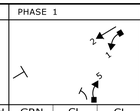
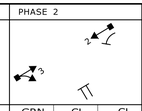
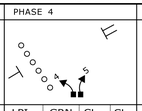
Town of Ledyard, Connecticut
RFP/RFQ #2021-02: Engineering Services for Ledyard High School Pathway Project

Addendum #2

September 21, 2020

See attached preliminary CT DOT Traffic Control Signal Plan Intersection 071-212 plan.

MOVEMENT DIAGRAM

	NTOR	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	
	NONE									

FACE #		FLASH	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	LPI	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL
	1	Y	←G	~~↓Y~~ G	G	G	Y	R				R	R	R	R												
	2	Y	G	G	G	G	Y	R				R	R	R	R												
	3	Y	R	R	R	G	Y	R				R	R	R	R												
	4	R	R	R	R	R	R	R				R	G	Y	R												
	5	R	R→	R ~~↓Y~~→	R	R	R	R				R	G	Y	R												
	P	OFF	← DW →			← DW →						WØ	← DW →														

INTERVALS																										
	MIN GRN	5			15							9														
	WALK											4 ① 3 ①														
	PED CLR											11 ②		ACCESSIBLE PEDESTRIAN SIGNAL												
	VEH EXT	2.0			2.5							2.0														
	MAX 1	10			40							17														
	MAX 2	15			50							25														
	YELLOW		3.0			4.2							3.3													
	RED			1.0			1.5							1.0												
	ADD INIT																									
	MAX INIT													COUNTDOWN PEDESTRIAN SIGNAL												
	TBR																									
	TTR																									
	MIN GAP																									
	MODE	NON-LOCK			MIN RECALL			OFF			NON-LOCK				OFF			OFF			OFF			OFF		
	INIT START				THIS PHASE																					

DETECTORS

IDENT	SIZE (WXL)	TYPE	MODE
D1	6' X 31'	VIDEO 360	PRESENCE
D2	6'X6'	VIDEO-THERM	PRESENCE
D2A	6'X6'	VIDEO-THERM	PRESENCE
D2B	6'X6'	VIDEO-THERM	PRESENCE
D2C	6'X6'	VIDEO-THERM	PRESENCE
D4	6'X44'	VIDEO 360	PRESENCE
D4	SEE PLAN	VIDEO 360	8" DELAY

SYSTEM LOC
MASTER

COORDINATION TYPE: NONE

PROGRAM FUNCTION	PROGRAM TIME	PROGRAM DAYS	CYCLE	OFFSET SEC	OFFSET %
FLASH	NONE				
MAX 1	ALL OTHER TIMES				
MAX 2					
	0700-0900	M-SAT			
	1530-1800				

TECHNICAL NOTES

STANDARD OVERLAP SKIP FEATURES APPLY

① PERCUSSIVE TONE ONLY DURING PEDESTRIAN WALK INTERVAL.

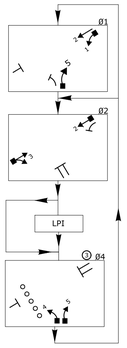
② COUNTDOWN ONLY DURING FLASHING PEDESTRIAN CHANGE INTERVAL.

③ CONCURRENT PED PHASE ONLY COMES IN WHEN ACTUATED BY PUSHBUTTON.
PHASE 2 ON TO OMIT PHASE 1

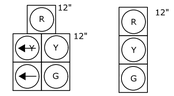
OFFICE RECORD

REV # | TIR # N/A | SM # N/A | SIGNAL REVISED:

REPLACED TRAFFIC CONTROL SIGNAL EQUIPMENT UNDER STATE PROJECT NO. 0172-0476.

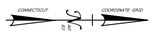


SIGNAL FACES



ALL INDICATIONS HAVE LED LAMPS.

ALL VEHICULAR SIGNAL FACES HAVE BACKPLATES WITH YELLOW RETROREFLECTIVE BORDER.



CONSTRUCTION NOTES:

ALL TRAFFIC SIGNAL EQUIPMENT IS NEW.

STATE FORCES TO STAKE ALL R.O.W PRIOR TO EXCAVATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ANY PROPOSED REVISIONS TO THE LOCATION OF THE APPURTENANCES SHOWN ON THE PLAN MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE DIVISION OF TRAFFIC ENGINEERING PRIOR TO INSTALLATION.

THE LOCATION OF TRAFFIC SIGNAL FOUNDATIONS WHEN IN OR ADJACENT TO SIDEWALKS SHALL BE VERIFIED PRIOR TO INSTALLATION TO PROVIDE A FREE PATH OF NOT LESS THAN 4 FEET. IF A MINIMUM 4 FOOT FREE PATH IS UNAVAILABLE NOTIFY THE ENGINEER AND CONTACT THE DIVISION OF TRAFFIC ENGINEERING.

REMOVE ALL ABANDONED TRAFFIC SIGNAL EQUIPMENT PER SPECIAL PROVISION.

INSTALL PEDESTAL FOUNDATIONS ADJACENT TO LANDING AREAS.

(E) CONSTRUCT TYPE 13 SIDEWALK RAMP PER GUIDE SHEETS.

(F) TRIM TREE BRANCHES/VEGETATION TO _____. WORK TO BE PAID UNDER ITEM NO. 0952001A SELECTIVE CLEARING AND THINNING.

(G) INSTALL SPAN POLE FOUNDATION ADJACENT TO AND ~~WITH~~ WITHIN R.O.W.

(H) CONSTRUCT TYPE 13 SIDEWALK RAMP PER GUIDE SHEETS. INSTALL CONCRETE SIDEWALK TO CONNECT LANDING AREA TO EXISTING SIDEWALK TO THE SOUTH.

(W) INSTALL 30" X 30" HANDHOLE.

(X) VIDEO DETECTION BY USE OF VIDEO-THERMAL AND 360 DEGREE CAMERAS MOUNTED ON LIGHT STANDARD(15' BRACKET, 30' MOUNTING HEIGHT) ALUMINUM.

(Y) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON SPAN POLE 071-212-B.

INSTALL RISER ON UTILITY POLE SNET 5650.

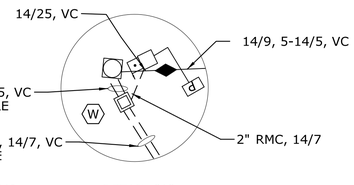
COORDINATE WITH UTILITY COMPANY REPRESENTATIVES LISTED IN THE SPECIAL PROVISION, 1.07 - LEGAL RELATIONS AND RESPONSIBILITIES.

COORDINATE AND SCHEDULE THE FOLLOWING WORK BY FRONTIER:
* REPLACE UTILITY POLE AT&T 6241 WITH A 45' CLASS 2 POLE.
* REPLACE UTILITY POLE SNET 5650 WITH A 45' CLASS 2 POLE.
* REPLACE UTILITY POLE SNET 5649 WITH A 45' CLASS 2 POLE.
* ATTACH HANGING COMMUNICATION WIRES TO UTILITY POLE FRONTIER 7328

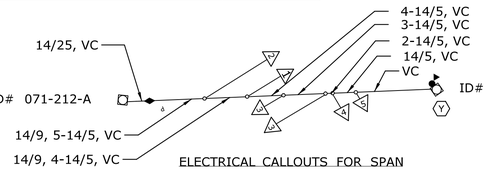
COORDINATE AND SCHEDULE THE FOLLOWING WORK BY EVERSOURCE:
* RELOCATE OVERHEAD FACILITIES ON UTILITY POLE AT&T 6241 AFTER FRONTIER POLE CHANGES.
* RELOCATE OVERHEAD FACILITIES ON UTILITY POLE SNET 5650 AFTER FRONTIER POLE CHANGES.
* RELOCATE OVERHEAD FACILITIES ON UTILITY POLE SNET 5649 AFTER FRONTIER POLE CHANGES.

VIDEO DETECTOR LOCATIONS ARE FOR ILLUSTRATION ONLY. EXACT LOCATIONS SHALL BE DETERMINED BY THE MANUFACTURER OR HIS DESIGNATED REPRESENTATIVE. DETECTOR CABLES ARE TO BE INSTALLED CONTINUOUS BETWEEN EACH DETECTOR AND THE CONTROLLER CABINET.

INSTALL CABLE CLOSURE (TYPE A) AND INTERCONNECT CABLE.



