



TO: Mayor and Councilmembers

FROM: Charles W Ebeling, Public Works Director

CONTACT: Julie Jang, Assistant Engineer

SUBJECT: Approval of Plans for the Traffic Signal at Storke Road and Whittier Drive,
in the City of Goleta

RECOMMENDATIONS:

Approve plans for the construction of new traffic signal improvements at Storke Road and Whittier Drive.

BACKGROUND:

In the County of Santa Barbara and adjacent to the City of Goleta, the Ocean Meadows residential development was approved by the County on December 9, 2020. The Ocean Meadows development constructs 32 single-family residences on Lot 2 (APN 073-090-072) and 6 affordable apartments on Lot 3 (APN 073-090-073). Generally, the development is near the Devereux Slough and in the vicinity of the former Ocean Meadows Golf Course. The apartments will take access from Whittier Drive, a City of Goleta street (See Attachment 1- Vicinity Map).

As a condition of approval, Ocean Meadows Investors, the property owner, must construct a new traffic signal at the intersection of Storke Road and Whittier Drive. The project will improve the level of service at the intersection by reducing the delay experienced on Whittier Drive, and will enhance pedestrian movements across Storke Road

DISCUSSION:

The development approval requires the property owner to install a new traffic signal at the intersection of Storke Road and Whittier Drive. The improvements will be built under an encroachment permit issued by the Public Works Department. While the precise timing is unknown at this time, the engineers for the developer have indicated that the project will be started this calendar year. The intersection improvements must be completed prior to occupancy. The design will allow for interconnection of Storke Road signals at a future date, if so desired.

Given the location of the project, staff recommends City Council approve the plans prior to issuance of the encroachment permit (Attachment 2).

FISCAL IMPACTS:

The applicant, Ocean Meadows Investors, is responsible for all cost associated with the for the improvement at the intersection of Stroke Road and Whittier Drive including traffic signal, curb ramps, signing & striping, and inspection services. The City will be responsible for maintenance once the improvements are completed.

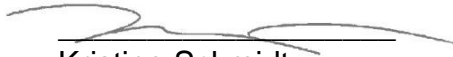
ALTERNATIVES:

The City Council may elect to not approve the intersection improvements at Storke Road and Whittier Drive. This would result in degraded level of service and would not enhance pedestrian crossing of Storke Road.

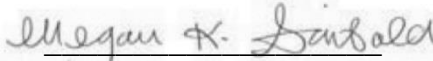
Reviewed By:

Legal Review By:

Approved By:



Kristine Schmidt
Assistant City Manager



Megan Garibaldi
City Attorney



Michelle Greene
City Manager

ATTACHMENTS:

1. Vicinity map
2. Intersection Improvements Plan for Storke Road and Whittier Drive

ATTACHMENT 1

Vicinity Map

ATTACHMENT 1

VICINITY MAP



ATTACHMENT 2

Traffic Signal Improvement Plan for Stroke Road and Whittier Drive

CONDUCTOR SCHEDULE

AWG SIZE OR CABLE TYPE	POLE	CONDUIT RUN & SIZE									
		(N) 3"	(N) 3"	(N) 2-3"	(N) 3"	(N) 3"	(N) 4"	(N) 2-3"	(N) 3"	(N) 3"	(N) 2"
		1	2	3	4	5	6	7	8	9	10
NO. 14 WIRES 12 (a) 3 (b)	POLE (A)	-	-	-	-	1	1	1	-	-	-
	POLE (B)	-	-	-	-	-	1	1	-	-	-
	POLE (C)	-	-	-	-	-	1	1	-	-	-
	POLE (D)	-	1	-	-	-	1	1	-	-	-
	POLE (E)	1	1	-	-	-	1	1	-	-	-
	POLE (F)	-	-	1	1	1	1	1	-	-	-
	POLE (G)	-	-	-	1	1	1	1	-	-	-
TOTAL CABLES-3 CONDUCT/12 CONDUCT		1	2	1	2	3	6	6	-	-	-
NO. 10	LIGHTING	2	2	2	2	2	4	-	4	-	-
NO. 6	SIGNAL POWER	-	-	-	-	-	-	-	3	-	-
VIDEO/POWER CABLE PN-KG-9915	POLE (D)	-	1	-	-	-	1	1	-	-	-
	POLE (E)	1	1	-	-	-	1	1	-	-	-
	POLE (F)	-	-	1	1	1	1	1	-	-	-
	TOTAL	1	2	1	1	1	3	3	-	-	-
6-PR.	INTERCONNECT	-	-	-	-	-	-	-	-	-	-
(c)	SERVICE	-	-	-	-	-	-	-	-	1	-
EMERGENCY VEHICLE PREEMPTION (EVP)		-	-	-	-	-	1	1	-	-	-
CONDUIT FILL PERCENTAGE		5%	9%	3%	9%	14%	16%	15%	2%	3%	2%

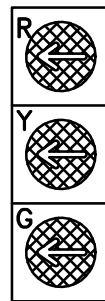
NOTES

- (a) 12-CONDUCTOR CABLES SHALL BE RUN WITHOUT SPLICES FROM CONTROLLER TO TERMINAL BOX ON POLE.
- (b) 3-CONDUCTOR CABLES SHALL BE RUN FROM CONTROLLER TO PEDESTRIAN PUSHBUTTON TERMINALS ON POLES.
- (c) SERVICE CONDUCTORS SHALL BE FURNISHED AND INSTALLED BY THE SERVING UTILITY.

ALL CONDUCTORS SHALL BE LABELED BY POLE & PHASE IN CONTROLLER CABINET AND EACH PULL BOX.

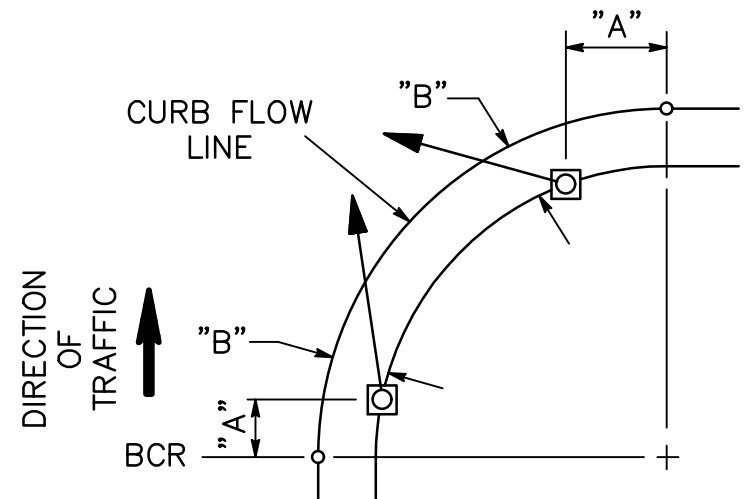
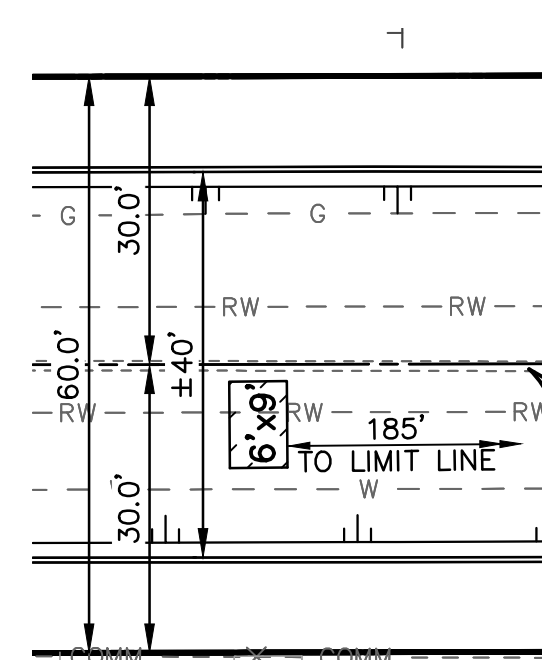
CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT NUMBER OF CONDUCTORS FOR THE INTENDED OPERATION.

