ITEM 632 - STRAIN POLE & SIGNAL SUPPORT, (BY TYPE AND DESIGN), AS PER

COULD AFFECT THE LOCATION OF THE FOUNDATIONS FOR THESE ITEMS, AND

CONSEQUENTLY, THE DESIGN OF THE VARIOUS SUPPORTS, AND/OR ARMS, THE

CONTRACTOR SHALL NOT PLACE FINAL ORDERS FOR THESE ITEMS UNTIL THE

THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DETERMINING THE REVISED

DESIGN. THE ENGINEER WILL SUBSEQUENTLY INFORM THE CONTRACTOR OF ANY

WRITTEN NOTICE TO PROCEED WITH THE ORDERS FOR THESE ITEMS.

CHANGES NECESSARY, AND AUTHORIZE HIM TO ORDER THE SUPPORTS.

DUE TO THE POSSIBILITY OF CONFLICT WITH EXISTING OR PROPOSED UNDERGROUND

OBSTRUCTIONS (INCLUDING THE POSSIBILITY OF UNRECORDED OBSTRUCTIONS) WHICH

FOUNDATIONS HAVE BEEN INSTALLED, AND HE HAS RECEIVED, FROM THE ENGINEER,

IF ANY FOUNDATION LOCATIONS MUST BE ADJUSTED, THE CONTRACTOR SHALL NOTIFY

THE ENGINEER. WHO WILL DETERMINE THE REVISED LOCATIONS AND IF ANY SUPPORT

DESIGN CHANGES ARE NECESSARY, IN CONSULTATION WITH THE MAINTAINING AGENCY.

THE CONTRACTOR SHALL, WHEN DEVELOPING HIS PROGRESS SCHEDULE, AND THOSE

OF HIS SUBCONTRACTORS, ENSURE THAT THE FOUNDATIONS ARE INSTALLED AT THE

EARLIEST TIME AS IS FEASIBLE AND PRACTICAL. AND SHALL INCLUDE SUFFICIENT

TIME IN THE PROGRESS SCHEDULE FOR THE ORDERING, MANUFACTURE, DELIVERY,

NO PAYMENTS FOR DELIVERED MATERIALS FOR THESE ITEMS WILL BE MADE UNTIL

ARE REQUIRED. NO PAYMENTS WILL BE MADE FOR ITEMS MANUFACTURED TO THE

THE CONTRACTOR SHALL PROTECT PEDESTRIANS AND VEHICLES FROM EXPOSED

THE METHOD OF COVERING THE ANCHOR BOLTS SHALL BE APPROVED BY THE

ALL COSTS ASSOCIATED WITH THE PROCEDURES AS OUTLINED ABOVE SHALL BE

CONSIDERED INCIDENTAL TO THE COST OF THE UNIT PRICE BID (EACH) FOR ITEM

632 - STRAIN POLE & SIGNAL SUPPORT, (BY TYPE AND DESIGN), AS PER PLAN.

THE FOUNDATIONS ARE IN PLACE. AND IF CHANGES IN THE DESIGN OF THESE ITEMS

ANCHOR BOLTS AT ALL TIMES UNTIL THE ASSOCIATED SIGNAL SUPPORT IS ERECTED.

AND INSTALLATION OF THESE ITEMS AFTER THE FOUNDATIONS ARE IN PLACE.

THE CONTRACTOR SHALL BE COMPENSATED FOR EACH FOUNDATION HOLE THAT MUST BE ABANDONED. PAYMENT FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS, INCLUDING BACK FILL COMPACTING AND SURFACE RESTORATION, SHALL BE AT THE CONTRACT UNIT PRICE BID FOR ITEM "632 — SIGNALIZATION MISC.: FOUNDATION TEST HOLES" FOR THE NUMBER EXCAVATED AND BACKFILLED. THE FOLLOWING QUANTITY IS ESTIMATED:

M TOTAL UNIT DESCRIPTION

632 2 EA. SIGNALIZATION MISC.: FOUNDATION TEST HOLES

## CERTIFICATION AND APPROVAL OF TRAFFIC CONTROL ITEMS

SUBMISSIONS BY THE CONTRACTOR FOR APPROVAL SHALL CONFORM WITH SECTIONS 632.03 AND 633.03 AS APPROPRIATE EXCEPT THAT FOUR (4) SETS OF INFORMATION AND SUBMISSIONS SHALL BE MADE TO THE CITY OF MENTOR ENGINEER FOR HIS INFORMATION AND COMMENTS.

### ITEM 630. BREAKAWAY SIGN POSTS

ALL SIGN POSTS USING STRUCTURAL STEEL BEAMS SHALL HAVE BREAKAWAY HARDWARE.

#### ITEM 633. PREEMPTION. AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING PREEMPTION EQUIPMENT IN THE LOCATIONS AND LOCAL CONTROLLERS, AS SHOWN IN THE PLANS

THE PREEMPTION SHALL CONFORM TO O.D.O.T. SPECIFICATION 633 AND SHALL UTILIZE COMMUNICATIONS TO IDENTIFY THE PRESENCE OF AN EMERGENCY PRIORITY VEHICLE. IT SHALL CAUSE THE TRAFFIC SIGNAL CONTROLLER TO SELECT A PREPROGRAMMED PREEMPTIONS PLAN THAT WILL DISPLAY AND HOLD THE DESIRED SIGNAL PHASE FOR THE DIRECTION OF THE EMERGENCY VEHICLE.

