

GENERAL NOTES

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WBS

PAVEMENT

ITEM 407 - TACK COAT AND ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF:

407, TACK COAT	0.45 LITER PER SQ. METER
407, TACK COAT FOR INTERMEDIATE COURSE	0.23 LITER PER SQ. METER

ITEM 408. BITUMINOUS PRIME COAT

THE RATE OF APPLICATION OF THE 408 PRIME COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 1.8 LITERS PER SQUARE METER OF PRIME COAT FOR ESTIMATING PURPOSES ONLY.

ITEM 304 - AGGREGATE BASE, AS PER PLAN

MATERIAL FURNISHED FOR THIS ITEM SHALL EXCLUDE ALL SLAG.

CONTINGENCY UNDERCUTTING OF SOIL - S.R. 640

THE FOLLOWING IS A CONTINGENCY QUANTITY FOR AN ADDITIONAL 600mm OF UNDERCUT. THE UNDERCUT TO BE BACKFILLED WITH ITEM 304 AGGREGATE BASE, TO BE USED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR MAY HAVE TO USE LIGHTER EQUIPMENT AND LOAD ON THE 304 AND MAY NOT BE ABLE TO USE IT TO HAUL ON.

ITEM 203	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	2400 CU. METER
ITEM 304	AGGREGATE BASE, AS PER PLAN	2400 CU. METER

THE ABOVE QUANTITIES ARE BASED ON A 25% AREA OF THE TOTAL S.R. 640 PAVEMENT AREA.

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN TAKEN FROM THE RECORDS AND ARE BELIEVED TO REPRESENT THE EXISTING PAVEMENT CONDITIONS, BUT THE STATE OF OHIO WILL NOT GUARANTEE THE ACCURACY OF THE SAME.

ITEM 608 - 100mm CONCRETE WALK, AS PER PLAN

THIS ITEM MAY BE NON PERFORMED AS A PART OF THIS CONTRACT. THE ENGINEER WILL PROVIDE A WRITTEN ORDER TO THE CONTRACTOR IF THE ITEM IS TO BE ELIMINATED FROM THE CONTRACT. SUCH ACTION SHALL IN NO WAY INVALIDATE THE CONTRACT. THE CONTRACTOR SHALL NOT PURCHASE ANY OF THE MATERIAL REQUIRED FOR THIS ITEM UNTIL NOTIFIED BY THE ENGINEER TO PROCEED WITH THE ITEM OR TO ELIMINATE THE ITEM.

NO CLAIM SHALL BE MADE BY THE CONTRACTOR FOR ANY LOSS OF ANTICIPATED PROFITS BECAUSE OF THE ELIMINATION OF THIS CONTRACT ITEM.

A 0.60 METER WIDE STRIP OF COLORED, IMPRINTED AND TEXTURED CONCRETE WALK SHALL BE PLACED ALONG BOTH SIDES OF THE ROADWAY DIRECTLY BEHIND THE CURB. THE COLORED, IMPRINTED AND TEXTURED CONCRETE WALK SHALL BE PLACED UP TO THE EDGE OF CURB RAMPS AND DRIVE APRONS. QUANTITIES FOR THE COLORED, IMPRINTED AND TEXTURED CONCRETE WALK APPEAR ON THE SIDEWALK SUB-SUMMARY. THE COLORED, IMPRINTED AND TEXTURED CONCRETE WALK SHALL BE INSTALLED BY A CONTRACTOR WHO HAS A MINIMUM OF THREE YEARS EXPERIENCE IN PROPER INSTALLATION OF COLORED, IMPRINTED AND TEXTURED CONCRETE PROJECTS OF COMPARABLE SIZE.

MATERIALS

COLOR HARDENER: BOMACRON BRICK RED, BC-1, REGULAR GRADE, OR EQUAL.

RELEASE AGENT: BOMACRON COBBLESTONE GRAY, BC-1, OR EQUAL.

CURING AGENT: BOMACRON CURE AND SEAL, OR EQUAL.

SEALER: BOMACRON CONCRETE SEALER, OR EQUAL.

NO ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE PERMITTED.

IMPRINT PATTERN

PATTERN: BASKETWEAVE USED BRICK.

INSTALLATION

CONCRETE WALK SHALL BE INSTALLED PER ODOT 608 AND MANUFACTURER'S INSTRUCTIONS.

COLOR HARDENER SHALL BE APPLIED EVENLY TO THE PLASTIC SURFACE BY THE DRY-SHAKE METHOD USING A MINIMUM OF 60 POUNDS PER 100 SQUARE FEET. IT SHALL BE APPLIED IN TWO (2) OR MORE SHAKES, FLOATED AFTER EACH AND TROWELED ONLY AFTER THE FINAL FLOATING. AFTER TROWELING, THE ENTIRE AREA SHALL BE CHECKED FOR COLOR UNIFORMITY AND EXTRA COLOR HARDENER SHOULD BE ADDED AS NEEDED.

RELEASE AGENT SHALL BE APPLIED EVENLY TO THE SURFACE (TO BE USED ONLY WHEN THE SURFACE IS TO BE TEXTURED).

WHILE THE CONCRETE IS STILL IN THE PLASTIC STAGE OF SET, IMPRINTING TOOLS SHALL BE APPLIED TO MAKE THE DESIRED IMPRESSION TO THE SURFACE.

A SELF-DISSIPATING CURING AGENT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IMMEDIATELY AFTER COMPLETING THE IMPRINTING PROCESS.

CONTROL JOINTS SHALL BE CUT AS EARLY AS POSSIBLE FOLLOWING 24 HOURS AFTER INITIAL SET. JOINTS SHALL NOT BE CUT USING HAND GROOVERS WHILE THE CONCRETE IS STILL PLASTIC. JOINTS SHALL BE CUT IN A RATIO NO GREATER THAN 2 TO 1 OF THE LENGTH BY WIDTH OF THE SQUARE AREA AND SHALL BE PLACED AT IMPRINTED JOINT LINES WITHIN THE PATTERN WHEN POSSIBLE.

ALL EXPOSED SURFACES OF THE COLORED, IMPRINTED AND TEXTURED CONCRETE WALK SHALL BE SEALED WITH PERMANENT CONCRETE SEALER AT THE MANUFACTURER'S RECOMMENDED RATE WHEN THE WALK IS AT 28 DAYS BUT NO MORE THAN 35 DAYS OLD.

SOILS DATA

THE SOIL BORINGS ARE NOT INCLUDED WITH THE PLANS. THE BORING LOGS AND SOILS DATA ARE CONTAINED IN THE SUBSURFACE EXPLORATION REPORT PREPARED BY PSI INCORPORATED. A COPY OF THIS REPORT IS AVAILABLE FROM CT CONSULTANTS, INC..

CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISIONS OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE SO AS TO FORM CONTINUOUS JOINTS WITH THOSE IN THE EXISTING CONCRETE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE SHALL BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2, IF NECESSARY ADDITIONAL JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

ITEM SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATIONS - 12/29/94

1.0 DESCRIPTION

THIS WORK CONSISTS OF CONDUCTING A SURVEY OF THE CONDITION OF STRUCTURES AND THE MONITORING OF GROUND VIBRATIONS. THE SURVEY WORK IS TO BE CONDUCTED BEFORE AND AFTER ALL CONSTRUCTION WORK IS PERFORMED WHICH COULD CAUSE UNDESIRABLE GROUND VIBRATIONS. GROUND VIBRATIONS AND ACOUSTICS SHALL BE MONITORED AT THE APPROPRIATE TIMES DURING THE DURATION OF THIS PROJECT.

2.0 PERSONNEL QUALIFICATIONS

A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF OHIO, SHALL BE ENGAGED BY THE CONTRACTOR TO BE IN CHARGE OF CONDUCTING A STRUCTURAL SURVEY AND IN CHARGE OF MONITORING VIBRATIONS AND ACOUSTICS. THE ENGINEER IN CHARGE OF PERFORMING THE REQUIRED WORK UNDER THIS ITEM IS HEREIN REFERRED TO AS THE MONITORING FOREMAN. THE MONITORING FOREMAN AND/OR HIS TEAM OF EXPERTS SHALL HAVE COLLECTIVELY WORKED ON TWO SIMILAR PROJECTS OR SHALL HAVE COLLECTIVELY ACCRUED NOT LESS THAN TWO YEARS OF SUCCESSFUL EXPERIENCE IN PERFORMING THE TYPE OF WORK SPECIFIED BY THIS NOTE. THE MONITORING FOREMAN AND/OR HIS TEAM OF EXPERTS SHALL HAVE EXPERTISE IN (1) CONDUCTING STRUCTURAL SURVEYS BY VIDEO METHODS, (2) MONITORING VIBRATIONS WITH A SEISMOGRAPH OR WITH OTHER APPROPRIATE INSTRUMENTATION, AND (3) ASSESSING SITES FOR POTENTIAL DAMAGE THAT MAY OCCUR AS A RESULT OF THE PROPOSED CONSTRUCTION. DOCUMENTATION OF THIS EXPERIENCE SHALL BE FURNISHED AT THE PRECONSTRUCTION MEETING.

2.1 THE REQUIREMENT FOR THE MONITORING FOREMAN TO BE AN ENGINEER CAN BE WAIVED BY O.D.O.T. DISTRICT 12 AND THE FIELD ENGINEER PROVIDED THAT THE MONITORING FOREMAN'S EXPERIENCE OR THE COLLECTIVE EXPERIENCE OF THE MONITORING TEAM SHOWS SUBSTANTIAL EXPERTISE IN PERFORMING THE REQUIRED WORK.

3.0 STRUCTURAL SURVEY

THE STRUCTURAL SURVEY SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

3.1 DOCUMENTATION OF THE INTEGRITY OF EXISTING BUILDING MATERIALS AND THE GENERAL OVERALL CONDITION OF THE STRUCTURES RECORDED BY WRITTEN TEXT, PHOTOGRAPHS, AND VHS VIDEO CASSETTE RECORDING.

