CONDUIT SIZING

CONDUCTOR	EQUIVALENT NUMBER OF #14 A.W.G. CONDUCTORS FOR USE IN CONDUIT SIZING		
#12 CONDUCTOR	1.2		
#10 CONDUCTOR	1.5		
#8 CONDUCTOR	2.3		
#6 CONDUCTOR	3		
#4 CONDUCTOR	4		
#2 CONDUCTOR	5.3		
#0 CONDUCTOR	11.5		
INTERCONNECT CABLE	18		
DETECTOR LEAD-IN CABLE	2.5		
EMERGENCY VEHICLE DETECTOR CABLE	2		

CONDUIT SIZE	1"	1.5"	2"	2.5"	3"	3.5"	4"
MAXIMUM NUMBER OF #14 A.W.G CONDUCTORS	8	19	31	44	69	91	113

NOTE: MINIMUM SIZE FOR NEW CONDUITS IS 1.5".

SERVICE WIRE MAXIMUM LENGTHS FOR TRAFFIC SIGNALS

WIRE SIZE	LENGTH		
#0	576'		
#2	360'		
#4	224'		

CIRCUIT BREAKER SIZING

CONDUCTOR SIZE A.W.G.	MAXIMUM CIRCUIT BREAKER AMPERAGE		
#2	100		
#4	80		
#6	50		
#8	40		
#10	30		

THE BREAKER SIZE SHALL BE DETERMINED BY THE LOAD REQUIREMENTS. MINIMUM BREAKER SIZE IS 30 AMPS.

NOTE

DATE: 09/22/2017		NOT TO SCALE		CITY OF ELK GROVE - PUBLIC WORKS		10/24/2018	
REVISION	BY	APP	ROVED	DATE		CITY ENGINEER	DATE
					CONDUIT, SERVICE WIRE AND BREAKER SIZING	DRAWING	_