

**GENERAL CONSTRUCTION NOTES:**   - ALL CIVIL CONSTRUCTION SHALL COMPLY WITH CITY OF DETROIT AND WAYNE COUNTY CODES AND STANDARDS. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL (CITY OF DETROIT) REGULATIONS. - ALL CONSTRUCTION WITHIN A CITY OF DETROIT RIGHT OF WAY SHALL COMPLY WITH ALL CITY OF DETROIT STANDARD SPECIFICATIONS AND STREET ALLEY STANDARDS, AND MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION. - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO PERFORM ALL THE WORK. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK. - THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE OWNER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION. ANY CONFLICT BETWEEN DRAWINGS AND THE SPECIFICATIONS SHALL BE CONFIRMED WITH THE CONSTRUCTION MANAGER PRIOR TO BIDDING. - SHOULD ANY UNCHARTED, OR INCORRECTLY CHARTED, EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE ENGINEER IMMEDIATELY BEFORE PROCEEDING FURTHER WITH THE WORK IN THIS AREA. - THE CONTRACTOR SHALL NOTIFY THE ENGINEER SHOULD ANY DISCREPANCY REGARDING THE PROPOSED WORK OR UNFORESEEN CONDITIONS ARISE PRIOR TO PROCEEDING FURTHER WITH THE AFFECTED WORK. - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS FOR THE PROJECT AND NOTIFYING THE OWNER AND ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO CONSTRUCTION. - DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER OR UTILITIES/ADJACENT PROPERTY OWNERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE OWNER, LOCAL MUNICIPALITY AND/OR UTILITY COMPANY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY OR PERMANENT SERVICE HAS BEEN PROVIDED. - THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. - THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS, LANDSCAPED AREAS, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER, LOCAL MUNICIPALITY, AND STATE. - THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL AND MAINTAIN TRAFFIC DEVICES FOR PROTECTION OF PEDESTRIANS AND VEHICLES CONSISTING OF DRUMS, BARRIERS, SIGNS, LIGHTS, FENCES AND UNIFORMED TRAFFIC CONTROLLERS IN ACCORDANCE WITH MDOT REGULATIONS AND/OR AS REQUIRED OR DIRECTED BY THE SITE ENGINEER OR CONSTRUCTION MANAGER OR LOCAL GOVERNING AUTHORITIES. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC LANES AND PEDESTRIAN WALKWAYS AT ALL TIMES UNLESS WRITTEN APPROVAL FROM MDOT, LOCAL MUNICIPALITY, COUNTY, OR OTHER GOVERNING AUTHORITY IS RECEIVED. - WHERE CONFLICT ARISES BETWEEN ALL SPECIFICATIONS (BOOK OR PLAN BASED) INCLUDING CITY REQUIREMENTS, THE MORE CONSERVATIVE SPECIFICATION SHALL PREVAIL. - FINAL CLEANUP: THE CONTRACTOR SHALL CLEAN-UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION AND SHALL RESTORE ALL SURFACES, STRUCTURES, DITCHES AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AND ALL APPLICABLE GOVERNMENTAL AND REGULATORY AGENCIES.   **DEMOLITION NOTES:**   - EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING. IF CONDITIONS ENCOUNTERED ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK. - THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE ENGINEER AND OWNER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT, AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS. - ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING, AND/OR ABATEMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY LISTED ON THE PLANS. - ALL DEMOLISHED MATERIALS SHALL BE TAKEN FROM THE SITE IMMEDIATELY (UNLESS OTHERWISE NOTED) AND DISPOSED OFF-SITE IN ACCORDANCE WITH ALL LAWS, REGULATIONS AND ORDINANCES. NO BURNING OF ANY MATERIALS WILL BE ALLOWED ON OR OFF SITE. - MATERIALS NOTED ON THE PLANS TO BE SALVAGED TO OWNER SHALL BE STORED IN AREAS INDICATED ON THE PLANS. - USE SUITABLE METHODS TO LIMIT DUST AND DIRT TO ADJACENT STRUCTURES OR PROPERTY. CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO EXISTING CONDITIONS PRIOR TO THE START OF THE DEMOLITION WORK. - INFORMATION ON EXISTING UTILITIES HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY COMPANY AND MUNICIPAL RECORD MAPS AND FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS DIG AT 1-800-482-7171 AT LEAST 72 HOURS BEFORE START OF WORK AND VERIFY ALL EXISTING UTILITY LOCATIONS. - THE CONTRACTOR SHALL REMOVE CONFLICTING PAVEMENT MARKINGS IN A METHOD APPROVED BY MDOT CONSTRUCTION AND MATERIALS SPECIFICATIONS. - ANY DEFECTS DISCOVERED IN NEW CONSTRUCTION, WORKMANSHIP, EQUIPMENT, OR MATERIALS SHALL BE REPAIRED, OR CORRECTED BY APPROVED METHODS AS DIRECTED BY AND AT NO ADDITIONAL COST TO THE OWNER. - ALL DISTURBANCE INCURRED TO CITY OR STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER TO THE SATISFACTION OF THE CITY OF THE LOCAL AND/OR MDOT. - THE LIMITS OF CLEARING AND GRADING SHALL BE FIELD STAKED 48 HOURS (2 WORKING DAYS) PRIOR TO THE PRE CONSTRUCTION MEETING. AREAS BEYOND THE LIMITS OF CLEARING AND GRADING SHALL NOT BE DISTURBED INCLUDING THE STOCKPILE OF ANY MATERIALS OR CONSTRUCTION TRAFFIC. - WHEREVER UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED THAT ARE NOT INDICATED ON THE PLANS, THE WORK SHALL BE DISCONTINUED UNTIL THE PROJECT ENGINEER AND OWNER APPROVE THE METHOD AND MATERIALS TO BE INCORPORATED INTO THE WORK. - ALL ROAD SURFACES, EASEMENTS, OR RIGHT-OF-WAY DISTURBED BY THE CONSTRUCTION OF ANY PART OF THESE IMPROVEMENTS ARE TO BE RESTORED ACCORDING TO THE CITY REQUIREMENTS. - THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OR ITS REPRESENTATIVE IF SUSPECTED HAZARDOUS MATERIAL OR ANY OTHER MATERIAL THAT MAY CREATE A HEALTH RISK IS DISCOVERED ON SITE. - ANY TRAFFIC CONTROL REQUESTED OR REQUIRED BY THE CONTRACTOR WILL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE OWNER. - IF MUD, SOIL, OR OTHER DEBRIS IS DEPOSITED ON ADJACENT STREETS, ROADS, OR OTHER PROPERTY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF SUCH AT THE END OF EACH WORK DAY, OR AS REQUIRED DURING THE WORK DAY. - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR ALL MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF DELIVERED MATERIAL. MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHALL BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR. - THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHT-OF-WAY CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER. - THE MINIMUM ROLLER WEIGHT FOR PAVEMENT SHALL BE TEN (10) TON. ALL COURSES SHALL BE COMPACTION TO A MINIMUM OF NINETY-THREE (93%) PERCENT OF THEORETICAL MAXIMUM DENSITY (TMD). - ALL PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO AASHTO AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNS SHALL BE CONSTRUCTED OF FLAT SHEET ALUMINUM IN ACCORDANCE WITH STATE HIGHWAY SPECIFICATIONS. STEEL SIGN POSTS SHALL BE USED AND CONFORM TO ASTM A36 OR ASTM A441 AND SHOULD BE GALVANIZED IN ACCORDANCE WITH AASHTO M111. - CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS AS SHOWN ON THE PLANS. PAVEMENT MARKINGS SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS. APPLY PAINT TO CLEAN, DRY SURFACES TO YIELD SHARP DEFINITION OF EDGES. AIR TEMPERATURE 50°F MINIMUM. APPLY TWO (2) COATS. - PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH MDOT CONSTRUCTION AND MATERIALS SPECIFICATIONS AND SHALL BE EITHER COLD LAID PLASTIC TAPE OR PAINTED AS DESIGNATED ON THE PLANS OR PAVEMENT MARKING DETAILS. - DIRECTIONAL TRAFFIC ARROWS SHALL BE PAINTED WHITE UNLESS OTHERWISE NOTED. - A MINIMUM CLEARANCE OF 2 FEET SHALL BE MAINTAINED BETWEEN THE FACE OF CURB AND ANY PART OF A LIGHT POLE OR TRAFFIC SIGN. - CONTRACTOR SHALL SAW-CUT IN A NEAT, STRAIGHT LINE FOR SMOOTH TRANSITIONS AT TIE-INS TO EXISTING EDGES OF PAVEMENT AND AT COLD JOINTS OF RECENTLY PAVED PAVEMENT. - JOINTS OR SCORE MARKS ARE TO BE SHARP AND CLEAN WITHOUT SHOWING EDGES OF JOINTING TOOL. - CONTRACTOR SHALL SAWCUT TIE-INS AT EXISTING CURBS TO ENSURE SMOOTH TRANSITIONS. CONTRACTOR SHALL SAWCUT AND TRANSITION TO EXISTING PAVEMENT TO ENSURE POSITIVE DRAINAGE. - ALL CONCRETE SHALL BE 6% (+/-1%) AIR ENTRAINED, 3/4" AGGREGATE AND CONFORM TO A 28 DAY STRENGTH OF 4,000 PSI MINIMUM AND SHALL HAVE A MAXIMUM W/C OF 0.50. ALL CONCRETE SHALL BE MADE WITH TYPE I OR TYPE II CEMENT. - ALL SIDEWALKS SHALL HAVE A LIGHT BROOM FINISH. VERTICAL FACES SHALL BE FORMED. - BASE AND ASPHALT THICKNESS SPECIFIED ARE THE MINIMUM REQUIRED. - ALL CONCRETE FOR CURBS SHALL BE AIR ENTRAINED TO BE 6% (+/-1%), MADE WITH SAND AND GRAVEL AGGREGATE AND SHALL CONFORM TO A TWENTY EIGHT (28) DAY STRENGTH OF 4,500 PSI MINIMUM, SHALL HAVE A MAXIMUM W/C OF 0.40 AND 130 LBS/LF. - THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY - EROSION, POLLUTION, AND DUST CONTROL MEASURES THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT. REFERENCE ATTACHED EROSION & SEDIMENTATION CONTROL PLANS AND REPORT. - ANY AND ALL DAMAGE TO EXISTING PAVEMENT WITHIN THE LAYDOWN AREA SHALL BE REPAIRED. - ALL UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION SHALL REMAIN INTACT. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGE TO EXISTING UTILITIES NOT MARKED FOR REMOVAL OR RELOCATION AT HIS SOLE EXPENSE. - CONTRACTOR SHALL PERFORM ALL CLEARING, GRUBBING, AND TREE REMOVAL NECESSARY TO PERFORM THE WORK INDICATED HEREIN. THAT CONTRACTOR SHALL LIMIT LAND DISTURBANCE TO ONLY THAT REQUIRED TO COMPLETE THE PROPOSED IMPROVEMENTS. - ALL WORK WITHIN RIGHT OF WAY TO INCLUDE TRAFFIC CONTROL IN ACCORD WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND PER ALL CITY REQUIREMENTS. ROAD MUST REMAIN OPEN AT ALL TIMES. CONTRACTOR SHALL PREPARE A MAINTENANCE OF TRAFFIC PLAN AND SUBMIT TO THE CITY OF DETROIT FOR APPROVAL PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO COORDINATE ANY NECESSARY LANE CLOSURES WITH THE CITY OF DETROIT. - CONTRACTOR TO COORDINATE TEMPORARY UTILITY OUTAGES WITH APPLICABLE UTILITY COMPANY AND CITY AND NOTIFY NEIGHBORING EFFECTED OWNERS NO LESS THAN 72 HOURS PRIOR TO PLANNED OUTAGE.   **LAYOUT AND PAVING NOTES**   - ALL SITE DIMENSIONS (LENGTHS AND RADII) ARE REFERENCED TO THE BACK OF CURBS UNLESS OTHERWISE NOTED. DRIVE WIDTHS ARE REFERENCED TO THE FACE OF CURBS. ALL BUILDING DIMENSIONS ARE REFERENCED TO THE OUTSIDE FACE OF THE STRUCTURE UNLESS OTHERWISE NOTED. - ASPHALT SURFACE COURSE SHALL BE LAID WITH THE DIRECTION OF TRAFFIC FLOW IN ALL DRIVE LANES WITHIN PARKING FIELDS. - DO NOT PLACE MIX ON FROZEN OR WET SURFACES, OR WHEN PRECIPITATION IS OCCURRING. - DO NOT PLACE MIX WHEN AIR OR SURFACE TEMPERATURE IS BELOW THE FOLLOWING:   - BINDER COURSE AND WALKS 40°F   - WEARING COURSE, ROADWAYS AND PARKING AREAS 50°F - ANY MATERIAL DELIVERED TO THE SPREADER HAVING A TEMPERATURE LOWER THAN 250°F SHALL NOT BE USED. - SITE GRADING SHALL BE PERFORMED TO PROVIDE POSITIVE DRAINAGE TO CATCH BASINS AND TO PRECLUDE THE PONDING OF WATER ON SITE. - VERIFY REQUIRED SPOT ELEVATIONS/GRADING IN THE VICINITY OF THE BUILDINGS WITH THE ARCHITECTURAL PLANS. - IT IS THE CONTRACTOR'S OBLIGATION AND RESPONSIBILITY TO CONFIRM/CONCUR WITH THE EXISTING GRADES SHOWN HEREIN. THE CONTRACTOR MUST CONFIRM ALL EXISTING GRADES PRIOR TO ANY ALL/EXCAVATION. - THE CONTRACTOR MUST DOCUMENT EXISTING GRADE DISPUTES BY PROVISION OF A TOPOGRAPHIC SURVEY BY A STATE OF MICHIGAN REGISTERED PROFESSIONAL SURVEYOR, PRIOR TO ANY EARTH DISTURBING ACTIVITIES. IN THE ABSENCE OF THE PROVISION OF TOPOGRAPHIC SURVEY BY THE CONTRACTOR, THE GRADES SHOWN HEREON WILL BE THE "TOPOGRAPHY OF RECORD" FOR ANY AND ALL SOIL VOLUME DISPUTES. - THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL IMPORT/EXPORT NECESSARY TO ACHIEVE THE PROPOSED GRADES. - ALL PROPOSED SLOPES 3:1 OR STEEPER AND ALL EARTHEN DRAINAGE WAYS SHALL RECEIVE MULCH BLANKET AS PER MDOT 917.15. - ALL EXCAVATION UNDER OR NEAR EXISTING OR FUTURE PAVEMENT (INCLUDING SIDEWALKS), SUBJECT TO SETTLEMENT, WILL BE BACK FILLED WITH PREMIUM BACKFILL AS DEFINED HEREIN. AT QUESTIONABLE AREAS THE DECISION OF THE OF THE ENGINEER, OR HIS REPRESENTATIVE, WILL PREVAIL. - THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF WATER MAINS & SERVICES TO A POINT 5' OUTSIDE OF EACH BUILDING. THE INDIVIDUAL BUILDING CONTRACTORS SHALL BE RESPONSIBLE FOR ALL CONNECTIONS TO INTERIOR PLUMBING. - IN THE EVENT OF CONFLICT OF ANY REQUIREMENTS OR PROVISIONS OF THE WORK INDICATED HEREON, THE SITE ENGINEER SHALL BE NOTIFIED FOR A DETERMINATION OF THE PLAN REQUIREMENTS AND INTENT THEREOF. - REFERENCE SITE ELECTRICAL PLAN FOR LOCATION OF ELECTRIC CONDUIT FOR ALL SITE ELECTRICAL WORK. - ALL UTILITIES SHALL BE CONSTRUCTED, INSPECTED, AND TESTED IN ACCORDANCE WITH CITY STANDARDS AND REGULATIONS. THE CITY ENGINEERING DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 HOURS IN ADVANCE FOR SCHEDULING OF AN INSPECTOR. - PROPOSED ELEVATIONS SHOWN SHALL NOT BE CHANGED WITHOUT APPROVAL OF THE CITY BUILDING DEPARTMENT AND THE CONSTRUCTION MANAGER. - THE LOCATION, SIZE, AND DEPTH OF THE EXISTING SANITARY LATERAL SHALL BE VERIFIED IN THE FIELD IN THE PRESENCE OF THE CITY INSPECTOR. THE SLOPE OF THE LATERAL TO THE BUILDING WILL THEN BE DETERMINED. THE CITY MUST APPROVE THE TYPE AND LOCATION OF ANY CONNECTION PRIOR TO INSTALLATION. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF THE EXISTING LATERAL IS NOT FOUND TO BE IN GOOD CONDITION. - ALL BACK FLOW PREVENTION DEVICES SHALL BE APPROVED BY THE CITY'S PUBLIC WORKS DEPARTMENT. SEE MEP PLAN FOR LOCATION AND TYPE OF BACKFLOW PREVENTION   **GENERAL UTILITY NOTES:**   - PROPER COORDINATION WITH THE RESPECTIVE UTILITY COMPANIES SHALL BE PERFORMED BY THE CONTRACTOR TO INSURE THAT ALL UTILITY COMPANY, LOCAL MUNICIPALITY, AND LOCAL COUNTY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SERVICES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS DIG AT 1-800-482-7171 AT LEAST 72 HOURS BEFORE START OF WORK AND VERIFY ALL EXISTING UTILITY LOCATIONS. - THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE SEWERS CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE CONSTRUCTION MANAGER IN THE EVENT OF ANY UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE. - THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR SERVICE INSTALLATIONS AND CONNECTIONS AND MAIN AND SERVICE RELOCATIONS. THE CONTRACTOR SHALL COORDINATE THE WORK TO BE PERFORMED BY THE VARIOUS UTILITY COMPANIES AND SHALL SECURE ALL PERMITS AND PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION, AS NECESSARY. - THE CONTRACTOR SHALL INSTALL ALL CURBING IN A TRUE LINE AND		PROPER GRADE IN ACCORDANCE WITH THE APPROVED SITE PLANS AND APPROPRIATE STATE DOT SPECIFICATIONS. CURVED CURB SECTIONS SHALL BE USED FOR RADII LESS THAN 30'. ALL CURBING SHALL BE BACKFILLED WITH CLEAN AGGREGATE.  CONTRACTOR SHALL REPAIR ANY CURB DAMAGED DURING CONSTRUCTION ACTIVITIES.  BUILDING FOOTPRINTS ARE SHOWN FOR INTENT ONLY. SEE STRUCTURAL AND ARCHITECTURAL PLANS FOR BUILDING FOUNDATION AND WALL DIMENSIONS.  CONTRACTOR TO COORDINATE TRANSFORMER AND GENERATOR PAD DIMENSIONS AND SPECIFICATIONS WITH MEP PLANS AND ELECTRIC PROVIDER PRIOR TO CONSTRUCTION.  SEE ARCHITECTURAL PLANS FOR FROST SLAB DETAILS AND SPECIFICATIONS.  CONTRACTOR TO INSTALL ALL UTILITY PIPING, SEWERS, CONDUIT PRIOR TO PAVING OPERATIONS. CONTRACTOR TO COORDINATE ALL SITE UTILITIES WITH UTILITY PLAN, AND MEP PLANS.  **GENERAL GRADING & DRAINAGE NOTES:**   - TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING. - UNDERDRAINS MAY BE ADDED, IF DETERMINED NECESSARY BY THE ENGINEER OR CONSTRUCTION MANAGER, AFTER SUBGRADE IS ROUGH GRADED. - THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS NOTED ON DRAWINGS. REFER TO EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND NOTES. - THE CONTRACTOR SHALL COMPACT FILL IN 8" MAXIMUM LIFTS UNDER ALL PARKING, BUILDING, AND DRIVE AREAS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D155 (MODIFIED PROCTOR TEST), OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER. - THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN MAX. 8" LOOSE LIFTS TO 95% OF THE MAXIMUM DRY DENSITY PER ASTM D155, ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDBREAKER AREAS. - CONTRACTOR TO PROVIDE SLEEVES UNDER FOOTINGS OR THROUGH FOUNDATIONS FOR UTILITY CONNECTIONS. - CONTRACTOR SHALL PROVIDE ALL BENDS, FITTINGS, ADAPTERS, ETC. AS REQUIRED FOR PIPE CONNECTIONS TO BUILDING/CANOPY STUB-OUTS, INCLUDING ROOF/FOOTING DRAIN CONNECTIONS TO ROOF LEADERS AND TO STORM DRAINAGE SYSTEM. - ELECTRICAL AND TELECOMMUNICATION CONDUIT PIPE SHALL BE SCHEDULE 80 PVC AND/OR AS REQUIRED BY THE LOCAL UTILITY COMPANY. SERVICES MAY BE INSTALLED IN A COMMON TRENCH WITH 12" CLEAR SPACE BETWEEN SERVICES. MINIMUM COVER SHALL BE 36" ON ELECTRIC CONDUITS AND 24" ON TELEPHONE AND CABLE CONDUITS. SERVICES SHALL BE MARKED WITH MAGNETIC LOCATOR TAPE. GALVANIZED STEEL ELECTRICAL CONDUIT SHALL BE USED AT POLE AND TRANSFORMER LOCATIONS. INSTALL HAND HOLES AS REQUIRED. - ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION PRIOR TO APPROVAL FOR BACKFILL, IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY, LOCAL MUNICIPALITY, AND/OR LOCAL COUNTY REQUIREMENTS. - SANITARY LATERAL SHALL BE A MINIMUM 6" DIAMETER OF PVC PIPE, ASTM D3034 SDR 26 WITH RUBBER GASKET JOINTS OR APPROVED EQUAL. LATERALS SHALL BE CONSTRUCTED WITH A MINIMUM 1% SLOPE, AND HAVE A MINIMUM OF 3 FT. COVER. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL; ASTM D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE. - MANHOLE SECTION AND CONSTRUCTION SHALL CONFORM TO ASTM C-478 & ASTM C-891. - ALL STORM SEWERS, INLET BASINS AND MANHOLES SHALL BE CLEANED PRIOR TO ACCEPTANCE. - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF MATERIALS AND STRUCTURES TO THE CONSTRUCTION MANAGER AND LOCAL GOVERNING AGENCIES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.   **GENERAL NOTES:**   - RELOCATION OF ANY UTILITY COMPANY FACILITIES TO BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY AND LOCAL MUNICIPALITY. - ALL WATER MAINS, WATER SERVICES AND SANITARY SEWER LATERALS SHALL CONFORM TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, APPROPRIATE COUNTY AND LOCAL DEPARTMENTS, AND APPROPRIATE UTILITY COMPANY SPECIFICATIONS. - THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS, ETC. WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNER, UTILITY COMPANIES, AND GOVERNING AUTHORITIES. THE CONTRACTOR SHALL INSTALL AS NECESSARY, TEMPORARY SITE LIGHTING, GAS, SANITARY, WATER, STORM, ELECTRIC, TELEPHONE, AND CABLE SERVICES TO SERVICE BUILDING(S) TO REMAIN OPEN. - TRAFFIC SHALL BE MAINTAINED ON ALL ADJOINING STREETS AT ALL TIMES. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. - CONTRACTOR TO INSTALL SHORING AND/OR TEMPORARY STRUCTURES TO PROVIDE SUPPORT TO ANY AND ALL EXISTING AFFECTED UTILITIES PER UTILITY PROVIDER'S MINIMUM STANDARDS. - WATER METER AND BACKFLOW PREVENTER TO BE INSTALLED WITHIN THE BUILDING. REFERENCE BUILDING PLANS FOR DETAIL. - CONTRACTOR TO COORDINATE ALL UTILITY CONNECTIONS, ELECTRICAL AND TELECOMMUNICATIONS CONDUIT, AND GAS LINES WITH M.E.P. PLANS PRIOR TO START OF CONSTRUCTION. - ALL STORM SEWER PIPES SHALL BE REINFORCED CONCRETE PIPE CLASS IV MINIMUM OR PVC PIPE SCHEDULE 40, AS SPECIFIED IN THE PLANS. - HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL HAVE A SMOOTH INTERIOR AND CORRUGATED EXTERIOR. 4-INCH THROUGH 10-INCH PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M252, TYPE S AND 12-INCH THROUGH 36-INCH PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S. PIPE SECTIONS SHALL BE JOINED WITH COUPLING BANDS OR EXTERNAL SNAP COUPLERS COVERING AT LEAST TWO FULL CORRUGATIONS ON EACH END OF THE PIPE. SILT-TIGHT (GASKETED) CONNECTIONS SHALL INCORPORATE A CLOSED-CELL SYNTHETIC EXPANDED RUBBER GASKET MEETING THE REQUIREMENTS OF ASTM D1056 GRADE 2A2. GASKETS SHALL BE INSTALLED ON THE CONNECTIONS BY THE PIPE MANUFACTURER. ALTERNATIVE HDPE PIPE MAY BE USED IF APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER. - POLY VINYL CHLORIDE (PVC) PIPE FOR STORM SHALL HAVE BUILT-IN RUBBER GASKET JOINTS. PVC PIPE SHALL CONFORM TO ASTM D3034 SDR35 WITH COMPRESSION JOINTS AND APPROPRIATE FITTINGS. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL; ASTM D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE. - ALL RCP SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-76; ALL RCP SHALL BE CLASS IV UNLESS OTHERWISE SHOWN. JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-443. - SANITARY LATERAL SHALL BE A MINIMUM 6" DIAMETER OF PVC PIPE, ASTM D3034 SDR 26 WITH RUBBER GASKET JOINTS OR APPROVED EQUAL. LATERALS SHALL BE CONSTRUCTED WITH A MINIMUM 1% SLOPE, AND HAVE A MINIMUM OF 3 FT. COVER. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL; ASTM D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE. - MANHOLE SECTION AND CONSTRUCTION SHALL CONFORM TO ASTM C-478 & ASTM C-891. - ALL STORM SEWERS, INLET BASINS AND MANHOLES SHALL BE CLEANED PRIOR TO ACCEPTANCE. - THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF MATERIALS AND STRUCTURES TO THE CONSTRUCTION MANAGER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.		26. ALL FIRE SERVICE MAINS SHALL BE INSTALLED BY AN INDIVIDUAL WITH APPROPRIATE CERTIFICATION BY THE STATE OF MICHIGAN.  27. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.  28. MINIMUM DEPTH OF WATER MAIN COVER SHALL BE FIVE AND ONE HALF (5.5) FEET BELOW FINISH GRADE.  29. IN THOSE AREAS WHERE IT IS REQUIRED TO LOWER THE WATER LINE TO CLEAR AN OBSTACLE AND THE DEFLECTION WILL BE GREATER THAN 18", THE USE OF BENDS WILL BE REQUIRED TO CLEAR THE OBSTACLE AND BRING THE WATER MAIN UP TO THE STANDARD FIVE (5) FEET OF COVER.  30. TRAFFIC SHALL BE MAINTAINED ON ALL ADJOINING STREETS AT ALL TIMES. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.  31. CONTRACTOR TO INSTALL SHORING AND/OR TEMPORARY STRUCTURES TO PROVIDE SUPPORT TO ANY AND ALL EXISTING AFFECTED UTILITIES PER UTILITY PROVIDER'S MINIMUM STANDARDS.  32. WATER METER AND BACKFLOW PREVENTER TO BE INSTALLED WITHIN THE BUILDING. REFERENCE BUILDING PLANS FOR DETAIL.  33. CONTRACTOR TO COORDINATE ALL UTILITY CONNECTIONS, ELECTRICAL AND TELECOMMUNICATIONS CONDUIT, AND GAS LINES WITH M.E.P. PLANS PRIOR TO START OF CONSTRUCTION.  34. ALL STORM SEWER PIPES SHALL BE REINFORCED CONCRETE PIPE CLASS IV MINIMUM OR PVC PIPE SCHEDULE 40, AS SPECIFIED IN THE PLANS.  34.1. HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL HAVE A SMOOTH INTERIOR AND CORRUGATED EXTERIOR. 4-INCH THROUGH 10-INCH PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M252, TYPE S AND 12-INCH THROUGH 36-INCH PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S. PIPE SECTIONS SHALL BE JOINED WITH COUPLING BANDS OR EXTERNAL SNAP COUPLERS COVERING AT LEAST TWO FULL CORRUGATIONS ON EACH END OF THE PIPE. SILT-TIGHT (GASKETED) CONNECTIONS SHALL INCORPORATE A CLOSED-CELL SYNTHETIC EXPANDED RUBBER GASKET MEETING THE REQUIREMENTS OF ASTM D1056 GRADE 2A2. GASKETS SHALL BE INSTALLED ON THE CONNECTIONS BY THE PIPE MANUFACTURER. ALTERNATIVE HDPE PIPE MAY BE USED IF APPROVED BY THE ENGINEER AND CONSTRUCTION MANAGER.  34.2. POLY VINYL CHLORIDE (PVC) PIPE FOR STORM SHALL HAVE BUILT-IN RUBBER GASKET JOINTS. PVC PIPE SHALL CONFORM TO ASTM D3034 SDR35 WITH COMPRESSION JOINTS AND APPROPRIATE FITTINGS. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAIL; ASTM D2321 AND MANUFACTURERS RECOMMENDED PROCEDURE.  34.3. ALL RCP SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-76; ALL RCP SHALL BE CLASS IV UNLESS OTHERWISE SHOWN. JOINTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM	