

THE COMMONWEALTH OF MASSACHUSETTS MASSDOT - HIGHWAY DIVISION

EVENT TEMPORARY TRAFFIC CONTROL PLANS FOR

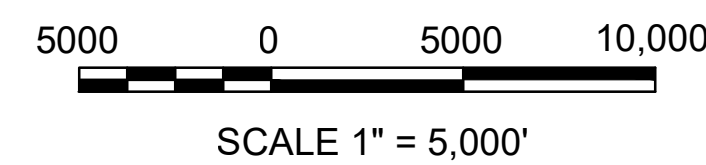
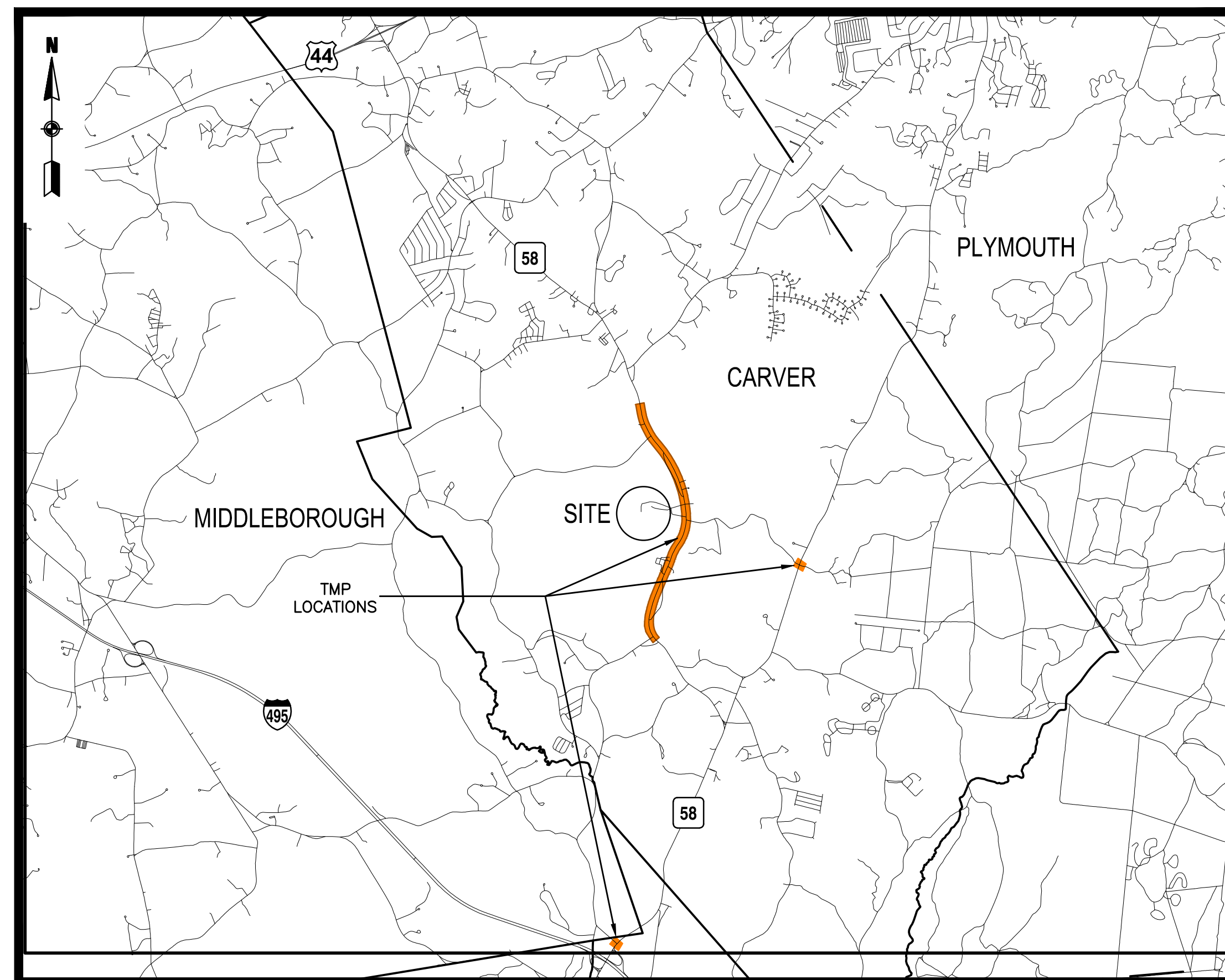
MAIN STREET / SOUTH MAIN STREET (ROUTE 58)

