

NOTES

(C-8)

ADDED PLAN NOTE 6/9/17

SCOPE OF WORK

- THE WORKS DETAILED BY THESE PLANS INCLUDE THE FOLLOWING ITEMS:
- 1) DEMOLITION, INCLUDING REMOVAL OF SIDEWALK, EXISTING POLES, BASES, PULLBOXES, CONDUIT, CONDUCTOR AND ALL OTHER REMOVALS AND DEMOLITION NEEDED TO EFFECT THE DESIGN INTENT AS SHOWN ON THESE PLANS
- 2) INSTALLATION OF POLES, BASES, PULLBOXES, CONDUIT, AND CONDUCTOR
- 3) REPAIR OF SIDEWALK OR OTHER PAVEMENT REMOVED AS PART OF INSTALLATION

SURVEY

SURVEY FOR THESE PLANS WAS ACCOMPLISHED USING DIFFERENT SURVEY METHODS. THE LOCATION OF ITEMS SHOWN CAN VARY SEVERAL FEET. BECAUSE OF THIS, THESE PLANS SHOULD BE CONSIDERED SCHEMATIC IN NATURE AND ARE INTENDED TO CONVEY GENERAL INTENT OF DESIGN.

R.O.W.

RIGHT-OF-WAY HAS NOT BEEN LOCATED. PROPOSED POLES AND PULLBOXES ARE TO BE PLACED WITHIN EXISTING SIDEWALK, OR WHERE NO SIDEWALK, NO CLOSER TO ROADWAY THAN CURRENT INFRASTRUCTURE. IT IS NOT THE INTENT TO LOCATE ANY NEW ITEMS IN AREAS THAT ARE NOT WITHIN WHAT HAS BEEN REASONABLY ASSUMED TO BE THE EXISTING ROW.

UTILITIES

UTILITY LOCATIONS WERE NOT SPHERICALLY IDENTIFIED AND NOT ALL UTILITIES ARE SHOWN. SOME VISIBLE ABOVE-GROUND UTILITIES WERE NOTED AND ARE REFLECTED IN PLANS. THE CONTRACTOR SHALL DETERMINE THE OKIE-IDENTIFIED LOCATION OF ALL EXISTING UTILITIES IN THE VICINITY BEFORE COMMENCING WORK. IF ANY CONFLICTS WITH THE PROPOSED DESIGN IS NOTED, THE ENGINEER WILL COORDINATE WITH THE CONTRACTOR TO FIELD-CORRECT THE DESIGN. STANDARD COT GENERAL CONSTRUCTION AND PAY ITEM NOTES WILL BE ADDED IN THE CONSTRUCTION PLANS TO BE SUBMITTED AT A LATER DATE.

SHOULD DOWNTOWN SIGNAL COMMUNICATIONS BE DISRUPTED DUE TO THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL PROVIDE TEMPORARY COMMUNICATIONS EQUIPMENT TO THE CITY OF TULSA. ALL ITEMS SHALL BE DELIVERED TO THE CITY OF TULSA TRAFFIC ENGINEERING DEPARTMENT. CITY OF TULSA PERSONNEL SHALL INSTALL THE EQUIPMENT AND THE EQUIPMENT SHALL BECOME THE PROPERTY OF THE CITY OF TULSA ON COMPLETION OF THE PROJECT. TEMPORARY SIGNAL EQUIPMENT SHALL INCLUDE THE FOLLOWING PER INTERSECTION WHERE COMMUNICATIONS ARE DISRUPTED (FOR A MAXIMUM OF 10 INTERSECTIONS ON THIS PROJECT):

- 1500AH STAND-ALONE GPS TIME SOURCE MODULE
- R8220C WORKS ANTENNA, STAND-ALONE GPS CABLE TO 170 CONTROLLER AND STAND-ALONE GPS POWER SUPPLY/CONFIGURATION CABLE TO PG. 50 FEET OF ANTENNA COAXIAL CABLE, AND ONE ASTRO-BRACKET FOR MOUNTING.

