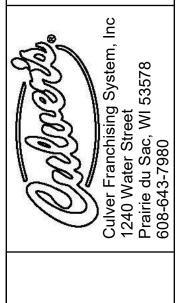
- DEPRESS CONCRETE SLAB IN THIS AREA PER S101. PAD MUST BE LEVEL.





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2024-083





WINDOW AND DOOR FRAMES

BUILDING SIGNAGE, BY OTHERS

−CLEAR GLAZING, TYPICAL

-DUMPSTER ENCLOSURE

WEST / FRONT ELEVATION

DUMPSTER ENCLOSURE —

NATURAL ALUMINUM CANOPY FASCIA —— OVERFLOW SCUPPER, VERIFY W/ PLB PLANS

RECESSED EIFS ACCENT PANELS TO BE "TONY TAUPE" SW7038

EAST / REAR ELEVATION RUNNER CANOPY FASCIA TO MATCH ROOF EDGE

ALUMINUM ROOF LADDER

w/ SECURITY SCREEN





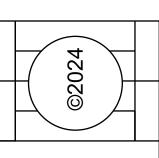






LEFT PERSPECTIVE (NORTH VIEW)
RIGHT PERSPECTIVE (SOUTH VIEW)



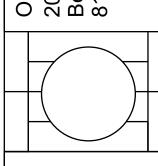


V CULVER'S RESTAURANT

OSSOVER Stat E Dixie Drivest Carrollton, OH 45449

Culver Franchising System, Inc 1240 Water Street

OLLMANN ASSOCIATES AR 200 South State Street Belvidere, Illinois 61008 815-544-7790 Phone



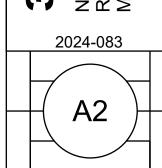
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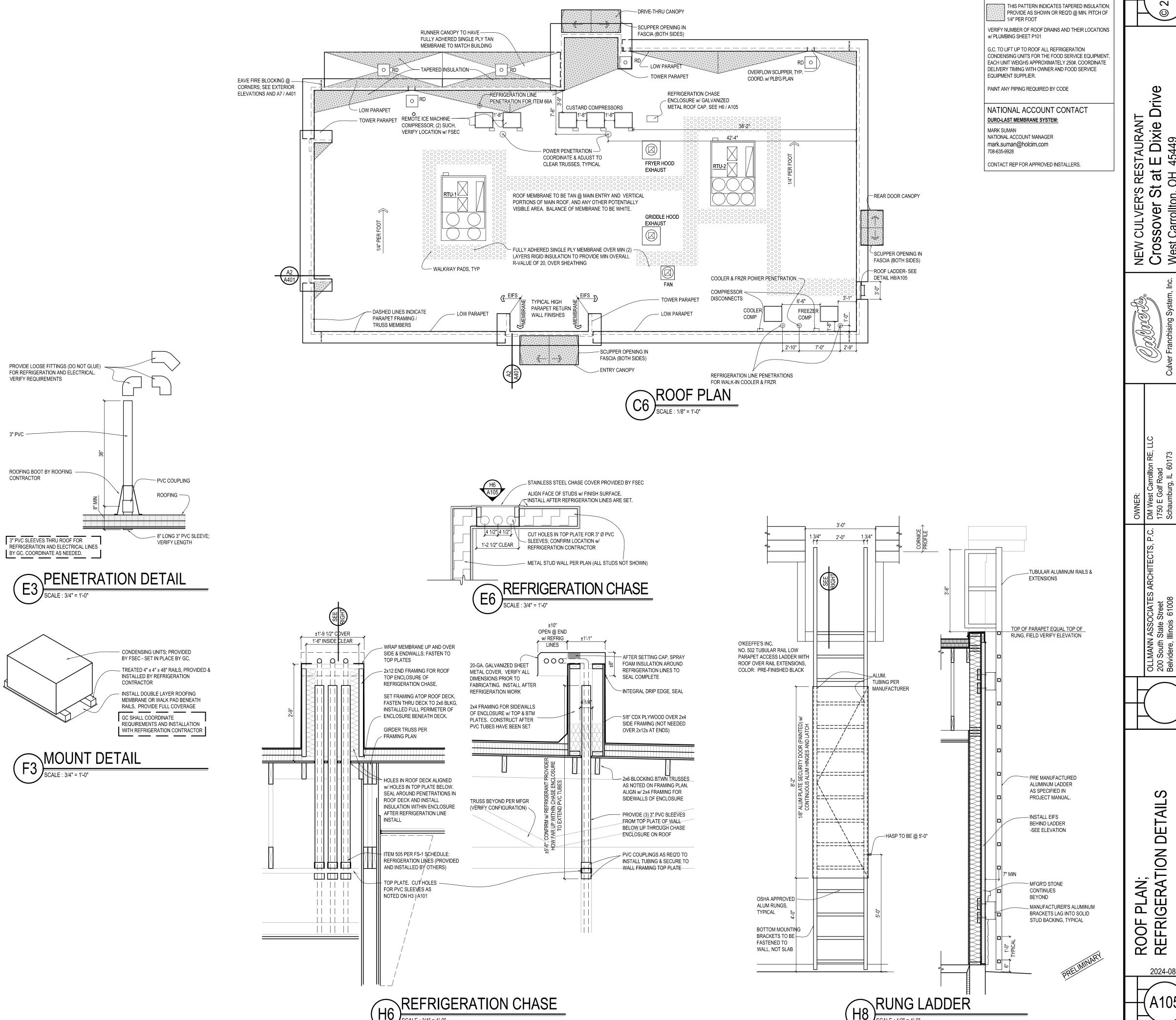
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**ROOF PLAN NOTES:** CONTRACTOR TO VERIFY ROOF TOP UNIT SPECIFICATION AND TRUSS SIZE AND SPACING



# FINAL ENGINEERING PLANS CULVER'S

SEC DIXIE DR & MANCHESTER RD WEST CARROLLTON, OH 45449

**Kimley** » Horn



SH 0

ORIGINAL ISSUE: 07/02/2024 KHA PROJECT NO. 168974019 SHEET NUMBER

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**UTILITY AND GOVERNING AGENCY CONTACTS** 

ENGINEERING DIVISION WEST CARROLLTON SERVICE DEPARTMENT 300 E CENTRAL AVE CONTACT: RICH NORTON

WEST CARROLLTON SERVICE DEPARTMENT WEST CARROLLTON, OH 45449

ROADWAY AUTHORITY CITY OF WEST CARROLTON 300 E CENTRAL AVE

PLANNING & ZONING CITY OF WEST CARROLTON PLANNING & COMMUNITY DEVELOPMENT DPT. 300 E CENTRAL AVE WEST CARROLLTON. OH 45449 TEL: (937) 859-5783

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NATURAL GAS COMPANY CENTERPOINT ENERGY 6500 CLYO ROAD DAYTON, OH 45459 TEL: (800) 227-1376

CONTACT: GREG GAINES

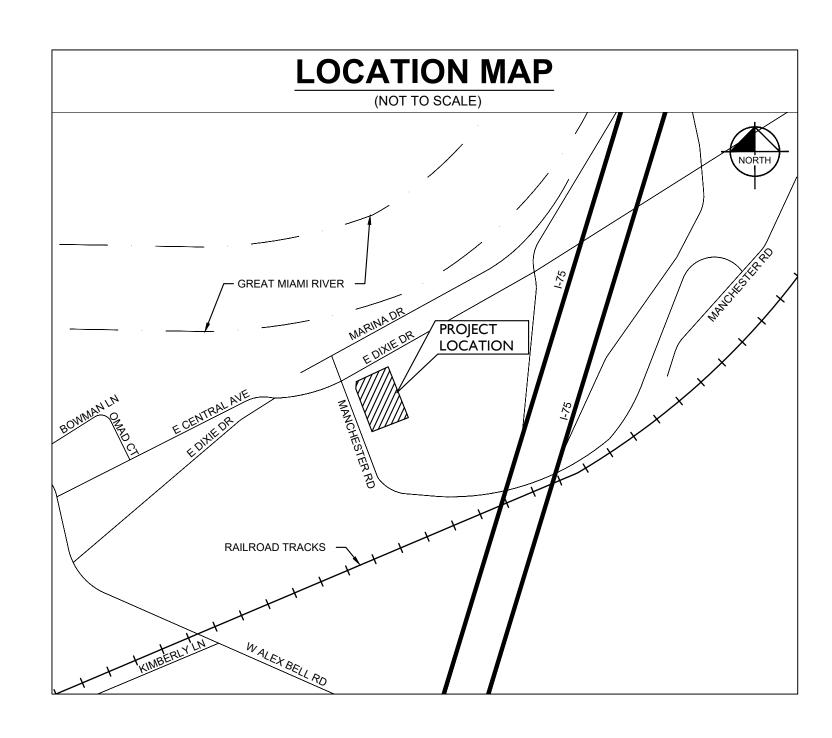
# PROJECT TEAM

OWNER'S REP/GENERAL CONTRACTOR MCCON BUILDING CORPORATION 1059 CIRCLE DRIVE HIGHLAND, WISCONSIN 53543 TEL: (608) 930-7011 CONTACT: CHRIS MCGUIRE

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LANDSCAPE ARCHITECT KIMLEY-HORN AND ASSOCIATES, INC. 4201 WINFIELD RD WARRENVILLE, IL 60555 TEL: (630) 487 3415 CONTACT: DANIEL GROVE



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# PROFESSIONAL ENGINEER'S CERTIFICATION

I, JUSTIN MULLER, A LICENSED PROFESSIONAL ENGINEER OF OHIO, HEREBY CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE "C" SERIES CIVIL SHEETS LISTED ABOVE BUT EXCLUDING DETAILS PREPARED BY OTHERS, WAS PREPARED ON BEHALF OF MCCON BUILDING CORPORATION BY KIMLEY-HORN AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 25TH DAY OF JULY, A.D., 2024.

OHIO LICENSED PROFESSIONAL ENGINEER E-75459 MY LICENSE EXPIRES ON DECEMBER 31, 2025 DESIGN FIRM REGISTRATION NUMBER: 184002012-0006

# **GENERAL NOTES**

. EXISTING SITE TOPOGRAPHY, UTILITIES, RIGHT-OF-WAY AND HORIZONTAL CONTROL SHOWN ON THE DRAWINGS (PHASE 1 PLANS, DATED 06/12/2024) WERE OBTAINED FROM THE SELLER:

MANNIK SMITH GROUP 1160 DUBLIN ROAD, SUITE 100 COLUMBUS, OH 43215 TEL: (614) 441–4222

- COPIES OF SOILS INVESTIGATION REPORTS MAY BE OBTAINED FROM THE OWNER. ANY BRACING, SHEETING OR SPECIAL CONSTRUCTION METHODS DEEMED NECESSARY BY THE CONTRACTOR IN ORDER TO INSTALL THE PROPOSED IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT. ANY ADDITIONAL SOILS DATA NEEDED TO CONFIRM THE CONTRACTOR'S OPINIONS OF THE SUBSOIL CONDITIONS SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL OBTAIN THE OWNER'S WRITTEN AUTHORIZATION TO ACCESS THE SITE TO CONDUCT A SUPPLEMENTAL SOILS INVESTIGATION.

  THE CONTRACTOR SHALL PHOTOGRAPH THE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS
- PURPOSE OF DOCUMENTING EXISTING CONDITIONS.

  EXCEPT WHERE MODIFIED BY THE CONTRACT DOCUMENTS, ALL PROPOSED WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS WHICH ARE HEREBY MADE A PART
- HEREOF:

  A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN OHIO," AS
- B. "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN OHIO" AS PUBLISHED BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA), LATEST EDITION.
- ENVIRONMENTAL PROTECTION AGENCY (OEPA), LATEST EDITION.

  D. REGULATIONS, STANDARDS AND GENERAL REQUIREMENTS SET FORTH BY CITY OF WEST CARROLLTON REQUIREMENTS TOGETHER WITH THE CURRENT EDITION OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS (CCMS), UNLESS OTHERWISE NOTED ON THE PLANS.

C. "OHIO RECOMMENDED STANDARDS FOR SEWAGE WORKS," AS PUBLISHED BY THE OHIO

- E. THE NATIONAL ELECTRIC CODE.
- F. ALL APPLICABLE PROVISIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT ARE HEREIN INCORPORATED BY REFERENCE.
- G. CONSTRUCTION PLANS FOR IMPROVEMENTS SHALL BE FURNISHED IN ACCORDANCE WITH THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE CITY OF COLUMBUS.
- STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THE CONTRACTOR'S WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED A PART OF THE CONTRACTOR'S CONTRACT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT, AS SHOWN ON THE PLANS, ARE INCLUDED IN THE CONTRACT. ANY ITEM NOT SPECIFICALLY INCLUDED IN THE CONTRACT, BUT SHOWN ON THE PLANS, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN THE EVENT OF A DISCREPANCY WITH THE PLANS AND QUANTITIES.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF "APPROVED" ENGINEERING PLANS WITH THE LATEST REVISION DATE ON THE JOB SITE PRIOR TO THE START OF CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT THEM TO THE SURVEYOR OR ENGINEER BEFORE DOING ANY WORK. OTHERWISE, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS, AND ON SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THE CONTRACTOR'S OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE
- ENGINEER SHALL BE FINAL AND CONCLUSIVE.

  8. THE CONTRACTOR SHALL SUBSCRIBE TO ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS PRIOR TO STARTING WORK. THE CONTRACTOR, BY USING THESE PLANS FOR THEIR WORK, AGREE TO HOLD HARMLESS KIMLEY—HORN AND ASSOCIATES, INC, THE MUNICIPALITY, THEIR EMPLOYEES AND AGENTS AND THE OWNER FROM AND AGAINST ANY AND ALL LIABILITY, CLAIMS, DAMAGES, AND THE COST OF DEFENSE ARISING OUT OF CONTRACTOR(S) PERFORMANCE OF THE WORK DESCRIBED HEREIN.
- 9. THE ENGINEER AND OWNER ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF THE WORK IN ACCORDANCE WITH THE CONTRACT
- 10. CONSTRUCTION MATERIALS AND/OR EQUIPMENT MAY NOT BE STORED IN THE RIGHT-OF-WAY, AS DIRECTED BY THE OWNER.
- 11. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT—OF—WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- 12. OWNER SHALL OBTAIN EASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND FASEMENTS.
- 13. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE SURVEYOR AT THE CONTRACTOR'S EXPENSE.
   14. NOTIFICATION OF COMMENCING CONSTRUCTION:
- 14.A. THE CONTRACTOR SHALL NOTIFY AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY, AS NECESSARY, ALL TESTING AGENCIES, CITY OF WEST CARROLLTON, AND THE OWNER SUFFICIENTLY IN ADVANCE OF CONSTRUCTION.
- 14.B. FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN THE TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING WILL CAUSE THE CONTRACTOR TO SUSPEND THE OPERATION TO BE TESTED UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK SHALL BE BORNE BY THE CONTRACTOR.
- 15. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL EMERGENCY TRAFFIC, AS DIRECTED BY THE MUNICIPALITY.
- 16. ANY EXISTING SIGNS, LIGHT STANDARDS, AND UTILITY POLES THAT INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED ON THE PLANS FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE, AS DIRECTED BY THE ENGINEER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.
- 17. ALL TREES TO BE SAVED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION BY THE LANDSCAPE ARCHITECT AND SHALL BE PROTECTED PER ODOT SECTION 201.02. THE RIGHT-OF-WAY LINE AND LIMITS OF THE CONTRACTOR'S OPERATIONS SHALL BE CLEARLY DEFINED THROUGHOUT THE CONSTRUCTION PERIOD. ALL TREES NOTED TO REMAIN SHALL BE PROTECTED FROM DAMAGE TO TRUNKS, BRANCHES AND ROOTS. NO EXCAVATING, FILLING OR GRADING IS TO BE DONE INSIDE THE DRIP LINE OF TREES UNLESS OTHERWISE
- 18. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT, FORESTER, OR ARBORIST AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THE CONTRACTOR'S WORK SHALL BE DISPOSED OF OFF—SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. ALL CUTS OVER ONE (1) INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.
- 19. ALL EXISTING PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAWCUT ALONG LIMITS OF PROPOSED REMOVAL BEFORE COMMENCEMENT OF PAVEMENT REMOVAL.
- 20. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT, AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A PAY ITEM IS LISTED ON THE BID LIST.
- 21. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL.
- 22. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEANUP, AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.
- 23. NO UNDERGROUND WORK WITHIN THE PUBLIC RIGHT—OF—WAY SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY CITY OF WEST CARROLLTON. APPROVAL TO PROCEED MUST BE OBTAINED FROM CITY OF WEST CARROLLTON AND OHIO DEPARTMENT OF TRANSPORTATION PRIOR TO INSTALLING PAVEMENT BASE, BINDER, AND SURFACE, AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET, AS NECESSARY.
- 4. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND PIPE SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THE CONTRACTOR'S WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE MERGED INTO THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR STORM SEWERS, WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL, AND DISPOSAL OF DEBRIS AND DIRT. DRAINAGE STRUCTURES AND STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR STORM SEWERS CONSTRUCTED AS PART OF THE CONTRACTOR'S PROJECT.
- 25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLANS. THE CONTRACTOR SHALL CALL OHIO811 (1–800–362–2764) AND CITY OF WEST CARROLLTON FOR LITHING LOCATIONS.
- 26. THE GENERAL CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO PROVIDE CABLE TV, PHONE, ELECTRIC, GAS AND IRRIGATION SERVICES. GENERAL CONTRACTOR

- SHALL BE RESPONSIBLE FOR SECURING SITE LAYOUTS FOR THESE UTILITIES AND SHALL COORDINATE AND PROVIDE CONDUIT CROSSINGS AS REQUIRED. THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO GENERAL CONTRACTOR AGREEMENT WITH THE OWNER. ANY CONFLICTS IN UTILITIES SHALL BE CORRECTED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 27. CONTRACTOR IS TO VERIFY ALL EXISTING STRUCTURES AND FACILITIES AT ALL PROPOSED UTILITY CONNECTION LOCATIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL AND STARTING WORK.
- 28. ANY FIELD TILES ENCOUNTERED SHALL BE INSPECTED BY THE ENGINEER. THE DRAIN TILE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM AND A RECORD KEPT BY THE CONTRACTOR OF THE LOCATIONS AND TURNED OVER TO THE ENGINEER UPON COMPLETION OF THE PROJECT. THE COST OF THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

  29. ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWERS, VALVE VAULT COVERS, FIRE HYDRANTS, AND B-BOXES ARE TO BE ADJUSTED TO MEET FINISHED GRADE. THE CONTRACTOR'S ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR, AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED
- BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT.

  30. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM, IF AVAILABLE. DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR FLUSHING OR USING THE HYDRANT AT THE CONTRACTOR'S OWN EXPENSE. LEAKS IN THE WATER DISTRIBUTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE WATER MAIN CONTRACTOR AND SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 31. TRENCH BACKFILL WILL BE REQUIRED TO THE FULL DEPTH ABOVE SEWERS AND WATERMAIN WITHIN TWO (2) FEET HORIZONTAL OF PROPOSED OR EXISTING PAVEMENT.

  32. IF SOFT, SPONGY, OR OTHER UNSUITABLE SOILS WITH UNCONFINED COMPRESSIVE STRENGTH LESS THAN 0.5 TSF ARE ENCOUNTERED AT THE BOTTOM OF THE TRENCH, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH WELL—COMPACTED, CRUSHED LIMESTONE
- BEDDING MATERIAL. IF ROCK IS ENCOUNTERED, IT SHALL BE REMOVED TO AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE TO ALLOW PROPER THICKNESS OF BEDDING. ANY UNDERCUTS OF TWO (2) FEET OR LESS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. DEPTHS GREATER THAN TWO (2) FEET SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PROCEEDING.

  33. THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR, AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.
- 4. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE PROPER INLET PROTECTION EROSION CONTROL AT LOCATIONS INDICATED BY THE ENGINEER. THE PURPOSE OF THE INLET PROTECTION WILL BE TO MINIMIZE THE AMOUNT OF SILTATION THAT NORMALLY WOULD ENTER THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.
- 35. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.
- 36. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH OEPA REGULATIONS AND ODOT STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL AND SHALL BE MAINTAINED BY THE CONTRACTOR AND REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS DEVELOPED.

  37. THE CONTRACTOR SHALL CONFORM TO ALL EROSION CONTROL REQUIREMENTS AS SET FORTH BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY THROUGH THE NPDES PHASE II PERMIT PROGRAM REQUIREMENTS AND GOVERNING MUNICIPALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THE EROSION CONTROL DRAWINGS AND SPECIFICATIONS AS WELL AS THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY—HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP
- PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY—HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPI AT A MINIMUM, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SWPPP DOCUMENTATION CURRENT AND READILY AVAILABLE ON THE PROJECT SITE AT ALL TIMES FOR REVIEW BY THE OWNER, ENGINEER, AND REGULATORY AGENCIES. KIMLEY—HORN AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR SUPPLIERS, WHICH CONTRIBUTE TO DEFICIENCIES IN THE SWPPP OR ANY VIOLATIONS RESULTING FROM INADEQUATE EROSION CONTROL PROTECTION AND/OR DOCUMENTATION.
- 38. THE PAVEMENT SHALL BE KEPT FREE OF MUD AND DEBRIS AT ALL TIMES. IT MAY BE NECESSARY TO KEEP A SWEEPER ON-SITE AT ALL TIMES.

  39. ALL DISTURBED AREAS OF THE RIGHT-OF-WAY SHALL BE FULLY RESTORED TO PRE-CONSTRUCTION CONDITIONS WITH A MINIMUM OF SIX (6) INCHES OF TOPSOIL, SEEDING,
- AND MULCH AS PER ODOT STANDARDS.

  40. ALL PROPOSED GRADES SHOWN ON PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.
- 41. ALL TESTING SHALL BE THE RESPONSIBILITY AND EXPENSE OF THE CONTRACTOR. IF REQUESTED BY THE MUNICIPALITY OR ENGINEER, COPIES OF ALL TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL.
  42. PROVIDE SMOOTH VERTICAL CURVES THROUGH HIGH AND LOW POINTS INDICATED BY SPOT
- ELEVATIONS. PROVIDE UNIFORM SLOPES BETWEEN NEW AND EXISTING GRADES. AVOID RIDGES AND DEPRESSIONS.

  43. WHEN REQUIRED, THE CONTRACTOR SHALL NOTIFY THE OWNER WHEN RECORD DRAWINGS CAN BE PREPARED. RECORD DRAWINGS SHALL INDICATE THE FINAL LOCATION AND LAYOUT OF ALL IMPROVEMENTS, INCLUDING VERIFICATION OF ALL CONCRETE PADS, INVERT, RIM, AND SPOT GRADE ELEVATIONS, AND INCORPORATE ALL FIELD DESIGN CHANGES APPROVED BY THE OWNER.
- 44. BEFORE ACCEPTANCE, ALL WORK SHALL BE INSPECTED BY CITY OF WEST CARROLLTON, AS NECESSARY.

## **EARTHWORK NOTES**

- 1. GENERAL
- 1.1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.
- 1.2. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND BE KNOWLEDGEABLE OF ALL SITE CONDITIONS.
- 1.3. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC., MUST BE ACCOUNTED FOR.
- 1.4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
- 1.5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTY, WETLANDS, ETC., SHALL OCCUR BEFORE GRADING BEGINS.
- 1.6. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A CONSTRUCTION FENCE AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE, THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.
- 2. TOPSOIL EXCAVATION INCLUDES:
- 2.1. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.
- 2.2. PLACEMENT OF EXCAVATED MATERIAL IN OWNER-DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.
  2.3. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED
- OF OFF-SITE.

  2.4. TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING SIX (6) INCHES OF TOPSOIL DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR AS
- DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE FEOR DIRECTED BY THE OWNER.

  2.5. MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.

  3. EARTH EXCAVATION INCLUDES:
- 3.1. EXCAVATION OF SUBSURFACE MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.
- 3.2. PLACEMENT OF SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.
  3.3. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.
- 3.4. COMPACTION OF SUITABLE MATERIALS SHALL BE TO AT LEAST 98% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION

- SHALL BE AT LEAST 98% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.

  4. UNSUITABLE MATERIAL: UNSUITABLE MATERIALS SHALL BE CONSIDERED MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION.
- THE DECISION TO REMOVE SAID MATERIAL AND TO WHAT EXTENT SHALL BE MADE BY THE SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

  5. MISCELLANEOUS. THE CONTRACTOR SHALL:
- 5.1. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
- 5.2. SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
- 5.3. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.5.4. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.
- PLACEMENT OF THE BASE COURSE MATERIAL.

  6. TESTING AND FINAL ACCEPTANCE

  6.1. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM A FULLY LOADED SIX—WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SUBGRADE PRIOR TO THE PLACEMENT OF THE CURB AND GUTTER AND THE BASE MATERIAL. THIS SHALL BE WITNESSED BY THE SOILS ENGINEER AND THE OWNER. (SEE PAVING SPECIFICATION.)
- 6.2. ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE CORRECTED AND APPROVED BY THE SOILS ENGINEER.

# **PAVING NOTES**

- GENERAL
- I. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION, AND COMPACTION;
  PLACEMENT OF SUBBASE OR BASE COURSE MATERIALS; BITUMINOUS BINDER AND/OR
  SURFACE COURSES; FORMING, FINISHING, AND CURING CONCRETE PAVEMENT, CURBS, AND
  WALKS; AND FINAL CLEAN—UP AND ALL RELATED WORK.
- 1.2. COMPACTION REQUIREMENTS [REFERENCE ASTM D-1557 (MODIFIED PROCTOR)]: SUBGRADE = 98%; SUBBASE = 98%; AGGREGATE BASE COURSE = 98%; BITUMINOUS COURSES = 98% OF MAXIMUM DENSITY, PER OHIO DEPARTMENT OF TRANSPORTATION (ODOT) HIGHWAY STANDARDS.
- 1.3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING WARNING DEVICES, AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, AND IN ACCORDANCE WITH CITY OF WEST CARROLLTON CODE.
  2. SUBGRADE PREPARATION
- 2.1. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL CONFIRM THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISHED TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS, UNLESS THE CONTRACTOR ADVISES THE SOILS ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION. IT IS UNDERSTOOD THAT THE CONTRACTOR HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.
- 2.2. PRIOR TO THE PLACEMENT OF THE BASE COURSE, THE SUBGRADE MUST BE PROOF—ROLLED AND INSPECTED FOR UNSUITABLE MATERIALS AND/OR EXCESSIVE MOVEMENT. IF UNSUITABLE SUBGRADE IS ENCOUNTERED, IT SHALL BE CORRECTED. THIS MAY INCLUDE ONE OR MORE OF THE FOLLOWING METHODS:
- 2.2.1. SCARIFY, DISC, AND AERATE.
- 2.2.2. REMOVE AND REPLACE WITH STRUCTURAL CLAY FILL.
- 2.2.3. REMOVE AND REPLACE WITH GRANULAR MATERIAL.
- 2.2.4. USE OF GEOTEXTILE FABRIC.
- MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE—QUARTER (1/4) INCH TO ONE—HALF (1/2) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.

  2.3. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE—GRADED TO WITHIN 0.04 FEET (1/2 INCH) OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF THE CURB, SO AS TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE
- PREPARATION WILL BE HONORED.

  2.4. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER.
- 3. CONCRETE WORK

  3.1. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AIR ENTRAINMENT OF NOT LESS THAN FIVE (5%) OR MORE THAN EIGHT (8%) PERCENT. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 3,500 PSI COMPRESSIVE STRENGTH AT FOURTEEN (14) DAYS AND A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY—EIGHT (28) DAYS. ALL CONCRETE SHALL BE BROOM—FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.
- 3.2. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PRE—MOLDED FIBER EXPANSION JOINTS, WITH TWO 3/4—INCH BY 18—INCH EPOXY—COATED STEEL DOWEL BARS, SHALL BE GREASED AND FITTED WITH METAL
- 3.3. CURBS SHALL BE DEPRESSED AND MEET THE SLOPE REQUIREMENTS OF THE OHIO BUILDING CODE AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINES AND OTHER LOCATIONS, AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY.
- 3.4. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.
  3.5. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT 5-FOOT INTERVALS AND 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINTS AT 20-FOOT INTERVALS AND ADJACENT TO CONCRETE CURBS,
- DRIVEWAYS, FOUNDATIONS, AND OTHER STRUCTURES.

  3.6. CONCRETE CURING AND PROTECTION SHALL BE PER ODOT STANDARDS. TWO (2) COATS OF ODOT APPROVED CURING AGENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE
- SURFACES.

  3.7. THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.
- 4.1. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AISLES SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE COURSE, TYPE B, BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, 408 PRIME COAT; AND BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX N50, OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM
- 4.2. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE BINDER COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE BINDER COURSE. PRIME COAT MATERIALS SHALL BE ODOT APPROVED.
- 4.3. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE BINDER COURSE SHALL BE CLEANED AND TACK—COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE BINDER, BASE, OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND STAFF NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS PER ODOT STANDARDS.
- 4.4. SEAMS IN BAM, BINDER, AND SURFACE COURSE SHALL BE STAGGERED A MINIMUM OF 6 INCHES.
- TESTING AND FINAL ACCEPTANCE.
   THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE TESTING ENGINEER.
- 5.2. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY CITY OF WEST CARROLLTON, SHALL OBTAIN SPECIMENS OF THE BINDER COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.
- 5.3. WHEN REQUIRED BY CITY OF WEST CARROLLTON, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD REQUIRED BY ODOT STANDARDS.5.4. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.
- ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO CITY OF WEST CARROLLTON CODE. WHEN CONFLICTS ARISE BETWEEN MUNICIPAL CODE, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

# SIGNAGE AND PAVEMENT MARKING NOTES

- ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT)
- ON.
  2. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080—INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE. LEGEND SHALL BE IN ACCORDANCE WITH THE MUTCD.

  3. POSTS: SIGN POSTS SHALL BE A HEAVY—DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0
  POLINDS/FOOT SUCH AS A TYPE B METAL POST AS PER THE IDOT STANDARDS (OR 2—INCH
- 3. POSTS: SIGN POSTS SHALL BE A HEAVY-DUTY STEEL "U" SHAPED CHANNEL WEIGHING 3.0 POUNDS/FOOT, SUCH AS A TYPE B METAL POST, AS PER THE IDOT STANDARDS (OR 2-INCH PERFORATED STEEL TUBE).

  4. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH ODOT STANDARDS.
- 5. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED THERMOPLASTIC.
   6. PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH ODOT STANDARDS.
- COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND LOCAL CODE. STANDARD PARKING SPACES SHALL BE PAINTED WHITE OR YELLOW PER LOCAL CODE.
   THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55 DEGREES FAHRENHEIT AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT AND RISING.

# **SANITARY SEWER NOTES**

1. SANITARY SEWER PIPE: ALL SANITARY SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PLASTIC PIPE (PVC SDR-35), CONFORMING TO ASTM D3034 AND D2241 WITH ELASTOMERIC GASKET JOINTS CONFORMING TO ASTM D3139 AND D3212. ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND CITY OF WEST CARROLLTON PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL SANITARY SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

- PIPE SIZE
  4" 12"
  PVC
  POLYVINYL CHLORIDE PLASTIC PIPE SDR-35 (ASTM D3034 AND D2241)
  4"-48"
  DIP
  DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)

  2. BAND-SEAL OR SIMILAR FLEXIBLE-TYPE COUPLINGS SHALL BE USED WHEN CONNECTING SEWER PIPES OF DISSIMILAR MATERIALS. ALL SANITARY SEWER CONSTRUCTION (AND STORM SEWER CONSTRUCTION IN COMBINED SEWER AREAS), REQUIRES STONE BEDDING WITH STONE ½" TO 1" IN SIZE WITH MINIMUM BEDDING THICKNESS EQUAL TO ¼ THE OUTSIDE DIAMETER OF THE SEWER PIPE, BUT NO LESS THAN FOUR (4) INCHES NOR MORE THAN EIGHT (8) INCHES. AS A MINIMUM, THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-33. THE GRADATION SHALL BE EXTENDED AT LEAST 12" ABOVE THE TOP OF THE PIPE WHEN USING PVC.
- 3. ALL UNSUITABLE MATERIALS SHALL BE REMOVED BELOW THE PROPOSED SANITARY SEWER AND REPLACED WITH COMPACTED CRUSHED GRAVEL OR STONE, AS PER ODOT STANDARDS.
  4. ALL TRENCHES BENEATH PROPOSED OR EXISTING UTILITIES, PAVEMENTS, ROADWAYS, SIDEWALKS, AND FOR A DISTANCE OF TWO (2) FEET ON EITHER SIDE OF SAME, AND/OR WHERE SHOWN ON THE PLANS, SHALL BE BACKFILLED WITH SELECT GRANULAR BACKFILL PER ODOT STANDARDS AND THOROUGHLY MECHANICALLY COMPACTED IN 9-INCH THICK (LOOSE MEASUREMENT) LAYERS. JETTING WITH WATER IS
- NOT PERMITTED.