3.2 THE ESTABLISHMENT OF LOCATIONS AND ELEVATIONS OF REFERENCE POINTS, CHOSEN BY THE MONITORING FOREMAN, FOR DOCUMENTATION OF MEASUREMENTS.

3.3 A DETAILED ON-SITE INSPECTION CONDUCTED IN THE PRESENCE OF THE PROJECT ENGINEER, THE CONTRACTOR, PROPERTY OWNERS, PROPERTY TENANTS IF APPROPRIATE, AND REPRESENTATIVES OF ANY INVOLVED UTILITY COMPANIES.

3.4 DOCUMENTATION OF ALL STRUCTURAL DEFICIENCIES WITH REGARD TO LOCATION, SIZE, TYPE, ETC.

4.0 MONITORING OF VIBRATIONS AND ACOUSTICS

THE MONITORING OF VIBRATIONS AND ACOUSTICS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

4.1 DETERMINATION AND DOCUMENTATION OF EXISTING LEVELS OF VIBRATIONS AND NOISE.

4.2 MONITORING OF ALL CONSTRUCTION OPERATIONS THAT SIGNIFICANTLY CONTRIBUTE TO THE PRODUCTION OF VIBRATIONS AND NOISE WITH A SPECIAL EFFORT MADE TO DOCUMENT THE VIBRATION AND SOUND LEVELS ASSOCIATED WITH BLASTING AND/OR PILE INSTALLATION PROCEDURES.

4.3 THE DEVELOPMENT OF CRITERIA FOR CONTROLLING CONSTRUCTION ACTIVITIES SO THAT THE MONITORING FOREMAN'S ALLOWABLE PREDETERMINED VIBRATION LEVELS ARE NOT EXCEEDED DURING CONSTRUCTION.

5.0 WATER QUALITY

WHEN APPROPRIATE, WATER SAMPLES SHALL BE COLLECTED FROM WELLS, STREAMS OR PROJECT RUNOFF AREAS TO DOCUMENT BEFORE AND AFTER CONSTRUCTION SITE CONDITIONS REGARDING THE QUALITY OF WATER AVAILABLE IN THE VICINITY OF THE PROJECT.

6.0 GROUND VIBRATION

VIBRATION MONITORING GUIDELINES CAN BE FOUND IN FHWA'S MAY 1985 MANUAL ENTITLED "ROCK BLASTING" AND IN VARIOUS OTHER REPORTS.

THE PEAK PARTICLE VELOCITY (PPV) OF GROUND VIBRATIONS IS GENERALLY USED TO MONITOR THE EFFECT OF VIBRATIONS ON STRUCTURES. WHEN MONITORING VIBRATIONS CONSIDERATION MUST BE GIVEN TO (1) THE TYPE OF STRUCTURE BEING EVALUATED AND (2) THE FREQUENCY OF THE VIBRATIONS (LOW FREQUENCY 40 HZ). GENERALLY ALLOWABLE GROUND VIBRATION PEAK PARTICLE VELOCITIES RANGE FROM 13mm/SECOND (0.5 INCHES PER SECOND) TO 50mm/SECOND (2 INCHES PER SECOND) DEPENDING ON THE TYPE OF STRUCTURE UNDER CONSIDERATION. WHEN AN ALLOWABLE PPV IS EXCEEDED, THE VIBRATION PRODUCING OPERATION SHALL BE SUSPENDED AND ALTERNATIVE CONSTRUCTION PROCEDURES SHOULD BE EVALUATED. THE DIRECTOR SHALL BE CONSULTED WHENEVER THE MEASURED MAGNITUDE OF THE VIBRATION LEVEL IS CONSIDERED POTENTIALLY CAPABLE OF PRODUCING STRUCTURAL DAMAGE.

7.0 METHOD OF MEASUREMENT

THE FINAL TWENTY PERCENT OF THE PAYMENT FOR THIS WORK SHALL NOT BE MADE UNTIL THE CENTRAL OFFICE BUREAU OF BRIDGES HAS RECEIVED AND APPROVED THREE COPIES OF THE MONITORING FOREMAN'S FINAL REPORT. THE FINAL REPORT SHALL BE TYPED AND CONTAIN ALL MEASUREMENTS, CONCLUSIONS, AND RECOMMENDATIONS WHICH RESULTED FROM PERFORMING THE ABOVE REQUIRED WORK. INCLUDED WITH THE REPORTS SHALL BE ONE COPY OF ALL PICTURES AND VIDEO RECORDINGS. INTERIM REPORTS SHALL BE FURNISHED TO THE PROJECT ENGINEER DURING CONSTRUCTION THEREBY KEEPING THE PROJECT ENGINEER INFORMED OF THE MONITORING FOREMAN'S PROGRESS AND FINDINGS. THE ORIGINAL TAPES SHALL REMAIN IN THE EXCLUSIVE POSSESSION OF THE MONITORING FOREMAN FOR A PERIOD OF NOT LESS THAN 10 YEARS.

8.0 METHOD OF PAYMENT

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL - "STRUCTURAL SURVEY AND MONITORING OF VIBRATIONS".

GENERAL NOTES

LAK - 640 - 2865 (178)

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