



Delaware County Engineer
50 Channing Street
Delaware, Ohio 43015

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Design Department

SAMPLE PLAN NOTES FOR CAPITAL PROJECTS

ROADWAY GENERAL NOTES

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Note #DC-RD001

EXCAVATION AND EMBANKMENT CONSTRUCTION

EXCAVATED SOILS ON THE PROJECT SITE MAY NOT BE SUITABLE FOR EMBANKMENT USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ANY ON-SITE SOIL USED AS EMBANKMENT MEETS THE REQUIREMENTS OF 203.

ITEM 203, EXCAVATION, INCLUDES WASTING ANY EXCAVATED MATERIAL WITHIN THE RIGHT-OF-WAY WITH THE APPROVAL OF THE ENGINEER OR OUTSIDE THE RIGHT-OF-WAY AT THE CONTRACTOR'S EXPENSE, IF NO SUITABLE AREAS EXIST FOR WASTING WITHIN THE RIGHT-OF-WAY.

ITEM 203, EMBANKMENT INCLUDES CONSTRUCTING EMBANKMENTS TO PLAN LINES AND INCLUDES FURNISHING AND PLACING SUITABLE BORROW MATERIAL AS SPECIFIED IN 203, WHEN REQUIRED. FOR SOIL BORROW OR OTHER MATERIALS NOT ALREADY CERTIFIED TO MEET 203 REQUIREMENTS, THE CONTRACTOR SHALL ALLOW THE ENGINEER 10 DAYS TO PERFORM IN SITU TESTS PRIOR TO USING THE MATERIAL.

PRIOR TO EARTH DISTURBING ACTIVITIES, INSTALL ALL REQUIRED EROSION CONTROL ITEMS AS SPECIFIED ON THE STORMWATER POLLUTION PREVENTION PLAN PREPARED BY THE CONTRACTOR. FOR EARTH DISTURBING WORK OUTSIDE THE WORK LIMITS, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS, IF REQUIRED, INCLUDING FOR BORROW AREAS. PROVIDE THE APPROPRIATE EROSION CONTROL MEASURES AS REQUIRED.

Designer Note:

Use this note on all projects with earthwork.

Note #DC-RD002

UNSUITABLE SUBGRADE SOILS

IF UNSUITABLE SUBGRADE SOILS ARE ENCOUNTERED IN THE AREAS OF THE PROPOSED ROADBED, REMOVE AND REPLACE WITH SUITABLE MATERIAL MEETING THE REQUIREMENTS OF 203.02.R., OR WHEN REQUIRED BY THE ENGINEER, USE GRANULAR MATERIAL MEETING THE SPECIFICATIONS OF 703.16.C TYPE B GRANULAR MATERIAL (304, 411 OR 617 MATERIALS WITH 0 TO 20 PERCENT PASSING THE NO. 200 SIEVE). THE LIMITS OF THE MATERIAL TO BE REMOVED AND REPLACED SHALL BE AS DETERMINED BY THE ENGINEER.

PRIOR TO PLACING FILL, THE CONTRACTOR SHALL CROSS SECTION THE EXCAVATED AREAS AND DETERMINE THE VOLUME. THIS AREA CALCULATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTING EMBANKMENTS. MEASUREMENT SHALL BE MADE USING THE AVERAGE END AREA METHOD. IN SMALL OR IRREGULARLY SHAPED AREAS, MEASUREMENT MAY BE MADE BY WEIGHT WHEN APPROVED BY THE ENGINEER.

THE FOLLOWING QUANTITIES ARE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER FOR USE IN THE WORK NOTED ABOVE:

- ITEM 204, EXCAVATION OF SUBGRADE _____ CU.YD.
- ITEM 204, EMBANKMENT _____ CU.YD.
- ITEM 204, GRANULAR MATERIAL, TYPE B _____ CU.YD.
- ITEM 204, GEOTEXTILE FABRIC, TYPE D _____ SQ.YD.
- ITEM SPECIAL, GEOGRID _____ SQ.YD.

Designer Note:

Use this note on all projects with earthwork that may require removal of unsuitable subgrade materials. For estimating purposes, use the following calculations to determine the required contingency quantities:

204, Excavation of Subgrade

For pavement widening sections, assume 25% of plan area of pavement widening times an average depth of 1.5 feet. This item is intended for undercutting of pavement or shoulder sections where existing soils are poorly drained or not otherwise suitable for subgrade.

204, Embankment

Provide 50% of the calculated quantity of 204, Excavation of Subgrade. This item is intended for areas where soil or other non granular materials can be placed and compacted with large compaction equipment to required 203 compaction levels.

204, Granular Material, Type B

Provide 50% of the calculated quantity of 204, Excavation of Subgrade. This item is intended for areas which are inaccessible to large compaction equipment or in areas where groundwater may be a problem. This item is also used over Geogrid where there are very soft subgrade soils and additional undercutting is deemed not feasible by the construction engineer.

204, Geotextile Fabric, Type D

Provide 25% of the plan area used to calculate 204, Excavation of Subgrade. This item is intended for areas which have very soft or wet subgrade soils and additional undercutting is deemed not feasible by the construction engineer.

Special, Geogrid

Provide 75% of the plan area used to calculate 204, Excavation of Subgrade.

Note #DC-RD003**ITEM SPECIAL-GEOGRID**

PROVIDE BIAXIAL GEOGRID REINFORCEMENT MATERIAL AS DIRECTED BY THE ENGINEER AT LOCATIONS SPECIFIED. THIS ITEM IS INTENDED FOR STRENGTHENING WEAK OR POORLY DRAINED EXISTING SOILS UNDER PLANNED EMBANKMENTS OR SUBGRADE.

GEOGRIDS SHALL NOT BE PLACED ON SOILS WHICH ARE EXPOSED TO LIME OR OTHER CHEMICALS. GEOGRIDS SHALL BE COVERED WITH A MINIMUM OF 6" OF 304, 411 OR 617 MATERIALS UNLESS DIRECTED OTHERWISE BY THE ENGINEER. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR THE INSTALLATION OF THE MATERIAL.

MATERIAL SHALL MANUFACTURED FROM POLYETHELENE, POLYPROPYLENE, OR POLYESTER, AND MEETING THE FOLLOWING PROPERTIES:

MINIMUM APERTURE DIMENSIONS – 0.50 IN. X 0.50 IN.

MAXIMUM APERTURE AREA – 1.25 SQ. IN.

PERCENT OPEN AREA – 50% TO 85%

MASS PER UNIT AREA – 6.0 TO 15.0 OZ. / SQ.YD. (ASTM D 5261)

MINIMUM ULTIMATE TENSILE STRENGTH (T ULT) – 2000 X 1300 LB. / FT. (ASTM D 6637)

MINIMUM TENSILE STRENGTH AT 2% STRAIN – 600 X 400 LB. / FT. (ASTM D 6637)

REDUCTION IN REQUIRED ULTIMATE STRENGTH AFTER 500 HOURS UV EXPOSURE – NONE (ASTM D 4355)

PAYMENT SHALL BE BASED ON THE NUMBER OF SQUARE YARDS OF PLAN AREA COVERED BY GEOGRID NOT INCLUDING OVERLAPS REQUIRED BY THE MANUFACTURER.

Designer Note:

Use this note only with note #DC-R002 where a contingency quantity for Geogrid is provided. This item is intended for areas which have very soft subgrade soils and additional undercutting is deemed not feasible by the construction engineer. 204, Granular Embankment (crushed stone) must be used in the first 6" over top of the geogrid to create the aggregate locking mechanism in the geogrid apertures. It is generally not advisable to install soil or other natural materials between this layer and the pavement section for compaction and settlement reasons.

Note #DC-RD004**USE OF RECYCLED ASPHALT CONCRETE PAVEMENT (RACP) AS EMBANKMENT**

DO NOT USE RECYCLED MATERIAL OR RACP AS EMBANKMENT WITHIN 3 FEET OF THE ROAD SUBGRADE OR FINISHED SHOULDER GRADE. IF RACP IS USED OUTSIDE THESE LIMITS, THE MATERIAL SHALL BE BLENDED WITH A MINIMUM OF 30% NATURAL SOILS OR GRANULAR MATERIAL AS SPECIFIED IN 703.16.

Designer Note:

The note is required for all projects that have embankment construction.

EROSION CONTROL GENERAL NOTES

Note #DC-EC001**SITE PREPARATION FOR SEEDING AND MULCHING**

IN ADDITION TO THE REQUIREMENTS OF 659.10, IN MAINTAINED LAWN AREAS REMOVE ALL STONES LARGER THAN 1/2-INCH BY RAKING OR OTHER METHODS APPROVED BY THE ENGINEER. IF THERE IS EXCESSIVE GRAVEL OR DEBRIS THAT CANNOT BE REMOVED BY CONVENTIONAL METHODS, PROVIDE 4-INCHES OF TOPSOIL AT NO ADDITIONAL COST TO THE COUNTY OVER THESE AREAS. TOPSOIL SHALL BE FERTILE, LOOSE, FRIABLE AND LOAMY AND NOT CONTAIN DEBRIS OR PARTICLES LARGER THAN 1/2-INCH IN ANY DIMENSION. TOPSOIL SHALL CONTAIN BETWEEN 6 AND 20 PERCENT ORGANIC MATERIAL AND NO MORE THAN 18% MOISTURE. TEST TOPSOIL ACCORDING TO SUPPLEMENT 1016.

Designer Note:

Use this note on all projects requiring seeding and mulching.

Note #DC-EC002

ITEM 659-TOPSOIL, AS PER PLAN

PROVIDE PULVERIZED TOPSOIL THAT IS FERTILE, LOOSE, FRIABLE AND LOAMY AT LOCATIONS SHOWN IN THE PLAN OR AS DIRECTED BY THE ENGINEER. TOPSOIL SHALL BE FURNISHED FROM COMMERCIAL SOURCES (TOPSOIL SUPPLIERS) OR SHALL BE FURNISHED FROM STOCKPILES THAT ARE APPROVED BY THE DEPARTMENT.

IN ADDITION TO THE REQUIREMENTS OF 659, TOPSOIL SHALL CONTAIN BETWEEN 6 PERCENT AND 20 PERCENT ORGANIC MATERIAL. TOPSOIL SHALL NOT CONTAIN MORE THAN 18% MOISTURE AND SHALL BE FREE OF WEEDS AND OTHER DELETERIOUS MATERIAL. TOPSOIL SHALL NOT CONTAIN MORE THAN 5 PERCENT OF MATERIAL NOT PASSING THE 1/2-INCH SIEVE, OR ANY MATERIAL 1-INCH OR LARGER IN ANY DIMENSION. FOR TOPSOIL TO BE CONSIDERED LOAMY, ENSURE THAT THE FRACTION PASSING THE NO. 10 SIEVE DOES NOT CONTAIN MORE THAN 40 PERCENT CLAY. TEST FOR ACIDITY OR ALKALINITY AND ENSURE THAT PH IS BETWEEN 6 AND 7. TEST TOPSOIL ACCORDING TO SUPPLEMENT 1016.

Designer Note:

Use this note on project that have areas to be seeded in lawns or other highly maintained areas.

DRAINAGE GENERAL NOTES

Note #DC-DR001

CONCRETE ENCASEMENT FOR PIPES

FOR ALL CULVERT AND SEWER PIPES SPECIFIED IN THE PLANS AND/OR PIPES WITH LESS THAN 24" OF COVER BETWEEN TOP OF PIPE AND PAVEMENT OR TREATED SHOULDER SUBGRADE, CONCRETE ENCASEMENT SHALL BE PROVIDED FOR THE FULL WIDTH OF THE TRENCH AND WITHIN LIMITS OF THE PAVEMENT OR TREATED SHOULDERS. CONCRETE SHALL EXTEND VERTICALLY TO THE PAVEMENT OR SHOULDER SUBGRADE, OR MAY EXTEND INTO THE PAVEMENT SECTION IF ALLOWED BY THE ENGINEER.

FOR AREAS NOT REQUIRING OPENING TO TRAFFIC WITHIN 3 DAYS, PROVIDE CLASS F OR CLASS C CONCRETE. FOR AREAS THAT REQUIRE OPENING TO TRAFFIC WITHIN 24 HOURS, PROVIDE CLASS MS OR FS CONCRETE, AT NO ADDITIONAL COST. CONCRETE SHALL BE PLACED AT A MAXIMUM SLUMP OF 7 INCHES, PROVIDED THE INCREASE IN SLUMP IS ACHIEVED BY ADDING A CHEMICAL ADMIXTURE CONFORMING TO THE REQUIREMENTS OF 705.12, TYPE F OR G.

CONCRETE SHALL NOT BE DROPPED WITH A FREE-FALL DISTANCE OF GREATER THAN 5 FEET. CONCRETE PLACED WHEN THE ATMOSPHERIC TEMPERATURE IS 32 °F OR LESS, OR IF WEATHER FORECASTS PREDICT THESE TEMPERATURES DURING THE CURING PERIOD, NON-CHLORIDE ACCELERATING ADMIXTURES SHALL BE PROVIDED. CHLORIDE ADMIXTURES MAY BE USED ONLY WITH APPROVAL OF THE ENGINEER.

PAYMENT SHALL BE BASED ON THE NUMBER OF LINEAR FEET OF PIPE ENCASED AS MEASURED FROM THE REQUIRED LIMITS. NO ADDITIONAL COMPENSATION WILL BE MADE FOR OVER-EXCAVATED TRENCHES OR ADDITIONAL LENGTH OF PIPE ENCASED WHEN NOT PRE-APPROVED BY THE ENGINEER.

Designer Note:

Use this note when there is sewer pipe with less than 24" of cover to subgrade or is otherwise specified by the Department.

PAVEMENT GENERAL NOTES

Note #DC-PA001

ITEM 407-TACK COAT AND ITEM 408- PRIME COAT

THE ENGINEER SHALL ADJUST THE RATE OF APPLICATION IN THE FIELD OF THE 407 TACK COAT AND 408 PRIME COAT AS NEEDED. FOR ESTIMATING PURPOSES ONLY, THE PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE FOR THESE ITEMS. DO NOT ORDER MATERIALS FOR THESE ITEMS UNLESS AUTHORIZED BY THE ENGINEER.

Designer Note:

Use this note on all projects requiring asphalt concrete pavement.

Note #DC-PA002

SAWCUTS AND ASPHALT CONCRETE JOINTS

THE COST OF SAWCUTS, BUTT JOINTS AND SEALING THESE JOINTS THAT ARE NOT SEPARATELY ITEMIZED IN THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE PAVING ITEMS. ALL JOINTS BETWEEN EXISTING AND PROPOSED ASPHALT CONCRETE PAVEMENT SHALL BE SEALED WITH AN 8" WIDE ASPHALT CEMENT (AC) BAND OF LIQUID ASPHALT MEETING MEETING 702.02, 702.03 OR 702.04 AT NO ADDITIONAL COST.

Designer Note:

Use this note on all projects requiring asphalt concrete pavement.

Note #DC-PA003

PAVEMENT JOINT MESH REINFORCEMENT

PROVIDE A SELF ADHESIVE PAVEMENT JOINT REINFORCING MESH AT THE LOCATIONS SHOWN IN THE PLAN OR AS DIRECT BY THE ENGINEER, MEETING THE FOLLOWING SPECIFICATIONS:

MINIMUM APERTURE DIMENSIONS 0.375 IN. X 0.375 IN.

MAXIMUM APERTURE AREA 0.75 SQ. IN.

PERCENT OPEN AREA 40% TO 70%

MINIMUM ULTIMATE TENSILE STRENGTH (T ULT)
MACHINE DIRECTION (MD) 500 LB/FT

MINIMUM ULTIMATE TENSILE STRENGTH (T ULT)
ACROSS MACHINE DIRECTION (XMD OR CMD) 500 LB/FT

MINIMUM WEIGHT 10 OZ PER SQ YD PER ASTM D 5261-92

MAXIMUM ELONGATION AT BREAK 6% AS PER ASTM D 6637

MINIMUM MELTING POINT 400°F

PAVEMENT AREAS SHALL BE CLEANED AND FREE OF DEBRIS PRIOR TO PLACEMENT. MESH SHALL BE APPLIED TO PAVEMENT IN A MANNER THAT WILL RESIST MOVEMENT OR DEBONDING FROM CONSTRUCTION AND PAVING TRAFFIC. MESH SHALL BE PULLED TIGHT TO ELIMINATE RIPPLES. FOLLOW ALL OTHER MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF THE MATERIAL.

Designer Note:

Provide this item for areas where there is pavement widening that may be subject to settlement cracking relative to the existing pavement or if specified by the Department.

MAINTENANCE OF TRAFFIC GENERAL NOTES

Note #DC-MT001

MAINTENANCE OF TRAFFIC GENERAL NOTES

IN ADDITION TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS INDICATED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION AND ITEM 614, COMPLY WITH THE FOLLOWING REQUIREMENTS:

BEFORE WORK BEGINS, DESIGNATE A PERSON UNDER THE CONTRACTOR'S EMPLOYMENT TO BE RESPONSIBLE FOR MAINTAINING TRAFFIC CONTROL DEVICES ASSOCIATED WITH THIS PROJECT. THIS PERSON MUST BE AVAILABLE TO BE CONTACTED 24 HOURS A DAY BY THE DELAWARE COUNTY ENGINEER AND ALL INTERESTED LAW ENFORCEMENT AGENCIES IN THE EVENT THAT ANY PROBLEMS ARISE DURING NON-WORKING HOURS. THIS PERSON SHALL CORRECT ANY DEFICIENCIES WITHIN 4 HOURS OF NOTIFICATION BY THE ENGINEER OR LAW ENFORCEMENT AGENCIES. SUBMIT TO THE ENGINEER, IN WRITING, THE NAME AND TELEPHONE NUMBER OF THIS PERSON NO LESS THAN THREE (3) WORKING DAYS BEFORE INSTALLATION OF ANY TRAFFIC CONTROL DEVICES. DELAWARE COUNTY ENGINEER, 50 CHANNING STREET, DELAWARE, OHIO 43015, PHONE: 740-833-2400, FAX: 740-833-2399.

FURNISH, ERECT, AND MAINTAIN SIGNS, SIGN SUPPORTS, AND BARRICADES OF THE TYPE AND LOCATION SHOWN IN THESE PLANS. PAYMENT FOR ALL DETOUR SIGNING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 614, __ (MAINTAINING TRAFFIC OR DETOUR SIGNING) __.

THE CONTRACTOR MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. DO NOT PLACE AN ALTERNATE PLAN INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED BY THE ENGINEER.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR MAINTENANCE OF TRAFFIC:

ITEM 614, MAINTAINING TRAFFIC LUMP SUM
ITEM 614, DETOUR SIGNING LUMP SUM

Designer Note:

Use this note on all projects that require a closure of the road with a posted detour. Provide ODOT plan insert sheet 2010160, available here: <http://www.dot.state.oh.us/traffic/Publication%20Manuals/PIS/PISs.htm>

Fill in the pay item blanks with the appropriate items. On most projects, it is desirable to have separate pay items for Item 614, Maintaining Traffic and Item 614, Detour Signing. If the project is small or there is minimal signing required, it may be appropriate to include all work in Item 614, Maintaining Traffic.

Note #DC-MT002

LOCAL ACCESS

MAINTAIN INGRESS AND EGRESS TO ALL PROPERTIES AFFECTED BY THIS IMPROVEMENT AT ALL TIMES. ANY COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO MAINTAIN LOCAL ACCESS TO PROPERTIES.

Designer Note:

Use this note on projects that have local residences within the work limits.

Note #DC-MT003

NOTICE OF CLOSURE

NOTIFY THE ENGINEER IN WRITING AT LEAST 7 DAYS IN ADVANCE OF INTENDED ROAD CLOSURE. THE _(COUNTY/CONTRACTOR)_ SHALL PROVIDE AND MAINTAIN #_ CLASS _A OR B_ PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 1061. PCMS'S SHALL BE POSITIONED TO DISPLAY THE DATE AND DURATION OF THE ROAD CLOSURE FOR THE PERIOD OF TIME AND AT LOCATIONS SPECIFIED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.

PROVIDE THE FOLLOWING MESSAGES, OR OTHER MESSAGES AS DIRECTED BY THE ENGINEER (* DENOTES LIMITS OF EACH SCREEN MESSAGE):

```
* _____ *
* _____ *
* _____ *
* _____ *
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Designer Note:

Use this note on projects that require closure of the road. Fill in the blank with who will be responsible for providing PCMS. Class "A" PCMS is used for roads with speeds 45mph and over. Class "B" PCMS is used for roads 40mph and under. The note may include the second paragraph defining the actual messages to be displayed, especially if the Contractor is to provide signs.

Examples:

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*ROAD CLOSED AHEAD*
*BEGINNING JAN 1*
*FOR 60 DAYS*
*USE DETOUR*
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STRUCTURE GENERAL NOTES

Note #DC-BR001

CONCRETE CURING AND PLACEMENT REQUIREMENTS

THE REQUIREMENTS OF 511.17 SHALL APPLY EXCEPT THAT _(BEAMS/GIRDERS/SLAB)_ SHALL NOT BE PLACED UNTIL ABUTMENT CONCRETE AT OR BELOW THE BEAM SEAT HAS CURED FOR A MINIMUM OF 7 DAYS AND HAS REACHED A COMPRESSIVE STRENGTH OF 60% DESIGN STRENGTH. MEASUREMENT SHALL BE DETERMINED BY THE DEPARTMENT'S CONCRETE TEST CYLINDERS.

Designer Note:

Use this note on all bridge projects with structural beams or girders that bear on abutment concrete. This note is intended to clarify 511.17 and to ensure that abutment concrete is of adequate strength to support dead load of beams or girders. Change text to the applicable type of superstructure as needed.

Note #DC-BR002

CONCRETE STRENGTH REQUIREMENTS AND ACCEPTANCE

STRUCTURAL CONCRETE REQUIRED IN THE PROJECT SHALL ATTAIN THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTH (F'C):

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CLASS HP CONCRETE - 4,500 PSI
CLASS C CONCRETE - 4,000 PSI
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CONCRETE STRENGTH SHALL BE EVALUATED AND ACCEPTED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301-99, SECTIONS 1.6.6 THROUGH 1.6.7. THE DEPARTMENT WILL BE RESPONSIBLE FOR INITIAL CONCRETE SAMPLING AND TESTING. A SET OF FOUR (4) CYLINDERS WILL BE TAKEN FOR EACH TEST REQUIRED BY THE ENGINEER. ONE CYLINDER WILL BE TESTED AT SEVEN (7) DAYS AFTER PLACEMENT, OR AS EARLY AS THREE (3) DAYS AFTER PLACEMENT IF REQUESTED BY THE CONTRACTOR, TO DETERMINE CURING PROGRESS. TWO (2) CYLINDERS WILL BE TESTED AT 28 DAYS, AND THE MEAN COMPRESSIVE STRENGTH OF THESE TWO (2) TEST SPECIMENS SHALL BE THE BASIS FOR DETERMINING SATISFACTORY STRENGTH LEVEL. IF THE MEAN OF THE TWO SPECIMENS IS LESS THAN 95% OF THE MINIMUM 28-DAY COMPRESSIVE STRENGTH (F'C) LISTED ABOVE, THE CONCRETE FROM THE PORTION OF THE WORK BEING TESTED, INCLUDING ALL CONCRETE FROM THE SAME SUPPLIER USED IN THE DAY'S WORK, SHALL BE CONSIDERED POTENTIALLY DEFICIENT. IF THE CONCRETE IS DETERMINED TO BE POTENTIALLY DEFICIENT, THE REMAINING TEST CYLINDER WILL BE HELD FOR TESTING AT 56-DAYS.

STRUCTURAL ANALYSIS AND/OR ADDITIONAL TESTING MAY BE REQUIRED WHEN THE STRENGTH OF THE CONCRETE, IN PLACE, IS CONSIDERED POTENTIALLY DEFICIENT. THE DEPARTMENT SHALL PERFORM ADDITIONAL TESTING OF IN-PLACE CONCRETE THAT IS CONSIDERED POTENTIALLY DEFICIENT OR MAY REQUIRE THE CONTRACTOR TO PERFORM ADDITIONAL TESTING, AND DESIGN OF REINFORCEMENT USING ADDITIONAL CONSTRUCTION, IN-LIEU OF REMOVAL AND REPLACEMENT. ANY ADDITIONAL TESTING PERFORMED ON POTENTIALLY DEFICIENT CONCRETE SHALL BE AT THE CONTRACTOR'S EXPENSE.

Designer Note:

Use this note on all bridge projects with structural concrete. This note expands on the requirements of ODOT Items 499 and 511 and requires structural concrete to meet design strength requirements, beyond the mixture and placement requirements of 499 and 511.

Note #DC-BR003

CONTAINMENT OF POLLUTANTS

THE CONTRACTOR SHALL PROVIDE A PLAN AND METHOD TO CONTAIN ALL POTENTIAL POLLUTANTS INCLUDING SOLVENTS, PAINTS, SEALERS, OIL, GREASE, ETC., ENTERING THE WATER. THE PROPOSED CONTAINMENT PLAN SHALL BE SUBMITTED IN WRITING TO THE ENGINEER NO LESS THAN 14 DAYS PRIOR TO BEGINNING CONSTRUCTION. WORK SHALL NOT BEGIN UNTIL THE ENGINEER APPROVES THE PLAN IN WRITING.

Designer Note:

This note may be required whenever the project is in or over a waterway that is a public drinking water supply, such as a reservoir, or other any other major water course.

NOTE #DC-BR004
DEMOLITION DEBRIS

NO PORTIONS OF THE DEMOLITION DEBRIS SHALL FALL INTO THE WATER. THE CONTRACTOR SHALL SUBMIT THE PROPOSED METHOD OF REMOVING THE EXISTING STRUCTURE TO THE ENGINEER NO LESS THAN 14 DAYS PRIOR TO STARTING REMOVAL OPERATIONS. NO REMOVALS SHALL BE PERFORMED WITHOUT WRITTEN APPROVAL OF THE ENGINEER.

Designer Note:

This note maybe required whenever the project is in or over a waterway that is a public drinking water supply, such as a reservoir, or other any other major water course.

Note #DC-BR005
ITEM 516-ELASTOMERIC BEARINGS

DESTRUCTIVE TESTING BY AN INDEPENDENT LABORATORY SHALL BE REQUIRED AS STATED IN 711.23. THE CONTRACTOR SHALL PROVIDE CERTIFIED TEST RESULTS NO LESS THAN 14 DAYS BEFORE BEARINGS ARE INCORPORATED INTO THE WORK.

Designer Note:

Use this note on all bridge projects with elastomeric bearings. This note is intended to clarify and enforce the requirements of destructive testing of a sample bearing as required in 711.23.

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