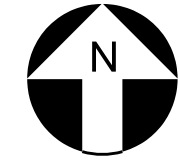
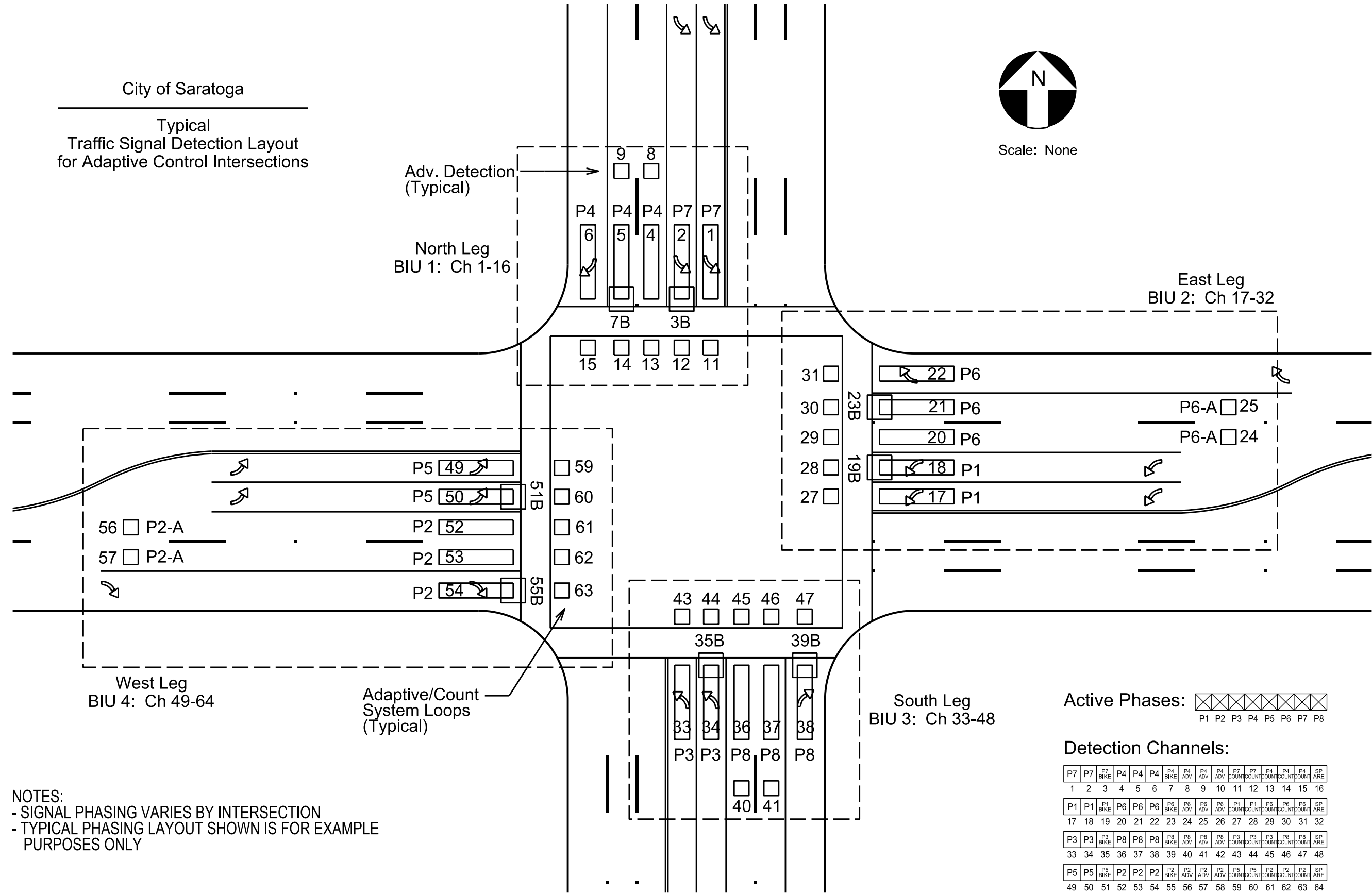


CITY OF SARATOGA  
 SMART CITY SIGNALS  
 IoT TRAFFIC SIGNAL PANEL  
 INSTALLATION  
 TYPICAL ADAPTIVE DETECTION LAYOUT

City of Saratoga  
 Typical  
 Traffic Signal Detection Layout  
 for Adaptive Control Intersections



Scale: None



NOTES:  
 - SIGNAL PHASING VARIES BY INTERSECTION  
 - TYPICAL PHASING LAYOUT SHOWN IS FOR EXAMPLE PURPOSES ONLY

Active Phases:          
 P1 P2 P3 P4 P5 P6 P7 P8

Detection Channels:

P7	P7	P7	P4	P4	P4	P4	P4	P4	P7	P7	P4	P4	P4	SP	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P1	P1	P1	P6	P6	P6	P6	P6	P6	P1	P1	P6	P6	P6	SP	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
P3	P3	P3	P8	P8	P8	P8	P8	P8	P3	P3	P8	P8	P8	SP	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
P5	P5	P5	P2	P2	P2	P2	P2	P2	P5	P5	P2	P2	P2	SP	
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

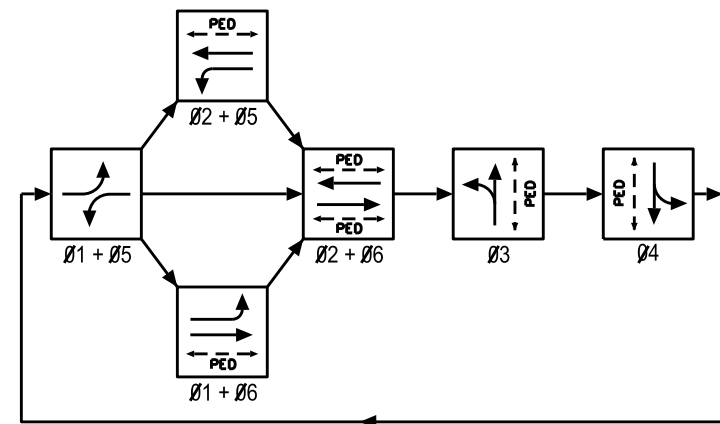
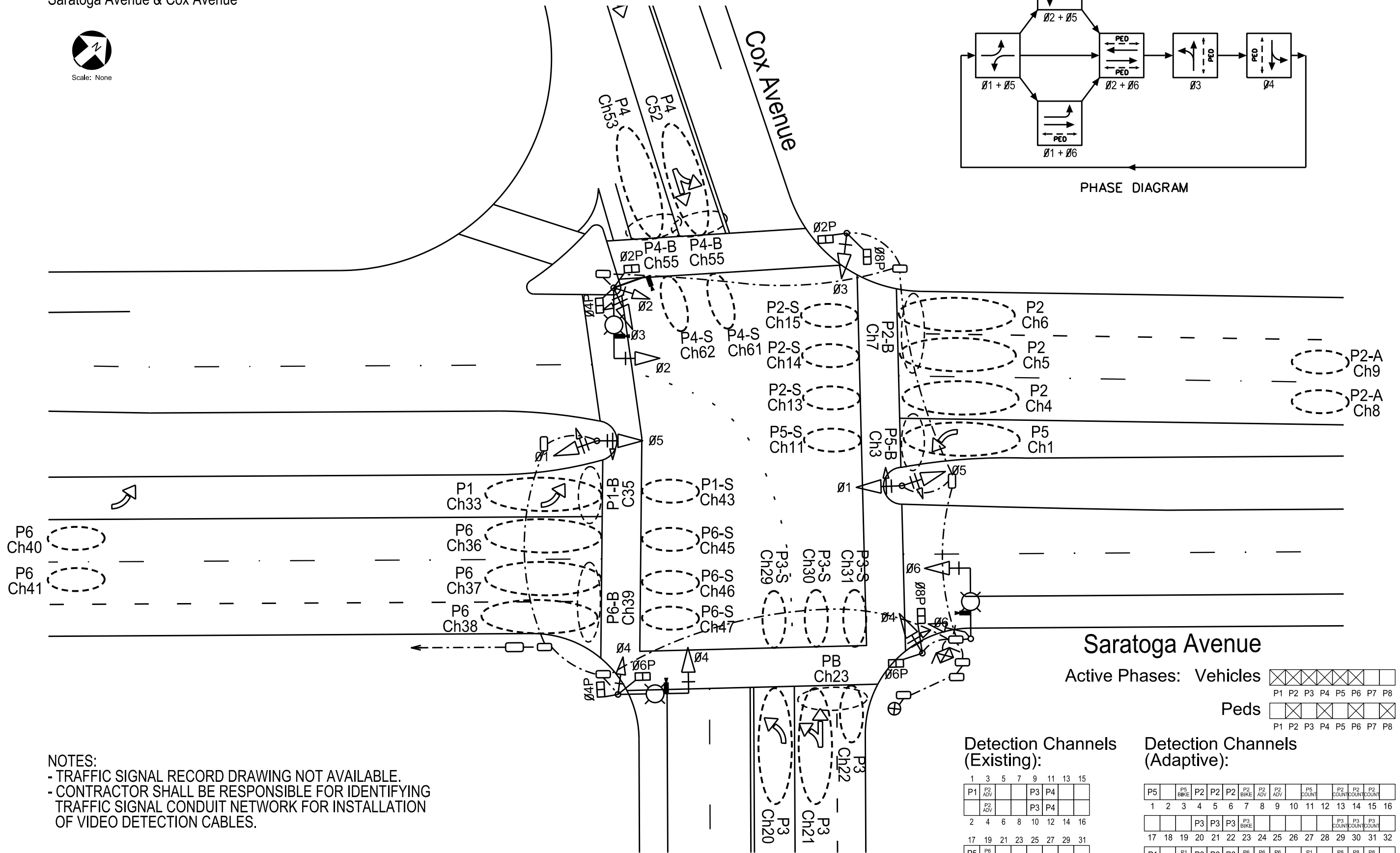
ENGINEER'S STAMP

NO.	DESCRIPTION	DATE	

Node 11-1  
Saratoga Avenue & Cox Avenue



Scale: None



PHASE DIAGRAM

**Saratoga Avenue**

Active Phases: Vehicles  P1  P2  P3  P4  P5  P6  P7  P8

Peds  P1  P2  P3  P4  P5  P6  P7  P8

**NOTES:**  
 - TRAFFIC SIGNAL RECORD DRAWING NOT AVAILABLE.  
 - CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING TRAFFIC SIGNAL CONDUIT NETWORK FOR INSTALLATION OF VIDEO DETECTION CABLES.

**Detection Channels (Existing):**

	1	3	5	7	9	11	13	15
P1							P3	P4
P2							P3	P4
P5								
P6								
	17	19	21	23	25	27	29	31
P5								
P6								
	18	20	22	24	26	28	30	32

No Limit Line Loops for P2 and P6.

