IDAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION PHASE 5

DAS PROJECT NO: 9279.50

WOODWARD RESOURCE CENTER
34 CEDAR ST,
WOODWARD, IA 50276

VICINITY MAP
1" = 300'

CONTACT INFORMATION

ENGINEER

SHIVE-HATTERY, INC.
ATTN: CHRIS BAUER
CBAUER@SHIVE-HATTERY.COM
4125 WESTOWN PKWY, SUITE 100
WEST DES MOINES, IA 50266
515-223-8104

OWNER

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
ATTN: JENNIFER KLEENE
JENNIFER.KLEENE@IOWA.GOV
109 SE 13TH STREET
DES MOINES, IA 50319
515-822-8197

CONSTRUCTION MANAGER

STORY CONSTRUCTION
ATTN: DARREN MILLIKEN
EMAIL: DARREN.MILLIKEN@STORYCON.COM
2810 WAKEFIELD CIRCLE
AMES, IA 50010
PHONE: 515-291-5358

SITE ADDRESS

WOODWARD RESOURCE CENTER
34 CEDAR ST.
WOODWARD, IA

Sheet List Table

MECHANICAL ENGINEER

LICENSED PROFESSIONAL ENGINEER
JOHN D. BAUMHOVER
P25737
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: John Baumhover DATE: 4-24-2026
PRINTED OR TYPED NAME: JOHN D. BAUMHOVER
LICENSE NUMBER: 25737
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2028
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: ALL "M" SHEETS

ELECTRICAL ENGINEER

LICENSED PROFESSIONAL ENGINEER
KEVIN J. BRUXVOORT
19927
IOWA

I HEREBY CERTIFY THAT THE PORTION OF THIS TECHNICAL SUBMISSION DESCRIBED BELOW WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND RESPONSIBLE CHARGE. I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: Kevin Bruxvoort DATE: 4-24-2026
PRINTED OR TYPED NAME: KEVIN J. BRUXVOORT
LICENSE NUMBER: 19927
MY LICENSE RENEWAL DATE IS JUNE 30, 2027
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: ALL "E" SHEETS

CIVIL ENGINEER

LICENSED PROFESSIONAL ENGINEER
CHRISTOPHER R. BAUER
19737
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: Chris Bauer DATE: 4-24-2026
PRINTED OR TYPED NAME: CHRISTOPHER R. BAUER
LICENSE NUMBER: 19737
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2027
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: ALL "C" SHEETS

STRUCTURAL ENGINEER

LICENSED PROFESSIONAL ENGINEER
MATT METTEMEYER
20396
IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

SIGNATURE: Matt Mettemeyer DATE: 4-24-2026
PRINTED OR TYPED NAME: MATTHEW A. METTEMEYER
LICENSE NUMBER: 20396
MY LICENSE RENEWAL DATE IS DECEMBER 31, 2026
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: ALL "S" SHEETS

SHIVEHATTERY
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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9279.50
34 CEDAR ST, WOODWARD, IA 50276

DRAWN BY	BDD
APPROVED BY	CRB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK:	----

COVER SHEET
00-C000

GENERAL NOTES:
1. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP (PUBLIC OR PRIVATE) SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE IOWA STATEWIDE URBAN AND DESIGN AND SPECIFICATIONS (SUDAS), UNLESS OTHERWISE NOTED ON THE DRAWINGS.

2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL AND STATE AGENCY CODES, STANDARDS AND SPECIFICATIONS.

3. ANY WORK REQUIRED TO COMPLETE THE SCOPE OF THIS PROJECT BUT NOT SPECIFICALLY CALLED OUT, SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO ADDITIONAL COMPENSATION TO BE ALLOWED FOR THE COMPLETION OF THIS WORK.

4. WORK WHICH DOES NOT CONFORM TO THE REQUIREMENTS OF THE CONTRACT WILL BE CONSIDERED UNACCEPTABLE. UNACCEPTABLE WORK, WHETHER THE RESULT OF POOR WORKMANSHIP, USE OF DEFECTIVE MATERIALS, DAMAGE THROUGH CARELESSNESS OR ANY OTHER CAUSE, FOUND TO EXIST PRIOR TO THE FINAL ACCEPTANCE OF THE WORK, SHALL BE REMOVED AND REPLACED IN AN ACCEPTABLE MANNER, AS REQUIRED BY THE OWNERS REPRESENTATIVE, AT THE CONTRACTOR'S EXPENSE. WORK DONE CONTRARY TO THE INSTRUCTIONS OF THE OWNERS REPRESENTATIVE, WORK DONE BEYOND THE LINES SHOWN ON THE PLANS OR ANY EXTRA WORK DONE WITHOUT AUTHORITY WILL NOT BE PAID FOR.

5. STAGING LOCATION FOR CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF WORK OF ALL SUBCONTRACTOR(S) INVOLVED IN THE PROJECT.

7. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND LICENSES FROM THE APPLICABLE GOVERNING AUTHORITIES.

8. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES, ELEVATIONS, SETBACKS, AND EASEMENTS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.

9. IF DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR FINDS ANY DISCREPANCIES OR CONFLICTS BETWEEN THE PROPOSED SITE IMPROVEMENTS INDICATED ON THE PLANS AND THE PHYSICAL CONDITIONS OF THE SITE, OR ANY ERRORS OR OMISSIONS WITHIN THE PLANS OR IN THE SITE LAYOUT AS PROVIDED BY THE ENGINEER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMMEDIATELY NOTIFY THE ENGINEER. UNTIL AUTHORIZED TO PROCEED, ANY WORK PERFORMED BY THE CONTRACTOR AFTER SUCH A DISCOVERY WILL BE AT THE CONTRACTOR'S SOLE RISK AND EXPENSE.

10. PROTECT ALL EXISTING FEATURES (INCLUDING BUT NOT LIMITED TO WALLS, TREES, LANDSCAPING, DRIVEWAYS, SIDEWALKS, CURBS, PAVEMENT, UTILITIES, ETC.) NOT SPECIFICALLY NOTED FOR REMOVAL. FEATURES NOT DESIGNATED FOR REMOVAL THAT ARE DAMAGED OR REMOVED RESULTING FROM CONSTRUCTION TRAFFIC AND/OR OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. REPAIRS SHALL BE MADE TO THE SATISFACTION OF THE OWNER AND/OR ENGINEER.

11. CONTRACTOR SHALL ADJUST ALL VALVES, MANHOLES, CASTINGS, GAS VENTS, ETC., TO MATCH THE NEW SURFACE. ADJUSTMENT SHALL BE COORDINATED WITH THE UTILITY COMPANIES AND THE COST FOR ALL ADJUSTMENTS SHALL BE INCIDENTAL TO THE CONSTRUCTION. AT NO ADDITIONAL COST TO THE OWNER, REPAIR ANY DAMAGE TO SAID STRUCTURES AND APPURTENANCES THAT OCCUR DURING CONSTRUCTION.

12. CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST FORTY-EIGHT (48) HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. EXACT LOCATION, ELEVATION AND INVERTS OF ALL UTILITIES,SERVICES AND CONNECTIONS MUST BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES SO THE CONFLICT MAY BE RESOLVED.

13. IOWA CODE 480, UNDERGROUND FACILITIES INFORMATION, REQUIRES VERBAL NOTICE TO IOWA ONE-CALL BY CALLING 811 OR 1-800-292-8989, NOT LESS THAN 48 HOURS BEFORE EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS.

14. CONTRACTOR SHALL SCHEDULE A UTILITY LOCATING SERVICE AND/OR NOTIFY ALL UTILITY COMPANIES (GAS, ELECTRIC, TELEPHONE, CABLE, ETC.) AND THE LOCAL MUNICIPALITY TO DETERMINE THE LOCATION AND HORIZONTAL AND VERTICAL ELEVATION OF UNDERGROUND UTILITIES AND PROPOSED POINTS OF CONNECTION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION IN ORDER TO AVOID POTENTIAL CONFLICTS. IF CONFLICTS ARE FOUND, NOTIFY THE ENGINEER. IT IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING PUBLIC AND PRIVATE UTILITIES WHETHER INDICATED ON THE PLANS OR NOT AND TO HAVE THESE UTILITIES MARKED PRIOR TO CONSTRUCTION.

15. NOTIFY UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN CONSTRUCTION LIMITS PRIOR TO EACH STAGE OF CONSTRUCTION. NOTIFY THE APPROPRIATE PUBLIC AND PRIVATE UTILITY OWNER A MINIMUM OF 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ON ANY FACILITIES OWNED OR OPERATED BY THAT UTILITY.

16. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES/OWNERS REGARDING OUTAGES, RELOCATION, ADJUSTMENT, CONNECTIONS, OR TEMPORARY SUPPORT OF THEIR FACILITIES. COORDINATE ALL UTILITY OUTAGES WITH PROVIDER OF UTILITY A MINIMUM OF 12 BUSINESS DAYS IN ADVANCE.

17. THE MEANS OF THE WORK AND THE SAFETY OF THE CONTRACTOR'S EMPLOYEES ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. AT NO TIME WILL EITHER THE OWNER/OPERATOR OR THE ENGINEER TAKE RESPONSIBILITY FOR EITHER THE MEANS OF THE WORK OR THE SAFETY OF THE CONTRACTOR'S EMPLOYEES.

18. ALL OPEN EXCAVATIONS SHALL BE PROTECTED IN ACCORDANCE WITH REGULATORY REQUIREMENTS.

19. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION. ANY DAMAGE CAUSED BY A FAILURE TO MAINTAIN POSITIVE DRAINAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

20. CONSTRUCTION ACTIVITIES ARE TO BE LIMITED TO THE EXISTING RIGHT-OF-WAY, TEMPORARY CONSTRUCTION EASEMENTS, OR LIMITS OF THE PROJECT AS INDICATED ON THE PLANS. IF ADDITIONAL AREAS ARE NEEDED FOR STAGING, STORAGE, ETC., IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN WRITTEN PERMISSION FROM THE PROPERTY OWNER(S). COPIES OF THE AGREEMENTS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE PRIOR TO THE USE OF THE PROPERTY.

21. ALL EMERGENCY ACCESS LANES WITHIN THE PROJECT AREA SHALL REMAIN IN SERVICE, CLEAN OF DEBRIS, AND ACCESSIBLE FOR USE BY EMERGENCY VEHICLES.

22. SITE CLEAN-UP TO BE PERFORMED ON A DAILY BASIS. SIDEWALKS, PARKING LOTS, ROADWAYS, ETC. WITHIN AND ADJACENT TO PROJECT LIMITS SHALL BE KEPT CLEAN AT ALL TIMES. ALL COSTS FOR CLEANING SHALL BE INCIDENTAL TO THE CONTRACT.

23. ALL INSPECTIONS REQUIRED FOR PUBLIC OR PRIVATE IMPROVEMENTS SHALL BE FACILITATED BY THE CONTRACTOR.

24. CONTACT THE OWNER FOR PROCEDURES FOR HANDLING CONTAMINATED SOILS IF LOCATED ON SITE.

25. PRIOR TO INITIAL ACCEPTANCE BY THE OWNER(S) AND/OR GOVERNING AUTHORITY, ALL WORK SHALL BE REVIEWED AND APPROVED BY THE OWNER AND ENGINEER OR THEIR REPRESENTATIVE(S). THE CONTRACTOR SHALL GUARANTEE THEIR WORK FOR A PERIOD OF 12 (TWELVE) MONTHS FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL BE HELD RESPONSIBLE FOR ANY DEFECTS IN MATERIAL OR WORKMANSHIP OF THIS WORK DURING THAT PERIOD AND UNTIL FINAL ACCEPTANCE IS MADE.

26. ALL TRAFFIC AND PEDESTRIAN CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE TRAFFIC AND PEDESTRIAN CONTROL MEASURES (SIGNS, BARRICADES, FLAGGERS, ETC.) IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST EDITION.

27. WHEN PERFORMING WORK WITHIN THE PUBLIC RIGHT OF WAY, CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO CITY ENGINEER AT LEAST SEVEN (7) DAYS PRIOR TO STARTING WORK. IF THE AUTHORITY HAVING JURISDICTION REQUIRES ADDITIONAL TRAFFIC CONTROLS, IT SHALL BE INCIDENTAL TO THE PROJECT.

28. ALL PROPERTY MARKERS AND SURVEY REFERENCE MARKERS SHALL BE CAREFULLY PRESERVED DURING CONSTRUCTION UNTIL THEIR LOCATION HAS BEEN WITNESSED OR OTHERWISE TIED IN BY AN AUTHORIZED AGENT OR PROFESSIONALLY LICENSED SURVEYOR.

29. REPLACE ANY PROPERTY MONUMENTS REMOVED OR DESTROYED BY CONSTRUCTION. MONUMENTS SHALL BE SET BY A LAND SURVEYOR REGISTERED TO PRACTICE IN THE STATE OF IOWA.

30. ALL CONSTRUCTION STAKING, LAYOUT, SCHEDULING, AND PAYMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

SITE PREPARATION AND DEMOLITION NOTES:
1. ALL EXISTING BUILDINGS, FOUNDATIONS, CONCRETE OR ASPHALT PAVEMENT OR WALKS, CURB AND GUTTER, AND MISCELLANEOUS STRUCTURES (INCLUDING, BUT NOT LIMITED TO FENCES, POLES, YARD LIGHTS, ELECTRICAL PANELS, WHEEL STOPS, AND MISCELLANEOUS DEBRIS) NOTED TO BE REMOVED AND/OR EXCESS MATERIAL (EXCAVATED MATERIAL OR BROKEN CONCRETE) WHICH IS NOT DESIRABLE TO BE INCORPORATED INTO THE WORK INVOLVED ON THIS PROJECT SHALL BE DEMOLISHED, REMOVED FROM THE SITE, AND LEGALLY DISPOSED OF BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WASTE AREAS OR LEGAL DISPOSAL SITES FOR DEMOLISHED ITEMS. NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES. NO MATERIAL SHALL BE PLACED WITHIN THE EASEMENTS, UNLESS SPECIFICALLY STATED IN THE PLANS OR APPROVED BY THE ENGINEER. DISPOSAL SITES MUST BE APPROVED BY THE ENGINEER OR OWNER. CONTRACTOR SHALL APPLY NECESSARY MOISTURE TO THE CONSTRUCTION AREA AND TEMPORARY HAUL ROADS TO PREVENT THE SPREAD OF DUST. OFF-SITE DISPOSAL SHALL BE IN ACCORDANCE WITH THE APPLICABLE GOVERNMENTAL REGULATIONS.

2. WHERE A SECTION OF PAVEMENT, CURB AND GUTTER, OR SIDEWALK IS CUT OR OTHERWISE DAMAGED BY THE CONTRACTOR, THE ENTIRE SECTION SHALL BE REMOVED AND REPLACED. PAVEMENT, CURBS, GUTTERS, AND SIDEWALKS SHALL BE REMOVED A MINIMUM OF TWO FEET BEYOND THE EDGE OF THE TRENCH CUT AND TO THE NEAREST JOINT.

3. DOUBLE SAWCUT EDGES OF PAVEMENT FULL DEPTH PRIOR TO REMOVAL TO PREVENT DAMAGE TO ADJACENT SLABS AND FIXTURES.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL TREES AND SHRUBS IN PROJECT AREA FROM DAMAGE DUE TO CONSTRUCTION ACTIVITY UNLESS SHOWN ON THE PLANS OR DIRECTED BY THE OWNER'S REPRESENTATIVE.

5. REMOVAL AND DISPOSAL OF EXISTING TREES AND SHRUBS WITHIN CONSTRUCTION LIMITS SHALL BE INCIDENTAL TO THE PROJECT. STUMPS ARE TO BE GROUND TO TWO FEET BELOW FINISHED GRADE. TREES THAT QUALIFY FOR ENDANGERED BAT HABITAT ARE TO BE FELLED BETWEEN OCTOBER 1ST AND MARCH 31ST.

6. ALL FENCES WHICH ARE IMPACTED BY THIS PROJECT ARE TO BE REMOVED AND REPLACED TO AN EQUAL OR BETTER CONDITION. SALVAGED MATERIALS MAY BE USED UPON APPROVAL OF THE OWNER'S REPRESENTATIVE. FENCES SHALL NOT BE REMOVED UNTIL PROPERTY OWNER HAS BEEN NOTIFIED. TEMPORARY FENCING MAY BE REQUIRED OVERNIGHT DURING CONSTRUCTION AND SHOULD BE INCIDENTAL TO THE PROJECT.

7. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH THE MUNICIPALITY AND OWNER'S REPRESENTATIVE TO ENSURE PROTECTION AND MAINTENANCE OF EXISTING SITE FEATURES NOT NOTED FOR REMOVAL.

8. THE DEMOLITION PLAN IS INTENDED TO SHOW REMOVAL OF KNOWN SITE FEATURES AND UTILITIES AS SHOWN ON THE SURVEY PROVIDED TO THE ENGINEER FOR DESIGN. THERE MAY BE OTHER SITE FEATURES, UTILITIES, STRUCTURES, AND MISCELLANEOUS ITEMS BOTH BURIED AND ABOVE GROUND THAT ARE WITHIN THE LIMITS OF WORK THAT MAY REQUIRE REMOVAL FOR THE PROPOSED SITE IMPROVEMENTS BUT THAT ARE NOT SHOWN HEREIN. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF SUCH ITEMS.

9. VOIDS LEFT BY ANY ITEM REMOVED (FENCE POST, UTILITIES, SIGN, ETC.) SHALL BE BACKFILLED IN ACCORDANCE WITH SUDAS SPECIFICATIONS.

10. AS SOON AS DEMOLITION WORK HAS BEEN COMPLETED, FINAL GRADE OF BACKFILL IN DEMOLITION AREAS SHALL BE COMPACTED PER SUDAS SPECIFICATIONS TO PRESENT A NEAT, WELL DRAINED APPEARANCE, AND TO PREVENT WATER FROM DRAINING UNNECESSARILY ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL PROVIDE TEMPORARY DIVERSION SWALES OR OTHER MEANS OF MAINTAINING ADEQUATE SITE DRAINAGE.

11. ALL EXISTING SANITARY SEWERS, STORM SEWERS, WATER MAINS OR IRRIGATION LINES AND APPURTENANCES NOTED FOR REMOVAL WITHIN THE AREA OF THE PROPOSED CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR. ALL ABANDONED SEWER LINES SHALL BE PLUGGED AT BOTH ENDS WITH A MINIMUM OF TWO (2) FEET LONG NON-SHRINK CONCRETE MORTAR PLUGS UNLESS OTHERWISE NOTED.

12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF A FIELD OR DRAIN TILE IS ENCOUNTERED AND SHALL INDICATE THE METHOD OF RESOLVING THE CONFLICT. THE ENGINEER SHALL APPROVE THE PROPOSED METHOD. A RECORD OF THE LOCATION OF ALL FIELD TILE OR DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE CONTRACTOR AND TURNED OVER TO THE OWNER AND/OR ENGINEER UPON COMPLETION OF THE PROJECT AND ACCURATELY SHOWN ON THE RECORD DRAWINGS. EXISTING FIELD TILE LINES ENCOUNTERED IN THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR IN ONE OF THE FOLLOWING WAYS:
   a. CONNECT TILE TO THE NEAREST STORM SEWER.
   b. DAYLIGHT TO FINISHED GROUND.
   c. REPAIR TILE AND MAINTAIN SERVICE.

EROSION CONTROL NOTES:

1. USE ALL AVAILABLE MEANS TO MINIMIZE THE AMOUNT OF SOIL EROSION CAUSED BY THE WORK OF THE PROJECT. THIS INCLUDES RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DEVICES INDICATED.

2. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL OR STATE REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

3. CONTROL DUST FROM ALL WORK AND STAGING AREAS.

4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DEVICES SHALL BE INSTALLED AND FUNCTIONAL BEFORE THE SITE IS OTHERWISE DISTURBED. THEY SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SITE STABILIZATION HAS BEEN ACHIEVED.

5. STABILIZE ALL DISTURBED AREAS IMMEDIATELY IF THEY REMAIN INACTIVE FOR 14 DAYS OR MORE WITH A TEMPORARY SEED MIX PER SUDAS SPECIFICATION 9010. TEMPORARY SEEDING SHALL BE INCIDENTAL TO THE PROJECT.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, PERIODIC CHECKING AND REINSTALLATION/MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES. EROSION CONTROL DEVICES SHALL BE CHECKED ONCE PER WEEK AND AFTER EACH RAINFALL TO ENSURE WORKING ORDER.

SURFACE RESTORATION:

1. ALL DISTURBED AREAS NOT PAVED OR HARD SURFACE ON THE SITE SHALL RECEIVE 6 INCHES OF TOPSOIL. SCARIFY AREAS TO RECEIVE TOPSOIL TO A DEPTH OF 6 INCHES. REMOVE ALL STONES, WOOD, AND OTHER DEBRIS LARGER THAN 3 INCHES FROM AREAS TO RECEIVE TOPSOIL. DO NOT COMPACT TOPSOIL.

2. ALL DISTURBED AREAS SHALL BE SEEDED, FERTILIZED, AND MULCHED IN ACCORDANCE WITH SUDAS SPECIFICATION SECTION 9010. SPRING SEEDING SHALL BE COMPLETED BETWEEN MARCH 1 AND MAY 31. FALL SEEDING SHALL BE COMPLETED BETWEEN AUGUST 10 AND SEPTEMBER 30.

3. CONTRACTOR TO SUBMIT PROPOSED SEED MIX, FERTILIZER, AND MULCH PRODUCTS FOR OWNER APPROVAL PRIOR TO APPLICATION.

4. ALL AREAS DISTURBED BY CONSTRUCTION, NOT DESIGNATED AS PLANTED, TO BE SEEDED USING SUDAS TYPE 1 SEED MIX.

5. ALL SEEDED AREAS SHALL BE MULCHED WITH HYDRAULIC MULCHING PER SUDAS SPECIFICATION SECTION 9010.2.07.B.

6. MAINTAIN ANY SEEDED AREAS UNTIL AN ADEQUATE STAND OF GRASS HAS BEEN ESTABLISHED. RESEED ANY AREAS AS NECESSARY DURING MAINTENANCE PERIOD.

PAVEMENT GENERAL NOTES:
1. SEE STRUCTURAL PLANS FOR ANY SPECIAL EXCAVATION AND FILL REQUIREMENTS WITHIN THE BUILDING FOOTPRINT.

2. ALL DIMENSIONS AND CURB RADII SHOWN ARE MEASURED FROM BACK OF CURB TO BACK OF CURB/EDGE OF PAVEMENT TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

3. ALL SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY ANY AREAS OF EXISTING OR PROPOSED PAVEMENTS THAT HAVE POTENTIAL TO POND WATER AND MAKE ANY ADJUSTMENTS NECESSARY TO ENSURE THAT WATER WILL POSITIVELY DRAIN ACROSS THE PAVING OR OVERLAY.

4. ALL SIDEWALKS SHALL BE CONSTRUCTED PER SUDAS SECTION 7030.

5. ALL PROPOSED PCC PAVEMENT SHALL BE PROTECTED ACCORDING TO SUDAS SECTION 7010-3.04.

PCC JOINTING NOTES:
1. JOINTING SHOULD CONFORM TO SUDAS SECTION 7010.

2. ALL JOINT TYPES REFERRED TO IN THE FOLLOWING NOTES OR ELSEWHERE ON THE PLANS ARE DETAILED IN IOWA SUDAS STANDARD DETAIL 7010.101.

3. WHERE ACCESS DRIVES INTERSECT EACH OTHER OR WHERE ACCESS DRIVES INTERSECT PARKING AREAS, THE JOINTING PLAN SHALL BE CONSTRUCTED PER IOWA SUDAS STANDARD DETAIL 7010.904.

4. PROVIDE CONTROL JOINTS 14 FEET O/C MAXIMUM (7 INCH PAVEMENT) OR 12 FEET O/C MAXIMUM (6 INCH PAVEMENT) UNLESS NOTED OTHERWISE.

5. INSTALL TYPE "K" OR TYPE "L" JOINTS AT 14 FEET O/C MAXIMUM (7 INCH PAVEMENT) OR 12 FEET O/C MAXIMUM (6 INCH PAVEMENT) UNLESS NOTED OTHERWISE.

6. PAVEMENT LONGITUDINAL JOINTS SHALL BE TYPE "KT-1" OR "L-1", TYP.

7. PAVEMENT TRANSVERSE JOINTS SHALL BE TYPE "C", TYP. TRANSVERSE JOINTS IN 5 INCH THICK SIDEWALK PAVING SHOULD BE SPACED TO MATCH THE WIDTH OF THE SIDEWALK NOT TO EXCEED 5 FEET.

8. ALL JOINTS, INCLUDING "KT" OR "L" TYPE JOINTS, SHALL BE SEALED PER IOWA SUDAS STANDARD DETAIL 7010.101 DETAIL "A" AND IOWA SUDAS STANDARD SPECIFICATION SECTION 7010-3.02 K.

9. INSTALL 1 INCH EXPANSION JOINT AT ALL LOCATIONS WHERE PAVEMENT ABUTS A BUILDING, STRUCTURE, STOOP, OR BACK-OF-CURB.

10. ALL EXPANSION JOINTS SHALL BE SEALED WITH A PEDESTRIAN RATED, SELF-LEVELING, ELASTOMERIC POLYURETHANE SEALANT, INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE SUBMITTAL OF ALL SEALANTS TO ENGINEER FOR REVIEW.

11. CONTRACTOR TO SUBMIT JOINTING PLAN TO ENGINEER FOR APPROVAL, PRIOR TO PAVING.

12. SIDEWALK REPLACEMENTS WHICH ARE ADJACENT TO STRUCTURAL STOOPS OR TUNNEL CAPS SHALL BE TIED TO EXISTING FROST FREE STRUCTURES WITH 24" LONG #4 TIE BARS EMBEDDED A MINIMUM OF 9" INTO THE EXISTING STRUCTURE TO PREVENT SETTLEMENT AND FROST HEAVE.

13. SAW CUTTING TO BE COMPLETED A MAXIMUM OF 24 HOURS FROM CONCRETE PLACEMENT. RANDOM CRACKING CAUSED BY DELAYED SAW CUTTING MAY REQUIRE REMOVAL AND REPLACEMENT.

14. PAVEMENT REINFORCING STEEL: PAVING REINFORCEMENT SHALL BE ASTM A615 GRADE 60 AND SHALL HAVE A PROTECTIVE COATING OF EPOXY APPLIED BY ELECTROSTATIC SPRAY METHOD IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A775.

SITE WORK TECHNICAL SPECIFICATIONS

THE MOST RECENT EDITION OF THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) AND IOWA DOT SPECIFICATIONS SHALL APPLY TO ALL SITE WORK PERFORMED ON THIS PROJECT EXCEPT AS MODIFIED HEREIN. MEASUREMENT AND PAYMENT SECTIONS AND ADDITIONAL COMPENSATION REFERENCES SHALL NOT APPLY TO THIS PROJECT AS IT IS A LUMP SUM BID .

CONTRACTOR SHALL SUBMIT SHOP DRAWING SUBMITTALS FOR ALL PROPOSED PRODUCTS.

A. CONCRETE PAVING:
CONCRETE: MATERIALS AND MIXING FOR ALL CONCRETE WORK, UNLESS OTHERWISE SPECIFIED, SHALL CONFORM TO IOWA DOT SPECIFICATIONS, SECTIONS 2301.03 THROUGH 2301.06, 2301.13 AND 2301.28 FOR AIR-ENTRAINED TYPE C-4 MIX WITH TYPE I CEMENT

FLY ASH (CONTRACTOR'S OPTION AS ADDITIONAL PAYMENT DUE TO FLY ASH SHORTAGE WILL NOT BE PAID BY OWNER) - ASTM C618, TYPE C, NOT TO EXCEED 15% OF CEMENTITIOUS MATERIAL.

COARSE AGGREGATE DURABILITY SHALL BE CLASS III, 3/4" MAX.

COMPRESSIVE STRENGTH: 2800 PSI @ 7 DAYS AND 4000 PSI @ 28 DAYS

SLUMP: 3" ± 1".

AIR CONTENT: 7.0% ± 1.0%

WATER/CEMENT RATIO: NOT TO EXCEED 0.53

FINISH: MATCH EXISTING FINISH FOR ROADWAY AND SIDEWALK PATCHING.

TESTING - ONE SET OF TEST CYLINDERS REQUIRED FOR EACH 100 C.Y. OR PORTION THEREOF, OF CONCRETE POURED PER WORK LOCATION. CONCRETE TESTING TO BE DONE AND PAID FOR BY OWNER. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED TESTING AND GEOTECHNICAL WORK WITH CONSTRUCTION MANAGER.

SURFACE CURING: CONTRACTOR SHALL APPLY WHITE PIGMENT LIQUID CURING COMPOUND IN A FINE SPRAY TO FORM CONTINUOUS UNIFORM FILM AFTER FINISHING AND SURFACE MOISTURE HAS DISAPPEARED, OR WITHIN 30 MINUTES AFTER FORMS ARE REQUIRED.

SUBMIT CONCRETE MIX DESIGN FOR APPROVAL.

COLD WEATHER CONCRETE: WHEN THE ATMOSPHERIC AIR TEMPERATURE MAY BE EXPECTED TO DROP BELOW 40°F AT THE TIME CONCRETE IS DELIVERED TO THE WORK SITE, DURING PLACEMENT, OR AT ANY TIME DURING CURING PERIOD, CONCRETE SHALL BE MIXED, PLACED, AND PROTECTED IN ACCORDANCE WITH ACI STANDARD 306, "RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING." IT IS THE OWNERS PREFERENCE TO AVOID COLD WEATHER CONCRETE FOR THIS PROJECT AND PROVIDE TEMPORARY GRANULAR SURFACING FOR SIDEWALK AND PAVING AS REQUIRED.

SIDEWALK REPLACEMENTS WHICH ARE ADJACENT TO STRUCTURAL STOOPS OR TUNNEL CAPS SHALL BE TIED TO EXISTING FROST FREE STRUCTURES WITH 24" LONG #4 TIE BARS EMBEDDED A MINIMUM OF 9" INTO THE EXISTING STRUCTURE TO PREVENT SETTLEMENT AND FROST HEAVE.

SAW CUTTING TO BE COMPLETED A MAXIMUM OF 24 HOURS FROM CONCRETE PLACEMENT. RANDOM CRACKING CAUSED BY DELAYED SAW CUTTING MAY REQUIRE REMOVAL AND REPLACEMENT.

B. PAVEMENT REINFORCING STEEL: PAVING REINFORCEMENT SHALL BE ASTM A615 GRADE 60 AND SHALL HAVE A PROTECTIVE COATING OF EPOXY APPLIED BY ELECTROSTATIC SPRAY METHOD IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A775.

C. GRANULAR SURFACING
MATERIALS AND INSTALLATION TO MEET IDOT SPECIFICATIONS 4120, CLASS A ROADSTONE.

D. WATER MAIN, WATER SERVICES, AND APPURTENANCES

ALL WATER MAINS AND WATER SERVICES SHALL BE INSTALLED TO A MINIMUM DEPTH OF COVER OF FIVE (5) FEET.

WATER MAIN AND WATER SERVICE PIPE MATERIAL: SHALL COMPLY WITH AWWA C900 POLYVINYL CHLORIDE (PVC) PIPE.

WATER SERVICE PIPE WITHIN TEN (10) FEET OF BUILDING AND TUNNEL TERMINATION POINTS SHALL BE DUCTILE IRON PIPE (DIP): SHALL COMPLY WITH AWWA C151 SPECIAL THICKNESS CLASS 52.

WATER SERVICE PIPE MATERIAL LESS THAN 4" DIAMETER: COPPER PIPE COMPLYING WITH ASTM B 88, WALL THICKNESS TYPE K.

JOINT TYPE: SHALL BE PUSH-ON JOINT TYPE ACCORDING TO AWWA C900 UNLESS OTHERWISE SPECIFIED. ALL WATER SERVICE JOINTS WITHIN THIRTY (30) FEET OF TUNNEL OR BUILDING TERMINATION POINTS OR WHICH ARE CAPPED FOR FUTURE CONNECTION SHALL HAVE RESTRAINED MECHANICAL OR INTEGRAL RESTRAINED JOINTS.

FITTINGS: SHALL COMPLY WITH AWWA C110 OR AWWA C153. MECHANICAL JOINTS AND GASKETS SHALL COMPLY WITH AWWA C111.

THRUST BLOCKS: SHALL USE IOWA DOT CLASS C CONCRETE. SHALL BE USED FOR ALL PIPES ON THE SITE AND SHALL COMPLY WITH IOWA SUDAS FIGURE 5010.101. INSTALL DEAD END ALTERNATE METHOD THRUST BLOCKS APPROXIMATELY FIVE (5) FEET OUTSIDE OF ALL BUILDING AND TUNNEL TERMINATION POINTS AND AT LOCATIONS WHERE FUTURE CONNECTIONS WILL BE MADE. INSTALL THRUST BLOCKS ON EXISTING MAINS OR SERVICES WHERE ADJUSTMENTS ARE BEING MADE WHICH REQUIRE NEW THRUST BLOCKS TO BE INSTALLED.

TRACER SYSTEM: SHALL COMPLY WITH IOWA SUDAS FIGURE 5010.102. TRACER WIRE, GROUND ROD, GROUND-ROD CLAMP, SPLICE KIT AND TRACER WIRE STATION SHALL COMPLY WITH IOWA SUDAS SECTION 5010. CONTRACTOR SHALL COMPLETE FINAL INSPECTION OF THE TRACER SYSTEM TO BE WITNESSED BY THE CONSTRUCTION MANAGER AT THE COMPLETION OF THE PROJECT TO VERIFY ELECTRICAL CONTINUITY OF THE SYSTEM.

WATER MAINS AND WATER SERVICES SHALL BE PRESSURE TESTED AND DISINFECTED ACCORDING TO SUDAS SECTION 5030 SPECIFICATIONS AND JURISDICTION REQUIREMENTS.

E. TRENCH EXCAVATION AND BACKFILL

BEDDING AND BACKFILL MATERIAL: SHALL COMPLY WITH IOWA SUDAS SECTION 3010.

BACKFILL COMPACTION REQUIREMENTS:
1. UNDER AND WITHIN FIVE (5) FEET OF PAVEMENT, SIDEWALKS, GRANULAR SURFACING, OR OTHER SURFACE IMPROVEMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY.
2. UNDER LANDSCAPING AND LAWN AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM STANDARD PROCTOR DENSITY.

COMPACTION TESTING SHALL BE COMPLETED ON A FREQUENCY OF ONE TEST PER 100 LINEAR FEET AT APPROXIMATELY EVERY OTHER 8" LIFT OR AT ALTERNATIVE LOCATIONS AND FREQUENCIES AS RECOMMENDED BY TESTING AGENCY. COMPACTION TESTING TO BE DONE BY AN INDEPENDENT TESTING LABORATORY AND PAID FOR BY OWNER. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL REQUIRED TESTING AND GEOTECHNICAL WORK WITH CONSTRUCTION MANAGER.

CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING WHICH MAYBE REQUIRED INCIDENTAL TO THE PIPE INSTALLATION.

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9279.50
34 CEDAR ST, WOODWARD, IA 50276

DRAWN BY	BDD
APPROVED BY	CRB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK:	----

CONSTRUCTION NOTES

00-C001

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Printed: 4/24/2026 10:16:12 AM

LEGEND	
GENERAL SITE	
PLAN MARK	DESCRIPTION
— · — W — · —	ACTIVE WATER LINE
— · — W — · —	ABANDONED WATER LINE
— · — W — · —	PROPOSED WATER LINE

QUANTITY NOTE:
APPROXIMATE QUANTITIES ARE PROVIDED FOR REFERENCE ONLY AND CONTRACTORS SHALL VERIFY ALL QUANTITIES. PAYMENT FOR ADDITIONAL QUANTITIES WILL NOT BE COMPLETED.

6" PCC PAVING: 170 SY
7" PCC PAVING: 30 SY

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9279.50
34 CEDAR ST, WOODWARD, IA 50276

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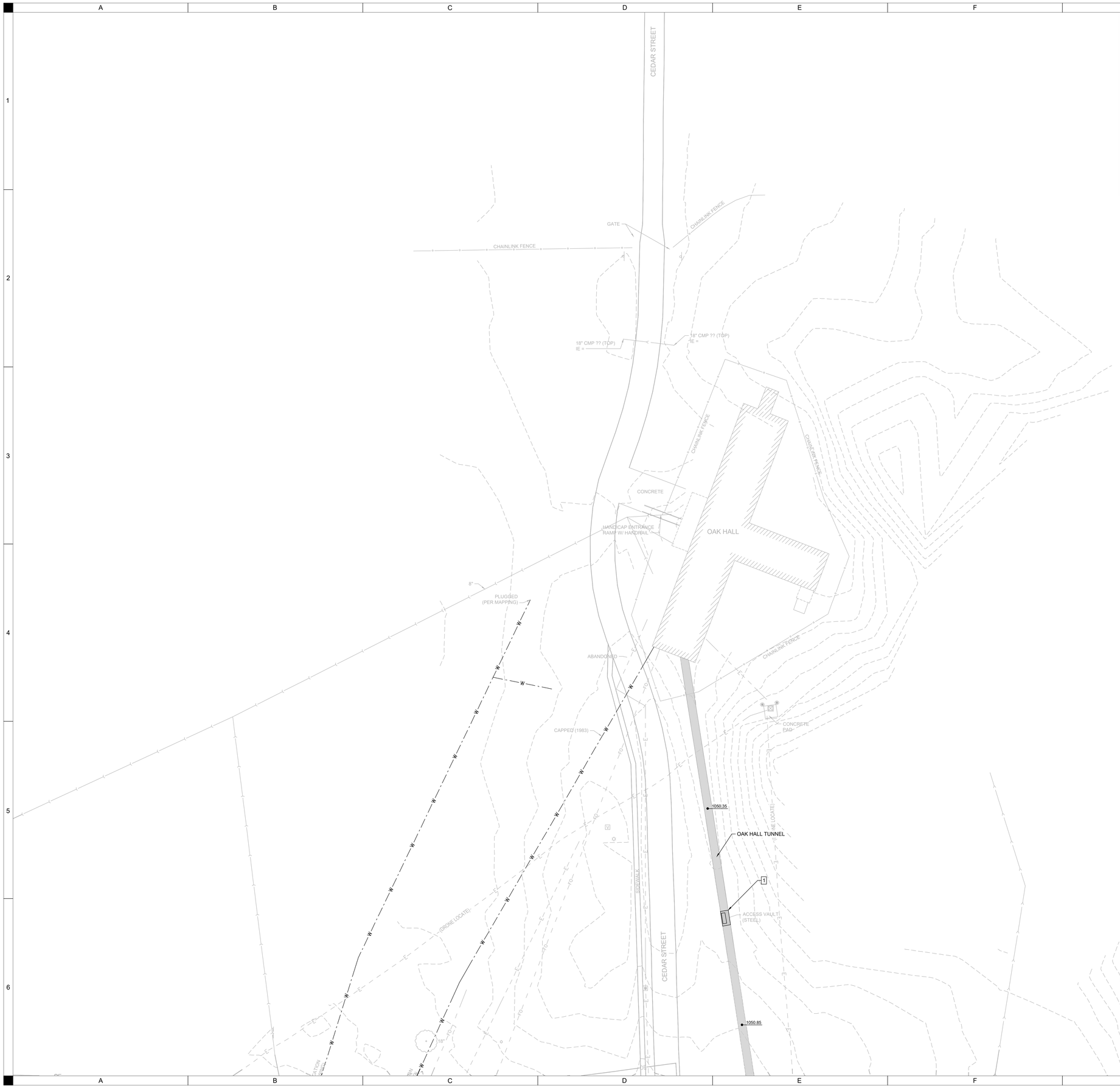
CLIENT PROJECT NUMBER	----

OVERALL SITE PLAN

00-C101

KEYNOTES	
KEY	NOTE
1	ONCE TUNNEL HAS BEEN GROUTED OR, AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500

NOTE: CONTRACTOR MAY REMOVE AND REPLACE ADDITIONAL TUNNEL CAPS AS REQUIRED BY THEIR MEANS AND METHODS AND FOR CONSTRUCTABILITY PURPOSES. COORDINATE ADDITIONAL TUNNEL CAP REMOVAL LOCATIONS WITH CONSTRUCTION MANAGER.



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IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 22730.50
134 CEDAR ST, WOODWARD, IA 50276

DRAWN BY	BDD
APPROVED BY	CRB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
CLIENT PROJECT NUMBER	---

ISITE PLAN

00-C102

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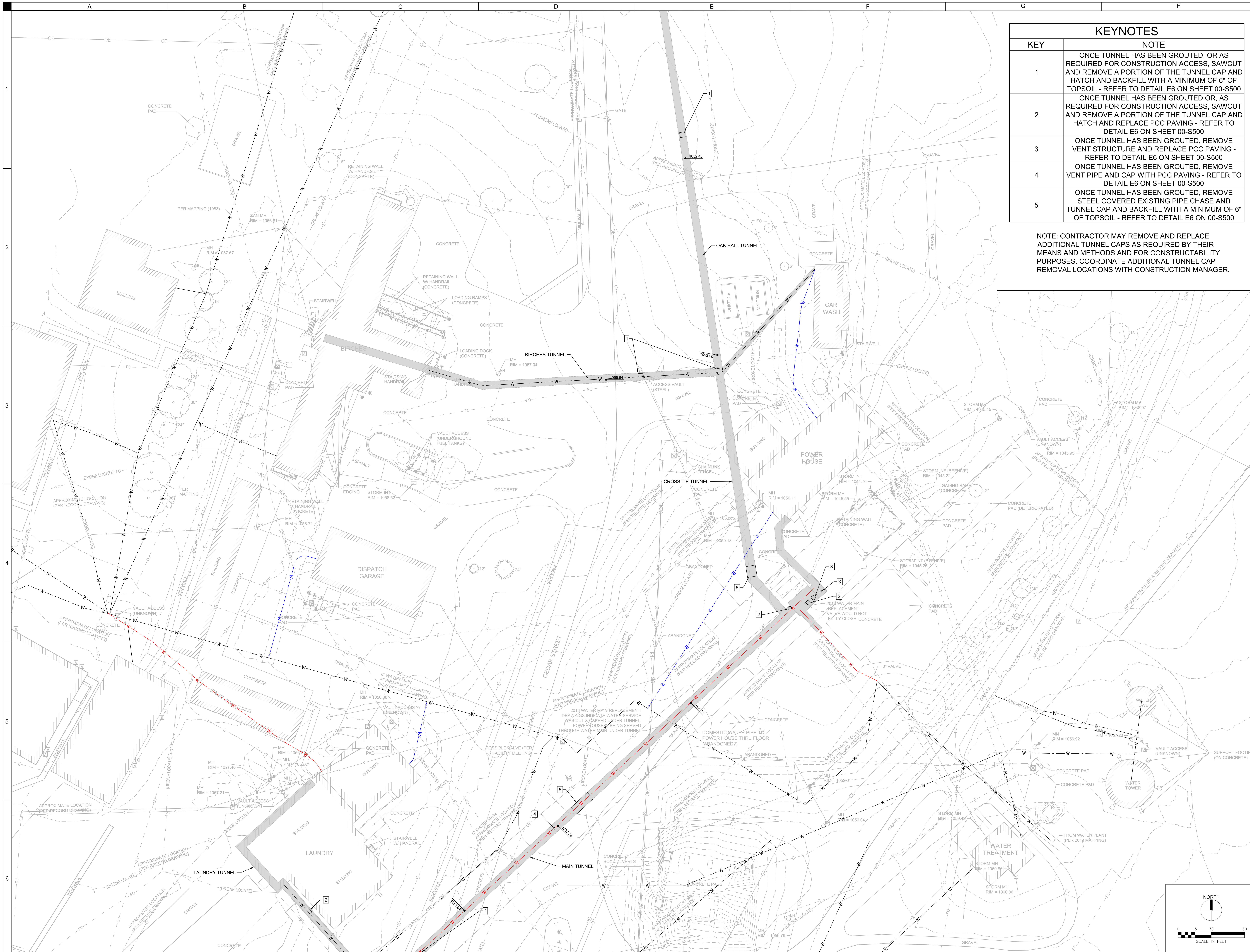

KEYNOTES

KEY	NOTE
1	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON SHEET 00-S500
2	ONCE TUNNEL HAS BEEN GROUTED OR, AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
3	ONCE TUNNEL HAS BEEN GROUTED, REMOVE VENT STRUCTURE AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
4	ONCE TUNNEL HAS BEEN GROUTED, REMOVE VENT PIPE AND CAP WITH PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
5	ONCE TUNNEL HAS BEEN GROUTED, REMOVE STEEL COVERED EXISTING PIPE CHASE AND TUNNEL CAP AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON 00-S500

NOTE: CONTRACTOR MAY REMOVE AND REPLACE ADDITIONAL TUNNEL CAPS AS REQUIRED BY THEIR MEANS AND METHODS AND FOR CONSTRUCTABILITY PURPOSES. COORDINATE ADDITIONAL TUNNEL CAP REMOVAL LOCATIONS WITH CONSTRUCTION MANAGER.

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9279.50
34 CEDAR ST, WOODWARD, IA 50276

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ISSUED FOR	100% CD
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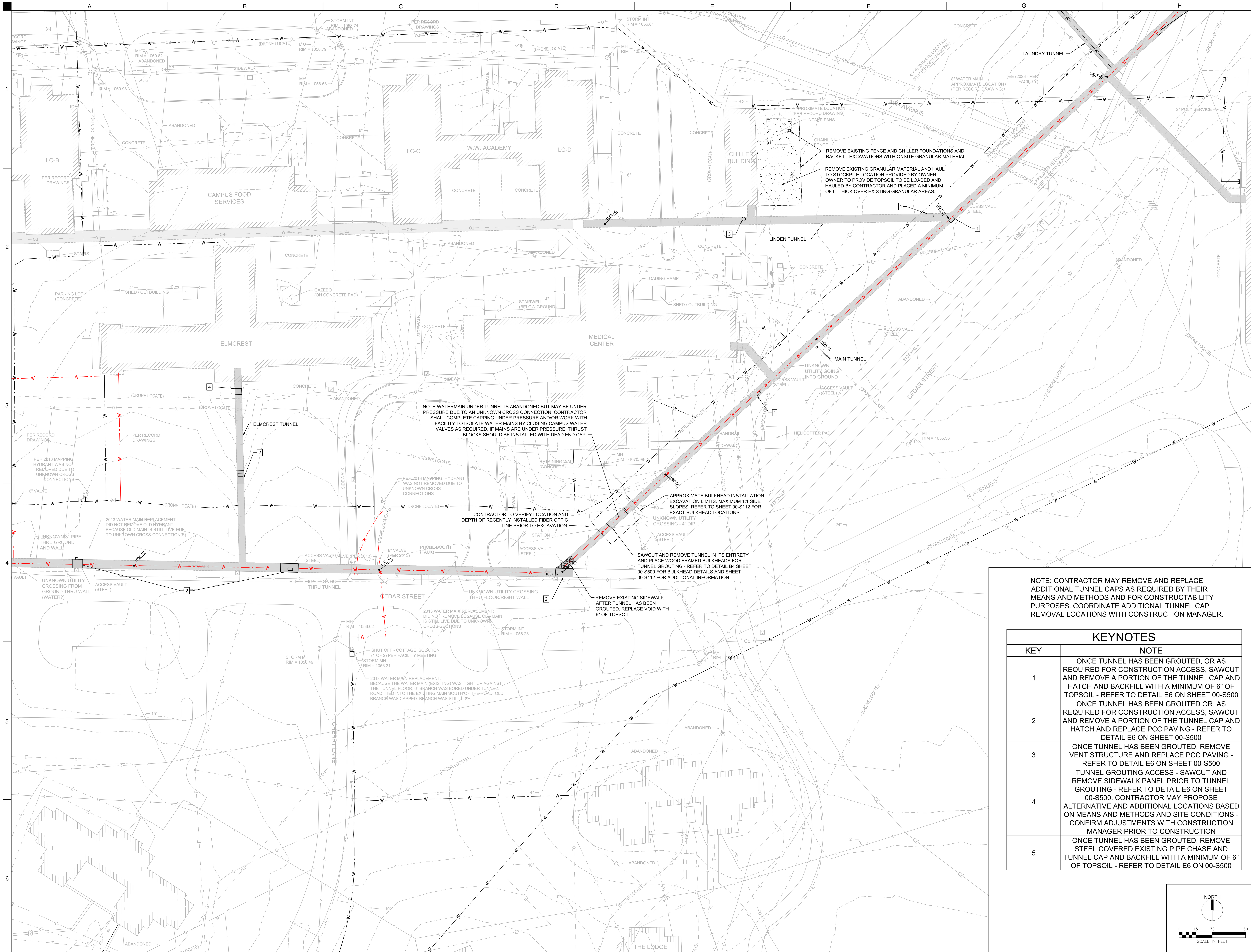
PROJECT NUMBER	2240007040
CLIENT PROJECT NUMBER	----

SITE PLAN

00-C103



NOTE: CONTRACTOR MAY REMOVE AND REPLACE ADDITIONAL TUNNEL CAPS AS REQUIRED BY THEIR MEANS AND METHODS AND FOR CONSTRUCTABILITY PURPOSES. COORDINATE ADDITIONAL TUNNEL CAP REMOVAL LOCATIONS WITH CONSTRUCTION MANAGER.

KEYNOTES

KEY	NOTE
1	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON SHEET 00-S500
2	ONCE TUNNEL HAS BEEN GROUTED OR, AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
3	ONCE TUNNEL HAS BEEN GROUTED, REMOVE VENT STRUCTURE AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
4	TUNNEL GROUTING ACCESS - SAWCUT AND REMOVE SIDEWALK PANEL PRIOR TO TUNNEL GROUTING - REFER TO DETAIL E6 ON SHEET 00-S500. CONTRACTOR MAY PROPOSE ALTERNATIVE AND ADDITIONAL LOCATIONS BASED ON MEANS AND METHODS AND SITE CONDITIONS - CONFIRM ADJUSTMENTS WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION
5	ONCE TUNNEL HAS BEEN GROUTED, REMOVE STEEL COVERED EXISTING PIPE CHASE AND TUNNEL CAP AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON 00-S500

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ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
CLIENT PROJECT NUMBER	---

SITE PLAN

KEYNOTES

KEY	NOTE
1	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON SHEET 00-S500
2	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
3	TUNNEL GROUTING ACCESS - SAWCUT AND REMOVE SIDEWALK PANEL PRIOR TO TUNNEL GROUTING - REFER TO DETAIL E6 ON SHEET 00-S500. CONTRACTOR MAY PROPOSE ALTERNATIVE AND ADDITIONAL LOCATIONS BASED ON MEANS AND METHODS AND SITE CONDITIONS - CONFIRM ADJUSTMENTS WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION
4	EXCAVATE AND BACKFILL AS REQUIRED TO REMOVE VENT STRUCTURE - REFER TO SHEET 00-S113 FOR REMOVAL REQUIREMENTS

NOTE: CONTRACTOR MAY REMOVE AND REPLACE ADDITIONAL TUNNEL CAPS AS REQUIRED BY THEIR MEANS AND METHODS AND FOR CONSTRUCTABILITY PURPOSES. COORDINATE ADDITIONAL TUNNEL CAP REMOVAL LOCATIONS WITH CONSTRUCTION MANAGER.

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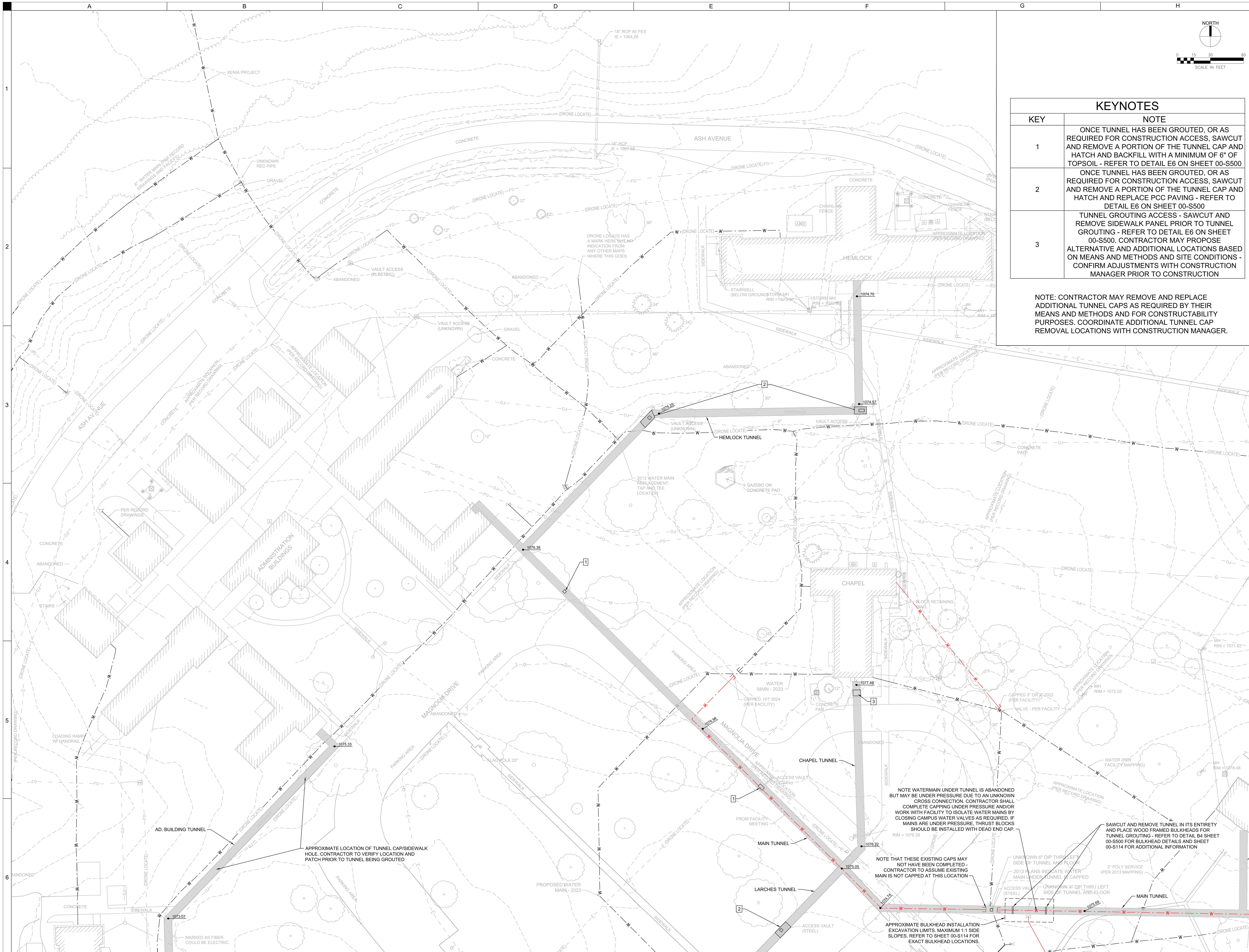
SITE PLAN

00-C105



KEYNOTES

KEY	NOTE
1	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON SHEET 00-S500
2	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
3	TUNNEL GROUTING ACCESS - SAWCUT AND REMOVE SIDEWALK PANEL PRIOR TO TUNNEL GROUTING - REFER TO DETAIL E6 ON SHEET 00-S500. CONTRACTOR MAY PROPOSE ALTERNATIVE AND ADDITIONAL LOCATIONS BASED ON MEANS AND METHODS AND SITE CONDITIONS - CONFIRM ADJUSTMENTS WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION

NOTE: CONTRACTOR MAY REMOVE AND REPLACE ADDITIONAL TUNNEL CAPS AS REQUIRED BY THEIR MEANS AND METHODS AND FOR CONSTRUCTABILITY PURPOSES. COORDINATE ADDITIONAL TUNNEL CAP REMOVAL LOCATIONS WITH CONSTRUCTION MANAGER.

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

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SITE PLAN

00-C106

KEYNOTES

KEY	NOTE
1	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND BACKFILL WITH A MINIMUM OF 6" OF TOPSOIL - REFER TO DETAIL E6 ON SHEET 00-S500
2	ONCE TUNNEL HAS BEEN GROUTED, OR AS REQUIRED FOR CONSTRUCTION ACCESS, SAWCUT AND REMOVE A PORTION OF THE TUNNEL CAP AND HATCH AND REPLACE PCC PAVING - REFER TO DETAIL E6 ON SHEET 00-S500
3	TUNNEL GROUTING ACCESS - SAWCUT AND REMOVE SIDEWALK PANEL PRIOR TO TUNNEL GROUTING - REFER TO DETAIL E6 ON SHEET 00-S500. CONTRACTOR MAY PROPOSE ALTERNATIVE AND ADDITIONAL LOCATIONS BASED ON MEANS AND METHODS AND SITE CONDITIONS - CONFIRM ADJUSTMENTS WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION

NOTE: CONTRACTOR MAY REMOVE AND REPLACE ADDITIONAL TUNNEL CAPS AS REQUIRED BY THEIR MEANS AND METHODS AND FOR CONSTRUCTABILITY PURPOSES. COORDINATE ADDITIONAL TUNNEL CAP REMOVAL LOCATIONS WITH CONSTRUCTION MANAGER.

APPROXIMATE LOCATION OF TUNNEL CAP/SIDEWALK HOLE. CONTRACTOR TO VERIFY LOCATION AND PATCH PRIOR TO TUNNEL BEING GROUTED

AD. BUILDING TUNNEL

WESTWOOD TUNNEL

MEYERS TUNNEL

LARCHES TUNNEL

1071.80

1071.40

1071.36

1071.03

1071.85

1073.03

1074.38

PER 2013 MAP

WESTWOOD

MYERS HALL

LARCHES

STORAGE BUILDING

MAGNOLIA DRIVE

ASH AVENUE

CEDAR STREET

FRANKLIN STREET

WSHS BOULEVARD

PROPOSED WATER MAIN - 2023

6" WATER MAIN UNDER TUNNEL (ON THROUGH FOOTING (PER 2013 MAP)

MH RIM = 1071.36

MH RIM = 1070.98

MH RIM = 1071.05

MH RIM = 1073.03

STORM MH RIM = 1065.82

STORM MH RIM = 1060.67

STORM INT RIM = 1064.04

12" RCP ?? (TOP) IE = ———

2014 NATURAL GAS PIPING: 93' BORE

2014 NATURAL GAS PIPING: PLACED VENT ON SLEEVE

2014 NATURAL GAS PIPING: 25' BORE

2014 NATURAL GAS PIPING: 580' BORE

2014 NATURAL GAS PIPING: 90 BORE

2014 NATURAL GAS PIPING: 60 BORE (SLEEVE)

2014 NATURAL GAS PIPING: STEEL CASING WITH VENT. CASING: 2" LARGER IN DIAMETER THAN PIPE

2014 NATURAL GAS PIPING: STEEL CASING WITH VENT. CASING: 2" LARGER IN DIAMETER THAN PIPE

2014 NATURAL GAS PIPING: 6" ON SHEET C-105

MARKED AS FIBER. COULD BE ELECTRIC.

