CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

PROJECT INFORMATION

SITE DATA	
SITE ZONING:	(SEE CIVIL)
SITE SIZE:	(SEE CIVIL)
SITE DENSITY:	(SEE CIVIL)
NO. OF PARKING SPACES:	(SEE CIVIL)
CODES AND REGULATIONS	
BLDG. & RELATED CODES:	2015 IBC, 2015 IFC, 2015 IMC, 2006 IECC, 2014 ICC 500
ELECT. CODE:	2014 NEC
FIRE CODE:	2015 IFC
ACCESSIBILITY:	UFAS & FAIR HOUSING ON GROUND FLOOR UNITS AS INDICATED ON PLANS, ADA-2010 @ COMMUNITY BUILDING AND COMMON USE AREAS.
MISC.:	ALL APPLICABLE FEDERAL, STATE & LOCAL CODES, LAWS & ORDINANCES
BUILDING CODE DATA	
USE GROUP:	(SEE SPECIFIC BUILDING COVER SHEETS)
CONSTRUCTION TYPE:	(SEE SPECIFIC BUILDING COVER SHEETS)
EXT. WALL CONSTRUCTION:	(SEE SPECIFIC BUILDING COVER SHEETS)
OTHER WALL CONSTRUCTION:	(SEE SPECIFIC BUILDING COVER SHEETS)
TOTAL ALLOW. AREA:	(SEE SPECIFIC BUILDING COVER SHEETS)
TOTAL ACTUAL AREA:	(SEE SPECIFIC BUILDING COVER SHEETS)
ALLOW. HEIGHT & FLOORS:	(SEE SPECIFIC BUILDING COVER SHEETS)
ACTUAL HEIGHT & FLOORS:	(SEE SPECIFIC BUILDING COVER SHEETS)
HEIGHT/AREA ADJUSTMENTS:	(SEE SPECIFIC BUILDING COVER SHEETS)
OCCUPANT LOAD	(SEE SPECIFIC BUILDING COVER SHEETS)
SPRINKLER SYSTEM:	(SEE SPECIFIC BUILDING COVER SHEETS)

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ARCHITECT'S JOB NO. 4341
OHFA PROJECT NO. 21-06-38

PROJECT LOCATION MAP



SIGNATURE AREAS

NOTE: PROJECT CONSTRUCTION MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND REGULATIONS AS ENUMERATED ELSEWHERE IN THE PLANS AND SPECIFICATIONS.

ARCHITECT: WALLACE ARCHITECTS, L.L.C.
302 CAMPUSVIEW DRIVE SUITE 208, COLUMBIA, MO 65201
BY: _____ DATE: _____

OWNER: CROSSROADS AT WESTCHESTER, LP
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: _____ DATE: _____

CONTRACTOR: HAMILTON BUILDERS CONTRACTING, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: _____ DATE: _____

OHFA REPRESENTATIVE:
100 NW 63RD STREET, SUITE 200, OKLAHOMA CITY, OK 73116
BY: _____ DATE: _____

PM: RS
PC: RS
PLAN SET NO. _____

MASTER COVER SHEET

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0173

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1ST ISSUE
19 AUG 2022

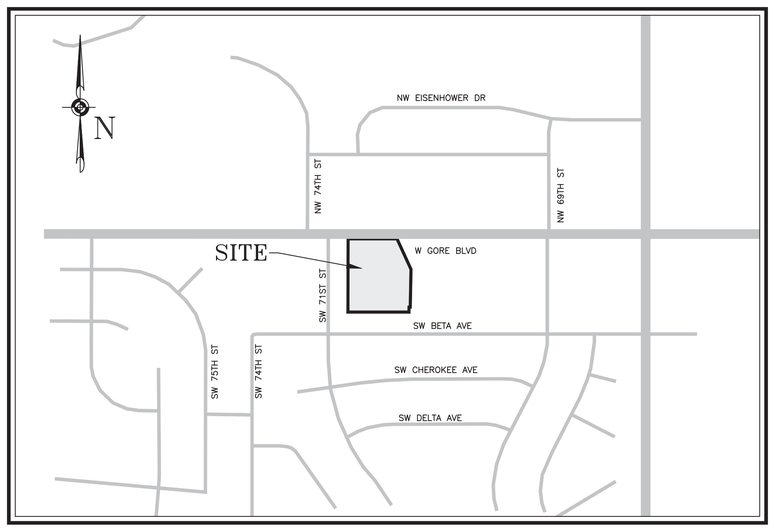
ISSUE/REVISIONS
1 19 AUG 2022 ISSUE SET
2
3
4
5
6

SHEET NO. 0.0M

JOB NO. 4341

9/22/2022 11:01:06 AM

SITE DEVELOPMENT PLANS
CROSSROADS AT WESTCHESTER CIRCLE
7100 W GORE BLVD, LAWTON, COMANCHE COUNTY, OKLAHOMA



VICINITY MAP
NTS

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SHEET 24	DETAILS
SHEET 25	DETAILS

Cobblestone Crossroads at
Westchester Circle, LP

3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

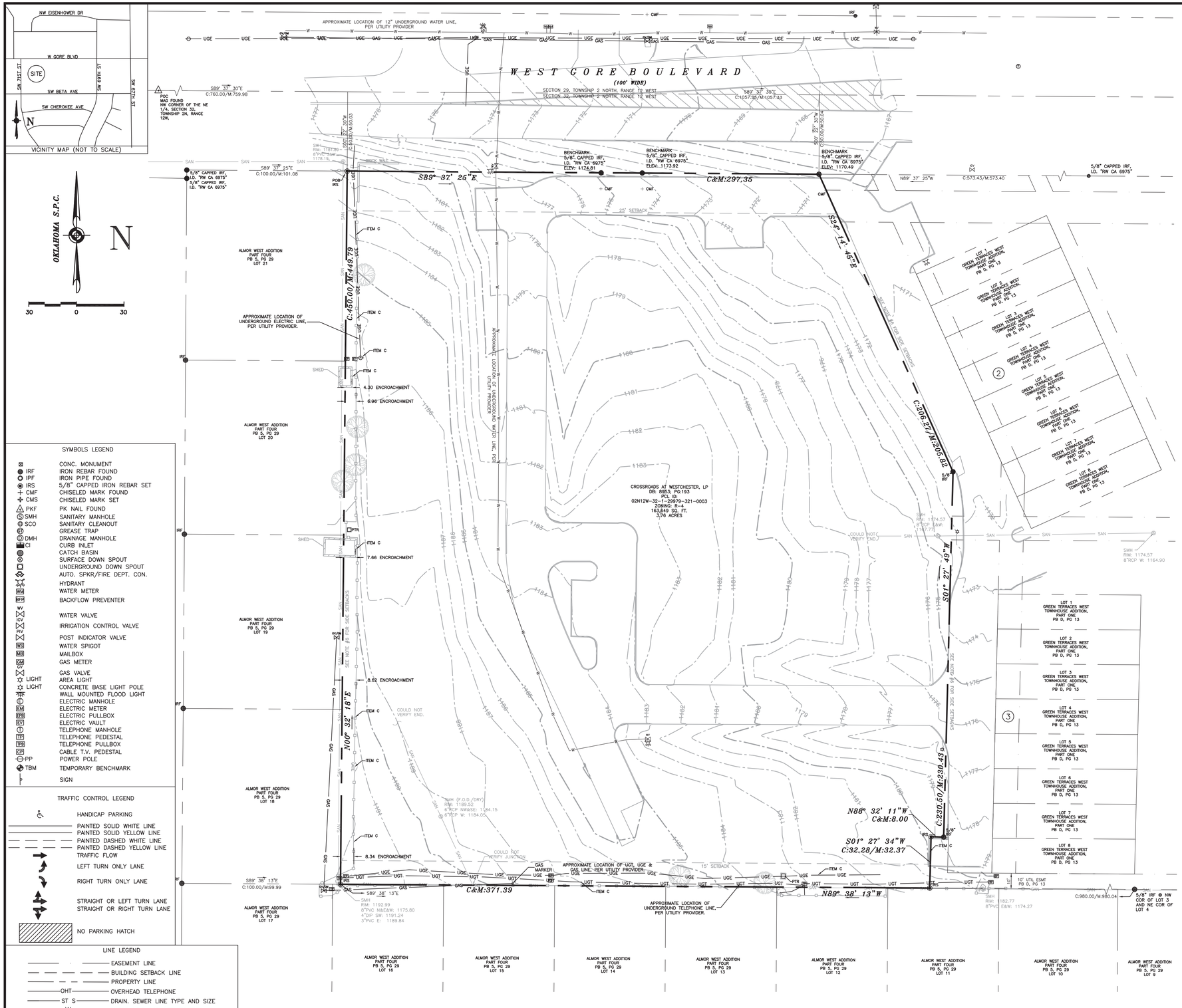
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ENGINEERS, INC.

7068 Ledgestone Commons, Bartlett, TN 38133
Phone (901) 384-0404 • Fax (901) 384-0710
Texas Registered Engineering Firm F-9624

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
5/19/22

ENGINEER OF RECORD



SYMBOLS LEGEND

⊠	CONC. MONUMENT
IRF	IRON REBAR FOUND
IPF	IRON PIPE FOUND
IRS	5/8" CAPPED IRON REBAR SET
CMF	CHISELED MARK FOUND
CMS	CHISELED MARK SET
PKF	PK NAIL FOUND
SMH	SANITARY MANHOLE
SCO	SANITARY CLEANOUT
GT	GREASE TRAP
DMH	DRAINAGE MANHOLE
CI	CURB INLET
	CATCH BASIN
	SURFACE DOWN SPOUT
	UNDERGROUND DOWN SPOUT
	AUTO. SPKR/FIRE DEPT. CON.
	HYDRANT
WM	WATER METER
BFP	BACKFLOW PREVENTER
WV	WATER VALVE
IRV	IRRIGATION CONTROL VALVE
PIV	POST INDICATOR VALVE
WS	WATER SPIGOT
MB	MAILBOX
GM	GAS METER
GV	GAS VALVE
LIGHT	AREA LIGHT
LIGHT	CONCRETE BASE LIGHT POLE
WF	WALL MOUNTED FLOOD LIGHT
E	ELECTRIC MANHOLE
EM	ELECTRIC METER
EPB	ELECTRIC PULLBOX
EV	ELECTRIC VAULT
	TELEPHONE MANHOLE
TP	TELEPHONE PEDESTAL
TPB	TELEPHONE PULLBOX
CX	CABLE T.V. PEDESTAL
PP	POWER POLE
TBM	TEMPORARY BENCHMARK
	SIGN

TRAFFIC CONTROL LEGEND

	HANDICAP PARKING
	PAINTED SOLID WHITE LINE
	PAINTED SOLID YELLOW LINE
	PAINTED DASHED WHITE LINE
	PAINTED DASHED YELLOW LINE
	TRAFFIC FLOW
	LEFT TURN ONLY LANE
	RIGHT TURN ONLY LANE
	STRAIGHT OR LEFT TURN LANE
	STRAIGHT OR RIGHT TURN LANE
	NO PARKING HATCH

LINE LEGEND

	EASEMENT LINE
	BUILDING SETBACK LINE
	PROPERTY LINE
OHT	OVERHEAD TELEPHONE
ST S	DRAIN. SEWER LINE TYPE AND SIZE
W	WATER LINE AND SIZE OF PIPE
SAN	SANITARY SEWER LINE AND SIZE
P	OVERHEAD POWER
P&T	OVERHEAD POWER & TELEPHONE CABLE
UGE	UNDERGROUND ELECTRIC CABLE
UGT	UNDERGROUND TELEPHONE CABLE
FO	UNDERGROUND FIBER OPTIC CABLE
GAS	GAS LINE AND SIZE
	FENCE
P&CATV	OVERHEAD POWER AND CATV

NOTES:

1. THE STREET ADDRESS OF THE PROPERTY SHOWN ON THIS SURVEY IS 7100 W GORE BLVD, LAWTON OK.

2. THE TAX PARCEL NUMBER FOR THIS PROPERTY IS 02N12W–32–1–29979–321–0003. THE RECORD OWNER OF LOT SHOWN HEREON IS: CROSSROADS AT WESTCHESTER, LP

3. THE AREA OF THE PROPERTY SURVEYED CONTAINING 163,649 SQ. FT. OR 3.76 ACRES ACRES, MORE OR LESS.

4. THE PROPERTY AREA WAS DETERMINED BY THE COORDINATE COMPUTATION METHOD.

5. DISTANCES SHOWN HEREON ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE NOTED.

6. THE CURRENT ZONING OF THIS PROPERTY IS HIGH–DENSITY APARTMENT DISTRICT (R–4) THE MINIMUM BUILDING SETBACK DISTANCES ARE AS FOLLOWS:
FRONT YARD: 25 FEET
SIDE YARD: EXCEPT AS PROVIDED IN SECTION 18–404.1 OF THE CITY OF LAWTON ZONING CODE, FOR DWELLINGS OTHER THAN TOWN HOUSES, LOCATED ON AN INTERIOR LOT, A SIDE YARD OF NOT LESS THAN FIVE (5) FEET SHALL BE PROVIDED ON BOTH SIDES OF THE MAIN DWELLING FOR THE FIRST TWO (2) STORIES OR PART THEREOF AND AN ADDITIONAL THREE (3) FEET SHALL BE PROVIDED FOR EACH ADDITIONAL STORY OR PART THEREOF BEYOND THE FIRST TWO (2) STORIES NOT TO EXCEED THIRTY–FIVE (35) FEET.
REAR YARD: 15 FEET
ZONING INFORMATION PROVIDED BY LAWTON ZONING DEPARTMENT.

7. ANY UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. BEFORE BEGINNING ANY CONSTRUCTION OR BORINGS CONTACT THE UTILITIES PROTECTION SERVICE CENTER AT OKLAHOMA 1–CALL: 811/1–800–522–6543.

8. THE SUBJECT PROPERTY IS LOCATED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS PER FLOOD LINES ESTABLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 40031C0426E, DATED: JULY 20, 2009.

9. ALL CORNERS NOT LABELED ARE TO BE CONSIDERED POINTS.

10. THIS IS A SURVEY OF THE PROPERTY REFERENCED IN DEED BOOK 8953, PG: 193 IN THE COMANCHE COUNTY CLERK'S OFFICE.

11. THE REFERENCE BEARING FOR THIS DRAWING IS BASED ON OKLAHOMA SPC. PROVIDED BY OPUS OBSERVATION BY GLOBAL POSITIONING SYSTEM. NAD 83 OKLAHOMA STATE PLANES, 3502 OK S ZONE, US FOOT.
COMBINED FACTOR=0.99988406
CONVERGENCE ANGLE=–0.27244444
ELEVATIONS FOR THIS DRAWING ARE BASED ON NAVD88
HORIZONTAL AND VERTICAL CONTROL POINTS USED:

DE8099 OKLW LAWTON CORS ARP	N343421.987 W0982435.689	7570.4
DG9753 OKAL ALTUS CORS ARP	N343756.124 W0991945.647	77940.6
DF7479 TXWF WICHITA FALLS RRP CORS ARP	N335114.109 W0983019.962	83774.9

12. THERE ARE NO VISIBLE AND/OR APPARENT ENCROACHMENTS OR PROJECTIONS OTHER THAN THOSE SHOWN ON THIS PLAT OF SURVEY.

13. AT THE TIME OF THE SURVEY, THE SURVEYOR NOTICED OBSERVABLE EVIDENCE OF THE FOLLOWING UTILITIES: SANITARY SEWER, STORM SEWER, WATER, ELECTRIC, TELEPHONE, GAS, FIBER OPTICS, CATV.

14. NO LOCAL ROADWAY MILE MARKERS APPARENT.

15. ALL ACTIVE DRAINAGE PIPES, STRUCTURES AND SANITARY MANHOLES ARE PRECAST AND IN FAIR CONDITION.

16. NO OBSERVED EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

17. NO EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.

18. ALL CONTIGUOUS/APPURTENANT EASEMENTS AND ENCUMBRANCES AFFECTING SUBJECT PARCEL AS PROVIDED BY TITLE POLICY, COMMITMENT NUMBER: 21–06–0053 AND EFFECTIVE DATE: DECEMBER 13, 2021 AT 8:00 AM, ARE SHOWN HEREON. OTHER OFFSITE EASEMENTS AND ENCUMBRANCES COULD EXIST BUT CAN NOT BE DETERMINED WITHOUT TITLE FOR ADJOINING PROPERTIES.

19. SUBJECT PARCEL HAS DIRECT ACCESS TO GORE BLVD, A PUBLIC RIGHT–OF–WAY.

20. DATE OF THE FIELD SURVEY: 1/17/22–1/20/22

SURVEY LEGAL DESCRIPTION

SITUATED IN SECTION 32, TOWNSHIP 2 NORTH, RANGE 12 WEST, IN THE CITY OF LAWTON, COUNTY OF COMANCHE AND STATE OF OKLAHOMA AND KNOWN AS BEING A PARCEL OF LAND CONVEYED TO CROSSROADS AT WEST CHESTER, LP BY DEED RECORDED IN DEED BOOK 8978, PAGE 82 IN THE COMANCHE COUNTY CLERK'S OFFICE AND IS FURTHER BONDED AND DESCRIBED AS FOLLOWS.

COMMENCING AT A MAG FOUND AT THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 2 NORTH, RANGE 12 WEST; THENCE ALONG THE NORTHERLY LINE OF SECTION 32 SOUTH 89°37'30" EAST A DISTANCE OF 759.98 FEET; THENCE SOUTH 00°22'30" WEST A DISTANCE OF 50.03 FEET TO A CAPPED 5/8" IRON REBAR SET, I.D. "ED GRAY #1684" AT A NORTHWESTERLY CORNER OF LOT 21 OF THE AMOR WEST ADDITION, PART FOUR RECORDED BY PLAT IN PLAT BOOK 5, PAGE 29 IN THE COMANCHE COUNTY CLERKS OFFICE SAID IRON LYING IN THE SOUTHERLY RIGHT–OF–WAY OF WEST GORE BLVD (100' WIDE) AND BEING THE POINT OF BEGINNING OF THE PREMISES HEREIN INTENDED TO BE DESCRIBED

THENCE ALONG SAID SOUTHERLY RIGHT–OF–WAY SOUTH 89°37'25" EAST A DISTANCE OF 297.35 FEET TO A 5/8" CAPPED IRON REBAR FOUND, I.D. "RW CA 6975", AT NORTHWESTERLY CORNER OF GREEN TERRACES WEST TOWNHOUSE ADDITION, PART ONE RECORDED BY PLAT IN PLAT BOOK D, PAGE 13 IN THE COMANCHE COUNTY CLERK'S OFFICE; THENCE CONTINUING ALONG WESTERLY LINE SOUTH 24°14'45" EAST A DISTANCE OF 205.82 FEET TO A 5/8" IRON REBAR FOUND AT ANGLE POINT THEREIN; THENCE CONTINUING ALONG SAID WESTERLY LINE SOUTH 01°27'49" WEST A DISTANCE OF 230.43 FEET TO A 5/8" IRON REBAR FOUND AT AN ANGLE POINT THERIN; THENCE CONTINUING ALONG SAID WESTERLY LINE NORTH 88°32'11" WEST A DISTANCE OF 8.00 FEET TO A CAPPED 5/8" IRON REBAR SET, I.D. "ED GRAY #1684" AT AN ANGLE POINT THEREIN; THENCE CONTINUING ALONG SAID WESTERLY LINE SOUTH 01°27'34" WEST A DISTANCE OF 32.37 FEET TO A CAPPED 5/8" IRON REBAR SET, I.D. "ED GRAY #1684" IN A NORTHERLY LINE OF LOT 11 OF SAID AMOR WEST ADDITION, PART FOUR; THENCE ALONG SAID NORTHERLY LINE AND THE NORTHERLY LINE OF LOTS 12 THROUGH 16 IN SAID SUBDIVISION NORTH 89°38'13" WEST A DISTANCE OF 371.39 FEET TO A CAPPED 5/8" IRON REBAR SET, I.D. "ED GRAY #1684", AT A SOUTHEASTERLY CORNER OF LOT 18 IN SAID SUDIVISION; THENCE ALONG AN EASTERLY LINE OF SAID LOT 18 AND AN EASTERLY LINE OF LOTS 19 THROUGH 21 OF SAID SUBDIVISION NORTH 00°32'18" EAST A DISTANCE OF 449.79 FEET TO THE PLACE OF BEGINNING CONTAINING 163,649 SQ. FT. OR 3.76 ACRES (MORE OR LESS) OF LAND.

CERTIFICATION

TO: CROSSROADS AT WESTCHESTER, LP; KEEGAN LEDFORD AND MARY BONNEN LEDFORD; LEGACY BANK AND TRUST; OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established by ALTA and NSPS, and includes Items 1 through 6, 8, 9, 10, 11(a)(b), 13, 14, 15 through 20 of Table A thereof. The fieldwork was completed on January 20th 2022. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date of this certification, undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of Oklahoma, the Relative Positional Accuracy of this survey does not exceed that which is specified therein.

PRELIMINARY ONLY
NOT FOR RECORDATION, CONSTRUCTION, SALES OR CONVEYANCES

2/18/2022
Date

ED GRAY RPLS No. 1684

LICENSED PROFESSIONAL LAND SURVEYOR
C. ED GRAY 1684
OKLAHOMA

811
Know what's below.
Call before you dig.

OKLAHOMA DIG INFORMATION
TICKET NUMBER: 22011210351499

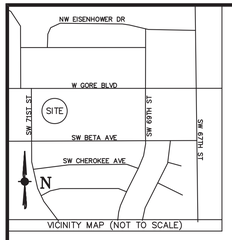
T11158–AT&T DISTRIBUTION	CLEAR
T09102–FIDELITY COMM	CLEAR
T09627–LAWTON/SEWER–WATER	MARKED
T09627–LAWTON/SEWER–WATER	MARKED
S01335–SUMMIT UTILITIES OK ARKLA	CLEAR

ALTA/NSPS LAND TITLE SURVEY FOR CROSSROADS AT WESTCHESTER, LP

SECTION 32, TOWNSHIP 2 NORTH, RANGE 12 WEST
IN THE CITY OF LAWTON, COMANCHE COUNTY, OKLAHOMA

ED GRAY, RPLS
501 E. Centeron Blvd. Apt 1917
Centerton, AR 72719
PH. (479) 366–8702

SCALE: 1" = 30'	DRAWING FILE: TRINITY	JOB No. LAWTON, OK
DATE: 2/18/2022	DRAWN BY: CDR/JSL	SHEET 1 OF 2



VICINITY MAP (NOT TO SCALE)

OLD REPUBLIC NATIONAL TITILE INSURANCE COMPANY
SCHEDULE A
LEGAL DESCRIPTION

ORDER NO.: 21-06-0053
EFFECTIVE DATE: DECEMBER 13, 2021AT 8:00AM

A TRACT OF LAND BEGINNING ON THE SECTION LINE 655 FEET WEST OF THE NORTHEAST CORNER OF THE NORTHEAST QUARTER (NE/4) OF SECTION THIRTY-TWO (32), TOWNSHIP TWO (2) NORTH, RANGE TWELVE (12) WEST I.M., COMANCHE COUNTY, OKLAHOMA, ACCORDING TO THE U.S. GOVERNMENT SURVEY THEREOF; THENCE N89°59'W A DISTANCE OF 1225.8 FEET; THENCE S00°03'W A DISTANCE OF 500.0 FEET; THENCE S89°59'E A DISTANCE OF 1225.65 FEET; THENCE N00°04'E A DISTANCE OF 500.0 FEET TO THE POINT OF BEGINNING,
LESS AND EXCEPT THEREFROM SUCH PORTIONS OF THE ABOVE DESCRIBED REAL PROPERTY WHICH ARE DESCRIBED AND CONTAINED IN THE RECORDED PLAT OF GREEN TERRACE WEST TOWNHOUSE ADDITION, PART ONE, TO THE CITY OF LAWTON, COMANCHE COUNTY, OKLAHOMA, WHICH SAID REAL PROPERTY IS DESCRIBED AS FOLLOWS: BEGINNING AT A POINT OF 1057.35 FEET S89°59'E AND 50 FEET S00°03'W OF THE NORTHWEST CORNER OF THE NE/4, SECTION 32, TOWNSHIP 2 NORTH, RANGE 12 WEST, I.M., COMANCHE COUNTY, OKLAHOMA; THENCE S24°40'E A DISTANCE OF 206.27 FEET; THENCE S00°58'W A DISTANCE OF 230.50 FEET; THENCE N89°02'W A DISTANCE OF 8.0 FEET; THENCE S00°58'W A DISTANCE OF 32.28 FEET; THENCE S89°59'E A DISTANCE OF 438.26 FEET; THENCE N00°01 'E A DISTANCE OF 105.0 FEET; THENCE S89°59'E A DISTANCE OF 176.0 FEET; THENCE N76°13'45"E A DISTANCE OF 26.102 FEET; THENCE N79°16'E A DISTANCE OF 176.0 FEET, THENCE N85°17'17"E A DISTANCE OF 42.009 FEET; THENCE N00°04'E A DISTANCE OF 30.0 FEET; THENCE SOUTHWESTERLY ON A CURVE TO THE LEFT HAVING A RADIUS OF 279.472 FEET A DISTANCE OF 52.679 FEET; THENCE S79°16'W A DISTANCE OF 177.969 FEET; THENCE SOUTHWESTERLY ON A CURVE TO THE RIGHT HAVING A RADIUS OF 250.709 FEET A DISTANCE OF 47.038 FEET; THENCE N89°59'W A DISTANCE OF 52.944 FEET; THENCE N10°44'W A DISTANCE OF 149.239 FEET; THENCE N00°01'E A DISTANCE OF 168.38 FEET; THENCE N89°59'W A DISTANCE OF 573.43 FEET TO THE POINT OF BEGINNING. AND LESS AND EXCEPT TRACT B: BEGINNING AT A POINT 1985.8 FEET(RECORD=L985.78 FEET) S89°59'E AND 500 FEET S00°04'W OF THE NORTHWEST CORNER OF THE NORTHEAST QUARTER (NE/4),SECTION THIRTY-TWO (32), TOWNSHIP TWO (2) NORTH, RANGE TWELVE (12) WEST, I.M., COMANCHE COUNTY, OKLAHOMA; THENCE N89°59'W A DISTANCE OF 416.0 FEET; THENCE N00°01 'E A DISTANCE OF 105.0 FEET; THENCE S89°59'E A DISTANCE OF 176.0 FEET; THENCE N76°13'45"E A DISTANCE OF 26.102 FEET; THENCE N79°16'E A DISTANCE OF 176.0 FEET; THENCE N85°17'17"E A DISTANCE OF 42.009 FEET; THENCE S00°04'W A DISTANCE OF 147.50 FEET TO THE POINT OF BEGINNING. ALSO LESS AND EXCEPT TRACT C: BEGINNING AT A POINT 1985.8 FEET (RECORD=L985.78 FEET) S89°59'E AND 50 FEET S00°04'W OF THE NORTHWEST CORNER OF THE NORTHEAST QUARTER (NE/4), SECTION THIRTY-TWO (32), TOWNSHIP TWO (2) NORTH, RANGE TWELVE (12) WEST, J.M., COMANCHE COUNTY, OKLAHOMA; THENCE S00°04'W A DISTANCE OF 272.50 FEET; THENCE SOUTHWESTERLY ON A CURVE TO THE LEFT HAVING A RADIUS OF 279.472 FEET A DISTANCE OF 52.679 FEET; THENCE S79°16'W A DISTANCE OF 177.969 FEET; THENCE SOUTHWESTERLY ON A CURVE TO THE RIGHT HAVING A RADIUS OF 250.709 FEET A DISTANCE OF 47.038 FEET; THENCE N89°59'W A DISTANCE OF 52.944 FEET; THENCE N10°44'W A DISTANCE OF 149.239 FEET; THENCE N00°01'E A DISTANCE OF 168.38 FEET; THENCE S89°59'E A DISTANCE OF 355.0 FEET TO THE POINT OF BEGINNING.
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PHYSICAL ADDRESS: 7100 SW GORE BLVD, LAWTON, OKLAHOMA

SCHEDULE B PART II
EXCEPTIONS
OLD REPUBLIC NATIONAL TITILE INSURANCE COMPANY

ORDER NO.: 21-06-0053
EFFECTIVE DATE: DECEMBER 13, 2021AT 8:00AM

STANDARD EXCEPTIONS:

a. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. ***NOT A SURVEY RELATED ITEM.***

b. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS. ***NONE APPARENT.***

c. ENCROACHMENTS, OVERLAPS, DISCREPANCIES OR CONFLICTS IN BOUNDARY LINES, SHORTAGE IN AREA, OR OTHER MATTERS WHICH WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE SURVEY OR INSPECTION OF THE PREMISES. ***WOOD FENCE ALONG WESTERLY PROPERTY LINE, APPARENT ENCROACHMENT; GATE ALONG WESTERLY LINE, APPARENT INGRESS EGRESS WITH NO EASEMENT; LIGHT POLE AND UNDERGROUND ELECTRIC LINE ALONG WESTERLY PROPERTY LINE APPARENTLY WITHOUT EASEMENT; SHEDS ALONG WESTERLY PROPERTY LINE, APPARENT ENCROACHMENT; CURB AT SOUTHEASTERLY CORNER OF SUBJECT PARCEL, APPARENT ENCROACHMENT; UNDERGROUND ELECTRIC, UNDERGROUND TELEPHONE AND GAS LINES ALONG SOUTHERLY PROPERTY LINE, APPARENTLY WITHOUT EASEMENT;***

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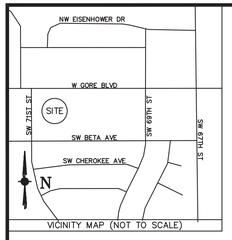
LICENSED PROFESSIONAL LAND SURVEYOR
C. ED GRAY
1684
OKLAHOMA

ALTA/NSPS LAND TITLE SURVEY
FOR
CROSSROADS AT WESTCHESTER, LP

SECTION 32, TOWNSHIP 2 NORTH, RANGE 12 WEST
IN THE CITY OF LAWTON, COMANCHE COUNTY, OKLAHOMA

ED GRAY, RPLS
501 E. Centeron Blvd. Apt 1917
Centerton, AR 72719
PH. (479) 366-9702

SCALE: 1" = 30' DATE: 2/18/2022	DRAWING FILE: TRINITY DRAWN BY: CDR/JSL	JOB No. LAWTON, OK SHEET 2 OF 2



VICINITY MAP (NOT TO SCALE)

OLD REPUBLIC NATIONAL TITILE INSURANCE COMPANY
SCHEDULE A
LEGAL DESCRIPTION

ORDER NO.: 21-06-0053
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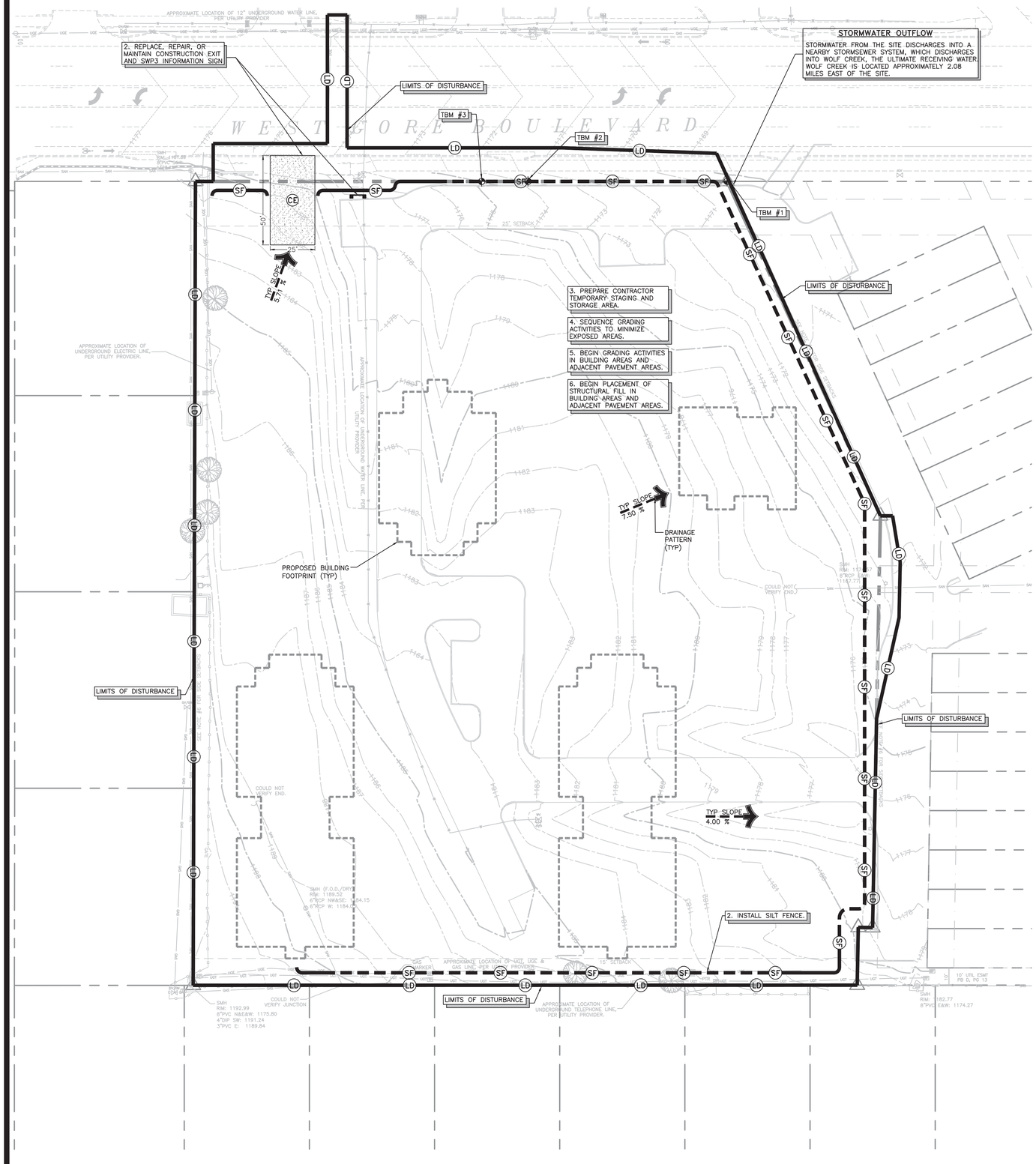
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PROJECT BENCHMARKS

TBM #1 – IRON REBAR FOUND AT NORTHEAST PROPERTY CORNER.
ELEV: 1170.49

TBM #2 – IRON REBAR FOUND AT ALONG THE NORTHERN PROPERTY LINE.
ELEV: 1173.92

TBM #3 – IRON REBAR FOUND AT ALONG THE NORTHERN PROPERTY LINE.
ELEV: 1174.81

SILT FENCE LOCATION

SILT FENCE LOCATION SHOWN ON PLAN HAS BEEN OFFSET FOR CLARITY. WHERE SILT FENCE IS SHOWN ADJACENT TO LIMITS OF DISTURBANCE IT IS THE INTENTION THAT SILT FENCE BE INSTALLED ALONG LIMITS OF DISTURBANCE (NO DISTURBANCE BEYOND SILT FENCE). SILT FENCE SHALL FOLLOW CONTOURS.

LIMITS OF DISTURBANCE

CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.

NOTE TO GENERAL CONTRACTOR

PRIOR TO CONSTRUCTION, GC MUST CLEARLY DELINEATE AND MARK AREAS IDENTIFIED IN THE SWP3 OR IN THE FIELD, TO BE PROTECTED (SUCH AS, NATURAL BUFFERS, TREES, HABITATS OF ENDANGERED/ THREATENED SPECIES, HISTORIC PROPERTIES, ETC.).

CAUTION NOTICE TO CONTRACTOR

IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

SPECIFICATIONS REQUIREMENTS

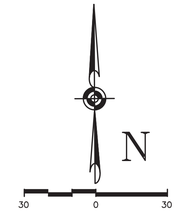
THE REQUIREMENTS SHOWN ON THIS PLAN ARE SUPPLEMENTED BY THE SWP3 CONTAINED WITHIN THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICTS BETWEEN THE PLANS, SWP3 SPECIFICATIONS AND THE ACTUAL GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

TRACK OUT PREVENTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE VEHICLES ARE ADEQUATELY CLEANED PRIOR TO EXITING THE LIMITS OF DISTURBANCE TO PREVENT TRACK OUT.IF THE ACTION OF THE STONE CONSTRUCTION EXIT DOES NOT SATISFACTORILY PREVENT TRACK OUT FROM TRAFFIC EXITING THE SITE, THE CONTRACTOR SHALL IMPLEMENT A WHEEL WASH SYSTEM AT THE CONSTRUCTION EXIT.WATER FROM THE WHEEL WASH SYSTEM SHALL BE DIRECTED TOWARDS THE CONSTRUCTION EXIT SEDIMENT TRAP FOR TREATMENT OF THE SEDIMENT LADEN WATER.THE CONTRACTOR SHALL ALSO HAVE AN ATTENDANT STATIONED AT THE CONSTRUCTION EXIT. THE ATTENDANT SHALL HAVE THE AUTHORITY TO PROHIBIT TRAFFIC FROM EXITING THE SITE IF IT APPEARS THAT VEHICLES EXITING THE SITE WILL CAUSE TRACK OUT. IT IS ULTIMATELY THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRAFFIC FROM THE SITE WILL NOT CAUSE TRACK OUT FROM THE PROJECT SITE.BY SUBMITTING A BID ON THE PROJECT, THE CONTRACTOR AFFIRMS THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THESE REQUIREMENTS.

ACREAGE SUMMARY

TOTAL PROJECT AREA	3.76 ACRES
ON-SITE DISTURBED AREA	3.76 ACRES
OFF-SITE DISTURBED AREA	0.16 ACRES
TOTAL DISTURBED AREA	3.92 ACRES
IMPERVIOUS AREA AT COMPLETION	2.23 ACRES
PERVIOUS/SEEDED AREA AT COMPLETION	1.53 ACRES
TOTAL AREA	3.76 ACRES



LEGEND

- PROPERTY LINE
- LD – LIMITS OF DISTURBANCE
- SF – SEDIMENTATION/SILT FENCE
- CE – TEMPORARY CONSTRUCTION ENTRANCE
- DRAINAGE PATTERN
- SWP3 INFORMATION SIGN

SWP3 UPDATES AND AMENDMENTS

THE CONTRACTOR MUST UPDATE THE SWP3, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, FOOTING INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

IMPORTANT:
THE CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CEC AND OBTAIN WRITTEN CEC APPROVAL BEFORE DOING ANY OF THE FOLLOWING:

1. MODIFYING EROSION OR SEDIMENT CONTROL BMPS (SUBSTITUTIONS ARE TYPICALLY ONLY APPROVED IF SPECIFIED MATERIALS ARE NOT AVAILABLE OR THERE IS A VALID REASON THE SPECIFIED BMP WILL NOT WORK)
2. ADDING/DELETING EROSION OR SEDIMENT CONTROL BMPS;
3. MODIFYING THE SWP3 IMPLEMENTATION SEQUENCE; OR
4. PERFORMING ANY ACTIONS OR IN ANY MANNER THAT IS CONTRARY TO THE SWP3.

THE CONTRACTOR MAY MODIFY OR ADD ADDITIONAL BMPS, WITHOUT CEC APPROVAL, IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY; HOWEVER, CONTRACTOR MUST NOTIFY THE CEC AS SOON AS PRACTICAL AS TO THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

AMENDING THE SWP3 DOES NOT MEAN THAT IT HAS TO BE REPRINTED. IT IS ACCEPTABLE TO ADD ADDENDA, SKETCHES, NEW SECTIONS, DETAILS, AND/OR REVISED DRAWINGS THAT HAVE THE CEC NAME IN PRINT, ARE STAMPED, SIGNED, DATED, AND ARE ACCOMPANIED BY WRITTEN COPY OF THE ASSOCIATED RFI AND ITS RESPONSE FROM CEC. ENGINEERED ITEMS MUST BE SIGNED AND STAMPED BY THE CEC OF RECORD FOR THE PROJECT.

BEST MANAGEMENT PRACTICES SEQUENCE

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC, IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ALL AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

PHASE I – EROSION CONTROL SEQUENCING

1. ***INSTALL STONE CONSTRUCTION EXIT AND SWP3 INFORMATION SIGN.***
2. ***INSTALL SILT FENCE IN ALL AREAS SHOWN.*** BMP's MUST BE IN PLACE PRIOR TO SUBGRADE DISTURBING ACTIVITIES.
3. PREPARE CONTRACTOR TEMPORARY STAGING AND STORAGE AREA.
4. SEQUENCE GRADING ACTIVITIES TO MINIMIZE EXPOSED AREAS.
5. BEGIN GRADING ACTIVITIES IN BUILDING AREAS AND ADJACENT PAVEMENT AREAS.
6. BEGIN PLACEMENT OF STRUCTURAL FILL IN BUILDING AREAS AND ADJACENT PAVEMENT AREAS.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY, ONLY IF ALL PRECEDING BMPS AND STABILIZATION ACTIVITIES HAVE BEEN COMPLETELY INSTALLED. BMP RELATED STEPS IN THE ABOVE SEQUENCE ARE BOLDED FOR CLARITY. THE CEC MUST APPROVE, IN WRITING, ANY CHANGES IN THE ABOVE SWP3 IMPLEMENTATION SEQUENCE, BEFORE THEIR IMPLEMENTATION BEGINS.

OWNER
COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
(417) 882-1701

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
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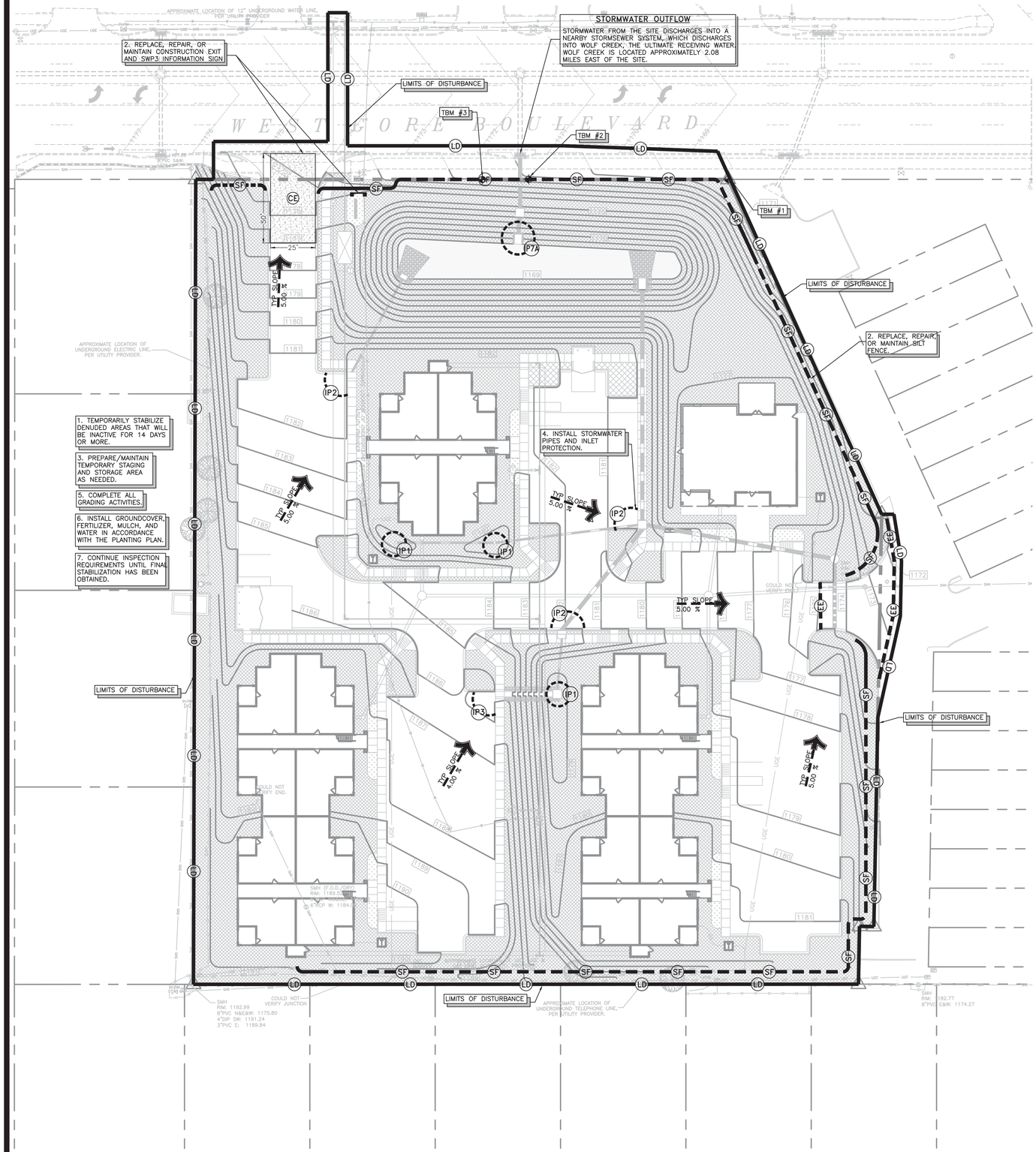
PHASE I EROSION & SEDIMENTATION CONTROL PLAN

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7088 Ledgestone Commons
Springfield, MO 65804
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	1" = 30'
JOB No.	N/A
SHEET	4 OF 25 SHEET



PROJECT BENCHMARKS

TBM #1 – IRON REBAR FOUND AT NORTHEAST PROPERTY CORNER.
ELEV: 1170.49

TBM #2 – IRON REBAR FOUND AT ALONG THE NORTHERN PROPERTY LINE.
ELEV: 1173.92

TBM #3 – IRON REBAR FOUND AT ALONG THE NORTHERN PROPERTY LINE.
ELEV: 1174.81

SILT FENCE LOCATION

SILT FENCE LOCATION SHOWN ON PLAN HAS BEEN OFFSET FOR CLARITY. WHERE SILT FENCE IS SHOWN ADJACENT TO LIMITS OF DISTURBANCE IT IS THE INTENTION THAT SILT FENCE BE INSTALLED ALONG LIMITS OF DISTURBANCE (NO DISTURBANCE BEYOND SILT FENCE). SILT FENCE SHALL FOLLOW CONTOURS.

LIMITS OF DISTURBANCE

CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.

NOTE TO GENERAL CONTRACTOR

PRIOR TO CONSTRUCTION, GC MUST CLEARLY DELINEATE AND MARK AREAS IDENTIFIED IN THE SWP3 OR IN THE FIELD, TO BE PROTECTED (SUCH AS, NATURAL BUFFERS, TREES, HABITATS OF ENDANGERED/ THREATENED SPECIES, HISTORIC PROPERTIES, ETC.).

CAUTION NOTICE TO CONTRACTOR

IF PROPERLY IMPLEMENTED, THIS PLAN WILL PROVIDE AN EFFECTIVE MEANS FOR CONTROLLING EROSION. HOWEVER, IT IS ACKNOWLEDGED THAT NO ONE PLAN CAN BE PREPARED THAT WILL DEPICT ALL POSSIBLE CONTROL MEASURES NECESSARY FOR VARIOUS STAGES OF CONSTRUCTION. THE CONTRACTOR SHALL INCLUDE IN THE BASE BID ADEQUATE FUNDS TO PROVIDE ALL EROSION CONTROL MEASURES NECESSARY TO COMPLY WITH CODES FOR THE DURATION OF THE CONSTRUCTION PROJECT.

SPECIFICATIONS REQUIREMENTS

THE REQUIREMENTS SHOWN ON THIS PLAN ARE SUPPLEMENTED BY THE SWP3 CONTAINED WITHIN THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICTS BETWEEN THE PLANS, SWP3 SPECIFICATIONS AND THE ACTUAL GENERAL PERMIT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.

TRACK OUT PREVENTION

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE VEHICLES ARE ADEQUATELY CLEANED PRIOR TO EXITING THE LIMITS OF DISTURBANCE TO PREVENT TRACK OUT.IF THE ACTION OF THE STONE CONSTRUCTION EXIT DOES NOT SATISFACTORILY PREVENT TRACK OUT FROM TRAFFIC EXITING THE SITE, THE CONTRACTOR SHALL IMPLEMENT A WHEEL WASH SYSTEM AT THE CONSTRUCTION EXIT.WATER FROM THE WHEEL WASH SYSTEM SHALL BE DIRECTED TOWARDS THE CONSTRUCTION EXIT SEDIMENT TRAP FOR TREATMENT OF THE SEDIMENT LADEN WATER.THE CONTRACTOR SHALL ALSO HAVE AN ATTENDANT STATIONED AT THE CONSTRUCTION EXIT. THE ATTENDANT SHALL HAVE THE AUTHORITY TO PROHIBIT TRAFFIC FROM EXITING THE SITE IF IT APPEARS THAT VEHICLES EXITING THE SITE WILL CAUSE TRACK OUT. IT IS ULTIMATELY THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRAFFIC FROM THE SITE WILL NOT CAUSE TRACK OUT FROM THE PROJECT SITE.BY SUBMITTING A BID ON THE PROJECT, THE CONTRACTOR AFFIRMS THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THESE REQUIREMENTS.

ACREAGE SUMMARY

TOTAL PROJECT AREA	3.76 ACRES
ON–SITE DISTURBED AREA	3.76 ACRES
OFF–SITE DISTURBED AREA	0.16 ACRES
TOTAL DISTURBED AREA	3.92 ACRES
IMPERVIOUS AREA AT COMPLETION	2.23 ACRES
PERVIOUS/SEEDED AREA AT COMPLETION	1.53 ACRES
TOTAL AREA	3.76 ACRES

N

30 0 30

LEGEND

- PROPERTY LINE
- LD – LIMITS OF DISTURBANCE
- SF – SEDIMENTATION/SILT FENCE
- EE – EROSION EEL
- CE – TEMPORARY CONSTRUCTION ENTRANCE
- IP1 – BLOCK AND AGGREGATE SEDIMENTATION FILTER
- IP2 – BLOCK AND AGGREGATE CURB INLET PROTECTION
- IP3 – BLOCK AND AGGREGATE FLUME PROTECTION
- P7A – GRAVEL AND WIRE MESH OCS SEDIMENT FILTER
- DRAINAGE PATTERN
- RIP–RAP PAD
- SODDED AREA
- PLANTING BED: MULCH, GROUNDCOVER, ETC. SEE PLANTING PLAN FOR SPECIFIC INFORMATION
- SEEDED AREA
- SWP3 INFORMATION SIGN
- TEMPORARY BENCHMARK

SWP3 UPDATES AND AMENDMENTS

THE CONTRACTOR MUST UPDATE THE SWP3, INCLUDING THE JOBSITE BINDER AND SITE MAPS, TO REFLECT THE PROGRESS OF CONSTRUCTION ACTIVITIES AND GENERAL CHANGES TO THE PROJECT SITE. UPDATES SHALL BE MADE DAILY TO TRACK PROGRESS WHEN ANY OF THE FOLLOWING ACTIVITIES OCCUR: BMP INSTALLATION, MODIFICATION OR REMOVAL, CONSTRUCTION ACTIVITIES (E.G., PAVING, STORM SEWER INSTALLATION, FOOTING INSTALLATION, ETC.), CLEARING, GRUBBING OR GRADING, OR TEMPORARY OR PERMANENT STABILIZATION.

IMPORTANT:
THE CONTRACTOR MUST SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE CEC AND OBTAIN WRITTEN CEC APPROVAL BEFORE DOING ANY OF THE FOLLOWING:

1. MODIFYING EROSION OR SEDIMENT CONTROL BMPS (SUBSTITUTIONS ARE TYPICALLY ONLY APPROVED IF SPECIFIED MATERIALS ARE NOT AVAILABLE OR THERE IS A VALID REASON THE SPECIFIED BMP WILL NOT WORK)
2. ADDING/DELETING EROSION OR SEDIMENT CONTROL BMPS;
3. MODIFYING THE SWP3 IMPLEMENTATION SEQUENCE; OR
4. PERFORMING ANY ACTIONS OR IN ANY MANNER THAT IS CONTRARY TO THE SWP3.

THE CONTRACTOR MAY MODIFY OR ADD ADDITIONAL BMPS, WITHOUT CEC APPROVAL, IN AN EMERGENCY SITUATION TO PREVENT SEDIMENT DISCHARGE OR PROTECT WATER QUALITY; HOWEVER, CONTRACTOR MUST NOTIFY THE CEC AS SOON AS PRACTICAL AS TO THEIR ACTIONS TO DISCUSS THE NEED FOR ADDITIONAL OR SUPPLEMENTAL MEASURES AND TO OBTAIN THE REQUIRED APPROVALS. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PERMIT AND PROTECTION OF DOWNSTREAM WATER QUALITY.

AMENDING THE SWP3 DOES NOT MEAN THAT IT HAS TO BE REPRINTED. IT IS ACCEPTABLE TO ADD ADDENDA, SKETCHES, NEW SECTIONS, DETAILS, AND/OR REVISED DRAWINGS THAT HAVE THE CEC NAME IN PRINT, ARE STAMPED, SIGNED, DATED, AND ARE ACCOMPANIED BY WRITTEN COPY OF THE ASSOCIATED RFI AND ITS RESPONSE FROM CEC. ENGINEERED ITEMS MUST BE SIGNED AND STAMPED BY THE CEC OF RECORD FOR THE PROJECT.

BEST MANAGEMENT PRACTICES SEQUENCE

NOTE: UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA–POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC, IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. IN ADDITION, NOTE ALL AREAS WHERE FILL IS IMPORTED FROM OR SOIL IS EXPORTED TO ON THE SITE MAPS.

PHASE II – EROSION CONTROL SEQUENCING

1. TEMPORARILY STABILIZE, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE. ALL AREAS AT FINAL GRADE MUST BE PAVED OR STABILIZED WITH SPECIFIED GROUNDCOVER PER LANDSCAPE PLAN WITHIN 14 DAYS AFTER COMPLETION OF WORK IN THESE AREAS.
2. INSTALL, REPLACE, REPAIR, OR MAINTAIN SILT FENCE, STONE CONSTRUCTION EXIT, AND SWP3 INFORMATION SIGN AS NEEDED.
3. PREPARE/MAINTAIN TEMPORARY STAGING AND STORAGE AREA AS NEEDED.
4. *BEGIN INSTALLATION OF STORMWATER PIPES WITH INLET PROTECTION AS SOON AS POSSIBLE FOR USE AS SEDIMENT TRAPS.*
5. COMPLETE ALL GRADING ACTIVITIES AT THIS TIME.
6. *IMMEDIATELY INSTALL PERMANENT GROUNDCOVER, FERTILIZE, MULCH, AND WATER AREAS IN ACCORDANCE WITH THE PLANTING PLAN AND SITEWORK SPECIFICATIONS.*
7. CONTINUE INSPECTION REQUIREMENTS UNTIL FINAL STABILIZATION HAS BEEN OBTAINED AND THE NOTICE OF TERMINATION HAS BEEN FILED PER THE GENERAL PERMIT.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION–RELATED ACTIVITIES CONCURRENTLY, ONLY IF ALL PRECEDING BMPS AND STABILIZATION ACTIVITIES HAVE BEEN COMPLETELY INSTALLED. BMP RELATED STEPS IN THE ABOVE SEQUENCE ARE BOLDED FOR CLARITY. THE CEC MUST APPROVE, IN WRITING, ANY CHANGES IN THE ABOVE SWP3 IMPLEMENTATION SEQUENCE, BEFORE THEIR IMPLEMENTATION BEGINS.

OWNER
COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
(417) 882–1701

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882–1701

PHASE II EROSION & SEDIMENTATION CONTROL PLAN

CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Memphis, TN 38120
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3204

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	1" = 30'
JOB No.	N/A
SHEET	5 OF 25 SHEET

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR ESTIMATED PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION EXITS																								
TEMPORARY CONTROL MEASURES																								
SEDIMENT CONTROL BASIN(S)/TRAP(S)																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADING																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
FINISH GRADING																								
PERMANENT CONTROL STRUCTURES																								
FOUNDATION / BUILDING CONSTRUCTION																								
LANDSCAPING/SEED/FINAL STABILIZATION																								

1) CONTRACTOR MUST COMPLETE TABLE WITH ESTIMATED DATES OR PROJECT ACTIVITIES PRIOR TO BMP CERTIFICATION.
2) TIME SCHEDULE MUST COINCIDE WITH THE SWP3 IMPLEMENTATION SEQUENCE.

OPERATION TIME SCHEDULE

SITE LOCATION SUMMARY

ADDRESS:	TO BE ASSIGNED
CENTER OF SITE:	
LATITUDE:	34° 36' 30.00" N (34.60833 N)
LONGITUDE:	98° 28' 48.53" W (98.48015 W)
ADJACENT SURROUNDING PROPERTIES:	NORTH: WEST GORE BLVD EAST: RESIDENTIAL SOUTH: RESIDENTIAL WEST: RESIDENTIAL

SITE LOCATION SUMMARY

SITE RAINFALL SUMMARY

	JAN.	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
AVERAGE RAINFALL IN INCHES	1.20	1.70	2.50	2.90	4.50	4.40	2.30	2.80	3.30	3.70	1.80	1.80

THE TOTAL AVERAGE ANNUAL RAINFALL FOR THE PROJECT AREA IS: 32.90 INCHES

THE DESIGN RAIN EVENT FOR THE PROJECT IS: 100 YEAR/24 HOUR RAIN EVENT – 9.00 INCHES

SITE RAINFALL SUMMARY

SITE SOILS SUMMARY

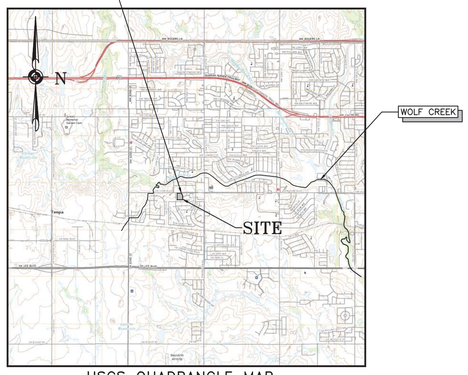
SOIL TYPE AND TEXTURE:	THE PROJECT GEOTECHNICAL REPORT INDICATES THAT THE SITE IS LOCATED IN AN AREA THAT IS MAINLY UNDEVELOPED, APPEARS RELATIVELY LEVEL AND COVERED WITH GRASS AND CONTAINED CONCRETE DRIVES. BASED ON THE SUBSURFACE CONDITIONS IDENTIFIED BY THE EXPLORATORY BORINGS, THE GENERALIZED SUBSURFACE PROFILE CONSISTS OF ELASTIC SILTS (MH), FAT CLAY (CH), AND LEAN CLAY (CL).
AVERAGE DEPTH TO GROUNDWATER:	GROUNDWATER WAS NOT ENCOUNTERED DURING OR AFTER THE COMPLETION OF DRILLING ACTIVITIES.

NOTE: THE ABOVE SOILS INFORMATION IS FOR INFORMATION ONLY AND SHOULD NOT BE USED FOR BIDDING PURPOSES, CONSTRUCTION COSTS OR ESTIMATING.

SITE SOILS SUMMARY

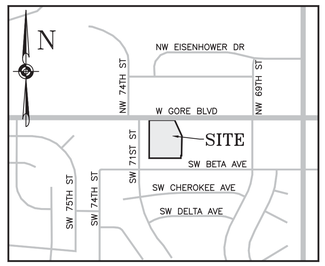
STORMWATER OUTFLOW

STORMWATER FROM THE SITE DISCHARGES INTO A NEARBY STORMSEWER SYSTEM, WHICH DISCHARGES INTO WOLF CREEK, THE ULTIMATE RECEIVING WATER. WOLF CREEK IS LOCATED APPROXIMATELY 2.08 MILES EAST OF THE SITE.



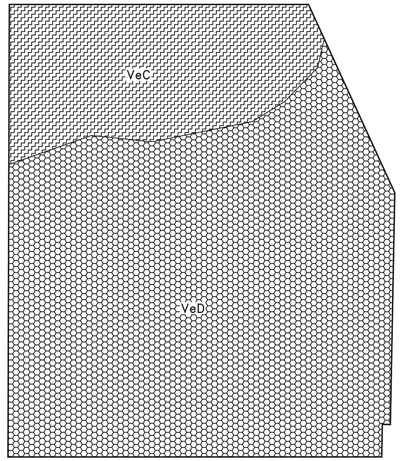
USGS QUADRANGLE MAP
SCALE:1"=5000'

QUADRANGLE MAP



SITE LOCATION MAP
SCALE=NTS

VICINITY MAP



SOIL MAP
NTS

SOIL SURVEY AREA MAP UNIT SYMBOL	SOIL NAME	SLOPES	HYDRIC CLASSIFICATION
VeC	VERNON CLAY	1–5%	NON–HYDRIC
VeD	VERNON–KNOCO COMPLEX	3–12%	NON–HYDRIC

SOIL MAP

NOTES:

1. CONSIDERATION MUST BE GIVEN TO ANTICIPATED CLIMATE AND SEASONAL CONDITIONS WHEN PLANTING SEED.
2. SEED SHALL BE FREE OF WEEDY SPECIES AND APPROPRIATE FOR SITE SOILS AND REGIONAL CLIMATE. SEED AND MULCH PER THE CONSTRUCTION DRAWINGS AND THE 02900 PLANTING SPECIFICATION IMMEDIATELY AFTER TOPSOIL IS APPLIED AND FINAL GRADE IS REACHED.
3. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OTHER LANDSCAPING COVER (STONE, MULCH, ETC.), OR HAVE A STAND OF GRASS WITH A MINIMUM OF 70 PERCENT DENSITY OVER THE ENTIRE VEGETATED AREA, OR GREATER IN ACCORDANCE WITH THE GENERAL PERMIT REQUIREMENTS.
4. VEGETATED AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS REQUIREMENT.
5. THE VEGETATIVE DENSITY MUST BE MAINTAINED THROUGH PROJECT COMPLETION TO BE CONSIDERED STABILIZED. AREAS PROTECTED BY EROSION CONTROL BLANKETS ARE NOT PERMANENTLY STABILIZED UNTIL THE APPLICABLE GENERAL PERMIT REQUIREMENT FOR FINAL VEGETATIVE DENSITY IS ACHIEVED.
6. RIP–RAP, MULCH, GRAVEL, DECOMPOSED GRANITE OR OTHER EQUIVALENT PERMANENT STABILIZATION MEASURES MAY BE EMPLOYED IN LIEU OF VEGETATION BASED ON SITE–SPECIFIC CONDITIONS, DESIGN AND GOVERNING AUTHORITY APPROVAL.
7. ALL SEEDED AREAS SHALL BE INSPECTED REGULARLY TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED.

(SVR) SEEDING/VEGETATION REQUIREMENTS

NOTES:

1. PERMANENT STABILIZATION SHALL BE ACCOMPLISHED IN ALL DISTURBED AREAS BY COVERING THE SOIL WITH PAVEMENT, BUILDING STRUCTURES, VEGETATION, OR OTHER FORMS OF SOIL STABILIZATION.
2. THE GC IS REQUIRED TO INITIATE PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY UPON REACHING FINAL GRADE. FOR THOSE AREAS NOT AT FINAL GRADE THAT WILL NOT BE DISTURBED FOR GREATER THAN 14 DAYS, THE CONTRACTOR SHALL INITIATE TEMPORARY STABILIZATION PER THE TEMPORARY SEEDING OR STABILIZATION DETAIL.
3. THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON–VEGETATED MEASURES, IF UTILIZED.
4. SOILS MUST BE PREPARED BEFORE INSTALLATION OF SOD OR SEED. SEE 02900 SPECIFICATION FOR INSTRUCTION ON PROPER SOIL PREPARATION.
5. AT THE COMPLETION OF GROUND–DISTURBING ACTIVITIES, THE ENTIRE SITE MUST HAVE PERMANENT VEGETATIVE COVER MEETING VEGETATIVE DENSITY REQUIREMENTS IN THE GENERAL PERMIT, OR MULCH PER LANDSCAPE PLAN, IN ALL AREAS NOT COVERED BY HARDSCAPE (STONE, PAVEMENT, BUILDINGS, ETC.).
6. SEEDED AREAS SHALL BE PROTECTED WITH STRAW MULCH, HYDRAULIC MULCH OR A ROLLED EROSION CONTROL PRODUCT. STRAW MULCH MUST BE TACKIFIED OR CRIMPED BY DISC OR OTHER MACHINERY, AND ROLLED EROSION CONTROL PRODUCTS MUST BE INSTALLED PER MANUFACTURER RECOMMENDATIONS. ONLY ROLLED EROSION CONTROL PRODUCTS ARE PERMITTED TO BE USED IN FLOW CONVEYANCES.
7. ALL AREAS TO BE SEEDED MUST MEET TOPSOIL DEPTH, PH AND ORGANIC CONTENT REQUIREMENTS AS SPECIFIED IN THE 02900 SPECIFICATION – PLANTING OR XERISCAPE SPECIFICATION.
8. FINAL SITE STABILIZATION IS ACHIEVED WHEN PERENNIAL VEGETATIVE COVER PROVIDES PERMANENT STABILIZATION WITH A UNIFORM DENSITY GREATER THAN 70 PERCENT OVER THE ENTIRE AREA TO BE STABILIZED BY VEGETATIVE COVER. THIS AREA IS EXCLUSIVE OF AREAS THAT ARE COVERED WITH ROCK (CRUSHED GRANITE, GRAVEL, ETC.) OR LANDSCAPE MULCH, PAVED OR HAVE A BUILDING OR OTHER PERMANENT STRUCTURE ON THEM.

(PS) PERMANENT SEEDING, SOD OR MULCHING

NOTES:

1. THE GC IS REQUIRED TO, AT A MINIMUM, INITIATE SOIL STABILIZATION MEASURES IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT LIKELY RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
2. THE GC HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETE SOIL PREPARATION, SEEDING, MULCHING, AND ANY OTHER REQUIRED ACTIVITIES RELATED TO THE PLANTING AND ESTABLISHMENT OF VEGETATION. THE GC ALSO HAS 7 DAYS FROM INITIATION OF STABILIZATION TO COMPLETELY INSTALL NON–VEGETATED MEASURES, IF UTILIZED.
3. ALL DISTURBED AREAS MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST–GERMINATING ANNUAL GRASS/GRAIN VARIETIES APPROPRIATE FOR SITE SOIL AND CLIMATE CONDITIONS. MULCH IS REQUIRED FOR ALL SEEDING APPLICATIONS, AND ALL MULCH APPLICATIONS MUST INCLUDE A SUITABLE FORM OF MULCH ANCHORING TO MINIMIZE MOVEMENT OF MULCH BY WIND OR WATER.
4. ALTERNATIVE STABILIZATION MEASURES TO SEEDING, SUCH AS ANCHORED MULCH APPLICATION (WITHOUT SEEDING), MAY BE UTILIZED DURING PERIODS WHEN VEGETATIVE GROWTH IS UNLIKELY (E.G. WINTER MONTHS).
5. IT IS NOT ACCEPTABLE TO ALLOW BARE SOIL TO REMAIN EXPOSED AT ANY TIME DURING THE YEAR, REGARDLESS OF WEATHER/TEMPERATURE/SITE CONDITIONS.
6. ALTERNATIVE STABILIZATION MEASURES INCLUDE, BUT ARE NOT LIMITED TO: ANCHORED STRAW/HAY MULCH, WOOD CELLULOSE FIBER MULCH, SPRAY–ON SOIL GLUES/BINDERS, AND ROLLED EROSION CONTROL PRODUCTS.
7. ALL ROLLED EROSION CONTROL PRODUCTS SHALL HAVE CURRENT QDOR(TM) STATUS ISSUED BY THE EROSION CONTROL TECHNOLOGY COUNCIL (ECTC) PLUS ANY STATE OR AGENCY–SPECIFIC REQUIREMENTS. EVIDENCE OF QDOR(TM) APPROVAL SHALL ACCOMPANY THE PRODUCT SHIPPED TO THE JOBSITE FOR READY IDENTIFICATION BY THE CONTRACTOR OR AGENCY INSPECTOR.
8. ROLLED EROSION CONTROL PRODUCTS (NETS, BLANKETS, TURF REINFORCED MATES) AND VEGETATED AREAS NOT MEETING REQUIRED VEGETATIVE DENSITIES FOR FINAL STABILIZATION MUST BE INSPECTED DAILY. RILING, RUTTING AND OTHER SIGNS OF EROSION INDICATE THE SPECIFIED EROSION CONTROL DEVICE IS NOT FUNCTIONING OR INSTALLED PROPERLY AND/OR ADDITIONAL EROSION CONTROL DEVICES ARE WARRANTED.

(TS) TEMPORARY SEEDING OR STABILIZATION

EROSION CONTROL DETAILS,
SHEET 3 OF 5, MUST BE POSTED IN JOB TRAILER.

NOTES:

A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("SITE MAP"), THE STANDARD DETAILS, SPECIFICATIONS SECTION 02370 ("SWP3"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWP3. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
E. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. CONTRACTOR SHALL CONSTRUCT TEMPORARY BERM ON DOWN STREAM SIDES IN COMPLIANCE WITH 02370 SPECIFICATION.
H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN–UP FUEL OR CHEMICAL SPILLS AND LEAKS.
J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE OR TO DRAINAGE DITCHES OR WATERS OF THE STATE.
L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
M. ALL DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST–GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS AS SHOWN ON SITE MAP.
N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDED, SODDED, AND/OR VEGETATED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR PLANTING PLAN.
O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
R. ON–SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCE, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
U. SEE SITE PLAN FOR PERMANENT SIGNAGE.
V. GENERAL CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE SITE MAPS, INSIDE OF THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
W. REFER TO THE SWP3 FOR REPORTABLE SPILL QUANTITIES OF PETROLEUM PRODUCTS AND/OR HAZARDOUS WASTES.
X. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
Y. REFER TO 02370 SPECIFICATION FOR RUN–OFF SAMPLING/MONITORING REQUIREMENTS IF APPLICABLE TO SITE DURING CONSTRUCTION.

MAINTENANCE REQUIREMENTS:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE–HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXIT AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREAS SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
6. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. AND DEBRIS AND/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

CAUTION – NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE IMPROVEMENTS SHOWN BY THESE PLANS.

OWNER
COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
(417) 882–1701

SITE OPERATOR/GENERAL CONTRACTOR: _____

SUPERINTENDENT: _____

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882–1701

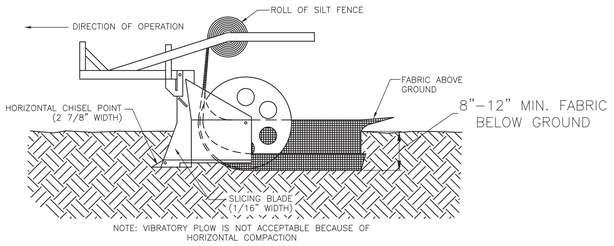
EROSION CONTROL DETAILS

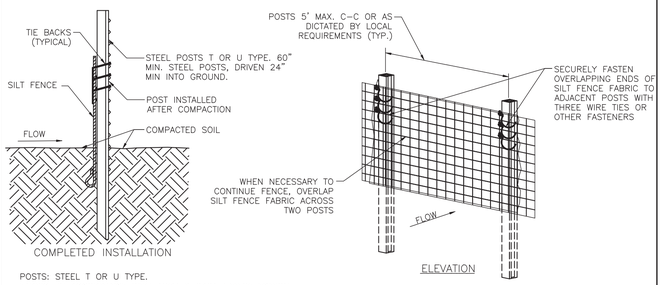
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7088 Ledgestone Commons
Fayetteville, AR 72703
Phone (501) 384-0404
Fax (501) 384-0710
Oklahoma Registered Engineering Firm CA-3224

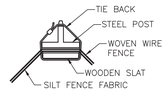
LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	6 OF 25 SHEET





POSTS: STEEL T OR U TYPE.
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.



INSIDE CORNER – PLAN VIEW

SPECIFICATIONS FOR STATIC SLICING METHOD FOR SILT FENCE INSTALLATION

(STATIC SLICING SHALL BE USED TO ANCHOR SILT FENCE FABRIC IN ORDER TO NOT USE THE WOVEN WIRE BACKING.)

1. SILT FENCE SHALL BE PROVIDED AND INSTALLED PER ASTM D-6462-03 LATEST EDITION.
2. INSTALL SILT FENCE AT A FAIRLY LEVEL GRADE ALONG THE CONTOUR WITH THE ENDS CURVED UPHILL TO PROVIDE SUFFICIENT UPSTREAM STORAGE VOLUME FOR ANTICIPATED RUNOFF.
3. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
4. INSTALL POSTS AT A MINIMUM DEPTH OF 24" ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC, ENABLING POSTS TO SUPPORT UPSTREAM WATER PRESSURE ON THE FABRIC.
5. INSTALL POSTS WITH THE NIPPLES FACING AWAY FROM THE SILT FENCE FABRIC.
6. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH TIE SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
7. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
8. WHEN NECESSARY TO CONTINUE FENCE, OVERLAP SILT FENCE FABRIC ACROSS TWO POSTS.
9. NO MORE THAN 24" OF A 36" FABRIC IS ALLOWED ABOVE GROUND LEVEL.
10. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT–BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE TRENCH IF NECESSARY.
11. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
12. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
13. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

MAINTENANCE NOTES

1. SILT FENCES SHALL BE INSPECTED ALONG ITS ENTIRETY AND MUST BE CLEANED WHEN SEDIMENT HAS ACCUMULATED TO ONE–THIRD THE HEIGHT OF THE SILT FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ON–THIRD THE HEIGHT OF THE SILT FENCE.
2. ALL MATERIAL EXCAVATED FROM BEHIND SILT FENCE SHALL BE STOCKPILED ON AN UPLAND PORTION OF THE SITE IF SUITABLE FOR REUSE.
3. SPECIAL ATTENTION SHOULD BE PAID TO ENSURE THAT NO UNDERMINING OF SILT FENCE HAS OCCURRED AND THAT NO BYPASS IS OCCURRING AT JOINING SECTIONS.
4. IF EXCESS SEDIMENT IS ACCUMULATING IN ANY SECTION OF SILT FENCE, THE CONTRACTOR SHOULD IMPLEMENT ADDITIONAL UPSTREAM STABILIZATION MEASURES OR ADDITIONAL BMPS (PENDING CEC APPROVAL) TO PREVENT EXCESSIVE BUILDUP ON SILT FENCE.
5. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.

TABLE 1 Temporary Silt Fence Material Property Requirements

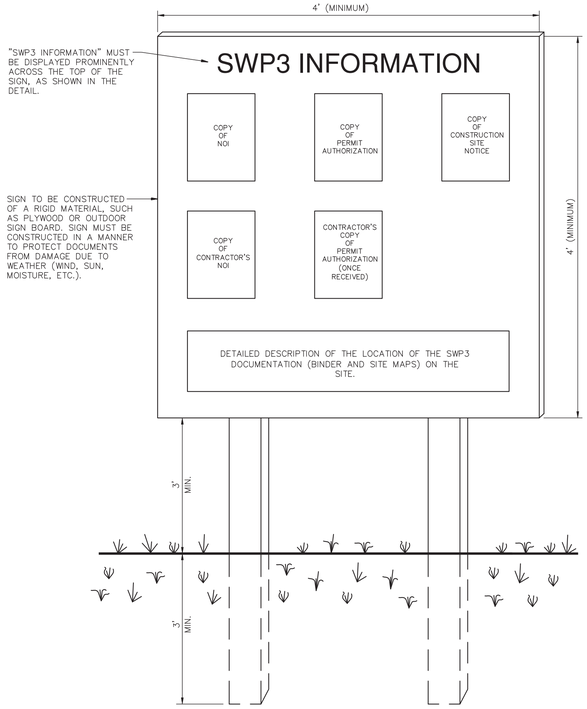
		Test Method	Units	Supported[a] Silt Fence	Unsupported[a] Silt Fence	Type of Value
Grab Strength		ASTM D 4632	N (lbs)			
	Machine Direction			400 (90)	550 (90)	MARV
	X–Machine Direction			400 (90)	450 (90)	MARV
Permittivity[b]		ASTM D 4491	sec–1	0.05	0.05	MARV
Apparent Opening Size[b]		ASTM D 4751	mm (US Sieve #)	0.60 (30)	0.60 (30)	Max. ARV[c]
Ultraviolet Stability		ASTM D 4355	% Retained Strength	70% after 500 h of exposure	70% after 500 h of exposure	Typical

[a]Silt fence support shall consist of 14 gage steel wire with a mesh spacing of 150 mm (6 in.) or prefabricated polymer mesh of equivalent strength.
[b]These default values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests in accordance with Test Method D 5141 should be performed by the agency to confirm suitability of these requirements.
[c]As measured in accordance with Test Method D 4632.

TABLE 1 TAKEN FROM ASTM D 6461–99 (2007)

NON–WIRE BACKED SLICING METHOD FOR SILT FENCE INSTALLATION
N.T.S. (SF)

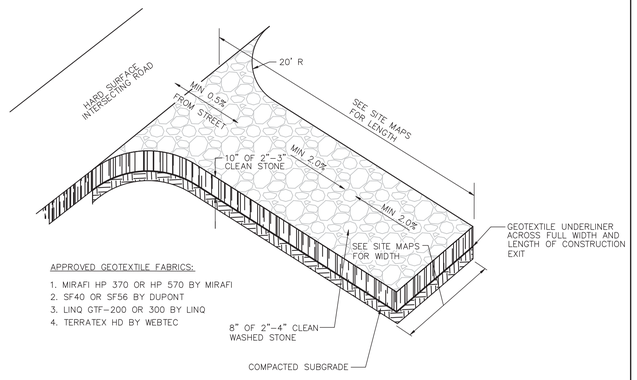
SILT FENCE



NOTES:
1) THE SWP3 INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE–OF–TERMINATION (NOT) IS FILED FOR THE PERMIT.
3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT–OF–WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWP3 INFORMATION SIGN.

SWP3 INFORMATION SIGN
N.T.S.

SWP3 INFORMATION SIGN

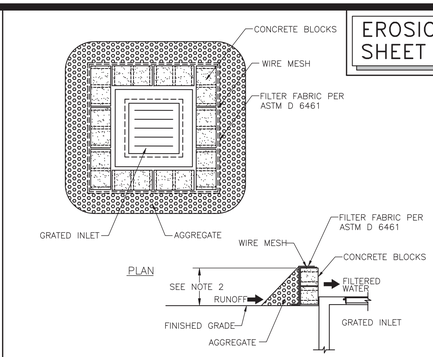


APPROVED GEOTEXTILE FABRICS:

1. MIRAFI HP 370 OR HP 570 BY MIRAFI
2. SF40 OR SF56 BY DUPONT
3. LINQ GTF–200 OR 300 BY LINQ
4. TERRATEX HD BY WEBTEC

CONSTRUCTION EXIT
N.T.S. (CE)

CONSTRUCTION EXIT



NOTES:

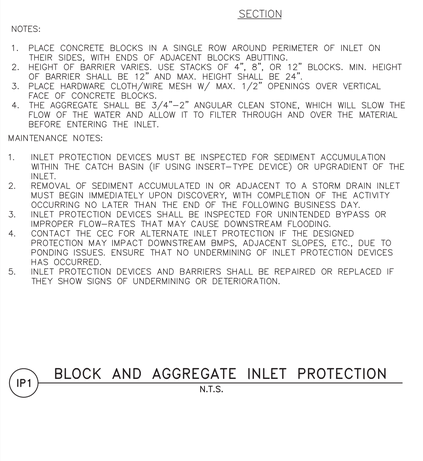
1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. MIN. HEIGHT OF BARRIER SHALL BE 12" AND MAX. HEIGHT SHALL BE 24".
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE 3/4"–2" ANGULAR CLEAN STONE, WHICH WILL SLOW THE FLOW OF THE WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT–TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW–RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

IP1 BLOCK AND AGGREGATE INLET PROTECTION
N.T.S.

BLOCK AND AGGREGATE CURB INLET PROTECTION



NOTES:

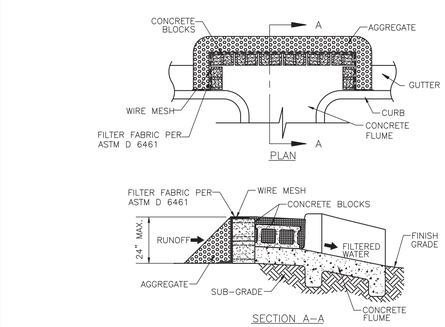
1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF CURB INLET ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. TOP OF BARRIER MUST BE LOWER THAN TOP OF CURB ELEVATIONS ADJACENT TO INLET. MAX. HEIGHT SHALL BE 24".
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE 3/4" – 2" ANGULAR CLEAN STONE WHICH WILL SLOW THE FLOW OF WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE INLET.
5. IF ROAD OR PARKING AREA IS OPEN TO PUBLIC, VERIFY SUITABILITY OF BMP WITH AGENCIES HAVING JURISDICTION AND WITH CEC.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT–TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW–RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

IP2 BLOCK AND AGGREGATE CURB INLET PROTECTION
N.T.S.

BLOCK AND AGGREGATE CURB INLET PROTECTION



NOTES:

1. PLACE CONCRETE BLOCKS IN A SINGLE ROW AROUND PERIMETER OF FLUME ON THEIR SIDES, WITH ENDS OF ADJACENT BLOCKS ABUTTING.
2. HEIGHT OF BARRIER VARIES. USE STACKS OF 4", 8", OR 12" BLOCKS. TOP OF BARRIER MUST BE LOWER THAN TOP OF CURB ELEVATIONS ADJACENT TO FLUME. MAX. HEIGHT SHALL BE 24".
3. PLACE HARDWARE CLOTH/WIRE MESH W/ MAX. 1/2" OPENINGS OVER VERTICAL FACE OF CONCRETE BLOCKS.
4. THE AGGREGATE SHALL BE 3/4" – 2" ANGULAR CLEAN STONE WHICH WILL SLOW THE FLOW OF WATER AND ALLOW IT TO FILTER THROUGH AND OVER THE MATERIAL BEFORE ENTERING THE FLUME.
5. IF ROAD OR PARKING AREA IS OPEN TO PUBLIC, VERIFY SUITABILITY OF BMP WITH AGENCIES HAVING JURISDICTION AND WITH CEC.

MAINTENANCE NOTES:

1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT–TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW–RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE CEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPS, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

IP3 BLOCK AND AGGREGATE FLUME PROTECTION
N.T.S.

BLOCK AND AGGREGATE FLUME PROTECTION

EROSION CONTROL DETAILS,
SHEET 4 OF 5, MUST BE POSTED IN JOB TRAILER.

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882–1701

EROSION CONTROL DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7088 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3204

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
07/11

OWNER
COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
(417) 882–1701

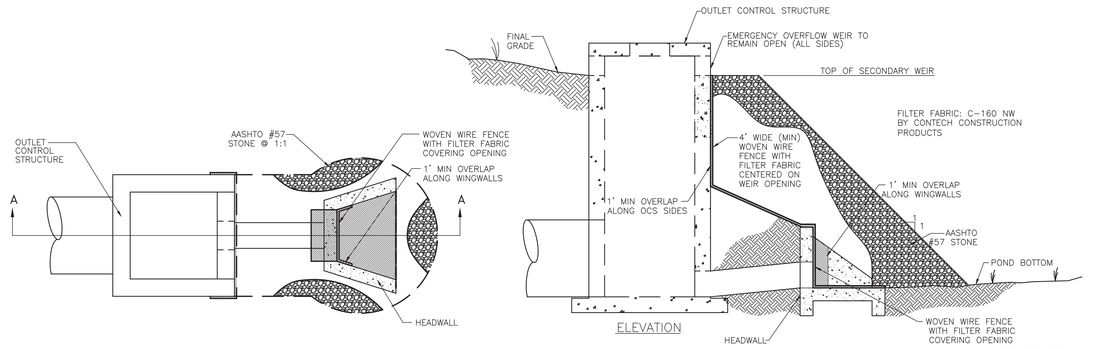
SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	7 OF 25 SHEET

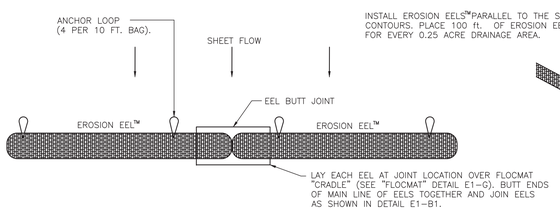
EROSION CONTROL DETAILS,
SHEET 5 OF 5, MUST BE POSTED IN JOB TRAILER.



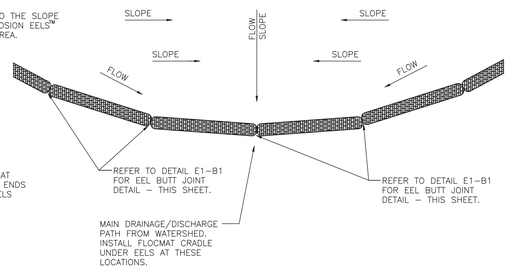
LAST REVISED: JUNE 27, 2013 | CONSULTANT DETAIL

GRAVEL & WIRE MESH OCS
SEDIMENT FILTER WITH HEADWALL
NTS
(IP7A)

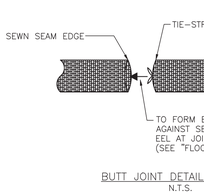
OCS SEDIMENT FILTER WITH HEADWALL



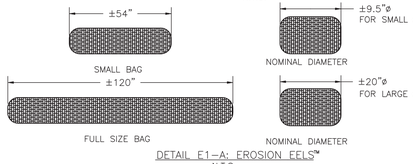
DETAIL E1-B: INTERCEPTING SHEET FLOW
PERPENDICULAR TO FLOW PATH - PLAN VIEW
N.T.S.



DETAIL E1-F: PLAN VIEW - TYPICAL
ARRANGEMENT OF EELS USED FOR PERIMETER CONTROL
N.T.S.

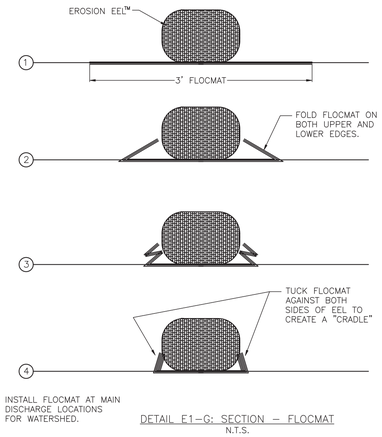


BUTT JOINT DETAIL E1-B1
N.T.S.



NOTE:
ALL EROSION EELS™ USED FOR PERIMETER CONTROL SHALL USE MIXTURE SPECIFICATIONS 1.0 AND 2.0

DETAIL E1-A: EROSION EELS™
N.T.S.



DETAIL E1-G: SECTION - FLOCMAT
N.T.S.

SPACING RECOMMENDATIONS FOR THE EROSION EEL™ FOR PERIMETER CONTROLS AND INTERCEPTING SHEET FLOW ON SLOPES

SLOPE(%)	SINGLE EEL SPACING(ft)
0.5	300
1	200
2	160
3	80
4	50
5	40
6	35
8	30
10	25
15	+17
20	+12
25	N/A
33	N/A
50	N/A

CONTACT INFORMATION

FRIENDLY ENVIRONMENT
100 PRINCE STREET
SHELBYVILLE, TN 37160
1-866-H2O-EELS
INFO@FRIENDLYENVIRONMENTUS.COM
http://FRIENDLYENVIRONMENTUS.COM

SOURCE BOX

LAST REVISED:	CEC STANDARD DETAIL
OCTOBER 2012	

GENERAL NOTES

1. EROSION EELS™ USED IN PERIMETER CONTROL APPLICATIONS SHALL HAVE A SPECIFICATION MIXTURE 1.0 OR 2.0.
   A. MIXTURE SPECIFICATION 1.0. A FILTER MATERIAL COMPRISED OF 100% RUBBER SHREDS. THE RUBBER SHALL BE DERIVED FROM RECYCLED TIRES AND SHALL BE SHREDDED TO PRODUCE A MAXIMUM PARTICLE SIZE OF +/- 3/4 INCH.
   B. MIXTURE SPECIFICATION 2.0. A FILTER MIXTURE COMPRISED OF 100% SHREDDED RUBBER DERIVED FROM RECYCLED TIRES. MAXIMUM PARTICLE SIZE IS ±2 INCHES.
2. LENGTHS OF EROSION EELS™ SHALL BE EITHER A NOMINAL +/-10 FT. OR +/- 4.5 FT. NOMINAL DIAMETER SHALL BE +/-9.5 INCHES FOR PERIMETER CONTROLS AND +/-20 INCHES FOR CHECK DAM APPLICATIONS.
3. EROSION EELS™ CAN BE PLACED AT THE TOP, ON THE FACE, OR AT THE TOE OF SLOPES TO INTERCEPT RUNOFF, REDUCE FLOW VELOCITY, RELEASE THE RUNOFF AS SHEET FLOW AND PROVIDE REMOVAL OF SEDIMENT FROM THE RUNOFF.
4. EROSION EELS™ SHALL BE INSTALLED ALONG THE GROUND CONTOUR, AT THE TOE OF SLOPES, AT AN ANGLE TO THE CONTOUR TO DIRECT FLOW AS A DIVERSION BERM, AROUND INLET STRUCTURES, IN A DITCH AS A CHECK DAM TO HELP REDUCE SUSPENDED SOLIDS LOADING AND RETAIN SEDIMENT, OR AS A GENERAL FILTER FOR ANY DISTURBED SOIL AREA.
5. NO TRENCHING IS REQUIRED FOR INSTALLATION OF EROSION EELS™.
6. PREPARE BED FOR EEL INSTALLATION BY REMOVING ANY LARGE DEBRIS INCLUDING ROCKS, SOIL CLODS, AND WOODY VEGETATION. EROSION EELS™ CAN ALSO BE PLACED OVER PAVED SURFACES INCLUDING CONCRETE AND ASPHALT WITH NO SURFACE PREPARATION REQUIRED.
7. RAKE BED AREA WITH A HAND RAKE OR BY DRAG HARROW.
8. DO NOT PLACE EEL DIRECTLY OVER RILL AND GULLIES UNTIL AREA HAS BEEN HAND-EXCAVATED AND RAKED TO PROVIDE A LEVEL BEDDING SURFACE. ALL SURFACES SHALL BE UNIFORMLY COMPACTED FOR MAXIMUM SEATING OF EELS IN PLACE.
9. FOR LOCATIONS WHERE EELS WILL BE PLACED IN CONCENTRATED FLOWS (SUCH AS CHECK DAMS, INLET PROTECTION) AND FOR PERIMETER CONTROLS, BED THE EELS IN A FLOCMAT CRADLE PER THE DETAILED DRAWINGS.
10. FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE AREA SHALL BE 10 ACRES.
11. IF MORE THAN ONE EROSION EEL™ IS PLACED IN A ROW, PREPARE JOINTS PER DETAIL E1-B1.
12. EROSION EELS™ SHALL REMAIN IN PLACE UNTIL FULLY ESTABLISHED VEGETATION HAS COMPLETELY DEVELOPED OR UNTIL THE STORAGE CAPACITY/FUNCTIONAL LIFE OF THE EEL HAS BEEN EXHAUSTED (REQUIRING REPLACEMENT WITH NEW EELS).
13. ANCHORING POSTS FOR CHECK DAM APPLICATIONS SHALL HAVE A MINIMUM WEIGHT OF 1.25 LBS/FT STEEL T-POSTS (5 TO 7 FT. LENGTHS) ROLLED FROM HIGH CARBON STEEL. POSTS SHOULD BE HOT-DIP GALVANIZED OR COATED WITH A WEATHER-RESISTANT PAINT FOR STEEL APPLICATION. POSTS SHOULD BE EQUIPPED WITH A METAL ANCHOR PLATE.
14. PLACE T-POSTS THROUGH HANDLE OF BAGS. DO NOT DRIVE POSTS THROUGH EROSION EELS™. T-POSTS ARE TO BE EMBEDDED A MINIMUM OF 3 FT. INTO GROUND ON STEEP SLOPES GREATER THAN 25%.