  5. ALL SANITARY SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.

  6. CONNECTIONS TO EXISTING SANITARY SEWER SYSTEM SHALL NOT BE DONE UNTIL AUTHORIZED BY CITY
- WATERMAINS SHALL BE SEPARATED FROM SANITARY SEWERS AND STORM SEWERS IN ACCORDANCE WITH OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) REQUIREMENTS, AS SPECIFIED IN THE OHIO BUILDING CODE.
   NO WATER LINE SHALL BE PLACED IN THE SAME TRENCH AS A SEWER LINE, EXCEPT UNDER SPECIAL CIRCUMSTANCES AND THEN ONLY UNDER THE FOLLOWING RULES:
- A. IF NECESSARY PERMISSION SHALL BE OBTAINED FROM CITY OF WEST CARROLLTON IN WRITING PRIOR TO BEGINNING CONSTRUCTION.

  B. THE BOTTOM OF A WATER LINE SHALL BE INSTALLED ON A SHELF A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER AND 18 INCHES HORIZONTALLY AWAY FROM THE EDGE OF THE SEWER.

  9. ALL SANITARY MANHOLES (AND STORM MANHOLES IN COMBINED SEWER AREAS) SHALL HAVE A MINIMUM INSIDE DIAMETER OF 48 INCHES AND SHALL BE CAST IN PLACE OR PRE—CAST REINFORCED CONCRETE. A WATERTIGHT BOOT, CONFORMING TO ASTM C—923, SHALL BE USED AT THE PIPE—STRUCTURE
- 10. ALL PIPE CONNECTION OPENINGS SHALL BE PRECAST WITH RESILIENT RUBBER WATER—TIGHT SLEEVES.
  THE BOTTOM OF THE MANHOLE SHALL HAVE A CONCRETE BENCH POURED TO FACILITATE SMOOTH
  FLOWS.

  11. FRAMES AND LIDS: SEE DETAILS FOR ALL SANITARY SEWER MANHOLE FRAMES AND LIDS. THE LIDS
  SHALL HAVE RECESSED (CONCEALED) PICK HOLE AND BE SELF—SEALING WITH AN "O" RING GASKET. THE
  LIDS SHALL HAVE THE WORD "SANITARY" EMBOSSED ON THE SURFACE. THE JOINTS BETWEEN THE FRAME
- AND CONCRETE SECTION SHALL BE SEALED WITH A BUTYL ROPE.

  12. A MAXIMUM OF TWELVE (12) INCHES OF CONCRETE—ADJUSTING RINGS SHALL BE USED TO ADJUST FRAME ELEVATIONS. RINGS SHALL BE SEALED TOGETHER WITH BUTYL ROPE.
- 13. CLEANING: ALL MANHOLES AND PIPES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS, AND ALL VISIBLE LEAKAGE ELIMINATED, BEFORE FINAL INSPECTION AND ACCEPTANCE.

  14. TESTING: DEFLECTION, AIR, AND LEAKAGE TESTING WILL BE REQUIRED. THE PROCEDURE AND

ALLOWABLE TESTING LIMITS SHALL BE IN ACCORDANCE WITH THE OHIO BUILDING CODE.

- 15. TESTING THE ALIGNMENT/STRAIGHTNESS SHALL BE IN ACCORDANCE WITH CITY OF WEST CARROLLTON CODE.

  16. TELEVISING: IF REQUIRED BY THE MUNICIPALITY, ALL SANITARY SEWERS SHALL BE TELEVISED, AND A COPY OF THE TAPE AND A WRITTEN REPORT SHALL BE SUBMITTED AND REVIEWED BY CITY OF WEST CARROLLTON BEFORE FINAL ACCEPTANCE. THE REPORT SHALL INCLUDE STUB LOCATION AS WELL AS A DESCRIPTION OF ALL DEFECTS, WATER LEVEL, LEAKS, AND LENGTHS. IDENTIFY MANHOLE TO MANHOLE BOTH VERBALLY AND ON—SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE VIDEOTABLES.
- BOTH VERBALLY AND ON-SCREEN USING MANHOLE NUMBERS FROM APPROVED PLANS. ORDER OF WRITTEN REPORT SHALL BE THE SAME AS THE VIDEOTAPES.

  17. TEST RESULTS: IF THE SANITARY SEWER INSTALLATION FAILS TO MEET THE TEST REQUIREMENTS SPECIFIED, THE CONTRACTOR SHALL DETERMINE THE CAUSE OR CAUSES OF THE DEFECT AND REPAIR, OR REPLACE ALL MATERIALS AND WORKMANSHIP, AS MAY BE NECESSARY TO COMPLY WITH THE TEST
- 18. CERTIFICATION: CONTRACTOR SHALL SUBMIT CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIPE. TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FOR "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL PLATE LOADING." ASTM STANDARDS D—2241, AS APPROPRIATE FOR THE PIPE, TO BE USED. TESTS SHALL ALSO BE CONDUCTED TO DEMONSTRATE JOINT PERFORMANCE AT FIVE (5) PERCENT MAXIMUM DIAMETRIC DEFLECTION OF THE SPIGOT.
- 19. CONTRACTOR SHALL VERIFY THAT THE TESTING METHODS DESIGNATED HEREIN ARE ACCEPTABLE TO THE LOCAL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

# STORM SEWER NOTES

WEST CARROLLTON.

- 1. STORM SEWER PIPE: ALL STORM SEWER PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE, IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS FOR DETERMINING PIPE CLASS AND CONFORMING TO ASTM C76. ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND CITY OF WEST CARROLLTON PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL STORM SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:
- PIPE SIZE CODE PIPE MATERIAL

  12"-60" RCP REINFORCED CONCRETE PIPE (ASTM C76); SEE ODOT SPECS FOR PIPE CLASS

  3" 12" PVC POLYVINYL CHLORIDE PLASTIC PIPE SDR-26 (ASTM D3034 AND D2241)

  3"-48" HDPE HIGH DENSITY POLYETHYLENE PIPE

  3"-48" DIP DUCTILE IRON PIPE, CLASS 52 (ANSI 21.51 AND AWWA C151)
- 2. BAND-SEAL OR SIMILAR COUPLING SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS.
- ALL FOOTING DRAIN DISCHARGE PIPES AND DOWN SPOUTS SHALL DISCHARGE TO THE STORM SEWER SYSTEM.
   CONSTRUCTION: ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND CRADE
- 5. COVER: THE CONTRACTOR SHALL MAINTAIN AT LEAST TWO (2) FEET OF COVER OVER THE TOP OF SHALLOW PIPES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MOUND OVER ANY PIPES THAT HAVE LESS THAN TWO (2) FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINAL GRADED OR PAVED.
- 6. STRUCTURES: MANHOLE, CATCH BASIN, AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE. MANHOLES AND CATCH BASINS SHALL BE A MINIMUM OF FOUR (4) FEET IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. STRUCTURE JOINTS SHALL BE SEALED WITH "O" RING OR BUTYL ROPE. A MAXIMUM OF TWELVE (12) INCHES OF ADJUSTING RINGS SHALL BE USED.
- 7. A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS AND MANHOLES.8. THE FRAME, GATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE STYLE SHOWN ON THE PLANS.
- 9. CLEANING: THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.
  10. THE STORM SEWER SHALL BE TELEVISED IF REQUIRED BY CITY OF WEST CARROLLTON.

  11. MANHOLES, CATCH BASINS, INLETS, FRAMES, GRATES, AND OTHER STRUCTURES SHALL BE CONSTRUCTED OF THE TYPE, STYLE, AND SIZE AS SET FORTH WITH THE ORDINANCES AND STANDARDS OF CITY OF

12. ALL PVC PIPES CONNECTED TO REINFORCED CONCRETE PIPE SHALL BE CORED AND BOOTED.

- WATERMAIN NOTES
- 1. WATERMAIN PIPE: ALL WATERMAIN PIPE MATERIAL, SIZE AND TYPE SHALL BE INSTALLED AS INDICATED ON THE UTILITY PLAN. UNLESS OTHERWISE NOTED ON THE PLANS, ALL WATERMAIN PIPE SHALL BE CONSTRUCTED OF BITUMINOUS—COATED CEMENT—LINED DUCTILE IRON PIPE, CLASS 53, CONFORMING TO ANSI A21.51 (AWWA C151). CEMENT MORTAR LINING SHALL CONFORM TO ANSI A21.4 (AWWA C104). THE JOINTS SHALL BE PUSH—ON COMPRESSION GASKET JOINTS CONFORMING TO ANSI A21.11 (AWWA C111). ANY CHANGES TO THE PIPE MATERIAL, SIZE AND TYPE MUST BE APPROVED BY THE OWNER, ENGINEER AND CITY OF WEST CARROLLTON PRIOR TO ORDERING MATERIALS OR INSTALLING THE PIPE. ALL WATERMAIN PIPE SHALL BE INSTALLED IN ACCORDANCE
- INSTALLING THE PIPE. ALL WATERMAIN PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

  PIPE SIZE CODE PIPE MATERIAL
  3"-48" DIP DUCTILE IRON PIPE, CLASS 53 (ANSI 21.51 AND AWWA C151)
  ≤ 2" TYPE "K" COPPER PIPE
- FITTINGS: ALL FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND MECHANICAL JOINTS CONFORMING TO ANSI AS21.10 (AWWA C110).
   VALVES: GATE VALVES SHALL BE USED ON ALL WATERMAINS. ALL VALVES SHALL TURN COUNTER—CLOCKWISE TO OPEN. VALVES SHALL BE IRON BODY RESILIENT WEDGE GATE VALVES WITH BRONZE—MOUNTED SEATS AND NON—RISING STEMS CONFORMING TO AWWA
- C-509. THE VALVES SHALL HAVE MECHANICAL JOINTS.

  4. THE MECHANICAL JOINTS AND ALL FASTENERS ON THE VALVE BODY SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.
- 5. VALVE VAULTS: VALVE VAULTS SHALL BE PRECAST CONCRETE STRUCTURES FIVE (5) FEET IN DIAMETER, AS NOTED ON THE PLANS. THE FRAME AND LID SHALL BE ACCORDING TO THE DETAIL ON THE PLANS, WITH "WATER" EMBOSSED ON THE LID.
- 6. FIRE HYDRANTS: SEE PLANS FOR APPROVED FIRE HYDRANT DETAIL. FIRE HYDRANTS SHALL BE INSTALLED WITH AN AUXILIARY VALVE AND CAST IRON VALVE BOX. FIRE HYDRANTS SHALL HAVE AUXILIARY VALVES WITH A HYDRANT BARREL TO VALVE BOX RESTRAINING DEVICE. THE PUMPER CONNECTION SHALL FACE THE ROADWAY.
- PROVIDE AND INSTALL FOUR MEGALUG JOINT RESTRAINTS AT EACH JOINT FROM THE
  MAINLINE TEE TO THE AUXILIARY VALVE AND BETWEEN THE AUXILIARY VALVE AND THE
  HYDRANT BARREL.
   THE BREAK FLANGE AND ALL BELOW-GRADE FITTING SHALL HAVE STAINLESS STEEL
- 9. CORPORATION STOPS: CORPORATION STOPS SHALL BE BRONZE BODY KEY STOPS CONFORMING TO AWWA C-800 AND SHALL INCLUDE "J" BEND, TAILPIECE, AND COMPRESSION FITTINGS. SIZE AND LOCATION AS SHOWN ON THE PLANS.
- 10. SERVICE BOX: PROVIDE CURB VALVE AND CURB BOX, AS INDICATED ON THE PLANS.
  BOX SHALL BE EXTENSION TYPE WITH FOOT PIECE AND STATIONARY RODS FOR SIX (6)
  FEET OF BURY.
- 11. MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.

12. BEDDING: ALL WATERMAINS SHALL BE BEDDED ON FIRM GROUND, WITH BELLHOLES EXCAVATED SO THAT THE PIPE HAS AN EVEN BEDDING FOR ITS ENTIRE LENGTH.

- 13. GRANULAR BEDDING MATERIAL OR GRANULAR BACKFILL MATERIAL SHALL BE CAREFULLY PLACED TO TWELVE (12) INCHES OVER THE TOP OF THE PIPE BEFORE FINAL BACKFILLING AND COMPACTION.
- 14. A MINIMUM DEPTH OF COVER OF 4 FEET 6 INCHES SHALL BE MAINTAINED OVER THE WATER LINES. THE MAXIMUM COVER SHALL BE EIGHT (8) FEET, EXCEPT AT SPECIAL CROSSINGS AND ONLY AS DESIGNATED ON THE PLANS..
  15. "MEGA-LUG" RETAINER GLANDS AND THRUST BLOCKING SHALL BE INSTALLED ON WATERMAINS AT ALL BENDS, FITTINGS, TEES, ELBOWS, ETC. "MEGA-LUG" RESTRAINED JOINTS ARE REQUIRED ON ALL VALVES AND ALL FITTINGS. THE COST FOR THIS WORK SHALL BE INCIDENTAL TO THE UNIT PRICE FOR THE PIPE INSTALLED.
- 16. OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) AND CITY OF WEST CARROLLTON WATERMAIN PROTECTION:16.1. HORIZONTAL SEPARATION
- 16.1.1. WATERMAINS SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED DRAIN, STORM SEWER, SANITARY SEWER, OR SEWER SERVICES CONNECTION.
- 16.1.2. WATERMAINS MAY BE LAID CLOSER THAN TEN (10) FEET TO A SEWER LINE WHEN:16.1.2.1. LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF TEN (10) FEET;
- 16.1.2.2. THE WATERMAIN INVERT IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE SEWER;

  16.1.2.3. THE WATERMAIN IS EITHER IN A SEPARATE TRENCH OR IN THE SAME
- TRENCH ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER.

  16.1.3. WHEN IT IS IMPOSSIBLE TO MEET (1) OR (2) ABOVE, BOTH THE WATERMAIN AND DRAIN OR SEWER SHALL BE CONSTRUCTED OF SLIP—ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, PRESTRESSED CONCRETE PIPE, OR PVC PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION AND IN CONFORMANCE WITH THE OHIO BUILDING CODE. THE DRAIN OR SEWER SHALL BE PRESSURE—TESTED TO THE MAXIMUM EXPECTED SURCHARGE HEAD BEFORE
- 16.2. <u>VERTICAL SEPARATION</u>
- 16.2.1. A WATERMAIN SHALL BE LAID SO THAT ITS INVERT IS EIGHTEEN (18) INCHES ABOVE THE CROWN OF THE DRAIN OR SEWER WHENEVER WATERMAINS CROSS STORM SEWERS, SANITARY SEWERS, OR SEWER SERVICE CONNECTIONS. THE VERTICAL SEPARATION SHALL BE MAINTAINED FOR THAT PORTION OF THE WATERMAIN LOCATED WITHIN TEN (10) FEET HORIZONTALLY OF ANY SEWER OR DRAIN CROSSED. A LENGTH OF WATERMAIN PIPE SHALL BE CENTERED OVER THE SEWER TO BE CROSSED WITH JOINTS EQUIDISTANT FROM THE SEWER OR
- 16.2.1.1. IT IS IMPOSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, AS DESCRIBED ABOVE; OR
- DESCRIBED ABOVE; OR

  16.2.1.2. THE WATERMAIN PASSES UNDER A SEWER OR DRAIN.
- 16.2.1.3. BOTH THE STORM SEWER AND SANITARY SEWER SHALL BE CONSTRUCTED WITH PIPE EQUIVALENT TO WATERMAIN STANDARDS OF CONSTRUCTION OR THE STORM SEWER SHALL BE CONSTRUCTED USING "O" RING GASKET JOINTS, PER ASTM C-443, OR THE WATERMAIN MAY BE IN ENCASED IN A WATERTIGHT CASING PIPE WHEN:

  16.2.2. A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF
- 16.2.2. A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE SEWER OR DRAIN AND THE CROWN OF THE WATERMAIN SHALL BE MAINTAINED WHERE A WATERMAIN CROSSES UNDER A SEWER. SUPPORT THE SEWER OR DRAIN LINES TO PREVENT SETTLING AND BREAKING OF THE WATERMAIN.
- 17. ALL WATERMAINS SHALL BE PRESSURE—TESTED FOR A MIN. OF 2 HOURS AT 200 PSI, FLUSHED, AND DISINFECTED IN ACCORDANCE WITH AWWA AND CITY OF WEST CARROLLTON SPECIFICATIONS. EACH VALVE SECTION SHALL BE PRESSURE—TESTED FOR A MINIMUM OF ONE (1) HOUR. ALLOWABLE LEAKAGE IS TO BE ONLY THAT WHICH IS PREDETERMINED BY CITY OF WEST CARROLLTON. AT NO TIME IS THERE TO BE ANY VISIBLE LEAKAGE FROM THE MAIN.

16.2.3. CONSTRUCTION SHALL EXTEND ON EACH SIDE OF THE CROSSING UNTIL THE NORMAL DISTANCE FROM THE WATERMAIN TO THE SEWER OR DRAIN LINE IS AT

SSOCIATES, INC.

D, STE 1320

CITY COMMENTS

No. REVISIONS

# MAN BY: LAD © 2024 KIMLEY—HORN AND ASSOCIATE: 111 WEST JACKSON BOULEVARD, STE 1: CHICAGO, IL 60604 PHONE: 312-726-9445 WWW.KIMLEY—HORN.COM

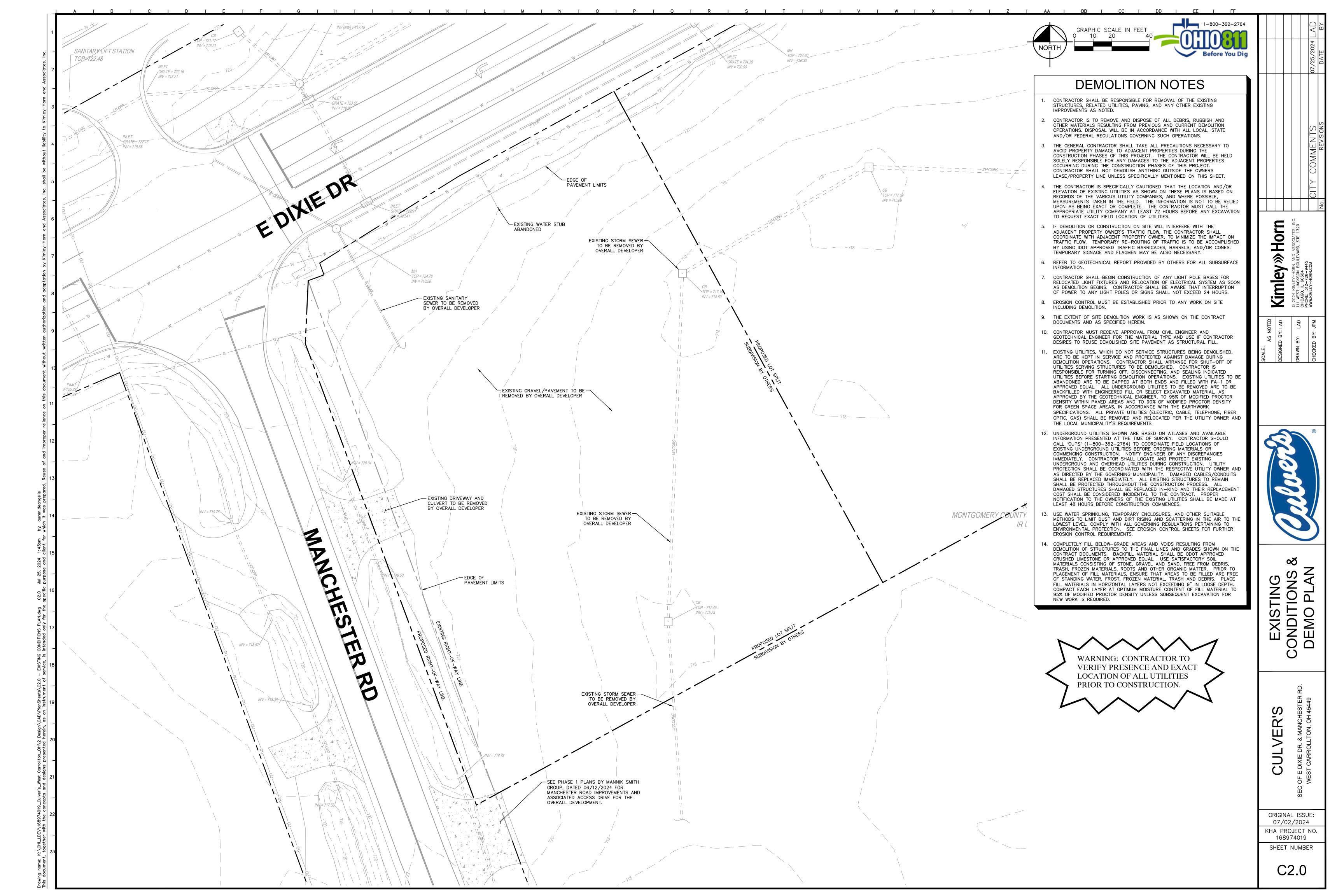
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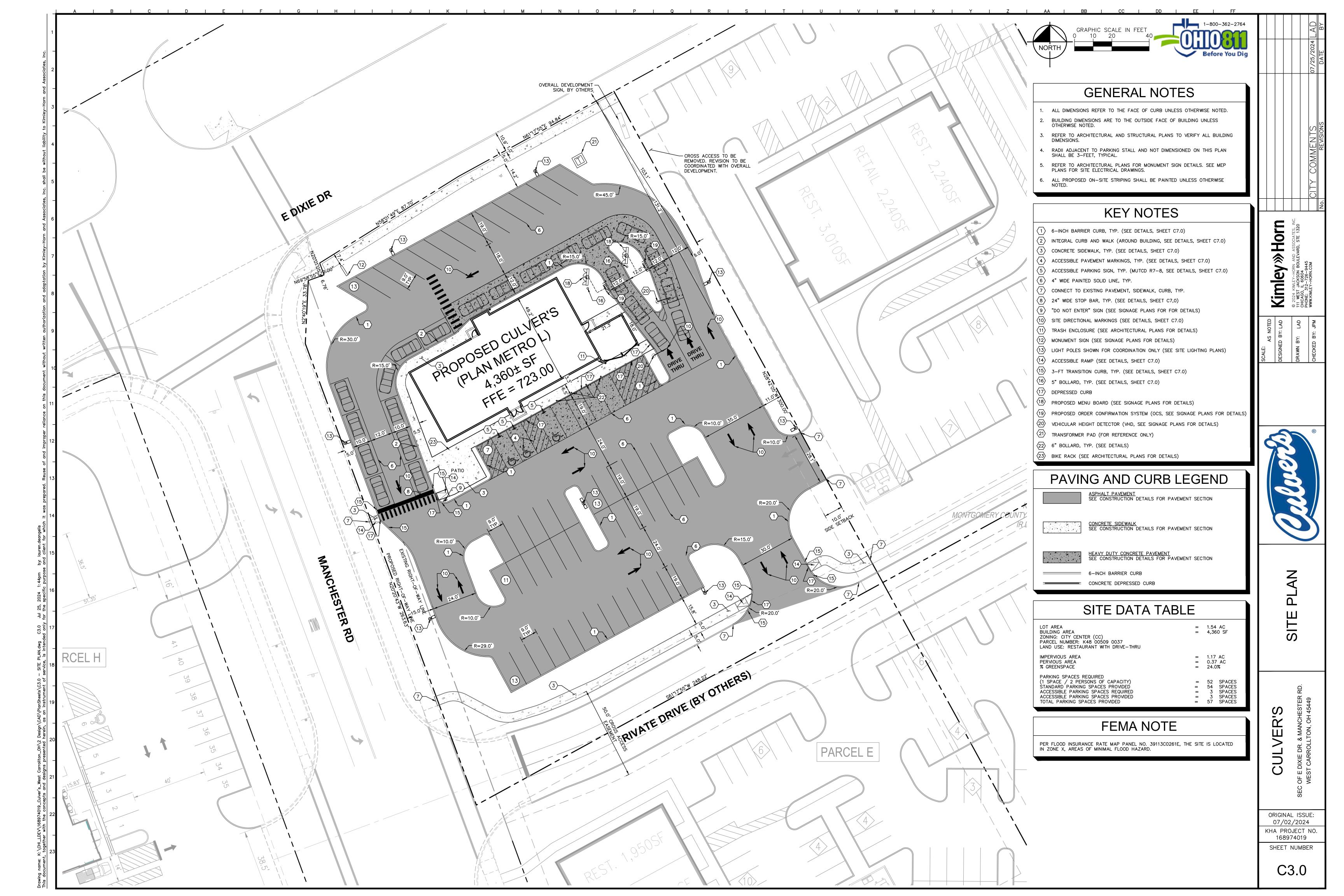
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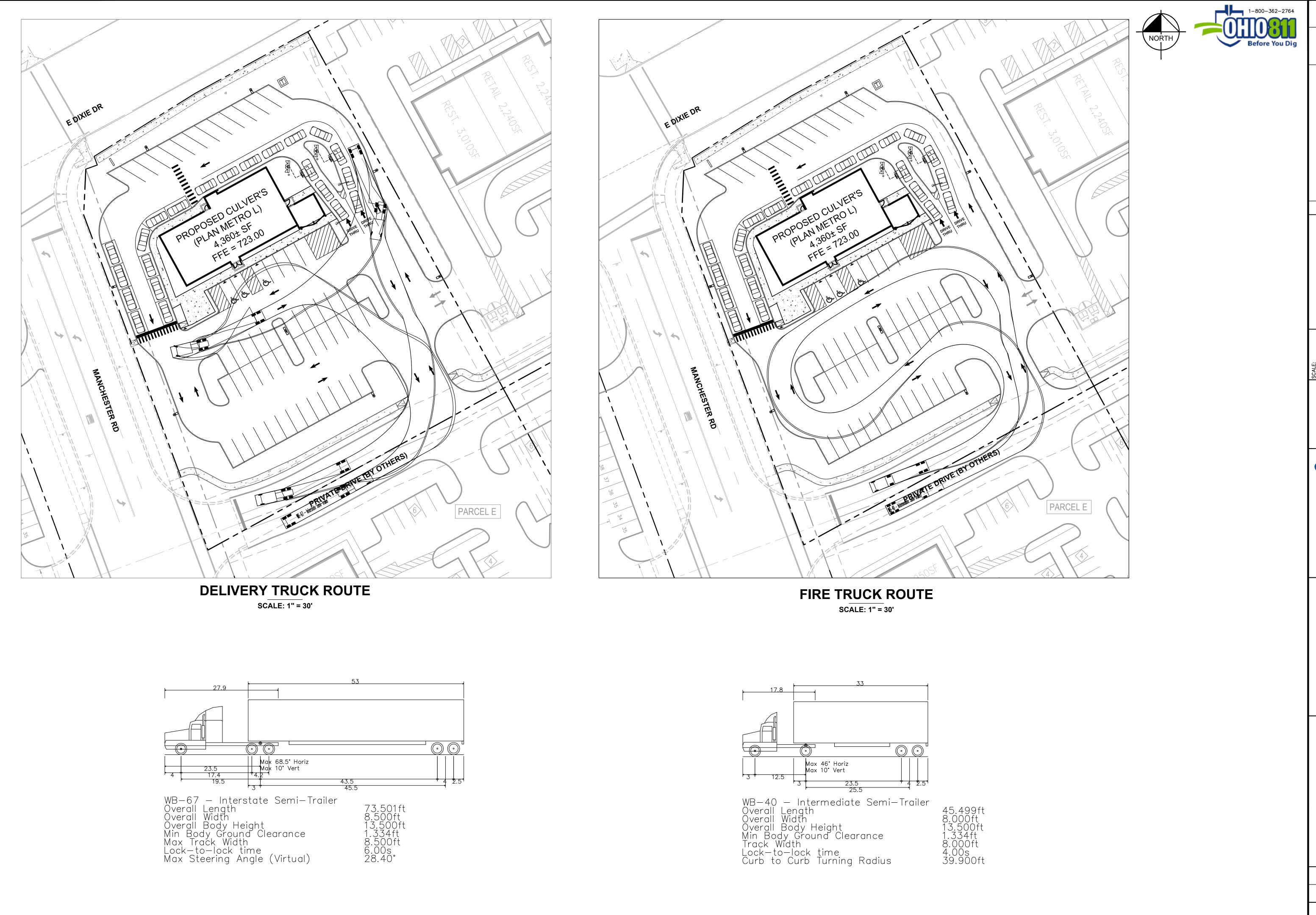
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DRAWN BY: LAD 111 WEST J CHICAGO, II PHONE: 31 WWW.KIMLE)

James !

TRUCK TURN EXHIBIT

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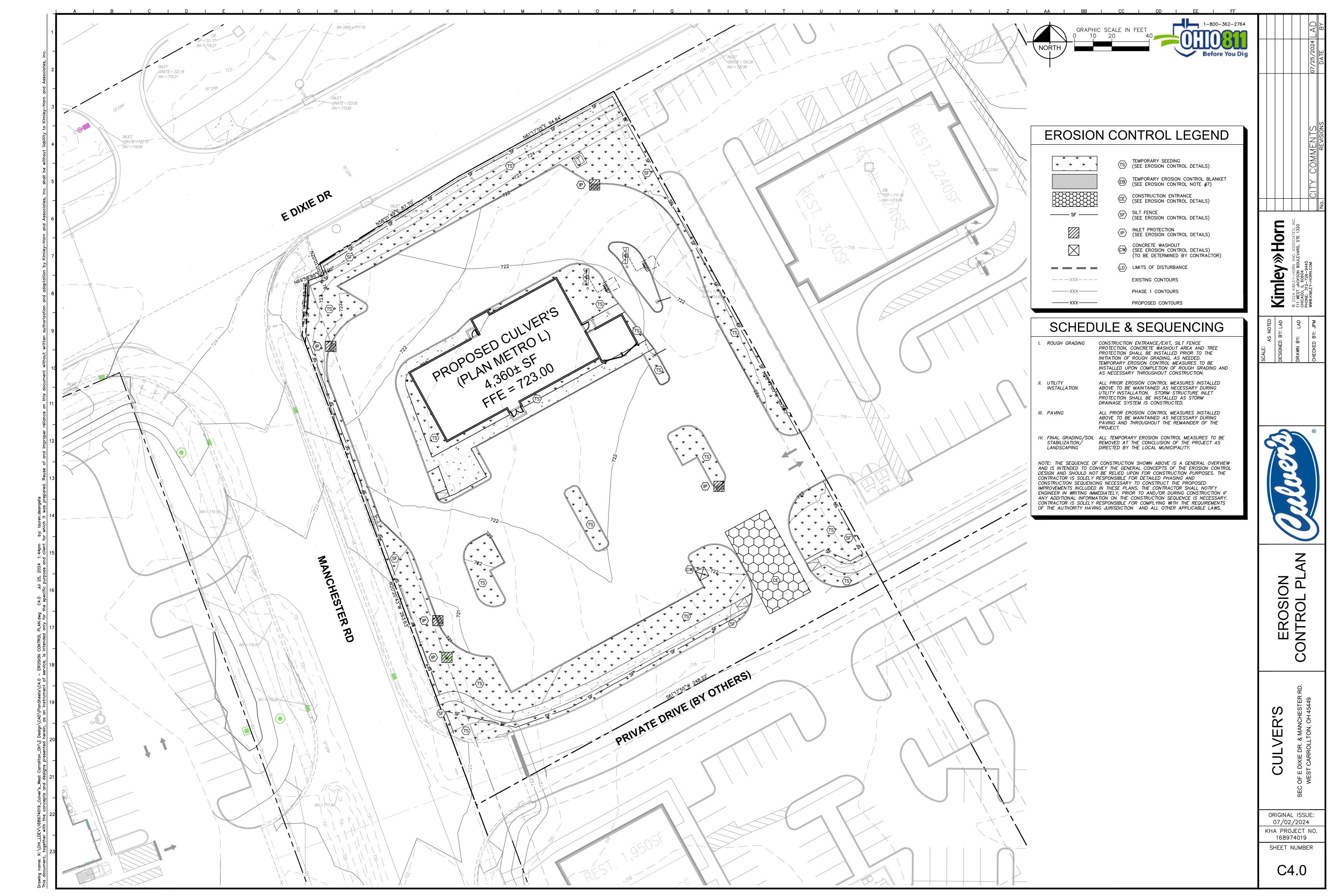
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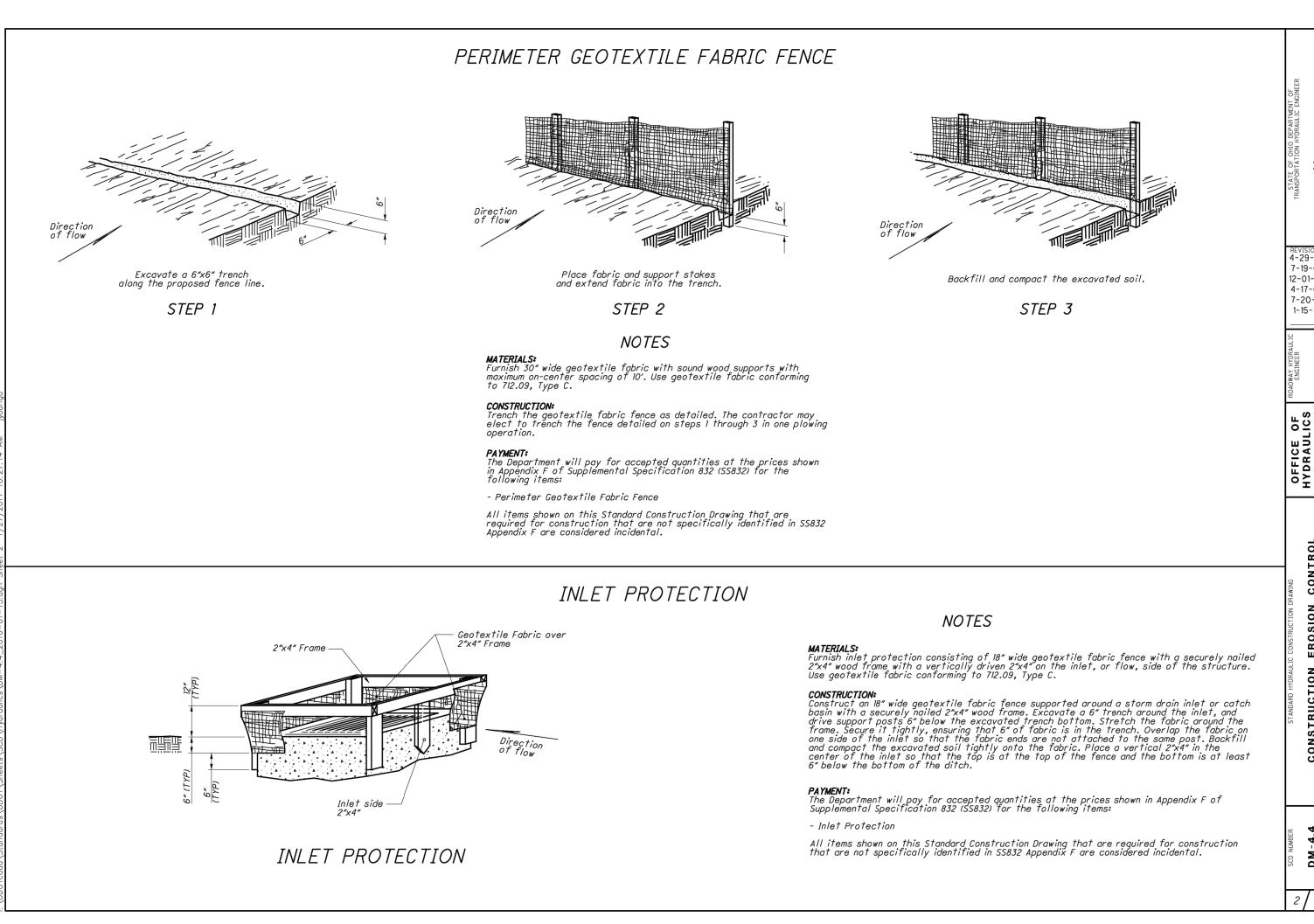
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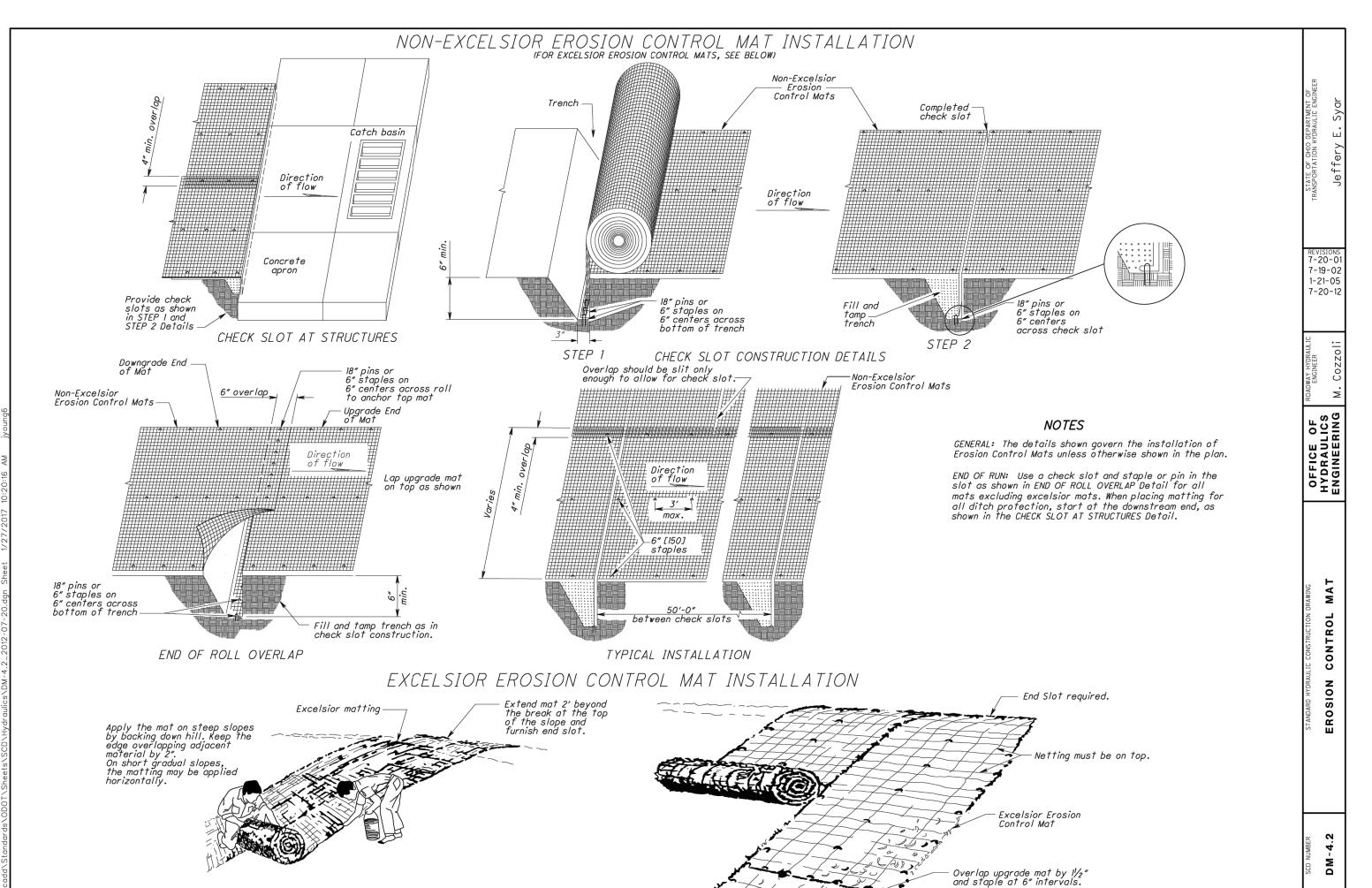
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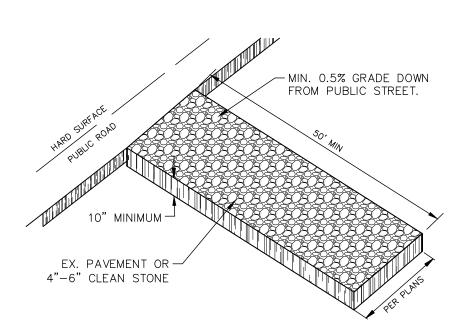
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# - BARRIER WALL 30-MIL -POLYETHYLENE - BARRIER WALL BARRIER WALL ANCHOR SECTION NOT TO SCALE 30-MIL POLYETHYLENE -(ANCHOR EVERY 2' ON TOP OF BARRIER) LETTERS 6" MIN. HEIGHT AREA - PLYWOOD OR ALUMINUM 48" X 24" MIN - 4" X 4" X 6' WOOD POST OR 6' STEEL POST MIN.

<u>NOTES</u> 1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDEND CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION. 2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO—THIRDS FULL.







STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	ост.	NOV.	DEC.
PERMANENT SEEDING			<b>●</b> A			*	*					
DORMANT SEEDING	В		-								В	
TEMPORARY SEEDING			<u>C</u>			-	D		•			
SODDING			<u>E</u> **						<b>^</b>			
MULCHING	F											

- KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE
- KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE
- C SPRING OATS 100 LBS/ACRE D WHEAT OR CEREAL RYE

\* WATERING NEEDED DURING JUNE AND JULY

\*\* WATERING NEEDED FOR 2 TO 3 WEEKS

AFTER APPLYING SOD

- F STRAW MULCH 2 TONS/ACRE
  - **SEEDING CHART**

150 LBS/ACRE

- CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH
- STABILIZATION BY PERMANENT PAVING, DRAINAGE SYSTEM STRUCTURE, OR
- TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY
- BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF
- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN
- ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE, MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
- GREEN S150BN OR APPROVED EQUAL) ON ALL SITE AREAS WITH SLOPES GREATER THAN 4:1, AND IN THE BOTTOM AND SIDE SLOPES OF ALL SWALES.
- PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
- 10. ALL CONTROL DEVICES THAT FUNCTION SIMILARLY TO SILT FENCE OR FIBER ROLLS MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WITH EFFECTIVE CONTROLS WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF THE RAINFALL EVENT OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- 11. ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGE WAYS, CATCH BASINS AND OTHER DRAINAGE SYSTEMS. ALL AREAS WHERE SEDIMENT REMOVAL RESULTED IN EXPOSED SOIL MUST BE RESTABILIZED. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE RAINFALL EVENT UNLESS PRECLUDED BY LEGAL, REGULATORY OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
- FROM OFF-SITE PAVED SURFACES WITHIN 24 HOURS OR SOONER IF REQUIRED. SEDIMENT TRACKING MUST BE MINIMIZED BY THE APPROPRIATE MANAGEMENT PRACTICE, LIKE A DEDICATED SITE EXIT WITH AN AGGREGATE SURFACE OR DESIGNATED OFFSITE PARKING AREA. CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING IF YOUR PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED FROM THE SITE.
- 13. SURFACE WATERS, DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR SEDIMENT DEPOSITS.
- MEASURES AS INDICATED ON THIS SHEET IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE OHIO EPA NPDES CONSTRUCTION GENERAL PERMIT #OHCO00006 AND THE CITY OF WEST CARROLLTOWN CODIFIED ORDINANCES. IF A CONFLICT EXISTS REGARDING THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROLS THE MORE RESTRICTIVE SHALL APPLY.
- 16. SOIL STOCKPILES SHALL NOT BE LOCATED IN A DRAINAGEWAY, FLOOD PLAIN AREA OR A DESIGNATED BUFFER, UNLESS OTHERWISE APPROVED, UNDER SPECIFIC CONDITIONS TO BE ESTABLISHED BY THE DIRECTOR OR ADMINISTRATOR.
- 18. ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED.TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
- 19. WATER REMOVED FROM TRAPS, BASINS, AND OTHER WATER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED,
- DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. 20. SITE STABILIZATION REQUIREMENTS ARE AS FOLLOWS:

MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.

- CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION
- 20.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.

ROSION	<b>CONTRO</b>	L NOTES

- THE PHASING OF THE PAVEMENT REPLACEMENT.
- POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE
- LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
- ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL
- CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN
- PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.

- 12. ACCUMULATIONS OF TRACKED AND DEPOSITED SEDIMENT MUST BE REMOVED
- 14. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL
- 15. PUMPING SEDIMENT LADEN WATER INTO ANY STORMWATER FACILITY THAT IS NOT DESIGNATED TO BE A SEDIMENT TRAP, DRAINAGEWAY, OR OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS PROHIBITED.
- 17. STOCKPILES TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE PROVIDED WITH SESC MEASURES. MATERIAL IS TO BE HAULED OFF IMMEDIATELY AND LEGALLY IF NO STOCKPILE IS TO REMAIN IN PLACE.
- WHERE THE INITIATION OF STABILIZATION MEASURE BY THE 7TH DAY AFTER

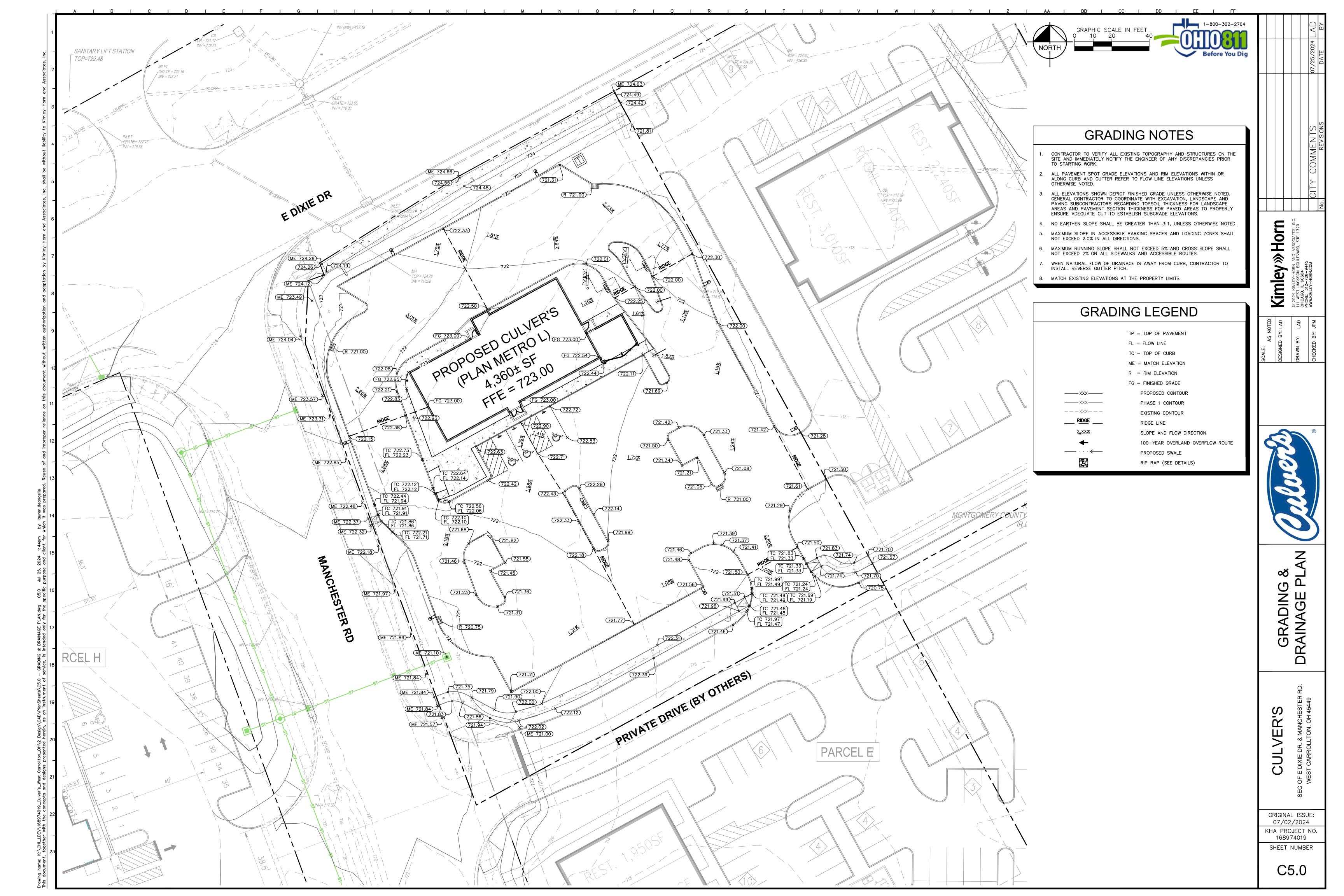
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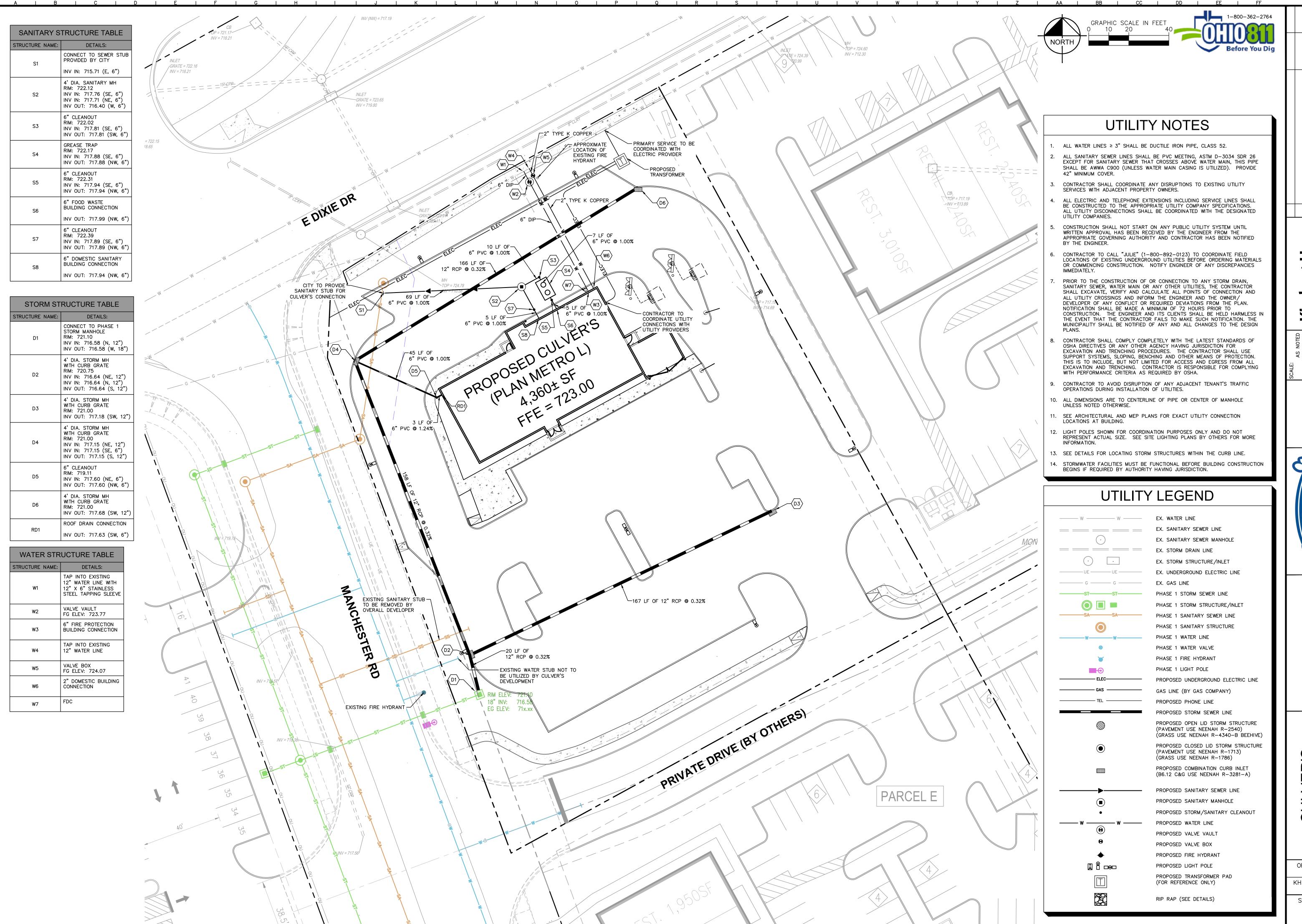
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CITY COMMENTS

REVISIONS

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Julia

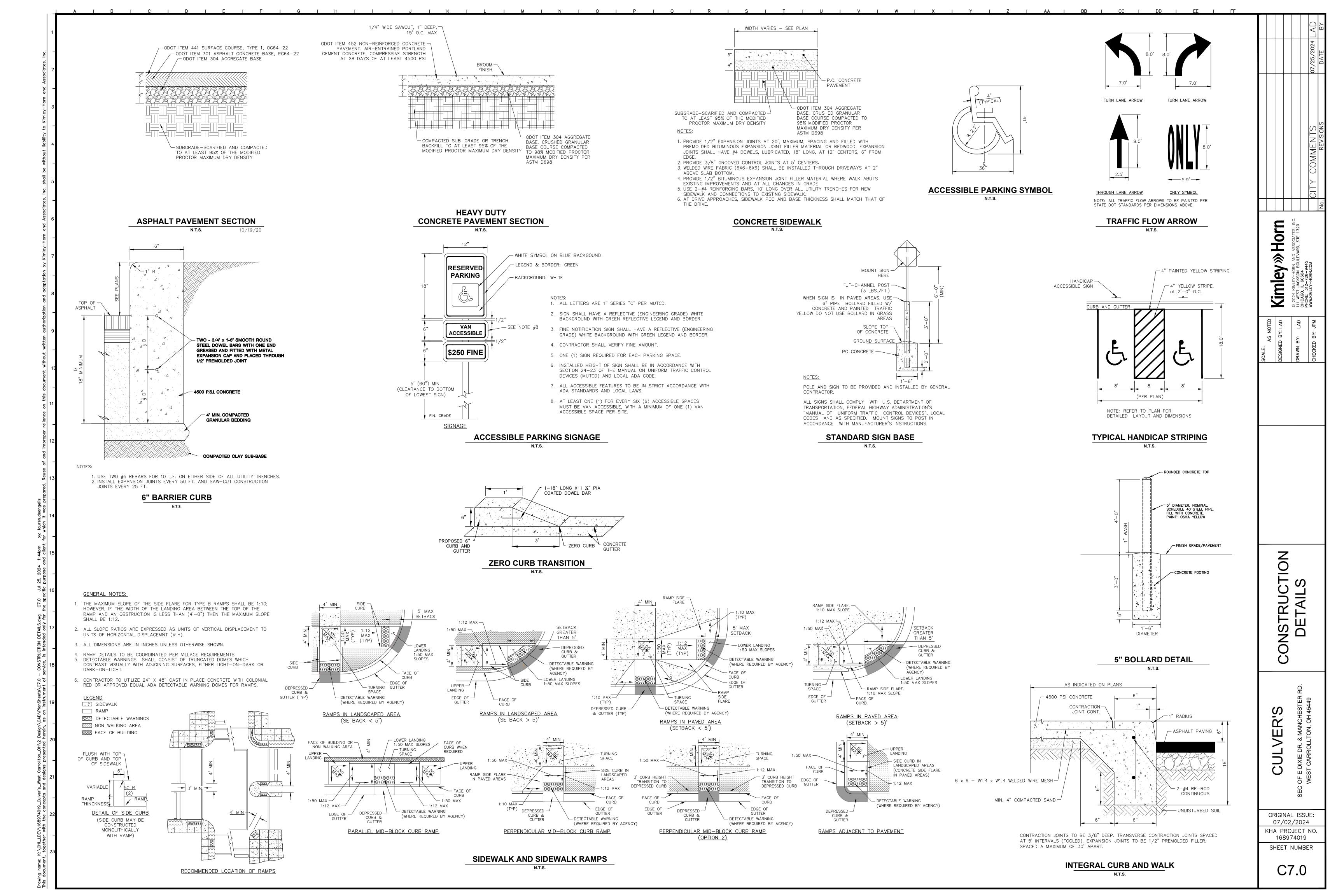
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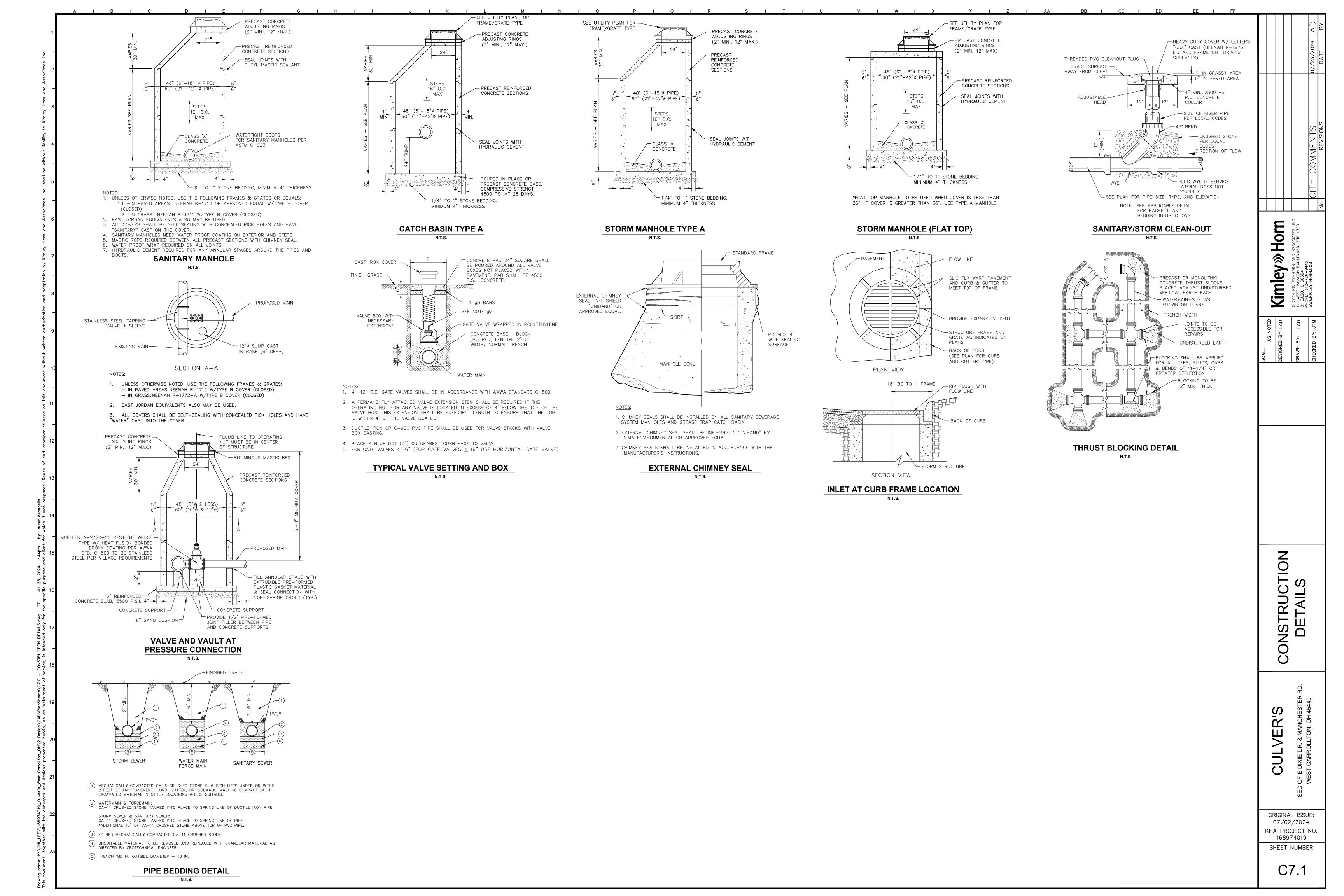
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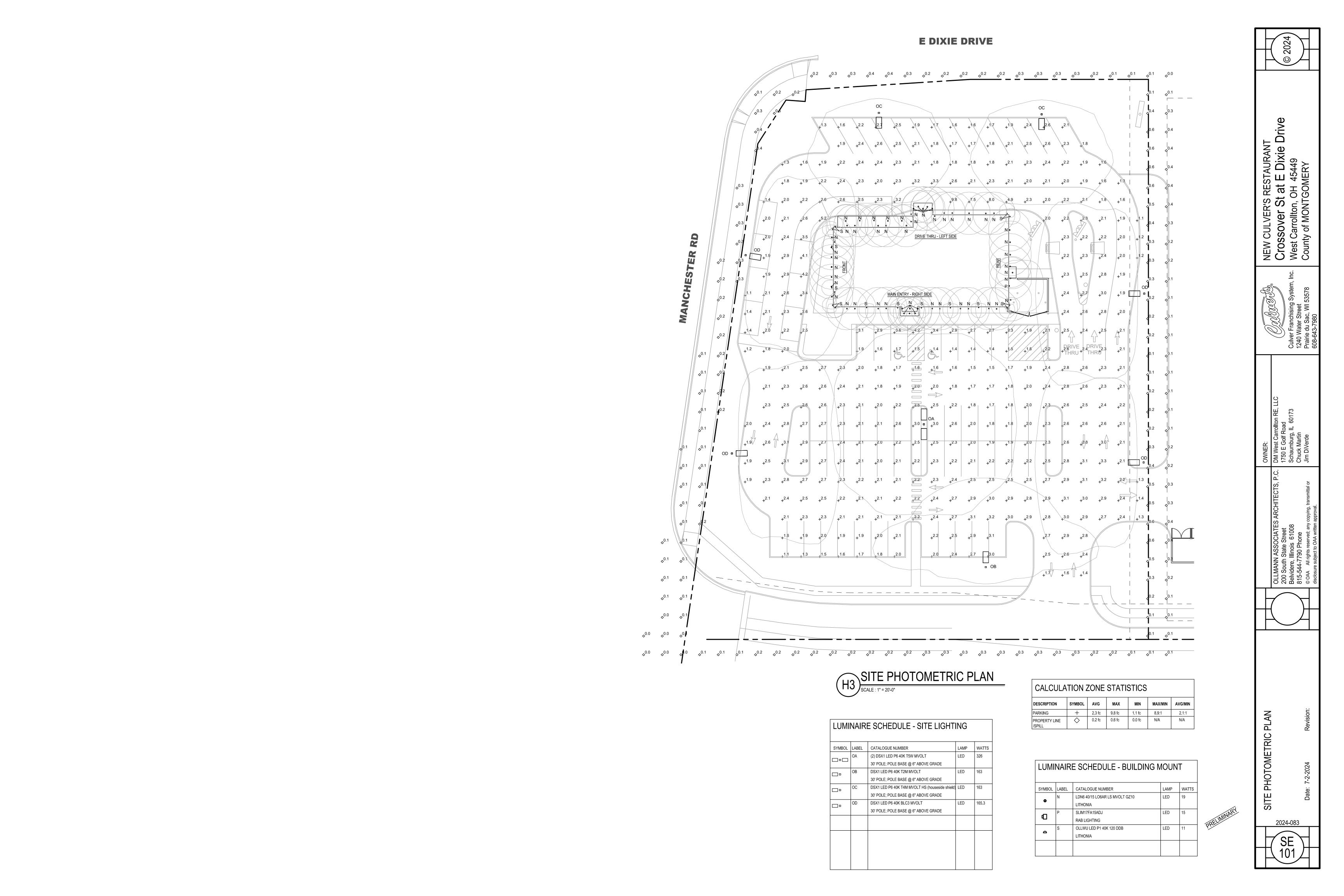
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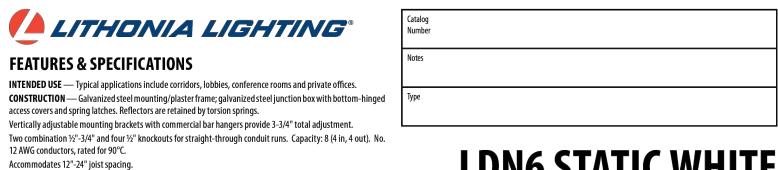








