

CONTRACT PLANS

COUNTY PROJECT NO. 6096260, 6096560, 5400033, 5400034

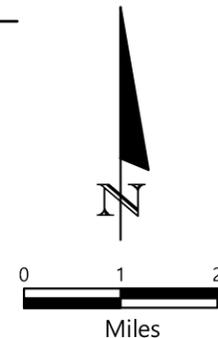
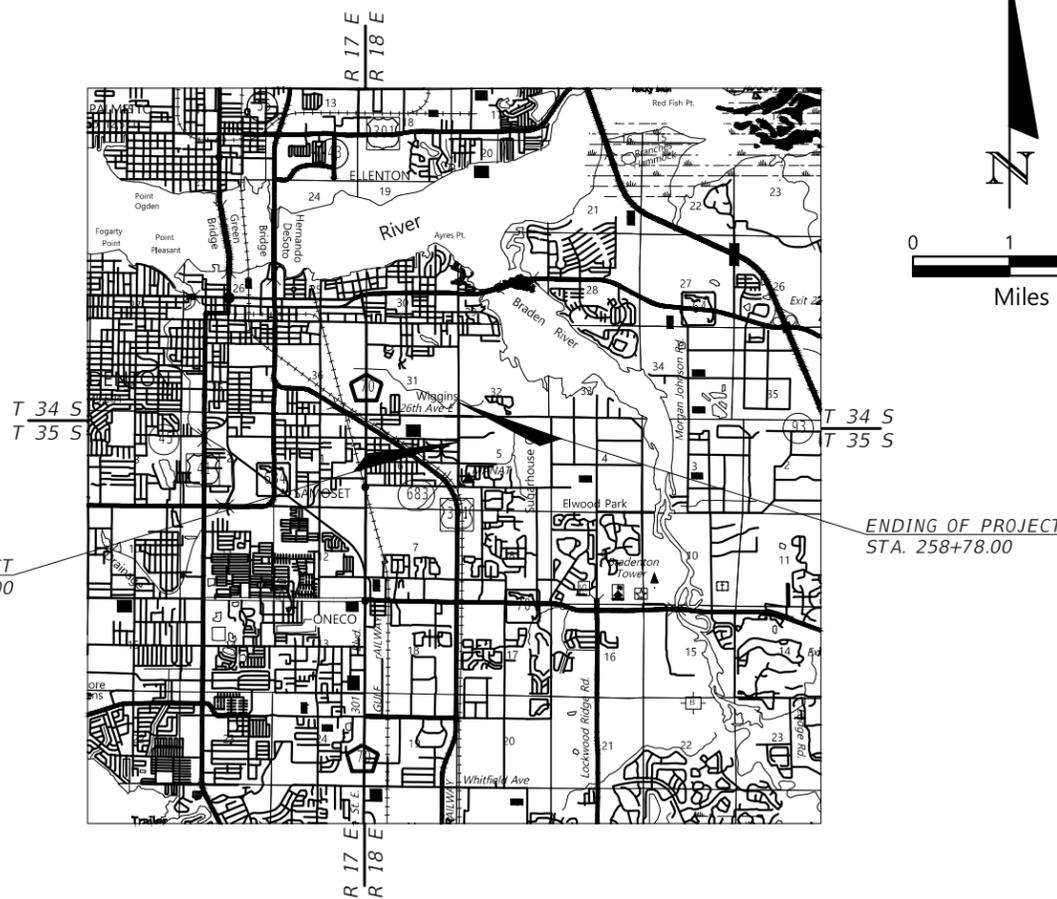
MANATEE COUNTY

27TH STREET EAST FROM
38TH AVENUE EAST TO 26TH AVENUE EAST
ADVANCED TRAFFIC MANAGEMENT SYSTEM PLANS

MAY 2024

INDEX OF ADVANCED TRAFFIC MANAGEMENT SYSTEM PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	SIGNATURE SHEET
T-3 - T-4	TABULATION OF QUANTITIES
T-5 - T-6	GENERAL NOTES
T-7	PROJECT LAYOUT SHEET
T-8 - T-11	SIGNALIZATION PLANS
T-12	STANDARD MAST ARM TABULATION SHEET
T-13	STANDARD MAST ARM ASSEMBLIES DATA TABLE
T-14	GUIDE SIGN WORKSHEET
T-15 - T-18	INTELLIGENT TRANSPORTATION SYSTEMS PLANS
T-19 - T-20	MOUNTING DETAILS
T-21	CABINET DETAILS
T-22	WIRING DIAGRAM
T-23	MANAGED FIELD ETHERNET SWITCH DETAIL
T-24	SPLICE DIAGRAMS



PROJECT LOCATION
MANATEE COUNTY

PLANS PREPARED BY:

ATKINSREALIS
482 SOUTH KELLER ROAD
ORLANDO, FL 32810
(407) 647-7275

CONTRACT NO. 6096560
VENDOR NO. 45-3031954

NOTE: THE SCALE OF THESE PLANS MAY
HAVE CHANGED DUE TO THE REPRODUCTION.

FINAL SUBMITTAL

SIGNALIZATION PLANS
ENGINEER OF RECORD:

NATHAN J. MOZELESKI, P.E.
P.E. NO.: 83308

All Wavetronix placement overlays are based on Drawings and/or Google Earth. A field review should be conducted before installation of sensors. Sensors may need to be relocated depending on the actual field environment. If Needed, please contact flsupport@wavetronix.com for any additional support.

GOVERNING STANDARD PLANS:
Florida Department of Transportation, FY2020-21 Standard plans for Road and Bridge Construction and applicable Interim Revisions (IRs).
<http://www.fdot.gov/design/Standardplans.shtm>
Standard Plans for Road Construction and associated IRs are available at the following website:

APPLICABLE IRs: IR546-001-01, IR546-010-01

GOVERNING STANDARD SPECIFICATIONS:
Florida Department of Transportation, July, 2020 Standard Specifications for Road and Bridge Construction at the following website:

<http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

MANATEE COUNTY PROJECT MANAGER: AL NEUMANN, P.E.

