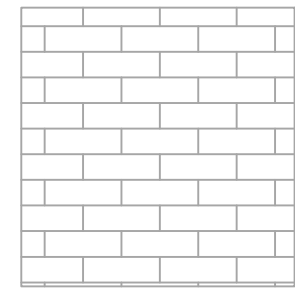
8
6 DETECTABLE WARNING SURFACES
N.T.S.

A) TRADITIONAL HANOVER®
PREST® BRICK
SIZE: 4"x8"
COLOR: NEW RUSSET
RUNNING BOND (DIRECTION AS SHOWN)



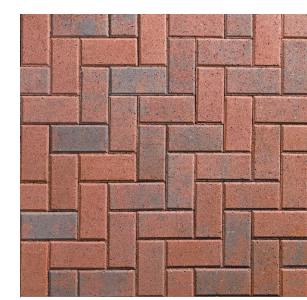
TRADITIONAL HANOVER®
PREST® BRICK
COLOR: NEW RUSSET

A2) TRADITIONAL HANOVER®
PREST® BRICK
SIZE: 4"x8"
COLOR: NATURAL/CHARCOAL
RUNNING BOND (DIRECTION AS SHOWN)



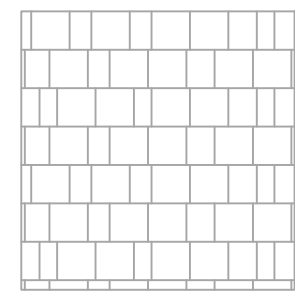
TRADITIONAL HANOVER®
PREST® BRICK
COLOR: NATURAL/CHARCOAL

B) TRADITIONAL HANOVER®
PREST® BRICK
SIZE: 4"x8"
COLOR: RED CHARCOAL BLEND
SOLDIER COURSE



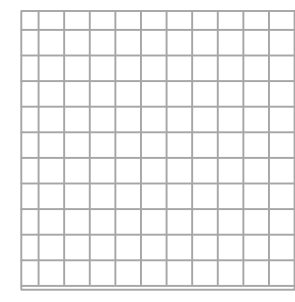
TRADITIONAL HANOVER®
PREST® BRICK
COLOR: RED/CHARCOAL

C) TRADITIONAL HANOVER®
APPIAN® TUMBLE FINISH
SIZE: 3"x6", 4"x6", AND 6"x6"
COLOR: GETTYSBURG GRAY



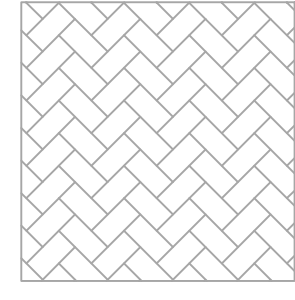
TRADITIONAL HANOVER®
APPIAN® TUMBLE FINISH
COLOR: GETTYSBURG GRAY

D) TRADITIONAL HANOVER® PREST® BRICK
W/ COBBLE
SIZE: 4"x8" (W APPEARANCE OF TWO 4" X 4" UNITS)
COLOR: CHARCOAL GRAY



TRADITIONAL HANOVER®
PREST® BRICK
COLOR: CHARCOAL GRAY

E) TRADITIONAL HANOVER®
PREST® BRICK
SIZE: 4"x8"
COLOR: NATURAL/CHARCOAL
HERRINGBONE (DIRECTION AS SHOWN)



TRADITIONAL HANOVER®
PREST® BRICK
COLOR: NATURAL/CHARCOAL

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY
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ENGINEERS
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SCIENTISTS
CONSTRUCTION MANAGERS
KCI TECHNOLOGIES
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				N.T.S.
				TM
				SC

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

SITE DETAILS
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.
C-06
SHEET 6 of 30
KCI JOB NUMBER
272206100.03

CARROLL COUNTY, MD

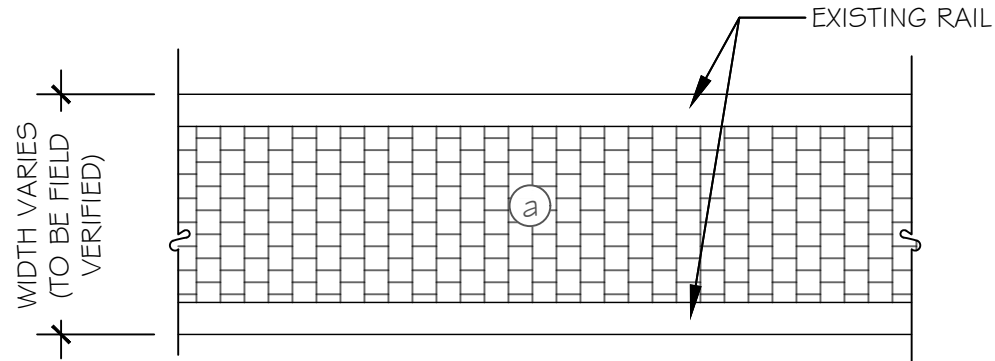
ELECTION DISTRICT 13

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BY: \$USER\$
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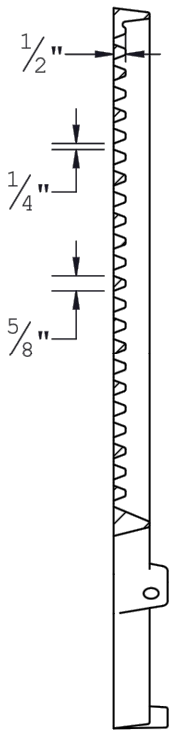
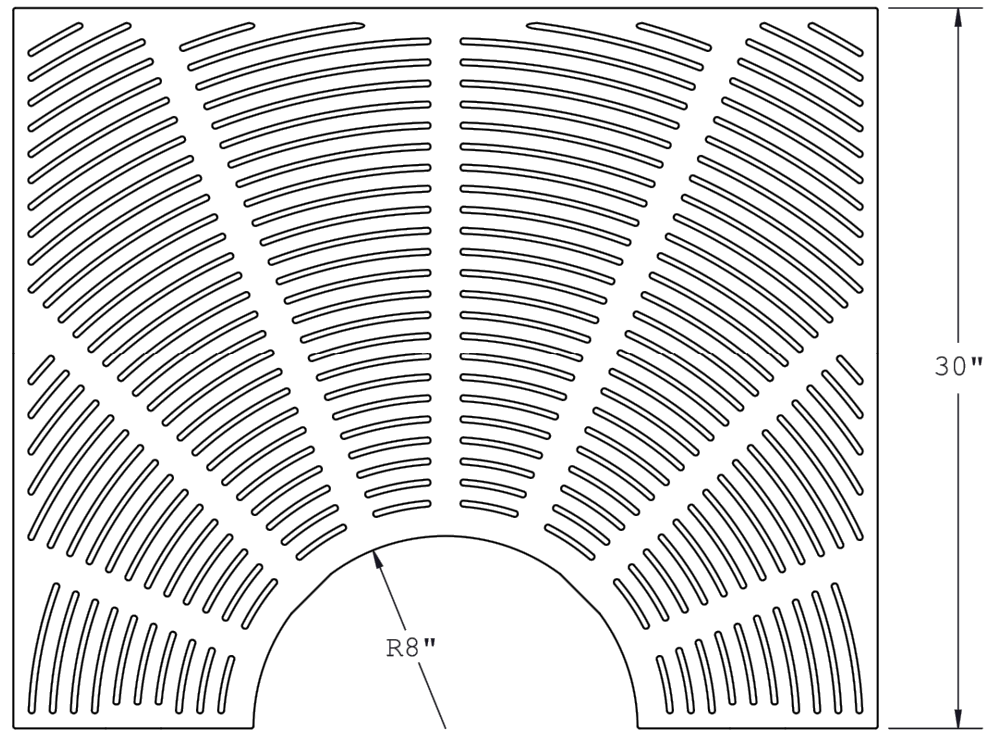
OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83



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USF 9521-S Tree Grate ADA Compliant	
LOAD CLASSIFICATION: Light Duty	
MATERIAL: Gray Cast Iron	ASTM A-48 Class 35B
ITEM: SAAN #	DRAWING
TreeGrate 8070226	DATE 7/19/2017
	DRAWN BY AB
REV 0	DATE
REV BY	DATE

Customer Drawing

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3 USF 9521-S TREE GRATE

7 N.T.S.



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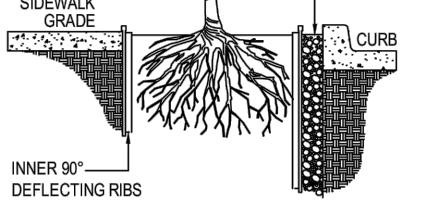
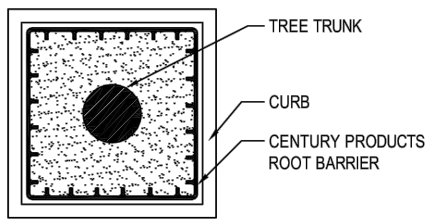
SPECIFICATIONS:

CP - SERIES: CP19-2, CP19-2, CP24-2, CP28-2, AND CP48-2 90°
1/2"-3/4" RIBBED SIDE INTERLOCKING CONNECTION
MATERIAL: POLYETHYLENE WITH ULTRAVIOLET INHIBITORS
THICKNESS: .060 - .085

MATERIAL	POLYETHYLENE
THICKNESS	.060 - .085
ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
TENSILE STRESS @ YIELD	D638 4100 TO 4300 PSI
ELONGATION @ BREAK	D638 40%
TENSILE MODULUS OF ELASTICITY	D638 150,000 PSI
FLEXURAL STIFFNESS	D747 125,000 PSI
CANTILEVER BEAM	D1822 50 FT. LBS/IN
TENSILE IMPACT	D1822 50 FT. LBS/IN
ENVIRONMENTAL STRESS	D1683 1 HR
CRACK RESISTANCE	D2240 68
HARDNESS SHORE D	D2240 68

FEATURES:

- FLEXIBLE TOP SAFETY EDGE
- VERSATILE BARRIER FOR LINEAR OR TREE WELL APPLICATIONS
- MANUFACTURED WITH 80% RECYCLED PLASTIC
- RAISED 90° ROOT DEFLECTING RIBS
- 90° 1/2"-3/4" RIBBED SIDE INTERLOCKING PANEL CONNECTION
- ADJUSTABLE ANTI-LIFT POLYETHYLENE PANELS WHICH CAN BE SEPARATED INTO 1' SECTIONS



- NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
 3. DO NOT SCALE DRAWING.
 4. THESE DRAWINGS ARE NOT FOR CONSTRUCTION PURPOSES AND ARE FOR INFORMATION PURPOSES ONLY. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
 5. TOLERANCES MAY VARY IN ORDER TO MAINTAIN THE INTEGRITY OF POST-CONSUMER MATERIALS, AND ASSURE THE MATERIAL STRUCTURE. WE MAKE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM THE WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
 6. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 005-003A.



5 ROOT BARRIER SYSTEM

7 N.T.S.



CENTURY PRODUCTS
1144 N. GROVE ST.
ANAHEIM, CA 92806
TOLL FREE: 1-800-489-8084
PHONE: (714) 632-7083
FAX: (714) 632-5470
www.centuryrootbarrier.com

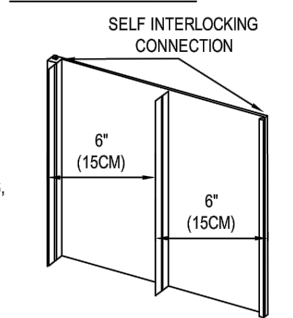
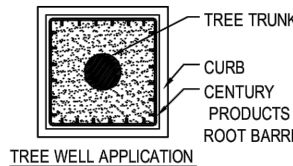
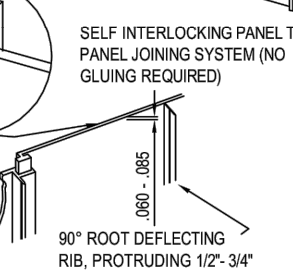
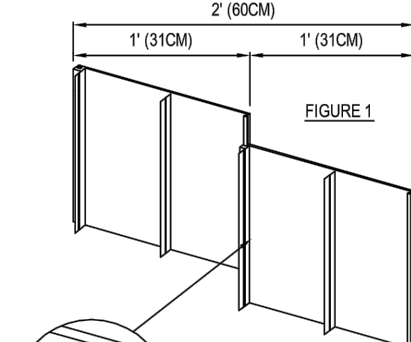
CENTURY CP - SERIES PANELS ARE PRE-ASSEMBLED IN 2' LONG SEGMENTS WHICH CAN BE COMBINED TO CREATE VARIOUS LENGTHS OF BARRIER TO FIT YOUR APPLICATION.

1. SPECIFICATIONS:

- A. THE ROOT BARRIER SHALL BE CP - SERIES MANUFACTURED BY CENTURY PRODUCTS, 1144 NORTH GROVE ST., ANAHEIM, CA 92806 (714) 632-7083, OR APPROVED EQUIVALENT.
- B. THE BARRIERS ARE BLACK, MOLDED, MODULAR PANELS MANUFACTURED USING 80% RECYCLED POLYETHYLENE PLASTIC WITH ULTRAVIOLET INHIBITORS AND .060 - .085 IN THICKNESS. EACH PANEL HAS VERTICAL 90° ROOT DEFLECTING RIBS PROTRUDING 1/2"-3/4" IN HEIGHT. THE RIBS HAVE A MINIMUM THICKNESS OF .060 - .085 AND ARE PLACED 6"-8" APART. AN INTEGRATED SELF-INTERLOCKING 90° RIBBED CONNECTION JOINING SYSTEM PROVIDES FOR INSTANT ASSEMBLY BY SLIDING ONE PANEL INTO ANOTHER.
- C. ALWAYS INSTALL THE PANELS 1"-2" ABOVE GRADE TO AVOID ROOT PENETRATION ABOVE THE BARRIER.
- D. PREPARE YOUR INSTALLATION AS DEPICTED IN ILLUSTRATIONS (ASSEMBLY PANELS AS SHOWN IN FIG. 1).
- E. RECOMMENDED FOR LINEAR OR TREE WELL PLANTING APPLICATIONS. FOR DRAINAGE BACKFILL WITH NATIVE SOIL OR (IF NECESSARY) WHILE COMPACT SOIL CONDITIONS EXIST, USE GRAVEL OR CRUSHED ROCK. AVOID BACKFILL LESS THAN 3/4" OR GREATER THAN 1 1/2". FINISH TO GRADE. DO NOT DISTORT BARRIER INSTALLATION.

NOTES:

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6. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 005-003B.



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NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				N.T.S.
				TM
				SC

1-800-BOLLARDS

The Bollard Experts

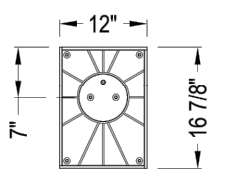
1-800-BOLLARDS
10 HUGHES, SUITE A-105
IRVINE, CA 92618
TOLL FREE: 1-800-BOLLARDS
PHONE: (866) 834-1338
www.1800bollards.com

SELECT DESIRED DIAMETER

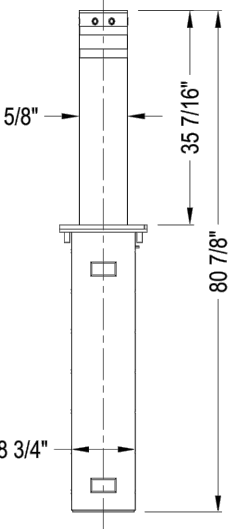
- ☐ 6" (SHOWN) ☐ 8"
☐ 10"

SELECT DESIRED MATERIAL:

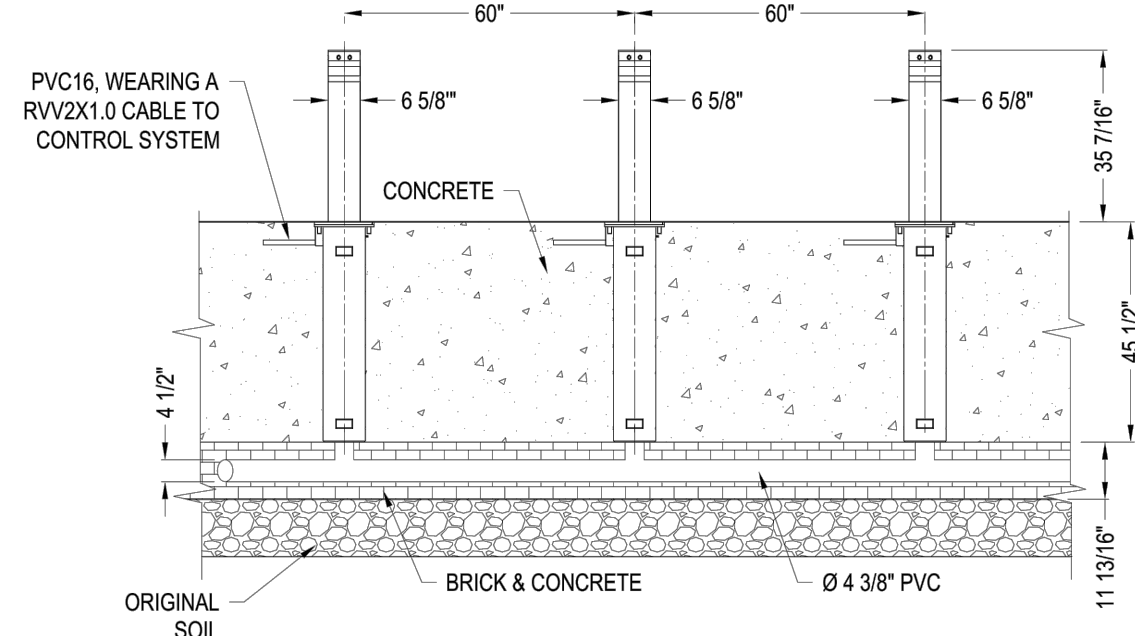
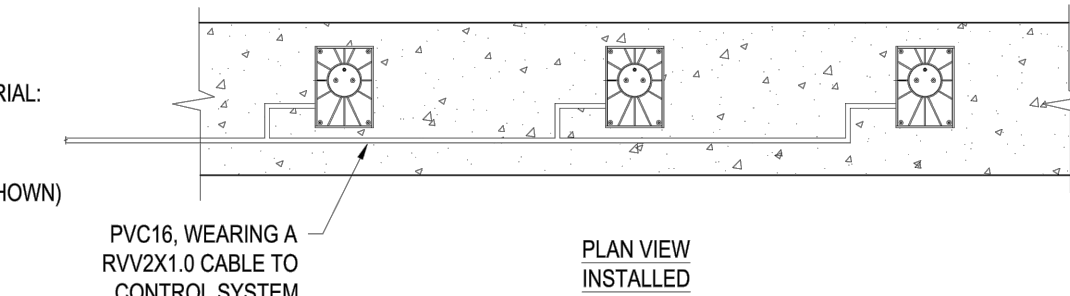
- ☐ CARBON STEEL
☐ STAINLESS STEEL (SHOWN)



PLAN VIEW BOLLARD



FRONT VIEW BOLLARD



MANUFACTURERS NOTES

1. BOLLARDS ARE AVAILABLE IN CUSTOM HEIGHTS

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 5046-087.

4 MANUAL RETRACTABLE BOLLARDS

7 6" ASSISTED LIFT MANUAL RETRACTABLE STAINLESS STEEL BOLLARD

QTY - 8

5046-087

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REVISION DATE 22/08/2024

CADdetails.com

NOTES:

1. OWNER'S REPRESENTATIVE & LANDSCAPE ARCHITECT TO APPROVE FINAL MATERIAL AND COLOR SELECTION AFTER REVIEW OF FIELD MOCK-UP PANELS.
2. ALL CENTER POINT FOR PROPOSED PLAZA AND ASSOCIATED HARDSCAPE FEATURES RADII SHALL BE COMPUTED FOR STAKEOUT PURPOSES
3. GEOTECHNICAL ENGINEER MUST APPROVE SUBSURFACE BASE PREPARATION, I.E. COMPACTED, CRUSHED, AGGREGATE BASE PRIOR TO CONSTRUCTION OF MASONRY STRUCTURES OR WALKS.
4. PLANTING SHOWN FOR ILLUSTRATIVE PURPOSES ONLY - SEE PLANTING PLAN
5. ALL HARDSCAPE TO BE INSTALLED PER SPECIFIED MANUFACTURER PERFORMANCE SPECIFICATIONS.

PAVING PLAN KEY:

- a COLOR STAMP CONCRETE
PATTERN: BRICKFORM STAMP
6" X 6" EDINBURGH COBBLE, FM-520
COLOR: SOLOMON COLORS 'MUSHROOM'
- b1 COLOR STAMP CONCRETE
PATTERN: BRICKFORM STAMP
RUNNING BOND NEW BRICK, FM-5150 S/O
COLOR: SOLOMON COLORS 'SIENNA'
- b2 COLOR STAMP CONCRETE
PATTERN: BRICKFORM STAMP
RUNNING BOND NEW BRICK, FM-5150 S/O
COLOR: SOLOMON COLORS 'CURRENT'
- c COLOR STAMP CONCRETE
PATTERN: BRICKFORM STAMP
HERRINGBONE NEW BRICK (FINE GROUT), FM-5050 S/O
COLOR: SOLOMON COLORS 'SLATE'
- d COLOR STAMP CONCRETE
PATTERN: BRICKFORM STAMP
4" X 8" NEW BRICK BORDER, FM-5325 S/O
COLOR: SOLOMON COLORS 'CURRANT'
- e COLOR STAMP CONCRETE
PATTERN: BRICKFORM STAMP
4" X 12" BRICK BORDER, FM-1000
COLOR: SOLOMON COLORS 'SLATE'

NOTES:

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2. THIS DRAWING IS INTENDED FOR USE BY DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. ALL INFORMATION CONTAINED HEREIN MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER.

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. 28935 EXPIRATION DATE: 1/15/25

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

SITE DETAILS
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.

C-07

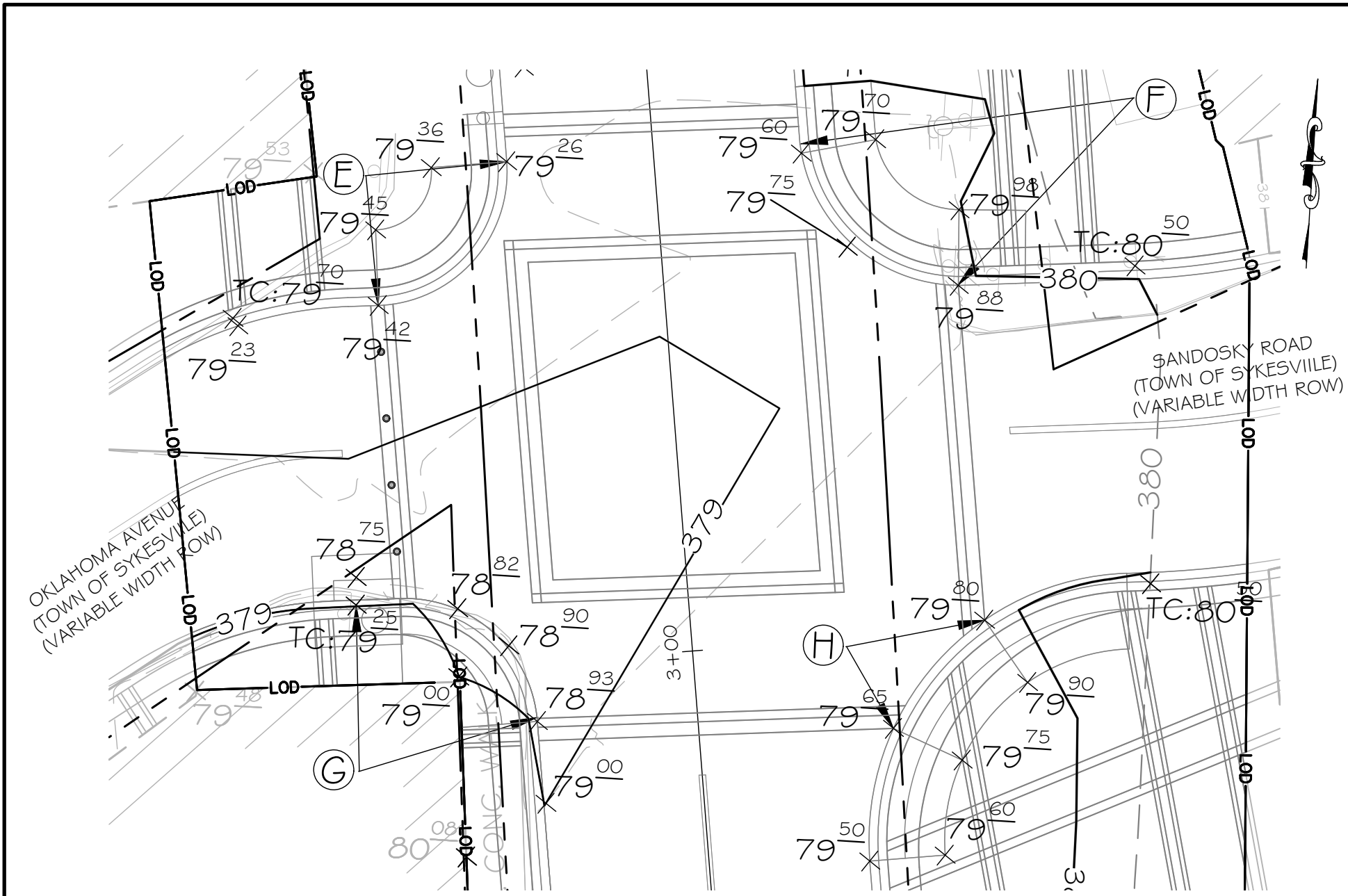
SHEET 7 OF 30

KCI JOB NUMBER 272206100.03

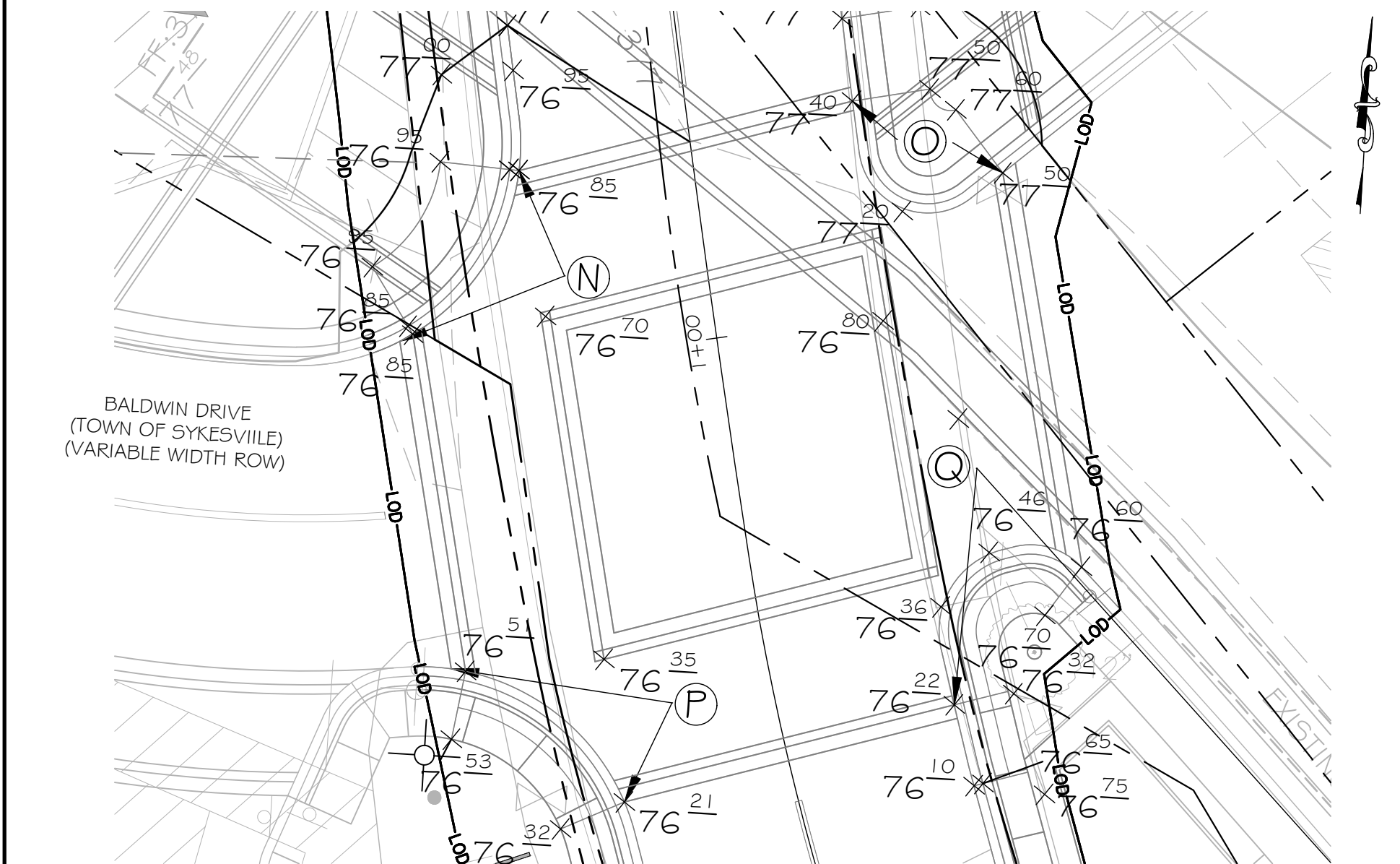
CARROLL COUNTY, MD

ELECTION DISTRICT 13

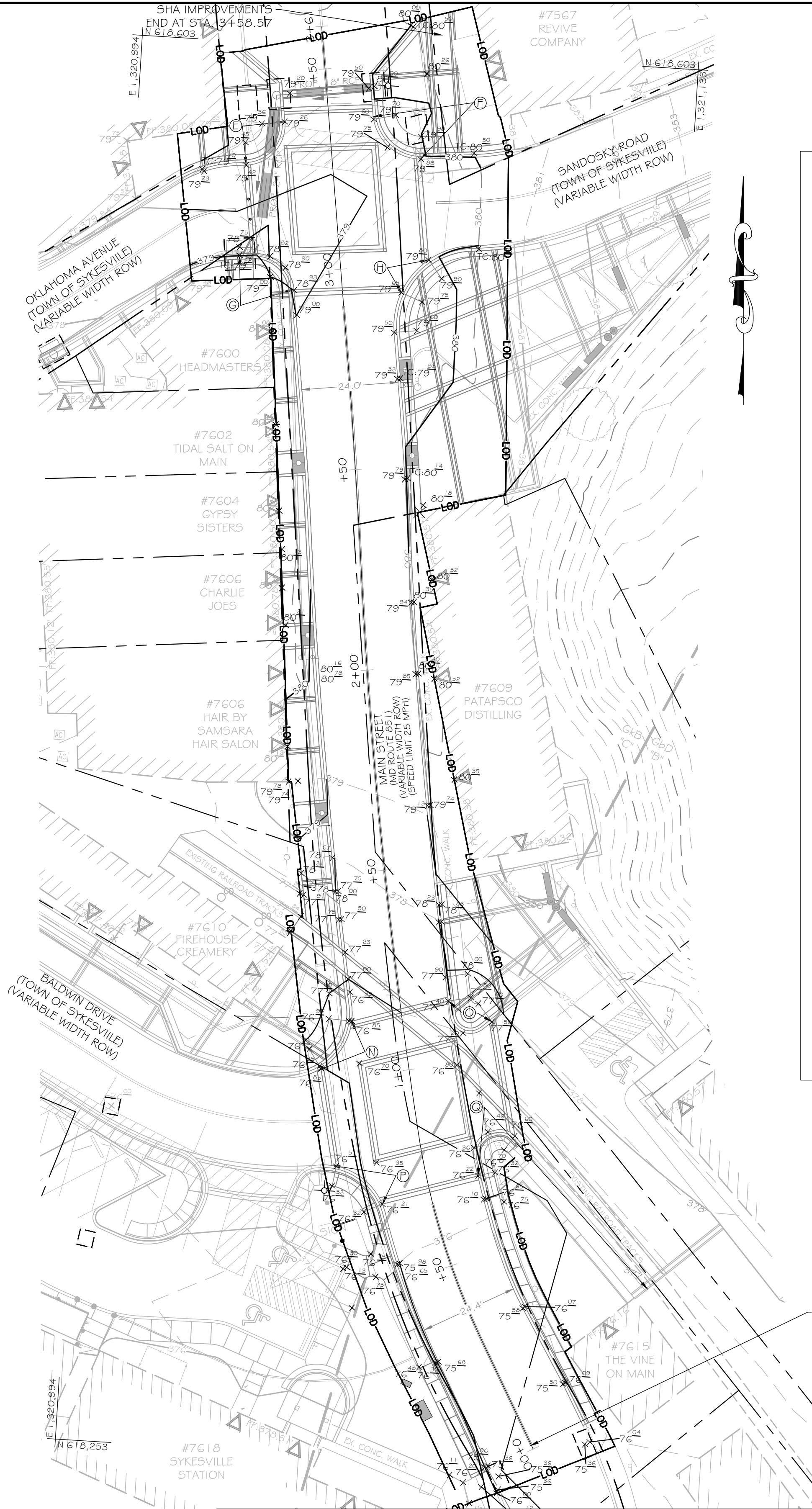
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NORTH ADA INTERSECTION EXHIBIT
SCALE 1" = 10'



SOUTH ADA INTERSECTION EXHIBIT
SCALE 1" = 10'



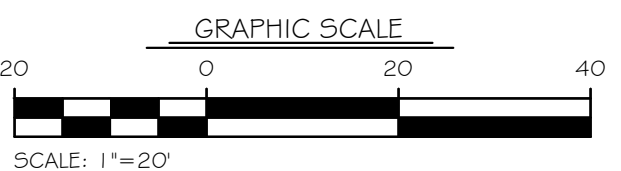
MAIN STREET IS LISTED ON THE LRP DATABASE OF FORMERLY INVESTIGATED SITES WITH A STATUS OF NO FURTHER ACTION REQUIRED WITH SITE SOILS AND GROUNDWATER CONTAMINATED WITH METALS AND SITE SOILS CONSTAMINATED WITH POLYAROMATIC HYDROCARBONS (PAH). SHA REQUIRES THAT ADJACENT TO AND WITHIN SHA ROW, EXCAVATIONS GREATER THAN FOUR-FOOT DEEP, OR ANY LOCATION WHERE MATERIAL IS SUSPECT, SHALL BE MONITORED FOR INDICATIONS OF CONTAMINATION BY AN ENVIRONMENTAL PROFESSIONAL (EP) EXPERIENCED IN THE FIELD IDENTIFICATION AND SAMPLING OF CONTAMINATED MEDIA WITH A 40-HOUR HAZWOPER CERTIFICATION OR A CURRENT 8-HOUR HAZWOPER REFRESHER. IT MUST BE NOTED THAT CONTAMINANTS SUSPECT OF BEING PRESENT INCLUDE METALS AND PAH WHICH CANNOT BE DETECTED WITH FIELD SCREENING DEVICES. MEDIA CHARACTERIZATION SAMPLING PROXIMATE TO THESE LOCATIONS FOR HEALTH AND SAFETY AND MATERIALS MANAGEMENT MAY BE WARRANTED.

