

TABLE 1

SPEED (S)	MINIMUM TAPER LENGTH* FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	50	100	25
60	1440	720	360	240	50	100	25
65	1560	780	390	260	50	100	25
70	1680	840	420	280	50	100	25
75	1800	900	450	300	50	100	25

* - FOR OTHER OFFSETS, USE THE FOLLOWING MERGING TAPER LENGTH FORMULA FOR L:
FOR SPEED OF 40 MPH OR LESS, $L = WS^{3/60}$
FOR SPEED OF 45 MPH OR MORE, $L = WS$

WHERE: L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED LIMIT, OFF - PEAK 86TH - PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH

** - USE FOR TAPER AND TANGENT SECTIONS WHERE THERE ARE NO PAVEMENT MARKINGS OR WHERE THERE IS A CONFLICT BETWEEN EXISTING PAVEMENT MARKINGS AND CHANNELIZERS (CA).

TABLE 2

SPEED *	MIN D **	DOWNGRADE MIN D ***		
		-3%	-6%	-9%
		ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - SPEED IS POSTED SPEED LIMIT, OFF - PEAK 85TH - PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

** - LONGITUDINAL BUFFER SPACE OR FLAGGER STATION SPACING.

*** - USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

TABLE 3

Road Type	Distance Between Signs**		
	A	B	C
Urban - 25 mph or less***	100 feet	100 feet	100 feet
Urban - more than 25 mph to 40 mph***	250 feet	250 feet	250 feet
Urban - more than 40 mph***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* - THE DISTANCES ARE APPROXIMATE, ARE INTENDED FOR GUIDANCE PURPOSES ONLY, AND SHOULD BE APPLIED WITH ENGINEERING JUDGEMENT. THESE DISTANCES SHOULD BE ADJUSTED BY THE ENGINEER FOR FIELD CONDITIONS, IF NECESSARY, BY INCREASING OR DECREASING THE RECOMMENDED DISTANCES.

CONTENTS

4	VICINITY MAP, SOW, TTC NOTES, CHARTS, LEGEND, TYPICAL, TTC DESIGN SHEET (PHASE 1)
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8-11	TTC DESIGN SHEETS (PHASE 2)
12-14	TTC DESIGN SHEETS (PHASE 3)
15-16	TTC DESIGN SHEETS (PHASE 4)
17-19	TTC DESIGN SHEETS (PHASE 5)

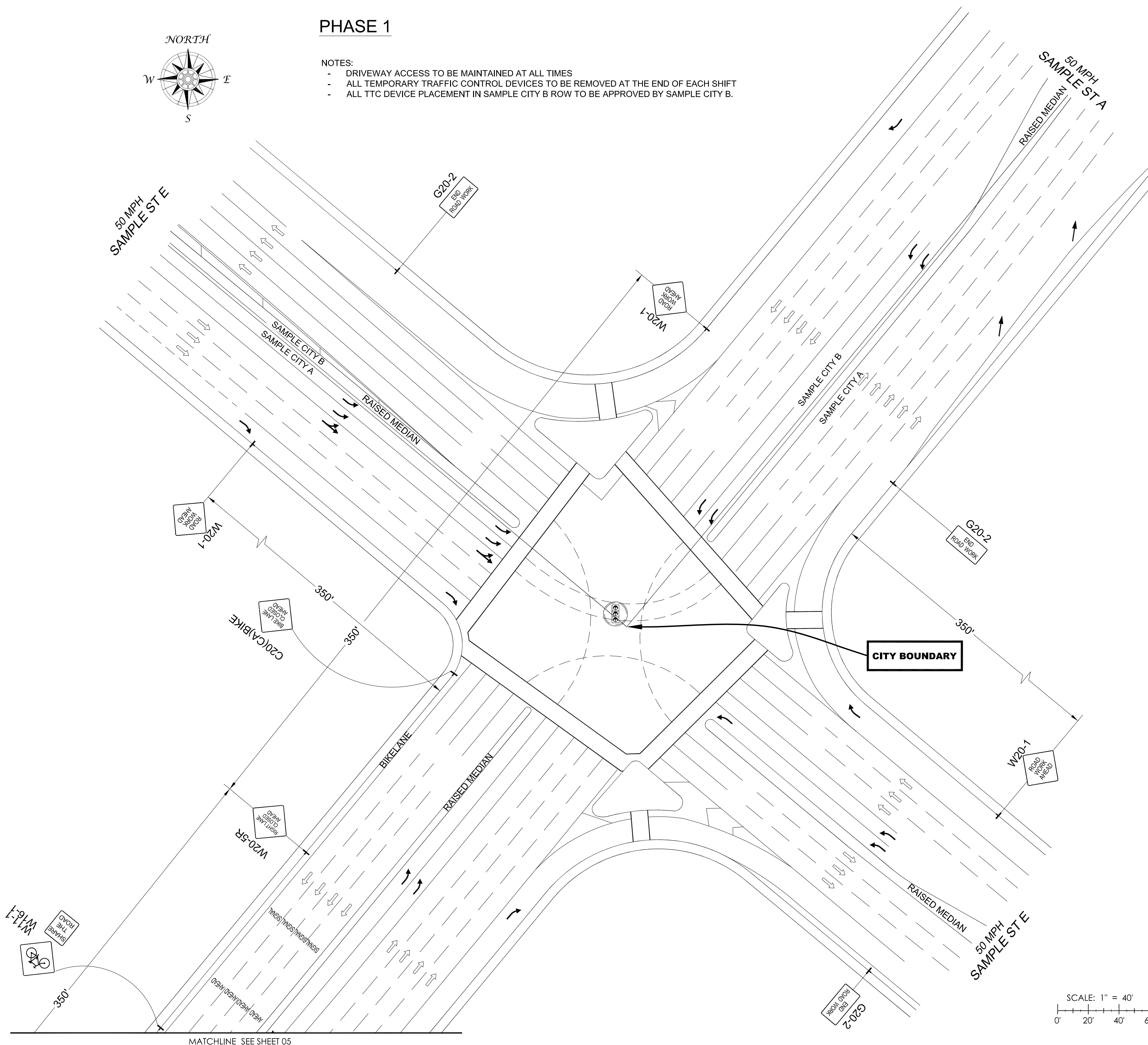
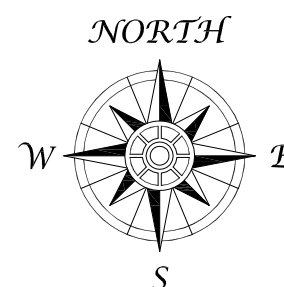
SAMPLE CLIENT SAMPLE PROJECT XXX SAMPLE STREET A, SAMPLE CITY A, CA

TTC NOTES

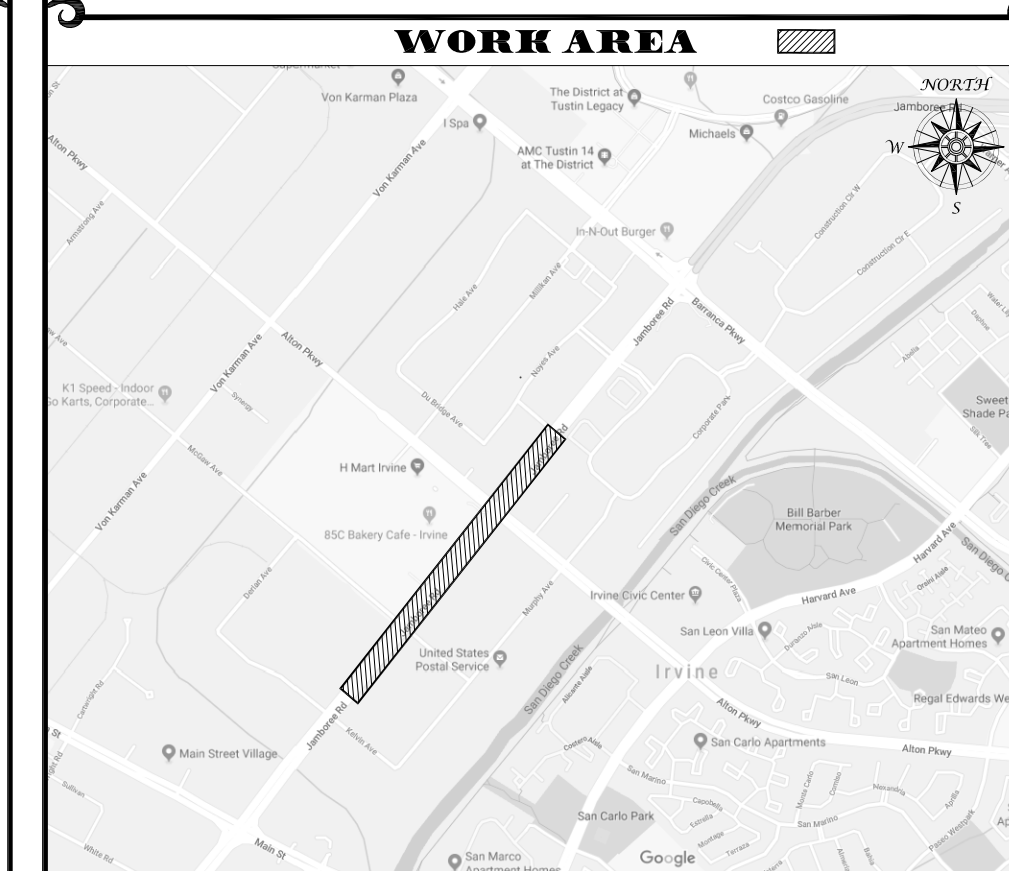
- INDIVIDUALS WHO ARE KNOWLEDGEABLE IN THE PRINCIPLES OF PROPER TTC SHOULD BE ASSIGNED RESPONSIBILITY FOR SAFETY IN TTC ZONES, TO CHECK THAT ALL TTC DEVICES OF THE PROJECT ARE REASONABLY CONSISTENT WITH THE TTC PLAN AND ARE EFFECTIVE IN PROVIDING REASONABLY SAFE CONDITIONS FOR MOTORISTS, BYCYCLISTS, PEDESTRIANS, AND WORKERS.
- AS WORK PROGRESSES TEMPORARY TRAFFIC CONTROLS AND/OR WORKING CONDITIONS SHOULD BE MODIFIED IN ORDER TO PROVIDE REASONABLY SAFE AND EFFICIENT ROAD USER MOVEMENT AND TO PROVIDE WORKER SAFETY. THE INDIVIDUAL RESPONSIBLE FOR TTC SHOULD HAVE THE AUTHORITY TO HALT WORK UNTIL APPLICABLE OR REMEDIAL SAFETY MEASURES ARE TAKEN.
- ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AS SOON AS IS PRACTICAL.
- AUDIBLE INFORMATION DEVICES ARE TO BE USED TO ASSIST PEDESTRIANS WITH VISUAL DISABILITIES WHERE NEEDED.
- ALL DRIVEWAYS ARE TO REMAIN OPEN AT ALL TIMES.
- CONTRACTOR TO CONTACT LOCAL TRANSIT AGENCY WHEN REQUIRED WORK IMPACTS PUBLIC TRANSPORTATION.
- CONTRACTOR TO PLACE TEMPORARY NO PARKING SIGNS 48HRS IN ADVANCE OF CLOSING ANY PARKING LANES.
- ALL TTC WILL BE COMPLIANT WITH THE MOST RECENT CALIFORNIA MUTCD AND/OR WATCHBOOK PER LOCAL JURISDICTIONAL REQUIREMENTS

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 - ALL TTC DEVICE PLACEMENT IN SAMPLE CITY B ROW TO BE APPROVED BY SAMPLE CITY B.



