SITE DEVELOPMENT PLANS **FOR**

SBUX #85175 - BARRY RD & GREEN HILLS RD

S8, T51N, R33W KANSAS CITY, PLATTE COUNTY, MISSOURI

PROJECT TEAM:

ENGINEER & LANDSCAPE ARCHITECT KIMLEY-HORN AND ASSOCIATES, INC.



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ARCHITECT

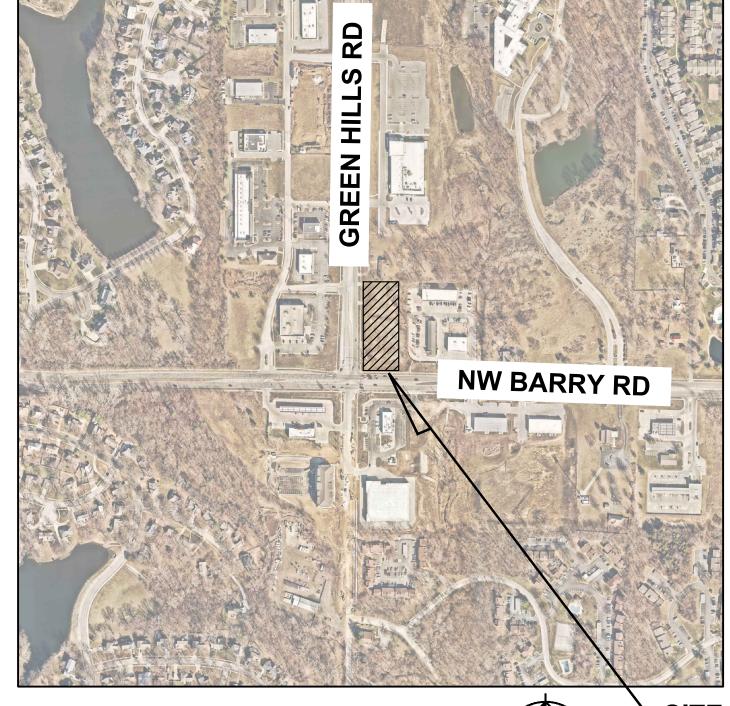
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GEOTECHNICAL ENGINEER **CFS ENGINEERS**

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OWNER / DEVELOPER HUM BARRY, LLC 3624 N BRIARCLIFF ROAD KANSAS CITY, MO 64116

SURVEYOR J & J SURVEY 8680A N. GREEN HILLS ROAD KANSAS CITY, MO 64154 TELEPHONE: (816) 741-1017 **CONTACT: JAKE YOUNG**



VICINITY N.T.S.



NOTES:

- CONTRACTOR SHALL CONFIRM THAT THE EXISTING CONDITIONS FOR THE SITE MATCH WHAT IS SHOWN ON THE DRAWINGS INCLUDED PRIOR TO CONSTRUCTION.
- 2. IF REPRODUCED, THE SCALES SHOWN ON THESE PLANS ARE BASED ON A 22x34 SHEET. 3. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICES COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING
- POSSESSION AND THE FINAL CONNECTION OF SERVICES. 4. ALL GENERAL CONTRACTOR WORK TO BE COMPLETED (EARTHWORK, FINAL UTILITIES, AND FINAL GRADING) BY THE MILESTONE DATE IN PROJECT DOCUMENTS.

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DEVELOPMENT PLAN DEVIATIONS

1. TRACT 2 DRIVE THROUGH USE IS CONTINGENT UPON REZONING TO COMMERCIAL USE.

BENCHMARKS

SITE BENCHMARKS: (LOCATIONS SHOWN ON SURVEY)

SBM #1 PL-26: STANDARD KC METRO GRS 30" ALUMINUM POSTS STAMPED "PL-26 1992", SET FLUSH WITH THE GROUND. THE STATION IS 19.2 FEET NORTH OF THE CENTER LINE OF THE WESTBOUND LANE OF NORTHWEST BARRY ROAD; 32.0 FEET WEST OF THE CENTER LINE OF SOUTH GRANBY AVENUE (EXIT LANE); 10.8 FEET EAST OF A LIGHT POLE; 4.0 FEET NORTH OF THE BACK OF THE CURB AND 3.9 FEET SOUTH OF THE SOUTH END OF THE SIDEWALK. ELEVATION=994.75



FOR BUX #

S R SHEET NUMBER

VER

C000

GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE LOCAL JURISDICTION AND MISSOURI DEPARTMENT OF TRANSPORTATION AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
- PERFORM ALL WORK IN COMPLIANCE WITH APPLICABLE CITY REGULATIONS, STATE CODES, AND O.S.H.A STANDARDS. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING THE NECESSARY MATERIALS & LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS, AND IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE APPROPRIATE APPROVING AUTHORITIES.
- CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
- THE EXISTING SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS QUALITY LEVEL "D" UNLESS OTHERWISE NOTED. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ACSE 38/02, ENTITLED STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF SUBSURFACE QUALITY DATA BY THE FHA. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
- 10. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER DIRECTLY FROM THE TESTING AGENCY.
- . THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
- 12. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
- 13. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED. THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- . SHOULD CONTRACTOR ENCOUNTER ANY DEBRIS LADEN SOIL, STRUCTURES NOT IDENTIFIED IN THE DOCUMENTS, OR OTHER SOURCE OF POTENTIAL CONTAMINATION, THEY SHALL IMMEDIATELY CONTACT THE ENGINEER AND OWNER.
- 16. CONTRACTOR SHALL NOTIFY OWNER AND/OR ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES: PRE-CONSTRUCTION MEETING, SUBGRADE PREPARATION, BASE INSTALLATION, ASPHALT INSTALLATION, UNDERGROUND PIPING AND UTILITIES INSTALLATION, INSTALLATION OF STRUCTURES, CHECK VALVES, HYDRANTS, METERS, ETC., SIDEWALK INSTALLATION, CONNECTIONS TO WATER AND SEWER MAINS, TESTS OF UTILITIES.

THIRD PARTY SUPPLEMENTAL INFORMATION

KIMLEY-HORN ASSUMES NO LIABILITY FOR ANY ERRORS, INACCURACIES, OR OMISSIONS CONTAINED WITHIN SUPPLEMENTAL INFORMATION PROVIDED BY THIRD PARTY CONSULTANTS.

- **BOUNDARY & TOPOGRAPHIC SURVEY** PERFORMED BY: J & J SURVEY ADDRESS: 8680 N. GREEN HILLS ROAD, KANSAS CITY, MO 64154 PHONE: 816-741-1017
- DATED: 06/25/2024 **GEOTECHNICAL EVALUATION REPORT** PERFORMED BY: CFS ENGINEERS
- DATED: 07/23/2024 **CONSTRUCTION TESTING**
- TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:

ADDRESS: 1100 W. CAMBRIDGE CIRCLE DRIVE, SUITE 700, KANSAS CITY, MO 66103

- DENSITY TEST REPORTS • BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY/MUNICIPALITY

EROSION CONTROL NOTES

- 1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- 2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- 3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION.
- 5. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE. LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE JOB SITE TRAILER.
- 6. BMPS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION AS REQUIRED BY ALL JURISDICTIONS UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A CERTIFIED PERSON AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5-INCH OR GREATER RAINFALL EVENT.
- 7. EROSION & SEDIMENT CONTROL BMPS SHALL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING:
- 7.1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
- 7.2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO VERIFY THAT A HEALTHY STAND OF VEGETATION IS MAINTAINED. SEEDED AREAS SHOULD BE FERTILIZED, WATERED AND RE-SEEDED AS NEEDED. REFER TO THE LANDSCAPE PLAN AND PROJECT SPECIFICATIONS.
- 7.3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-THIRD THE HEIGHT OF THE SILT FENCE.
- 7.4. THE ROCK CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC ADDITIONS OF ROCK TOP DRESSING AS CONDITIONS DEMAND.
- 7.5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC ADDITIONS OF TOP DRESSING IF THE TEMPORARY PARKING CONDITIONS DEMAND.
- 7.6. PERFORM ALL MAINTENANCE OPERATIONS IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

PAVING AND STRIPING NOTES

- 1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE KANSAS CITY OR PLATTE COUNTY SPECIFICATIONS AND STANDARDS, OR THE MODOT SPECIFICATIONS AND STANDARDS IF NOT COVERED BY KANSAS CITY OR PLATTE COUNTY REGULATIONS.
- 2. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D) AND KANSAS CITY STANDARDS.
- CONTRACTOR SHALL FURNISH ALL PAVEMENT MARKINGS FOR FIRE LANES, ROADWAY LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, ACCESS AISLES, STOP BARS AND SIGNS, AND MISCELLANEOUS STRIPING WITHIN THE PARKING LOT AS SHOWN ON THE PLANS.
- 4. ALL EXPANSION JOINTS SHALL EXTEND THROUGH THE CURB.
- 5. THE MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS SHALL BE 2 FEET.
- 6. ALL JOINTS, INCLUDING EXPANSION JOINTS WITH REMOVABLE TACK STRIPS, SHALL BE SEALED WITH JOINT SEALANT.
- 7. THE MATERIALS AND PROPERTIES OF ALL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS IN THE A.C.I. (AMERICAN CONCRETE INSTITUTE) MANUAL OF CONCRETE PRACTICE.
- 8. CONTRACTOR SHALL APPLY A SECOND COATING OVER ALL PAVEMENT MARKINGS PRIOR TO ACCEPTANCE
- BY OWNER FOLLOWED BY A COAT OF GLASS BEADS AS APPLICABLE PER THE PROJECT DOCUMENTS. 9. ANY EXISTING PAVEMENT, CURBS AND/OR SIDEWALKS DAMAGED OR REMOVED WILL BE REPAIRED BY THE
- 10. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY SUITABLE ACCESSIBLE ROUTES (PER A.D.A). GRADING FOR ALL SIDEWALKS AND ACCESSIBLE ROUTES INCLUDING CROSSING DRIVEWAYS SHALL CONFORM TO CURRENT ADA STATE/NATIONAL STANDARDS. IN NO CASE SHALL ACCESSIBLE RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2%. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5%. IN NO CASE SHALL ACCESSIBLE PARKING STALLS OR AISLES EXCEED 2% (1.5% TARGET) IN ALL DIRECTIONS. SIDEWALK ACCESS TO EXTERNAL BUILDING DOORS AND GATES SHALL BE ADA COMPLIANT. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF ADA CRITERIA CANNOT BE MET IN ANY LOCATION PRIOR TO PAVING. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A COMPLIANCE ISSUES.
- 11. MAXIMUM JOINT SPACING IS TWICE THE DEPTH OF THE CONCRETE PAVEMENT IN FEET.

CONTRACTOR AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND OWNER.

GRADING AND DRAINAGE NOTES

- GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL ADJUST BMP'S AS NECESSARY AND REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
- CONTRACTOR SHALL ENSURE THERE IS POSITIVE DRAINAGE FROM THE PROPOSED BUILDINGS SO THAT SURFACE RUNOFF WILL DRAIN BY GRAVITY TO NEW OR EXISTING DRAINAGE OUTLETS. CONTRACTOR SHALL ENSURE NO PONDING OCCURS IN PAVED AREAS AND SHALL NOTIFY ENGINEER IF ANY GRADING DISCREPANCIES ARE FOUND IN THE EXISTING AND PROPOSED GRADES PRIOR TO PLACEMENT OF PAVEMENT OR UTILITIES.
- CONTRACTOR SHALL PROTECT ALL MANHOLE COVERS. VALVE COVERS. VAULT LIDS. FIRE HYDRANTS. POWER POLES, GUY WIRES, AND TELEPHONE BOXES THAT ARE TO REMAIN IN PLACE AND UNDISTURBED DURING CONSTRUCTION. EXISTING CASTINGS AND STRUCTURES TO REMAIN SHALL BE ADJUSTED TO MATCH THE PROPOSED FINISHED GRADES.
- BACKFILL FOR UTILITY LINES SHALL BE PLACED PER DETAILS, STANDARDS, AND SPECIFICATIONS SO THAT THE UTILITY WILL BE STABLE. WHERE UTILITY LINES CROSS THE PARKING LOT, THE TOP 6 INCHES SHALL BE COMPACTED SIMILARLY TO THE REMAINDER OF THE LOT. UTILITY DITCHES SHALL BE VISUALLY INSPECTED DURING THE EXCAVATION PROCESS TO ENSURE THAT UNDESIRABLE FILL IS NOT USED.
- CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF 4" OF TOPSOIL AT COMPLETION OF WORK. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
- AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
- WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT FULL DEPTH FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
- THE CONTRACTOR SHALL INSTALL PROTECTION OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
- 10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
- AGENCY OR TO MODOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

11. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL

- 12. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL GROWTH IS ESTABLISHED TO MINIMUM COVERAGE OF 70% IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 14. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
- 15. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
- 16. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS AND MODOT SPECIFICATIONS.
- 17. PAVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE RECOMMENDATION OF THE SITE SPECIFIC GEOTECHNICAL EVALUATION REPORT AND KANSAS CITY & MODOT SPECIFICATIONS.
- 18. SPOT ELEVATIONS REPRESENT THE FINISHED SURFACE GRADE OR FLOWLINE OF CURB UNLESS OTHERWISE NOTED
- 19. LIMITS OF CONSTRUCTION ARE TO THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED ON THE PLAN.
- 20. IMMEDIATELY REPORT TO THE OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS.
- 21. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UTILITIES, AND SHALL REPAIR ALL DAMAGE TO EXISTING UTILITIES THAT OCCUR DURING CONSTRUCTION WITHOUT
- 22. BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.
- 23. ALL PROPOSED GRADES ONSITE SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS. ANY SLOPES STEEPER THAN 4:1 REQUIRE EROSION AND SEDIMENT CONTROL BLANKET.
- 24. ADHERE TO ALL TERMS AND CONDITIONS AS NECESSARY IN THE GENERAL N.P.D.E.S. PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 25. ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS

WATER STORM SEWER & SANITARY SEWER NOTES

- THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES, AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
- 3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
- DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
- ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 6. WATER FOR FIRE FIGHTING SHALL BE MADE AVAILABLE FOR USE BY THE CONTRACTOR PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT. THE MOST STRINGENT SHALL GOVERN.
- UNDERGROUND UTILITY LINES SHALL BE SURVEYED BY A MISSOURI LICENSED PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
- CONTRACTOR SHALL PERFORM, AT THEIR OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCI UDE. BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.
- 10. BETWEEN WATER AND SEWER MANHOLES AND PIPES, CONTRACTOR SHALL PROVIDE FOR A MINIMUM HORIZONTAL CLEARANCE OF 10-FEET AND A MINIMUM VERTICAL SEPARATION OF 18-INCHES.
- 11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- 12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GASKETED AND/OR GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT UNLESS OTHERWISE STATED BY KANSAS CITY AND MISSOURI DESIGN STANDARDS AND SPECIFICATIONS.
- 13. UNLESS OTHERWISE STATED IN KANSAS CITY AND MISSOURI DESIGN STANDARDS AND SPECIFICATIONS, ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". EXISTING CASTINGS AND STRUCTURES WITHIN PROJECT LIMITS SHALL BE ADJUSTED TO MEET THESE CONDITIONS AND THE PROPOSED FINISHED GRADE.
- 14. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
- 15. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO
- 16. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR FROM INVERT IN TO INVERT
- 17. ROOF DRAINS SHALL BE CONNECTED TO STORM SEWER BY PREFABRICATED WYES OR AT STORM STRUCTURES. ROOF DRAINS AND TRUCK WELL DRAIN SHALL RUN AT A MINIMUM 2.0% SLOPE, UNLESS NOTED OTHERWISE, AND TIE IN AT THE CENTERLINE OF THE STORM MAIN.
- 18. PROVIDE INSULATION OF UNDERGROUND ROOF DRAINS AND SANITARY SEWER SERVICES IF ADEQUATE FROST DEPTH CANNOT BE PROVIDED.
- 19. THE CONTRACTOR SHALL PROTECT EXISTING UNDERGROUND UTILITIES AND APPURTENANCES THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
- 20. THE LOCATION OF EXISTING UTILITIES, STORM DRAINAGE STRUCTURES AND OTHER ABOVE AND BELOW-GRADE IMPROVEMENTS ARE APPROXIMATE AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION, SIZE AND INVERT ELEVATIONS OF EACH PRIOR TO THE START OF CONSTRUCTION.
- 21. A MINIMUM SEPARATION OF 5-FEET IS REQUIRED BETWEEN UNDERGROUND UTILITIES AND TREES UNLESS A ROOT BARRIER IS UTILIZED.
- COMPANIES MAY ALTER THE DESIGN LAYOUT DURING THEIR REVIEW. CONTRACTOR TO COORDINATE FINAL DESIGN AND INSTALLATION WITH UTILITY COMPANIES.