UPON IDENTIFICATION OF CONTAMINATED MEDIA, THE FOLLOWING STEPS SHALL BE TAKEN FOR ANY WORK WITH SAME ADJOINING OR WITHIN SHA ROW.

- A. EXCAVATED CONTAMINATED SOILS AND GROUNDWATER MUST BE SEGREGATED FROM CLEAN MATERIALS AND MANAGED AND DISPOSED OF APPROPRIATELY AND IN ACCORDANCE WITH COMAR 26.10.09. THE POTENTIAL PRESENCE OF CONTAMINATED SOILS AND GROUNDWATER REQUIRES THE DEVELOPER TO:
- PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN PREPARED BY A CERTIFIED INDUSTRIAL HYGIENIST (CIH) OR APPROPRIATELY TRAINED AND CERTIFIED HEALTH AND SAFETY PROFESSIONAL, IN ACCORDANCE WITH 29 CFR 1926.65(b), AND FOR SITE WORK THAT ADDRESSES THE POTENTIAL FOR ENCOUNTERING CONTAMINATED SOILS AND GROUNDWATER. THE PLAN IS TO INCLUDE:
 - MEANS TO MONITOR ALL POTENTIALLY CONTAMINATED ZONES DURING EXCAVATION.
 - SCREENING OF POTENTIALLY CONTAMINATED SOIL OR WATER WITH A PHOTO IONIZATION DETECTOR OR EQUIVALENT WITH DEFINED RESPONSE LEVELS FOR MANAGEMENT OF THESE MATERIALS AND DETERMINATION OF HEALTH AND SAFETY REQUIREMENTS. SUCH SCREENING IS TO BE DONE BY AN EP EXPERIENCED IN FHTE FIELD IDENTIFICATION AND SAMPLING OF CONTAMINATED SOILS AND GROUNDWATER WITH A 40-HOUR HAZWOPER CERTIFICATION OR A CURRENT 8-HOUR HAZWOPER REFRESHER. THE EP SHALL BE A CIH OR EQUIVALENT OR BE UNDER THEIR DIRECT SUPERVISION.
 - IDENTIFICATION OF A QUALIFIED AND APPROPRIATELY CERTIFIED SITE SAFETY OFFICER WHO CAN DETERMINE WHEN THE PRESENCE OF CONTAMINATED MATERIALS WARRANTS AN UPGRADE TO SITE HEALTH AND SAFETY REQUIREMENTS, INCLUDING WORKER TRAINING PERSONNEL PROTECTIVE EQUIPMENT AND THE ESTABLISHMENT OF WORKER EXCLUSION ZONES.
 - DEFINED FIELD SCREENING ACTION LEVELS FOR SEPARATION AND STOCKPILING OF CONTAMINATED SOILS AND GROUNDWATER.
 - REQUIREMENTS FOR THE ON-SITE STOCKPILING AND STORAGE OF CONTAMINATED SOILS AND GROUNDWATER.
 - IDENTIFICATION OF A CONTRACTED DISPOSAL FACILITY FOR CONTAMINATED SOILS AND GROUNDWATER INCLUDING SAMPLING AND WASTE CHARACTERIZATION REQUIREMENTS FOR WASTE ACCEPTANCE.
 - CONTAMINATED MATERIALS STOCKPILED ON-SITE MUST BE PROTECTED FROM PRECIPITATION, SURFACE WATERS, AND MANAGED TO PREVENT DUST GENERATION. NO CONTAMINATED MATERIALS ARE TO BE STOCKPILED ON OR ADJACENT TO SHA ROW. CONTAMINATED GROUNDWATER MUST BE CONTAINED ON-SITE, CHARACTERIZED, AND TREATED AS NECESSARY PRIOR TO DISPOSAL.

DEPRESSED CURB SUMMARY	
IDENTITY	LENGTH (FT)
A	12.00
B	10.00
C	16.00
D	12.00
E	16.00
F	17.00
G	15.00
H	11.00
I-J	81.00
K	9.50
N	15.00
O	48.43
P	16.50
Q	70.07

- DRAWING LEGEND
- EX. MINOR CONTOUR (2' INTERVAL)
 - EX. MAJOR CONTOUR (10' INTERVAL)
 - ADJACENT PROPERTY LINE
 - EX. PROPERTY BOUNDARY
 - SURVEYED CONTROL POINT
 - EX. ROAD/EDGE OF PAVING
 - EX. GAS LINE
 - EX. STORM DRAIN
 - EX. SEWER LINE # MANHOLES, CLEAN-OUTS
 - EX. UNKNOWN UNDERGROUND LINE
 - EX. WATER LINE # STRUCTURES
 - EX. OVERHEAD ELECTRIC # UTILITIES POLES
 - EX. UNDERGROUND ELECTRIC
 - EX. DOOR
 - FENCE
 - STREAM
 - PROP. MINOR CONTOUR (2' INTERVAL)
 - PROP. MAJOR CONTOUR (10' INTERVAL)
 - PROP. CURB # GUTTER
 - PROP. PRIVATE ROAD/DRIVE CENTERLINE
 - EX. BUILDING
 - PROP. BUILDING
 - PROP. SPOT ELEVATION # FLOW ARROW
 - PROP. ORNAMENTAL TREE
 - PROP. SHADE TREE
 - PROP. EVERGREEN TREE
 - EX. TREELINE
 - LIMIT OF DISTURBANCE
 - PROP. STORM DRAIN W/ INLETS # MANHOLE
 - PROP. INLET PROTECTION MEASURES
 - PROP. WATER LINE # HYDRANT
 - PROP. LIGHT POLE
 - PROP. SILT FENCE
 - PROP. SUPER SILT FENCE
 - PROP. FENCE



BID SET

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

GRADING PLAN
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.
C-08
SHEET 8 OF 30
KCI JOB NUMBER
272206100.03

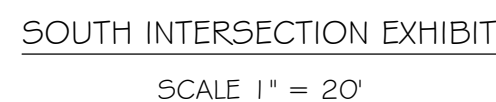
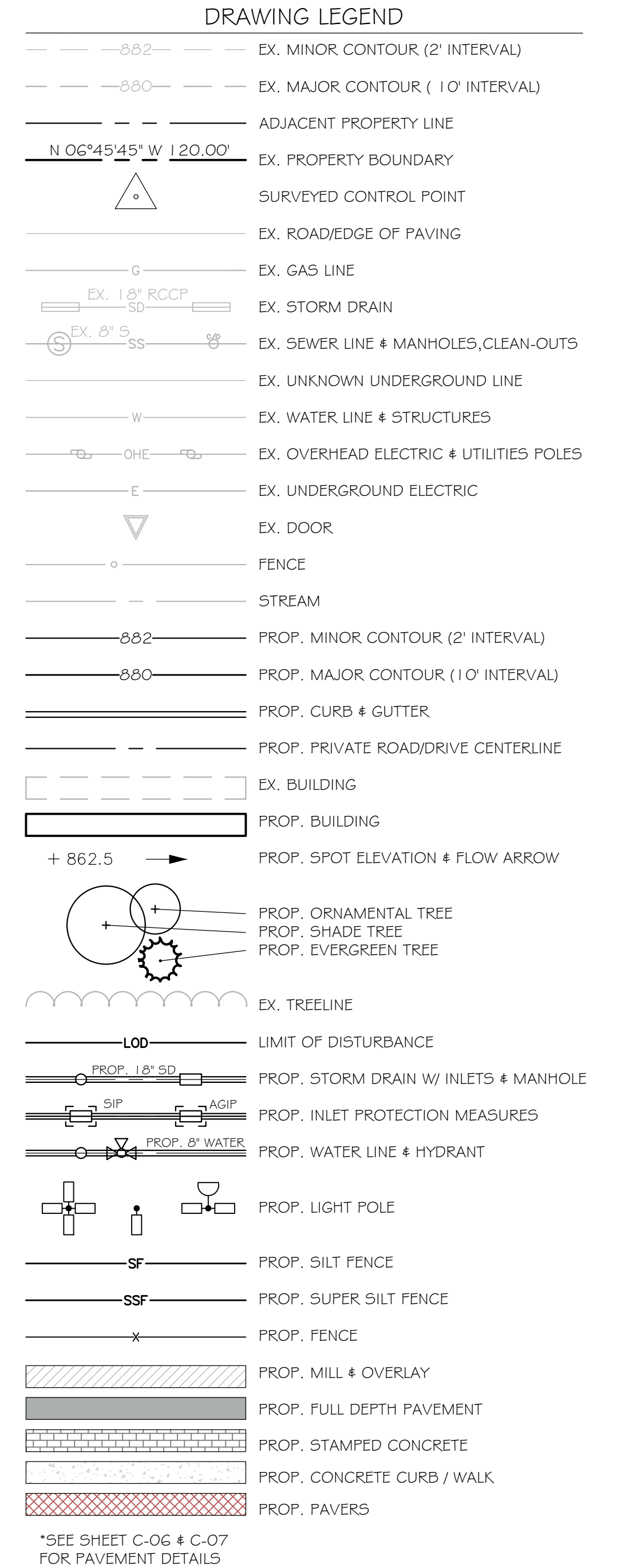
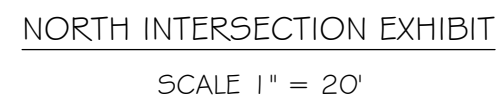
CARROLL COUNTY, MD ELECTION DISTRICT 13

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ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
KCI
TECHNOLOGIES
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				SCALE 1" = 20'
				DESIGNED BY TM
				DRAWN BY SC

PLOTTED: \$DATE\$
BY: \$USERNAME\$
FILE: \$FILE\$



REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				SCALE
				1" = 20'
				DESIGNED BY
				TM
				DRAWN BY
				SC

CARROLL COUNTY, MD

ELECTION DISTRICT 13

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLOO3XX

SIGNAGE & PAVEMENT MARKINGS PLAN

FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

DRAWING NO.	
C-10	
SHEET	10 OF 30
KCI JOB NUMBER	
272206100.03	

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OF THE STATE OF MARYLAND, LICENSE NO. 28935 EXPIRATION DATE: 1/15/25



PLOTTED: \$DATE\$
BY: \$USERNAME\$
FILE: \$FILE\$



KCI
TECHNOLOGIES

*ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS*

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				SCALE
				1" = 20'
				DESIGNED BY
				TM
				DRAWN BY
				SC

1. ALL BEDS ARE TO BE MULCHED WITH THREE (3) INCHES OF HARDWOOD MULCH. NO MULCH SHALL BE PLACED AGAINST TRUNKS AND/OR STEMS. ALL GROUND COVERING AND SEEDLINGS SHOULD BE MULCHED TO A DEPTH OF ONE TO TWO (2) INCHES.
2. AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN SHALL COMPLY WITH PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE CARROLL COUNTY "LANDSCAPE MANUAL". NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME, AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
3. NO SUBSTITUTIONS ARE TO BE MADE WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT AND/OR THE OWNER.

SEEDING AND PLANTING SHOULD BEGIN IMMEDIATELY UPON COMPLETION OF THE MICRO-BIOREMEDIATION FACILITY WHILE THE SOIL IS STILL FRIABLE AND BEFORE INVASIVE WEEDS EMERGE. PLANT SEEDING AND PLANTING BEFORE THE BASIN IS FLOODED OR ALLOW THE BASIN TO DRAIN BEFORE SEEDING. BROADCAST SEED EVENLY OVER EACH UNIT BY HAND SEEDING OR HYDRO SEEDING. SEEDING RATE SHOULD BE 1/2 POUND PER 1,000 S.F., WHICH CAN BE BROADCAST OVER THE ENTIRE AREA TO BE PLANTED, REFER TO CONCEPT LANDSCAPE PLAN. MULCHING, IF USED, SHOULD BE SPARSE TO ALLOW SUNLIGHT TO REACH THE GROUND. REGULAR WATERING OF SEEDED AREAS IS VITAL UNTIL SEED BECOMES ESTABLISHED.

1. ALL PLANT MATERIAL (NURSERY STOCK) TO MEET AMERICAN NURSERY AND LANDSCAPE ASSOCIATION'S (ANLA) LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), PARTICULARLY WITH REGARD TO SIZE, GROWTH, SIZE OF BALL, AND DENSITY OF BRANCH STRUCTURE.
2. CONTRACTOR SHALL FOLLOW SPECIFICATION GUIDELINES FOR BALTIMORE & WASHINGTON METROPOLITAN AREA AS APPROVED BY THE L.C.A. OF MARYLAND, WASHINGTON D.C., & VIRGINIA AND DESCRIBED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" AS WELL AS ALL GUIDELINES SPECIFIED IN THE LATEST EDITION OF THE CARROLL COUNTY, MARYLAND "LANDSCAPE MAINTENANCE" SPECIFICATIONS.
3. LANDSCAPE ARCHITECT/OWNER SHALL SELECT, VERIFY, AND/OR APPROVE ALL PLANT MATERIAL. AT THE OWNER'S DISCRETION, SPECIMEN AND OTHER PLANT MATERIAL MAY BE SELECTED, NO SUBSTITUTIONS ARE TO BE MADE WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT AND/OR OWNER.
4. CONTRACTOR TO NOTIFY MISS UTILITY AT, 1 (800) 257-7777, AT LEAST 72 HOURS PRIOR TO CONSTRUCTION TO VERIFY LOCATIONS OF ALL UTILITIES WITH THE OWNER BEFORE PLANTING.
5. THE LANDSCAPE CONTRACTOR SHALL COORDINATE WITH THE GENERAL, LIGHTING, AND IRRIGATION CONTRACTORS REGARDING TIMING AND INSTALLATION OF PLANT MATERIAL. AT THE TIME OF FINAL INSPECTION WITH ACCEPTANCE, ALL ELECTRIC, WATER AND DRAINAGE UTILITIES, AS WELL AS PLANT MATERIAL, SHALL REMAIN UNDAMAGED. LIKEWISE, THE LANDSCAPE CONTRACTOR AND UTILITIES CONTRACTOR SHALL COORDINATE EFFORTS TO ENSURE THAT SURFACE UTILITIES ARE AT THE PROPER ELEVATION RELATIVE TO FINAL GRADE.
6. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIAL AND BERMS, FENCES AND WALLS. ALL PLANT MATERIAL SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIAL TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
7. CONTRACTOR TO PROVIDE TREE PROTECTION AND ROOT PRUNING USING BEST URBAN FORESTRY PRACTICES.
8. DEVELOPER/BUILDER'S CERTIFICATE

NAME _____ DATE _____

PLANT SCHEDULE*						
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	REMARKS
TREES/EVERGREEN TREE						
ARA	3	ACER RUB. 'ARMSTRONG'	FASTIGIATE RED MAPLE	2.5" CAL.	B+B	CROWN, ONE LEADER
PSK	3	PRUNUS SERRULATA 'KWANZAN'	KWANZAN CHERRY	1" CAL.	B+B	SPECIMEN

LEGEND

EXISTING MAJOR CONTOUR	
EXISTING MINOR CONTOUR	
EXISTING TREE	
PROPOSED MAJOR TREE	
PROPOSED UNDERSTORY TREE	
PROPOSED SHRUB	



OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.

C-11

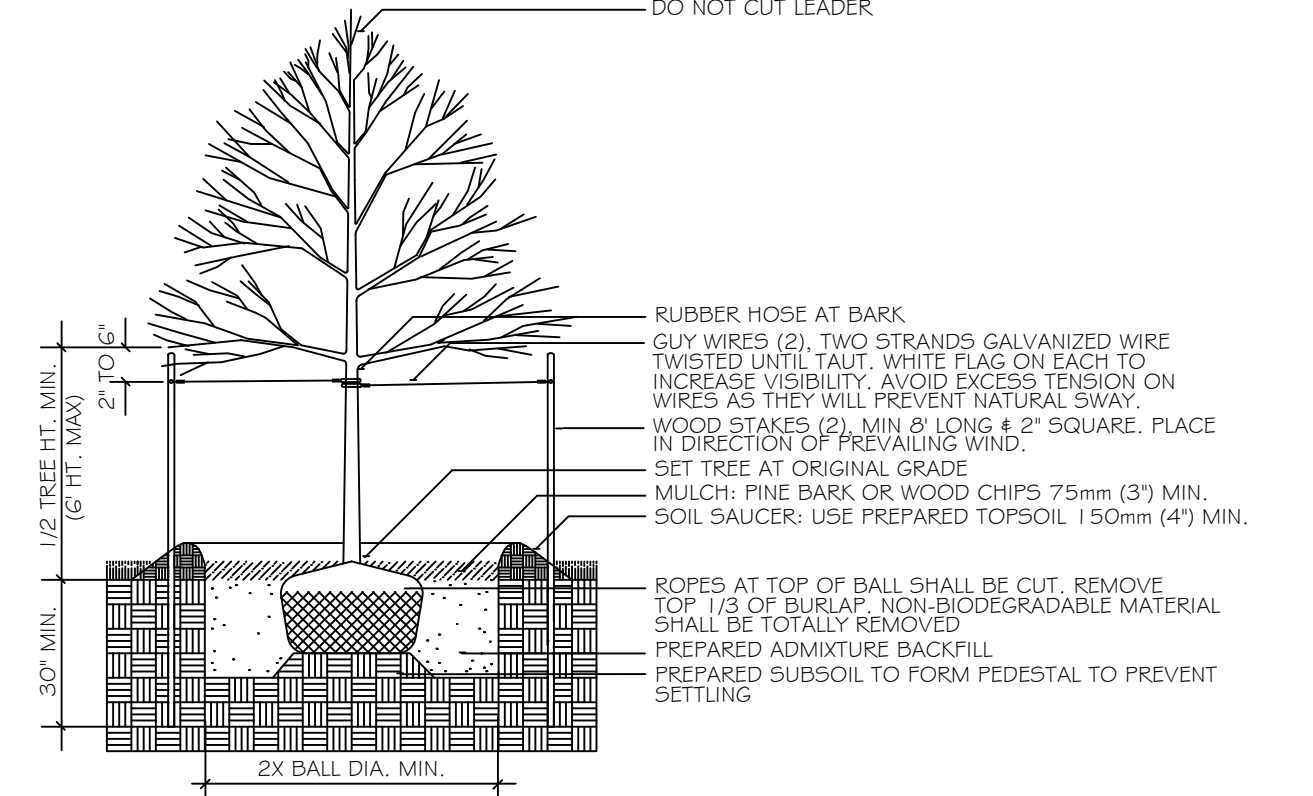
SHEET 11 OF 30

JOB NUMBER

CARROLL COUNTY, MD

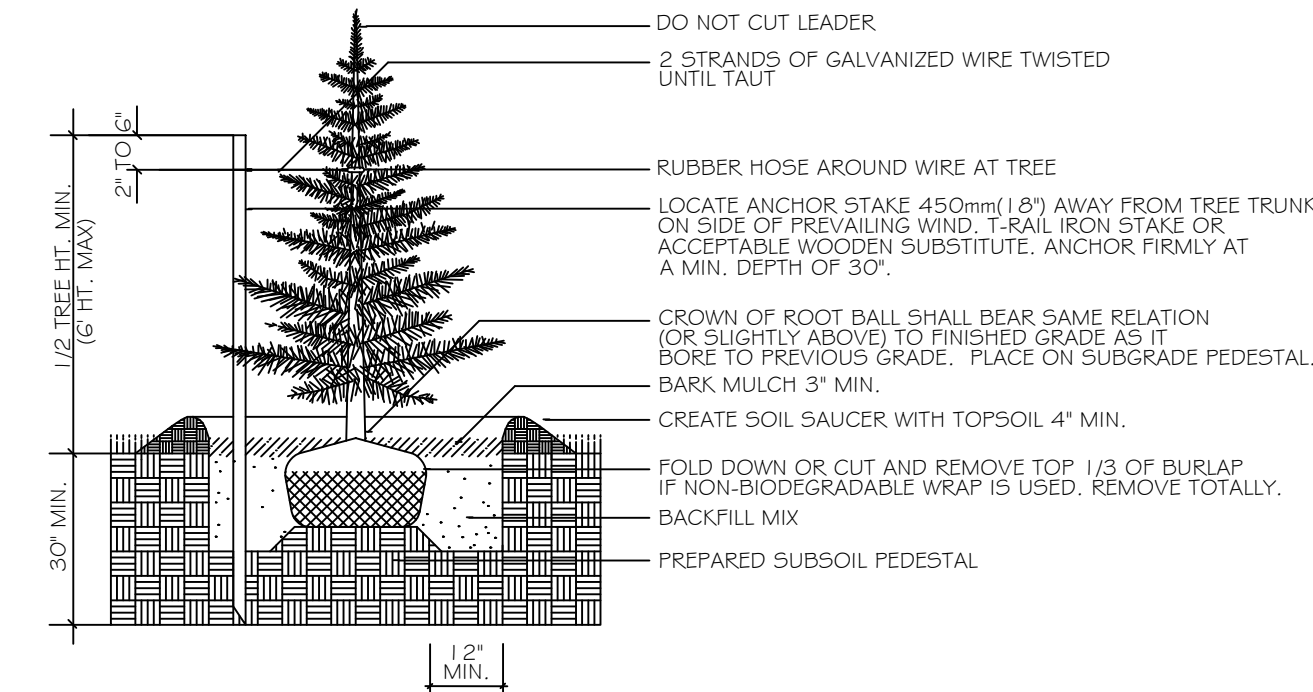
ELECTION DISTRICT 13

PLOTTED: \$DATE\$
 BY: \$USER\$
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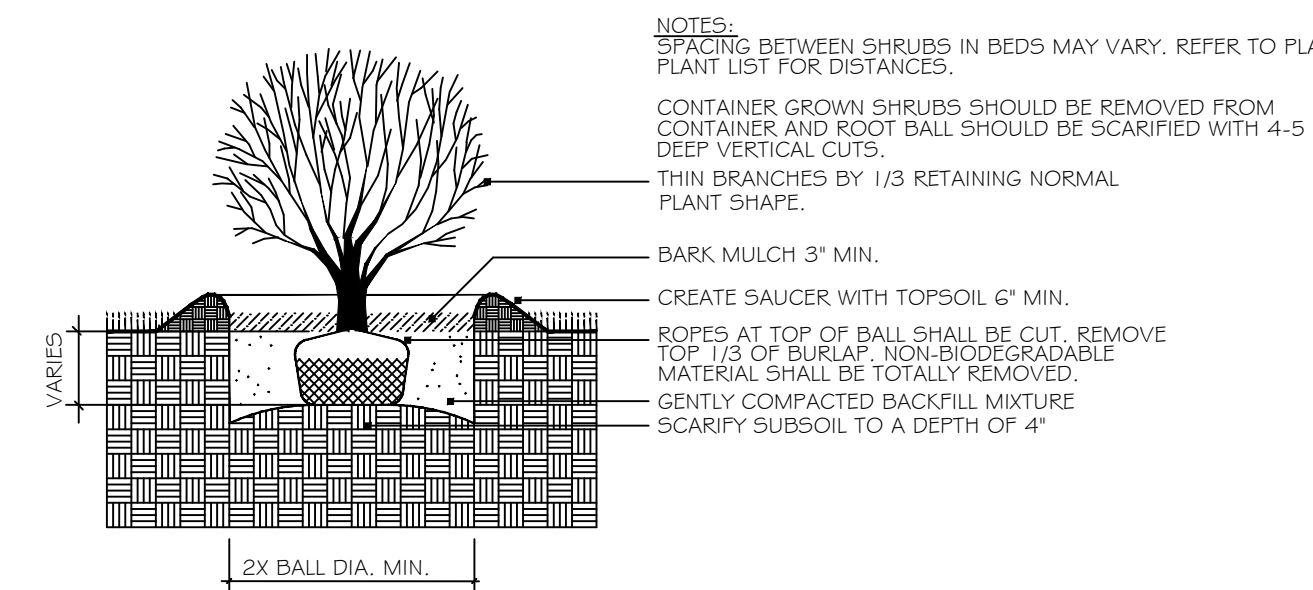
1 DECIDUOUS TREE PLANTING (LESS THAN 3" CAL.)

12 N.T.S.



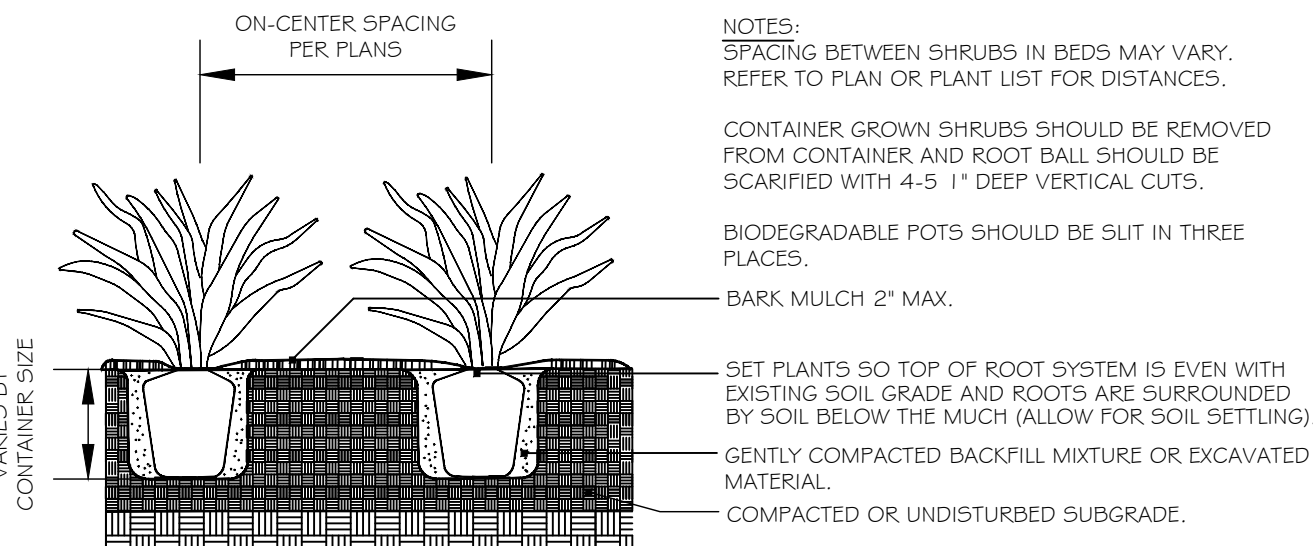
2 EVERGREEN TREE PLANTING

12 N.T.S.



3 SHRUB PLANTING - BALL AND BURLAP

12 N.T.S.



4 PERENNIAL PLANTING

12 N.T.S.

SUPPLEMENTAL LANDSCAPE NOTES & SPECIFICATIONS

- THE CONTRACTOR SHALL REVIEW ARCHITECTURAL/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH THE GRADING AND SURFACE UTILITIES.
- THE CONTRACTOR SHALL INSURE THAT HIS WORK DOES NOT INTERRUPT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.
- DURING PLANTING OPERATIONS, EXCESS WASTE MATERIALS SHALL BE PROMPTLY AND FREQUENTLY REMOVED FROM THE SITE.
- ALL EQUIPMENT AND TOOLS SHALL BE PLACED SO AS NOT TO INTERFERE OR HINDER THE PEDESTRIAN AND/OR VEHICULAR TRAFFIC FLOW. NO VEHICLES, EQUIPMENT, TOOLS, ETC. SHALL BE PLACED ON OR WITHIN ANY INDICATED TREE PROTECTION ZONE. NO STAGING, STORING OR STOCKPILING OF SUPPLIES OR MATERIAL WITHIN INDICATED TREE PROTECTION ZONES.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UTILITIES. IF UTILITY LINES ARE ENCOUNTERED IN THE EXCAVATION OF TREE PITS, OTHER LOCATIONS FOR TREES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION. NO CHANGES OF LOCATION SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- EVERY POSSIBLE SAFEGUARD SHALL BE TAKEN TO PROTECT BUILDING SURFACES, EQUIPMENT, AND FURNISHINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY WHICH MAY OCCUR AS A RESULT OF NEGLIGENCE IN THE EXECUTION OF THE WORK.
- IN THE EVENT OF A VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL GOVERN. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK. SOD QUANTITY TAKEOFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN SIZES SPECIFIED IN THE PLANT LIST.
- TRANSPORT AND HANDLE PLANTS SO THAT FOLIAGE, ROOTS, OR ROOT BALLS ARE PROTECTED FROM BREAKAGE, SUN, AND WINDS. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM THE SOURCE TO THE JOB SITE AND UNTIL PLANTED. TOPS OR ROOTS OF PLANTS ALLOWED TO DRY OUT OR WHICH HAVE BEEN DAMAGED AND/OR DISTURBED ROOT BALLS WILL BE REJECTED.
- THE CONTRACTOR SHALL STAKE ALL MATERIAL LOCATED ON THE SITE FOR REVIEW AND/OR ADJUSTMENT BY THE LANDSCAPE ARCHITECT OR THE OWNER PRIOR TO PLANTING. ALL LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE BEFORE EXCAVATION.
- THE CONTRACTOR IS RESPONSIBLE FOR TESTING PROJECT SOILS. THE CONTRACTOR IS TO PROVIDE A CERTIFIED SOILS REPORT TO THE OWNER. THE CONTRACTOR SHALL VERIFY THAT THE SOILS ON SITE ARE ACCEPTABLE FOR THE PROPER GROWTH OF THE PROPOSED PLANT MATERIAL. SHOULD THE CONTRACTOR FIND POOR SOIL CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AS AN ADDENDUM AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE TO INCLUDE, BUT NOT BE LIMITED TO, FERTILIZERS, LIME AND TOPSOIL. PROPER PLANTING SOILS MUST BE VERIFIED PRIOR TO PLANTING MATERIALS.

