VILLAGE OF MONTGOMERY GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

1. THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JAN. 1, 2012, THE MOST RECENT EDITION OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", AND REVISIONS THERETO, THESE IMPROVEMENT PLANS AND DETAILS, SPECIAL PROVISIONS AND CODES AND ORDINANCES OF THE VILLAGE OF MONTGOMERY, ILLINOIS SHALL GOVERN APPLICABLE PORTIONS OF THIS PROJECT.

2. THE CONTRACTOR SHALL OBTAIN, ERECT, MAINTAIN AND REMOVE ALL SIGNS, BARRICADES, FLAGMEN AND OTHER CONTROL DEVICES AS MAY BE NECESSARY FOR THE PURPOSE OF REGULATING, WARNING OR GUIDING TRAFFIC. PLACEMENT AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PARTS OF ARTICLE 107.14 OF THE STANDARD SPECIFICATIONS, THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS".

3. LOCATION OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE ONLY, AND ARE NOT NECESSARILY COMPLETE. CONTRACTOR SHALL MAKE HIS OWN INVESTIGATIONS AS TO LOCATION OF ALL EXISTING UNDERGROUND STRUCTURES, CABLES, UTILITIES AND PIPE LINES.

4. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND VILLAGE SO THAT THE CONFLICT MAY BE RESOLVED.

5. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. (1-800-892-0123) AT LEAST TEN DAYS PRIOR TO CONSTRUCTION SO REQUIRED PROTECTION OF ALL ROADWAYS, STRUCTURES, POLES, CABLES AND PIPE LINES, BEFORE CONSTRUCTION THAT EACH UTILITY COMPANY CAN STAKE OUT ANY UNDERGROUND IMPROVEMENTS THAT THEY MAY HAVE WHICH MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION.

6. THE CONTRACTOR SHALL BE REQUIRED TO MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS, STRUCTURES, POLES, CABLES AND PIPE LINES, BEFORE CONSTRUCTION BEGINS. HE SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE ENGINEER AND VILLAGE AT HIS OWN EXPENSE.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AND VILLAGE BY THE CONTRACTOR AT HIS OWN EXPENSE.

8. THE CONTRACTOR SHALL EXAMINE THE PLANS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK AND INFORM HIMSELF/HERSELF FULLY WITH THE WORK INVOLVED, GENERAL AND LOCAL CONDITIONS, ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, RULES AND REGULATIONS AND ALL OTHER PERTINENT ITEMS WHICH MAY AFFECT THE COST AND TIME OF COMPLETION OF THIS PROJECT BEFORE SUBMITTING A PROPOSAL.

9. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CODE REQUIREMENTS.

10. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR SHALL CALL THE ATTENTION OF THE ENGINEER TO ANY MATERIAL OR EQUIPMENT HE DEEMS INADEQUATE AND TO ANY ITEM OF WORK OMITTED.

11. THE UNDERGROUND CONTRACTOR SHALL BE RESPONSIBLE TO PLACE ON GRADE AND COORDINATE WITH OTHER CONTRACTORS ALL UNDERGROUND STRUCTURE FRAMES SUCH AS CATCH BASINS, INLETS, MANHOLES, HYDRANTS, BUFFALO BOXES, VALVES, ETC. NO ADDITIONAL COMPENSATION SHALL BE PAID AND SAID ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF CONSTRUCTION.

12. THE CONTRACTOR SHALL RESTORE ANY AREA DISTURBED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL USE. THIS SHALL INCLUDE FINISH GRADING, ESTABLISHMENT OF A VEGETATIVE COVER (SEEDING OR SOD), GENERAL CLEANUP AND PAVEMENT REPLACEMENT.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

14. THE CONTRACTOR SHALL INFORM THE VILLAGE ENGINEER BEFORE WORK COMMENCES ON EACH CATEGORY OF CONSTRUCTION, I.E. WATER MAIN AND SANITARY SEWER. A TWENTY-FOUR (24) HOUR NOTICE SHALL BE GIVEN FOR ANY ITEM THAT REQUIRES FINAL TESTING AND INSPECTION SUCH AS WATER MAINS OR SANITARY SEWERS.

15. ALL LOT IRONS DAMAGED OR REMOVED DURING CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED BY THE ENGINEER AND SAID COST OF REPLACEMENT SHALL BE PAID BY THE CONTRACTOR.

16. BEFORE ACCEPTANCE BY THE VILLAGE AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY IDOT AND THE VILLAGE ENGINEER. FINAL PAYMENT SHALL BE MADE AFTER ALL OF THE CONTRACTOR'S WORK HAS BEEN APPROVED AND ACCEPTED.

17. THE CONTRACTOR WILL HAVE IN HIS POSSESSION ON THE JOB SITE A COPY OF THE PLANS AND SPECIFICATIONS DURING CONSTRUCTION.

18. IF ANY APPROVED EQUAL ITEMS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR APPROVAL.

19. ANY DRAIN AND/OR FIELD TILE ENCOUNTERED BY THE CONTRACTOR DURING THE INSTALLATION OF THE IMPROVEMENTS SHALL BE RETURNED TO ORIGINAL CONDITION. THIS WORK TO BE CONSIDERED INCIDENTAL TO THE CONTRACT.

20. ALL ROAD SIGNS, STREET SIGNS AND TRAFFIC SIGNS WHICH NEED TO BE RELOCATED OR MOVED DUE TO CONSTRUCTION SHALL BE TAKEN DOWN AND STORED BY THE CONTRACTOR AT HIS OWN EXPENSE, EXCEPT THOSE WHICH ARE NECESSARY FOR PROPER TRAFFIC CONTROL WHICH SHALL BE TEMPORARILY RESET UNTIL COMPLETION OF CONSTRUCTION OPERATIONS. AFTER COMPLETION OF THE WORK, THE CONTRACTOR SHALL RESET, AT HIS EXPENSE, ALL SAID SIGNS.

21. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATION, UNSUITABLE AND UNUSABLE MATERIALS OFFSITE AND AT AN APPROVED LOCATION IN A MANNER THAT PUBLIC OR PRIVATE PROPERTY WILL NOT BE DAMAGED OR ENDANGERED. THIS WORK IS CONSIDERED AS INCIDENTAL TO THE COST OF THE PROJECT.

22. NO EXCAVATIONS WILL BE PERMITTED TO REMAIN OPEN OVER ANY WEEKEND.

23. "BAND-SEAL" OR SIMILAR COUPLINGS SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.

24. AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER AS SOON AS THE SITE IMPROVEMENTS ARE COMPLETED. ANY CHANGE IN LENGTH, LOCATION OR ALIGNMENT SHALL BE SHOWN IN RED.

25. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY REQUIRED INSPECTIONS WITH THE VILLAGE OF MONTGOMERY.

26. SPECIAL ATTENTION IS DRAWN TO THE FACT THAT ARTICLE 105.06 OF THE STANDARD SPECIFICATIONS REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT, SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 108.07.

27. THE ENGINEER AND VILLAGE ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

28. IF GROUNDWATER IS ENCOUNTERED, THE DEWATERING SHALL BE CONSIDERED INCIDENTAL WHEN NECESSARY. PRIOR TO COMMENCING ANY DEWATERING, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A DEWATERING PLAN INDICATING WELL POINT LOCATIONS, PUMP SIZES AND CAPACITIES AND ALL DISCHARGE POINTS.

29. CONTRACTOR WILL BE REQUIRED TO COORDINATE ALL ONSITE ACTIVITIES WITH THE VILLAGE, THE ENGINEER AND THE SITE SUPERINTENDENT FOR THE ONGOING BUILDING CONSTRUCTION. COOPERATION AND PHASING AS NECESSARY TO FACILITATE AND MAINTAIN THE BUILDING CONSTRUCTION SHALL BE EXPECTED OF THE CONTRACTOR AWARDED WITH THIS CONTRACT.

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION.

DATED AT SUGAR GROVE, ILLINOIS,

THIS 26th DAY OF April, 2012

TIMOTHY N. PAULSON, P.E.
ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 062-055400
EXPIRATION DATE: 11/30/13

TIMOTHY N. PAULSON 55400 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

VILLAGE OF MONTGOMERY WATER MAIN CONSTRUCTION

1. ALL WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", SIXTH EDITION, DATED JULY 2009, AND REVISIONS THERETO, THE NOTES ON THE PLANS, AND IN ACCORDANCE WITH CODES AND ORDINANCES OF THE VILLAGE OF MONTGOMERY, ILLINOIS.

2. ALL WATER MAIN SHALL BE DUCTILE IRON PIPE CLASS 52 WITH EITHER MECHANICAL OR PUSH_ON JOINTS AND SHALL CONFORM TO ANSI A21.51-96, AWWA C151 AND ANSI A21.11-00, AWWA C111. PIPE SHALL BE MANUFACTURED IN THE UNITED STATES.

3. ALL FITTINGS SHALL BE COMPACT DUCTILE IRON AND SHALL CONFORM TO AWWA/ANSI C153/A21.53_00. FITTINGS SHALL BE U.L. LISTED CLASS 350 TYLER GRIFFIN OR APPROVED EQUAL. FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES.

4. ALL PIPE AND FITTINGS SHALL BE CEMENT LINED IN ACCORDANCE WITH AWW/ANSI C104/A21.4-95.

5. ALL FITTINGS SHALL BE MECHANICAL JOINT AND INSTALLED WITH RETAINER GLANDS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

6. ALL MECHANICAL JOINT FITTINGS, VALVES, AND HYDRANTS SHALL BE RESTRAINED WITH RETAINER GLANDS. RETAINER GLANDS SHALL BE EBAA IRON SERIES 1100 MEGALUG, UNI-FLANGE SERIES 1400, STARGRIP SERIES 3000, OR SIGMA ONE LOK SLD.

7. ALL WATER MAIN SHALL BE WRAPPED WITH POLYETHYLENE IN ACCORDANCE WITH AWWA/ANSI C105/A21.5-99.

8. LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE LAID WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL BE IN ACCORDANCE WITH AWWA C600-99. WHEN RUBBER GASKETED PIPE IS LAID ON A CURVE, THE PIPE SHALL BE JOINTED IN A STRAIGHT ALIGNMENT AND THEN DEFLECTED TO THE CURVED ALIGNMENT. TRENCHES SHALL BE MADE WIDER ON CURVES FOR THIS PURPOSE.

9. ALL VALVES SHALL BE GATE VALVES AND SHALL HAVE A NON-RISING STEM, A STANDARD OPERATING NUT, AND OPEN IN A COUNTER-CLOCKWISE DIRECTION. GATE VALVES SHALL BE CLOW, MUELLER, OR WATEROUS RESILIENT WEDGE GATE VALVE IN ACCORDANCE WITH AWWA C509-94. GATE VALVES SHALL BE IN VALVE VAULTS. ALL GATE VALVES SHALL BE CONSISTENT THROUGHOUT A DEVELOPMENT. NO BUTTERFLY VALVES ARE ALLOWED.

10. ALL VALVE BOXES SHALL BE CAST IRON, TWO (2) PIECE 5¼" SHAFTS. ALL VALVE BOXES SHALL EITHER BE TRENCH ADAPTER MODEL 6 BY AMERICAN FLOW CONTROL OR SCREW TYPE TYLER MODEL 666-S AND ATTACHED TO THE HYDRANT BARREL WITH GRIP ARMS AS MANUFACTURED BY BLR OR APPROVED EQUAL. LIDS TO BE MARKED "WATER" (VALVE BOX EXTENSIONS IF REQUIRED ARE CONSIDERED INCIDENTAL).

11. ALL HYDRANTS SHALL BE IN ACCORDANCE WITH AWWA C502-94 AND SHALL BE WATEROUS PACER MODEL #WB-67, CLOW F-2545 (MEDALLION), OR MUELLER A-423MJ CENTURION (BREAK AWAY STYLE TRAFFIC DESIGN) WITH ONE (1) 4½" STEAMER NOZZLE AND TWO (2) 2½" HOSE OUTLETS, OF WHICH THE THREADS CONFORM WITH THE STANDARDS OF THE VILLAGE OF MONTGOMERY, ILLINOIS. ALL HYDRANTS SHALL HAVE AN AUXILIARY GATE VALVE. ALL HYDRANTS SHALL BE ONE MODEL THROUGHOUT A DEVELOPMENT.

12. SLEEVES SHALL BE ROCKWELL D.I. COUPLING TYPE 441 OR EQUAL. SLEEVES SHALL BE PROVIDED AT LOCATIONS SHOWN ON THE PLANS OR AS REQUIRED.

13. ALL TEES, BENDS, FIRE HYDRANTS, PLUGS, AND VALVES SHALL BE ADEQUATELY SUPPORTED WITH A CONCRETE BASE AND SUPPORTED LATERALLY WITH POURED IN PLACE THRUST BLOCKING AGAINST UNDISTURBED EARTH.

14. ALL WATER MAINS SHALL HAVE A MINIMUM DEPTH OF COVER OF 5.5'.

15. ALL PRESSURE TAPS TO AN EXISTING VILLAGE MAIN SHALL BE MADE WITH A MUELLER MECHANICAL JOINT TAPPING SLEEVE NO. H-615 AND MUELLER RESILIENT TAPPING VALVE (MJ X FL) NO.
T-2360-16 OR AMERICAN FLOW CONTROL SERIES 2800 TAPPING SLEEVE AND AMERICAN FLOW CONTROL SERIES 2500 RESILIENT TAPPING VALVE (MJ X FL) AND SHALL BE CONSTRUCTED IN A VALVE VAULT.

16. THE CONTRACTOR SHALL OBTAIN, ERECT, MAINTAIN, AND REMOVE ALL SIGNS, BARRICADES, FLAGMEN, AND OTHER CONTROL DEVICES AS MAY BE NECESSARY FOR THE PURPOSE OF REGULATING, WARNING, OR GUIDING TRAFFIC. PLACEMENT AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE PARTS OF ARTICLE 107.14 OF THE STANDARD SPECIFICATIONS AND THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. CONTRACTOR SHALL FURNISH A TRAFFIC CONTROL PLAN FOR IDOT OR VILLAGE APPROVAL IF REQUIRED.

17. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CODE REQUIREMENTS.

18. THE CONTRACTOR SHALL RESTORE ANY AREA DISTURBED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL USE. THIS SHALL INCLUDE FINISH GRADING, ESTABLISHMENT OF A VEGETATIVE COVER (SEEDING OR SOD), GENERAL CLEANUP, AND PAVEMENT REPLACEMENT.

19. ALL TRENCHES CAUSED BY THE CONSTRUCTION OF SEWERS, WATER MAINS, WATER SERVICE PIPES, AND THE EXCAVATION AROUND CATCH BASINS, MANHOLES, INLETS, AND OTHER APPURTENANCES WHICH OCCUR WITHIN THE LIMITS OF EXISTING OR PROPOSED PAVEMENTS, SIDEWALKS, AND CURB AND GUTTERS OR WHERE THE EDGE OF THE TRENCH SHALL BE WITHIN 2' OF SAID IMPROVEMENTS SHALL BE BACKFILLED WITH CA-6 CRUSHED LIMESTONE (IDOT CERTIFIED) AND MECHANICALLY COMPACTED IN 6"-12" LIFTS DEPENDING ON COMPACTION EQUIPMENT USED.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND HEALTHFUL WORKING CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

21. BEFORE ACCEPTANCE BY THE VILLAGE ALL WORK SHALL BE INSPECTED AND APPROVED BY THE VILLAGE OR ITS REPRESENTATIVES.

22. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION IN THE FIELD OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

23. WATER MAINS AND WATER SERVICE LINES SHALL BE PROTECTED FROM SANITARY SEWERS, STORM SEWERS, COMBINED SEWERS, HOUSE SEWER SERVICE CONNECTIONS, AND DRAINS IN ACCORDANCE WITH TITLE 35: ENVIRONMENTAL PROTECTION AGENCY SUBTITLE F: PUBLIC WATER SUPPLIES, CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY, PARTS 651_654 TECHNICAL POLICY STATEMENTS, SECTION 653.119.

