



UNDERGROUND CABLE REQUIREMENTS

UG	CABLE DESCRIPTION	FROM - TO
1	1ea. 2C#6 AWG TWISTED PAIR	HOUSE TO TRACK CONNECTION BOX T1 & T2
2	1ea. 2C#6 AWG TWISTED PAIR	HOUSE TO TRACK CONNECTION BOX R1 & R2
3	1ea. 5C#6 AWG & 1ea. 9C#9 AWG	HOUSE TO SIGNAL "A"
4	1ea. 5C#6 AWG & 1ea. 9C#9 AWG	HOUSE TO SIGNAL "B"
5	1ea. 3C#4 AWG WITH #8 GND	HOUSE TO AC POWER SERVICE

WARNING TIME/APPROACH DISTANCE CALCULATIONS

TIME DESCRIPTION	VALUE
MINIMUM TIME (MT)	35 SEC.
PLUS CLEARANCE TIME (CT)	0 SEC.
PLUS EXIT GATE CLEARANCE TIME (EGCT)	0 SEC.
EQUALS PRESCRIBED/MINIMUM WARNING TIME	
PLUS BUFFER TIME (BT)	0 SEC.
PLUS EQUIPMENT RESPONSE TIME - ACQUISITION (ERT-A)	5 SEC.
PLUS EQUIPMENT RESPONSE TIME - CONTROL (ERT-C)	3 SEC.
PLUS EQUIPMENT RESPONSE TIME - DELAY (ERT-D)	3 SEC.
PLUS ADVANCE PREEMPTION TIME (APT)	0 SEC.
EQUALS SYSTEM DESIGN TIME	
	46 SEC.

TOTAL APPROACH DISTANCE (FEET) = SYSTEM DESIGN TIME (SEC.) * MAS (MPH) * 1.47 ([FT./SEC.]/MPH)
 = 46 SEC. * 59 MPH * 1.47 [FT./SEC.]/MPH
 = 3,990 FEET (CALCULATED PER AREMA C&S MANUAL PART 3.3.10)

PROJECT NAME: NEW HAVEN
 PROJECT NUMBER: STP. 2035 (19)
 FILE NAME: CROSSING LAYOUT PLAN.dgn PLOT DATE: 02/15/17
 PROJECT LEADER: DRAWN BY: J.L.S.
 DESIGNED BY: D.W.S. CHECKED BY: K.N.
 SIGNAL PLANS-CROSSING LAYOUT PLAN SHEET 33 OF 42