


TABULATION OF QUANTITIES

| BID ITEM NO. | DESCRIPTION | UNIT | SHEET NUMBERS | | | | | | | | | | | | | | | | SUB TOTAL | | GRAND TOTAL | |
|-----------------|--|------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------|----------------|--|
| | | | 40 | | | | | | | | | | | | | | | | | | | |
| | | | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | ORIG. | FINAL | | |
| 102-99 | CHANGEABLE VARIABLE MESSAGE SIGN- TEMPORARY | ED | 14 | | | | | | | | | | | | | | | 14 | | 14 | | |
| 630-1-12 | CONDUIT (FURNISH & INSTALL) (UNDERGROUND) | LF | 1026 | | | | | | | | | | | | | | | 1026 | | 1026 | | |
| 630-1-14 | CONDUIT (FURNISH & INSTALL) (DIRECTIONAL BORE) | LF | 160 | | | | | | | | | | | | | | | 160 | | 160 | | |
| 632-7-1 | CABLE (SIGNAL) (FURNISH & INSTALL) | PI | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 634-4-112 | SPAN WIRE ASSEMBLY (F&I) (TWO WIRE) (DIAGONAL) | PI | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 635-1-11 | PULL AND JUNCTION BOXES (F&I) | EA | 18 | | | | | | | | | | | | | | | 18 | | 18 | | |
| 635-1-15 | PULL AND JUNCTION BOXES (F&I) (FIBER OPTICS) | EA | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 639-1-12 | ELECTRICAL POWER SERVICE (OVERHEAD) | AS | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 639-2-1 | ELECTRICAL SERVICE WIRE | LF | 200 | | | | | | | | | | | | | | | 200 | | 200 | | |
| 641-16-148 | PRESTRESSED CONCRETE POLES (F&I-WITH FOUNDATION) (TYPE N-VII) | EA | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 641-16-150 | PRESTRESSED CONCRETE POLES (F&I-WITH FOUNDATION) (TYPE N-VII) | EA | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 650-51-311 | TRAFFIC SIGNAL 12" STANDARD (F&I) (3 SECTION, 1 WAY) | AS | 4 | | | | | | | | | | | | | | | 4 | | 4 | | |
| 650-51-511 | TRAFFIC SIGNAL 12" STANDARD (F&I) (5 SECTION, 1 WAY) | AS | 4 | | | | | | | | | | | | | | | 4 | | 4 | | |
| 653-191 | PEDESTRIAN SIGNAL (F&I) (1 WAY) | AS | 4 | | | | | | | | | | | | | | | 4 | | 4 | | |
| 653-192 | PEDESTRIAN SIGNAL (F&I) (2 WAY) | AS | 2 | | | | | | | | | | | | | | | 2 | | 2 | | |
| 659-101 | SIGNAL HEAD AUXILIARIES (F&I) (BACKPLATES, 3-SECTION) | EA | 2 | | | | | | | | | | | | | | | 2 | | 2 | | |
| 659-106 | SIGNAL HEAD AUXILIARIES (F&I) (TUNNEL VISOR) | EA | 32 | | | | | | | | | | | | | | | 32 | | 32 | | |
| 659-109 | SIGNAL HEAD AUXILIARIES (F&I) (CONCRETE PEDESTAL TYPE II) | EA | 2 | | | | | | | | | | | | | | | 2 | | 2 | | |
| 659-118 | SIGNAL HEAD AUXILIARIES (F&I) (BACKPLATES, 5-SECTION) | EA | 2 | | | | | | | | | | | | | | | 2 | | 2 | | |
| 660-1-109 | INDUCTIVE LOOP DETECTOR (F&I) (TYPE 9, 2 CH, SS, RM) | EA | 6 | | | | | | | | | | | | | | | 6 | | 6 | | |
| 660-1-110 | INDUCTIVE LOOP DETECTOR (F&I) (TYPE 10, 2 CH, SS, RM, TD) | EA | 2 | | | | | | | | | | | | | | | 2 | | 2 | | |
| 660-2-102 | LOOP ASSEMBLY (F&I) (TYPE B) | AS | 4 | | | | | | | | | | | | | | | 4 | | 4 | | |
| 660-2-106 | LOOP ASSEMBLY (F&I) (TYPE F) (6' X 40') | AS | 6 | | | | | | | | | | | | | | | 6 | | 6 | | |
| 663-74-11 | VEHICLE DETECTOR ASSEMBLIES, FURNISH AND INSTALL, OPTICAL TYPE (OPTICOM) | EA | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 665-11 | PEDESTRIAN DETECTOR (F&I) (POLE/CONTROL CABINET MOUNTED) | EA | 8 | | | | | | | | | | | | | | | 8 | | 8 | | |
| 670-5-112 | TRAFFIC CONTROLLER ASSEMBLY (F&I) (NEMA) (2 PREEMPTION PLANS) | AS | 1 | | | | | | | | | | | | | | | 1 | | 1 | | |
| 699-1-1 | INTERNALLY ILLUMINATED SIGN (STREET NAME) | EA | 4 | | | | | | | | | | | | | | | 4 | | 4 | | |

Firas Munjed
6/11/2007

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|-----------|----|-------------|------|----|-------------|--|--|--|--|--|--|--|---|--|--|----------------------------|
| REVISIONS | | | | | | ENGINEER OF RECORD: FIRAS S. MUNJED, P.E. PROFESSIONAL ENGINEER CERTIFICATE NO. 49292 PROFESSIONAL ENGINEERING CONSULTANTS, INC. 200 EAST ROBINSON STREET SUITE 1560 ORLANDO, FLORIDA 32801 CERTIFICATE OF AUTHORIZATION NO. 3556 | |  LAKE COUNTY FLORIDA | | PEC PROFESSIONAL ENGINEERING CONSULTANTS, INC. engineers planners surveyors | | | HANCOCK ROAD AND JOHNS LAKE ROAD INTERSECTION IMPROVEMENTS TABULATION OF QUANTITIES | | | SHEET NO. 39A |
| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION | | | | | | | | | | | |

SIGNALIZATION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING LAKE COUNTY TRAFFIC OPERATIONS, AT 352-742-1766, OF ALL PHASES OF CONSTRUCTION WITH AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION, AND AGAIN FOR LOOP INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS, INCLUDING THE ELECTRIC PERMIT, AND TO COORDINATE APPLICATION FOR POWER, WITH LAKE COUNTY TRAFFIC OPERATIONS.
3. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
4. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND HAVE APPROVED BY LAKE COUNTY TRAFFIC OPERATIONS.
5. THE CONTRACTOR SHALL NOTIFY LAKE COUNTY TRAFFIC OPERATIONS AT LEAST 24 HOURS IN ADVANCE OF INSTALLING SIGNAL POLES, GROUND RODS, UNDERGROUND CONDUIT, AND SEALING SIGNAL HEAD ASSEMBLIES.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EXACT LOCATIONS OF ALL UTILITIES PRIOR TO BEGINNING WORK.
7. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE A CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND WHEN JOINT USE POLES ARE TO BE USED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING THE PROPER AMOUNT OF RAKE WITH RESPECT TO LOADING TO BE USED ON POLES AT THE TIME OF INSTALLATION.
9. ALL MATERIALS AND HARDWARE SHALL BE F.D.O.T. APPROVED, AND PRE APPROVED BY LAKE COUNTY TRAFFIC OPERATIONS.
10. ALL REMOVED EQUIPMENT SHALL BE DELIVERED TO LAKE COUNTY TRAFFIC OPERATIONS, 28127 C.R. 561, TAVARES, 352-742-1766, EXCEPT SIGNAL POLES, WHICH SHALL BE DISPOSED OF BY THE CONTRACTOR.
11. SIGNAL HEADS SHALL BE WIRED DIRECTLY TO THE TERMINAL BLOCKS. THE USE OF 'JONES' PLUGS SHALL BE PROHIBITED.
12. THE INSIDE LANE DISCONNECT SHALL BE WIRED FOR FUTURE 5 SECTION HEADS.
13. SIGNAL CABLE SHALL BE ATTACHED TO MESSENGER WIRE USING PROPER SIZE SPIRALWRAP.
14. VEHICLE SIGNAL HEAD ASSEMBLIES SHALL BE BLACK, CAST ALUMINIUM, WITH TUNNEL VISORS, AND LED'S FOR ALL INDICATIONS, UNLESS OTHERWISE NOTED.
15. IT SHALL BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.
16. LOOP HOME RUNS SHALL NOT BE CUT INTO THE RADIUS.
17. PULL BOXES SHALL BE LOCATED AWAY FROM EDGE OF PAVEMENT, OR BEHIND A CURB WHEN POSSIBLE, ATTEMPTING TO KEEP FROM THE BOTTOM OF A DITCH OR RETENTION AREA, AND WHERE LARGE VEHICLES PARK.
18. THE MOUNTING OF ELECTRICAL SERVICE TO THE TRAFFIC SIGNAL CABINET SHALL BE PROHIBITED.
19. THE CONTROLLER ASSEMBLY SHALL BE A 'LAKE COUNTY' NAZTEC REGIONAL TS2-TYPE 1, WITH A TS2-TYPE 2 CONTROLLER ETHERNET ENABLED FOR COUNTY CLOSED LOOP SYSTEM, WITH GENERATOR SWITCH.
20. THE CABINET DOOR SHALL OPEN AWAY FROM THE INTERSECTION WHEN POSSIBLE.
21. A MANUAL PUSH BUTTON CORD SHALL BE FURNISHED IN ALL CONTROLLER CABINETS.
22. OPTICOM PREEMPTION SHALL BE USED WHEN EMERGENCY PREEMPTION IS REQUESTED.

23. INTERNALLY ILLUMINATED STREET NAME SIGNS (LED) SHALL BE INSTALLED ONE FOOT BELOW THE MESSENGER CABLE WHERE POSSIBLE, POWERED BY A SEPARATE CIRCUIT BREAKER, AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH LAKE COUNTY PUBLIC WORKS INTERNALLY ILLUMINATED (LED) STREET NAME SIGN DETAIL.

24. A PHOTOCCELL SHALL BE INSTALLED INSIDE THE CABINET WITH A 2 INCH PLEXIGLAS WINDOW, OR NEAR THE ELECTRIC SERVICE WITHIN REACH OF A LIFT TRUCK. CARE TO BE GIVEN TO INSTALL WHERE STREETLIGHTS DO NOT AFFECT OPERATION.

25. THE CONTRACTOR SHALL FURNISH LAKE COUNTY TRAFFIC OPERATIONS WITH EMERGENCY CONTACTS AND PHONE NUMBERS AND HAVE AN IMSA LEVEL II CERTIFIED SIGNAL TECHNICIAN ON CALL WITHIN A TWO HOUR MINIMUM RESPONSE TIME.

26. ANY STRIPING/PAVEMENT MARKINGS DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

27. THE COST FOR THE USE OF OFF-DUTY LAW ENFORCEMENT OFFICERS IN THE EVENT OF LANE CLOSURES SHALL BE INCIDENTAL TO THE WORK AND WILL NOT BE PAID SEPARATELY.

28. ANY ITEM NOT SPECIFICALLY ADDRESSED IN THESE PLANS, USE FDOT SPECIFICATIONS.

29. THE CONTRACTOR SHALL FURNISH LAKE COUNTY TRAFFIC OPERATIONS, TWO COMPLETE SETS OF AS-BUILT PLANS THAT INCLUDE CONDUIT AND PULL BOX LOCATIONS, AT FINAL INSPECTION.

30. A PRE CONSTRUCTION MEETING SHALL BE SCHEDULED WITH LAKE COUNTY TRAFFIC OPERATIONS (352-742-1766) PRIOR TO ANY CONSTRUCTION.

31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY PROVIDING THE ELECTRICAL POWER TO DETERMINE IF ANY ADDITIONAL FEES ARE REQUIRED TO CONNECT POWER AND FOR CONNECTION OF POWER. IF REQUIRED, THE FEE SHALL BE INCLUDED AS PART OF THE BID ITEM PAYMENT FOR ELECTRICAL SERVICE ASSEMBLY.

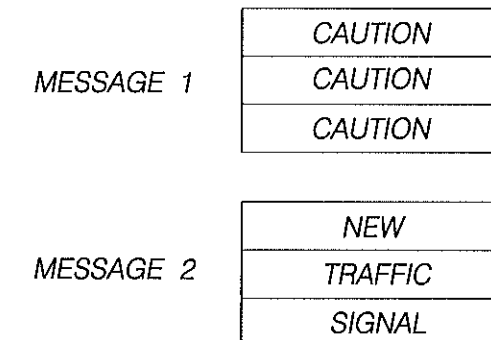
32. A FIBER PULL BOX AND CONDUIT INTO THE CONTROLLER ASSEMBLY SHALL BE INSTALLED.

33. PULL BOX COVERS SHALL BE FDOT APPROVED NON-METALLIC WITH RECESSED COVER LOGO 'TRAFFIC SIGNAL' OR 'FIBER OPTICS' AS APPROPRIATE.

34. A GENERATOR PAD, 3' x 3' OF 4" CONCRETE SHALL BE INSTALLED.


35. GROUNDING FOR THE CONTROLLER ASSEMBLY SHALL MEASURE 25 OHMS OR LESS.

VARIABLE MESSAGE SIGNS



NOTE: VARIABLE MESSAGE SIGNS (BOARDS) SHALL BE PROVIDED ON BOTH APPROACHES (NORTH AND SOUTH) TO THIS NEW TRAFFIC SIGNAL. THESE BOARDS SHALL BE PLACED 500' - 800' IN ADVANCE OF THE STOP BARS. SIGNS SHALL BE ACTIVE THE FIRST WEEK OF SIGNAL OPERATION.

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6/11/2007

| REVISIONS | | | | | | ENGINEER OF RECORD: FIRAS S. MUNJED, P.E. PROFESSIONAL ENGINEER CERTIFICATE NO. 49292 PROFESSIONAL ENGINEERING CONSULTANTS, INC. 200 EAST ROBINSON STREET SUITE 1560 ORLANDO, FLORIDA 32801 CERTIFICATE OF AUTHORIZATION NO. 3556 |  PEC PROFESSIONAL ENGINEERING CONSULTANTS, INC. <i>engineers planners surveyors</i> | HANCOCK ROAD AND JOHNS LAKE ROAD INTERSECTION IMPROVEMENTS SIGNALIZATION NOTES | SHEET NO. 39B |
|-----------|----|-------------|------|----|-------------|---|--|--|-------------------------|
| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION | | | | |
| | | | | | | | | | |

PROPOSED SIGNAL HEAD DETAILS



3-SECT., 1-WAY (LED)

FURNISH & INSTALL
4 STANDARD TRAFFIC SIGNAL
3 SECTIONS ON EACH FACE
1 DIRECTION

FURNISH & INSTALL
12 TUNNEL VISOR
SIGNAL HEAD AUXILIARIES



5-SECT., 1-WAY (LED)

FURNISH & INSTALL
4 STANDARD TRAFFIC SIGNAL
5 SECTIONS ON EACH FACE
1 DIRECTION

FURNISH & INSTALL
20 TUNNEL VISOR
SIGNAL HEAD AUXILIARIES

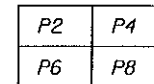
FURNISH & INSTALL 1 CONTROLLER ASSEMBLY
NEMA ONE PREEMPTION PLAN ACTUATED SOLID STATE;
SIGNAL CABLE;
6 TYPE 9, 2 Ch, SS, RM INDUCTIVE LOOP DETECTOR;
2 TYPE 10, 2 Ch, SS, RM, TD, INDUCTIVE LOOP DETECTOR;
AND 1 OPTICAL TYPE VEHICLE DETECTOR ASSEMBLIES

FURNISH & INSTALL - 1 TYPE N-VII
PRESTRESSED CONCRETE POLE
WITH FOUNDATION
POLE LENGTH: 48'

ALSO 1 ELECTRICAL OVERHEAD POWER
SERVICE. METER BASE PURCHASED BY
CONTRACTOR FROM POWER COMPANY
AND ELECTRICAL SERVICE WIRE

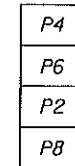
FIBER PULL
BOX W/CONDUIT

PROPOSED PED SIGNAL DETAILS



1-SECT., 2-WAY (LED)
COUNT-DOWN

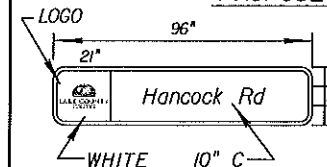
FURNISH & INSTALL
2 PEDESTRIAN
TRAFFIC SIGNAL
SECTION ON EACH FACE
2 DIRECTIONS



1-SECT., 1-WAY (LED)
COUNT-DOWN

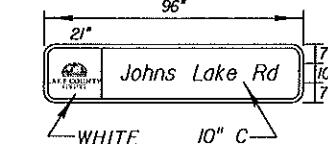
FURNISH & INSTALL
4 PEDESTRIAN
TRAFFIC SIGNAL
SECTION ON EACH FACE
1 DIRECTION

PROPOSED OVERHEAD SIGNS



Hancock Rd
WHITE 10" C

FURNISH & INSTALL
2 INTERNALLY ILLUMINATED
SIGN



Johns Lake Rd
WHITE 10" C

FURNISH & INSTALL
2 INTERNALLY ILLUMINATED
SIGN

WHITE LETTERS ON GREEN BACKGROUND
DOUBLE FACED

- NOTES:
1. CONTRACTOR SHALL VERIFY STREET NAME SIGNS AND COLOR SCHEMES PRIOR TO FABRICATION.
2. SIGNS SHALL BE FABRICATED AND INSTALLED PER LAKE COUNTY PUBLIC WORKS STANDARD SPECIFICATIONS.
3. ILLUMINATED SIGNS TO BE ILLUMINATED BY LED.

FURNISH & INSTALL
18 PULL AND
JUNCTION BOXES

FURNISH & INSTALL
500 LF UNDERGROUND CONDUIT
630-1-12

FURNISH & INSTALL
20 LF UNDERGROUND CONDUIT
630-1-12

FURNISH & INSTALL
1- CONCRETE PEDESTAL TYPE II

CONSTRUCT TYPE F
CURB AND GUTTER

POLE A
STATION=9+52.51
OFFSET= 31.92 LT
ELEV.= 208.00

POLE B
STATION=10+55.27
OFFSET= 52.98 RT
ELEV.= 205.25

FURNISH & INSTALL
4 TYPE B LOOP ASSEMBLY
660-2-102

FURNISH & INSTALL
1- CONCRETE
PEDESTAL TYPE II

FURNISH & INSTALL
26 LF UNDERGROUND CONDUIT
630-1-12

80' DIRECTIONAL BORE W/ 2 CONDUITS
630-1-14

MAINLINE SPEED = 45 MPH
SIDE STREET SPEED = 35 MPH

| DETECTORS FOR LOOPS | | | | |
|---------------------|--------------|-----------------|----------------------|------------------|
| LOOP | NO. OF LOOPS | NO. OF CHANNELS | NO. OF NEW DETECTORS | SECONDS OF DELAY |
| L-1 | 1 | 1 | 1 | - |
| L-2A&B | 2 | 2 | 1 | - |
| L-4 | 1 | 1 | 1 | - |
| L-4R | 1 | 1 | 1 | 5 |
| L-5 | 1 | 1 | 1 | - |
| L-6A&B | 2 | 2 | 1 | - |
| L-B | 1 | 1 | 1 | - |
| L-BR | 1 | 1 | 1 | 5 |

| INITIAL CONTROLLER TIMINGS | | | | | | | | |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| TIMING FUNCTION | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| MOVEMENT NUMBER | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| MINIMUM GREEN | 7 | 15 | 10 | 10 | 7 | 15 | 10 | 10 |
| EXTENSION | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| MAXIMUM GREEN 1 | 30 | 45 | 30 | 30 | 20 | 45 | 30 | 30 |
| MAXIMUM GREEN 2 | | | | | | | | |
| YELLOW CLEARANCE | 4.5 | 4.5 | 4.0 | 4.0 | 4.5 | 4.5 | 4.0 | 4.0 |
| ALL RED | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| PEDESTRIAN WALK | 7 | | 7 | | 7 | | 7 | |
| PED. CLEARANCE | 22 | | 20 | | 20 | | 22 | |
| RECALL | MIN | | | | MIN | | | |

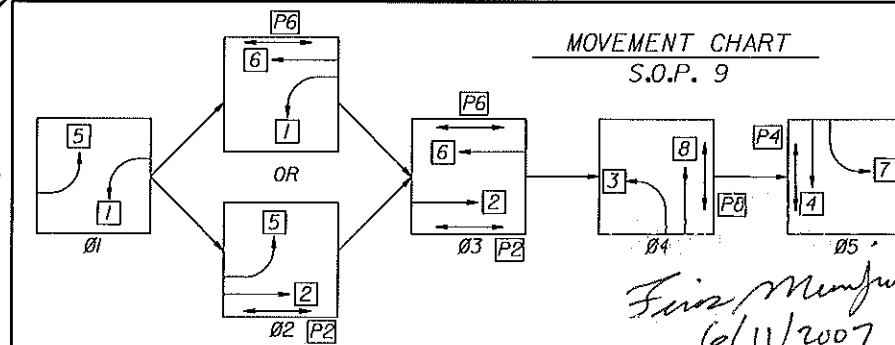
TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER INSTALL SEQUENTIAL TIMING OF INITIAL AND EXTENSION INTERVALS.

PEDESTRIAN SIGN DETAILS



NOTE:
CONTRACTOR SHALL VERIFY ROAD NAME PRIOR TO FABRICATION

**MOVEMENT CHART
S.O.P. 9**



Firas Munjed
6/11/2007

REVISIONS

| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
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| | | | | | |

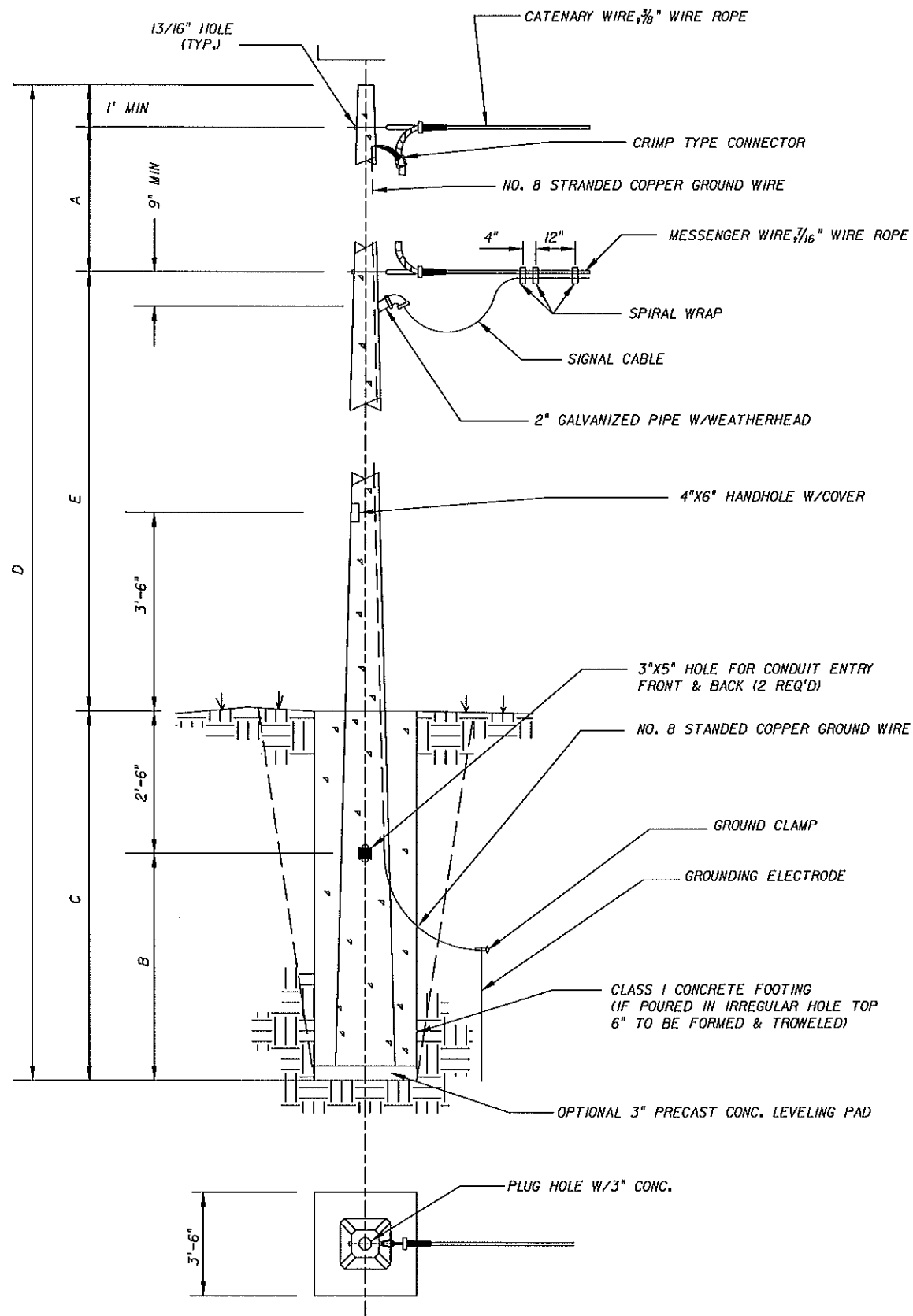
ENGINEER OF RECORD:
FIRAS S. MUNJED, P.E.
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200 EAST ROBINSON STREET SUITE 1560
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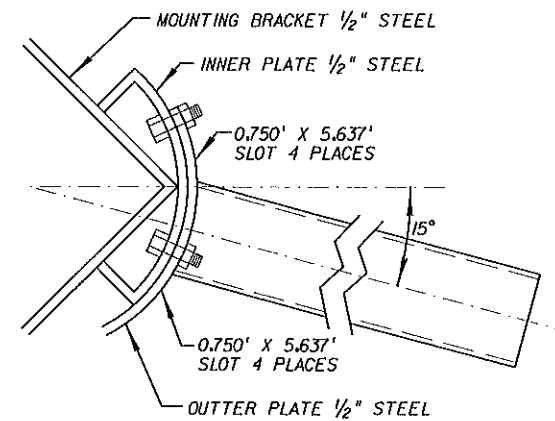
PEC
PROFESSIONAL ENGINEERING CONSULTANTS, INC.
engineers planners surveyors

HANCOCK ROAD AND JOHNS LAKE ROAD
INTERSECTION IMPROVEMENTS
SIGNALIZATION PLAN

SHEET NO.
40



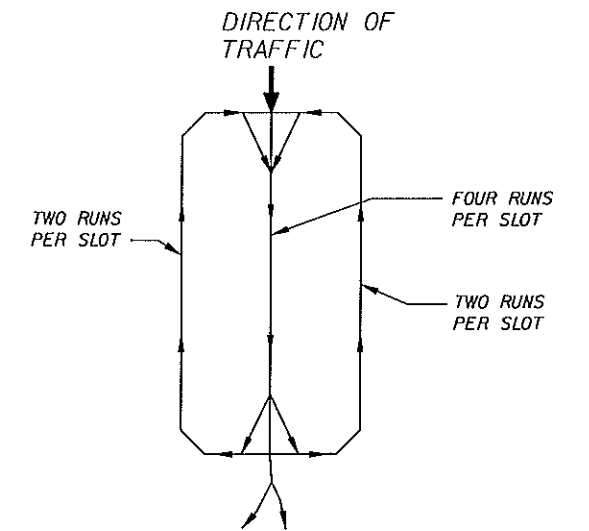
TYPE IV-VIII



STEEL SIGN BRACKET

NOTES:

- PIPE TO BE 5" STEEL SCHEDULE 40.
- MOUNTING PLATE TO BE 1/2" X 1/4" X 14" LONG WITH FOUR (4) 3/4" DIA. MOUNTING HOLES (2 EACH SIDE). STAGGER HOLES MINIMUM OF 2" FROM ALL EDGES AND FROM EACH OTHER.
- ARC WELD INNER PLATE TO MOUNTING BRACKET WITH 1/4" FILLET WELD CONTINUOUS ON OUTSIDE.
- ARC WELD 5" PIPE TO OUTER PLATE WITH 1/4" FILLET WELD CONTINUOUS OUTSIDE.
- OUTTER PLATE AND INNER PLATE BOLTED TOGETHER WITH 3/4" X 2 1/2" STEEL BOLTS AT 4 LOCATIONS.
- ONE 5/8" DIA. DRAIN HOLE ON PIPE.
- UNIT HAS 15° SWING TO LEFT AND 15° SWING TO RIGHT, A TOTAL OF 30°.



DETAIL OF LOOP WINDING (QUADRA POLE PRESENCE LOOP)

LOOP WIRE SHALL BE PLACED IN THE ABOVE MANNER TO AVOID CENTER SLOT CANCELLATION

| POLE SCHEDULE | | | | | | | |
|---------------|------|--------------------------------|-----|------|------|----|------|
| POLE | TYPE | LOCATION | A | B | C | D | E |
| A | VII | STA. 9+52.51, OFFSET=31.92 LT | 9.5 | 11.4 | 13.9 | 48 | 23.6 |
| B | VII | STA. 10+55.27, OFFSET=52.98 RT | 9.5 | 10.7 | 13.2 | 50 | 26.3 |

Firas Munjed
6/11/2007

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PEC
 PROFESSIONAL ENGINEERING CONSULTANTS, INC.
 engineers planners surveyors

HANCOCK ROAD AND JOHNS LAKE ROAD
 INTERSECTION IMPROVEMENTS
 CONCRETE STRAIN POLE DETAILS

SHEET NO.
 41