22. GAS, PHONE AND ELECTRIC SERVICES SHOWN FOR INFORMATIONAL PURPOSES ONLY. DRY UTILITY

- 23. COORDINATE UTILITY INSTALLATION WITH IRRIGATION DESIGN AND INSTALLATION.
- 24. ALL DIMENSIONS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED. PERIMETER WALL DIMENSIONS ARE TO INSIDE WALL FACE. REFERENCE ARCHITECTURAL PLANS FOR EXACT WALL WIDTH AND
- 25. REFERENCE ARCHITECTURAL PLANS (BY OTHERS) FOR EXACT BUILDING DIMENSIONS, MATERIALS
- 26. REFERENCE M.E.P. PLANS (BY OTHERS) FOR MECHANICAL EQUIPMENT DIMENSIONS AND SPECIFICATIONS.
- 27. CONTRACTOR SHALL REFERENCE STRUCTURAL PLANS (BY OTHERS) FOR FOOTING AND FOUNDATION PAD PREPARATION SPECIFICATIONS.
- 28. CONTRACTOR SHALL REFERENCE M.E.P PLANS (BY OTHERS) FOR ROUTING OF PROPOSED ELECTRICAL & COMMUNICATIONS SERVICES AND SITE LIGHTING LAYOUT.

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SHEET NUMBER C100

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PROPERTY LINE

REMOVE BITUMINOUS SURFACE REMOVE CONCRETE SURFACE CLEARING & GRUBBING

FULL DEPTH SAWCUT REMOVE CONCRETE CURB & GUTTER

REMOVE UTILITY LINES FILL & ABANDON UTILITY LINES

LIMITS OF CONSTRUCTION EXISTING OVERHEAD POWER LINE

EXISTING CHAINLINK FENCE EXISTING J-BARRIER EXISTING RETAINING WALL EXISTING SANITARY SEWER EXISTING STORM SEWER

EXISTING WATERMAIN EXISTING GAS MAIN EXISTING UNDERGROUND TELEPHONE EXISTING UNDERGROUND CABLE

EXISTING CONTOUR EXISTING CURB & GUTTER EXISTING SIGN

EXISTING FLARED END SECTION EXISTING STORM MANHOLE EXISTING STORM CATCHBASIN EXISTING GAS METER

EXISTING POST INDICATOR VALVE EXISTING WELL EXISTING AUTOMATIC SPRINKLER EXISTING ROOF DRAIN EXISTING GATE VALVE

EXISTING HYDRANT EXISTING METAL COVER EXISTING ELECTRICAL METER

EXISTING AIR CONDITIONER EXISTING TELEPHONE MANHOLE EXISTING CABLE BOX EXISTING GUY WIRE EXISTING POWER POLE

EXISTING LIGHT POLE **EXISTING TREE**

EXISTING TREE LINE

KEYNOTE LEGEND

SAWCUT EXISTING PAVEMENT

REMOVE EXISTING CURB

REMOVE EXISTING SIDEWALK

REMOVE EXISTING PAVEMENT

REMOVE EXISTING FENCE

REMOVE EXISTING TREE

REMOVE EXISTING SIGN

PROTECT EXISTING SIGN

REMOVE EXISTING WATER LINE / HYDRANT / VALVE

REMOVE EXISTING SEWER LINE / STRUCTURE REMOVE EXISTING ELECTRICAL LINE /

EQUIPMENT REMOVE EXISTING NATURAL GAS LINE

PROTECT EXISTING WATER LINE / HYDRANT / VALVE PROTECT EXISTING SEWER LINE / STRUCTURE

PROTECT EXISTING UTILITY LINE / STRUCTURE PROTECT EXISTING UTILITY POLE & GUY

PROTECT EXISTING LIGHT POLE

PROTECT EXISTING TREE



Know what's below.

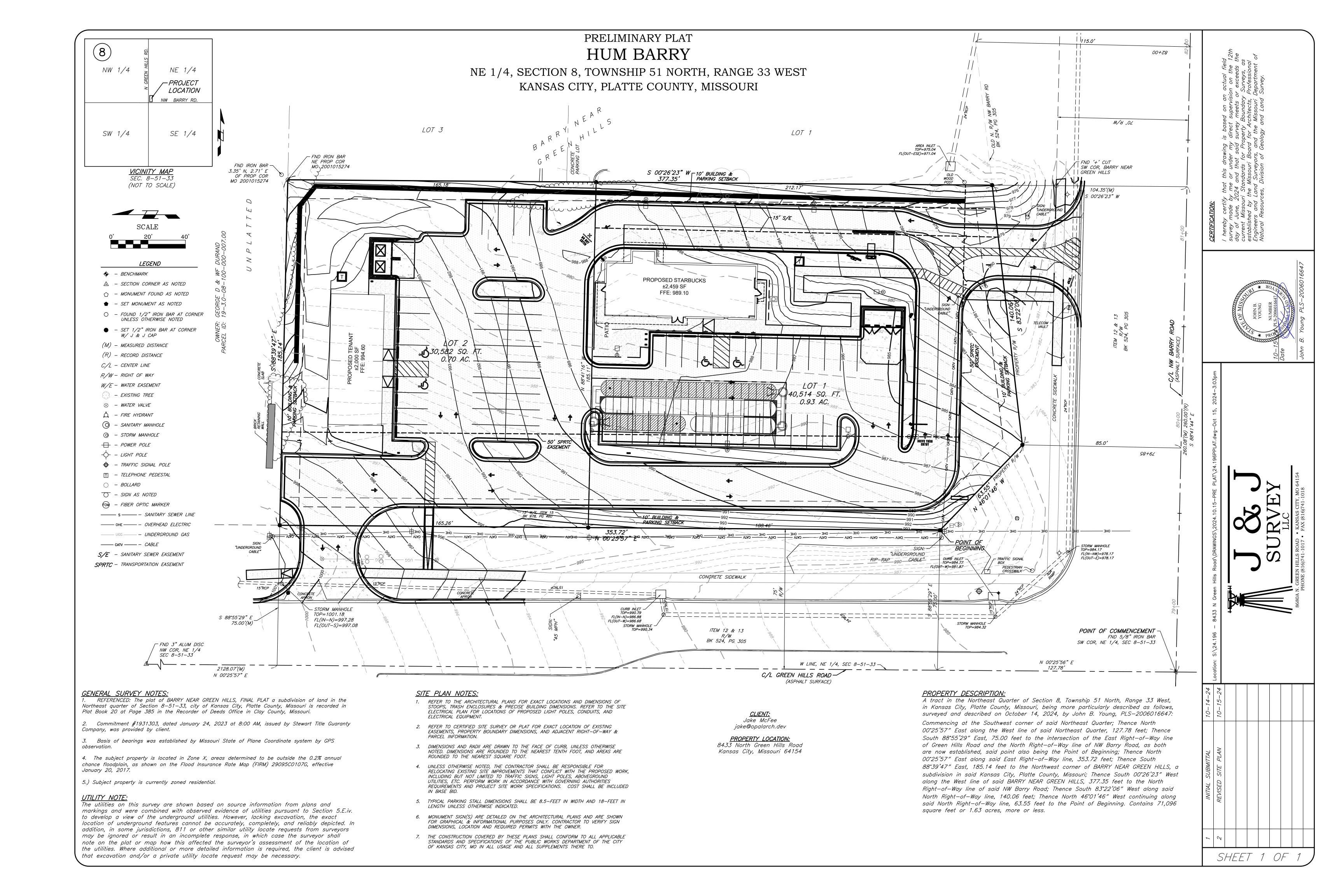
Call before you dig.

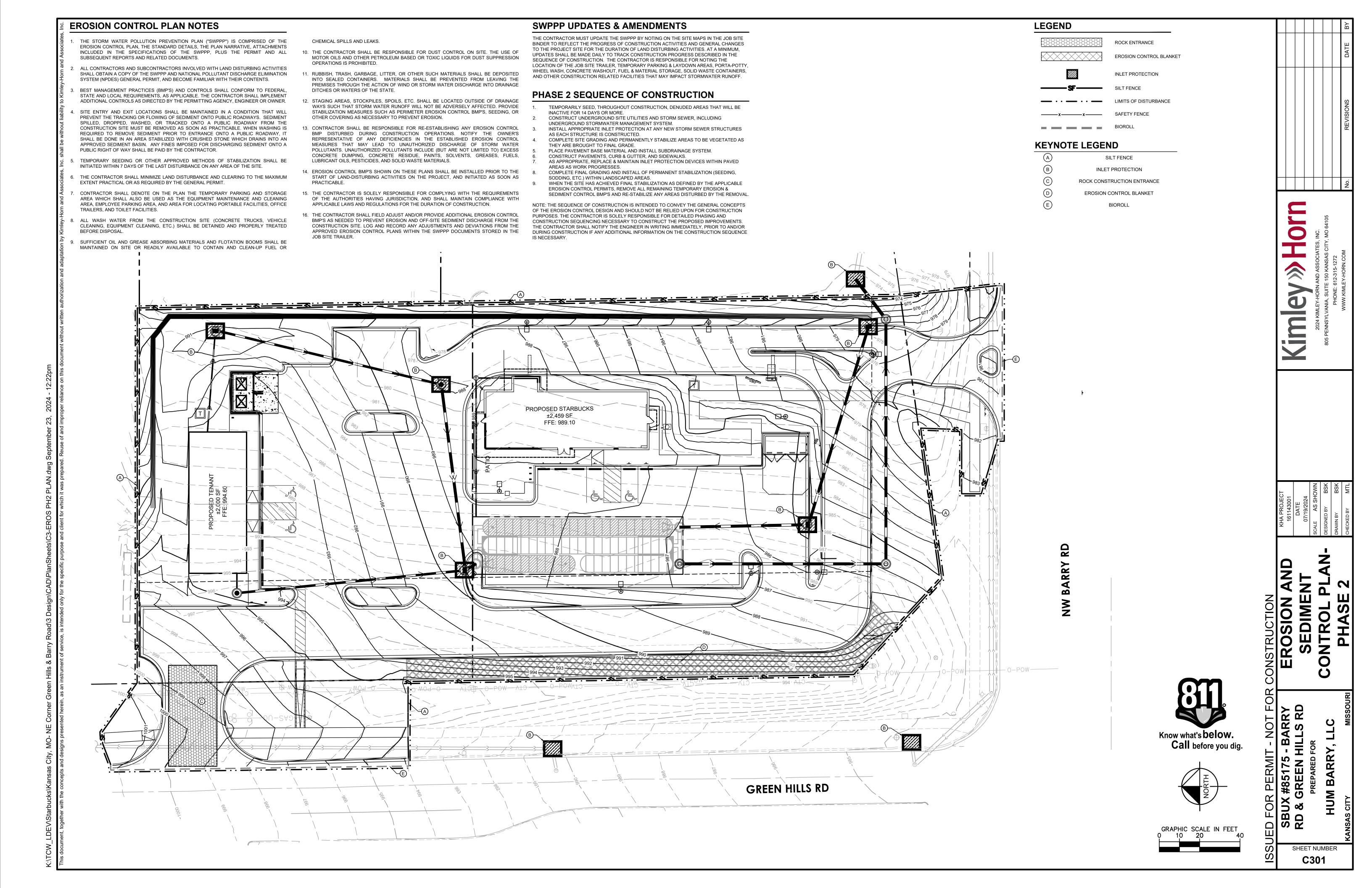


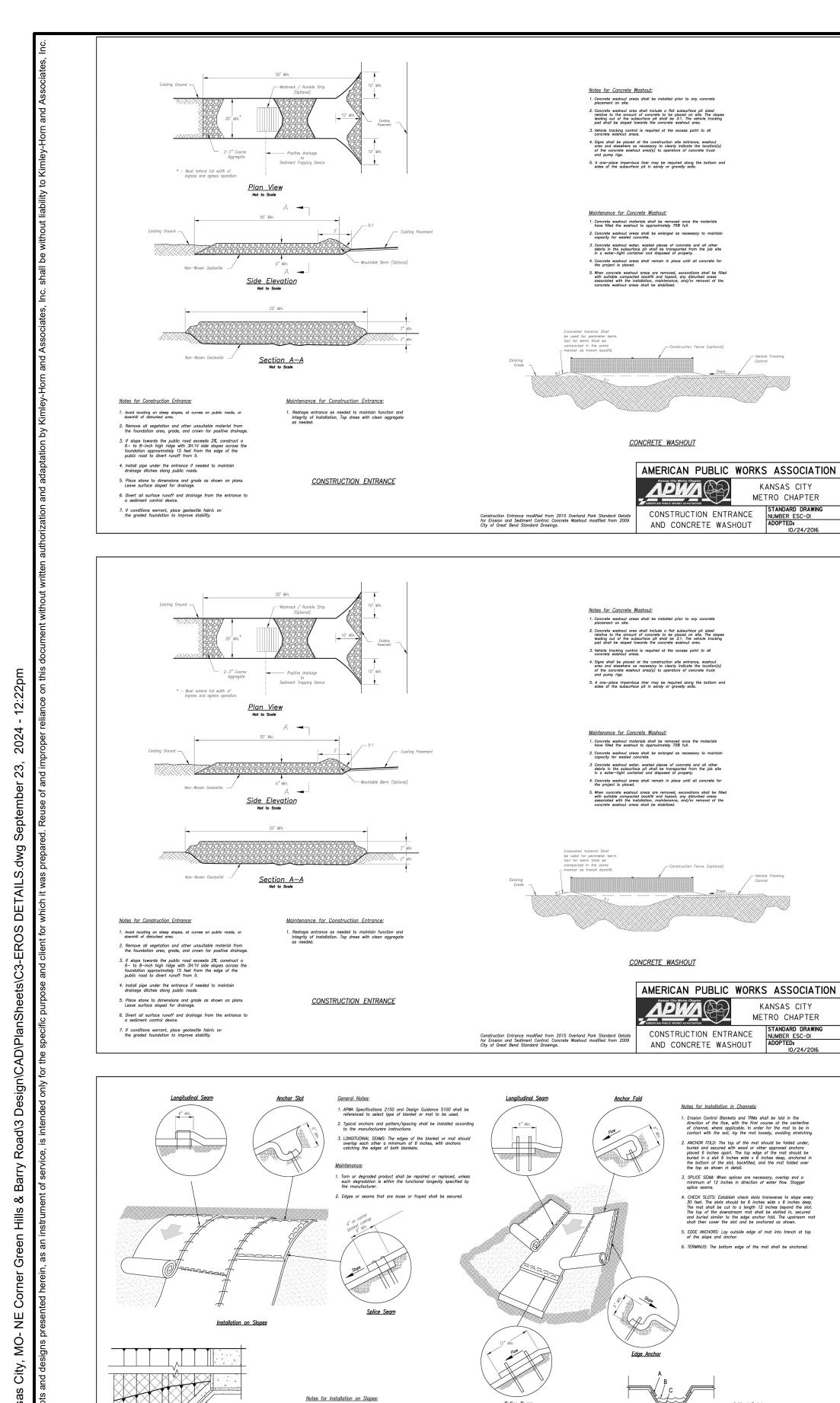
C200

SHEET NUMBER

EROSION CONTROL PLAN NOTES SWPPP UPDATES & AMENDMENTS LEGEND THE CONTRACTOR MUST UPDATE THE SWPPP BY NOTING ON THE SITE MAPS IN THE JOB SITE THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE CHEMICAL SPILLS AND LEAKS. **ROCK ENTRANCE** BINDER TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS TO THE PROJECT SITE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. AT A MINIMUM, INCLUDED IN THE SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF UPDATES SHALL BE MADE DAILY TO TRACK CONSTRUCTION PROGRESS DESCRIBED IN THE **EROSION CONTROL BLANKET** SUBSEQUENT REPORTS AND RELATED DOCUMENTS. MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR NOTING THE OPERATIONS IS PROHIBITED. LOCATION OF THE JOB SITE TRAILER, TEMPORARY PARKING & LAYDOWN AREAS, PORTA-POTTY ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH LAND DISTURBING ACTIVITIES WHEEL WASH, CONCRETE WASHOUT, FUEL & MATERIAL STORAGE, SOLID WASTE CONTAINERS, SHALL OBTAIN A COPY OF THE SWPPP AND NATIONAL POLLUTANT DISCHARGE ELIMINATION 11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INLET PROTECTION AND OTHER CONSTRUCTION RELATED FACILITIES THAT MAY IMPACT STORMWATER RUNOFF. INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE SYSTEM (NPDES) GENERAL PERMIT, AND BECOME FAMILIAR WITH THEIR CONTENTS. PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE SILT FENCE BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, DITCHES OR WATERS OF THE STATE. PHASE 1 SEQUENCE OF CONSTRUCTION STATE AND LOCAL REQUIREMENTS, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY, ENGINEER OR OWNER. 12. STAGING AREAS, STOCKPILES, SPOILS, ETC. SHALL BE LOCATED OUTSIDE OF DRAINAGE LIMITS OF DISTURBANCE WAYS SUCH THAT STORM WATER RUNOFF WILL NOT BE ADVERSELY AFFECTED. PROVIDE INSTALL PERIMETER EROSION CONTROL (I.E. SILT FENCE) AND INLET PROTECTION AT STABILIZATION MEASURES SUCH AS PERIMETER EROSION CONTROL BMP'S, SEEDING, OR SITE ENTRY AND EXIT LOCATIONS SHALL BE MAINTAINED IN A CONDITION THAT WILL EXISTING STORMWATER INLETS. SAFETY FENCE PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. SEDIMENT OTHER COVERING AS NECESSARY TO PREVENT EROSION. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT SPILLED, DROPPED, WASHED, OR TRACKED ONTO A PUBLIC ROADWAY FROM THE PREPARE TEMPORARY PARKING AND STORAGE AREA. CONSTRUCTION SITE MUST BE REMOVED AS SOON AS PRACTICABLE. WHEN WASHING IS 13. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-ESTABLISHING ANY EROSION CONTROL CONSTRUCT AND STABILIZE DIVERSIONS AND TEMPORARY SEDIMENT BASINS. BMP DISTURBED DURING CONSTRUCTION OPERATIONS. NOTIFY THE OWNER'S REQUIRED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY, IT CLEAR AND GRUB THE SITE. REPRESENTATIVE OF ANY DEFICIENCIES IN THE ESTABLISHED EROSION CONTROL SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN BEGIN MASS SITE GRADING AND ROUGH GRADE SITE SUFFICIENTLY TO ESTABLISH **KEYNOTE LEGEND** APPROVED SEDIMENT BASIN. ANY FINES IMPOSED FOR DISCHARGING SEDIMENT ONTO A MEASURES THAT MAY LEAD TO UNAUTHORIZED DISCHARGE OF STORM WATER PROPOSED DRAINAGE PATTERNS. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES. PUBLIC RIGHT OF WAY SHALL BE PAID BY THE CONTRACTOR. POLLUTANTS. UNAUTHORIZED POLLUTANTS INCLUDE (BUT ARE NOT LIMITED TO) EXCESS CONCRETE DUMPING, CONCRETE RESIDUE, PAINTS, SOLVENTS, GREASES, FUELS, TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE SILT FENCE TEMPORARY SEEDING OR OTHER APPROVED METHODS OF STABILIZATION SHALL BE LUBRICANT OILS, PESTICIDES, AND SOLID WASTE MATERIALS. INACTIVE FOR 14 DAYS OR MORE OR AS REQUIRED BY THE NPDES AND/OR CITY INITIATED WITHIN 7 DAYS OF THE LAST DISTURBANCE ON ANY AREA OF THE SITE. INLET PROTECTION 14. EROSION CONTROL BMP'S SHOWN ON THESE PLANS SHALL BE INSTALLED PRIOR TO THE THE CONTRACTOR SHALL MINIMIZE LAND DISTURBANCE AND CLEARING TO THE MAXIMUM START OF LAND-DISTURBING ACTIVITIES ON THE PROJECT, AND INITIATED AS SOON AS NOTE: THE SEQUENCE OF CONSTRUCTION IS INTENDED TO CONVEY THE GENERAL CONCEPTS **ROCK CONSTRUCTION ENTRANCE** EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT. PRACTICABLE. OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE 15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS **EROSION CONTROL BLANKET** CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING OF THE AUTHORITIES HAVING JURISDICTION, AND SHALL MAINTAIN COMPLIANCE WITH THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING IMMEDIATELY, PRIOR TO AND/OR AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE APPLICABLE LAWS AND REGULATIONS FOR THE DURATION OF CONSTRUCTION. BIOROLL DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE TRAILERS, AND TOILET FACILITIES. 16. THE CONTRACTOR SHALL FIELD ADJUST AND/OR PROVIDE ADDITIONAL EROSION CONTROL ALL WASH WATER FROM THE CONSTRUCTION SITE (CONCRETE TRUCKS, VEHICLE BMP'S AS NEEDED TO PREVENT EROSION AND OFF-SITE SEDIMENT DISCHARGE FROM THE CONSTRUCTION SITE, LOG AND RECORD ANY ADJUSTMENTS AND DEVIATIONS FROM THE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED APPROVED EROSION CONTROL PLANS WITHIN THE SWPPP DOCUMENTS STORED IN THE BEFORE DISPOSAL. JOB SITE TRAILER. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR Know what's below. Call before you dig.







Erosion Control Blankets and TRMs shall be laid in the direction of the slope. In order for blanket to be in contact with the soil, lay blanket loosely, avoiding stretching.

ANCHOR SLOTS: The top of the blanket should be "slotted in"
at the top of the slope and anchored in place with anchors 6
inches apart. The slots should be 6 inches wide x 6 inches
deep with the blanket anchored in the bottom of the slot,
then backfilled, tamped and seeded.

SPLICE SEAM: When splices are necessary, overlap end a minimum of 8 inches in direction of water flow. Stagger splice seams.

TERMINAL FOLD: The bottom edge of the blanket shall be turned under a minimum of 4 inches, then anchored in place with anchors 9 inches apart.

15' Min. —

Partial Box Culvert Plan

Not to Scale

Installation Around Culvert Slope

Installation in Channels

Critical Points:

AMERICAN PUBLIC WORKS ASSOCIATION

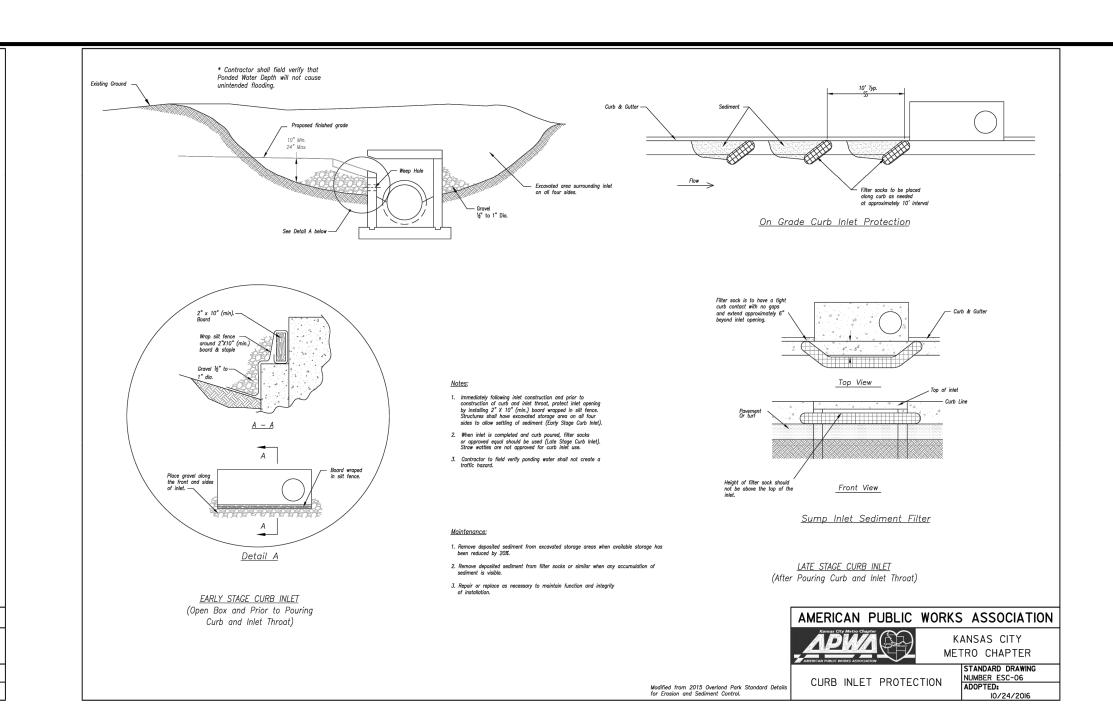
A - Overlaps and seams;

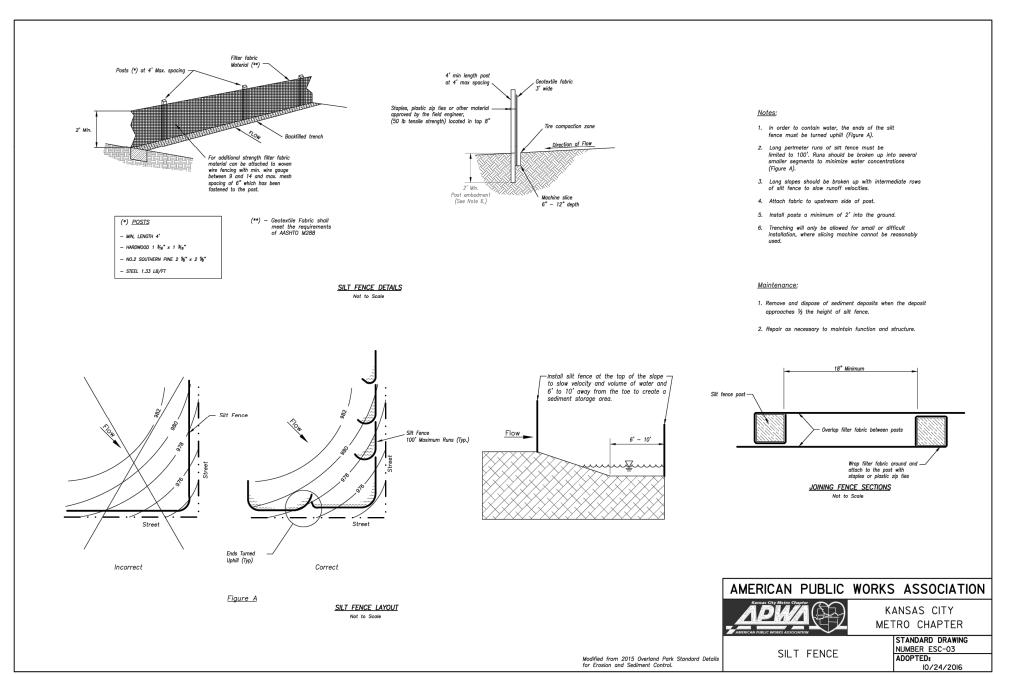
B - Projected water line;

C - Channel bottom / side slope vertices;

KANSAS CITY

METRO CHAPTER







S

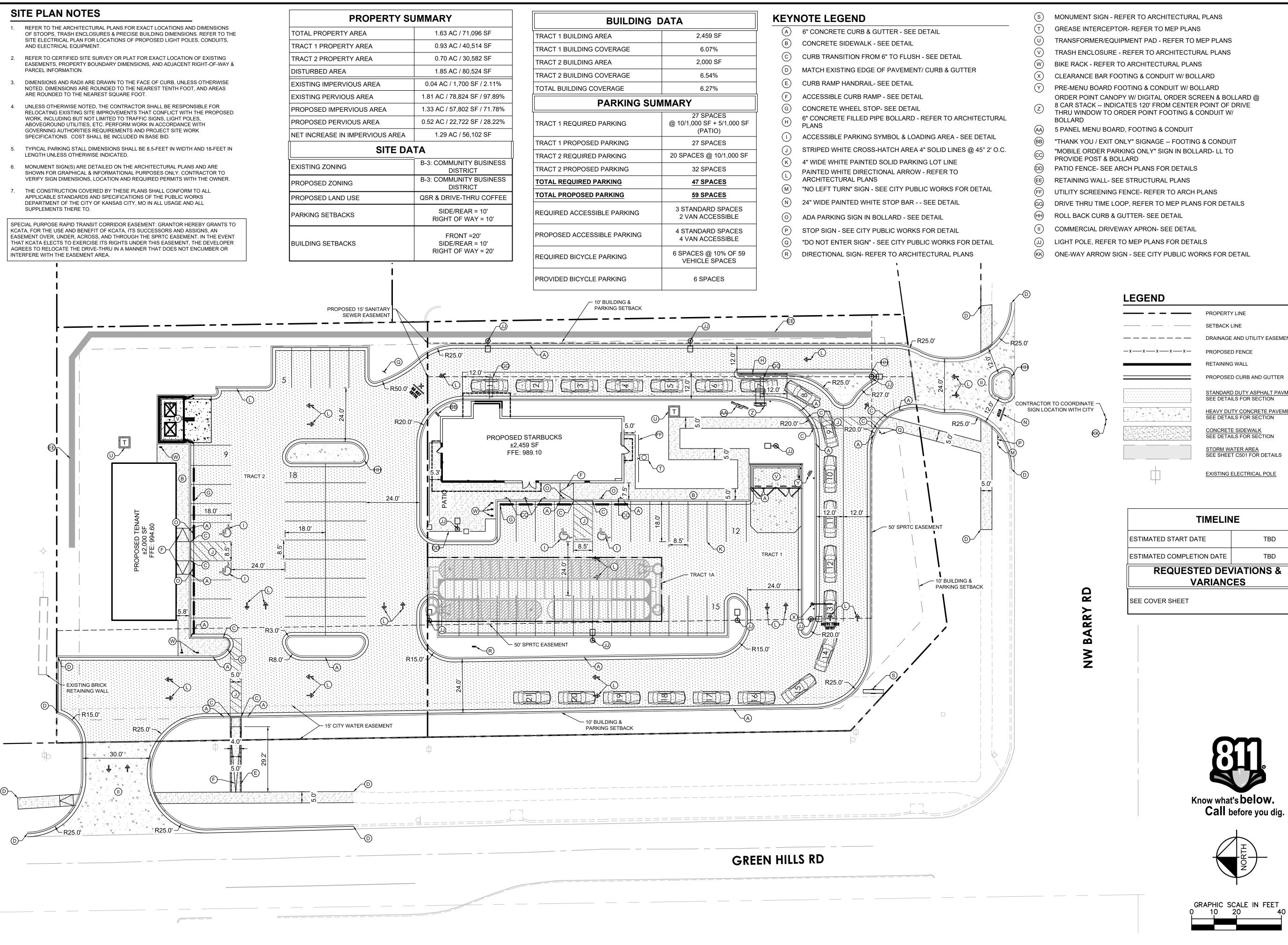
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0 C BARRY

C302

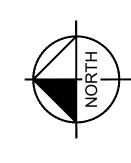
K #85175 GREEN P FOR BUX # S R

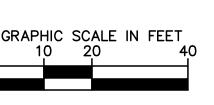
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DRAINAGE AND UTILITY EASEMENT PROPOSED FENCE PROPOSED CURB AND GUTTER STANDARD DUTY ASPHALT PAVMENT SEE DETAILS FOR SECTION HEAVY DUTY CONCRETE PAVEMENT SEE DETAILS FOR SECTION CONCRETE SIDEWALK
SEE DETAILS FOR SECTION STORM WATER AREA SEE SHEET C501 FOR DETAILS

> TBD **REQUESTED DEVIATIONS &**





BARRY

SHEET NUMBER C400

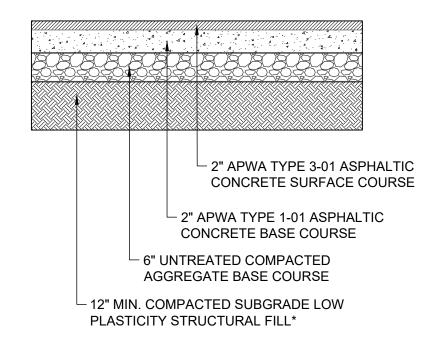
ACCESSIBLE RAMPS

CG-1 CURB & -

GUTTER

SUBGRADE NOTES:

1. PROOF-ROLLING SHOULD BE ACCOMPLISHED TO IDENTIFY SOFT OR UNSTABLE SOILS TO BE REMOVED FROM PAVEMENT AREA PRIOR TO FILL PLACEMENT AND/OR PAVEMENT CONSTRUCTION. 2. IN-LIEU-OF THE PROPOSED COMPACTED STRUCTURAL FILL, THE CONTRACTOR MAY SUBSTITUTE 12" OF CLASS "C" FLY ASH, PORTLAND CEMENT OR LIME-TREATMENT OF ON-SITE HIGH PLASTIC CLAYS. CRUSHED STONE BASE CAN BE INCLUDED IN THE 12" OF REMEDIATION IN AREAS OF UNDOCUMENTED FILL AND FAT CLAY

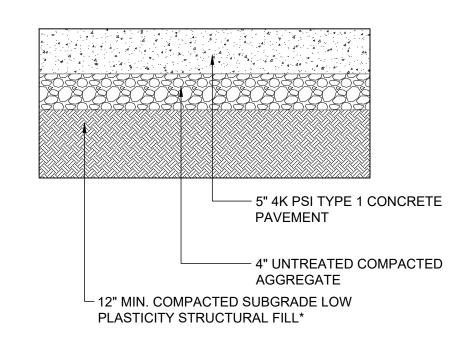


ASHALT PAVEMENT (PARKING LOTS)

SCALE: NOT TO SCALE

SUBGRADE NOTES:

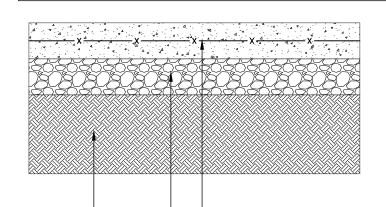
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HEAVY DUTY CONCRETE PAVEMENT DRIVE APPROACH SCALE: NOT TO SCALE

SUBGRADE NOTES:

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- 6" CONCRETE PAVEMENT REINFORCED W/ 6X6 W2.9X2.9 WELDED WIRE FABRIC - 4" APWA UNTREATED COMPACTED AGGREGATE

- 12" MIN. COMPACTED SUBGRADE LOW PLASTICITY STRUCTURAL FILL*

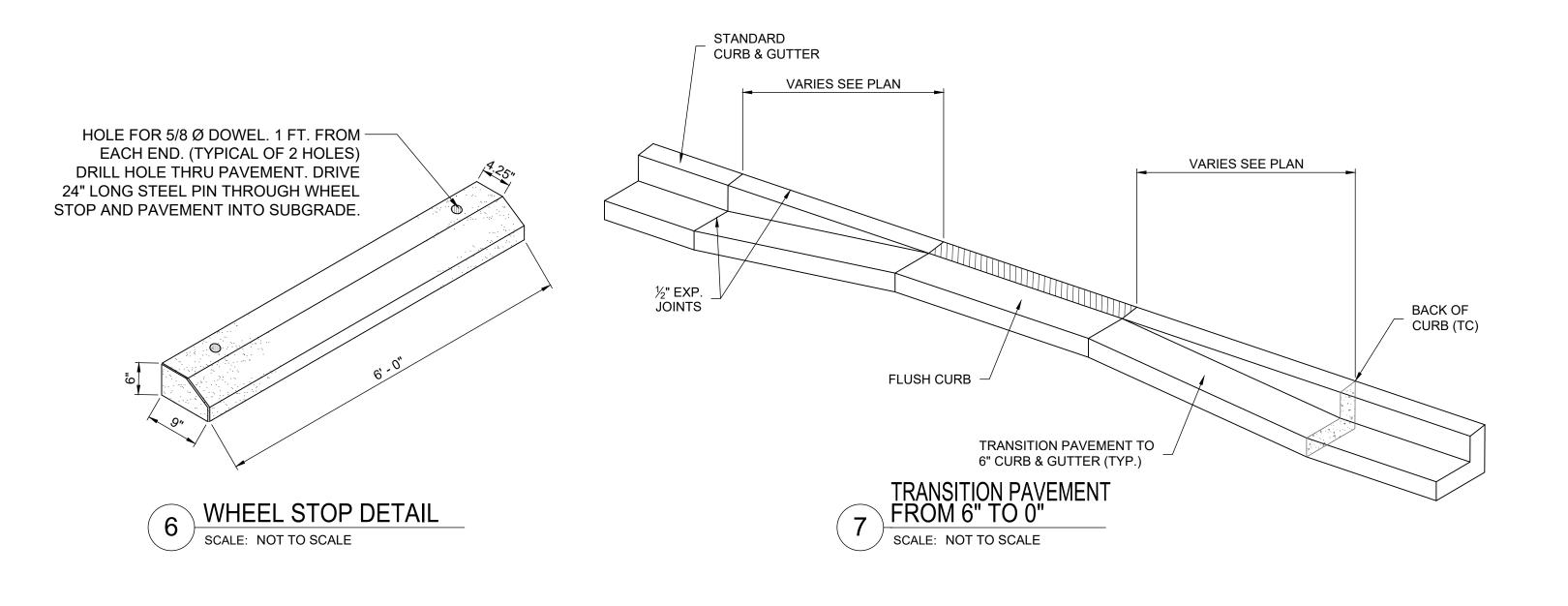
HEAVY DUTY CONCRETE PAVEMENT TRASH ENCLOSURE

SCALE: NOT TO SCALE

- REINFORCING WITH 6X6-W2.9XW2.9 WELDED WIRE FABRIC — 4" 4K PSI TYPE 1 CONCRETE PAVEMENT (6" IF IN DRIVEWAY OR HIGH TRAFFIC AREA) - 4" UNTREATED COMPACTED AGGREGATE 6" MIN. COMPACTED SUBGRADE TO A MINIMUM 95% STANDARD MODIFIED PROCTOR

SIDEWALK PAVEMENT SECTION

5 CONCRETE SIDEWALK
SCALE: NOT TO SCALE



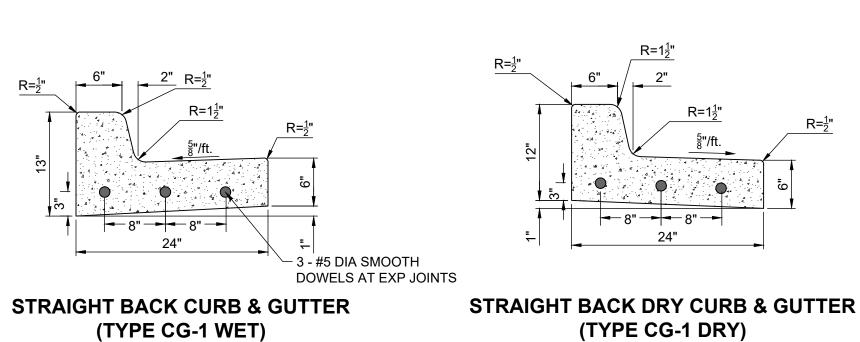
REFLECTIVE WHITE -TRAFFIC PAINT WIDTH OF LANE └- 6" STRIPE STOP BAR

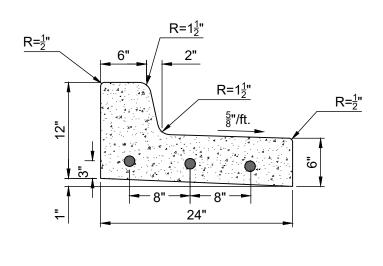
SCALE: NOT TO SCALE

BARRY FOR BUX # S R SHEET NUMBER

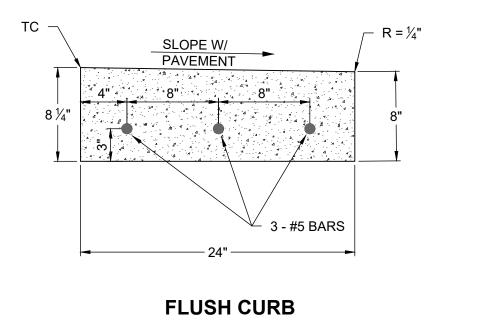
SITE

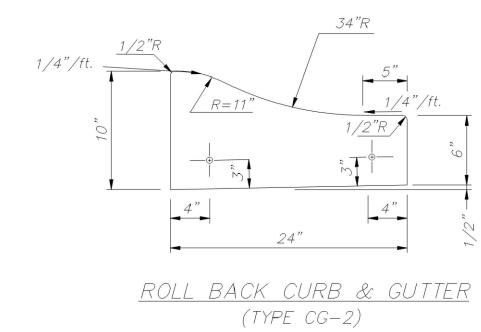
C401

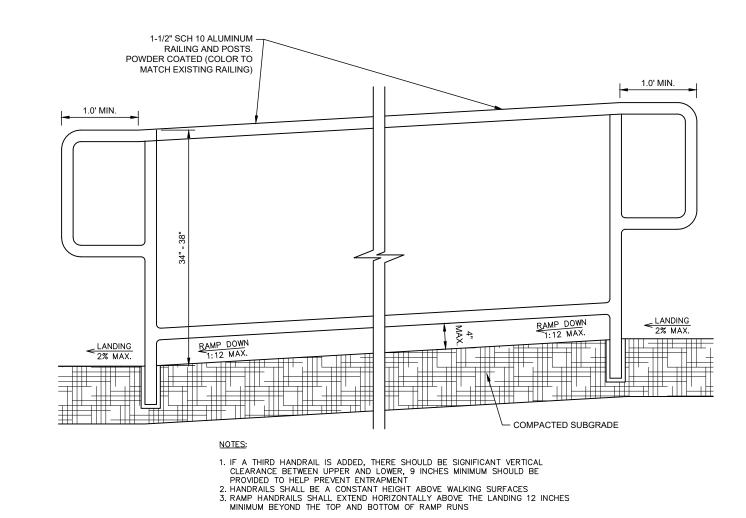




(TYPE CG-1 DRY)



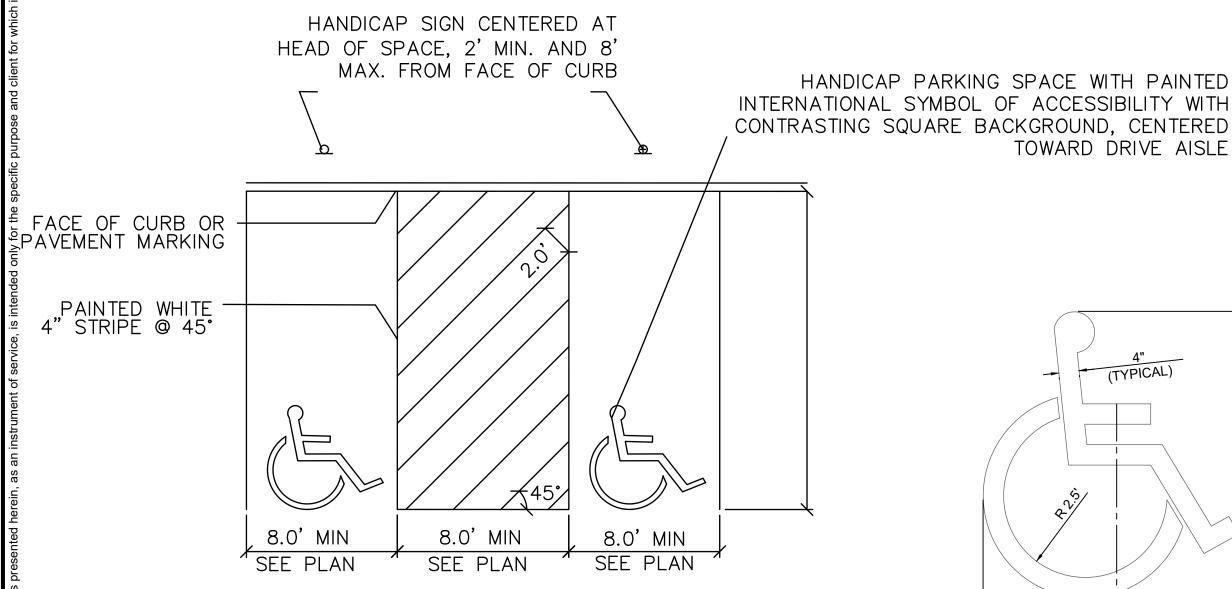


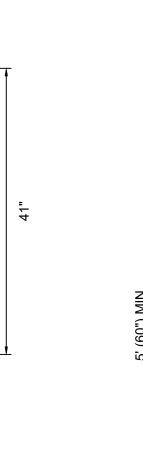


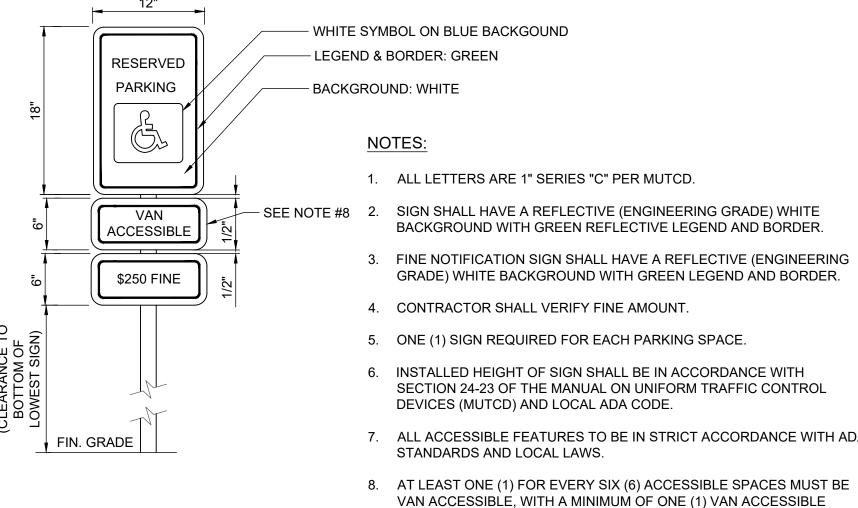
HANDRAIL AT RAMP SCALE: NOT TO SCALE

*CONTRACTOR TO SUBMIT SPECIFICATIONS FOR HANDRAIL TO ENGINEER FOR REVIEW.

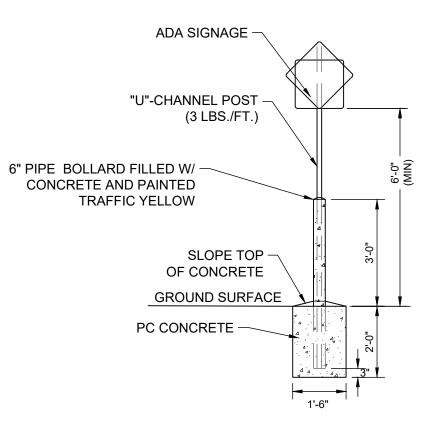
CURB & GUTTER SCALE: NOT TO SCALE







1. ALL LETTERS ARE 1" SERIES "C" PER MUTCD. - SEE NOTE #8 2. SIGN SHALL HAVE A REFLECTIVE (ENGINEERING GRADE) WHITE BACKGROUND WITH GREEN REFLECTIVE LEGEND AND BORDER. 3. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTIVE (ENGINEERING GRADE) WHITE BACKGROUND WITH GREEN LEGEND AND BORDER. 4. CONTRACTOR SHALL VERIFY FINE AMOUNT. 5. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE. 6. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL ADA CODE. 7. ALL ACCESSIBLE FEATURES TO BE IN STRICT ACCORDANCE WITH ADA STANDARDS AND LOCAL LAWS.



NOTES:

POLE AND SIGN TO BE PROVIDED AND INSTALLED BY GENERAL CONTRACTOR.

ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

BOLLARD SIGN BASE SCALE: NOT TO SCALE

ADA PARKING STALL LAYOUT SCALE: NOT TO SCALE

NOT TO SCALE

ADA PARKING SYMBOL SCALE: NOT TO SCALE

ADA PARKING STALL SIGNAGE SCALE: NOT TO SCALE

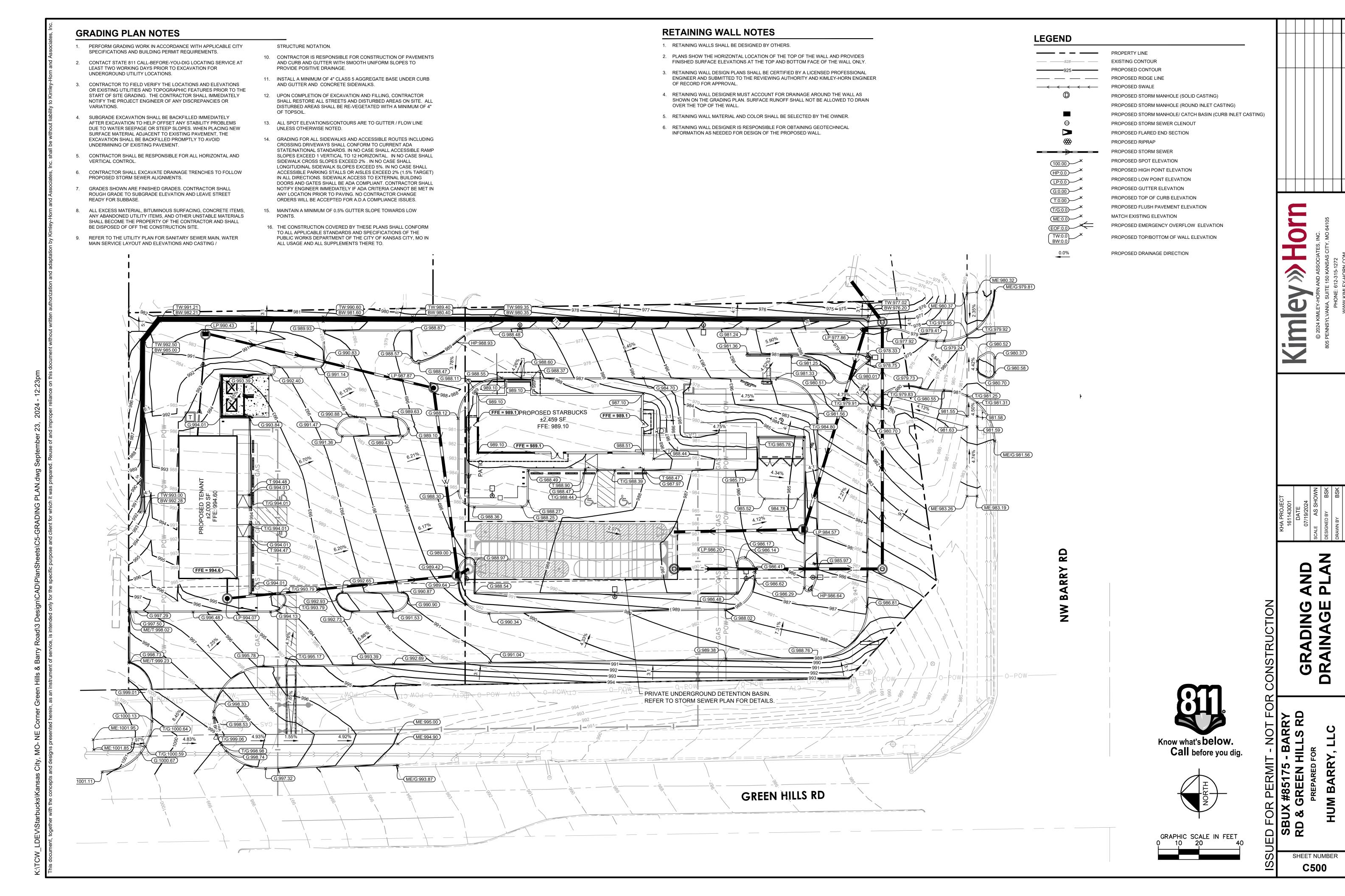
SPACE PER SITE.

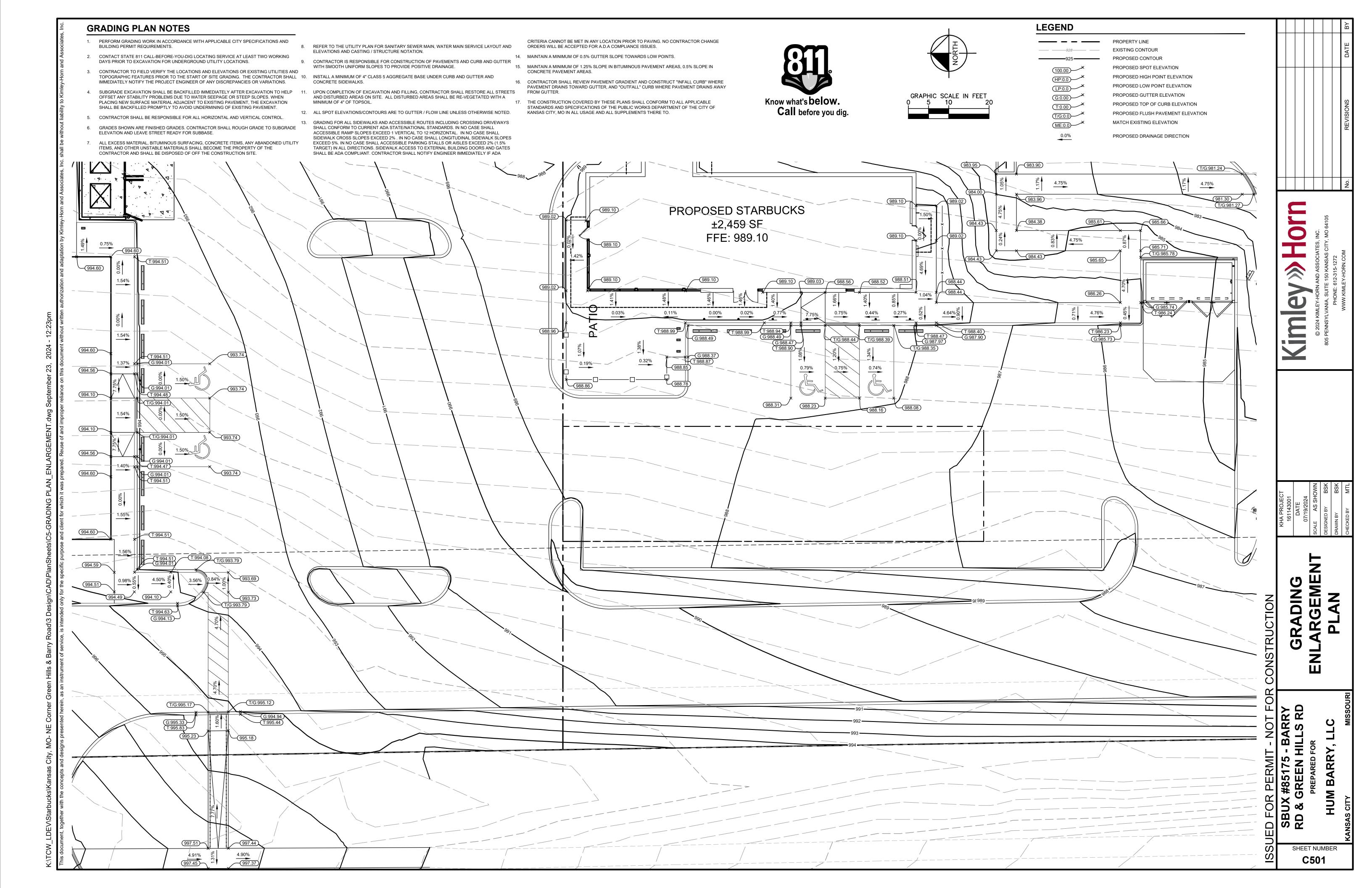
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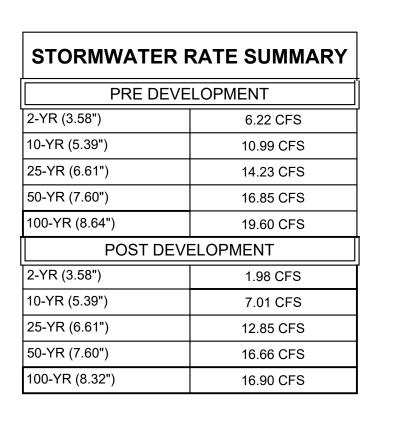
C402

TOWARD DRIVE AISLE

ACCESSIBLE PARKING STALL LAYOUT







STORMWATER BMP		
7.00		
7.98		

- STORM SEWER NOTES

 1. INSTALL STORM SEWER IN ACCORDANCE WITH APPLICABLE CITY OR STATE SPECIFICATIONS, STATE PLUMBING CODE, AND BUILDING PERMIT
- CONTACT STATE 811 CALL-BEFORE-YOU-DIG LOCATING SERVICE AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION FOR UNDERGROUND UTILITY LOCATIONS.
- 3. STORM SEWER PIPE SHALL BE: RCP: ASTM C-76 HDPE: ASTM F-714, F-894

REQUIREMENTS.

- PVC: ASTM D-2729 PVC SCH40: ASTM D-1785, D-2665, F-794 PRAIN TILE SHALL BE:
- DRAIN TILE SHALL BE: PE: ASTM F-6667
- PE: ASTM F-6667 PVC: ASTM D-2729 FITTINGS SHALL BE:

PVC SCH40: ASTM D-2665, F-794, F-1866

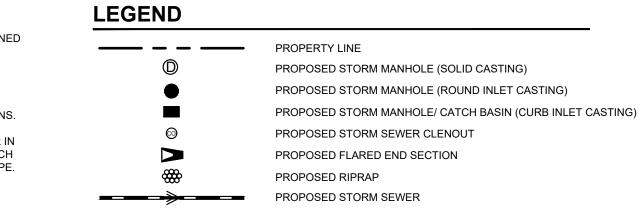
- TINGS SHALL BE:

 RCP: ASTM C-76, JOINTS PER ASTM C-361, C-990, AND C-443

 HDPE: ASTM D-3212

 PVC: ASTM D-2729, JOINTS PER ASTM D-3212
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL.
- 5. FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO THE START OF LAND DISTURBING ACTIVITIES. NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS IMPACTING THE PROPOSED DESIGN OF THE PROJECT.
- 6. EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
 REFER TO THE UTILITY PLANS FOR LAYOUT AND ELEVATIONS FOR PROPOSED SANITARY SEWER, WATER MAIN, AND OTHER BUILDING UTILITY SERVICE CONNECTIONS. REFER TO THE GRADING PLAN FOR DETAILED SURFACE

- EXCESS MATERIAL, BITUMINOUS SURFACING, CONCRETE ITEMS, ABANDONED UTILITY ITEMS, AND OTHER UNSTABLE MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
- COORDINATE WITH THE PLUMBING PLANS FOR THE LOCATION, SIZE AND ELEVATION OF THE PROPOSED UNDERGROUND ROOF DRAIN CONNECTIONS.
- 9. WHERE STORM SEWER ROOF DRAINS HAVE LESS THAN 4-FEET OF COVER IN PAVED AREAS OR 3-FEET OF COVER IN LANDSCAPE AREAS, PROVIDE 3-INCH THICK INSULATION A MINIMUM OF 5-FEET IN WIDTH, CENTERED ON THE PIPE.
- 10. ALL STORM SEWER PIPE JOINTS SHALL BE WATER-TIGHT CONNECTIONS.
- 11. ALL STORM SEWER PIPE CONNECTIONS TO MANHOLES SHALL BE GASKETED AND WATER TIGHT. BOOTED COUPLERS AT THE STRUCTURE OR A WATER STOP WITH NON-SHRINK GROUT MAY BE USED IN ACCORDANCE WITH LOCAL CODES.
- 12. CONTRACTOR SHALL AIR TEST ALL STORM SEWER PIPE IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.
- 13. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF KANSAS CITY, MO IN ALL USAGE AND ALL SUPPLEMENTS THERE TO.



PROPOSED WATERMAIN

PROPOSED SANITARY SEWER

No. REVISIONS DA



O7/19/2024

CALE AS SHOWN
ESIGNED BY BSK
RAWN BY BSK
HECKED BY MTL

SEWER SCAL

STORM SEWE PLAN

PERMIT - NOT FOR

485175 - BARRY

REEN HILLS RD

REPARED FOR

BARRY, LLC

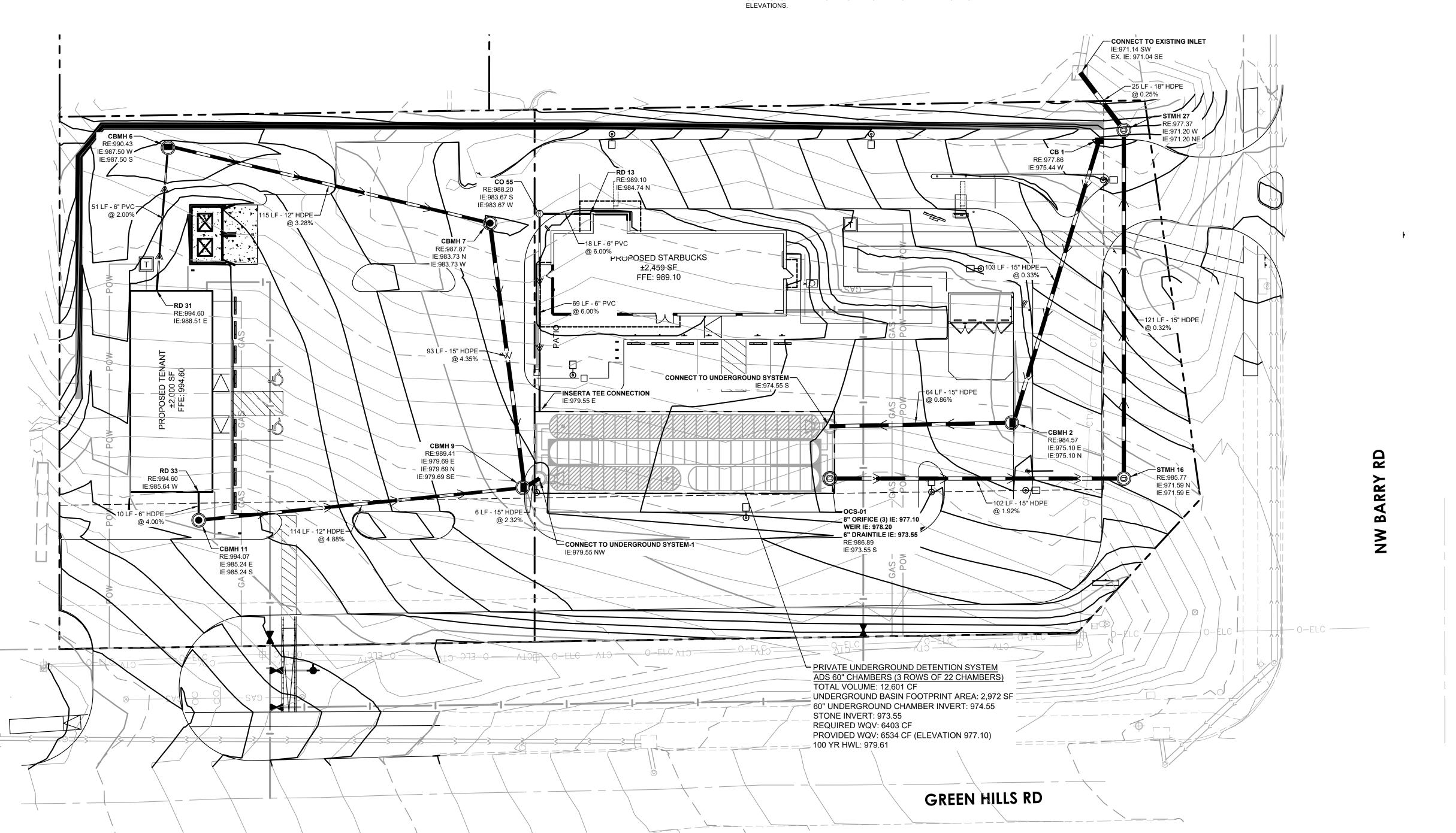
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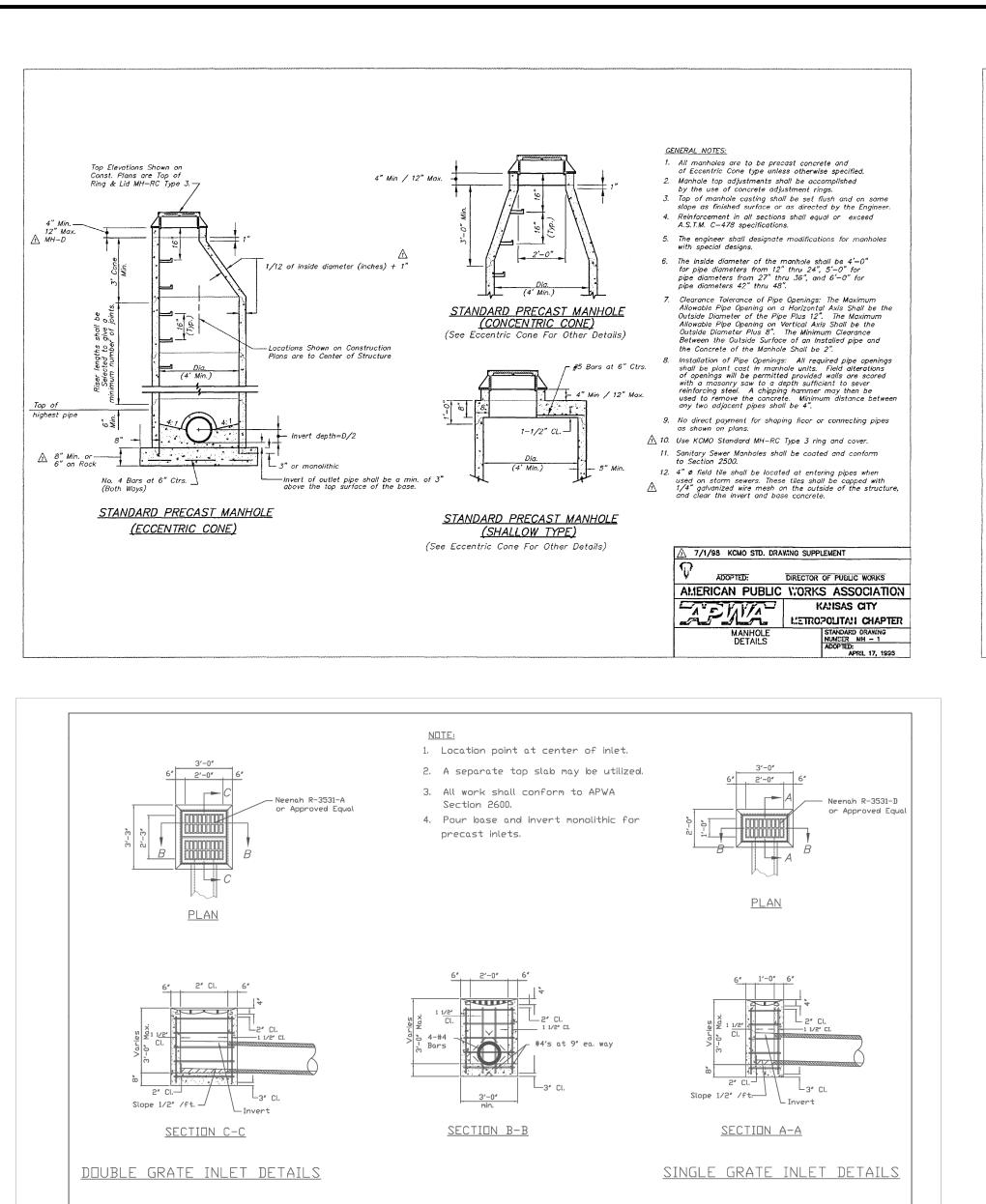
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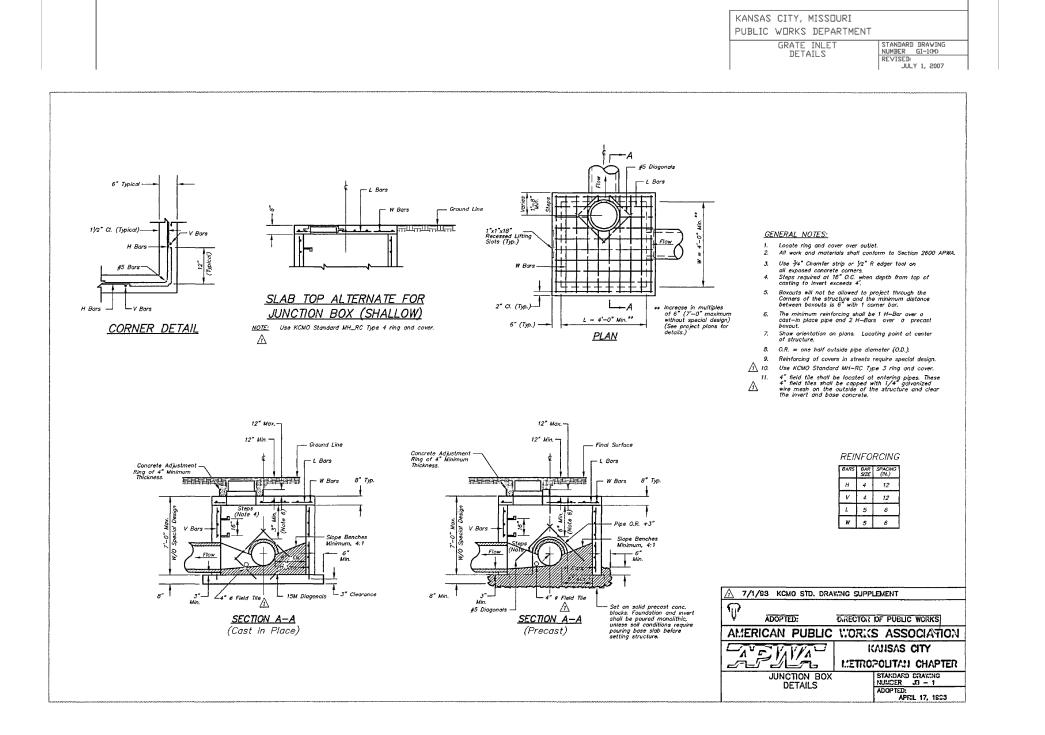
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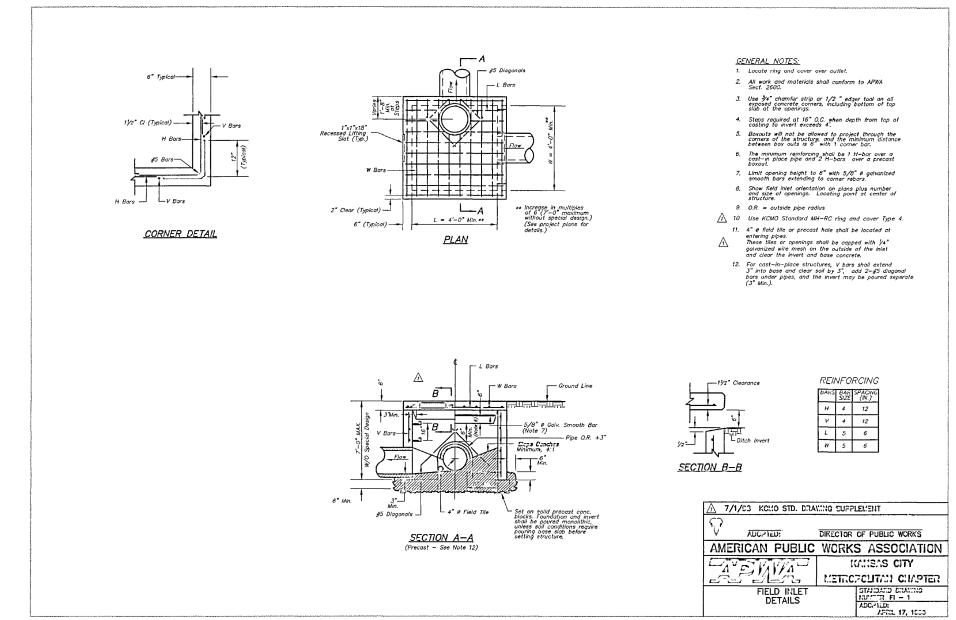
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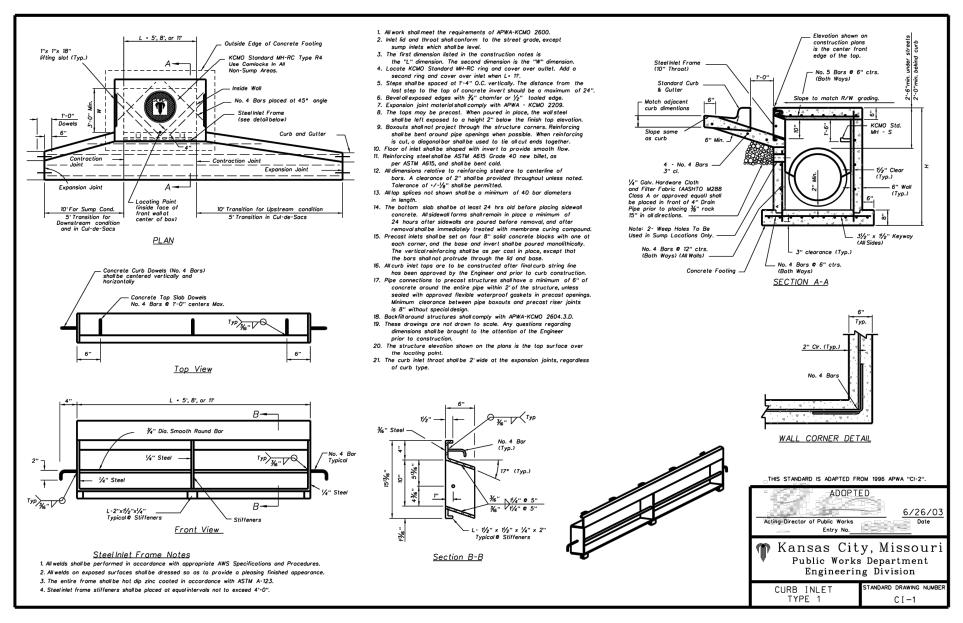
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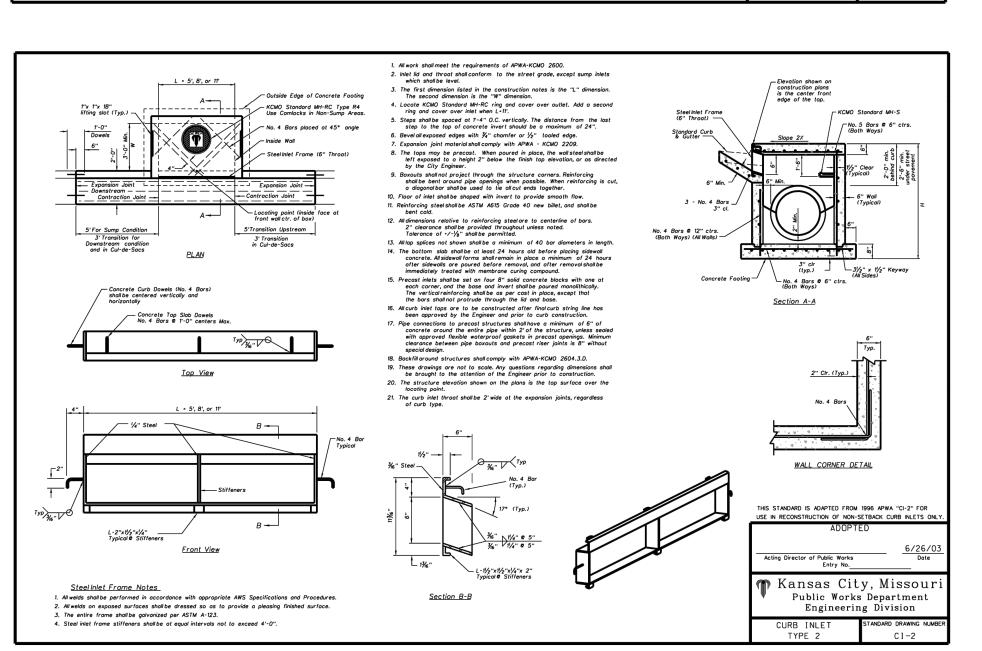


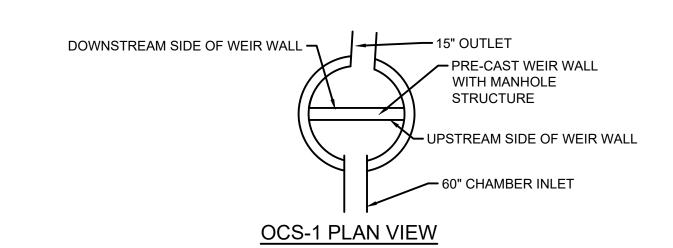


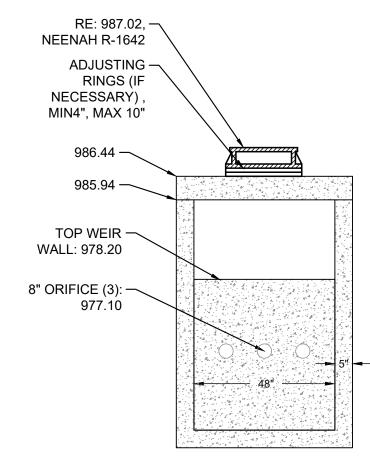






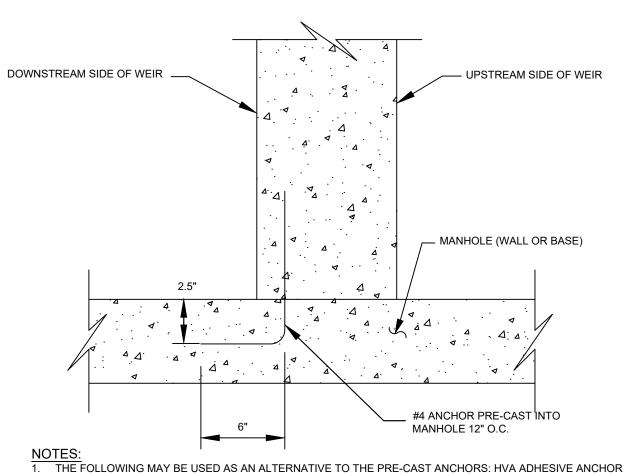






OCS-01 WEIR WALL SECTION





SYSTEM, WITH HVA ADHESIVE CAPSULES AND #5 REBAR, AS MANUFACTURED BY HILTI CORP OR APPROVED 2. REINFORCEMENT BARS IN WEIR NOT SHOWN.

OCS-01 WEIR REINFORCEMENT @ WALL AND BASE

STANDARD DETAIL

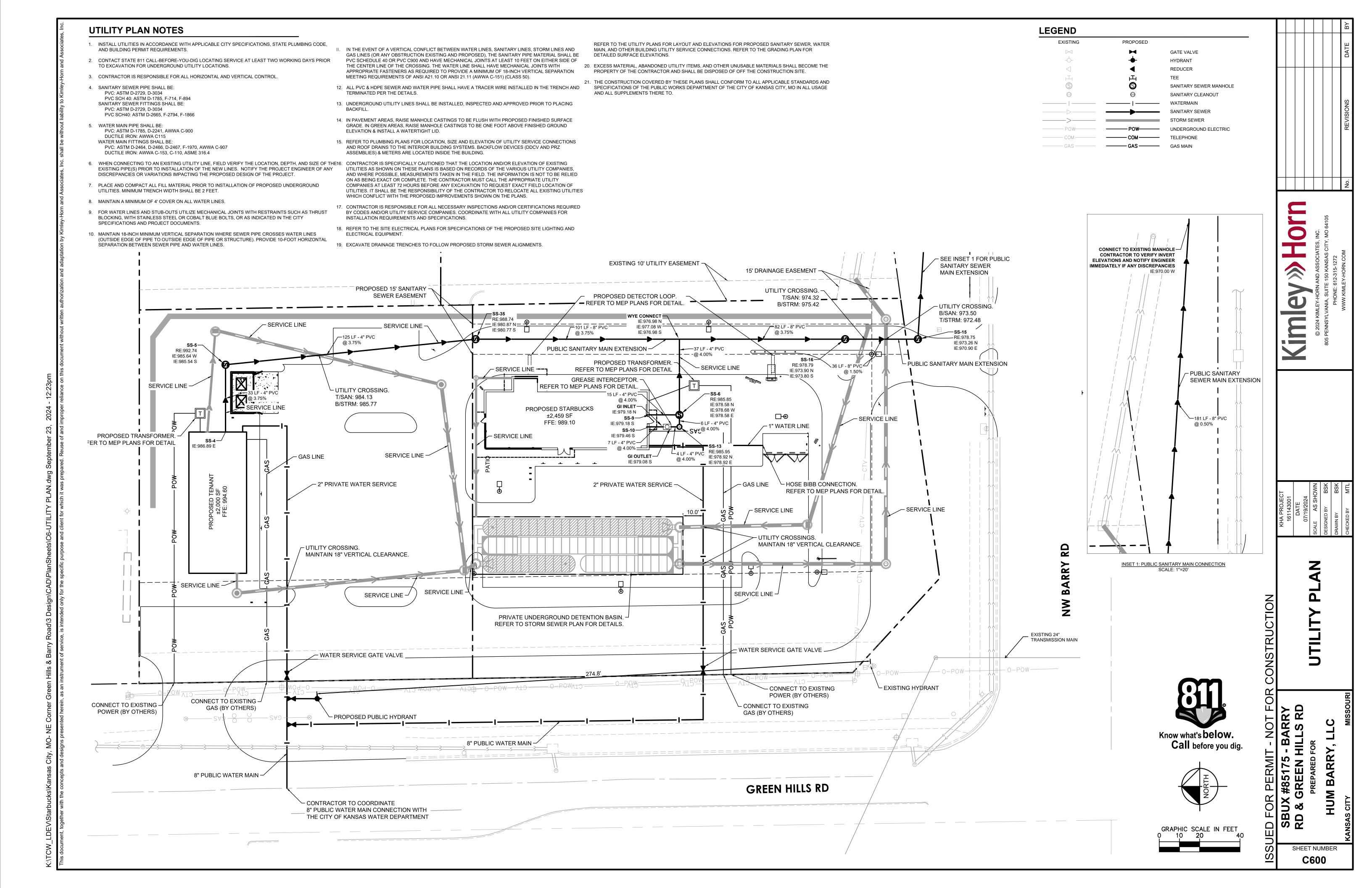
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BARRY SHEET NUMBER C503

(1)

N



BACKING BLOCK (SEE DETAIL

WATER SERVICES

DEVELOPED BY:

CITY OF KANSAS CITY, MISSOURI

TECHNICAL ADVISORY COMMITTEE

DETAIL 02645-2

02645 - 9 of 13Revised 1/28/21

UNDISTURBED EARTH

Kansas City, Missouri Water Services Department Standard Specification

DATE: 12/17/2020

STRAIGHT SET HYDRANT INSTALLATION

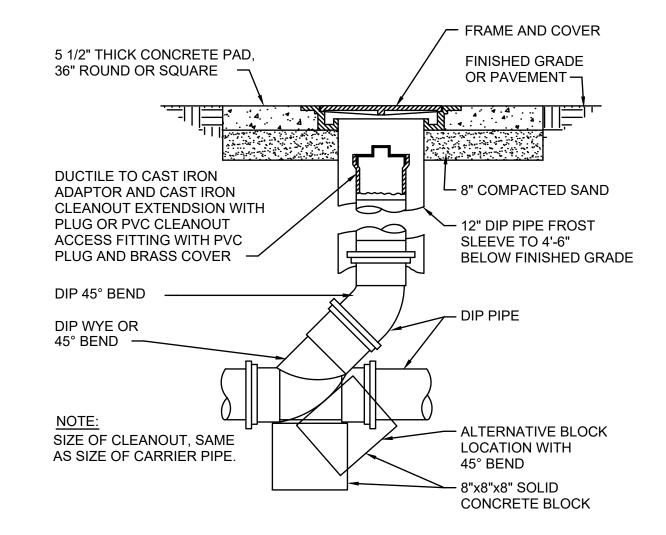
(TYPE "B" SETTING)

DRAWING NO. 02645-2

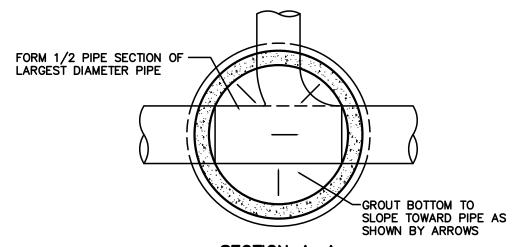
APPROVED BY:

KEY NOTES:

- 1 FOR USE ON 8" DIAMETER OR SMALLER NON-PRESSURE PIPE LINES
- 2 USE DUCTILE IRON PIPE ADAPTOR IF CARRIER PIPE
- IS NOT DUCTILE IRON PIPE
- SEE PLAN AND PROFILE DRAWINGS FOR ELEVATIONS
- FIRMLY COMPACT EARTH AROUND BLOCK, WYE AND BEND
- USES 1/2" ASPHALT IMPREGNATED FIBER PREFORMED JOINT MATERIAL AROUND PAD PLACED IN CONCRETE PAVEMENT



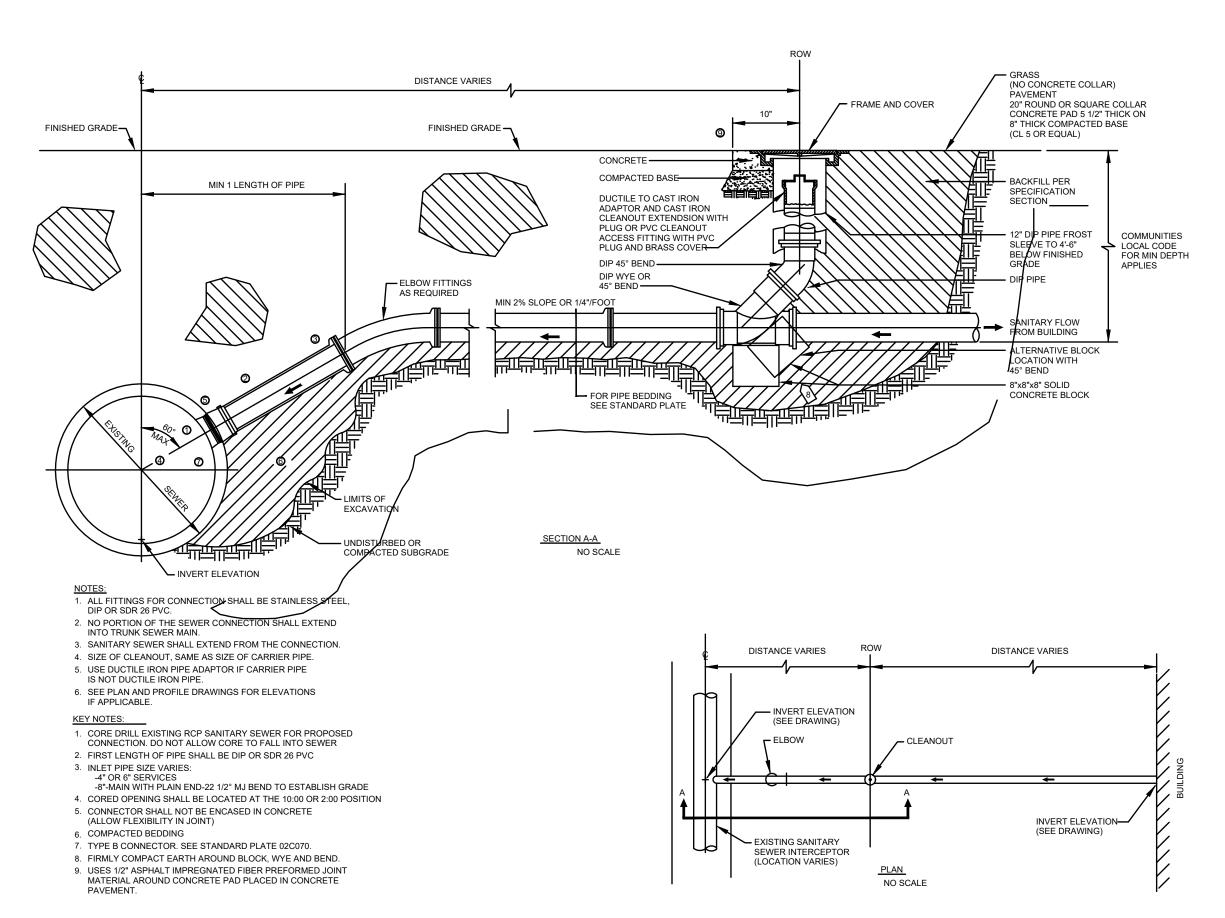
SANITARY SEWER CLEANOUT



SECTION A-A -BITUMINOUS ROLLOVER CASTING AS INDICATED ON-1/8" MIN. - 1/2" MAX. PLANS OR SCHEDULE GROUT PERIMETER OF CASTING & ADJUSTING RINGS CONCRETE ADJUSTING RINGS (2") — ALL INTERIOR JOINTS SHALL BE MIN. 2, MAX. 4 GROUTED TO A SMOOTH FINISH MIN. 1/4" MORTAR BETWEEN CASTING, RINGS & STRUCTURE. SHIMS USED FOR LEVELING MORTAR SHALL MEET MnDOT SHALL BE METAL OR SPEC. 2506.2B. CONCENTRIC REDUCER SECTION -STEPS SHALL BE EXTRUDED STEEL REINFORCED COPOLYMER PLASTIC AS MANUFACTURED BY M.A. INDUSTRIES MANHOLE INVERT SHALL BE SLOPED TO PROVIDE SMOOTH - WALLS TO BE CONSTRUCTED OF PRECAST SECTIONS. JOINTS FLOW FROM INLET TO OUTLET SHALL BE CONSTRUCTED WITH NEOPRENE WATERPROOF -CONFINED O-RING GASKETS. GASKETS REQUIRED FOR PIPE INSERTS CONCRETE SLAB ---- 6" BASE FOR ALL MANHOLES LESS THAN 14 FT. DEEP INCREASE BASE 2" PER 6 GROUT FLOW LINE AS FT. OF DEPTH BEYOND 14 FT. 5" 5'-4"

PRECAST BASE MAY BE USED FOR

MANHOLES LESS THAN 14 FT. DEEP. SANITARY SEWER STANDARD MANHOLE

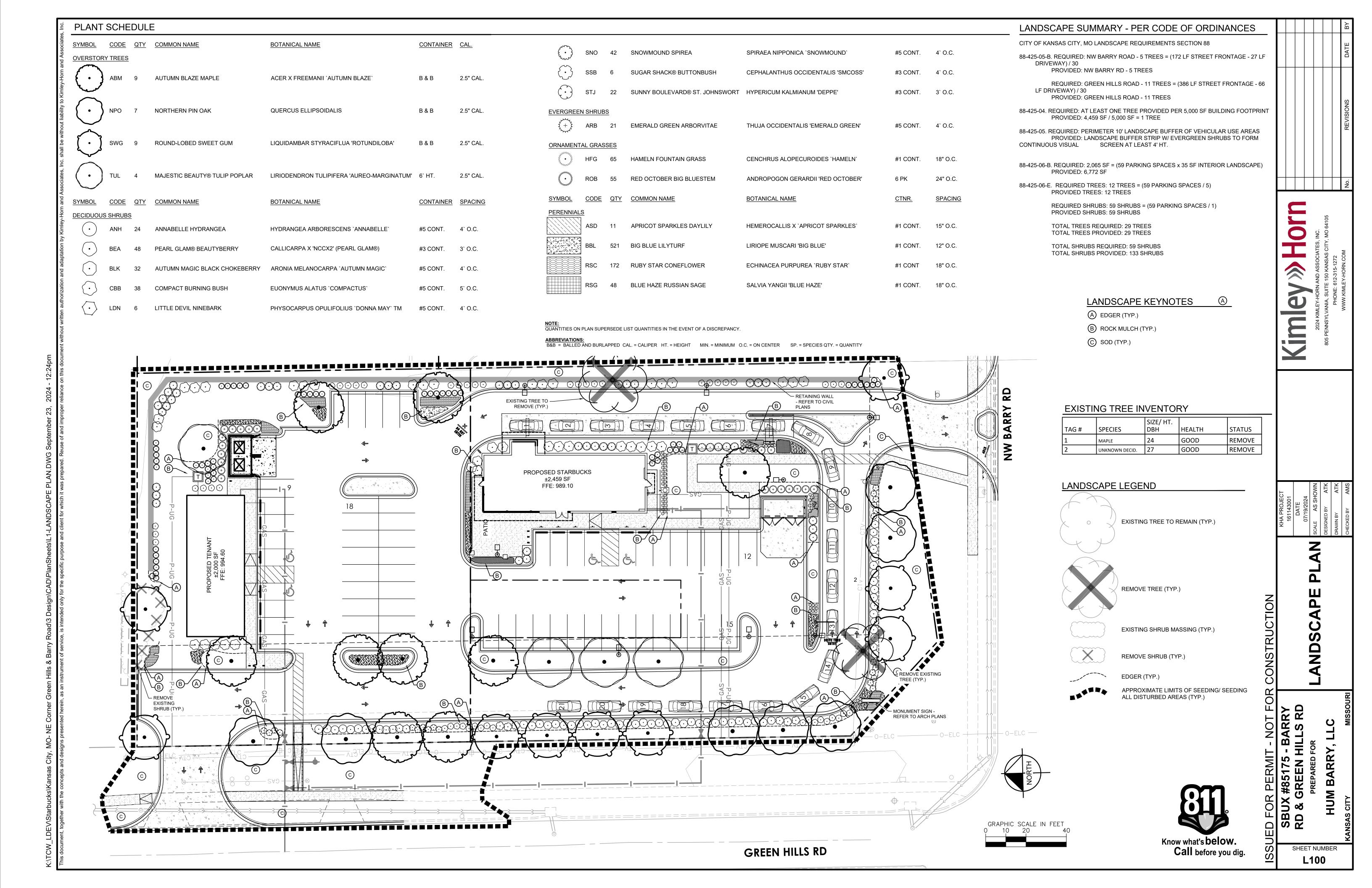


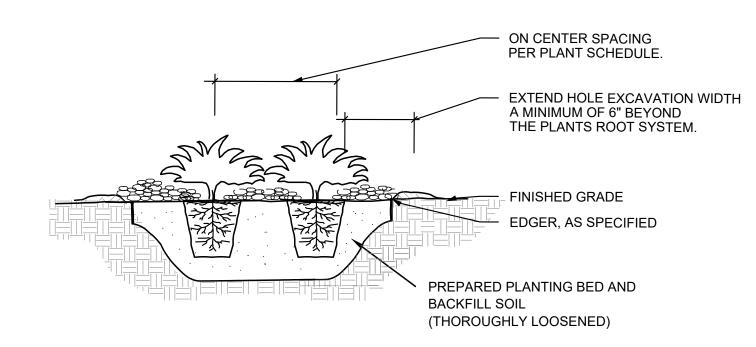
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SANITARY SEWER SERVICE

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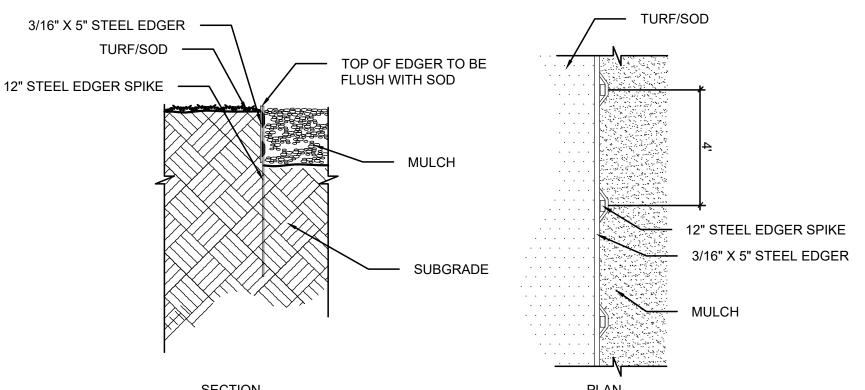




- SCARIFY SIDES AND BOTTOM OF HOLE.
- PROCEED WITH CORRECTIVE PRUNING OF TOP AND ROOT.
- REMOVE CONTAINER AND SCORE OUTSIDE OF SOIL MASS TO REDIRECT AND PREVENT CIRCLING FIBROUS ROOTS. REMOVE OR CORRECT STEM GIRDLING ROOTS.
- 4. PLUMB AND BACKFILL WITH PLANTING SOIL.
- 5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL
- BACK FILL VOIDS AND WATER SECOND TIME. 7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS
- SOIL MOISTURE IS EXCESSIVE.

MIX IN 3-4" OF ORGANIC COMPOST.

SHRUB / PERENNIAL PLANTING DETAIL



STEEL EDGER DETAIL SCALE: N.T.S.

LANDSCAPE NOTES

<u>PLANTING</u>

- 1. CONTACT COMMON GROUND ALLIANCE AT 811 OR CALL811.COM TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY PLANTS OR LANDSCAPE MATERIAL.
- 2. ACTUAL LOCATION OF PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONDITIONS.
- 3. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN
- 4. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SUBMISSION OF ANY BID AND/OR QUOTE BY THE LANDSCAPE CONTRACTOR.
- PROVIDE TWO YEAR GUARANTEE OF ALL PLANT MATERIALS. THE GUARANTEE BEGINS ON THE DATE OF THE LANDSCAPE ARCHITECT'S OR OWNER'S WRITTEN ACCEPTANCE OF THE INITIAL PLANTING. REPLACEMENT PLANT MATERIAL SHALL HAVE A ONE YEAR GUARANTEE COMMENCING UPON PLANTING.
- 6. ALL PLANTS TO BE SPECIMEN GRADE, MISSOURI-GROWN AND/OR HARDY. SPECIMEN GRADE SHALL ADHERE TO, BUT IS NOT LIMITED BY, THE FOLLOWING STANDARDS: ALL PLANTS SHALL BE FREE FROM DISEASE, PESTS, WOUNDS, SCARS, ETC. ALL PLANTS SHALL BE FREE FROM NOTICEABLE GAPS, HOLES, OR DEFORMITIES. ALL PLANTS SHALL BE FREE FROM BROKEN OR DEAD BRANCHES. ALL PLANTS SHALL HAVE HEAVY, HEALTHY BRANCHING AND LEAFING. CONIFEROUS TREES SHALL HAVE AN ESTABLISHED MAIN LEADER AND A HEIGHT TO WIDTH RATIO OF NO
- 7. PLANTS TO MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR MOST CURRENT VERSION) REQUIREMENTS FOR SIZE AND TYPE SPECIFIED.
- 8. PLANTS TO BE INSTALLED AS PER ANSI STANDARD PLANTING PRACTICES.
- 9. INSTALL PLANTS BY PLANT INSTALLATION PERIOD INFORMATION IN THE LATEST STANDARD PLANTING DETAILS FROM MoDOT. PLANTINGS BEFORE OR AFTER THESE DATES ARE DONE AT RISK.
- 10. PLANTS SHALL BE IMMEDIATELY PLANTED UPON ARRIVAL AT SITE. PROPERLY HEEL-IN MATERIALS IF NECESSARY; TEMPORARY ONLY.
- 11. PRIOR TO PLANTING, FIELD VERIFY THAT THE ROOT COLLAR/ROOT FLARE IS LOCATED AT THE TOP OF THE BALLED & BURLAP TREE. IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLAR/ROOT FLARE. WHEN THE BALLED & BURLAP TREE IS PLANTED, THE ROOT COLLAR/ROOT FLARE SHALL BE EVEN OR SLIGHTLY ABOVE FINISHED GRADE.
- 12. OPEN TOP OF BURLAP ON BB MATERIALS; REMOVE POT ON POTTED PLANTS; SPLIT AND BREAK APART
- 13. PRUNE PLANTS AS NECESSARY PER STANDARD NURSERY PRACTICE AND TO CORRECT POOR BRANCHING OF EXISTING AND PROPOSED TREES.
- 14. WRAP ALL SMOOTH-BARKED TREES FASTEN TOP AND BOTTOM. REMOVE BY APRIL 1ST.
- 15. STAKING OF TREES AS REQUIRED; REPOSITION, PLUMB AND STAKE IF NOT PLUMB AFTER ONE YEAR.

- 16. TOPSOIL SHALL BE LOCAL FERTILE AGRICULTURAL SOIL FREE OF SUBSOILS, ROCKS LARGER THAN ONE INCH, CLAYS, PLANTS, WEEDS, ROOTS AND OTHER IMPURITIES. PH VALUE TO BE BETWEEN 5.4 AND 7.0. REMOVE DEBRIS AND WEEDS FROM SUBSOIL. MINIMUM 4" DEPTH TOPSOIL FOR ALL LAWN GRASS AREAS AND 12" DEPTH TOPSOIL FOR TREES, SHRUBS AND PERENNIALS. LIGHTLY COMPACT TOPSOIL AFTER PLACEMENT AND PROHIBIT CONSTRUCTION TRAFFIC FROM AREAS WITH TOPSOIL.
- 17. THE NEED FOR SOIL AMENDMENTS SHALL BE DETERMINED UPON SITE SOIL CONDITIONS PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR THE NEED OF ANY SOIL AMENDMENTS.

18. MULCH TO BE AT ALL TREE, SHRUB, PERENNIAL, AND MAINTENANCE AREAS. TREE PLANTINGS SHALL HAVE 4" DEPTH OF DOUBLE SHREDDED HARDWOOD MULCH. DOUBLE SHREDDED HARDWOOD MULCH TO BE USED AROUND ALL PLANTS WITHIN TURF AREAS. SHRUB, PERENNIAL AND ORNAMENTAL GRASS BEDS SHALL HAVE ROCK MULCH. ROCK MULCH TO BE BULK RIVER ROCK COLORADO, 1-2" DIAMETER, AT MINIMUM 3" DEPTH, OR APPROVED EQUAL, MULCH TO BE FREE OF DELETERIOUS MATERIAL AND NATURAL IN COLOR (DYE-FREE), OR APPROVED EQUAL. APPLY PRE-EMERGENT HERBICIDE PRIOR TO MULCH PLACEMENT PER MANUFACTURER RECOMMENDATIONS. USE PREEN OR PRE-APPROVED EQUAL. MULCH AND FABRIC TO BE APPROVED BY OWNER PRIOR TO INSTALLATION. MULCH TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).

EDGER

19. EDGING TO BE COMMERCIAL GRADE COL-MET (OR EQUAL) STEEL EDGING; 3/16" THICK x 5" TALL, COLOR BLACK, OR SPADED EDGE, AS INDICATED. STEEL EDGING SHALL BE PLACED WITH SMOOTH CURVES AND STAKED WITH METAL SPIKES NO GREATER THAN 4 FOOT ON CENTER WITH TOP OF EDGER AT GRADE, FOR MOWERS TO CUT ABOVE WITHOUT DAMAGE. UTILIZE CURBS AND SIDEWALKS FOR EDGING WHERE POSSIBLE. WHERE EDGING TERMINATES AT A SIDEWALK, BEVEL OR RECESS ENDS TO PREVENT TRIP HAZARD. SPADED EDGE TO PROVIDE V-SHAPED DEPTH AND WIDTH TO CREATE SEPARATION BETWEEN MULCH AND GRASS. INDIVIDUAL TREE, SHRUB, OR RAIN-GARDEN BEDS TO BE SPADED EDGE, UNLESS NOTED OTHERWISE. EDGING TO MATCH EXISTING CONDITIONS (WHERE APPLICABLE).

20. ALL DISTURBED AREAS TO BE SODDED OR SEEDED, UNLESS OTHERWISE NOTED. SOD TO BE STANDARD MISSOURI GROWN AND HARDY BLUEGRASS MIX, FREE OF LAWN WEEDS. ALL TOPSOIL AREAS TO BE RAKED TO REMOVE DEBRIS AND ENSURE DRAINAGE. SLOPES OF 3:1 OR GREATER SHALL BE STAKED. SEED AS SPECIFIED, PER MODOT SPECIFICATIONS AND SUPPLIER/MANUFACTURER RECOMMENDATIONS. IF NOT INDICATED ON LANDSCAPE PLAN, SEE EROSION CONTROL PLAN.

<u>IRRIGATION</u>

21. PROVIDE NEW IRRIGATION SYSTEM, OR MODIFY EXISTING IRRIGATION PER OWNERS DIRECTION TO ALL PLANTED AREAS ON SITE. IRRIGATION SYSTEM TO BE DESIGN/BUILD BY LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR TO PROVIDE SHOP DRAWINGS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE OPERATION MANUALS, AS-BUILT PLANS, AND NORMAL PROGRAMMING. SYSTEM SHALL BE WINTERIZED AND HAVE SPRING STARTUP DURING FIRST YEAR OF OPERATION. SYSTEM SHALL HAVE ONE-YEAR WARRANTY ON ALL PARTS AND LABOR. ALL INFORMATION ABOUT INSTALLATION AND SCHEDULING CAN BE OBTAINED FROM THE GENERAL CONTRACTOR. SYSTEM SHALL INCLUDE A RAIN SENSOR AND APPROPRIATE TECHNOLOGY.

- 22. PROVIDE NECESSARY WATERING OF PLANT MATERIALS UNTIL THE PLANT IS FULLY ESTABLISHED OR IRRIGATION SYSTEM IS OPERATIONAL. OWNER WILL NOT PROVIDE WATER FOR CONTRACTOR.
- 23. REPAIR, REPLACE, OR PROVIDE SOD/SEED AS REQUIRED FOR ANY ROADWAY BOULEVARD AREAS ADJACENT TO THE SITE DISTURBED DURING CONSTRUCTION.

- 24. REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO OWNER.
- MAINTAIN TREES, SHRUBS, SEED AND OTHER PLANTS UNTIL PROJECT COMPLETION, BUT IN NO CASE, LESS THAN FOLLOWING PERIOD; 1 YEAR AFTER PROJECT COMPLETION. MAINTAIN TREES, SHRUBS, SEED 25. MAINTAIN TREES, SHRUBS, SEED AND OTHER PLANTS UNTIL PROJECT COMPLETION, BUT IN NO CASE, AND OTHER PLANTS BY PRUNING, CULTIVATING, AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS. TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. RESTORE OR REPLACE DAMAGED WRAPPINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. REPLENISH MULCH TO THE REQUIRED DEPTH. MAINTAIN LAWNS FOR 60 DAYS AFTER INSTALLING SOD INCLUDING MOWING WHEN SOD RECITES 4" IN HEIGHT. WEED PLANTING BEDS AND MULCH SAUCERS AT MINIMUM ONCE A MONTH DURING THE GROWING SEASON. PROVIDE A MONTHLY REPORT TO THE OWNER ON WEEDING AND OTHER MAINTENANCE RESPONSIBILITIES.

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