EE EROSION EEL
N.T.S.

OWNER
COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
(417) 882-1701

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

IMPORTANT: GC MUST SIGN ALL SHEETS AND ANY NEW PLAN SHEETS ISSUED BY THE CEC.

EROSION EEL

NO	REVISIONS

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SPRINGFIELD, MO 65804
PH. (417) 882-1701

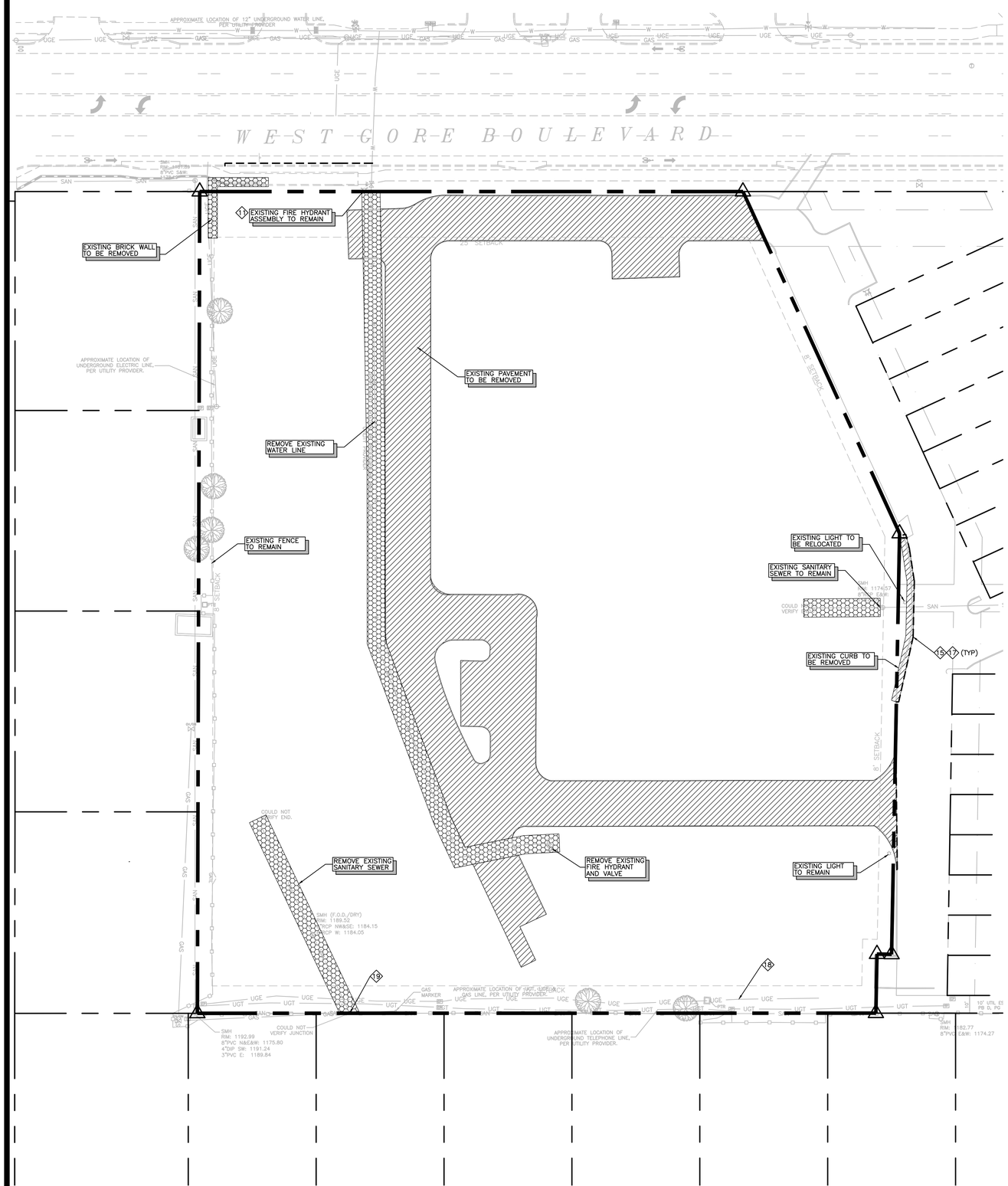
EROSION CONTROL DETAILS

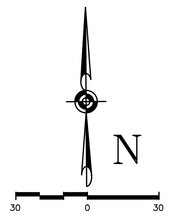
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

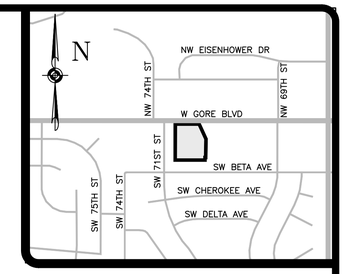
CARLSON CONSULTING ENGINEERS, INC.
7066 Ledgestone Commons
Bixby, OK 74008
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	8 OF 25 SHEET







LEGEND

– SAWCUT

– EXISTING PAVEMENT/CURB AND GUTTER TO BE REMOVED

– EXISTING UTILITIES AND APPURTENANCES TO BE REMOVED

NOTES:

1. THIS PLAN IS INTENDED TO GIVE AN OVERVIEW OF THE DEMOLITION WORK REQUIRED FOR THE CONSTRUCTION. IT HAS BEEN PREPARED FROM THE PROJECT SURVEY AND SHOWS ITEMS REPRESENTED ON THE SURVEY. IT DOES NOT, HOWEVER, NECESSARILY REPRESENT ALL ITEMS PRESENT IN THE FIELD. THE INTENT OF THIS DRAWING IS TO REMOVE/RELOCATE ALL ITEMS WHICH CONFLICT WITH THE PLANNED IMPROVEMENTS. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE TO THE LEVEL NECESSARY TO INCLUDE THIS WORK IN THE BASE BID.
2. ALL SITEWORK FOR THIS PROJECT SHALL MEET OR EXCEED THE "SITE SPECIFIC SPECIFICATIONS."
3. ALL NECESSARY INSPECTIONS, APPROVALS, AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR AUTHORITIES SHALL BE COMPLETED PRIOR TO THE ANNOUNCED BUILDING POSSESSION AND THE FINAL CERTIFICATION OF SERVICES.
4. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON–SITE OR OFF–SITE ITEMS THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.
5. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROTECT THE PUBLIC AT ALL TIMES. FENCING, BARRICADES, ENCLOSURES, BARRELS, ETC. SHALL BE USED IN THE BEST POSSIBLE MANNER.
6. ALL VOIDS SHALL BE FILLED IN ACCORDANCE WITH THE SPECIFICATIONS.
7. SEE OTHER PLAN SHEETS FOR PLANNED IMPROVEMENTS.
8. THE CONTRACTOR SHALL DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIAL RESULTING FROM DEMOLITION ACTIVITIES IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ANY UTILITY COMPANY WHICH MAINTAINS A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY FOR ANY DAMAGE, INCURRED BY ANY UTILITY COMPANY, TO THEIR LINES AS A RESULT OF HIS ACTIVITIES, WHETHER THESE LINES ARE SHOWN ON THE CONSTRUCTION PLANS OR NOT.
10. ALL SOLID WASTE MATERIALS, INCLUDING WITHOUT LIMITATION, HOUSEHOLD TRASH, USED TIRES, CONSTRUCTION DEBRIS, ETC. SHALL BE PROPERLY DISPOSED OF IN A SOLID WASTE LANDFILL.
11. CONTRACTOR TO CAP AND PLUG EXISTING WATER SERVICE AT EXISTING CONNECTION TO PUBLIC MAIN. CONTRACTOR SHALL REMOVE EXISTING FIRE LINES FROM THE SITE.
12. REFER TO UTILITY, GRADING, THIS SET, FOR ADDITIONAL INFORMATION REGARDING REMOVAL/RELOCATION OF EXISTING UTILITY LINES CONFLICTING WITH PROPOSED IMPROVEMENTS.
13. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN PERFORMING CONSTRUCTION ACTIVITIES IN THE VICINITY OF EXISTING UTILITIES. EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE RELOCATED OR ADJUSTED IN PLACE TO MEET THE SEPARATION AND MINIMUM REQUIREMENTS ESTABLISHED BY ALL APPLICABLE CODES. ANY COSTS ASSOCIATED WITH THIS WORK SHALL BE IN THE CONTRACTOR'S BID FOR THE PROJECT.
14. CONTRACTOR SHALL KEEP ALL EXISTING PARKING, SIDEWALKS, DRIVES, ETC. OUTSIDE THE PROJECT LIMITS CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL.
15. LIMITS OF DEMOLITION AND SAWCUT SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS ONLY. CONTRACTOR IS RESPONSIBLE FOR SAWCUTTING AND REMOVING EXISTING SITE ITEMS AS NECESSARY TO REMOVE/INSTALL ALL ITEMS ASSOCIATED WITH THIS PROJECT. BY SUBMITTING A BID FOR THIS PROJECT, THE CONTRACTOR ACKNOWLEDGES THIS LIMITATION AND ENSURES THAT ADEQUATE FUNDS HAVE BEEN INCLUDED TO ADDRESS THIS SITUATION.
16. CONTRACTOR SHALL CONTACT 811 FOR LOCATION OF ALL UTILITIES, AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
17. THE CONTRACTOR SHALL SAWCUT ALONG EDGE OF PAVEMENT REMOVAL LIMITS TO ENSURE CLEAN, STRAIGHT JOINT BETWEEN OLD AND NEW PAVING SECTIONS.
18. EXISTING UTILITY LINES TO REMAIN UNLESS NOTED OTHERWISE.
19. WHERE INDICATED ON THE DRAWING, CONTRACTOR SHALL PERMANENTLY PLUG INVERTS OF OF EXISTING SANITARY SEWER AND STORM SEWER LINES TO BE REMOVED.



CAUTION – NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, APPURTENANCES AND IMPROVEMENTS WHICH CONFLICT WITH THE IMPROVEMENTS SHOWN BY THESE PLANS.

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
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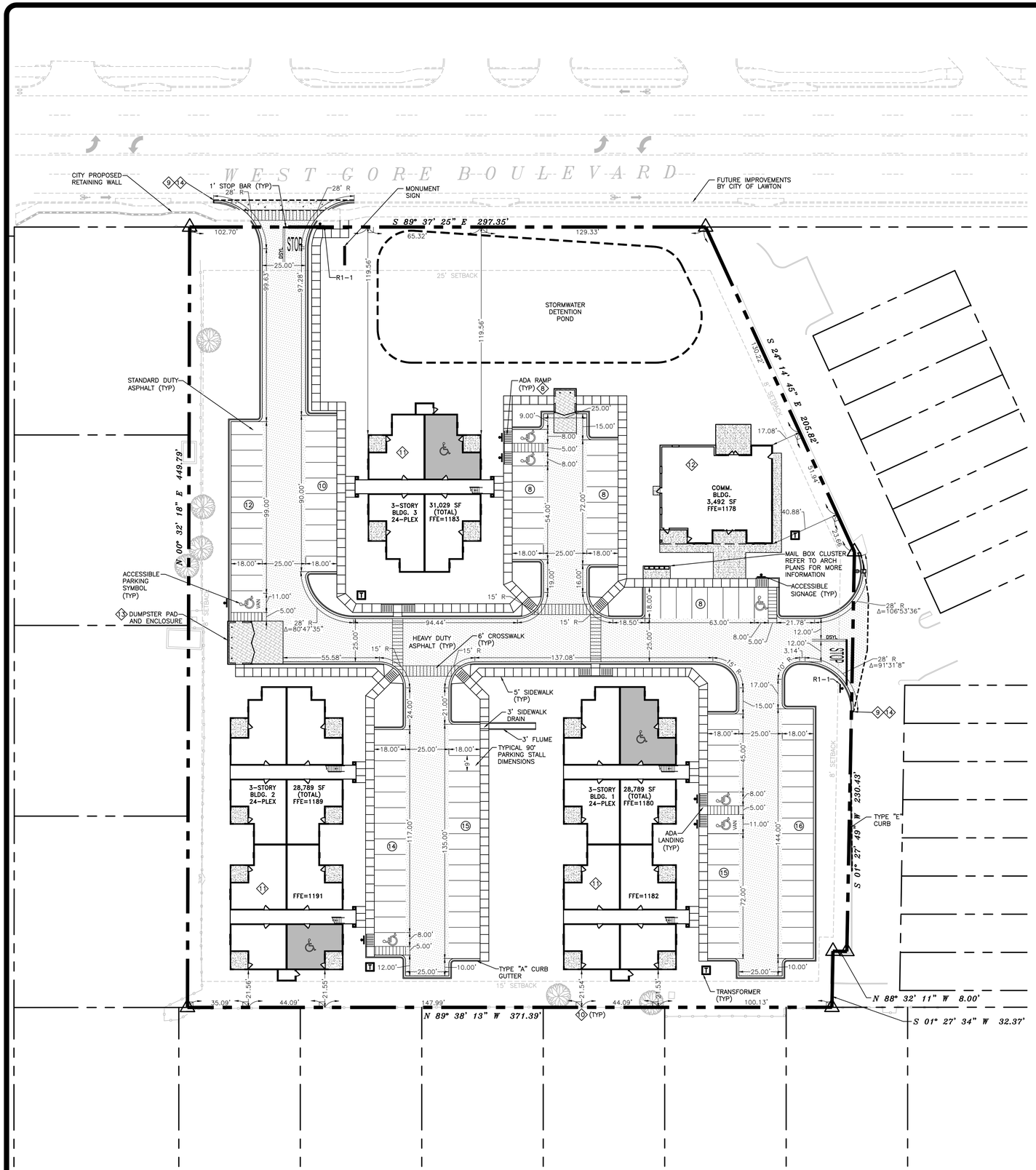
DEMOLITION PLAN

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3204

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
08/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	1" = 30'
JOB No.	N/A
SHEET	9 OF 25 SHEET

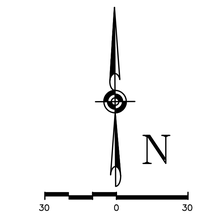


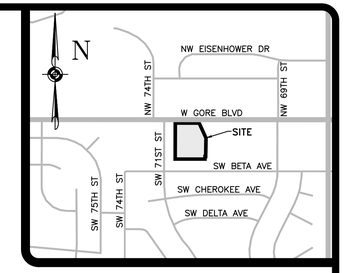
SITE INFORMATION

LAND AREA:	3.76 AC (TOTAL)
EXISTING USE:	VACANT
CURRENT ZONING:	R-4 (HIGH-DENSITY APARTMENT DISTRICT)
PROPOSED USE:	MULTI-FAMILY RESIDENTIAL
PROPOSED ZONING:	N/A

LOT INFORMATION

REGULATIONS WITHIN THE R-4 DISTRICT	
MINIMUM LOT AREA:	7,500 SF
MINIMUM LOT WIDTH:	100 FEET
MINIMUM FRONT YARD:	25 FEET
MINIMUM REAR YARD:	15 FEET
MINIMUM SIDE YARD:	8 FEET
PARKING REQUIRED:	106 SPACES
PARKING COUNT:	106 SPACES





LEGEND

- PROPERTY LINE
- BUILDING SIDEWALK/PATIO
- HEAVY DUTY ASPHALT
- STANDARD DUTY ASPHALT
- DUMPSTER PAD
- HEAVY DUTY CONCRETE
- ACCESSIBLE PARKING SYMBOL
- 6" RAISED CONCRETE CURB
- (XX) PARKING COUNT
- SIGN
- T TRANSFORMER PAD
- DSYL DOUBLE SOLID YELLOW LINE

◇ NOTES:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY OF LAWTON REGULATIONS AND CODES, O.S.H.A. STANDARDS, AND PROJECT SPECIFICATIONS. MOST STRINGENT REQUIREMENTS SHALL GOVERN.
2. CONTRACTOR SHALL REFER TO THE BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF STOOP, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
3. ALL SODDED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL. WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. REFER TO PLANTING PLAN, THIS SET, FOR ADDITIONAL INFORMATION.
4. ALL RADII ARE 3' AND ALL DELTA ANGLES ARE 90° U.N.O.
5. ALL NECESSARY INSPECTIONS, APPROVALS, AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR AUTHORITIES SHALL BE COMPLETED PRIOR TO THE ANNOUNCED BUILDING POSSESSION AND THE FINAL CERTIFICATION OF SERVICES.
6. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF THE EXISTING CONDITIONS OF THE SITE, AND OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE HIM OF ANY RESPONSIBILITY FOR PERFORMING HIS WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO THE FAILURE OF THE GENERAL CONTRACTOR TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.
7. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN PERFORMING CONSTRUCTION ACTIVITIES IN THE VICINITY OF EXISTING UTILITIES. EXISTING UTILITIES THAT CONFLICT WITH THE PLANNED IMPROVEMENTS SHALL BE RELOCATED OR LOWERED IN PLACE BY THE CONTRACTOR TO MEET THE SEPARATION AND MINIMUM REQUIREMENTS ESTABLISHED BY LOCAL CODE. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER A MINIMUM OF 72 HOURS PRIOR TO ANY PLANNED DISRUPTION TO UTILITY SERVICES. TEMPORARY UTILITY SERVICES SHALL BE USED IF REQUIRED. ANY COSTS ASSOCIATED WITH THIS WORK SHALL BE IN THE CONTRACTOR'S LUMP SUM PRICE FOR THE OVERALL PROJECT.
8. 7' RAMP TO EITHER SIDE OF ADA LANDING.
9. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT AS SHOWN TO ALLOW FOR A CLEAN, STRAIGHT JOINT BETWEEN OLD AND NEW SURFACES. CONTRACTORS SHALL REMOVE ALL PAVEMENT LOOSE MATERIALS, CURBING, ETC. WITHIN SAWCUT LIMITS OF CONSTRUCTION.
10. BUILDING TIES SHOWN FROM THE CORNER OF THE BUILDING TO A POINT PERPENDICULAR TO THE PROPERTY LINE.
11. APARTMENT BUILDINGS SHALL BE EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
12. COMMUNITY BUILDING WILL NOT BE EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM.
13. REFERENCE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION REGARDING THE DUMPSTER PAD ENCLOSURE.
14. CONNECT TO EXISTING CONCRETE PAVEMENT WITH CONSTRUCTION JOINT. REFER TO CONCRETE JOINT DETAIL, THIS SET, FOR MORE INFORMATION.
15. STOP BAR SHALL BE PLACED 4' IN ADVANCE OF THE CROSSWALK.

NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT DAMAGE TO EXISTING ROADWAYS AND INFRASTRUCTURE. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON-SITE OR OFF-SITE ITEMS INCLUDING RELATED APPURTENANCES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC AND CONSTRUCTION MANAGER. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND CONSTRUCTION MANAGER HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.

WEST GORE BOULEVARD IMPROVEMENTS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ROAD AND DRAINAGE IMPROVEMENTS TO WEST GORE BOULEVARD WILL BE UNDER ACTIVE CONSTRUCTION DURING PROJECT CONSTRUCTION. IMPROVEMENTS IN THESE AREAS HAVE BEEN INCORPORATED INTO THE SITE DEVELOPMENT PLANS BASED UPON INFORMATION OBTAINED FROM THE CITY OF LAWTON. PRIOR TO BEGINNING WORK IN THESE AREAS, THE CONTRACTOR SHOULD FIELD VERIFY THE IMPROVEMENTS INSTALLED BY THE CITY OF LAWTON TO MATCH THOSE SHOWN ON THESE PLANS. IF ANY DISCREPANCIES ARE IDENTIFIED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY CARLSON CONSULTING ENGINEERS.

BEFORE YOU DIG 811 CALL OKIE

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
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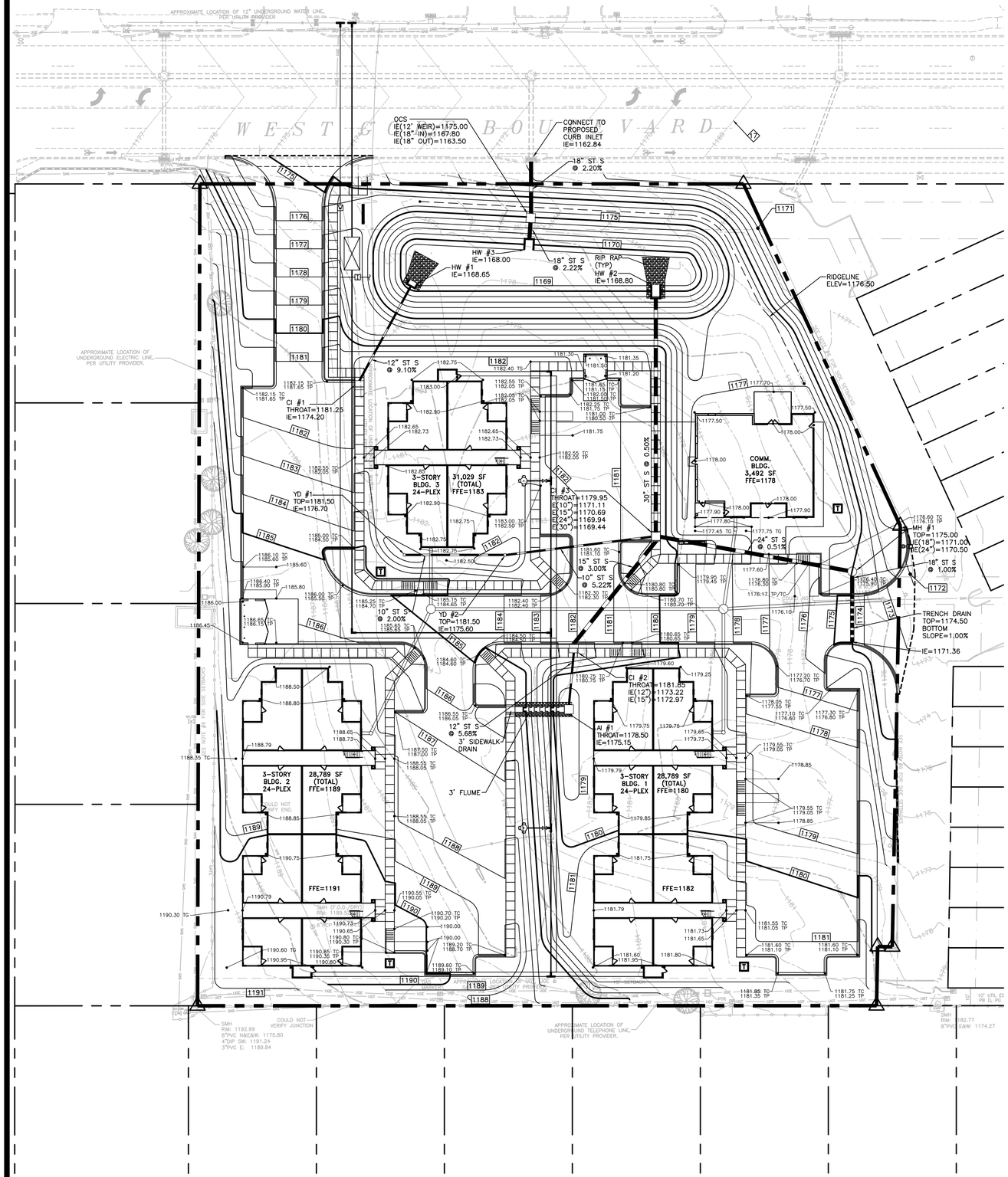
SITE PLAN

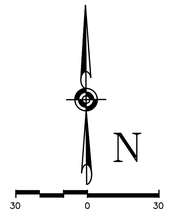
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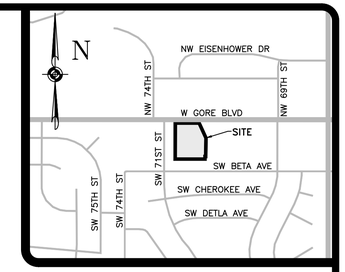
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SHEET	10 OF 25 SHEET







LEGEND

- PROPERTY LINE
- STORM SEWER
- CURB INLET/AREA INLET
- HEADWALL
- RIP-RAP
- XXX.XX – SPOT ELEVATION
- HP – HIGH POINT
- TC – TOP OF CURB
- TG – TOP OF GROUND
- TP – TOP OF PAVEMENT
- TS – TOP OF SIDEWALK

◇ NOTES:

1. ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SOD AND/OR LANDSCAPING. WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. REFER TO PLANTING PLAN, THIS SET, FOR ADDITIONAL INFORMATION.
2. PRECAST STRUCTURES SHALL BE USED UNLESS OTHERWISE APPROVED BY CEC.
3. ACCEPTABLE STORM SEWER MATERIALS (THERE WILL BE NO SUBSTITUTIONS ALLOWED FOR PIPES SHOWN TO BE RCP)
   1) REINFORCED CONCRETE PIPE
   2) SPIRAL RIB METAL PIPE
   3) CORRUGATED POLYETHYLENE (N-12)
   4) POLYVINYL CHLORIDE (PVC) – ONLY PERMITTED IN 15" DIAMETER OR LESS.
4. SLOPES WITHIN ALL ADA STALLS AND ACCESS AISLES SHALL NOT EXCEED 1:50 IN ALL DIRECTIONS.
5. SLOPE ON ALL ADA ACCESSIBLE ROUTES SHALL NOT EXCEED 1:20. CROSS SLOPE OF ADA ROUTES SHALL NOT EXCEED 1:50.
6. THE CONTRACTOR SHALL HAVE ANY RIGHT-OF-WAY MONUMENTS LOCATED BY A LICENSED SURVEYOR PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES WITHIN THE RIGHT-OF-WAY. ANY MONUMENTS WHICH ARE DESTROYED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED.
7. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION ON DUMPSTER ENCLOSURE.
8. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
9. ALL STORM SEWER MANHOLES AND CATCH BASINS SHALL BE FLUSH WITH FINAL GRADE; AND SHALL HAVE TRAFFIC BEARING RING AND COVERS OR GRATES. LIDS SHALL BE LABELED "STORM SEWER".
10. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
11. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.
12. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
13. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
14. AN ORIFICE PLATE SHALL BE INSTALLED ON THE INLET HEADWALL AS SHOWN ON THE OUTLET CONTROL STRUCTURE DETAIL.
15. THROAT ELEVATIONS SHOWN ON CURB INLETS INCLUDE 3" SUMP U.N.O.
16. RIP-RAP PADS WILL BE PLACED IN ACCORDANCE WITH THE SIZES INDICATED ON THIS PLAN AND SHOWN ON THE DETAIL SHEETS.
17. FUTURE CONTOURS ALONG WEST GORE BOULEVARD ARE BASED ON ROAD PLAN AND PROFILE FROM WEST GORE BOULEVARD CITY STREET CONSTRUCTION PLAN DATED 02/10/2021.

NOTICE TO CONTRACTOR

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE DAMAGE TO EXISTING ITEMS TO REMAIN DOES NOT OCCUR. THESE PRECAUTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO USE OF LIGHTLY LOADED EQUIPMENT IN ORDER TO PREVENT DAMAGE TO EXISTING ROADWAYS AND INFRASTRUCTURE. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY EXISTING ON-SITE OR OFF-SITE ITEMS INCLUDING RELATED APPURTENANCES THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE. THOSE ITEMS INCLUDE, BUT ARE NOT LIMITED TO DRAINAGE SYSTEMS, UTILITIES, CURBING, PAVEMENT, LANDSCAPING, IRRIGATION SYSTEMS, FENCING, RETAINING WALLS, PUBLIC ROADWAYS, ETC. REPAIRS SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS, AND SHALL BE TO THE SATISFACTION OF THE OWNER OF THE REPAIRED ITEM. PRIOR TO MAKING ANY REPAIRS, THE CONTRACTOR SHALL SUBMIT DETAILED REPAIR METHODOLOGY TO THE CEC AND CONSTRUCTION MANAGER. REPAIRS SHALL NOT BEGIN UNTIL WRITTEN APPROVAL FROM THE CEC AND CONSTRUCTION MANAGER HAS BEEN ISSUED. CONTRACTOR SHALL DOCUMENT ANY EXISTING DAMAGE WITH PHOTOS, VIDEOS, ETC., AND NOTIFY THE CONSTRUCTION MANAGER PRIOR TO COMMENCING CONSTRUCTION IN THE AREA OF THE EXISTING DAMAGED ITEM.

WEST GORE BOULEVARD IMPROVEMENTS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ROAD AND DRAINAGE IMPROVEMENTS TO WEST GORE BOULEVARD WILL BE UNDER ACTIVE CONSTRUCTION DURING PROJECT CONSTRUCTION. IMPROVEMENTS IN THESE AREAS HAVE BEEN INCORPORATED INTO THE SITE DEVELOPMENT PLANS BASED UPON INFORMATION OBTAINED FROM THE CITY OF LAWTON. PRIOR TO BEGINNING WORK IN THESE AREAS, THE CONTRACTOR SHOULD FIELD VERIFY THE IMPROVEMENTS INSTALLED BY THE CITY OF LAWTON TO MATCH THOSE SHOWN ON THESE PLANS. IF ANY DISCREPANCIES ARE IDENTIFIED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY CARLSON CONSULTING ENGINEERS.

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NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

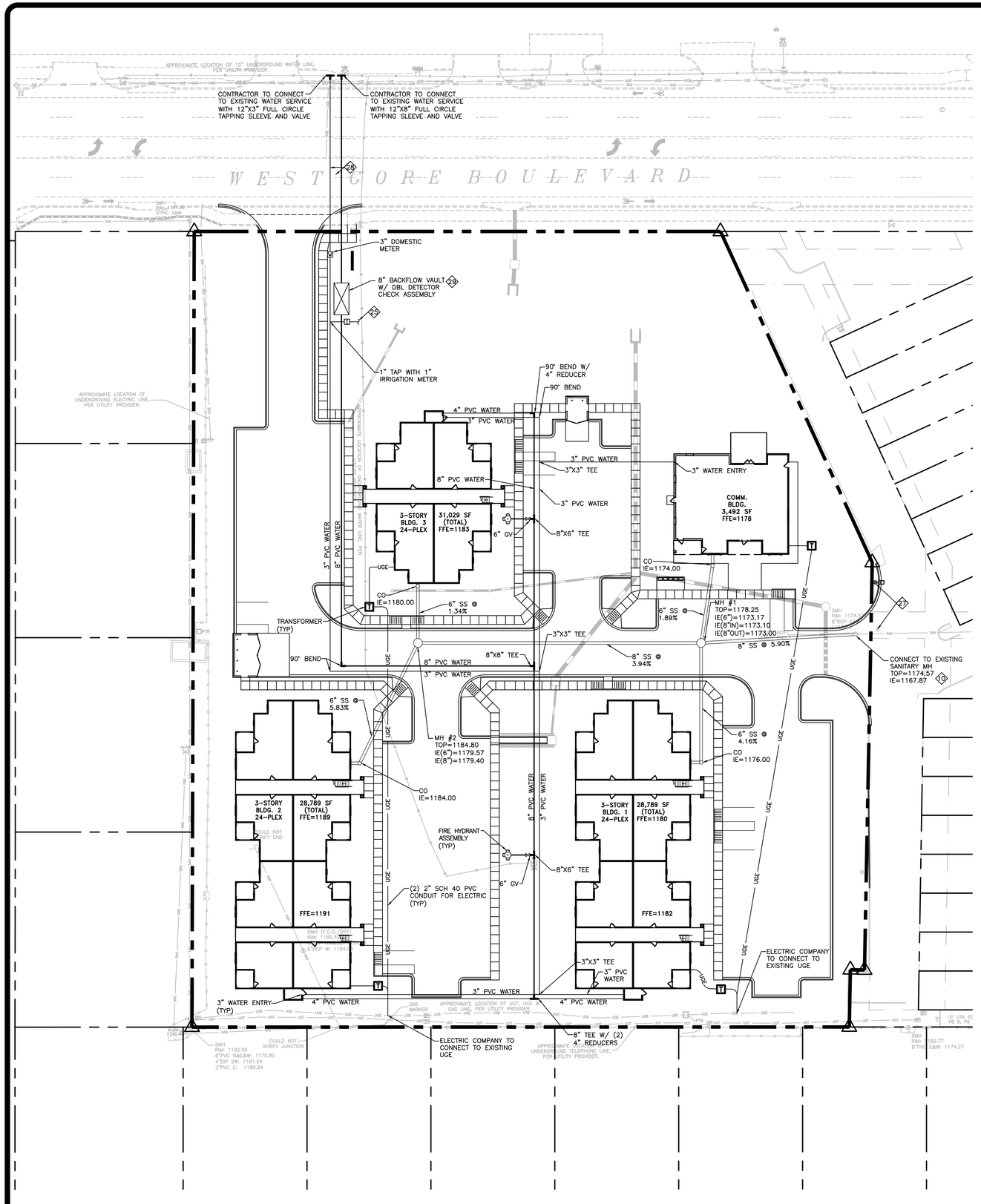
GRADING PLAN

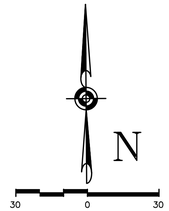
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

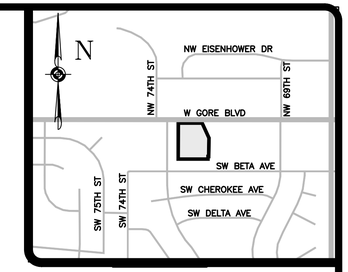
CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Rogersville, MO 65742
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Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3204

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
12/31/2022

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	1" = 30'
JOB No.	N/A
SHEET	11 OF 25 SHEET







LEGEND

- PROPERTY LINE
- UGE — UNDERGROUND ELECTRIC
- SANITARY SEWER
- CLEANOUT
- MANHOLE
- WATER LINE (6" OR GREATER)
- WATER LINE (LESS THAN 6")
- FIRE HYDRANT
- DOMESTIC WATER METER
- IRRIGATION WATER METER

UTILITY SERVICE NOTES:

ELECTRIC SERVICE

- CONTRACTOR TO INSTALL SECONDARY CABLE AND CONDUITS FOR INSTALLATION.
- ELECTRIC COMPANY TO INSTALL NEW TRANSFORMERS AND TRANSFORMER PADS, AND MAKE ALL CONNECTIONS AT EXISTING UNDERGROUND LINES, TRANSFORMERS, AND METER BOX ON THE BUILDINGS.

CONTACT: PUBLIC SERVICE COMPANY OF OKLAHOMA
TELEPHONE: (888) 218-3919

WATER SERVICE

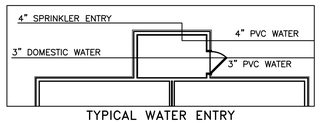
- CONTRACTOR TO PROVIDE AND INSTALL ALL WATER MAINS AND APPURTENANCES IN ACCORDANCE TO PLANS AND SPECIFICATIONS.
- CONTRACTOR TO INSTALL DOUBLE DETECTOR CHECK TYPE BACKFLOW PREVENTOR FOR THE FIRE LINE.
- CITY OF LAWTON TO PROVIDE AND INSTALL PROPOSED DOMESTIC AND IRRIGATION METERS.
- CONTRACTOR TO CONNECT TO EXISTING WATER LINE, PROVIDE ALL REDUCERS, TEES, AND BENDS REQUIRED TO SET THE METERS, INCLUDING THE CONCRETE METER BOX FOR BOTH THE DOMESTIC AND IRRIGATION METERS.

CONTACT: RUSTY WHISENHUNT, CITY OF LAWTON
TELEPHONE: (580) 581-3405

SANITARY SEWER

- CONTRACTOR TO PROVIDE AND INSTALL ALL SANITARY SEWER LINE AND APPURTENANCES IN ACCORDANCE TO PLANS AND SPECIFICATIONS.

CONTACT: CITY OF LAWTON
TELEPHONE: (580) 581-3405



TYPICAL WATER ENTRY
SCALE: 1" = 10'

NOTICE TO CONTRACTOR
IMMEDIATELY UPON AWARD OF PROJECT, CONTRACTOR SHALL CONTACT THE UTILITY COMPANIES TO PROVIDE ADEQUATE LEAD TIME AND TO COORDINATE THE INSTALLATION OF THE RESPECTIVE UTILITIES.

WEST GORE BOULEVARD IMPROVEMENTS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ROAD AND DRAINAGE IMPROVEMENTS TO WEST GORE BOULEVARD WILL BE UNDER ACTIVE CONSTRUCTION DURING PROJECT CONSTRUCTION. IMPROVEMENTS IN THESE AREAS HAVE BEEN INCORPORATED INTO THE SITE DEVELOPMENT PLANS BASED UPON INFORMATION OBTAINED FROM THE CITY OF LAWTON. PRIOR TO BEGINNING WORK IN THESE AREAS, THE CONTRACTOR SHOULD FIELD VERIFY THE IMPROVEMENTS INSTALLED BY THE CITY OF LAWTON TO MATCH THOSE SHOWN ON THESE PLANS. IF ANY DISCREPANCIES ARE IDENTIFIED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY CARLSON CONSULTING ENGINEERS.

◇ NOTES:

1. ALL UTILITIES SHALL BE INSTALLED IN A TRENCH CONDITION IN ACCORDANCE WITH THE UTILITY TRENCHING DETAIL, THIS SET.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS A MINIMUM OF 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED FROM APPROPRIATE UTILITY COMPANIES AND CONTRACTOR HAS BEEN NOTIFIED.
3. SANITARY SEWER PIPE MATERIAL SHALL BE IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
4. WATER LINE PIPE MATERIAL SHALL BE IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS.
5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
6. WATER AND SEWER LINES SHALL BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
7. CONTRACTOR SHALL MAINTAIN MINIMUM BURIAL DEPTHS AS REQUIRED BY THE UTILITY PROVIDER AND THE PROJECT SPECIFICATIONS.
8. SEE SURVEY FOR DESCRIPTION OF EXISTING EASEMENTS.
9. UTILITY LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
10. TOPS OF EXISTING MANHOLES, VALVES, PULL BOXES, ETC. SHALL BE ADJUSTED AS NECESSARY TO BE FLUSH WITH FINAL GRADE.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
12. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
13. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE CITY OF LAWTON SPECIFICATIONS FOR WATER AND SEWER MATERIALS AND INSTALLATION REQUIREMENTS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO SUBSTANTIAL COMPLETION.
16. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. ALL UTILITY CONSTRUCTION SHALL CONFORM WITH THE MOST STRINGENT REQUIREMENTS OF THE UTILITY COMPANY OR THE CITY OF LAWTON SPECIFICATIONS.
17. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
18. CONTRACTOR SHALL VERIFY AS-BUILT INVERT ELEVATION AND ADVISE ENGINEER OF ANY DISCREPANCIES.
19. CONTRACTOR SHALL NOT OPEN, TURN OFF, INTERFERE WITH, OR ATTACH ANY PIPE OR HOSE TO OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF ANY SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE LIABILITY OF THE CONTRACTOR.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING CONDUIT FOR UNDERGROUND UTILITIES AS PER THE UTILITY COMPANY REQUIREMENTS.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING PIPE BOLLARD PROTECTION AROUND UTILITY ENTRANCES AND METER LOCATIONS. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR EXACT REQUIREMENTS.
22. ALL TRANSFORMER PADS, TRANSFORMERS, PEDESTALS, AND METERS TO BE INSTALLED BY ELECTRIC COMPANY.
23. CONTRACTOR SHALL PROVIDE ADEQUATE COMPACTION AND BACKFILL, IF NECESSARY, IN ACCORDANCE WITH THE SPECIFICATIONS AFTER IMPROVEMENTS MADE BY UTILITY COMPANY.
24. ALL 6" SEWER LATERALS SHALL BE CONSTRUCTED AT A 1.00% MINIMUM SLOPE. INVERTS ON CLEANOUTS MAY BE LOWERED AS LONG AS MINIMUM SLOPES ARE MAINTAINED WITH A MINIMUM COVER OF 3.00'.
25. REFER TO IRRIGATION PLANS FOR CONTINUATION OF THIS LINE.
26. A LICENSED IRRIGATION CONTRACTOR SHALL INSTALL A TESTABLE DOUBLE CHECK VALVE IN A HOT BOX DOWNSTREAM OF THE IRRIGATION SERVICE METER. REF IRRIGATION PLAN FOR ADDITIONAL INFORMATION.
27. RELOCATE EXISTING FIXTURES AND POLE WITH NEW BASE. EXTEND SITE LIGHTING WIRING AND CONDUITS TO RELOCATED LIGHT. MATCH EXISTING IN KIND.
28. CONTRACTOR TO INSTALL WATER LINES UNDER WEST GORE BOULEBARD PRIOR TO ROAD IMPROVEMENTS OR INSTALL THE WATER LINES USING DIRECTIONAL BORE.
29. 8" WILKINS 350ADA DOUBLE DETECTOR CHECK ASSEMBLY (OR EQUIVALENT).

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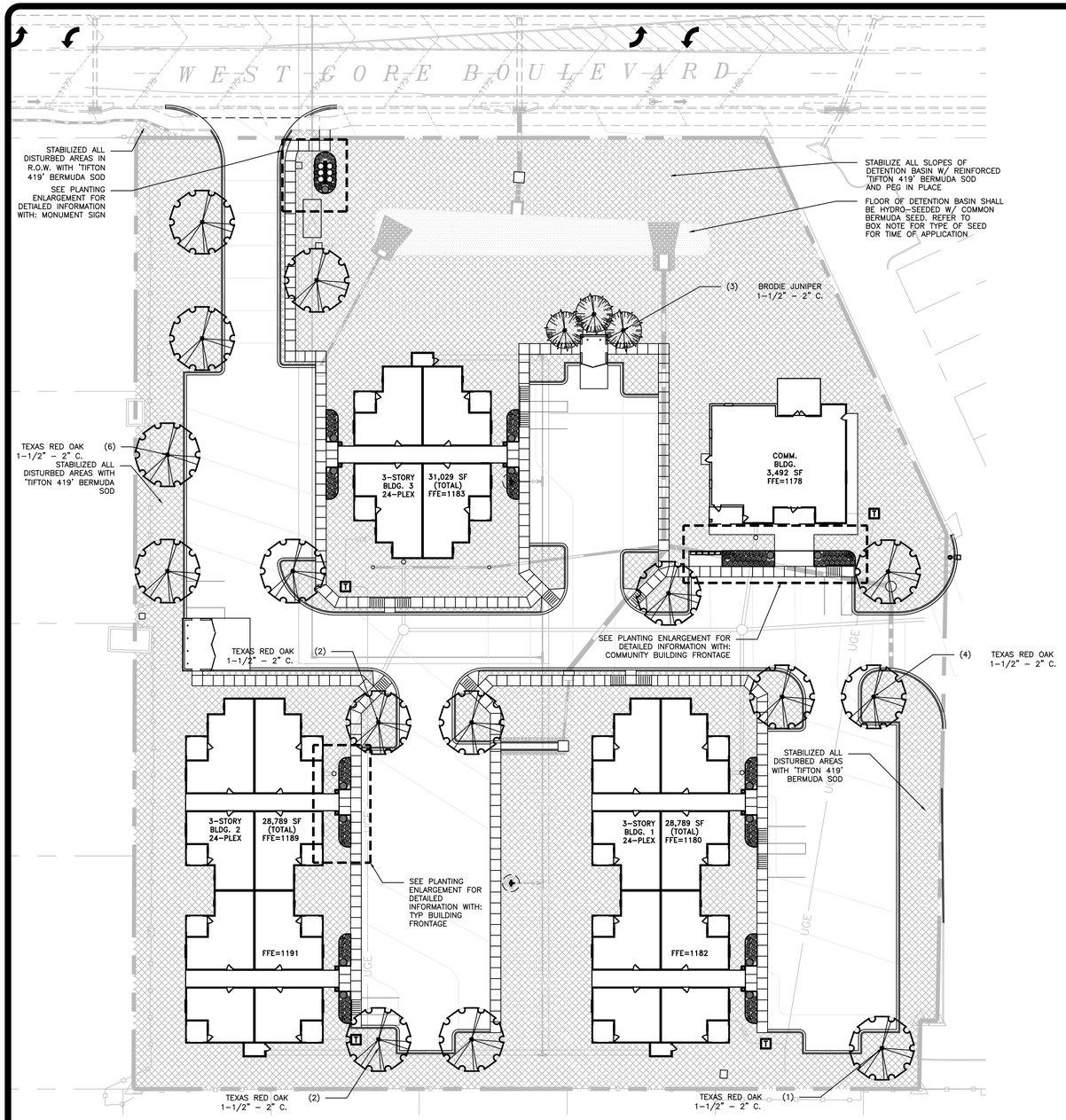
UTILITY PLAN

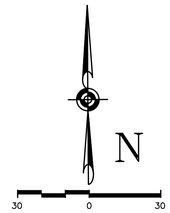
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

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Oklahoma Registered Engineering Firm CA-4224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

DRAWN
DPS
CHECKED
JSP
DATE
08/19/22
SCALE
1" = 30'
JOB No.
N/A
SHEET
12 OF 25 SHEET





CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL MAINTENANCE AND A WARRANTY ON ALL PLANT MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.

ALL UNSURFACED AREAS SHALL RECEIVE A 6" LAYER OF SUITABLE TOPSOIL AND SOD. WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED

SOD SHALL BE PEGGED ON ALL 3:1 SLOPES OR STEEPER IN ORDER TO HOLD SOD IN PLACE. SEE SITEWORK SPECIFICATIONS FOR OTHER REQUIREMENTS.

UNLESS SHOWN OTHERWISE, ALL LARGE CANOPY TREES SHALL MAINTAIN 25' HORIZONTAL CLEARANCE FROM ALL OVERHEAD UTILITY LINES AND 10' HORIZONTAL CLEARANCE FROM ALL UNDERGROUND UTILITY LINES.

ALL LANDSCAPE AREAS SHALL BE FULLY IRRIGATED AS SHOWN ON THE IRRIGATION PLAN. SEE IRRIGATION PLAN, THIS SET, FOR ADDITIONAL INFORMATION.

TREE PROTECTION FENCING TO BE REMOVED JUST PRIOR TO THE INSTALLATION OF ALL LANDSCAPE PLANTING.

PLANT SCHEDULE

NOTE: ALL SIZES AND CONDITION OF NURSERY STOCK SHALL MEET THE STANDARDS ESTABLISHED IN THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.

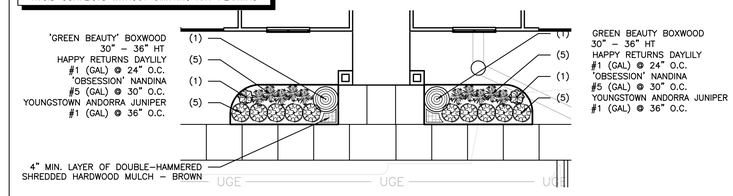
QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE (BOTH MIN'S TO BE MET)	SPACING	CONDITION	REMARKS
TREES:							
3		JUNIPERUS VIRGINIANA	BRODIE JUNIPER	5' - 6' HT	AS SHOWN	B&B/CONT	FULL HEAD w/UNIFORM GROWTH
15		QUERCUS TAXANA	TEXAS RED OAK	1-1/2" - 2" C / 8' - 10' HT	AS SHOWN	B&B/CONT	FULL HEAD w/UNIFORM GROWTH
SHRUBS:							
15		BUXUS MICROPHYLLA VAR. JAPONICA 'GREEN BEAUTY'	'GREEN BEAUTY' BOXWOOD	30" - 36" HT	AS SHOWN	CONT	ROUND, FULL HEAD
6		ILEX VOMITORIA 'NANA'	DWARF YAUPON HOLLY	#5 (GAL) / 24" - 30" HT	36" O.C.	CONT	ROUND, FULL HEAD
28		NANDINA DOMESTICA 'SEIKA' PP21891	'OBSESSION' NANDINA	#5 (GAL) / 18" - 24" HT	30" O.C.	CONT	ROUND, FULL HEAD
GROUNDCOVERS:							
FILL AREA		CYNODON DACTYLON	COMMON BERMUDA	4 LBS / 1000 SF	SOLID	SEED	99% PURE - 99% GERM RATE
FILL AREA		CYNODON DACTYLON 'TIFTON 419'	'TIFTON 419' BERMUDA SOD	SLAB / ROLL	SOLID	SOD	WEED FREE & ACTIVELY GROWING
87		HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	#1 (GAL) / 8" - 12" HT	24" O.C.	CONT.	WEED FREE & ACTIVELY GROWING
95		JUNIPERUS HORIZONTALIS 'YOUNGSTOWN'	YOUNGSTOWN ANDORRA JUNIPER	#1 (GAL) / 8" - 12" SPD	36" O.C.	CONT.	WEED FREE & ACTIVELY GROWING
FILL AREA		SHREDDED HARDWOOD MULCH	DOUBLE - HAMMERED	4" MIN DEPTH	SOLID	BULK	BROWN COLOR - DEPTH TO BE MEASURED AFTER SETTING

NOTE: SYMBOLS SHOWN IN TABLE ABOVE ARE FOR SPECIES IDENTIFICATION ONLY. PLANT SIZE SHOWN IN THE TABLE IS NOT INTENDED TO BE REPRESENTATIVE OF THE PLANT AT EITHER INSTALLATION OR MATURITY. SIZE OF SYMBOL SHOWN IN TABLE ABOVE MAY VARY FROM THOSE SHOWN ON PLANS.

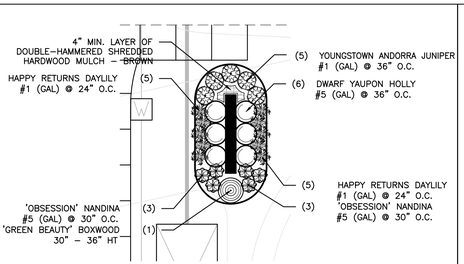
NOTE: NO SUBSTITUTIONS OF PLANT MATERIALS ARE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE LANDSCAPE ARCHITECT.

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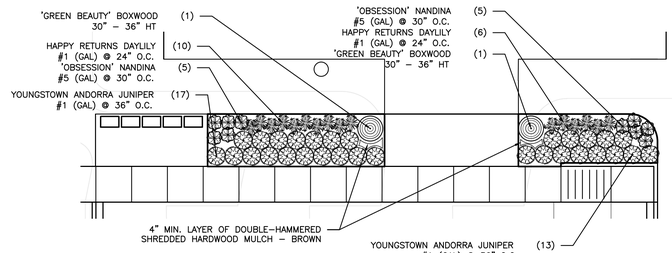
IF UTILITIES ARE PRESENT WITHIN PLANTING BEDS AVOID CONFLICTS WITHOUT OMITTING ANY PLANTING



PLANTING ENLARGEMENT: TYP BUILDING FRONTAGE SCALE: 1"= 10'-0"



PLANTING ENLARGEMENT: MONUMENT SIGN SCALE: 1"= 10'-0"



PLANTING ENLARGEMENT: COMMUNITY BUILDING FRONTAGE SCALE: 1"= 10'-0"

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

PLANTING PLAN

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7088 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3024

STATE OF OKLAHOMA
CHARLES R. WALKER
327
LANDSCAPE ARCHITECT

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	1" = 30'
JOB No.	N/A
SHEET	13 OF 25 SHEET

PLANTING NOTES

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST. NO PLANTING SHALL BE INSTALLED IN CONFLICT WITH UTILITIES.
2. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON THE BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES ON THE PROJECT SITE AND ADJACENT TO THE WORK AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING SITE CONDITIONS PRIOR TO PROCEEDING. IF UNFORESEEN CIRCUMSTANCES ARE ENCOUNTERED, THE CONTRACTOR IS TO STOP WORK AND CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY.
4. SAFE, CLEARLY MARKED PEDESTRIAN AND VEHICULAR ACCESS TO ALL ADJACENT PROPERTIES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS.
5. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
6. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
7. ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
8. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
9. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
10. ALL LANDSCAPED AREAS SHALL BE SPRAYED WITH HERBICIDE 4 WEEKS PRIOR TO INSTALLATION OF LANDSCAPING. THE EXISTING MATERIAL SHALL BE REMOVED BEFORE ANY INSTALLATION OF PLANT MATERIAL OR SEED.
11. THE LANDSCAPE ARCHITECT SHALL APPROVE THE STAKING LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION. IF PLANT MATERIAL IS INSTALLED PRIOR TO LOCATION APPROVAL, THE CONTRACTOR MAY BE REQUIRED TO RELOCATE MATERIAL AT HIS OWN EXPENSE.
12. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
13. ALL NEW TREES SHALL HAVE 'MYCOR TREE SAVER' OR EQUAL MYCORIZAL FUNGAL TREATMENT INSTALLED AT RATE RECOMMENDED BY MANUFACTURER AT THE TIME OF INSTALLATION.
14. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
15. ALL SHRUB BED AREAS SHALL RECEIVE A MIN OF 8" OF PLANTING BED MIX AS DESCRIBED IN PLANTING BED PREP DETAIL.
16. ALL BED AREAS SHALL BE BERMED A MINIMUM OF 8" TO PROMOTE GOOD BED DRAINAGE (AFTER GENTLE TOPSOIL TAMPING). BEDS WILL BE MOUNDED FROM SIDES TO CENTER, PROMOTING GOOD DRAINAGE.
17. ALL CONSTRUCTION AREAS TO RECEIVE TURFGRASS SHALL RECEIVE A 4" MIN DEPTH OF SUITABLE TOPSOIL MIX PER DETAILS AND SPECIFICATIONS. RESULTS OF TOPSOIL ANALYSIS ARE TO BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR THE APPROVAL PRIOR TO ANY TURFGRASS OPERATIONS TAKING PLACE.
18. PRIOR TO PLANTING OR SEEDING, MULTIPLE REPRESENTATIVE SAMPLES OF THE TOPSOIL SHALL BE TAKEN AND SENT TO THE STATE EXTENSION AGENCY FOR ANALYSIS. FERTILIZE SUITABLE TOPSOIL IN TURFGRASS AREAS AS PER EXTENSION SERVICE'S RECOMMENDATIONS FOR TURFGRASS SPECIES SPECIFIED ON PLANS. THE SAME MIX TO BE USED IN SHRUB PLANTING BEDS IS TO BE FERTILIZED AS PER EXTENSION SERVICE'S RECOMMENDATIONS FOR ORNAMENTAL PLANTINGS.
19. ALL PLANTING BEDS SHALL HAVE 'SURFLAN' OR EQUAL PRE-EMMERGENT HERBICIDE BROADCAST AT RATE RECOMMENDED BY MANUFACTURER.
20. PLANTING OPERATIONS SHOULD ONLY TAKE PLACE DURING SUITABLE WEATHER CONDITIONS. PLANTS ARE NOT TO BE INSTALLED WHEN THE SOIL IS EITHER HIGHLY SATURATED OR FROZEN.
21. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.
22. DURING THE GROWING SEASON ALL ANNUALS SHALL REMAIN IN A HEALTHY, VIABLE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
23. ALL PLANTING AREAS, SHRUB, GROUND COVER AND SEASONAL COLOR ANNUAL PLANTING BEDS, ARE TO BE COMPLETELY COVERED WITH SHREDDED HARDWOOD MULCH AND SHALL MAINTAIN A MINIMUM LAYER OF (4") FOUR INCHES IN DEPTH AFTER SETTLING.
24. THERE IS NO SEPARATE PAY ITEM FOR DRESSING OUT SHRUB BEDS OR TREE SAUCERS WITH SHREDDED HARDWOOD MULCH, IT SHALL BE INCLUDED WITH THE COST OF ALL PLANT MATERIALS.
25. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. ALL PLANT MATERIALS QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.
26. ALL DISTURBED AREAS ARE TO RECEIVE A 4" LAYER OF SUITABLE TOPSOIL AND HYDROSEED AND/OR SOD (WHERE SHOWN). WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. THIS IS EXCLUDING ALL LANDSCAPED ISLANDS AND ENTRANCE AREAS.
27. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR 12 MONTHS BEGINNING ON THE DATE OF TOTAL ACCEPTANCE. PLANTS NOT IN A HEALTHY GROWING CONDITION SHALL BE REMOVED FROM THE SITE AT THE DIRECTION OF THE LANDSCAPE ARCHITECT AND THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS WITH PLANTS ALSO GUARANTEED FOR THE REMAINDER OF THE 12 MONTH WARRANTY.
28. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL GUY WIRES AT THE END OF THE 1 YEAR WARRANTY PERIOD.
29. REFER TO PROJECT SITEWORK SPECIFICATIONS FOR ALL INFORMATION NEEDED FOR INPLEMENTATION OF PLANTING PLANS.

SEEDING & SODDING NOTES

TEMPORARY SEEDING

- SEED: MIXTURE 70% RYEGRASS/30% WINTER WHEAT – 4 LBS / 1,000 SQ FT.
- AREAS TO RECEIVE SEED ARE TO BE FERTILIZED WITH A COMPLETE FERTILIZER PER EXTENSION SERVICE'S RECOMMENDATIONS.

PERMANENT SEEDING

- SEED MIX B: COMMON BERMUDA @ 4 LBS / 1,000 SQ FT.
- AREAS TO RECEIVE SEED ARE TO BE FERTILIZED WITH A COMPLETE FERTILIZER PER EXTENSION SERVICE'S RECOMMENDATIONS.

SEED:

- SEED MIX B: COMMON BERMUDA @ 4 LBS / 1,000 SQ FT.
- ALL DISTURBED AREAS NOT RECEIVING SOD SHALL BE SEEDED WITH SEED MIX UNLESS NOTED OTHERWISE.
- PREPARATION OF ALL AREAS TO BE SEEDED SHALL CONSIST OF THOROUGHLY LOOSENING OR SCARIFYING THE SOIL TO A DEPTH OF TWO (2) TO FOUR (4) INCHES USING A TRACTOR DISC OR OTHER APPROVED METHOD. AREAS TO BE SEEDED SHALL BE CLEARED OF ANY WEEDS, STICKS, OR OTHER DEBRIS. SEEDING MAY BE DONE IMMEDIATELY THEREAFTER PROVIDED THE BED HAS REMAINED IN GOOD FRIABLE CONDITION AND HAS NOT BECOME WET. WATER ALL SEEDED SOIL IMMEDIATELY AFTER SEEDING USING SPRAY NOZZLES OR ANOTHER ACCEPTABLE METHOD WHICH DOES NOT CAUSE SOIL OR SEED TO WASH AWAY.
- SUITABLE TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS:
  - IT SHALL ALL BE A RICH EASILY FRIABLE BROWN OR BLACK LOAMY TO SANDY LOAM SOIL
  - 5% ORGANIC MATERIAL
  - PH OF 5.5 – 7.4
  - FREE OF WEEDS, LITTER, STIFF CLAY, OR STONES GREATER THAN 1" IN DIAMETER
  - HEAVY CLAYS AND FINE SILTY SOILS ARE NOT ACCEPTABLE
- ANY AREAS WHERE THE SEED MAY WASH OR BLOW AWAY OR DOES NOT GERMINATE ARE TO BE RE-GRADED AND RE-SEEDED UNTIL AREA HAS A FULL AND HEALTHY STAND OF TURFGRASS.
- AREAS TO RECEIVE SEED ARE TO BE FERTILIZED WITH A COMPLETE FERTILIZER AS PER EXTENSION SERVICE'S RECOMMENDATIONS FOR SPECIFIED TURFGRASS SPECIES.
- CONTRACTOR SHALL SEQUENCE SEEDING TO PROVIDE A HEALTHY STAND OF GRASS AT THE TIME OF THE OWNER'S POSSESSION.

SOD:

- ALL SODDED AREAS TO BE 'TIFTON 419' HYBRID BERMUDA.
- ALL CURBED ISLANDS TO BE SODDED UNLESS NOTED OTHERWISE.
- SLOPES GREATER THAN 3:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
- ALL AREAS TO BE SODDED SHALL RECEIVE A MINIMUM 4" LAYER OF SUITABLE TOPSOIL THAT MEETS THE CONDITIONS LISTED ABOVE AND THAT HAS BEEN TILLED, FINE GRADED, AND HAS HAD ALL STONES, ROOTS, DEBRIS, ETC REMOVED.
- SOD IS TO BE LAID AS SOON AS IT IS DELIVERED TO PLANTING AREAS. ONLY HEALTHY MOIST GREEN SOD IS TO BE LAID. ANY SOD WHICH IS BROWN AND UNDER STRESS IS UNACCEPTABLE. ANY SOD WHICH IS NOT LAID WITHIN 24 HOURS OF DELIVERY SHALL BE UNACCEPTABLE.
- SOD SHALL BE A MINIMUM OF 3/4" THICK, FREE OF WEEDS AND PESTS AND CUT NO MORE THAN 24 HOURS PRIOR TO PLANTING.
- SOD PANELS SHALL BE LAID TIGHTLY TOGETHER AND END JOINTS STAGGERED SO AS TO MAKE A SOLID SODDED AREA.
- ANY JOINTS OR SEAMS THAT MAY EXIST AFTER LAYING SOD SHALL BE FILLED WITH SAND SO AS TO CREATE A SMOOTH AND UNIFORM GROWING SURFACE.
- SOD IS TO BE ROLLED AND WATERED AT THE TIME OF INSTALLATION TO ENSURE GOOD SOD-SOIL CONTACT AND TO PROVIDE A SMOOTH, UNIFORM WALKING SURFACE.

SOD IS TO BE PEGGED ON ALL SLOPES IN ORDER TO HOLD SOD IN PLACE. SEE SITEWORK SPECIFICATIONS FOR OTHER REQUIREMENTS.

ALL DISTURBED AREAS WITHIN DEVELOPED AREAS ARE TO RECEIVE A 4" LAYER OF SUITABLE TOPSOIL. HYDRO-SEED, MULCH, OR SOD (WHERE SHOWN). AREA IS TO BE WATERED UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. SOD MAY BE SUBSTITUTED FOR HYDRO-SEED IN TURF GRASS AREAS AT GENERAL CONTRACTOR'S DISCRETION WITH NO ADDITIONAL COST TO OWNER. SOD TYPE SHALL MATCH PERMANENT SOD TYPE SPECIFIED ON CONSTRUCTION PLANS.

PERMANENT SEEDING SHALL BE APPLIED BASED ON THE TIME OF YEAR AND TEMPERATURE OF SOIL.

MAY 1 – JULY 30 (OR ONCE SOIL TEMP. IS ABOVE 60°) APPLY HULLED BERMUDA SEED @ MIN 4 LBS / 1000 SF.

PERMANENT SEEDING OPERATIONS WITH BERMUDAGRASS SEED SHOULD NOT TAKE PLACE DURING AUGUST. IF SEEDING IS REQUIRED, APPLY THE TEMPORARY SEED MIX TO STABILIZE THE SOIL, AND RE-SEED WITH THE PERMANENT SEED MIX DURING THE FALL/WINTER SEASON.

SEPTEMBER 1 – FEBRUARY 28 (OR ONCE SOIL TEMP. IS BELOW 60°) – APPLY UNHULLED BERMUDA SEED @ MIN 8 LBS / 1000 SF AND OVERSEED WITH TEMPORARY SEED MIX AS DESCRIBED IN THE SEEDING AND SODDING NOTES.

PERMANENT SEEDING OPERATIONS WITH BERMUDAGRASS SEED SHOULD NOT TAKE PLACE DURING MARCH – APRIL. IF SEEDING IS REQUIRED, APPLY THE TEMPORARY SEED MIX TO STABILIZE THE SOIL, AND RE-SEED WITH THE PERMANENT SEED MIX DURING THE SUMMER SEASON.

ALL MINIMUM SIZES LISTED IN PLANT SCHEDULE SHALL BE MET: CALIPER, HEIGHT, AND ROOT BALL

	SHADE AND FLOWERING TREES				
	CALIPER	HEIGHT TYPE 1	HEIGHT TYPE 2	MINIMUM DIAMETER BALL	BALL DEPTH
	INCHES	FEET	FEET	INCHES	INCHES
MEASURED 6" ABOVE GRADE	1"	8'-10'	6'-7'	16"	12"
	1-1/2"	10'-12'	8'-9'	20"	15"
	2"	12'-14'	8'-10'	24"	16"
	2-1/2"	12'-14'	8'-10'	28"	18"
	3"	14'-16'	10'-12'	32"	19"
	3-1/2"	14'-16'	10'-12'	38"	23"
	4"	16'-18'	10'-12'	42"	25"
MEASURED 12" ABOVE GRADE	4-1/2"	16'-18'	10'-12'	48"	29"
	5"	18'+	12'+	54"	32"
	5-1/2"	18'+	12'+	57"	34"
	6"	20'+	14'+	60"	36"
	7"	24'+	16'+	70"	42"
	8"	26'+	18'+	80"	48"

SOURCE: AMERICAN STANDARD FOR NURSERY STOCK
CALIPER TAKES PRECEDENCE OVER HEIGHT FOR TYPE I SHADE TREES. BOTH MINIMUMS MUST BE MET.

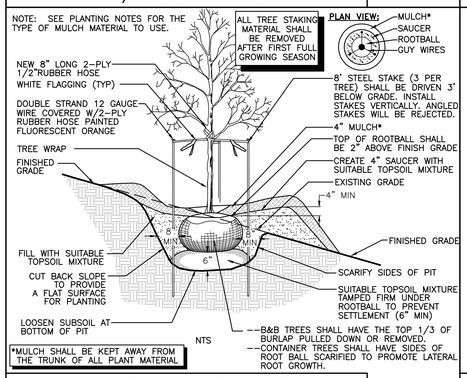
TYPE 1 (LARGE SHADE TREES)	
ACER RUBRUM	PLATANUS *SPP*
ACER SACCHARUM	QUERCUS *SPP*
BETULA *SPP*	TAXODIUM *SPP*
GINKGO *SPP*	SALIX *SPP*
GLEDITSIA *SPP*	ZELKOVA *SPP*

TYPE 2 (MEDIUM/SLOW SHADE TREES)	
AESCULUS *SPP*	MAGNOLIA GRANDIFLORA
CELTIS *SPP*	NYSSA *SPP*
CLADRASTIS LUTEA	OLEA EUROPA
FAGUS SYLVATICA	QUERCUS ALBA
KOELREUTERIA *SPP*	SORBUS *SPP*
LABURNUM *SPP*	TILIA CORDATA
LIQUIDAMBAR *SPP*	ULMUS PARVIFOLIA

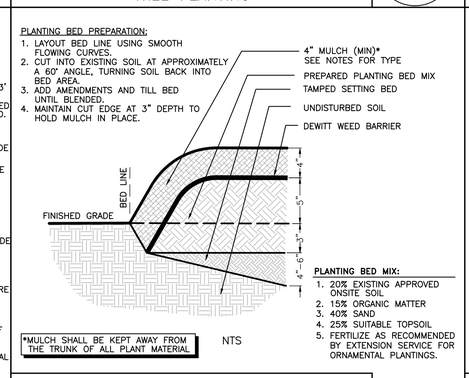
TYPE 3 (SMALL UPRIGHT TREES)	
ACER CAMPESTRE	MAGNOLIA VIRGINIANA
AMELANCHIER *SPP*	PRUNUS *SPP*
CARPINUS *SPP*	PYRUS *SPP*
CERCIS *SPP*	STYRAX *SPP*
CRATAEGUS *SPP*	SYRINGA RETICULATA
OXYDENDRUM *SPP*	

TYPE 4 (SMALL SPREADING TREES)
ACER PALMATUM
ACER GRISEUM
CORNUS *SPP*
LAGERSTROMIA *SPP*
MAGNOLIA SOULANGIANA
MAGNOLIA STELLATA
VITEX *SPP*

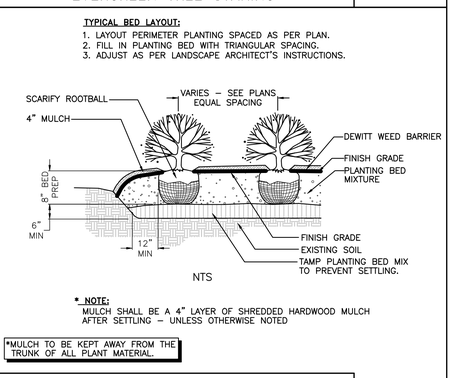
TREE SIZE/ROOT BALL RELATIONSHIP



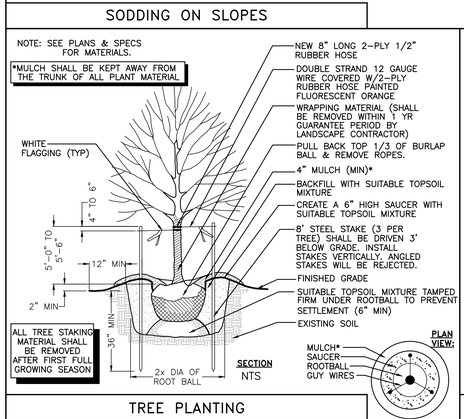
TREE PLANTINGS ON SLOPE



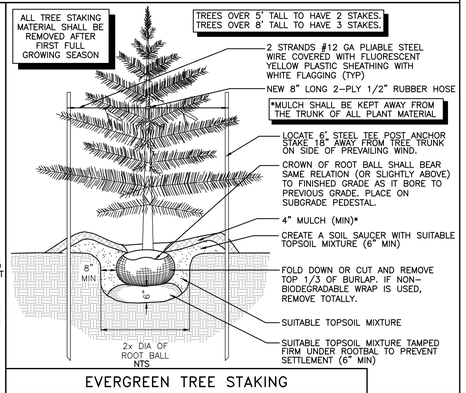
PLANTING BED PREP



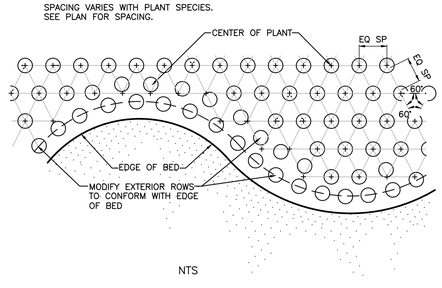
SHRUB AND GROUNDCOVER PLANTINGS



TREE PLANTING



EVERGREEN TREE STAKING



PLANT SPACING

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

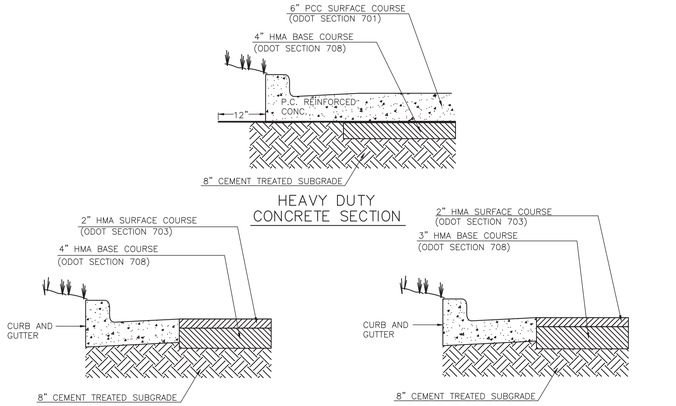
PLANTING DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-4224

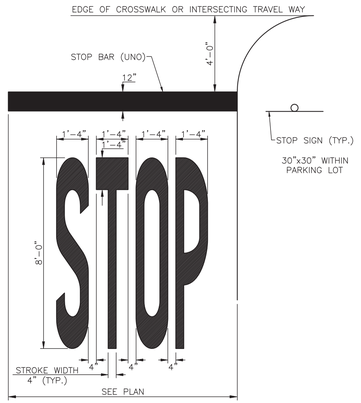
STATE OF OKLAHOMA
CHARLES W. WALKER
327
REGISTERED LANDSCAPE ARCHITECT
Aug 17 22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	NTS
JOB No.	N/A
SHEET	14 OF 25 SHEET



1. FOR PREPARATION OF PAVEMENT SUBGRADE, FILL SHALL BE PLACED IN ACCORDANCE WITH SECTION 02300 OF THE SITEWORK SPECIFICATIONS.
2. GRANULAR BASE COURSE MATERIAL SHOULD MEET THE SPECIFICATION OF SECTION 703, ODOT TYPE A MATERIAL OR EQUIVALENT. PLACEMENT OF GRANULAR BASE MATERIAL SHOULD MEET THE SPECIFICATION OF ODOT SECTION 303.
3. SUBGRADE TREATMENT MATERIALS AND CONSTRUCTION METHODS SHOULD MEET THE SPECIFICATIONS OF ODOT SECTIONS 307 AND 310.
4. ASPHALTIC SURFACE AND BINDER COURSE MATERIALS SHOULD MEET THE SPECIFICATIONS OF ODOT SECTIONS 703 AND 708. PLACEMENT OF ASPHALTIC SURFACE AND BINDER COURSE MATERIALS SHOULD MEET THE SPECIFICATION OF ODOT SECTION 411.
5. THE PORTLAND CEMENT CONCRETE PAVEMENT MATERIAL SHOULD MEET THE SPECIFICATION OF ODOT SECTION 701. PLACEMENT OF PORTLAND CEMENT CONCRETE PAVEMENT SHOULD MEET THE SPECIFICATION OF ODOT SECTION 414. THE MIXTURE SHOULD BE DESIGNED TO DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS.
6. REFER TO OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2019 EDITION.
7. SOURCE: GEOTECHNICAL ENGINEERING REPORT PREPARED BY INTERTEK PSI AND DATED 2/15/2022.
8. CONTRACTOR SHALL APPLY TACK COAT IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
9. IT IS ESTIMATED 6 TO 7 PERCENT PORTLAND CEMENT, BY DRY WEIGHT, WILL REDUCE THE POTENTIAL VOLUMETRIC CHANGES DUE TO THE HIGH SHRINK/SWELL POTENTIAL SOIL. THE ACTUAL CEMENT, LIME OR FLY ASH PERCENTAGE SHOULD BE DETERMINED BASED ON LABORATORY TESTS AFTER THE SOURCE OF THE STABILIZING AGENT HAS BEEN DETERMINED.

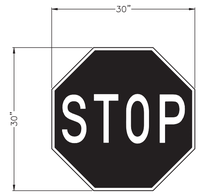
PAVING SECTIONS



NOTE:

1. WORDS AND BARS SHALL BE APPLIED IN ACCORDANCE WITH SECTIONS 3B.16 AND 3B.20 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED RETROREFLECTIVE WHITE.

PAINTED STOP BAR



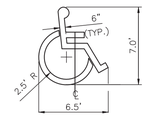
WHITE LEGEND RED BACKGROUND

R1-1
30"X30"
"STOP" SIGN
NTS

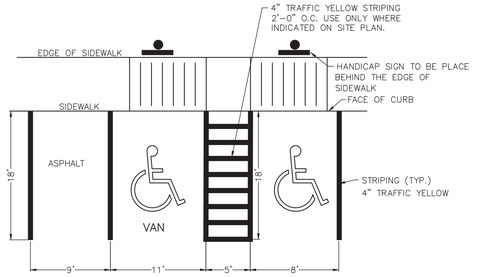
STOP SIGN

NOTES:

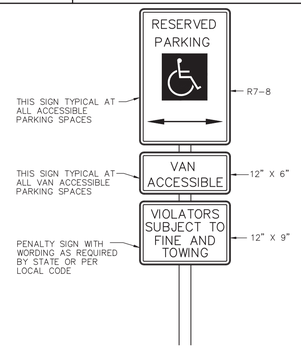
1. SEE SITE PLAN FOR TOTAL LAYOUT.
2. THESE DETAILS ARE FOR REFERENCE AND DIMENSION CONTROL ONLY.
3. ALL DIMENSIONS ARE TO ℄ OF WHITE STRIPE UNLESS OTHERWISE INDICATED.
4. ALL COLORS AS SHOWN OR AS SPECIFIED BY LOCAL CODES.
5. ALL SYMBOLS SHALL BE APPLIED USING TEMPLATE.



ACCESSIBLE PARKING SYMBOL

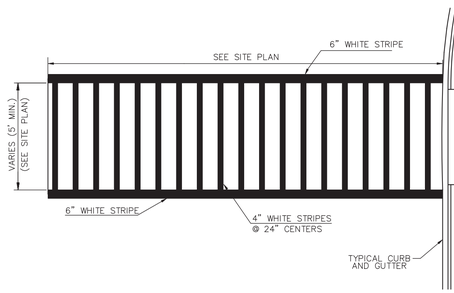


ACCESSIBLE PARKING STALL



ACCESSIBLE PARKING SIGN
N.T.S.

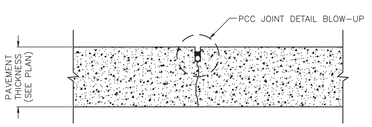
ACCESSIBLE PARKING SIGN



NOTES:

1. MARKINGS FOR STREET SHALL BE ACCORDING TO LOCAL CODE REQUIREMENTS AND AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. MARKINGS WITHIN PRIVATE PARKING LOT SHALL BE PER THIS DETAIL.
3. THESE MARKINGS ARE TO BE PAINTED REFLECTIVE WHITE.

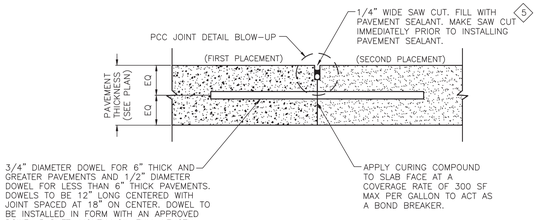
CROSSWALK MARKING



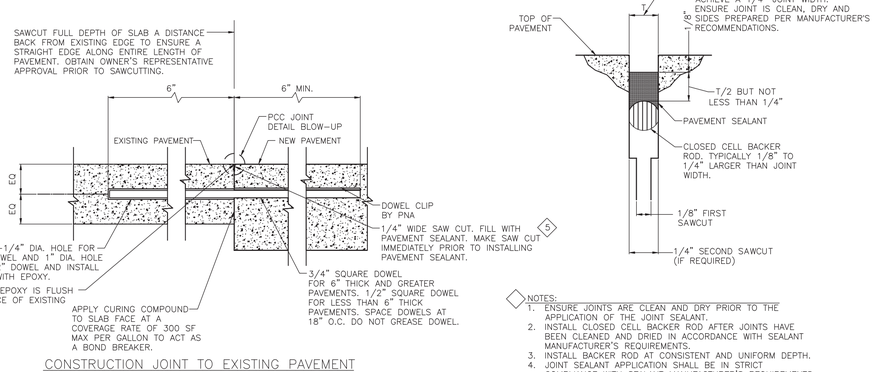
NOTE:

1. SEE PLAN FOR JOINT SPACING. IF JOINTS NOT SHOWN ON ON PLANS, REFER TO SPECIFICATIONS FOR MAXIMUM JOINT SPACING.

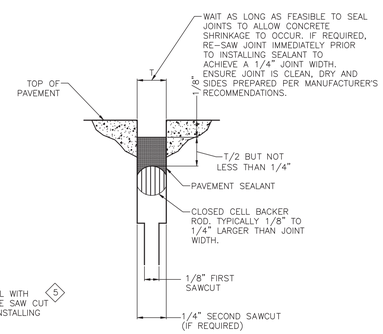
CONTRACTION JOINT



CONSTRUCTION JOINT



CONSTRUCTION JOINT TO EXISTING PAVEMENT

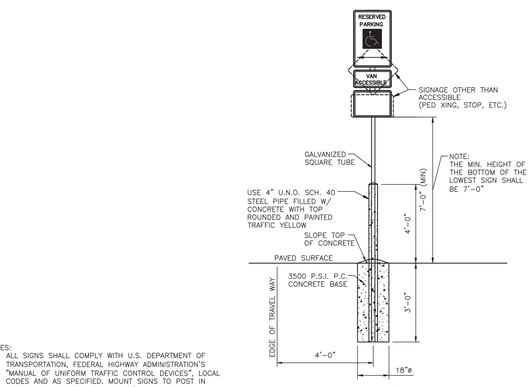


NOTES:

1. ENSURE JOINTS ARE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE JOINT SEALANT.
2. INSTALL CLOSED CELL BACKER ROD AFTER JOINTS HAVE BEEN CLEANED AND DRIED IN ACCORDANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.
3. INSTALL BACKER ROD AT CONSISTENT AND UNIFORM DEPTH.
4. JOINT SEALANT APPLICATION SHALL BE IN STRICT COMPLIANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS.
5. DEPTH OF CUT SHALL BE 1/4 THE THICKNESS OF THE SLAB.

PCC JOINT DETAIL BLOW-UP (TYP.)

CONCRETE JOINT

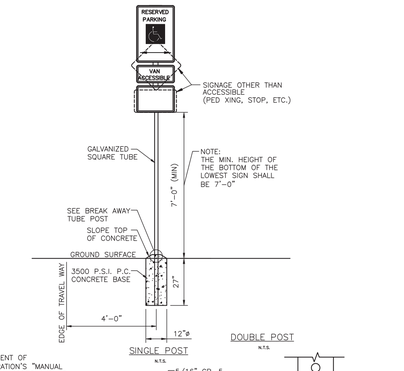


NOTES:

1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. GALVANIZED SQUARE TUBE

   POST TUBES - 2"x2"x3/16" 12ga
   POST TUBE SHALL MEET ASTM A1011 GRADE 50.
   POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

SIGN MOUNTING AND BASE WITH BOLLARD
(USE WHERE SIGN IS NOT WITHIN CURBED ISLAND)
N.T.S.



NOTES:

1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. GALVANIZED SQUARE TUBE

   POST TUBES - 2"x2"x3/16" 12ga
   POST TUBE SHALL MEET ASTM A1011 GRADE 50.
   POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

   ANCHOR TUBE - 2-1/4"x2-1/4"x3/16" 12ga
   HEAVY DUTY ANCHOR TUBE SHALL MEET ASTM A500 GRADE B. STRUCTURAL TUBE AND STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123.

   THE UPPER SIGN POST SHALL TELESCOPE INSIDE THE ANCHOR TUBE A MINIMUM OF 12". THE ANCHOR TUBE SHALL BE A MINIMUM 27" DEEP WITH 3" MIN. 4" MAX. EXPOSED ABOVE FINISH GRADE.

SIGN MOUNTING AND BASE WITHOUT BOLLARD
(USE WHERE SIGN IS WITHIN CURBED ISLAND)
N.T.S.

SIGN MOUNTING AND BASE

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3204

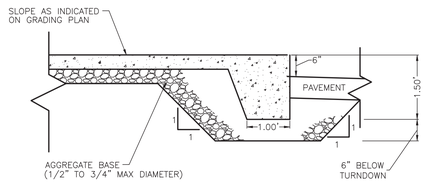
LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
08/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	18 OF 25 SHEET

SIDEWALK TURNDOWNS

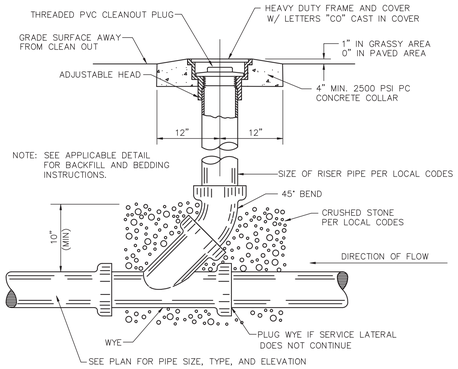
NOTES:

1. SIDEWALK TURNDOWN TO BE USED WHENEVER SIDEWALK IS ABUTTING PAVEMENT AND CURB AND GUTTERS.



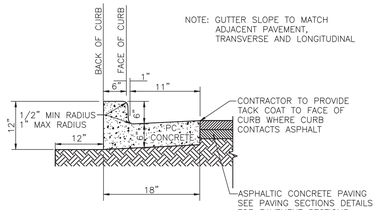
SIDEWALK ABUTTING PAVEMENT
NTS

SANITARY SEWER CLEANOUT

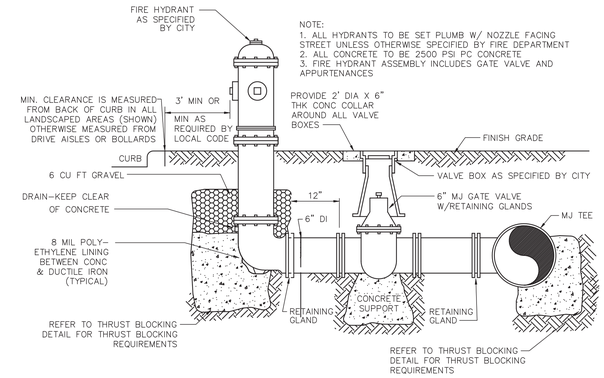


SANITARY SEWER CLEAN-OUT
NTS

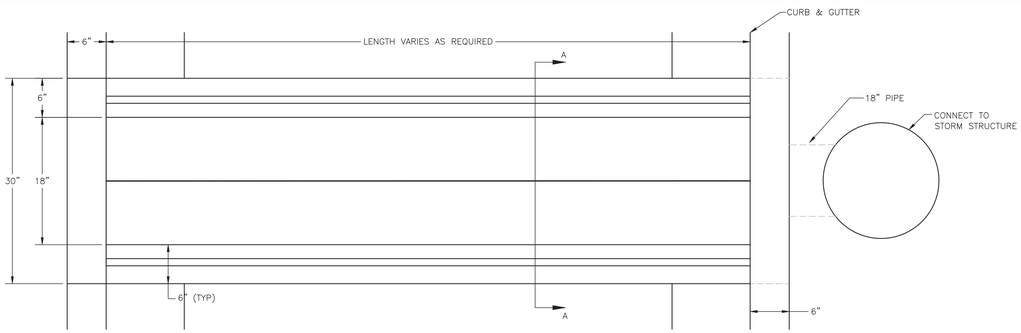
TYPE "A" CURB & GUTTER



FIRE HYDRANT ASSEMBLY



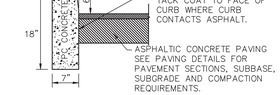
TRENCH DRAIN



NOTES:

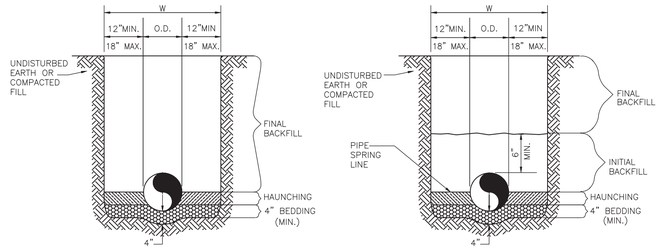
1. CONCRETE TO TEST 4,000 PSI AT 28 DAYS.
2. REINFORCING STEEL PER ASTM A185 FOR WELDED WIRE FABRIC (WWF).
3. NEENAH FOUNDRY CATALOG NUMBER R-4999-L6 VANED GRATES WILL BE CAST INTO TOP OF WALLS.
4. PLACE A #3 BENT REBAR (6" MIN) THROUGH THE HOLES IN THE ANCHOR LUGS PRIOR TO PLACING CONCRETE.
5. INSTALL TRENCH GRATE PER MANUFACTURER'S RECOMMENDATIONS.

TYPE "E" CURB



TYPE "E" CURB

STORM SEWER TRENCH & BEDDING



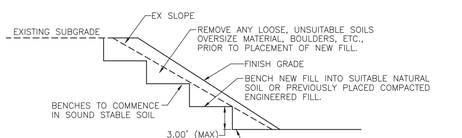
REINFORCED CONCRETE PIPE (RCP)
N.T.S.

ALL OTHER PIPES
N.T.S.

GENERAL NOTES

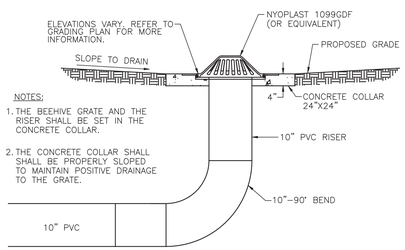
1. BEDDING SHALL BE CLASS I WORKED BY HAND OR CLASS II COMPACTED TO 90% STANDARD PROCTOR.
2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I OR CLASS II COMPACTED TO 90% PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I WORKED BY HAND OR CLASS II COMPACTED TO 90% STANDARD PROCTOR.
4. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
5. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED TO 98% STANDARD PROCTOR.
6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV COMPACTED TO 95% STANDARD PROCTOR.
7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-11.
8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)
11. ANY OPEN-GRADED MATERIAL MEETING THE REQUIREMENTS OF ASTM D 2321-11 MAY BE USED ONLY IF THE MATERIAL IS WRAPPED IN AN APPROVED FILTER OR DRAINAGE FABRIC (REFER TO SITEWORK SPECIFICATION SECTION 02300 FOR TYPE) AND WITH WRITTEN PERMISSION FROM THE CEC.
12. THE UPPER 12" OF FINAL BACKFILL (MAY BE REDUCED TO 9" IN LIMITED AREAS WHERE BURIAL DEPTH WILL NOT ALLOW FOR 12" CAP) FOR ALL TRENCHES IN NON-PAVEMENT AREAS SHALL BE A LOW PLASTICITY COHESIVE FILL. REFER TO SITEWORK SPECIFICATION SECTION 02300 FOR ALLOWABLE "SATISFACTORY MATERIALS" AND COMPACTION REQUIREMENTS.
13. BEDDING, HAUNCHING, AND INITIAL AND FINAL BACKFILL MATERIALS USED IN CONJUNCTION WITH ANY PIPES WHICH PENETRATE A LEVEE OR ROAD EMBANKMENT, SHALL BE A LOW PERMEABILITY, COHESIVE SOIL. SOILS EXHIBITING HIGH SHRINK/SWELL POTENTIAL OR CONTAINING GREATER THAN 5% ORGANICS SHALL NOT BE USED.

FILL SLOPE CONSTRUCTION METHOD



NOTE:
1. APPROPRIATE DRAINAGE TO BE PROVIDED AT TOE OF SLOPE DEPENDING ON ACTUAL FIELD CONDITIONS.
2. NEW SLOPES TO BE OVER FILLED AND CUT BACK TO SPECIFIED SLOPE TO DEVELOP AN ADEQUATELY COMPACTED SLOPE FACE.
3. THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY.

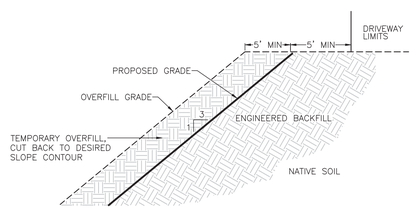
YARD DRAIN



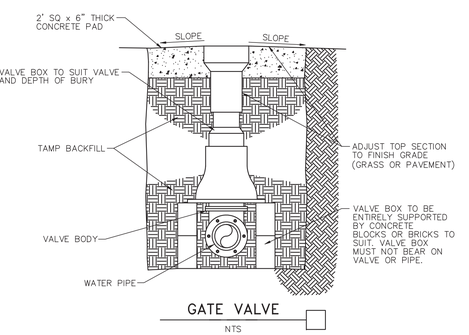
NOTES:

1. THE BEEHIVE GRATE AND THE RISER SHALL BE SET IN THE CONCRETE COLLAR.
2. THE CONCRETE COLLAR SHALL SHALL BE PROPERLY SLOPED TO MAINTAIN POSITIVE DRAINAGE TO THE GRATE.

TEMPORARY OVERFILL OF SLOPE



GATE VALVE



GATE VALVE
NTS

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

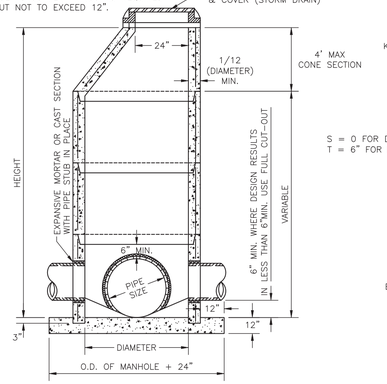
CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3204

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
12-31-22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	19 OF 25 SHEET

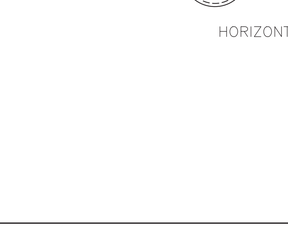
JUNCTION BOX

NOTE: TOP OF MANHOLE TO BE LEVEL WITH FINISH GRADE UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. USE ADJUSTMENT RINGS AS REQUIRED BUT NOT TO EXCEED 12".



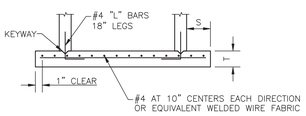
PRECAST BASE SECTION SET ON CONCRETE BLOCKS FOUNDATION SLAB AND INVERT POURED MONOLITHIC.