24. WHENEVER POSSIBLE, A WATER MAIN MUST BE LAID AT LEAST 10' HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN OR SEWER LINE. SHOULD LOCAL CONDITIONS EXIST WHICH WOULD PREVENT A LATERAL SEPARATION OF 10', A WATER MAIN MAY BE LAID CLOSER THAN 10' TO A STORM OR SANITARY SEWER PROVIDED THAT THE WATER MAIN INVERT IS AT LEAST 18" ABOVE THE CROWN OF THE SEWER, AND IS EITHER IN A SEPARATE TRENCH OR IN THE SAME TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL OR VERTICAL SEPARATION AS DESCRIBED ABOVE, THEN THE SEWER MUST ALSO BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL (DUCTILE IRON PIPE WITH SLIP-ON OR MECHANICAL JOINTS, PRESTRESSED REINFORCED CONCRETE PIPE WITH ASTM C-443 JOINTS, ETC.) AND PRESSURE TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD TO ASSURE WATER TIGHTNESS BEFORE BACKFILLING.

25. WHENEVER WATER MAINS MUST CROSS HOUSE SEWERS, STORM SEWERS, OR SANITARY SEWERS, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE INVERT OF THE WATER MAIN IS 18" ABOVE THE CROWN OF THE DRAIN OR SEWER. THIS VERTICAL SEPARATION MUST BE MAINTAINED FOR THAT PORTION OF THE WATER MAIN LOCATED WITHIN 10' HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. THIS MUST BE MEASURED AS THE NORMAL DISTANCE FROM THE WATER MAIN TO THE DRAIN OR SEWER. IF IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION AS DESCRIBED ABOVE OR IF IT IS NECESSARY FOR THE WATER MAIN TO PASS UNDER A SEWER OR DRAIN, THEN THE SEWER MUST BE CONSTRUCTED OF WATER MAIN TYPE MATERIAL (AS NOTED IN ITEM 23). THIS CONSTRUCTION MUST EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATER MAIN TO THE SEWER OR DRAIN LINE IS AT LEAST 10'. IN MAKING SUCH CROSSINGS, CENTER A LENGTH OF WATER MAIN PIPE OVER/UNDER THE SEWER TO BE CROSSED SO THAT THE JOINTS WILL BE EQUIDISTANT FROM THE SEWER AND AS REMOTE THEREFROM AS POSSIBLE. WHERE A WATER MAIN MUST CROSS UNDER A SEWER, A VERTICAL SEPARATION OF 18" BETWEEN THE INVERT OF THE SEWER AND THE CROWN OF THE WATER MAIN SHALL BE MAINTAINED, ALONG WITH MEANS TO SUPPORT THE LARGER SIZED SEWER LINES TO PREVENT THEIR SETTLING AND BREAKING THE WATER MAIN.

26. VALVE VAULTS SHALL BE ADJUSTED WITH PRECAST CONCRETE OR RUBBER ADJUSTING RINGS TO A MAXIMUM OF 8". NO MORE THAN TWO ADJUSTING RINGS ARE ALLOWED. ANY REQUIRED ADJUSTMENT GREATER THAN 12" WILL NECESSITATE THE ADDITION OF A BARREL SECTION.

27. HYDROSTATIC TESTS _ THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTS IN ACCORDANCE WITH DIVISION IV, SECTION 41 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION, AND APPLICABLE PROVISIONS OF AWWA C600 AND C603. THE WATER MAINS SHALL BE PRESSURE TESTED AT 150 PSI. THE TEST PRESSURE SHALL NOT DROP MORE THAN 2 PSI FOR THE DURATION OF THE TEST. THE GAUGE SHALL BE OF GOOD QUALITY AND CONDITION, AND BE FLUID FILLED. THE GAUGE SHALL HAVE A LARGE ENOUGH RANGE FOR THE PRESSURE BEING TESTED AND SHALL BE CAPABLE OF READING A MINIMUM PRESSURE INCREMENT OF 1 PSI. ALLOWABLE LEAKAGE SHALL BE AS SET FORTH IN AWWA C600, LATEST EDITION. THE TESTING LENGTH SHALL BE LIMITED TO 1,000'. IF MORE THAN 1,000' OF WATERMAIN IS TESTED, THE ALLOWABLE LEAKAGE WILL BE BASED UPON 1,000'. THE DURATION OF THE TEST SHALL BE FOR 2 HOURS MINIMUM.

28. DISINFECTION OF THE WATER MAINS _ UPON COMPLETION OF THE NEWLY LAID WATER MAINS, THE WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION, PROCEDURE DESIGNATION, AWWA C651, LATEST EDITION. THE CONTRACTOR IS RESPONSIBLE FOR COLLECTING SAMPLES AND HAVING BACTERIOLOGICAL TESTING PERFORMED AS REQUIRED BY THE IEPA. THE CONTRACTOR SHALL FURNISH TO THE VILLAGE THE REQUIRED DOCUMENTATION, TEST RESULTS, ETC., REQUIRED BY THE IEPA FOR PLACING THE WATER MAINS OR SERVICE LINES IN SERVICE AND/OR SECURING AN OPERATING PERMIT.

29. WATER VALVES AND FIRE HYDRANTS SHALL ONLY BE OPERATED BY VILLAGE OF MONTGOMERY WATER DEPARTMENT PERSONNEL. PLEASE CONTACT THE MONTGOMERY WATER DEPARTMENT AT 630/896-9241.

30. IF THE CONTRACTOR PROPOSES TO USE AN EQUAL PRODUCT FOR ANY OF THE ITEMS CONTAINED IN THE
VILLAGE OF MONTGOMERY WATERMAIN CONSTRUCTION NOTES OR DETAILS, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FROM THE MANUFACTURER THAT THE PROPOSED PRODUCT MEETS THE VILLAGE STANDARDS TO THE VILLAGE OF MONTGOMERY DIRECTOR OF PUBLIC WORKS. THE VILLAGE OF MONTGOMERY DIRECTOR OF PUBLIC WORKS SHALL APPROVE THE PROPOSED EQUAL PRODUCT PRIOR TO USE BY THE CONTRACTOR.

SOIL EROSION AND SEDIMENTATION CONTROL

THE CONTRACTOR SHALL PROVIDE SOIL EROSION AND SEDIMENTATION CONTROL IN ACCORDANCE WITH THE "PROCEDURES AND STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL IN NORTHEASTERN ILLINOIS" (REVISED JULY, 1988) PREPARED BY THE NORTHEASTERN ILLINOIS EROSION AND SEDIMENTATION CONTROL STEERING COMMITTEE AND THE ILLINOIS URBAN MANUAL PUBLISHED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE – NATURAL RESOURCE CONSERVATION SERVICE FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (LATEST EDITION) AND IN ACCORDANCE WITH THE PLANS.

SOIL STABILIZATION

1. TOPSOIL AND VEGETATIVE COVER _ STRIP TOPSOIL AND REMOVE EXISTING VEGETATION. STOCKPILE ON_SITE (FOR REUSE) AT LOCATION DESIGNATED.

2. TEMPORARY SEEDING _ TEMPORARY SEEDING SHALL BE PROVIDED WITHIN 15 DAYS TO ANY DISTURBED AREAS THAT ARE SCHEDULED TO REMAIN DENUDED FOR LONGER THAN 60 DAYS.

3. PERMANENT SEEDING _ IMMEDIATELY FOLLOWING FINISH GRADING AND TOPSOIL PLACEMENT INSTALL SEEDING OR SOD IN AREAS AS DESIGNATED ON PLANS.

4. SLOPE PROTECTION _ PROTECT SEEDING ON STEEP SLOPES WITH MULCH, EXCELSIOR BLANKET, OR EQUAL.

SEDIMENT CONTROL

1. ADJACENT PROPERTY _ PROTECT ADJACENT PROPERTY FROM SEDIMENT DEPOSITION BY PRESERVING A VEGETATED BUFFER STRIP OR BY SEDIMENT BARRIERS OR FILTERS AT THE LOWER PERIMETER OF THE LOT.

2. SEDIMENTATION CONTROL SHALL BE PROVIDED IN ALL AREAS AROUND THE PERIMETER OF ALL STOCKPILE AREAS.

3. STORM SEWER INLET PROTECTION _ DURING CONSTRUCTION FILTER SEDIMENT LADEN WATER THROUGH STRAW BALES AND FILTER FABRIC BEFORE IT ENTERS NEWLY CONSTRUCTED STORM SEWER.

4. STRAW BALES SHALL BE INSTALLED AS DITCH CHECKS AND STAKED IN PLACE AT 250 LINEAL FEET MAXIMUM SPACING IN ALL SWALES.

5. CONSTRUCTION ACCESS _ CONSTRUCTION TRAFFIC SHALL ENTER AND LEAVE SITE AT A DESIGNATED ACCESS. PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT (MUD) BY RUNOFF OR VEHICLE TRACKING ONTO STATE HIGHWAYS OR LOCAL STREETS. IF NECESSARY, STATE HIGHWAYS OR LOCAL STREETS SHALL BE CLEANED DAILY AT THE END OF EACH WORK DAY OR AS REQUIRED TO KEEP MUD AND/OR OTHER DEBRIS OFF OF ANY HIGHWAY OR STREET.

6. REMOVAL OF CONTROL MEASURES _ DISPOSE OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED.

AWWA C651-99 SECTION 4.7: DISINFECTION PROCEDURES WHEN CUTTING INTO OR REPAIRING EXISTING MAINS

THE FOLLOWING PROCEDURES APPLY PRIMARILY WHEN MAINS ARE WHOLLY OR PARTIALLY DEWATERED. AFTER THE APPROPRIATE PROCEDURES HAVE BEEN COMPLETED, THE MAIN MAY BE RETURNED TO SERVICE PRIOR TO COMPLETION OF BACTERIOLOGICAL TESTING IN ORDER TO MINIMIZE THE TIME CUSTOMERS ARE OUT OF WATER. LEAKS OR BREAKS THAT ARE REPAIRED WITH CLAMPING DEVICES WHILE THE MAINS REMAIN FULL OF PRESSURIZED WATER PRESENT LITTLE DANGER OF CONTAMINATION AND REQUIRE NO DISINFECTION.

4.7.1 TRENCH TREATMENT

WHEN AN EXISTING MAIN IS OPENED, EITHER BY ACCIDENT OR BY DESIGN, THE EXCAVATION WILL LIKELY BE WET AND MAY BE BADLY CONTAMINATED FROM NEARBY SEWERS. LIBERAL QUANTITIES OF HYPOCHLORITE APPLIED TO OPEN TRENCH AREAS WILL LESSEN THE DANGER FROM SUCH POLLUTION. TABLETS HAVE THE ADVANTAGE IN SUCH A SITUATION BECAUSE THEY DISSOLVE SLOWLY AND CONTINUE TO RELEASE HYPOCHLORITE AS WATER IS PUMPED FROM THE EXCAVATION.

4.7.2 SWABBING WITH HYPOCHLORITE SOLUTION

THE INTERIORS OF ALL PIPE AND FITTINGS (PARTICULARLY COUPLINGS AND SLEEVES) USED IN MAKING THE REPAIR SHALL BE SWABBED OR SPRAYED WITH A 1% HYPOCHLORITE SOLUTION BEFORE THEY ARE INSTALLED.