ALL CITY ELECTRICAL SYSTEM CONDUITS SHALL BE PLACED IN TRENCH PER SANTA BARBARA COUNTY ENGINEERING DESIGN STANDARDS 2-030.



DETAIL "A"

12" 3-SECTION VEHICLE HEAD



POLE LOCATION DETAIL

EXACT LOCATION TO BE DETERMINED BY CITY TRAFFIC ENGINEER

POLE SCHEDULE

POLE NO.	SIGNAL STANDARD				SIGNAL MOUNTING			PEDESTRIAN PUSH BUTTON			SIGNS			POLE LOCATION (SEE POLE LOCATION DETAIL)		NOTES
	TYPE	MAST ARM		LUMINAIRE *	VEHICLE		PEDESTRIAN **	PHASE	ARROW	QUAD	POLE MTD	MAST ARM	S.N.S. ***	A	B	
		SIG.	LUM.		POLE	MT'G										
(A)	15TS	—	15'	GE EVOLVE	—	—	SP-1-T	6	←	E	—	—	—	7.4'	3.0'	<div>4</div>
(B)	PBAP	—	—	—	—	—	—	4	→	S	—	—	—	7.6'	10'	
(C)	1-A	—	—	—	TV-2-T	—	SP-1-T	—	—	—	—	—	—	0.8'	2.5'	
(D)	24-4-100	35'	15'	GE EVOLVE	SV-2-T	2-MAS	SP-1-T	4	←	S	—	R73-3(CA)	Whittier Dr	—	10'	<div>4</div> <div>S</div> <div>IS</div> F=12'
(E)	19-3-100	25'	15'	GE EVOLVE	SV-2-T	MAS	SP-1-T	4	→	N	—	R73-6(CA)	Storke Rd	—	10'	<div>4</div> <div>S</div> <div>IS</div>
(F)	19-3-100	25'	15'	GE EVOLVE	SV-1-T	MAS	SP-1-T	4	←	N	—	R3-18	Whittier Dr	8.5'	2.5'	<div>4</div> <div>S</div> <div>IS</div>
(G)	1-A-7'	—	—	—	—	—	TP-1-T	6	→	E	—	—	—	8.9'	4.8'	

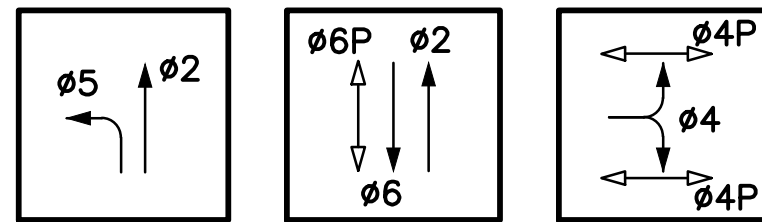
* GE EVOLVE (PART ERL2021C330AGRAYBL054)
** ALL PEDESTRIAN INDICATIONS SHALL BE COUNTDOWN TYPE.
*** 8" UPPER CASE & 6" LOWER CASE LETTERS.

GENERAL NOTES

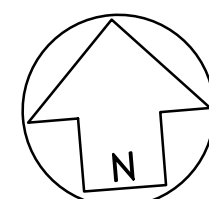
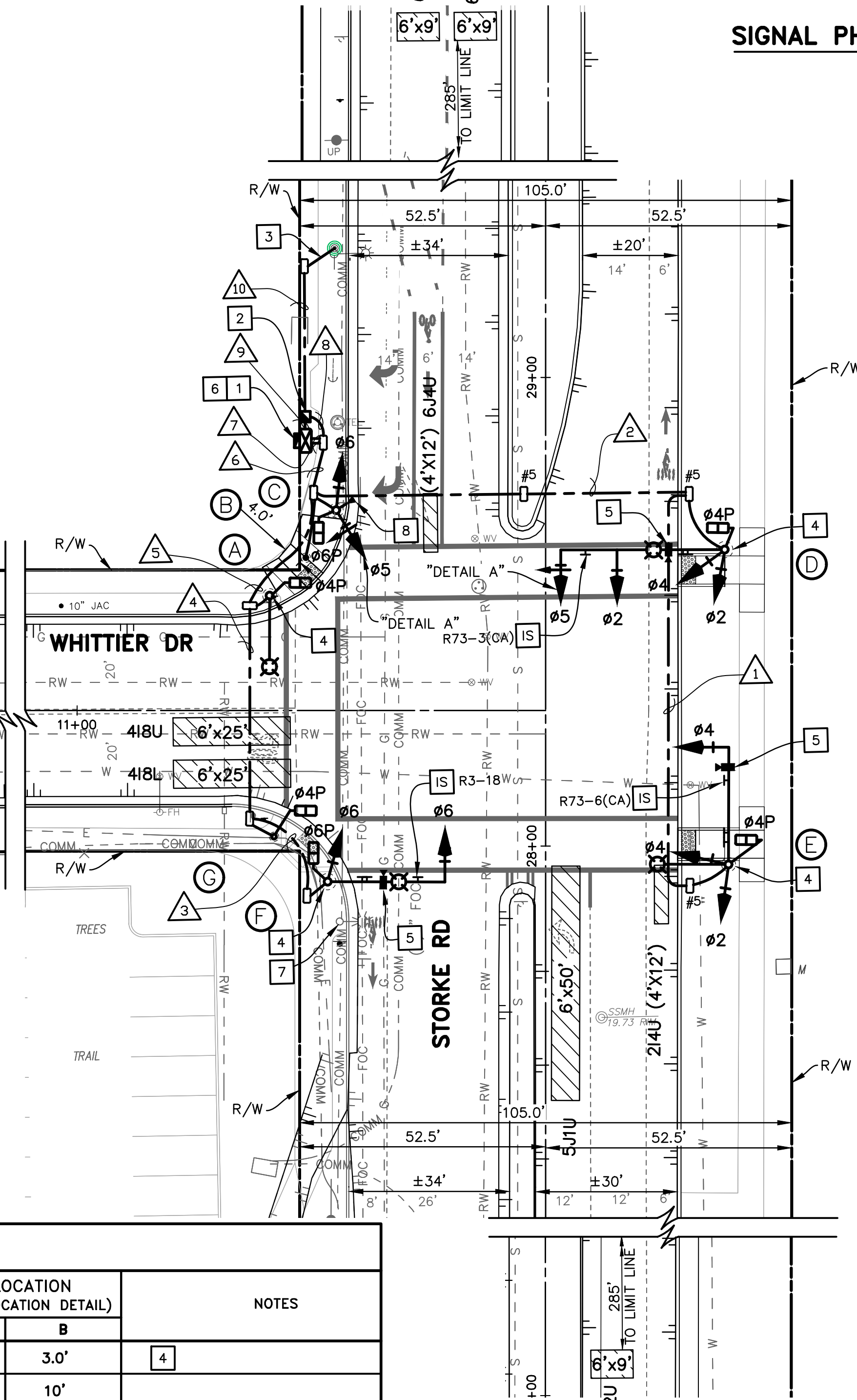
- ALL ITEMS TO BE FURNISHED AND ALL WORK TO BE DONE SHALL CONFORM TO SECTION 86 "ELECTRICAL SYSTEMS" OF THE 2018 STATE OF CALIFORNIA, STANDARD SPECIFICATIONS AND STANDARD PLANS AS MOST RECENTLY REVISED.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL UTILITY COMPANIES 48 HOURS IN ADVANCE OF CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL PHASES OF CONSTRUCTION.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE MADE BY A SEARCH OF THE RECORDS; HOWEVER, NO GUARANTEE IS MADE THAT ALL SUBSTRUCTURES OR THAT THE LOCATIONS SHOWN ARE EXACT. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES INCLUDING THOSE NOT SHOWN OR THOSE NOT OF RECORD. CALL "UNDERGROUND SERVICE ALERT" 811. CONTRACTOR WILL VERIFY THE LOCATION OF THE UTILITIES BEFORE INSTALLING FOUNDATIONS. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REALIGNMENT OF ANY UNDERGROUND UTILITIES DAMAGED BY HIS OPERATIONS.
- ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE MCCAIN TRAFFIC. ALL SIGNAL HEADS SHALL BE 12" AND HAVE BLACK LOUVERED RETROREFLECTIVE BACKPLATES, VISORS SHALL BE TUNNEL TYPE, AND FRAMEWORK SHALL BE ALUMINUM.
- NO PULL BOXES SHALL BE LOCATED IN ANY WHEELCHAIR RAMP. ALL NEW PULL BOXES SHALL BE NO. 6 UNLESS OTHERWISE NOTED. INSTALL PULL BOXES NO. 5 FOR POLES D & E.
- ALL VEHICLE AND PEDESTRIAN INDICATIONS SHALL BE LED PER STATE STANDARDS. PEDESTRIAN SIGNAL SHALL BE COUNTDOWN TYPE.
- THE LOCATION OF ALL TRAFFIC SIGNAL EQUIPMENT (INCL. PULL BOXES) SHALL BE APPROVED BY CITY INSPECTOR PRIOR TO CONSTRUCTION.
- CONSTRUCTION INVOLVING LANE CLOSURES SHALL BE RESTRICTED TO 9 AM TO 3 PM. CITY INSPECTOR MAY APPROVE EXPANDED WORK HOURS SUBJECT TO TRAFFIC CONDITIONS.
- MANUFACTURE'S REPRESENTATIVE FOR VEHICLE DETECTION SYSTEM SHALL BE PRESENT TO POSITION AND CONFIGURE SENSORS AT SIGNAL TURN-ON.
- SOUTHERN CALIFORNIA EDISON SERVICE POWER SOURCE. ARRANGE WITH SOUTHERN CALIFORNIA EDISON SERVICE PLANNER SHAWN LEE (805) 535-5901.
- INSTALL CAMERA AND BRACKET PER CALTRANS STANDARD PLAN ES-7R.
- ALL SIGN NUMBERS REFER TO 2014 CALIFORNIA MUTCD (REV. 6).
- ALL LEGENDS, NOTES AND ABBREVIATIONS REFER TO CALTRANS STANDARD PLANS ES-1A, ES-1B AND ES-1C.
- INSTALL AUDIBLE APS/PER ADA/PROWAG. CITY'S APS REPRESENTATIVE TO BE PRESENT FOR SIGNAL TURN-ON.

CONSTRUCTION NOTES

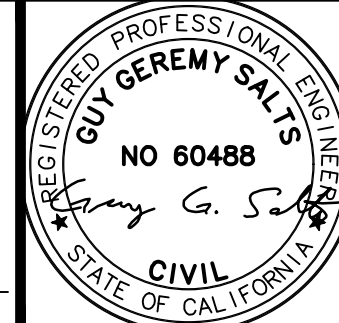
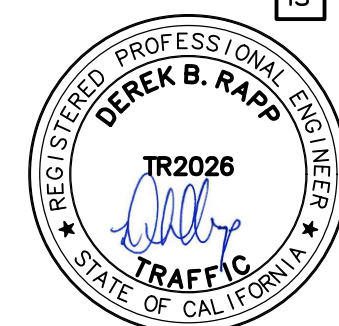
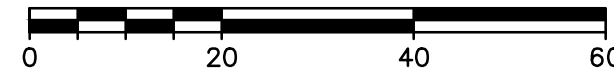
- FURNISH AND INSTALL MCCAIN OR APPROVED EQUAL TYPE 332L CONTROLLER CABINET ON NEW FOUNDATION WITH FRONT AND REAR LIGHTS, DOUBLE FANS, DOCUMENT DRAWER, MODEL 2070 CONTROLLER, 2030 PROGRAM, 2010ECL CONFLICT MONITOR, BATTERY BACKUP SYSTEM, AND PERIPHERAL COMPONENTS PER MANUFACTURER'S RECOMMENDATION TO PROVIDE THE INTENDED OPERATION.
- FURNISH AND INSTALL TYPE IIIBF 100, 120/240V, SINGLE PHASE SERVICE PEDESTAL IN 3R ENCLOSURE, WITH ONE 100A, 3P, 240V BREAKER, ONE 50A, 1P, 120V BREAKER AND ONE 30A, 2P, 240V BREAKER.
- INSTALL 3 INCH CONDUIT FROM SOUTHERN CALIFORNIA EDISON (SCE) POINT OF SERVICE TO NEW TYPE III BF SERVICE. DEPTH OF CONDUIT SHALL BE 42" MINIMUM. COORDINATE REMOVAL OF UTILITY POLE-MOUNTED LUMINAIRE WITH SCE.
- POT HOLE PROPOSED POLE LOCATION PRIOR TO ORDERING EQUIPMENT TO CONFIRM NO UTILITY CONFLICTS.
- INSTALL FLIR THERMAL SENSOR ON SIGNAL MAST ARM (POLE E) AND LUMINAIRE MAST-ARM (POLE D & F) AS SHOWN. SENSOR ON SIGNAL MAST ARM SHALL BE MOUNTED WITH PELCO MOUNTING BRACKET. THERMAL SENSORS SHALL BE FLIR FC-344 T2. INSTALL COMMUNICATIONS MODULE IN CONTROLLER CABINET. SEE SPECIAL PROVISIONS FOR EQUIPMENT LIST AND INSTALLATION REQUIREMENTS. RUN 5 IN 1 SIAMESE CABLE FROM SENSOR HOUSING DIRECTLY TO VIP-3D.1 PROCESSING CARD IN CONTROLLER CABINET.
- FURNISH AND INSTALL BATTERY BACK UP SYSTEM IN EXTERNAL CABINET PER PROJECT SPECIFICATIONS.
- REMOVE STREET LIGHT.
- FURNISH AND INSTALL OPTICOM MODEL 3100 PREEMPTION RADIO/GPS UNIT ON POLE WITH PELCO BRACKET. INSTALL PHASE SELECTOR (MODEL 764) AND AUXILIARY INTERFACE PANEL (MODEL 768). HARDWARE CONNECTED DIRECTLY TO TRAFFIC SIGNAL CONTROLLER PREEMPTION INPUT IN CONTROLLER CABINET.
- INSTALL SIGN ON TRAFFIC SIGNAL AS NOTED.



SIGNAL PHASE DIAGRAM



SCALE: 1"=20'



TRAFFIC SIGNAL PLAN

INTERSECTION IMPROVEMENT PLANS
STORKE ROAD AND WHITTIER DRIVE

CITY OF GOLETA, CA

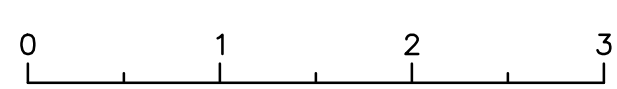
STANTEC PROJECT NO.
2064157800

SHEET
3 OF 4

PLAN DATE
2/10/2022



FOR REDUCED PLANS
ORIGINAL SCALE IN INCHES



NO.	DATE	REVISION BLOCK	APPD.

PREPARED FOR:
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GUY GEREMY SALTS 60488 6/30/2022
PROJECT ENGINEER R.C.E. EXP. DATE