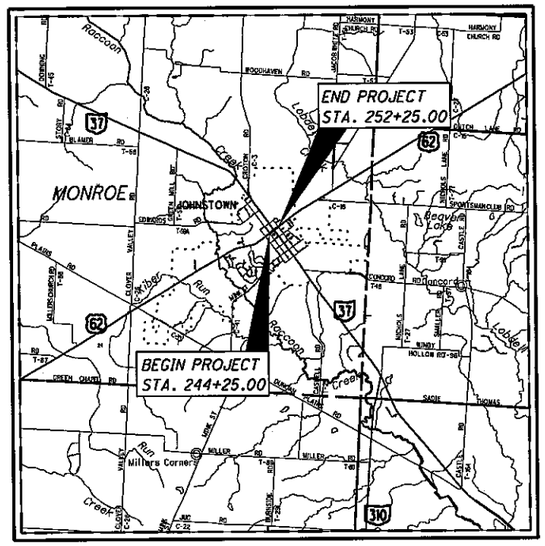


LOCATION MAP

LATITUDE: 82°41'06" LONGITUDE: 40°09'15"

SCALE IN MILES

0 1 2 3 4

N

| DESIGN DESIGNATION | U.S. 62 | S.R. 37 |
|---|---|---|
| FUNCTIONAL CLASSIFICATION | RMA/RMC | RMA |
| OPENING YEAR ADT (2011) | 11,800 | 7,900 |
| DESIGN YEAR ADT (2023) | 13,100 | 8,800 |
| DESIGN HOURLY VOLUME (2023) | 1,310 | 880 |
| DIRECTIONAL DISTRIBUTION | 55% | 55% |
| TRUCKS (24 HOUR B&C) | 5% | 9% |
| DESIGN SPEED | 35 MPH | 35 MPH |
| LEGAL SPEED | 35 MPH | 35 MPH |
| NHS PROJECT | NO | NO |

RMA = RURAL MINOR ARTERIAL
RMC - RURAL MAJOR COLLECTOR (U.S. 62 NORTHEAST OF S.R. 37)

DESIGN EXCEPTIONS: NONE

**UNDERGROUND UTILITIES**
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
**BEFORE YOU DIG**
CALL
**1-800-362-2764**
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL & GAS PRODUCERS PROTECTIVE
SERVICE CALL: **1-800-925-0988**

PLAN PREPARED BY:
Ohio Department of
Transportation
District 5

# STATE OF OHIO
# DEPARTMENT OF TRANSPORTATION

# LIC-62-4.63

## MONROE TOWNSHIP
## LICKING COUNTY

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ENGINEER'S SEAL
STATE OF OHIO
DOUGLAS N. MORGAN
E-63839
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Douglas N. Morgan
DATE: 12-20-2010

STANDARD CONSTRUCTION DRAWINGS

| | | | | | | | | SUPPLEMENTAL SPECIFICATIONS | |
|---|---|---|---|---|---|---|---|---|---|
| BP-3.1 | 10-19-07 | HL-10.11 | 4-17-19 | TC-42.10 | 1-19-07 | MT-35.10 | 4-20-01 | 800 | 1-21-11 |
| BP-4.1 | 7-16-04 | HL-10.12 | 10-15-10 | TC-42.20 | 7-16-04 | MT-97.12 | 10-15-10 | 802 | 10-15-10 |
| BP-5.1 | 7-28-00 | HL-20.11 | 1-19-07 | TC-52.10 | 1-19-07 | MT-99.20 | 1-16-09 | 815 | 1-19-07 |
| | | HL-30.11 | 1-16-09 | TC-52.20 | 1-19-07 | MT-101.90 | 1-16-09 | 816 | 1-19-07 |
| | | HL-30.22 | 4-17-09 | TC-71.10 | 1-15-10 | MT-105.10 | 1-16-09 | 823 | 10-15-10 |
| CB-1.1 | 7-15-05 | HL-60.11 | 1-19-07 | TC-81.21 | 7-16-10 | MT-110.10 | 1-16-09 | 832 | 5-05-09 |
| CB-2.2 | 7-15-05 | HL-60.12 | 1-19-07 | TC-83.10 | 1-19-07 | | | | |
| | | | | TC-83.20 | 1-19-07 | | | | |
| MH-1.1 | 7-19-02 | TC-12.30 | 1-19-07 | TC-85.10 | 10-16-09 | | | SPECIAL PROVISIONS | |
| | | TC-21.20 | 10-15-10 | TC-85.20 | 10-15-10 | | | | |
| DM-1.1 | 4-21-06 | TC-22.10 | 1-19-01 | | | | | | |
| DM-1.4 | 4-21-06 | TC-41.20 | 1-19-01 | | | | | | |
| DM-4.1 | 4-21-06 | TC-41.30 | 1-19-07 | | | | | | |
| | | TC-41.40 | 7-16-04 | | | | | | |

### PROJECT DESCRIPTION

SAFETY ROJECT TO IMPROVE THE U.S. 62 AND S.R. 37 INTERSECTION IN THE VILLAGE OF JOHNSTOWN IN LICKING COUNTY.

PROJECT EARTH DISTRUBED AREA: 0.29 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: (NOI NOT REQUIRED)

### 2010 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

APPROVED _____
DATE 12-23-10 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E090 (113)
PID NO. 85170
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
LIC-62-4.63
1/66

85170_GTS_001.DGN 12/20/10

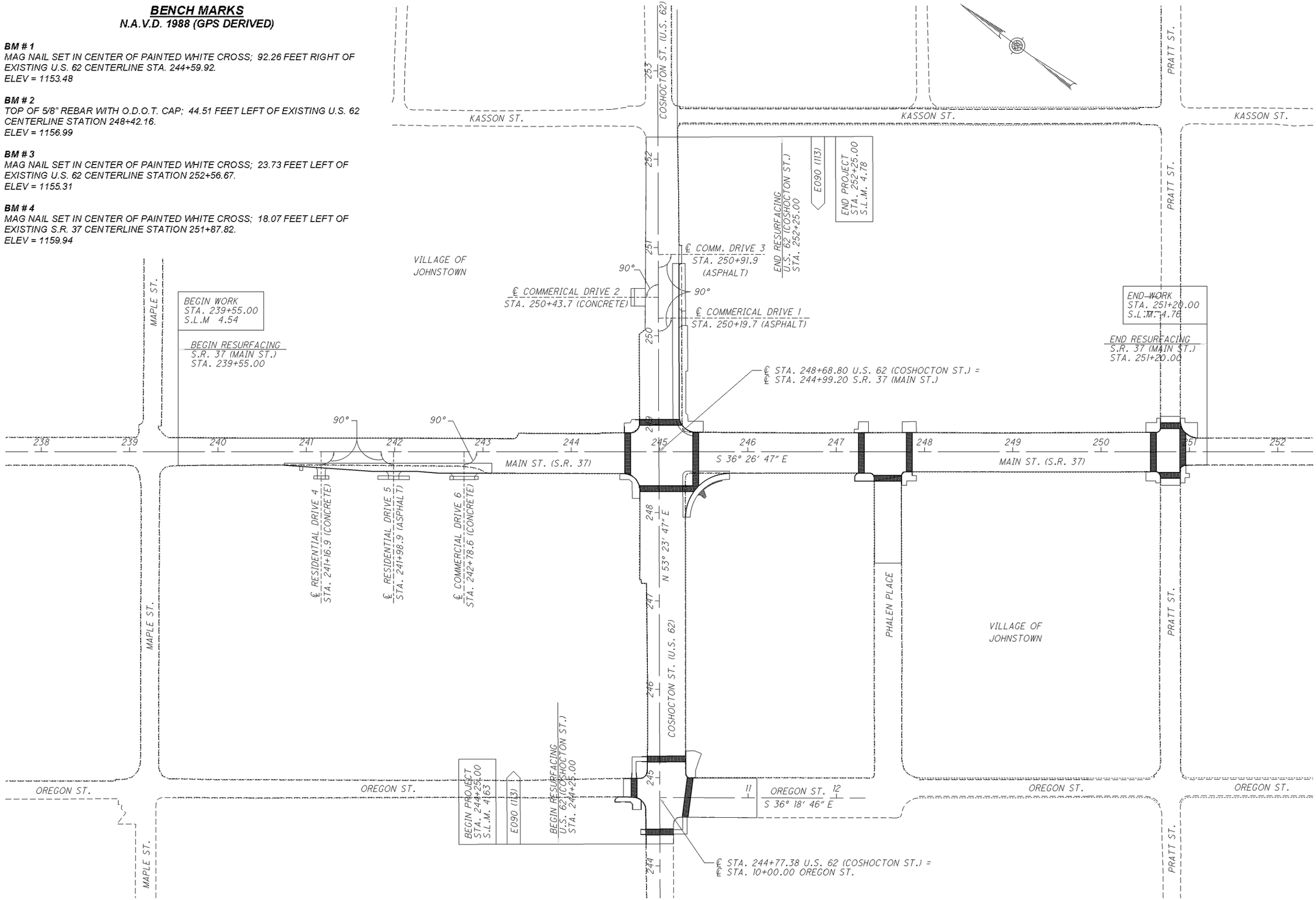
## BENCH MARKS
### N.A.V.D. 1988 (GPS DERIVED)

**BM # 1**
MAG NAIL SET IN CENTER OF PAINTED WHITE CROSS; 92.26 FEET RIGHT OF EXISTING U.S. 62 CENTERLINE STA. 244+59.92.
ELEV = 1153.48

**BM # 2**
TOP OF 5/8" REBAR WITH O.D.O.T. CAP; 44.51 FEET LEFT OF EXISTING U.S. 62 CENTERLINE STATION 248+42.16.
ELEV = 1156.99

**BM # 3**
MAG NAIL SET IN CENTER OF PAINTED WHITE CROSS; 23.73 FEET LEFT OF EXISTING U.S. 62 CENTERLINE STATION 252+56.67.
ELEV = 1155.31

**BM # 4**
MAG NAIL SET IN CENTER OF PAINTED WHITE CROSS; 18.07 FEET LEFT OF EXISTING S.R. 37 CENTERLINE STATION 251+87.82.
ELEV = 1159.94




HORIZONTAL SCALE IN FEET
0 50 100

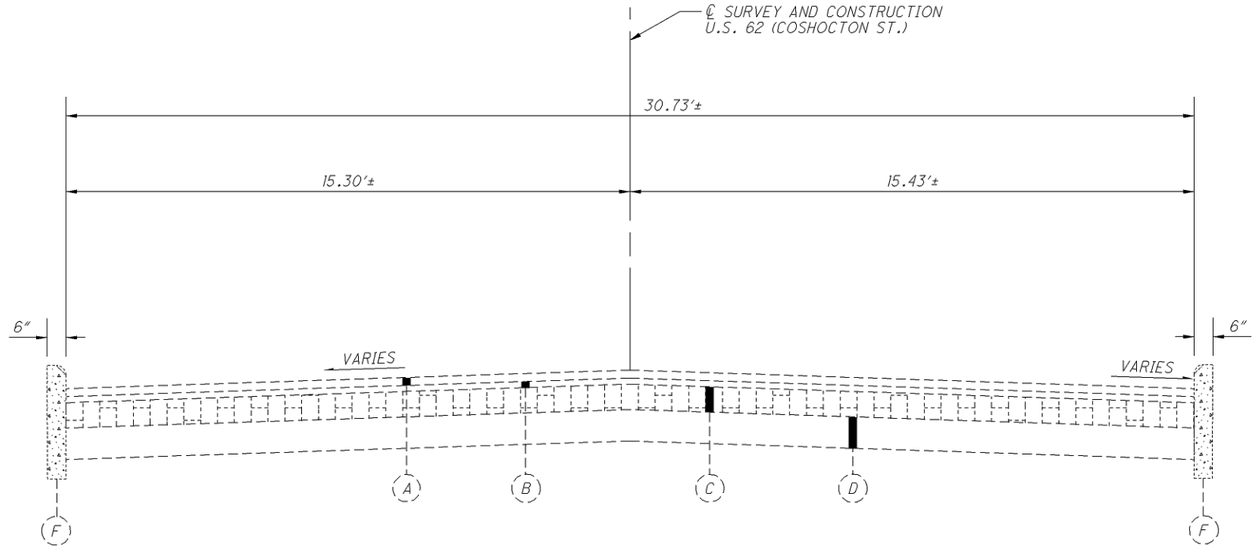
CALCULATED JLS
CHECKED DNM

# SCHEMATIC PLAN

LIC-62-4.63



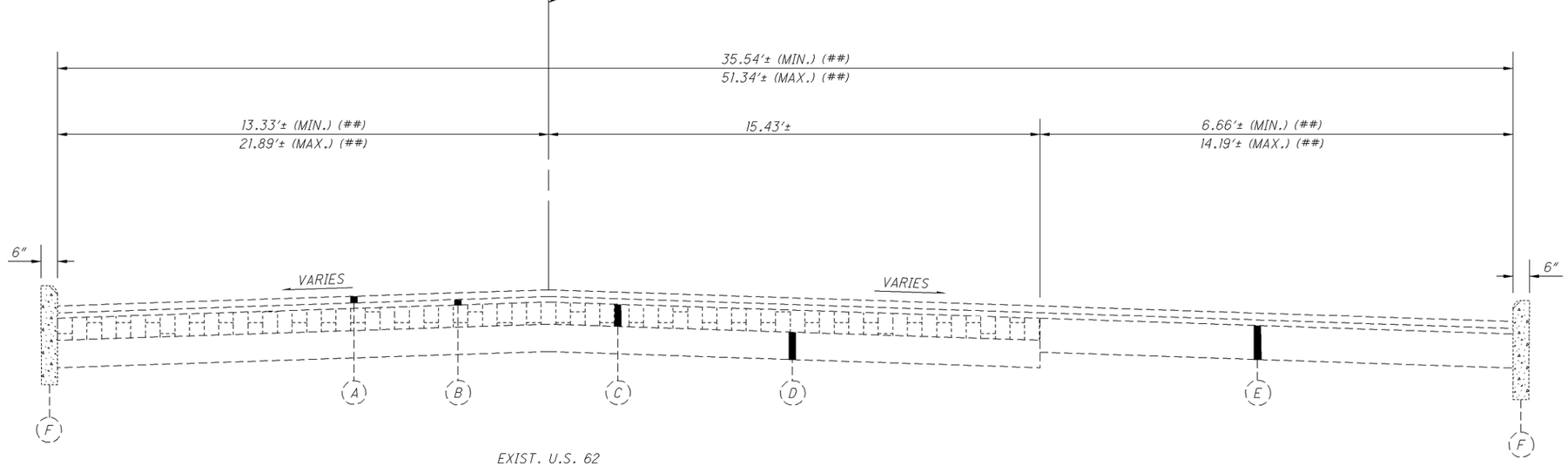
85170_GSP_001.DGN 12/10/10




EXIST. U.S. 62
SECTION APPLIES:

STA. 244+25.00 TO STA. 244+99.00 = 74.0 FT.
TOTAL 74.0 FT.

(##) - SEE U.S. 62 PLAN SHEETS 23 & 24 FOR PAVEMENT WIDTH DETAILS.




EXIST. U.S. 62
SECTION APPLIES:

STA. 244+99.00 TO STA. 252+25.00 = 726.00 FT.
TOTAL 726.00 FT.

EXISTING LEGEND

(A) - EXIST. 1 1/4"± ASPHALT CONCRETE SURFACE COURSE
(B) - EXIST. 1"± ASPHALT CONCRETE LEVELING COURSE
(C) - EXIST. BRICK PAVEMENT ON SAND CUSHION
(D) - EXIST. 4"± CONCRETE BASE
(E) - EXIST. 6"± ASPHALT CONCRETE BASE
(F) - EXIST. CURB

CALCULATED JLS
CHECKED DNM

# TYPICAL SECTIONS (U.S. 62)

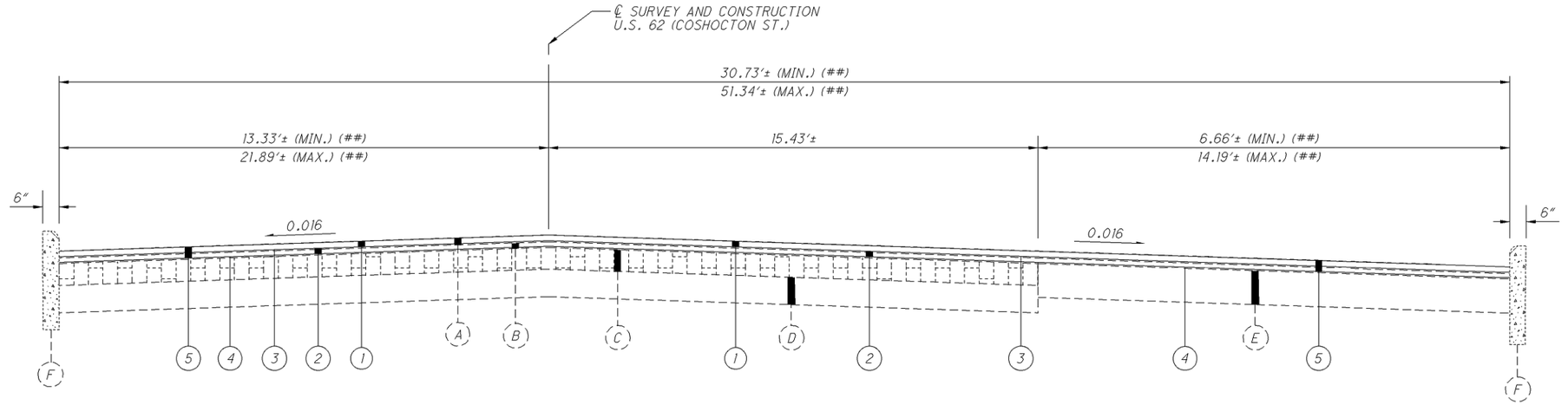
LIC-62-4.63



85170_PTS_001.DGN 11/08/10

CALCULATED JLS
CHECKED DNM

# TYPICAL SECTIONS (U.S. 62)



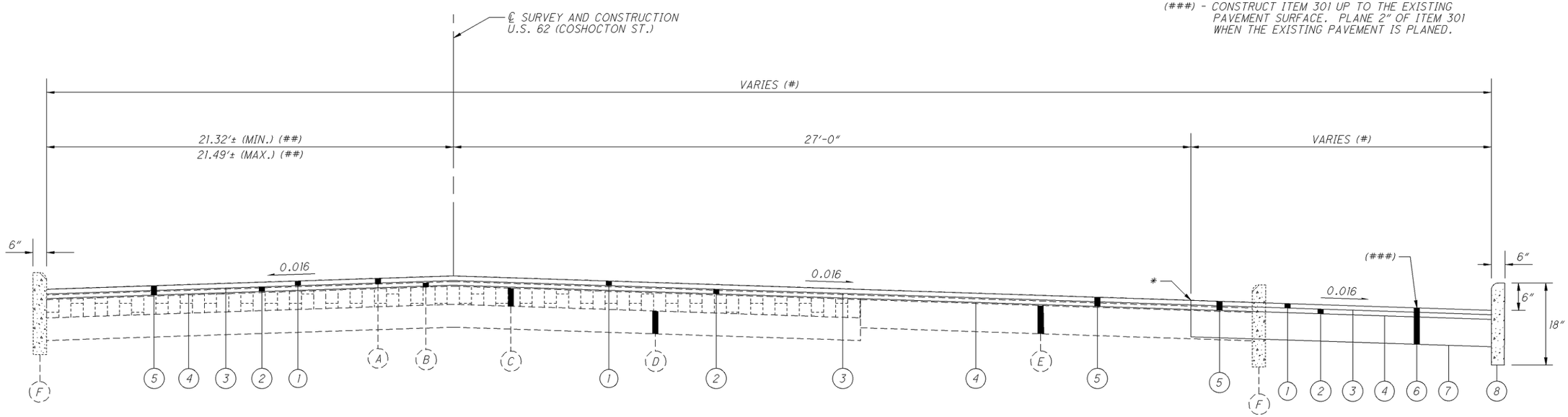

PROP. U.S. 62 (RESURFACING)
SECTION APPLIES:

STA. 244+25.00 TO STA. 247+94.61 = 369.61 FT.
STA. 248+46.70 TO STA. 249+05.43 = 58.73 FT.
STA. 250+81.73 TO STA. 252+25.00 = 143.27 FT.
TOTAL 571.61 FT.

(#) - INTERSECTION DETAIL SHEET 35.

(##) - SEE U.S. 62 PLAN SHEETS 23 & 24 FOR PAVEMENT WIDTH DETAILS.

(###) - CONSTRUCT ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE. PLANE 2" OF ITEM 301 WHEN THE EXISTING PAVEMENT IS PLANED.




PROP. U.S. 62 (PAVEMENT WIDENING)
SECTION APPLIES:

STA. 247+94.61 TO STA. 248+46.70 = 52.09 FT.
TOTAL 52.09 FT.

* - SAW CUT AS PER 203.04(E).
TACK COAT, 702.13 FOR FACE OF TRENCH @ 0.025 GAL./SQ. YD.

PROPOSED LEGEND

(1) - ITEM 448, 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(2) - ITEM 448, 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
(3) - ITEM 407, TACK COAT FOR INTERMEDIATE COURSE
(4) - ITEM 407, TACK COAT
(5) - ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (2")
(6) - ITEM 301, 8" ASPHALT CONCRETE BASE, PG64-22
(7) - ITEM 204, SUBGRADE COMPACTION
(8) - ITEM 609, CURB, TYPE 6

EXISTING LEGEND

(A) - EXIST. 1 1/4"± ASPHALT CONCRETE SURFACE COURSE
(B) - EXIST. 1"± ASPHALT CONCRETE LEVELING COURSE
(C) - EXIST. BRICK PAVEMENT ON SAND CUSHION
(D) - EXIST. 4"± CONCRETE BASE
(E) - EXIST. 6"± ASPHALT CONCRETE BASE
(F) - EXIST. CURB

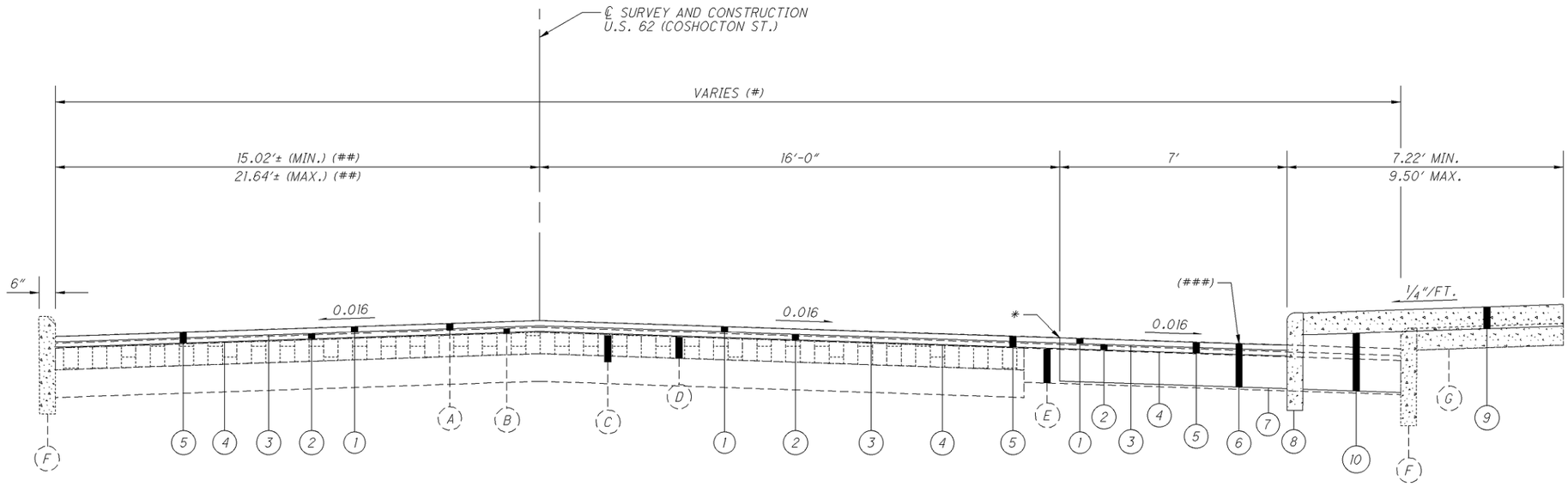
85170_PTS_002.DGN 11/09/10

LIC-62-4.63

(#) - SEE INTERSECTION DETAIL SHEET 35.

(##) - SEE U.S. 62 PLAN SHEETS 23 & 24 FOR PAVEMENT WIDTH DETAILS.

(###) - CONSTRUCT ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE. PLANE 2" OF ITEM 301 WHEN THE EXISTING PAVEMENT IS PLANED.




PROP. U.S. 62 (PAVEMENT REPAIR)
SECTION APPLIES:

STA. 249+05.43 TO STA. 250+81.73 = 176.30 FT.
TOTAL 176.30 FT.

* - SAW CUT AS PER 203.04(E).
TACK COAT, 702.13 FOR FACE OF
TRENCH @ 0.025 GAL./SQ. YD.

PROPOSED LEGEND

(1) - ITEM 448, 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(2) - ITEM 448, 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
(3) - ITEM 407, TACK COAT FOR INTERMEDIATE COURSE
(4) - ITEM 407, TACK COAT
(5) - ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (2")
(6) - ITEM 301, 8" ASPHALT CONCRETE BASE, PG64-22
(7) - ITEM 204, SUBGRADE COMPACTION
(8) - ITEM 609, CURB, TYPE 6
(9) - ITEM 608, 4" CONCRETE WALK
(10) - ITEM 203, EMBANKMENT

EXISTING LEGEND

(A) - EXIST. 1 1/4"± ASPHALT CONCRETE SURFACE COURSE
(B) - EXIST. 1"± ASPHALT CONCRETE LEVELING COURSE
(C) - EXIST. BRICK PAVEMENT ON SAND CUSHION
(D) - EXIST. 4"± CONCRETE BASE
(E) - EXIST. 6"± ASPHALT CONCRETE BASE
(F) - EXIST. CURB
(G) - EXIST. WALK

CALCULATED JLS
CHECKED DNM

# TYPICAL SECTIONS (U.S. 62)

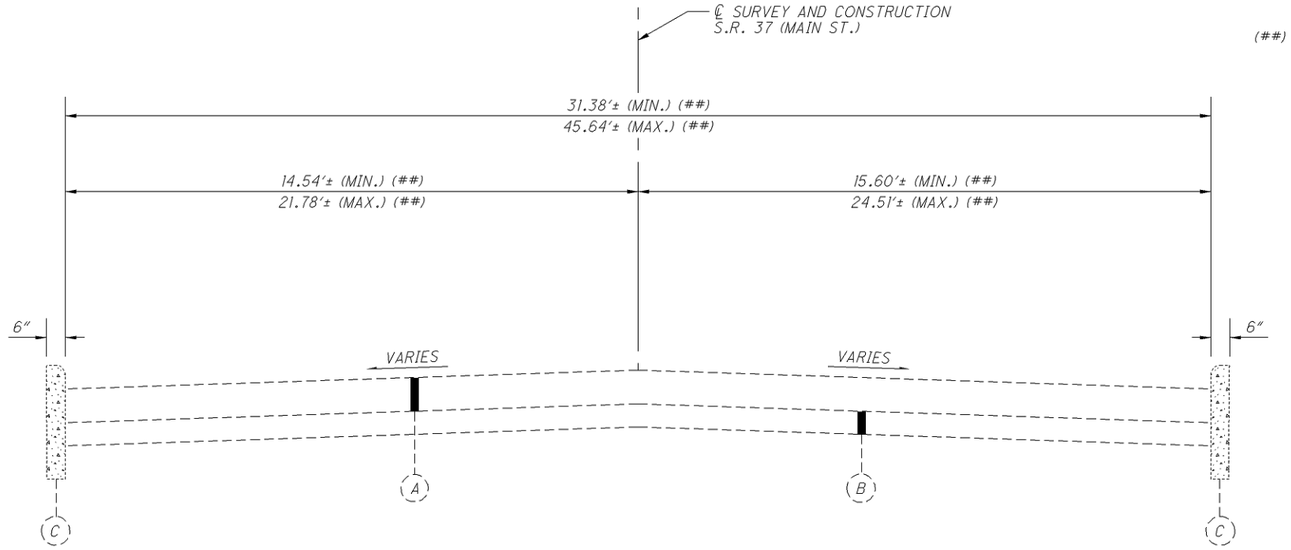
LIC-62-4.63



85170_PTS_003.DGN 11/09/10

CALCULATED JLS
CHECKED DNM

# TYPICAL SECTIONS (S.R. 37)



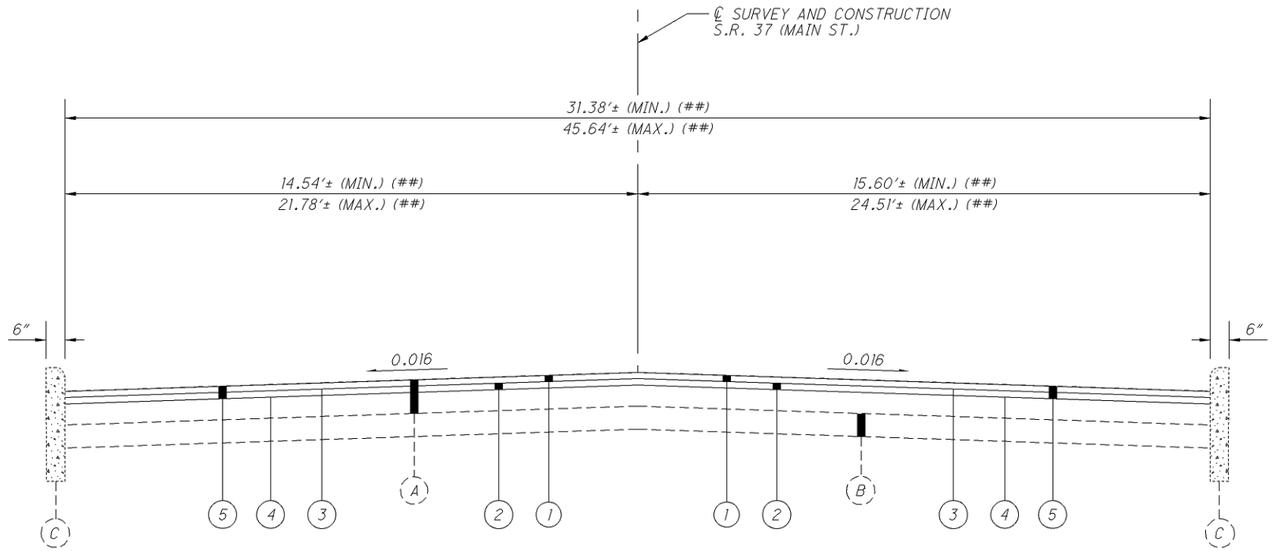

(##) - SEE S.R. 37 PLAN SHEETS 27 & 28 FOR PAVEMENT WIDTH DETAILS.

EXISTING LEGEND

(A) - EXIST. 6"± ASPHALT CONCRETE COURSE
(B) - EXIST. 4"± BRICK PAVEMENT ON SAND
(C) - EXIST. CURB

EXIST. S.R. 37
SECTION APPLIES:

STA. 239+55.00 TO STA. 251+20.00 = 1,165.00 FT.
TOTAL 1,165.00 FT.




(##) - SEE S.R. 37 PLAN SHEETS 27 & 28 FOR PAVEMENT WIDTH DETAILS.

EXISTING LEGEND

(A) - EXIST. 6"± ASPHALT CONCRETE COURSE
(B) - EXIST. 4"± BRICK PAVEMENT ON SAND
(C) - EXIST. CURB

PROPOSED LEGEND

(1) - ITEM 448, 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(2) - ITEM 448, 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
(3) - ITEM 407, TACK COAT FOR INTERMEDIATE COURSE
(4) - ITEM 407, TACK COAT
(5) - ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (2")

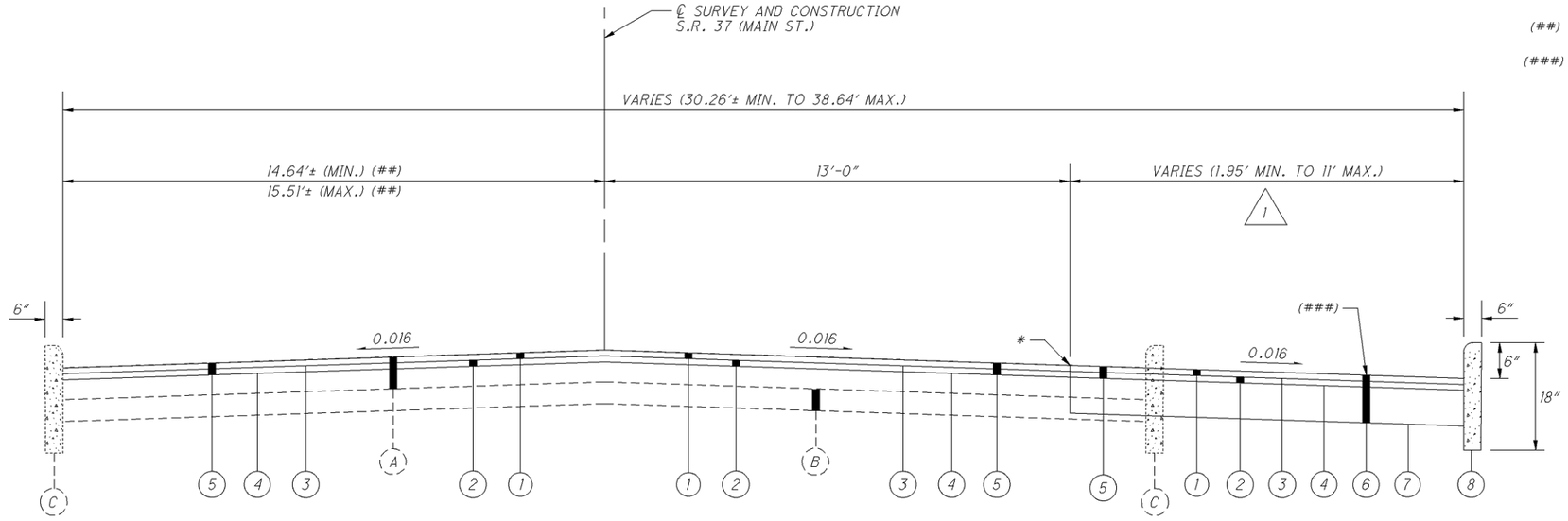
PROP. S.R. 37 (RESURFACING)
SECTION APPLIES:

STA. 239+55.00 TO STA. 240+75.00 = 120.00 FT.
STA. 243+10.00 TO STA. 245+26.28 = 216.28 FT.
STA. 245+79.26 TO STA. 251+20.00 = 540.74 FT
TOTAL 877.02 FT.

LIC-62-4.63



85170_PTS_004.DGN 11/09/10




(##) - SEE S.R. 37 PLAN SHEETS 27 & 28 FOR PAVEMENT WIDTH DETAILS.

(###) - CONSTRUCT ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE. PLANE 2" OF ITEM 301 WHEN THE EXISTING PAVEMENT IS PLANED.

1 TAPERS FROM 1.95' @ STA. 240+75.00 TO 9' @ STA. 241+75.00.
9' FROM STA. 241+75.00 TO STA. 242+25.00.
TAPERS FROM 9' @ STA. 242+25.00 TO 11' @ STA. 242+50.00.
11' FROM STA. 242+50.00 TO STA. 243+10.00.

* - SAW CUT AS PER 203.04(E). TACK COAT, 702.13 FOR FACE OF TRENCH @ 0.025 GAL./SQ. YD.

EXISTING LEGEND

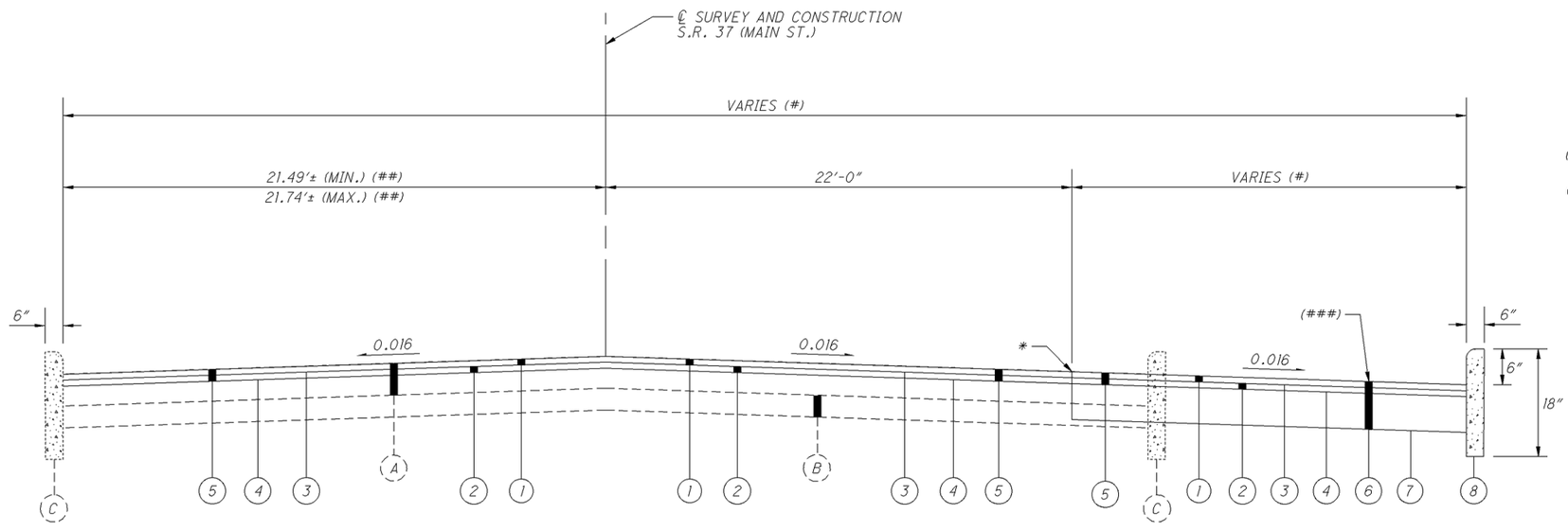
(A) - EXIST. 6"± ASPHALT CONCRETE COURSE
(B) - EXIST. 4"± BRICK PAVEMENT ON SAND
(C) - EXIST. CURB

PROP. S.R. 37 (PAVEMENT WIDENING) SECTION APPLIES:

STA. 240+75.00 TO STA. 243+10.00 = 235.00 FT.
TOTAL 235.00 FT.

PROPOSED LEGEND

(1) - ITEM 448, 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(2) - ITEM 448, 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
(3) - ITEM 407, TACK COAT FOR INTERMEDIATE COURSE
(4) - ITEM 407, TACK COAT
(5) - ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (2")
(6) - ITEM 301, 8" ASPHALT CONCRETE BASE, PG64-22
(7) - ITEM 204, SUBGRADE COMPACTION
(8) - ITEM 609, CURB, TYPE 6




(#) - SEE INTERSECTION DETAIL SHEET 35.

(##) - SEE S.R. 37 PLAN SHEETS 27 & 28 FOR PAVEMENT WIDTH DETAILS.

(###) - CONSTRUCT ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE. PLANE 2" OF ITEM 301 WHEN THE EXISTING PAVEMENT IS PLANED.

* - SAW CUT AS PER 203.04(E). TACK COAT, 702.13 FOR FACE OF TRENCH @ 0.025 GAL./SQ. YD.

EXISTING LEGEND

(A) - EXIST. 6"± ASPHALT CONCRETE COURSE
(B) - EXIST. 4"± BRICK PAVEMENT ON SAND
(C) - EXIST. CURB

PROP. S.R. 37 (PAVEMENT WIDENING) SECTION APPLIES:

STA. 245+26.28 TO STA. 245+79.26 = 52.98 FT.
TOTAL 52.98 FT.

PROPOSED LEGEND

(1) - ITEM 448, 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M
(2) - ITEM 448, 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
(3) - ITEM 407, TACK COAT FOR INTERMEDIATE COURSE
(4) - ITEM 407, TACK COAT
(5) - ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (2")
(6) - ITEM 301, 8" ASPHALT CONCRETE BASE, PG64-22
(7) - ITEM 204, SUBGRADE COMPACTION
(8) - ITEM 609, CURB, TYPE 6

CALCULATED JLS
CHECKED DNM

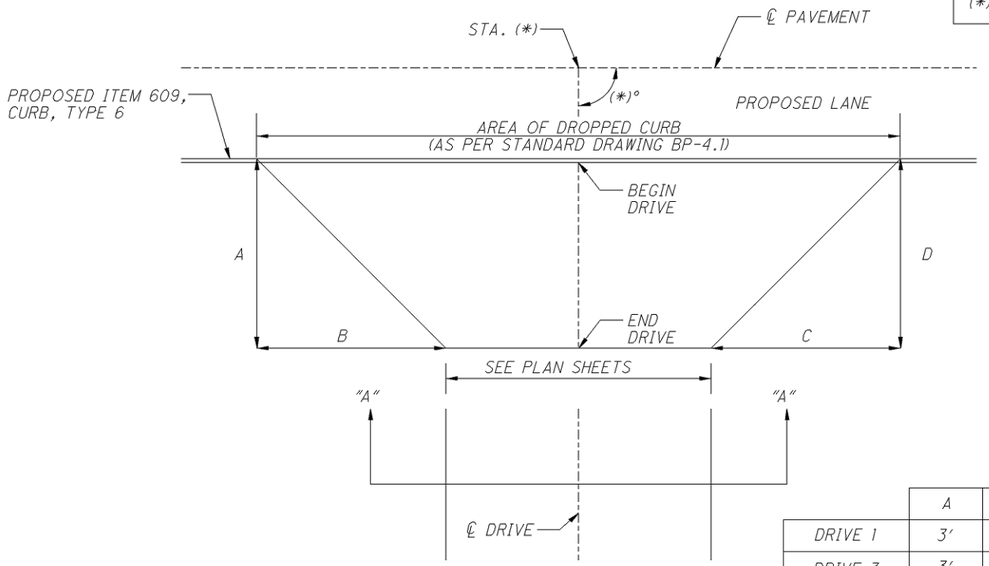
# TYPICAL SECTIONS (S.R. 37)

LIC-62-4.63

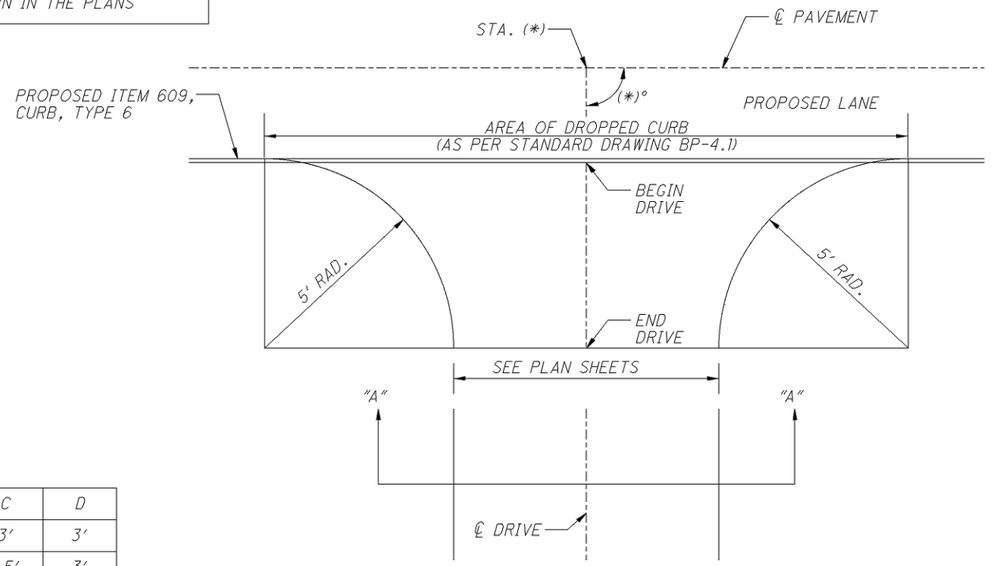


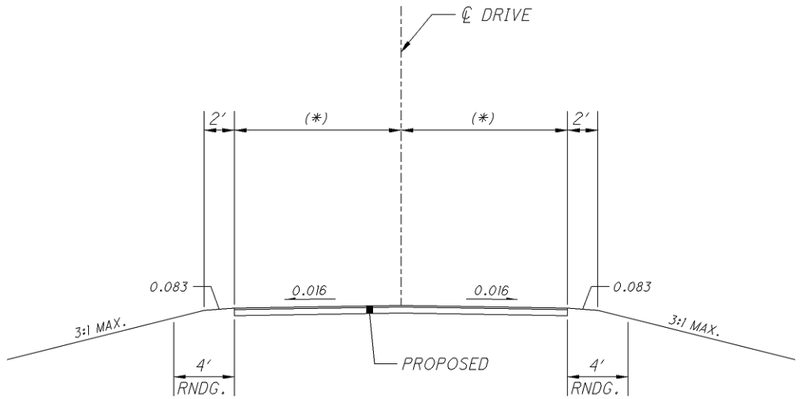
85170_PTS_005.DGN 11/09/10

(*) - AS SHOWN IN THE PLANS

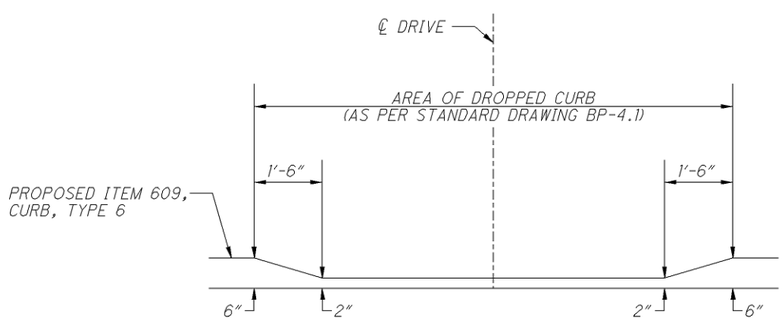



| | A | B | C | D |
|---|---|---|---|---|
| DRIVE 1 | 3′ | 3′ | 3′ | 3′ |
| DRIVE 3 | 3′ | 1.5′ | 1.5′ | 3′ |
| DRIVE 5 | 3.6′ | 3.6′ | 3.7′ | 3.7′ |

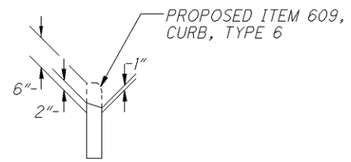



SECTION A-A




CURB HEIGHT REDUCTION DETAIL
(AT BACK OF CURB)




DROPPED CURB DETAIL
(AT DRIVES)

## RESIDENTIAL DRIVES

1¼″ ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
ON 3¾″ ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)

OR

6″ ITEM 452 NON-REINFORCED CONCRETE PAVEMENT

## COMMERCIAL DRIVES

1¼″ ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)
ON 4¾″ ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)

OR

8″ ITEM 452 NON-REINFORCED CONCRETE PAVEMENT

CALCULATED JLS CHECKED DNM

# PROPOSED TYPICAL SECTIONS (DRIVES)

LIC-62-4.63



DRIVES_PTS_001.DGN 11/09/10

CALCULATED JLS CHECKED DNM

# GENERAL NOTES

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

**CABLE:**
TIME WARNER CABLE
3760 INTERCHANGE DRIVE
COLUMBUS, OHIO 43204
ATTN: TERRY ALLEN
614.255.6349

**ELECTRIC:**
AMERICAN ELECTRIC POWER CO.
850 TECH CENTER DRIVE
GAHANNA, OHIO 43230
ATTN: PAUL PAXTON
614.883.6831

**GAS:**
COLUMBIA GAS OF OHIO
3550 JOHNNEY APPLESEED COURT
COLUMBUS, OHIO 43231
ATTN: MATT COYNE
614.296.4858

**TELEPHONE:**
CENTURYLINK CORPORATION
441 WEST BROAD STREET
PATASKALA, OHIO 43062
ATTN: DEE REED
740.927.8282

**WATER AND SANITARY:**
THE VILLAGE OF JOHNSTOWN WATER/WASTEWATER
599 SOUTH MAIN STREET
P.O. BOX 457
JOHNSTOWN, OHIO 43031
ATTN: JACK LIGGETT
740.967.4746

**EXISTING PLANS**

EXISTING PLANS ARE AVAILABLE FOR VIEWING OR PURCHASE AT THE ODOT DISTRICT 5 PRODUCTION OFFICE IN JACKSONTOWN, OHIO.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THE WORK LIMITS.

**PROFILE AND ALIGNMENT**

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

**ELEVATION DATUM**

USE THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID03

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (CORS 96)
ELLIPSOID: GRS 80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLAN (SOUTH)

UNITS ARE IN U.S. SURVEY FEET.

**NOTIFICATION OF ROAD CLOSURE OR RESTRICTION**

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:
DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR
P.O. BOX 306
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

**ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE**

DEPTH OF PLANING SHALL BE 2" AND FULL WIDTH OF PAVEMENT UNLESS OTHERWISE NOTED. THE ROADWAY SHALL BE PLANED SUCH THAT POSITIVE DRAINAGE IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT IN TANGENT SECTIONS. ALL REQUIREMENTS OF ITEM 254 SHALL APPLY.

**BUTT JOINT**

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW. BUTT JOINTS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-3.1 UNLESS OTHERWISE SHOWN IN THE PLANS. THE MINIMUM BUTT JOINT LENGTHS SHALL BE 35'.

| ROUTE | DESCRIPTION | STATION | ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC CU. YD. |
|---|---|---|---|
| U.S. 62 | BEGIN WORK | 244+25.0 | 3.3 |
| U.S. 62 | END WORK | 252+25.0 | 3.8 |
| | | | |
| S.R. 37 | BEGIN WORK | 239+55.0 | 3.4 |
| S.R. 37 | END WORK | 251+20.0 | 3.3 |
| | | | |
| TOTAL | | | 13.8 |

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

**ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 14 CU. YD.**

**UNRECORDED STORM WATER DRAINAGE**

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.33, 707.41 NON-PERFORATED, 707.42, 707.43, 707.45, 707.46, 707.47, 707.51, 707.52 SDR35.

THE FOLLOWING ITEM 603 ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

**ITEM 604, 4" CONDUIT, TYPE B 50 FT.**
**ITEM 604, 4" CONDUIT, TYPE C 50 FT.**
**ITEM 604, 4" CONDUIT, TYPE E 50 FT.**
**ITEM 604, 4" CONDUIT, TYPE F 50 FT.**

**SEEDING AND MULCHING**

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

**ITEM 659, SEEDING AND MULCHING 217 SQ. YD.**
(TOTALS CARRIED FROM SHEET 34)

**ITEM 659, REPAIR SEEDING AND MULCHING 11 SQ. YD.**
(5% OF THE PERMANENT SEEDING AREA)
0.05 x 217 = 10.9

**ITEM 659, INTER-SEEDING 11 SQ. YD.**
(5% OF THE PERMANENT SEEDING AREA)
0.05 x 217 = 10.9

**ITEM 659, COMMERCIAL FERTILIZER 0.06 TON**
(ONE TON PER 7,410 SQ. YD. OF THE PERMANENT SEEDED AREA)
2 x (217 ÷ 7,410) = 0.059

**ITEM 659, LIME 0.05 ACRE**
(PERMANENT SEEDED AREA)
217 SQ. YD. x 9 SQ. FT./SQ.YD. ÷ 43,560 SQ. FT./ACRE = 0.045 ACRE

**ITEM 659, WATER 2 M. GAL.**
(0.0027 M. GAL. PER SQ. YD. OF THE PERMANENT SEEDED AREA)
3 x (217 x 0.0027) = 1.758

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

**ITEM 201, CLEARING AND GRUBBING**

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

| SIZES | NO. TREES | NO. STUMPS | TOTAL |
|---|---|---|---|
| 18" | 3 | 0 | 3 |

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CALCULATED JLS | CHECKED DNM

# GENERAL NOTES

**CONTINGENCY QUANTITES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATING INTO THE FINAL CHANGE ORDER GOVERNING THE COMPLETION OF THIS PROJECT.

**PAVEMENT RESTORATION FOR PIPE INSTALLATIONS**

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF PIPES UNDER ITEM 603.

**ITEM 301, ASPHALT CONCRETE BASE, PG64-22 20 CU. YD.**

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF **12** INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH. SEE STANDARD CONSTRUCTION DRAWING DM-1.4 FOR TRENCH WIDTH FORMULA AND CALCULATION.