KING RICHARD'S FAIRE

IN THE TOWN OF

CARVER

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	GENERAL NOTES
3-4	TMP - PRE-EVENT FULL SETUP
5	TMP - PRE-EVENT SMALL SETUP
6	TMP - EGRESS SETUP



LENGTH OF PROJECT= 8,060.00 FEET= 1.52 MILES

JUNE 30, 2022

PROJECT TITLE

Route 58 Event
Management Plans

Carver,
Massachusetts

PREPARED FOR

King's Faire, Inc.

Minnetonka,
Minnesota



35 N.E. BUSINESS CENTER DRIVE
ANDOVER, MA 01810-1071
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DESIGNED BY	DAD
DRAWN BY	DAD/MPP
CHECKED BY	SMB
DATE	JUNE 2022
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REVISIONS		
NO.	DESCRIPTION	DATE
1	REVISED TAPER	7/18/22

DRAWING TITLE

Title Sheet & Index

SHEET 1 OF 6	DRAWING NUMBER
JOB NO. 9243	1
CAD 9243DS	

TRAFFIC MANAGEMENT NOTES

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, WITH MASSACHUSETTS AMENDMENTS.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO EVENT TRAFFIC DEMANDS.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR THE AASHTO 2009 OR 2016 "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED AND APPROVED BY THE CARVER POLICE DEPARTMENT PRIOR TO POSTING.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF TRAFFIC CONES.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- THE TYPICAL STANDARDS (SHOWN TO THE RIGHT) ARE FOR TYPICAL CONSTRUCTION WORK ACTIVITIES. SIGN SPACING AND TRAFFIC DEVICE LOCATIONS MAY HAVE BEEN MODIFIED FROM THE TYPICAL STANDARDS TO ACCOMMODATE EXISTING FIELD CONDITIONS AND/OR OTHER REQUIREMENTS OF THE EVENT TRAFFIC CONTROL.

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

Type of Taper	Taper Length (L)*
MERGING TAPER	AT LEAST L
SHIFTING TAPER	AT LEAST 0.5L
SHOULDER TAPER	AT LEAST 0.33L
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MIN, 100 FT MAXIMUM
DOWNSTREAM TAPER	50 FT MIN, 100 FT MAX PER LANE

FORMULAS FOR DETERMINING TAPER LENGTHS

Speed Limit (S)	Taper Length (L) Feet
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

WHERE: L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

SUGGESTED WORK ZONE WARNING SIGN SPACING

Road Type	Distance Between Signs**		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS*	350	350	350
MOST OTHER ROADWAYS*	500	500	500
EXPRESSWAY/FREEWAY*	1,000	1,500	2,640

* SPEED CATEGORY TO BE DETERMINED BY HIGHWAY AGENCY. DISTANCES ARE SHOWN IN FEET.

** THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCED WARNING" SIGN ON THE TTC SETUPS. THESE ADVANCED WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (I.E. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (I.E. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERENCED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

MA-R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

GENERAL NOTES

- THESE TEMPORARY TRAFFIC CONTROL PLANS DEPICT TRAFFIC OPERATIONS FOR A KING RICHARD'S FAIRE EVENT. TRAFFIC OPERATIONS WERE DEVELOPED IN COORDINATION WITH THE CARVER POLICE DEPARTMENT AND REPRESENTATIVES OF KING'S FAIRE, INC.
- THE PROJECT BASE MAPPING SHOWN WAS PREPARED FROM AERIAL PHOTOGRAPHY FOR STUDY PURPOSES, ACCURACY IS NOT GUARANTEED.
- POLICE OFFICER LOCATIONS SHOWN ON THESE PLANS ARE UNDER THE CONTROL OF THE THE CARVER POLICE DEPARTMENT. THESE LOCATIONS ARE SUBJECT TO CHANGE IN ORDER TO ADDRESS SPECIFIC FIELD CONDITIONS AND PUBLIC SAFETY RELATED ISSUES.
- IT IS THE ENGINEER'S INTENT THAT THE CARVER POLICE DEPARTMENT AND KING RICHARDS FAIRE STAFF WILL COORDINATE 24-48 HOURS PRIOR TO THE EVENT TO DETERMINE THE LEVEL OF TRAFFIC CONTROL REQUIRED FOR THE UPCOMING EVENT DAY. THE TEMPORARY TRAFFIC CONTROL SETUP EXPECTED TO BE UTILIZED ON A TYPICAL EVENT DAY IS THE PRE-EVENT SMALL SETUP SHOWN ON SHEET 5.
- IT IS THE ENGINEER'S INTENT THAT THE CARVER POLICE DEPARTMENT AND KING RICHARDS FAIRE STAFF WILL COORDINATE TO DETERMINE WHEN THE INCOMING TRAFFIC HAS SUBSIDED AND THE EGRESS TRAFFIC IS INCREASING. THE TIME TO REMOVE THE PRE-EVENT SETUP AND INSTALL THE EGRESS PATTERN SHALL BE MUTUALLY COORDINATED.

PROJECT TITLE

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DRAWING TITLE

General Notes

SHEET 2 OF 6	DRAWING NUMBER
JOB NO. 9243	2
CAD: 9243DS	

TEMPORARY SIGN SUMMARY											
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCH)			COLOR			POST TYPE & NUMBER PER SIGN	AREA PER SIGN
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	RTE. MKR. ARROW	BACK-GROUND	LEGEND	BORDER		
R3-2	24"	24"		SEE 2009 MUTCD			WHITE	RED/BLACK	BLACK	TEMPORARY STAND	4.00
R5-1	30"	30"					WHITE	RED	NONE	TEMPORARY STAND	6.25
R11-4	60"	30"	ROAD CLOSED TO THRU TRAFFIC				FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	12.50
SP-1	42"	36"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	10.50
SP-2	42"	30"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	8.75
SP-3	42"	36"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	10.50
SP-4	42"	30"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	8.75
SP-5	36"	36"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	9.00
SP-6	36"	48"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	12.00
SP-7	36"	48"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	12.00
SP-8	36"	30"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	7.50
SP-9	36"	30"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	7.50
W13-1	18"	18"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	2.25
W23-2	36"	36"					FLUOR-ESCENT ORANGE	BLACK	BLACK	TEMPORARY STAND	9.00

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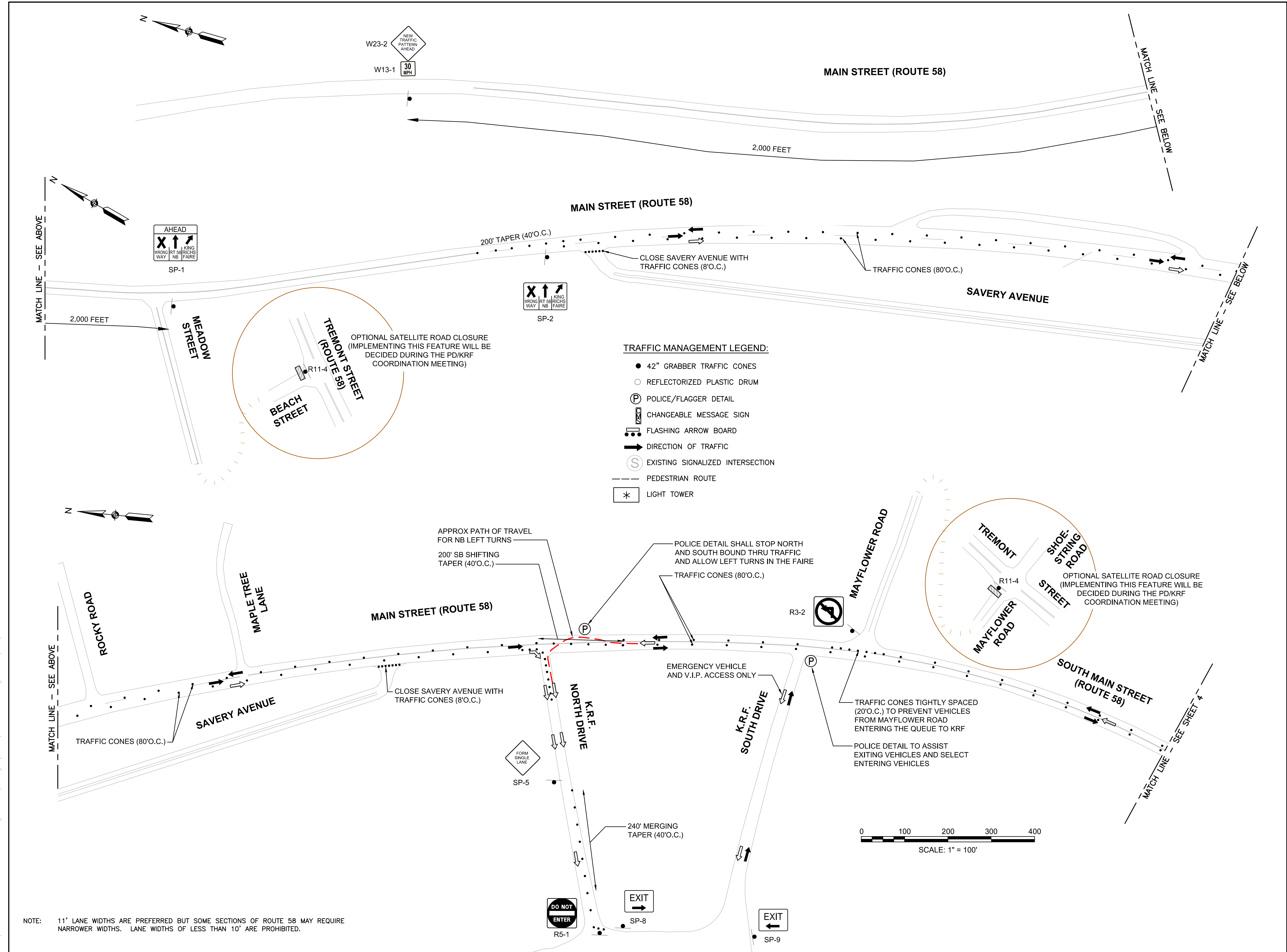
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DRAWING TITLE

**Traffic Management Plans
 Pre-Event Full Setup**

SHEET 3 OF 6	DRAWING NUMBER
JOB NO. 9243	3
CAD 9243TTCP	



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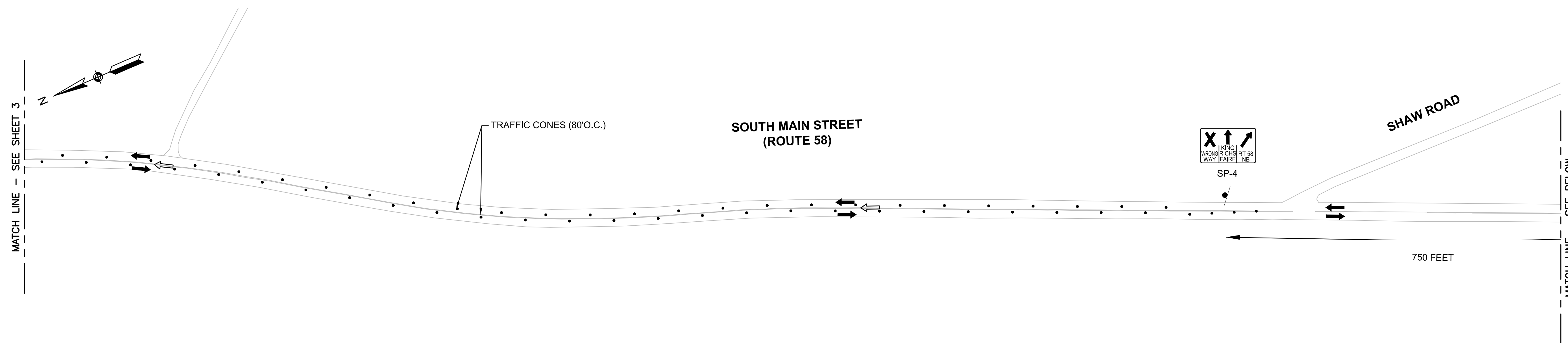
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DRAWING TITLE