NOTE: IF THE CONDUIT IS HIT BETWEEN TWO JUNCTION CABINETS, THEN THE CABLE MUST BE REPLACED FROM ONE JUNCTION CABINET TO ANOTHER JUNCTION CABINET. QUANTITIES SHOULD BE ESTIMATED TO INCLUDE ONE FOR EVERY INTERSECTION THAT IS LOCATED BETWEEN THE TWO JUNCTION CABINETS, SO AT LEAST TWO OF EACH ITEM WILL BE NECESSARY AND MAYBE MORE DEPENDING ON THE LOCATION OF THE JUNCTION CABINETS. CONTACT TRACY NYHOLM (TNYHOLM@CITYOFTULSA.ORG FOR THE NUMBER COUNT FOR THE ABOVE NOTE OF SIGNALS THAT COULD BE IMPACTED IF THE COMMUNICATIONS IS DISRUPTED AT THIS INTERSECTION.)

THE STRUCTURAL DESIGN OF ALL POLES, MAST ARMS, HIGH-MAST POLES, AND OTHER SUPPORTS FOR SIGNS, LUMINAIRE, AND SIGNALS AS WELL AS THEIR CONNECTIONS SHALL BE IN ACCORDANCE WITH THE 2000 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRE, AND TRAFFIC SIGNALS. THE MANUFACTURER SHALL ENSURE THE FOLLOWING ARE APPLIED TO THE DESIGN:

THE MINIMUM DESIGN WIND SPEED AND DESIGN LIFE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

THE CALCULATED STRESSES AND FORCES FROM THE DESIGN LOADINGS DO NOT EXCEED THOSE REQUIRED IN THE AASHTO SPECIFICATIONS;

ALL MEMBERS ARE AT LEAST THE MINIMUM THICKNESS AS REQUIRED IN THE AASHTO SPECIFICATIONS;

LUMINAIRE MAST ARMS, POLES, AND ANCHOR BOLTS SHALL BE DESIGNED TO MEET ALL REQUIREMENTS OF THE CITY OF TULSA STANDARDS 603 FOR SIGNAL POLE FOOTINGS AND 617 FOR SIGNAL POLES AND MAST ARMS; AND

UNLESS SITE SPECIFIC GEOTECHNICAL DATA IS AVAILABLE, FOUNDATION SHALL BE DESIGNED UTILIZING THESE PARAMETERS: SHEAR STRENGTH OF THE COHESIVE SOIL (C) OF 500 PCF, ANGLE OF INTERNAL FRICTION (φ) OF 22 DEGREES, AND EFFECTIVE UNIT WEIGHT OF SOIL (γ) OF 120 PCF.

COT 807 SIGNAL SERVICE

THE INSTALLED SERVICE SHALL BE FULLY OPERATIONAL AND ANY COSTS CHARGED BY THE UTILITY COMPANY FOR THE SERVICE INSTALLATION SHALL BE PAID BY THE CONTRACTOR AND IS INCLUDED IN THIS PAY ITEM.

COT 614 LED TRAFFIC SIGNAL HEADS

HEADS SHALL BE LOCATED TO THE LEFT SIDE FOR 3-SECTION SIGNAL HEADS AND TOWARD THE OUTSIDE EDGES FOR A 2-SECTION SIGNAL HEAD.

COT 617 TRAFFIC SIGNAL MAST ARMS & POLES LUMINAIRE EXTENSIONS

THE CONTRACTOR SHALL PICK UP THE LUMINAIRE(S) AND RELATED EQUIPMENT (200W HPS LUMINAIRE, 200W HPS LAMP, 120V PHOTO CELL, IN-LINE FUSE HOLDER, AND BAMP KIT FUSE) AT THE AEPPO WAREHOUSE ON 16TH STREET NEAR FULTON AVENUE IN TULSA.

