GENERAL CONSTRUCTION NOTES:

G1. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OFALL UTILITIES AND MUST HAVE ALL UTILITIES LOCATED PRIOR TO COMPELLING ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE INVERT AND FLOWLINE ELEVATIONS OF ALL WATER LINES, SANITARY SEWERS, STORM DRAINS, DRAINAGE STRUCTURES, AND SURFACE DRAINAGE COURSES PRIOR TO LAYING ANY NEW PIPE.

THE CONTRACTOR MUST CALL ONE AT (405) 840-5102 TO HAVE ALL PUBLIC UTILITIES (WATER AND SANITARY SEWER LINES) AND FRANCHISED UTILITIES (ELECTRIC LINES, TELEPHONE CABLES, FIBER OPTIC LINES, CABLE TELEVISION, GAS LINES AND OIL PIPELINES) LOCATED AT LEAST TWO (2) DAYS PRIOR TO STARTING CONSTRUCTION.

G2. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES AND STRUCTURES, WHETHER SHOWN OR NOT, FROM ANY DAMAGE TO A UTILITY LINE OR STRUCTURE. B ECAUSE OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED SOLELY AT THE CONTRACTOR'S EXPENSE TO A CONDITION AS GOOD OR BETTER THAN THAT PRIOR TO THE DAMAGE.

THE CONTRACTOR MUST CALL 9-1-1 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED OR OTHERWISE DISTURBED.

G3. THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REPLACEMENT AND/OR REPAIR OF ALL TRAFFIC CONTROL DEVICES AND APPURTENANCES DAMAGED OR DISTURBED DUE TO CONSTRUCTION.

G4. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL PAVEMENT MARKINGS THAT WILL BE IN CONFLICT WITH THE PROPOSED WORK.

G5. A WORK ZONE PERMIT MUST BE OBTAINED AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF WORK AND/OR PLACING OR REMOVING ANY BARRIERS OR MODIFYING EXISTING TRAFFIC CONTROL DEVICES.

G6. STREETS AND/OR LANES WITHIN THE CONSTRUCTION ZONE MAY BE CLOSED ONLy UPON THE PRIOR APPROVAL OF THE CITY.

G7. THE CONTRACTOR MUST NOTIFY ALL AFFECTED CITY UTILITY CUSTOMERS AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY ANTICIPATED SERVICE INTERRUPTION. ALL WORK MUST BE CARRIED OUT CAREFULLY TO MINIMIZE CUSTOMER SERVICE INTERRUPTION DURING CONSTRUCTION, STREETS TEMPORARILY CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION SHALL REMAIN OPEN TO LOCAL TRAFFIC TO THE MAXIMUM EXTENT PRACTICAL DURING THE WORK. DETOUR ROUTES SHALL BE FURNISHED BY THE CONTRACTOR FOR APPROVAL BY THE CITY. THE CONTRACTOR SHALL FURNISH AND ERECT DETOUR SIGNAGE AS DIRECTED.

G8. ALL CONSTRUCTION MATERIALS AND WORK SHALL CONFORM TO THE APPLICABLE CITY OF OKLAHOMA CITY AND THE CURRENT OKLAHOMA DEPARTMENT OF TRANSPORTATION (ODOT) STANDARDS AND SPECIFICATIONS, AS REFERENCED IN THE PROJECT DOCUMENTS.

G9. ALL DIMENSIONS TO CURB ARE TO BE THE BACK OF CURB. ALL DIMENSIONS TO STREET "CENTERLINES" ARE TO BE CENTER OF THE CENTER CURB. ExISTING OR NEW CURB LINES AND/OR SEWER LINES, ARE TO BE ADJUSTED AS REQUIRED TO MAINTAIN THE SAME 12 INCHES CLEARANCE." CENTERLINES" ARE TO THE CURB EDGE OF THE CURB, B ECAUSE OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED SOLELY AT THE CONTRACTOR'S EXPENSE TO A CONDITION AS GOOD OR BETTER THAN THAT PRIOR TO THE DAMAGE.

THE CONTRACTOR SHALL DEVELOP AND MAKE ALL DETAIL SURVEYS NEEDED FOR CONSTRUCTION. THE COST OF THE CONSTRUCTION SURVEY AND STAKING SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK.

G10. ALL FENCES REMOVED AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPLACED IN KIND WITH FENCING EQUAL TO OR BETTER THAN THE ORIGINAL FENCE. ALL COSTS FOR FENCE REMOVAL AND REPLACEMENT SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK.

G11. ALL WORK NOT CLASSIFIED AS A CONTRACT PAY ITEM SHALL BE CONSIDERED INCIDENTAL CONSTRUCTION. THE COST FOR SUCH WORK SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK.

G12. ALL DISTURBED UNEVEN AREAS WITHIN THE PROJECT LIMITS ON EASEMENTS AND RIGHTS-OF-WAY SHALL BE SODDED, FERTILIZED AND WATERED IN ACCORDANCE WITH THE CITY OF THE VILLAGE. THIS SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS. SODDED AREAS SHALL BE REPAIRED AND MAINTAINED UNTIL ALL PORTIONS OF THE PROJECT ARE COMPLETED AND APPROVED. ALL OTHER AREAS DISTURBED AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE RESTORED IN A MANNER ACCEPTABLE TO THE OWNER TO A CONDITION AS GOOD OR BETTER THAN THAT PRIOR TO THE DISTURBANCE AT NO EXPENSE TO THE OWNER.

G13. WORK ZONE SIGNS DO NOT PLACE SIGNS THAT RESTRICT TRAFFIC OTHER THAN AS SPECIFIED.

WHEN EXISTING SIGNS NEED TO BE COVERED, USE AN OPAQUE, BREATHABLE MATERIAL. DO NOT USE PLASTIC BAGS, RUBBER OR SIMILAR MATERIALS. HANGING OR BOLTING RIGID MATERIAL TO THE SIGN IS ACCEPTABLE WHEN APPROVED BY THE ENGINEER AND SPACERS ARE USED TO MINIMIZE CONTACT BETWEEN THE RIGID MATERIAL AND THE SIGN FACE. RIGID COMPONENTS OF THE COVER, SUCH AS A HANDLE FOR LIFTING, SHALL NOT HANG BELOW THE MINIMUM SIGN HEIGHT. DO NOT PLACE TAPE DIRECTLY TO THE FACE OF ANY EXISTING SIGN. INSTALL SIGN TALLIES TO MARK THE LOCATION OF THE CONTRACTOR'S SIGNS THAT ARE ANTICIPATED TO REMAIN IN PLACE FOR MORE THAN 30 DAYS ON APPROVED POLES OR POSTS SECURED TO THE EDGE OF THE SIGN, BUT NO MORE THAN 6 INCHES ABOVE THE SIGN TO REDUCE THE SPEED LIMIT IN A WORK ZONE PUBLICATION LETTER TO THE CITY TRAFFIC ENGINEER. DO NOT DISPLAY ANY POSTED SPEED LIMIT UNTIL AN APPROVAL LETTER IS RECEIVED LISTING WHAT THE MINIMUM SPEED LIMIT WILL BE ALLOWED ON THE PROJECT. INSTALL WORK ZONE PLACQUES ABOVE ALL EXISTING AND TEMPORARY SPEED LIMIT SIGNS LOCATED BETWEEN THE ROAD WORK AHEAD AND THE END ROAD WORK. ON THE POSTS END OF ROADWORK IS POSTED, POST THE ORIGINAL SPEED LIMIT OF THE ROAD. DO NOT ALLOW THE PLAQUE TO OVERLAP ANY PORTION OF THE SPEED LIMIT SIGN.

G14. ALL SIGNAL POLES AND MAST ARMS SHALL BE GALVANIZED IN ACCORDANCE WITH BUILDING REQUIREMENTS. AS AN ALTERNATIVE, TRAFFIC SIGNAL POLES, MAST ARMS AND PEDESTRIAN POLES MAY BE POWDER COATED BLACK. AN ALTERNATIVE BID FOR POWDER COATED SIGNAL POLES, MAST ARMS AND PEDESTRIAN POLES SHALL BE SUBMITTED.

G15. THE LOCATION OF THE SIGNAL POLES AND FIXTURES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED TO ACCOMMODATE LOCAL CONDITIONS. EXACT LOCATION OF SIGNAL POLES, CONTROLLER, ETC. TO BE APPROVED BY THE ENGINEER IN THE FIELD.

G16. PROPOSED PUSH BUTTONS SHALL BE PLACED ADJACENT TO A LEVEL LANDING AREA (2% MAX SLOPE IN ALL DIRECTIONS).

GENERAL NOTE:

I1. THE PLANS AND REFERENCED CONSTRUCTION SPECIFICATIONS DESCRIBE THE WORK CONTEMPLATED AND IDENTIFY THE DESIGN LEGENDS AND MATERIALS TO BE USED. THE CONTRACTOR SHALL SELECT THE MATERIALS TO BE USED AND THE MATERIALS NEEDED FOR CONSTRUCTION. THESE PLANS ARE INTENDED TO BE FULLY EXPLANATORY. THE PLAN AND SPECIFICATION DOCUMENTS SHALL BE CONSTRUED AND INTERPRETED AS A WHOLE AND THEREFORE, ANYTHING SHOWN, INDICATED OR SPECIFIED IN ONE AND NOT THE OTHER, SHALL BE INTERPRETED AS BEING SHOWN, INDICATED OR SPECIFIED IN BOTH.

I2. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND SHALL BE CONSIDERED INCIDENTAL AND INCLUDED AS AN ORDINARY PART OF THE WORK. NO CHANGES THAT ALTER THE CHARACTER OF THE WORK CAN BE MADE OR WILL BE PERMITTED BY THE OWNER WITHOUT THE ISSUANCE OF A CHANGE ORDER.

I3. NO PLEA OF IGNORANCE OF EXISTING CONDITIONS OR OF DIFFICULTIES OR CONFLICTS ENCOUNTERED IN THE EXECUTION OF THE CONTRACT WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULLY COMPARE EVERY DETAIL OF ALL OF THE REQUIREMENTS IN THE CONTRACT DOCUMENTS GOVERNING THE WORK.
TS-1. CONTRACTOR SHALL SUPPLY A TRAFFIC SIGNAL CABINET AND CONTROLLER MANUFACTURED BY NACTEC, INC. THAT SHALL OPERATE AS SHOWN IN THE SIGNAL FLANS AND DETAIL SHEETS. PROVIDE ISO ATC CONTROLLER POWER TO THE TRAFFIC SIGNAL CONTROLLER CABINET TO POWER ALL SIGNALS AND LUMINARIES SHALL BE SUPPLIED BY THE EXISTING POWER SOURCE. THE CONTRACTOR SHALL COMPLETE THE NECESSARY WORK TO POWER THE SIGNALS AND LUMINARIES. THIS WORK SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL CONTROLLER ASSEMBLY ITEM.

TS-3. P.C. CONCRETE ANODIZED POLYMER CONCRETE PULL BOXES SHALL BE USED. POLYMER CONCRETE PULL BOX SHALL HAVE A POLYMER CONCRETE COVER FRAME AND BODY AND A MINIMUM LOAD RATING OF 20,000 LBS. POLYMER CONCRETE PULL BOX SHALL BE ARMORCAST, QUARZITE OR AN APPROVED EQUAL. FIBERGLASS AND/OR PLASTIC PULL BOX OR COMPOSITES OF SAME WIL NOT BE ACCEPTED.

TS-4. ALL DAMAGED LOOPS MUST BE REPLACED WITH RADAR DETECTION. SEE NOTE TS-26.

TS-5. ROUND POLES SHALL BE USED. ALL POLES AND FOUNDATIONS SHALL MEET THE CURRENT DOT STANDARDS.

TS-6. SIGNAL POLE HANDLE COVERS SHALL BE ONE PIECE FORGED FROM ALS PLASTIC PEARL GRAY IN COLOR AND SHALL BE SUITABLE FOR EXPOSURE TO SUNLIGHT AND ALL WEATHER CONDITIONS. HANDLE COVERS SHALL MATCH WITH TWO SCREW LACHES AND SHALL FIT TIGHTLY TO THE ENCLOSURE RING TO CREATE A RAINPROOF SEAL. LATCH SCREWS SHALL BE ¼-20 STAINLESS STEEL FLAT SOCKET HEAD SCREWS WITH TAP-MENDER RESISTANT FEATURES.

TS-7. CARD RACK DETeCTORS SHALL BE FURNISHED.


COMPLETE TRAFFIC SIGNAL CONTROLLER ASSEMBLY

THERMAL DETECTORS

MAST ARMS AND POLES

SIGNAL HEADS

PULL BOXES IF SALVAGEABLE

SIGNS

SIGN POSTS

PARKING METER POSTS

RELIEVED SIGNAL EQUIPMENT THAT REMAINS THE PROPERTY OF THE CITY SHALL BE DELIVERED TO THE CITY OF THE VILLAGE.

TS-10. THE PRICE BID SHALL INCLUDE THE REMOVAL OF THE CABINET FOUNDATION AND POLE FOOTINGS. POLE FOOTINGS SHALL BE REMOVED TO A DEPTH AT LEAST THREE FEET BEYOND FINAL FINISH GRADE AND RESTORED AND COMPACTED TO MATCH SURROUNDING GRADE.

TS-11. THE CONTRACTOR SHALL CONTACT THE CITY OF THE VILLAGE TO COORDINATE ALL REGULATORY SIGN REMOVALS.

TS-13. LIGHT EMITTING DIODE (LED) LAMPS WITH SPARE TAB CONNECTIONS SHALL BE USED IN LIEU OF INCANDESCENT TRAFFIC SIGNAL LAMPS. THE LED MODULS SHALL MEET THE REQUIREMENTS IN THE INSTITUTE OF TRAFFIC ENGINEERS (I.T.E.) STANDARD ENTITLED VEHICLE TRAFFIC CONTROL SIGNAL HEADS EMITTING DIODE (LED) CIRCULAR SIGNAL SUPPLEMENT" (VTCS-L-LED). LED LENSERS SHALL BE DUALITE, DELCORE, DURALIGHT OR AN APPROVED EQUAL.

WHEN LIT, ALL LED MODULS SHALL APPEAR TO DRIVERS TO BE INCANDESCENT BULB TYPE SIGNALS.

THE WARRANTY FROM DEFECTIVE WORKMANSHIP AND MATERAALS ON THE CONTRACT WORKS ARE FOR FIVE YEARS OR _ THE LIFE OF THE PROJECTS FINAL ACCEPTANCE BY THE CITY. DURING THE PROJECTS MAINTENANCE BOND PERIOD, THE CONTRACTOR SHALL REMOVE AND REPLACE DEFECTIVE MODULES WITHIN TWO (2) WORKING DAYS OF RECEIVING NOTICE FROM THE CITY OF TRAFFIC OPERATIONS DIVISION FOR REASONS OF IMMEDIATE PUBLIC SAFETY. THE CITY MAY REMOVE AND REPLACE THE MODULE(S) AND THE CONTRACTOR WILL BE NOTIFIED TO FURNISH THE CITY WITH REPLACEMENT UNIT(S) MEETING CURRENT IT REQUIREMENTS AFTER THE END OF THE MAINTENANCE BOND PERIOD. ALL FAILED MODULES WILL BE REMOVED AND REPLACED BY THE CITY AND THE CONTRACTOR WILL BE REQUIRED TO FURISH THE VILLAGE WITH DIRECT REPLACEMENT UNIT(S) MEETING CURRENT IT REQUIREMENTS.

TS-14. R10-36 PEDESTRIAN PUSH BUTTON SIGNS SHALL BE USED.

TS-15. AN INNOVATIVE TECHNOLOGY MODEL #HS-P-SP-103-30A-RH PROTECTOR TRANSPARENT VOLTAGE SENSE SUPPRESSOR EQUIVALENT SHALL BE INSTALLED BETWEEN THE AC POWER AND CABINET. THE CLEAR WINDOW EQUIVALENT SHALL BE INSTALLED ON THE SIDE OF THE CABINET IMMEDIATELY ADJACENT TO THE AC TERMINAL BLOCK.