**SPOT LEVELING**

THE FOLLOWING QUANTITIES SHALL BE USED AS DIRECTED BY THE ENGINEER TO CORRECT PROFILE/CROSS SLOPE IRREGULARITIES. THIS WORK MAY BE INTERMITTENT THROUGHOUT THE LIMITS OF THE PROJECT. SPOT LEVELING SHALL OCCUR BEFORE PLACING THE INTERMEDIATE COURSE.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN CARRIED TO THE SUB-SUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

**ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22 – 25 CU.YD.**

**ITEM 604, CATCH BASIN ADJUSTED TO GRADE**
**ITEM 604, MANHOLE ADJUSTED TO GRADE**
**ITEM 604, GAS VALVE BOX ADJUSTED TO GRADE**
**ITEM 638, VALVE BOX ADJUSTED TO GRADE**

THESE ITEMS SHALL BE USED TO ADJUST CATCH BASINS, MANHOLES, GAS VALVE BOXES AND WATER VALVE BOXES LOCATED THROUGH OUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER.

ALL MATERIALS, LABOR EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DECRIBED SHALL BE INCLUDED FOR PAYMENT WITH THE ITEMS LISTED BELOW:

| | |
|---|---|
| **ITEM 604, CATCH BASIN ADJUSTED TO GRADE** | **9 EACH** |
| **ITEM 604, MANHOLE ADJUSTED TO GRADE** | **7 EACH** |
| **ITEM 604, GAS VALVE BOX ADJUSTED TO GRADE** | **6 EACH** |
| **ITEM 638, VALVE BOX ADJUSTED TO GRADE** | **19 EACH** |

**ITEM 625, REMOVAL OF LUMINAIRE AND REERECTION, AS PER PLAN**

PRIOR TO REERECTION, THE CONTRACTOR SHALL CLEAN THE EXISTING LUMINAIRE AND FIX ANY DEFECTS. THE CONTRACTOR SHALL ALSO REMOVE THE EXISTING LAMP AND REPLACE IT WITH A NEW LAMP. THE NEW LAMP WATTAGE SHALL MATCH THE OLD LAMP WATTAGE.

**DECORATIVE LIGHT POLE S**

THE EXISTING DECORATIVE LIGHT POLES (INCLUDING LUMINAIRES) LOCATED AT STA. 245+32.53, 36.7' RT. AND STA. 248+26.69, 36.7' RT., SHALL BE REMOVED FOR REUSE. THE LIGHT POLES AND LUMINAIRES SHALL BE CAREFULLY REMOVED AND STORED ON SITE TO BE INSTALLED ON A NEW FOUNDATIONS AT STA. 245+46.71, 36.7' RT. AND STA. 248+09.17, 39.5' RT., RESPECTIVELY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE LIGHT POLES OR THE LUMINAIRES DURING REMOVAL, STORAGE AND RE-ERECTION.

PRIOR TO REMOVING THE EXISTING LIGHT POLES AND FOUNDATIONS, THE CONTRACTOR SHALL CONTACT ***JIM LENNER, VILLAGE PLANNER OF JOHNSTOWN, 740.967.3177***, IN ORDER TO HAVE THE ELECTRIC SHUT OFF TO THE DECORATIVE LIGHTS AND DECORATIVE CLOCK.

THE CONTRACTOR SHALL INSTALL A NEW 18" PULL BOX AT STA. 245+46.71, 44.1' RT. TO INTERCEPT THE EXISTING CONDUIT AND WIRE THAT SUPPLIES POWER TO THE DECORATIVE LIGHT LOCATED AT STA. 245+32.53. THE CONTRACTOR SHALL USE THIS PULL BOX TO SPLICE THE EXISTING WIRING TO NEW DUCT CABLE. THE CONTRACTOR SHALL RUN NEW DUCT CABLE FROM THIS PULL BOX TO THE NEW DECORATIVE LIGHT POLE FOUNDATION LOCATED AT STA. 245+46.71, 36.7' RT..

THE CONTRACTOR SHALL ALSO INSTALL A NEW 18" PULL BOX AT STA. 247+98.18, 37.1' RT. TO INTERCEPT THE EXISTING CONDUIT AND WIRE THAT SUPPLIES POWER TO THE EXISTING DECORATIVE LIGHT POLE LOCATED AT STA. 247+32.58, 36.2' RT. THE CONTRACTOR SHALL USE THIS PULL BOX TO SPLICE THE EXISTING WIRING TO NEW DUCT CABLE. THE CONTRACTOR SHALL RUN NEW DUCT CABLE FROM THIS PULL BOX TO THE NEW DECORATIVE LIGHT POLE FOUNDATION LOCATED AT STA. 248+09.17, 39.5' RT..

THE CONTRACTOR SHALL REMOVE THE EXISTING PULL BOX LOCATED AT STA. 248+36.17, 52.9' RT. AND REPLACE IT AT STA. 248+34.74, 53.9' RT.. THE CONTRACTOR SHALL LABEL ALL EXISTING WIRES IN THE PULL BOX BEFORE REMOVING THE EXISTING PULL BOX. THE EXISTING CONDUIT AND WIRE THAT TRAVELS FROM THIS PULL BOX TO THE EXISTING DECORATIVE LIGHT LOCATED AT STA. 248+26.69, 36.7' RT. SHALL BE REMOVED AND DISCARDED. THE EXISTING CONDUIT AND WIRE THAT SUPPLIES POWER TO THE DECORATIVE CLOCK SHALL BE RECONNECTED IN THE PULL BOX ONCE IT HAS BEEN RELOCATED. THE CONTRACTOR SHALL RUN NEW DUCT CABLE FROM THIS PULL BOX TO THE NEW DECORATIVE LIGHT POLE FOUNDATION LOCATED AT STA. 248+09.17, 39.5' RT..

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN IN ORDER TO PERFORM THE WORK DESCRIBED ABOVE:

**ITEM 625, CONNECTION, FUSED PULL APART– 4 EACH**

**ITEM 625, CONNECTION, UNFUSED PULL APART – 2 EACH**

**ITEM 625, CONNECTION, UNFUSED PERMANENT – 9 EACH**

**ITEM 625, LIGHT POLE FOUNDATION, 24" X 6' DEEP – 2 EACH**

**ITEM 625, NO. 10 AWG POLE AND BRACKET CABLE – 80 FT**

**ITEM 625, 1 ½" DUCT CABLE WITH THREE NO. 4 AWG 5000 VOLT CABLES – 88 FT**

**ITEM 625, REMOVAL OF LUMINAIRE AND REERECTION, AS PER PLAN – 2 EACH**

**ITEM 625, TRENCH, 24" DEEP, AS PER PLAN – 51 FT**

**ITEM 625, PULL BOX, 725.08, 18" – 2 EACH**

**ITEM 625, PULL BOX REMOVED AND REPLACED – 1 EACH**

**DECORATIVE LIGHT POLE S, CONT'D**

**ITEM 625, GROUND ROD – 2 EACH**

**ITEM 625, REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN – 2 EACH**

**ITEM 625, LIGHT POLE FOUNDATION REMOVED – 2 EACH**

**ITEM 625, DISCONNECT CIRCUIT – 3 EACH**

**ITEM 625, REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN**

PRIOR TO REERECTION, THE CONTRACTOR SHALL CLEAN THE EXISTING DECORATIVE LIGHT POLE AND FIX ANY DEFECTS. THE CONTRACTOR SHALL INSURE THAT THE DECORATIVE LIGHT POLE IS WORKING PROPERLY BEFORE REERECTION. THE ANCHOR BOLTS FOR THE RELOCATED LIGHT POLE SHALL BE INLCUDED WITH THE COST OF THE NEW FOUNDATION.

**ITEM 653, TOPSOILFURNISHED AND PLACED, AS PER PLAN**

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING TOPSOIL ADJACENT TO SIDEWALK AND CURB RAMPS THROUGHOUT THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE REQUIRED TO SEED AND MULCH THE TOPSOIL AS PER 659 OF THE 2010 CMS.

PAYMENT FOR ITEM 653 "TOPSOIL FURNISHED AND PLACED, AS PER PLAN", SHALL BE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL FURNISHED AND PLACED, INCLUDING ALL OF THE LABOR, MATERIALS AND EQUIPMENT NEEDED TO COMPLETE THE WORK.

AN ESTIMATED QUANTITY OF **10 CU. YD.** HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

**ITEM 690, SPECIAL-MISC.: 6FT BENCH**

THE CONTRACTOR SHALL PROVIDE AND INSTALL A DECORATIVE PARK BENCH AT THE LOCATION SHOWN IN THE PLANS. THE DECORATIVE PARK BENCH SHALL BE MADE FOR OUTSIDE USE AND SHALL HAVE A METAL FRAME WITH WOOD SLATS. THE FRAME SHALL BE PAINTED BLACK.

THE PARK BENCH SHALL BE A "WB CHESAPEAKE" STYLE, MODEL WB346, AS MANUFACTURED BY STERNBERG LIGHTING, 555 LAWRENCE AVE., ROSELLE, ILLINIOIS 60172, A "VICTORIAN" STYLE, MODEL VBLF-80-W, AS MANUFACTURED BY BELSON OUTDOORS, INC., 111 NORTH RIVER ROAD, NORTH AURORA, IL 60542 OR AN APPROVED EQUAL.

ALL MATERIALS, LABOR EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO INSTALL THE DECORATIVE PARK BENCH AS DECRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT WITH **ITEM 690, SPECIAL-MISC.: 6FT BENCH.**

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

**ITEM 690, SPECIAL-MISC.: 6FT BENCH 1 EACH**

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CALCULATED JLS CHECKED DNM

# GENERAL NOTES

**ITEM 604, MANHOLE NO. 1, AS PER PLAN**

THE PROPOSED MANHOLE WILL REPLACE AN EXISTING CATCH BASIN. THE FLOWLINE AND OUTLET CONDUIT SIZE OF THE EXISTING CATCH BASIN COULD NOT BE VERIFIED. PRIOR TO REMOVING THE CATCH BASIN. THE CONTRACTOR SHALL RECORD THE FLOWLINE ELEVATION AND DIAMETER OF THE EXISTING OUTLET CONDUIT. THE CONTRACTOR SHALL REMOVE THE EXISTING CATCH BASIN WITHOUT CAUSING DAMAGE TO THE EXISITING OUTLET CONDUIT.

THE CONTRACTOR WILL BE REQUIRED TO FIELD CUT TWO HOLES IN THE MANHOLE. ONE OF THE HOLES WILL BE CUT TO ACCEPT THE EXISTING OUTLET CONDUIT MENTIONED ABOVE. THE FLOWLINE OF THE EXISTING OUTLET CONDUIT SHALL MATCH THE ELEVATION RECORDED PRIOR TO REMOVING THE CATCH BASIN. THE SECOND HOLE WILL BE CUT TO ACCEPT THE PROPOSED 12" CONDUIT, TYPE B AS SHOWN IN THE DETAIL ON SHEET 41.

ALL MATERIALS, LABOR EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO INSTALL THE MANHOLE AS DECRIBED ABOVE SHALL BE INCLUDED FOR PAYMENT WITH **ITEM 604, MANHOLE NO. 1, AS PER PLAN.**

**ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT**

THIS ITEM SHALL CONSIST OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 12 IN DIAMETER CONDUIT AND FILLING THE AREA THUS SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

BULKHEADS SHALL BE LOCATED AT THE LIMITS OF THE AREA TO BE FILLED AS INDICATED ON THE PLANS. THE BULKHEADS SHALL CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

THE FILL MATERIAL SHALL BE PUMPED INTO PLACE, OR PLACED BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT, AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH, SHALL BE FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR SHALL BE THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

**ITEM 690, SPECIAL-MISC.: BRICK WALK**

THE PROPOSED WORK AT THE INTERSECTION OF U.S. 62 AND S.R. 37 WILL REQUIRE THE CONTRACTOR TO REVISE A PORTION OF THE BRICK WALK LOCATED AROUND THE DECORATIVE CLOCK AND WILL REQUIRE ONE OF THE DECORATIVE BENCHES TO BE REMOVED.

THE CONTRACTOR SHALL NOT DISTURB THE DECORATIVE CLOCK OR THE TWO REMAINING DECORATIVE BENCHES.

THE CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING BRICKS AND THE DECORATIVE BENCH NECESSARY TO INSTALL THE PROPOSED WALK. THE EXISTING BRICKS SHALL BE STORED ON SITE TO BE REUSED.

THE EXISTING DECORATIVE BENCH SHALL BE REMOVED AND STORED ON SITE FOR PICKUP BY THE VILLAGE. ONCE THE BENCH HAS BEEN REMOVED, THE CONTRACTOR SHALL CONTACT **JIM LENNER, VILLAGE PLANNER OF JOHNSTOWN, 740.967.3177** TO SET UP PICKUP BY THE VILLAGE.

ONCE THE CONTRACTOR HAS PLACED THE PROPOSED WALK, THE CONTRACTOR SHALL USE THE EXISTING BRICKS TO REBUILD THE BRICK WALK UP TO THE NEW WALK AS SHOWN ON SHEET 36. ANY BRICKS NOT USED SHALL BE TURNED OVER TO THE VILLAGE.

ALL EXCAVATION, MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTAL ITEMS NEEDED TO COMPLETE THE WORK AS DESCRIBED ABOVE, SHALL BE PAID FOR UNDER **ITEM 690, SPECIAL-MISC.: BRICK WALK.**

**ITEM 690, SPECIAL-MISC.: DECORATIVE CROSSWALK**

THIS ITEM SHALL CONSIST OF FURNISHING AND PLACING A DECORATIVE STAMPED CONCRETE CROSSWALK. AFTER PLACING THE ASPHALT CONCRETE SURFACE COURSE, THE CONTRACTOR SHALL LAYOUT THE PROPOSED DECORATIVE CROSSWALKS. PRIOR TO SAWING THE PAVEMENT, THE CONTRACTOR SHALL GET APPROVAL OF THE CROSSWALK LOCATIONS FROM THE PROJECT ENGINEER.

THE CONTRACTOR SHALL SAW THE PAVEMENT AS PER 203.04(E) OF THE 2010 CMS.

THE DEPTH OF EXCAVATION FOR THE CROSSWALK SHALL BE APPROXIMATELY 10"±. AFTER EXCAVATION HAS BEEN COMPLETED, PLACE APPROXIMATELY 10"± OF CLASS FS CONCRETE, AS PER ITEM 499 OF THE CMS, BRINGING THE TOP OF CONCRETE SURFACE TO THE ELEVATION OF THE ADJOINING PAVEMENT.

THIS ITEM SHALL MEET ALL REQUIREMENTS AS PER 451.07 OF THE CMS.

THE CONTRACTOR SHALL PROVIDE STAMPED COLORED CONCRETE FOR THIS ITEM. THE STAMPED CONCRETE SHALL BE PATTERNED AND COLORED AFTER THE VILLAGE OF JOHNSTOWN'S BIGELOW PARK BRICK AT THE SOUTHEAST QUADRANT OF THE U.S. 62 AND S.R. 37 INTERSECTION. THE PATTERN AND COLOR SHALL BE APPROVED BY **JIM LENNER, VILLAGE PLANNER OF JOHNSTOWN, 740.967.3177**.

COLORING OF THE CONCRETE SHALL BE ACCOMPLISHED BY BLENDING/MIXING COLORING AGENT WITHIN THE CONCRETE.

ALL EXCAVATION, PAVEMENT CUTTING, MATERIALS, LABOR, EQUIPMENT, TOOLS, TRAFFIC CONTROL, AND INCIDENTAL ITEMS NEEDED TO COMPLETE THE WORK AS DESCRIBED ABOVE, SHALL BE PAID FOR UNDER **ITEM 690, SPECIAL-MISC.: DECORATIVE CROSSWALK.**

**CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES**

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEM.

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

**ITEM 407, TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE**

THE RATE OF APPLICATION OF THE 407 TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

**ITEM 407, TACK COAT, TRACKLESS TACK, SURFACE COURSE**

THE RATE OF APPLICATION OF THE 407 TACK COAT, TRACKLESS TACK, SURFACE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

**ITEM 603, 12" CONDUIT, TYPE B, AS PER PLAN**

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A 12" CONDUIT, TYPE B, UNDER U.S. 62 AT THE LOCATION SHOWN IN THE PLANS. THE INLET OF THIS CONDUIT WILL BE CONNECTED TO A NEW CATCH BASIN THAT WILL BE INSTALLED AT STA. 250+35.77, 23.0' RT., AS SHOWN ON CROSS SECTION SHEET 26. THE OUTLET OF THIS CONDUIT WILL BE CONNECTED TO AN EXISTING CONDUIT THAT CONNECTS TO AN EXISTING MANHOLE LOCATED AT STA. 250+42.45, 24.2' LT. THE CONTRACTOR SHALL JOIN THE TWO CONDUITS TOGETHER AT A LOCATION OUTSIDE OF THE EXISTING MANHOLE.

THIS CONDUIT SHALL BE CONSTRUCTED PART-WIDTH SO THAT TRAFFIC CAN BE MAINTAINED ON U.S. 62 DURING INSTALLATION.

ANY TEMPORARY SHORING THAT IS REQUIRED TO SUPPORT THE ROADWAY ADJACENT TO THE TRENCH EXCAVATED FOR THIS CONDUIT INSTALLATION SHALL BE INCLUDED IN THE COST OF THIS ITEM.

ALL EXCAVATION, TEMPORARY SHORING, MATERIALS, STRUCTURAL BACKFILL, LABOR, EQUIPMENT, TOOLS, AND INCIDENTAL ITEMS NEEDED TO COMPLETE THE WORK AS DESCRIBED ABOVE, SHALL BE PAID FOR UNDER **ITEM 603, 12" CONDUIT, TYPE B, AS PER PLAN.**

LIC-62-4.63

CALCULATED JLS CHECKED DNM

# MAINTENANCE OF TRAFFIC GENERAL NOTES

## ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT AND THE PARKING LANE ON THE SIDE THE WORK IS BEING PERFORMED, AS PER STANDARD DRAWINGS MT-97.10 & MT-97.12.

BEFORE WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF A PERSON OR PERSONS WHO CAN BE CONTACTED 24 HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION AND ALL INTERESTED POLICING AGENCIES. THIS PERSON OR PERSONS SHALL BE RESPONSIBLE FOR REPLACING NECESSARY TRAFFIC CONTROL DEVICES IMMEDIATELY.

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR THE PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL REQUIRED TRAFFIC CONTROL DEVICES SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO AS TO PREVENT ANY INTERFERENCE TO THE CONTINUOUS FLOW OF TRAFFIC. ALL VEHICLES, EQUIPMENT, WORKERS AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIME TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

TEMPORARY FEATHERS USING ITEM 448 WILL BE REQUIRED AT ANY LOCATION DESIGNATED BY THE PROJECT ENGINEER. THEY SHALL BE INSTALLED ACCORDING TO BP-3.1 AND REMOVED WHEN NO LONGER REQUIRED.

THE CONTRACTOR SHALL PROVIDE THE NECESSARY TRAFFIC CONTROL DEVICES TO CONVERT THE SIGNALIZED INTERSECTION AT U.S. 62 AND S.R. 37 TO A 4-WAY STOP CONDITION DURING THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

DURING THE PROPOSED TRAFFIC SIGNAL INSTALLATION AT THE INTERSECTION OF U.S. 62 AND OREGON STREET, THE CONTRACTOR SHALL CONVERT ONLY THE OREGON STREET APPROACHES TO STOP CONDITION. U.S. 62 WILL REMAIN FREE FLOWING DURING THE PROPOSED TRAFFIC SIGNAL INSTALLATION.

EXISTING SIGNS OR CONTRACTOR SUPPLIED SIGNS SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION.

ALL CONFLICTING SIGNS AND PAVEMENT MARKINGS, WHETHER INSIDE OR OUTSIDE THE WORK LIMITS, SHALL BE COVERED OR REMOVED. WHERE APPLICABLE, AND WHEN DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL PLACE TEMPORARY SIGNS OR TEMPORARY PAVEMENT MARKING AT THESE LOCATIONS.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT, IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY:

**ITEM 614, MAINTAINING TRAFFIC LUMP**

## TEMPORARY ACCESS TO DRIVES AND APPROACHES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC TO DRIVES AND APPROACHES. ALL DRIVES SHALL BE PROVIDED ACCESS AS PER 614.02(A).

**ITEM 410, TRAFFIC COMPACTED SURFACE, TYPE C 10 CU. YD.**
**ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 20 CU. YD.**

## PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES EXCEPT THAT ONE-WAY TRAFFIC WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

## TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

## OVERNIGHT TRENCH CLOSING

THE BASE WIDENING SHALL BE COMPLETED TO A DEPTH OF NO MORE THAN **2 INCHES** BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT EXCEPT FOR A SHORT LENGTH (25 FEET OR LESS) OF A WORK SECTION AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

## DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY:

**ITEM 616, WATER 1 M. GAL.**
(0.004 M. GAL. PER CU. YD. OF THE TOTAL EARTHWORK)
(76 CU. YD. TOTAL OF EXCAVATION)
(3 CU. YD. TOTAL OF EMBANKMENT)
76 + 3 = 79 CU. YD. TOTAL EARTHWORK
0.004 x 79 = 0.316

## ITEM 614, WORK ZONE MARKING SIGN

IN ACCORDANCE WITH CMS SECTION 614.04, THE QUANTITY OF WORK ZONE MARKING SIGN HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

W8-H15 (GROOVED PAVEMENT): 12 EACH

**ITEM 614, WORK ZONE MARKING SIGN 12 EACH**

## ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF **20 EACH** HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

## ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPENED TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

MEMORIAL DAY FOURTH OF JULY
LABOR DAY

FIREMAN'S FESTIVAL - THIRD WEEK OF JUNE
HARTFORD FAIR - FIRST WEEK OF AUGUST

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

| DAY OF THE WEEK | TIME ALL LANES MUST BE OPEN TO TRAFFIC |
|---|---|
| SUNDAY | 12:00N FRIDAY THROUGH 6:00AM MONDAY |
| MONDAY | 12:00N FRIDAY THROUGH 6:00AM TUESDAY |
| TUESDAY | 12:00N MONDAY THROUGH 6:00AM WEDNESDAY |
| WEDNESDAY | 12:00N TUESDAY THROUGH 6:00AM THURSDAY |
| THURSDAY | 12:00N WEDNESDAY THROUGH 6:00AM MONDAY |
| FRIDAY | 12:00N THURSDAY THROUGH 6:00AM MONDAY |
| SATURDAY | 12:00N FRIDAY THROUGH 6:00 AM MONDAY |

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE OF **$50.00** FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED

LIC-62-4.63



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**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF CMS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.
- WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BERETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONTINUED)**

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE 100 HOURS**

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE.

**WORK RESTRICTIONS**

- PEDESTRIAN ACCESS TO BUSINESSES SHALL BE MAINTAINED AT ALL TIMES.
- TRAFFIC SHALL NOT BE MAINTAINED ON A PLANED SURFACE. ALL PLANED SURFACES SHALL BE OVERLAYED WITH AT LEAST ONE ASPHALT CONCRETE COURSE BEFORE OPENING TO TRAFFIC.
- THE EXISTING OVERHEAD LIGHTING AT THE INTERSECTION OF U.S. 62 (COSHOCTON ST.)/S.R. 37 (MAIN ST.) AND THE INTERSECTION OF U.S. 62 (COSHOCTON ST.)/OREGON ST. IS OWNED AND OPERATED BY AEP. AEP WILL BE RESPONSIBLE FOR REMOVING THE EXISTING OVERHEAD LUMINAIRE AND BRACKET ARM.
- ALL LANES OF TRAFFIC SHALL BE OPENED TO TRAFFIC DURING THE THIRD WEEK OF JUNE FOR THE FIREMAN'S FESTIVAL. NIGHTWORK SHALL NOT BE PERMITTED DURING THIS WEEK.
- ALL LANES OF TRAFFIC SHALL BE OPENED TO TRAFFIC DURING THE FIRST WEEK OF AUGUST DURING THE HARTFORD FAIR. NIGHTWORK SHALL NOT BE PERMITTED DURING THIS WEEK.
- THE EXISTING SIGNAL EQUIPMENT LOCATED AT THE INTERSECTION OF S.R. 37 (MAIN STREET) AND PRATT STREET CANNOT BE REMOVED UNTIL THE SIGNAL HEADS HAVE BEEN BAGGED FOR A PERIOD OF 60 DAYS OR UNTIL JULY 15, 2011. THE SIGNAL HEADS WILL BE BAGGED BY ODOT PERSONNEL PRIOR TO START OF THIS PROJECT.
- THE CONTRACTOR SHALL REMOVE/REPLACE THE TRAFFIC SIGNAL LOCATED AT THE INTERSECTION OF U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN STREET) BEFORE REMOVING THE TRAFFIC SIGNAL AT THE INTERSECTION U.S. 62 (COSHOCTON STREET) AND OREGON STREET.
- THE CONTRACTOR SHALL NOT USE THE PARK PROPERTY FOR STAGGING AREAS OR EQUIPMENT STORAGE.

**SEQUENCE OF OPERATIONS**

**PHASE 1**

- CONSTRUCT THE PAVEMENT WIDENING ON S.R. 37 (MAIN ST.) FROM STA. 240+75 RT. TO STA. 243+10 RT. INCLUDING THE DRIVES AND CONCRETE WALK.

  **NOTE: CONSTRUCT THE ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE AT THIS TIME.**

  **NOTE: ACCESS TO ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES.**

**PHASE 2**

- CONSTRUCT THE PAVEMENT WIDENING ON U.S. 62 (COSHOCTON ST.) FROM STA. 248+86 RT. TO STA. 250+82 RT. INCLUDING THE DRIVES, THE PROPOSED DRAINAGE LOCATED WITHIN SECTION, AND THE CONCRETE WALK.
- CONSTRUCT THE RADIUS IMPROVEMENT AT THE NORTH EAST QUADRANT OF THE U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.) INTERSECTION.

  **NOTE: CONSTRUCT THE ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE AT THIS TIME.**

  **NOTE: ACCESS TO ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES.**

**PHASE 3**

- CONSTRUCT THE PROPOSED SIGNAL AT THE U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.) INTERSECTION AND REMOVE THE EXISTING SIGNAL EQUIPMENT.
- CONSTRUCT THE PROPOSED SIGNAL AT THE U.S. 62 (COSHOCTON ST.) AND OREGON STREET INTERSECTION AND REMOVE THE EXISTING SIGNAL EQUIPMENT.
- REMOVE THE EXISTING SIGNAL AND ALL ITEMS ASSOCIATED WITH THE SIGNAL AT THE S.R. 37 (MAIN ST.) AND PRATT ST. INTERSECTION.

  **NOTE: CONSTRUCT ALLTHE PROPOSED CONCRETE WALK, CURB AND CURB RAMPS AT EACH INTERSECTION.**

**PHASE 4**

- CONSTRUCT THE RADIUS IMPROVEMENT AT THE SOUTH EAST QUADRANT OF THE U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.) INTERSECTION INCLUDING THE PROPOSED DRAINAGE IMPROVEMENT AT THIS LOCATION, THE NEW CONCRETE WALK AND THE BRICK WALK LOCATED AROUND THE DECORATIVE CLOCK.

  **NOTE: CONSTRUCT THE ITEM 301 UP TO THE EXISTING PAVEMENT SURFACE AT THIS TIME.**

  **NOTE: ACCESS TO ALL DRIVES SHALL BE MAINTAINED AT ALL TIMES.**

**PHASE 5**

- CONSTRUCT PAVEMENT PLANING AND RESURFACING AS PER THE TYPICAL SECTIONS ON BOTH U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.).

**PHASE 6**

- CONSTRUCT PROPOSED DECORATIVE CROSSWALKS.

  **NOTE: THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF THE PROPOSED CROSSWALKS WITH THE ENGINEER BEFORE SAW CUTTING THEIR LOCATIONS.**

CALCULATED JLS CHECKED DNM

**MAINTENANCE OF TRAFFIC GENERAL NOTES**

**LIC-62-4.63**



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## ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, EIGHT CHANGEABLE MESSAGE SIGNS, ON SITE, FOUR OF THE SIGNS SHALL BE ON SITE FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR (OFFICE OF MATERIALS MANAGEMENT). THE APPROVED LIST OF PORTABLE CHANGEABLE MESSAGE SIGNS CAN BE FOUND ON THE ODOT WEBSITE BY CLICKING ON THE SERVICES MENU, THEN CLICKING ON MATERIALS MANAGEMENT. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 475 FT. AND 650 FT. RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM. TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. PCMS TRAILERS SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO CMS 614.03, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM ALL TRAFFIC, AND SHALL DISPLAY ONE OR MORE TYPE G YELLOW RETROREFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN ONE HOUR FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.)

## ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (CONT'D)

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF CMS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTORS NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK. THE CONTRACTOR SHALL ONLY BE PAID FOR PCMS UNITS WHEN THEY ARE IN OPERATION ON THE PROJECT AS SPECIFIED IN THE PLANS OR BY THE ENGINEER.

**ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 400 DAY**

## RESTRICTING PARKING ON VILLAGE STREETS

THE STREETS WITHIN THE PROJECT AREA ARE URBAN IN CHARACTER AND GENERALLY ALLOW ON-STREET PARKING ON ONE OR BOTH SIDES OF THE STREET. IN ORDER TO MAINTAIN TRAFFIC DURING PAVING OPERATIONS, THE CONTRACTOR WILL NEED TO RESTRICT PARKING ALONG THE STREET IN THE AREA WHERE WORK IS BEING PERFORMED.

BEFORE RESTRICTING PERMITTED PARKING ALONG ANY PUBLIC STREET, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE VILLAGE OF JOHNSTOWN, **VILLAGE PLANNER, JIM LENNER, 740.967.3177**. UPON APPROVAL, THE CONTRACTOR SHALL PLACE "NO PARKING" SIGNS IN THE AREA WHERE WORK IS BEING PERFORMED. THE SIGNS SHALL BE POSTED A MINIMUM OF TWENTY-FOUR (24) HOURS PRIOR TO THE EFFECTIVE TIME OF THE RESTRICTION. THE CONTRACTOR SHALL MARK ON THE SIGNS THE EFFECTIVE TIME AND DATE OF THE POSTED RESTRICTION. THE PERSON POSTING THE SIGNS SHALL INITIAL, AND NOTE THE DATE AND TIME THE SIGN WAS ERECTED IN THE LOWER OUTSIDE MARGIN.

THE SIGNS SHALL BE ERECTED PER THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES. FAILURE TO FOLLOW THESE PROCEDURES WILL CAUSE THE RESTRICTION TO BE VOIDED.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

## ITEM 614, WORK ZONE MARKINGS, CLASS III, 642 PAINT

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER UNTIL THE PERMANENT MARKINGS ARE IN PLACE.

| | |
|---|---|
| **ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT** | **0.23 MILE** |
| **ITEM 614, WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT** | **312 FT.** |
| **ITEM 614, WORK ZONE STOP LINE, CLASS III, 642 PAINT** | **82 FT.** |

## ITEM 614, MAINTAINING TRAFFIC (SIGNALS & NIGHTWORK)

TO MINIMIZE THE IMPACTS TO THE TRAVELING PUBLIC AND REDUCE CONGESTION, THE CONTRACTOR HAS THE OPTION TO WORK DURING NIGHT TIME HOURS. HOWEVER, ALL OF THE PROPOSED SIGNAL WORK AT THE FOLLOWING INTERSECTIONS SHALL BE COMPLETED DURING NIGHT TIME HOURS BEGINNING AT 9:00 P.M. AND ENDING AT 8:00 A.M.

- U.S. 62(COSHOCTON ST.) AND S.R. 37(MAIN ST.)
- U.S. 62(COSHOCTON ST.) AND OREGON STREET

THE CONTRACTOR SHALL ERECT TEMPORARY STOP SIGNS AT EACH APPROACH LEG TO THE INTERSECTIONS LISTED BELOW IN ORDER TO MAINTAIN THE TRAFFIC AS A 4-WAY STOP CONDITION UNTIL THE SIGNAL IS COMPLETEY OPERATIONAL:

- U.S. 62(COSHOCTON ST.) AND S.R. 37(MAIN ST.)

THE CONTRACTOR SHALL ERECT TEMPORARY STOP SIGNS AT EACH APPROACH LEG ON OREGON STREET AT THE INTERSECTION OF U.S. 62 (COSHOCTON ST.) AND OREGON STREET. NO STOP SIGNS WILL BE PLACED ON U.S. 62 AT THIS INTERSECTION. THE STOP SIGNS SHALL REMAIN IN PLACE ON OREGON STREET UNTIL THE SIGNAL IS COMPLETELY OPERATIONAL.

PRIOR TO REMOVING THE SIGNAL INSTALLATIONS, THE CONTRACTOR SHALL PLACE ONE PORTABLE CHANGEABLE MESSAGE SIGN IN ADVANCE OF THE INTERSECTION, AT EACH APPROACH, TO GIVE ADVANCED WARNING OF THE CHANGE IN TRAFFIC CONTROL. THE PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE AT LEAST 72 HOURS BEFORE THE INTERSECTION IS CONVERTED TO A STOP CONDITION.

THE LEFT TURN LANES, LOCATED AT THE SIGNALIZED INTERSECTIONS LISTED ABOVE, SHALL NOT BE UTILIZED DURING STOP CONDITIONS. THE CONTRACTOR SHALL PROVIDE THE NECESSARY TRAFFIC CONTROL TO CLOSE OFF THE LEFT TURN LANES DURING THE TIME THAT SIGNALS ARE NOT IN OPERATION. DURING PEAK HOURS OF OPERATION (6:00 - 10:00 A.M. AND 2:00 - 7:00 P.M.), THE CONTRACTOR SHALL UTILIZE LEO'S TO HELP FACILITATE TRAFFIC FLOW AT THE INTERSECTION OF U.S. 62 AND S.R. 37.

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE CONTRACTOR SHALL MAKE PREPARATIONS TO REMOVE THE EXISTING SIGNAL INSTALLATIONS AT THE INTERSECTIONS LISTED ABOVE. ONCE THE CONTRACTOR BEGINS WORKING AT ONE INTERSECTION, THE CONTRACTOR SHALL CONTINUE WORKING AT THAT INTERSECTION UNTIL ALL OF THE NEW SIGNAL EQUIPMENT IS IN PLACE AND THE SIGNAL IS OPERATIONAL.

EACH SIGNAL, AT THE INTERSECTIONS LISTED ABOVE, SHALL BE TAKEN OUT OF OPERATION FOR A MAXIMUM OF 120 CONSECUTIVE HOURS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

## FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

| SHEET NUMBER | | | | | | | | | FEDERAL SAFETY | LCATS SAFETY | ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 10 | 19 | 20 | 21 | 22 | 26 | 34 | 41 | | | | | | | | |
| | | | | | | | | | | | | | | | **ROADWAY** | |
| LUMP | | | | | | | | | 0.8 | 0.2 | 201 | 11000 | LUMP | | CLEARING AND GRUBBING | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | 247 | 4,393 | | | | 3,712 | 928 | 202 | 30000 | 4,640 | SQ FT | WALK REMOVED | |
| | | 177 | 235 | | 899 | | | | 1,049 | 262 | 202 | 32000 | 1,311 | FT | CURB REMOVED | |
| | | | | | | | | 55 | 44 | 11 | 202 | 35100 | 55 | FT | PIPE REMOVED, 24" AND UNDER | |
| | | | | | | | | 2 | 1.6 | 0.4 | 202 | 58100 | 2 | EACH | CATCH BASIN REMOVED | |
| | | | | | | | | 1 | 0.8 | 0.2 | 202 | 58500 | 1 | EACH | CATCH BASIN ABANDONED | |
| | | | | | | | | 35 | 28 | 7 | 202 | 70000 | 35 | FT | SPECIAL - FILL AND PLUG EXISTING CONDUIT | 11 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | 15 | | 52 | 77 | | 115 | 29 | 203 | 10000 | 144 | CU YD | EXCAVATION | |
| | | | | | | 18 | 1 | | 15 | 4 | 203 | 20000 | 19 | CU YD | EMBANKMENT | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | 151 | 300 | 68 | | | | | 415 | 104 | 204 | 10000 | 519 | SQ YD | SUBGRADE COMPACTION | |
| | | 0.08 | 0.18 | | | | | | 0.21 | 0.05 | 204 | 45000 | 0.26 | HOUR | PROOF ROLLING | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | 0.8 | 0.2 | 690 | 98000 | 1 | EACH | SPECIAL - MISC.: 6FT BENCH | 10 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | **EROSION CONTROL** | |
| | 10 | | | | | | | | 8 | 2 | 653 | 10001 | 10 | CU YD | TOPSOIL FURNISHED AND PLACED, AS PER PLAN | 10 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 217 | | | | | | | | | 174 | 43 | 659 | 00500 | 217 | SQ YD | SEEDING AND MULCHING, CLASS 1 | |
| 11 | | | | | | | | | 9 | 2 | 659 | 14000 | 11 | SQ YD | REPAIR SEEDING AND MULCHING | |
| 11 | | | | | | | | | 9 | 2 | 659 | 15000 | 11 | SQ YD | INTER-SEEDING | |
| 0.06 | | | | | | | | | 0.05 | 0.01 | 659 | 20000 | 0.06 | TON | COMMERCIAL FERTILIZER | |
| 0.05 | | | | | | | | | 0.04 | 0.01 | 659 | 31000 | 0.05 | ACRE | LIME | |
| | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | 1.6 | 0.4 | 659 | 35000 | 2 | M GAL | WATER | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | 1,440 | 360 | 832 | 30000 | 1,800 | EACH | EROSION CONTROL | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | **DRAINAGE** | |
| 50 | | | | | | | | | 40 | 10 | 603 | 00100 | 50 | FT | 4" CONDUIT, TYPE B | |
| 50 | | | | | | | | | 40 | 10 | 603 | 00200 | 50 | FT | 4" CONDUIT, TYPE C | |
| 50 | | | | | | | | | 40 | 10 | 603 | 00400 | 50 | FT | 4" CONDUIT, TYPE E | |
| 50 | | | | | | | | | 40 | 10 | 603 | 00406 | 50 | FT | 4" CONDUIT, TYPE F | |
| | | | | | | | | 4 | 3 | 1 | 603 | 01800 | 4 | FT | 8" CONDUIT, TYPE B | |
| | | | | | | | | 90 | 72 | 18 | 603 | 04400 | 90 | FT | 12" CONDUIT, TYPE B | |
| | | | | | | | | 55 | 44 | 11 | 603 | 04401 | 55 | FT | 12" CONDUIT, TYPE B, AS PER PLAN | 11 |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | 2 | 1.6 | 0.4 | 604 | 00800 | 2 | EACH | CATCH BASIN, NO. 3A | |
| | | | | | | | | 1 | 0.8 | 0.2 | 604 | 04500 | 1 | EACH | CATCH BASIN, NO. 2-2B | |
| | 9 | | | | | | | | 7 | 2 | 604 | 09000 | 9 | EACH | CATCH BASIN ADJUSTED TO GRADE | |
| | | | | | | | | 1 | 0.8 | 0.2 | 604 | 30101 | 1 | EACH | MANHOLE, NO. 1, AS PER PLAN | 11 |
| | 7 | | | | | | | | 6 | 1 | 604 | 34500 | 7 | EACH | MANHOLE ADJUSTED TO GRADE | |
| | 6 | | | | | | | | 5 | 1 | 604 | 36000 | 6 | EACH | GAS VALVE BOX ADJUSTED TO GRADE | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | 19 | | | | | | | | 15 | 4 | 638 | 10800 | 19 | EACH | VALVE BOX ADJUSTED TO GRADE | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

CALCULATED JLS CHECKED DNM

# GENERAL SUMMARY

LIC-62-4.63

| SHEET NUMBER | | | | | | FEDERAL SAFETY | LCATS SAFETY | ENHANCEMENT | ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 19 | 20 | 21 | 22 | | | | | | | | | | |
| | | | | | | | | | | | | | **PAVEMENT** | |
| | 3,609 | 6,126 | | | | 7,788 | 1,947 | | 254 | 01000 | 9,735 | SQ YD | PAVEMENT PLANING, ASPHALT CONCRETE | |
| 20 | 34 | 67 | | | | 97 | 24 | | 301 | 46000 | 121 | CU YD | ASPHALT CONCRETE BASE, PG64-22 | |
| | | | 1 | | | 0.8 | 0.2 | | 301 | 48000 | 1 | CU YD | ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS) | |
| | 289 | 462 | | | | 601 | 150 | | 407 | 20000 | 751 | GALLON | TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE | |
| | 1 | 2 | | | | 2.4 | 0.6 | | 407 | 13900 | 3 | GALLON | TACK COAT, 702.13 | |
| | 190 | 309 | | | | 399 | 100 | | 407 | 20100 | 499 | GALLON | TACK COAT, TRACKLESS TACK, SURFACE COURSE | |
| 25 | 102 | 173 | | | | 240 | 60 | | 448 | 46020 | 300 | CU YD | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 | |
| | 108 | 173 | | | | 225 | 56 | | 448 | 46904 | 281 | CU YD | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M | |
| | | | 1 | | | 0.8 | 0.2 | | 448 | 48020 | 1 | CU YD | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS) | |
| | | | 17 | | | 14 | 3 | | 452 | 10000 | 17 | SQ YD | 6" NON-REINFORCED CONCRETE PAVEMENT | |
| | | | 44 | | | 35 | 9 | | 452 | 12000 | 44 | SQ YD | 8" NON-REINFORCED CONCRETE PAVEMENT | |
| | | | 157 | 6,119 | | 5,021 | 1,255 | | 608 | 10000 | 6,276 | SQ FT | 4" CONCRETE WALK | |
| | | | 82 | | | 66 | 16 | | 608 | 13000 | 82 | SQ FT | 6" CONCRETE WALK | |
| | | | 242 | | | 194 | 48 | | 608 | 15000 | 242 | SQ FT | 8" CONCRETE WALK | |
| | 177 | 235 | | 880 | | 1,034 | 258 | | 609 | 26000 | 1,292 | FT | CURB, TYPE 6 | |
| | | | | 14 | | 11 | 3 | | 690 | 98000 | 14 | EACH | SPECIAL - MISC.: CURB RAMP, TYPE A1 | 38 |
| | | | | 6 | | 5 | 1 | | 690 | 98000 | 6 | EACH | SPECIAL - MISC.: CURB RAMP, TYPE A2 | 38 |
| | | | | 3 | | 2.4 | 0.6 | | 690 | 98000 | 3 | EACH | SPECIAL - MISC.: CURB RAMP, TYPE D | 38 |
| | | | | 48 | | 38 | 10 | | 690 | 98200 | 48 | SQ FT | SPECIAL - MISC.: DETECTABLE WARNING | 38 |
| | | | | 71 | | 57 | 14 | | 690 | 98200 | 71 | SQ FT | SPECIAL - MISC.: BRICK WALK | 11 |
| | | | | 4,229 | | | | 4,229 | 690 | 98200 | 4,229 | SQ FT | SPECIAL - MISC.: DECORATIVE CROSSWALK | 11 |
| | | | | | | | | | | | | | **LIGHTING** | |
| 4 | | | | | | 3.2 | 0.8 | | 625 | 00450 | 4 | EACH | CONNECTION, FUSED PULL APART | |
| 2 | | | | | | 1.6 | 0.4 | | 625 | 00460 | 2 | EACH | CONNECTION, UNFUSED PULL APART | |
| 9 | | | | | | 7 | 2 | | 625 | 00480 | 9 | EACH | CONNECTION, UNFUSED PERMANENT | |
| 2 | | | | | | 1.6 | 0.4 | | 625 | 14000 | 2 | EACH | LIGHT POLE FOUNDATION, 24" X 6' DEEP | |
| 80 | | | | | | 64 | 16 | | 625 | 23400 | 80 | FT | NO. 10 AWG POLE AND BRACKET CABLE | |
| 88 | | | | | | 70 | 18 | | 625 | 24320 | 88 | FT | 1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 5000 VOLT CABLES | |
| 2 | | | | | | 1.6 | 0.4 | | 625 | 27521 | 2 | EACH | REMOVAL OF LUMINAIRE AND REERECTION, AS PER PLAN | 10 |
| 1 | | | | | | 0.8 | 0.2 | | 625 | 31506 | 1 | EACH | PULL BOX REMOVED AND REPLACED | |
| 2 | | | | | | 1.6 | 0.4 | | 625 | 35011 | 2 | EACH | REMOVE AND REERECT EXISTING LIGHT POLE, AS PER PLAN | 10 |
| 2 | | | | | | 1.6 | 0.4 | | 625 | 75500 | 2 | EACH | LIGHT POLE FOUNDATION REMOVED | |
| 3 | | | | | | 2.4 | 0.6 | | 625 | 75800 | 3 | EACH | DISCONNECT CIRCUIT | |

CALCULATED JLS CHECKED DNM

# GENERAL SUMMARY

LIC-62-4.63

16
66

85170_GGS_002.DGN 3/28/2011

| SHEET NUMBER | | | | FEDERAL SAFETY | LCATS SAFETY | ALTERNATE BID | ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 47 | 62 | 63 | | | | | | | | | |
| | | | | | | | | | | | **TRAFFIC CONTROL** | |
| | 115.25 | | | 92.20 | 23.05 | | 630 | 02100 | 115.25 | EACH | GROUND MOUNTED SUPPORT, NO. 2 POST | |
| | 1 | | | 0.8 | 0.2 | | 630 | 08600 | 1 | EACH | SIGN POST REFLECTOR | |
| | 20 | | | 16 | 4 | | 630 | 79500 | 20 | EACH | SIGN SUPPORT ASSEMBLY, POLE MOUNTED | |
| | 149.25 | | | 119.40 | 29.85 | | 630 | 80100 | 149.25 | SQ FT | SIGN, FLAT SHEET | |
| | 6 | | | 5 | 1 | | 630 | 84900 | 6 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL | |
| | | | | | | | | | | | | |
| | 8 | | | 6 | 2 | | 630 | 85100 | 8 | EACH | REMOVAL OF GROUND MOUNTED SIGN AND REERECTION | |
| | 10 | | | 8 | 2 | | 630 | 86002 | 10 | EACH | REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | |
| | 2 | | | 1.6 | 0.4 | | 630 | 87520 | 2 | EACH | REMOVAL OF POLE MOUNTED SIGN AND REERECTION | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | 0.38 | | | 0.30 | 0.08 | | 644 | 00300 | 0.38 | MILE | CENTER LINE | |
| | 649 | | | 519 | 130 | | 644 | 00400 | 649 | FT | CHANNELIZING LINE | |
| | 224 | | | 179 | 45 | | 644 | 00500 | 224 | FT | STOP LINE | |
| | 128 | | | 102 | 26 | | 644 | 00700 | 128 | FT | TRANSVERSE/DIAGONAL LINE | |
| | 946 | | | 757 | 189 | | 644 | 01200 | 946 | FT | PARKING LOT STALL MARKING | |
| | | | | | | | | | | | | |
| | 7 | | | 5.6 | 1.4 | | 644 | 01300 | 7 | EACH | LANE ARROW | |
| | 4 | | | 3.2 | 0.8 | | 644 | 01400 | 4 | EACH | WORD ON PAVEMENT, 72" | |
| | 31 | | | 25 | 6 | | 644 | 20800 | 31 | FT | YIELD LINE | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | 4 | | | | 4 | 625 | 17961 | 4 | EACH | BRACKET ARM, 8', AS PER PLAN | 49 |
| | | 161 | | 129 | 32 | | 625 | 25402 | 161 | FT | CONDUIT, 2", 725.05 | |
| | | 412 | | 330 | 82 | | 625 | 25500 | 412 | FT | CONDUIT, 3", 725.04 | |
| | | 34 | | 27 | 7 | | 625 | 25502 | 34 | FT | CONDUIT, 3", 725.05 | |
| | | 4 | | | | 4 | 625 | 26251 | 4 | EACH | LUMINAIRE, CONVENTIONAL, AS PER PLAN | 49 |
| | | | | | | | | | | | | |
| 51 | | 136 | | 150 | 37 | | 625 | 29003 | 187 | FT | TRENCH, 24" DEEP, AS PER PLAN | 49 |
| | | 124 | | 99 | 25 | | 625 | 29500 | 124 | FT | TRENCH IN PAVED AREA, TYPE A | |
| | | 330 | | 264 | 66 | | 625 | 29601 | 330 | FT | TRENCH IN PAVED AREA, TYPE B, AS PER PLAN | 49 |
| 2 | | 6 | | 6 | 2 | | 625 | 30700 | 8 | EACH | PULL BOX, 725.08, 18" | |
| | | 5 | | 4 | 1 | | 625 | 30706 | 5 | EACH | PULL BOX, 725.08, 24" | |
| 2 | | 11 | | 10 | 3 | | 625 | 32000 | 13 | EACH | GROUND ROD | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | 11 | | 9 | 2 | | 632 | 04911 | 11 | EACH | VEHICULAR SIGNAL HEAD, (LED) BLACK, 3-SECTION, 12" LENS, 1-WAY, WITH BACKPLATE, AS PER PLAN | 51 |
| | | 5 | | 4 | 1 | | 632 | 04921 | 5 | EACH | VEHICULAR SIGNAL HEAD, (LED) BLACK, 5-SECTION, 12" LENS, 1-WAY, WITH BACKPLATE, AS PER PLAN | 51 |
| | | 16 | | 13 | 3 | | 632 | 20731 | 16 | EACH | PEDESTRIAN SIGNAL HEAD (LED) , (COUNTDOWN), TYPE D2, AS PER PLAN | 49 |
| | | 16 | | 13 | 3 | | 632 | 25000 | 16 | EACH | COVERING OF VEHICULAR SIGNAL HEAD | |
| | | 16 | | 13 | 3 | | 632 | 25010 | 16 | EACH | COVERING OF PEDESTRIAN SIGNAL HEAD | |
| | | | | | | | | | | | | |
| | | 8 | | 6 | 2 | | 632 | 26000 | 8 | EACH | PEDESTRIAN PUSHBUTTON | |
| | | 839 | | 671 | 168 | | 632 | 40500 | 839 | FT | SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG | |
| | | 2,779 | | 2,223 | 556 | | 632 | 40700 | 2,779 | FT | SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG | |
| | | 1 | | 0.8 | 0.2 | | 632 | 63000 | 1 | EACH | PHONE DROP | |
| | | 4 | | 3 | 1 | | 632 | 64010 | 4 | EACH | SIGNAL SUPPORT FOUNDATION | |
| | | | | | | | | | | | | |
| | | 6 | | 5 | 1 | | 632 | 64020 | 6 | EACH | PEDESTAL FOUNDATION | |
| | | | 57 | 46 | 11 | | 632 | 67200 | 57 | FT | POWER CABLE, 2 CONDUCTOR, NO. 8 AWG | |
| | | | 101 | 81 | 20 | | 632 | 67300 | 101 | FT | POWER CABLE, 3 CONDUCTOR, NO. 8 AWG | |
| | | | 150 | 120 | 30 | | 632 | 69700 | 150 | FT | SERVICE CABLE, 3 CONDUCTOR, NO. 8 AWG | |
| | | | 2 | 1.6 | 0.4 | | 632 | 70001 | 2 | EACH | POWER SERVICE, AS PER PLAN | 49 |
| | | | | | | | | | | | | |
| | | | 1 | | | 1 | 632 | 76207 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 7 POLE, WITH MAST ARMS TC-81.21 DESIGN 13 AND DESIGN 2, AS PER PLAN | 50 |
| | | | 1 | | | 1 | 632 | 76411 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 8 POLE, WITH MAST ARMS TC-81.21 DESIGN 13 AND DESIGN 11, AS PER PLAN | 50 |
| | | | 1 | | | 1 | 632 | 77093 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-81.21 DESIGN 12 POLE, WITH MAST ARMS TC-81.21 DESIGN 11 AND DESIGN 1, AS PER PLAN | 50 |
| | | | 1 | | | 1 | 632 | 77173 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 6 POLE, WITH MAST ARMS TC-81.21 DESIGN 11 AND DESIGN 11, AS PER PLAN | 50 |
| | | | 6 | | | 6 | 632 | 89611 | 6 | EACH | PEDESTAL, 9', AS PER PLAN | 50 |
| | | | 3 | 2.4 | 0.6 | | 632 | 90101 | 3 | EACH | REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN | 50 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