VICINITY MAP



SCOPE OF WORK

TEMPORARY TRAFFIC CONTROL DEVICE AND SIGN PLACEMENT IN SAMPLE CITY A RIGHT OF WAY FOR UNDERGROUND FIBER INSTALLATION IN SAMPLE CITY A ROW.

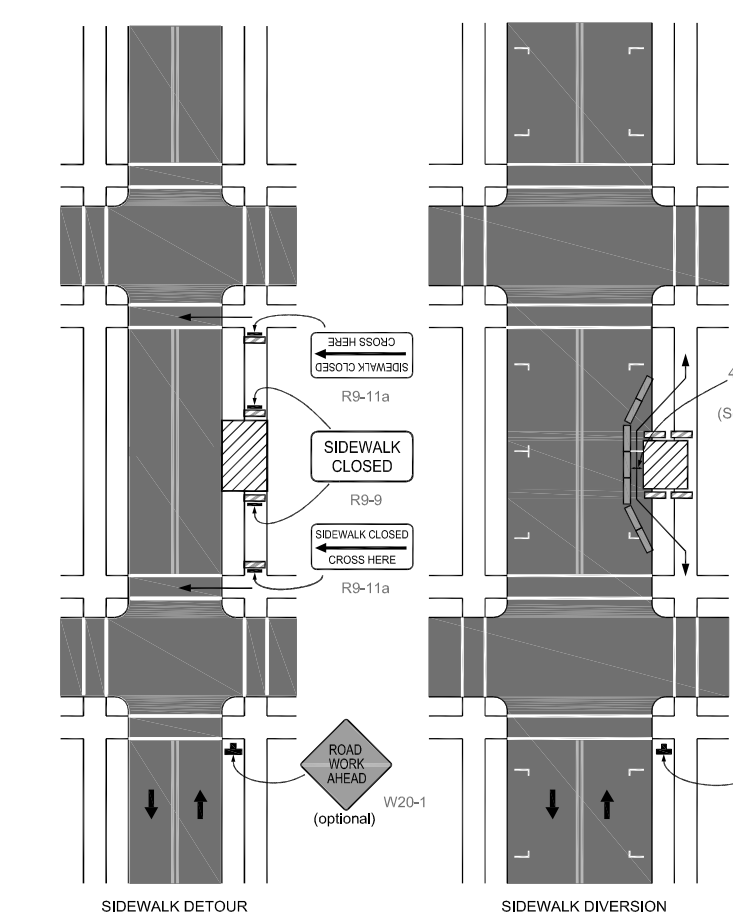
TTC DEVICE AND SIGN PLACEMENT IN SAMPLE CITY B RIGHT OF WAY APPLIED FOR UNDER PERMIT XXXXXXXXXX.

LEGEND

- TRAFFIC SIGNAL
- FLASHING ARROW BOARD
- EXISTING TURN-ONLY LANE
- EXISTING NO-TURN LANE
- TRAFFIC FLOW DIRECTION
- TRAFFIC SIGN
- BARRICADE
- FLAGGER
- DRIVEWAY
- WORK ZONE
- TRAFFIC CONE

PEDESTRIAN DETOUR PLAN

Figure 6H-28. Sidewalk Detour or Diversion (TA-28)



Typical Application 28
CAMUTCD 2014 Edition, Revision 4

REVISION NOTES

DATE	DESCRIPTION	INITIALS
02-25-20	REVISED CONDUIT LINE TO SIDEWALK	NEM
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--	----	--
--	----	--
--	----	--

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TRAFFIC CONTROL

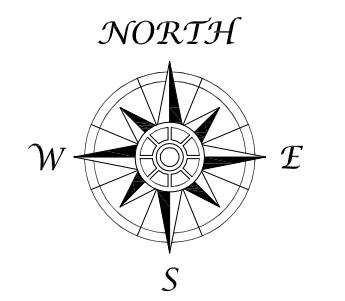
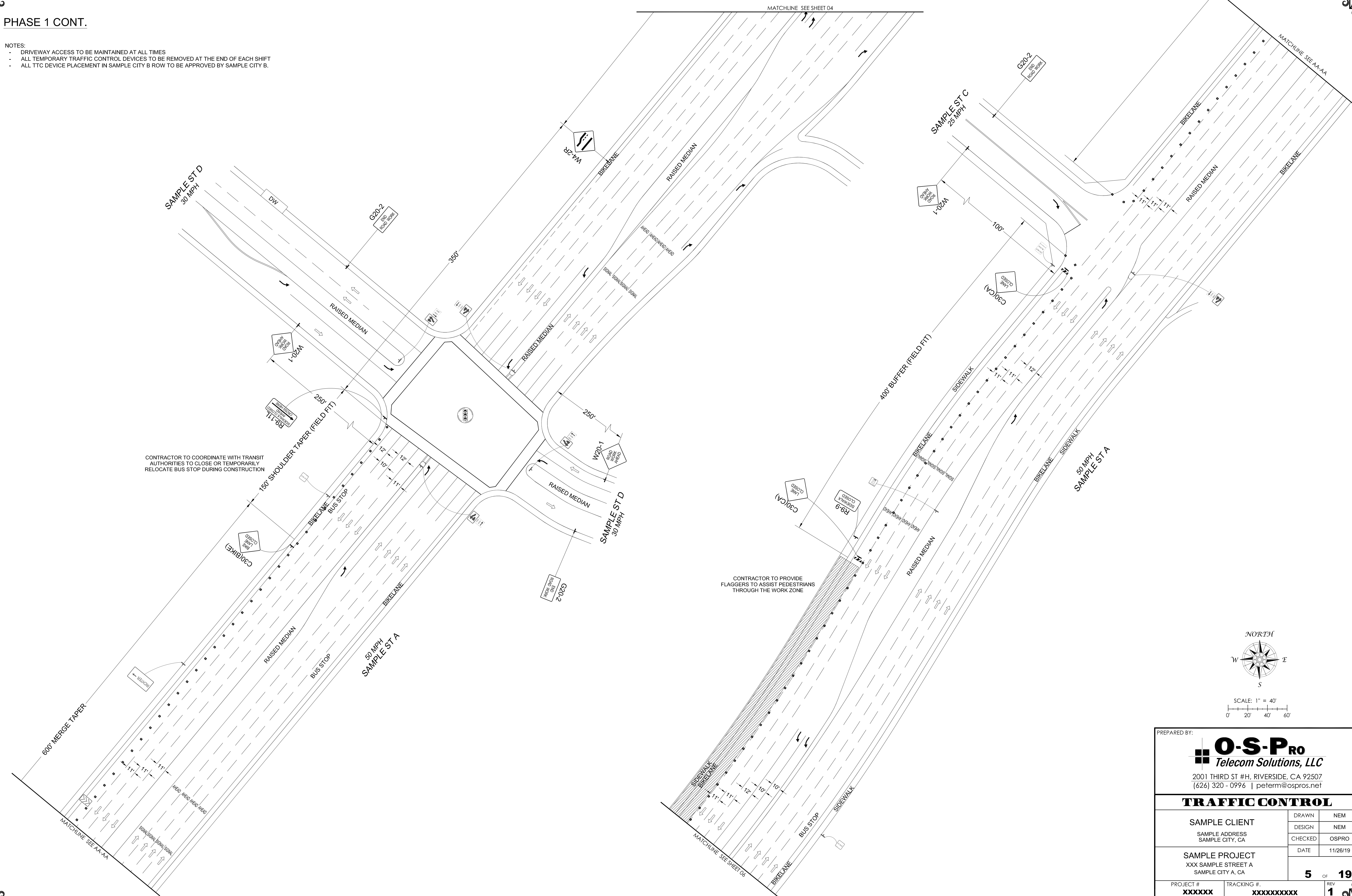
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	DESIGN	NEM
	CHECKED	OSPRO
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19
	PROJECT #	XXXXXX

4 OF 19

TRACKING # XXXXXXXXXX REV 1

PHASE 1 CONT.

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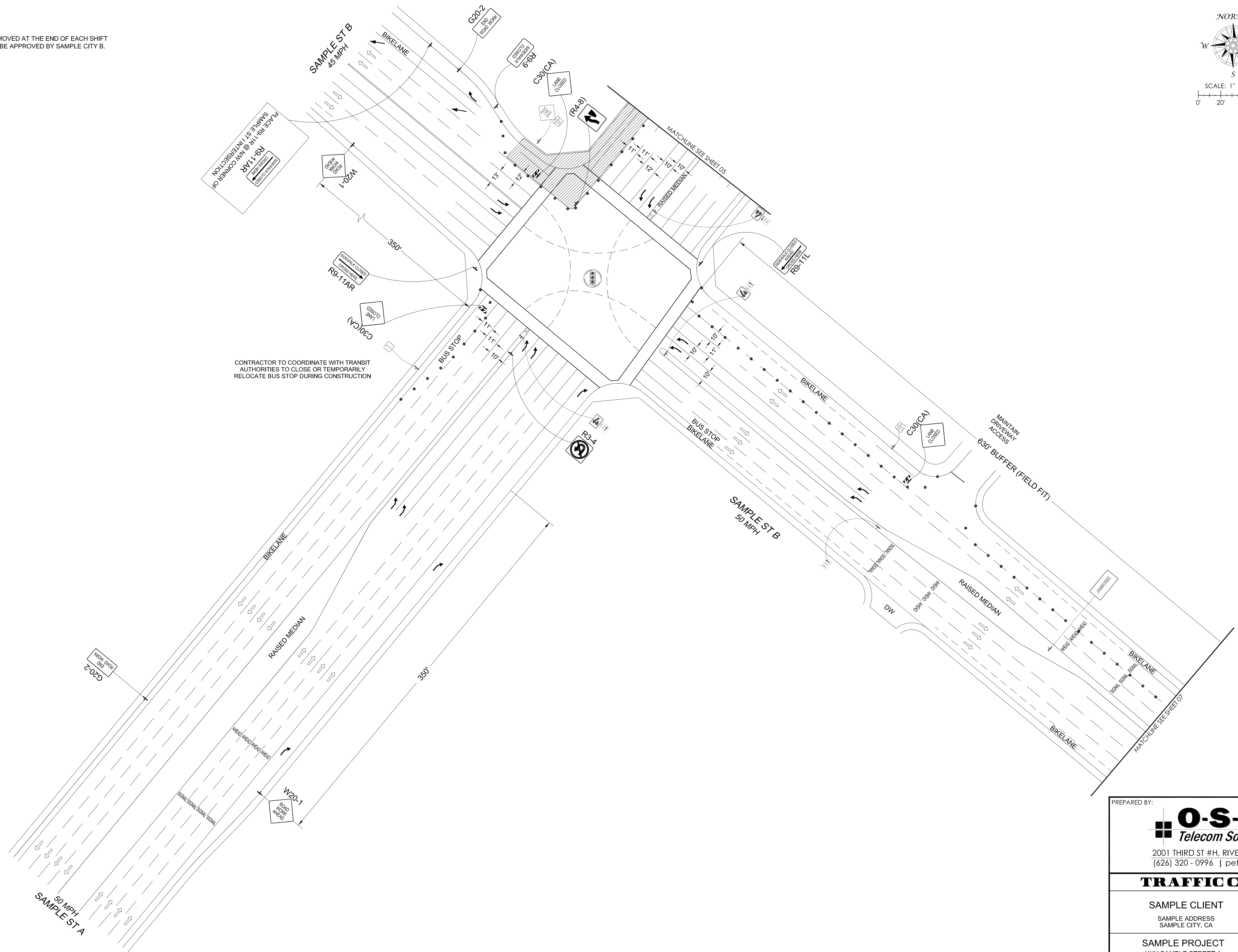
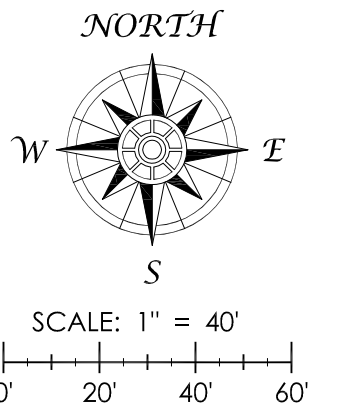
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TRAFFIC CONTROL

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	DESIGN	NEM
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	DATE	11/26/19
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REV 1		5 OF 19

PHASE 1 CONT.

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CONTRACTOR TO COORDINATE WITH TRANSIT AUTHORITIES TO CLOSE OR TEMPORARILY RELOCATE BUS STOP DURING CONSTRUCTION

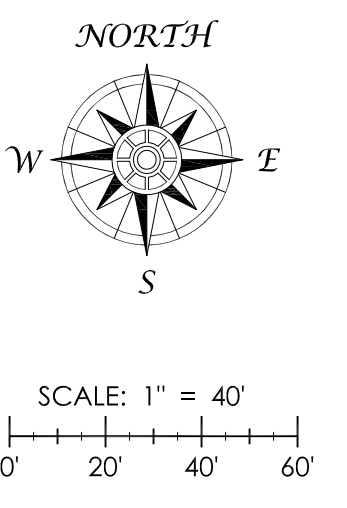
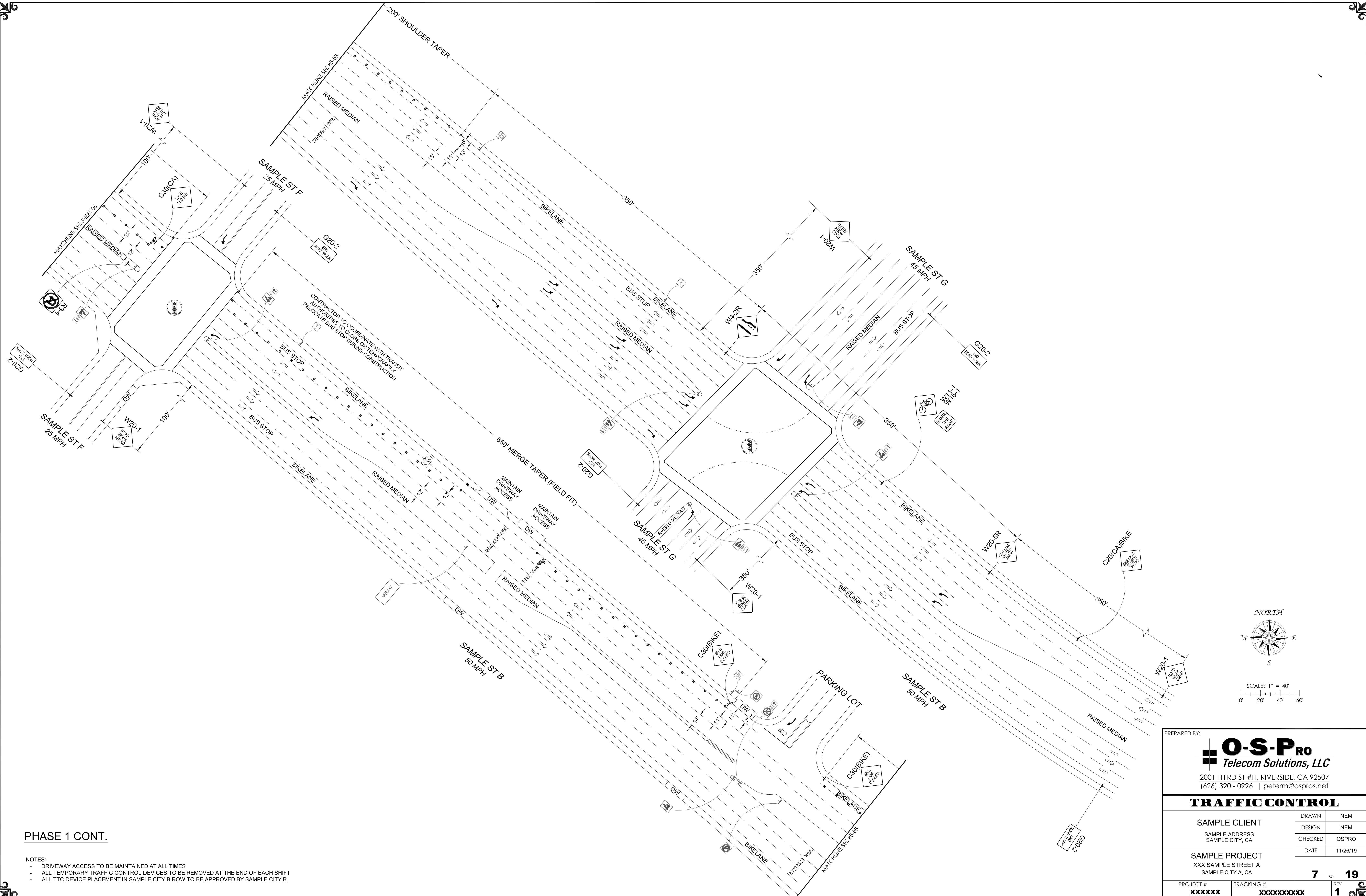
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TRAFFIC CONTROL

SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM
	DESIGN	NEM
	CHECKED	OSPRO
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19
	6 OF 19	
PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV 1



PHASE 1 CONT.

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TRAFFIC CONTROL

SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM
	DESIGN	NEM
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REV # 1		7 OF 19