ACCESS VAULT (STEEL)

FLOOR DRAIN (PLUGGED)

SWINGSET

PLAYGROUND

CONCRETE

CONCRETE PAD

LOADING RAMP W/ HANDRAIL

HANDRAIL

SIDEWALK

STAIRWELL (ABOVE GROUND)

STAIRWELL (BELOW GROUND)

LP TANK

SHED / OUTBUILDING

CHAINLINK FENCE

GAS METER

ABANDONED

CHAINLINK FENCE

(DRONE LOCATE)

NORTH

0 15 30 60

SCALE IN FEET

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ISITE PLAN

00-C107

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Plotted: 4/24/2026 @ 2:27 PM

LEGEND	
	GENERAL SITE
PLAN MARK	DESCRIPTION
W	ACTIVE WATER LINE
W	ABANDONED WATER LINE
W	PROPOSED WATER LINE

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34 CEDAR ST., WOODWARD, IA 50276

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ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK:	----

OVERALL WATER PLAN

00-C201

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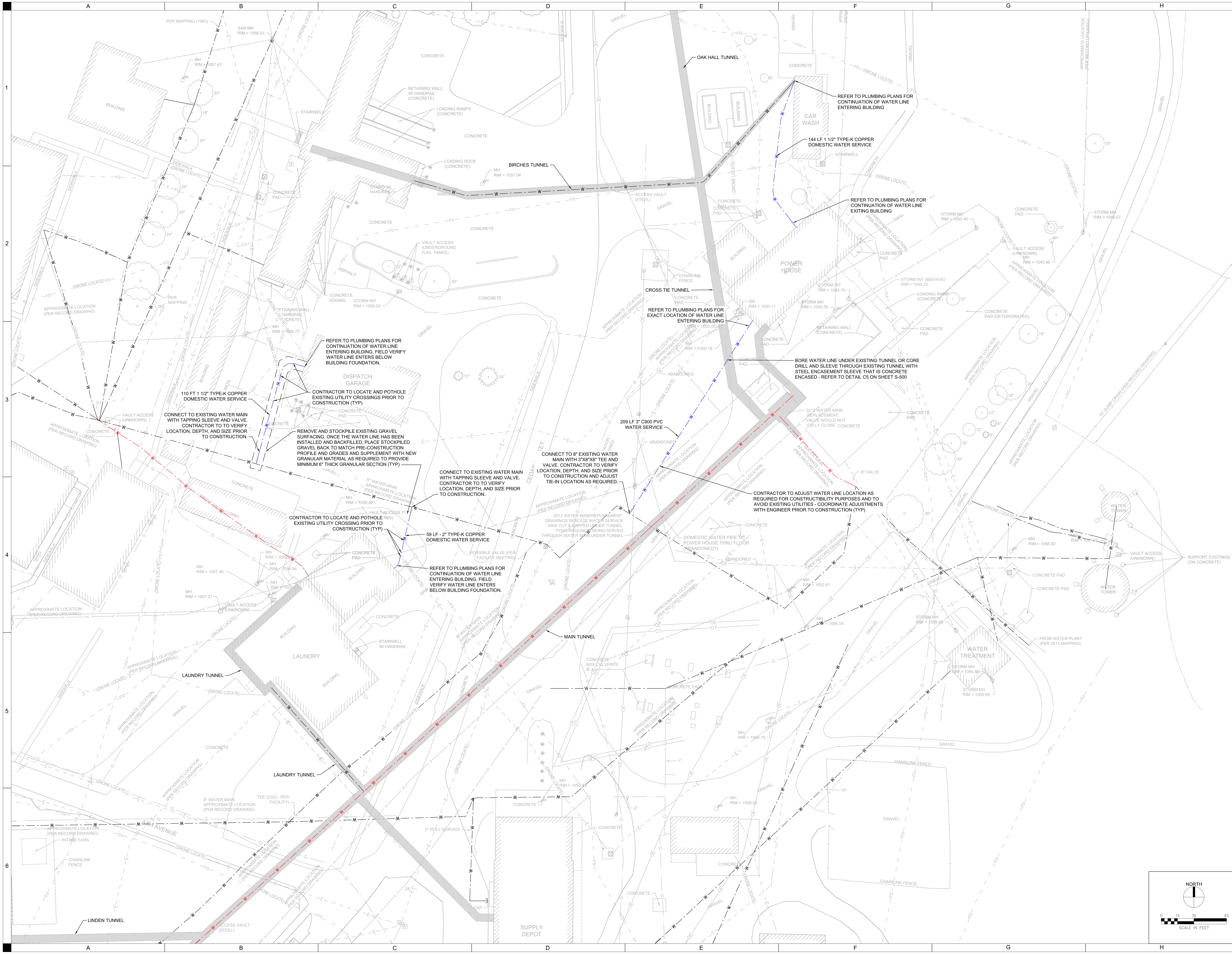
Plotted: 4/24/2026 10:17 AM


OAK HALL TUNNEL
REFER TO PLUMBING PLANS FOR CONTINUATION OF WATER LINE ENTERING BUILDING
CAR WASH
144 LF 1 1/2" TYPE-K COPPER DOMESTIC WATER SERVICE
BIRCHES TUNNEL
REFER TO PLUMBING PLANS FOR CONTINUATION OF WATER LINE EXITING BUILDING
POWER HOUSE
CROSS TIE TUNNEL
REFER TO PLUMBING PLANS FOR EXACT LOCATION OF WATER LINE ENTERING BUILDING
REFER TO PLUMBING PLANS FOR CONTINUATION OF WATER LINE ENTERING BUILDING. FIELD VERIFY WATER LINE ENTERS BELOW BUILDING FOUNDATION.
DISPATCH GARAGE
110 FT 1 1/2" TYPE-K COPPER DOMESTIC WATER SERVICE
CONTRACTOR TO LOCATE AND POTHOLE EXISTING UTILITY CROSSINGS PRIOR TO CONSTRUCTION (TYP)
CONNECT TO EXISTING WATER MAIN WITH TAPPING SLEEVE AND VALVE. CONTRACTOR TO TO VERIFY LOCATION, DEPTH, AND SIZE PRIOR TO CONSTRUCTION.
REMOVE AND STOCKPILE EXISTING GRAVEL SURFACING. ONCE THE WATER LINE HAS BEEN INSTALLED AND BACKFILLED, PLACE STOCKPILED GRAVEL BACK TO MATCH PRE-CONSTRUCTION PROFILE AND GRADES AND SUPPLEMENT WITH NEW GRANULAR MATERIAL AS REQUIRED TO PROVIDE MINIMUM 6" THICK GRANULAR SECTION (TYP)
BORE WATER LINE UNDER EXISTING TUNNEL OR CORE DRILL AND SLEEVE THROUGH EXISTING TUNNEL WITH STEEL ENCASEMENT SLEEVE THAT IS CONCRETE ENCASED - REFER TO DETAIL C5 ON SHEET S-500
209 LF 3" C900 PVC WATER SERVICE
2013 WATER MAIN REPLACEMENT VALVE WOULD NOT FULLY CLOSE
CONNECT TO 8" EXISTING WATER MAIN WITH 3"X8"X8" TEE AND VALVE. CONTRACTOR TO VERIFY LOCATION, DEPTH, AND SIZE PRIOR TO CONSTRUCTION AND ADJUST TIE-IN LOCATION AS REQUIRED.
CONNECT TO EXISTING WATER MAIN WITH TAPPING SLEEVE AND VALVE. CONTRACTOR TO TO VERIFY LOCATION, DEPTH, AND SIZE PRIOR TO CONSTRUCTION.
CONTRACTOR TO ADJUST WATER LINE LOCATION AS REQUIRED FOR CONSTRUCTIBILITY PURPOSES AND TO AVOID EXISTING UTILITIES - COORDINATE ADJUSTMENTS WITH ENGINEER PRIOR TO CONSTRUCTION (TYP)
2013 WATER MAIN REPLACEMENT DRAWINGS INDICATE WATER SERVICE WAS CUT & CAPPED UNDER TUNNEL. POWERHOUSE IS BEING SERVED THROUGH WATER MAIN UNDER TUNNEL
DOMESTIC WATER PIPE TO POWER HOUSE THRU FLOOR (ABANDONED?)
CONTRACTOR TO LOCATE AND POTHOLE EXISTING UTILITY CROSSING PRIOR TO CONSTRUCTION (TYP)
59 LF - 2" TYPE-K COPPER DOMESTIC WATER SERVICE
REFER TO PLUMBING PLANS FOR CONTINUATION OF WATER LINE ENTERING BUILDING. FIELD VERIFY WATER LINE ENTERS BELOW BUILDING FOUNDATION.
WATER TOWER
SUPPORT FOOTINGS (ON CONCRETE)
FROM WATER PLANT (PER 2013 MAPPING)
WATER TREATMENT
MAIN TUNNEL
LAUNDRY
LAUNDRY TUNNEL
LINDEN TUNNEL
SUPPLY DEPOT
2" POLY SERVICE
TEE (2023 - PER FACILITY)
8" WATER MAIN APPROXIMATE LOCATION (PER RECORD DRAWING)
NORTH
SCALE IN FEET
0 15 30 60

IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

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ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK:	---

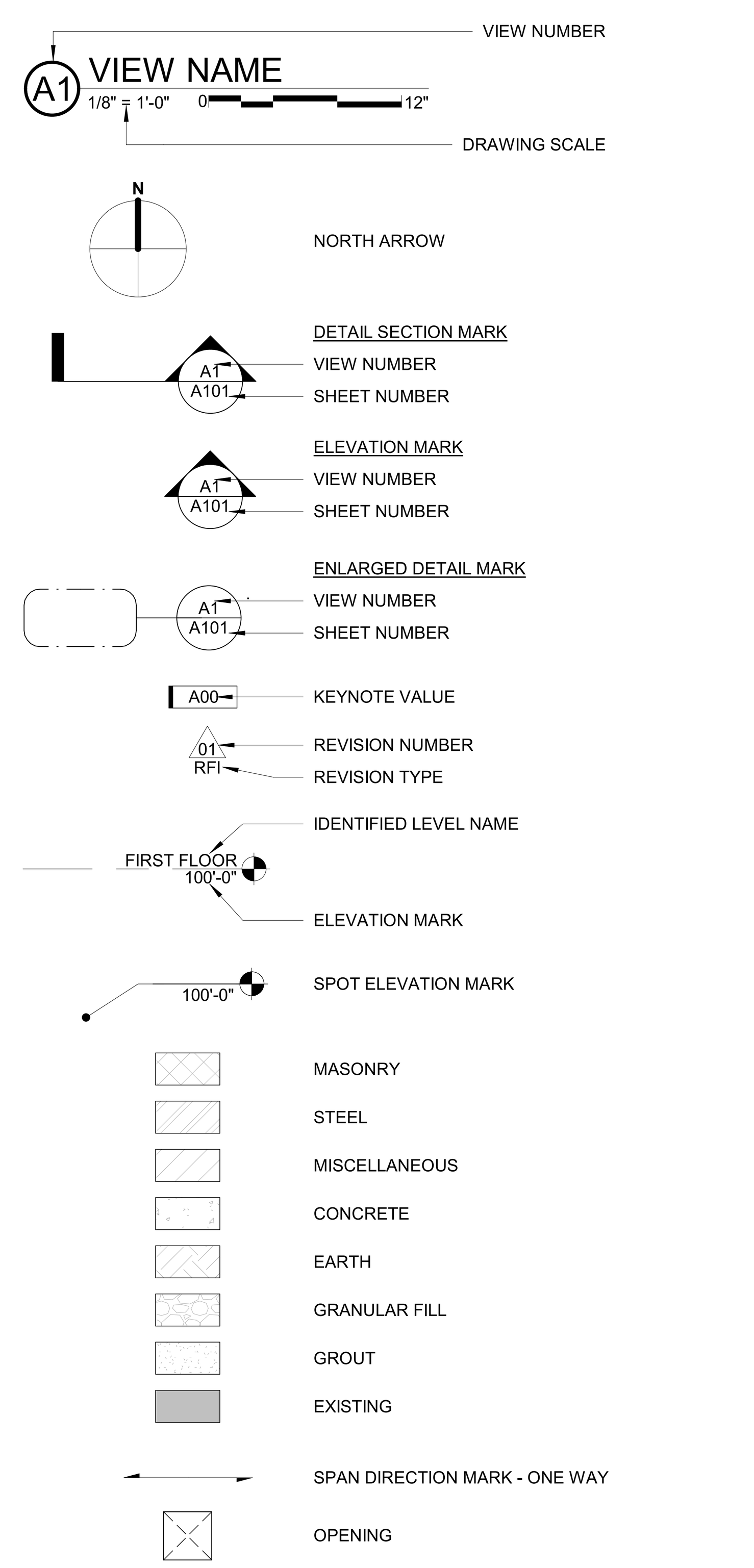
WATER PLAN

00-C202

ABBREVIATIONS

A	
@	AT
ADD	ADDENDUM
AHJ	AUTHORITY HAVING JURISDICTION
ALT	ALTERNATE
ARCH	ARCHITECT (URAL)
B	
B/	BOTTOM OF
BLDG	BUILDING
BOT	BOTTOM
BP	BASE PLATE
BRG	BEARING
BTWN	BETWEEN
C	
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CIP	CAST-IN PLACE
CJ	CONSTRUCTION/CONTROL JOINT
CL	CENTER LINE
CLR	CLEAR (ANCE)
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECT (ION) (ED) (OR)
CONT	CONTINUOUS
COORD	COORDINATE
CFSF	COLD FORMED STEEL FRAMING
D	
DBE	DECK BEARING ELEVATION
DEG, °	DEGREE
DEMO	DEMOLITION
DIA, Ø	DIAMETER
DIM	DIMENSION
DN	DOWN
DTL	DETAIL
DWG	DRAWING
E	
(E)	EXISTING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELEC	ELECTRIC / ELECTRICAL
ELEV or EL	ELEVATION
EMBED	EMBEDDED
EOR	ENGINEER OR RECORD
EQ	EQUAL
EQUIP	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
F	
FND	FOUNDATION
FF	FINISHED FLOOR
FRP	FIBER REINFORCED POLYMER
FTG	FOOTING
FV	FIELD VERIFY
G	
GA	GAGE or GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GRID LINE
H	
HORIZ	HORIZONTAL
HWS	HEADED WELDED STUDS
I	
ID	INSIDE DIAMETER
J	
JBE	JOIST BEARING ELEVATION
L	
LF	LINEAR FOOT
LLBB	LONG LEG BACK TO BACK
LLOS	LONG LEG OUTSTANDING
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LVL	LAMINATED VENEER LUMBER
M	
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
N	
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O	
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED-CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED-OWNER INSTALLED
OPP	OPPOSITE HAND
OH	OVERHEAD
P	
PAF	POWDER ACTUATED FASTENER
PC	PRECAST CONCRETE
PL	PLATE
PREFAB	PREFABRICATED
PRELIM	PRELIMINARY
PVC	POLYVINYL CHLORIDE
Q	
QTY	QUANTITY
R	
R	RADIUS
REF	REFER (ENCE)
REINF	REINFORCE (D) (ING) (MENT)
REQD	REQUIRED
REV	REVISION
RO	ROUGH OPENING
RTU	ROOF TOP UNIT
S	
SCHED	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SIM	SIMILAR
SJ	SAW CUT JOINT
SLBB	SHORT LEG BACK TO BACK
SLOS	SHORT LEG OUTSTANDING
SOG	SLAB ON GRADE
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL
T	
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
T/	TOP OF
TEMP	TEMPORARY
TRANS	TRANSVERSE
TYP	TYPICAL
U	
UNO	UNLESS NOTED OTHERWISE
V	
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	
W/	WITH
W/O	WITHOUT
WP	WORKING POINT
WWR	WELDED WIRE REINFORCEMENT

GENERAL SYMBOLS LEGEND



GENERAL NOTES

1. THE GENERAL STRUCTURAL NOTES ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND SPECIFICATIONS. SHOULD CONFLICTS EXIST BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS NOTIFY THE ENGINEER.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL PROJECT DRAWINGS AND SPECIFICATIONS. REFER TO ALL DRAWINGS FOR THE COORDINATION OF THE WORK IN THIS PROJECT.
3. THE INTENT OF THESE PLANS AND NOTES IS TO PRESENT THE PROJECT REQUIREMENTS. MAJOR DETAILS HAVE BEEN SHOWN ON THE DRAWINGS. HOWEVER, CERTAIN MINOR DETAILS MUST BE WORKED OUT IN THE FIELD OR SHOP DRAWING PROCESS BY THE CONTRACTOR.
4. UNLESS NOTED OTHERWISE, DETAILS SHOWN ON DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
5. UNLESS NOTED OTHERWISE, THE DRAWINGS DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE CONSTRUCTION PROCEDURE AND SEQUENCING TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF TEMPORARY BRACING NECESSARY FOR THE CONSTRUCTION PROCESS.
6. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
7. CONTRACTOR'S CONSTRUCTION AND ERECTION SEQUENCE SHALL CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF THE STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
8. EXISTING CONDITIONS:
   A. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS RELATING TO EXISTING CONSTRUCTION AND EXISTING SERVICES ON SITE. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING COLUMNS, WALLS, OPENINGS, ETC, PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
   B. DURING CONSTRUCTION THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION (DISCOVERY). SUCH CONDITIONS MAY INTERFERE WITH THE NEW CONSTRUCTION OR REQUIRE PROTECTION AND/OR SUPPORT OF EXISTING WORK DURING CONSTRUCTION. IT MAY ALSO CONSIST OF DAMAGED OR DETERIORATION OF STRUCTURAL MATERIALS OR COMPONENTS WHICH COULD JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE STRUCTURE(S). THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL DISCOVERIES WHICH MAY INTERFERE WITH THE PROPER EXECUTION OF THE WORK OR JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE STRUCTURE(S) PRIOR TO PROCEEDING WITH THE WORK RELATED TO SUCH DISCOVERIES.
   C. DURING THE CONSTRUCTION PROCESS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF EXISTING STRUCTURES AND TO PROTECT FROM DAMAGE ANY PORTIONS THAT ARE TO REMAIN.
   D. CONTRACTOR SHALL INVESTIGATE THE SITE DURING EARTHWORK OPERATIONS FOR FILL MATERIAL OR BURIED STRUCTURES. IMMEDIATELY NOTIFY THE ENGINEER IF ANY SUCH MATERIALS OR STRUCTURES ARE DISCOVERED.
9. STRUCTURAL COORDINATION
   A. MECHANICAL, ELECTRICAL OR PLUMBING LOADS, OPENINGS, AND SUPPORT FRAMING ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTOR BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK.
   B. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, HOLES AND SLEEVES THROUGH FOUNDATIONS AND OTHER STRUCTURAL ELEMENTS WITH THE MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS. NO OPENINGS SHALL PASS THROUGH STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER.
   C. EXCESS COST DUE TO VARIATION IN THE STRUCTURE TO ACCOMMODATE A SUBSTITUTION OR ALTERNATE MANUFACTURER(S) FROM THE LISTED BASIS OF DESIGN SHALL BE BORNE BY THE CONTRACTOR.
10. BEFORE SUBMITTING A BID, EACH BIDDER SHALL VISIT THE SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS, CONSTRUCTION REQUIREMENTS, RESTRICTIONS, QUANTITIES AND EQUIPMENT NECESSARY TO COMPLETE THE WORK. THE BID SHALL INCLUDE ALL ITEMS REQUIRED TO COMPLETE THE WORK WITHIN THE EXISTING CONDITIONS. DISRUPTION OF THE OWNERS NORMAL ACTIVITIES AROUND THE CONSTRUCTION SITE SHALL BE KEPT TO A MINIMUM.
11. THE COST OF ADDITIONAL DESIGN WORK DUE TO ERRORS AND OMISSIONS BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE BORNE BY THE RESPONSIBLE CONTRACTOR.
12. CONTRACTOR SHALL COORDINATE WORK SCHEDULES WITH THE OWNER TO ESTABLISH CONSTRUCTION SEQUENCING AROUND ANY OCCUPIED AREAS. CONTRACTOR SHALL NOT PROCEED TO OCCUPIED AREAS UNTIL AUTHORIZED BY THE OWNER.
13. ALL ELEMENTS AND SURFACES DAMAGED BY DEMOLITION, BUT NOT SCHEDULED FOR REMOVAL SHALL BE REPAIRED AND REFINISHED TO MATCH THE ADJACENT SURFACES AT NO ADDITIONAL COST TO THE OWNER.
14. CONTRACTOR SHALL REMOVE ALL DEBRIS AND WASTE MATERIALS RESULTING FROM CONSTRUCTION FROM THE SITE, UNLESS NOTED OTHERWISE.
15. CONTRACTOR SHALL MINIMIZE CREATION OF DUST, DIRT AND WINDBORNE DEBRIS FROM BLOWING ACROSS THE SITE AND ONTO ADJACENT SITES.
16. CONTRACTOR SHALL COVER ANY EXTERIOR OPENING WITH TEMPORARY CLOSURES WHEN NOT WORKING ON SITE TO PROTECT THE INTERIOR SPACES FROM WEATHER, INSECTS, RODENTS AND INTRUDERS.
17. DIMENSIONS WERE FIELD-MEASURED AND ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS CRITICAL TO CONSTRUCTION OR FABRICATION.
18. WATERSTOPS PER SPECIFICATIONS TO BE INSTALLED AT NEW/EXISTING CONCRETE INTERFACES. WATERSTOP SHALL BE INSTALLED WITH 2" MIN COVER WITH ONE MAT OF REINFORCING BETWEEN THE WATERSTOP AND THE EXTERIOR FACE OF THE CONCRETE AND OTHERWISE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
19. STRUCTURES ARE DESIGNED FOR A SOIL BEARING CAPACITY OF 1500 PSF ON NATIVE SOILS AND STRUCTURAL FILL. IF SOIL OF QUESTIONABLE QUALITY IS DISCOVERED, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD AND ALLOW A GEOTECHNICAL ENGINEER TO VERIFY THAT ACTUAL CONDITIONS MEET OR EXCEED THIS CAPACITY. GEOTECHNICAL ENGINEERING SERVICES SHALL BE PAID BY OWNER.

TUNNEL FILLING NOTES

1. FILL EXISTING TUNNEL WITH IDOT 2506 FLOWABLE MORTAR OR FOAMED CELLULAR CONCRETE, HEREUNTO REFERRED TO AS "GROUT". SUBMIT GROUT MIX WITH PROPERTIES THAT MAKE FILL REMOVABLE WITHOUT DAMAGING EXISTING UTILITIES. GROUT SHALL HAVE SIMILAR INSULATING PROPERTIES TO NATIVE SOILS. GROUT SHALL HAVE A COMPRESSIVE STRENGTH OF 50 TO 100 PSI. CONTRACTOR TO MONITOR AND DOCUMENT THE VOLUME OF GROUT USED TO FILL TUNNELS. PROVIDE VENTING AND ADDITIONAL FILL PORTS AS REQUIRED IN TEMPORARY FORMS FOR GROUT.
2. CONCRETE BULKHEADS TO REACH F'c OF AT LEAST 4000 PSI PRIOR TO INFILLING WITH GROUT.
3. FILL PORT LOCATIONS IN ROAD ARE NOT ANTICIPATED. SUBMIT PLANS AND EXPLANATION TO OWNER FOR REVIEW AND APPROVAL IF DEEMED NECESSARY.
4. GROUT TUNNEL TO BOTTOM OF ROOF SLAB, UNLESS NOTED OTHERWISE. DO NOT FILL MANHOLES TO TOP OF ACCESS STRUCTURE SO MANHOLE CAN BE REMOVED WITHOUT REQUIRING GROUT MODIFICATION. TUNNEL MUST BE GROUTED PRIOR TO DEMOLITION OF SIDEWALK PANEL, AS PANEL IS ANTICIPATED TO BE TUNNEL ROOF AND PROVIDE SUPPORT TO THE WALLS.
5. CONTRACTOR MAY USE PLYWOOD FORMS, PROPERLY BRACED AGAINST BOW, AS INTERMEDIATE BULKHEADS, AT LIMITS OF EACH GROUT POUR. INTERMEDIATE BULKHEADS ARE NOT SHOWN ON THE DRAWINGS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL COSTS ASSOCIATED WITH INTERMEDIATE BULKHEADS SHALL BE INCLUDED IN BID. INTERMEDIATE BULKHEAD LOCATIONS SHALL BE LOCATED ON SITE PLAN WITH DIMENSIONS FROM NEAREST TUNNEL INTERSECTION AND PROVIDED TO OWNER FOR RECORDS. AT CONTRACTOR'S OPTION, CONCRETE OR CMU MAY BE USED FOR INTERMEDIATE BULKHEADS IN LIEU OF WOOD. CONCRETE OR CMU BULKHEADS SHALL BE PROPERLY DESIGNED TO RESIST HYDROSTATIC FORCES FROM GROUT DURING INSTALLATION AND DESIGN SHALL BE SUBMITTED TO ENGINEER OF RECORD PRIOR TO CONSTRUCTION FOR REVIEW.
6. CONTRACTOR TO DESIGN AND PROVIDE PERMANENT SUPPORT FOR PROPOSED CONDUIT AND PIPING WITHIN EXISTING TUNNELS. SUPPORTS SHALL BE SPACED AND CONFIGURED TO PREVENT DISPLACEMENT AND/OR COLLAPSE OF UTILITIES WHEN TUNNEL IS GROUTED. SUPPORT CONCEPT SHALL BE SUBMITTED TO OWNER AND ENGINEER FOR INFORMATION AT LEAST TWO WEEKS PRIOR TO FABRICATION OF SUPPORTS.

DESIGN INFORMATION

1. CODES:
   A. INTERNATIONAL BUILDING CODE (IBC) 2015
   B. AMERICAN CONCRETE INSTITUTE - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)
   C. AMERICAN CONCRETE INSTITUTE - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530)
   D. AMERICAN SOCIETY OF CIVIL ENGINEERS AND STRUCTURAL ENGINEERING INSTITUTE (ASCE/SEI 7) - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
   E. AMERICAN WELDING SOCIETY D1.1
2. DESIGN LOADS PER THE 2015 IBC (RISK CATEGORY II)
   A. DEAD LOADS
      STRUCTURE SELF WEIGHT AS SHOWN
3. STRUCTURES ARE DESIGNED FOR A SOIL BEARING CAPACITY LISTED BELOW ON NATIVE SOILS AND STRUCTURAL FILL. IF SOIL OF QUESTIONABLE QUALITY IS DISCOVERED, CONTRACTOR SHALL NOTIFY ENGINEER OF RECORD AND ALLOW A GEOTECHNICAL ENGINEER TO VERIFY THAT ACTUAL CONDITIONS MEET OR EXCEED THIS CAPACITY. GEOTECHNICAL ENGINEERING SERVICES SHALL BE PAID BY OWNER.
   NET ALLOWABLE SOIL BEARING PRESSURE 1500PSF (ASSUMED)

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTES PUBLICATIONS: ACI 301, ACI 305.1, ACI 306.1, ACI 315, AND ACI 318 UNLESS NOTED OTHERWISE.
2. CONCRETE COMPRESSIVE STRENGTH (28 DAY)(F'c)
   FOUNDATION WALLS AND PIERS 4000 PSI
   SLAB ON GRADE 4000 PSI
   ELEVATED BEAM, SLABS AND JOISTS 4000 PSI
3. CONCRETE REINFORCEMENT STANDARDS:
   DEFORMED BARS ASTM A615 Fy = 60 KSI
   WELDED WIRE REINFORCEMENT (WWR) ASTM A1064 Fy = 65 KSI
   EPOXY COATED REINFORCING ASTM A775 Fy = 60 KSI
4. ALL CONCRETE SHALL BE STONE AGGREGATE UNLESS NOTED OTHERWISE. SUBMIT MIX DESIGN AND DOCUMENTATION FOR APPROVAL PER ACI 318.
5. REINFORCEMENT PROTECTION
   A. CONCRETE PLACED AGAINST EARTH - 3"
   B. CONCRETE PLACED IN FORMS BUT EXPOSED TO WEATHER OR EARTH:
      a. BARS #5 AND SMALLER - 1 1/2"
      b. BARS LARGER THAN #5 - 2"
   C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
      a. SLABS, WALLS, AND JOISTS - 3/4"
      b. BEAMS, COLUMNS - 1 1/2"
6. WHERE REQUIRED, DOWELS SHALL MATCH THE SIZE, NUMBER AND SPACING OF THE MAIN REINFORCING UNLESS NOTED OTHERWISE.
7. ALL SPLICES, STANDARD HOOKS, AND DEVELOPMENT LENGTHS TO BE PER THE REFERENCED EDITION OF ACI 318. MAKE BARS CONTINUOUS AROUND CORNERS. ALL SPLICES SHALL BE BY CONTACT LAP.
8. ALL SPLICES SHALL BE A CLASS "B" TENSION SPLICE AS DEFINED IN ACI 318. PROVIDE LAP SPLICES LENGTHS AS FOLLOWS:

	4000 PSI	
BAR SIZE	TYPICAL	TOP BARS
#3	19"	25"
#4	25"	33"
#5	31"	41"
#6	37"	49"
#7	54"	71"
#8	62"	81"
#9	70"	91"
#10	79"	102"
#11	87"	114"

   LAP SPLICE LENGTHS GIVEN, ASSUME CLEAR SPACING BETWEEN BARS OF 2 BAR DIAMETERS, AND A MINIMUM CLEAR COVER OF 1 BAR DIAMETER. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12" ON FRESH CONCRETE BENEATH THE BARS.
9. WALLS AND GRADE BEAMS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE, UNLESS APPROVED BY THE ENGINEER.
10. CONSTRUCTION JOINTS IN STRUCTURAL CONCRETE WORK MUST BE MADE AT CENTER OF SPAN OR AT CENTER OF SUPPORT WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN.
11. THERE SHALL BE NO ADDITIONAL OPENINGS LARGER THAN 10" IN CONCRETE WALLS AND SLABS NOT SHOWN. REFER TO CONCRETE OPENING DETAIL FOR ADDITIONAL REINFORCEMENT AROUND OPENINGS.
12. REINFORCING STEEL SHALL BE SECURELY FASTENED INTO FORMS PRIOR TO POURING CONCRETE. WET SETTING OF REINFORCING STEEL WILL NOT BE ACCEPTED PER ACI.
13. CONCRETE MIX - FOUNDATIONS
   COARSE AGGREGATE 100% PASSING 1" SIEVE
   FINE AGGREGATE 100% PASSING 3/8" SIEVE
   WATER/CEMENT RATIO 0.45
   SLUMP (NO WATER REDUCER) 4" +/- 1"
   SLUMP (WITH WATER REDUCER) 4" TO 8"
   AIR CONTENT 6% +/- 1.5%
14. ALL REINFORCING STEEL FOR TUNNELS SHALL BE EPOXY-COATED AND 60 KSI YIELD STRENGTH, UNLESS NOTED OTHERWISE.
15. ALL EPOXY-DRILLED REBAR SHALL BE INSTALLED WITH C6 EPOXY ADHESIVE BY RED HEAD, HIT RE-500 V3 BY HILTI, OR APPROVED EQUIVALENT EMBED #5 BARS MINIMUM 6" INTO SOUND CONCRETE. ALL THREADED ROD TO BE STAINLESS STEEL.
16. WHERE NEW CONCRETE IS TO BE CAST AGAINST EXISTING CONCRETE, PREPARE SURFACE OF EXISTING BY REMOVING ALL SPALLS, CORROSION, AND LOOSE CONCRETE.
17. ALL CONCRETE FOR STRUCTURE SHALL HAVE INTEGRAL CRYSTALLINE WATERPROOFING ADMIXTURE, PER SPECIFICATIONS.

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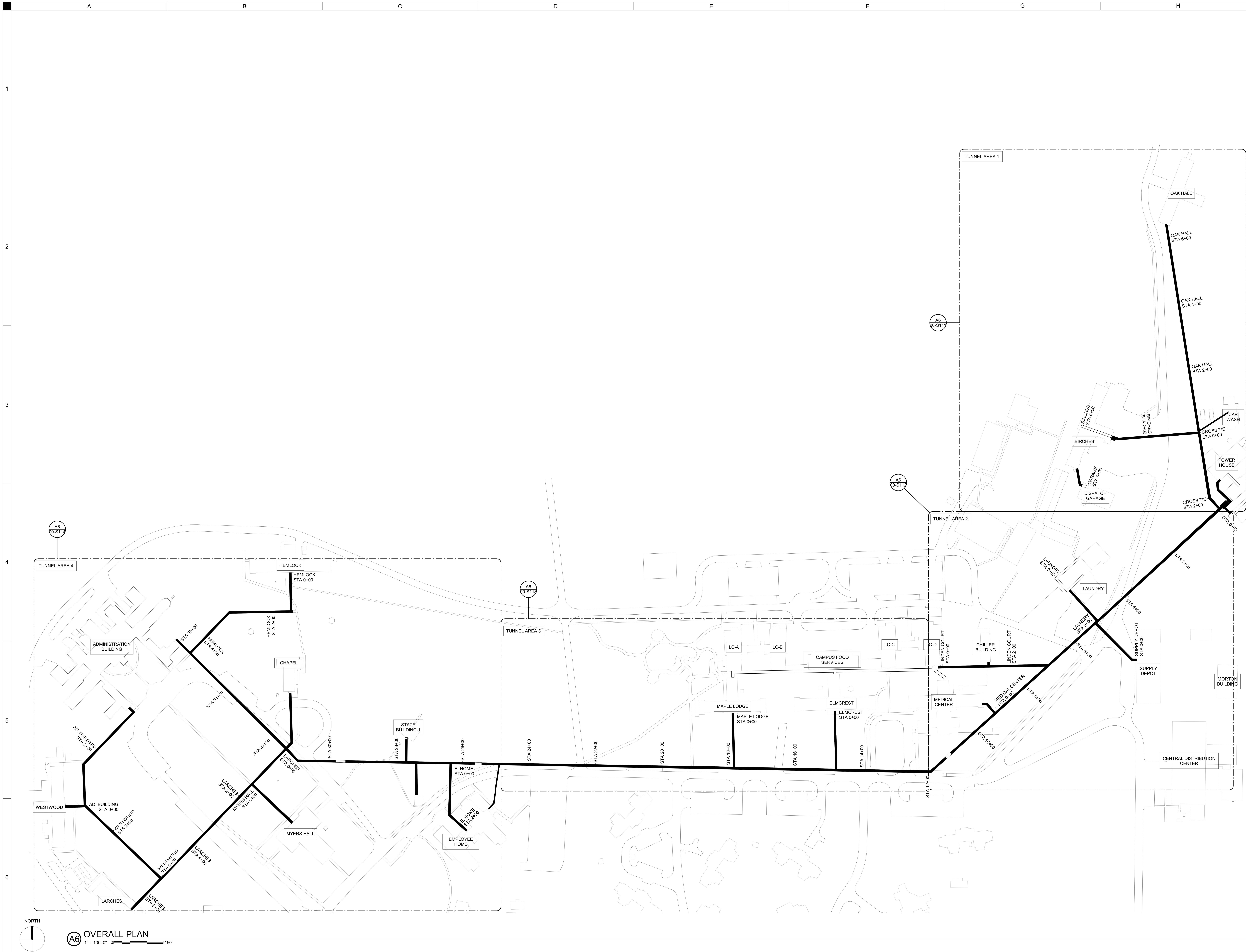
IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

DRAWN BY	KAB
APPROVED BY	MM
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

STRUCTURAL GENERAL INFORMATION



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FIELD BOOK	

TUNNEL PLAN

00-S110

PLAN NOTES

1. SEE SHEET 00-S000 FOR GENERAL NOTES.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND QUANTITIES.

KEYNOTES

KEY	NOTE
2	OPENING IN FLOOR TO TUNNEL SUBDRAIN TO REMAIN. COVER OPENING PER DETAIL B5/00-S500.
24	2 1/2" OD FIBERGLASS PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS. ENCLOSE EXISTING PIPE WITH CONCRETE PRIOR TO GROUT FILL PER DETAIL C5/00-S500.
31	4 1/2" OD DUCTILE IRON PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
32	3'-0"X1'-4" X 2' DEEP BRICK PIT IN FLOOR TO TUNNEL SUBDRAIN. INFILL PER DETAIL E5/00-S500.
33	2 1/2" OD STEEL PIPE PENETRATIONS IN TUNNEL LEFT AND RIGHT WALLS. CAP PIPES PER DETAIL A5/00-S500.
34	7" OD DUCTILE IRON PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN. ENCLOSE EXISTING PIPE WITH CONCRETE PRIOR TO GROUT FILL PER DETAIL C5/00-S500.
35	2'-9" X 1'-3" VENT OPENING IN TUNNEL LEFT WALL. INFILL PER DETAIL A2/00-S500.
36	FLOOR DRAIN PIPE PENETRATION LOCATED IN TUNNEL LEFT WALL TO BE RELOCATED. SEE MECHANICAL FOR ADDITIONAL INFORMATION.
41	4" OD STEEL PIPE PENETRATION IN TUNNEL ROOF. PIPE TO BE REMOVED IN ROOF DEMOLITION, SEE SHEET 16-S133 FOR ADDITIONAL INFORMATION.
42	(2) STEEL CONDUIT PIPE PENETRATION IN TUNNEL ROOF. CAP PIPES PER DETAIL A5/00-S500.
48	UTILITY PIPE CHASE. CAP PIPES ENTERING TUNNEL AT TUNNEL WALL PER DETAIL A5/00-S500. REMOVE PIPES IN UTILITY CHASE AS ABLE.
52	7" OD DUCTILE IRON PIPE PENETRATION IN FLOOR. CAP PIPE PER DETAIL A5/00-S500.

TUNNEL	APPROXIMATE GROUT (CY)
OAK HALL TUNNEL	778
BIRCHES TUNNEL	350
CROSS TIE TUNNEL	278
POWER HOUSE TUNNEL	260
DISPATCH GARAGE TUNNEL	35
CAR WASH UTILITY CHASE	21

QUANTITY NOTE:
APPROXIMATE QUANTITIES ARE PROVIDED FOR REFERENCE ONLY AND CONTRACTORS SHALL VERIFY ALL QUANTITIES. PAYMENT FOR ADDITIONAL QUANTITIES WILL NOT BE COMPLETED.

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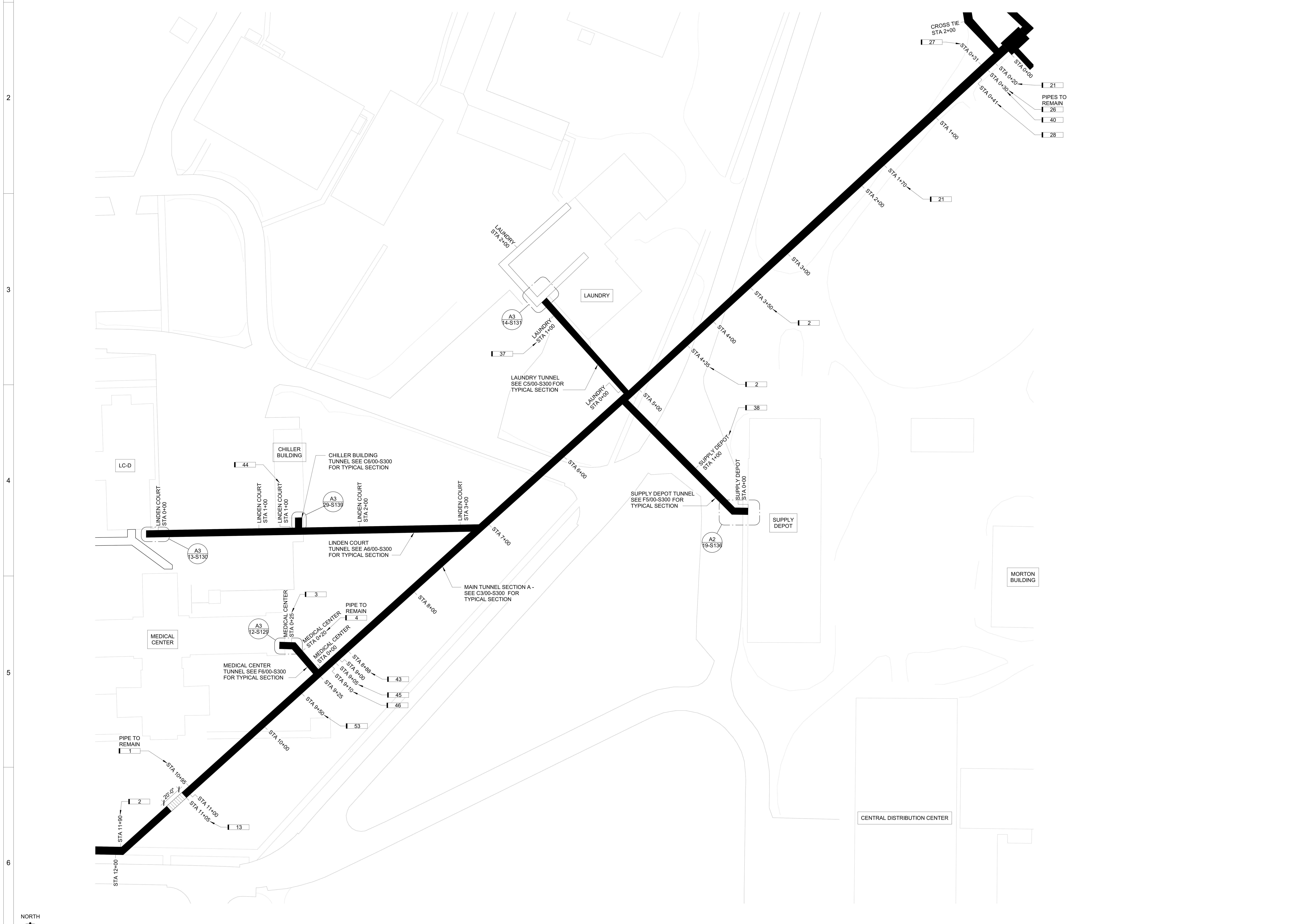
TUNNEL PLAN

00-S111



A6 TUNNEL AREA 2
1" = 40'-0" 0 60'

PLAN NOTES

1. SEE SHEET 00-S000 FOR GENERAL NOTES.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND QUANTITIES.

KEYNOTES

KEY	NOTE
1	5" OD STEEL PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
2	OPENING IN FLOOR TO TUNNEL SUBDRAIN TO REMAIN. COVER OPENING PER DETAIL B5/00-S500.
3	(2) 4" OD PIPE PENETRATIONS IN TUNNEL LEFT WALL. CAP PIPES PER DETAIL A5/00-S500.
4	7" OD DUCTILE IRON PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
13	DEMO TUNNEL AT LOCATION INDICATED ON PLAN. CAP WATERMAIN UNDERNEATH TUNNEL AT TUNNEL ENDS. PROVIDE WOOD FRAMED BULKHEAD AT TUNNEL ENDS TO RESIST FORCES FROM FLOWABLE GROUT. REFER TO CIVIL DRAWINGS FOR EXCAVATION LIMITS.
21	HOLE IN FLOOR TO TUNNEL SUBDRAIN. INFILL PER DETAIL A2/00-S500.
26	(2) 2 1/2" GROUTED PVC PIPE PENETRATIONS IN TUNNEL LEFT WALL TO REMAIN.
27	(5) PIPE PENETRATIONS, (4) 3" OD STEEL PIPES AND (1) 2 1/2" OD STEEL PIPE IN TUNNEL LEFT WALL. CAP PIPES PER DETAIL A5/00-S500.
28	4" OD STEEL PIPE PENETRATION WITH (2) PIPES INSIDE IN TUNNEL LEFT WALL. CAP PIPES PER DETAIL A5/00-S500.
37	2" OD STEEL CONDUIT PIPE PENETRATION IN TUNNEL RIGHT WALL. CAP PIPE PER DETAIL A5/00-S500.
38	EXISTING SHORING TO REMAIN. SEE DETAIL F5/00-S300 FOR ADDITIONAL INFORMATION.
40	2" OD PVC PIPE PENETRATION IN TUNNEL LEFT WALL. CAP PIPE PER DETAIL A5/00-S500.
43	1" OD STEEL CONDUIT PIPE PENETRATION IN TUNNEL LEFT WALL. CAP PIPE PER DETAIL A5/00-S500.
44	2'-0"X1'-4" OPENING IN TUNNEL LEFT WALL. INFILL PER DETAIL A2/00-S500.
45	5" OD DUCTILE IRON PIPE PENETRATION IN FLOOR. CAP PIPE PER DETAIL A5/00-S500.
46	5" OD DUCTILE IRON PIPE PENETRATION IN TUNNEL RIGHT WALL. CAP PIPE PER DETAIL A5/00-S500.
53	1 1/2" OD STEEL PIPE PENETRATION IN TUNNEL LEFT WALL. CAP PIPE PER DETAIL A5/00-S500.

TUNNEL	APPROXIMATE GROUT (CY)
LAUNDRY TUNNEL	115
SUPPLY DEPOT TUNNEL	150
LINDEN COURT TUNNEL	484
CHILLER BUILDING TUNNEL	12
MEDICAL CENTER TUNNEL	52
MAIN TUNNEL SECTION A	1,597

QUANTITY NOTE:
APPROXIMATE QUANTITIES ARE PROVIDED FOR REFERENCE ONLY AND CONTRACTORS SHALL VERIFY ALL QUANTITIES. PAYMENT FOR ADDITIONAL QUANTITIES WILL NOT BE COMPLETED.

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

DRAWN BY	KAB
APPROVED BY	MM
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

TUNNEL PLAN

00-S112

PLAN NOTES

1. SEE SHEET 00-S000 FOR GENERAL NOTES.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND QUANTITIES.

KEYNOTES

KEY	NOTE
2	OPENING IN FLOOR TO TUNNEL SUBDRAIN TO REMAIN. COVER OPENING PER DETAIL B5/00-S500.
5	11" OD DUCTILE IRON PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
6	9" OD CLAY CASING PIPE PENETRATION WITH (2) STEEL PIPES INSIDE IN TUNNEL LEFT WALL. CAP PIPES PER DETAIL A5/00-S500.
7	3" OD STEEL PIPE PENETRATION IN TUNNEL LEFT WALL. CAP PIPE PER DETAIL A5/00-S500.
8	VALVE IN TUNNEL FLOOR TO BE REMOVED AND CAPPED.
9	2" OD STEEL CONDUIT PIPE PENETRATION CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
10	7" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL FLOOR AND WALL. SAWCUT PIPE AND CAP AT TUNNEL FLOOR AND WALL PER DETAIL A5/00-S500.
11	2 1/2" OD STEEL PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
12	1'-6"X1'-6" VENT OPENING IN TUNNEL WALL. SAWCUT VENT FROM TUNNEL AND THEN INFILL TUNNEL WALL PER DETAIL A2/00-S500.
49	EXISTING SHORING TO REMAIN. SEE DETAIL F3/00-S300 FOR ADDITIONAL INFORMATION.
50	HOLE IN FLOOR TO WATERMAIN. INFILL PER DETAIL A2/00-S500.

TUNNEL	APPROXIMATE GROUT (CY)
ELMCREST TUNNEL	162
MAPLE LODGE TUNNEL	195
MAIN TUNNEL SECTION B	2,078

QUANTITY NOTE:
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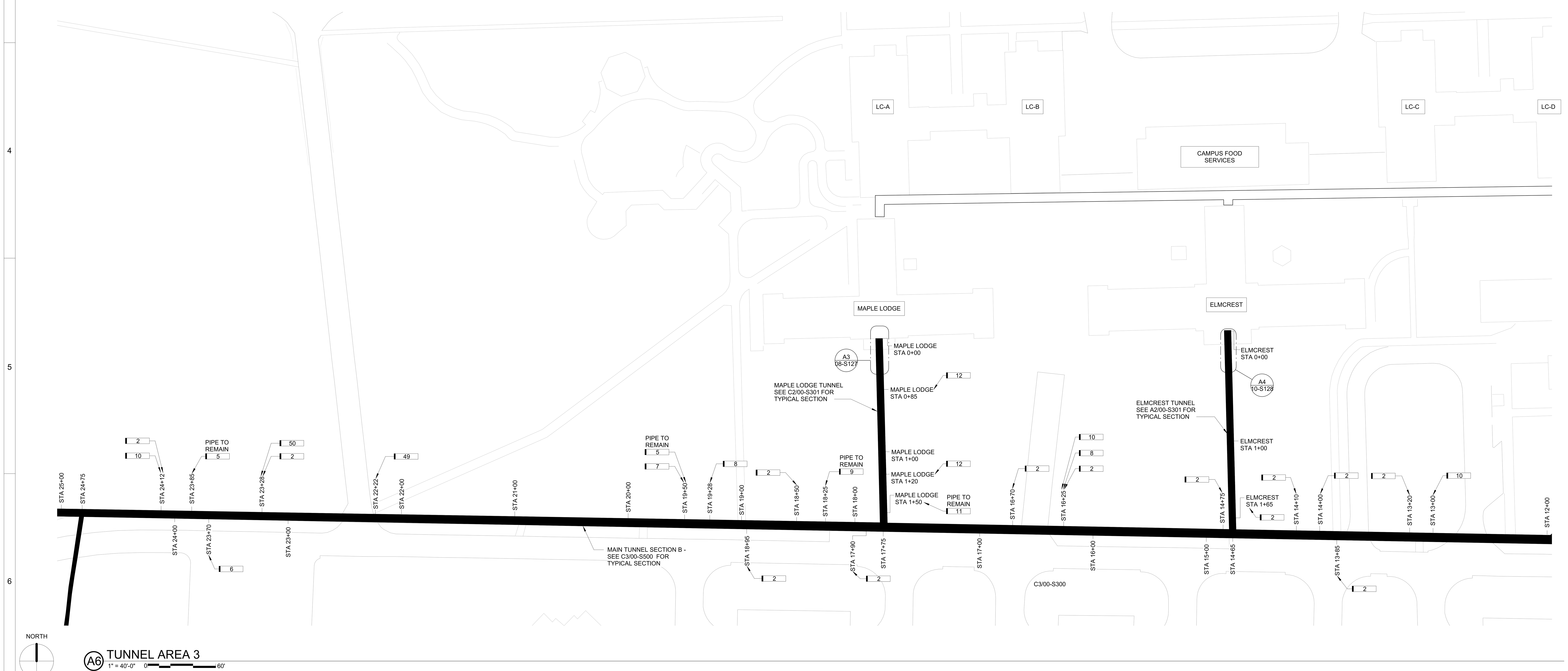

A6 TUNNEL AREA 3
1" = 40'-0" 0 60'

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FIELD BOOK	

TUNNEL PLAN

00-S113

PLAN NOTES

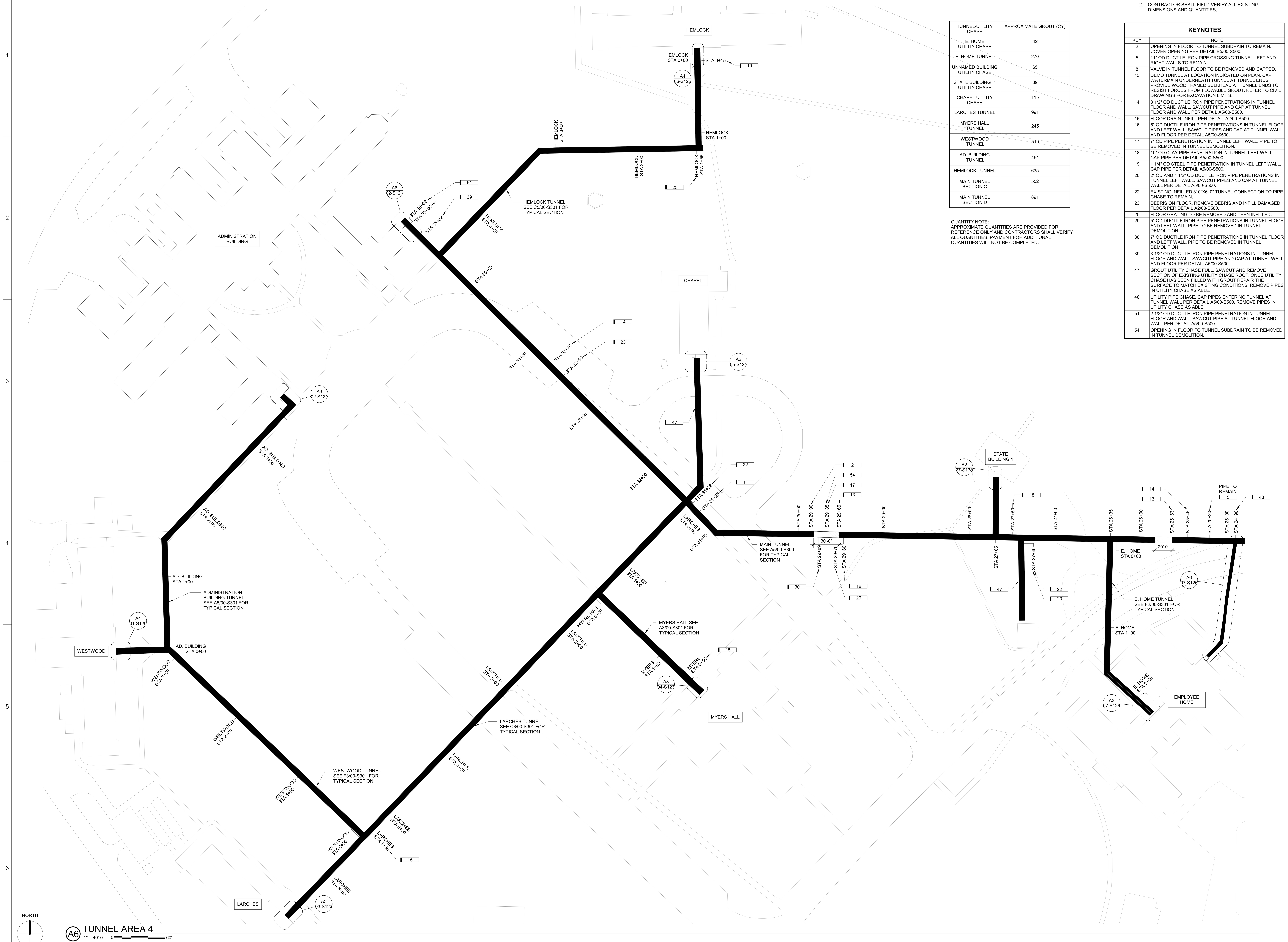
1. SEE SHEET 00-S000 FOR GENERAL NOTES.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND QUANTITIES.

TUNNEL/UTILITY CHASE	APPROXIMATE GROUT (CY)
E. HOME UTILITY CHASE	42
E. HOME TUNNEL	270
UNNAMED BUILDING UTILITY CHASE	65
STATE BUILDING 1 UTILITY CHASE	39
CHAPEL UTILITY CHASE	115
LARCHES TUNNEL	991
MYERS HALL TUNNEL	245
WESTWOOD TUNNEL	510
AD. BUILDING TUNNEL	491
HEMLOCK TUNNEL	635
MAIN TUNNEL SECTION C	552
MAIN TUNNEL SECTION D	891

QUANTITY NOTE:
APPROXIMATE QUANTITIES ARE PROVIDED FOR REFERENCE ONLY AND CONTRACTORS SHALL VERIFY ALL QUANTITIES. PAYMENT FOR ADDITIONAL QUANTITIES WILL NOT BE COMPLETED.

KEYNOTES

KEY	NOTE
2	OPENING IN FLOOR TO TUNNEL SUBDRAIN TO REMAIN. COVER OPENING PER DETAIL B5/00-S500.
5	11" OD DUCTILE IRON PIPE CROSSING TUNNEL LEFT AND RIGHT WALLS TO REMAIN.
8	VALVE IN TUNNEL FLOOR TO BE REMOVED AND CAPPED.
13	DEMO TUNNEL AT LOCATION INDICATED ON PLAN. CAP WATERMAIN UNDERNEATH TUNNEL AT TUNNEL ENDS. PROVIDE WOOD FRAMED BULKHEAD AT TUNNEL ENDS TO RESIST FORCES FROM FLOWABLE GROUT. REFER TO CIVIL DRAWINGS FOR EXCAVATION LIMITS.
14	3 1/2" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL FLOOR AND WALL. SAWCUT PIPE AND CAP AT TUNNEL FLOOR AND WALL PER DETAIL A5/00-S500.
15	FLOOR DRAIN. INFILL PER DETAIL A2/00-S500.
16	5" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL FLOOR AND LEFT WALL. SAWCUT PIPES AND CAP AT TUNNEL WALL AND FLOOR PER DETAIL A5/00-S500.
17	7" OD PIPE PENETRATION IN TUNNEL LEFT WALL. PIPE TO BE REMOVED IN TUNNEL DEMOLITION.
18	10" OD CLAY PIPE PENETRATION IN TUNNEL LEFT WALL. CAP PIPE PER DETAIL A5/00-S500.
19	1 1/4" OD STEEL PIPE PENETRATION IN TUNNEL LEFT WALL. CAP PIPE PER DETAIL A5/00-S500.
20	2" OD AND 1 1/2" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL LEFT WALL. SAWCUT PIPES AND CAP AT TUNNEL WALL PER DETAIL A5/00-S500.
22	EXISTING INFILLED 3'-0"X6'-0" TUNNEL CONNECTION TO PIPE CHASE TO REMAIN.
23	DEBRIS ON FLOOR. REMOVE DEBRIS AND INFILL DAMAGED FLOOR PER DETAIL A2/00-S500.
25	FLOOR GRATING TO BE REMOVED AND THEN INFILLED.
29	5" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL FLOOR AND LEFT WALL. PIPE TO BE REMOVED IN TUNNEL DEMOLITION.
30	7" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL FLOOR AND LEFT WALL. PIPE TO BE REMOVED IN TUNNEL DEMOLITION.
39	3 1/2" OD DUCTILE IRON PIPE PENETRATIONS IN TUNNEL FLOOR AND WALL. SAWCUT PIPE AND CAP AT TUNNEL WALL AND FLOOR PER DETAIL A5/00-S500.
47	GROUT UTILITY CHASE FULL. SAWCUT AND REMOVE SECTION OF EXISTING UTILITY CHASE ROOF. ONCE UTILITY CHASE HAS BEEN FILLED WITH GROUT REPAIR THE SURFACE TO MATCH EXISTING CONDITIONS. REMOVE PIPES IN UTILITY CHASE AS ABLE.
48	UTILITY PIPE CHASE. CAP PIPES ENTERING TUNNEL AT TUNNEL WALL PER DETAIL A5/00-S500. REMOVE PIPES IN UTILITY CHASE AS ABLE.
51	2 1/2" OD DUCTILE IRON PIPE PENETRATION IN TUNNEL FLOOR AND WALL. SAWCUT PIPE AT TUNNEL FLOOR AND WALL PER DETAIL A5/00-S500.
54	OPENING IN FLOOR TO TUNNEL SUBDRAIN TO BE REMOVED IN TUNNEL DEMOLITION.



A6 TUNNEL AREA 4
1" = 40'-0"

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

DRAWN BY	KAB
APPROVED BY	MM
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

TUNNEL PLAN

00-S114

REMOVAL OF ALL ABANDONED UTILITIES (INCLUDING PIPES, CONDUIT, CABLE, BOXES, STANDS/SUPPORTS, ALL ASSOCIATED APPARATUS AND MISC. DEBRIS) IN TUNNELS AND VAULTS TO BE COMPLETED BY OTHERS UNLESS NOTED OTHERWISE. UTILITIES TO REMAIN ARE NOTED ON INDIVIDUAL BULKHEAD SHEETS.

REMOVE CONDUIT AND CABLE BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS
REMOVE DEBRIS BY OTHERS, TYP

A2 OAK HALL TUNNEL
NOT TO SCALE

REMOVE CONDUIT, CABLE, AND LIGHT BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP
REMOVE DEBRIS BY OTHERS, TYP

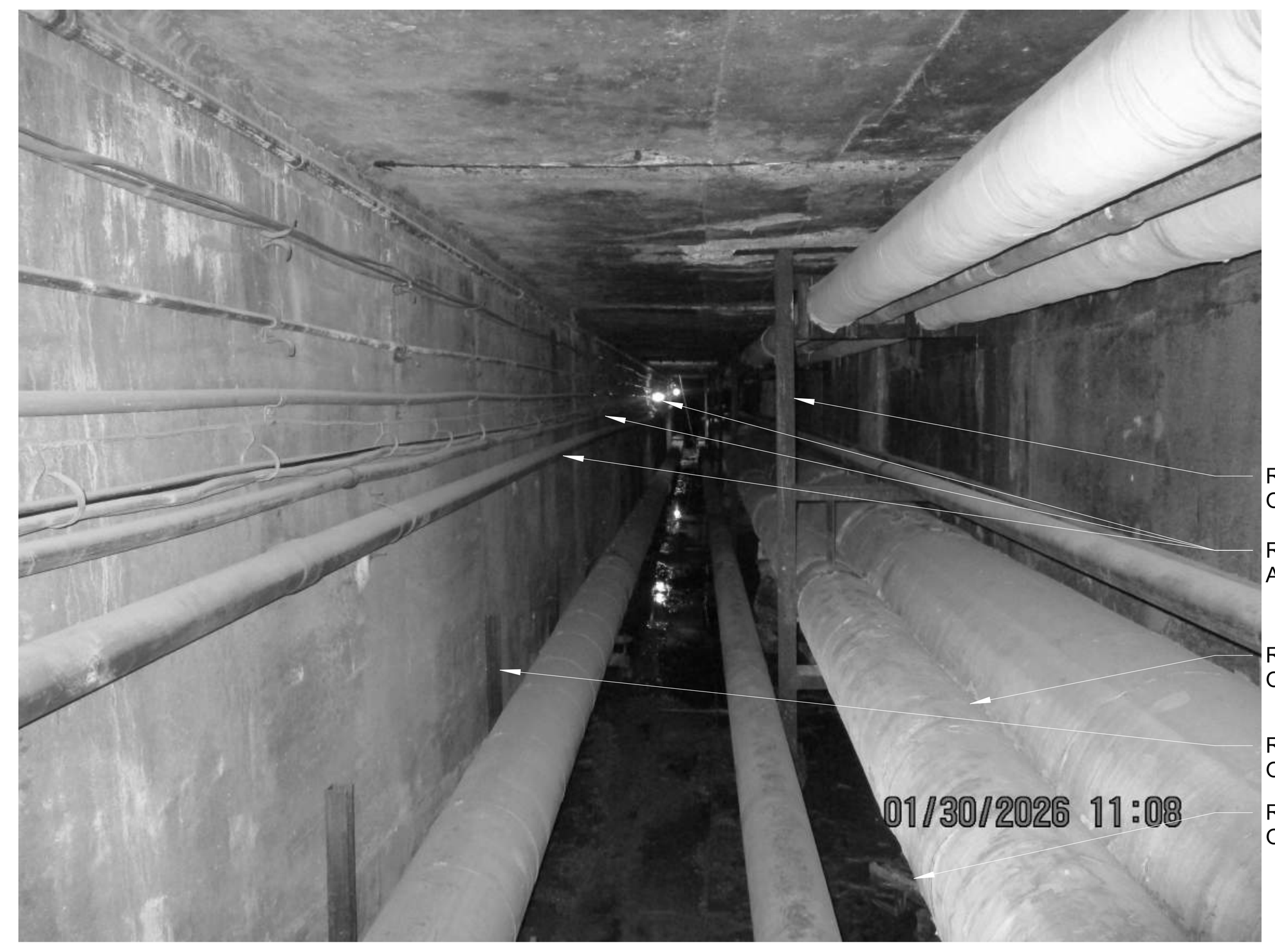
C2 BIRCHES TUNNEL
NOT TO SCALE

REMOVE PIPE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS
REMOVE CABLE BY OTHERS
REMOVE DEBRIS BY OTHERS, TYP

F2 DISPATCH GARAGE TUNNEL
NOT TO SCALE

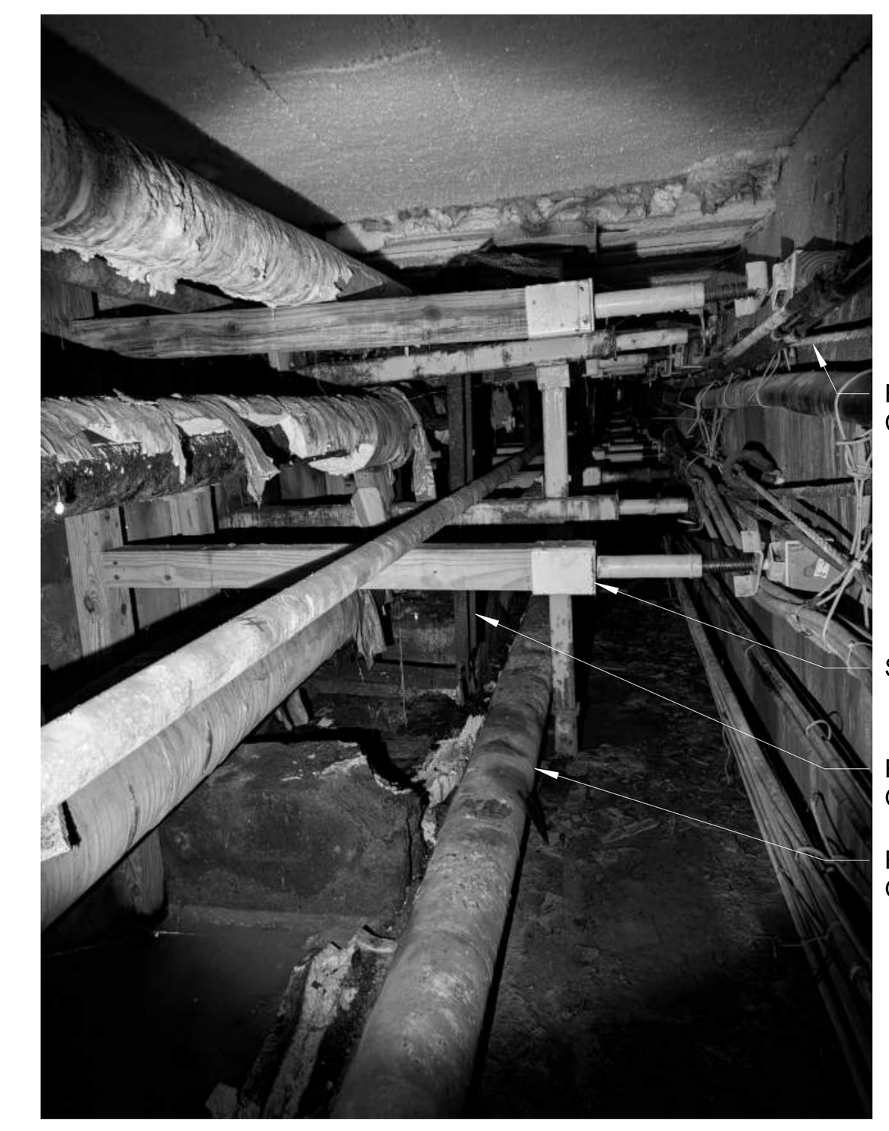
REMOVE CONDUIT AND CABLE BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE DEBRIS BY OTHERS, TYP

A3 CROSS TIE TUNNEL
NOT TO SCALE



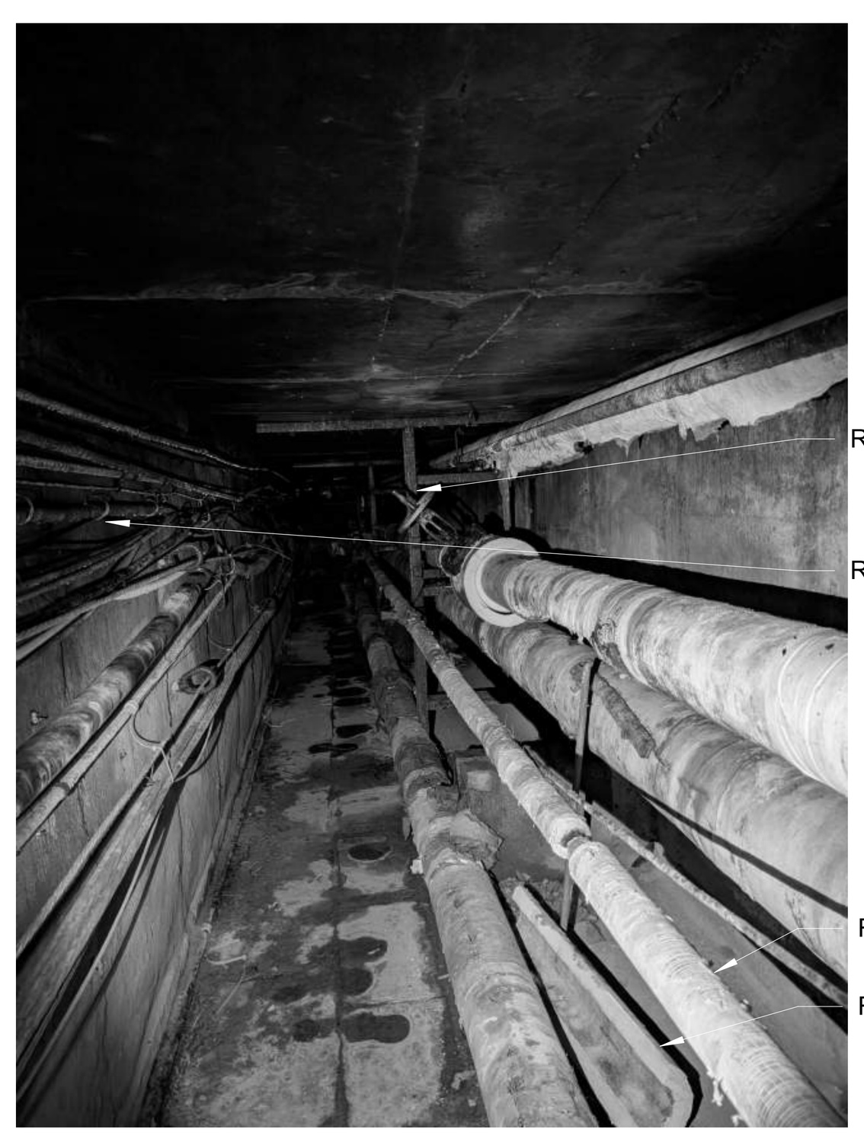
REMOVE SUPPORT BY OTHERS, TYP
REMOVE CONDUIT, CABLE, AND LIGHT BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE DEBRIS BY OTHERS, TYP

C3 MAIN TUNNEL
NOT TO SCALE



REMOVE CABLES AND CONDUITS BY OTHERS, TYP
SHORING TO REMAIN
REMOVE SUPPORT BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP

F3 MAIN TUNNEL SHORING
1/2" = 1'-0" 0 3'



REMOVE SUPPORT BY OTHERS, TYP
REMOVE CONDUIT AND CABLE BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP
REMOVE DEBRIS BY OTHERS, TYP

A5 MAIN TUNNEL
NOT TO SCALE

REMOVE PIPE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE CONDUIT AND CABLE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE DEBRIS BY OTHERS, TYP

C5 LAUNDRY TUNNEL
NOT TO SCALE

REMOVE CONDUIT, CABLE, AND LIGHT BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP

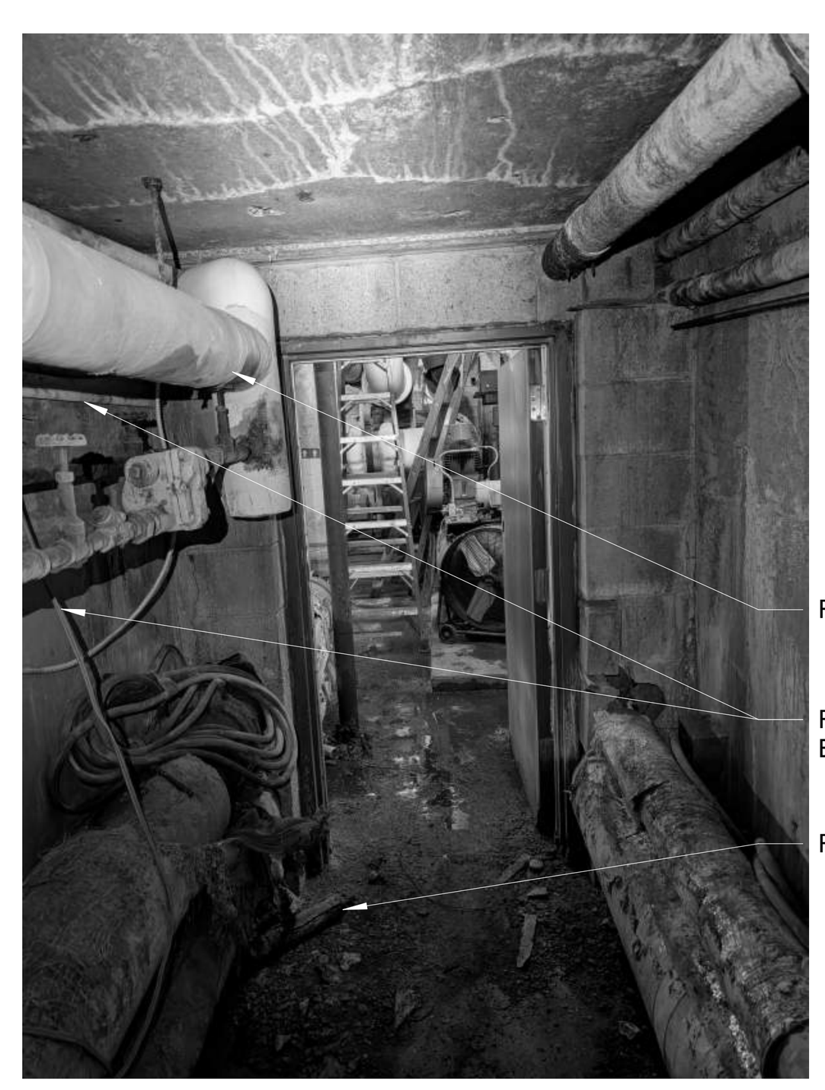
NOTES:

1. EXISTING SHORING NOT SHOWN, SHORING IS TO REMAIN.

F5 SUPPLY DEPOT TUNNEL
NOT TO SCALE

REMOVE CABLE BY OTHERS, TYP
REMOVE PIPE BY OTHERS, TYP
REMOVE SUPPORT BY OTHERS, TYP
REMOVE HANGER BY OTHERS, TYP
REMOVE CONDUIT BY OTHERS

A6 LINDEN COURT TUNNEL
1/2" = 1'-0" 0 3'



REMOVE PIPE BY OTHERS, TYP
REMOVE CONDUIT AND CABLE BY OTHERS, TYP
REMOVE DEBRIS BY OTHERS, TYP

C6 CHILLER BUILDING TUNNEL
NOT TO SCALE

REMOVE PIPE BY OTHERS, TYP
REMOVE CONDUIT, CABLE, AND LIGHT BY OTHERS, TYP

F6 MEDICAL CENTER TUNNEL
NOT TO SCALE

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

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APPROVED BY	MM
ISSUED FOR	100% CD
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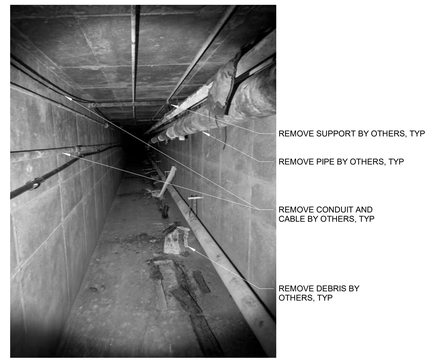
PROJECT NUMBER	2240007040
FIELD BOOK	

TUNNEL SECTIONS

00-S300

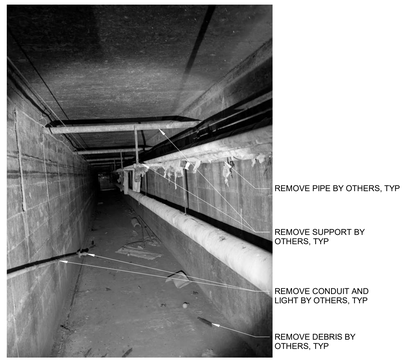
A2 ELMCREST TUNNEL
NOT TO SCALE

C2 MAPLE LODGE TUNNEL
NOT TO SCALE

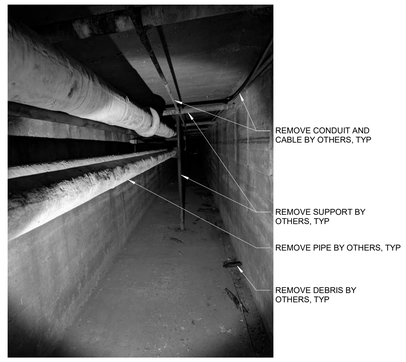


F2 EMPLOYEES HOME TUNNEL
NOT TO SCALE

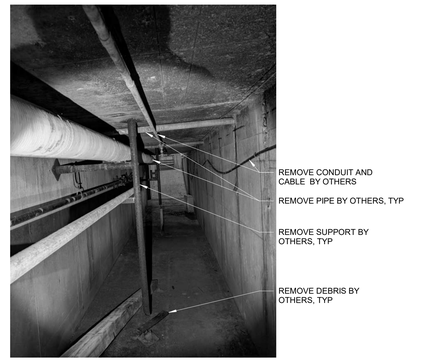
REMOVAL OF ALL ABANDONED UTILITIES (INCLUDING PIPES, CONDUIT, CABLE, BOXES, STANDS/SUPPORTS, ALL ASSOCIATED APPARATUS AND MISC. DEBRIS) IN TUNNELS AND VAULTS TO BE COMPLETED BY OTHERS UNLESS NOTED OTHERWISE. UTILITIES TO REMAIN ARE NOTED ON INDIVIDUAL BULKHEAD SHEETS.