FISCAL YEAR	SHEET NO.
24	T-1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REMOVAL PAY ITEMS

641-2-60	2 EA
646-1-60	8 EA
670-5-600	1 AS

1-1 EL 12.95

POLE LOCATION=
STA. 348+59.07
OFF. 74.0' (LT)

1 EA	649-21-15
2 EA	660-3-12
1 EA	700-5-22

PED. PEDESTAL G

1 EA	646-1-11
1 EA	665-1-11

2 RUNS at 8 LF 630-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

2 EA 635-2-11
7 RUNS at 5 LF 630-2-11
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

2 RUNS at 25 LF 630-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

7 RUNS at 114 LF 630-2-12
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

PED. POST F

1 EA	646-1-12
1 EA	665-1-11

7 RUNS at 111 LF 630-2-12
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

26TH AVE EAST
MATCHLINE (A) - REFER TO T-9

PED. PEDESTAL E

1 EA	646-1-11
1 EA	665-1-11

2 RUNS at 10 LF 630-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

2 RUNS at 10 LF 630-2-11
2 EA 635-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

PED. PEDESTAL D

1 EA	646-1-11
1 EA	665-1-11

4 RUNS at 15 LF 630-2-11
(1) SIGNAL-H
(1) DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H

1-2 EL 12.84

POLE LOCATION=
STA. 348+69.74
OFF. 59.9' (RT)

1 EA	649-21-6
1 EA	700-5-22

PED. PEDESTAL A

646-1-11	1 EA
665-1-11	1 EA

630-2-11 2 RUNS at 15 LF
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

635-2-11 2 EA

PED. POST B

646-1-12	1 EA
665-1-11	1 EA

630-2-11 1 RUN at 9 LF
(1) PED. DETECTION-L

630-2-11 5 RUNS at 8 LF
(2) SIGNAL/PED. SIGNAL-H
(2) ITS DETECTION-L
(1) ILLUMINATED SIGN-H

1-4 EL 12.90

POLE LOCATION=
STA. 449+92.49
OFF. 31.5' (LT)

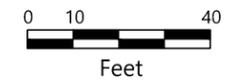
649-21-6	1 EA
660-3-12	3 EA
700-5-22	1 EA

630-2-12 7 RUNS at 109 LF
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

MATCHLINE (C) - REFER TO T-10

5 RUNS at 16 LF 630-2-11
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) CCTV/ITS DETECTION-L
(1) ILLUMINATED SIGN-H

ENDS



1-3 EL 13.11

POLE LOCATION=
STA. 450+18.43
OFF. 60.2' (RT)

649-21-3	1 EA
660-3-12	2 EA
660-6-122	1 EA
700-5-22	1 EA

630-2-11 3 RUNS at 16 LF
(1) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) CCTV/ITS DETECTION-L

630-2-11	11 RUNS at 10 LF
632-7-1	1 PI
639-1-121	1 AS
639-4-6	1 EA
641-2-12	1 EA

660-3-11	1 EA
660-6-121	1 EA
670-5-111	1 EA
684-1-1	1 EA
685-1-13	1 EA

PED. PEDESTAL C

646-1-11	1 EA
665-1-11	2 EA

(2) SIGNAL/PED. SIGNAL-H
(2) PED. DETECTION-L
(2) CCTV/ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(1) GROUNDING
(3) SPARE
FOR ALL CONNECTIONS TO FOC, REFER TO INTELLIGENT TRANSPORTATION SYSTEM PLANS

NO.	REVISIONS	DATE	BY	SCALE
				AS NOTED
				DESIGNED BY NJM
				DRAWN BY LNT
				CHECKED BY

AtkinsRéalis
ATKINSREALIS
482 SOUTH KELLER RD, ORLANDO, FL 32810
(407) 647-7275

DATE	PROJECT NO.
MAY 10, 2024	6096260 5400033 6096560 5400034

Manatee County Florida
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208
Regalado, Jose E

DESIGN ENGINEER	FL. LICENSE NO.
NATHAN J. MOZELESKI, P.E.	83308

SIGNALIZATION PLANS (1)

SHEET NO.
T-8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REMOVAL PAY ITEMS

641-2-60	2 EA
646-1-60	8 EA
670-5-600	1 AS

1-1 EL 12.95

POLE LOCATION=
STA. 348+59.07
OFF. 74.0' (LT)

1 EA	649-21-15
2 EA	660-3-12
1 EA	700-5-22

PED. PEDESTAL G

1 EA	646-1-11
1 EA	665-1-11

2 RUNS at 8 LF 630-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

2 EA 635-2-11
7 RUNS at 5 LF 630-2-11
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

2 RUNS at 25 LF 630-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

7 RUNS at 114 LF 630-2-12
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

PED. POST F

1 EA	646-1-12
1 EA	665-1-11

7 RUNS at 111 LF 630-2-12
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L

MATCHLINE (A) - REFER TO T-9

Advance Phase 2

PED. PEDESTAL E

1 EA	646-1-11
1 EA	665-1-11

2 RUNS at 10 LF 630-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

2 RUNS at 10 LF 630-2-11
2 EA 635-2-11
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

PED. PEDESTAL D

1 EA	646-1-11
1 EA	665-1-11

4 RUNS at 15 LF 630-2-11
(1) SIGNAL-H
(1) DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H

1-2 EL 12.84

POLE LOCATION=
STA. 348+69.74
OFF. 59.9' (RT)

1 EA	649-21-6
1 EA	700-5-22

MATCHLINE (C) - REFER TO T-10

PED. PEDESTAL A

646-1-11	1 EA
665-1-11	1 EA

630-2-11 2 RUNS at 15 LF
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

635-2-11 2 EA

Advance Phase 4

Matrix

Matrix

PED. PEDESTAL C

646-1-11	1 EA
665-1-11	2 EA

635-2-11 3 EA

630-2-11 2 RUNS at 23 LF
(1) PED. SIGNAL-H
(1) PED. DETECTION-L

MATCHLINE (D) - REFER TO T-10

PED. POST B

646-1-12	1 EA
665-1-11	1 EA

630-2-11 1 RUN at 9 LF
(1) PED. DETECTION-L

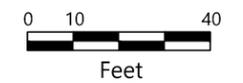
630-2-11 5 RUNS at 8 LF
(2) SIGNAL/PED. SIGNAL-H
(2) ITS DETECTION-L
(1) ILLUMINATED SIGN-H

1-4 EL 12.90

POLE LOCATION=
STA. 449+92.49
OFF. 31.5' (LT)

649-21-6	1 EA
660-3-12	3 EA
700-5-22	1 EA

630-2-12 7 RUNS at 109 LF
(2) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(2) SPARE-H/L



1-3 EL 13.11

POLE LOCATION=
STA. 450+18.43
OFF. 60.2' (RT)

649-21-3	1 EA
660-3-12	2 EA
660-6-122	1 EA
700-5-22	1 EA

630-2-11 3 RUNS at 16 LF
(1) SIGNAL/PED. SIGNAL-H
(1) PED. DETECTION-L
(1) CCTV/ITS DETECTION-L

630-2-11 11 RUNS at 10 LF
632-7-1 1 PI
639-1-121 1 AS
639-4-6 1 EA
641-2-12 1 EA

660-3-11	1 EA
660-6-121	1 EA
670-5-111	1 EA
684-1-1	1 EA
685-1-13	1 EA

(2) SIGNAL/PED. SIGNAL-H
(2) PED. DETECTION-L
(2) CCTV/ITS DETECTION-L
(1) ILLUMINATED SIGN-H
(1) GROUNDING
(3) SPARE
FOR ALL CONNECTIONS TO FOC, REFER TO INTELLIGENT TRANSPORTATION SYSTEM PLANS

NO.	REVISIONS	DATE	BY	SCALE
				AS NOTED
				DESIGNED BY NJM
				DRAWN BY LNT
				CHECKED BY

AtkinsRéalis
ATKINSREALIS
482 SOUTH KELLER RD, ORLANDO, FL 32810
(407) 647-7275

DATE
MAY 10, 2024
PROJECT NO.
6096260 5400033 6096560 5400034

Manatee County Florida
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER
NATHAN J. MOZELESKI, P.E.
FL. LICENSE NO.
83308

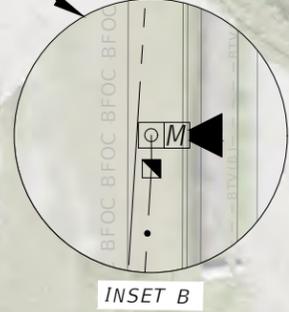
SIGNALIZATION PLANS (1)

SHEET NO.
T-8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

INSTALL NEW 4" ALUMINUM POLE
W/ MVDS UNIT & "ITS" PULL BOX

1 EA	635-2-11
1 EA	646-2-115
1 EA	660-3-12



midblock detector site
- SmartSensor HD

REFER TO INSET B

INSTALL 1-2" CONDUIT
W/ MVDS COMPOSITE
CABLE (24 VDC, RS-485)

495 LF	630-2-11
--------	----------

INSTALL "FIBER" PULL BOX
INSTALL 50 LF 24 SM FOC SLACK

50 LF	633-1-122
1 EA	635-2-12

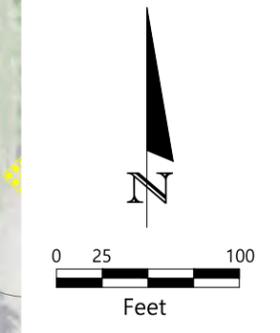
INSTALL 2-2" UNDERGROUND
CONDUIT W/ 24 SM FOC

86 LF	630-2-12
86 LF	633-1-122

UTILIZE PROPOSED "SIGNAL" PULL
BOXES AND CONDUIT TO TIE MVDS
COMPOSITE CABLE BACK INTO CABINET

INSTALL "FIBER" PULL BOX, INTERCEPT CONDUIT.
SEE MAINTENANCE OF COMMUNICATION NOTES.

1 EA	635-2-12
------	----------



UTILIZE EX. FO PULL BOX
INSTALL 50 LF 24 SM FOC SLACK

50 LF	633-1-122
-------	-----------

REMOVE EX. FOC
UTILIZE EX. CONDUIT,
INSTALL 24 SM FOC

390 LF	633-1-122
390 LF	633-1-620

REMOVE EX. FOC
UTILIZE EX. CONDUIT,
INSTALL 24 SM FOC

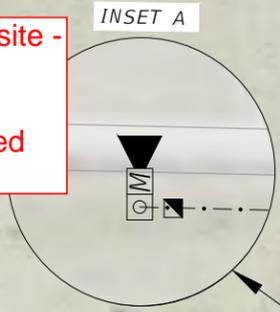
820 LF	633-1-122
820 LF	633-1-620

INSTALL 2-2" UNDERGROUND
CONDUIT W/ 24 SM FOC

630-2-12	100 LF
633-1-122	100 LF

MATCHLINE (C) - SEE NEXT SHEET

midblock detector site -
SmartSensor HD.
Site recently pushed
back 200 ft west



INSTALL NEW 4" ALUMINUM POLE
W/ MVDS UNIT & "ITS" PULL BOX

635-2-11	1 EA
646-2-115	1 EA
660-3-12	1 EA

INSTALL 1-2" CONDUIT
W/ MVDS COMPOSITE
CABLE (24 VDC, RS-485)

975 LF	630-2-11
--------	----------

UTILIZE PROPOSED "SIGNAL" PULL
BOXES AND CONDUIT TO TIE MVDS
COMPOSITE CABLE BACK INTO CABINET

INSTALL "FIBER" PULL BOX
INSTALL 50 LF 24 SM FOC SLACK

50 LF	633-1-122
1 EA	635-2-12

INSTALL FIELD-TERMINATED PATCH PANEL IN
SIGNAL CONTROLLER CABINET. REFER TO
SIGNALIZATION PLANS FOR CABINET DETAILS.
INSTALL 2-2" UNDERGROUND CONDUIT W/ 24 SM FOC

10 LF	630-2-11	1 EA	633-3-16
12 EA	633-2-32	1 EA	660-3-11
1 EA	633-3-14	1 EA	684-2-1

INSTALL CCTV CAMERA TO
SIGNAL SUPPORT UPRIGHT.
UTILIZE PROP. SIGNAL
CONDUIT AND PULL BOXES
TO TIE CCTV CABLE BACK
INTO CABINET.

682-1-113	1 EA
-----------	------

NO.	REVISIONS	DATE	BY

SCALE: AS NOTED

DESIGNED BY: NJM

DRAWN BY: ALC

CHECKED BY: PJM

ATKINSRÉALIS
482 SOUTH KELLER RD, ORLANDO, FL 32810
(407) 647-7275

DATE
MAY 10, 2024

PROJECT NO.
6096260 5400033 6096560 5400034

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208
Regalado, Jose E

DESIGN ENGINEER
NATHAN J. MOZELESKI, P.E.
FL. LICENSE NO. 83308

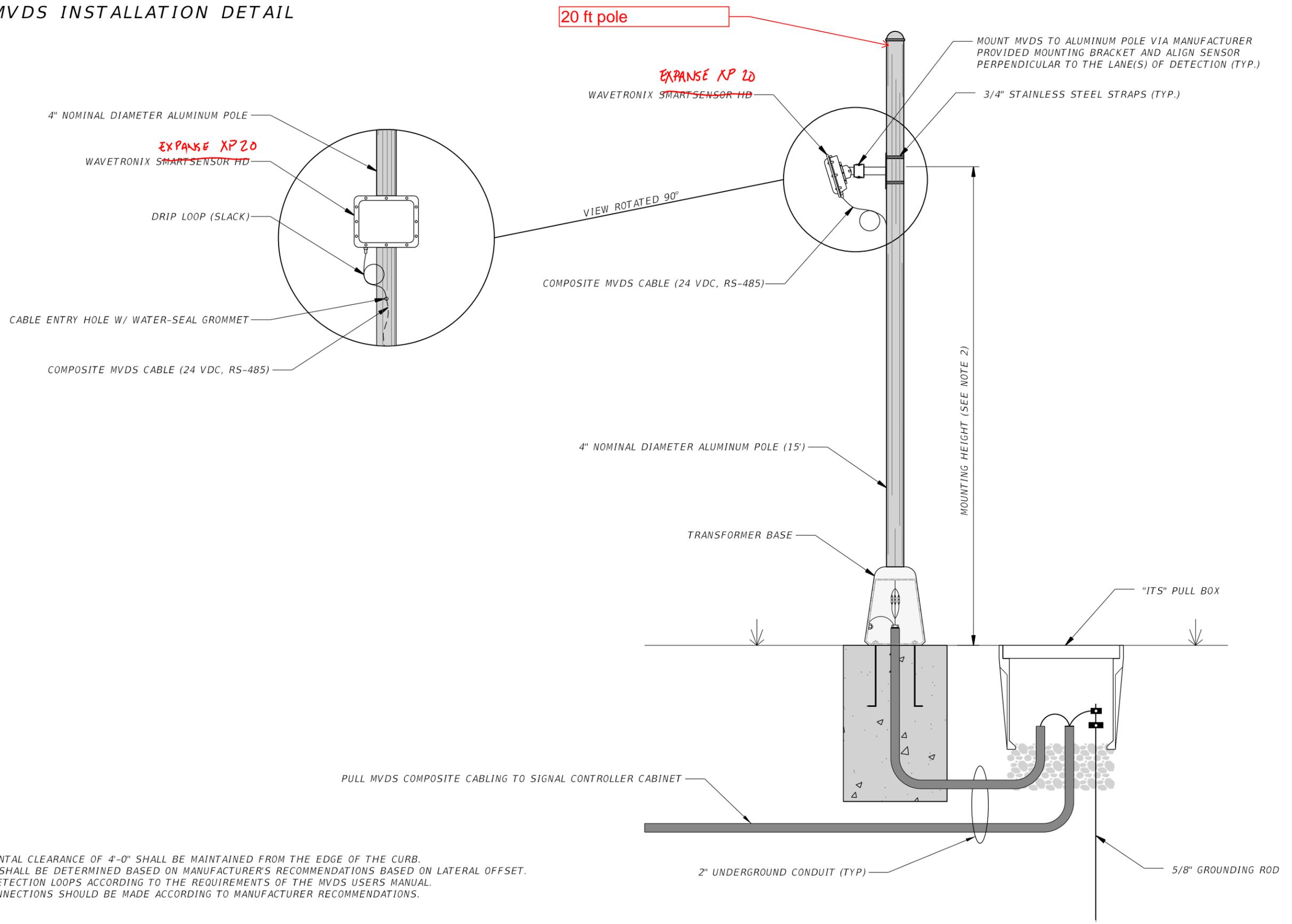
INTELLIGENT TRANSPORTATION
SYSTEMS PLANS (4)

SHEET NO.
T-18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

MIDBLOCK MVDS INSTALLATION DETAIL

(NOT TO SCALE)



- NOTES:
1. A MINIMUM HORIZONTAL CLEARANCE OF 4'-0" SHALL BE MAINTAINED FROM THE EDGE OF THE CURB.
 2. MOUNTING HEIGHT SHALL BE DETERMINED BASED ON MANUFACTURER'S RECOMMENDATIONS BASED ON LATERAL OFFSET.
 3. SET UP VIRTUAL DETECTION LOOPS ACCORDING TO THE REQUIREMENTS OF THE MVDS USERS MANUAL.
 4. ALL EQUIPMENT CONNECTIONS SHOULD BE MADE ACCORDING TO MANUFACTURER RECOMMENDATIONS.

NO.	REVISIONS	DATE	BY	SCALE	DATE	DESIGN ENGINEER	SHEET NO.
				AS NOTED	MAY 10, 2024	NATHAN J. MOZELESKI, P.E.	T-19
			NJM	DESIGNED BY	PROJECT NO.	FL. LICENSE NO.	
			ALC	DRAWN BY	6096260 5400033	83308	
			PJM	CHECKED BY	6096560 5400034		

AtkinsRéalis
 ATKINSRÉALIS
 482 SOUTH KELLER RD, ORLANDO, FL 32810
 (407) 647-7275

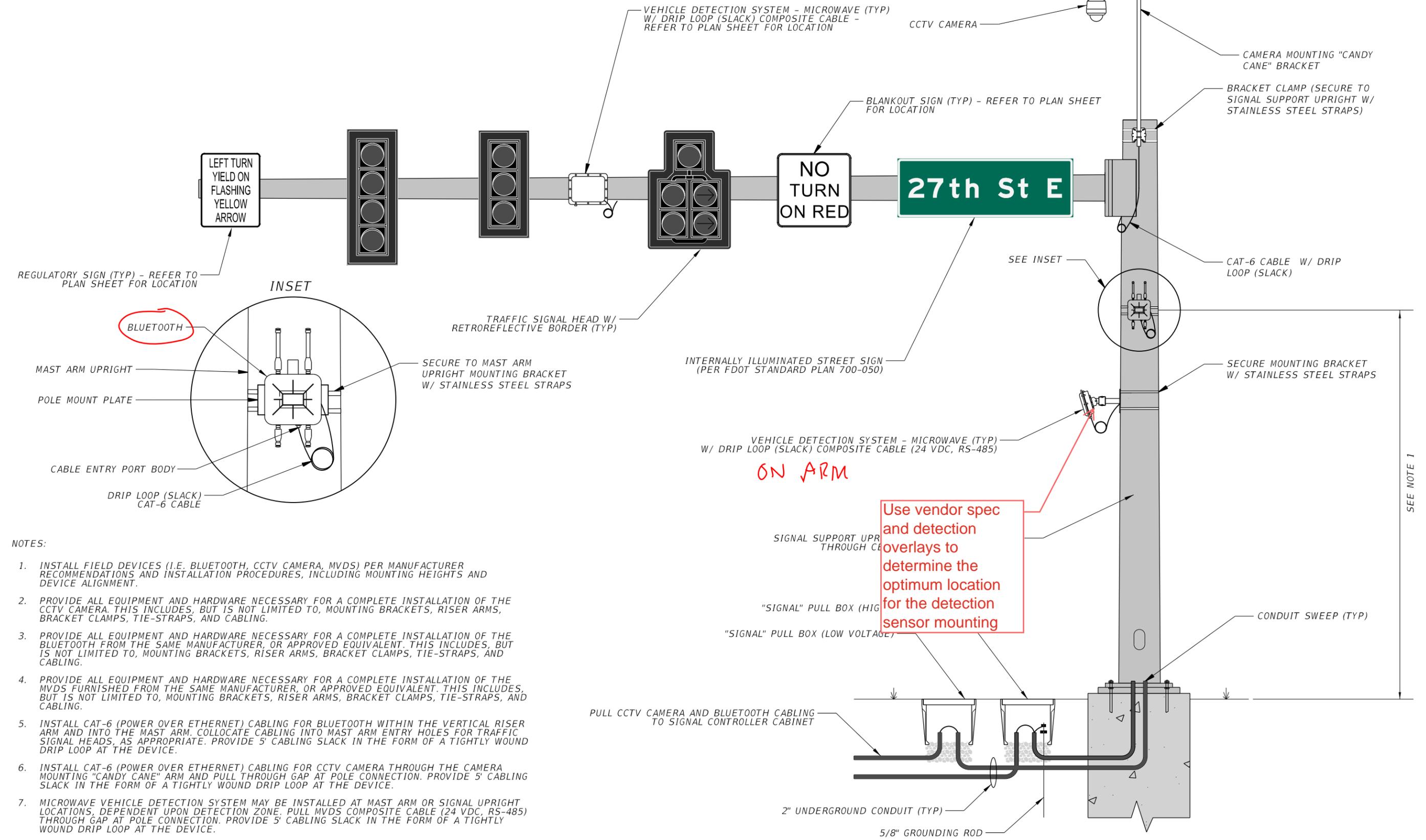
Manatee County
 FLORIDA
 PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208

MOUNTING DETAILS (1)

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

CCTV CAMERA, BLUETOOTH, MVDS INSTALLATION DETAIL

(NOT TO SCALE)



NOTES:

1. INSTALL FIELD DEVICES (I.E. BLUETOOTH, CCTV CAMERA, MVDS) PER MANUFACTURER RECOMMENDATIONS AND INSTALLATION PROCEDURES, INCLUDING MOUNTING HEIGHTS AND DEVICE ALIGNMENT.
2. PROVIDE ALL EQUIPMENT AND HARDWARE NECESSARY FOR A COMPLETE INSTALLATION OF THE CCTV CAMERA. THIS INCLUDES, BUT IS NOT LIMITED TO, MOUNTING BRACKETS, RISER ARMS, BRACKET CLAMPS, TIE-STRAPS, AND CABLING.
3. PROVIDE ALL EQUIPMENT AND HARDWARE NECESSARY FOR A COMPLETE INSTALLATION OF THE BLUETOOTH FROM THE SAME MANUFACTURER, OR APPROVED EQUIVALENT. THIS INCLUDES, BUT IS NOT LIMITED TO, MOUNTING BRACKETS, RISER ARMS, BRACKET CLAMPS, TIE-STRAPS, AND CABLING.
4. PROVIDE ALL EQUIPMENT AND HARDWARE NECESSARY FOR A COMPLETE INSTALLATION OF THE MVDS FURNISHED FROM THE SAME MANUFACTURER, OR APPROVED EQUIVALENT. THIS INCLUDES, BUT IS NOT LIMITED TO, MOUNTING BRACKETS, RISER ARMS, BRACKET CLAMPS, TIE-STRAPS, AND CABLING.
5. INSTALL CAT-6 (POWER OVER ETHERNET) CABLING FOR BLUETOOTH WITHIN THE VERTICAL RISER ARM AND INTO THE MAST ARM. COLLOCATE CABLING INTO MAST ARM ENTRY HOLES FOR TRAFFIC SIGNAL HEADS, AS APPROPRIATE. PROVIDE 5' CABLING SLACK IN THE FORM OF A TIGHTLY WOUND DRIP LOOP AT THE DEVICE.
6. INSTALL CAT-6 (POWER OVER ETHERNET) CABLING FOR CCTV CAMERA THROUGH THE CAMERA MOUNTING "CANDY CANE" ARM AND PULL THROUGH GAP AT POLE CONNECTION. PROVIDE 5' CABLING SLACK IN THE FORM OF A TIGHTLY WOUND DRIP LOOP AT THE DEVICE.
7. MICROWAVE VEHICLE DETECTION SYSTEM MAY BE INSTALLED AT MAST ARM OR SIGNAL UPRIGHT LOCATIONS, DEPENDENT UPON DETECTION ZONE. PULL MVDS COMPOSITE CABLE (24 VDC, RS-485) THROUGH GAP AT POLE CONNECTION. PROVIDE 5' CABLING SLACK IN THE FORM OF A TIGHTLY WOUND DRIP LOOP AT THE DEVICE.

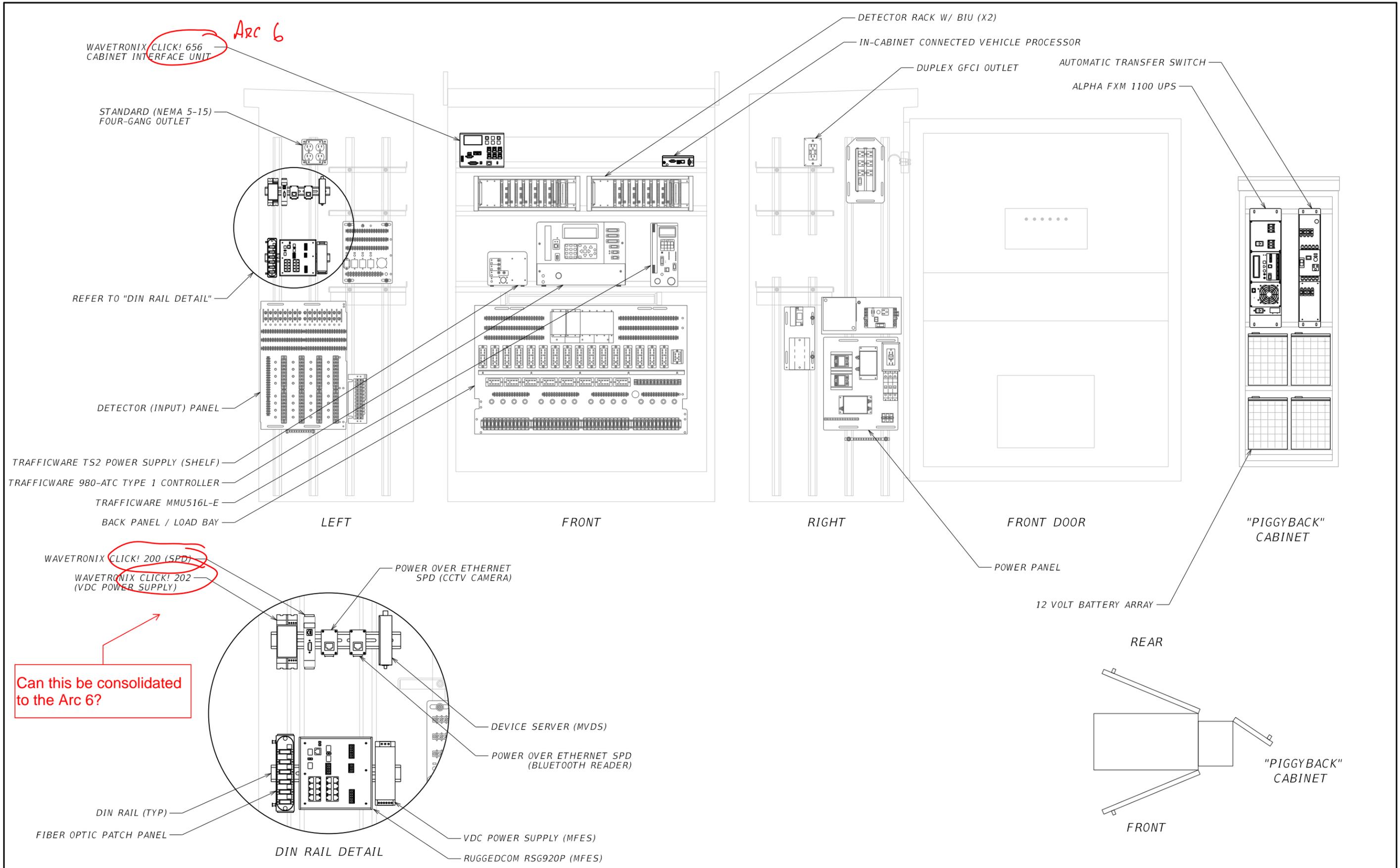
NO.	REVISIONS	DATE	BY	SCALE	DATE	DESIGN ENGINEER	SHEET NO.
				AS NOTED	MAY 10, 2024	NATHAN J. MOZELESKI, P.E.	T-20
			NJM	DESIGNED BY	PROJECT NO.	FL. LICENSE NO.	
			ALC	DRAWN BY	6096260 5400033	83308	
			PJM	CHECKED BY	6096560 5400034		

AtkinsRéalis
 ATKINSRÉALIS
 482 SOUTH KELLER RD, ORLANDO, FL 32810
 (407) 647-7275

Manatee County
 FLORIDA
 PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208

MOUNTING DETAILS (2)

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



NO.	REVISIONS	DATE	BY	SCALE
	AS NOTED			
	NJM			
	ALC			
	PJM			

AtkinsRéalis

ATKINSRÉALIS
482 SOUTH KELLER RD, ORLANDO, FL 32810
(407) 647-7275

DATE
MAY 10, 2024

PROJECT NO.
6096260 5400033
6096560 5400034

Manatee County Florida

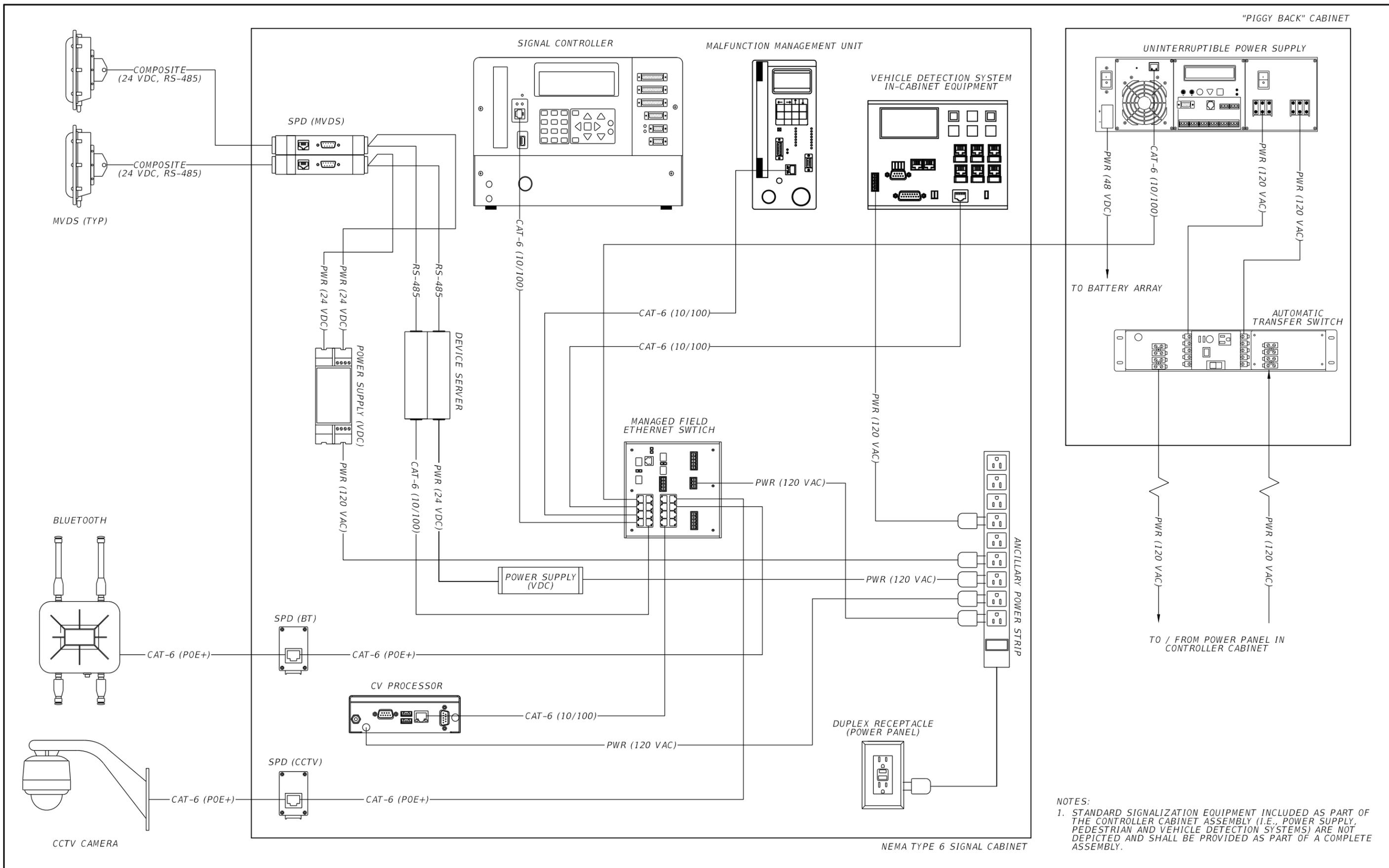
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

DESIGN ENGINEER
NATHAN J. MOZELESKI, P.E.
FL. LICENSE NO.
83308

CABINET DETAILS

SHEET NO.
T-21

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



NOTES:
 1. STANDARD SIGNALIZATION EQUIPMENT INCLUDED AS PART OF THE CONTROLLER CABINET ASSEMBLY (I.E., POWER SUPPLY, PEDESTRIAN AND VEHICLE DETECTION SYSTEMS) ARE NOT DEPICTED AND SHALL BE PROVIDED AS PART OF A COMPLETE ASSEMBLY.

NO.	REVISIONS	DATE	BY	SCALE	DATE	DESIGN ENGINEER	SHEET NO.
	AS NOTED				MAY 10, 2024	NATHAN J. MOZELESKI, P.E.	T-22
	NJM				PROJECT NO. 6096260 5400033 6096560 5400034	FL. LICENSE NO. 83308	
	ALC						
	PJM						

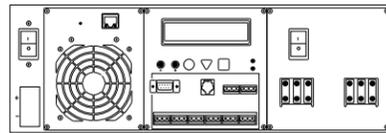
AtkinsRéalis
 ATKINSRÉALIS
 482 SOUTH KELLER RD, ORLANDO, FL 32810
 (407) 647-7275

Manatee County Florida
 PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208
 USER: REGA6848

WIRING DIAGRAM

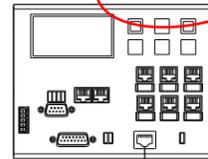
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

CONNECTED VEHICLE IN-CABINET PROCESSOR

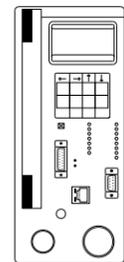


UNINTERRUPTIBLE POWER SUPPLY
(ALPHA TECHNOLOGIES FXM 1100)

IN-CABINET DETECTION INTERFACE UNIT
(WAVETRONIX CLICK! 656)

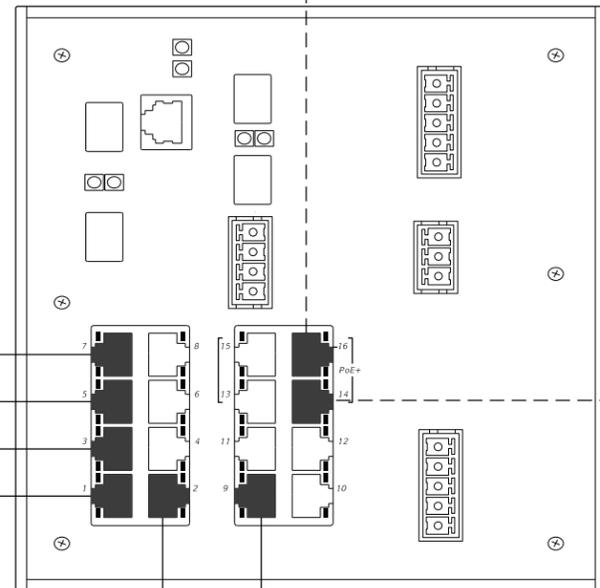
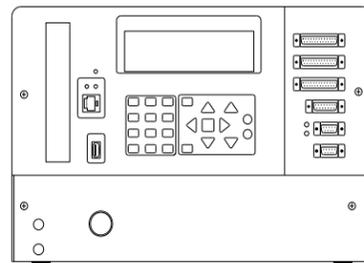


Replace with Arc 6

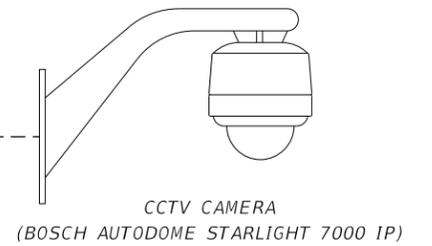


MALFUNCTION MANAGEMENT UNIT
(TRAFFICWARE MMU516L-E)

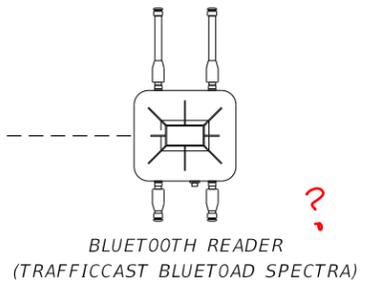
TRAFFIC SIGNAL CONTROLLER
(TRAFFICWARE 980-ATC, TYPE 1)



MANAGED FIELD ETHERNET SWITCH
(RUGGEDCOM RSG920P)



CCTV CAMERA
(BOSCH AUTODOME STARLIGHT 7000 IP)



BLUETOOTH READER
(TRAFFICAST BLUETOAD SPECTRA)

MICROWAVE VEHICLE DETECTION SYSTEM
(WAVETRONIX SMART SENSOR HD)



DEVICE SERVER

LEGEND:

	CAT-6 (STANDARD)
	CAT-6 (POWER-OVER ETHERNET)
	RJ-45 PORT (OCCUPIED)
	RJ-45 PORT (UNOCCUPIED / SPARE)

NO.	REVISIONS	DATE	BY	SCALE
	AS NOTED			
	NJM			
	ALC			
	PJM			

AtkinsRéalis
 ATKINSRÉALIS
 482 SOUTH KELLER RD, ORLANDO, FL 32810
 (407) 647-7275

DATE	MAY 10, 2024
PROJECT NO.	6096260 5400033 6096560 5400034

Manatee County Florida
 PUBLIC WORKS DEPARTMENT
 ENGINEERING SERVICES
 1022 26th Avenue East, Bradenton, FL 34208
 USER: REGA6848

DESIGN ENGINEER	NATHAN J. MOZELESKI, P.E.
FL. LICENSE NO.	83308

MANAGED FIELD ETHERNET SWITCH DETAIL

SHEET NO.	T-23
-----------	------

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.