Traffic Management Plans Pre-Event Full Setup

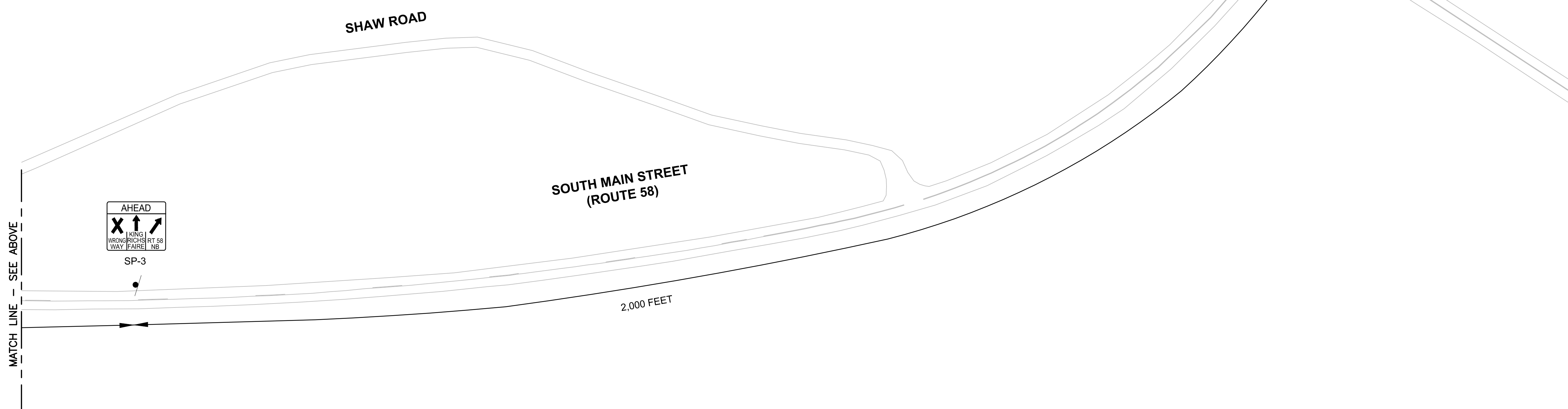
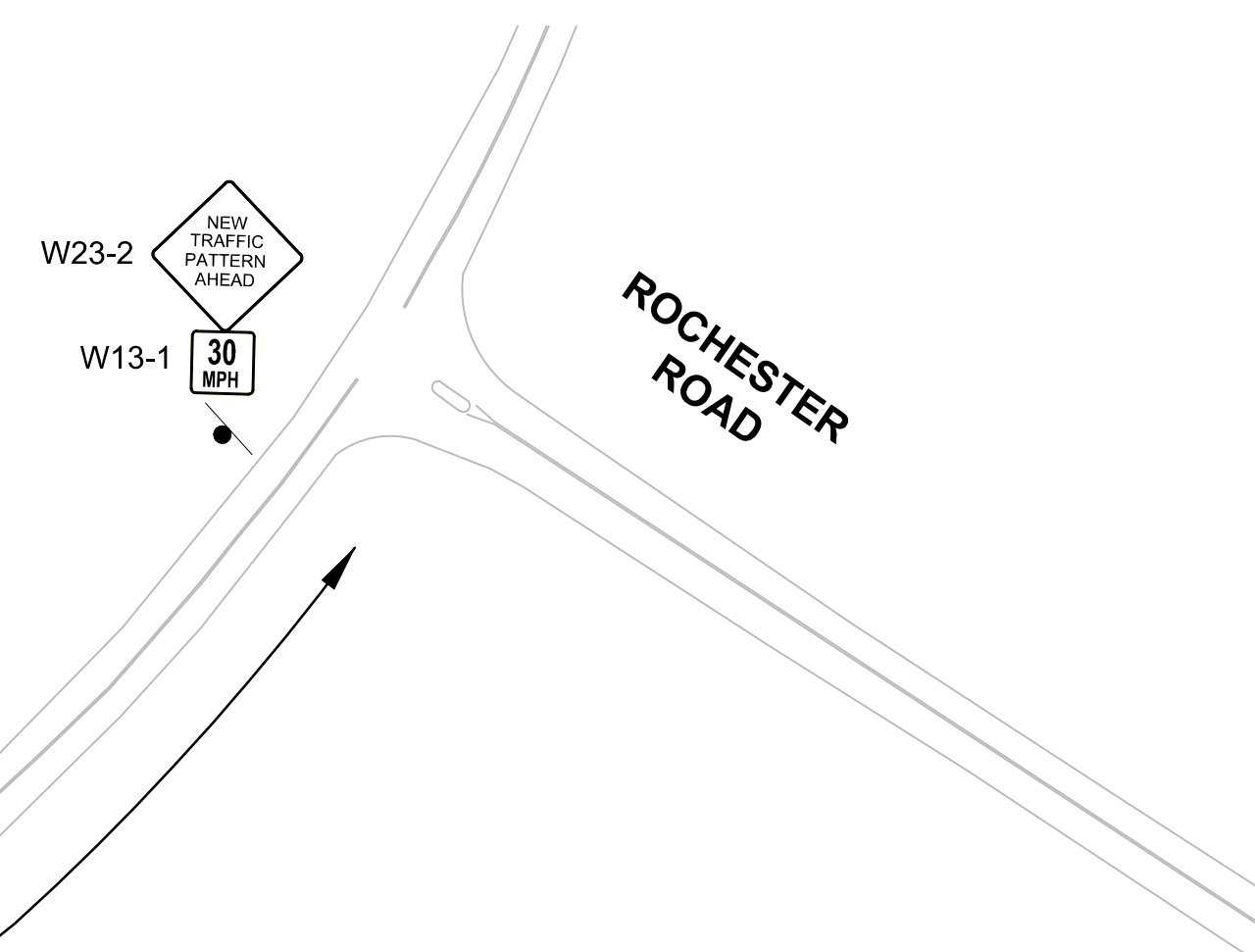
SHEET 4 OF 6	DRAWING NUMBER
JOB NO. 9243	4
CAD 9243TTCP	

