





# CIVIL SPECIFICATIONS

## DIVISION 31 EARTH WORK

### 31 10 00 SITE CLEARING (DEMOLITION)

- A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- B. CONTRACTOR TO FIELD TELEVIS ALL EXISTING SANITARY AND STORM LATERALS THAT ARE SCHEDULED TO BE RE-USED AND/OR CONNECTED TO ON SITE AT TIME OF DEMOLITION. THE TELEVISION SHALL BE COMPLETED USING THE EXISTING LATERALS ARE FREE OF OBSTRUCTIONS AND IN SOUND STRUCTURAL CONDITION. TELEVISION OF THESE LATERAL(S) SHOULD BE COMPLETED AT BEGINNING OF CONSTRUCTION AND DESIGN ENGINEER SHALL BE NOTIFIED OF ANY PIPE OBSTRUCTIONS AND/OR STRUCTURAL DEFICIENCIES IMMEDIATELY AFTER COMPLETION OF FIELD TELEVISION.
- C. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
- D. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- E. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

### 31 20 00 EARTH MOVING

- A. CONTRACTOR SHALL CALL DIGGER'S HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
- B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE RESPECTIVE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.
- C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY "SOFT" POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.
- D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS, UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY.
- E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDARD PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.
1. UNDER FOUNDATIONS - SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT.
  2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB - PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
  3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE - PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
  4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
  5. UNDER WALKWAYS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
  6. UNDER LAWN OR UNPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 85 PERCENT.
- G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS. CONTRACTOR SHALL PROVIDE DOCUMENTATION OF PASSING DENSITY TESTING AND PROVE-ROLLING TO ENGINEER UPON COMPLETION. IT IS SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. THE GEOTECHNICAL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. THE GEOTECHNICAL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS, PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING.
- H. WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
- I. THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS. SITE EARTHWORK SHALL BE GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN.

### 31 30 00 EROSION CONTROL

- A. THE GRADING PLAN REFLECTS LESS THAN 1 ACRE OF DISTURBED AREA. THE SITE IS THEREFORE EXEMPT FROM WISCONSIN DEPARTMENT OF NATURAL RESOURCES NR 216 NOTICE OF INTENT REQUIREMENTS. THE DESIGN ENGINEER SHALL PREPARE AN EROSION CONTROL PLAN TO MEET NR 151.105 CONSTRUCTION SITE PERFORMANCE STANDARDS FOR NON-PERMITTED SITES.
- B. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151. THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS. TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES THAT WILL EXIST FOR MORE THAN 7 DAYS. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1056 (CURRENT EDITION).
  2. STONE TRACKING PADS AND TRACKOUT CONTROL PRACTICES SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED FOR THE STONE TRACKING PAD SHALL BE 3/8" TO 3 INCH CLEAR OR WASHED STONE AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC AS NEEDED. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. OTHER TRACKOUT CONTROL PRACTICES INCLUDING STABILIZED WORK SURFACES, MANUFACTURED TRACKOUT CONTROL DEVICES, TIRE WASHING, AND STREET/PAVEMENT CLEANING SHALL BE IMPLEMENTED AS NECESSARY TO MITIGATE THE TRACKOUT OF SEDIMENT OFFSITE. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1057 (CURRENT EDITION).
  3. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060 (CURRENT EDITION).
  4. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068 (CURRENT EDITION).
  5. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION ACTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.
  6. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
  7. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
  8. IF SITE Dewatering IS REQUIRED FOR PROPOSED CONSTRUCTION ACTIVITIES, ALL SEDIMENT LADEN WATER GENERATED DURING THE Dewatering PROCESS SHALL BE TREATED TO REMOVE SEDIMENT PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE. FOLLOW ALL PROCEDURES FOUND IN TECHNICAL STANDARD 1061.
  9. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A RAIN EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. DUST CONTROL REQUIREMENTS SHALL BE FOLLOWED PER WISCONSIN DNR TECHNICAL STANDARD 1066 (CURRENT EDITION). FLUSHING SHALL NOT BE ALLOWED.
- C. ALL EROSION CONTROL DEVICES SHALL AT A MINIMUM BE INSPECTED EVERY 7 CALENDAR DAYS OR EVERY 14 DAYS AND WITHIN 24 HOURS OF THE END OF A RAIN EVENT OF 0.5" OR MORE. MAINTENANCE SHALL BE PERFORMED PER WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151 STORMWATER MANAGEMENT TECHNICAL STANDARD REQUIREMENTS.
- D. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
- E. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.

## DIVISION 32 EXTERIOR IMPROVEMENTS

### 32 10 00 AGGREGATE BASE & ASPHALT PAVEMENT

- A. CONTRACTOR TO PROVIDE COMPACTED AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT WHERE INDICATED ON THE PLANS. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. PROVIDE HOT MIX ASPHALT MIXTURE TYPES PER SECTION 460 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. CONTRACTOR SHALL OBTAIN AND REVIEW SOILS REPORT FOR RECOMMENDATIONS FOR GEO-GRID / GEOTEXTILE BELOW CRUSHED AGGREGATE (IF APPLICABLE). CONTRACTOR TO PROVIDE AGGREGATE BASE AND HOT MIX ASPHALT PAVEMENT TYPES AND DEPTHS AS INDICATED BELOW.
- |   |  |
|---|--|
| STANDARD ASPHALT PAVING SECTION           | HEAVY ASPHALT PAVING SECTION             |
| 1-1/2" SURFACE COURSE (5 LT 58-285)       | 1-1/2" SURFACE COURSE (5 LT 58-285)      |
| (WISDOT 455.2.5 TACK COAT (STAGED PAVING) | WISDOT 455.2.5 TACK COAT (STAGED PAVING) |
| 2" BINDER COURSE (4 LT 58-285)            | 2-1/2" BINDER COURSE (4 LT 58-285)       |
| 6" OF 1-1/4" CRUSHED AGGREGATE            | 8" OF 1-1/4" CRUSHED AGGREGATE           |
- B. CONTRACTOR TO COMPACT THE AGGREGATE BASE AND ASPHALT PAVEMENT COURSE TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL ASPHALT PAVEMENT AREAS SHALL BE PAVED TO WITHIN 0.05" OF DESIGN SURFACE GRADES WITH POSITIVE DRAINAGE BEING MAINTAINED IN ACCORDANCE WITH DESIGN PLANS. A MINIMUM OF 1% SLOPE SHALL BE MAINTAINED IN ALL ASPHALT PAVEMENT AREA.
- C. HOT MIX ASPHALT CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF GEOTECHNICAL REPORT OR CONSTRUCTION DOCUMENTS.
- D. SEE SHEET C1-18 FOR STRIPING PLAN OF PAVEMENT AREAS.

### 32 20 00 CONCRETE AND AGGREGATE BASE

- A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS.
- B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 308R-08 & ACI 318-08.
- D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:
1. SIDEWALK CONCRETE - 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONSTRUCTION JOINTS SHALL CONSIST OF 1/8" WIDE BY 1" DEEP TOGGLED JOINT WHERE INDICATED ON THE PLANS.
  2. DUMPSITER PAD/APRON CONCRETE - 8" OF CONCRETE OVER 6" OF AGGREGATE BASE.
    - a. CONCRETE SHALL BE STEEL REINFORCED WITH THE FOLLOWING AND PLACED IN THE UPPER 1/3 TO 1/2 OF THE SLAB:
      - 1) TIE BARS AT ALL CONSTRUCTION JOINTS OF THE CONCRETE. TIE BARS SHALL BE #4 REBAR 30" LONG PLACED AT 30" O.C.
    - b. DUMPSITER PAD CONCRETE JOINTING SHALL BE AS FOLLOWS:
      - 1) CONTRACTION SAWCUT JOINT - CONTRACTOR SHALL PROVIDE A SAWCUT JOINT AT MAXIMUM SPACING OF 15' ON CENTER. SAWCUT SHALL BE 2" IN DEPTH.
      - 2) TYPICAL POUR CONTROL JOINT - POUR CONTROL JOINT SHALL BE PROVIDED WITH 1-1/4" DIAMETER BY 20" LONG SMOOTH DOWEL PLACED AT 12" O.C. ONE HALF OF THE DOWEL SHALL BE GREASED. GREENTREK 9" SPEED DOWEL TUBES SHALL BE USED.
- E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94
1. STRENGTH TO BE MINIMUM OF 4,500 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
  2. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45.
  3. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK.
  4. SLUMP SHALL BE 2.5" OR LESS FOR SUP-FORM CURBED CURB AND GUTTER.
  5. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SUP-FORMED CURB AND GUTTER.
  6. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
  7. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.
- F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH CONTRACTOR REQUIRING PAD. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W/1.4 X W/1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 5.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. CONCRETE SHALL BE PROVIDED ON 6" OF 3/4" CRUSHED AGGREGATE BASE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
- G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05" OF DESIGN SURFACE AND FLOWLINE GRADIES ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS.
- H. CONCRETE FLAT WORK SHALL HAVE CONSTRUCTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURB AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN.). IF CONCRETE PAVEMENT IS ADJACENT TO CONCRETE CURB, JOINTING IN THE PAVEMENT AND CURB SHALL ALIGN. ALL EXTERIOR CONCRETE SHALL HAVE A BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE MASONRY UNITS.
- I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" FOR UP TO #5 BARS AND 2" FOR #6 TO #10 BARS IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 48 DIAMETERS FOR UP TO #5 BARS, 60 DIAMETERS FOR #7 TO #9 BARS, 68 DIAMETERS FOR #10 BARS OR AS NOTED ON THE DRAWINGS AND EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND SHALL BE FREE OF GREASE/OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 1064. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.
- J. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM SLUMP TESTING ACCORDING TO ASTM C 143. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
- K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELING.
- L. LIMIT MAXIMUM WATER-CEMENTITIOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DICING SALTS TO 0.45.
- M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH ON SITE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.

### 32 30 00 LANDSCAPING AND SITE STABILIZATION

- A. TOPSOIL: CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS, OTHER THAN A LANDSCAPE ISLANDS SHALL BE PROVIDED WITH A MINIMUM OF 10" OF TOPSOIL. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. EXCAVATOR SHALL BE RESPONSIBLE FOR ROUGH PLACEMENT OF TOPSOIL TO WITHIN 1" OF FINAL GRADE PRIOR TO LANDSCAPER FINAL GRADING. LANDSCAPER TO PROVIDE PULVERIZING AND FINAL GRADING OF TOPSOIL. PROVIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 8, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH SHALL ALSO BE REMOVED.
- TOPSOIL INSTALLATION: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE ANY STICKS, ROCKS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.
- B. SEED: LAWNS
1. PERMANENT LAWN AREAS SHALL BE SEEDD WITH THE FOLLOWING MIXTURE: 65% KENTUCKY BLUEGRASS BLEND (2.0-2.6 LBS./1,000 S.F.), 20% PERENNIAL RYEGRASS (0.6-0.8 LBS./1,000 S.F.), 15% FINE FESCUE (0.4-0.6 LBS./1,000 S.F.), STRAW AND MULCH SHALL BE LAID AT 100LBS/1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. ALL SITE DISTURBED AREAS NOT DESIGNATED FOR OTHER LANDSCAPING AND SITE STABILIZATION METHODS SHALL BE SEEDD AS PERMANENT LAWN. NO BARE TOPSOIL SHALL BE LEFT ON SITE. FOLLOW PROCEDURES FOUND IN WDN TECHNICAL STANDARDS 1058 & 1059.
  2. ALL PERMANENT AND TEMPORARY STORM WATER CONVEYANCE SWALE BOTTOMS AND SIDE SLOPES SHALL BE SEEDD WITH THE FOLLOWING MIXTURE: 45% KENTUCKY BLUEGRASS (0.60 LBS./1,000 S.F.), 40% CREEPING REE FESCUE (0.50 LBS./1,000 S.F.), AND 15% PERENNIAL RYEGRASS (0.20 LBS./1,000 S.F.). FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDN TECHNICAL STANDARDS 1058 & 1059.
  3. ALL TEMPORARY SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE: 100% RYEGRASS AT 19 LBS./1,000 S.F. STRAW AND MULCH SHALL BE LAID AT 100 LBS./1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDN TECHNICAL STANDARDS 1058 & 1059.
- C. SEEDD LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS SHOULD BE ESTABLISHED FREE OF WEEDS AND SURFACE IRREGULARITIES. LAWN COVERAGE SHOULD EXCEED 90% AND BARE SPOTS SHOULD NOT EXCEED 75". CONTRACTOR SHOULD REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.
- D. EROSION MATTING:
1. CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER. LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.
  2. CONTRACTOR TO PROVIDE EROSION MATTING (NORTH AMERICAN GREEN C125) OR EQUIVALENT IN ALL SWALE BOTTOMS AND SIDE SLOPES AS REQUIRED. LAWN SEED SHALL BE PLACED BELOW MATTING IN ACCORDANCE WITH SEEDING REQUIREMENTS AND MANUFACTURER SPECIFICATIONS.
- E. TREES AND SHRUBS: FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, AND HEALTHY LOOKING STOCK. STOCK SHOULD ALSO BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. SEE THE LANDSCAPE PLAN FOR SPECIFIC SPECIE TYPE, SIZE, AND LOCATION.
- F. TREE AND SHRUB INSTALLATION: EXCAVATE CIRCULAR PITS WITH SIDES SLOPED INWARD. TRIM BASE LEAVING CENTER AREA RAISED SLIGHTLY TO SUPPORT ROOT BALL. EXCAVATE PIT APPROXIMATELY THREE TIMES AS WIDE AS THE ROOT BALL DIAMETER. SET TREES AND SHRUBS PLUMB AND IN CENTER OF PIT WITH TOP OF BALL 1" ABOVE ADJACENT FINISHED GRADES. PLACE PLANTING SOIL MIX AROUND ROOT BALL IN LAYERS AND TAMP TO SETTLE MIX. WATER ALL PLANTS THOROUGHLY. PROVIDE TEMPORARY STAKING FOR TREES AS REQUIRED.
- G. TREE AND SHRUB MAINTENANCE/WARRANTY: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. MAINTENANCE TO INCLUDE REGULAR WATERING AS REQUIRED FOR SUCCESSFUL PLANT ESTABLISHMENT. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL TREES, SHRUBS, AND PERENNIALS.
- H. RIVER ROCK: PROVIDE 3" MINIMUM THICK BLANKET OF 1.5" MINIMUM TO 2.5" MAXIMUM RIVER ROCK AT ALL PLANTING AREAS INDICATED ON THE LANDSCAPE PLAN. INSTALL OVER NON-WOVEN WEED BARRIER FABRIC. COLOR BY OWNER.
- I. PLASTIC EDGING: INSTALL VALLEY VIEW INDUSTRIES BLACK DIAMOND LAWN EDGING TO SEPARATE ALL PLANTING BEDS FROM LAWN AREAS. EDGING TO BE 5.5" TALL WITH METAL STAKES INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

## DIVISION 33 UTILITIES

### 33 10 00 SITE UTILITIES

- A. CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES ON SITE. CONTRACTOR TO VERIFY PIPE LOCATIONS, SIZES, AND DEPTHS AT POINT OF PROPOSED CONNECTIONS AND VERIFY PROPOSED UTILITY ROUTES ARE CLEAR (PER CODE) OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS PRIOR TO CONSTRUCTION. COSTS INCURRED FOR FAILURE TO DO SO SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- B. CONTRACTOR TO FIELD TELEVIS ALL EXISTING SANITARY AND STORM LATERALS THAT ARE SCHEDULED TO BE RE-USED AND/OR CONNECTED TO ON SITE. THE TELEVISION SHALL BE COMPLETED TO ENSURE THE EXISTING LATERAL(S) ARE FREE OF OBSTRUCTIONS AND IN SOUND STRUCTURAL CONDITION. TELEVISION OF THESE LATERAL(S) SHOULD BE COMPLETED AT BEGINNING OF CONSTRUCTION AND DESIGN ENGINEER SHALL BE NOTIFIED OF ANY PIPE OBSTRUCTIONS AND/OR STRUCTURAL DEFICIENCIES IMMEDIATELY AFTER COMPLETION OF FIELD TELEVISION.
- C. ALL SANITARY PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A- ALLOWABLE PIPE MATERIAL SCHEDULE. ALL SANITARY PIPE BELOW PROPOSED & FUTURE BUILDINGS SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A- ALLOWABLE PIPE MATERIAL. INSULATION SHALL BE PROVIDED PER STATE PLUMBING CODES AS NECESSARY BASED ON PROPOSED DEPTH PER PLANS. ALL PROPOSED CPVC PROCESS PIPING SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A- ALLOWABLE PIPE MATERIAL SCHEDULE.
- D. CLEANOUTS SHALL BE PROVIDED FOR THE SANITARY & STORM SERVICES AT LOCATIONS INDICATED ON THE UTILITY PLAN. THE CLEANOUT SHALL CONSIST OF A COMBINATION WYE FITTING IN LINE WITH THE SANITARY/STORM SERVICE WITH THE CLEANOUT LEG OF THE COMBINATION WYE FACING STRAIGHT UP. THE CLEANOUT SHALL CONSIST OF A (4" OR 6") VERTICAL PVC PIPE WITH A WATER TIGHT REMOVABLE CLEANOUT PLUG. AN 8" PVC FROST SLEEVE SHALL BE PROVIDED. THE BOTTOM OF THE FROST SLEEVE SHALL TERMINATE 12" ABOVE THE TOP OF THE SANITARY LATERAL OR AT LEAST 6" BELOW THE PREDICTED FROST DEPTH, WHICHEVER IS SHALLOWER. THE CLEANOUT SHALL EXTEND JUST ABOVE THE SURFACE GRADE IN LAWN OR LANDSCAPE AREAS WITH THE FROST SLEEVE TERMINATING AT THE GRADE SURFACE. THE CLEANOUT SHALL EXTEND TO 4 INCHES BELOW SURFACE GRADE IN PAVED SURFACES WITH A ZURN (Z-1474-N) HEAVY DUTY CLEANOUT HOUSING PLACED OVER THE TOP OF THE CLEANOUT FLUSH WITH THE SURFACE GRADE. IN PAVED SURFACES, THE FROST SLEEVE SHALL TERMINATE IN A CONCRETE PAD AT LEAST 6" THICK AND EXTENDING AT LEAST 9" FROM THE SLEEVE ON ALL SIDES, SLOPING AWAY FROM THE SLEEVE. THE CLEANOUT HOUSING SHALL BE CONSTRUCTED PER MANUFACTURERS REQUIREMENTS.
- E. ALL PROPOSED WATER PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A- ALLOWABLE PIPE MATERIAL SCHEDULE. 6" MINIMUM COVER SHALL BE PROVIDED OVER ALL WATER PIPING UNLESS OTHERWISE SPECIFIED.
- F. ALL PROPOSED STORM PIPE SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A- ALLOWABLE PIPE MATERIAL SCHEDULE. ALL PROPOSED STORM PIPE BELOW BUILDINGS SHALL BE IN ACCORDANCE WITH MATERIALS SPECIFIED IN TABLE A- ALLOWABLE PIPE MATERIAL SCHEDULE. SEE UTILITY PLANS FOR ALL STORM PIPE MATERIAL TYPES TO BE USED. PIPE SHALL BE PLACED MIN. 8" HORIZONTALLY FROM FOUNDATION WALLS.
- G. SANITARY, STORM, AND WATER UTILITY PIPE INVERTS SHALL BE CONSTRUCTED WITHIN 0.10' OF DESIGN INVERT ELEVATIONS ASSUMING PIPE SLOPE AND SEPARATION IS MAINTAINED PER THE UTILITY DESIGN PLANS AND STATE REQUIREMENTS.
- H. SITE UTILITY CONTRACTOR SHALL RUN SANITARY SERVICE TO A POINT WHICH IS A MAXIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN STORM SEWER FOR INTERNALLY DRAINED BUILDINGS TO A POINT WHICH IS A MAXIMUM OF 5' FROM THE EXTERIOR WALL OF THE FOUNDATION. SITE UTILITY CONTRACTOR SHALL RUN DOWNSPOUT LEADS TO BUILDING FOUNDATION AND UP 6" ABOVE SURFACE GRADE FOR CONNECTION TO DOWNSPOUT FOR ALL DOWNSPOUT TO RISER (DSR) CONNECTIONS. DOWNSPOUTS TO GRADE (DSG) SHALL BE PROVIDED WITH SLASH BLOCKS AT THE DISCHARGE LOCATION. ALL DOWNSPOUT LOCATIONS SHALL BE VERIFIED WITH ARCHITECTURAL PLANS AND DOWNSPOUT CONTRACTOR/GC PRIOR TO INSTALLATION OF DOWNSPOUT LEADS. DOWNSPOUT LEADS SHALL NOT UNDERMINE BUILDING FOUNDATIONS. SITE UTILITY CONTRACTOR SHALL RUN WATER SERVICE TO A POINT WITHIN THE FOUNDATION SPECIFIED BY THE PLUMBING PLANS. CONTRACTOR TO CUT AND CAP WATER SERVICE 12" ABOVE FINISHED FLOOR ELEVATION.
- I. ALL UTILITIES SHALL BE INSTALLED WITH PLASTIC COATED TRACER WIRE (10 TO 14 GAUGE SOLID COPPER, OR COPPER COATED STEEL WIRE). PLASTIC WIRE MAY BE TAPED TO PLASTIC WATER OR SEWER PIPE. IF ATTACHED, THE TRACER WIRE SHALL BE SECURED EVERY 6 TO 30 FEET AND AT ALL BENDS. TRACER WIRE SHALL HAVE ACCESS POINTS AT LEAST EVERY 300 FEET. TRACER WIRE SHALL TERMINATE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS AT GRADE OR IN TERMINATION BOX PER LOCAL/STATE REQUIREMENTS.
- J. ALL UTILITIES SHALL BE INSTALLED PER STATE, LOCAL, AND INDUSTRY STANDARDS. WATER, SANITARY, AND STORM SEWER SHALL BE INSTALLED PER "STANDARD SPECIFICATION FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN". THE EXCEL ENGINEERING DESIGN ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING STATE PLUMBING REVIEW APPROVAL (IF REQUIRED). THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED TO INSTALL WATER, SANITARY AND STORM SEWER.
- K. SEE PLANS FOR ALL OTHER UTILITY SPECIFICATIONS AND DETAILS.

CONSTRUCTION SEQUENCE	
PHASE	TYPE OF ACTION
1. PRE-CONSTRUCTION ACTION	1. CONTRACTOR TO CALL DIGGERS HOTLINE AT A MINIMUM OF 3 DAYS PRIOR TO CONSTRUCTION.
	2. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF DISCREPANCIES.
	3. PLACE ALL SILT FENCE AND INLET PROTECTION.
	4. CONSTRUCT TRACKING STONE ENTRANCES AND ANY TEMPORARY CONSTRUCTION ROADWAYS AS NEEDED.
	5. CONSTRUCT PERMANENT STORMWATER CONVEYANCE SYSTEMS.
	6. CONSTRUCT TEMPORARY STORMWATER CONVEYANCE SYSTEMS AS NEEDED.
	7. STABILIZE ALL TEMPORARY AND PERMANENT EROSION CONTROL AND STORMWATER CONVEYANCE SYSTEMS BEFORE TOPSOIL CAN BE STRIPPED.
2. CONSTRUCTION ACTION	1. SITE DEMOLITION AS REQUIRED.
	2. STRIP AND RELOCATE TOPSOIL TO THE DESIGNATED TOPSOIL STOCKPILE. LOCATION BY OWNER. FINAL LOCATION BY CONTRACTOR. PROVIDE PERIMETER SILT FENCE UNTIL STABILIZED.
	3. BEGIN MASS EARTH WORK FOR THE BUILDING PAD AND PAVEMENT AREAS.
	4. CONSTRUCT ANY REMAINING STORMWATER CONVEYANCE SYSTEMS, AND INSTALL ALL OTHER UTILITIES ON SITE.
	5. DIG AND POUR ALL BUILDING FOOTINGS.
	6. PLACE GRAVEL FOR ALL PROPOSED PAVEMENT AREAS, INCLUDING FIRE LANES.
	7. TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS OUTSIDE THE BUILDING AND PROPOSED PAVEMENT AREAS.
	8. CONSTRUCT BUILDING.
	9. PAVE DRIVEWAYS AND PARKING AREAS.
	10. TOPSOIL, SEED, AND MULCH ALL OTHER DISTURBED AREAS.
3. POST CONSTRUCTION ACTION	1. CONTRACTOR TO REMOVE TEMPORARY EROSION CONTROL MEASURES UPON SITE STABILIZATION.

\*\*\*CONTRACTOR TO FOLLOW THE EROSION CONTROL SPECIFICATIONS FOR CONSTRUCTION EROSION CONTROL INSPECTION AND MAINTENANCE.\*\*



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#### PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:  
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66W TOWNE MALL • MADISON, WI 53719

#### PROFESSIONAL SEAL

#### SHEET DATA

SHEET ISSUE AUG. 1, 2025

#### REVISIONS


#### JOB NUMBER

240293100

#### SHEET NUMBER

C0.2

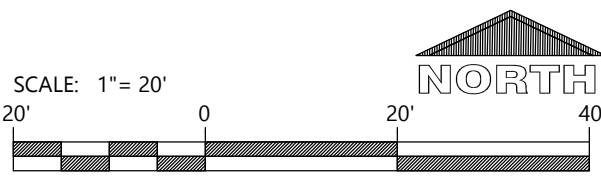




- GENERAL NOTES:**
- SEE SHEET C0.2 FOR PLAN SPECIFICATIONS AND REQUIREMENTS.
  - THE RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND IS SUBJECT TO CHANGE AT ANY TIME PER RECOMMENDATIONS/PLAN OF TRAFFIC ENGINEERING AND CITY ENGINEERING DEPARTMENTS.
  - AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION; NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRUNK OF THE STREET TREE OR WHEN CUTTING ROOTS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY AT (608) 266-4816 PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO ITS ROOT SYSTEM PRIOR TO WORK COMMENCING. TREE PROTECTION SPECIFICATIONS CAN BE FOUND ON THE FOLLOWING WEBSITE: [HTTPS://WWW.CITYOFMADISON.COM/BUSINESS/PW/SPECS/CFM](https://www.cityofmadison.com/business/pw/specs/cfm)

NOTE: SURFACE INDICATIONS OF UTILITIES ON THE SURVEYED PARCEL HAVE BEEN SHOWN. DIGGER'S HOTLINE WAS NOT NOTIFIED AS PART OF THIS SURVEY. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

KEYNOTES	
A	REMOVE SIGN
B	REMOVE LIGHT POLE
C	SAWCUT (AS NECESSARY) AND REMOVE PAVEMENT AND CURB AND GUTTER FOR CONSTRUCTION OF BUILDING AND SITE IMPROVEMENTS
D	SAWCUT (AS NECESSARY) AND REMOVE CURB AND GUTTER
E	SAWCUT (AS NECESSARY) AND REMOVE PAVEMENT FOR UTILITY CONSTRUCTION. REPLACE TO MATCH.
F	REMOVE INLET AND STORM PIPE FOR NEW STORM CONNECTION
G	PROTECT SIGN
H	PROTECT TREE
I	PROTECT UTILITY
J	FIELD VERIFY DEPTH, LOCATION, AND SIZE OF EXISTING SANITARY LATERAL DRAWN PER PREVIOUSLY PROPOSED PLANS. NOTIFY ENGINEER OF ANY DISCREPANCIES.



CIVIL EXISTING SITE AND DEMOLITION PLAN



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PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:  
**7-BREW MADISON**  
66 W TOWNE MALL • MADISON, WI 53719

PROFESSIONAL SEAL

SHEET DATES

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**C1.1**

LEGEND:

HATCH	PAVEMENT SECTION
	STANDARD ASPHALT
	HEAVY DUTY ASPHALT
	SIDEWALK CONCRETE
	DUMPSTER PAD / APRON CONCRETE
	INVERTED CURB & GUTTER

SITE INFORMATION:

EXISTING ZONING: REGIONAL MIXED USE (RMX) WITH WELLHEAD PROTECTION (WP16) AND TRANSIT ORIENTED DEVELOPMENT (TOD) OVERLAY DISTRICTS

PROPOSED ZONING: REGIONAL MIXED USE (RMX) WITH WELLHEAD PROTECTION (WP16) AND TRANSIT ORIENTED DEVELOPMENT (TOD) OVERLAY DISTRICTS

PROPOSED USE: COFFEE SHOP W/ DRIVE THRU

SETBACKS:  
BUILDING: FRONT MIN = 5'  
FRONT MAX = 20'  
SIDE = NONE  
REAR = NONE

PAVEMENT: FRONT = NONE  
SIDE = NONE  
REAR = NONE

PROPOSED BUILDING HEIGHT: 22' (MAX. HEIGHT ALLOWED: 116')

BUILDING AREA REQUIRED IN SETBACK: 30% (302 S.F.)

BUILDING AREA IN SET BACK: 37% (376 S.F.)

PARKING REQUIRED: NO MINIMUM UNLESS WITHIN 300' OF ANOTHER RESTAURANT, TAVERN, OR BREW PUB

PARKING PROVIDED: 4 SPACES (1 H.C. ACCESSIBLE)

HANDICAP STALLS REQUIRED: 1, HANDICAP STALLS PROVIDED: 1

AREA OF REDEVELOPMENT LAND DISTURBANCE: 9,989 S.F.

AREA OF RESURFACING: 15,343 S.F.

EXISTING SITE DATA

	AREA (AC)	AREA (SF)	RATIO
BUILDING FLOOR AREA	0.00	0	0.0%
PAVEMENT (ASP. & CONC.)	0.52	22,673	86.1%
TOTAL IMPERVIOUS	0.52	22,673	86.1%
LANDSCAPE/ OPEN SPACE	0.08	3,662	13.9%
PROJECT SITE	0.60	26,335	100.0%

PROPOSED SITE DATA

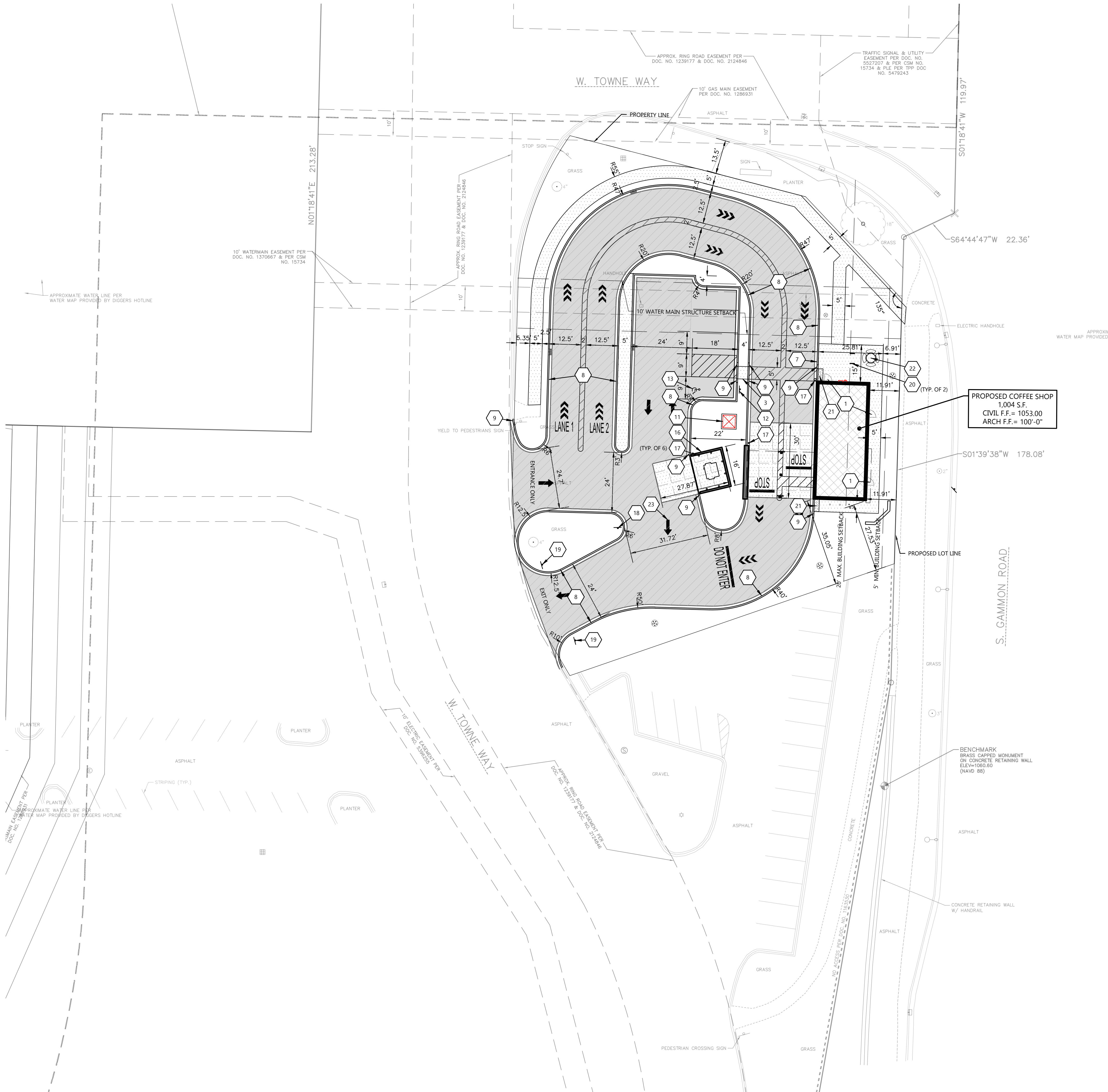
	AREA (AC)	AREA (SF)	RATIO
BUILDING FLOOR AREA	0.02	1,004	3.8%
PAVEMENT (ASP. & CONC.)	0.41	17,697	67.2%
TOTAL IMPERVIOUS	0.43	18,701	71.0%
LANDSCAPE/ OPEN SPACE	0.18	7,634	29.0%
PROJECT SITE	0.60	26,335	100.0%

KEYNOTES

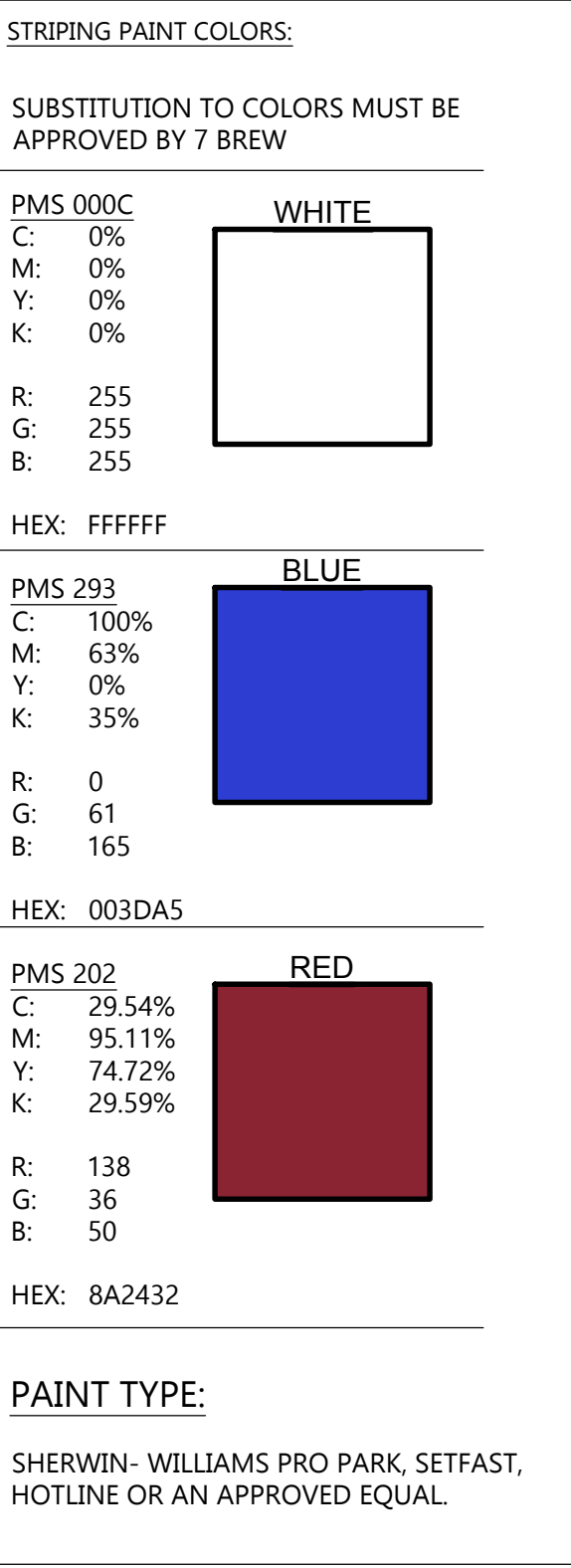
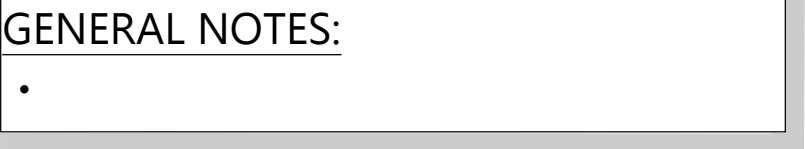
1	CONCRETE STOOP (SEE STRUCTURAL PLANS FOR DETAILS)
3	FLUSH WALK (SEE DETAIL)
7	18" MOUNTABLE CURB & GUTTER (SEE DETAIL)
8	18" CURB & GUTTER (SEE DETAIL)
9	CURB TAPER (SEE DETAIL)
11	CONCRETE TRANSFORMER PAD BY UTILITY SUPPLIER (CONTRACTOR TO VERIFY FINAL LOCATION & DESIGN PRIOR TO CONSTRUCTION)
12	HANDICAP SIGN PER STATE CODE (SEE DETAIL)
13	HANDICAP STALL & STRIPING PER STATE CODES
16	DUMPSTER ENCLOSURE (SEE ARCH PLANS FOR DETAILS)
17	6" CONCRETE BOLLARDS (TYP.)
18	YIELD SIGN
19	DO NOT ENTER SIGN
20	BIKE RACK (TYP.) (TYPE & COLOR BY OWNER)
21	DETECTABLE WARNING PLATE PER STATE CODE
22	PICNIC TABLE (SEE DETAIL)



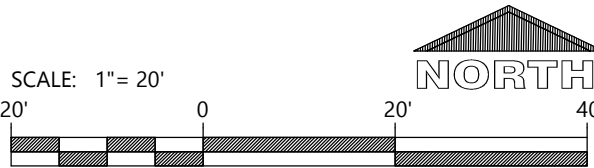
CIVIL SITE PLAN







STRIPING PLAN KEYNOTES	
1	12" TALL RED STOP BAR WITH 48-INCH TALL "STOP" TEXT PAINTED IN RED
2	4" SOLID BLUE PAVEMENT MARKER, TYPICAL MIDLINES SPACED AT 24' O.C.
3	ALIGN 4" SOLID BLUE CROSS WALK MARKER WITH SLIDING DOOR PANEL AT FRONT OPENING
4	SOLID WHITE TRIPLE ARROW PAVEMENT MARKER (SEE DETAIL)
5	WHITE PAINTED ADA ACCESSIBLE PARKING SYMBOL
6	48-INCH TALL "LANE #:" PAINTED IN WHITE
7	SOLID WHITE DIRECTIONAL ARROW PAVEMENT MARKING
8	4" SOLID WHITE PAVEMENT MARKER, TYPICAL



CIVIL STRIPING PLAN



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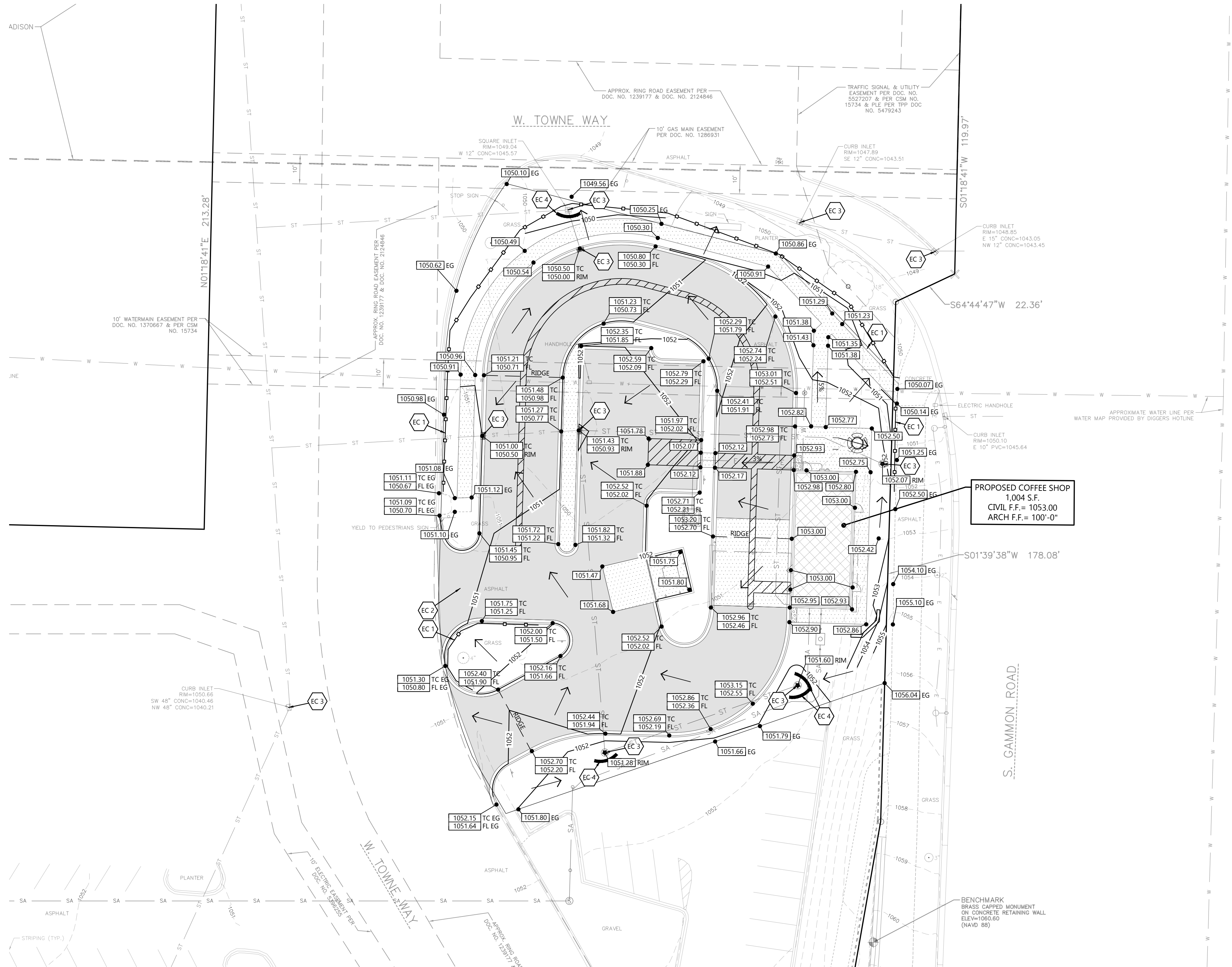
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- GENERAL NOTES:**
- ALL SPOT ELEVATIONS NOTED AS "EG-FV" ARE EXISTING GRADES TO BE FIELD VERIFIED. GRADES BY OTHERS IN COORDINATION WITH ADJACENT LOT REDEVELOPMENT.
  - HANDICAP STALL AND ACCESS AISLES SHALL NOT EXCEED A SLOPE OF 1.50% IN ANY DIRECTION. HANDICAP STALL & ACCESS AISLES SHALL CONFORM TO ADA REQUIREMENTS (CURRENT EDITION).
  - ALL SIDEWALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 1.50% AND RUNNING SLOPE OF 4.50% UNLESS OTHERWISE SPECIFIED.
  - CONTRACTOR SHALL PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT CONSTRUCTION ENTRANCE FOR PROPOSED IMPROVEMENTS AS REQUIRED PER CODE.
  - CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT AS REQUIRED PER CODE. FINAL LOCATION TBD BY CONTRACTOR.
  - CONTRACTOR SHALL PROVIDE TEMPORARY INLET PROTECTION FOR ALL CURB INLETS & CATCH BASINS ONSITE & OFFSITE IMMEDIATELY DOWNSTREAM OF THE PROJECT SITE PER LOCAL CODE.
  - THE RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND IS SUBJECT TO CHANGE AT ANY TIME PER RECOMMENDATIONS/ PLAN OF TRAFFIC ENGINEERING AND CITY ENGINEERING DEPARTMENTS.
  - AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION: NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRUNK OF THE STREET TREE OR WHEN CUTTING ROOTS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY AT (608) 266-4816 PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO ITS ROOT SYSTEM PRIOR TO WORK COMMENCING. TREE PROTECTION SPECIFICATIONS CAN BE FOUND ON THE FOLLOWING WEBSITE: [HTTPS://WWW.CITYOFMADISON.COM/BUSINESS/PW/SPECS.CFM](https://www.cityofmadison.com/business/pw/specs.cfm)
  - COMPLETE WEEKLY SELF-INSPECTIONS OF THE EROSION CONTROL PRACTICES AND POST THESE INSPECTIONS TO THE CITY OF MADISON WEBSITE - AS REQUIRED BY CHAPTER 37 OF THE MADISON GENERAL ORDINANCE.

KEYNOTES	
EC 1	SILT FENCE
EC 2	STABILIZED CONSTRUCTION ENTRANCE
EC 3	INLET PROTECTION
EC 4	SEDIMENT LOG

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CIVIL GRADING AND EROSION CONTROL PLAN





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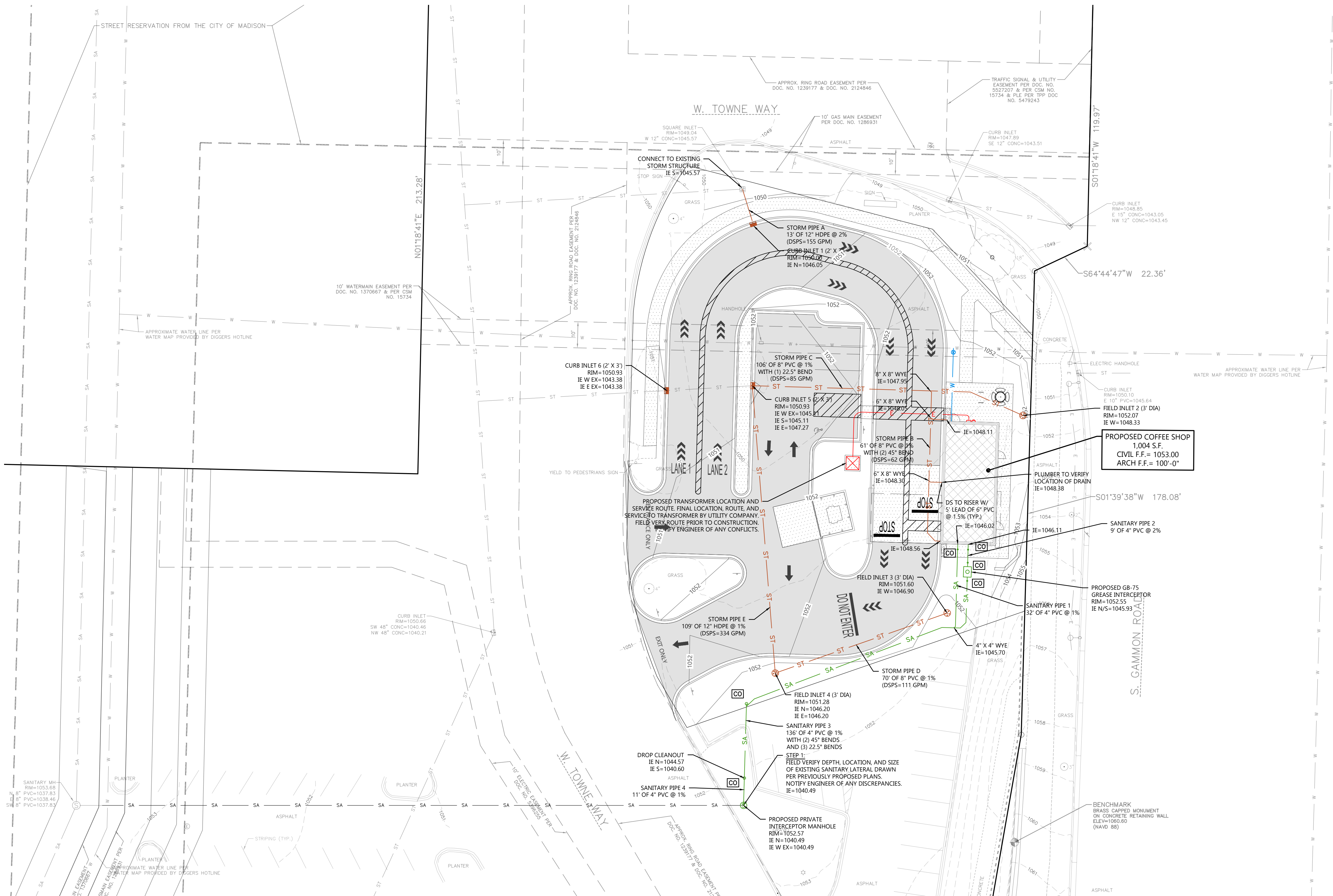
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GENERAL NOTES:

- CONTRACTOR TO PROVIDE GAS SERVICE TO BUILDING. FINAL ROUTE BY UTILITY COMPANY. CONTRACTOR TO COMPLETE PERMITTING, FIELD VERIFY ROUTE, AND NOTIFY ENGINEER OF ANY CONFLICTS.










SCALE: 1"= 20'



CIVIL UTILITY PLAN



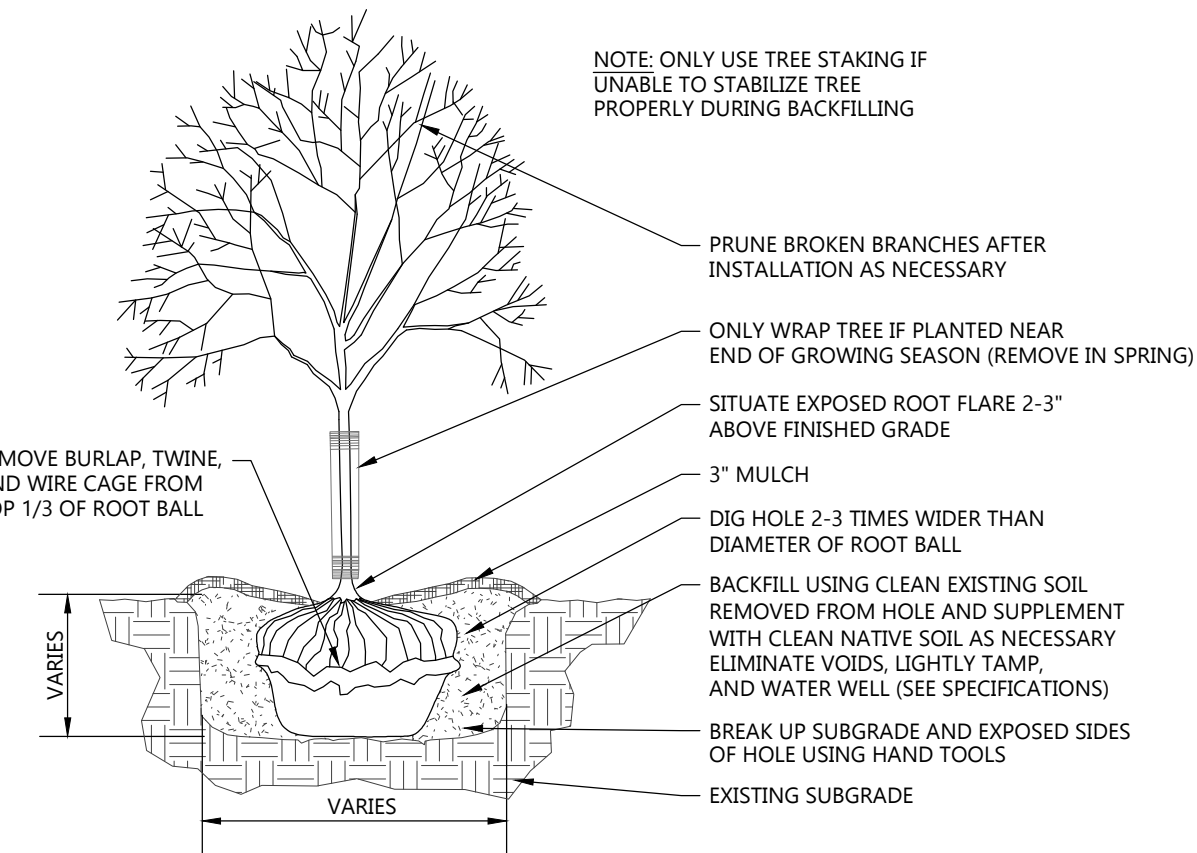


LANDSCAPE PLANT SCHEDULE										
ABBREVIATION	SYMBOL	COMMON NAME	BOTANICAL NAME	PLANTED SIZE	ROOT	HEIGHT	SPREAD	QUANTITY	POINTS	
EXISTING TREES										
		Existing Maple	Acer spp.					2	56	
								POINTS IN THIS SECTION		112
OVERSTORY TREES										
SGM		Sienna Glen Maple	Acer x freemanii 'Sienna'	2 1/2" CAL.	B&B	40-50'	35-40'	1	35	
HKB		Hackberry	Celtis occidentalis	2 1/2" CAL.	B&B	40-60'	40-60'	1	35	
AGG		Autumn Gold Ginkgo	Ginkgo biloba 'Autum Gold'	2 1/2" CAL.	B&B	40-50'	25-30'	1	35	
SKH		Street Keeper Honeylocust	Gleditsia triacanthos 'Draves'	2 1/2" CAL.	B&B	45'	20'	1	35	
RLN		Redmond Linden	Tilia americana 'Redmond'	2 1/2" CAL.	B&B	40-60'	25'	1	35	
								POINTS IN THIS SECTION		175
DECIDUOUS SHRUBS										
KOD		Kodiak Orange Diervilla	Diervilla x 'G2X88544'	18" HT.	CONT.	3-4'	3-4'	8	3	
LQH		Little Quickfire Hydrangea	Hydrangea paniculata 'SMHPLQF'	18" HT.	CONT.	3-5'	3-5'	8	3	
FSA		Fritsch Spirea	Spirea fritschiana	18" HT.	CONT.	2-3'	2-3'	15	3	
								POINTS IN THIS SECTION		93
EVERGREEN SHRUBS										
GVB		Green Velvet Boxwood	Buxus 'Green Velvet'	18" HT.	CONT.	3-4'	4-5'	16	4	
GOJ		Grey Owl Juniper	Juniperus virginiana 'Grey Owl'	18" HT.	CONT.	4-5'	6-8'	6	4	
								POINTS IN THIS SECTION		88
PERENNIALS/ORNAMENTAL GRASSES										
KFG		Karl Foerster Feather Reed Grass	Calamagrostis x acutiflora 'Karl Foerster'	1 GAL.	POT.	4-5'	2'	10	2	
SDO		Stella De Oro Daylily	Hemerocallis 'Stella De Oro'	1 GAL.	POT.	12-18"	16-24"	18	2	
								POINTS IN THIS SECTION		56
								TOTAL POINTS		524

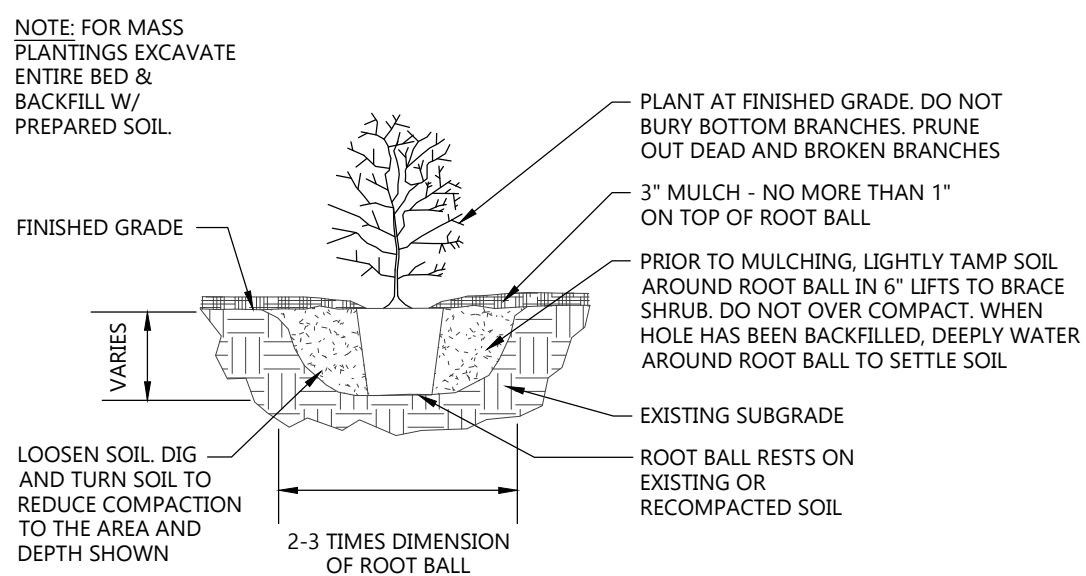
HATCH KEY:	
HATCH	LANDSCAPE MATERIAL
	ORGANIC MULCH
	SEEDED LAWN

LANDSCAPING CALCULATIONS		
ZONE	REQUIRED PLANTS	PLANTS PROVIDED
FRONTAGE	98' OF FRONTAGE AREA OUTSIDE OF SIDEWALKS 1 OVERSTORY TREE AND 5 SHRUBS PER 30' REQUIRED: 3.3 OVERSTORY TREES / 16 SHRUBS	PROVIDED: 3 OVERSTORY TREES / 16 SHRUBS POINTS FOR THIS SECTION: 167
INTERIOR PARKING LOT LANDSCAPE	13,555 SF x 5% = 677.75 SF REQ. LANDSCAPE AREA 1 TREE PER 160 SF OF REQ. LANDSCAPE AREA REQUIRED: 677.75 SF/160 SF = 4.23 TREES	PROVIDED: 4 OVERSTORY TREES (2 EXISTING) / 175 POINTS OF UNDERSTORY LANDSCAPING 891 SF LANDSCAPE AREA POINTS FOR THIS SECTION: 357
LANDSCAPE POINT CALCULATIONS	17,227 SF OF DEVELOPED AREA 5 LANDSCAPE POINTS REQ. PER 300 SF 17,227 SF/300 SF X 5 POINTS REQUIRED: 287.12 POINTS	TOTAL PROVIDED: 524 POINTS

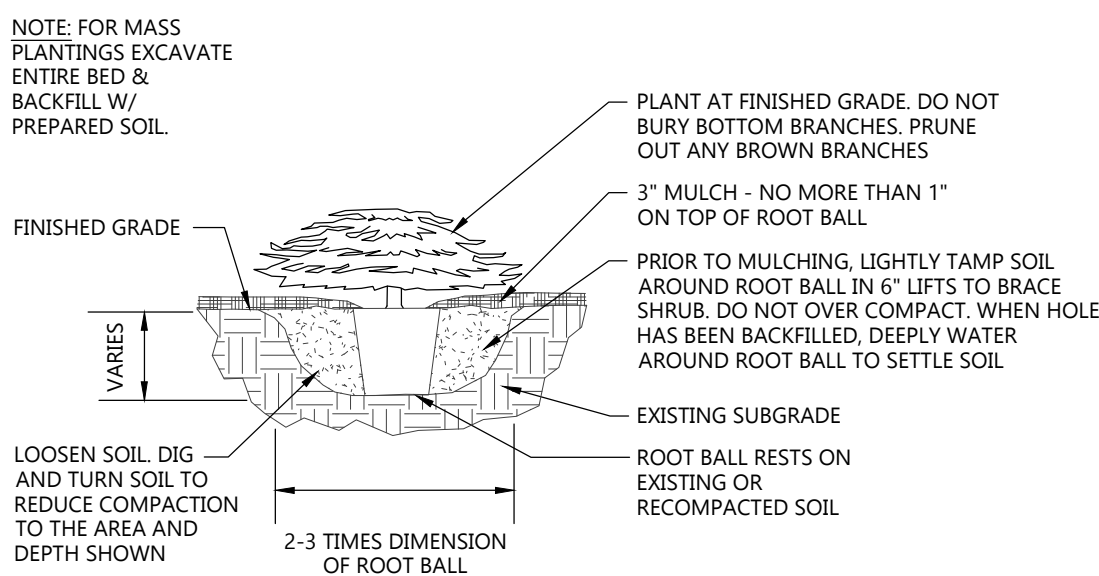
- GENERAL NOTES:**
- PLANTS ARE SHOWN AT 60% MATURITY
  - CANOPY TREE DIVERSITY AT 20% PER SPECIES
  - ALL PROPOSED STREET TREE REMOVALS WITHIN THE RIGHT OF WAY SHALL BE REVIEWED BY CITY FORESTRY BEFORE THE PLAN COMMISSION MEETING. STREET TREE REMOVALS REQUIRE APPROVAL AND A TREE REMOVAL PERMIT ISSUED BY CITY FORESTRY. ANY STREET TREE REMOVALS REQUESTED AFTER THE DEVELOPMENT PLAN IS APPROVED BY THE PLAN COMMISSION OR THE BOARD OF PUBLIC WORKS AND CITY FORESTRY WILL REQUIRE A MINIMUM OF A 72-HOUR REVIEW PERIOD WHICH SHALL INCLUDE THE NOTIFICATION OF THE ALDERPERSON WITHIN WHO'S DISTRICT IS AFFECTED BY THE STREET TREE REMOVAL(S) PRIOR TO A TREE REMOVAL PERMIT BEING ISSUED.
  - AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION: NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRUNK OF THE STREET TREE OR WHEN CUTTING ROOTS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY AT (608) 266-4816 PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO ITS ROOT SYSTEM PRIOR TO WORK COMMENCING. TREE PROTECTION SPECIFICATIONS CAN BE FOUND ON THE FOLLOWING WEBSITE: [HTTPS://WWW.CITYOFMADISON.COM/BUSINESS/PW/SPECS.CFM](https://www.cityofmadison.com/business/pw/specs.cfm)
  - STREET TREE PROTECTION FENCING SHALL BE ERCTED BEFORE THE DEMOLITION, GRADING OR CONSTRUCTION BEGINS. THE FENCE SHALL INCLUDE THE ENTIRE WIDTH OF TERRACE AND, EXTEND AT LEAST 5 FEET ON BOTH SIDES OF THE OUTSIDE EDGE OF THE TREE TRUNK. DO NOT REMOVE THE FENCING TO ALLOW FOR DELIVERIES OR EQUIPMENT ACCESS THROUGH THE TREE PROTECTION ZONE.
  - STREET TREE PRUNING SHALL BE COORDINATED WITH CITY FORESTRY AT A MINIMUM OF TWO WEEKS PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT. CONTACT CITY FORESTRY AT (608)266-4816. ALL PRUNING SHALL FOLLOW THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 - PART 1 STANDARDS FOR PRUNING.



DECIDUOUS TREE PLANTING DETAIL  
NOT TO SCALE



DECIDUOUS SHRUB PLANTING DETAIL  
NOT TO SCALE



EVERGREEN SHRUB PLANTING DETAIL  
NOT TO SCALE



PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:  
**7-BREW MADISON**  
FOND DU LAC, WISCONSIN  
66 W TOWNE MALL • MADISON, WI 53719



PRELIMINARY DATES

AUG. 1, 2025

JOB NUMBER

240293100

SHEET NUMBER

**C1.4**





Always a Better Plan

100 Camelot Drive  
Fond du Lac, WI 54935  
920-926-9800  
excelengineer.com

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:  
**7-BREW MADISON**  
66 W TOWNE MALL • MADISON, WI 53719

PROFESSIONAL SEAL

SHEET DATES

SHEET ISSUE AUG. 1, 2025

REVISIONS

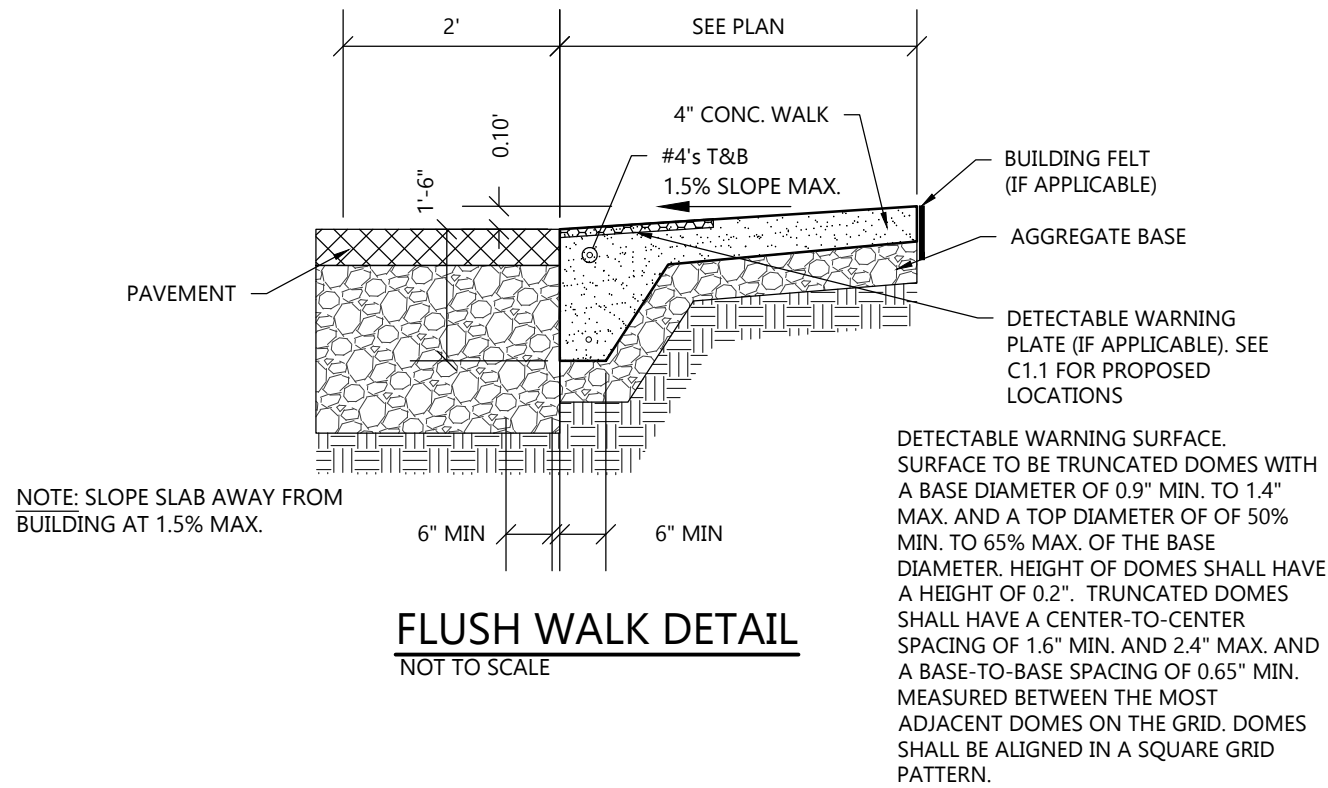

JOB NUMBER

240293100

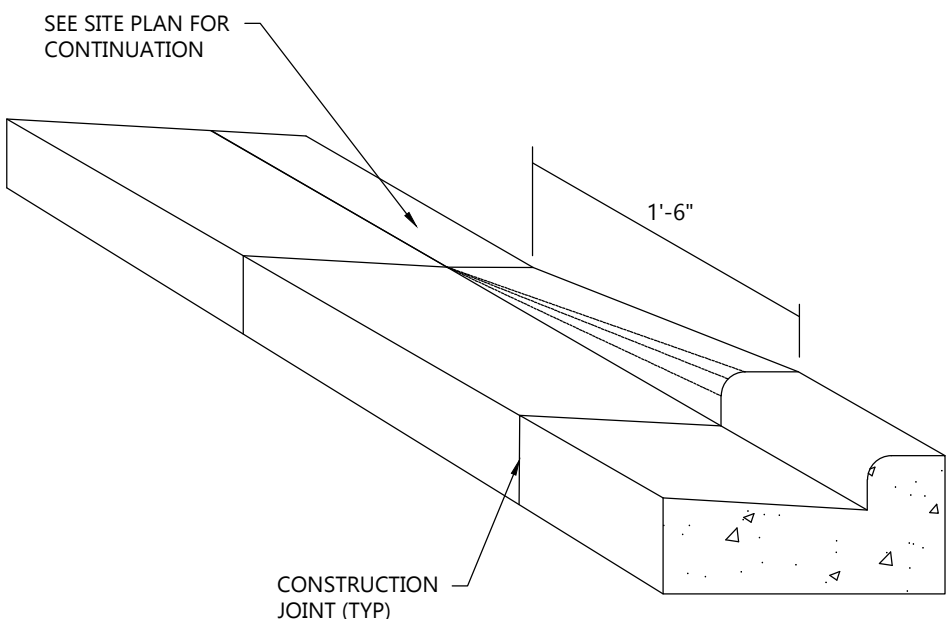
SHEET NUMBER

C2.0

CIVIL DETAILS



FLUSH WALK DETAIL  
NOT TO SCALE



CURB TAPER DETAIL  
NOT TO SCALE



MODEL NO.	DESCRIPTION	SIZE L x W x H	BIKE CAPACITY
H-2892BL	1-Loop	22 x 2 1/2 x 34"	3

- NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
  2. OWNER SHALL SELECT COLOR & FINISH
  3. SEE SITE PLAN FOR APPROX. LOCATION. COORDINATE W/ OWNER PRIOR TO CONSTRUCTION.
  4. MANUFACTURED BY ULIN; PRODUCT: H-289BL; DESCRIPTION: 1-LOOP WAVE STYLE BIKE RACK - 3 BIKE CAPACITY

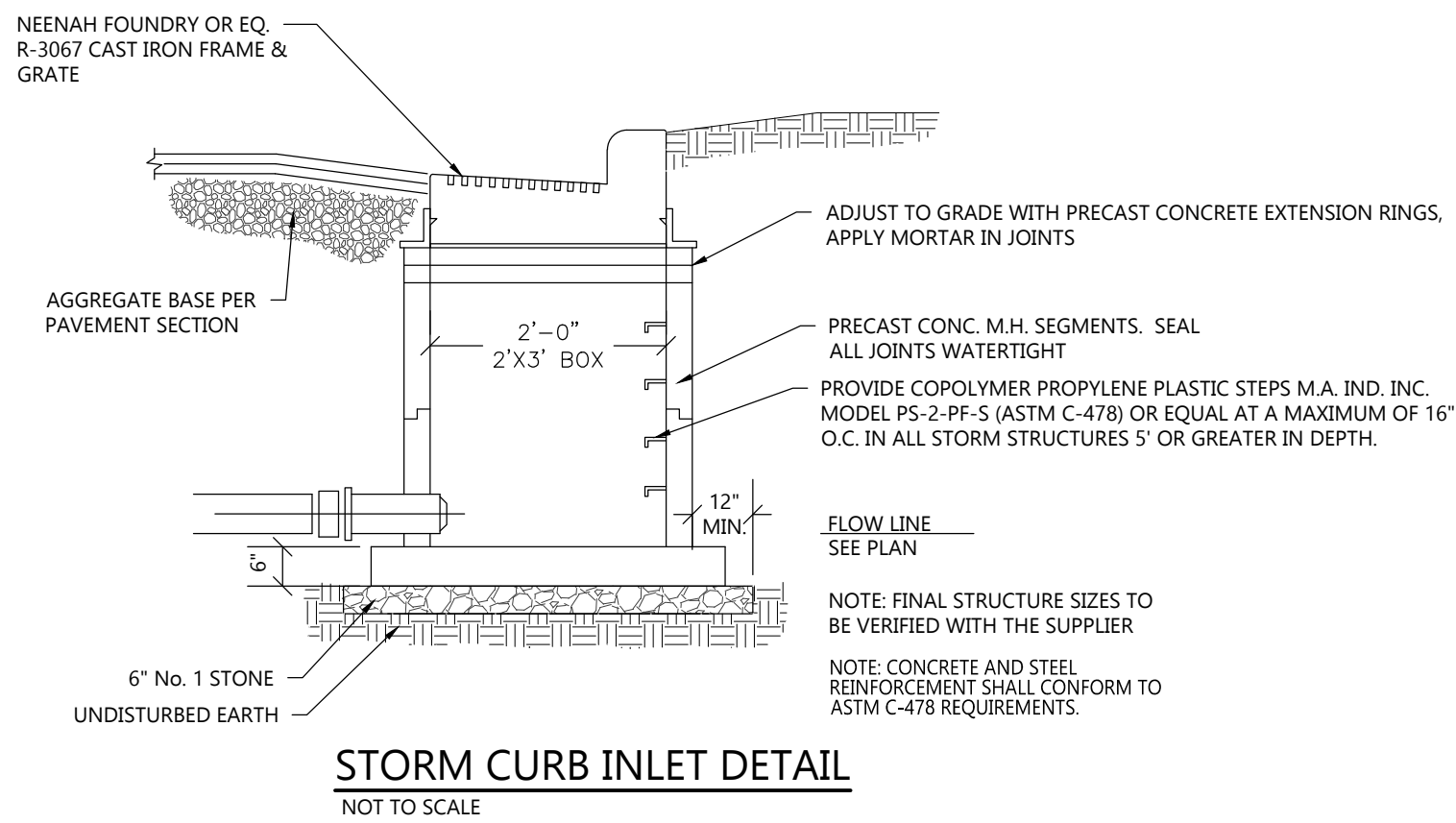
BIKE RACK  
NOT TO SCALE



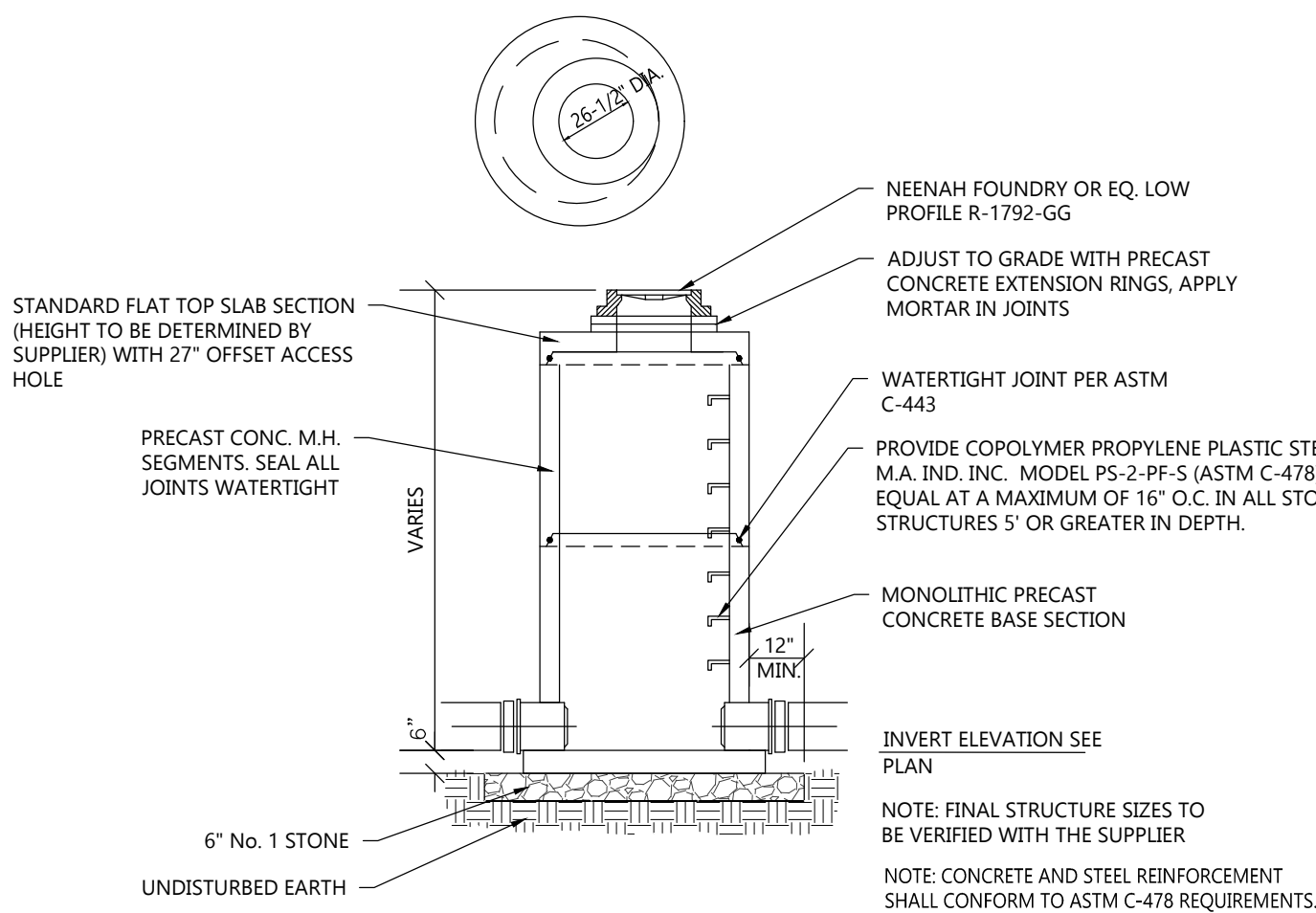
MODEL NO.	DESCRIPTION	SIZE L x W x H	WT. (LBS.)
H-10001	46" Round	81 x 81 x 31"	175

- NOTES:
1. OWNER SHALL SELECT COLOR & FINISH
  2. SEE SITE PLAN FOR APPROX. LOCATION. COORDINATE W/ OWNER PRIOR TO CONSTRUCTION.
  3. MANUFACTURED BY ULIN; PRODUCT: H-10001; DESCRIPTION: METAL PICNIC TABLE - 46" ROUND

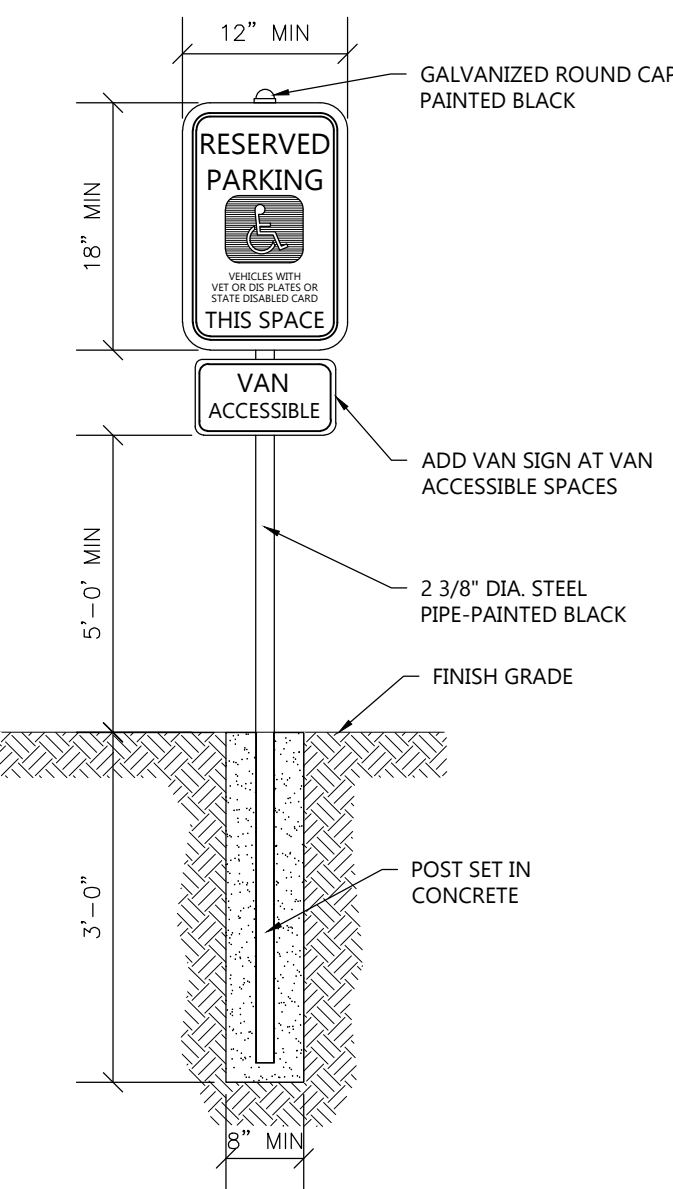
PICNIC TABLE  
NOT TO SCALE



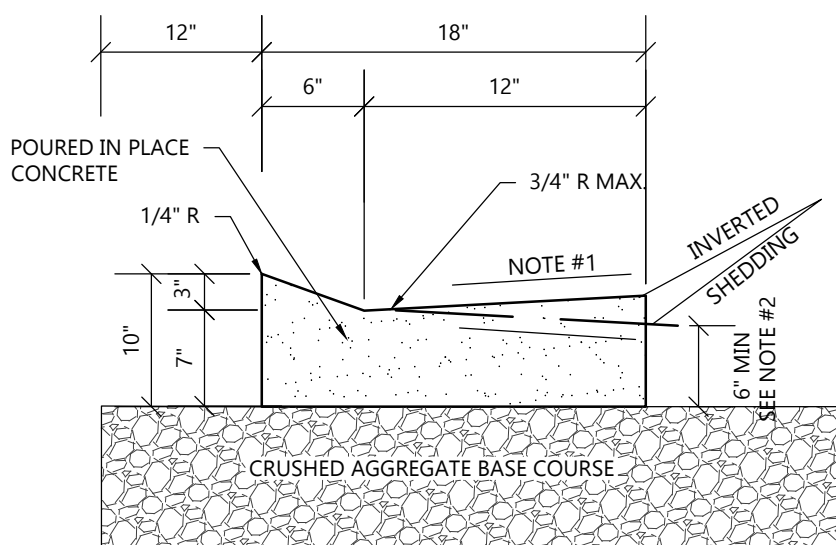
STORM CURB INLET DETAIL  
NOT TO SCALE



STORM CATCH BASIN DETAIL  
NOT TO SCALE

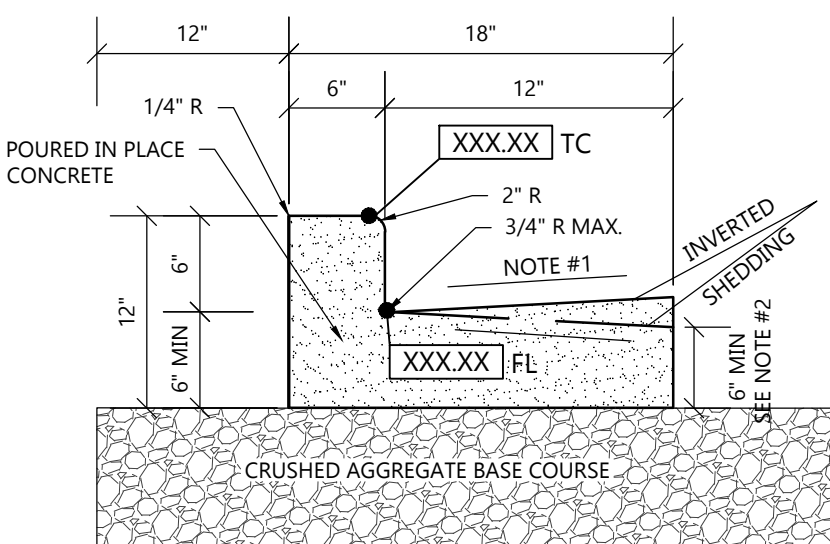


HANDICAP SIGNAGE WITH CONCRETE BASE DETAIL  
NOT TO SCALE



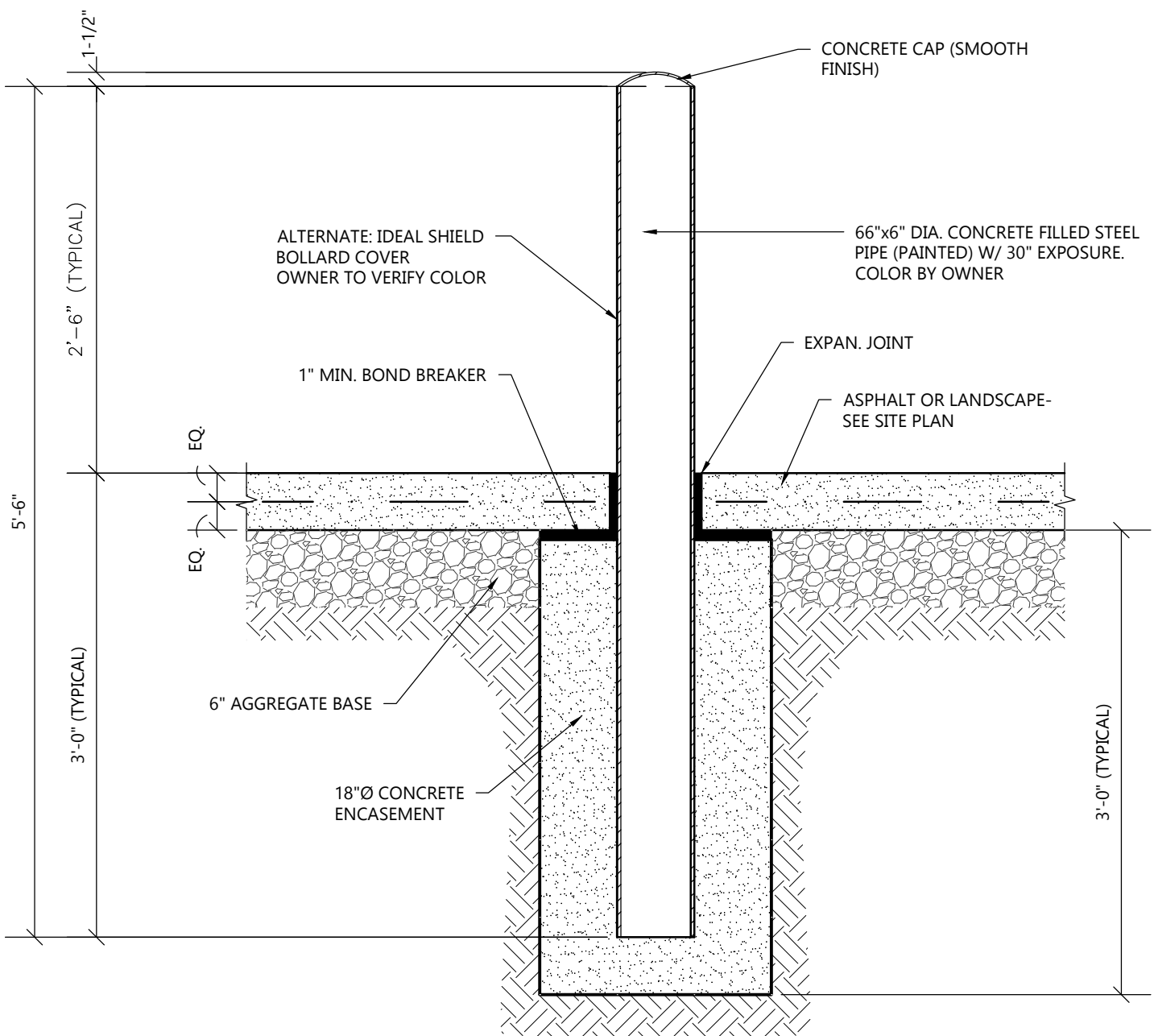
- NOTE:
1. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
  2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MIN. GUTTER THICKNESS IS MAINTAINED.
  3. SEE SITE PLAN & GRADING PLAN FOR INVERTED & SHEDDING CURB LOCATIONS

18" MOUNTABLE CURB & GUTTER DETAIL  
NOT TO SCALE



- NOTE:
1. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
  2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MIN. GUTTER THICKNESS IS MAINTAINED.
  3. SEE SITE PLAN & GRADING PLAN FOR INVERTED & SHEDDING CURB LOCATIONS

18" CONCRETE CURB & GUTTER DETAIL  
NOT TO SCALE



6" PIPE BOLLARD DETAIL  
NOT TO SCALE









OVERVIEW	
Lumen Package	7,000 - 55,000
Wattage Range	48 - 438
Efficacy Range (LPW)	115 - 162
Weight lbs(kg)	30 (13.6)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

## QUICK LINKS

Ordering Guide      Performance      Photometrics      Dimensions

## FEATURES & SPECIFICATIONS

## Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.
- Designed to mount to square or round poles.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: 37 lbs in carton.

### Optical System

- State-of-the-Art one piece silicone optic shell delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, 4, 5W, FT, FTA, AM, and LC/Rc.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93-95%.
- Zero uplight.
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also Available in Phosphor Converted Amber with Peak intensity at 610nm.
- Minimum CRI of 70.
- Integral lower (LL) and integral half lower (HL) options available for enhanced backlight control.

## Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit, and over-temperature protection. Custom luminaires and package wattages available.
- 0-10V dimming (100% - 100% standard)
- Standard Universal Voltage (120-277 Vac); Input voltage range: 120-277 Vac (347-480 Vac)
- LED Calculated Life: 100,000 Hours (See Lumen Maintenance chart)
- Total harmonic distortion: <20%
- Operating Temperature: -40°C to +50°C (-40°F to 122°F) and 48k lumen packages rated to +40°C. SSL lumen package rate to +35°C.
- Power factor: >90
- Long-term stable output
- Field replaceable 10V surge protection device meets a minimum Category C Low operating (ANSI/IEEE C62.412)
- High-efficiency LEDs mounted to metal-core PCBs
- Components are fully encapsured in potting material for moisture resistance. Driver and key electronic components can easily be accessed.

### Controls

- Optional integral passive infrared Bluetooth™ motion. Fixtures operate independently and can be commissioned via iOS or Android configuration app
- LSI's AirLink™ wireless control system options reduce energy and maintenance

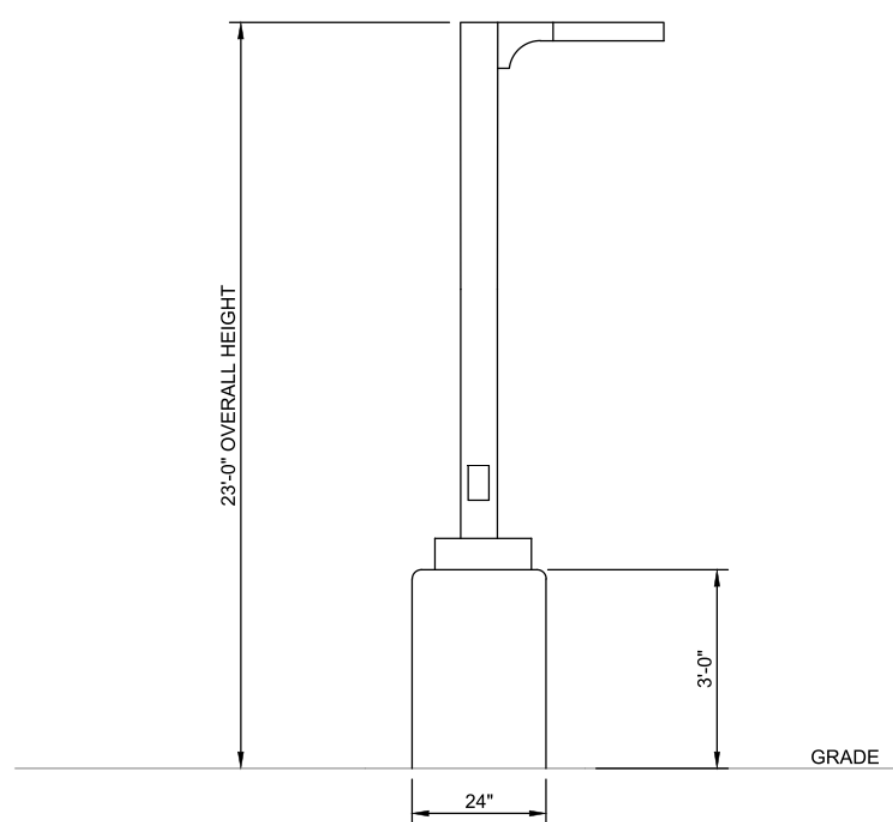
costs while optimizing light quality 24/7 (see controls section for more details).

## Installation

- Designed to mount to square or round poles.
- A single fastener secures the hinged door underneath the housing and provides quick & easy access to the electrical compartment.
- Included terminal block accepts up to 12 g wire.
- Utilizes LSI's traditional 3" drill pattern B3 for easy fastening of LSI products.

### Warranty

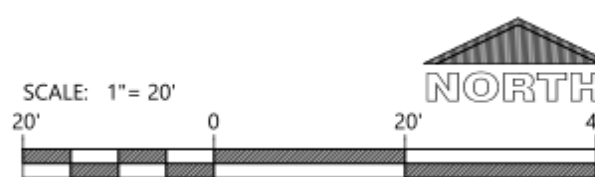
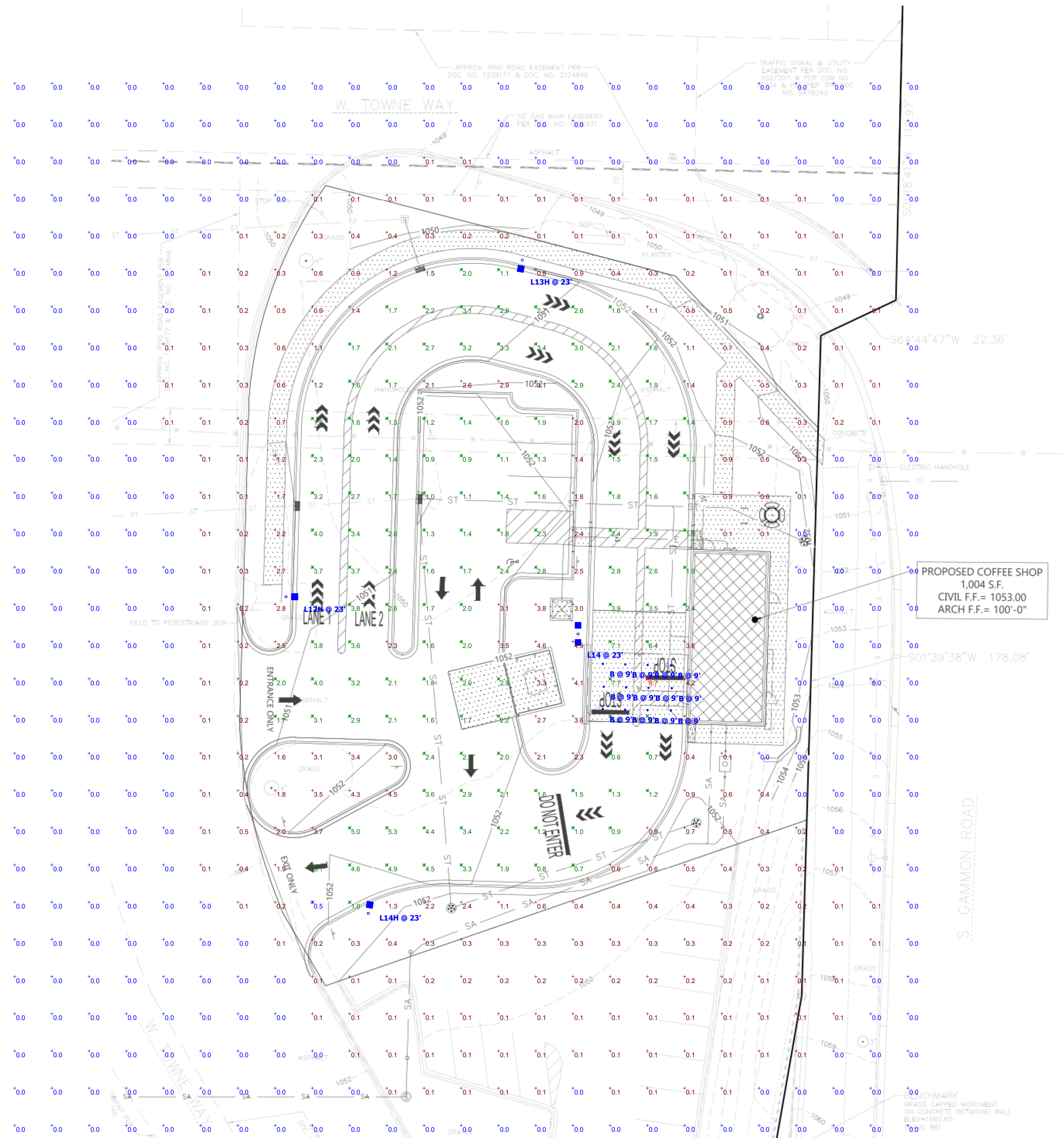
- LSI LED Fixtures carry a 5-year warranty.
- ### Listings
- Listed to UL 1598 and UL 8750.
  - Meets Bay Compatible Act requirements.
  - Dark Sky compliant, with 3000K color temperature selection.
  - Title 24 Compliant; see local ordinance for qualification information.
  - RoHS compliant
  - Suitable for wet Locations.
  - IP66 rated Luminaire per IEC 60598.
  - 3G rated for ANSI C136.3 high vibration application.
  - DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org](http://www.designlights.org), to confirm which versions are qualified.
  - Patented Silicone Optics (US Patent NO. 10,186,165 B2)
  - IK08 rated luminaire per IEC 66262



## NO SCALE

Schedule								
Symbol	Label	Quantity	Manufacturer	Catalog Number	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	<b>B</b>	12	Juno Lighting	6RLD G4 10LM 27K 90CRI 120 LRFC WWH M6	1	1043	0.8	11.7
	<b>L12H</b>	1	LSI INDUSTRIES, INC.	MRM-12L-12L-SIL-2-30-70CRI-III	1	9788	1	85
	<b>L14</b>	1	LSI INDUSTRIES, INC.	MRM-12L-12L-SIL-4-30-70CRI	1	12231	1	170
	<b>L13H</b>	1	LSI INDUSTRIES, INC.	MRM-12L-12L-SIL-3-30-70CRI-IL	1	9143	1	85
	<b>L14H</b>	1	LSI INDUSTRIES, INC.	MRM-12L-12L-SIL-AM-30-70CRI-IL	1	8502	1	85

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	0.7 fc	8.7 fc	0.0 fc	N/A	N/A
PARKING LOT	X	2.4 fc	8.7 fc	0.5 fc	17.4:1	4.8:1



## CIVIL SITE PHOTOMETRIC PLAN &amp; DETAILS



100 Camelot Drive  
Fond du Lac, WI 54935  
920-926-9800  
excelengineer.com

PROJECT INFORMATION
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PROPOSED COFFEE SHOP FOR:  
**7-BREW MADISON**  
66 W TOWNE MALL • MADISON, WI 53719

PROFESSIONAL SEAL

**SHEET DATES**

SHEET ISSUE      AUG. 1, 2025

## REVISIONS

[illegible]

JOB NUMBER
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240293100

SHEET NUMBER

## C3.1





# City of Madison Fire Department

314 W Dayton Street, Madison, WI 53703

Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: [fire@cityofmadison.com](mailto:fire@cityofmadison.com)

Project Address: 66 W Towne Mall

Contact Name & Phone #: Mylena Oliveira (816) 406-2667

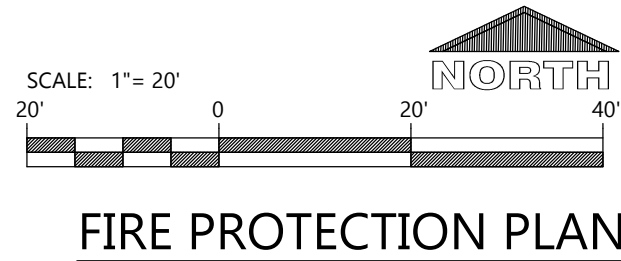
## FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system? <b>If non-sprinklered</b> , fire lanes extend to within 150-feet of all portions of the exterior wall? <b>If sprinklered</b> , fire lanes are within 250-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs? a) Is the fire lane a minimum unobstructed width of at least 20-feet? b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet? c) Is the minimum inside turning radius of the fire lane at least 28-feet? d) Is the grade of the fire lane not more than a slope of 8%? e) Is the fire lane posted as fire lane? (Provide detail of signage.) f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.) g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes: a) Is the gate a minimum of 20-feet clear opening? b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet? If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6 If yes, see IFC 3206.6 for further requirements.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
6. Is any part of the building <u>greater than 30-feet</u> above the grade plane? If yes, answer the following questions: a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter? b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building? c) Are there any overhead power or utility lines located across the aerial apparatus fire lane? d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species) e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet? f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants? <i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i> a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants? b) Is there at least 40' between a hydrant and the building? c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane? d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb? e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant? <i>Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.</i>	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	<input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2021 Edition Chapter 5 and Appendix D**; please see the codes for further information.





FIRE PROTECTION PLAN

PROJECT INFORMATION

PROPOSED COFFEE SHOP FOR:  
**7-BREW MADISON**  
66 W TOWNE MALL • MADISON, WI 53719

PROFESSIONAL SEAL

PRELIMINARY DATES

AUG. 1, 2025

JOB NUMBER

240293100

SHEET NUMBER

**FP**

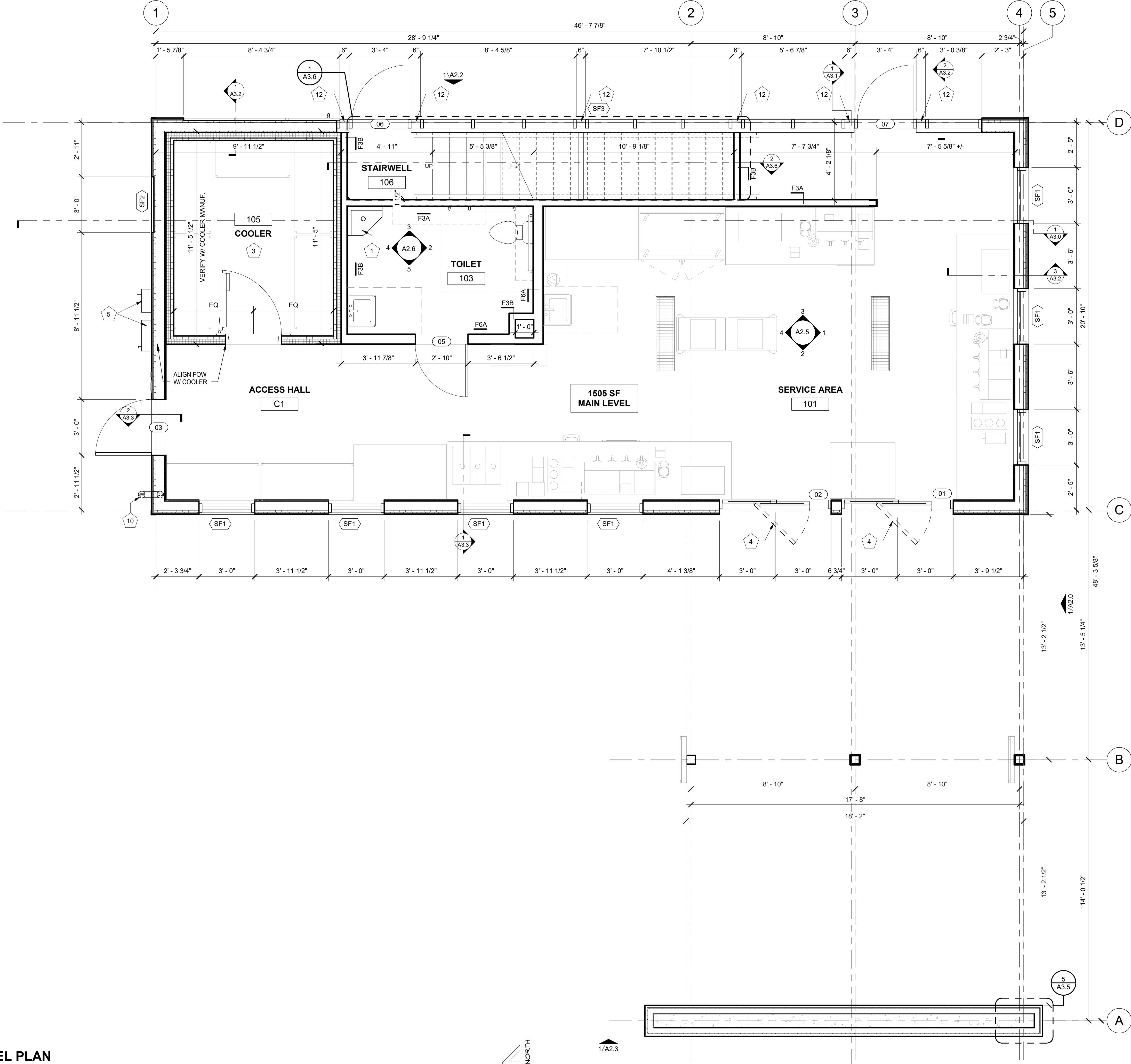
NOT FOR CONSTRUCTION



FLOOR PLAN KEYNOTES	
Note Number	Note Text
1	MOP SINK; REF PLUMBING
2	STEP, CENTER ON DOOR
3	PREFABRICATED COOLER; COORD LOCATION & SPECS WITH ARCH/MEP
4	SLIDING DOOR IS ADA AUTO/MANUAL EGRESS CAPABLE
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL
6	STOREFRONT SIGNS - SUPPLIED AND INSTALLED BY SIGN CONTRACTOR
7	DOWNSPOUT CONNECTION TO STORMWATER SYSTEM; REF CIVIL
8	DOWNSPOUT SCUPPER TO GRADE; REF CIVIL
9	SITE CONTRACTOR TO COORDINATE CIVIL AND STRUCTURAL DRAWINGS TO ENSURE ALL CANOPY COLUMN FOUNDATION PLATES AND BOLTS ARE CONSTRUCTED IN A MANNER THAT CONCEALS THEIR CONNECTIONS COMPLETELY BELOW GRADE; TYP.
10	DOWNSPOUT OUTLET - STORMWATER CONNECTION; REF CIVIL
11	EXTERIOR WALLS BUILT UP FOR MECHANICAL SCREENING
12	STUD PACK; RE STRUCTURAL

ZONING AREAS COMPARISON			
LEVEL 1	1505 SF	(100%)	
LEVEL 2	1162 SF	( 77%)	

1 MAIN LEVEL PLAN  
3/8" = 1'-0"



707 n. 6th street  
kansas city, ks 66101  
www.veritas-ad.com  
913.308.1460  
consulting engineer:

7 BREW DRIVE THRU - MADISON WI - GAMMON RD

7BMAD1, LLC

66 WEST TOWNE MALL, MADISON, WISCONSIN 53719

REVISIONS		
No.	Description	Date

sheet issue date:  
08/04/2025

project no.:  
23.26.05

sheet contents:  
FLOOR PLAN - MAIN  
LEVEL

sheet no.:

A1.1



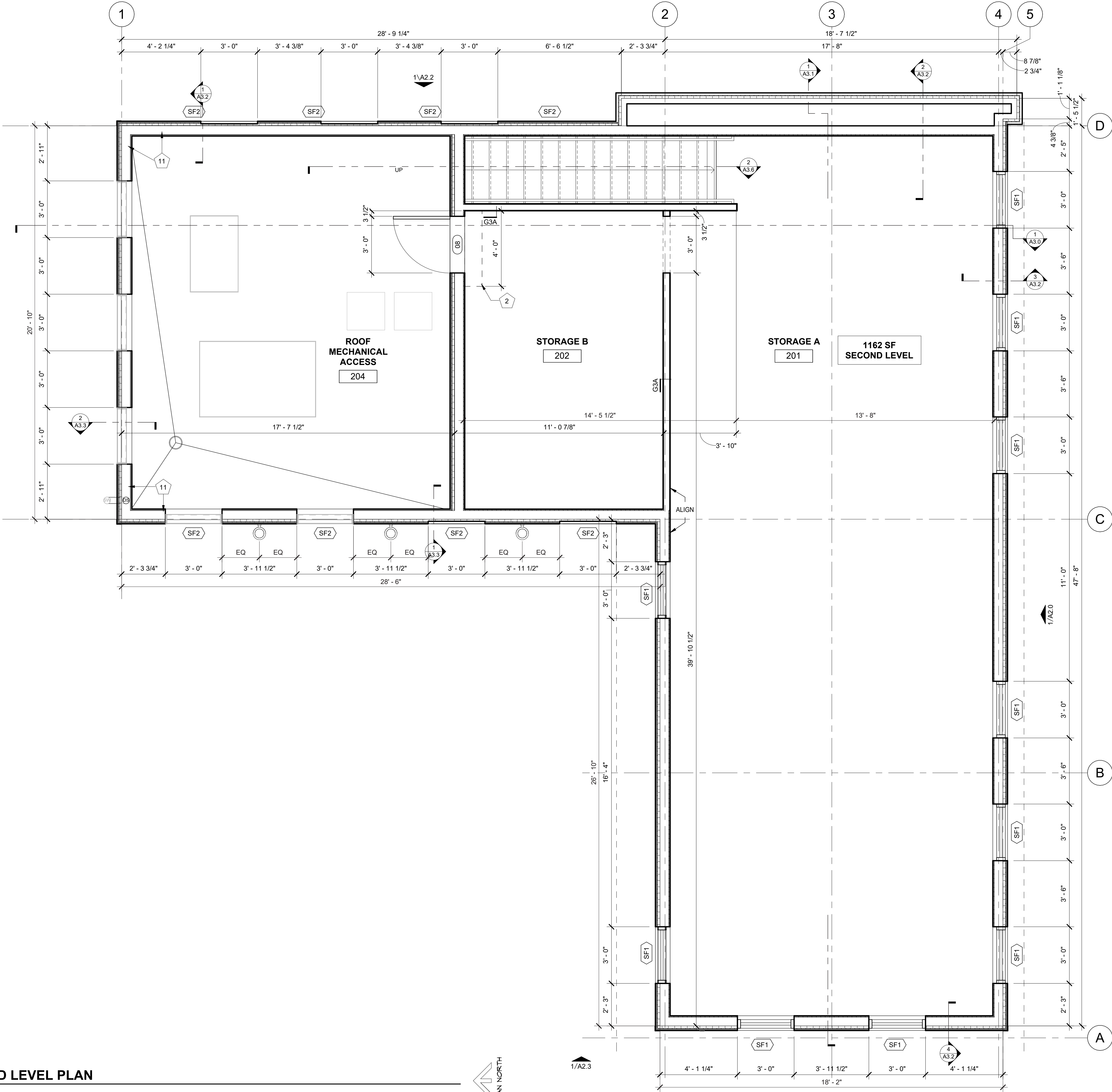
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4	SLIDING DOOR IS ADA AUTO/MANUAL EGRESS CAPABLE
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL
6	STOREFRONT SIGNS - SUPPLIED AND INSTALLED BY SIGN CONTRACTOR
7	DOWNSPOUT CONNECTION TO STORMWATER SYSTEM; REF CIVIL
8	DOWNSPOUT SCUPPER TO GRADE; REF CIVIL
9	SITE CONTRACTOR TO COORDINATE CIVIL AND STRUCTURAL DRAWINGS TO ENSURE ALL CANOPY COLUMN FOUNDATION PLATES AND BOLTS ARE CONSTRUCTED IN A MANNER THAT CONCEALS THEIR CONNECTIONS COMPLETELY BELOW GRADE; TYP.
10	DOWNSPOUT OUTLET - STORMWATER CONNECTION; REF CIVIL
11	EXTERIOR WALLS BUILT UP FOR MECHANICAL SCREENING
12	STUD PACK; RE STRUCTURAL

ZONING AREAS COMPARISON

LEVEL 1	1505 SF	(100%)
LEVEL 2	1162 SF	( 77%)

1 SECOND LEVEL PLAN  
3/8" = 1'-0"



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7BMAD1, LLC

66 WEST TOWNE MALL, MADISON, WISCONSIN 53719

REVISIONS  
No. Description Date

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08/04/2025

project no.:  
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sheet contents:  
FLOOR PLAN -  
SECOND LEVEL

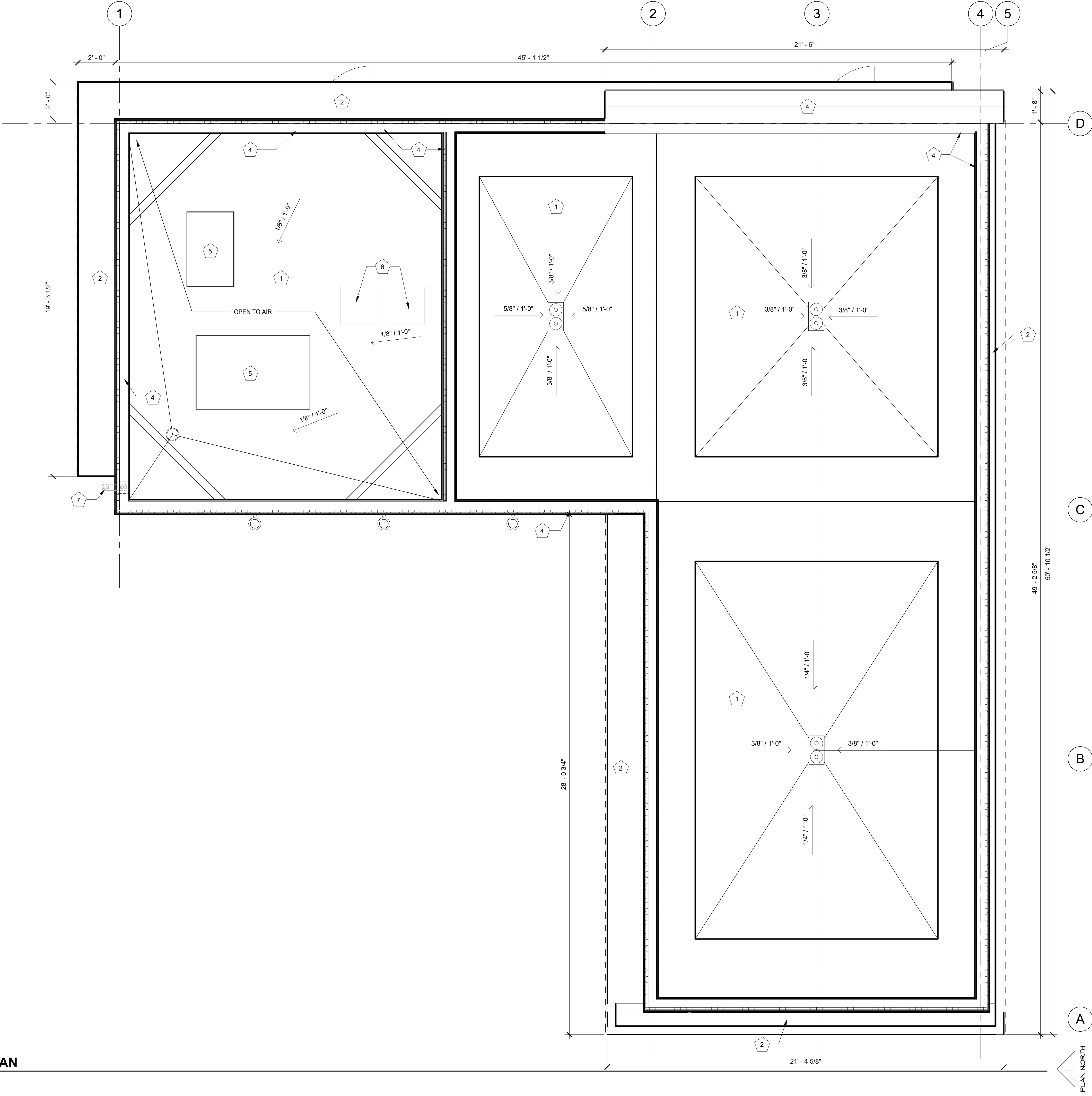
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ROOF PLAN KEYNOTES	
Note Number	Note Text
1	TAPERED INSULATION ROOF SYSTEM
2	PRE-ENGINEERED CANOPY AND FRAMING; REF STRUCTURAL DRAWINGS
3	8" WIDE X 4" HIGH TPO ROOF SCUPPER WITH SHEET METAL UNDERLAYMENT
4	BRAKE METAL CAP; REF ELEVATIONS
5	HVAC EQUIPMENT
6	ICE MACHINE CONDENSERS; SITE CONTRACTOR TO DETERMINE FINAL LOCATION
7	IN-WALL ROOF DRAIN W/ ABOVE-GRADE OUTLET CONNECTED TO SUB-GRADE STORMWATER COLLECTION SYSTEM; REF CIVIL

1 ROOF PLAN  
3/8" = 1'-0"



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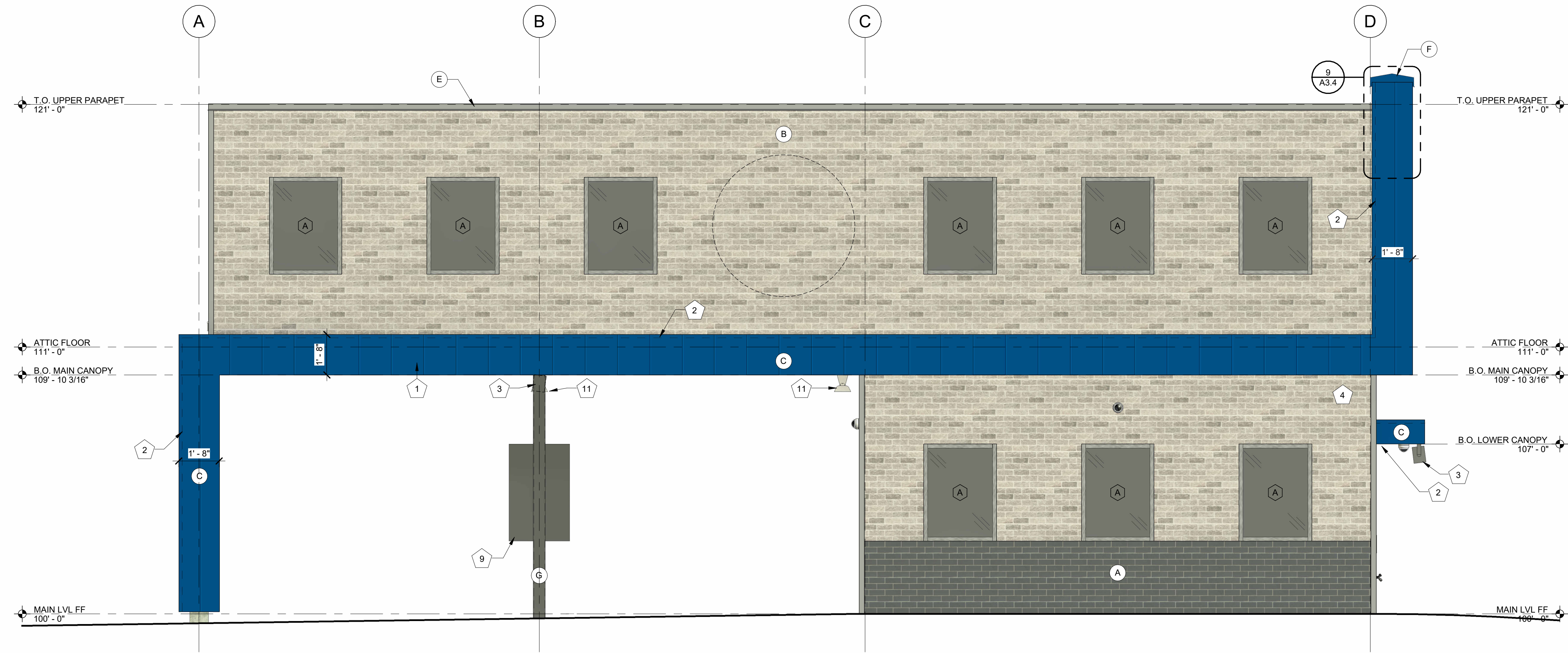
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project no.:  
23.26.05

sheet contents:  
ROOF PLAN

sheet no.:  
A1.10





**1** EXTERIOR ELEVATION - SOUTH  
3/8" = 1'-0"

EXTERIOR ELEVATION KEYNOTES

Note Number	Note Text
1	PRE-ENGINEERED ALUMINUM CANOPY BY GC; REF STRUCTURAL
2	SHIELDED SURFACE-MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP; REF ELECTRICAL
3	MOUNTED SPEAKER SYSTEM; SEE SYSTEMS PLAN
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL
6	FROST-PROOF FLUSH HOSE BIB
7	EXTERIOR WEATHER-PROOF OUTLET; REF ELECTRICAL
8	THROUGH-WALL OVERFLOW ROOF SCUPPER; TYP
9	SAMSUNG DIGITAL DISPLAYS -INSTALLED IN FIELD BY IT PROVIDER; CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY
10	OUTLINE OF MECHANICAL UNIT BEYOND
11	CANOPY HEATER
12	KNOX BOX
13	LIGHT PER ELECTRICAL DRAWINGS
14	IN-WALL DOWNSPOUT OUTLET - STORMWATER CONNECTION; REF CIVIL

EXTERIOR ELEVATION MATERIALS LEGEND

Note Number	Note Text
A	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-2)
C	BRAKE METAL FASCIA (MP-2)
D	STANDING SEAM ROOF PANELS (MP-2)
E	METAL BRAKE CAP (MP-3)
F	METAL BRAKE CAP (MP-2)
G	STRUCTURAL COLUMN; REF CIVIL; PAINT TO MATCH MP-4
H	LOUVERS FOR MECH EQUIP AIRFLOW

KEYNOTE LEGEND

- GLAZING PER WINDOW SCHEDULE
- EXTERIOR ELEVATION MATERIALS DESIGNATION
- EXTERIOR ELEVATION KEYNOTES



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No.	Description	Date
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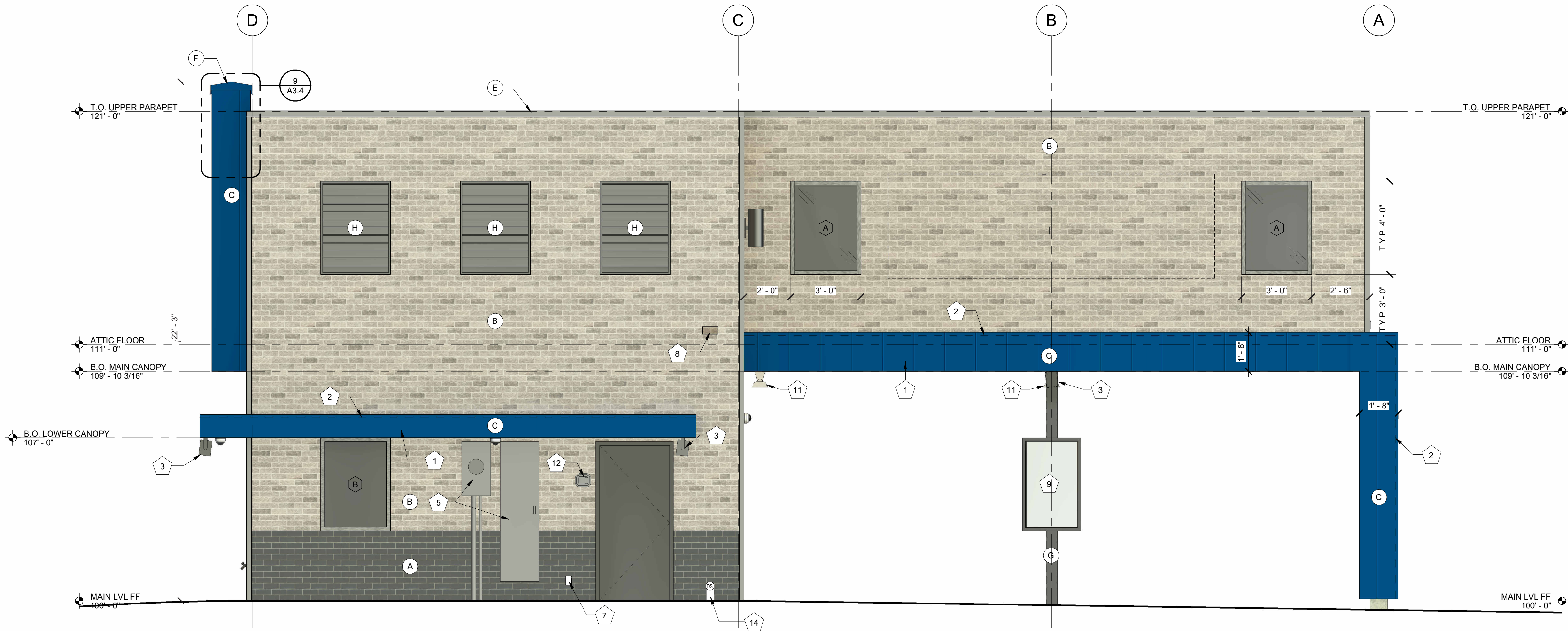
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project no.:  
23.26.05

sheet contents:  
EXTERIOR ELEVATIONS

sheet no.:  
A2.0





**1** EXTERIOR ELEVATION - NORTH  
3/8" = 1'-0"

EXTERIOR ELEVATION KEYNOTES

Note Number	Note Text
1	PRE-ENGINEERED ALUMINUM CANOPY BY GC; REF STRUCTURAL
2	SHIELDED SURFACE-MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP; REF ELECTRICAL
3	MOUNTED SPEAKER SYSTEM; SEE SYSTEMS PLAN
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE
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13	LIGHT PER ELECTRICAL DRAWINGS
14	IN-WALL DOWNSPOUT OUTLET - STORMWATER CONNECTION; REF CIVIL

EXTERIOR ELEVATION MATERIALS LEGEND

Note Number	Note Text
A	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-2)
C	BRAKE METAL FASCIA (MP-2)
D	STANDING SEAM ROOF PANELS (MP-2)
E	METAL BRAKE CAP (MP-3)
F	METAL BRAKE CAP (MP-2)
G	STRUCTURAL COLUMN; REF CIVIL; PAINT TO MATCH MP-4
H	LOUVERS FOR MECH EQUIP AIRFLOW

KEYNOTE LEGEND

- GLAZING PER WINDOW SCHEDULE
- EXTERIOR ELEVATION MATERIALS DESIGNATION
- EXTERIOR ELEVATION KEYNOTES



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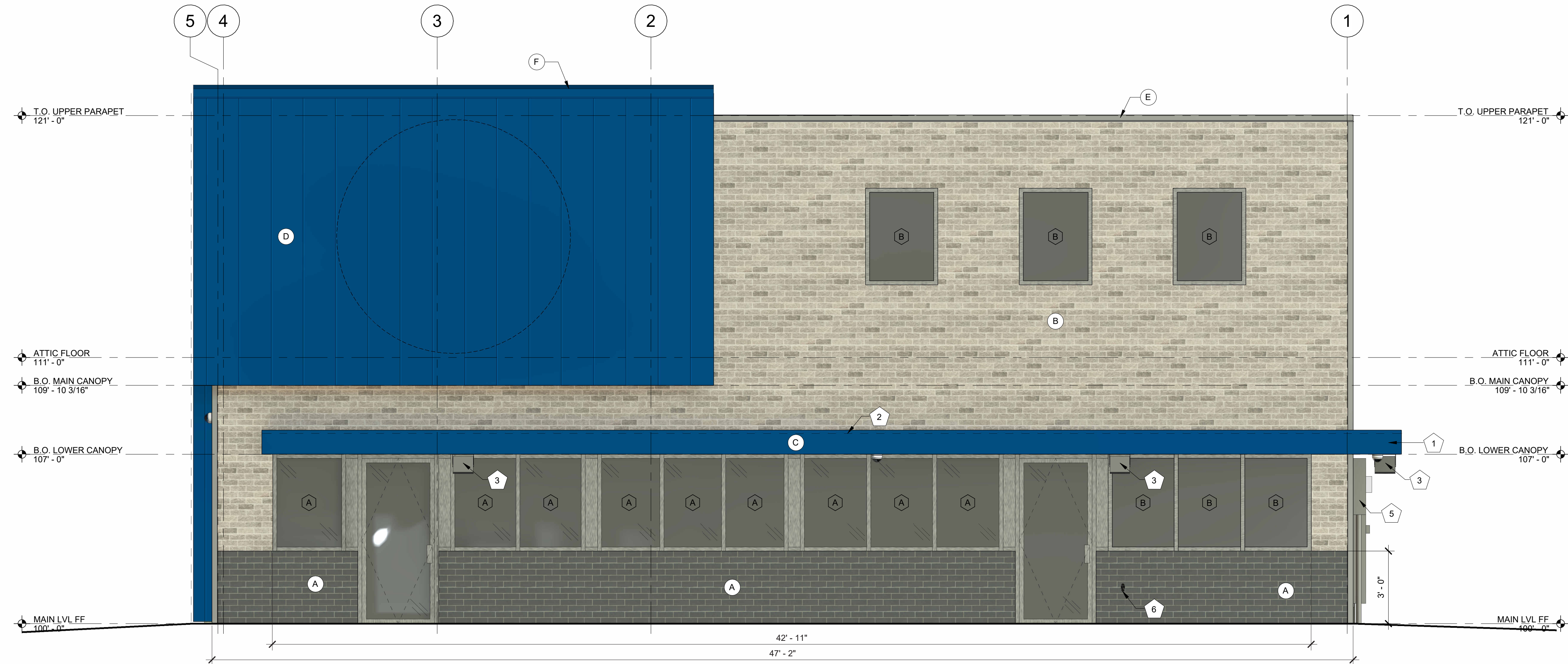
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EXTERIOR ELEVATIONS

sheet no.:  
A2.1





**1 EXTERIOR ELEVATION - EAST**  
3/8" = 1'-0"

### EXTERIOR ELEVATION KEYNOTES

Note Number	Note Text
1	PRE-ENGINEERED ALUMINUM CANOPY BY GC; REF STRUCTURAL
2	SHIELDED SURFACE-MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP; REF ELECTRICAL
3	MOUNTED SPEAKER SYSTEM; SEE SYSTEMS PLAN
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL
6	FROST-PROOF FLUSH HOSE BIB
7	EXTERIOR WEATHER-PROOF OUTLET; REF ELECTRICAL
8	THROUGH-WALL OVERFLOW ROOF SCUPPER; TYP
9	SAMSUNG DIGITAL DISPLAYS -INSTALLED IN FIELD BY IT PROVIDER; CHASE FOR DATA CABLE INSTALLED AT BUILDING MANUFACTURING FACILITY
10	OUTLINE OF MECHANICAL UNIT BEYOND
11	CANOPY HEATER
12	KNOX BOX
13	LIGHT PER ELECTRICAL DRAWINGS
14	IN-WALL DOWNSPOUT OUTLET - STORMWATER CONNECTION; REF CIVIL

### EXTERIOR ELEVATION MATERIALS LEGEND

Note Number	Note Text
A	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-2)
C	BRAKE METAL FASCIA (MP-2)
D	STANDING SEAM ROOF PANELS (MP-2)
E	METAL BRAKE CAP (MP-3)
F	METAL BRAKE CAP (MP-2)
G	STRUCTURAL COLUMN; REF CIVIL; PAINT TO MATCH MP-4
H	LOUVERS FOR MECH EQUIP AIRFLOW

#### KEYNOTE LEGEND

- GLAZING PER WINDOW SCHEDULE
- EXTERIOR ELEVATION MATERIALS DESIGNATION
- EXTERIOR ELEVATION KEYNOTES

#### LEVEL 1 PRIMARY FACADE GLAZING

LENGTH REQUIREMENT (60% REQUIRED)	
47.2 FT OVERALL FACADE LENGTH	(100%)
42.9 FT GLAZED LENGTH	( 91%)
AREA REQUIREMENT (40% REQUIRED)	
464 SF OVERALL LEVEL 1 FACADE	(100%)
192 SF GLAZED AREA	( 41%)

#### REVISIONS

No.	Description	Date
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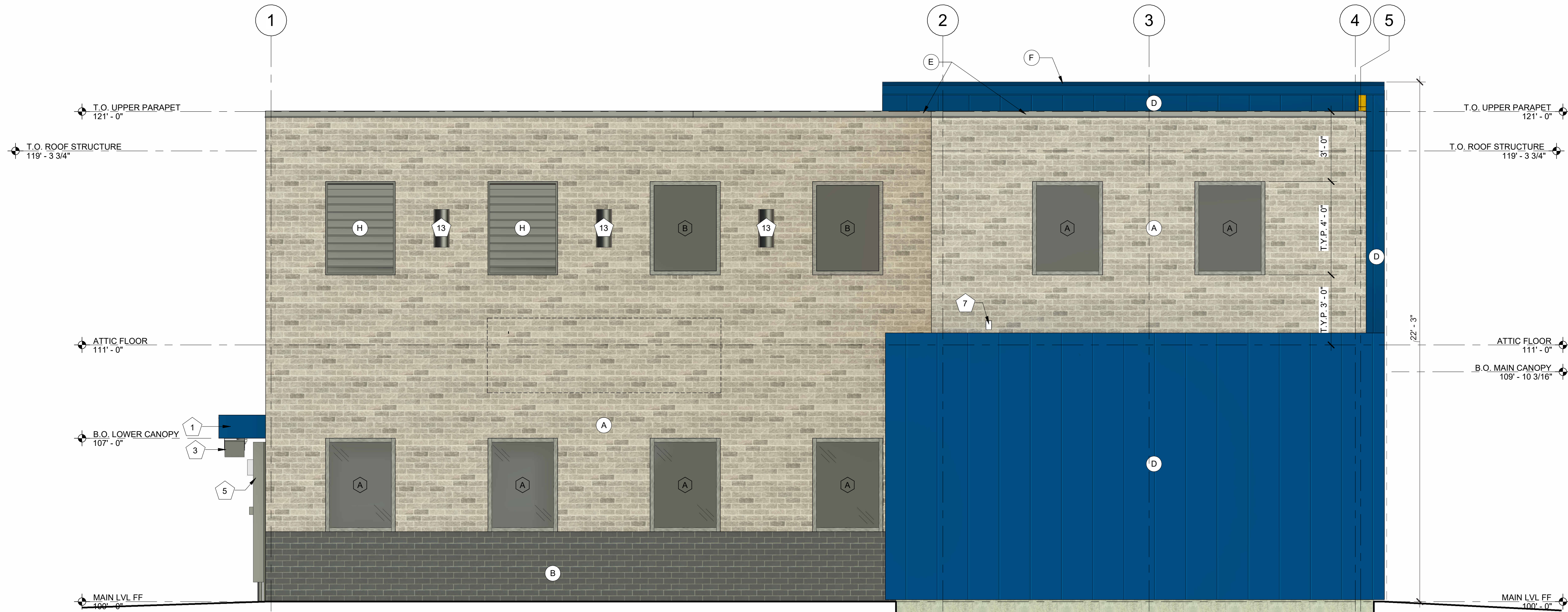
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EXTERIOR ELEVATIONS

sheet no.:  
**A2.2**





**1** EXTERIOR ELEVATION - WEST  
3/8" = 1'-0"




EXTERIOR ELEVATION KEYNOTES

Note Number	Note Text
1	PRE-ENGINEERED ALUMINUM CANOPY BY GC; REF STRUCTURAL
2	SHIELDED SURFACE-MOUNTED LED NEON FLEX LIGHTING AS INDICATED (SHOWN DASHED), TYP: REF ELECTRICAL
3	MOUNTED SPEAKER SYSTEM; SEE SYSTEMS PLAN
4	ADDRESS NUMBERS TO BE 8" TALL x 2" BRUSH STROKE
5	ELECTRICAL EQUIPMENT, PAINTED TO MATCH BUILDING; REF ELECTRICAL
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12	KNOX BOX
13	LIGHT PER ELECTRICAL DRAWINGS
14	IN-WALL DOWNSPOUT OUTLET - STORMWATER CONNECTION; REF CIVIL

EXTERIOR ELEVATION MATERIALS LEGEND

Note Number	Note Text
A	ARCHITECTURAL CEMENT BOARD SIDING (BRK-1)
B	ARCHITECTURAL CEMENT BOARD SIDING (BRK-2)
C	BRAKE METAL FASCIA (MP-2)
D	STANDING SEAM ROOF PANELS (MP-2)
E	METAL BRAKE CAP (MP-3)
F	METAL BRAKE CAP (MP-2)
G	STRUCTURAL COLUMN; REF CIVIL; PAINT TO MATCH MP-4
H	LOUVERS FOR MECH EQUIP AIRFLOW

KEYNOTE LEGEND

-  GLAZING PER WINDOW SCHEDULE
-  EXTERIOR ELEVATION MATERIALS DESIGNATION
-  EXTERIOR ELEVATION KEYNOTES

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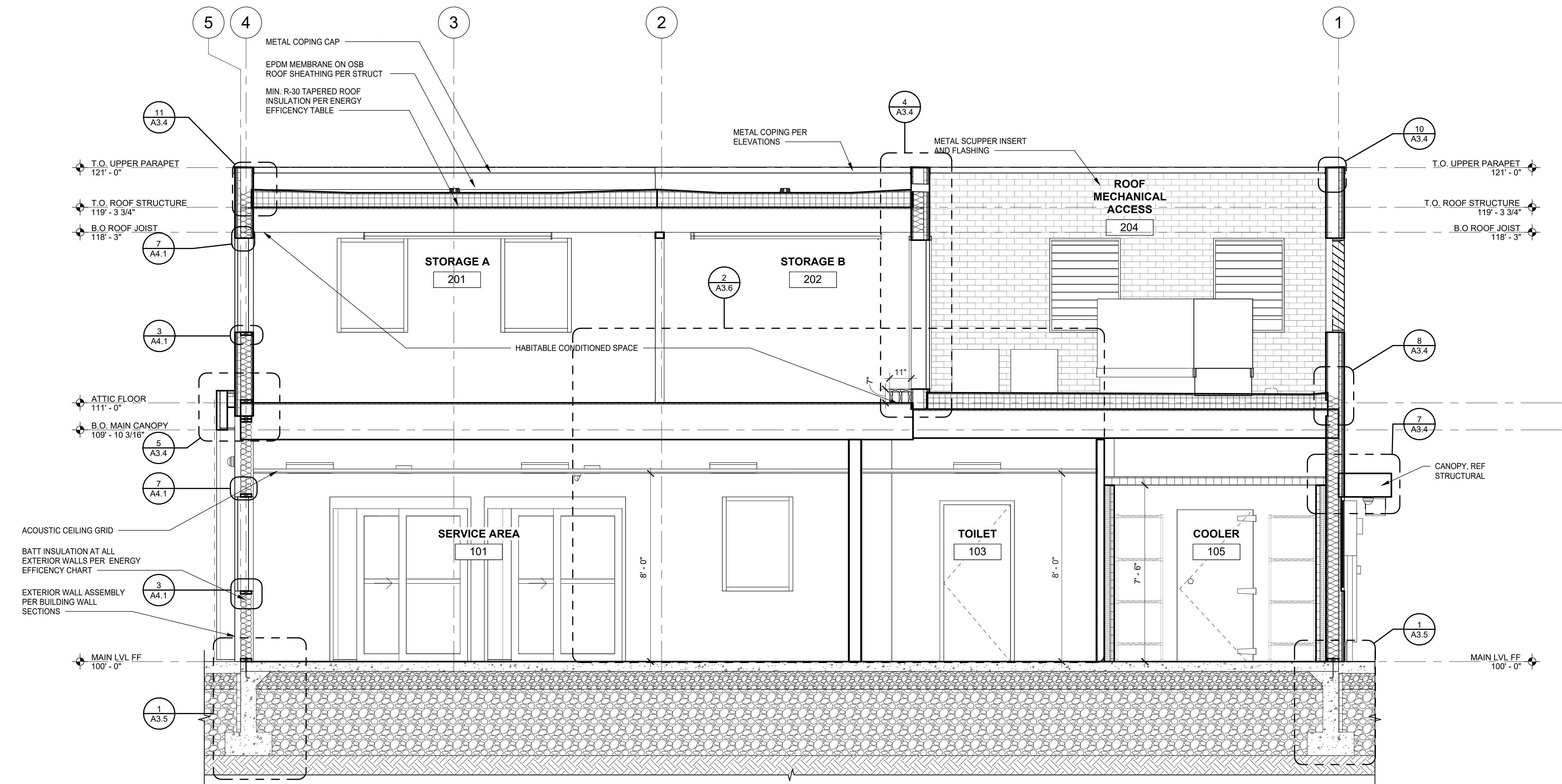
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EXTERIOR ELEVATIONS

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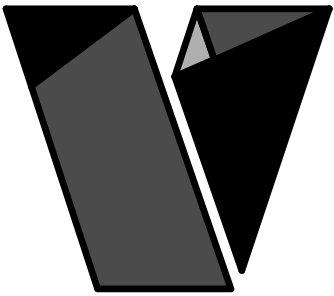


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**1 BUILDING SECTION**  
3/8" = 1'-0"



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BUILDING SECTION

sheet no.:

A3.0





BLUE METAL PANEL MP-2  
BRAND: BERRIDGE  
COLOR: ROYAL BLUE  
FINISH: LOW SHEEN SMOOTH - REFLECTIVITY .26



COPING TRIM METAL MP-3  
BRAND: BERRIDGE  
COLOR: ZINC GREY  
FINISH: LOW SHEEN SMOOTH - REFLECTIVITY .39



FIBER CEMENT PANEL SIDING - BRK-1  
BRAND: NICHHA  
COLOR: MIDNIGHT  
FINISH: MODERN BRICK



FIBER CEMENT PANEL SIDING - BRK-2  
BRAND: NICHHA  
COLOR: SHALE BROWN  
FINISH: CANYON BRICK

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MADISON WI -  
GAMMON RD  
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MATERIAL COLOR  
BOARD





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MADISON WI -  
GAMMON RD  
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RENDERINGS





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RENDERINGS





# City of Madison Fire Department

314 W Dayton Street, Madison, WI 53703

Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: [fire@cityofmadison.com](mailto:fire@cityofmadison.com)

Project Address:

Contact Name & Phone #:

## FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>If non-sprinklered</b> , fire lanes extend to within 150-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>If sprinklered</b> , fire lanes are within 250-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the fire lane a minimum unobstructed width of at least 20-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Is the minimum inside turning radius of the fire lane at least 28-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Is the grade of the fire lane not more than a slope of 8%?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Is the fire lane posted as fire lane? (Provide detail of signage.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the gate a minimum of 20-feet clear opening?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, see IFC 3206.6 for further requirements.			
6. Is any part of the building <u>greater than 30-feet</u> above the grade plane?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, answer the following questions:			
a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are there any overhead power or utility lines located across the aerial apparatus fire lane?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i>			
a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is there at least 40' between a hydrant and the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<i>Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.</i>			

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2021 Edition Chapter 5 and Appendix D**; please see the codes for further information.





CITY OF MADISON  
LANDSCAPE WORKSHEET

Section 28.142 Madison General Ordinance

Project Location / Address [TBD] S Gammon Rd, Madison, WI 53719 (West Towne Mall)

Name of Project Seven Brew Coffee (S Gammon Rd)

Owner / Contact Mylena Oliveira

Contact Phone (816) 406-2667 Contact Email moliveira@plazastreetpartners.com

**\*\* Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size  
MUST be prepared by a registered landscape architect. \*\***

**Applicability**

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless **all** of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

- (a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- (b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- (c) No demolition of a principal building is involved.
- (d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

**Landscape Calculations and Distribution**

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot. There are three methods for calculating landscape points depending on the size of the lot and Zoning District.

- (a) For all lots except those described in (b) and (c) below, five (5) landscape points shall be provided for each three hundred (300) square feet of developed area.

Total square footage of developed area 15,343

Total landscape points required 287

- (b) **For lots larger than five (5) acres**, points shall be provided at five (5) points per three hundred (300) square feet for the first five (5) developed acres, and one (1) point per one hundred (100) square feet for all additional acres.

Total square footage of developed area

Five (5) acres = 217,800 square feet

First five (5) developed acres = 3,630 points

Remainder of developed area

Total landscape points required

- (c) **For the Industrial – Limited (IL) and Industrial – General (IG) districts**, one (1) point shall be provided per one hundred (100) square feet of developed area.

Total square footage of developed area

Total landscape points required



**Tabulation of Points and Credits**

Use the table to indicate the quantity and points for all existing and proposed landscape elements.

Plant Type/ Element	Minimum Size at Installation	Points	Credits/ Existing Landscaping		New/ Proposed Landscaping	
			Quantity	Points Achieved	Quantity	Points Achieved
Overstory deciduous tree	2½ inch caliper measured diameter at breast height (dbh)	35			5	175
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35				
Ornamental tree	1 1/2 inch caliper	15				
Upright evergreen shrub (i.e. arborvitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12”-24”	3			31	93
Shrub, evergreen	#3 gallon container size, Min. 12”-24”	4			22	88
Ornamental grasses/ perennials	#1 gallon container size, Min. 8”-18”	2			28	56
Ornamental/ decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 ½ inch caliper dbh. *Trees must be within developed area and cannot comprise more than 30% of total required points.	14 per caliper inch dbh. Maximum points per tree: 200	2	112		
Landscape furniture for public seating and/or transit connections	* Furniture must be within developed area, publically accessible, and cannot comprise more than 5% of total required points.	5 points per “seat”				
Sub Totals				112		412

**Total Number of Points Provided** 524

\* As determined by ANSI, ANLA- American standards for nursery stock. For each size, minimum plant sizes shall conform to the specifications as stated in the current American Standard for Nursery Stock.



Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, as foundation plantings, or as general site landscaping. The total number of landscape points provided shall be distributed on the property as follows.

**Total Developed Area**

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

**Development Frontage Landscaping**

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant materials.

**Interior Parking Lot Landscaping**

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. **All parking lots with twenty (20) or more parking spaces** shall be landscaped in accordance with the interior parking lot standards.

**Foundation Plantings**

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses.

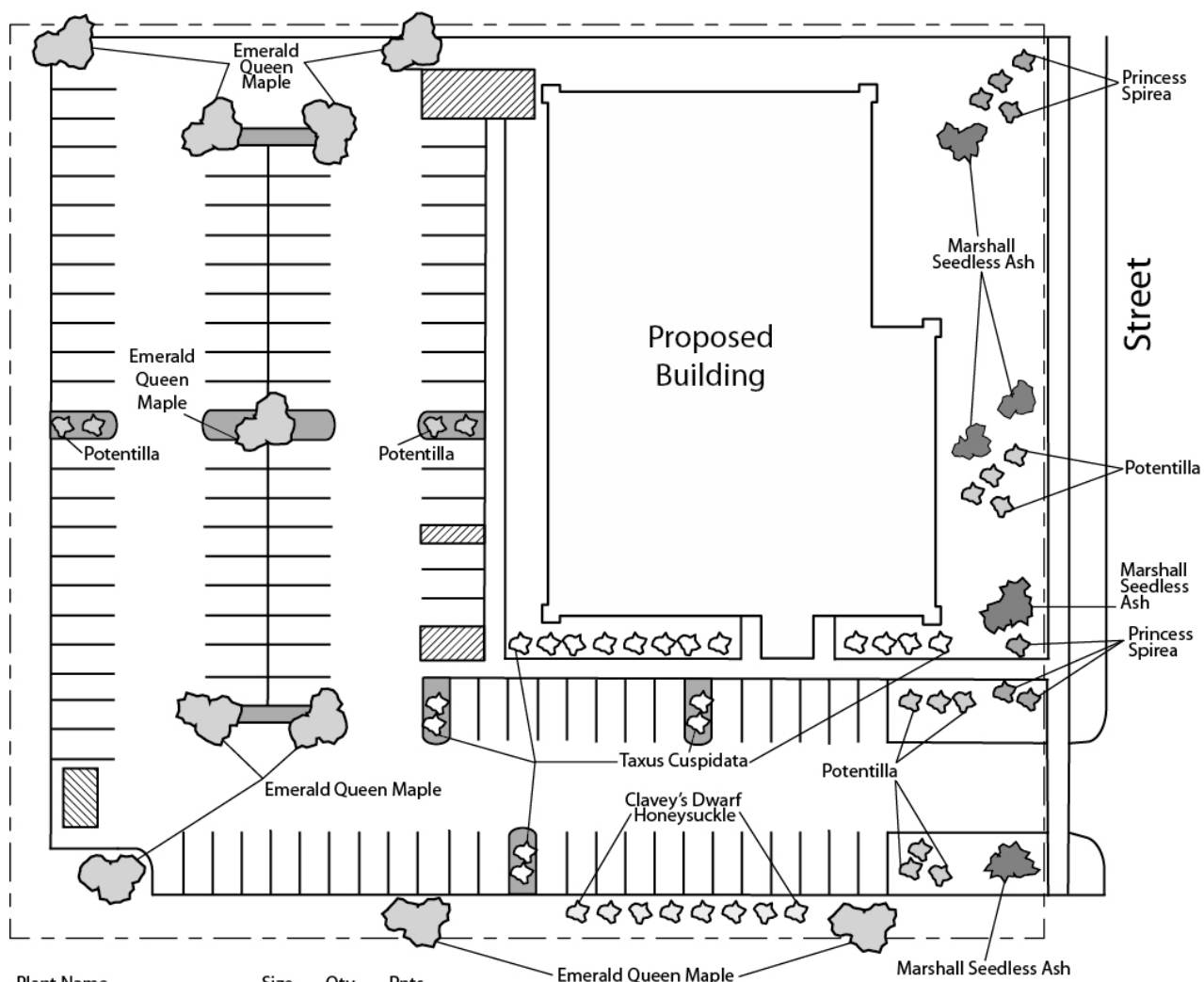
**Screening Along District Boundaries**

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts.

**Screening of Other Site Elements**

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site: refuse disposal areas, outdoor storage areas, loading areas, and mechanical equipment.

**Example Landscape Plan**



Plant Name	Size	Qty.	Pnts.
Emerald Queen Maple	2-2.5"	9	-
Marshall Seedless Ash	2-2.5"	4	450
Clavey's Dwarf Honelysuckle	1 Gal	8	24
Princess Spirea	1 Gal	7	21
Potentilla	1 Gal	10	30
Taxus Cuspidata	2 Gal	12	60
TOTAL			585

Call City Zoning, 266-4551, with your questions about this type of plan



## LANDSCAPE PLAN AND LANDSCAPE WORKSHEET INSTRUCTIONS

Refer to Zoning Code Section 28.142 LANDSCAPING AND SCREENING REQUIREMENTS for the complete requirements for preparing and submitting a Landscape Plan and Landscape Worksheet.

### **Applicability.**

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless all of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

- (a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- (b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- (c) No demolition of a principal building is involved.
- (d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

### **Landscape Plan and Design Standards.**

Landscape plans shall be submitted as a component of a site plan, where required, or as a component of applications for other actions, including zoning permits, where applicable. Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size must be prepared by a registered landscape architect.

- (a) Elements of the landscape plan shall include the following:
  - 1. Plant list including common and Latin names, size and root condition (i.e. container or ball & burlap).
  - 2. Site amenities, including bike racks, benches, trash receptacles, etc.
  - 3. Storage areas including trash and loading.
  - 4. Lighting (landscape, pedestrian or parking area).
  - 5. Irrigation.
  - 6. Hard surface materials.
  - 7. Labeling of mulching, edging and curbing.
  - 8. Areas of seeding or sodding.
  - 9. Areas to remain undisturbed and limits of land disturbance.
  - 10. Plants shall be depicted at their size at sixty percent (60%) of growth.
  - 11. Existing trees eight (8) inches or more in diameter.
  - 12. Site grading plan, including stormwater management, if applicable.
- (b) Plant Selection. Plant materials provided in conformance with the provisions of this section shall be nursery quality and tolerant of individual site microclimates.
- (c) Mulch shall consist of shredded bark, chipped wood or other organic material installed at a minimum depth of two (2) inches.

### **Landscape Calculations and Distribution.**

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area, for the purpose of this requirement, is defined as that area within a single contiguous boundary which is made up of structures, parking driveways and docking/loading facilities, but **excluding** the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

- (a) Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, and as foundation plantings, or as general site landscaping.
- (b) Planting beds or planted areas must have at least seventy-five percent (75%) vegetative cover.
- (c) Canopy tree diversity requirements for new trees:
  - 1. If the development site has fewer than 5 canopy trees, no tree diversity is required.
  - 2. If the development site has between 5 and 50 canopy trees, no single species may comprise more than 33% of trees.
  - 3. If the development site has more than 50 canopy trees, no single species may comprise more than 20% of trees.

### **Development Frontage Landscaping.**

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant material meeting the following minimum requirements:



- (a) One (1) overstory deciduous tree and five (5) shrubs shall be planted for each thirty (30) lineal feet of lot frontage. Two (2) ornamental trees or two (2) evergreen trees may be used in place of one (1) overstory deciduous tree.
- (b) In cases where building facades directly abut the sidewalk, required frontage landscaping shall be deducted from the required point total.
- (c) In cases where development frontage landscaping cannot be provided due to site constraints, the zoning administrator may waive the requirement or substitute alternative screening methods for the required landscaping.
- (d) Fencing shall be a minimum of three (3) feet in height, and shall be constructed of metal, masonry, stone or equivalent material. Chain link or temporary fencing is prohibited.

#### **Interior Parking Lot Landscaping.**

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. **All parking lots with twenty (20) or more parking spaces** shall be landscaped in accordance with the following interior parking lot standards.

- (a) For new development on sites previously undeveloped or where all improvements have been removed, a minimum of eight percent (8%) of the asphalt or concrete area of the parking lot shall be devoted to interior planting islands, peninsulas, or landscaped strips. For changes to a developed site, a minimum of five percent (5%) of the asphalt or concrete area shall be interior planting islands, peninsulas, or landscaped strips. A planting island shall be located at least every twelve (12) contiguous stalls with no break or alternatively, landscaped strips at least seven (7) feet wide between parking bays.
- (b) The primary plant materials shall be shade trees with at least one (1) deciduous canopy tree for every one hundred sixty (160) square feet of required landscaped area. Two (2) ornamental deciduous trees may be substituted for one (1) canopy tree, but ornamental trees shall constitute no more than twenty-five percent (25%) of the required trees. No light poles shall be located within the area of sixty percent (60%) of mature growth from the center of any tree.
- (c) Islands may be curbed or may be designed as uncurbed bio-retention areas as part of an approved low impact stormwater management design approved by the Director of Public Works. The ability to maintain these areas over time must be demonstrated. (See Chapter 37, Madison General Ordinances, Erosion and Stormwater Runoff Control.)

#### **Foundation Plantings.**

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses. The Zoning Administrator may modify this requirement for development existing prior to the effective date of this ordinance, as long as improvements achieve an equivalent or greater level of landscaping for the site.

#### **Screening Along District Boundaries.**

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts. Screening shall consist of a solid wall, solid fence, or hedge with year-round foliage, between six (6) and eight (8) feet in height, except that within the front yard setback area, screening shall not exceed four (4) feet in height. Height of screening shall be measured from natural or approved grade. Berms and retaining walls shall not be used to increase grade relative to screening height.

#### **Screening of Other Site Elements.**

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site, as follows:

- (a) Refuse Disposal Areas. All developments, except single family and two family developments, shall provide a refuse disposal area. Such area shall be screened on four (4) sides (including a gate for access) by a solid, commercial-grade wood fence, wall, or equivalent material with a minimum height of six (6) feet and not greater than seven (7) feet.
- (b) Outdoor Storage Areas. Outdoor storage areas shall be screened from abutting residential uses with a by a building wall or solid, commercial-grade wood fence, wall, year-round hedge, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.
- (c) Loading Areas. Loading areas shall be screened from abutting residential uses and from street view to the extent feasible by a building wall or solid, commercial-grade wood fence, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.
- (d) Mechanical Equipment. All rooftop and ground level mechanical equipment and utilities shall be fully screened from view from any street or residential district, as viewed from six (6) feet above ground level. Screening may consist of a building wall or fence and/or landscaping as approved by the Zoning Administrator.

#### **Maintenance.**

The owner of the premises is responsible for the watering, maintenance, repair and replacement of all landscaping, fences, and other landscape architectural features on the site. All planting beds shall be kept weed free. Plant material that has died shall be replaced no later than the upcoming June 1.