

# ADDENDUM ONE

### Project: Sullivan County Schools Central Middle School STEM Classroom Renovations Address: 4180 Weaver Pike, Bluff City, TN

April 17, 2024

This Addendum is part of the Contract Documents for the above referenced project and modifies the original drawings and/or specifications, dated **April 3, 2024**, as noted below. The bidder shall acknowledge receipt of this Addendum in the place provided in the Bid Form. The published bid date and time shall remain the same.

### GENERAL:

1. See attached Pre-Bid Meeting sign in sheet.

### CLARIFICATION:

1. None

### DRAWINGS:

- 1. **G-00** Code Revisions
- 2. **G-01**
- 3. **G-12**
- 4. A-01 Code Revisions
- 5. **A-10** Code Revisions
- 6. **I-10**
- 7. I-40 Code Revisions
- **8. ME-1** Code Revisions
- **9. PE-1** Code Revisions
- 10. MPE-1 Code Revisions

### SPECIFICATIONS:

1. None

### **Cain Rash West Architects**

**Richard Lutz** 



OFFICE OF THE SULLIVAN COUNTY PURCHASING AGENT 3411 HIGHWAY 126-SUITE 201 BLOUNTVILLE, TN 37617-0569

PURCHASING AGENT **KRISTINIA DAVIS** 

kris.davis@sullivancountyUn.gov PHONE 423-323-6400 FAX 423-323-7249

# PRE-BID ATTENDANCE RECORD

TIME: 2:00M 04.11.24 DATE:

PROJECT DESCRIPTION: Sullivian Central N/S STEN Classroom Reputchion

LOCATION OF PROJECT: Sulliver Central Middle School

VERIFIED BY REGISTRATION, TO AFFORD AN OPPORTUNITY FOR COMPANY TO OFFER A PRICED PROPOSAL. \*NOTE: MANDATORY PRE-BID MEETING REQUIRES REPRESENTATION OF COMPANY AGENT,

1. Wichelle Rames Yurhasung D

|                  |                          |                               |                             |                           | 4                    |   |
|------------------|--------------------------|-------------------------------|-----------------------------|---------------------------|----------------------|---|
| EMAIL ADDRESS    | RICKL (C)<br>GREINC. COM | Joe. Riyys C<br>Holszeny. com | andrew e'skservices 11c.com | storghe Main antritic. on | JSmith Emitchcox.com | Derwin. Chamér<br>C / USI ENG, CON<br>5 troubridre O<br>Mitcheor. com |
| PHONE NUMBER     | 423-349-7760             | 423-926-5991                  | 865 839 0490                | 727-470-5639              | 423-930-4996         | 495-526-5991<br>225-956-0448  |
| COMPANY / AGENCY | cou                      | Holslon Enginering            | Skilled Services            | MAVEN                     | MCC                  | Layrow Enly withorner<br>Me witch cox                                 |
| YOUR NAME        | Richard Lotz             | Loe Rices                     | Andrew Bond                 | Nick Folsothe             | Jason Smith          | Derevie Lantmer<br>Jerevie L<br>Troudrige                             |

Cain Rash West

130 Regional Park Dr. • Kingsport, TN 37660 • (423) 349-7760 • www.grcinc.com

Date: April 18, 2024

- To: Mr. Rickey Cottrell, Plans Examiner
- Re: TFM #01676 Project #2024-03-28-02 Sullivan County



Sullivan County Central Middle School STEM Classroom

Renovations

131 Shipley Ferry Road, Blountville, Tennessee 37617

Mr. Cottrell,

Thank you for the review of the above listed project. Please find below the revisions per your review.

- 1. All Layers within the PDF have been deleted to the best of our ability.
- 2. Please see the revised drawings ME-1, PE-1 and MPE-1 for clarification of engineering responsibility.
- 4. The Issued Dates have been included within the Drawing Index.
- 5. Please see attached Drawing I-10.
- 9. Drawing I-40 has been revised to address the door hardware requirements.
- 10. Drawing I-40 has been revised to remove the demonstration wall and create a new wall with metal studs furred to an existing wall.
- 11. Drawing A-10 has been revised to incorporate an enlarged opening with Bullnose CMU jambs.
- 12. Drawing PE-1 has been revised to include egress lighting.
- 13. Drawing PE-1 has been revised to include additional exist lighting.
- 14. Drawings ME-1 and PE-1 have been revised to existing panel information.
- 20. The existing building does NOT have a Sprinkler System within the building. There are no changes to this condition.

Sincerely,

Richard Lutz



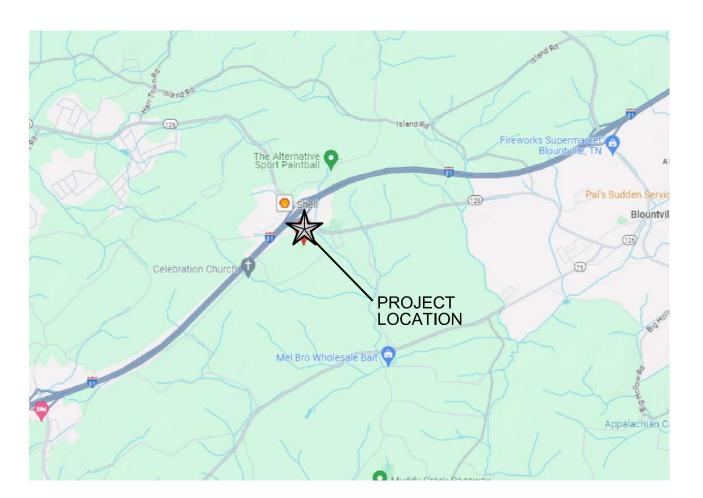


# Sullivan Central Middle School

131 Shipley Ferry Road Blountville, TN

April 3, 2024 CRW Project # 202395 FM # 01676

VICINITY MAP

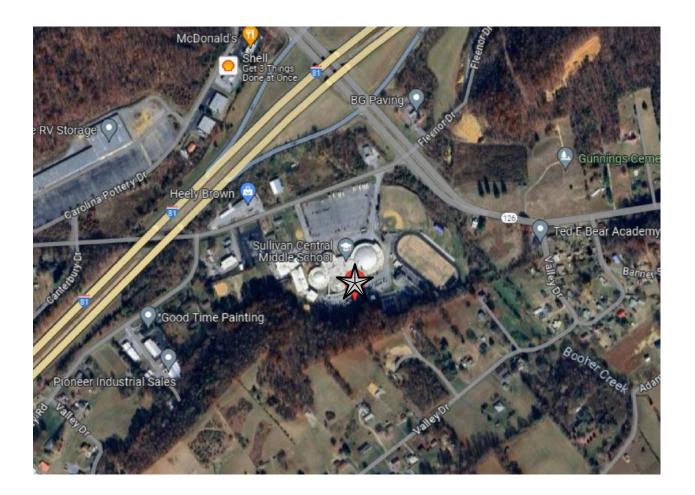


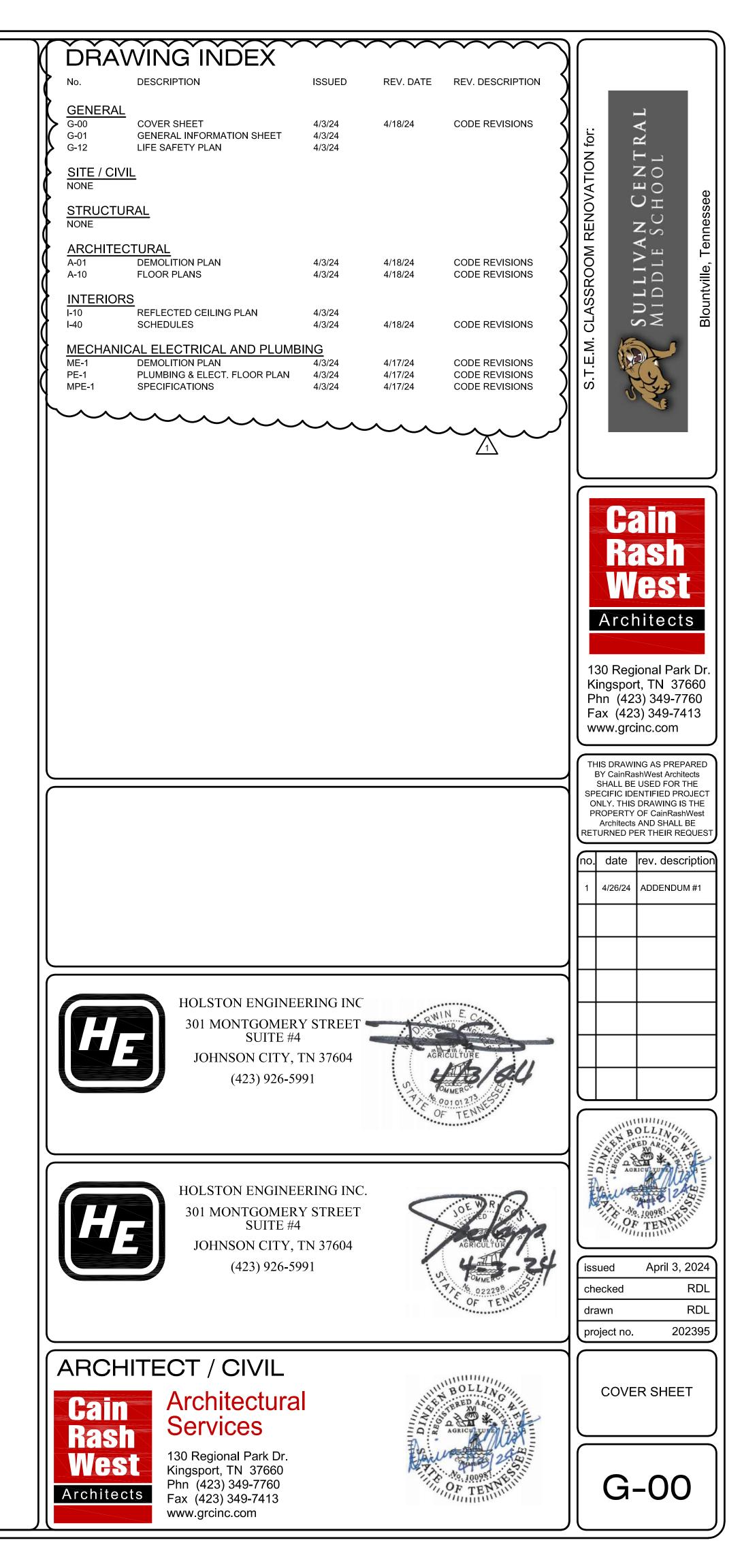
BE USED FOR THE SPECIFIC IDENTIFIED PROJECT ON RAWING IS THE PROPERTY OF CainRashWest Architect AND SHALL BE RETURNED PER THEIR REQUEST

# SULLIVAN CENTRAL MIDDLE SCHOOL

S.T.E.M. Classroom Renovation:

LOCATION MAP





# ABBREVIATIONSABV.ABOVEHSVHOMOGENEOUS SHEET VINYLACTACOUSTICAL TILEHT.HEIGHTADAAMERICANS WITH DISABILITIES ACTINSUL.INSULATING, INSULATION

| ABOVE   | HSV   | HOMOGENEOUS SHEET VINYL  |  |  |
|---|---|--|--|--|
| ACOUSTICAL TILE   | HT.   | HEIGHT   |  | EXISTING WALL CONSTRU  |
| AMERICANS WITH DISABILITIES ACT   | INSUL.  | INSULATING, INSULATION   |  |  |
| ABOVE FINISHED FLOOR  | JT.   | JOINT  |  |  |
| ALUMINUM  | LAV.  | LAVATORY   |  | EXISTING CONSTRUCTION  |
| AT OR AT THE RATE OF  | MANUF.  | MANUFACTURER   |  |  |
|   |   |  | $\langle \times \times \times \times \times \times \times \times \rangle$  | CONCRETE MASONRY (NE   |
|   |   |  |  | CONCRETE MASONAT (NE   |
|   |   |  |  |  |
|   |   |  |  | METAL STUD AND GYPSU   |
|   |   |  |  |  |
|   |   |  |  |  |
|   |   |  |  | METAL STUD AND GYPSU   |
|   |   |  |  |  |
|   |   |  |  |  |
|   |   |  | (11111111111)  | BRICK  |
|   |   |  |  |  |
|   |   |  |  |  |
|   |   |  |  | GYPSUM BOARD CEILING   |
|   |   |  |  |  |
| CONTINUOUS  | O.C.  | ON CENTER  |  | CASEWORK (IN PLAN VIEW   |
| COORDINATE  | OCC.  | OCCUPANTS  |  |  |
| CORRIDOR  | PH.   | PHASE  |  |  |
| CENTER  | PKG.  | PACKAGE  |  | GLASS OR MIRROR (ELEVA   |
| DETAIL  | ዊ   | PLATE  |  |  |
| DRINKING FOUNTAIN   | POLY  | POLYETHYLENE   |  |  |
| DIAMETER  | PR.   | PAIR   | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX   | BATT INSULATION  |
|   |   |  |  |  |
|   |   |  |  |  |
|   |   |  |  | VAPOR BARRIER  |
|   |   |  |  |  |
|   |   |  | · · · · · · ·  |  |
|   |   |  |  | CONCRETE (SECTION)   |
|   |   |  |  |  |
|   |   |  | $0 \bigcirc 220 \bigcirc 200 0 0 0 $ | CRUSHED STONE  |
|   |   |  | $\bigcirc \bigcirc $  | CROSHED STONE  |
|   |   |  | ·  |  |
|   |   |  |  | EARTH  |
|   |   |  |  |  |
|   |   |  |  |  |
|   |   |  |  | DENOTES 2-HR RATED FR  |
|   |   |  |  |  |
| FIRE EXTINGUISHER   |   |  |  |  |
| FINISHED FACE   | SUSP.   | SUSPENDED  | • • • • • • •  | DENOTES 2-HR RATED FIF   |
| FINISHED  | TK.   | THICK  |  |  |
| FLOOR   | TLT.  | TOILET   |  |  |
| FACE OF FINISH  | Т.О.  | TOP OF   |  | DENOTES 1-HR RATED FIR   |
| FOOTING   | T.O.F.  | TOP OF FOOTING   |  |  |
| FIELD VERIFY  | T.O.S.  | TOP OF STEEL   |  | DENOTES NON-RATED SM   |
| GAUGE   | TYP.  | TYPICAL  |  |  |
|   | U.L.  | UNDERWRITER'S LABORATORIES, INC.   |  |  |
| GALVANIZED, HOT DIPPED  |   | ,  |  |  |
|   |   | WIDE   |  |  |
| GALVANIZED HOLLOW METAL   | W.  | WIDE<br>WITH   | BID AI   | LTERNATE   |
| GALVANIZED HOLLOW METAL<br>GYPSUM BOARD   | W.<br>W/  | WITH   |  | _TERNATE   |
| GALVANIZED HOLLOW METAL<br>GYPSUM BOARD<br>HOSE BIBB                            | W.<br>W/<br>WD.   | WITH<br>WOOD   | BID AI   |  |
| GALVANIZED HOLLOW METAL<br>GYPSUM BOARD<br>HOSE BIBB<br>HANDICAPPED             | W.<br>W/<br>WD.<br>WDW.   | WITH<br>WOOD<br>WINDOW   |  |  |
| GALVANIZED HOLLOW METAL<br>GYPSUM BOARD<br>HOSE BIBB<br>HANDICAPPED<br>HARDWARE | W.<br>W/<br>WD.<br>WDW.<br>W.H.   | WITH<br>WOOD<br>WINDOW<br>WATER HEATER   | ALTERNATE  |  |
| GALVANIZED HOLLOW METAL<br>GYPSUM BOARD<br>HOSE BIBB<br>HANDICAPPED             | W.<br>W/<br>WD.<br>WDW.   | WITH<br>WOOD<br>WINDOW   | ALTERNATE  |  |
|   | AMERICANS WITH DISABILITIES ACT<br>ABOVE FINISHED FLOOR<br>ALUMINUM<br>AT OR AT THE RATE OF<br>APPROXIMATELY<br>BUILDING LINE<br>BUILDING LINE<br>BUILDING<br>BLOCKING<br>BLOCKING<br>BLOCKING<br>CATCH BASIN<br>CENTERLINE<br>CONTROL JOINT<br>CEILING<br>CONCRETE MASONRY UNIT<br>CEILING<br>CONCRETE MASONRY UNIT<br>CLEAN OUT<br>CONCRETE<br>CONTINUOUS<br>COORDINATE<br>CONTINUOUS<br>COORDINATE<br>CONTINUOUS<br>COORDINATE<br>CORRIDOR<br>CENTER<br>DETAIL<br>DRINKING FOUNTAIN<br>DIAMETER<br>DETAIL<br>DRINKING FOUNTAIN<br>DIAMETER<br>DRAWING<br>DISH WASHER<br>EXISTING<br>EACH<br>EXTERIOR INSULATION AND FINISH SYSTEM<br>EXTERIOR INSULATION AND FINISH SYSTEM<br>EXPANSION JOINT<br>ELECATION<br>ELECTRICAL<br>EQUAL<br>EXISTING<br>EXPANSION<br>FOUNDATION<br>FIRE EXTINGUISHER<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE<br>FINISHED FACE | ACOUSTICAL TILEHT.AMERICANS WITH DISABILITIES ACTINSUL.ABOVE FINISHED FLOORJT.ALUMINUMLAV.AT OR AT THE RATE OFMANUF.APPROXIMATELYMATL.BUILDING LINEMAX.BUILDING GMECH.BLOCKINGMDFBOTTOMMFDBEARINGM.H.CATCH BASINMIN.CEILINGM.R.CONTROL JOINTM.O.CEILINGM.R.CONCRETE MASONRY UNITMTL.CLEAN OUTN.I.C.CORRIDORPH.CENTERNOM.CONTROL JOINTO.C.CORRIDORPH.CENTERNOM.CONTRUJOUSO.C.CORRIDORPH.CENTERPKG.DETAILPDRINKING FOUNTAINPOLYDIAMETERPR.DRAWINGPSIDISH WASHERP.T.EXISTINGRDLELEVATIONRDLELEVATIONSIM.ELEVATIONSIM.ELEVATIONSIM.EXTERIOR INSULATION AND FINISH SYSTEMRDLELEVATIONSIM.EXTERIORSO.FLOOR DRAINSTL.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP.FINISHED FACESUSP. | ACOUSTICAL TILEHT.HEIGHTAMERICANS WITH DISABILITIES ACTINSUL.INSULATING, INSULATIONALUMINUMLAV.LAVATORYALUMINUMLAV.LAVATORYAT OR AT THE RATE OFMANUF.MATLENAAPROXIMATELYMATL.MATERIALBUILDING LINEMAX.MAXIMUMBUILDING GMECH.MECHANICALBUILDING LINEMAX.MAXIMUMBUILDING GMECH.MECHANICALBUICTINGMDFMEDIUM DENSITY FIBERBOARDBOTTOMMFDMULTI-FUNCTION DEVICEBEARINGMIR.MINNUM, OR MINUTESCENTERLINEMIR.MIROR IMAGE OF TYPICAL DETAILCOLTOMMIRMOSTURE RESISTANTCONTROL JOINTM.O.MASONRY OPENINGCELINGM.R.MOISTURE RESISTANTCONCRETE MASONRY UNITNIL.METALCORRETENOM.NOMINALCORRIDGRPH.PHASECORRIDGRPH.PHASECORRIDGRPH.PHASECORRIDGRPH.PACKAGEDENKING FOUNTAINPOLYPOLYETHYLENEDIAMETERPR.PAIRDRAWINGPSIPOUNDS PER SQUARE INCHDISH WASHERPSIPOUNDS PER SQUARE INCHEXTERIOR INSULATION AND FINISH SYSTEMROROOF DRAINEXATINGSQUARESCHEDU.SCHEDULEEXATINGSQUARESCHEDU.SCHEDULEEXATINGSQUARESCHEDU.SCHEDULEEXTERIOR INSULATION AN  | ACOUSTICAL TILE    HT.    HEIGHT      AMERICANS WITH DISABILITIES ACT    INSUL    INSULATING, INSULATION      ADOVE FINISHED FLOOD    JT.    JOINT      ALUMINUM    LAV.    LAVATORY      AT OR AT THE RATE OF    MANUE    MANUFACTURER      APPROXIMATELY    MATL    MATERIAL      BUILDING DINE    MAX    MAXIMUM      BUILDING LINE    MAC    MECH.      BOTTOM    MDF    MEDIUM DENSITY FIBERBOARD      CATCH BASIN    MIN    MINIK MAGE OF TYPICAL DETAIL      CONTROL, JOINT    MIR    MIROR IMAGE OF TYPICAL DETAIL      CONTINUOUS    O.C.    OCCUPANTS    CONTROL      CONTRUOUS    O.C.    OCCUPANTS    CONTROL      CONTRUOUS    O.C.    OCCUPANTS    CONTROL      CORTINUOUS    O.C.    OCCUPANTS    CONTROL |

### RUCTION TO REMAIN

LEGEND

ON TO BE REMOVED

(NEW, VIEWED IN PLAN & SECTION)

SUM BOARD WALL (NEW)

SUM BOARD WALL (PARTIAL HEIGHT WALL WITH CAP) (NEW)

IG (IN PLAN)

EW)

EVATION)

FREE STANDING FIRE WALL

FIRE SEPARATION WALL / SMOKE BARRIER

FIRE BARRIER

SMOKE PARTITION

ΈS

| SYMBOLS             | 6   |   |
|---------------------|---|---|
| SECTION             | (A)   | DENTIFICATION MARK LETTER<br>(SECTIONS AND ELEVATIONS)                    |
| SCALE: 3/4" = 1'-0" | A-30 A-11   | IDENTIFICATION MARK NUMBER<br>_(DETAILS)                                  |
|                     |   | - DRAWING WHERE SECTION IS CUT<br>OR ELEVATION OR DETAIL IS<br>CALLED OUT |
|                     |   | - DRAWING WHERE SECTION IS SHOWN  |
| A-30                | — DRAWING WHERE SECTION IS SHOWN                                |   |
| A                   | ELEVATION IDENTIFICATION  |   |
| A-20/               | - DRAWING WHERE ELEVATION IS SHOWN                              | I   |
| (1)                 | — DETAIL IDENTIFICATION   |   |
| A-14                | — DRAWING WHERE DETAIL IS SHOWN                                 |   |
|                     | - WALL TYPE IDENTIFICATION                                      |   |
| (A)                 | - WINDOW TYPE IDENTIFICATION                                    |   |
|                     | — DOOR MARK NUMBER<br>(CORRESPONDS WITH ROOM NUMBER)            |   |
|                     | — INDICATES QUANTITY OF DOORS PER<br>SPACE/ROOM (A, B, C, ETC.) |   |
| ROOM •              |   |   |
| EXISTING<br>ROOM    | — GRAY TEXT DENOTES EXISTING ROOM                               |   |
|                     | COLUMN IDENTIFICATION   |   |
|                     | COLUMN LINE   |   |
|                     |   |   |
|                     |   | <u>.</u> т  |

# ITEMS NOT IN CONTRACT

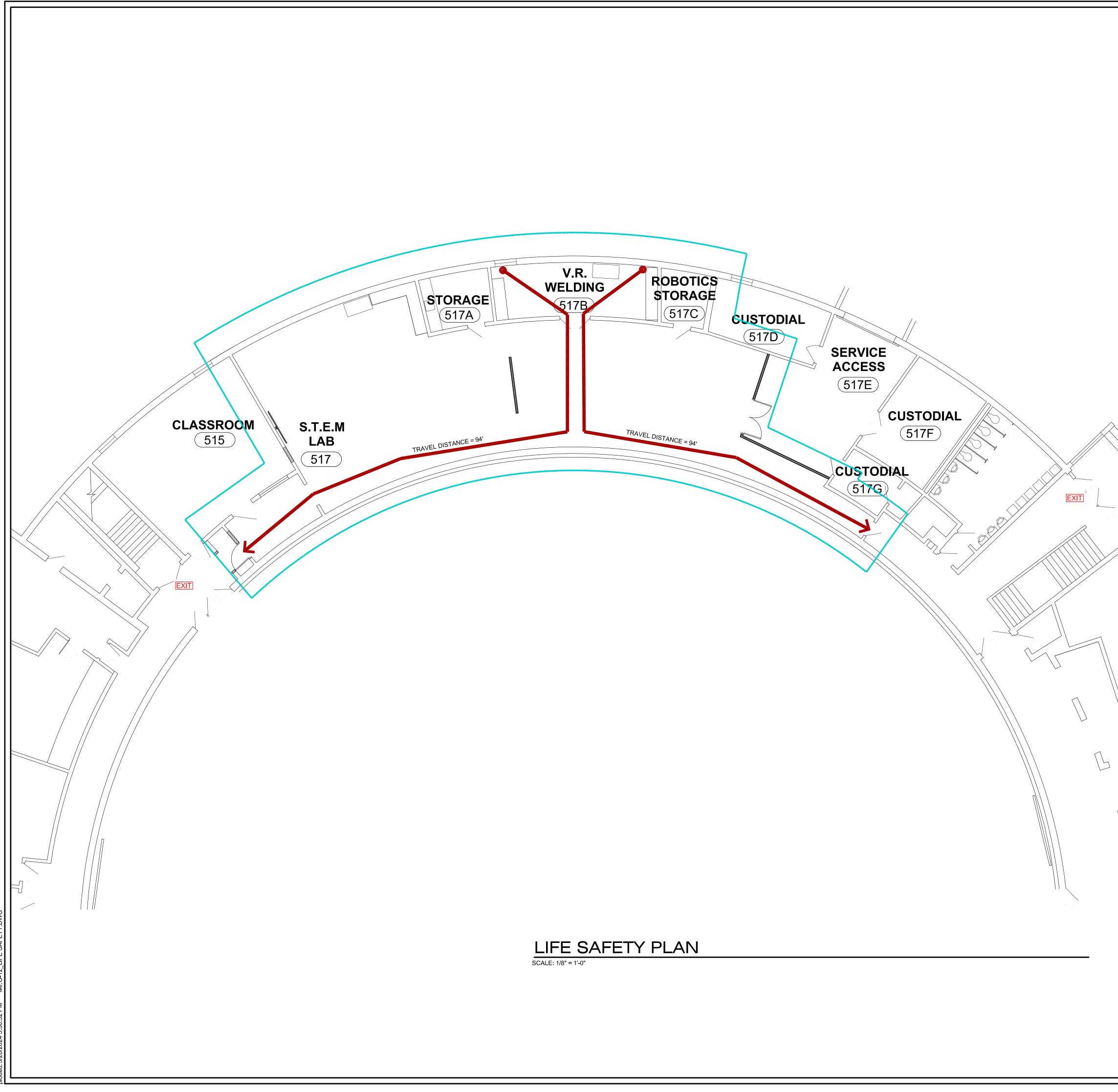
| COMPUTERS                      | CHAIRS        | TABLES                 |
|--------------------------------|---------------|------------------------|
| ROOM SIGNAGE                   | DESKS         | FILING CABINETS        |
| PRINTERS                       | TELEVISIONS   | REFRIGERATORS          |
| WINDOW TREATMENTS              | MICROWAVES    | DISHWASHERS            |
| SHELVES (NOT SHADED)           | EQUIPMENT     | COAT RACKS             |
| FREEZERS                       | CUBICLE WALLS | PAPER TOWEL DISPENSERS |
| OVERHEAD PROJECTOR             | LOCKERS       | SOAP DISPENSERS        |
| PHLEBOTOMY CHAIRS              | EXAM TABLES   | SCALES                 |
| ANY ITEMS LABELED "NIC" OR "B' | Y OWNER"      |                        |
|                                |               |                        |

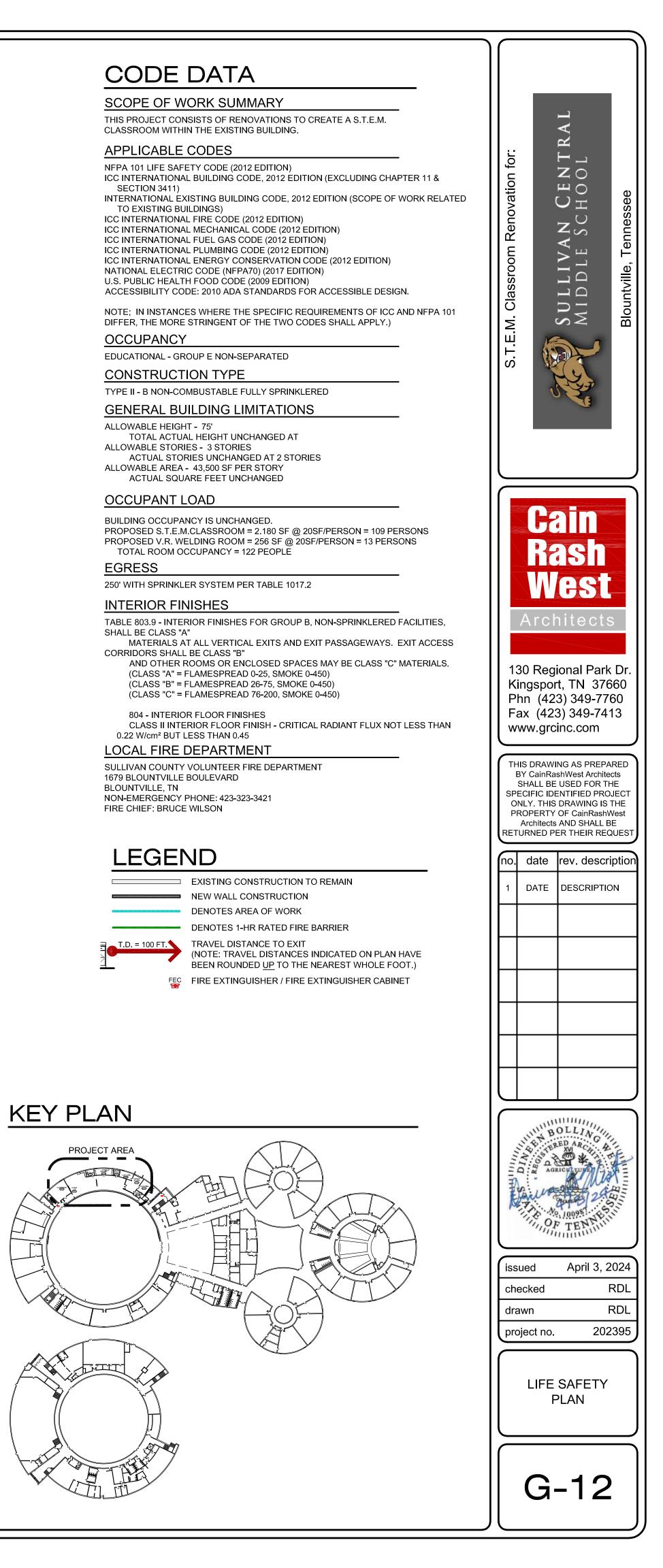
THESE ITEMS MAY BE SHOWN FOR REFERENCE AND COORDINATION PURPOSES ONLY.

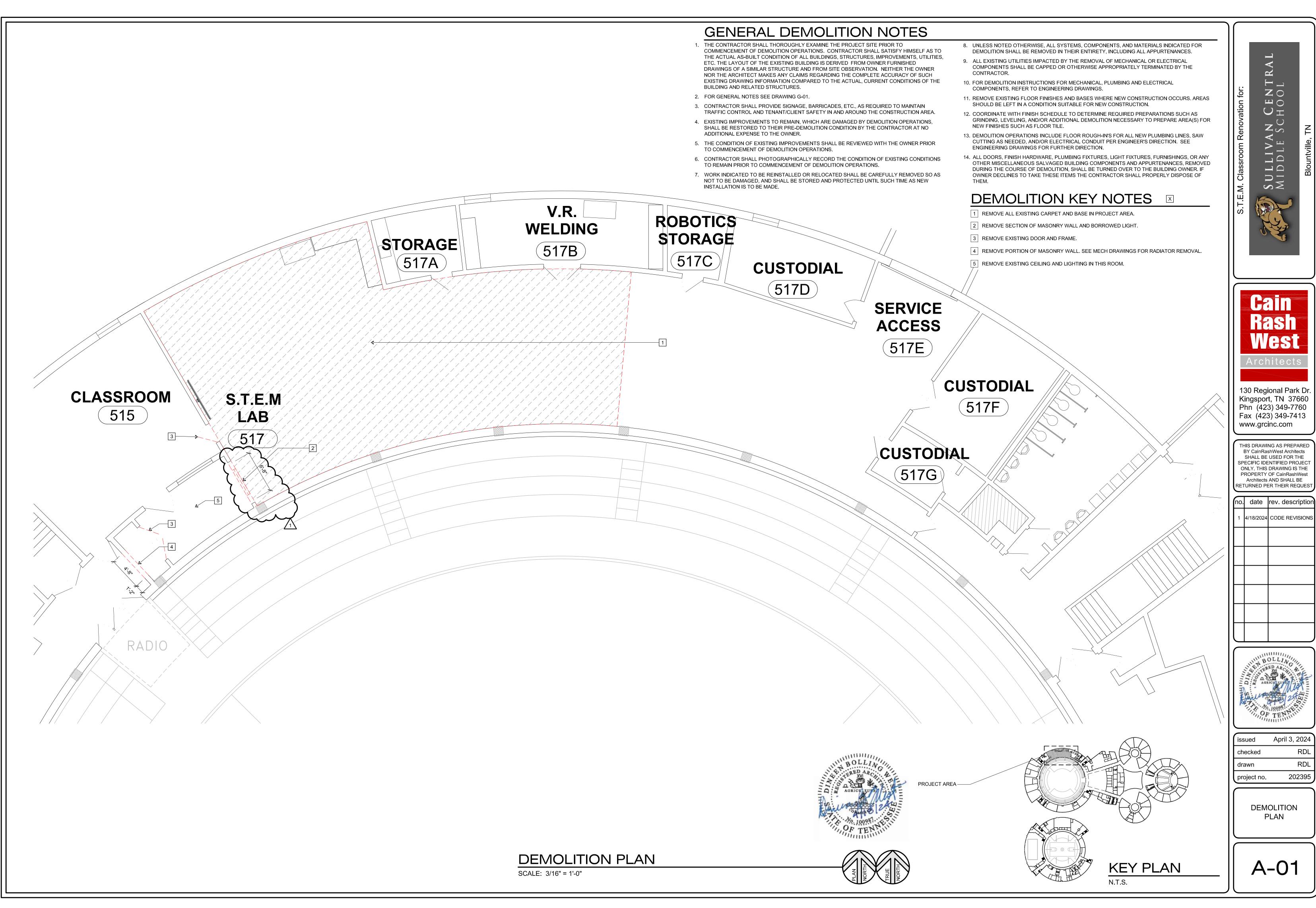
# GENERAL NOTES

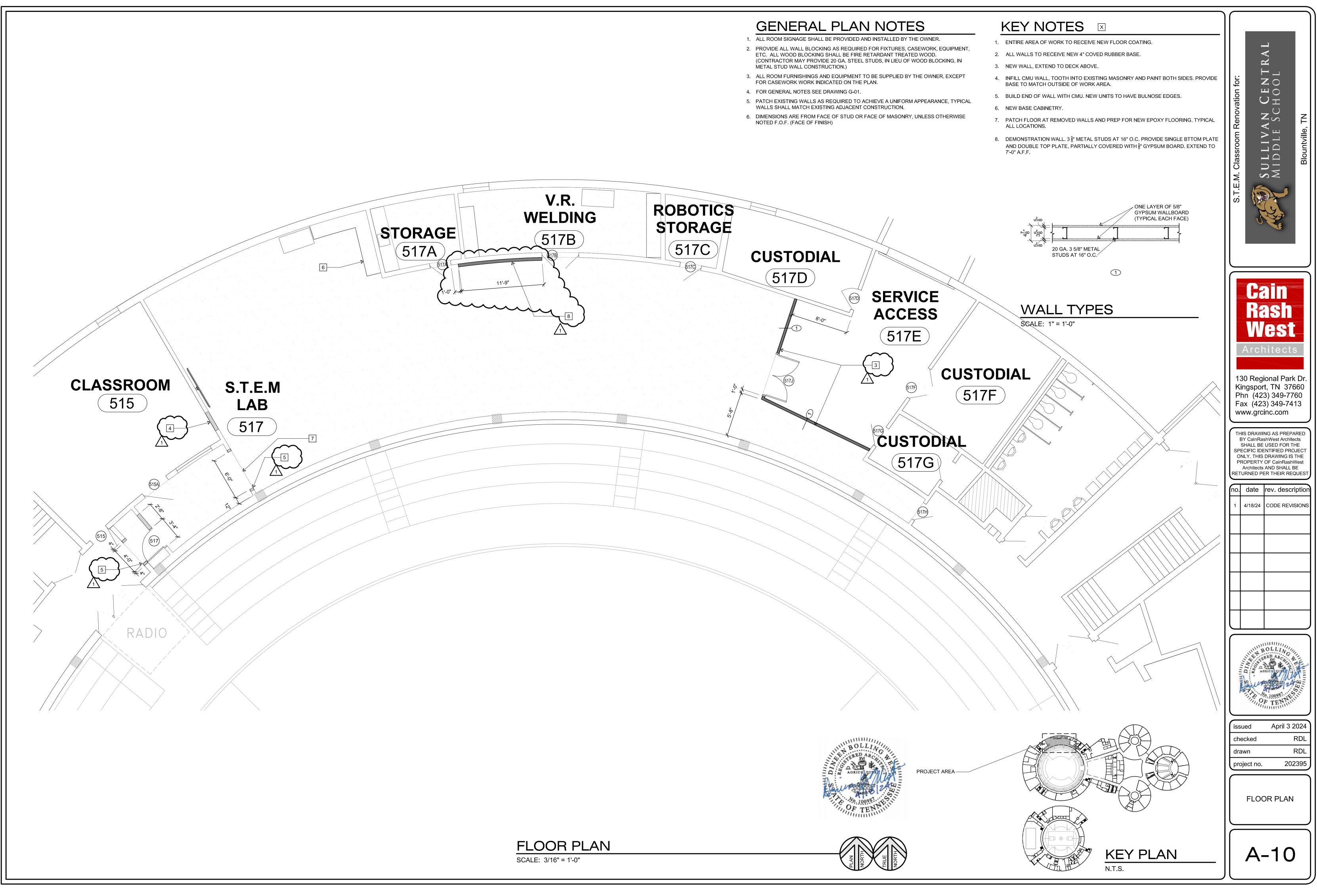
- 1. CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE IMMEDIATE VICINITY OF THE WORK SITE AS DIRECTED BY THE OWNER.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE VERIFICATION OF ACTUAL CONDITIONS SURROUNDING THE PROJECT, INCLUDING THE AS-BUILT LOCATIONS AND CONDITIONS OF EXISTING UTILITIES AND THE BUILDING STRUCTURE.
- CONTRACTOR SHALL COORDINATE THE LOCATIONS FOR THE STORAGE OF EQUIPMENT AND BUILDING MATERIALS WITH THE BUILDING OWNER. CONTRACTOR SHALL NOT BLOCK OR IMPEDE ACCESS TO THE BUILDING BY EXISTING TENANTS, CUSTOMERS OR EMERGENCY VEHICLES.
- 4. CONTRACTOR SHALL COORDINATE ANY REQUIRED SHUT-DOWN OF UTILITIES WITH THE LOCAL BODIES HAVING JURISDICTION. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO PERFORMING ANY EXCAVATION OPERATIONS. ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES, INADVERTENT OR OTHERWISE, RESULTING FROM CONSTRUCTION OPERATIONS, SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 5. UNLESS OTHERWISE NOTED, INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 20 GA., 3 5/8" STEEL STUDS AT 16" ON CENTER WITH ONE (1) LAYER OF 5/8" THICK, TYPE "X", GYPSUM BOARD ON EACH FACE. (TOTAL WALL THICKNESS = 4 7/8") PROVIDE VERTICAL CONTROL JOINT AT ONE SIDE OF DOOR HEADS (TYPICAL). SET TRACK IN ACOUSTICAL SEALANT FOR SOUND CONTROL. (TYPICAL ALL WALLS.)
- 6. PLAN DIMENSIONS DENOTE FACE OF NEW STUD TO FACE OF NEW STUD (OR FACE OF FINISH IF CONCRETE OR CMU) UNLESS OTHERWISE NOTED. (TYPICAL FOR NEW, INTERIOR STUD WALL CONSTRUCTION.)
- 7. PLAN DIMENSIONS DENOTE FINISHED FACE OF EXISTING WALL TO FINISHED FACE OF EXISTING WALL UNLESS OTHERWISE NOTED. (TYPICAL FOR EXISTING WALLS.)
- 8. ALL PARTITIONS SHALL BE CONTINUOUS FROM TOP OF FLOOR SLAB TO MIN. 6" ABOVE FIN. CEILING UNLESS OTHERWISE NOTED OR DETAILED. PROVIDE FIBERGLASS SOUND ATTENUATION BLANKETS IN ALL WALLS. (TYPICAL FULL HEIGHT OF WALL.) (SEE WALL TYPES.)
- 9. PROVIDE ALL WALL BLOCKING AS REQUIRED FOR FIXTURES, CASEWORK, COMMUNICATIONS EQUIPMENT, ETC. ALL WOOD BLOCKING SHALL BE FIRE TREATED LUMBER. (CONTRACTOR MAY PROVIDE 20 GA. STEEL STUDS, IN LIEU OF WOOD BLOCKING, IN METAL STUD WALL CONSTRUCTION.) CONTRACTOR TO REVIEW LOCATIONS OF ALL WOOD BLOCKING WITH THE OWNER.
- 10. CONTRACTOR SHALL PROVIDE 4'x4', 3/4" TREATED PLYWOOD BLOCKING IN ALL COMMUNICATIONS CLOSETS.
- CONTRACTOR SHALL PROVIDE TEMPORARY CONSTRUCTION WALLS AND CLOSURES AS REQUIRED TO PREVENT THE SPREAD AND INFILTRATION OF DUST AND DEBRIS TO OTHER OCCUPIED AREAS OF THE BUILDING.
- 12. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS. DEBRIS SHALL BE REMOVED FROM THE SITE DAILY.
- THE CONTRACTOR SHALL ACCESS THE BUILDING ONLY FROM LOCATIONS APPROVED BY THE OWNER'S REPRESENTATIVE. CONSTRUCTION OPERATIONS SHALL NOT IMPEDE THE NORMAL FLOW OF TRAFFIC AT OTHER ENTRYWAYS.
- 14. CONTRACTOR SHALL NOTIFY BUILDING OWNER, AND ALL TENANTS, OF ANY REQUIRED UTILITY SHUT-DOWN NOT LESS THAN 48 HOURS IN ADVANCE OF THE SCHEDULED INTERRUPTION OF UTILITY SERVICES.
- 15. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE BUILDING AND ITS CONTENTS FROM THE ELEMENTS AND FROM UNAUTHORIZED ENTRY. CONTRACTOR SHALL PROVIDE TEMPORARY CLOSURES AND BARRICADES AS REQUIRED TO MAINTAIN A SECURE ENVIRONMENT.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE VERIFICATION OF ALL DIMENSIONS, LOCATIONS, SIZES, ETC. OF ALL BUILDING COMPONENTS, STRUCTURAL MEMBERS, EQUIPMENT, AND ACCESSORIES TO REMAIN.
- 17. CONTRACTOR SHALL NOT IMPEDE TRAFFIC FLOW IN ROADWAYS OR PARKING AREAS. COMPLETE ACCESS TO THE BUILDING BY EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION OPERATIONS.
- 18. DOORS CONSTRUCTED AGAINST AN ADJACENT WALL SHALL BE PLACED 3" FROM THE OUTSIDE OF THE FRAME TO THE ADJACENT WALL (TYPICAL FOR STUD WALLS). DOORS IN MASONRY WALLS SHALL BE 8" (ONE BLOCK COURSE) FROM ADJACENT WALL. DOORS SHOWN IN THE CENTER OF A WALL SHALL BE CENTERED WITHIN THAT SPACE UNLESS OTHERWISE NOTED.
- 19. VERTICAL CHANGES IN FLOOR LEVEL MAY NOT EXCEED 1/4" UNLESS <u>HALF</u> OR <u>ALL</u> OF THE VERTICAL PORTION IS BEVELED  $\frac{2}{100}$ .
- 20. CONTRACTOR IS RESPONSIBLE FOR PATCHING AND FINISHING ALL EXISTING WALLS THAT ARE DAMAGED DURING DEMOLITION OPERATIONS OR THROUGH THE INSTALLATION OF NEW ITEMS AND APPURTENANCES TO A UNIFORM APPEARANCE TO MATCH THAT OF ADJACENT FINISHES.
- 21. THIS DRAWING SET UTILIZES COLOR FOR CLARITY AND IS BEST INTERPRETED WHEN VIEWED OR PRINTED IN COLOR.
- 22. THIS DRAWING SET IS INTENDED TO BE PRINTED AT 24"x36" SHEET SIZE. DO NOT SCALE DRAWINGS FROM ANY OTHER SIZE PRINT.

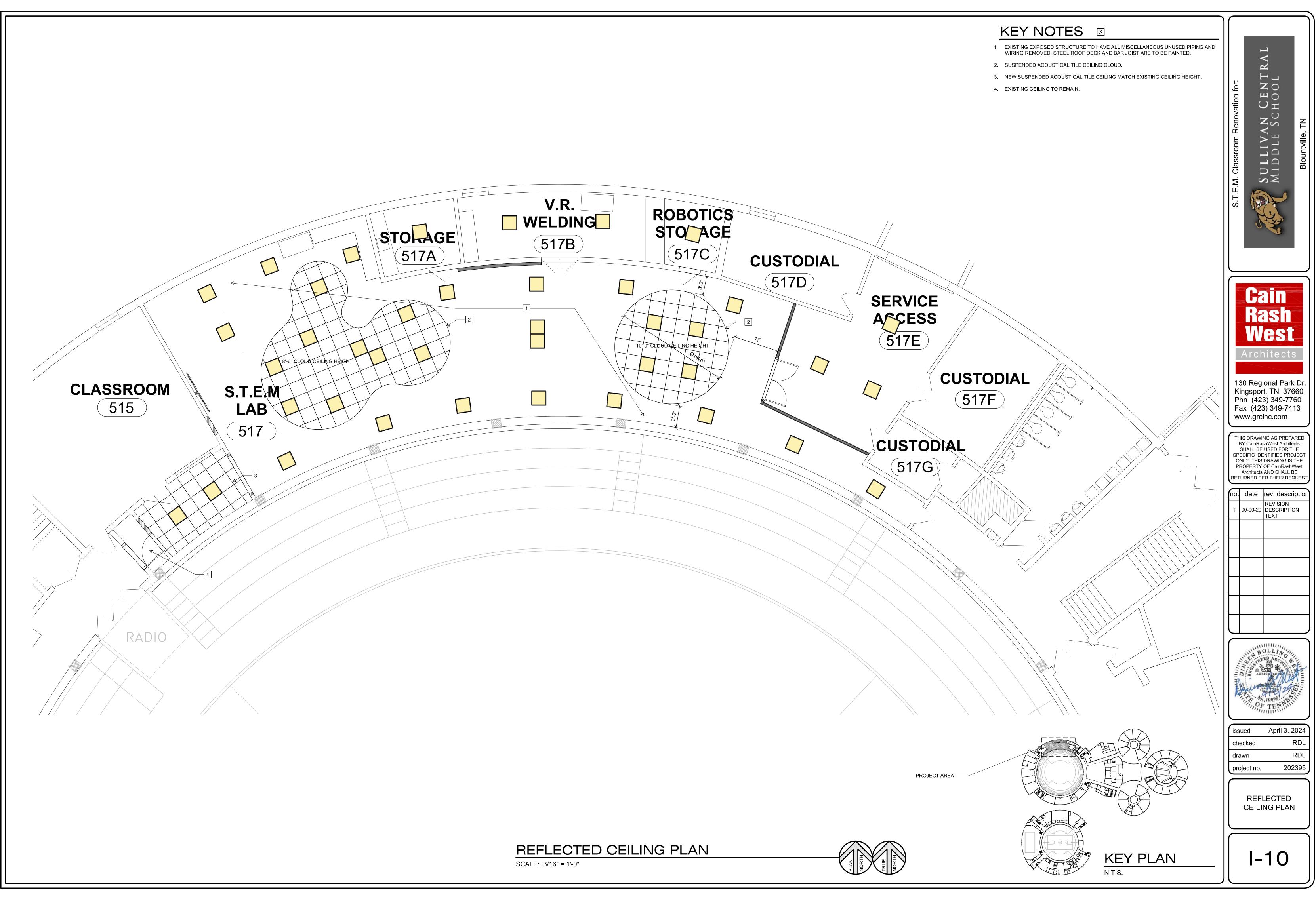
| S.T.E.M. Classroom Renovation for: | SULLIVAN CENTRAL   | MIDDLE SCHOOL   | Blountville, Tennessee                            |  |  |  |  |
|------------------------------------|--|---|---|--|--|--|--|
|                                    | <b>C</b> a<br>Ra   | ain<br>ash  |   |  |  |  |  |
|                                    |  | <b>CS</b>   |   |  |  |  |  |
|                                    | 30 Reg   | ional Pa<br>t, TN_3   | rk Dr.  |  |  |  |  |
| P<br>F                             | hn (42)<br>ax (42)   | 3) 349-7<br>3) 349-7<br>inc.com   | 760   |  |  |  |  |
| SP<br>O<br>P                       | BY CainRat<br>SHALL BE<br>ECIFIC IDE<br>NLY. THIS<br>ROPERTY<br>Architects | NG AS PRE<br>shWest Arch<br>USED FOR<br>ENTIFIED PF<br>DRAWING I<br>OF CainRas<br>AND SHALI<br>ER THEIR R | itects<br>THE<br>ROJECT<br>S THE<br>hWest<br>_ BE |  |  |  |  |
| no.<br>1                           | date<br>DATE   | rev. deso   | -   |  |  |  |  |
|                                    |  |   |   |  |  |  |  |
|                                    |  |   |   |  |  |  |  |
|                                    |  |   |   |  |  |  |  |
|                                    |  |   | $\dashv$  |  |  |  |  |
| AGRICULUTE 24                      |  |   |   |  |  |  |  |
|                                    | ued<br>ecked   | April 3,  | 2024<br>RDL                                       |  |  |  |  |
| dra                                | awn  |   | RDL<br>RDL  |  |  |  |  |
|                                    | oject no.  | 20  |   |  |  |  |  |
|                                    |  | NERAL<br>RMATIC   | N   |  |  |  |  |
|                                    | G  | -0  | 1   |  |  |  |  |

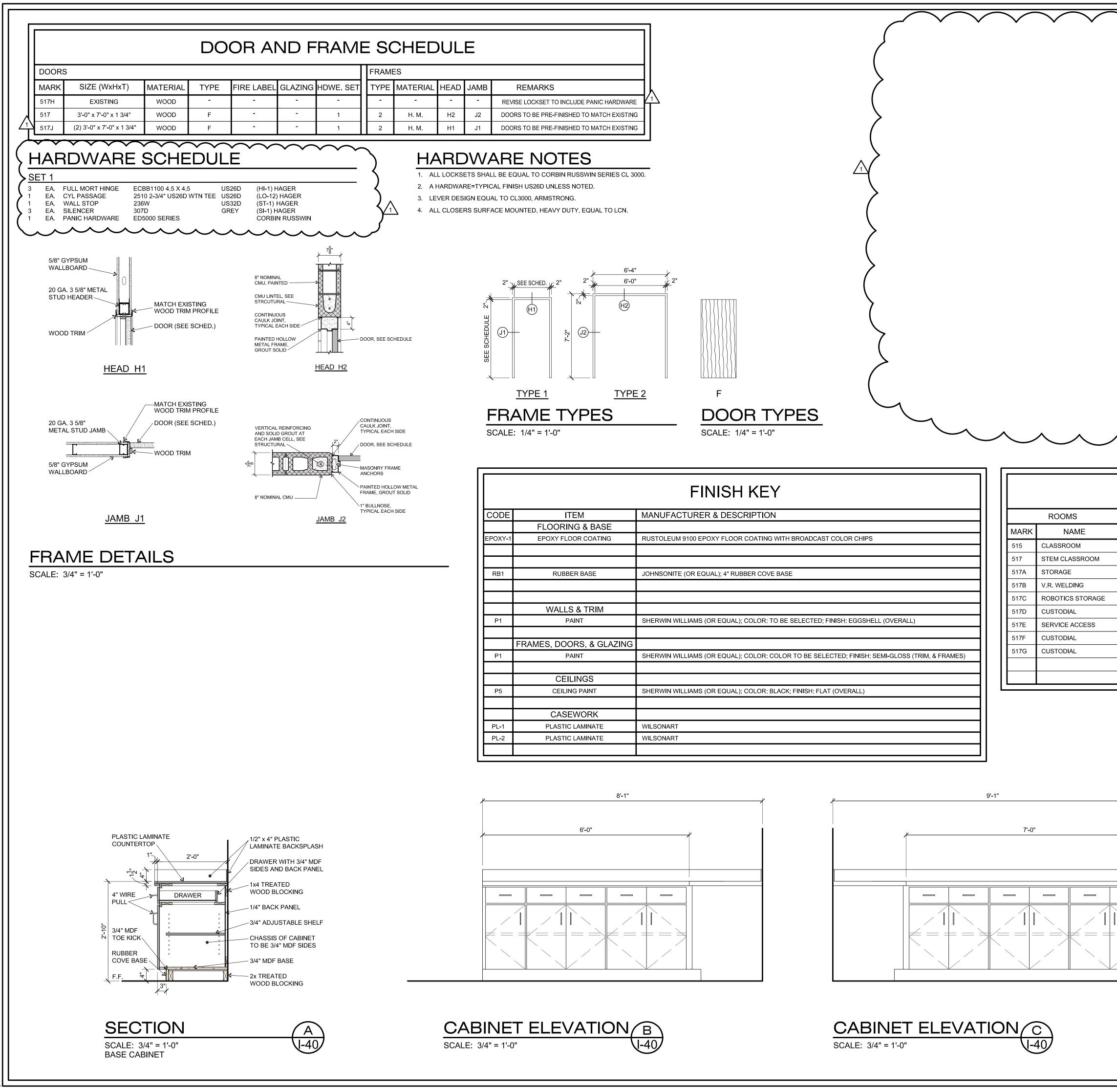






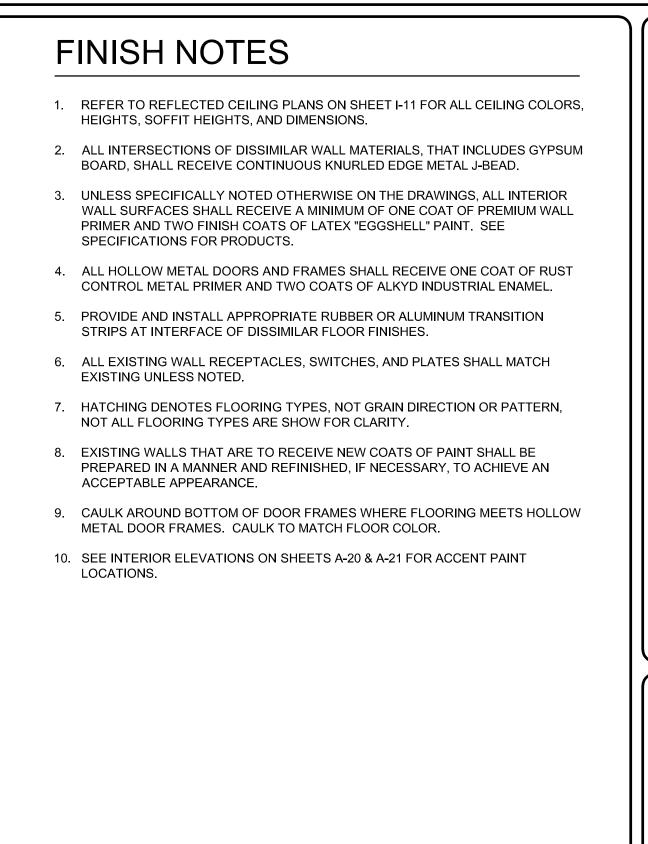






| ITEM                   | MANUFACTURER & DESCRIPTION  |
|------------------------|---|
| FLOORING & BASE        |   |
| EPOXY FLOOR COATING    | RUSTOLEUM 9100 EPOXY FLOOR COATING WITH BROADCAST COLOR CHIPS                                 |
|                        |   |
|                        |   |
| RUBBER BASE            | JOHNSONITE (OR EQUAL); 4" RUBBER COVE BASE  |
|                        |   |
|                        |   |
| WALLS & TRIM           |   |
| PAINT                  | SHERWIN WILLIAMS (OR EQUAL); COLOR: TO BE SELECTED; FINISH: EGGSHELL (OVERALL)                |
|                        |   |
| AMES, DOORS, & GLAZING |   |
| PAINT                  | SHERWIN WILLIAMS (OR EQUAL); COLOR: COLOR TO BE SELECTED; FINISH: SEMI-GLOSS (TRIM, & FRAMES) |
|                        |   |
| CEILINGS               |   |
| CEILING PAINT          | SHERWIN WILLIAMS (OR EQUAL); COLOR: BLACK; FINISH: FLAT (OVERALL)                             |
|                        |   |
| CASEWORK               |   |
| PLASTIC LAMINATE       | WILSONART   |
| PLASTIC LAMINATE       | WILSONART   |
|                        |   |
|                        |   |

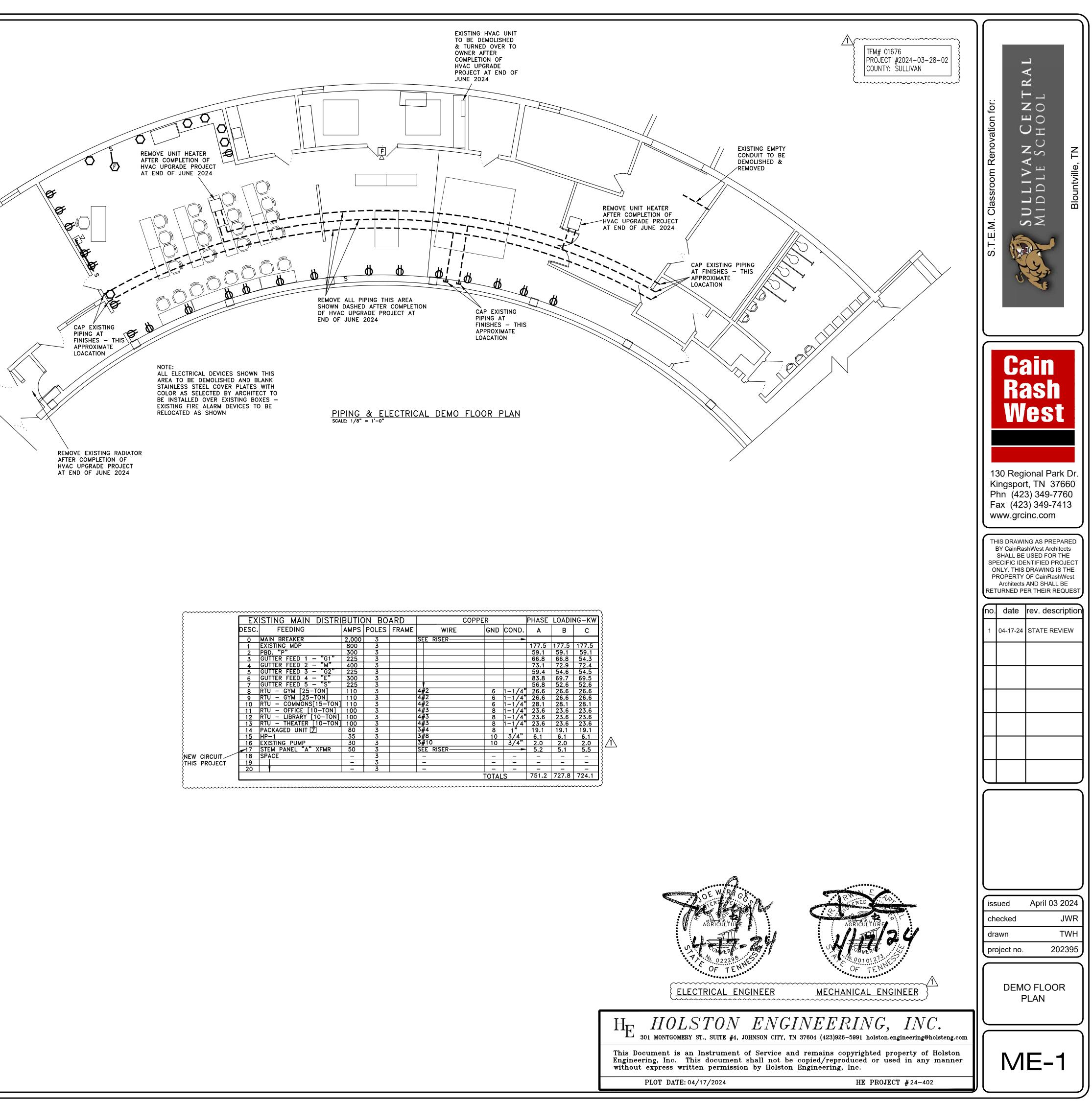
| FINISH SCHEDULE |                  |         |       |       |      |      |        |        |         |                   |  |
|-----------------|------------------|---------|-------|-------|------|------|--------|--------|---------|-------------------|--|
|                 | ROOMS            | FLO     | ORS   |       | WA   | LLS  |        | CEI    | LING    |                   |  |
| MARK NAME       | FINISH           | BASE    | NORTH | SOUTH | EAST | WEST | FINISH | HEIGHT | REMARKS |                   |  |
| 515             | CLASSROOM        | -       | RB-1  | -     | -    | P1   | -      | -      | 0'-0"   |                   |  |
| 517             | STEM CLASSROOM   | EPOXY-1 | RB-1  | P1    | P1   | P1   | P1     | P5/AC1 | VARIES  |                   |  |
| 517A            | STORAGE          | EPOXY-1 | RB-1  | P1    | P1   | P1   | P1     | P5     | 0'-0"   |                   |  |
| 517B            | V.R. WELDING     | EPOXY-1 | RB-1  | P1    | P1   | P1   | P1     | P5     | 0'-0"   |                   |  |
| 517C            | ROBOTICS STORAGE | EPOXY-1 | RB-1  | P1    | P1   | P1   | P1     | P5     | 0'-0"   |                   |  |
| 517D            | CUSTODIAL        |         |       |       |      |      |        |        |         | NO WORK THIS AREA |  |
| 517E            | SERVICE ACCESS   |         |       |       |      |      |        |        |         | NO WORK THIS AREA |  |
| 517F            | CUSTODIAL        |         |       |       |      |      |        |        |         | NO WORK THIS AREA |  |
| 517G            | CUSTODIAL        |         |       |       |      |      |        |        |         | NO WORK THIS AREA |  |
|                 |                  |         |       |       |      |      |        |        |         |                   |  |
|                 |                  |         |       |       |      |      |        |        |         |                   |  |





| Cain      Jan Regional Park Dr.      Jan Regional Park Dr.      Kingsport, TN 37660      Phn (423) 349-7760      Jax (423) 349-7760      Jax (423) 349-7760      Jax (423) 349-7413      www.grcinc.com      THS DRAWING AS PREPARED      Shall BE USED FOR THE      Specific IDENTIFIED PROJECT      ONLY. THIS DRAWING IS THE      PROPERTY OF CainRashWest      Architects AND SHALL BE      RETURNED PER THEIR REQUEST |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>Architects<br>SHALL BE USED FOR THE<br>SPECIFIC IDENTIFIED PROJECT<br>ONLY. THIS DRAWING IS THE<br>PROPERTY OF CainRashWest<br>Architects AND SHALL BE<br>RETURNED PER THEIR REQUEST   |  |  |  |  |  |  |  |
| 130 Regional Park Dr.<br>Kingsport, TN 37660<br>Phn (423) 349-7760<br>Fax (423) 349-7413<br>www.grcinc.com<br>THIS DRAWING AS PREPARED<br>BY CainRashWest Architects<br>SHALL BE USED FOR THE<br>SPECIFIC IDENTIFIED PROJECT<br>ONLY. THIS DRAWING IS THE<br>PROPERTY OF CainRashWest<br>Architects AND SHALL BE<br>RETURNED PER THEIR REQUEST   |  |  |  |  |  |  |  |
| Kingsport, TN 37660<br>Phn (423) 349-7760<br>Fax (423) 349-7413<br>www.grcinc.com<br>THIS DRAWING AS PREPARED<br>BY CainRashWest Architects<br>SHALL BE USED FOR THE<br>SPECIFIC IDENTIFIED PROJECT<br>ONLY. THIS DRAWING IS THE<br>PROPERTY OF CainRashWest<br>Architects AND SHALL BE<br>RETURNED PER THEIR REQUEST  |  |  |  |  |  |  |  |
| THIS DRAWING AS PREPARED<br>BY CainRashWest Architects<br>SHALL BE USED FOR THE<br>SPECIFIC IDENTIFIED PROJECT<br>ONLY. THIS DRAWING IS THE<br>PROPERTY OF CainRashWest<br>Architects AND SHALL BE<br>RETURNED PER THEIR REQUEST   |  |  |  |  |  |  |  |
| BY CainRashWest Architects<br>SHALL BE USED FOR THE<br>SPECIFIC IDENTIFIED PROJECT<br>ONLY. THIS DRAWING IS THE<br>PROPERTY OF CainRashWest<br>Architects AND SHALL BE<br>RETURNED PER THEIR REQUEST   |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 1 4/18/24 CODE REVISIONS   |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| AGRICULTURE 24-41<br>No. 100981<br>OF TENNINI  |  |  |  |  |  |  |  |
| issued April 3, 2024<br>checked RDL  |  |  |  |  |  |  |  |
| drawn RDL<br>project no. 202395  |  |  |  |  |  |  |  |
| CABINETRY AND<br>SCHEDULES   |  |  |  |  |  |  |  |
| <br>I-40   |  |  |  |  |  |  |  |





|             | EX    | ISTING MAIN DISTRI         | BUTIC | ON BO | ARD   | CO        | PHASE | LOADI          | NG-I  |       |     |
|-------------|-------|----------------------------|-------|-------|-------|-----------|-------|----------------|-------|-------|-----|
|             | DESC. | FEEDING                    | AMPS  | POLES | FRAME | WIRE      | GND   | COND.          | A     | В     | c   |
|             | 0     | MAIN BREAKER               | 2,000 | 3     |       | SEE RISER |       |                | -     |       |     |
|             | 1     | EXISTING MDP               | 800   | 3     |       |           |       |                | 177.5 | 177.5 | 177 |
|             | 2     | PBD. "P"                   | 300   | 3     |       |           |       |                | 59.1  | 59.1  | 59. |
|             | 3     | GUTTER FEED 1 - "G1"       | 225   | 3     |       |           |       |                | 66.8  | 66.8  | 54. |
|             | 4     | GUTTER FEED 2 - "M"        | 400   | 3     |       |           |       |                | 73.1  | 72.9  | 72. |
|             | 5     | GUTTER FEED 3 – "G2"       | 225   | 3     |       |           |       |                | 59.4  | 54.6  | 54. |
|             | 6     | GUTTER FEED 4 - "E"        | 300   | 3     |       |           |       |                | 83.8  | 69.7  | 69. |
|             | 7     | GUTTER FEED 5 – "S"        | 225   | 3     |       |           |       |                | 56.8  | 52.6  | 52. |
|             | 8     | RTU – GYM [25–TON]         | 110   | 3     |       | 4#2       | 6     | 1-1/4          | 26.6  | 26.6  | 26. |
|             |       | <u> RTU – GYM [25–TON]</u> | 110   | 3     |       | 4#2       | 6     | <u> 1-1/4'</u> |       | 26.6  | 26. |
|             |       | RTU - COMMONS[15-TON]      | 110   | 3     |       | 4#2       | 6     | 1-1/4'         |       | 28.1  | 28. |
|             |       | RTU – OFFICE [10-TON]      | 100   | 3     |       | 4#3       | 8     | <u> 1-1/4'</u> |       | 23.6  | 23. |
|             |       | RTU – LIBRARY [10-TON]     | 100   | 3     |       | 4#3       | 8     | 1-1/4          |       | 23.6  | 23. |
|             |       | RTU - THEATER [10-TON]     | 100   | 3     |       | 4#3       | 8     | <u> 1-1/4'</u> |       | 23.6  | 23. |
|             |       | PACKAGED UNIT 7            | 80    | 3     |       | 3#4       | 8     | 1"             | 19.1  | 19.1  | 19. |
|             |       | HP-1                       | 35    | 3     |       | 3#8       | 10    | 3/4"           | 6.1   | 6.1   | 6.  |
|             | 16    | EXISTING PUMP              | 30    | 3     |       | 3#10      | 10    | 3/4"           | 2.0   | 2.0   | 2.  |
|             | 17    | STEM PANEL "A" XFMR        | 50    | 3     |       | SEE RISER |       | -              | 5.2   | 5.1   | 5.  |
| IEW CIRCUIT | 18    | SPACE                      | -     | 3     |       | -         | _     | -              | -     |       |     |
| HIS PROJECT | 19    |                            |       | 3     |       | -         |       | -              | -     | -     |     |
|             | 20    |                            | -     | 3     |       | -         | -     | -              | -     | -     | -   |
|             |       |                            |       |       |       |           | TOTAL | S              | 751.2 | 727.8 | 724 |

# LIGHTING FIXTURE SCHEDULE

TYPE DESCRIPTION

- SURFACE MOUNTED EMERGENCY EXIT/LIGHTING UNIT WITH EXTERIOR REMOTE EMERGENCY HEAD, LED LAMPS, NICAD BATTERY, RED FACE, WHITE HOUSING, & ELECTRONIC CHARGING/SWITCHING. LITHONIA LHQM-LED-R-HO/ELA-LED-WP-M1Z
- EMERGENCY BATTERY BACKUP LUMINAIRE WITH SOLID STATE CHARGING & SWITCHING AND ALL CATALOGUED FEATURES LITHONIA EU2-LED-M12RECESSED
- AIR CRAFT CABLE MOUNTED LED 2X2 FLAT PANEL WITH 277 VOLT INPUT, 3200 LUMENS 4000K COLOR TEMP, 30 WATTS, & WHITE COLOR LITHONIA CPX- 2X2-3200LM-80-40K-A12-MVOLT WITH PAC-4DNF-36 MOUNTING KIT
- B RECESSED LED 2X2 FLAT PANEL WITH 277 VOLT INPUT, 3200 LUMENS 4000K COLOR TEMP, 30 WATTS, & WHITE COLOR LITHONIA CPX-2X2-3200LM-80-40K-A12-MVOLT

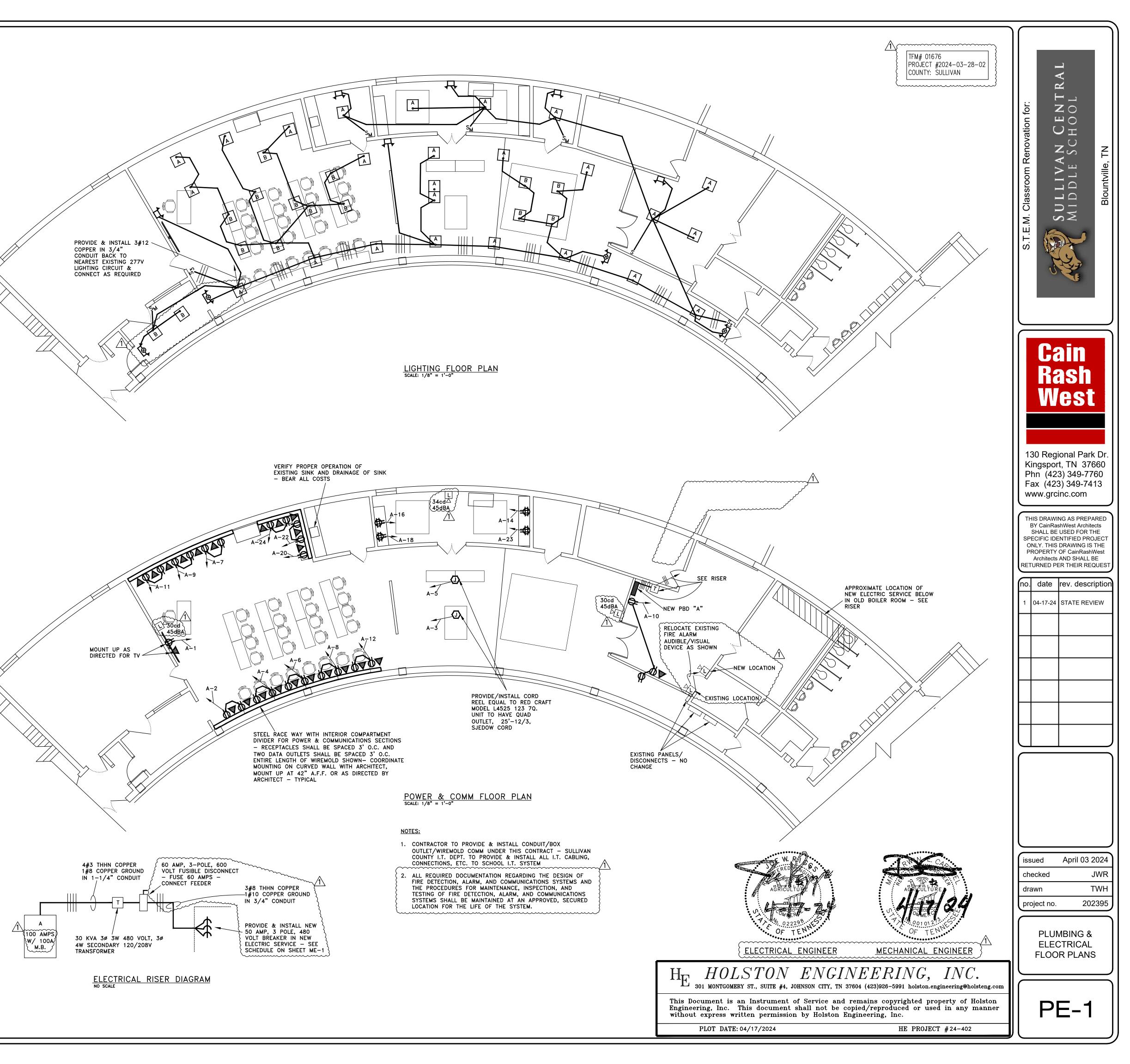
# BRANCH CIRCUIT PANELBOARD

| PANELBOARD NO. A |                    |           |          |                  |          |        |     |        |                 |       |     |          |
|------------------|--------------------|-----------|----------|------------------|----------|--------|-----|--------|-----------------|-------|-----|----------|
| FEEDING          | WIRE               | CIRC      |          | PBD.             |          |        | WIF | RE     | FEEDING         | PHASE | 1   | NG-KW    |
|                  |                    | AMPS      | NO.      |                  | NO.      | AMPS   |     |        |                 | A     | В   | <u> </u> |
| RECEPTACLE       | 12                 | 20        | 1        |                  | 2        | 20     | 1   | 2      | RECEPTACLE      | 1.2   |     |          |
|                  |                    |           | 3        |                  | 4        |        |     |        |                 |       | 2.0 |          |
|                  |                    |           | 5        |                  | 6<br>8   |        |     |        |                 | 2.0   |     | 2.0      |
|                  |                    |           | 9        |                  | 10       |        |     |        |                 | 2.0   | 1.6 |          |
|                  |                    |           | 11       | 1                | 12       |        |     |        |                 |       | 1.0 | 2.0      |
| SPARE            | <u> </u>           |           | 13       | -+ +-            | 14       |        |     |        |                 | 0.5   |     |          |
|                  |                    |           | 15       |                  | 16       |        |     |        |                 |       | 0.5 |          |
|                  |                    | + $+$ $-$ | 1/       |                  | 18<br>20 |        |     |        |                 | 0.5   |     | 0.5      |
|                  |                    |           | 21       |                  | 22       |        |     |        |                 | 0.5   | 1.0 |          |
|                  |                    |           | 23       | 1                | 24       |        |     |        |                 |       |     | 1.0      |
|                  | _                  |           | 25       |                  | 26       |        |     |        |                 | 1.0   |     |          |
|                  |                    |           | 27       | - + +            | 28<br>30 |        | -   | -      | SPARE           |       | _   |          |
|                  |                    |           | 29       |                  | 30       |        | -   | -      | SPARE           |       |     | _        |
|                  |                    |           | <b>F</b> |                  |          |        |     |        |                 |       |     |          |
|                  |                    | 1         |          |                  |          |        |     |        |                 |       |     |          |
|                  | $\frown$           |           |          |                  |          |        |     | $\sim$ |                 |       |     |          |
|                  |                    | $\vdash$  |          |                  |          |        |     |        |                 |       |     |          |
|                  |                    |           |          | - <del>ccc</del> |          |        | P   |        | LBOARD LOADING  | 5.2   | 5.1 | 5.5      |
|                  | LOCATION SEE PLANS |           |          |                  |          |        |     |        | AMPS WITH 100 A |       |     |          |
|                  |                    |           |          |                  |          |        |     | 100    |                 |       |     |          |
| MOUNTING SUP     | RFACE              |           |          |                  | TYF      | ΡE     |     | NQ     |                 |       |     |          |
| SERVICE 3ø       | 4W 208Y,           | /120 V    | OLTS     |                  | TO       | TAL LO | AD  | 15.8   | B KW            |       |     |          |

NOTE: PROVIDE & INSTALL T.V.S.S. UNIT FOR PANELBOARD "A" WITH 120KA/PHASE

### ELECTRIC LEGEND LIGHTING OUTLET LED. INSERT IS TYPE. **A** DUPLEX 15 AMPERE CONVENIENCE OUTLET WITH GROUND. BRYANT #5262–I. SUBSCRIPT "A" INDICATES 20 AMPERE SIZE. $\bigcup_{\mathbf{A}}$ QUADPLEX 15 AMPERE CONVENIENCE OUTLET WITH GROUND. BRYANT #1254-I. RACE WAY - SEE PLANS FOR SPECIFICATIONS JUNCTION BOX OUTLET. CONNECT POWER. VERIFY LOCATION AND SERVICE $\langle J \rangle$ PRIOR TO ROUGH-IN. WALL MOUNTED DATA OUTLET WITH STAINLESS STEEL PLATE WITH OPENING AS REQUIRED BY PHONE UTILITY COMPANY. EXTEND 3/4" CONDUIT TO ABOVE CEILING. Ĺ FIRE ALARM SYSTEM VISUAL AND AUDIBLE ALARM - INSTALL UP 7'-6"±. BRANCH CIRCUIT PANELBOARD. SINGLE POLE, QUIET ACTION, 20 AMPERE TOGGLE SWITCH - BRYANT #4901-I. 3 AND 4 WAY QUIET ACTION 20 AMPERE TOGGLE SWITCHES. BRYANT #4903-1 S3S4 AND 4 WAY AND #4904-1. WALL MOUNTED MOTION DETECTOR SWITCH WITH TIME DELAY OFF SETTING AND SM MANUAL ON/OFF SWITCH. SENSOR SWITCH WSX PDT CONDUIT CONCEALED. GROUND NOT SHOWN BUT REQUIRED. \_\_\_\_\_ CONDUIT AND 3 WIRES. NO MARKS INDICATE 2 WIRES. GROUND NOT SHOWN BUT REQUIRED. 1-1,3 CONDUIT AND WIRE HOME RUN. NUMBERS INDICATE PANELBOARD AND CIRCUIT NUMBERS. GROUND NOT SHOWN BUT REQUIRED. <del>\_+++ ⊳</del> 1. INSTALL SWITCHES $48^{\circ}\pm$ ABOVE FINISHED FLOOR AND RECEPTACLES AND PHONE/LAN OUTLETS $18^{\circ}\pm$ ABOVE FINISHED FLOOR AND $8^{\circ}\pm$ ABOVE COUNTERS UNLESS NOTED OTHERWISE. ALL DEVICES FLUSH MOUNTED UNLESS OTHERWISE REQUIRED. 2. ALL SWITCH AND DEVICE PLATES SATIN FINISH STAINLESS STEEL. 3. EQUAL SPEC GRADE DEVICES OF BRYANT, HUBBELL, P & S, LEVITON, AND GENERAL ELECTRIC MAKE ACCEPTABLE. NONE OTHER ACCEPTABLE, EXCEPT WITH WRITTEN PERMISSION.





d: 4/17/2024 10:26:55 AM file: MPE-1.DWG

## ELECTRICAL GENERAL PROVISIONS

GENERAL: The General Conditions and Supplemental General Conditions are part of this division. The Contractor shall and hereby agrees that he will read carefully all paragraphs and be bound by their conditions.

WORK DESCRIPTION: Provide all labor, equipment, material, (tools, services), etc. required to complete installation specified herein and/or shown or scheduled on the drawings. This section supplements all sections of this Division and shall apply to all phases of work hereinafter specified, shown on the drawings or required to provide a complete installation of systems shown. The specifications and drawings are complementary and are for the complete interpretation of the work. Unless noted or modified by specific notation to the contrary, the modification and/or description of any item in the documents carries with it the instruction to furnish, install and connect same. It shall be understood that the intent governs the work, regardless of whether or not this instruction is explicitly stated. No exclusion from, or limitation in the drawings or specifications, for the work shall be the reason for omitting the appurtenances or accessories necessary to complete any required system or item of equipment.

SPECIAL CONDITIONS: By the act of submitting a bid, this Contractor agrees that all of the "Contract Documents" in each of the Divisions of the complete specifications have been reviewed and studied and all requirements and coordination resulting therefrom are included in his proposal. The Contractor further acknowledges that he has visited the site to become familiar with existing conditions. In the Electrical Division, the word "Contractor" means the Electrical Contractor. The word "provide" means furnish, install and connect. Do not scale drawings having 1/4" or smaller scale. Because of small scale, it is not possible to indicate all offsets, fittings and accessories; provide such as are required for complete installation. The right is reserved to move any element as much as ten (10) feet at no increase in cost provided the Contractor is notified before work in question is started. The Contractors shall coordinate between trades responsible for determining and verifying the characteristics of electrical current available to operate all the mechanical and plumbing equipment prior to ordering such equipment.

RELATED WORK SPECIFIED ELSEWHERE: Foundations and pads required for equipment furnished under this Division of the Specifications are specified elsewhere. Field painting, except such painting as is required to maintain shop coat painting and factory finish painting are specified elsewhere. Flashing of conduits into roofing and outside walls are specified elsewhere.

REGISTRATION: Contractors and Sub—Contractors furnishing and installing work under the Electrical divisions of these specifications shall be registered in the State of Tennessee whether they are bound by legal contracts with the Owner of the project, with the General Contractor or another Sub—Contractor. CODES AND STANDARDS: The intent is that the complete installation shall comply with applicable laws

and ordinances, utility company regulations, and applicable requirements of the latest editions of the following: 1. IBC: International Building Code.

- 2. NFPA: National Fire Protection Association.
- FM: Association of Factory Mutual Fire Insurance Company.
  ASTM: American Society of Testing Materials.
- 5. UL: Underwriters Laboratories. 6. NEC: National Electrical Code.
- NEMA: National Electrical Manufacturer's Association.
  ANSI: American National Standard Institute.
- 9. ADA: Americans with Disabilities Act. 10. NESC: National Electrical Safety Code.
- 10. NESC: National Electrical Safety Code. 11. OSHA: Occupational Safety and Health Act.

Where the contract documents exceed minimum requirements, the contract documents take precedence. Comply with all requirements for permits, licenses, fees and codes. Permits, licenses, fees, inspections and arrangements required for the work under this contract shall be obtained at the completion of the work unless otherwise specified. Comply with the requirements of the applicable utility companies serving this work. Make all arrangements with the utility companies for proper coordination of the work. Pay all charges required by the utility.

COORDINATION OF WORK: Plan all work so that it proceeds with a minimum of interference with other trades. Inform all parties concerned, of the openings required for equipment or conduit in the building construction for work and provide all special frames, sleeves, inserts, supports, anchor bolts, etc. as required. Coordinate the work with all tradesmen. Conceal all work where possible. All work shall be installed as neatly as possible in the locations shown but shall be subject to such deviations, modifications and relocations as may be necessary to conform to the requirements of the architectural drawings and as necessary to avoid interferences with the structural work and the work of other trades, and interferences between the various trades. This shall be done at no cost to the Owner. No work or equipment shall be installed which would require ceilings to be lower than required by drawings, unless approval is obtained from the Architect. It is the responsibility of the General Contractor to coordinate the work of his subcontractors. To this end, the General Contractor shall require that the various subcontractors carefully examine and familiarize themselves with the architectural and structural drawings and drawings covering all other trades so that the work may be coordinated. If necessary to coordinate and expedite the work, the Contractor shall prepare "interference drawings" and submit them to the Architect for approval. Such drawings shall shown the work of the various trades involved, illustrate proposed details of construction and arrangement of equipment and apparatus, and clearly indicate any deviations from contract requirements.

EXECUTION OF THE WORK: Prior to installation, submit certified prints and/or descriptive brochures for all major electrical and mechanical pieces of equipment, fixtures, materials, etc. Submittals shall show: manufacturer's catalog number, finishes, optional features and modifications. When work in accordance with manufacturer's recommendation is specified, a copy of recommendations will be kept in the job office. Reference shall be made to drawing schedules and details for: manufacturer, model, catalog number, size, capacity, performance, installation, etc. of equipment, fixtures and materials. Equipment of manufacturers other than those named will be acceptable provided, in the opinion of the Engineer, it is of equal substance, function, performance and appearance.

CHOICE OF MATERIALS AND EQUIPMENT: In submitting substitutions, bidders should note th following minimum considerations:

- 1. Capacities shown are absolute minimum and must be equaled.
- Physical size limitations for space allotted.
  Structural properties.
- Static and dynamic weight limitation.
  Noise level.
- 6. Interchange ability.
  7. Vibration generation.
- 8. Accessibility for maintenance and replacement.
- Compatibility with other materials, assemblies and equipment.
  Similar items shall be same manufacturer and style, etc. except where specifically exempted.

All material and equipment, for which a UL Standard, a NEMA Standard, an AGA approval, or an ASME requirement is established, shall be so approved and labeled or stamped. Label or stamp shall be conspicuous and not covered, painted or otherwise obscured from visual inspection. Adhesives are not acceptable as a mounting, supporting, or assembling technique. The Contractor shall pay any costs added to the total contract as a result of any substitutions. Equipment, etc. shall not be purchased without the Engineer's written approval (shop drawings).

EXISTING SERVICES: No service shall be interrupted without permission of the Owner. When encountered in work, protect existing active: sewer, water, gas, electric, other utility service, structures; when required for proper execution of work, relocate them as directed. If existing active services are not indicated, request Engineer for instructions. When encountered in work, whether or not indicated, cap or plug or otherwise discontinue existing inactive: sewer, water, gas, electric, other utility services, structures which interfere with work execution. Notify the Engineer of action taken. If removal is required, request instructions.

DRAWINGS: Drawings are diagrammatic. The Contractor shall install the work in such manner that the equipment, piping, vents, conduit, panels, ductwork, etc. will fit in space provided, maintain head room, and if in finished areas, be neatly installed and as "out-of-the-way" as physically possible. All equipment, piping, ductwork, conduits, etc., shall be installed to provide needed maintenance and passage space.

FEES: The Contractor shall pay for fees and inspections as may be required for electric, H.V.A.C., plumbing, etc and all other systems requiring inspections by agencies having jurisdiction. COMPLETION ITEMS: Provide all labor, equipment, materials, etc. required to complete installation specified

herein and/or shown on the scheduled drawings. EQUIPMENT OPERATION: This Division is responsible for: proper rotation, observing that lubricating has been properly performed, motors operate within nameplate limits, overload heater elements properly sized, and

reporting observed discrepancies to the Engineer. Operate all motors for at least one hour. At the end of this hour's run, check for motor temperature. On equipment furnished by other sections, if lubricating is not correct, or if motors do not operate within proper limits, this Division is responsible for notifying the General Contractor as to the deficiencies and for leaving the piece of equipment involved in a locked "OFF" condition.

OPERATING INSTRUCTIONS: Furnish to the Owner written operating and maintenance instructions for each system and each piece of equipment. Include in the equipment data binder specified above, instructions to start and stop each piece of equipment, itemized maintenance schedule and submittals. When systems are completely adjusted, furnish personnel for one full day to instruct the Owner's operators.

CUTTING AND PATCHING: All cutting of surfaces will be by the General Contractor except for minor cutting for piping, conduit, etc. which shall be accomplished by these contractors. All major patching back will be by the General Contractor. Minor patching for piping, etc. shall be by these contractors. It will be the contractor's responsibility to advise the General Contractor of all locations and to size all openings. The contractors shall coordinate with the General Contractor for the best routing of piping and ductwork to clear existing construction. The contractors shall provide sleeves where required. The contractors shall coordinate with the General Contractor prior to bid and advise the General Contractor of anticipated requirements for cutting and patching so that the General Contractor may include these in his bids.