SECTION "A"–"A"



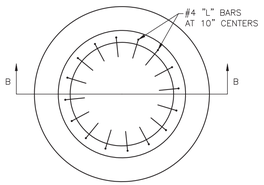
PLAN OF FOOTING

FOUNDATION SLAB AND BASE SECTION MAY BE POURED MONOLITHIC OR SEPARATELY WITH A KEYWAY. INVERT SHALL BE POURED AFTER PLACEMENT OF MANHOLE.

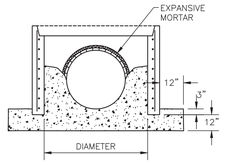


S = 0 FOR DEPTHS LESS THAN OR EQUAL TO 6' : S = 9" FOR DEPTHS GREATER THAN 6'.
T = 6" FOR DEPTHS LESS THAN OR EQUAL TO 6' : T = 9" FOR DEPTHS GREATER THAN 6'.

SECTION "B"–"B"



PRECAST FOUNDATION SLAB



PRECAST BASE SECTION SET ON CONCRETE BLOCKS FOUNDATION SLAB AND INVERT POURED MONOLITHIC.

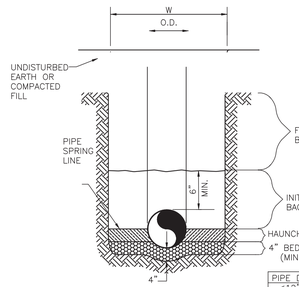
ALTERNATE FOOTING

BASE SECTION DIMENSIONS	
SIZE OF PIPE	MIN. DIA.
24" OR SMALLER	48"
30" – 36"	60"
42" – 48"	72"

GENERAL NOTES:

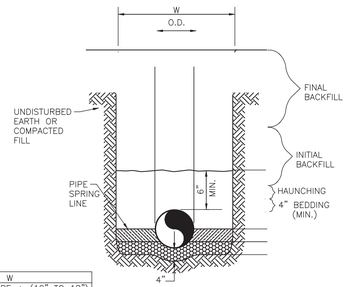
1. PRECAST MANHOLE SHALL BE MANUFACTURED PER LATEST ASTM C478 AND C913 SPECIFICATIONS.
2. THE CONFIGURATION DETAILS SHOWN ARE DESCRIPTIVE ONLY AND MAY BE VARIED TO CONFORM WITH AN ESTABLISHED MANUFACTURING PROCEDURE.
3. FORMED OR CUT OUT OPENINGS SHALL BE PROVIDED WHERE PIPE INLETS AND OUTLETS ARE SHOWN ON THE PLANS.
4. THE TOP OF THE INLET SHALL NOT BE SET BELOW THE TOP OF THE OUTLET PIPE.
5. REINFORCEMENT SHALL BE CUT AT PIPE OPENINGS.
6. WHERE PIPES DO NOT ENTER OR EXIT RADIALLY, USE NEXT LARGER SIZE MANHOLE.
7. CIRCUMFERENTIAL REINFORCEMENT SIZE AND PLACEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO A MAXIMUM DEPTH OF 20 FEET. OVER 20 FOOT DEPTH CIRCUMFERENTIAL REINFORCEMENT IS INCREASED TO 0.24 SQUARE INCHES STEEL REQUIRED PER LINEAR FOOT, TO A MAXIMUM DEPTH OF 30 FEET.
8. FOR PIPE CONNECTIONS, A RUBBER GASKET IN ACCORDANCE WITH ASTM RUBBER GASKET SPECIFICATIONS C443 OR C923 AND CAST INTEGRALLY IN MANHOLE MAY BE USED AS AN ALTERNATE TO EXPANSIVE MORTAR.

UTILITY TRENCH & BEDDING



WATER LINE

N.T.S.



PIPE DIA.	W
≤12"	O.D. OF PIPE + (12" TO 18")
>12"	≥ O.D. OF PIPE + 18"

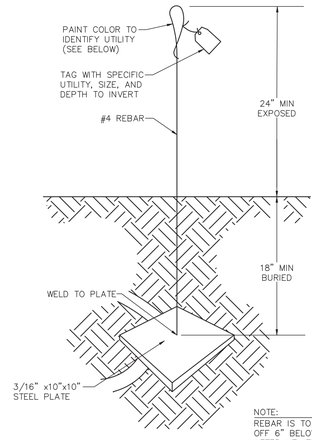
SANITARY SEWER

N.T.S.

GENERAL NOTES

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UTILITY MARKING

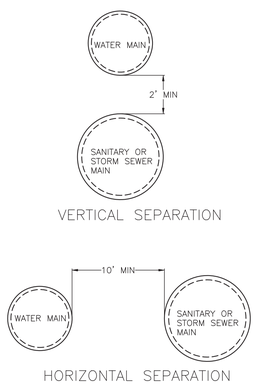


NOTE:
REBAR IS TO BE CUT OFF 6" BELOW SUBGRADE AFTER UTILITY CONNECTION IS COMPLETED AND PRIOR TO PAVING

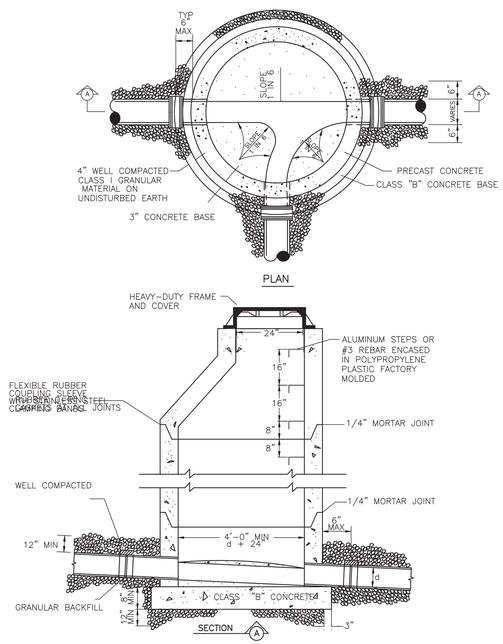
USE AT CAPPED END OF ALL UTILITY SERVICE CONNECTIONS

UTILITY	COLOR
SEWER	GREEN
WATER	BLUE
STORM DRAIN	WHITE
ELECTRICAL	RED
GAS	YELLOW
TELCO/CATV	ORANGE
FUTURE SITE LIGHTING	PINK
FIBER OPTIC (GAS STATION)	PURPLE

WATER/SEWER CROSSING REQUIREMENTS



SANITARY PRECAST CONCRETE MANHOLE



THRUST BLOCKING

90 DEGREE BEND							
SIZE	2"	4"	6"	8"	10"	12"	18"
A	16"	16"	26"	33"	40"	50"	70"
B	16"	16"	24"	33"	40"	50"	70"
C	9"	9"	12"	12"	15"	16"	22"
D	6"	12"	12"	16"	21"	32"	24"

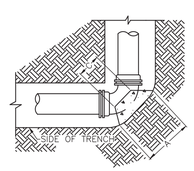
45 DEGREE BEND							
SIZE	2"	4"	6"	8"	10"	12"	18"
A	12"	12"	18"	24"	31"	37"	52"
B	12"	12"	18"	24"	31"	37"	52"
C	8"	8"	10"	12"	14"	16"	14"
D	6"	12"	12"	12"	15"	18"	18"

22-1/2" DEGREE BEND							
SIZE	2"	4"	6"	8"	10"	12"	18"
A	9"	9"	13"	18"	23"	26"	40"
B	9"	9"	13"	18"	23"	26"	40"
C	8"	8"	10"	12"	14"	16"	15"
D	4"	12"	12"	12"	12"	13"	16"

PLUG							
SIZE	2"	4"	6"	8"	10"	12"	18"
A	26"	26"	26"	34"	43"	52"	70"
B	26"	26"	26"	34"	43"	52"	70"
C	12"	12"	12"	12"	12"	12"	30"
D	11"	12"	12"	15"	22"	32"	32"

11-1/4 DEGREE BEND							
SIZE	2"	4"	6"	8"	10"	12"	18"
A	9"	9"	11"	13"	16"	18"	30"
B	9"	9"	11"	13"	16"	18"	30"
C	8"	8"	10"	12"	14"	16"	15"
D	12"	12"	12"	12"	12"	12"	16"

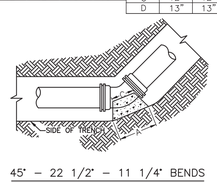
TEE							
SIZE MAIN	2"-6"	8"-12"	8"-10"	12"	12"	12"	18"
SIZE BRANCH	2"-6"	2"-6"	8"-10"	2"-6"	8"-10"	12"	16"-18"
A	26"	26"	43"	26"	43"	52"	70"
B	26"	26"	43"	26"	43"	52"	70"
C	12"	12"	12"	12"	12"	12"	30"
D	13"	13"	21"	21"	26"	26"	24"



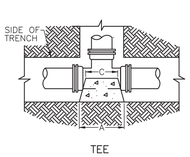
90° BEND

NOTE: THRUST BLOCK TO BE POURED AGAINST UNDISTURBED EARTH.

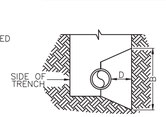
CONCRETE TO BE 3,000 PSI MINIMUM.



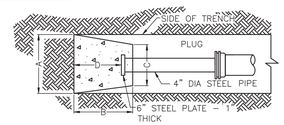
45° – 22 1/2" – 11 1/4° BENDS



TEE



TYPICAL SECTION



PLUG

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

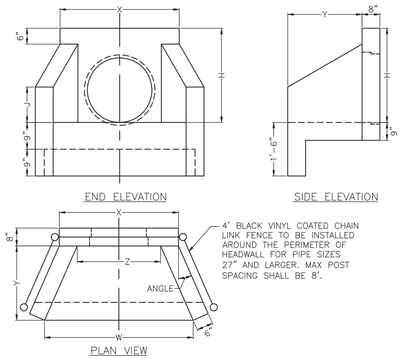
DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7066 Ledgestone Commons
Springfield, MO 65804
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
08/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	20 OF 25 SHEET

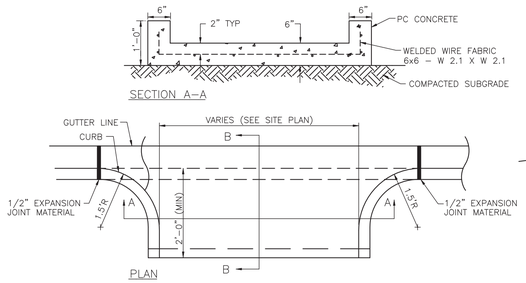


DIMENSIONS								
SIZE (IN)	H	J	W	X	Y	Z	ANGLE	WEIGHT
HW-12	2'-6"	12"	4'-0 7/8"	2'-11"	2'-0"	21 1/8"	30°	2,400#
HW-15	2'-6"	12"	4'-0 7/8"	2'-11"	2'-0"	21 1/8"	30°	2,400#
HW-18	2'-6"	12"	4'-0 7/8"	2'-11"	2'-0"	21 1/8"	30°	2,400#
HW-21	3'-0"	18"	5'-9 3/4"	3'-6"	3'-0"	28 1/8"	30°	3,800#
HW-24	3'-0"	18"	5'-9 3/4"	3'-6"	3'-0"	28 1/8"	30°	3,800#
HW-27	4'-1"	18"	8'-1 9/16"	4'-8"	4'-0"	3'-6 1/8"	30°	6,800#
HW-30	4'-1"	18"	8'-1 9/16"	4'-8"	4'-0"	3'-6 1/8"	30°	6,800#
HW-36	4'-1"	18"	8'-1 9/16"	4'-8"	4'-0"	3'-6 1/8"	30°	6,800#
HW-42	5'-2"	24"	11'-1 3/8"	5'-11"	5'-6"	4'-9 1/8"	30°	11,000#
HW-48	5'-2"	24"	11'-1 3/8"	5'-11"	5'-6"	4'-9 1/8"	30°	11,000#
HW-54	6'-3"	30"	13'-6 1/4"	7'-2"	6'-6"	6'-0 1/8"	30°	15,500#
HW-60	6'-3"	30"	13'-6 1/4"	7'-2"	6'-6"	6'-0 1/8"	30°	15,500#
HW-66	7'-2"	30"	14'-10 1/4"	8'-6"	6'-6"	7'-4 1/8"	30°	18,000#
HW-72	7'-2"	30"	14'-10 1/4"	8'-6"	6'-6"	7'-4 1/8"	30°	18,000#

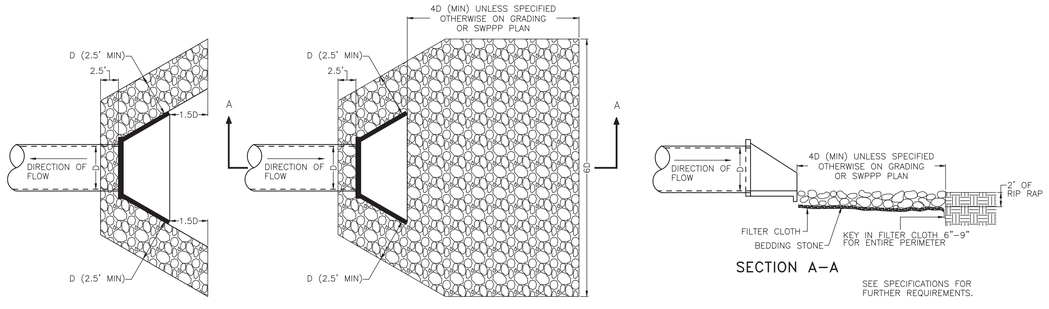
NOTES:

1. CONCRETE 4000 PSI @ 28 DAYS
2. REINFORCING STEEL TO MEET ASTM A-615, GRADE 60
3. 1.5" MIN CONCRETE COVERAGE
4. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4"
5. DESIGN REQUIREMENTS PRESENTED HERE ARE MINIMUM STANDARDS ONLY. THE CONTRACTOR AND/OR PRECAST COMPANY SHALL ASSUME ALL LIABILITY FOR THE FINAL DESIGN.

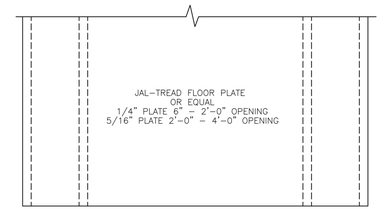
HEADWALL

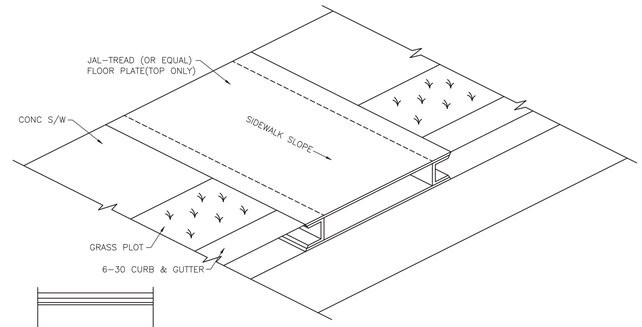


FLUME



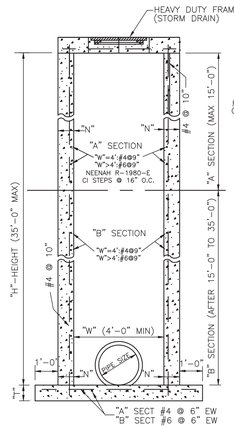
RIP-RAP

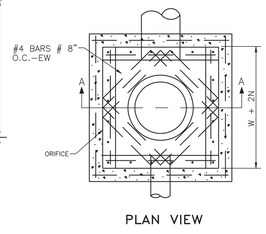


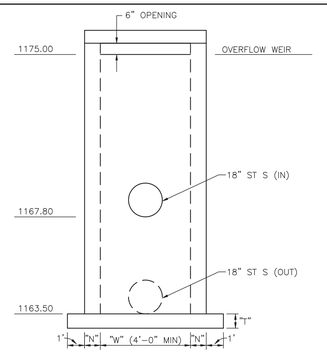


PREFABRICATED SIDEWALK DRAIN

SIDEWALK DRAIN







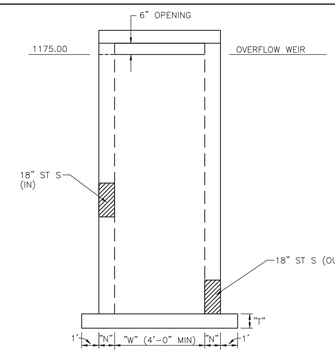
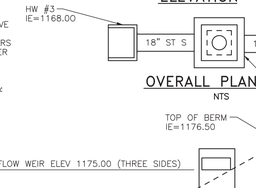


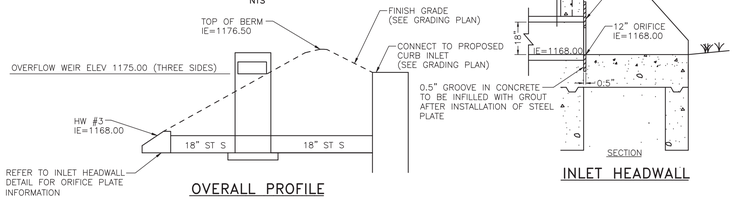
TABLE OF 'W' DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-7"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"

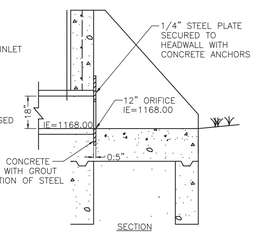
TABLE OF "T" & "N" DIMENSIONS			
SECTION	WIDTH ("W")	"T"	"N"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"
	GREATER THAN 7'	6" + PIPE THICKNESS	8"
"B"	4'	6" + PIPE THICKNESS	8"
	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"

GENERAL NOTES:

1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER.
2. ALL #4 & #5 REINFORCING BARS TO HAVE 1 1/2" COVER, LARGER SIZES TO HAVE 2" COVER.
3. ALL EXPOSED SURFACES TO BE HAND RUBBED SAND FINISH.
4. SEE DETAIL SHEET FOR INLET & OUTLET HEADWALLS.

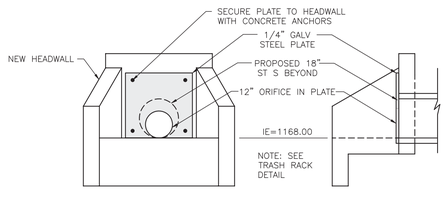




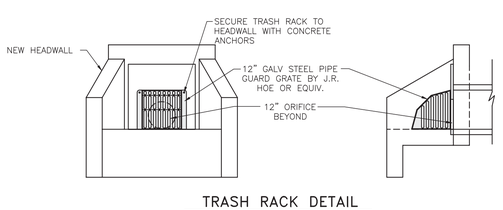


OUTLET CONTROL STRUCTURE (OCS)
N.T.S.

OUTLET CONTROL STRUCTURE



ORIFICE PLATE DETAIL
N.T.S.



TRASH RACK DETAIL
N.T.S.

HEADWALL #3

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7066 Ledgestone Commons
Suite 101 (918) 369-8383
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	21 OF 25 SHEET

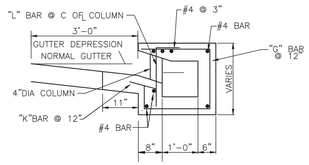
INLET TABLE

INLET	INLET CONFIGURATION
CI 1	REGULAR INLET
CI 2	REGULAR INLET
CI 3	REGULAR INLET

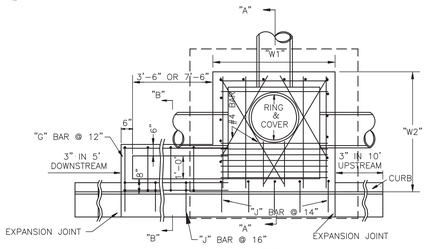
GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
2. ALL REINFORCING BARS TO HAVE 2" COVER.
3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
4. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF BOX.
5. ALL REINFORCING BARS TO BE GRADE 60.
6. PRECAST MANHOLE MAY BE USED UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

PRECAST MANHOLE SPECIFICATIONS

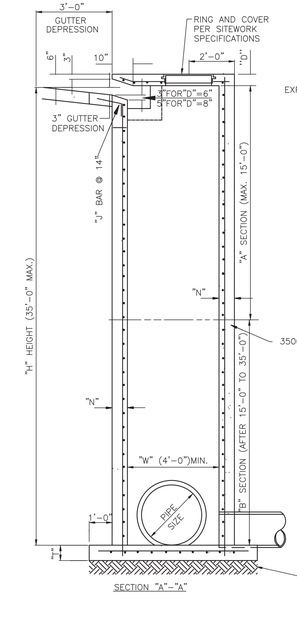
ASTM C478 – PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
ASTM C913 – PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES
CONCRETE: 4000 PSI AE (MIN.)
JOINT: WATERTIGHT RUBBER GASKET



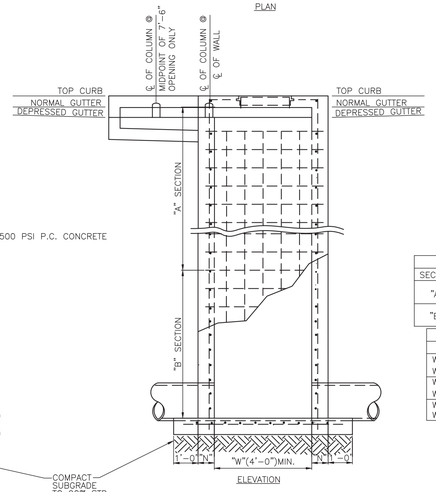
SECTION "B"–"B"



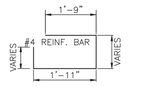
PLAN



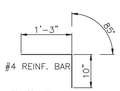
SECTION "A"–"A"



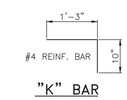
ELEVATION



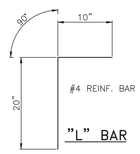
"G" BAR



"J" BAR



"K" BAR



"L" BAR

REINFORCEMENT SCHEDULE, BASE	
SECTION	
"A"	#4's @ 6" E.W.
"B"	#6's @ 6" E.W.

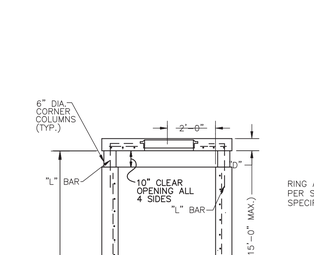
TABLE OF 'W' DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-7"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"
DOUBLE	FOR "A" SECTION ONLY		
24"	7'-0"	7'-10"	9'-5"
30"	8'-2"	9'-2"	11'-0"
36"	9'-4"	10'-6"	12'-6"
42"	10'-6"	11'-10"	14'-2"
48"	11'-8"	13'-2"	15'-10"

REINFORCEMENT SCHEDULE, WALLS			
SECTION	WIDTH ("W")	HOR.	VERT.
"A"	4'	#4's @ 9"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 9"	#4's @ 10"
	GREATER THAN 7'	#5's @ 4 1/2"	#4's @ 10"
"B"	4'	#4's @ 6"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 6"	#4's @ 10"

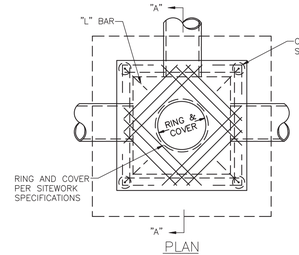
TABLE OF "T" & "N" DIMENSIONS				
SECTION	WIDTH ("W")	"T"	"N"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"B"	4'	6" + PIPE THICKNESS	8"	8"
	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"	8"

REINFORCEMENT SCHEDULE, TOP		
DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4'S @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER

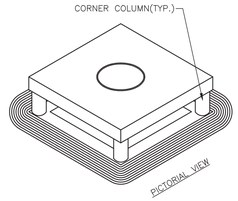
CURB INLET

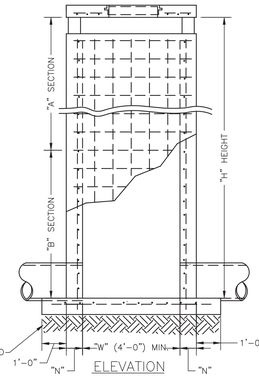


SECTION "A"–"A"



PLAN





ELEVATION

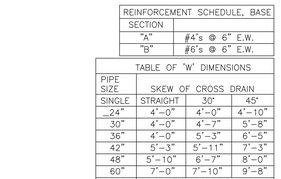
GENERAL NOTES:
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2. ALL REINFORCING BARS TO HAVE 2" COVER.
3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
4. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF BOX.
5. ALL REINFORCING BARS TO BE GRADE 60.
6. PRECAST MANHOLE MAY BE USED UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

PRECAST MANHOLE SPECIFICATIONS

ASTM C478
CONCRETE: 4000 PSI AE (MIN.)
JOINT: WATERTIGHT RUBBER GASKET

AREA INLET

N.T.S.



CORNER BAR

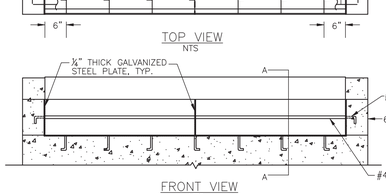
REINFORCEMENT SCHEDULE, BASE	
SECTION	
"A"	#4's @ 6" E.W.
"B"	#6's @ 6" E.W.

TABLE OF 'W' DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-7"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"
DOUBLE	FOR "A" SECTION ONLY		
24"	7'-0"	7'-10"	9'-5"
30"	8'-2"	9'-2"	11'-0"
36"	9'-4"	10'-6"	12'-6"
42"	10'-6"	11'-10"	14'-2"
48"	11'-8"	13'-2"	15'-10"

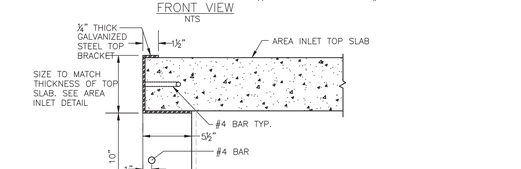
REINFORCEMENT SCHEDULE, WALLS			
SECTION	WIDTH ("W")	HOR.	VERT.
"A"	4'	#4's @ 9"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 9"	#4's @ 10"
	GREATER THAN 7'	#5's @ 4 1/2"	#4's @ 10"
"B"	4'	#4's @ 6"	#4's @ 10"
	BETWEEN 4' & 7'	#6's @ 6"	#4's @ 10"

TABLE OF "T" & "N" DIMENSIONS				
SECTION	WIDTH ("W")	"T"	"N"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"B"	4'	6" + PIPE THICKNESS	8"	8"
	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"	8"

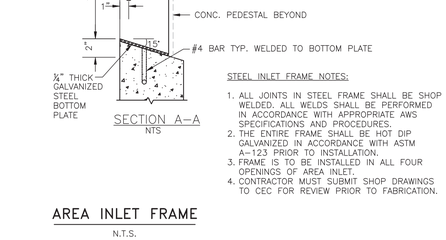
REINFORCEMENT SCHEDULE, TOP		
DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4'S @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER



TOP VIEW
NTS



FRONT VIEW
NTS



SECTION A–A
NTS

STEEL INLET FRAME NOTES:
1. ALL JOINTS IN STEEL FRAME SHALL BE SHOP WELDED. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. THE ENTIRE FRAME SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A–123 PRIOR TO INSTALLATION.
3. FRAME IS TO BE INSTALLED IN ALL FOUR OPENINGS OF AREA INLET.
4. CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO CEC FOR REVIEW PRIOR TO FABRICATION.

AREA INLET FRAME

N.T.S.

AREA INLET

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882–1701

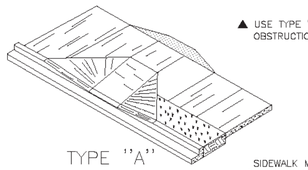
DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7088 Ledgestone Commons
Bartlett, TN 38133
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

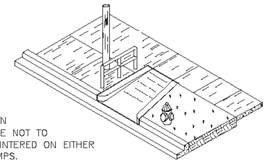
LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
4/6/22

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	22 OF 25 SHEET



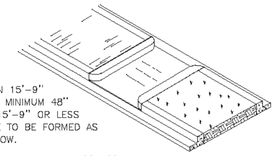
▲ USE TYPE "A" RAMP IF NO OBSTRUCTION, EXIST

TYPE ''A''



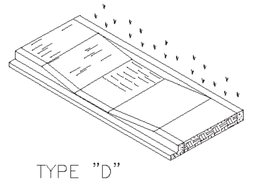
▲ USE TYPE "B" RAMP WHEN OBSTRUCTIONS, WHICH ARE NOT TO BE REMOVED, ARE ENCOUNTERED ON EITHER SIDE OF WHEELCHAIR RAMPS.

TYPE ''B''

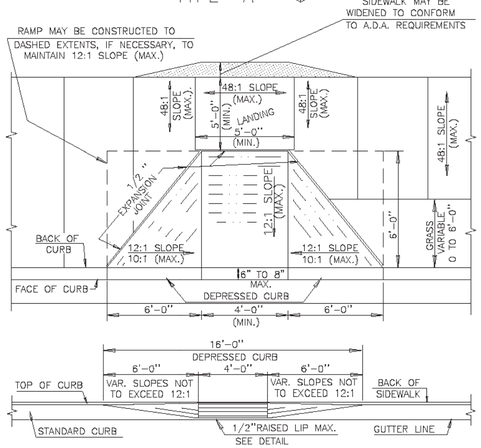


▲ FOR MEDIAN GREATER THAN 15'–9" USE TYPE "B" RAMP WITH MINIMUM 48" LANDING – IF MEDIAN IS 15'–9" OR LESS (5'–0" MIN.) SIDES ARE TO BE FORMED AS SHOWN IN THE DETAIL BELOW.

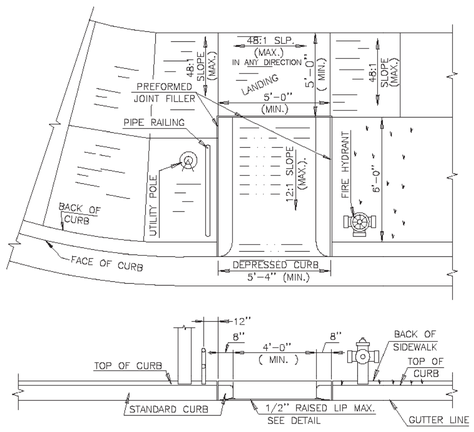
TYPE ''C''



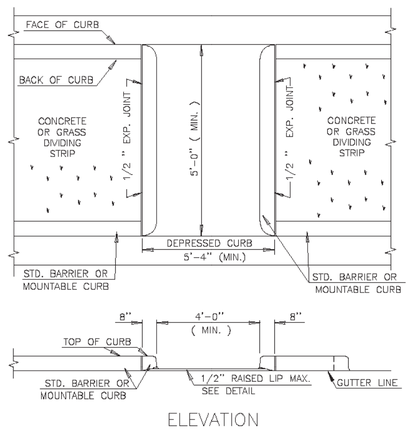
TYPE "D"



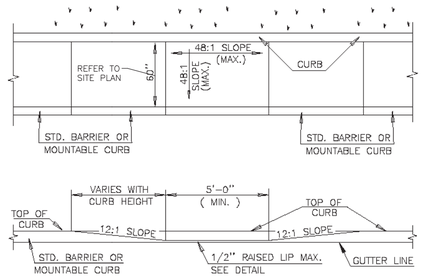
ELEVATION



ELEVATION



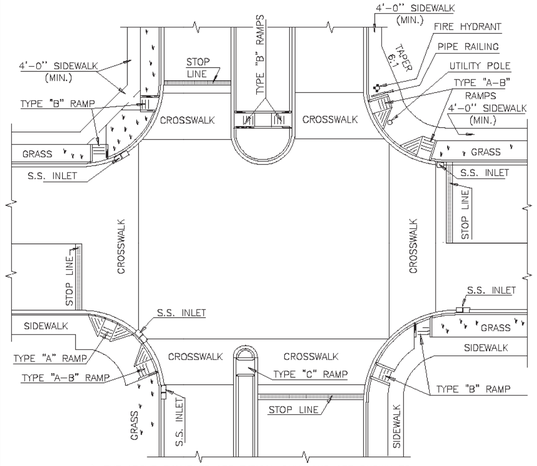
ELEVATION



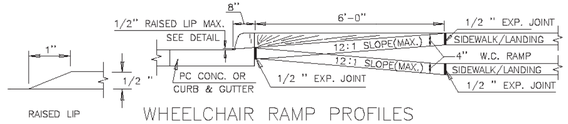
ELEVATION

GENERAL NOTES

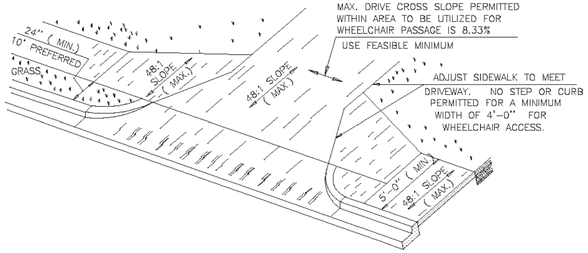
1. THERE WILL BE NO SEPARATE PAYMENT FOR RAMP AND TRUNCATED DOME CONSTRUCTION, AS ALL COSTS ASSOCIATED WITH THE WORK SHALL BE INCLUDED IN THE PRICE BID FOR "CONCRETE SIDEWALKS". THERE WILL BE NO DEDUCTION OF PAYMENT FOR CONCRETE CURB & GUTTER AND/OR INTEGRAL CURB FOR THE LENGTH OF THE DEPRESSED CURB.
2. RAMP AND LANDING WIDTHS SHALL MATCH SIDEWALK WIDTHS AND SHALL BE 4' MIN. UNLESS AUTHORIZED OTHERWISE BY THE ENGINEER.
3. LANDING LENGTHS SHALL BE 5' MIN. IF RAMP CHANGES DIRECTION, LANDING SHALL BE A MIN. OF 5'x 5'.
4. RAMP DIMENSIONS SHOWN ARE BASED ON A CURB HEIGHT OF SIX INCHES. THE DIMENSIONS SHOULD BE ADJUSTED FOR OTHER CURB HEIGHTS. THE MAXIMUM PERMISSIBLE SLOPES OF THE WHEELCHAIR RAMPS IS 8.33% (12:1). RAMP SLOPE MAY BE 10:1 (MAX.) ALONG FACE OF TAPERED CURB.
5. TRANSVERSE GROOVING (TINING) OR A MEDIUM BROOM FINISH SHALL BE REQUIRED ON RAMPS AS SHOWN ON THIS SHEET.
6. DRAINAGE STRUCTURES SHALL NOT BE PLACED IN LINE WITH THE RAMPS.
7. THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP WITH A 50:1 SLOPE (MAX.), SEE NOTE NO. 10.
8. WHEELCHAIR RAMPS SHOULD BE LOCATED SO THAT THE RAMP WILL BE ON THE TRAFFIC APPROACH SIDE OF ANY OBSTACLE.
9. WHEELCHAIR RAMPS SHOULD BE BUILT AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE TYPE OF RAMP WILL BE DESIGNATED ON THE PLANS. IF A RAMP IS TO BE CONSTRUCTED AS A COMBINATION OF TWO TYPES, (ONE SIDE TYPE A AND ONE SIDE TYPE B) THE RAMP SHALL BE DESIGNATED AS TYPE A–B.
10. PIPE RAILING CONSTRUCTION DETAILS, WHEN REQUIRED AT TYPE B WHEEL CHAIR RAMPS, WILL BE SHOWN ON THE PLANS.
11. EXCAVATION, BACKFILL, EXPANSION JOINT MATERIAL, SEALERS, AND OTHER RELATED MISCELLANEOUS ITEMS WILL NOT BE PAID FOR SEPARATELY BUT THE COST THEREOF SHALL BE INCLUDED IN THE COST OF THE SIDEWALK.
12. ALL FEATURES OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, SIDEWALKS, CURB RAMPS AND CROSSWALK MARKINGS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES (ADAAG). WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH THE ADAAG, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURE(S). THE CONTRACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK WHICH IS NOT IN FULL COMPLIANCE WITH THE ADAAG WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THE GUIDELINES OF THE ADAAG, FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

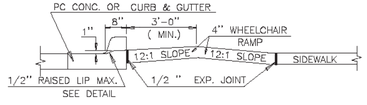


▲ THE ABOVE EXAMPLES ARE TYPICAL ONLY AND ARE SHOWN TO ILLUSTRATE POSSIBLE RAMP TYPES, POSSIBLE RAMP LOCATIONS, POSSIBLE INLET LOCATIONS, AND HOW THE RAMP WILL BE DESIGNATED ON THE PLANS. CARE SHOULD BE EXERCISED TO ASSURE THAT MEDIAN RAMP AND CURB RAMP LINE UP, AND THAT RAMPS THROUGHOUT A PROJECT ARE LOCATED WITH SOME DEGREE OF UNIFORMITY.

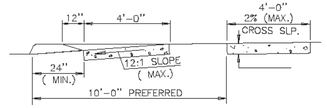


WHEELCHAIR RAMP PROFILES

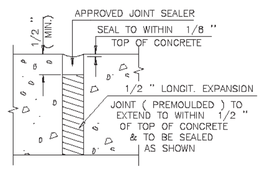




WHEELCHAIR RAMP PROFILES



▲ AT DRIVEWAY LOCATIONS, THE NORMAL 4'–0" SIDEWALK MUST BE SET BACK FROM CURB, OR A WIDER SIDEWALK (5'–0" TYP.) USED TO ASSURE WHEELCHAIR PASSAGE. WHEELCHAIR PASSAGE MUST BE AVAILABLE ON EXTENDED LENGTHS OF SIDEWALKS AT INTERVALS LESS THAN 200 FEET.



1/2'' EXPANSION JOINT

▲ JOINT FILLER SHALL MEET THE REQUIREMENTS OF SECTIONS 701.08(b) AND 701.08(e) OF THE ODOT 1999 ENGLISH STANDARD SPECIFICATIONS.

JOINT FILLER SHALL BE USED BETWEEN SIDEWALK AND CURBS, WHEELCHAIR RAMPS, DRIVEWAYS, STREETS, RETAINING WALLS, ETC.

STANDARD DETAILS WHEELCHAIR RAMPS

CITY OF LAWTON
ENGINEERING DIVISION

PROJECT NO.: | DATE:

REVISION	DATE
ENGINEER UPDATE	APRIL 2007
ENGINEER UPDATE	MARCH 2011
ENGINEER UPDATE	MAY 2011
ENGINEER UPDATE	MARCH 2012

DESIGNED BY: G. Hennessee | DRAWN BY: S. Mellous | AS BUILT DATE: | ENGINEER | SHEET OF

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882–1701

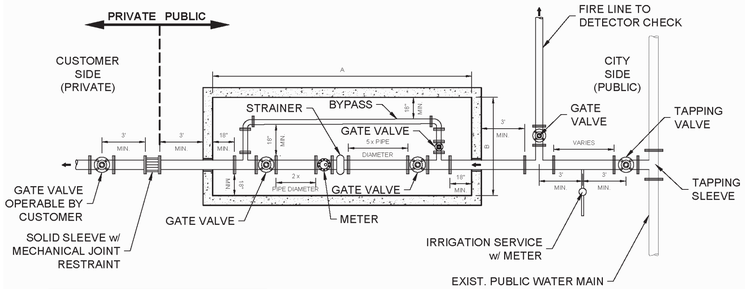
DETAILS
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7066 Ledgestone Commons
Springfield, MO 65804
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

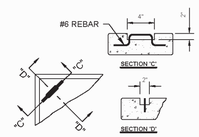
DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	23 OF 25 SHEET

CITY OF LAWTON CURB RAMPS



METER SIZE	BY-PASS SIZE	A	B
3"	2"	9'-6"	6'-0"
4"	2"	11'-0"	6'-0"
6"	3"	14'-0"	6'-6"

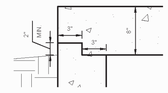
PLAN-VAULT LAYOUT
1"=5'



NOTE:
1. PROVIDE LIFTING EYES (4' MIN. PER PRECAST SECTION) BASED ON MIN. CAPACITY OF 2 TON / LIFTING EYE.

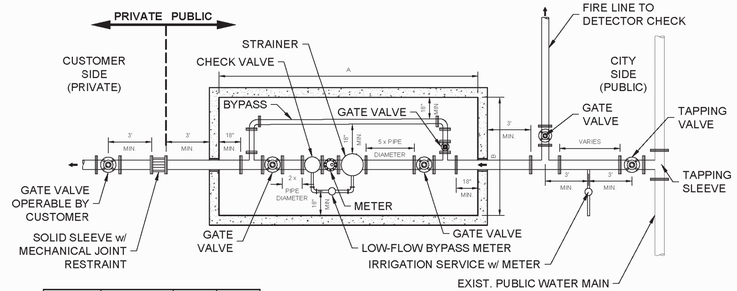
LIFTING EYE DETAIL

DETAIL 'A'



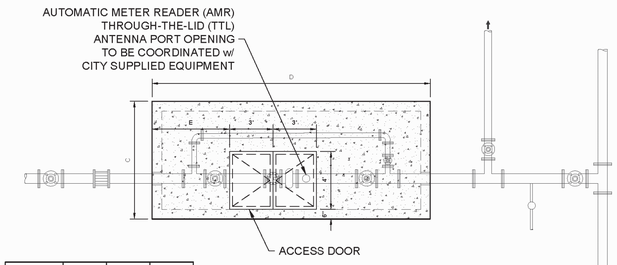
PRECAST JOINT DETAIL

DETAIL 'B'



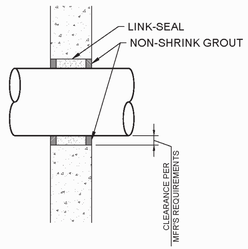
METER SIZE	BY-PASS SIZE	A	B
6"	3"	17'-0"	7'-6"
8"	4"	17'-0"	7'-6"
10"	6"	20'-6"	8'-6"
12"	8"	22'-0"	9'-0"

PLAN-VAULT LAYOUT
1"=5'



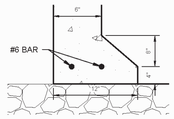
METER SIZE	C	D	E
3"	7'-0"	10'-6"	5'-0"
4"	7'-0"	12'-0"	5'-6"
6"	7'-6"	15'-0"	7'-0"

PLAN-LID LAYOUT
1"=5'



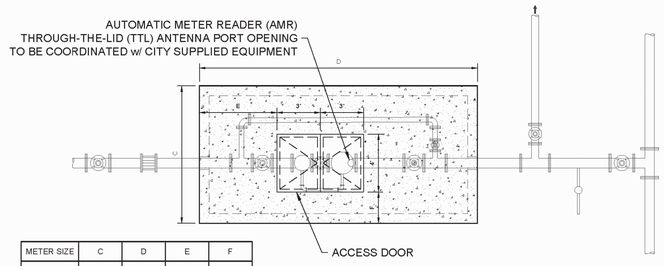
SEAL & GROUT
PIPE WALL PENETRATION DETAIL

DETAIL 'C'



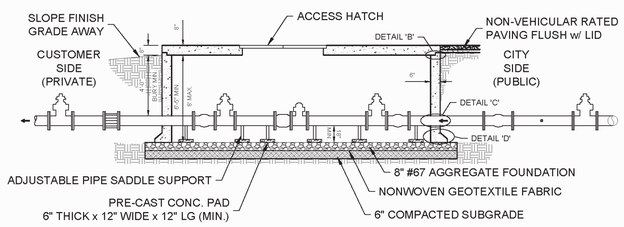
FOOTING DETAIL

DETAIL 'D'



METER SIZE	C	D	E	F
6"	8'-6"	18'-0"	8'-0"	1'-6"
8"	8'-6"	18'-0"	8'-0"	1'-6"
10"	9'-6"	21'-6"	9'-6"	1'-9"
12"	10'-0"	23'-0"	10'-0"	1'-9"

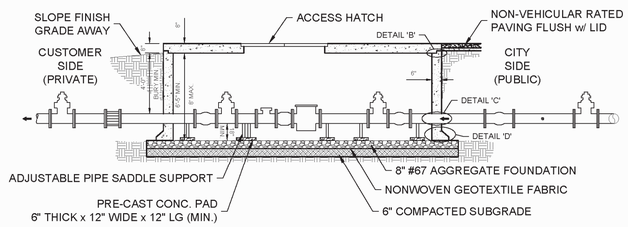
PLAN-LID LAYOUT
1"=5'



CL SECTION
1"=5'

WATER METER VAULT

GENERAL NOTES:
1. PRECAST VAULTS SHALL BE CONSTRUCTED AS SPECIFIED IN ASTM C857-16 & ASTM C858-18.
2. CONCRETE SHALL HAVE A MIN. 7 DAY COMPRESSIVE STRENGTH OF 3500 PSI.
3. REINFORCING STEEL SHALL BE GRADE 60.
4. REINFORCING STEEL SHALL HAVE A MIN. 2" CLEAR SPACE FROM EXPOSED SURFACE.
5. MINIMUM REINFORCEMENT IN VAULT LID & WALLS SHALL BE GRADE 60, #3 BARS AT 9 1/2" CC EW OR GRADE 65 WIRE MESH W6.2 / W6.2, 6"x 6".
6. JOINTS BETWEEN PRECAST VAULT SECTIONS (LID TO WALL OR WALL TO WALL) SHALL HAVE CONCRETE JOINT SEALANT APPLIED TO THE JOINT PRIOR TO THE SECTIONS BEING ASSEMBLED. SEALANT SHALL BE EVERGRIP990 OR APPROVED EQUAL MEETING ASTM C990, U.S. FEDERAL SPECIFICATION SS-S-210A, TYPE 1, ROPE FORM & AASHTO M-198-10.
7. VAULT ACCESS DOOR SHALL BE HALLIDAY H2C7248 w/ SAFETY FALL GRATING OR APPROVED EQUAL.
8. SUBGRADE SHALL BE COMPACTED TO 95% STD. PROCTOR DENSITY, ASTM D-698.
9. GEOTEXTILE FABRIC SHALL BE NON-WOVEN POLYPROPYLENE, TENSILE STRENGTH OF 200 LBS, MIRAFI 180N OR APPROVED EQUAL.
10. AGGREGATE FOUNDATION SHALL BE ASTM C-33 #67 COMPACTED TO 95% STD. PROCTOR DENSITY, ASTM D-698.
11. PRECAST VAULTS SHALL BE INSTALLED AS SPECIFIED IN ASTM C891-11.
12. ALL FITTINGS WITHIN VAULT SHALL BE FLANGED.
13. ALL FITTINGS & PIPE OUTSIDE OF VAULT SHALL BE RESTRAINED FITTINGS.
14. ADJUSTABLE PIPE SADDLE SUPPORT w/ THREADED PIPE STAND SHALL BE EATON B-LINE SERIES B3093 OR APPROVED EQUAL w/ ELECTRO-GALVANIZED FINISH MEETING ANSI / MSS SP-69 & SP-58, TYPE 38.



CL SECTION
1"=5'

FIRE FLOW METER VAULT

FIRE LINE BACK FLOW PREVENTOR VAULT

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

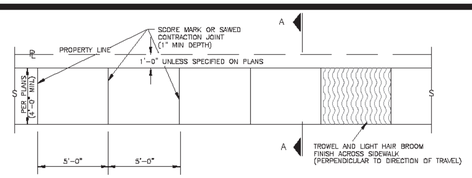
DETAILS

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

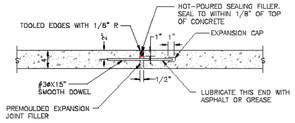
CARLSON CONSULTING ENGINEERS, INC.
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Bartlett, TN 38133
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Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
8/19/22

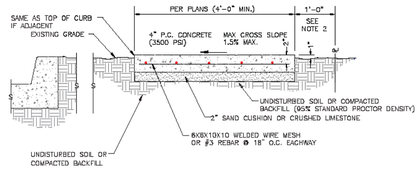
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DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	24 OF 25 SHEET



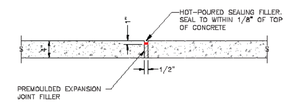
SIDEWALK PLAN AND JOINT LAYOUT



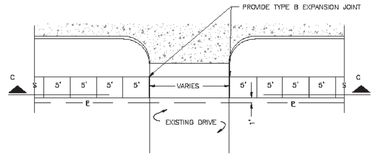
TYPE A TRANSVERSE EXPANSION JOINT



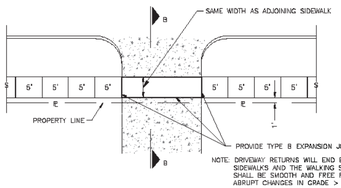
SECTION A–A



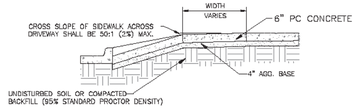
TYPE B EXPANSION JOINT



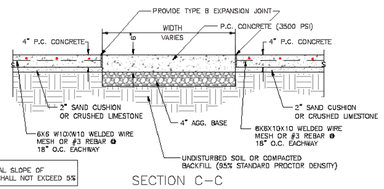
SIDEWALK AT EXISTING DRIVE OTHER THAN CONCRETE



SIDEWALK AT CONCRETE DRIVE

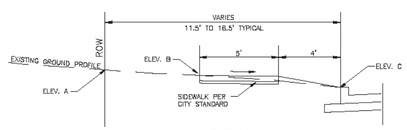


SECTION B–B



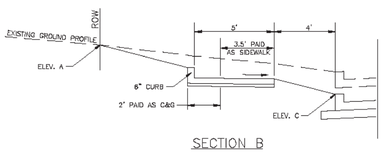
NOTE: LONGITUDINAL SLOPE OF SIDEWALK SHALL NOT EXCEED 5%

SECTION C–C



SECTION A

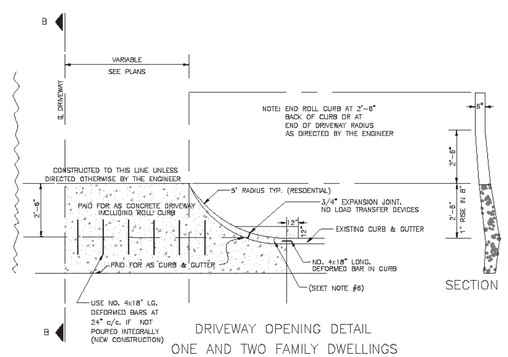
WHEN (ELEV. B – ELEV. C) IS LESS THAN 7" OR
WHEN (ELEV. A – ELEV. C) IS LESS THAN 1.5'
(NOTE: NEAR EDGE OF SIDEWALK WILL BE 6" ABOVE ELEV. C)



SECTION B

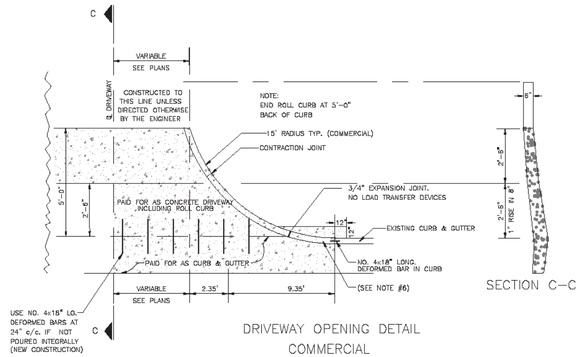
WHEN (ELEV. A – ELEV. C) IS GREATER THAN 1.5'
(NOTE: NEAR EDGE OF SIDEWALK WILL BE 6" TO 10" ABOVE ELEV. C)

SIDEWALK PLACEMENT DETAILS
(FOR USE AT LOCATIONS AS DIRECTED BY CITY ENGINEER)



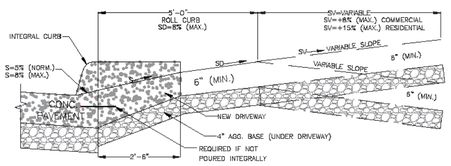
DRIVEWAY OPENING DETAIL
ONE AND TWO FAMILY DWELLINGS

SECTION B–B



DRIVEWAY OPENING DETAIL
COMMERCIAL

SECTION C–C



DRIVEWAY OPENING DETAIL
ALONG CENTERLINE OF DRIVE
(NOT TO SCALE)

DRIVEWAY CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF LAWTON STANDARD SPECIFICATIONS.
2. WHERE CONCRETE PAVEMENT WITH INTEGRAL CURB IS IN PLACE: REMOVE 2' WIDE SECTION OF CURB & CUTTER TO A NEAT LINE USING FULL DEPTH SAW CUT AND CONSTRUCT NEW DRIVEWAY USING BUTT JOINT WITH #4x18" DEFORMED BARS DRILLED AT 24" c/c AND EPOXY GROUTED INTO EXISTING PAVEMENT.
3. WHERE CONCRETE PAVEMENT OR ASPHALT PAVEMENT WITH A CURB & GUTTER SECTION IS IN PLACE: REMOVE EXISTING CURB & GUTTER THRU EXTENT OF PLANNED DRIVEWAY CONSTRUCTION TO A NEAT LINE USING FULL DEPTH SAW CUT. FOR CONCRETE PAVEMENT, CONSTRUCT NEW DRIVEWAY USING BUTT JOINT WITH #4x18" DEFORMED BARS DRILLED AT 24" c/c AND EPOXY GROUTED INTO EXISTING PAVEMENT. FOR ASPHALT PAVEMENT USE BUTT JOINT ONLY. NEW DRIVEWAY SHALL BE OF P.C. CONCRETE THRU EXTENT SHOW BY SHADING (MINIMUM).
4. EXPANSION JOINT MATERIAL SHALL EXTEND TO WITHIN 1" OF PAVING OR CURB SURFACE AND THEN SHALL BE FILLED TO SURFACE WITH JOINT SEALER.
5. WHERE DRIVEWAYS INTERSECT WITH SIDEWALKS, TRANSITIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA REQUIREMENTS.
6. DRIVEWAY CURBING SHALL BE POURED INTEGRALLY WITH CURB AND GUTTER, BLOCK OUT OF GUTTER SHALL OCCUR IF NOT POURED MONOLITHIC.
7. DRIVEWAY APPROACHES SHALL HAVE CONTROL JOINT TYPE 'C' AT MAXIMUM OF 15' O.C. EACHWAY.

SIDEWALK CONSTRUCTION NOTES

1. MINIMUM SIDEWALK WIDTHS SHALL BE DETERMINED AS FOLLOWS UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
   - *ALONG ARTERIALS 6'-0"
   - *ALONG COLLECTORS 5'-0"
   - *WITHIN TWO BLOCKS OF A SCHOOL 5'-0"
   - *R-3 & R-4 ZONING 5'-0"
   - *ALL OTHER 4'-0"
2. PUBLIC SIDEWALKS SHALL BE INSTALLED IN THE RIGHT-OF-WAY WITHIN 1' OF THE PROPERTY LINE UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER.
3. METER BOXES, FIRE HYDRANTS, LIGHT POLES, SIGN POSTS, ETC., WILL NOT BE INSTALLED WITHIN ANY PORTION OF THE SIDEWALK. VALVE BOXES INSTALLED IN SIDEWALKS SHALL BE CONSTRUCTED SO THAT PORTION OF THE SIDEWALK MEETS REQUIRED ADA SPECIFICATIONS.
4. THERE WILL BE A MAX. DROP ACROSS SIDEWALKS FOR DRAINAGE AS FOLLOWS:

SIDEWALK WIDTH	DROP ACROSS SIDEWALK
4'	3/4"
5'	1"
6'	1 1/4"
8'	1 1/2"
10'	1 3/4"
OTHER	1.5% MAX.

5. DRIVEWAY RETURNS WILL NOT CROSS SIDEWALKS.
6. EXPANSION JOINT EVERY 150' MIN.
7. ALL NEW SIDEWALKS WILL MEET ADA ACCESSIBILITY GUIDELINES AND AS SET FORTH IN ANSI A117.1 (2003) FOR ACCESSIBLE ROUTES:

(A.) ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 20:1 SHALL BE CONSTRUCTED TO ADA RAMP STANDARDS AS FOLLOWS AND WILL CONTAIN AT LEAST ONE LEVEL AREA 5'-0" IN LENGTH AT THE ENDS OF EACH RUN.

SLOPE	MAX. RISE	MAX. RUN
8:1 TO 9:1	3 IN (75 MM)	2 FT. (0.6M)
10:1 TO 11:1	6 IN (150 MM)	5 FT. (1.5M)
12:1 TO 15:1	30 IN (760 MM)	30 FT. (9M)
16:1 TO 19:1	30 IN (760 MM)	40 FT. (12M)
20:1	30 IN (760 MM)	50 FT. (15M)

(B.) TRANSITIONS BETWEEN RAMPS, WALKS, GUTTERS, DRIVEWAYS, AND STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 20:1.

(C.) THE MINIMUM WIDTH OF A CURB RAMP SHALL BE 48" EXCLUSIVE OF CURBING, RETURNS, OR FLARED SIDES. IF THE RAMP IS A RETURNED CURB RAMP WITH CURBS, RAMP WIDTH SHALL BE THE SAME AS THE ADJOINING WALK WIDTH.

(D.) IF A RAMP IS LOCATED WHERE PEDESTRIANS WILL WALK ACROSS THE RAMP, THEN IT SHALL HAVE FLARED SIDES. THE MAXIMUM SLOPE OF THE FLARE SHALL BE 12:1.

(E.) ALL CURB RAMPS SHALL HAVE WIRE MESH OR EQUAL AND 2" SAND CUSHION OR CRUSHED LIMESTONE.

STANDARD DETAILS
SIDEWALK AND DRIVEWAY

CITY OF LAWTON
ENGINEERING DIVISION

PROJECT #: Engineering Update March 2012
DATE:

FILE NAME: 12 Sidewalk And Driveway.dwg

DESIGNED BY:	DRAWN BY:	PLOT DATE:	AS BUILT DATE:	SHEET OF
G. Hennessee	S. Malicoat	03/22/2012		

NO	REVISIONS

COBBLESTONE DEVELOPMENT, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4
SPRINGFIELD, MO 65804
PH. (417) 882-1701

DETAILS
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, OKLAHOMA

CARLSON CONSULTING ENGINEERS, INC.
7068 Ledgestone Commons
Springfield, MO 65810
Phone (901) 384-0404
Fax (901) 384-0710
Oklahoma Registered Engineering Firm CA-3224

LICENSED PROFESSIONAL ENGINEER
JOSEPH PARSLEY
22955
OKLAHOMA
12/31/23

DRAWN	DPS
CHECKED	JSP
DATE	08/19/22
SCALE	N.T.S.
JOB No.	N/A
SHEET	25 OF 25 SHEET

Crossroads at Westchester Circle

Lawton, Comanche County, Oklahoma

GENERAL NOTES

ELEVATION DATUM
SEE ARCHITECTURAL DRAWINGS OR SITE PLAN FOR FINISH FLOOR ELEVATIONS

DESIGN SPECIFICATIONS
2015 INTERNATIONAL BUILDING CODE

EARTHWORK
EARTHWORK OPERATIONS SHALL BE PERFORMED UNDER THE DIRECTION OF A PROFESSIONAL TESTING AGENCY TO ASSURE COMPLIANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT BY PSI INC. DATED FEBRUARY 15, 2022.

CONCRETE

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 305 SPECIFICATIONS FOR HOT WATER CONCRETE, AND ACI 306 SPECIFICATIONS FOR COLD WEATHER CONCRETE, WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

1. CONCRETE SHALL DEVELOP THE FOLLOWING 28-DAY MINIMUM COMPRESSIVE STRENGTH:
   - FOUNDATIONS – 3,000 PSI
   - CAST-IN-PLACE WALLS – 3,500 PSI
   - FLOOR SLAB – 4,000 PSI
   - EXTERIOR SLABS, WALLS AND CURBS – 4,000 PSI
2. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED FILL.
3. CHLORIDE- BASED ADMIXTURES ARE PROHIBITED IN ALL REINFORCED CONCRETE.
4. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60.
5. ALL CONTINUOUS REINFORCING STEEL THAT MEETS AT A CORNER SHALL BE TIED TOGETHER WITH A CORNER BAR THAT HAS SUFFICIENT LAP DISTANCE IN EACH DIRECTION
6. CONTINUOUS REINFORCING BARS LAP LENGTH SHALL BE A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE
7. CONCRETE SLUMP SHALL BE A MAXIMUM OF 4" +/- 1" (ASTM C- 143) AS DELIVERED IN THE FIELD. CONTRACTOR MAY USE CHEMICAL ADMIXTURES TO ATTAIN A MAXIMUM SLUMP OF 8" FOR WORKABILITY. NO WATER MAY BE ADDED TO THE CONCRETE MIX ON SITE UNLESS WATER IS WITHHELD AT THE BATCHING FACILITY. IF WATER IS WITHHELD AT THE BATCHING FACILITY IT SHOULD BE REFLECTED ON THE LOAD TICKET. THE TOTAL AMOUNT OF WATER IN THE MIX SHALL NOT EXCEED WHAT IS NOTED ON THE APPROVED MIXED. THIS SHALL BE NOTED IN THE SPECIAL INSPECTOR'S RECORDS.
8. CONCRETE EXPOSED TO WEATHER, VEHICLES, AND/OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH 6% (+/-) 1.5% ENTRAINED AIR BY VOLUME AT POINT OF DISCHARGE. DO NOT ALLOW AIR CONTENT OF TROWELED FINISHED FLOORS TO EXCEED 3%.
9. SUBMIT CONCRETE MIX PROPORTIONS PRIOR TO START OF WORK. DO NOT BEGIN CONCRETE PRODUCTION UNTIL MIXES HAVE BEEN REVIEWED AND ARE ACCEPTABLE TO THE ENGINEER.
10. READY MIX CONCRETE SHALL COMPLY WITH REQUIREMENTS OF ASTM C94.
11. CONCRETE WORK EXECUTION
    - A. CONSTRUCT FORMS TO CORRECT SIZE, SHAPE, ALIGNMENT, ELEVATION AND POSITION; AND TO SUPPORT VERTICAL AND LATERAL LOADS.
    - B. POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE, UNLESS NOTED OTHERWISE ON THE DRAWINGS:
      CAST AGAINST AND EXPOSED TO EARTH.....3 INCHES
      EXPOSED TO EARTH OR WEATHER.....2 INCHES
      NOT EXPOSED TO WEATHER OR
      IN CONTACT WITH EARTH.....1 ½ INCHES
    - C. PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 15 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL JOINTS MINIMUM ¼ OF SLAB DEPTH, AS SOON AFTER SLAB FINISHING WITHOUT DISLODGING AGGREGATE.
    - D. STEEL TROWEL FINISH ALL INTERIOR CONCRETE SLABS, BROOM FINISH ALL EXTERIOR CONCRETE SLABS.
    - E. CURE ALL CONCRETE IN COMPLIANCE WITH ACI 301, USING A LIQUID TYPE MEMBRANE, NON-RESIDUAL, CURING COMPOUND COMPLYING WITH ASTM C309. ASSURE COMPATIBILITY WITH FINISH FLOOR COVERING.

POST-INSTALLED ANCHORS

1. ALL POST-INSTALLED ANCHORS SHALL MEET THE REQUIREMENTS OF THE CODE-CITED EDITION OF ACI 318, APPENDIX "D", AND SHALL BE ACCEPTABLE FOR BOTH CRACKED AND UNCRACKED CONCRETE.
2. EXPANSION ANCHORS HAVE BEEN DESIGNED AS HILTI KWIK BOLT TZ ANCHORS, UNLESS NOTED OTHERWISE.
3. ADHESIVE ANCHORS HAVE BEEN DESIGNED TO USE HILTI HIT HY 200 ADHESIVE IN CONCRETE OR SOLID MASONRY, UNLESS NOTED OTHERWISE.
4. EQUIVALENT ANCHORS MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL. SUBMITTALS ARE THE CONTRACTOR'S RESPONSIBILITY AND MUST INCLUDE EVALUATION REPORTS FROM THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS (ICBO).
5. EMBEDMENT DEPTH IS DEFINED AS THE DISTANCE FROM THE SURFACE OF THE LOAD-BEARING BASE MATERIAL TO THE DEEPEST PART OF THE ANCHOR AFTER THE ANCHOR HAS BEEN DRIVEN INTO THE HOLE BUT NOT YET EXPANDED.
6. ADHESIVE ANCHORS SHALL BE ACCEPTABLE FOR LONG-TERM LOADING. WHEN BASE MATERIAL TEMPERATURES ARE BELOW 40 DEG F, ONLY NON-EPOXY-BASED ADHESIVES SHALL BE USED.
7. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO USING POST-INSTALLED ANCHORS FOR MISSING OR MISPLACED CAST-IN-PLANE ANCHORS. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING BARS. HOLES SHALL BE DRILLED AND CLEANED PER ANCHOR MANUFACTURER'S SPECIFICATIONS.
8. STAINLESS STEEL ANCHORS ARE REQUIRED AT ALL PERMANENTLY EXPOSED WEATHER CONDITIONS.

TIMBER

TIMBER WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ANSI/AWC NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2015 NDS SUPPLEMENT FOR WOOD CONSTRUCTION, WITH THE FOLLOWING SUPPLEMENTAL REQUIREMENTS:

1. FOR COMMON MEMBER SIZES, THE SPECIES AND GRADES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
   - A. 2X4 SPF No.1/No.2
   - B. 2X6 SPF No.1/No.2
   - C. 2X8 DF-L No.2
   - D. 2X10 DF-L S.S.
   - E. 2X12 DF-L S.S.

   EQUIVALENT (OR BETTER) GRADES & SPECIES MAY BE SUBMITTED FOR THE ENGINEER'S APPROVAL.
2. SIZES SHOWN FOR LUMBER ARE NOMINAL SIZES.
3. TIMBER EXPOSED TO WEATHER OR GROUND, OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-IMPREGNATED BY AN APPROVED PROCESS AND PRESERVATIVE.
4. SPLICING OF JOISTS, STUDS, OR HEADERS IS PROHIBITED EXCEPT AS SHOWN.
5. BOLTS SHALL CONFORM TO ASTM A307. HOLES SHALL BE DRILLED PER SECTION 12.1.3 OF THE 2015 ANSI/AWC NDS FOR WOOD CONSTRUCTION NDS SUPPLEMENT.
6. LAG SCREWS AND WOOD SCREWS SHALL BE INSTALLED PER SECTIONS 12.1.4 & 12.1.5 RESPECTIVELY, OF THE 2015 ANSI/AWC NDS FOR WOOD CONSTRUCTION WITH 2015 NDS SUPPLEMENT.
7. COMMON NAILS SHALL BE USED, UNLESS NOTED OTHERWISE. IN ADDITION, NAILS SHALL BE GALVANIZED, IF EXPOSED TO WEATHER OR MOISTURE. TOE-NAILS SHALL BE DRIVEN PER SECTION 12.1.6.3 OF THE 2015 ANSI/AWC NDS FOR WOOD CONSTRUCTION WITH 2015 NDS SUPPLEMENT.
8. FASTENING SHALL BE PER THE IBC MINIMUM FASTENING SCHEDULE, TABLE 2304.10.1, UNLESS NOTED OTHERWISE.
9. CONNECTIONS/CONNECTORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE AISC SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES AND CURRENT OSHA STANDARDS.
2. WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992. STRUCTURAL TUBES SHALL CONFORM TO ASTM A500 GRADE B. ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
3. BOLTS, UNLESS OTHERWISE SHOWN, SHALL CONFORM TO ASTM A325-N, SIZE AS PER PLAN.
4. ANCHOR BOLTS, UNLESS OTHERWISE SHOWN, SHALL CONFORM TO ASTM F1554 GRADE 36.
5. SPLICING OF STRUCTURAL STEEL IS PROHIBITED EXCEPT AS DETAILED.
6. ALL STRUCTURAL AND MISCELLANEOUS STEEL ITEMS SHALL RECEIVE ONE COAT OF "IRONCLAD RETARDO RUST INHIBITIVE PAINT 163" (BENJAMIN MOORE) OR APPROVED EQUAL UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS. ALL STEEL SURFACES EMBEDDED IN CONCRETE SHALL NOT BE PAINTED. PREPARATION OF STEEL SURFACES SHALL MEET THE REQUIREMENTS OF THE STEEL STRUCTURES PAINTING COUNCIL (SSPC-SP1) AND THE REMOVAL OF GREASE AND OIL BY SOLVENT CLEANING (SSPC-SP1) AND THE REMOVAL OF MILL SCALE, RUST, WELD FLUX AND SLAG BY HAND TOOL CLEANING (SSPC-SP2). PRIMER SHALL BE APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE BUT NOT LESS THAN ONE GALLON PER 400 SQ.FT. THEREBY DEPOSITING A DRY FILM THICKNESS OF NOT LESS THAN 1.5 MILS. ANY SCARRED AREAS SHALL BE TOUCHED UP WITH THE SAME PAINT AFTER ERECTION.
7. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS IN ACCORDANCE WITH THE CURRENT EDITION OF THE AWS STRUCTURAL WELDING CODE. WELDING ELECTRODES SHALL BE E70XX.

MASONRY

MASONRY WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT ACI 530.1 SPECIFICATIONS FOR MASONRY STRUCTURES WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

1. HOLLOW MASONRY BLOCK SHALL CONFORM TO ASTM C90 REGULAR WEIGHT GRADE N1.
2. COURSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI.
3. MORTAR SHALL BE TYPE S CONFORMING TO ASTM C270. AVERAGE COMPRESSIVE STRENGTH IS 2,000 PSI.
4. MINIMUM 28-DAY COMPRESSIVE STRENGTH OF MASONRY; f'm = 2,000 PSI.
5. WIRE REINFORCING SHALL CONFORM TO ASTM A82, STANDARD TRUSS-TYPE DUR-O-WALL REINFORCING (OR APPROVED EQUAL) AND SHALL BE PLACED CONTINUOUSLY IN ALTERNATE HORIZONTAL MORTAR JOINTS.
6. REINFORCING STEEL SHALL CONFORM TO ASTM A615, A616, OR A617, GRADE 60. THE MINIMUM LAP FOR SPLICES SHALL BE 48 BAR DIAMETERS. PROVIDE DUR-O-WAL REBAR POSITIONERS.
7. ALL STEEL LINTELS TO BE A36 STEEL OR A992 GRADE 50. ALL LINTELS TO BE HOT DIPPED GALVANIZED.
8. INTERSECTING STRUCTURAL WALLS SHALL BE ANCHORED BY STEEL CONNECTORS SPACED VERTICALLY AT 48" O.C. MAXIMUM. THE CONNECTORS SHALL CONFORM TO ASTM A36 AND SHALL HAVE A MINIMUM SECTION OF ¼" x 1½". THEY SHALL BE 28" LONG WITH 2" AT EACH END BENT AT 90 DEGREES TO FORM A "U" OR "Z" SHAPE. ALL CELLS ABOVE AND BELOW THE ANCHOR SHALL BE GROUTED, AND THE BENT ENDS OF THE CONNECTORS SHALL BE EMBEDDED IN THE GROUT, 2" MIN.
9. EXPANSION JOINTS SHALL BE PROVIDED IN CMU BLOCK WALLS FULL HEIGHT OF WALL AT INTERVALS NOT EXCEEDING 24'-0". NOT CLOSER THAN 2'-8" FROM OPENINGS. JOINT REINFORCING SHALL BE SEVERED AT EXPANSION JOINT LOCATIONS, HOWEVER BOND BEAM REINFORCING SHALL BE CONTINUOUS THROUGH THE JOINT.
10. BOND BEAMS OR GROUTED CELLS ARE REQUIRED AT ALL CONNECTIONS TO CMU.

PREFABRICATED WOOD TRUSSES

1. FLOOR & ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE (TPI) DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, AND THE ANSI/AWC NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION.
2. PROVIDE TEMPORARY AND PERMANENT BRACING ON ALL TRUSSES, AS REQUIRED TO PROVIDE MEMBER AND TRUSS STABILITY.
3. FLOOR & ROOF TRUSSES SHALL BE DESIGNED AND CONSTRUCTED FOR A MAXIMUM TOTAL LOAD DEFLECTION OF L/360 AND TO SAFELY SUPPORT THE FOLLOWING LOADS:
   - A. DEAD, LIVE, SNOW, WIND, EARTHQUAKE: SEE PROJECT DESIGN DATA ON COVER SHEET.
   - B. MECHANICAL PIPE LOAD: TRUSSES SHALL BE DESIGNED FOR A CONCENTRATED LOAD OF 250 LBS HUNG ANYWHERE ALONG THE BOTTOM CHORD.
   - C. OVER-FRAMING LOAD: TRUSSES SHALL ALSO BE DESIGNED TO SUPPORT ADDITIONAL OVERBUILD FRAMING, SUCH AS THAT WHICH FORMS VALLEYS AND HIPS ON ROOFS.
   - D. DRIFTED SNOW LOAD: TRUSSES SHALL BE DESIGNED TO SUPPORT DRIFTED SNOW LOADS IN ACCORDANCE WITH THE APPROPRIATE BUILDING CODE.
   - E. IN-PLANE LATERAL LOADS: TRUSSES SHALL BE DESIGNED TO SUPPORT ANY LATERAL LOADS CARRIED AXIALLY IN THE PLANE OF THE TRUSS, AS SHOWN ON THE PLANS.
4. GABLED END TRUSSES SHALL HAVE VERTICAL MEMBERS SPACED AT 16" O.C. MAXIMUM.
5. SUBMITTALS SHALL INCLUDE THE FOLLOWING:
   - A. SHOP DRAWINGS PREPARED UNDER THE SUPERVISION OF, AND SIGNED AND SEALED BY, A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS BUILT. THESE DRAWINGS SHALL INDICATE SPECIES, GRADE, AND SIZES OF LUMBER TO BE USED; PITCH, SPAN, CAMBER, CONFIGURATION, AND SPACING FOR EACH TYPE OF TRUSS REQUIRED; TYPE, SIZE, MATERIAL, FINISH, AND LOCATION OF METAL CONNECTOR PLATES; AND BEARING DETAILS. SHOW TRUSS LAYOUT AND ALL REQUIRED TEMPORARY AND PERMANENT BRACING AFFECTING THE STRUCTURAL CAPACITY OF THE TRUSSES.

PROVIDE COMPLETE ENGINEERING DESIGN CALCULATIONS THAT INCLUDE DESIGN VALUES, DESIGN ANALYSIS INDICATING LOADING, ASSUMED ALLOWABLE STRESSES, STRESS DIAGRAMS, AND CALCULATIONS, AND ANY OTHER INFORMATION NEEDED FOR REVIEW. THE CALCULATIONS SHALL HAVE BEEN SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER WHO IS REGISTERED IN THE STATE WHERE THE PROJECT IS BUILT AND WHO IS RESPONSIBLE FOR PREPARATION OF THE CALCULATIONS.

SPECIAL INSPECTIONS

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

- a. CONCRETE GROUT DESIGN MIX (PERIODIC)
- b. PLACING OF CONCRETE AND REINFORCING STEEL (CONTINUOUS OF CONCRETE SAMPLING / PERIODIC OF REINFORCING)
- c. BOLTS & ANCHORS EMBEDDED IN CONCRETE (PERIODIC)
- d. STRUCTURAL STEEL FABRICATIONS (UNLESS AISC APPROVED) (PERIODIC)
- e. STRUCTURAL STEEL BOLTING & WELDING (PERIODIC)
- f. POST INSTALLED ANCHORS IN CONCRETE (CONTINUOUS)
- g. IN-SITU SOILS, EXCAVATIONS, FILLING & COMPACTION (PERIODIC)
- h. MASONRY AND REINFORCING STEEL (CONTINUOUS ON CELL GROUTING / PERIODIC ON REINFORCING)
- i. WOOD FRAMING:
  - i.a. SHEAR WALLS; WALL SIZE, CONFIGURATION, BLOCKING, PANEL GRADE, PANEL THICKNESS, AND FASTENING. (PERIODIC)
  - i.b. DIAPHRAGMS (FLOOR AND ROOF SHEATHING); SIZE, CONFIGURATION, BLOCKING, PANEL GRADE, PANEL THICKNESS, AND FASTENING. (PERIODIC)
  - i.c. FRAMING MEMBERS AND DETAILS (PERIODIC)
  - i.d. MATERIAL GRADE (PERIODIC)
  - i.e. CONNECTIONS; HANGERS, HOLD DOWNS, BUILT-UP COLUMNS, BUILT-UP BEAMS (PERIODIC)
  - i.f. PRE-ENGINEERED TRUSSES; FRAMING, CONNECTIONS, BRIDGING (PERIODIC)

THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE ITEMS LISTED ABOVE PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF THE WORK.

DESIGN DATA

2015 INTERNATIONAL BUILDING CODE / ASCE 7-10

BUILDING OCCUPANCY CATEGORY	II
ROOF LOAD DATA	
LIVE LOAD	20
ASPHALT SHINGLES + FELT	4.0
5/8" OSB ROOF SHEATHING	3.0
PRE-ENGINEERED WOOD TRUSSES @ 2'-0" O.C.	3.0
INSULATION (BLOWN)	2.0
MECHANICAL ALLOWANCE	5.0
5/8" GYP. CEILING	3.0
TOTAL TO TRUSSES	40 lbs/sqft
2ND FLOOR LOAD	
LIVE LOAD (COMMON AREA)	40 (100)
3/4" LIGHTWEIGHT CONCRETE & 3/4"SHEATHING	15
MECHANICAL ALLOWANCE	4
5/8" GYP. CEILING	3
FLOOR STRUCTURE	3
TOTAL TO FLOOR TRUSS	65 (125) lbs/sqft

ROOF SNOW LOAD DATA* (*UNBALANCED & DRIFTING SNOW TO BE DETERMINED IN ADDITION TO UNIFORM LOAD, WHERE APPLICABLE)

p_g =	10 lbs/sqft
C_e =	1.0
I_s =	1.0
C_t =	1.0
p_f =	7.00 lbs/sqft

WIND DESIGN DATA	
V_{ult} =	115 M.P.H. (3-SECOND GUST)
RISK CATEGORY	II
EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT =	± 0.18
DIRECTIONAL PROCEDURE (MWFRS - ASCE 7-10, CH 27; C&C - ASCE 7-10, CH 30, PART 4)	
MAXIMUM COMPONENTS & CLADDING WIND	+/-39.51 lbs/sqft
EARTHQUAKE DESIGN DATA	
RISK CATEGORY	II
I_E =	1.0
S_{DS} =	0.577
S_{D1} =	0.153
SITE CLASS	C
S_{DS} =	0.26
S_{D1} =	0.11
SEISMIC DESIGN CATEGORY	B
BASIC SEISMIC-FORCE-RESISTING SYSTEM =	LIGHT-FRAME (WOOD) WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
R =	6.5
Ω_0 =	3.0
C_d =	4.0
DESIGN BASE SHEAR	$V = 0.04W$
EQUIVALENT LATERAL FORCE PROCEDURE	
NET ALLOWABLE SOIL BEARING	2,100 lbs/sqft** (CONTINUOUS)
	2,500 lbs/sqft** (ISOLATED)

(**PER GEOTECHNICAL REPORT BY PSI INC. DATED FEBRUARY 15, 2022)

INDEX OF SHEETS

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ROOF FRAMING DETAILS	S510-S513

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY D. CROCKETT — 21007 — OKLAHOMA

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CLIENT:
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302 CAMPUS DR. #208
COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
GENERAL STRUCTURAL DATA

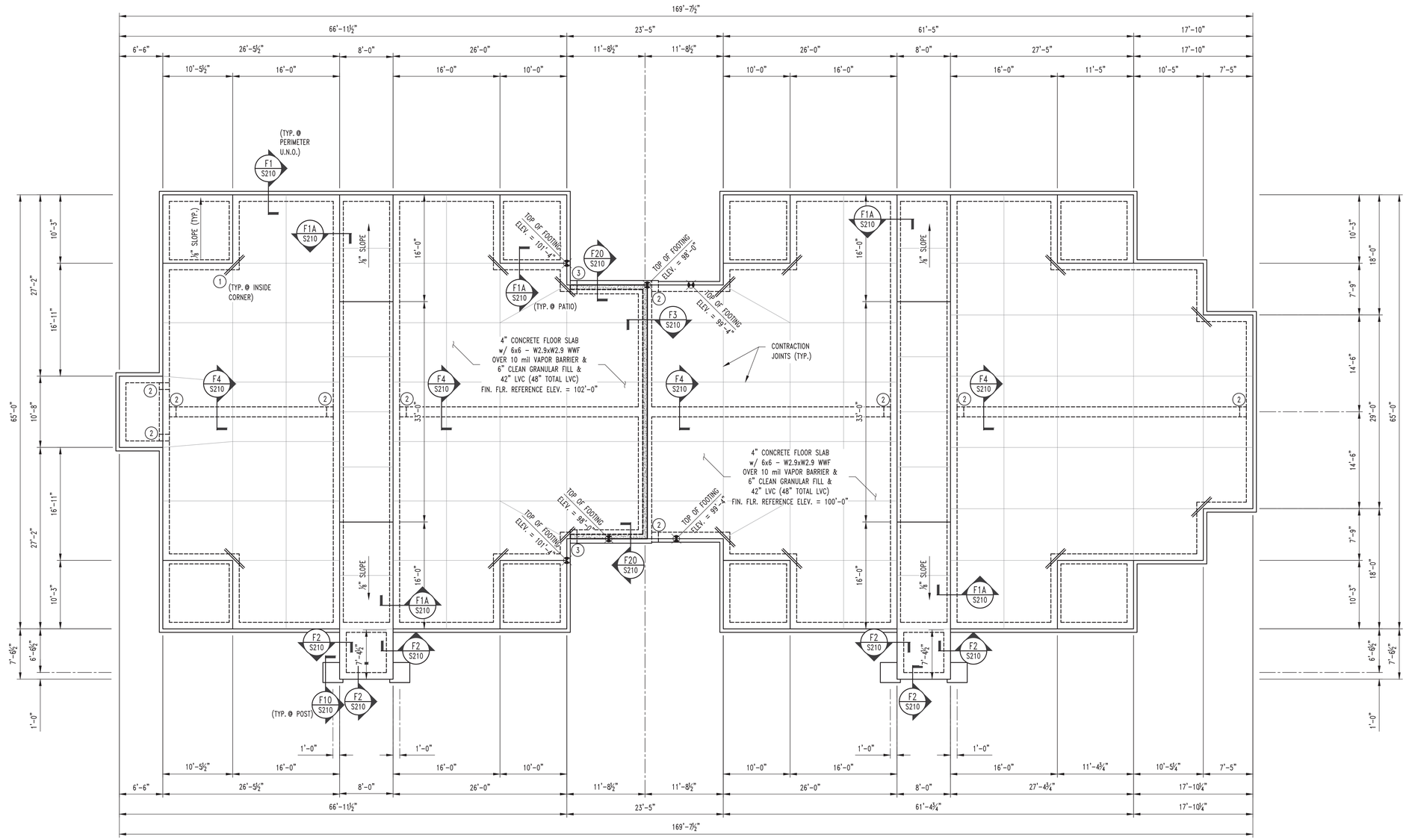
DESIGNED: JWV
DRAWN: JCS
PROJECT NO.: 220030

SHEET: S100

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.

FOUNDATION NOTES

1. REENTRANT CORNER BARS, REFER TO TYPICAL CRACK CONTROL REINFORCING DETAIL S210.
2. FOOTING STEP, REFER TO DETAIL FS1/S211.
3. FOOTING STEP, REFER TO DETAIL FS2/S211.



1 S200 FOUNDATION PLAN (BLDG. 1&2)
SCALE: 1/8" = 1'-0"

PLAN NORTH

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
8/19/2022
OKLAHOMA

STRUCTURAL ENGINEER:
CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
Columbia, Missouri 65203
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

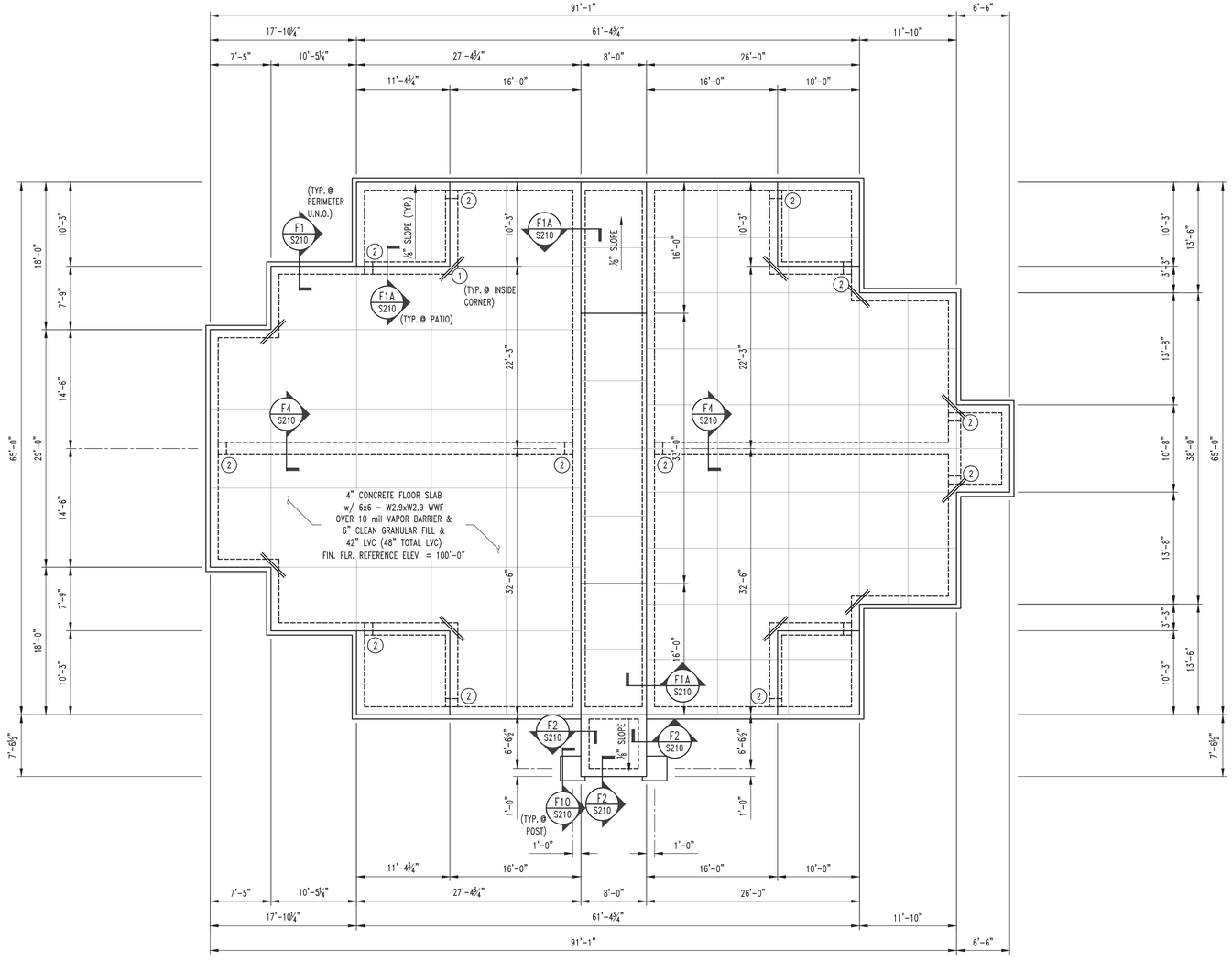
DRAWING INCLUDES:
(BLDG. 1&2)
FOUNDATION
PLAN

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030
SHEET:	S200

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.

FOUNDATION NOTES

1. REENTRANT CORNER BARS, REFER TO TYPICAL CRACK CONTROL REINFORCING DETAIL S210.
2. FOOTING STEP, REFER TO DETAIL FS1/S211.
3. FOOTING STEP, REFER TO DETAIL FS2/S211.



1 S201 FOUNDATION PLAN (BLDG. 3)
SCALE: ⅛" = 1'-0"
PLAN NORTH

REVISIONS:

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ISSUE SET	08/19/2022

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CROSSROADS AT WESTCHESTER CIRCLE

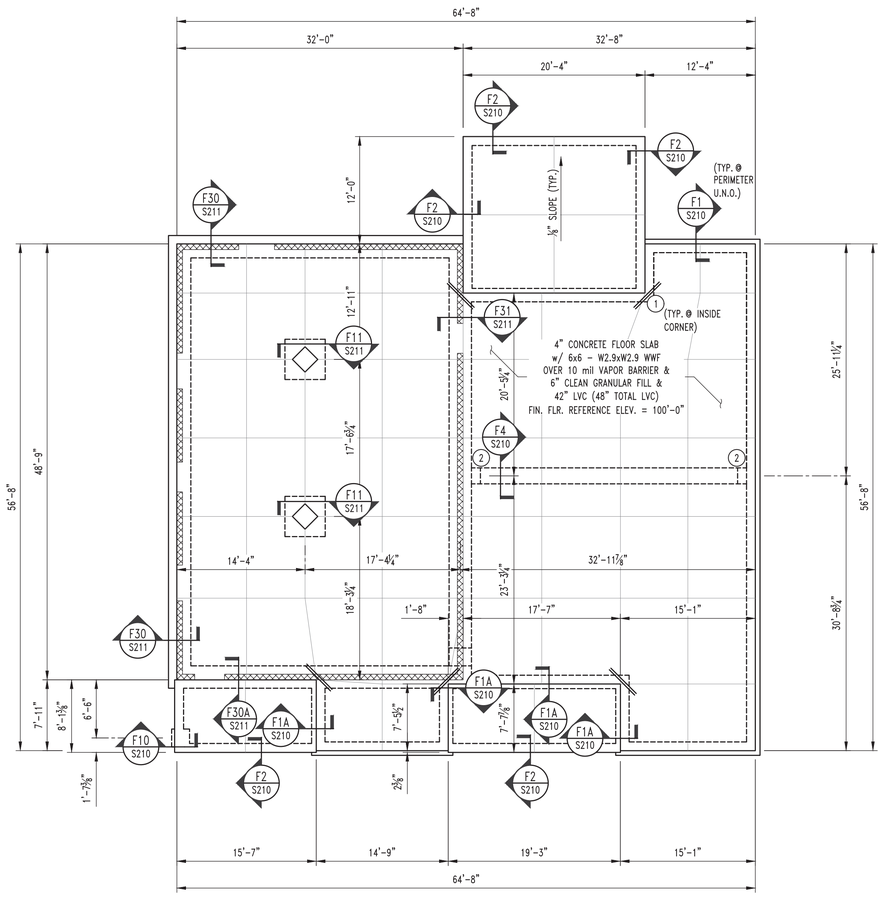
LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
(BLDG. 3)
FOUNDATION
PLAN

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET:
S201

NOTE:
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EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



1 S202 FOUNDATION PLAN (COMMUNITY BLDG.)
SCALE: ⅛" = 1'-0"

PLAN NORTH

FOUNDATION NOTES

1. REENTRANT CORNER BARS, REFER TO TYPICAL CRACK CONTROL REINFORCING DETAIL S210.
2. FOOTING STEP, REFER TO DETAIL FS1/S211.

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

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REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
OKLAHOMA

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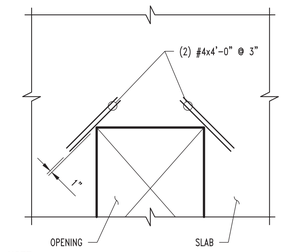
CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
(COMMUNITY BLDG.)
FOUNDATION
PLAN

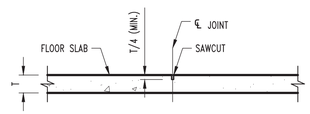
DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030
SHEET:	S202

NOTE:
REFER TO FOOTING SCHEDULE ON SHEET S200
FOR "W", "D", AND "REINFORCING" INFORMATION.

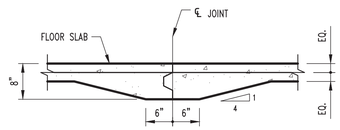


NOTE:
TYPICAL AT ALL REENTRANT CORNERS FOR
SLAB-ON-GRADE & STRUCTURAL SLAB.
REINFORCING TO BE CENTERED IN SLAB THICKNESS.

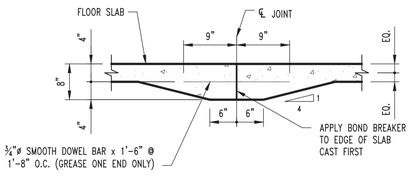
CRACK CONTROL REINFORCING



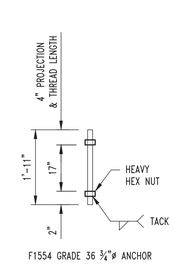
CONTRACTION JOINT



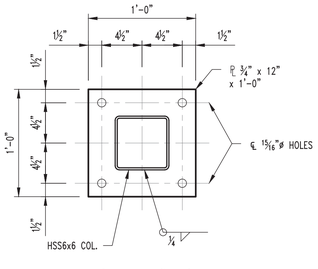
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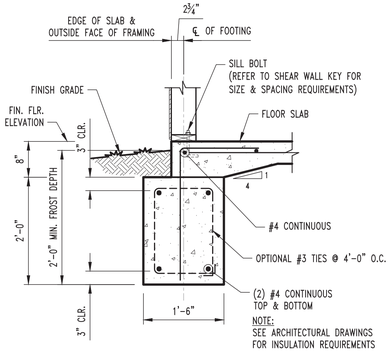
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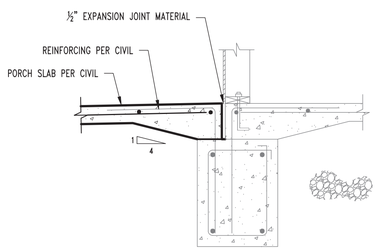
ANCHOR BOLT DETAIL (TYPE A)



BASE PLATE (BP-1)

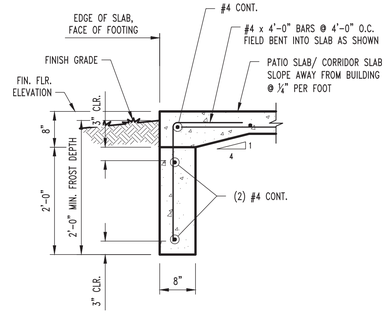


F1 S200-S202 TYP. CONT. FOOTING DETAIL
SCALE: ¾" = 1'-0"

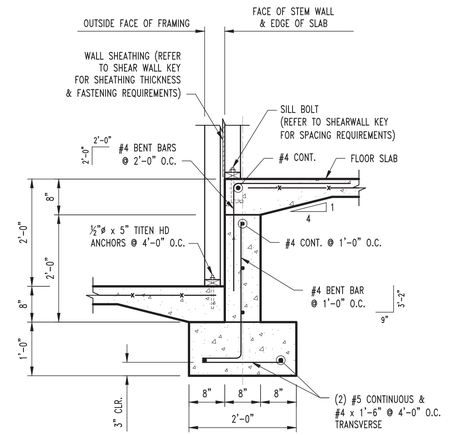


NOTE:
REFER TO DETAIL F1/S210 FOR
REMAINING DETAIL & INFORMATION.

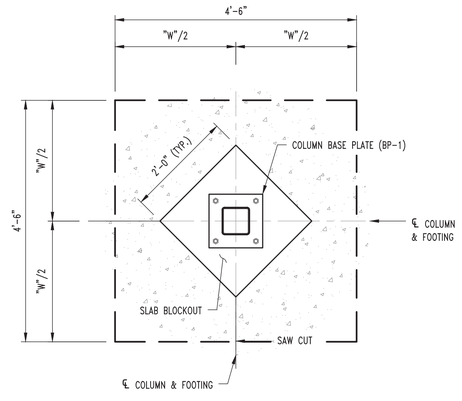
F1A S200-S202 FOOTING DETAIL @ THRESHOLD
SCALE: ¾" = 1'-0"



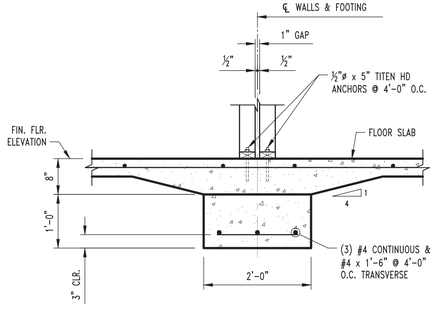
F2 S200-S202 CONT. FOOTING DETAIL
SCALE: ¾" = 1'-0"



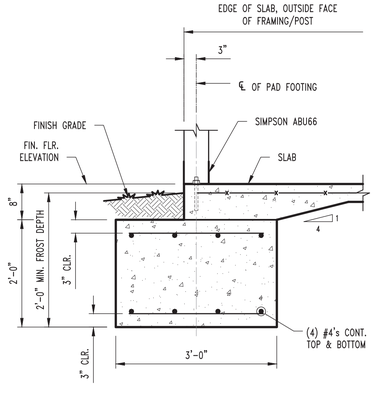
F3 S200 CONT. FOOTING SECTION
SCALE: ¾" = 1'-0"



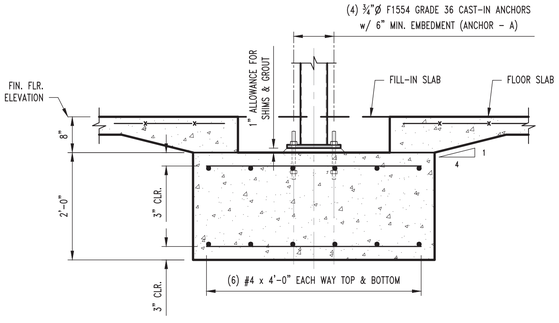
PLAN VIEW



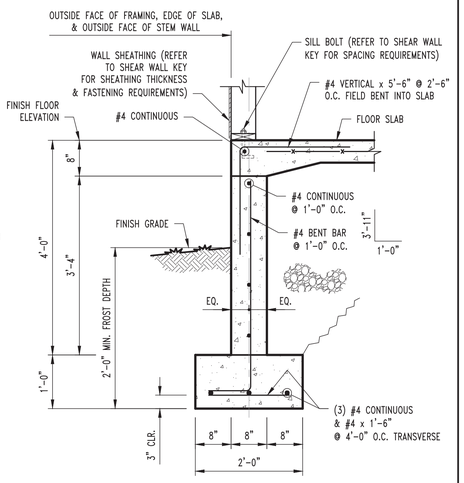
F4 S200-201 CONT. INTERIOR FOOTING SECTION
SCALE: ¾" = 1'-0"



F10 S200-202 PAD FOOTING DETAIL
SCALE: ¾" = 1'-0"



F11 S202 COLUMN FOOTING SECTION
SCALE: ¾" = 1'-0"



F20 S200 STEM WALL SECTION
SCALE: ¾" = 1'-0"

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

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SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
08/19/2022
OKLAHOMA

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CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

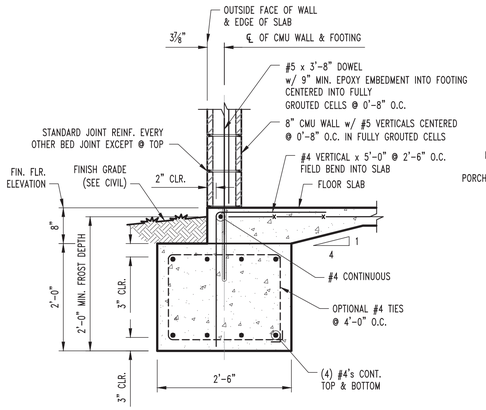
DRAWING INCLUDES:

FOUNDATION
DETAILS

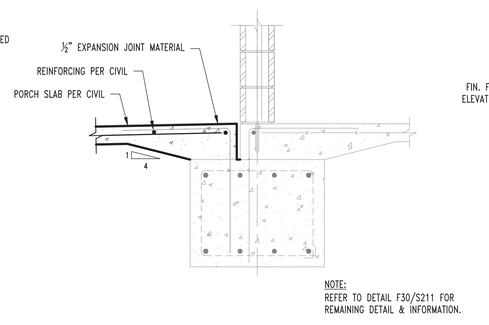
DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET:
S210

NOTE:
REFER TO FOOTING SCHEDULE ON SHEET S200
FOR "W", "D", AND "REINFORCING" INFORMATION.

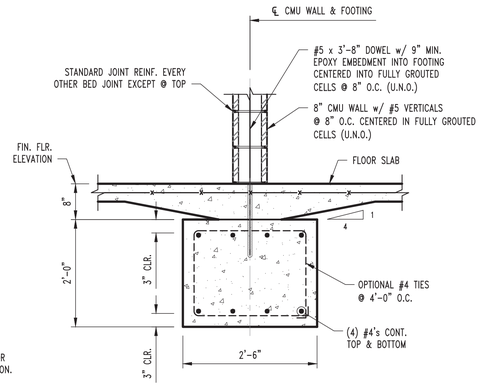


F30 / S202 CONTINUOUS FOOTING SECTION @ STORM SHELTER
SCALE: ¾" = 1'-0"

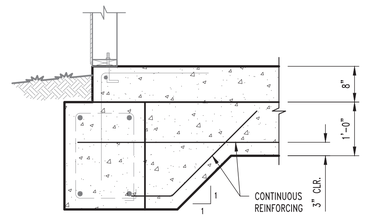


NOTE:
REFER TO DETAIL F30/S211 FOR REMAINING DETAIL & INFORMATION.

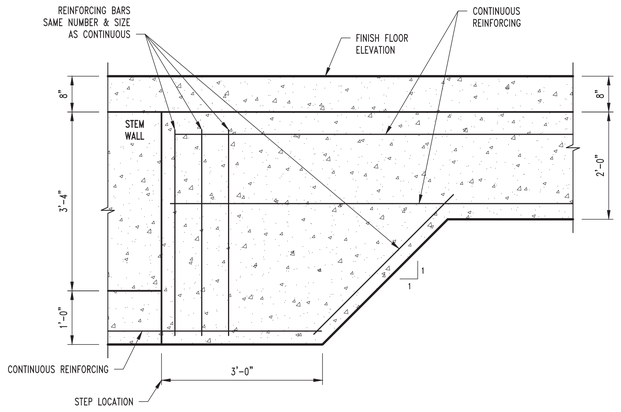
F30A / S202 CONTINUOUS FOOTING SECTION @ STORM SHELTER
SCALE: ¾" = 1'-0"



F31 / S202 CONT. FOOTING SECTION @ STORM SHELTER
SCALE: ¾" = 1'-0"



FS1 / S200-202 FOOTING STEP SECTION
SCALE: ¾" = 1'-0"



FS2 / S200 FOOTING STEP DETAIL
SCALE: ¾" = 1'-0"

REVISIONS:

No.	Date
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TIMOTHY D. CROCKETT
08/19/2022
OKLAHOMA

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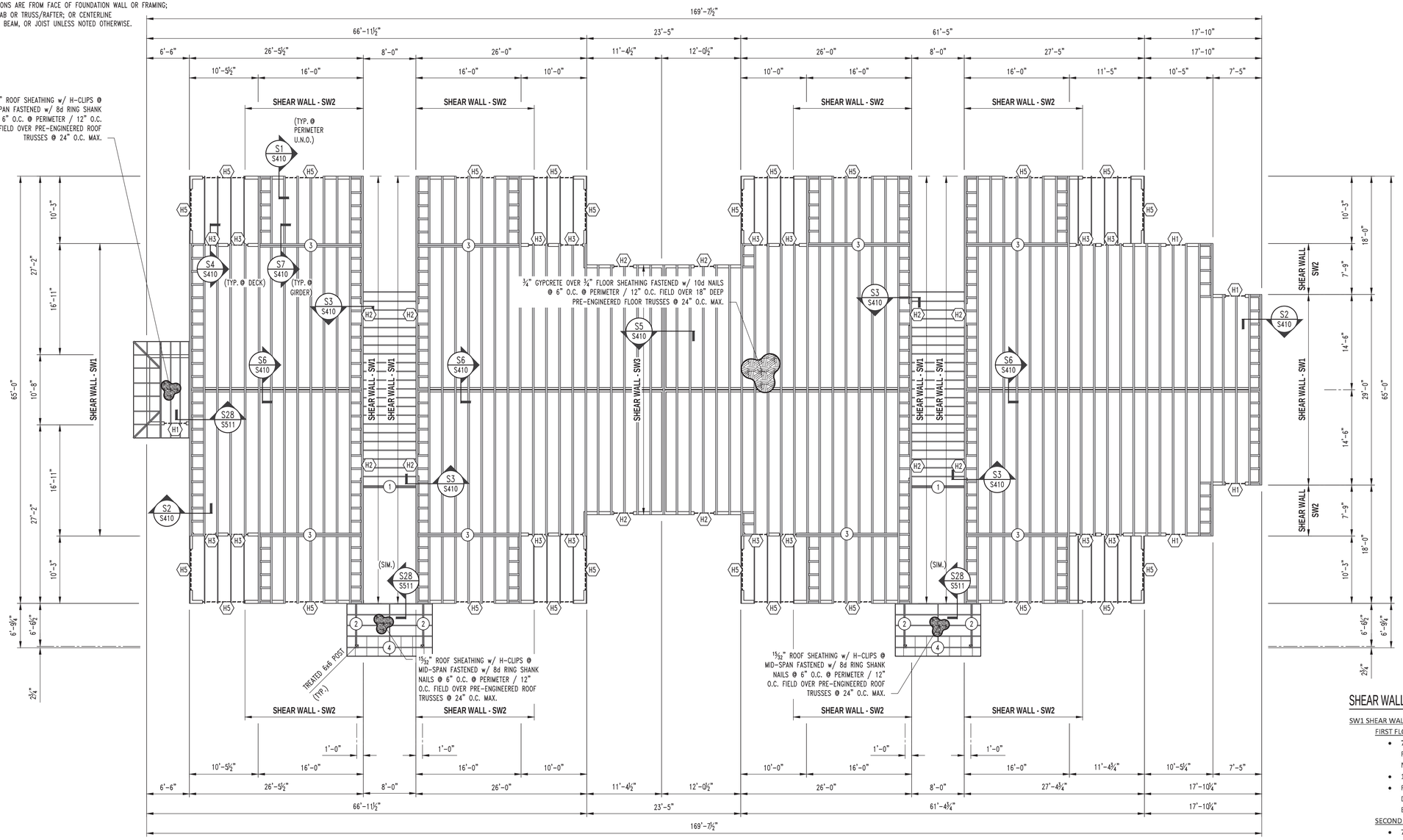
CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
FOUNDATION DETAILS

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030
SHEET:	S211

NOTE:
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1 S300 — 2ND FLOOR FRAMING PLAN (BLDG. 1&2)
SCALE: ⅛" = 1'-0"
PLAN NORTH

FLOOR FRAMING NOTES

1. (3) SEL STR DF 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (2) SEL STR DF 2x10's
3. GIRDER TRUSS w/ 3-PLY BUILT UP POST @ EACH END.
4. GABLE END TRUSS w/ VERTICALS @ 2'-0" O.C.

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 2'-0" O.C.
- REQUIRES SIMPSON LTTP2 HOLDOWN FASTENED TO SINGLE-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO SINGLE-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- NO STRAPTIES REQUIRED

SW2 SHEAR WALL

FRIST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HTT4 HOLDOWN FASTENED TO 2-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC40 STRAPTIE FASTENED TO 2-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO 2-PLY STUDS

TYPICAL WALL UNLESS NOTED
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 3'-0" O.C.
- NO HOLDDOWNS REQUIRED

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H2"	2 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H3"	2 Ply 2x8 Doug Fir #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H4"	2 Ply 2x10 Doug Fir Sel. Struct.	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H5"	2 Ply 2x10 Doug Fir Sel. Struct.	3 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

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REGISTERED PROFESSIONAL ENGINEER — TIMOTHY D. CROCKETT — 21037 — OKLAHOMA

STRUCTURAL ENGINEER:
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CROSSROADS AT WESTCHESTER CIRCLE

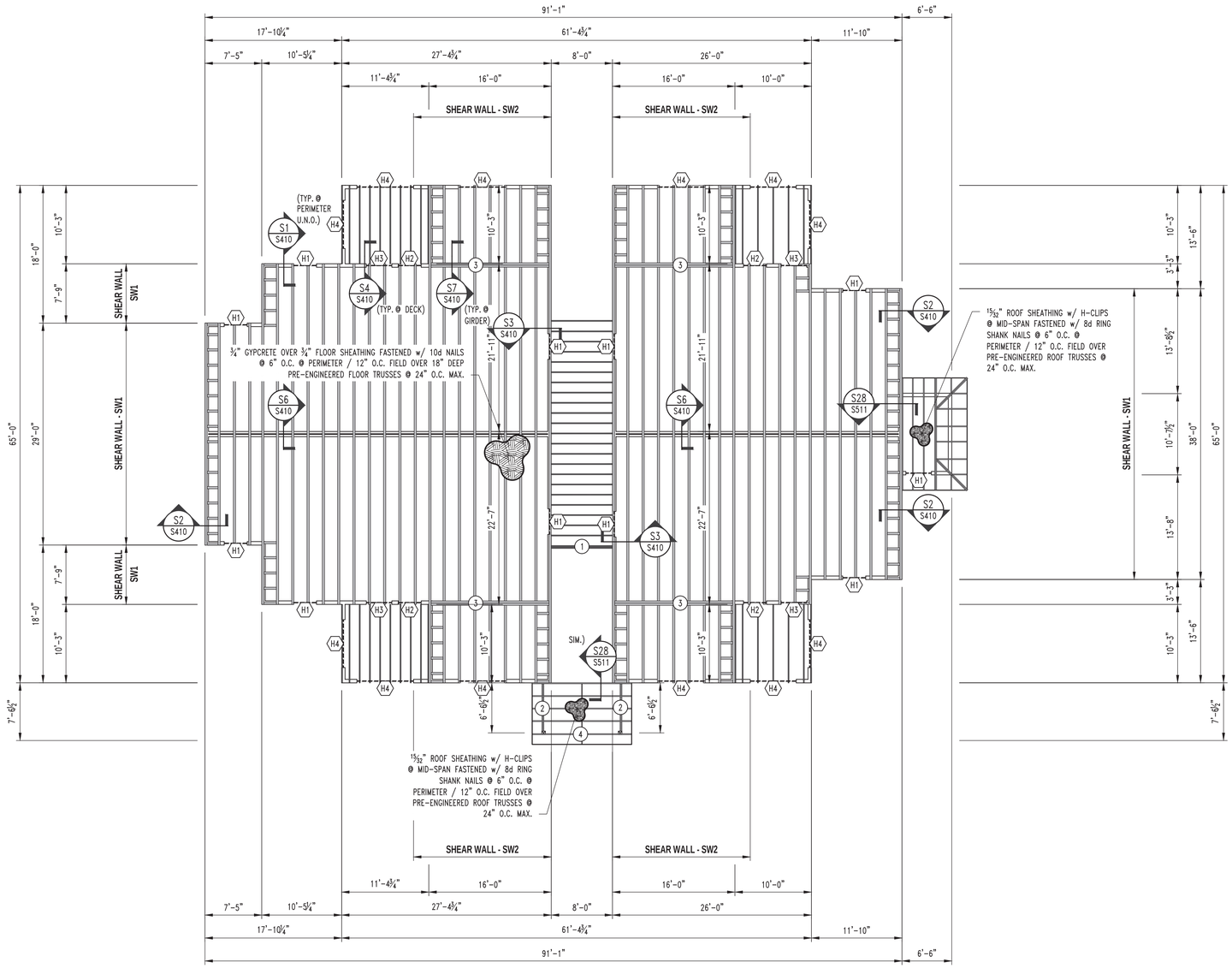
LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
(BLDG. 1&2)
2ND FLOOR
FRAMING PLAN

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET:
S300

NOTE:
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EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



FLOOR FRAMING NOTES

1. (3) SEL STR DF 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (2) SEL STR DF 2x10's
3. GIRDER TRUSS w/ 3-PLY BUILT UP POST @ EACH END.
4. GABLE END TRUSS w/ VERTICALS @ 2'-0" O.C.

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 2'-0" O.C.
- REQUIRES SIMPSON LTTP2 HOLDOWN FASTENED TO SINGLE-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO SINGLE-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- NO STRAPTIES REQUIRED

SW2 SHEAR WALL

FRIST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HTT4 HOLDOWN FASTENED TO 2-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC40 STRAPTIE FASTENED TO 2-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO 2-PLY STUDS

TYPICAL WALL UNLESS NOTED
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 3'-0" O.C.
- NO HOLDDOWNS REQUIRED

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H2"	2 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H3"	2 Ply 2x8 Doug Fir #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H4"	2 Ply 2x10 Doug Fir Sel. Struct.	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H5"	2 Ply 2x10 Doug Fir Sel. Struct.	3 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2

1 S301 — 2ND FLOOR FRAMING PLAN (BLDG. 3)
SCALE: ⅛" = 1'-0"
N — PLAN NORTH

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY D. CROCKETT — 21037 — OKLAHOMA

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Wilshire Blvd., Bldg. 1
Oklahoma City, OK 73116
(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

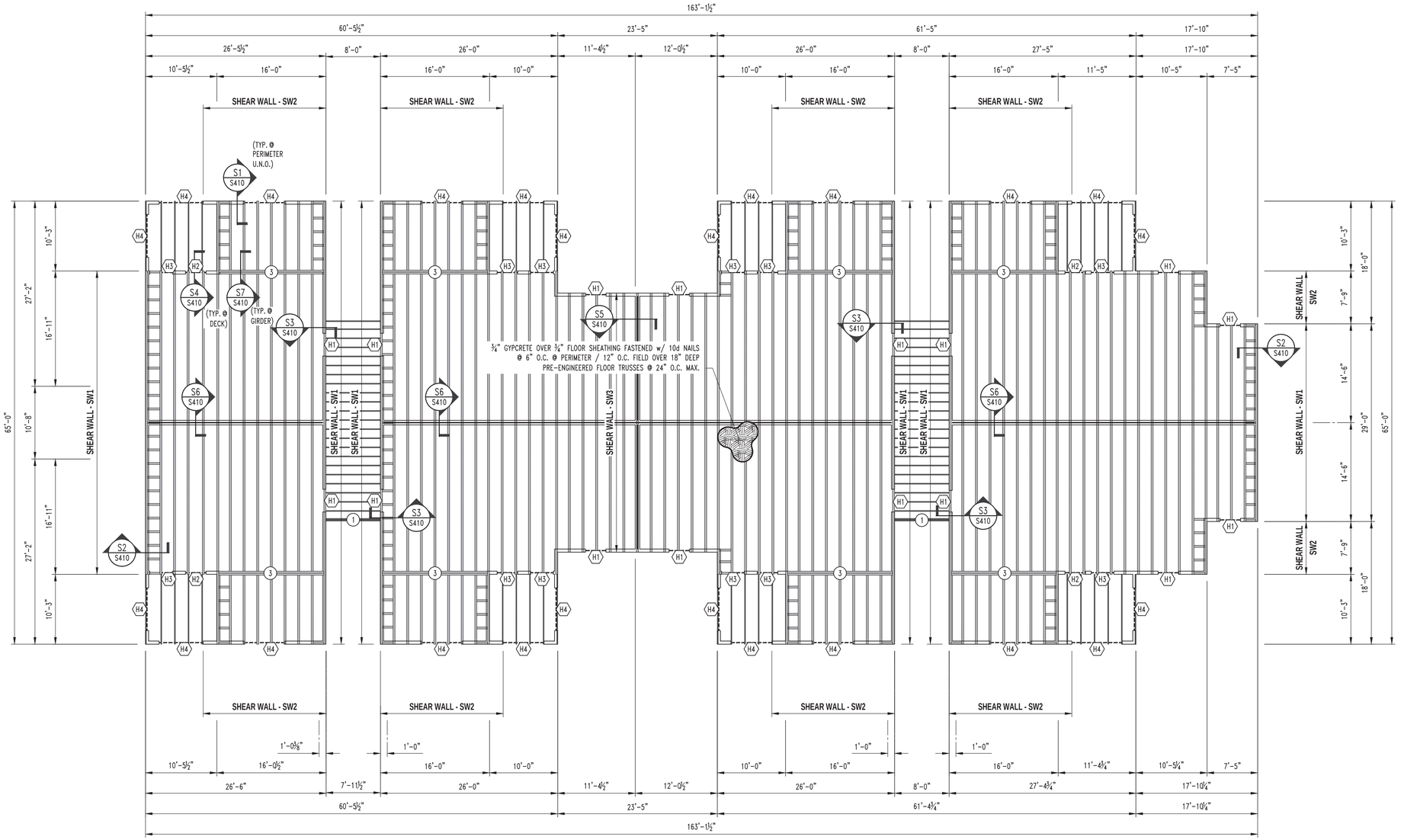
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
(BLDG. 3)
2ND FLOOR
FRAMING PLAN

DESIGNED: JWV
DRAWN: JCS
PROJECT NO.: 220030

SHEET:
S301

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



1 S400 — 3RD FLOOR FRAMING PLAN (BLDG. 1&2)
SCALE: ⅛" = 1'-0"
N — PLAN NORTH

FLOOR FRAMING NOTES

1. (3) SEL STR DF 2x10's w/ SIMPSON LUS210-3 HANGER @ EACH END.
2. (2) SEL STR DF 2x10's
3. GIRDER TRUSS w/ 3-PLY BUILT UP POST @ EACH END.

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 2'-0" O.C.
- REQUIRES SIMPSON LTTP2 HOLDOWN FASTENED TO SINGLE-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO SINGLE-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- NO STRAPTIES REQUIRED

SW2 SHEAR WALL

FRIST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HTT4 HOLDOWN FASTENED TO 2-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC40 STRAPTIE FASTENED TO 2-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
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- NO HOLDDOWNS REQUIRED

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
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"H3"	2 Ply 2x8 Doug Fir #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H4"	2 Ply 2x10 Doug Fir Sel. Struct.	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H5"	2 Ply 2x10 Doug Fir Sel. Struct.	3 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2

REVISIONS:

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REGISTERED PROFESSIONAL ENGINEER — TIMOTHY D. CROCKETT — 21057 — OKLAHOMA

STRUCTURAL ENGINEER:
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1000 W. Nifong Blvd., Bldg. 1
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www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
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COLUMBIA, MISSOURI

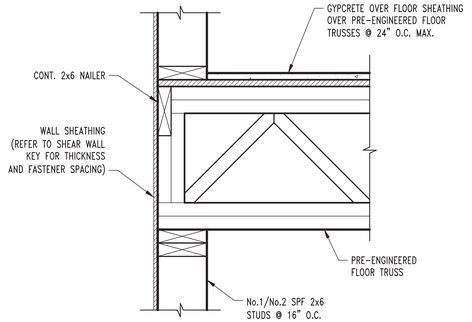
CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

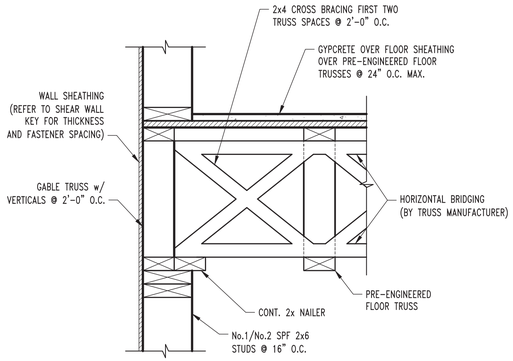
DRAWING INCLUDES:
(BLDG. 1&2)
3RD FLOOR
FRAMING PLAN

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

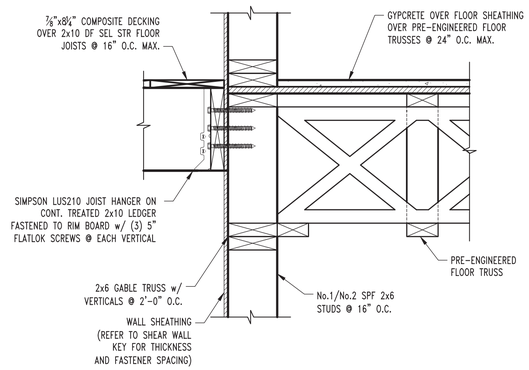
SHEET:
S400



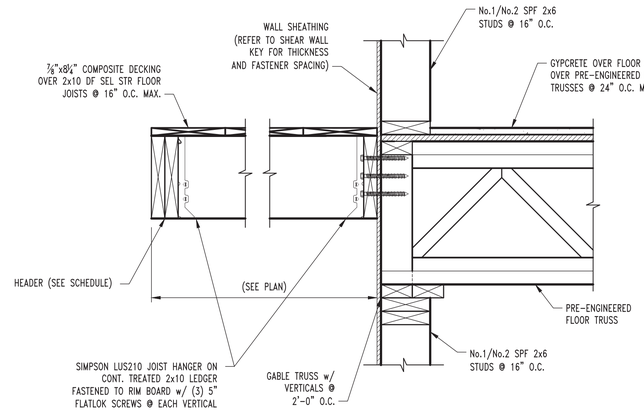
S1 S300-400 FRAMING SECTION
SCALE: 1½" = 1'-0"



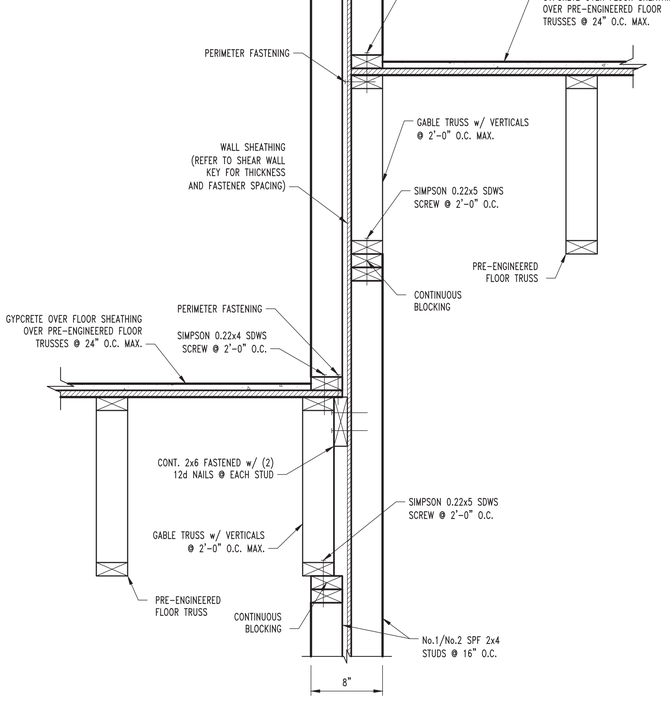
S2 S300-400 FRAMING SECTION
SCALE: 1½" = 1'-0"



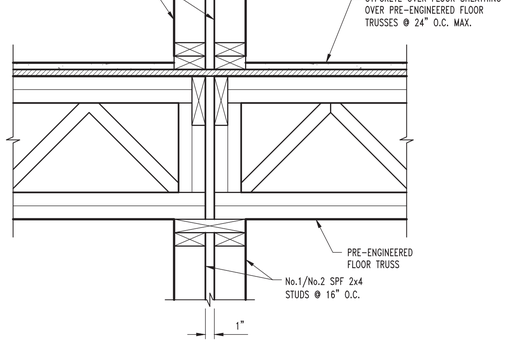
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SCALE: 1½" = 1'-0"



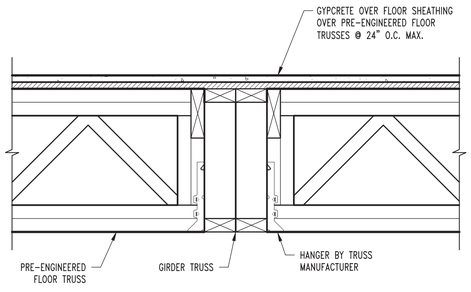
S4 S300-400 FRAMING SECTION
SCALE: 1½" = 1'-0"



S5 S300-S400 FRAMING SECTION
SCALE: 1½" = 1'-0"



S6 S300-400 FRAMING SECTION
SCALE: 1½" = 1'-0"



S7 S300-400 FRAMING SECTION
SCALE: 1½" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER — TIMOTHY D. CROCKETT — 24057 — OKLAHOMA

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CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

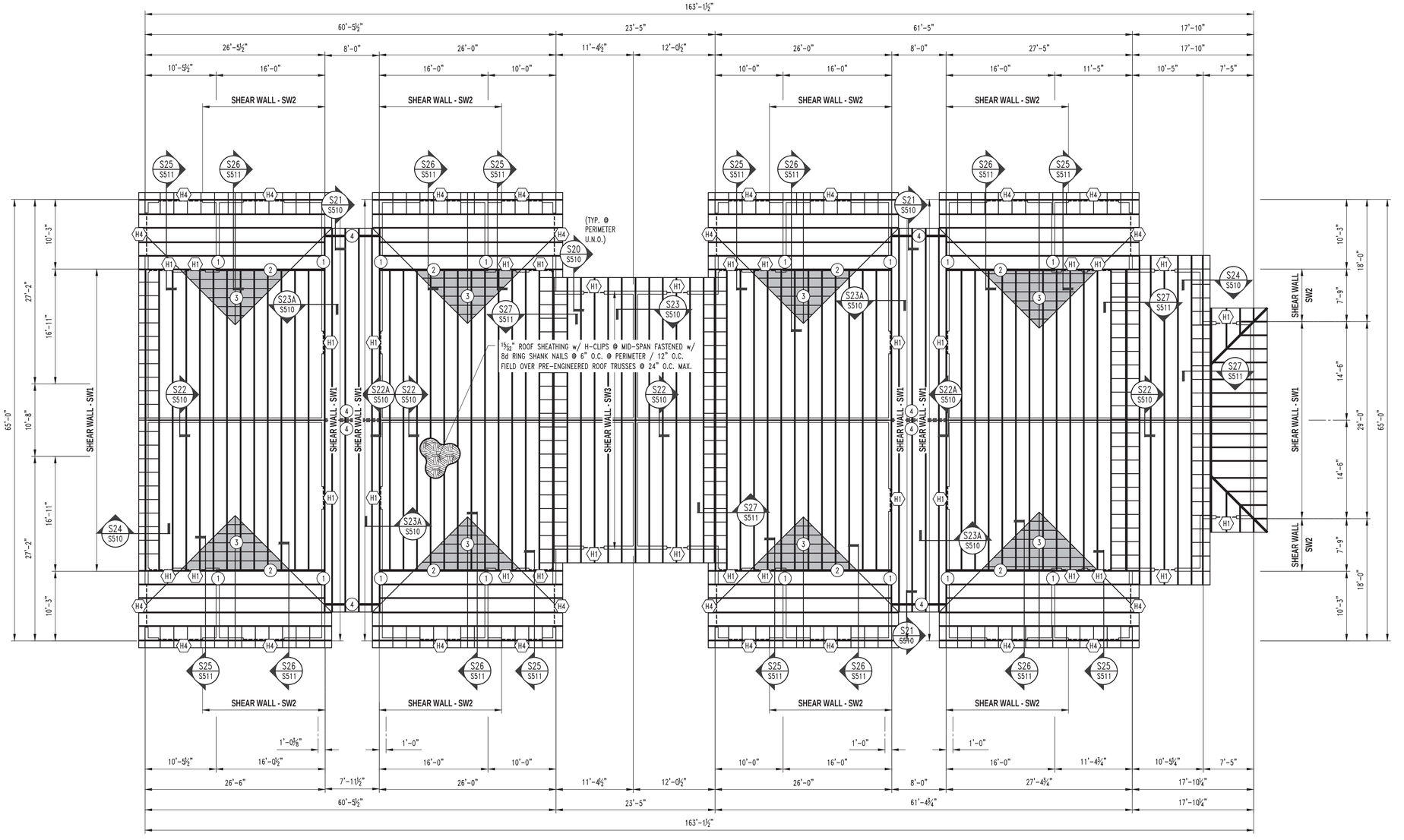
DRAWING INCLUDES:

FLOOR FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET: S410

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



1 S500 ROOF FRAMING PLAN (BLDG. 1&2)
SCALE: ⅛" = 1'-0"
PLAN NORTH

ROOF FRAMING NOTES

1. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS FASTENED w/ SIMPSON LGT3 @ TOP & SIMPSON MSTC52 @ BOTTOM (3 PLY BUILT UP POST TO FLOOR SLAB)
2. GIRDER TRUSS
3. FRAME ROOF OVER PRE-ENGINEERED TRUSSES TO CREATE RIDGE, VALLEY, OR HIP AS SHOWN w/ 2x #2 SPF RAFTERS @ 16" O.C. MAX.
4. (2) SEL STR OF 2x10's w/ 2-PLY BUILT UP POST BENEATH BEAM

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 2'-0" O.C.
- REQUIRES SIMPSON LTTP2 HOLDOWN FASTENED TO SINGLE-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO SINGLE-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- NO STRAPTIES REQUIRED

SW2 SHEAR WALL

FRIST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HTT4 HOLDOWN FASTENED TO 2-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC40 STRAPTIE FASTENED TO 2-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO 2-PLY STUDS

TYPICAL WALL UNLESS NOTED
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 3'-0" O.C.
- NO HOLDDOWNS REQUIRED

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H2"	2 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H3"	2 Ply 2x8 Doug Fir #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H4"	2 Ply 2x10 Doug Fir Sel. Struct.	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H5"	2 Ply 2x10 Doug Fir Sel. Struct.	3 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2

REVISIONS:

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REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
2022
OKLAHOMA

STRUCTURAL ENGINEER:
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1000 W. Wilfong Blvd., Bldg. 1
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CROSSROADS AT WESTCHESTER CIRCLE

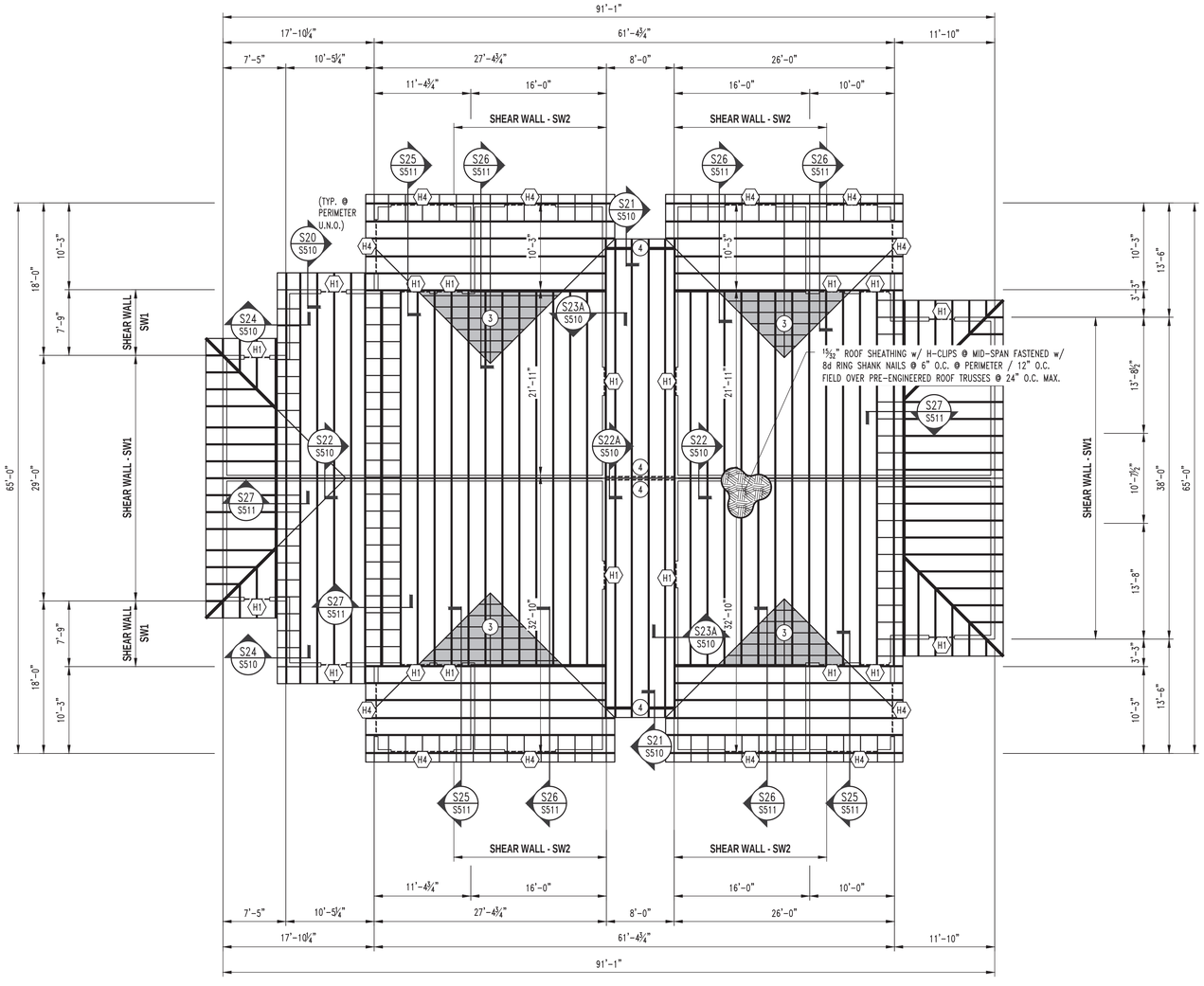
LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
(BLDG. 1&2)
ROOF FRAMING
PLAN

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET:
S500

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



1 S501 ROOF FRAMING PLAN (BLDG. 3)
SCALE: ⅛" = 1'-0"
N PLAN NORTH

ROOF FRAMING NOTES

1. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS FASTENED w/ SIMPSON LGT3 @ TOP & SIMPSON MSTC52 @ BOTTOM (3 PLY BUILT UP POST TO FLOOR SLAB)
2. GIRDER TRUSS
3. FRAME ROOF OVER PRE-ENGINEERED TRUSSES TO CREATE RIDGE, VALLEY, OR HIP AS SHOWN w/ 2x #2 SPF RAFTERS @ 16" O.C. MAX.
4. (2) SEL STR OF 2x10's w/ 2-PLY BUILT UP POST BENEATH BEAM

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 2'-0" O.C.
- REQUIRES SIMPSON LTTP2 HOLDOWN FASTENED TO SINGLE-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO SINGLE-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- NO STRAPTIES REQUIRED

SW2 SHEAR WALL

FRIST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HTT4 HOLDOWN FASTENED TO 2-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

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- REQUIRES SIMPSON MSTC40 STRAPTIE FASTENED TO 2-PLY STUDS

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- NO HOLDDOWNS REQUIRED

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
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"H5"	2 Ply 2x10 Doug Fir Sel. Struct.	3 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2

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REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
8/19/2022
OKLAHOMA

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
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Crockett Engineering Consultants, LLC

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COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE

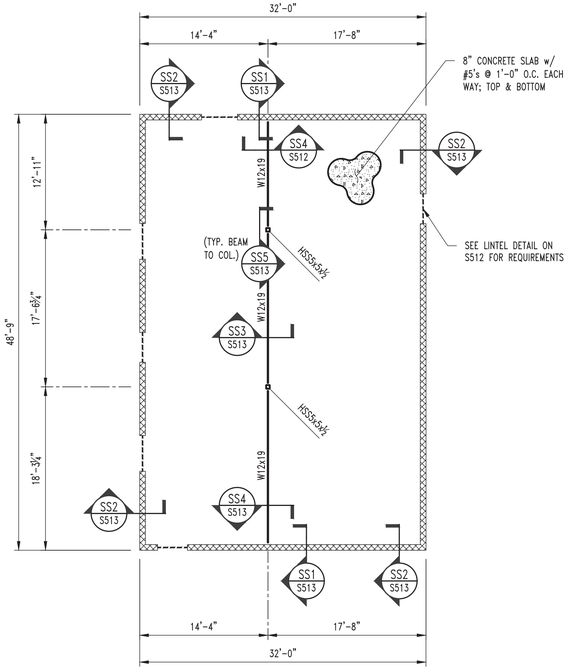
LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:
(BLDG. 3)
ROOF FRAMING
PLAN

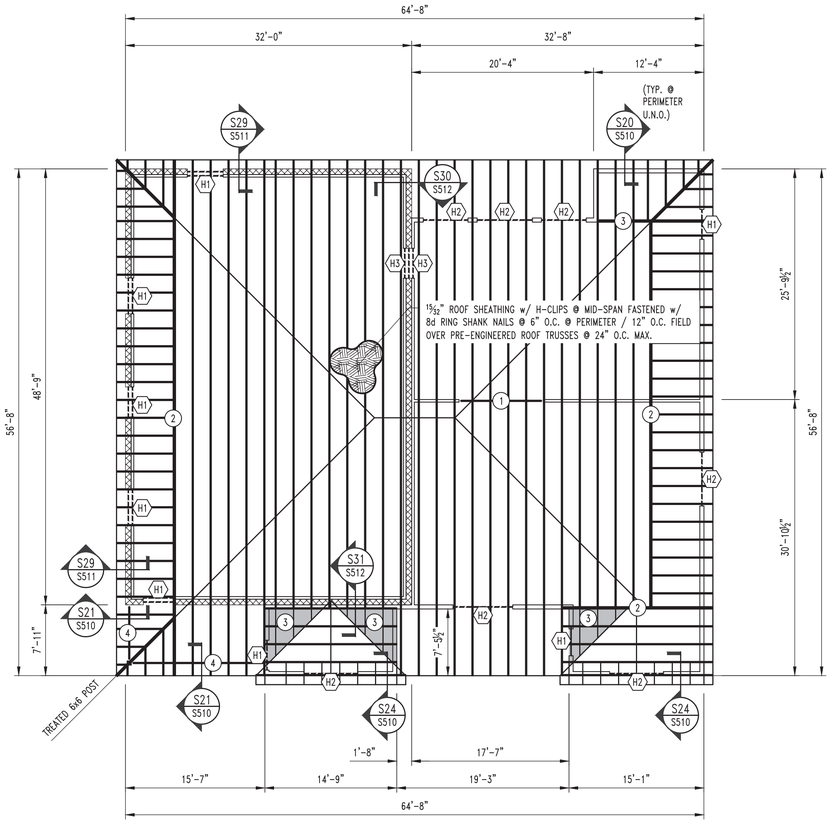
DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET:
S501

NOTE:
ALL DIMENSIONS ARE FROM FACE OF FOUNDATION WALL OR FRAMING;
EDGE OF SLAB OR TRUSS/RAFTER; OR CENTERLINE
OF COLUMN, BEAM, OR JOIST UNLESS NOTED OTHERWISE.



1 S502 STORM SHELTER ROOF PLAN
SCALE: ⅛" = 1'-0"



1 S502 ROOF FRAMING PLAN (COMMUNITY BLDG.)
SCALE: ⅛" = 1'-0"

ROOF FRAMING NOTES

1. 3-PLY BUILT-UP POST BENEATH GIRDER TRUSS FASTENED w/ SIMPSON LGT3 @ TOP & SIMPSON MSTC52 @ BOTTOM (3 PLY BUILT UP POST TO FLOOR SLAB)
2. GIRDER TRUSS
3. FRAME ROOF OVER PRE-ENGINEERED TRUSSES TO CREATE RIDGE, VALLEY, OR HIP AS SHOWN w/ 2x #2 SPF RAFTERS @ 16" O.C. MAX.
4. (2) SEL STR OF 2x10's w/ 2-PLY BUILT UP POST BENEATH BEAM

HEADER SCHEDULE

LABEL	HEADER	CRIPPLE/JACK	JAMB/KING
"H1"	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H2"	2 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H3"	2 Ply 2x8 Doug Fir #2	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H4"	2 Ply 2x10 Doug Fir Sel. Struct.	2 Ply 2x6 SPF #2	Single Ply 2x6 SPF #2
"H5"	2 Ply 2x10 Doug Fir Sel. Struct.	3 Ply 2x6 SPF #2	2 Ply 2x6 SPF #2

SHEAR WALL KEY

SW1 SHEAR WALL

FIRST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 2'-0" O.C.
- REQUIRES SIMPSON LTTP2 HOLDOWN FASTENED TO SINGLE-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO SINGLE-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- NO STRAPTIES REQUIRED

SW2 SHEAR WALL

FRIST FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD (**NOTE:** THIS SHEET FASTENING PATTERN REQUIRES 3X OR DOUBLE 2X FRAMING MEMBERS WHERE SHEETS MEET)
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 1'-6" O.C.
- REQUIRES SIMPSON HTT4 HOLDOWN FASTENED TO 2-PLY STUDS W/ 5/8" DIAMETER A307 THREADED ROD W/ 16" TOTAL (8" INTO FOOTING) SIMPSON "AT-XP" EPOXY EMBEDMENT AT EACH END OF THE SHEAR WALL

SECOND FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC40 STRAPTIE FASTENED TO 2-PLY STUDS

THIRD FLOOR
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 4" O.C. @ PERIMETER / 12" O.C. FIELD
- REQUIRES SIMPSON MSTC28 STRAPTIE FASTENED TO 2-PLY STUDS

TYPICAL WALL UNLESS NOTED
- 7/16" OSB SHEATHING FASTENED WITH 8D NAILS @ 3" O.C. @ PERIMETER / 12" O.C. FIELD
- 1/2" DIAMETER F1554 GRADE 36 STANDARD "J" BOLTS W/ 7" EMBEDMENT @ 3'-0" O.C.
- NO HOLDDOWNS REQUIRED

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
2005
OKLAHOMA

STRUCTURAL ENGINEER:
CROCKETT
ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1
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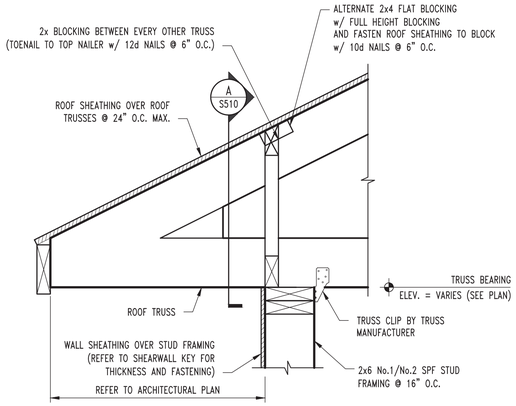
CLIENT:
WALLACE
ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

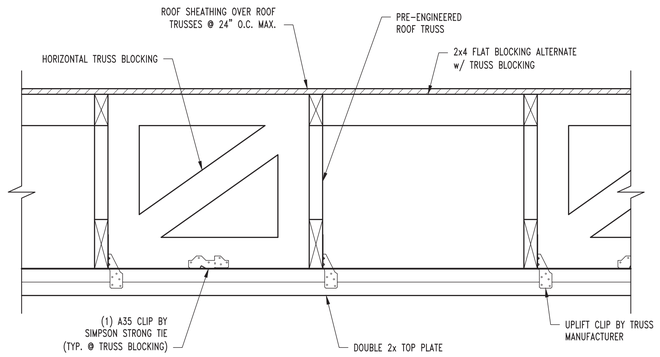
DRAWING INCLUDES:
(COMMUNITY BLDG.)
ROOF FRAMING
PLAN

DESIGNED: JWV
DRAWN: JCS
PROJECT NO.: 220030

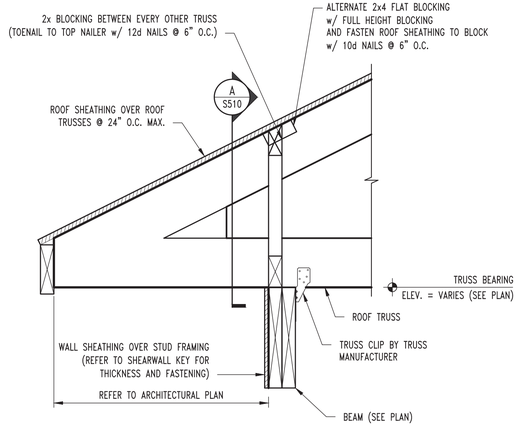
SHEET:
S502



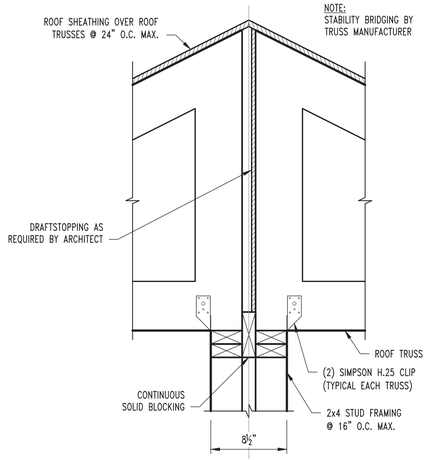
S20 / S500–S502 TYP. ROOF FRAMING SECTION
SCALE: 1½" = 1'–0"



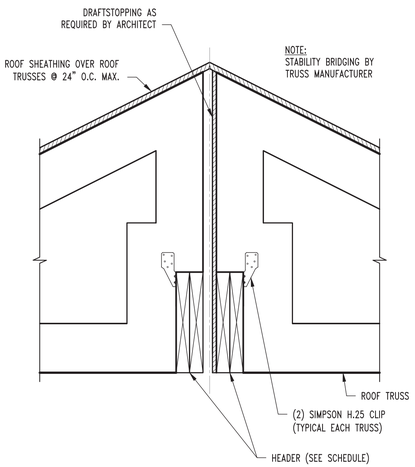
A / S510 TYP. TRUSS BLOCKING SECTION
SCALE: 1½" = 1'–0"



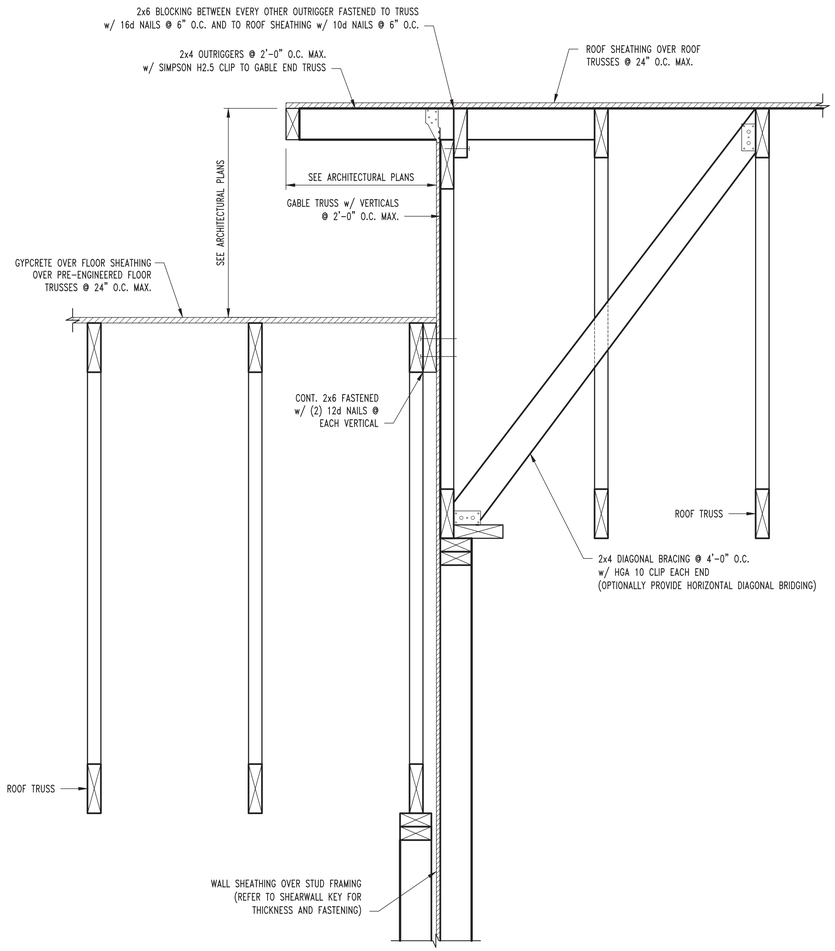
S21 / S500–S502 ENTRY ROOF SECTION
SCALE: 1½" = 1'–0"



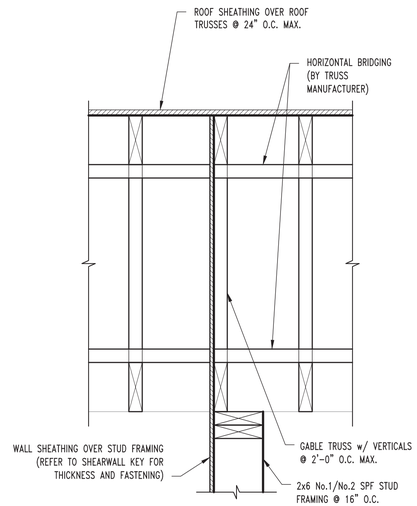
S22 / S500–S502 TYP. FRAMING SECTION
SCALE: 1½" = 1'–0"



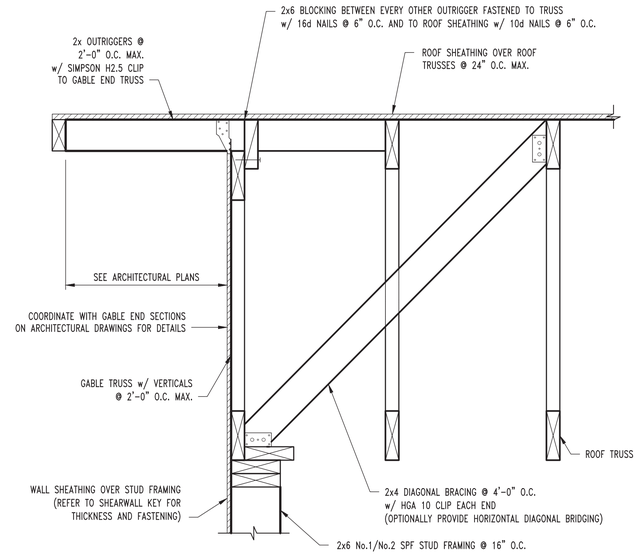
S22A / S500–S502 TYP. FRAMING SECTION
SCALE: ¾" = 1'–0"



S23 / S500 ROOF FRAMING SECTION
SCALE: 1½" = 1'–0"



S23A / S500–S502 ROOF FRAMING SECTION
SCALE: 1½" = 1'–0"



S24 / S500–S502 ROOF FRAMING SECTION
SCALE: 1½" = 1'–0"

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
8/19/2022
OKLAHOMA

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Crockett Engineering Consultants, LLC

CLIENT:
WALLACE
ARCHITECTS LLC
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COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE

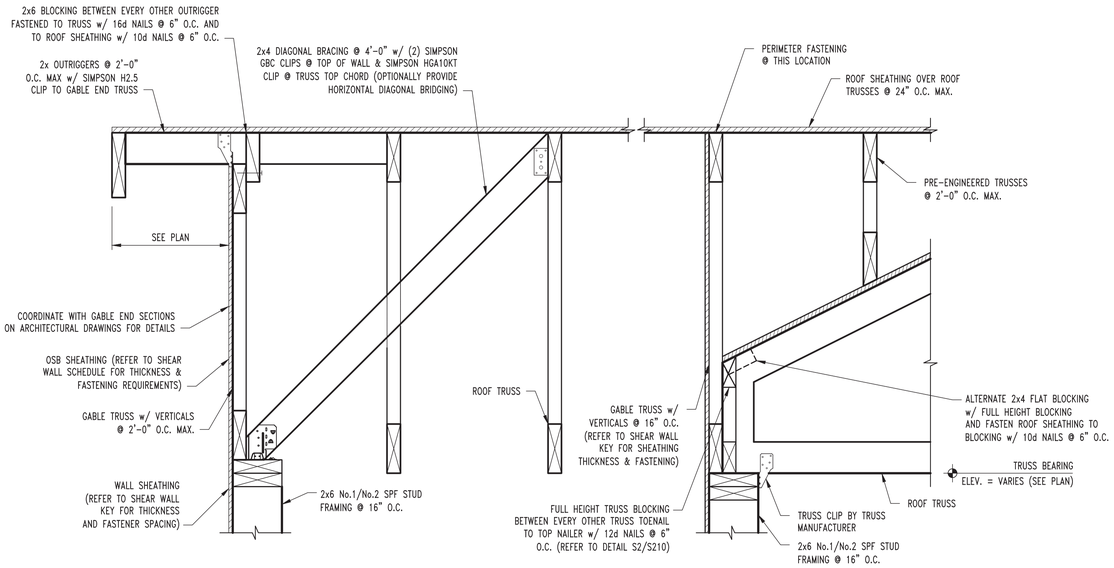
LAWTON, COMANCHE COUNTY, OKLAHOMA

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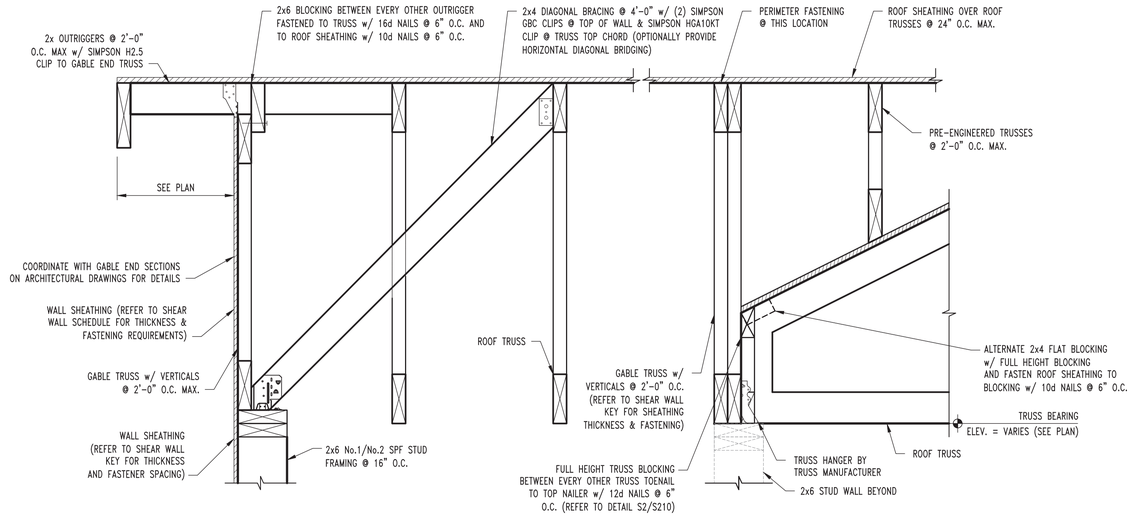
ROOF FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

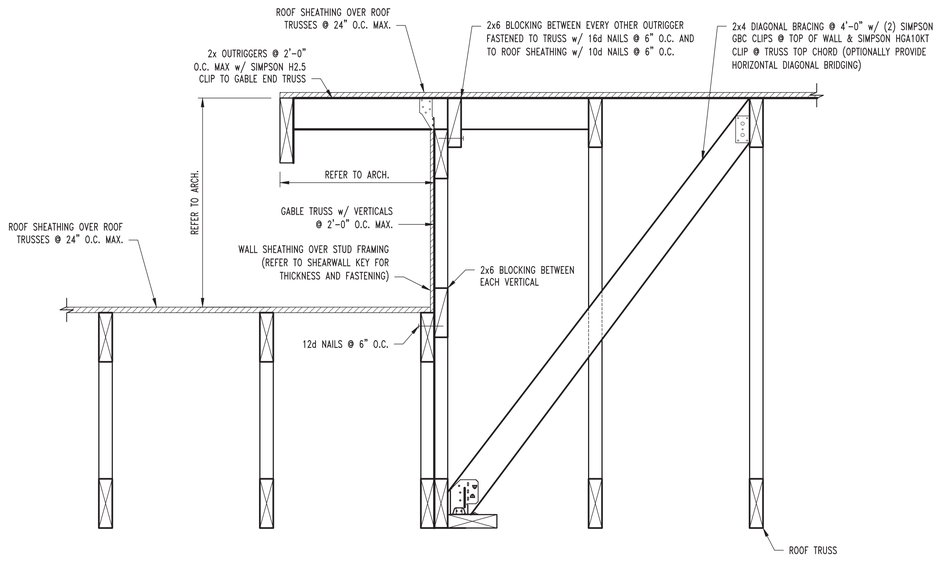
SHEET: S510



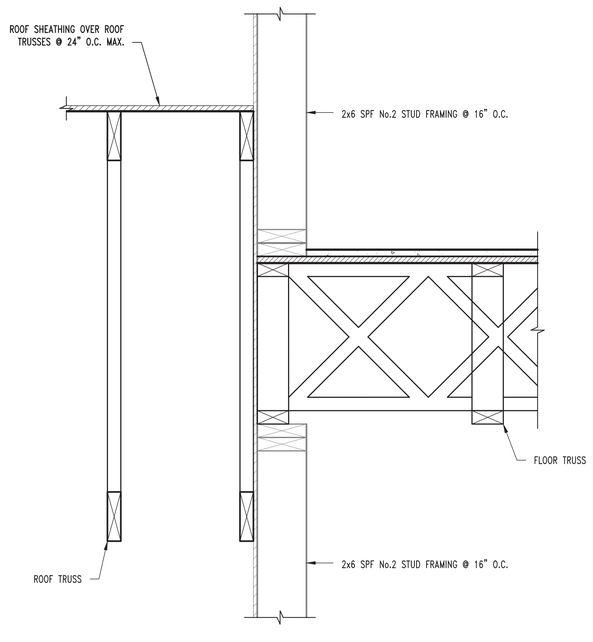
S25 / S500–S502 — ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"



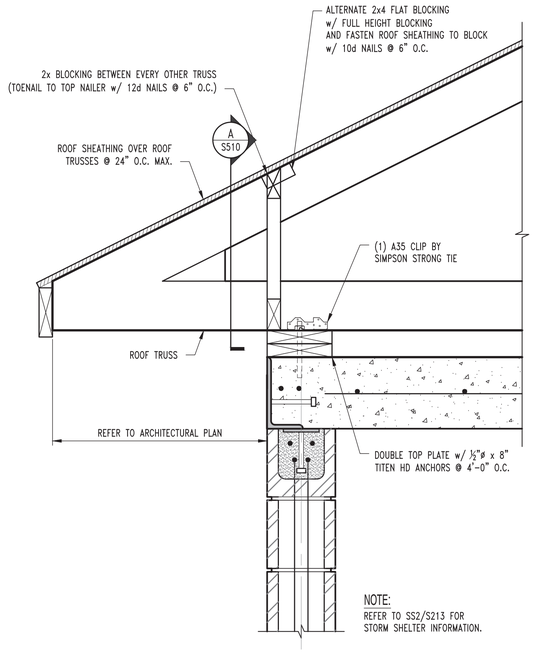
S26 / S500–S502 — ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"



S27 / S500–S502 — TYP. ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"



S28 / S300–S302 — TYP. LOW ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"



S29 / S502 — ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

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REGISTERED PROFESSIONAL ENGINEER — TIMOTHY D. CROCKETT — 21057 — OKLAHOMA

STRUCTURAL ENGINEER:
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1000 W. Nifong Blvd., Bldg. 1
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(573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE

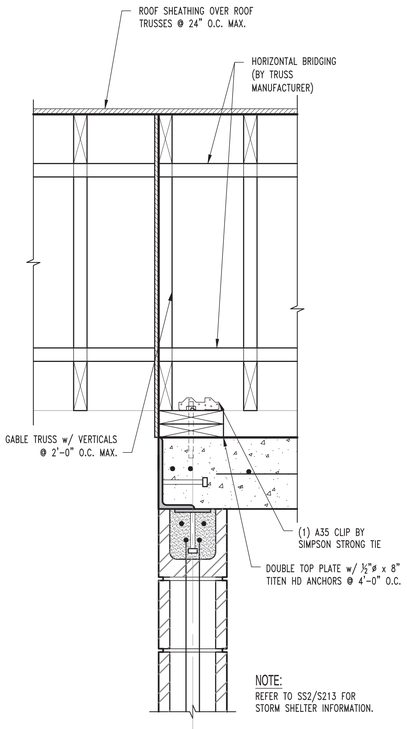
LAWTON, COMANCHE COUNTY, OKLAHOMA

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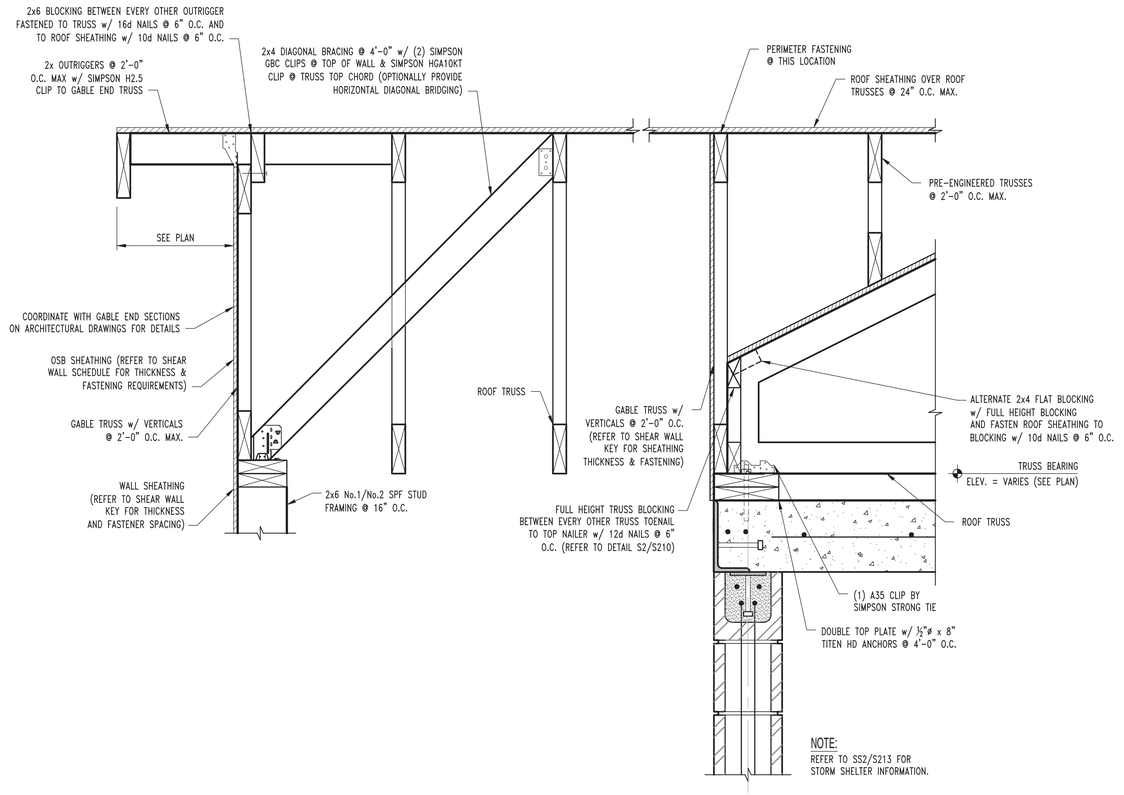
ROOF FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET: S511



S30 / S502 ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"



S31 / S502 ROOF FRAMING SECTION
SCALE: 1½" = 1'-0"

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

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REGISTERED PROFESSIONAL ENGINEER
TIMOTHY D. CROCKETT
8/19/2022
OKLAHOMA

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COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE

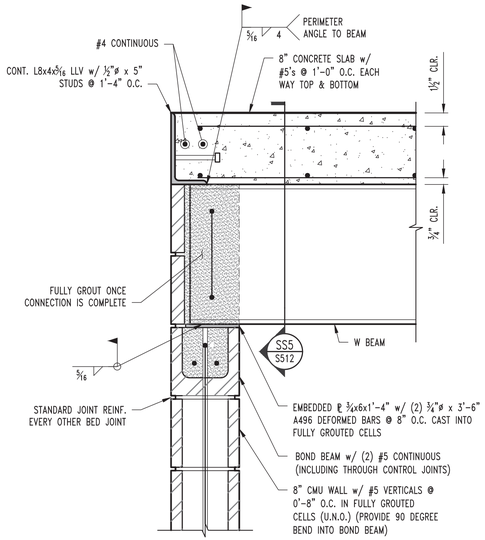
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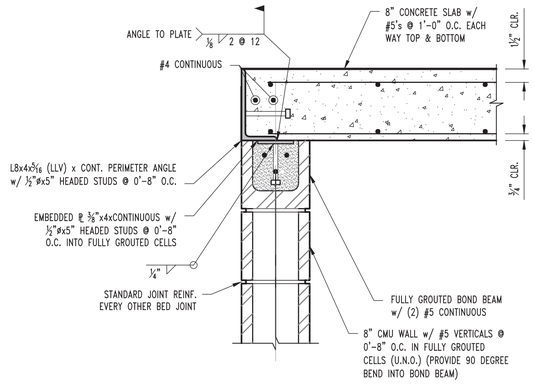
ROOF FRAMING DETAILS

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

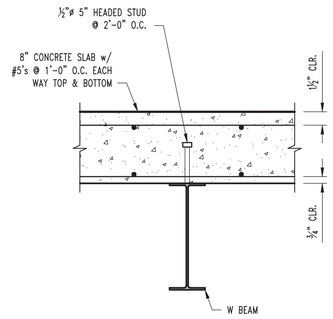
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S512



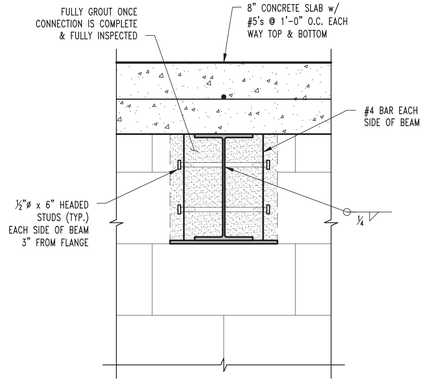
SS1 / S502 STORM SHELTER SECTION
SCALE: 1½" = 1'-0"



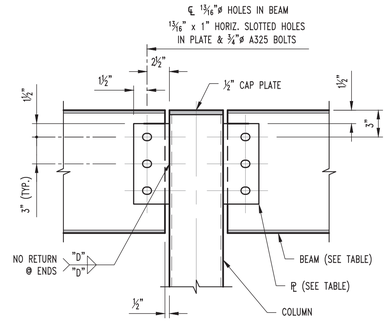
SS2 / S502 STORM SHELTER SECTION
SCALE: 1½" = 1'-0"



SS3 / S502 STORM SHELTER SECTION
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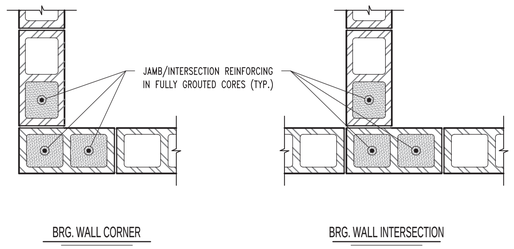


SS4 / S502 STORM SHELTER SECTION
SCALE: 1½" = 1'-0"

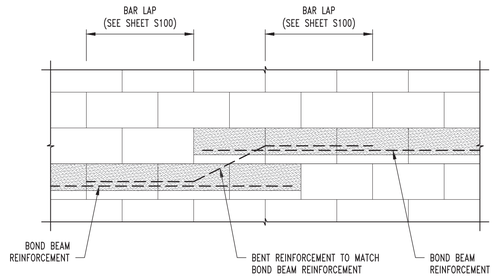


BEAM SIZE	No. OF BOLTS "N"	PLATE SIZE	WELD SIZE "D"
W12	3	5/16x4x0'-9"	¼"

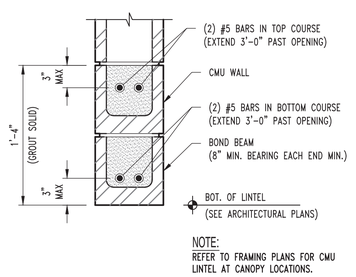
SS5 / S502 TYP. BEAM TO COLUMN DETAIL
SCALE: 1½" = 1'-0"



TYPICAL CMU WALL VERT REINFORCING

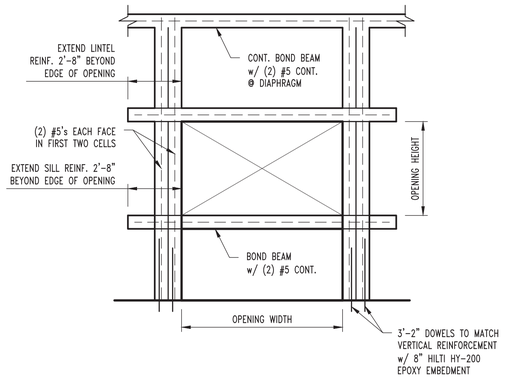


TYP. STEP IN BOND BEAM



NOTE:
REFER TO FRAMING PLANS FOR CMU LINTEL AT CANOPY LOCATIONS.

TYPICAL CMU LINTEL DETAIL



TYPICAL MASONRY OPENING REINFORCEMENT

REVISIONS:

No.	Date
ISSUE SET	08/19/2022

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

REGISTERED PROFESSIONAL ENGINEER TIMOTHY D. CROCKETT 21007 OKLAHOMA

STRUCTURAL ENGINEER:
CROCKETT ENGINEERING CONSULTANTS
1000 W. Nifong Blvd., Bldg. 1 Columbia, MO 65203 (573) 447-0292
www.crockettengineering.com
Crockett Engineering Consultants, LLC

CLIENT:
WALLACE ARCHITECTS LLC
302 CAMPUS DR. #208
COLUMBIA, MISSOURI

CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

DRAWING INCLUDES:

STORM SHELTER DETAILS

DESIGNED:	JWV
DRAWN:	JCS
PROJECT NO.:	220030

SHEET: S513

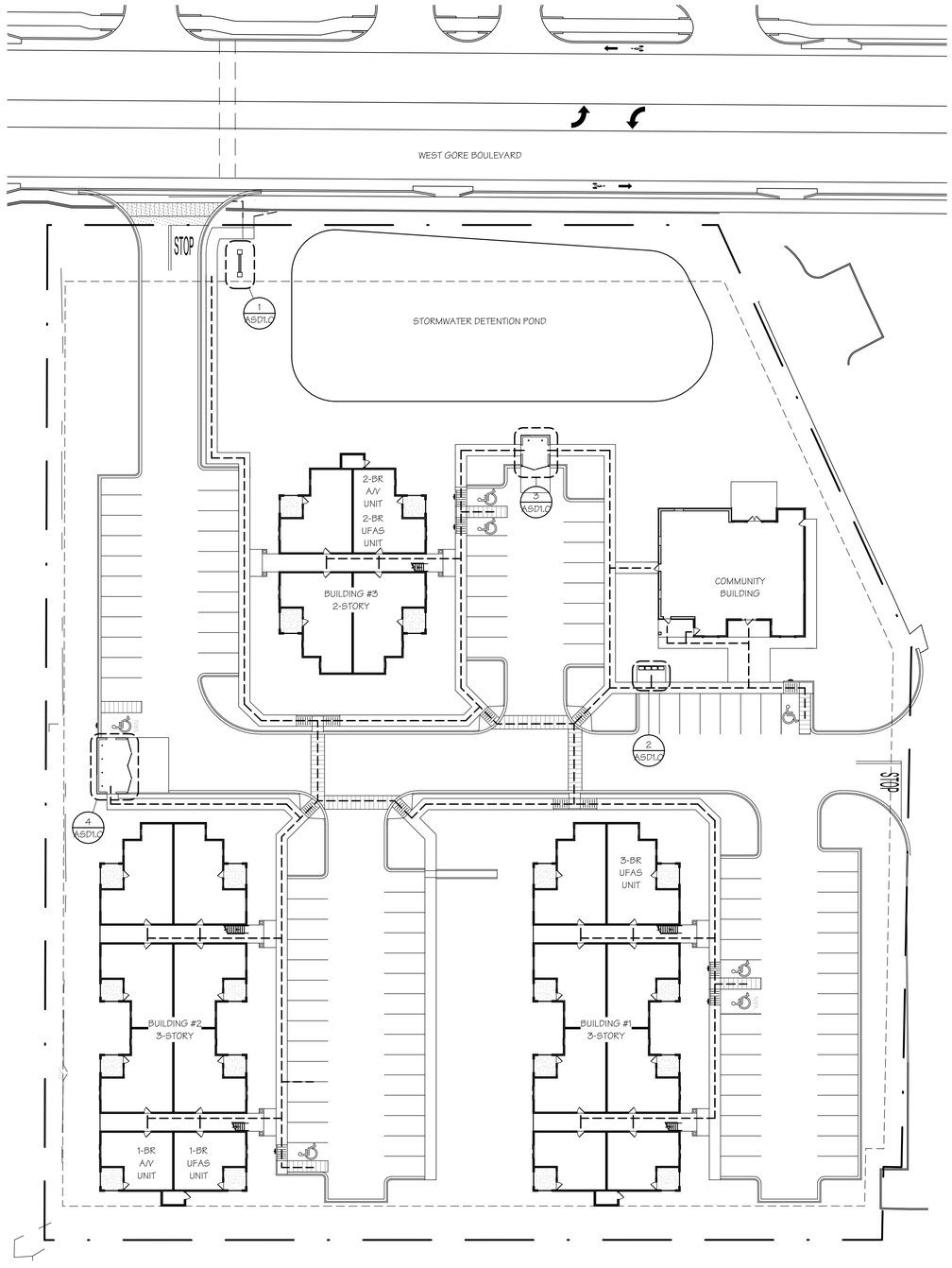
LEGEND

ACCESSIBLE ROUTE (36" MIN. WIDTH, 2% CROSS SLOPE MAX, 5% RUNNING SLOPE MAX, REPLACE AS REQUIRED.)

UFAS ACCESSIBLE

NOTE: INSTALL HANDRAILS @ ACCESSIBLE ROUTES AND WHERE OTHERWISE NOTED EXCEEDING 5% BUT LESS THAN 8.33%. 5'-0" LANDING REQUIRED AT TOP AND BOTTOM OF RAMP.

NOTE: APARTMENT NUMBERS ARE TO BE FIELD VERIFIED BY GENERAL CONTRACTOR. ARCHITECT TO BE NOTIFIED OF ANY DISCREPANCY PRIOR TO FINAL PRODUCTION/INSTALLATION.



1 AS1.0 SITE PLAN

SCALE: 1" = 30'-0"

N

ARCHITECTURAL SITE PLAN

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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1ST ISSUE
19 AUG 2022

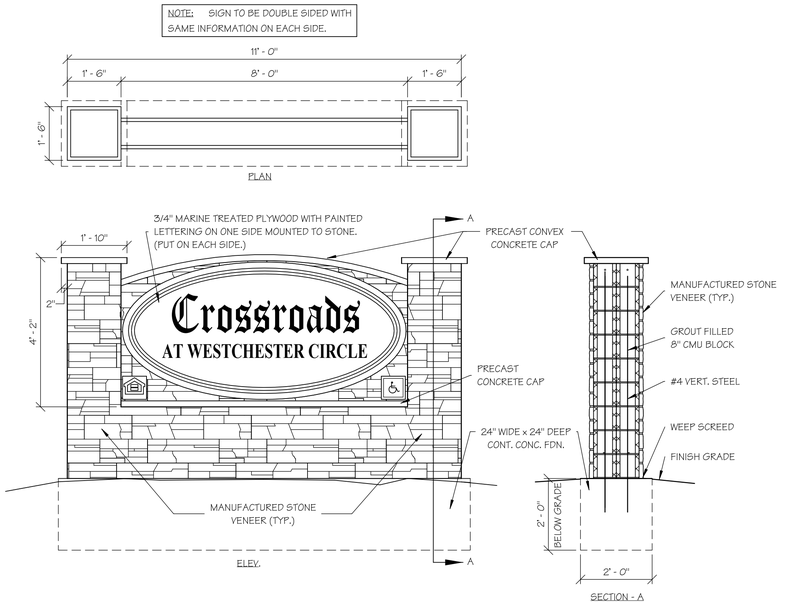
ISSUE/REVISIONS

1	19 AUG 2022	ISSUE SET

SHEET NO.
AS1.0

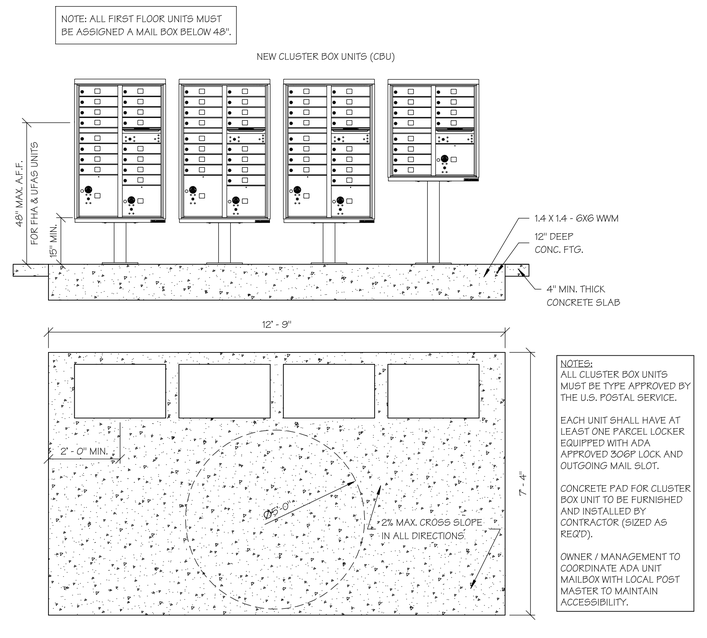
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8/22/2022 11:31:07 AM



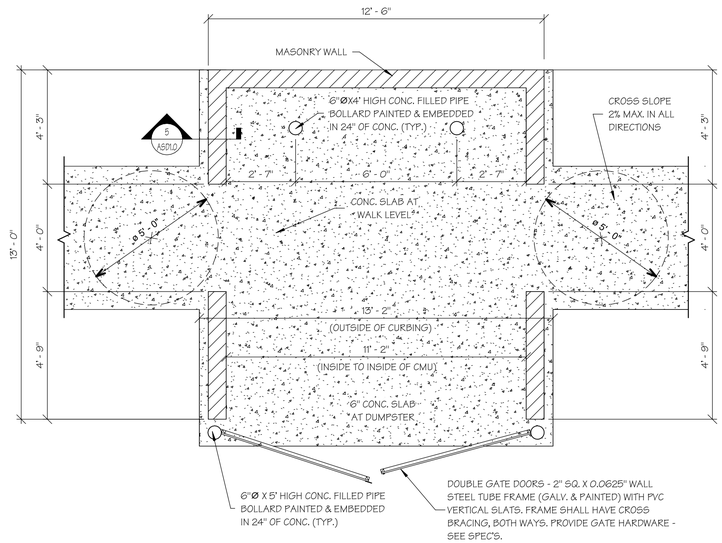
1 A5D1.0 SCALE: 1/2" = 1'-0"

PROJECT MONUMENT SIGN



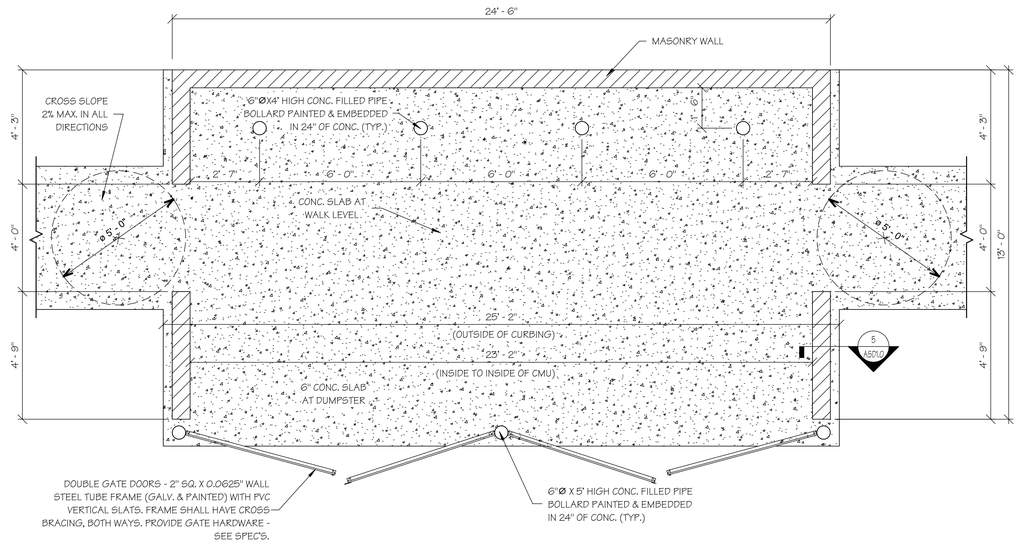
2 A5D1.0 SCALE: 1/2" = 1'-0"

MAILBOX DETAIL



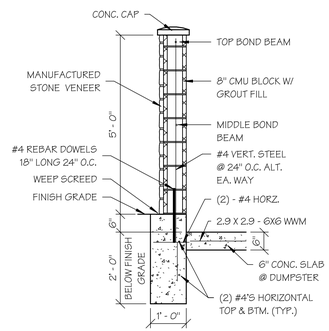
3 A5D1.0 SCALE: 3/8" = 1'-0"

SINGLE DUMPSTER ENCLOSURE



4 A5D1.0 SCALE: 3/8" = 1'-0"

DOUBLE DUMPSTER ENCLOSURE



5 A5D1.0 SCALE: 1/2" = 1'-0"

DUMPSTER ENCLOSURE SECTION

SITE DETAILS

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0117.1

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1 19 AUG 2022 ISSUE SET

SHEET NO. ASD1.0

JOB NO. 4341

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CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

PROJECT INFORMATION

SITE DATA

SITE ZONING:	(SEE CIVIL)
SITE SIZE:	(SEE CIVIL)
SITE DENSITY:	(SEE CIVIL)
NO. OF PARKING SPACES:	(SEE CIVIL)

BUILDING DATA

DWELLING UNITS	LABEL	COMPLIANCE WITH	SQ FT	QTY	SUBTOTAL
1-BR UNIT	FHA/TYP	FHA @ 1ST FLOOR	753	10	7,530 SF
1-BR UNIT	UFAS	UFAS	753	1	753 SF
1-BR UNIT	FHA/A/V	FHA/A/V	753	1	753 SF
2-BR UNIT	FHA/TYP	FHA @ 1ST FLOOR	965	26	25,090 SF
2-BR UNIT	FHA/A/V	FHA/A/V	965	1	965 SF
2-BR UNIT	UFAS	UFAS	965	1	965 SF
3-BR UNIT	FHA/TYP	FHA @ 1ST FLOOR	1113	15	16,695 SF
3-BR UNIT	UFAS	UFAS	1113	1	1,113 SF
DWELLING UNIT AREA:				56	53,864 SF
NON-DWELLING AREA:					11,038 SF
TOTAL BUILDING AREA:					64,902 SF

TOTAL RENTAL UNITS: (56) TOTAL UNITS: (12) 1-BR UNITS, (28) 2-BR UNITS, (16) 3-BR UNITS
BUILDING 1: (4) 1-BR TYP. UNITS, (2) 1-BR FHA UNITS, (8) 2-BR TYP. UNITS, (4) 2-BR FHA UNITS, (4) 3-BR TYP. UNITS, (1) 3-BR FHA UNIT, (1) 3-BR UFAS UNIT;
BUILDING 2: (4) 1-BR TYP. UNITS, (1) 1-BR A/V UNIT, (1) 1-BR UFAS UNIT, (8) 2-BR TYP. UNITS, (4) 2-BR FHA UNITS, (4) 3-BR TYP. UNITS, (2) 3-BR FHA UNITS;
BUILDING 3: (1) 2-BR TYP. UNIT, (1) 2-BR A/V UNIT, (1) 2-BR FHA UNIT, (1) 2-BR UFAS UNIT, (2) 3-BR TYP. UNITS, (2) 3-BR FHA UNITS

CODES AND REGULATIONS

BLDG. & RELATED CODES:	2015 IBC, 2015 IFC, 2015 IMC, 2006 IECC
ELECT. CODE:	2014 NEC
FIRE CODE:	2015 IFC
ACCESSIBILITY:	UFAS & FAIR HOUSING ON GROUND FLOOR UNITS AS INDICATED ON PLANS
AGENCY:	OHFA STATE POLICIES AND GUIDELINES
MISC.:	ALL APPLICABLE FEDERAL, STATE, LOCAL CODES, LAWS AND ORDINANCES

BUILDING CODE DATA

USE GROUP:	R-2
CONSTRUCTION TYPE:	5B
EXT. WALL CONSTRUCTION:	UNRATED EXTERIOR WALLS
OTHER CONSTRUCTION:	1-HR RATED UNIT SEPARATION WALLS, BREEZEWAY WALLS, ROOF/CEILING, FLOOR/CEILING. UNRATED INTERIOR WALLS. ATTIC DRAFTSTOPPING
ALLOW. AREA PER FLOOR:	R-2 = 7,000 SF
AREA ADJUSTMENTS:	FRONTAGE INCREASE R-2 = 7,000 (1.00-.25) X 30/30 = 5,250 12,250 SF/FLOOR TOTAL ALLOWABLE FRONTAGE INCREASE.
ACTUAL AREA PER FLOOR:	BUILDINGS 1 & 2 = 9,145 SF/PER FLOOR, BUILDING 3 = 5,016 SF/PER FLOOR
ALLOW. HEIGHT & FLOORS:	R-2 = 60'-0", 3 STORIES
HEIGHT ADJUSTMENTS:	NONE REQUIRED, NONE TAKEN
ACTUAL HEIGHT & FLOORS:	BUILDINGS 1 & 2 - 42'-10 7/8", 3 STORIES; BUILDING 3 - 32'-1", 2 STORIES
SPRINKLER SYSTEM:	NFPA 13R DESIGNED AND INSTALLED BY ACCREDITED FIRE PROTECTION SYSTEM DESIGNER AND INSTALLER. PROTECTION SHALL INCLUDE ALL AREAS AS APPLICABLE BY LOCAL AND STATE CODES. COORDINATE WITH GC/OWNER REGARDING THE INSTALLATION OF THE WET/DRY FIRE SUPRESSION SYSTEM FOR UNCONDITIONED FREEZE PROTECTION PER 0.0 CODE DATA OR PROVIDE FREEZE PROTECTED SOFFITS ON THE TOP FLOOR PER 0.0 CODE DATA INFORMATION. THIS COORDINATION SHOULUD BE INCLUDED IN THE BASE BID.

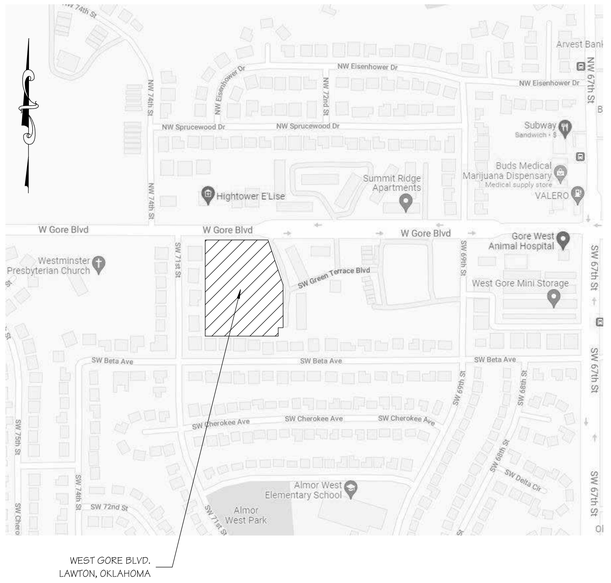
INDEX TO DRAWINGS

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A1.2	BUILDING 3 FIRST & SECOND FLOOR PLANS	19 AUG 2022	19 AUG 2022	ISSUE SET
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A1.6	1-BR UNIT CLEAR FLOOR SPACE & DOOR APPROACH PLANS & NOTES	19 AUG 2022	19 AUG 2022	ISSUE SET
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ARCHITECT'S JOB NO. 4341
OHFA PROJECT NO. 21-06-38

PROJECT LOCATION MAP



WEST GORE BLVD.
LAWTON, OKLAHOMA

SIGNATURE AREAS

NOTE: PROJECT CONSTRUCTION MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND REGULATIONS AS ENUMERATED ELSEWHERE IN THE PLANS AND SPECIFICATIONS.

ARCHITECT: WALLACE ARCHITECTS, LLC
302 CAMPUSVIEW DRIVE SUITE 208, COLUMBIA, MO 65201
BY: DATE:

OWNER: CROSSROADS AT WESTCHESTER, LP
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: DATE:

CONTRACTOR: HAMILTON BUILDERS CONTRACTING, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: DATE:

OHFA REPRESENTATIVE:
100 NW 63RD STREET, SUITE 200, OKLAHOMA CITY, OK 73116
BY: DATE:

PM: RS
PC: RS
PLAN SET NO. _____

COVER SHEET

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
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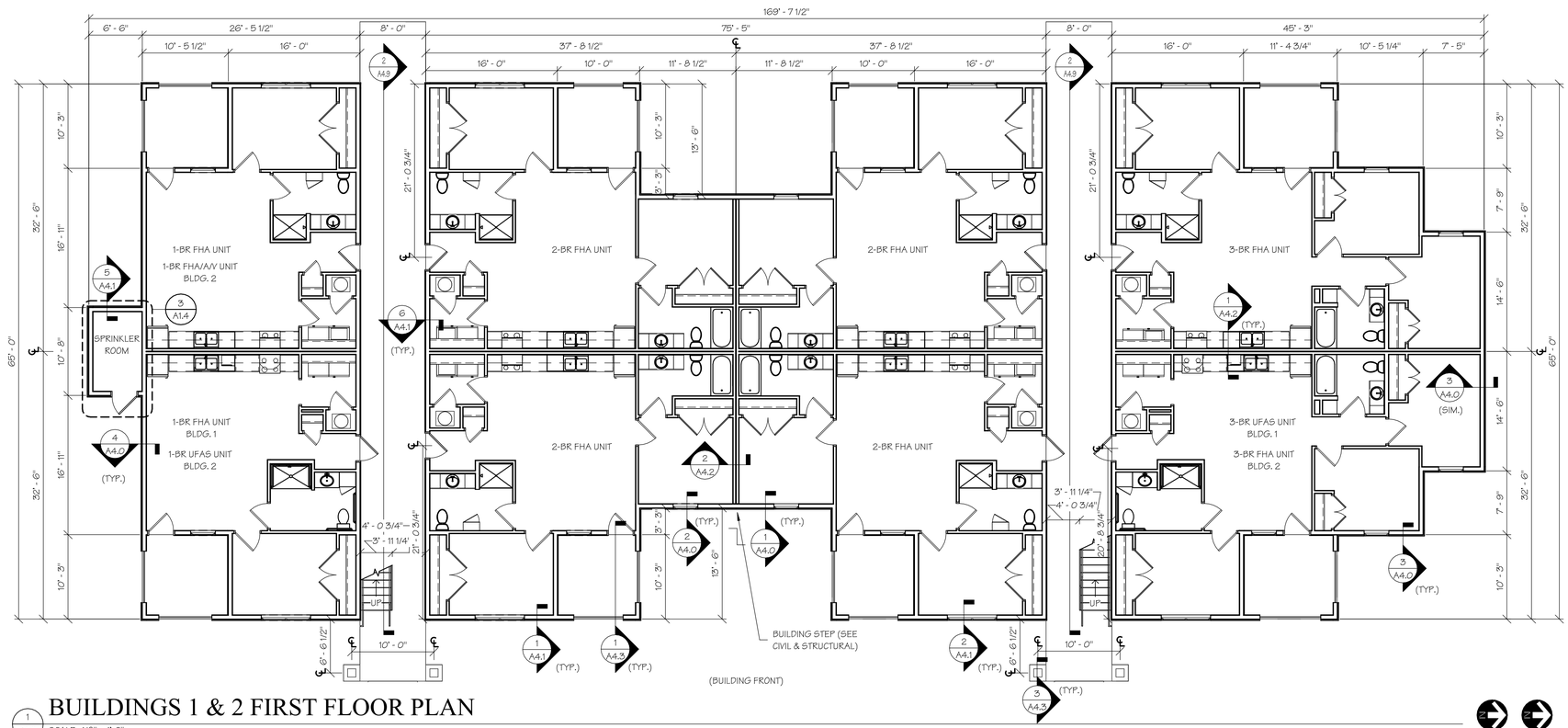
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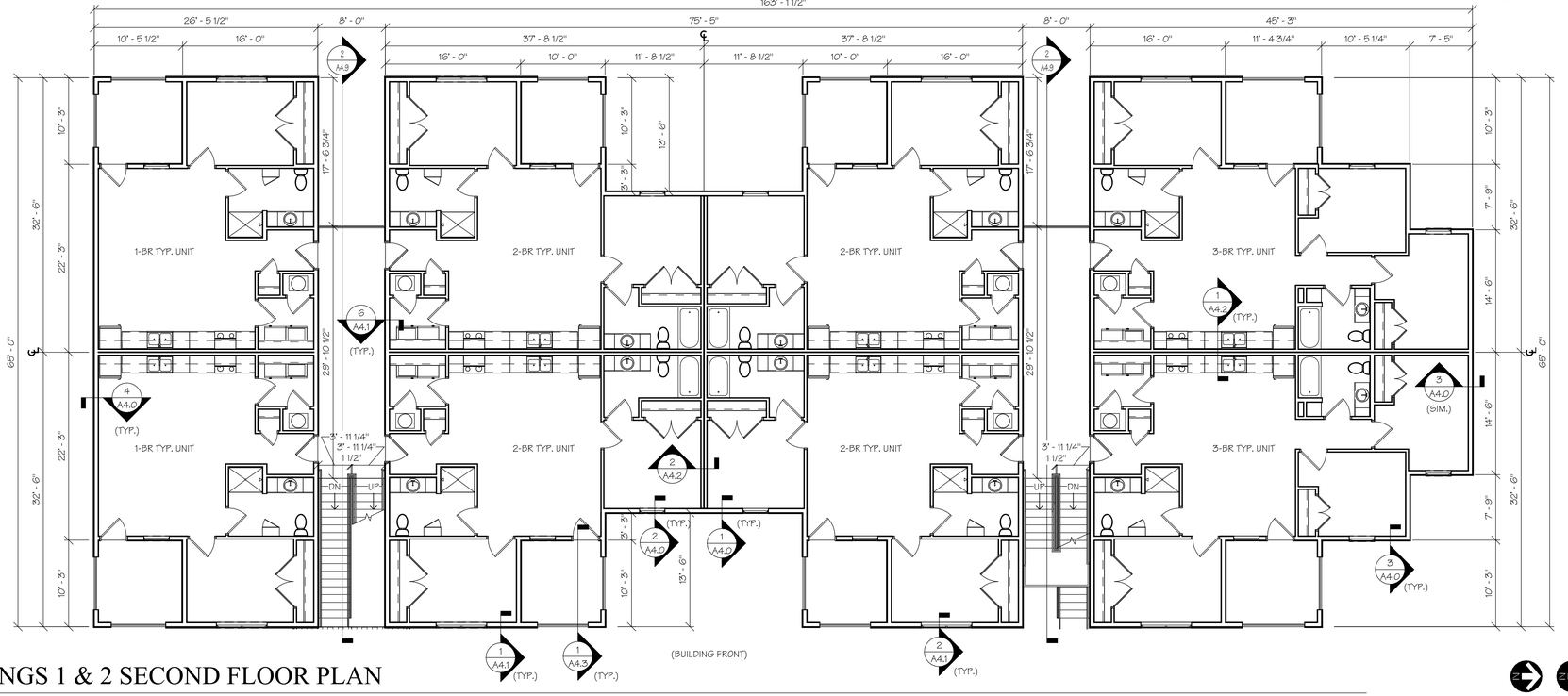
UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
TYP	=	TYPICAL UNIT
UFAS	=	UNIFORM FEDERAL ACCESSIBILITY STANDARD
A/V	=	AUDIO/VISUAL IMPAIRED



1 A1.0 SCALE: 1/8" = 1'-0"

BUILDINGS 1 & 2 FIRST FLOOR PLAN



2 A1.0 SCALE: 1/8" = 1'-0"

BUILDINGS 1 & 2 SECOND FLOOR PLAN

BLDG. 1 BLDG. 2

BUILDINGS 1 & 2 FIRST & SECOND FLOOR PLANS

ISSUE SET

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MARTIN RANDALL PORTER
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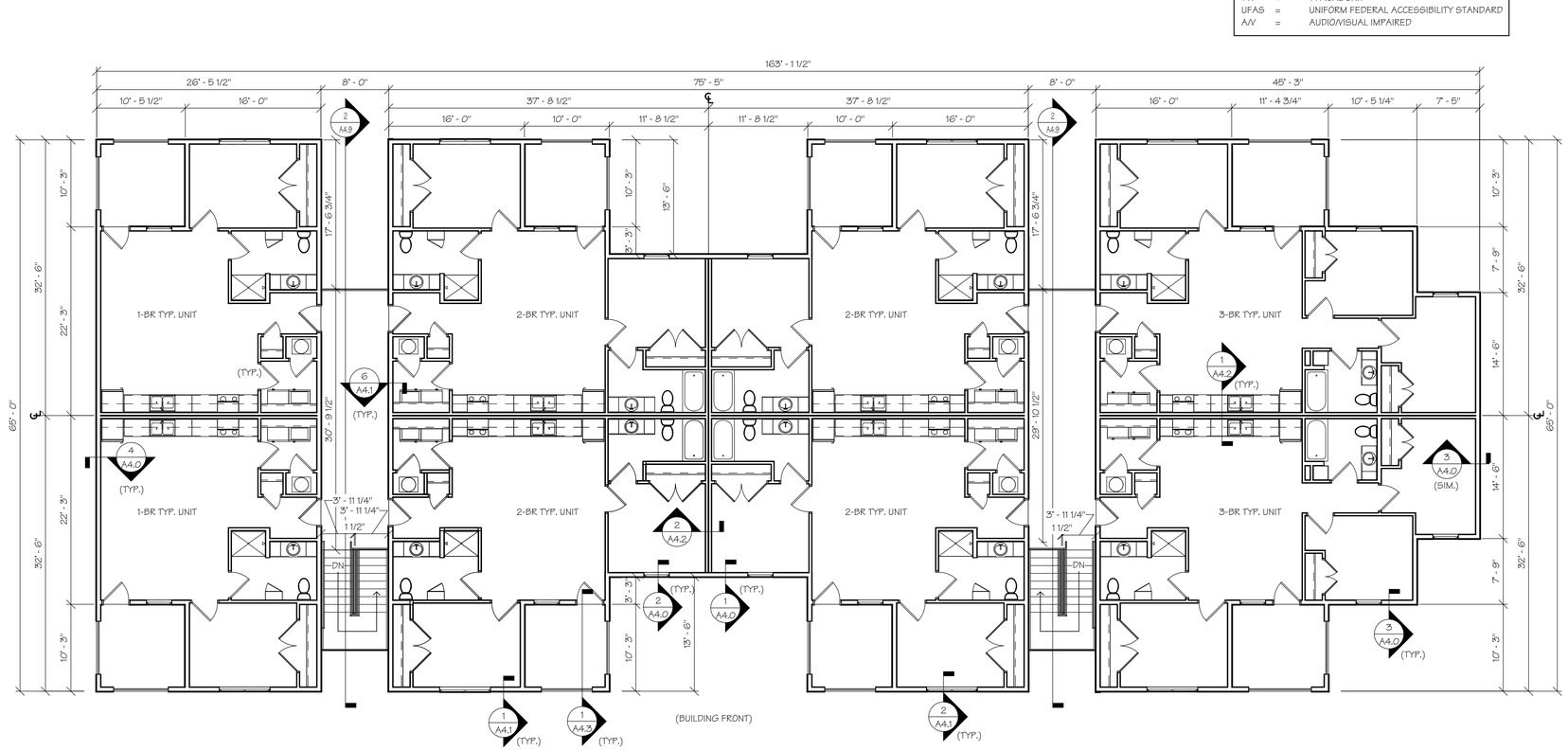
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JOB NO.
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1 A1.1 BUILDINGS 1 & 2 THIRD FLOOR PLAN

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

BLDG. 1 BLDG. 2

BUILDINGS 1 & 2 THIRD FLOOR PLAN

ISSUE SET

UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
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STATE OF OKLAHOMA
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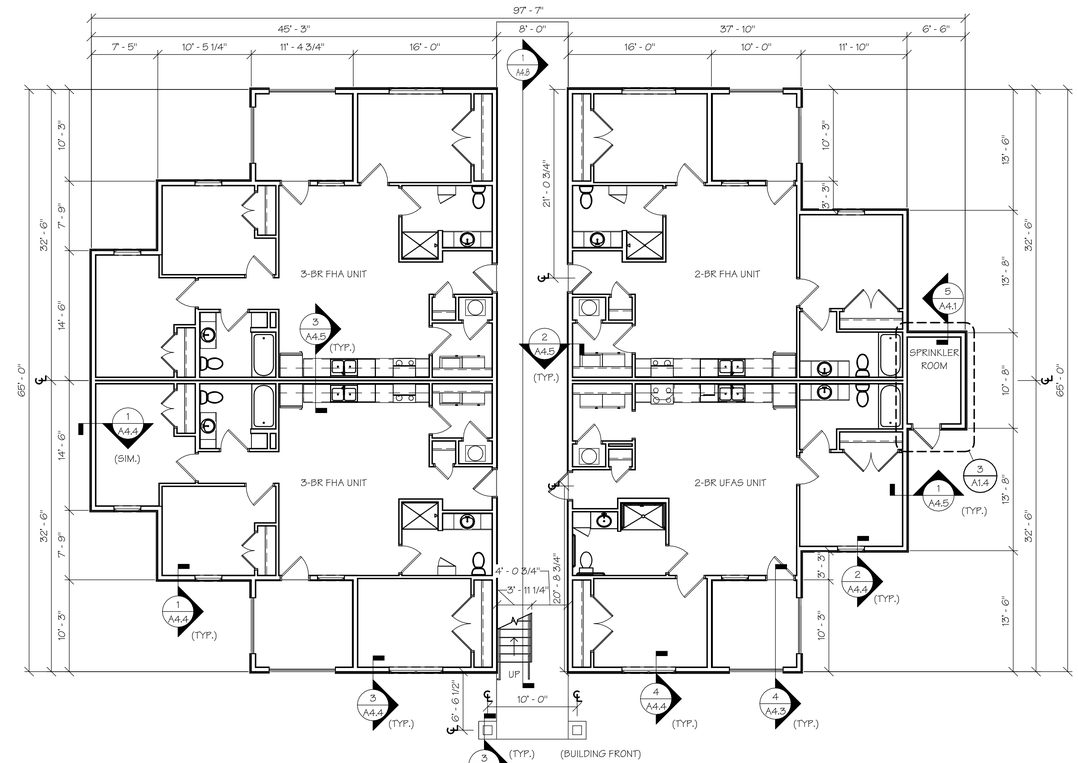
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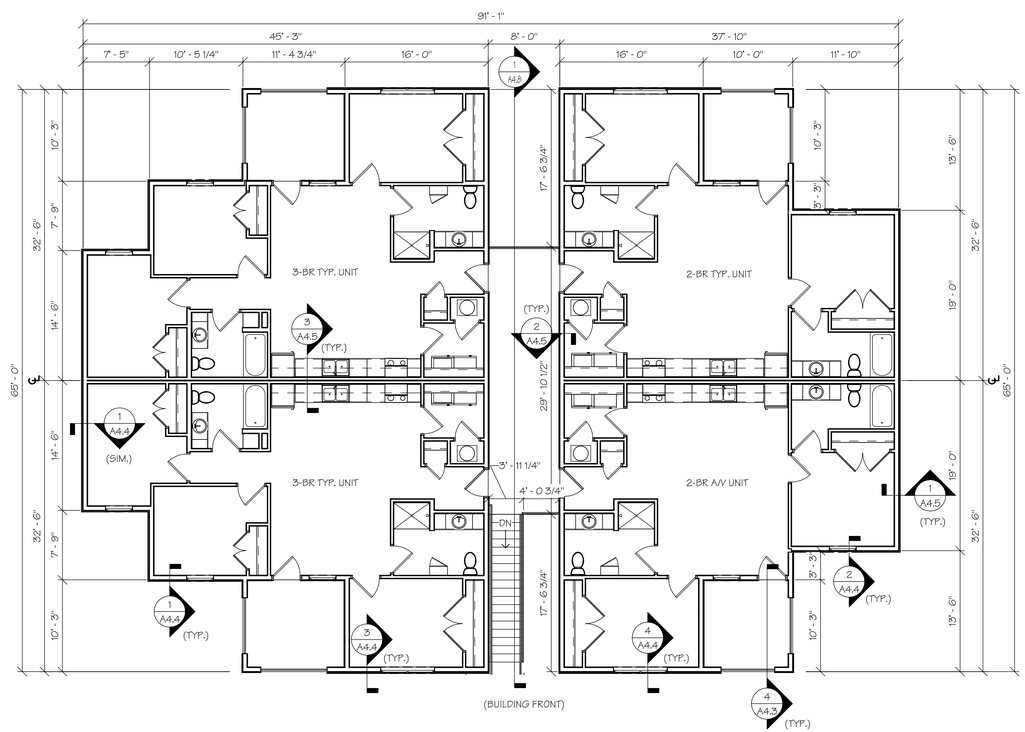
UNIT TYPE LEGEND

FHA	=	FAIR HOUSING ACT
TYP	=	TYPICAL UNIT
UFAS	=	UNIFORM FEDERAL ACCESSIBILITY STANDARD
A/V	=	AUDIO/VISUAL IMPAIRED



1 A1.2 BUILDING 3 FIRST FLOOR PLAN

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



2 A1.2 BUILDING 3 SECOND FLOOR PLAN

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

BUILDING 3 FIRST & SECOND FLOOR PLANS

ISSUE SET

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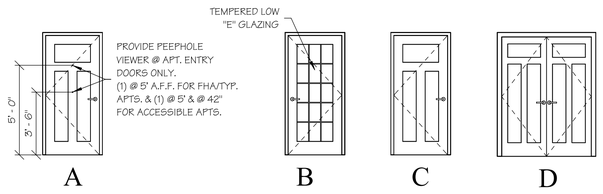
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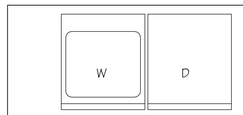
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DOOR SCHEDULE

MARK	SIZE	ELEVATION	PANEL MATL.	FRAME MTL.	HARDWARE SET (SEE SPECS)	COMMENTS
1	3'-0" X 6'-8" X 1 3/4"	A	INSUL. HOLLOW METAL	HOLLOW METAL	1	3 PANEL W/ PEEPHOLE, 60 MIN. FIRE RATED, WEATHER STRIPPING, ACC. THRESHOLD @ GROUND FLOOR UNITS & SPRING HINGES
2	3'-0" x 6'-8" x 1 3/4"	B	INSUL. FIBERGLASS	WD	2	FULL LITE, ACC. THRESHOLD @ GROUND FLOOR UNITS & WEATHER STRIPPING
3	3'-0" x 6'-8" x 1 3/8"	C	WD HC	WD	10 @ LAUNDRY, 7 @ BEDROOM & BATHROOM	3 PANEL MASONITE
4	2'-8" x 6'-8" x 1 3/8"	C	WD HC	WD	10	3 PANEL MASONITE
5	2'-0" x 6'-8" x 1 3/8"	C	WD HC	WD	10	3 PANEL MASONITE
6	PR. 3'-0" x 6'-8" x 1 3/8"	D	WD HC	WD	8	3 PANEL MASONITE
7	PR. 2'-0" x 6'-8" x 1 3/8"	D	WD HC	WD	8	3 PANEL MASONITE
8	3'-0" X 6'-8" X 1 3/4"	C	INSUL. FIBERGLASS	WD	5	3 PANEL & WEATHER STRIPPING





NOTE: WHEN ORIENTATION OF UNIT FLIPS, CONTRACTOR TO MAINTAIN ORIENTATION OF WASHER/DRYER AS WASHER ON LEFT AND DRYER ON RIGHT.

DOOR NOTES

1) ALL DOORS TO HAVE LEVER HANDLES.
2) ENTRY DOORS SHALL COMPLY WITH ANSI A117.1 ACCESSIBILITY REQUIREMENTS.
3) PROVIDE THRESHOLD AT ALL GROUND FLOOR UNIT ENTRY DOORS WHICH ARE 1/2" HIGH MAX., 1:2 SLOPE.
4) CONTRACTOR TO PROVIDE & INSTALL DOOR STOPS (ROUND WALL MOUNTED) @ ALL DOORS.
5) SEE SPECS FOR DOOR HARDWARE.
6) CAULK/SEAL ALL EXTERIOR THRESHOLDS.

WALL NOTES

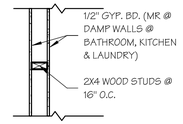
1) DIMENSIONS ARE STUD FACE TO STUD FACE UNLESS NOTED OTHERWISE.
2) PROVIDE SOLID BLOCKING BEHIND GRAB BARS, CURTAIN RODS, SHOWER RODS, SHOWER HEADS, TOWEL BARS, ALL CABINETS, AND ALL SOFFITS.
3) ALL EXTERIOR WALLS FRAMED W/ 2X6'S 16" O.C. AND COVERED W/ (1) LAYER 5/8" GYP. BD. AT INTERIOR.
4) ALL INTERIOR WALLS FRAMED WITH 2X4'S OR 2X6'S (ALL PLUMBING WALLS) 16" O.C. AND COVERED WITH (1) LAYER 1/2" GYP. BD.
5) ALL UNIT SEPARATION WALLS FRAMED WITH 2X4'S 16" O.C. AND COVERED WITH (1) LAYER 5/8" TYPE "X" GYP. BD. (EACH SIDE) PER WALL SECTION.
6) ALL EXTERIOR STAIR WALLS FRAMED W/ 2X6'S 16" O.C. AND COVERED W/ (1) LAYER 5/8" TYPE "X" GYP. BD. AT BOTH SIDES.

GENERAL UNIT NOTES

1) CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR EACH UNIT AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2) CONTRACTOR SHALL FURNISH ONE MAILBOX PER UNIT, PER OWNER SELECTION (SEE SPECS).
3) CERTIFICATION OF R-39 CEILING INSULATION MUST BE POSTED IN EACH ATTIC SPACE.
4) PROVIDE CARPET EDGES AS NECESSARY, DESIGNATED BY "CE" (COLOR SELECTED BY OWNER).
5) COAT AND BEDROOM CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
6) PRIME & PAINT WALLS BEHIND MILLWORK.
7) STAIN & SEAL MILLWORK AS SPECIFIED.
8) SUBMIT SAMPLES OF FLOOR TRANSITIONS FOR APPROVAL OF COLOR & TYPE.
9) APPLY SILICONE CAULK BETWEEN CONCRETE AND BOTTOM OF THE DRYWALL.
10) SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
11) APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING, INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.
12) IF ALTERNATE FLOORING IS SELECTED, ADDITIONAL TRANSITION STRIPS WILL BE REQUIRED.

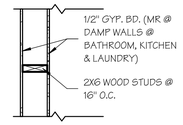
WALL TYPES

W1



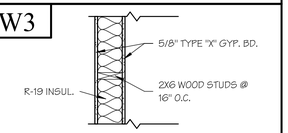
4-1/2" WALL
(NOT RATED)

W2

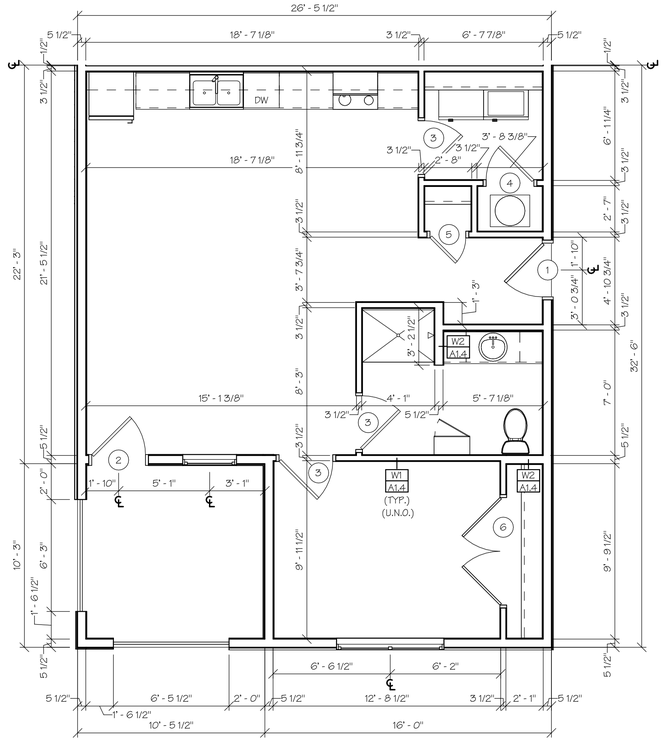


6-1/2" WALL
(NOT RATED)

W3

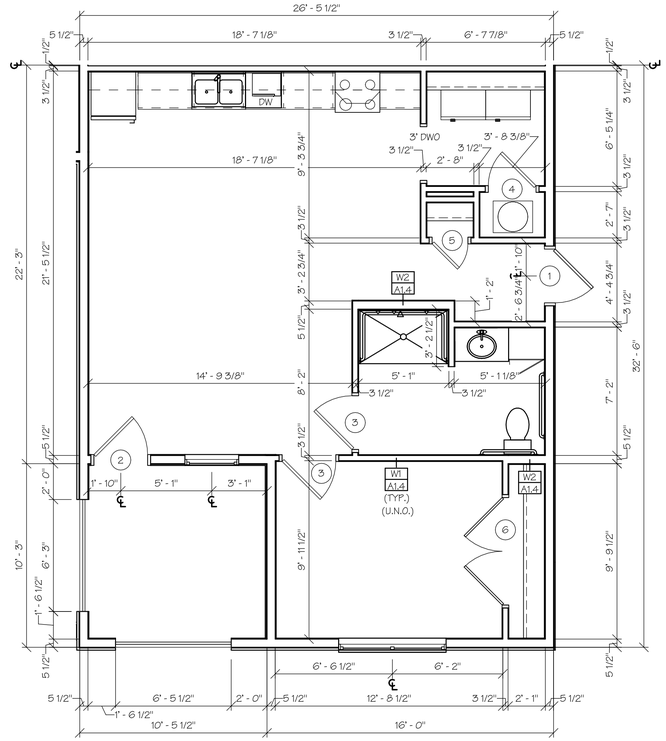


6-3/4" WALL
(1 HOUR U.L. NO. U305)



1 / A1.3 1-BR FHA/TYP. UNIT DIMENSION PLAN

SCALE: 1/4" = 1'-0"



2 / A1.3 1-BR UFAS UNIT DIMENSION PLAN

SCALE: 1/4" = 1'-0"

1-BR UNIT DIMENSION PLANS, DOOR SCHEDULE & NOTES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT LICENSE# 6574

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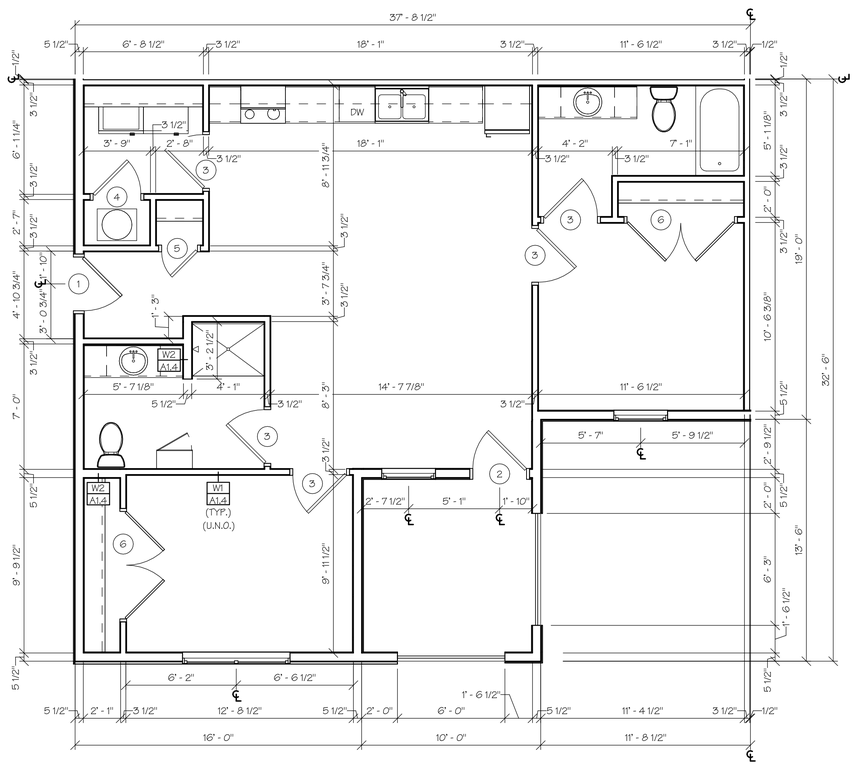
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JOB NO. 4341

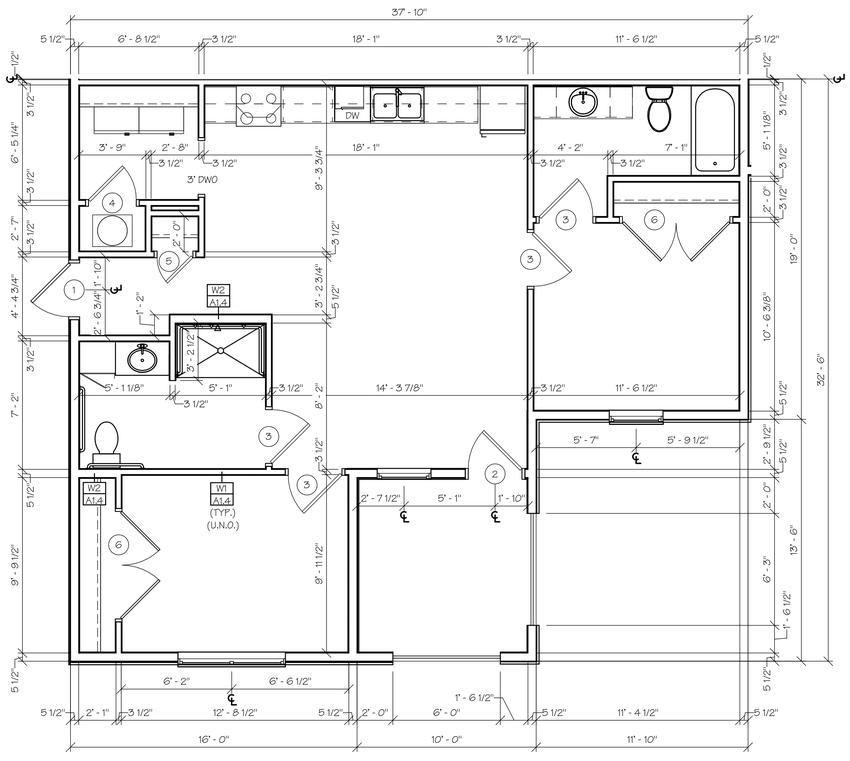
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NOTE: SEE SHEET A1.3 FOR DOOR SCHEDULE AND WALL TYPES.



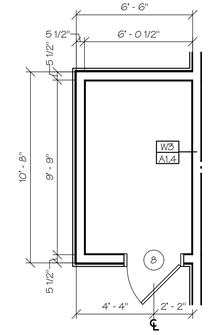
1 A1.4 2-BR FHA/TYP. UNIT DIMENSION PLAN

SCALE: 1/4" = 1'-0"



2 A1.4 2-BR UFAS UNIT DIMENSION PLAN

SCALE: 1/4" = 1'-0"



3 A1.4 SPRINKLER ROOM DIMENSION PLAN

SCALE: 1/4" = 1'-0"

2-BR UNIT & SPRINKLER ROOM DIMENSION PLANS

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STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL
PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

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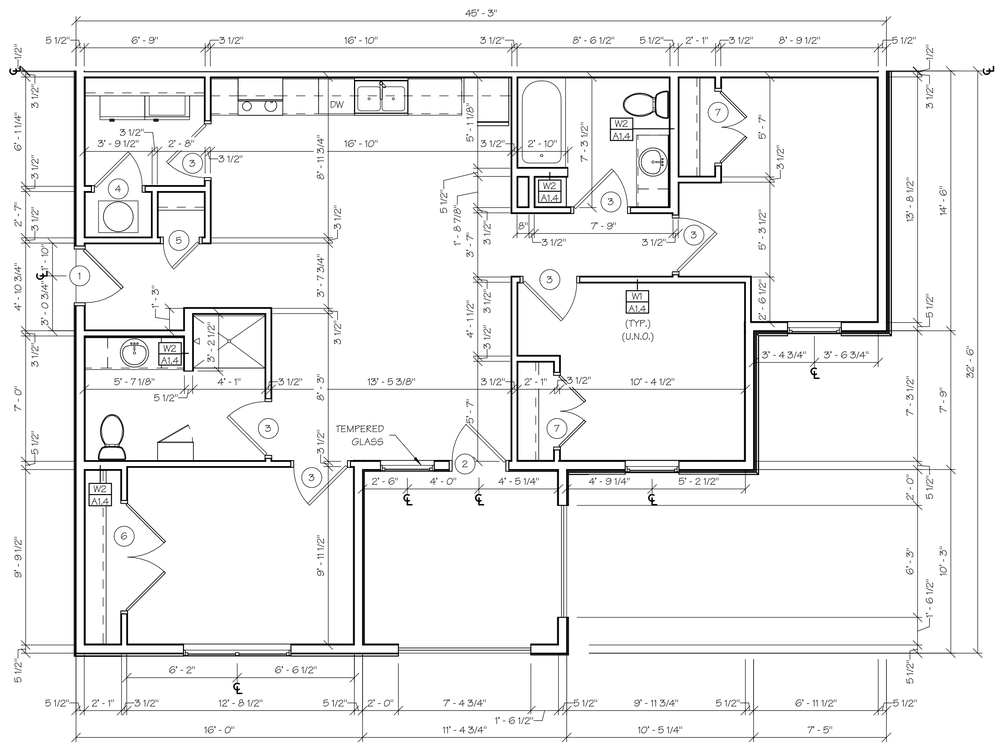
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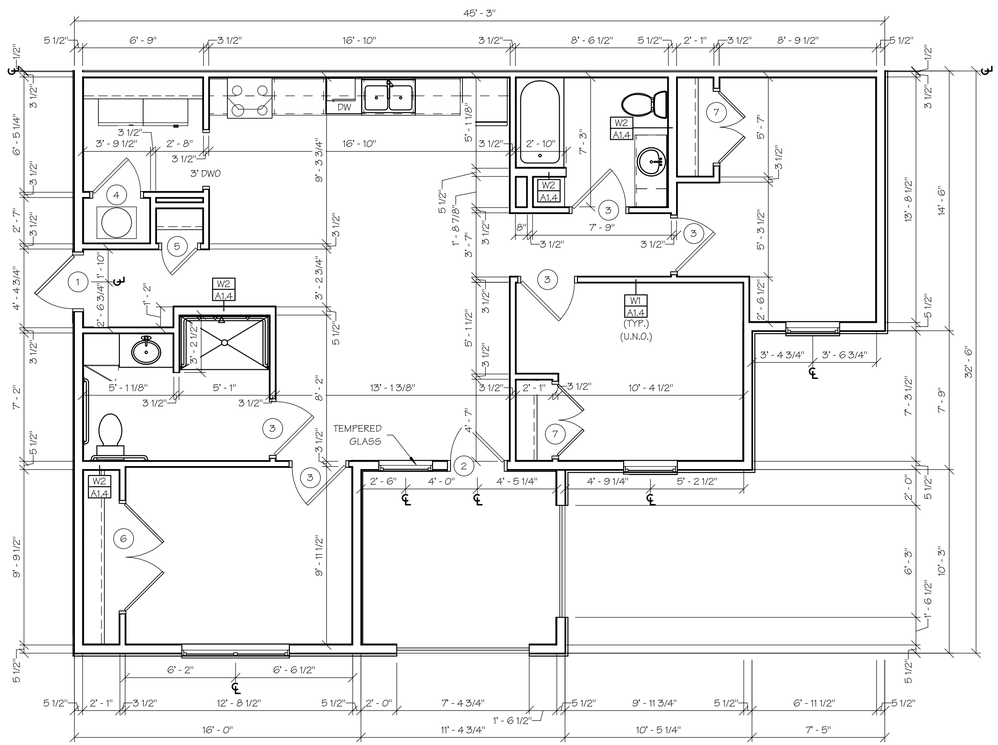
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NOTE: SEE SHEET A1.3 FOR DOOR SCHEDULE AND WALL TYPES.



1 A1.5 3-BR FHA/TYP. UNIT DIMENSION PLAN

SCALE: 1/4" = 1'-0"



2 A1.5 3-BR UFAS UNIT DIMENSION PLAN

SCALE: 1/4" = 1'-0"

3-BR UNIT DIMENSION PLANS

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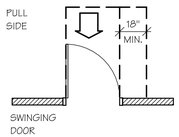
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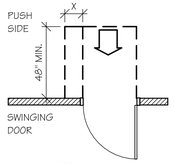
MANEUVERING CLEARANCES AT DOORS

PER UFAS

NOTE: WHERE ANY OBSTRUCTION WITHIN 18 INCHES OF THE LATCH SIDE OF A DOORWAY PROJECTS MORE THAN 8 INCHES BEYOND THE FACE OF THE DOOR, MEASURED PERPENDICULAR TO THE FACE OF THE DOOR, MANEUVERING CLEARANCES FOR A FORWARD APPROACH SHALL BE PROVIDED.

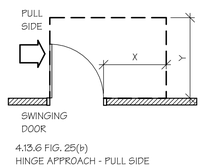


4.13.6 FIG. 25(a)
FRONT APPROACH - PULL SIDE



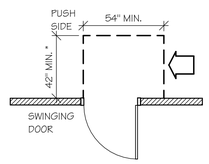
4.13.6 FIG. 25(a)
FRONT APPROACH - PUSH SIDE

NOTE: X = 12" MIN IF DOOR HAS BOTH A CLOSER AND LATCH



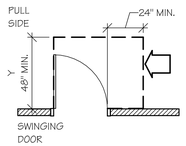
4.13.6 FIG. 25(b)
HINGE APPROACH - PULL SIDE
X = 36" MIN AND Y = 60" MIN

4.13.6 FIG. 25(b)
HINGE APPROACH - PULL SIDE
X = 42" MIN AND Y = 54" MIN



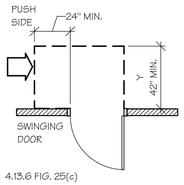
4.13.6 FIG. 25(b)
HINGE APPROACH - PUSH SIDE

* 48" MIN IF BOTH CLOSER AND LATCH PROVIDED.



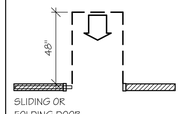
4.13.6 FIG. 25(c)
LATCH APPROACH - PULL SIDE

NOTE: Y = 54" MIN IF DOOR HAS A CLOSER

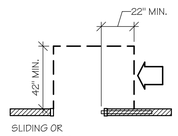


4.13.6 FIG. 25(c)
LATCH APPROACH - PUSH SIDE

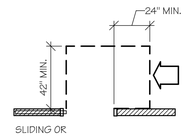
NOTE: Y = 48" MIN IF DOOR HAS A CLOSER



4.13.6 FIG 25(d)
FRONT APPROACH

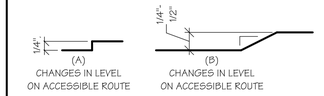


4.13.6 FIG 25(e)
POCKET OR HINGE ("SLIDE SIDE") APPROACH



4.13.6 FIG 25(f)
STOP OR LATCH APPROACH

CHANGES IN LEVEL ON AN ACCESSIBLE ROUTE



NOTE: STAIRS SHALL NOT BE PART OF AN ACCESSIBLE ROUTE.

ACCESSIBLE UNIT BATH NOTES

1)	VALVE & SHOWER HEAD SHALL BE ON 2X6 WALL OR WALL @ LAV., (SEE BATH ELEVATIONS SHEET A7.0)
2)	PROVIDE HAND-HELD SHOWER W/VACUUM BREAKER (IN LIEU OF FIXED SHOWER HEAD), FLEXIBLE HOSE, & 24" SLIDE BAR.
3)	INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
4)	PROVIDE & INSTALL 36" GRAB BAR BEHIND @ 42" GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. (SEE BATH ELEVATIONS SHEET A7.0)
5)	BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
6)	VANITY SINK FAUCET TO BE LEVER TYPE, & EXPOSED PIPING TO BE WRAPPED W/ PIPE WRAP.
7)	EXTEND VINYL FLOORING BENEATH LAV. SPACE.

ACCESSIBLE UNIT KITCHEN NOTES

1)	COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2)	EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE BESIDE THE RANGE. PROVIDE REMOVABLE FRONT & FLOOR IN LIEU OF SINK BASE.
3)	TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
4)	ADD SEPARATE WALL SWITCHES FOR RANGE HOOD FAN AND RANGE HOOD LIGHT (SEE ELECTRICAL PLANS)
5)	ADD SWITCHES FOR CONTROL OF LIGHT OVER SINK & GARBAGE DISPOSAL.
6)	TOP OF WALL TELEPHONE OUTLET TO BE 46" MAX. A.F.F.
7)	SWITCHES & OUTLETS IN KITCHEN ABOVE BASE CABINETS SHALL BE 40" A.F.F. TO BOTTOM OF SWITCH PLATE, SO AS NOT INTERFERE WITH WALL CABINET.
8)	INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ PIPE WRAP.
9)	DISHWASHER HOOKUPS ARE UNDER SINK, ACCESS OPENING IS TO BE MADE THROUGH END PANEL OF SNIK.

1 A1.6 1-BR FHA UNIT CLEAR FLOOR SPACE PLAN

SCALE: 1/4" = 1'-0"

2 A1.6 1-BR UFAS UNIT CLEAR FLOOR SPACE PLAN

SCALE: 1/4" = 1'-0"

1-BR UNIT CLEAR FLOOR SPACE & DOOR APPROACH PLANS & NOTES

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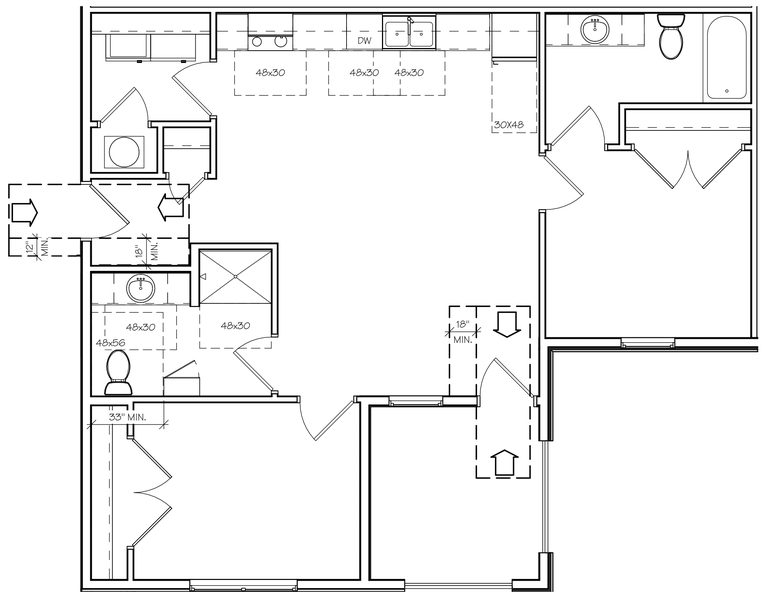
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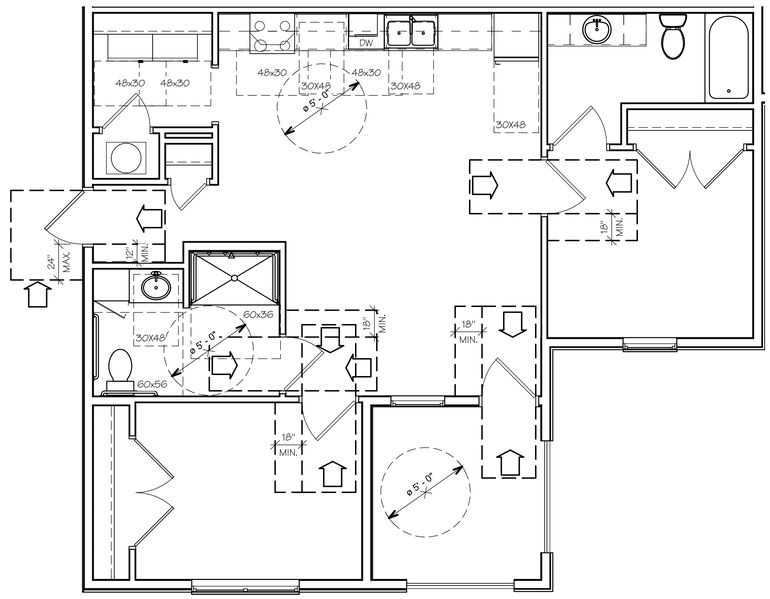
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1 A1.7 2-BR FHA UNIT CLEAR FLOOR SPACE PLAN

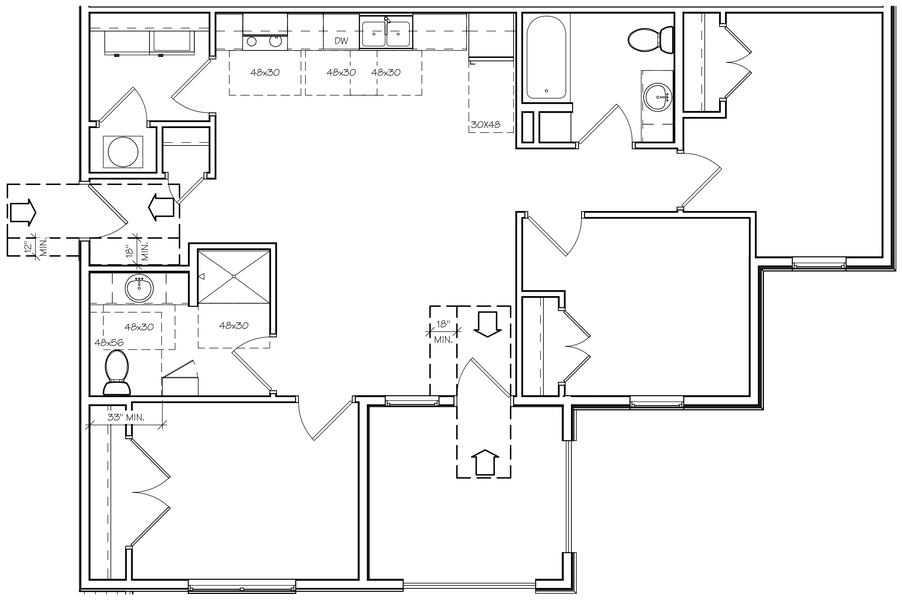
SCALE: 1/4" = 1'-0"



2 A1.7 2-BR UFAS UNIT CLEAR FLOOR SPACE PLAN

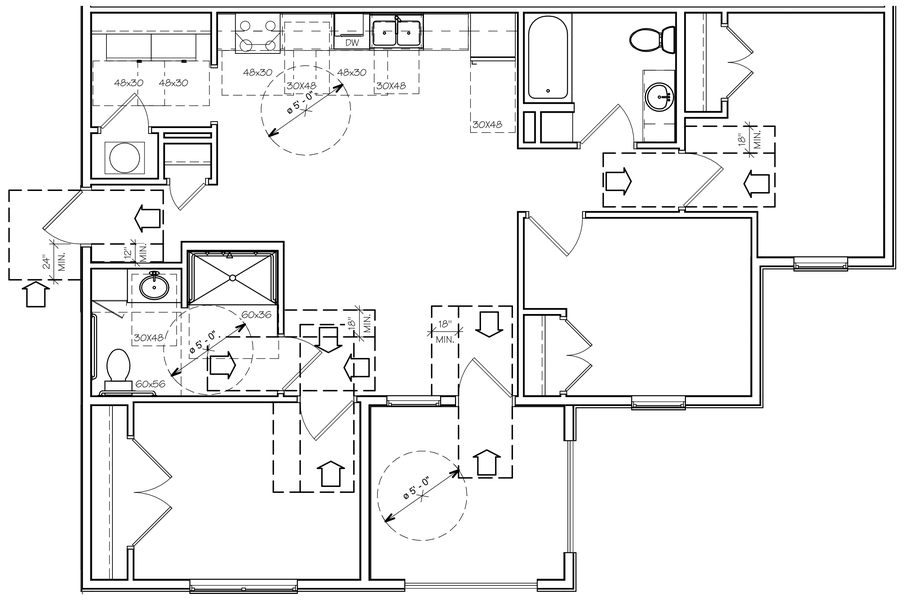
SCALE: 1/4" = 1'-0"

SEE SHEET A1.6 FOR GENERAL MANUVERING CLEARANCES AT DOORS, ACC. KITCHEN & BATH NOTES.



3 A1.7 3-BR FHA UNIT CLEAR FLOOR SPACE PLAN

SCALE: 1/4" = 1'-0"



4 A1.7 3-BR UFAS UNIT CLEAR FLOOR SPACE PLAN

SCALE: 1/4" = 1'-0"

2-BR & 3-BR UNIT CLEAR FLOOR SPACE & DOOR APPROACH PLANS

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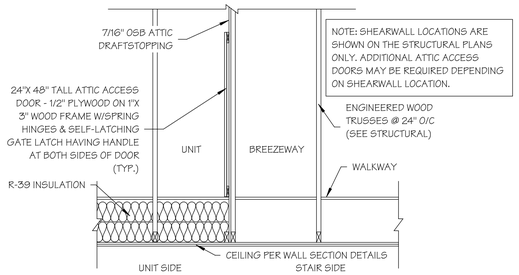
ATTIC COMPARTMENT VENTILATION

NAME	TYPE	AREA	TOTAL REQ'D VENT. (SQ. IN.)	SOFFIT VENT (SQ. IN.)	ROOF VENT (SQ. IN.)
AREA "A"	ATTIC SPACE	2482 SF	1191	596	596
AREA "B"	ATTIC SPACE	441 SF	212	106	106
AREA "C"	ATTIC SPACE	2152 SF	1033	516	516
AREA "D"	ATTIC SPACE	2152 SF	1033	516	516
AREA "E"	ATTIC SPACE	441 SF	212	106	106
AREA "F"	ATTIC SPACE	1738 SF	834	417	417
AREA "G"	ATTIC SPACE	68 SF	33	16	16
AREA "H"	ATTIC SPACE	68 SF	33	16	16
AREA "I"	ATTIC SPACE	2152 SF	1033	516	516
AREA "J"	ATTIC SPACE	441 SF	212	106	106
AREA "K"	ATTIC SPACE	2482 SF	1191	596	596



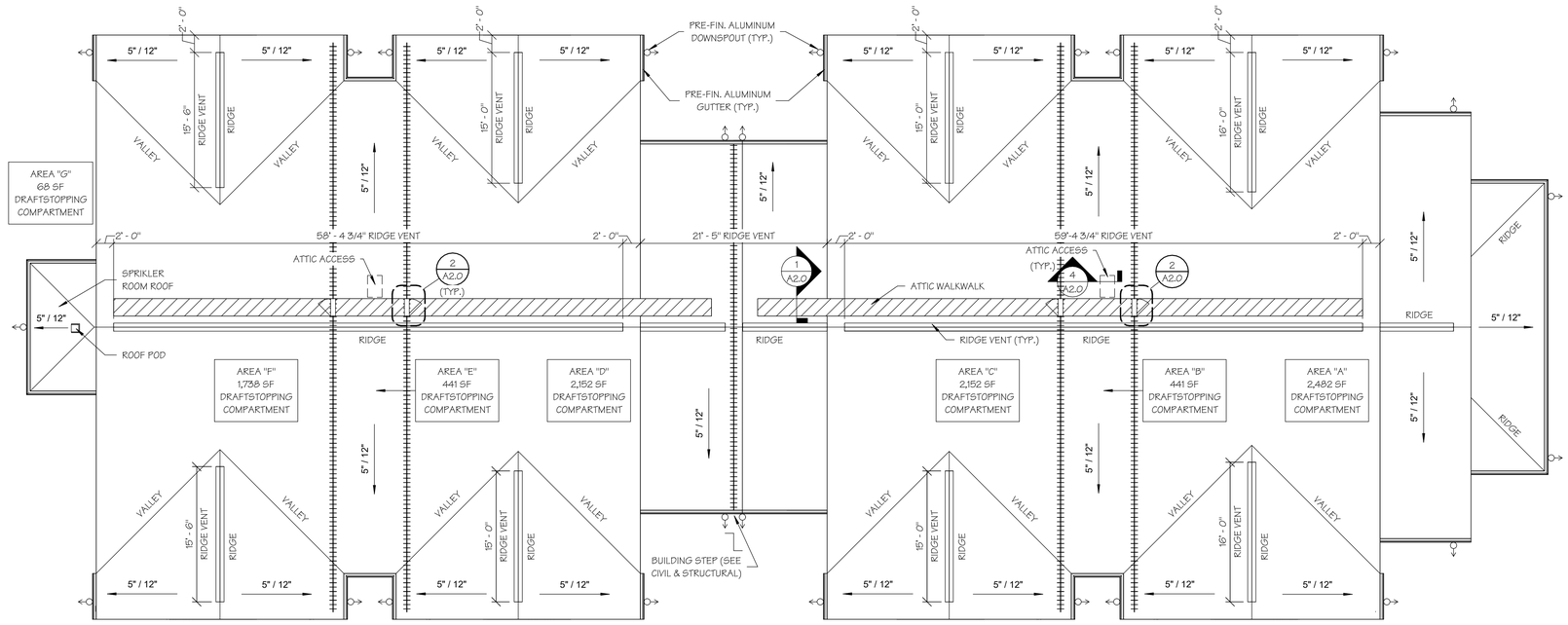
ATTIC WALKWAY DETAIL

1 A2.0 SCALE: 1/2" = 1'-0"



ATTIC DRAFTSTOP DOOR

2 A2.0 SCALE: 1/2" = 1'-0"



BUILDINGS 1 & 2 ROOF PLAN

3 A2.0 SCALE: 1/8" = 1'-0"

BLDG. 1 BLDG. 2

GENERAL ATTIC VENTILATION NOTES

1) TOTAL FREE AREA SHALL EQUAL 1/300 OF ATTIC AREAS W/50% OF VENT AREA WITHIN 3' OF ROOF PEAK AND 50% AT SOFFITS.
2) SPECIFIED RIDGE VENT LENGTHS BASED ON 18 SQ. IN. FREE AREA PER LINEAL FOOT. ADJUST VENT LENGTH AS REQUIRED BASED ON FREE AREA OF SPECIFIC VENTILATOR USED.
3) SPECIFID VENTILATION POD QUANTITY BASED ON 50 SQ. IN FREE AREA PER POD. ADJUST QUANTITY AS REQUIRED BASEED ON FREE AREA OF SPECIFIC VENTILATION POD USED.

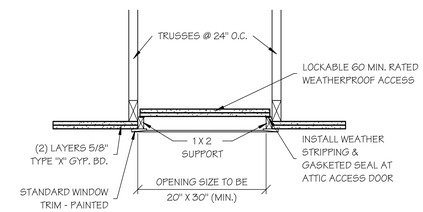
ATTIC DRAFTSTOPPING NOTES

1) DRAFTSTOPPING MATERIALS SHALL NOT BE LESS THAN 1/2" GYPSUM BOARD, 3/8" WOOD STRUCTURAL PANEL, 3/8" PARTICLEBOARD, 1" NOMINAL LUMBER, CEMENT FIBERBOARD, BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER, OR OTHER APPROVED MATERIALS ADEQUATELY SUPPORTED.
2) DRAFTSTOPPING SHALL BE PROVIDED IN ATTICS, MANSARDS, OVERHANGS, OR OTHER CONCEALED ROOF SPACES.
3) DRAFTSTOPPING SHALL BE INSTALLED ABOVE, AND IN LINE WITH, SLEEPING UNIT AND DWELLING UNIT SEPARARTION WALS THAT DO NOT EXTEND TO THE UNDERSIDE OF THE ROOF DECKING ABOVE.
4) THE ATTIC SPACE SHALL BE SUBDIVIDED BY DRAFTSTOPS INTO AREAS NOT EXCEEDING 3,000 SF OR ABOVE EVERY TWO DWELLING UNITS, WHICHEVER IS SMALLER.

SPECIAL INSTRUCTION:
STRUCTURAL DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER ANY DRAWING, DETAIL OR NOTE SHOWN ON THIS SHEET. CONTRACTORS, SUBCONTRACTORS, AND SUPPLIERS MUST REFERENCE STRUCTURAL DRAWINGS AND/ OR SPECIFICATIONS BEFORE CONSTRUCTING, OR SUPPLYING ANY LOAD-BEARING, OR LOAD-RESISTING ELEMENT SHOWN ON THIS SHEET.

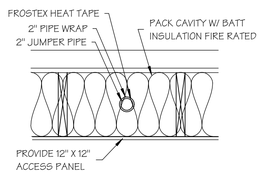
ATTIC LEGEND

ATTIC DRAFTSTOPPING



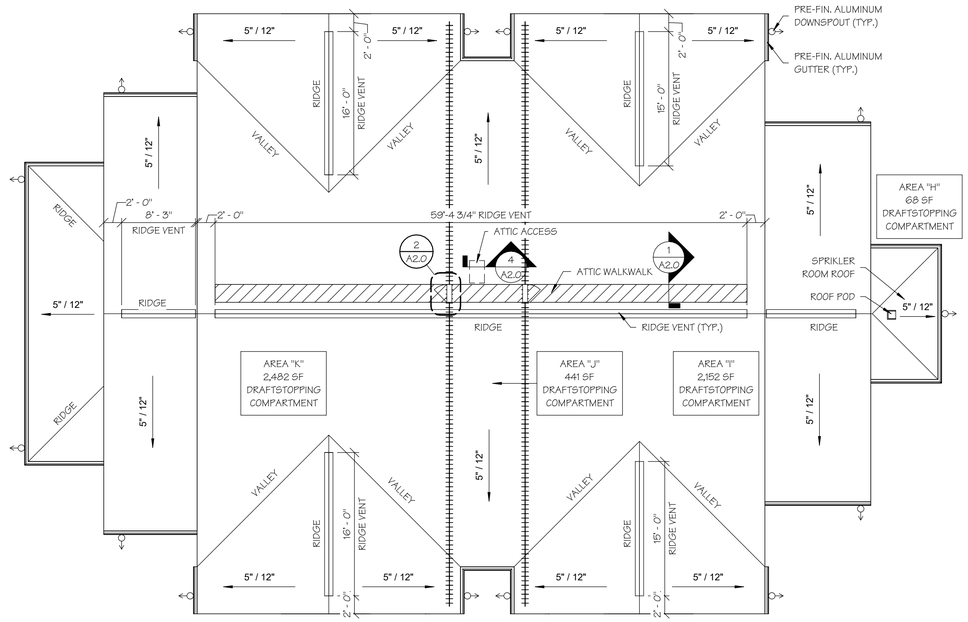
ATTIC ACCESS DETAIL

4 A2.0 SCALE: 1" = 1'-0"



SPRINKLER JUMPER DETAIL

5 A2.0 SCALE: 1" = 1'-0"



BUILDING 3 ROOF PLAN

6 A2.0 SCALE: 1/8" = 1'-0"

BLDG. 3

BUILDINGS 1, 2 & 3 ROOF PLANS

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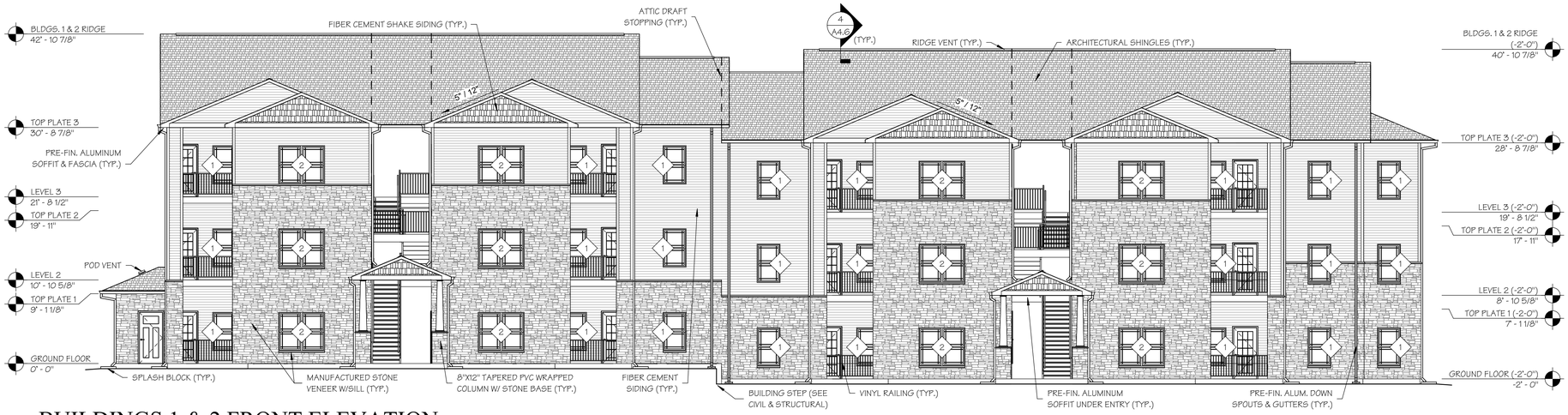
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1 A3.0 SCALE: 1/8" = 1'-0"

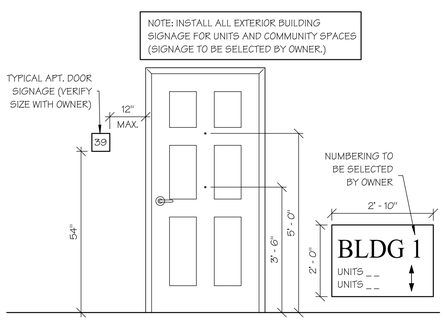
BUILDINGS 1 & 2 FRONT ELEVATION

NOTE: SEE SHEET A3.1 FOR WINDOW SCHEDULE AND WINDOW NOTES.



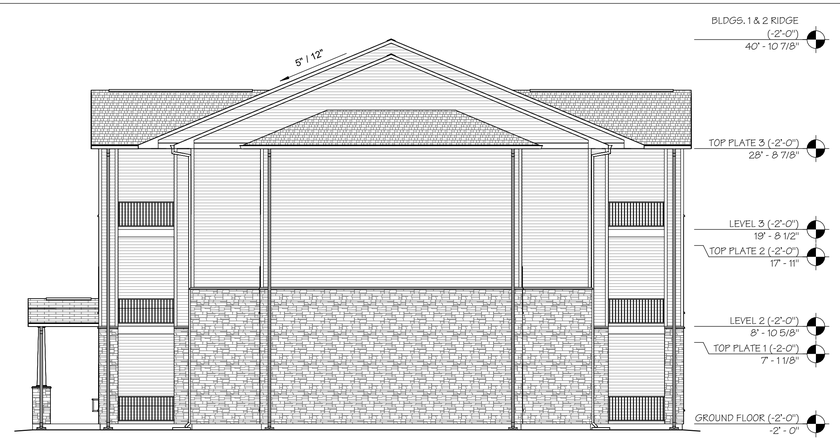
2 A3.0 SCALE: 1/8" = 1'-0"

BUILDINGS 1 & 2 REAR ELEVATION



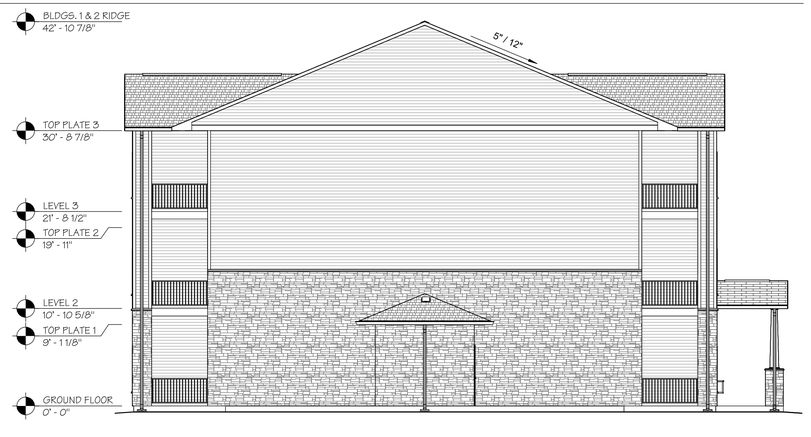
3 A3.0 SCALE: 1/2" = 1'-0"

EXTERIOR SIGNAGE DETAILS



4 A3.0 SCALE: 1/8" = 1'-0"

BUILDINGS 1 & 2 RIGHT ELEVATION



5 A3.0 SCALE: 1/8" = 1'-0"

BUILDINGS 1 & 2 LEFT ELEVATION

BUILDINGS 1 & 2 EXTERIOR ELEVATIONS

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LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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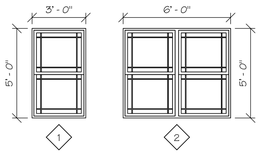
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JOB NO. 4341

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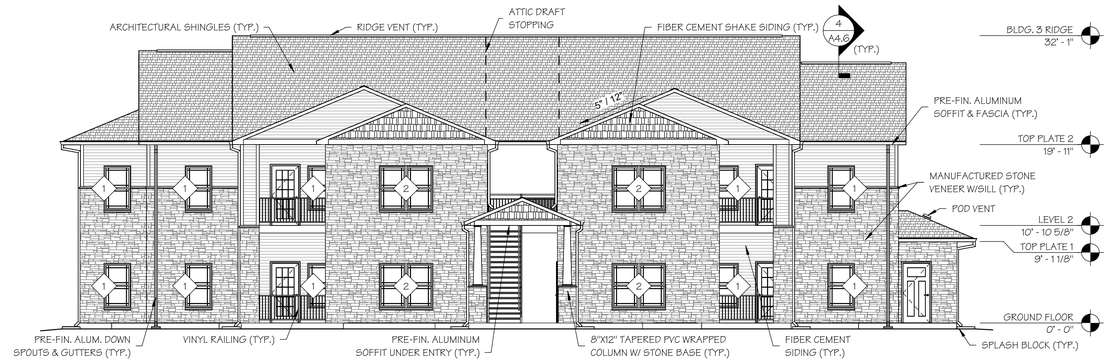
WINDOW SCHEDULE

MARK	SIZE	HARDWARE	GLAZING	COMMENTS
1	3'-0"" x 5'-0"	STANDARD	INSUL. LOW "E"	SINGLE HUNG W/ SCREENS, U-FACTOR=0.30 MAX., SHGC=0.25 MAX., W/ PRAIRIE MUNTINS, ENERGY STAR, TEMPERED AT PATIO DOOR
2	PR. 3'-0" x 5'-0"	STANDARD	INSUL. LOW "E"	SINGLE HUNG W/ SCREENS, U-FACTOR=0.30 MAX., SHGC=0.25 MAX., W/ PRAIRIE MUNTINS, ENERGY STAR



WINDOW NOTES

1)	CONTRACTOR SHALL CERTIFY THAT BEDROOM WINDOWS INSTALLED PROVIDE EGRESS OPENING OF 5.0 SQ. FT. (MIN.) 5.7 SQ FT. (MIN.) @ 2ND & 3RD FLOORS, CLEAR HEIGHT OF 24" AND MIN. CLEAR WIDTH OF 20".
2)	GLAZING WITHIN 24" OF DOORS SHALL BE TEMPERED GLASS.
3)	MAX. SILL HGT. @ 36" A.F.F.
4)	INSTALL WINDOW RESTRICTORS FOR SECOND AND THIRD FLOOR WINDOWS.
5)	REFER TO WALL SECTIONS FOR SPECIFIC STONE OR SIDING DETAILS AROUND WINDOW OPENINGS.
6)	INSTALL BLINDS AT ALL WINDOWS (FULL WIDTH X FULL HEIGHT)



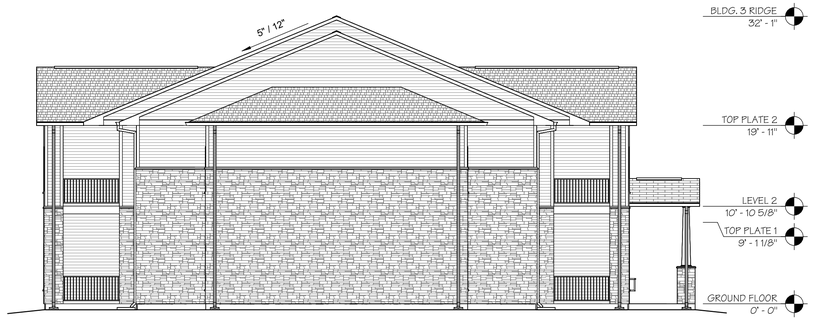
BUILDING 3 FRONT ELEVATION

1 A3.1 SCALE: 1/8" = 1'-0"



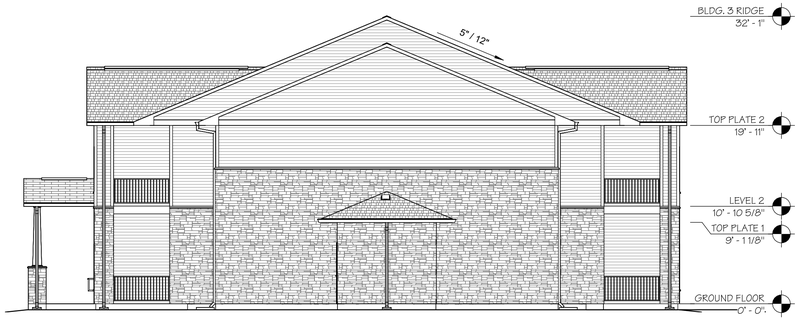
BUILDING 3 REAR ELEVATION

2 A3.1 SCALE: 1/8" = 1'-0"



BUILDING 3 LEFT ELEVATION

3 A3.1 SCALE: 1/8" = 1'-0"



BUILDING 3 RIGHT ELEVATION

4 A3.1 SCALE: 1/8" = 1'-0"

BUILDING 3 EXTERIOR ELEVATIONS

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6574
LICENSED ARCHITECT
19 AUG 2022
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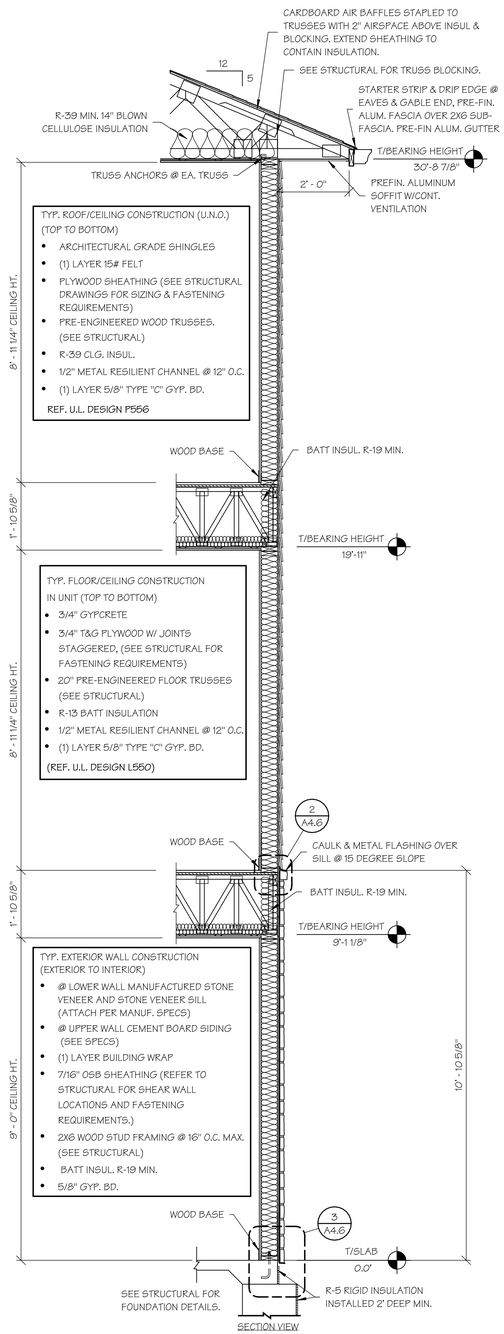
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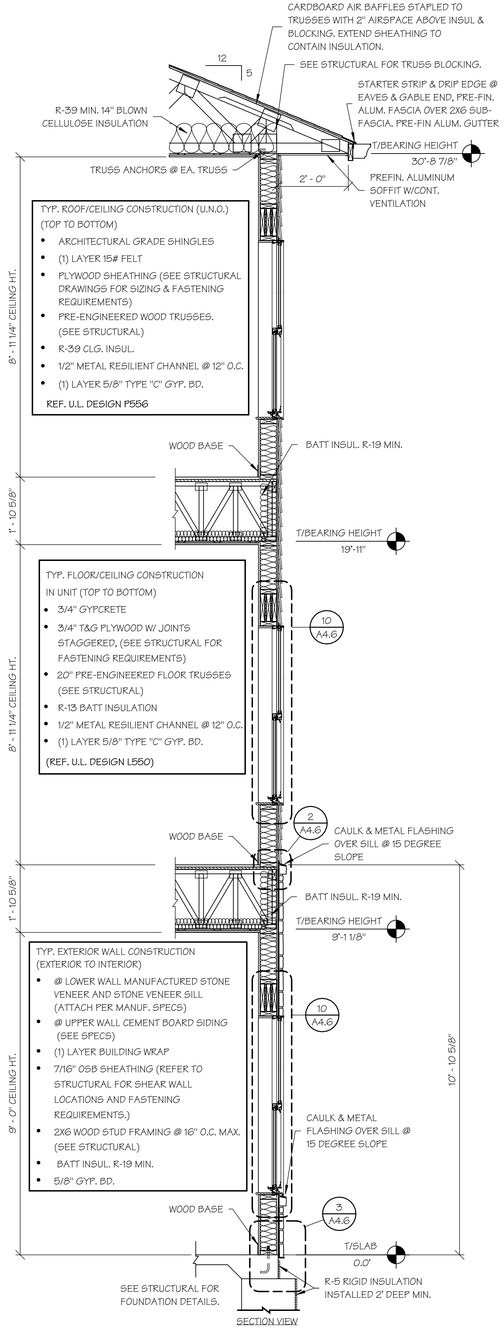
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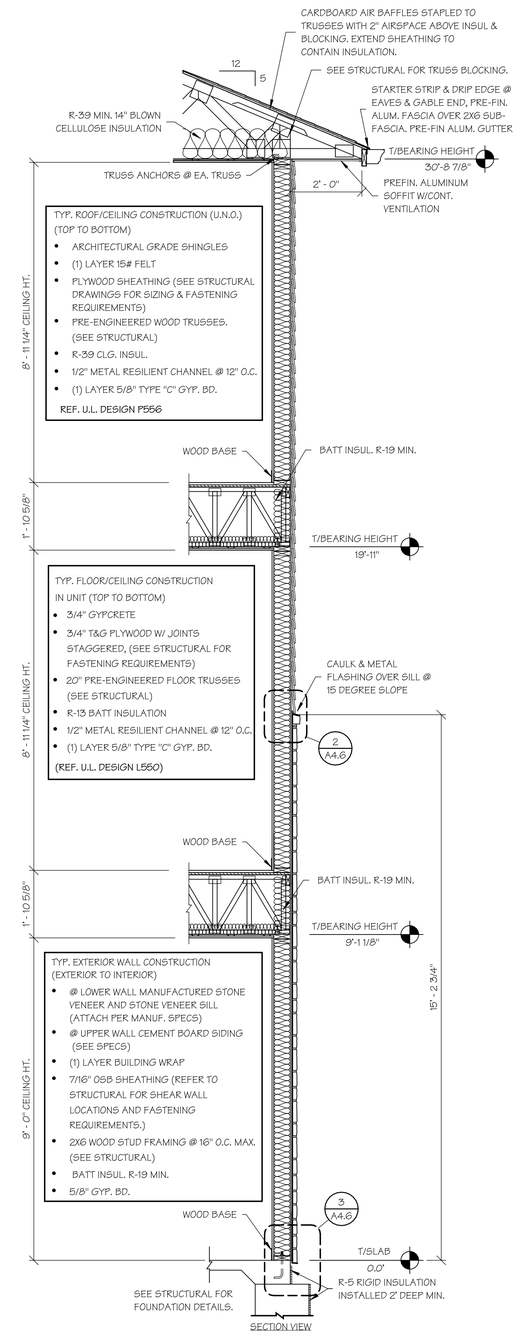
EXTERIOR WALL SECTION W/STONE

1 A4.0 SCALE: 1/2" = 1'-0"



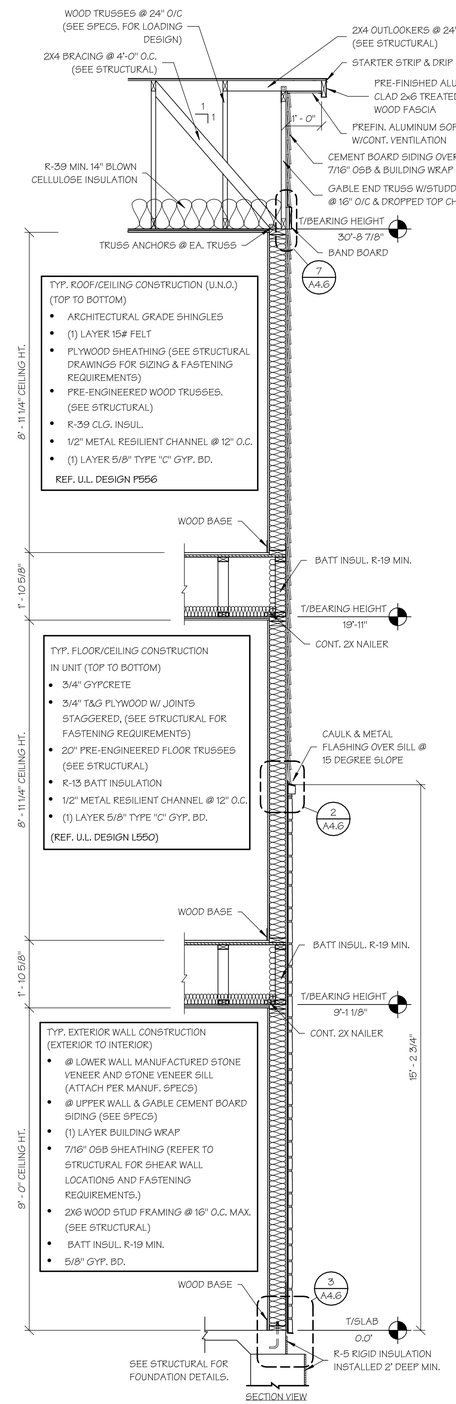
EXTERIOR WALL SECTION W/STONE & WINDOWS

2 A4.0 SCALE: 1/2" = 1'-0"



EXTERIOR WALL SECTION W/ HALF STONE

3 A4.0 SCALE: 1/2" = 1'-0"



EXTERIOR WALL SECTION W/ HALF STONE @ GABLE

4 A4.0 SCALE: 1/2" = 1'-0"

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

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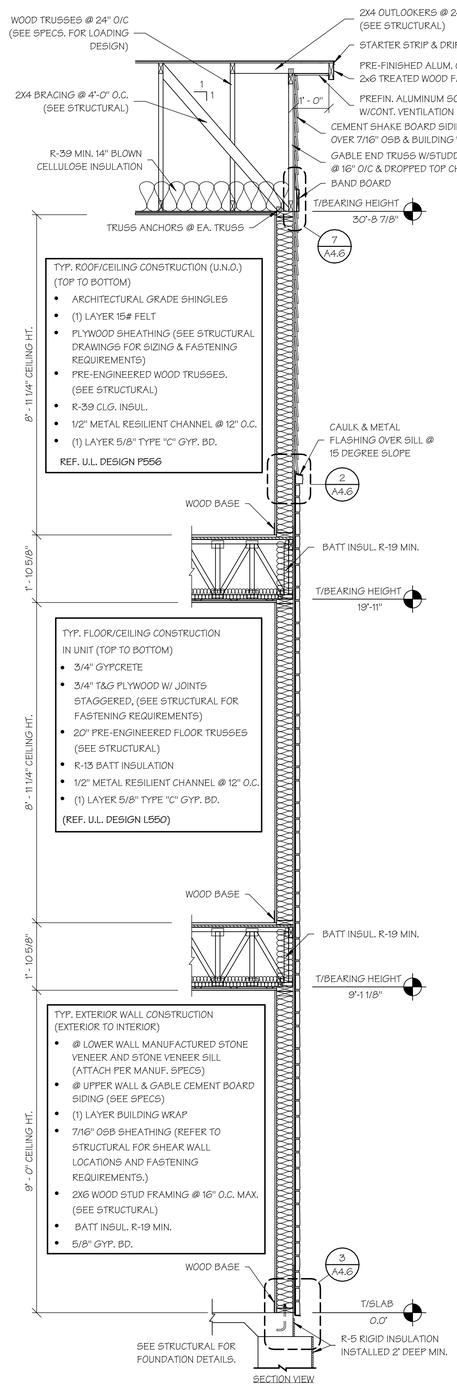
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WALL SECTIONS

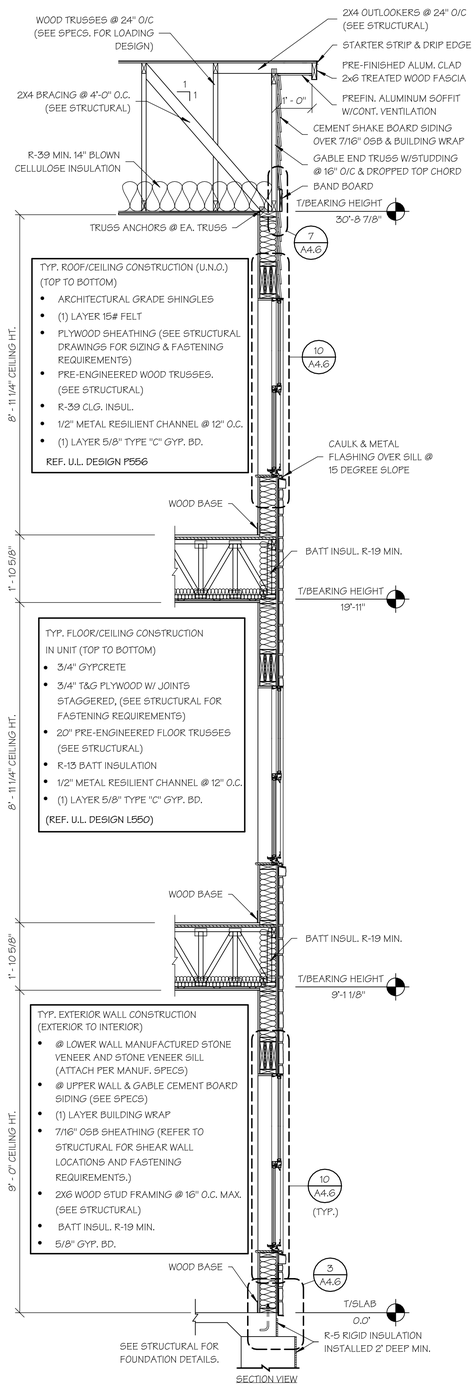
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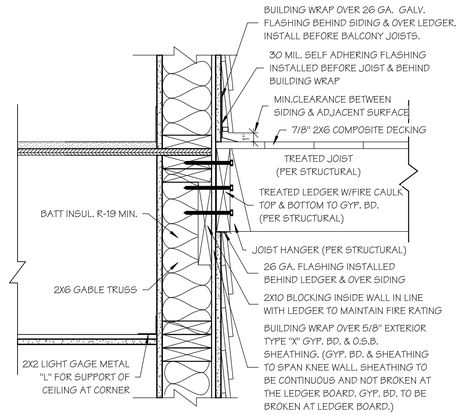
EXTERIOR WALL SECTION W/ STONE @ GABLE

1 A4.1 SCALE: 1/2" = 1'-0"



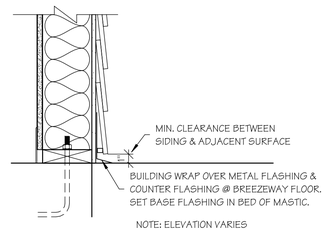
EXTERIOR WALL SECTION W/ STONE @ GABLE W/WINDOWS

2 A4.1 SCALE: 1/2" = 1'-0"



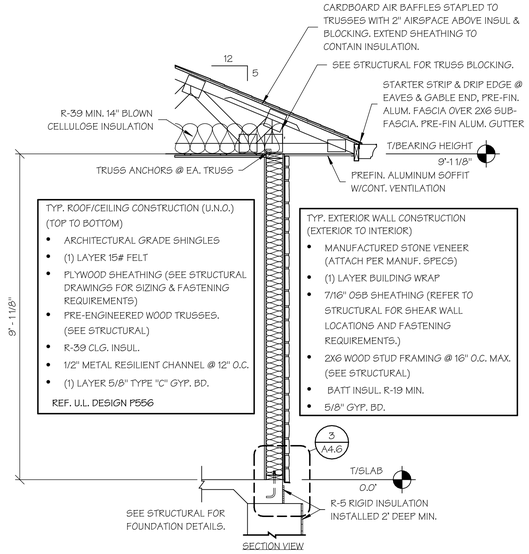
DECK FLASHING DETAIL

3 A4.1 SCALE: 1 1/2" = 1'-0"



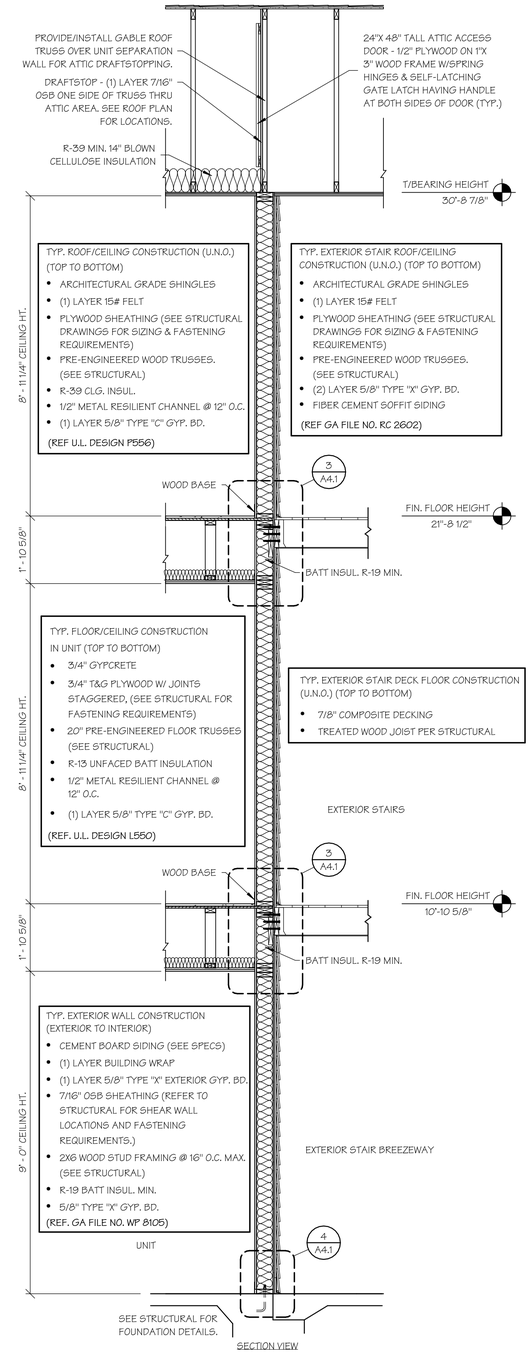
BREEZWAY FLASHING DETAIL

4 A4.1 SCALE: 1 1/2" = 1'-0"



EXTERIOR WALL SECTION W/ STONE @ SPRIKLER ROOM

5 A4.1 SCALE: 1/2" = 1'-0"



WALL SECTION @ EXTERIOR STAIR BREEZEWAY

6 A4.1 SCALE: 1/2" = 1'-0"

WALL SECTIONS & DETAILS

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MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
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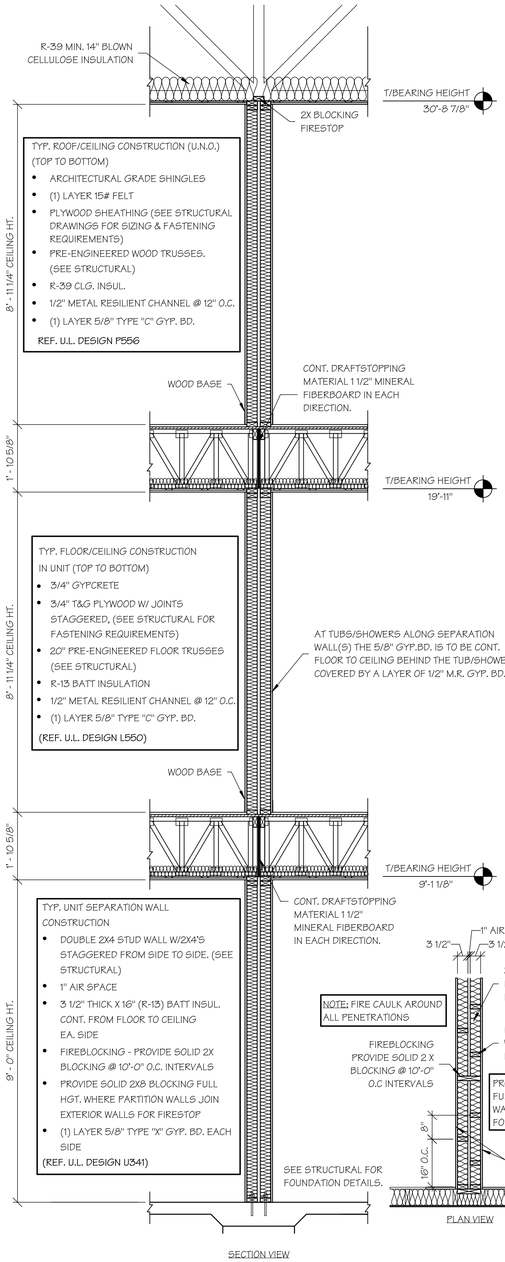
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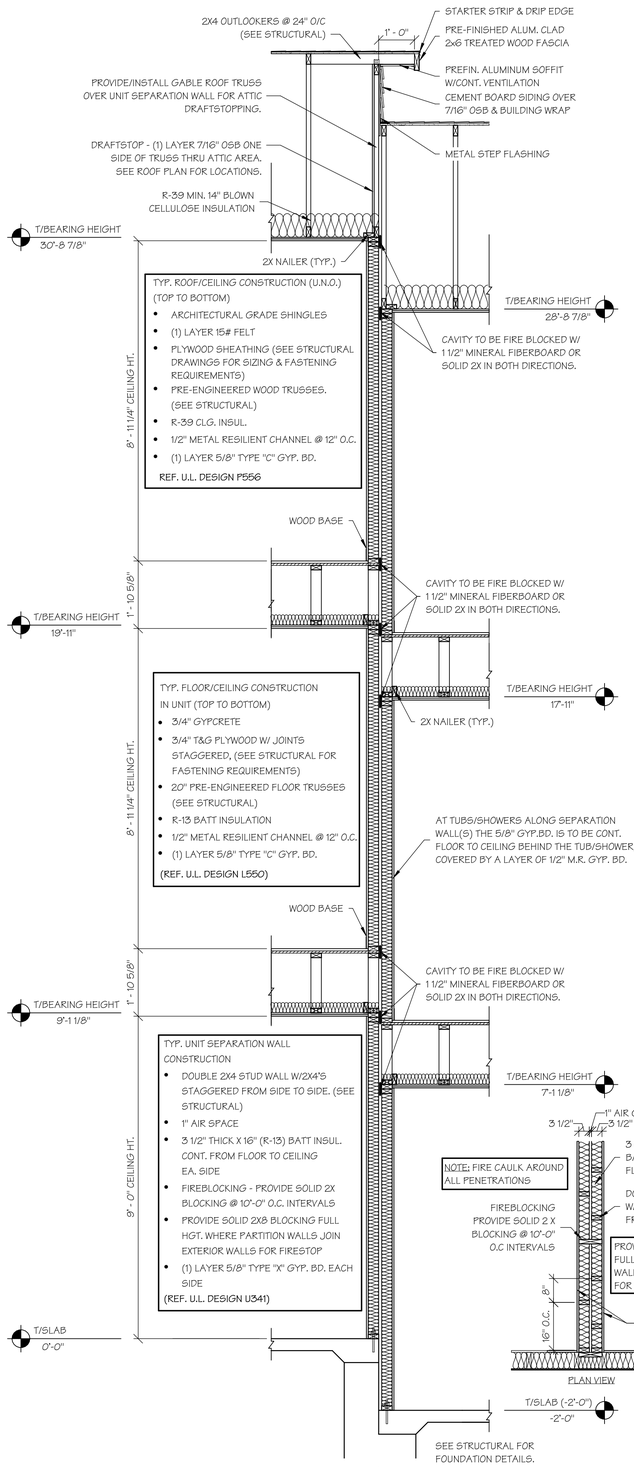
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1 A4.2 SCALE: 1/2" = 1'-0"

1-HOUR UNIT SEPARATION WALL



2 A4.2 SCALE: 1/2" = 1'-0"

1-HOUR UNIT SEPARATION WALL W/ DRAFTSTOP

WALL SECTIONS

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MARTIN RANDALL PORTER
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19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

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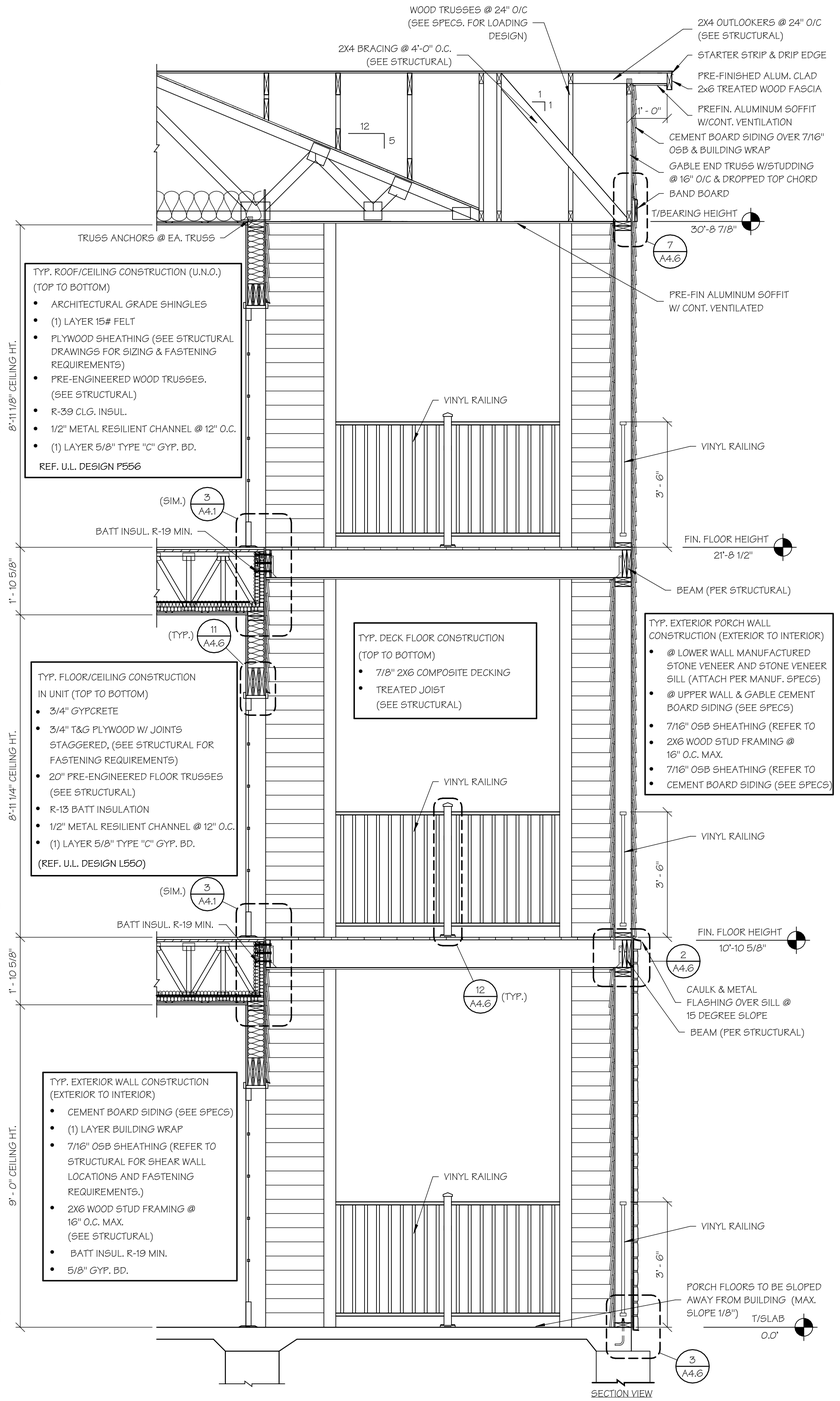
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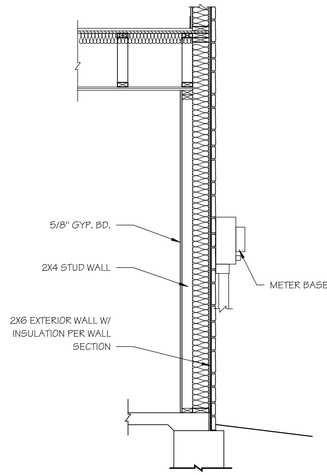
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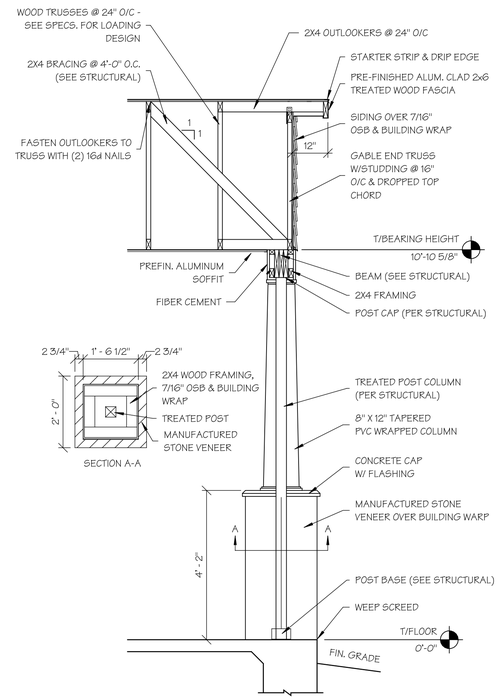
1 A4.3 WALL SECTION @ PORCH

SCALE: 1/2" = 1'-0"



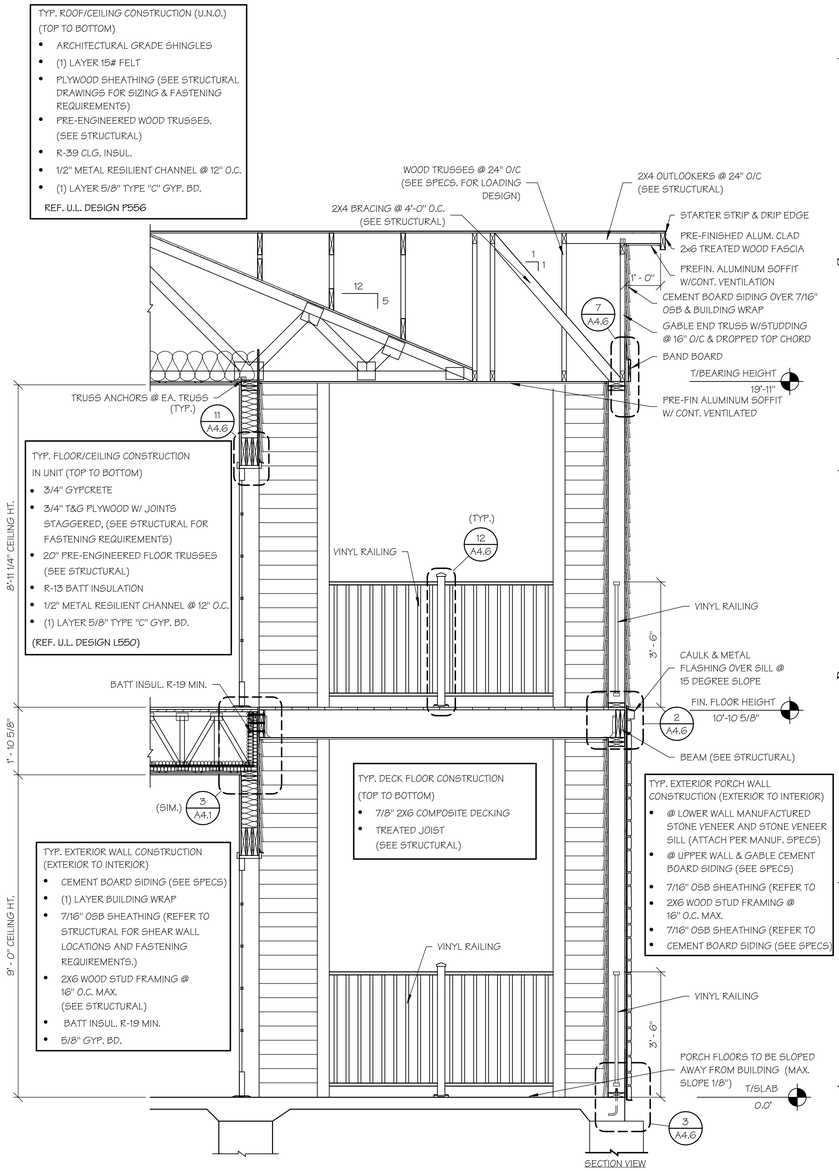
2 A4.3 FURRED METER WALL

SCALE: 1/2" = 1'-0"



3 A4.3 ENTRY COLUMN SECTION

SCALE: 1/2" = 1'-0"



4 A4.3 2-STORY WALL SECTION @ PORCH

SCALE: 1/2" = 1'-0"

STATE OF OKLAHOMA
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6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL
PORTER ARCHITECT
LICENSE# 6574

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LAWTON, COMANCHE COUNTY, OKLAHOMA

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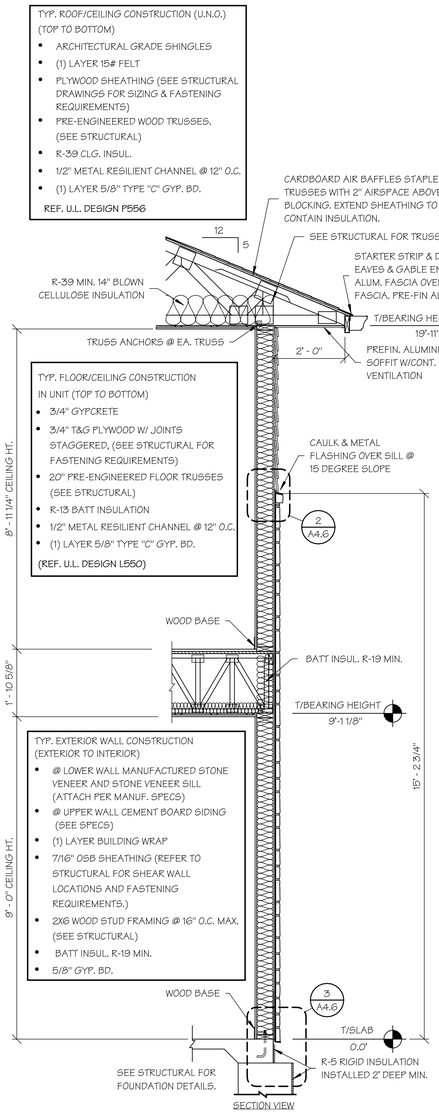
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WALL SECTIONS

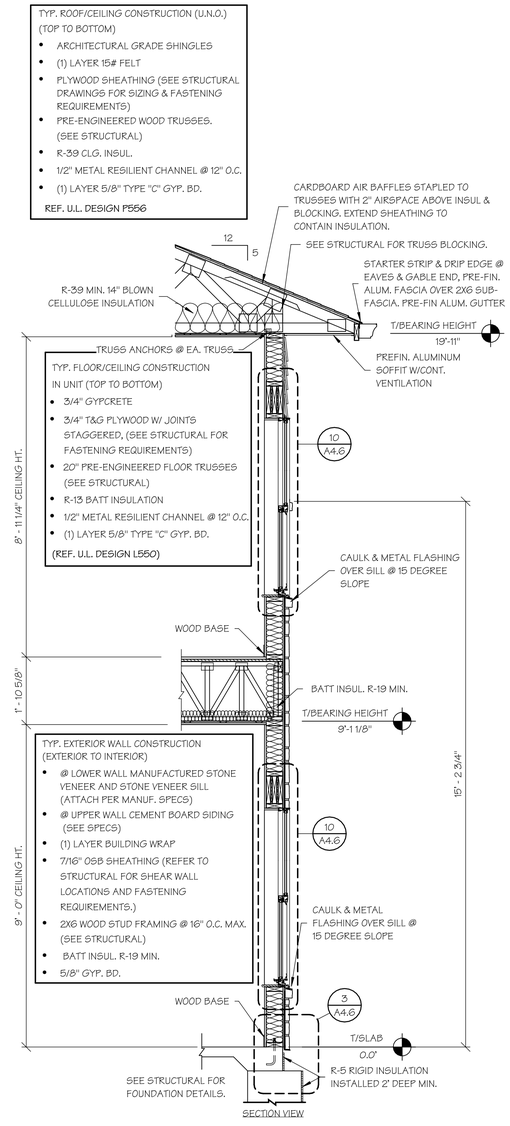
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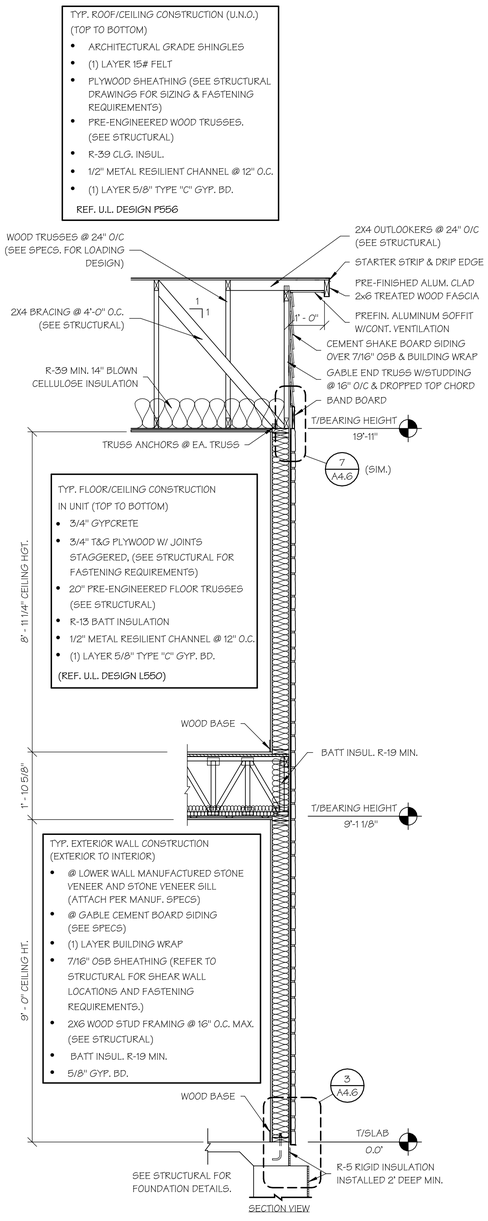
EXTERIOR WALL SECTION W/ 3/4 STONE

1 A4.4 SCALE: 1/2" = 1'-0"



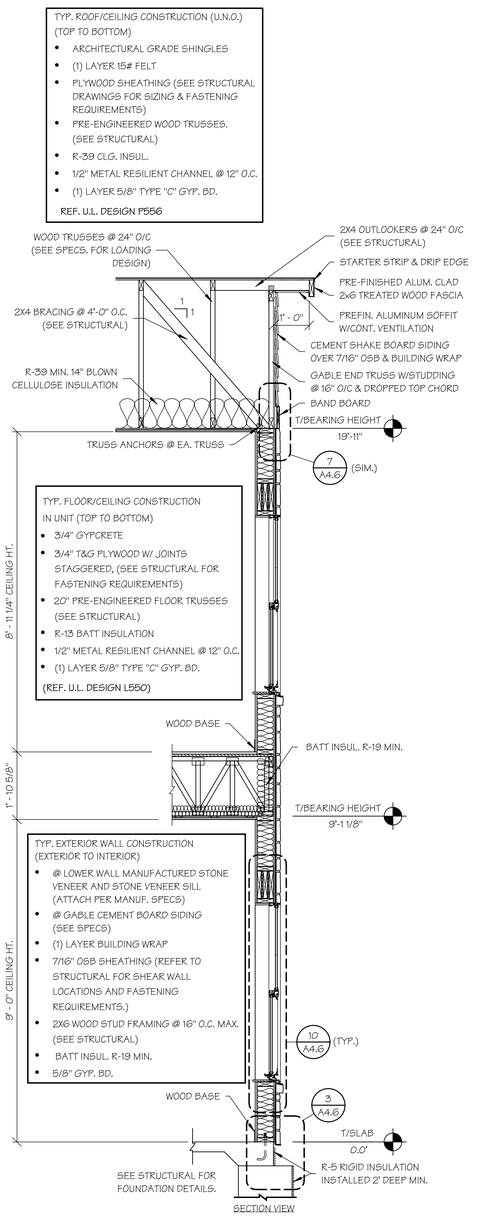
EXTERIOR WALL SECTION W/ 3/4 STONE & WINDOWS

2 A4.4 SCALE: 1/2" = 1'-0"



EXTERIOR WALL SECTION W/ STONE @ GABLE

3 A4.4 SCALE: 1/2" = 1'-0"



EXTERIOR WALL SECTION W/ STONE @ GABLE W/WINDOWS

4 A4.4 SCALE: 1/2" = 1'-0"

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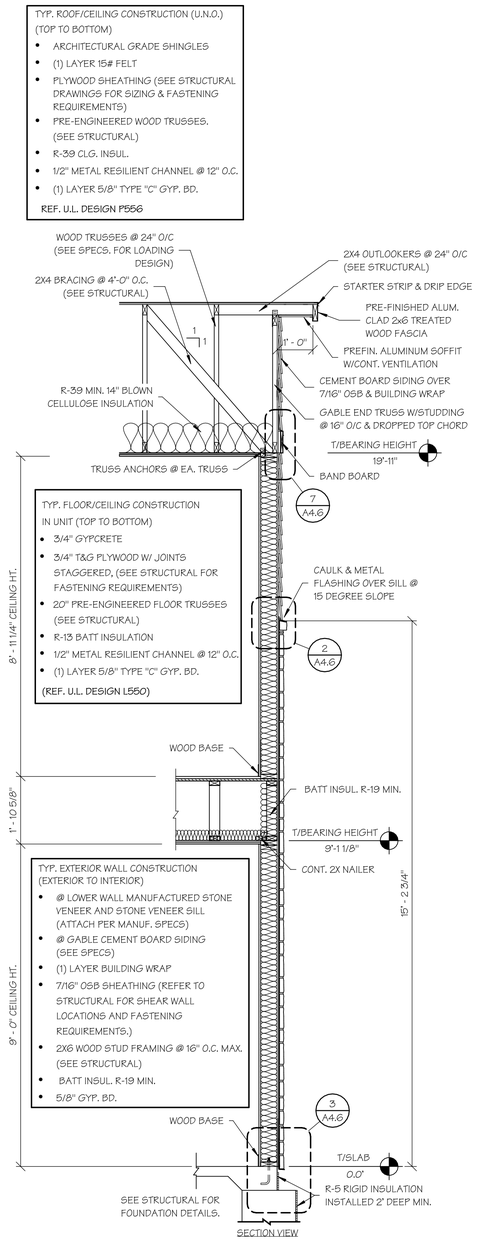
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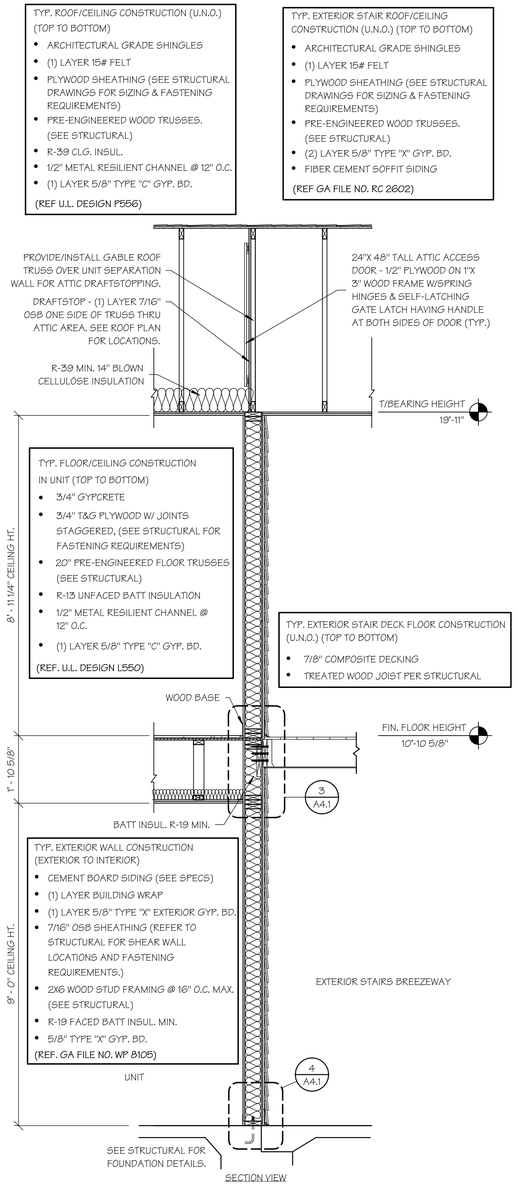
WALL SECTIONS

ISSUE SET



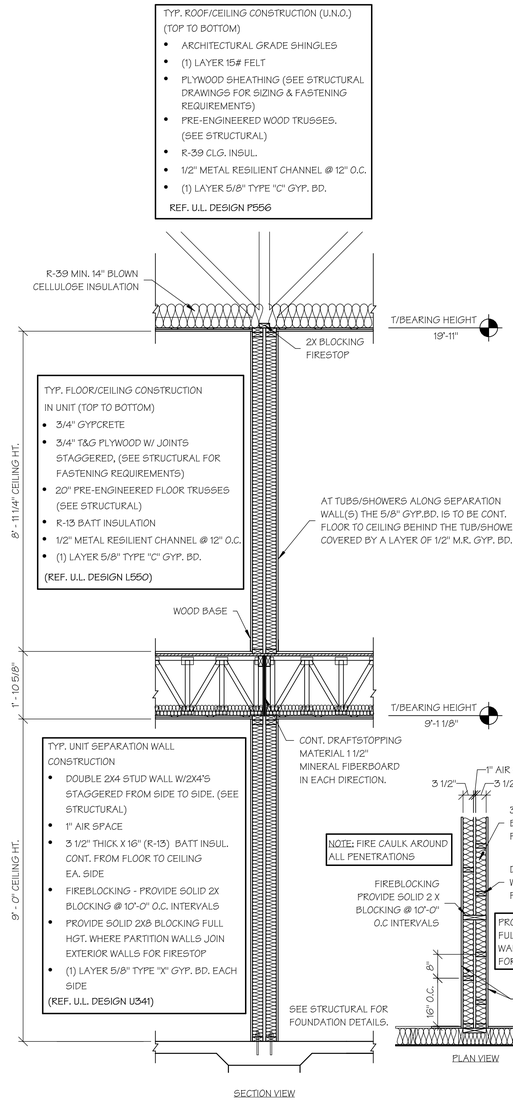
EXTERIOR WALL SECTION WITH 3/4 STONE @ GABLE

1 / A4.5 SCALE: 1/2" = 1'-0"



2-STORY WALL SECTION @ EXTERIOR STAIR BREEZEWAY

2 / A4.5 SCALE: 1/2" = 1'-0"



2-STORY 1-HOUR UNIT SEPARATION WALL

3 / A4.5 SCALE: 1/2" = 1'-0"

STATE OF OKLAHOMA
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19 AUG 2022

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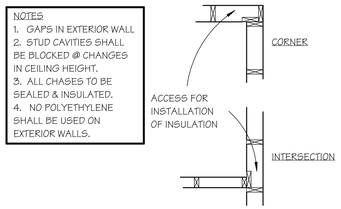
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WALL SECTIONS

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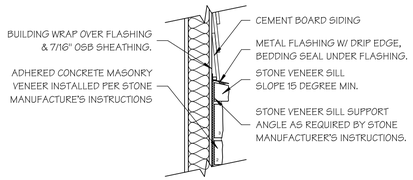
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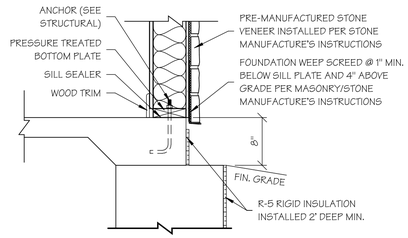
EXT. WALL / ADVANCED FRAMING DETAIL

1 A4.6 SCALE: 1/2" = 1'-0"



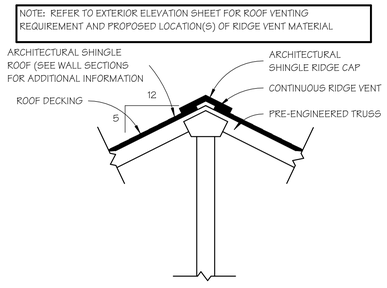
WALL FLASHING DETAIL

2 A4.6 SCALE: 1" = 1'-0"



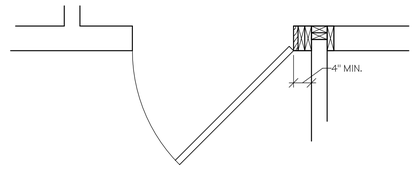
FLASHING DETAIL

3 A4.6 SCALE: 1" = 1'-0"



ROOF VENT DETAIL

4 A4.6 SCALE: 3/4" = 1'-0"



TYP. DOOR FRAMING DETAIL

5 A4.6 SCALE: 3/4" = 1'-0"

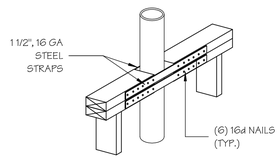
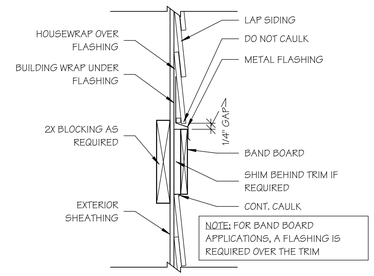


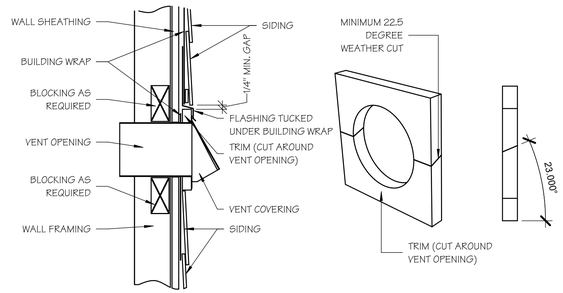
PLATE CUT DETAIL

6 A4.6 SCALE: 1" = 1'-0"



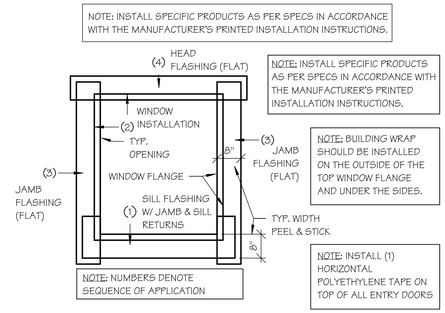
BAND BOARD DETAIL

7 A4.6 SCALE: 1 1/2" = 1'-0" (STONE VENEER SIMILAR)



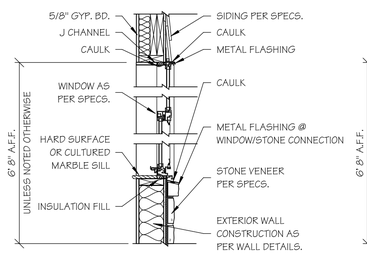
DRYER VENT IN SIDING DETAIL

8 A4.6 SCALE: 1/2" = 1'-0" (STONE VENEER SIMILAR)



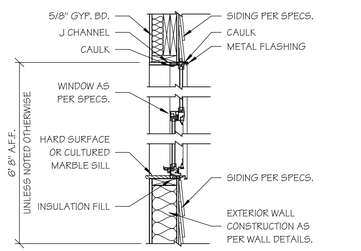
WINDOW FLASHING

9 A4.6 SCALE: 1/2" = 1'-0"



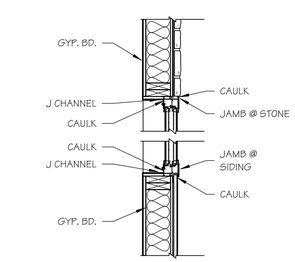
STONE VENEER / SIDING EXTERIOR SECTION

NOTE:
FILL ALL VOIDS AROUND WINDOW UNITS W/INSULATION PRIOR TO GYP. BD. INSTALLATION



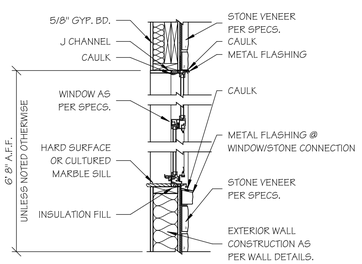
SIDING EXTERIOR SECTION

NOTE:
FILL ALL VOIDS AROUND WINDOW UNITS W/INSULATION PRIOR TO GYP. BD. INSTALLATION



PLAN VIEW

NOTE:
WINDOWS W/ SIDING ABOVE REQUIRE FLASHING & CAULKING @ SIDING / FLANGE JUNCTION

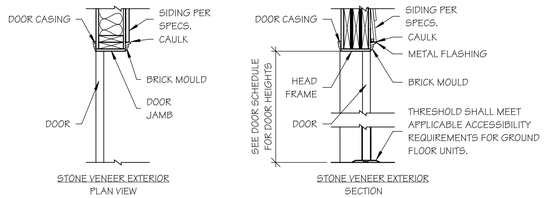


STONE VENEER EXTERIOR SECTION

NOTE:
FILL ALL VOIDS AROUND WINDOW UNITS W/INSULATION PRIOR TO GYP. BD. INSTALLATION

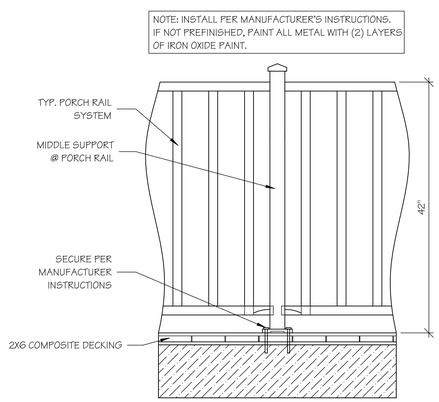
WALL SECTIONS AND DETAILS AT WINDOWS

10 A4.6 SCALE: 3/4" = 1'-0"



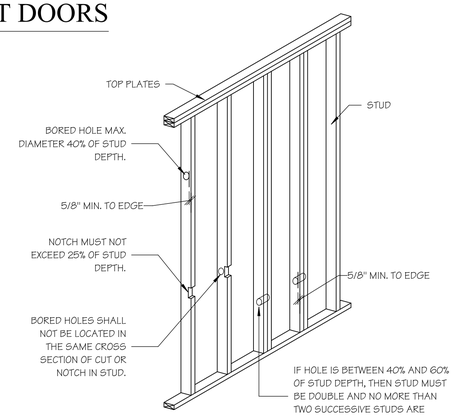
WALL SECTIONS AND DETAILS AT DOORS

11 A4.6 SCALE: 3/4" = 1'-0"



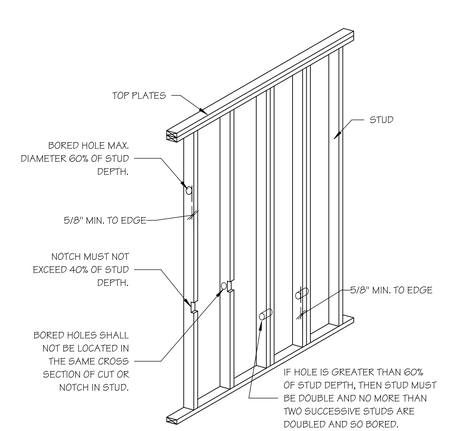
CENTER POST RAILING DETAIL

12 A4.6 SCALE: 1" = 1'-0"



LOAD BEARING WALL NOTCHING & BORING HOLE DETAILS

13 A4.6 SCALE: 1/2" = 1'-0"



NON-LOAD BEARING WALL NOTCHING & BORING HOLE DETAILS

14 A4.6 SCALE: 1/2" = 1'-0"

FRAMING DETAILS

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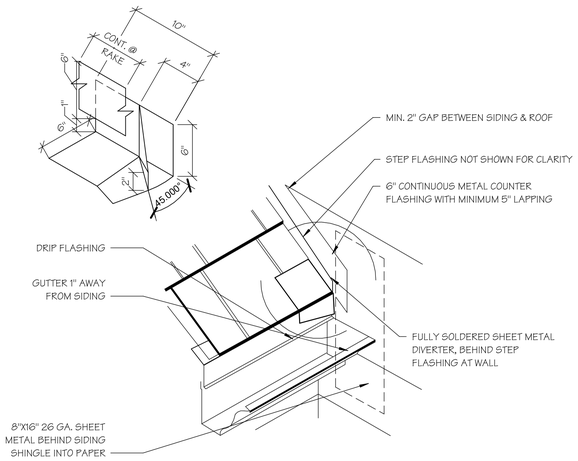
CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
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WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0117.3

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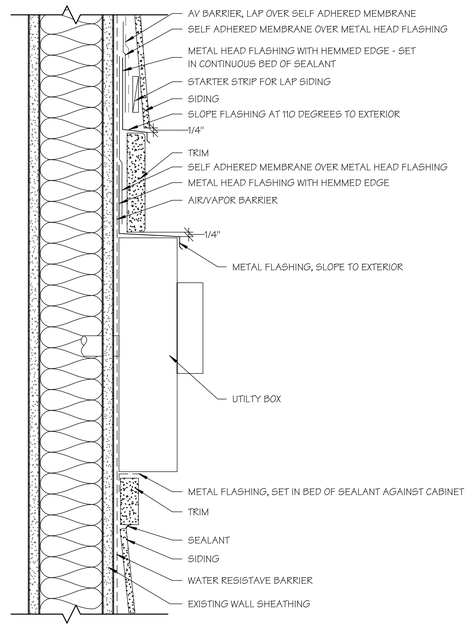
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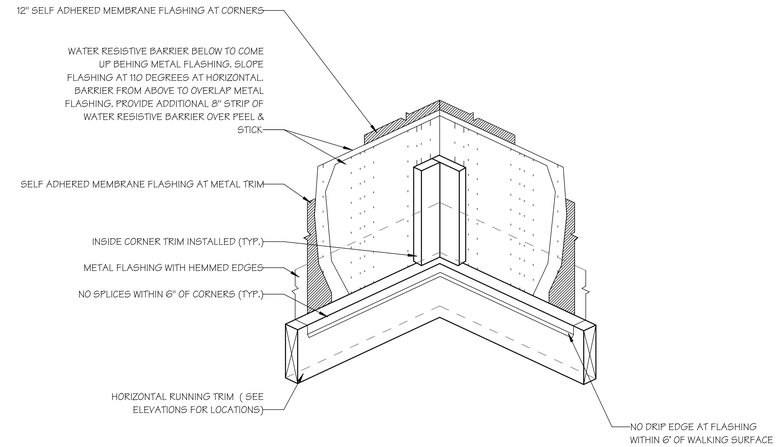
1 A4.7 ROOF DIVERTER FLASHING

SCALE: 1 1/2" = 1'-0"



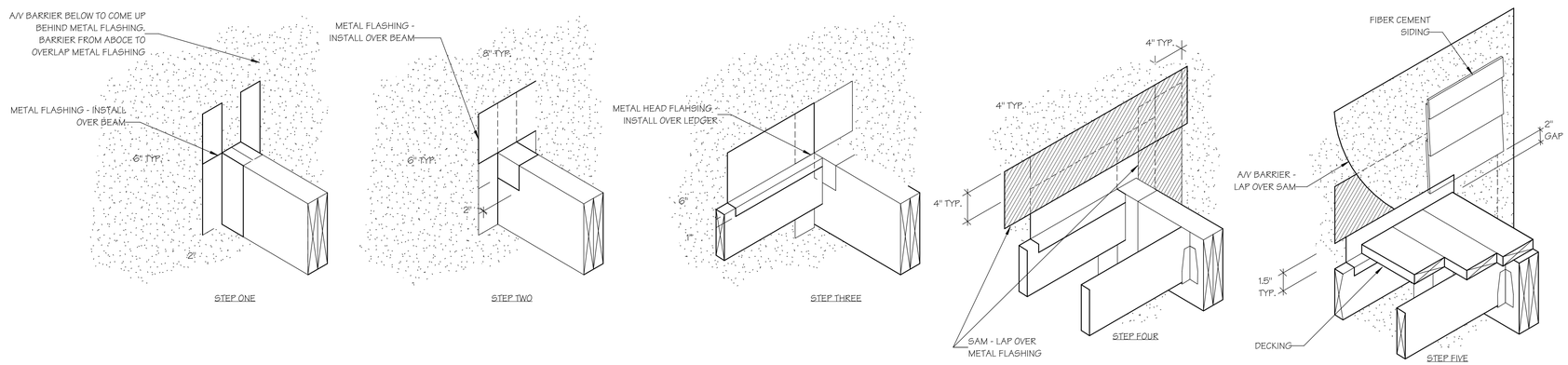
2 A4.7 SECTION THROUGH UTILITY BOX

SCALE: 3" = 1'-0"



3 A4.7 CORNER FLASHING AND TRIM

SCALE: 1 1/2" = 1'-0"



4 A4.7 FLASHING AT DECK LEDGER

SCALE: 1 1/2" = 1'-0"

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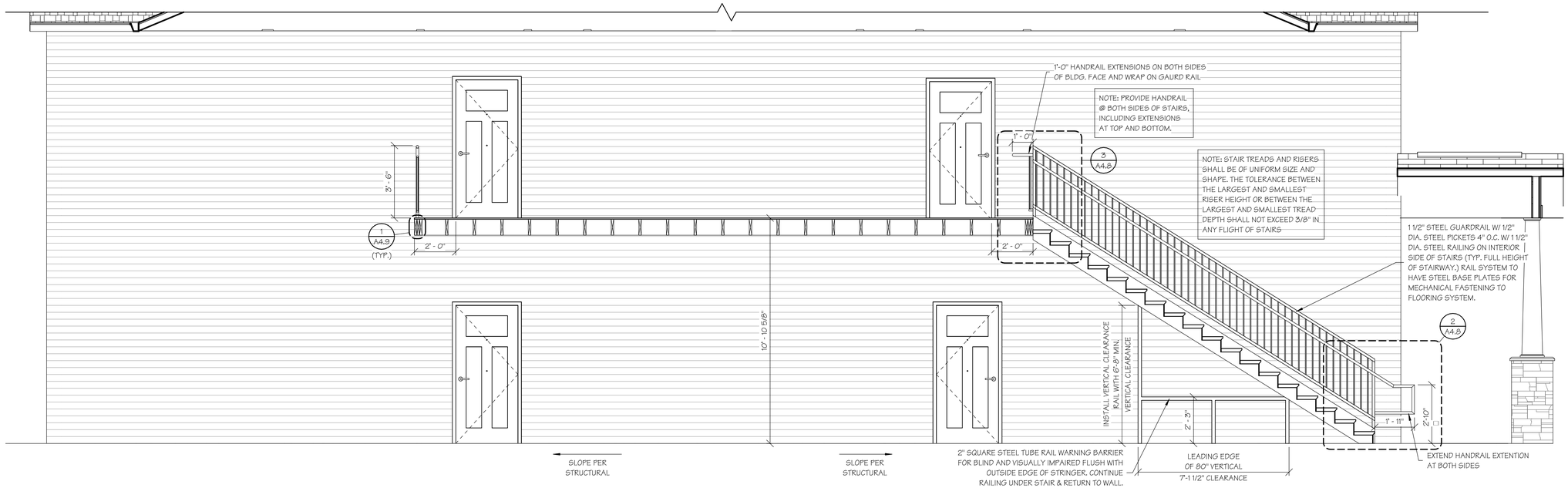
SHEET NO.
A4.7

JOB NO.
4341

FLASHING DETAILS

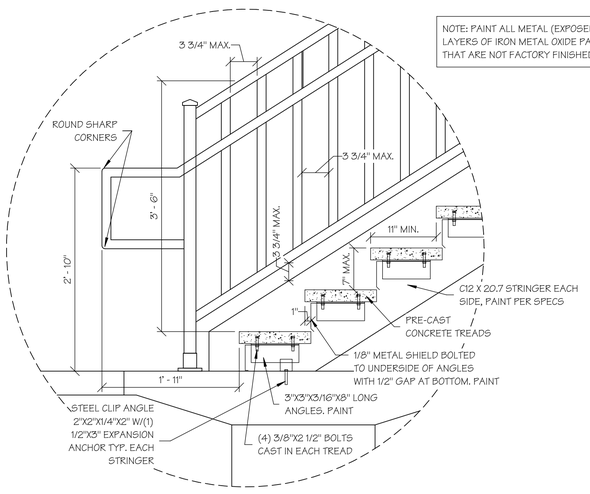
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1 A4.8 2-STORY EXTERIOR STAIR SECTION

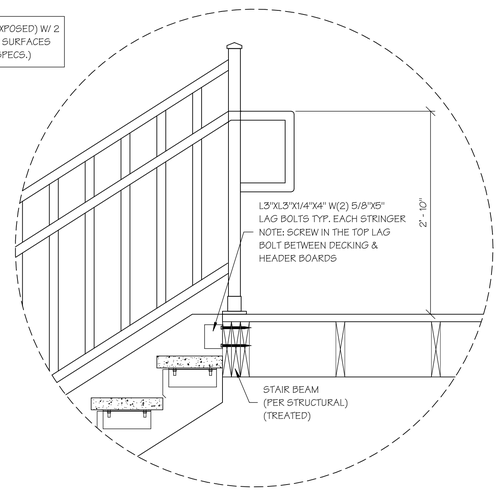
SCALE: 3/8" = 1'-0"



NOTE: PAINT ALL METAL (EXPOSED & UNEXPOSED) W/ 2 LAYERS OF IRON METAL OXIDE PAINT FOR SURFACES THAT ARE NOT FACTORY FINISHED (SEE SPECS.)

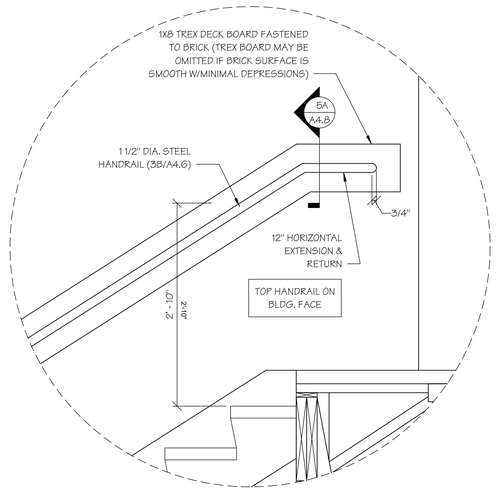
2 A4.8 TREAD/STRINGER STAIR DETAILS BOTTOM

SCALE: 1" = 1'-0"



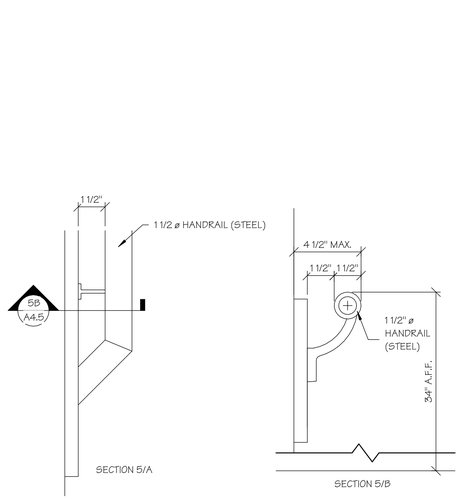
3 A4.8 TREAD/STRINGER STAIL DETAILS TOP

SCALE: 1" = 1'-0"



4 A4.8 TOP HANDRAIL DETAIL

SCALE: 1" = 1'-0"



5 A4.8 TYP. WALL HANDRAIL BRACKET

SCALE: 3" = 1'-0"

2-STORY BREEZEWAY STAIR SECTION & DETAILS

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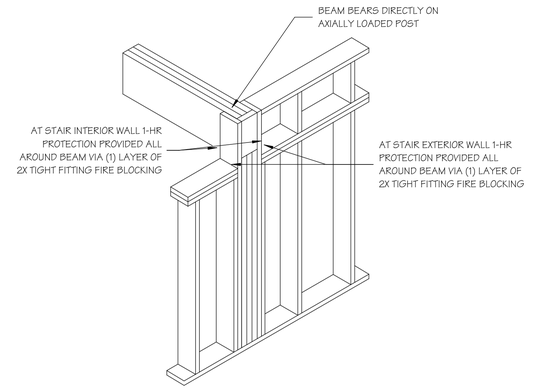
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JOB NO. 4341

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1 A4.9 BEAM PENNETRATION OF FIRE RATED WALL

SCALE: 1/2" = 1'-0"



2 A4.9 3-STORY EXTERIOR STAIR SECTION

SCALE: 3/8" = 1'-0"

3-STORY BREEZEWAY STAIR SECTION

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4341

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Design No. U341

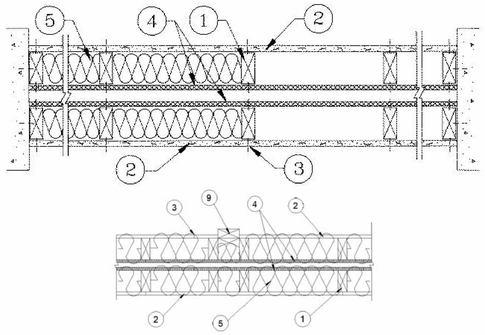
February 05, 2020

Bearing Wall Rating — 1 Hr.

Finish Rating — Min 20 min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



HORIZONTAL SECTION

1. **Wood Studs —** Nom 2 by 4 in., spaced 24 in. OC max. Cross braced at mid-height and effectively firestopped at top and bottom of wall. No min. air space between stud rows except to accommodate attachment of sheathing, where required. See items 4 and 5.

2. **Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305.** Nom 5/8 in. thick 4 ft wide. Gypsum board applied horizontally or vertically, unless specified below, and nailed to studs and bearing plates 7 in. OC with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam head. As an alternate, No. 6 bugle head drywall screws, 1-7/8 in. long, may be substituted for the 6d cement coated nails.
When **Steel Framing Members*** (Item 6-6C) are used, wallboard attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When used in widths other than 48 in., gypsum board to be installed horizontally.

AMERICAN GYPSUM CO (View Classification) — CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374

CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370

CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660

CGC INC (View Classification) — CKNX.R19751

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C (View Classification) — CKNX.R18482

GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717

LOADMASTER SYSTEMS INC (View Classification) — CKNX.R11809

NATIONAL GYPSUM CO (View Classification) — CKNX.R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094

PANEL REY S A (View Classification) — CKNX.R21796

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262

THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517

UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319

USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438

USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438

USG MEXICO S A DE C V (View Classification) — CKNX.R16089

2A. **Gypsum Board* —** (As an alternate to Item 2, not shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5C. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayed.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-530 (finish rating 23 min).

2B. **Gypsum Board* —** (As an alternate to Item 2, not shown) — Any 5/8 in. thick gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified companies listed below shown in the **Gypsum Board*** (CKNX) category. Applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally.
UNITED STATES GYPSUM CO

USG BORAL DRYWALL SFZ LLC

USG MEXICO S A DE C V

2C. **Gypsum Board* —** (As an alternate to Item 2, Not Shown) — 5/8 in. thick gypsum panels applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally.
AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1

NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL

THAI GYPSUM PRODUCTS PCL — Type C or Type X

2D. **Gypsum Board* —** (As an alternate to Items 2, 2A, 2B and 2C) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed as described in Item 2. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.
GEORGIA-PACIFIC GYPSUM L L C — GreenGlass Type X, Type DGG.

2E. **Gypsum Board* —** (As an alternate to Items 2 through 2D) — 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically only and secured as described in Item 2.
GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board.

2F. **Gypsum Board* —** (As an alternate to Items 2 through 2E) - Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC. Not for use with item #6.
NATIONAL GYPSUM CO — Type SBWB

2G. **Gypsum Board* —** (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES.

2H. **Gypsum Board* —** (As an alternate to Items 2 through 2G) — Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally fastened to the studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
CERTAINTEED GYPSUM INC — Type SilentFX

2I. **Wall and Partition Facings and Accessories* —** (As an alternate to Items 2 through 2H) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527.

2J. **Gypsum Board* —** (As an alternate to 5/8 in. Type FSW in Item 2) — 2 layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal joints on the same side need not be staggered. Inner layer attached with fasteners, as described in item 2, spaced 24 in. OC. Outer layer attached per Item 2.
NATIONAL GYPSUM CO — Type FSW.

2K. **Gypsum Board* —** (As an alternate to Item 2) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

3. **Joints and Nailheads —** Gypsum board joints of outer layer covered with tape and joint compound. Nail heads of outer layer covered with joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced with paper tape.

4. **Sheathing —** (Optional) — Septum may be sheathed with min 7/16 in. thick wood structural panels min grade "C-D" or "Sheathing" or min 1/2 in. thick **Mineral and Fiber Boards***.
See **Mineral and Fiber Boards** (CERZ) category for names of Classified companies.

5. **Batts and Blankets* —** 3-1/2 in. max thickness glass or mineral fiber batt insulation. **Optional** when sheathing (Item 4) is used on both halves of wall.
See **Batts and Blankets** (BZJZ) category for list of Classified companies.

5A. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft^3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft^3, in accordance with the application instructions supplied with the product.
U S GREENFIBER L L C — INS735, INS745 and INS750LD for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only.

5B. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 5) when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.
NU-WOOL CO INC — Cellulose Insulation

5C. **Batts and Blankets* —** (Required for use with Wall and Partition Facings and Accessories, Item 2A. Use of Sheathing, Item 4, does not nullify requirement of Item 5C for use with Item 2A) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

5D. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 5) and Item 5A when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft^3.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

5E. **Fiber, Sprayed* —** As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft^3.
APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized Cellulose Insulation

6. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
A. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 2.

B. **Steel Framing Members* —** Used to attach furring channels (Item a) to studs (Item 1) . Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).

6A. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
PLITEQ INC — Type Genie Clip

6B. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

6C. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
A. **Furring Channels —** Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2.

B. **Steel Framing Members* —** Used to attach furring channels (Item 6CA) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip

6D. **Steel Framing Members* —** (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below:
a. **Resilient Channels —** Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 2.

b. **Steel Framing Members* —** Used to attach resilient channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

7. **Wall and Partition Facings and Accessories* —** (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

8. **Mineral and Fiber Board* —** ((Optional, Not Shown) — For optional use as an additional layer on one or both sides of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing as described in Item 2. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32

9. **Non-Bearing Wall Partition Intersection —** (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

(Optional, Not Shown) Alternate Construction For Use On One Side Of The Wall.

10. **Mineral and Fiber Board* —** For use with Items 10A-10D) —Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32

10A. **Glass Fiber Insulation —** (For use with Item 10) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.

10B. **Batts and Blankets* —** (As an alternate to Item 10B, For use with Item 10), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC.
THERMAFIBER INC — Type SAFB, SAFB FF

10C. **Adhesive —** (For use with Item 10) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).

10D. **Gypsum Board* —** (For use with Item 10) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 10). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.
AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type C

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C

NATIONAL GYPSUM CO — Types FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C

PANEL REY S A — Type PRC

THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Type CTypes C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

EXTERIOR WALLS

GA FILE NO. WP 8105 | **GENERIC** | **1 HOUR FIRE**

GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS

EXTERIOR SIDE: One layer 48" wide 5/8" type X gypsum sheathing applied parallel to 2 x 4 wood studs 24" o.c. with 1 3/4" galvanized roofing nails 4" o.c. at vertical joints and 7" o.c. at intermediate studs and top and bottom plates . Joints of gypsum sheathing may be left utreated. Extrerior cladding to be attached through sheathing to studs.

INTERIOR SIDE: One layer 5/8" type X gypsum wallboard, water-resistant gypsum backing board, or gypsum veneer base applied parallel or at right angles to studs with 6d coated nails 1 7/8" long, 0.0915" shank, 1/4" heads 7" o.c. **(LOAD-BEARING)**

Thickness: Varies
Approx. Weight: 7 psf
Fire Test: See WP 3510 (UL R3501-47, -48, 9-17-65, UL Design U309; UL R1319-129, 7-22-70, UL Design U314)

ROOF-CEILING SYSTEMS

GA FILE NO. RC 2602 | **GENERIC** | **1 HOUR FIRE**

WOOD TRUSSES, GYPSUM WALLBOARD

Base layer 5/8" type X gypsum wallboard applied at right angles to wood trusses 24" o.c. with 1 1/4" Type W or S drywall screws 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to trusses with 1 7/8" Type W or S drywall screws 12" o.c. at joints and intermediate trusses and 1 1/2" Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood trusses supporting 1/2" wood structural panels applied at right angles to trusses with 8d nails. Appropriate roof covering.

Approx. Ceiling Weight: 5 psf
Fire Test: FM FC 172, 2-25-72; ITS, 8-6-98

FIRE RATED ASSEMBLIES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL
PORTER ARCHITECT
LICENSE# 6574

Wallace ARCHITECTS LLC
Columbia, MO
P 573-286-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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1ST ISSUE
19 AUG 2022

ISSUE/REVISIONS
1 19 AUG 2022 ISSUE SET

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CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Design No. L550

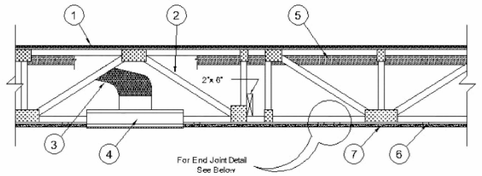
November 15, 2019

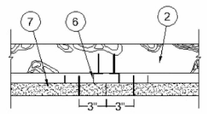
Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 23 Min (See Items 5 or 5A and 7), 20 Min. (See Items 6E and 7A)

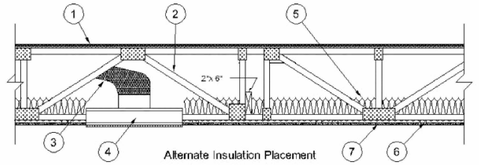
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**





End Joint Detail



1. **Flooring System —** The flooring system shall consist of one of the following:

System No. 1

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. plywood, min grade "Underlayment" or "Sturd-I-Floor" with T & G edges and conforming to PS1-83 specifications, or nonveneer APA rated Sturd-I-Floor, T & G panels per APA specifications PRP-108. Face grain of plywood to be perpendicular to trusses with joints staggered.

System No. 2

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) — Nom 3/8 in. thick floor mat material loose laid over the subfloor.

GRASSWORX L L C — Type SC50

System No. 3

Structural Cement-Fiber Units* — Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

UNITED STATES GYPSUM CO — Type STRUCTO-CRETE or USGSP

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

System No. 4

Structural Cement-Fiber Units* — Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

UNITED STATES GYPSUM CO — Types STRUCTO-CRETE or USGSP

System No. 5

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Floor Mat Materials* — (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

ECORE INTERNATIONAL INC — Type QTscu 4002

HACKER INDUSTRIES INC — Type Hacker Sound-Mat

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

ECORE INTERNATIONAL INC — Type QTrbm 3006-3

HACKER INDUSTRIES INC — Type Hacker Sound-Mat II

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm).

HACKER INDUSTRIES INC — FIRM-FILL SCM 125

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm).

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 250, Quiet Qurl 55/025

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm).

HACKER INDUSTRIES INC — FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials — (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm).

HACKER INDUSTRIES INC — Type FIRM-FILL SCM 750, Quiet Qurl 65/075

Metal Lath — (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 6

Deleted.

System No. 7

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue or nonveneer APA Sturd-I-Floor T & G panels per APA specifications PRP 108. Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Plywood or panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Floor* — Mineral and Fiber Board — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 8

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring* — Floor Topping Mixture — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA — Type FF

System No. 9

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring* — Floor Topping Mixture — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5.5 gal of water.

AERIX INDUSTRIES — Floor-Topping Mixture

System No. 10

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 11

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ACG MATERIALS — AccuCrete types NexGen, Green, Prime, B, M, and PrePour, AccuRadiant, and AccuLevel types G40, G50 and SD30

Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

ACG MATERIALS — AccuQuiet types P80, C40, D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 12

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 13

Subflooring — — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring* — Floor Topping Mixture — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
FORMULATED MATERIALS LLC — Types FR-25, FR-30, and SiteMix

Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.
FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, and R2

2. **Trusses —** Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in. Truss members secured together with min 0. 0356 in. thick galvanized steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tool has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width.

3. **Air Duct* —** Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

4. **Damper* —** For use with min 18 in. deep trusses. Max nom 20 in. long by 18 in. wide by 2-1/8 in. high, fabricated from galvanized steel. Plenum box max size nom 21 in. long by 18 in. wide by 16 in. high fabricated from either galvanized steel or Classified Air Duct Materials bearing the UL Classification Marking for Class 0 or Class 1 rigid air duct material. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 180 sq in. per 100 sq ft of ceiling area.
NAILOR INDUSTRIES INC — Types 0755, 0755A, 0756, 0756D , 0757, 0757D, 0757FP, 0757DFP, 0758, 0759, 0760, 0761, 0762, 0763, CRD5, CRD5D, CRD6, CRD6D, CRD6FP, CRD6DFP

SAFE AIR DOWCO — Types 0455, 0455A, 0456, 0456D, 0457, 0457D, 0457-D8, 0457-CB, 0463-FB, 0457-EB, 0463-GB, 0463

5. **Batts and Blankets* —** (Optional) — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. When no insulation is installed in the concealed space the resilient channels are spaced 24 in. OC. When the resilient channels (Item 6) are spaced 16 in. OC, the insulation shall be a max of 3-1/2 in. thick, and shall be secured against the subflooring with staples at 12 in. OC or held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 12 in. OC. When the resilient channels are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6A) are used, there is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the resilient channels (or Steel Framing Members) and gypsum panel membrane. The finished rating has only been determined when the insulation is secured to the subflooring.

5A. **Loose Fill Material* —** (Optional) — As an alternate to Item 5, when the resilient channels (Item 6) are spaced a maximum of 12 in. OC, or when the Steel Framing Members (Item 6A) are used - Any loose fill material bearing the UL Classification Marking for Surface Burning Characteristics. There is no limit in the overall thickness of insulation. The finished rating when loose fill material is used has not been determined.

5B. **Cavity Insulation - Batts and Blankets* or Loose Fill Material* - (Not Shown) —** (As described above in Items 5 and 5A) — For Use with Item 7A — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6E)/gypsum board (Item 7A) ceiling membrane.

5C. **Foamed Plastic* —** (As alternate to Item 5 and 5A, Not Shown) — Spray foam insulation applied directly to the underside of the plywood subflooring. Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft^3 or 2.0 lb/ft^3 density, depending on the product installed. Spray foam insulation is limited to use with minimum 18 in. deep trusses (Item 2). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Item 4) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 5 through 5B, or 6A through 6E, or 7A.
BASF CORP — Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

6. **Resilient Channels —** Formed from min 25 MSG galv steel installed perpendicular to trusses. When no insulation is installed in the concealed space resilient channels are spaced 24 in. When the insulation (Item 5) is installed to the underside of the subfloor the resilient channels are spaced 16 in. OC. When insulation (Item 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, or when foamed plastic insulation (Item 5C) is sprayed to the underside of the subfloor, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of panel.

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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6A. **Steel Framing Members* —** (Not Shown) — As an alternate to Item 6.

a. **Main Runners —** Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC perpendicular to trusses. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires spaced max 48 in. OC.

b. **Cross Tees or Channels —** Cross tees, nom 4 ft long, 15/16 in. or 1-1/2 in. wide face, or cross channels, nom 4 ft long, 1-1/2 in. wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted panel end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. **Wall Angles or Channels —** Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or channel with a 1 by 1 1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC. Used to support steel framing member ends and for screw-attachment of the gypsum panels.
CGC INC — Type DGL, RX

USG INTERIORS LLC — Type DGL, RX

6B. **Steel Framing Members* —** (Not Shown) — As an alternate to Items 6 and 6A.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 12 in. OC perpendicular to wood structural members. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 12 in. OC, RSIC-1 and RSIC-1 (2.75) clips secured to consecutive trusses with No. 8 by 2-1/2 in. course drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to consecutive trusses with No. 8 by 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6C. **Steel Framing Members* —** (Not Shown) — As an alternate to Items 6, 6A and 6B.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 12 in. OC perpendicular to trusses. When insulation (Item5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (24 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PLITEQ INC — Type Genie Clip

6D. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to items 6, 6A, 6B and 6C, furring channels and Steel Framing Members as described below.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation (Item5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6E. **Resilient Channels - (Not Shown) —** For Use With Item 7A - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 5B is applied over the resilient channel/gypsum panel (Item 7A) ceiling membrane.

6F. **Alternate Steel Framing Members* —** (Not Shown) — As an alternate to items 6, 6A, 6B, 6C, 6D and 6E furring channels and Steel Framing Members as described below.

a. **Furring Channels —** — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation (Item5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7.
REGUPOL AMERICA — Type SonusClip

6G. **Steel Framing Members* —** (Optional, Not Shown) — As an alternate to Item 6.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

b. **Cold Rolled Channels —** 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Gd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking —** Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Gd) location with 16d nails or minimum 2-1/2 in. screws.

d. **Steel Framing Members* —** Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.
PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6H. **Steel Framing Members* —** (Not Shown) — As an alternate to Item 6.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6Hc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. **Blocking —** Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Hc) location with 16d nails or minimum 2-1/2 in. screws.

c. **Steel Framing Members* —** Used to attach furring channels (Item 6Ha) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.
PAC INTERNATIONAL L L C — Type RSIC-S1-1 Ultra

6I. **Steel Framing Members* —** (Optional - Not Shown) — Used to attach resilient channels (Item 6) to trusses (Item 2). Clips spaced 48 in. OC and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Philips Modified screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional resilient channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured with a clip.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

7. **Gypsum Board* —** Nom 5/8 in. thick, 48 in. wide gypsum panels. When resilient channels (Item 6) are used, gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from end joints. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane the screw spacing shall be reduced to 8 in. OC. End joints secured to both resilient channels as shown in end joint detail. When foamed plastic insulation (Item 5C) is applied to the underside of the subflooring, screw spacing shall be reduced to 8 in. OC and minimum 1-1/4 in. long Type S screws to install gypsum to the resilient channels (Item 6), and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. End joints secured to both resilient channels as shown in end joint detail. When **Steel Framing Members** (Item 6A) are used, gypsum panels installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Panels fastened to cross tees with 1 in. long Type S bugle-head screws spaced 8 in. OC in the field and along end joints. Panels fastened to main runners with 1 in. long Type S bugle-head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 to 1/2 in. from board edge. End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 2 ft OC. When **Steel Framing Members** (Item 6B or 6C) are used, gypsum panels installed with long dimensions perpendicular to furring channels. Panels attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 8 in. OC along butted end joints and in the field of the panel. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum panel shall be supported by a single length of furring channel equal to the width of the gypsum panel plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the truss with one clip at each end of the channel. When **Steel Framing Members** (Item 6D) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with a RESILMOUNT Sound Isolation Clip at each end of the channel.
When **Steel Framing Members** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

When **Steel Framing Members** (Item 6G) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Adjacent butt joints staggered minimum 48 in. OC.

When **Steel Framing Members** (Item 6H) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Butt joints staggered minimum 24 in. OC.

CGC INC — Types C, IP-X2, IPC-AR

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

7A. **Gypsum Board* - (Not Shown) —** For use with Items 5B and 6E. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Type ULIX

8. **Finishing System —** (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Design No. P556

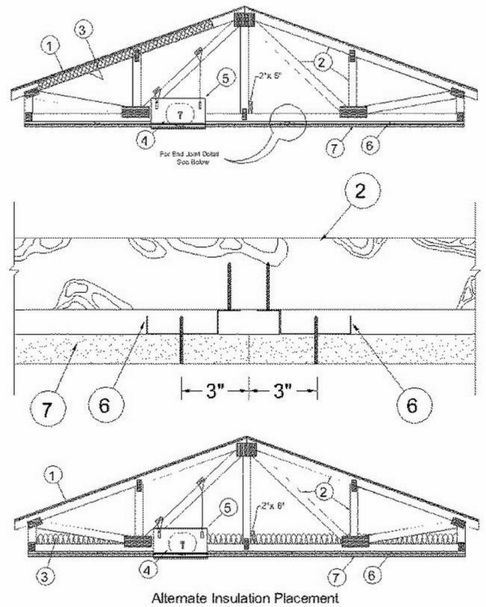
November 18, 2020

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 24 or 25 Min (See Items 3, 3A and 3B)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



Alternate Insulation Placement

1. **Roofing System* —** Any UL Class A, B or C Roofing System **(TGFU)** or Prepared Roof Covering **(TFWZ)** acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails. Nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive is optional and may be used with either nails or staples.

2. **Trusses —** Pitch or Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together min.0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. area in the plane of the truss of 21 sq/ft. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts and blankets (Item 3) are used as shown in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the plywood sheathing.

3. **Batts and Blankets* —** (Optional) -Glass fiber insulation, secured to the wood structural panesl with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The Finish Rating is 24 min. when the insulation is draped over the resilient channels and gypsum board ceiling membrane and 25 min. when it is installed on underside of the plywood deck or when it is omitted.

3A. **Loose Fill Material* —** As an alternate to Item 3 — Any thickness of loose fill material bearing the UL Classification Marking for Surface Burning Characteristics, having a min density of 0.5 pcf, fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The finished rating when loose fill material is used has not been determined.

3B. **Fiber, Sprayed* —** As an alternate to Items 3 and 3A (not evaluated for use with Items 6B, 6C, 6D and 6E) — Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft3, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft3 over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft3 behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber.
U S GREENFIBER L L C — INS735, INS745, INS750LD, and SANCTUARY for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only.

3C. **Foamed Plastic* —** (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft^3 density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling radiation damper in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. . Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.
SES FOAM INC — Sucraseal

3D. **Foamed Plastic* —** (As alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft^3 or 2.0 lb/ft^3 density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling radiation damper in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.
BASF CORP — Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3E. **Foamed Plastic* —** (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft^3 density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5B) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. . Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.
SES FOAM INC — EasySeal.5

4. **Air Duct* —** Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. **Ceiling Damper* —** (For use with Air Duct Item 4) — Max 14 in. long by 14 in. wide by 18 in. high ceiling damper with boot or box assembly, fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Model 50 w/Boot, 50EA w/Boot, 51 w/Boot, 50 w/Box, 50EA w/Box or 51 w/Box.

AIRVAC INDUSTRIES — Series AVI-50 w/Boot, AVI-50EA w/Boot, AVI-51 w/Boot, AVI-50 w/Box, AVI-50EA w/Box, AVI-51 w/Box.

5A. **Ceiling Damper* —** (For use with Air Duct Item 4) — Max 12 in. diameter damper and insulated register box assembly. The maximum size of the register box assembly is nom. 20 in. long by 20 in. wide and 4 in. high fabricated from galv. Steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Series 57

AIRVAC INDUSTRIES — Model AVI-57IB

5B. **Ceiling Damper* —** (For use with Air Duct Item 4) — Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with duct board plenum box assembly. The maximum outer dimensions of the plenum box assembly is 23-1/2 in. long by 19-1/2 in. wide and 17 in. high fabricated from 6pcf, 1-1/2 to 2 in. thick Knauf Air Duct Board M*. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Series 58

AIRVAC INDUSTRIES — Series AVI-58

6. **Furring Channels —** Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When batt and blanket material, Item 3, is draped over the resilient channel/gypsum board ceiling membrane, the spacing

FIRE RATED ASSEMBLIES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL
PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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shall be 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at board butt joints (spaced 6 in. OC) as shown in the above illustration.

6A. **Steel Framing Members* - (Not Shown) —** As an alternate to Item 6, furring channels and Steel Framing Members* as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses. When batt insulation (Item 3) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

6B. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6 and 6A.

a. **Furring Channels —** Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 3. Two layers of gypsum board attached to furring channels as described in Item 7.

b. **Cold Rolled Channels —** 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking —** Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location.

d. **Steel Framing Members* —** Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Bc) on alternating trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.
KINETICS NOISE CONTROL INC — Type ICW.

6C. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6, 6A and 6B.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 16 in. OC when no insulation (Item 3, 3A or 3B) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3, 3A or 3B) is fitted in the concealed space. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (24 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PLITEQ INC — Type Genie Clip

6D. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6, 6A, 6B and 6C.

a. **Main runners —** Installed perpendicular to trusses — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. **Cross tees or channels —** Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. **Wall angles or channels —** Used to support steel framing member ends and for screw-attachment of the gypsum board — Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC.
CGC INC — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

6E. **Alternate Steel Framing Members* —** (Not Shown) - As an alternate to items 6, 6A, 6B, 6C and 6D, furring channels and Steel Framing Members as described below.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Item 3, 3A or 3B) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire.Additional clips are required to hold the Gypsum Butt joints as described in Item 7.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6F. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6 through 6E- Not for use with Items 3, 3A, or 3B. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.
USG INTERIORS LLC — Type DGL or RX

6G. **Alternate Steel Framing Members* —** (Not Shown) - As an alternate to items 6 through 6F furring channels and Steel Framing Members as described below.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Item 3, 3A or 3B) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7.
REGUPOL AMERICA — Type SonusClip

6H. **Furring Channels — For use with American Gypsum Co. Type AG-C gypsum board only.** Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When insulation material, Item 3, 3A or 3B, is applied over the resilient channel/gypsum board ceiling membrane, the spacing may remain at 16 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at gypsum board butt joints (spaced 6 in. OC) as shown in the above illustration.

7. **Gypsum Board* —** One layer of nom 5/8 in. thick, 48 in. wide, installed with long dimension perpendicular to resilient channels with 1 in. long Type S screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. At end joints, two resilient channels are used, extending a min of 6 in. beyond both ends of the joint. When insulation (Item 3, 3A, 3B) is draped over the resilient channel/gypsum board ceiling membrane, screws shall be installed at 8 in. OC. When **Steel Framing Members*** (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3, 3A, 3B) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3, 3A, 3B) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 6E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from end joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Butt joing furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When **Steel Framing Members*** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

When **Steel Framing Members** (Item 6G) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

AMERICAN GYPSUM CO — Types AG-C

CGC INC — Types C, IP-X2, IPC-AR.

CERTAINTEED GYPSUM INC — Type C

CERTAINTEED GYPSUM INC — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Type TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSW-G, FSW-C, FSK-G, FSK-C.

THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR.

7A. **Gypsum Board* —** For use with **Steel Framing Members** (Item 6D) when **Batts and Blankets*** (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five gypsum board screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at gypsum board end joints, gypsum board screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with gypsum board screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with gypsum board screws spaced 12 in. OC. Joints treated as described in Item 7. For use with **Steel Framing Members*** (Item 6D) when **Batts and Blankets*** (Item 3) are used - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.
CGC INC — Type C or IP-X2.

UNITED STATES GYPSUM CO — Type C or IP-X2.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Type C or IP-X2.

7B. **Gypsum Board* (As an alternative to Items 7 and 7A) —** Nom 5/8 in. thick, 48 in. wide gypsum board, installed and secured as described in Items 7 and 7A with max screw spacing 8 in. OC.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — ULIX

8. **Finishing System —** (Not Shown)— Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

9. **Netting —** (Not Shown) - For use when Sprayed Fiber* (Item 3B) is used - Woven netting material fastened to underside of each truss with staples, with side joints overlapped.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2020-11-18

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0117

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FIRE RATED ASSEMBLIES

ISSUE SET

Design No. U305

February 04, 2020

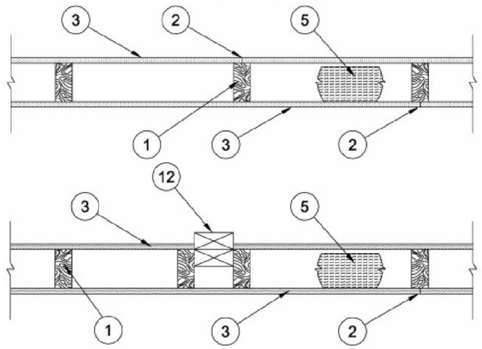
Bearing Wall Rating — 1 Hr

Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

STC Rating - 56 (See Item 9)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Wood Studs —** Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2. **Joints and Nail-Heads —** Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. **Gypsum Board* —** 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F, **Steel Framing Members***.

When Items 6, 6B, 6C, 6D, 6E, or 6F, **Steel Framing Members***, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6A, **Steel Framing Members***, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO — Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type AGX-12 (finish rating 22 min), Type LightRoc (finish rating 23 min.) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1 (finish rating 24 min)

CABOT MANUFACTURING ULC — Type X (finish rating 22 min), 5/8 Type X. Moisture Resistant Type X. Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating 26 min).

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min), Type ULIX (finish rating 20 min)

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX (finish rating 21 min), Type CLLX (finish rating 24 min)

GEORGIA-PACIFIC GYPSUM L L C — Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing - Type DGL2W (finish rating 22 min)

NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min), Type FSW-8, Type FSLX (finish rating 21 min).

NATIONAL GYPSUM CO — Riyadh, Saudi Arabia — Type FR, or WR.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS, PGS-WRS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 PG-13 (Nails increased to 2 in.), or Type PG-C

PANEL REY S A — Type GREX, GRIX, PRX, PRC, PRC2; Types RHX, Guard Rey, MDX, ETX (finish rating 22 min)

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min)

THAI GYPSUM PRODUCTS PCL — Type C, Type X (finish rating 26 min)

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULIX (finish rating 20 min)

USG BORAL DRYWALL SFZ LLC — Type SGX (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type ULX (finish rating 22 min)

3A. **Gypsum Board* —** (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.
AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LighttRoc (finish rating 25 min.)

CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1 (finish rating 26 min)

CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min)

NATIONAL GYPSUM CO — Type FSW (finish rating 24 min)

UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min)

USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX (finish rating 24 min).

USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min)

3B. **Gypsum Board* —** (As an alternate to Item 3) — Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.
CGC INC — Types AR, IP-AR

UNITED STATES GYPSUM CO — Types AR, IP-AR

USG MEXICO S A DE C V — Types AR, IP-AR

3C. **Gypsum Board* —** (As an alternate to Items 3, 3A and 3B) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not required.
CGC INC — Type SHX

UNITED STATES GYPSUM CO — Type SHX

USG MEXICO S A DE C V — Type SHX

3D. **Gypsum Board* —** (As an alternate to Items 3, 3A, 3B, or 3C — Not Shown) — For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".
RAY-BAR ENGINEERING CORP — Type RB-LBG (finish rating 24 min)

3E. **Gypsum Board* —** (As an alternate to Items 3, 3A, 3B, 3C, and 3D) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.
GEORGIA-PACIFIC GYPSUM L L C — Type DGG (finish rating 20 min), GreenGlass Type X (finish rating 23 min)

3F. **Gypsum Board* —** (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) — 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter.
CGC INC — Type USGX (finish rating 22 min)

UNITED STATES GYPSUM CO — Type USGX (finish rating 22 min.)

USG BORAL DRYWALL SFZ LLC — , Type USGX (finish rating 22 min.)

USG MEXICO S A DE C V — Type USGX (finish rating 22 min.)

3G. **Gypsum Board* —** (As an alternate to Items 3 through 3F) — 5/8 in. thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.
GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board (finish rating 27 min)

3H. **Gypsum Board* —** (As an alternate to Items 3) — Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.
NATIONAL GYPSUM CO — Type SBWB

3I. **Gypsum Board* —** (As an alternate to Items 3 through 3H, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES (finish rating 20 min)

3J. **Gypsum Board* —** (As an alternate to Item 3) — Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically or horizontally. Gypsum panels secured per item 3 or 3A.
CERTAINTEED GYPSUM INC — Type SilentFX

3K. **Gypsum Board* —** (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min).

3L. **Gypsum Board* —** (As an alternate to Item 3) — For Direct Application to Studs Only — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".
MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum"

3M. **Gypsum Board* —** (As an alternate to Items 3) — For Direct Application to Studs Only — For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.
RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

3N. **Gypsum Board* —** (As an alternate to Item 3) — 5/8 in. thick, 4 ft. wide, applied horizontally or vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Secured as described in Item 3 or 3A.
CERTAINTEED GYPSUM INC — Easi-Lite Type X (finish rating 24 min), Easi-Lite Type X-2 (finish rating 24 min)

3O. **Wall and Partition Facings and Accessories* —** (As an alternate to Item 3, Not Shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527 (finish rating 24 min).

3P. **Gypsum Board* —** (As an alternate to Item 3, Not Shown) — Two layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by wood studs. Horizontal joints on the same side between face and base layers need not be staggered. Base layer gypsum panels fastened to studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to studs with 1-7/8 in. long drywall nails spaced 8 in. OC starting with a 4" stagger.
NATIONAL GYPSUM CO — Type FSW (finish rating 25 min)

3Q. **Gypsum Board* —** (As an alternate to Item 3) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.
CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

3R. **Gypsum Board* —** (As an alternate to Item 3. For use with Item 5H) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied either horizontally or vertically, and screwed to panels with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the board when applied as the base layer. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

3S. **Gypsum Board* —** 3/4 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels secured as described in Item 3 with nail length increased to 2 in.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-13

3T. **Wall and Partition Facings and Accessories* —** (As an alternate to 5/8 in. thick board as outlined in Item 3) — Nominal 1-3/8 in. thick, 4 ft wide panels, applied vertically or horizontally. Fastened with #6 x 2 in. long drywall screws spaced 8 in. OC along the perimeter and 12 in. OC in the field.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 545

3U. **Gypsum Board* —** (As an alternate to Item 3 - For use with Item 5J) — 5/8 in. thick, 4 ft. wide, applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.
UNITED STATES GYPSUM CO — Type SCX

4. **Steel Corner Fasteners —** (Optional) — For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. **Batts and Blankets* —** (Optional — Required when Item 6A is used (RC-1)) — Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities.
CERTAINTEED CORP

JOHNS MANVILLE

KNAUF INSULATION LLC

MANSON INSULATION INC

ROCKWOOL — Types Acoustical Fire Batts and Type AFB, min. density 1.69 pcf / 27.0 kg/m³

ROCKWOOL MALAYSIA SDN BHD — Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO — Delta Board

THERMAFIBER INC — Type SAFB, SAFB FF

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0117.3

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1ST ISSUE
19 AUG 2022

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SHEET NO. A5.4

JOB NO. 4341

FIRE RATED ASSEMBLIES

ISSUE SET

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5A. **Fiber, Sprayed* —** (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product. When Item 6B is used, Fiber, Sprayed shall be INS735, INS745, INS750LD, INS765LD or INS773LD.
U S GREENFIBER L L C — INS735, INS745 and INS750LD for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only

5B. **Fiber, Sprayed* —** (Not Shown - Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.
NU-WOOL CO INC — Cellulose Insulation

5C. **Batts and Blankets* —** Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, friction-fitted to fill interior of wall.
THERMAFIBER INC — Type SAFB, SAFB FF

5D. **Glass Fiber Insulation —** (As an alternate to Item 5C) — 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the interior of the wall. See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

5E. **Batts and Blankets* —** (Required for use with Wall and Partition Facings and Accessories, Item 3D) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

5F. **Fiber, Sprayed* —** (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D) — As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See **Fiber, Sprayed** (CCAZ).
AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

5G. **Fiber, Sprayed* —** (Optional, Not Shown — Not for use with Items 6, 6A, 6B, 6C, or 6D). — As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft³.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

5H. **Foamed Plastic* —** (Optional -For use with Item 3R) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

SES FOAM INC — Nexseal™ 2.0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam.

5I. **Fiber, Sprayed* —** (Not Shown — Not for use with Item 6) — As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft³.
APPLEGATE HOLDINGS L L C — Applegate Advanced Stabilized Cellulose Insulation

5J. **Foamed Plastic* —** (Optional, Not Shown - For use with Item 3U) — Spray applied, foamed plastic insulation, to completely filling stud cavity.
GACO WESTERN L L C — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M

6. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6A. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members on one side of studs as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.
KINETICS NOISE CONTROL INC — Type Isomax

6B. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
PLITEQ INC — Type Genie Clip

6C. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6D. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip

6E. **Steel Framing Members* —** (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below:
a. **Resilient Channels —** Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach resilient channels (Item 6Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip

6F. **Steel Framing Members* —** (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
a. **Furring Channels —** Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. or 1-1/2 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.
CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

7. **Furring Channel —** Optional — Not Shown — For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

8. **Caulking and Sealants —** (Not Shown, Optional) — A bead of acoustical sealant applied around the partition perimeter for sound control.

9. **STC Rating —** The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:

A. Item 2, above — Nailheads Shall be covered with joint compound.

B. Item 2, above — Joints As described, shall be covered with fiber tape and joint compound.

C. Item 5, above — Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above — Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.

E. Item 8, above — Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.

10. **Wall and Partition Facings and Accessories* —** (Optional, Not Shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510

11. **Cementitious Backer Units* —** (Optional Item Not Shown — For Use On Face Of 1 Hr Systems With All Standard Items Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing.
NATIONAL GYPSUM CO — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. **Non-Bearing Wall Partition Intersection —** (Optional) —Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

13. **Mesh Netting —** (Not Shown) — Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row.

14. **Mineral and Fiber Board* —** (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32

14A. **Mineral and Fiber Board* —** (Optional, Not Shown) — For use with Items 14B-14E) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32

14B. **Glass Fiber Insulation —** (For use with Item 14A) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.

14C. **Batts and Blankets* —** (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC.
THERMAFIBER INC — Type SAFB, SAFB FF

14D. **Adhesive —** (For use with Item 14A) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).

14E. **Gypsum Board* —** (For use with Item 14A) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.
AMERICAN GYPSUM CO — Type AG-C

CERTAINTEED GYPSUM INC — Type C

CGC INC — Types C, IP-X2, IPC-AR

CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C

NATIONAL GYPSUM CO — Types FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C

PANEL REY S A — Type PRC

THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

14F. **Mineral and Fiber Board —** (Optional, Not Shown) — For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards applied vertically to studs on one side of the wall in between the wood studs and the UL Classified Gypsum Board (Item 3). Fiber boards installed with 1-1/4 in. long, Type W, bugle head, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

BLUE RIDGE FIBERBOARD INC — SoundStop

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

FIRE RATED ASSEMBLIES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL
PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0117 3

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FINISH SCHEDULE

NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH
1-BR FHA/TYP. UNIT				
BATH	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COATS	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN/DINING	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PORCH OR BALCONY	SEALED CONCRETE	NONE	NONE	NONE
1-BR UFAS UNIT				
BATH	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COATS	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN/DINING	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PORCH OR BALCONY	SEALED CONCRETE	NONE	NONE	NONE
2-BR FHA/TYP. UNIT				
BATH 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BATH 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COATS	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN/DINING	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PORCH OR BALCONY	SEALED CONCRETE	NONE	NONE	NONE
2-BR UFAS UNIT				
BATH 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BATH 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COATS	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN/DINING	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PORCH OR BALCONY	SEALED CONCRETE	NONE	NONE	NONE
3-BR FHA/TYP. UNIT				
BATH 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BATH 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 3	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 3	CARPET	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COATS	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
HALL	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN/DINING	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LINEN	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PORCH OR BALCONY	SEALED CONCRETE	NONE	NONE	NONE
3-BR UFAS UNIT				
BATH 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BATH 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
BEDROOM 3	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 1	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 2	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
CLOSET 3	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COATS	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
HALL	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN/DINING	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LINEN	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LIVING ROOM	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	LVT - VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PORCH OR BALCONY	SEALED CONCRETE	NONE	NONE	NONE
SPRINKLER ROOM				
SPRINKLER ROOM	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.

ACCESSIBLE UNIT KITCHEN NOTES

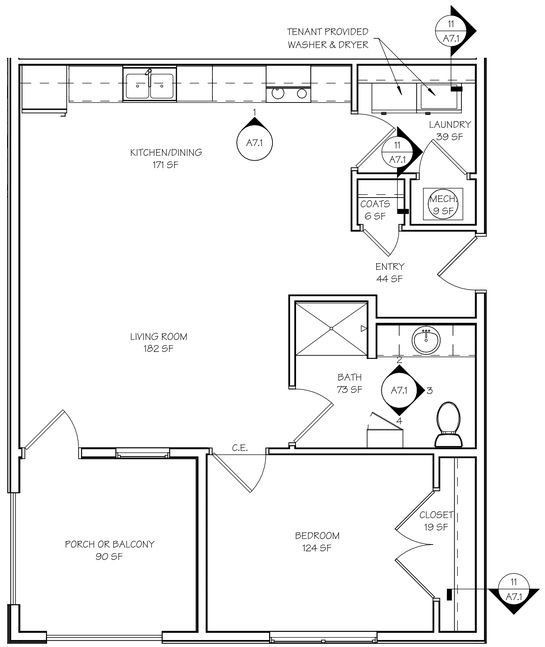
1)	COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2)	EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE BESIDE THE RANGE. PROVIDE REMOVABLE FRONT & FLOOR IN LIEU OF SINK BASE.
3)	TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
4)	ADD SEPARATE WALL SWITCHES FOR RANGE HOOD FAN AND RANGE HOOD LIGHT (SEE ELECTRICAL PLANS)
5)	ADD SWITCHES FOR CONTROL OF LIGHT OVER SINK & GARBAGE DISPOSAL.
6)	TOP OF WALL TELEPHONE OUTLET TO BE 46" MAX. A.F.F.
7)	SWITCHES & OUTLETS IN KITCHEN ABOVE BASE CABINETS SHALL BE 40" A.F.F. TO BOTTOM OF SWITCH PLATE, SO AS NOT INTERFERE WITH WALL CABINET.
8)	INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ PIPE WRAP.
9)	DISHWASHER HOOKUPS ARE UNDER SINK, ACCESS OPENING IS TO BE MADE THROUGH END PANEL OF SINK.

ACCESSIBLE UNIT BATH NOTES

1)	VALVE & SHOWER HEAD SHALL BE ON 2X6 WALL OR WALL @ LAV., (SEE BATH ELEVATIONS SHEET A7.0)
2)	PROVIDE HAND-HELD SHOWER W/VACUUM BREAKER (IN LIEU OF FIXED SHOWER HEAD), FLEXIBLE HOSE, & 24" SLIDE BAR.
3)	INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
4)	PROVIDE & INSTALL 36" GRAB BAR BEHIND @ 42" GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. (SEE BATH ELEVATIONS SHEET A7.0)
5)	BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
6)	VANITY SINK FAUCET TO BE LEVER TYPE, & EXPOSED PIPING TO BE WRAPPED W/ PIPE WRAP.
7)	EXTEND VINYL FLOORING BENEATH LAV. SPACE.

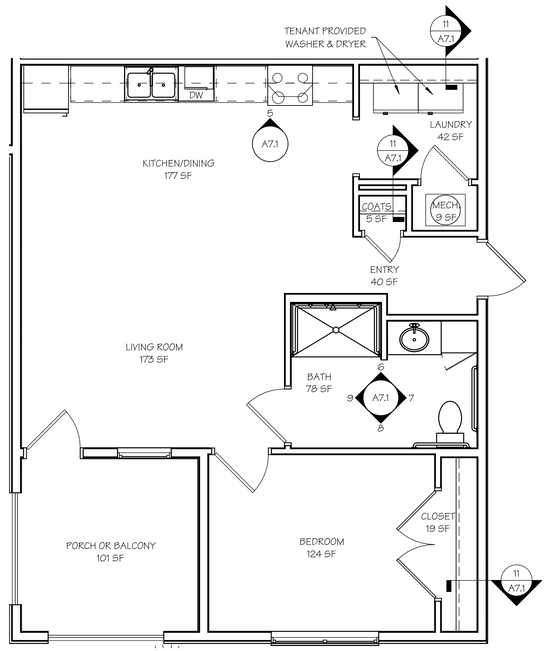
GENERAL UNIT NOTES

1)	CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR EACH UNIT AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2)	CONTRACTOR SHALL FURNISH ONE MAILBOX PER UNIT, PER OWNER SELECTION (SEE SPECS).
3)	CERTIFICATION OF R-39 CEILING INSULATION MUST BE POSTED IN EACH ATTIC SPACE.
4)	PROVIDE CARPET EDGES AS NECESSARY, DESIGNATED BY "CE" (COLOR SELECTED BY OWNER).
5)	COAT AND BEDROOM CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
6)	PRIME & PAINT WALLS BEHIND MILLWORK.
7)	STAIN & SEAL MILLWORK AS SPECIFIED.
8)	SUBMIT SAMPLES OF FLOOR TRANSITIONS FOR APPROVAL OF COLOR & TYPE.
9)	APPLY SILICONE CAULK BETWEEN CONCRETE AND BOTTOM OF THE DRYWALL.
10)	SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
11)	APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING, INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.
12)	IF ALTERNATE FLOORING IS SELECTED, ADDITIONAL TRANSITION STRIPS WILL BE REQUIRED.



1 A6.0 1-BR FHA/TYP. UNIT FINISH PLAN

SCALE: 1/4" = 1'-0"



2 A6.0 1-BR UFAS UNIT FINISH PLAN

SCALE: 1/4" = 1'-0"

1-BR UNIT FINISH PLANS, FINISH SCHEDULE & NOTES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
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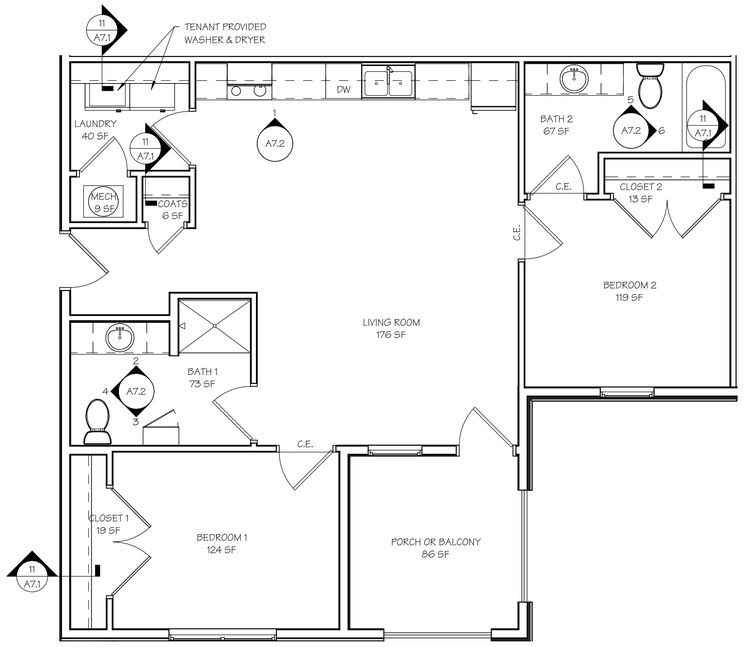
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SHEET NO. A6.0

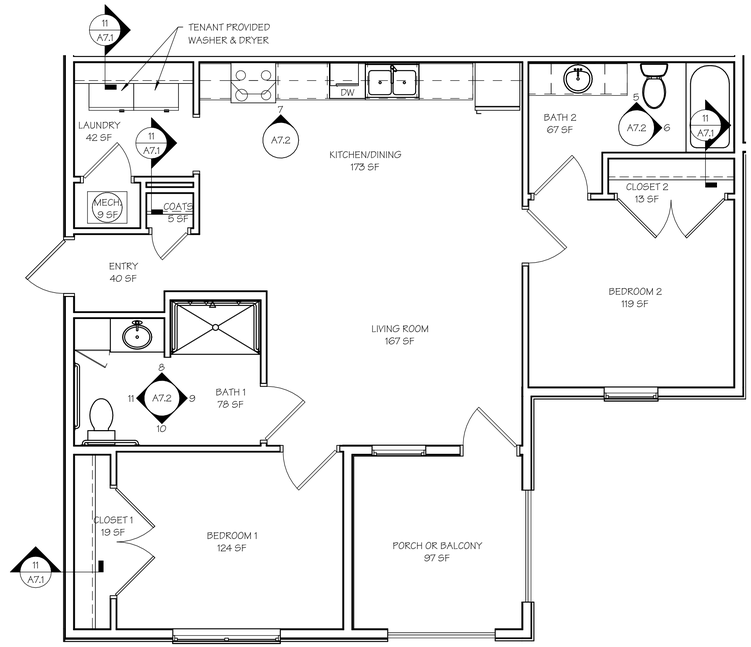
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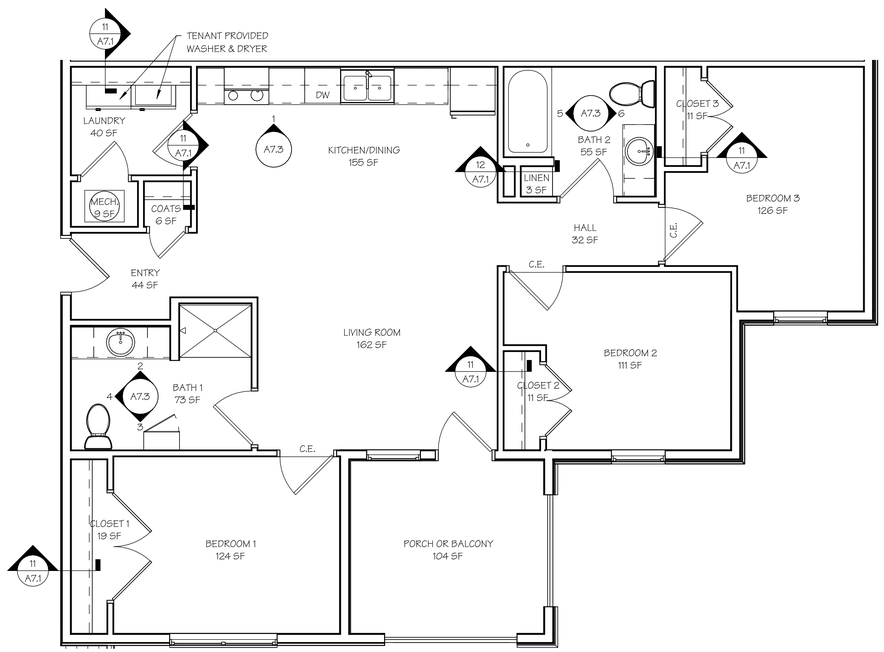
1 A6.1 2-BR FHA/TYP. UNIT FINISH PLAN

SCALE: 1/4" = 1'-0"



2 A6.1 2-BR UFAS UNIT FINISH PLAN

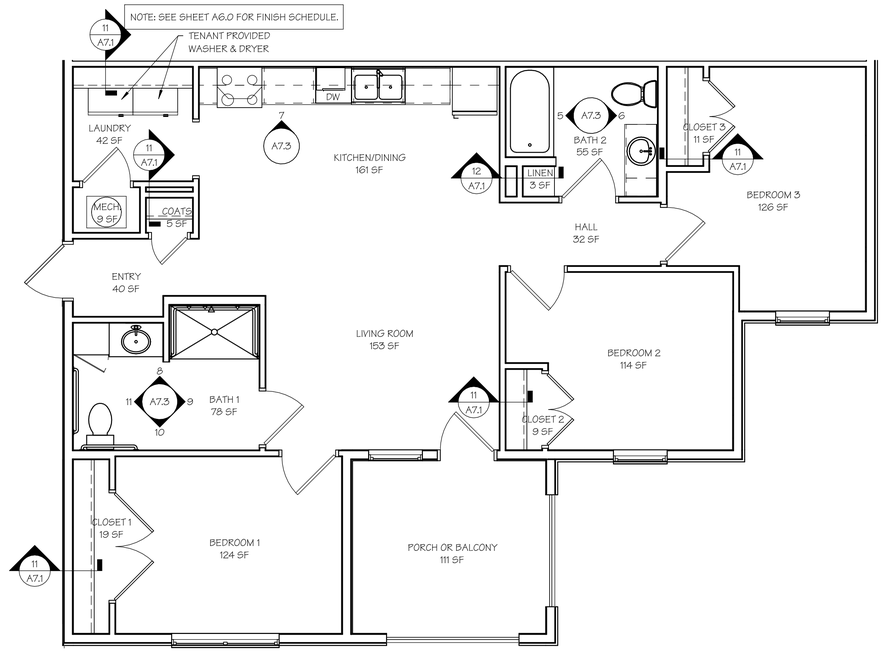
SCALE: 1/4" = 1'-0"



3 A6.1 3-BR FHA/TYP. UNIT FINISH PLAN

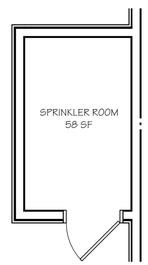
SCALE: 1/4" = 1'-0"

NOTE: SEE SHEET A6.0 FOR FINISH SCHEDULE.



4 A6.1 3-BR UFAS UNIT FINISH PLAN

SCALE: 1/4" = 1'-0"



5 A6.1 SPRINKLER ROOM DIMENSION PLAN

SCALE: 1/4" = 1'-0"

2-BR UNIT, 3-BR UNIT & SPRINKLER ROOM FINISH PLANS

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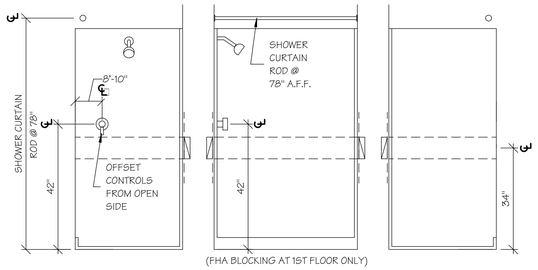
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JOB NO.
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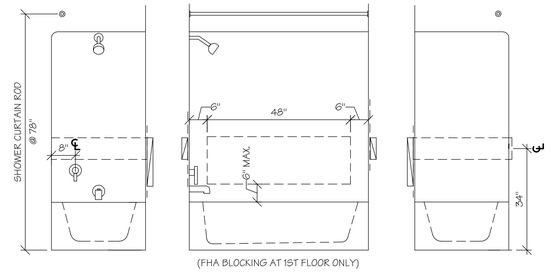
NOTE:
CONTRACTOR OPTION TO ORDER TUBS, SHOWERS WITH FACTOR INSTALLED GRAB BAR BLOCKING. IF SELECTED, BLOCKING MUST STILL COVER AT LEAST THE AREAS SHOWN.

GRAB BAR BLOCKING NOTE:
MANUFACTURER INSTALLED INTEGRAL BACKING OR 2X8 BLOCKING FOR GRAB BARS



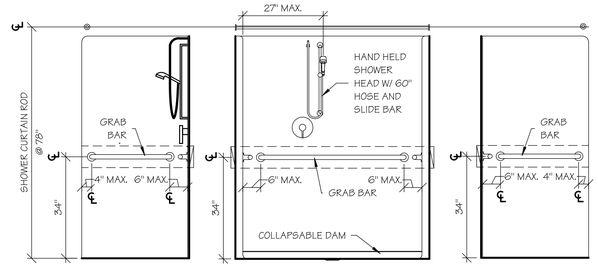
1 A7.0 SCALE: 1/2" = 1'-0"

FHA SHOWER NOTES & DETAILS



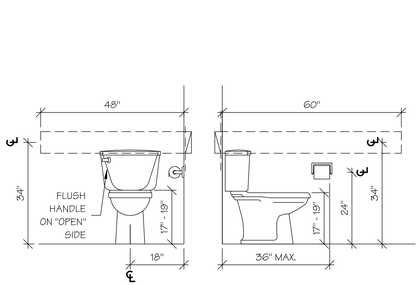
2 A7.0 SCALE: 1/2" = 1'-0"

FHA TUB/SHOWER NOTES & DETAILS



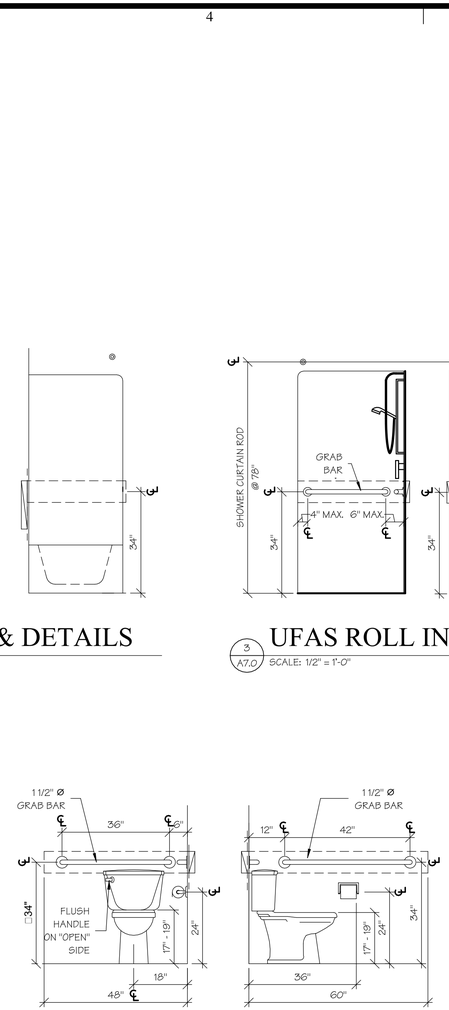
3 A7.0 SCALE: 1/2" = 1'-0"

UFAS ROLL IN SHOWER NOTES & DETAILS



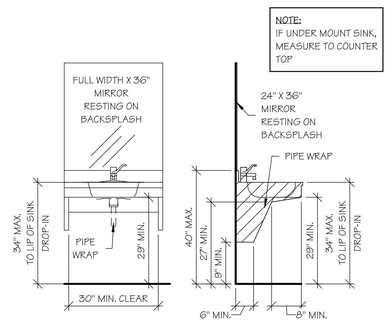
4 A7.0 SCALE: 1/2" = 1'-0"

FHA WATER CLOSET NOTES & DETAILS



5 A7.0 SCALE: 1/2" = 1'-0"

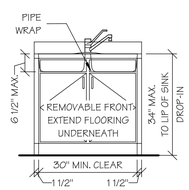
UFAS WATER CLOSET NOTES & DETAILS



6 A7.0 SCALE: 1/2" = 1'-0"

UFAS WALL HUNG VANITY

NOTE:
IF UNDER MOUNT SINK- MEASURE TO COUNTER TOP



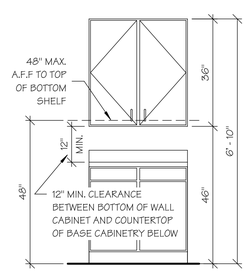
7 A7.0 SCALE: 1/2" = 1'-0"

UFAS SINK REMOV. FRONT



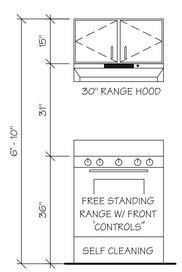
8 A7.0 SCALE: 1/2" = 1'-0"

REMOVABLE FRONT WORK STATION



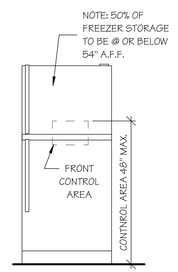
9 A7.0 SCALE: 1/2" = 1'-0"

UFAS WALL CABINET



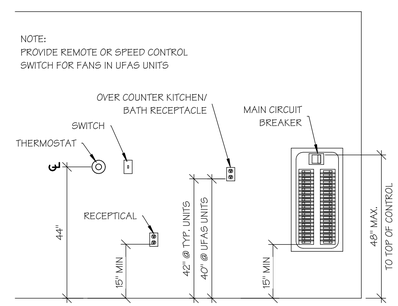
10 A7.0 SCALE: 1/2" = 1'-0"

UFAS RANGE



11 A7.0 SCALE: 1/2" = 1'-0"

ACCESSIBLE REFRIGERATOR



12 A7.0 SCALE: 1/2" = 1'-0"

ELECTRICAL MOUNTING HEIGHTS

INTERIOR ELEVATIONS NOTES AND DETAILS

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MARTIN RANDALL PORTER
6574
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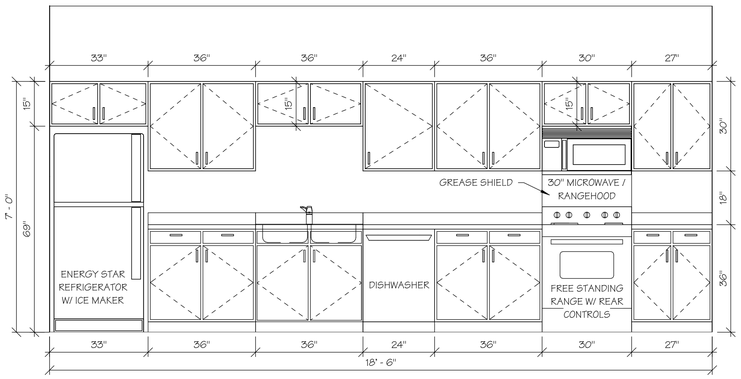
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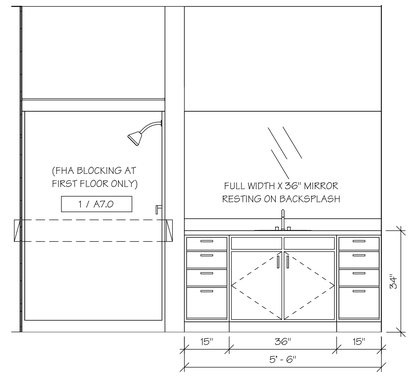
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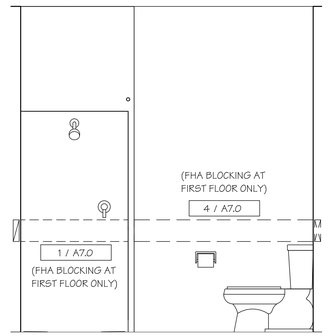
1 A7.1 — 1-BR FHA/TYP. KITCHEN ELEV. 1

SCALE: 1/2" = 1'-0"



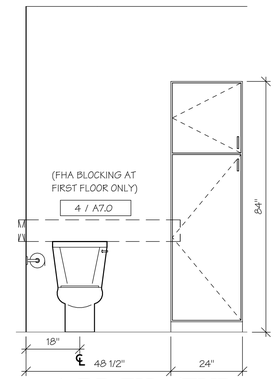
2 A7.1 — 1-BR FHA/TYP. BATH ELEV. 1

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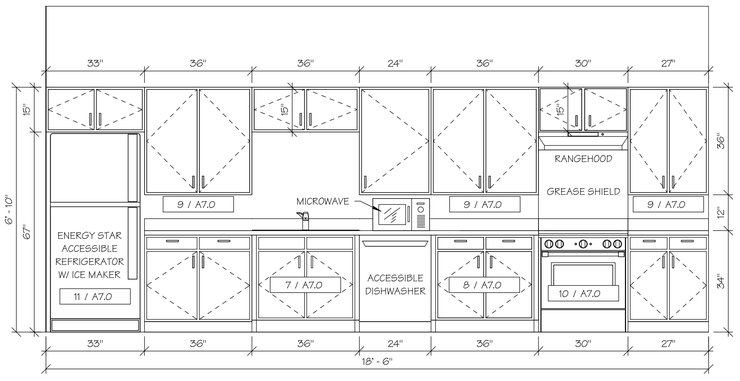
3 A7.1 — 1-BR FHA/TYP. BATH ELEV. 2

SCALE: 1/2" = 1'-0"



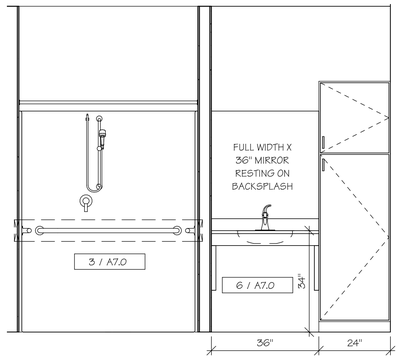
4 A7.1 — 1-BR FHA/TYP. BATH ELEV. 3

SCALE: 1/2" = 1'-0"



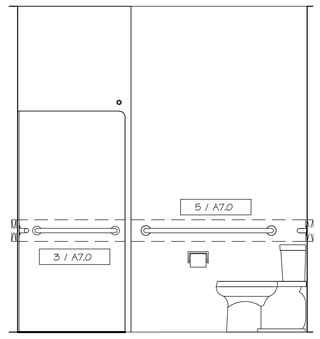
5 A7.1 — 1-BR UFAS KITCHEN ELEV. 1

SCALE: 1/2" = 1'-0"



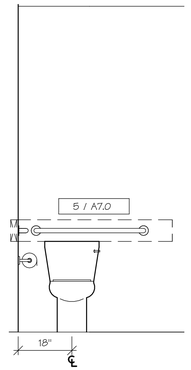
6 A7.1 — 1-BR UFAS BATH ELEV. 1

SCALE: 1/2" = 1'-0"



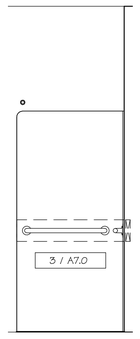
7 A7.1 — 1-BR UFAS BATH ELEV. 2

SCALE: 1/2" = 1'-0"



8 A7.1 — 1-BR UFAS BATH ELEV. 3

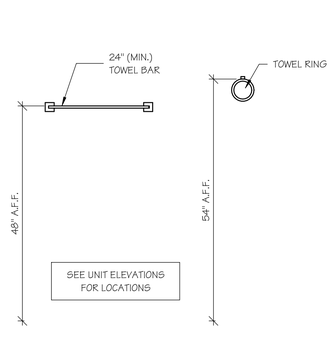
SCALE: 1/2" = 1'-0"



9 A7.1 — 1-BR UFAS BATH ELEV. 4

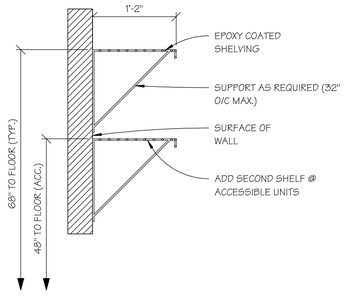
SCALE: 1/2" = 1'-0"

NOTE: REFER TO SHEET A7.0 FOR ADDITIONAL DIMENSIONS, NOTES & DETAILS APPLICABLE, TO INTERIOR ELEVATION ON THIS SHEET.



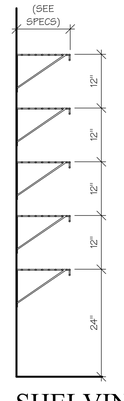
10 A7.1 — BATH ACCESSORIES

SCALE: 3/4" = 1'-0"



11 A7.1 — CLOSET SHELF

SCALE: 1" = 1'-0"



12 A7.1 — SHELVING

SCALE: 3/4" = 1'-0"

1-BR INTERIOR ELEVATIONS & DETAILS

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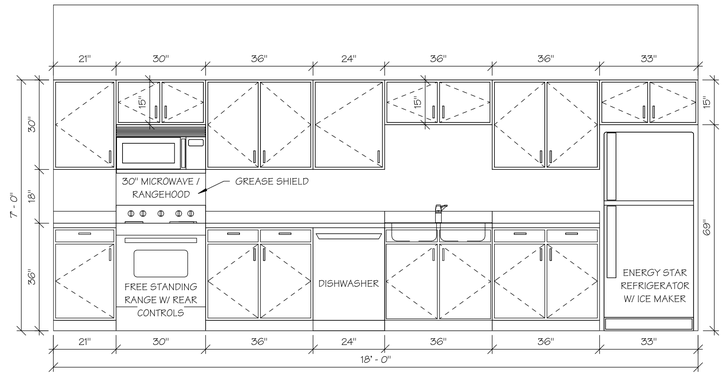
ISSUE/REVISIONS

1	19 AUG 2022	ISSUE SET

SHEET NO. A7.1

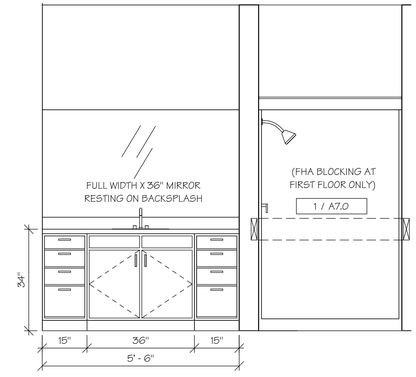
JOB NO. 4341

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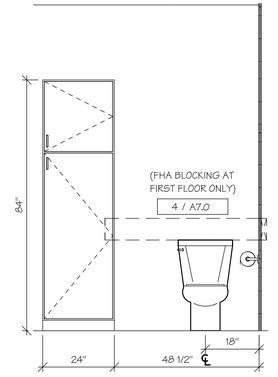
1 A7.2 — 2-BR FHA/TYP. KITCHEN ELEV. 1

SCALE: 1/2" = 1'-0"



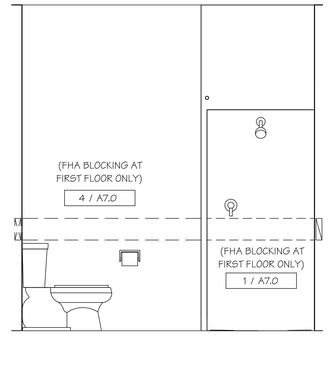
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SCALE: 1/2" = 1'-0"



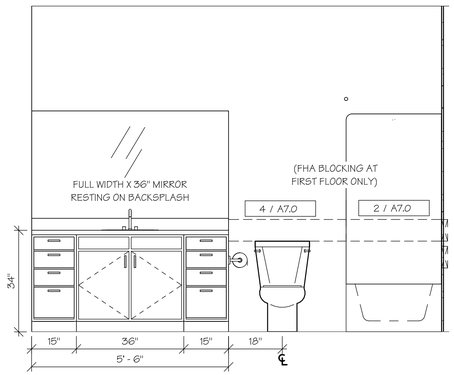
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SCALE: 1/2" = 1'-0"



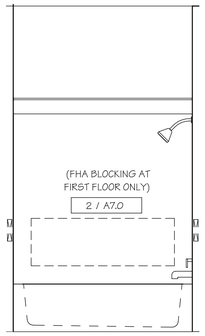
4 A7.2 — 2-BR FHA/TYP. BATH 1 ELEV. 3

SCALE: 1/2" = 1'-0"



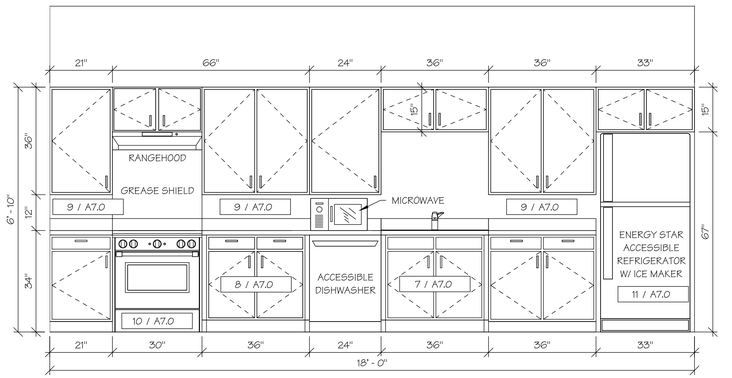
5 A7.2 — 2-BR BATH 2 ELEV. 1

SCALE: 1/2" = 1'-0"



6 A7.2 — 2-BR BATH 2 ELEV. 2

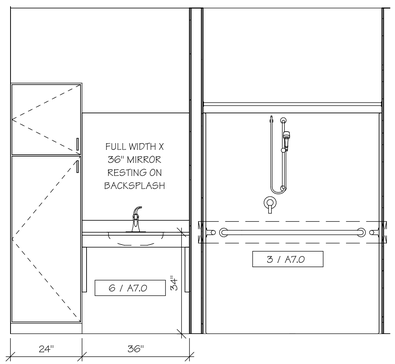
SCALE: 1/2" = 1'-0"



7 A7.2 — 2-BR UFAS KITCHEN ELEV. 1

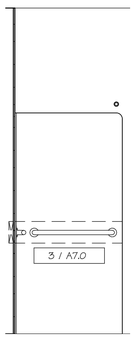
SCALE: 1/2" = 1'-0"

NOTE: REFER TO SHEET A7.0 FOR ADDITIONAL DIMENSIONS, NOTES & DETAILS APPLICABLE, TO INTERIOR ELEVATION ON THIS SHEET.



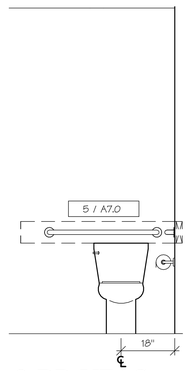
8 A7.2 — 2-BR UFAS BATH 1 ELEV. 1

SCALE: 1/2" = 1'-0"



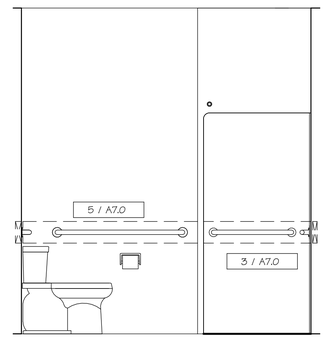
9 A7.2 — 2-BR UFAS BATH 1 ELEV. 2

SCALE: 1/2" = 1'-0"



10 A7.2 — 2-BR UFAS BATH 1 ELEV. 3

SCALE: 1/2" = 1'-0"



11 A7.2 — 2-BR UFAS BATH 1 ELEV. 4

SCALE: 1/2" = 1'-0"

2-BR INTERIOR ELEVATIONS

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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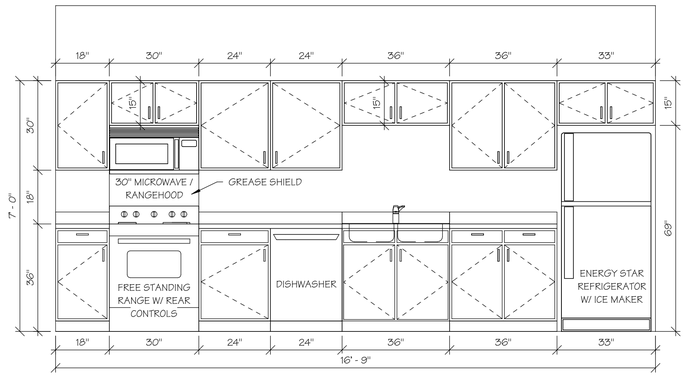
1ST ISSUE
19 AUG 2022

ISSUE/REVISIONS
1 19 AUG 2022 ISSUE SET

SHEET NO.
A7.2

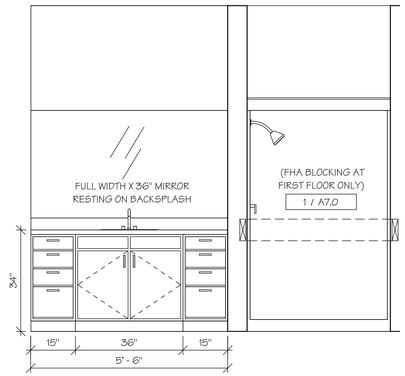
JOB NO.
4341

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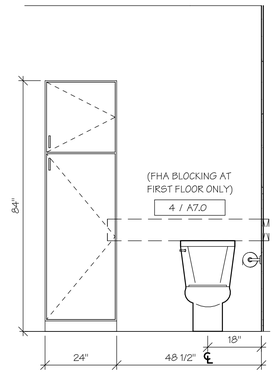
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SCALE: 1/2" = 1'-0"



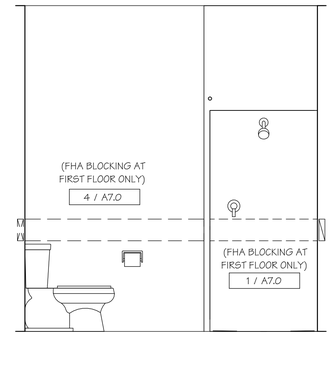
2 A7.3 — 3-BR FHA/TYP. BATH 1 ELEV. 1

SCALE: 1/2" = 1'-0"



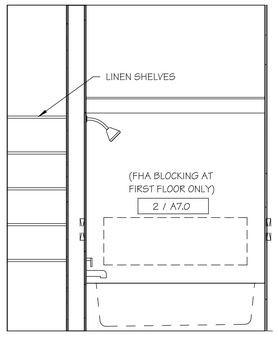
3 A7.3 — 3-BR FHA/TYP. BATH 1 ELEV. 2

SCALE: 1/2" = 1'-0"



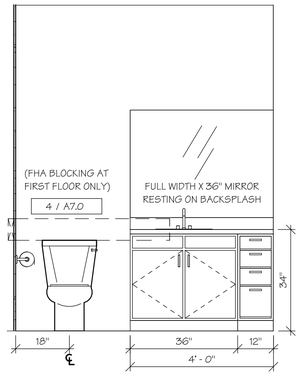
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SCALE: 1/2" = 1'-0"



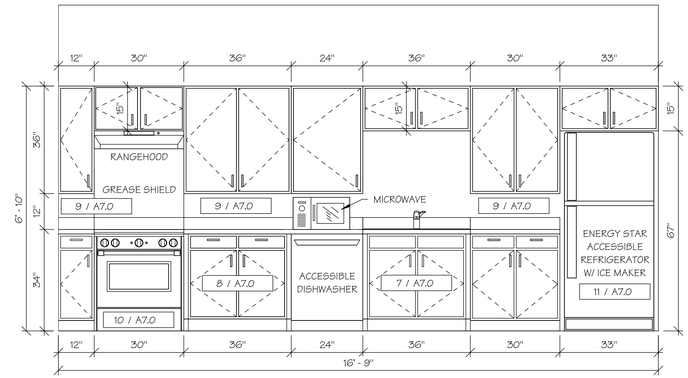
5 A7.3 — 3-BR BATH 2 ELEV. 1

SCALE: 1/2" = 1'-0"



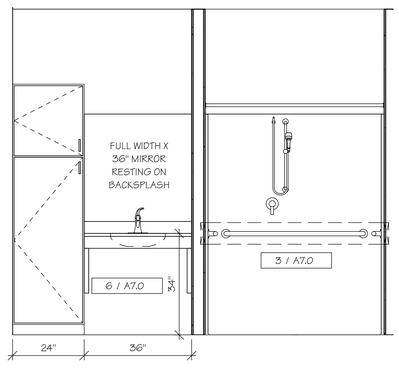
6 A7.3 — 3-BR BATH 2 ELEV. 2

SCALE: 1/2" = 1'-0"



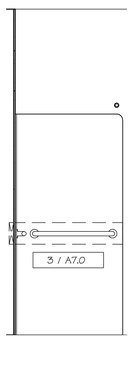
7 A7.3 — 3-BR UFAS KITCHEN ELEV. 1

SCALE: 1/2" = 1'-0"



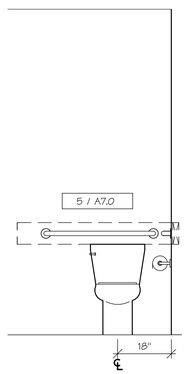
8 A7.3 — 3-BR UFAS BATH 1 ELEV. 1

SCALE: 1/2" = 1'-0"



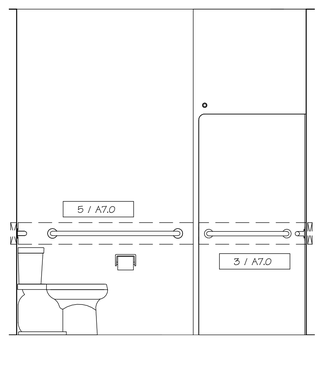
9 A7.3 — 3-BR UFAS BATH 1 ELEV. 2

SCALE: 1/2" = 1'-0"



10 A7.3 — 3-BR UFAS BATH 1 ELEV. 3

SCALE: 1/2" = 1'-0"



11 A7.3 — 3-BR UFAS BATH 1 ELEV. 4

SCALE: 1/2" = 1'-0"

NOTE: REFER TO SHEET A7.0 FOR ADDITIONAL DIMENSIONS, NOTES & DETAILS APPLICABLE, TO INTERIOR ELEVATION ON THIS SHEET.

3-BR INTERIOR ELEVATIONS

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE# 6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0117

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19 AUG 2022

ISSUE/REVISIONS

1	19 AUG 2022	ISSUE SET

SHEET NO.
A7.3

JOB NO.
4341

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CROSSROADS AT WESTCHESTER CIRCLE

LAWTON, COMANCHE COUNTY, OKLAHOMA

PROJECT INFORMATION

SITE DATA	
SITE ZONING:	(SEE CIVIL)
SITE SIZE:	(SEE CIVIL)
SITE DENSITY:	(SEE CIVIL)
NO. OF PARKING SPACES:	(SEE CIVIL)

BUILDING DATA					
DWELLING UNITS	COMPLIANCE WITH	SQUARE FEET OF AREA	SQUARE FEET PER PERSON	CALC.	OCCUPANT LOAD
OFFICE	ADA 2010/UFAS	156	100	1.56	2
COMPUTER AREA	UFAS	208	100	2.08	3
STORM SHELTER/ COMMUNITY ROOM	UFAS	1,255	15	83.67	84
KITCHEN	UFAS	124	200	0.62	1
LAUNDRY	UFAS	95	100	0.95	1
FITNESS ROOM	UFAS	293	50	5.86	6
ENTRY	ADA 2010/UFAS	133			
MAINTENANCE		129			
MEN'S RESTROOM	ADA 2010/UFAS	59			
WOMEN'S RESTROOM	ADA 2010/UFAS	59			
COMMON AREA	ADA 2010/UFAS	419	15	27.93	28
TOTAL BUILDING OCCUPANT LOAD:				125 PERSONS	

CODES AND REGULATIONS	
BLDG. & RELATED CODES:	2015 IBC, 2015 IPC, 2015 IMC, 2006 IECC, 2014 ICC 500
ELECT. CODE:	2014 NEC
FIRE CODE:	2015 IFC
ACCESSIBILITY:	AMERICANS WITH DISABILITIES ACT - 2010, UFAS
AGENCY:	OHFA STATE POLICIES AND GUIDELINES
MISC.:	ALL APPLICABLE FEDERAL, STATE, LOCAL CODES, LAWS AND ORDINANCES

BUILDING CODE DATA	
USE GROUP:	A-3 (ASSEMBLY)
CONSTRUCTION TYPE:	V-B
EXT. WALL CONSTRUCTION:	NON-RATED
OTHER CONSTRUCTION:	1-HR RATED INTERIOR WALLS AND CEILING AT LAUNDRY ROOM; ALL OTHER INTERIOR WALLS AND CEILINGS UNRATED; 2-HR STORM SHELTER
ALLOW. AREA:	A-3 = 6,000 SF/FLOOR
AREA ADJUSTMENTS:	NONE REQUIRED, NONE TAKEN
ACTUAL AREA PER FLOOR:	3,286 SF
ALLOW. HEIGHT & FLOORS:	A-3=40'-0", 1 STORY
HEIGHT ADJUSTMENTS:	NONE REQUIRED, NONE TAKEN
ACTUAL HEIGHT & FLOORS:	22'-1 7/8", 1 STORY
SPRINKLER SYSTEM:	NONE REQUIRED, NONE INSTALLED

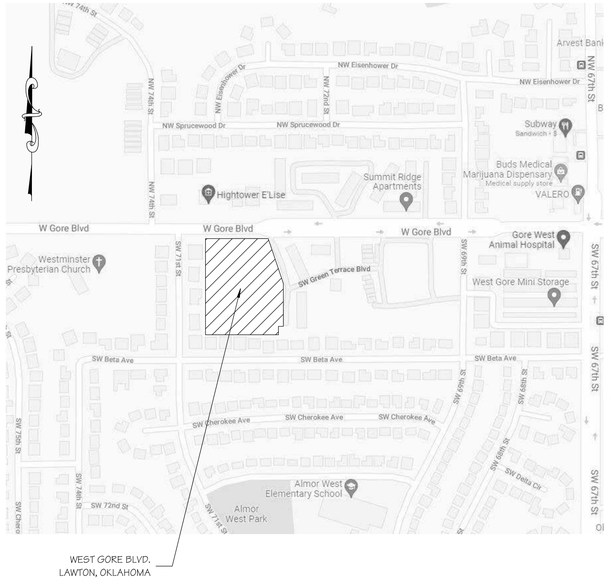
INDEX TO DRAWINGS

COMMUNITY BUILDING INDEX

Sheet Number	Sheet Name	Sheet Issue Date	Current Revision Date	Current Revision Description
1 - COVER SHEET				
0.0CB	COMMUNITY BLDG. COVER SHEET	19 AUG 2022	19 AUG 2022	ISSUE SET
2 - ARCHITECTURAL				
A1.0CB	DIMENSION PLAN & DOOR SCHEDULE	19 AUG 2022	19 AUG 2022	ISSUE SET
A1.1CB	CLEAR FLOOR SPACE & DOOR APPROACH PLAN	19 AUG 2022	19 AUG 2022	ISSUE SET
A2.0CB	ROOF PLAN, DETAILS & NOTES	19 AUG 2022	19 AUG 2022	ISSUE SET
A3.0CB	EXTERIOR ELEVATIONS	19 AUG 2022	19 AUG 2022	ISSUE SET
A4.0CB	WALL SECTIONS	19 AUG 2022	19 AUG 2022	ISSUE SET
A4.1CB	FRAMING DETAILS	19 AUG 2022	19 AUG 2022	ISSUE SET
A4.2CB	FLASHING DETAILS	19 AUG 2022	19 AUG 2022	ISSUE SET
A5.0CB	FIRE RATED ASSEMBLIES	19 AUG 2022	19 AUG 2022	ISSUE SET
A5.1CB	FIRE RATED ASSEMBLIES	19 AUG 2022	19 AUG 2022	ISSUE SET
A6.0CB	FINISH PLAN, FINISH SCHEDULE & NOTES	19 AUG 2022	19 AUG 2022	ISSUE SET
A7.0CB	INTERIOR ELEVATIONS, NOTES AND DETAILS	19 AUG 2022	19 AUG 2022	ISSUE SET

ARCHITECT'S JOB NO. 4341
OHFA PROJECT NO. 21-06-38

PROJECT LOCATION MAP



SIGNATURE AREAS

NOTE: PROJECT CONSTRUCTION MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, AND REGULATIONS AS ENUMERATED ELSEWHERE IN THE PLANS AND SPECIFICATIONS.

ARCHITECT: WALLACE ARCHITECTS, LLC
302 CAMPUSVIEW DRIVE SUITE 208, COLUMBIA, MO 65201
BY: DATE:

OWNER: CROSSROADS AT WESTCHESTER CIRCLE, LP
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: DATE:

CONTRACTOR: HAMILTON BUILDERS CONTRACTING, LLC
3556 S. CULPEPPER CIRCLE, SUITE 4, SPRINGFIELD, MO 65804
BY: DATE:

OHFA REPRESENTATIVE:
100 NW 63RD STREET, SUITE 200, OKLAHOMA CITY, OK 73116
BY: DATE:

PM: RP
PC: RS
PLAN SET NO. ____ COMMUNITY BLDG. COVER SHEET

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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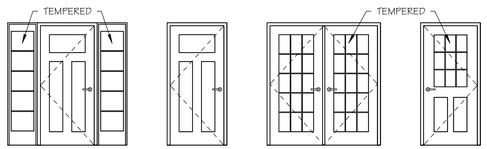
SHEET NO. 0.0CB

JOB NO. 4341

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DOOR SCHEDULE

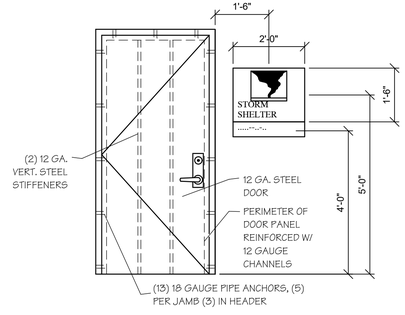
MARK	SIZE	ELEV.	PANEL MATL.	FRAME MTL.	HARDWARE SET (SEE SPECS)	COMMENTS
1	3'-0" X 6'-8" X 1 3/4"	A	INSUL. HOLLOW METAL	STEEL	3	3 PANEL W/ 18" SIDELITES, WEATHERSTRIPPING, ACCESSIBLE THRESHOLD, CLOSER & PANIC BAR
2	3'-0" X 6'-8" X 1 3/4"	B	INSUL. FIBERGLASS	WD	5	3 PANEL, WEATHERSTRIPPING
3	PR. 3'-0" x 6'-8" x 1 3/4"	C	INSUL. HOLLOW METAL	STEEL	4 @ EXTERIOR, 9 @ INTERIOR	DOUBLE HINGED FULL LITE, WEATHER STRIPPING, ACC. THRESHOLD, CLOSER & PANIC BAR
4	3'-0" X 6'-8" X 1 3/4"	1/1.0CB	12 GA. STEEL	STEEL	3	STORM SHELTER DOOR - SEE STORM SHELTER DOOR & HARDWARE SCHEDULE NOTES ON DETAIL 1/A1.0CB, ACCESSIBLE THRESHOLD, CLOSER & PANIC BAR
5	3'-0" x 6'-8" x 1 3/4"	D	INSUL. FIBERGLASS	WD	5	2 PANEL 9 LITE, WEATHER STRIPPING, ACC THRESHOLD & CLOSER
6	3'-0" x 6'-8" x 1 3/8"	E	WD SC	WD	9	FULL LITE
7	PR. 3'-0" x 6'-8" x 1 3/8"	G	WD HC	WD	8	3-PANEL MASONITE
8	2'-6" x 6'-8" x 1 3/8"	B	WD HC	WD	10	3-PANEL MASONITE
9	3'-0" x 6'-8" x 1 3/8"	B	WD HC	WD	6	3-PANEL MASONITE & SPRING HINGES
10	2'-6" X 6'-8" X 1 3/8"	F	WD SC	WD	10	FULLY LOUVERED



DOOR ELEVATIONS

STORM SHELTER DOOR & HARDWARE SCHEDULE

1. COMMERCIAL GRADE ICC-500 & FEMA 361 COMPLIANT 12 GAUGE STEEL DOOR & FRAME WITH LEVER ACTION HANDLE AND PANIC EXIT DEVICE.
2. THREE (3) POINT LOCK MECHANISM PROVIDING SURFACE MOUNTED VERTICAL RODS AND A CENTER LATCH.
3. FOUR (4) HEAVY WEIGHT BALL BEARING HINGES.
4. STORM SHELTER DOOR MANUFACTURER - SECURALL STORMSAFE 361 DOOR 1 3/4" THICK X 12 GA. GALVANIZED STEEL DOOR AND FRAME WITH 12 GA. REINFORCED CHANNELS.

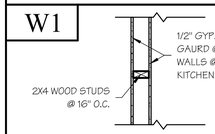


1 / A1.0CB — SCALE: 1/2" = 1'-0"

STORM SHELTER DOOR DETAIL

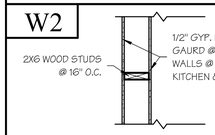
WALL TYPES

W1



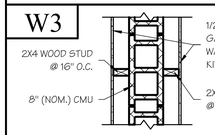
4-1/2" WALL (NOT RATED)

W2



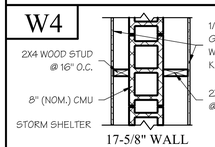
6-1/2" WALL (NOT RATED)

W3



15-5/8" WALL (2-HR RATED U906)

W4



17-5/8" WALL (2 HOUR U.L. NO. U906)

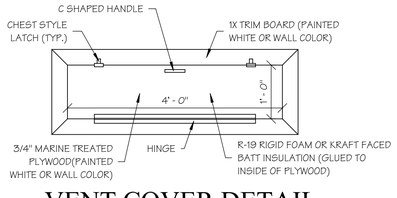
DOOR NOTES

1) ALL DOORS TO HAVE LEVER HANDLES OR PANIC HARDWARE.
2) ENTRY DOORS SHALL COMPLY WITH ANSI A117.1 ACCESSIBILITY REQUIREMENTS.
3) PROVIDE THRESHOLD AT ALL ENTRY DOORS WHICH ARE 1/2" HIGH MAX., 1:2 SLOPE.

WALL NOTES

1) DIMENSIONS ARE STUD FACE TO STUD FACE UNLESS NOTED OTHERWISE.
2) PROVIDE SOLID BLOCKING BEHIND GRAB BARS, TOWEL BARS, ALL CABINETS, AND ALL SOFFITS.
3) ALL EXTERIOR WALLS OUTSIDE OF FEMA STORM SHELTER ARE FRAMED W/ 2X6'S 16" O.C. AND COVERED W/ (1) LAYER 1/2" GYP. BD. AT INTERIOR.
4) ALL INTERIOR WALLS FRAMED WITH 2X4'S OR 2X6'S (ALL PLUMBING WALLS) 16" O.C. AND COVERED WITH (1) LAYER 1/2" GYP. BD.

NOTE: SIGN TO BE POSTED THAT READS "OPEN VENT COVERS IN THE EVENT OF FULL OCCUPANCY FOR PROPER VENTILATION"

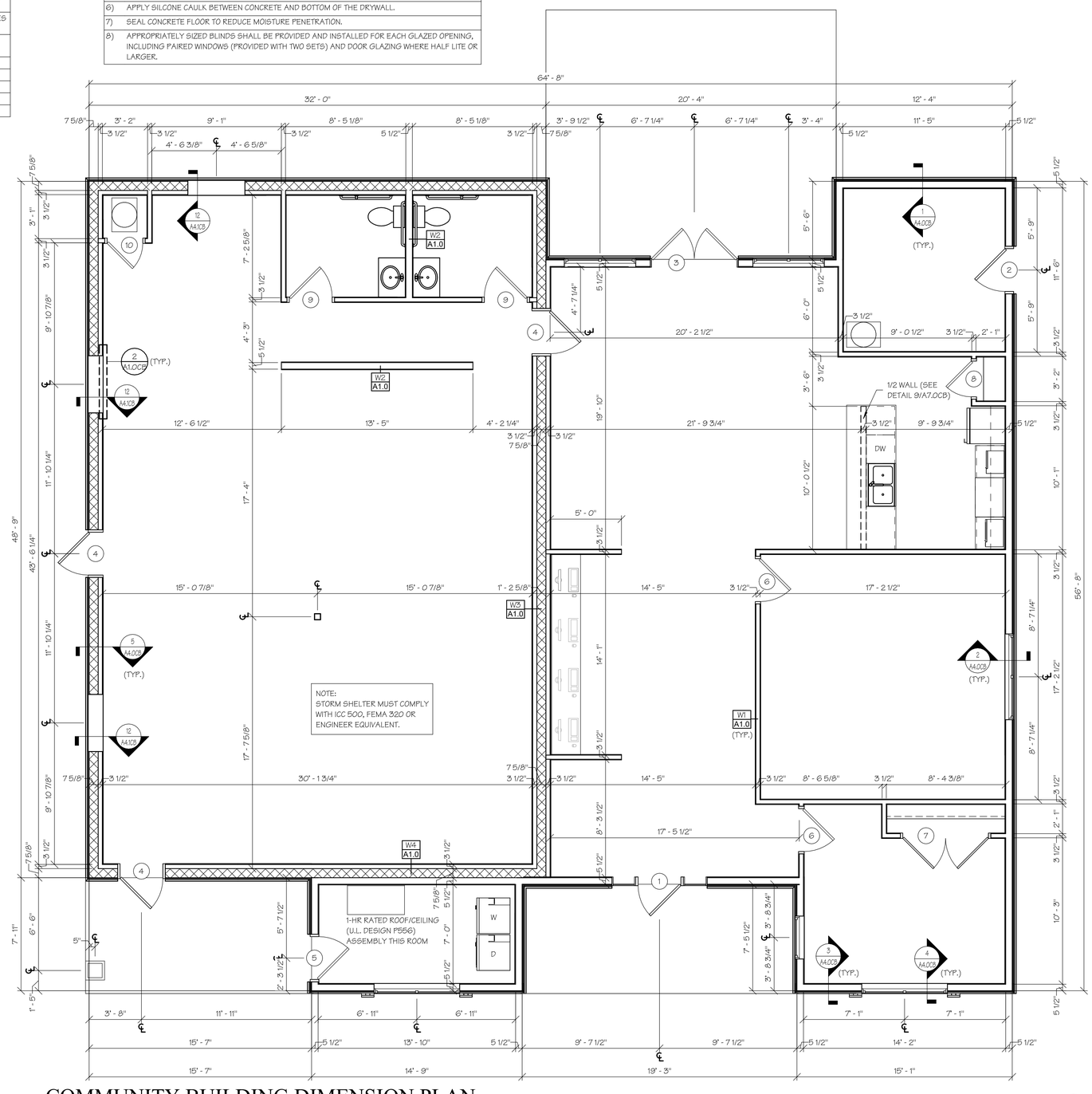


2 / A1.0CB — SCALE: 3/4" = 1'-0"

VENT COVER DETAIL

GENERAL NOTES

1) CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR COMMUNITY BUILDING AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2) CERTIFICATION OF R-39 CEILING INSULATION MUST BE POSTED IN ATTIC.
3) CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
4) PRIME & PAINT WALLS BEHIND MILLWORK.
5) STAIN & SEAL MILLWORK AS SPECIFIED.
6) APPLY SILCONE CAULK BETWEEN CONCRETE AND BOTTOM OF THE DRYWALL.
7) SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
8) APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING, INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.



3 / A1.0CB — SCALE: 1/4" = 1'-0"

COMMUNITY BUILDING DIMENSION PLAN

DIMENSION PLAN & DOOR SCHEDULE

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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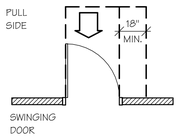
JOB NO. 4341

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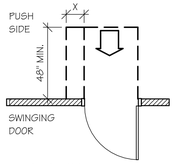
MANEUVERING CLEARANCES AT DOORS

PER UFAS

NOTE: WHERE ANY OBSTRUCTION WITHIN 18 INCHES OF THE LATCH SIDE OF A DOORWAY PROJECTS MORE THAN 8 INCHES BEYOND THE FACE OF THE DOOR, MEASURED PERPENDICULAR TO THE FACE OF THE DOOR, MANEUVERING CLEARANCES FOR A FORWARD APPROACH SHALL BE PROVIDED.

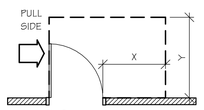


4.13.6 FIG. 25(a)
FRONT APPROACH - PULL SIDE



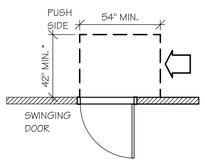
4.13.6 FIG. 25(a)
FRONT APPROACH - PUSH SIDE

NOTE: X = 12" MIN IF DOOR HAS BOTH A CLOSER AND LATCH



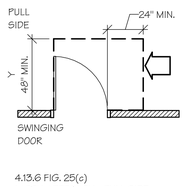
4.13.6 FIG. 25(b)
HINGE APPROACH - PULL SIDE
X = 36" MIN AND Y = 60" MIN

4.13.6 FIG. 25(b)
HINGE APPROACH - PULL SIDE
X = 42" MIN AND Y = 54" MIN



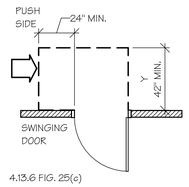
4.13.6 FIG. 25(b)
HINGE APPROACH - PUSH SIDE

* 48" MIN IF BOTH CLOSER AND LATCH PROVIDED.



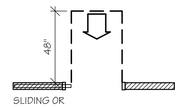
4.13.6 FIG. 25(c)
LATCH APPROACH - PULL SIDE

NOTE: Y = 54" MIN IF DOOR HAS A CLOSER

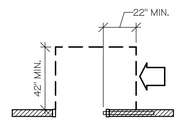


4.13.6 FIG. 25(c)
LATCH APPROACH - PUSH SIDE

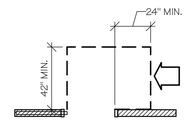
NOTE: Y = 48" MIN IF DOOR HAS A CLOSER



4.13.6 FIG 25(d)
FRONT APPROACH

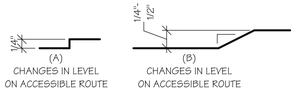


4.13.6 FIG 25(e)
POCKET OR HINGE ("SLIDE SIDE") APPROACH



4.13.6 FIG 25(f)
STOP OR LATCH APPROACH

CHANGES IN LEVEL ON AN ACCESSIBLE ROUTE



(A) CHANGES IN LEVEL ON ACCESSIBLE ROUTE

(B) CHANGES IN LEVEL ON ACCESSIBLE ROUTE

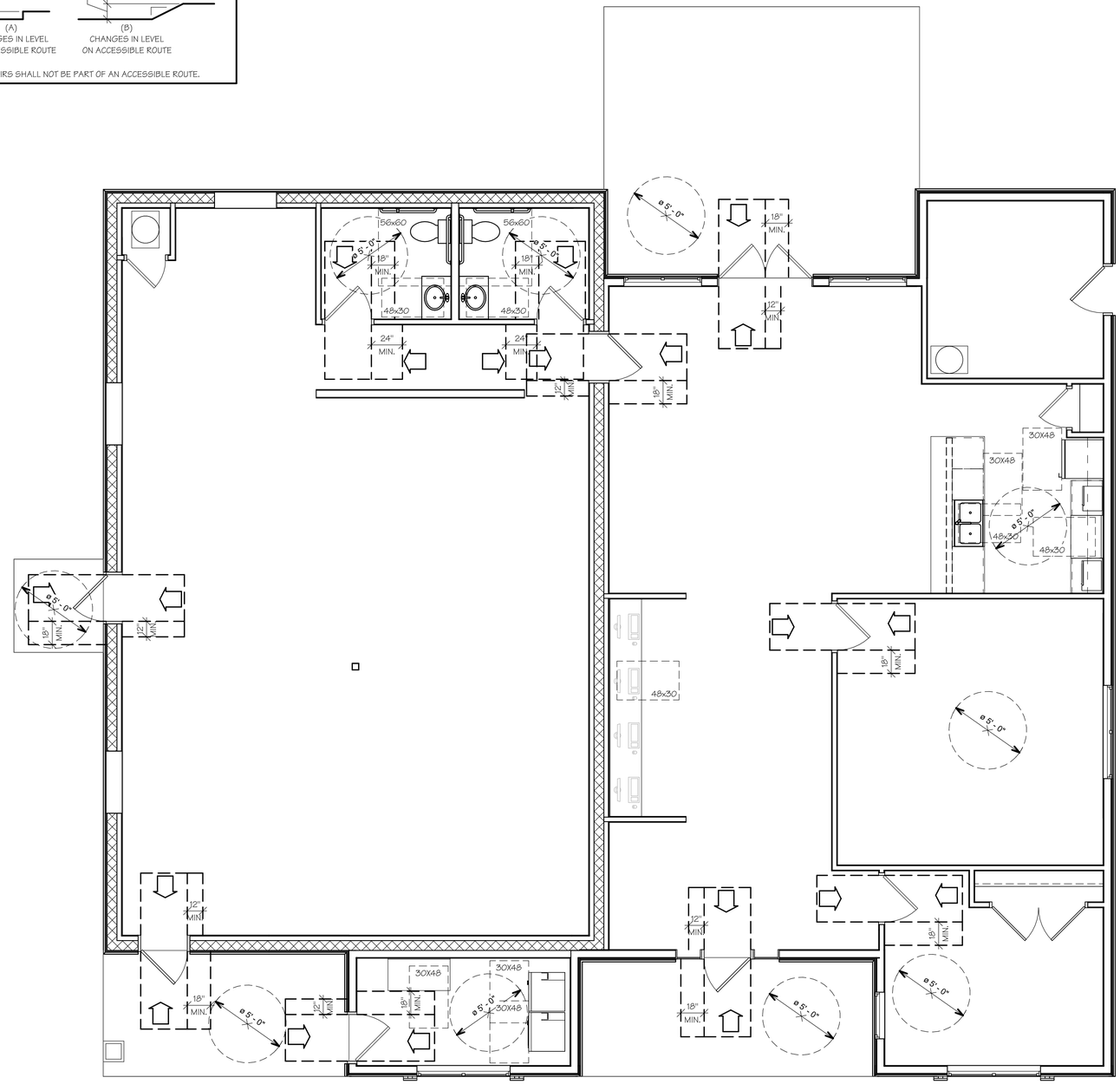
NOTE: STAIRS SHALL NOT BE PART OF AN ACCESSIBLE ROUTE.

COMM. BLDG. BATH NOTES

1)	INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
2)	PROVIDE & INSTALL (1) 36" HORIZONTAL GRAB BAR BEHIND & (1) 42" HORIZONTAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. & (1) 18" VETICAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 40" A.F.F. & 40" FROM NEAR WALL. (SEE BATH ELEVATIONS SHEET A7.0)
3)	BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
4)	VANITY SINK FAUCET TO BE LEVER TYPE, PIPES & TRAP TO BE WRAPPED W/ "TRAP WRAP" BY BROCAR PRODUCTS, INC. OR EQUAL.
5)	EXTEND VINYL FLOORING BENEATH LAV. SPACE.

COMM. BLDG. KITCHEN NOTES

1)	COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2)	EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE.
3)	TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
4)	TOP OF WALL TELEPHONE OUTLET TO BE 46" MAX. A.F.F.
5)	SWITCHES & OUTLETS IN KITCHEN ABOVE BASE CABINETS SHALL BE 40" A.F.F. TO BOTTOM OF SWITCH PLATE, SO AS NOT INTERFERE WITH WALL CABINET.
6)	INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ "TRAP WRAP" BY BROCAR PRODUCTS, INC. OR EQUAL.
7)	DISHWASHER HOOKUPS ARE UNDER SINK, ACCESS OPENING IS TO BE MADE THROUGH END PANEL OF SINK.



1 A1.1CB COMMUNITY BUILDING CLEAR FLOOR SPACE PLAN

SCALE: 1/4" = 1'-0"

CLEAR FLOOR SPACE & DOOR APPROACH PLAN

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
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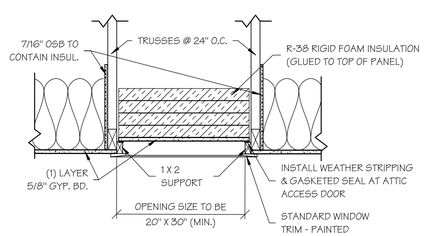
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ATTIC COMPARTMENT VENTILATION					
NAME	TYPE	AREA	TOTAL REQ'D VENT. (SQ. IN.)	SOFFIT VENT (SQ. IN.)	ROOF VENT (SQ. IN.)
ATTIC SPACE	ATTIC SPACE	3664 SF	1759	879	879

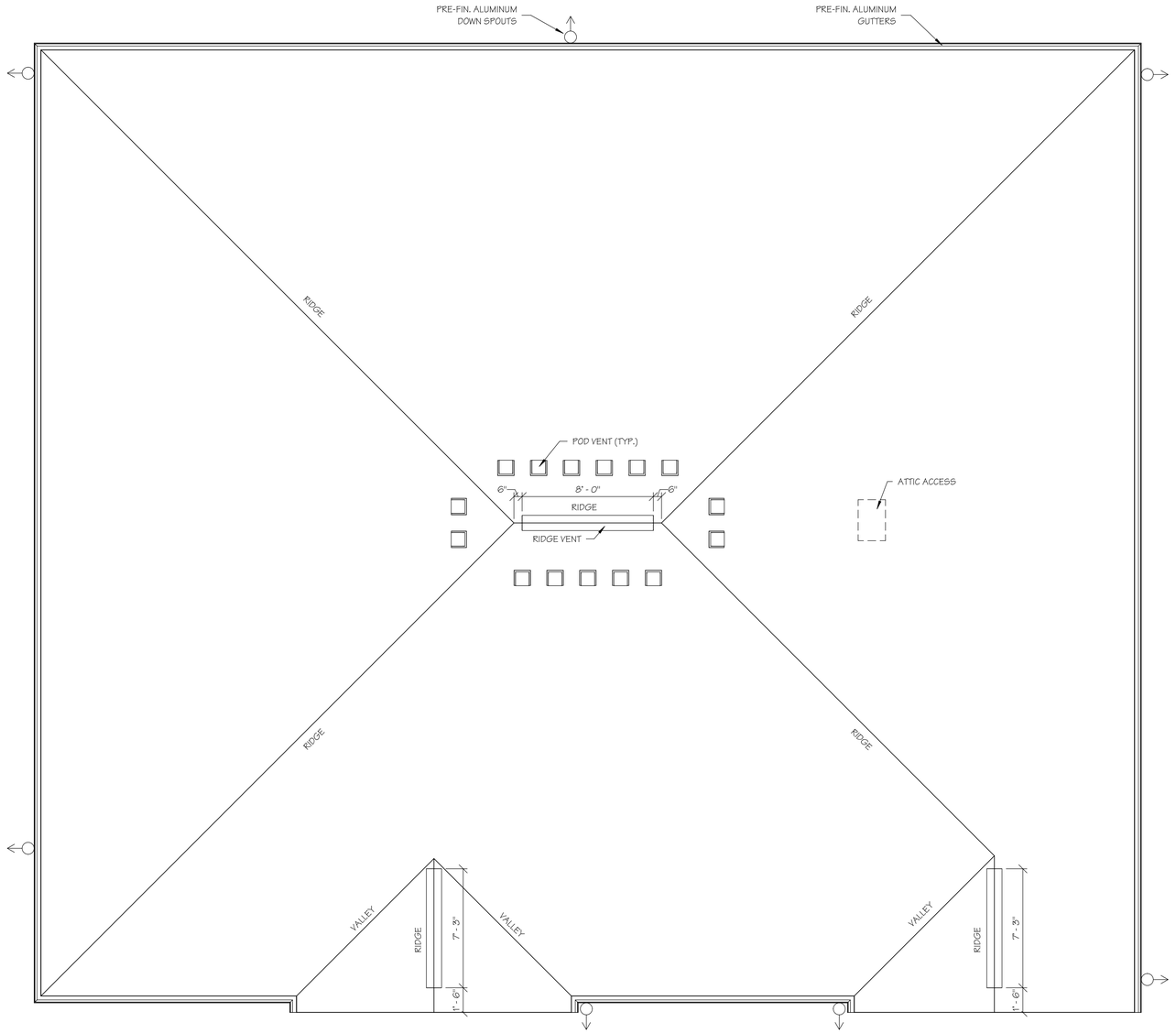
GENERAL ATTIC VENTILATION NOTES

1) TOTAL FREE AREA SHALL EQUAL 1/300 OF ATTIC AREAS W/50% OF VENT AREA WITHIN 3' OF ROOF PEAK AND 50% AT SOFFITS.
2) SPECIFIED RIDGE VENT LENGTHS BASED ON 18 SQ. IN. FREE AREA PER LINEAL FOOT. ADJUST VENT...
3) SPECIFID VENTILATION POD QUANTITY BASED ON 50 SQ. IN FREE AREA PER POD. ADJUST QUANTITY AS REQUIRED BASED ON FREE AREA OF SPECIFIC VENTILATION POD USED.

SPECIAL INSTRUCTION:
STRUCTURAL DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE OVER ANY DRAWING, DETAIL OR NOTE SHOWN ON THIS SHEET. CONTRACTORS, SUBCONTRACTORS, AND SUPPLIERS MUST REFERENCE STRUCTURAL DRAWINGS AND/ OR SPECIFICATIONS BEFORE CONSTRUCTING, OR SUPPLYING ANY LOAD-BEARING, OR LOAD-RESISTING ELEMENT SHOWN ON THIS SHEET.



1 A2.0CB ATTIC ACCESS DETAIL
SCALE: 1" = 1'-0"



2 A2.0CB COMMUNITY BUILDING ROOF PLAN
SCALE: 1/4" = 1'-0"

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

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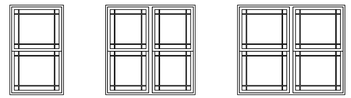
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ROOF PLAN, DETAILS & NOTES

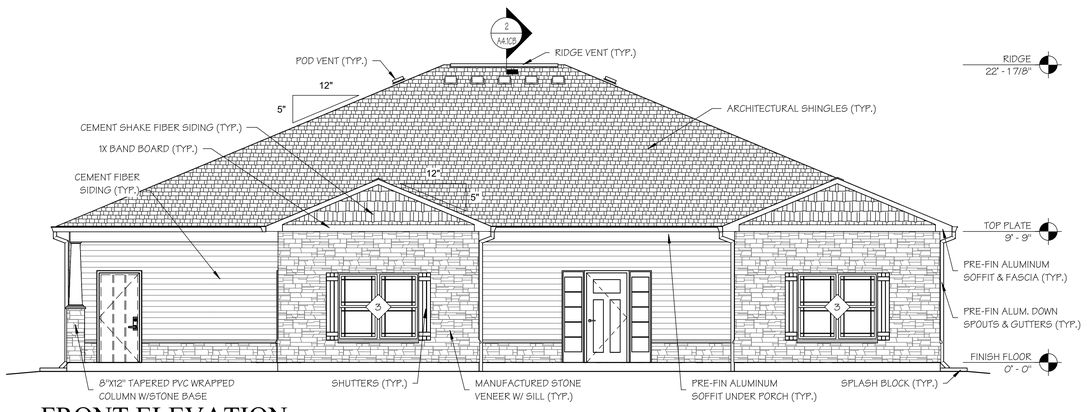
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WINDOW SCHEDULE TYPE MARK

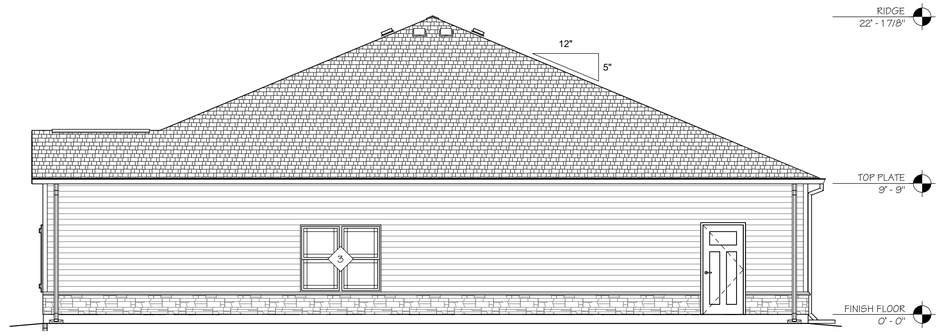
MARK	SIZE	HARDWARE	GLAZING	COMMENTS
1	3'-0"' x 5'-0"	STANDARD	INSUL. LOW "E"	SINGLE HUNG W/SCREENS, U-FACTOR = 0.30, SHGC = 0.25, ENERGY STAR
2	PR. 2'-6" x 5'-0"	STANDARD	INSUL. LOW "E"	SINGLE HUNG W/SCREENS, TEMPERED GLASS, U-FACTOR = 0.30, SHGC = 0.25, ENERGY STAR
3	PR. 3'-0" x 5'-0"	STANDARD	INSUL. LOW "E"	SINGLE HUNG W/SCREENS, U-FACTOR = 0.30, SHGC = 0.25, ENERGY STAR



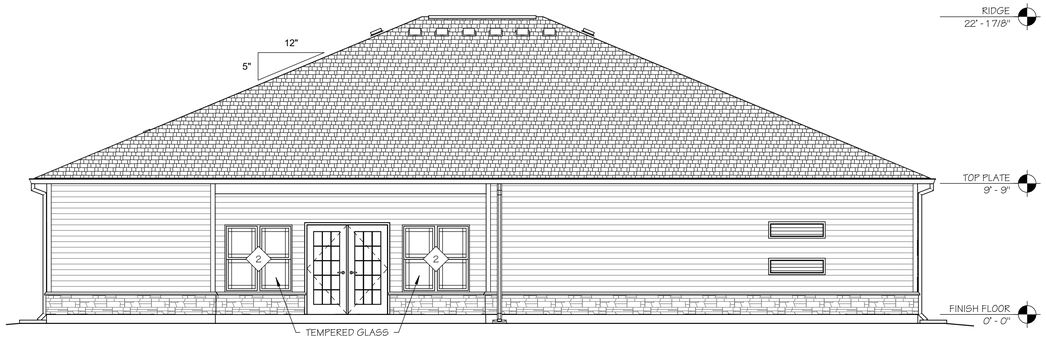
WINDOW ELEVATIONS



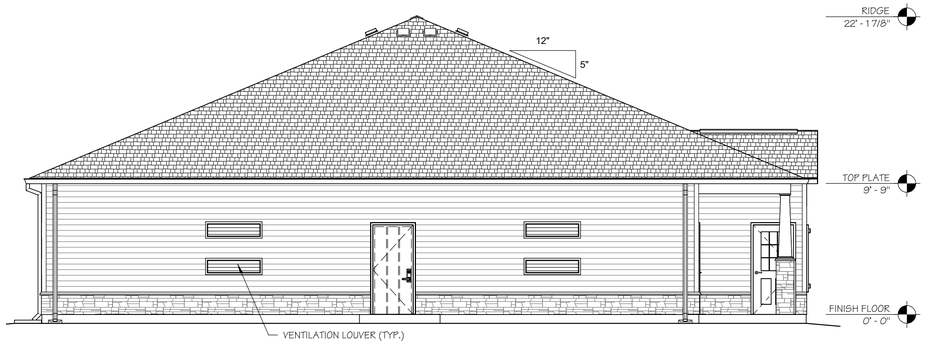
1 A3.03 FRONT ELEVATION
SCALE: 3/16" = 1'-0"



3 A3.03 RIGHT SIDE ELEVATION
SCALE: 3/16" = 1'-0"



2 A3.03 REAR ELEVATION
SCALE: 3/16" = 1'-0"



4 A3.03 LEFT SIDE ELEVATION
SCALE: 3/16" = 1'-0"

EXTERIOR ELEVATIONS

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
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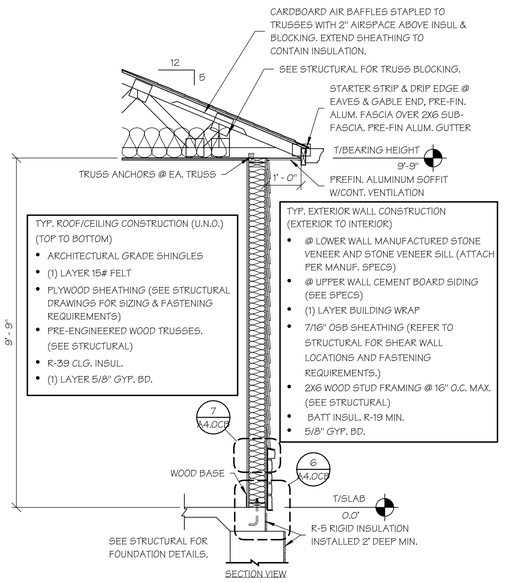
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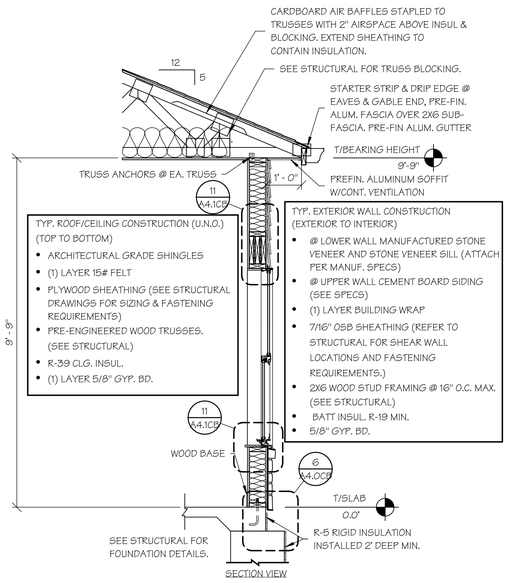
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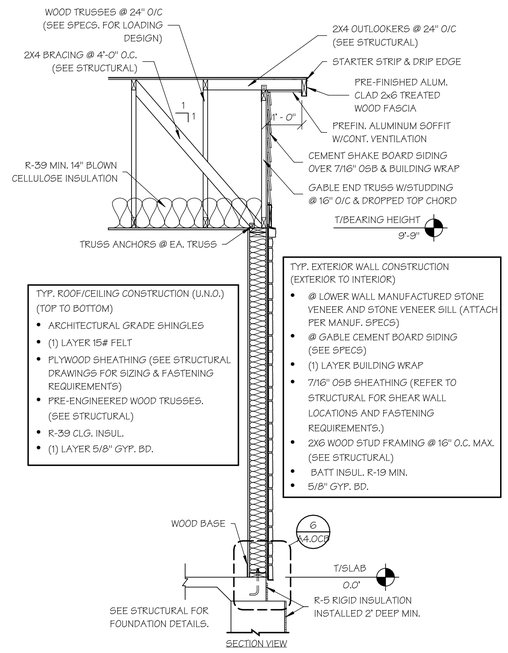
1 M4.0CB — WALL SECTION W/ SILL STONE

SCALE: 1/2" = 1'-0"



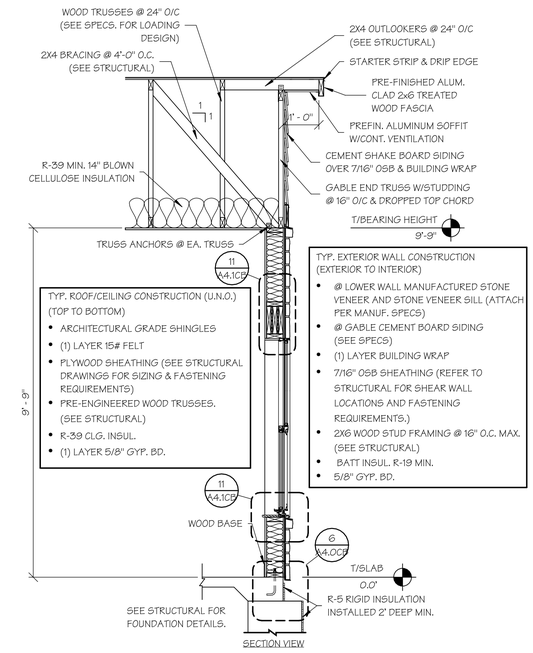
2 M4.0CB — WALL SECTION W/ SILL STONE W/ WINDOW

SCALE: 1/2" = 1'-0"



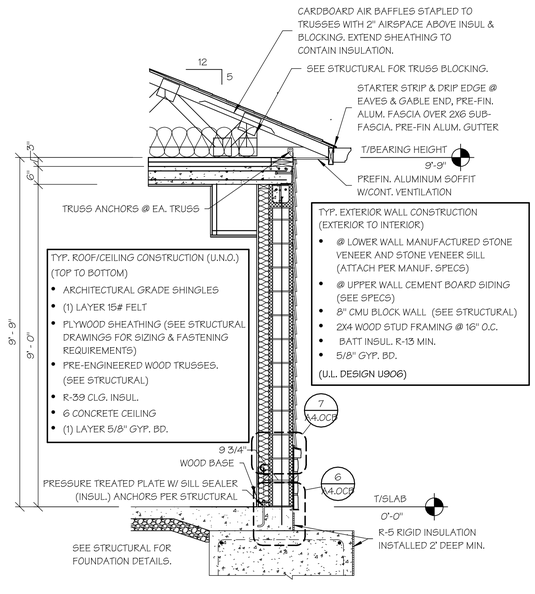
3 M4.0CB — WALL SECTION W/ FULL STONE @ GABLE

SCALE: 1/2" = 1'-0"



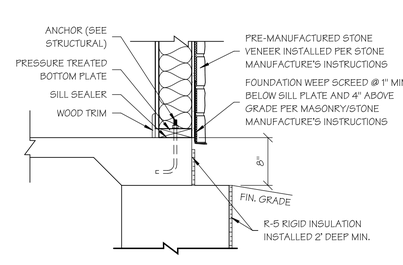
4 M4.0CB — WALL SECTION W/ FULL STONE @ GABLE W/ WINDOW

SCALE: 1/2" = 1'-0"



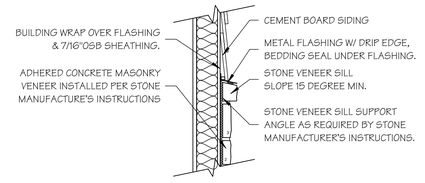
5 M4.0CB — WALL SECTION SIDING OVER STONE BLOCK WALL

SCALE: 1/2" = 1'-0"



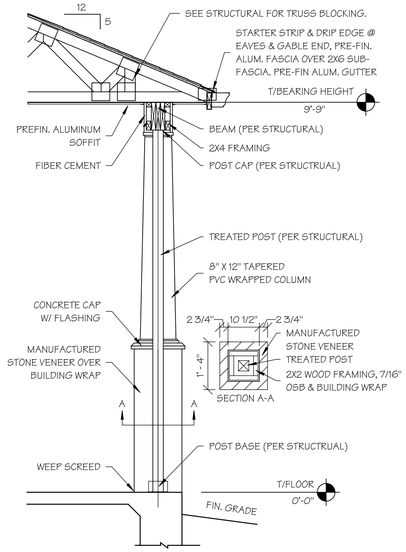
6 M4.0CB — FLASHING DETAIL

SCALE: 1" = 1'-0"



7 M4.0CB — WALL FLASHING DETAIL

SCALE: 1" = 1'-0"



8 M4.0CB — PORCH COLUMN SECTION

SCALE: 1/2" = 1'-0"

WALL SECTIONS

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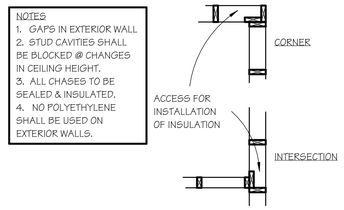
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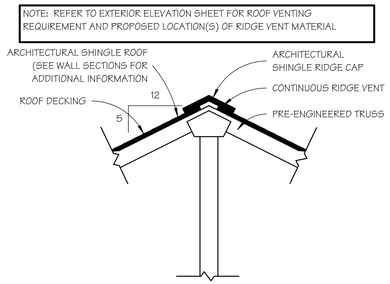
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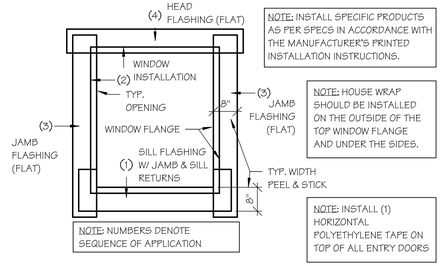
EXT. WALL / ADVANCED FRAMING DETAIL

1 A4.1CB SCALE: 1/2" = 1'-0"



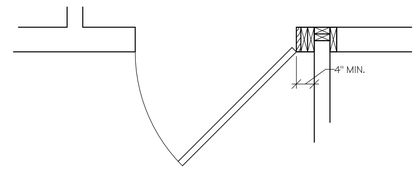
ROOF VENT DETAIL

2 A4.1CB SCALE: 3/4" = 1'-0"



WINDOW FLASHING

3 A4.1CB SCALE: 1/2" = 1'-0"



TYP. DOOR FRAMING DETAIL

4 A4.1CB SCALE: 3/4" = 1'-0"

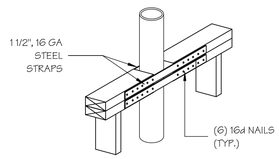
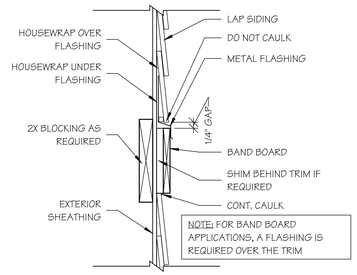


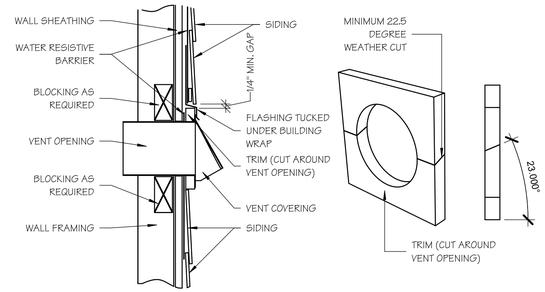
PLATE CUT DETAIL

5 A4.1CB SCALE: 1" = 1'-0"



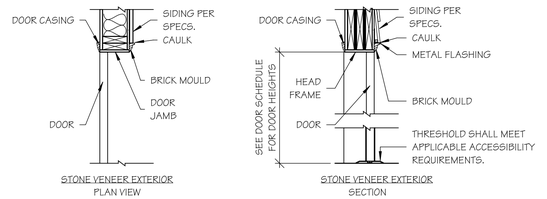
BAND BOARD DETAIL

6 A4.1CB SCALE: 1 1/2" = 1'-0" (STONE VENEER SIMILAR)



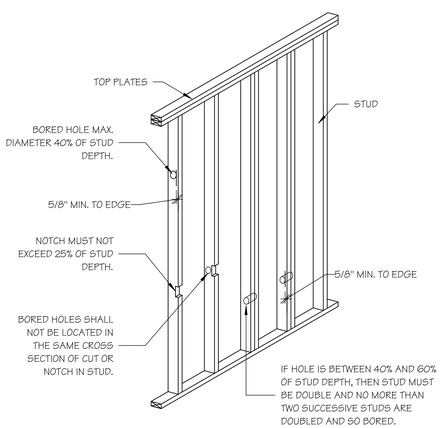
DRYER VENT IN SIDING DETAIL

7 A4.1CB SCALE: 1/2" = 1'-0" (STONE VENEER SIMILAR)



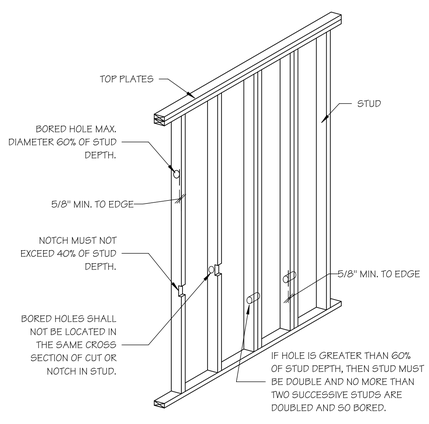
WALL SECTIONS AND DETAILS AT DOORS

8 A4.1CB SCALE: 3/4" = 1'-0"



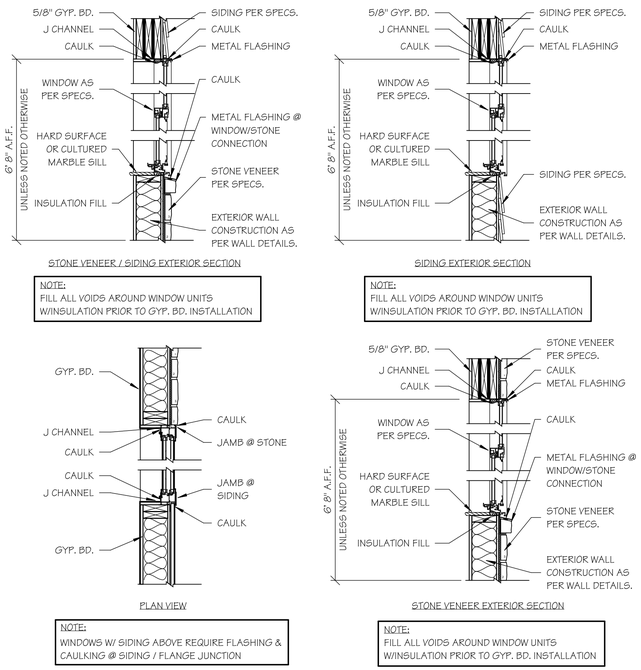
LOAD BEARING WALL NOTCHING & BORING HOLE DETAILS

9 A4.1CB SCALE: 1/2" = 1'-0"



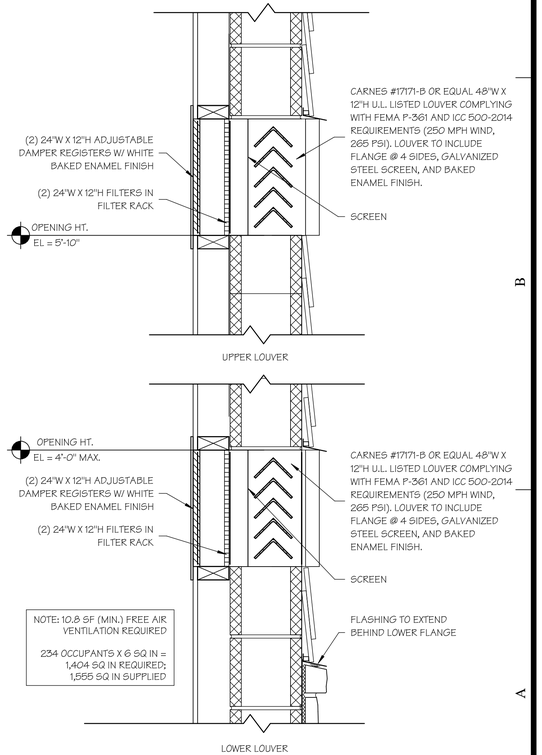
NON-LOAD BEARING WALL NOTCHING & BORING HOLE DETAILS

10 A4.1CB SCALE: 1/2" = 1'-0"



WALL SECTIONS AND DETAILS AT WINDOWS

11 A4.1CB SCALE: 3/4" = 1'-0"



NATURAL VENTILATION LOUVER @ STONE & SIDING EXTERIOR

12 A4.1CB SCALE: 1 1/2" = 1'-0"

FRAMING DETAILS

ISSUE SET

SHEET NO. A4.1CB

JOB NO. 4341

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022

MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

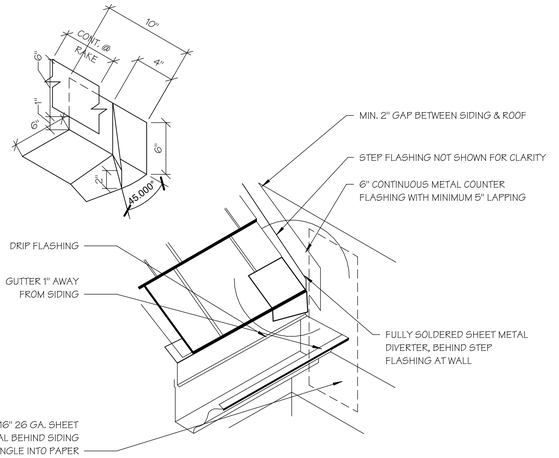
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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19 AUG 2022

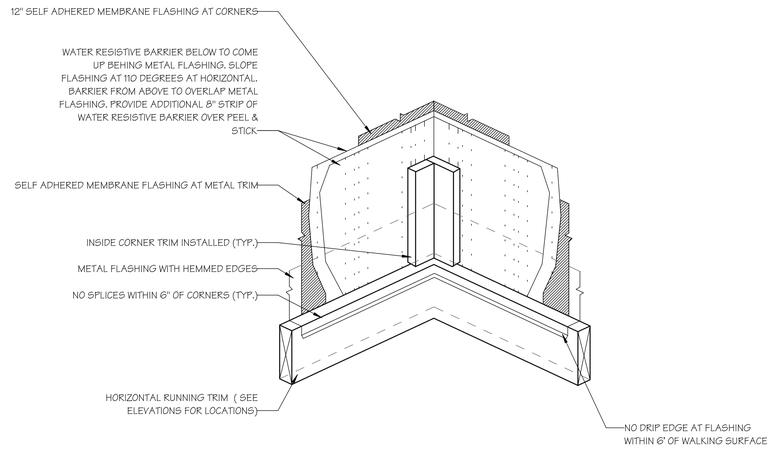
ISSUE/REVISIONS
1 19 AUG 2022 ISSUE SET

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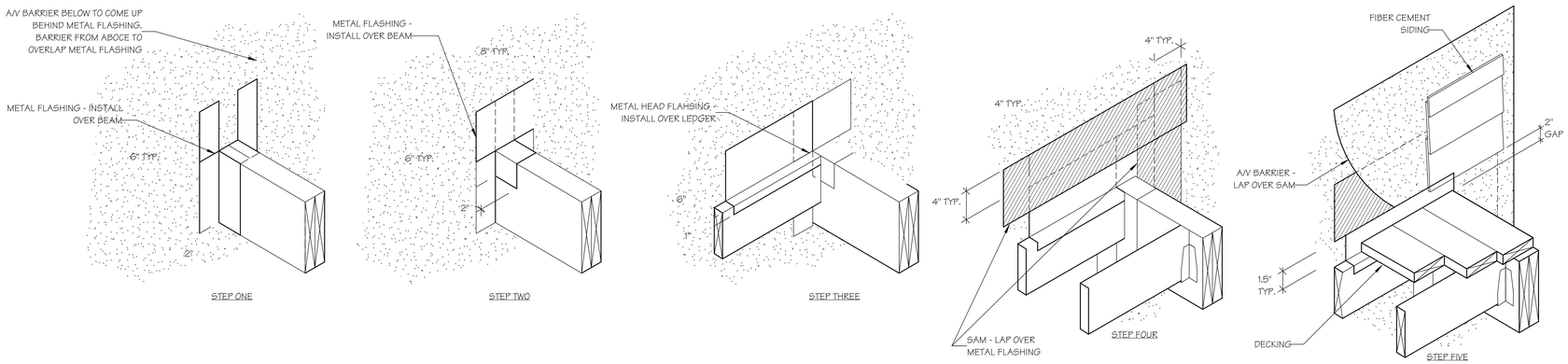
1 M2.28 ROOF DIVERTER FLASHING

SCALE: 1 1/2" = 1'-0"



2 M2.28 CORNER FLASHING AND TRIM

SCALE: 1 1/2" = 1'-0"



3 M2.28 FLASHING AT DECK LEDGER

SCALE: 1 1/2" = 1'-0"

FLASHING DETAILS

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA#1173

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1ST ISSUE
19 AUG 2022

ISSUE/REVISIONS

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SHEET NO.
A4.2CB

JOB NO.
4341

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Design No. U906

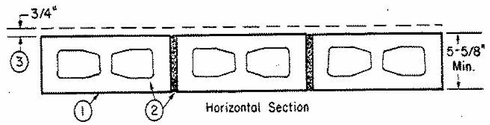
March 02, 2020

Bearing Wall Rating — 2 HR.