CALCULATED JLS
CHECKED DNM

# GENERAL SUMMARY

LIC-62-4.63



85170_GGS_003.DGN 3/28/2011

| SHEET NUMBER | | | | | | | | | FEDERAL SAFETY | LCATS SAFETY | ALTERNATE BID | ITEM | ITEM EXT. | GRAND TOTAL | UNIT | DESCRIPTION | SEE SHEET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 12 | 13 | 14 | 19 | 20 | 51 | 62 | 63 | | | | | | | | | |
| | | | | | | | | | | | | | | | | ***TRAFFIC SIGNAL (con't.)*** | |
| | | | | | | | | 2 | | | 2 | 633 | 01581 | 2 | EACH | CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN | 51 |
| | | | | | | | | 1 | | | 1 | 633 | 39000 | 1 | EACH | CONTROLLER, MASTER, TRAFFIC RESPONSIVE | |
| | | | | | | | | 1 | 0.8 | 0.2 | | 633 | 67000 | 1 | EACH | CABINET RISER | |
| | | | | | | | | 1 | 0.8 | 0.2 | | 633 | 67101 | 1 | EACH | CABINET FOUNDATION, AS PER PLAN | 51 |
| | | | | | | | | 1 | 0.8 | 0.2 | | 633 | 67201 | 1 | EACH | CONTROLLER WORK PAD, AS PER PLAN | 51 |
| | | | | | | | | 2 | 1.6 | 0.4 | | 633 | 75000 | 2 | EACH | UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | 2 | 1.6 | 0.4 | | 815 | 30000 | 2 | EACH | SPREAD SPECTRUM RADIO | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | 2 | | 8 | 8 | 2 | | 816 | 30001 | 10 | EACH | VIDEO DETECTION SYSTEM, AS PER PLAN | 51 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | ***ALTERNATE BID*** | |
| | | | | | | | 4 | | | | 4 | 625 | 17961 | 4 | EACH | BRACKET ARM, 8', (ALTERNATE BID), AS PER PLAN | 49 |
| | | | | | | | 4 | | | | 4 | 625 | 26251 | 4 | EACH | LUMINARE, CONVENTIONAL, (ALTERNATE BID), AS PER PLAN | 49 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | 1 | | | 1 | 632 | 76207 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 7 POLE, WITH MAST ARMS TC-81.21 DESIGN 13 AND DESIGN 2, (ALTERNATE BID), AS PER PLAN | 50 |
| | | | | | | | | 1 | | | 1 | 632 | 76411 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 8 POLE, WITH MAST ARMS TC-81.21 DESIGN 13 AND DESIGN 11, (ALTERNATE BID), AS PER PLAN | 50 |
| | | | | | | | | 1 | | | 1 | 632 | 77093 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-81.21 DESIGN 12 POLE, WITH MAST ARMS TC-81.21 DESIGN 11 AND DESIGN 1, (ALTERNATE BID), AS PER PLAN | 50 |
| | | | | | | | | 1 | | | 1 | 632 | 77173 | 1 | EACH | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 6 POLE, WITH MAST ARMS TC-81.21 DESIGN 11 AND DESIGN 11, (ALTERNATE BID), AS PER PLAN | 50 |
| | | | | | | | | 6 | | | 6 | 632 | 89611 | 6 | EACH | PEDESTAL, 9', (ALTERNATE BID), AS PER PLAN | 50 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | 2 | | | 2 | 633 | 01581 | 2 | EACH | CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, (ALTERNATE BID), AS PER PLAN | 51 |
| | | | | | | | | 1 | | | 1 | 633 | 39000 | 1 | EACH | CONTROLLER, MASTER, TRAFFIC RESPONSIVE, (ALTERNATE BID) | 51 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | ***MAINTENANCE OF TRAFFIC*** | |
| | 10 | | | | | | | | 8 | 2 | | 410 | 13000 | 10 | CU YD | TRAFFIC COMPACTED SURFACE, TYPE C | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | 100 | | | | | | | 80 | 20 | | 614 | 11110 | 100 | HOUR | LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE | |
| | 12 | | | | | | | | 10 | 2 | | 614 | 12460 | 12 | EACH | WORK ZONE MARKING SIGN | |
| | 20 | | | | | | | | 16 | 4 | | 614 | 12600 | 20 | EACH | REPLACEMENT DRUM | |
| 14 | 20 | | | | | | | | 27 | 7 | | 614 | 13000 | 34 | CU YD | ASPHALT CONCRETE FOR MAINTAINING TRAFFIC | |
| | | | 400 | | | | | | 320 | 80 | | 614 | 18401 | 400 | DAY | PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN | 14 |
| | | | | | | | | | | | | | | | | | |
| | | | | 0.20 | 0.32 | | | | 0.5 | 0.02 | | 614 | 21400 | 0.52 | MILE | WORK ZONE CENTER LINE, CLASS II | |
| | | | 0.23 | | | | | | 0.19 | 0.04 | | 614 | 21550 | 0.23 | MILE | WORK ZONE CENTER LINE, CLASS III, 642 PAINT | |
| | | | 312 | | | | | | 250 | 62 | | 614 | 23680 | 312 | FT | WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT | |
| | | | 82 | | | | | | 66 | 16 | | 614 | 26610 | 82 | FT | WORK ZONE STOP LINE, CLASS III, 642 PAINT | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | 0.8 | 0.2 | | 616 | 10000 | 1 | M GAL | WATER | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 103 | 05000 | LUMP | | PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND | |
| | | | | | | | | | | | | | | | | | |
| | LUMP | | | | | | | | 0.8 | 0.2 | | 614 | 11000 | LUMP | | MAINTAINING TRAFFIC | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 3 | 1 | | 619 | 16000 | 4 | MONTH | FIELD OFFICE, TYPE A | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 0.8 | 0.2 | | 623 | 10000 | LUMP | | CONSTRUCTION LAYOUT STAKES | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 0.8 | 0.2 | | 624 | 10000 | LUMP | | MOBILIZATION | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
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CALCULATED JLS CHECKED DNM

**GENERAL SUMMARY**

**LIC-62-4.63**



85170_GSS_004.DGN 3/28/2011

| STATION TO STATION | SIDE | LENGTH | PAVEMENT WIDTH | PAVEMENT AREA | 202 | 204 | | 254 | 301 | 407 | | | 448 | | 609 | 614 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 2" | 8.0" | | | | 1.0" | 1.0" | | |
| | | | | | CURB REMOVED | SUBGRADE COMPACTION | PROOF ROLLING | PAVEMENT PLANING, ASPHALT CONCRETE | ASPHALT CONCRETE BASE, PG64-22 | TACK COAT, 702.13 @ 0.025 GAL./SQ. YD. (FOR FACE OF TRENCH) | TACK COAT @ 0.075 GAL./SQ. YD. | TACK COAT FOR INTERMEDIATE COURSE @ 0.050 GAL./SQ. YD. | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M | ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 | CURB, TYPE 6 | WORK ZONE CENTER LINE, CLASS II |
| | LT./RT. | LIN. FT. | FT. | SQ. YD. | FT. | SQ. YD. | HOUR | SQ. YD. | CU.YD. | GAL. | GAL. | GAL. | CU. YD | CU.YD. | FT. | MILE |
| **U.S. 62 (COSHOCTON ST.) (NORTHBOUND)** | | | | | | | | | | | | | | | | |
| 244+25.00 TO 244+47.11 | RT. | 22.11 | 15.41 (AVG.) | 37.9 | | | | 37.9 | | | 2.9 | 1.9 | 1.1 | 1.1 | | 0.01 |
| 244+47.11 TO 245+04.22 | RT. | 57.11 | 22.34 (AVG.) | 141.8 | | | | 141.8 | | | 10.7 | 7.1 | 4.0 | 4.0 | | 0.02 |
| 245+04.22 TO 246+63.98 | RT. | 159.76 | 29.45 (AVG.) | 522.8 | | | | 522.8 | | | 39.3 | 26.2 | 14.6 | 14.6 | | 0.04 |
| 246+63.98 TO 247+94.61 | RT. | 130.63 | 29.74 (AVG.) | 431.7 | | | | 431.7 | | | 32.4 | 21.6 | 12.0 | 12.0 | | 0.03 |
| 247+94.61 TO 248+41.71 | RT. | 47.10 | 27.0 | 141.3 | | | | 141.3 | | | 10.6 | 7.1 | 4.0 | 4.0 | | 0.01 |
| INTERSECTION OF S.R. 37 (**SEE SHEET 19** FOR QUANTITIES) | | | | | | | | | | | | | | | | |
| 249+04.32 TO 250+46.70 | RT. | 142.38 | 26.31 (AVG.) | 416.3 | | | | 416.3 | | | 31.3 | 20.9 | 11.6 | 11.6 | | 0.03 |
| 250+46.70 TO 251+02.00 | RT. | 55.30 | 26.44 (AVG.) | 162.5 | | | | 162.5 | | | 12.2 | 8.2 | 4.6 | 4.6 | | 0.02 |
| 251+02.00 TO 251+02.90 | RT. | 0.90 | 24.98 (AVG.) | 2.5 | | | | 2.5 | | | 0.2 | 0.2 | 0.1 | 0.1 | | 0.01 |
| 251+02.90 TO 252+25.00 | RT. | 122.10 | 22.79 (AVG.) | 309.2 | | | | 309.2 | | | 23.2 | 15.5 | 8.6 | 8.6 | | 0.03 |
| | | | | | | | | | | | | | | | | |
| **U.S. 62 (COSHOCTON ST.)(NORTHBOUND)(WIDENING)** | | | | | | | | | | | | | | | | |
| 249+05.43 TO 250+81.73 | RT. | 176.30 | 7.0 | 137.2 | 177 | 137.2 | 0.07 | 137.2 | 30.5 | 0.5 | 10.3 | 6.9 | 3.9 | 3.9 | 177 | |
| | | | | | | | | | | | | | | | | |
| **U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.)(WIDENING)** | | 30.27 | 4.0 | 13.5 | | 13.5 | 0.01 | 13.5 | 3.0 | 0.1 | 1.1 | 0.7 | 0.4 | 0.4 | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **U.S. 62 (COSHOCTON ST.) (SOUTHBOUND)** | | | | | | | | | | | | | | | | |
| 244+25.00 TO 244+63.39 | LT. | 38.39 | 15.47 (AVG.) | 66.0 | | | | 66.0 | | | 5.0 | 3.3 | 1.9 | 1.9 | | |
| 244+63.39 TO 245+07.95 | LT. | 44.56 | 13.65 (AVG.) | 67.6 | | | | 67.6 | | | 5.1 | 3.4 | 1.9 | 1.9 | | |
| 245+07.95 TO 245+37.06 | LT. | 29.11 | 13.60 (AVG.) | 44.0 | | | | 44.0 | | | 3.3 | 2.2 | 1.3 | 1.3 | | |
| 245+37.06 TO 246+09.69 | LT. | 72.63 | 13.40 (AVG.) | 108.2 | | | | 108.2 | | | 8.2 | 5.5 | 3.1 | 3.1 | | |
| 246+09.69 TO 247+19.93 | LT. | 110.24 | 13.69 (AVG.) | 167.7 | | | | 167.7 | | | 12.6 | 8.4 | 4.7 | 4.7 | | |
| 247+19.93 TO 247+24.32 | LT. | 4.39 | 17.99 (AVG.) | 8.8 | | | | 8.8 | | | 0.7 | 0.5 | 0.3 | 0.3 | | |
| 247+24.32 TO 248+26.11 | LT. | 101.79 | 21.61 (AVG.) | 244.5 | | | | 244.5 | | | 18.4 | 12.3 | 6.8 | 6.8 | | |
| INTERSECTION OF S.R. 37 (**SEE SHEET 19** FOR QUANTITIES) | | | | | | | | | | | | | | | | |
| 249+05.32 TO 250+01.78 | LT. | 96.46 | 21.64 (AVG.) | 232.0 | | | | 232.0 | | | 17.4 | 11.6 | 6.5 | 6.5 | | |
| 250+01.78 TO 250+06.76 | LT. | 4.98 | 18.39 (AVG.) | 10.2 | | | | 10.2 | | | 0.8 | 0.6 | 0.3 | 0.3 | | |
| 250+06.76 TO 252+16.07 | LT. | 209.31 | 14.18 (AVG.) | 329.8 | | | | 329.8 | | | 24.8 | 16.5 | 9.2 | 9.2 | | |
| 252+16.07 TO 252+25.00 | LT. | 8.93 | 13.39 (AVG.) | 13.3 | | | | 13.3 | | | 1.0 | 0.7 | 0.4 | 0.4 | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **OREGON STREET** | RT. | | VARIES | 159.0 | | | | *159.0 | | | 12.0 | 8.0 | 4.5 | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **OREGON STREET** | LT. | | VARIES | 68.4 | | | | *68.4 | | | 5.2 | | 1.9 | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| **TOTALS (CARRIED TO GENERAL SUMMARY)** | | | | | **177** | **151** | **0.08** | **3,609** | **34** | **1** | **289** | **190** | **108** | **102** | **177** | **0.20** |

* NOTE: ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE ON OREGON STREET SHALL BE 1".

CALCULATED JLS CHECKED DNM

# PAVEMENT CALCULATIONS (U.S. 62)(COSHOCTON ST.)

LIC-62-4.63



85170_PCS_001.DGN 3/28/2011

| STATION TO STATION | | | SIDE | LENGTH | PAVEMENT WIDTH | PAVEMENT AREA | 202 | 204 | | 254 | 301 | 407 | | | 448 | | 609 | 614 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | CURB REMOVED | SUBGRADE COMPACTION | PROOF ROLLING | 2" PAVEMENT PLANING, ASPHALT CONCRETE | 8.0" ASPHALT CONCRETE BASE, PG64-22 | TACK COAT, 702.13 @ 0.025 GAL./SQ. YD. (FOR FACE OF TRENCH) | TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE @ 0.075 GAL./SQ. YD. | TACK COAT, TRACKLESS TACK, SURFACE COURSE @0.050 GAL./SQ. YD. | 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG70-22M | 1.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22 | CURB, TYPE 6 | WORK ZONE CENTER LINE, CLASS II |
| | | | LT./RT. | LIN. FT. | FT. | SQ. YD. | FT. | SQ. YD. | HOUR | SQ. YD. | CU.YD. | GAL. | GAL. | GAL. | CU. YD | CU.YD. | FT. | MILE |
| S.R. 37 (MAIN ST.) (EASTBOUND) | | | | | | | | | | | | | | | | | | |
| 239+55.00 | TO | 240+75.00 | RT. | 120.00 | 15.28 (AVG.) | 203.8 | | | | 203.8 | | | 15.3 | 10.2 | 5.7 | 5.7 | | 0.03 |
| 240+75.00 | TO | 243+10.00 | RT. | 235.00 | 13.0 | 339.5 | | | | 339.5 | | | 25.5 | 17.0 | 9.5 | 9.5 | | 0.05 |
| 243+10.00 | TO | 243+55.04 | RT. | 45.04 | 24.10 (AVG.) | 120.7 | | | | 120.7 | | | 9.1 | 6.1 | 3.4 | 3.4 | | 0.01 |
| 243+55.04 | TO | 244+30.07 | RT. | 75.03 | 24.36 (AVG.) | 203.1 | | | | 203.1 | | | 15.3 | 10.2 | 5.7 | 5.7 | | 0.02 |
| 244+30.07 | TO | 244+63.29 | RT. | 33.22 | 24.48 (AVG.) | 90.4 | | | | 90.4 | | | 6.8 | 4.6 | 2.6 | 2.6 | | 0.01 |
| 244+63.29 | TO | 245+31.28 | RT. | 67.99 | 23.23 (AVG.) | 175.5 | | | | 175.5 | | | 13.2 | 8.8 | 4.9 | 4.9 | | 0.02 |
| 245+31.28 | TO | 245+79.26 | RT. | 47.98 | 22.0 | 117.3 | | | | 117.3 | | | 8.8 | 5.9 | 3.3 | 3.3 | | 0.01 |
| 245+79.26 | TO | 246+56.09 | RT. | 76.83 | 24.12 (AVG.) | 206.0 | | | | 206.0 | | | 15.5 | 10.3 | 5.8 | 5.8 | | 0.02 |
| 246+56.09 | TO | 247+37.54 | RT. | 81.45 | 24.08 | 218.0 | | | | 218.0 | | | 16.4 | 10.9 | 6.1 | 6.1 | | 0.02 |
| 247+37.54 | TO | 247+78.53 | RT. | 40.99 | 23.29 (AVG.) | 106.1 | | | | 106.1 | | | 8.0 | 5.4 | 3.0 | 3.0 | | 0.01 |
| 247+78.53 | TO | 248+87.71 | RT. | 109.18 | 22.65 (AVG.) | 274.8 | | | | 274.8 | | | 20.7 | 13.8 | 7.7 | 7.7 | | 0.03 |
| 248+87.71 | TO | 249+95.84 | RT. | 108.13 | 22.79 (AVG.) | 273.9 | | | | 273.9 | | | 20.6 | 13.7 | 7.7 | 7.7 | | 0.03 |
| 249+95.84 | TO | 250+61.66 | RT. | 65.82 | 22.56 (AVG.) | 165.0 | | | | 165.0 | | | 12.4 | 8.3 | 4.6 | 4.6 | | 0.02 |
| 250+61.66 | TO | 250+94.50 | RT. | 32.84 | 18.76 (AVG.) | 68.5 | | | | 68.5 | | | 5.2 | 3.5 | 2.0 | 2.0 | | 0.01 |
| 250+94.50 | TO | 251+20.00 | RT. | 25.50 | 15.07 (AVG.) | 42.7 | | | | 42.7 | | | 3.3 | 2.2 | 1.2 | 1.2 | | 0.01 |
| S.R. 37 (MAIN ST.) (EASTBOUND) (WIDENING) | | | | | | | | | | | | | | | | | | |
| 240+75.00 | TO | 241+75.00 | RT. | 100.00 | 5.48 (AVG.) | 60.9 | 100 | 60.9 | 0.04 | 60.9 | 13.6 | 0.3 | 4.6 | 3.1 | 1.7 | 1.7 | 100 | |
| 241+75.00 | TO | 242+25.00 | RT. | 50.00 | 9.0 | 50.0 | 50 | 50.0 | 0.03 | 50.0 | 11.2 | 0.2 | 3.8 | 2.5 | 1.4 | 1.4 | 50 | |
| 242+25.00 | TO | 242+50.00 | RT. | 25.00 | 10.0 (AVG.) | 27.8 | 25 | 27.8 | 0.02 | 27.8 | 6.2 | 0.1 | 2.1 | 1.4 | 0.8 | 0.8 | 25 | |
| 242+50.00 | TO | 243+10.00 | RT. | 60.00 | 11.0 | 73.4 | 60 | 73.4 | 0.04 | 73.4 | 16.4 | 0.2 | 5.6 | 3.7 | 2.1 | 2.1 | 60 | |
| U.S. 62 (COSHOCTON ST.) / S.R. 37 (MAIN ST.)(WIDENING AREA) | | | RT. | | VARIES | 87.9 | | 87.9 | 0.05 | 87.9 | 19.6 | 0.3 | 6.6 | 4.4 | 2.5 | 2.5 | | |
| S.R. 37 (MAIN ST.) (WESTBOUND) | | | | | | | | | | | | | | | | | | |
| 239+55.00 | TO | 240+23.38 | LT. | 68.38 | 15.57 (AVG.) | 118.3 | | | | 118.3 | | | 8.9 | 6.0 | 3.3 | 3.3 | | |
| 240+23.38 | TO | 240+75.00 | LT. | 51.62 | 15.34 (AVG.) | 88.0 | | | | 88.0 | | | 6.6 | 4.4 | 2.5 | 2.5 | | |
| 240+75.00 | TO | 241+17.97 | LT. | 42.97 | 15.29 (AVG.) | 73.1 | | | | 73.1 | | | 5.5 | 3.7 | 2.1 | 2.1 | | |
| 241+17.97 | TO | 242+04.34 | LT. | 86.37 | 15.21 (AVG.) | 146.0 | | | | 146.0 | | | 11.0 | 7.3 | 4.1 | 4.1 | | |
| 242+04.34 | TO | 242+98.89 | LT. | 94.55 | 14.92 (AVG.) | 156.8 | | | | 156.8 | | | 11.8 | 7.9 | 4.4 | 4.4 | | |
| 242+98.89 | TO | 243+10.00 | LT. | 11.11 | 14.67 (AVG.) | 18.2 | | | | 18.2 | | | 1.4 | 1.0 | 0.6 | 0.6 | | |
| 243+10.00 | TO | 243+34.68 | LT. | 24.68 | 14.59 (AVG.) | 40.1 | | | | 40.1 | | | 3.1 | 2.1 | 1.2 | 1.2 | | |
| 243+34.68 | TO | 243+40.99 | LT. | 6.31 | 17.71 (AVG.) | 12.5 | | | | 12.5 | | | 1.0 | 0.7 | 0.4 | 0.4 | | |
| 243+40.99 | TO | 244+32.93 | LT. | 91.94 | 21.01 (AVG.) | 214.7 | | | | 214.7 | | | 16.2 | 10.8 | 6.0 | 6.0 | | |
| 244+32.93 | TO | 244+68.19 | LT. | 35.26 | 21.20 (AVG.) | 83.1 | | | | 83.1 | | | 6.3 | 4.2 | 2.4 | 2.4 | | |
| 244+68.19 | TO | 245+35.18 | LT. | 66.99 | 21.50 (AVG.) | 160.1 | | | | 160.1 | | | 12.1 | 8.1 | 4.5 | 4.5 | | |
| 245+35.18 | TO | 246+66.71 | LT. | 131.53 | 21.36 (AVG.) | 312.2 | | | | 312.2 | | | 23.5 | 15.7 | 8.7 | 8.7 | | |
| 246+66.71 | TO | 247+90.09 | LT. | 123.38 | 21.22 (AVG.) | 291.0 | | | | 291.0 | | | 21.9 | 14.6 | 8.1 | 8.1 | | |
| 247+90.09 | TO | 248+87.29 | LT. | 97.20 | 21.26 (AVG.) | 229.7 | | | | 229.7 | | | 17.3 | 11.5 | 6.4 | 6.4 | | |
| 248+87.29 | TO | 249+54.19 | LT. | 66.90 | 21.17 (AVG.) | 157.4 | | | | 157.4 | | | 11.9 | 7.9 | 4.4 | 4.4 | | |
| 249+54.19 | TO | 250+63.35 | LT. | 109.16 | 21.53 (AVG.) | 261.2 | | | | 261.2 | | | 19.6 | 13.1 | 7.3 | 7.3 | | |
| 250+63.35 | TO | 251+09.34 | LT. | 45.99 | 18.52 (AVG.) | 94.7 | | | | 94.7 | | | 7.2 | 4.8 | 2.7 | 2.7 | | |
| 251+09.34 | TO | 251+20.00 | LT. | 10.66 | 15.22 (AVG.) | 18.1 | | | | 18.1 | | | 1.4 | 1.0 | 0.6 | 0.6 | | |
| PHALEN PLACE | | | RT. | 103.00 | 30.5 | 349.1 | | | | 349.1 | | | 26.2 | 17.5 | 9.7 | 9.7 | | 0.02 |
| PRATT STREET | | | RT. | | VARIES | 46.3 | | | | 46.3 | | | 3.5 | 2.4 | 1.3 | 1.3 | | |
| PRATT STREET (AT INTERSECTION) | | | LT. | | VARIES | 54.1 | | | | 54.1 | | | 4.1 | 2.8 | 1.6 | 1.6 | | |
| | | | LT. | 111.00 | 24.0 | 296.0 | | | | 296.0 | | | 22.2 | 14.8 | 8.3 | 8.3 | | |
| TOTALS (CARRIED TO GENERAL SUMMARY) | | | | | | | 235 | 300 | 0.18 | 6,126 | 67 | 2 | 462 | 309 | 173 | 173 | 235 | 0.32 |

CALCULATED JLS CHECKED DNM

# CALCULATIONS (S.R. 37)(MAIN ST.)

## PAVEMENT CA

LIC-62-4.63



85170_PCS_002.DGN 12/10/10

| REFERNCE NO. | SHEET NO. | SURVEY AND CONSTRUCTION (STATION) | SIDE | DESCRIPTION | EXISTING SURFACE | AREA (CALCULATED BY COMPUTER) | 202 | 203 | | 204 | 301 | 448 | 452 | | 608 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 6" | 8" | | 4.75" | 1.25" | | | | | |
| | | | LT./RT. | | | SQ. YD. | WALK REMOVED SQ. FT. | EXCAVATION CU. YD. | EXCAVATION CU. YD. | SUBGRADE COMPACTION SQ. YD. | ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS) CU. YD. | ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS) CU. YD. | 6" NON-REINFORCED CONCRETE PAVEMENT SQ. YD. | 8" NON-REINFORCED CONCRETE PAVEMENT SQ. YD. | 4" CONCRETE WALK SQ. FT. | 6" CONCRETE WALK SQ. FT. | 8" CONCRETE WALK SQ. FT. |
| | | U.S. 62 (COSHOCTON ST.) | | | | | | | | | | | | | | | |
| 1-DR | 23 | 250+19.7 | RT. | COMMERCIAL | ASPHALT | 6.4 | | | 1.5 | 6.4 | | | | 6.4 | | | 69.1 |
| 2-DR | 23 | 250+43.7 | LT. | COMMERCIAL | CONCRETE | 27.4 | 9.0 | | 6.1 | 27.4 | | | | 27.4 | | | 81.0 |
| 3-DR | 23 | 250+91.9 | RT. | COMMERCIAL | ASPHALT | 7.4 | | | 1.7 | 7.4 | 1.0 | 0.3 | | | | | |
| | | S.R. 37 (MAIN ST.) | | | | | | | | | | | | | | | |
| 4-DR | 26 | 241+16.9 | RT. | RESIDENTIAL | CONCRETE | 9.1 | 62.9 | 1.6 | | 9.1 | | | 9.1 | | 29.6 | 33.3 | |
| 5-DR | 26 | 241+98.9 | RT. | RESIDENTIAL | ASPHALT | 7.2 | 144.8 | 1.2 | | 7.2 | | | 7.2 | | 96.9 | 48.0 | |
| 6-DR | 26 | 242+78.6 | RT. | COMMERCIAL | CONCRETE | 9.7 | 30.3 | | 2.2 | 9.7 | | | | 9.7 | 30.3 | | 91.4 |
| SUB-TOTALS | | | | | | | | 2.8 | 11.5 | | | | | | | | |
| TOTALS (CARRIED TO GENERAL SUMMARY) | | | | | | | 247.0 | 14.3 | | 67.2 | 1.0 | 0.3 | 16.3 | 43.5 | 156.8 | 81.3 | 241.5 |

CALCULATED JLS
CHECKED DNM

# DRIVE CALCULATIONS

LIC-62-4.63



85170_PCS_003.DGN 12/16/10

| REFERNCE NO. | SHEET NO. | LOCATION | SIDE | 202 | | 608 | 609 | 690 | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | WALK REMOVED | CURB REMOVED | 4" CONCRETE WALK | CURB, TYPE 6 | SPECIAL-MISC.: CURB RAMPS, | | | SPECIAL - MISC.: DETECTABLE WARNING | SPECIAL - MISC.: BRICK WALK | SPECIAL - MISC.: DECORATIVE CROSSWALK | |
| | | | | | | | | TYPE A1 | TYPE A2 | TYPE D | | | | |
| | | | LT./RT. | SQ. FT. | FT. | SQ. FT. | FT. | EACH | EACH | EACH | SQ. FT. | SQ. FT. | SQ. FT. | |
| | | **U.S. 62 (COSHOCTON ST.)** | | | | | | | | | | | | |
| 1-SW | 36 | U.S. 62 (COSHOCTON ST.) | LT. | 23.4 | 39 | 28.7 | 51 | | 1 | | | | | |
| 2-SW | 36 | AT OREGON ST. | RT. | 109.6 | | 148.5 | | | | | 16 | | | SOUTHWEST QUADRANT OF OREGON ST. INTERSECTION |
| 3-SW | 36 | AT OREGON ST. | LT. | 212.5 | 39 | 218.7 | 80 | 1 | | | | | | NORTHWEST QUADRANT OF OREGON ST. INTERSECTION |
| 4-SW | 36 | AT OREGON ST. | RT. | 405.6 | 56 | 579.4 | 56 | 2 | | | | | | SOUTHEAST QUADRANT OF OREGON ST. INTERSECTION |
| 5-SW | 36 | AT OREGON ST. | LT. | 171.6 | 67 | 236.9 | 91 | | 2 | | | | | NORTHEAST QUADRANT OF OREGON ST. INTERSECTION |
| | | | | | | | | | | | | | | |
| | | **S.R. 37 (MAIN ST.)** | | | | | | | | | | | | |
| 6-SW | 36 | AT U.S. 62 (COSHOCTON ST.) | RT. | 529.2 | 98 | 425.0 | 79 | | | 1 | | 70.1 | | SOUTHWEST QUADRANT OF U.S.62 (COSHOCTON ST.) INTERSECTION |
| 7-SW | 36 | AT U.S. 62 (COSHOCTON ST.) | LT. | 263.0 | 46 | 259.0 | 46 | 2 | | | | | | NORTHWEST QUADRANT OF U.S.62 (COSHOCTON ST.) INTERSECTION |
| 8-SW | 36 | AT U.S. 62 (COSHOCTON ST.) | LT. | 197.6 | 29 | 197.6 | 41 | 1 | 1 | | | | | NORTHEAST QUADRANT OF U.S.62 (COSHOCTON ST.) INTERSECTION |
| 9-SW | 36 | AT U.S. 62 (COSHOCTON ST.) | RT. | 324.0 | 141 | 1,186.8 | 39 | 2 | | | | | | SOUTHEAST QUADRANT OF U.S.62 (COSHOCTON ST.) INTERSECTION |
| 10-SW | 36 | STA. 249+10.50 TO STA. 250+11.44 | RT. | 520.2 | 41 | 325.9 | 99 | | | | | | | |
| | 36 | STA. 250+28.03 TO STA. 250+81.77 | RT. | 221.4 | 101 | 844.2 | 54 | | | | | | | |
| 11-SW | 37 | AT PHALEN PLACE | LT. | 158.4 | 54 | 370.5 | 16 | 1 | | | | | | NORTHWEST QUADRANT OF PHALEN PLACE INTERSECTION |
| 12-SW | 37 | AT PHALEN PLACE | RT. | 175.8 | 25 | 172.2 | 60 | 1 | 1 | | | | | SOUTHWEST QUADRANT OF PHALEN PLACE INTERSECTION |
| 13-SW | 37 | AT PHALEN PLACE | RT. | 160.0 | 26 | 168.8 | 31 | 1 | 1 | | | | | SOUTHEAST QUADRANT OF PHALEN PLACE INTERSECTION |
| 14-SW | 37 | AT PHALEN PLACE | LT. | 195.2 | 16 | 195.2 | 16 | 1 | | | | | | NORTHWEST QUADRANT OF PHALEN PLACE INTERSECTION |
| 15-SW | 37 | AT PRATT ST. | LT. | 189.0 | 31 | 189.0 | 31 | 2 | | | | | | NORTHEAST QUADRANT OF PRATT ST. INTERSECTION |
| 16-SW | 37 | AT PRATT ST. | RT. | 145.9 | 28 | 167.9 | 28 | | | 1 | 8 | | | NORTHWEST QUADRANT OF PRATT ST. INTERSECTION |
| 17-SW | 37 | AT PRATT ST. | LT. | 277.3 | 35 | 277.3 | 35 | | | 1 | 8 | | | SOUTHEAST QUADRANT OF PRATT ST. INTERSECTION |
| 18-SW | 37 | AT PRATT ST. | RT. | 113.1 | 27 | 126.5 | 27 | | | | 16 | | | SOUTHWEST QUADRANT OF PRATT ST. INTERSECTION |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | **U.S. 62 (COSHOCTON ST.)** | | | | | | | | | | | | |
| 1-CW | 36 | BEFORE OREGON ST. | LT./RT. | | | | | | | | | | 215.9 | |
| 2-CW | 36 | ON OREGON ST. (RT.) | LT./RT. | | | | | | | | | | 312.9 | |
| 3-CW | 36 | ON OREGON ST. (LT.) | LT./RT. | | | | | | | | | | 146.1 | |
| 4-CW | 36 | AFTER OREGON ST. | LT./RT. | | | | | | | | | | 300.6 | |
| 5-CW | 36 | BEFORE S.R. 37 (MAIN ST.) | LT./RT. | | | | | | | | | | 441.3 | |
| 6-CW | 36 | ON S.R. 37 (MAIN ST.)(LT.) | LT./RT. | | | | | | | | | | 325.5 | |
| 7-CW | 36 | ON S.R. 37 (MAIN ST.)(RT.) | LT./RT. | | | | | | | | | | 422.6 | |
| 8-CW | 36 | AFTER S.R. 37 (MAIN ST.) | LT./RT. | | | | | | | | | | 316.2 | |
| | | | | | | | | | | | | | | |
| | | **S.R. 37 (MAIN ST.)** | | | | | | | | | | | | |
| 9-CW | 37 | BEFOR PHALEN PLACE | LT./RT. | | | | | | | | | | 317.3 | |
| 10-CW | 37 | ON PHALEN PLACE | LT./RT. | | | | | | | | | | 214.2 | |
| 11-CW | 37 | AFTER PHALEN PLACE | LT./RT. | | | | | | | | | | 307.8 | |
| 12-CW | 37 | BEFORE PRATT ST. | LT./RT. | | | | | | | | | | 309.2 | |
| 13-CW | 37 | ON PRATT ST. (LT.) | LT./RT. | | | | | | | | | | 160.4 | |
| 14-CW | 37 | ON PRATT ST. (RT.) | LT./RT. | | | | | | | | | | 159.1 | |
| 15-CW | 37 | AFTER PRATT ST. | LT./RT. | | | | | | | | | | 279.4 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| **TOTALS (CARRIED TO GENERAL SUMMARY)** | | | | **4,392.8** | **899** | **6,118.1** | **880** | **14** | **6** | **3** | **48** | **70.1** | **4,228.5** | |

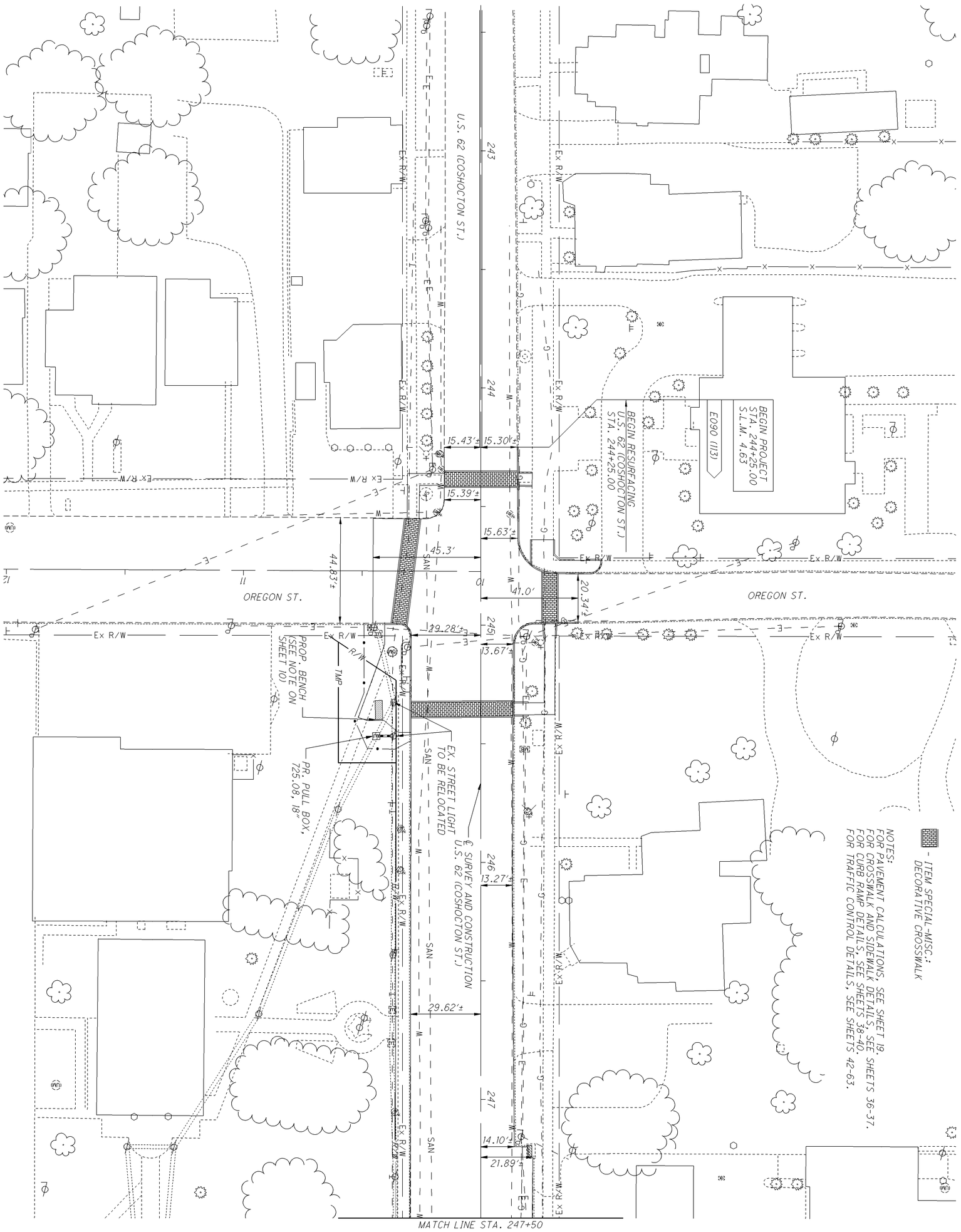
CALCULATED JLS
CHECKED DNM

# ROADWAY QUANTITIES

LIC-62-4.63



85170_ROS_001.DGN 3/28/2011


U.S. 62 (COSHOCTON ST.)
OREGON ST.
OREGON ST.
BEGIN RESURFACING
U.S. 62 (COSHOCTON ST.)
STA. 244+25.00
BEGIN PROJECT
STA. 244+25.00
S.L.M. 4.63
E090 (113)
Ex R/W
15.43'±
15.30'±
15.39'±
15.63'±
45.3'
44.83'±
41.0'
20.34'±
29.28'±
13.67'
13.27'
29.62'±
14.10'
21.89'
243
244
245
246
247
PROP. BENCH
(SEE NOTE ON
SHEET 10)
PR. PULL BOX,
725.08, 18"
EX. STREET LIGHT
TO BE RELOCATED
℄ SURVEY AND CONSTRUCTION
U.S. 62 (COSHOCTON ST.)
TMP
SAN
MATCH LINE STA. 247+50
- ITEM SPECIAL-MISC.: DECORATIVE CROSSWALK
NOTES:
FOR PAVEMENT CALCULATIONS, SEE SHEET 19.
FOR CROSSWALK AND SIDEWALK DETAILS, SEE SHEETS 36-37.
FOR CURB RAMP DETAILS, SEE SHEETS 38-40.
FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 42-63.

NOTES:
FOR LIGHTING QUANTITIES, SEE NOTE SHEET 10.
FOR PAVEMENT CALCULATIONS, SEE SHEET 19.
FOR DRIVE CALCULATIONS, SEE SHEET 21.
FOR INTERSECTION DETAILS, SEE SHEET 35.
FOR CROSSWALK AND SIDEWALK DETAILS, SEE SHEETS 36-37.
FOR CURB RAMP DETAILS, SEE SHEETS 38-40.
FOR STORM SEWER PROFILE, SEE SHEET 41.
FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 42-63.

MATCH LINE STA. 243+50 (S.R. 37) (SEE SHEET 27)

MATCH LINE STA. 247+50

S.R. 37 (MAIN ST.)

℄ STA. 248+68.80 U.S. 62 (COSHOCTON ST.) =
℄ STA. 244+99.20 S.R. 37 (MAIN ST.)

℄ SURVEY AND CONSTRUCTION
U.S. 62 (COSHOCTON ST.)

KASSON ST.

24.20'±
24.51'±
21.13'±
24.4'±
20.0'
Ex R/W
EX. R/W
R/W
SAN
244
246
248
250
251
252
27'
22.13'±
26.52±
22'
16'
17'
20.40'±
23.79'±
22.09'±
13.33'
13.41'
15.02'
16.53'
20.25'
2.85'
4.09'
6.69'
2.16'

2-DR
1-DR
3-DR

SAW CUT LINE
PROP. MANHOLE NO. 1, A.P.P.
PROP. CATCH BASIN NO. 3A
PROP. CATCH BASIN NO. 2-2B
PROP. 12" CONDUIT, TYPE B
PROP. 12" CONDUIT, TYPE B, A.P.P.
PR. PULL BOX, 725.08, 18"
EX. STREET LIGHT TO BE RELOCATED
EXIST. BENCH (TO BE REMOVED)
EXIST. BENCHES, CLOCK AND GAZEBO (DO NOT DISTURB)
PULL BOX, REMOVED AND REPLACED
END PAVEMENT WIDENING RT.
U.S. 62 (COSHOCTON ST.)
STA. 250+81.73
END RESURFACING
U.S. 62 (COSHOCTON ST.)
STA. 252+25.00
E090 (113)
BEGIN PROJECT
STA. 252+25.00
S.L.M. 4.78

MATCH LINE STA. 246+50 (S.R. 37) (SEE SHEET 28)

- ITEM SPECIAL-MISC.: DECORATIVE CROSSWALK
- ITEM SPECIAL-MISC.: BRICK WALK

HORIZONTAL SCALE IN FEET
0 20 40

CALCULATED JLS
CHECKED DNM

# PLAN SHEET
## STA. 247+50 TO STA. 252+25 (U.S. 62)

LIC-62-4.63

24
66

US062_PPP_002.DGN 12/17/10

| SEEDING | |
|---|---|
| END WIDTH | SQ. YDS. |
| | 0 |
| 0 | |
| | 0 |
| | 0 |

| END AREA | | VOLUME | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| | | 7 | 2 |
| 10 | 4 | | |
| | | 19 | 7 |
| | | 10 | 5 |
| 1 | 1 | | |

CALCULATED JLS

CHECKED DNM




# CROSS SECTIONS (U.S. 62)(COSHOCTON ST.) STA. 249+00 TO STA. 250+00

LIC-62-4.63

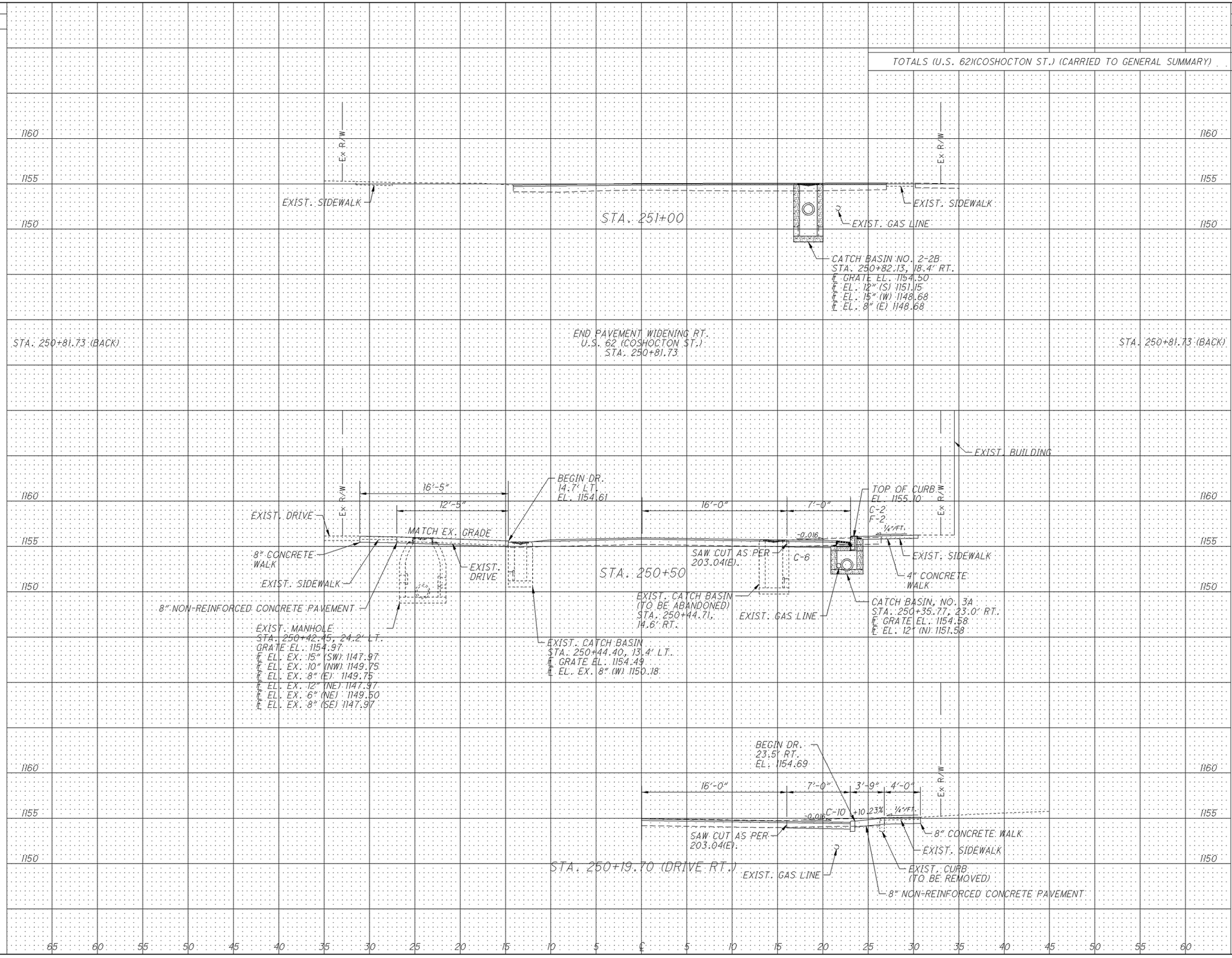


SHEET 1

US62_PXS.DGN 12/07/10

| SEEDING | | END AREA | | VOLUME | | CALCULATED JLS / CHECKED DNM |
|---|---|---|---|---|---|---|
| END WIDTH | SQ. YDS. | CUT | FILL | CUT | FILL | |
| | | | | | | |
| | | | | 52 | 18 | |
| 0 | 0 | 2 | 2 | 6 | 2 | |
| 0 | 0 | 8 | 2 | 10 | 2 | |
| 0 | 0 | 10 | 0 | | | |

TOTALS (U.S. 62)(COSHOCTON ST.) (CARRIED TO GENERAL SUMMARY)




# CROSS SECTIONS (U.S. 62)(COSHOCTON ST.) STA. 250+50 TO STA. 251+00

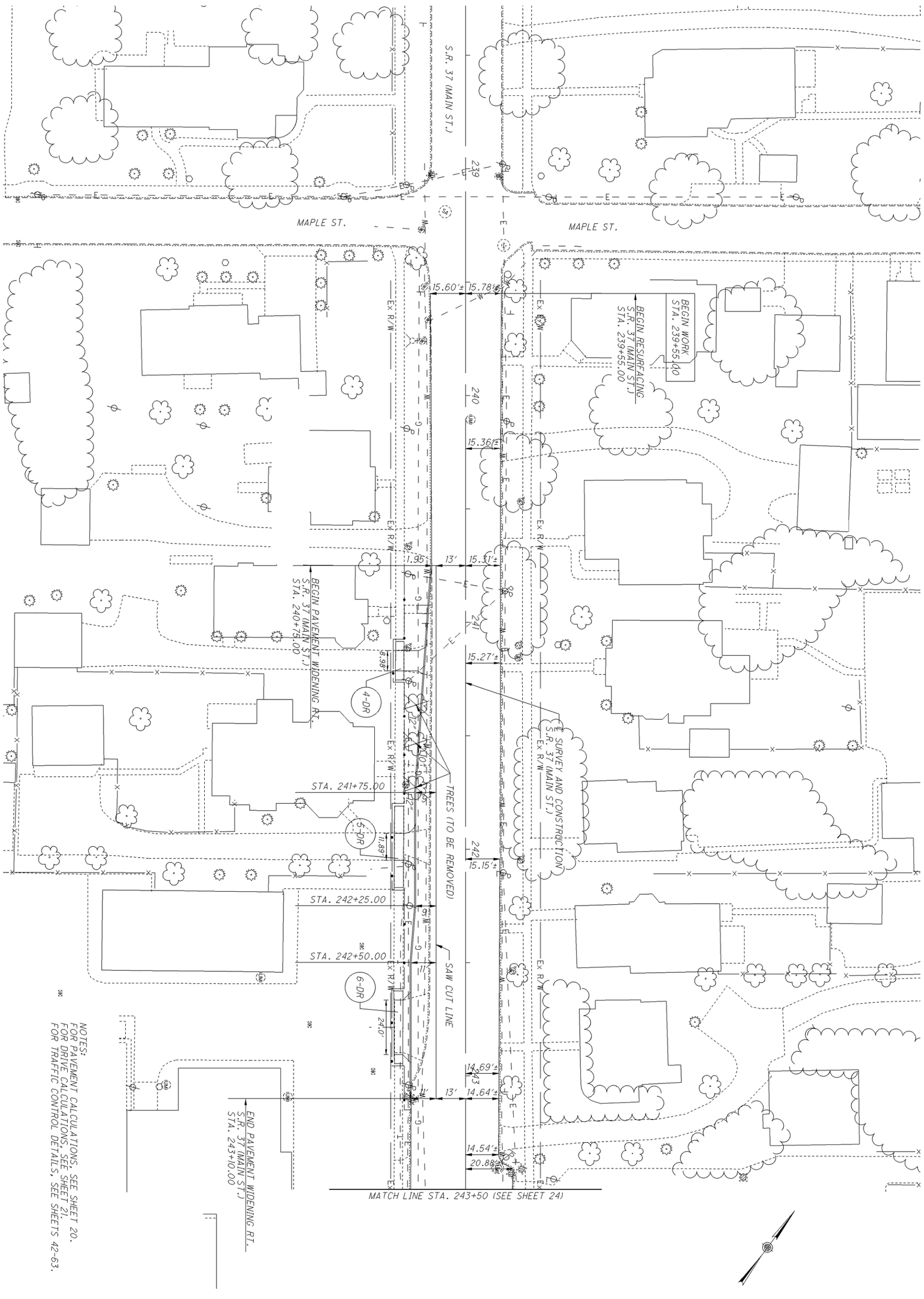
LIC-62-4.63

26
66

SHEET 2

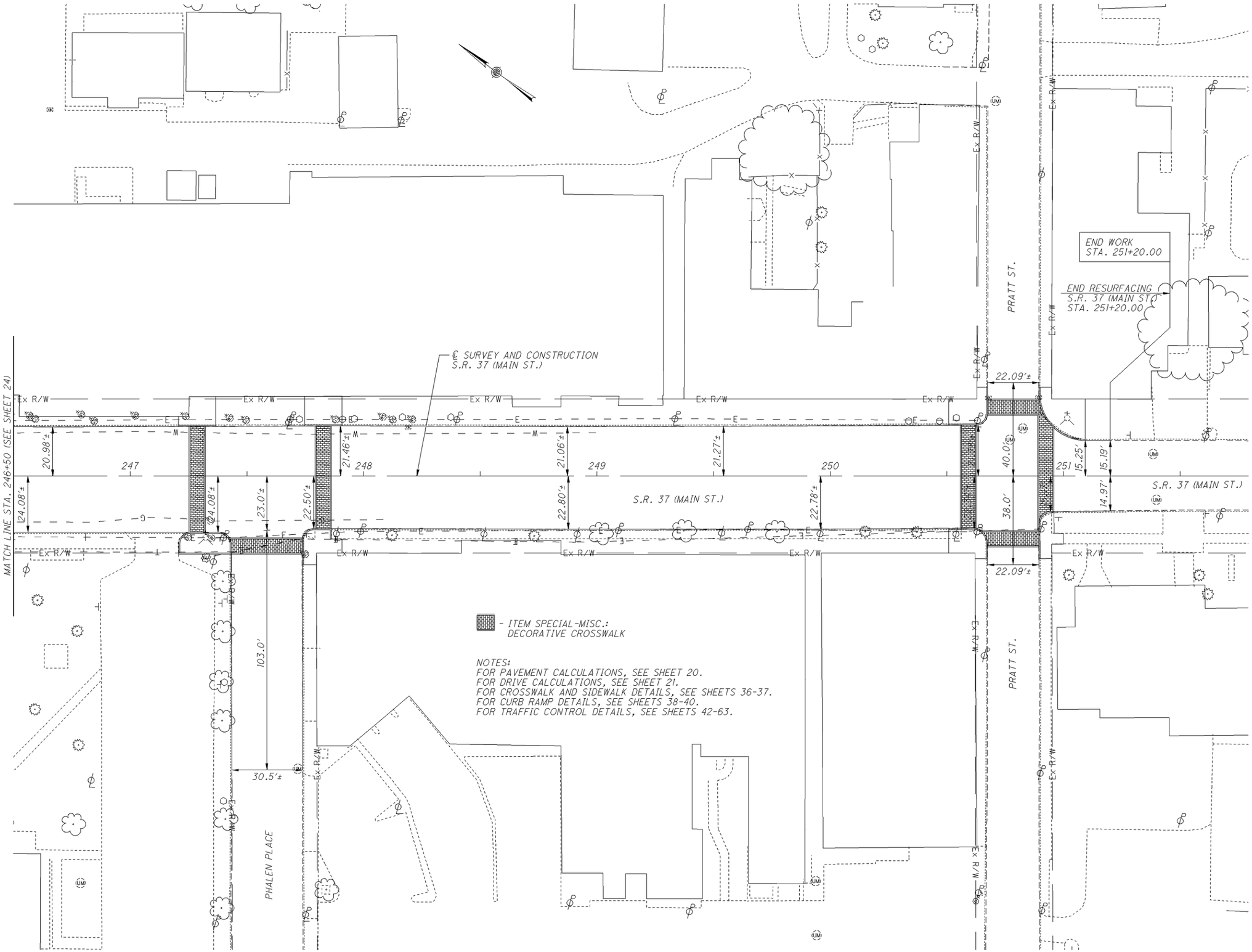
US62_PXS.DGN 12/07/10

SR037_PPP_001.DGN 12/17/10




NOTES:
FOR PAVEMENT CALCULATIONS, SEE SHEET 20.
FOR DRIVE CALCULATIONS, SEE SHEET 21.
FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 42-63.