TS-17. THE CONTRACTOR SHALL CAREFULLY REMOVE AND REINSTALL ALL COMPONENTS OF THE EXISTING EMERGENCY TRAFFIC SIGNAL PREEMPTION SYSTEM AFFECTED BY CONSTRUCTION OF OPTICAL DETECTORS SHALL BE REINSTALLED ON TRAFFIC SIGNAL MAST ARMS OR POLES AS POSSIBLE TO MATCH WITH THE ORIGINAL EQUIPMENT OR AS OTHERWISE SHOWN ON THE PLANS. DETECTORS SHALL BE REINSTALLED USING NEW STAINLESS STEEL HOE CLAMPS WITH THE ORIGINAL MOUNTING HARDWARE. NEW CABLE SHALL BE INSTALLED BETWEEN THE DETECTOR AND THE CABINET.

REMOVAL AND REINSTALLATION OF PREEMPTION EQUIPMENT SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE PRICE BID FOR OPTICAL DETECTOR CABLE.

TRAFFIC SIGNAL PAY QUANTITY NOTES

TRAFFIC SIGNAL PAY QUANTITIES
TS-18 THE CITY OF THE VILLAGE WILL PROVIDE THE SIGNAL CONTROLLER TYPING PLAN, CONTACT THE TRAFFIC MANAGEMENT DIVISION AT LEAST TEN (10) WORKING DAYS PRIOR TO THE ANTICIPATED TURN-ON DATE. THE CONTRACTOR SHALL PROVIDE, PROGRAM AND PLACE CHANGEABLE MESSAGE BOARDS ADVISING MOTORISTS OF THE IMPENDING SIGNAL TURN-ON. THESE SIGNS SHALL BE IN OPERATION AT LEAST TWO (2) WORKING DAYS PRIOR TO THE ANTICIPATED TURN-ON DATE AND THE MESSAGE DISPLAYED SHALL BE FURNISHED BY THE TRAFFIC MANAGEMENT DIVISION. CHANGEABLE MESSAGE BOARDS SHALL BE SUBSIDIARY TO THE CONSTRUCTION SIGNING AND TRAFFIC CONTROL ITEM.

THE CONTRACTOR IS RESPONSIBLE FOR COVERING ALL EXISTING CITY-OWNED AND PRIVATELY OWNED STOP SIGNS) AND RELATED WARNING SIGNS AT THE INTERSECTION AT THE TIME THAT THE TRAFFIC SIGNAL IS AUTHORIZED TO BE TURNED ON.

THE STOP SIGN(S) AND RELATED WARNING SIGNS SHALL BE COVERED WITH AN OPAQUE PLASTIC TARP OR HEAVY PLASTIC SHEETING SECURELY WRAPPED WITH DUCT TAPE SO AS NOT TO BE EASILY REMOVABLE OR BLOWN OFF BY WIND. THE TAPE SHALL ONLY BE APPLIED TO THE COVERING AND NOT DIRECTLY TO THE FACE OR THE BACK OF THE SIGN.

AFTER THE SIGNAL IS TURNED ON, THE CITY OF THE VILLAGE TRAFFIC OPERATIONS WILL REMOVE ALL EXISTING CITY-OWNED STOP SIGNS AND RELATED WARNING SIGNS. ALL PRIVATELY OWNED SIGNS WILL BE REMOVED BY OTHERS.

TS-20 CONTRACTOR SHALL COVER NEW SIGNAL HEADS WITH TRAFFIC SIGN AND SIGNAL COVER CONCEPTS MODEL 3GRC COVERS OR APPROVED EQUAL WHEN SIGNAL HEADS HAVE BEEN INSTALLED ON MASTER ARMS. SIGNAL HEADS ARE TO REMAIN COVERED UNTIL TRAFFIC SIGNALS HAVE BEEN TURNED ON. REMOVED COVERS TO BECOME THE PROPERTY OF THE CITY OF THE VILLAGE. COST TO BE INCLUDED IN OTHER ITEMS OF WORK.

TS-21 CONTRACTOR SHALL PROVIDE POLARIA IN2 - NAVIGATOR 2-WIRE PUSH BUTTON STATION OR APPROVED EQUAL FACEPLATE SHALL BE BLACK.

TS-22 THIS PAY ITEM SHALL INCLUDE ONE IVC-15S - INTELLIGENT CENTRAL CONTROL UNIT FOR SHELF MOUNT OR APPROVED EQUAL FOR EACH OF THE INTERSECTION(S) INCLUDED IN THIS PROJECT THE CONTRACTOR SHALL ALSO FURNISH ONE IVC-"Y" CABLE. THE SDLC "Y" CABLE IN CONJUNCTION WITH IX PROGRAMMING SHALL BE USED FOR PEDESTRIAN CALLS WITHIN THE CONTROLLER.

TS-23 ONE-WAY ONE SECTION LIED COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL BE USED.

TS-24 ALL DEVICES INSTALLED MUST BE COMPATIBLE WITH EXISTING CITY CELLULAR SYSTEM. THE CITY WILL VERIFY COMMUNICATION EXISTS WITH THE CONTRACTOR AT THIS LOCATION PRIOR TO FINAL ACCEPTANCE. COST OF ALL EQUIPMENT AND INSTALLATION NECESSARY TO ESTABLISH COMMUNICATION WITH THE CITY OF THE VILLAGE CELLULAR SYSTEM SHALL BE INCLUDED IN THE COST OF THIS ITEM.

THE ELECTRONIC COPIES OF THE CONTROL CABINET SHEET SHALL BE PROVIDED TO THE CITY OF THE VILLAGE COST TO BE INCLUDED IN THIS ITEM.

TS-25 CONTROLLER CABINET SHALL INCLUDE AN EXTENSION BASE WITH A HEIGHT OF 15 INCHES AND BASE DIMENSIONS AND FIT TO MATCH THE CABINET INSTALLED.

TS-26 THIS BID ITEM CONSISTS OF THE INSTALLATION OF FOUR RADAR PRESENCE DETECTORS (RPP), WAVETRONIX SMARTSENSOR MATRIX MODEL 225 OR APPROVED EQUAL AND FOUR CONTINUOUS TRACKING ADVANCE DETECTOR (CTAD), WAVETRONIX SMARTSENSOR ADVANCE MODEL 20V OR APPROVED EQUAL, ASSOCIATED WIRING/CABLES, CONTROLLER MODULES AND ALL OTHER NECESSARY ITEMS OF WORK FOR A COMPLETE OPERATIONAL VEHICLE DETECTION SYSTEM. THE RPP SHALL BE DESIGNED WITH A MATRIX OF 16 RADARS AND SHALL BE ABLE TO DETECT AND REPORT PRESENCE IN UP TO 10 LANES WITHIN A 90 DEGREE FIELD OF VIEW WITH BOUNDARIES AS CLOSE AS 8 FEET FROM THE BASE OF THE POLE ON WHICH THE RPP IS MOUNTED, THE RPP SHALL BE ABLE TO DETECT AND REPORT PRESENCE IN CURVED LANES AND AREAS WITH ISLANDS AND MEDIANs.

THE CTAD SHALL DETECT RANGE AND SPEED TO THE STOP BAR FOR VEHICLES OR CLUSTERS OF VEHICLES MOVING IN THE USER-SELECTED DIRECTION OF TRAVEL. THE CTAD SHALL DYNAMICALLY TRACK AND UPDATE THE ESTIMATED TIME OF ARRIVAL (ETA) FOR EACH VEHICLE AS IT APPROACHES THE STOP BAR. EACH NEVA-Y-MEASURED ETA RESULT WILL BE CONTINUALLY COMPARED AGAINST THE PRE-DETERMINED ETA RANGES THAT DEFINE THE DELIMA ZONE, AND A GREEN LIGHT EXTENSION REQUEST WILL BE PROVIDED TO THE CONTROLLER WHEN ONE OR MORE VEHICLES ARE WITHIN THAT RANGE, THE CTAD SHALL ALSO DETECT INSTANTANEOUS ROADWAY EFFICIENCY.

THESE RADAR SENSOR INTERFACES (CI) WAVETRONIX CLICKI MODEL 658 OR APPROVED EQUAL. CI SHALL BE AN ENCLOSED UNIT, SUITABLE FOR PLACEMENT TO A CONTROLLER CABINET SHELF. CI SHALL HAVE A MASTER POWER SWITCH, INDIVIDUAL SENSOR POWER SWITCHES, AND STANDARD 120VAC POWER PLUG. EACH CI SHALL PROVIDE UP TO 64 DETECTOR CHANNELS USING THE NEMA TS-2 SDLC CONNECTION. SENSOR CONNECTION TO THE CI SHALL BE ACCOMPLISHED BY COLOR-CODED, QUICK-CONNECT (INSULATION DISPLACEMENT TERMINATIONS). CI SHALL HAVE A OLED ILLUMINATED DISPLAY PANEL AND SIX-BUTTON KEYPAD FOR NAVIGATION AND SETTINGS ENTRY/REVISION. CI SHALL BE CONFIGURABLE VIA ETHERNET RJ-45 PORT USING A STANDARD WEB BROWSER.

THE EXISTING TRAFFIC SIGNAL CABINET AND CONTROLLER SHALL BE USED IF APPROVED BY CITY. THE CONTRACTOR SHALL CAREFULLY REMOVE AND REINSTALL THE NECESSARY CABINET AND CONTROLLER COMPONENTS TO RESTORE THE FUNCTIONALITY OF THE TRAFFIC SIGNALS. THE QUANTITY SHOWN INCLUDES THE APS CONTROL UNIT FOR THE PEDESTRIAN SIGNALS. POWER TO THE TRAFFIC SIGNAL CONTROLLER CABINET TO POWER ALL SIGNALS AND LUMINAIRES SHALL BE SUPPLIED BY THE EXISTING POWER SOURCE. THE CONTRACTOR SHALL COMPLETE THE NECESSARY WORK TO POWER THE SIGNALS AND LUMINAIRES. THIS WORK SHALL BE SUBSIDIARY TO THE TRAFFIC SIGNAL CONTROLLER ASSEMBLY.

TS-29 INSTALL INTERNALLY ILLUMINATED STREET NAME SIGN PER MANUFACTURER RECOMMENDATIONS.
GENERAL NOTES

- SURVEY FOR THIS PROJECT SHOULD ENCOMPASS THE RIGHT OF WAYS OF PENNSYLVANIA AVE. AND BRITTON RD. IN BOTH DIRECTIONS FOR THE LINEAR FOOTAGE DISTANCE SHOWN ON PLAN. THIS IS NECESSARY IN ORDER TO DETERMINE SEVERAL FACTORS INVOLVED IN THE DESIGN PROCESS OF AN INTERSECTION FOR SIGNALIZATION.

- SURVEYOR SHALL COLLECT ALL INFORMATION IN THESE AREAS IN AS MUCH DETAIL AS POSSIBLE, MUCH LIKE AN ALTA SURVEY. ALL ABOVE GROUND ITEMS, CURB LINES, PULL BOXES, ETC. AND ANY BELOW GROUND REFERENCES OF UTILITIES THAT MAY BE OBSERVED IN THE FIELD SHOULD BE COLLECTED.

- INCLUDE ALL BUILDING OUTLINES IN THE INTERSECTION AREA.

- ALL POWER POLES, BACK OF CURBS, CURB RADIUS', EDGE OF PAVEMENT, DRIVES, VALVES, UTILITIES, PARKING LOTS, SIGNS, STORM SEWER, MANHOLES, FIRE HYDRANTS, TREES, SIDEWALKS, INLETS AND EXISTING STRIPING AND APPROX. LANE DIVIDES.

- ALL EXISTING SIGNAL POLES, SIGNAL LOOPS, PEDESTRIAN POLES, SIGNAL CONTROL BOXES, PEDESTALS, AND BOLLARDS IF ANY.
1. All work must meet current Americans With Disabilities Act (ADA) requirements.

