

1. STANDARD SPECIFICATIONS

THE FOLLOWING STANDARDS SHALL GOVERN THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS, UNLESS WHERE SUPERSEDED BY THE CITY OF BATAVIA STANDARDS AND DETAILS, ALWAYS USING THE LATEST EDITION.

- 1.1 CITY OF BATAVIA.
ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE ORDINANCES AND REQUIREMENTS OF THE CITY OF BATAVIA'S STANDARDS AND DETAILS, ENGINEERING AND CONSTRUCTION STANDARDS AND SPECIFICATIONS (HERINAFTER BATAVIA'S STANDARD SPECIFICATIONS), INCLUDING THE LATEST EDITION OF THE CITY OF BATAVIA SUBDIVISION CONTROL ORDINANCE INCLUDING ALL PERTINENT ADDENDA.
- 1.2 STANDARD SPECIFICATIONS FOR EARTHWORK, PAVEMENT AND SIDEWALKS:
ALL EARTHWORK, PAVEMENT, CURBING AND SIDEWALK ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION AS PREPARED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION (HERINAFTER I.D.O.T.) AND THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", LATEST EDITION AS PREPARED BY I.D.O.T.
- 1.3 STANDARD SPECIFICATIONS FOR SANITARY SEWERS, STORM SEWERS AND WATER MAINS: ALL SANITARY SEWER, STORM SEWER AND WATER MAIN CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS" LATEST ADDITION AND WITH ANY SPECIAL PROVISIONS SPECIFIED HEREIN TO SAID STANDARD SPECIFICATIONS.
- 1.4 TRAFFIC CONTROL:
THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS" LATEST EDITION AS PUBLISHED BY I.D.O.T. AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", LATEST EDITION (OR DOT BUREAU OF ROAD DESIGN CONTACT MEADE ELECTRIC (703) 287-7672 FOR IDOT ROADS OR KANE COUNTY DIVISION OF TRANSPORTATION (630) 205-3130 FOR ROAD ROADS.
- 1.5 EROSION CONTROL:
ALL EROSION CONTROL WORK SHALL COMPLY WITH THE LATEST ADPTION OF THE KANE COUNTY STORMWATER MANAGEMENT ORDINANCE AND TECHNICAL MANUAL, AS AMENDED BY THE CITY OF BATAVIA, IEPA NPDES STORMWATER PERMIT, AND PER THE LATEST EDITION OF THE ILLINOIS URBAN MANUAL.
- 1.6 CONFLICTS:
IN THE EVENT OF A DISCREPANCY BETWEEN ANY PARTS OF THE CONTRACT DOCUMENTS WITH ANY PART OR PARTS THEREOF, PREFERENCE SHALL BE GIVEN IN THE FOLLOWING ORDER:
a) STANDARD GENERAL CONDITIONS OF THE CONTRACT.
b) SPECIAL PROVISIONS.
c) SUPPLEMENTARY GENERAL CONDITIONS OF THE CONTRACT.
d) STANDARD DRAWINGS (INCLUDING THE CITY ENGINEER'S DESIGN).
e) CONTRACT DRAWINGS (DETAILED DRAWINGS TAKE PRECEDENCE OVER TYPICAL DRAWINGS), AND
f) STANDARD SPECIFICATIONS. DIV

IN THE EVENT OF A DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR WILL BE REQUIRED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE, IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE CITY ENGINEER SHALL BE FINAL AND CONCLUSIVE.

- 1.7 CHANGES, REVISION OR SUBSTITUTIONS:
ANY CHANGES, REVISIONS OR SUBSTITUTIONS TO THE PLANS, SPECIFICATIONS, MATERIALS, REQUIREMENTS OR WORK SHALL BE SUBMITTED TO THE CITY ENGINEER, IN WRITING AND WRITTEN APPROVAL, GRANTED BY THE CITY ENGINEER PRIOR TO BEGINNING OF SAID WORK. ALL SUCH MATERIALS AND CONSTRUCTION WHEN INSTALLED OR OTHERWISE PLACED ON THE PROJECT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS SHALL BE APPROVED BY THE CITY ENGINEER, PRIOR TO COMMENCING THE INSTALLATION AND CONSTRUCTION. THE CHANGED, REVISIONED AND SUBSTITUTED ITEMS MUST BE ACCOUNTED FOR IN THE RECORD DRAWINGS.

2. GENERAL

- 2.1 HEALTH AND SAFETY: THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL SAFETY REGULATIONS AS OUTLINED IN THE LATEST REVISIONS OF THE FEDERAL CONSTRUCTION SAFETY STANDARDS (STANDARD NUMBER 1926) AND THE APPLICABLE PROVISIONS AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA STANDARDS OF THE WILLIAMS STEGER OCCUPATIONAL HEALTH STATE AND SAFETY ACT OF 1970) REVISION.
- 2.2 BONDING AND LICENSING: THE CONTRACTOR AND HIS INDIVIDUAL SUBCONTRACTORS SHALL OBTAIN ALL APPLICABLE CITY PERMITS, LICENSES AND BONDS PRIOR TO THE COMMENCEMENT OF WORK. BONDS MUST MEET THE CITY'S MINIMUM REQUIREMENTS.
- 2.3 THE CONTRACTOR SHALL PERFORM ALL WORK INDICATED OR IMPLIED IN THE CONTRACT DOCUMENTS, ALL WORK NOT SPECIFIED, BUT REQUIRED TO COMPLETE THE PROJECT, INCLUDING ACCESSORIES AND IMPURANCES, SHALL BE PERFORMED BY THE CONTRACTOR IN A SATISFACTORY MANNER.
- 2.4 TREE TRIMMING OR TREE REMOVAL SHALL BE PERFORMED BY A LICENSED ARBORIST, AND APPROVED BY THE CITY'S ARBORIST OR DESIGNEE.
- 2.5 ELECTRIC, TELEPHONE, NATURAL GAS AND OTHER UTILITY COMPANIES HAVE UNDERGROUND AND/OR OVERHEAD SERVICE FACILITIES IN THE VICINITY OF THE PROPOSED WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR MAINTENANCE AND PRESERVATION OF THE FACILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 811 FOR UTILITY LOCATIONS AT LEAST 48 HOURS IN ADVANCE.
- 2.6 NEITHER THE ENGINEER NOR THE CITY OF BATAVIA ARE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY CONTRACTOR.
- 2.7 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS AS SHOWN AT THE COMMENCEMENT OF WORK. THE CITY ENGINEER'S DESIGN AND 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 ABLE TO COMMUNICATE IN ENGLISH. THEY SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS AND HAVE THE AUTHORITY TO EXECUTE ORDERS TO REDIRECT THE PROJECT, AND 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 109.08.
- 2.8 THE CONTRACTOR, ENGINEER AND DEVELOPER SHALL BE RESPONSIBLE FOR THEIR OWN RESPECTIVE AGENTS AND EMPLOYEES.
- 2.9 NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY STAMPED "APPROVED FOR CONSTRUCTION" AND SIGNED AND DATED BY CITY OF BATAVIA ENGINEERING STAFF.
- 2.10 PRIOR TO THE START OF CONSTRUCTION, THE CITY ENGINEER OR DESIGNEE, PROJECT ENGINEER, THE DEVELOPER OR OWNER, THE GENERAL CONTRACTOR AND ANY SUBCONTRACTORS SHALL ATTEND A PRECONSTRUCTION MEETING, THE PURPOSE OF THE MEETING IS TO REVIEW ACCEPTABLE SITE DEVELOPMENT AND CONSTRUCTION PRACTICES IN ACCORDANCE WITH THE CONSTRUCTION CONTROL PLAN AND CITY ORDINANCES AND CODES.
- 2.11 GRANULAR TRENCH BACKFILL: ALL TRENCH SECTIONS FOR STORM SEWERS, SANITARY SEWERS, WATER MAINS, ELECTRICAL CONDUITS AND ALL OTHER UNDERGROUND SERVICE LINES LOCATED WITHIN EXISTING AND PROPOSED PAVEMENT AREAS OR AS OTHERWISE NOTED ON THE PLAN SHALL BE BACKFILLED TO THE PROPER SUBGRADE AS SHOWN IN THE UTILITY TRENCH SECTION TYPICAL DETAILS.
- 2.12 FINAL ADJUSTMENTS OF FRAMES, LIDS AND GRATES: THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING AND ADJUSTING FRAMES AND GRATES ON MANHOLES, INLETS AND VALVE VAULTS TO THEIR FINISHED ELEVATIONS OR AS DIRECTED BY THE ENGINEER.
- 2.13 EXISTING STREET CLEANLINESS: THE CONTRACTOR(S) SHALL KEEP EXISTING ADJACENT STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS. CLEAN PAVEMENTS ON A DAILY BASIS OR MORE OFTEN WHEN NECESSARY AS DIRECTED BY THE CITY ENGINEER.
- 2.14 CONCRETE: ALL CONCRETE USED IN CONSTRUCTING THE IMPROVEMENTS SHALL BE CLASS "SP", SIX (6) BAG MIX, AND SHALL HAVE A COMPRESSIVE STRENGTH OF 3500 PSI AFTER 14 DAYS.
- 2.15 IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE FROM THE SITE AND PROPERLY DISPOSE ANY AND ALL MATERIALS AND DEBRIS WHICH RESULT FROM THEIR CONSTRUCTION OPERATIONS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 2.16 UNDERGROUND UTILITY INSPECTION: PRIOR TO THE PLACEMENT OF BACKFILL, THE INSTALLATION OF ALL UNDERGROUND UTILITY LINES SHALL BE INSPECTED AND APPROVED BY THE CITY OF BATAVIA.
- 2.17 TRENCH SETTLEMENT: ANY TRENCH SETTLEMENT OCCURRING WITHIN ONE YEAR FROM THE TIME OF ACCEPTANCE, WHETHER IT BE BEFORE OR AFTER STREET PAVING, HAS BEEN COMPLETED, SHALL BE REPAIRED BY THE CONTRACTOR OR THE OWNER/DEVELOPER RESPONSIBLE FOR BACKFILLING THE TRENCHES AND REPAIR FITS IN QUESTION. THIS REPAIR SHALL INCLUDE BUT NOT BE LIMITED TO THE COST OF PAVEMENT, CURBS, DRIVEWAYS, TREES AND SIDEWALKS REPLACEMENT CAUSED BY THIS SETTLEMENT.
- 2.18 EXISTING FIELD TILES: THE LOCATION OF ANY EXISTING FIELD TILES ENCOUNTERED DURING EXCAVATION SHOULD IMMEDIATELY BE FLAGGED ON SITE AND MARKED ON THE CONTRACTORS RECORD PLAN SET. THE CONTRACTOR SHALL RECONNECT ALL FIELD TILE OR CONNECT FIELD TILE TO THE PROPOSED STORM SEWER SYSTEM IN A MANNER ACCEPTABLE TO THE CITY ENGINEER.
- 2.19 PRIOR TO ANY REDUCTION IN THE CONSTRUCTION GUARANTEE, THE CITY ENGINEER SHALL CERTIFY THAT THE PROJECT IS "SUBSTANTIALLY COMPLETE".
- 2.20 FINAL INSPECTION OF THE CONSTRUCTION IMPROVEMENTS SHALL INCLUDE THE CITY ENGINEER, PROJECT ENGINEER, PUBLIC WORKS SUPERINTENDENTS OR CITY'S DESIGNEE, DEVELOPER AND CONTRACTOR(S).
- 2.21 BEFORE ACCEPTANCE BY THE CITY OF BATAVIA AND FINAL PAYMENTS, ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY ENGINEER OR HIS REPRESENTATIVE, INCLUDING PROVISIONS FOR THE CITY'S REQUIREMENTS, EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE AND UTILITIES WITH PUBLIC RIGHTS-OF-WAY ARE ALSO PROPERLY SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS.
- 2.22 THE CONTRACTOR SHALL PROVIDE AND MAINTAIN COMPREHENSIVE LIABILITY INSURANCE WHICH WILL PROTECT THE CITY OF BATAVIA, ITS OFFICERS, EMPLOYEES, AGENTS AND CONSULTANTS FROM CLAIMS WHICH MAY ARISE OUT OF OR RESULT FROM THE PERFORMANCE OF WORK BY ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THE CONTRACTOR OR SUBCONTRACTOR, OR BY ANYONE FOR WHOSE ACTS THE CONTRACTOR MAY BE LIABLE. COMPREHENSIVE GENERAL LIABILITY COVERAGE SHALL BE AS FOLLOWS: \$500,000 PER ACCIDENT FOR PROPERTY; \$500,000 PER PERSON AND \$500,000 AGGREGATE PER ACCIDENT FOR BODILY INJURY, SICKNESS OR DISEASE, OR DEATH OF ANY PERSON, AS PROTECTION FOR ANY AND ALL CLAIMS BY ANYONE, INCLUDING THE SUBDIVIDERS CONTRACTORS OR EMPLOYEES WHICH MAY ARISE OUT OF OR RESULT FROM SUBDIVIDERS WORK OR BY ANYONE FOR WHOSE ACTS THE SUBDIVIDER MAY BE LIABLE. THE INSURANCE POLICY SHOULD NAME THE CITY OF BATAVIA, THEIR OFFICERS, EMPLOYEES AND AGENTS AS ADDITIONAL INSUREDS. THIS CERTIFICATE SHALL STATE THAT THE COVERAGE WILL NOT BE TERMINATED OR REDUCED WITHOUT 30 DAY ADVANCED WRITTEN NOTICE TO THE CITY OF BATAVIA.
- 2.23 UNLAWFUL ACTIVITIES--DRAINAGE FACILITIES--EARTHEN BERMS: IT IS UNLAWFUL FOR ANY PERSON TO CONSTRUCT OR CAUSE TO BE CONSTRUCTED ANY DRAINAGE FACILITY FOR THE PURPOSE OF THE DETENTION OR RETENTION OF WATER WITHIN A DISTANCE OF 10 FEET PLUS ONE AND ONE-HALF TIMES THE DEPTH OF THE DRAINAGE FACILITY ADJACENT TO THE RIGHT OF WAY OF ANY PUBLIC HIGHWAY WITHOUT THE WRITTEN PERMISSION OF THE HIGHWAY AUTHORITY HAVING JURISDICTION OVER THE PUBLIC HIGHWAY. IT IS UNLAWFUL FOR ANY PERSON TO CONSTRUCT OR CAUSE TO BE CONSTRUCTED ANY EARTHEN BERM SUCH THAT THE TOE OF SUCH BERM WILL BE NEARER THAN 10 FEET TO THE RIGHT OF WAY OF ANY PUBLIC HIGHWAY WITHOUT THE WRITTEN PERMISSION OF THE HIGHWAY AUTHORITY HAVING JURISDICTION OVER THE PUBLIC HIGHWAY.

3. EARTH WORK
WORK UNDER THIS SECTION SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING:

- 3.1 CLEARING AND REMOVAL OF ALL UNDESIRABLE TREES AND OTHER VEGETATIVE GROWTH WITHIN THE CONSTRUCTION AREA SHALL BE RESTRICTED TO THE DESIGNATION ON THE APPROVED LANDSCAPE PLAN APPROVED BY THE CITY OF BATAVIA. THE CITY OF BATAVIA WILL NOT PERMIT THE ON-SITE BURIAL OF TREES, BRUSH, MISC. CONCRETE AND ETC. IF ADDITIONAL TREES ARE REQUESTED TO BE REMOVED DURING A WATER CONSERVATION APPROVAL NEEDS TO BE OBTAINED FROM THE CITY OF BATAVIA PRIOR TO REMOVAL.
- 3.2 PRIOR TO ONSET OF MASS GRADING OPERATIONS AN APPROVED GRADING PLAN AND SIGN OFF FROM KANE DUGAPLE SOIL & WATER CONSERVATION DISTRICT OR THE CITY SHALL BE OBTAINED. IN ADDITION, THE EARTHWORK CONTRACTOR SHALL FAMILIARIZE THEMSELV WITH THE SOIL EROSION CONTROL SPECIFICATIONS, THE INITIAL IMPLEMENTATION OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT FENCINGS, ETC., TO PROTECT ADJACENT PROPERTIES. TRENCH COVERS BEING USED FOR CONSTRUCTION SHALL OCCUR BEFORE MASS GRADING BEGINS, IN ACCORDANCE WITH THE APPROVED SOIL EROSION CONTROL CONSTRUCTION SCHEDULE.

- 3.3 ALL TESTING, INSPECTION AND SUPERVISION OF SOIL QUALITY, THE REMOVAL AND REPLACEMENT OF UNSUITABLE SOIL AND OTHER SOILS RELATED OPERATIONS SHALL BE ENTIRELY THE RESPONSIBILITY OF THE DEVELOPMENT'S GEOTECHNICAL ENGINEER, THEIR REPRESENTATIVE WILL CLOSELY SUPERVISE AND INSPECT THE GRADING OPERATIONS, PARTICULARLY DURING REMOVAL OF UNSUITABLE MATERIAL AND THE CONSTRUCTION OF EMBANKMENTS OR BUILDING PADS. THE CITY SHALL HAVE A COPY OF THE GEOTECHNICAL REPORT PRIOR TO EARTHWORK AND RECEIVE COPIES OF THE TESTS AND INSPECTION LOGS.
- 3.4 THE GRADING AND CONSTRUCTION OF THE SITE IMPROVEMENTS SHALL NOT CAUSE PONDING OF STORMWATER UNLESS DENOTED AS A SETTLING BASIN ON APPROVED PLANS, ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE AND/OR AN OVERFLOW ROUTE AND CONFORM WITH EXISTING DRAINAGE PATTERNS.
- 3.5 THE PROPOSED GRADING ELEVATIONS SHOWN ON THE PLANS ARE FINISH GRADES, A MINIMUM OF SIX INCHES (6") INCHES OF TOPSOIL IS TO BE REGRADED ONSITE BEFORE FINISH GRADE ELEVATIONS ARE ACHIEVED, EXCEPT IN BUILDING PADS AND PAVEMENT AREAS, WHICH SHALL BE KEPT FREE OF TOPSOIL.
- 3.6 THE SELECTED STRUCTURAL FILL MATERIAL SHALL BE PLACED IN LEVEL UNIFORM LAYERS SO THAT THE COMPACTED THICKNESS IS APPROXIMATELY SIX INCHES (6"), IF COMPACTION EQUIPMENT DEMONSTRATED THE ABILITY TO COMPACT GREATER THICKNESSES, THEN A GREATER THICKNESS MAY BE SPECIFIED. EACH LAYER SHALL BE THOROUGHLY SCARIFIED DURING SPREADING TO INSURE UNIFORMITY.
- 3.7 EMBANKMENT MATERIAL WITHIN ROADWAY, PARKING LOT AND OTHER STRUCTURAL CLAY FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF NINETY-FIVE PERCENT (95%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM SPECIFICATION D-1557 (MODIFIED PROCTOR METHOD), OR TO OTHER SUCH DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE GEOTECHNICAL ENGINEER. EMBANKMENT MATERIAL FOR BUILDING PADS SHALL BE COMPACTED TO MINIMUM OF NINETY-FIVE PERCENT (95%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM DESIGNATION D-1557 (MODIFIED PROCTOR METHOD) OR TO SUCH OTHER DENSITY AS MAY BE DETERMINED APPROPRIATE BY THE GEOTECHNICAL ENGINEER.
- 3.8 EMBANKMENT MATERIAL (RANDOM FILL) WITHIN NON-STRUCTURAL FILL AREAS SHALL BE COMPACTED TO MINIMUM OF NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM DESIGNATION D-1557 (MODIFIED PROCTOR METHOD).
- 3.9 THE SURFACE VEGETATION, TOPSOIL, AND ANY OBVIOUSLY SOFT UNDERLYING SOIL SHOULD BE STRIPPED FROM ALL AREAS TO RECEIVE CLAY FILL. IF THE UNDERLYING SUBGRADE SOILS RUT DEEPER THEN AN INCH UNDER THE CONSTRUCTION EQUIPMENT OR IF THE MOISTURE CONTENT EXCEEDS THAT NEEDED FOR PROPER COMPACTION, THE SOIL SHALL BE SCARIFIED, DREGD AND RECOMPACTED TO THE REQUIRED SOIL SPECIFICATIONS.
- 3.10 ALL PAVEMENT SUBGRADE SHALL HAVE A MINIMUM BRNS AS DETERMINED BY THE GEOTECHNICAL ENGINEER WITH RESULTS SUBMITTED TO THE CITY ENGINEER. IF AREAS OF PAVEMENT SUBGRADE ARE ENCOUNTERED WHICH DO NOT PROVIDE A MINIMUM INCR.3, SUBGRADE REPLACEMENT OR PAVEMENT DESIGN REVISIONS SHALL BE PROVIDED WHICH ARE ADEQUATE TO OBTAIN EQUIVALENT PAVEMENT STRENGTH, AS DETERMINED BY THE ENGINEER AND GEOTECHNICAL ENGINEER.
- 3.11 PRIOR TO UTILITY CONSTRUCTION PROPOSED PAVEMENT AREAS, BUILDING PADS, SIDEWALKS AND VARDOPEN SPACE AREAS SHALL BE ROUGH EXCAVATED OR FILLED TO PLUS OR MINUS ONE FOOT (1') OF DESIGN SUBGRADE ELEVATION BY THE CONTRACTOR.
- 3.12 THE STREET SUBGRADE SHALL BE SHAPED AND COMPACTED AS SPECIFIED IN SECTION 301 OF THE I.D.O.T. SPECIFICATIONS. JUST PRIOR TO THE CONSTRUCTION OF THE BASE COURSE, THE SUBGRADE SHALL BE PROOF-ROLLED, WITNESSED AND RECORDED FOR THE FIELD AND/OR SIGNED OFF BY THE CITY ENGINEER OR REPRESENTATIVE. IF IN THE OPINION OF THE CITY ENGINEER OR THEIR DESIGNEE THAT ANY SUBGRADE AREAS ARE FOUND TO BE UNSTABLE, THEN SUBGRADE AREAS SHALL BE REGRADED TO MEET THE CITY ENGINEER'S DESIGN. IF PRECIPITATION OCCURS AFTER THE SUBGRADE PROOF-ROLLING AND BEFORE THE CONSTRUCTION OF THE BASE COURSE, THEN SAID SUBGRADE PROOF-ROLLING SHALL BE REPEATED TO VERIFY THAT THE SUBGRADE IS STABLE. IF AREAS OF THE SUBGRADE ARE FOUND TO BE UNSTABLE FOLLOWING ALIGNMENT WITH ACCEPTABLE GRANULAR MATERIALS THE GEOTECHNICAL ENGINEER AND THE CITY ENGINEER SHALL COLLECTIVELY DETERMINE THE CORRECTIVE ACTION.
- 3.13 GEOTEXTILE PAVING FABRIC ARE REQUIRED ON ALL STREET SUBGRADE APPLICATIONS AND SHALL CONSIST OF A NONWOVEN GEOTEXTILE FABRIC, 4 OZ/SY MINIMUM, CONFORMING TO ASTM D3776.
- 3.14 THE SUBGRADE SHALL MEET MINIMUM STANDARD OF NINETY-FIVE PERCENT (95%) OF THE STANDARD PROCTOR TEST AND SHALL BE TESTED AT 200 FOOT INTERVALS, MINIMUM.
- 3.15 AGGREGATE BASE COURSE: AFTER APPROVAL BY THE CITY ENGINEER, THE AGGREGATE BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 351 OF THE I.D.O.T. STANDARD SPECIFICATIONS FOR TYPE A OR TYPE B CONSTRUCTION. THE MATERIAL SHALL BE CRUSHED LIMESTONE CONFORMING TO CA-6 GRADATION. THE MINIMUM COMPACTED THICKNESS SHALL BE AS SHOWN ON THE TYPICAL CROSS-SECTION DETAIL. THE AGGREGATE BASE SHALL BE APPLIED ONE DAY PRIOR TO PLANNED PAVEMENT COURSE. IF, IN THE OPINION OF THE CITY ENGINEER THE AGGREGATE BASE IS UNSTABLE, IT SHALL BE REMOVED AND REPLACED WITH NEW SUBBASE AND AGGREGATE BASE MATERIAL AND COMPACTED TO NOT LESS THAN NINETY-FIVE PERCENT (95%) OF THE STANDARD LABORATORY DENSITY.
- 3.16 STORMWATER DETENTION AREAS: PROPOSED STORMWATER DETENTION AREAS SHALL BE EXCAVATED TO THE LINES, ELEVATIONS AND SLOPES SHOWN ON THE APPROVED ENGINEERING PLANS. AFTER THE AREA HAS BEEN EXCAVATED AND SHAPED TO ROUGH FINISHED GRADES, THE TOPSOIL MATERIAL SHALL BE SPREAD ON ALL AREAS AND GRADED TO FINISHED ELEVATIONS. THE FINISHED SURFACE SHALL THEN BE PLANTED ACCORDING TO THE APPROVED LANDSCAPE PLAN MEETING THE REQUIREMENTS FOUND IN SECTION 17 AFTER ACCEPTANCE OF THE FINISHED SURFACE AND DETENTION STORAGE REQUIREMENTS. ANY DAMAGE TO THE FINISHED SURFACE AFTER ACCEPTANCE SHALL BE REPAIRED BY CONTRACTOR PRIOR TO THE FINAL DESIGN, EROSION CONTROL AND DETENTION DESIGN. EROSION CONTROL SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE BY THE CITY.
- 3.17 AFTER COMPLETION OF ALL UTILITIES IN THE RIGHT OF WAY THE PARKWAYS SHALL BE TOPSOILED, SEEDED AND BLANKETTED. THE PRIMARY METHOD FOR SEEDING IS DRILL OR BROADCAST. HYDROSEEDING CAN BE USED FOR AREAS WITH EROSION ISSUES OR OTHER HARD TO ACCESS AREAS AS ALLOWED BY THE CITY ENGINEER OR THEIR DESIGNEE. SEEDING SHALL BE DONE IN ACCORDANCE WITH THE CITY ENGINEER'S DESIGN. AREAS TO BE SEEDED SHALL BE FIRM BUT NOT COMPACTED AND SHALL BE FINE GRADED TO A SMOOTH AND NATURAL CONTOUR PRIOR TO SEEDING. ALL ROCKS, STICKS, ROOTS, CLODS, AND DEBRIS GREATER THAN ONE INCH IN DIAMETER SHALL BE REMOVED AND DISPOSED ON-SITE IN LOCATIONS APPROVED BY THE CITY ENGINEER OR THEIR DESIGNEE.

4. 4. STORM SEWER CONSTRUCTION

- 4.1 STORM SEWER SHALL TYPICALLY BE REINFORCED CONCRETE SEWER PIPE, CLASS III OR IV AS NOTED, CONFORMING TO ASTM C-76 SPECIFICATIONS WITH RUBBER GASKET JOINTS. WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER MAIN QUALITY SHALL BE USED, WITH JOINTS CONFORMING TO ASTM D-2885. NO ALTERNATE PIPE MATERIAL, SUCH AS PVC OR ADS PLASTIC, ETC., SHALL BE CONSIDERED ACCEPTABLE FOR THE MAIN STORM SEWER LINES WITHOUT THE WRITTEN CONSENT OF THE ENGINEER AND THE CITY ENGINEER UPON REQUEST. THE CONTRACTOR SHALL PROVIDE EACH WITH SUPPLIERS PRODUCT TEST REPORTS, CATALOG INFORMATION, ALTERNATE BIDS, OR ANY OTHER INFORMATION THEY MAY FIND NECESSARY IN CONSIDERING THE PROPOSED ALTERNATE MATERIAL. THE ACCEPTANCE OF THE PROPOSED ALTERNATE MATERIAL WILL IN NO WAY BE WARRANTED BY THESE SUBMITTALS.
- 4.2 FRAMES, LIDS AND GRATES DESIGNATED ON THE PLANS FOR STORM SEWER INLETS, MANHOLES AND JUNCTION BOXES SHALL CONFORM TO THE FOLLOWING OR AN APPROVED EQUAL:
CURB INLET E-1 7721 TYPE 1 CURB BACK, TYPE M1 GRATE
DEPRHS CURB INLET E-1 7000 WITH M3 GRATE
MANHOLE E-1 1020 TYPE M1 OR TYPE A GRATE
YARD INLET E-1 6527
JUNCTION BOX E-1 1020 TYPE M1 OR TYPE A GRATE
THE WORDS "CITY OF BATAVIA," "STORM" SHALL BE CAST INTO THE LID. ALL STRUCTURES TRIBUTARY TO THE FOX RIVER THE GRATE SHALL BE CAST WITH A FISH AND STATE "DRAINS TO THE RIVER".
- 4.3 MANHOLES TYPE "B": MANHOLES DESIGNATED ON THE PLANS AS TYPE "B" ARE SHALLOW DEPTH MANHOLES WITH A REINFORCED CONCRETE FLAT SLAB TOP. THE THICKNESS OF THE FLAT SLAB TOP TO BE 6 INCHES, MINIMUM. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL MEET THE REQUIREMENTS OF ASTM C-478.
- 4.4 EXISTING DRAINAGE SYSTEM CLEANING AND REPAIR: WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES OR SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO INSURE INTEGRITY.
- 4.5 ALL COMPLETED MAIN LINE STORM SEWERS (NOT LATERALS) SHALL BE INSPECTED USING COLOR CLOUSED CIRCUIT TELEVISION CAMERA (CCTV) AND DOCUMENT THE INSPECTION ON A DIGITAL RECORDER. THE CONTRACTOR OR DEVELOPER SHALL PAY TO HAVE THE LINES TELEVIEWED. TELEVISION SHALL BE DONE WITH APPROXIMATELY ONE HALF INCH (1/2") CONTINUAL FLOW IN THE SEWER. ALL INSPECTION VIDEO SHALL BE CAPTURED AND STORED IN THE CITY ENGINEER'S OFFICE. THE CITY ENGINEER SHALL REVIEW AND SIGN OFF ON SUBMITTAL AND RECORDS. IF NECESSARY, PRIOR TO ACCEPTANCE OF THE SEWERS BY THE CITY, THE FINAL INSPECTION VIDEOS PROVIDED SHALL BECOME THE PROPERTY OF THE CITY. ALL WORK WILL CONFORM TO CURRENT MASSCO PIPELINE ASSESSMENT CERTIFICATION PROGRAM (PACP) CODING CONVENTIONS AND ALL SOFTWARE USED BY THE CONTRACTOR WILL BE PACP COMPLIANT.
- 4.6 FINAL CLEARING: PRIOR TO FINAL INSPECTION AND ACCEPTANCE BY THE CITY, ALL STORM SEWER MAINS AND STRUCTURES SHALL BE CLEANED BY JETTING OR SNOW REMOVAL. THE STREETS, RAMPS SHALL BE REMOVED PRIOR TO CONSTRUCTION OF THE SURFACE COURSE. PRIOR TO THE CONSTRUCTION OF THE FINAL SURFACE COURSE, CORE BORING SHALL BE MADE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY, THROUGH THE EXISTING BINDER COURSE AND AGGREGATE BASE COURSE. THE CORINGS SHALL BE SPACED AS DIRECTED BY THE CITY ENGINEER AND SHALL BE ALTERNATELY STAGGERED ON EACH SIDE OF THE CENTERLINE OF THE SURFACE COURSE. CORE BORING SHALL BE MEASURED FOR THICKNESS AND RESULTS OF THE CORE BORINGS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL BEFORE PROCEEDING THE FINAL BITUMINOUS COURSE. ANY DEFICIENCIES IN THICKNESS OF BASE AND/OR BINDER SHALL BE CORRECTED BY AN APPROVED THICKNESS OF SURFACE COURSE OR OTHER METHOD FOUND ACCEPTABLE BY THE CITY ENGINEER. CORE BORINGS SHALL BE FILLED AND COMPACTED WITH BITUMINOUS ASPHALT. THE COST OF ALL BORINGS SHALL BE AT THE DEVELOPERS EXPENSE.
- 4.7 POURED INVERTS: ALL INLETS, CATCH BASINS, STORM MANHOLES AND OTHER DRAINAGE STRUCTURES SHALL BE PROVIDED WITH PRECAST CONCRETE INVERTS OR SHALL HAVE POURED IN PLACE CONCRETE INVERTS CONFORMING TO THE SHAPE OF THE PIPE OR AS OTHERWISE SHOWN ON THE PLANS. POURED IN PLACE CONCRETE SHALL BE CLASS "SP" SHAPED AND TOWELED FOR A SMOOTH FINISH.
- 4.8 SUMP PUMP LINES: SUMP PUMP LINES SHALL BE PVC SEWER PIPE CONFORMING TO ASTM D-3034. SPECIFICATIONS TYPE 1. SDR 26. THE MINIMUM COVER DEPTH SHALL BE 2 1/2 MINIMUM. ALL STUBS SHALL BE EXTENDED INTO LOT 10 MINIMUM, CAPPED, AND LOCATIONS MARKED WITH 2 X 4 POST PAINTED YELLOW. IF SUMP PUMP LINES ARE INSTALLED TO THE HOUSE PROPER CITY INSPECTIONS ARE REQUIRED.
- 4.9 SUMP PUMP DRAINAGE BOXES: A PRECAST CONCRETE JUNCTION BOX OF THE SIZE AND TYPE SHOWN IN "INLET TYPE A" ON THE PLANS SHALL BE INSTALLED WHERE MULTIPLE SUMP DRAINS FLOW INTO THE RCP STORM SEWER LINE AT A COMMON CONNECTION.

5. SANITARY SEWER CONSTRUCTION

- 5.1 SEWER PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS EXCEPT AS APPROVED BY THE CITY ENGINEER:
1. BETWEEN DEPTHS OF SIX FEET (6') AND FOURTEEN FEET (14'), PVC PIPE ASTM D-3034 SDR 26 SHALL BE REQUIRED. (ORD. 97-32, 62-1997)
2. FOR DEPTHS SHALLOWER THAN SIX FEET (6') OR DEEPER THAN FOURTEEN FEET (14') DUCTILE IRON PIPE, ASTM C151, CLASS 50 WITH PUSH ON JOINTS OR RESTRAINED JOINTS WHERE APPLICABLE PIPE SHALL BE AS MANUFACTURED BY GRIFFIN PIPE CO., HSEWER SAFE, DUCTILE IRON OR APPROVED EQUAL. ALL DUCTILE IRON SHALL INCLUDE POLY-WRAP. ALL PIPE INSTALLED AT DEPTHS GREATER THAN FOURTEEN FEET (14') SHALL BE EVALUATED FOR TRENCH LOSS AND PRESSURE.
SEPARATELY IN ACCORDANCE WITH ANSI/AWWA C150A.21.5. PRESSURE RATED PIPE, ASTM D-2241, SDR 21 MAY BE SUBSTITUTED FOR BURY DEPTHS FROM FOURTEEN FEET (14'), TO TWENTY FEET (20'). PRESSURE RATED PIPE, ASTM D-2241, (DR) 18, AWWA C-900, MAY BE REQUIRED OR SUBSTITUTED AT DEPTHS GREATER THAN TWENTY FEET (20'). ANY USE OF PLASTIC PIPE AT THESE DEPTHS SHALL BE WITH THE PERMISSION OF (OR REQUIRED BY) THE CITY ENGINEER. (ORD. 85-21, 9-3-1985)
3. FOR PIPE TWENTY FOUR INCHES (24") AND LARGER, PIPE SHALL BE AS MANUFACTURED BY GRIFFIN PIPE CO., HSEWER SAFE DUCTILE OR APPROVED EQUAL. ALL DUCTILE IRON SHALL INCLUDE POLY-WRAP. ALL PIPE GREATER THAN TWENTY FOUR INCHES (24") DIA. OR INSTALLED AT DEPTHS GREATER THAN FOURTEEN FEET (14') SHALL BE EVALUATED FOR THICKNESS AND PRESSURE. CONSIDERING THE TRENCH LOAD AND INTERNAL PRESSURE SEPARATELY IN ACCORDANCE WITH ANSI/AWWA C150A.21.5. PRESSURE RATED PIPE ASTM D- 2241 OR AWWA C905, MAYBE REQUIRED (OR SUBSTITUTED) ON LARGE DIA. PIPE BY THE CITY ENGINEER.
- 5.2 MANHOLE FRAMES AND LIDS: THE FRAMES AND LIDS SHALL BE OF THE NON-ROCKING AND SELF-SEALING TYPE WITH RUBBER WATERTIGHT GASKET AND SHALL CONFORM TO AED JORDAN NO 1020 OR AN APPROVED EQUAL. THE LIDS TO BE SOLD WITH CONCEALED PICK HOLE AND WITH THE WORDS "CITY OF BATAVIA" AND "SANITARY SEWER" IN THE CAST IN LID. "INFA-SHEILD," "CANUSA" OR APPROVED EQUAL, CHIMNEY SEALS SHALL BE INSTALLED ON ALL SANITARY SEWER MANHOLES.
- 5.3 SEWER PIPE BEDDING AND COVER: ALL SANITARY SEWER PIPE INCLUDING SERVICE LINES SHALL BE BEDDED AND CRADLED TO THE CENTERLINE OF THE PIPE IN SAND OR FINE GRAVEL. FROM THE CENTERLINE OF THE PIPE TO 12 INCHES OVER THE TOP OF THE PIPE, GRANULAR TRENCH BACKFILL MATERIAL SHALL BE HAND PLACED AND COMPACTED. ALL TO THE DETAILS SHOWN ON THE PLANS, PVC PIPE SHALL BE BEDDED AND CRADLED IN ACCORDANCE WITH ASTM D-2211 (CLASS 1) SPECIFICATIONS. ALL TRENCHES WITHIN STREETS AND FOR SANITARY SEWERS CONSTRUCTED UNDER PROPOSED PAVED AREAS SHALL BE BACKFILLED WITH CA-7 CRUSHED STONE. FLOWABLE FILL IN ACCORDANCE WITH I.D.O.T. SPECIAL PROVISION FOR CONTROLLED LOW-STRENGTH MATERIALS (CLSM) MAY BE REQUIRED UNDER CERTAIN CIRCUMSTANCES AS DIRECTED BY THE DEPT. OF PUBLIC WORKS OR THE CITY ENGINEER. TRENCH COVERS BEING USED FOR CONSTRUCTION SHALL OCCUR BEFORE MASS GRADING BEGINS. IN ACCORDANCE WITH THE APPROVED SOIL EROSION CONTROL POLICY) OR OTHER SUITABLE TRENCH BACKFILL MAY BE SUBSTITUTED FOR CA-7 UNDER THE FOLLOWING CONDITIONS: 1) APPROVED BY STREET DEPARTMENT SUPERINTENDENT AND CITY ENGINEER, 2) ON SITE INSPECTION OF TRENCH BACKFILL DURING CONSTRUCTION.

- 5.4 SANITARY SEWER SERVICES: SANITARY SEWER STUBS INSTALLED FOR HOUSE SERVICE CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS OR THE STANDARD SPECIFICATIONS. SEWER STUBS SHALL BE EXTENDED TO THE R.O.W. THE EXACT LOCATION SHALL BE DETERMINED IN THE FIELD, AND THE CONSTRUCTED LOCATION ACCURATELY RECORDED AND THE END MARKED WITH A 2X4 POST PAINTED GREEN. SERVICE LINES SHALL HAVE A MINIMUM SLOPE OF 2.0%.
- 5.5 LEAKAGE TESTING: ALL SANITARY SEWERS SHALL BE TESTED FOR WATERTIGHTNESS BY THE AIR TESTING METHOD SPECIFIED IN THE STANDARD SPECIFICATIONS.
- 5.6 DEFLECTION TESTING: ALL SANITARY SEWER MAIN CONSTRUCTED OF PVC PIPE SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
- 5.7 TV INSPECTION: PRIOR TO ACCEPTANCE OF THE SANITARY SEWERS BY THE CITY, ALL SANITARY SEWER MAINS SHALL BE INTERNALLY INSPECTED BY TELEVISION CAMERA. THE CITY ENGINEER IS TO BE NOTIFIED PRIOR TO THE INSPECTION. VHS VIDEO TAPES OF THE TV INSPECTION SHALL BE RECORDED AND GIVEN TO THE CITY AND THE ENGINEER FOR THEIR RECORDS. CORRECTION OF ANY IRREGULARITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 5.8 VACUUM TESTING: VACUUM TESTING SHALL BE CARRIED OUT IMMEDIATELY AFTER ASSEMBLY AND PRIOR TO BACKFILLING. ALL LIFT HOLES SHOULD BE PLUGGED WITH AN APPROVED NON-SHRINK GROUT, OR RUBBER PLUG, NO GROUT WILL BE PLACED IN THE HORIZONTAL JOINTS BEFORE TESTING. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED, TAKING CARE TO SECURELY GRABE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE. A VACUUM OF TEN (10) INCHES OF MERCURY SHALL BE PLACED ON THE MANHOLE AND THE TIME MEASURED FOR THE VACUUM TO DROP TO NINE (9) INCHES OF MERCURY. THE VACUUM SHALL NOT DROP BELOW NINE (9) INCHES OF MERCURY FOR THE FOLLOWING TIME PERIODS FOR EACH SIZE MANHOLE:
FORTY EIGHT (48) INCHES DIAMETER SIXTY (60) SECONDS
SEVENTY-TWO (72) INCHES DIAMETER NINETY (90) SECONDS
THE VACUUM TESTER SHALL BE MANUFACTURED BY P.A. GLAZIER, INC., WORCESTER, MA, 01913, PHONE: (800) 822-4848, OR OTHER TESTING EQUIPMENT MEETING THE SAME STANDARDS, IF APPROVED BY THE CITY DEPARTMENT OF PUBLIC WORKS. ALL TESTING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF P.A. GLAZIER, INC. IF TESTING FAILS THE CONTRACTOR SHALL SEAL ALL LEAKS WITH MATERIAL AND METHODS RECOMMENDED BY P.A. GLAZIER, INC. AND RE-TESTED UNTIL ACCEPTABLE. IT IS RECOMMENDED THAT THIS TESTING BE DONE BEFORE BACKFILLING SO THAT ANY LEAKS CAN BE FOUND AND FIXED EXTERNALLY. THE MANHOLE FRAME AND ADJUSTING RINGS SHALL BE IN PLACE WHEN TESTING.
- 5.9 MANHOLES: ALL SANITARY SEWER MANHOLES SHALL BE OF PRECAST CONCRETE CONSTRUCTION, AND SHALL HAVE RUBBER GASKETTED COUPLINGS FOR ALL INLET AND OUTLET PIPES. INVERTS SHALL BE PRECAST CONCRETE CONFORMING TO THE SIZE AND SHAPE OF THE SHAPE OF THE PIPE OR Poured IN PLACE CLASS "SP" CONCRETE SHAPED AND TROWELED FOR A SMOOTH FINISH CONFORMING TO THE SIZE AND SHAPE OF THE PIPE. MINIMUM SLOPE OF EACH PIPE SHALL BE 2% PER FOOT. SEWER DROPS ARE TO BE INSTALLED WHERE INLETS TO MANHOLE ARE GREATER THEN TWO (2) FEET ABOVE THE OUTLET INVERT.
- 5.10 A NON-SHAR "MISSION" BRAND COMPOUND SHALL BE USED WHEN JOINING PIPES MADE OF DISSIMILAR MATERIAL OR WHERE NO "HUB" END EXISTS. PVC TRANSITION FITTINGS SHALL BE USED WHEN JOINING PVC PIPES OF DISSIMILAR MATERIAL, SPECIFICATIONS SUCH AS WITH STORM SEWER OR WATER MAIN.

6. SIDEWALK, CURB, AND APRON CONSTRUCTION

- 6.1 COMBINATION CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE LATEST I.D.O.T. STANDARD SPECIFICATIONS (HEREFOTORE REFERRED TO AS THE STANDARD SPECIFICATIONS). THE CONCRETE CURB AND GUTTER SHALL BE TYPE BE.12 UNLESS DETAILED OTHERWISE. PRIOR TO THE CONSTRUCTION PLANS, THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS-SECTION TO DETERMINE THE GUTTER FLG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BETWEEN THE CURB AND GUTTER. THE CONCRETE SHALL BE CLASS SI MIX DESIGN. IT SHALL HAVE AN AIR CONTENT OF NOT LESS THAN 5% NOR MORE THAN 7% OF THE VOLUME OF THE CONCRETE. IT SHALL HAVE A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT 14 DAYS. TEST CYLINDERS SHALL BE TAKEN BY THE CONTRACTOR AND THE CERTIFIED COMPRESSION TEST RESULTS SUBMITTED TO THE CITY ENGINEER.
- 6.2 FOR CURB AND GUTTER CONSTRUCTED OVER UTILITY TRENCHES, TWO (2) EPOXY COATED REINFORCING BARS (NO. 5) SHALL BE PLACED IN THE CURB AND GUTTER, CENTER OVER THE TRENCH. AT EACH EXPANSION JOINT PROVIDE TWO 1" LONG NO. 6 SMOOTH BARS WITH EXPANSION CAPS AND 3/4" PRECASTED NON-SHRINK GROUT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SPACING AND INSTALLATION DETAILS OF EXPANSION JOINTS. CITY STANDARD DETAIL NO. 7.03 AND 7.04 FOR THE REQUIRED SPACING AND INSTALLATION DETAILS OF EXPANSION JOINTS.
- 6.3 CONSTRUCTION JOINTS SHALL BE SAWED AT A MAXIMUM OF TEN FEET (10') SPACING. THE CONSTRUCTION JOINTS SHALL BE CUT IN THE UPPER 1/3 OF CURBS AND GUTTERS WITHIN 24 HOURS OF PLACEMENT.
- 6.4 ALL CURB AND GUTTER SHALL BE BROOM FINISHED, FINISHED SURFACES OF ALL NEWLY CONSTRUCTED CURB AND GUTTER SHALL BE COATED WITH CURING COMPOUND ACCORDING TO THE REQUIREMENTS OF SECTION 102Z OF THE STANDARD SPECIFICATIONS AND AS PROVIDED BY THE CITY ENGINEER. CURING COMPOUND SHALL BE APPLIED ACCORDING TO THE MANUFACTURER INSTRUCTIONS.
- 6.5 CURING AND PROTECTION OF ALL EXPOSED CONCRETE SURFACES SHALL BE IN ACCORDANCE WITH ARTICLE 102D.13 OF THE STANDARD SPECIFICATIONS. NO HONEYCOMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.
- 6.6 BACKFILLING OF CURBS SHALL BE COMPLETED PRIOR TO PLACEMENT OF ROADWAY BASE-COURSE.
- 6.7 SIDEWALKS SHALL BE FIVE INCHES (5") THICK MINIMUM EXCEPT THRU DRIVEWAYS, WHERE SIX INCHES (6") IS REQUIRED FOR RESIDENTIAL AND 8 INCHES (8") FOR COMMERCIAL DRIVEWAYS. THE WIDTH OF THE SIDEWALK SHALL BE A MINIMUM OF FIVE FEET (5'). THE CONCRETE SHALL BE CLASS SI MIX DESIGN. REFER TO CITY STANDARD DETAIL NO. 7.09 FOR THE REQUIRED SPACING AND INSTALLATION DETAILS OF EXPANSION JOINTS. JOINTS PREFORMED FLOW EXPANSION JOINT FILLER SHALL MEET THE REQUIREMENTS OF SECTION 1061 OF THE STANDARD SPECIFICATIONS. ALL SIDEWALKS SHALL BE BROOM FINISHED.
- 6.8 ADA SIDEWALK RAMPS SHALL BE INSTALLED AT ALL SIDEWALK/CURB INTERSECTIONS AS SHOWN ON CITY OF BATAVIA SIDEWALK CURB RAMP DETAIL (STANDARD NO. 7.10) OR IN COMPLIANCE WITH THE MOST CURRENT ADA STANDARDS.
- 6.9 SIDEWALK SHALL NOT BE PLACED UNTIL BUILDING CONSTRUCTION HAS BEEN COMPLETED TO THE POINT THAT CONSTRUCTION TRAFFIC NEED NO LONGER CROSS THE SIDEWALK AREA, OR AS OTHERWISE DIRECTED BY THE ENGINEER.
- 6.10 CONCRETE DRIVEWAY APRONS SHALL BE POURED IN A SEPARATE POUR FROM ADJACENT SIDEWALK AND CURB. MONOLITHIC POURS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL OF THE CITY OF BATAVIA. NO CONCRETE SHALL BE PLACED UNTIL ALL THE FORMS HAVE BEEN INSPECTED FOR LINE, LEAD, AND SUBGRADE CONDITIONS BY THE CITY OF BATAVIA ENGINEERING INSPECTOR. REFER TO CITY STANDARD DETAIL NO. 7.16 AND 7.17 FOR DETAILED INFORMATION ON COMMERCIAL AND RESIDENTIAL DRIVEWAY APRONS.

7. PAVEMENT CONSTRUCTION

- 7.1 PROOF ROLL WILL BE REQUIRED WITH THE CITY ENGINEER OR THEIR DESIGNEE PRESENT AFTER PREPARATION OF THE SUBGRADE. PROOF ROLL MUST USE A FULLY LOADED SEMI TRUCK UNLESS OTHERWISE APPROVED AND WEIGH TICKETS MUST BE PROVIDED.
- 7.2 THE PROPOSED PAVEMENT SHALL CONSIST OF THE SUB-BASE COURSE; HOT MIX ASPHALT (HMA) BINDER COURSE, AND HMA SURFACE COURSE. OF THE THICKNESS AND MATERIAL SHOWN ON THE CONSTRUCTION PLANS. PRIME COAT SHALL BE APPLIED TO THE SUB-BASE COURSE AT A RATE OF 2.5 POUNDS PER SQUARE FOOT. ALL PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
- 7.3 AFTER THE INSTALLATION OF THE SUB-BASE COURSE, ALL TRAFFIC SHALL BE KEPT OFF THE BASE UNTIL THE BINDER COURSE IS LAID. AFTER INSTALLATION OF THE BINDER COURSE, AND FOR PUBLIC IMPROVEMENTS AFTER THE BINDER COURSE HAS BEEN IN PLACE 80% OF DEVELOPMENT BUILT OUT), AND UPON THE COMPLETION OF INSPECTION OF SAME AND APPROVAL BY THE CITY AND DEVELOPER, THE PAVEMENT SHALL BE CLEANED, PRIME COAT SHALL BE APPLIED TO THE BINDER COURSE. ALL DAMAGED AREAS IN THE BINDER BASE OR BINDER SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY AND DEVELOPER PRIOR TO LAYING THE SURFACE COURSE. THE PAVING CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND MANPOWER IS NECESSARY, INCLUDING THE USE OF POWER BROOMS, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. A TACK COAT SHALL BE APPLIED TO THE BINDER AT A RATE OF 0.1 GALLONS PER SQUARE YARD.
- 7.4 THE BITUMINOUS CONCRETE BINDER COURSE SHALL BE CLASS 1, MIXTURE 11.90. N50. ALL WORK AND MATERIALS SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION PLANS. PRIME COAT SHALL BE APPLIED TO THE SUB-BASE COURSE AT A RATE OF 2.5 POUNDS PER SQUARE FOOT. ALL PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
- 7.5 THE BINDER COURSE SHALL BE SUBJECT TO ONE WINTER PERIOD (MINIMUM) OF FREEZING AFTER PLACEMENT BEFORE THE CONSTRUCTION OF THE FINAL SURFACE COURSE. PRIOR TO NOVEMBER, BITUMINOUS RAMPS SHALL BE INSTALLED AT RAISED MANHOLES, VAULT, AND INLET CASTING TO FACILITATE SNOW REMOVAL FROM THE STREETS. RAMPS SHALL BE REMOVED PRIOR TO CONSTRUCTION OF THE SURFACE COURSE. PRIOR TO THE CONSTRUCTION OF THE FINAL SURFACE COURSE, CORE BORING SHALL BE MADE IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY, THROUGH THE EXISTING BINDER COURSE AND AGGREGATE BASE COURSE. THE CORINGS SHALL BE SPACED AS DIRECTED BY THE CITY ENGINEER AND SHALL BE ALTERNATELY STAGGERED ON EACH SIDE OF THE CENTERLINE OF THE SURFACE COURSE. CORE BORING SHALL BE MEASURED FOR THICKNESS AND RESULTS OF THE CORE BORINGS SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL BEFORE PROCEEDING THE FINAL BITUMINOUS COURSE. ANY DEFICIENCIES IN THICKNESS OF BASE AND/OR BINDER SHALL BE CORRECTED BY AN APPROVED THICKNESS OF SURFACE COURSE OR OTHER METHOD FOUND ACCEPTABLE BY THE CITY ENGINEER. CORE BORINGS SHALL BE FILLED AND COMPACTED WITH BITUMINOUS ASPHALT. THE COST OF ALL BORINGS SHALL BE AT THE DEVELOPERS EXPENSE.
- 7.6 PRIOR TO CONSTRUCTION OF THE FINAL BITUMINOUS SURFACE COURSE ON PREVIOUSLY CONSTRUCTED BITUMINOUS BINDER COURSE SUBJECT TO EXTENDED TRAFFIC USE, BITUMINOUS TACK COAT SHALL BE APPLIED TO SAID BITUMINOUS BINDER COURSE SURFACE. THE BITUMINOUS CONCRETE SURFACE COURSE SHALL BE MIX D, 11, 9.5 MIN N50 CONSTRUCTED ON PREVIOUSLY PLACED BITUMINOUS BINDER COURSE. THE WORK AND MATERIALS SHALL CONFORM TO APPLICABLE PROVISIONS OF SECTION 408 OF THE STANDARD I.D.O.T. SPECIFICATIONS. THE BITUMINOUS MIXTURE SHALL BE SHOWN ON THE PLANS OR SPECIFIED IN THE PROJECT SPECIFICATIONS AND APPROVED BY THE CITY ENGINEER. NO RECYCLED BITUMINOUS MATERIAL WILL BE PERMITTED IN THE FINAL BITUMINOUS SURFACE COURSE MIXTURE UNLESS APPROVED BY THE CITY ENGINEER. THE MINIMUM THICKNESS OF THE FINAL COMPLETED BITUMINOUS SURFACE COURSE, AS MEASURED AT ANY POINT ON THE PAVEMENT SURFACE, SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION DETAILS SHOWN ON THE PLANS.
- 7.7 THE CONTRACTOR SHALL GUARANTEE THE PAVEMENT FOR ONE YEAR AFTER FINAL ACCEPTANCE AGAINST SETTLEMENT, LOW SPOTS, AND/OR RAVELING OUT OF SURFACE. THE CONTRACTOR SHALL MAKE ANY REPAIRS NECESSARY DURING THE GUARANTEE PERIOD TO MAINTAIN FINISHED PAVEMENT IN SATISFACTORY CONDITION. REPAIR SHALL INCLUDE BUT NOT BE LIMITED TO REMOVING DEFECTIVE PAVEMENT AND REPLACING WITH NEW PAVEMENT AS DIRECTED BY THE CITY ENGINEER.
- 7.8 HMA PATCHES SHALL BE CONSTRUCTED IN ACCORDANCE TO THE SECTION 442 OF THE STANDARD SPECIFICATIONS FOR CLASS D PATCHES. FOR UTILITY TRENCH HMA PATCHES THE CONTRACTOR SHALL SAWCUT THE PAVEMENT AND PATCH AS SHOWN PER THE CITY DETAIL STANDARD NO. 7-15. SAWCUTTING SHALL BE DONE AT THE EDGE OF THE PATCHES AT AN ANGLE OF 45 DEGREES TO THE VERTICAL.
- 7.9 PAVEMENT MARKINGS SHALL BE THERMOPLASTIC TYPE AND MEETING THE REQUIREMENTS OF ARTICLE 109.61 OF THE STANDARD SPECIFICATIONS. MARKINGS SHALL BE APPLIED ONLY WHEN THE PAVEMENT TEMPERATURE IS 55 DEG. OR ABOVE AND NO L