| | | | | |
|---|---|---|---|---|
| 27/66 | LIC-62-4.63 | PLAN SHEET<br>STA. 239+55 TO STA. 243+50 (S.R. 37) | CALCULATED JLS<br>CHECKED DNM | 0 20 40<br>HORIZONTAL SCALE IN FEET |




HORIZONTAL SCALE IN FEET
0 20 40

CALCULATED JLS
CHECKED DNM

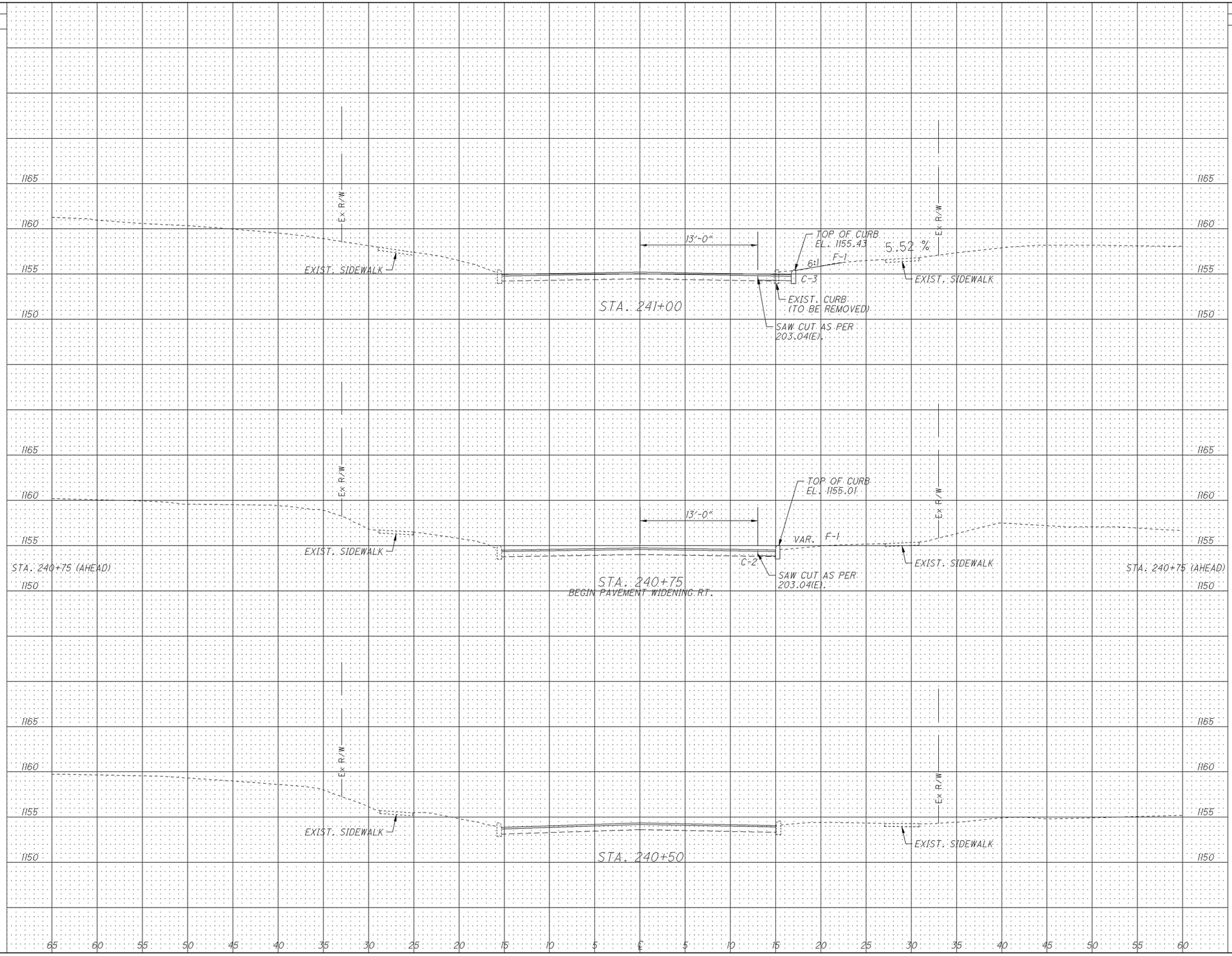
# PLAN SHEET
## STA. 246+50 TO STA. 251+20 (S.R. 37)

LIC-62-4.63



SR037_PPP_002.DGN 12/17/10

| SEEDING | |
|---|---|
| END WIDTH | SQ. YDS. |
| 10 | 29 |
| 11 | |




| END AREA | | VOLUME | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 3 | 1 | | |
| | | 2 | 1 |
| 2 | 1 | | |

CALCULATED JLS
CHECKED DNM

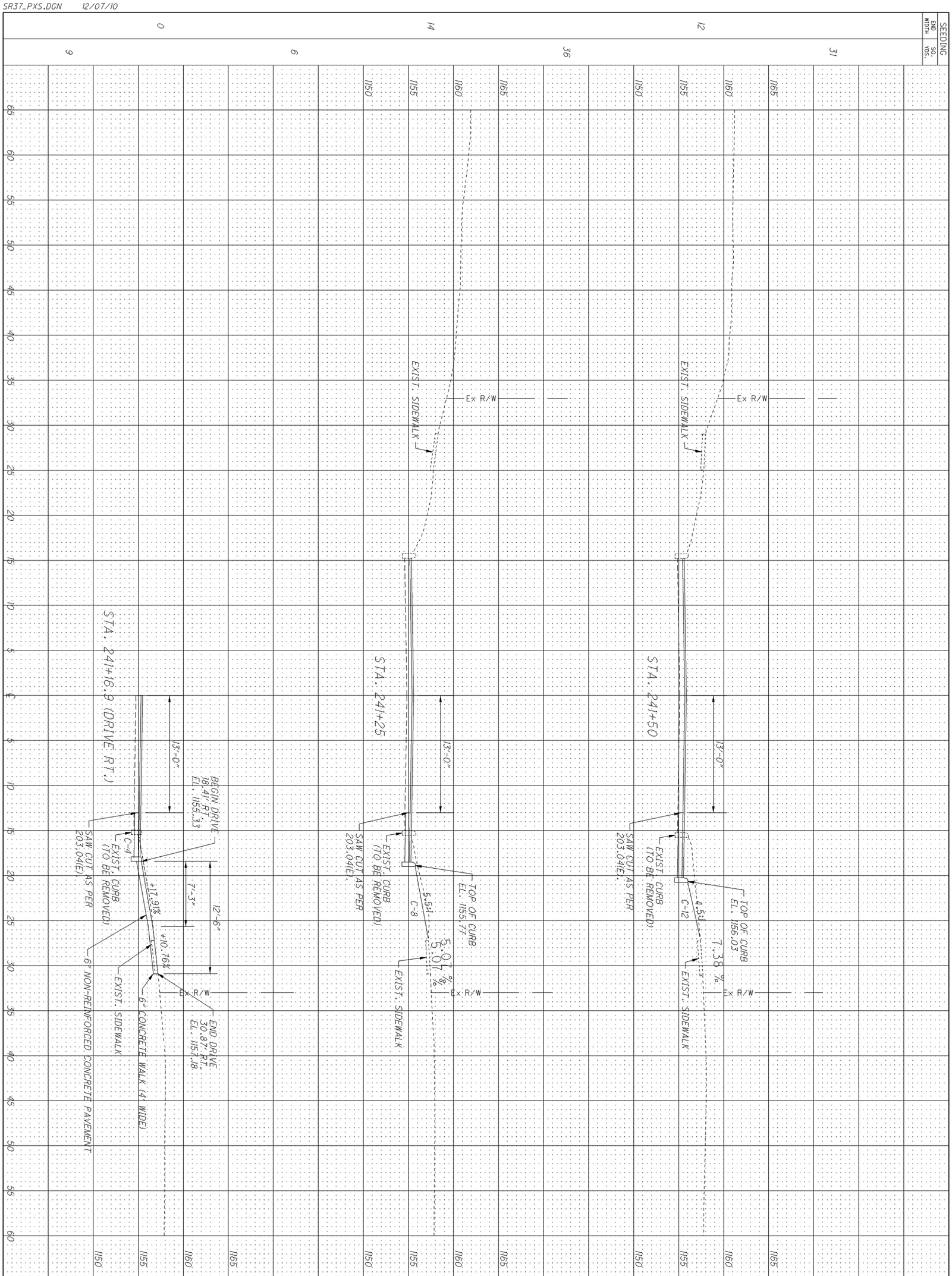
# CROSS SECTIONS (S.R. 37)(MAIN ST.) STA. 240+50 TO STA. 241+00

LIC-62-4.63



SR37_PXS.DGN 12/07/10

SR37_PXS.DGN 12/07/10




LIC-62-4.63

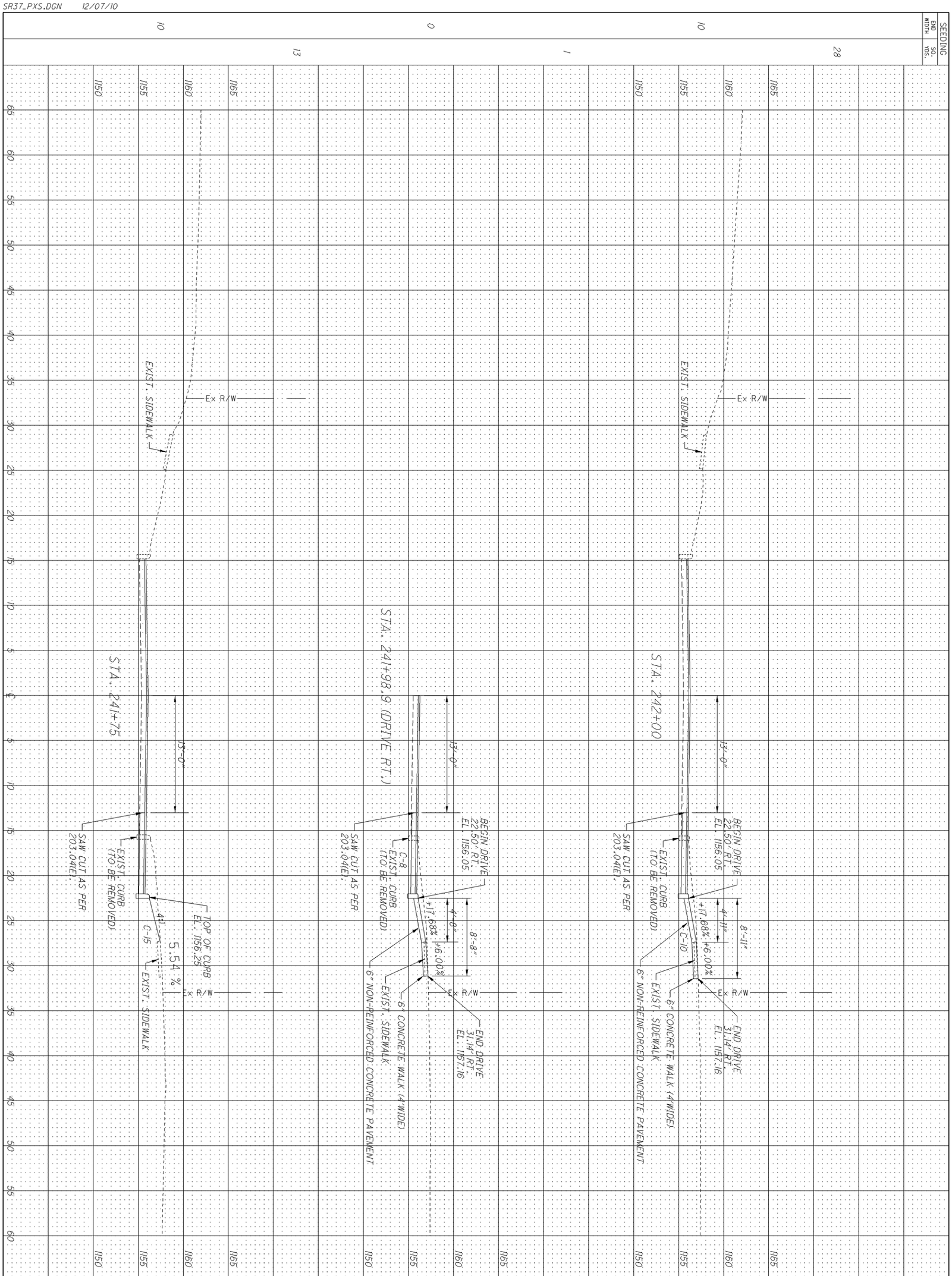
# CROSS SECTIONS (S.R. 37)(MAIN ST.) STA. 241+16.9 TO STA. 241+50

30/66

CALCULATED JLS

CHECKED DNM

SR37_PXS.DGN 12/07/10




| | | |
|---|---|---|
| 31/66 | LIC-62-4.63 | CROSS SECTIONS (S.R. 37)(MAIN ST.) STA. 241+75 TO STA. 242+00 |

CALCULATED JLS
CHECKED DNM

| SEEDING | |
|---|---|
| END WIDTH | SQ. YDS. |
| 8 | 24 |
| 9 | 26 |
| 10 | |

| END AREA | | VOLUME | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 8 | 0 | 8 | 0 |
| 10 | 0 | 9 | 0 |
| 9 | 0 | | |

CALCULATED JLS

CHECKED DNM



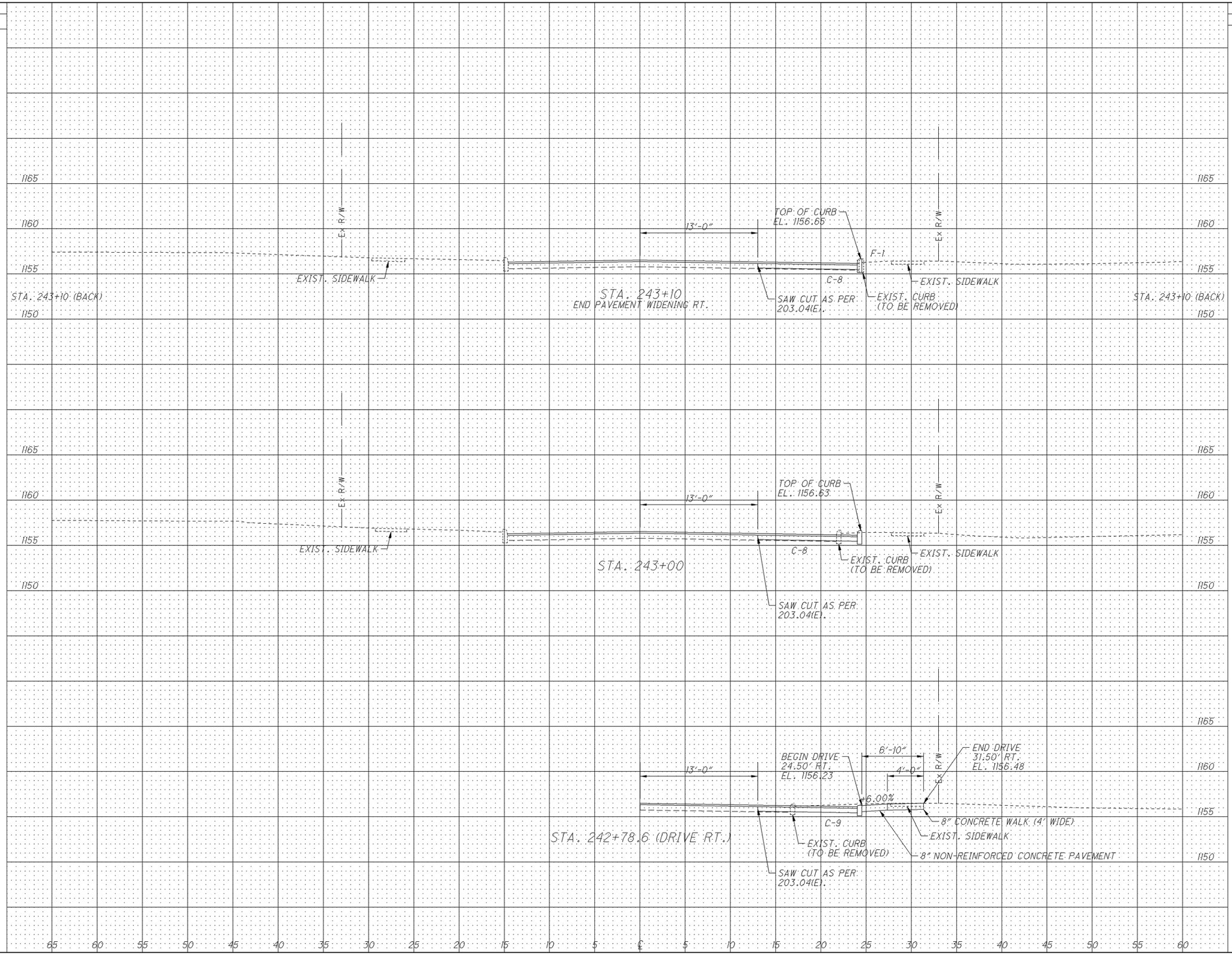

# CROSS SECTIONS (S.R.37)(MAIN ST.) STA. 242+25 TO STA. 242+75

LIC-62-4.63



SR37_PXS.DGN 12/07/10

| SEEDING | |
|---|---|
| END WIDTH | SQ. YDS. |
| 6 | 6 |
| 5 | 6 |
| 0 | 2 |




| END AREA | | VOLUME | |
|---|---|---|---|
| CUT | FILL | CUT | FILL |
| 8 | 1 | 3 | 0 |
| 8 | 0 | 7 | 0 |
| 9 | 0 | 1 | 0 |

CALCULATED JLS
CHECKED DNM

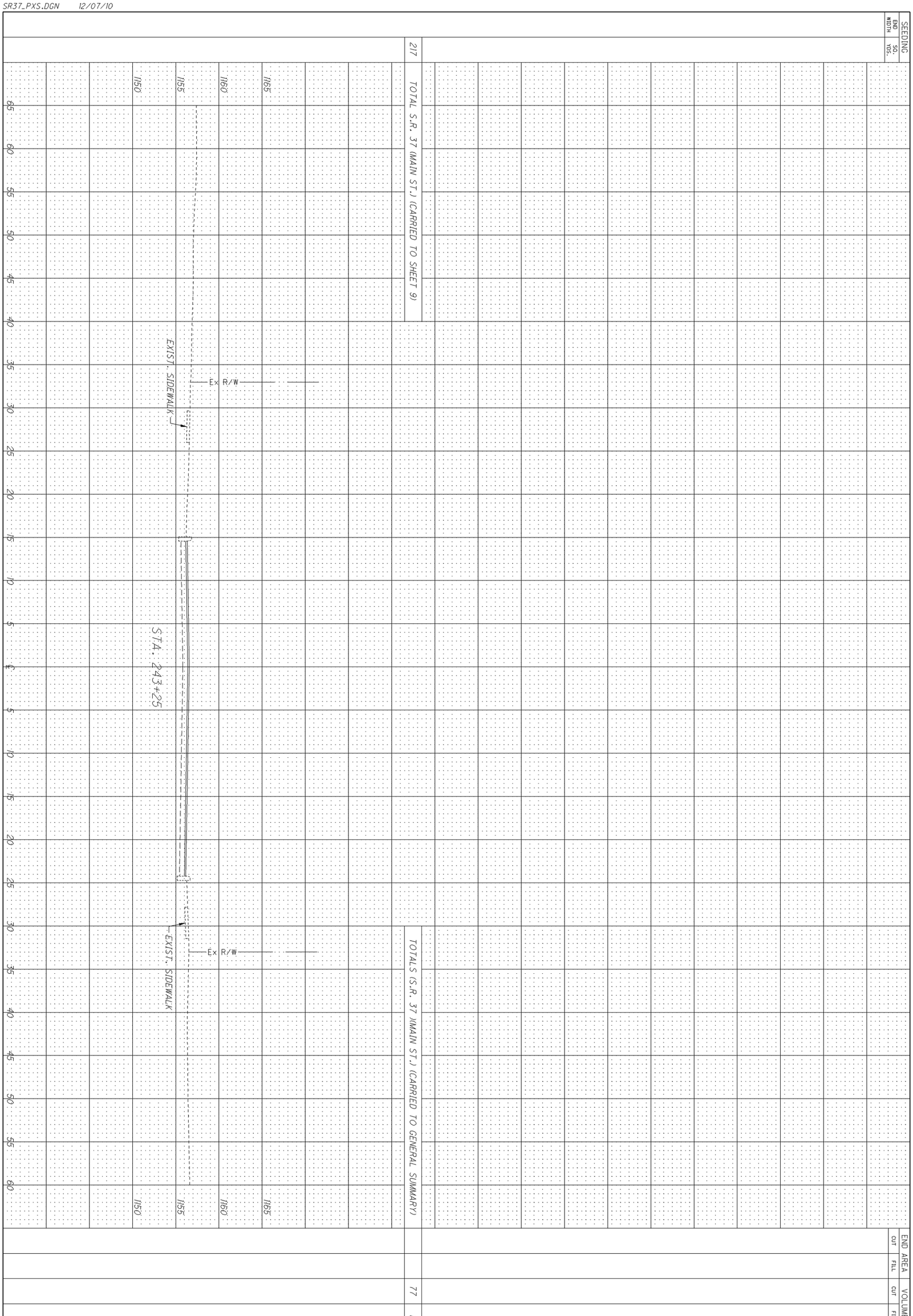
# CROSS SECTIONS (S.R. 37)(MAIN ST.) STA. 242+78.6 TO STA. 243+10

LIC-62-4.63



SR37_PXS.DGN 12/07/10

SR37_PXS.DGN 12/07/10



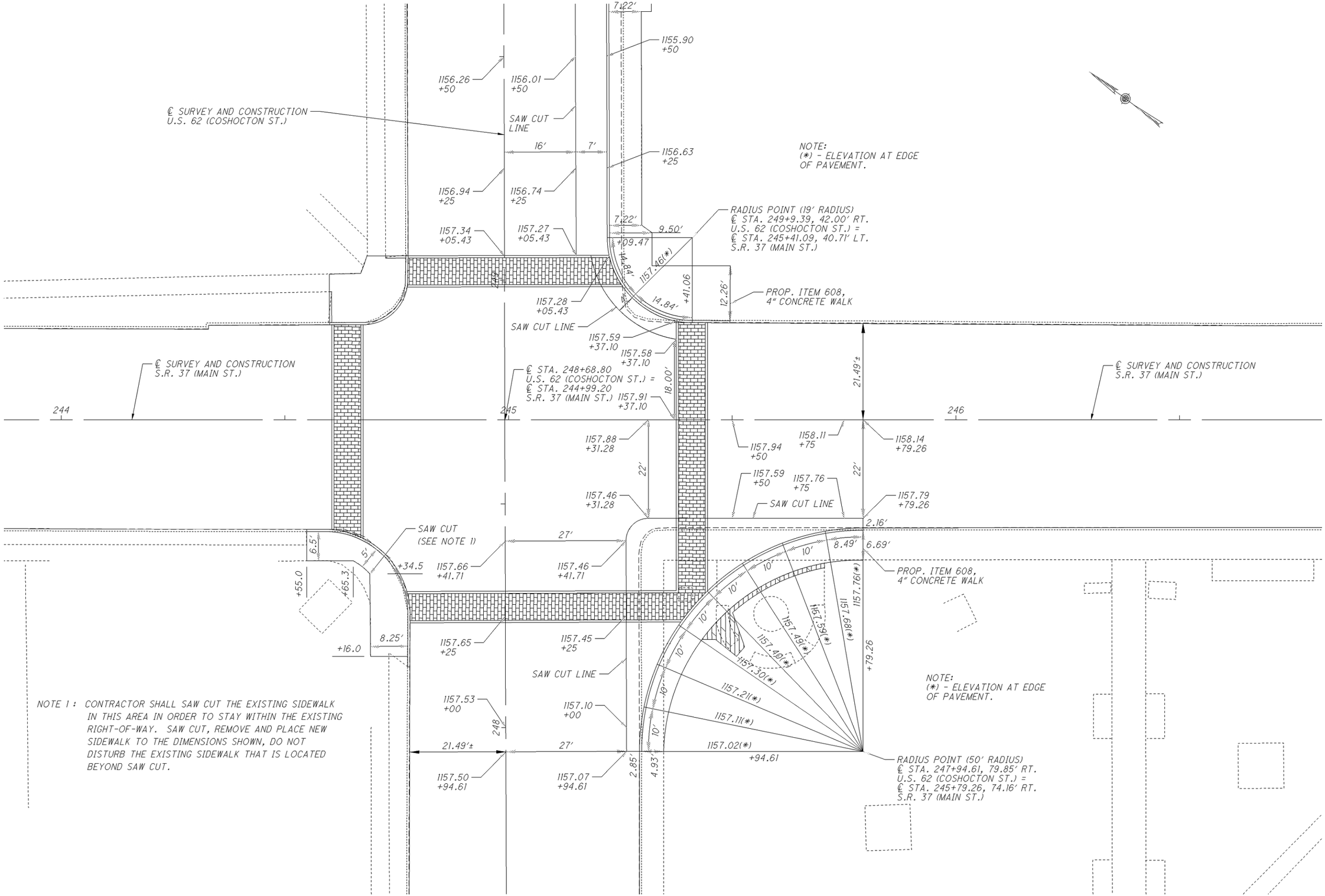

34/66

**LIC-62-4.63**

# CROSS SECTIONS (S.R. 37)(MAIN ST.) STA. 243+25

CALCULATED JLS

CHECKED DNM




HORIZONTAL SCALE IN FEET
0 10 20

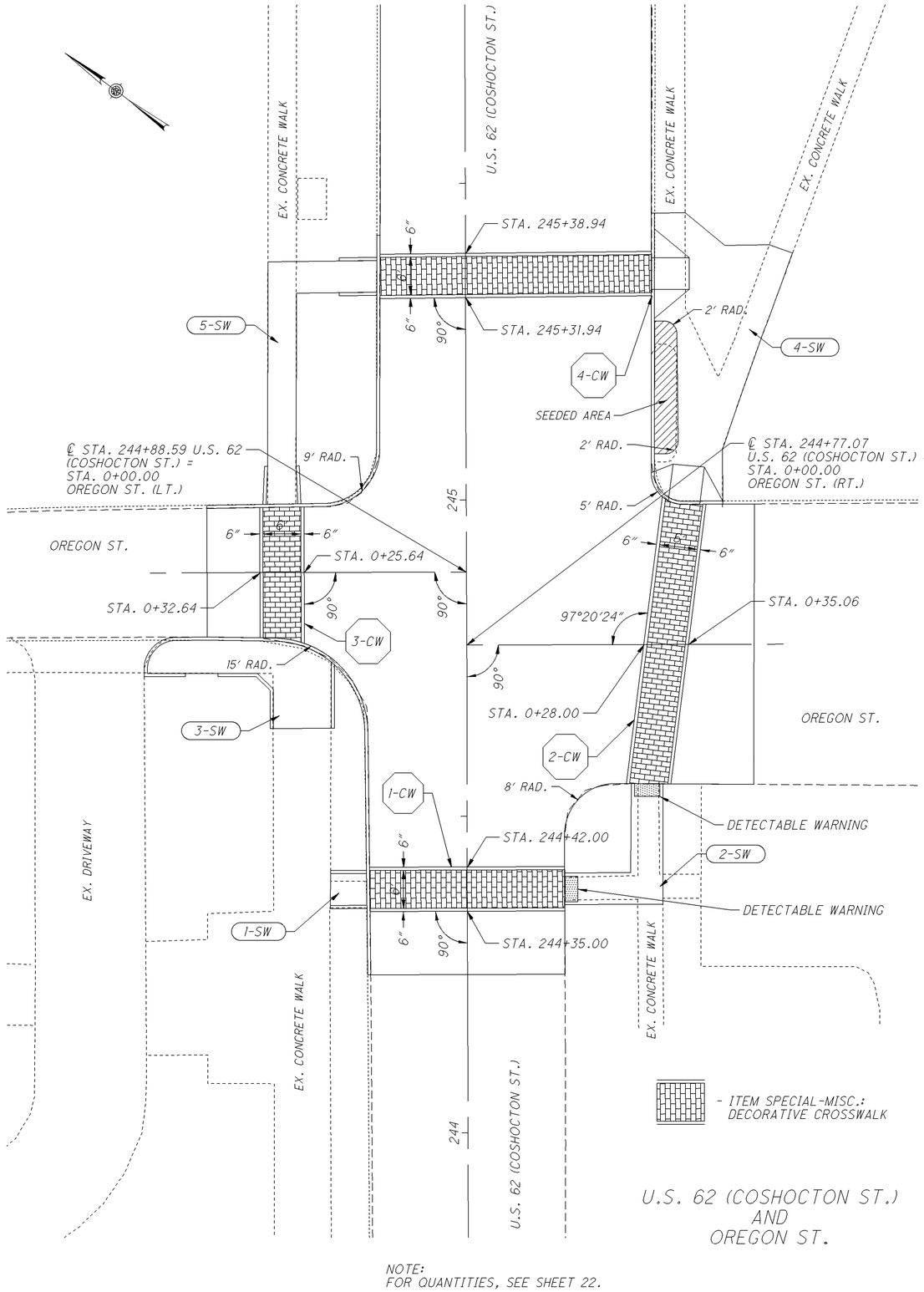
CALCULATED JLS
CHECKED DNM

# INTERSECTION DETAIL SHEET
## U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.)

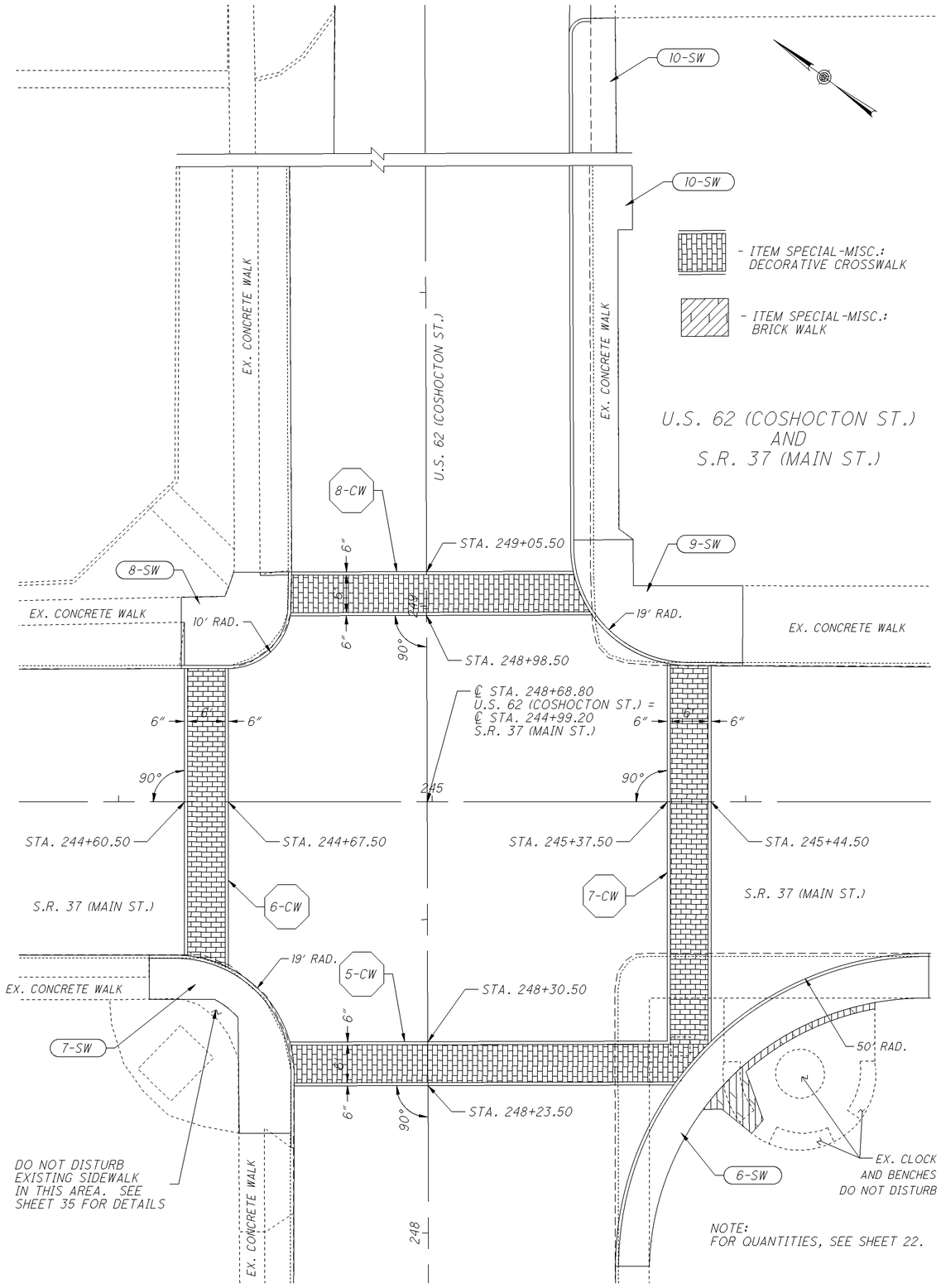
LIC-62-4.63



85170_PDS_001.DGN 11/09/10




NOTE:
FOR QUANTITIES, SEE SHEET 22.




NOTE:
FOR QUANTITIES, SEE SHEET 22.

HORIZONTAL SCALE IN FEET
0 10 20

CALCULATED JLS
CHECKED DNM

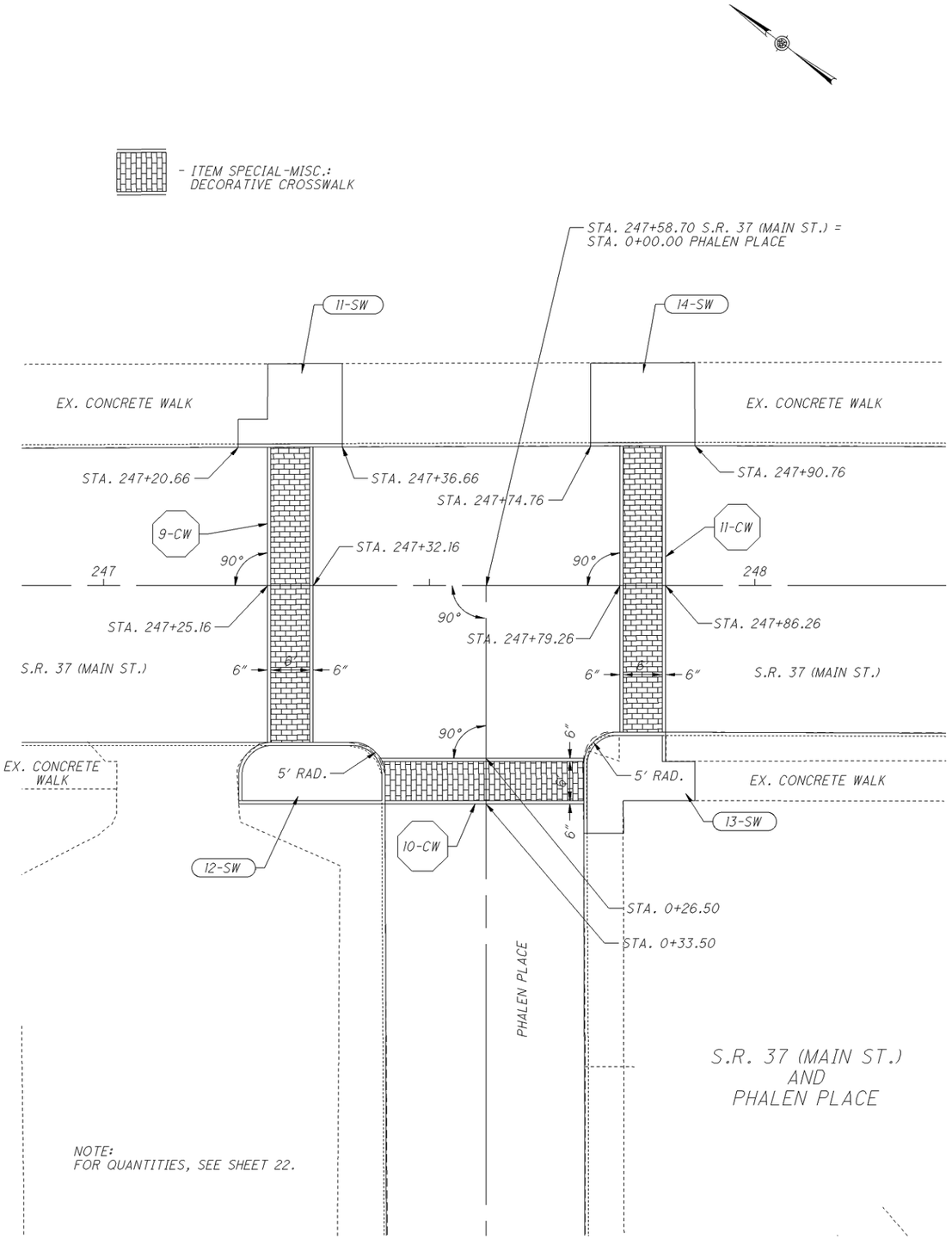
# DETAIL SHEET
# ITEM SPECIAL-MISC.: DECORATIVE CROSSWALK

LIC-62-4.63



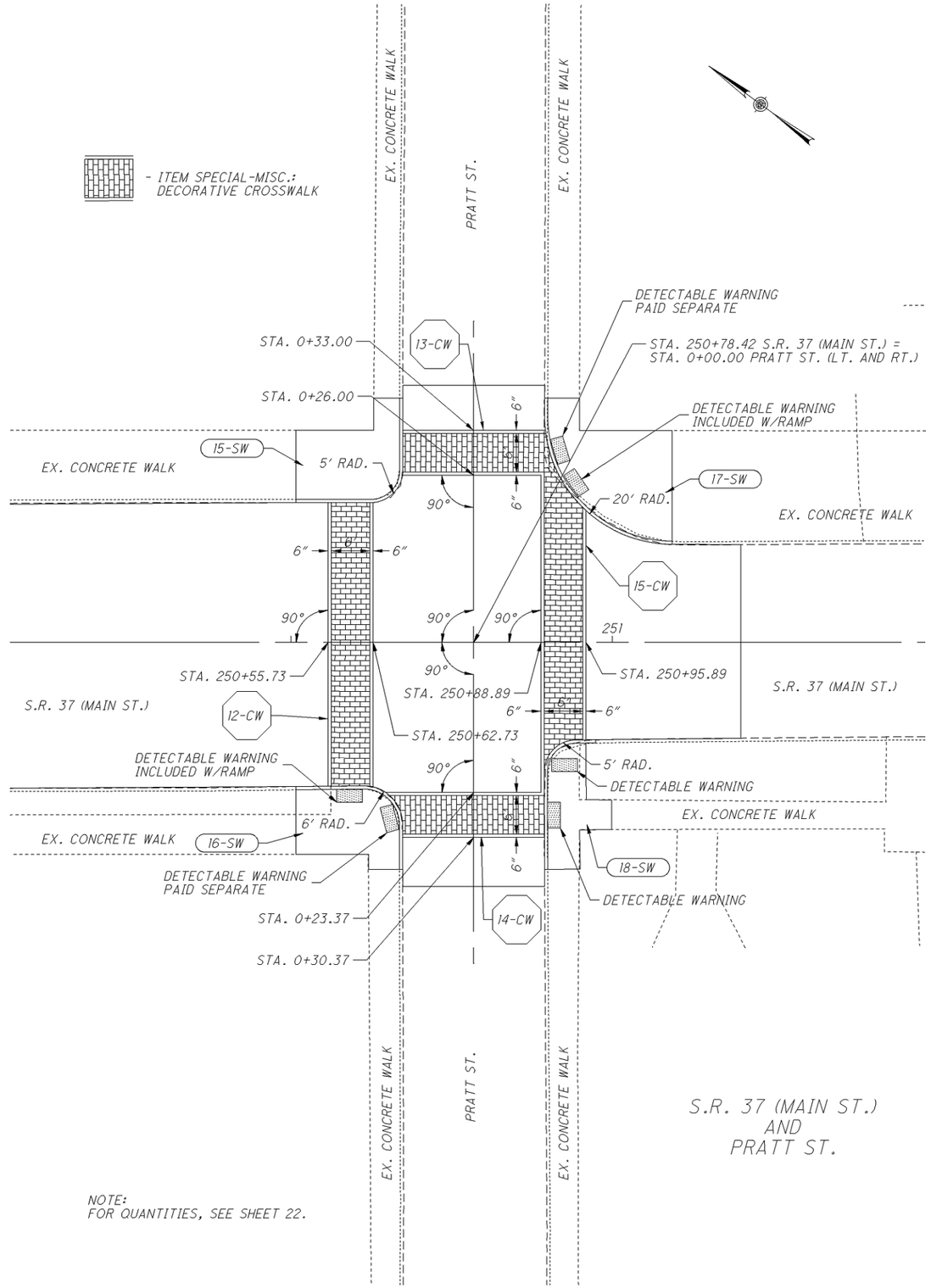
85170_PDS_002.DGN 3/28/2011

- ITEM SPECIAL-MISC.: DECORATIVE CROSSWALK




NOTE:
FOR QUANTITIES, SEE SHEET 22.

- ITEM SPECIAL-MISC.: DECORATIVE CROSSWALK




NOTE:
FOR QUANTITIES, SEE SHEET 22.

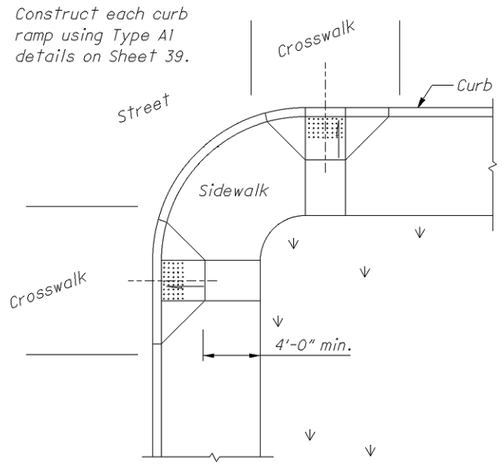
85170_PDS_003.DGN 12/14/10

HORIZONTAL SCALE IN FEET
0 10 20

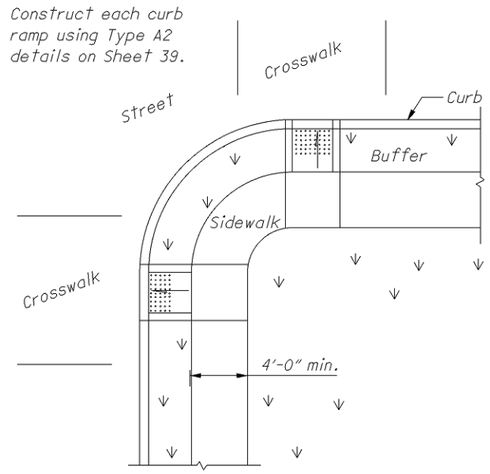
CALCULATED JLS CHECKED DNM

# DETAIL SHEET
# ITEM SPECIAL-MISC.: DECORATIVE CROSSWALK

LIC-62-4.63

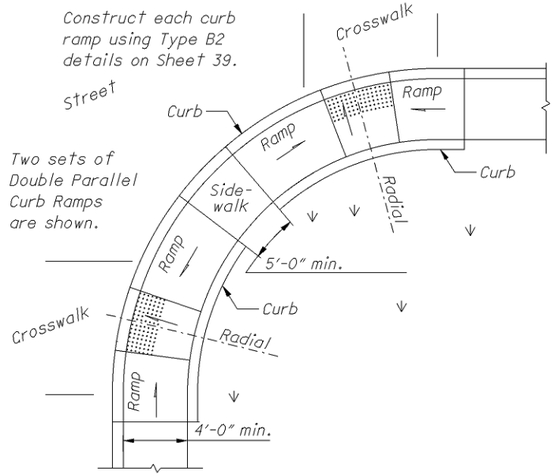



Use curb ramps with flared sides at locations with wide sidewalks.



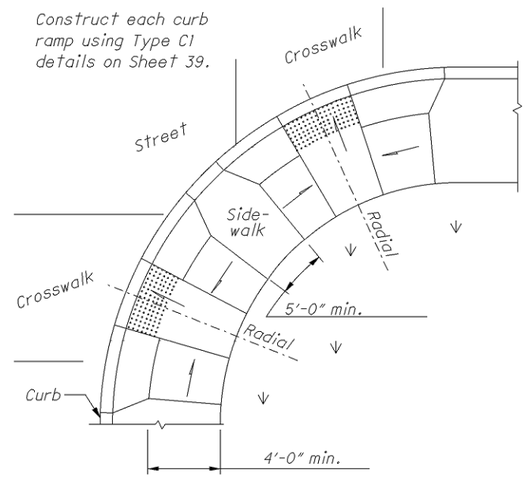

Use curb ramps with returned curbs where buffer is wide enough to accommodate ramp slope.

PERPENDICULAR CURB RAMPS




Place on streets having wide turning radius and where sidewalks are narrow.

PARALLEL CURB RAMPS




Curb ramp placement where streets have wide turning radius, and sufficient sidewalks width.

COMBINATION CURB RAMPS

## NOTES

GENERAL: This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 39 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown in the project plans.

The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

Excavate, form, place, finish, and cure according to 608.03.A, 608.03.B, 608.03.C, and 608.03.E.

DETECTABLE WARNINGS: Install Detectable Warnings on each curb ramp with approved materials, as shown on Sheet 40. Install these proprietary products as per manufacturer's written instructions.

DRAINAGE: Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. Vertical change in level exceeding ⅛" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed.

JOINTS: Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. Provide a ½" Item 705.03 expansion joint filler around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edges and slope changes, and do not necessarily indicate joint lines.

METHOD OF MEASUREMENT: The Department will measure Curb Ramps by the number of each completed curb ramp. The Department will measure Detectable Warnings in existing curb ramps and at grade crossings by the number of square feet completed.

Concrete Walk and Curb, Item 608 and 609, will be measured through out the curb ramp area and paid for under their respective Items.

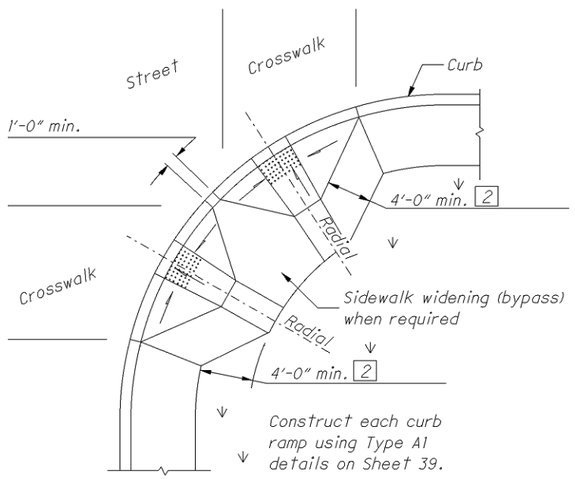
METHOD OF PAYMENT: New Curb Ramps constructed in new or existing Walk are paid for under Item 690 Special Misc.: Curb Ramp, Type __ (A1, A2, B1, B2, B3, C1, C2, or D) each, and includes the cost of any additional materials and installation (including detectable warnings), grading, forming and finishing.

Detectable Warnings constructed in existing curb ramps or for at-grade crossing locations are paid for under Item 690-Special Misc.: Detectable Warning (Sq. Ft.) and is full compensation for excavation, backfill, base course material, reinforcing steel, expansion joint materilas, and any incidentals required to complete the installation as specified. The work to cast the tiles in place will also require removal of existing pavement or sidewalk (Item 202) to the nearest joint, or if no joint exists, a minimum of 4 feet.

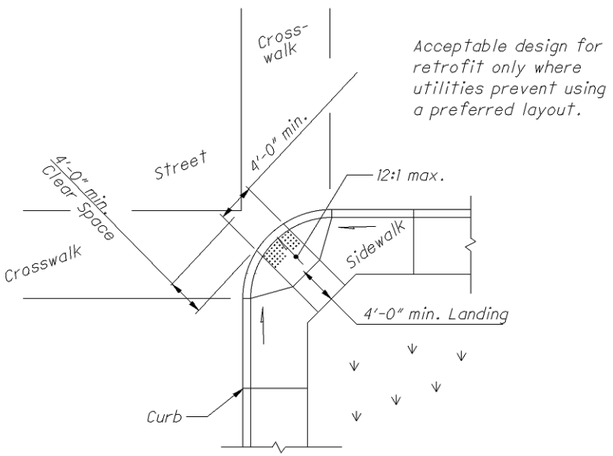
Removal of existing curb, pavement, walk (or existing curb ramps) are paid under Item 202.

### LEGEND

[2] May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.




PERPENDICULAR RAMPS




Use this design only for existing walks, and when site constraints prohibit other designs. The diagonal Type D ramp may be constructed as either a Perpendicular, Parallel or Combination curb ramp type. Avoid using where curb radii are less than 20'-0".

DIAGONAL RAMP (Type D)

ACCEPTABLE CONSTRUCTION PLACEMENT

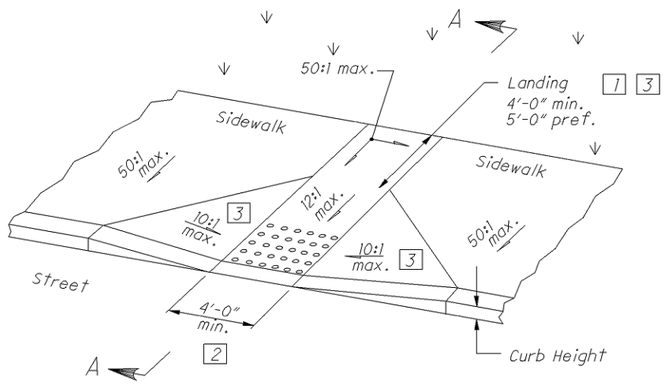
CALCULATED JLS CHECKED DNM

# CURB RAMP AND DETECTABLE WARNING DETAILS

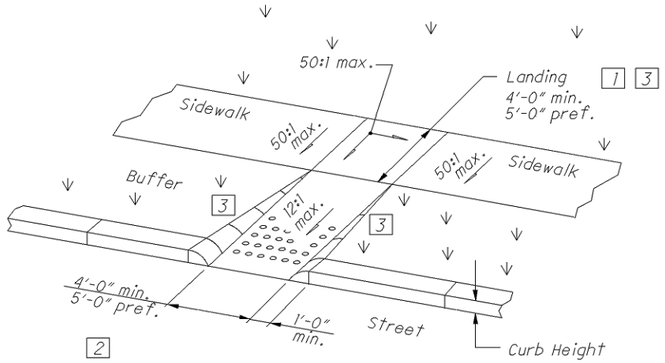
LIC-62-4.63



85170_CRD_001.DGN 11/23/10

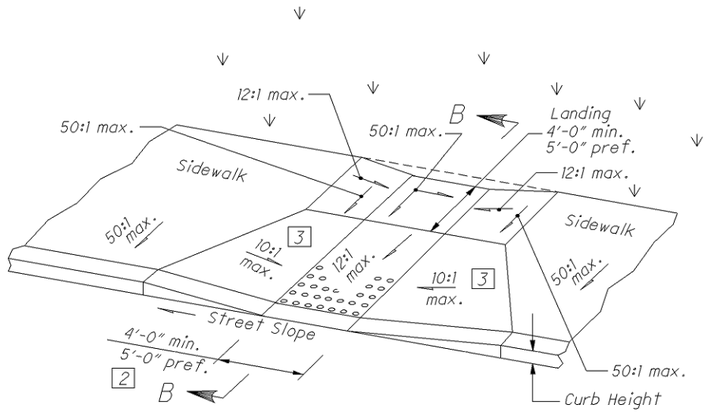



Type A1 (Perpendicular with flared sides)

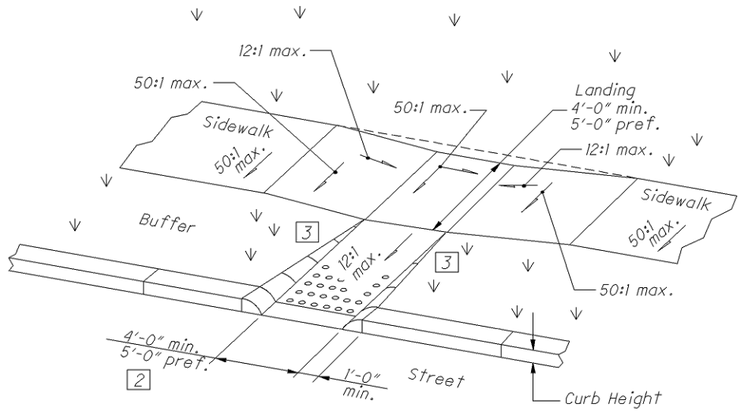



Type A2 (Perpendicular with returned curb)

PERPENDICULAR CURB RAMP DETAILS

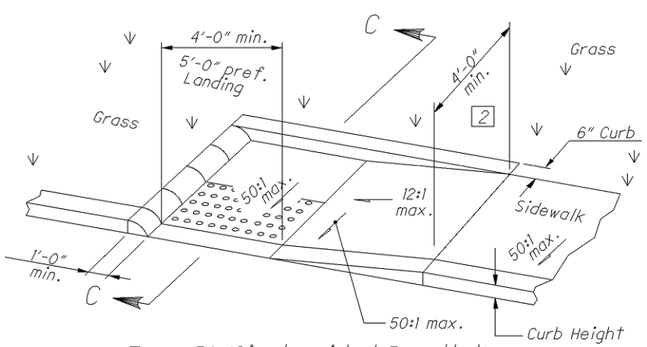



Type C1 (Combined with flared sides)

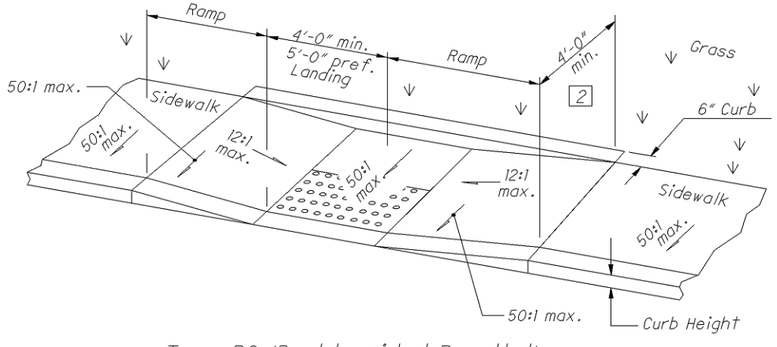



Type C2 (Combined with returned curb)

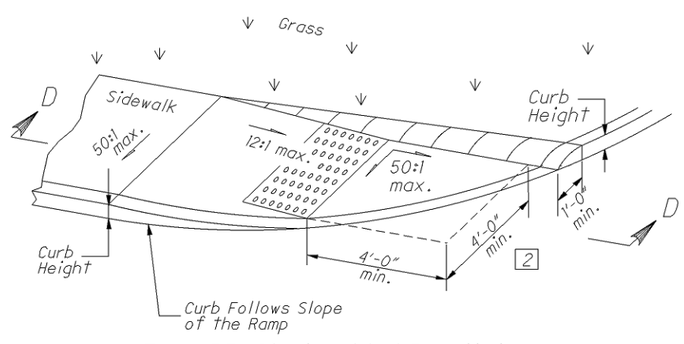
COMBINED CURB RAMP DETAILS




Type B1 (Single sided Parallel)




Type B2 (Double sided Parallel)




Type B3 (Single sided Parallel)

PARALLEL CURB RAMP DETAILS

## NOTES

The running slope of the ramp is preferred to be 12:1 or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due to site constraints (e.g. utility poles or vaults, right-of-way limits) it may be reduced as follows:

A) 10:1 for a max. rise of 6",
B) 8:1 for a max. rise of 3",
C) 6:1 over a max. run of 2'-0" for historic areas where a flatter slope is not feasible.

To prevent chasing the grade indefinately, the transition from exisiting sidewalk to the curb ramp area is not required to exceed 15 feet in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the cross walk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transitions shall be 20:1 ot flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

Ramp landings shall be 4' min. x 4' min. with a 50:1 or flatter cross slope and running slope, unless otherwise shown.

## LEGEND

1 Dimension may be reduced to 3'-0" in existing sidewalks if the landing is unconstrained along the back edge.

2 May be reduced to 3'-4" in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

3 Where landing width (D) has been reduced to 3'-0" the flared sides shall have a maximum slope of 12:1.

Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheelchair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

See Sheeet 40 for Sections.

CALCULATED JLS CHECKED DNM

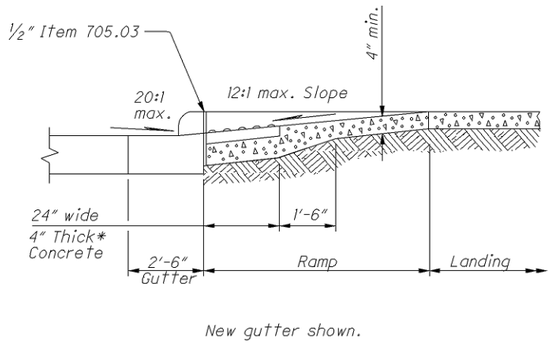
# DETECTABLE WARNING DETAILS

# CURB RAMP AND DE

LIC-62-4.63

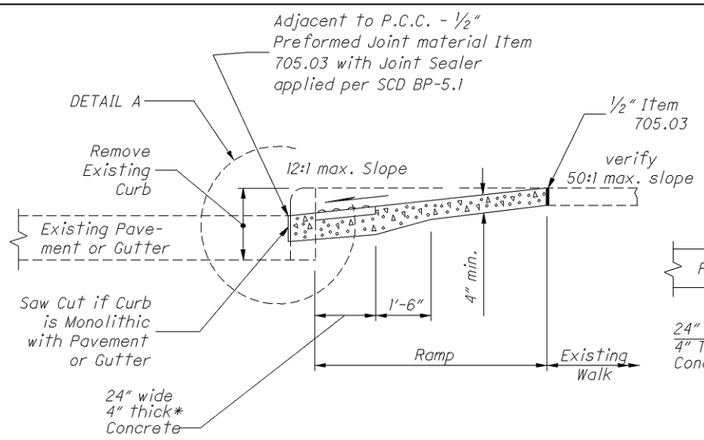


85170_CRD_002.DGN 11/23/10

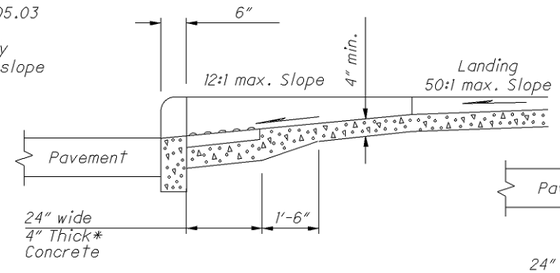



New gutter shown.

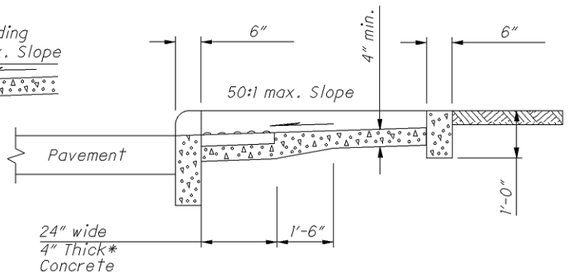
SECTION A-A
NORMAL DETAIL
See Sheet 39.



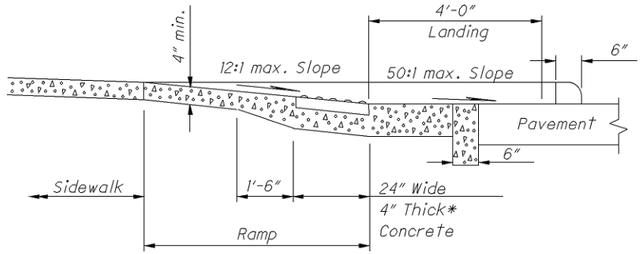

SECTION A-A
EXISTING WALK DETAIL
See Sheet 39.




SECTION B-B
See Sheet 39.

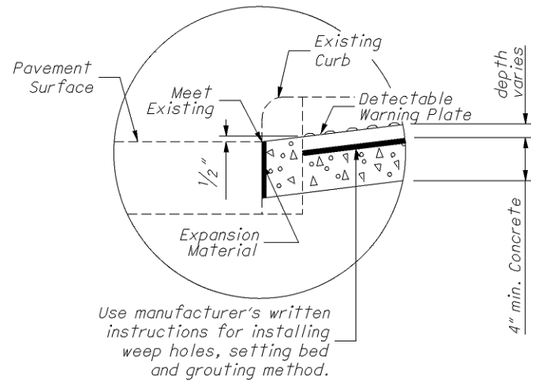



SECTION C-C
See Sheet 39.

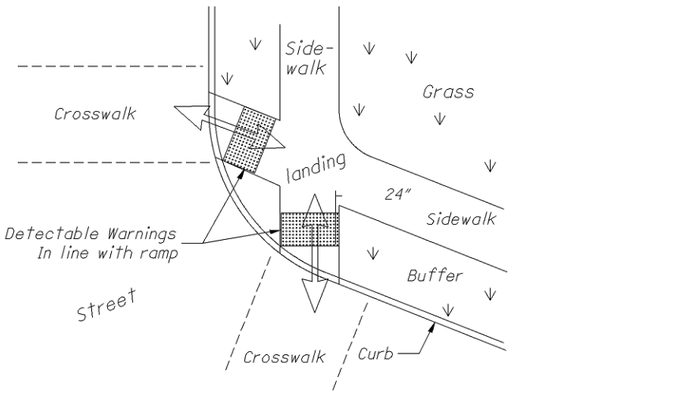



SECTION D-D
See Sheet 39.

*Where possible, pour ramp area integral with the curb, otherwise use 6" thick walk.




DETAIL A




DETECTABLE WARNING ALIGNMENT

## DETECTABLE WARNINGS NOTES

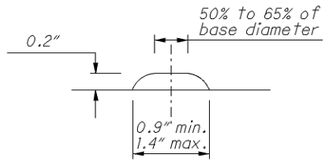
GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

PLACEMENT: Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 38.

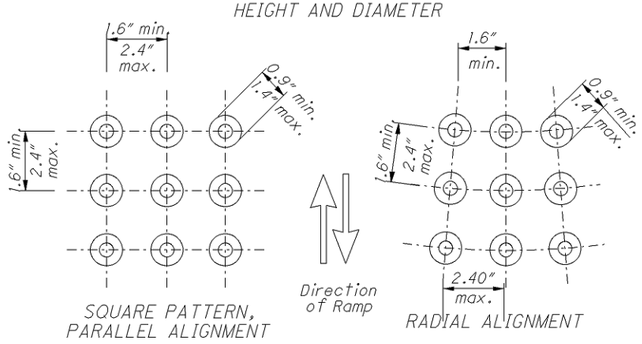
The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

ALIGNMENT: Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but in skewed conditions at least one corner of the 24" strip should be adjacent to the back of curb. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

PRODUCTS & COLORS: Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per manufacturer's printed instructions.



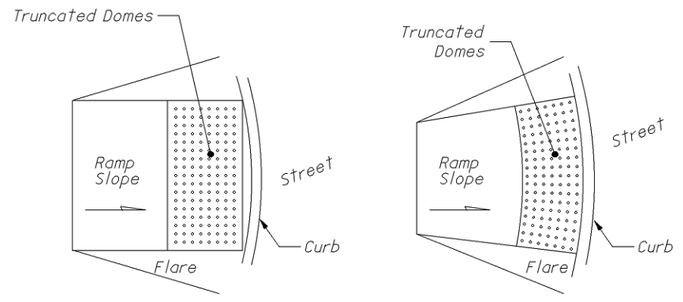

HEIGHT AND DIAMETER




SQUARE PATTERN, PARALLEL ALIGNMENT

RADIAL ALIGNMENT

TRUNCATED DOMES DETAILS




DOME ALIGNMENT ON RADIUSED CURB

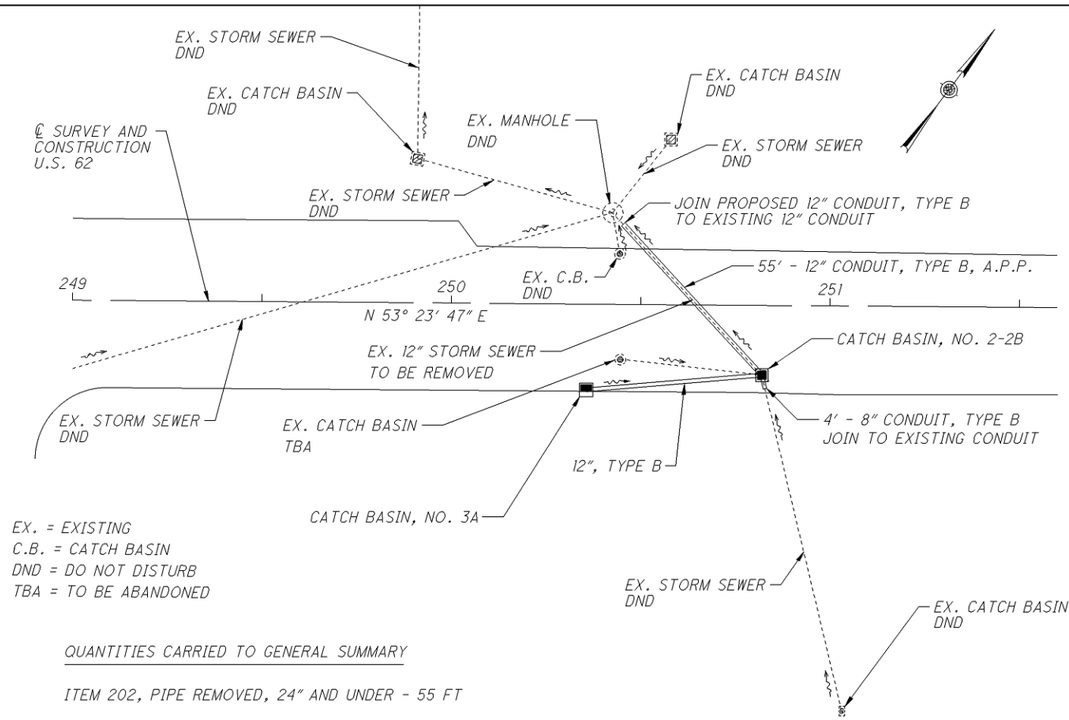
CALCULATED JLS
CHECKED DNM

# CURB RAMP AND DETECTABLE WARNING DETAILS

LIC-62-4.63



85170_CRD_003.DGN 11/23/10



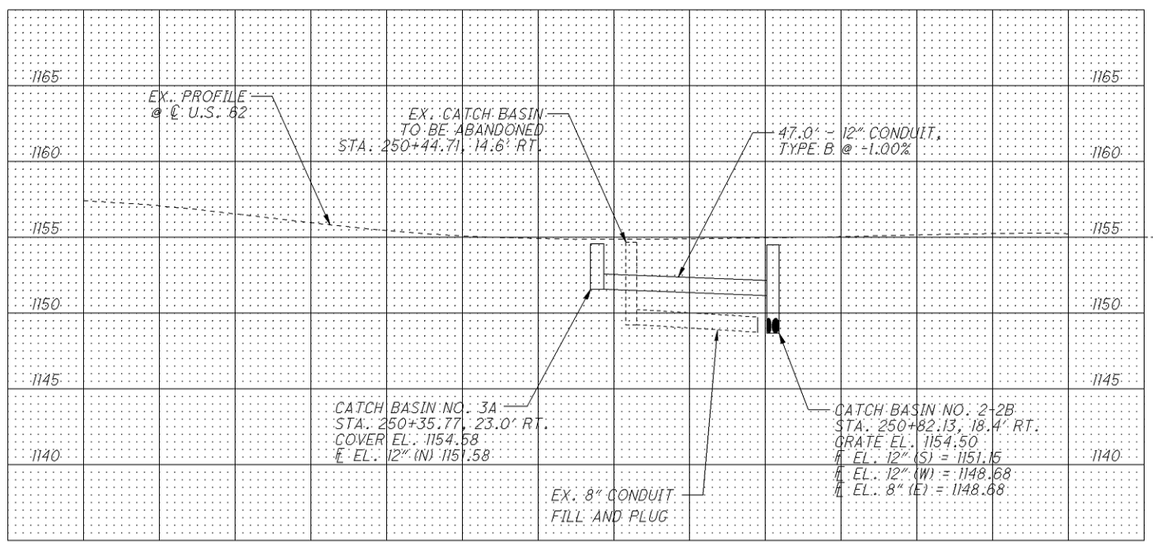

EX. = EXISTING
C.B. = CATCH BASIN
DND = DO NOT DISTURB
TBA = TO BE ABANDONED

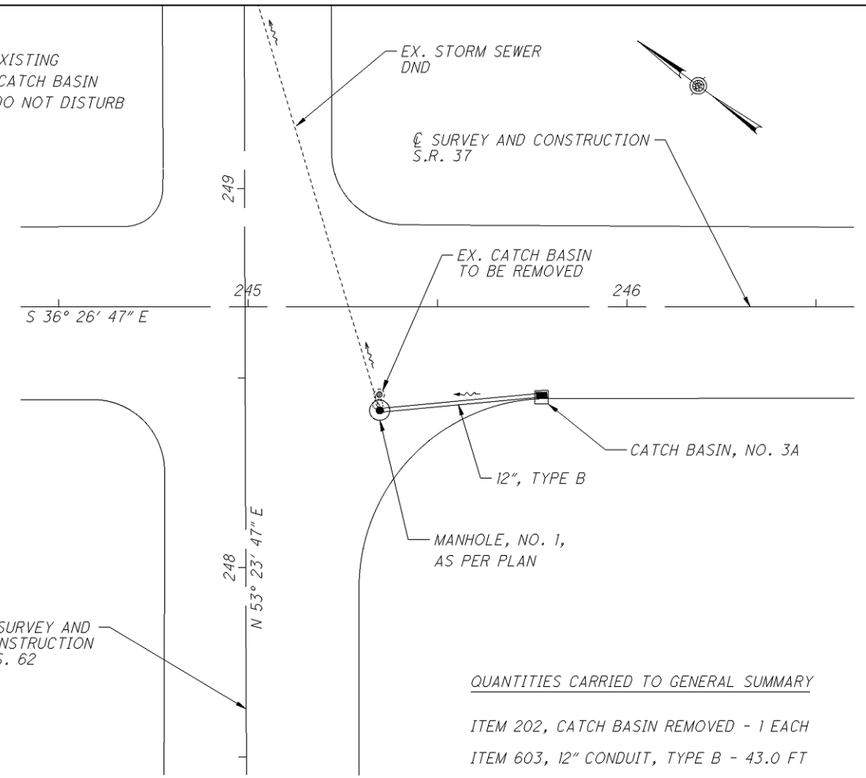
QUANTITIES CARRIED TO GENERAL SUMMARY

ITEM 202, PIPE REMOVED, 24" AND UNDER - 55 FT
ITEM 202, CATCH BASIN REMOVED - 1 EACH
ITEM 202, CATCH BASIN ABANDONED - 1 EACH
ITEM 202, SPECIAL - FILL AND PLUG EXISTING CONDUIT - 35 FT
ITEM 603, 8" CONDUIT, TYPE B - 4.0 FT
ITEM 603, 12" CONDUIT, TYPE B - 47.0 FT
ITEM 603, 12" CONDUIT, TYPE B, A.P.P. - 55.0 FT
ITEM 604, CATCH BASIN, NO. 3A - 1 EACH
ITEM 604, CATCH BASIN, 2-2B - 1 EACH

NOTES

1. THE CONTRACTOR SHALL CONNECT THE PROPOSED 12" CONDUIT, TYPE B, A.P.P. TO AN EXISTING 12" CONDUIT THAT IS ALREADY CONNECTED TO THE EXISTING MANHOLE. THE TWO CONDUITS SHALL BE JOINED TOGETHER WITHOUT DISTURBING THE EXISTING MANHOLE.




EX. = EXISTING
C.B. = CATCH BASIN
DND = DO NOT DISTURB

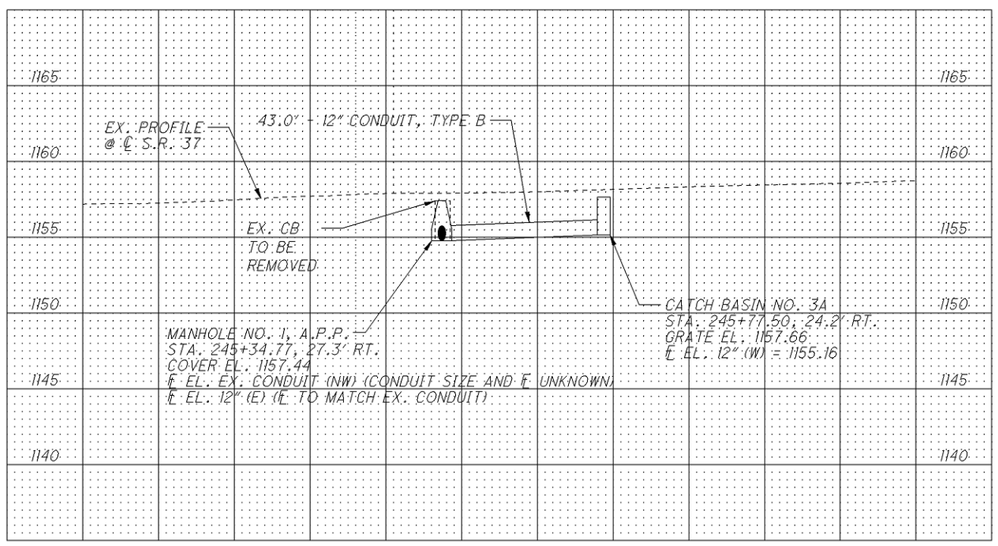
QUANTITIES CARRIED TO GENERAL SUMMARY

ITEM 202, CATCH BASIN REMOVED - 1 EACH
ITEM 603, 12" CONDUIT, TYPE B - 43.0 FT
ITEM 604, CATCH BASIN, NO. 3A - 1 EACH
ITEM 604, MANHOLE NO. 1, AS PER PLAN - 1 EACH

NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE FLOWLINE ELEVATION AND SIZE OF THE EXISTING OUTLET CONDUIT PRIOR TO REMOVING THE EXISTING CATCH BASIN.

2. THE FLOWLINE ELEVATION OF THE PROPOSED 12" CONDUIT, TYPE B (AT THE PROPOSED MANHOLE) SHALL MATCH THE FLOWLINE OF THE EXISTING OUTLET CONDUIT.




CALCULATED DNM
CHECKED DNM

HORIZONTAL SCALE IN FEET
0 10 20 40

STORM SEWER PROFILES

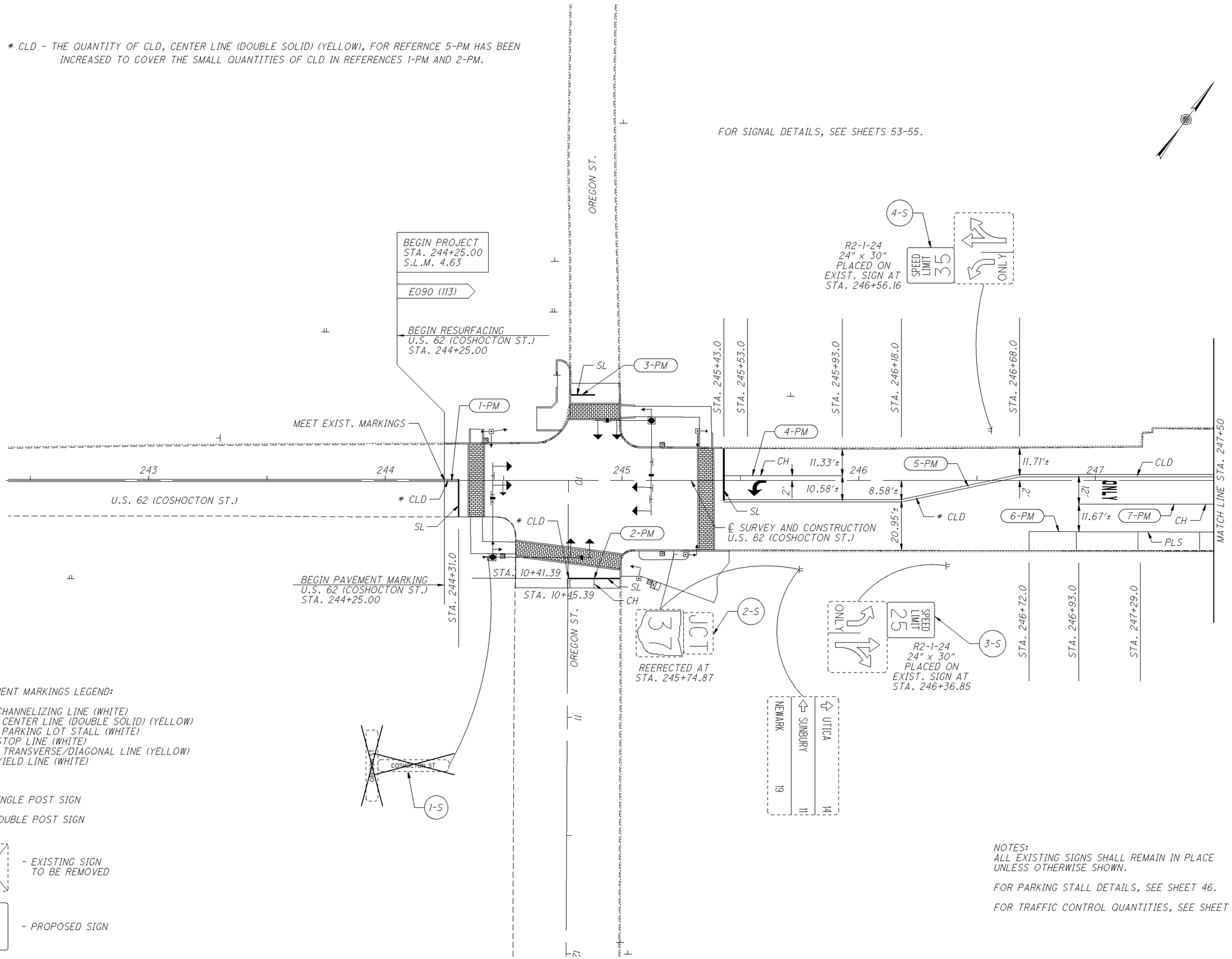
LIC-62-4.63



85170_DPP_01.DGN DATED 12/21/2010

* CLD - THE QUANTITY OF CLD, CENTER LINE (DOUBLE SOLID) (YELLOW), FOR REFERNCE 5-PM HAS BEEN INCREASED TO COVER THE SMALL QUANTITIES OF CLD IN REFERENCES 1-PM AND 2-PM.

FOR SIGNAL DETAILS, SEE SHEETS 53-55.




PAVEMENT MARKINGS LEGEND:

CH - CHANNELIZING LINE (WHITE)
CLD - CENTER LINE (DOUBLE SOLID) (YELLOW)
PLS - PARKING LOT STALL (WHITE)
SL - STOP LINE (WHITE)
TLY - TRANSVERSE/DIAGONAL LINE (YELLOW)
YL - YIELD LINE (WHITE)

┤ - SINGLE POST SIGN

╪ - DOUBLE POST SIGN

- EXISTING SIGN TO BE REMOVED

- PROPOSED SIGN

NOTES:
ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNLESS OTHERWISE SHOWN.

FOR PARKING STALL DETAILS, SEE SHEET 46.

FOR TRAFFIC CONTROL QUANTITIES, SEE SHEET 47.

HORIZONTAL SCALE IN FEET
0 20 40

CALCULATED JLS
CHECKED DNM

# TRAFFIC CONTROL PLAN SHEET
## STA. 244+25 TO STA. 247+50 (U.S. 62)

LIC-62-4.63



US062_TPS_001.DGN 3/28/2011

FOR SIGNAL DETAILS, SEE SHEETS 56-58.

MATCH LINE STA. 243+50 (S.R. 37) (SEE SHEET 44)

STA. 243+56.0

ONLY

11-PM

12-S

62

13-PM

REERECTED ON PROP. SIGNAL POLE AT STA. 244+58.46

244

CH

CLD

STA. 244+22.0

STA. 244+32.0

SL

STA. 244+57.0

SL

STA. 249+19.0

STA. 249+44.0

STA. 249+54.0

STA. 250+20.0

R2-1-24
24" x 30"
PLACED ON
EXIST. SIGN
AT STA. 250+83.37

8-S

SPEED LIMIT 25

ONLY

STA. 250+75.0

STA. 250+86.0

STA. 251+00.0

STA. 251+50.0

KASSON ST.

MATCH LINE STA. 247+50

5-PM

CLD

248

SL

7-PM

CH

SL

PLS

6-PM

245

SL

8-PM

250

CH

ONLY

251

CLD

13.86'±

10-PM

252

13.44'±

SL

11'

9-PM

CLD

8'

15.43'±

TLY

CLD

22.10'±

ONLY

6-S

STA. 247+64.0

STA. 247+95.0

STA. 248+05.0

STA. 248+20.0

STA. 245+48.0

SL

CH

SL

STA. 245+73.0

STA. 245+78.0

STA. 245+83.0

14-PM

246

COSHOCTON ST

13-S

PLS

16-PM

15-PM

CLD

STA. 246+49.0

MATCH LINE STA. 246+50 (S.R. 37) (SEE SHEET 45)

REERECTED AT STA. 248+05.0

WEST

62

37

EAST

5-S

62

EAST

7-S

REERECTED ON EXIST. WOOD POLE AT STA. 249+69.28

℄ SURVEY AND CONSTRUCTION
U.S. 62 (COSHOCTON ST.)

9-S

SPEED LIMIT 35

R2-1-24
24" x 30"
PLACED ON
EXIST. WOOD POLE
AT STA. 251+03.83

END PAVEMENT MARKING
U.S. 62 (COSHOCTON ST.)
STA. 252+25.00

END RESURFACING
U.S. 62 (COSHOCTON ST.)
STA. 252+25.00

E090 (113)

BEGIN PROJECT
STA. 252+25.00
S.L.M. 4.78

KASSON ST.

PAVEMENT MARKINGS LEGEND:

CH - CHANNELIZING LINE (WHITE)
CLD - CENTER LINE (DOUBLE SOLID) (YELLOW)
PLS - PARKING LOT STALL (WHITE)
SL - STOP LINE (WHITE)
TLY - TRANSVERSE/DIAGONAL LINE (YELLOW)
YL - YIELD LINE (WHITE)

┤ - SINGLE POST SIGN

╡ - DOUBLE POST SIGN

- EXISTING SIGN TO BE REMOVED

- PROPOSED SIGN

NOTES:
ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNLESS OTHERWISE SHOWN.

FOR PARKING STALL DETAILS, SEE SHEET 46.

FOR TRAFFIC CONTROL QUANTITIES, SEE SHEET 47.

HORIZONTAL SCALE IN FEET
0 20 40

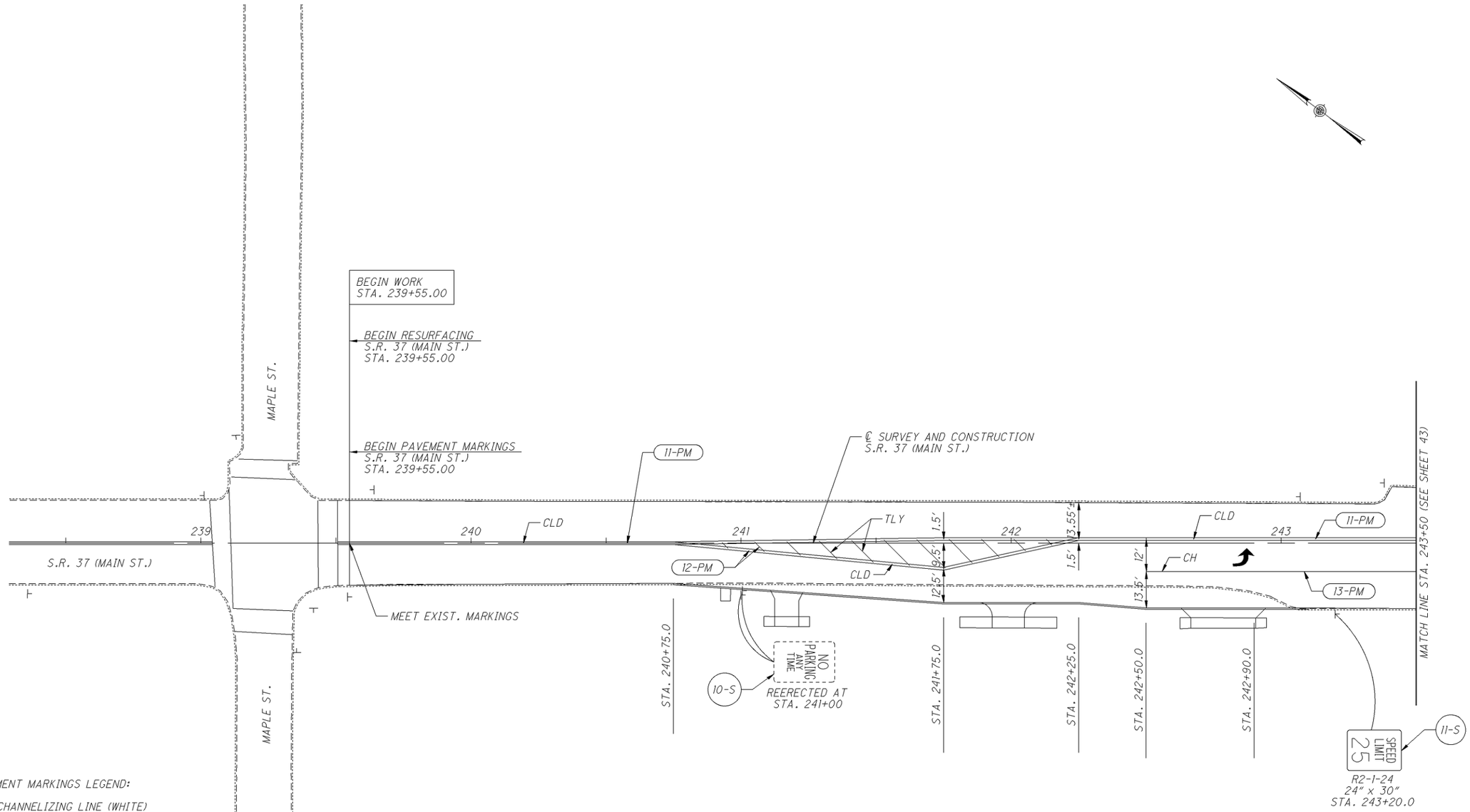
CALCULATED JLS
CHECKED DNM

# TRAFFIC CONTROL PLAN SHEET
# STA. 247+50 TO STA. 252+25 (U.S. 62)

LIC-62-4.63



US062_TPS_002.DGN 12/20/10




PAVEMENT MARKINGS LEGEND:

CH - CHANNELIZING LINE (WHITE)
CLD - CENTER LINE (DOUBLE SOLID) (YELLOW)
PLS - PARKING LOT STALL (WHITE)
SL - STOP LINE (WHITE)
TLY - TRANSVERSE/DIAGONAL LINE (YELLOW)
YL - YIELD LINE (WHITE)

⊣ - SINGLE POST SIGN

⫤ - DOUBLE POST SIGN

- EXISTING SIGN TO BE REMOVED

- PROPOSED SIGN

NOTES:
ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNLESS OTHERWISE SHOWN.

FOR TRAFFIC CONTROL QUANTITIES, SEE SHEET 47.

HORIZONTAL SCALE IN FEET
0 20 40

CALCULATED JLS
CHECKED DNM

# TRAFFIC CONTROL PLAN SHEET
# STA. 239+55 TO STA. 243+50 (S.R. 37)

LIC-62-4.63



SR037_TPS_001.DGN 12/17/10

# TRAFFIC CONTROL PLAN SHEET
## STA. 246+50 TO STA. 251+20 (S.R. 37)

CALCULATED JLS | CHECKED DNM

HORIZONTAL SCALE IN FEET
0 20 40

LIC-62-4.63



NOTE:
EXISTING SIGNAL AT S.R. 37 (MAIN ST.) AND PRATT ST. INTERSECTION SHALL BE REMOVED.

END WORK
STA. 251+20.00

END RESURFACING
S.R. 37 (MAIN ST.)
STA. 251+20.00

END PAVEMENT MARKING
S.R. 37 (MAIN ST.)
STA. 251+20.00

MEET EXIST. MARKINGS

PRATT ST.

STA. 246+53.0
STA. 247+06.00
STA. 247+25.16
STA. 247+86.26
STA. 248+06.26
STA. 250+31.96
STA. 250+55.73
STA. 250+95.89

MATCH LINE STA. 246+50 (SEE SHEET 43)

16-PM 15-PM 21-PM 19-PM 23-PM

247 248 249 250 251

11.51'± 23.00' 21.45' PLS

9.45' 14.63'± CLD YL 17-PM 22.32' 22.53' 20-PM PLS CLD 18-PM

S.R. 37 (MAIN ST.)

17-S

RI-5AL-18
18" x 24"
STA. 248+06.26

© SURVEY AND CONSTRUCTION
S.R. 37 (MAIN ST.)

16-S

TO TRAFFIC YIELD PEDESTRIANS

22-PM SL

STOP
RI-1-30
30" x 30"
PLACED AT
PROP. STOP
BAR LOCATION

18-S

STA. 246+78.0
STA. 246+96.20

RI-5AL-18
18" x 24"
STA. 246+96.20

15-S

PHALEN PLACE

25
SPEED LIMIT

14-S
REERECTED AT
STA. 246+96.20

PAVEMENT MARKINGS LEGEND:

CH - CHANNELIZING LINE (WHITE)
CLD - CENTER LINE (DOUBLE SOLID) (YELLOW)
PLS - PARKING LOT STALL (WHITE)
SL - STOP LINE (WHITE)
TLY - TRANSVERSE/DIAGONAL LINE (YELLOW)
YL - YIELD LINE (WHITE)

┤ - SINGLE POST SIGN

╡ - DOUBLE POST SIGN

- EXISTING SIGN TO BE REMOVED

- PROPOSED SIGN

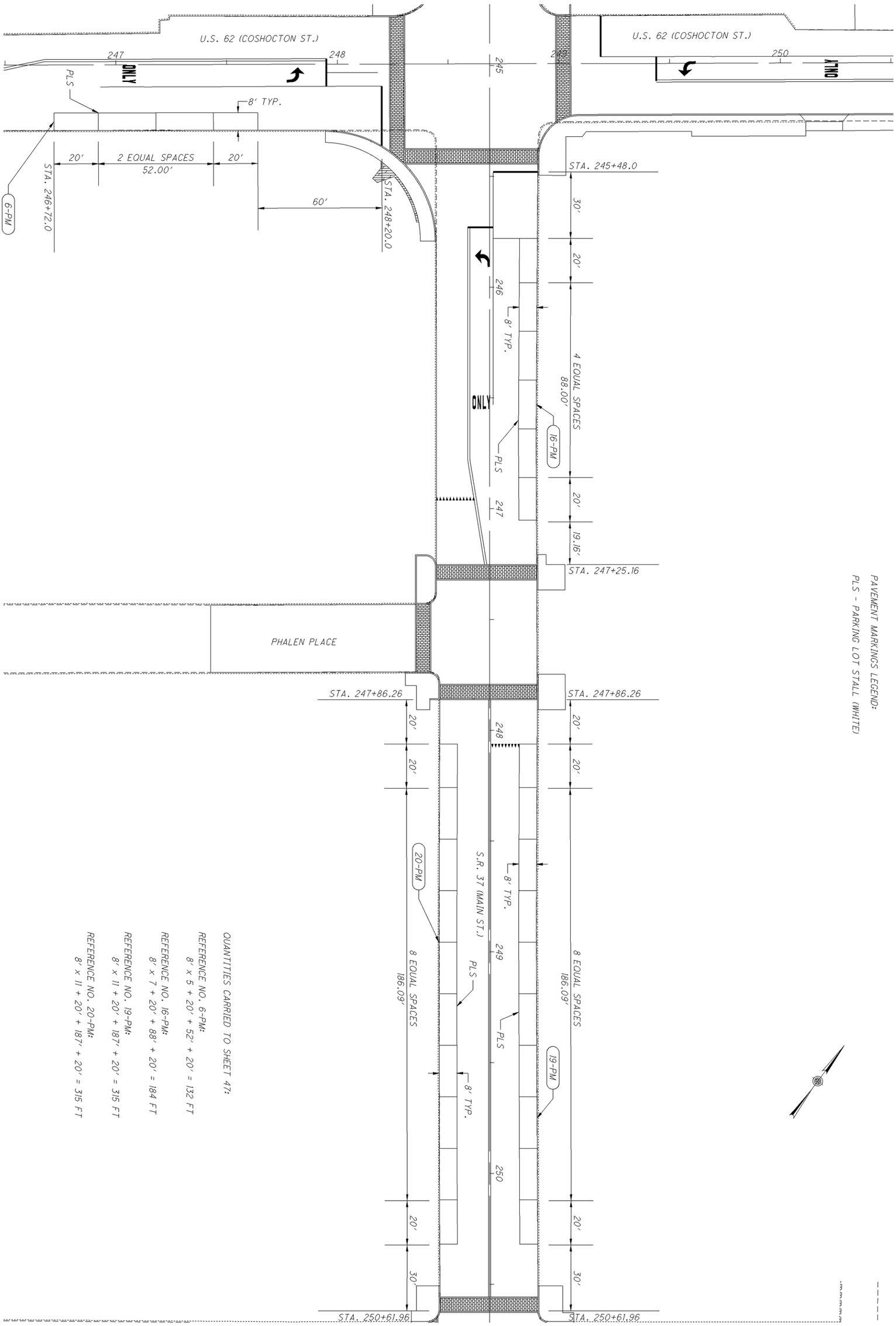
NOTES:
ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNLESS OTHERWISE SHOWN.

FOR PARKING STALL DETAILS, SEE SHEET 46.

FOR TRAFFIC CONTROL QUANTITIES, SEE SHEET 47.

SR037_TPS_002.DGN 12/17/10

SR037_TPS_003.DGN 12/17/10




PAVEMENT MARKINGS LEGEND:
PLS - PARKING LOT STALL (WHITE)

QUANTITIES CARRIED TO SHEET 47:

REFERENCE NO. 6-PM:
8' x 5 + 20' + 52' + 20' = 132 FT

REFERENCE NO. 16-PM:
8' x 7 + 20' + 88' + 20' = 184 FT

REFERENCE NO. 19-PM:
8' x 11 + 20' + 187' + 20' = 315 FT

REFERENCE NO. 20-PM:
8' x 11 + 20' + 187' + 20' = 315 FT

46
66

**LIC-62-4.63**

# PROPOSED PARKING STALL DETAIL SHEET
## U.S. 62 (COSHOCTON ST.) AND S.R. 37 (MAIN ST.)

CALCULATED JLS
CHECKED DNM

0 20 40
HORIZONTAL SCALE IN FEET

# PAVEMENT MARKING QUANTITIES

CALCULATED JLS | CHECKED DNM

| REFERENCE NO. | SHEET NO. | SURVEY AND CONSTRUCTION (STATION TO STATION) | SIDE | LENGTH | SIGN CODE | SIGN SIZE (FT. x FT.) | 630 | | | | | | | | 644 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | GROUND MOUNTED SUPPORT, NO. 2 POST | SIGN POST REFLECTOR | SIGN SUPPORT ASSEMBLY, POLE MOUNTED | SIGN, FLAT SHEET | REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL | REMOVAL OF GROUND MOUNTED SIGN AND REERECTION | REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL | REMOVAL OF POLE MOUNTED SIGN AND REERECTION | CENTER LINE (DOUBLE SOLID) | CHANNELIZING LINE | STOP LINE | TRANSVERSE/DIAGONAL LINE (YELLOW) | PARKING LOT STALL MARKING | LANE ARROW (LEFT) | WORD ON PAVEMENT, 72" | YIELD LINE |
| | | | CL/LT./RT. | FT. | | | FT. | EACH | EACH | SQ. FT. | EACH | EACH | EACH | EACH | MILE | FT. | FT. | FT. | FT. | EACH | EACH | FT. |
| | | **U.S. 62 (COSHOCTON ST.)** | | | | | | | | | | | | | | | | | | | | |
| 1-PM | 42 | 244+25.00 TO 244+31.00 | CL | 6.00 | | | | | | | | | | | | | 16 | | | | | |
| 2-PM | 42 | OREGON ST. APPROACH | RT. | | | | | | | | | | | | | 4 | 22 | | | | | |
| 3-PM | 42 | OREGON ST. APPROACH | LT. | | | | | | | | | | | | | | 11 | | | | | |
| 4-PM | 42 | 245+28.00 TO 245+93.00 | LT./RT. | 65.00 | | | | | | | | | | | | 50 | 23 | | | 1 | | |
| 5-PM | 42-43 | 245+43.00 TO 248+05.00 | LT./RT. | 262.00 | | | | | | | | | | | 0.06 | | | | | | | |
| 6-PM | 42-43 & 46 | 246+72.00 TO 247+64.00 | RT. | 92.00 | | | | | | | | | | | | | | | 132 | | | |
| 7-PM | 42-43 | 246+93.00 TO 248+20.00 | LT./RT. | 127.00 | | | | | | | | | | | | 127 | 40 | | | 1 | 1 | |
| 8-PM | 43 | 249+19.00 TO 250+75.00 | LT./RT. | 156.00 | | | | | | | | | | | | 156 | 30 | | | 2 | 1 | |
| 9-PM | 43 | 249+44.00 TO 252+25.00 | RT. | 281.00 | | | | | | | | | | | 0.06 | | | | | | | |
| 10-PM | 43 | 251+00.00 TO 252+25.00 | RT. | 125.00 | | | | | | | | | | | 0.03 | | | 32 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | **S.R. 37 (MAIN ST.)** | | | | | | | | | | | | | | | | | | | | |
| 11-PM | 43-44 | 239+55.00 TO 244+32.00 | CL/LT. | 477.00 | | | | | | | | | | | 0.10 | | | | | | | |
| 12-PM | 44 | 240+75.00 TO 242+25.00 | RT. | 150.00 | | | | | | | | | | | 0.03 | | | 96 | | | | |
| 13-PM | 43-44 | 242+50.00 TO 244+57.00 | RT. | 207.00 | | | | | | | | | | | | 207 | 27 | | | 2 | 1 | |
| 14-PM | 43 & 45 | 245+48.00 TO 246+53.00 | LT./RT. | 105.00 | | | | | | | | | | | | 105 | 32 | | | 1 | 1 | |
| 15-PM | 43 & 45 | 245+73.00 TO 247+25.16 | LT. | 152.16 | | | | | | | | | | | 0.03 | | | | | | | |
| 16-PM | 43 & 45-46 | 245+78.00 TO 247+06.00 | LT. | 128.00 | | | | | | | | | | | | | | | 184 | | | |
| 17-PM | 45 | 246+96.20 | RT. | | | | | | | | | | | | | | | | | | | 18 |
| 18-PM | 45 | 247+66.26 TO 250+55.73 | CL | 269.47 | | | | | | | | | | | 0.06 | | | | | | | |
| 19-PM | 45-46 | 248+06.26 TO 250+31.96 | LT. | 225.70 | | | | | | | | | | | | | | | 315 | | | |
| 20-PM | 45-46 | 248+06.26 TO 250+31.96 | RT. | 225.70 | | | | | | | | | | | | | | | 315 | | | |
| 21-PM | 45 | 248+06.26 | LT. | | | | | | | | | | | | | | | | | | | 13 |
| 22-PM | 45 | PRATT ST. | RT. | | | | | | | | | | | | | | 23 | | | | | |
| 23-PM | 45 | 250+95.89 TO 251+20.00 | CL | 24.11 | | | | | | | | | | | 0.01 | | | | | | | |
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| | | **U.S. 62 (COSHOCTON ST.)** | | | | | | | | | | | | | | | | | | | | |
| 1-S | 42 | 244+43.25 | RT. | | EX. SIGN | | | | | | 2 | | 1 | | | | | | | | | |
| 2-S | 42 | 245+21.81 | RT. | | EX. SIGN | | 6.25 | | | | | 1 | 1 | | | | | | | | | |
| 3-S | 42 | 246+36.65 | RT. | | R2-1-24 | 24" x 30" | 5.0 | | | 5.00 | | | | | | | | | | | | |
| 4-S | 42 | 246+56.16 | LT. | | R2-1-24 | 24" x 30" | 5.0 | | | 5.00 | | | | | | | | | | | | |
| 5-S | 43 | 248+05.00 | RT. | | EX. SIGNS | | 28.5 | | | | | 3 | 2 | | | | | | | | | |
| 6-S | 43 | 248+10.27 | RT. | | EX. SIGN | | | | | | 1 | | 1 | | | | | | | | | |
| 7-S | 43 | 249+61.28 | RT. | | EX. SIGN | | | | 1 | | | 2 | 1 | | | | | | | | | |
| 8-S | 43 | 253+83.37 | LT. | | R2-1-24 | 24" x 30" | 5.0 | | | 5.00 | | | | | | | | | | | | |
| 9-S | 43 | 251+03.83 | RT. | | R2-1-24 | 24" x 30" | | | 1 | 5.00 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | **S.R. 37 (MAIN ST.)** | | | | | | | | | | | | | | | | | | | | |
| 10-S | 44 | 241+00.00 | RT. | | EX. SIGN | | 12.0 | | | | | 1 | 1 | | | | | | | | | |
| 11-S | 44 | 243+20.00 | RT. | | R2-1-24 | 24" x 30" | 13.0 | | | 5.00 | | | | | | | | | | | | |
| 12-S | 43 | 244+58.46 | LT. | | EX. SIGN | | | | 1 | | | | | 2 | | | | | | | | |
| 13-S | 43 | 245+35.94 | RT. | | EX. SIGN | | | | | | 2 | | 1 | | | | | | | | | |
| 14-S | 45 | 246+80.81 | RT. | | EX. SIGN | | | | | | | 1 | 1 | | | | | | | | | |
| 15-S | 45 | 246+96.20 | RT. | | R1-5AL-18 | 18" x 24" | 15.0 | | | 3.00 | | | | | | | | | | | | |
| 16-S | 45 | 247+75.57 | RT. | | EX. SIGN | | | | | | 1 | | 1 | | | | | | | | | |
| 17-S | 45 | 248+06.26 | LT. | | R1-5AL-18 | 18" x 24" | 12.5 | | | 3.00 | | | | | | | | | | | | |
| 18-S | 45 | PRATT ST. | RT. | | R1-1-30 | 30" x 30" | 13.0 | 1 | | 6.25 | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | |
| | | CARRIED FROM SHEET 55 | | | | | | | 8 | 51.50 | | | | | | | | | | | | |
| | | CARRIED FROM SHEET 58 | | | | | | | 9 | 60.50 | | | | | | | | | | | | |
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| **TOTALS (CARRIED TO GENERAL SUMMARY)** | | | | | | | **115.25** | **1** | **20** | **149.25** | **6** | **8** | **10** | **2** | **0.38** | **649** | **224** | **128** | **946** | **7** | **4** | **31** |

LIC-62-4.63



85170_TMQ_001.DGN 3/28/2011

## GENERAL

THE CONTRACTOR SHALL FURNISH AND INSTALL TRAFFIC CONTROL EQUIPMENT AND MATERIALS IN CONFORMANCE TO THESE PLANS AND SPECIFICATIONS AND THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (2010) AND ALL SUPPLEMENTAL SPECIFICATIONS. BEFORE ANY EQUIPMENT IS ORDERED OR INSTALLATION IS BEGUN, THREE (3) SETS OF A COMPLETE SCHEDULE OF EQUIPMENT INCLUDING CATALOG CUTS, DIAGRAMS, DRAWINGS, BROCHURES OR OTHER DESCRIPTIVE DATA SHALL BE SUBMITTED TO THE ENGINEER. ONE COPY WILL BE RETURNED MARKED "APPROVED" IF FOUND SATISFACTORY. WORK MAY BEGIN WHEN THE APPROVED COPY IS RECEIVED BY THE CONTRACTOR.

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF WORK FOR THE PROJECT TO THE PROJECT ENGINEER FOR APPROVAL. THIS SCHEDULE SHALL BE SUBMITTED NOT LESS THAN TWO (2) WEEKS IN ADVANCE OF STARTING WORK.

REFERENCE TO A PARTICULAR TRADE NAME, MANUFACTURER'S CATALOG OR MODEL NUMBER IS MADE FOR DESCRIPTIVE PURPOSES TO GUIDE THE BIDDER. IN INTERPRETING THE REQUIREMENTS OF THE CONTRACT, THEY SHOULD NOT BE CONSTRUED AS EXCLUDING PROPOSALS ON OTHER MATERIALS, EQUIPMENT OR SUPPLIES THAT ARE EQUAL TO OR BETTER THAN THOSE REFERRED TO.

ANY EQUIPMENT OR MATERIAL NOT SPECIFICALLY CALLED FOR IN THESE SPECIFICATIONS BUT NECESSARY TO PROVIDE A COMPLETE AND SUCCESSFULLY OPERATING SYSTEM SHALL BE FURNISHED AS INCIDENTAL TO THE CONTRACT. PAYMENT FOR SUCH ITEMS WILL BE MADE UNDER THE APPROPRIATE RELATED ITEM AT THE CONTRACT BID PRICE, COMPLETE AND IN PLACE.

## PLAN AND SPECIFICATION COMPLIANCE

THESE SPECIFICATIONS, TOGETHER WITH THE ACCOMPANYING PLANS, ARE INTENDED TO DESCRIBE THE TYPE, SIZE AND LOCATION OF THE PRODUCTS AND MATERIALS TO BE PROVIDED AND INSTALLED UNDER VARIOUS BID ITEMS RELATED TO TRAFFIC CONTROL. THE CONTRACTOR SHALL FURNISH AND INSTALL TRAFFIC CONTROL DEVICES AND RELATED MATERIALS IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS, AS WELL AS THE 2010 OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, THE TRAFFIC ENGINEERING MANUAL, AND THE STANDARD CONSTRUCTION DRAWINGS ISSUED BY THE OHIO DEPARTMENT OF TRANSPORTATION. THESE SPECIFICATIONS SET FORTH THE MINIMUM PERFORMANCE AND OPERATING REQUIREMENTS OF THE TRAFFIC CONTROL ITEMS REFERRED TO HEREIN.

TRAFFIC SIGNAL CONTROL EQUIPMENT SHALL MEET OR EXCEED THE STANDARDS SPECIFIED IN THE FOLLOWING DOCUMENTS:

(A) SPECIFICATIONS LISTED IN THIS PLAN
(B) NEMA STANDARDS PUBLICATION NO. TS1-1989 AND/OR TS2-1992 (OR CURRENT NEMA ISSUE) SECTIONS 1, 2, 5, 6, 8, 11, 13, & 14.
(C) 2010 ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS 625, 632, 633, 725, 732 AND 733.

IN CASE OF A CONFLICTING SPECIFICATION STATEMENT, THE SPECIFICATION DOCUMENT HIERARCHY SHALL BE IN THE ORDER LISTED FROM (A) – HIGHEST TO (C) - LOWEST.

## MAINTENANCE OF TRAFFIC SIGNAL INSTALLATION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TRAFFIC SIGNAL/FLASHER INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

A) FOR NEW SIGNAL/FLASHER INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. THE CONTRACTOR SHALL PROVIDE THE STATE AND THE ENGINEER ADDRESSES AND PHONE NUMBERS WHERE THE CONTRACTOR'S MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL ALSO PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS CONTINUALLY AVAILABLE 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MIS-ALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK INTO SERVICE WITHIN FOUR HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AND THE SIGNAL SHALL BE BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8 HOUR PERIOD AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHEN MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHEN OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHEN THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION, WITHIN THE PERIODS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15. ANY SUBSEQUENT BILLINGS TO THE STATE FOR POLICE SERVICES AND MAINTENANCE SERVICES BY STATE FORCES WILL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS WHICH REQUIRE HANDLING DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING WHICH WILL BE OUT OF OPERATION SHALL BE COVERED IN THE MANNER DESCRIBED IN SECTION 632.25.

## GUARANTEE

THE CONTRACTOR SHALL GUARANTEE THAT THE TRAFFIC CONTROL SYSTEM INSTALLED AS PART OF THIS CONTRACT SHALL OPERATE SATISFACTORILY FOR A PERIOD OF 120 DAYS FOLLOWING COMPLETION OF THE 10-DAY PERFORMANCE TEST. IN THE EVENT OF UNSATISFACTORY OPERATION THE CONTRACTOR SHALL CORRECT FAULTY INSTALLATIONS, MAKE REPAIRS AND REPLACE DEFECTIVE PARTS WITH NEW PARTS OF EQUAL OR BETTER QUALITY. EQUIPMENT, MATERIAL AND LABOR COSTS INCURRED IN CORRECTING AN UNSATISFACTORY OPERATION SHALL BE BORNE BY THE CONTRACTOR.

THE GUARANTEE SHALL COVER THE FOLLOWING ITEMS OF THE TRAFFIC CONTROL SYSTEM: CONTROLLERS AND ASSOCIATED EQUIPMENT AND DETECTOR UNITS.

CUSTOMARY MANUFACTURER'S GUARANTEES FOR THE FOREGOING ITEMS SHALL BE TURNED OVER TO THE STATE OR THE MAINTAINING AGENCY FOLLOWING ACCEPTANCE OF THE EQUIPMENT.

THE COST OF GUARANTEEING THE TRAFFIC CONTROL SYSTEM WILL BE INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE SYSTEM.

## ELECTRICAL INSPECTION BY STATE LICENSED INSPECTOR

MOST ELECTRIC COMPANIES REQUIRE THAT ALL NEW OR RELOCATED ELECTRIC SERVICE ENCLOSURES ARE TO BE INSPECTED BY A LICENSED STATE INSPECTOR PRIOR TO CONNECTION TO A UTILITY DISTRIBUTION LINE. THIS IS A NEW SITUATION FOR ODOT BECAUSE INSPECTIONS ARE NOW BEING REQUIRED FOR TRAFFIC CONTROL DEVICES.

THE CONTRACTOR SHALL HIRE A LICENSED ELECTRICAL INSPECTOR(S); PAY THE APPROPRIATE FEE(S), AND ADVISE THE ODOT PROJECT ENGINEER OF THE TIME OF THE INSPECTION(S) SO THAT HE/SHE MAY HAVE A REPRESENTATIVE IN ATTENDANCE. IT IS TO BE NOTED THAT THE INSPECTION DOES NOT SUBSTITUTE FOR ODOT'S FINAL INSPECTION, NOR DOES IT SUPERSEDE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.

THE COST OF THE INSPECTIONS SHALL BE CONSIDERED AS INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE OF THE VARIOUS ITEMS MAKING UP THE TRAFFIC CONTROL DEVICES.

## UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 OF THE OHIO REVISED CODE. ODOT ASSUMES NO RESPONSIBILITY FOR THE LOCATION OR THE DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THESE PLANS.

AT LEAST 48 HOURS BEFORE DIGGING, THE CONTRACTOR SHALL CALL THE OHIO UTILITIES PROTECTION SERVICE AT THE NUMBER LISTED ON THE TITLE SHEET. NON-MEMBER UTILITY COMPANIES MUST BE CALLED DIRECTLY. SEE SHEET **9** OF **66** FOR THE NAMES AND ADDRESSES OF THE UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS.

CALCULATED DNM
CHECKED BFB

# TRAFFIC SIGNAL GENERAL NOTES

LIC-62-4.63



85170_sgn_01.dgn dated 12/17/2010

**ITEM 625, TRENCH, 24" DEEP, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF 625.13 AND THE STANDARD CONSTRUCTION DRAWINGS, WITHIN EACH TRENCH, THE LOCATION OF UNDERGROUND CABLE OR CONDUIT SHALL BE MARKED BY THE USE OF A PLASTIC CAUTION TAPE BURIED IN THE TRENCH ABOVE THE LINE. THE PLASTIC CAUTION TAPE SHALL MEET THE REQUIREMENTS OF 625.20 AND 725.22 EXCEPT THAT THE TAPE SHALL BE PLACED APPROXIMATELY 8.0" TO 12.0" BELOW THE FINISHED GRADE. PAYMENT SHALL BE INCLUDED IN THE BID PRICE PER LINEAR FOOT OF ITEM 625, TRENCH, 24" DEEP, AS PER PLAN, COMPLETE AND IN PLACE.

**ITEM 625 TRENCH IN PAVED AREA, TYPE A**

THE DEPTH OF THE SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF 4 INCHES IN AREAS WHERE A TRENCH IS CUT INTO AN EXISTING SIDEWALK.

**ITEM 625 TRENCH IN PAVED AREA, TYPE B, AS PER PLAN**

THE DEPTH OF THE PAVEMENT REPLACEMENT SHALL BE AN AVERAGE OF **12** INCHES. PAVEMENT CORES ARE AS FOLLOWS:

| OREGON ST. | U.S. 62 | S.R. 37 |
|---|---|---|
| 1 ½" ASPHALT | 6" ASPHALT | 5" ASPHALT |
| 8" BRICK/CONCRETE | 8" BRICK/CONCRETE OR 8" ASPHALT | 7" CONCRETE |

IN ADDITION TO THE REQUIREMENTS OF 625.13 AND THE STANDARD CONSTRUCTION DRAWINGS, WITHIN EACH TRENCH, THE LOCATION OF UNDERGROUND CABLE OR CONDUIT SHALL BE MARKED BY THE USE OF A PLASTIC CAUTION TAPE BURIED IN THE TRENCH ABOVE THE LINE. THE PLASTIC CAUTION TAPE SHALL MEET THE REQUIREMENTS OF 625.20 AND 725.22 EXCEPT THAT THE TAPE SHALL BE PLACED APPROXIMATELY 8.0" TO 12.0" BELOW THE FINISHED GRADE. PAYMENT SHALL BE INCLUDED IN THE BID PRICE PER LINEAR FOOT OF ITEM 625, TRENCH, 24" DEEP, AS PER PLAN, COMPLETE AND IN PLACE.

**LAMPS**

HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC "LUCALOX," OSRAM SYLVANIA "LUMALUX," PHILIPS "CERAMALUX," OR EQUAL APPROVED BY THE ENGINEER.

**ITEM 625, BRACKET ARM, 8', AS PER PLAN**

BRACKET ARMS SHALL BE HOT-DIPPED GALVANIZED AND COATED USING AN APPROVED THERMOSET POWDER MATERIAL PROCESS. ALL VISIBLE ELEMENTS OF THE LIGHTING MOUNTING HARDWARE, SHALL BE PROPERLY PREPARED PRIMED AND PAINTED ACCORDING TO THESE SPECIFICATIONS. ALL COATINGS SHALL BE PERFORMED UNDER CONTROLLED ENVIRONMENTAL CONDITIONS, AND IN ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS PERTAINING TO SURFACE PREPARATION, MATERIAL HANDLING, AND APPLICATION. THE COATING SHALL BE BLACK THERMOSET POLYESTER POWDER COAT FINISH PER FEDERAL STANDARD PAINT # 17038.

PAYMENT FOR ITEM 625, BRACKET ARM, 8', AS PER PLAN WILL BE AT THE CONTRACT UNIT PRICE FOR EACH, IN PLACE, IN ESSENTIALLY A VERTICAL POSITION UNDER FULL PLAN LOADING AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS (INCLUDING THE ANCHOR BOLTS) NECESSARY TO PURCHASE, TRANSPORT, STORE, ERECT, ADJUST AND REPAIR THE SIGNAL SUPPORT.

**ITEM 625, BRACKET ARM, 8', (ALTERNATE BID), AS PER PLAN**

THE BRACKET ARM SHALL BE FLUTED, USING THE 16-SHARP FLUTE STYLE TO MATCH THE DESIGN OF THE COMBINATION SIGNAL SUPPORT POLES AND SHALL INCORPORATE ALL OF THE DESIGN FEATURES, ACCESSORIES OR REQUIREMENTS OF THE STANDARD BID ITEM.

THE BRACKET ARM SHALL BE THE "OXFORD CSA" STYLE AS MANUFACTURED BY STERNBERG LIGHTING, 555 LAWRENCE AVE., ROSELLE, ILLINOIS 60172, THE "DS30" STYLE AS MANUFACTURED BY VALMONT INDUSTRIES, INC., 58027 CHARLOTTE AVENUE, ELKHART, INDIANA 46516 OR AN APPROVED EQUAL.

**ITEM 632 PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

LAMPS:

LED, LIGHT EMITTING DIODE, SIGNAL LAMP UNITS SHALL MEET THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 872. ALL LAMP UNITS SHALL BE THE 12 INCH SIZE. LED SIGNAL LAMP UNITS SHALL BE PROVIDED FOR THE FOLLOWING LENS TYPES: CIRCULAR RED, CIRCULAR YELLOW, CIRCULAR GREEN, YELLOW ARROW, GREEN ARROW.

SIGNAL SECTIONS:

1. SIGNAL HEADS AND VISORS SHALL BE CONSTRUCTED OF BLACK POLYCARBONATE PLASTIC AND MEET ITE SPECIFICATIONS.
2. PIPE, SPACERS AND FITTINGS CONSTRUCTED OF POLYCARBONATE PLASTIC SHALL BE USED IN LIEU OF GALVANIZED STEEL OR ALUMINUM.
3. PROPER EXTERIOR COLORS SHALL BE OBTAINED BY USE OF COLORED PLASTIC MATERIAL RATHER THAN PAINTING.

THE DEPARTMENT WILL MEASURE PEDESTRIAN SIGNAL HEAD, (LED), (COUNTDOWN), TYPE D2, AS PER PLAN BY THE NUMBER OF COMPLETE UNITS FURNISHED AND INSTALLED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, CLOSURE CAPS, AND LAMPS AS SPECIFIED.

**ITEM 625, LUMINAIRE, CONVENTIONAL, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS SHALL BE AS FOLLOWS: LUMINAIRES FOR CONVENTIONAL LIGHTING UNITS WITH AN IES II-M-SC DISTRIBUTION AND 150 WATT HIGH PRESSURE SODIUM LAMPS SHALL BE AMERICAN ELECTRIC "SERIES 126" WITH PHOTOMETRIC DISTRIBUTION AE3849I. COOPER "OVD" WITH PHOTOMETRIC DISTRIBUTION OVD2S2F, GENERAL ELECTRIC "M-400" WITH PHOTOMETRIC DISTRIBUTION 1014, OR EQUAL AS APPROVED BY THE ENGINEER.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH CMS ITEM 625, "LUMINAIRE, CONVENTIONAL, AS PER PLAN FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

**ITEM 625, LUMINAIRE, CONVENTIONAL,(ALTERNATE BID), AS PER PLAN**

IN LIEU OF PLACING THE CONVENTIONAL LUMINAIRE, THE CONTRACTOR SHALL INSTALL A DECORATIVE LUMINAIRE. THE LAMPS SHALL BE 150 WATT HIGH PRESSURE SODIUM. THE LUMINAIRES SHALL BE THE "LIBERTYVILLE 1913G3" STYLE AS MANUFACTURED BY STERNBERG LIGHTING, 555 LAWRENCE AVE., ROSELLE, ILLINOIS 60172, THE "COLUMBIA" STYLE AS MANUFACTURED BY SPRING CITY ELECTRICAL MANUFACTURIN COMPANY, HALL AND MAIN STREETS, SPRING CITY, PA 19475 OR AN APPROVED EQUAL.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH CMS ITEM 625, "LUMINAIRE, CONVENTIONAL,(ALTERNATE BID), AS PER PLAN FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

**ITEM 632, POWER SERVICE, AS PER PLAN**

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

AEP SOLUTION CENTER
1-800-672-2231

POWER SERVICE SHALL BE AS PER CMS ITEM 632 AND STD. DWG. TC-83.10 WITH THE FOLLOWING EXCEPTIONS:

1. THE POWER SERVICE SHALL SUPPLY POWER TO BOTH THE TRAFFIC SIGNAL AND INTERSECTION LIGHTING THROUGH ONE METER BASE.
2. THE METER BASE MOUNTING HEIGHT SHALL BE NO MORE THAN 5 FEET HIGH TO THE CENTER OF THE METER BASE FROM THE GROUND.
3. THE CONTRACTOR SHALL SUPPLY THE NECESSARY METER BASE AND TWO (2)-30 AMP WATERPROOF DISCONNECT SWITCHES. ONE SWITCH WILL SERVICE THE TRAFFIC SIGNAL AND THE OTHER SWITCH WILL SERVICE THE LIGHTING. EACH DISCONNECT SHALL HAVE A LEVER OPERATED BYPASS.
4. THE CONTRACTOR SHALL SUPPLY THE NECESSARY CONDUIT FROM THE POWER SUPPLY TO THE METER BASE AND FROM THE METER BASE TO EACH DISCONNECT SWITCH.
5. THE CONTRACTOR SHALL SUPPLY A RELAY BOX BETWEEN THE DISCONNECT SWITCH FOR THE LIGHTING AND THE LUMINAIRES. THE RELAY BOX SHALL BE A UL LISTED WATERTIGHT LOCKABLE STAINLESS STEEL NEMA TYPE 4. THE RELAY BOX WILL INCLUDE AN INTERNAL HOA SWITCH AND A PHOTO ELECTRIC CONTACTOR AS PER 725.19.

THE PHOTO ELECTRIC CELL SHALL BE MANUFACTURED FOR TIME DELAY.

THE CONTRACTOR SHALL CONTACT THE METER SECTION OF THE POWER COMPANY FOR INFORMATION REGARDING THE METER BASE INSTALLATION PRIOR TO ORDERING POLES. THE CONTRACTOR WILL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE HOOK UP. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR SPLICE POWER CABLE INTO THE POWER COMPANY'S CIRCUITS. THE VOLTAGE SUPPLIED SHALL BE NOMINALLY 120 VOLTS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND THE PAYING OF ALL FEES. THE CONTRACTOR SHALL PAY ALL POWER CHARGES UNTIL THE SIGNAL AND LIGHTING IS ACCEPTED BY THE MAINTAINING AGENCY.

CALCULATED DNM CHECKED BFB

TRAFFIC SIGNAL GENERAL NOTES

LIC-62-4.63



85170_sgn_02.dgn dated 12/17/2010

**ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC-81-21, BY DESIGN, AS PER PLAN**
**ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC-12.30, BY DESIGN, AS PER PLAN**

ALL SIGNAL AND POWER CABLES SHALL BE RUN INSIDE THE SIGNAL SUPPORTS. THE USE OF EXTERNAL CONDUIT RISERS FOR SIGNAL, LIGHTING OR POWER CABLING, OR ANY OTHER USE, AS SHOWN IN STANDARD DRAWING TC-83.10 SHALL BE PROHIBITED.

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ATTACHMENTS OR CONNECTIONS TO EACH SIGNAL SUPPORT POLE. ALL HOLES IN THE POLE NECESSARY TO ATTACH, WIRE, OR OTHERWISE, USE EQUIPMENT SPECIFIED IN THESE PLANS AND QUANTITIES SHALL BE INSTALLED DURING THE MANUFACTURE OF THE POLE OR SHALL BE DRILLED, REAMED, OR HOLE SAWED BY THE CONTRACTOR. FLAME CUTTING (OXYACETYLENE OR ELECTRICAL ARC) WILL NOT BE ACCEPTED. ALL CUT EDGES OR OTHER DEFECTS IN THE ZINC COATING SHALL BE CLEANED AND COVERED WITH TWO COATS OF ZINC RICH REPAIR PAINT MATCHING THE FACTORY FINISH. PEDESTRIAN SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO THE SIGNAL SUPPORT POLES. THE CONTRACTOR SHALL NOT USE POLE CLAMPS OR BANDING TO MOUNT THE PEDESTRIAN SIGNAL HEADS. STAINLESS STEEL BANDING MAY BE USED ONLY WHERE SPECIFICALLY AUTHORIZED BY THESE PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER. ALL BANDING, WHERE USED, SHALL BE FACTORY PAINTED TO MATCH THE SIGNAL SUPPORTS.

POLES AND ARMS SHALL BE HOT-DIPPED GALVANIZED AND COATED USING AN APPROVED THERMOSET POWDER MATERIAL PROCESS. ALL VISIBLE ELEMENTS OF THE SIGNAL MOUNTING HARDWARE, SHALL BE PROPERLY PREPARED PRIMED AND PAINTED ACCORDING TO THESE SPECIFICATIONS. ALL COATINGS SHALL BE PERFORMED UNDER CONTROLLED ENVIRONMENTAL CONDITIONS, AND IN ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS PERTAINING TO SURFACE PREPARATION, MATERIAL HANDLING, AND APPLICATION. THE COATING SHALL BE BLACK THERMOSET POLYESTER POWDER COAT FINISH PER FEDERAL STANDARD PAINT # 17038.

THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS TO THE ENGINEER THAT ILLUSTRATE THE HARDWARE TO BE FURNISHED AND THE CURVATURE OF THE MAST ARM TO ILLUSTRATE THE COSMETIC APPEARANCE OF THE SUPPORTS, ARMS, AND HARDWARE TO BE FURNISHED. THE SUPPORT SUPPLIER SHALL PROVIDE STRUCTURAL DESIGN DATA SIGNED AND SEALED BY AN OHIO LICENSED PROFESSIONAL ENGINEER DEMONSTRATING THAT EACH SUPPORT PROVIDED CONFORMS TO ALL APPLICABLE OHIO DEPARTMENT OF TRANSPORTATION DESIGN CRITERIA. THE CONTRACTOR SHALL ALSO SUBMIT COLOR CHIPS TO THE ENGINEER TO CONFIRM THE COLOR OF THE FINISH TO THE SIGNAL SUPPORTS. THE ENGINEER SHALL APPROVE THE SHOP DRAWINGS AND THE COLOR ON THE CHIPS BEFORE SUPPORTS ARE ORDERED.

PAYMENT FOR ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC-81.20, BY DESIGN, AS PER PLAN OR FOR ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC-12.30, BY DESIGN, AS PER PLAN WILL BE AT THE CONTRACT UNIT PRICE FOR EACH, IN PLACE, IN ESSENTIALLY A VERTICAL POSITION UNDER FULL PLAN LOADING AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS (INCLUDING THE ANCHOR BOLTS) NECESSARY TO PURCHASE, TRANSPORT, STORE, ERECT, ADJUST AND REPAIR THE SIGNAL SUPPORT.

**ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC-81.21, BY DESIGN, (ALTERNATE BID), AS PER PLAN**
**ITEM 632 COMBINATION SIGNAL SUPPORT, TYPE TC-12.30, BY DESIGN, (ALTERNATE BID), AS PER PLAN**

THE COMBINATION SIGNAL SUPPORT POLES AND MAST ARMS SHALL BE FLUTED, USING THE 16-SHARP FLUTE STYLE AND SHALL INCORPORATE ALL OF THE DESIGN FEATURES, ACCESSORIES OR REQUIREMENTS OF THE STANDARD BID ITEM. THE MAST ARMS SHALL HAVE A PRONOUNCED UPSWEEP BEGINNING AT THE ATTACHMENT END AND EXTENDING A UNIFORM DISTANCE TOWARD THE UNSUPPORTED END OF THE ARM. THE REMAINING LENGTH OF THE ARM SHALL BE STRAIGHT AND SHALL HAVE A NORMAL RISE AS PER ODOT'S STANDARD DRAWING TC-81.21.

THE TOP OF THE COMBINATION SIGNAL POLE SHALL BE CAPPED WITH AN ORNAMENTAL TOP. THE ORNAMENTAL TOP SHALL BE THE "RPBP" STYLE AS MANUFACTURED BY STERNBERG LIGHTING, 555 LAWRENCE AVE., ROSELLE, ILLINOIS 60172, THE "ALHAMBRA" STYLE AS MANUFACTURED BY VALMONT INDUSTRIES, INC., 58027 CHARLOTTE AVENUE, ELKHART, INDIANA 46516 OR AN APPROVED EQUAL

THE BASE OF THE SUPPORTS SHALL BE COVERED WITH A DECORATIVE SPLIT PEDESTAL BASE HAVING INTERNAL CORROSION RESITANT HARDWARE. THE SPLIT PEDESTAL SHALL BE THE "OXFORD 9201SS" STYLE AS MANUFACTURED BY STERNBERG LIGHTING, 555 LAWRENCE AVE., ROSELLE, ILLINOIS 60172, THE "HUNTINGTON" STYLE AS MANUFACTURED BY VALMONT INDUSTRIES, INC., 58027 CHARLOTTE AVENUE, ELKHART, INDIANA 46516 OR AN APPROVED EQUAL.

**ITEM 632 9' PEDESTAL, AS PER PLAN**

THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ATTACHMENTS OR CONNECTIONS TO EACH PEDESTAL. ALL HOLES IN THE PEDESTAL NECESSARY TO ATTACH, WIRE, OR OTHERWISE, USE EQUIPMENT SPECIFIED IN THESE PLANS AND QUANTITIES SHALL BE INSTALLED DURING THE MANUFACTURE OF THE POLE OR SHALL BE DRILLED, REAMED, OR HOLE SAWED BY THE CONTRACTOR. FLAME CUTTING (OXYACETYLENE OR ELECTRICAL ARC) WILL NOT BE ACCEPTED. ALL CUT EDGES OR OTHER DEFECTS IN THE ZINC COATING SHALL BE CLEANED AND COVERED WITH TWO COATS OF ZINC RICH REPAIR PAINT MATCHING THE FACTORY FINISH. PEDESTRIAN SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO THE PEDESTAL. THE CONTRACTOR SHALL NOT USE POLE CLAMPS OR BANDING TO MOUNT THE PEDESTRIAN SIGNAL HEADS. STAINLESS STEEL BANDING MAY BE USED ONLY WHERE SPECIFICALLY AUTHORIZED BY THESE PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER. ALL BANDING, WHERE USED, SHALL BE FACTORY PAINTED TO MATCH THE SIGNAL SUPPORTS.

PEDESTALS SHALL BE HOT-DIPPED GALVANIZED AND COATED USING AN APPROVED THERMOSET POWDER MATERIAL PROCESS. ALL VISIBLE ELEMENTS OF THE SIGNAL MOUNTING HARDWARE, SHALL BE PROPERLY PREPARED PRIMED AND PAINTED ACCORDING TO THESE SPECIFICATIONS. ALL COATINGS SHALL BE PERFORMED UNDER CONTROLLED ENVIRONMENTAL CONDITIONS, AND IN ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS PERTAINING TO SURFACE PREPARATION, MATERIAL HANDLING, AND APPLICATION. THE COATING SHALL BE BLACK THERMOSET POLYESTER POWDER COAT FINISH PER FEDERAL STANDARD PAINT # 17038.

PAYMENT FOR ITEM 632 "9' PEDESTAL, AS PER PLAN", WILL BE AT THE CONTRACT UNIT PRICE FOR EACH 9' PEDESTAL, IN PLACE, IN ESSENTIALLY A VERTICAL POSITION UNDER FULL PLAN LOADING AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS (INCLUDING ANCHOR BOLTS).

**ITEM 632 9' PEDESTAL, (ALTERNATE BID), AS PER PLAN**

THE PEDESTALS SHALL BE FLUTED, USING THE 16-SHARP FLUTE STYLE TO MATCH THE DESIGN OF THE COMBINATION SIGNAL SUPPORT POLES AND SHALL INCORPORATE ALL OF THE DESIGN FEATURES, ACCESSORIES OR REQUIREMENTS OF THE STANDARD BID ITEM.

THE BASE OF THE PEDESTALS SHALL BE COVERED WITH A DECORATIVE SPLIT PEDESTAL BASE HAVING INTERNAL CORROSION RESITANT HARDWARE. THE SPLIT PEDESTAL SHALL BE THE "OXFORD 9201SS" STYLE AS MANUFACTURED BY STERNBERG LIGHTING, 555 LAWRENCE AVE., ROSELLE, ILLINOIS 60172, THE "HUNTINGTON" STYLE AS MANUFACTURED BY VALMONT INDUSTRIES, INC., 58027 CHARLOTTE AVENUE, ELKHART, INDIANA 46516 OR AN APPROVED EQUAL.

**ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN**

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC, THE EXISTING SIGNAL INSTALLATION AT THE INTERSECTIONS OF U.S. 62 & S.R. 37 AND U.S. 62 & OREGON STEET SHALL BE REMOVED BY THE CONTRACTOR. ALTERNATE METHODS OF TRAFFIC CONTROL SHALL BE APPROVED BY THE ENGINEER AND IN PLACE PRIOR TO THE DEACTIVATION AND REMOVAL OF ANY EXISTING EQUIPMENT.

THE COST TO REMOVE THE SIGNAL AT THE INTERSECTION OF U.S. 62 & S.R. 37 SHALL INCLUDE THE COST TO DISCONNECT THE NECESSARY WIRING FROM THE CABINET LOCATED AT THE INTERSECTION OF U.S. 62 & OREGON STREET. THE SIGNAL CABINET LOCATED AT THE INTERSECTION OF U.S 62 & OREGON STREET OPERATES BOTH SIGNALS.

IN ADDITION TO THE INTERSECTIONS LISTED ABOVE, THE EXISTING SIGNAL INSTALLATION AT THE INTERSECTION OF S.R. 37 & PRATT STREET SHALL ALSO BE REMOVED. PRIOR TO THIS PROJECT, THE POWER TO THE SIGNAL HEADS WILL BE DISCONNECTED AND THE SIGNAL HEADS WILL BE BAGGED. PRIOR TO REMOVING THE SIGNAL EQUIPMENT, THE CONTRACTOR SHALL INSTALL THE PROPOSED TRAFFIC CONTROL AS SHOWN IN THE PLANS.

THE FOLLOWING REMOVAL ITEMS SHALL BE STORED ON THE PROJECT FOR SALVAGE BY THE VILLAGE OF JOHNSTOWN:

ITEMS TO BE SALVAGED: VEHICLE SIGNAL HEADS, AND POLE MOUNTED CABINETS (INCLUDING EQUIPMENT).

ONCE THESE ITEMS HAVE BEEN REMOVED AND ARE AVAILABLE FOR PICK UP, THE CONTRACTOR SHALL CONTACT THE VILLAGE PLANNER, JIM LENNER AT 740-967-3177, WHO WILL ARRANGE THE PICK UP OF THESE ITEMS BY VILLAGE FORCES. IN THE EVENT THE ITEMS STORED ON THE PROJECT FOR SALVAGE ARE NOT REMOVED, THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

A TABLE HAS BEEN INCLUDED ON EACH OF THE SIGNAL PLAN SHEETS IDENTIFYING THE ITEMS TO BE REMOVED AT EACH SIGNAL. THE TABLE INDICATES WHICH ITEMS ARE TO BE REMOVED FOR STORAGE OR REMOVED TO BE PROPERLY DISPOSED.

CALCULATED DNM
CHECKED BFB

# TRAFFIC SIGNAL GENERAL NOTES

LIC-62-4.63



85170_sgn_03.dgn dated 12/20/2010

**ITEM 632 VEHICULAR SIGNAL HEAD, (LED) BLACK, BY TYPE, WITH BACKPLATE, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 632 AND 732, THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

MOUNTING HARDWARE:

1. ALL SIGNAL HEADS SHALL BE RIGIDLY MOUNTED TO THE MAST ARM WITH THE (COLOR) LENS LOCATED IN FRONT OF THE MAST ARM.

2. ALL UPPER SIGNAL SUPPORT HARDWARE AND PIPING UP TO AND INCLUDING THE WIRE INLET FITTING SHALL BE FERROUS METAL FOR SIGNAL DISPLAYS OF TWO OR MORE SECTIONS.

3. THE ENTRANCE FITTING SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.

THE DEPARTMENT WILL MEASURE VEHICULAR SIGNAL HEAD, (LED), COLOR, BY TYPE, WITH BACKPLATE, AS PER PLAN BY THE NUMBER OF COMPLETE UNITS FURNISHED AND INSTALLED, AND WILL INCLUDE ALL SUPPORT AND MOUNTING HARDWARE, DISCONNECT HANGERS, CLOSURE CAPS, DIMMERS, AND LAMPS AS SPECIFIED.

**ITEM 633, CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN**

THE EXTERIOR OF THE CONTROLLER CABINET SHALL BE FINISHED TO MATCH THE SIGNAL SUPPORT FINISH COLOR. ALL PAINTING SHALL BE PERFORMED UNDER CONTROLLED ENVIRONMENT CONDITIONS AND IN ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS PERTAINING TO SURFACE PREPARATION, MATERIAL HANDLING AND APPLICATION. THE TOP FINISH COAT OF PAINT SHALL BE SIMILAR TO FEDERAL STANDARD PAINT # 17038 (BLACK). THE CONTRACTOR SHALL PROVIDE A PAINT SAMPLE CHIP TO BE SUBMITTED WITH THE CABINET SHOP DRAWINGS FOR REVIEW AND APPROVAL. THE APPLICATION PROCEDURE SHALL GUARANTEE A FINISH THAT WILL NOT SCALE, FLAKE OR PEEL.

PAYMENT FOR ITEM 633 "CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN" SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH CABINET, IN PLACE, COMPLETELY INSTALLED IN THE LOCATION SHOWN IN THE PLANS, WIRED, TESTED AND ACCEPTED.

**ITEM 633 CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS-1, (ALTERNATE BID), AS PER PLAN**

THE CONTROLLER SHALL BE THE SIEMENS/EAGLE EPAC 3108M52 MODEL AS MANUFACTURED BY EAGLE TRAFFIC CONTROL SYSTEMS, AUSTIN, TEXAS.

PAYMENT FOR ITEM 633 "CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS-1, AS PER PLAN" SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH CONTROLLER UNIT.

**ITE M 633 CONTROLLER, MASTER, TRAFFIC RESPONSIVE**

THE CONTRACTOR SHALL FURNISH AND INSTALL A TRAFFIC RESPONSIVE MASTER CONTROLLER IN THE NEW CABINET PLACED AT THE INTERSECTION OF U.S. 62 AND OREGON STREET. THE TRAFFIC RESPONSIVE MASTER CONTROLLER SHALL BE COMPATIBLE WITH THE SIGNAL CONTROLLER AND SOFTWARE CHOSEN TO OPERATE THE TRAFFIC SIGNALS.

PAYMENT FOR ITEM 633 CONTROLLER, MASTER, TRAFFIC RESPONSIVE, WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER UNIT INSTALLED, ALONG WITH CONNECTING THE CITY SUPPLIED PHONE DROP TO THE CONTROLLER UNIT, TESTED AND ACCEPTED.

**ITE M 633 CONTROLLER, MASTER, TRAFFIC RESPONSIVE, (ALTERNATE BID)**

THIS ITEM OF WORK SHALL CONSIST OF PURCHASING AND INSTALLING THE "CMARK" SOFTWARE INTO THE SIEMENS/EAGLE EPAC3108M52 CONTROLLER UNIT PURCHASED FOR THE INTERSECTION OF U.S. 62(COSHOCTON ST.) AND OREGON STREET. THIS INTERSECTION WILL FUNCTION AS BOTH A LOCAL CONTROLLER AND THE MASTER CONTROLLER. IN ORDER FOR THE CONTROLLER UNIT TO FUNCTION AS A MASTER, THE CONTRACTOR WILL ONLY NEED TO PURCHASE THE "CMARK" SOFTWARE AND HAVE IT PLACED ON THE SIEMENS/EAGLE EPAC3108M52 CONTROLLER.

PAYMENT FOR ITEM 633 CONTROLLER, MASTER, TRAFFIC RESPONSIVE, WILL BE MADE AT THE CONTRACT PRICE FOR EACH AND SHALL INCLUDE THE PURCHASE AND INSTALLATION OF THE "CMARK" SOFTWARE, ALONG WITH CONNECTING THE CITY SUPPLIED PHONE DROP TO THE CONTROLLER UNIT,TESTED AND ACCEPTED.

**ITEM 633, CABINET FOUNDATION, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE ADDITIONAL EXCAVATION AND CONCRETE NECESSARY TO EXTEND THE CABINET FOUNDATION IN ORDER TO SUPPORT THE UNINTERRUPTIBLE POWER SUPPLY (UPS). IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A FOUNDATION LARGE ENOUGH TO ACCOMMODATE THE UPS BEING PROVIDED BY SEPARATE BID ITEM. AS A MINIMUM, THE ADDITIONAL FOUNDATION SHALL BE 30 INCHES SQUARE AND BE OTHERWISE CONSTRUCTED IN ACCORDANCE WITH NEMA CABINET FOUNDATIONS SHOWN ON TC-83.20.

PAYMENT FOR ITEM 633 "CABINET FOUNDATION, AS PER PLAN" SHALL INCLUDE ALL EQUIPMENT, LABOR AND MATERIALS NECESSARY TO INSTALL THE FOUNDATION, INCLUDING CONDUIT ELLS AND ANCHOR BOLTS, RESTORATION OF DISTURBED AREA AND DISPOSAL OF SURPLUS MATERIAL AS PER CMS 104.04.

**ITEM 816, VIDEO DETECTION SYSTEM, AS PER PLAN**

THIS ITEM CONSISTS OF FURNISHING AND INSTALLING A VIDEO DETECTION CAMERA SYSTEM IN CONFORMANCE WITH SUPPLEMENTAL SPECIFICATIONS 816 & 907 FOR USE IN LIEU OF A CONVENTIONAL VEHICLE DETECTOR LOOP INSTALLATION. THE CAMERA SYSTEM SHALL INCLUDE THE CAMERA, CABINET, VIDEO CONTROL COMPONENTS, COMMUNICATION CABLES, CONNECTORS, MOUNTING HARDWARE INCLUDING EXTENSION TUBE, PC SOFTWARE AND ALL OTHER NECESSARY COMPONENTS TO INSTALL A VIDEO DETECTION CAMERA SYSTEM COMPLETE IN PLACE THAT IS FULLY FUNCTIONAL WITH THE TRAFFIC SIGNAL INSTALLATION. THE VIDEO DETECTION CABINET HARDWARE SHALL BE CAPABLE OF RUNNING ALL THE DESIGNATED CAMERAS SHOWN IN THE PLANS AT EACH INTERSECTION. THE CAMERAS SHALL BE CONFIGURED TO PERFORM VEHICLE DETECTION AND TRAFFIC COUNTS AS SPECIFIED. TWO PORTABLE COLOR LCD MONITORS, HAVING AN 8" MINIMUM SCREEN AND AT LEAST ONE BNC COMPOSITE VIDEO CONNECTOR, SHALL BE PROVIDED TO VIEW AND CONFIGURE THE VIDEO DETECTION CAMERAS. TEN (10) BUSINESS DAYS PRIOR TO INSTALLATION OF THE VIDEO DETECTION SYSTEM, THE CONTRACTOR SHALL CONTACT BRIAN BOSCH. P. E., DISTRICT 5 TRAFFIC ENGINEER SO AN ODOT REPRESENTATIVE CAN BE PRESENT FOR THE CONFIGURATION OF THE VIDEO DETECTION CAMERA SYSTEM. ONE OF THE PORTABLE LCD MONITORS WILL BE GIVEN TO THE VILLAGE OF JOHNSTOWN THE OTHER MONITOR WILL BE TURNED OVER TO ODOT.

PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, CABINET & MOUNTING HARDWARE, AND OTHER INCIDENTALS NECESSARY FOR EACH VIDEO DETECTION CAMERA, COMPLETE IN PLACE, ALL CONNECTIONS MADE AND WIRING COMPLETED, TESTED, AND ACCEPTED. THIS ITEM WILL BE PAID AT THE CONTRACT UNIT PRICE PER EACH CAMERA INCLUDING TWO SPARE CAMERAS TO BE DELIVERED TO THE VILLAGE OF JOHNSTOWN.

**ITEM 633, CONTROLLER WORK PAD, AS PER PLAN**

THIS ITEM SHALL INCLUDE THE INSTALLATION OF A WORK PAD FOR THE GROUND MOUNTED NEMA CABINET AS DETAILED ON STANDARD DRAWING TC-83.20.

IN ADDITION TO THE WORK PAD FOR THE NEMA CABINET, THE CONTRACTOR SHALL INSTALL A WORK PAD FOR THE UNINTERRUPTIBLE POWER SUPPLY (UPS).

PROVIDE A 36" SQUARE WORK PAD IN FRONT OF THE UPS. EXCAVATE A MINIMUM OF 9" BELOW GRADE. PLACE AND COMPACT 6" OF MATERIAL CONFORMING TO 304.02 AND INSTALL A CAST-IN-PLACE WORK PAD THAT IS A MINIMUM OF 4" THICK.

PAYMENT FOR ITEM 633, CONTROLLER WORK PAD, AS PER PLAN, SHALL INCLUDE ALL EQUIPMENT, LABOR AND MATERIALS NECESSARY TO INSTALL THE CONCRETE WORK PAD.

**ITEM 633 UNINTERRUPTIBLE POWER SUPPLY, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF CMS 633 AND 733, THE CONTRACTOR SHALL FURNISH, INSTALL AND TEST UNINTERRUPTIBLE POWER SUPPLY (UPS) STATUS INDICATOR LAMPS THAT ALLOW MAINTENANCE PERSONNEL AND LAW ENFORCEMENT TO QUICKLY ASSESS WHETHER A TRAFFIC SIGNAL CABINET IS BEING POWERED BY A UPS. A 1-INCH (25 MM) WATERPROOF NEMA 4X OR IP66 LAMP WITH A DOMED RED LENS SHALL BE USED TO INDICATE THE CABINET IS OPERATING UNDER UPS BACKUP POWER (THE "BACKUP" OPERATING CONDITION). THIS LAMP SHALL BE WIRED USING MINIMUM 20GA STRANDED, INSULATED HOOKUP WIRE TO THE STATUS RELAY OUTPUTS OF THE UPS. THE WIRES SHALL BE TERMINATED BY LUGS AT THE DISPLAY END AND PERMANENTLY LABELED "BACKUP POWER STATUS DISPLAY," WITH WIRE POLARITY INDICATED. THIS ITEM INCLUDES PROGRAMMING THE UPS STATUS RELAY OUTPUTS TO PRODUCE THE LAMP STATUS DISPLAYS. THE STATUS DISPLAY SHALL BE SOLID 100% DUTY CYCLE (NOT FLASHING). THE LAMP SHALL BE PLACED IN THE UPS CABINET WALL (NOT THE ROOF) IN SUCH A MANNER AS TO BE SEALED FROM WATER INTRUSION AND VISIBLE FROM A VEHICLE AT THE STOP LINE IN THE CLOSEST LANE OF AT LEAST ONE APPROACH TO THE SIGNALIZED INTERSECTION. THE OPERATING VOLTAGE OF THE LED LAMP SHALL BE 120V AC.

THE EXTERIOR OF THE UNINTERRUPTIBLE POWER SUPPLY (UPS) CABINET SHALL BE FINISHED TO MATCH THE SIGNAL SUPPORT FINISH COLOR. ALL PAINTING SHALL BE PERFORMED UNDER CONTROLLED ENVIRONMENT CONDITIONS AND IN ACCORDANCE WITH ALL MANUFACTURERS RECOMMENDATIONS PERTAINING TO SURFACE PREPARATION, MATERIAL HANDLING AND APPLICATION. THE TOP FINISH COAT OF PAINT SHALL BE SIMILAR TO FEDERAL STANDARD PAINT # 17038 (BLACK). THE CONTRACTOR SHALL PROVIDE A PAINT SAMPLE CHIP TO BE SUBMITTED WITH THE CABINET SHOP DRAWINGS FOR REVIEW AND APPROVAL. THE APPLICATION PROCEDURE SHALL GUARANTEE A FINISH THAT WILL NOT SCALE, FLAKE OR PEEL.

PAYMENT FOR ITEM 633 "UNINTERRUPTIBLE POWER SUPPLY, AS PER PLAN" SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH CABINET, IN PLACE, COMPLETELY INSTALLED IN THE LOCATION SHOWN IN THE PLANS, WIRED, TESTED AND ACCEPTED.

CALCULATED DNM CHECKED BFB

TRAFFIC SIGNAL GENERAL NOTES

LIC-62-4.63



85170_sgn_04.dgn dated 12/20/2010

**ITEM 815, SPREAD SPECTRUM RADIO**

THIS ITEM SHALL CONSIST OF INSTALLATION AND SETUP OF A COMPLETE AND OPERATIONAL SPREAD SPECTRUM RADIO IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. THE CONTRACTOR SHALL INSTALL THE MANUFACTURER'S RECOMMENDED COAXIAL CABLE FROM THE ANTENNA TO A TERMINATION POINT IN THE TRAFFIC CONTROL CABINET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, BUT NOT LIMITED TO, SUPPLYING AND INSTALLATION OF RADIO UNIT, ALL CABLING YAGI / OMNI-DIRECTIONAL ANTENNA, PHASERS, GROUND STRAPS, AND ALL TERMINATION CONNECTORS ETC.

THE MASTER CONTROLLER FOR THIS SYSTEM WILL BE LOCATED AT THE INTERSECTION OF US 62 (COSHOCTON ST.) AND OREGON STREET. THE CONTRACTOR SHALL PERFORM A SITE SURVEY PRIOR TO START OF CONSTRUCTION WITH THE ENGINEER AND RADIO/CONTROLLER MANUFACTURER'S REPRESENTATIVE TO DISCUSS AND CONFIRM ANTENNA LOCATION(S) AND INSTALLATION REQUIREMENTS.

PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH UNIT INSTALLED COMPLETE, INCLUDING ALL MATERIAL, LABOR AND EQUIPMENT FOR A FULLY OPERATIONAL SPREAD SPECTRUM RADIO TESTED, AND ACCEPTED.

**GROUNDING AND BONDING**

THE REQUIREMENTS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND THE HL AND TC SERIES OF STANDARD CONSTRUCTION DRAWINGS ARE MODIFIED AS FOLLOWS:

1) ALL METALLIC PARTS CONTAINING ELECTRICAL CONDUCTORS SHALL BE PERMANENTLY JOINED TO FORM AN EFFECTIVE GROUND FAULT CURRENT PATH BACK TO THE GROUNDED CONDUCTOR IN THE POWER SERVICE DISCONNECT SWITCH.

   A. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN METALLIC CONDUITS (725.04) IN ADDITION TO THE CONDUCTORS SPECIFIED AND BOND THE CONDUIT TO THIS GROUNDING CONDUCTOR.

   B. WHEN AN EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED IN PLASTIC CONDUIT (725.05), THE INSTALLATION SHALL INCLUDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN ADDITION TO THE CONDUCTORS SPECIFIED.

   C. METALLIC CONDUIT CARRYING THE LOOP WIRES FROM IN THE PAVEMENT TO THE PULL BOX SPLICE LOCATION WILL ONLY BE BONDED AT THE PULL BOX END, AND WILL NOT CONTAIN AN EQUIPMENT GROUNDING CONDUCTOR.

   D. METAL PULL BOX LIDS SHALL BE BONDED BY ATTACHMENT OF THE EQUIPMENT GROUNDING CONDUCTOR TO THE FRAME DIAGONAL AS PROVIDED ON HL-30.11.

   E. IF MULTIPLE CONDUIT RUNS BEGIN AND END AT THE SAME POINTS, ONLY ONE EQUIPMENT GROUNDING CONDUCTOR IS REQUIRED.

   F. IF AN EQUIPMENT GROUNDING CONDUCTOR IS NEEDED IN CONDUIT BETWEEN SIGNALIZED INTERSECTIONS FOR UNDERGROUND INTERCONNECT CABLE, THE GROUNDING SYSTEM FOR EACH SIGNALIZED INTERSECTION WILL BE SEPARATED ABOUT MIDWAY BETWEEN THE INTERSECTIONS.

   G. THE MESSENGER WIRE AT SIGNALIZED INTERSECTIONS WILL BE USED AS THE CONDUCTIVE PATH FROM CORNER TO CORNER IF CONDUIT IS NOT PROVIDED UNDER THE ROADWAY. WHEN CONDUIT CONNECTS THE CORNERS OF AN INTERSECTION, AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE USED IN THE CONDUIT.

2) CONDUITS.

   A. THE 725.04 CONDUIT SHALL HAVE GROUNDING BUSHINGS INSTALLED AT ALL TERMINATION POINTS. THE BUSHING MATERIAL SHALL BE COMPATIBLE WITH GALVANIZED STEEL CONDUIT AND THE GROUNDING LUG MATERIAL SHALL BE COMPATIBLE FOR USE WITH COPPER WIRE. THREADED OR COMPRESSION TYPE BUSHINGS MAY BE USED.

   B. THE 725.05 CONDUIT SHALL HAVE THE INSIDE AND OUTSIDE DIAMETERS OF THE CONDUIT DEBURRED AT ALL TERMINATION POINTS.

   C. BOTH ENDS OF METALLIC CONDUIT SHALL BE BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

   D. METALLIC CONDUIT MAY BE BONDED TO METALLIC BOXES THROUGH THE USE OF CONDUIT FITTINGS UL APPROVED FOR THIS TYPE OF CONNECTION, WITH THE BOX BONDED TO THE EQUIPMENT GROUNDING CONDUCTOR.

3) WIRE FOR GROUNDING AND BONDING.

   A. USE INSULATED, COPPER WIRE FOR THE EQUIPMENT GROUNDING CONDUCTOR. BONDING JUMPERS IN BOXES AND ENCLOSURES MAY BE BARE OR INSULATED COPPER WIRE. WIRE SIZE SHALL BE AS FOLLOWS:

      I) USE 4 AWG BETWEEN THE POWER SERVICE AND SUPPORTS, POLES, PEDESTALS, CONTROLLER OR FLASHER CABINETS.

      II) USE A MINIMUM 8 AWG BETWEEN LOOP DETECTOR PULL BOXES AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.

      III) USE A MINIMUM 8 AWG BETWEEN THE "PREPARE TO STOP WHEN FLASHING" INSTALLATION (INCLUDING SUPPORT) AND THE FIRST CONDUIT THAT REQUIRES A LARGER SIZE AS SPECIFIED IN 3.A.I ABOVE.

      IV) THE INSULATION SHALL BE GREEN OR GREEN WITH YELLOW STRIPE(S). FOR 4 AWG OR LARGER, INSULATION MAY ALSO BE BLACK WITH GREEN TAPE/LABELS INSTALLED AT ALL ACCESS POINTS.

   B. IN A HIGHWAY LIGHTING SYSTEM, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE THE SAME WIRE SIZE AS THE DUCT CABLE OR DISTRIBUTION CABLE CIRCUIT CONDUCTORS, WITH THE MINIMUM CONDUCTOR SIZE OF 4 AWG. BONDING JUMPERS WILL BE MINIMUM SIZE 4 AWG.

4) GROUND ROD.

   A. A 3/4 INCH SCHEDULE 40 PVC CONDUIT WILL BE USED IN FOUNDATIONS AND CONCRETE WALLS FOR THE GROUNDING CONDUCTOR (GROUND WIRE) RACEWAY TO THE GROUND ROD. SHOULD METALLIC CONDUIT BE USED, BOTH ENDS OF THE CONDUIT SHALL BE BONDED TO THE GROUNDING CONDUCTOR.
   B. THE TYPICAL GROUNDING CONDUCTOR (GROUND WIRE) SHALL BE 4 AWG INSULATED, COPPER.

5) THE GREEN CONDUCTOR IN SIGNAL CABLES (CONDUCTOR #4) SHALL NOT BE USED TO SUPPLY POWER TO A SIGNAL INDICATION. IT WILL BE CONNECTED TO THE SIGNAL BODY AS AN EQUIPMENT GROUND IN ALUMINUM HEADS AND IT WILL BE UNUSED IN PLASTIC HEADS. UNUSED CONDUCTORS SHALL BE GROUNDED IN THE CABINET. TYPICAL USE OF CONDUCTORS IS AS FOLLOWS:

| COND. NO. | COLOR | VEHICLE SIGNAL | PEDESTRIAN SIGNAL |
|---|---|---|---|
| 1 | BLACK | GREEN BALL | #1 WALK |
| 2 | WHITE | AC NEUTRAL | AC NEUTRAL |
| 3 | RED | RED BALL | #1 DW/FDW |
| 4 | GREEN | EQUIPMENT GROUND | EQUIPMENT GROUND |
| 5 | ORANGE | YELLOW BALL | #2 DW/FDW |
| 6 | BLUE | GREEN ARROW | # 2 WALK |
| 7 | WHITE/BLACK STRIPE | YELLOW ARROW | NOT USED |

6) POWER SERVICE AND DISCONNECT SWITCH.

   A. AT THE POWER SERVICE LOCATION, THE GROUNDING CONDUCTOR (GROUND WIRE) FROM THE DISCONNECT SWITCH NEUTRAL (AC-) BAR TO THE GROUND ROD SHALL BE A CONTINUOUS, UNSPLICED CONDUCTOR. IF SPLICED, IT SHALL BE AN EXOTHERMIC WELD BUTT SPICE.

   B. THE SERVICE NEUTRAL (AC-) SHALL ONLY BE CONNECTED TO GROUND AT THE PRIMARY POWER SERVICE DISCONNECT SWITCH.

      I) NEMA CONTROLLER CABINETS: IF A POWER SERVICE DISCONNECT SWITCH IS LOCATED BEFORE THE CONTROLLER CABINET, THE NEUTRAL (AC-) AND THE GROUNDING BARS IN THE CONTROLLER CABINET SHALL NOT BE CONNECTED TOGETHER AS SHOWN IN NEMA TS-2, FIGURE 5-4.

      II) IF SECONDARY DISCONNECT SWITCHES ARE CONNECTED AFTER THE PRIMARY DISCONNECT SWITCH, THE NEUTRAL (AC-) SHALL ONLY BE GROUNDED AT THE PRIMARY SWITCH. EQUIPMENT GROUNDING CONDUCTORS SHALL BE BROUGHT TO THE PRIMARY SWITCH, BUT SHALL BE GROUNDED AT BOTH SECONDARY AND PRIMARY SWITCHES.

7) STRUCTURE GROUNDING: HL-50.21 SHOWS A 1/0 AWG STRANDED COPPER CABLE USED FOR STRUCTURE GROUNDING. ADDITIONALLY, THIS SAME CABLE SHALL BE INSULATED AND ANY CONNECTIONS AND BARE COPPER STRANDS EXPOSED TO CONCRETE SHALL BE COVERED WITH MASTIC TO PREVENT CONTACT WITH THE CONCRETE.

8) PAYMENT.

   A. ALL MATERIALS AND WORK REQUIRED TO COMPLETE THE EFFECTIVE GROUND FAULT CURRENT PATH SYSTEM ARE INCIDENTAL TO THE CONDUCTORS INSTALLED BY CONTRACT.

   B. WORK ON BRIDGES MAY BE INCLUDED IN THE BID ITEM FOR "ITEM 625, STRUCTURE GROUNDING."

   C. IN A 3-WIRE HIGHWAY LIGHTING SYSTEM, THE THIRD CONDUCTOR OF THE DUCT CABLE OR DISTRIBUTION CABLE WILL BE USED AS THE EQUIPMENT GROUNDING CONDUCTOR AND MAY AS SUCH BE PART OF THE CABLE BID ITEM.

CALCULATED DNM CHECKED BFB

TRAFFIC SIGNAL GENERAL NOTES

TRAFFIC

LIC-62-4.63



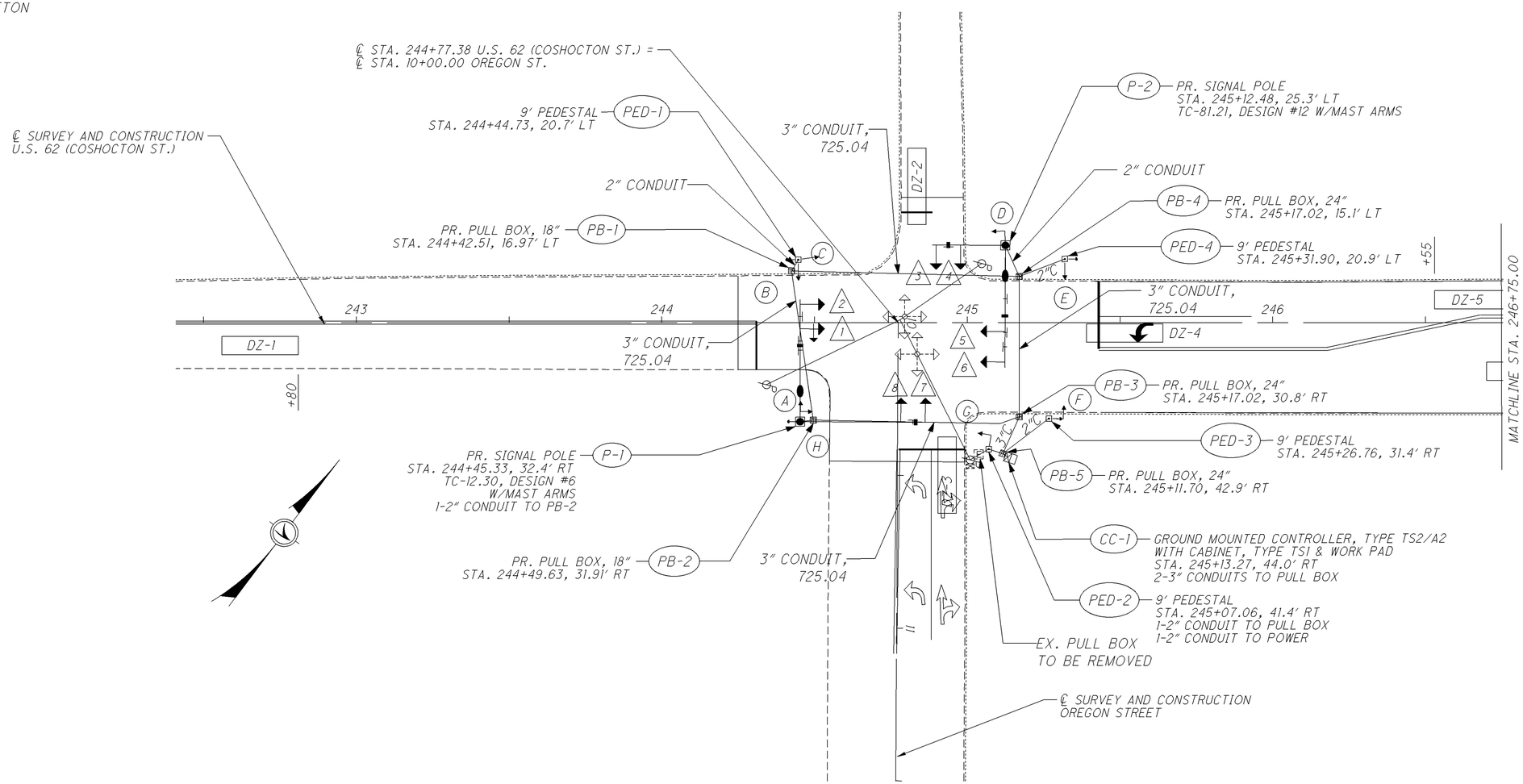
85170_sgn_05.dgn dated 11/03/2010

| PEDESTRIAN PUSHBUTTON SIGN |
|---|
| TO CROSS COSHOCTON ST. PUSH BUTTON WAIT FOR WALK SIGNAL |
| R10-H4D-9 |

MOUNTED ABOVE PUSHBUTTON

| PEDESTRIAN SIGNAL INDICATIONS (LED) | SIGNAL INDICATIONS ALL 12" LENS WITH BACKPLATES | |
|---|---|---|
| TYPE D2: A,B,C,D,E,F,G,H | SIGNAL: 1 | SIGNAL: 2,3,4,5,6,7,8 |

| CROSS REFERENCES | |
|---|---|
| SHEET(S) | DESCRIPTION |
| 54 | WIRING DIAGRAM, PHASING DIAGRAM, DETECTOR CHART AND WIRING HOOK-UP CHART |
| 55 | POLE DIAGRAM, MAST ARM SIGNAL HEAD AND SIGN DETAILS |
| 59 | SIGNAL TIMING CHART |
| 62-63 | TRAFFIC SIGNAL QUANTITIES |




| ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN | | | | |
|---|---|---|---|---|
| FOR INFORMATION ONLY | | | REMOVE AND | |
| ITEM DESCRIPTION | UNIT | QTY | STORE | DISPOSE |
| VEHICLE SIGNAL HEAD, 3-SECTION, 4-WAY | EACH | 2 | X | |
| POLE MOUNTED CABINET INCLUDING EQUIPMENT | EACH | 1 | X | |
| PULL BOX | | 1 | | X |
| CABLE & WIRE | | LUMP | | X |

**LEGEND**

DND = DO NOT DISTURB
TBA = TO BE ABANDONED
EX. = EXISTING
PR. = PROPOSED

PEDESTRIAN PUSH BUTTON.....
PEDESTRIAN SIGNAL HEAD..... W/ COUNT DOWN
VEHICULAR SIGNAL HEAD..... W/ BACKPLATE
SIGNAL HEAD I.D. NUMBER.....
PROPOSED PULL BOX.....

EXISTING PULL BOX.....
PEDESTAL.....
SIGNAL POLE W/MAST ARM(S).....
CONTROLLER CABINET GROUND MOUNTED....
VIDEO DETECTION AREA.....
BRACKET ARM W/LUMINAIRE.....

HORIZONTAL SCALE IN FEET 0 20 40

CALCULATED DNM CHECKED BFB

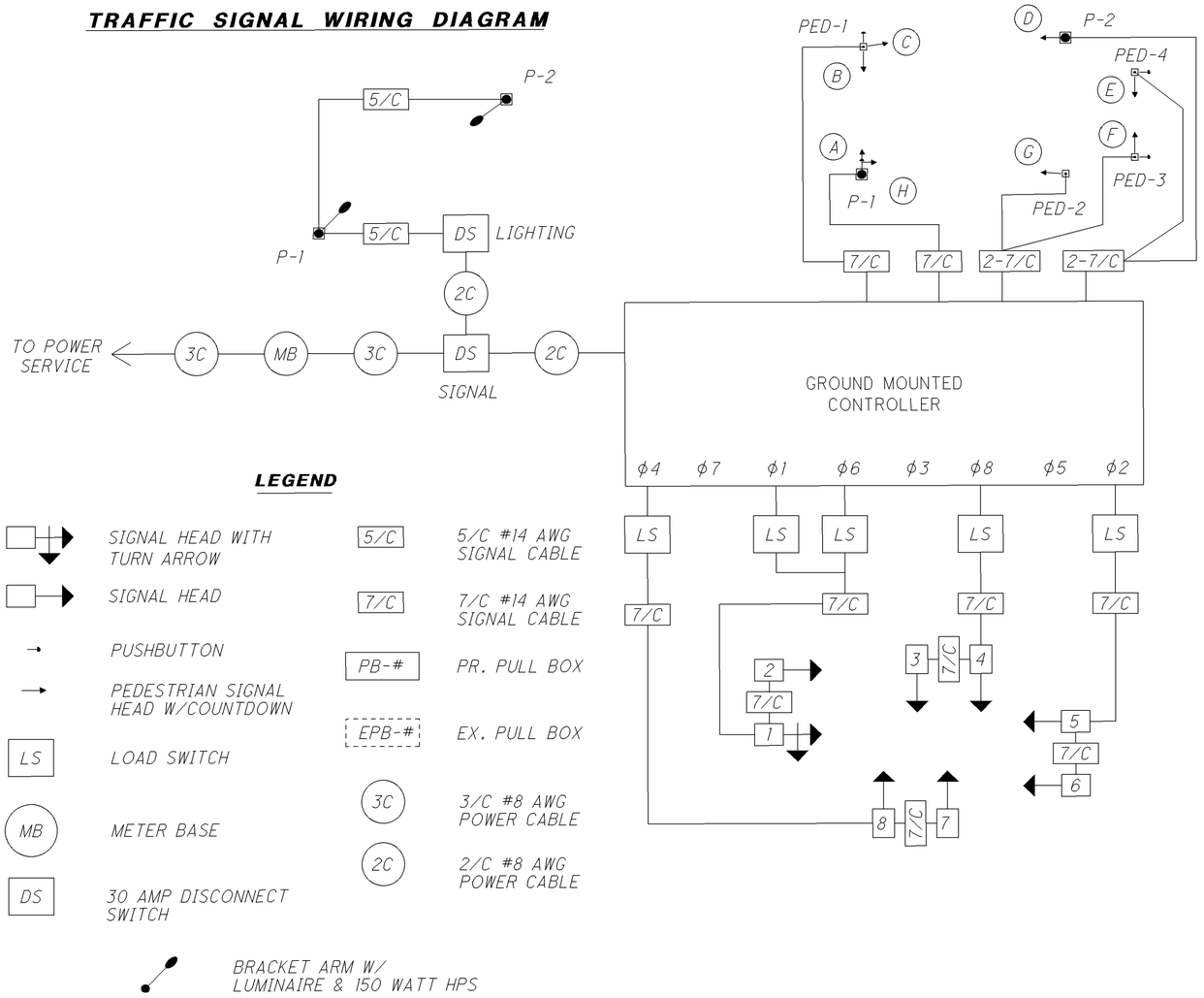
# TRAFFIC SIGNAL DETAIL SHEET
## U.S. 62 AND OREGON ST. INTERSECTION

LIC-62-4.63



85170_SDS_01.DGN 3/28/2011

## TRAFFIC SIGNAL WIRING DIAGRAM



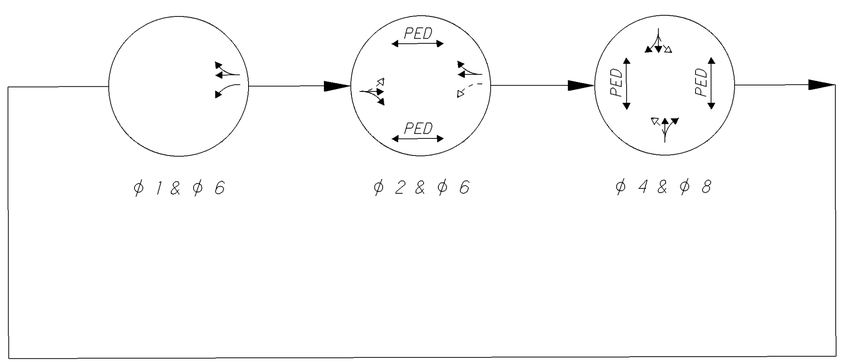

### LEGEND

| | | | |
|---|---|---|---|
| SIGNAL HEAD WITH TURN ARROW | 5/C | 5/C #14 AWG SIGNAL CABLE |
| SIGNAL HEAD | 7/C | 7/C #14 AWG SIGNAL CABLE |
| PUSHBUTTON | PB-# | PR. PULL BOX |
| PEDESTRIAN SIGNAL HEAD W/COUNTDOWN | EPB-# | EX. PULL BOX |
| LS — LOAD SWITCH | 3C | 3/C #8 AWG POWER CABLE |
| MB — METER BASE | 2C | 2/C #8 AWG POWER CABLE |
| DS — 30 AMP DISCONNECT SWITCH | | |
| BRACKET ARM W/ LUMINAIRE & 150 WATT HPS | | |

## FIELD WIRING HOOK-UP CHART

| SIGNAL HEAD | INDICATION | FIELD TERMINAL | FLASH | SIGNAL HEAD | INDICATION | FIELD TERMINAL | FLASH |
|---|---|---|---|---|---|---|---|
| 1 (SBLT) | R | ϕ6 R | Y | 7,8 (EB) | R | ϕ4 R | R |
| | Y | ϕ6 Y | | | Y | ϕ4 Y | |
| | G | ϕ6 G | | | G | ϕ4 G | |
| | ~~Y~~ | ϕ1 Y | | AB (SOUTH) | W | ϕ4 G | OUT |
| | ~~G~~ | ϕ1 G | | | DW | ϕ4 R | |
| 2 (SB) | R | ϕ6 R | Y | CD (WEST) | W | ϕ6 G | OUT |
| | Y | ϕ6 Y | | | DW | ϕ6 R | |
| | G | ϕ6 G | | EF (NORTH) | W | ϕ8 G | OUT |
| 3,4 (WB) | R | ϕ8 R | R | | DW | ϕ8 R | |
| | Y | ϕ8 Y | | GH (EAST) | W | ϕ2 G | OUT |
| | G | ϕ8 G | | | DW | ϕ2 R | |
| 5,6 (NB) | R | ϕ2 R | Y | | | | |
| | Y | ϕ2 Y | | | | | |
| | G | ϕ2 G | | | | | |

## SIGNAL PHASING DIAGRAM




## TRAFFIC SIGNAL DETECTOR CHART

| LOOP DESIGNATION | CONTROLLER PHASE | DIRECTION | PULSE OR PRESENCE | EXTENSION (SEC.) | DELAY (SEC.) | DELAY INHIBITED DURING | CONNECT TO DETECTOR UNIT (Unit-Channel) | LOOP DETECTION TYPE |
|---|---|---|---|---|---|---|---|---|
| DZ-1 | 2 | NB | PULSE | 1.0 | | | 1-1 | V.D. |
| DZ-2 | 4 | EB | PRESENCE | | 8 | ϕ4 | 1-2 | V.D. |
| DZ-3 | 8 | WB | PRESENCE | | 8 | ϕ8 | 1-3 | V.D. |
| DZ-4 | 1 | SBLT | PRESENCE | | 3 | ϕ1 | 1-4 | V.D. |
| DZ-5 | 6 | SB | PULSE | 1.0 | | | 2-1 | V.D. |

V.D. - VIDEO DETECTION

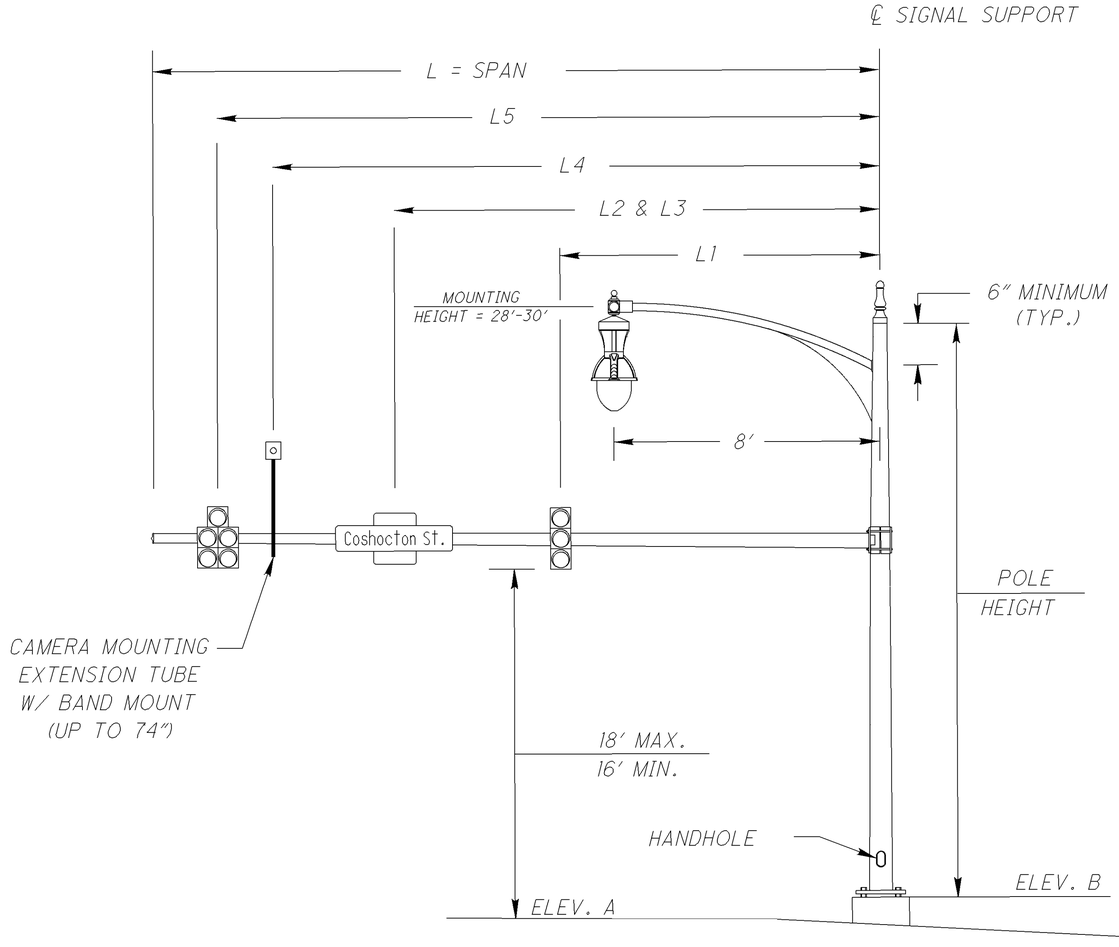
CALCULATED DNM CHECKED BFB

SIGNAL PLAN DETAILS - U.S. 62/OREGON ST.

LIC-62-4.63



85170_SDS_03.DGN 3/28/2011

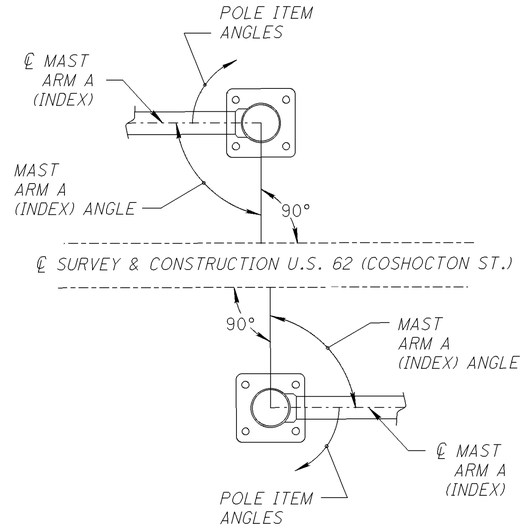



THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO SHEET 47:

ITEM 630 - SIGN SUPPORT ASSEMBLY, POLE MOUNTED - 8 EACH

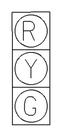
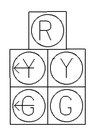
ITEM 630 - SIGN, FLAT SHEET - 51.5 S.F.
2(2.5 x 3.0) + 2(2.0 x 2.0) +
2(1.5 x 5.5) + 2(1.5 x 4.0) = 51.5 S.F.

## SIGNAL POLE DIAGRAM




| SUPPORT NO. | MAST ARM (INDEX) ANGLE | ORIENTATION ANGLES FROM MAST ARM A | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MAST ARM B | HANDHOLE | POWER DISCONNECT | PEDESTRIAN SIGNAL HEAD | PEDESTRIAN PUSH BUTTON | BRACKET ARM W/LUMINAIRE | | |
| 1 | 0° | 90° | 270° | | 0° / 90° | 270° | 0° | | |
| 2 | 0° | 90° | 180° | | 90° | | 0° | | |
| PED-1 | | | 90° | | 0° / 270° | 90° | | | |
| PED-2 | | | 90° | 240° | 270° | | | | |
| PED-3 | | | 180° | | 0° | 90° | | | |
| PED-4 | | | 90° | | 0° | 270° | | | |

| SUPPORT NO. | SIGNAL SUPPORT TYPE: STD. DWG. TC-12.30 | SIGNAL SUPPORT TYPE: STD. DWG. TC-81.21 | SIGNAL SUPPORT TYPE: DESIGN NO. | MAST ARM (A) | MAST ARM (B) | POLE HEIGHT (FT) | SPAN "L" (FT) | MAST ARM SIGNAL HEAD AND SIGN DETAILS: L1 ITEM | L1 OFFSET (FT) | L2 ITEM | L2 OFFSET (FT) | L3 ITEM | L3 OFFSET (FT) | L4 ITEM | L4 OFFSET (FT) | L5 ITEM | L5 OFFSET (FT) | L6 ITEM | L6 OFFSET (FT) | L7 ITEM | L7 OFFSET (FT) | ELEVATION: ELEV. A | ELEV. B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | X | | 6 | X | | 28.0 | 40.0 | S6 | 23.5 | S9 | 25.0 | S5 | 26.5 | S2 | 30.5 | S8 | 34.5 | S1 | 38.5 | | | 1154.45 | 1154.50 |
| | | | | | X | | 42.0 | S1 | 33.0 | S7 | 37.0 | S9 | 38.0 | S1 | 41.0 | | | | | | | 1154.52 | |
| 2 | | X | 12 | X | | 28.0 | 40.0 | S4 | 17.5 | S9 | 23.0 | S1 | 28.0 | S3 | 29.0 | S8 | 33.0 | S1 | 38.0 | | | 1154.92 | 1154.30 |
| | | | | | X | | 24.0 | S1 | 14.5 | S7 | 18.5 | S9 | 18.5 | S1 | 22.5 | | | | | | | 1153.99 | |
| PED-1 | | | | | | 9.0 | | | | | | | | | | | | | | | | | 1154.45 |
| PED-2 | | | | | | 9.0 | | | | | | | | | | | | | | | | | 1154.65 |
| PED-3 | | | | | | 9.0 | | | | | | | | | | | | | | | | | 1154.75 |
| PED-4 | | | | | | 9.0 | | | | | | | | | | | | | | | | | 1154.80 |

| S1 | S2 | S3 | S4 | S5 |
|---|---|---|---|---|
|  |  |  |  |  |
| SIGNAL HEAD 3-SECTION, 1-WAY | SIGNAL HEAD 5-SECTION, 1-WAY | SIGN R3-5L-30 30″ X 36″ | SIGN R3-6R-30 30″ X 36″ | SIGN R3-2-24 24″ X 24″ |

| S6 | S7 | S8 | S9 |
|---|---|---|---|
|  |  |  |  |
| SIGN R10-20A-24 24″ X 24″ | SIGN D3-1-60 18″ X 66″ | SIGN D3-1-36 18″ X 48″ | VIDEO DETECTION EQUIPMENT |

CALCULATED DNM
CHECKED BFB

SIGNAL PLAN DETAILS - U.S. 62/OREGON ST.

LIC-62-4.63



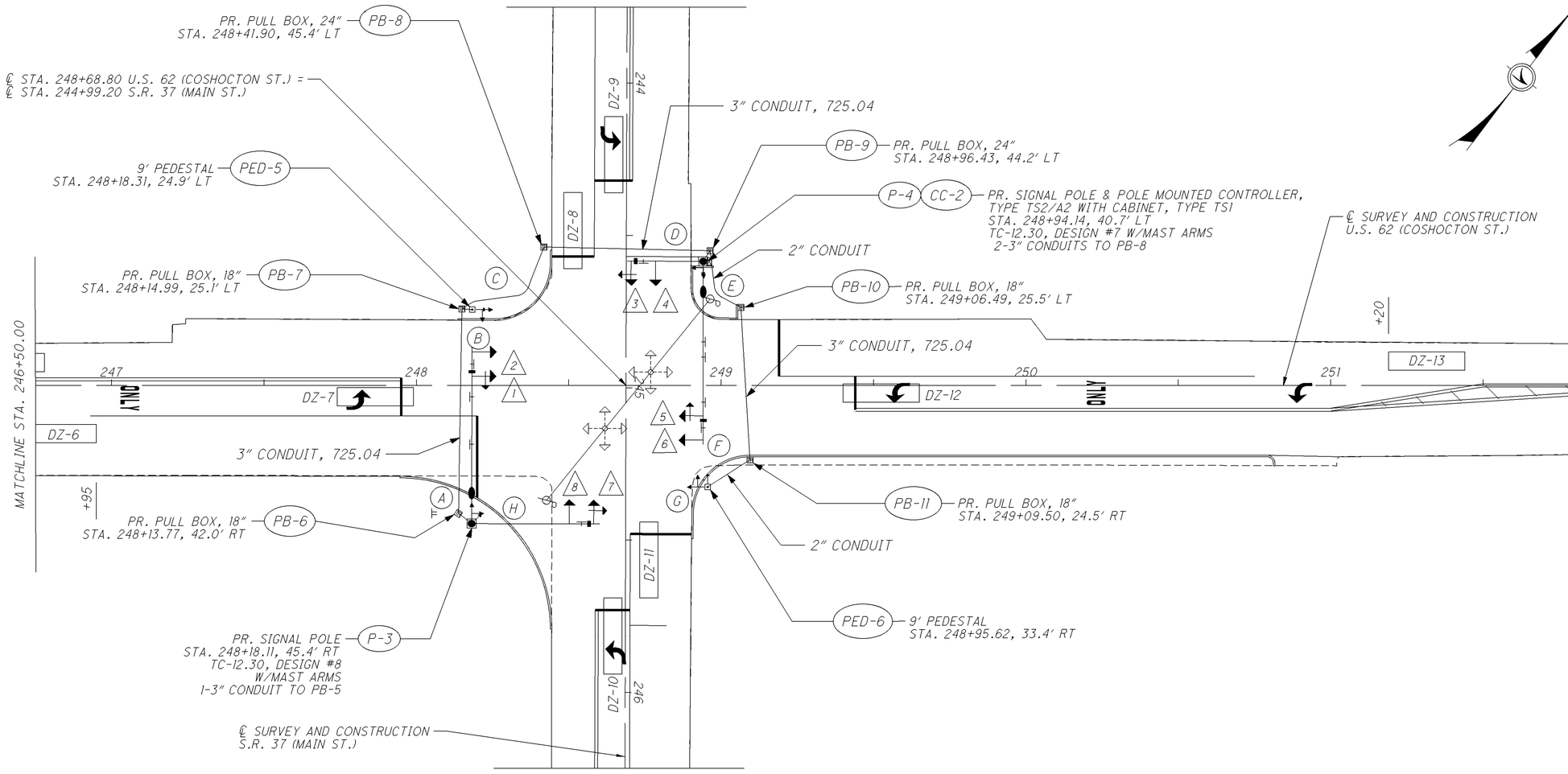
85170_SDS_04.DGN 3/28/2011

| PEDESTRIAN PUSHBUTTON SIGN |
|---|
| TO CROSS COSHOCTON ST. PUSH BUTTON WAIT FOR WALK SIGNAL |
| R10-H4D-9 |

MOUNTED ABOVE PUSHBUTTON

| PEDESTRIAN SIGNAL INDICATIONS (LED) | SIGNAL INDICATIONS ALL 12" LENS WITH BACKPLATES | |
|---|---|---|
| TYPE D2: A,B,C,D,E,F,G,H | SIGNAL: 1,3,5,7 | SIGNAL: 2,4,6,8 |

| CROSS REFERENCES | |
|---|---|
| SHEET(S) | DESCRIPTION |
| 57 | WIRING DIAGRAM, PHASING DIAGRAM, DETECTOR CHART AND WIRING HOOK-UP CHART |
| 58 | POLE DIAGRAM, MAST ARM SIGNAL HEAD AND SIGN DETAILS |
| 59 | SIGNAL TIMING CHART |
| 62-63 | TRAFFIC SIGNAL QUANTITIES |




| ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN | | | | |
|---|---|---|---|---|
| FOR INFORMATION ONLY | | | REMOVE AND | |
| ITEM DESCRIPTION | UNIT | QTY | STORE | DISPOSE |
| VEHICLE SIGNAL HEAD, 3-SECTION, 4-WAY | EACH | 2 | X | |
| CABLE & WIRE | | LUMP | | X |
| | | | | |
| | | | | |

**LEGEND**

DND = DO NOT DISTURB
TBA = TO BE ABANDONED
EX. = EXISTING
PR. = PROPOSED

PEDESTRIAN PUSH BUTTON.....
PEDESTRIAN SIGNAL HEAD..... W/ COUNT DOWN
VEHICULAR SIGNAL HEAD..... W/ BACKPLATE
SIGNAL HEAD I.D. NUMBER.....
PROPOSED PULL BOX.....

EXISTING PULL BOX.....
PEDESTAL.....
SIGNAL POLE W/MAST ARM(S).....
CONTROLLER CABINET GROUND MOUNTED....
VIDEO DETECTION AREA.....
BRACKET ARM W/LUMINAIRE.....

HORIZONTAL SCALE IN FEET 0 20 40

CALCULATED DNM CHECKED BFB

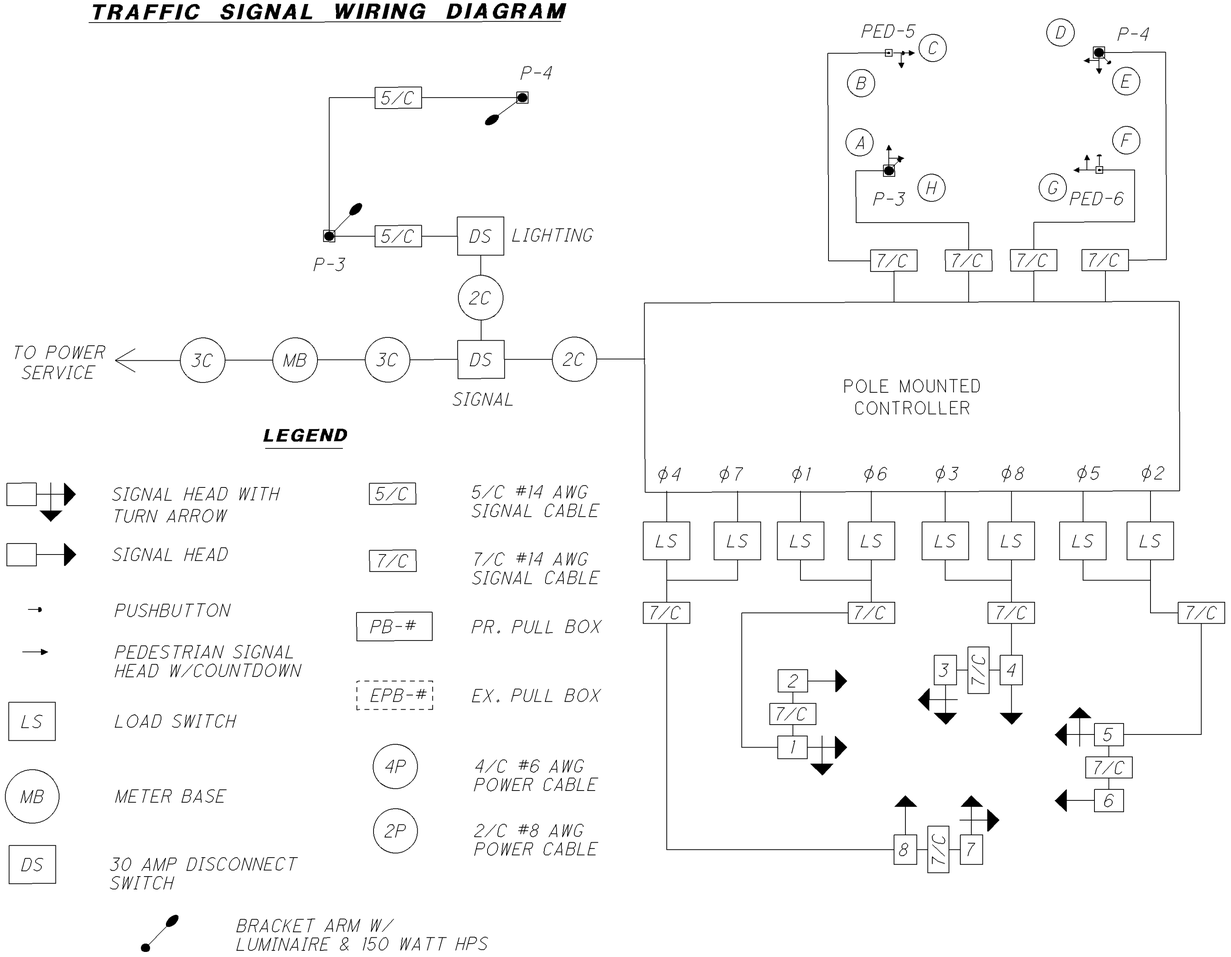
TRAFFIC SIGNAL DETAIL SHEET
U.S. 62 AND S.R. 37 INTERSECTION

LIC-62-4.63



85170_SDS_02.DGN 3/28/2011

## TRAFFIC SIGNAL WIRING DIAGRAM



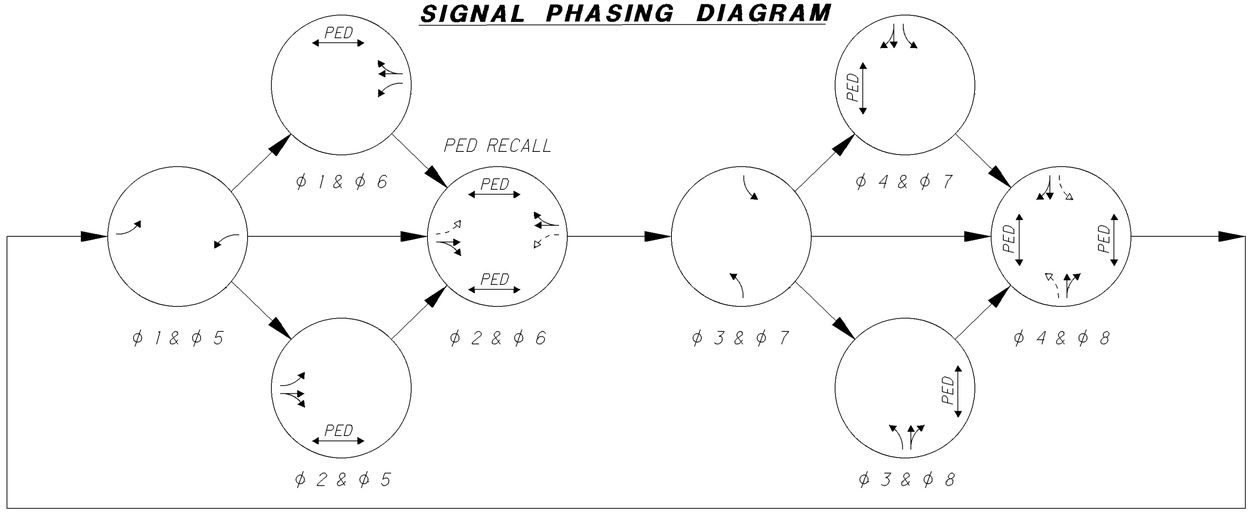

### LEGEND

| | | | |
|---|---|---|---|
| | SIGNAL HEAD WITH TURN ARROW | 5/C | 5/C #14 AWG SIGNAL CABLE |
| | SIGNAL HEAD | 7/C | 7/C #14 AWG SIGNAL CABLE |
| → | PUSHBUTTON | PB-# | PR. PULL BOX |
| → | PEDESTRIAN SIGNAL HEAD W/COUNTDOWN | EPB-# | EX. PULL BOX |
| LS | LOAD SWITCH | 4P | 4/C #6 AWG POWER CABLE |
| MB | METER BASE | 2P | 2/C #8 AWG POWER CABLE |
| DS | 30 AMP DISCONNECT SWITCH | | |
| | BRACKET ARM W/ LUMINAIRE & 150 WATT HPS | | |

## FIELD WIRING HOOK-UP CHART

| SIGNAL HEAD | INDICATION | FIELD TERMINAL | FLASH | SIGNAL HEAD | INDICATION | FIELD TERMINAL | FLASH |
|---|---|---|---|---|---|---|---|
| 1 (SBLT) | R | ϕ2 R | Y | 5 (NBLT) | R | ϕ6 R | Y |
| | Y | ϕ2 Y | | | Y | ϕ6 Y | |
| | G | ϕ2 G | | | G | ϕ6 G | |
| | ~~Y~~ | ϕ5 Y | | | ~~Y~~ | ϕ1 Y | |
| | ~~G~~ | ϕ5 G | | | ~~G~~ | ϕ1 G | |
| 2 (SB) | R | ϕ2 R | Y | 6 (NB) | R | ϕ6 R | Y |
| | Y | ϕ2 Y | | | Y | ϕ6 Y | |
| | G | ϕ2 G | | | G | ϕ6 G | |
| 3 (WBLT) | R | ϕ4 R | R | 7 (EBLT) | R | ϕ8 R | R |
| | Y | ϕ4 Y | | | Y | ϕ8 Y | |
| | G | ϕ4 G | | | G | ϕ8 G | |
| | ~~Y~~ | ϕ7 Y | | | ~~Y~~ | ϕ3 Y | |
| | ~~G~~ | ϕ7 G | | | ~~G~~ | ϕ3 G | |
| 4 (WB) | R | ϕ4 R | R | 8 (EB) | R | ϕ8 R | R |
| | Y | ϕ4 Y | | | Y | ϕ8 Y | |
| | G | ϕ4 G | | | G | ϕ8 G | |
| AB (SOUTH) | W | ϕ4 G | OUT | EF (NORTH) | W | ϕ8 G | OUT |
| | DW | ϕ4 R | | | DW | ϕ8 R | |
| CD (WEST) | W | ϕ6 G | OUT | GH (EAST) | W | ϕ2 G | OUT |
| | DW | ϕ6 R | | | DW | ϕ2 R | |

## SIGNAL PHASING DIAGRAM




## TRAFFIC SIGNAL DETECTOR CHART

| LOOP DESIGNATION | CONTROLLER PHASE | DIRECTION | PULSE OR PRESENCE | EXTENSION (SEC.) | DELAY (SEC.) | DELAY INHIBITED DURING | CONNECT TO DETECTOR UNIT (Unit-Channel) | LOOP DETECTION TYPE |
|---|---|---|---|---|---|---|---|---|
| DZ-6 | 2 | NB | PULSE | 1.0 | | | 1-1 | V.D. |
| DZ-7 | 5 | NBLT | PRESENCE | 2.0 | 3 | ϕ5 | 1-2 | V.D. |
| DZ-8 | 4 | EB | PRESENCE | | 8 | ϕ4 | 1-3 | V.D. |
| DZ-9 | 7 | EBLT | PRESENCE | 2.0 | 3 | ϕ7 | 1-4 | V.D. |
| DZ-10 | 3 | WBLT | PRESENCE | 2.0 | 3 | ϕ3 | 2-1 | V.D. |
| DZ-11 | 8 | WB | PRESENCE | | 8 | ϕ8 | 2-2 | V.D. |
| DZ-12 | 1 | SBLT | PRESENCE | 2.0 | 3 | ϕ1 | 2-3 | V.D. |
| DZ-13 | 6 | SB | PULSE | 1.0 | | | 2-4 | V.D. |

V.D. - VIDEO PRESENCE DETECTION

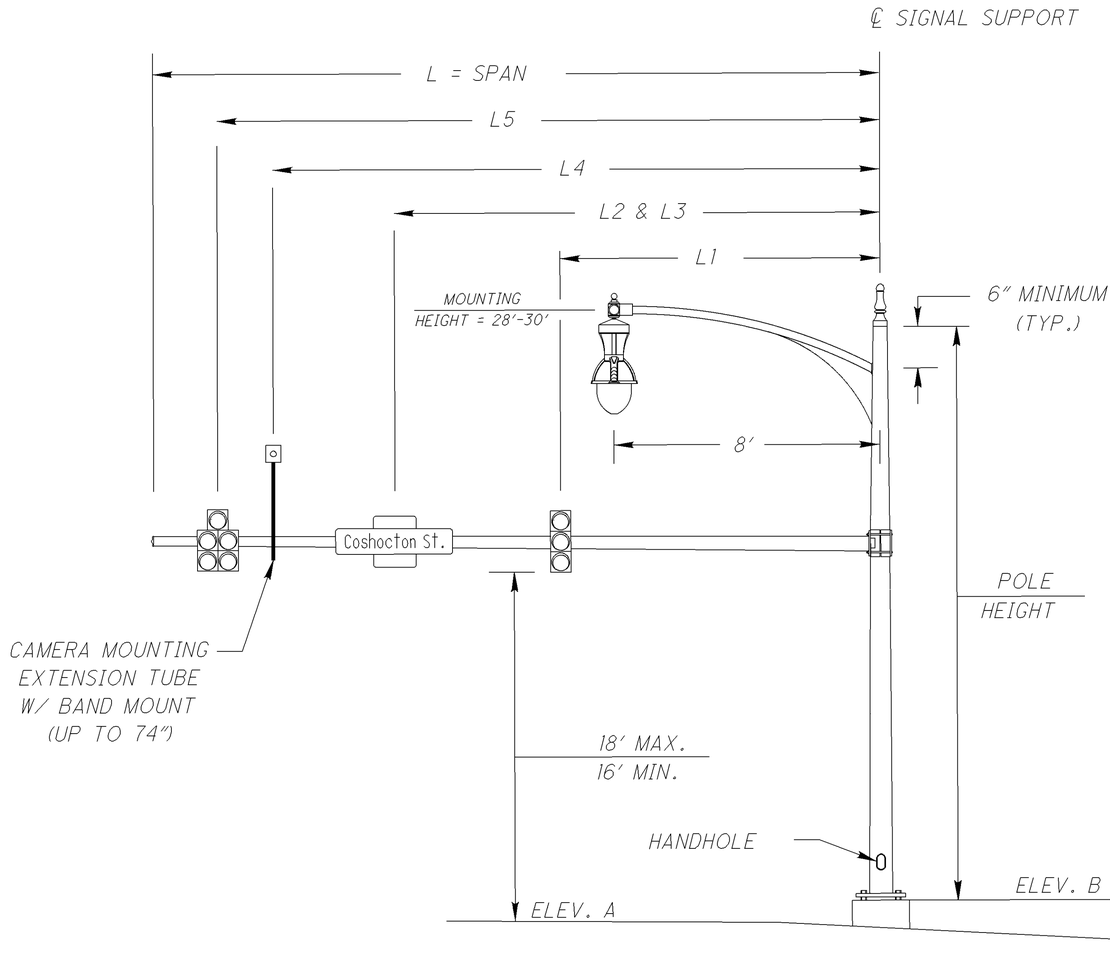
CALCULATED DNM CHECKED BFB

SIGNAL PLAN DETAILS - U.S. 62/S.R. 37

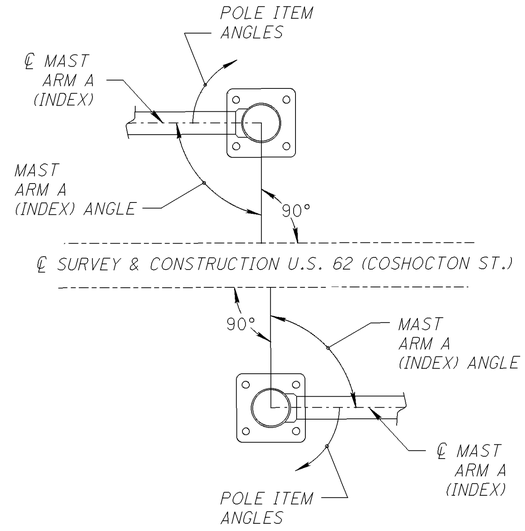
LIC-62-4.63



85170_SDS_05.DGN 3/28/2011




## SIGNAL POLE DIAGRAM




| SUPPORT NO. | MAST ARM (INDEX) ANGLE | ORIENTATION ANGLES FROM MAST ARM A | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MAST ARM B | HANDHOLE | POWER SERVICE AND DISCONNECTS | PEDESTRIAN SIGNAL HEAD | PEDESTRIAN PUSH BUTTON | CONTROLLER | LUMINAIRE BRACKET ARM | UPS |
| 3 | 0° | 90° | 0° | | 0° / 90° | 45° | | 0° | |
| 4 | 0° | 90° | 180° | 180° | 0° / 90° | 0° | 270° | 0° | 90° |
| PED-5 | | | 90° | | 0° / 270° | 270° | | | |
| PED-6 | | | 90° | | 0° / 270° | 0° | | | |

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO SHEET 47:

ITEM 630 - SIGN SUPPORT ASSEMBLY, POLE MOUNTED - 9 EACH

ITEM 630 - SIGN, FLAT SHEET - 55.5 S.F.
4(2.5 x 3.0) + 2(1.5 x 5.5) + 2(1.5 x 3.0) + 1(2.0 x 2.5) = 60.5 S.F.

| SUPPORT NO. | SIGNAL SUPPORT TYPE: STD. DWG. TC-12.30 | SIGNAL SUPPORT TYPE: STD. DWG. TC-81.21 | SIGNAL SUPPORT TYPE: DESIGN NO. | MAST ARM (A) | MAST ARM (B) | POLE HEIGHT (FT) | SPAN "L" (FT) | MAST ARM SIGNAL HEAD AND SIGN DETAILS: L1 ITEM | L1 OFFSET (FT) | L2 ITEM | L2 OFFSET (FT) | L3 ITEM | L3 OFFSET (FT) | L4 ITEM | L4 OFFSET (FT) | L5 ITEM | L5 OFFSET (FT) | L6 ITEM | L6 OFFSET (FT) | L7 ITEM | L7 OFFSET (FT) | L8 ITEM | L8 OFFSET (FT) | ELEVATION: ELEV. A | ELEV. B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | | X | 8 | X | | 28.0 | 58.0 | S4 | 26.0 | S3 | 41.0 | S2 | 48.5 | S7 | 50.0 | S6 | 52.5 | S1 | 56.5 | | | | | 1157.64 | 1157.75 |
| | | | | | X | | 42.0 | S1 | 32.0 | S7 | 33.0 | S5 | 36.0 | S7 | 38.5 | S2 | 40.0 | | | | | | | 1157.82 | |
| 4 | | X | 7 | X | | 28.0 | 60.0 | S8 | 26.4 | S4 | 31.4 | S3 | 46.0 | S2 | 50.5 | S7 | 52.0 | S6 | 54.5 | S1 | 58.5 | | | 1157.50 | 1157.35 |
| | | | | | X | | 25.0 | S1 | 15.5 | S5 | 19.5 | S7 | 22.5 | S2 | 23.5 | | | | | | | | | 1157.21 | |
| PED-5 | | | | | | 9.0 | | | | | | | | | | | | | | | | | | | 1157.60 |
| PED-6 | | | | | | 9.0 | | | | | | | | | | | | | | | | | | | 1157.70 |

| S1 | S2 | S3 | S4 |
|---|---|---|---|
| SIGNAL HEAD 3-SECTION, 1-WAY | SIGNAL HEAD 5-SECTION, 1-WAY | SIGN R3-5L-30 30" X 36" | SIGN R3-6R-30 30" X 36" |
| **S5** | **S6** | **S7** | **S8** |
| SIGN D3-1-60 18" X 66" | SIGN D3-1-36 18" X 36" | VIDEO DETECTION EQUIPMENT | SIGN R10-11A-30 24" X 30" |

CALCULATED DNM
CHECKED BFB

SIGNAL PLAN DETAILS - U.S. 62/S.R. 37

LIC-62-4.63



85170_SDS_06.DGN 3/28/2011

## TRAFFIC SIGNAL TIMING CHART U.S. 62/OREGON ST.

### TIMING SCHEDULE

| INTERVAL OR FEATURE | | | φ1 | φ2 | φ4 | φ6 | φ8 |
|---|---|---|---|---|---|---|---|
| INTERSECTION MOVEMENT | | | SBLT | NB | EB | SB | WB |
| MINIMUM GREEN (TRUE) | | (SEC.) | 8.0 | 17.0 | 17.0 | 17.0 | 17.0 |
| PASSAGE TIME | | (SEC.) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| MAXIMUM GREEN I | | (SEC.) | 21.0 | 44.0 | 28.0 | 69.0 | 28.0 |
| MAXIMUM GREEN II | | (SEC.) | | | | | |
| YELLOW CHANGE | | (SEC.) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| ALL RED CLEARANCE | | (SEC.) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| ADDED INITIAL | | (SEC./ACTUATION) | | | | | |
| MAXIMUM INITIAL | | (SEC.) | | | | | |
| TIME BEFORE REDUCTION | | (SEC.) | | | | | |
| TIME TO REDUCE | | (SEC.) | | | | | |
| MINIMUM GAP | | (SEC.) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| START UP GREEN | | | | X | | X | |
| START UP YELLOW | | | | | | | |
| START UP RED | | | | | | | |
| RECALL | MINIMUM | | | X | | X | |
| | MAXIMUM | | | | | | |
| WALK | | | | 4.0 | 4.0 | 4.0 | 4.0 |
| FLASHING DON'T WALK | | | | 13.0 | 13.0 | 13.0 | 13.0 |
| FLASH | | | | Y | R | Y | R |

## TRAFFIC SIGNAL TIMING CHART U.S. 62/S.R. 37

### TIMING SCHEDULE

| INTERVAL OR FEATURE | | | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 |
|---|---|---|---|---|---|---|---|---|---|---|
| INTERSECTION MOVEMENT | | | SBLT | NB | WB LT | EB | NBLT | SB | EB LT | WB |
| MINIMUM GREEN (TRUE) | | (SEC.) | 8.0 | 22.0 | 8.0 | 22.0 | 8.0 | 22.0 | 8.0 | 22.0 |
| PASSAGE TIME | | (SEC.) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| MAXIMUM GREEN I | | (SEC.) | 18.0 | 22.0 | 18.0 | 22.0 | 18.0 | 22.0 | 18.0 | 22.0 |
| MAXIMUM GREEN II | | (SEC.) | | | | | | | | |
| YELLOW CHANGE | | (SEC.) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| ALL RED CLEARANCE | | (SEC.) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| ADDED INITIAL | | (SEC./ACTUATION) | | | | | | | | |
| MAXIMUM INITIAL | | (SEC.) | | | | | | | | |
| TIME BEFORE REDUCTION | | (SEC.) | | | | | | | | |
| TIME TO REDUCE | | (SEC.) | | | | | | | | |
| MINIMUM GAP | | (SEC.) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| START UP GREEN | | | | X | | | | X | | |
| START UP YELLOW | | | | | | | | | | |
| START UP RED | | | | | | | | | | |
| RECALL | MINIMUM | | | X | | | | X | | |
| | MAXIMUM | | | | | | | | | |
| WALK | | | | 4.0 | | 4.0 | | 4.0 | | 4.0 |
| FLASHING DON'T WALK | | | | 18.0 | | 18.0 | | 18.0 | | 18.0 |
| FLASH | | | | R | | R | | R | | R |

| PLAN | TIME PERIOD IN EFFECT |
|---|---|
| 1 | 5:00 A.M. TO 1:00 P.M. |
| 2 | 1:00 P.M. TO 7:30 P.M. |
| 3 | |

NOTES:

1. ALL OFFSETS ARE REFERENCED TO THE END OF THE NB/SB THROUGH PHASES (φ2 & φ6).
2. COORDINATED INTERSECTIONS SHALL RUN A FREE TIMING PLAN (LOCAL TIMING) BETWEEN THE HOURS OF 7:30 P.M. AND 5:00 A.M..

