EROSION CONTROL NOTES:

- 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MCHENRY COUNTY, CITY OF CRYSTAL LAKE, AND VILLAGE OF LAKE IN THE HILLS STORMWATER ORDINANACES. ALL CONSTRUCTION ACTIVITIES WILL BE IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORM WATER PERMIT ILRAG.
- 2. EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE SEQUENCE OF STAGE CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE FOR APPROVAL.
- 3. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE THE PROJECT SITE IS OTHERWISE DISTURBED.
- 4. ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN 15 DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.
- 5. IF A TOPSOIL STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 3 DAYS, EROSION CONTROL MEASURES WILL BE PROVIDED. SOIL STOCKPILES MUST NOT BE LOCATED WITHIN ANY SPECIAL MANAGEMENT AREAS. SPECIAL MANAGEMENT AREAS INCLUDE JURISDICTIONAL WETLANDS AND ADJACENT OFF-SITE WETLANDS.
- 6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT WETLANDS TO REMAIN FROM DAMAGE BY SEDIMENT, CONSTRUCTION EQUIPMENT OR BY HIS WORK CREWS. THE CONTRACTOR SHALL ASSURE THAT DEBRIS OR ANY CONSTRUCTION MATERIAL IS NOT DISPOSED OF IN WETLANDS.
- 7. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED.
- 8. WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION CONTROL MEASURES MAY BE REQUIRED BY THE ENGINEER.
- 9. GRAVEL ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, SHALL BE PROVIDED TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY AND AS NEEDED.
- 10. CLEANING OF VEHICLES AND EQUIPMENT, INCLUDING CONCRETE MIXERS, SHALL BE PERFORMED IN A MANNER TO REDUCE THE AMOUNT OF POLLUTANTS TRIBUTARY TO STORM SEWERS AND OPEN WATERS TO THE MAXIMUM EXTENT PRACTICAL.
- 11. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- 12. SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM EROSION CONTROL SYSTEMS WHEN THE HEIGHT OF THE SEDIMENT EXCEEDS ONE-HALF OF THE HEIGHT OF THE FILTER DEVICE.
- 13. THE ENGINEER SHALL INSPECT EROSION CONTROL MEASURES PERIODICALLY AND WITHIN 24 HOURS OF ANY STORM EXCEEDING 1/2 INCH PRECIPITATION. DAMAGED AND INEFFECTIVE EROSION CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WITHIN 72 HOURS. EROSION CONTROL SYSTEMS REPLACED DUE TO SEDIMENT LOADING WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
- 14. ALL SEDIMENT AND EROSION CONTROL MEASURES WILL BE PAID FOR IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS, EXCEPT WHERE OTHERWISE NOTED IN THE CONTRACT SPECIAL PROVISIONS.
- 15. THE COST OF REPAIRING OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
- 16. ALL EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
- 17. STRAW OR HAY BALES SHALL NOT BE USED FOR INLET AND PIPE PROTECTION.

BOX CULVERT CONSTRUCTION

- 1. APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL METHODS WILL BE INCLUDED FOR EACH STEP OF THE BOX CULVERT CONSTRUCTION BY THE CONTRACTOR AND RESIDENT ENGINEER. WORK IN THE WATERWAY SHALL BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS. THIS SHOULD BE DONE BY EITHER BY-PASS PUMPING OR BY-PASS PIPING THE FLOW AROUND THE WORK AREA. PROTECTION MUST BE PROVIDED UP TO THE EXISTING 10 YEAR HIGHWATER ELEVATION. ROCK CHECK DAMS ARE SPECIFIED, BUT OTHER METHODS INCLUDING BUT NOT LIMITED TO SANDBAGS, STEEL SHEETS, AND WATER INFLATED DAMS MAY BE USED UPON APPROVAL BY THE RESIDENT ENGINEER.
- 2. WORK MAY NOT BE PERFORMED IN THE WATER, EXCEPT FOR THE PLACEMENT OF THE MATERIALS NECESSARY FOR THE CONSTRUCTION OF THE COFFERDAM. THE COFFERDAM MUST BE CONSTRUCTED FROM THE UPLAND AREA AND NO EQUIPMENT MAY ENTER THE WATER AT ANY TIME. IF THE INSTALLATION OF THE COFFERDAM CANNOT BE COMPLETED FROM SHORE AND ACCESS IS NEEDED TO REACH THE AREA TO BE COFFERED, OTHER MEASURES WILL BE NECESSARY TO ENSURE THAT EQUIPMENT DOES NOT ENTER THE WATER. ONCE THE COFFERDAM IS IN PLACE AND THE ISOLATED AREA IS DEWATERED, EQUIPMENT MAY ENTER THE COFFERED AREA TO PERFORM THE REQUIRED WORK.
- 3. A SUMP PIT SHALL BE USED DURING DEWATERING OPERATIONS OF THE WORK AREA AS SHOWN ON THE PLAN AND SHALL BE DISCHARGED TO A SEDIMENT BAG OF ADEQUATE SIZE TO PROVIDE FOR SEDIMENT COLLECTION PRIOR TO DISCHARGE TO THE DRAINAGE SYSTEM. WATER SHALL HAVE SEDIMENT REMOVED PRIOR TO BEING RE-INTRODUCED TO THE DOWNSTREAM WATERWAY. DISCHARGE WATER IS CONSIDERED CLEAN IF IT DOES NOT RESULT IN A VISUALLY IDENTIFIABLE DEGRADATION OF WATER CLARITY.
- 4. WATER CAPTURED UPSTREAM OF THE COFFERDAM MAY BE DISCHARGED DIRECTLY BACK INTO THE DRAINAGE SYSTEM AS LONG AS NO SCOURING OCCURS FROM THE DRAINAGE OPERATION.
- 5. THE MCHENRY COUNTY SOIL AND WATER CONSERVATION DISTRICT WILL BE CONTACTED SEVEN (7) DAYS BEFORE ANY IN-STREAM WORK BEGINS TO ENSURE ADEQUATE SESC PRACTICES ARE IN PLACE BEFORE CONSTRUCTION BEGINS. THE MCSWCD HAS PERMISSION TO ACCESS THE SITE TO VERIFY THAT SEDIMENT AND EROSION CONTROL PRACTICES ARE WORKING PROPERLY AND TO DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY BY THE MCSWCD THE CONTRACTOR SHALL IMPLEMENT THE PRACTICES IN A TIMELY MANNER.
- 6. IF BYPASS PUMPING IS NECESSARY, THE PUMP SHALL BE PLACED ON A STABLE SURFACE OR FLOATED TO PREVENT SEDIMENT FROM BEING SUCKED INTO THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY-DISSIPATING SURFACE PRIOR TO REJOINING THE STREAM FLOW AND SHALL NOT CAUSE EROSION OF DOWNSTREAM AREAS. CLEANING OR FILTERING OF BYPASS WATER IS NOT NECESSARY UNLESS OTHERWISE REQUIRED.
- 7. THE SIDE SLOPES SHALL BE RESEEDED AND STABILIZED WITH AN APPROPRIATE EROSION CONTROL BLANKET AND PROPOSED FILTER FABRIC AND RIP RAP (SEE DRAINAGE SHEETS) SHALL BE PLACED PRIOR TO ACCEPTING FLOWS. THE SUBSTRATE SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS AND STABLE ENOUGH TO ACCEPT FLOWS. RIP RAP SHALL BE PLACED ALONG THE BANKS OF THE CREEK DOWNSTREAM OF THE CULVERT.



USER NAME = Jmacke(Chicago_R)	DESIGNED - D. DOERFLER	REVISED -
PLOT CONFIG= PDF(Grey_Large).plt	DRAWN - D. DOERFLER	REVISED ~
PLOT SCALE = 1:50	CHECKED - E. CHOW	REVISED -
PLOT DATE = 7/29/2010	DATE - 8/2/2010	REVISED -



SCALE: NONE

SHEET NO. ERO 16 OF 19 STA.

TO STA.