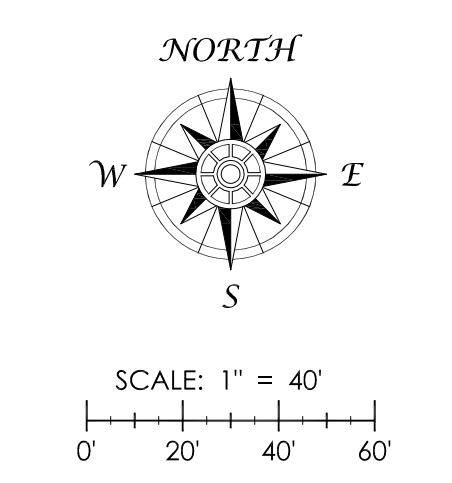
SAMPLE ST B
45 MPH

40 MPH
SAMPLE ST H

SAMPLE ST B
45 MPH

PHASE 2

- NOTES:
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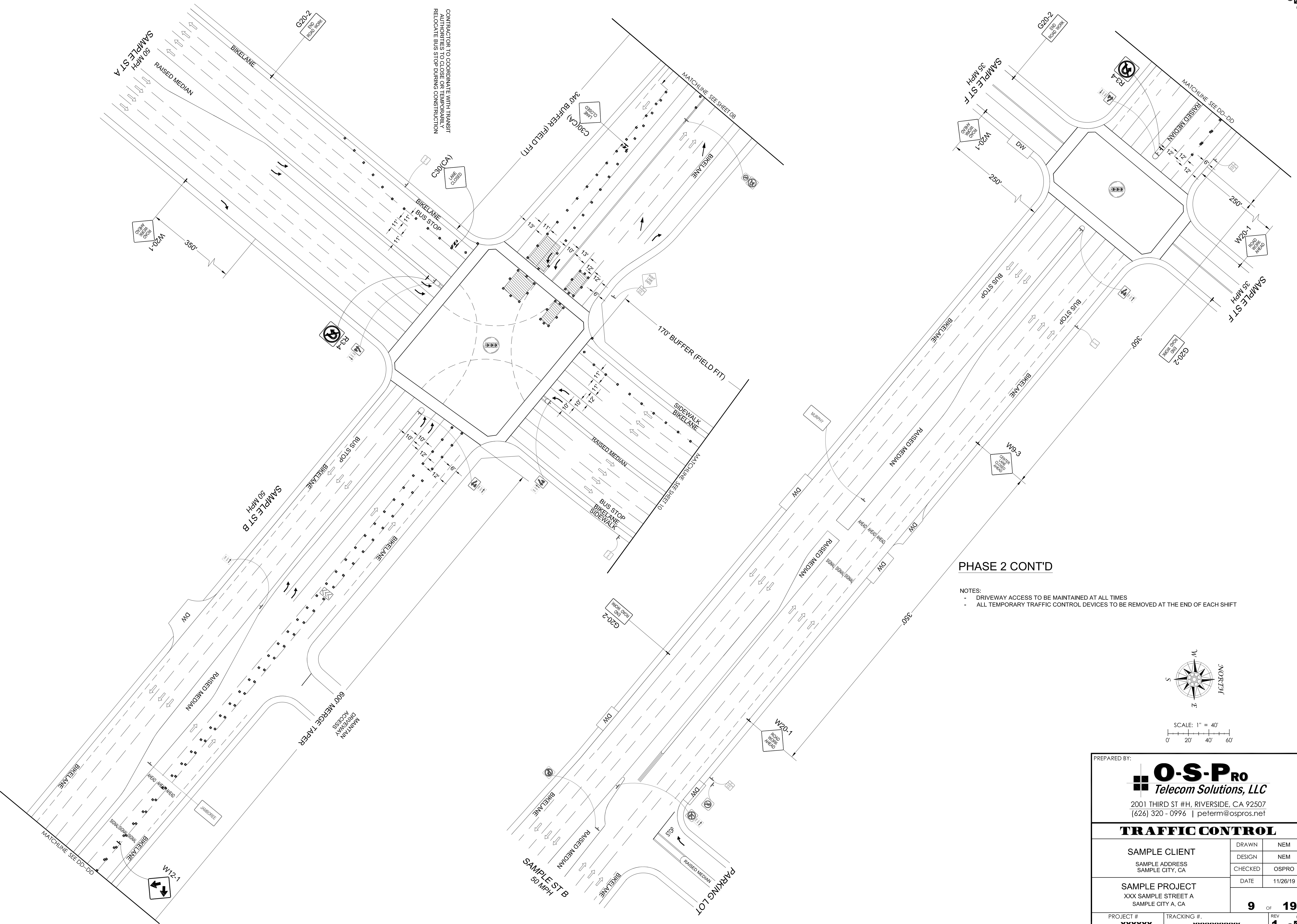
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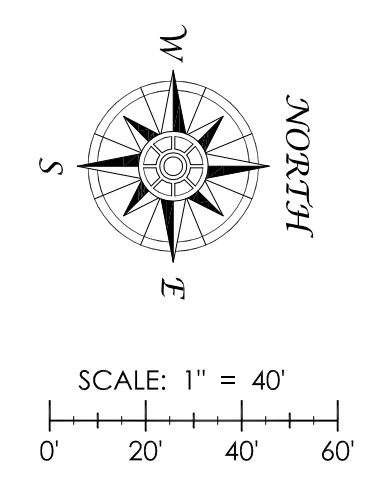
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	8 OF 19	
PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV 1



CONTRACTOR TO COORDINATE WITH TRANSIT
 RELATIONS TO DISBURS TEMPORARY
 RELATIVE BUS STOP BURNING CONSTRUCTION

PHASE 2 CONT'D

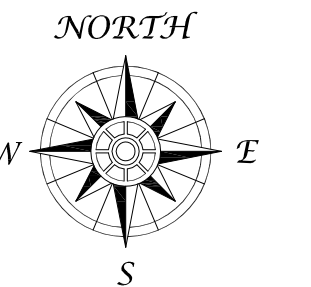
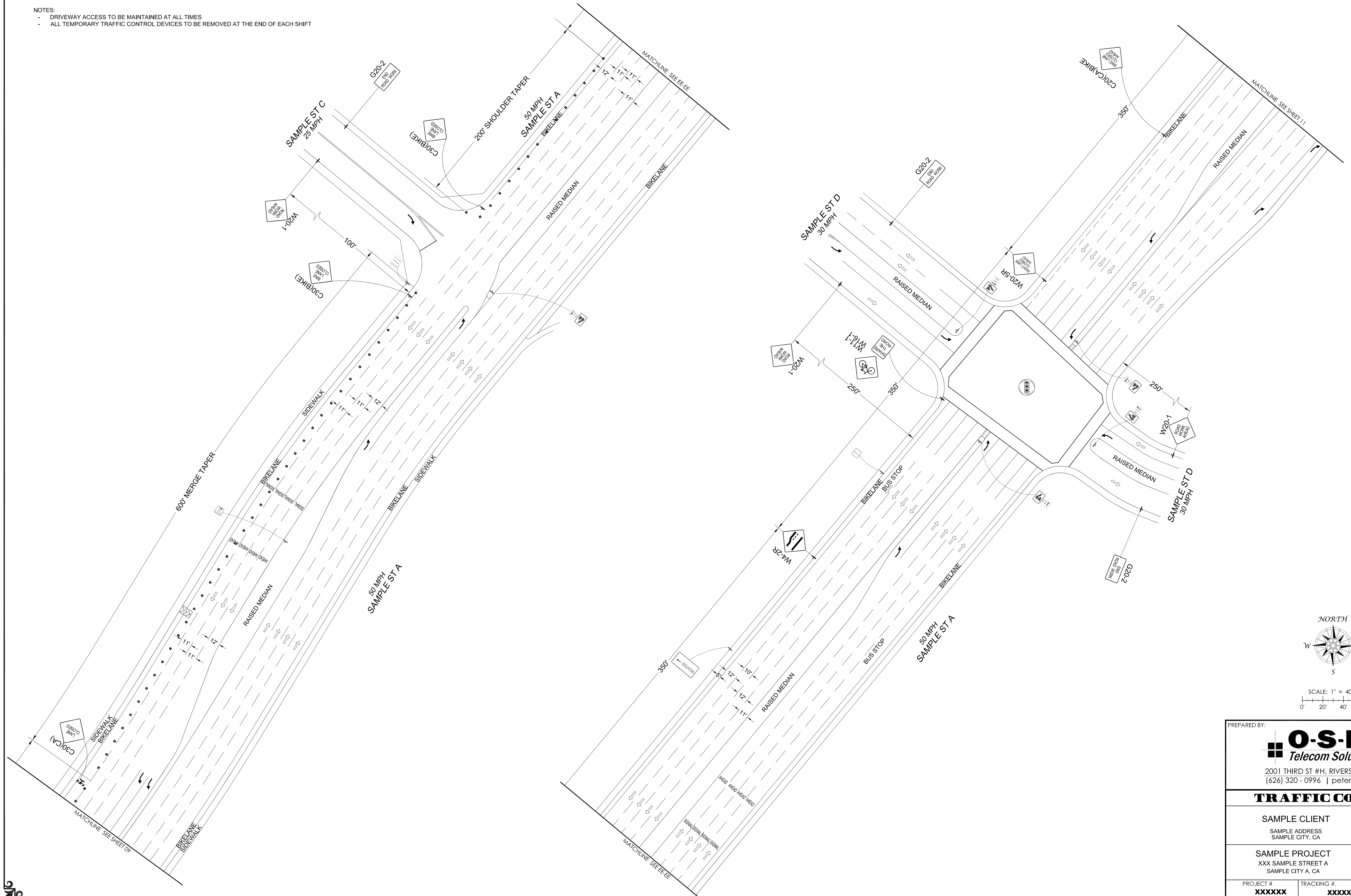
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TRAFFIC CONTROL			
SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM	
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	CHECKED	OSPRO	
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PHASE 2 CONT'D

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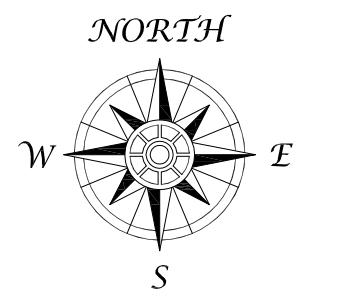
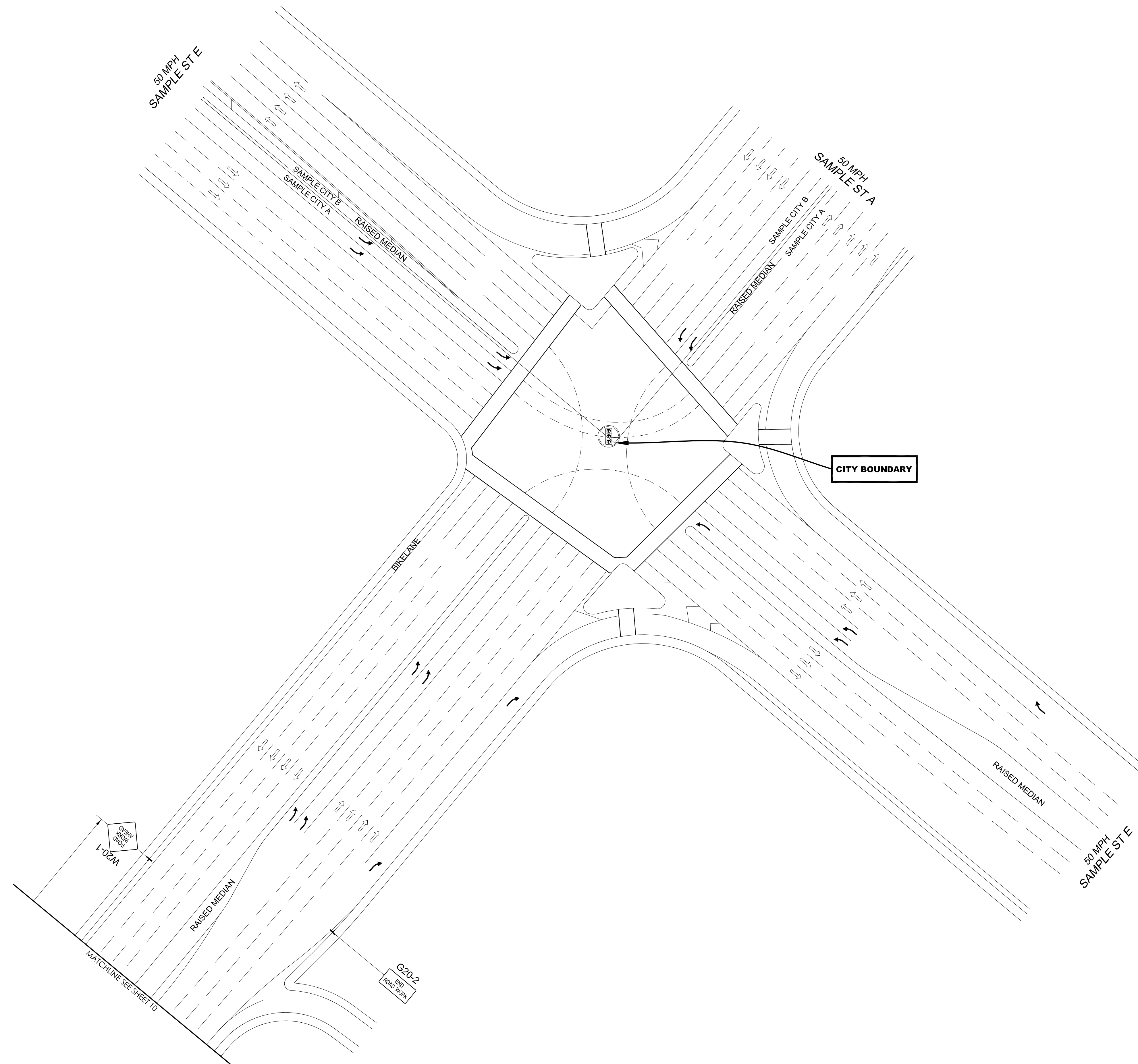


SCALE: 1" = 40'

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TRAFFIC CONTROL			
SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM	
	DESIGN	NEM	
	CHECKED	OSPRO	
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19	
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	PROJECT #	TRACKING #	REV
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PHASE 2 CONT'D

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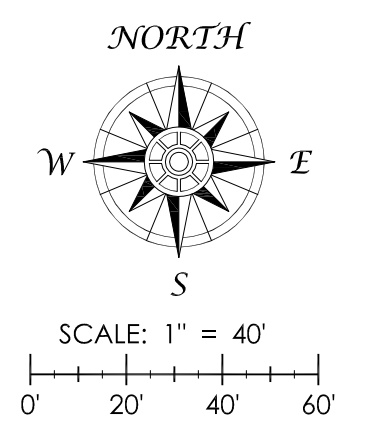
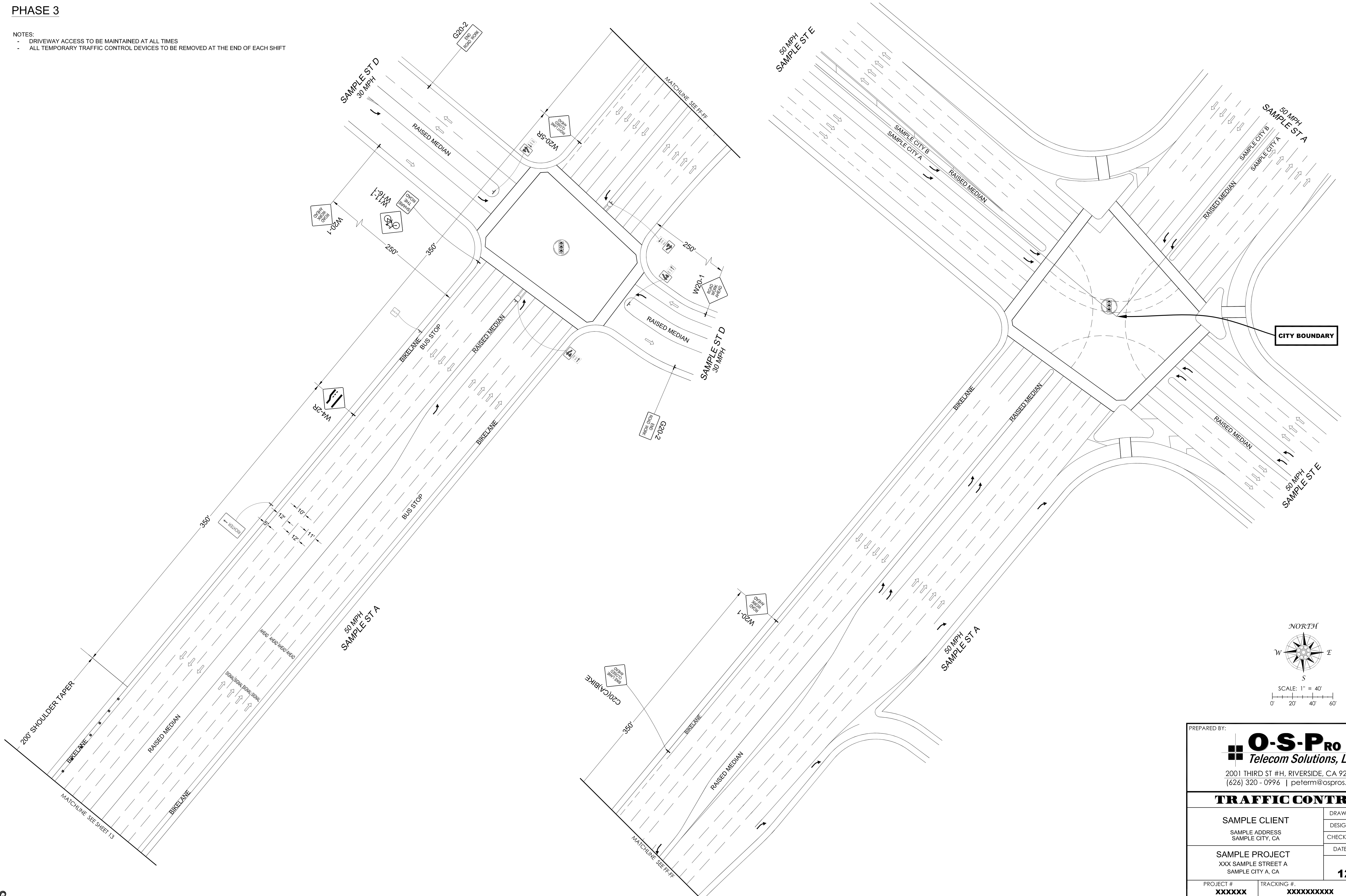


SCALE: 1" = 40'
0' 20' 40' 60'

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TRAFFIC CONTROL			
SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM	
	DESIGN	NEM	
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SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19	
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	PROJECT #	TRACKING #	REV
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PHASE 3

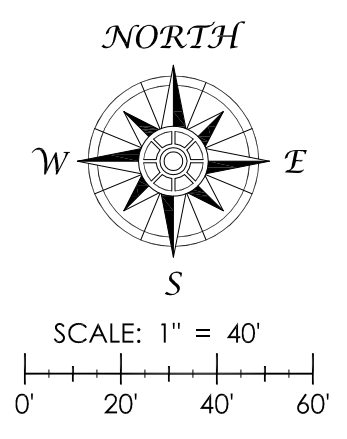
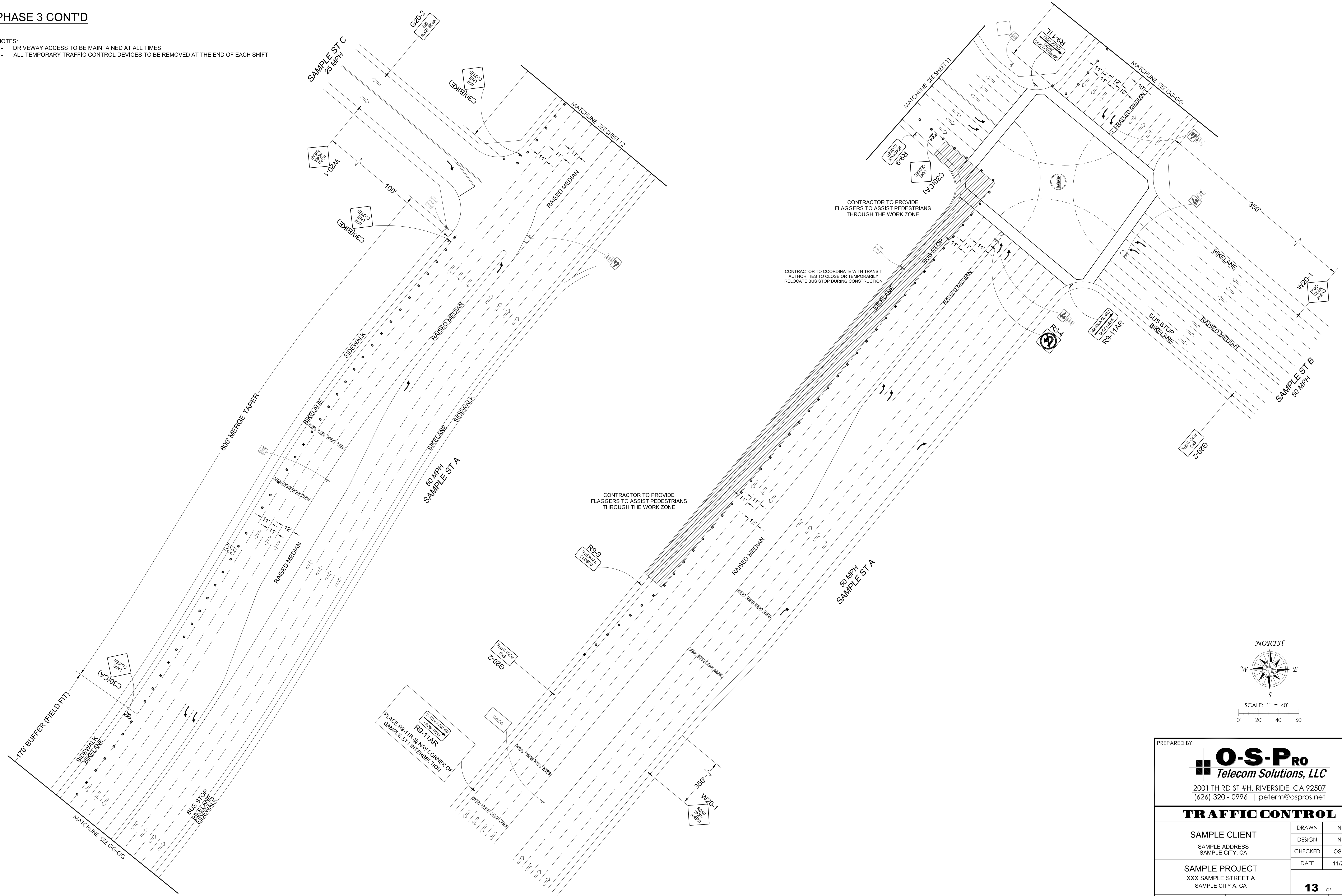
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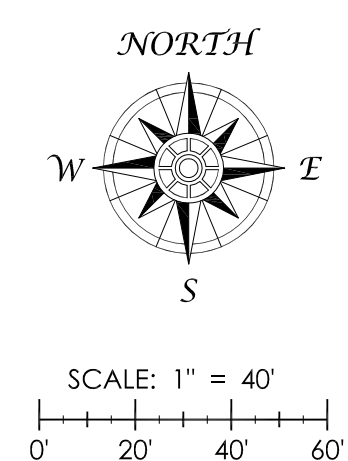
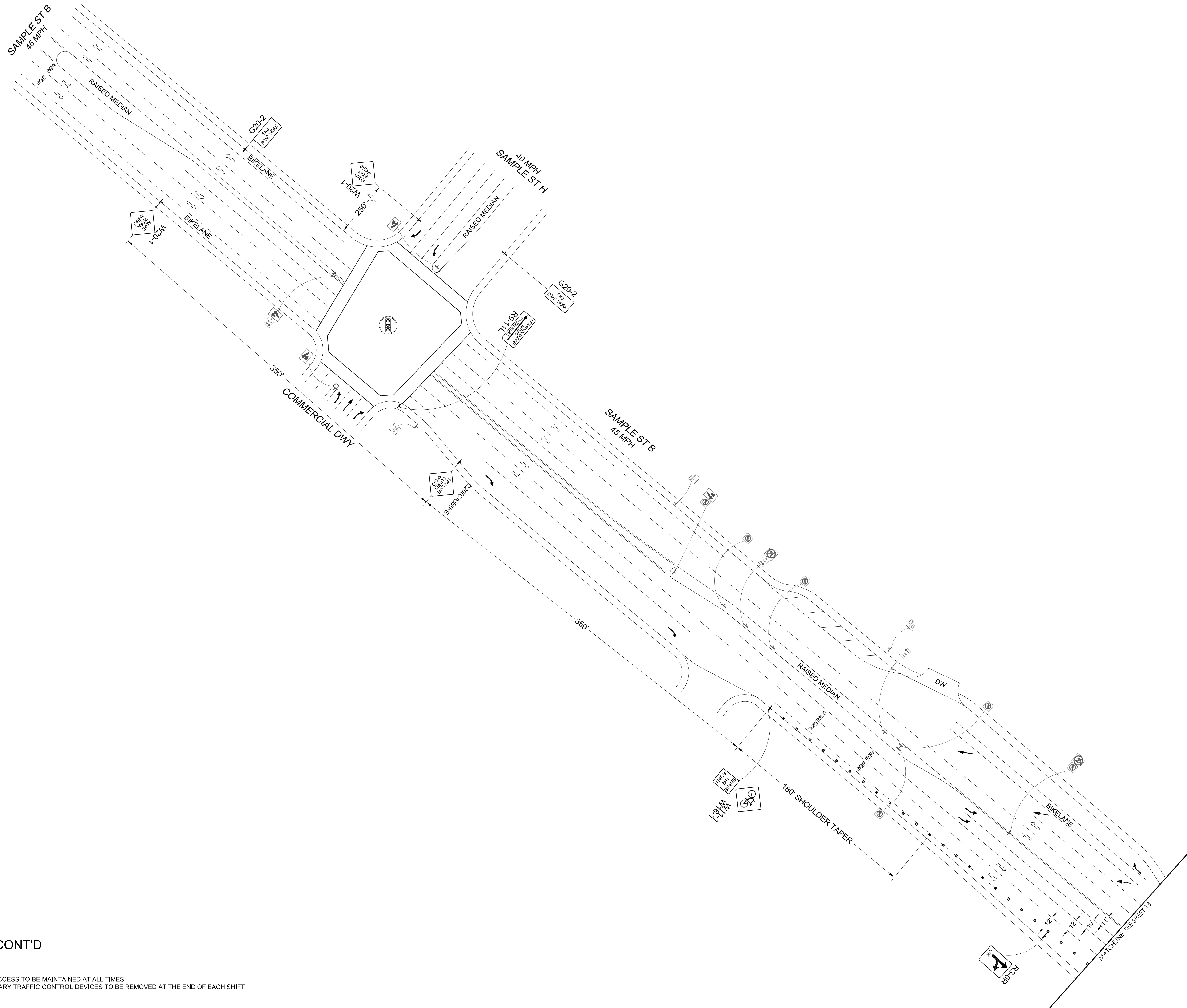
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TRAFFIC CONTROL			
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SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19	
	12 OF 19		
PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV	1

PHASE 3 CONT'D

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TRAFFIC CONTROL			
SAMPLE CLIENT	DRAWN	NEM	
	DESIGN	NEM	
SAMPLE ADDRESS SAMPLE CITY, CA	CHECKED	OSPRO	
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SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	13 OF 19		
PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV	1



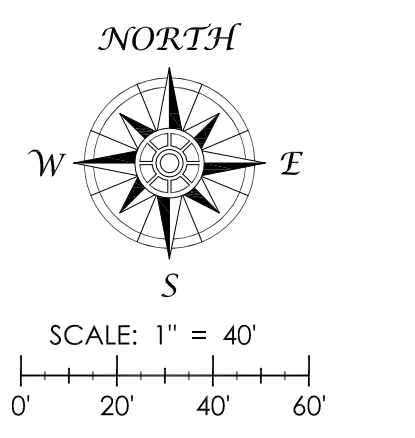
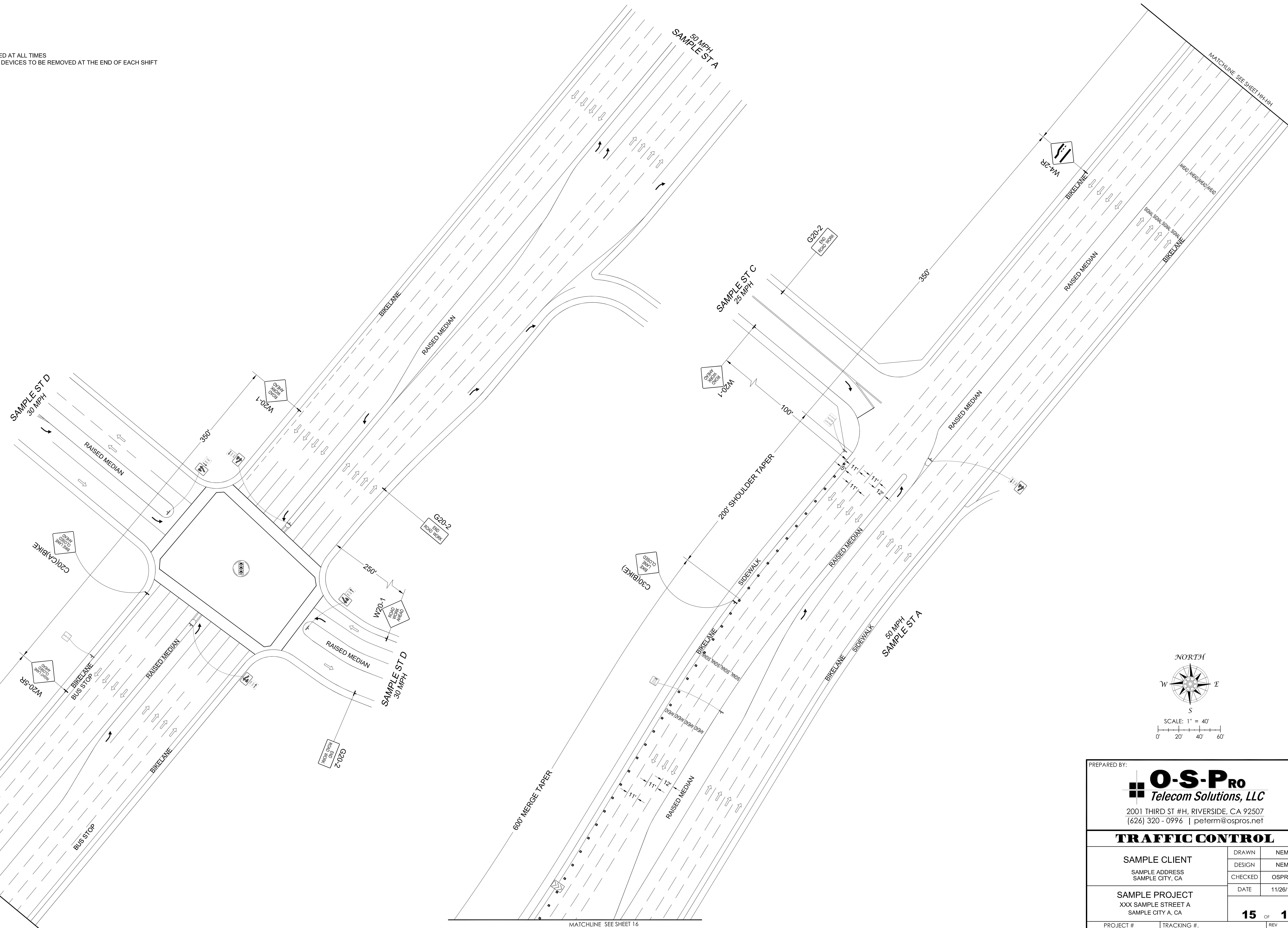
PHASE 3 CONT'D

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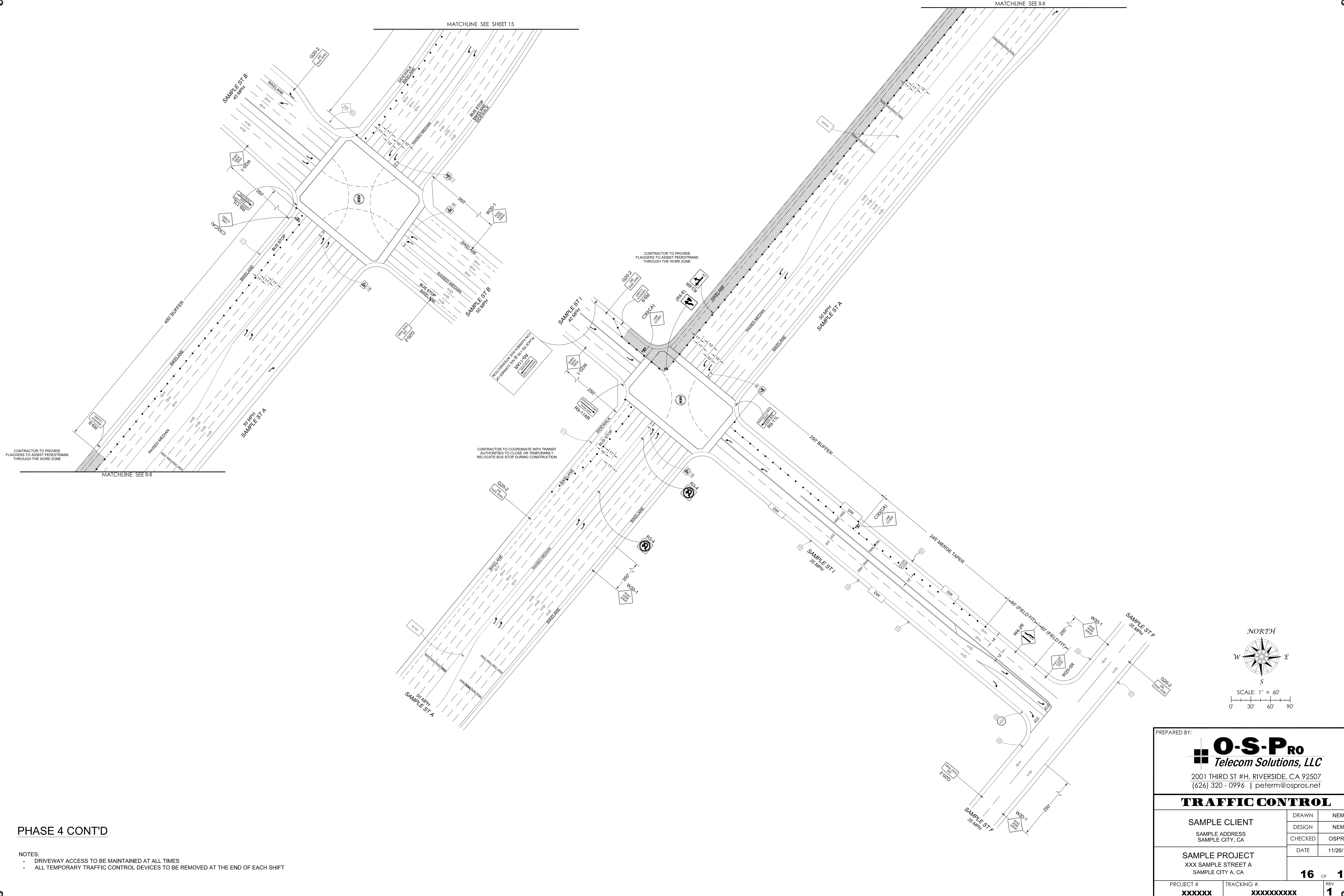
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TRAFFIC CONTROL			
SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM	
	DESIGN	NEM	
	CHECKED	OSPRO	
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19	
	14 OF 19		
	PROJECT #	TRACKING #	REV
XXXXXX	XXXXXXXXXX		

PHASE 4

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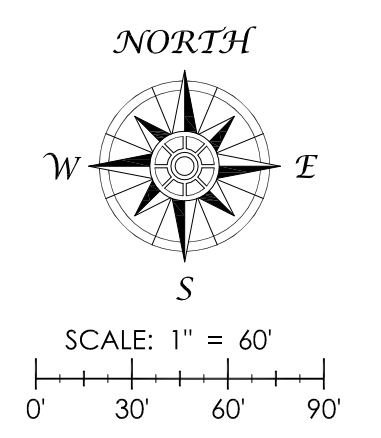


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TRAFFIC CONTROL			
SAMPLE CLIENT	DRAWN	NEM	
	DESIGN	NEM	
SAMPLE ADDRESS SAMPLE CITY, CA	CHECKED	OSPRO	
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SAMPLE PROJECT	15 OF 19		
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PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV	1



PHASE 4 CONT'D

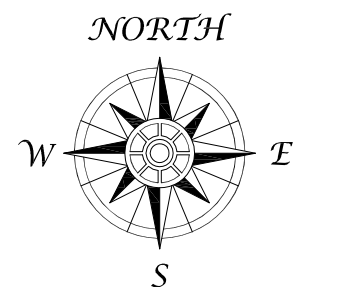
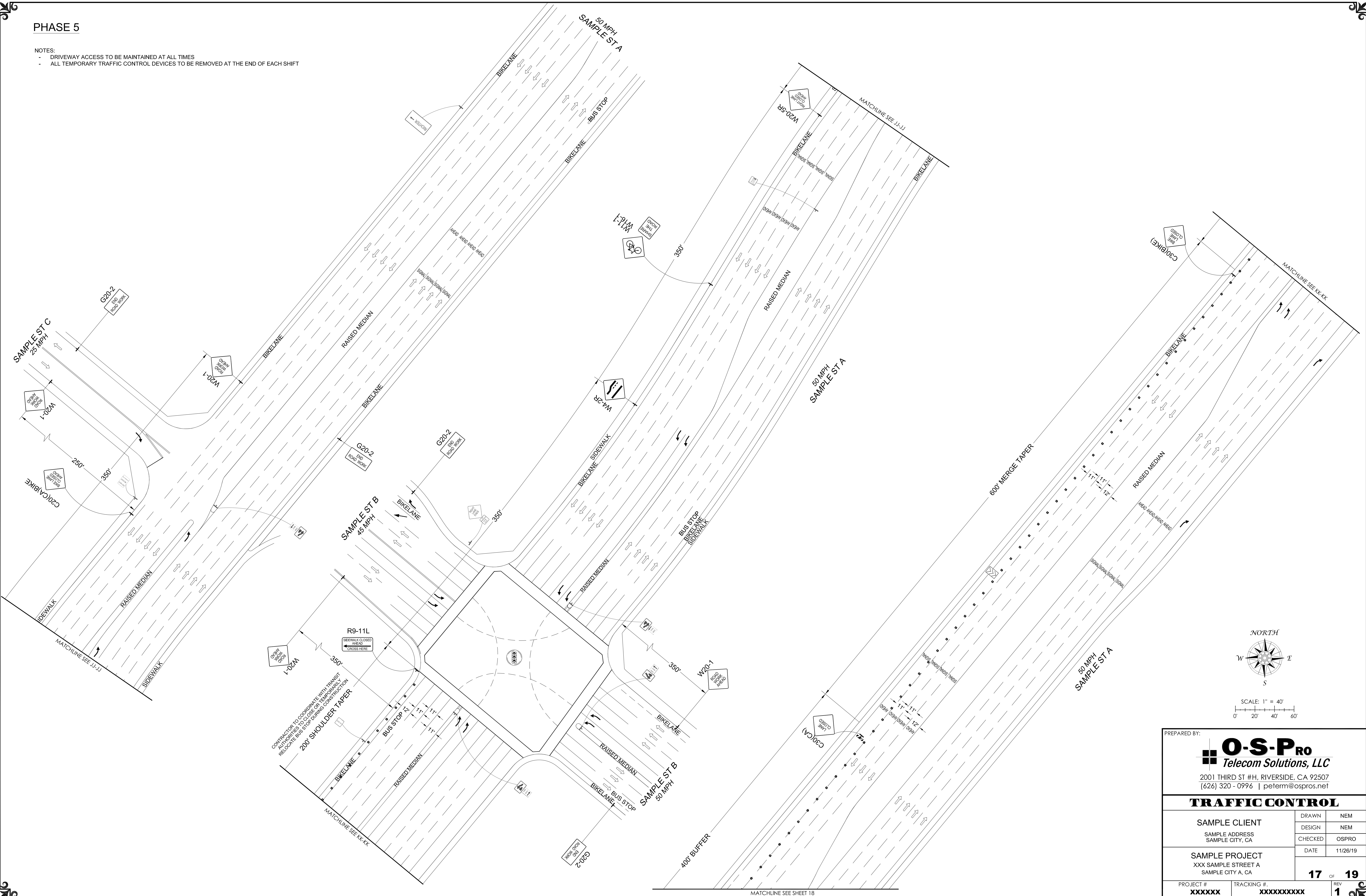
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TRAFFIC CONTROL			
SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM	
	DESIGN	NEM	
	CHECKED	OSPRO	
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19	
	16 OF 19		
	PROJECT #	TRACKING #	REV
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PHASE 5

- NOTES:
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SCALE: 1" = 40'

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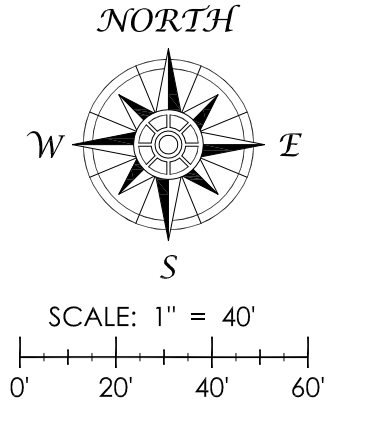
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TRAFFIC CONTROL

SAMPLE CLIENT	DRAWN	NEM
	DESIGN	NEM
SAMPLE ADDRESS SAMPLE CITY, CA	CHECKED	OSPRO
	DATE	11/26/19
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	17 OF 19	
	PROJECT #	TRACKING #
XXXXXX	XXXXXXXXXX	REV 1

PHASE 5 CONT.

- NOTES:
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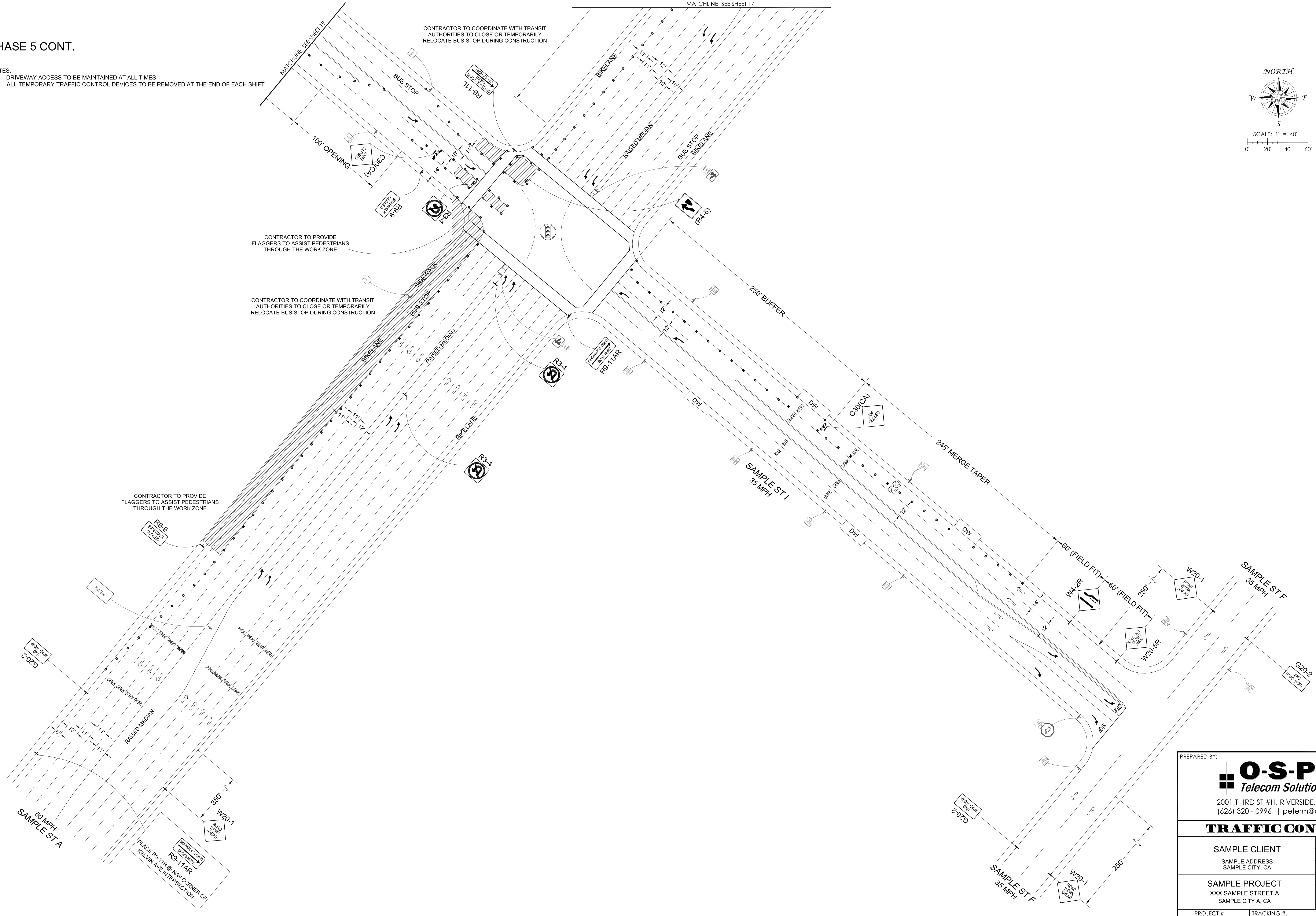


CONTRACTOR TO COORDINATE WITH TRANSIT AUTHORITIES TO CLOSE OR TEMPORARILY RELOCATE BUS STOP DURING CONSTRUCTION

CONTRACTOR TO PROVIDE FLAGGERS TO ASSIST PEDESTRIANS THROUGH THE WORK ZONE

CONTRACTOR TO COORDINATE WITH TRANSIT AUTHORITIES TO CLOSE OR TEMPORARILY RELOCATE BUS STOP DURING CONSTRUCTION

CONTRACTOR TO PROVIDE FLAGGERS TO ASSIST PEDESTRIANS THROUGH THE WORK ZONE



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Telecom Solutions, LLC

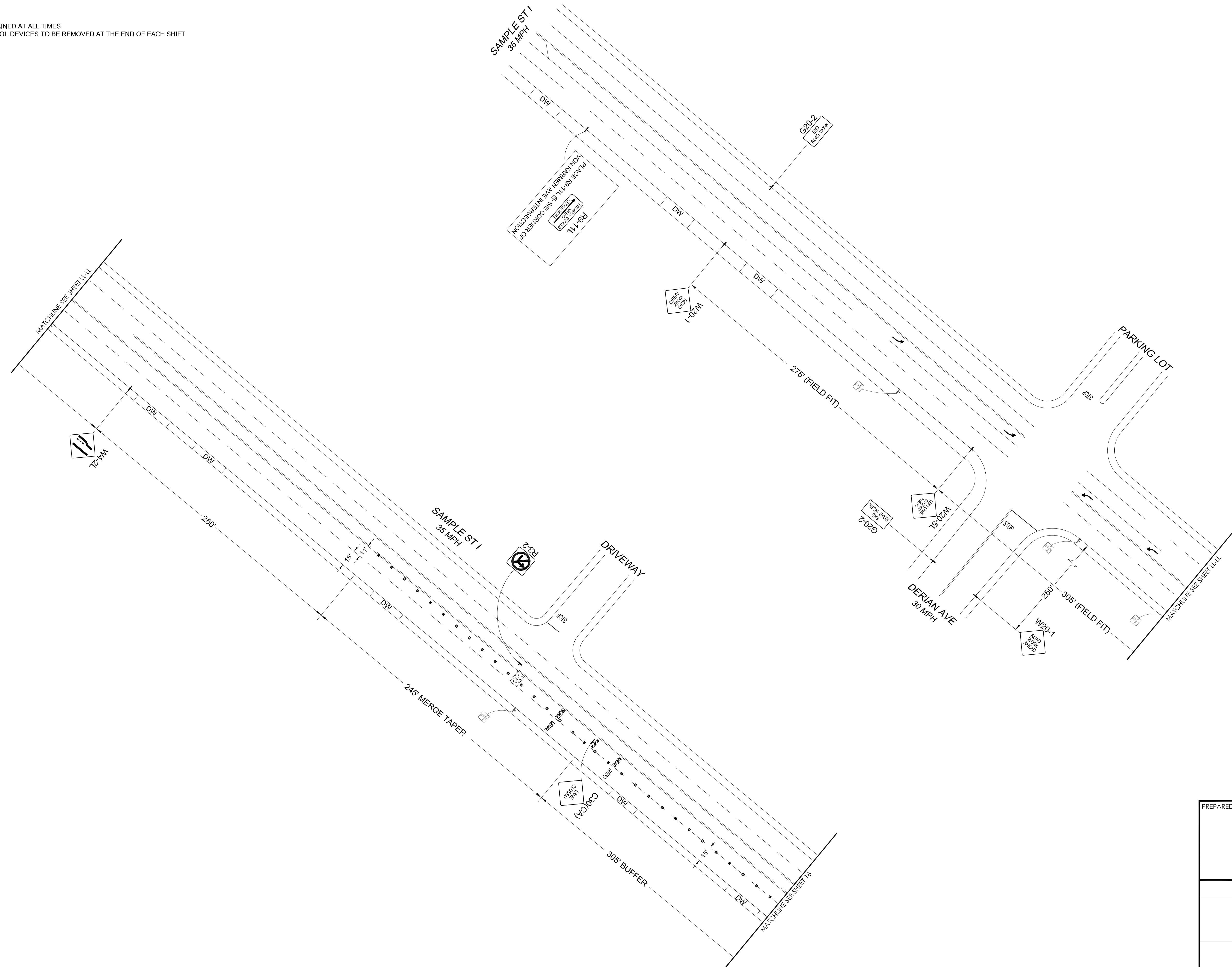
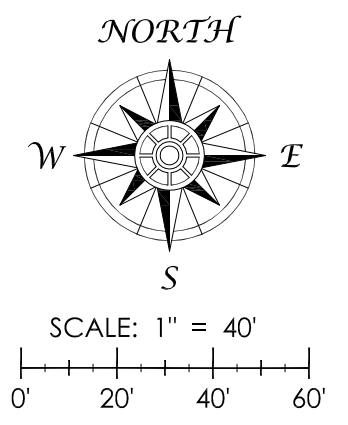
2001 THIRD ST #H, RIVERSIDE, CA 92507
(626) 320-0996 | peterm@ospros.net

TRAFFIC CONTROL

SAMPLE CLIENT SAMPLE ADDRESS SAMPLE CITY, CA	DRAWN	NEM
	DESIGN	NEM
	CHECKED	OSPRO
SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	DATE	11/26/19
	18 OF 19	
PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV 1

PHASE 5 CONT.

- NOTES:
- DRIVEWAY ACCESS TO BE MAINTAINED AT ALL TIMES
 - ALL TEMPORARY TRAFFIC CONTROL DEVICES TO BE REMOVED AT THE END OF EACH SHIFT



PREPARED BY:

O-S-PRO
Telecom Solutions, LLC

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TRAFFIC CONTROL

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SAMPLE PROJECT XXX SAMPLE STREET A SAMPLE CITY A, CA	CHECKED	OSPRO
	DATE	11/26/19
		19 OF 19
PROJECT # XXXXXX	TRACKING # XXXXXXXXXX	REV 1