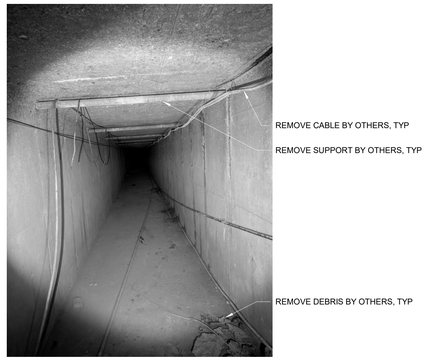
A3 MYERS HALL TUNNEL
NOT TO SCALE



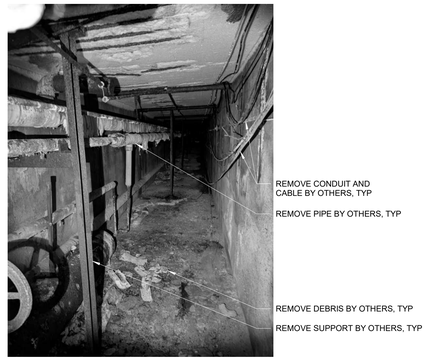
C3 LARCHES TUNNEL
NOT TO SCALE



F3 WESTWOOD TUNNEL
NOT TO SCALE



A5 ADMINISTRATION BUILDING TUNNEL
NOT TO SCALE



C5 HEMLOCK TUNNEL
NOT TO SCALE

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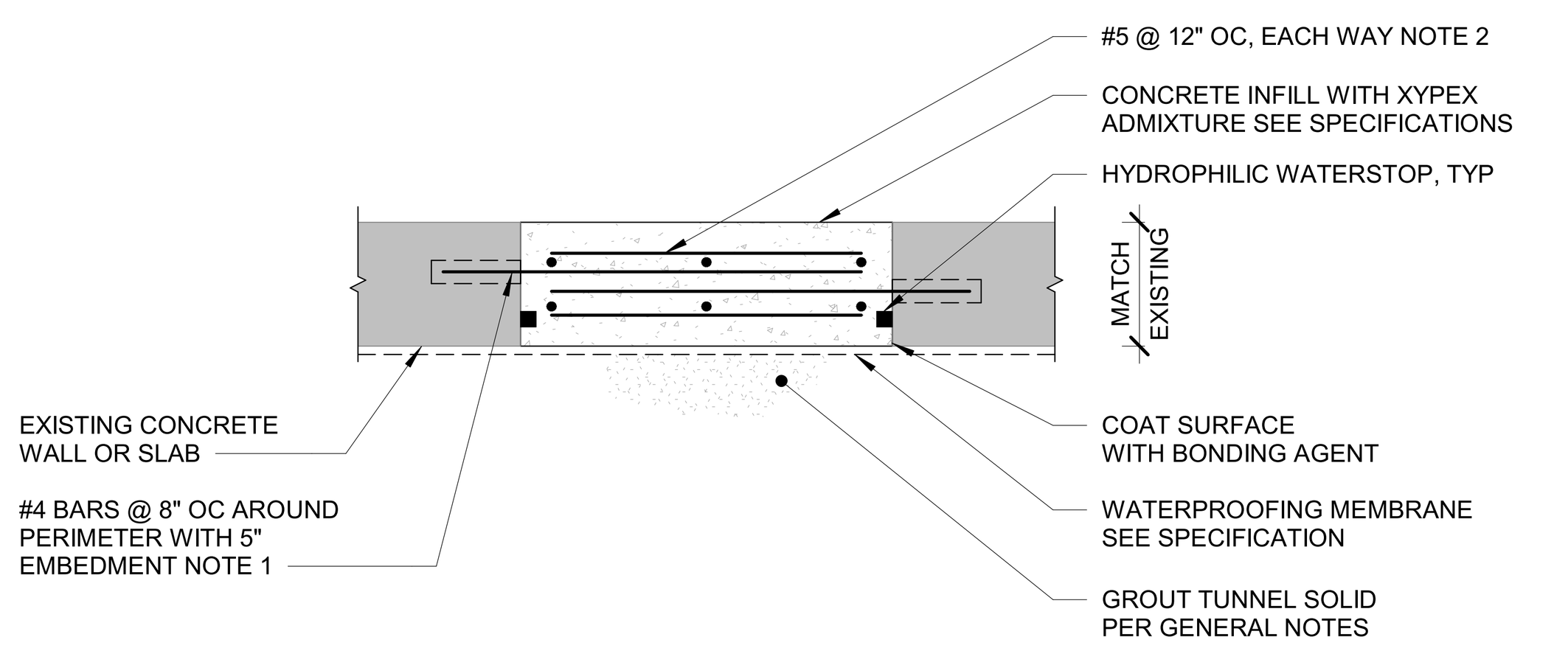
FIELD BOOK	

TUNNEL SECTIONS

00-S301

320 l2ivsk eRedotuA

A | B | C | D | E | F | G | H



NOTES:

1. IF MAXIMUM DIMENSION OF OPENING IS 8" OR LESS, REPLACE #4 BARS WITH (3) 1/4" ⌀ STAINLESS STEEL THREADED RODS DRILLED AND EPOXY SET WITH 4" EMBEDMENT.
2. ADDITIONAL REINFORCEMENT IS ONLY REQUIRED FOR OPENINGS LARGER THAN 2'-0". ADD REINFORCEMENT ON EACH FACE IF THE EXISTING CONCRETE IS THICKER THAN 8".

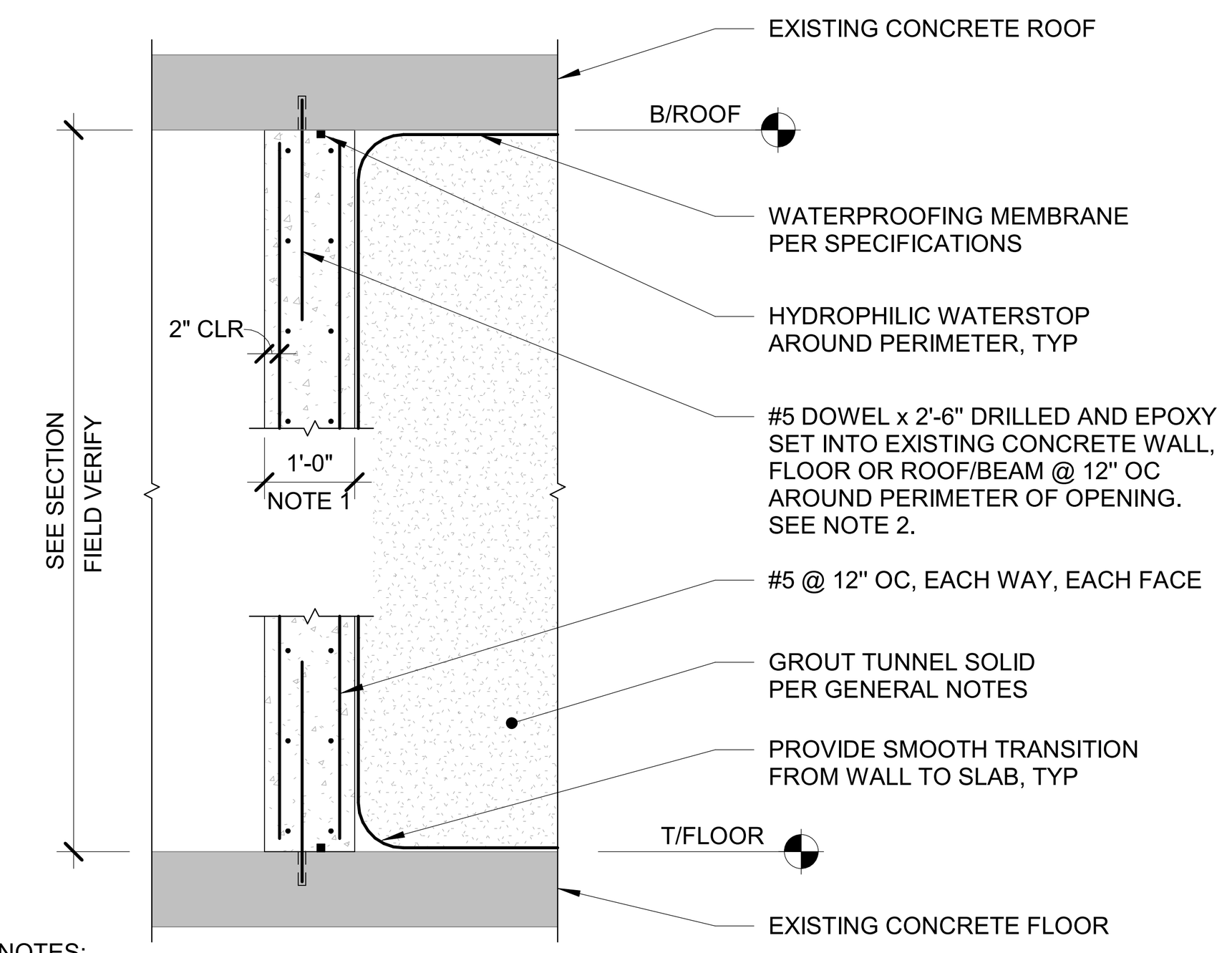
A2 INFILL EXISTING OPENING, TYP
1" = 1'-0"

DIAMETER	MINIMUM EMBEDMENT IN CONCRETE UNO
#4	5"
#5	6"
#6	6"
#7	8"

NOTES:

1. EPOXY SHALL BE C6 EPOXY ADHESIVE BY RED HEAD, HIT RE-500 V3 BY HILTI, OR APPROVED EQUAL.

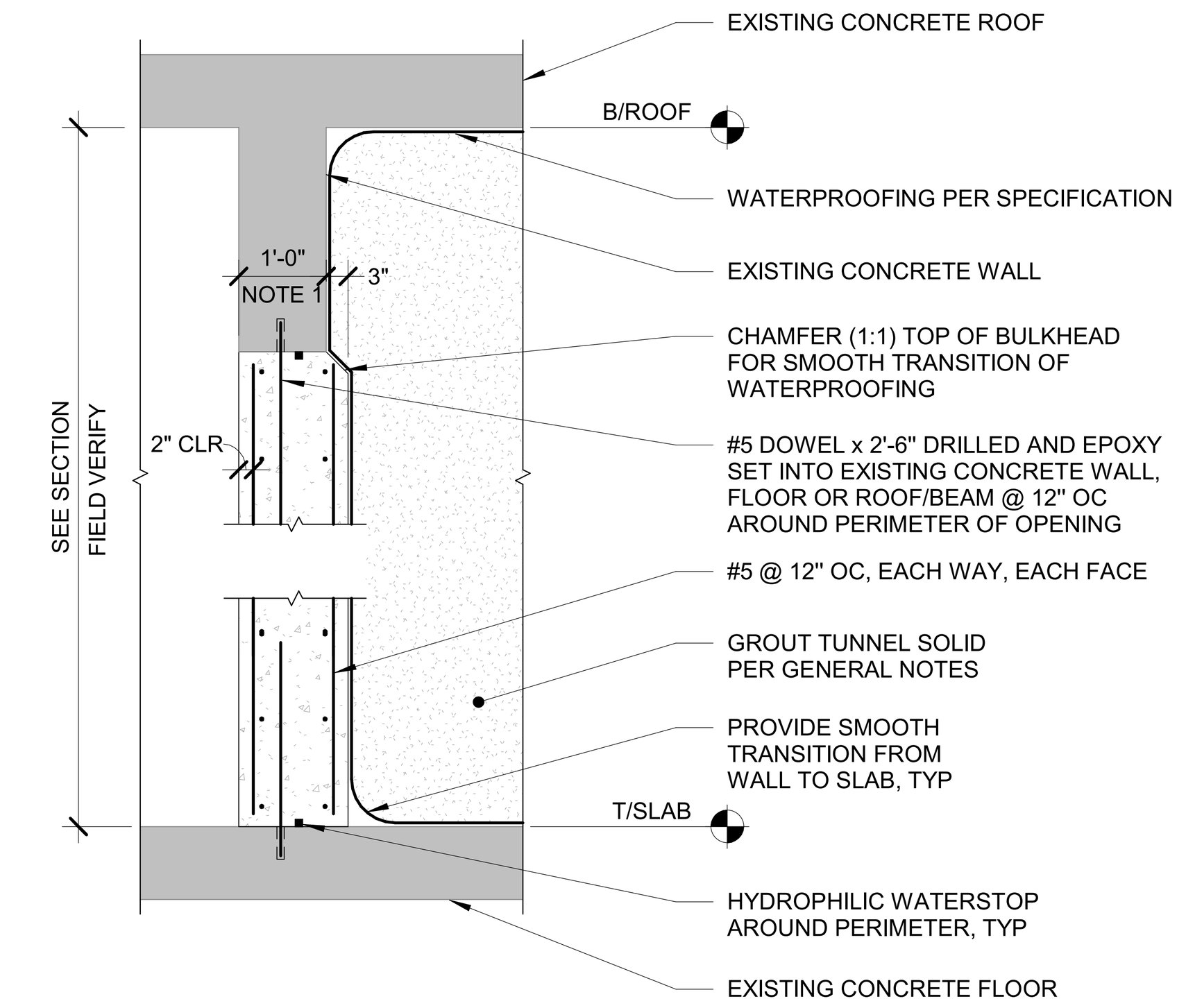
C2 REBAR EMBEDMENT SCHEDULE
1" = 1'-0"



NOTES:

1. BULKHEAD WILL BE 1'-4" THICK AT MYERS HALL TO MATCH THE EXISTING WALL THICKNESS, FIELD VERIFY.
2. USE #4 DOWEL x 2'-6", DRILL AND EPOXY SET INTO EXISTING CONCRETE ROOF @ 12" OC (2.75" EMBED) AT LAUNDRY TUNNEL ROOF.

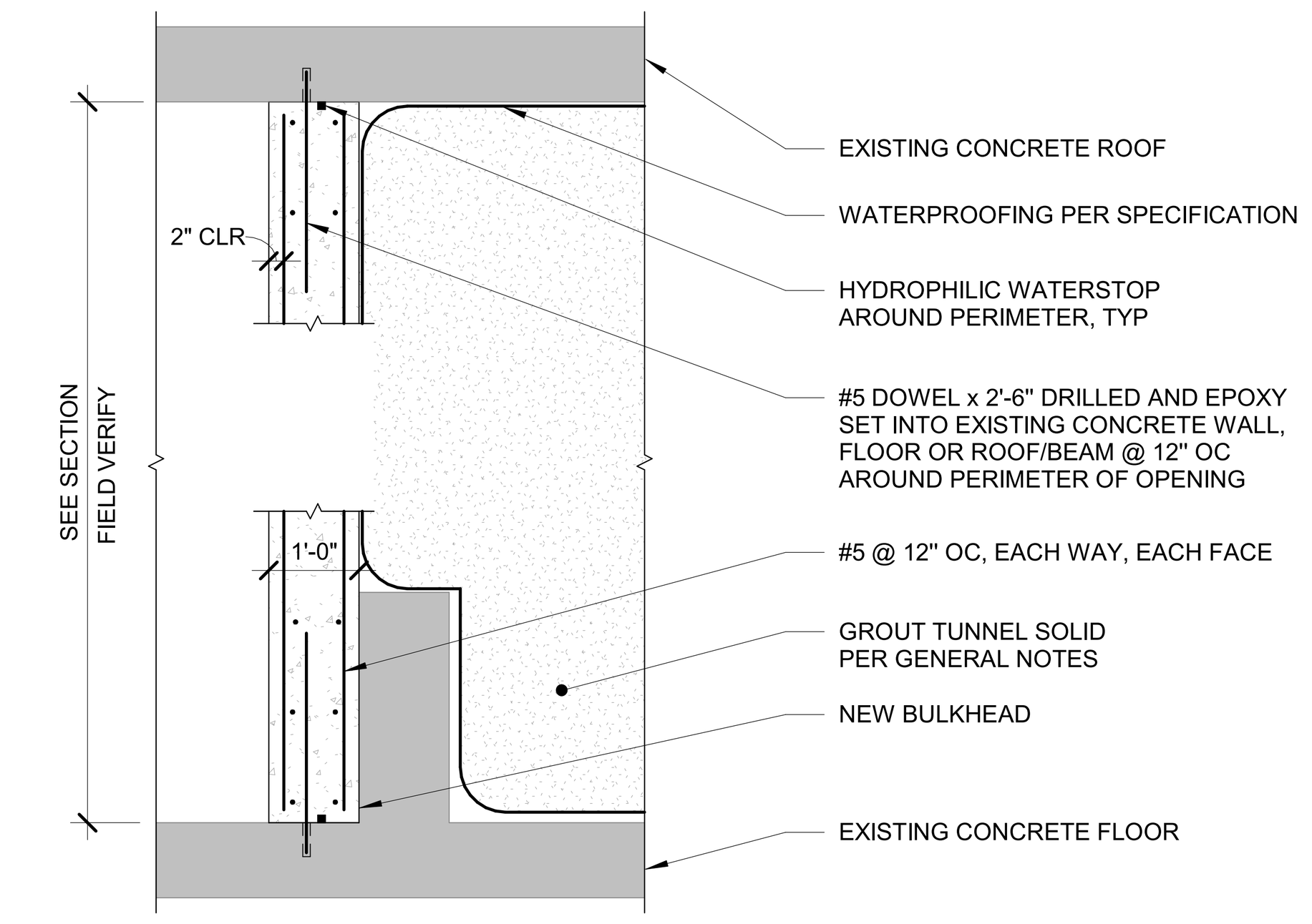
D2 BULKHEAD DETAIL
1/2" = 1'-0"



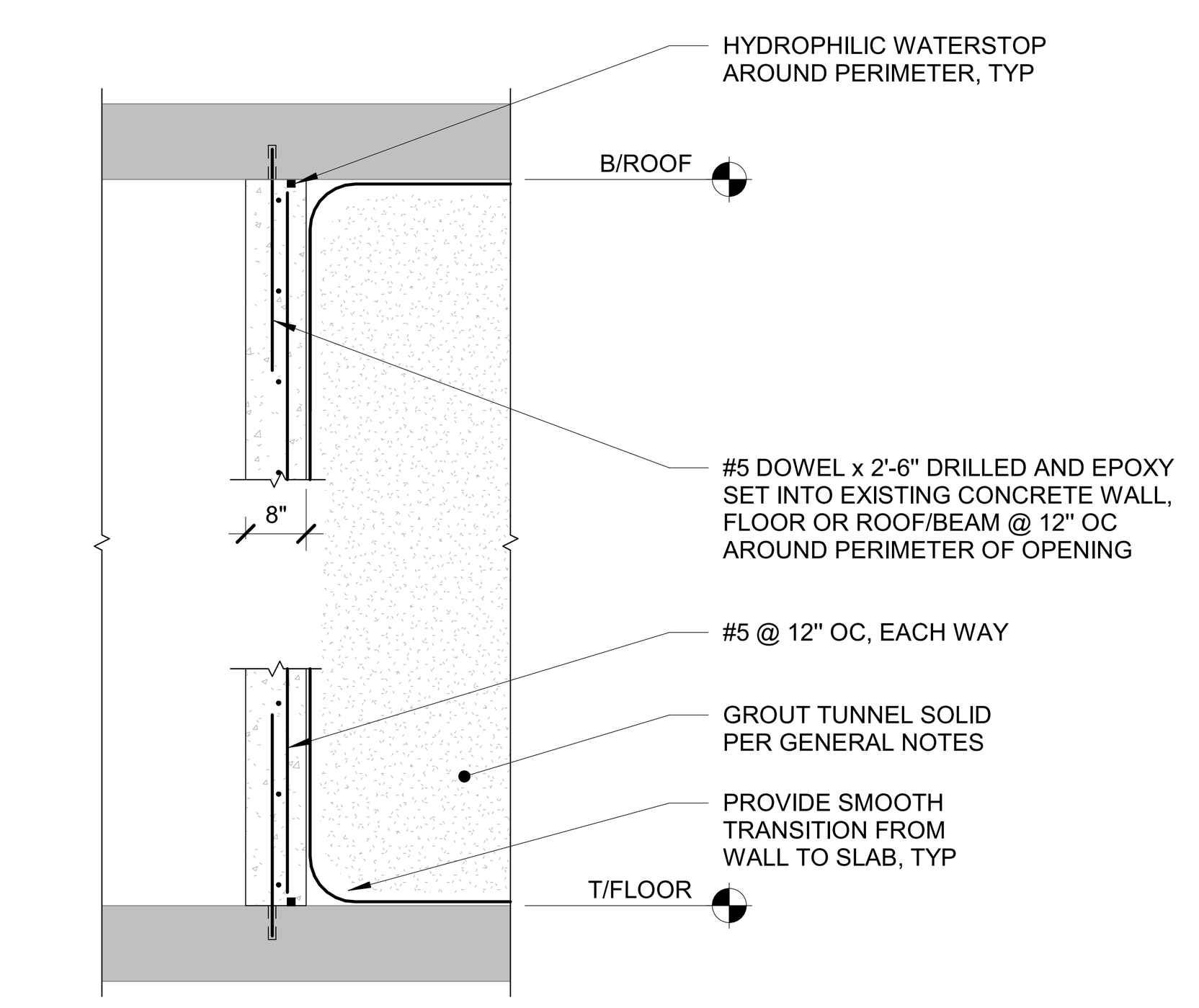
NOTES:

1. BULKHEAD WILL BE 1'-9" THICK AT LARCHES TO MATCH THE EXISTING WALL THICKNESS, FIELD VERIFY.

E2 BULKHEAD DETAIL
1/2" = 1'-0"



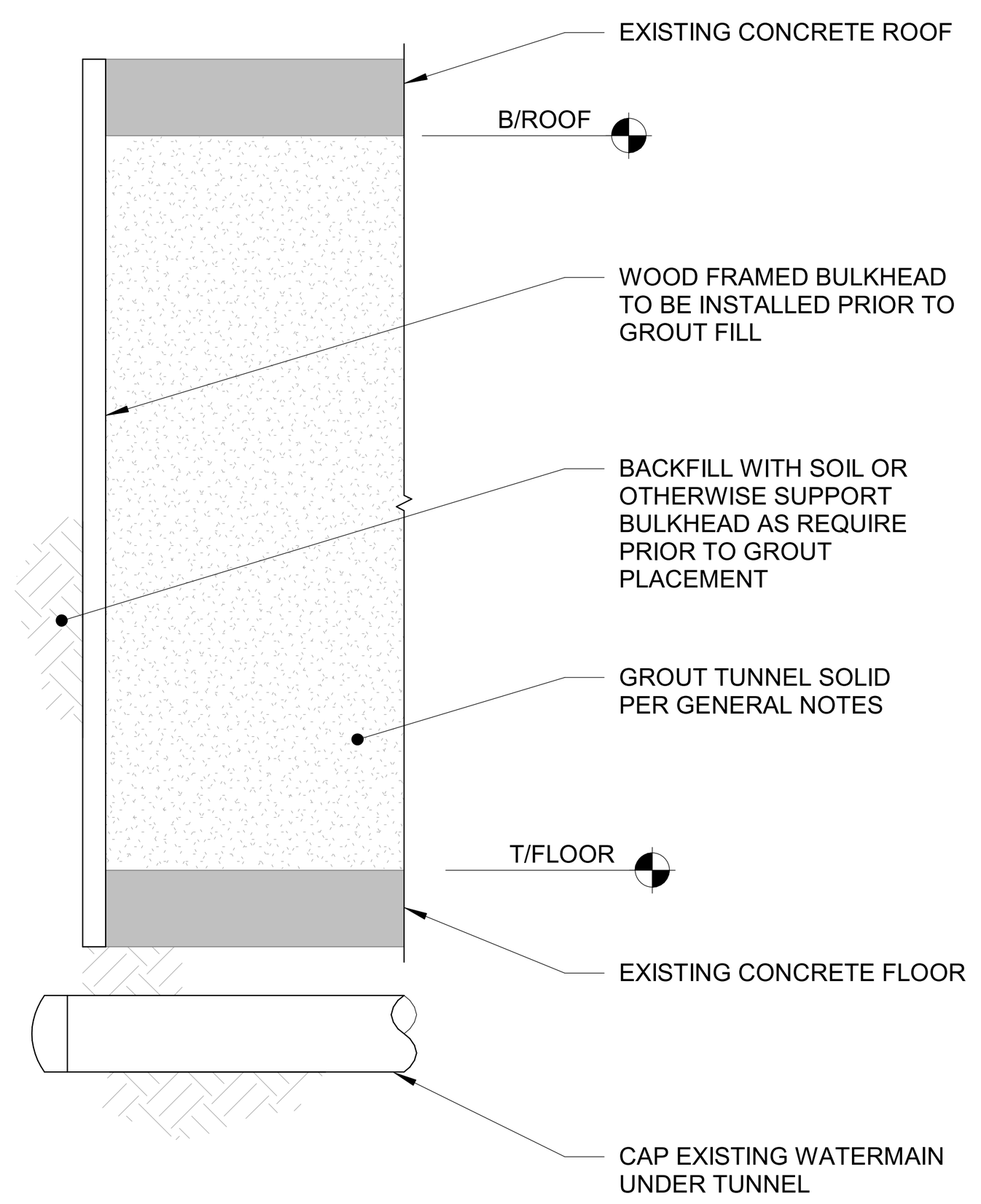
G2 BULKHEAD DETAIL
1/2" = 1'-0"



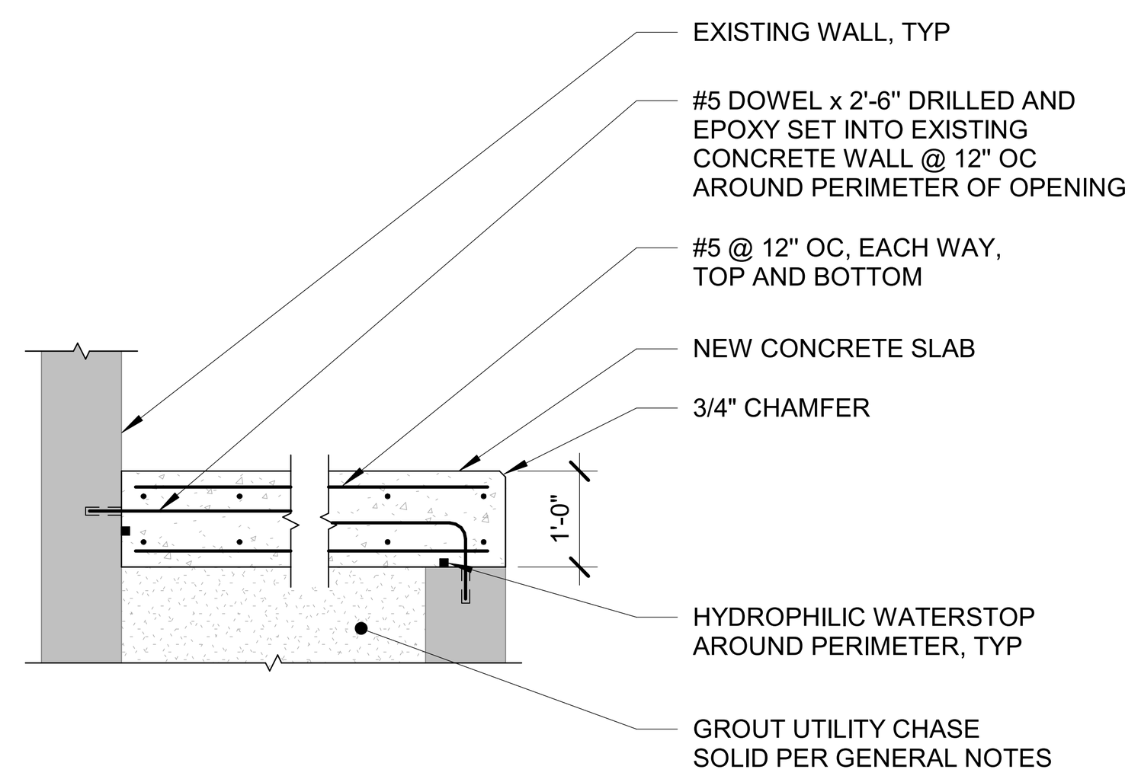
NOTES:

1. SEE SECTION FOR TOP AND BOTTOM CONNECTION SLOPE CONDITIONS.

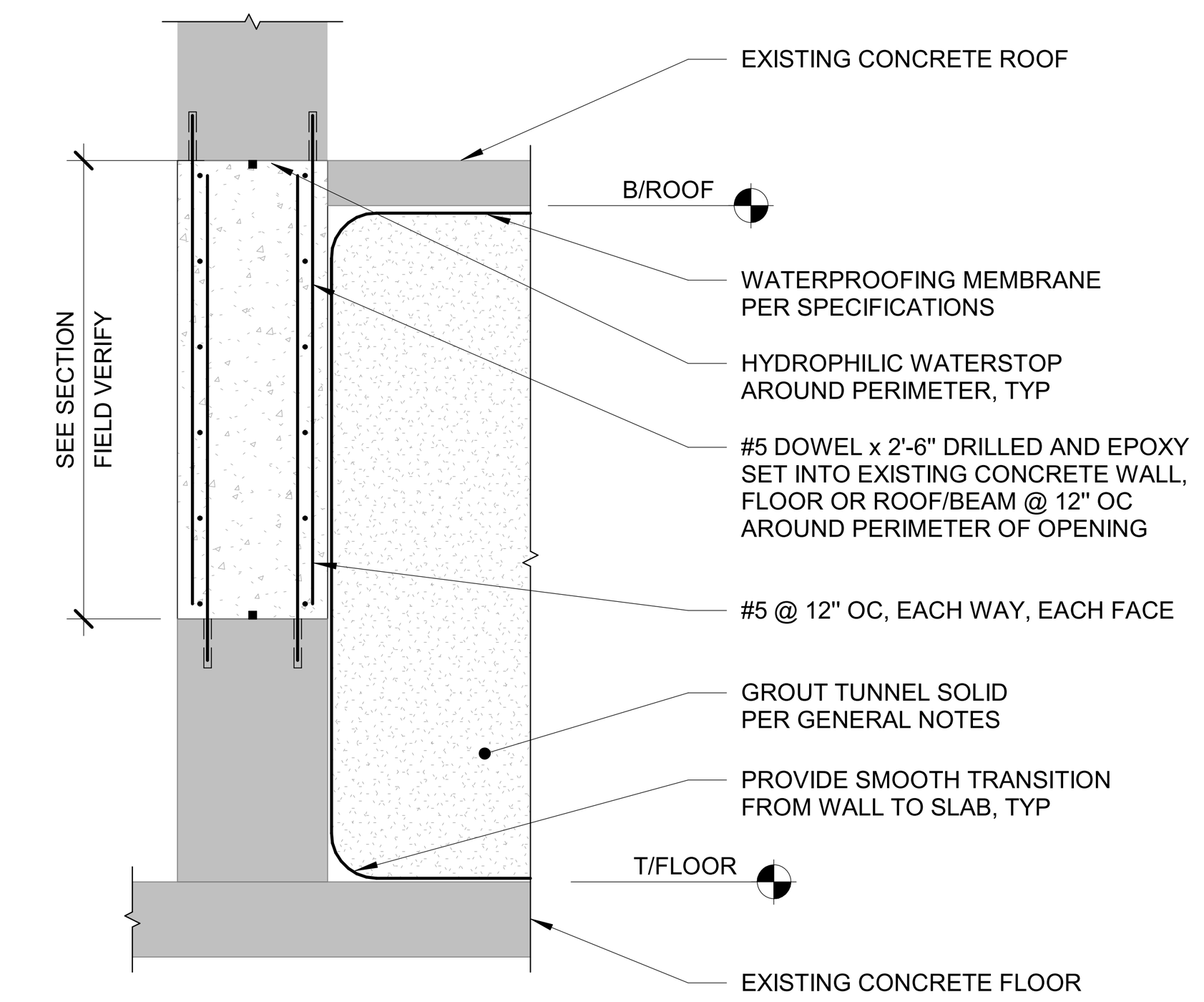
A4 8" THICK BULKHEAD DETAIL
1/2" = 1'-0"



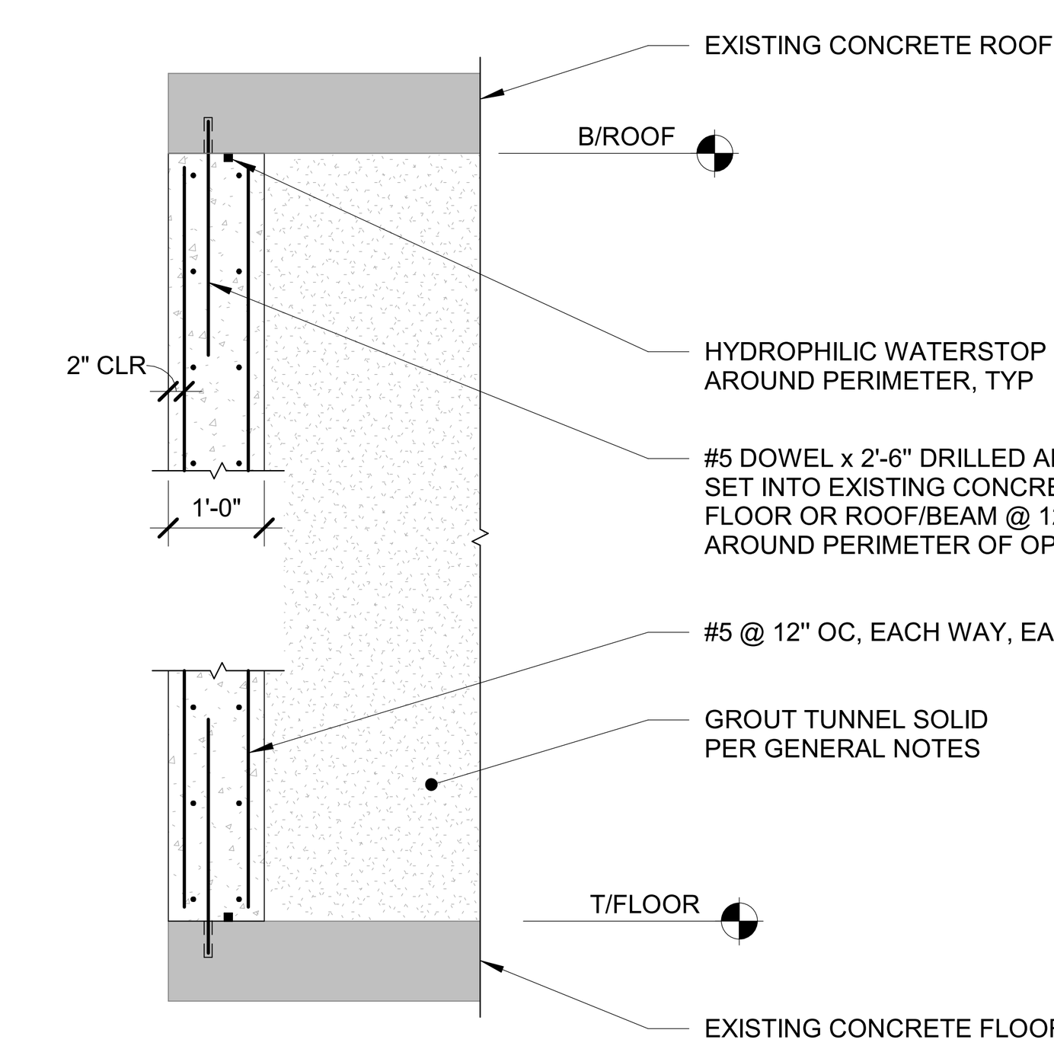
B4 WOOD FRAMED BULKHEAD DETAIL
1/2" = 1'-0"



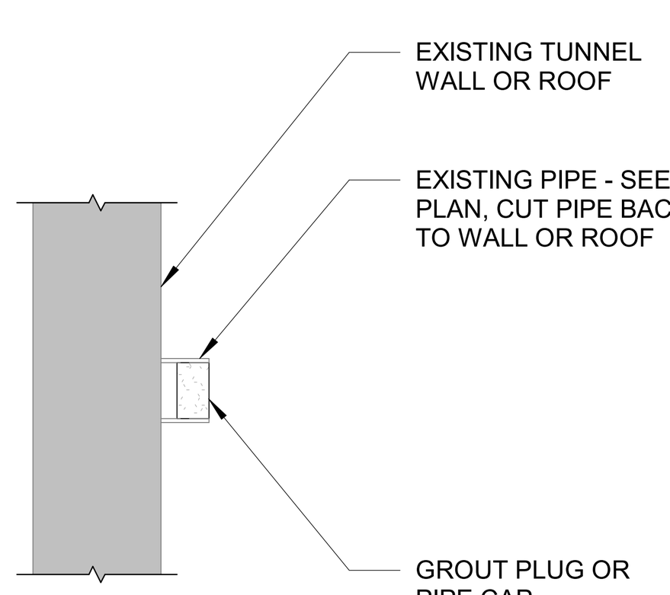
D4 CAR WASH BULKHEAD DETAIL
1/2" = 1'-0"



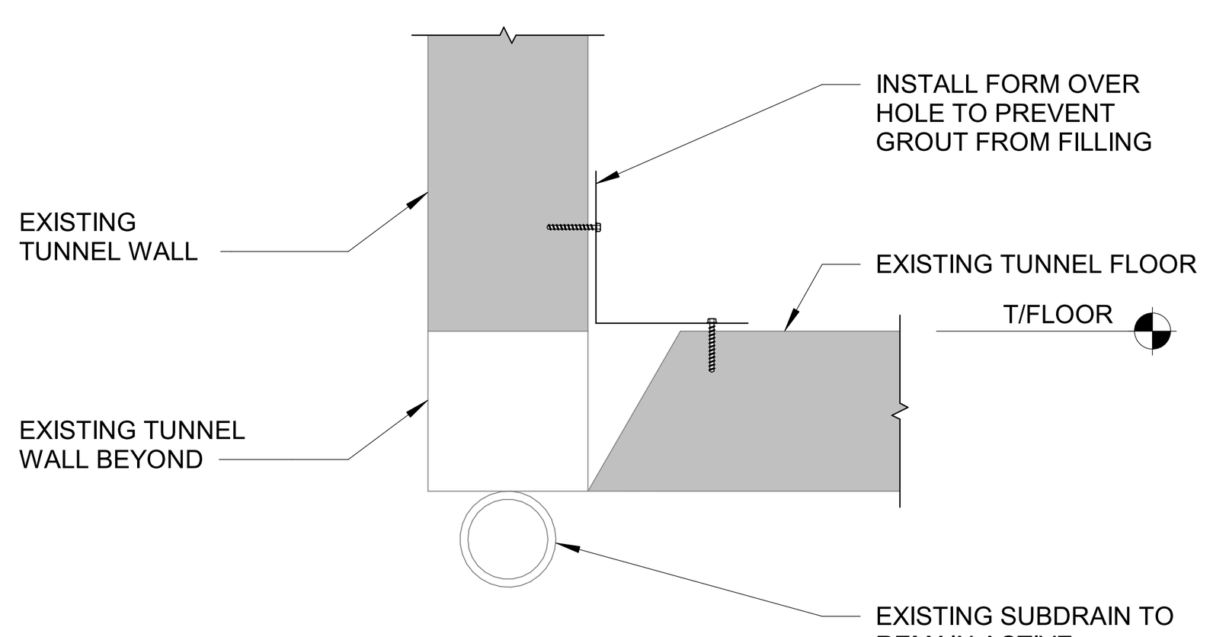
E4 OAK HALL BULKHEAD DETAIL
1/2" = 1'-0"



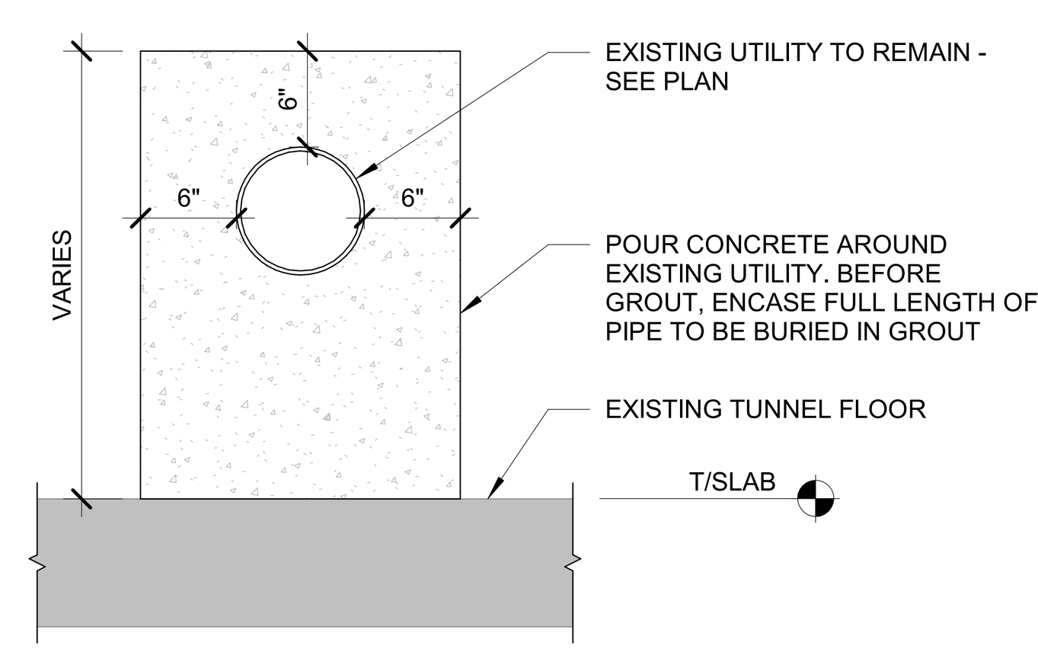
G4 UTILITY CHASE BULKHEAD DETAIL
1/2" = 1'-0"



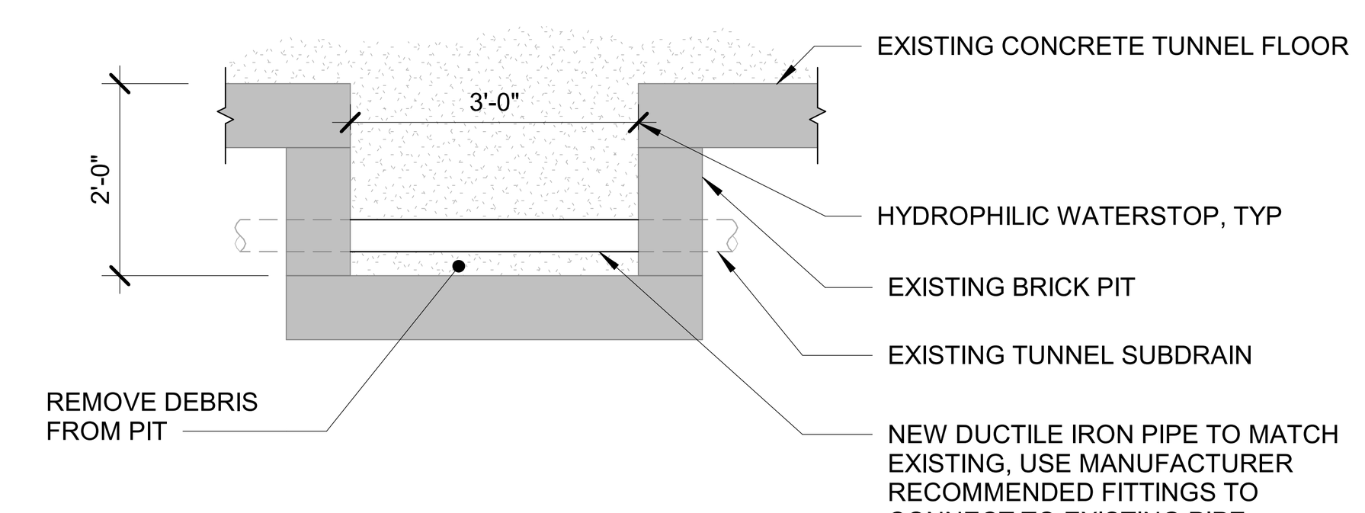
A5 TYPICAL PIPE CAPPING DETAIL
1" = 1'-0"



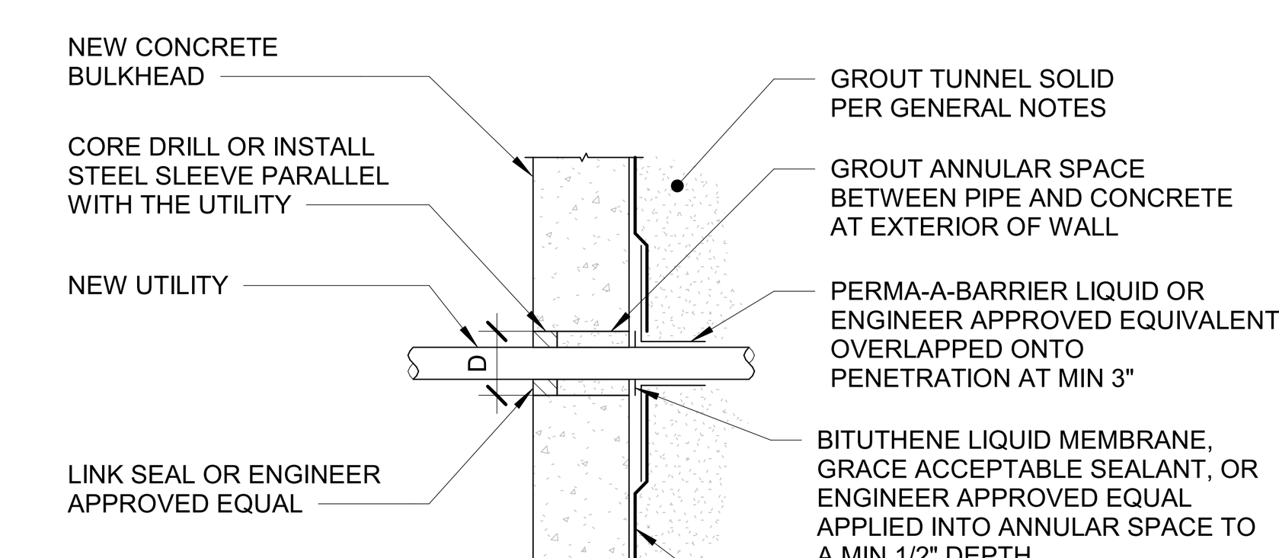
B5 SUBDRAIN INFILL DETAIL
1" = 1'-0"



C5 EXISTING UTILITY CONCRETE ENCASEMENT
1" = 1'-0"



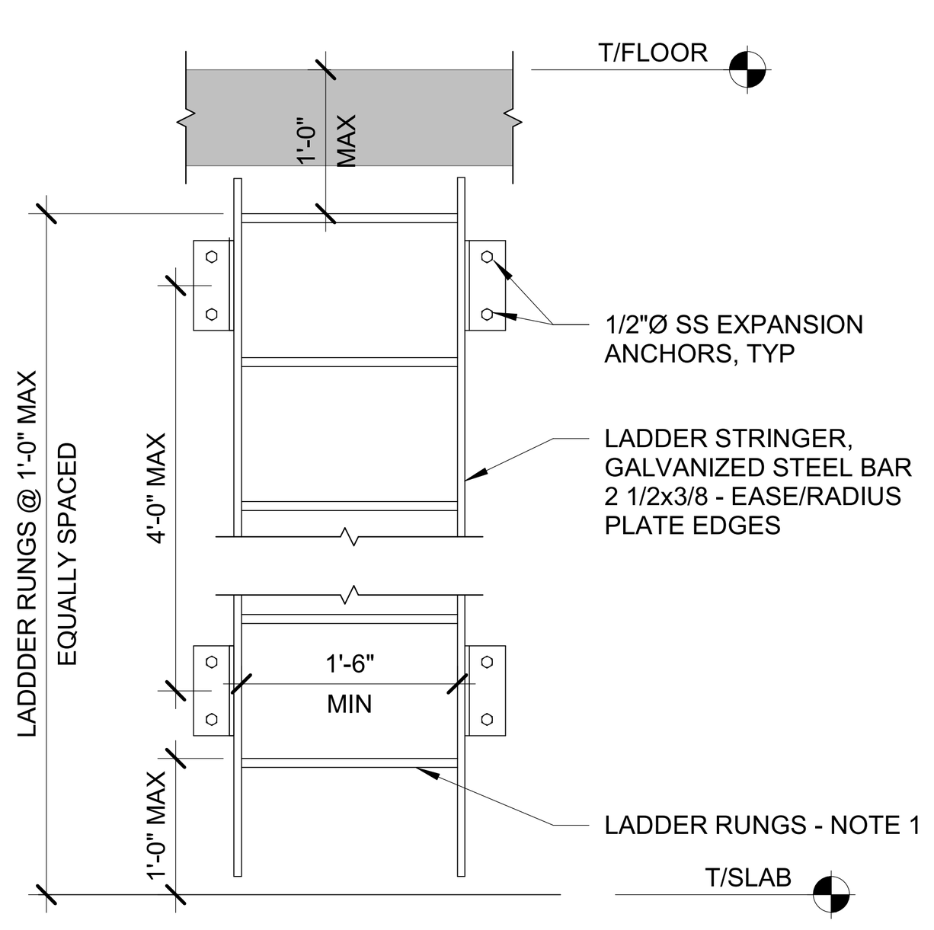
E5 CROSS TIE TUNNEL PIT INFILL
NOT TO SCALE

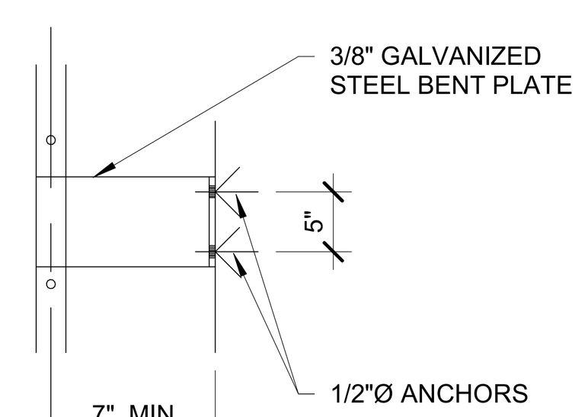


NOTES:

1. COORDINATE DIMENSION "D" WITH LINK SEAL AND PIPE.

G5 PENETRATION FOR UTILITIES AT BULKHEAD
1/2" = 1'-0"



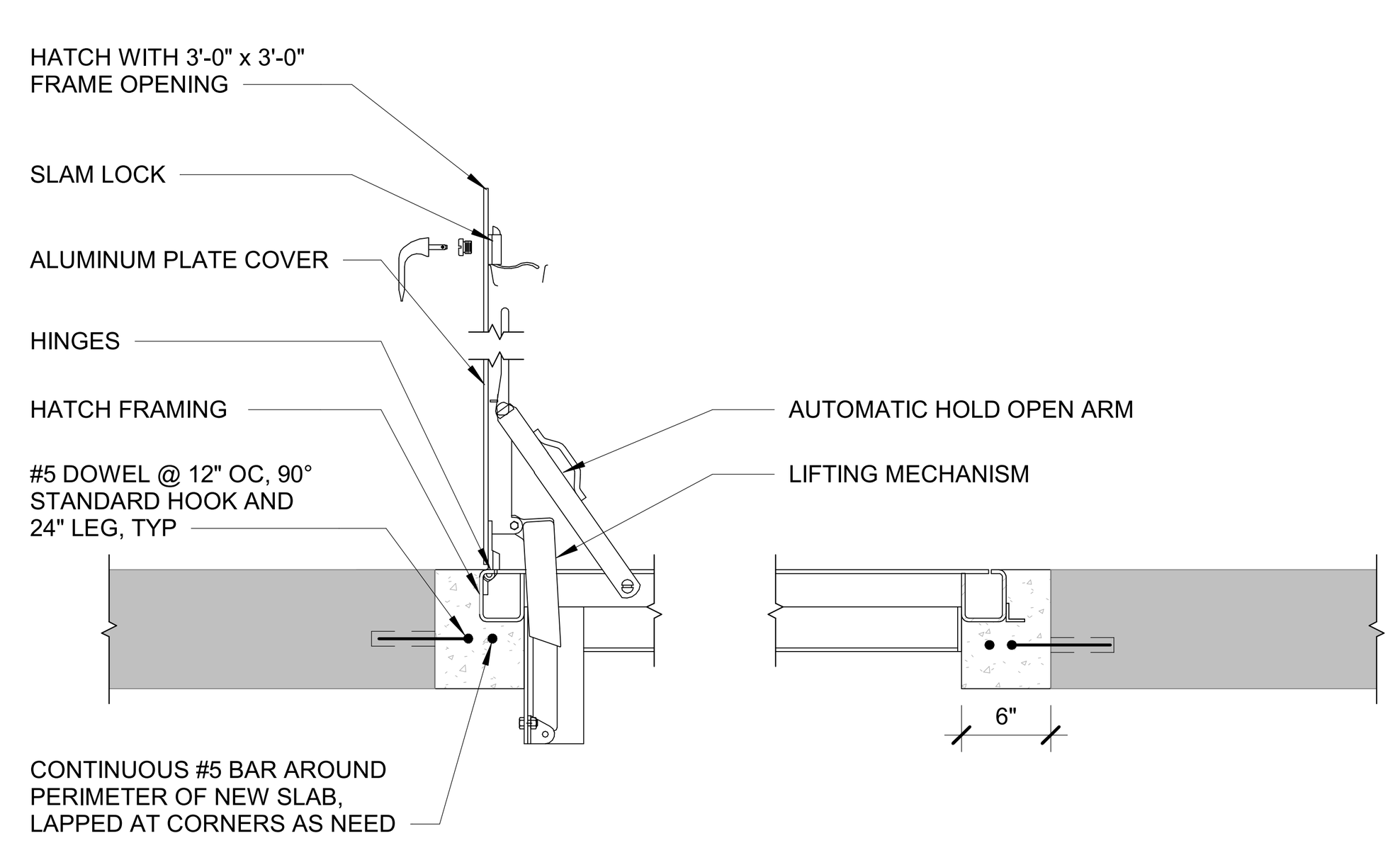


LADDER SUPPORT DETAIL

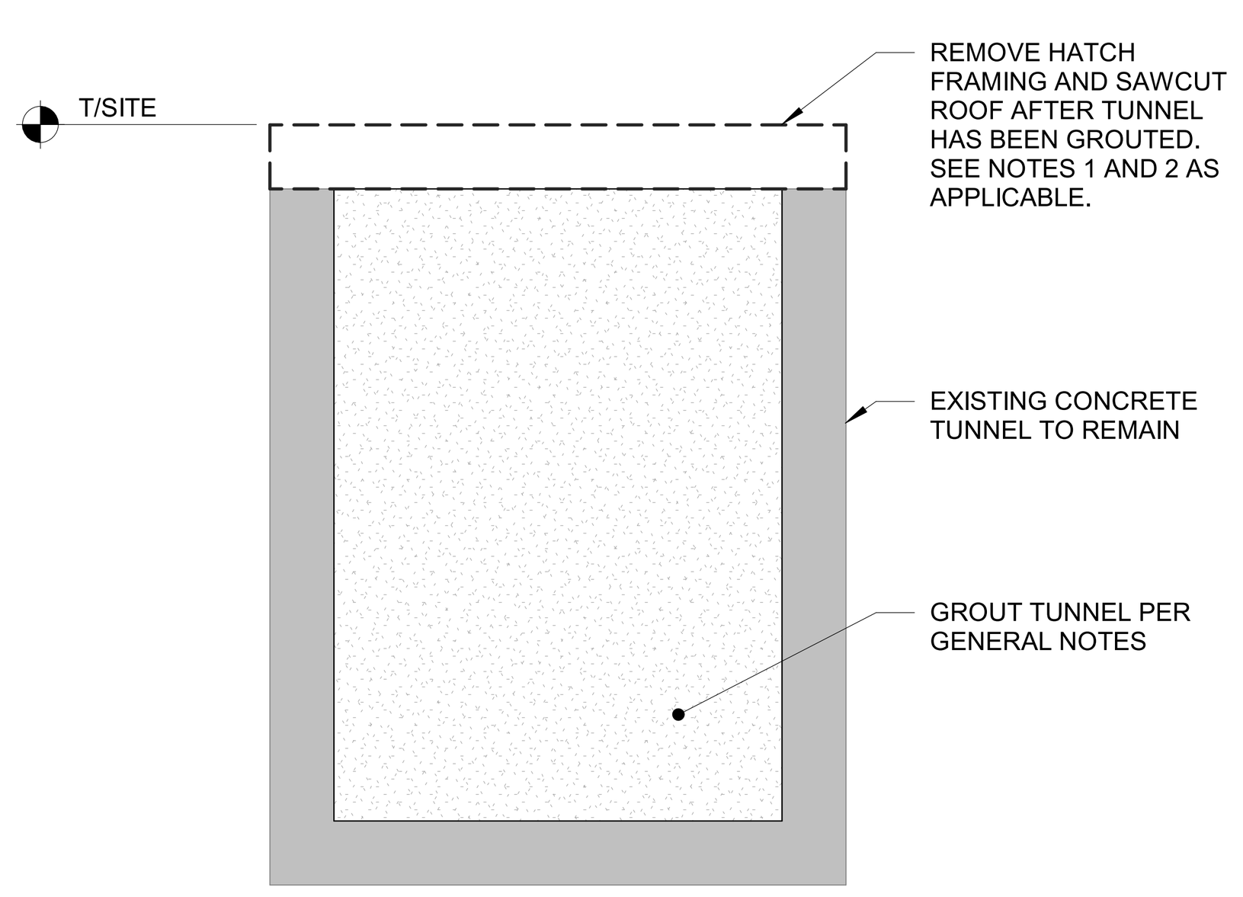
NOTES:

1. RUNGS: TRACTION TREAD LADDER RUNGS, GALVANIZED 13 GAUGE (3) ROW, 1.125" DEPTH x 1.625" WIDE.

A6 LADDER DETAIL
3/4" = 1'-0"



C6 HATCH DETAIL
1" = 1'-0"



NOTES:

1. MATCH EXISTING THICKNESS AND EXISTING CORNER ELEVATIONS OF ADJACENT PANELS. ROUGHEN GROUT SURFACE TO 1/4" AMPLITUDE. CUT OR REMOVE ALL EXISTING REINFORCING STEEL AND DO NOT TIE SIDEWALK PANEL INTO TUNNEL WALL. SEE CIVIL FOR LOCATION.
2. COVER REMAINING TUNNEL WITH TOP SOIL TO MATCH EXISTING ELEVATIONS. SEE CIVIL FOR LOCATION.

E6 TUNNEL CAP/SIDEWALK REMOVAL AND REPLACEMENT
1/2" = 1'-0"

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

DRAWN BY	KAB
APPROVED BY	MM
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

DETAILS

00-S500

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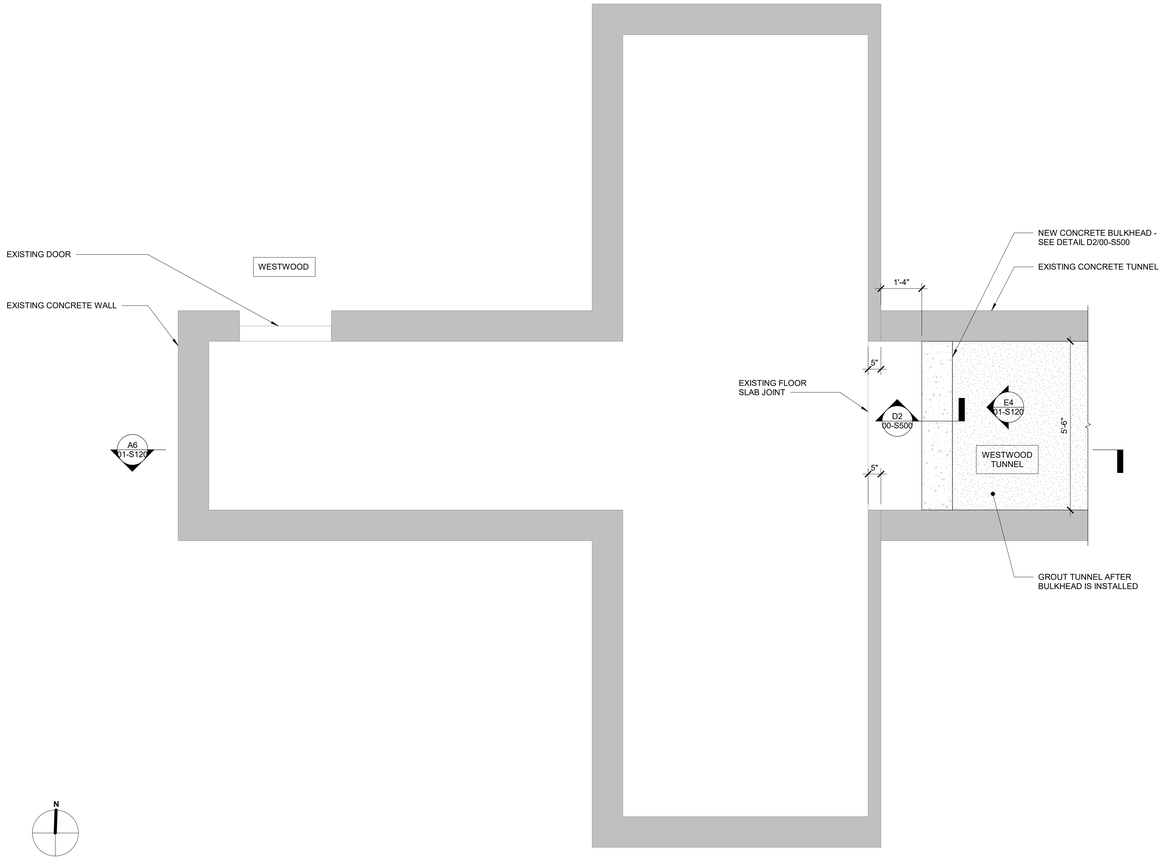
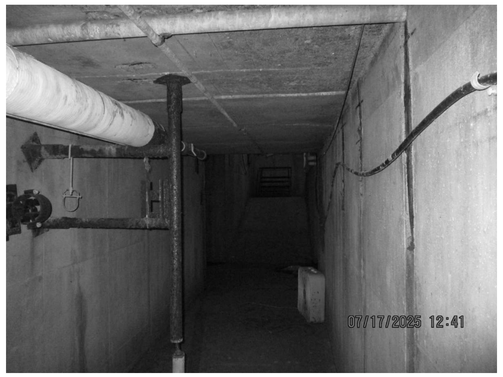
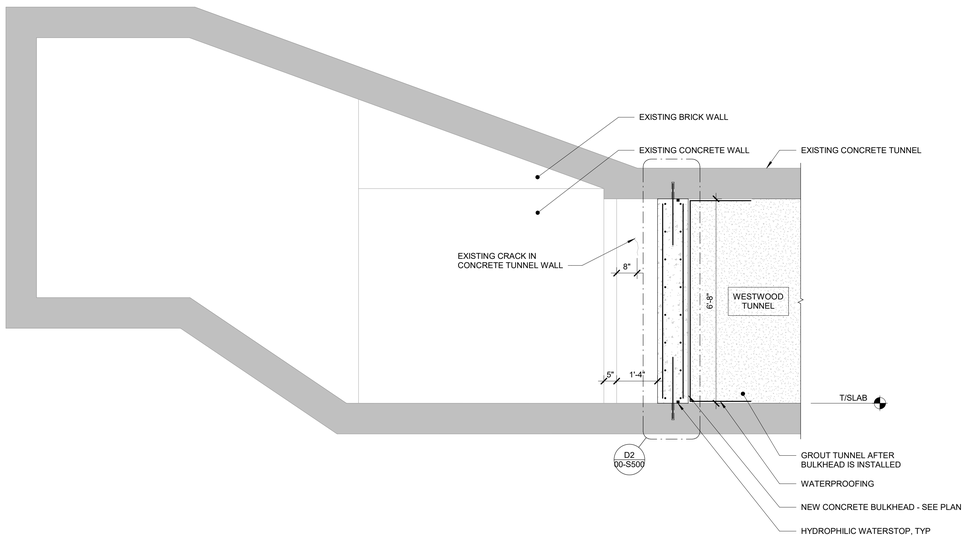


A4 WESTWOOD PLAN
1/2" = 1'-0" 0 3'



E4 WESTWOOD BUILDING CONNECTION
NOT TO SCALE



A6 WESTWOOD SECTION
1/2" = 1'-0" 0 3'

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IDAS PROJECT NUMBER 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

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WESTWOOD

01-S120

320 l2ivsk eRedotuA

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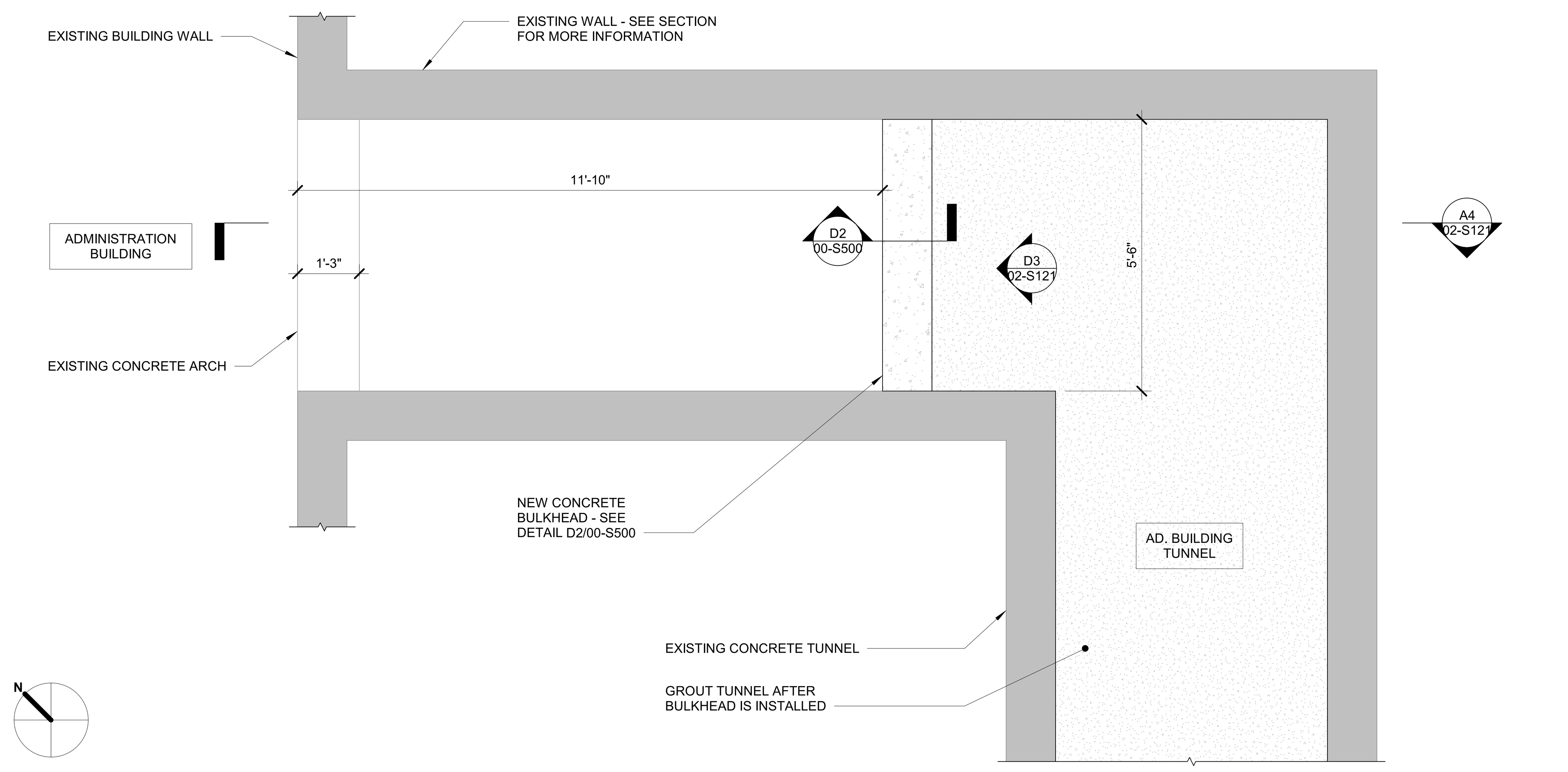
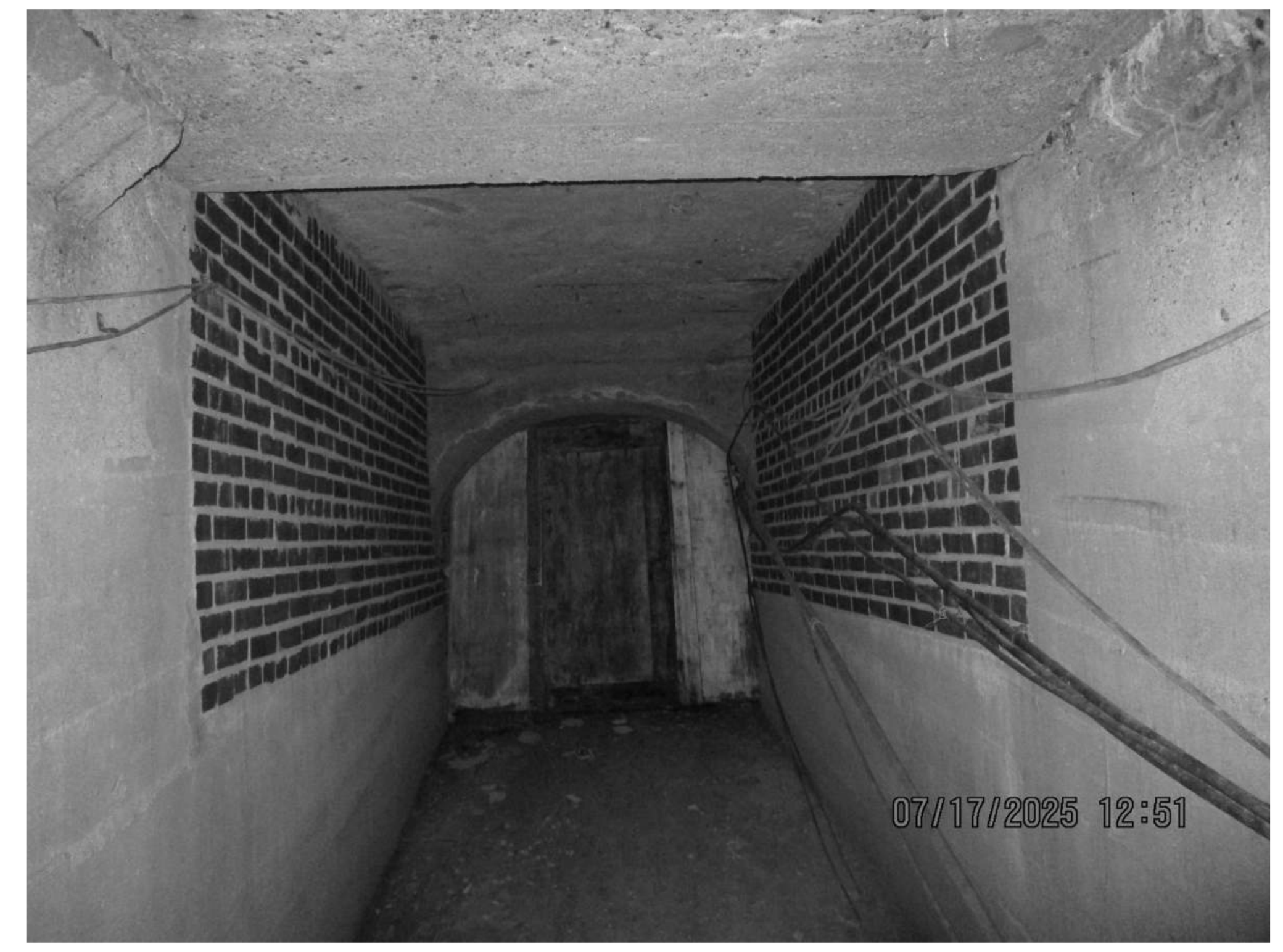
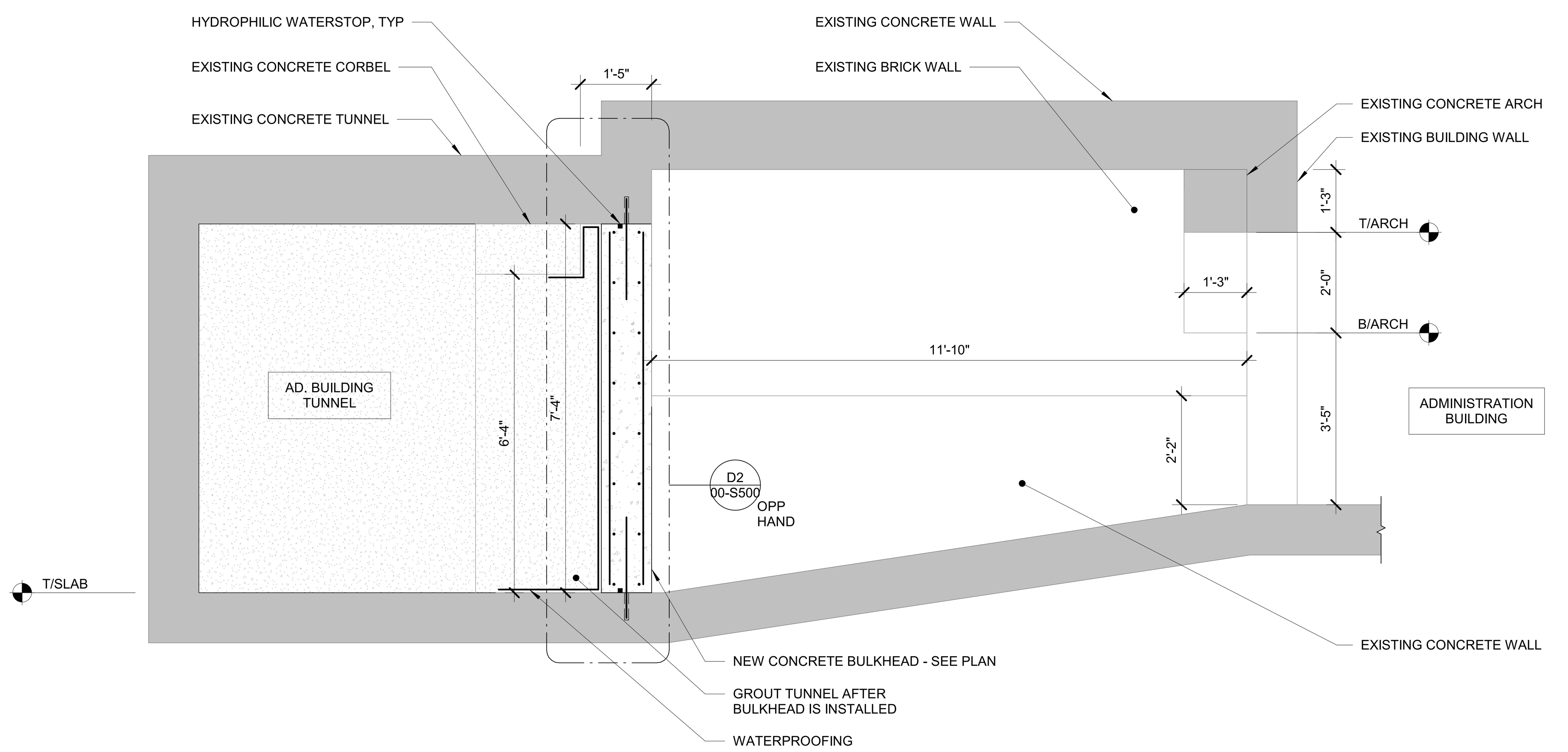


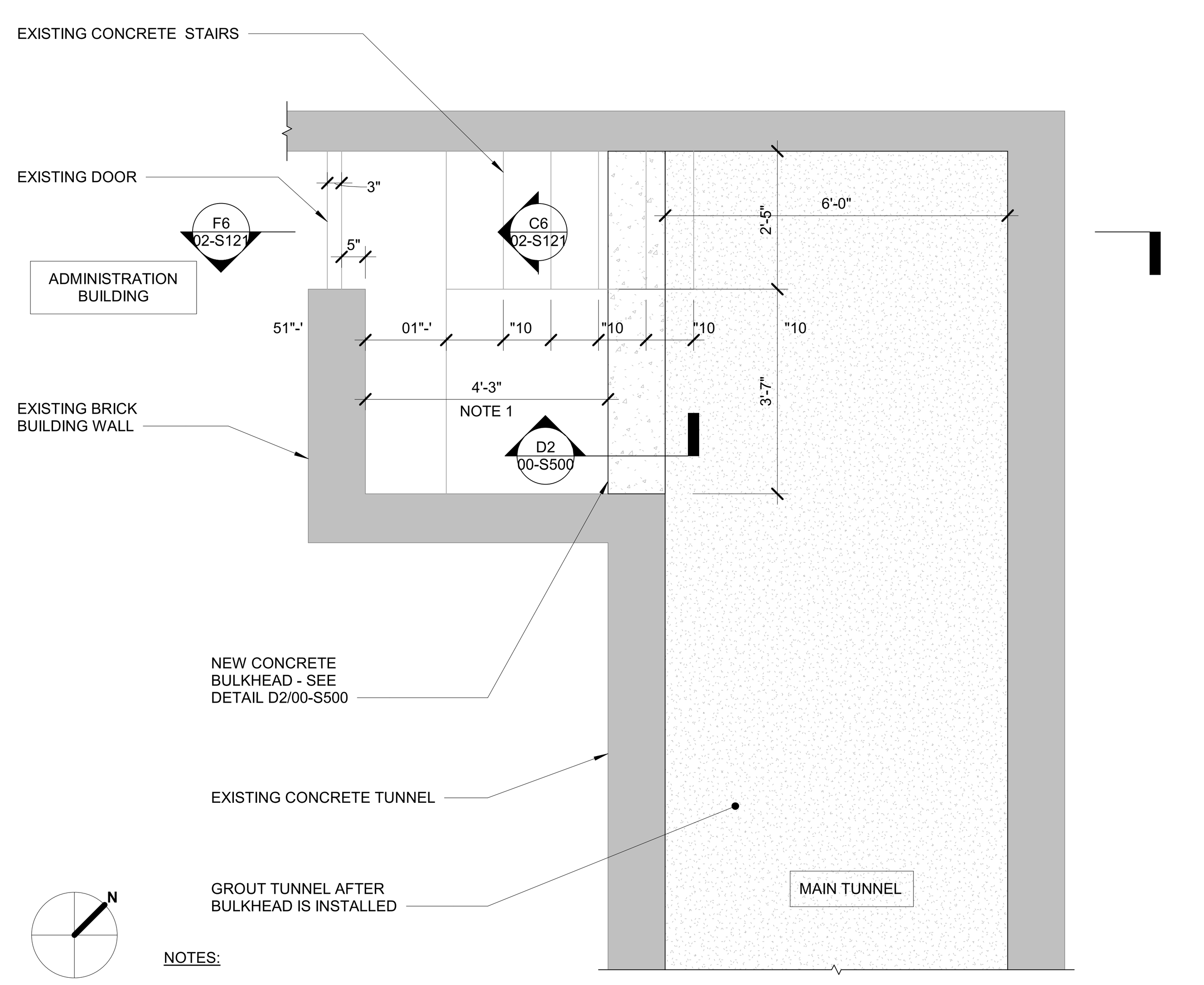
A3 ADMINISTRATION BUILDING PLAN AT AD. BUILDING TUNNEL
1/2" = 1'-0" 0 3'



D3 AD. BUILDING TUNNEL TUNNEL BUILDING CONNECTION TO ADMINISTRATION BUILDING
NOT TO SCALE

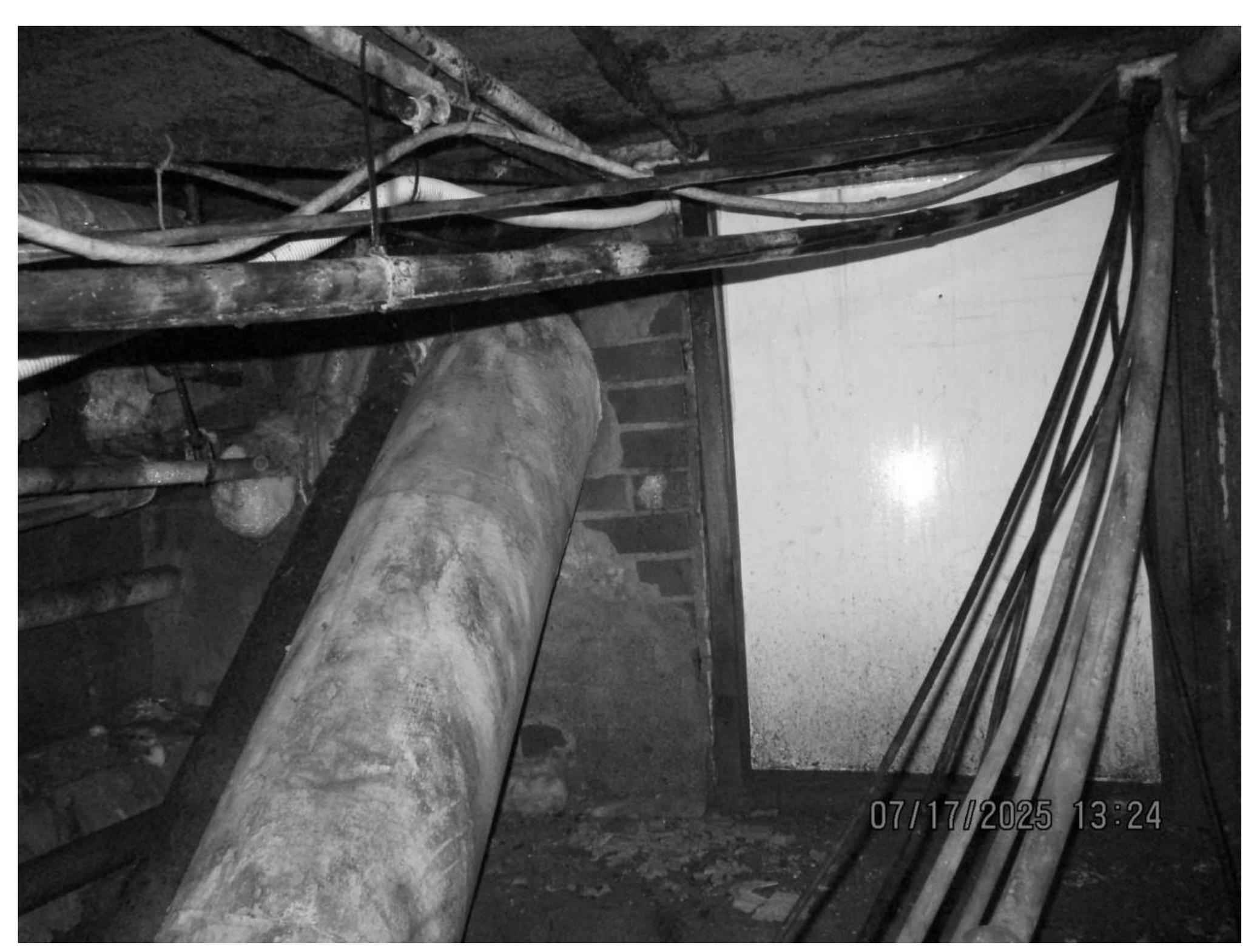


A4 ADMINISTRATION BUILDING SECTION AT AD. BUILDING TUNNEL
1/2" = 1'-0" 0 3'

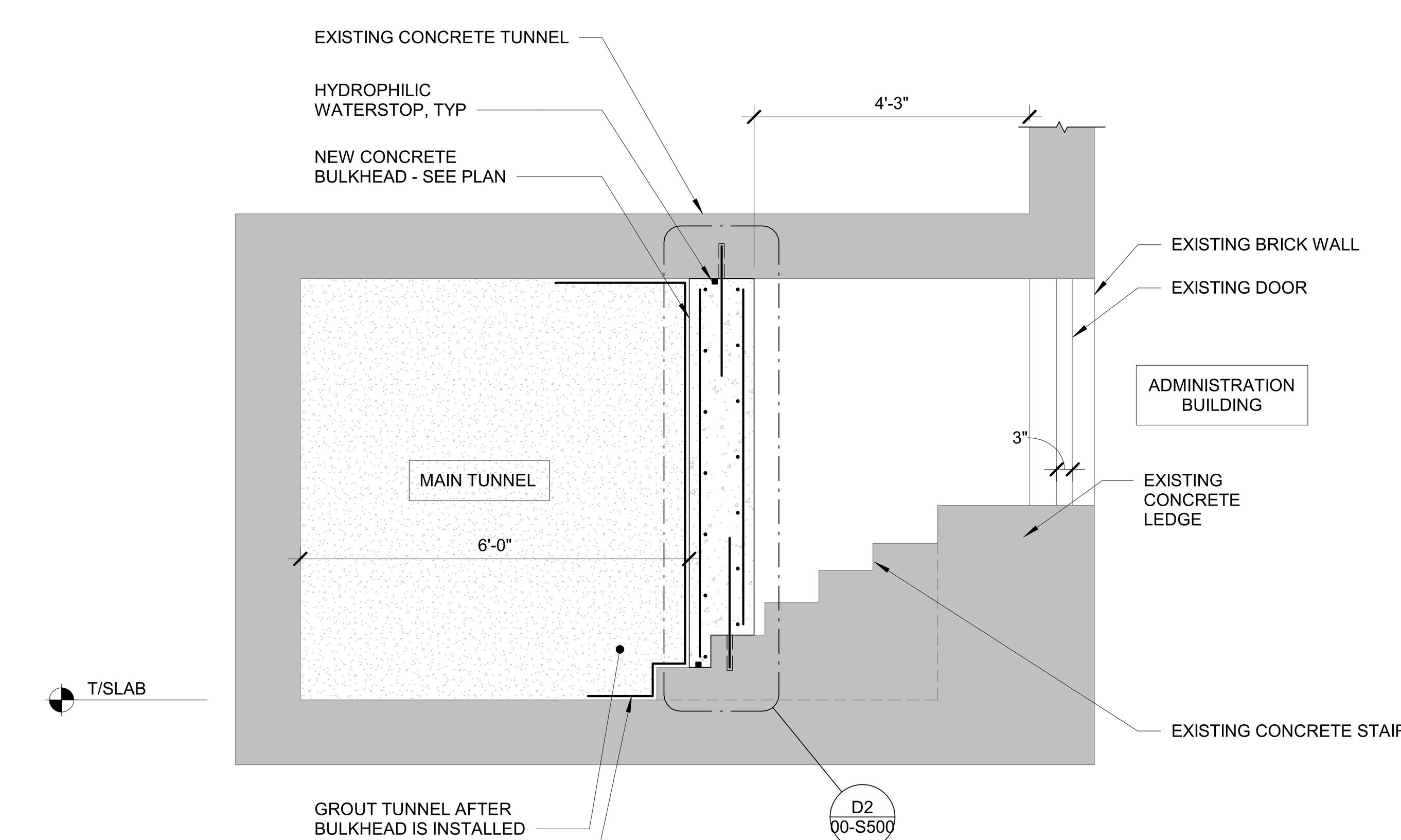


NOTES:
1. VERIFY THAT THE BULKHEAD LOCATION ALIGNS WITH THE BUILDING FACE.

A6 ADMINISTRATION BUILDING PLAN AT MAIN TUNNEL
1/2" = 1'-0" 0 3'



C6 MAIN TUNNEL BUILDING CONNECTION TO ADMINISTRATION BUILDING
NOT TO SCALE



F6 ADMINISTRATION BUILDING SECTION
1/2" = 1'-0" 0 3'

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

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IDAS PROJECT NUMBER 9275.50
34 CEDAR ST, WOODWARD, IA 50276

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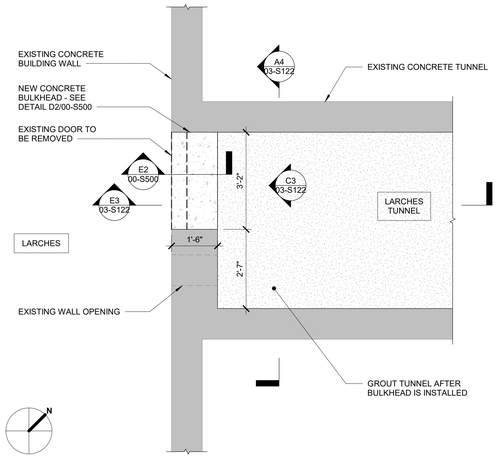
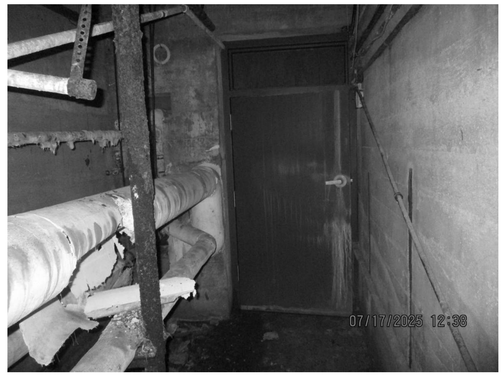
ADMINISTRATION BUILDING

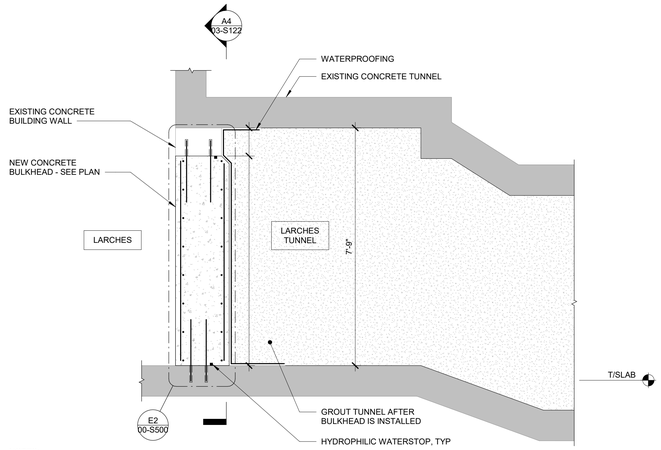
02-S121



A3 LARCHES PLAN
1/2" = 1'-0" 0" 3"



C3 LARCHES TUNNEL BUILDING CONNECTION
NOT TO SCALE



NOTES:

1. EXISTING DOOR TO BE REMOVED NOT SHOWN.

E3 LARCHES SECTION
1/2" = 1'-0" 0" 3"

A4 LARCHES SECTION
1/2" = 1'-0" 0" 3"

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LARCHES

03-S122

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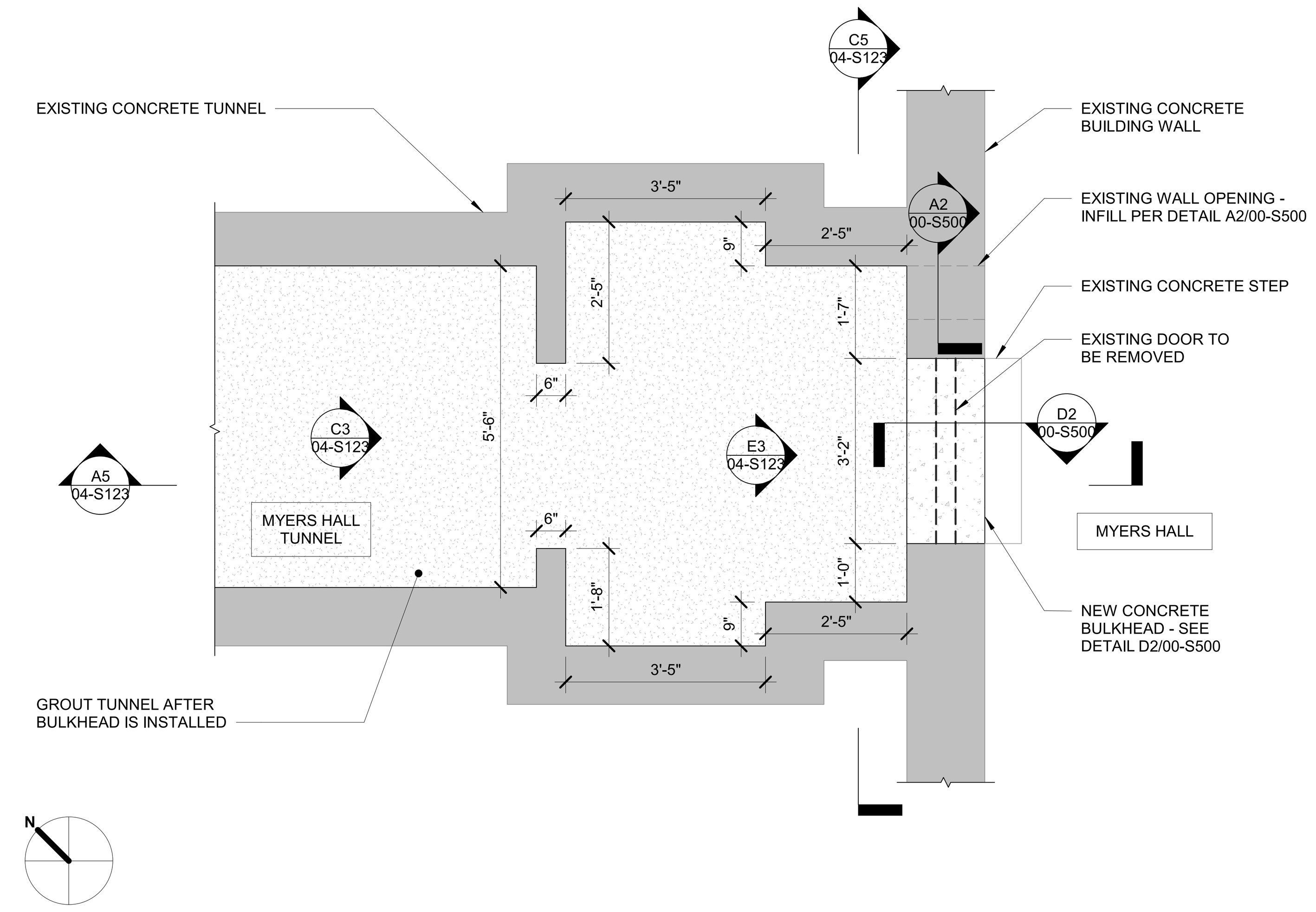
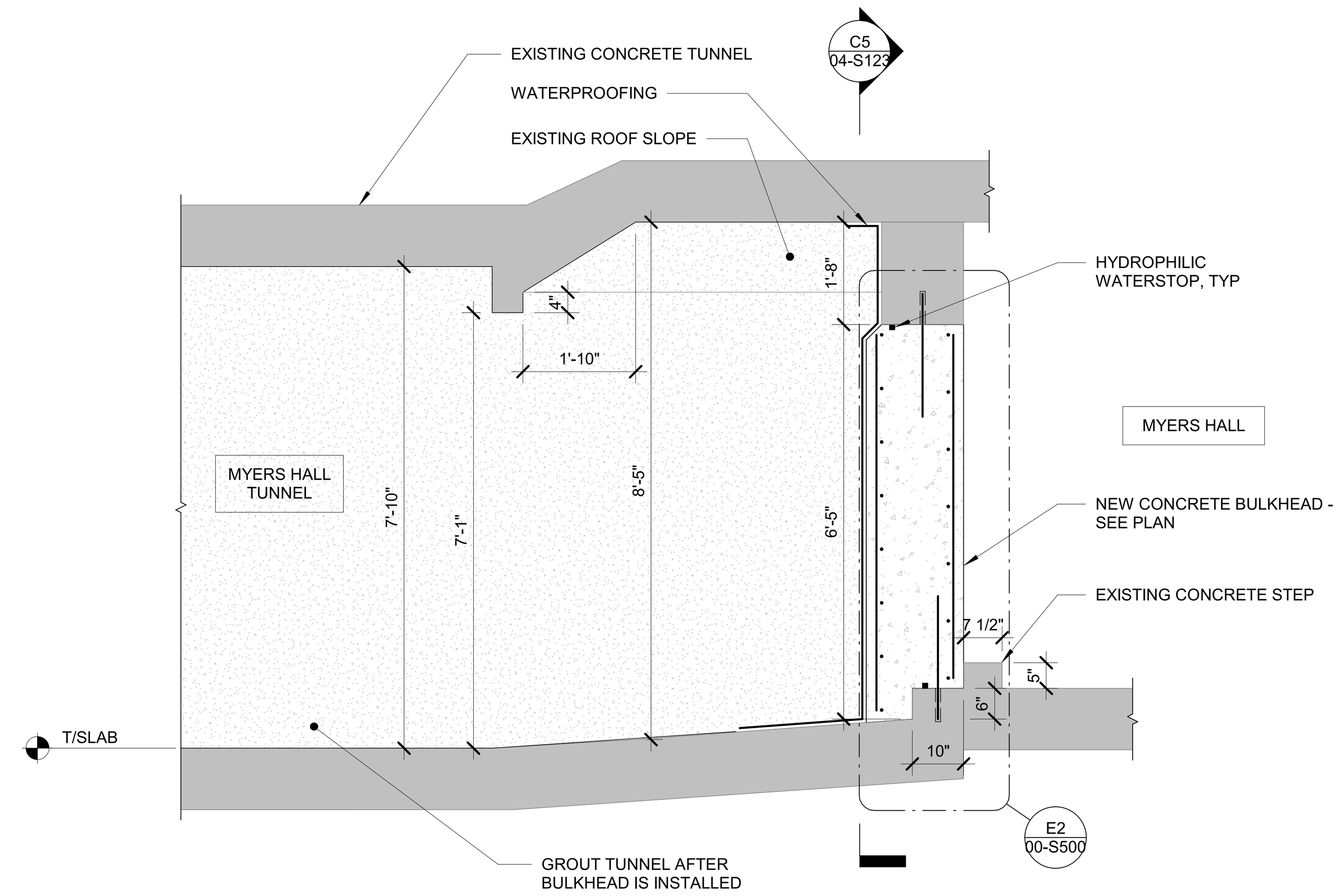


A3 MYERS HALL PLAN
1/2" = 1'-0" 0 3'

C3 MYERS HALL TUNNEL BUILDING CONNECTION
NOT TO SCALE

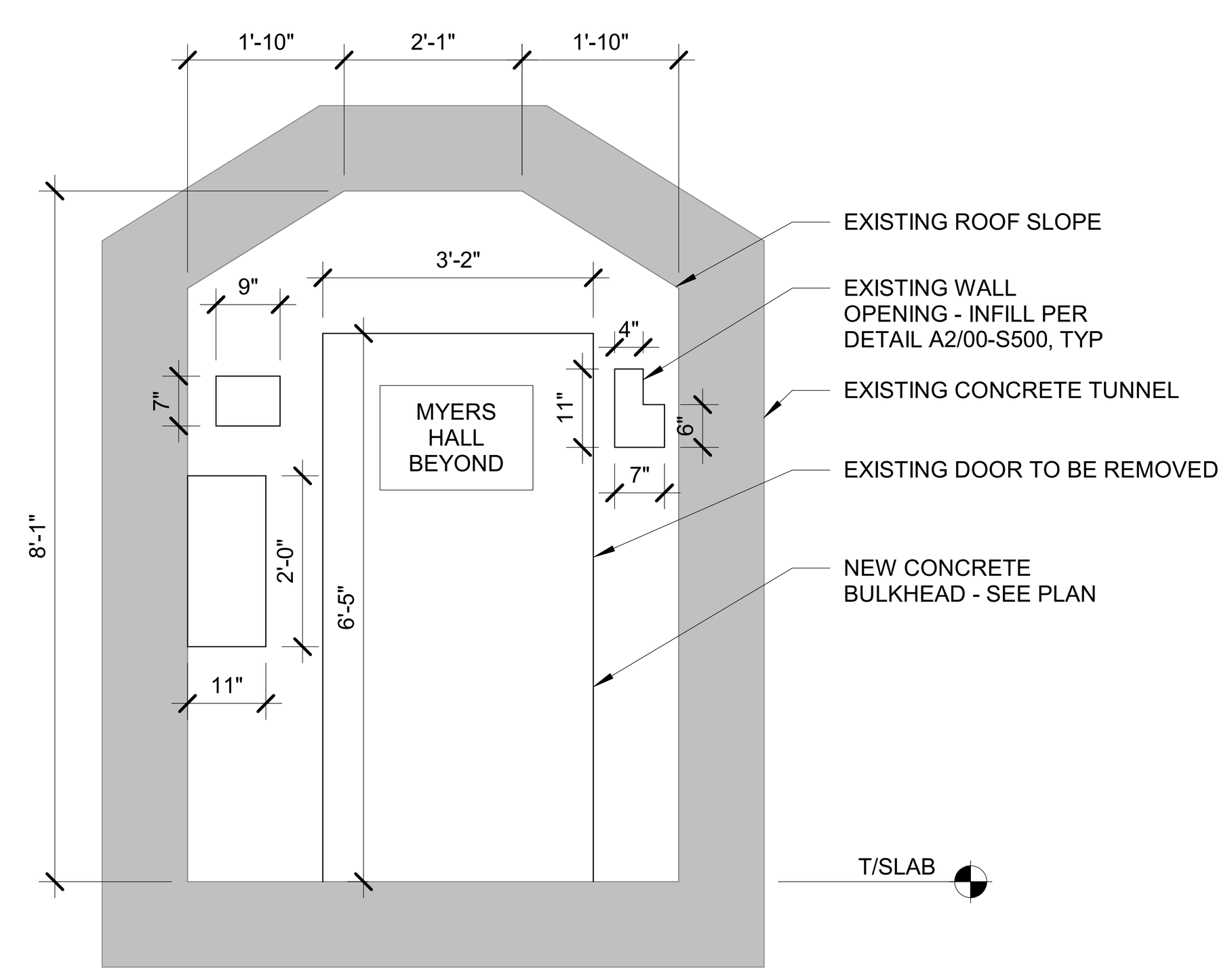
E3 MYERS HALL TUNNEL BUILDING CONNECTION
NOT TO SCALE



NOTES:

1. EXISTING DOOR TO BE REMOVED NOT SHOWN.

A5 MYERS HALL SECTION
1/2" = 1'-0" 0 3'



C5 MYERS HALL SECTION
1/2" = 1'-0" 0 3'

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MYERS HALL

04-S123

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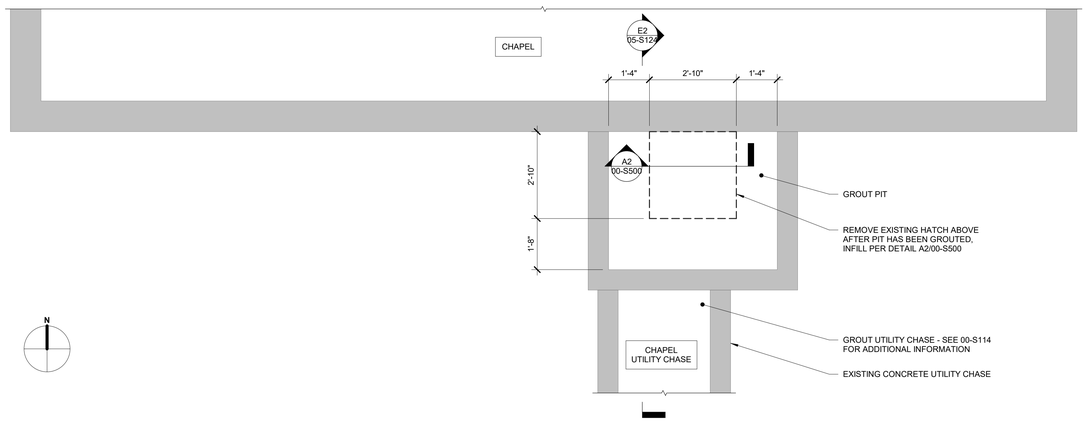
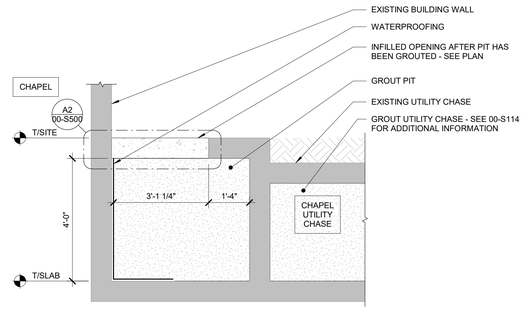


A2 CHAPEL UTILITY CHASE PLAN
1/2" = 1'-0" 0 3'



E2 CHAPEL UTILITY CHASE SECTION
1/2" = 1'-0" 0 3'

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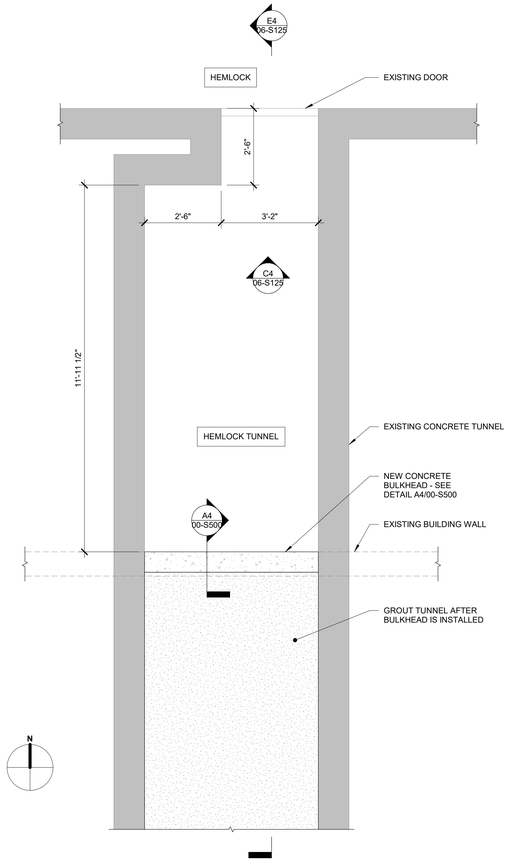
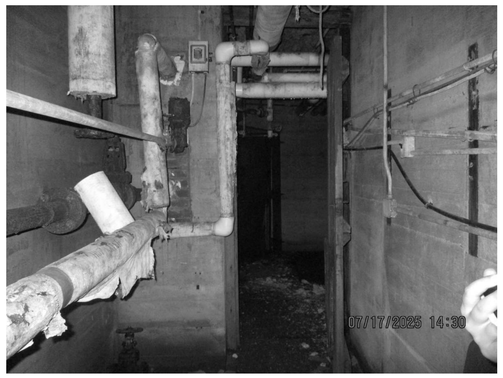
CHAPEL UTILITY CHASE

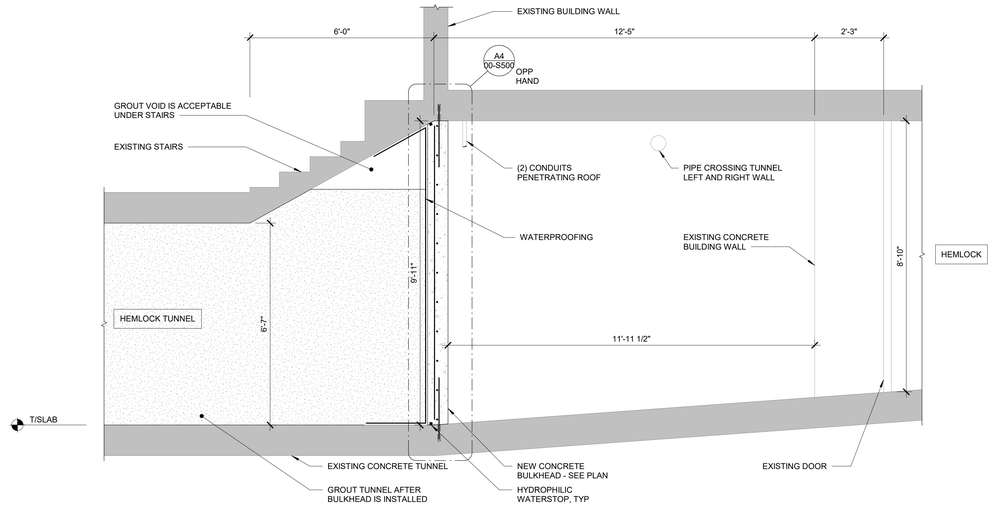
05-S124



A4 HEMLOCK PLAN
1/2" = 1'-0"



C4 HEMLOCK TUNNEL BUILDING CONNECTION
NOT TO SCALE



E4 HEMLOCK SECTION
1/2" = 1'-0"

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HEMLOCK

06-S125

320 l2ivsk eRedotuA

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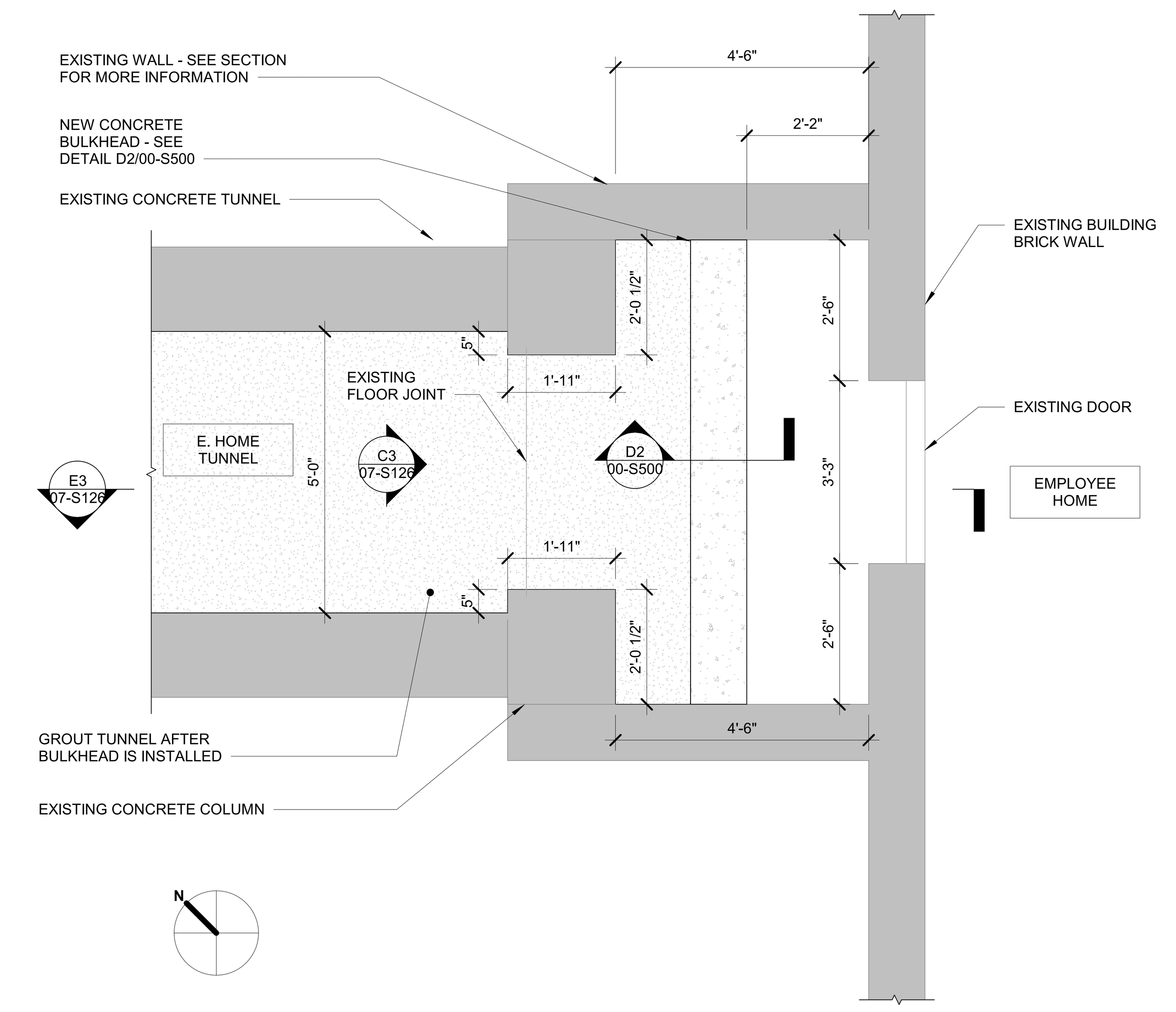
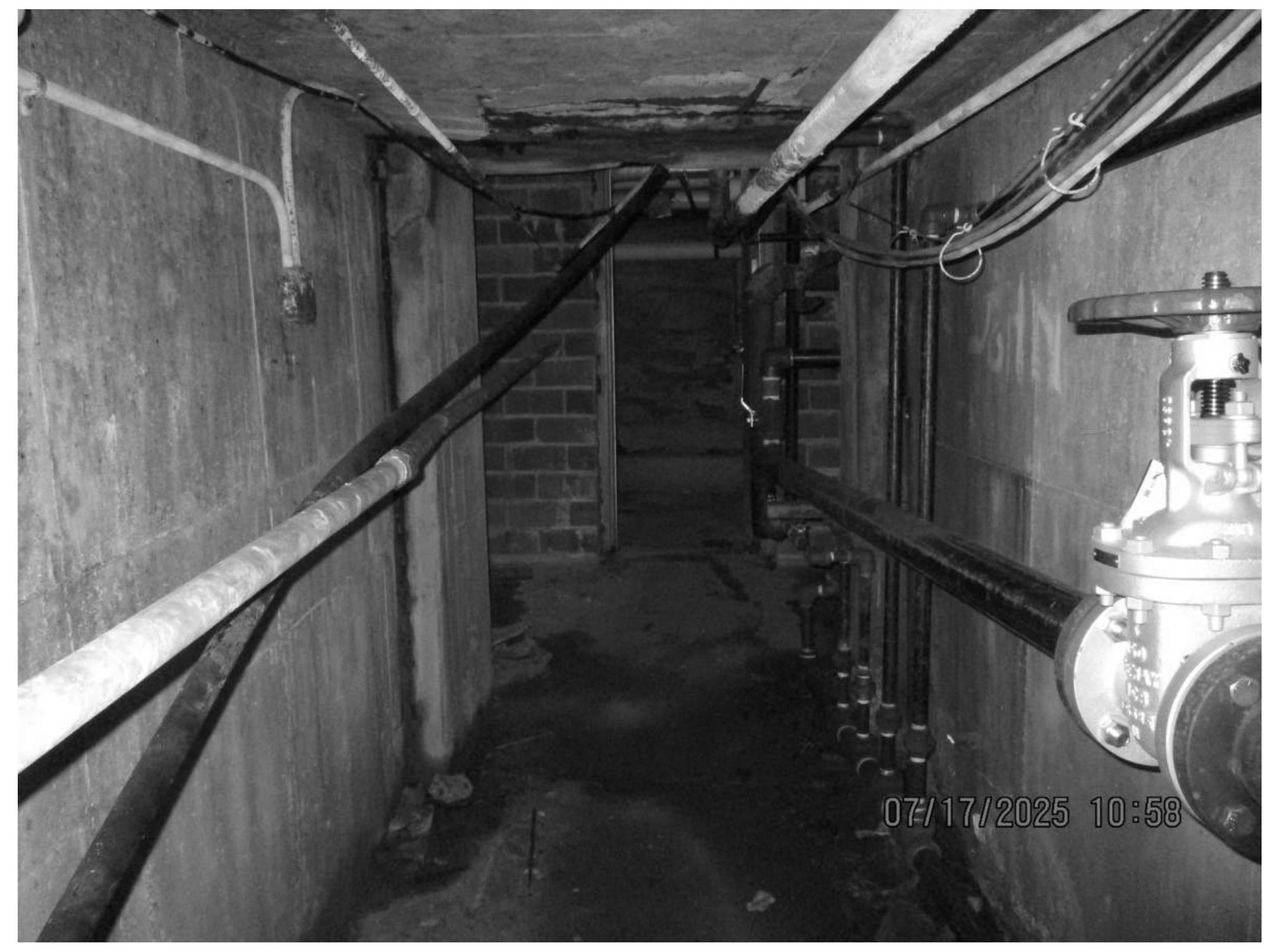
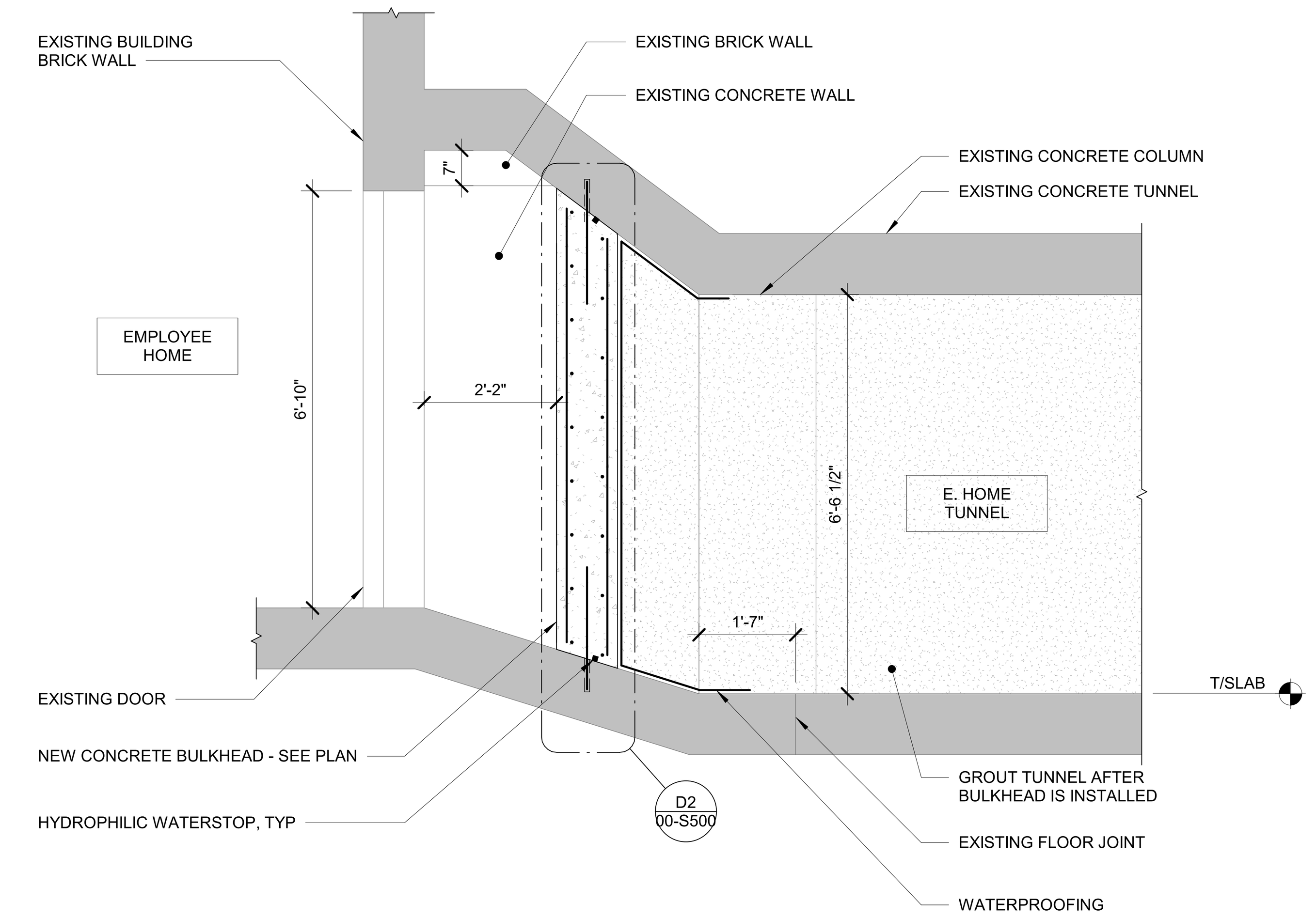


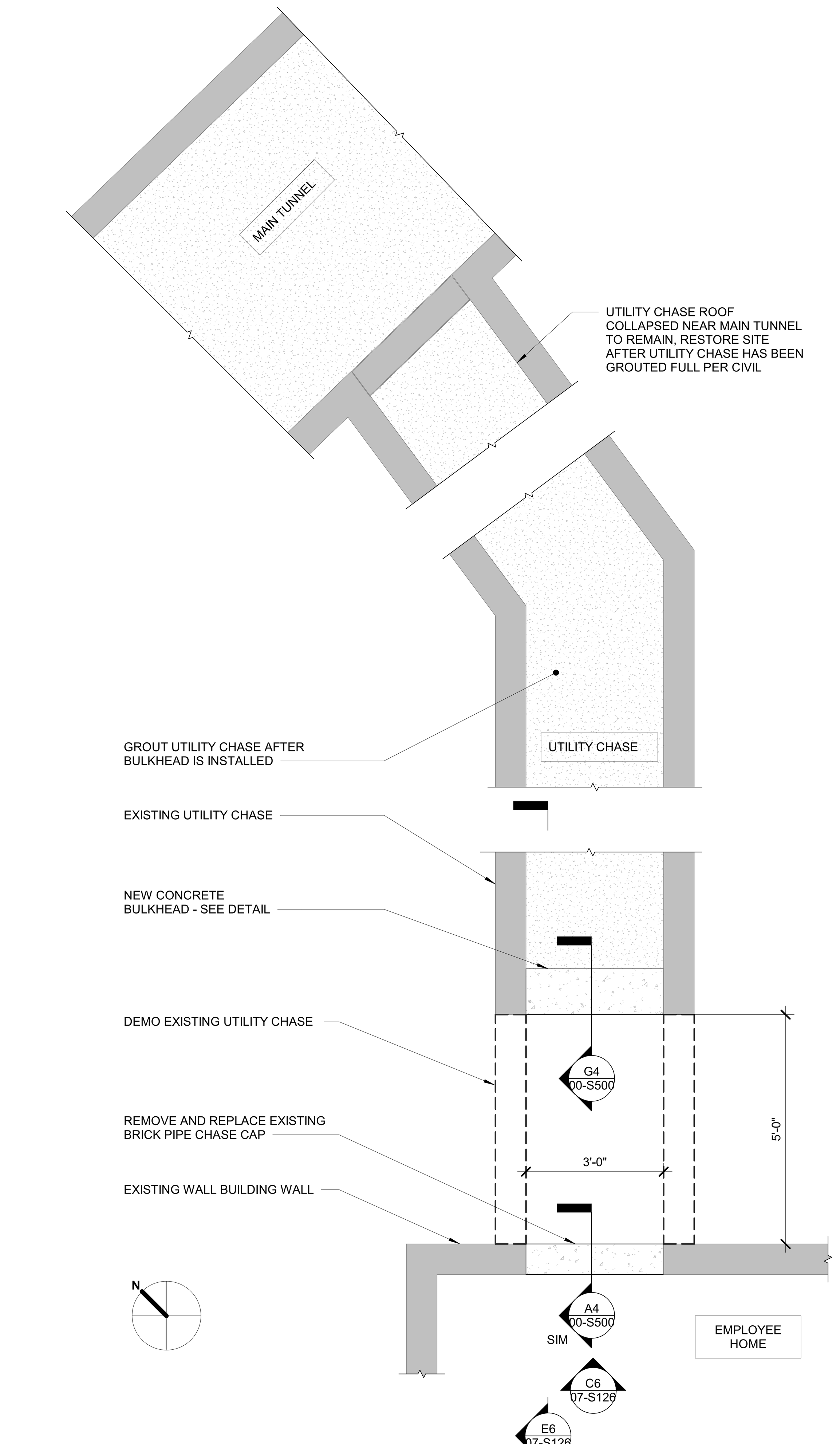
A3 EMPLOYEE HOME PLAN
1/2" = 1'-0"



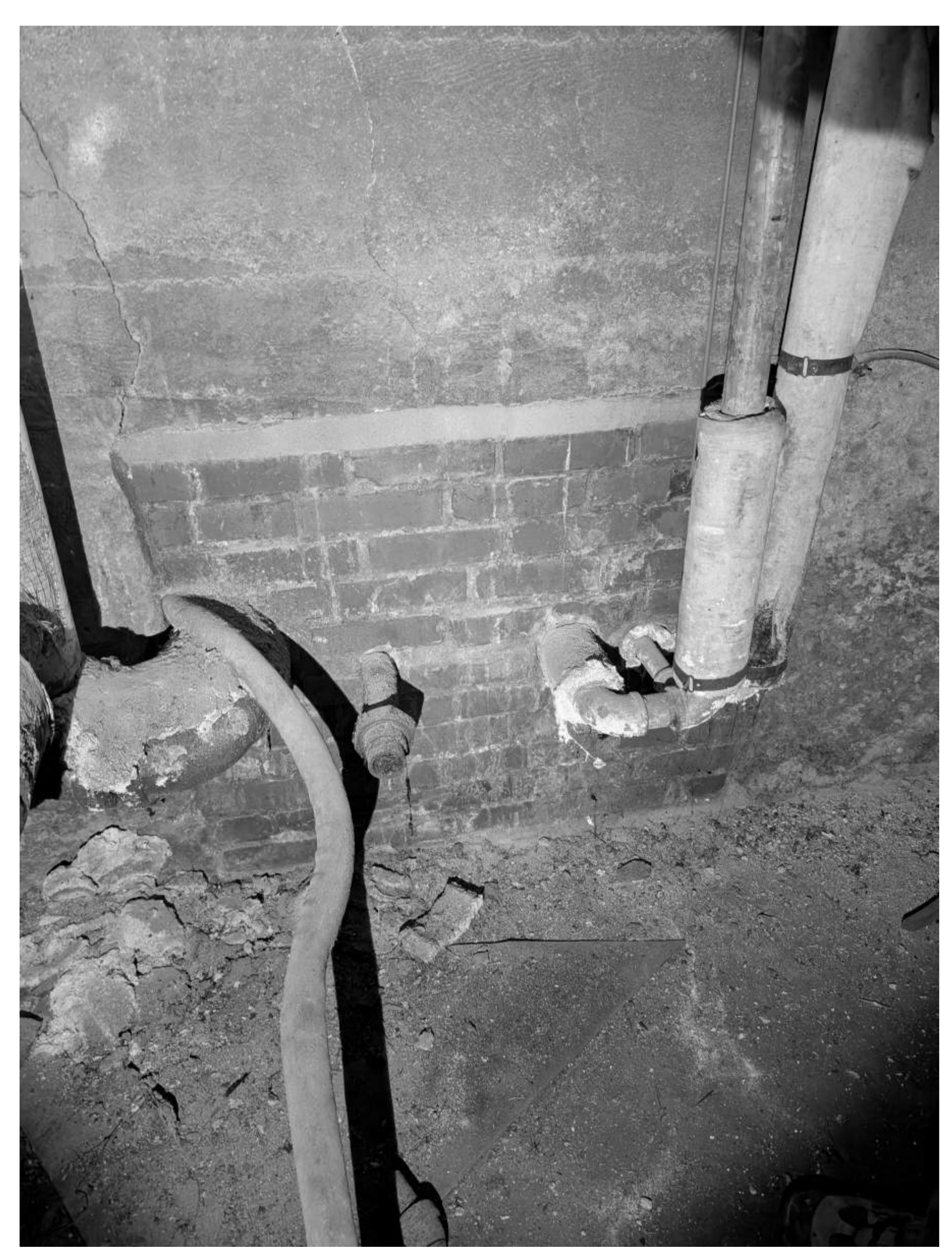
C3 EMPLOYEE HOME TUNNEL BUILDING CONNECTION
NOT TO SCALE



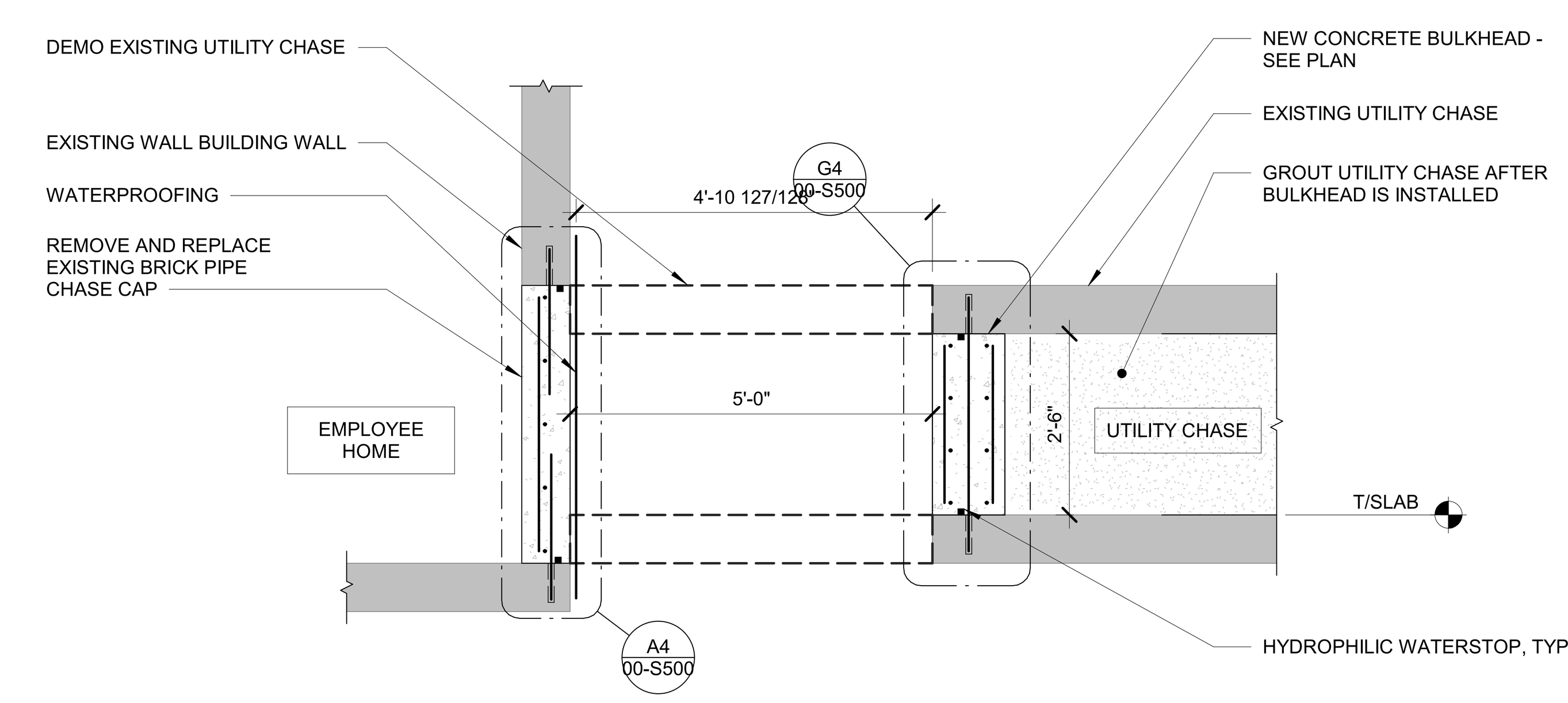
E3 EMPLOYEE HOME SECTION
1/2" = 1'-0"



A6 EMPLOYEE HOME UTILITY CHASE PLAN
1/2" = 1'-0"



C6 E. HOME UTILITY CHASE BUILDING CONNECTION
1/2" = 1'-0"



E6 EMPLOYEE HOME UTILITY CHASE SECTION
1/2" = 1'-0"

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EMPLOYEE HOME

07-S126

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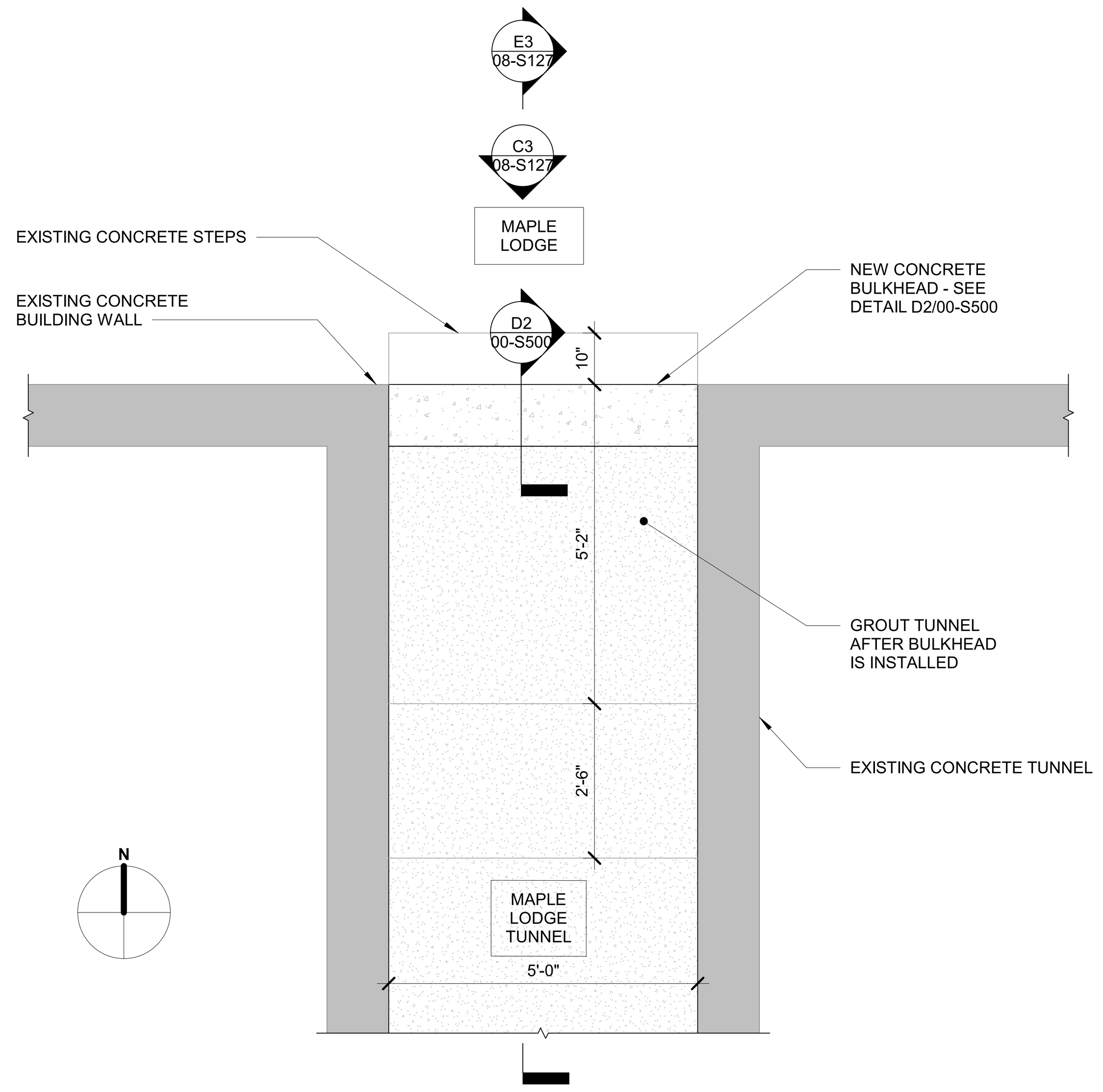
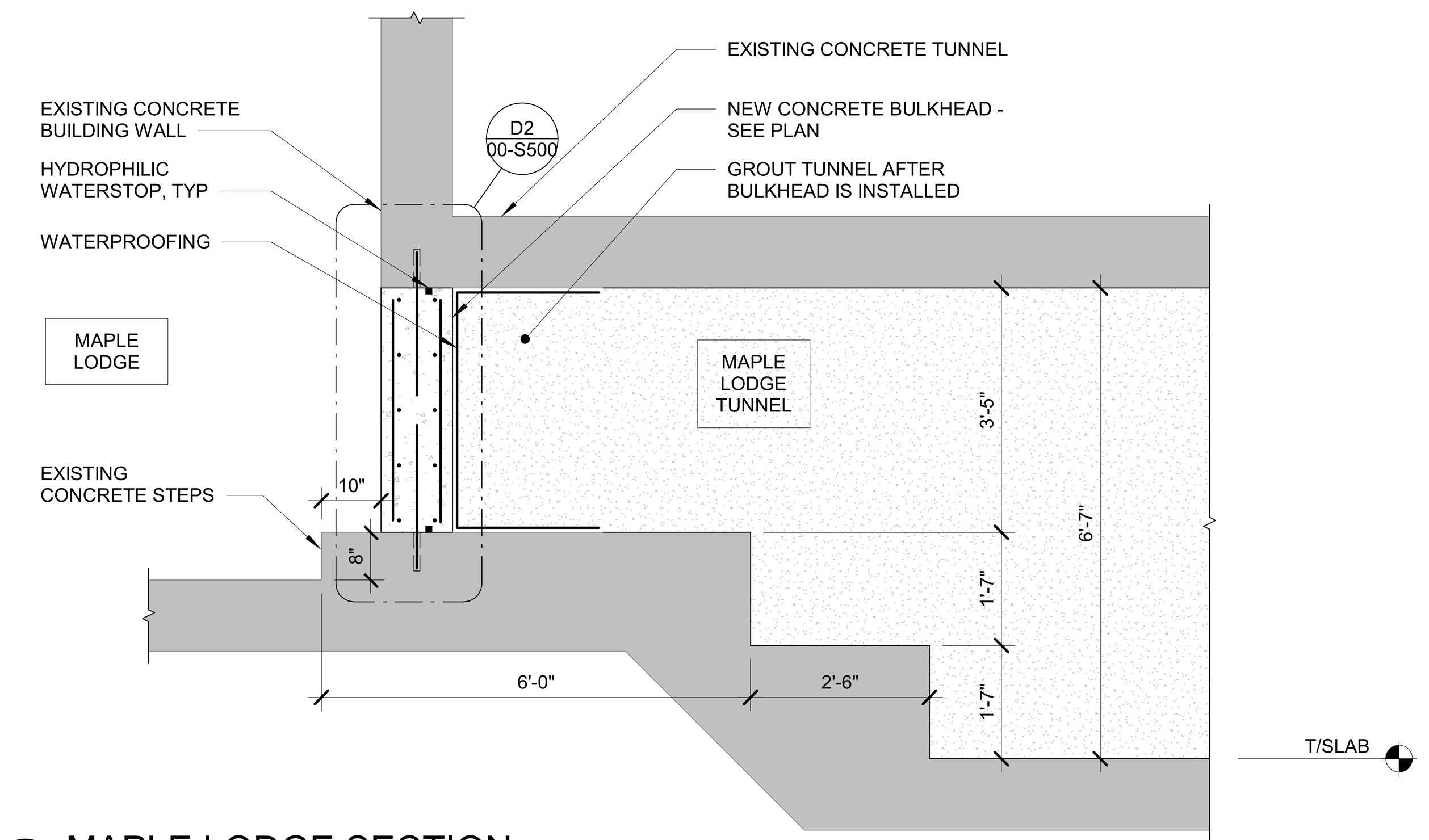


A3 MAPLE LODGE PLAN
1/2" = 1'-0"

C3 MAPLE LODGE BUILDING CONNECTION
1/2" = 1'-0"



E3 MAPLE LODGE SECTION
1/2" = 1'-0"

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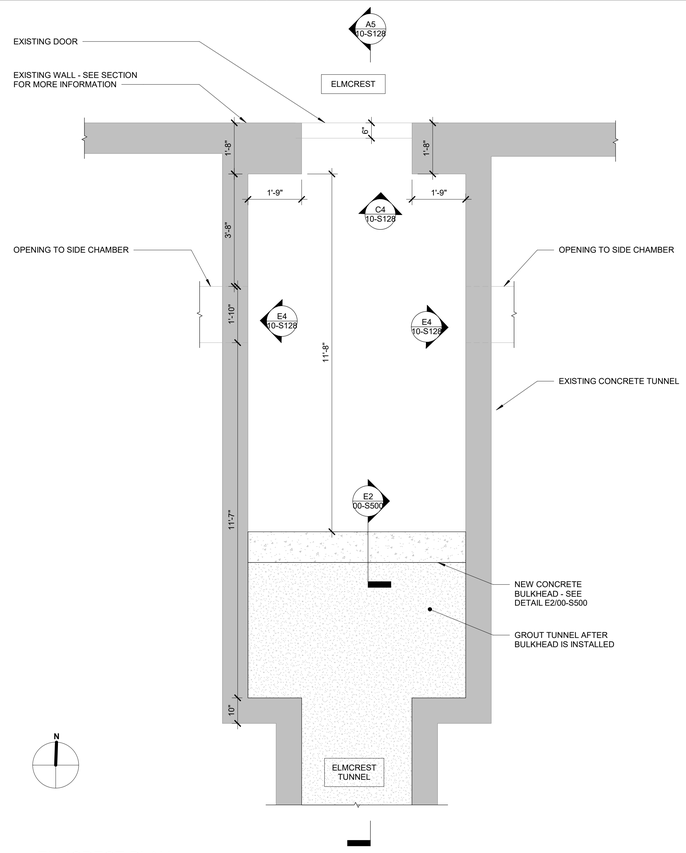
MAPLE LODGE

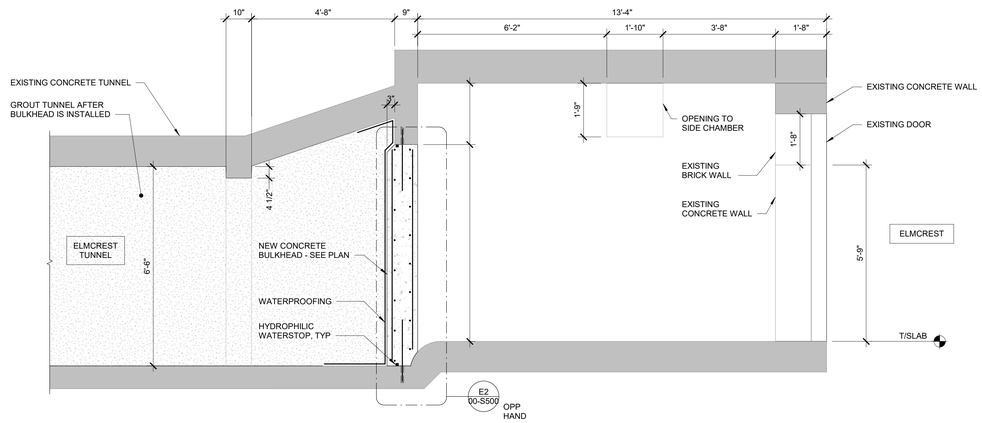
08-S127



A4 ELMCREST PLAN
1/2" = 1'-0" 0 3'

C4 ELMCREST TUNNEL BUILDING CONNECTION
NOT TO SCALE

E4 ELMCREST TUNNEL SIDE CHAMBER
NOT TO SCALE



A5 ELMCREST SECTION
1/2" = 1'-0" 0 3'

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ELMCREST

10-S128

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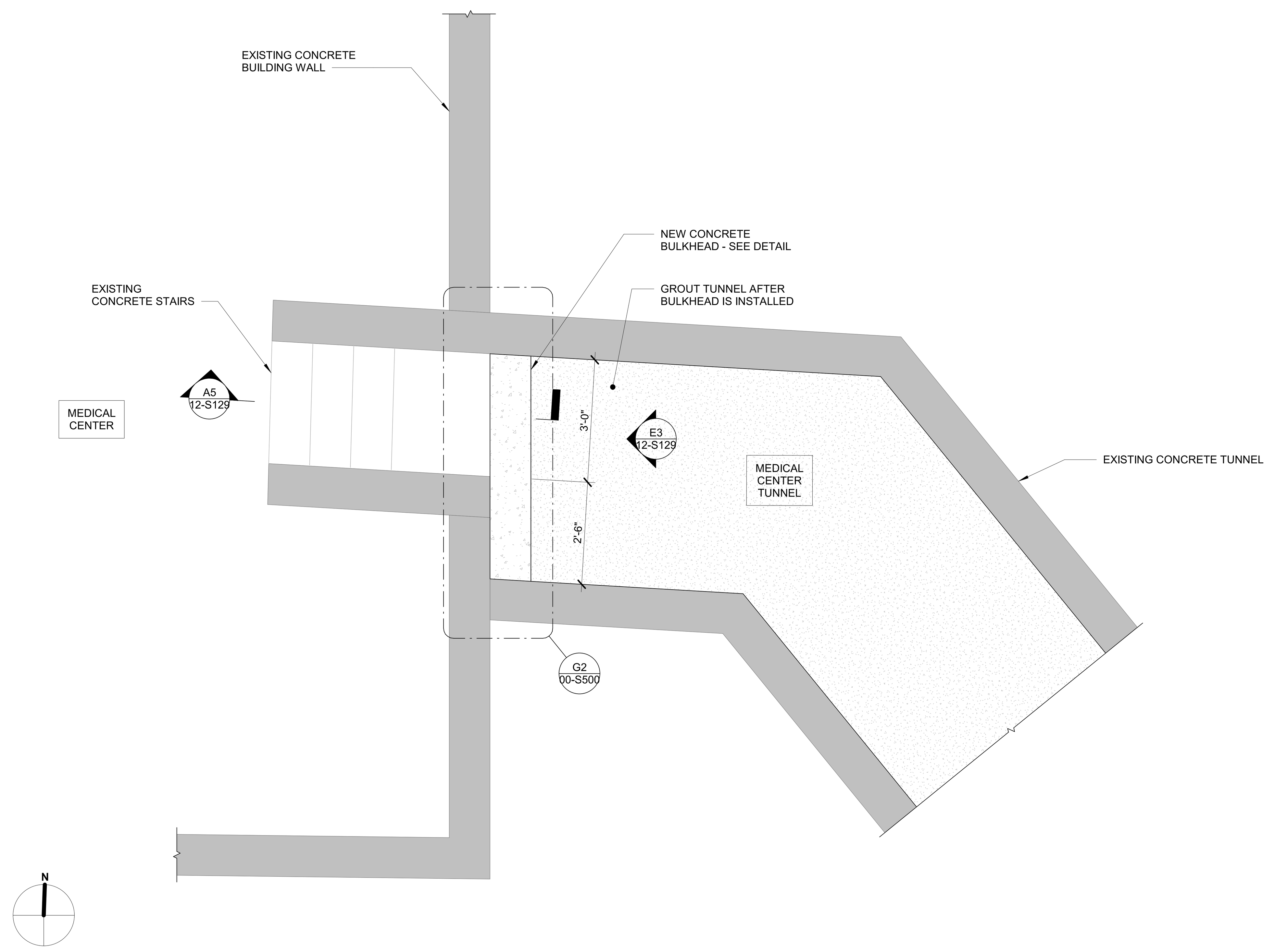
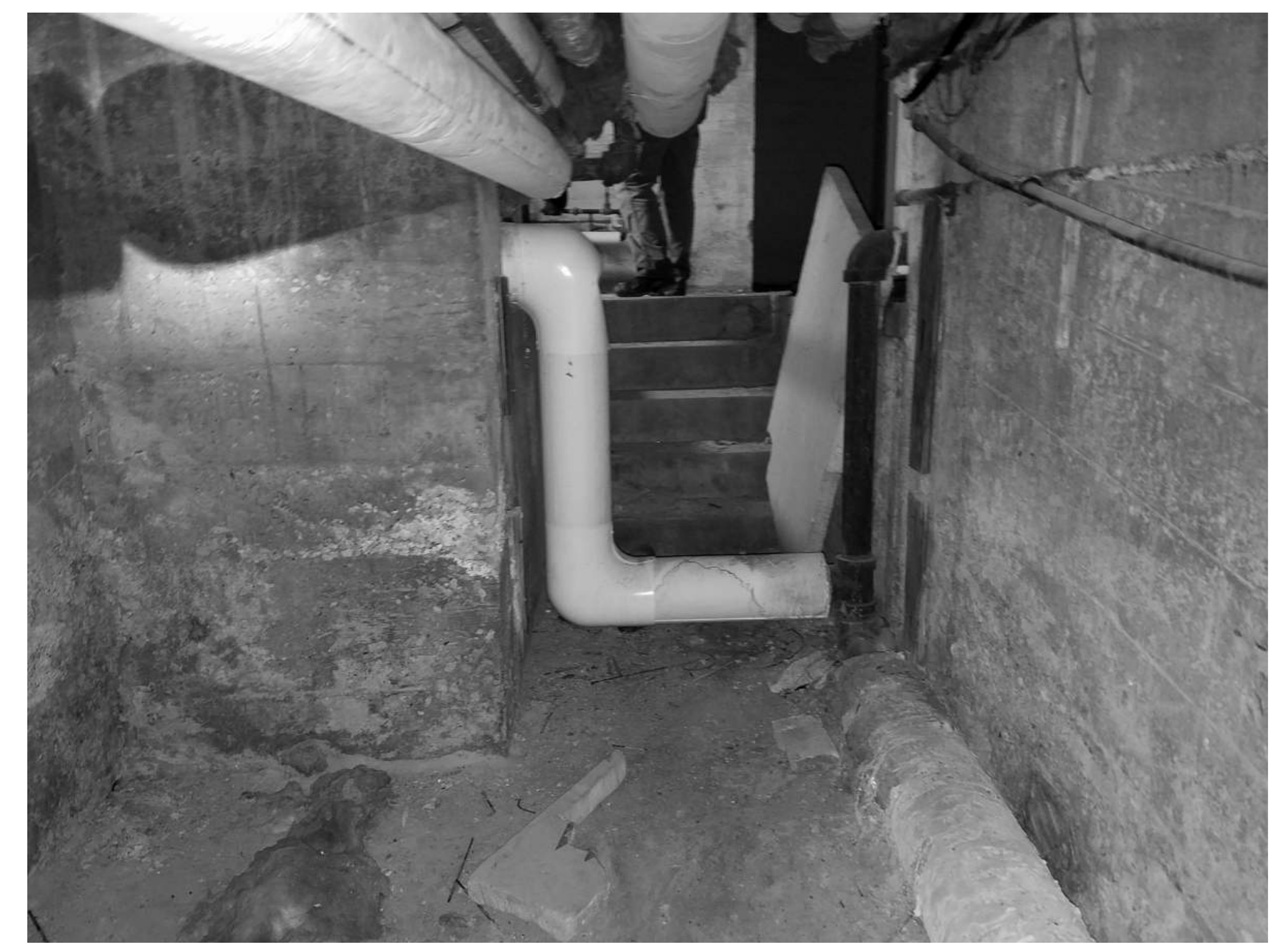


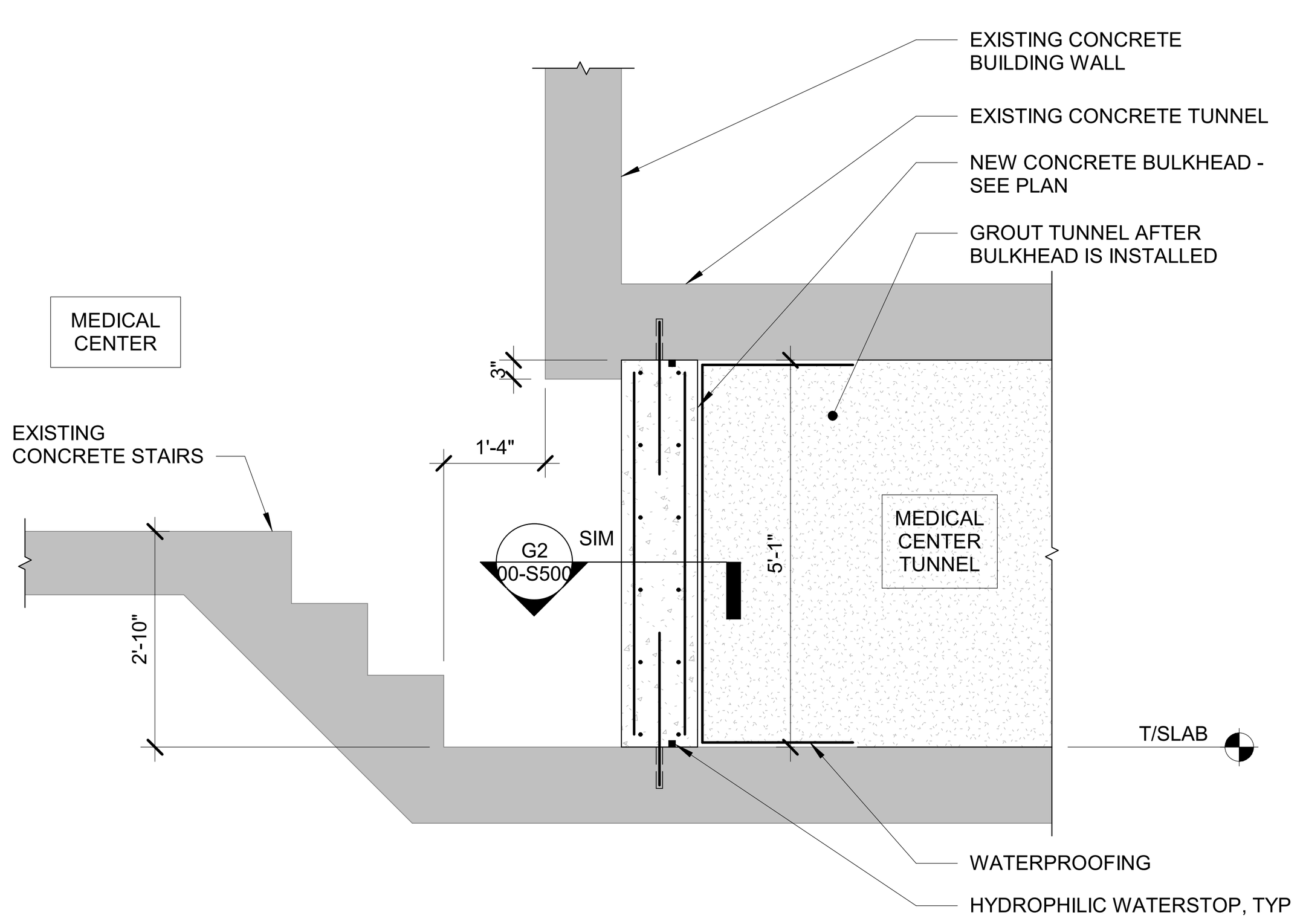
A3 MEDICAL CENTER PLAN

1/2" = 1'-0" 0 3'



E3 MEDICAL CENTER TUNNEL BUILDING CONNECTION

NOT TO SCALE



A5 MEDICAL CENTER SECTION

1/2" = 1'-0" 0 3'

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MEDICAL CENTER

12-S129

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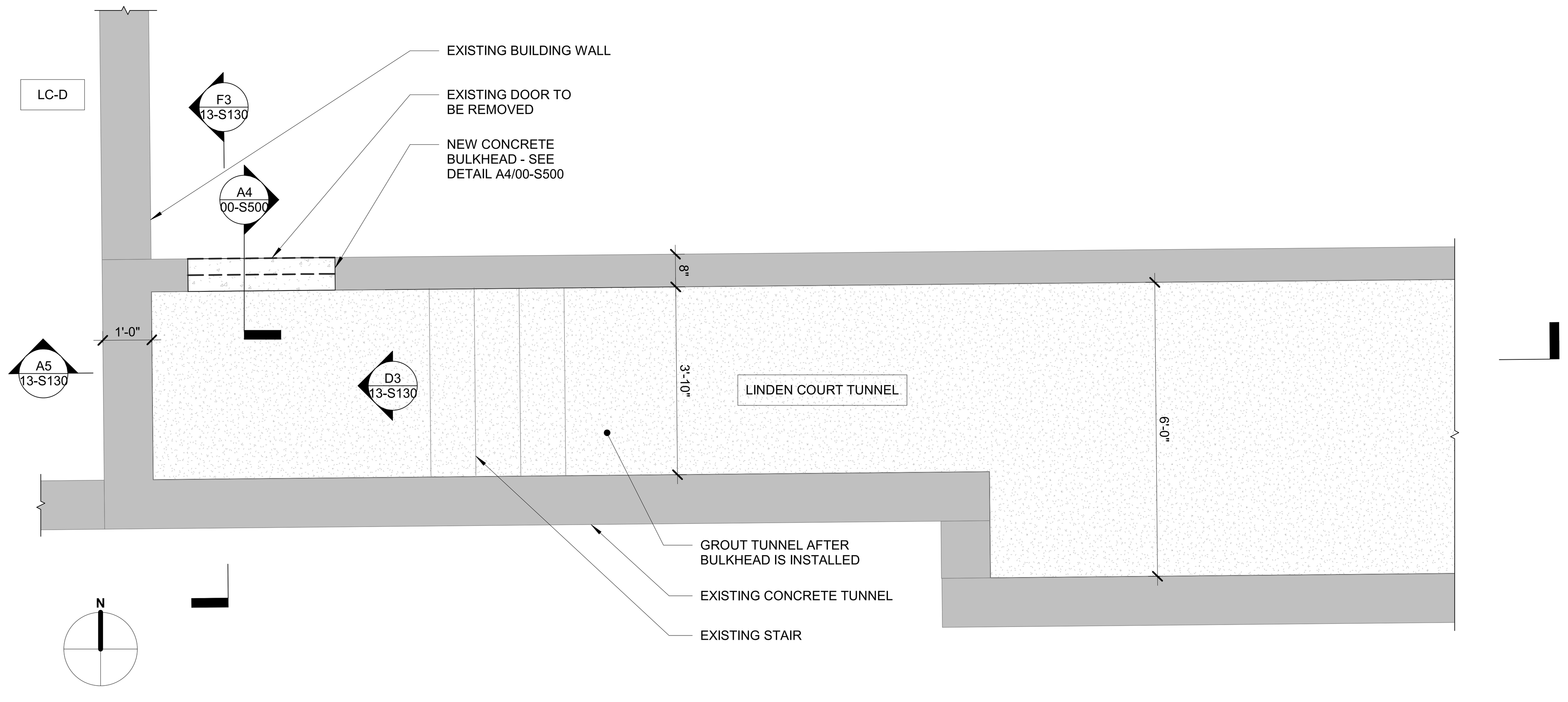
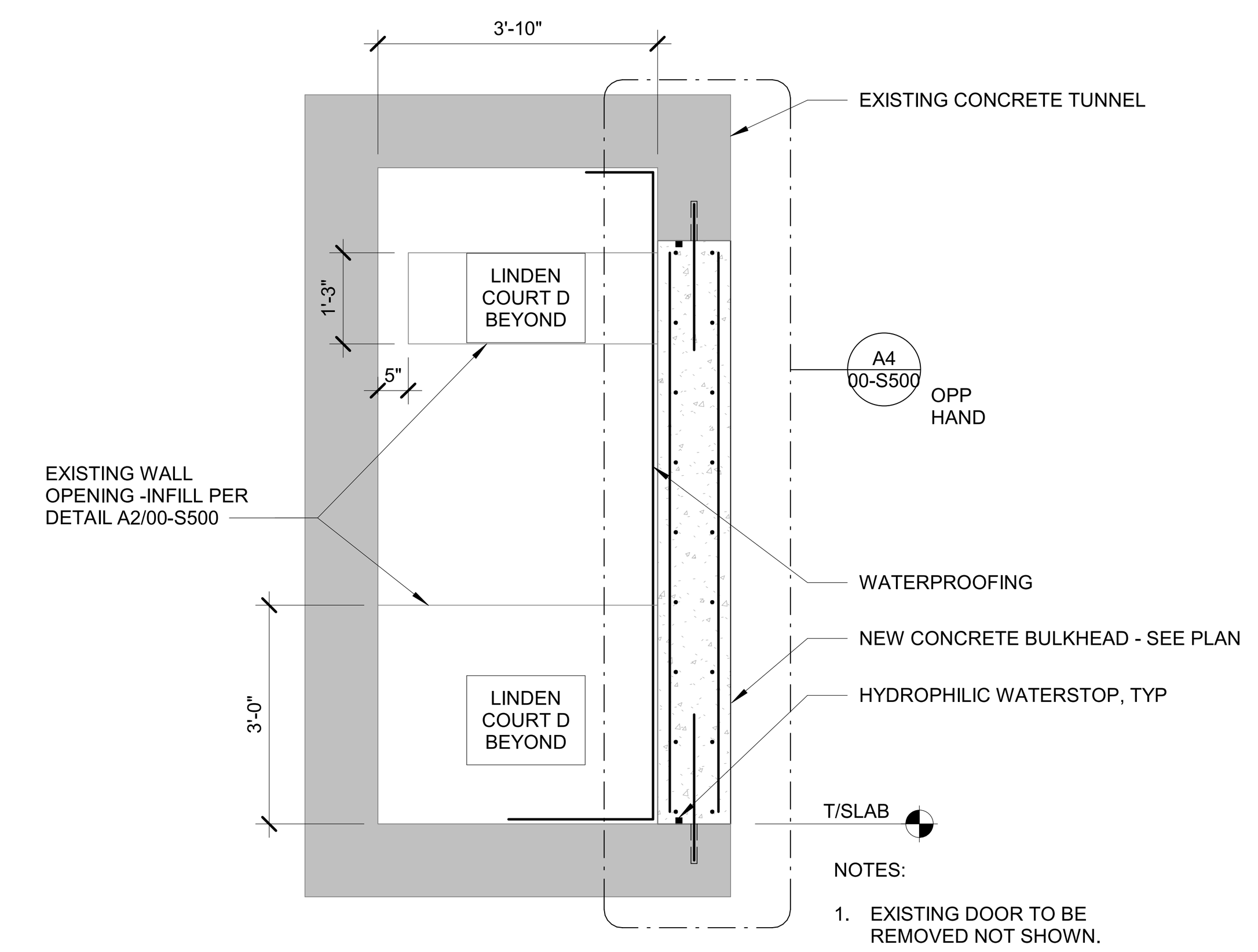


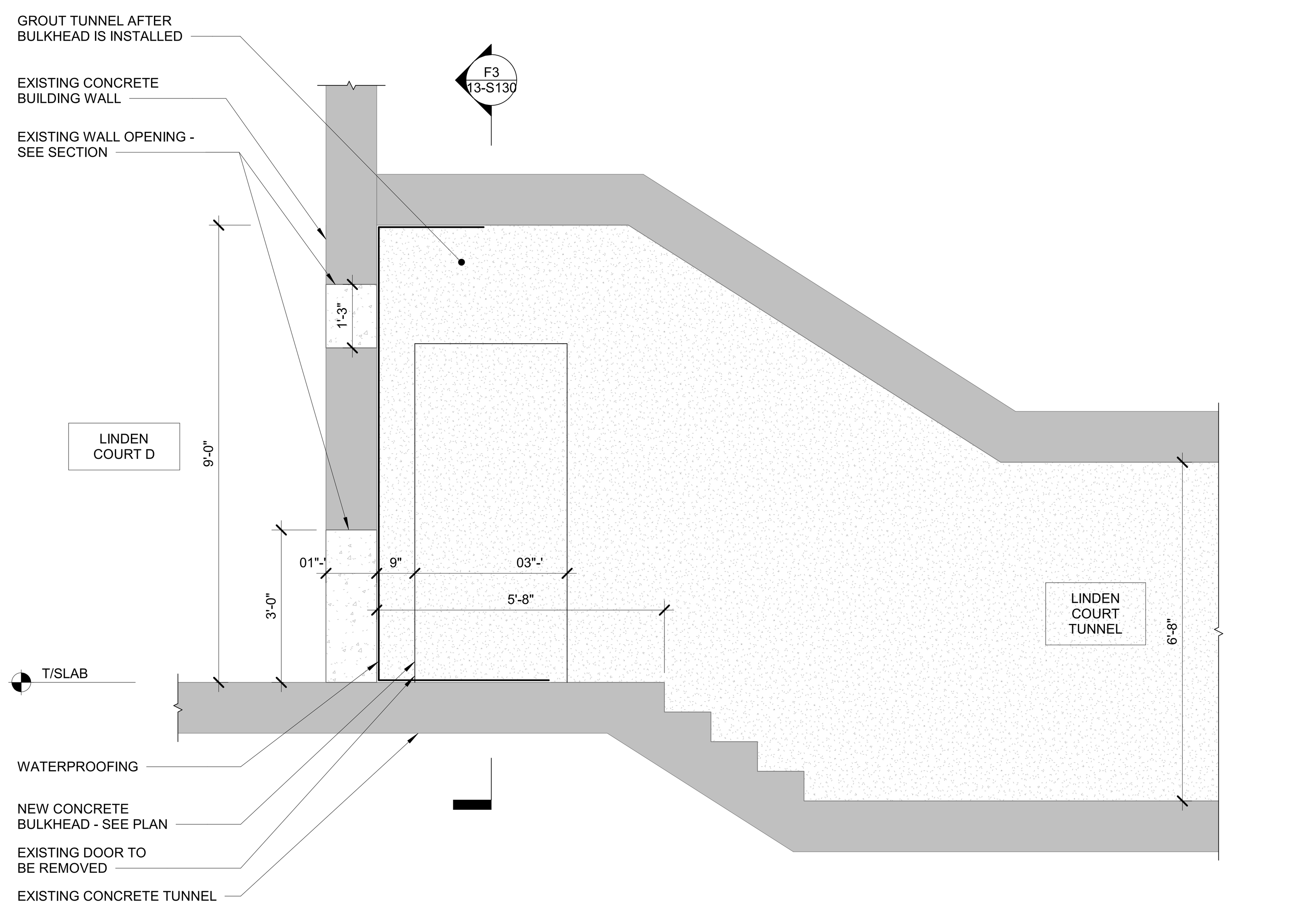
A3 LINDEN COURT D PLAN
1/2" = 1'-0"

D3 LINDEN COURT TUNNEL BUILDING CONNECTION
1/2" = 1'-0"



NOTES:
1. EXISTING DOOR TO BE REMOVED NOT SHOWN.

F3 LINDEN COURT D SECTION
1/2" = 1'-0"



A5 LINDEN COURT D SECTION
1/2" = 1'-0"

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER 9275.50
34 CEDAR ST, WOODWARD, IA 50276

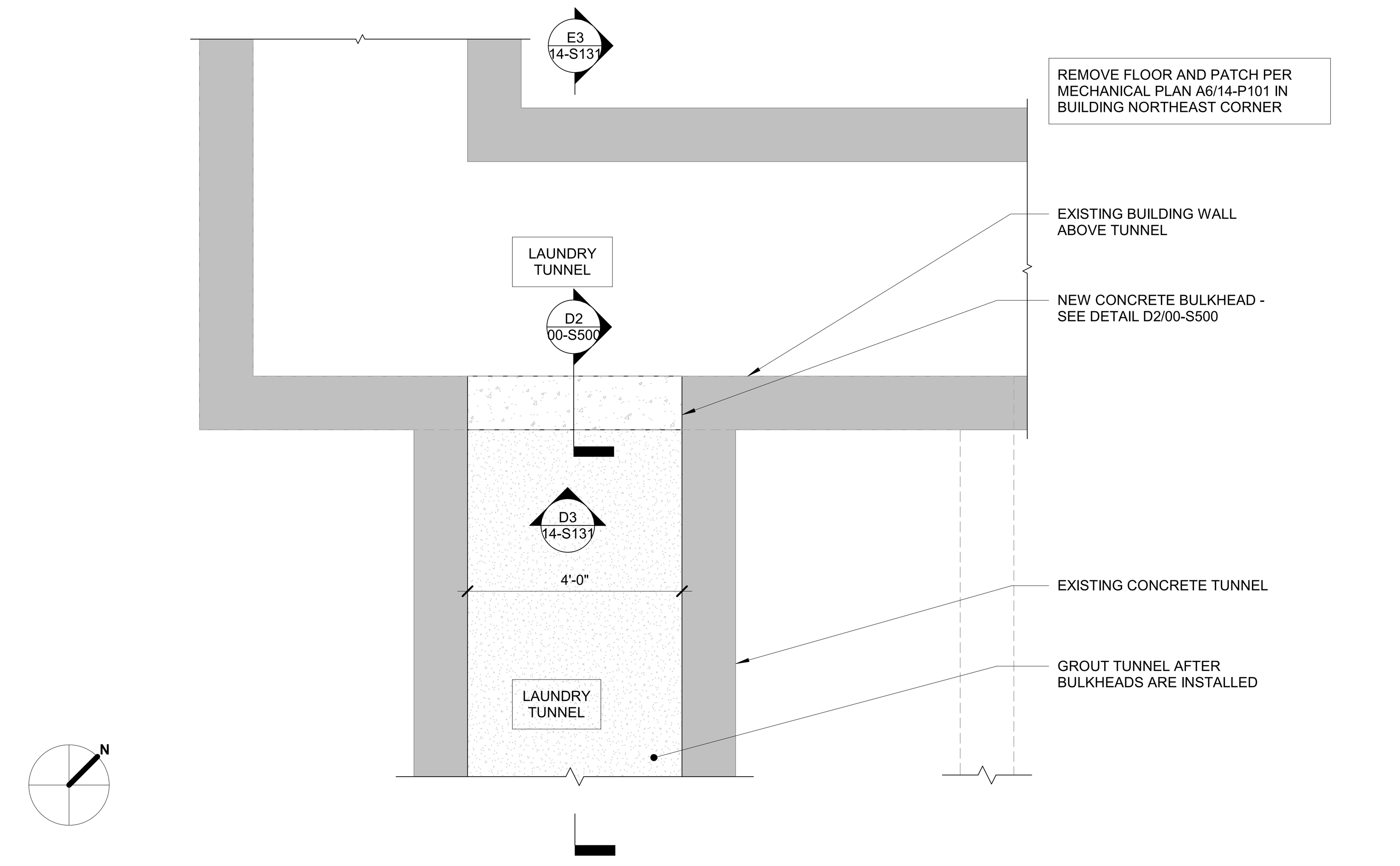
PRELIMINARY - NOT FOR CONSTRUCTION

DRAWN BY	KAB
APPROVED BY	MM
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

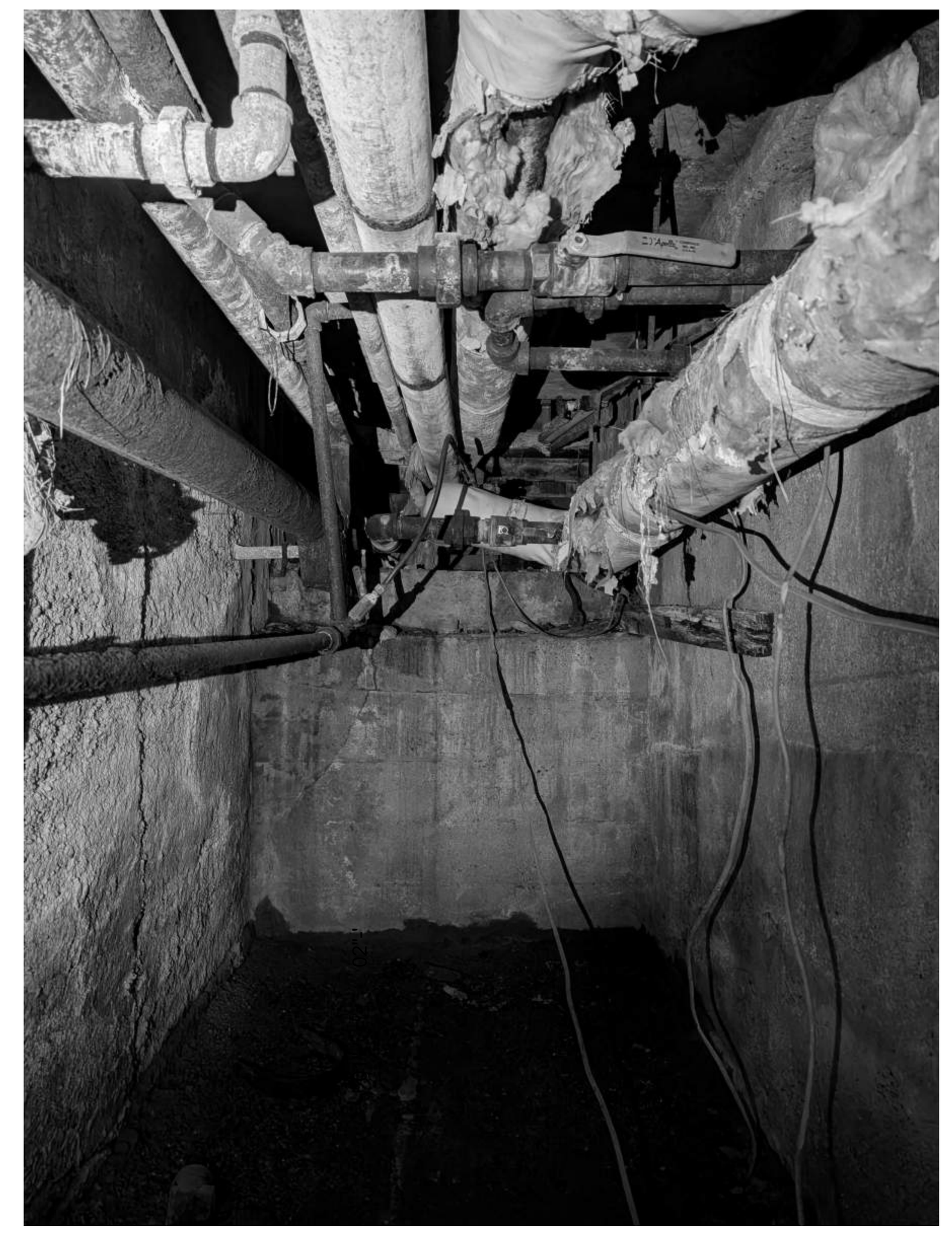
LINDEN COURT D

13-S130

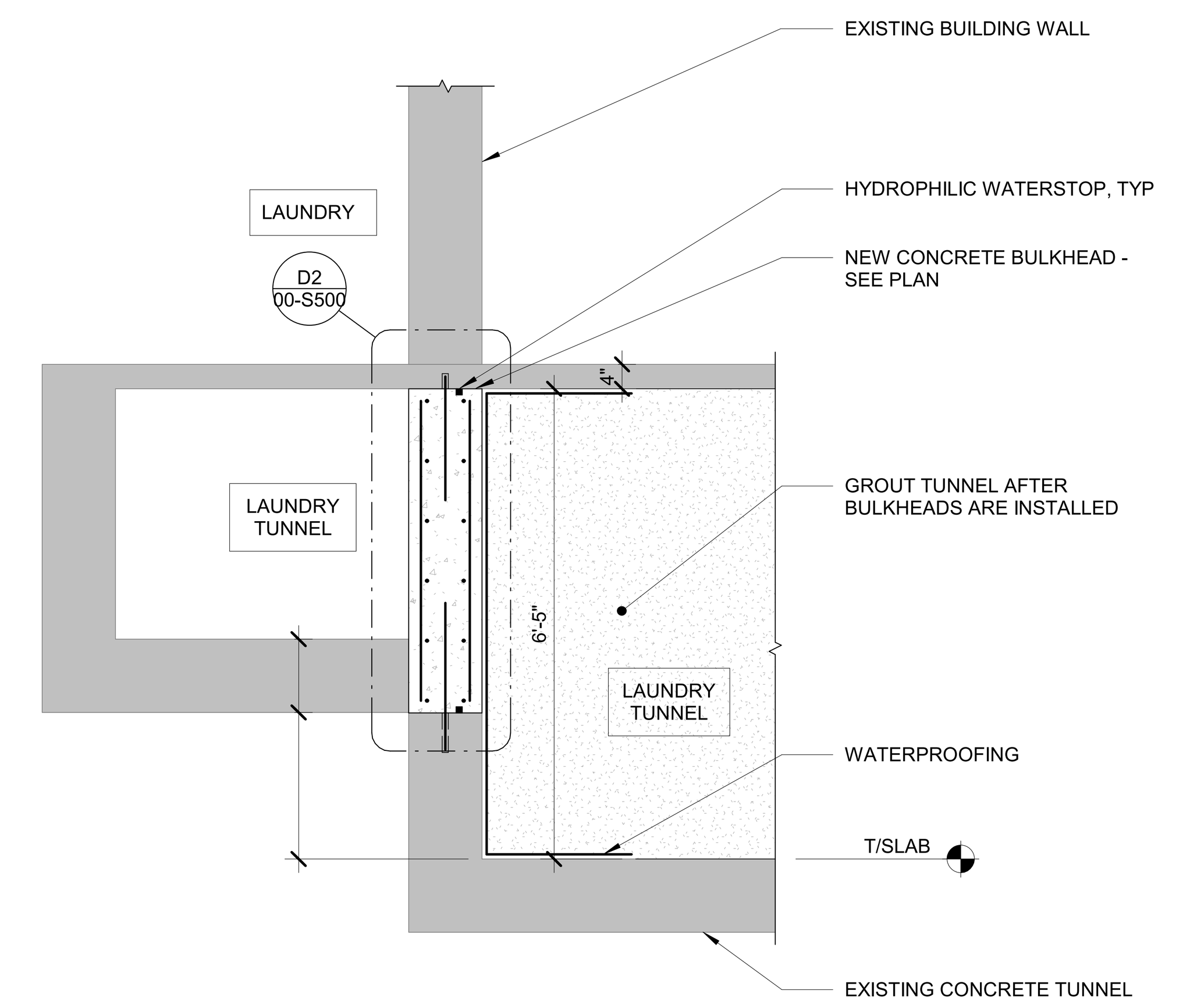
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR. DIMENSIONS PROVIDED ARE FOR RELATIVE SCOPE OF PROJECT, AND SHOULD NOT BE USED TO CALCULATE QUANTITIES WITHOUT FIELD VERIFICATION OF CONDITIONS FIRST.



A3 LAUNDRY PLAN
1/2" = 1'-0" 0 3'



D3 LAUNDRY TUNNEL BUILDING CONNECTION
NOT TO SCALE



E3 LAUNDRY SECTION
1/2" = 1'-0" 0 3'

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FIELD BOOK	

LAUNDRY

14-S131

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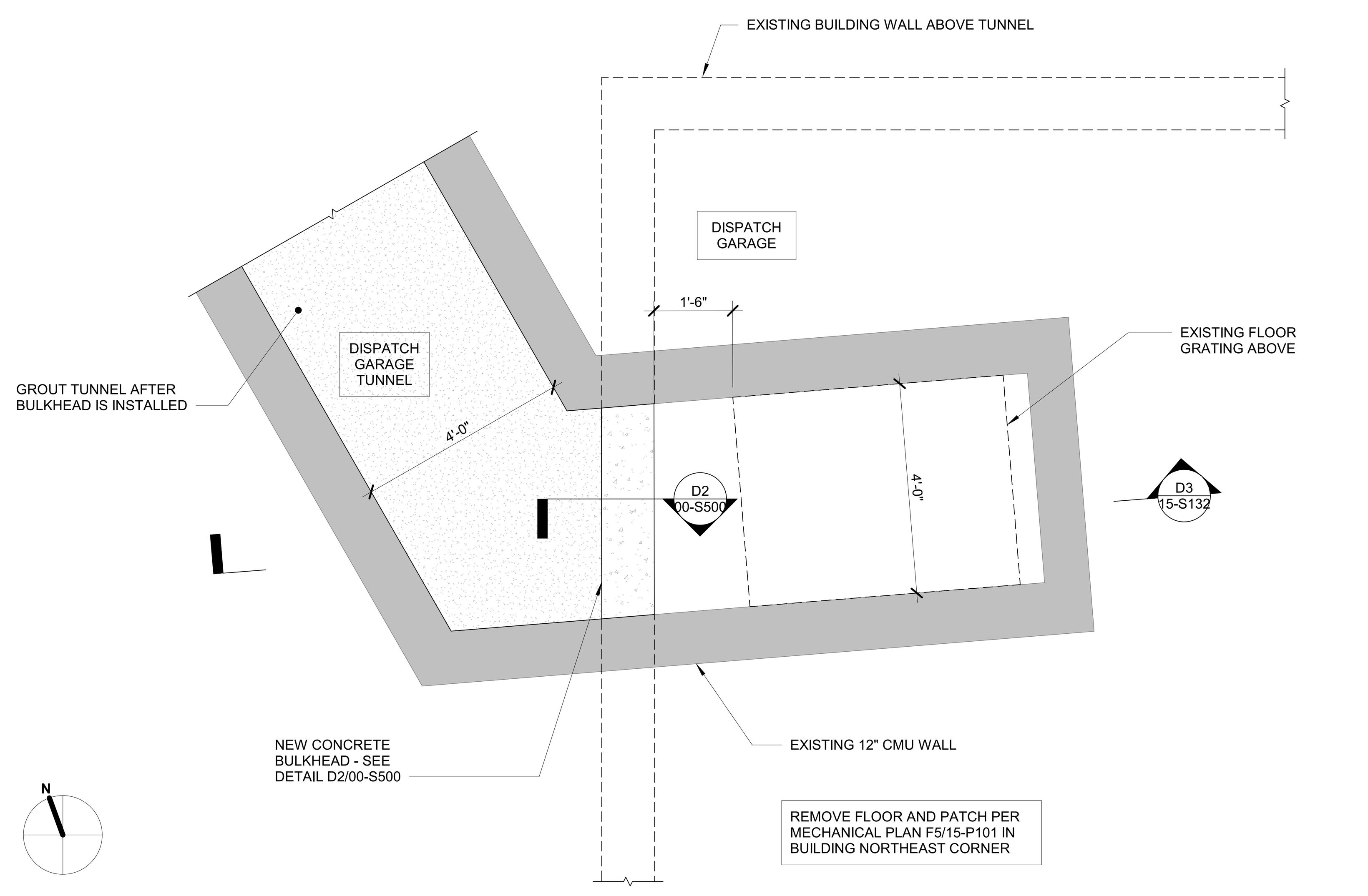
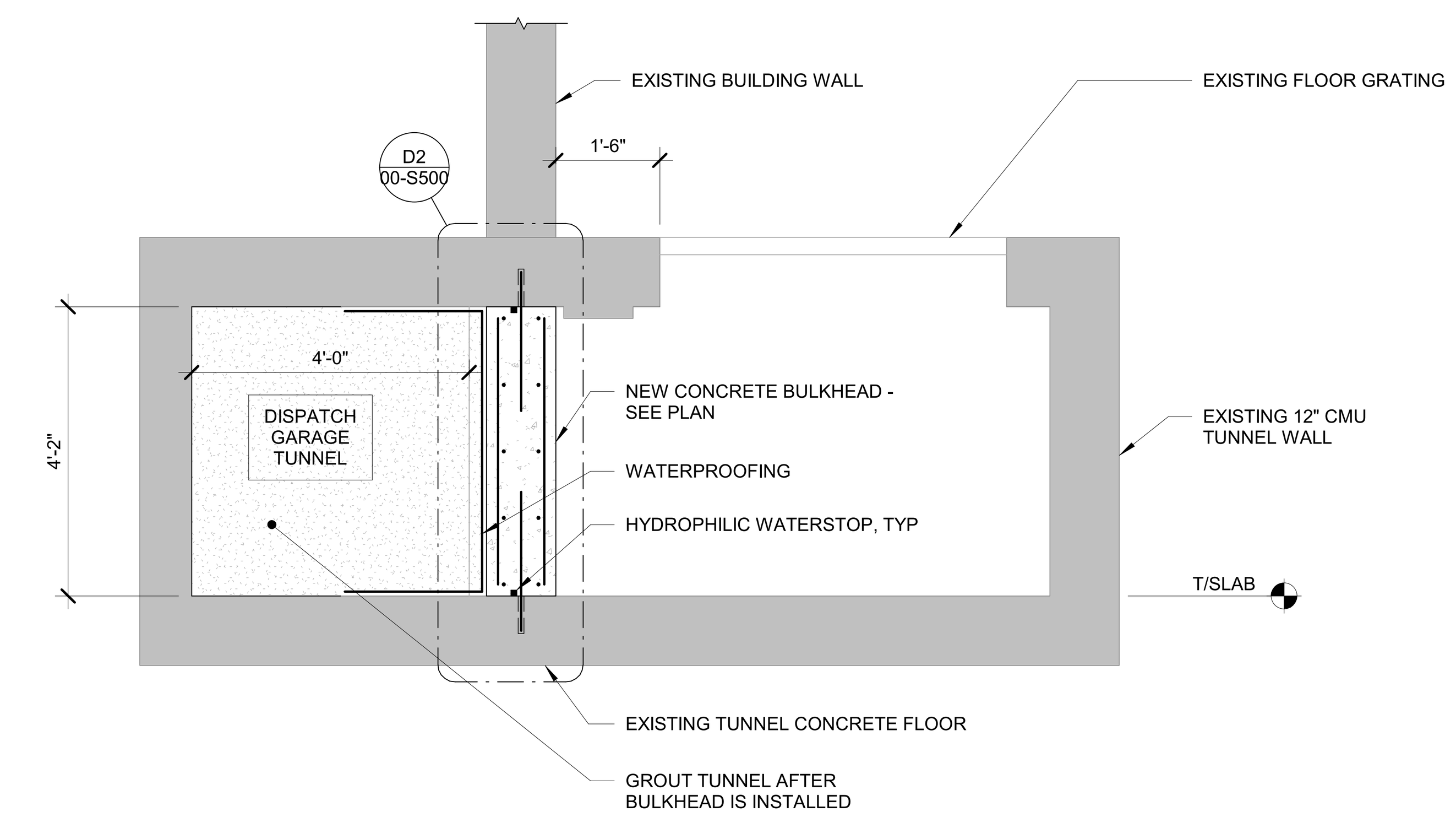


A3 DISPATCH GARAGE PLAN
1/2" = 1'-0"



D3 DISPATCH GARAGE SECTION
1/2" = 1'-0"

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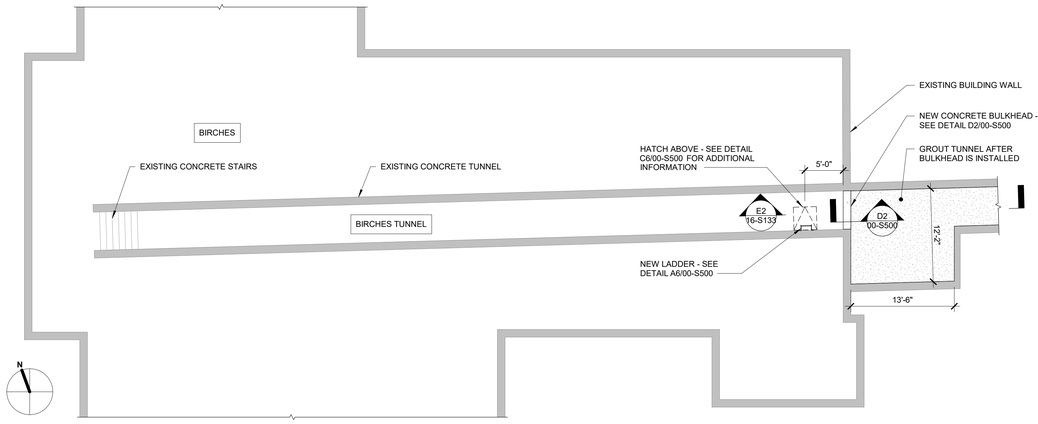
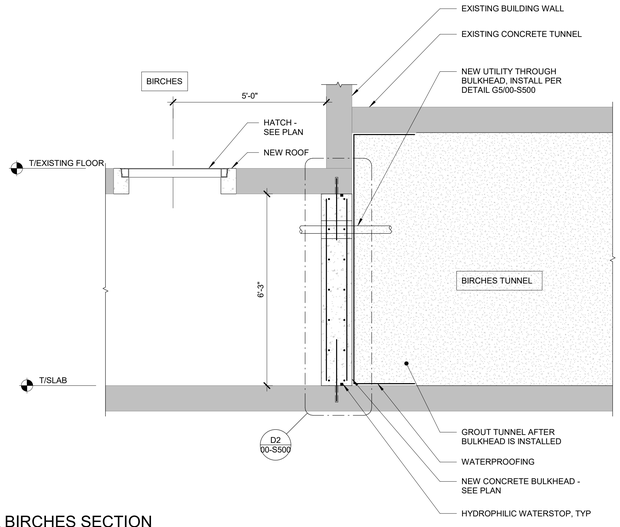
DISPATCH GARAGE

15-S132

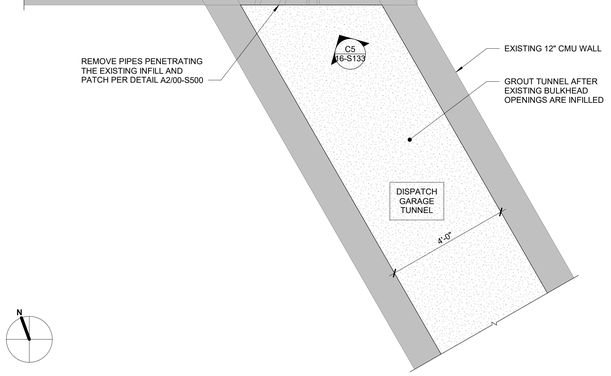


A2 BIRCHES PLAN AT BIRCHES TUNNEL
1/8" = 1'-0" 0 12'



E2 BIRCHES SECTION
1/2" = 1'-0" 0 3'

ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR. DIMENSIONS PROVIDED ARE FOR RELATIVE SCOPE OF PROJECT, AND SHOULD NOT BE USED TO CALCULATE QUANTITIES WITHOUT FIELD VERIFICATION OF CONDITIONS FIRST.



A5 BIRCHES PLAN AT DISPATCH GARAGE TUNNEL
1/2" = 1'-0" 0 3'

C5 DISPATCH GARAGE TUNNEL BUILDING CONNECTION TO BIRCHES
NOT TO SCALE

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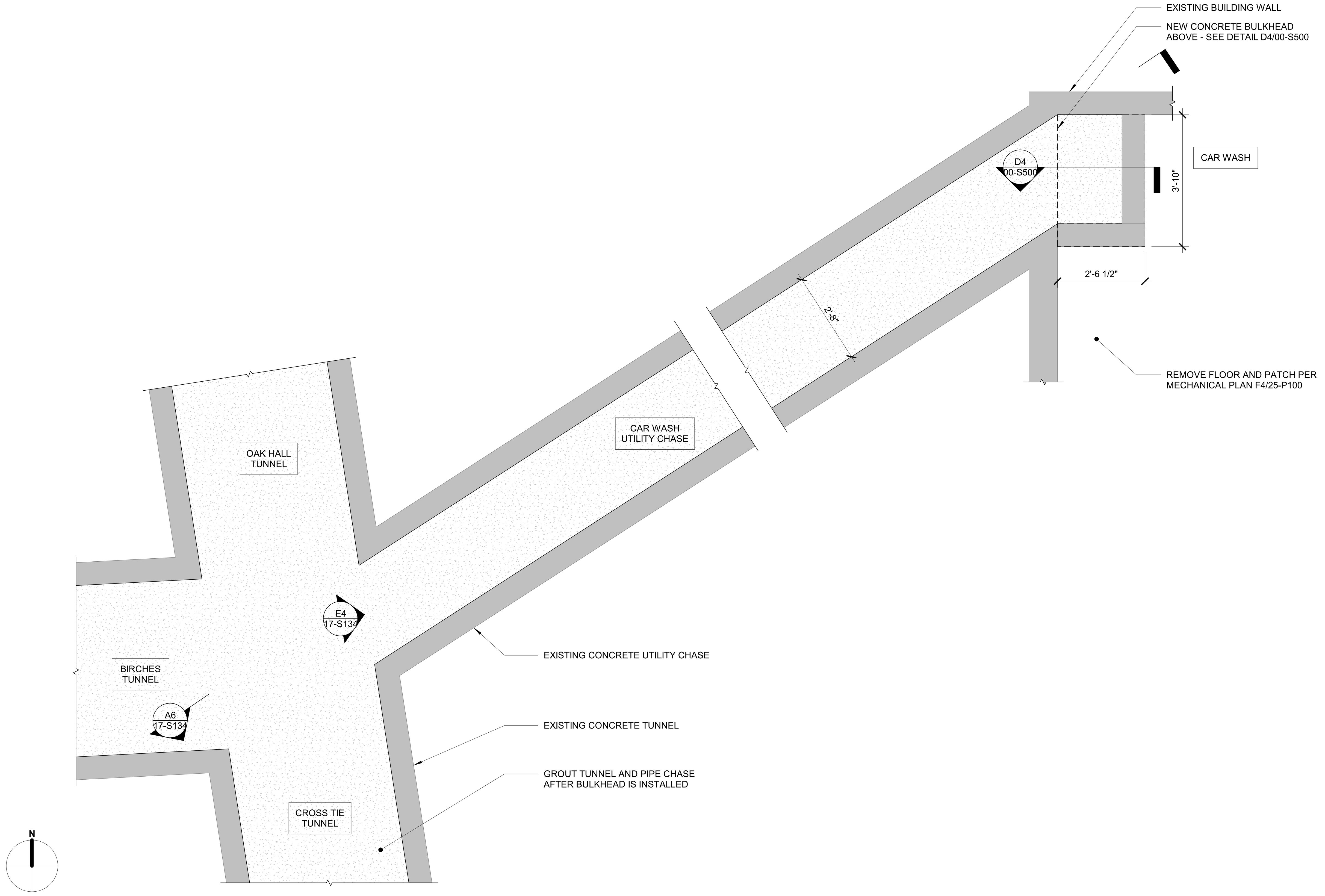
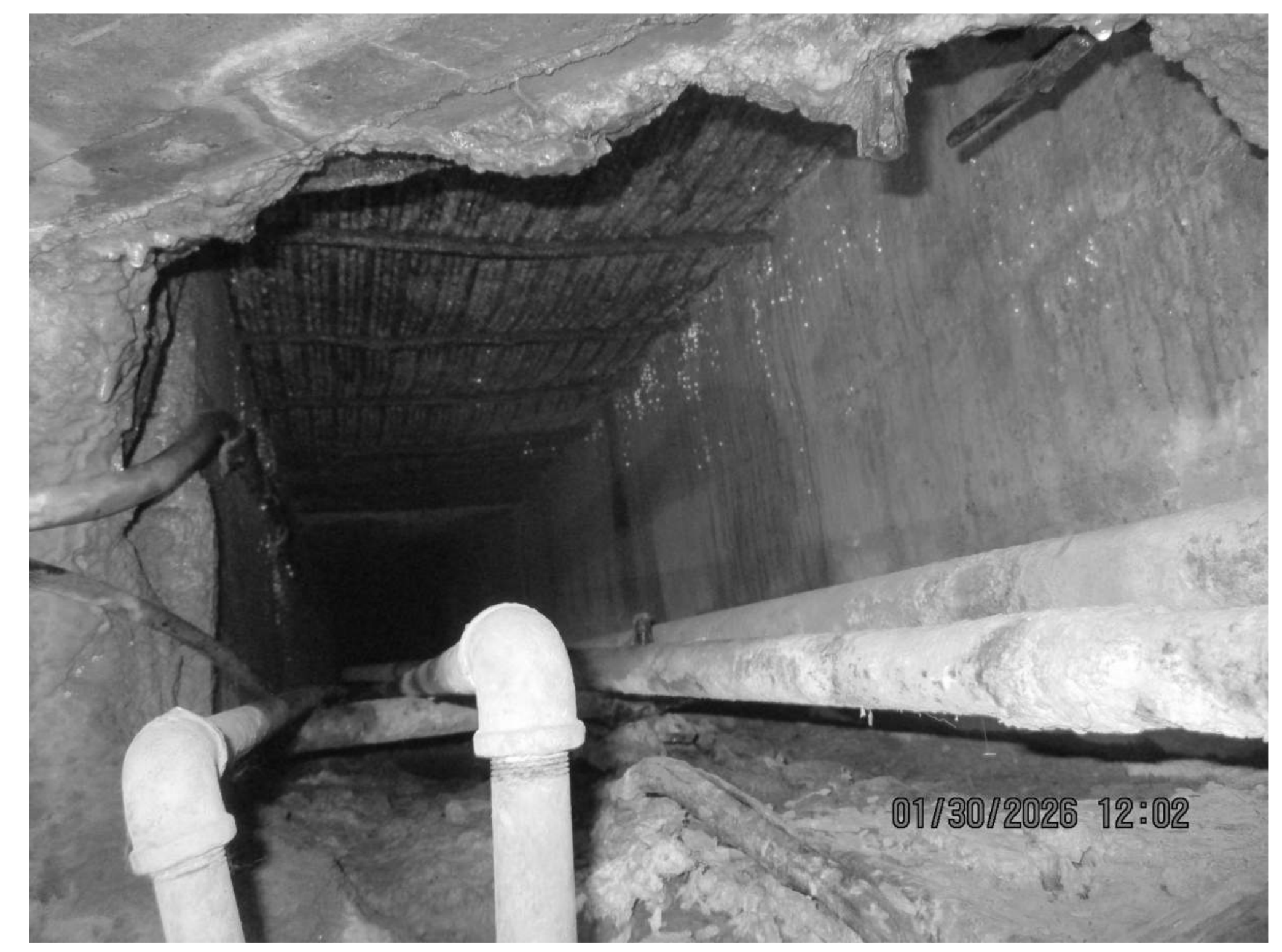
BIRCHES

16-S133

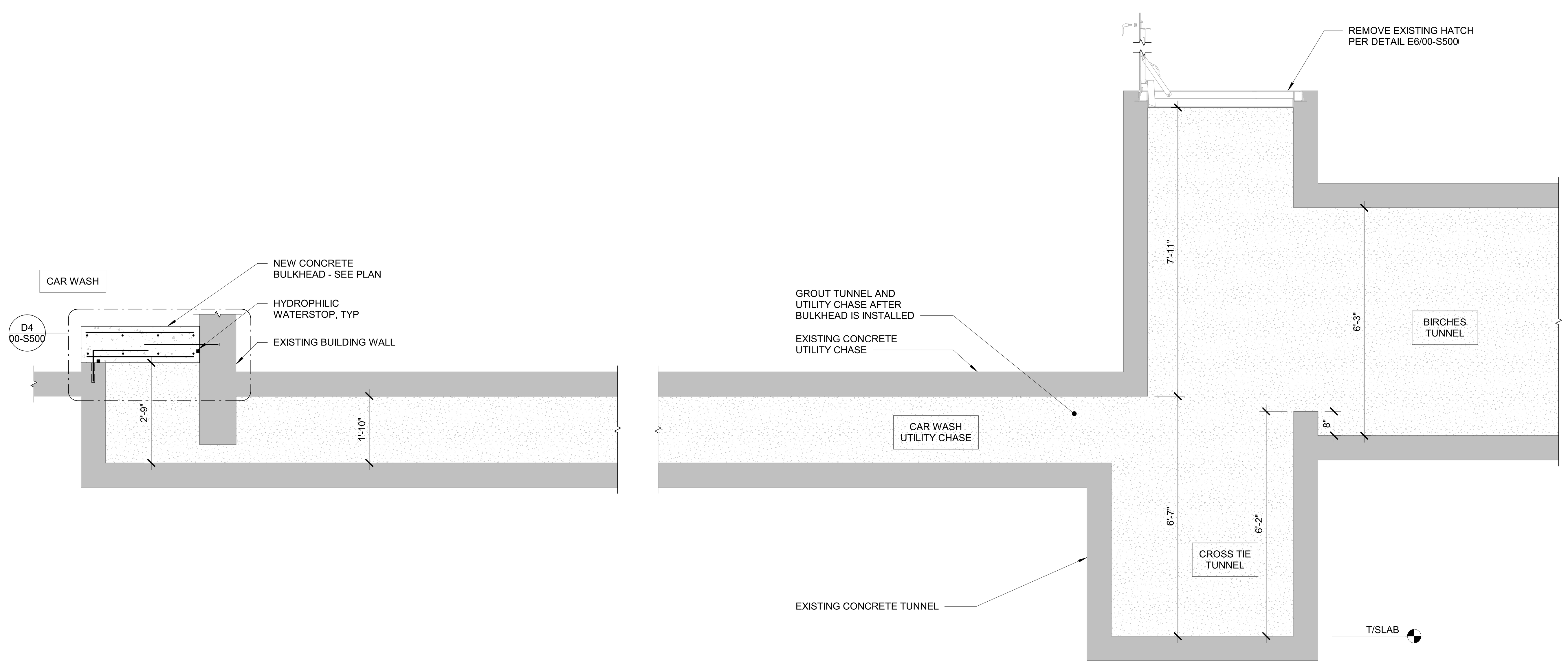
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR, DIMENSIONS PROVIDED ARE FOR RELATIVE SCOPE OF PROJECT, AND SHOULD NOT BE USED TO CALCULATE QUANTITIES WITHOUT FIELD VERIFICATION OF CONDITIONS FIRST.



A4 CAR WASH UTILITY CHASE PLAN
1/2" = 1'-0" 0 3'



E4 CAR WASH UTILITY CHASE
NOT TO SCALE



A6 CAR WASH UTILITY CHASE SECTION
1/2" = 1'-0" 0 3'

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

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IDAS PROJECT NUMBER 9275.50
34 CEDAR ST, WOODWARD, IA 50276

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CAR WASH UTILITY CHASE

17-S134

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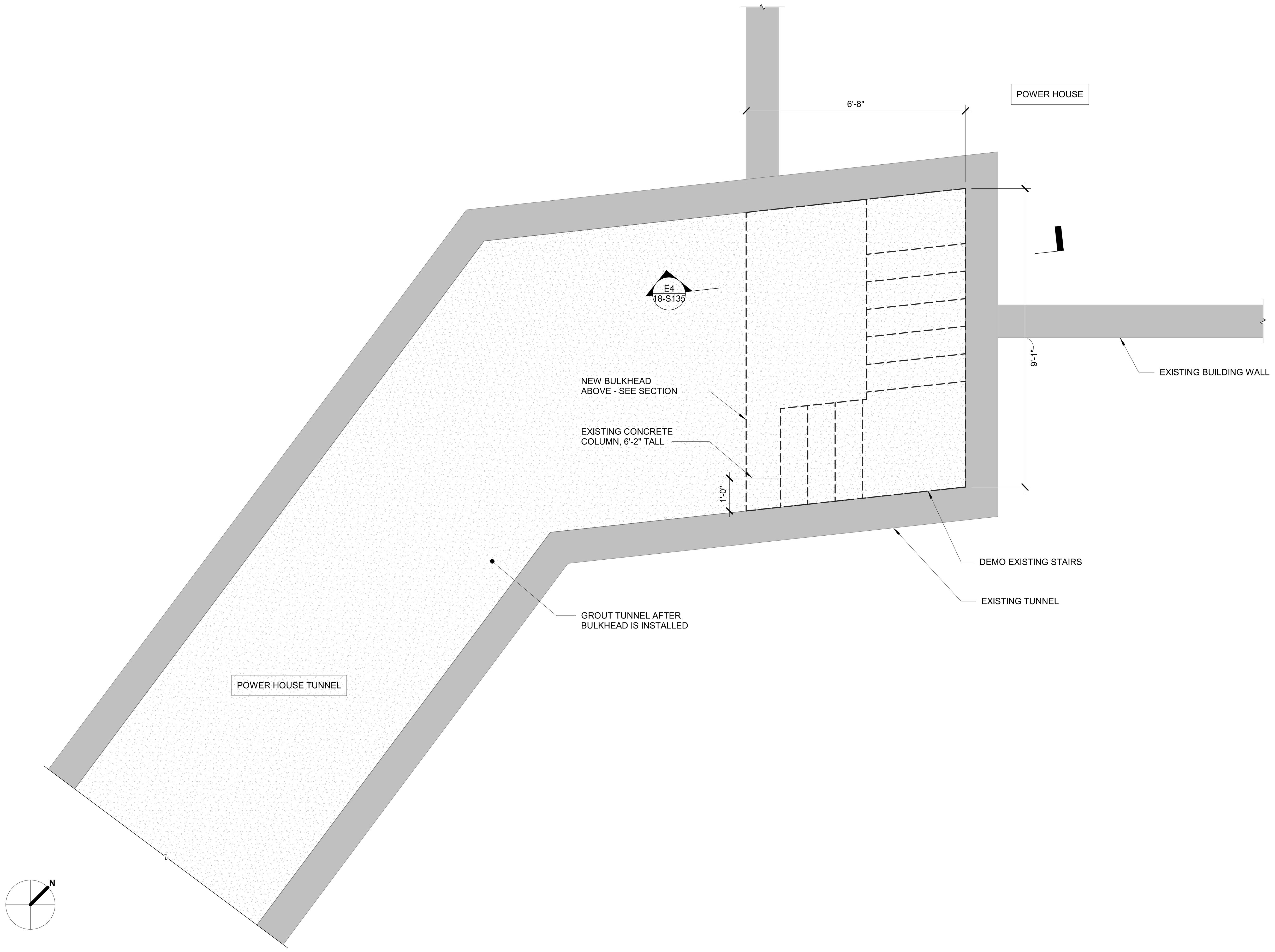
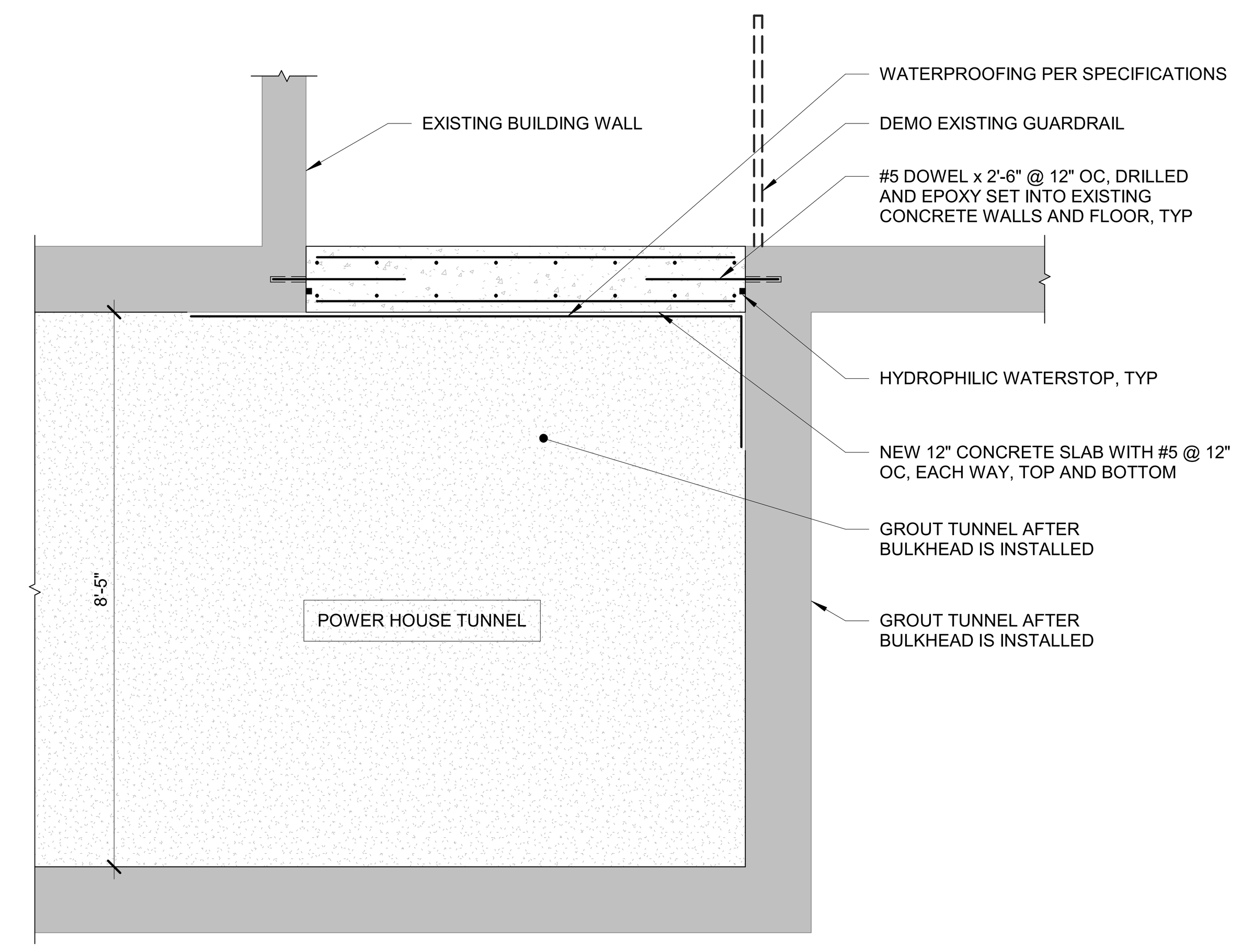


A4 POWER HOUSE PLAN
1/2" = 1'-0"



E4 POWER HOUSE SECTION
1/2" = 1'-0"

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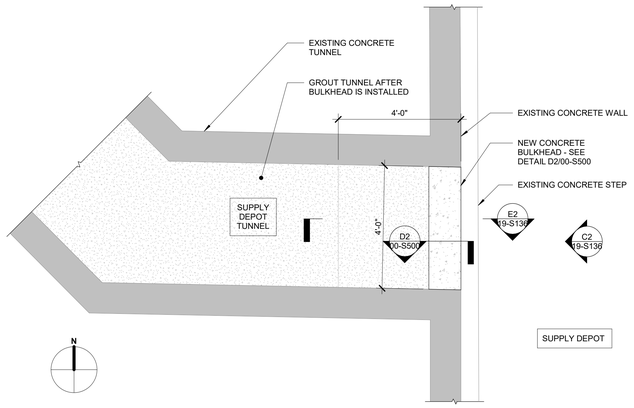
FIELD BOOK	

POWER HOUSE

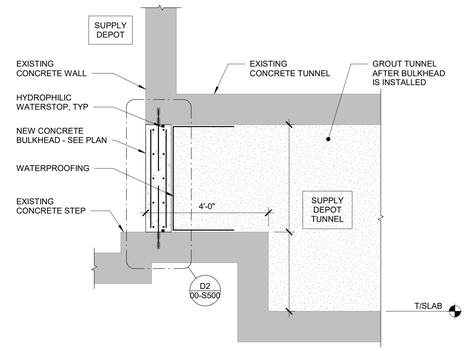
18-S135

ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR. DIMENSIONS PROVIDED ARE FOR RELATIVE SCOPE OF PROJECT, AND SHOULD NOT BE USED TO CALCULATE QUANTITIES WITHOUT FIELD VERIFICATION OF CONDITIONS FIRST.



A2 SUPPLY DEPOT PLAN
1/2" = 1'-0" 0 3'

C2 SUPPLY DEPOT TUNNEL BUILDING CONNECTION
NOT TO SCALE



E2 SUPPLY DEPOT SECTION
1/2" = 1'-0" 0 3'

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 22775.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

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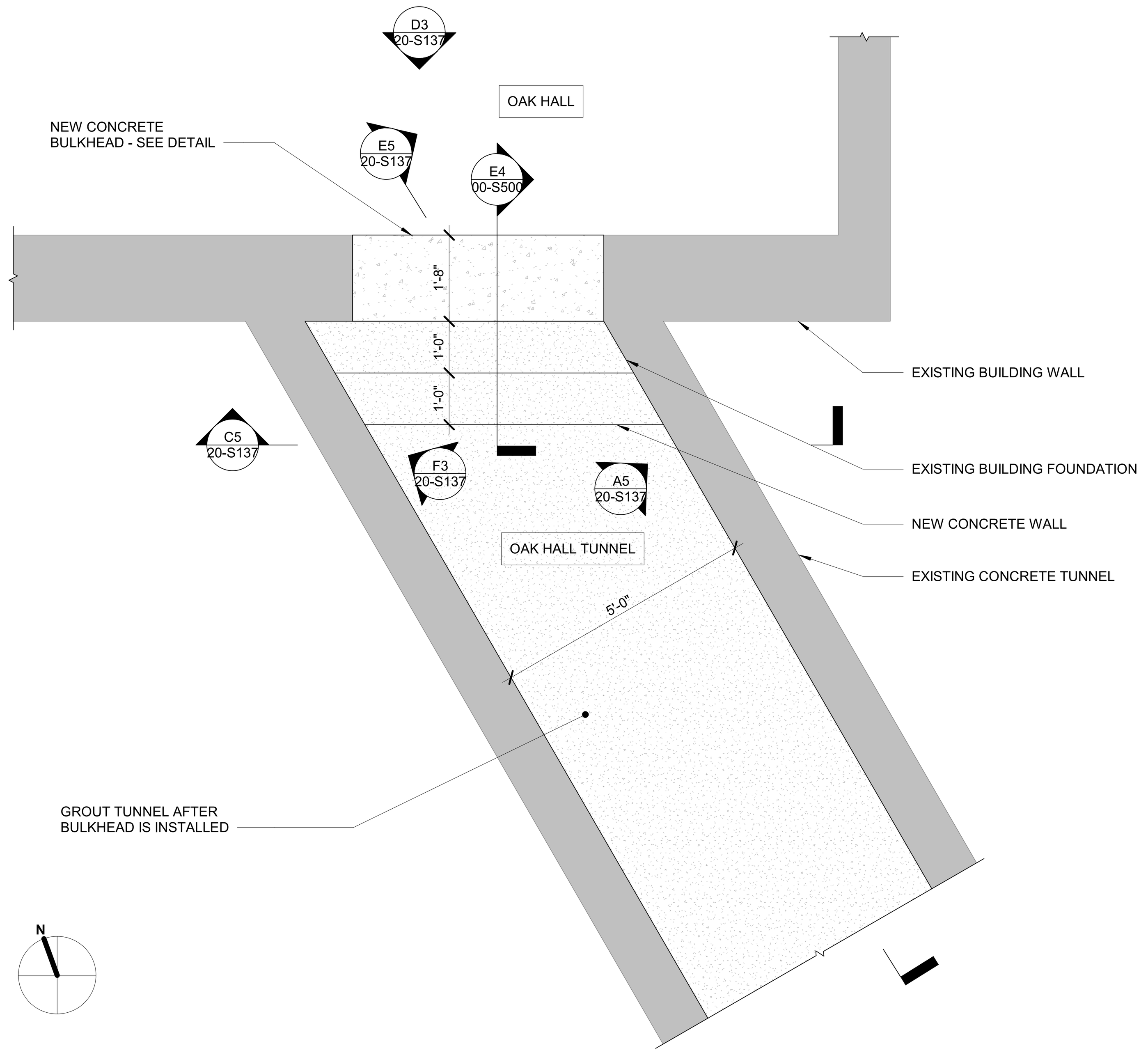
FIELD BOOK	

SUPPLY DEPOT

19-S136

ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR. DIMENSIONS PROVIDED ARE FOR RELATIVE SCOPE OF PROJECT, AND SHOULD NOT BE USED TO CALCULATE QUANTITIES WITHOUT FIELD VERIFICATION OF CONDITIONS FIRST.

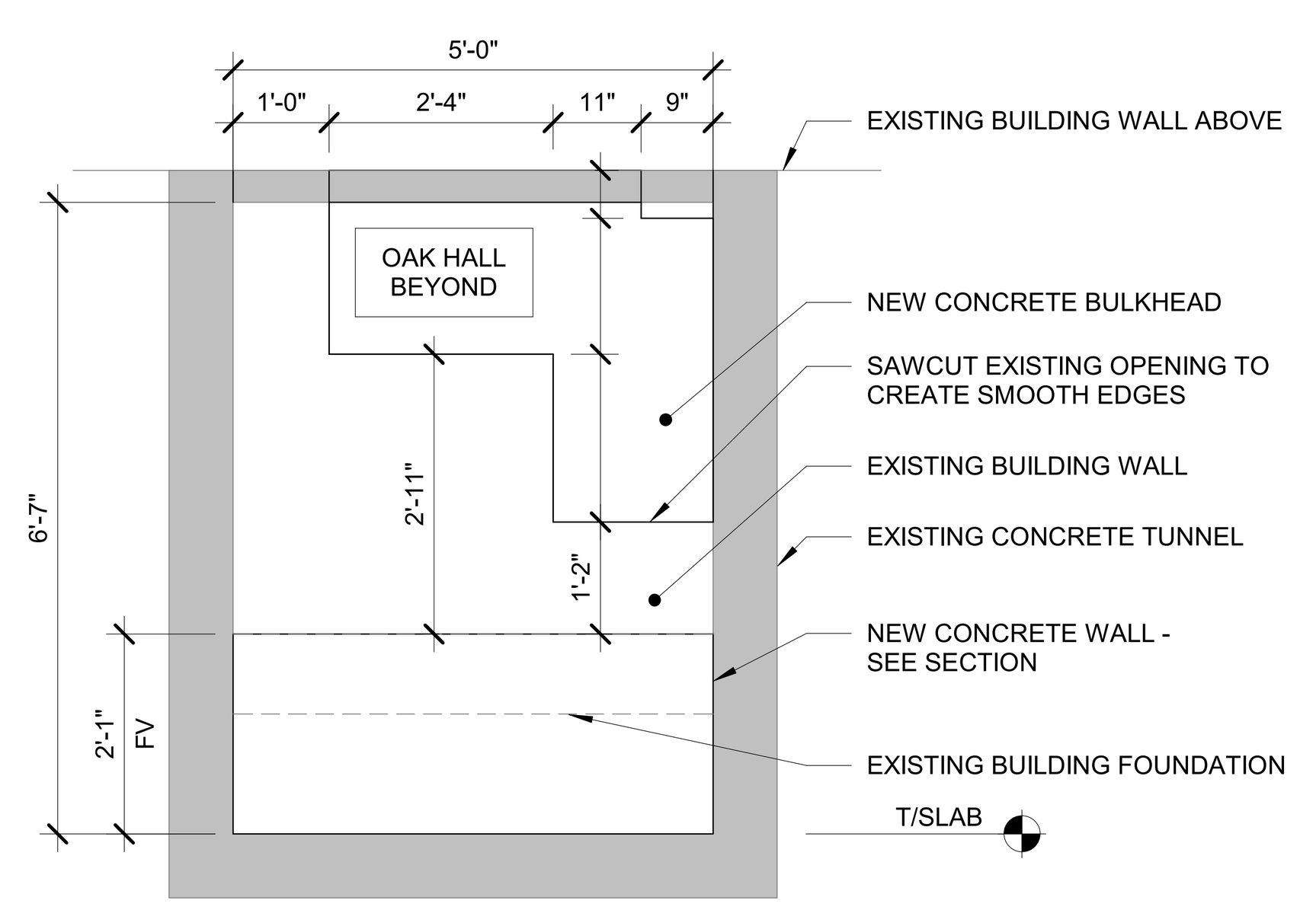


A3 OAK HALL PLAN
1/2" = 1'-0" 0 3'

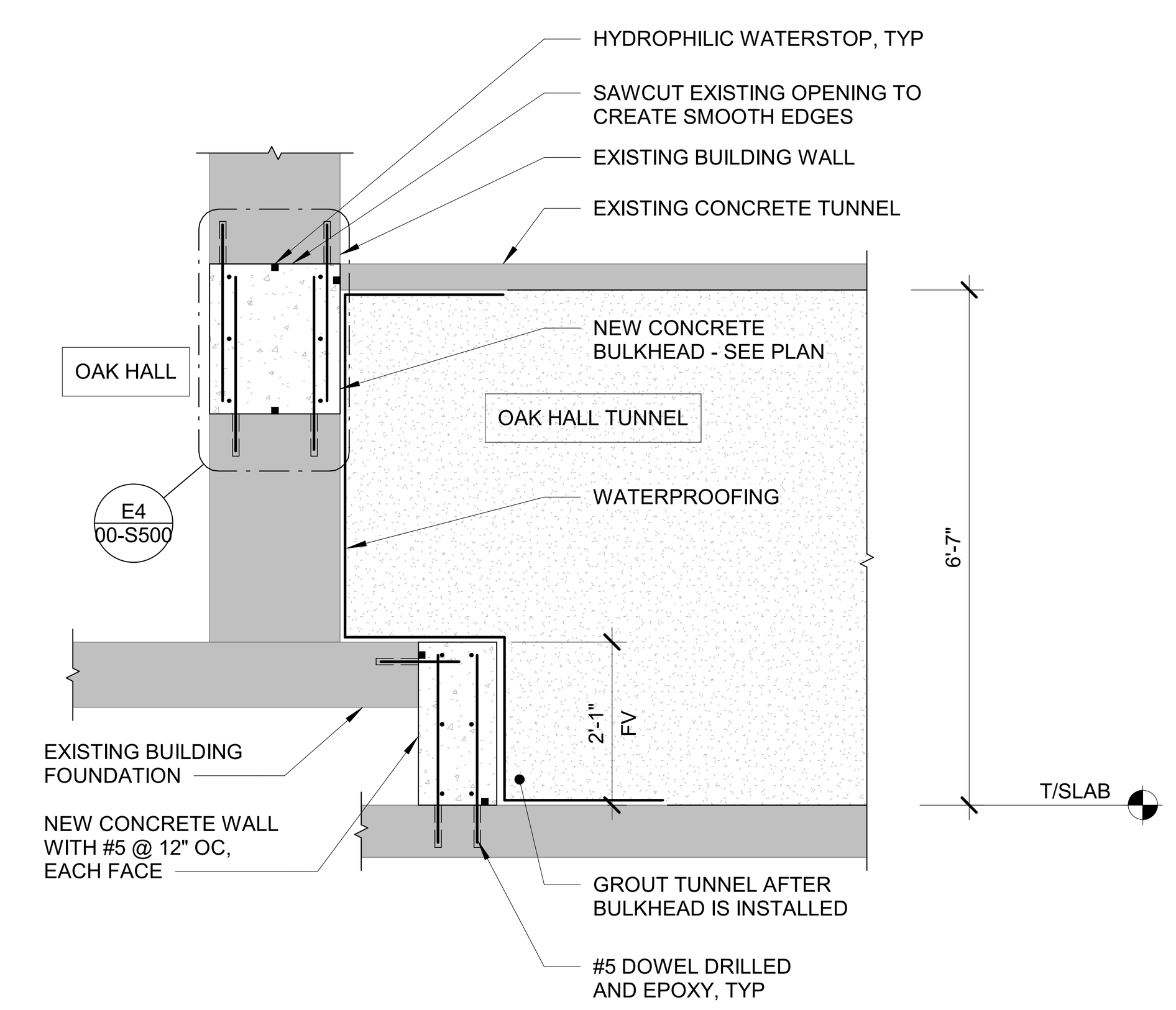
D3 OAK HALL TUNNEL ENTRY BUILDING CONNECTION
NOT TO SCALE

F3 OAK HALL OPENING AT TUNNEL WALL
NOT TO SCALE

A5 OAK HALL OPENING AT TUNNEL WALL
NOT TO SCALE



C5 OAK HALL BUILKHEAD ELEVATION
1/2" = 1'-0" 0 3'



E5 OAK HALL SECTION
1/2" = 1'-0" 0 3'

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

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IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST, WOODWARD, IA 50276

PRELIMINARY - NOT FOR CONSTRUCTION

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ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
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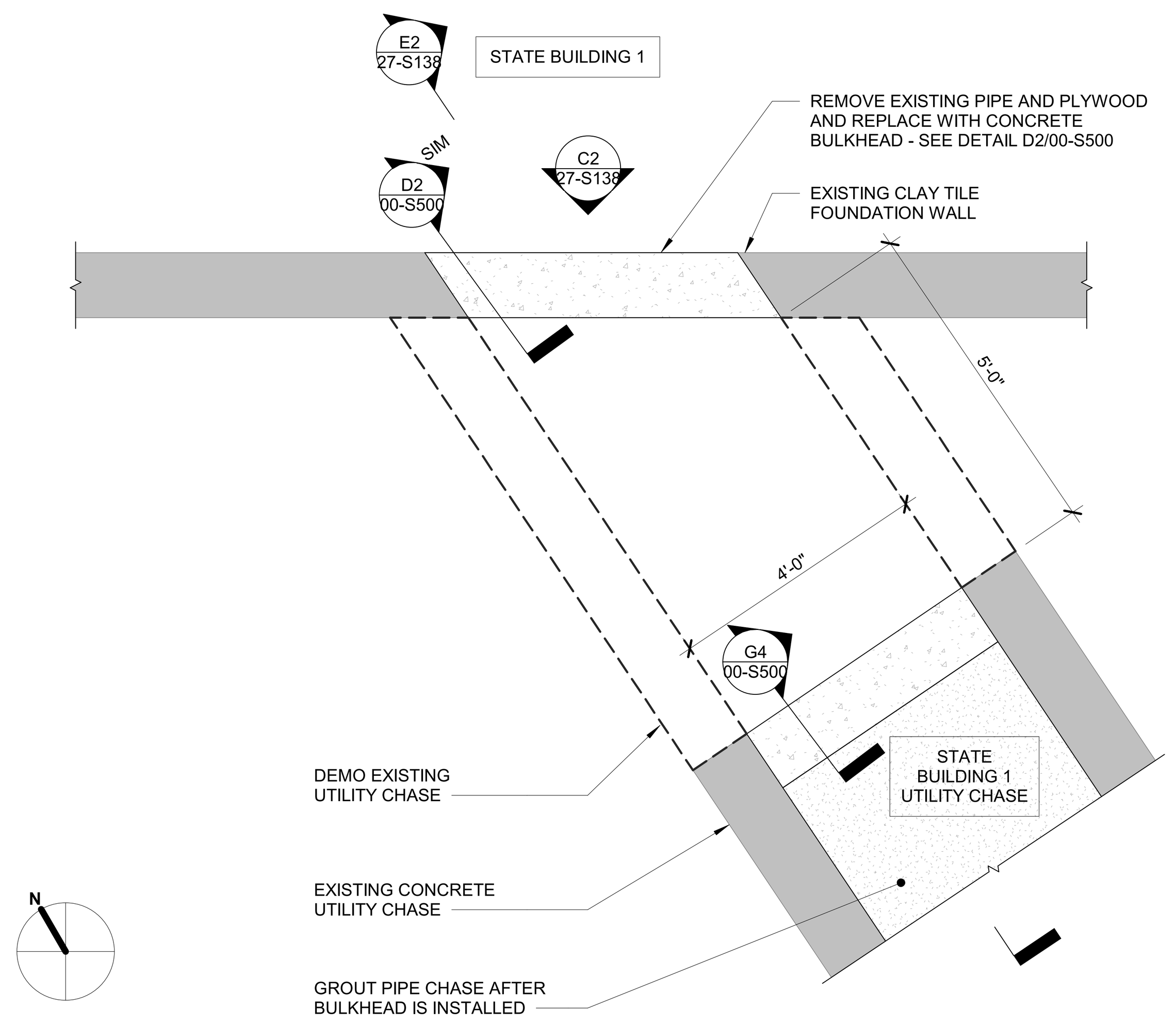
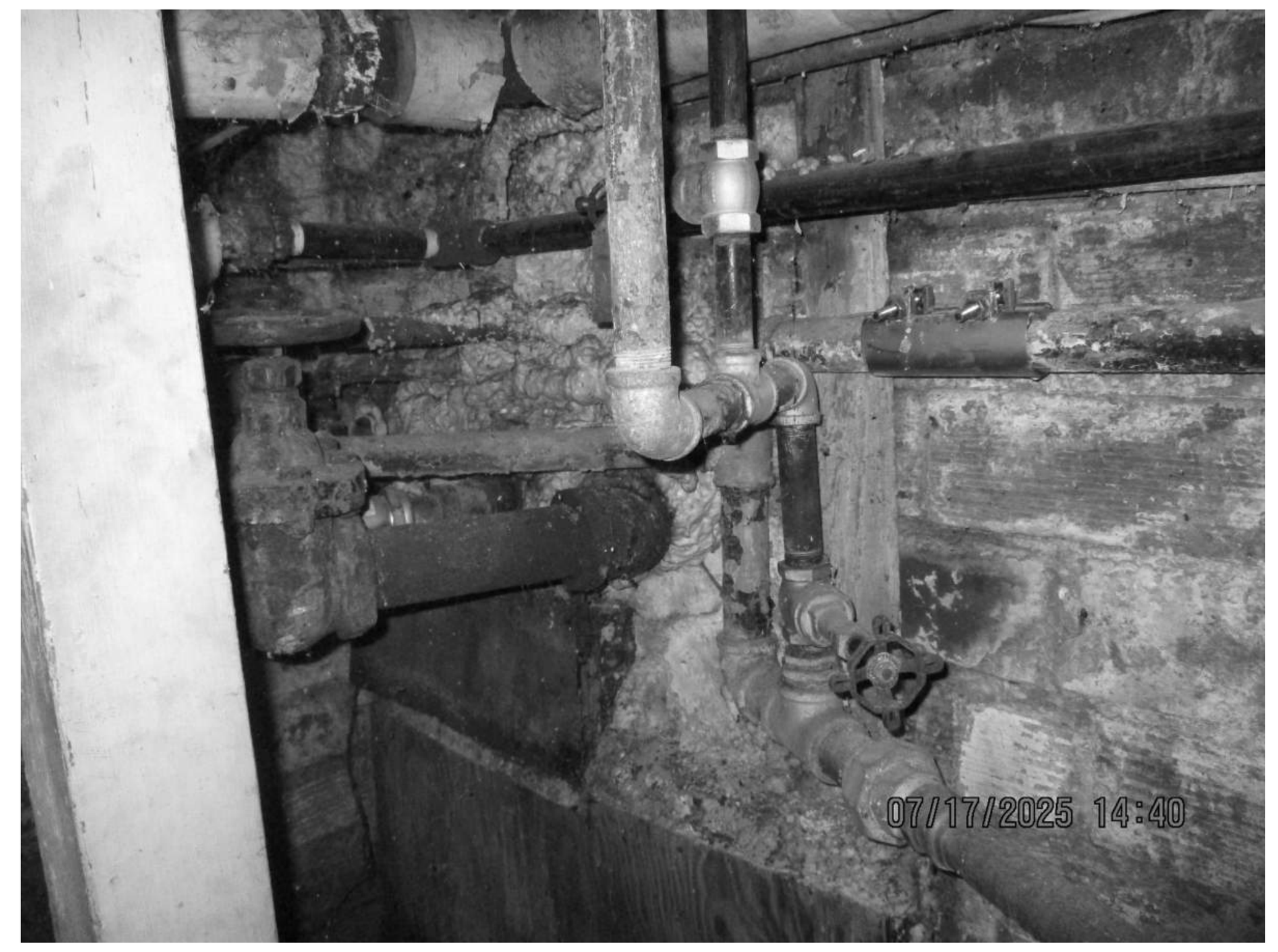
OAK HALL

20-S137

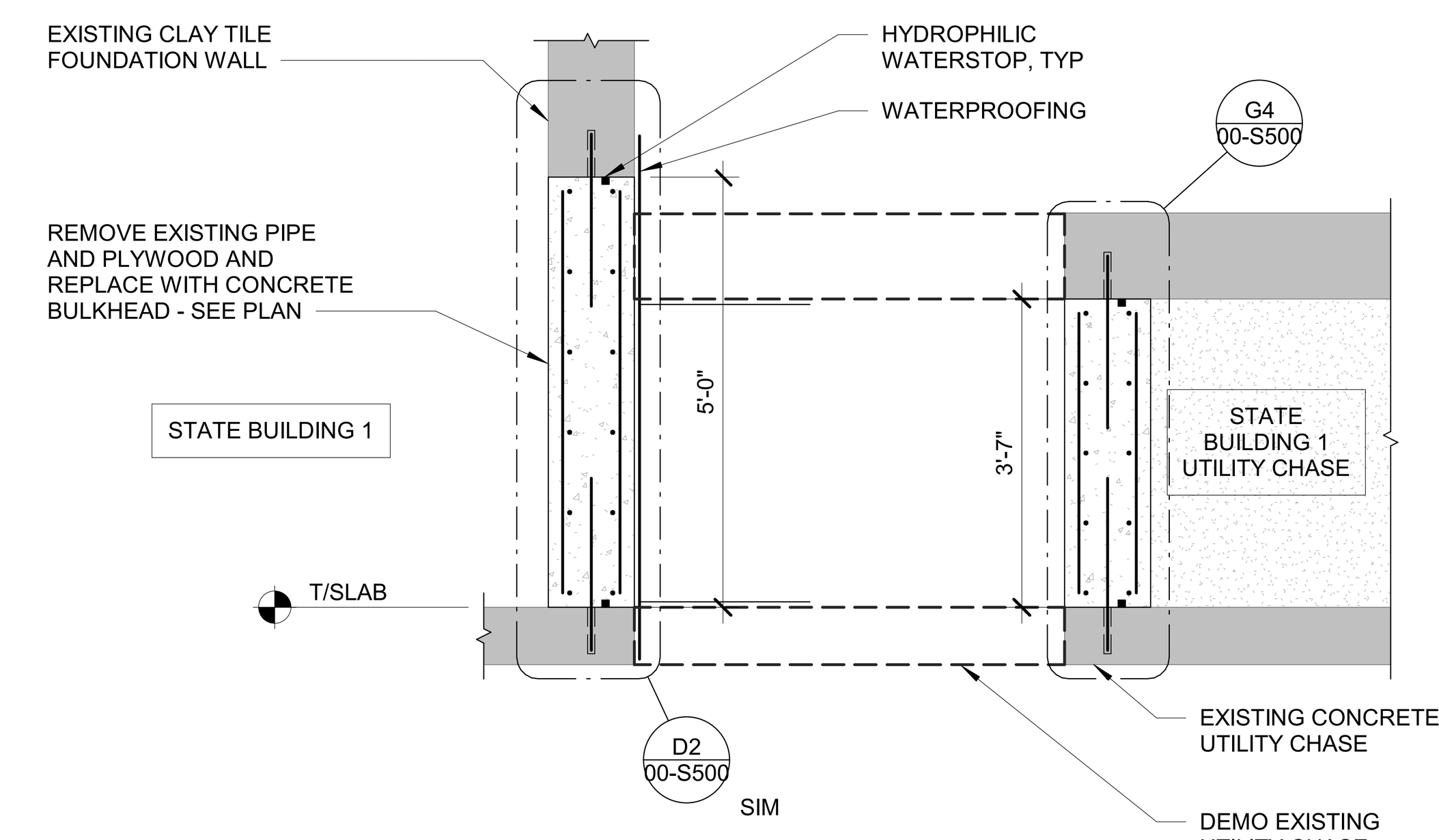
ALL DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTOR. DIMENSIONS PROVIDED ARE FOR RELATIVE SCOPE OF PROJECT, AND SHOULD NOT BE USED TO CALCULATE QUANTITIES WITHOUT FIELD VERIFICATION OF CONDITIONS FIRST.



A2 STATE BUILDING 1 UTILITY CHASE PLAN
1/2" = 1'-0" 0' 3'



C2 STATE BUILDING 1 UTILITY CHASE CONNECTION
NOT TO SCALE



E2 STATE BUILDING 1 UTILITY CHASE SECTION
1/2" = 1'-0" 0' 3'

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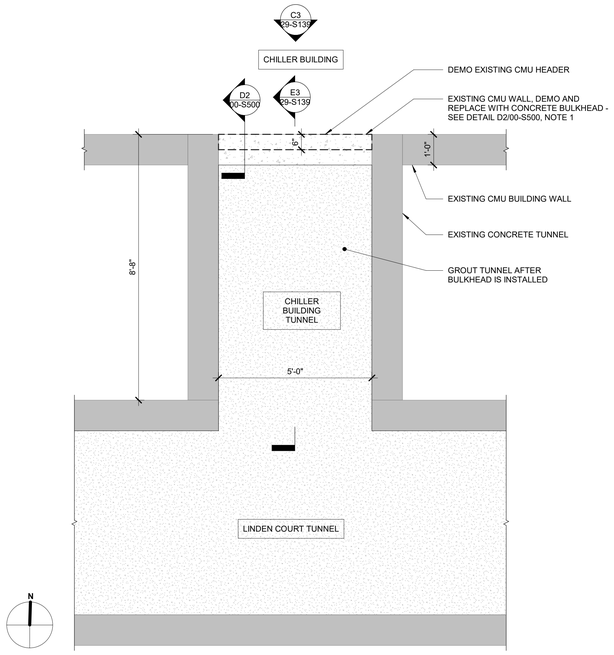
STATE BUILDING 1 UTILITY CHASE

27-S138



NOTES:

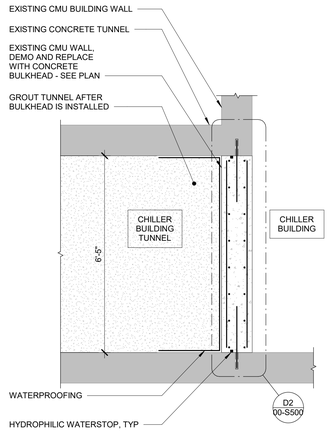
1. DO NOT REMOVE EXISTING LINTEL.

A3 CHILLER BUILDING NEW BULKHEAD PLAN

1/2" = 1'-0" 0 3'

C3 CHILLER BUILDING TUNNEL BUILDING CONNECTION

1" = 1'-0" 0 1'-6"



E3 CHILLER BUILDING SECTION

1/2" = 1'-0" 0 3'

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FIELD BOOK	

CHILLER BUILDING

29-S139

MECHANICAL ABBREVIATIONS

SYMBOLS

&	AND
@	AT
#	NUMBER or POUND

A

A/E	ARCHITECT/ENGINEER
AC	AIR CONDITIONER(ING)
ACH	AIR CHANGES PER HOUR
ACCU	AIR COOLED CONDENSING UNIT
ACU	AIR CONDITIONING UNIT
AD	ACCESS DOOR
ADJ	ADJUSTABLE/ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALT	ALTERNATE
AMB	AMBIENT
AP	ACCESS PANEL
APPROX	APPROXIMATE(LY)
ASD	ADJUSTABLE SPEED DRIVE
AS	AIR SEPARATOR
ASSY	ASSEMBLY
ATM	ATMOSPHERE
AUX	AUXILIARY
AV	AIR VENT
AVG	AVERAGE

B

BAS	BUILDING AUTOMATION SYSTEM
BCU	BLOWER COIL UNIT
BDD	BACKDRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BFBP	BOILER FEED BOOSTER PUMP
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNITS PER HOUR

C

CAL	CALIBRATE
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CCR	CONCENTRIC REDUCER
CCW	COUNTER CLOCKWISE
CDWR	CONDENSER WATER RETURN
CDWS	CONDENSER WATER SUPPLY
CFM	CUBIC FEET PER MINUTE
CFH	CUBIC FEET PER HOUR
CH	CHILLER
CHP	CHILLED WATER PUMP
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
CHSP	CHILLED WATER SECONDARY PUMP
CIP	CAST IRON PUMP
CIRC	CIRCULATING
CISP	CAST IRON SOIL PIPE
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR(ANCE)
CLW	CLOCKWISE
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COND	CONDENSATE
CONSTR	CONSTRUCTION
CONT	CONTINUATION
CONTR	CONTRACTOR
CONV	CONVERTER
COORD	COORDINATE
CP	CONDENSATE PUMP
CRT	CONDENSATE RETURN TANKR
CT	COOLING TOWER
CTRL	CONTROL
CU	COPPER
CU FT	CUBIC FEET
CU IN	CUBIC INCH
CUH	CABINET UNIT HEATER
CWP	CONDENSER WATER PUMP

D

°/DEG	DEGREE
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROLS
DEMO	DEMOLITION
DIA	DIAMETER
DIAG	DIAGRAM
DIFF	DIFFUSER
DIP	DUCTILE IRON PIPE
DMPR	DAMPER
DN	DOWN
DW	DISHWASHER
DWG	DRAWING

E

EA	EXHAUST AIR OR EACH
EAT	ENTERING AIR TEMPERATURE
ECCR	ECCENTRIC REDUCER
ECON	ECONOMIZER
ECU	EVAPORATIVE COOLING UNIT
EDB	ENTERING DRY BULB (TEMP)
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN / ENERGY FACTOR
EG	EXHAUST GRILLE
EH	EXHAUST HOOD
ELEV	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ER	EXHAUST REGISTER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EX	EXISTING

F

FCU	FAN COIL UNIT
FD	FIRE DAMPER
FOB	DUCT FLAT ON BOTTOM
FOT	DUCT FLAT ON TOP
FPT	FEMALE PIPE THREAD
FS	FLOW SWITCH
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR
FSD	FIRE/SMOKE DAMPER
FST	FLASH TANK
FT	FINNED TUBE RADIATION
FTHD	FOOT HEAD OR PRESSURE DROP

G

GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GV	GRAVITY VENTILATOR

H

H	HUMIDISTAT
HG	MERCURY
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPR	HIGH PRESSURE STEAM RETURN
HPS	HIGH PRESSURE STEAM SUPPLY
HTG	HEATING
HTR	HEATER
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HX	HEAT EXCHANGER
HZ	HERTZ (FREQUENCY)

I

ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IN	INCHES
IN WC	INCHES (WATER COLUMN)
INS	INSULATION
INSTR	INSTRUMENT
IP	IRON PIPE
IPS	IRON PIPE SIZE
IPLV	INTEGRATED PART LOAD VALUE
ISO	ISOMETRIC

K

K	KELVIN
KW	KILOWATT
KWH	KILOWATT HOUR

L

LAT	LEAVING AIR TEMPERATURE
LB(S)	POUND(S)
LDB	LEAVING DRY BULB (TEMP)
LPCR	LOW PRESSURE CONDENSATE RETURN
LPS	LOW PRESSURE STEAM
LWB	LEAVING WET BULB (TEMP)
LWT	LEAVING WATER TEMPERATURE

M

MAINT	MAINTENANCE
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	BRITISH THERMAL UNIT (1000/HR)
MC	MECHANICAL CONTRACTOR
MCC	MOTOR CONTROL CENTER
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM OR MINUTE
MISC	MISCELLANEOUS
MOD	MOTOR OPERATED DAMPER
MOV	MOTOR OPERATED VALVE
MPT	MALE PIPE THREAD

N

NA	NOT APPLICABLE
NC	NORMALLY CLOSED OR NOISE CRITERIA
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NOM	NOMINAL
NPLV	NON STANDARD PART LOAD VALUE
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE

O

OA	OUTDOOR AIR
OAD	OUTDOOR AIR DAMPER
OD	OUTER DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED

P

PCWP	PRIMARY CHILLED WATER PUMP
PG	PRESSURE GAUGE
PH	PHASE
PRV	PRESSURE RELIEF VALVE OR PRESSURE REGULATING VALVE
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
PUH	PROPELLER UNIT HEATER

R

RA	RETURN AIR
REFR	REFRIGERATION
REQD	REQUIRED
RG	RETURN AIR GRILLE
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RPM	REVOLUTIONS PER MINUTE
RPZ	REDUCED PRESSURE ZONE
RTU	ROOFTOP UNIT

S

SA	SUPPLY AIR
SCH	SCHEDULE
SCHM	SCHEMATIC
SCWP	SECONDARY CHILLED WATER PUMP
SD	SMOKE DAMPER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SF	SUPPLY FAN OR SQUARE FEET
SHT	SHEET
SP	STATIC PRESSURE
SPEC	SPECIFICATION(S)
SQ IN	SQUARE INCH
SS	STAINLESS STEEL
STBY	STANDBY
STD	STANDARD
STL	STEEL
SUCT	SUCTION
SV	SAFETY VALVE
SYS	SYSTEM
SRV	SAFETY RELIEF VALVE

T

T	THERMOSTAT
TAB	TERMINAL AIR BOX
TCC	TEMPERATURE CONTROL CONTRACTOR
TEFC	TOTALLY ENCLOSED FAN COOLED
TEMP	TEMPERATURE OR TEMPORARY
THRU	THROUGH
TOD	TOP OF DUCT
TOP	TOP OF PIPE
TP	TOTAL PRESSURE
TYP	TYPICAL

U

UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITY
UV	UNIT VENTILATOR

V

VAV	VARIABLE AIR VOLUME
VBX	VALVE BOX
VD	VOLUME DAMPER
VEL	VELOCITY
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE

W

W/	WITH
W/O	WITHOUT
WB	WET BULB
WH	WALL HYDRANT
WPD	WATER PRESSURE DROP
WT	WEIGHT
WTR	WATER

MECHANICAL SYMBOLS LEGEND

- 8" CHWS — PIPE SIZE, SYSTEM AND FLOW TAG (DIA)
- CHWS — EXISTING TO REMAIN
- CHWS — TO BE DEMOLISHED
- CHWR — CHILLED WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- CA — COMPRESSED AIR
- CDWR — CONDENSER WATER RETURN
- CDWS — CONDENSER WATER SUPPLY
- GTR — GEOTHERMAL RETURN
- GTS — GEOTHERMAL SUPPLY
- HWR — HEATING WATER RETURN
- HWS — HEATING WATER SUPPLY
- HPC — HIGH PRESSURE CONDENSATE
- HPS — HIGH PRESSURE STEAM
- LPC — LOW PRESSURE CONDENSATE
- LPS — LOW PRESSURE STEAM
- PD — PUMP DISCHARGE
- RHG — REFRIGERANT - HOT GAS
- RL — REFRIGERANT - LIQUID
- RS — REFRIGERANT - SUCTION
- SHWR — SOLAR HOT WATER RETURN
- SHWS — SOLAR HOT WATER SUPPLY

- BALANCING VALVE
- BALL VALVE
- CHECK VALVE
- THREE-WAY VALVE
- MOTORIZED CONTROLVALVE
- THREE-WAY MOTORIZED CONTROLVALVE
- PRESSURE REDUCING VALVE
- SOLENOIDVALVE
- BUTTERFLY VALVE
- T — STEAM TRAP
- EJ — EXPANSION JOINT
- ELBOW UP
- ELBOW DOWN
- PIPE OFFSET UP
- PIPE OFFSET DOWN
- PIPE TEE TURNED UP
- PIPE TEE TURNED DOWN
- PIPE TEE
- PIPE CAP
- PIPE UNION
- PIPE TRANSITION

- 12x12 — DUCT SIZE TAG (SQ. OR RECT.)
- 12ø — DUCT SIZE TAG (ROUND)
- EXISTING TO REMAIN
- TO BE DEMOLISHED
- SUPPLY DUCT (SA)
- RETURN DUCT (RA)
- EXHAUST DUCT (EA)
- SQ. OR RECT. ELBOW TURNED UP W/ TAG (12x12 SA UP)
- SQ. OR RECT. ELBOW TURNED DOWN W/ TAG (12x12 SA DN)
- ROUND ELBOW TURNED UP W/ TAG (12ø SA UP)
- ROUND ELBOW TURNED DOWN W/ TAG (12ø SA DN)
- FLEXIBLE DUCT
- 45° TAP BRANCH TAKE-OFF
- CONICAL TAP ROUND BRANCH TAKE-OFF
- CONICAL TAP ROUND BRANCH TAKE-OFF W/ MANUAL VOLUME DAMPER
- DOUBLE SIDED TRANSITION
- SINGLE SIDED TRANSITION
- SQ. OR RECT.ELBOW WITH TURNING VANES (45° AND 90°)
- SQ. OR RECT. TEE WITH TURNING VANES
- RADIUS ELBOW (45° AND 90°)
- MANUAL VOLUME DAMPER
- F — FIRE DAMPER
- S — SMOKE DAMPER
- FS — FIRE/SMOKE DAMPER
- M — MOTORIZED DAMPER
- D — DUCT SMOKE DETECTOR

CD-A / ø8 / 200 — TYPE = SEE BELOW; ID. NO. - SEE SCHEDULE; NECK SIZE IN INCHES (ROUND SHOWN); AIR FLOW (CFM)

DIFFUSER, GRILLE, REGISTER NOTATIONS

CD = CEILING DIFFUSER	RR = RETURN REGISTER
EG = EXHAUST DIFFUSER	SG = SUPPLY GRILLE
ER = EXHAUST REGISTER	SR = SUPPLY REGISTER
LD = LINEAR DIFFUSER	TG = TRANSFER GRILLE
RG = RETURN GRILLE	

- KEYNOTE
- CAP EXISTING PIPE OR DUCT
- NEW CONNECTION INTO EXISTING PIPE OR DUCT
- AIR FLOW ARROW POSITIVE PRESSURE
- AIR FLOW ARROW NEGATIVE PRESSURE
- CO2 — CARBON DIOXIDESENSOR
- CO — CARBON MONOXIDESENSOR
- NO2 — NITROGEN DIOXIDESENSOR
- P — PRESSURE SENSOR
- TS — TEMPERATURE SENSOR
- T — THERMOSTAT
- H — HUMIDISTAT OR HUMIDITY SENSOR
- THERMOMETER
- PRESSURE GAUGE
- A — ANCHOR
- G — GUIDE
- S — SUPPORT
- DETAIL NUMBER
- SHEET NUMBER ON WHICH THE DETAIL RESIDES

MECHANICAL DUCTWORK

1. LIGHT LINES INDICATE EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC. TO REMAIN. BOLD LINES INDICATE PIPING, DUCTWORK, EQUIPMENT, ETC. TO BE INSTALLED BY THIS CONTRACTOR UNLESS NOTED OTHERWISE.
2. NEW WORK HAS BEEN SHOWN DIAGRAMATICALLY AND DUE TO THE LIMITED SCALE OF THESE DRAWINGS, THE PLACEMENT AND ROUTING OF ALL DUCTWORK, PIPING, ETC. IS CONSIDERED SCHEMATIC IN NATURE; THEREFORE THE DRAWINGS MAY NOT SHOW ALL OFFSETS AND TRANSITIONS WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL PROVIDE COMPLETE FULLY FUNCTIONAL SYSTEMS.
3. COORDINATE ROUGH-IN AND FINAL LOCATION OF DUCTWORK AND PIPING WITH LIGHTING, STRUCTURE, SPRINKLERS, ETC. PROVIDE OFFSETS AND/OR EASEMENTS, OR RELOCATE AS REQUIRED AVOIDING CONFLICTS WITH WORK OF OTHER TRADES.
4. INSTALL MANUAL VOLUME DAMPERS IN ALL SUPPLY, RETURN AND EXHAUST DUCT SYSTEMS AS REQUIRED FOR CONTROLLING AIR VOLUMES TO TRUNK DUCTS, BRANCH DUCTS, OUTLETS, AND INLETS. CONTRACTOR SHALL INSTALL A COMPLETE SYSTEM OF DAMPERS AS REQUIRED FOR BALANCING AIR SYSTEMS.
5. PLACE DIFFUSERS AS CLOSE TO PLAN LOCATION AS POSSIBLE WITHOUT INTERFERING WITH LIGHT GRID.
6. ALL EXPOSED DUCTWORK SHALL BE DOUBLE WALL INSULATED DUCT AND PAINTED. CONFIRM COLOR PRIOR TO PAINTING.
7. THERMOSTATS SHALL BE MOUNTED 4'-0" ABOVE FINISHED FLOOR. COORDINATE LOCATION WITH OTHER WALL MOUNTED DEVICES.
8. PROVIDE CONCEALING FLANGES AT ALL VISIBLE DUCT PENETRATIONS THROUGH WALLS.
9. ENSURE ALL MANUFACTURER RECOMMENDED CLEARANCES ARE MET FOR ALL EQUIPMENT.
10. PROVIDE REQUIRED NEC CLEARANCE FOR ALL CONTROL PANELS INCLUDING VAV BOX CONTROL BOXES LOCATED ABOVE CEILINGS.
11. DO NOT ROUTE ANY COMPONENTS ABOVE ELECTRICAL EQUIPMENT. MAINTAIN ALL CODE REQUIRED CLEARANCES.
12. ALL FLOOR MOUNTED MECHANICAL EQUIPMENT SHALL BE MOUNTED ON MINIMUM 4" CONCRETE HOUSEKEEPING PADS.
13. PREP ALL EXPOSED METAL DUCTWORK TO RECEIVE PAINT.
14. ALL WORK WITHIN THE CONTRACT DOCUMENTS, WHICH INCLUDE THIS DRAWING, SHALL BE COMPLETED IN A SAFE WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL APPLICABLE STATE AND NATIONAL CODES, REGULATIONS AND ORDINANCES. IF ANY CONFLICTS ARISE BETWEEN THE CONTRACT DOCUMENTS AND THE APPLICABLE CODES, REGULATIONS OR ORDINANCE, THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ALL WORK CONFORM TO THE STRICTER OF SAID REQUIREMENTS.
15. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS AS REQUIRED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE BOTH A COMPLETE AND COMPLIANT INSTALLATION AS MAY BE DETERMINED BY THE AUTHORITY(S) HAVING JURISDICTION.
16. CONTRACTOR SHALL NOT PROCURE OR FABRICATE ANY PIPING, DUCTWORK OR OTHER EQUIPMENT WITHOUT FIRST VERIFYING ALL DIMENSIONS AND CONDITIONS WHETHER CURRENTLY EXISTING OR NOT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, INCLUDING ANY REQUIRED REWORK.
17. MAINTAIN ALL MANUFACTURER RECOMMENDED EQUIPMENT SERVICE AND SAFETY CLEARANCES. DO NOT LOCATE ANY EQUIPMENT OR RUN MATERIALS ABOVE ANY ELECTRICAL PANELS OR SWITCHGEAR. MAINTAIN ALL NFPA/NEC CODE REQUIRED CLEARANCES.
18. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, SCHEDULING AND SEQUENCING OF THEIR WORK WITH ALL OTHER TRADES. PROVIDE OFFSETS, EASEMENTS, OR RELOCATE TO AVOID CONFLICTS WITH WORK OF OTHER TRADES. FURNISH SUFFICIENT RESOURCES TO MEET ALL PROJECT MILESTONES AND DEADLINES.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE WATERTIGHT AND WEATHER-PROOF INTEGRITY OF ROOFS, WALLS AND FLOORS DURING CONSTRUCTION. EACH TRADE SHALL LOCATE/DIMENSION/COORDINATE THEIR ROOF, FLOOR AND WALL OPENINGS WITH THE CONSTRUCTION MANAGER.
20. PROTECT NEW WORK FROM DAMAGE OR CONTAMINATION. PROVIDE TEMPORARY PROTECTIVE CAPPING OR TAPED POLYETHYLENE ENCLOSURES OVER OPEN DUCTWORK AND PIPING ENDS AND EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING MECHANICAL SYSTEMS PRIOR TO PLACING THEM IN SERVICE.
21. IN A NEAT AND WORKMANLIKE MANNER: PATCH ANY REMAINING OPENINGS AND FILL EXCESSIVE GAPS; REWORK AND REFINISH TO MATCH ADJACENT STRUCTURES; FLASH AND SEAL ALL MECHANICAL AND ELECTRICAL PENETRATIONS THRU WALLS, CEILINGS AND FLOORS WITH METAL FRAMEWORK OR ESCUTCHEONS. ALL OPENINGS SHALL BE PROPERLY SEALED SO AS TO MEET FIRE RATING NEEDS.
22. ALL BRANCH DUCTWORK EQUIPMENT CONNECTION SIZE UNLESS OTHERWISE NOTED.
23. PROVIDE ACCESS PANELS IN HARD LID CEILINGS TO ALLOW ACCESS FOR ALL DUCT MOUNTED EQUIPMENT (VOLUME DAMPERS, FIRE DAMPERS, FIRE/SMOKE DAMPERS, ETC.) COORDINATE LOCATION WITH CEILING PLAN AND ARCHITECTURAL REQUIREMENTS.
24. ALL PIPING, EQUIPMENT AND DUCTWORK SUSPENDED BELOW THE ROOF SHALL BE SUSPENDED FROM THE STRUCTURE AND NOT THE ROOF DECK.

MECHANICAL PIPING

1. PIPING IS SHOWN IN SCHEMATIC FORM, ROUTE AS REQUIRED FOR CLEARANCE. VERIFY ROUTING AND CLEARANCES AND COORDINATE WITH OTHER TRADES PRIOR TO FABRICATION. THE CONTRACTOR SHALL PROVIDE COMPLETE FULLY FUNCTIONAL SYSTEMS.
2. BREAK CONNECTIONS REQUIRED AT ALL MAJOR EQUIPMENT AND PIPING ITEMS THAT REQUIRE REMOVAL FOR MAINTENANCE.
3. PIPE REDUCTIONS ON HORIZONTAL PIPING GOING FROM LARGER TO SMALLER SHALL BE MADE WITH ECCENTRIC REDUCERS: TOP FLAT FOR LIQUID SYSTEMS, CONCENTRIC REDUCERS MAY BE USED FOR FLOW GOING FROM SMALL TO LARGER SIZE PIPE.
4. FIRE SAFE ALL PIPE PENETRATIONS PER UL AT RATED WALLS.
5. NEW FLOOR/WALL/CEILING PENETRATIONS REQUIRED FOR MECHANICAL PIPING INSTALLATION SHALL BE CLEANLY BORED AT RIGHT ANGLES. AS NEW PIPING IS INSTALLED, NEW PIPING PENETRATIONS SHALL BE NEATLY CAULKED TO FILL VOID. WALL PENETRATIONS SHALL BE FINISHED WITH ESCUTCHEONS.
6. ALL NEW PIPING EXPOSED IN OCCUPIED SPACES SHALL HAVE PVC JACKETS INSTALLED OVER THE PIPING INSULATION. ANY PIPING REQUIRED TO BE EXPOSED SHALL BE INSTALLED VERTICALLY OR HORIZONTALLY IN LEAST VISIBLE LOCATION.
7. ALL NEW EQUIPMENT AND ACCESSORIES SHALL BE INSTALLED SO AS TO BE EASILY ACCESSIBLE.
8. CONTRACTOR SHALL PATCH/REPAIR ALL UNUSED OPENINGS AND MODIFIED FINISH SURFACES. PATCHING SHALL MATCH MATERIALS, FINISH AND TEXTURE OF ADJACENT SURFACES.
9. ALL WORK WITHIN THE CONTRACT DOCUMENTS, WHICH INCLUDE THIS DRAWING, SHALL BE COMPLETED IN A SAFE WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL APPLICABLE STATE AND NATIONAL CODES, REGULATIONS AND ORDINANCES. IF ANY CONFLICTS ARISE BETWEEN THE CONTRACT DOCUMENTS AND THE APPLICABLE CODES, REGULATIONS OR ORDINANCE, THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ALL WORK CONFORM TO THE STRICTER OF SAID REQUIREMENTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS AS REQUIRED FOR ELECTRICAL, FIRE PROTECTION, PLUMBING, MECHANICAL AND BACKFLOW PREVENTION INSTALLATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE BOTH A COMPLETE AND COMPLIANT INSTALLATION AS MAY BE DETERMINED BY THE AUTHORITY(S) HAVING JURISDICTION.
11. CONTRACTOR SHALL NOT PROCURE OR FABRICATE ANY PIPING, DUCTWORK OR OTHER EQUIPMENT WITHOUT FIRST VERIFYING ALL DIMENSIONS AND CONDITIONS WHETHER CURRENTLY EXISTING OR NOT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, INCLUDING ANY REQUIRED REWORK.
12. MAINTAIN ALL MANUFACTURER RECOMMENDED EQUIPMENT SERVICE AND SAFETY CLEARANCES. DO NOT LOCATE ANY EQUIPMENT OR RUN MATERIALS ABOVE ANY ELECTRICAL PANELS OR SWITCHGEAR. MAINTAIN ALL NFPA/NEC CODE REQUIRED CLEARANCES.
13. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING, SCHEDULING AND SEQUENCING OF THEIR WORK WITH ALL OTHER TRADES. PROVIDE OFFSETS, EASEMENTS, OR RELOCATE TO AVOID CONFLICTS WITH WORK OF OTHER TRADES. FURNISH SUFFICIENT RESOURCES TO MEET ALL PROJECT MILESTONES AND DEADLINES.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE WATERTIGHT AND WEATHER-PROOF INTEGRITY OF ROOFS, WALLS AND FLOORS DURING CONSTRUCTION. EACH TRADE SHALL LOCATE/DIMENSION/COORDINATE THEIR ROOF, FLOOR AND WALL OPENINGS WITH THE CONSTRUCTION MANAGER.
15. PROTECT NEW WORK FROM DAMAGE OR CONTAMINATION. PROVIDE TEMPORARY PROTECTIVE CAPPING OR TAPED POLYETHYLENE ENCLOSURES OVER OPEN DUCTWORK AND PIPING ENDS AND EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING MECHANICAL SYSTEMS PRIOR TO PLACING THEM IN SERVICE.
16. IN A NEAT AND WORKMANLIKE MANNER: PATCH ANY REMAINING OPENINGS AND FILL EXCESSIVE GAPS; REWORK AND REFINISH TO MATCH ADJACENT STRUCTURES; FLASH AND SEAL ALL MECHANICAL AND ELECTRICAL PENETRATIONS THRU WALLS, CEILINGS, AND FLOORS WITH METAL FRAMEWORK OR ESCUTCHEONS. ALL OPENINGS SHALL BE PROPERLY SEALED SO AS TO MEET FIRE RATING NEEDS.
17. ALL BRANCH PIPING TO EQUIPMENT TO BE A MINIMUM OF 3/4" UNLESS OTHERWISE NOTED.
18. EXTEND ALL DRAIN CONNECTIONS FOR MECHANICAL EQUIPMENT TO NEAREST FLOOR DRAIN. MOP SINK, ETC. PROVIDE P-TRAP AS REQUIRED BY MANUFACTURER. DRAIN PIPING TO BE SIZED PER CODE OR LINE SIZE, WHICHEVER IS LARGER.

MECHANICAL DEMOLITION

1. THIS DRAWING DIAGRAMMATICALLY REPRESENTS THE LAYOUT OF EXISTING CONDITIONS WITH MAJOR MECHANICAL AND ELECTRICAL COMPONENTS. THEY ARE NOT INTENDED TO SHOW ACCESSORIES OR INCIDENTALS COMMON TO EQUIPMENT INDICATED, THOUGH THESE ITEMS ARE TO BE REMOVED. ACCESSIBILITY TO DEMOLITION ITEMS SHALL NOT BE INFERRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF BUILDING AND EXISTING CONDITIONS, PRIOR TO BID SUBMISSION.
2. DEMOLITION SHALL INCLUDE ALL HANGERS, FITTINGS, DAMPERS, VALVES, ETC.
3. REPAIR ANY INSULATION DAMAGED DURING REMOVAL. REPAIR WORK TO BE SAME AS NEW.
4. COORDINATE WALL AND FLOOR PATCHING REQUIREMENTS. PATCHWORK SHALL MATCH MATERIALS, FINISH AND TEXTURE OF ADJACENT SURFACES. REFERENCE ARCHITECTURAL PLANS.
5. CONTRACTOR SHALL PATCH/REPAIR ALL UNUSED OPENINGS AND MODIFIED FINISH SURFACES. PATCH SHALL MATCH MATERIALS, FINISH AND TEXTURE OF ADJACENT SURFACES.
6. CONTRACTOR SHALL HAVE FIRST SALVAGE RIGHTS TO ALL REMOVED EQUIPMENT AND MATERIALS UNLESS NOTED OTHERWISE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER AND TIMELY DISPOSAL OF ALL CONSTRUCTION DEBRIS INCLUDING BUT NOT LIMITED TO EQUIPMENT AND MATERIALS NOT CLAIMED BY OWNER TO AN EPA APPROVED, ENVIRONMENTALLY RESPONSIBLE, RECYCLE FACILITY OR LANDFILL.
7. IT IS ESSENTIAL TO MINIMIZE DISRUPTIONS. COORDINATE ALL DEMOLITION WITH OWNER OR CONSTRUCTION MANAGER BEFORE SHUTTING DOWN ANY UTILITY OR SIMILAR SYSTEM. SHUTDOWNS FOR UTILITIES OR SIMILAR SYSTEMS SHALL BE REQUESTED WELL IN ADVANCE AND PRE-APPROVED BY THE PROPER AUTHORITY(S) HAVING JURISDICTION BEFORE BEGINNING WORK.
8. ALL WORK WITHIN THE CONTRACT DOCUMENTS, WHICH INCLUDE THIS DRAWING, SHALL BE COMPLETED IN A SAFE WORKMANLIKE MANNER AND IN ACCORDANCE WITH ALL APPLICABLE STATE AND NATIONAL CODES, REGULATIONS AND ORDINANCES. IF ANY CONFLICTS ARISE BETWEEN THE CONTRACT DOCUMENTS AND THE APPLICABLE CODES, REGULATIONS OR ORDINANCE, THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ALL WORK CONFORM TO THE STRICTER OF SAID REQUIREMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS AS REQUIRED FOR ELECTRICAL, FIRE PROTECTION, PLUMBING, MECHANICAL, AND BACKFLOW PREVENTION INSTALLATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE BOTH A COMPLETE AND COMPLIANT INSTALLATION AS MAY BE DETERMINED BY THE AUTHORITY(S) HAVING JURISDICTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE WATERTIGHT AND WEATHER-PROOF INTEGRITY OF ROOFS, WALLS AND FLOORS DURING CONSTRUCTION. EACH TRADE SHALL LOCATE/DIMENSION/COORDINATE THEIR ROOF, FLOOR AND WALL OPENINGS WITH THE CONSTRUCTION MANAGER.

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
CLIENT PROJECT NUMBER: 9275.50
34 CEDAR ST , WOODWARD, IA 50276

DRAWN BY	GEP
APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

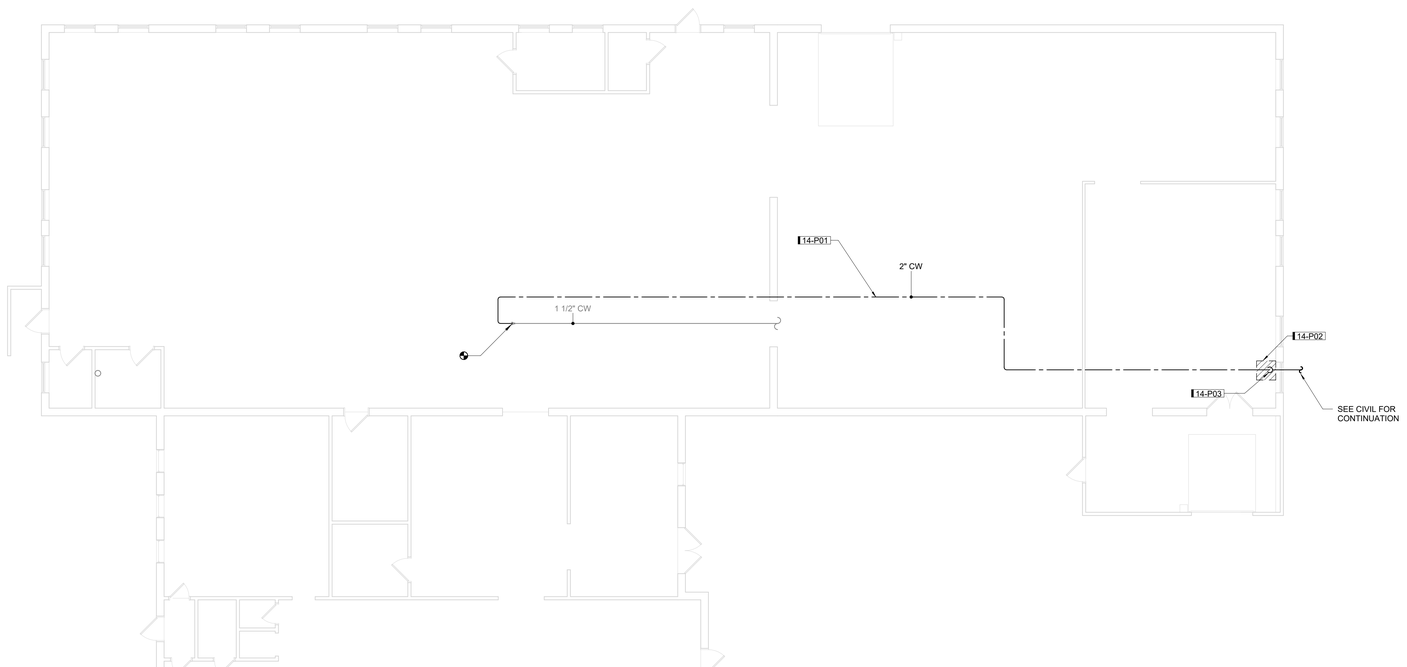
MECHANICAL GENERAL INFORMATION

00-M000

KEYNOTES	
KEY	NOTE
14-P01	INSTALL NEW 2" CW SERVICE AND CONNECT AT EXISTING 2" PIPE. SEE CIVIL FOR NEW INCOMING SERVICE LOCATION.
14-P02	REMOVE EXISTING SLAB AS REQUIRED TO INSTALL PIPES AND REPOUR SLAB ONCE PIPE IS INSTALLED. NEW SLAB SHOULD BE 5" THICK WITH #4 REBAR @18" O.C. EACH WAY. DRILL AND GROUT BARS INTO EXISTING SLAB WITH 6" EMBEDMENT.
14-P03	INSTALL ISOLATION VALVE AT SERVICE ENTRANCE.
14-PD01	REMOVE EXISTING 4" CW PIPE FROM ABOVE OFFICE TO REDUCER. ALL SERVICE BRANCHES AND MAIN PIPING STARTING AT 2" TO REMAIN FOR NEW CONNECTION. EXISTING 4" PIPE IN OFFICE CHASE TO BE CAPPED AND ABANDONED IN PLACE.

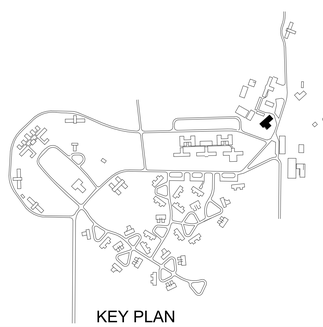
PLAN NORTH
TRUE NORTH

A3 LEVEL 1 DOMESTIC WATER DEMOLITION PLAN
1/8" = 1'-0"



PLAN NORTH
TRUE NORTH

A6 LAUNDRY BUILDING DOMESTIC WATER PIPING
1/8" = 1'-0"



KEY PLAN

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

Iowa Department of Administrative Services
1251 334th Street, Woodward, IA 50276

DRAWN BY	JDB
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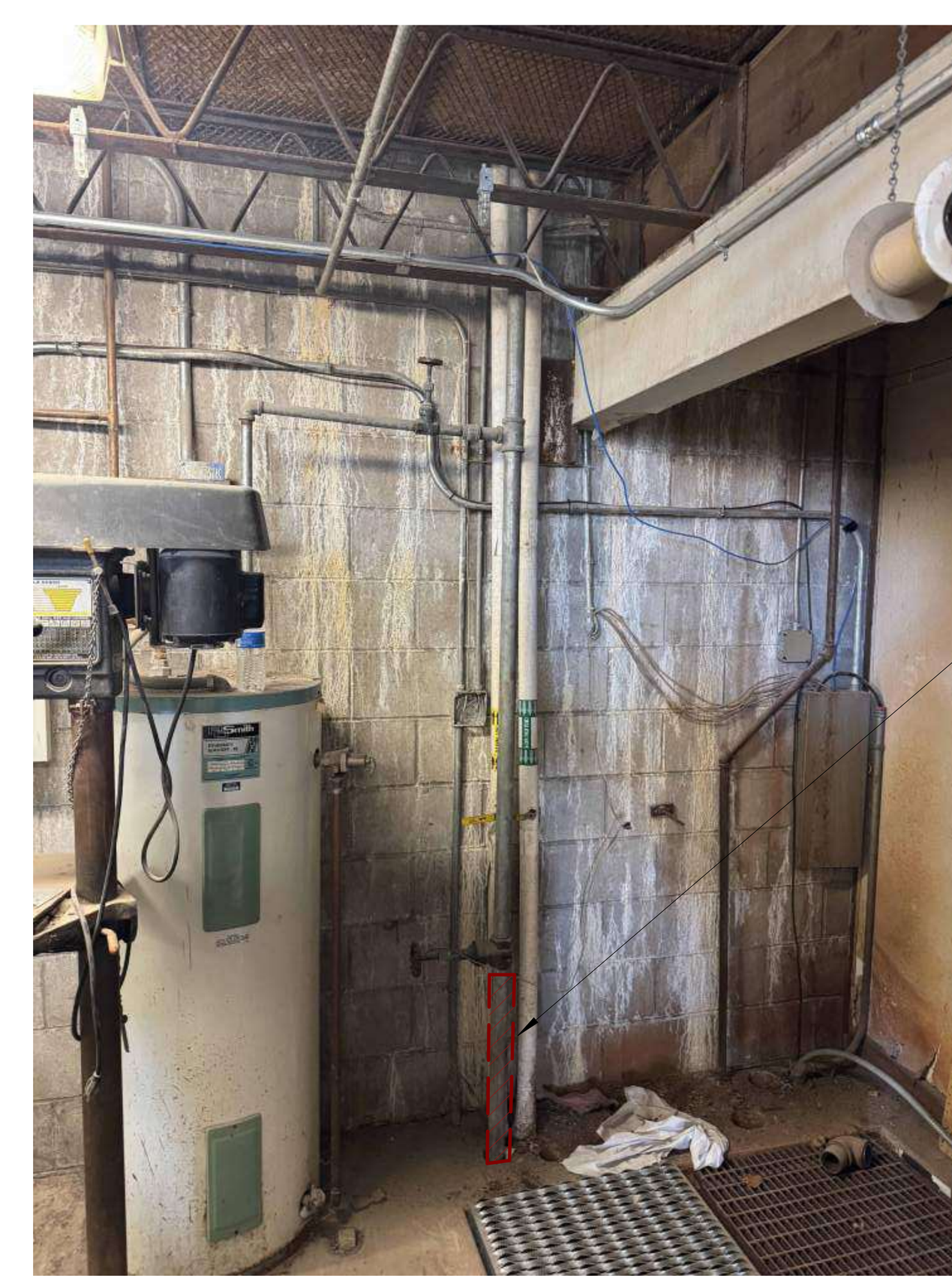
FIELD BOOK	

LAUNDRY BUILDING PLUMBING PLAN

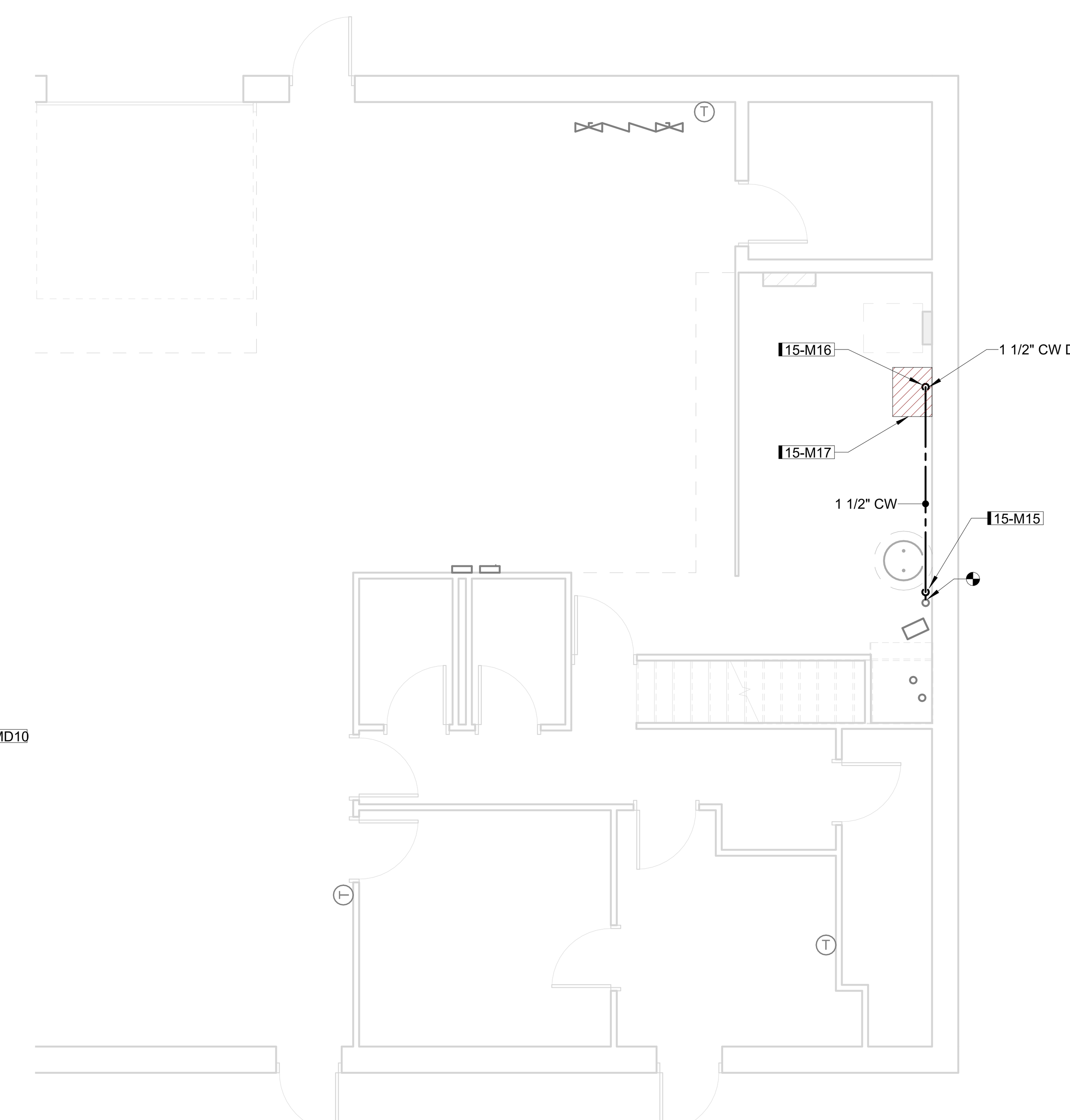
14-P101

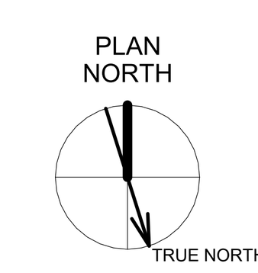
KEYNOTES

KEY	NOTE
15-M15	ROUTE NEW 1 1/2" CW SERVICE FROM NEW SERVICE ENTRANCE TO EXISTING 1 1/2" CW PIPE. CONNECT TO EXISTING ISOLATION VALVE.
15-M16	APPROXIMATE LOCATION OF NEW CW ENTRANCE 5'-0" BELOW SLAB. COORDINATE EXACT LOCATION AND DEPTH WITH OWNER AND CIVIL CONTRACTOR. INSTALL ISOLATION VALVE AT SERVICE ENTRANCE.
15-M17	REMOVE EXISTING SLAB AS REQUIRED TO INSTALL PIPES AND REPOUR SLAB ONCE PIPE IS INSTALLED. NEW SLAB SHOULD BE 5" THICK WITH #4 REBAR @18" O.C. EACH WAY. DRILL AND GROUT BARS INTO EXISTING SLAB WITH 6" EMBEDMENT.
15-MD10	REMOVE EXISTING 1 1/2" CW SERVICE FROM ISOLATION VALVE BACK TO BELOW SLAB AND CAP IN TUNNEL. PREPARE ISOLATION VALVE FOR CONNECTION TO NEW SERVICE.

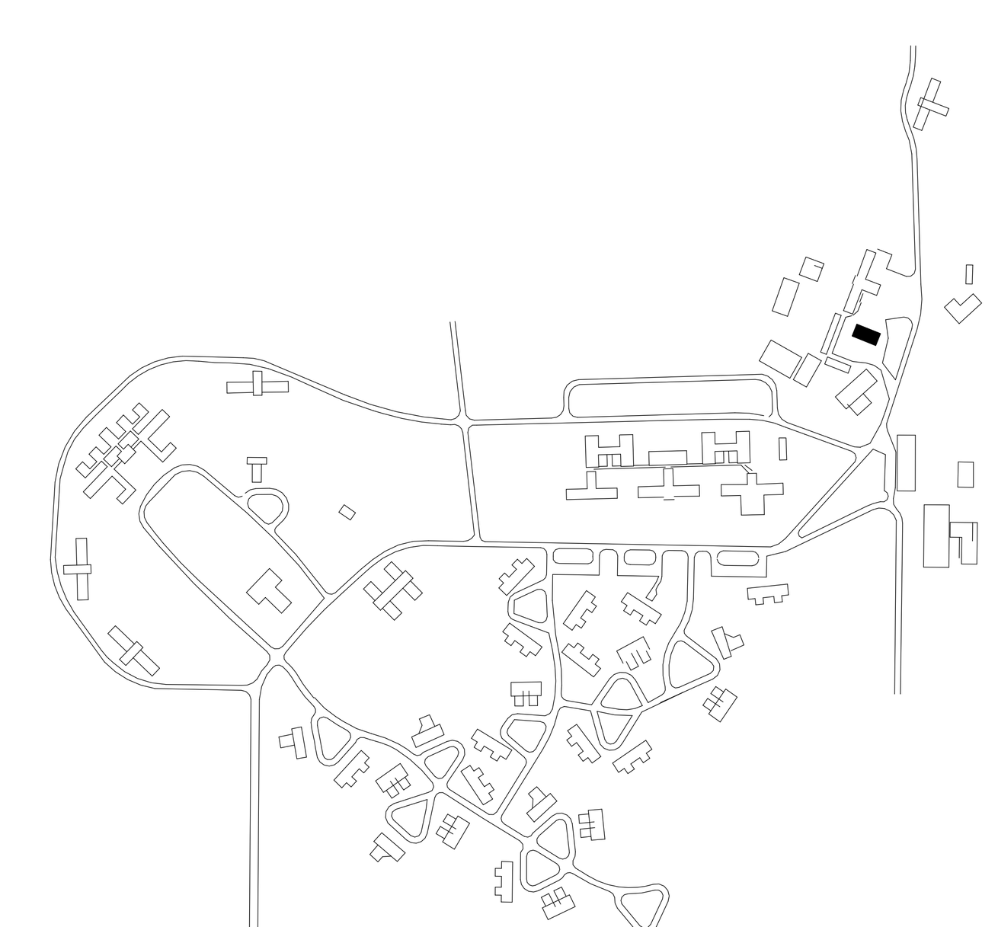


E5 WATER SERVICE ENTRANCE DEMO
NOT TO SCALE





F5 FIRST FLOOR PLUMBING PLAN
3/16" = 1'-0" 0' 8'



KEY PLAN

15-Dispatch Garage

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABADONMENT

15 - DISPATCH GARAGE

Iowa Department of Administrative Services
1251 334th St, Woodward, IA 50276

DRAWN BY	JDB
APPROVED BY	JDB
ISSUED FOR	100% CD
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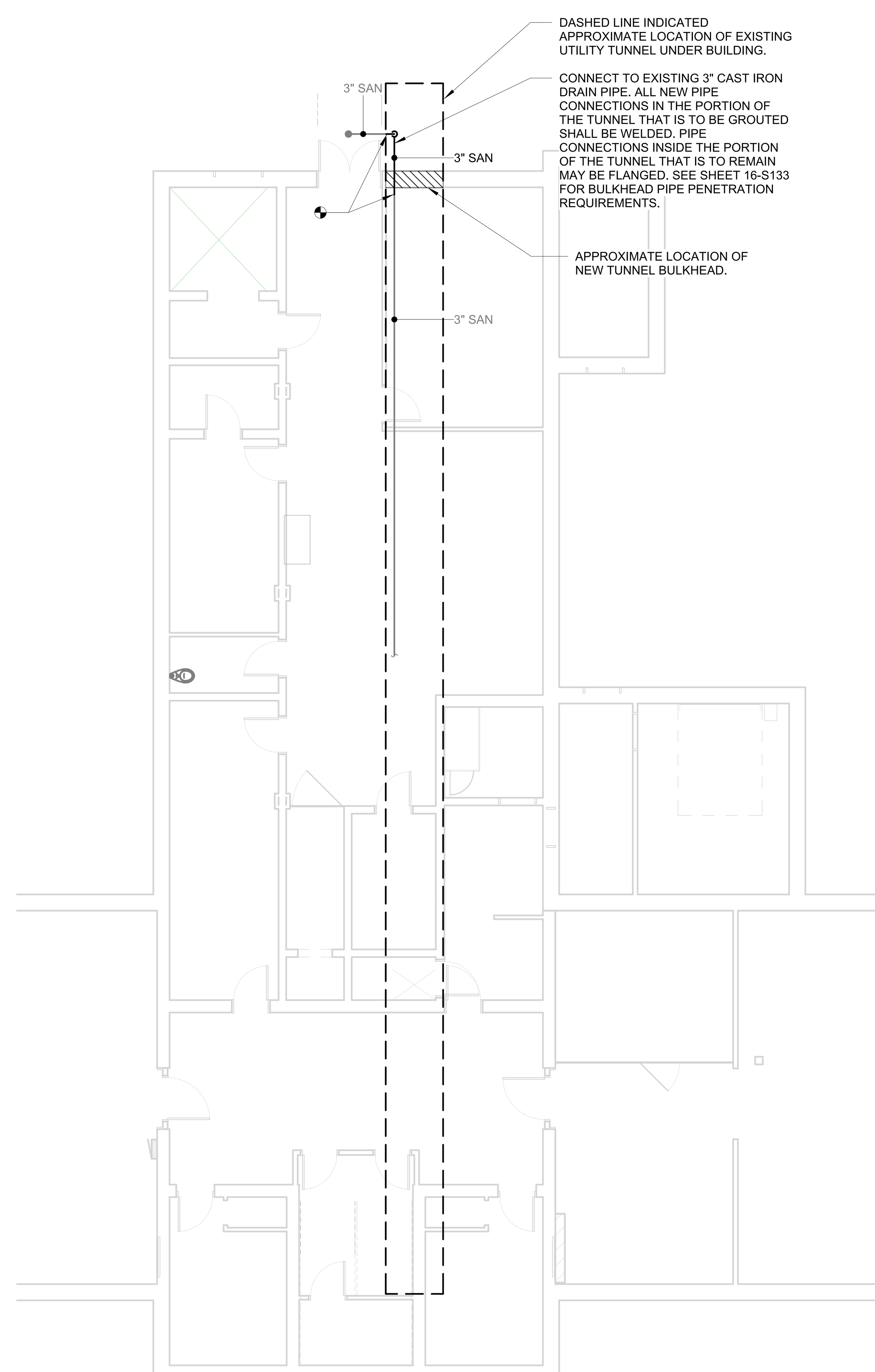
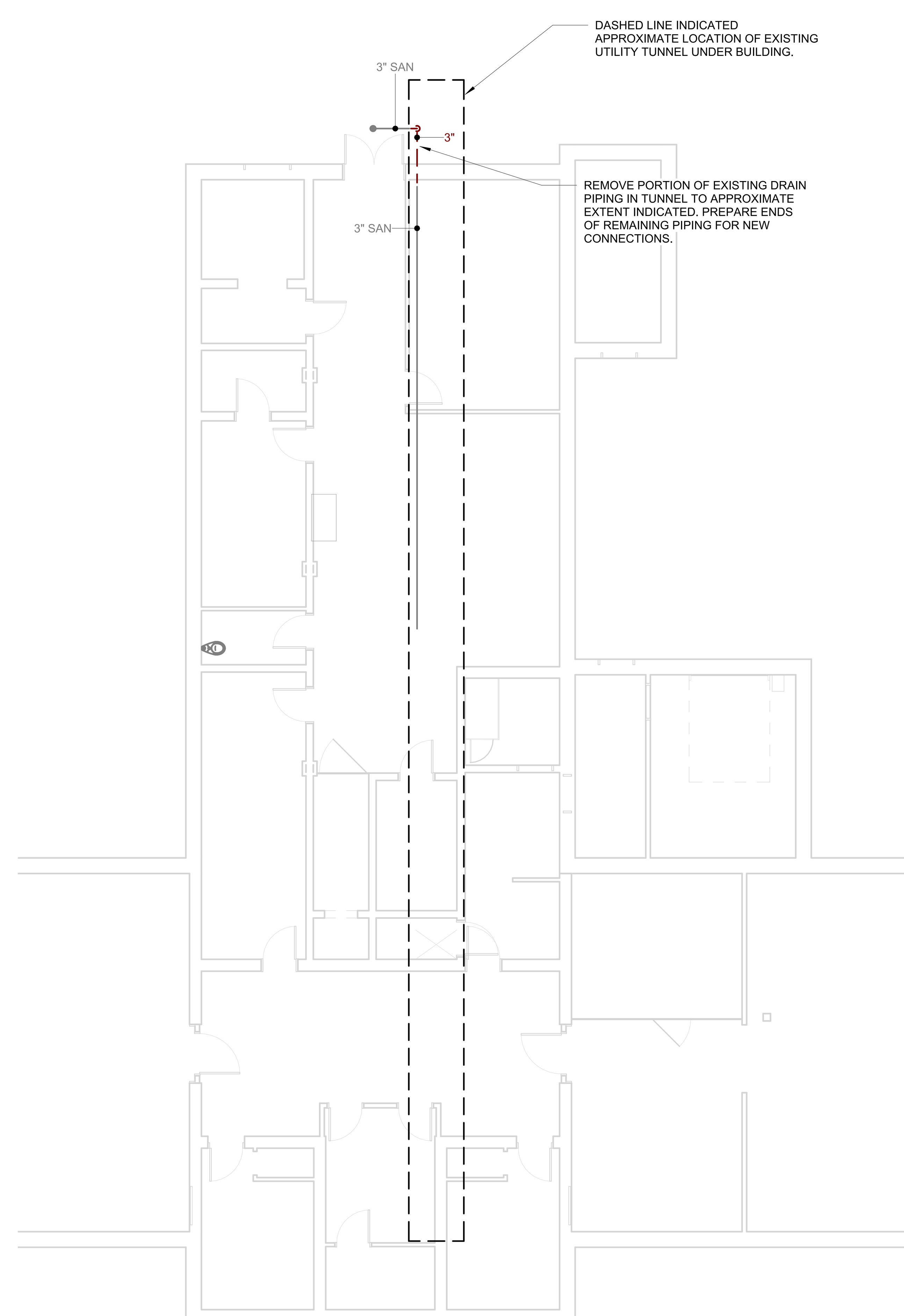
FIELD BOOK	

DISPATCH GARAGE PLUMBING PLANS

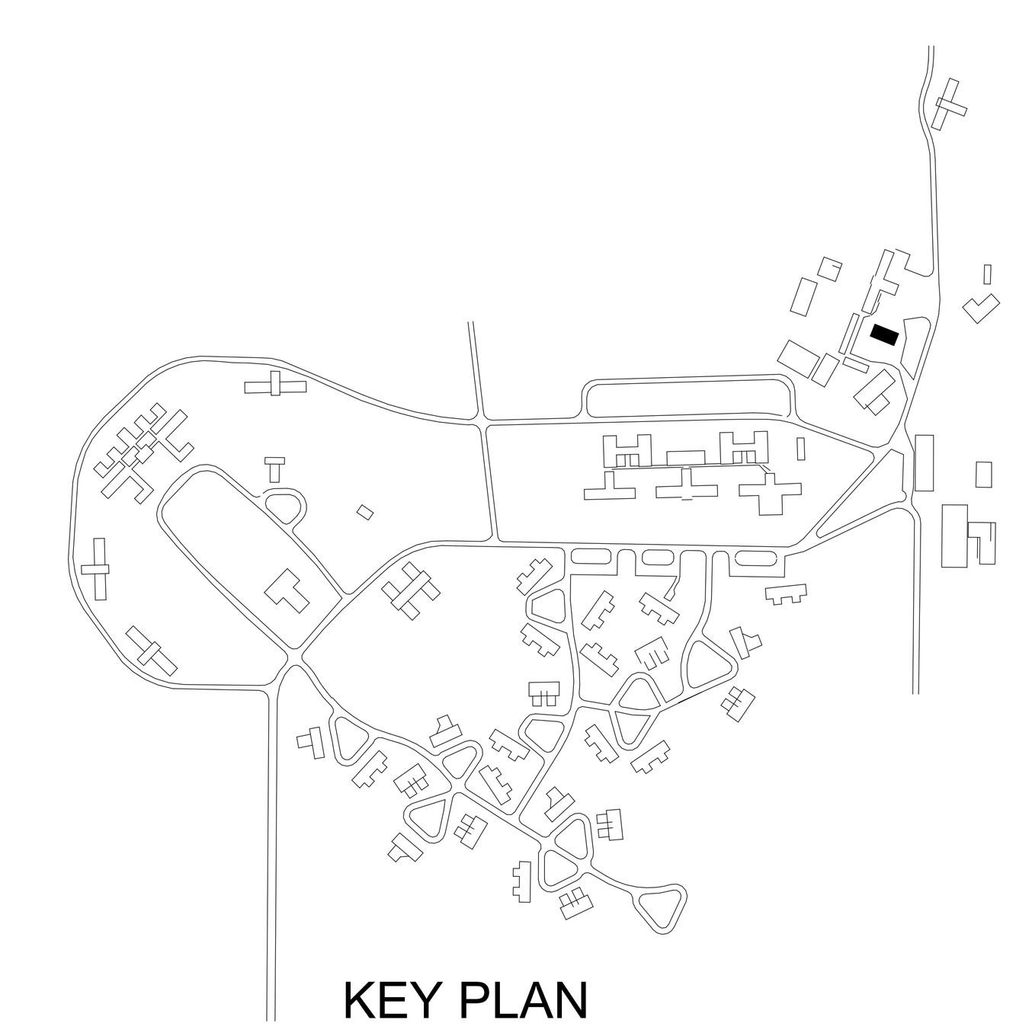
15-P101



2 BIRCHES TUNNEL PLUMBING PLAN
1/8" = 1'-0"



1 BIRCHES TUNNEL PLUMBING DEMOLITION PLAN
1/8" = 1'-0"



KEY PLAN

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IA DAS - HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABADONMENT

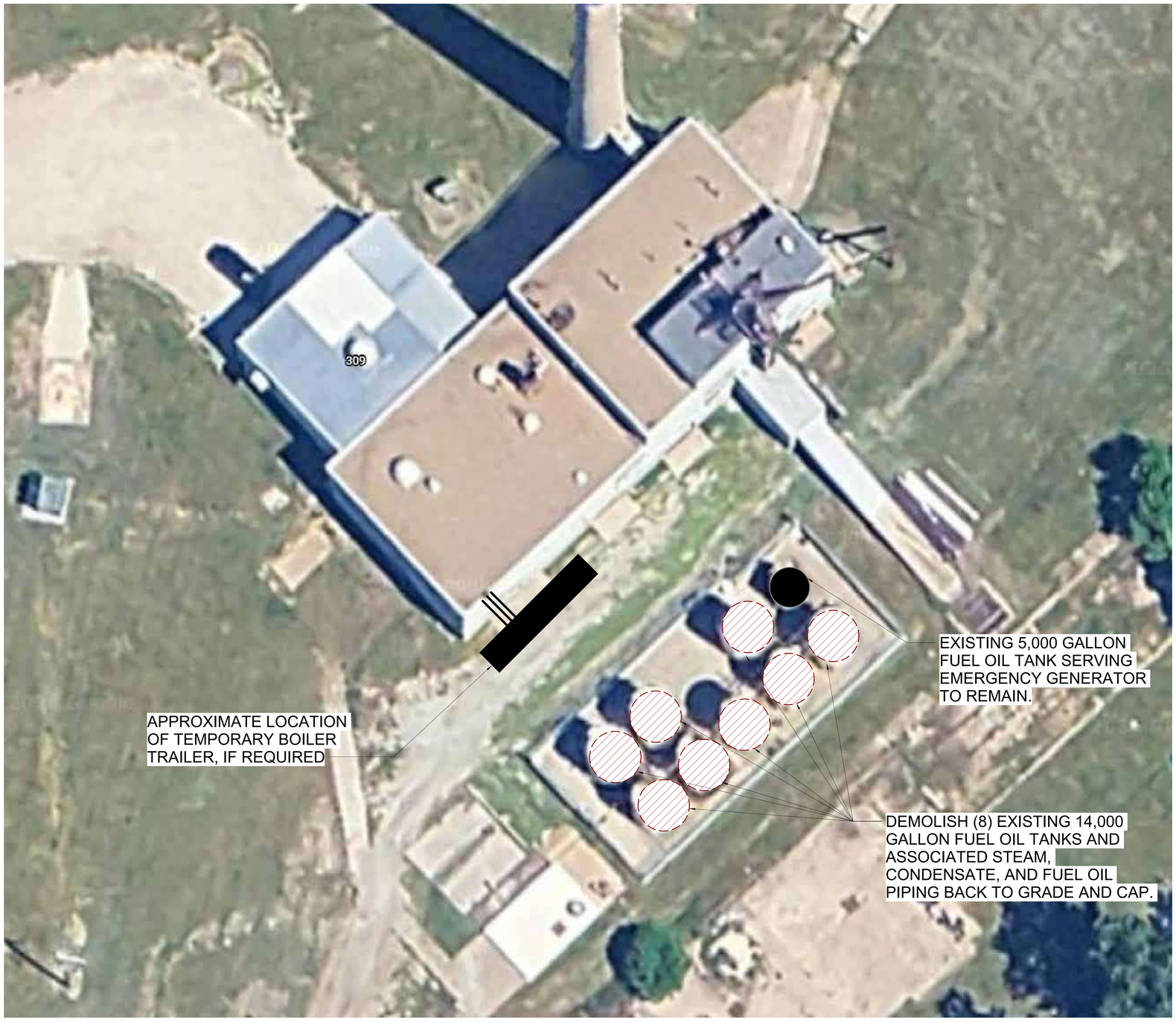
Iowa Department of Administrative Services
1251 334th St, Woodward, IA 50276

DRAWN BY	JDB
APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

BIRCHES TUNNEL
PLUMBING
PIPING PLAN

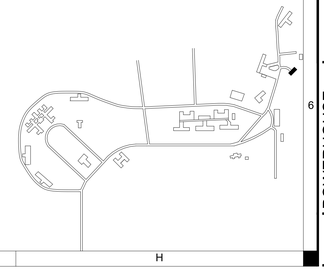
16-P001

Autodesk Revit 2022



NORTH

1 POWERHOUSE SITE PLAN
12" = 1'-0" 0



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IA DAS -HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
34 CEDAR ST , WOODWARD, IA 50276

DRAWN BY	JDB
APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
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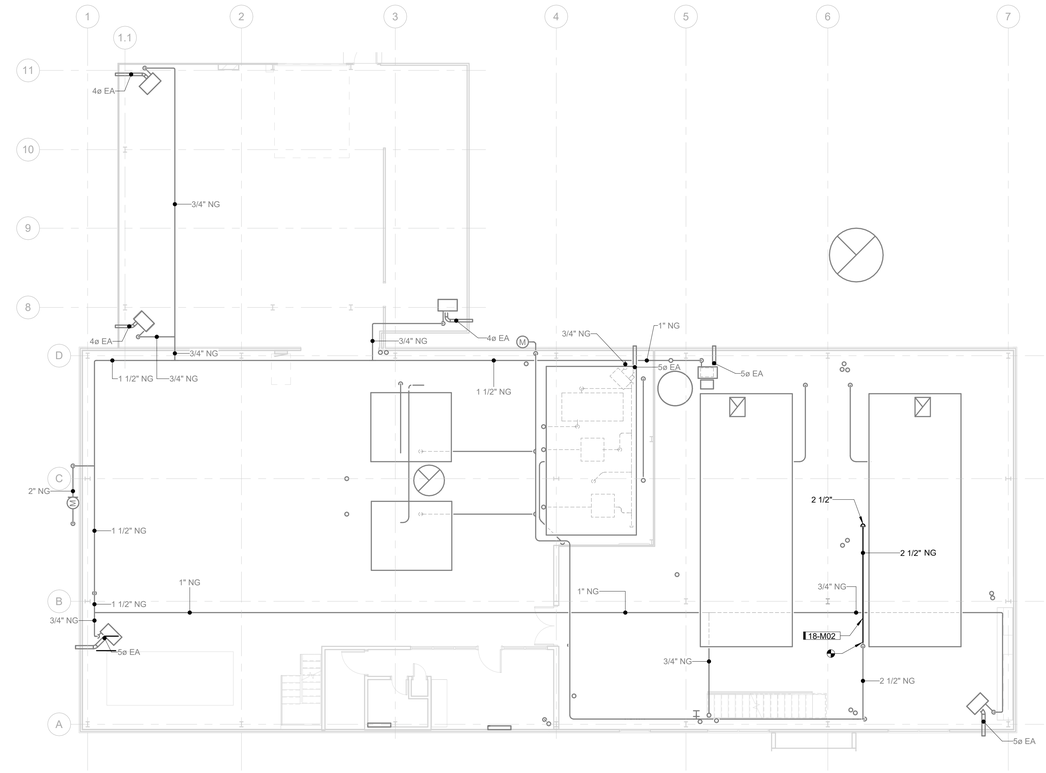
POWERHOUSE MECHANICAL SITE PLAN

18-M001

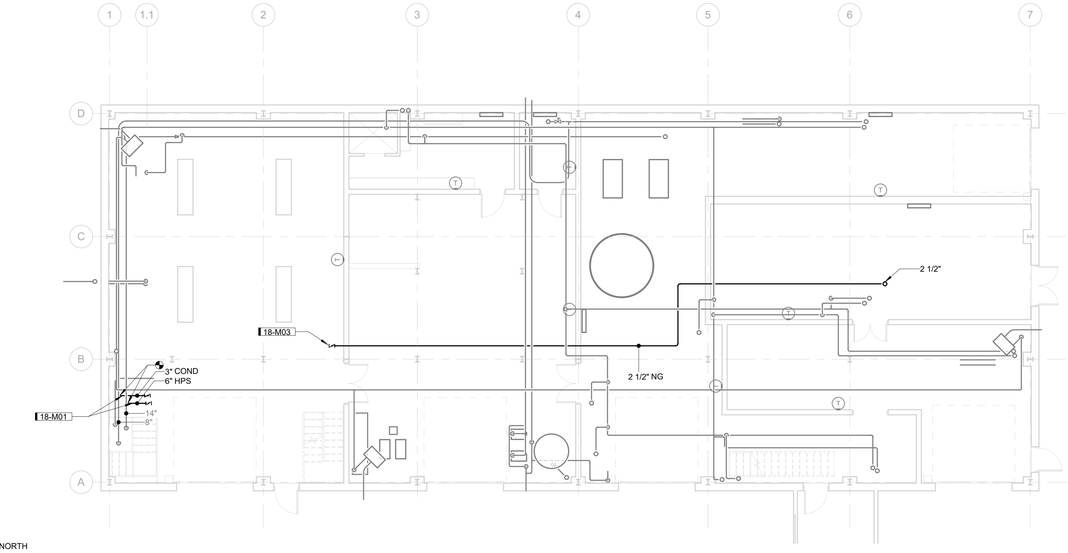
KEYNOTES	
KEY	NOTE
18-M01	INSTALL NEW 6" HPS TAP ON EXISTING 14" HPS PIPE. INSTALL NEW 3" COND TAP ON EXISTING 8" COND PIPE. TERMINATE NEW TAPS WITH BUTTERFLY VALVES AND CAP WITH BLIND FLANGES.
18-M02	CONNECT TO EXISTING NATURAL GAS PIPE FROM OLD BOILER BRANCH. ROUTE NEW 2 1/2" NG PIPE DOWN THROUGH EXISTING STEEL PLATING FLOOR COVER TO BASEMENT LEVEL.
18-M03	ROUTE 2 1/2" NG PIPE THROUGH BASEMENT TO APPROXIMATELY THIS LOCATION AND TERMINATE WITH BUTTERFLY VALVE AND CAP FOR FUTURE CONNECTION.



NORTH

C4 FIRST FLOOR TEMPORARY PIPING PLAN

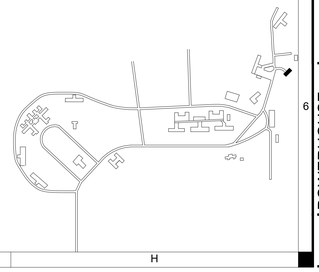
1/8" = 1'-0" 0 12'



NORTH

C6 POWERHOUSE BASEMENT TEMPORARY PIPING

1/8" = 1'-0" 0 12'



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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER 9275.50
304 CEDAR ST , WOODWARD, IA 50276

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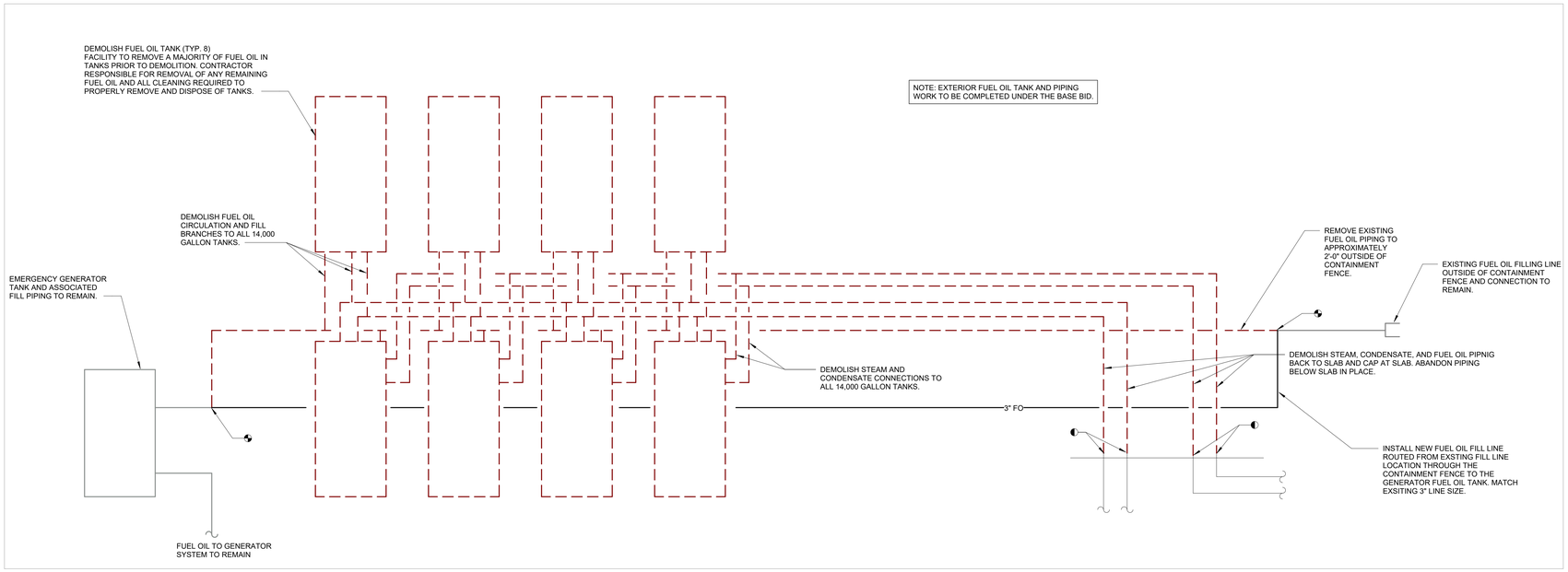
PROJECT NUMBER	2340007040
FIELD BOOK	

POWERHOUSE MECHANICAL TEMPORARY CONNECTION PLAN

18-M002



A3 FUEL OIL SCHEMATIC
NOT TO SCALE

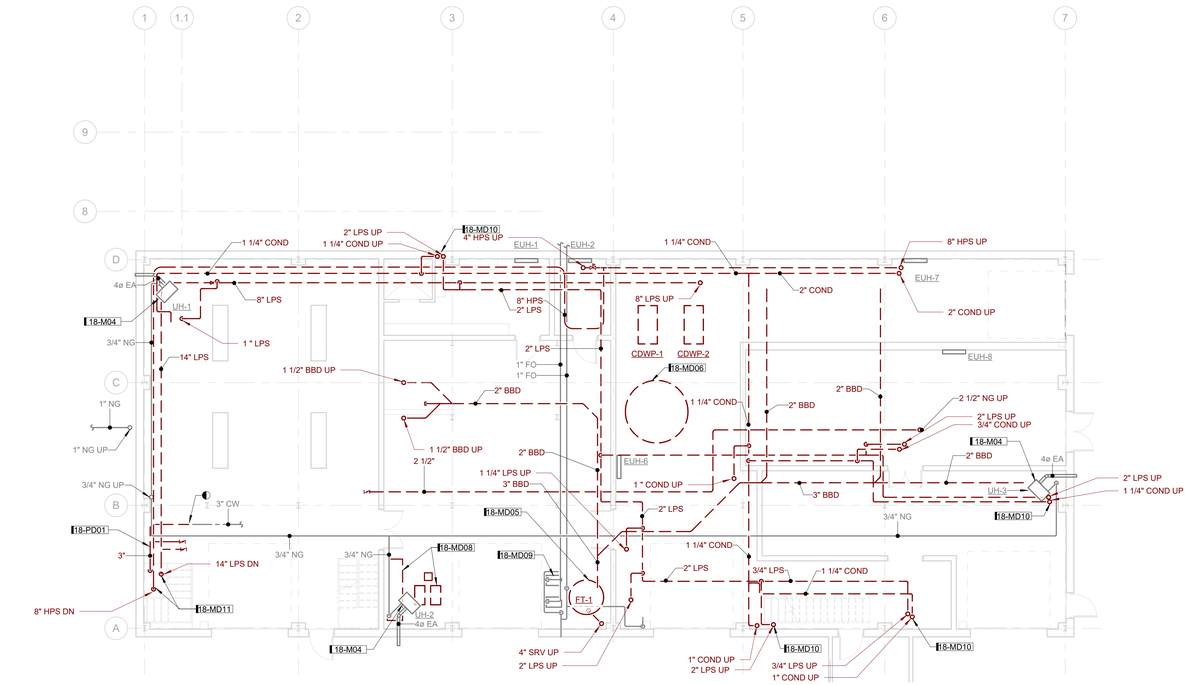
KEYNOTES

KEY	NOTE
18-M04	EXISTING UNIT HEATER AND ASSOCIATED DUCTING, NATURAL GAS PIPING, CIRCUIT, AND CONTROLS TO REMAIN.
18-MD05	DEMOLISH EXISTING BLOWDOWN SEPARATOR AND ASSOCIATED DRAIN PIPING.
18-MD06	DEMOLISH EXISTING CONDENSATE TANK, CONDENSATE PUMPS, AND ASSOCIATED CONTROLS AND PIPING.
18-MD08	DEMOLISH EXISTING FUEL OIL PUMPS, HEATER, AND FILTER. DEMOLISH ASSOCIATED STEAM AND CONDENSATE PIPING AND ACCESSORIES. DEMOLISH FUEL OIL CROSS-CONNECTION PIPING TO GENERATOR FUEL OIL PIPING SYSTEM AND CAP AT CONNECTION. EXISTING GENERATOR FUEL OIL PIPING SYSTEM TO REMAIN.
18-MD09	EXISTING GENERATOR FUEL OIL PUMPS AND ASSOCIATED PIPING SYSTEM TO REMAIN.
18-MD10	DEMOLISH BRANCH PIPING FROM PREVIOUSLY DEMOLISHED UNIT HEATER.
18-MD11	DEMOLISH STEAM AND CONDENSATE PIPING DOWN INTO TUNNEL. SEE STRUCTURAL PLANS FOR CONTINUATION OF PIPING DEMOLITION.
18-PD01	DEMOLISH EXISTING DOMESTIC WATER PIPING FROM APPROXIMATE POINT INDICATED BACK TO TUNNEL. SEE STRUCTURAL DRAWINGS FOR CONTINUATION OF PIPE DEMOLITION. EXISTING CW PIPING SERVING POWERHOUSE TO REMAIN FOR NEW CONNECTION.

NOTE: DESIGN INTENT IS TO DEMOLISH ALL ABANDONED EQUIPMENT ASSOCIATED WITH THE STEAM SYSTEM INSIDE THE POWERHOUSE INCLUDING STEAM PIPING, CONDENSATE PIPING, FEEDWATER PIPING, BLOWDOWN PIPING, FUEL OIL PIPING, AND CHEMICAL FEED PIPING UNDER BID ALTERNATE #1.

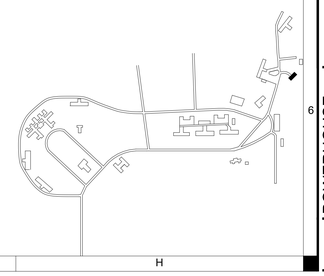
FUEL OIL PIPING AND PUMPS SERVING EXISTING GENERATOR TO REMAIN.

GAS-FIRED UNIT HEATERS AND ASSOCIATED NATURAL GAS SYSTEM TO REMAIN.



NORTH

C6 BASEMENT MECHANICAL DEMOLITION PLAN
1/8" = 1'-0" 0 12"



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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9273.50
34 CEDAR ST , WOODWARD, IA 50276

DRAWN BY	AZN
APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

POWERHOUSE BASEMENT MECHANICAL DEMOLITION PLAN

18-MD001

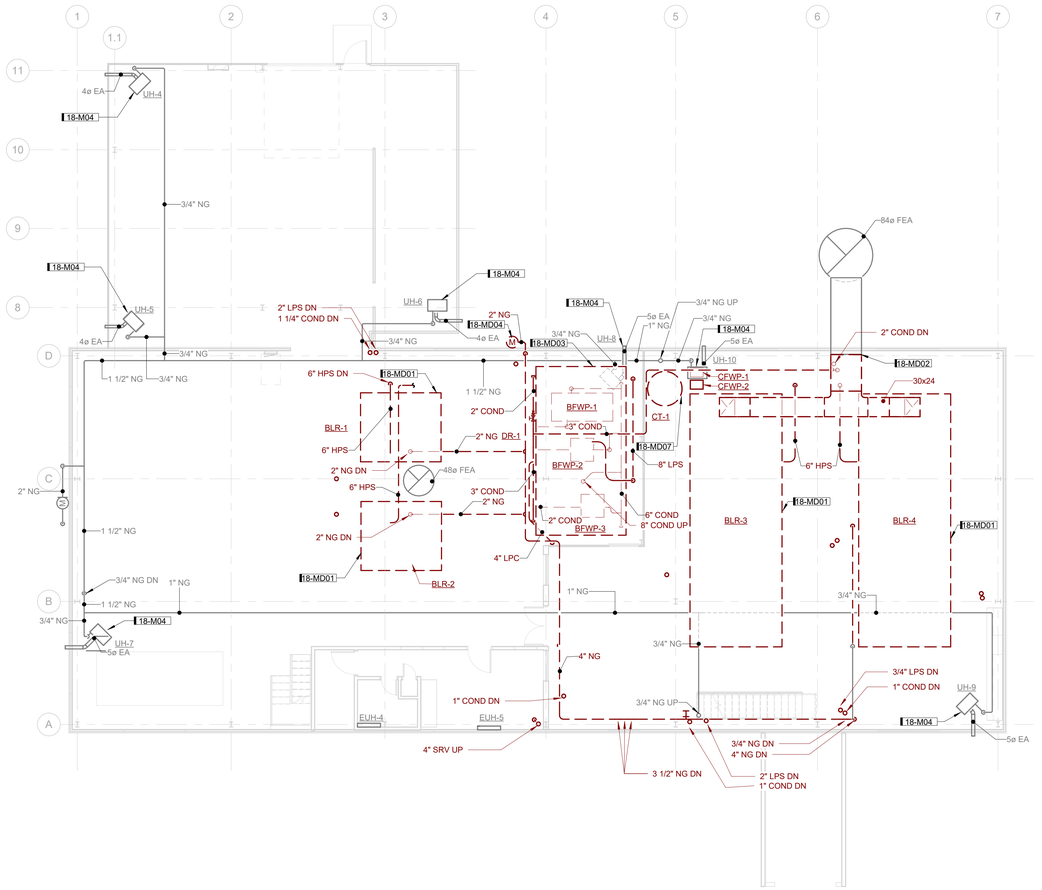
KEYNOTES

KEY	NOTE
18-M04	EXISTING UNIT HEATER AND ASSOCIATED DUCTING, NATURAL GAS PIPING, CIRCUIT, AND CONTROLS TO REMAIN.
18-MD01	DEMOLISH BOILERS AND ASSOCIATED CONTROLS, NATURAL GAS PIPING, FUEL OIL PIPING, STEAM PIPING, CONDENSATE PIPING, AND ASSOCIATED ACCESSORIES.
18-MD02	DEMOLISH COMBINED BOILER FLUE DUCTING FROM BOILERS TO WALL FACE. CAP FLUE AT WALL WITH INSULATED DUCT CAP AND SEAL WEATHERTIGHT. EXTERIOR FLUE AND TOWER TO REMAIN.
18-MD03	DEMOLISH EXISTING DEAERATOR TANK, FEEDWATER PUMPS, AND ASSOCIATED CONTROLS AND PIPING.
18-MD04	DEMOLISH NATURAL GAS PIPING AND ASSOCIATED METER. CAP AND ABANDON SERVICE PIPE 1'-0" ABOVE GRADE.
18-MD07	DEMOLISH EXISTING CHEMICAL FEED WATER TANK AND ASSOCIATED CHEMICAL FEED PUMPS AND PIPING.

NOTE: DESIGN INTENT IS TO DEMOLISH ALL ABANDONED EQUIPMENT ASSOCIATED WITH THE STEAM SYSTEM INSIDE THE POWERHOUSE INCLUDING STEAM PIPING, CONDENSATE PIPING, FEEDWATER PIPING, BLOWDOWN PIPING, FUEL OIL PIPING, AND CHEMICAL FEED PIPING UNDER BID ALTERNATE #1.

FUEL OIL PIPING AND PUMPS SERVING EXISTING GENERATOR TO REMAIN.

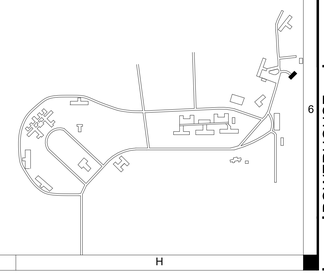
GAS-FIRED UNIT HEATERS AND ASSOCIATED NATURAL GAS SYSTEM TO REMAIN.



NORTH

B6 FIRST FLOOR MECHANICAL DEMOLITION PLAN

1/8" = 1'-0" 0 12'



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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

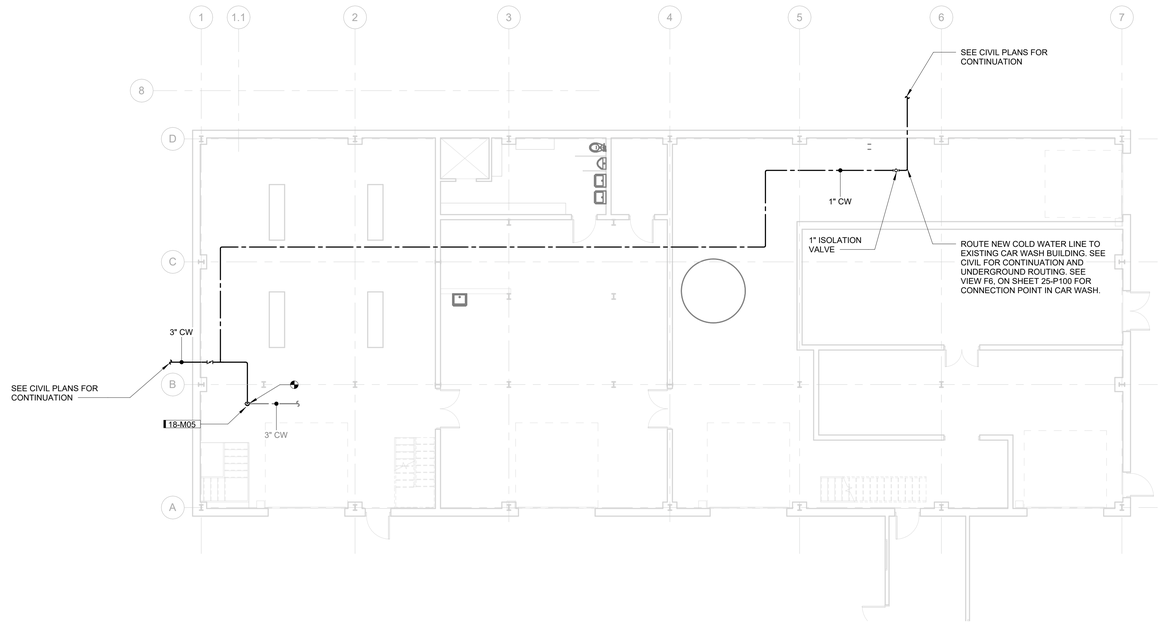
IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER 9275.30
34 CEDAR ST ; WOODWARD, IA 50276

DRAWN BY	AZN
APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

POWERHOUSE
FIRST FLOOR
MECHANICAL
DEMOLITION
PLAN

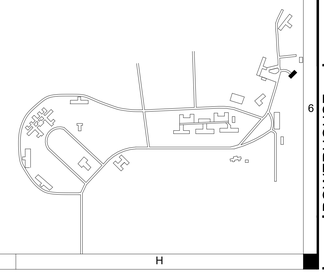
18-MD002

KEYNOTES	
KEY	NOTE
18-M05	CONNECT NEW 3" CW TO EXISTING POWERHOUSE DOMESTIC WATER SERVICE.



NORTH

C6 POWERHOUSE GROUND LEVEL PLUMBING PLAN
1/8" = 1'-0" 0



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IDAS PROJECT NUMBER: 9273.50
34 CEDAR ST , WOODWARD, IA 50276

DRAWN BY	JDB
APPROVED BY	JDB
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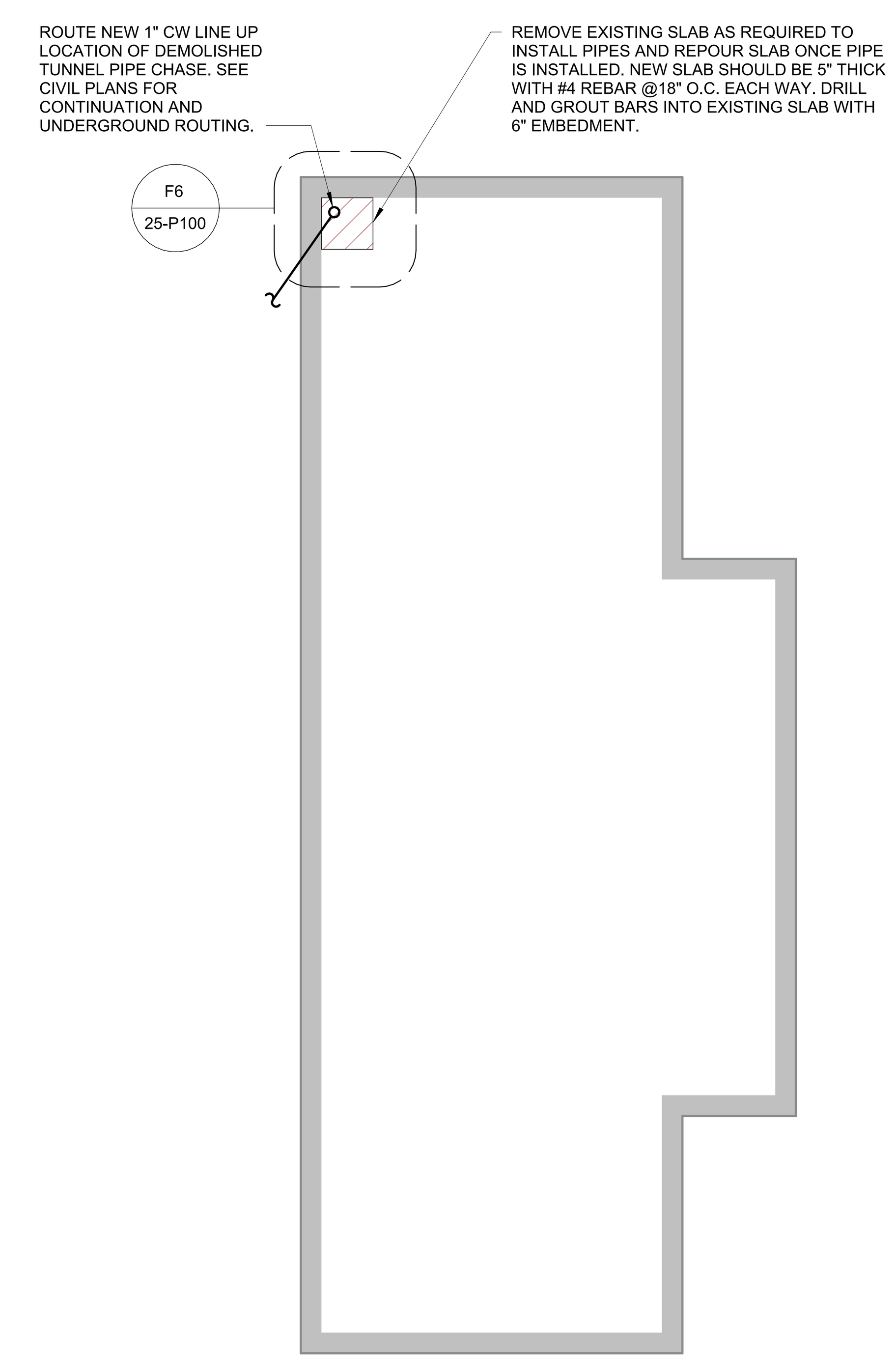
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

POWERHOUSE PLUMBING PLANS

18-P100

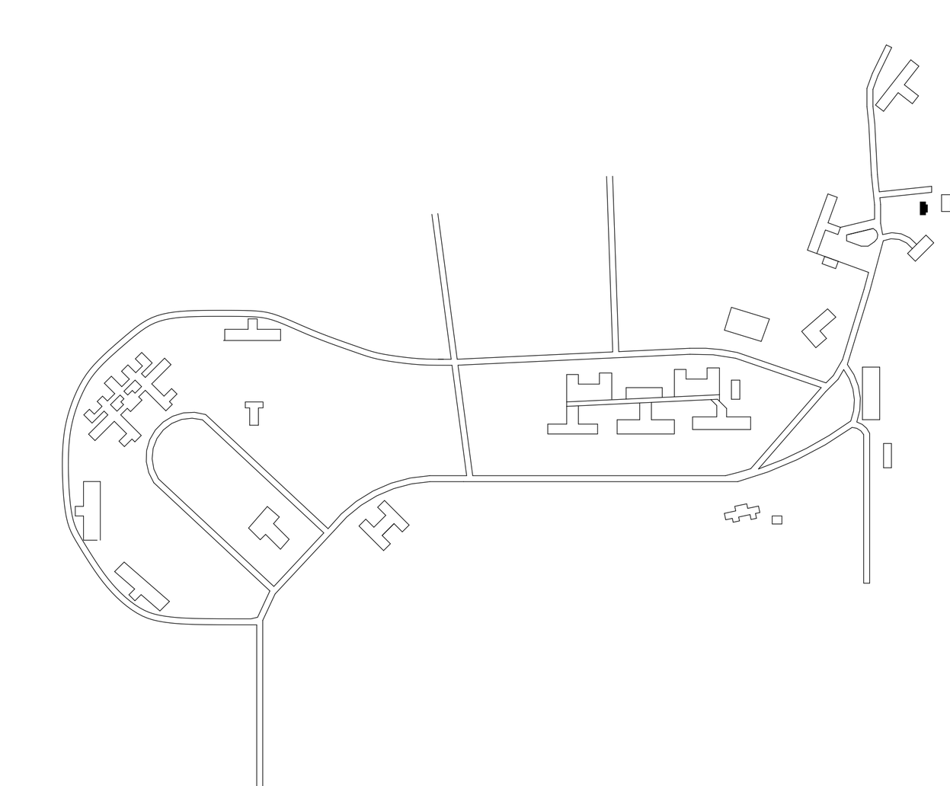


F4 CAR WASH PLUMBING PLAN

NOT TO SCALE

F6 CAR WASH WATER CONNECTION

NOT TO SCALE



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CAR WASH PLUMBING PLANS

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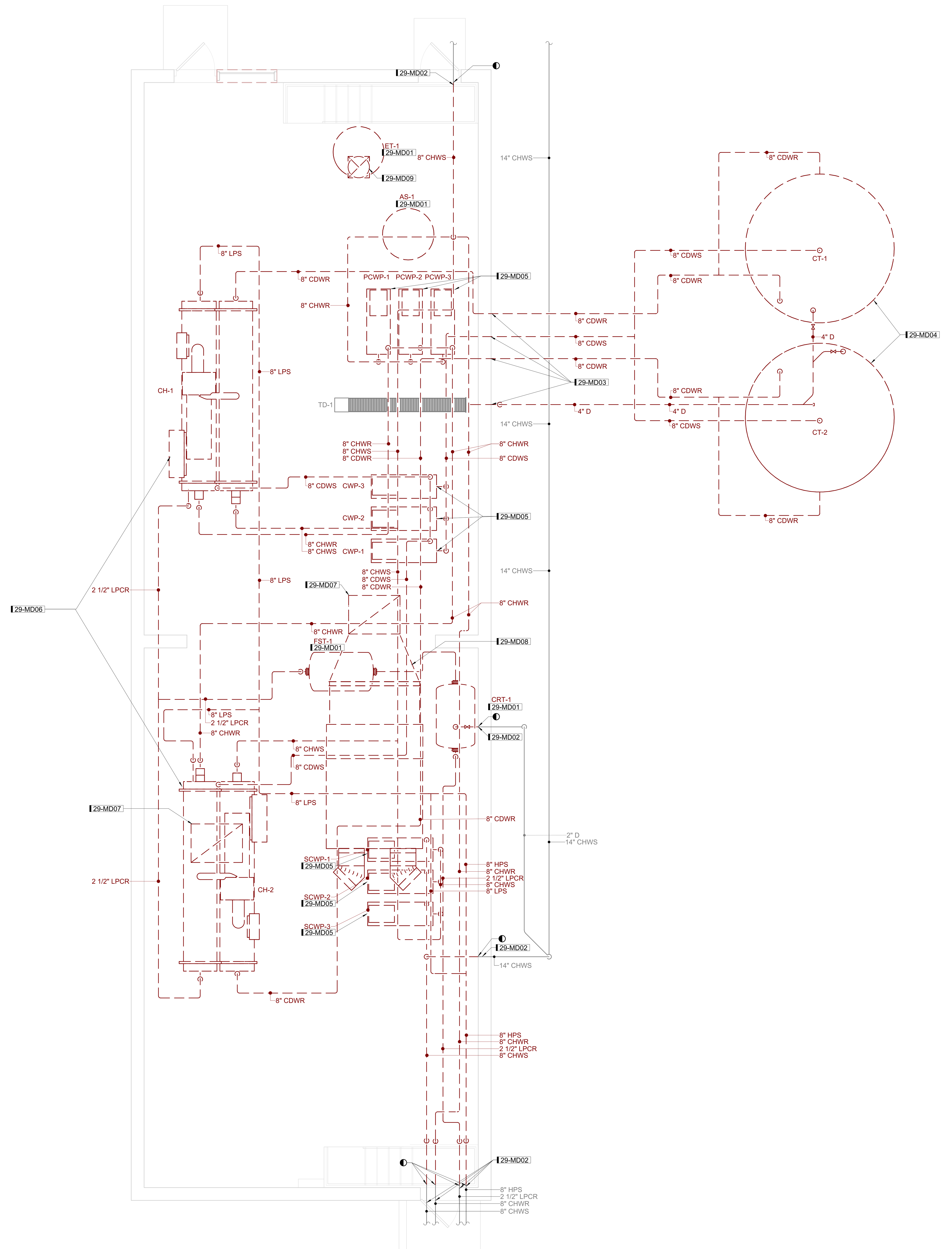
APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

KEYNOTES

KEY	NOTE
29-MD01	DEMOLISH AND CAP ALL EQUIPMENT AND ASSOCIATED PIPING BACK TO MAIN (TYP.)
29-MD02	DEMOLISH PIPING BACK TO WALL PENETRATION AND CAP.
29-MD03	INFILL WALL PENETRATION FROM DEMOLISHED PIPE AND SEAL OPENING WEATHERTIGHT.
29-MD04	DEMOLISH EXISTING COOLING TOWER AND ASSOCIATED PIPING, CONTROLS, AND SUPPORT STRUCTURE. COORDINATE DEMOLITION WITH ELECTRICAL CONTRACTOR.
29-MD05	DEMOLISH EXISTING PUMPS AND ASSOCIATED CONTROLS, AND ACCESSORIES. COORDINATE DEMOLITION WITH ELECTRICAL CONTRACTOR.
29-MD06	REMOVE EXISTING CHILLER AND ASSOCIATED CONTROLS, AND ACCESSORIES. COORDINATE DEMOLITION WITH ELECTRICAL CONTRACTOR. CHILLERS ARE NOMINAL 500 TON TRANE BASD600 ABSORPTION CHILLERS, INSTALLED IN APPROXIMATELY 2006 BASED ON EXISTING SUBMITTAL DATA.
29-MD07	REMOVE EXISTING GRAVITY HOOD ON ROOF. CAP CURB WITH WEATHER-TIGHT INSULATED CURB CAP.
29-MD08	REMOVE EXISTING HEATER AND ASSOCIATED STEAM AND CONDENSATE PIPING.
29-MD09	REMOVE EXHAUST FAN ON ROOF. CAP CURB WITH WEATHER-TIGHT INSULATED CURB CAP.

ALL DEMOLITION WORK IN THE CHILLER PLANT SHALL BE PERFORMED UNDER ALTERNATE #2

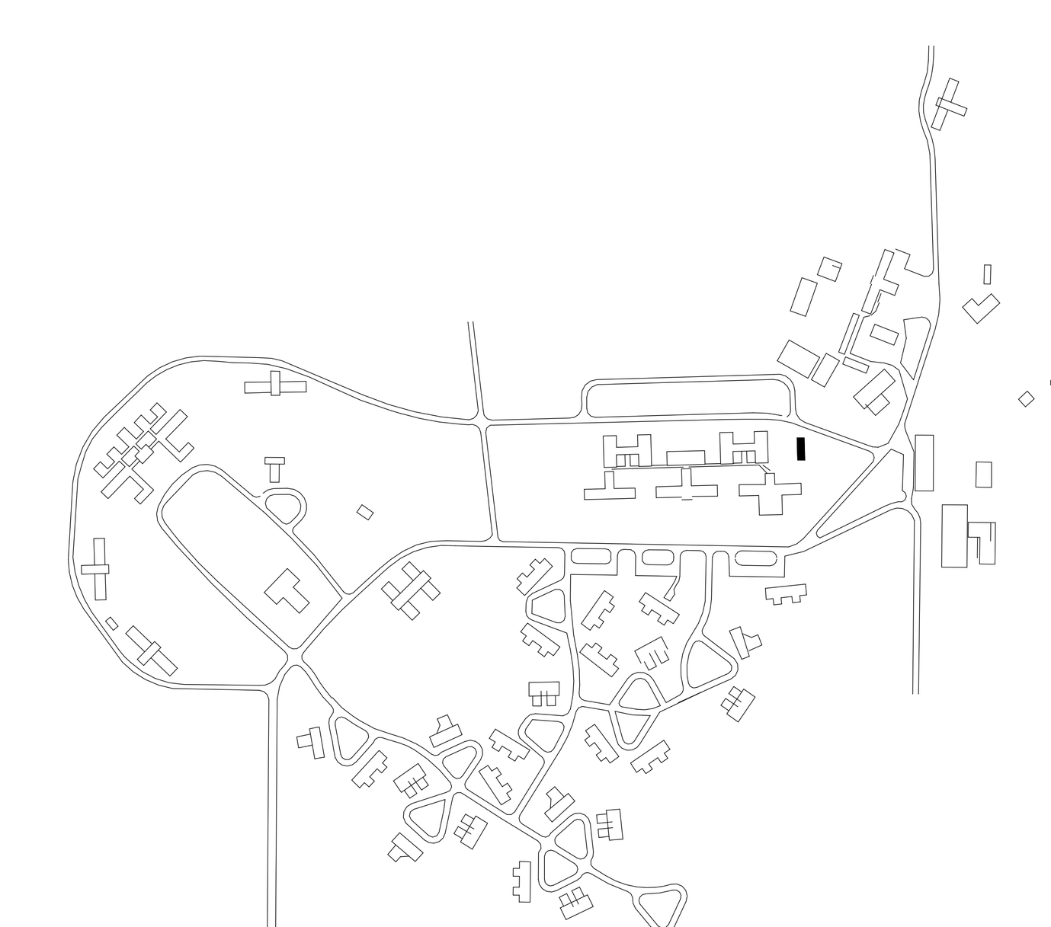


C6 CHILLER BUILDING MECHANICAL DEMO PLAN

1/4" = 1'-0"

PLAN NORTH

TRUE NORTH



KEY PLAN

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PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
CLIENT PROJECT NUMBER: 9275.50
34 CEDAR ST , WOODWARD, IA 50276

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APPROVED BY	JDB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
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CHILLER BUILDING MECHANICAL DEMOLITION PLAN

29-M001

Autodesk Revit 2022

ELECTRICAL SYMBOL LEGEND

HT AFF	SYMBOL	DESCRIPTION
	X	SURFACE LIGHT (TYPE DENOTED)
	X	RECESSED LIGHT (TYPE DENOTED)
PER SCHED	X	WALL MOUNTED LIGHT (TYPE DENOTED)
PER SCHED	X	WALL MOUNTED FLOOD LIGHT (TYPE DENOTED)
		SURFACE LIGHT (TYPE DENOTED)
		SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)
		RECESSED LIGHT (TYPE DENOTED)
PER SCHED	X	SITE POLE MOUNTED LIGHT (TYPE DENOTED)
PER SCHED	X	SITE BOLLARD LIGHT (TYPE DENOTED)
AS NOTED		TRACK AND TRACK LIGHT (TYPE DENOTED)
96"	EM	EMERGENCY BATTER LIGHT (TYPE DENOTED)
	E E	EXIT SIGN (TYPE DENOTED)
AS NOTED		LIGHT FIXTURE ON EMERGENCY CIRCUIT
	1	LIGHTING CONTROL DENOTATION
48"	$S	SINGLE POLE SWITCH
48"	$3	3-WAY SWITCH
48"	$4	4-WAY SWITCH
48"	$K	KEYED SWITCH
48"	$D	DIMMER SWITCH
48"	$OS	OCCUPANCY SENSOR SWITCH
48"	$MS	MOMENTARY CONTACT SWITCH
48"	$T	TIMER SWITCH
48"	$SP	FAN SPEED CONTROL
48"	$M	MOTOR HORSEPOWER RATED SWITCH
48"		PUSH BUTTON
48"	UC	DURESS PUSH BUTTON, UNDER COUNTER
18" UNO		DUPLEX RECEPTACLE
18" UNO		FOURPLEX RECEPTACLE
	FB 1	FLOOR BOX (TYPE DENOTED)
	CLG	CEILING MOUNTED DUPLEX RECEPTACLE

HT AFF	SYMBOL	DESCRIPTION
18"	A	SURFACE RACEWAY (TYPE DENOTED)
	A	CLOCK (TYPE DENOTED)
	P	POWER POLE (OPEN OFFICE STYLE)
	E	ELECTRICAL CONNECTION (SEE SCHEDULE)
AS NOTED		JUNCTION BOX
72"**		CIRCUIT BREAKER PANEL
72"**		POWER OR DISTRIBUTION PANEL
72"**		SPECIAL CABINET (TYPE DENOTED)
	T	TRANSFORMER (TYPE DENOTED)
	25 KVA	GENERATOR (KVA DENOTED)
	1 SF-1	MOTOR (SEE SCHEDULE)
	M *****	MOTORIZED DAMPER
72"**		SAFETY DISCONNECTION SWITCH
	ASD	ADJUSTABLE SPEED DRIVE
72"**	R	RELAY
	OS IR	OCCUPANCY SENSOR (TYPE DENOTED)
	LS A	LIGHT LEVEL SENSOR (TYPE DENOTED)
AS NOTED	PC	PHOTOCELL
AS NOTED	CCTV	CCTV CAMERA (TYPE DENOTED)
	SM	SURVEILLANCE MONITOR
48"	$V	VOLUME CONTROL
48"	IC	INTERCOM STATION
	ICM	INTERCOM MASTER
	E#	KEYED NOTE (SEE SCHEDULE)
	FS	SPRINKLER FLOW SWITCH
	TS	SPRINKLER VALVE TAMPER SWITCH
	CT	CONTACT SENSING CONTROL MODULE
	CR	RELAY OUTPUT CONTROL MODULE
	VFD	VARIABLE FREQUENCY DRIVE
	DDC	DIRECT DIGITAL CONTROL PANEL

HT AFF	SYMBOL	DESCRIPTION
		CONDUIT CONCEALED IN WALL OR OVERHEAD
		CONDUIT CONCEALED BELOW FLOOR
		CONDUIT TRANSITION UP
		CONDUIT TRANSITION DOWN
		CONDUIT STUBBED OUT
		BRANCH CIRCUIT HOME RUN
		CABLE TRAY (TYPE DENOTED)
		CONDUIT SLEEVE (SIZE DENOTED)
48"****	W	WALL TELEPHONE OUTLET (TYPE DENOTED)
18" UNO		TELEPHONE OUTLET (TYPE DENOTED)
18" UNO	X	DATA OUTLET (INDICATED QTY CABLES)
18" UNO		VOICE/DATA OUTLET (TYPE DENOTED)
		WIRELESS ACCESS POINT
18" UNO	TV	TELEVISION OUTLET
	TV	CEILING MOUNTED TELEVISION OUTLET
84"		SPEAKER (WALL OR CEILING MOUNT)
84"		HORN TYPE SPEAKER
		SURFACE MOUNT SPEAKER SUSPENDED FROM CEILING
60"		NURSE CALL SINGLE PATIENT STATION
60"	3	37 PIN BED INTERFACE RECEPTACLE
60"	J	AUXILIARY ALARM STATION, TWO JACK
36" UNO	E	EMERGENCY PULL CORD STATION
60"	T	STAFF TERMINAL, TOUCHSCREEN
60"	D	DUTY STATION
60"	S	NURSE CALL STAFF STATION
60"	A	STAFF ASSIST
48"	B	CODE BLUE STATION
12"*	DL1 DL1	NURSE CALL DOME LIGHT
48"****	NCM	NURSE CALL MASTER STATION
48"****	NCC	NURSE CALL EQUIPMENT CABINET
72"****	NC ANNUN	NURSE CALL ANNUNCIATOR PANEL

HT AFF	SYMBOL	DESCRIPTION
	F	MANUAL PULL STATION (46" ABOVE FLOOR) K = KEY OPERATED INSTITUTIONAL PULL STATION
	B	AUDIO NOTIFICATION DEVICE - CEILING MOUNTED B = BELL C = CHIME H = HORN S = SPEAKER
	B	AUDIO NOTIFICATION DEVICE - CEILING MOUNTED 80" ABOVE FLOOR OR AS NOTED B = BELL C = CHIME H = HORN S = SPEAKER
	L	VISUAL NOTIFICATION DEVICE - CEILING MOUNTED
	L	VISUAL NOTIFICATION DEVICE - WALL MOUNTED 80" ABOVE FLOOR OR AS NOTED
		AUDIO/VISUAL NOTIFICATION DEVICE - CEILING MOUNTED B = BELL C = CHIME H = HORN S = SPEAKER
		AUDIO/VISUAL NOTIFICATION DEVICE - WALL MOUNTED 80" ABOVE FLOOR OR AS NOTED B = BELL C = CHIME H = HORN S = SPEAKER
72"**	FACP	FIRE ALARM CONTROL PANEL
72"**	FARP	FIRE ALARM RELAY PANEL
72"**	ANN	FIRE ALARM REMOTE ANNUNCIATOR
8"*****	P P	SMOKE DETECTOR (TYPE DENOTED)
	R/F135 R/F135	HEAT DETECTOR (TYPE AND TEMP DENOTED)
		LINEAR HEAT DETECTOR
		DUCT SMOKE DETECTOR (TYPE DENOTED)
	DH	DOOR HOLDER
	CH	DOOR CLOSER/HOLD OPEN
	DR	SMOKE DAMPER RELEASE
	FR	FIRE ALARM SHUT DOWN RELAY

ALL DISTANCES ARE TO CENTER OF DEVICE OR EQUIPMENT UNLESS OTHERWISE NOTED. DEVICES INDICATED AT 48" MAY NOT BE INSTALLED WITH ANY OPERABLE PART HIGHER THAN 48". DEVICES MAY BE INSTALLED IN CONCRETE MASONRY UNITS WITH THE TOP OF THE DEVICE AT 48".

* DISTANCE ABOVE DOOR FRAME ** DISTANCE TO TOP OF EQUIPMENT OR DEVICE *** DISTANCE TO HIGHEST OPERABLE POINT OF EQUIPMENT **** DISTANCE BELOW CEILING ***** DISTANCE TO BOTTOM OF DEVICE

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)	DCP	DOMESTIC WATER CIRCULATING PUMP	HT	HEIGHT	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION	SWBD	SWITCHBOARD
A	AMPERE	DEPT	DEPARTMENT	HTG	HEATING			SYM	SYMMETRICAL
AC	ABOVE COUNTER	DET	DETAIL	HTR	HEATER			SYS	SYSTEM
ACLG	ABOVE CEILING	DIA	DIAMETER	HV	HIGH VOLTAGE	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH	TEL	TELEPHONE
ADO	AUTOMATIC DOOR OPENER	DISC	DISCONNECT	HVAC	HEATING, VENTILATING AND AIR CONDITIONING			TEL/DATA	TELEPHONE/DATA
AF	AMP FRAME	DIST	DISTRIBUTION			NIC	NOT IN CONTRACT	TERM	TERMINAL
AFF	ABOVE FINISHED FLOOR	DN	DOWN	HWP	HYDRONIC WATER PUMP	NL	NIGHT LIGHT	TL	TWIST LOCK
AFG	ABOVE FINISHED GRADE	DPR	DAMPER	IC	INTERRUPTING CAPACITY	NO	NORMALLY OPEN	TR	TAMPER RESISTANT
AFI	ARC FAULT CIRCUIT INTERRUPTER	DS	SAFETY DISCONNECT SWITCH	IG	ISOLATED GROUND	NPF	NORMAL POWER FACTOR	T-STAT	THERMOSTAT
		DT	DOUBLE THROW	IMC	INTERMEDIATE METAL CONDUIT	NTS	NOT TO SCALE	TTC	TELEPHONE TERMINAL CABINET
AHU	AIR HANDLING UNIT	DWG	DRAWING	INCAND	INCANDESCENT	OH	OVERHEAD	TV	TELEVISION
AL	ALUMINUM			IR	INFRARED	OL	OVERLOADS	TVTC	TELEVISION TERMINAL CABINET
ALT	ALTERNATE	EC	ELECTRICAL CONTRACTOR	IW	INTERLOCK WITH				
AMP	AMPERE	ELEC	ELECTRIC, ELECTRICAL			PA	PUBLIC ADDRESS	TYP	TYPICAL
AMPL	AMPLIFIER	ELEV	ELEVATOR	J-BOX	JUNCTION BOX	PB	PULL BOX OR PUSHBUTTON		
ANNUN	ANNUNCIATOR	EM	EMERGENCY			PE	PNEUMATIC ELECTRIC	UC	UNDER COUNTER
APPROX	APPROXIMATELY	EMS	ENERGY MANAGEMENT SYSTEM	KV	KILOVOLT	PED	PEDESTAL	UE	UNDERGROUND ELECTRICAL
AQ-STAT	AQUASTAT	EMT	ELECTRICAL METALLIC TUBING	KVA	KILOVOLT-AMPERE	PF	POWER FACTOR	UG	UNDERGROUND
ARCH	ARCHITECT, ARCHITECTURAL	EP	ELECTRIC PNEUMATIC	KVAR	KILOVOLT-AMPERE REACTIVE	PH	PHASE	UH	UNIT HEATER
AS	AMP SWITCH	EQUIP	EQUIPMENT	KW	KILOWATT	PIV	POST INDICATING VALVE	UNO	UNLESS NOTED OTHERWISE
AT	AMP TRIP	EWC	ELECTRIC WATER COOLER	KWH	KILOWATT HOUR	PNL	PANEL	UT	UNDERGROUND TELEPHONE
ATS	AUTOMATIC TRANSFER SWITCH	EXIST	EXISTING			PP	POWER POLE	UTIL	UTILITY
AUTO	AUTOMATIC	EXH	EXHAUST	LOC	LOCATE OR LOCATION	PR	PAIR	UV	UNIT VENTILATOR OR ULTRAVIOLET
AUX	AUXILIARY	EXP	EXPLOSION PROOF	LT	LIGHT	PRI	PRIMARY		
AV	AUDIO VISUAL			LTG	LIGHTING	PROJ	PROJECTION		
AWG	AMERICAN WIRE GAUGE	FA	FIRE ALARM	LTNG	LIGHTNING	PRV	POWER ROOF VENTILATOR	V	VOLT
		FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	LV	LOW VOLTAGE	PT	POTENTIAL TRANSFORMER	VA	VOLT-AMPERES
BATT	BATTERY					PVC	POLYVINYL CHLORIDE (CONDUIT)	VDT	VIDEO DISPLAY TERMINAL
BD	BOARD	FACP	FIRE ALARM CONTROL PANEL	MAX	MAXIMUM			VERT	VERTICAL
BLDG	BUILDING	FCU	FAN COIL UNIT	MAG.S	MAGNETIC STARTER	PWR	POWER	VFD	VARIABLE FREQUENCY DRIVE
BMS	BUILDING MANAGEMENT SYSTEM	FIXT	FIXTURE	MC	MOMENTARY CONTACT			VOL	VOLUME
		FLR	FLOOR	MC	MECHANICAL CONTRACTOR	QUAN	QUANTITY		
		FLUOR	FLUORESCENT	MCA	MINIMUM CIRCUIT AMPACITY			W	WATT
C	CONDUIT	FU	FUSE	MCB	MAIN CIRCUIT BREAKER	RCPT	RECEPTACLE	W/	WITH
CAB	CABINET	FUDS	FUSED SAFETY DISCONNECT SWITCH	MCC	MOTOR CONTROL CENTER	REQD	REQUIRED	WG	WIRE GUARD
CAT	CATALOG			MDC	MAIN DISTRIBUTION CENTER	RM	ROOM	WH	WATER HEATER
CATV	CABLE TELEVISION			MDP	MAIN DISTRIBUTION PANEL	RSC	RIGID STEEL CONDUIT	W/O	WITHOUT
CB	CIRCUIT BREAKER	GA	GAUGE	MFR	MANUFACTURER	RTU	ROOF TOP UNIT	WP	WEATHERPROOF
CCTV	CLOSED CIRCUIT TELEVISION	GAL	GALLON	MFS	MAIN FUSED DISCONNECT SWITCH	SC	SURFACE CONDUIT	XFMR	TRANSFORMER
CKT	CIRCUIT	GALV	GALVANIZED			SEC	SECONDARY	XFR	TRANSFER
CLG	CEILING	GC	GENERAL CONTRACTOR	MH	MANHOLE	SHT	SHEET		
COMB	COMBINATION	GEN	GENERATOR	MIC	MICROPHONE	SIM	SIMILAR		
CMPR	COMPRESSOR	GFI	GROUND FAULT CIRCUIT INTERRUPTER	MIN	MINIMUM	S/N	SOLID NEUTRAL		
CONN	CONNECTION			MISC	MISCELLANEOUS	SPEC	SPECIFICATION	∠	ANGLE
CONST	CONSTRUCTION	GFP	GROUND FAULT PROTECTOR	MLO	MAIN LUGS ONLY	SPKR	SPEAKER	@	AT
CONT	CONTINUATION OR CONTINUOUS	GND	GROUND	MMS	MANUAL MOTOR STARTER	SP	SPARE	Δ	DELTA
		GRS	GALVANIZED RIGID STEEL (CONDUIT)	MOA	MULTI/OUTLET ASSEMBLY	SR	SURFACE RACEWAY	'	FEET
CONTR	CONTRACTOR			MOCP	MAXIMUM OVER-CURRENT PROTECTION	SS	STAINLESS STEEL	"	INCHES
CONV	CONVECTOR	GYP BD	GYPSUM BOARD			SSW	SELECTOR SWITCH	#	NUMBER
CP	CIRCULATING PUMP			MSP	MOTOR STARTER PANELBOARD	S/S	STOP/START PUSHBUTTONS	Ø	PHASE
CRT	CATHODE-RAY TUBE	HOA	HANDS-OFF-AUTOMATIC SWITCH	MSBD	MAIN SWITCHBOARD	STA	STATION	℄	CENTER LINE
CT	CURRENT TRANSFORMER			MT	MOUNT	STD	STANDARD	Ⓔ	PLATE
CTR	CENTER	HORIZ	HORIZONTAL	MT.C	EMPTY CONDUIT	SURF	SURFACE MOUNTED		
CU	COPPER	HP	HORSEPOWER	MTS	MANUAL TRANSFER SWITCH	SW	SWITCH		
		HPF	HIGH POWER FACTOR	MTR	MOTOR, MOTORIZED				
				N.C.	NORMALLY CLOSED				
				NEC	NATIONAL ELECTRICAL CODE				

DEMOLITION GENERAL NOTES

1. LIGHT LINES INDICATE EXISTING WALLS AND EQUIPMENT TO REMAIN. DASHED LINES INDICATE WALLS, EQUIPMENT, AND ELECTRICAL ITEMS TO BE REMOVED.
2. COORDINATE PATCHING REQUIREMENTS FOR UNUSED OPENINGS WITH THE CONSTRUCTION MANAGER.
3. FIRE ALARM - REMOVE EXISTING CEILING MOUNTED DEVICES TO PERMIT REMOVAL OF CEILING. WALL MOUNTED NOTIFICATION DEVICES SHALL BE DEMOLISHED. COORDINATE WORK WITH PROJECT PHASING TO MAINTAIN FIRE ALARM SYSTEM PROTECTION OF SPACES AT ALL TIMES.
4. COORDINATE DISPOSAL OF ALL ITEMS NOT REQUESTED AS SALVAGE BY THE OWNER.
5. DISCONNECT OUTLETS, WIRING, AND OTHER NOTED EQUIPMENT TO PERMIT DEMOLITION OF WALLS. VERIFY AND MAINTAIN CONNECTION TO EXISTING OUTLETS THAT WILL NOT BE REMOVED BUT ARE ON COMMON CIRCUITS WITH ITEMS TO BE REMOVED.
6. DRAWINGS DO NOT IDENTIFY ALL OUTLETS, SWITCHES, CABLING, OR EQUIPMENT TO BE REMOVED. CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE PRIOR TO BIDDING AND INCLUDE LABOR AND MATERIAL NECESSARY FOR REQUIRED DEMOLITION IN THEIR BID.
7. WIRING SHALL BE REMOVED BACK TO SERVING PANEL. INSTALLATION OF NEW CONDUCTORS IN EXISTING CONDUITS WILL BE PERMITTED AS DESCRIBED IN THE DIVISION 26 SPECIFICATIONS.
8. HVAC EQUIPMENT NOTED FOR REMOVAL IS FOR REFERENCE ONLY. THE ELECTRICAL CONTRACTOR SHALL REVIEW THE MECHANICAL SYSTEMS DEMOLITION PLANS AND INCLUDE ALL LABOR AND MATERIAL NECESSARY TO FACILITATE REMOVAL OF EQUIPMENT AS SHOWN ON THOSE DRAWINGS. THIS SHALL INCLUDE ALL ITEMS NOTED ON EITHER THE PLUMBING OR MECHANICAL SERIES OF DRAWINGS.
9. CONTRACTOR TO CONTACT JEREMY DENMON AT SIEMENS FOR DECOMMISSIONING AND REPROGRAMMING OF EXISTING SIEMENS SYSTEM jeremy.denmon@siemens.com 515-553-7019.

HAZARDOUS MATERIAL NOTES

BUILDING CONTAINS HAZARDOUS MATERIAL SUCH AS ASBESTOS AND LEAD PAINT. SUPPLEMENTAL HAZARDOUS MATERIAL REPORT IS PROVIDED IN THE BID DOCUMENTS AS A SEPARATE ATTACHMENT. REFER TO HAZARDOUS MATERIAL REPORT FOR EXTENTS OF TESTING AND RESULTS.

ELECTRICAL GENERAL NOTES

1. ALL WORK SHALL BE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE - LATEST EDITION ADOPTED BY THE STATE. THE STATE AMENDMENTS, AND THE AUTHORITY HAVING JURISDICTION. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES).
2. IT IS THE INTENT OF THESE DOCUMENTS TO COMPLY WITH THE APPLICABLE CODES. WHERE DISCREPANCIES OCCUR, NOTIFY THE ENGINEER/ARCHITECT IN WRITING FOR INTERPRETATION. CORRECT ANY INSTALLATION THAT FAILS TO COMPLY WITH THE CODES AND STANDARDS AT NO ADDITIONAL COST TO THE OWNER.
3. CONTRACTOR SHALL PROVIDE ALL WORK NECESSARY INCLUDING ALL LABOR, MATERIALS, PERMITS, TAXES, FEES, INSPECTIONS, HARDWARE, AND COST FOR INSTALLATION FOR A COMPLETE AND OPERATIONAL SYSTEM.
4. ALL MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE NEW, COMPLETE WITH MANUFACTURER'S GUARANTEE OR WARRANTY AND SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
5. COORDINATE ELECTRICAL INSTALLATION WITH ALL TRADES PRIOR TO INSTALLATION. IF ELECTRICAL WORK INSTALLED INTERFERES WITH OTHER TRADES AFTER INSTALLATION, THE CONTRACTOR SHALL MAKE ALL NECESSARY CHANGES TO CORRECT THE CONDITION AT NO ADDITIONAL COST TO THE OWNER.
6. DRAWINGS ARE DIAGRAMMATIC. ALL DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE, AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION THIS CONTRACTOR SHALL ADJUST CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
7. ALL ELECTRICAL PANELS WITH ANY BRANCH CIRCUIT/LOAD REVISIONS (DEMOLITION OR NEW WORK) SHALL HAVE A NEW TYPED UPDATED CIRCUIT DIRECTORY CARD INSTALLED INSIDE THE DOOR OF THE ELECTRICAL PANEL. THE CONTRACTOR SHALL VERIFY THAT ALL UNUSED CIRCUIT BREAKERS ARE TURNED 'OFF' AND PROPERLY INDICATED AS 'SPARE' ON THE NEW CIRCUIT DIRECTORY CARD. THE CONTRACTOR SHALL INSTALL FILLER PLATES WHERE BREAKERS ARE REMOVED AS PART OF THIS PROJECT OR HAVE BEEN REMOVED PREVIOUSLY.
8. NO ENERGIZED CONDUCTORS SHALL BE EXPOSED AT ANYTIME EXCEPT WHEN THE IMMEDIATE AREA IS UNDER THE SUPERVISION OF A QUALIFIED ELECTRICIAN.
9. WHERE CONDUIT IS SURFACE MOUNTED TO A WALL AND RUN VERTICALLY DOWN TO A SWITCH/OUTLET BOX, UTILIZE 1-HOLE OR 2-HOLE CONDUIT STRAPS.
10. PENETRATIONS THROUGH FIRE RATED WALLS BY OR FOR DIVISION 26 CONTRACTOR SHALL BE SEALED WITH APPROPRIATE FIRE PROOFING MATERIAL TO RESTORE FIRE RATING.
11. THE CONTRACTOR SHALL KEEP THE WORK AREA CLEAN OF ALL DEBRIS ON A DAILY BASIS. ALL NEW MATERIALS AWAITING INSTALLATION SHALL BE KEPT IN AREAS DESIGNATED BY THE OWNER.
12. PERIODIC SITE OBSERVATION BY THE ENGINEER IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.
13. THE INFORMATION CONTAINED ON THE ELECTRICAL DRAWINGS IS IN ITSELF INCOMPLETE AND VOID UNLESS USED IN CONJUNCTION WITH ALL OTHER DISCIPLINE DRAWINGS, THE SPECIFICATIONS, TRADE PRACTICES, OR APPLICABLE STANDARDS, CODES, ETC., AND SHALL BE CONSIDERED THE CONTRACT DOCUMENTS AND WITH ALL THEREIN BY REFERENCE, WHICH THE CONTRACTOR CERTIFIES KNOWLEDGE OF BY SIGNING THE CONTRACT.
14. CONTRACTOR IS TO ASSUME FULL RESPONSIBILITY, UNRELIEVED BY REVIEW OF SHOP DRAWINGS OR PERIODIC OBSERVATION OF CONSTRUCTION, FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, FOR DIMENSIONS TO BE CONFIRMED AND CORRELATED ON THE JOB SITE AND BETWEEN INDIVIDUAL DRAWINGS OR SETS OF DRAWINGS FOR FABRICATION PROCESSES AND CONSTRUCTION TECHNIQUES (INCLUDING EXCAVATION, SHORING, SCAFFOLDING, BRACING, ERECTION, FORM WORK, ETC.), FOR COORDINATION OF THE VARIOUS TRADES, AND FOR SAFE CONDITIONS ON THE JOB SITE. VARIATIONS IN FIELD CONDITIONS RELATIVE TO THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER AS SOON AS THEY ARE FOUND. WORK SHALL NOT PROGRESS UNTIL WRITTEN PERMISSION FROM THE ENGINEER IS OBTAINED.

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ARCHITECTURE + ENGINEERING
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WEST DES MOINES, IA 50266
515.223.8104 | SHIVEHATTERY.COM

IA DAS -HHS WRC CAMPUS UTILITY DECENTRALIZATION
PHASE 5 - TUNNEL & UTILITY ABANDONMENT

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES
IDAS PROJECT NUMBER: 9275.50
304 CEDAR ST | WOODWARD, IA 50276

DRAWN BY	RML
APPROVED BY	KJB
ISSUED FOR	100% CD
ISSUE DATE	04/24/2026
PROJECT NUMBER	2240007040
FIELD BOOK	

ELECTRICAL GENERAL INFORMATION

00-E001

KEYNOTES	
KEY	NOTE
00-TE01	THE OWNER TO DISCONNECT ELECTRICAL CONNECTION TO EXHAUST FAN. REMOVE WIRING IN ADMINISTRATION BUILDING. WIRING IN TUNNEL TO BE REMOVED BY ABATEMENT CONTRACTOR. EXHAUST FAN CIRCUITED TO PANEL AJI IN ADMINISTRATION BUILDING.
00-TE02	THE OWNER TO DISCONNECT ELECTRICAL CONNECTION FOR LIGHTING AND RECEPTACLES REMOVE WIRING IN POWERHOUSE. WIRING IN TUNNEL TO BE REMOVED BY ABATEMENT CONTRACTOR. LIGHTING AND RECEPTACLES CIRCUITED TO PANEL 2 IN THE POWERHOUSE.
00-TE03	THE OWNER TO DISCONNECT ELECTRICAL CONNECTIONS FOR TWO PUMPS. REMOVE WIRING IN POWERHOUSE. WIRING IN TUNNEL TO BE REMOVED BY ABATEMENT CONTRACTOR. PUMPS CIRCUITED TO SOUTHEAST PANEL IN THE POWERHOUSE.

00-TE01

00-TE02

00-TE03

NORTH

A6 OVERALL ELECTRICAL TUNNEL EXCAVATION PLAN

1" = 100'-0" 0 150'

WRC LEGEND

BUILDINGS
1. WESTWOOD
2. ADMINISTRATION
3. LARCHES
4. MYERS HALL
5. CHAPEL
6. HEMLOCK
7. EMPLOYEE HOME
8. MAPLE LODGE
9. LINDEN COURT A/B
10. ELMCREST
11. CAMPUS FOOD SERVICE
12. MEDICAL CENTER
13. LINDEN COURT C/D
14. LAUNDRY
15. GARAGE
16. BIRCHES
17. CAR WASH
18. POWER HOUSE
19. SUPPLY DEPOT
20. OAK HALL
21. WATER TREATMENT
22. CDC CENTRAL DISTRIBUTION
23. THE LODGE
24. STATEROOM 4
25. STATEROOM 3
26. STATEROOM 2
27. STATEROOM 1
28. WESTWOOD STORAGE BUILDING
29. CHILLER BUILDING

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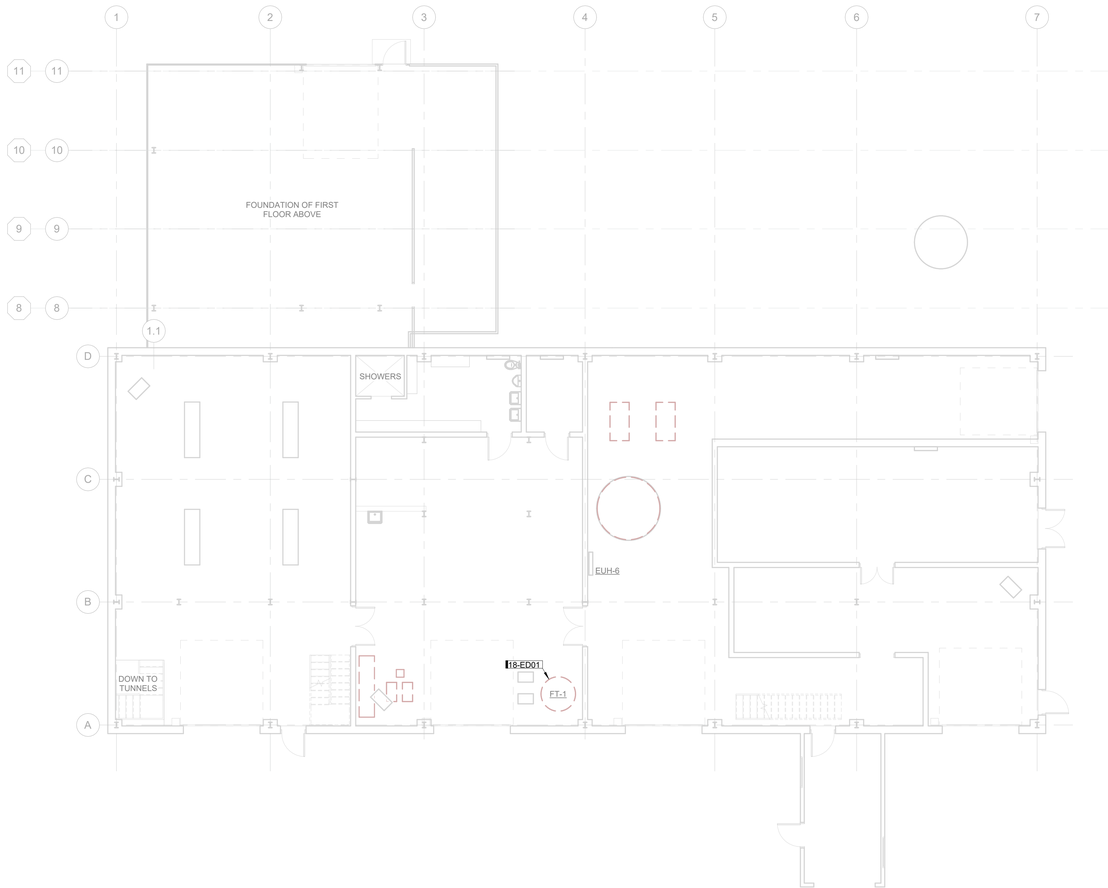
OVERALL TUNNEL ELECTRICAL SITE PLAN

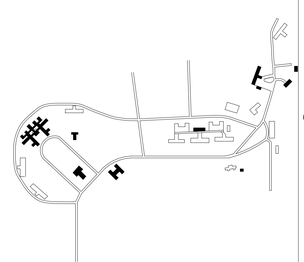
00-ESD01

KEYNOTES	
KEY	NOTE
18-ED01	EXISTING MECHANICAL EQUIPMENT TO BE REMOVED. CONTRACTOR SHALL DISCONNECT AND REMOVE ELECTRICAL CONNECTION SERVING UNIT. CONTRACTOR SHALL REMOVE ELECTRICAL FEEDS AND CONTROL WIRING BACK TO SOURCE. UPDATE ELECTRICAL PANEL SCHEDULE.



NORTH

A5 BASEMENT ELECTRICAL ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0" 0 12'



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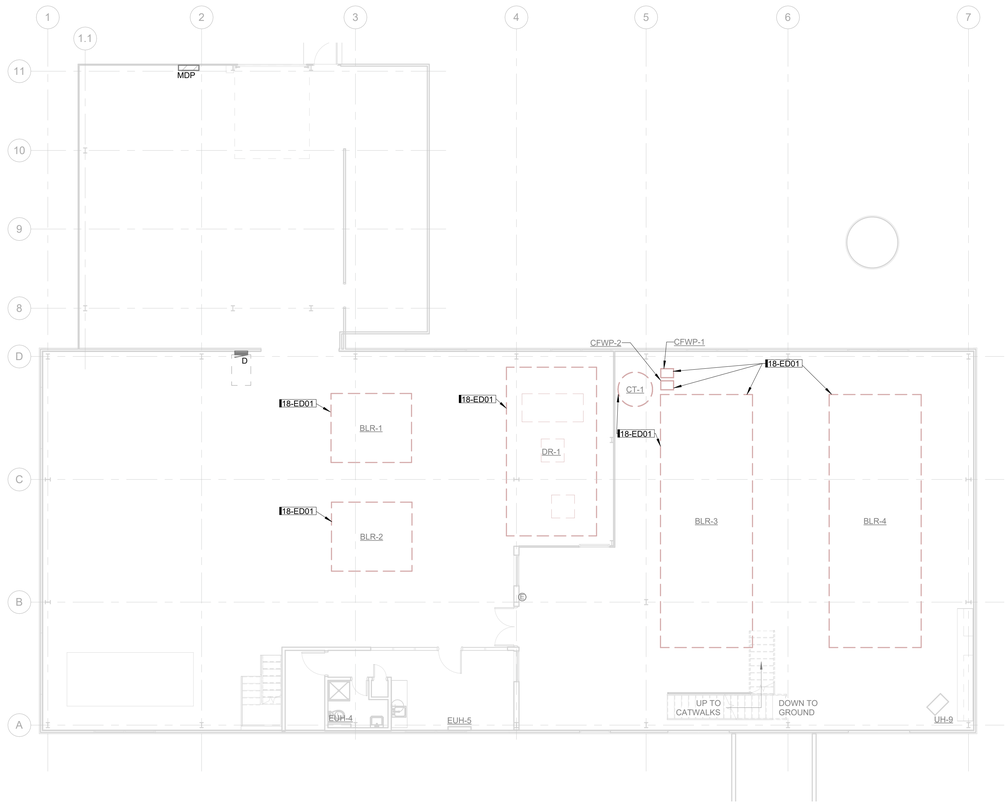
POWERHOUSE BASEMENT ELECTRICAL DEMOLITION PLAN

18-ED001

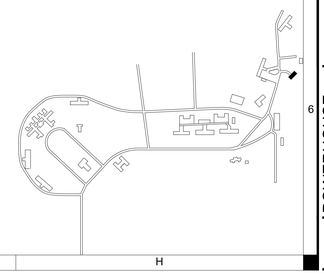
KEYNOTES	
KEY	NOTE
18-ED01	EXISTING MECHANICAL EQUIPMENT TO BE REMOVED. CONTRACTOR SHALL DISCONNECT AND REMOVE ELECTRICAL CONNECTION SERVING UNIT. CONTRACTOR SHALL REMOVE ELECTRICAL FEEDS AND CONTROL WIRING BACK TO SOURCE. UPDATE ELECTRICAL PANEL SCHEDULE.



NORTH

A5 FIRST FLOOR ELECTRICAL ELECTRICAL DEMOLITION PLAN

1/8" = 1'-0" 0 12'



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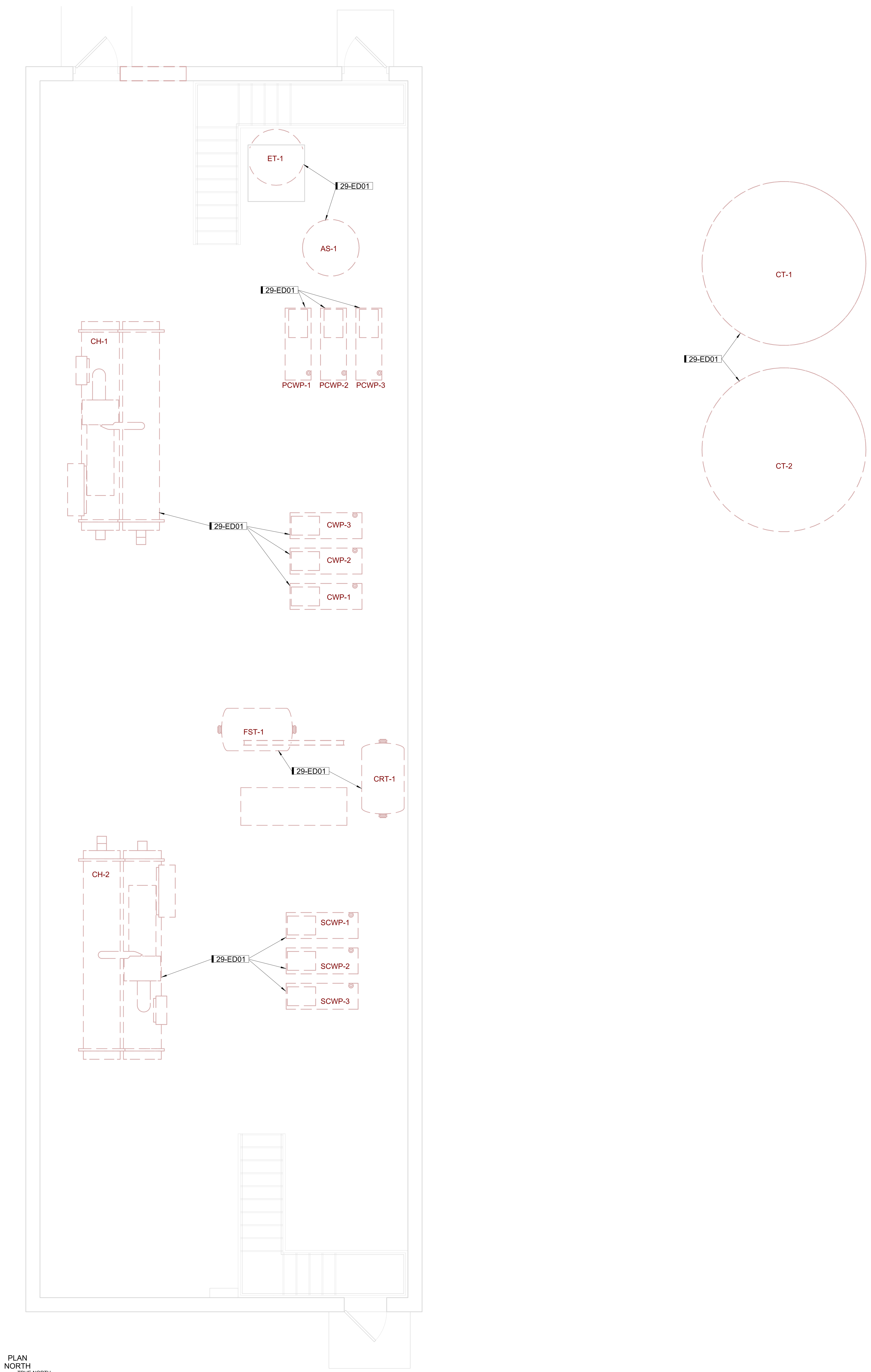
POWERHOUSE
FIRST FLOOR
ELECTRICAL
DEMOLITION
PLAN

18-ED002

KEYNOTES

KEY	NOTE
29-ED01	EXISTING MECHANICAL EQUIPMENT TO BE REMOVED. CONTRACTOR SHALL DISCONNECT AND REMOVE ELECTRICAL CONNECTION SERVING UNIT. CONTRACTOR SHALL REMOVE ELECTRICAL FEEDS AND CONTROL WIRING BACK TO SOURCE. UPDATE ELECTRICAL PANEL SCHEDULE.

ALL DEMOLITION WORK IN THE CHILLER PLANT SHALL BE PERFORMED UNDER ALTERNATE #2



PLAN NORTH
TRUE NORTH

1 GROUND LEVEL ELECTRICAL DEMOLITION PLAN

1/4" = 1'-0"

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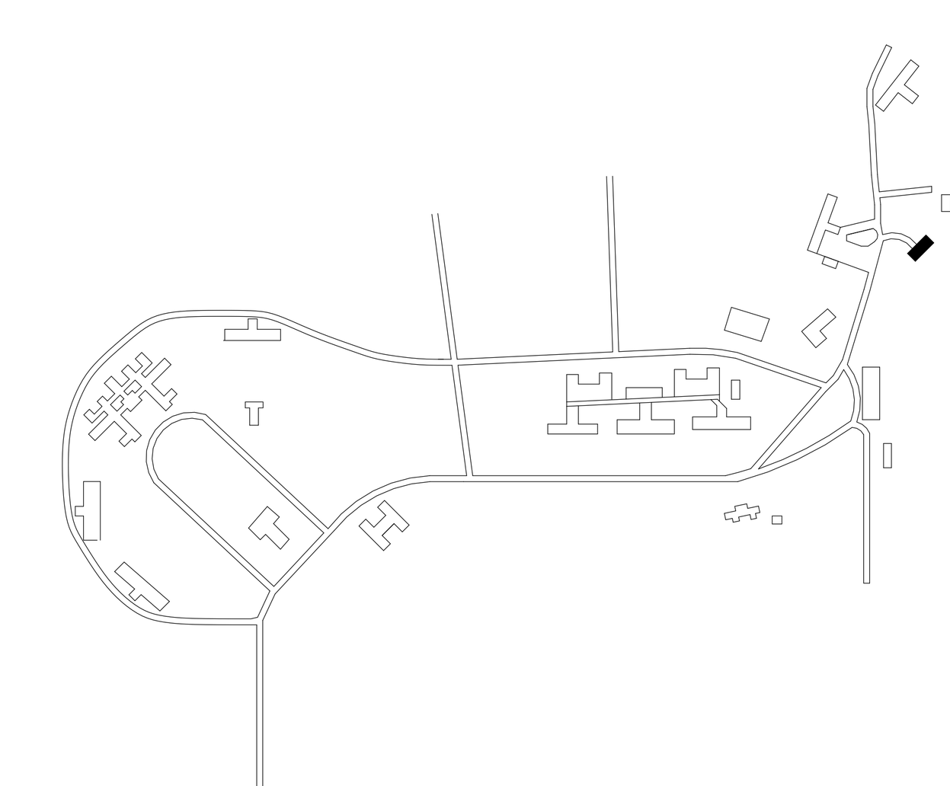

CHILLER BUILDING ELECTRICAL DEMO PLAN

29-ED01

Autodesk Revit 2022