COT 622 WIRELESS TRAFFIC SIGNAL COMMUNICATIONS SYSTEM

ETHERNET CABLE USED FOR WIRELESS SIGNAL COMMUNICATIONS SHALL BE INDUSTRIAL GRADE SHIELDED CAT 6E, RATED FOR OUTDOOR USE, UNLESS OTHERWISE SPECIFIED IN THE PROJECT PLANS. SHIELDING SHALL BE FIBER RATED/POLYURETHAN INSULATION SHIELD BONDED TO AN OIL RESISTANT AND SUN RESISTANT PVC JACKET. THIS PAY ITEM SHALL INCLUDE APPROXIMATELY LINEAR FEET OF CAT 6E CABLE INSTALLED FROM THE CONTROLLER TO THE SIGNAL POLE. EXCESS CABLE SHOULD BE STORED IN THE HAND HOLE OF THE SIGNAL POLE AND IN PULL BOXES. USE CAUTION WHEN WORKING WITH CAT 6E CABLE NOT TO BEND OR CRIMP THE CABLE.

COT 626 REMOVAL OF TRAFFIC ITEMS

THIS PAY ITEM INCLUDES THE REMOVAL AND DELIVERY OF THE FOLLOWING EQUIPMENT TO THE CITY OF TULSA TRAFFIC OPERATIONS SHOP AT 240 W. 23RD, WHICH IS TO REMAIN THE PROPERTY OF THE CITY OF TULSA:

MULTI-SIDED GALVANIZED TRAFFIC SIGNAL POLES, SIGNAL HEADS, PEDESTRIAN HEADS AND PUSH BUTTONS, BACK PLATES, CONTROLLER CABINET ASSEMBLY, CABINET GUARD, UNDAMAGED PULL BOX LIDS, MAST ARM SIGNS, ASTRO-BRACKETS, SPAN WIRE EQUIPMENT AND ANY OTHER TRAFFIC SIGNAL EQUIPMENT REMOVED EXCEPT FOR THE PULL BOXES, CONDUIT AND WIRE WHICH SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS, GREEN ARM POLES, AND ALL OTHER SIGNAL POLES OTHER THAN THE MULTI-SIDED POLES ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

INTERSECTIONS MAY BE CONTROLLED WITH MULTI-WAY STOP SIGNS DURING SIGNAL CONSTRUCTION ACTIVITIES WHICH REQUIRE THE POWER TO BE DISCONNECTED OR WHEN CABLES ARE BEING REPLACED. THE TIME THAT THE SIGNALS ARE OUT OF SERVICE IS TO BE MINIMIZED TO THE EXTENT POSSIBLE AND ONLY WITH APPROVAL OF THE TRAFFIC ENGINEER. THE CITY'S INTENT IS TO PROVIDE TRAFFIC SIGNAL CONTROL THROUGHOUT THE CONSTRUCTION PROJECT AT ALL INTERSECTIONS, EXCEPT FOR BRIEF PERIODS OF TIME (NOT TO EXCEED 24 HOURS). TEMPORARY SIGNALS ARE INCLUDED AS A CONTINGENCY AND MAY BE USED ONLY AT THE DISCRETION OF THE TRAFFIC ENGINEER. IN THE EVENT THAT POWER CANNOT BE MAINTAINED TO THE SIGNAL, THE CONTRACTOR SHALL PLACE MULTI-WAY STOP SIGNS IN ACCORDANCE WITH THE MUTCD AND WITH THE APPROVAL OF THE TRAFFIC ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR AND INCIDENTALS NECESSARY TO MAKE CONNECTIONS FROM NEWLY INSTALLED EQUIPMENT TO OLD EQUIPMENT IN ORDER TO MAKE THE SIGNAL FUNCTIONAL AGAIN.

WHERE A PAVEMENT MARKING HAS BEEN ONLY PARTIALLY REMOVED, IT SHALL BE REPLACED IN ITS ENTIRETY. INSTALLATION OF PAVEMENT MARKINGS INCLUDES THE SCARIFYING OF THE PAVEMENT SURFACE AND THE APPLICATION OF THE APPROPRIATE QUALITY AND QUANTITY OF PRIMER.

ALL CABLES IN DISTURBED CONDUITS ARE TO BE REMOVED AND REPLACED WITH NEW CABLE. CABLES IN ABANDONED CONDUITS ARE TO BE REMOVED. ALL REMOVED CABLE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE CITY OF TULSA TO ESTABLISH, INSTALL, MAINTAIN, AND OPERATE COMPLETE, ADEQUATE, AND SAFE TRAFFIC CONTROLS DURING THE ENTIRE CONSTRUCTION PERIOD. ALL FLAGGERS, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY THE FIELD ENGINEERING REPRESENTATIVE.

CONSTRUCTION SIGNALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MUTCD AND APPROVED BY THE FIELD ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL REQUIRED FOR COMPLETION OF THE PROJECT.

HOLES IN THE SIDEWALK RESULTING FROM THE REMOVAL OF SIGN POSTS OR TRAFFIC SIGNAL EQUIPMENT SHALL BE NEATLY REPAIRED TO PREVENT TRIPPING HAZARDS. ALL CUTS IN THE SIDEWALK SHALL BE SAWS IN ORDER TO PROVIDE CLEAN EDGES FOR SIDEWALK REPAIRS.

THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FOR ELECTRICAL INSPECTION ON ALL SIGNAL AND LIGHTING WORK PER COT SPECIFICATION 626 TRAFFIC SIGNAL CONSTRUCTION AND OPERATION. ADDRESSING FOR THE PERMIT SHALL BE PROVIDED BY THE CITY OF TULSA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ALL EXISTING TRAFFIC SIGNS AND MARKINGS REMOVED OR DAMAGED AS PART OF THIS PROJECT. ALL SIGNS AND POLES PROVIDED SHALL BE NEW AND UNDAMAGED AND SHALL MEET THE REQUIREMENTS OF COT SPECIFICATION 608 TRAFFIC SIGNS.

CONSTRUCTION TIME OF 270 DAYS IS TO INCLUDE THE BASE BID WORK AS WELL AS THE AD-ALTERNATE.

GREEN POLE REMOVAL, AND NEW POLE CONSTRUCTION WORK SHALL BE LIMITED TO THREE (3) INTERSECTIONS PER DAY. SIGNAL HEAD REPLACEMENT, AND BACK PLATE WORK CAN BE DONE AT THE CONTRACTOR'S DISCRETION.

ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPECIFICATION 625 REMOVAL OF TRAFFIC ITEMS.

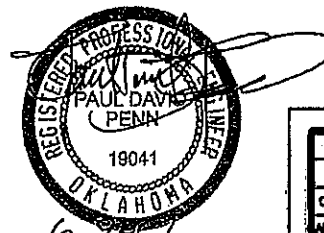
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE THAT HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC PRIOR TO DIGGING NEAR THE UTILITIES. THE CONTRACTOR SHALL CALL FOR A

THE OKIE NOTIFICATION CENTER 1-800-522-6543.  
THE LOCAL COUNTY CLERKS OFFICE.

DEPTH OF THE EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

THE PEDESTRIAN SIGNAL INDICATIONS FURNISHED ON THIS PROJECT SHALL INCLUDE AUDIBLE INDICATIONS TO SERVE VISUALLY IMPAIRED PEDESTRIANS. THE AUDIBLE INDICATIONS SHALL BE U.S. TRAFFIC CORPORATION / IDC MODEL APS-10, OR APPROVED EQUAL, WITH INTERNAL SPEAKERS OR APPROVED EQUAL. IT SHALL PROVIDE AN ELECTRONIC BIRD SOUND WITH CUCKOO FOR NORTH/SOUTH AND PEEP-PEEP FOR EAST/WEST. THE OUTPUT VOLUME SHALL ADJUST AUTOMATICALLY TO CHANGING AMBIENT NOISE LEVELS. ALL PEDESTRIAN SIGNAL INDICATIONS SHALL ALSO INCLUDE COUNTDOWN TIMERS.

BEFORE YOU DIG  
CALL OKIE  
811



JACOBS

10816 EXECUTIVE CENTER DR. STE. 300  
LITTLE ROCK, ARKANSAS 72211

DESIGN	BLV
DRAWN	AB
CHECKED	BLV
APPROVED	BLV
SCALE	As Shown

OKLAHOMA DEPARTMENT OF TRANSPORTATION  
DESIGN DIVISION

GENERAL NOTES

PROJECT NO. 22708(06) SHEET NO. 5