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TRAFFIC MANAGEMENT LEGEND:

- 42" GRABBER TRAFFIC CONES
- REFLECTORIZED PLASTIC DRUM
- Ⓟ POLICE/FLAGGER DETAIL
- Ⓜ CHANGEABLE MESSAGE SIGN
- Ⓜ FLASHING ARROW BOARD
- ➔ DIRECTION OF TRAFFIC
- Ⓢ EXISTING SIGNALIZED INTERSECTION
- PEDESTRIAN ROUTE
- * LIGHT TOWER



NOTE: 11' LANE WIDTHS ARE PREFERRED BUT SOME SECTIONS OF ROUTE 58 MAY REQUIRE NARROWER WIDTHS. LANE WIDTHS OF LESS THAN 10' ARE PROHIBITED.





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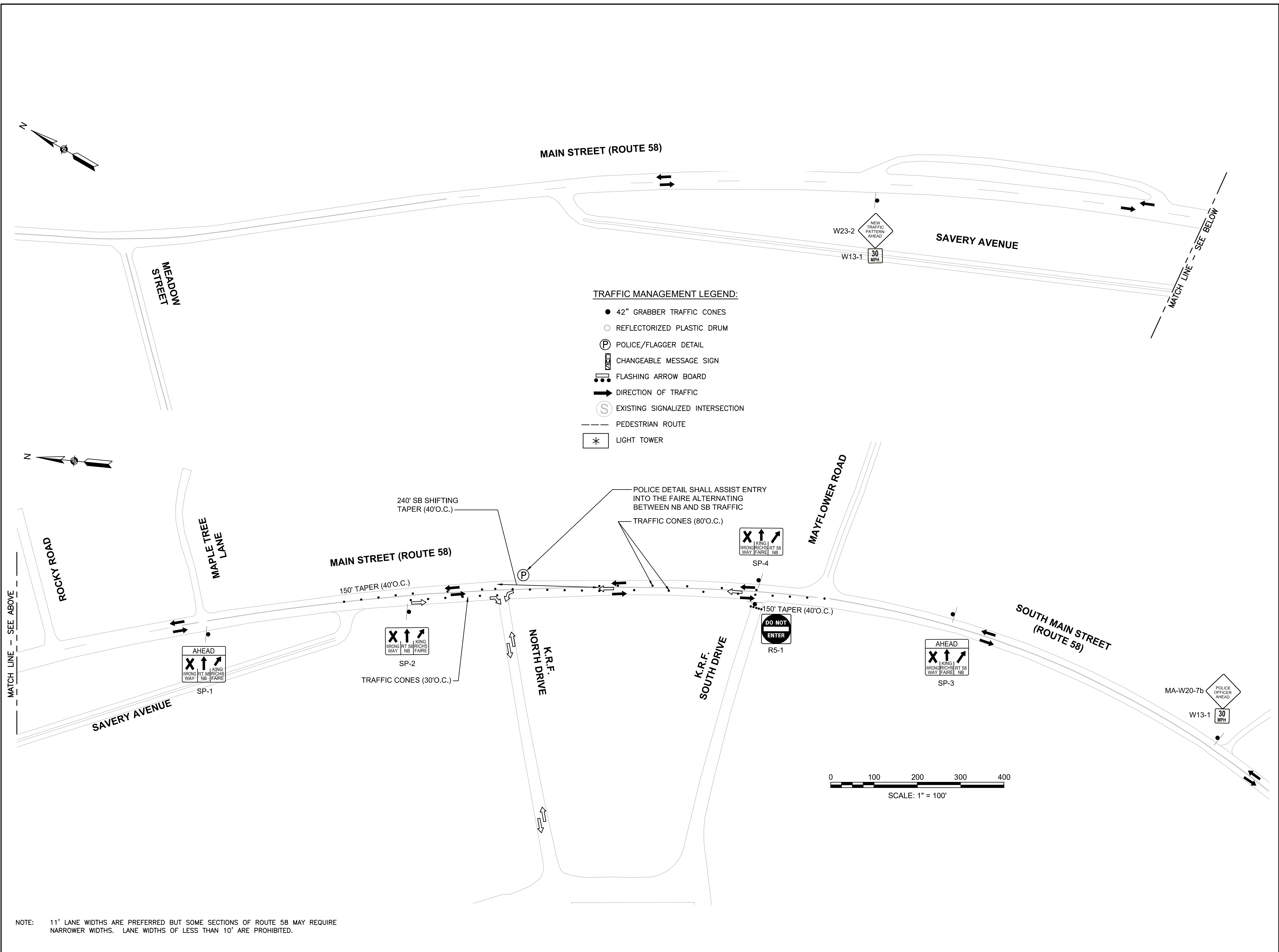
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Traffic Management Plans
Pre-Event Small Setup

SHEET 5 OF 6	DRAWING NUMBER
JOB NO. 9243	5
CAD 9243TTCP3	



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Traffic Management Plans Post-Event Egress

SHEET 6 OF 6	DRAWING NUMBER
JOB NO. 9243	6
CAD 9243TTC4	

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