DETAIL "A"
SCALE 1"=20'



ELECTRICAL CALLOUTS FOR SPAN

SIGN LEGEND:

(A) INSTALL NEW 31-1626 (TURNING VEHICLES / YIELD TO)

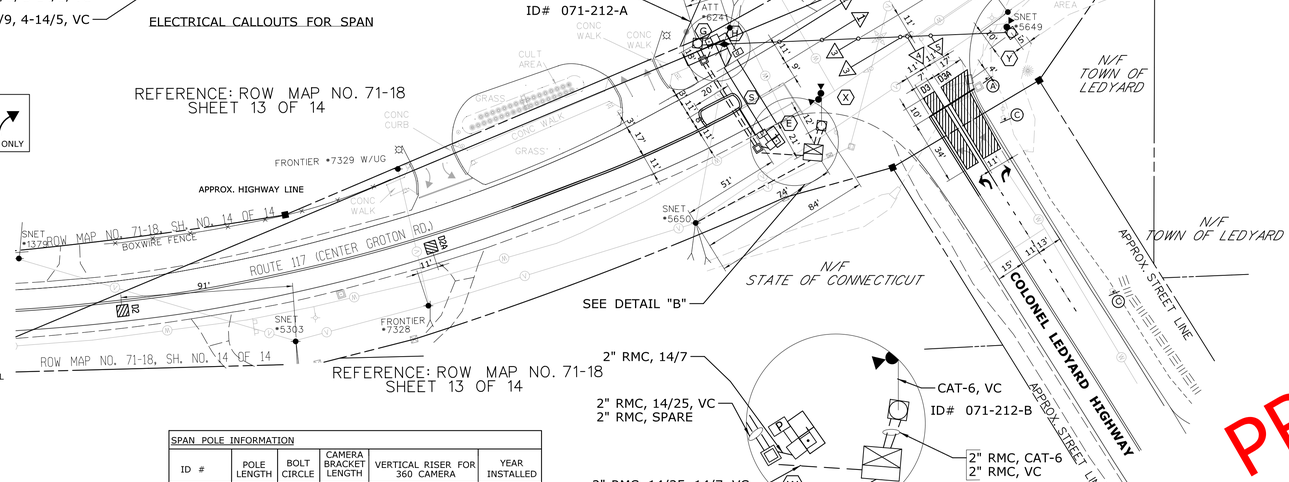
(B) REPLACE EXISTING (ONLY) WITH 31-0222 (ONLY)

(C) REPLACE EXISTING (ONLY ONLY) WITH 31-0290 (ONLY ONLY)

(D) INTALL NEW 31-0222 (ONLY)

REFERENCE: ROW MAP NO. 71-18
SHEET 14 OF 14

REFERENCE: ROW MAP NO. 71-18
SHEET 13 OF 14



REFERENCE: ROW MAP NO. 71-18
SHEET 13 OF 14

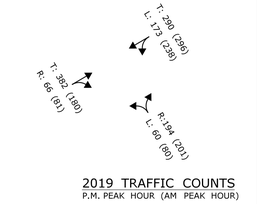
REFERENCE: ROW MAP NO. 71-18
SHEET 14 OF 14

DETAIL "B"
SCALE 1"=20'

CONTRACTOR TO REVISE PAVEMENT MARKINGS AS INDICATED BELOW

INSTALL NEW CROSSWALK ON ON RT. 117 ~~SB.~~ SOUTH LEG.
ERADICATE AND INSTALL STOP BAR ON RT. 117 ~~NORTH LEG.~~ SOUTH LEG. ERADICATE PORTIONS OF EXISTING CENTERLINE AND EDGE LINE THAT EXTEND BEYOND NEW STOP BAR.
REPAINT TURN ARROWS ON RT. 117 ~~SB.~~ NORTH LEG.
REPAINT STOP BAR ON RT. 117 ~~NB.~~ AND ON COLONEL LEDYARD HIGHWAY ~~WB.~~
NORTH LEG
EAST LEG

PRELIMINARY



2019 TRAFFIC COUNTS
P.M. PEAK HOUR (AM PEAK HOUR)

NOTES:

STATE TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON ROUTE 117 (COLONEL LEDYARD HWY) AND ALL STOP BARS.

TOWN TO MAINTAIN SIGNS AND ALL OTHER PAVEMENT MARKINGS ON COLONEL LEDYARD HIGHWAY.

OTHERS TO MAINTAIN ALL SIGNS AND PAVEMENT MARKINGS ON RETAIL AND PRIVATE DRIVEWAY.

(S) BAR TYPE CROSSWALK - STATE MAINTAINED.

THE TOWN OF LEDYARD OWNS AND MAINTAINS THE EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT.

(W) INSTALL 30" X 30" HANDHOLE.

(X) VIDEO DETECTION BY USE OF VIDEO-THERMAL AND 360 DEGREE CAMERAS MOUNTED ON LIGHT STANDARD (15' BRACKET, 30' MOUNTING HEIGHT) ALUMINUM.

(Y) VIDEO DETECTION BY USE OF VIDEO-THERMAL CAMERA MOUNTED ON SPAN POLE 071-212-B.

SPAN POLE INFORMATION

ID #	POLE LENGTH	BOLT CIRCLE	CAMERA BRACKET LENGTH	VERTICAL RISER FOR 360 CAMERA	YEAR INSTALLED
071-212-A	34'	24"	N/A	N/A	-
071-212-B	30'	24"	N/A	N/A	-
-	-	-	-		-
-	-	-	-		-

	TRAFFIC DESIGN	ELECTRICAL DESIGN
ENGINEER	JONAS LUCCEUS	WALEED TELLAWI
DRAWN BY	JONAS LUCCEUS	WALEED TELLAWI
CHECKED BY	DANIEL VERONESI	RAJA POLINENI
SUBMITTED BY	GREGORY PALMER	JORGE M. KULJIS
APPROVED BY	MARK F. MAKUCH	MARK F. MAKUCH
APPROVED DATE	_/_/_	_/_/_

REV # | INTERSECTION # 071-212

ENERGY BY - TOWN | ADDRESS #

MAINT LEVEL 5 | SERVICE POLE SNET #5650

UNMETERED SERVICE

NO.	DATE	REVISION DESCRIPTION

LEGEND:
R, Y, G RED, YEL, GRN
R← RED ARROW
Y← YELLOW ARROW
G← GREEN ARROW
W@ WALK/ PED. CLR
D.W. DON'T WALK
FL. FLASHING
LIGHT STANDARD

PROPOSED WOOD SPAN POLE
EXISTING WOOD SPAN POLE
PROPOSED STEEL SPAN POLE
EXISTING STEEL SPAN POLE
PROPOSED UTILITY POLE
EXISTING UTILITY POLE
PEDESTAL MOUNTING
PEDESTRIAN PUSH BUTTON & SIGN
DIRECTIONAL ARW. FOR PUSH BUTTON

TRAFFIC SIGNAL FACE
PEDESTRIAN SIGNAL FACE
DET. LEADS IN SAW CUT
PROPOSED RMC (RIGID METAL CONDUIT)
EXISTING RMC (RIGID METAL CONDUIT)
AUXILIARY TERMINATION CABINET
AUXILIARY EQUIPMENT CABINET
VIDEO DETECTION ZONE

PROPOSED CONTROLLER
EXISTING CONTROLLER
LOOP DETECTOR
SD SYSTEM DETECTOR
MAGNETIC DETECTOR
OPTICAL DETECTOR
VIDEO DETECTOR
AUDIO DETECTOR

VC VIDEO CAMERA CABLE
CABLE CLOSURE
WIRELESS SENSOR
WIRELESS RECEIVER
WIRELESS TRANSCEIVER
GUY WIRE
PROPOSED HANDHOLE
EXISTING HANDHOLE

DATE PLOTTED : 9/21/2020 D:\Users\lucceusj\Connecticut Department of Transportation\0172-0476 - Internal Documents\330_Design_Data\Traffic\Signals\TR_TCS_MSH_071_212_XXpending.dgn

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

ROUTE 117 (CENTER GROTON ROAD AND COLONEL LEDYARD HIGHWAY) AT COLONEL LEDYARD HIGHWAY

SCALE 1" = 40'

TOWN:
LEDYARD

DRAWING TITLE:
TRAFFIC CONTROL SIGNAL PLAN

PROJECT NO.
0172-0476

DRAWING NO.
TCS-07

SHEET NO.