DECORATIVE INDOOR & OUTDOOR



Passive cooling thermal management for 25°C standard; high ambient (40°C) option available. Light engine and

Self-flanged anodized reflectors in specular, semi-specular, or matte diffuse finishes. Also available in white and

A+CAPABLE LUMINAIRE — This item is an A+ capable luminaire, which has been designed and tested to provide

consistent color appearance and out-of-the-box control compatibility with simple commissioning when used with Acuity Brands controls products. All configurations of this luminaire are calibrated and tested to meet the Acuity

Brands' specifications for chromatic consistency – including color rendering, color fidelity and color temperature

tolerance around standard CIE chromaticity coordinates. To learn more about A+ standards, specifications, and

 $\textbf{UGR} - \underline{\textbf{UGR}} is zero for fixtures a imed at nadir with a cut-off equal to or less than 60 deg, per CIE 117-1996 Discomfort$ 

**ELECTRICAL** — Multi-volt (120-277V, 50/60Hz) 0-10V dimming drivers mounted to junction box, 10% or 1%

**LISTINGS** — Certified to US and Canadian safety standards. Wet location standard (covered ceiling). IP55 rated.

**BUY AMERICAN ACT** — Product with the BAA option is assembled in the USA and meets the Buy America(n)

 $government procurement requirements under FAR, DFARS and DOT regulations. Please refer to \underline{www.acuitybrands.}$ 

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this

specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed.

Complete warranty terms located at: <a href="https://www.acuitybrands.com/support/warranty/terms-and-conditions">www.acuitybrands.com/support/warranty/terms-and-conditions</a>

**OPTICS** — LEDs are binned to a 3-step MacAdam Ellipse; 80 CRI minimum. 90 CRI optional.

General illumination lighting with 1.0 S/MH and 55° cutoff to source and source image.

0-10V dimming fixture requires two (2) additional low-voltage wires to be pulled.

ENERGY STAR® certified product. Drivers are RoHS compliant

com/buy-american for additional information.

Specifications subject to change without notice.

Lumens Lumens Wattage Lm/W

500 527.9 5.8 90.5 750 758.1 8.9 85.1

1000 950.1 10.4 91.0

1500 1514 17.5 86.4

2000 2006 22.5 89.1

2500 2504 28.3 88.6

3000 3021 34.8 86.9

4000 4008 44.3 90.6

5000 4975 57.7 86.3

• Tested to current IES and NEMA standards under stabilized laboratory conditions.

• Tested in accordance with IESNA LM-79-08.

DOWNLIGHTING

1 Only available with OLLWU and in DDB.

OLLWD-OLLWU

PERFORMANCE DATA

LUMEN MAINTENANCE — 70% lumen maintenance at 60,000 hours. L70/60,000 hours

**Note:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

drivers are accessible from above or below ceiling.

LED light source concealed with diffusing optical lens.

testing visit www.acuitybrands.com/aplus.

minimum dimming level available.

Max ceiling thickness 1-1/2".

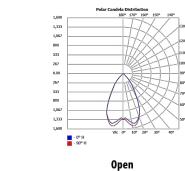
black painted reflectors.

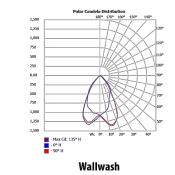
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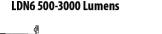


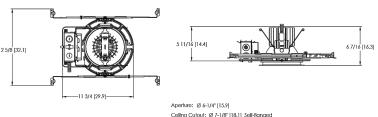
### DISTRIBUTIONS





## DIMENSIONS





Ceiling Cutout: Ø 7-1/8" [18.1] Self-flanged

See page 4 for other fixture dimensions

# SLIM17FA15ADJ



Weight: 3.0 lbs

Performance

Project:	Туре:
Prepared By:	Date:
Driver Info	LED Info

RAB

Driver Info	)	LED Info	
Туре	Constant Current	Watts	15W
120V	0.13A	Color Temp	3000K/4000K/5000K
208V	0.07A	Color	70 CRI
240V	0.06A	Accuracy	70 CH
277V	0.05A	L70 Lifespan	100,000 Hours
Input Watts	s 14.2/14/14.2W	Lumens	1761/1904/1852 lm
•		Efficacy	124/136.2/130.3 lm/V

<b>Technical</b>	Specifications
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DLC Product Code: PL0MVJOV62Q3

Specifications

Field Adjustability

Color: Bronze

	Field Adjustable:	Lifespan:		
Color temperature selectable by 3000K, 4000K and 5000K		100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations		
	Compliance	Wattage Equivalency:		
UL Listed:		Equivalent to 70W Metal Halide		
	Suitable for wet locations	LED Characteristics		

Suitable for wet locations IESNA LM-79 & LM-80 Testing: RAB LED luminaires and LED components have been Long-life, high-efficiency, surface-mount LEDs tested by an independent laboratory in accordance

with IESNA LM-79 and LM-80 Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: Ingress protection rating of IP65 for dust and water 0.13A, 208V: 0.07A, 240V: 0.06A, 277V: 0.05A DLC Listed:

This product is listed by Design Lights Consortium Driver includes dimming control wiring for 0-10V (DLC) as an ultra-efficient premium product that dimming systems. Requires separate 0-10V DC qualifies for the highest tier of rebates from DLC dimming circuit. Dims down to 10%. Member Utilities. Designed to meet DLC 5.1

120-277V Integrated button photocell included. Construction Cold Weather Starting:

The minimum starting temperature is -40°C (-40°F) **Maximum Ambient Temperature:** Suitable for use in up to 50°C (122°F) Housing:

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly

Precision die-cast aluminum housing and door frame

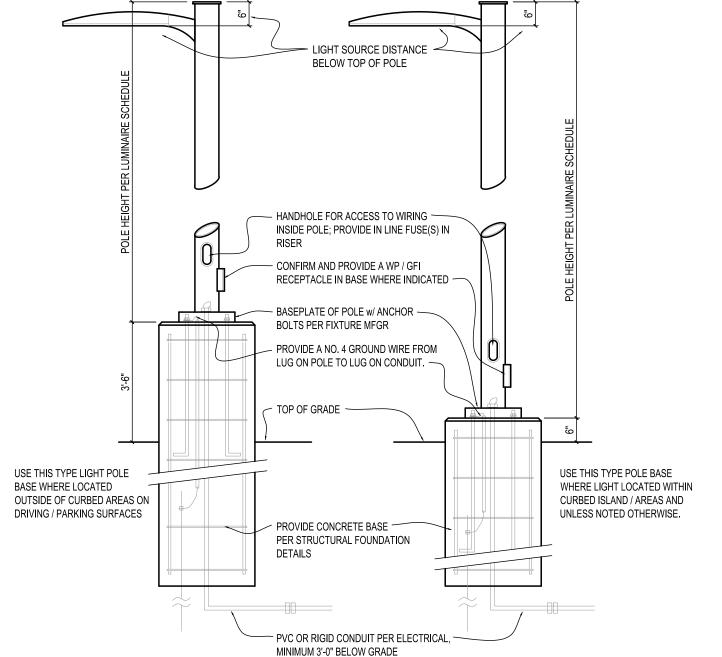
Copyright © 2023 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

**D-Series Size 1** LED Area Luminaire

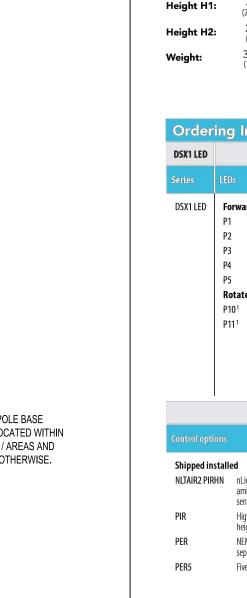
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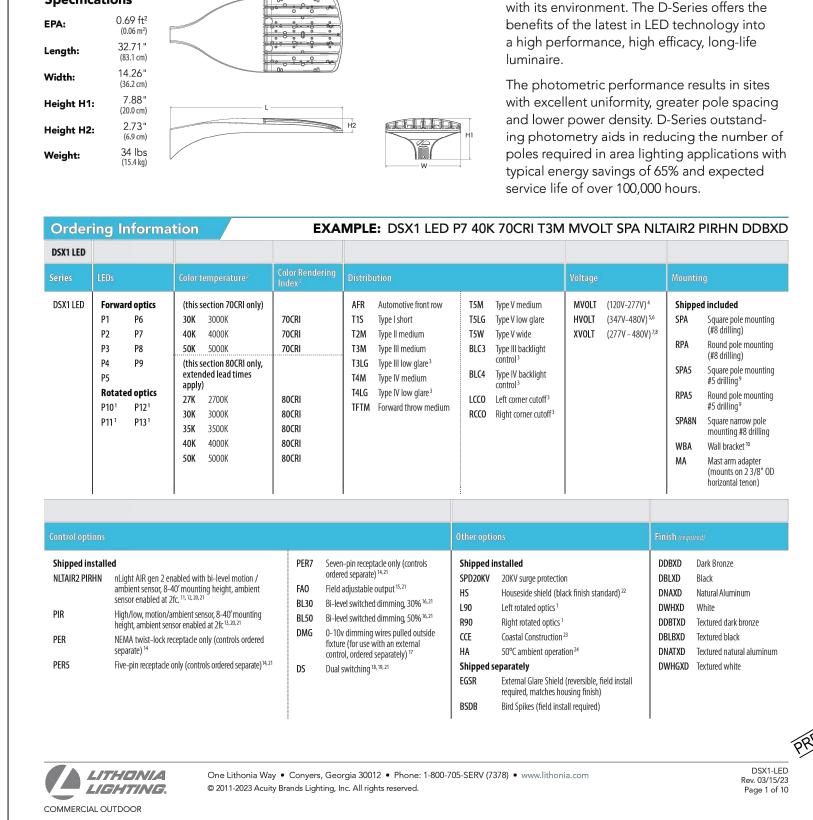
Need help? Tech help line: (888) 722-1000 Email: sales@rablighting.com Website: www.rablighting.com

Page 1 of 2









V CULVER'S RESTAURANT SSOVER St at E Dixie Lat Carrollton, OH 45449 of MONTGOMERY



# SIGN PACKAGE PROPOSAL NEW BUILD

### **PRESENTED TO:**

Culver's West Carrollton, OH

### **DATE PREPARED:**

06/28/24 - Preliminary





### **ButterBurger Outdoor Panel Wall Sign**

**BB-1** 

All aluminum 0.080" thick panel backside is blank (white)

Baked on aluminum white enamel

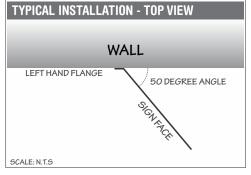
Digital print overlay with overlaminate

Rounded corners are to be 1.25" radius

Sign is to be mounted at 50 degree angle (set by flange)







### **HOLE PATTERN**

HOLES ARE .250" DIAMETER .737" IN FROM SIDE & 1.488" IN FROM TOP & BOTTOM TAB IS TO BE BENT 50 DEGREES UP AT LINE

NOTES	

ONLEG I LITOUIT.	DEGIGIT	LU U I.	No.		
MARK WESSELL	J KROEGER		54185		
DATE CREATED / I	DATE CREATED / REVISION HISTORY				
06/28/24 - NEW					

CALES DEDCOM: DECICNED DV: AO:

Culver's

SCALE: 1-1/2" = 1'

\* Determined by physical address numbers \*SCALE AND COLORS NOT REPRESENTATIVE FROM EMAIL ATTACHMENTS

\*ALL MEASUREMENTS ARE APPROXIMATE

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### SL-45 & SL-30 Illuminated White Script Channel Letters

# **SL-SERIES**

Channel letter construction

One piece (saddle capped sections)

LED internal illumination

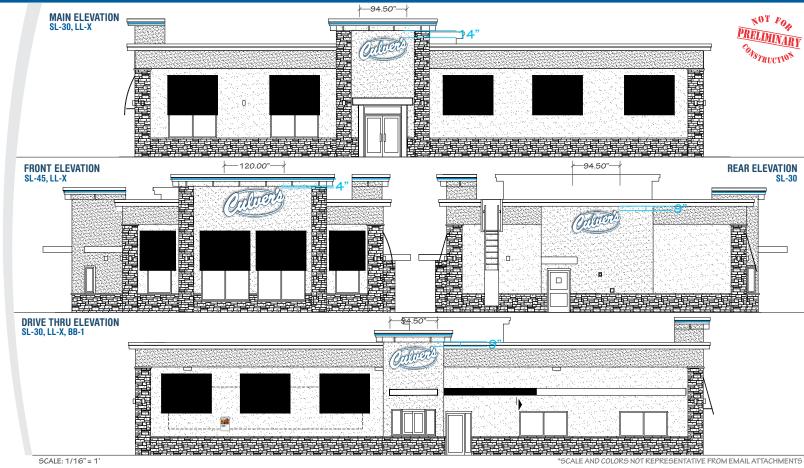
Typical application for new construction

**Embedded power supplies** 

**UL** marked product

No install pattern needed, level line scribed in back of sign





\*ALL MEASUREMENTS ARE APPROXIMATE

### SIGN SQUARE FOOTAGE

MAIN ELEVATION: QTY-1 SL-30 (44.37" X 94.50") = 29.12 SF FRONT ELEVATION: QTY-1 SL-45 (56.00" X 120.00") = 46.67 SF QTY-1 SL-30 (44.37" X 94.50") = 29.12 SF REAR ELEVATION: DRIVE THRU ELEVATION: QTY-1 SL-30 (44.37" X 94.50") = 29.12 SF

QTY-1 BB-1 (17.67" X 27.88") = 3.42 SF

### NOTES

LL-X LED accent strip lighting typical placements: MAIN: (2) places - FRONT: (3) Places - REAR: 2, DRIVE THRU: (2) places

BB-1 typical Drive-Thru placement: DRIVE THRU



MFG: T.B.D. STYLE: T.B.D. COLOR: T.B.D.



MFG: T.B.D. STYLE: T.B.D. COLOR: T.B.D.

### DATE CREATED / REVISION HISTORY 06/28/24 - NEW SALES PERSON: **DESIGNED BY:** PLAN METRO L-2020 PROTOTYPE DRAWINGS SHOWN

54185

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MARK WESSELL

J KROEGER



ACTUAL ARCHITECTURAL DRAWINGS PENDING

### ME-35-L-60X210-10-RGB

# **ME-35**

Culver's sign cabinet of aluminum construction and internally illuminated with LED's

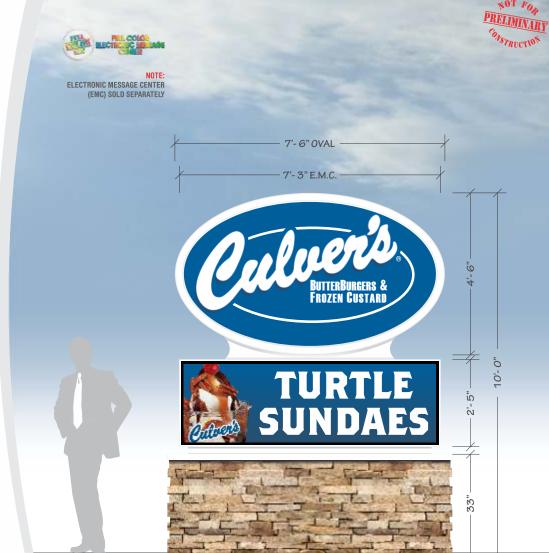
Thermoformed polycarbonate faces, embossed Culver's, 3M1HP vinyl decoration

Watchfire 60x210 RGB full color 10mm Electronic Message Center (EMC) with RF wireless communication

Amber EMC option available

**Broadband communication option** available

**UL** marked product





ANIMATION: Y NX

COLOR: Y N STATIC: Y N VIDEO: Y NX MOVEMENT: Y N X

HOLD TIME (IF STATIC): ? Sec/Min

TRANSITION TYPE: Transition if applicable

DAYTIME BRIGHTNESS: Brightness if applicable

NIGHTTIME BRIGHTNESS: Brightness if applicable

ADDITIONAL RESTRICTIONS:

Additional restrictions if applicable

### SIGN CODES

Max Height:

Max Square Footage:

### NOTES

Square Footage:

MATHEMATICAL METHOD:

OVAL (26.51 SF) + EMC (17.52 SF) = 44.03 SF RECTANGULAR METHOD:

OVAL (33.75 SF) + EMC (17.52 SF) = 51.27 S

SALES PERSON: MARK WESSELL

DESIGNED BY:

J KROEGER 54185

DATE CREATED / REVISION HISTORY 06/28/24 - NEW





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### **Routed Address Numbers**

AD-1

Address letters as required for building occupancy

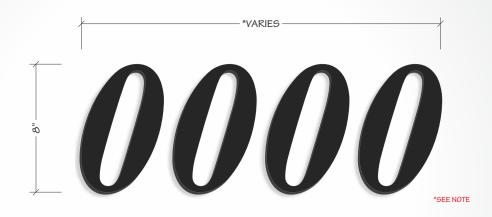
Size & quantity may vary

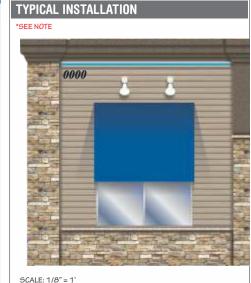
Stud/adhesive mounting

1/2" thick, black XPVC

NOTE: Address to be verified with G.C. prior to mfq.









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Calver's

SCALE: 1" = 6'

\* Determined by physical address numbers \*SCALE AND COLORS NOT REPRESENTATIVE FROM EMAIL ATTACHMENTS

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### **Illuminated Directional Signs**



All aluminum construction

LED internal illumination

Totally self contained lighting

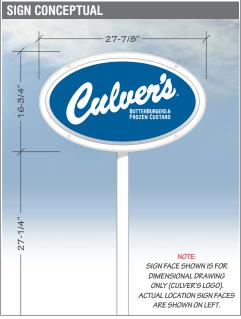
Polycarbonate thermoformed faces

Face removal for service

Site plans show placement & field orientation

**UL** marked product





### NOTES

SQUARE FOOTAGE CALCULATIONS: MATHEMATICAL: 2.55 SF RECTANGULAR: 3.24 SF

SALES PERSON:	DESIGNED BY:	A0:
MARK WESSELL	J KROEGER	54185

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SCALE: 3/4" = 1'

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### **Drive-Thru Canopy For Order Confirmation System (OCS)**

DTC-2

All aluminum construction

Rated for 160 mph winds (3 second burst) & heavy northern states snow loads

**Order Confirmation System (OCS)** by others

Rear panel (door) access lockable

Provides protection from rain for **DT** customer

Houses OCS, speaker & microphone







6'-8.50"

SCALE: 3/8" = 1'

\*ALL MEASUREMENTS ARE APPROXIMATE

NOTES		

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		ī		

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J KROEGER

54185

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West Carrollton, OH

SIGN PLACEMENT

6"TO GRADE

SCALE: 1/2" = 1' SALES PERSON:

MARK WESSELL

06/28/24 - NEW

### FCO Interior Sign with City & State

FCO-3

0.25" painted aluminum plate

Routed to shape

Pin mounted for rough surface application

VHB tape for smooth wall application

Mounting pattern with fastener instructions





0.25" PAINTED ALUMINUM PLATE



0.25" PAINTED ALUMINUM PLATE



SCALE: 1" = 1'

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# SPRINGFIELD**SIGN** www.springfieldsign.com

DESIGNED BY:

54185

J KROEGER

DATE CREATED / REVISION HISTORY

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**Interior Maximum Occupancy Sign** 

MAX-1

3/16" White acrylic substrate

Direct to surface printing

3M1 VHB peel & stick adhesive on

"MAXIMUM OCCUPANCY" must be verified prior to manufacturing



SCALE: 3" = 1"

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				"ALL ME	EASUREMENTS ARE APPROXIMATE
NOTES	REVISION HISTORY	REVISION HISTORY			
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	SALES PERSON:	DESIGNED BY:	A0:		
	MARK WESSELL	J KROEGER	54185		

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# **MB-DT-46 EXTERIOR MENU BOARD**

WEST CARROLLTON, OH

### Blue Outdoor Drive-Thru Menu Board

# **MB-DT-46**

Standard Menu Board for Drive-Thru Lane

**LED Internal Illumination** 

POP Graphic panels must be purchased separately

POPP-Out magnet access panels included for easy in & out of POP panels

"-CS" option for 160mph coastal wind standards available

Locking rear access doors (4)

**QTY: 2** 





POPP-Out **Point Of Purchase Panel System** INTERIOR VIEW OF MENU BOARD PANEL BEING REMOVED PANEL IN PLACE

- A INSIDE BACK OF MENU BOARD FACE (ONLY ONE PANEL SHOWN FOR
- B FRONT PANEL IS ANTI-GLARE (CLEAR) FOR INCREASED VISIBILITY
- C POP PANEL PRODUCT GRAPHIC
- D REAR PANEL FITTED WITH POPP-Out PANEL
- E SUPPORTING "TIP TRAY" FOR PANELS (SELF ALIGNING)
- F POPP-Out TAB HANDLE
- G PAIRED MAGNETIC "LATCH" (MAGNETS EMBEDDED IN POP-Out PANEL & BACK OF MENU BOARD)

SALES PERSON: MARK WESSELL	DESIGNED BY J KROEGER	A0: 54185			
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**Blue Indoor Menu Board** 

# **MB-ID-84**

Easy lift up & out graphic panel

**American Beech Wood surround** 

Surround is painted black

LED internal illumination

Ultra low power consumption

### **FRONT VIEW END VIEW**







SCALE: 3/8" = 1'

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### NOTES

MENU BOARD TO INSTALL CENTERED TO THE FRONT CASH REGISTER COUNTER



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AN EO REDOON DEGLOVED DV					

SALES PERSON: DESIGNED BY:

J KROEGER

54185

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WAIT

STANDARD FACE OPTIONS: PLEASE

PULL FORWARD

YOU'RE

ON THE

### **Handicapped Parking Post & Panel Sign**

# REG-HC-1

All aluminum 0.080" thick panel

U-Channel steel post (green)

**Bolted connection** 

Local codes may require actual copy/graphics to vary

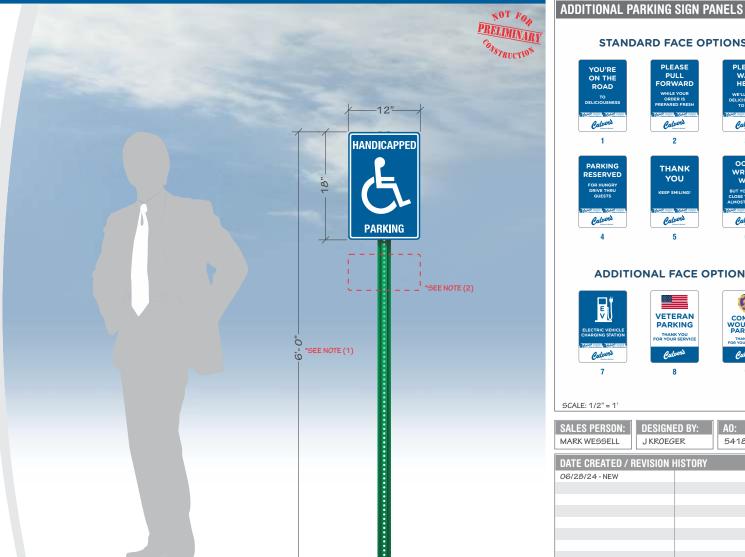
Rounded corners for safety

First surface vinyl (printed) copy

NOTE 1: Overall height can vary per local codes

NOTE 2: 6' x 12" sign panel may also be required





Calvers PARKING THANK YOU Calvers **ADDITIONAL FACE OPTIONS:** VETERAN COMBAT **PARKING** SCALE: 1/2" = 1' SALES PERSON: DESIGNED BY: MARK WESSELL J KROEGER 54185 DATE CREATED / REVISION HISTORY 06/28/24 - NEW

SCALE: 3/4" = 1'

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# RR-1-G, RR-1-L, RR-3 RESTROOM SIGNS

WEST CARROLLTON, OH

SIGN MOUNTING LOCATIONS

**Restroom Signs** 

# RR-1-G RR-1-L RR-3

### **RR-1 SERIES RESTROOM SIGNS**

Injection molded plastic

**ADA** compliant

Raised braille

Self adhesive back

### **RR-3 SIGN**

White aluminum substrate laminated with black core

Digitally printed blue copy routed to shape





RR-1-G GENTI EMEN



RR-1-L



SCALE: 3" = 1'

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# **RR-1 SERIES** RR-3 INTERIOR SIDE OF DOOR SCALE: 1-1/2" = 1 SALES PERSON: DESIGNED BY: MARK WESSELL J KROEGER 54185 DATE CREATED / REVISION HISTORY 06/28/24 - NEW













SIGN SPECIFICATIONS

V-1-1

**Entry Door & Drive-Thru Vinyl Letering** 

# V-1-1 V-5-1 **V-6**

3M1 HP white vinyl substrate

UV digitally printed image (blue)

Satin gloss over laminate

Contour cut

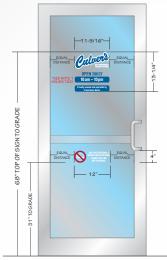
First surface application

NOTE 1: Business hours shown are typical. However, each location may be different than shown.

1 - 3M is a registered trademark of Minnesota Mining & Manufacturing

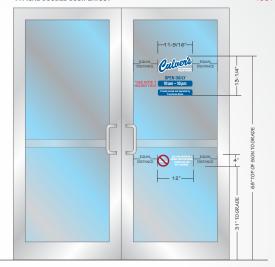


### V-1-1 & V-6 TYPICAL SINGLE DOOR LAYOUT



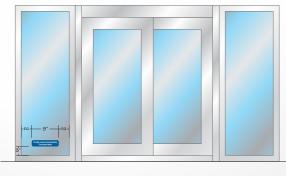
### V-1-1 & V-6

TYPICAL DOUBLE DOOR LAYOUT



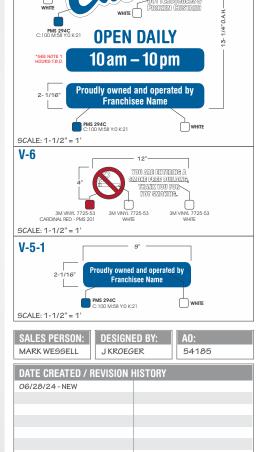
### V-5-1

TYPICAL DRIVE-THRU LAYOUT



SCALE: 3/8" = 1'

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**Vehicle Height Detector for Drive-Thru Lane** 

VHD-1

All steel (painted) construction

Re-settable if engaged

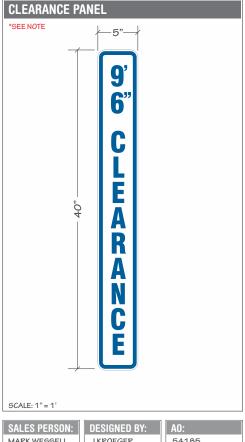
Used to help protect canopies from advancing vehicles that are too tall

NOTE: Clearance height must be verified prior to mfg.

**QTY: 2** 







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J KROEGER

54185

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SCALE: 1/2" = 1'

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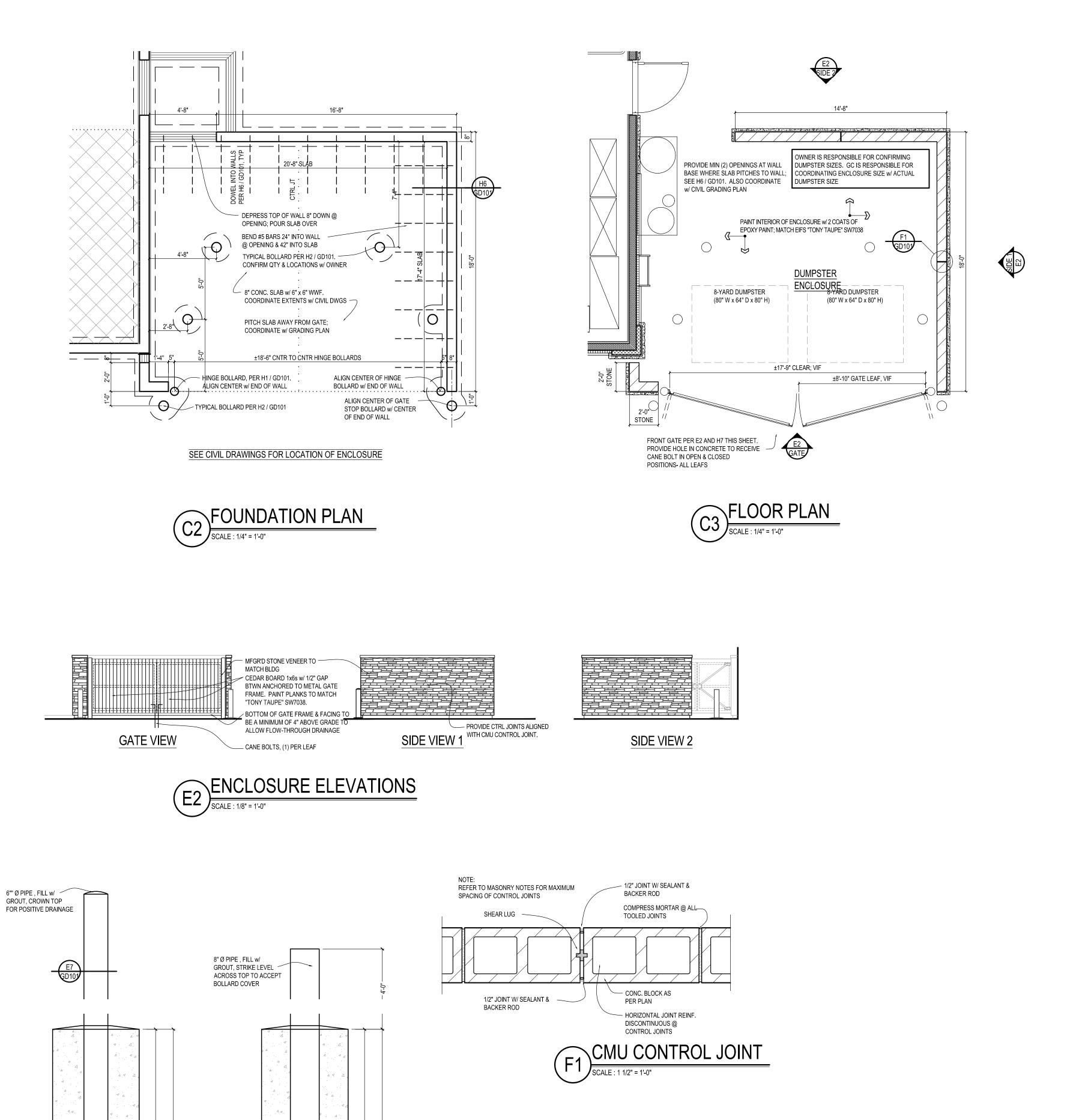












2'-0"

HINGE BOLLARD