U.S. 62/OREGON ST.

| TIMING PLAN | CYCLE LENGTH (SEC.) | FULL DEMAND PHASE SPLITS (SEC.) | | | | | | | | OFFSET |
|---|---|---|---|---|---|---|---|---|---|---|
| | | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 | |
| 1 | 106.0 | 58.0 | 0.0 | | 32.0 | | 0.0 | | 32.0 | 0.0 |
| 2 | 108.0 | 48.0 | 0.0 | | 26.5 | | 0.0 | | 26.5 | 0.0 |
| | | | | | | | | | | |
| | | | | | | | | | | |

U.S. 62/S.R. 37

| TIMING PLAN | CYCLE LENGTH (SEC.) | FULL DEMAND PHASE SPLITS (SEC.) | | | | | | | | OFFSET |
|---|---|---|---|---|---|---|---|---|---|---|
| | | φ1 | φ2 | φ3 | φ4 | φ5 | φ6 | φ7 | φ8 | |
| 1 | 106.0 | 79.5 | 0.0 | 26.5 | 53.0 | 79.5 | 0.0 | 26.5 | 53.0 | 84.0 |
| 2 | 108.0 | 79.5 | 0.0 | 26.5 | 53.0 | 79.5 | 0.0 | 26.5 | 53.0 | 102.0 |
| | | | | | | | | | | |
| | | | | | | | | | | |

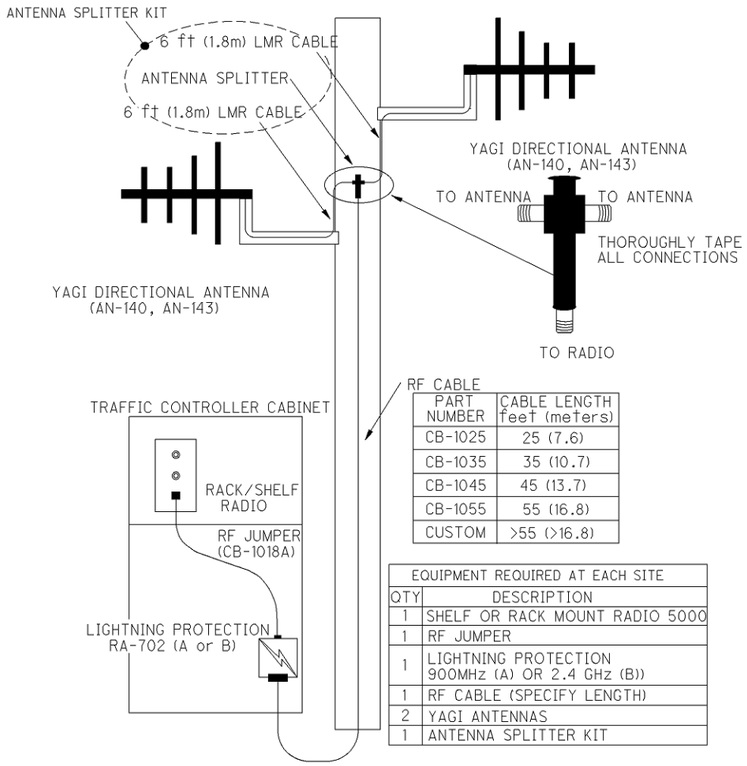
CALCULATED DNM CHECKED BFB

TRAFFIC SIGNAL TIMING AND COORDINATION

LIC-62-4.63



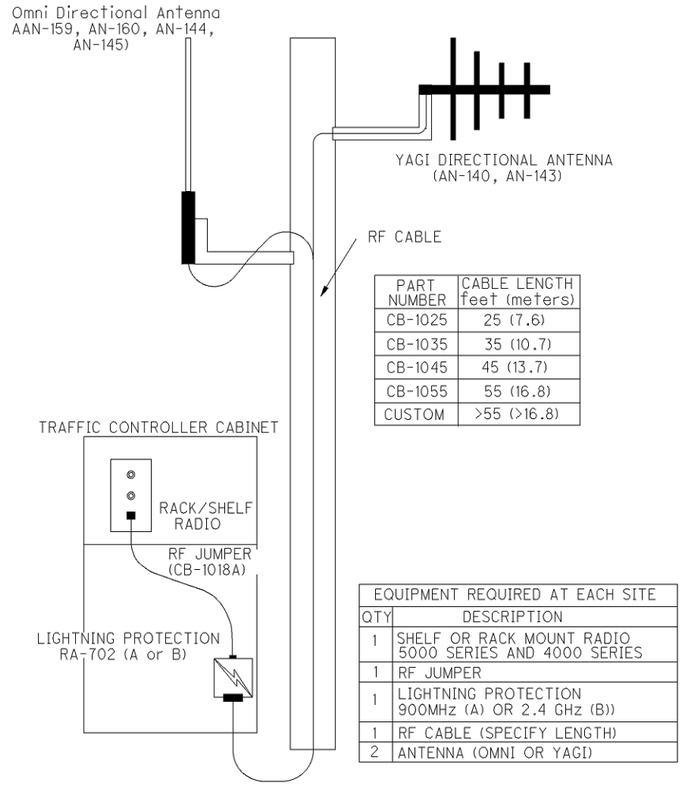
85170_SDS_07.DGN 1/7/2011




| PART NUMBER | CABLE LENGTH feet (meters) |
|---|---|
| CB-1025 | 25 (7.6) |
| CB-1035 | 35 (10.7) |
| CB-1045 | 45 (13.7) |
| CB-1055 | 55 (16.8) |
| CUSTOM | >55 (>16.8) |

| EQUIPMENT REQUIRED AT EACH SITE | |
|---|---|
| QTY | DESCRIPTION |
| 1 | SHELF OR RACK MOUNT RADIO 5000 |
| 1 | RF JUMPER |
| 1 | LIGHTNING PROTECTION 900MHz (A) OR 2.4 GHz (B)) |
| 1 | RF CABLE (SPECIFY LENGTH) |
| 2 | YAGI ANTENNAS |
| 1 | ANTENNA SPLITTER KIT |

ANTENNA SPLITTER KIT




| PART NUMBER | CABLE LENGTH feet (meters) |
|---|---|
| CB-1025 | 25 (7.6) |
| CB-1035 | 35 (10.7) |
| CB-1045 | 45 (13.7) |
| CB-1055 | 55 (16.8) |
| CUSTOM | >55 (>16.8) |

| EQUIPMENT REQUIRED AT EACH SITE | |
|---|---|
| QTY | DESCRIPTION |
| 1 | SHELF OR RACK MOUNT RADIO 5000 SERIES AND 4000 SERIES |
| 1 | RF JUMPER |
| 1 | LIGHTNING PROTECTION 900MHz (A) OR 2.4 GHz (B)) |
| 1 | RF CABLE (SPECIFY LENGTH) |
| 2 | ANTENNA (OMNI OR YAGI) |

OMNI OR YAGI DIRECTIONAL ANTENNA

OFFICE OF TRAFFIC ENGINEERING

DESIGNED | REVIEWED LAM

REVISION DATE 11/27/06 | CHECKED

PIS NUMBER 207560

PLAN INSERT SHEET

# RADIO INTERCONNECT DETAILS

LIC-62-4.63

1 / 1

60
66

85170_SDS_09.dgn DATED 11/04/2010

## MATERIAL SPECIFICATIONS FOR GENERATOR POWER PANEL EQUIPMENT

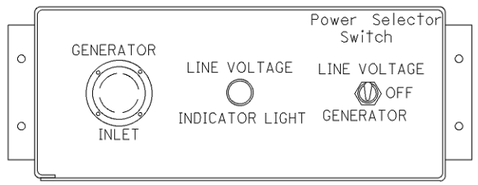
GENERATOR INLET --- The inlet shall be 30 amp, 125/250V, locking, four (4) wire grounding and meet the NEMA configuration number L14-30-P 30A 125/250V specification. The inlet shall be a Hubbell catalog #2715.

LINE VOLTAGE GENERATOR SWITCH --- The switch shall be 30 amp, 125/250V AC, two (2) pole, three (3) position (On, Off, On). The switch shall be a Hubbell catalog #1388.

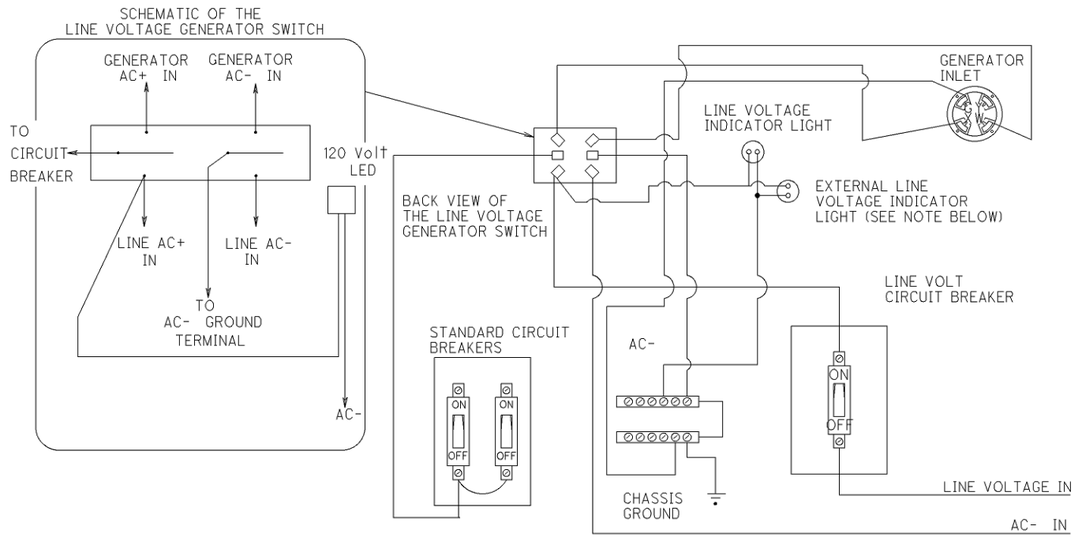
LINE VOLTAGE INDICATOR LIGHT --- The indicator light shall be a 125V AC light emitting diode with a red lens.

LINE VOLTAGE CIRCUIT BREAKER --- The circuit breaker shall be single pole single throw and a minimum of 30 amps. The amperage shall be increased to accomodate greater loads, if necessary. The gauge of the power cable shall be of proper size per the N.E.C.

EXTERNAL LINE VOLTAGE INDICATOR LIGHT --- The indicator light shall be a 1-inch (25mm) waterproof NEMA 4X or IP66 LED lamp with a GREEN lens.




FRONT VIEW OF GENERATOR POWER PANEL

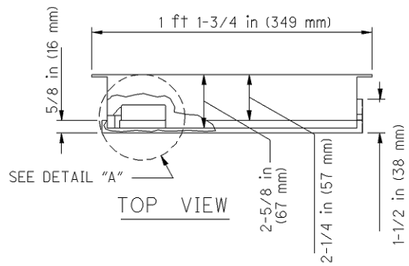



ELECTRICAL HOOKUP DETAIL FOR THE GENERATOR POWER PANEL

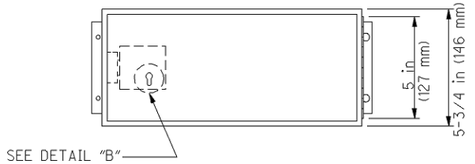
NOTE : EXTERNAL LINE VOLTAGE INDICATOR LIGHT required when called for in the plans. EXTERNAL LINE VOLTAGE INDICATOR LIGHT shall be located on the enclosure exterior for visibility from the adjacent roadway when all cabinet, and generator panel doors are closed.

85170_SDS_10.dgn DATED 11/04/2010

## GENERATOR POWER PANEL ENCLOSURE



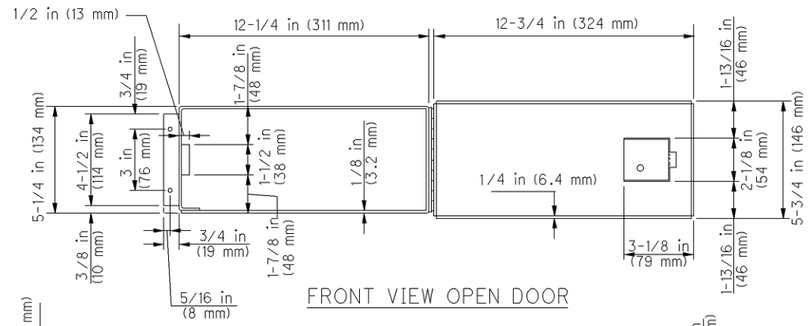

TOP VIEW



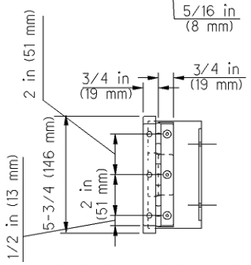

FRONT VIEW CLOSED DOOR

### NOTES

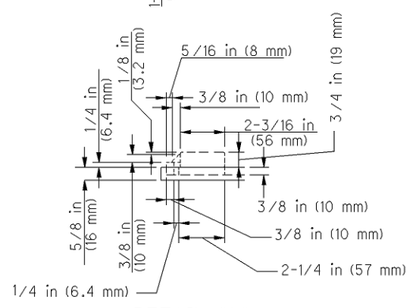
1. The enclosure shall be constructed Of 1/8 inch (3.2 millimeter) thick aluminum.
2. The lock shall be the standard police door type, keyed with the standard flasher door skeleton key.
3. The door shall be sealed with a foam rubber gasket to prevent moisture from entering the enclosure.
4. The enclosure shall be mounted onto the outside of the controller cabinet with non-accessible bolts and sealed with a high quality silicon caulk at all surfaces touching the cabinet.
5. The hinge shall be of stainless steel or equivalent corrosive-resistant material.
6. All metric dimensions in parentheses are in millimeters unless otherwise noted.



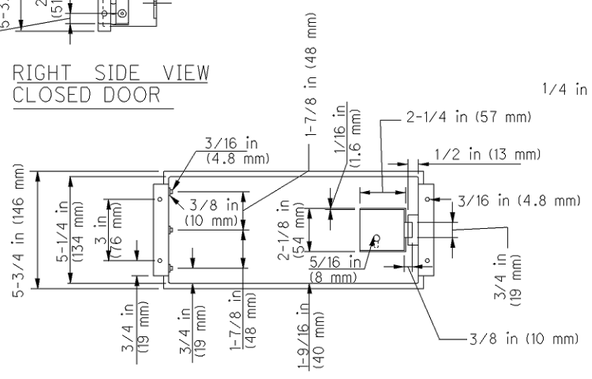

FRONT VIEW OPEN DOOR



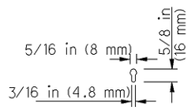

RIGHT SIDE VIEW CLOSED DOOR




DETAIL "A"




BACK VIEW CLOSED DOOR




DETAIL "B"

OFFICE OF TRAFFIC ENGINEERING

DESIGNED | REVIEWED LAM

REVISION DATE 4/16/10 | CHECKED

PIS NUMBER 203010

PLAN INSERT SHEET

GENERATOR POWER PANEL

LIC-62-4.63

1 / 1

61
66

| SHEET NO. | LOCATION | | | SIDE | 625 | | | | | | | | | | | 632 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | * - PULL BOX IN QUANTITIES | | | | BRACKET ARM, 8', AS PER PLAN | CONDUIT, 2", 725.05 | CONDUIT, 3", 725.04 | CONDUIT, 3", 725.05 | LUMINAIRE, CONVENTIONAL, AS PER PLAN | TRENCH, 24" DEEP, AS PER PLAN | TRENCH IN PAVED AREA, TYPE A | TRENCH IN PAVED AREA, TYPE B, AS PER PLAN | PULL BOX, 725.08, 18" | PULL BOX, 725.08, 24" | GROUND ROD | VEHICULAR SIGNAL HEAD, (LED), BLACK, 3-SECTION, 12" LENS, 1-WAY, WITH BACKPLATE, A.P.P. | VEHICULAR SIGNAL HEAD, (LED), BLACK, 5-SECTION, 12" LENS, 1-WAY, WITH BACKPLATE, A.P.P. | PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2, AS PER PLAN | COVERING OF VEHICULAR SIGNAL HEAD | COVERING OF PEDESTRIAN SIGNAL HEAD | PEDESTRIAN PUSHBUTTON | SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG. | SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG. | PHONE DROP | SIGNAL SUPPORT FOUNDATION | PEDESTAL FOUNDATION |
| | | | | LT./RT. | EACH | FT. | FT. | FT. | EACH | FT. | FT. | FT. | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | FT. | FT. | EACH | EACH | EACH |
| | U.S. 62/OREGON STREET | | | | | | | | | | | | | | | | | | | | | | | | |
| 53 | PED-1 | TO | *PB-1 | LT. | | 5 | | | | 5 | | | 1 | | 1 | | | 2 | | 2 | 1 | | 15 | | | 1 |
| | PB-1 | TO | *PB-2 | CL. | | | 50 | | | 11 | 6 | 33 | 1 | | | | | | | | | | 60 | | | |
| | P-1 | TO | PB-2 | RT. | 1 | 7 | | | 1 | 4 | | | | | 1 | 3 | 1 | 2 | 4 | 2 | 1 | 104 | 204 | | 1 | |
| | PB-2 | TO | *PB-3 | RT. | | | 69 | | | 15 | 9 | 45 | | 1 | | | | | | | | 158 | 316 | | | |
| | PB-1 | TO | *PB-4 | LT. | | | 75 | | | 38 | | 37 | | 1 | | | | | | | | 85 | | | | |
| | P-2 | TO | PB-4 | LT. | 1 | 12 | | | 1 | 12 | | | | | 1 | 4 | | 1 | 4 | 1 | | 60 | 219 | | 1 | |
| | PED-4 | TO | PB-4 | LT. | | 16 | | | | 16 | | | | | 1 | | | 1 | | 1 | 1 | | 38 | | | 1 |
| | PB-4 | TO | PB-3 | CL. | | | 46 | | | | | 46 | | | | | | | | | | | 224 | | | |
| | PB-3 | TO | *PB-5 | RT. | | | | 14 | | 3 | 11 | | | 1 | | | | | | | | 24 | 192 | | | |
| | PED-3 | TO | PB-5 | RT. | | 19 | | | | 3 | 16 | | | | 1 | | | 1 | | 1 | 1 | | 41 | | | 1 |
| | PED-2 | TO | PB-5 | RT. | | 12 | | | | 12 | | | | | 1 | | | 1 | | 1 | | 23 | 27 | | | 1 |
| | PD-5 | TO | CC-1 | RT. | | | | 12 | | 2 | | | | | 1 | | | | | | | | 160 | 1 | | |
| | U.S. 62/S.R. 37 | | | | | | | | | | | | | | | | | | | | | | | | |
| 56 | *PB-6 | TO | P-3 | RT. | 1 | 6 | | | 1 | 6 | | | 1 | | 1 | 2 | 2 | 2 | 4 | 2 | 1 | 46 | 222 | | 1 | |
| | PB-6 | TO | *PB-7 | CL. | | | 67 | | | | 3 | 64 | 1 | | | | | | | | | 77 | 231 | | | |
| | PED-5 | TO | PB-7 | LT. | | 4 | | | | | 4 | | | | 1 | | | 2 | | 2 | 1 | | 26 | | | 1 |
| | PB-7 | TO | *PB-8 | LT. | | 39 | | | | | 39 | | | 1 | | | | | | | | 49 | 196 | | | |
| | PB-8 | TO | *PB-9 | LT. | | | 55 | | | | | 55 | | 1 | | | | | | | | 65 | 260 | | | |
| | P-4/CC-2 | TO | PB-9 | LT. | 1 | | | 8 | 1 | 4 | | | | | 1 | 2 | 2 | 2 | 4 | 2 | 1 | 88 | 215 | | 1 | |
| | PB-9 | TO | *PB-10 | LT. | | 24 | | | | 5 | 19 | | 1 | | | | | | | | | | 34 | | | |
| | PB-10 | TO | *PB-11 | CL. | | | 50 | | | | | 50 | 1 | | | | | | | | | | 60 | | | |
| | PB-11 | TO | PED-6 | RT. | | 17 | | | | | 17 | | | | 1 | | | 2 | | 2 | 1 | | 39 | | | 1 |
| | TOTALS (CARRIED TO GENERAL SUMMARY) | | | | 4 | 161 | 412 | 34 | 4 | 136 | 124 | 330 | 6 | 5 | 11 | 11 | 5 | 16 | 16 | 16 | 8 | 839 | 2,779 | 1 | 4 | 6 |

CALCULATED DNM
CHECKED BFB

# TRAFFIC SIGNAL SUB-SUMMARY

LIC-62-4.63

62
66

85170_SSS_01.DGN 3/28/2011

| SHEET NO. | LOCATION | | | SIDE | 632 | | | | | | | | | | 633 | | | | | | 815 | 816 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | POWER CABLE, 2 CONDUCTOR, NO. 8 AWG. | POWER CABLE, 3 CONDUCTOR, NO. 8 AWG. | SERVICE CABLE, 3 CONDUCTOR, NO. 8 AWG. | POWER SERVICE, AS PER PLAN | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 7 POLE, WITH MAST ARMS TC-81.21 DESIGN 13 AND DESIGN 2, A.P.P. | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 8 POLE, WITH MAST ARMS TC-81.21 DESIGN 13 AND DESIGN 11, A.P.P. | COMBINATION SIGNAL SUPPORT, TYPE TC-81.21 DESIGN 12 POLE, WITH MAST ARMS TC-81.21 DESIGN 11 AND DESIGN 1, A.P.P. | COMBINATION SIGNAL SUPPORT, TYPE TC-12.30 DESIGN 6 POLE, WITH MAST ARMS TC-81.21 DESIGN 11 AND DESIGN 11, A.P.P. | PEDESTAL 9', AS PER PLAN | REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN | CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1, AS PER PLAN | CONTROLLER, MASTER, TRAFFIC RESPONSIVE | CABINET RISER | CABINET FOUNDATION, AS PER PLAN | CONTROLLER WORK PAD, AS PER PLAN | UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT | SPREAD SPECTRUM RADIO | VIDEO DETECTION SYSTEM, AS PER PLAN |
| | | | | LT./RT. | FT. | FT. | FT. | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH | EACH |
| | U.S. 62/OREGON ST. | | | | | | | | | | | | | 1 | | | | | | | | |
| 53 | PED-1 | TO | PB-1 | LT. | | | | | | | | | 1 | | | | | | | | | |
| | PB-2 | TO | P-1 | RT. | | | | | | | | 1 | | | | | | | | | | 2 |
| | P-2 | TO | PB-4 | LT. | | | | | | | 1 | | | | | | | | | | | 2 |
| | PED-4 | TO | PB-4 | LT. | | | | | | | | | 1 | | | | | | | | | |
| | PED-2 | TO | PB-5 | RT. | 29 | 64 | | 1 | | | | | 1 | | | | | | | | | |
| | PED-3 | TO | PB-5 | RT. | | | | | | | | | 1 | | | | | | | | | |
| | PB-5 | TO | CC-1 | RT. | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | U.S. 62/S.R. 37 | | | | | | | | | | | | | 1 | | | | | | | | |
| 56 | PB-6 | TO | P-3 | RT. | | | | | | 1 | | | | | | | | | | | | 2 |
| | PED-5 | TO | PB-7 | LT. | | | | | | | | | 1 | | | | | | | | | |
| | P-4/CC-2 | TO | PB-9 | LT. | 28 | 37 | 150 | 1 | 1 | | | | | | 1 | | | | | 1 | 1 | 2 |
| | PB-11 | TO | PED-6 | RT. | | | | | | | | | 1 | | | | | | | | | |
| | S.R. 37/PRATT ST. | | | | | | | | | | | | | 1 | | | | | | | | |
| | TOTALS (CARRIED TO GENERAL SUMMARY) | | | | 57 | 101 | 150 | 2 | 1 | 1 | 1 | 1 | 6 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 8 |

CALCULATED DNM
CHECKED BFB

# TRAFFIC SIGNAL SUB-SUMMARY

LIC-62-4,63



85170_SSS_02.DGN 3/28/2011

FINAL

| UTILITY OWNERS | |
|---|---|
| TYPE | NAME & ADDRESS |
| ELECTRIC | AMERICAN ELECTRIC POWER CO.<br>850 Tech Center Drive<br>Gahanna, Ohio 43230<br>Attn: Paul Paxton<br>614-883-6831 |
| TELEPHONE | CENTURYLINK CORPORATION<br>441 WEST BROAD ST.<br>PATASKLA, OHIO 43062<br>Attn: DEE REED<br>740-927-8282 |
| GAS | COLUMBIA GAS OF OHIO.<br>2429 LINDEN AVENUE<br>P.O. Box 310<br>ZANESVILLE, OHIO 43701<br>Attn: Craig Flynn<br>740-450-1205 |
| WATER | THE VILLAGE OF JOHNSTOWN WATER/WASTEWATER<br>599 SOUTH MAIN STREET, P.O. BOX 457<br>JOHNSTOWN, OHIO 43031<br>Attn: JACK LIGGETT<br>740-967-4746. |
| CABLE | TIME WARNER CABLE<br>3760 INTERCHANGE DR.<br>COLUMBUS, OHIO 43204<br>Attn: TERRY ALLEN<br>614-255-6349 |

# RIGHT OF WAY LEGEND SHEET LIC-62-4.63

LICKING COUNTY, OHIO
MONROE TOWNSHIP
VILLAGE OF JOHNSTOWN
TOWNSHIP 3 NORTH RANGE 15 WEST
UNITED STATES MILITARY LANDS

**PROJECT DESCRIPTION**

*SAFETY PROJECT TO IMPROVE U.S. 62 AND S.R. 37 INTERSECTION IN THE VILLAGE OF JOHNSTOWN IN LICKING COUNTY.*

*NOTES: THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.*

**UNDERGROUND UTILITIES**
CONTACT BOTH SERVICES
CALL TWO WORKING DAYS
**BEFORE YOU DIG**
CALL
1-800-362-2764
(TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY
OIL AND GAS PRODUCERS PROTECTIVE SERVICE CALL: 1-800-929-0988

**INDEX OF SHEETS:**


LEGEND SHEET ..... 1
PROPERTY MAP, RIGHT OF WAY PLANS & SUMMARY OF ADDITIONAL R/W ..... 2,3


**PLANS PREPARED BY:**

FIRM NAME : ODOT DISTRICT 5
PLANS PREPARED BY: TAMMARA HUDSON
FIELD REVIEW BY: TAMMARA HUDSON & ED SCHMELZER
DATE COMPLETED: 10-20-09
OWNERSHIP VERIFIED BY: TAMMARA HUDSON
DATE COMPLETED: October 9, 2009
DATE COMPLETED: October 23, 2009

**STRUCTURE KEY**

- COMMERCIAL
- RESIDENTIAL
- OUT-BUILDING

LEGEND:
WL = FEE SIMPLE WITH LIMITATION OF ACCESS
WD = WARRANTY DEED
BS = BILL OF SALE
PRW = PROPERTY RIGHT FEE SIMPLE
SH = STANDARD HIGHWAY EASEMENT
LA = LIMITED ACCESS EASEMENT
T = TEMPORARY EASEMENT
SL = SLOPE EASEMENT
S = SEWER EASEMENT
CH = CHANNEL EASEMENT
FL = FLOW EASEMENT
U = UTILITY EASEMENT
A = AERIAL EASEMENT
PRE = PROPERTY RIGHT
SC = SCENIC EASEMENT
V = IN NAME OF ANOTHER STATE AGENCY, LPA, ETC.
R = SPECIAL RESERVATION
WA = WORK AGREEMENT
SA = SPECIAL AGREEMENT AND WAIVER OF DAMAGES

**CONVENTIONAL SYMBOLS**

County Line
Township Line
Section Line
Corporation Line
Fence Line (Ex) (Pr)
Center Line
Right of Way (Ex) (Standard Highway) Ex SH
Right of Way (Pr) (Fee) R/W
Right of Way (Ex)(Fee) Ex R/W
Temporary Right of Way TMP
Storm Sewer Ease. (Pr) SW
Utility Ease. (Ex) Ex U
Railroad Right of Way (Ex) Ex RR
Railroad
Guardrail (Ex) (Pr)
Construction Limits
Edge of Pavement (Ex)
Edge of Pavement (Pr)
Edge of Shoulder (Ex)
Edge of Shoulder ( Pr)

Ditch / Creek (Ex)
Ditch / Creek (Pr)
Tree Line (Ex)
Ownership Hook Symbol , Example
Property Line Symbol , Example
Break Line Symbol , Example
Tree (Pr) , Tree (Ex) , Shrub (Ex)
Tree (Remove) , Shrub (Remove)
Evergreen (Ex) , Stump
Evergreen (Remove) , Stump (Remove)
Wetland (Pr) , Grass (Pr) , Aerial Target
Post (Ex) , Mailbox (Ex) , Mailbox (Pr)
Light (Ex) , Telephone Marker (Ex)
Fire Hydrant (Ex) , Water Meter (Ex)
Water Valve (Ex) , Utility Valve Unknown (Ex.)
Telephone Pole (Ex) , Power Pole (Ex)
Light Pole (Ex)

**MONUMENT LEGEND**

- EXISTING R/W MONUMENT BOX
- PROPOSED R/W MONUMENT BOX
- EXISTING CONCRETE MONUMENT
- PROPOSED CONCRETE MONUMENT
- RAILROAD SPIKE FOUND
- RAILROAD SPIKE SET
- I.R.F. IRON PIN FOUND
- I.R.F. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
  3/4" x 30" REBAR WITH ALUMINUM CAP
  STAMPED "ODOT R/W DISTRICT 5"
- R.F. IRON PIPE FOUND
- R.S. IRON PIPE SET
- P.K.F. P.K. NAIL FOUND
- P.K.S. P.K. NAIL SET

*I, Charles W. Price, Jr., P.S. have conducted a survey of the existing conditions for the Ohio Department of Transportation on 06/22/09. The results of that survey are contained herein.*

*Underground utility locations are shown for informational purposes only. Though they are believed to be accurate, their location is as marked on the ground by the utility company per OUPS Confirmation Number (s) A916700127, A916700128 (E), A916700137, A916700138 (N), A916700148, A916700151W, A916700156 & A916700157 S and those markings subsequently surveyed as part of this project.*

*As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for property takes contained herein.*

*All of my work contained herein was conducted in accordance with Ohio Administrative Code 4733-37 commonly known as "A Minimum Standards for Boundary Surveys in the State of Ohio" unless noted.*
*The words I and my as used herein are to mean that either myself or someone working under my direct supervision.*

Charles W. Price, Jr., P.S.
Charles W. Price, Jr., Professional Land Surveyor No. S-7825,

12-20-10
Date:

SURVEYORS SEAL
STATE OF OHIO
CHARLES W. PRICE, JR.
S-7825
REGISTERED SURVEYOR

SIGNED: Charles W. Price, P.S.
DATE: 12-20-10

FEDERAL PROJECT NO. E090 (113)
PID NO. 85170
R/W DESIGNER T.H.
R/W REVIEWER C.P.
RIGHT OF WAY LEGEND SHEET
LIC-62-4.63
1 / 3
64 / 66

p:\Lic\85170\design\Right_of_Way\Plan_Sheets\sr037_RLS_001.dgn 12/17/10

# LICKING COUNTY OHIO, OHIO
# MONROE TOWNSHIP
# VILLAGE OF JOHNSTOWN
# TOWNSHIP 3 NORTH RANGE 15 WEST

VILLAGE OF JOHNSTOWN (1873)
PLAT BOOK 2, PAGE 456

NOTE:
THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

- LICKING COUNTY TAX MAP, LEASE D.B. 1, PG. 486 AND JOHNSTOWN PLAT D.B. 00F-0455, VARIOUS SURVEY PLATS AND IRON PINS FOUND IN THE FIELD.

RICHARD L. SCOVELL AND
TERESA A. SCOVELL TRUSTEES
6 SOUTH MAIN STREET
LOTS 68-69
053-177858-000.00

KATHLEEN J. MEYER AND
CRAIG B. PERKINS
053-180246-000.00
22 NORTH MAIN ST.
NO R/W REQUIRED

SUNOCO
GAS STATION

STANEART PROPERTIES LLC
8 NORTH MAIN STREET
053-177972-00.000
NO R/W REQUIRED

℄ EXISTING RIGHT OF WAY AND CONSTRUCTION U.S. 62 (COSHOCTON ST.)

℄ EXISTING RIGHT OF WAY AND CONSTRUCTION S.R. 37 (MAIN ST.)

℄ STA. 248+68.80 U.S. 62 (COSHOCTON ST.) =
℄ STA. 244+99.20 S.R. 37 (MAIN ST.)

MULTIPLE BRICK COMMERCIAL BUILDINGS WITH SEPARATE OWNERS
SEE LICKING COUNTY TAX MAP

L20 - N 53° 14' 31" E , 33.00'
LEAD IN (3-WA)

| PARCEL | ELEMENT | BEARING | DISTANCE | STATION & OFFSET S.R. 37 & U.S. 62 |
|---|---|---|---|---|
| 3-WA | L16 | N 53° 16' 25" E | 1.43' | 249+03.13/33.00' RT. |
| 3-WA | L17 | S 36° 13' 40" E | 19.00' | 245+51.11/34.35' LT. |
| 3-WA | L18 | S 53° 23' 47" W | 1.35' | 245+51.11/33.00' LT. |
| 3-WA | L19 | N 36° 26' 47" W | 19.00' | 245+32.11/33.00' LT. |

CLIFTON SHELLENBARGER AND
CHERYL SHELLENBARGER
PARCEL 2, LOT 53
053-178392-000.00

CLIFTON SHELLENBARGER AND
CHERYL SHELLENBARGER
8 WEST COSHOCTON STREET
PARCEL 1, LOT 52
053-178032-000.00
NO R/W REQUIRED

MARATHON
GAS STATION

THE VILLAGE OF JOHNSTOWN
(CITY PARK) MAIN ST. JOHNSTOWN
053-177538-00.000
D.B. 00F-0455

MONROE TOWNSHIP
BOARD OF TRUSTEES
053-177538-00.000
D.B. 840, PG. 938
NO R/W REQUIRED

MULTI-STY BRICK
MONROE TWP. HALL

STA. 243+34.73
31.58' LT. S.R. 37

STA. 245+32.11
33.00' LT S.R. 37=
STA. 249+01.71
33.00' RT. U.S. 62

PR. BRICK WALKWAY

S 36° 26' 47" E , 33.09' & 32.91'
LEAD IN (1-WDV1, 3-WA)

STA. 245+32.29

STA. 245+79.22
33.35' RT S.R. 37

STA. 245+87.79
33.00' RT S.R. 37

STA. 246+88.09
33.00' RT.

90°

+78.6

S 36° 26' 47" E

EX. R/W CORNER
STA. 244+66.29
33.00' RT S.R. 37=
STA. 248+35.89
33.00' LT. U.S. 62

S 53° 33' 04"W , 33.00'
LEAD IN (1-WDV1)

STONE TRASH
CONTAINER
(TO BE REMOVED)

STA. 245+32.29
33.00' RT S.R. 37=
STA. 248+35.71
33.00' RT. U.S. 62

(1-WDV1) DO NOT DISTURB EXISTING CLOCK AND BENCHES

IRON PIN FD.
STA. 245+88.30
33.57' RT.

DRILL HOLE FD.
STA. 246+32.25
33.82' RT.

BRICK BENCH
(TO BE REMOVED)

LANDSCAPE AREA
(DO NOT DISTRUB)

FLAG POLE

LIGHT POLES

GAZEBO

EX. LAMP POST
(TO BE REMOVED)

PR. TRAFFIC PULL BOX
& SIGNAL POLE

STA. 245+87.80
35.00' RT S.R. 37

STA. 245+58.00
55.00' RT S.R. 37

STA. 247+88.00
33.00' RT U.S. 62

S 36° 36' 13" E
3.26' (1-WDV1),
(1-WDV3)

STA. 247+88.00
42.00' RT U.S. 62 (1-T1)

STA. 247+88.00
36.26' RT U.S. 62
(1-WDV1, 1-WDV3 & 1-T1)

N 53° 23' 47" E
263.00' (1-WDV3)

S 53° 30' 38" W
264.81' (1-WDV3)

IRON PIPE FD.
STA. 247+19.11
32.52' LT.

℄ EXISTING RIGHT OF WAY
AND CONSTRUCTION U.S. 62
(COSHOCTON ST.)

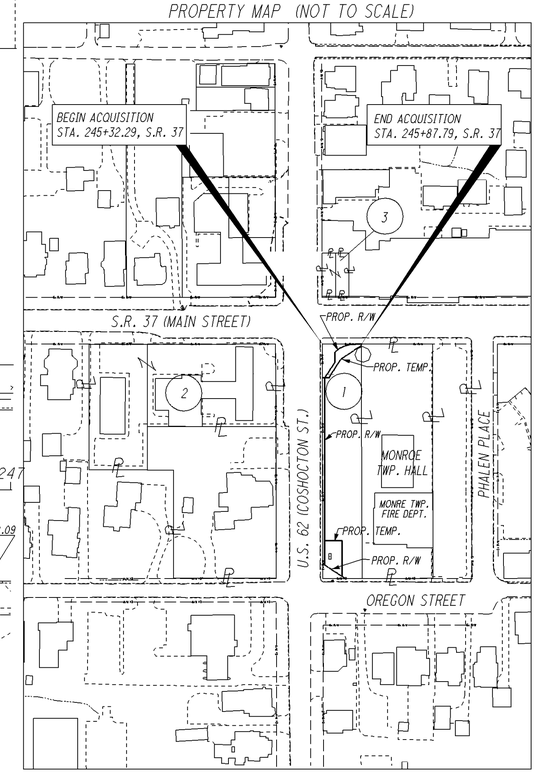
PROPOSED R/W

33.00'

N 53° 23' 47" E

MATCHLINE STA. 247+00 (SEE SHEET 3/3)

PROPERTY MAP (NOT TO SCALE)




1-WDV1 & 1-T1 LINE & CURVE DATA TABLE

| PARCEL | ELEMENT | BEARING | DISTANCE | ARC LENGTH | CENTRAL ANGLE | RADIUS | CHORD LENGTH | STATION & OFFSET/S.R. 37 |
|---|---|---|---|---|---|---|---|---|
| 1-WDV1 | L1 | S 36° 26' 47" E | 55.50' | | | | | |
| 1-WDV1 | L2 | N 38° 45' 57" W | 8.58' | | | | | |
| 1-WDV1 | CS-1 | N 57° 18' 08" W | | 32.05' | 44°01'58" LT. | 41.70' | 31.27' | 245+50.00/44.48' RT. |
| 1-WDV1 | L3 | NOT USED | | | | | | |
| 1-WDV1 | L4 | S 53° 33' 13" W | 14.17' | | | | | 245+50.00/58.64' RT. |
| 1-WDV1 | L5 | S 86° 33' 01" W | 26.30' | | | | | 245+35.68/80.70' RT. |
| 1-WDV1 | CS-2 | NOT USED | | | | | | |
| 1-WDV1 | L6 | NOT USED | | | | | | |
| 1-WDV1 | L7 | N 36° 36' 13" W | 3.26' | | | | | |
| 1-WDV1 | L8 | N 53° 23' 47" E | 47.71' | | | | | |
| | | | | | | | | |
| 1-T1 | L6 | NOT USED | | | | | | |
| 1-T1 | CS-2 | NOT USED | | | | | | |
| 1-T1 | L5 | N 86° 33' 01" E | 26.30' | | | | | 245+50.00/58.64' RT. |
| 1-T1 | L4 | N 53° 33' 13" E | 14.17' | | | | | 245+50.00/44.48' RT. |
| 1-T1 | L3 | NOT USED | | | | | | |
| 1-T1 | CS-1 | S 57° 18' 08" E | | 32.05' | 44°01'58" RT. | 41.70' | 31.27' | |
| 1-T1 | L2 | S 38° 45' 57" E | 8.58' | | | | | |
| 1-T1 | L9 | S 53° 23' 47" W | 2.00' | | | | | |
| 1-T1 | L10 | N 70° 18' 57" W | 35.89' | | | | | |
| 1-T1 | L11 | S 86° 23' 44" W | 30.57' | | | | | |
| 1-T1 | L12 | N 36° 36' 13" W | 5.74' | | | | | |

| REV. BY | DATE | DESCRIPTION |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| T.H. | 03-30-11 | ADDED PARCEL 1-WDV3, REV'D 1-WDV1 & 1-T2 |
| T.H. | 01-06-11 | REMOVED PARCEL 2-WDV |

DATE COMPLETED

TOTAL NUMBER OF :
2 OWNERSHIPS
6 PARCELS
0 TOTAL TAKES
0 OWNERSHIPS W/ STRUCTURES INVOLVED

NOTE: ALL TEMPORARY PARCELS TO BE OF 12 MONTH DURATION.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

ALL AREAS IN ACRES

NET RESIDUE = RECORD AREA - TOTAL P.R.O. - NET TAKE

C = CALCULATED AREA

* DENOTES RIGHT OF WAY ENCROACHMENT

| PARCEL NO. | OWNER | SHEET NO. | OWNERS BOOK | RECORD PAGE | AUDITOR'S PARCEL | RECORD AREA(AC.) | TOTAL P.R.O. | GROSS TAKE | P.R.O. IN TAKE | NET TAKE | STRUCTURE | NET LEFT | RESIDUE RIGHT | TYPE FUND | REMARKS AND PERSONALTY | AS ACQUIRED BOOK | AS ACQUIRED PAGE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-WDV1 | THE VILLAGE OF JOHNSTOWN (CITY PARK) | 2 | D.B. 00F | 0455 | 053-177538-00.000 | 0.420 (C) | 0.000 | 0.018 | 0.000 | 0.018 | | | | LOCAL | EX. BRICK BENCH, EX. LAMP POST & EX. STONE TRASH CONTAINER TO BE REMOVED | | |
| 1-WDV2 | | 3 | | | 053-177538-00.000 | | | 0.007 | 0.000 | 0.007 | | | | LOCAL | THE ENTIRE CORNER LOT SHARES SAME PARCEL NUMBER | | |
| 1-WDV3 | | 2,3 | | | 053-177538-00.000 | | | 0.018 | 0.000 | 0.018 | | | | LOCAL | ACQUIRE IN THE NAME OF THE VILLAGE OF JOHNSTOWN | | |
| | TOTAL | | | | | | | 0.043 | 0.000 | 0.043 | | | 0.377 | | | | |
| | | | | | | | | | | | | | | | | | |
| 1-T1 | | 2 | | | | | | 0.013 | 0.000 | 0.013 | | | | LOCAL | GRADING | | |
| 1-T2 | | 3 | | | | | | 0.024 | 0.000 | 0.024 | | | | LOCAL | TO CONSTRUCT SIDEWALK & BENCH | | |
| 2 | NOT USED | | | | | | | | | | | | | | | | |
| 3-WA | RICHARD L. SCOVELL & TERESA A. SCOVELL TRUSTEES | 2 | O.R. 491 | PG. 896 | 053-177858-00.000 | 0.027 (C) | 0.000 | 0.001 | 0.000 | 0.001 | | 0.026 | | | TRACT 1, LOT 68; RESIDUE IS LEFT OF S.R. 37 | | |

FINAL

RIGHT OF WAY PLAN
STA. 242+50 TO STA. 247+00 (S.R. 37)

LIC-62-4.63

PID NO. 85170

R/W DESIGNER T.H.
R/W REVIEWER C.P.

HORIZONTAL SCALE IN FEET
0 10 20 40

2 / 3

65
66

p:/lic/85170/Design/Right_of_way/Plan Sheets/SR037_RDS_001.DGN 03/30/11

# LICKING COUNTY, OHIO
# MONROE TOWNSHIP
# VILLAGE OF JOHNSTOWN
# TOWNSHIP 3 NORTH RANGE 15 WEST

NOTE:

THE EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING DOCUMENTATION ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 5 OFFICE, JACKSONTOWN, OHIO.

- LICKING COUNTY TAX MAP, LEASE D.B. 1, PG. 486 AND JOHNSTOWN PLAT D.B. 00F-0455 ALONG WITH VARIOUS SURVEY PLATS AND IRON PINS FOUND IN THE FIELD.

I-WDV2 & I-T2 LINE DATA TABLE

| PARCEL | ELEMENT | BEARING | DISTANCE |
|---|---|---|---|
| I-WDV2 | *L1 | N 53° 23' 47" E | 20.54' |
| I-WDV2 | L2 | S 03° 06' 22" E | 37.34' |
| I-WDV2 | L3 | N 36° 28 56" W | 31.14' |
| | | | |
| I-WDV3 | L8 | N 03° 06' 22" W | 3.27' |
| | | | |
| I-T2 | L4 | N 53° 30' 38" E | 34.81' |
| I-T2 | L5 | S 36° 36' 12" E | 24.20' |
| I-T2 | L6 | S 53° 23' 47" W | 50.87' |
| I-T2 | L7 | N 03° 06' 22" W | 29.10' |

(A) STA. 245+23.19, 35.73 (I-WDV3)

* - DENOTES LEAD IN COURSE

PARK NATIONAL BANK
60 COSHOCTON STREET
053-183720-01.000
NO R/W REQUIRED

TERRY S. BAUGHMAN AND
TERRY LEE HOLTER
72 COSHOCTON ST.
053-180522-00.000
NO R/W REQUIRED

MICHELE COLE
W. COSHOCTON ST.
053-179376-00.000
NO R/W REQUIRED

LARRY L. RIFFE AND
DIANE RIFFE
18 W. COSHOCTON ST.
053-182214-00.001
NO R/W REQUIRED

IRON PIN FD.
STA. 242+33.16
32.93' LT.

IRON PIPE FD.
STA. 242+97.48
32.69' LT.

IRON PIPE FD.
STA. 245+05.14
33.03' LT.

N. OREGON ST.

Ex R/W

33.00'

242 243 244 245 246 247

U.S. 62 (COSHOCTON ST.)

℄ STA. 244+77.38 U.S. 62 (COSHOCTONST.) =
℄ STA. 10+00.00 OREGON STREET

N 53°23' 47" E, 27.08'
LEAD IN I-WDV2,I-WDV3

STA. 245+04.46

STA. 245+04.46
33.00' RT. U.S. 62=
STA. 10+32.86
27.24' LT. OREGON ST.

N 53° 23' 47" E

S 36°36'02" E, 33.00'
LEAD IN I-WDV2,I-WDV3

EX. LAMP POST
(TO BE RELOCATED)

STA. 245+25.00
33.00' RT. U.S. 62

STA. 245+58.00
35.80' RT.

℄ EXISTING RIGHT OF WAY AND
CONSTRUCTION U.S. 62
(COSHOCTON ST.)

N 53°23'47" E, 263.00' (I-WDV3)

I-WDV3

MATCH LINE STA. 247+00 (SEE SHEET 2/3)

IRON PIPE FD.
STA. 242+06.52
32.69'RT.

TRACEY A. DODDERER AND
ELIZABETH A. DODDERER
75 W. COSHOCTON ST.
053-183786-00.000
NO R/W REQUIRED

CHAREE L. ADAMS
65 W. COSHOCTON ST.
053-177690-00.000
NO R/W REQUIRED

GROUND MOUNTED
CONTROLER

I-WDV2

TMP

L6

I.P.S.

STA. 10+64.00
27.34' LT. OREGON ST.

STA. 245+07.13
60.00' RT.

I-T2

STA. 245+58.00
60.00' RT.

PR. PULL BOX

PROPOSED BRICK
BENCH

S 53°30'38" W
264.81' (I-WDV3)

PROPOSED R/W
FOR SIDEWALK

BURIED TELE.
(DO NOT DISTURB)

THE VILLAGE OF JOHNSTOWN
(CITY PARK) MAIN ST. JOHNSTOWN
053-177538-00.000
D.B. 00F-0455

IRON PIN FD.
STA. 10+82.84
38.22' RT.

OREGON ST.

S 36° 18' 46" E

VANCE HOLTER AND
MONICA HOLTER
17 OREGON ST.
053-181584-00.000
NO R/W REQUIRED

IRON PIN FD.
STA. 11+36.81
38.11' RT.

MONROE TOWNSHIP
BOARD OF TRUSTEES
053-177538-00.000
D.B. 840, PG. 938
NO R/W REQUIRED

℄ EXISTING RIGHT OF WAY AND
CONSTRUCTION OREGON STREET

MULTI-LEVEL BRICK
MONROE TWP. HALL

BRICK STRUCTURE
TOWNSHIP FIRE DEPARTMENT

RODNEY L. BEMILLER &
CHARLOTTE A. BEMILLER
23 S. OREGON ST.
053-183216-00.000
NO R/W REQUIRED

38.17' 27.25'
R/W WIDTH VARIES

IRON PIN FD.
STA. 11+88.67
27.78' LT.

| REV. BY | DATE | DESCRIPTION |
|---|---|---|
| T.H. | 03-30-11 | ADDED PARCEL I-WDV3, REV'D PARCEL I-T2 |
| DATE COMPLETED | | |

FINAL

p:/lic/85170/Design/Right_of_Way/Plan_Sheets/us062_rds_001.dgn 03/30/11

HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 85170

R/W DESIGNER T.H.
R/W REVIEWER C.P.

RIGHT OF WAY PLAN
STA. 242+00.00 TO STA. 247+00 (U.S. 62)

LIC-62-4.63

3 / 3

66 / 66