THE COMMUNICATIONS MEDIUM SHALL EMPLOY EITHER SOUND, LIGHT, OR RADIO DETECTION TECHNIQUES TO DETERMINE AND LOG THE PRESENCE OF THE EMERGENCY VEHICLE. THE SYSTEM SHALL DETECT THE PRESENCE OF THE VEHICLE THROUGH AN EMITTING DEVICE LOCATED ON THE EMERGENCY VEHICLE.

THE SYSTEM SHALL ACTIVATE THE PREEMPTION SEQUENCE BY APPLYING A SIGNAL TO ONE OF THE CONTROLLERS PREEMPT DISCRETE INPUTS. THE SYSTEM SHALL BE COMPLETELY COMPATIBLE WITH THE NEMA CONTROLLER.

THE EQUIPMENT SHALL BE SHELF MOUNTED AND EASILY REMOVABLE AND REPLACEABLE WITHIN THE CABINET. THE EQUIPMENT SHALL BE SUPPLIED COMPLETELY WIRED IN THE CONTROLLER CABINET AND TESTED.

THE SYSTEM SHALL BE CAPABLE OF PREEMPTING AND RECEIVING PRIORITY FOR EACH APPROACH TO THE INTERSECTION, AS INDICATED IN THE PLANS. IT SHALL BE POSSIBLE TO DETECT THE EMERGENCY VEHICLE UP TO 1200 FEET FROM THE INTERSECTION.

# ITEM 633, PREEMPTION, AS PER PLAN, ALTERNATE BID

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ALL ITEMS TO PROVIDE A COMPLETE PRIORITY CONTROL SYSTEM. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR SHALL INCLUDE OPTICOM MODEL 754 PHASE SELECTOR, MODEL 711, 721, 722 OPTICAL DETECTORS, MODEL 760 CARD RACKS AND 150 WATT WHITE FLOOD LIGHTS FOR CONFIRMATION LIGHTS. INSTALLATION OF ALL CONNECTORS, TERMINALS AND INTERFACE RACKS NECESSARY TO PROVIDE A COMPLETE PRIORITY CONTROL SYSTEM SHALL BE INCIDENTAL TO THIS ITEM. ANY ITEMS OF LABOR, MATERIALS OR EQUIPMENT REQUIRED BUT NOT LISTED SHALL BE FURNISHED AND INSTALLED AS INCIDENTAL TO THE CONTRACT. PAYMENT FOR ITEM 633 — PREEMPTION, AS PER PLAN, WILL BE MADE AT THE CONTRACT PRICE FOR ALL PRIORITY CONTROL COMPONENTS AT EACH LOCATION IN PLACE, INSTALLED, WIRED, TESTED AND ACCEPTED.

### ITEM 630. SIGNING MISC.: SIGNAL AND OVERHEAD SIGN SUPPORT. AS PER PLAN

THE SUPPORT SHALL INCLUDE A MAST ARM FOR THE TRAFFIC SIGNAL AND A SUPPORT ARM FOR THE OVERHEAD ILLUMINATED SIGN. THE POLE DESIGN DETAIL AND SIGN SUPPORT DETAIL CAN BE FOUND ON THE ELEVATION VIEW #26 OF THE "OVERHEAD AND GROUND MOUNTED SIGN ELEVATION VIEWS". THE MAST ARM DETAIL ALONG WITH THE TRAFFIC SIGNAL DETAILS CAN BE FOUND IN THE SIGNAL SUPPORT CHART ON THE INTERSECTION SIGNAL PLANS. ITEM 632, "STRAIN POLE & SIGNAL SUPPORT (BY TYPE AND DESIGN), AS PER PLAN" SHALL ALSO APPLY TO THIS ITEM.

### ITEM - 625 SPECIAL, PLASTIC CAUTION TAPE

THE LOCATION OF CONDUIT IN TRENCH SHALL BE MARKED BY THE USE OF A CONTINUOUS IDENTIFYING TAPE BURIED IN THAT TRENCH ABOVE THE LINE. THE IDENTIFYING TAPE SHALL BE AN INERT MATERIAL APPROXIMATELY 6" WIDE COMPOSED OF POLYETHYLENE PLASTIC AND SHALL BE HIGHLY RESISTANT TO ALKALIS. ACIDS OR OTHER CHEMICAL COMPONENTS LIKELY TO BE ENCOUNTERED IN SOILS. THE TYPE SHALL BE RED WITH THE WORDS "ELECTRIC LINE BURIED BELOW" PRINTED IN BLACK LETTERS ON ONE SIDE ONLY. IT SHALL BE SUPPLIED IN CONTINUOUS ROLLS WITH THE IDENTIFYING LETTERING REPEATED FOR THE FULL LENGTH OF THE TAPE. THE CONTRACTOR SHALL BURY THE TAPE IN THE TRENCH WITH ONE STRIP PLACED APPROXIMATELY DOWN THE CENTER LINE AND 8" TO 12" BELOW THE FINAL GRADE. IT SHALL BE PLACED IN THE TRENCH WITH THE PRINTED SIDE UP AND SHALL BE ESSENTIALLY PARALLEL TO THE FINISHED SURFACE. THE CONTRACTOR SHALL TAKE ANY NECESSARY PRECAUTIONS TO INSURE THAT THE TAPE IS NOT PULLED. DISTORTED OR OTHERWISE MISPLACED IN COMPLETING THE TRENCH BACKFILLING. THE TAPE SHALL BE "TERRA TAPE", "ALLEN SYSTEM'S" OR AN EQUAL AS APPROVED BY THE ENGINEER IN ADVANCE.

ORIGINAL DESIGNS.

ENGINEER.