# MAINTENANCE OF TRAFFIC GENERAL NOTES

#### ITEM 614 - TEMPORARY IMPACT ATTENUATOR (G-R-E-A-T TYPE)(MODEL NO. 200200NF6GCZ)

THIS WORK SHALL CONSIST OF FURNISHING TEMPORARY IMPACT ATTENUATORS AS REQUIRED IN THE PLANS. THIS ITEM SHALL ALSO INCLUDE ALL RELATED HARDWARE NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER TO CONSTRUCT COMPLETE AND FUNCTIONAL G-R-E-A-T CZ IMPACT ATTENUATOR SYSTEMS. THE IMPACT ATTENUATOR SHALL BE MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., ONE EAST WACKER DRIVE, CHICAGO, ILLINOIS 60601, TELEPHONE: (312) 467-6750. THE ATTENUATORS SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND AT THE LOCATIONS SHOWN ON SHEET NO. 12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION, REPAIRING AND OTHERWISE RESTORING THE IMPACT ATTENUATOR IN ACCORDANCE WITH THE MANUFACTURER'S MAINTENANCE INSTRUCTIONS WHILE IT IS IN USE ON THE PROJECT. SUCH REPAIRS SHALL BE PERFORMED WITHIN TWENTY-FOUR (24) HOURS OF NOTIFICATION OF THE INCIDENT WHICH CAUSED DAMAGE TO THE ATTENUATOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL NECESSARY MATERIALS AND EQUIPMENT REQUIRED TO PERFORM THE ABOVE DESCRIBED RESTORATION OF THE ATTENUATOR. ONE (1) EXTRA COMPLETE SET OF HEX FOAM CARTRIDGES, AS MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., FOR THE ATTENUATORS FURNISHED, SHALL BE STOCKED AT ALL TIMES FOR THE ABOVE REPAIRS AND THE COST SHALL BE INCLUDED IN THE COST OF THE ATTENUATOR.

THE NOSE COVER OF THE ATTENUATOR SHALL BE MARKED WITH EVENLY SPACED FOUR (4)-INCH WIDE HORIZONTAL STRIPES OF YELLOW REFLECTIVE MATERIAL, MEETING THE REQUIREMENTS OF ITEM 730.19 OF THE SPECIFICATIONS.

THE SYSTEM SHALL BE A MODEL NO. 200200NF6GCZ, WITH 4" OFFSET NJ TRANSITION PANELS AND PLACED ATOP AND ANCHORED INTO EXISTING PAVEMENT (3" +?\_ ASPHALT CONCRETE OVER 10" +?\_ PORTLAND CEMENT REINFORCED CONCRETE PAVEMENT) WITH 18" "MP-3" BOLTING SYSTEM, ALL AS RECOMMENDED BY THE MANUFACTURER.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR EACH, ITEM 6/4 - IMPACT ATTENUATOR, G-R-E-A-T CZ SYSTEMS, MODEL NO. 200200NF6GCZ, WHICH PRICE SHALL BE CONSIDERED FULL PAYMENT FOR FURNISHING, INSTALLING AT THE SPECIFIC LOCATIONS, FURNISHING EXTRA HEX FOAM CARTRIDGES AS SPECIFIED ABOVE, RESTORATION AFTER EACH VEHICULAR IMPACT, INCLUDING ALL LABOR, TOOLS, EQUIPMENT, AND MISCELLANEOUS HARDWARE MATERIALS NECESSARY TO COMPLETE THIS ITEM OF WORK IN PLACE. ALSO INCLUDED IN THE ABOVE COST SHALL BE THE REMOVAL AND DISPOSAL OF THE IMPACT ATTENUATORS.

THE QUANTITIES FOR TEMPORARY IMPACT ATTENUATORS ARE SHOWN ON SHEET NO. 4-7.

## ITEM 614 - TEMPORARY IMPACT ATTENUATOR, G-R-E-A-T TYPE (REPLACEMENT)

## (MDDEL NO. 200200NF6GCZ)

TEMPORARY IMPACT ATTENUATORS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENT OF THE PLAN, SPECIFICATION AND PROPOSAL, WHICH BECOME DAMAGED BEYOND REPAIR BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED, BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, WITHIN TWENTY-FOUR (24) HOURS OF THE NOTIFICATION OF THE INCIDENT WHICH CAUSED THE DAMAGE TO THE ATTENUATOR. REPLACEMENT ATTENUATORS SHALL MEET THE SPECIFICATIONS OF THE ORIGINAL ATTENUATOR.

ONE (1) REPLACEMENT ATTENUATOR SHALL BE STOCKED AT ALL TIMES BY THE CONTRACTOR FOR IMMEDIATE REPLACEMENT ON THE PROJECT.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DESCRIBED ABOVE:

ITEM 6/4 TEMPORARY IMPACT ATTENUATOR, G-R-E-A-T TYPE (REPLACEMENT) 1 EACH MODEL NO. 200200NF6GCZ.

## ITEM SPECIAL - REPLACEMENT SIGN

FLAT SHEET SIGNS 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 SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED BUT GOOD CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER SQUARE FOOT FOR ITEM SPECIAL - REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 100 SQUARE FEET HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

#### ITEM SPECIAL - 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 SPECIAL - 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 25 SQUARE FEET HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

## ITEM 614 - BARRIER REFLECTORS, TYPE B

THE CONTRACTOR SHALL REFER TO THE ITEM 622 'DELINEATION OF PORTABLE CONCRETE BARRIER' PROPOSAL NOTE FOR THE SPECIFICATIONS CONCERNING THIS ITEM. SEE THE SECTION TITLED '32 INCH PORTABLE CONCRETE BARRIER WITHOUT GLARE SCREEN'. IN ADDITION, REFLECTORS AND THEIR MOUNTING SHALL CONFORM TO SUPPLEMENTAL SPECIFICATION 802 EXCEPT THAT SPACING SHALL BE AT TWENTY-FIVE (25) FEET CENTER-TO-CENTER.

#### ITEM 614 - DBJECT MARKER, 730.19

THE CONTRACTOR SHALL REFER TO THE "ITEM 622 - DELINEATION OF PORTABLE CONCRETE BARRIER" PROPOSAL NOTE FOR THE SPECIFICATIONS CONCERNING THIS ITEM. SEE THE SECTION TITLED "32 INCH PORTABLE CONCRETE BARRIER WITHOUT GLARE SCREEN".

#### ITEM 614 - WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND REMOVE WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS (R-10-48) (45 MPH) WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT OR MINIMUM SPEED SIGNS WITHIN THE REDUCED SPEED ZONE. THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED SIGNS IS INCIDENTAL TO THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED AND COVERED PRIOR TO STARTING WORK OR MAY BE ERECTED UNCOVERED NO MORE THAN 4 HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN 4 HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF ANY LANE RESTRICTION EXPECTED TO LAST AT LEAST 30 DAYS, OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF DIVIDED HIGHWAYS, 500 FEET IN ADVANCE OF THE LANE REDUCTION TAPER. THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, 250 FEET IN ADVANCE OF THE LANE REDUCTION TAPER ON UNDIVIDED HIGHWAYS. THE SIGN SHALL BE REPEATED, ON THE SIDE NEAREST TRAFFIC, EVERY 1 MILE FOR 55 MPH ZONES AND EVERY 1/2 MILE FOR 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH ENTRANCE RAMP WITHIN THE ZONE. A SIGN TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. THIS SIGN SHALL BE A R-8A.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED BUT GOOD CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19 AND U.S. DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION FOR TYPE III SHEETING, FP-85. WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO (2) ITEM 630 GROUND MOUNTED SUPPORTS, NO. 4 POSTS.

WORK ZONE SPEED LIMIT SIGN AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REFRECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTION, MAINTENANCE, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGNS AND SUPPORTS.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DUTLINED ABOVE:

ITEM 614 - WORK ZONE SPEED LIMIT SIGN

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### EXCAVATION AND EMBANKMENT RESULTING FROM THE CONSTRUCTION OF TEMPORARY PAVEMENT

THE FOLLOWING ESTIMATED QUANTITIES FOR EXCAVATION AND EMBANKMENT, WHICH WILL RESULT FROM THE CONSTRUCTION OF ALL THE ITEM 615 - TEMPORARY PAVEMENT, CLASS A (INCLUDING AS PER PLAN), LOCATED ON THIS PROJECT, ARE NOT PAY ITEM QUANTITIES, BUT RATHER ARE INCLUDED HERE FOR INFORMATION ONLY.

(ITEM 203) EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION (ITEM 203) EMBANKMENT

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