4.7.3 FLUSHING

THOROUGH FLUSHING IS THE MOST PRACTICAL MEANS OF REMOVING CONTAMINATION INTRODUCED DURING REPAIRS. IF VALVE AND HYDRANT LOCATIONS PERMIT, FLUSHING TOWARD THE WORK LOCATION FROM BOTH DIRECTIONS IS RECOMMENDED. FLUSHING SHALL BE STARTED AS SOON AS THE REPAIRS ARE COMPLETED AND SHALL BE CONTINUED UNTIL DISCOLORED WATER IS ELIMINATED.

4.7.4 SLUG CHLORINATION

WHERE PRACTICAL, IN ADDITION TO THE PROCEDURES PREVIOUSLY DESCRIBED, A SECTION OF MAIN IN WHICH THE BREAK IS LOCATED SHALL BE ISOLATED, ALL SERVICE CONNECTIONS SHUT OFF, AND THE SECTION FLUSHED AND CHLORINATED AS DESCRIBED IN SEC. 4.4.4. THE DOSE MAY BE INCREASED TO AS MUCH AS 300 MG/L AND THE CT REDUCED TO AS LITTLE AS 15 MIN. AFTER CHLORINATION, FLUSHING SHALL BE RESUMED AND CONTINUED UNTIL DISCOLORED WATER IS ELIMINATED AND THE CHLORINE CONCENTRATION IN THE WATER EXITING THE MAIN IS NO HIGHER THAN THE PREVAILING WATER IN THE DISTRIBUTION SYSTEM OR THAT WHICH IS ACCEPTABLE FOR DOMESTIC USE.

4.7.5 BACTERIOLOGICAL SAMPLES

BACTERIOLOGICAL SAMPLES SHALL BE TAKEN AFTER REPAIRS ARE COMPLETED TO PROVIDE A RECORD FOR DETERMINING THE PROCEDURE'S EFFECTIVENESS. IF THE DIRECTION OF FLOW IS UNKNOWN, SAMPLES SHALL BE TAKEN ON EACH SIDE OF THE MAIN BREAK. IF POSITIVE BACTERIOLOGICAL SAMPLES ARE RECORDED, THEN THE SITUATION SHALL BE EVALUATED BY THE PURCHASER WHO CAN DETERMINE CORRECTIVE ACTION. DAILY SAMPLING SHALL BE CONTINUED UNTIL TWO CONSECUTIVE NEGATIVE SAMPLES ARE RECORDED.

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
28000400	PERIMETER EROSION BARRIER	FOOT	50
56100900	WATER MAIN, 12"	FOOT	300
56101000	WATER MAIN, 16"	FOOT	756
56105200	WATER VALVES, 12"	FOOT	2
56105300	WATER VALVES, 16"	FOOT	3
56400600	FIRE HYDRANTS	EACH	2
56400500	FIRE HYDRANTS TO BE REMOVED	EACH	2
X0326160	POROUS GRANULAR EMBANKMENT, SUBGRADE (SPECIAL)	CUBIC YARD	100
X2080250	TRENCH BACKFILL, SPECIAL	CUBIC YARD	20
X6510712	WATER MAIN REMOVAL, 12"	FOOT	225
X5610716	WATER MAIN REMOVAL, 16"	FOOT	665
X6026622	VALVE VAULTS TO BE REMOVED	EACH	2
Z0068200	STEEL CASINGS, 30"	FOOT	188
XX000836	PRESSURE TESTING AND DISINFECTION	LUMP SUM	1
XX004731	CONNECTION TO EXISTING WATER MAIN	EACH	2
	DRAIN TILE REPAIR	FOOT	20

FILE NAME = H:\SDSKProj\MO1120\dgn\Dgn Final Eng\MO1120-Cover.dgn	USER NAME = kpung	DESIGNED - TNP	REVISED -
		DRAWN - KKP	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - TAW	REVISED -
	PLOT DATE = 4/26/2012	DATE - 4/26/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION SPECIFICATIONS AND SUMMARY OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. N/A TO STA. N/A

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
349	11 WRS-3	KENDALL	527	178
		CONTRACT NO. 30132		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT