Architecture Planning

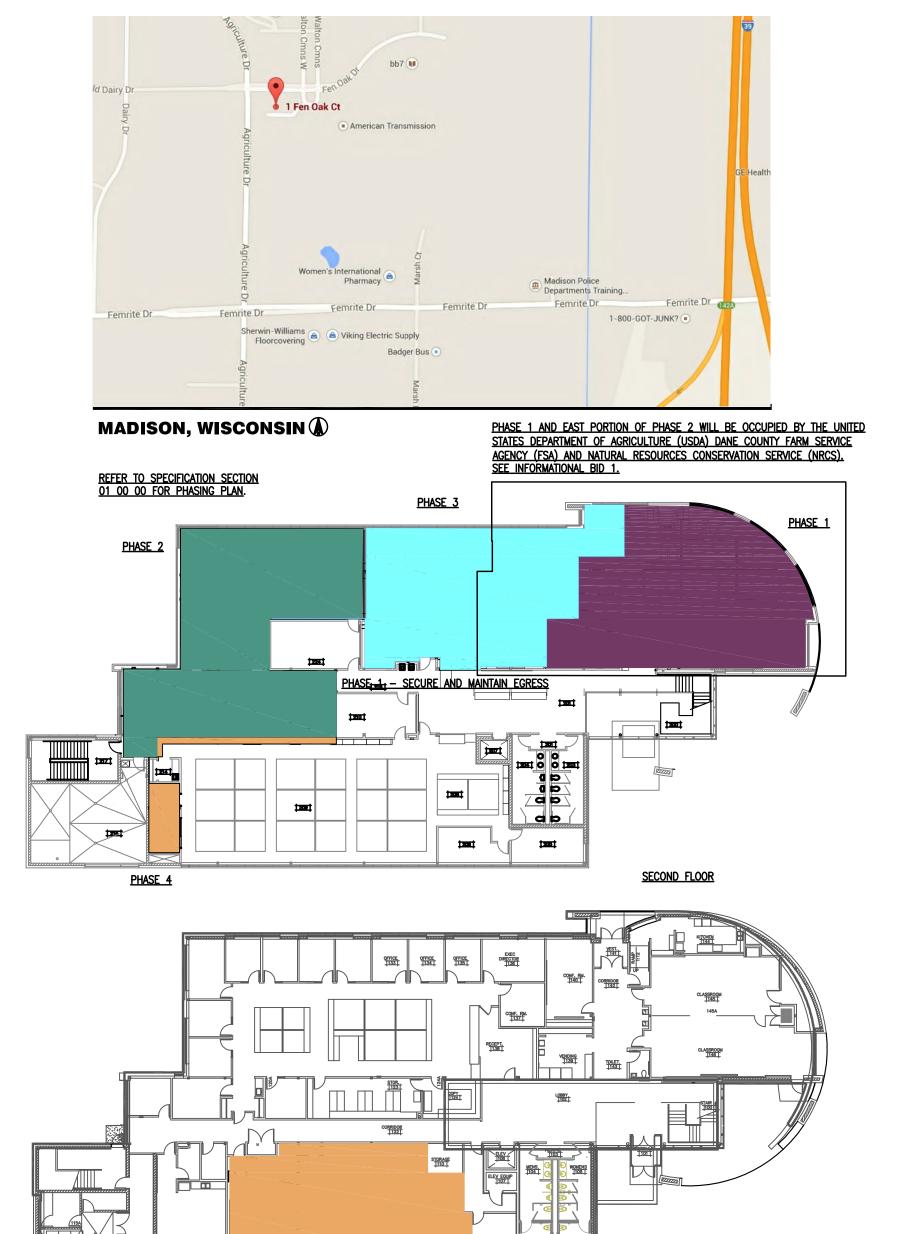
ASSOCIATES

Dorschner Associates, Inc.
849 E. Washington Ave., Ste. 112
Madison, Wisconsin 53703
608.204.0777

FEN OAK SECOND FLOOR RENOVATIONS LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WISCONSIN

DORSCHNER|ASSOCIATES # 15002-00

RFB NO. 315028



FIRST FLOOR

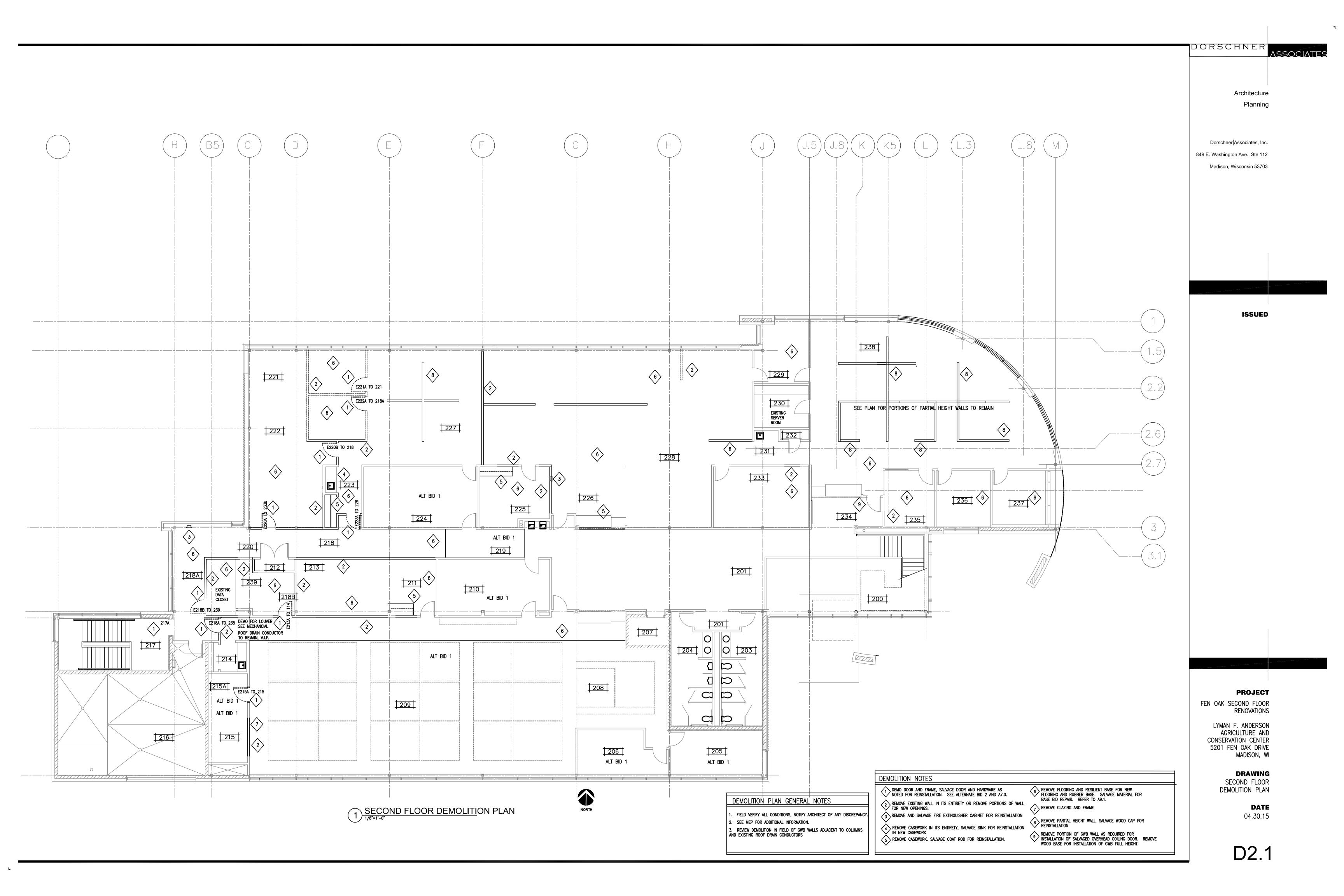
INDEX OF DRAWINGS ABBREVIATIONS ARCHITECTURAL SYMBOLS AND LEGEND **SCHEDULE OF ALTERNATE BIDS** DETAIL REFERENCE - SHEET REFERENCE **GENERAL** AMERICANS WITH DISABILITIES ACT SCHEDULE OF ALTERNATE BIDS - DETAIL NUMBER G1.0 COVER SHEET AND INDEX OF DRAWINGS ABOVE FINISHED FLOOR ALTERNATE BID 1: PROVIDE CPT-1 AND RB-1 IN SECOND FLOOR AREAS NOTED 'EXISTING CARPET' ON A9.1 INCLUDING REMOVAL OF ALUMINUM WALL SECTION REFERENCE **DEMOLITION** —— SHEET REFERENCE ACCESS PANEL — DETAIL NUMBER D2.1 SECOND FLOOR DEMOLITION PLAN ALTERNATE BID 2: PROVIDE ACCESS CONTROL SYSTEM INCLUDING POLISHED CONCRETE RETROPLATE SECOND FLOOR DEMO REFLECTED CEILING PLAN ASSOCIATED MODIFICATIONS TO DOORS AND FRAMES CORNER GUARD WALL SECTION REFERENCE CONTROL JOINT **ARCHITECTURAL** SCHEDULE OF INFORMATIONAL BIDS CONCRETE MASONRY UNIT — DETAIL NUMBER INFORMATIONAL BID 1: WORK RELATED TO UNITED STATES CONCRETE SECOND FLOOR PLAN DEPARTMENT OF AGRICULTURE DANE COUNTY FARM SERVICE AGENCY CPT CARPET SECOND FLOOR REFLECTED CEILING PLAN AND NATURAL RESOURCES CONSERVATION SERVICE. ALL DIVISION 26 ELEVATION REFERENCE WORK (PHONE, DATA, POWER) IN FED SERVER ROOM 230 AND CERAMIC TILE A7.0 DOOR & FRAME ELEVATIONS, PARTITION TYPES, DETAILS & SCHEDULE ASSOCIATED WITH THE RELOCATION OF FED STAFF. MODIFICATIONS CUH CABINET UNIT HEATER A8.0 INTERIOR ELEVATIONS TO OPENINGS TO SECURE THE FSA SUITE INCLUDING BASE BID WORK AT FSA ENTRY 234 AND DOOR 228 (INCLUDING DEMO, A9.1 SECOND FLOOR FINISH PLAN AND ILLUSTRATIVE FURNITURE PLAN EXPANSION JOINT PARTITION TYPE REF. SEE SHEET A7.0 FRAMING AND PAINT). ELECTRIC WATER COOLER FIRE PROTECTION ____ NEW WALLS INFORMATIONAL BID 2: DIRECT DIGITAL CONTROL SYSTEM FOR HVAC FLOOR DRAIN FP0.0 SYMBOLS AND ABBREVIATIONS - FIRE PROTECTION FOUNDATION DRAIN SYSTEM FLUSHOUT WINDOW TYPES SEE A7.0 FP1.1 PARTIAL FIRST FLOOR DEMOLITION PLAN - FIRE PROTECTION FIRE TREATED 1 HOUR FIRE RATED WALL PARTIAL SECOND FLOOR DEMOLITION PLAN - FIRE PROTECTION FX-# FIRE EXTINGUISHER AND TYPE PARTIAL FIRST FLOOR NEW WORK PLAN - FIRE PROTECTION GYPSUM WALL BOARD 2 HOUR FIRE RATED WALL PARTIAL SECOND FLOOR NEW WORK PLAN - FIRE PROTECTION HOLLOW METAL MARKER BOARD DOOR SWING w/NUMBER. SEE A7.0 <u>PLUMBING</u> TACK BOARD P2.1 FLOOR PLANS - PLUMBING BULLETIN BOARD EXISTING DOOR SWING w/NUMBER. SEE A7.0 **MECHANICAL** MASONRY OPENING MO.O SYMBOLS AND ABBREVIATIONS - HVAC NOT IN CONTRACT **REVISIONS** 0.F.C.I. OWNER FURNISHED CONTRACTOR INSTALLED M1.1 PARITAL FIRST FLOOR DEMOLITION PLAN - HVAC RECESSED FIRE EXTINGUISHER OWNER FURNISHED OWNER INSTALLED M1.2 PARITAL SECOND FLOOR DEMOLITION PLAN - HVAC SEMI RECESSED FIRE EXTINGUISHER OPP OPPOSITE M2.1 PARITAL FIRST FLOOR PLAN NEW WORK PLAN - HVAC P.LAM. PLASTIC LAMINATE M2.2 PARITAL SECOND FLOOR PLAN NEW WORK PLAN - HVAC ROOM NAME & NUMBER REV SEE ROOM FIN SCHED SHEET A9.1 REVERSE M3.0 DETAILS - HVAC RESILIENT PANEL M4.0 SCHEDULES - HVAC REFLECTED CEILING PLAN SYMBOLS: ROUGH OPENING S.S. STAINLESS STEEL ELECTRICAL GYPSUM WALL BOARD TZO TERRAZZO EO.O SYMBOLS & SCHEDULES ELECTRICAL UNLESS NOTED OTHERWISE PARTIAL FIRST FLOOR DEMOLITION PLAN ELECTRICAL 2'X2' ACOUSTICAL CEILING TILE VCT PARTIAL SECOND FLOOR DEMOLITION PLAN ELECTRICAL VINYL COMPOSITION TILE E2.1 PARTIAL FIRST FLOOR NEW WORK PLAN ELECTRICAL WOOD EXISTING GYPSUM WALL BOARD PARTIAL SECOND FLOOR NEW WORK LIGHTING PLAN WATER PROOFING WORK POINT RECESSED DOWNLIGHT PARTIAL SECOND FLOOR NEW WORK PLAN POWER & SYSTEMS E9.0 DETAILS - ELECTRICAL MAJOR USE & OCCUPANCY CLASSIFICATION: B 2'X2' LIGHT FIXTURE, SEE ELECTRICAL CONSTRUCTION CLASSIFICATION: IB 1'X LINEAR FLUORESCENT INDIRECT PROJECT AREA: 8,000 S.F. 0 0 PENDANT FIXTURE. SEE ELECTRICAL SPRINKLERED TRACK MOUNTED FIXTURES, SEE ELECTRICAL MAXIMUM EXIT ACCESS TRAVEL DISTANCE: 300' 1'X4' LIGHT FIXTURE. SEE ELECTRICAL EXIT LIGHT, ARROW INDICATES DIRECTION PLACE CENTER OF 2x2' TILE

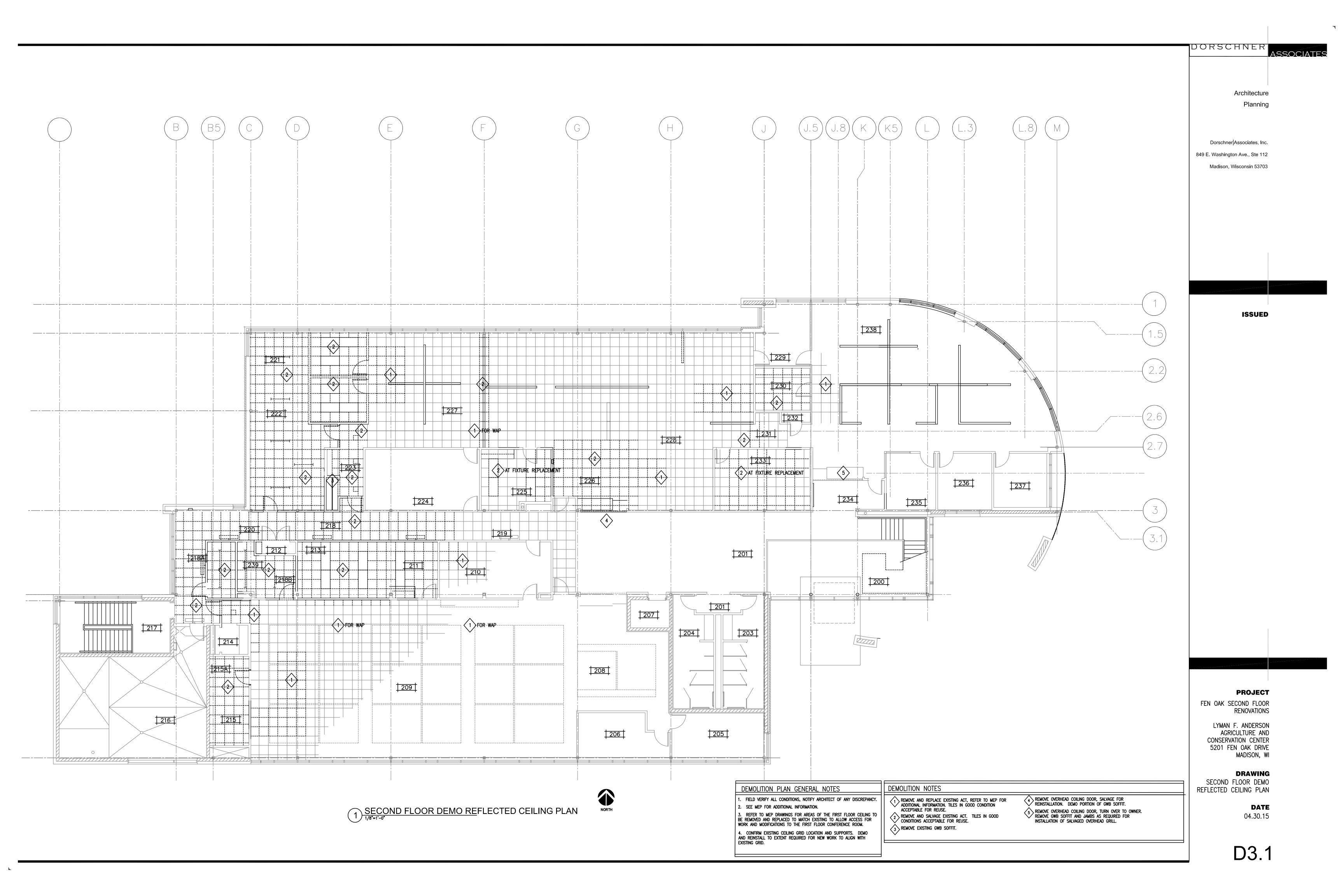
DATE: 04.30.15

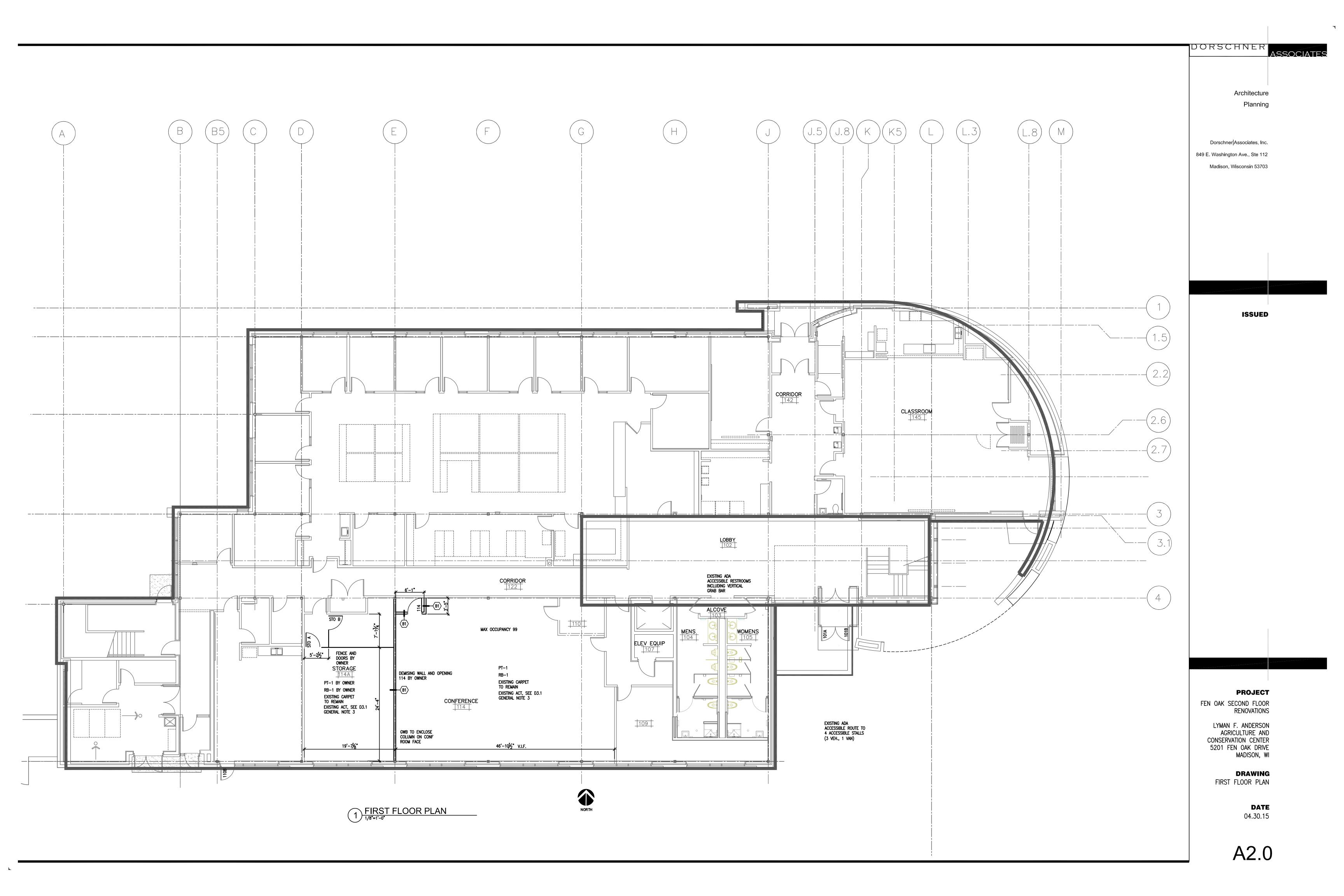
WALLS BY OWNER

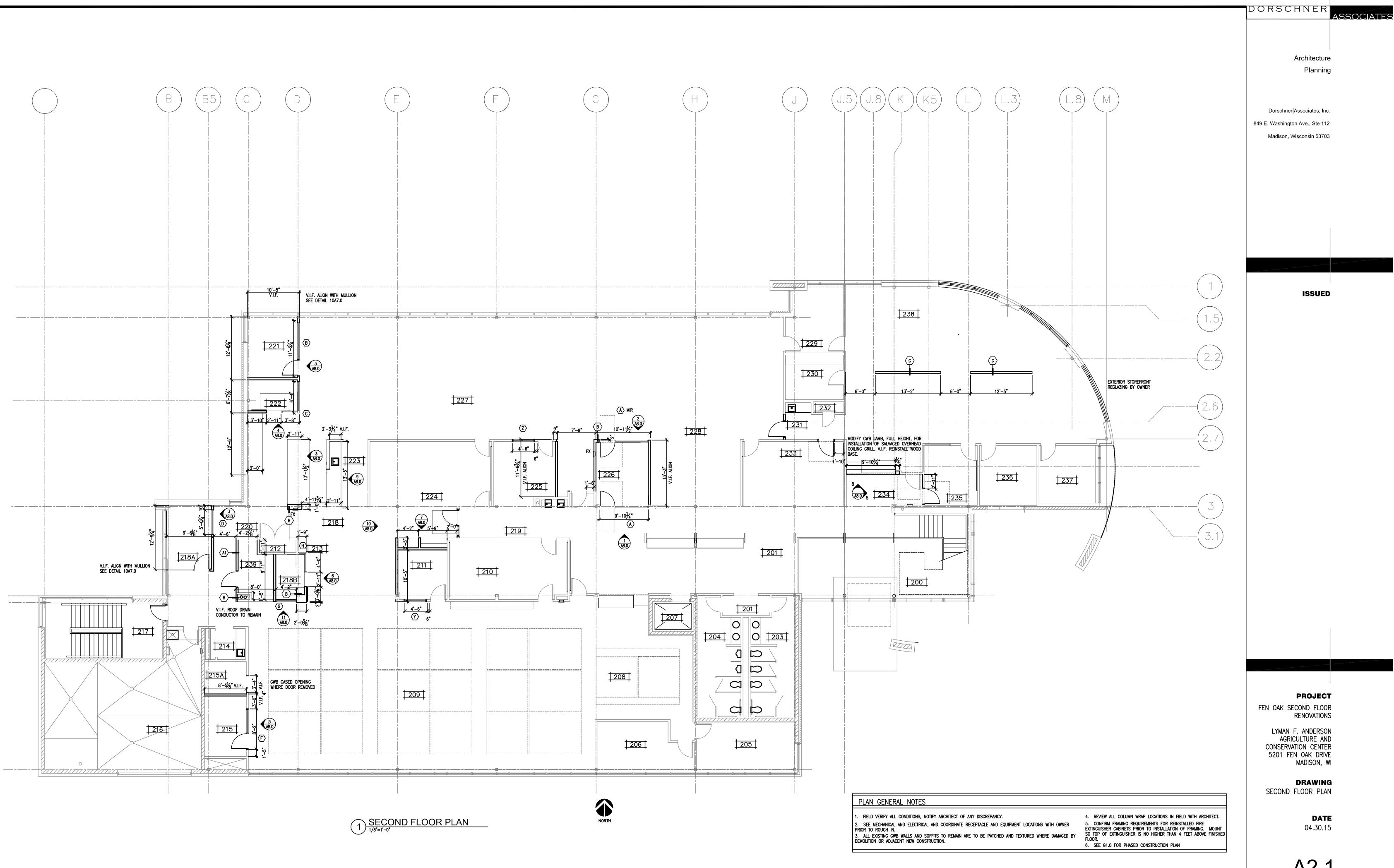
PHASE 5

HVAC DIFFUSER

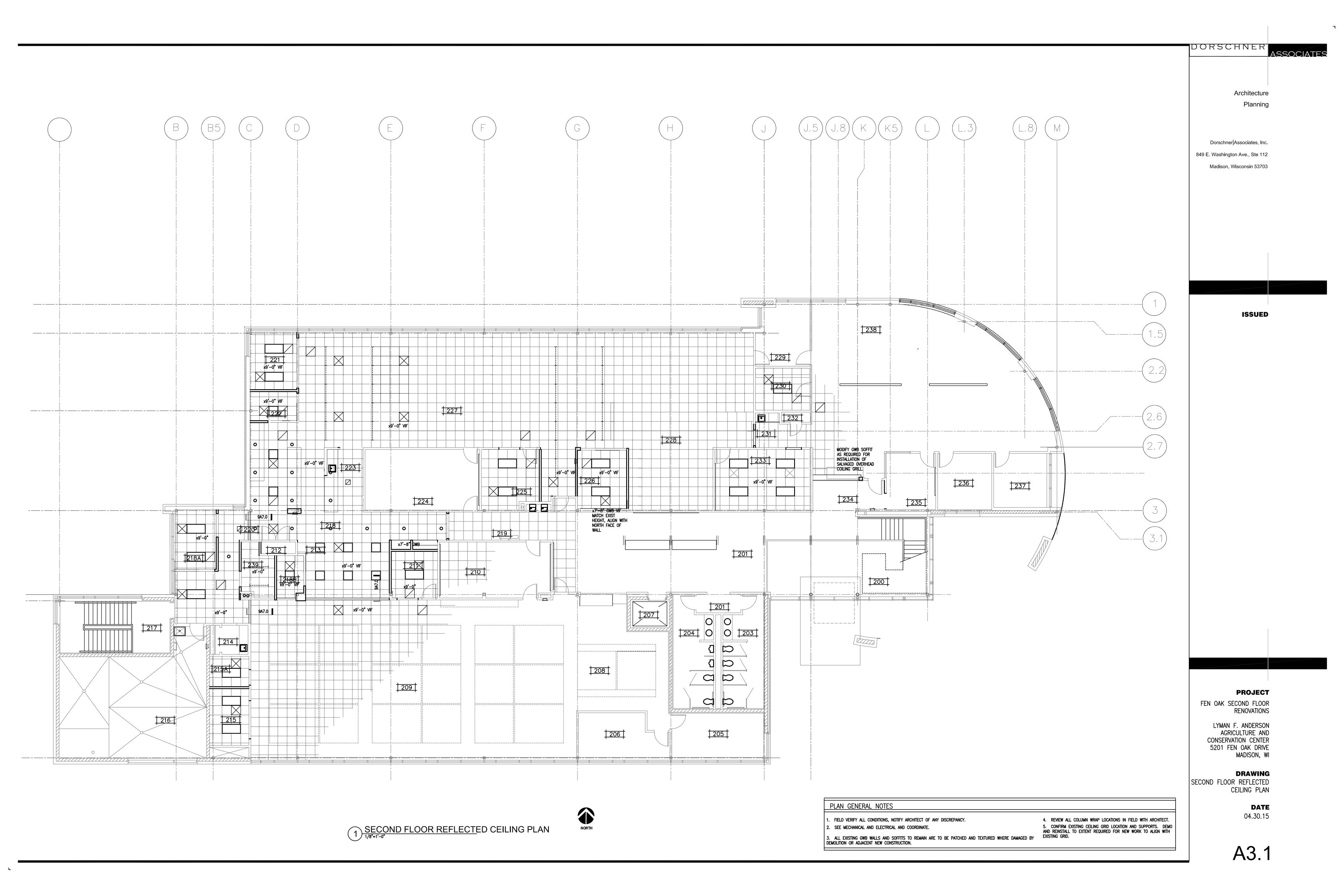


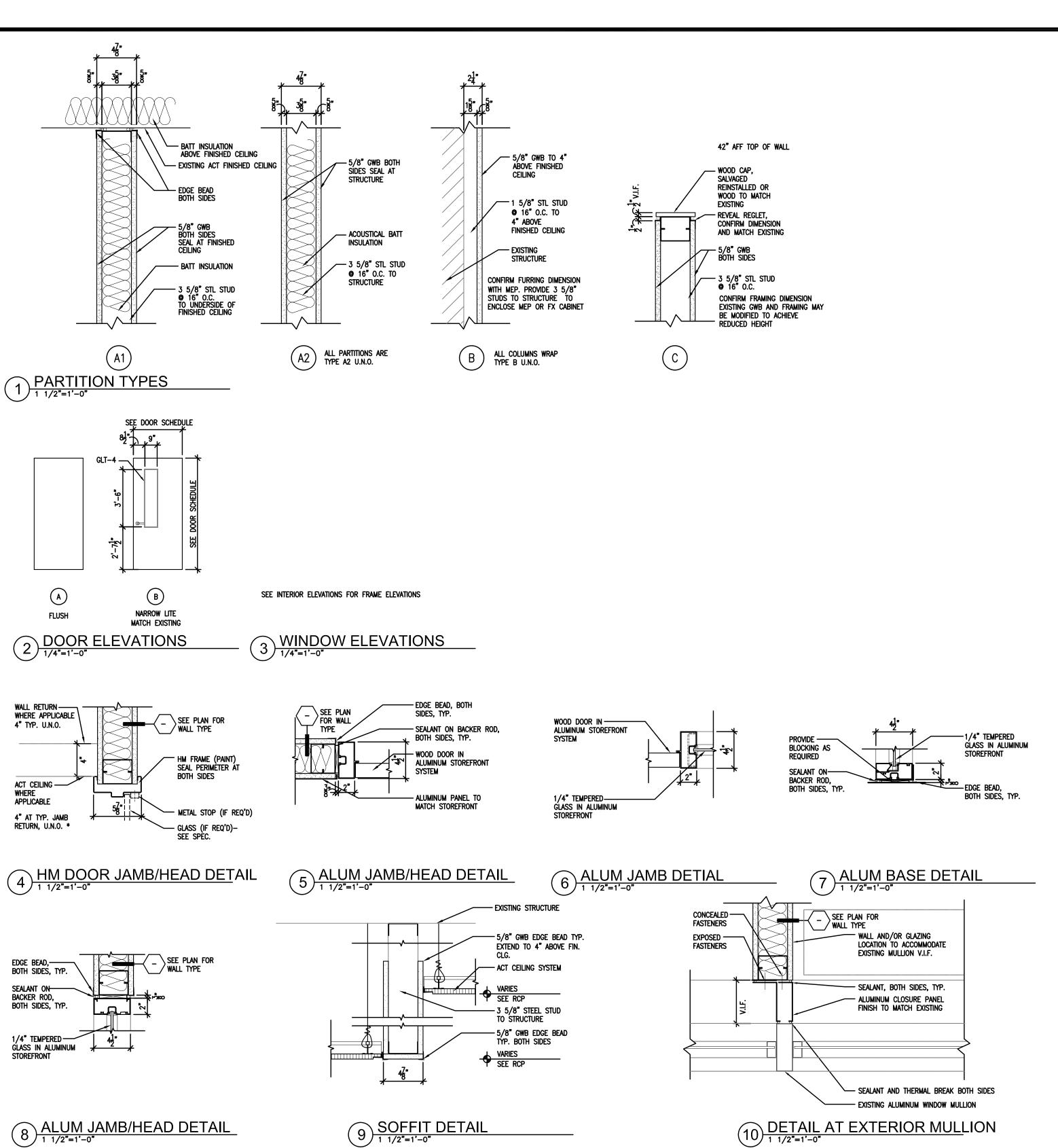


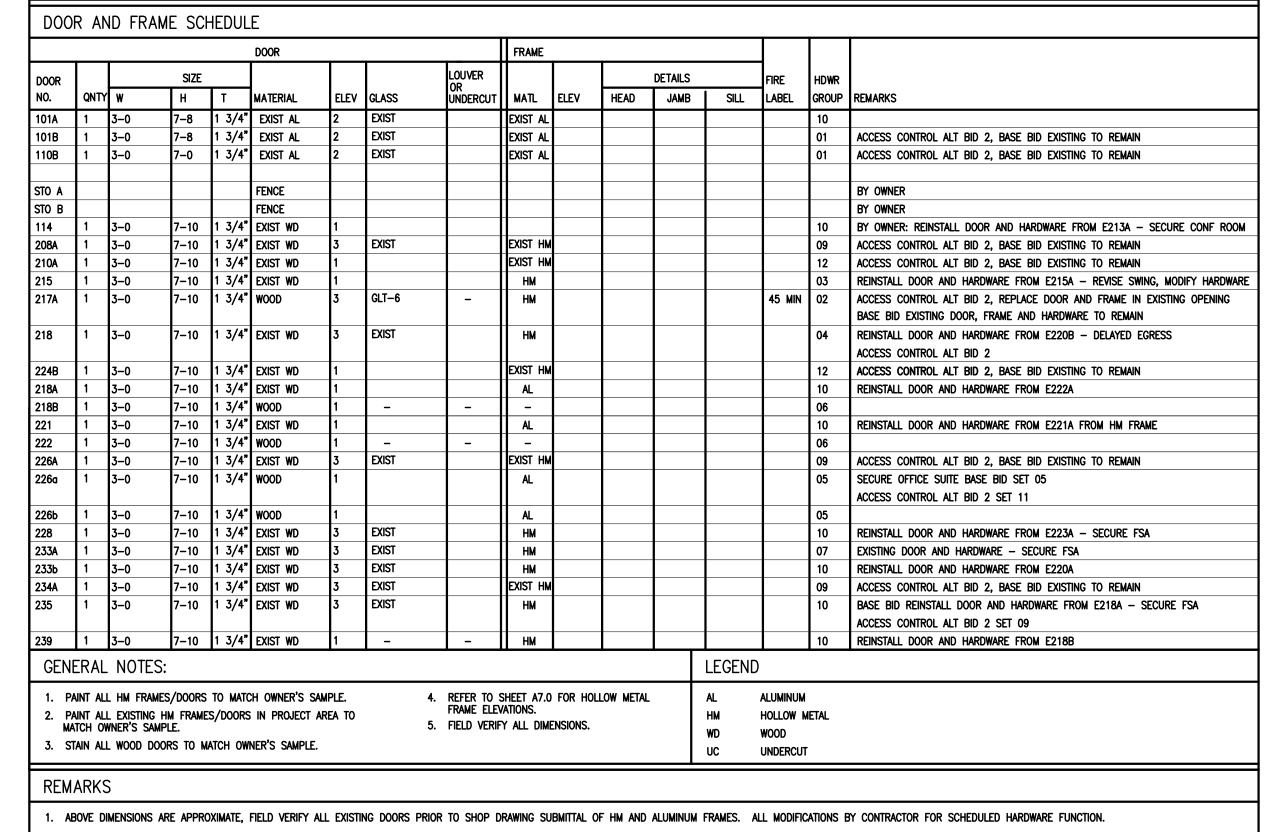


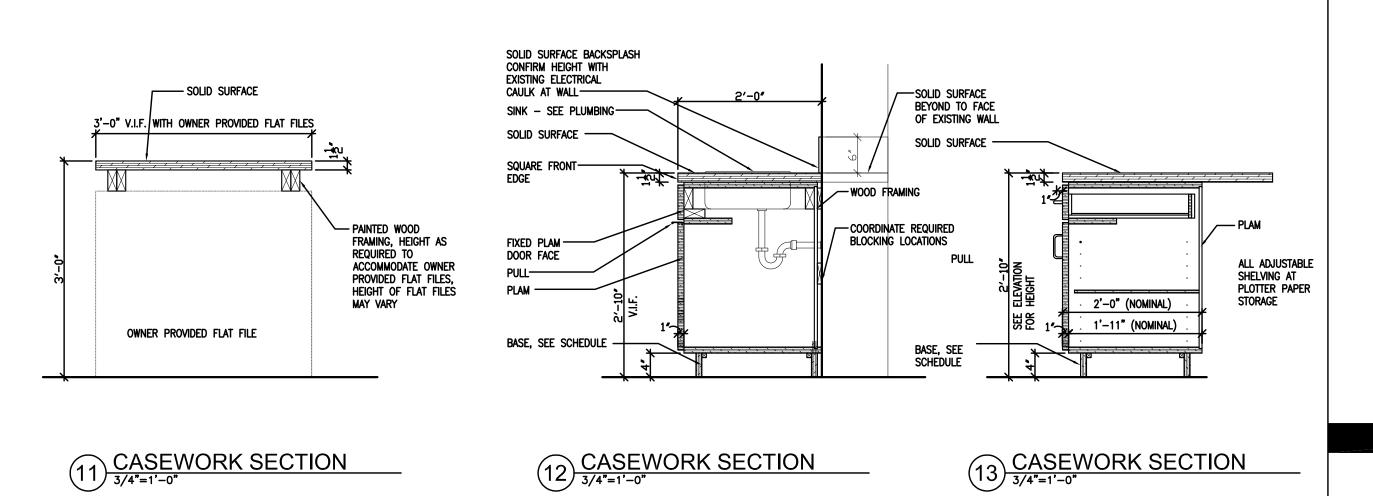


A2.1









PROJECT

FEN OAK SECOND FLOOR RENOVATIONS

DORSCHNER

Architecture

Dorschner Associates, Inc.

Madison, Wisconsin 53703

849 E. Washington Ave., Ste 112

Planning

ISSUED

ASSOCIATES

LYMAN F. ANDERSON
AGRICULTURE AND
CONSERVATION CENTER
5201 FEN OAK DRIVE
MADISON, WI

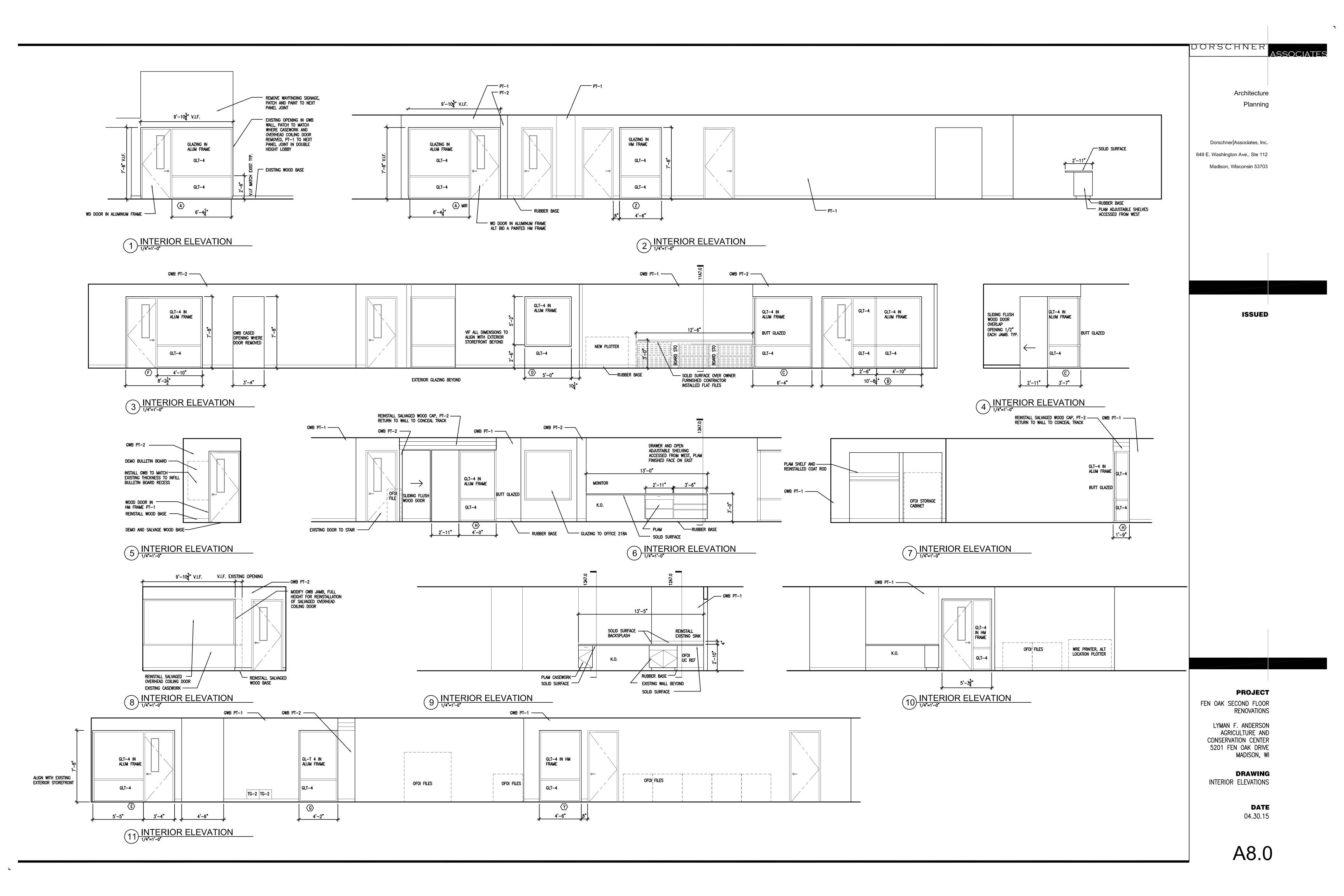
DRAWING

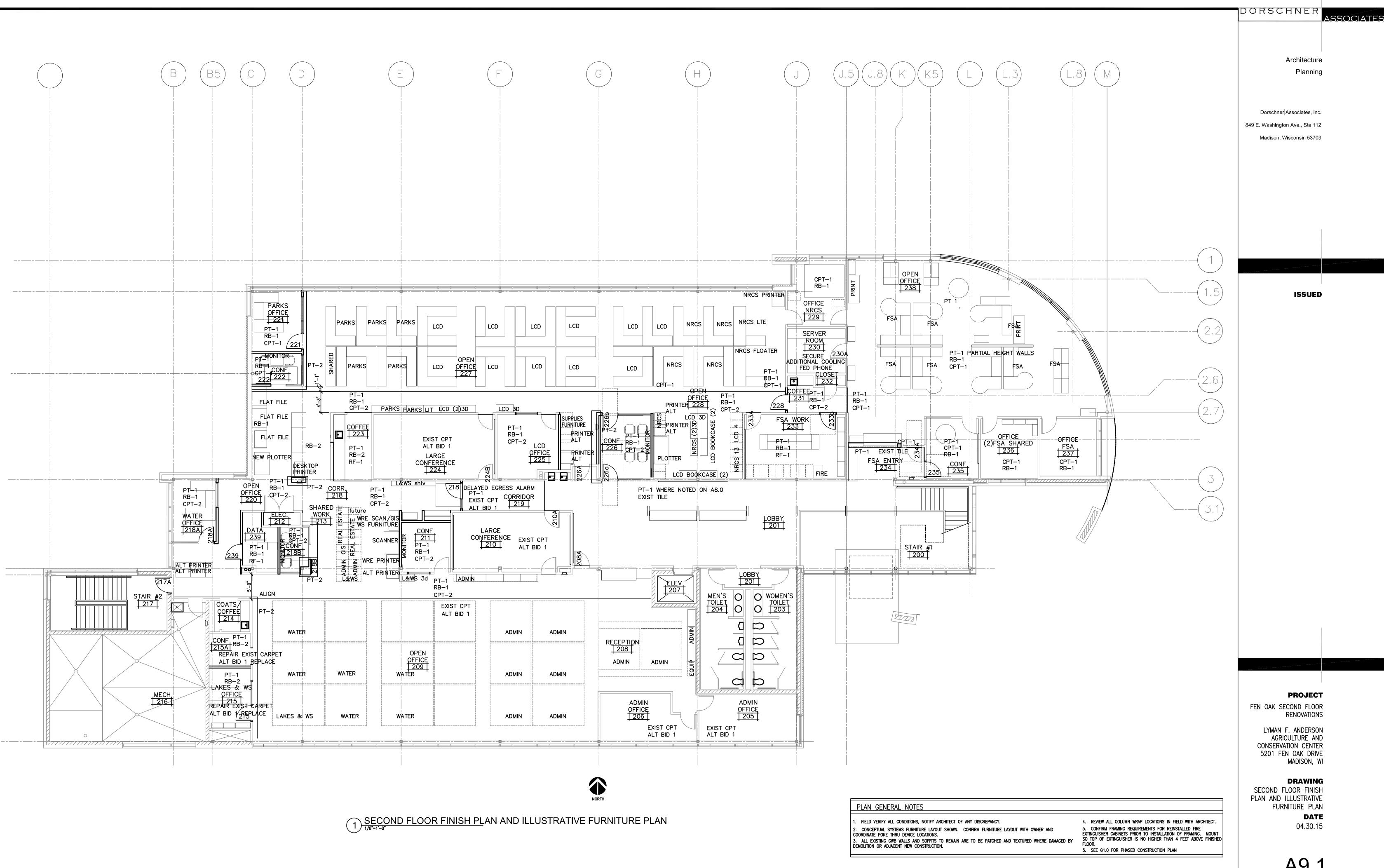
DOOR & FRAME ELEVATIONS,
PARTITION TYPES, DETAILS
& SCHEDULE

DATE

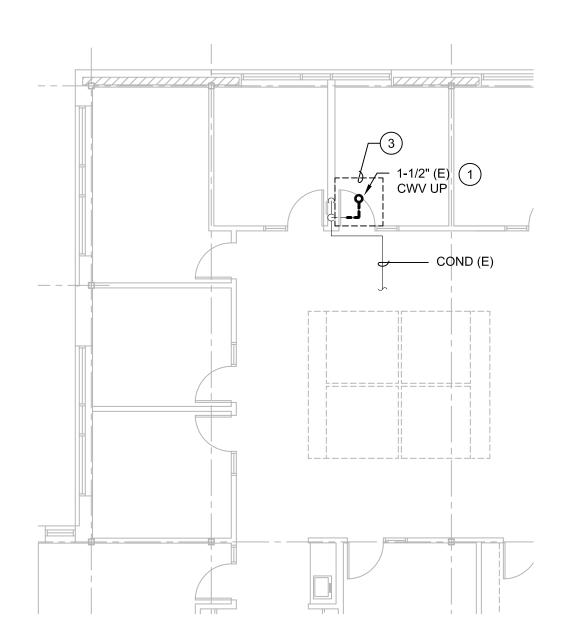
04.30.15

A7.0

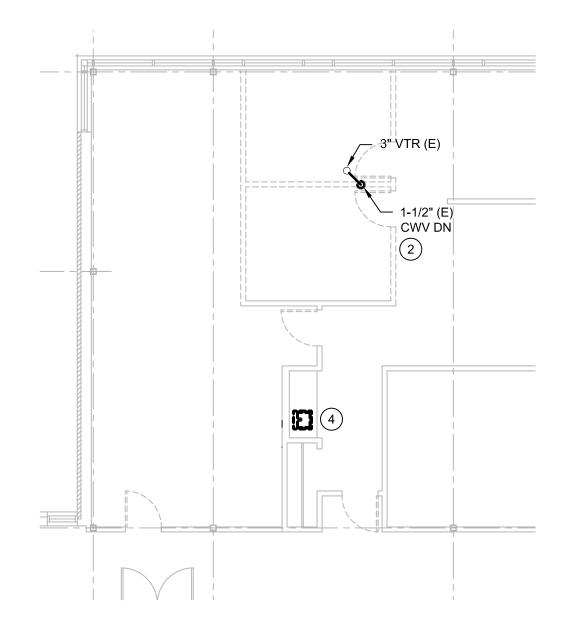




A9.1

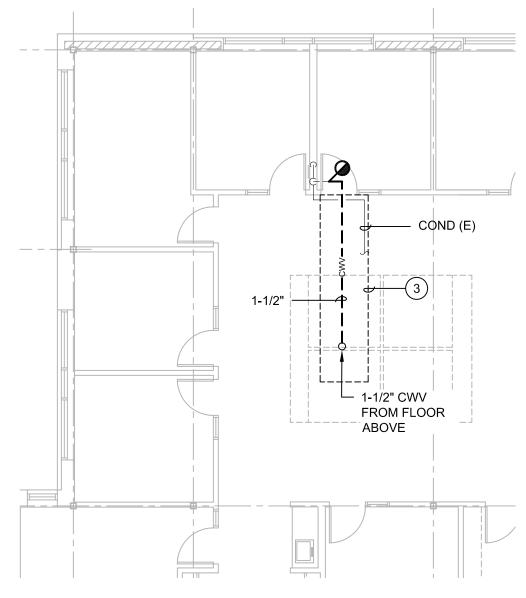




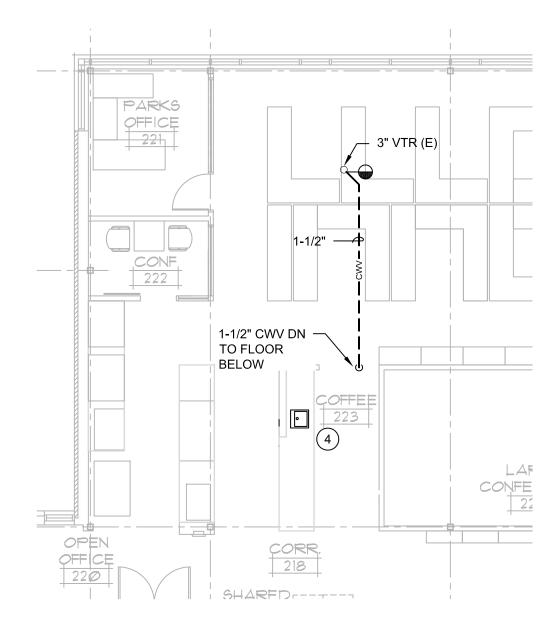


PARTIAL SECOND FLOOR
DEMOLITION PLAN - PLUMBING

P2.1 SCALE: 1/8"=1'-0"







PARTIAL SECOND FLOOR
NEW WORK PLAN - PLUMBING

SCALE: 1/8"=1"-0"

GENERAL NOTES:

- 1. PC SHALL VISIT SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO CONSTRUCTION. PC SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. DEMOLITION DRAWINGS ARE DIAGRAMMATICAL IN NATURE. HC IS RESPONSIBLE FOR ALL DEMOLITION REQUIRED TO ACCOMPLISH ALL NEW WORK REQUIREMENTS.
- 2. GC RESPONSIBLE FOR REMOVAL AND REINSTALLATION OF ALL CEILINGS TO PERFORM PLUMBING PROJECT WORK. PC TO FIELD VERIFY AND COORDINATE CEILINGS REQUIRED FOR REMOVAL. COORDINATE CEILING REMOVAL WITH OTHER TRADES.

KEYED NOTES:

- (1) REMOVE CLEAR WATER VENT PIPE FROM FLOOR ABOVE TO EXISTING HUB DRAIN.
- 2 REMOVE CLEAR WATER VENT FROM BELOW UP TO EXISTING 3" VTR. GC TO PATCH FLOOR OPENING.
- (3) APPROXIMATE LOCATION OF CEILING REMOVAL REQUIRED FOR PLUMBING WORK.
- disconnect and remove existing sink and fixture. Reinstall existing sink and fixture in New Counter. Reconnect all Piping.

PLUMBING SPECIFICATIONS:

PIPE PENETRATIONS:

FIRE, SMOKE AND FIRE/SMOKE RATED SURFACES:
3M CP 25N/S OR CP 25S/L CAULK, 3M FS 195 WRAP/STRIP WITH RESTRICTING COLLAR, 3M CS 195
COMPOSITE SHEET, PIPE SHIELDS INC. SERIES F FIRE BARRIER KITS, PROSET SYSTEMS FIRE RATED
FLOOR AND WALL PENETRATIONS, INSTA_FOAM PRODUCTS INSTA_FIRE SEAL FIRESTOP FOAM OR
DOW CORNING FIRE STOP SYSTEM.

ALL FIRE STOPPING SYSTEMS SHALL BE PROVIDED BY THE SAME MANUFACTURER.

UL LISTED OR TESTED BY INDEPENDENT TESTING LABORATORY, APPROVED BY STATE AND LOCAL CODE JURISDICTIONS.

USE PRODUCT THAT HAS A RATING NOT LESS THAN RATING OF WALL OR FLOOR BEING PENETRATED. REFERENCE ARCHITECTURAL DRAWINGS FOR IDENTIFICATION OF FIRE AND/OR SMOKE RATED WALLS AND FLOORS.

SLEEVES IN CONCRETE TO BE SCHEDULE 40 STEEL PIPE WITH INTEGRAL WATER STOP UNLESS FIRE STOP MATERIAL USED INCLUDES A SLEEVE THAT IS AN INTEGRAL PART OF RATED ASSEMBLY.

USE FIRESTOP PUTTY, CAULK SEALANT, INTUMESCENT WRAPSTRIPS, INTUMESCENT FIRESTOP COLLARS, FIRESTOP BLOCKS, FIRESTOP MORTAR OR A COMBINATION OF THESE PRODUCTS TO PROVIDE A UL LISTED SYSTEM FOR EACH APPLICATION REQUIRED FOR THIS PROJECT. PROVIDE MINERAL WOOL BACKING WHERE SPECIFIED IN MANUFACTURER'S APPLICATION DETAIL.

NON-RATED SURFACES:

STAMPED STEEL, CHROME PLATED, HINGED, SPLIT RING ESCUTCHEONS OR FLOOR/CEILING PLATES FOR COVERING OPENINGS IN OCCUPIED SPACES.

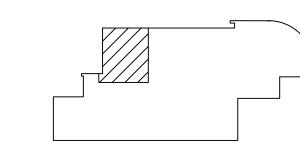
PIPING SYSTEMS:

CLEARWATER WASTE AND VENT PIPING:

PVC, SCHEDULE 40, TYPE I, ASTM D1785, AND PVC DRAIN-WASTE-VENT FITTINGS, ASTM D2665, WITH SOLVENT WELD JOINTS, ASTM D2855. SOLID WALL PVC ONLY.

PREPARE PVC PIPE ENDS AS RECOMMENDED BY MANUFACTURER. USE A P_70 TYPE PRIMER (FOR PVC) AND A PVC SOLVENT CEMENT APPROPRIATE TO THE PIPE SIZE AND TEMPERATURE RANGE.

HYDRO-STATICALLY PRESSURE TEST ALL PIPING TO 10 FEET OF WATER COLUMN PRESSURE FOR 2 HOURS. NO LEAKS ALLOWED. PROVIDE MINT TEST OF ENTIRE SYSTEM AS REQUIRED BY LOCAL INSPECTOR.



ENGINEERING, INC.
5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711
ph:608.277.1728 fax:608.271.7046
JDR Project No. 150045

DORSCHNER

Architecture Planning

ASSOCIATES

Dorschner Associates, Inc.

849 E. Washington Ave., Ste 112

Madison, Wisconsin 53703

ISSUED

PROJECT

FEN OAK SECOND FLOOR RENOVATIONS

> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

> > **DRAWING**FLOOR PLANS -

PLUMBING **DATE**

04.30.15

P2.1

FIRE PROTECTION GENERAL NOTES:

- 1. VERIFY UTILITY INFORMATION WITH LOCAL UTILITY COMPANIES, VISIT THE BUILDING SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING CONDITIONS AFFECTING THE WORK.
- 2. VERIFY ALL MEASUREMENTS, PIPE SIZES, PIPE LOCATIONS, ELEVATIONS, ETC. AT SITE.
- 3. DRAWINGS OF ALL OTHER TRADES SHALL BE REVIEWED. COORDINATE THE INSTALLATION AND SCHEDULING OF THE WORK WITH OTHER TRADES TO PREVENT INTERFERENCE WITH THEIR RESPECTIVE INSTALLATION.
- 4. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL STRUCTURAL DIMENSIONS AND LAYOUT.
- 5. IT IS THE INTENT OF THESE DRAWINGS THAT A COMPLETE WORKING SYSTEM, PROPERLY TESTED, WILL BE OPERATIONAL UPON COMPLETION OF INSTALLATION.
- 6. CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID OPENING. THE ENGINEER RESERVES THE RIGHT TO FINAL INTERPRETATION.
- 7. REFER TO SYMBOL SCHEDULE FOR SYMBOLS USED.
- 8. ALL SPRINKLER PIPING SHALL BE LOCATED WITHIN THE JOIST SPACE UNLESS INDICATED OTHERWISE WHERE CONSTRUCTION TYPE IS APPLICABLE.
- 9. SPRINKLER/FIRE SUPPRESSION SYSTEM(S) SHALL BE DEFINED FOR INDIVIDUAL AREAS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES, EXPOSED STRUCTURE AND CEILING DEVICES. IN EXPOSED AREAS, COORDINATE PIPE ROUTING AND HEAD LAYOUT TO PROVIDE A CLEAN SYMMETRICAL INSTALLATION WITH DUCTWORK, LIGHTING, ETC.
- 10. WHERE APPLICABLE, INSTALL SPRINKLERS IN CENTER OF CEILING TILE.

FIRE PROTECTION NARRATIVE

- 1. THE FIRE PROTECTION SYSTEM IS TO BE DESIGNED TO THE CONTRACT SCOPE DOCUMENTS, NFPA 13 LATEST EDITION, AND THE LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS.
- 2. CONTRACTOR TO NOTE SPECIAL AESTHETIC CONDITION OF SPRINKLER INSTALLATION IN AREAS WITH NO CEILINGS.
- 3. SPRINKLER COVERAGE AND PIPING SHALL BE WET PIPE HYDRAULICALLY DESIGNED BY THE FIRE PROTECTION CONTRACTOR BASED ON NFPA 13.

FIRE PROTECTION SYSTEM CLASSIFICATION

LIGHT HAZARD OCCUPANCY:

THE PROTECTION AREA ALLOTTED PER SPRINKLER SHOULD NOT EXCEED 200 SQUARE FEET WITH THE MAXIMUM DISTANCE BETWEEN LINES AND SPRINKLERS ON LINES BEING 15 FEET. THE SPRINKLERS DO NOT NEED TO BE STAGGERED.

AREAS OF LIGHT HAZARD SHALL INCLUDE: ALL GENERAL OFFICE SPACE, TOILET ROOMS, SLEEPING ROOMS AND CORRIDORS.

FIRE PROTECTION LEGEND EXISTING PIPING TO BE REMOVED/DEMOLISHED EXISTING PIPING (SERVICE DESIGNATED) DOMESTIC WATER SERVICE FIRE PROTECTION WATER SERVICE SPRINKLER PIPING TEE (BRANCH TO SIDE) TEE (BRANCH DOWN) RISER UP RISER DOWN CLEANOUT (CO) WALL CLEANOUT (WCO) FLOOR CLEANOUT (FCO) YARD CLEANOUT (YCO) FLANGE CHECK VALVE EXISTING NEW POINT OF CONNECTION (POC) CAP SHUT-OFF VALVE PIPE STRAINER ____

TAMPER SWITCH

OS&Y GATE VALVE FIRE DEPARTMENT CONNECTION (FDC)

FIRE HYDRANT (HYD)

ANGLE VALVE - FIRE HOSE

VALVE IN RISER

PRESSURE GAUGE

FLOW SWITCH

CONNECTION EXISTING SPRINKLER HEAD

NEW SPRINKLER HEAD

DEMOLITION KEYED NOTE

NEW WORK KEYED NOTE REVISION KEYED NOTE

TAG FOR CONTINUATION MATCH POINTS

ABBREVIATIONS

ABOVE FINISHED FLOOR ABOVE FINISHED GRADE

BFF BELOW FINISHED FLOOR BELOW FINISHED GRADE

DOUBLE DETECTOR CHECK VALVE

EXISTING

ELECTRICAL CONTRACTOR

FIRE PROTECTION WATER SERVICE FIRE PROTECTION CONTRACTOR

DOMESTIC WATER SERVICE

GENERAL CONTRACTOR

HVAC CONTRACTOR

PLUMBING CONTRACTOR

SPRINKLER PIPING

GENERAL NOTES:

LIGHT HAZARD (NFPA 13) - MAXIMUM AREA PER ZONE = 52,000 SF (SPRINKLER HEADS: CHROME SEMI-RECESSED IN CEILINGS)

FIRE PROTECTION SHEET INDEX

FP0.0 SYMBOLS AND ABBREVIATIONS - FIRE PROTECTION

FP1.1 PARTIAL FIRST FLOOR DEMOLITION PLAN - FIRE PROTECTION

FP1.2 PARTIAL SECOND FLOOR DEMOLITION PLAN - FIRE PROTECTION PARTIAL FIRST FLOOR NEW WORK PLAN - FIRE PROTECTION

FP2.2 PARTIAL SECOND FLOOR NEW WORK PLAN - FIRE PROTECTION

ENGINEERING, INC. 5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711

ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

Architecture Planning Dorschner Associates, Inc. 849 E. Washington Ave., Ste 112 Madison, Wisconsin 53703

ASSOCIATES

DORSCHNER

ISSUED

PROJECT

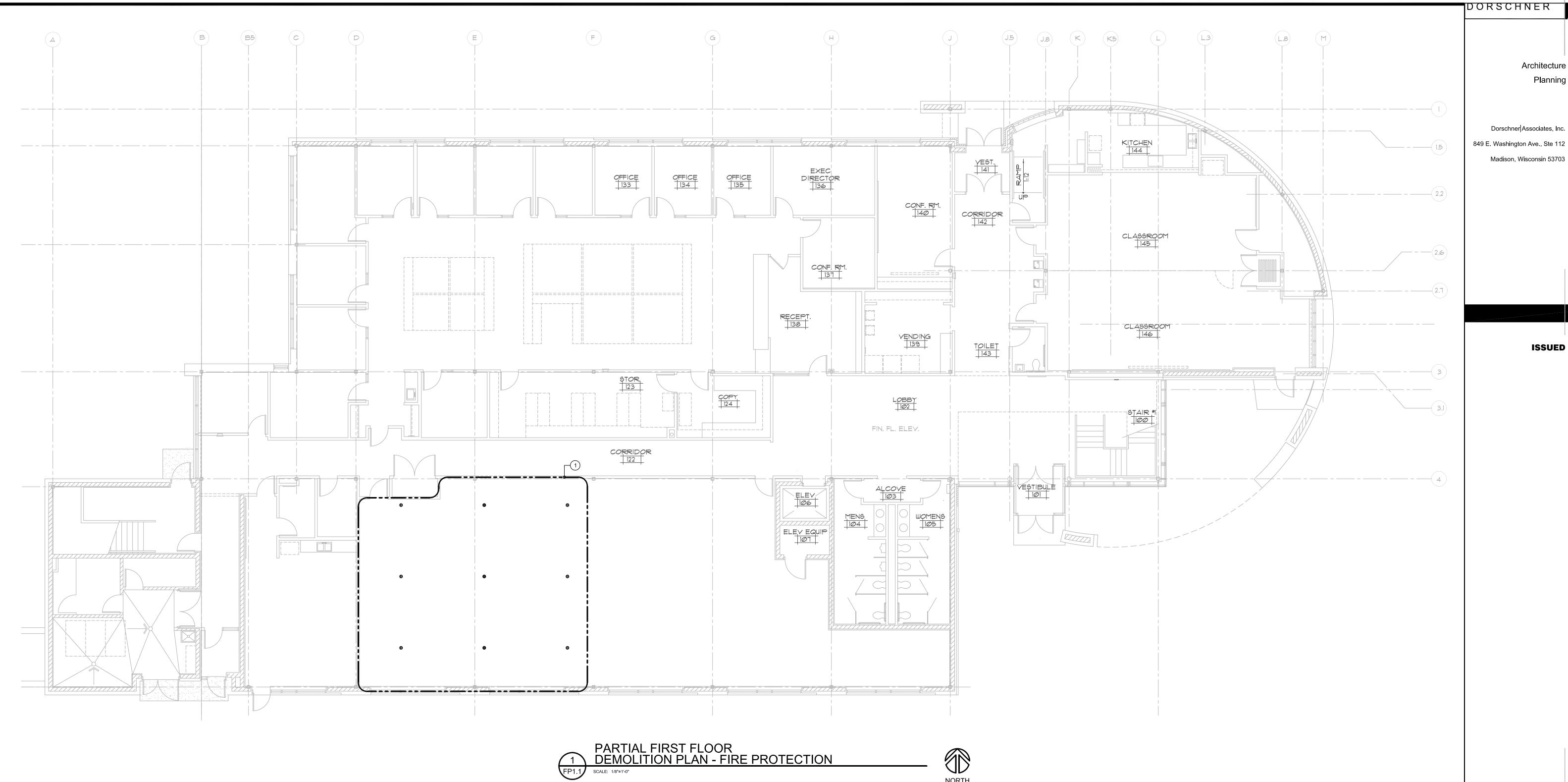
FEN OAK SECOND FLOOR RENOVATIONS

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING

SYMBOLS AND ABBREVIATIONS - FIRE PROTECTION DATE 04.30.15

FP0.0

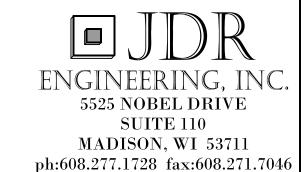


GENERAL NOTES:

- 1. FPC SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE A/E IMMEDIATELY BEFORE COMMENCING WORK.
- 2. COORDINATE EXISTING SPRINKLER HEADS WITH NEW ARCHITECTURAL WORK. FINAL SPRINKLER HEAD LAYOUT, SYSTEM DESIGN, COVERAGES, ETC SHALL BE THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR. SPRINKLER HEADS SHOWN FOR INFORMATIONAL PURPOSES ONLY.

KEYED NOTES:

1 LIMITS OF DEMOLITION: FPC SHALL DEMOLISH ALL EXISTING SPRINKLER HEAD DROPS NOT REQUIRED FOR NEW SPRINKLER HEAD LOCATIONS. ALL EXISTING SPRINKLER HEADS SHALL BE DEMOLISHED AND ARE <u>NOT</u> TO BE



JDR Project No. 150045

ASSOCIATES

Architecture

Dorschner Associates, Inc.

Madison, Wisconsin 53703

Planning

ISSUED

PROJECT

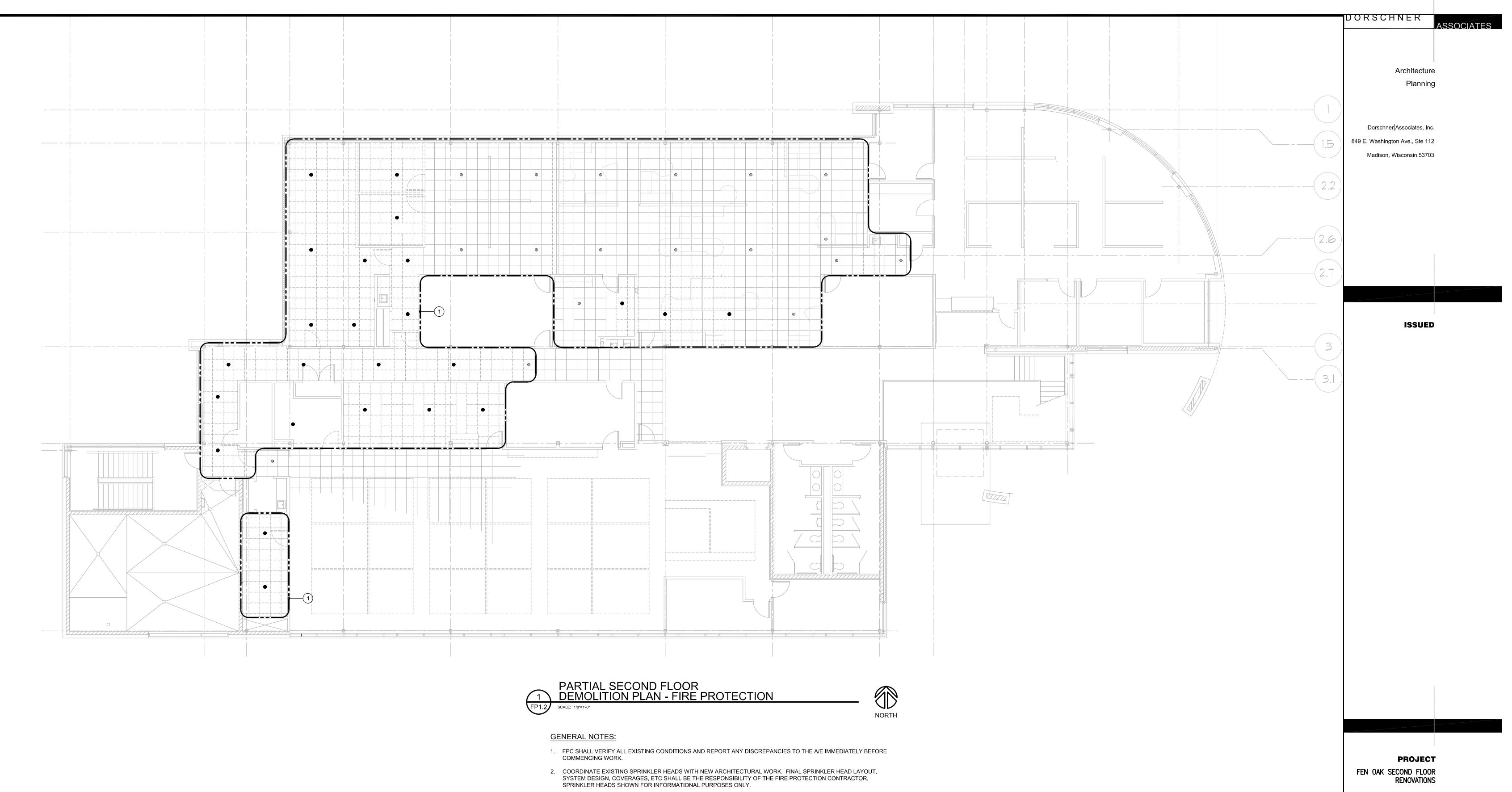
FEN OAK SECOND FLOOR RENOVATIONS

> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

> > **DRAWING**

PARTIAL FIRST FLOOR DEMOLITION PLAN - FIRE PROTECTION DATE 04.30.15

FP1.1



1 LIMITS OF DEMOLITION: FPC SHALL DEMOLISH ALL EXISTING SPRINKLER HEAD DROPS NOT REQUIRED FOR NEW

SPRINKLER HEAD LOCATIONS. ALL EXISTING SPRINKLER HEADS SHALL BE DEMOLISHED AND ARE <u>NOT</u> TO BE

KEYED NOTES:

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING

PARTIAL SECOND FLOOR
DEMOLITION PLAN — FIRE
PROTECTION

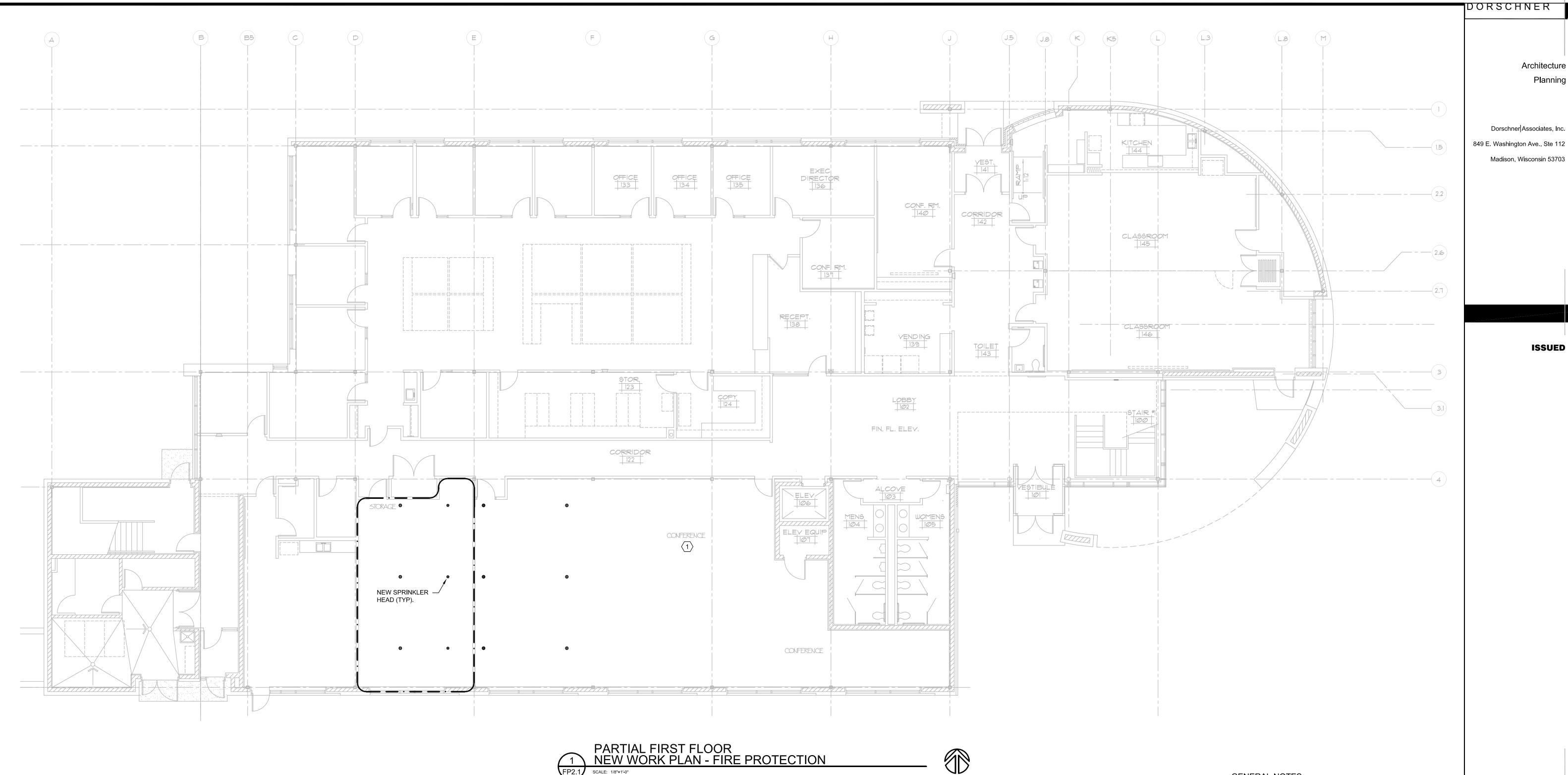
DATE

04.30.15

5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711
ph:608.277.1728 fax:608.271.7046
JDR Project No. 150045

FP1.2

ENGINEERING, INC.



GENERAL NOTES:

LIGHT HAZARD (NFPA 13) - MAXIMUM AREA PER ZONE = 52,000 SF (SPRINKLER HEADS: CHROME SEMI-RECESSED IN CEILINGS)

GENERAL NOTES:

- 1. FPC SHALL VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE A/E IMMEDIATELY BEFORE COMMENCING WORK.
- 2. COORDINATE EXISTING SPRINKLER HEADS WITH NEW ARCHITECTURAL WORK. FINAL SPRINKLER HEAD LAYOUT, SYSTEM DESIGN, COVERAGES, ETC SHALL BE THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR. SPRINKLER HEADS SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- 3. REFER TO ARCHITECTURAL DRAWING FOR CEILING TYPES AND HEIGHT. COORDINATE WORK WITH ALL TRADES. **KEYED NOTES:**
- 1 EXISTING SPRINKLER COVERAGE TO REMAIN.

ENGINEERING, INC. 5525 NOBEL DRIVE SUITE 110

MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046 JDR Project No. 150045

PROJECT

ASSOCIATES

Architecture

Planning

ISSUED

FEN OAK SECOND FLOOR RENOVATIONS

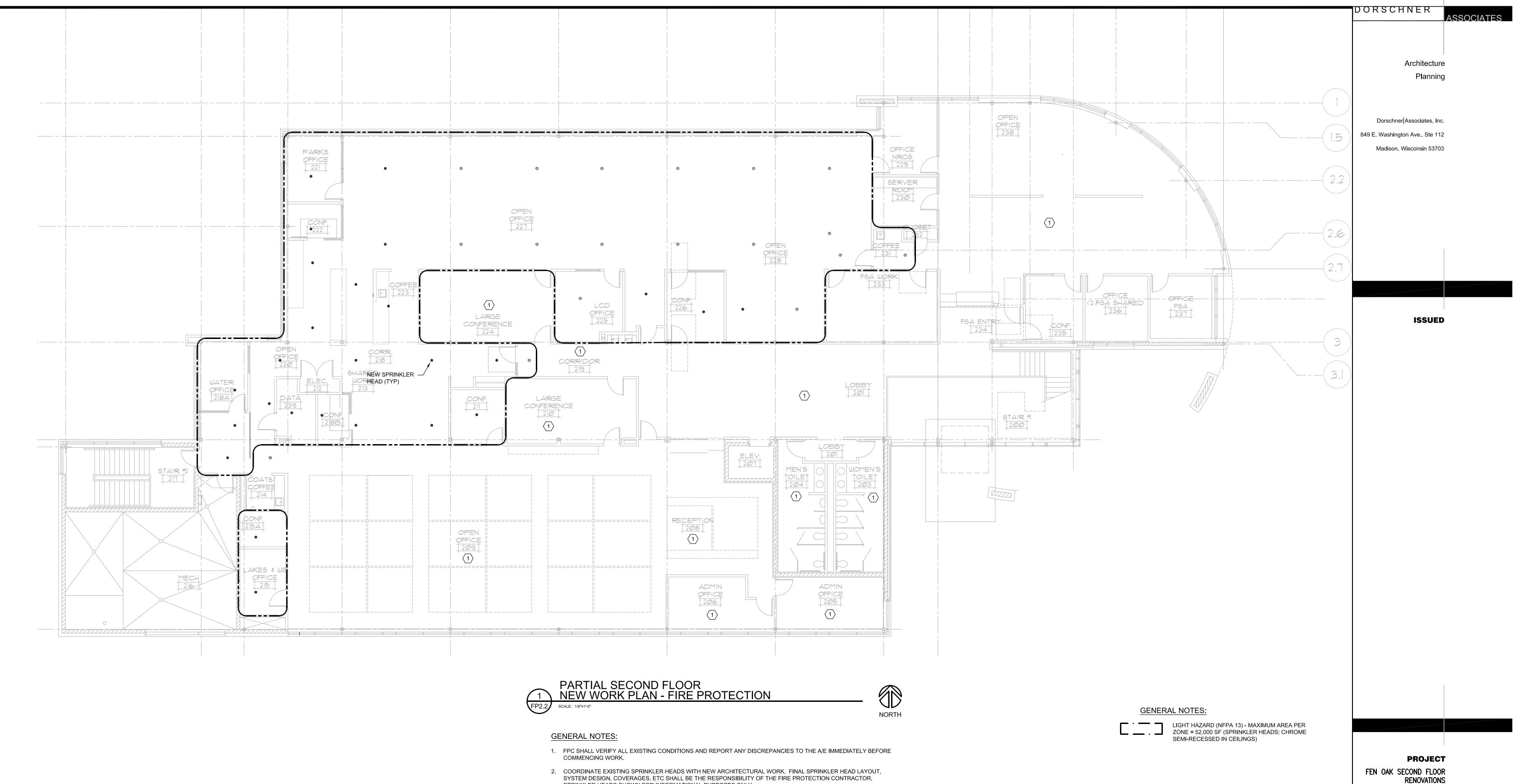
> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE

> > **DRAWING**

MADISON, WI

PARTIAL FIRST FLOOR NEW WORK PLAN - FIRE PROTECTION DATE 04.30.15

FP2.1



- SPRINKLER HEADS SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- 3. REFER TO ARCHITECTURAL DRAWING FOR CEILING TYPES AND HEIGHT. COORDINATE WORK WITH ALL TRADES. **KEYED NOTES:**
- (1) EXISTING SPRINKLER COVERAGE TO REMAIN.

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING

PARTIAL SECOND FLOOR NEW WORK PLAN - FIRE PROTECTION DATE 04.30.15

ENGINEERING, INC.

5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

FP2.2

ABBREVIATIONS DUCTWORK SYSTEMS PIPING SYSTEMS ACCESS DOOR MOTOR OPERATED DAMPER ADJUSTABLE MIXED AIR TEMPERATURE 20/12 DUCT SIZE, (FIRST FIGURE IS SIDE SHOWN) ARCHITECT/ENGINEER MIXED AIR MAX ABOVE FINISHED FLOOR MAXIMUM ALUMINUM MBH 1000 BRITISH THERMAL UNITS/HOUR ROUND DUCT MINIMUM CIRCUIT AMPS 12" Ø AMPERE MCA ACCESS PANEL MCC MOTOR CONTROL CENTER AIR PRESSURE DROP MECH MECHANICAL ABOVE SUSPENDED CEILING MFS MAXIMUM FUSE SIZE CHANGE OF ELEVATION IN DIRECTION AUTOMATIC MINIMUM OF AIR FLOW MOCP MAXIMUM OVERCURRENT PROTECTION BASEBOARD MTD MOUNTED BACK DRAFT DAMPER ACCESS DOOR, VERTICAL OR HORIZONTAL NOISE CRITERIA BRAKE HORSEPOWER NORMALLY CLOSED BACKWARD INCLINED ——(l)—— BLDG BUILDING NOT IN CONTRACT NORMALLY OPEN BOTTOM OF DUCT ACOUSTICAL DUCT LINER <u>}----</u> NOT TO SCALE BOTTOM OF PIPE NTS BOTTOM OF STRUCTURE OUTDOOR AIR BRITISH THERMAL UNIT OAT OUTDOOR AIR TEMPERATURE FLEXIBLE CONNECTION CEILING DIFFUSER ON CENTER OPD CUBIC FEET PER MINUTE OPPOSED BLADE DAMPER CENTERLINE DUCT TRANSITION (DOUBLE LINE) CEILING PLUMBING CONTRACTOR PLBG COND CONDENSATE PLUMBING CONTRACTOR POC POINT OF CONNECTION COEFFICIENT OF PERFORMANCE PRELIM PRELIMINARY DUCT TRANSITION (RECT. TO ROUND) $-\!\!\!\!-\!\!\!\!\!-$ PRESS PRESSURE PRESSURE REDUCING VALVE DIRECT DIGITAL CONTROL PRESSURE SWITCH S DUCT TRANSITION (SINGLE LINE) DEPARTMENT POUNDS PER SQUARE INCH ___ POLYVINYL CHLORIDE DIAMETER DOWN DWG DRAWING RETURN AIR ——HPS—— HIDDEN DUCTWORK REQD REQUIRED EXISTING RG RETURN GRILLE ENTERING AIR TEMPERATURE REVOLUTIONS PER MINUTE ——HPR—— RETURN REGISTER ELECTRICAL CONTRACTOR STANDARD BRANCH, SUPPLY, RETURN, OR EXHAUST FAN -- COND --EXHAUST GRILLE EXHAUST, NO SPLITTER SUPPLY AIR ELEVATION SUPPLY FAN ELECTRICAL SUPPLY GRILLE **EQUIP EQUIPMENT** MOTOR OPERATED DAMPER SHEET METAL EXISTING TO REMAIN **GENERAL SYMBOLS** ELECTRIC WALL HEATER SQ FT SQUARE FEET ENTERING WATER TEMPERATURE SUPPLY REGISTER SINGLE WALL DUCTWORK MANUAL VOLUME DAMPER EXHAUST EXTERIOR OR EXTERNAL THERMOSTAT/TEMPERATURE SENSOR DEGREES FAHRENHEIT THROWAWAY FREE AREA TEMPERATURE CONTROL CONTRACTOR DUCT CAP EXISTING TO REMAIN TCP (DUCTWORK, PIPING, & EQUIPMENT) FORWARD CURVED TEMPERATURE CONTROL PANEL FLOOR DRAIN OR FIRE DAMPER TCV TEMPERATURE CONTROL VALVE FROM FLOOR ABOVE TEMP TEMPORARY END OF DUCT EXISTING TO BE REMOVED FROM FLOOR BELOW TRANSFER FAN (DUCTWORK, PIPING, & EQUIPMENT) FILL LINE TO FLOOR ABOVE FULL LOAD AMPS TFB TO FLOOR BELOW POSITIVE PRESSURE DUCT SECTION FLEXIBLE TRANSFER GRILLE NEW DUCTWORK/PIPING FIRE PROTECTION CONTRACTOR TEST OPENINGS FEET PER MINUTE TIP SPEED FLOW SWITCH TYP TYPICAL POSITIVE PRESSURE DUCT (DOWN OR AWAY) FOOT OR FEET NEW EQUIPMENT UNIT HEATER GAUGE GALV GALVANIZED **VOLUME DAMPER** NEGATIVE PRESSURE DUCT SECTION GENERAL CONTRACTOR VEL VELOCITY GALLONS PER MINUTE VERT VERTICAL NEGATIVE PRESSURE DUCT (DOWN OR AWAY) HEATING CONTRACTOR WB WET BULB HUB DRAIN WATER COLUMN MERCURY WEATHER PROOF WPD WATER PRESSURE DROP HEIGHT FLEXIBLE DUCT DIFFUSER CONNECTION HORSEPOWER HEAT PUMP UNIT HEAT PUMP WATER RETURN HEAT PUMP WATER SUPPLY SIDEWALL AIR DEVICE HOUR HVAC HEATING VENTILATING AND AIR CONDITIONING EXHAUST, RETURN, OR TRANSFER AIR DEVICE HERTZ INCH SUPPLY AIR DEVICE KILOWATT LEAVING AIR TEMPERATURE POUNDS TRANSFER GRILLE ASSEMBLY LEAVING WATER TEMPERATURE ELBOW WITH TURNING VANES

ADJ

A/E

AFF

AMP

ΑP

ASC

BHP

BOD

BOP

BOS

BTU

CD

CFM

CLG

COP

DDC

DIA

DN

ELEC

ETR

EWH

EWT

EXH

EXT

FFA

FFB

FILL

FLA

FLEX

FPM

FS

GA

GPM

HGT

HP

HPS

HZ

KW

LAT

DEPT

GENERAL SHUTOFF VALVE SEE SPECIFICATIONS FOR TYPE Architecture CALIBRATED BALANCE/SHUTOFF VALVE (FLOW MEASURING) Planning BLIND FLANGE CONNECTION, BOTTOM Dorschner Associates, Inc. 849 E. Washington Ave., Ste 112 CONNECTION, TOP Madison, Wisconsin 53703 ELBOW, TURNED UP ELBOW, TURNED DOWN REDUCER, CONCENTRIC REDUCER, ECCENTRIC - STRAIGHT INVERT REDUCER, ECCENTRIC - STRAIGHT CROWN FLOW DIRECTION IN PIPES HEAT PUMP SUPPLY HEAT PUMP RETURN CONDENSATE **ISSUED** THERMOSTAT OR TEMPERATURE SENSOR

DORSCHNER

ASSOCIATES

RENOVATIONS

PROJECT

FEN OAK SECOND FLOOR

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE

ABBREVIATIONS - HVAC

ENGINEERING, INC.

5525 NOBEL DRIVE

SUITE 110

MADISON, WI 53711

ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

DRAWING SYMBOLS AND

MADISON, WI

DATE 04.30.15

M0.0

HVAC SHEET INDEX

SYMBOLS AND ABBREVIATIONS - HVAC PARTIAL FIRST FLOOR DEMOLITION PLAN - HVAC PARTIAL SECOND FLOOR DEMOLITION PLAN - HVAC

AIR FLOW

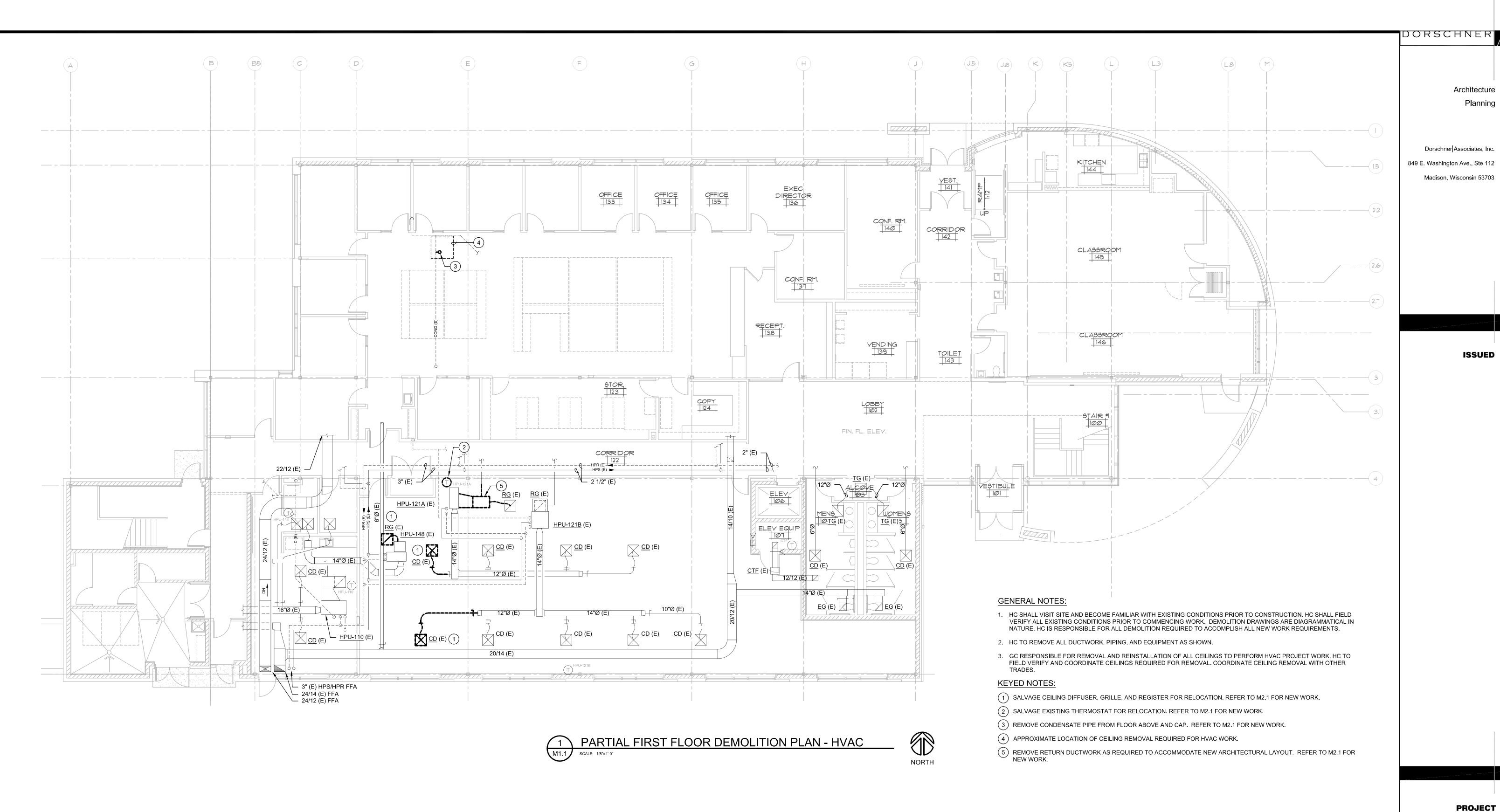
(PIPE OR DUCT)

POINT OF NEW CONNECTION

PARTIAL FIRST FLOOR NEW WORK PLAN - HVAC PARTIAL SECOND FLOOR NEW WORK PLAN - HVAC

SCHEDULES - HVAC

M3.0 **DETAILS - HVAC**



PROJECT FEN OAK SECOND FLOOR RENOVATIONS

Planning

ISSUED

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

ENGINEERING, INC.

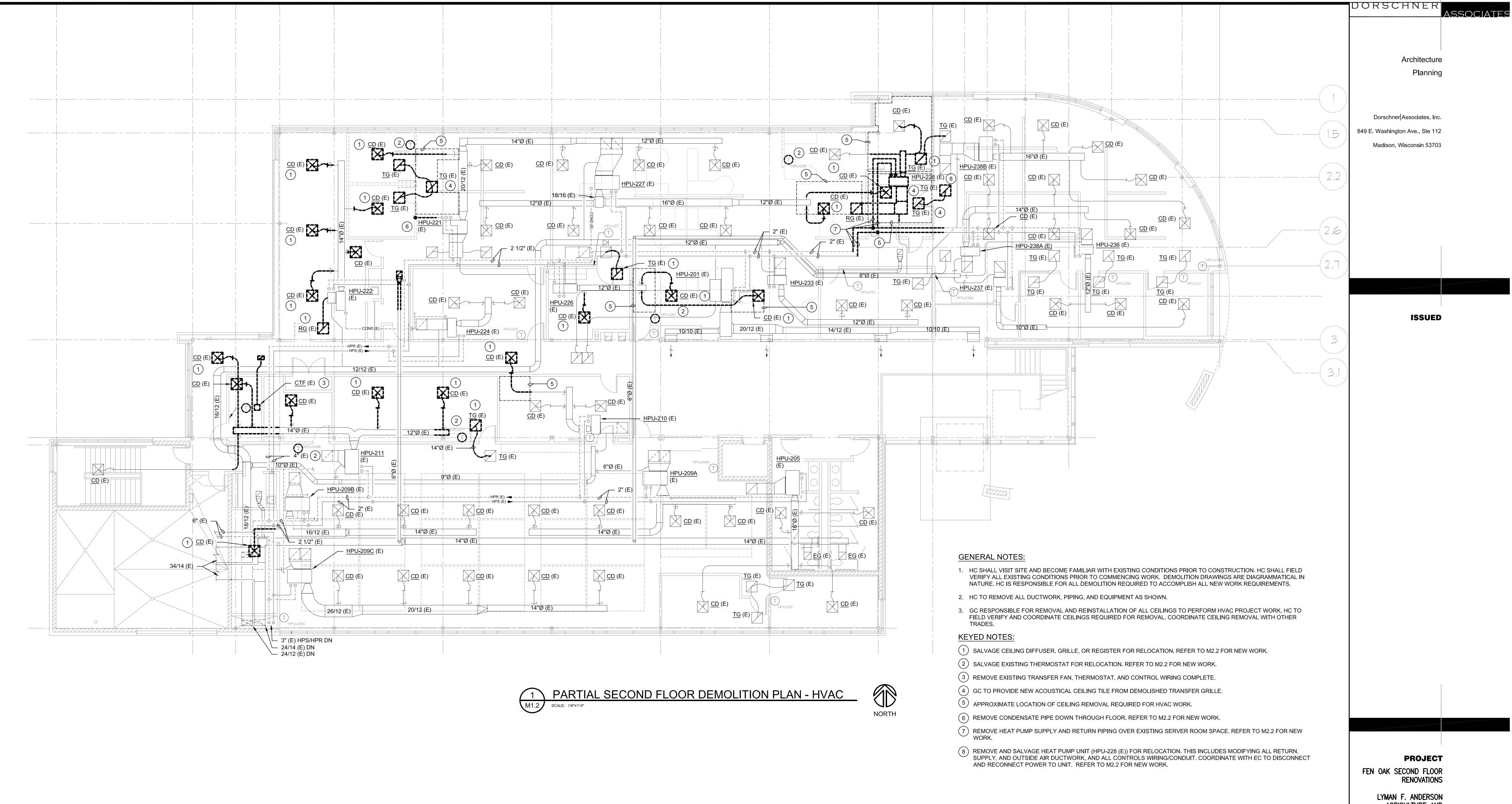
5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

DRAWING PARTIAL FIRST FLOOR DEMOLITION PLAN - HVAC

> DATE 04.30.15

M1.1



ENGINEERING, INC.
5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711
ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

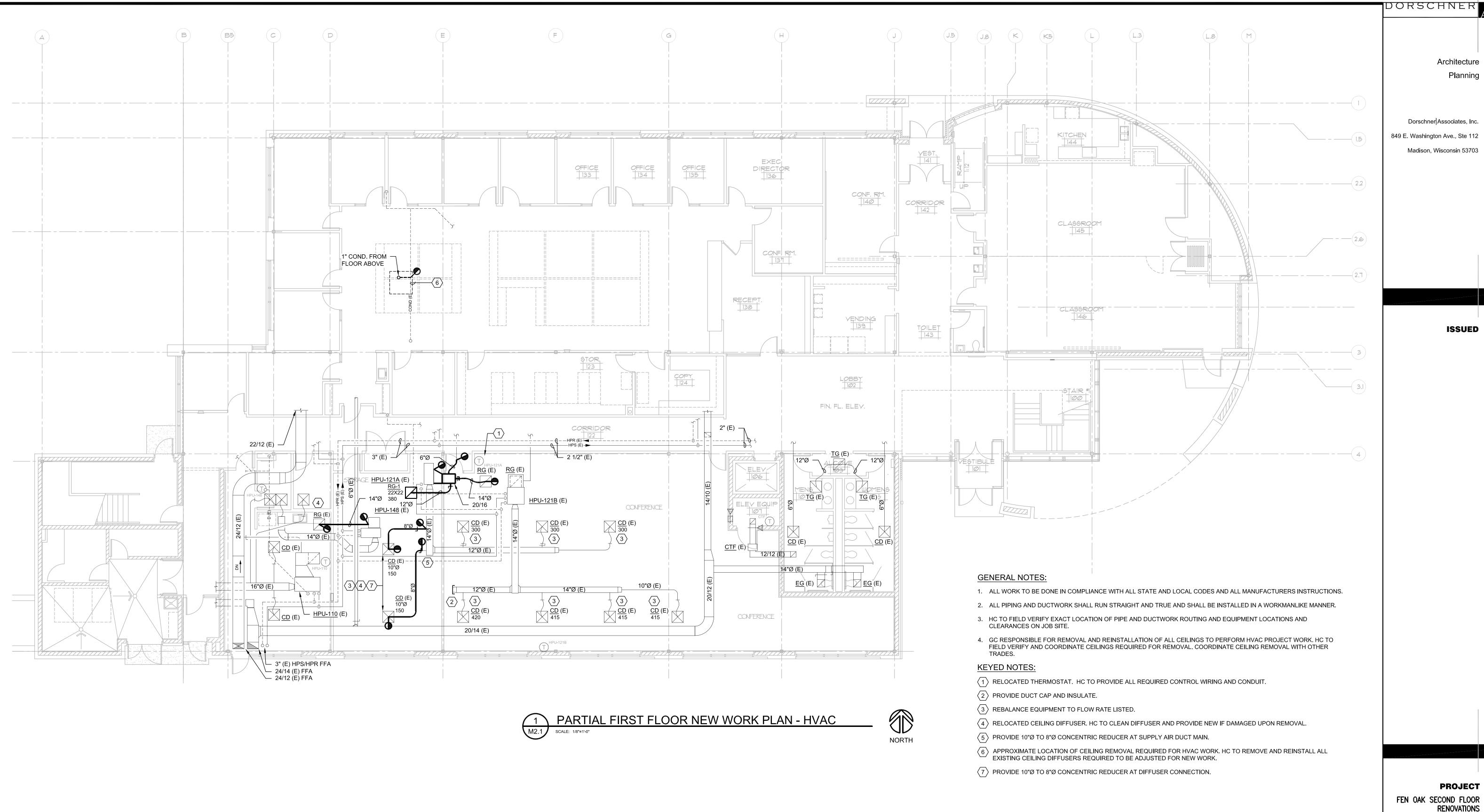
LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

PARTIAL SECOND FLOOR
DEMOLITION PLAN — HVAC

DATE

M1.2

04.30.15



ENGINEERING, INC. 5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

RENOVATIONS LYMAN F. ANDERSON

PROJECT

Architecture

Planning

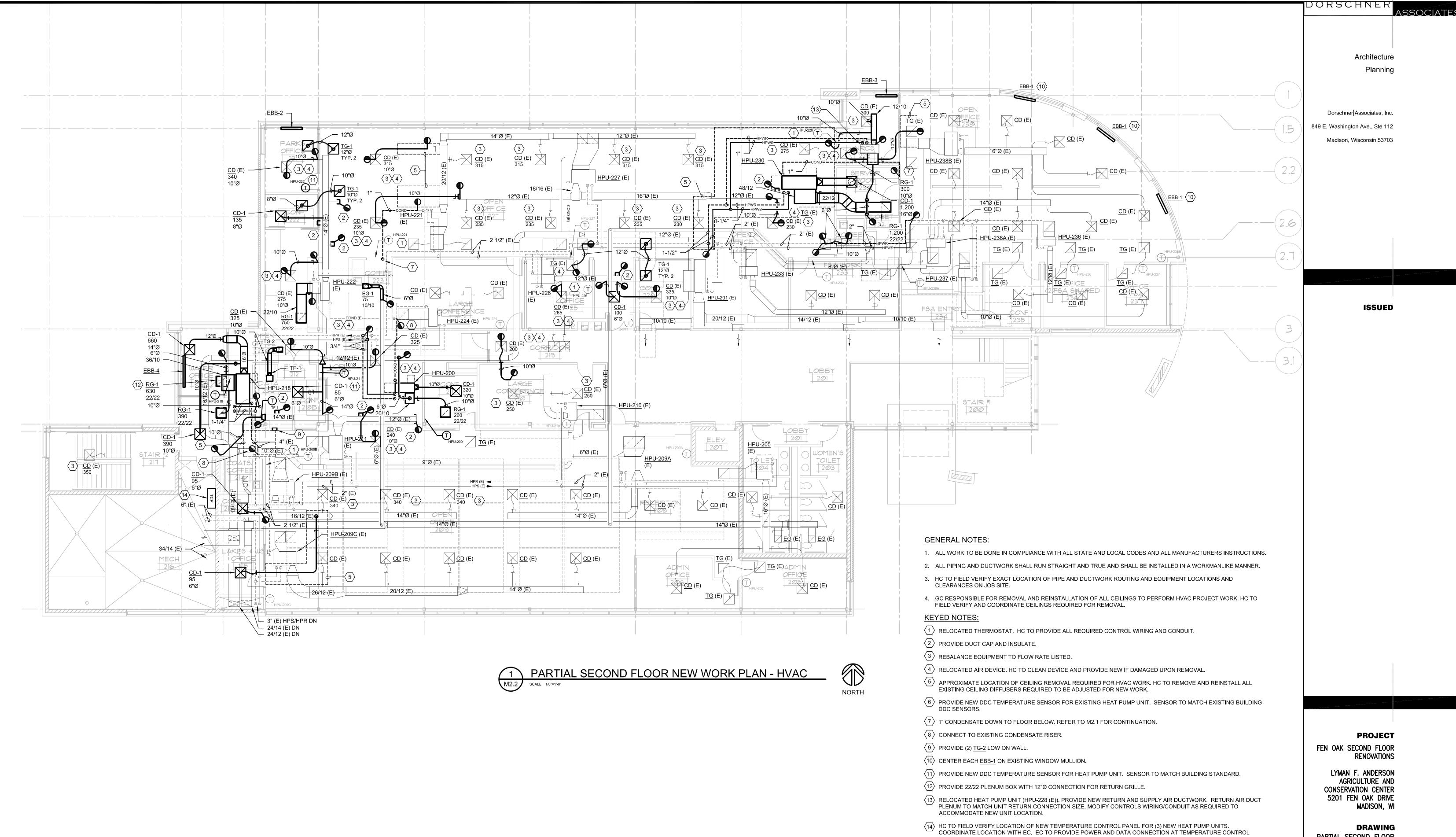
ISSUED

AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING PARTIAL FIRST FLOOR NEW WORK PLAN - HVAC

> DATE 04.30.15

M2.1



DRAWING PARTIAL SECOND FLOOR NEW WORK PLAN - HVAC

ENGINEERING, INC.

5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

DATE 04.30.15

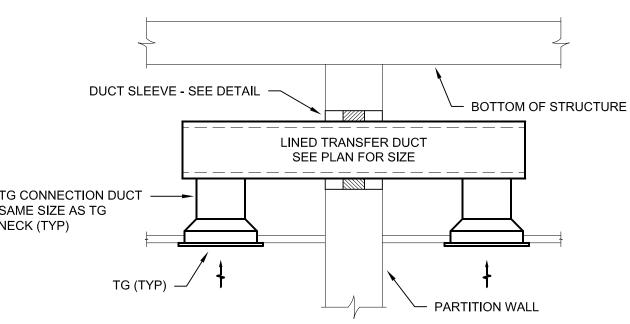
M2.2

NOTE: VERTICAL DISCHARGE WHERE INDICATED ON DRAWINGS.

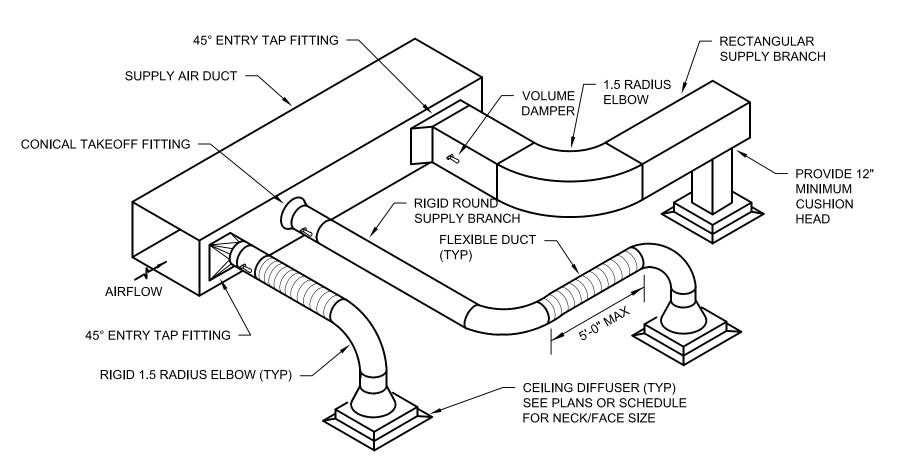
EXHAUST INLET

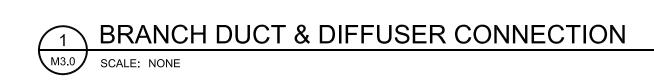
CEILING

6 CEILING MOUNTED TRANSFER FAN M3.0 SCALE: NONE









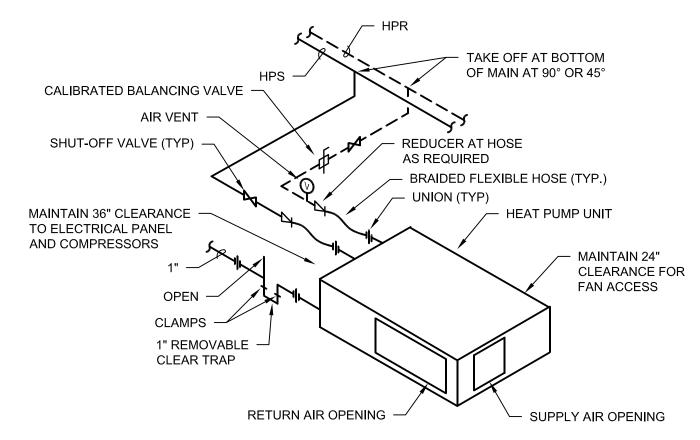
ENGINEERING, INC. 5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046 JDR Project No. 150045

— 1/8" COPPER TUBING - ADAPTER **→** REDUCTER — 6" HIGH AIR CHAMBER MANUAL AIR VENT. LOCATE 6'-0" -ABOVE FLOOR IN MECHANICAL **ROOM ONLY** NOTES:

1. PROVIDE AT ALL HIGH POINTS IN PIPING SYSTEM.

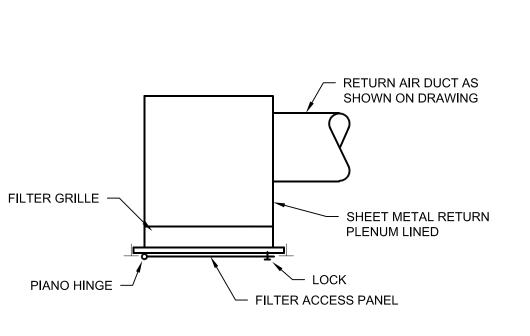
2. PROVIDE 1/2" BALL VALVE AND PIPING WITH HOSE BIBB ADAPTER FOR PIPING 2 1/2" DIAMETER AND LARGER.





HEAT PUMP UNIT PIPING DETAIL

M3.0 SCALE: NONE



HEAT PUMP UNIT

8 HEAT PUMP UNIT DUCT CONNECTION DETAIL

O.A. CONNECTION ON TOP OR -

CONNECTION

M3.0 SCALE: NONE

SIDE OF RETURN WITH VOLUME DAMPER

RETURN DUCT

FROM GRILLE

- PROVIDE 4 CORNER SUPPORTS

- FLEXIBLE CONNECTION FULL SIZE ON UNIT OUTLET

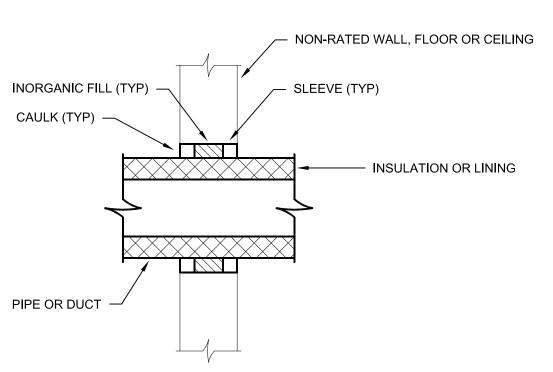
TRANSITION TO DUCT SIZE

SHOWN ON DRAWING

TO STRUCTURE ABOVE (TYP)

NOTE: FOR TOP CONNECTION PROVIDE MINIMUM 6" PLENUM HEIGHT

7 FILTER GRILL DETAIL
M3.0 SCALE: NONE



NOTE: CAULKING SHALL BE 1/2" DEEP BUTYL RUBBER.

M3.0 SCALE: NONE

4 PIPE OR DUCT SLEEVE DETAIL

PROJECT

DORSCHNER

Architecture

Dorschner Associates, Inc.

Madison, Wisconsin 53703

849 E. Washington Ave., Ste 112

Planning

ISSUED

ASSOCIATES

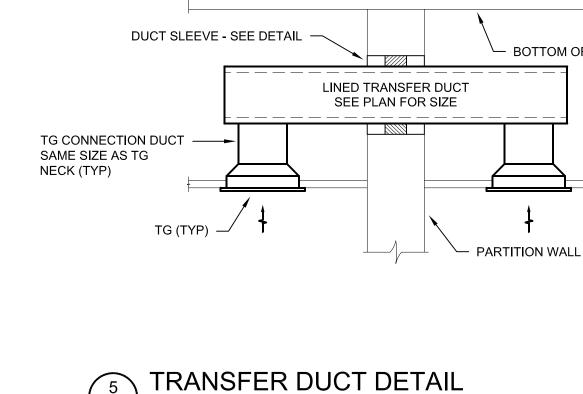
FEN OAK SECOND FLOOR RENOVATIONS LYMAN F. ANDERSON

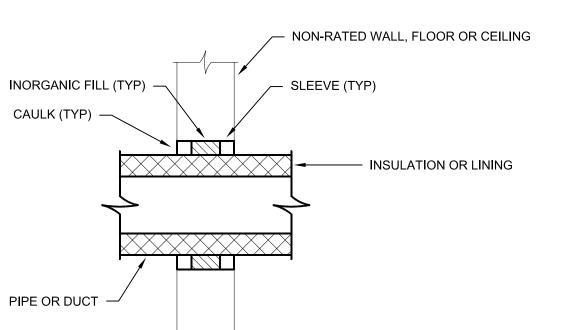
AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

> **DRAWING** DETAILS - HVAC

> > DATE 04.30.15

M3.0





AIR DEVICE SCHEDULE						
EG - 1 (3) THROW (IF OTHER THAN NORMAL) SG = SUPPLY GRILLE UNIT NUMBER CFM THROW (IF OTHER SG = SUPPLY GRILLE RG = RETURN GRILLE CD = CEILING DIFFUSER (SUPPLY) TG = TRANSFER GRILLE						
UNIT NO.	CD-1	RG-1	TG-1	TG-2	EG-1	
SERVICE	SUPPLY	RETURN	TRANSFER	TRANSFER	TRANSFER	
MANUFACTURER	CARNES	CARNES	CARNES	CARNES	CARNES	
MODEL NO.	SKTA	RSABH	RSABH	RSABH	RSABH	
FACE STYLE	LOUVERED	SINGLE DEFLECTION	SINGLE DEFLECTION	SINGLE DEFLECTION	SINGLE DEFLECTION	
FINISH	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD	
MATERIAL	STEEL	STEEL	STEEL	STEEL	STEEL	
SIZE (FACE/NECK)	SEE PLANS	24X24 / 22X22	24X24 / 22X22	14X12 / 12X10	12X12 / 10X10	
CFM RANGE	-	-	-	-	-	
MOUNTING	SEE PLANS	LAY IN	LAY IN	SURFACE	SURFACE	
DAMPER	NO	NO	NO	NO	NO	
REMARKS		$\langle 1 \rangle \langle 2 \rangle$	(2)			

GENERAL NOTES:

- 1. CONTRACTOR SHALL VERIFY MOUNTING SURFACE / FRAME REQUIREMENTS.
- 2. BRANCH DUCT SIZE TO DIFFUSER SHALL BE THE NECK SIZE OF THE DIFFUSER UNLESS NOTED OTHERWISE.
- SEE SPECIFICATION FOR GRILLE, REGISTER, AND DIFFUSER FINISHES.
 MAXIMUM STATIC PRESSURE DROP THROUGH GRILLE, REGISTER, OR DIFFUSER SHALL NOT EXCEED 0.1".
- 5. MAXIMUM NC LEVELS FOR GRILLES, REGISTERS, OR DIFFUSERS SHALL NOT EXCEED 25.
- 6. UNLESS THROW IS NOTED OTHERWISE, ALL DIFFUSERS SHALL BE 4-WAY THROW.

KEYED NOTES:

- 1 PROVIDE WITH INTEGRAL FILTER.
- $\langle 2 \rangle$ PROVIDE WITH 22X22 PLENUM BOX WITH DUCT CONNECTION LISTED ON PLANS.

FAN	SCHE	DULE	-
SF = SUPPLY FAN EF = RETURN FAN TF =	EXHAUST FAN TRANSFER FAN	CEF = CEILING EX	HAUST FAN
UNIT NO.	TF-1		
LOCATION	SEE PLANS		
MANUFACTURER	GREENHECK		
MODEL NO.	SP-A710		
SERVICE	DATA 239		
FAN TYPE	CEILING		
ARRANGEMENT	-		
DESIGN CFM	400		
EXT. SP (IN WC)	0.5		
FAN WHEEL TYPE	-		
FAN DIAMETER	-		
APPROXIMATE FAN RPM	1,050		
ВНР	-		
MOTOR HP	285 W		
VOLTS/PHASE	115 / 1		
DRIVE	DIRECT		
TWO SPEED	NO		
VFD	NO		
MAX. SONES	5.5		
REMARKS	$\langle 1 \rangle \langle 2 \rangle$		

KEYED NOTES:

- HC TO FURNISH LINE VOLTAGE REVERSE ACTING THERMOSTAT TO EC. EC TO PROVIDE POWER TO FAN AND CONTROL WIRING BETWEEN FAN AND THERMOSTAT.
- 2 PROVIDE FAN WITH FACTORY MOUNTED DISCONNECT.

WATER SOURCE HEAT PUMP UNIT SCHEDULE

UNIT NO.		HPU-200	HPU-218	HPU-230	
SERVICE		SEE PLANS	SEE PLANS	SERVER 230	
MANUFACTURER		CARRIER	CARRIER	CARRIER	
MODEL NO.		50PSH007	50PSH030	50PSH042	
AIR FLOW (CFM)		320	1,050	1,200	
OUTIDE AIR CFM		60	70	-	
OUTIDE AIR CFM EXT. SP. (IN WC)		0.38	0.38	0.38	
FAI	N MOTOR HP	-	-	-	
MOTOR TYPE		PSC	PSC	PSC	
FILTER		NONE	NONE	NONE	
	EAT (°F) DB/WB	75.9 / 62.9	75.2 / 62.2	80 / 62	
	LAT (°F) DB/WB	58.0 / 56.1	55.5 / 54.2	54.5 / 50.5	
٩TA	EWT (°F)	90.0	90.0	90.0	
EWT (°F) LWT (°F) TOTAL CAPACITY (MBH)		100.0	98.2	98.3	
TOTAL CAPACITY (MBH)		6.2	26.0	37.3	
MIN. EER GPM		11.8	14.4	15.9	
GPM MAX WPD (FT WC)		1.5	7.5	10.5	
		3.0	3.7	6.3	
	EAT (°F)	64.6	68.9	80.0	
А	LAT (°F)	87.2	93.2	111.5	
DAT	EWT (°F)	60.0	60.0	60.0	
COIL	LWT (°F)	51.3	53.2	53.8	
NG (TOTAL CAPACITY (MBH)	7.8	30.2	40.5	
EATI	MIN. COP	5.0	5.4	4.4	
MIN. COP GPM		1.5	7.5	10.5	
MAX. WPD (FT WC)		3.0	3.7	6.3	
1		208 / 1	208 / 1	208 / 1	
ZEZ Z	CYCLE	60	60	60	
VOLTAGE/PHASE CYCLE MINIMUM CIRCUIT AMPS MOCP		4.0	20.0	28.0	
П	МОСР	15.0	25.0	35.0	
REI	MARKS	<u></u>	<u></u>	<u>\(1 \)</u>	

KEYED NOTES:

PROVIDE UNIT WITH INTEGRAL DISCONNECT AND METALLIC FLEXIBLE HOSE KIT. UNIT MUST BE CAPABLE OF COMMUNICATING WITH EXISTING JOHNSON CONTROL BUILDING AUTOMATION SYSTEM. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ELECTRIC BASEBOARD SCHEDULE

	OOIIL			
UNIT NO.	EBB-1	EBB-2	EBB-3	EBB-4
SERVICE	OPEN OFFICE 238	PARKS OFFICE 221	OFFICE NRCS 229	WATER OFFICE 218A
LOCATION	OPEN OFFICE 238	PARKS OFFICE 221	OFFICE NRCS 229	WATER OFFICE 218A
MANUFACTURER	VULCAN	VULCAN	VULCAN	VULCAN
MODEL NO.	LBT-PD	LBT	LBT-PD	LBT-PD
LENGTH (IN)	48"	48"	48"	72"
DENSITY (WATTS/FT)	500	250	250	250
CAPACITY (BTU/HR)	6,824	3,412	3,412	5,118
KW INPUT	2.0	1.0	1.0	1.5
VOLTS	277	277	277	277
PHASE	1	1	1	1
REMARKS	1	2	1	1

GENERAL NOTES:

- 1. ARCHITECT TO DETERMINE FINAL COLOR DURING SUBMITTAL PROCESS.
- BASEBOARD TO BE INTERLOCKED WITH CORRESPONDING HEAT PUMPS UNIT. REFER TO SEQUENCE OF OPERATIONS FOR ADDITIONAL REQUIREMENTS.

KEYED NOTES:

- PROVIDE UNIT WITH PEDESTAL MOUNTS, END CAPS, FINISHED BACKS, AND INTEGRAL DISCONNECT. COORDINATE FINAL COLOR WITH ARCHITECT.
- PROVIDE UNIT WITH WALL MOUNTING KIT, END CAPS, AND INTEGRAL DISCONNECT. COORDINATE FINAL COLOR WITH ARCHITECT.

ENGINEERING, INC.
5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711
ph:608.277.1728 fax:608.271.7046
JDR Project No. 150045

DORSCHNER

Architecture Planning

Dorschner Associates, Inc.
849 E. Washington Ave., Ste 112
Madison, Wisconsin 53703

ISSUED

PROJECT

FEN OAK SECOND FLOOR RENOVATIONS

> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING

SCHEDULES - HVAC

DATE 04.30.15

M4₋(

RECEPT	ACLE SCHEDULE			
SYMBOL	DESCRIPTION	NEMA	VOLTS	NOTE 1
© _{2PF}	2 CIRCUIT POWER POKE THRU FLOOR BOX - FURNITURE CONNECTION		120V 1P 2W	CONNECT TO PREWIRED FURNITURE WHIP. SEE DETAIL 1/E9.0
© 3PF	3 CIRCUIT POWER POKE THRU FLOOR BOX - FURNITURE CONNECTION		120V 1P 2W	CONNECT TO PREWIRED FURNITURE WHIP. SEE DETAIL 1/E9.0
→ 30/1	DATA RACK RECEPTACLE	L5-30R	120V 1P 2W	PROVIDE TWIST LOCK RECEPTACLE AT 16" AFF
-₩	DOUBLE DUPLEX RECPT	5-20R	120V 1P 2W	MOUNT AT 16" AFF UNLESS NOTED OTHERWISE.
=	DUPLEX	5-20R	120V 1P 2W	MOUNT AT 16" AFF UNLESS NOTED OTHERWISE.
=00	GFI COUNTER DOUBLE DUPLEX RECPT	5-20R	120V 1P 2W	MOUNT AT 46" AFF OR 4" ABOVE BACKSPLASH WHER MOUNTED ABOVE COUNTER.
=	ISOLATED GROUND DOUBLE DUPLEX RECEPTACLE	5-20R	120V 1P 2W	ORANGE RECEPTACLE. MOUNT AT 16" AFF UNLESS NOTED OTHERWISE.
⇒	RAISED DUPLEX RECPT	5-20R	120V 1P 2W	MOUNT AT 46" AFF OR 4" ABOVE BACKSPLASH WHER MOUNTED ABOVE COUNTER UNLESS NOTED OTHERWISE.

SWIT	SWITCH SCHEDULE							
SYMBOL	DESCRIPTION	NOTE 1	NOTE 2					
\$	SINGLE POLE SWITCH	MOUNT AT 46" TO CENTER UNLESS OTHERWISE NOTED						
\$ 3	THREE WAY SWITCH	MOUNT AT 46" TO CENTER UNLESS OTHERWISE NOTED						
⊗ ^	TYPE A OCCUPANCY SENSOR	DUAL TECHNOLOGY LOW VOLTAGE 360 DEGREE STANDARD RANGE CEILING SENSOR W/ ISOLATED LOW VOLTAGE RELAY	SENSORSWITCH CM PDT 9 R. ACCEPTABLE EQUAL MODELS: WATTSTOPPER, LEVITON, HUBBEL					
₽ 8	TYPE B OCCUPANCY SENSOR	PIR SINGLE RELAY LINE VOLTAGE WALL SENSOR WITH SELECTABLE SETTINGS FOR OCCUPANCY OR VACANCY. MOUNT AT 46" TO CENTER UNLESS OTHERWISE NOTED	SENSORSWITCH WSD SA WH, ACCEPTABLE EQUAL MODELS: WATTSTOPPER, LEVITON, HUBBEL					
rs c	TYPE C OCCUPANCY SENSOR	PIR, DUAL RELAY, LINE VOLTAGE WALL SENSOR WITH SELECTABLE SETTINGS FOR OCCUPANCY OR VACANCY. MOUNT AT 46" TO CENTER UNLESS OTHERWISE NOTED	SENSORSWITCH WSD 2P 2SA WH, ACCEPTABLE EQUAL MODELS: WATTSTOPPER, LEVITON, HUBBEL					

LOIV		IRE SCHEI				T	
SYMBOL	TAG	LAMP	DESCRIPTION	MOUNTING	MODEL	VOLTS	NOTES
	A(E)	(3) 32W T8SP35	RELOCATED EXISTING 2X4 LAY-IN	CEILING		277V 1P 2W	
	В	(3) 28W T8 GE SPX41	2X4 LAY-IN ARCHITECTURAL	RECESSED	LITHONIA 2AV G328 MDR MVOLT METALUX 2RDI-328T8RP-UNV-HR82-U DAYBRITE CFS2GPF 328(T8)UNV-1/21-EBLHE	MULTIPLE	PROVIDE WITH ONE 2-LAMP AND 1-1 LAMP BALLAST W/.87 BALLAST FACTOR
	С	(1) 23W LED	6" RECESSED DOWNLIGHT	RECESSED	HALO PD612ED010 PDM6840-64VW USAI SHALLOW HOUSING 1020-DL-RD-BEVELED-10 LIGHTOLIER P6RD15 N Z10/P6R D 80 40/P6R D W	MULTIPLE	SHALLOW HOUSING - MAX HEIGHT 5 1/2"
<u> </u>	D	(2) 28W T8 GE SPX41	4' INDUSTRIAL	SURFACE	METALUX ICF-228-UNV-HB81 LITHONIA SERIES EJA DAYBRITE IS228(T8) UNV 1/2EBLHE	MULTIPLE	
4^	EM	(2) 1.5W LED	SELF POWERED EMERGENCY LIGHT	SURFACE	LITHONIA ELM2 LED ISOLITE RL2LED2WH CHLORIDE VU6L	MULTIPLE	CONNECT TO LIGHTING CIRCUIT SERVING LIGHTING IN SAME AREA
	G	(4) 32W T8SP35	NEW PENDANT FIXTURE	PENDANT	PMC E0V8-1-AC-T432-277V	277V 1P 2W	PROVIDE CONTINUOUS ROW AS INDICATED ON FLOOR PLAN, MATCH MOUNTING HEIGHT OF EXISTING FIXTURES.
—	G(E)	(4) 32W T8SP35	RELOCATED EXISTING PENDANT FIXTURE	PENDANT		277V 1P 2W	MOVE ROW OF FIXTURES TO LOCATION SHOWN ON FLOOR PLAN
	Н	(3) 17W T8 GE SPX41	2X2 LAY-IN ARCHITECTURAL	RECESSED	LITHONIA 2AV G317 MDR MVOLT METALUX 2RDI-317RP-UNV-HR82-U DAYBRITE CFS2GPF317 UNV-1/21-EBLHE	MULTIPLE	PROVIDE WITH ONE 2-LAMP AND 1-1 LAMP BALLAST W/.92 BALLAST FACTOR
×	Х	(1) 3W LED	UNIVERSAL MOUNT SELF POWERED EXIT LIGHT	WALL/CEILIN	SURELITES SLX7SD LITHONIA SERIES LQM SELF DIAGNOSTIC PHILIPS CHLORIDE CCXL3RW	MULTIPLE	CONNECT TO LIGHTING CIRCUIT SERVING LIGHTING IN SAME AREA
×	X(E)	(1)	RELOCATED EXISTING EXIT LIGHT	CEILING		277V 1P 2W	CONNECT TO LIGHTING CIRCUIT SERVING LIGHTING IN SAME AREA

EQUIF	PMENT	SCHEDULE									
SYMBOL	LABEL	DESCRIPTION	VOLTS	AMPS	KVA	HP	CIRCUIT	CONTROL TYPE	PROVIDE BY	INSTALLED BY	NOTE 1
0	EBB-1(1)	PEDESTAL MOUNT ELECTRIC BASEBOARD HEATER	277V 1P 2W	7.2	2		PANEL C-68	INTEGRAL	HC	НС	FEED POWER FROM FLOOR THROUGH UNIT PEDESTAL.
0	EBB-1(2)	PEDESTAL MOUNT ELECTRIC BASEBOARD HEATER	277V 1P 2W	7.2	2		PANEL C-68	INTEGRAL	HC	HC	FEED POWER FROM FLOOR THROUGH UNIT PEDESTAL.
0	EBB-1(3)	PEDESTAL MOUNT ELECTRIC BASEBOARD HEATER	277V 1P 2W	7.2	2		PANEL C-70	INTEGRAL	HC	HC	FEED POWER FROM FLOOR THROUGH UNIT PEDESTAL.
0	EBB-2	WALL MOUNT ELECTRIC BASEBOARD HEATER	277V 1P 2W	3.6	1		PANEL C-72	INTEGRAL	HC	HC	
0	EBB-3	PEDESTAL MOUNT ELECTRIC BASEBOARD HEATER	277V 1P 2W	3.6	1		PANEL C-70	INTEGRAL	HC	HC	FEED POWER FROM FLOOR THROUGH UNIT PEDESTAL.
0	EBB-4	PEDESTAL MOUNT ELECTRIC BASEBOARD HEATER	277V 1P 2W	5.4	1.5		PANEL C-72	INTEGRAL	HC	HC	FEED POWER FROM FLOOR THROUGH UNIT PEDESTAL.
Ó	HPU-200	HEAT PUMP UNIT	208V 2P 2W	4.2	0.86	1/3 HP	PANEL F-31,33	LOW VOLTAGE	НС	HC	EC TO PROVIDE NON-FUSED DISCONNECT AT UNIT
Ó	HPU-218	HEAT PUMP UNIT	208V 2P 2W	19.6	4.08	3 HP	PANEL F-35,37	LOW VOLTAGE	HC	HC	EC TO PROVIDE NON-FUSED DISCONNECT AT UNIT
Ó	HPU-230	HEAT PUMP UNIT	208V 2P 2W	32.3	6.72	5 HP	PANEL F-39,41	LOW VOLTAGE	HC	HC	EC TO PROVIDE NON-FUSED DISCONNECT AT UNIT
Φ	TCP	TEMPERATURE CONTROL PANEL	120V 1P 2W	4.2	0.5		PANEL D-29	LINE VOLTAGE	HC	EC	EC TO PROVIDE A DEDICATED 120V CIRCUIT AND ROUTE ONE CAT 6 CABLE TO COMMUNICATIONS PATCH PANEL.
9	TF-1	TRANSFER FAN	120V 1P 2W	3.5	0.42	1/10 HP	PANEL D-30	LINE VOLTAGE	HC	EC	EC TO PROVIDE TOGGLE SWITCH DISCONNECT AT UNIT

SYMBOL	TYPE	NOTE 1	NOTE 2	NOTE 3
⊳ _A	LV DEVICE TYPE A	THREE ORANGE COLORED JACKS IN SINGLE GANG FACE PLATE.	ROUTE THREE BLUE CAT 6 CABLES TO DATA ROOM 239.	MOUNT AT 16" TO CENTER OF DEVICE UNLESS NOTED OTHERWISE*.
⊳ A(E)	LV DEVICE TYPE A(E)	THREE ORANGE COLORED JACKS IN SINGLE GANG FACE PLATE.	REROUTE THREE BLUE CAT 5 CABLES FROM ABANDONED DEVICE LOCATION.	MOUNT AT 16" TO CENTER OF DEVICE UNLESS NOTED OTHERWISE*.
⊳ _B	LV DEVICE TYPE B	FOUR GREEN COLORED JACKS IN SINGLE GANG FACE PLATE.	ROUTE FOUR WHITE CAT 6 CABLES TO DATA ROOM 230. ROUTE THREE BLUE CAT 6 SPARE CABLES TO DATA ROOM 239 FOR FUTURE USE. SPARE CABLES TO BE TERMINATED, TESTED AND LABLED AT EACH END.	MOUNT AT 16" TO CENTER OF DEVICE UNLESS NOTED OTHERWISE*.
D _C	LV DEVICE TYPE C	FOUR GREEN COLORED JACKS IN SINGLE GANG FACE PLATE.	ROUTE FOUR WHITE CAT 6 CABLES TO DATA ROOM 230.	MOUNT AT 16" TO CENTER OF DEVICE UNLESS NOTED OTHERWISE*.
> _D	LV DEVICE TYPE D	TWO ORANGE COLORED JACKS IN SINGLE GANG FACE PLATE.	ROUTE TWO BLUE CAT 6 CABLES TO DATA ROOM 239.	MOUNT AT 16" TO CENTER OF DEVICE UNLESS NOTED OTHERWISE*.
⊅ _D	LV DEVICE TYPE D - RAISED	TWO ORANGE COLORED JACKS IN SINGLE GANG FACE PLATE.	ROUTE TWO BLUE CAT 6 CABLES TO DATA ROOM 239.	MOUNT AT 46" TO CENTER OF DEVICE.
⊳нн	LV DEVICE TYPE HH	HDMI FEMALE CONNECTOR IN DECORATOR STYLE PLATE	INSTALL IN A 4" BACKBOX WITH A SINGLE GANG PLASTER RING. PROVIDE ONE (1) 1 1/4" CONDUIT BETWEEN UPPER AND LOWER BOXES. PROVIDE AND INSTALL HDMI CABLE BETWEEN UPPER AND LOWER BOXES. PROVIDE ONE (1) 1" CONDUIT FROM UPPER BOX TO ABOVE ACCESSIBLE CEILING FOR FUTURE USE.	MOUNT AT 54" TO CENTER OF DEVICE. COORDINATE LOCATION WITH MONITOR MOUNTING HARDWARE.
⊳	LV DEVICE TYPE HL	HDMI FEMALE CONNECTOR IN DECORATOR STYLE PLATE	REFER TO TYPE HH DEVICE NOTE 2.	MOUNT AT 16" TO CENTER OF DEVICE.
© _{CF}	LV FLOOR POKE THRU	LOW VOLTAGE CABLE ACCESS FOR SYSTEM FURNITURE PARTITIONS.	SEE DETAIL 1/E9.0	
>	WIRELESS ACCESS POINT	TERMINATE WITH A SURFACE MOUNT JACK (BISCUIT) AND A MINIMUM OF 10' CABLE LOOP ABOVE CEILING.	ROUTE ONE BLUE CAT 6 CABLE TO DATA ROOM 239.	EC TO INSTALL OWNER PROVIDED ACCESS POINT.

*WHERE DEVICE IS SHOWN ON SYSTEM FURNITURE, EXTEND CABLE FROM FLOOR OR WALL ACCESS THROUGH FURNITURE PATHWAY AND TERMINATE AT DEVICE LOCATION.

ACCE	ACCESS CONTROL DEVICE SCHEDULE				
SYMBOL	DESCRIPTION	NOTE 1			
CR	CARD READER	TRIDIUM VYKON SEC-R2R CARD READER			
DS	DOOR STATUS SENSOR	DOOR STATUS SENSOR			
ES	ELECTRIC STRIKE				
ML	MAGNETIC LOCK				
REX	REQUEST EXIT	REQUEST TO EXIT			

ACCESS CONTROL SYSTEM TO BE INCLUDED IN ALTERNATE BID #2

ENGINEERING, INC.
5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711
ph:608.277.1728 fax:608.271.7046
JDR Project No. 150045

DORSCHNE ASSOCIATES

> Architecture Planning

Dorschner Associates, Inc.

849 E. Washington Ave., Ste 112

Madison, Wisconsin 53703

ISSUED

PROJECT

FEN OAK SECOND FLOOR RENOVATIONS

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING
SYMBOLS & SCHEDULES
ELECTRICAL

DATE 04.30.15

E0.0



PARTIAL FIRST FLOOR DEMOLITION PLAN - ELECTRICAL

SCALE: 1/8"=1'-0"

NORTH

GENERAL NOTES:

- 1. DASHED LINES INDICATE LIGHTING OR DEVICE TO BE REMOVED OR RELOCATED. LIGHT SOLID LINES INDICATE LIGHTING OR DEVICES TO REMAIN. LIGHTING AND DEVICE IN ROOMS WHERE NO WORK IS INCLUDED MAY NOT BE SHOWN ON THIS DRAWING.
- 2. EXISTING CIRCUITS TO BE REUSED AND REROUTED AS REQUIRED TO NEW LIGHTING AND DEVICE LOCATIONS. KEYED NOTES:
- 1) REMOVE EXISTING EXIT LIGHT AND RELOCATE AS INDICATED ON NEW WORK PLAN.
- 2 REMOVE EXISTING 2X4 FLUORESCENT FIXTURES. RE-BALLAST, RELAMP AND CLEAN FOR RE-INSTALLATION AS INDICATED ON NEW WORK PLAN.
- 3 RELOCATE EXISTING 3 WAY SWITCH AND RELATED WIRING TO LOCATION INDICATED ON NEW WORK PLAN.

ENGINEERING, INC. 5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

Dorschner Associates, Inc. 849 E. Washington Ave., Ste 112

Madison, Wisconsin 53703

Architecture

Planning

ISSUED

PROJECT

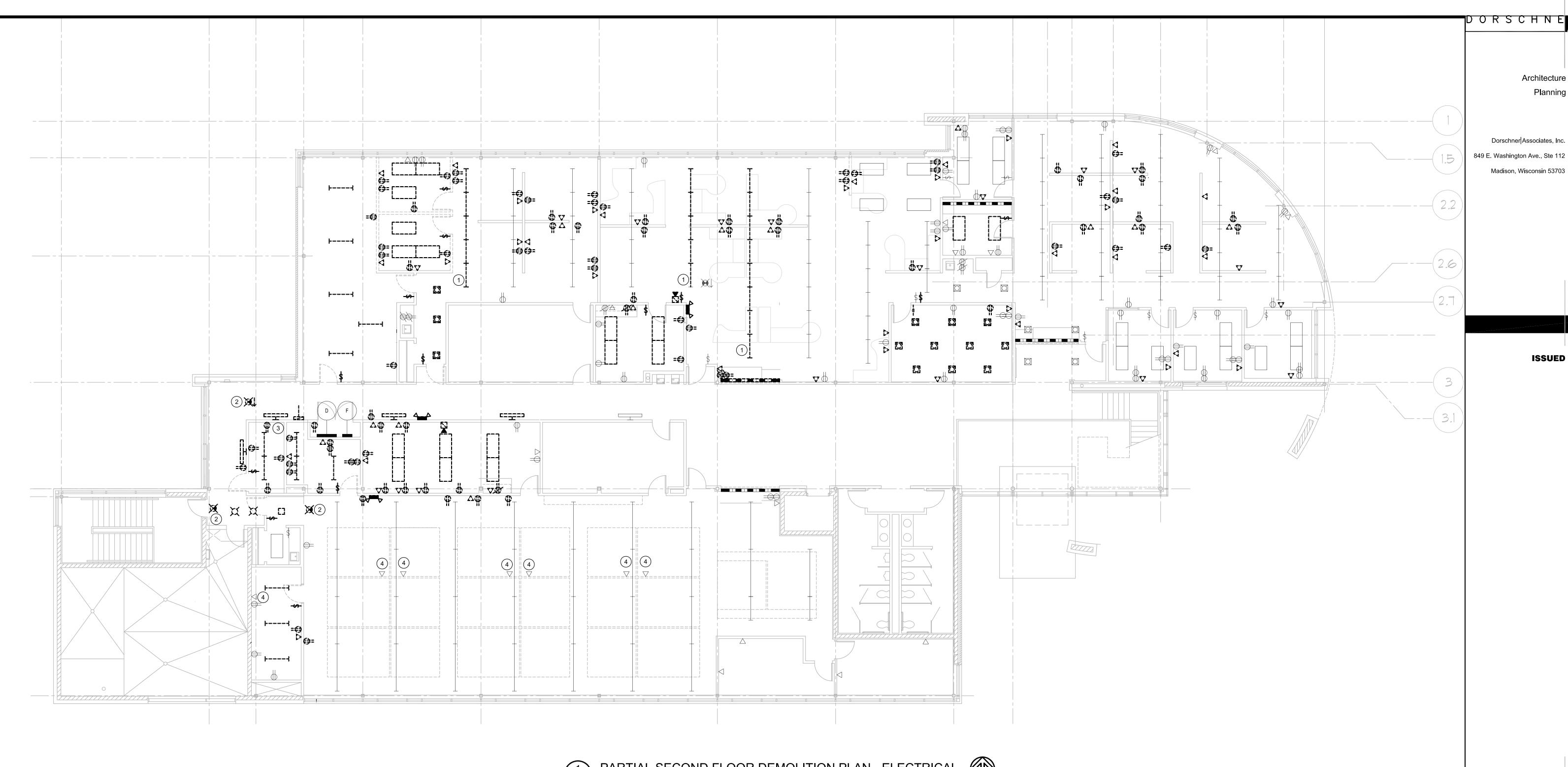
FEN OAK SECOND FLOOR RENOVATIONS

> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING PARTIAL FIRST FLOOR DEMOLITION PLAN

ELECTRICAL DATE 04.30.15

E1.1



PARTIAL SECOND FLOOR DEMOLITION PLAN - ELECTRICAL

SCALE: 1/8"=1"-0"

GENERAL NOTES:

- 1. DASHED LINES INDICATE LIGHTING OR DEVICE TO BE REMOVED OR RELOCATED. LIGHT SOLID LINES INDICATE LIGHTING OR DEVICES TO REMAIN. LIGHTING AND DEVICE IN ROOMS WHERE NO WORK IS INCLUDED MAY NOT BE SHOWN ON THIS DRAWING.
- 2. EXISTING CIRCUITS TO BE REUSED AND REROUTED AS REQUIRED TO NEW LIGHTING AND DEVICE LOCATIONS.
- 3. ALL REMOVED LIGHT FIXTURES NOT SCHEDULE TO BE RE-INSTALLED ARE TO BE TURNED OVER TO OWNER.

KEYED NOTES:

- 1) EXISTING LINEAR PENDANT LIGHT FIXTURES TO BE REMOVED AND RELOCATED AS INDICATED ON NEW LIGHTING
- 2 REMOVE EXISTING EXIT LIGHT FIXTURE. RE-INSTALL AS INDICATED ON NEW WORK PLAN.
- 3 EXISTING COMMUNICATIONS CABLING FEEDING DEVICES TO REMAIN THAT ARE ROUTED INTO THIS ROOM FROM CEILING SPACE BELOW IS TO BE REMOVED FROM PATCH PANEL AND CAREFULLY REROUTED THROUGH NEW CORED HOLES IN NEW DATA ROOM.
- disconnect existing cable routed to room 230 from data Jack at this location. Cable to remain in place for future use.

PROJECT

Architecture

Planning

ISSUED

FEN OAK SECOND FLOOR RENOVATIONS

> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

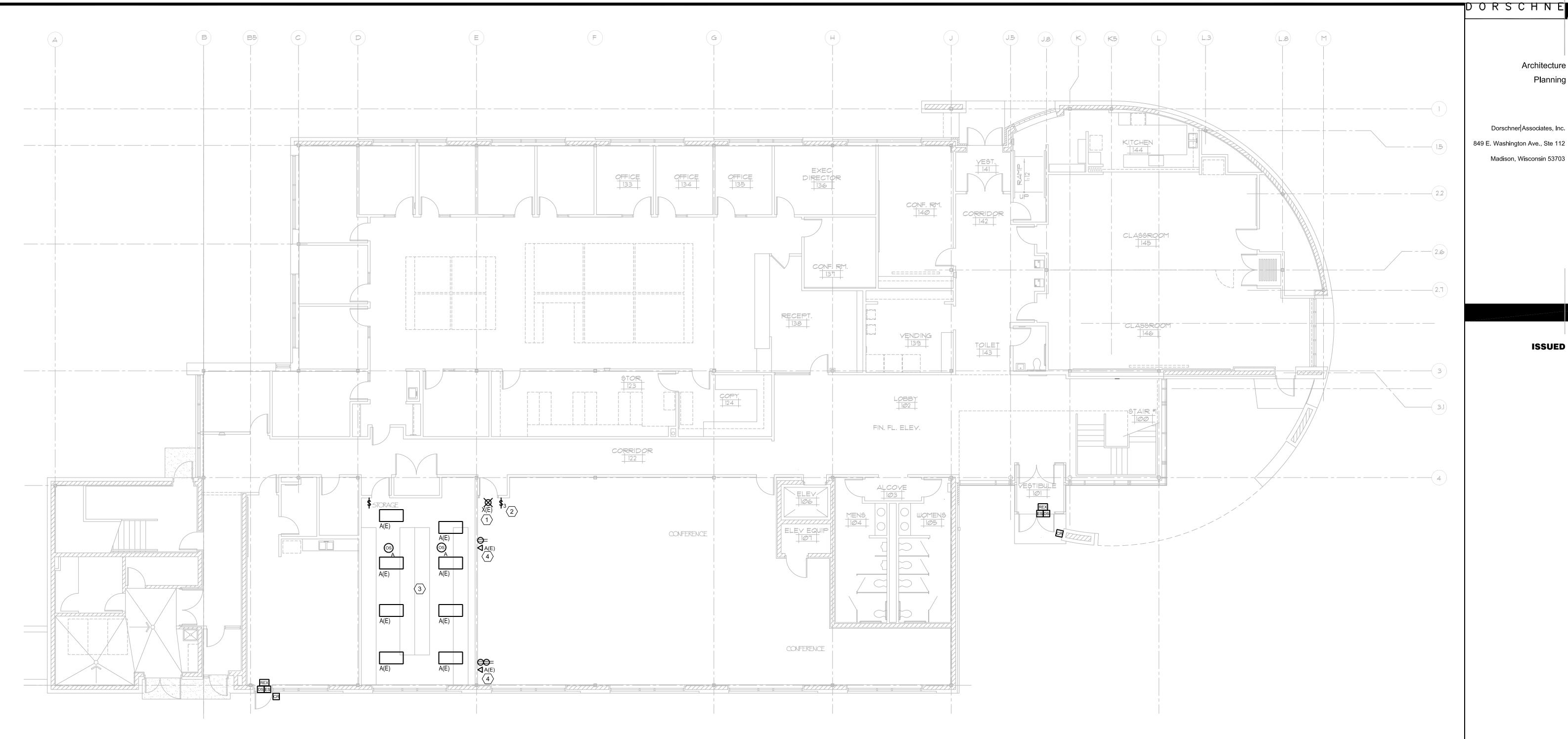
DRAWING PARTIAL SECOND FLOOR DEMOLITION PLAN ELECTRICAL

DATE ENGINEERING, INC. 04.30.15 5525 NOBEL DRIVE SUITE 110

MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

E1.2



1 PARTIAL FIRST FLOOR NEW WORK PLAN - ELECTRICAL
E2.1 SCALE: 1/8"=1"-0"

GENERAL NOTES:

1. EXISTING CIRCUITS TO BE REUSED AND REROUTED AS REQUIRED TO NEW LIGHTING AND DEVICE LOCATIONS.

KEYED NOTES:

- 1 RELOCATED EXIT LIGHT.
- 2 RELOCATE EXISTING 3 WAY SWITCH AND RELATED WIRING
- RE-INSTALL EXISTING FIXTURES. CONNECT TO EXISTING LIGHTING CIRCUIT IN AREA THROUGH OCCUPANCY SENSORS AND WALL SWITCH CONTROL.
- 4 RELOCATE EXISTING COMMUNICATIONS OUTLET RE-USING EXISTING CABLES, JACK AND FACEPLATE.

ENGINEERING, INC. 5525 NOBEL DRIVE $\mathbf{SUITE}\ 110$ MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

Architecture Planning Dorschner Associates, Inc. 849 E. Washington Ave., Ste 112 Madison, Wisconsin 53703

ISSUED

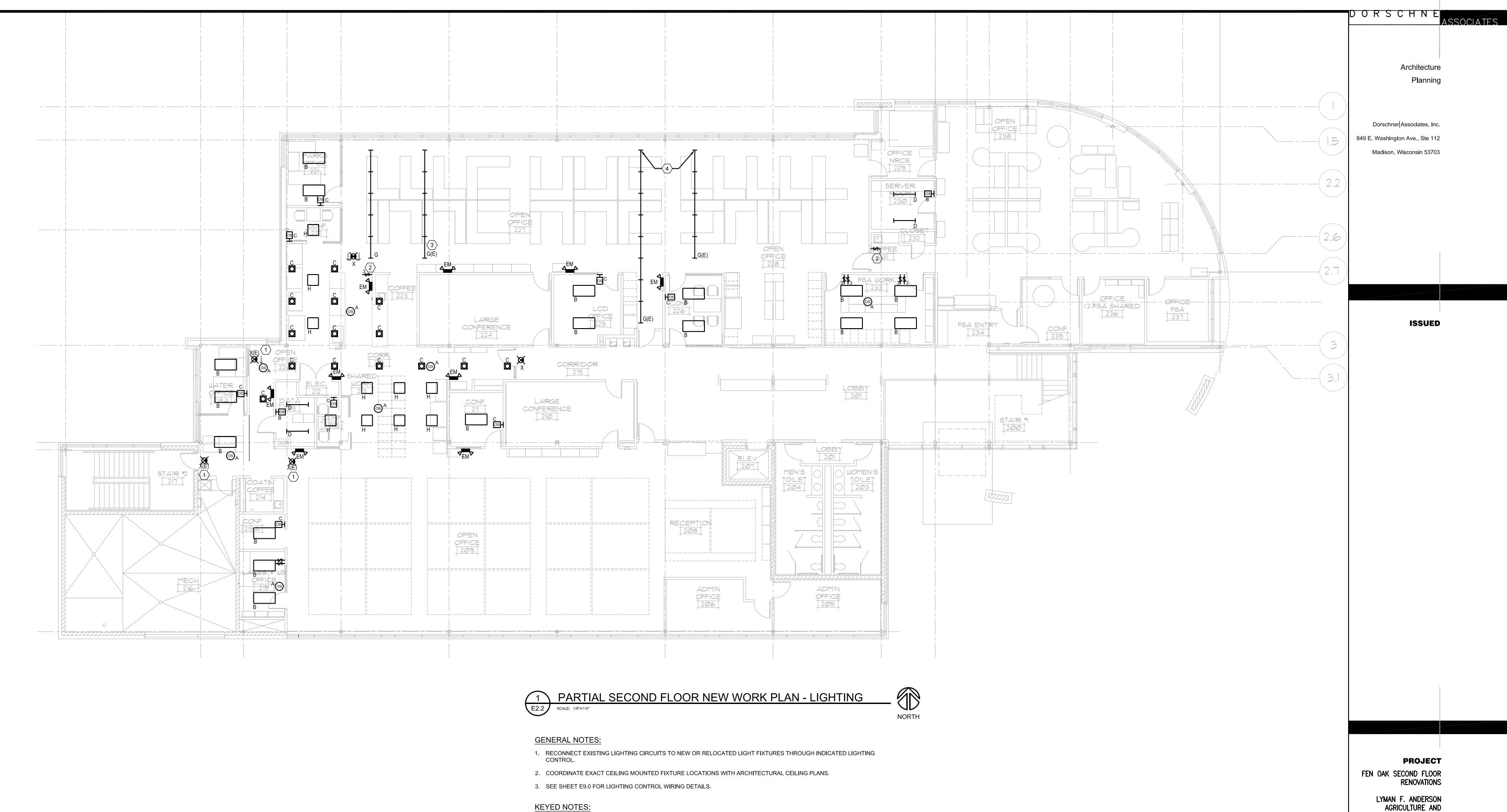
PROJECT

FEN OAK SECOND FLOOR RENOVATIONS

LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

DRAWING PARTIAL FIRST FLOOR NEW WORK PLAN ELECTRICAL DATE 04.30.15

E2.1



1 RELOCATED EXIT LIGHT.

2 RELOCATE EXISTING 3 WAY SWITCH AND RELATED WIRING

4 EXCHANGE LOCATIONS OF EXISTING ROWS OF LINEAR PENDANT FIXTURES.

3 RE-INSTALL EXISTING LINEAR PENDANT FIXTURE ROW MATCHING SPACING OF REMAINING FIXTURE ROWS.

LYMAN F. ANDERSON
AGRICULTURE AND
CONSERVATION CENTER
5201 FEN OAK DRIVE
MADISON, WI

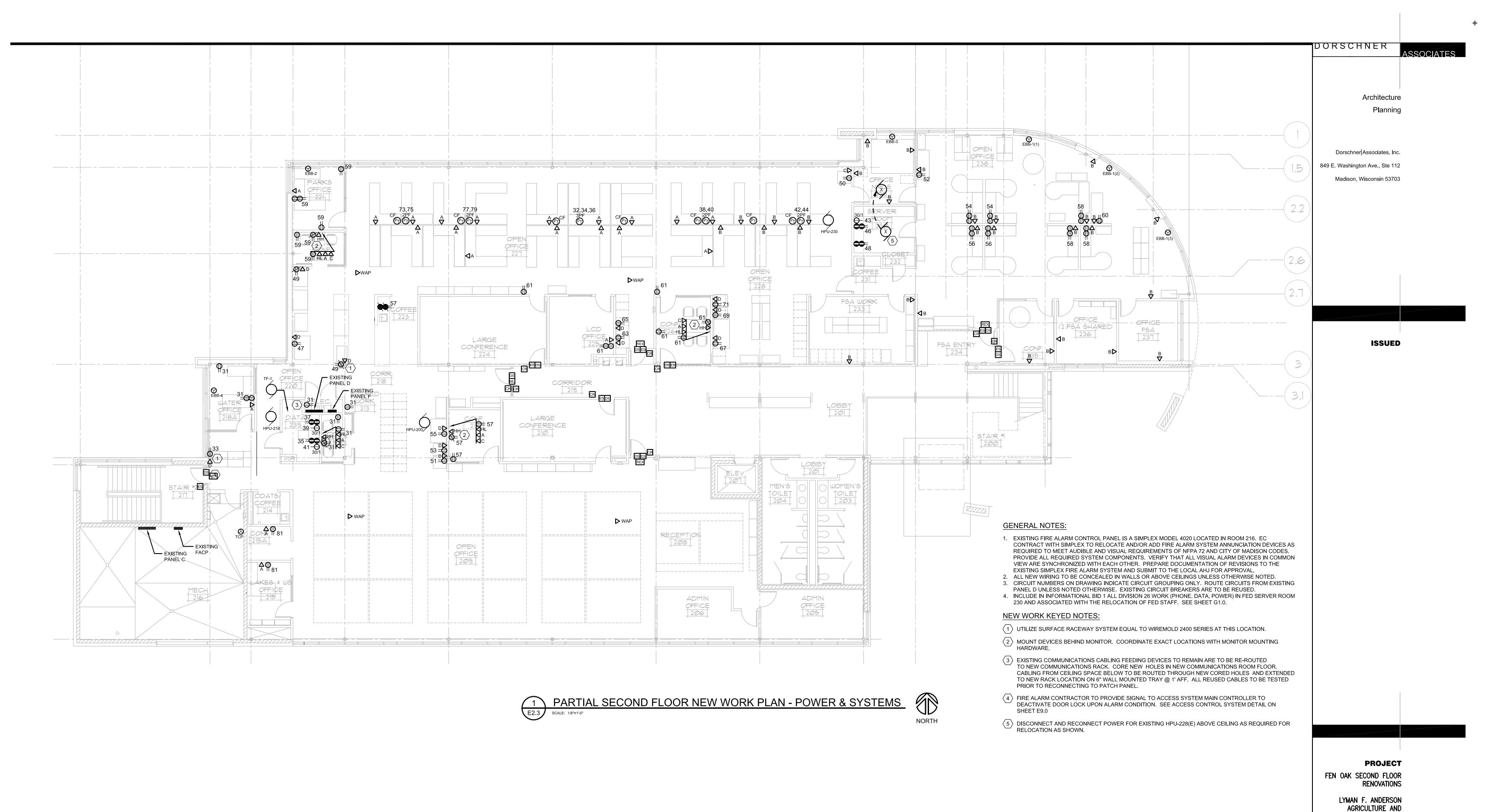
DRAWING
PARTIAL SECOND FLOOR
NEW WORK PLAN
LIGHTING
DATE

ENGINEERING, INC.
5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711
ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

E2.2

04.30.15



ENGINEERING, INC.
5525 NOBEL DRIVE
SUITE 110
MADISON, WI 53711

ph:608.277.1728 fax:608.271.7046

JDR Project No. 150045

E2.3

CONSERVATION CENTER 5201 FEN OAK DRIVE

PARTIAL SECOND FLOOR

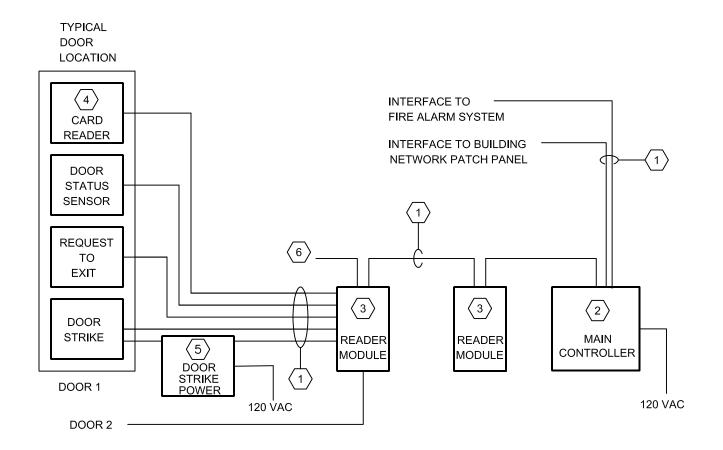
MADISON, WI

DRAWING

DATE

04.30.15

NEW WORK PLAN POWER & SYSTEMS



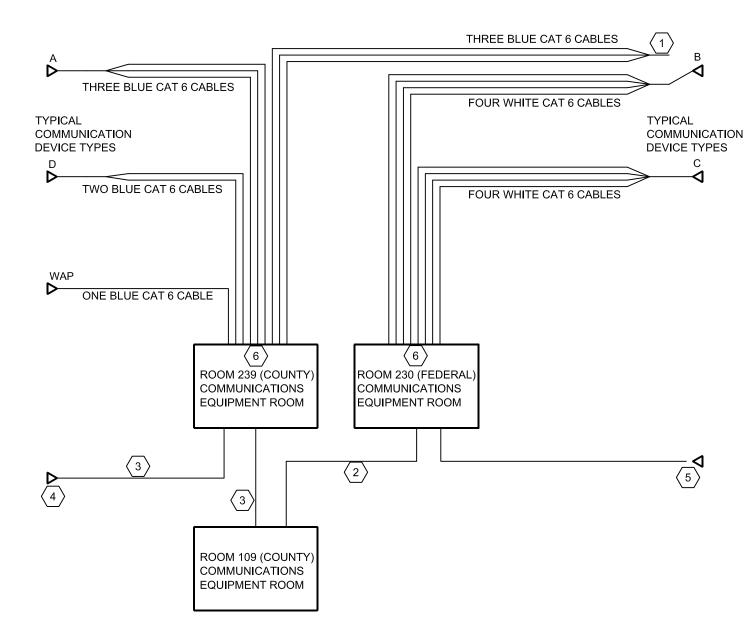
GENERAL NOTE:

1. ACCESS CONTROL SYSTEM TO BE INCLUDED IN ALTERNATE BID #2

KEY NOTES:

- $\langle 1 \rangle$ CABLES AND CONNECTORS AS RECOMMENDED BY MANUFACTURER.
- WEB BASED VYKON JACE MODEL 601 WITH INTEGRAL POWER SUPPLY AND BATTERY BACK UP
- 3 VYKON MODEL SEC-R2R WITH REQUIRED I/O TO SUPPORT TWO DOORS.
- $\langle 4 \rangle$ WIEGAND STYLE CARD READER COMPATIBLE WITH VYKON SYSTEM.
- 24 VOLT MAXIMUM (AC OR DC) DOOR STRIKE POWER SUPPLY INDEPENDENT OF CONTROLLER POWER.
- 6 CONTINUE WIRING TO ADDITIONAL READER MODULES

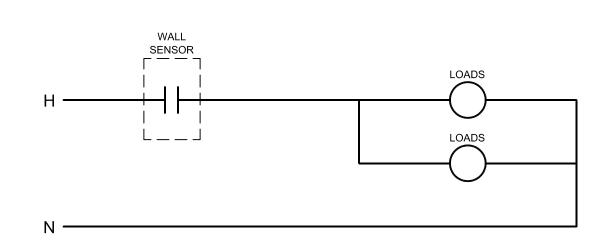




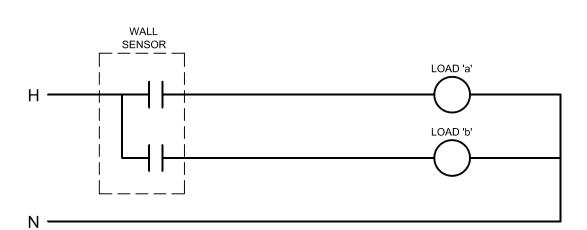
KEY NOTES:

- TERMINATE CABLE END AND LEAVE 8" CABLE IN TYPE B DEVICE BOX FOR FUTURE CONNECTION PURPOSES.
- 25 PAIR CABLE FROM AT&T DEMARCATION TO NEW 110 BLOCK IN ROOM 230.
- (3) EXISTING CABLING TO BE RE-ROUTED FROM EXISTING COMMUNICATIONS RACK LOCATION ON SECOND FLOOR TO NEW COMMUNICATIONS RACK LOCATION IN ROOM 239.
- TYPICAL EXISTING COMMUNICATIONS DEVICE REMAINING IN SERVICE AND NOT INDICATED ON DRAWINGS.
- 5 TYPICAL EXISTING COMMUNICATIONS DEVICE CONNECTED TO ROOM 230 COMMUNICATIONS RACK AND NOT INDICATED ON DRAWINGS TO BE USED. REMOVE TERMINATION AT DEVICE.
- 6 PROVIDE NEW RACK MOUNTED PATCH PANELS AS SPECIFIED FOR THE QUANTITY OF CABLES REQUIRED. CONNECTIONS FROM PATCH PANEL TO EQUIPMENT TO BE BY AGENCY IT PERSONNEL.

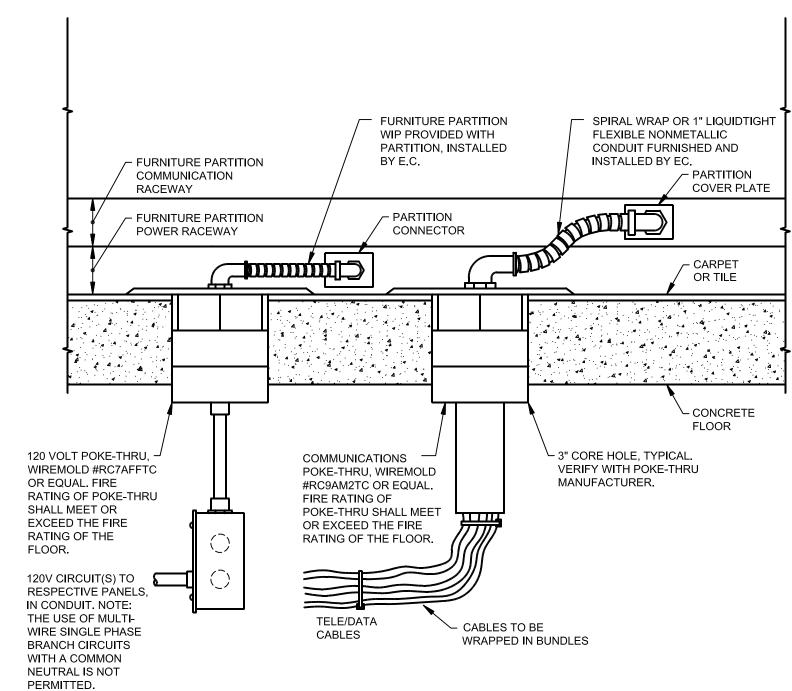




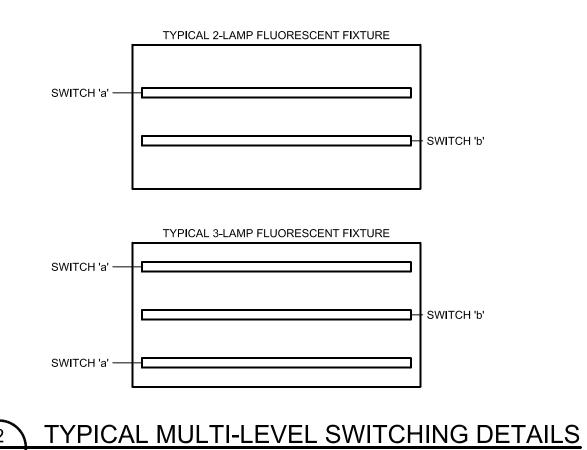








1 FLOOR POKE-THRU DETAIL



WALL SWITCH(ES)



SENSOR

CONTACTS

ENGINEERING, INC. 5525 NOBEL DRIVE SUITE 110 MADISON, WI 53711 ph:608.277.1728 fax:608.271.7046 JDR Project No. 150045

OORSCHNE Architecture Planning Dorschner Associates, Inc. 849 E. Washington Ave., Ste 112 Madison, Wisconsin 53703

ISSUED

PROJECT

FEN OAK SECOND FLOOR RENOVATIONS

> LYMAN F. ANDERSON AGRICULTURE AND CONSERVATION CENTER 5201 FEN OAK DRIVE MADISON, WI

> > **DRAWING** DETAILS-ELECTRICAL

> > > DATE 04.30.15

E9.0