- ALL PLANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH "HORTUS THIRD, BY THE STAFF OF THE L. H. BAILEY HORTORIUM, CORNELL UNIVERSITY, 1976.
- PLANTS SHALL HAVE NORMAL, WELL DEVELOPED BRANCHES AND VIGOROUS, FIBROUS ROOT SYSTEMS. THEY SHALL BE HEALTHY AND FREE FROM DISEASE, DECAY, SUN SCALD, ABRASIONS, INSECT PESTS OR INFESTATIONS AND OTHER DAMAGE.
- THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND MATERIALS WHICH, IN HIS OR HER OPINION, DOES NOT MEET THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS. ALL REJECTED MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- ALL PLANT MATERIAL SHOULD BE BACKFILLED WITH SOIL (AMENDED AS NECESSARY) IN LAYERS TO TWO-THIRDS OF THE DEPTH OF THE PLANTING PIT. SOIL SHOULD THEN BE TAMPED AND WATERED THOROUGHLY AT LOW PRESSURE BEFORE BEING BACKFILLED TO PROPER GRADE. THE PLANTING PIT SHOULD BE FLOODED AGAIN, ONCE BACKFILLING IS COMPLETED, SO THAT BACKFILL IS THOROUGHLY SATURATED AND SETTLED.
- IF THE SOIL IS WET OR COMPACTED, ALL CONTAINERIZED AND BALLED NURSERY STOCK SHOULD BE PLANTED SUCH THAT THE TOP ONE-THIRD OF THE BALL IS ABOVE THE EXISTING GRADE.
- THE TOP TWO-THIRDS OF WIRE BASKETS ON ROOT BALLS SHOULD BE REMOVED.
- ALL SOILS DISTURBED DURING INSTALLATION OF PLANT MATERIAL SHALL BE TREATED BY INCORPORATING COMPOSTED ORGANIC MATERIAL WITHIN THE TOP FOUR TO SIX (4 - 6) INCHES.
- ALL PLANTING BEDS ADJACENT TO LAWN, SOD, OR SEEDED AREAS SHALL BE SPADE EDGED TO A DEPTH OF THREE INCHES.
- THE CONTRACTOR SHALL DISPOSE OF STUMPS AND MAJOR ROOTS OF ALL PLANTS TO BE REMOVED. ANY DEPRESSIONS CAUSED BY REMOVAL OPERATIONS SHALL BE FILLED WITH FERTILE, FRIABLE, SOIL PLACED AND COMPACTED SO AS TO REESTABLISH PROPER GRADE FOR NEW PLANTING AND/OR LAWN AREAS.
- THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS.
- UPON COMPLETION OF ALL LANDSCAPING, AN ACCEPTANCE OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR THE OWNER FOR SCHEDULING OF THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
- MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE 90 DAYS AFTER INITIAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT OR THE OWNER'S REPRESENTATIVE. MAINTENANCE SHALL INCLUDE MOWING OF TURF, WATERING, PRUNING, WEEDING, FERTILIZING, MULCHING, REPLACEMENT OF SICK OR DEAD PLANTS, AND OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE USE OF ALL EQUIPMENT, LABOR AND MATERIAL NECESSARY TO PERFORM MAINTENANCE OPERATIONS AND ANY INJURY TO PLANT MATERIAL CAUSED BY SUCH EQUIPMENT, LABOR AND MATERIAL SHALL BE CORRECTED AND REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- ALL TREES SHALL BE GUARANTEED FOR TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE. ALL SHRUBS AND GROUND COVERS SHALL BE GUARANTEED FOR TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.
- ALL DISTURBED AREAS ON THE SITE NOT PLANTED WITH SHRUBS OR GROUND COVER SHALL BE FINE GRADED AND SEEDED OR SODDED AS NOTED ON LANDSCAPE PLAN.
- ALL SOD SHALL BE OBTAINED FROM AREAS HAVING GROWING CONDITIONS FAMILIAR TO AREAS TO BE COVERED. AREAS TO BE SODDED SHALL BE RAKED OF STONES AND DEBRIS. DEBRIS AND STONES OVER ONE INCH (1") SHALL BE REMOVED FROM THE SITE. ALL DAMAGED SOD WILL BE REJECTED. ALL SOD MUST BE PLACED WITH STAGGERED JOINTS, TIGHTLY BUTTED, WITH NO INEQUALITIES IN GRADE. PLACE ALL SOD ROWS AT RIGHT ANGLE TO SLOPE (WHERE APPLICABLE).

TREE PROTECTION NOTES/SEQUENCE

PRE-CONSTRUCTION

- AN ON-SITE PRE-CONSTRUCTION MEETING IS REQUIRED AFTER THE LIMITS OF DISTURBANCE HAVE BEEN STAKED AND FLAGGED, BUT BEFORE ANY CLEARING OR GRADING BEGINS. THE DEVELOPER'S REPRESENTATIVE, CONSTRUCTION SUPERINTENDENT, ISA CERTIFIED ARBORIST OR MARYLAND-LICENSED TREE EXPERT THAT WILL IMPLEMENT THE TREE PROTECTION MEASURES, SHOULD ATTEND THIS PRE-CONSTRUCTION MEETING.
- NO CLEARING OR GRADING SHALL BEGIN BEFORE STRESS-REDUCTION MEASURES HAVE BEEN IMPLEMENTED. APPROPRIATE MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO:
 - ROOT PRUNING
 - CROWN REDUCTION OR PRUNING
 - WATERING
 - FERTILIZING
 - VERTICAL MULCHING
 - ROOT AERATION MATTING
- A MARYLAND-LICENSED TREE EXPERT OR AN INTERNATIONAL SOCIETY OF ARBORICULTURE-CERTIFIED ARBORIST MUST PERFORM ALL STRESS REDUCTION MEASURES.
- TEMPORARY TREE PROTECTION DEVICES SHALL BE INSTALLED PER THE FOREST CONSERVATION PLANT/TREE SAVE PLAN AND PRIOR TO ANY CONSTRUCTION ACTIVITIES. TREE PROTECTION FENCING LOCATIONS SHOULD BE STAKED PRIOR TO THE PRE-CONSTRUCTION MEETING.
- TEMPORARY PROTECTION DEVICES SHALL BE MAINTAINED AND INSTALLED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION PROJECT AND MUST NOT BE ALTERED WITHOUT PRIOR APPROVAL. NO EQUIPMENT, TRUCKS, MATERIALS, OR DEBRIS MAY BE STORED WITHIN THE TREE PROTECTION FENCE AREAS DURING THE ENTIRE CONSTRUCTION PROJECT. NO VEHICLE OR EQUIPMENT ACCESS TO THE FENCED AREA WILL BE PERMITTED. TREE PROTECTION SHALL NOT BE REMOVED WITHOUT PRIOR APPROVAL FROM THE ISA CERTIFIED ARBORIST OR MARYLAND-LICENSED TREE EXPERT.

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. 28935 EXPIRATION DATE: 1/15/25

POST-CONSTRUCTION

- AFTER CONSTRUCTION IS COMPLETED CORRECTIVE MEASURES MAY INCLUDE:

- STRESS REDUCTION ("MITIGATION FOR UNANTICIPATED AND UNAUTHORIZED INJURY TO TREES").
- PRUNING OF DEAD OR DECLINING LIMBS
- SOIL AERATION
- FERTILIZATION
- WATERING
- WOUND REPAIR

- AFTER INSPECTION AND COMPLETION OF CORRECTIVE MEASURES HAVE BEEN UNDERTAKEN, ALL TEMPORARY PROTECTION DEVICES SHALL BE REMOVED FROM THE SITE. REMOVAL OF TREE PROTECTION DEVICES THAT ALSO OPERATE FOR EROSION AND SEDIMENT CONTROL MUST BE COORDINATED WITH THE SEDIMENT CONTROL INSPECTOR. NO ADDITIONAL GRADING, SODDING, OR BURIAL MAY TAKE PLACE AFTER THE TREE PROTECTION FENCING IS REMOVED.

MITIGATION MEASURES FOR UNANTICIPATED AND UNAUTHORIZED INJURY TO TREES

DISTURBANCE WITHIN THE FOREST PROTECTION AREAS IS NOT PROPOSED AT THIS TIME; HOWEVER, IF UNAUTHORIZED IMPACTS WITHIN THE FOREST PROTECTION AREAS WERE TO OCCUR, THE FOLLOWING CORRECTIVE MEASURES WILL BE REQUIRED, AS APPROPRIATE, TO INSURE TREE HEALTH AND SURVIVAL:

ROOT INJURY
 IF AN INCREASE IN GRADE WITHIN AN IDENTIFIED FOREST PROTECTION AREA OCCURS, THIS MAY RESULT IN ROOT INJURY. THE USE OF A POROUS TOPSOIL WILL BE USED TO ALLOW FOR EXCHANGE OF OXYGEN THROUGH THE SOIL. THE OPPOSITE OF THIS, LOWERING IF THE GRADE WITHIN THE PROTECTED AREA, SHALL BE MITIGATED BY COVERING THE ROOTS WITH A FINE WOOD CHIP OR ORGANIC MULCH MATERIAL. THIS WILL HELP RETAIN MOISTURE AND THEREFORE, STIMULATE ROOT RE-GROWTH INTO THE DISTURBED AREA.

SOIL COMPACTION
 SOIL COMPACTION IS A PROBLEM ON MOST CONSTRUCTION SITES; HOWEVER, THE HIGHLY VISIBLE ORANGE BLAZE PLASTIC MESH FENCE SHOULD ELIMINATE THE COMPACTION PROBLEM. IF HEAVY EQUIPMENT DID COME IN CONTACT WITH A CRITICAL ROOT ZONE, A FIBER MAT SHOULD BE LAID DOWN TO INCREASE THE WEIGHT BEARING CAPACITY AND MINIMIZE SOIL COMPACTION.

SOIL PH CHANGE
 SINCE DESIGNATED AREAS HAVE BEEN ESTABLISHED FOR CEMENT TRUCK WASH OUT AND VEHICLE FUELING, LITTLE TO NO CHANGE IN THE SOIL PH SHOULD BE SEEN. CEMENT AND FUEL SPILLS ARE THE TWO MAIN CAUSES OF SOIL PH CHANGE.

TREE WOUNDS
 WOUNDS TO THE TREE TRUNK ARE UNLIKELY TO OCCUR, DUE TO THE MESH FENCE PROTECTION DEVICE; HOWEVER, CROWN BRANCHING STRUCTURES MAY BE DAMAGED BY VEHICULAR MOVEMENT. IF THIS SHOULD OCCUR, PROPER PRUNING WILL BE INITIATED, "CROWN REDUCTION".

APPLICATION OF FERTILIZERS BY INJECTION

AS MENTIONED ABOVE, TREES INSIDE THE TREE PROTECTION AREA SHALL NOT BE DAMAGED DUE TO THE ESTABLISHMENT OF FOREST PROTECTION DEVICES. IF TREES ARE DAMAGED AND SHOW SIGNS OF STRESS, THEY WILL RECEIVE LIQUID FERTILIZER INJECTIONS. FERTILIZER INJECTIONS WILL IMPROVE THE HEALTH AND VIGOR OF THE DAMAGED TREE AND INCREASE THE SURVIVAL POTENTIAL. FOR RECOMMENDED RATES AND TIME OF APPLICATION, CONTACT A LICENSED TREE EXPERT.

SHA LANDSCAPE NOTES

7.0 REQUIRED SHA LANDSCAPE NOTES

TO ENSURE THE USE OF APPROVED MATERIALS AND CONFORMANCE WITH SHA CONSTRUCTION SPECIFICATIONS, ALL PLANS DEVELOPED FOR AN ACCESS PERMIT, OR FOR A UTILITY CONSTRUCTION PERMIT OR FOR A UTILITY RELOCATION PERMIT SHALL INCLUDE PROJECT-SPECIFIC SHA LANDSCAPE NOTES. DISTRICT PERMITS ISSUED FOR UTILITY INFRASTRUCTURE MAINTENANCE/ EMERGENCY PERMITS (BLANKET PERMITS) AND TREE TRIMMING PERMITS DO NOT REQUIRE SHA LANDSCAPE NOTES ON PLANS, BUT THE PERMIT DOCUMENTS SHALL INCLUDE NECESSARY PERMIT PROVISIONS FOR OPERATIONS AND LANDSCAPE RESTORATION.

FOR ALL ACCESS PERMITS AND DISTRICT UTILITY CONSTRUCTION & RELOCATION PERMITS:

- SHA LANDSCAPE NOTES ARE NOT SHOWN ON PLANS WHEN NO LANDSCAPING PER CAT. 700 - LANDSCAPING OF THE STANDARD SPECIFICATIONS IS REQUIRED FOR A PROJECT.
- THE SELECTION OF SHA LANDSCAPE NOTES DEPENDS ON THE WORK TO BE PERFORMED.
- SHA LANDSCAPE NOTES THAT DO NOT APPLY ARE NOT REPRODUCED ON PLANS.
- REFER TO EG CHAPTER 6.0-E REGARDING THE NOTE THAT IS REPRODUCED ON PLAN SHEETS WHICH REFERENCE NON-SHA LANDSCAPE SPECIFICATIONS OR NON-SHA LANDSCAPE MATERIALS FOR WORK ON NON-SHA PROPERTY.
- EG CHAPTERS 7.1 THROUGH 7.25 DESCRIBES THE CONDITIONS AND PROVIDES THE EXACT TEXT OF THE SHA LANDSCAPE NOTES WHICH ARE INCLUDED ON PLANS WHEN LANDSCAPED AREAS OF SHA PROPERTY ARE IMPACTED BY CONSTRUCTION.
- THE TITLE PROVIDED FOR SHA LANDSCAPE NOTES IN EG CHAPTER 7.1 AND THE TEXT OF ALL PERTINENT NOTES SHALL BE REPRODUCED IN THE ITALIC TEXT PROVIDED IN CHAPTER 7.
- WHEN SHA LANDSCAPE NOTES ARE NECESSARY, THE TEXT OF EACH PERTINENT NOTE SHALL BE REPRODUCED UNDER THE TITLE AS PART OF A SINGLE LIST OR TEXT BOX. EG CHAPTER 7.26 INCLUDES A TABLE WITH TEXT OF ALL SHA LANDSCAPE NOTES.

7.1 TITLE FOR SHA LANDSCAPE NOTES

WHEN SHA LANDSCAPE NOTES ARE REQUIRED, THE FOLLOWING TITLE SHALL BE SHOWN ON THE PLANS, AND ALL REQUIRED NOTES SHALL BE INCLUDED UNDERNEATH IT:

SHA LANDSCAPE NOTES. LANDSCAPE CONSTRUCTION WITHIN SHA PROPERTY, INCLUDING RIGHT-OF-WAYS,EASEMENT AREAS AND LANDS TO BE CONVEYED TO SHA SHALL CONFORM TO THESE NOTES. FOR GUIDANCE REGARDING DESIGN MODIFICATIONS DURING CONSTRUCTION, REFER TO SHA LANDSCAPE DESIGN GUIDE, SHA LANDSCAPE ESTIMATING MANUAL, AND SHA ENVIRONMENTAL GUIDE FOR DISTRICT, ACCESS, AND UTILITY PERMIT APPLICANTS AT [HTTPS://ROADS.MARYLAND.GOV/MDOT/SHA/PAGES/SSCM.ASPX?PAGEID=853&LID=559](https://roads.maryland.gov/mdot/sha/PAGES/SSCM.ASPX?PAGEID=853&LID=559) .

7.2 SHA STANDARD SPECIFICATIONS

REFER TO EG CHAPTER 2.1 . WHEN CONSTRUCTION INVOLVES SOIL DISTURBANCE, SEEDING, TREE INSTALLATION OR INSTALLING ANY OTHER LANDSCAPING OR PLANT MATERIALS, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

SHA STANDARD SPECIFICATIONS. LANDSCAPE CONSTRUCTION SHALL CONFORM TO CATEGORY 700 - LANDSCAPING, AND LANDSCAPE MATERIALS SHALL CONFORM TO SECTION 920. OF THE MOST RECENT REVISION OF SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, INCLUDING ALL REVISIONS AND SUPPLEMENTS, AND AS SPECIFIED IN THESE NOTES. THE REQUIREMENTS OF SHA SPECIFICATIONS SHALL SUPERSIDE ALL OTHER SPECIFICATIONS FOR WORK ON SHA PROPERTY OR PROPERTY TO BE CONVEYED TO SHA EXCEPT AS SPECIFICALLY INDICATED IN THE PLANS. REFER TO [HTTPS://ROADS.MARYLAND.GOV/MDOT/SHA/PAGES/SSCM.ASPX?PAGEID=853&LID=559](https://roads.maryland.gov/mdot/sha/PAGES/SSCM.ASPX?PAGEID=853&LID=559) .

7.3 EROSION AND SEDIMENT CONTROL MANAGER (ESCM)

IN CONFORMANCE WITH REQUIREMENTS OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND POLICIES OF SHA, ALL PROJECTS THAT INVOLVE SOIL DISTURBANCE ON SHA PROPERTY SHALL BE SUPERVISED BY A CERTIFIED ESCM. THE ESCM SHALL POSSESS BOTH "MDE GREEN CARD" AND THE "SHA YELLOW CARD" AND SHALL BE PRESENT AT THE CONSTRUCTION SITE DURING SOIL DISTURBANCE OR EXCAVATION. THE ESCM SHALL SUPERVISE THE IMPLEMENTATION OF ANY REQUIRED EROSION AND SEDIMENT CONTROL PLAN (E45 PLAN), THE MARYLAND DEPT. OF THE ENVIRONMENT (MDE) "RESPONSIBLE PERSONNEL TRAINING FOR EROSION AND SEDIMENT CONTROL" ("MDE GREEN CARD") IS REQUIRED FOR THE BASIC EROSION AND SEDIMENT CONTROL COURSE ("SHA YELLOW CARD"). WHEN CONSTRUCTION ACTIVITIES REQUIRE SOIL DISTURBANCE, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

EROSION AND SEDIMENT CONTROL MANAGER (ESCM). SOIL DISTURBANCE SUCH AS GRADING, EXCAVATION, SOIL PLACEMENT OR OTHER ACTIVITIES THAT INVOLVE SOIL DISTURBANCE SHALL BE SUPERVISED BY AN ESCM MANAGER WITH A VALID "SHA YELLOW CARD" IN CONFORMANCE WITH SHA STANDARD SPECIFICATIONS AND ANY APPLICABLE EROSION AND SEDIMENT CONTROL PERMIT.

7.4 SHA STANDARD DETAILS FOR TREES, SHRUBS, AND PLANTING BEDS

REFER TO EG CHAPTER 2.4. WHEN LANDSCAPING WILL INVOLVE INSTALLING TREES, SHRUBS, PLANTING BEDS AND OTHER CONSTRUCTION RELATED TO SECTION 7.1 O OF THE STANDARD SPECIFICATIONS, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

SHA STANDARD DETAILS FOR TREES, SHRUBS AND PLANTING BEDS. THE INSTALLATION OF TREES, SHRUBS, PLANTING BEDS AND OTHER LANDSCAPE CONSTRUCTION RELATED TO SECTION 7.1 O OF THE SHA STANDARD SPECIFICATIONS SHALL CONFORM TO THE SHA BOOK OF STANDARDS FOR HIGHWAY & INCIDENTAL STRUCTURES - CATEGORY 7 AT [HTTPS://APPS.ROADS.MARYLAND.GOV/BUSINESSWITHSHA/BUSINESSWITHSHA/STDSPECSDSMANUAL/STD/PUB/PUBLICATIONSONLINE/DHD/BOOKSTD/TOCCAT7.ASP](https://apps.roads.maryland.gov/businesswithsha/BUSINESSWITHSHA/STDSPECSDSMANUAL/STD/PUB/PUBLICATIONSONLINE/DHD/BOOKSTD/TOCCAT7.ASP).

7.5 TEMPORARY STABILIZATION

REFER TO CHAPTER 704 OF THE ESTIMATING MANUAL. WHEN CONSTRUCTION WILL REMOVE PAVEMENT, OR WILL INVOLVE ANY OTHER ACTIVITIES SUCH AS GRADING, TILLING OR OTHER DISTURBANCE THE LEAVES THE SOIL OF VULNERABLE TO EROSION FROM WIND, RAINFALL OR FLOWING WATER, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

TEMPORARY STABILIZATION SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 704 TO ENSURE THAT AREAS OF SOIL DISTURBANCE ARE PROTECTED FROM WIND, RAINFALL AND FLOWING WATER UNTIL PERMANENT STABILIZATION IS INSTALLED.

- TEMPORARY MULCH, EITHER AS TEMPORARY STRAW MULCH OR TEMPORARY MATTING MULCH, SHALL BE INSTALLED AT THE END OF EACH WORKING DAY TO PROVIDE "SAME DAY STABILIZATION" UNLESS OTHER APPROVED STABILIZATION IS INSTALLED.
- TEMPORARY STRAW MULCH SHALL BE INSTALLED ON AREAS AND SLOPES FLATTER THAN 4:1; TEMPORARY MATTING MULCH SHALL BE APPLIED ON SLOPES 4:1 AND STEEPER, AND TO AREAS WITHIN CHANNELS.

7.6 PAVEMENT REMOVAL AND RESTORATION

REFER TO EG CHAPTER 5.6 AND 5.7; AND TO CHAPTER 701 OF THE ESTIMATING MANUAL. AN EXCAVATION DEPTH OF 1.6 INCHES IS NECESSARY FOR ROADWAY PAVEMENT REMOVAL, AND A DEPTH OF 6 INCHES IS NECESSARY FOR SIDEWALK AND DRIVEWAY PAVEMENT REMOVAL.

WHEN LANDSCAPING INVOLVES REMOVING PAVEMENTS IN PREPARATION FOR RESTORING LANDSCAPED AREAS FOR PERMANENT VEGETATION, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

PAVEMENT REMOVAL AND RESTORATION. AREAS OF PAVEMENT REMOVAL SHALL BE EXCAVATED TO REMOVE PAVEMENTS, AGGREGATE BASE, COMPACTED SOIL AND OTHER UNSUITABLE MATERIALS BEFORE PLACING SOILS IN CONFORMANCE WITH SECTION 701 OF THE SHA STANDARD SPECIFICATIONS.

- ROADWAYS SHALL BE EXCAVATED TO A DEPTH OF 1.6 INCHES BELOW FINAL GRADE BEFORE PLACING FURNISHED SUBSOIL 12 IN. DEPTH AND PLACING FURNISHED TOPSOIL 4 IN. DEPTH IN CONFORMANCE WITH NOTE 7.8.
- SIDEWALKS AND DRIVEWAYS SHALL BE EXCAVATED TO A DEPTH OF 6 INCHES BELOW FINAL GRADE BEFORE PLACING FURNISHED TOPSOIL 6 IN. DEPTH IN CONFORMANCE WITH NOTE 7.8.

7.8 SOIL RESTORATION

REFER TO EG CHAPTERS 5.6 AND 5.7; AND TO CHAPTER 701 OF THE ESTIMATING MANUAL. SOIL RESTORATION MAY INVOLVE EXCAVATION FOLLOWED BY RESTORATION WITH SUBSOIL AND TOPSOIL IN CONJUNCTION WITH BIORETENTION SOIL MIX (BSM) AND REPAIR MATERIALS IN STORMWATER MANAGEMENT FACILITIES. THE REQUIREMENTS ARE DETERMINED BY THE OFFICE OF ENVIRONMENTAL DESIGN AND HIGHWAY HYDRAULICS DIVISION.

WHEN LANDSCAPING INVOLVES EXCAVATING PAVEMENT, UTILITY TRENCHING, DRILLING OR ANY SIMILAR WORK IN PREPARATION FOR RESTORING LANDSCAPED AREAS FOR PERMANENT VEGETATION, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

SOIL RESTORATION. AREAS OF PAVEMENT REMOVAL, EXCAVATION OR DRILLING IN LANDSCAPED AREAS SHALL REMOVE EXCAVATED DEBRIS AND RESTORE TOPSOIL PLACED IN CONFORMANCE WITH SECTION 701 OF THE SHA STANDARD SPECIFICATIONS.

- A LAYER OF APPROVED TOPSOIL AT LEAST 4-INCH DEPTH SHALL BE PLACED ON ALL DISTURBED AREAS FLATTER THAN 2:1 AND IN ALL CHANNELS BEFORE SEEDING, SODDING OR OTHER LANDSCAPING, UNLESS OTHERWISE SPECIFIED ON THE PLANS AS WHEN REQUIRED FOR PAVEMENT REMOVAL AND RESTORATION.
- A LAYER OF APPROVED TOPSOIL AT LEAST 2-INCH DEPTH SHALL BE PLACED ON ALL DISTURBED AREAS 2:1 AND STEEPER BEFORE SEEDING, SODDING OR OTHER LANDSCAPING, UNLESS OTHERWISE SPECIFIED.

WHEN STORMWATER INFILTRATION FACILITIES ARE PROPOSED, THE FOLLOWING NOTE SHALL BE ADDED TO THE FOREGOING:

- BIORETENTION SOIL MIX (BSM) AND OTHER MATERIALS INSTALLED IN CONJUNCTION WITH SECTION 3.16 -STORMWATER FILTRATION FACILITIES AND SHA TREES INSIDE THE FOREST PROTECTION AREA SHALL BE INSTALLED IN CONJUNCTION WITH SECTION 3.16 -STORMWATER FILTRATION FACILITIES AND SHA TREES INSIDE THE FOREST PROTECTION AREA. PLANT MATERIALS AND MULCH SHALL BE INSTALLED IN BSM IN CONFORMANCE WITH STORMWATER DETAILS, SECTION 7.1 O OR OTHER SHA SPECIFICATIONS.

7.9 TURFGRASS SOD ESTABLISHMENT

REFER TO EG CHAPTERS 5.7 AND 6.2-D, AND TO CHAPTER 708 OF THE ESTIMATING MANUAL. WHEN LANDSCAPING INVOLVES RESTORING TURFGRASS SOD IN URBAN OR SUBURBAN AREAS, OR AREAS THAT ARE ADJACENT TO COMMERCIAL OR RESIDENTIAL PROPERTIES WHERE PEDESTRIANS MAY BE EXPECTED, OR WHERE STORMWATER IS CONVEYED IN GRASS-LINED CHANNELS, THE GROUNDCOVER VEGETATION OF AREAS IMPACTED BY CONSTRUCTION SHALL BE RESTORED WITH TURFGRASS SOD, AND THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

TURFGRASS SOD ESTABLISHMENT SHALL BE PERFORMED IN ALL DISTURBED AREAS, OR WITHIN THE AREAS INDICATED IN THE PLANS, IN CONFORMANCE WITH SECTION 708 OF THE SHA STANDARD SPECIFICATIONS. THE REQUIRED APPLICATION RATE OF 20-16-12 FERTILIZER SHALL BE 200 POUNDS PER ACRE, OR SHALL BE EQUIVALENT FERTILIZER AND APPLICATION RATE AS SPECIFIED IN SECTION 708. NO FERTILIZER SHALL BE APPLIED FROM NOVEMBER 15 TO MARCH 1 .

7.1.4 ROADSIDE TREE INDIVIDUAL PERMIT (RTIP)

REFER TO EG CHAPTER 4.1 . A ROADSIDE TREE PERMIT ISSUED BY THE MARYLAND DEPARTMENT OF NATURAL RESOURCES – FOREST SERVICE IS REQUIRED WHEN TREES OR OTHER WOODY VEGETATION IS REMOVED, PRUNED OR INSTALLED. THE APPLICANT IS RESPONSIBLE FOR ALL COORDINATION REQUIRED TO OBTAIN THIS PERMIT. NO TREE OR WOODY PLANT REMOVALS, PRUNING OR INSTALLATION MAY BE PERFORMED WITHIN SHA RIGHT-OF-WAYS UNLESS A ROADSIDE TREE PERMIT HAS BEEN ISSUED, AND A COPY OF THE PERMIT HAS BEEN SUBMITTED TO THE OFFICE OF ENVIRONMENTAL DESIGN. NO TREE, SHRUB OR BRUSH REMOVAL, PRUNING OR INSTALLATION MAY BE PERFORMED IN ANY SHA RIGHT-OF-WAYS, SHA EASEMENT AREAS, OR PROPERTY OF SHA WITHOUT AN APPROVED SHA PERMIT. THE RTIP IS A SEPARATE PERMIT REQUIREMENT OF THE MARYLAND DEPARTMENT OF NATURAL RESOURCES FOR CERTAIN REGULATED ACTIVITIES IN PUBLIC RIGHT-OF-WAYS WITHIN THE STATE OF MARYLAND WHEN LANDSCAPING REQUIRES A ROADSIDE TREE PERMIT, OR REQUIRES COMPLIANCE WITH THE MARYLAND FOREST CONSERVATION ACT, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

ROADSIDE TREE PERMIT. TREE REMOVAL, TREE INSTALLATION, TREE ROOT AND BRANCH PRUNING, AND OTHER REGULATED IMPACTS TO TREES IN THE SHA RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE ROADSIDE TREE INDIVIDUAL PERMIT (RTIP) ISSUED BY THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, OR THE APPROVED FOREST CONSERVATION PLAN (FCP) OF THE LOCAL AUTHORITY.

- A COPY OF THE RTIP OR FCP SHALL BE SUBMITTED TO THE SHA LANDSCAPE PROGRAMS DIVISION BEFORE WORK IS PERFORMED, AND A COPY OF THE RTIP OR FCP SHALL BE REPRODUCED IN THE PLANS OR KEPT IN POSSESSION OF THE APPLICANT AT THE PROJECT SITE WHEN THE PERMITTED WORK IS PERFORMED.
- A MARYLAND LICENSED TREE EXPERT SHALL PERFORM THE SPECIFIED TREE OPERATIONS IN CONFORMANCE WITH THE SHA STANDARD SPECIFICATIONS AND ANSI A300 STANDARDS FOR TREE CARE OPERATIONS.

7.15 INSTALLATION OF TREES, SHRUBS, OTHER LANDSCAPE PLANTINGS

REFER TO EG CHAPTERS 4.1-B, C, D; TO EG CHAPTER 5.9; AND TO CHAPTER 7.1 O OF THE ESTIMATING MANUAL. WHEN LANDSCAPING INVOLVES INSTALLING TREES, SHRUBS, PERENNIALS, LANDSCAPE BEDS, ANNUALS, BULBS, SHREDDED HARDWOOD BARK MULCH OR OTHER LANDSCAPE PLANTS OR MATERIALS, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

TREES AND OTHER PLANT MATERIAL INSTALLATION. TREES, SHRUBS, PERENNIALS, ANNUALS, BULBS, LANDSCAPE BEDS, BARK MULCH AND SIMILAR MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION7.1 O AND 7.1 I OF THE SHA STANDARD SPECIFICATIONS. THE SHA LANDSCAPE PROGRAMS DIVISION WILL APPROVE MATERIALS AND LAYOUT, AND PERFORM OTHER APPROVALS AND INSPECTIONS IN CONFORMANCE WITH STANDARD SPECIFICATIONS. TREES AND SHRUBS SHALL BE PRUNED AT THE TIME OF INSTALLATION TO ENSURE SIDEWALK CLEARANCE FOR PEDESTRIANS IS MAINTAINED TO A HEIGHT OF 8 FEET. NO TREE OR SHRUB SHALL BE INSTALLED WITHIN 3 FEET OF CURBS, SIDEWALKS, OR PAVEMENT EDGES.

7.25 FUTURE MAINTENANCE

REFER TO EG CHAPTER 5.11 . AN ACCESS PERMIT DOES NOT CONFER ANY FUTURE RIGHT TO MAINTAIN MATERIALS INSTALLED WITHIN SHA RIGHT-OF-WAYS,OR WITHIN SHA PROPERTY OR EASEMENT AREAS. FOR THAT PURPOSE, A DISTRICT OR UTILITY PERMIT IS REQUIRED, WHICH IS ISSUED SEPARATELY.

WHEN LANDSCAPING INVOLVES INSTALLING HARDSCAPE, STREET FURNITURE, TREES, SHRUBS, PERENNIALS, ANNUALS, PLANTING BEDS OR ANY OTHER LANDSCAPE MATERIALS FOR WHICH ADDITIONAL MAINTENANCE IS APPROPRIATE OR DESIRABLE UNDER A FUTURE DISTRICT PERMIT, THE FOLLOWING NOTE SHALL BE INSERTED INTO THE SHA LANDSCAPE NOTES:

FUTURE MAINTENANCE. ADDITIONAL MAINTENANCE THAT MAY BE REQUIRED AFTER HARDSCAPE, STREET FURNITURE OR PLANT MATERIALS ARE INSTALLED AND ACCEPTED BY SHA SHALL AS REPLACEMENT, WATERING, WEEDING, MULCHING OR PEST CONTROL MAY BE PROVIDED BY THE APPLICANT WHEN A PERMIT FOR THE PROPOSED WORK IS ISSUED BY THE SHA DISTRICT OFFICE.

VII. PLAN PREPARATION AND CERTIFICATION

All Plans shall contain a written certification that the plan has been prepared in compliance with the Landscape Manual. The certification shall read as follows:

"I certify that this landscape plan is consistent with the goal and intent of and complies with the Town of Sykesville Landscape Manual and meets all applicable policies, guidelines and ordinances and agree to implement the final landscape plan shown herein within one year of occupancy."

Signature of Landscape Architect

Date

"I certify that this landscape plan is consistent with the goal and intent of and complies with the Town of Sykesville Landscape Manual and meets all applicable policies, guidelines and ordinances and agree to implement the final landscape plan shown herein within one year of occupancy."

Signature of Owner

Date

Address

FOR CONTINUATION SEE
 CARROLL COUNTY GRO-23-006
 SHA TRACKING NO. 24AFCL003XX

OWNER/APPLICANT
 TOWN OF SYKESVILLE
 C/O JOE COSENTINI
 7547 MAIN STREET
 SYKESVILLE, MD 21784

THESE PLANS ARE
 ON THE MARYLAND
 COORDINATE SYSTEM
 NAD-83

LANDSCAPE NOTES

FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

CARROLL COUNTY, MD

ELECTION DISTRICT 13

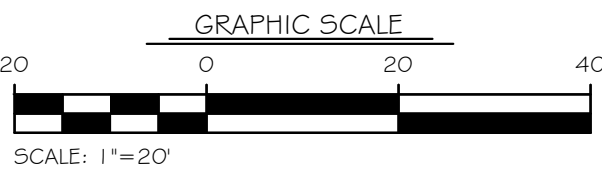
DRAWING NO.