2. Minimum sidewalk width shall be as follows: residential 5'-0" at curb, 4'-0" at property line, commercial 6'-0" at curb, 5'-0" at property line.

3. Sidewalk cross slope shall be a maximum of 2% and a minimum of 2% cross slope.

4. All obstructions into the walk, such as power poles, meters, sign posts, etc., must have at least 48" of clear travel space around the obstruction.

5. Sidewalk running grade shall not exceed 3%, unless the sidewalk is contained in the R-0-50 and then cannot exceed the general grade established for the adjacent street. Sidewalk slope requirements also apply to transition (T) zones.

RAMP LEGEND

- Ramp
- Existing curb
- Existing full box
- Existing mast arm w/ pole
- Existing signal head
- Existing pedestrian controller
- Existing power source controller
- Pedestrian push button
- Walk and don't walk
- Signal arm w/ pole (articulated)
- MAST ARM W/ POLE WITH ABOVE SYMBOLS
- Prop. Pedestrian marking
- Approach

SUMMARY OF QUANTITIES

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THE VILLAGE

PROJECT "B" SIDEWALK PLAN SHEET
BRITTON RD. AND PENNSYLVANIA AVE.

CIVIL ENGINEERS

ARCHITECTS

CONTRACTOR

PROJECT MANAGER

PENNYSYLVANIA AVE.

GWS

SCD

SCD

R309113.05(B)

09/21/20

HUITT-ZOLLARS

BRITTON RD.

PENNSYLVANIA AVE.

RAMP LEGEND

LEGAL DESCRIPTION

R = RAMP
L = LANDING AREA
C = CURVE (ALL DIRECTIONS)
T = TRANSITION
SW = SIDEWALK
GW = DRIVEWAY
NOTES:

1. All construction shall conform to the specifications of the City of the Village, design standards, specifications, guidelines, and the latest Oklahoma Hydrographic standards.

2. Proposed signal phasing and wiring shown in the plans are subject to change. Contractor shall install, cable, and connect the signals, as shown on the cabinet preparatory to installation by the City of the Village.

3. Contractor shall restore any damaged vegetation to its original condition.

4. Contractor shall contact the City of the Village for the proper procedure of shutting down the signals when construction will affect the City's signal operations.

5. All equipment furnished by the contractor shall be inspected and approved by the City prior to installation.

6. Refer to Oklahoma Hydrographic standards and the City of the Village's construction standards for additional information.

7. Avoid damage to existing concrete curbs and gutters. Avoid all overhead powerlines and services throughout project area. Contractor is responsible for locating all utilities that may be impacted.

8. Remove existing traffic signal ground wires not in use and existing ground plates shall be removed if not needed. Contractor is responsible for barricading existing surrounding traffic. New signal shall be potted to the existing traffic signal equipment box.

9. Abandon existing circuit and remove conduits.

10. Abandon existing loop detectors.

11. The location of the signal poles and fixtures are not to be altered, and may be added to accommodate local conditions, exact location of signal poles, controller, etc., to be approved by the engineer in the field.

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<th>TABLE 1 - SIGNAL HEADS - PROJECT &quot;B&quot;</th>
<th>SIGNAL HEAD NUMBER</th>
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<th>VISOR</th>
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PHASING DIAGRAM - PROJECT "B"

DRAWN BY
CHECKED BY
APPROVED BY
DATE
JOB NUMBER

RB
JGD
JGD
R309113.05(B)
09/22/20

HUITT-ZOLLARS

PHASING DIAGRAM - PROJECT "B"

PHASE "A"
BRITTON RD.

PHASE "B"
PENNSYLVANIA AVE.

PHASE "A"

PHASE "B"

PHASING & SIGNAL HEAD NO.'S

SEQUENCE CHART - PROJECT "B"

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THE VILLAGE
SIGNALIZATION PROJECT B

PROJECT "B" SIGNAL DETAIL PLAN
BRITTON RD. AND PENNSYLVANIA AVE.

PROJECT NO. R309113.05(B)