**Detection Channels (Adaptive):**

	P5		P6 BIKE	P2	P2	P2	P2 BIKE	P2 ADV	P2 ADV		P5 COUNT	P3 COUNT	P2 COUNT	P2 COUNT		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				P3	P3	P3						P3 COUNT	P3 COUNT	P3 COUNT		
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	P1		P1 BIKE	P6	P6	P6	P6 BIKE	P6 ADV	P6 ADV		P1 COUNT	P8 COUNT	P8 COUNT	P8 COUNT		
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
				P4	P4								P4 COUNT	P4 COUNT		
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

PROJECT NO.	
SCALE:	
SHEET NO.	2 OF 16
DRAWN BY:	J. RODRIGUEZ
REVIEWED BY:	CITY OF SARATOGA
APPROVED BY:	CITY OF SARATOGA

CITY OF SARATOGA  
 SMART CITY SIGNALS  
 IoT TRAFFIC SIGNAL PANEL  
 INSTALLATION  
 SARATOGA AVE & COX AVE

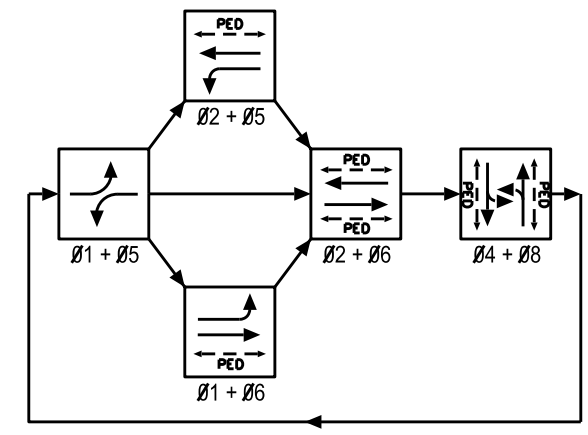
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NO.	DESCRIPTION	REVISIONS	
		DATE	BY

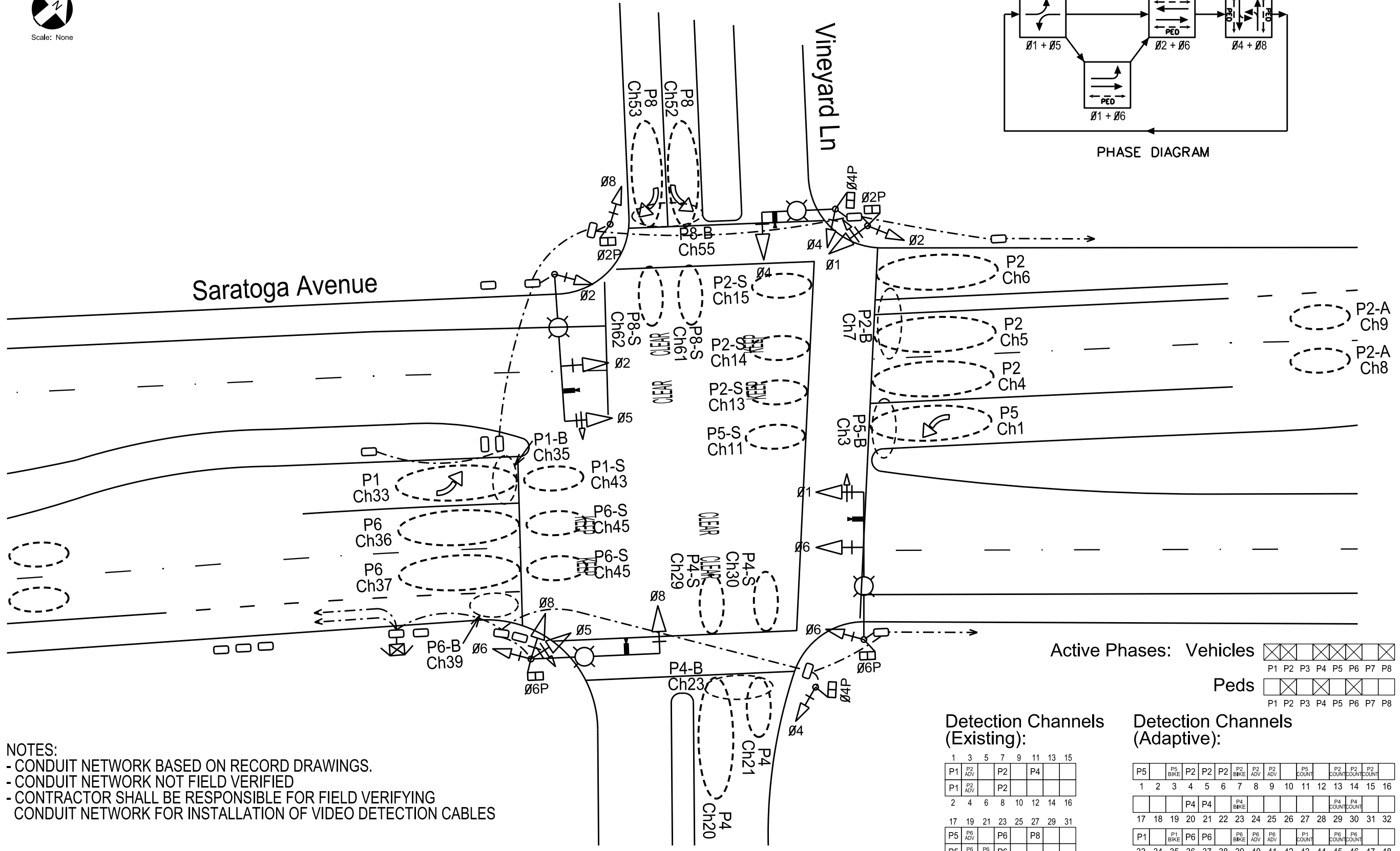
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 O: (408) 916-8141  
 www.trafficpatterns.net  
 Info@trafficpatterns.net



Scale: None



PHASE DIAGRAM



Active Phases: Vehicles

Peds

Detection Channels (Existing):

1	3	5	7	9	11	13	15
P1	P2	P2	P4				
P1	P2	P2					
2	4	6	8	10	12	14	16
17	19	21	23	25	27	29	31
P5	P6	P6	P8				
P5	P6	P6	P6				
18	20	22	24	26	28	30	32

Detection Channels (Adaptive):

P5	P5 BIKE	P2	P2	P2	P2 BIKE	P2 ADV	P2 ADV	P5 COUNT	P2 COUNT	P2 COUNT	P2 COUNT				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			P4	P4								P4 COUNT	P4 COUNT		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
P1	P1 BIKE	P6	P6			P6 BIKE	P6 ADV	P6 ADV	P1 COUNT	P6 COUNT	P6 COUNT				
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
			P8	P8								P8 COUNT	P8 COUNT		
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

NOTES:  
- CONDUIT NETWORK BASED ON RECORD DRAWINGS.  
- CONDUIT NETWORK NOT FIELD VERIFIED  
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING CONDUIT NETWORK FOR INSTALLATION OF VIDEO DETECTION CABLES

CITY OF SARATOGA  
SMART CITY SIGNALS  
IoT TRAFFIC SIGNAL PANEL  
INSTALLATION  
SARATOGA AVE & VINEYARD DR

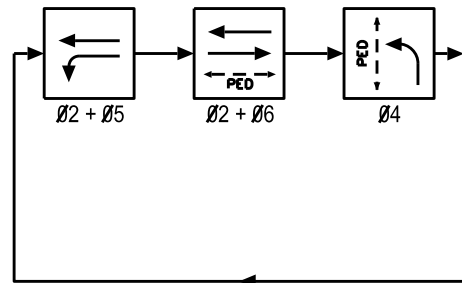
ENGINEER'S STAMP

NO.	DESCRIPTION	DATE

Node 11-3  
Saratoga Avenue & Dagmar Drive



Scale: None



PHASE DIAGRAM

Active Phases: Vehicles

P1 P2 P3 P4 P5 P6 P7 P8

Peds

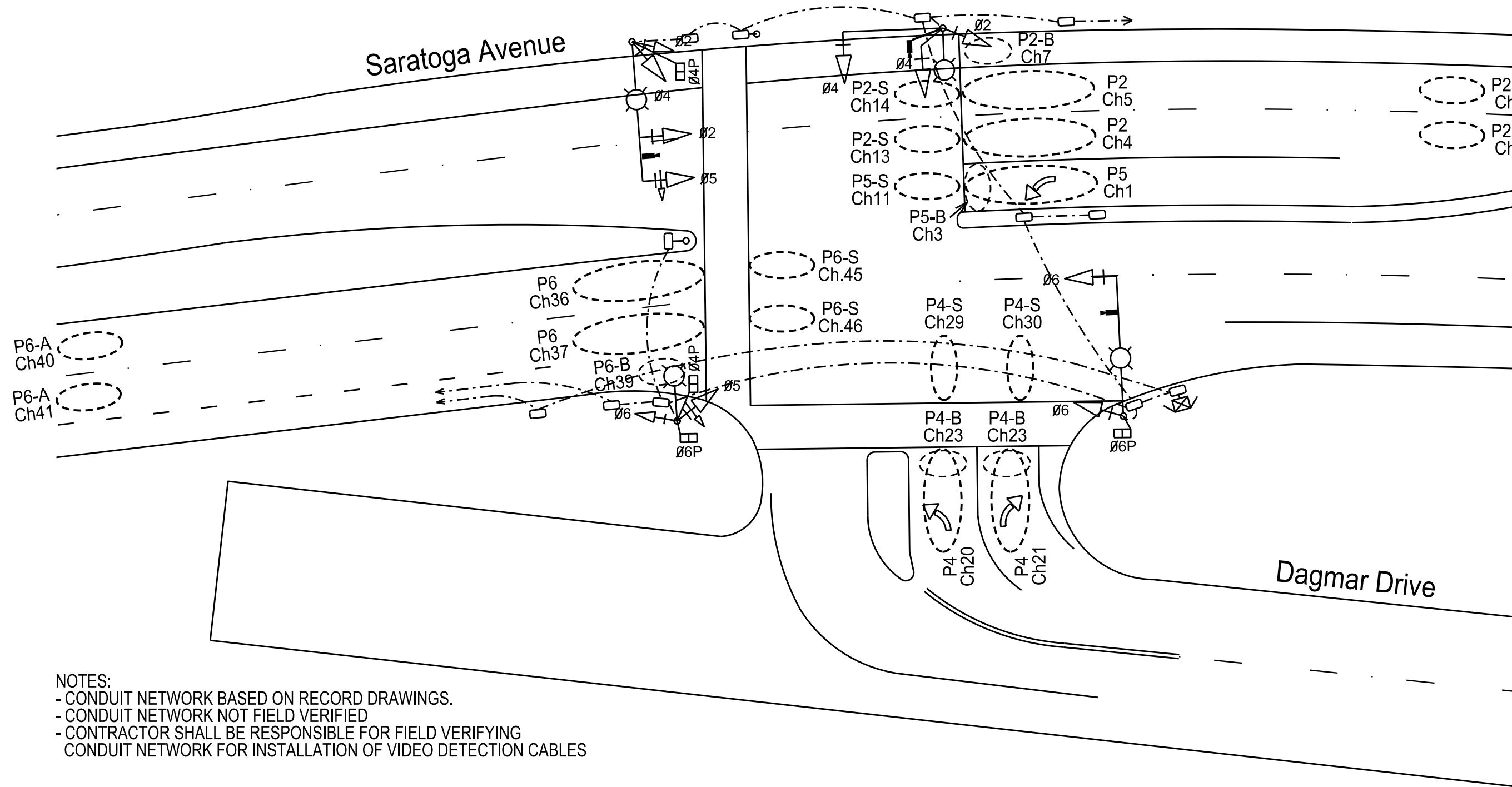
P1 P2 P3 P4 P5 P6 P7 P8

Detection Channels  
(Existing):

1	3	5	7	9	11	13	15
P2 ADV		P2		P4			
P2 ADV		P2		P4			
2	4	6	8	10	12	14	16
17	19	21	23	25	27	29	31
P5		P6					
P6 ADV		P6					
18	20	22	24	26	28	30	32

Detection Channels  
(Adaptive):

P5		P5 BIKE	P2	P2		P2 BIKE	P2 ADV	P2 ADV		P5 COUNT	P2 COUNT	P2 COUNT			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			P4	P4		P4 BIKE						P4 COUNT	P4 COUNT		
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
			P6	P6		P6 BIKE	P6 ADV	P6 ADV				P6 COUNT	P6 COUNT		
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64



- NOTES:
- CONDUIT NETWORK BASED ON RECORD DRAWINGS.
  - CONDUIT NETWORK NOT FIELD VERIFIED
  - CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING CONDUIT NETWORK FOR INSTALLATION OF VIDEO DETECTION CABLES

PROJECT NO. \_\_\_\_\_

SCALE: \_\_\_\_\_

SHEET NO. 4 OF 16

DRAWN BY: J. RODRIGUEZ

REVIEWED BY: CITY OF SARATOGA

APPROVED BY: CITY OF SARATOGA

CITY OF SARATOGA  
SMART CITY SIGNALS  
IoT TRAFFIC SIGNAL PANEL  
INSTALLATION  
SARATOGA AVE & DAGMAR AVE

ENGINEER'S STAMP

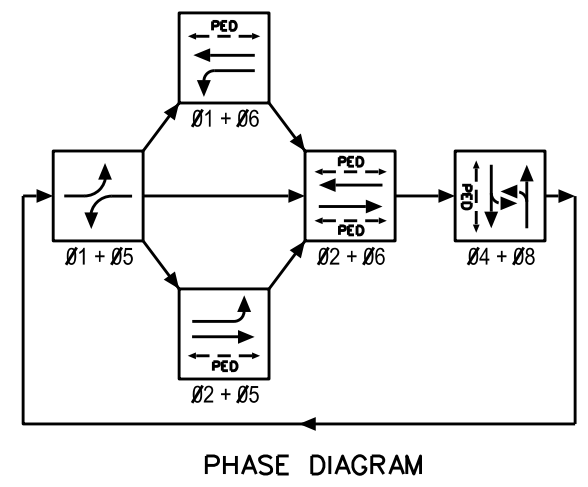
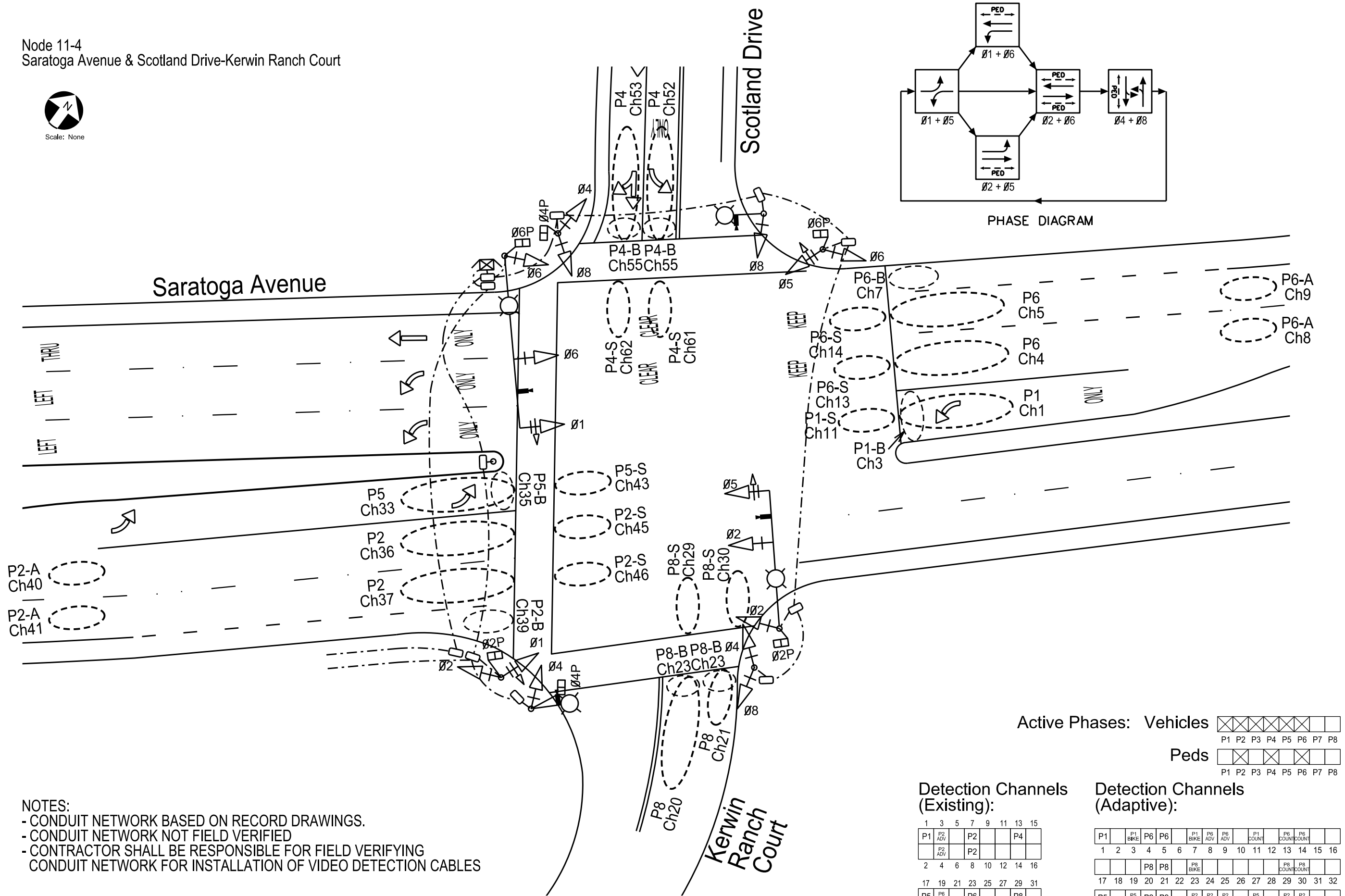
NO.	REVISIONS DESCRIPTION	DATE	

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Info@trafficpatterns.net

Node 11-4  
Saratoga Avenue & Scotland Drive-Kerwin Ranch Court



Scale: None



P2-A Ch40  
P2-A Ch41

P5 Ch33  
P2 Ch36  
P2 Ch37

P5-S Ch43  
P2-S Ch45  
P2-S Ch46

P8-B Ch23  
P8-B Ch23

Kerwin Ranch Court

Active Phases: Vehicles          
 Peds

Detection Channels (Existing):

P1	P2	P4	P8
1	3	5	7
9	11	13	15
2	4	6	8
10	12	14	16
17	19	21	23
25	27	29	31
18	20	22	24
26	28	30	32

Detection Channels (Adaptive):

P1	P1 BIKE	P6	P6	P1 BIKE	P6 ADV	P6 ADV	P1 COUNT	P6 COUNT	P6 COUNT
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16				
			P8	P8	P8 BIKE			P8 COUNT	P8 COUNT
17	18	19	20	21	22	23	24	25	26
27	28	29	30	31	32				
P5	P5 BIKE	P2	P2	P2 BIKE	P2 ADV	P2 ADV	P5 COUNT	P2 COUNT	P2 COUNT
33	34	35	36	37	38	39	40	41	42
43	44	45	46	47	48				
			P4	P4	P4 BIKE			P4 COUNT	P4 COUNT
49	50	51	52	53	54	55	56	57	58
59	60	61	62	63	64				

- NOTES:
- CONDUIT NETWORK BASED ON RECORD DRAWINGS.
  - CONDUIT NETWORK NOT FIELD VERIFIED
  - CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING CONDUIT NETWORK FOR INSTALLATION OF VIDEO DETECTION CABLES

PROJECT NO. \_\_\_\_\_

SCALE: \_\_\_\_\_

SHEET NO. 5 OF 16

DRAWN BY: J. RODRIGUEZ

REVIEWED BY: CITY OF SARATOGA

APPROVED BY: CITY OF SARATOGA

CITY OF SARATOGA  
 SMART CITY SIGNALS  
 IoT TRAFFIC SIGNAL PANEL  
 INSTALLATION  
 SARATOGA AVE & SCOTLAND DR

ENGINEER'S STAMP

REVISIONS

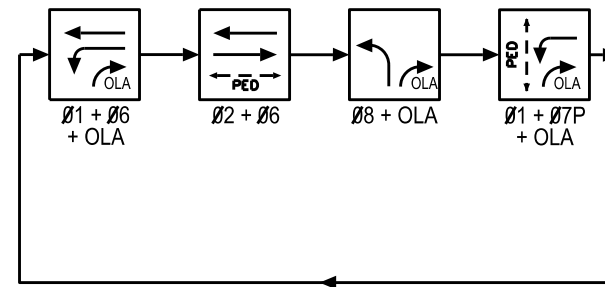
NO.	DESCRIPTION	DATE

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 www.trafficpatterns.net  
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Node 11-5  
Saratoga Avenue & Fruitvale Avenue



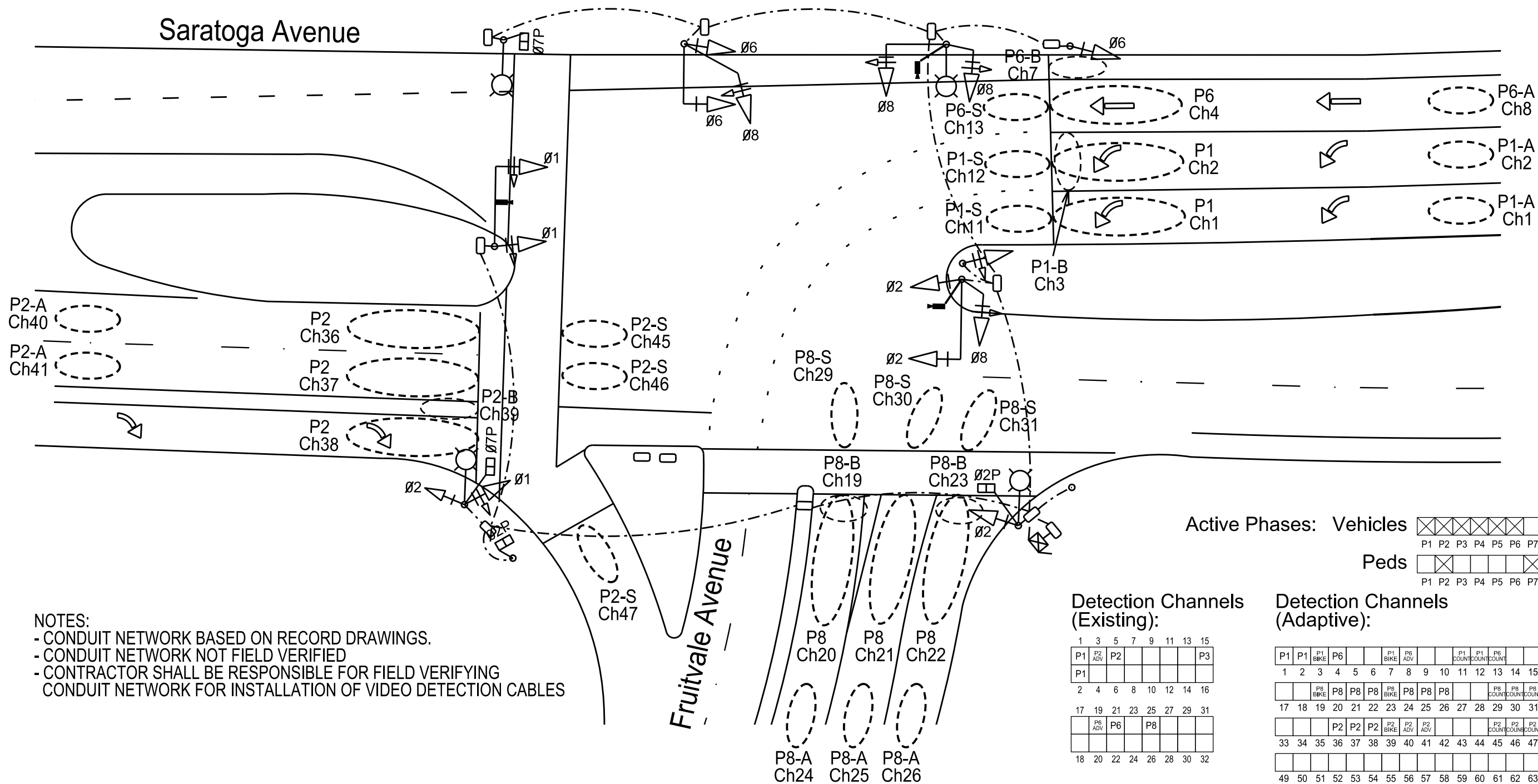
Scale: None



PHASE DIAGRAM

OLA = Ø1 Left Turn + Ø3 Right Turn

Fruitvale Ave Right Turn Driven by Ø3 Load Switch  
but Loop Inputs are on Phase Ø4

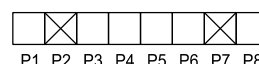


- NOTES:
- CONDUIT NETWORK BASED ON RECORD DRAWINGS.
  - CONDUIT NETWORK NOT FIELD VERIFIED
  - CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING CONDUIT NETWORK FOR INSTALLATION OF VIDEO DETECTION CABLES

Active Phases: Vehicles



Peds



Detection Channels (Existing):

P1	P2	P3	P4	P5	P6	P7	P8								
P1															

Detection Channels (Adaptive):

P1	P1	P1	P6													

PROJECT NO.	
SCALE:	
SHEET NO.	6 OF 16
DRAWN BY:	J. RODRIGUEZ
REVIEWED BY:	CITY OF SARATOGA
APPROVED BY:	CITY OF SARATOGA

CITY OF SARATOGA  
SMART CITY SIGNALS  
IoT TRAFFIC SIGNAL PANEL  
INSTALLATION  
SARATOGA AVE & FRUITVALE AVE

ENGINEER'S STAMP

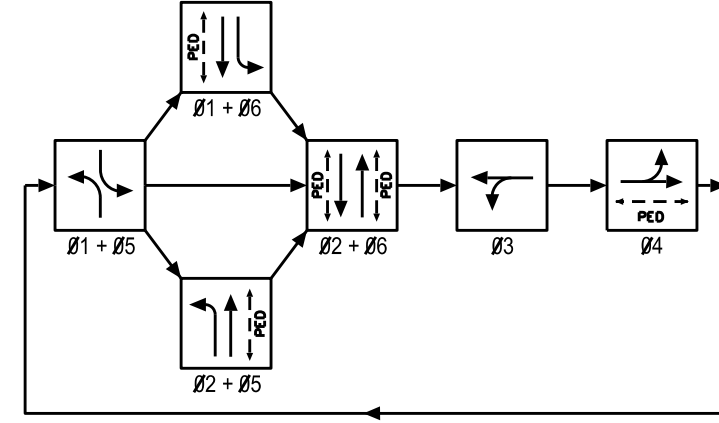
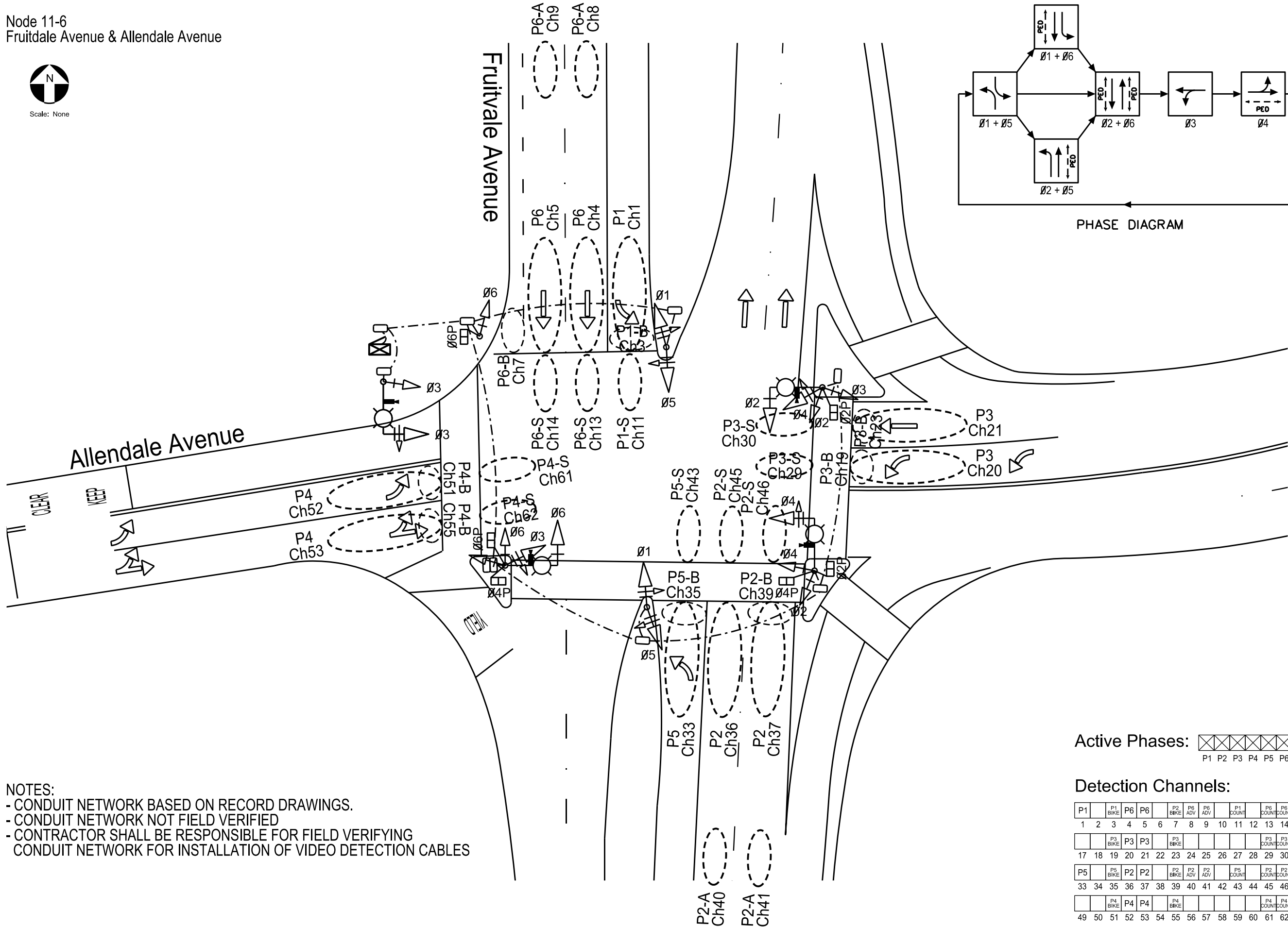
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Node 11-6  
Fruitdale Avenue & Allendale Avenue



Scale: None



PHASE DIAGRAM

- NOTES:
- CONDUIT NETWORK BASED ON RECORD DRAWINGS.
  - CONDUIT NETWORK NOT FIELD VERIFIED
  - CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING CONDUIT NETWORK FOR INSTALLATION OF VIDEO DETECTION CABLES

Active Phases:  P1  P2  P3  P4  P5  P6  P7  P8

Detection Channels:

P1	P1 BIKE	P6	P6	P2 BIKE	P2 ADV	P2 ADV	P1 COUNT	P6 COUNT	P6 COUNT								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
		P3 BIKE	P3	P3									P3 COUNT	P3 COUNT			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32		
P5	P5 BIKE	P2	P2	P2 BIKE	P2 ADV	P2 ADV	P5 COUNT	P2 COUNT	P2 COUNT								
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
		P4 BIKE	P4	P4									P4 COUNT	P4 COUNT			
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64		

PROJECT NO.  
SCALE:  
SHEET NO. 7 OF 16  
DRAWN BY: J. RODRIGUEZ  
REVIEWED BY: CITY OF SARATOGA  
APPROVED BY: CITY OF SARATOGA

CITY OF SARATOGA  
SMART CITY SIGNALS  
IoT TRAFFIC SIGNAL PANEL  
INSTALLATION  
FRUITVALE AVE & ALLENDALE AVE

ENGINEER'S STAMP

NO.	DESCRIPTION	DATE	

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