C-12
 FOR
 ROADWAY



EROSION & SEDIMENT CONTROL NOTES

1. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION IN ASSOCIATION WITH THE NATURAL RESOURCES CONSERVATION SERVICE AND THE MARYLAND ASSOCIATION WITH THE NATURAL RESOURCES CONSERVATION SERVICE AND THE MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS (REFERENCED AS THE 2011 STANDARDS AND SPECS).
2. AREAS THAT HAVE BEEN CLEARED AND/OR GRADED, BUT WILL NOT BE CONSTRUCTED ON OR PERMANENTLY VEGETATED FOR MORE THAN 5 DAYS (3 DAYS FOR SEDIMENT CONTROL MEASURES AND FOR STEEP SLOPES) MUST BE STABILIZED WITH MULCH OF TEMPORARY STABILIZATION. ANY AREAS THAT ARE IN TEMPORARY VEGETATION FOR OVER 6 MONTHS WILL NEED TO BE PERMANENTLY VEGETATED.
3. FOR SPECIFICATIONS OF PERMANENT OR TEMPORARY STABILIZATION, SEE B-4-4 AND B-4-5.
4. MULCHING ONLY IS RESTRICTED TO USE ON DISTURBED AREAS AS A TEMPORARY COVER WHERE VEGETATION IS NOT FEASIBLE OR WHERE SEEDING GERMINATION CANNOT BE COMPLETED BECAUSE OF WEATHER CONDITIONS. FOR SPECIFICATIONS SEE B-4-3, A.1.B.
5. FOR SPECIFICATIONS ON STABILIZATION OF CUT AND FILL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL, SEE INCREMENTAL STABILIZATION B-4-1.
6. THE EXISTING TOPSOIL FROM ON OR OFF SITE THAT IS USED MUST MEET THE MINIMUM SPECIFICATIONS IN B-4-2.
7. THE REQUIRED SEQUENCE OF CONSTRUCTION MUST BE FOLLOWED DURING SITE DEVELOPMENT. ANY CHANGES IN THE SEQUENCE OF CONSTRUCTION MUST BE APPROVED BY THE SOIL CONSERVATION DISTRICT.
8. ANY REVISIONS TO THE SEDIMENT CONTROL PLAN, NOT COVERED UNDER THE LIST OF PLAN MODIFICATIONS THAT CAN BE APPROVED BY THE SEDIMENT CONTROL INSPECTOR, NEED TO BE SUBMITTED TO THE SOIL CONSERVATION DISTRICT FOR APPROVAL.
9. NO PROPOSED SLOPE THAT IS REQUIRED TO BE SEEDED AND/OR MULCHED SHALL BE STEEPER THAN 2:1. SLOPES STEEPER THAN 2:1 SHALL REQUIRE AN ENGINEERED DESIGN FOR STABILIZATION.
10. ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED ONCE A WEEK AND AFTER EACH RAINFALL AND WILL BE REPAIRED, AS NEEDED, SO THAT THE STRUCTURE MEETS THE MINIMUM SPECIFICATIONS AS SHOWN IN THE 2011 STANDARDS AND SPECS.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND EROSION CONTROL MEASURES UNTIL THE DISTURBED AREAS ARE PERMANENTLY STABILIZED.
12. THE DISTRICT APPROVAL FOR THIS SEDIMENT CONTROL PLAN IS GOOD FOR 2 YEARS. AT THE END OF 2 YEARS, IF CONSTRUCTION OF THE PLAN HAS NOT STARTED, THE PLAN WILL NEED TO BE RESUBMITTED TO THE SOIL CONSERVATION DISTRICT FOR REVIEW AND RE-APPROVAL. ANY PLANS THAT ARE CURRENTLY UNDER CONSTRUCTION AFTER 2 YEARS MAY BE REQUIRED TO BE RESUBMITTED TO THE SOIL CONSERVATION DISTRICT BY THE SEDIMENT CONTROL INSPECTOR.



BID SET

TOTAL PROPOSED
IMPERVIOUS - 16,265 S.F.
FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

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. 289335 EXPIRATION DATE: 1/15/25

KCI
TECHNOLOGIES
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS				DATE	
NO.	DATE	DESCRIPTION	BY	11/13/2024	
				SCALE 1" = 20'	
				DESIGNED BY TM	
				DRAWN BY SC	

EROSION & SEDIMENT
CONTROL PLANS
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.

C-13

SHEET 13 OF 30

KCI JOB NUMBER 272206100.03

CARROLL COUNTY, MD

ELECTION DISTRICT 13

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION	
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.	
PURPOSE	
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH CONDITIONS WHERE PRACTICE APPLIES	
CRITERIA	
I. SOIL PREPARATION	
I.A. TEMPORARY STABILIZATION	
I.A.1. SEEDING PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.	
I.A.2. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.	
I.A.3. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.	
I.A.1. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:	
I.A.1.1. SOIL PH BETWEEN 6.0 AND 7.0.	
I.A.1.2. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).	
I.A.1.3. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL TO CONTAIN LESS THAN 30 PERCENT SILT PLUS CLAY.) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION; IF LOVEGRASS WILL BE PLANTED, THAN 5 SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.	
I.A.1.4. SOIL CONTAINS 1-5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.	
I.A.1.5. SOIL CONTAINS SUFFICIENT OPEN SPACE TO PERMIT ADEQUATE ROOT PENETRATION.	
I.A.2. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.	
I.A.3. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWNS AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSENED SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THAT SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDING PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING SOIL IN AN IRREGULAR CONDITION WITH RIDGES. RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRABLE. SEEDBED LOOSENING MAY BE UNNECESSARY NEWLY DISTURBED AREAS.	
I.B. TOPSOILING	
I.A.1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA - NRCS.	
I.A.3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:	
I.A.1.1. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.	
I.A.1.2. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.	
I.A.1.3. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.	
I.A.1.4. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIME/STONE IS NOT FEASIBLE.	
I.A.2. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.	
I.A.3. TOPSOIL SPECIFICATIONS FOR TOPSOIL MUST MEET THE FOLLOWING CRITERIA:	
I.A.1.1. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1-1/2 INCHES IN DIAMETER.	
I.A.1.2. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSTON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.	
I.A.1.3. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.	
I.A.2. TOPSOIL APPLICATION	
I.A.1.1. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.	
I.A.1.2. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.	
I.A.1.3. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET R IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.	
I.B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)	
I.A.1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.	
I.A.2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.	
I.A.3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE.) LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.	
I.A.4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.	
I.A.5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEVAY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,00 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.	

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

DEFINITION	
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.	
PURPOSE	
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.	
CRITERIA	
A. SEEDING	
A.1. SPECIFICATIONS	
A.1.A. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY, ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.	
A.1.B. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.	
A.1.C. INOCULANTS: THE INOCULATE FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED, TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.	
A.1. APPLICATION	
A.1.A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.	
A.1.A.A. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE SPECIFIC SEEDING SUMMARIES.	
A.1.A.B. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.	
A.1.B. DRILL OR CULTPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.	
A.1.1.A. CULTPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.	
A.1.1.B. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.	
A.1.C. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).	
A.1.1.A. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 1,00 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.	
A.1.1.B. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.	
A.1.1.C. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.	
A.2. MULCHING	
A.2.A. MULCH MATERIALS (IN ORDER OF PREFERENCE)	
A.2.A.1. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.	

A.2.A.1. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.	
A.2.A.1.A. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.	
A.2.A.1.B. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.	
A.2.A.1.C. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.	
A.2.A.1.D. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.	
A.2.A.1.E. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.0, ASH CONTENT OF 1-6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.	
A.2.B. APPLICATION	
A.2.B.1. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.	
A.2.B.2. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCHING ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.	
A.2.B.3. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.	
A.2.C. ANCHORING	
A.2.C.1. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:	
A.2.C.1.A. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENTED DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL. IT MUST BE A MINIMUM OF 2 INCHES. THIS PRACTICE IS THE MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.	
A.2.C.1.B. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.	
A.2.C.1.C. SYNTHETIC BINDERS SUCH AS ACRYLIC UR (AGRO-TACK), DCA-70, PETROSET, TERRA TAY II, TERRA TACK AR OR OTHER APPROVED EQUAL MAYBE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.	
A.2.C.1.D. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.	

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION	
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.	
PURPOSE	
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.	
CRITERIA	
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.	
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1. FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND ENTER THEM IN THE TEMPORARY SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.	
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.	
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3. A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.	

HARDNESS ZONE (FROM FIGURE B.3)		SEED MIXTURE (FROM TABLE B.1)				FERTILIZER RATE (10-20-20)	LIME RATE
NO.	FORKAL MILLET (CERIAL ITALICA)	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS			
		30 LBS.	5/1 - 6/14	1/2"			
	ANNUAL PERGRASS (CLOUUM PERENNE SSP. MULTIFLORUM)	40 LBS.	5/15 - 4/30 AND 6/15 - 1/31	1/2"		43G LB/ AC (10 LB / 1000 SF)	2 TONS/ AC (90 LB / 1000 SF)

NOTE:

- SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES.
- SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS, WHEN PLANTED ALONE. WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXES DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION	
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.	
PURPOSE	
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.	
CRITERIA	
A.1.A. SEED MIXTURES	
A.1.A.1. GENERAL USE	
A.1.A.1.A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2 ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.	
A.1.A.1.B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA - NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.	
A.1.A.1.C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.	
A.1.A.1.D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 100 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.	
A.1.A.2. TURFGRASS MIXTURES	
A.1.A.2.A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.	
A.1.A.2.B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.	
A.1.A.2.B.1. KENTUCKY BLUEGRASS: FULL SUN MIXTURE. FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATES: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.	

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. 289355 EXPIRATION DATE: 1/15/25

A.1.A.2.B.2. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE. FOR USE IN FULL SUN AREAS WHERE B.22 RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.	
A.1.A.2.B.3. TALL FESCUE/ KENTUCKY BLUEGRASS: FULL SUN MIXTURE. FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET.	
NOTES: SELECT TURFGRASS VARIETIES FORM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS IF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.	
A.1.A.2.C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) CENTRAL MD : MARCH 1 TO MAY 15, AUGUST 5 TO OCTOBER 15 (HARDINESS ZONES: 6B) TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.	
A.1.A.2.E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LAKE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.	

HARDNESS ZONE (FROM FIGURE B.3)				7a		FERTILIZER RATE (10-20-20)		LIME RATE
SEED MIXTURE (FROM TABLE B.1)								
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K ₂ O	
	KENTUCKY BLUEGRASS 10% TURF - TYPE TALL FESCUE 40% GRADE TALL FESCUE 30% PERENNIAL RYEGRASS 20%	350	2/15 - 4/30 AND 6/15 - 10/31	1/4 - 1/2 IN.	45 POUNDS PER ACRE (11 LB / 1000 SF)	90 LB/AC (2 LB / 1000 SF)	90 LB/AC (2 LB / 1000 SF)	2 TONS/ AC (90 LB / 1000 SF)

NOTE: FOR THE PERIOD 5/1 - 6/14 ADD 17.5 LBS. FORTAL MILLET TO THE PERMANENT SEED MIX PER THE TEMPORARY SEED SUMMARY TABLE NOTE #1.

A. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER)	
A.1. GENERAL SPECIFICATIONS	
A.1.A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE, AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.	
A.1.B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCHES PLUS OR MINUS 1/4 INCH. AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.	
A.1.C. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.	
A.1.D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.	
A.1.E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.	
A.2. SOD INSTALLATION	
A.2.A. DURING PERIODS OR EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING SOD.	
A.2.B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED RIGHT IN ORDER TO RIGHT IN ORDER TO PREVENT POSSIBLE AIR DRYING OF THE ROOTS.	
A.2.C. WHEREVER FEASIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SURFACE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.	
A.2.D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.	
A.3. SOD MAINTENANCE	
A.3.A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL IN A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE SAY TO PREVENT WILTING.	
A.3.B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.	
A.3.C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.	

MAINTENANCE NOTE

SILT FENCE, SUPER SILT FENCE, SUPER FENCE DIVERSION AND INLET PROTECTION SHALL BE INSPECTED AND MAINTAINED EACH DAY AND AFTER EACH RAINFALL. MAINTENANCE TO INCLUDE BUT NOT LIMITED TO REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE SHALL BE REPLACED AS NECESSARY TO ENSURE PROPER FUNCTION.

UTILITY NOTE

- CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE OF) THE TRENCH.
- PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH
- ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

DAILY STABILIZATION NOTE

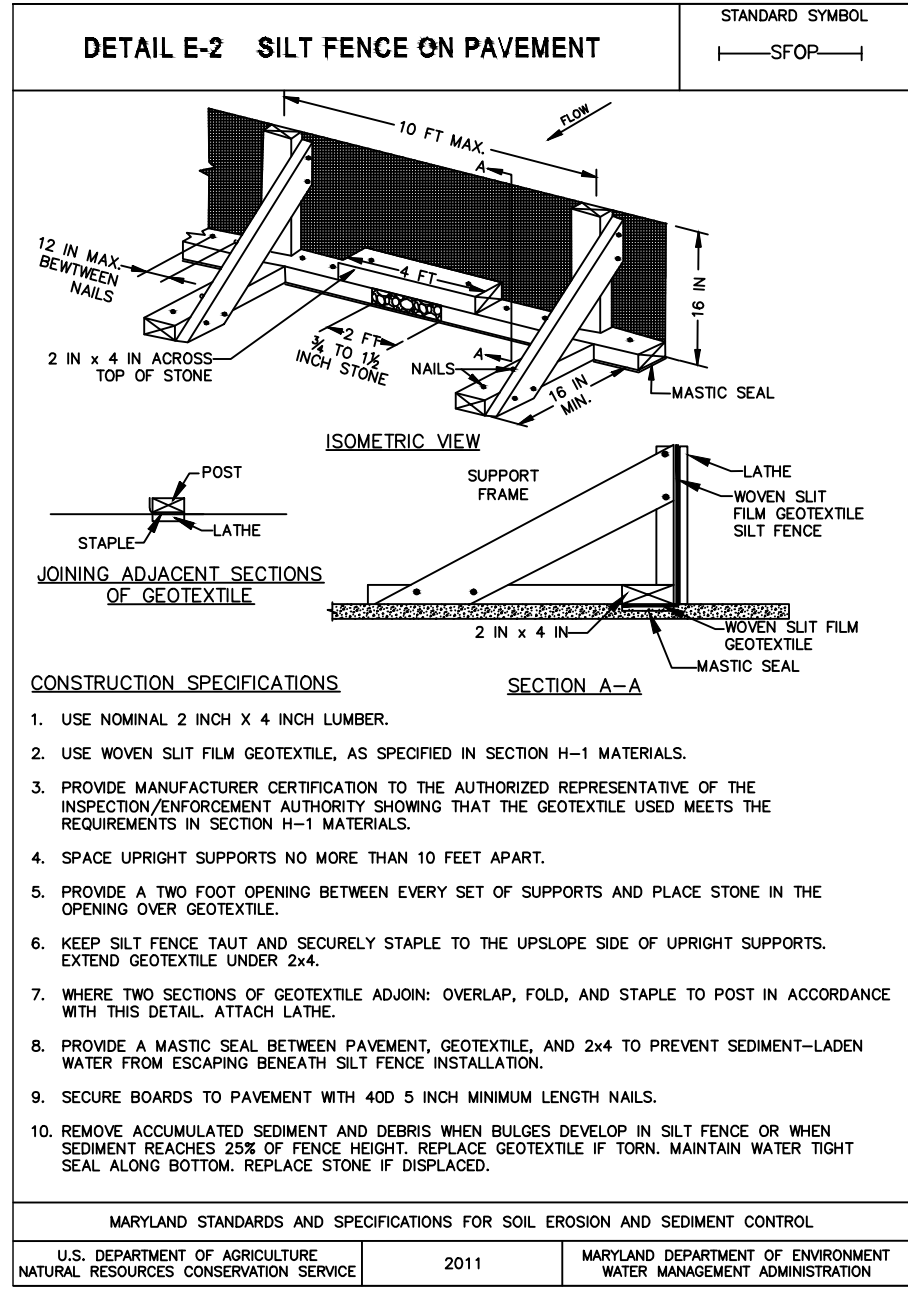
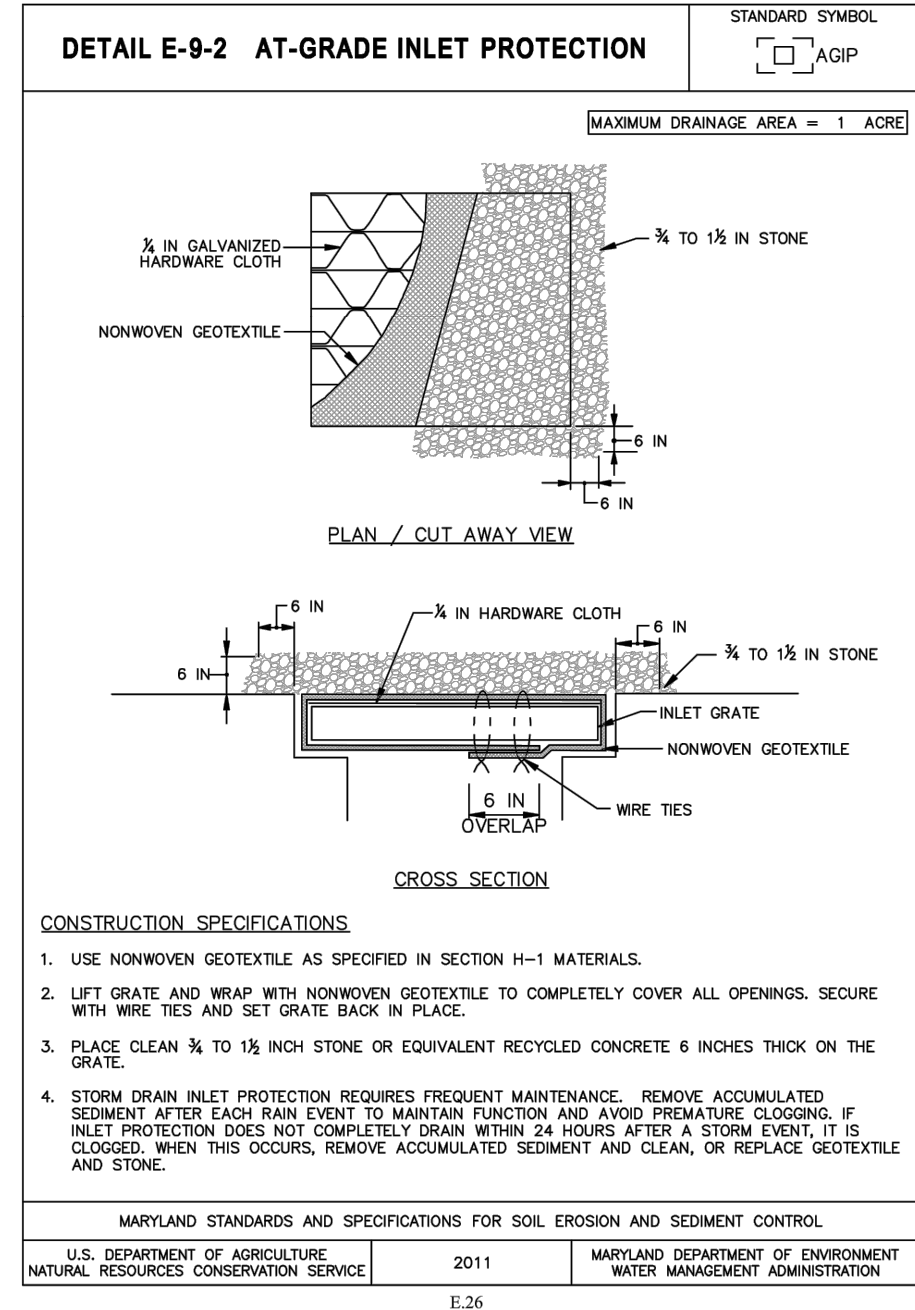
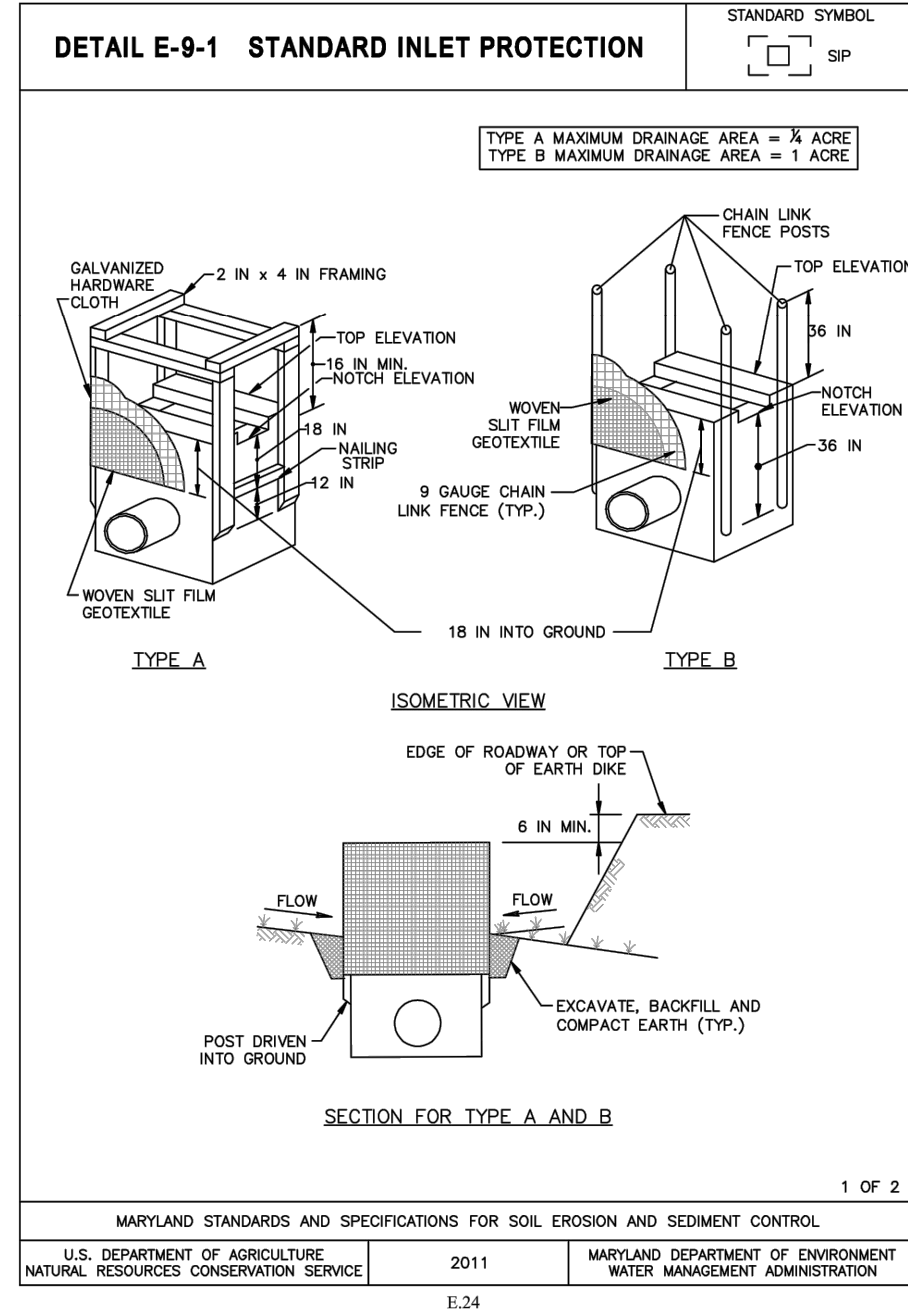
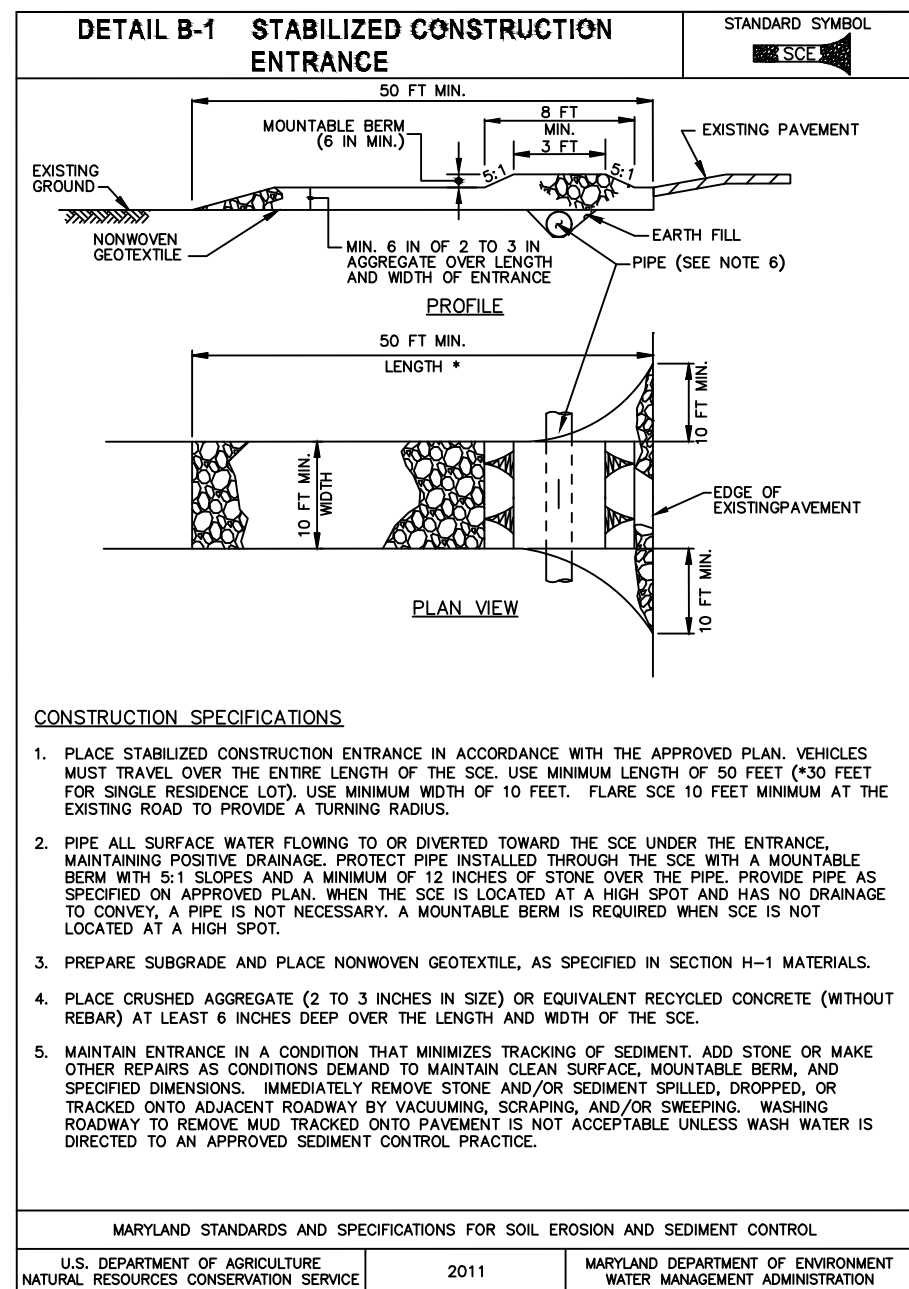
THIS NOTE SHOULD BE USED FOR MINIMAL AREAS WITHIN THE LIMITS OR DISTURBANCE THAT DO NOT DRAIN TO A SEDIMENT CONTROL MEASURE AND/OR WHERE THE INSTALLATION OF SEDIMENT CONTROLS IS NOT FEASIBLE. (ROAD WIDENING, SIDEWALK INSTALLATION, ETC.) CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CHAT AREA BE STABILIZED BY THE END OF EACH WORK DAY.

- STABILIZATION SHALL BE AS FOLLOWS:
- FOR AREAS TO BE PAVED, THE APPLICATION OF STONE.
 - FOR AREAS TO BE VEGETATIVELY STABILIZED:
 - PERMANENT SEED, AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
 - PERMANENT SEED AND MULCH FOR ALL OTHER AREAS. ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.

SEQUENCE OF CONSTRUCTION

- CONTRACTOR MUST CONTACT THE CARROLL COUNTY SEDIMENT INSPECTOR AT LEAST 24 HOURS PRIOR TO ANY WORK BEING DONE. ALL PROTECTION FENCING AND SIGNAGE REQUIRED UNDER THE CODE OF PUBLIC LAWS AND ORDINANCES CHAPTER 115 OF FOREST CONSERVATION AND CHAPTER 154 OF WATER RESOURCES MUST BE INSTALLED PRIOR TO THE PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR.
- START WITH BALDWIN DRIVE WORK. CONTRACTOR TO CONTACT FIREHOUSE CREAMERY, SYKESVILLE STATION 4 THE TOWN OF SYKESVILLE TO COORDINATE CONSTRUCTION PRIOR TO PROCEEDING, CONTRACTOR TO MAINTAIN ACCESS TO LOCAL BUSINESSES AS WORK PROGRESSES.
- CONTRACTOR TO INSTALL ALL PERIMETER SEDIMENT CONTROLS AND INLET PROTECTION, ALONG BALDWIN DRIVE.
- WITH PERMISSION OF THE TOWN OF SYKESVILLE, TEMPORARILY CLOSE BALDWIN DRIVE. CONTRACTOR TO FOLLOW MARYLAND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - 2011 EDITION.
- CONTRACTOR TO REMOVE EXISTING CURB, SAW CUT LINES AND REMOVE EXISTING PAVEMENT ALONG NEW CURB LINES, MILL EXISTING PAVEMENT AND INSTALL NEW CURB. INSTALL SAFETY FENCE AS NECESSARY.
- CONTRACTOR TO BEGIN SIDEWALK IMPROVEMENTS. NOTE THAT ACCESS TO ALL BUSINESSES IS TO BE MAINTAINED DURING CONSTRUCTION.
- OVERLAY PAVEMENT WHERE NECESSARY TO ENSURE SMOOTH TRANSITIONS BETWEEN STAMPED CONCRETE AND EXISTING PAVEMENT. PAVE AND STRIPE PARKING AREAS.
- CONTRACTOR TO REOPEN BALDWIN DRIVE AND WITH PERMISSION OF THE TOWN OF SYKESVILLE TEMPORARILY CLOSE PORTION OF OKLAHOMA AVENUE. CONTRACTOR TO FOLLOW MARYLAND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - 2011 EDITION.

- PRIOR TO STARTING WORK ON OKLAHOMA AVENUE CONTRACTOR TO MEET WITH THE TOWN OF SYKESVILLE, THE OWNER OF THE FRENCH TWIST CAFE AND OWNER OF TRI SPORT JUNCTION TO COORDINATE CONSTRUCTION PRIOR TO PROCEEDING. ACCESS TO LOCAL HOUSING AND BUSINESSES IS TO BE MAINTAINED DURING CONSTRUCTION.
- CONTRACTOR TO INSTALL PERIMETER SEDIMENT CONTROLS AND INLET PROTECTION ALONG OKLAHOMA AVENUE.
- INSTALL INLET I-30 AND STORM DRAIN FROM I-30 TO M-31, M-31 TO M-32, AND M-32 TO M-33. PLEASE NOTE THAT THE WATER HOUSE AND SEWER HOUSE CONNECTION TO THE FRENCH TWIST CAFE MAY NEED TO BE RELOCATED. CONTRACTOR TO COORDINATE WITH THE FRENCH TWIST CAFE. BUSINESSES TO REMAIN OPEN DURING CONSTRUCTION. NOTE THAT CONTRACTOR THE INSTALL SAFETY FENCING AS NECESSARY.
- CONTRACTOR TO INSTALL INLETS I-36 AND I-37, REMOVE EXISTING INLETS EX. I-111 AND EX. I-110, AND INSTALL PROPOSED STORM DRAIN FROM I-37 TO M-33 AND M-33 TO M-34. CONTRACTOR TO REFER TO STORM WATER MANAGEMENT SEQUENCE OF CONSTRUCTION FOR INSTALLATION OF ROTONDO STORM GARDEN.
- INSTALL INLET I-38 AND I-39, NOTE AS A NEW INLET IS INSTALLED INLET PROTECTION IS TO BE ADDED TO INLET.
- CONTRACTOR TO REMOVE EXISTING CURBS, SAW CUT LINES AND REMOVE EXISTING PAVEMENTS WITHIN LIMITS OF PAVERS. MILL EXISTING PAVEMENT ALONG PERIMETER OF PAVERS TO ALLOW FOR SMOOTH TRANSITIONS BETWEEN PAVERS AND EXISTING PAVEMENT AND INSTALL NEW CURB AS THIS WORK PROGRESSES.
- CONTRACTOR TO BEGIN SIDEWALK IMPROVEMENTS ALONG OKLAHOMA AVENUE. NOTE ACCESS TO ALL BUSINESSES AND PRIVATE RESIDENCES IS TO BE MAINTAINED DURING CONSTRUCTION. PAVERS AND RETRACTABLE BOLLARDS ARE TO BE INSTALLED IN OKLAHOMA AVENUE AT THIS TIME.
- OVERLAY PAVEMENT WHERE NECESSARY TO ENSURE SMOOTH TRANSITIONS BETWEEN PROPOSED PAVERS AND EXISTING PAVEMENT.
- PRIOR TO STARTING WORK ON MAIN STREET, CONTRACTOR TO MEET WITH BUSINESS OWNERS AND THE TOWN OF SYKESVILLE TO COORDINATE CONSTRUCTION PRIOR TO PROCEEDING. ACCESS TO LOCAL HOUSING AND BUSINESS IS TO BE MAINTAINED.
- CONTRACTOR TO INSTALL PERIMETER SEDIMENT CONTROLS AND INLET PROTECTION AND M.O.T. SIGNAGE PER PLAN.
- WITH PERMISSION OF SEDIMENT CONTROL INSPECT



KCI
TECHNOLOGIES

*ENGINEERS
PLANNERS
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REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	11/13/2024
				SCALE
				1" = 20'
				DESIGNED BY
				TM
				DRAWN BY
				SC

CARROLL COUNTY, MD

ELECTION DISTRICT 13

TOTAL PROPOSED
IMPERVIOUS - 16,265 S.F.
FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

EROSION & SEDIMENT
CONTROL DETAILS
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.

C-15

SHEET | 5 OF 30
KCI JOB NUMBER
272206100.03

BID SET





Project Name: Main St Improvements Sykesville
Project Number: 272206100
By: SC
Date: 10/27/23
Chk: TM
Date: 10/27/23

Stormwater Management Using Environmental Site Design (ESD)

Site Data: L.O.D. / Site Area = 19788 sf = 0.45 Ac.
Existing Impervious = 18429 sf = 0.42 Ac.
Proposed Impervious = 16265 sf = 0.37 Ac.

Step 1: Determine ESD Implementation Goals (WQv, Rev & Cpv Total)

A. Determine Pre-Developed Conditions:

Total Area within Limits of Disturbance:	0.454 Ac.
Existing Impervious within LOD:	0.423 Ac.
Proposed Impervious within LOD:	0.373 Ac.

%I = $\frac{\text{Existing Impervious Area}}{\text{Limit of Disturbance}}$ = $\frac{0.42 \text{ Ac.}}{0.454 \text{ Ac.}}$ = 93%

Because existing site impervious is greater than 40%, the project is subject to redevelopment requirements. There is a net decrease in impervious area in proposed conditions, so water quality treatment for only 50% of the existing impervious within the LOD is required.

0.423 x 50% = 0.21 Ac.

Net increase in impervious by development -0.05 Ac. , therefore, water quality treatment is required for 0.16 Ac. (0.21 Ac. + -0.05 Ac.)

Redevelopment Area Calculations:

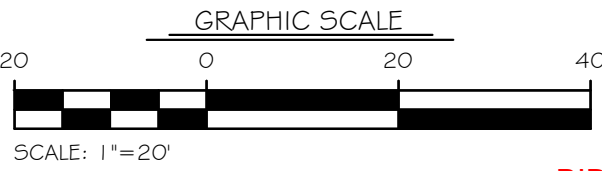
I = 100%
PE = 1.0 inch
Rv = 0.05 + (0.009) x (I)
Rv = 0.05 + (0.009) x 100
Rv = 0.95

ESDv = $\frac{P}{12} \times \frac{Rv}{1.00} \times \frac{A}{0.95}$
ESDv = $\frac{12}{1.00 \times 0.95 \times 0.16}$

ESDv = 0.013 Acre Feet or 558 Cubic Feet for Redevelopment Area

SWM SUMMARY TABLE		
STRUCTURE NO.	IMPERVIOUS AREA (S.F.)	GRASS AREA (S.F.)
1	140	273
2	2005	227
3	1356	0
4	306	0
5	382	0
6	183	0
7	2320	229
8	952	0
9	187	0
10	502	0
11	1610	746
12	1239	662
13	287	681
14	3453	459
15	283	84
16	1060	152

NOTE: SITE AREA IS ANY AREA WHERE THE ELEVATION CHANGE IS GREATER THAN 3'.



GRAPHIC SCALE
0 20 40
SCALE: 1"=20'

TOTAL PROPOSED IMPERVIOUS - 16,265 S.F.
FOR CONTINUATION SEE CARROLL COUNTY GRO-23-006 SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE ON THE MARYLAND COORDINATE SYSTEM NAD-83



ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS			
NO.	DATE	DESCRIPTION	BY

DATE
11/13/2024
SCALE
1" = 20'
DESIGNED BY
TM
DRAWN BY
SC

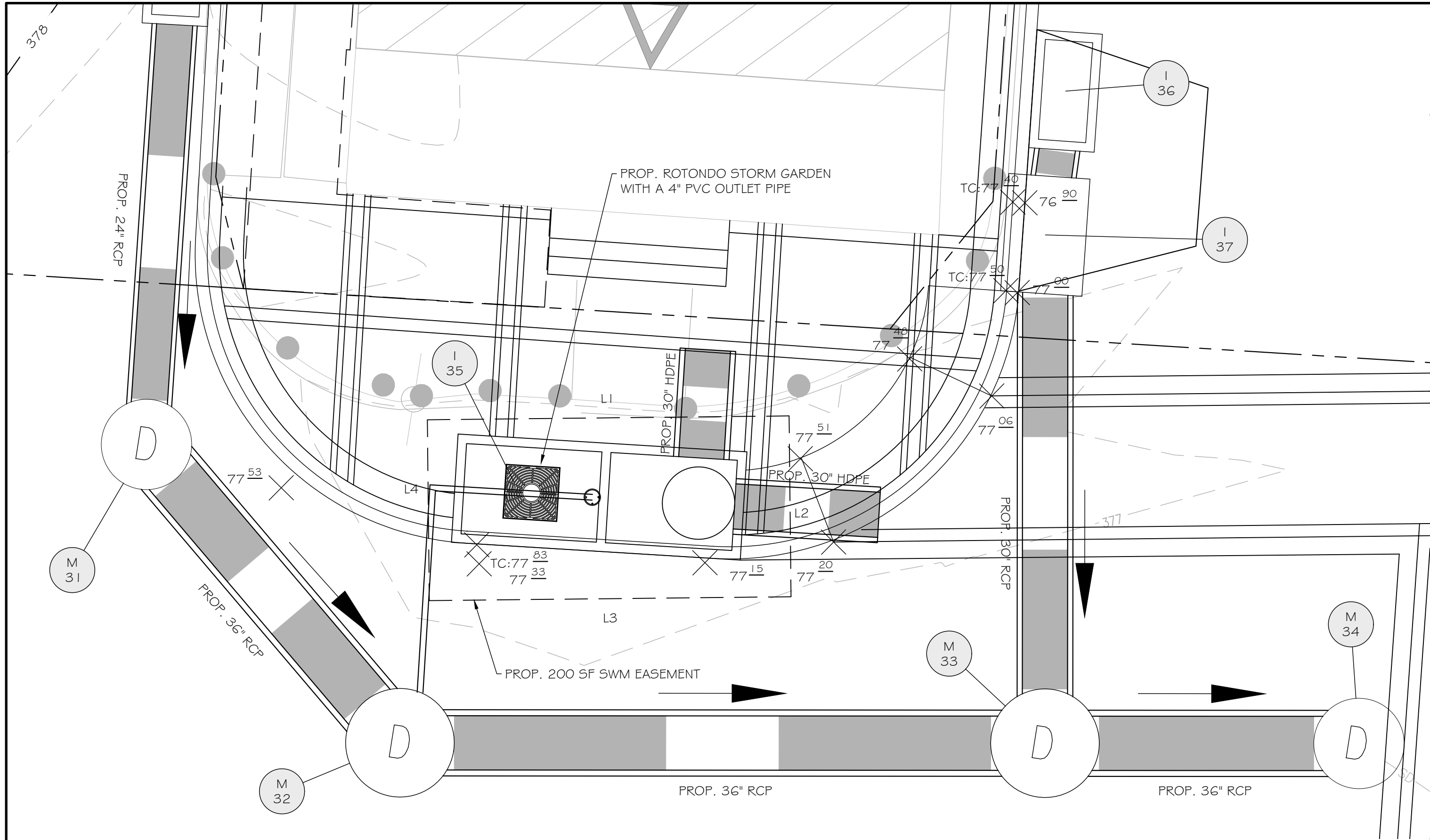
PROPOSED IMPERVIOUS AREA MAP
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

CARROLL COUNTY, MD
ELECTION DISTRICT 13

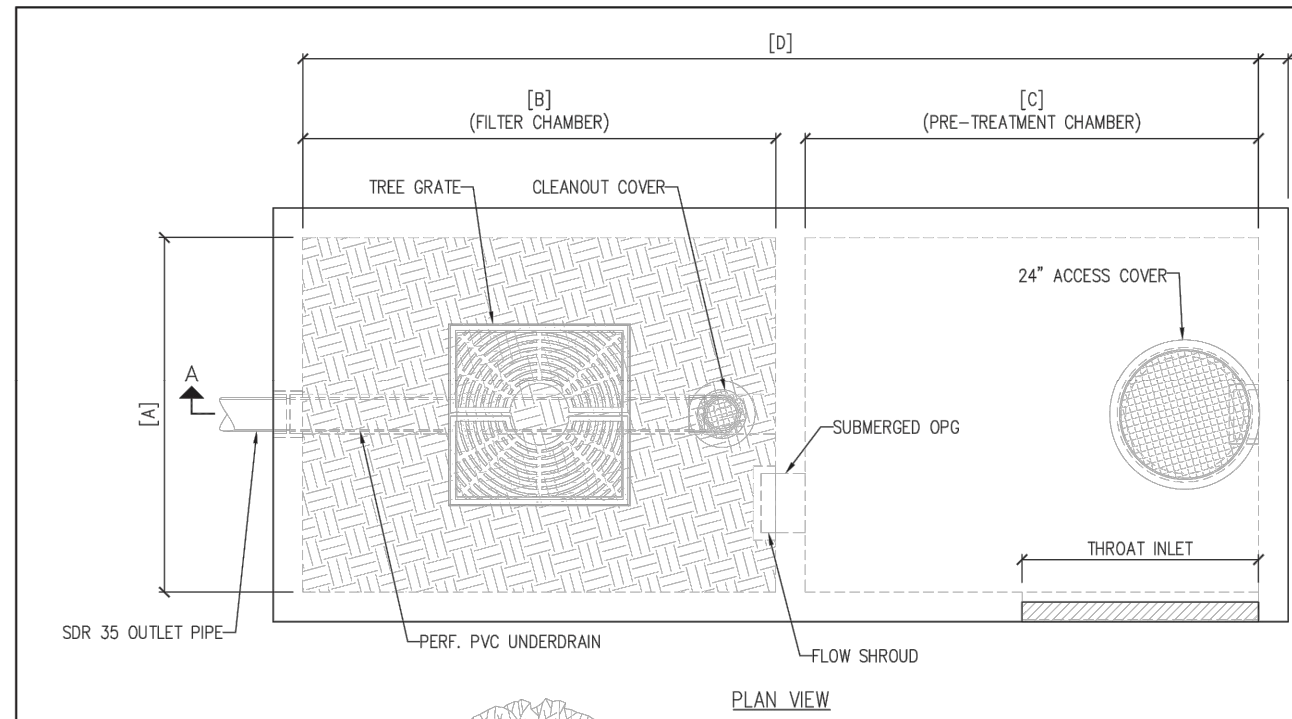
DRAWING NO.
C-17
SHEET 17 OF 30
KCI JOB NUMBER
272206100.03

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. 289335 EXPIRATION DATE: 1/15/25

PLOTTED: \$DATE\$
BY: \$USER\$
FILE: \$FILE\$

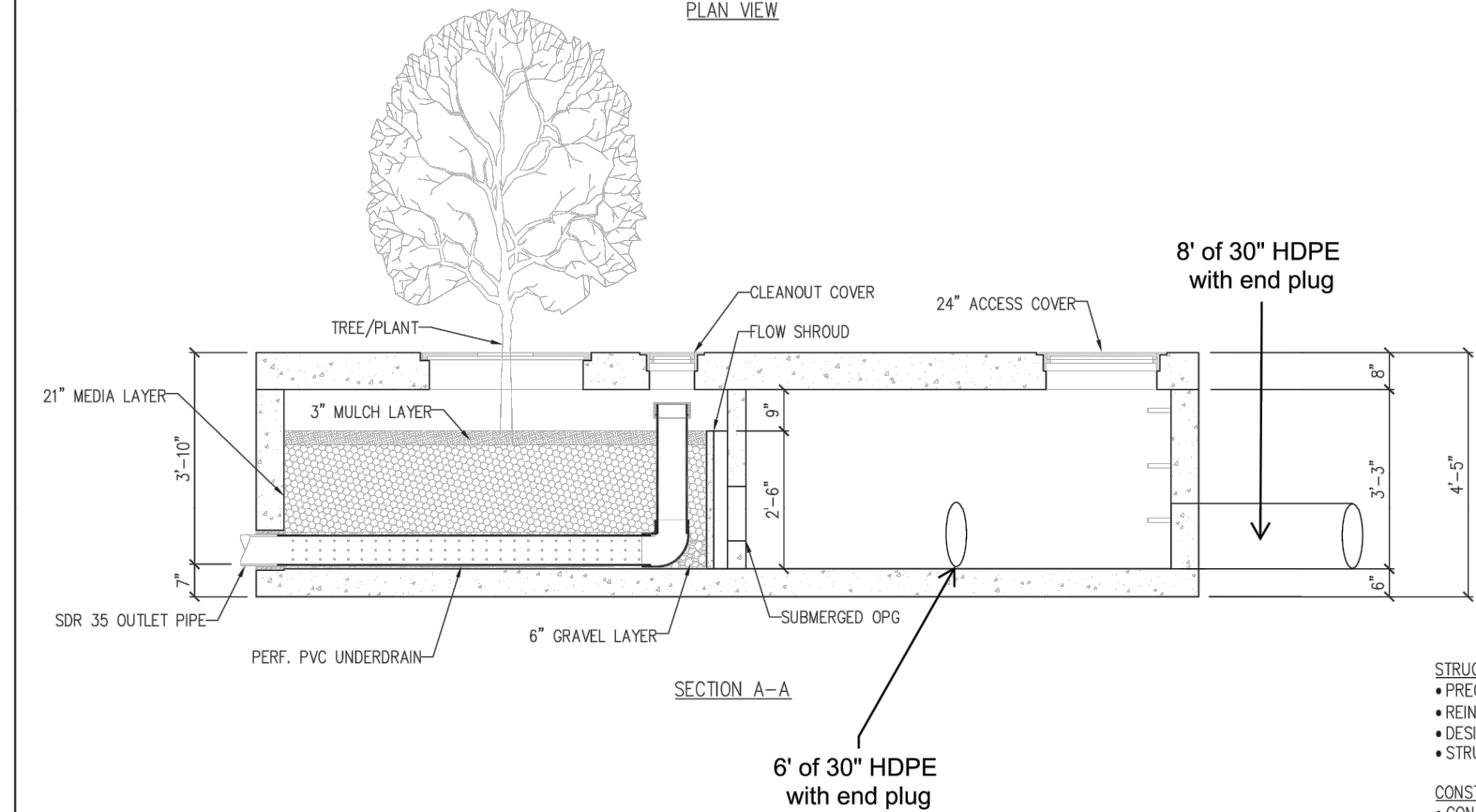
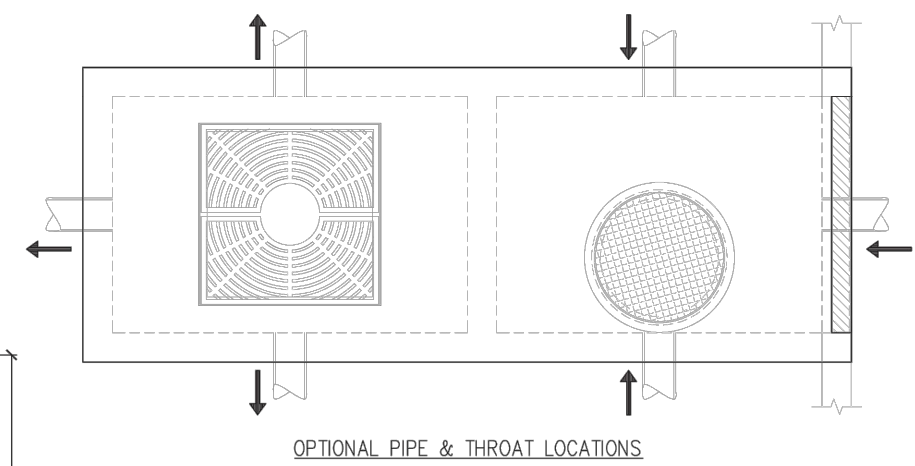


STORM GARDEN #1 PLAN
SCALE 1" = 5'



STANDARD HEIGHT CONFIGURATION (LONG SIDE INLET)										
DESIGNATION	[A]	[B]	[C]	[D]	TREATMENT FLOW CAPACITY (GPM/QSF)	THROAT INLET LENGTH	TREE GRATE QTY & SIZE	OUTLET PIPE DIA (SPP35)	STORAGE CAPACITY PRIOR TO FILTRATION (CF)	WQV EQUIVALENT VOLUME (CF)
SGPT-0404	4'	4'	3'-6"	8'	23.3 / 0.052	3'	(1) 3' x 3'	4"	57.50	230
SGPT-0406	4'	6'	5'-6"	12'	34.8 / 0.078	3'	(1) 3' x 3'	4"	89.50	358
SGPT-0408	4'	8'	7'-6"	16'	46.4 / 0.104	4'	(1) 3' x 3'	4"	121.50	496
SGPT-0606	6'	6'	5'-6"	12'	52.2 / 0.117	4'	(1) 3' x 3'	4"	134.25	537
SGPT-0608	6'	8'	7'-6"	16'	69.6 / 0.156	4'	(1) 3' x 3'	4"	182.25	729
SGPT-0610	6'	10'	9'-6"	19'	87.0 / 0.195	5'	(1) 3' x 3'	6"	210.75	843
SGPT-0706	7'	6'	6'-6"	13'	61.1 / 0.136	4'	(1) 3' x 3'	4"	179.38	718
SGPT-0710	7'	10'	9'-6"	20'	101.8 / 0.227	5'	(2) 3' x 3'	6"	268.63	1075
SGPT-0810	8'	10'	9'-6"	20'	116.4 / 0.259	6'	(2) 3' x 3'	6"	307.00	1228
SGPT-0811	8'	11'	10'-6"	22'	127.9 / 0.285	6'	(2) 3' x 3'	6"	339.00	1356

NOTES:
1. TREATMENT FLOW CAPACITY OF 1.45 GPM/SF OF MEDIA SURFACE AREA IS BASED ON WASHINGTON ECOLOGY GULF APPROVAL FOR BASIC AND PHOSPHOROUS
2. OTHER SIZES AVAILABLE UPON REQUEST
3. INTERNAL PIPE CONFIGURATION MAY VARY DEPENDING UPON OUTLET LOCATION
4. ALTERNATE LAYOUT ORIENTATION AVAILABLE

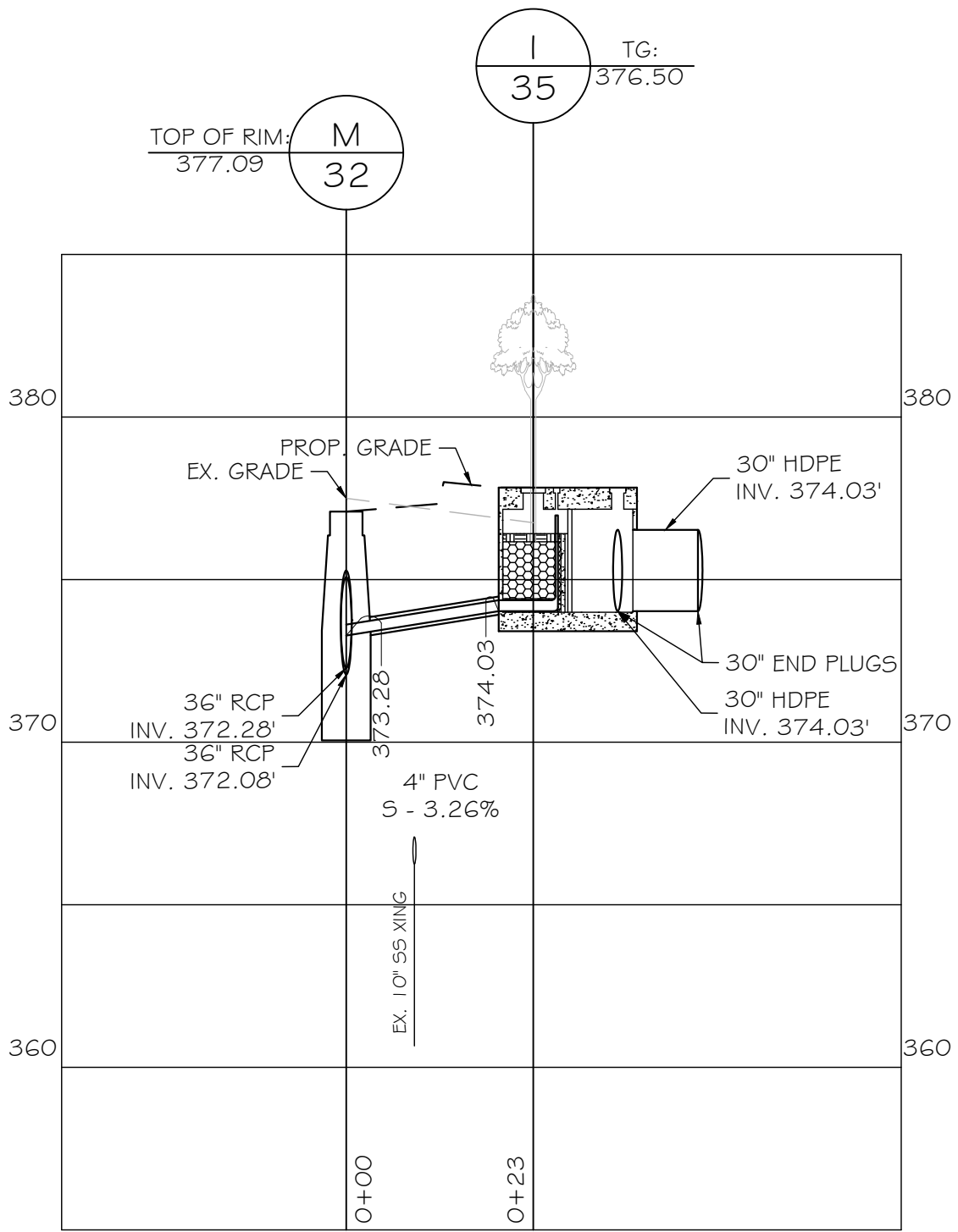


STRUCTURE DESIGN SPECIFICATIONS:
• PRECAST CONCRETE MINIMUM (28-DAY) STRENGTH 5000 PSI.
• REINFORCING BARS CONFORMING TO ASTM A 615 (FY=60 KSI).
• DESIGN LOAD: AASHTO HS-20
• STRUCTURE DESIGN TO MEET ACI 318
CONSTRUCTION NOTES:
• CONTRACTOR TO GRAD WITH NON-SHRINK GROUT (MINIMUM 3,000 PSI COMPRESSIVE STRENGTH) BENEATH TOP SLAB TO MATCH FINISHED GRADES.



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ROTONDO STORM GARDEN #1 EASEMENT LINE TABLE		
LINE	BEARING	LENGTH
L1	N 80°25'41" E	60.0'
L2	S 09°34'19" E	60.0'
L3	N 80°25'41" W	60.0'
L4	N 09°34'19" W	60.0'
EASEMENT AREA = 200 SF/0.005 AC		



STORM GARDEN PROFILE - OKLAHOMA AVE.
SCALE HORIZ. - 1" = 20'
SCALE VERT. - 1" = 5'

STORMWATER FACILITY DATA TABLE - ROTONDO STORM GARDEN			
OWNED & MAINTAINED BY	TOWN OF SYKESVILLE		
STRUCTURE CLASSIFICATION	STORM GARDEN		
WATERSHED RECEIVING STREAM CLASSIFICATION	WATERSHED #02130908 PATAPSCO RIVER SB		
CONTRIBUTORY AREA	USE 1		
IMPERVIOUS AREA	0.37 ACRES		
MAX. EMBANKMENT HEIGHT	0.26 ACRES		
EMBANKMENT WIDTH	N/A		
CENTROID COORDINATES:	N: 618521.20 E: 1320847.51		
UNIFORM STORMWATER SIZING CRITERIA:	REQUIRED	PROVIDED	
ESD VOLUME (ESD)	558	917	
OVERBANK FLOOD PROTECTION VOLUME(QP)	---		
EXTREME FLOOD VOLUME(QF)	NOT REQUIRED: NO IMMEDIATE FLOOD HAZARD		

SEQUENCE OF CONSTRUCTION

- CONTACT THE CERTIFYING PROFESSIONAL ENGINEER/PROFESSIONAL LAND SURVEYOR, ONCE THE CERTIFYING PROFESSIONAL HAS GIVEN HIS/ HER APPROVAL IN ACCORDANCE WITH INSPECTION CHART.
- EXCAVATE TO SUBGRADE.
- INSTALL STORM GARDEN STRUCTURE ACCORDING TO MANUFACTURERS SPECIFICATIONS.
- INSTALL OUTGOING PIPES.
- INSTALL PLANTING MEDIA AND TREE ACCORDING TO MANUFACTURERS SPECIFICATIONS.
- SUBMIT AS-BUILT CERTIFICATION FOR BOND RELEASE.

LANDSCAPE NOTE

A TREE ON APPROVED TREE LIST FOR THE STORM GARDEN IS TO BE PROVIDED. VERIFICATION OF TREE WILL BE PROVIDED ON AS-BUILT.

ROTONDO TREE GARDEN MAINTENANCE

ALL STORM-WATER TREATMENT SYSTEMS REQUIRE MAINTENANCE FOR EFFECTIVE OPERATION. THIS NECESSITY IS OFTEN INCORPORATED IN YOUR PROPERTY'S PERMITTING PROCESS AS A LEGALLY BINDING BMP MAINTENANCE AGREEMENT.

- AVOIDING LEGAL CHALLENGES FROM YOUR JURISDICTION'S MAINTENANCE ENFORCEMENT PROGRAM.
- PROLONGING THE EXPECTED LIFE SPAN OF YOUR STORMGARDEN® MEDIA.
- AVOIDING MORE COSTLY MEDIA REPLACEMENTS.
- HELPING REDUCE POLLUTANT LOADS LEAVING YOUR PROPERTY.

Box Length	Box Width	Filter Surface Area (ft ²)	Volume at 5" (ft ³)	# of 2 ft ³ Mulch Bags
4	4	16	6.67	4
6	4	24	10	5
8	4	32	13.33	7
10	4	40	16.67	9
12	4	48	20	10
6	6	36	15	8
8	6	48	20	10
10	6	60	25	13
12	6	72	30	15
13	7	91	37.91	19
16	8	128	53.33	27

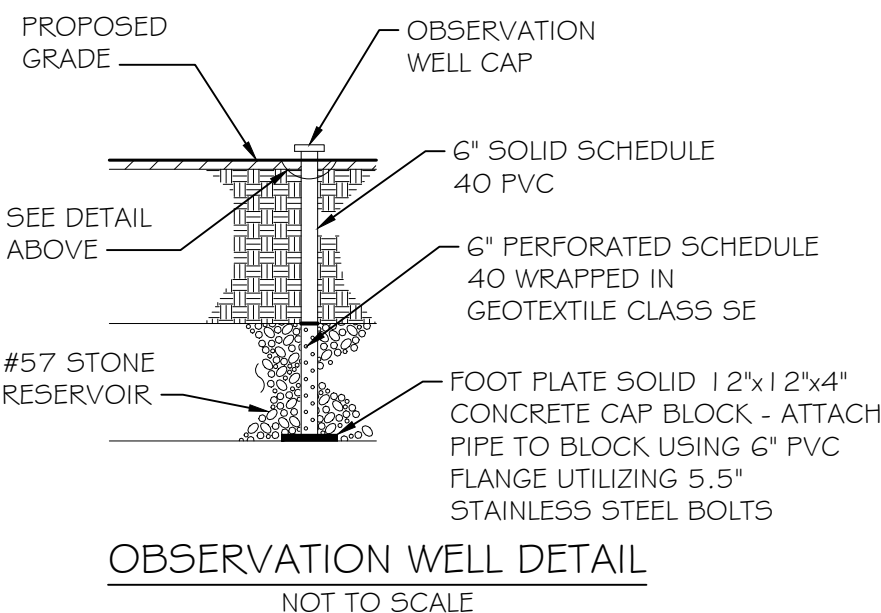
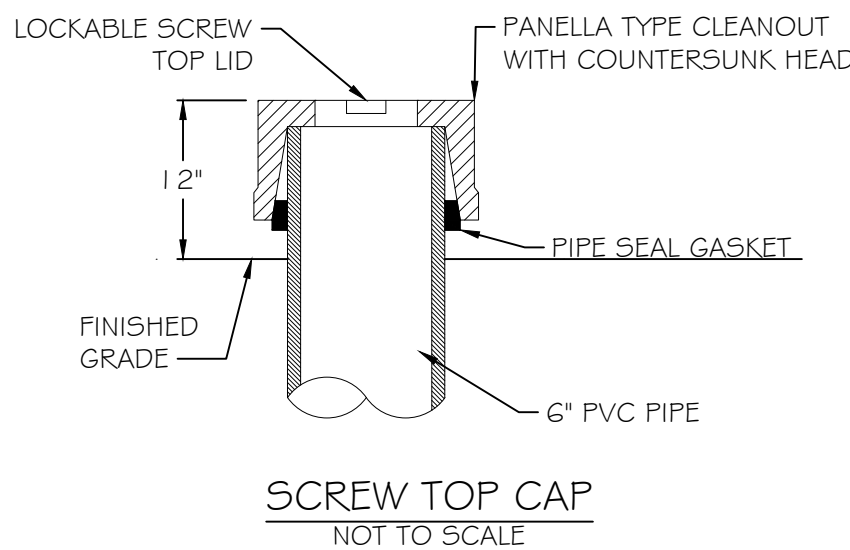
ROTONDO STORM GARDEN #1 INSTALLATION INSPECTION CHART

STAGE *	INSPECTORS APPROVAL*	
1. EXCAVATION TO SUBGRADE	INITIALS	DATE
2. CONSTRUCTION OF THE STORM GARDEN INLET STRUCTURES		
3. INSTALLATION OF OUTGOING PIPES.		
4. COMPLETION OF FINAL GRADING, PAVING, CONSTRUCTION OF STRUCTURE.		
5. PLACEMENT OF FILTER MEDIA AND TREE ACCORDING TO MANUFACTURERS SPECIFICATIONS.		
6. SUBMIT AS-BUILT PAPER PRINTS TO CARROLL COUNTY BUREAU OF RESOURCE MANAGEMENT WITHIN 60 DAYS OF CONSTRUCTION COMPLETION.		
PLEASE NOTIFY CERTIFYING ENGINEER 48 HOURS PRIOR COMMENCING CONSTRUCTION ENGINEER'S NAME: KCI PHONE NUMBER: (410) 316-7898		

ENGINEER'S AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY/FACILITIES SHOWN ON THIS/THESE PLAN(S) WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS. I ALSO CERTIFY THIS/THESE FACILITIES WERE INSPECTED IN ACCORDANCE WITH SECTIONS 5-136-22 AND 5-136-23 OF THE CHARTER AND CODE OF THE CITY OF WESTMINSTER, MD AND I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND I AM A DULY LICENSED PROFESSIONAL ENGINEER OR PROFESSIONAL LAND SURVEYOR, AS APPROPRIATE, UNDER THE LAWS OF THE STATE OF MARYLAND.

SIGNED _____ DATE _____
XXXXXX _____ XXXXXXXX
LICENSE NO. _____ EXP. DATE _____



FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

SWM DETAILS & NOTES
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

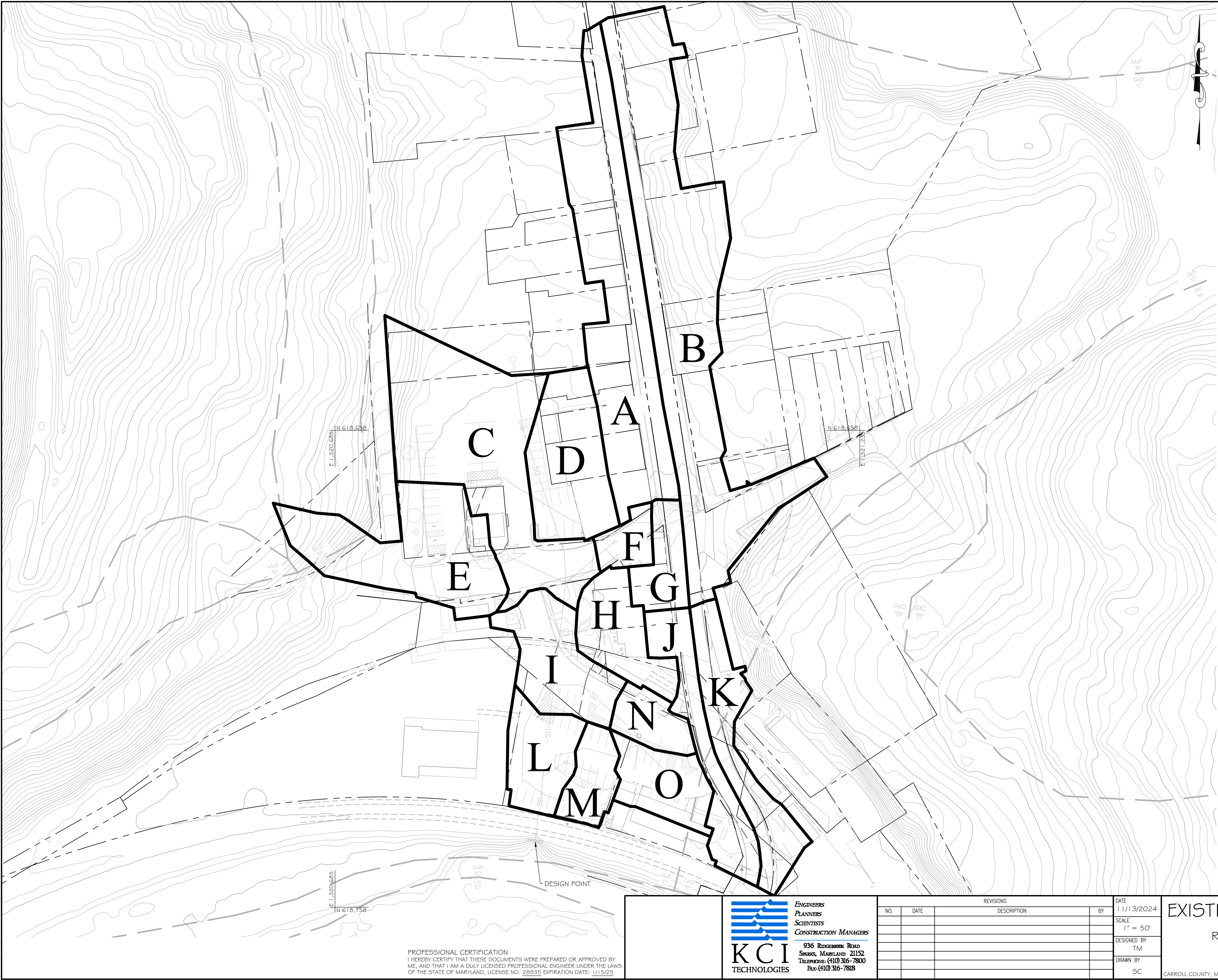
DRAWING NO.
C-18
SHEET 18 OF 30
KCI JOB NUMBER
272206100.03

CARROLL COUNTY, MD

ELECTION DISTRICT 13

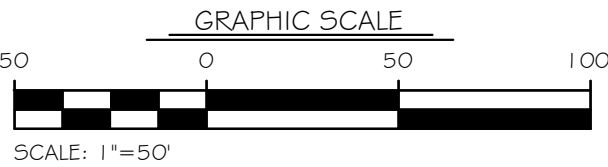
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				SCALE 1" = 5'
				DESIGNED BY TM
				DRAWN BY SC



DRAINAGE AREA SUMMARY TABLE	
DRAINAGE AREA NO.	AREA (AC.)
A	0.66
B	1.02
C	0.70
D	0.30
E	0.44
F	0.07
G	0.11
H	0.19
I	0.24
J	0.22
K	0.25
L	0.17
M	0.11
N	0.10
O	0.16

THE OVERALL DRAINAGE AREA TO THE DESIGN POINT = 4.74 AC. IN BOTH THE EXISTING AND PROPOSED CONDITION. THE PURPOSE OF THIS PROJECT IS TO PROVIDE IMPROVEMENTS TO THE SIDEWALKS IN THE TOWN OF SYKESVILLE. AS PART OF THIS IMPROVEMENT PROJECT THE IMPERVIOUS AREA WILL BE REDUCED, WHILE MAINTAINING THE DRAINAGE AREA SIZE. DUE TO THIS QUANTITY MANAGEMENT WILL BE OBTAINED.



BID SET

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

PROFESSIONAL CERTIFICATION
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ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS
OF THE STATE OF MARYLAND, LICENSE NO. 289335 EXPIRATION DATE: 1/15/25



ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

REVISIONS			
NO.	DATE	DESCRIPTION	BY

DATE 11/13/2024
SCALE 1" = 50'
DESIGNED BY TM
DRAWN BY SC

EXISTING DRAINAGE AREA MAP
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

CARROLL COUNTY, MD ELECTION DISTRICT 13

DRAWING NO.
C-19

SHEET 19 OF 30
KCI JOB NUMBER
272206100.03

PLOTTED: \$DATE\$
BY: \$USERNAME\$
FILE: \$FILE\$



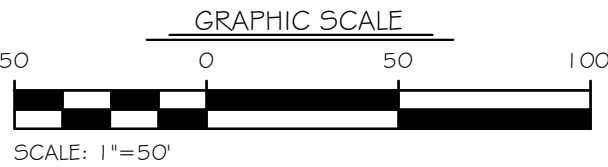
DRAINAGE AREA SUMMARY TABLE	
DRAINAGE AREA NO.	AREA (AC.)
A	0.56
B	0.81
C	0.68
D	0.30
E1	0.09
E2	0.37
F	0.06
G	0.34
H	0.19
I	0.24
J	0.22
K	0.25
L	0.08
M	0.19
N	0.08
O1	0.09
O2	0.09

The overall Drainage Area to the Design Point = 4.74 Ac. in both the Existing and Proposed Condition. The purpose of this project is to provide improvements to the sidewalks in the Town of Sykesville. As part of this Improvement Project the Impervious Area will be reduced, while maintaining the Drainage Area size. Due to this Quantity Management will be obtained.

LEGEND

PROP. IMPERVIOUS AREA

PROP. GRASS AREA



FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

PROPOSED DRAINAGE AREA MAP

FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

DRAWING NO.
C-20

SHEET **20** OF **30**
KCI JOB NUMBER
272206100.03

CARROLL COUNTY, MD ELECTION DISTRICT 13

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KCI
TECHNOLOGIES

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
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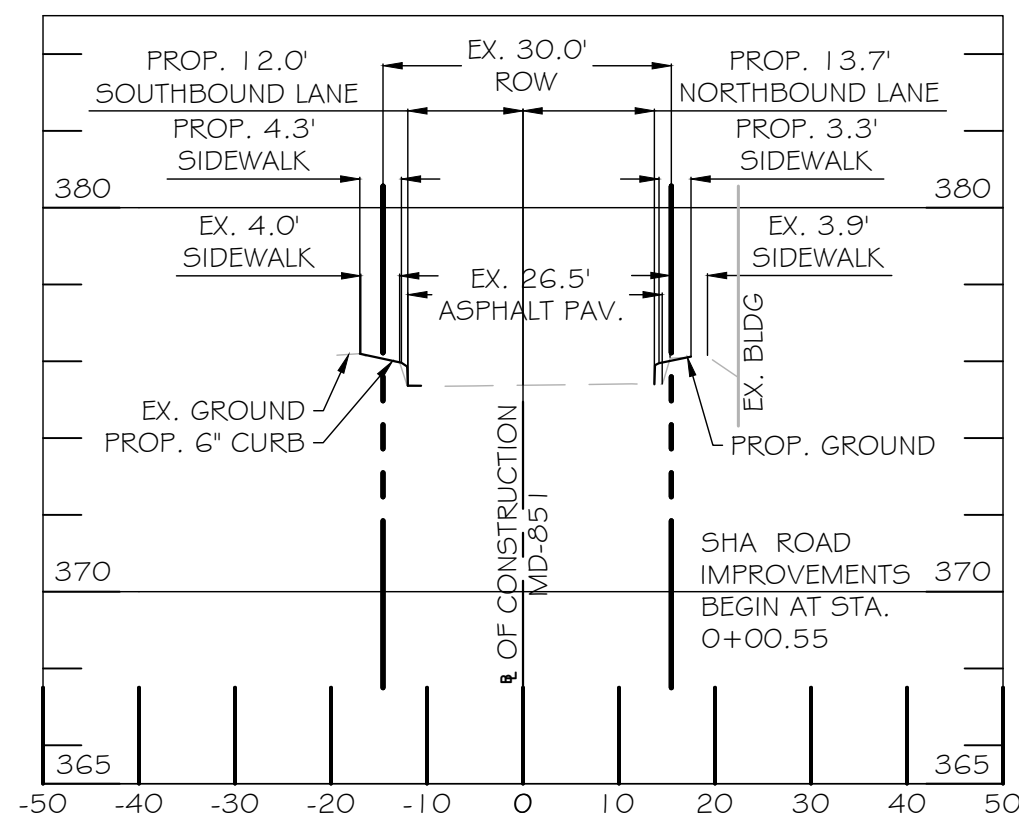
REVISIONS			
NO.	DATE	DESCRIPTION	BY

DATE
11/13/2024

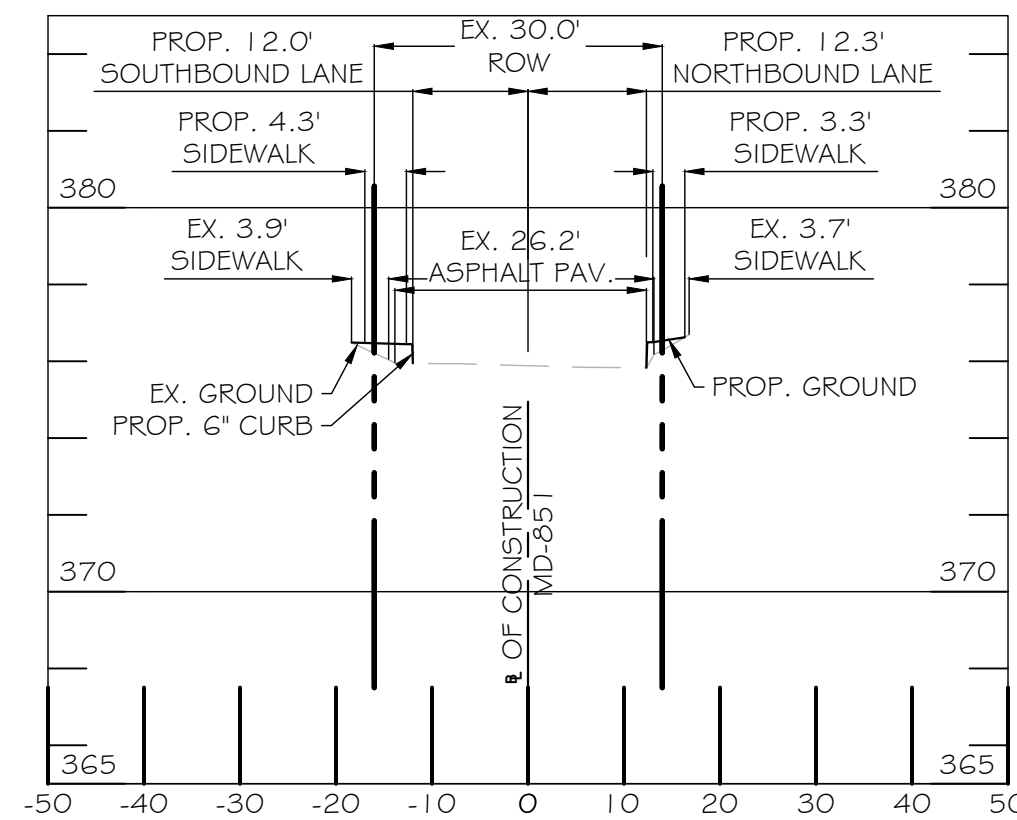
SCALE
1" = 50'

DESIGNED BY
TM

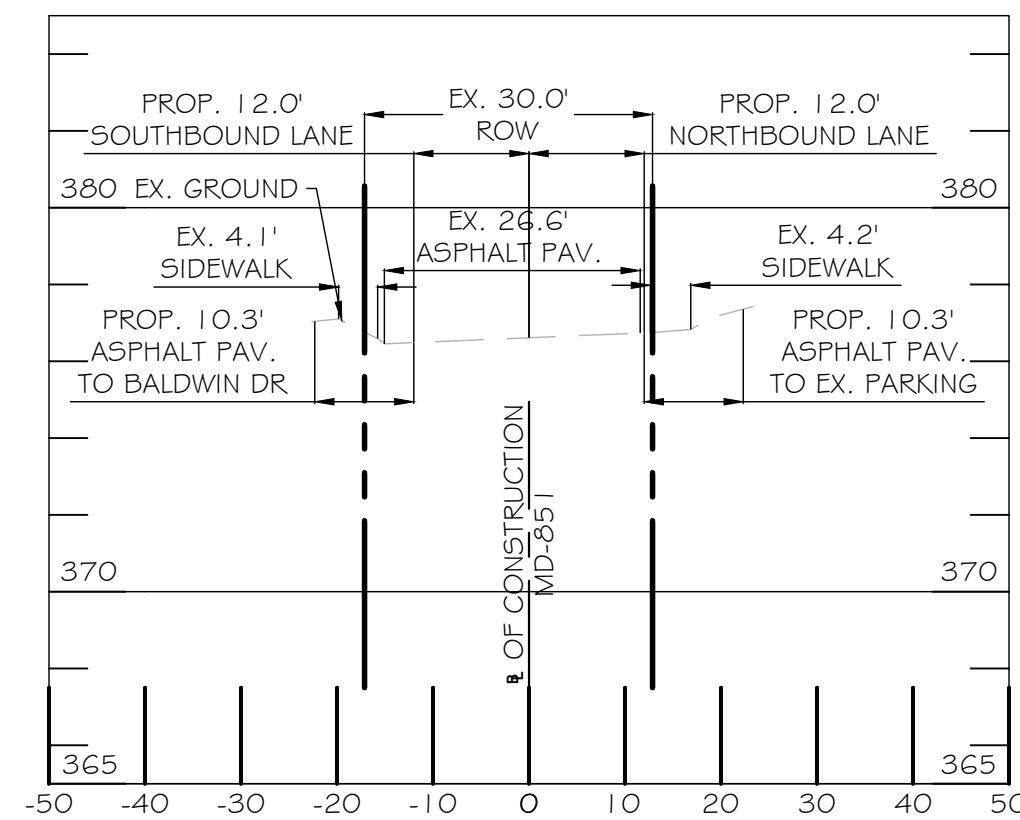
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SC



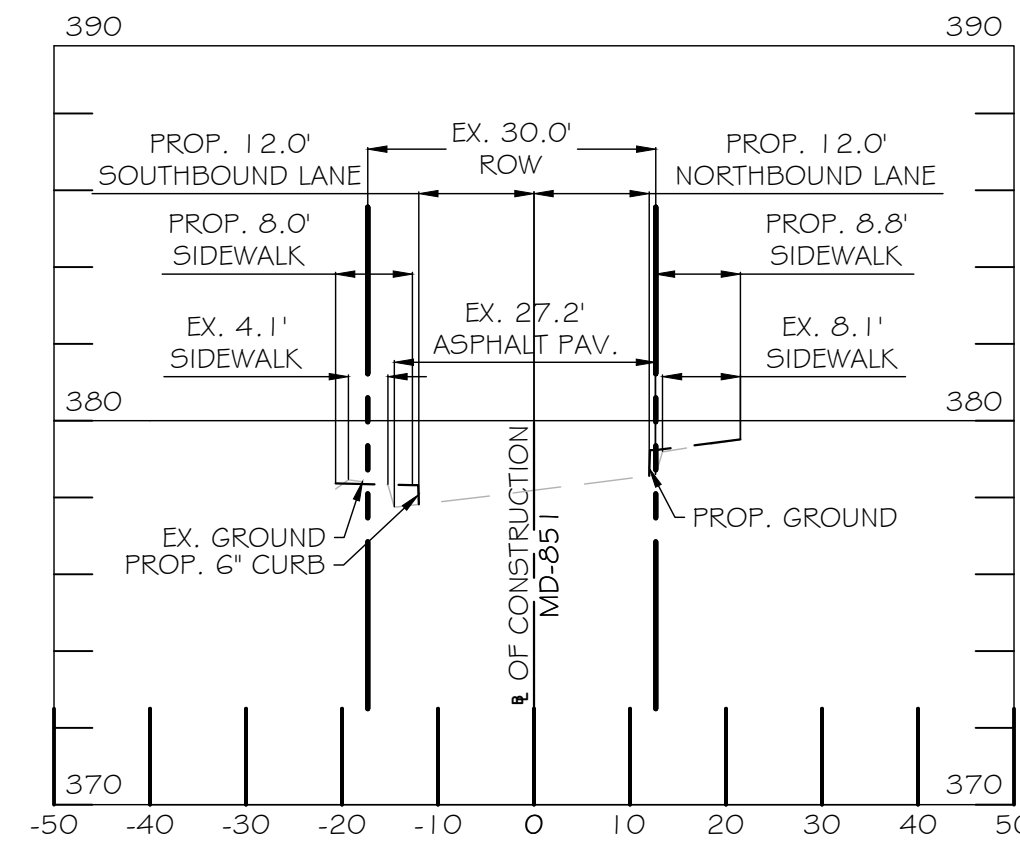
MD-85 | 0+00.55
SCALE: 1" = 20' HORIZ
1" = 5' VERT



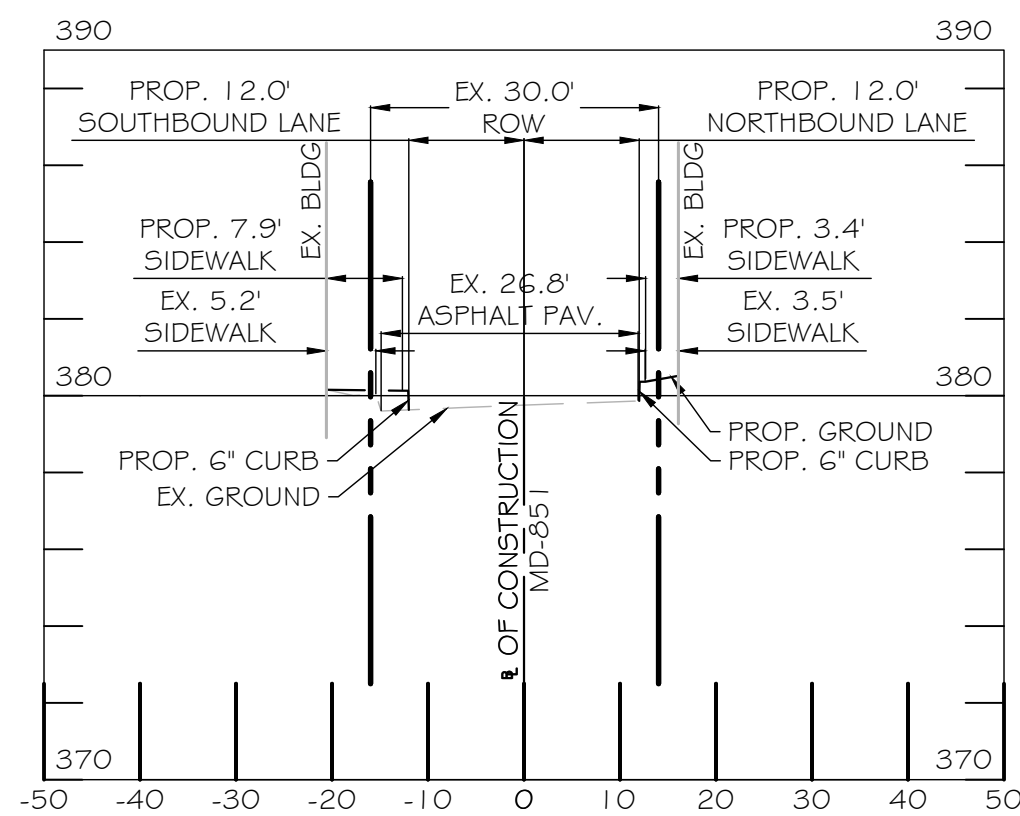
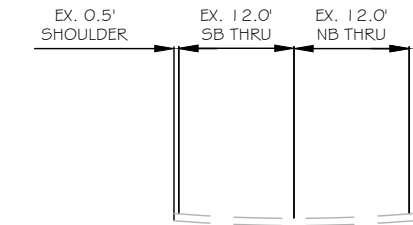
MD-85 | 0+50
SCALE: 1" = 20' HORIZ
1" = 5' VERT



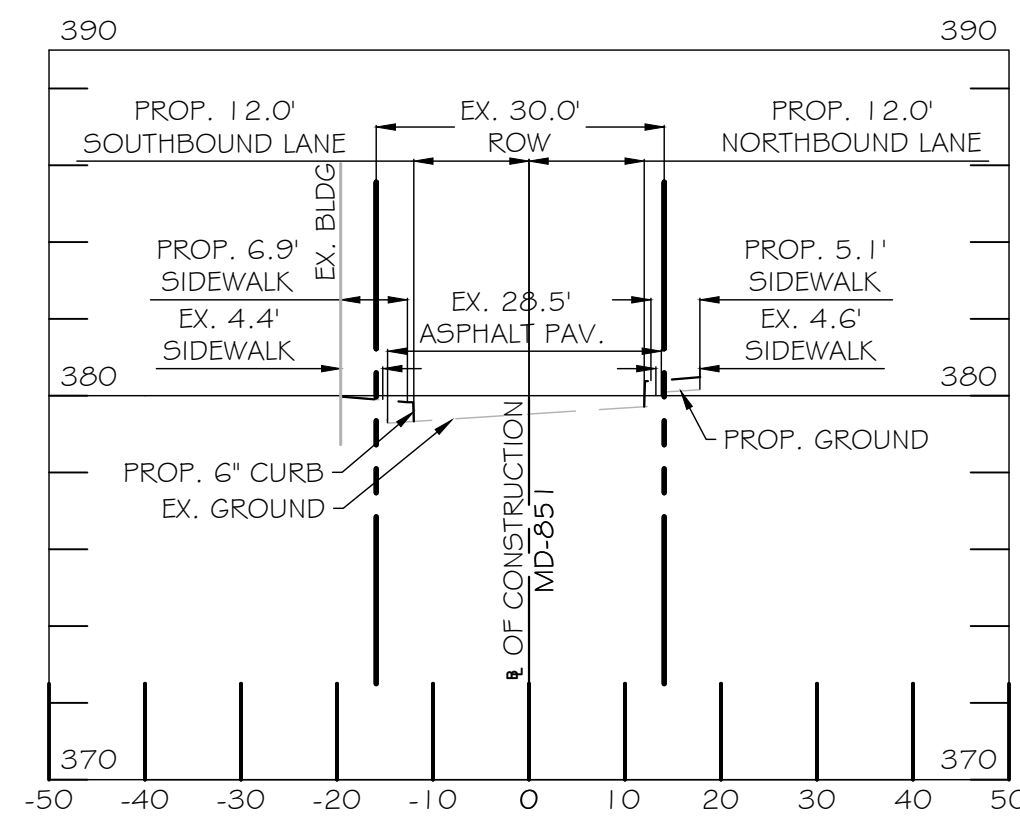
MD-85 | 1+00
SCALE: 1" = 20' HORIZ
1" = 5' VERT



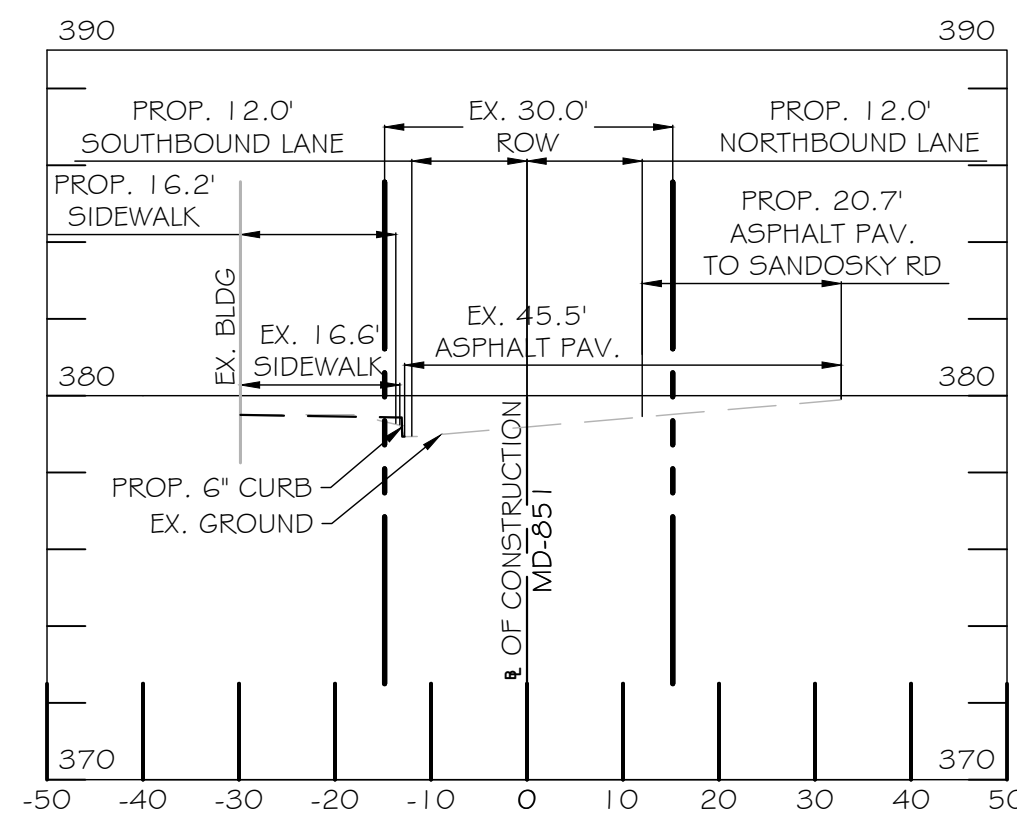
MD-85 | 1+50
SCALE: 1" = 20' HORIZ
1" = 5' VERT



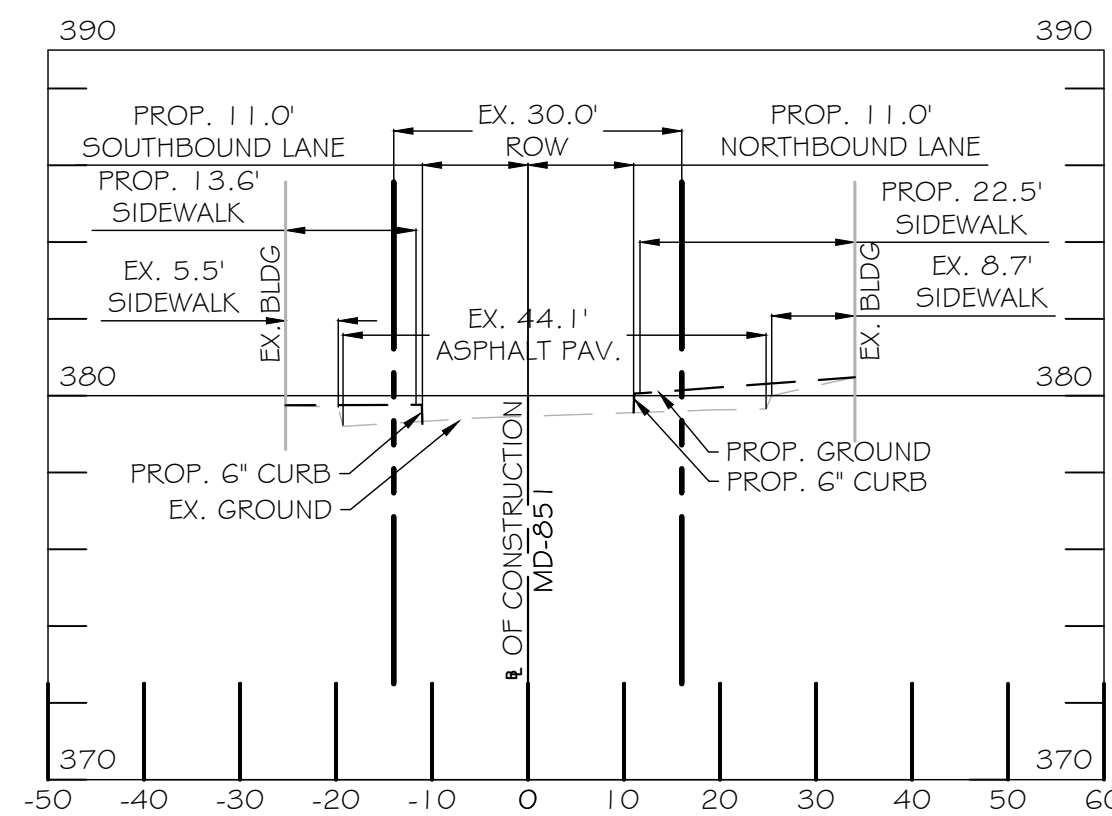
MD-85 | 2+00
SCALE: 1" = 20' HORIZ
1" = 5' VERT



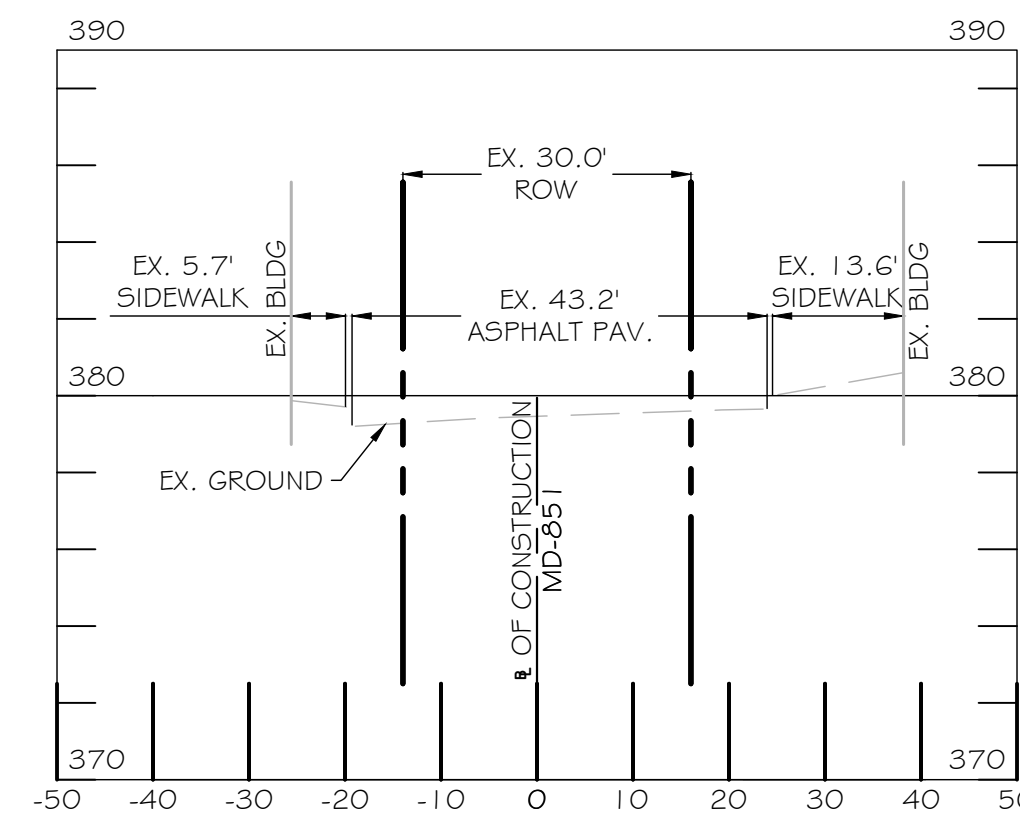
MD-85 | 2+50
SCALE: 1" = 20' HORIZ
1" = 5' VERT



MD-85 | 3+00
SCALE: 1" = 20' HORIZ
1" = 5' VERT



MD-85 | 3+40
SCALE: 1" = 20' HORIZ
1" = 5' VERT



MD-85 | 3+60
SCALE: 1" = 20' HORIZ
1" = 5' VERT

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REVISIONS				DATE
NO.	DATE	DESCRIPTION	BY	
				11/13/2024
				AS SHOWN
				DESIGNED BY TM
				DRAWN BY SC

FOR CONTINUATION SEE
CARROLL COUNTY GRO-23-006
SHA TRACKING NO. 24APCLO03XX

CROSS SECTION PLAN
FOR
ROADWAY IMPROVEMENT PLANS
TOWN OF SYKESVILLE
SYKESVILLE, MD 21784

OWNER/APPLICANT
TOWN OF SYKESVILLE
C/O JOE COSENTINI
7547 MAIN STREET
SYKESVILLE, MD 21784

THESE PLANS ARE
ON THE MARYLAND
COORDINATE SYSTEM
NAD-83

DRAWING NO.

C-21

SHEET 21 OF 30
KCI JOB NUMBER
272206100.03

CARROLL COUNTY, MD

ELECTION DISTRICT 13

BID SET

PLOTTED: \$DATE\$
BY: \$USERNAME\$
FILE: \$FILE\$

SEQUENCE OF CONSTRUCTION – PHASE 1

STEP 1

INSTALL THE LONG-TERM TEMPORARY TRAFFIC CONTROL SIGNS AS SHOWN ON MT-01. THESE SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE NOTED ON AN INDIVIDUAL PHASE OF CONSTRUCTION. AS PART OF THIS EFFORT, THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE AGENCY (CARROLL COUNTY AND/OR MDOT SHA DISTRICT 7) ON INSTALLING PORTABLE CHANGEABLE MESSAGE SIGNS TWO WEEKS IN ADVANCE OF THE PLANNED PARTIAL CLOSURE OF OKLAHOMA AVENUE AT A LOCATION SHOWN ON MT-02.

STEP 2

IMPLEMENT THE CLOSURE OF OKLAHOMA AVENUE FROM THE MAIN STREET INTERSECTION TO THE PARKING LOT ACCESS BY ESTABLISHING THE DETOUR AS SHOWN ON MT-02.

STEP 3

THE CONTRACTOR SHALL ESTABLISH THE ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES SHOWN ON MT-03. THIS INCLUDES:

FRENCH TWIST/MAIN PARKING AREA:
THE CONTRACTOR WILL NEED TO REVISE THE CIRCULATION TO THE MAIN PARKING LOT AS NOTED AND ESTABLISH A PEDESTRIAN PATH SO THAT PEDESTRIANS CAN ACCESS FRENCH TWIST AS SHOWN. THE CONTRACTOR WILL NEED TO COORDINATE WITH THE BUSINESS OWNER TO ADJUST ACCESS AS WORK PROGRESSES. THE ACCESS AS SHOWN IS ONLY SUGGESTED TO ALLOW FOR WORK TO PROCEED IN THE FRONT OF THE BUSINESS.

SYKESVILLE STATION/BALDWIN DRIVE:
ADJUST THE EXISTING PARKING AREA TO THE SYKESVILLE STATION AS NOTED. ADJUST THE PAVEMENT MARKINGS AND OPERATION OF BALDWIN DRIVE AS SHOWN.

STEP 4

WITH THE ADDITIONAL TRAFFIC CONTROL DEVICES IMPLEMENTED IN STEP 3, THE CONTRACTOR SHALL THE SAWCUT AND EXCAVATE FOR THE IMPROVEMENTS SHOWN ON MT-03. THIS INCLUDES THE DRAINAGE ELEMENTS, CURB AND GUTTER, SIDEWALK, AND STAMPED CROSSWALK ALONG OKLAHOMA AVENUE. WHILE CONSTRUCTING DRAINAGE IMPROVEMENTS, IF AN OPEN CUT IS ANTICIPATED AT THE END OF A WORK OPERATION, THE CONTRACTOR WILL BE REQUIRED TO SHORE THE EXCAVATION AND PLATE THESE AREAS DURING NON-WORKING HOURS.

ADDITIONAL PEDESTRIAN ACCESS PATHS ARE SUGGESTED SO THAT THE CONTRACTOR HAS AMPLE WORK SPACE TO RECONSTRUCT ELEMENTS OF THE PROPOSED IMPROVEMENTS FOR THIS PHASE AS SHOWN ON KCI'S ROADWAY IMPROVEMENT PLANS. AS WORK PROGRESSES, THE CONTRACTOR WILL NEED TO ADJUST THE PEDESTRIAN ACCESS SO THAT IT IS GENERALLY IN THE SAME AREAS. THE CONTRACTOR MAY NEED TO CONSTRUCT TEMPORARY ASPHALT PATCHES TO PROVIDE AN ADA ACCESSIBLE PATH DURING THIS PHASE OF CONSTRUCTION. THIS INCLUDES AREAS WITHIN THE PROPOSED STAMPED/PAVER CROSSWALKS AS WELL AS THE SIDEWALK AREA ON THE SOUTH SIDE OF OKLAHOMA AVENUE NEAR THE GARDEN AREA WHERE PEDESTRIANS ARE TEMPORARILY DIVERTED DURING THIS PHASE.

SEQUENCE OF CONSTRUCTION – PHASE 2

STEP 1

MAINTAIN/ADJUST/INSTALL THE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON MT-04. THIS INCLUDES TEMPORARY PEDESTRIAN PATH/CROSSING LOCATIONS SHOWN AS WELL AS CIRCULATION ADJUSTMENTS TO THE MAIN PARKING AREA. THE CONTRACTOR SHALL REMOVE THE PARKING ON THE EAST SIDE OF SANDOSKY ROAD (HE MAY CHOOSE TO UTILIZE FOR STAGING AND STORAGE PURPOSES) AND DRUM OFF AN AREA AS SHOWN AND ADJUST THE PAVEMENT MARKINS AS NOTED. THIS WILL ALLOW PEDESTRIANS TO TRAVERSE THE INTERSECTION AREA DURING THE WORK OPERATIONS.

STEP 2

THE CONTRACTOR SHALL SAWCUT AND EXCAVATE FOR THE REMAINING CURB AND GUTTER, SIDEWALK AND DRAINAGE IMPROVEMENTS SHOWN AROUND THE FRENCH TWIST AS SHOWN ON KCI'S ROADWAY PLANS. THE CONTRACTOR SHALL COMPLETE THIS WORK AT NIGHT AND ENSURE THAT ACCESS TO THE BUSINESS IS AVAILABLE DURING ALL WORKING HOURS. IF STORM DRAIN IMPROVEMENTS LAST LONGER THAN ONE WORK OPERATION, THE CONTRACTOR SHALL SHORE THE EXCAVATION AREAS AND PLACE STEEL PLATES OVER THE WORK AREA.

STEP 3

THE CONTRACTOR SHALL UTILIZE A FLAGGING OPERATION (MDOT SHA STD. NO. 104-02-10/14 DAY/NIGHT) TO COMPLETE THE WORK HIGHLIGHTED AROUND THE POST OFFICE. AS THE CONTRACTOR PROGRESSES WITH WORK ON THE PROJECT, HE WILL NEED TO COORDINATE WITH AFFECTED BUSINESS OWNERS. IF WORK OPERATIONS MUST BE SHIFTED TO NIGHT, HE SHALL UTILIZE THIS STANDARD IN LIEU OF THE DAY STANDARD. IF NIGHT WORK IS CHOSEN, THE CONTRACTOR MUST ENSURE ADEQUATE ACCESS IS PROVIDED BY THE NEXT BUSINESS DAY AND MAINTAINED FOR THE POST OFFICE DURING WORKING TIMES. THE REMAINING PORTIONS OF THE STAMPED CROSSWALK (ACROSS BALDWIN DRIVE) SHALL BE COMPLETED SUCH THAT VEHICLES CAN BE DIRECTED AROUND THE WORK UNTIL A WIDE ENOUGH PORTION OF THE NEWLY CONSTRUCTED CROSSWALK CAN BE USED AS A VEHICLE PATH AT SUBSEQUENT TIMES DURING THIS PHASE. ONCE ENOUGH OF THE STAMPED CROSSWALK HAS BEEN COMPLETED THE CONTRACTOR SHALL FINISH THE REMAINING INSTALLATION OF THE CROSSWALK WHILE DIRECTING TRAFFIC OVER THE NEWLY CONSTRUCTED STAMPED CROSSWALK. FOR THE PAVEMENT AREA DRUMMED OFF IN FRONT OF THE POST OFFICE, THE CONTRACTOR SHALL PROVIDE A TEMPORARY ACCESSIBLE PATH SO THAT PEDESTRIANS CAN ACCESS THE NEWLY CONSTRUCTED SIDEWALK IN PHASE 3A.

STEP 4

FOR WORK AT THE INTERSECTION OF MAIN STREET AND OKLAHOMA AVENUE/ SANDOSKY ROAD THE CONTRACTOR SHALL UTILIZE MDOT SHA STANDARD NO. 104-02-10/14 (DAY/NIGHT STANDARDS). THIS WORK INCLUDES CONCRETE SIDEWALK, DRAINAGE IMPROVEMENTS, AND CURB AND GUTTER. THE CONTRACTOR SHALL WORK ON ONE SIDE OF MAIN STREET AT A TIME. IF STORM DRAIN IMPROVEMENTS LAST LONGER THAN ONE WORK OPERATION, THE CONTRACTOR SHALL SHORE ALL OPEN CUTS AND PLATE THE WORK AREAS AS NEEDED TO MAINTAIN VEHICULAR AND PEDESTRIAN TRAFFIC. IF PLATES ARE USED FOR VEHICULAR AREAS, A STEEL PLATE SIGN (W8-8(4)) MUST BE INSTALLED IN ALL DIRECTIONS WHERE VEHICULAR TRAFFIC IS IMPACTED. THE CONTRACTOR SHALL PHASE THE WORK SO THAT PEDESTRIANS CAN CONTINUE TO WALK ON SIDEWALK ADJACENT TO REVIVE & COMPANY ON BOTH MAIN STREET AND SANDOSKY ROAD.

SEQUENCE OF CONSTRUCTION – PHASE 3A

STEP 1

MAINTAIN/ADJUST/INSTALL THE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON MT-05. THIS INCLUDES TEMPORARY PEDESTRIAN PATH/CROSSING LOCATIONS SHOWN. AT THIS POINT IN THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL OF THE REMAINING ON-STREET PARKING ADJACENT TO THE SYKESVILLE STATION AS SHOWN ON BALDWIN DRIVE AND ADJUST THE PAVEMENT MARKINGS AS SHOWN.

STEP 2

THE CONTRACTOR SHALL UTILIZE THE BEFORE-MENTIONED TRAFFIC CONTROL TO COMPLETE THE CURB AND GUTTER, SIDEWALK AND STAMPED CROSSWALK INSTALLATION ALONG THE WEST SIDE OF MAIN STREET FOR CROSSWALK/SIDEWALK IMPROVEMENTS AS SHOWN ON KCI'S ROADWAY PLANS. REMOVE THE NINE (9) PARKING SPACES ALONG BALDWIN AS IDENTIFIED ON SHEET MT-04. THE CONTRACTOR SHALL COORDINATE WITH ALL ADJACENT PROPERTY OWNERS WHEN CONSTRUCTING THESE ELEMENTS OF THE PROJECT. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-05 IN THE EVENT THAT THE CONTRACTOR NEEDS TO ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA.

BECAUSE THE BUSINESSES ON THE WEST SIDE OF MAIN STREET MUST REMAIN OPEN DURING NORMAL BUSINESS HOURS, THE CONTRACTOR WILL NEED TO MAKE THE NECESSARY PROVISIONS TO MAINTAIN THIS ACCESS. IF HE CHOSES TO WORK IN THESE AREAS ON DAYS WHEN THE BUSINESSES ARE NOT OPEN, HE CAN UTILIZE THE PEDESTRIAN DETOUR NOTED ON THIS SHEET.

STEP 3

THE CONTRACTOR SHALL FINALIZE THE WORK BEHIND THE FRENCH TWIST AS SHOWN ON THIS SHEET AND IDENTIFIED ON KCI'S ROADWAY PLANS. THE CONTRACTOR CAN CONSTRUCT THESE ELEMENTS AT NIGHT OR JUST USE FLAGGERS TO DIRECT VEHICLES ENTERING/EXITING THE MAIN PARKING LOT AROUND WORK ACTIVITIES.

SEQUENCE OF CONSTRUCTION – PHASE 3B

STEP 1

MAINTAIN/ADJUST/INSTALL THE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON MT-06. THIS INCLUDES TEMPORARY PEDESTRIAN PATH LOCATIONS SHOWN.

STEP 2

THE CONTRACTOR SHALL UTILIZE THE BEFORE-MENTIONED FLAGGER STANDARD TO COMPLETE THE CURB AND GUTTER, SIDEWALK AND STAMPED CROSSWALK INSTALLATION ALONG THE EAST SIDE OF MAIN STREET AT ITS INTERSECTION WITH OKLAHOMA AVENUE/SANDOSKY ROAD. FOR THE STAMPED CROSSWALK CROSSING SANDOSKY ROAD, THE CONTRACTOR SHALL CONSTRUCT THIS ONE LANE AT A TIME AT NIGHT USING MDOT SHA STANDARD NO. 104-02-14 (NIGHT STANDARD). THE CONTRACTOR SHALL COORDINATE WITH ALL ADJACENT PROPERTY OWNERS WHEN CONSTRUCTING THESE ELEMENTS OF THE PROJECT. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-06 IN THE EVENT THAT THE CONTRACTOR NEEDS TO ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA. ONCE ALL OF THE CONCRETE BANDS ARE COMPLETED, THE CONTRACTOR CAN FINALIZE ALL OF THE PAVERS AS SHOWN ON KCI'S ROADWAY PLANS.

STEP 3

THE CONTRACTOR SHALL UTILIZE THE BEFORE-MENTIONED TRAFFIC CONTROL TO COMPLETE THE CURB AND GUTTER, SIDEWALK AND STAMPED CROSSWALK INSTALLATION ALONG THE EAST SIDE OF MAIN STREET FOR CROSSWALK/SIDEWALK IMPROVEMENTS AS SHOWN ON KCI'S ROADWAY PLANS. THE CONTRACTOR SHALL COORDINATE WITH ALL ADJACENT PROPERTY OWNERS WHEN CONSTRUCTING THESE ELEMENTS OF THE PROJECT. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-06 IN THE EVENT THAT THE CONTRACTOR NEEDS TO ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA.

BECAUSE THE BUSINESSES ON THE EAST SIDE OF MAIN STREET MUST REMAIN OPEN DURING NORMAL BUSINESS HOURS, THE CONTRACTOR WILL NEED TO MAKE THE NECESSARY PROVISIONS TO MAINTAIN THIS ACCESS. IF HE CHOSES TO WORK IN THESE AREAS ON DAYS WHEN THE BUSINESSES ARE NOT OPEN, HE CAN UTILIZE THE PEDESTRIAN DETOUR NOTED ON THIS SHEET.

STEP 4

THE CONTRACTOR SHALL UTILIZE MDOT SHA STD. NO. 104.02-10 (DAY STANDARD) TO CONSTRUCT THE REMAINING PORTIONS OF THE CONCRETE CURB AND GUTTER AND SIDEWALK IMPROVEMENTS ON THE NORTH SIDE OF BALDWIN AVENUE AS SHOWN ON KCI'S ROADWAY PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE FIRE HOUSE CREAMERY WHEN CONSTRUCTING THE UPGRADES AROUND THIS BUSINESS. HE MAY CHOOSE TO CONSTRUCT THESE ELEMENTS AT NIGHT USING MDOT SHA STD. NO. 104.02-10 (NIGHT TIME STANDARD) STAGING WORK ACTIVITIES FROM MAIN STREEET. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-06 IN THE EVENT THAT THE CONTRACTOR NEEDS TO CONSTRUCT THESE ELEMENTS DURING THE DAY AND ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA. IF HE CHOOSES TO DO THIS, HE WILL NEED TO MAINTAIN ACCESS TO THE BUSINESS DURING ALL WORKING HOURS.

SEQUENCE OF CONSTRUCTION – PHASE 4A

STEP 1

MAINTAIN/ADJUST/INSTALL THE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON MT-07. THIS INCLUDES TEMPORARY PEDESTRIAN PATH LOCATIONS SHOWN. THE CONTRACTOR SHALL RE-OPEN OKLAHOMA AVENUE BETWEEN THE MAIN PARKING LOT AND MAIN STREET. HE SHALL REMOVE ALL SIGNS ASSOCIATED WITH THE DETOUR SHOWN ON MT-02. IF NEEDED, THE CONTRACTOR SHALL MARK OKLAHOMA AVENUE WITH TEMPORARY PAVEMENT MARKING PAINT ESTABLISHING A DOUBLE YELLOW CENTERLINE.

STEP 2

THE CONTRACTOR SHALL COMPLETE THE CURB AND GUTTER WORK ON THE NORTH SIDE SANDOSKY ROAD (EAST OF MAIN STREET) USING THE PREVIOUSLY-MENTIONED TRAFFIC CONTROL.

STEP 3

THE CONTRACTOR SHALL COMPLETE THE CURB AND GUTTER WORK ON THE NORTH SIDE OF OKLAHOMA AVENUE (WEST OF THE MAIN PARKING LOT) UTILIZING MDOT SHA STD. NO. 104.02-10 (DAY TIME STANDARD).

STEP 4

FOR THE CROSSWALK, CURB AND GUTTER AND SIDEWALK WORK AT THE INTERSECTION OF MAIN STREET AT BALDWIN AVENUE, THE CONTRACTOR SHALL CONSTRUCT THESE ELEMENTS AT NIGHT USING MDOT SHA STD NO. 10.02-14 (NIGHT STANDARD). FOR THE STAMPED CROSSWALK CROSSING THE BUSINESS ACCESS POINT, THE CONTRACTOR SHALL CONSTRUCT THIS ONE LANE AT A TIME AT NIGHT USING MDOT SHA STANDARD NO. 104.02-14 (NIGHT STANDARD). THE CONTRACTOR SHALL COORDINATE WITH ALL ADJACENT PROPERTY OWNERS WHEN CONSTRUCTING THESE ELEMENTS OF THE PROJECT. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-07 IN THE EVENT THAT THE CONTRACTOR NEEDS TO ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA.

SEQUENCE OF CONSTRUCTION – PHASE 4B

STEP 1

MAINTAIN/ADJUST/INSTALL THE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON MT-08. THIS INCLUDES RE-MARKING A PORTION OF SANDOSKY ROAD, EAST OF MAIN STREET AS SHOWN AS WELL AS RE-ESTABLISHING SOME OF THE TEMPORARY PEDESTRIAN CROSSINGS AS NOTED.

STEP 2

THE CONTRACTOR SHALL COMPLETE THE CURB AND GUTTER, SIDEWALK AND PEDESTRIAN PLAZA WORK AS SHOWN ON KCI'S ROADWAY PLANS, ON THE SOUTH SIDE OF SANDOSKY ROAD, EAST OF MAIN STREET USING THE PREVIOUSLY-MENTIONED TRAFFIC CONTROL.

STEP 3

THE CONTRACTOR SHALL FINALIZE ALL CURB AND GUTTER, SIDEWALK AND STAMPED CROSSWALK WORK IN THE VICINITY OF THE POST OFFICE AS SHOWN ON KCI'S ROADWAY PLANS. THE CONTRACTOR SHALL CLOSE OFF THE ACCESS POINT (WEST OF THE POST OFFICE) ALONG OKLAHOMA AVENUE AT THE LOCATION OF THE PROPOSED STAMPED CROSSWALK FROM BOTH DIRECTIONS TO COMPLETE THIS WORK. THE CONTRACTOR SHALL COORDINATE WITH THE POST OFFICE AND VISITOR CENTER ON DETERMINING THE BEST TIMES TO CONSTRUCT THE CONCRETE CURB AND GUTTER AS WELL AS SIDEWALK UPGRADES. IF HE CHOSES TO WORK DURING THE DAY, ACCESS MUST BE PROVIDED DURING ALL WORKING HOURS. IF THE CONTRACTOR CHOOSES TO CONSTRUCT THESE ELEMENTS AT NIGHT, HE MUST MAKE SURE THAT ACCESS IS AVAILABLE FOR THE NEXT BUSINESS DAY. IN EITHER CASE, THE CONTRACTOR SHALL UTILIZE MDOT SHA STD. NO. 104.02-10 (DAY/NIGHT STANDARD) TO CONSTRUCT THIS PORTION OF THE PROJECT.

STEP 4

FOR THE REMAINING CROSSWALK, CURB AND GUTTER AND SIDEWALK WORK AT THE INTERSECTION OF MAIN STREET AT BALDWIN AVENUE, THE CONTRACTOR SHALL CONSTRUCT THESE ELEMENTS AT NIGHT USING MDOT SHA STD NO. 10.02-14 (NIGHT STANDARD). FOR THE STAMPED CROSSWALK CROSSING THE BALDWIN AVENUE, THE CONTRACTOR SHALL CONSTRUCT THIS ONE LANE AT A TIME AT NIGHT USING MDOT SHA STANDARD NO. 104.02-14 (NIGHT STANDARD). THE CONTRACTOR SHALL COORDINATE WITH ALL ADJACENT PROPERTY OWNERS WHEN CONSTRUCTING THESE ELEMENTS OF THE PROJECT. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-08 IN THE EVENT THAT THE CONTRACTOR NEEDS TO ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA. ONCE ALL OF THE CONCRETE BANDS ARE COMPLETED, THE CONTRACTOR CAN FINALIZE ALL OF THE PAVERS AS SHOWN ON KCI'S ROADWAY PLANS.

SEQUENCE OF CONSTRUCTION – PHASE 5

STEP 1

MAINTAIN/ADJUST/INSTALL THE TEMPORARY TRAFFIC CONTROL DEVICES AS SHOWN ON MT-09. THIS INCLUDES DETOURING PEDESTRIANS TO THE NORTH SIDE OF BALDWIN AVENUE AS SHOWN.

STEP 2

THE CONTRACTOR SHALL CONSTRUCT THE STAMPED CROSSWALK AT THE INTERSECTION OF BALDWIN AVENUE AT SYKESVILLE STATION INTERSECTION. FOR THE STAMPED CROSSWALK CROSSING THE DRIVEWAY, THE CONTRACTOR SHALL CONSTRUCT THIS ONE LANE AT A TIME AT NIGHT USING MDOT SHA STANDARD NO. 104.02-14 (NIGHT STANDARD). THE CONTRACTOR SHALL COORDINATE WITH ALL ADJACENT PROPERTY OWNERS WHEN CONSTRUCTING THESE ELEMENTS OF THE PROJECT. AN ALTERNATIVE PEDESTRIAN PATH IS PROPOSED ON MT-09 IN THE EVENT THAT THE CONTRACTOR NEEDS TO ELIMINATE ALL PEDESTRIAN TRAFFIC THROUGH THIS WORK AREA. ONCE ALL OF THE CONCRETE BANDS ARE COMPLETED, THE CONTRACTOR CAN FINALIZE ALL OF THE PAVERS AS SHOWN ON KCI ½ S ROADWAY PLANS.

STEP 3

THE CONTRACTOR SHALL COORDINATE WITH THE SYKESVILLE STATION BUSINESS ON THE PROPOSED CONCRETE CURB AND GUTTER, SIDEWALK AND PARKING REVISIONS. AS TIME IS OF THE ESSENCE, THE CONTRACTOR SHALL ESTABLISH PERIMETER FENCING AS SHOWN, SAWCUT, EXCAVATE AND CONSTRUCT THE PROPOSED CURB AND GUTTER DURING HOURS WHEN THE BUSINESS IS NOT OPEN/AT NIGHT. FOR WORK ASSOCIATED WITH THE SIDEWALK ON THE SOUTH SIDE OF BALDWIN AVENUE, THE CONTRACTOR SHALL CONSTRUCT THESE IMPROVEMENTS USING MDOT SHA STD. NO. 104.02-10 (DAY STANDARD) ALONG WITH THE PEDESTRIAN DETOUR SHOWN ON MT-09.

STEP 4

THE CONTRACTOR SHALL FINALIZE THE REMAINING PORTIONS OF SIDEWALK UPGRADES ALONG MAIN STREET, ONE SIDE AT A TIME, AS SHOWN ON KCI'S ROADWAY PLANS. THE CONTRACTOR MAY CHOOSE TO CONSTRUCT THESE ELEMENTS AT NIGHT USING MDOT SHA STD. NO. 104.02-14 (NIGHT STANDARD) OR CONSTRUCT THESE ELEMENTS DURING THE DAY USING MDOT SHA STD. NO. 104.02-10 (DAY TIME STANDARD). IF THE WORK COMMENCES DURING THE DAY, THE CONTRACTOR WILL NEED TO ESTABLISH A TEMPORARY PEDESTRIAN CROSSING AS SHOWN SOUTH OF THE WORK ON MAIN STREET.

STEP 5

ONCE ALL OF THE STREETScape IMPROVEMENTS HAVE BEEN CONSTRUCTED, THE CONTRACTOR CAN THEN PROCEED TO COMPLETE ALL OF THE PROPOSED RESURFACING AS SHOWN ON KCI'S ROADWAY PLANS.

MILLING OF PAVEMENT SHALL BE COMPLETED AT NIGHT USING THE BEFORE-MENTIONED TRAFFIC CONTROL. AT THE END OF A MILLING OPERATION, THE CONTRACTOR SHALL RE-ESTABLISH PAVEMENT MARKINGS MATCHING THOSE SHOWN ON THE SIGNING AND PAVEMENT MARKING PLANS USING TEMPORARY PAVEMENT MARKING PAINT.

RESURFACING OF PAVEMENT SHALL BE COMPLETED AT NIGHT USING THE BEFORE-MENTIONED TRAFFIC CONTROL. AT THE END OF A RESURFACING OPERATION, THE CONTRACTOR SHALL RE-ESTABLISH PAVEMENT MARKINGS MATCHING THOSE SHOWN ON THE SIGNING AND PAVEMENT MARKING PLANS USING TEMPORARY REMOVABLE PAVEMENT MARKINGS.

APPLICATION OF FINAL THERMOPLASTIC PAVEMENT MARKINGS CAN BE IMPLEMENTED USING MDOT SHA STD. NO. 104.02-18. THE CONTRACTOR SHALL ALSO ADJUST ALL OF THE SIGNS AS NOTED ON THE SIGNING AND PAVEMENT MARKING PLANS.

STEP 6

ONCE ALL OF THE WORK LISTED ABOVE HAS BEEN COMPLETED, THE CONTRACTOR SHALL REMOVE ALL OF THE TEMPORARY TRAFFIC CONTROL DEVICES ASSOCIATED WITH THIS PLAN.

BID SET

AMD. PERMIT NO. 24APCL003XX

SEQUENCE OF CONSTRUCTION

MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/
SANDOSKY ROAD IMPROVEMENTS

(SYKESVILLE, MARYLAND)

DESIGNED BY LTC/BCS SCALE NONE

DRAWN BY LTC/DAB DATE OCTOBER 2024

CHECKED BY LTC/BAB COUNTY CARROLL

DRAWING NO. MT- 01 OF 09

SHEET NO. 22 OF 30

LENHART TRAFFIC CONSULTING, INC.

645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214

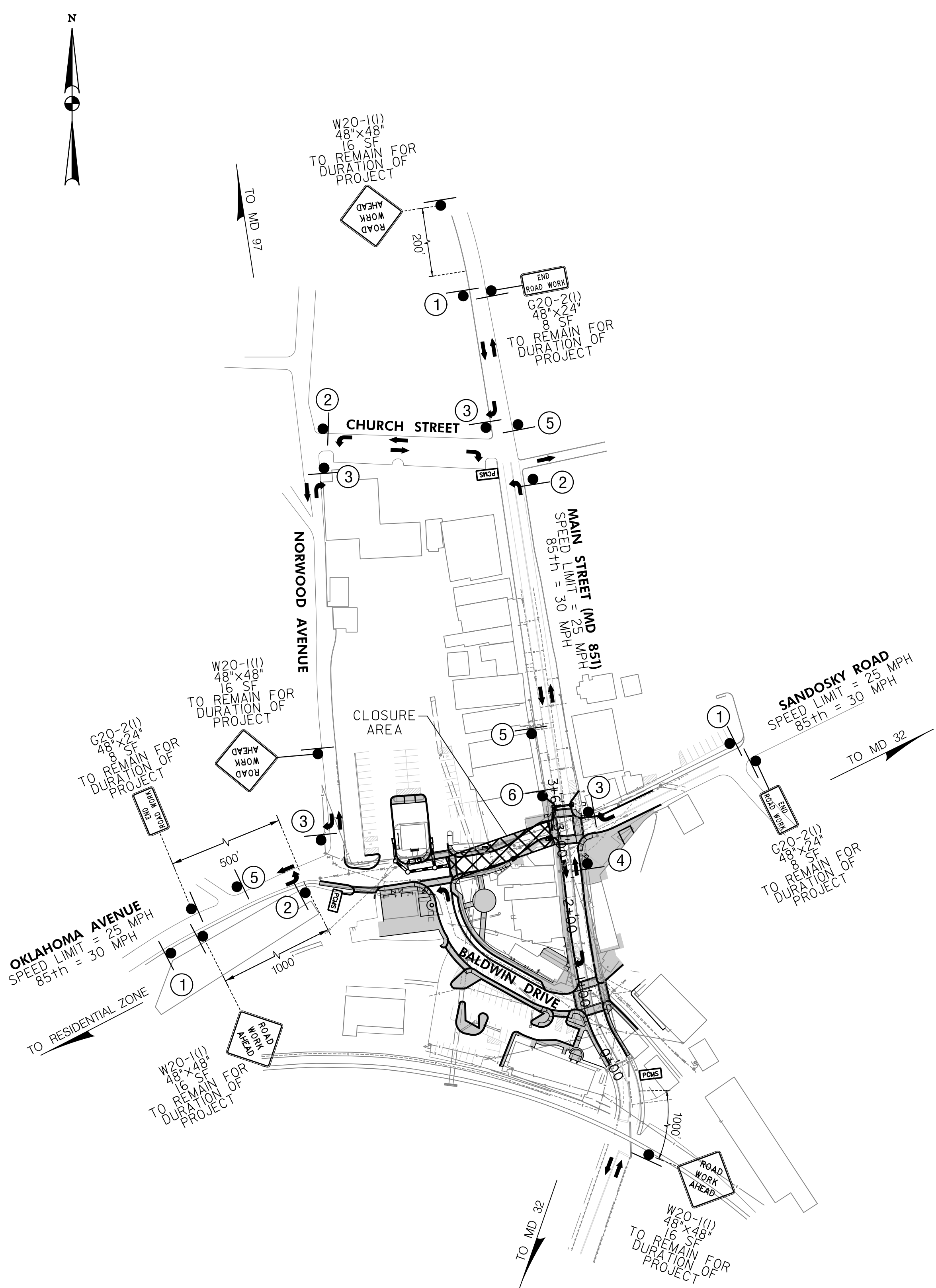
SEVERNA PARK, MD 21146

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TEMPORARY TRAFFIC CONTROL SIGN SCHEDULE					
NO.	SIGN PANEL	SIGN DESIGNATION AND DIMENSIONS	QUANTITY (SF)	LOCATION (EACH)	TOTAL QUANTITY (SF)
①		W20-2(I) (48"x48")	16	3	63
		D3-2 MOD (60"x12")	5		
②		M4-9(I) (30"x12")	2.5	3	22.5
		M4-9L (30"x24")	5		
③		M4-9(I) (30"x12")	2.5	4	30
		M4-9R (30"x24")	5		
④		R3-2 (30"x30")	6.25	1	6.25
⑤		M4-8a (36"x24")	6	3	18
⑥		R3-1 (30"x30")	6.25	1	6.25

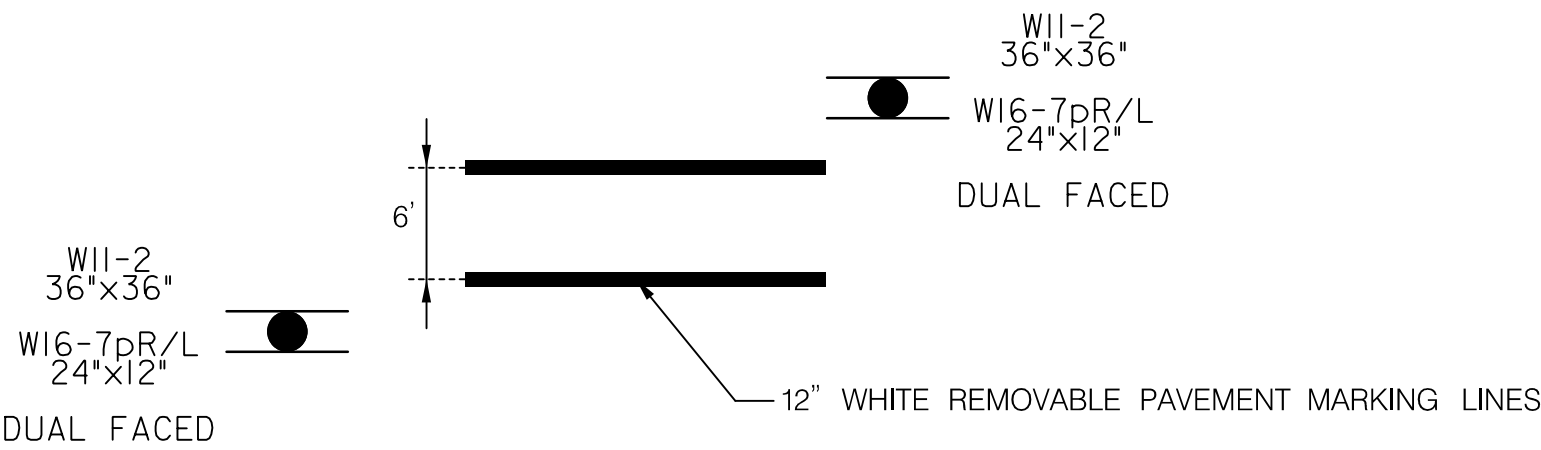


- GENERAL NOTES
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MARYLAND-MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE LOCATION OF TEMPORARY SIGNS MAY NEED TO BE FIELD ADJUSTED TO AVOID CONFLICTS WITH EXISTING SIGNS. THE ENGINEER SHALL APPROVE THE LOCATION OF ALL TEMPORARY SIGNS PRIOR TO INSTALLATION.
 - THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE FABRICATION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES. ALL DEVICES (INCLUDING THE INSTALLATION OF BARRICADES) SHALL CONFORM TO THE LATEST ADDITION OF THE MARYLAND-MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND BOOK OF STANDARDS.
 - TRAFFIC SIGNS SHALL NOT BE PLACED WHERE THEY IMPEDE THE PATH OF PEDESTRIANS OR MOTORISTS.
 - ACCESS TO ALL DRIVEWAYS AND BUSINESSES MUST BE MAINTAINED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WOODEN TEMPORARY ADA ACCESS RAMPS (THAT DO NOT HINDER DRAINAGE) IN COMBINATION WITH THE TEMPORARY CROSSWALKS SHOWN ON THIS PLAN SET. RELOCATE AND REUSE AS NECESSARY.
 - IF A PORTION OF ANY CROSSWALK OR PROPOSED PAVER AREA WITH A CONCRETE BAND IS CONSTRUCTED WITHOUT THE PAVERS, THE CONTRACTOR WILL NEED TO UTILIZE TEMPORARY ASPHALT TO PROVIDED AN ADA WEDGE TO MAINTAIN ACCESSIBILITY.

MDOT SHA TEMPORARY CROSSWALK DETAIL (NTS)



COUNTY TEMPORARY CROSSWALK DETAIL (NTS)



PCMS 2-WEEK PRIOR MESSAGE DETAIL

PCMS MESSAGE 1	OKLAHOMA AVENUE DETOUR
PCMS MESSAGE 2	STARTS DATE

**** SPECIAL PCMS NOTES ****

THE PCMS PHASING, MESSAGE AND DISPLAY OPERATION SHALL CONFORM TO THE LATEST MARYLAND-MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE LOCATION AND MESSAGE SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT. RELOCATE THE PCMS AS DIRECTED BY THE ENGINEER AT THE TIME OF THE CLOSURE. SEE PCMS MESSAGE DETAIL ON THIS SHEET.

PCMS DURING WORK MESSAGE DETAIL

PCMS MESSAGE 1	OKLAHOMA AVENUE CLOSED
PCMS MESSAGE 2	FOLLOW DETOUR

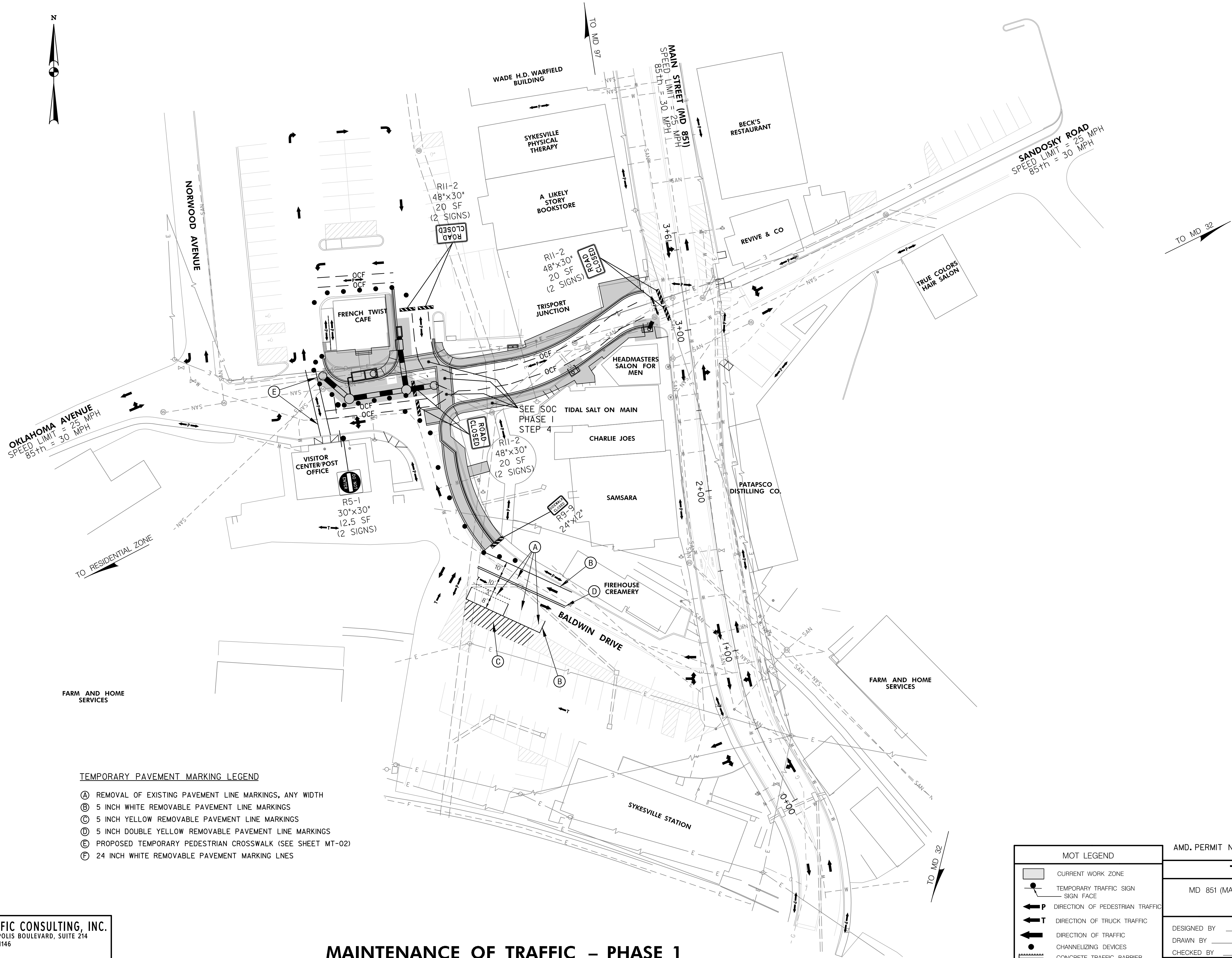
**** SPECIAL PCMS NOTES ****

THE PCMS PHASING, MESSAGE AND DISPLAY OPERATION SHALL CONFORM TO THE LATEST MARYLAND-MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE LOCATION AND MESSAGE SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT. RELOCATE THE PCMS AS DIRECTED BY THE ENGINEER AT THE TIME OF THE CLOSURE. SEE PCMS MESSAGE DETAIL ON THIS SHEET.

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MAINTENANCE OF TRAFFIC – OVERALL LONG TERM TEMPORARY TRAFFIC CONTROL

MOT LEGEND	AMD. PERMIT NO. 24APCL003XX
TEMPORARY TRAFFIC SIGN	TRAFFIC CONTROL PLAN
WORK ZONE	MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/ SANDOSKY ROAD IMPROVEMENTS (SYKESVILLE, MARYLAND)
PORTABLE CHANGEABLE MESSAGE SIGN PRIOR TO WORK START	DESIGNED BY LTC/BCS SCALE 1" = 100'
PORTABLE CHANGEABLE MESSAGE SIGN DURING WORK	DRAWN BY LTC/DAB DATE OCTOBER 2024
	CHECKED BY LTC/BAB COUNTY CARROLL
	DRAWING NO. MT- 02 OF 09 SHEET NO. 23 OF 30



TEMPORARY PAVEMENT MARKING LEGEND

- Ⓐ REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
- Ⓑ 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
- Ⓒ 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- Ⓓ 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- Ⓔ PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
- Ⓕ 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MAINTENANCE OF TRAFFIC – PHASE 1

LENHART TRAFFIC CONSULTING, INC.

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MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX

TRAFFIC CONTROL PLAN

MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/
SANDOSKY ROAD IMPROVEMENTS

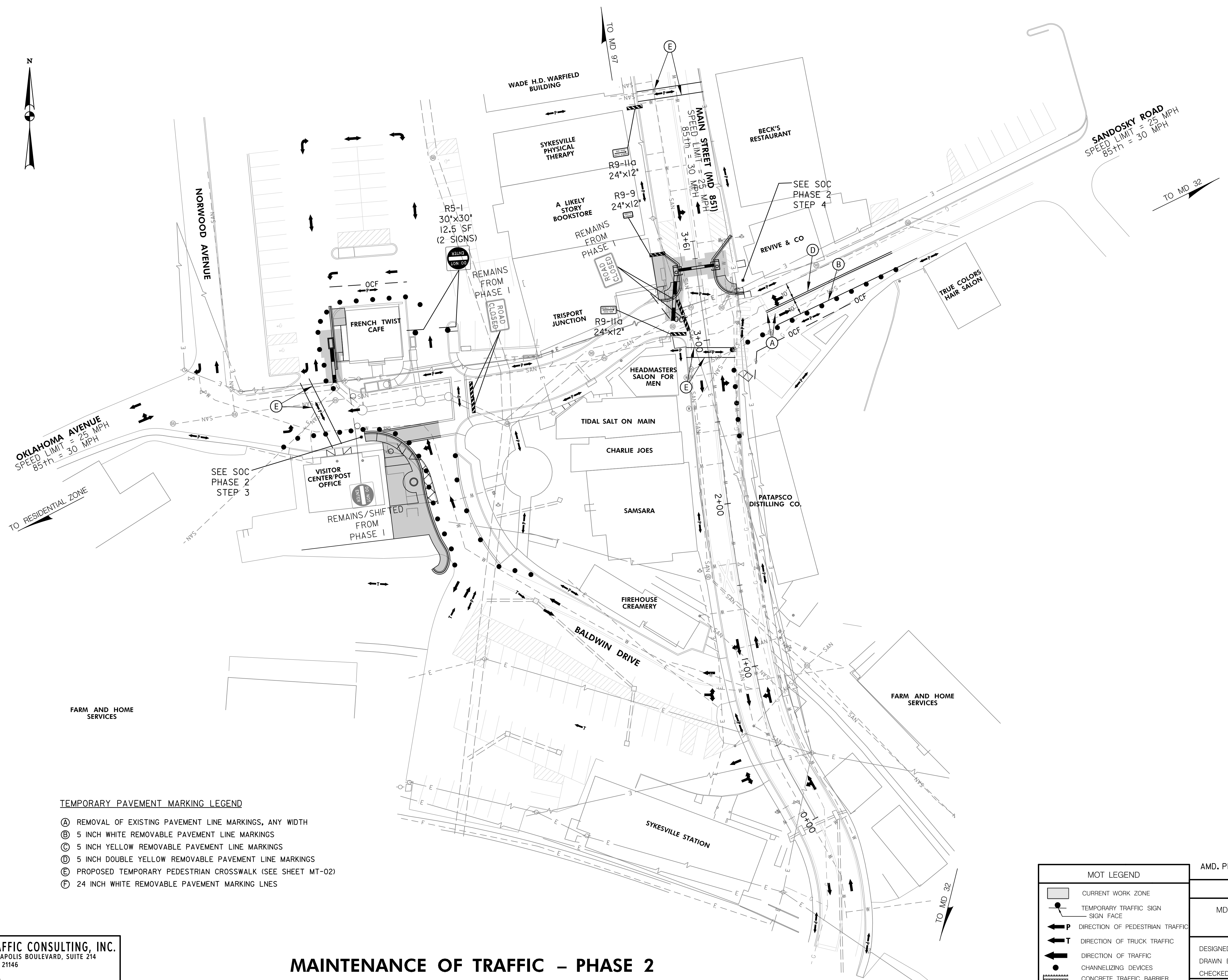
(SYKESVILLE, MARYLAND)

DESIGNED BY LTC/BCS SCALE 1"=30'
DRAWN BY LTC/DAB DATE OCTOBER 2024
CHECKED BY LTC/BAB COUNTY CARROLL

DRAWING NO. MT- 03 OF 09 SHEET NO. 24 OF 30

PLOTTED: MONDAY, OCTOBER 28, 2024 AT 11:33 AM
FILE: I:\SYKESVILLE STREETSCAPE\50.DESIGN\PM1-P101.MD 851.DGN





TEMPORARY PAVEMENT MARKING LEGEND

- (A) REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
- (B) 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
- (C) 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- (D) 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- (E) PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
- (F) 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX

TRAFFIC CONTROL PLAN

MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/
SANDOSKY ROAD IMPROVEMENTS
(SYKESVILLE, MARYLAND)

DESIGNED BY LTC/BCS SCALE 1" = 30'
DRAWN BY LTC/DAB DATE OCTOBER 2024
CHECKED BY LTC/BAB COUNTY CARROLL

DRAWING NO. MT- 04 OF 09 SHEET NO. 25 OF 30

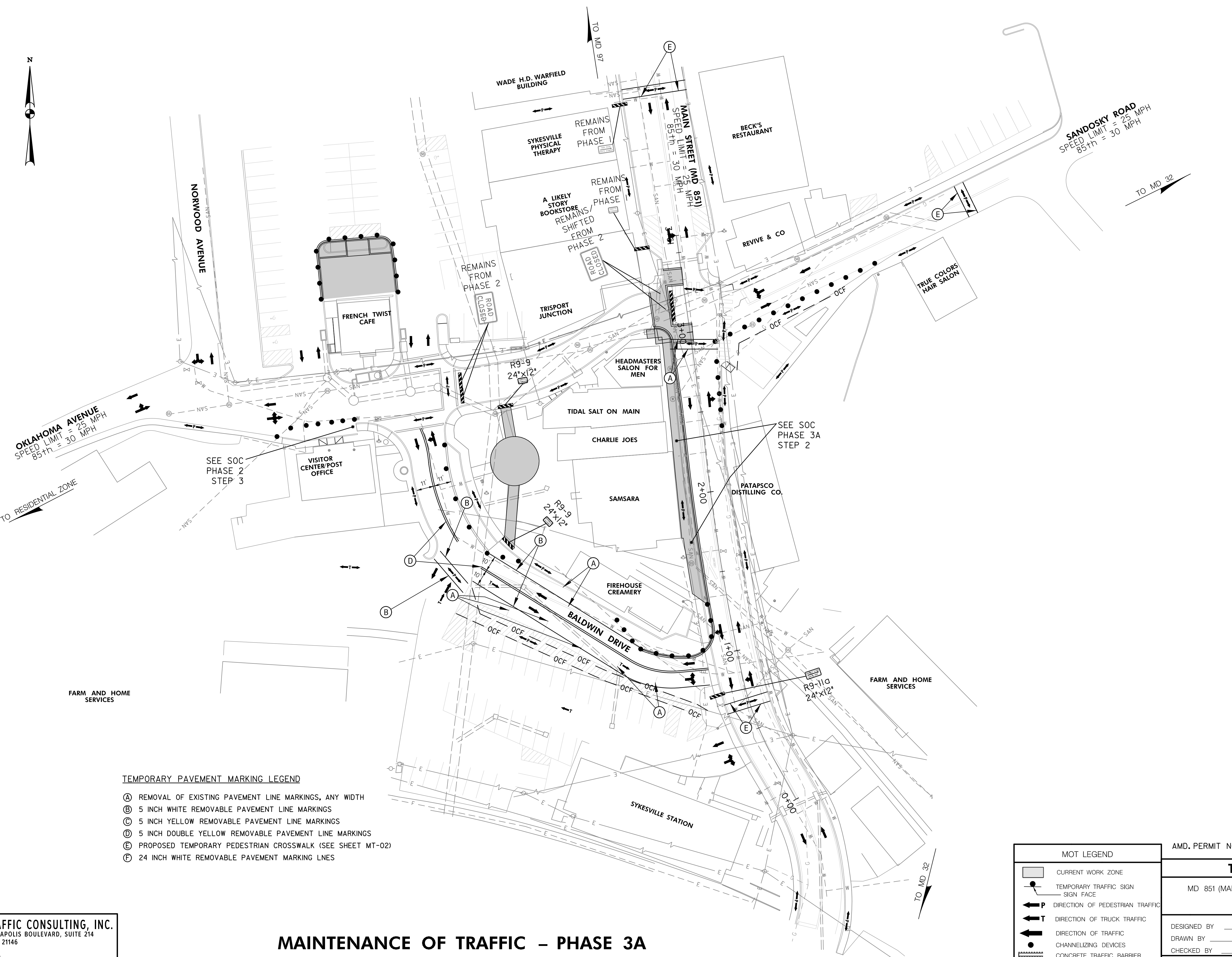
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MAINTENANCE OF TRAFFIC – PHASE 2

PLOTTED: MONDAY, OCTOBER 28, 2024 AT 11:33 AM
FILE: I:\SYKESVILLE STREETSCAPE\500.DESIGN\PMT-P201.MD 851.DGN

BID SET





TEMPORARY PAVEMENT MARKING LEGEND

- A REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
- B 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
- C 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- D 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- E PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
- F 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MAINTENANCE OF TRAFFIC – PHASE 3A

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MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN SIGN FACE
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX

TRAFFIC CONTROL PLAN

MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/
SANDOSKY ROAD IMPROVEMENTS

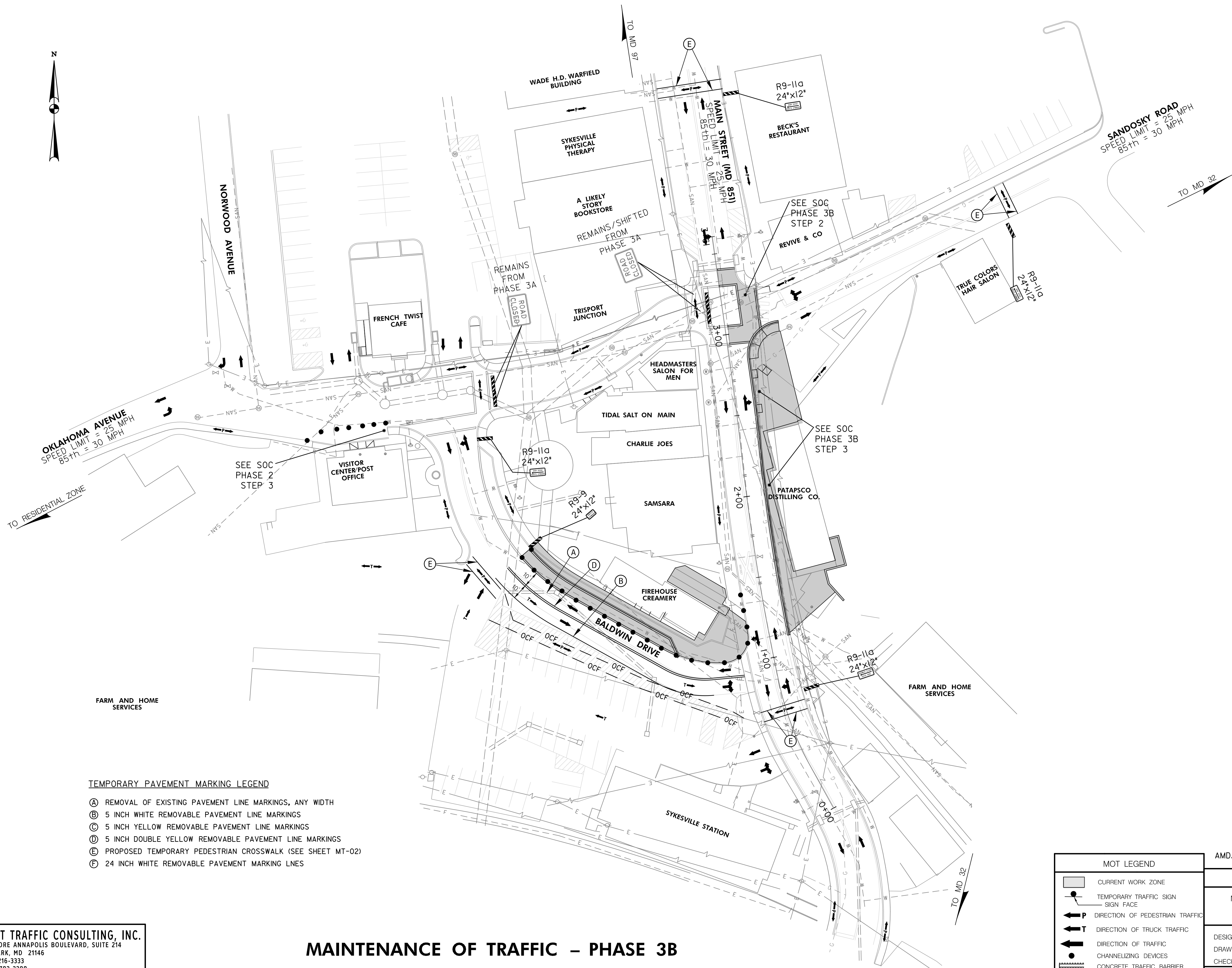
(SYKESVILLE, MARYLAND)

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DRAWN BY LTC/DAB DATE OCTOBER 2024
CHECKED BY LTC/BAB COUNTY CARROLL

DRAWING NO. MT- 05 OF 09 SHEET NO. 26 OF 30

PLOTTED: MONDAY, OCTOBER 28, 2024 AT 11:33 AM
FILE: I:\SYKESVILLE STREETSCAPE\50_DESIGN\PM1-P301A.MD 851.DGN





TEMPORARY PAVEMENT MARKING LEGEND

- A REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
- B 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
- C 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- D 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- E PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
- F 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX

TRAFFIC CONTROL PLAN

MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/
SANDOSKY ROAD IMPROVEMENTS

(SYKESVILLE, MARYLAND)

DESIGNED BY LTC/BCS SCALE 1" = 30'
DRAWN BY LTC/DAB DATE OCTOBER 2024
CHECKED BY LTC/BAB COUNTY CARROLL

DRAWING NO. MT- 06 OF 09 SHEET NO. 27 OF 30

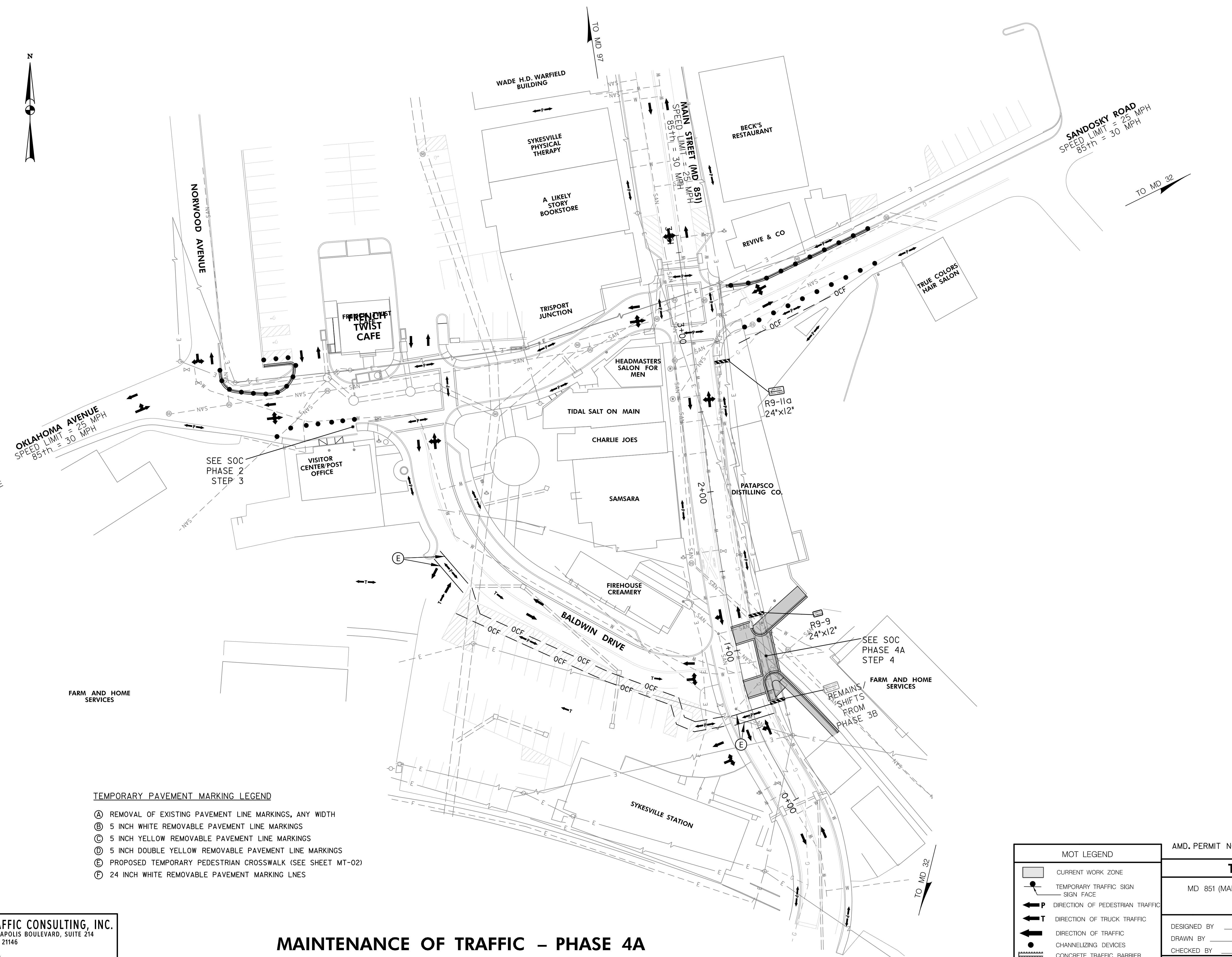
LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214
SEVERNA PARK, MD 21146
TEL: (410) 216-3333
FAX: (443) 782-2288
www.lenharttraffic.com

MAINTENANCE OF TRAFFIC – PHASE 3B

PLOTTED: MONDAY, OCTOBER 28, 2024 AT 11:33 AM
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BID SET





- TEMPORARY PAVEMENT MARKING LEGEND
- Ⓐ REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
 - Ⓑ 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
 - Ⓒ 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
 - Ⓓ 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
 - Ⓔ PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
 - Ⓕ 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX	
TRAFFIC CONTROL PLAN	
MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/ SANDOSKY ROAD IMPROVEMENTS (SYKESVILLE, MARYLAND)	
DESIGNED BY LTC/BCS	SCALE 1" = 30'
DRAWN BY LTC/DAB	DATE OCTOBER 2024
CHECKED BY LTC/BAB	COUNTY CARROLL
DRAWING NO. MT- 06 OF 09	SHEET NO. 28 OF 30

LENHART TRAFFIC CONSULTING, INC.

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SEVERNA PARK, MD 21146

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MAINTENANCE OF TRAFFIC – PHASE 4A

PLOTTED: MONDAY, OCTOBER 28, 2024 AT 11:33 AM
FILE: I:\SYKESVILLE STREETSCAPE\50_DESIGN\PMT-P401A.MD 851.DGN

BID SET

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. 101280 EXPIRATION DATE: 09/30/2026



TEMPORARY PAVEMENT MARKING LEGEND

- (A) REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
- (B) 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
- (C) 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- (D) 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- (E) PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
- (F) 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN
	SIGN FACE
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX	
TRAFFIC CONTROL PLAN	
MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/ SANDOSKY ROAD IMPROVEMENTS (SYKESVILLE, MARYLAND)	
DESIGNED BY LTC/BCS	SCALE 1" = 30'
DRAWN BY LTC/DAB	DATE OCTOBER 2024
CHECKED BY LTC/BAB	COUNTY CARROLL
DRAWING NO. MT- 08 OF 09	SHEET NO. 29 OF 30

LENHART TRAFFIC CONSULTING, INC.

645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214

SEVERNA PARK, MD 21146

TEL: (410) 216-3333

FAX: (443) 782-2288

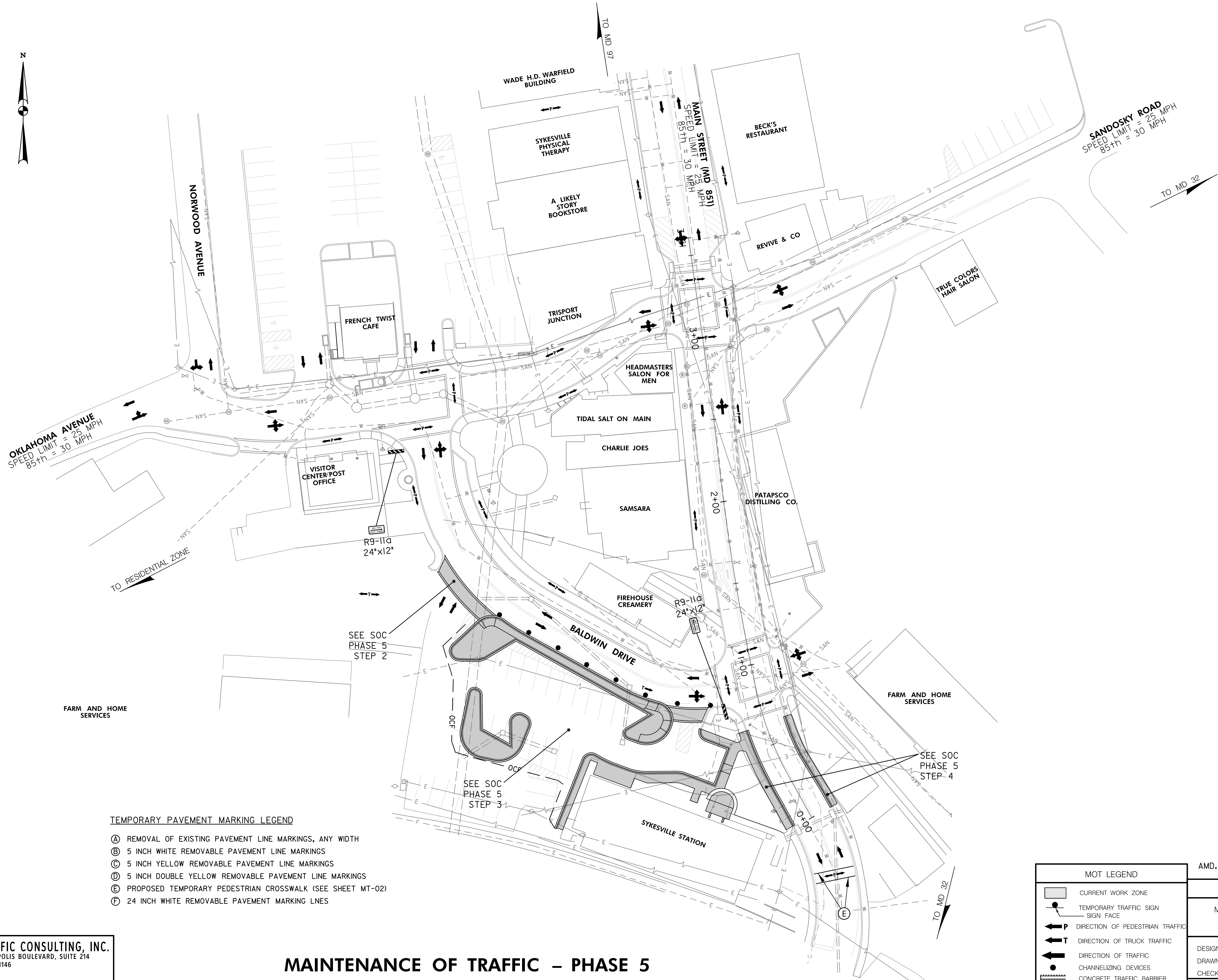
www.lenharttraffic.com

MAINTENANCE OF TRAFFIC – PHASE 4B

PLOTTED: MONDAY, OCTOBER 28, 2024 AT 11:33 AM
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BID SET





TEMPORARY PAVEMENT MARKING LEGEND

- (A) REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
- (B) 5 INCH WHITE REMOVABLE PAVEMENT LINE MARKINGS
- (C) 5 INCH YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- (D) 5 INCH DOUBLE YELLOW REMOVABLE PAVEMENT LINE MARKINGS
- (E) PROPOSED TEMPORARY PEDESTRIAN CROSSWALK (SEE SHEET MT-02)
- (F) 24 INCH WHITE REMOVABLE PAVEMENT MARKING LINES

MOT LEGEND	
	CURRENT WORK ZONE
	TEMPORARY TRAFFIC SIGN
	DIRECTION OF PEDESTRIAN TRAFFIC
	DIRECTION OF TRUCK TRAFFIC
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES
	CONCRETE TRAFFIC BARRIER
	ARROW PANEL

AMD. PERMIT NO. 24APCL003XX	
TRAFFIC CONTROL PLAN	
MD 851 (MAIN STREET) AND OKLAHOMA AVENUE/BALDWIN DRIVE/ SANDOSKY ROAD IMPROVEMENTS (SYKESVILLE, MARYLAND)	
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LENHART TRAFFIC CONSULTING, INC.

645 BALTIMORE ANNAPOLIS BOULEVARD, SUITE 214

SEVERNA PARK, MD 21146

TEL: (410) 216-3333

FAX: (443) 782-2288

www.lenharttraffic.com

MAINTENANCE OF TRAFFIC – PHASE 5

BID SET

Professional Engineer
Sykesville, Maryland
10/28/24

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. 10384 EXPIRATION DATE: 09/2026