Nonbearing Wall Rating — 2 HR.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Concrete Blocks* —** Nominal 6 by 8 by 16 in, hollow or solid. Various designs. Classification (2 hr). See **Concrete Blocks** category for list of eligible manufacturers.

ANCHOR CONCRETE PRODUCTS INC

GAGNE & SON CONCRETE BLOCK INC

GLENWOOD MASONRY PRODUCTS

Allowable compressive stress of 57% of max allowable compressive stress in accordance with the empirical design method.

OLDCASTLE APG SOUTH INC, DBA ADAMS PRODUCTS

WESTBROOK CONCRETE BLOCK CO INC

Allowable compressive stress of 75.6% of max allowable compressive stress in accordance with the empirical design method.

2. **Mortar —** Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. **Portland Cement Stucco or Gypsum Plaster —** Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1).

4. **Foamed Plastic* —** (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
ATLAS ROOFING CORP — "EnergyShield Pro Wall Insulation", "EnergyShield Pro 2 Wall Insulation", EnergyShield CGF Pro and EnergyShield Ply Pro

CARLISLE COATINGS & WATERPROOFING INC — Type R2+ SHEATHE

DUPONT DE NEMOURS, INC. — Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP), TUFF-R™ ci Insulation, Thermax Butler Stylwall Insulation Board and Thermax Morton Heavy Duty Insulation Board

FIRESTONE BUILDING PRODUCTS CO L L C — "Enverge™ CI Foil Exterior Wall Insulation" and "Enverge™ CI Glass Exterior Wall Insulation"

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Types "Xci-Class A", "Xci 286", "Xci Foil (Class A)"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — Types "TSX-8500", "ECOMAXci FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAXci", "ECOMAXci FR Air Barrier", "Thermasheath-XP", "Thermasheath", "Durasheath", "Thermasheath-3", "Durasheath-3".

4A. **Building Units —** As an alternate to Item 5, min. 1-in thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.
RMAX, A BUSINESS UNIT OF SIKA CORPORATION — "Thermasheath-SI", "ECOBASEci", "ThermaBase-CI", "ECOMAXci FR Ply", "ECOMAXci Ply"

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2020-03-02

Design No. P556

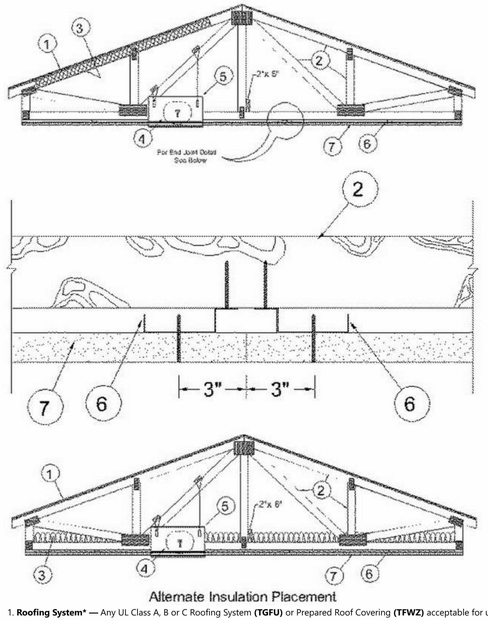
November 18, 2020

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 24 or 25 Min (See Items 3, 3A and 3B)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



Alternate Insulation Placement

1. **Roofing System* —** Any UL Class A, B or C Roofing System **(TGFU)** or Prepared Roof Covering **(TFWZ)** acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails. Nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive is optional and may be used with either nails or staples.

2. **Trusses —** Pitch or Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together min.0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. area in the plane of the truss of 21 sq/ft. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts and blankets (Item 3) are used as shown in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the plywood sheathing.

3. **Batts and Blankets* —** (Optional) -Glass fiber insulation, secured to the wood structural panesl with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The Finish Rating is 24 min. when the insulation is draped over the resilient channels and gypsum board ceiling membrane and 25 min. when it is installed on underside of the plywood deck or when it is omitted.

3A. **Loose Fill Material* —** As an alternate to Item 3 — Any thickness of loose fill material bearing the UL Classification Marking for Surface Burning Characteristics, having a min density of 0.5 pcf, fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. The finished rating when loose fill material is used has not been determined.

3B. **Fiber, Sprayed* —** As an alternate to Items 3 and 3A (not evaluated for use with Items 6B, 6C, 6D and 6E) — Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft3, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft3 over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft3 behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber.
U S GREENFIBER L L C — INS735, INS745, INS750LD, and SANCTUARY for use with wet or dry application. INS510LD, INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used for dry application only.

3C. **Foamed Plastic* —** (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft^3 density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling radiation damper in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. . Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.
SES FOAM INC — Sucraseal

3D. **Foamed Plastic* —** (As alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft^3 or 2.0 lb/ft^3 density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a ceiling radiation damper in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.
BASF CORP — Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3E. **Foamed Plastic* —** (As an alternate to Item 3 - Not Shown) — Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 lb/ft^3 density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5B) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. . Limited to resilient channels, Item 6 only, no Item 6 alternates. The finished rating when this insulation is used has not been determined.
SES FOAM INC — EasySeal.5

4. **Air Duct* —** Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. **Ceiling Damper* —** (For use with Air Duct Item 4) — Max 14 in. long by 14 in. wide by 18 in. high ceiling damper with boot or box assembly, fabricated from galv steel. The aggregate area of the register opening(s) through the ceiling membrane shall not exceed 98 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Model 50 w/Boot, 50EA w/Boot, 51 w/Boot, 50 w/Box, 50EA w/Box or 51 w/Box.

AIRVAC INDUSTRIES — Series AVI-50 w/Boot, AVI-50EA w/Boot, AVI-51 w/Boot, AVI-50 w/Box, AVI-50EA w/Box, AVI-51 w/Box.

5A. **Ceiling Damper* —** (For use with Air Duct Item 4) — Max 12 in. diameter damper and insulated register box assembly. The maximum size of the register box assembly is nom. 20 in. long by 20 in. wide and 4 in. high fabricated from galv. Steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Series 57

AIRVAC INDUSTRIES — Model AVI-57IB

5B. **Ceiling Damper* —** (For use with Air Duct Item 4) — Max 20 in. long by 16 in. wide by 4 in. high rectangular damper with duct board plenum box assembly. The maximum outer dimensions of the plenum box assembly is 23-1/2 in. long by 19-1/2 in. wide and 17 in. high fabricated from 6pcf, 1-1/2 to 2 in. thick Knauf Air Duct Board M*. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 160 sq in. per 100 sq ft ceiling area. Damper assembly installed in accordance with the manufacturers installation instructions.
AIRE TECHNOLOGIES INC — Series 58

AIRVAC INDUSTRIES — Series AVI-58

6. **Furring Channels —** Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When batt and blanket material, Item 3, is draped over the resilient channel/gypsum board ceiling membrane, the spacing shall be 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at board butt joints (spaced 6 in. OC) as shown in the above illustration.

6A. **Steel Framing Members* - (Not Shown) —** As an alternate to Item 6, furring channels and Steel Framing Members* as described below:

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses. When batt insulation (Item 3) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

6B. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6 and 6A.

a. **Furring Channels —** Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 3. Two layers of gypsum board attached to furring channels as described in Item 7.

b. **Cold Rolled Channels —** 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. **Blocking —** Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location.

d. **Steel Framing Members* —** Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Bc) on alternating trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.
KINETICS NOISE CONTROL INC — Type ICW.

6C. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6, 6A and 6B.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 16 in. OC when no insulation (Item 3, 3A or 3B) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3, 3A or 3B) is fitted in the concealed space. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. **Steel Framing Members* —** Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (24 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.
PLITEQ INC — Type Genie Clip

6D. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6, 6A, 6B and 6C.

a. **Main runners —** Installed perpendicular to trusses — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. **Cross tees or channels —** Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. **Wall angles or channels —** Used to support steel framing member ends and for screw-attachment of the gypsum board — Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC.
CGC INC — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

6E. **Alternate Steel Framing Members* —** (Not Shown) - As an alternate to items 6, 6A, 6B, 6C and 6D, furring channels and Steel Framing Members as described below.

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Item 3, 3A or 3B) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire.Additional clips are required to hold the Gypsum Butt joints as described in Item 7.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6F. **Steel Framing Members* —** (Not Shown) - As an alternate to Items 6 through 6E- Not for use with Items 3, 3A, or 3B. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.
USG INTERIORS LLC — Type DGL or RX

6G. **Alternate Steel Framing Members* —** (Not Shown) - As an alternate to items 6 through 6F furring channels and Steel Framing Members as described below.

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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FIRE RATED ASSEMBLIES

ISSUE SET

a. **Furring Channels —** Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When batt insulation (Item 3, 3A or 3B) is draped over the resilient channel/gypsum board ceiling membrane, the resilient channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b.

b. **Steel Framing Members* —** Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7.
REGUPOL AMERICA — Type SonusClip

6H. **Furring Channels — For use with American Gypsum Co. Type AG-C gypsum board only.** Resilient channels formed of 25 MSG galv steel, spaced 16 in. OC, installed perpendicular to trusses. When insulation material, Item 3, 3A or 3B, is applied over the resilient channel/gypsum board ceiling membrane, the spacing may remain at 16 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at gypsum board butt joints (spaced 6 in. OC) as shown in the above illustration.

7. **Gypsum Board* —** One layer of nom 5/8 in. thick, 48 in. wide, installed with long dimension perpendicular to resilient channels with 1 in. long Type S screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. At end joints, two resilient channels are used, extending a min of 6 in. beyond both ends of the joint. When insulation (Item 3, 3A, 3B) is draped over the resilient channel/gypsum board ceiling membrane, screws shall be installed at 8 in. OC. When **Steel Framing Members*** (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3, 3A, 3B) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3, 3A, 3B) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 6E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from end joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Butt joing furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When **Steel Framing Members*** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

When **Steel Framing Members** (Item 6G) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board *is* installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

AMERICAN GYPSUM CO — Types AG-C

CGC INC — Types C, IP-X2, IPC-AR.

CERTAINTEED GYPSUM INC — Type C

CERTAINTEED GYPSUM INC — Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C — Type TG-C

NATIONAL GYPSUM CO — Types eXP-C, FSW-G, FSW-C, FSK-G, FSK-C.

THAI GYPSUM PRODUCTS PCL — Type C

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR.

7A. **Gypsum Board* —** For use with **Steel Framing Members** (Item 6D) when **Batts and Blankets*** (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five gypsum board screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at gypsum board end joints, gypsum board screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with gypsum board screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with gypsum board screws spaced 12 in. OC. Joints treated as described in Item 7. For use with **Steel Framing Members*** (Item 6D) when **Batts and Blankets*** (Item 3) are used - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.
CGC INC — Type C or IP-X2.

UNITED STATES GYPSUM CO — Type C or IP-X2.

USG BORAL DRYWALL SFZ LLC — Type C

USG MEXICO S A DE C V — Types C or IP-X2.

7B. **Gypsum Board* (As an alternative to Items 7 and 7A) —** Nom 5/8 in. thick, 48 in. wide gypsum board, installed and secured as described in Items 7 and 7A with max screw spacing 8 in. OC.
CGC INC — Type ULIX

UNITED STATES GYPSUM CO — ULIX

8. **Finishing System —** (Not Shown)— Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

9. **Netting —** (Not Shown) - For use when Sprayed Fiber* (Item 3B) is used - Woven netting material fastened to underside of each truss with staples, with side joints overlapped.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2020-11-18

FIRE RATED ASSEMBLIES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
REGISTERED ARCHITECT
19 AUG 2022
MARTIN RANDALL
PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA01173

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FINISH SCHEDULE

Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish
CLOSET	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COMMON AREA	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
COMPUTER AREA	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
ENTRY PORCH	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
FITNESS ROOM	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
KITCHEN	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
LAUNDRY	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
MECH.	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
MEN'S	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
OFFICE	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
PANTRY	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
REAR PATIO	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
SIDE PORCH	SEALED CONCRETE	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH	NO ADDITIONAL FINISH
STORAGE	SEALED CONCRETE	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
STORM SHELTER / COMMUNITY ROOM	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.
WOMEN'S	VINYL PLANK	5 1/4" PRIMED & PAINTED WHITE PINE BASE	PAINTED KNOCKDOWN FINISH ON GYP. BD.	PAINTED KNOCKDOWN FINISH ON GYP. BD.

COMM. BLDG. BATH NOTES

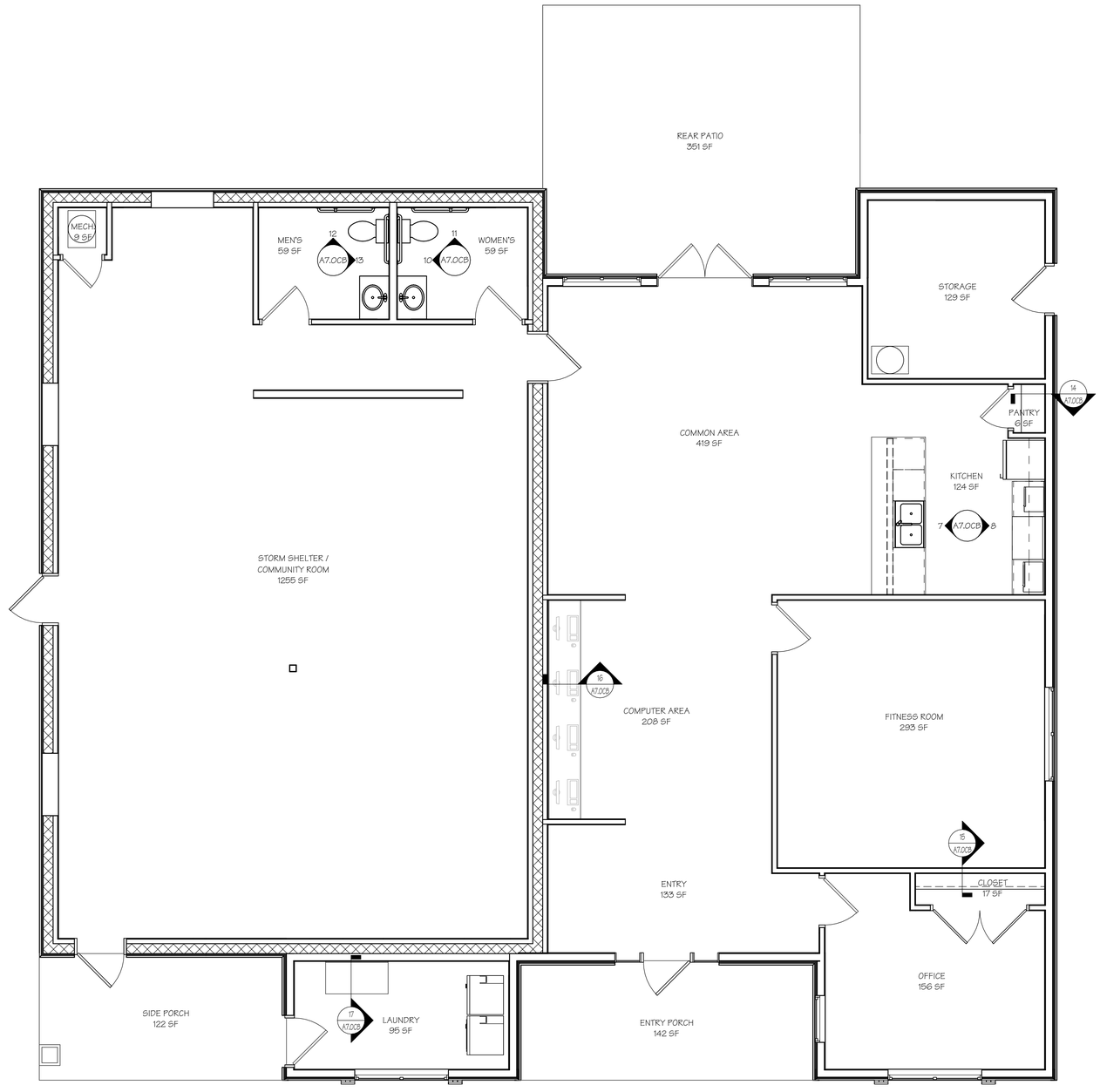
1)	INSTALL GRAB BARS WITH ROUND HEAD SCREWS.
2)	PROVIDE & INSTALL (1) 36" HORIZONTAL GRAB BAR BEHIND & (1) 42" HORIZONTAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 34" A.F.F. & (1) 18" VETICAL GRAB BAR BESIDE WATER CLOSET ON WALL @ 40" A.F.F. & 40" FROM NEAR WALL. (SEE BATH ELEVATIONS SHEET A7.0)
3)	BOTTOM OF MIRROR TO REST ON COUNTERTOP BACKSPLASH.
4)	VANITY SINK FAUCET TO BE LEVER TYPE, PIPES & TRAP TO BE WRAPPED W/ "TRAP WRAP" BY BROCAR PRODUCTS, INC. OR EQUAL.
5)	EXTEND VINYL FLOORING BENEATH LAV. SPACE.

COMM. BLDG. KITCHEN NOTES

1)	COUNTER HEIGHT SHALL BE 34" A.F.F. TO TOP OF SINK.
2)	EXTEND VINYL FLOORING BENEATH SINK SPACE AND THE 30" WORKSPACE.
3)	TOE KICK SPACE @ BOTTOM OF BASE CABINETS SHALL REMAIN 4" MIN. (STANDARD)
4)	TOP OF WALL TELEPHONE OUTLET TO BE 46" MAX. A.F.F.
5)	SWITCHES & OUTLETS IN KITCHEN ABOVE BASE CABINETS SHALL BE 40" A.F.F. TO BOTTOM OF SWITCH PLATE, SO AS NOT INTERFERE WITH WALL CABINET.
6)	INSULATE EXPOSED PIPING BELOW KITCHEN SINK W/ "TRAP WRAP" BY BROCAR PRODUCTS, INC. OR EQUAL.
7)	DISHWASHER HOOKUPS ARE UNDER SINK, ACCESS OPENING IS TO BE MADE THROUGH END PANEL OF SINK.

GENERAL NOTES

1)	CONTRACTOR SHALL FURNISH & INSTALL 4" BUILDING NUMBERS FOR COMMUNITY BUILDING AS REQUIRED BY CITY OR LOCAL POSTMASTER.
2)	CERTIFICATION OF R-39 CEILING INSULATION MUST BE POSTED IN ATTIC.
3)	CLOSETS SHALL HAVE EPOXY-COATED WIRE SHELVING.
4)	PRIME & PAINT WALLS BEHIND MILLWORK.
5)	STAIN & SEAL MILLWORK AS SPECIFIED.
6)	APPLY SILCONE CAULK BETWEEN CONCRETE AND BOTTOM OF THE DRYWALL.
7)	SEAL CONCRETE FLOOR TO REDUCE MOISTURE PENETRATION.
8)	APPROPRIATELY SIZED BLINDS SHALL BE PROVIDED AND INSTALLED FOR EACH GLAZED OPENING, INCLUDING PAIRED WINDOWS (PROVIDED WITH TWO SETS) AND DOOR GLAZING WHERE HALF LITE OR LARGER.



1 A6.0CB COMMUNITY BUILDING FINISH PLAN
SCALE: 1/4" = 1'-0"

FINISH PLAN, FINISH SCHEDULE & NOTES

ISSUE SET

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT

19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200

WALLACE ARCHITECTS, LLC
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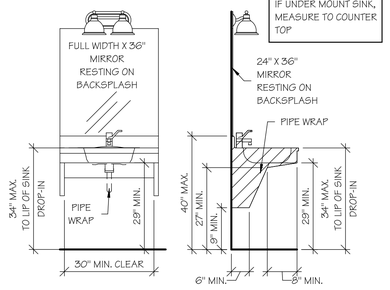
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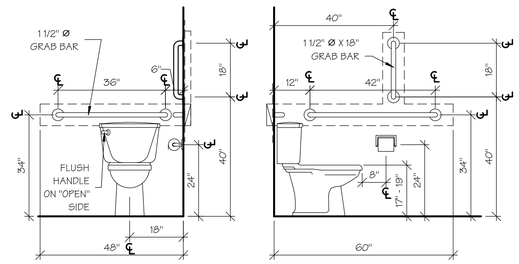
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NOTE:
CONTRACTOR OPTION TO ORDER TUBS, SHOWERS WITH FACTOR INSTALLED GRAB BAR BLOCKING. IF SELECTED, BLOCKING MUST STILL COVER AT LEAST THE AREAS SHOWN.

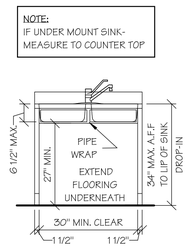
GRAB BAR BLOCKING NOTE:
MANUFACTURER INSTALLED INTEGRAL BACKING OR 2X8 BLOCKING FOR GRAB BARS



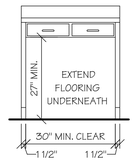
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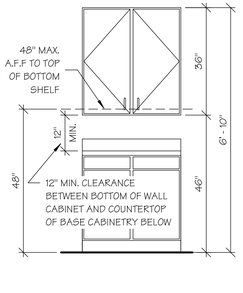
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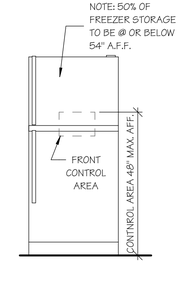
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SCALE: 1/2" = 1'-0"



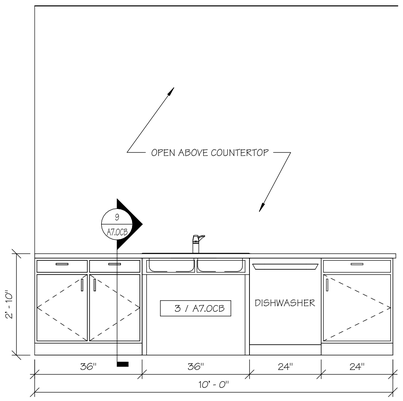
4 A7.0CB — OPEN FRONT WORK STATION
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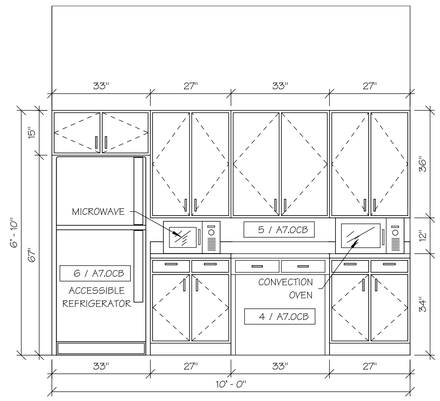
5 A7.0CB — UFAS WALL CABINET
SCALE: 1/2" = 1'-0"



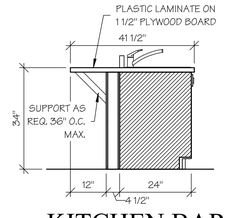
6 A7.0CB — ACCESSIBLE REFRIGERATOR
SCALE: 1/2" = 1'-0"



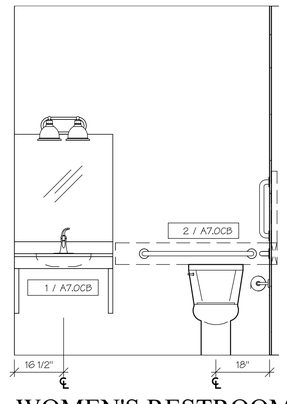
7 A7.0CB — KITCHEN ELEVATION 1
SCALE: 1/2" = 1'-0"



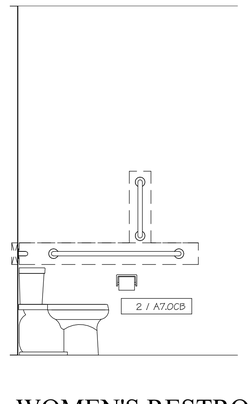
8 A7.0CB — KITCHEN ELEVATION 2
SCALE: 1/2" = 1'-0"



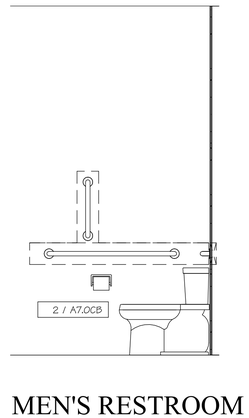
9 A7.0CB — KITCHEN BAR SECTION
SCALE: 1/2" = 1'-0"



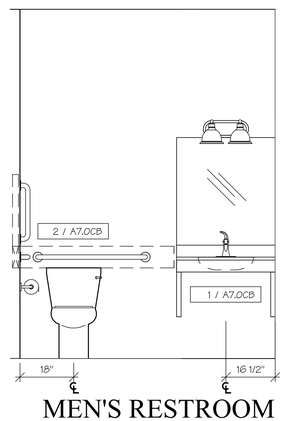
10 A7.0CB — WOMEN'S RESTROOM ELEVATION 1
SCALE: 1/2" = 1'-0"



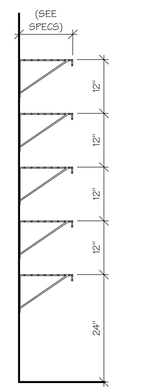
11 A7.0CB — WOMEN'S RESTROOM ELEVATION 2
SCALE: 1/2" = 1'-0"



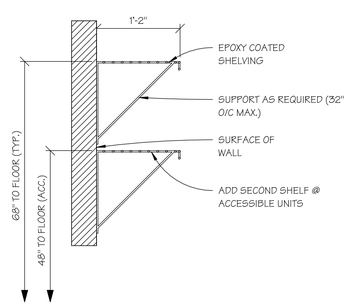
12 A7.0CB — MEN'S RESTROOM ELEVATION 1
SCALE: 1/2" = 1'-0"



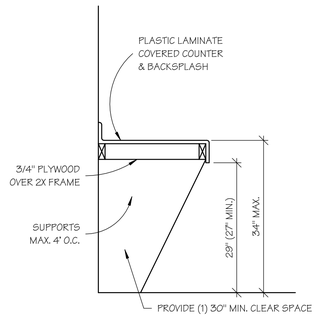
13 A7.0CB — MEN'S RESTROOM ELEVATION 2
SCALE: 1/2" = 1'-0"



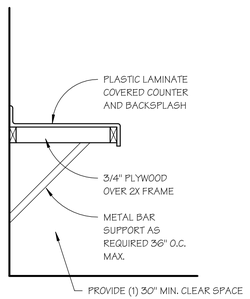
14 A7.0CB — SHELVING
SCALE: 3/4" = 1'-0"



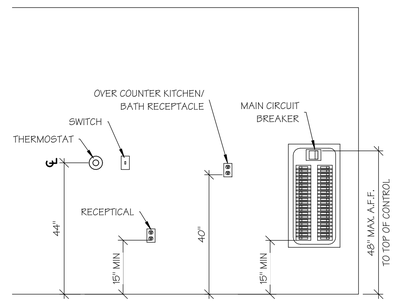
15 A7.0CB — CLOSET SHELF
SCALE: 1" = 1'-0"



16 A7.0CB — COMPUTER COUNTER
SCALE: 3/4" = 1'-0"



17 A7.0CB — LAUNDRY COUNTER
SCALE: 3/4" = 1'-0"



18 A7.0CB — ELECTRICAL MOUNTING HEIGHTS
SCALE: 1/2" = 1'-0"

INTERIOR ELEVATIONS, NOTES AND DETAILS

ISSUE SET

SHEET NO. A7.0CB

JOB NO. 4341

8/18/2022 9:53:04 AM

STATE OF OKLAHOMA
MARTIN RANDALL PORTER
6574
LICENSED ARCHITECT
19 AUG 2022
MARTIN RANDALL PORTER ARCHITECT
LICENSE #6574

CROSSROADS AT WESTCHESTER CIRCLE
LAWTON, COMANCHE COUNTY, OKLAHOMA

Wallace ARCHITECTS LLC
Columbia, MO
P 573-256-7200
WALLACE ARCHITECTS, LLC
OKLAHOMA STATE CERTIFICATE OF AUTHORITY: CA0173

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1ST ISSUE
19 AUG 2022

ISSUE/REVISIONS
1 19 AUG 2022 ISSUE SET

MECHANICAL SYMBOL SCHEDULE

WST	WASTE PIPING	
V	VENT PIPING	
VW	VENT PIPING OVER WASTE PIPING	
CW	COLD WATER PIPING	
HW	HOT WATER PIPING	
	PIPE FITTINGS (ELL DOWN – TEE DOWN – TEE UP)	
	VALVE	– CHECK VALVE
	UNION	– STRAINER
	GAS COCK	– BALANCING COCK
A200 12x12	AIR TERMINAL TAG. "A" INDICATES MARK ON GRILLE AND REGISTER SCHEDULE.	
	"200" INDICATES AIR VOLUME IN CFM. "12x12" INDICATES FACE SIZE.	
	AIR TERMINALS (REGISTER – GRILLE)	
	FIRE DAMPER	
	SMOKE DAMPER	
	MANUAL DAMPER	
	MOTORIZED DAMPER	
T1 H1	THERMOSTAT – HUMIDISTAT (ZONE SUBSCRIPT)	
WST V	WASTE	– VENT
CO VTR	CLEAN OUT	– VENT THROUGH ROOF
SA RA	SUPPLY AIR	– RETURN AIR
FA EA	FRESH AIR	– EXHAUST AIR
N/E E/R	NEW CONNECTS TO EXISTING	– EXISTING TO REMAIN
	PENDANT MOUNTED SPRINKLER HEAD	
	UPRIGHT MOUNTED SPRINKLER HEAD	
	PENDANT HEAD BELOW / UPRIGHT HEAD ABOVE	
	SIDEWALL SPRINKLER HEAD	
	EXTENDED COVERAGE SIDEWALL SPRINKLER HEAD	

ELECTRICAL SYMBOL SCHEDULE

P2–22,24	HOME RUN CIRCUIT TO PANEL P2, CIRCUITS 22,24
	EACH ARROW INDICATES ONE CIRCUIT
	SHORT HATCH MARKS INDICATE # OF PHASE CONDUCTORS
	LONG HATCH MARKS INDICATE # OF NEUTRAL CONDUCTORS
	NO HATCH MARK INDICATES TWO CONDUCTORS
E	ELECTRICAL SERVICE OR FEEDER WIRING
	WIRING IN WALL OR CEILING – WIRING IN FLOOR
	RECEPTACLE OUTLET (DUPLEX – QUADRUPLEX – SPECIAL POWER)
	COMMUNICATIONS OUTLET (TELEPHONE – CATV – DATA/PHONE)
3 D 4 P S K T	WALL SWITCH SINGLE POLE (3–WAY – DIMMER – 4–WAY – PILOT – SPEED – KEYED – TIMER) 48" STANDARD HEIGHT
	INCANDESCENT OR HID STYLE LIGHT FIXTURE (CEILING MOUNTED – WALL MOUNTED)
FS S	FLUORESCENT STYLE LIGHT FIXTURE (ENCLOSED – STRIP) (S INDICATES SPLIT WIRED)
	EXIT LIGHT – EMERGENCY LIGHT – EMERGENCY/EXIT LIGHT
C	OTHER RECEPTACLE OUTLET (CLOCK – FLOOR – SPLIT WIRED)
	ELECTRIC PANEL
S T	SPEAKER – PUSH TO TALK
J P	JUNCTION BOX – PULL BOX
F D	DISCONNECT (FUSED – NONFUSED)
S C	STARTER – CONTACTOR
5–208–3	ELECTRIC MOTOR (5 HP – 208V – 3 PHASE)
T1 H1	THERMOSTAT – HUMIDISTAT (ZONE SUBSCRIPT)
42 G W	OUTLET MODIFIERS (MOUNT HEIGHT INCHES (18 STANDARD) – GFI PROTECTED – WEATHER PROOF GFI)
S H	SMOKE DETECTOR – HEAT DETECTOR
F A	MANUAL PULL STATION – ALARM
M R	MAGNETIC DOOR HOLDER – INTERLOCK RELAY
	END OF LINE RESISTOR
FACP	FIRE ALARM CONTROL PANEL
DIAL	DIALER

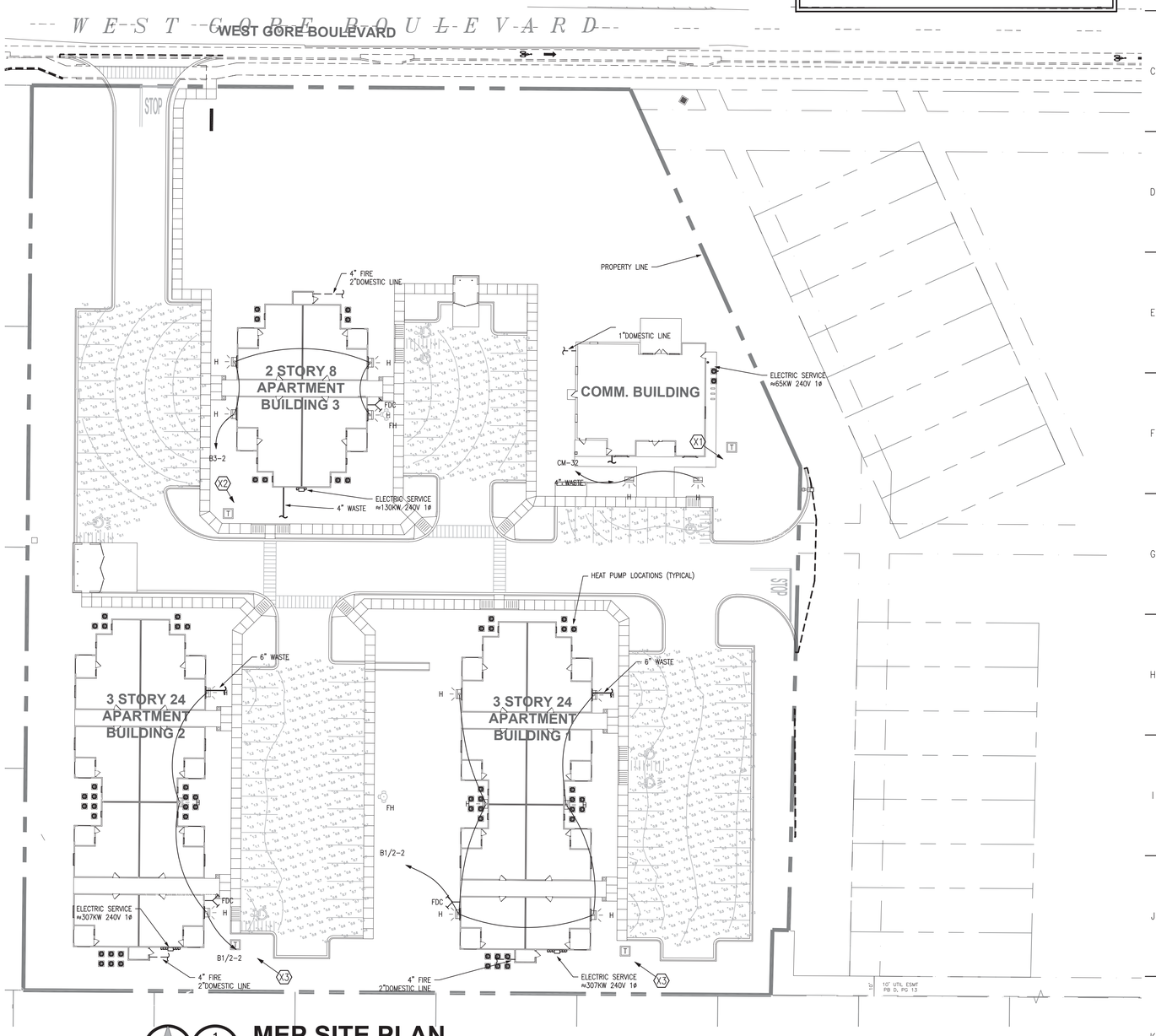
(FOR ALL SYSTEMS, ALL MEP PLANS)

GENERAL NOTES:

1. VERIFY SERVICE REQUIREMENTS FOR OWNER'S SPECIFIC EQUIPMENT PRIOR TO ROUGH–IN.
2. COORDINATE INSTALLATION OF EQUIPMENT WITH MANUFACTURERS' INSTALLATION INSTRUCTIONS PRIOR TO ROUGH–IN.
3. CONTRACTOR SHALL MAINTAIN FIRE RATING OF ANY PENETRATION AND SHALL SEAL ANY PENETRATION IN A FLOOR, CEILING, OR EXTERIOR WALL.

KEYED NOTES:

(X) I.E. X1, X2: PROPOSED TRANSFORMER LOCATION. CONTRACTOR SHALL VERIFY WITH UTILITY. COMPARE PROVIDED TRANSFORMER SIZES & LOCATIONS (FEEDER LENGTHS) TO AIC SCHEDULE (ME3) TO DETERMINE IF THEY ARE WITHIN THE CALCULATED ALLOWANCES.



MEP SITE PLAN

1 / ME1

SCALE: 1" = 30'–0"

FREDDIE L. MALICOAT - ENGINEER
OK# 17945
REGISTERED PROFESSIONAL ENGINEER
FREDDIE L MALICOAT 17945 OKLAHOMA
08–18–22

MALICOAT - WINSLOW ENGINEERS, INC.
OKLAHOMA STATE CA2693PE – RENEWAL DATE: 6–30–23
5649 N. CLEARVIEW ROAD
COLUMBIA, MISSOURI 65202
TEL 573–875–1300
FAX 573–875–1305
FREDDIE MALICOAT, P.E.

CROSSROADS AT WESTCHESTER CIRCLE

WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08–18–22

REVISIONS :

TITLE : MEP SITE PLAN

SHEET : ME1 OF ME4

PROJECT : 22028

T:\Job\22\22028\22028.dwg, 8/19/2022 11:00:52 AM, JaredR

HVAC EQUIPMENT SCHEDULE

GOODMAN HEAT PUMPS / AIR HANDLERS

MARK	HTG KW IN	HTG BTU OUT	TOTAL CLG	SENS CLG	CFM @ 0.5"	O.A. CFM	V / ø	FLA	MOCP	MODEL	REMARKS
F1	5.0	12,788	15,000	11,250	500	SEE UNIT LIGHTING	240 / 1	25.3	40	ASPT-25-B-14/HKSC0 5XC	1,2,3,6
HP1							240 / 1	8.5	20	GSZ14-018-1	
F2	5.0	12,788	18,000	13,500	600	SEE UNIT LIGHTING	240 / 1	25.3	40	ASPT-25-B-14/HKSC0 5XC	1,2,6
HP2							240 / 1	8.5	20	GSZ14-018-1	
F3	5.0	12,788	24,000	18,000	800	SEE UNIT LIGHTING	240 / 1	25.3	40	ASPT-25-B-14/HKSC0 5XC	1,2,6
C3							240 / 1	14.6	30	GSZ14-024-1	
F4	8.0	27,280	30,000	22,500	1,000	75	240 / 1	36.15	50	ASPT-37-B-14/HKSC0 8XC	1,2,6
HP4							240 / 1	17.8	30	GSZ14-030-1	

LG MINI SPLIT SYSTEMS

MARK	STYLE	HTG BTU OUT	TOTAL CLG	SENS CLG	CFM	O.A. CFM	V / ø	FLA	MOCP	MODEL	REMARKS
I1	WALL	10,900	9,000	6,750	450	–	240 / 1	7.4	20	LS090HSV5	1,2,4,5
O1											

LG MULTI SPLIT CONDENSING UNITS

MARK	–	HTG BTU OUT	TOTAL CLG	SENS CLG	–	–	V / ø	FLA	MOCP	MODEL	REMARKS
O2		41,000	36,000	27,000			240 / 1	30.2	50	LMU360HHV	1,2

LG MULTI SPLIT MINI COILS

MARK	STYLE	HTG BTU OUT	TOTAL CLG	SENS CLG	CFM	O.A. CFM	V / ø	FLA	–	MODEL	REMARKS
I2	WALL	21,600	18,000	13,500	250	–	240 / 1	–		LSN180HSV5	1,4,5

BROAN EXHAUST FANS

MARK	CFM	ESP	DRIVE	RPM	SONES	HP	V / ø	FLA	–	MODEL	REMARKS
EF1	80	0.100"	DIRECT	935	< 0.3	–	120 / 1	0.4	–	ZB80	1,7,8,9

GE RANGE HOOD AND MICROWAVE FANS

MARK	–	–	–	–	SONES	AMPS	V / ø	WATTS	–	MODEL	REMARKS
MW	–	–	–	–	–	–	120 / 1	1,580	–	JNM3184DPBB	1
RH	–	–	–	–	–	2.5	120 / 1	–	–	JV338HBB	1

DRYERBOX DRYER CONNECTION BOXES

MARK	–	–	–	–	–	–	–	–	–	MODEL	REMARKS
DB	–	–	–	–	–	–	–	–	–	DB-425	1

1. OR APPROVED EQUAL.
2. WITH PROGRAMMABLE STAT, ENERGY STAR RATED EQUIPMENT
3. SET INDOOR BLOWER TO LOW SPEED (500 CFM) FOR COOLING MODE.
4. WITH INTEGRAL THERMOSTAT.
5. MOUNT INDOOR UNIT WITH TOP AT 7'-0" AFF.
6. HEAT PUMPS SHALL HAVE ELECTRIC HEAT LOCKOUT WHEN UNIT IS IN THE DEFROST CYCLE.
7. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED ENCLOSURE FOR FIXTURES LOCATED IN FIRE RATED WALL OR CEILING SYSTEMS.
8. WITH FIRE DAMPER.
9. WITH TIMER FOR FRESH AIR, SEE UNIT LIGHTING FOR CFM REQUIREMENT.

GRILLE AND REGISTER SCHEDULE

MARK	MFG / MODEL	DAMPER	COLOR	DESCRIPTION
A	PRICE / 620DAL	YES	WHITE	ALL ALUMINUM DOUBLE DEFLECTION SUPPLY REGISTER WITH O.B.D. AND FIRE DAMPER.
B	PRICE / 620	NO	WHITE	WALL OR CEILING MOUNT ALL ALUMINUM RETURN AIR GRILLE.
C	PRICE / AMCD	YES	WHITE	SURFACE MOUNT ALL ALUMINUM MODULAR CORE LOUVERED FACE DIFFUSER. 4-WAY BLOW PATTERN

NOTE: ALL GRILLES, REGISTERS, AND DIFFUSERS TO BE ALL ALUMINUM UNLESS NOTED OTHERWISE. STEEL CAN BE USED IF POWDER COATED PAINT IS APPLIED. QUANTITIES, SIZES, FRAMES AND ACCESSORIES TO BE CONFIRMED BY CONTRACTOR.

FIRE DAMPER SCHEDULE

WHERE REQUIRED	LOCATION	TYPE	DESCRIPTION
UNITS	MECHANICAL	CEILING	CEILING RADIATION DAMPER REQUIRED AT MAIN DUCT TRUNK PENETRATION INTO THE RATED CEILING/FLOOR ASSEMBLY. (TYPICAL FOR ALL UNIT SUPPLY DUCT).
UNITS	CEILING	CEILING	CEILING RADIATION DAMPER REQUIRED FOR EACH CEILING SUPPLY REGISTER AT THE RATED CEILING/FLOOR ASSEMBLY PENETRATION. (TYPICAL FOR ALL SUPPLY REGISTERS).
UNITS	BATH	CEILING	CEILING RADIATION DAMPER REQUIRED FOR ALL EXHAUST FANS MOUNTED IN THE RATED CEILING/FLOOR ASSEMBLY. (TYPICAL FOR ALL EXHAUST FANS).

LIGHTING FIXTURE SCHEDULE

MARK	FIXTURE	MANUFACTURER AND MODEL NUMBER	TYPE	LAMPS #	LAMPS SIZE	MOUNTING	REMARKS
A	6IN DISK	HALO SLD6129S1EMWR	SLD	1	15	SURFACE	1
B	BATH VANITY	PROGRESS PROGRESS P3333-15	SLD	3	4	WALL	1
C	CLG FAN	PROGRESS PROGRESS P250016-129 / P2600-20WB	SLD	3	6	SURFACE	1
D	OUTDOOR CLG FAN	PROGRESS PROGRESS P2576-8030K	LED	1	18	SURFACE	1
E	SCONCE	SATCO 76-703	SFL	1	26	WALL	1
F	EMERG	LIGHTALARMS LCA-2LEDR	LED	2	6	SURFACE	1
G	EMERG/EXIT	DUAL LITE LTURW3-03L	LED	2	6	SURFACE	1,2
H	WALLPACK	LSI TLWP-LED-11L	LED	1	79	12' WALL	1,3
I	EGRESS EYE	DUAL LITE OCRSW0603L	LED	1	5	WALL	1
J	WRAP	WILLIAMS 17-4-L55/840-AF-DRV-UNV	LED	1	32	SURFACE	1

1. CONFIRM FIXTURE SELECTION WITH OWNER PRIOR TO PURCHASE.
2. REMOTE HEADS AS SHOWN.
3. VIA PHOTOCELL AND TIMER WHERE INDICATED ON PLANS.

ELECTRICAL FIXTURE SCHEDULE

MARKEL ELECTRIC HEATERS

MARK	HTG KW IN	HTG BTU OUT	V / ø	AMPS	WATTS	LENGTH	MODEL	REMARKS
EH1	1.0	3,413	120 / 1	8.3	1,000	–	E3322TD-RP (WALL)	1,2

1. OR APPROVED EQUAL.
2. WITH INTEGRAL THERMOSTAT.

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	MODEL NUMBER
WC1	WATER CLOSET	AMERICAN STANDARD 3517C.101.020, WHITE VITREOUS CHINA, 15" HEIGHT, ELONGATED BOWL,
		FLUSH TANK, BEMIS 1200SLOWA WHITE SEAT. SUPPLY & STOP.
WC2	WATER CLOSET	AMERICAN STANDARD 3517A.101.020, WHITE VITREOUS CHINA, 16 1/2" HEIGHT, ELONGATED BOWL,
		FLUSH TANK, ADA HEIGHT. BEMIS 1200SLOWA WHITE SEAT, SUPPLY & STOP.
L1	LAVATORY	AMERICAN STANDARD 0476.028.020, WHITE VITREOUS CHINA, SELF-RIMMING, MOEN 8917 FAUCET,
		POPUP DRAIN, P-TRAP, SPEEDWAY 1920A SUPPLIES AND STOPS - FOR EXPOSED PIPING
		WITH TRUEBRO INSULATION KIT.
L2	LAVATORY	AMERICAN STANDARD 0476.028.020, WHITE VITREOUS CHINA, SELF-RIMMING, MOEN 8915 FAUCET,
		DEARBORN BRASS 760-1 GRID DRAIN, P-TRAP, SPEEDWAY 1920A SUPPLIES AND STOPS
		FOR EXPOSED PIPING WITH TRUEBRO INSULATION KIT, MOUNT PER ADA.
S1	SINK	ELKAY DAYTON DSE2-3321-4, 20GA STAINLESS STEEL, LK-35 STRAINER,
		LK2423C FAUCET W/SPRAY, SPEEDWAY CR1920A SUPPLIES AND STOPS.
S2	SINK	ELKAY DAYTON GE2-3321-4, 22GA STAINLESS STEEL, LK-35 STRAINER,
		LK2423C FAUCET W/SPRAY, SPEEDWAY CR1920A SUPPLIES AND STOPS
		FOR EXPOSED PIPING WITH TRUEBRO INSULATION KIT, MOUNT PER ADA.
WB	WASHER BOX	GUY GRAY BB200TS WASHING MACHINE CONNECTION BOX.
IMB	ICE MAKER BOX	GUY GRAY BIM875 ICE MAKER CONNECTION BOX.
DSP	DISPOSAL	INSINKERATOR EVOLUTION PRO 880, 7/8 HP, 2 STAGE GRIND, SOUND REDUCING COMPONENTS
DW	DISHWASHER	DISHWASHER BY CONTRACTOR AS SELECTED BY OWNER.
SH1	SHOWER	LASCO 1483DTS, MOEN TL182 FAUCET 2.5 GPM, MOEN 62320 VALVE, SIOUX CHIEF 827-2B DRAIN.
SHR2	SHOWER	LASCO 16034BFSBTTR 60"x34" BARRIER FREE SHOWER, LH OR RH FIXTURE MOUNT,
		HAND-HELD SHOWER (2.5 GPM MAX), 24" SLIDE BAR, VACUUM BREAKER AND 60" HOSE,
		PRESSURE BALANCING MIXING VALVE, 3-1/4" DRAIN, L-SHAPED GRAB BAR,
		L-SHAPED FOLD-UP CUSHIONED SEAT, SOAP DISH, CURTAIN ROD AND CURTAIN.
TUB	TUB/SHOWER	LASCO 2603-SGMR OR 2603-SGML, MOEN 62320 VALVE & TL-183 FAUCET 2.5 GPM MAX,
		K-7160 DRAIN.
FD	FLOOR DRAIN	JOSAM 30003-6A, NICKALOY TOP, WITH P-TRAP FOR CONCRETE FLOORS.
		OR MIFAB F1230-WF-1, NICKEL BRONZE TOP, WITH P-TRAP FOR WOOD FLOORS.
		WITH TRAP PRIMER OR TRAP GUARD.
FPHB	FRZ PROOF HOSE BIB	WOODFORD MODEL 67 SERIES POLISHED CHROME WALL FAUCET WITH TEE KEY, VACUUM BREAKER.
WH1	WATER HEATER	A.O. SMITH ENJB-40, 40 GALLON ELECTRIC, DUAL 4,500W ELEMENTS.
DCA	BACKFLOW PREVENTER	WATTS 350 SERIES - DOUBLE CHECK DETECTOR ASSEMBLY
ET	EXPANSION TANK	AMTROL ST-5

NOTE: A WATER-HAMMER ARRESTOR SHALL BE INSTALLED WHERE QUICK-CLOSING VALVES ARE UTILIZED (ICE MAKERS, DISHWASHERS, AND WASHING MACHINES).

FREDDIE L. MALICOAT - ENGINEER
OK# 17945
PROFESSIONAL ENGINEER REGISTERED FREDDIE L MALICOAT 17945 OKLAHOMA
08-18-22

MALICOAT - WINSLOW ENGINEERS, INC.
OKLAHOMA STATE CA2693PE - RENEWAL DATE: 6-30-23
5649 N. CLEARVIEW ROAD
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TEL 573-875-1300
FAX 573-875-1305
FREDDIE MALICOAT, P.E.

CROSSROADS AT WESTCHESTER CIRCLE
WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08-18-22

REVISIONS :

TITLE : MECHANICAL & ELECTRICAL SCHEDULES

SHEET : ME2 OF ME4

PROJECT : 22028

T:\Job\22\22028\22028.dwg, 8/19/2022 11:04:02 AM, JaredR

A

VOLTS 120/240 | MAIN CAPACITY 125 A MLO | A WATTS 19691
PHASE 1 | BUSS MATERIAL | B WATTS 16491
WIRE 3 | MOUNTING | TOTAL WATTS 36182

TYPICAL 1BR APT PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	LAUNDRY / DRYER	30–2	2500	A	4000	40–2	KITCHEN / RANGE	2
3	–	–	2500	B	4000	–	–	4
5	MECH / WH1	30–2	2250	A	3036	40–2	MECH / FAN COIL	6
7	–	–	2250	B	3036	–	–	8
9	OUTSIDE / HP	20–2	1020	A	1500	20–1	KITCHEN / MICROWAVE	10
11	–	–	1020	B	1200	20–1	LAUNDRY / WASHER	12
13	BEDROOM / REC / LIGHTS	20–1	1230	A	1080	20–1	HALL / RECEPTACLES	14
15	KITCHEN / DISPOSER	20–1	1200	B	500	20–1	KITCHEN / REFIGERATOR	16
17	LIVING ROOM / RECEPTACLES	20–1	720	A	360	20–1	KITCHEN / RECEPTACLES	18
19	KITCHEN / RECEPTACLES	20–1	360	B	180	20–1	BATH / RECEPTACLE	20
21	KITCHEN / DISHWASHER	20–1	1200	A	795	20–1	APARTMENT LIGHTS	22
23	BATH / LIGHTS	20–1	245	B				24
25				A				26
27				B				28
29				A				30

B

VOLTS 120/240 | MAIN CAPACITY 125 A MLO | A WATTS 19171
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 18486
WIRE 3 | MOUNTING | TOTAL WATTS 37657
| MODEL SQUARE D QO

TYPICAL 2BR APT PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	LAUNDRY / DRYER	30–2	2500	A	4000	40–2	KITCHEN / RANGE	2
3	–	–	2500	B	4000	–	–	4
5	MECH / WH1	30–2	2250	A	3036	40–2	MECH / FAN COIL	6
7	–	–	2250	B	3036	–	–	8
9	OUTSIDE / HP	20–2	1020	A	1500	20–1	KITCHEN / MICROWAVE	10
11	–	–	1020	B	1200	20–1	LAUNDRY / WASHER	12
13	BEDROOM / REC / LIGHTS	20–1	1230	A	1080	20–1	HALL / RECEPTACLES	14
15	KITCHEN / DISPOSER	20–1	1200	B	500	20–1	KITCHEN / REFIGERATOR	16
17	LIVING ROOM / RECEPTACLES	20–1	720	A	360	20–1	KITCHEN / RECEPTACLES	18
19	KITCHEN / RECEPTACLES	20–1	360	B	180	20–1	BATH / RECEPTACLE	20
21	BATH / LIGHTS	20–1	245	A				22
23	APARTMENT / LIGHTS	20–1	795	B				24
25	BEDROOM / REC / LIGHTS	20–1	1050	A	180	20–1	BATH / REC	26
27	BATH / LIGHTS	20–1	245	B	1200	20–1	KITCHEN / DISHWASHER	28
29				A				30

C

VOLTS 120/240 | MAIN CAPACITY 125 A MLO | A WATTS 21463
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 19278
WIRE 3 | MOUNTING | TOTAL WATTS 40741
| MODEL SQUARE D QO

TYPICAL 3BR APT PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	LAUNDRY / DRYER	30–2	2500	A	4000	40–2	KITCHEN / RANGE	2
3	–	–	2500	B	4000	–	–	4
5	MECH / WH1	30–2	2250	A	3036	40–2	MECH / FAN COIL	6
7	–	–	2250	B	3036	–	–	8
9	OUTSIDE / HP	30–2	1752	A	1500	20–1	KITCHEN / MICROWAVE	10
11	–	–	1752	B	1200	20–1	LAUNDRY / WASHER	12
13	BEDROOM / REC / LIGHTS	20–1	1230	A	1080	20–1	HALL / RECEPTACLES	14
15	KITCHEN / DISPOSER	20–1	1200	B	500	20–1	KITCHEN / REFIGERATOR	16
17	LIVING ROOM / RECEPTACLES	20–1	900	A	360	20–1	KITCHEN / RECEPTACLES	18
19	KITCHEN / RECEPTACLES	20–1	360	B	180	20–1	BATH / RECEPTACLE	20
21	BATH / LIGHTS	20–1	245	A				22
23	APARTMENT / LIGHTS	20–1	825	B				24
25	BEDROOM / REC / LIGHTS	20–1	1230	A	180	20–1	BATH / REC	26
27	BATH / LIGHTS	20–1	245	B	1230	20–1	BEDROOM / REC / LIGHTS	28
29	KITCHEN / DISHWASHER	20–1	1200	A				30

B1/2

VOLTS 120/240 | MAIN CAPACITY 100 A MLO | A WATTS 2680
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 645
WIRE 3 | MOUNTING | TOTAL WATTS 3325
| MODEL SQUARE D QO

BLDG 1 &2 HOUSE PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	OUTSIDE / RECEPTACLES	20–1	1080	A	600	20–1	OUTSIDE / WALL PACKS	2
3	CORRIDOR / LIGHTS	20–1	465	B	180	20–1	FACP	4
5	SPRINKLER ROOM / EH1	20–1	1000	A				6
7				B				8
9				A				10

CM

VOLTS 120/240 | MAIN CAPACITY 400 A MLO | A WATTS 31372
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 32487
WIRE 3 | MOUNTING | TOTAL WATTS 63859
| MODEL SQUARE D QO

COMMUNITY BUILDING PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	OUTSIDE / HP4	30–2	2136	A	1752	30–2	OUTSIDE / HP3	2
3	–	–	2136	B	1752	–	–	4
5	LAUNDRY / DRYER	30–2	2500	A	3036	40–2	MECH / F3	6
7	–	–	2500	B	3036	–	–	8
9	STORAGE / F4	50–2	4338	A	2250	30–2	MECH / WH1	10
11	–	–	4338	B	2250	–	–	12
13	STORAGE / WH1	30–2	2250	A	888	15–2	OUTSIDE / O1	14
15	–	–	2250	B	888	–	–	16
17	OUTSIDE / O1	15–2	888	A	1500	20–1	KITCHEN / MICROWAVE	18
19	–	–	888	B	1500	20–1	KITCHEN / MICROWAVE	20
21	KITCHEN / DISHWASHER	20–1	1200	A	500	20–1	KITCHEN / REFIGERATOR	22
23	LAUNDRY / WASHER	20–1	1200	B	1260	20–1	STORM / RECEPTACLES	24
25	STORM / RECEPTACLES	20–1	900	A	360	20–1	COMPUTER / RECEPTACLES	26
27	OFFICE / RECEPTACLES	20–1	900	B	900	20–1	FITNESS / RECEPTACLES	28
29	FITNESS / RECEPTACLES	20–1	540	A	540	20–1	KITCHEN / RECEPTACLES	30
31	OUTSIDE / RECEPTACLES	20–1	1260	B	200	20–1	OUTSIDE / WALL PACKS	32
33	MENS/WOMENS / RECEPTACLES	20–1	360	A	540	20–1	COMMON AREA / STORAGE / RECEPTACLES	34
35	COMPUTER AREA / RECEPTACLES	20–1	540	B	180	20–1	STORM / LIGHTS	36
37	STORM/LAUNDRY / LIGHTS	20–1	240	A	460	20–1	MENS/WOMENS / LIGHTS	38
39	COMMON AREA / LIGHTS	20–1	165	B	180	20–1	KITCHEN/STORAGE / LIGHTS	40
41	FITNESS/OFFICE / LIGHTS	20–1	150	A	240	20–1	OUTSIDE / LIGHTS	42
43	OUTSIDE / LIGHTS	20–1	180	B	360	20–1	COMMUNITY AREA / COMPUTERS	44
45	CCTV MODULE	20–1	180	A				46
47				B				48
49	FACP	20–1	0	A				50
51	OUTSIDE / O2	50–2	3624	B				52
53	–	–	3624	A				54

B3

VOLTS 120/240 | MAIN CAPACITY 100 A MLO | A WATTS 2300
PHASE 1 | BUSS MATERIAL ALUMINUM | B WATTS 345
WIRE 3 | MOUNTING | TOTAL WATTS 2645
| MODEL SQUARE D QO

BLDG 3 HOUSE PANEL

CIRC	LOCATION / DESCRIPTION	BRKR	WATTS	ø	WATTS	BRKR	LOCATION / DESCRIPTION	CIRC
1	OUTSIDE / RECEPTACLES	20–1	900	A	400	20–1	OUTSIDE / WALL PACKS	2
3	CORRIDOR / LIGHTS	20–1	165	B	180	20–1	FACP	4
5	SPRINKLER ROOM / EH1	20–1	1000	A				6
7				B				8
9				A				10

WIRE SIZE SCHEDULE

MARK	DESCRIPTION	RATING	WIRE SIZE (CU)	WIRE SIZE (AL)
A	BLDG 1&2 METER CENTER	1600–2	5@ 3 400MCM, #3/0 GND, 4"C.	6@ 3 400MCM, 250MCM GND, 4"C.
B	BLDG 3 METER CENTER	800–2	3@ 3 300MCM, #1/0 GND, 3"C.	3@ 3 400MCM, #3/0 GND, 3 1/2"C.
C	COMMUNITY BUILDING	400–2	2@ 3 #3/0, #1/0 GND, 2 1/2"C.	2@ 3 250MCM, #3/0 GND, 3"C.
D1	APT PANELS (>150')	125–2	3 #1, #6 GND, 1 1/2"C. OR SE CABLE	3 #2/0, #6 GND, 2"C. OR SE CABLE
D2	APT PANELS	125–2	3 #2, #6 GND, 1 1/2"C. OR SE CABLE	3 #1/0, #6 GND, 2"C. OR SE CABLE
E	BLDG HOUSE PANELS	100–2	3 #3, #8 GND, 1 1/4"C.	3 #1, #6 GND, 2"C.

ALUMINUM WIRE SIZES IN THIS TABLE ONLY APPLIES TO FEEDERS SHOWN IN THE RISER BELOW.
NOTE: CONNECTIONS REQUIRE MORE ATTENTION THAN COPPER (SUCH AS TORQUE, OXIDATION AND PERIODIC INSPECTION). OWNER TO VERIFY WITH INSURANCE PROVIDER PRIOR TO INSTALLING ALUMINUM WIRING.

ELECTRIC CALCULATIONS

TYPICAL UNIT		A 1BR)	B (2BR)	C (3BR)
TOTAL CONNECTED LOAD	(W)	36,182	37,657	40,741
FLOOR AREA	(SF)	763	974	1,128
3 WATTS / SQUARE FOOT	(W)	2,289	2,922	3,384
2 SMALL APPL @ 1,500	(W)	3,000	3,000	3,000
LAUNDRY	(W)	1,500	1,500	1,500
WASHER	(W)	1,200	1,200	1,200
WATER HEATER	(W)	4,500	4,500	4,500
DRYER	(W)	5,000	5,000	5,000
RANGE	(W)	8,000	8,000	8,000
MICROWAVE	(W)	1,500	1,500	1,500
DISHWASHER	(W)	1,200	1,200	1,200
REFRIGERATOR/DISPOSER	(W)	1,200	1,200	1,200
SUBTOTAL	(W)	29,389	30,022	30,484
FIRST 10KW @ 100%	(W)	10,000	10,000	10,000
REMAINDER @ 40%	(W)	7,756	8,009	8,194
HVAC EQUIPMENT	(W)	6,000	6,000	6,000
CALCULATED TOTAL LOAD	(W)	35,389	36,022	36,484
CALCULATED DEMAND LOAD	(W)	23,756	24,009	24,194
@240–1–60	(A)	99.0	100.0	100.8

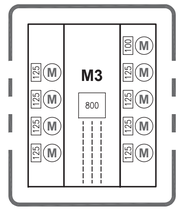
TYPICAL BUILDING		B1/2	B3
TOTAL CONNECTED LOAD	(W)	668,976	150,628
1BR UNITS	(#)	6	0
2BR UNITS	(#)	12	4
3BR UNITS	(#)	6	4
TOTAL UNITS	(#)	24	8
SUBTOTAL	(W)	863,502	290,024
DEMAND FACTOR	(%)	35	43
UNIT DEMAND	(W)	302,226	124,710
HOUSE PANEL	(W)	5,000	5,000
CALCULATED DEMAND LOAD	(W)	307,226	129,710
@240–1–60	(A)	1,280.1	540.5
@125%	(A)	1600.1	675.6

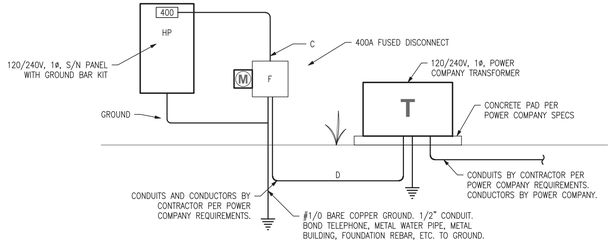
AIC SCHEDULE

MARK	FED FROM	MIN. LENGTH	MAX. AFC	MIN. AIC	REMARKS
X1 (1ø, 45KVA, 1.2%Z)	–	–	23,438	–	
X2 (1ø, 125.5KVA, 1.2%Z)	–	–	58,594	–	
X3 (1ø, 225KVA, 1.2%Z)	–	–	117,188	–	
B1 & 2 METER CENTER	X3	30'	–	100 kA	
B3 METER CENTER	X2	35'	–	42 kA	
COMMUNITY BLDG. METER	X1	40'	–	22 kA	
PANEL CM	CM MTR.	0'	–	22 kA	
PANEL B1/B2	MTR CTR	10'	–	42 kA	
PANEL B3	MTR CTR	45'	–	10 kA	
APT PANEL (NEAREST)	MC	10'	–	42 kA	
APT PANEL (ALL OTHERS)	MC	25'	–	22 kA	
APT PANEL (FURTHEST)	MC	80'	–	10 kA	

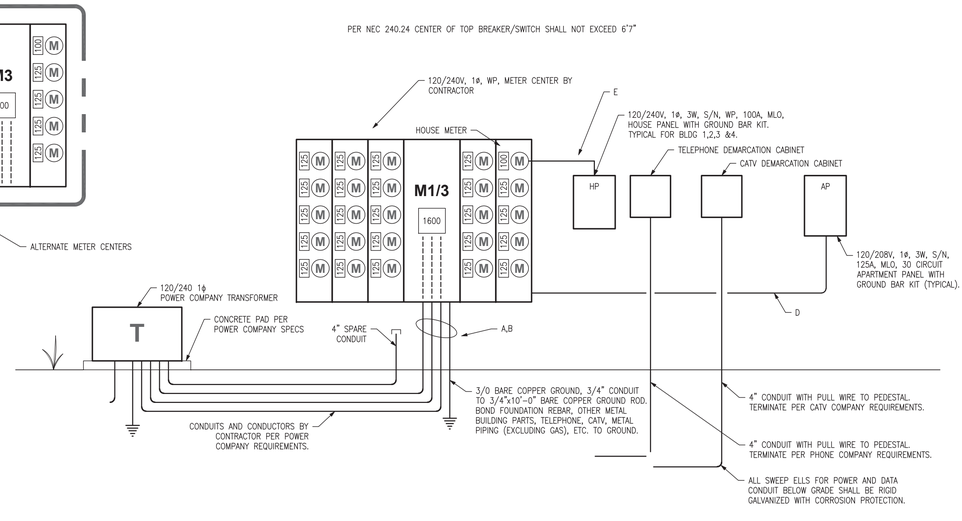
CONTRACTOR SHALL VERIFY PROVIDED TRANSFORMERS' AVAILABLE FAULT CURRENTS AND ENSURE FEEDER CONDUCTOR LENGTHS MATCH OR EXCEED THOSE LISTED IN THIS TABLE. NOTE THAT SHORTER CONDUCTORS REQUIRE HIGHER AIC RATINGS.

IF A) PROVIDED TRANSFORMER'S AFC IS HIGHER, OR B) ANY FEEDER LENGTH IS SHORTER THAN SHOWN, OR C) ANY WIRE SIZE IS LARGER THAN SHOWN IN THE WIRE SIZE SCHEDULE, THEN THESE CALCULATIONS MUST BE REVISED AND DESIGN CHANGES SHALL BE MADE TO ASSURE LIFE SAFETY.





2 ME3 **ELECTRIC RISER DIAGRAM** — NO SCALE — COMMUNITY BLDG



1 ME3 **ELECTRIC RISER DIAGRAM** — NO SCALE — APARTMENT BLDGS

FREDDIE L. MALICOAT - ENGINEER
OK# 17945
PROFESSIONAL ENGINEER — FREDDIE L. MALICOAT 17945 — REGISTERED — OKLAHOMA
08-18-22

MALICOAT - WINSLOW ENGINEERS, INC.
OKLAHOMA STATE CA2693PE – RENEWAL DATE: 6-30-23
5649 N. CLEARVIEW ROAD
COLUMBIA, MISSOURI 65202
TEL 573-875-1300
FAX 573-875-1305
FREDDIE MALICOAT, P.E.

CROSSROADS AT WESTCHESTER CIRCLE

WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08–18–22

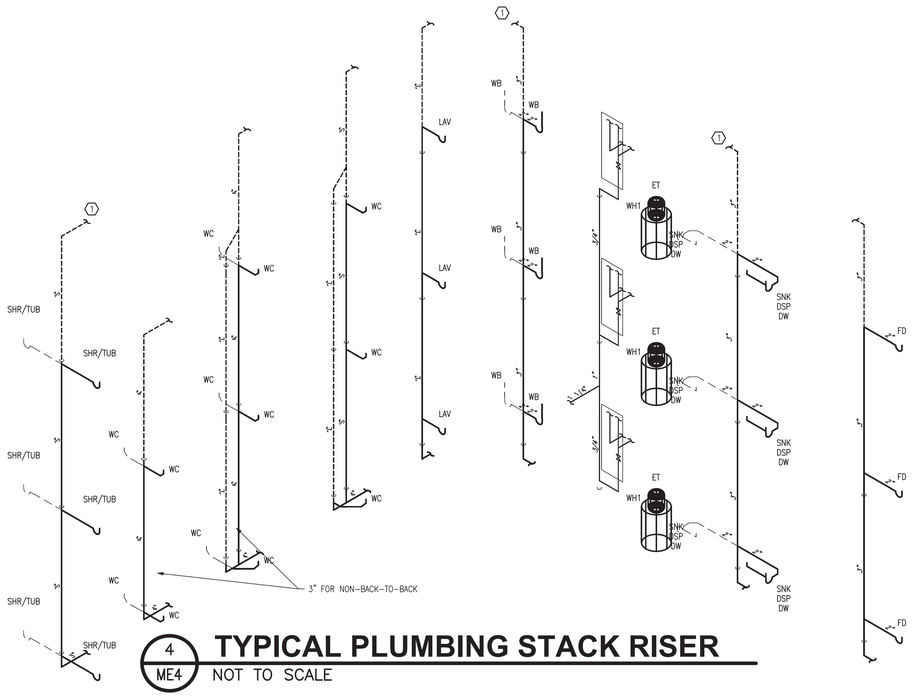
REVISIONS :

TITLE : **PANEL SCHEDULES & ELECTRICAL RISERS**

SHEET : **ME3** OF **ME4**

PROJECT : 22028

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4 ME4 TYPICAL PLUMBING STACK RISER

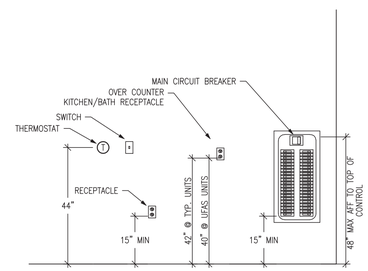
NOT TO SCALE

GENERAL NOTES: PLUMBING RISER

1. IPC SECTION 917 "SINGLE STACK VENT SYSTEM" USED FOR ALL STACKED WATER CLOSETS (LIMIT 2 WATER CLOSETS PER 3" STACK).
2. IPC SECTION 913 "WASTE STACK VENTS" USED FOR ALL OTHER STACKED PLUMBING FIXTURES (LIMIT 4 LAVATORIES OR 2 OTHER FIXTURES PER 2" STACK).
3. ALL WASTE BRANCHES AND VENT HEADERS 3" EXCEPT WHERE SHOWN OTHERWISE.

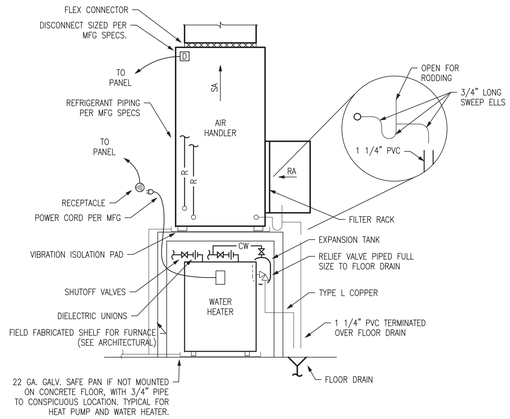
KEYED NOTES:

(1) PIPE SIZES SAME FOR BACK-TO-BACK (6) AND SINGLE (3) FIXTURE INSTANCES OF THESE STACKS.



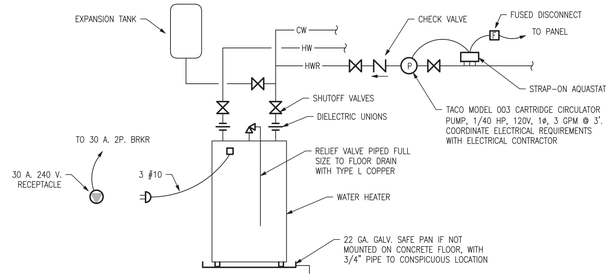
2 ME4 TYPICAL MOUNTING HEIGHTS

NO SCALE



5 ME4 WH/FURN MOUNTING DETAIL

NO SCALE



6 ME4 HOT WATER RETURN PIPING

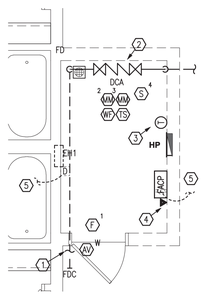
NOT TO SCALE (COMMUNITY BLDG. ONLY)

SVC CLOSET GENERAL NOTES:

1. SEE SHEET ME1 FOR GENERAL NOTES FOR ALL SYSTEM .

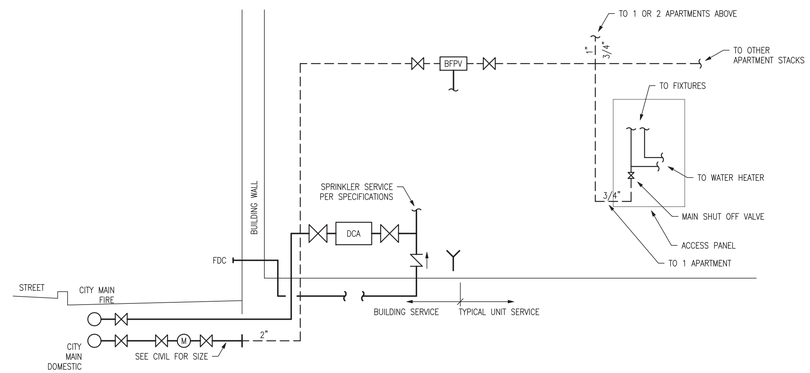
SVC CLOSET KEYED NOTES:

(1) SEE CIVIL FOR CONTINUATION. (VERIFY LOCATION.)
(2) SEE WATER SERVICE DETAIL.
(3) THERMOSTAT TO OPERATE HEATER BELOW 40°F.
(4) PHONE AND POWER FOR FACP/DIALER.
(5) SEE COMMONS AREA PLANS FOR CIRCUITING.



1 ME4 SVC CLOSET MEP PLAN

SCALE: 1/4" = 1'-0"



INSTALLATION MUST COMPLY WITH ALL SPECIFICATIONS AND REQUIREMENTS OF CITY OF LAWTON AND WILL BE INSPECTED BY LAWTON WATER DEPARTMENT PRIOR TO WATER SERVICE.

3 ME4 WATER SERVICE DETAIL

NO SCALE

FREDDIE L. MALICOAT - ENGINEER
OK# 17945
REGISTERED PROFESSIONAL ENGINEER
FREDDIE L MALICOAT 17945 OKLAHOMA
08-18-22

MALICOAT - WINSLOW ENGINEERS, INC.
OKLAHOMA STATE CA2693PE - RENEWAL DATE: 6-30-23
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CROSSROADS AT WESTCHESTER CIRCLE
WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08-18-22

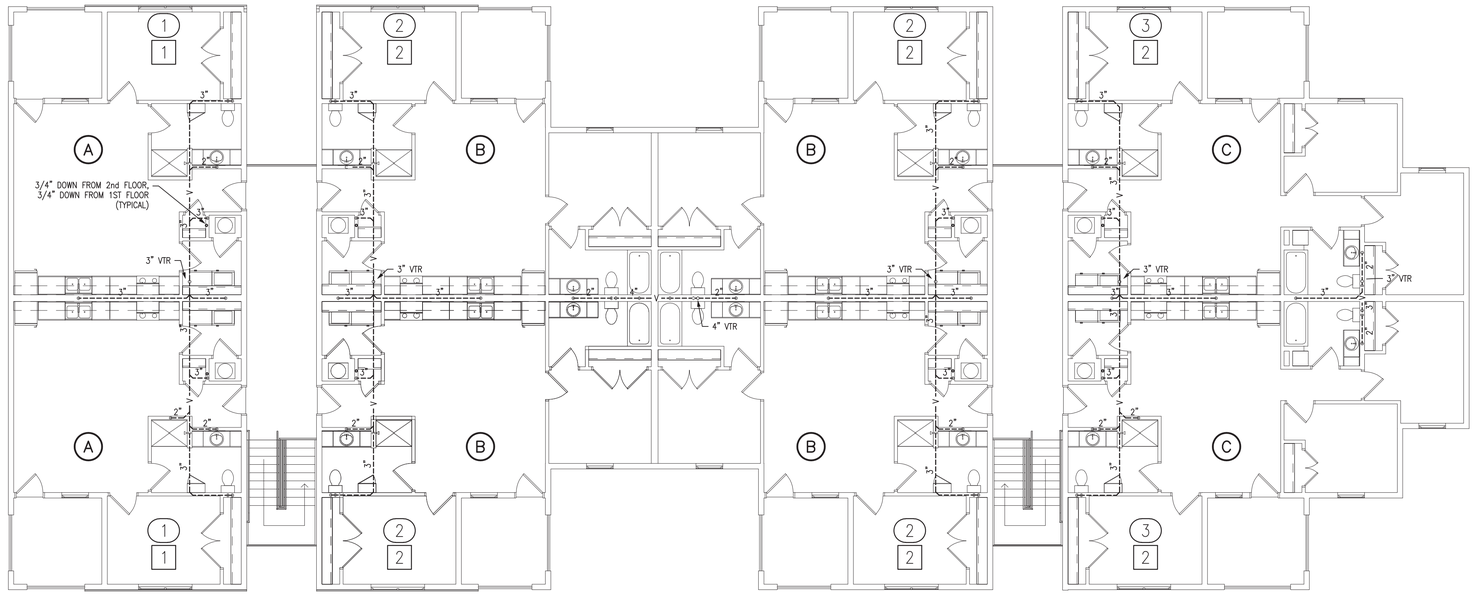
REVISIONS :

TITLE : DETAILS

SHEET : ME4 OF ME4

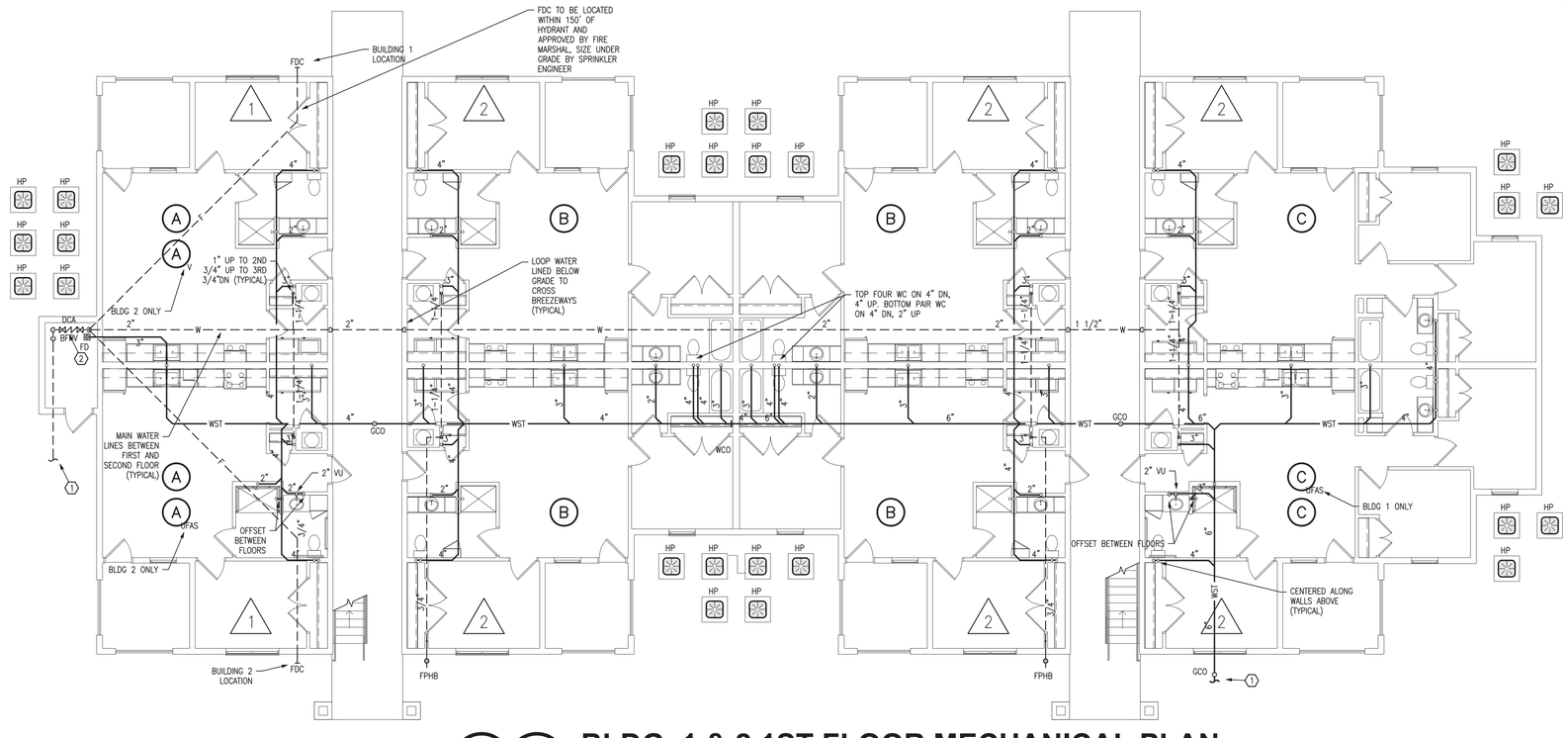
PROJECT : 22028

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BLDG. 1 & 2 3RD FLOOR MECHANICAL PLAN

SCALE: 1/8" = 1'-0" (2nd FLOOR SIMMILAR)



BLDG. 1 & 2 1ST FLOOR MECHANICAL PLAN

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

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	1 M3	1 M5	1 E5	1 E7	1 FA1
A UFAS	2 M3	2 M5	2 E5	2 E7	2 FA1
B	1 M4	1 M6	1 E6	1 E8	1 FA2
B UFAS	2 M4	2 M6	2 E6	2 E8	2 FA2
C	3 M4	3 M6	3 E6	3 E8	3 FA2
C UFAS	4 M4	4 M6	4 E6	4 E8	4 FA2
A V	1 M3	1 M5	1 E5	1 E7	2 FA3
B V	1 M4	1 M6	1 E6	1 E8	1 FA3

NOTES:
"V" INDICATES AN AUDIO/VISUAL IMPAIRED UNIT.

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. STACKED FIXTURE VENTS 2009 IPC SECTIONS USED: 917 "SINGLE STACK VENT SYSTEM" FOR WATER CLOSETS. 913 "WASTE STACK VENTS" FOR OTHER PLUMBING FIXTURES.
3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING.
4. PROVIDE CLEANOUT AT BASE OF EACH STACK, AND MAX 50' OC THROUGHOUT BUILDING. PROVIDE THEM IN COMMON AREAS INDEPENDENTLY OF PRIVATE APARTMENTS WHERE POSSIBLE.

KEYED NOTES:

1. SEE CIVIL FOR CONTINUATION (VERIFY LOCATION).
2. SEE WATER SERVICE DETAIL.
3. 1ST FLOOR HVAC UNIT (F/HP) PAIR SELECTION. I.E "1" INDICATES AN F1/HP1 UNIT.
4. 2ND FLOOR HVAC UNIT (F/HP) PAIR SELECTION. I.E "1" INDICATES AN F1/HP1 UNIT.
5. 3RD FLOOR HVAC UNIT (F/HP) PAIR SELECTION. I.E "1" INDICATES AN F1/HP1 UNIT.

FREDDIE L. MALICOAT - ENGINEER
OK# 17945
PROFESSIONAL ENGINEER
FREDDIE L. MALICOAT 17945
REGISTERED
OKLAHOMA
08-18-22

MALICOAT - WINSLOW ENGINEERS, INC.
OKLAHOMA STATE CA2693PE - RENEWAL DATE: 6-30-23
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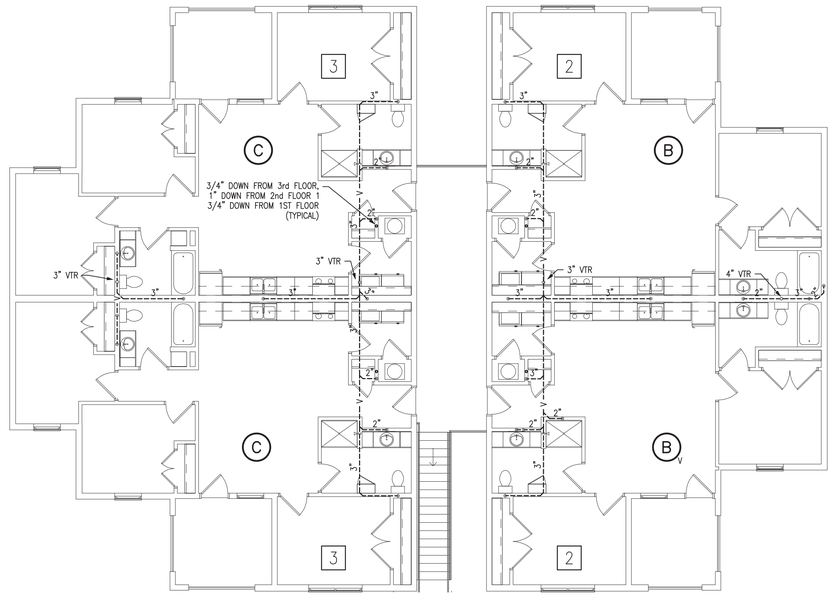
REVISIONS :

TITLE : **BLDG. 1 & 2 MECHANICAL PLAN**

SHEET : **M1** OF **M6**

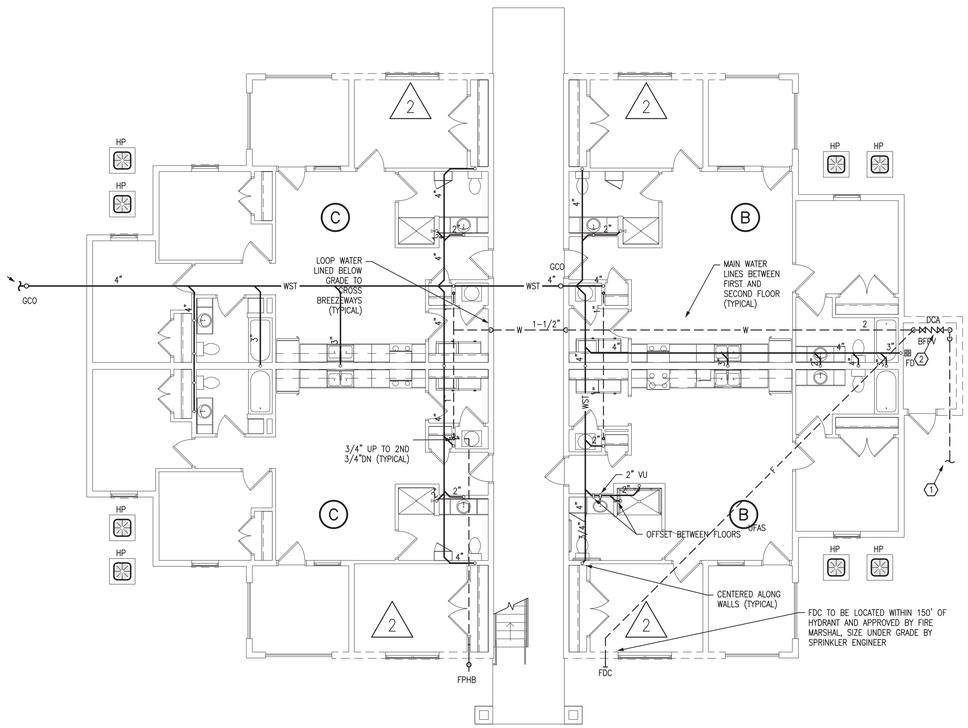
PROJECT : 22028

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BLDG. 3 2ND FLOOR MECHANICAL PLAN

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



BLDG. 3 1ST FLOOR MECHANICAL PLAN

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

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	1 M3	1 M5	1 E5	1 E7	1 FA1
A UFAS	2 M3	2 M5	2 E5	2 E7	2 FA1
B	1 M4	1 M6	1 E6	1 E8	1 FA2
B UFAS	2 M4	2 M6	2 E6	2 E8	2 FA2
C	3 M4	3 M6	3 E6	3 E8	3 FA2
C UFAS	4 M4	4 M6	4 E6	4 E8	4 FA2
A V	1 M3	1 M5	1 E5	1 E7	2 FA3
B V	1 M4	1 M6	1 E6	1 E8	1 FA3

NOTES:
"V" INDICATES AN AUDIO/VISUAL IMPAIRED UNIT.

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. STACKED FIXTURE VENTS 2009 IPC SECTIONS USED: 917 "SINGLE STACK VENT SYSTEM" FOR WATER CLOSETS. 913 "WASTE STACK VENTS" FOR OTHER PLUMBING FIXTURES.
3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING.
4. PROVIDE CLEANOUT AT BASE OF EACH STACK, AND MAX 50' OC THROUGHOUT BUILDING. PROVIDE THEM IN COMMON AREAS INDEPENDENTLY OF PRIVATE APARTMENTS WHERE POSSIBLE.

KEYED NOTES:

1. SEE CIVIL FOR CONTINUATION (VERIFY LOCATION).
2. SEE WATER SERVICE DETAIL.
3. 1ST FLOOR HVAC UNIT (F/HP) PAIR SELECTION. I.E "1" INDICATES AN F1/HP1 UNIT.
4. 2ND FLOOR HVAC UNIT (F/HP) PAIR SELECTION. I.E "1" INDICATES AN F1/HP1 UNIT.
5. 3RD FLOOR HVAC UNIT (F/HP) PAIR SELECTION. I.E "1" INDICATES AN F1/HP1 UNIT.

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CROSSROADS AT WESTCHESTER CIRCLE

WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08-18-22

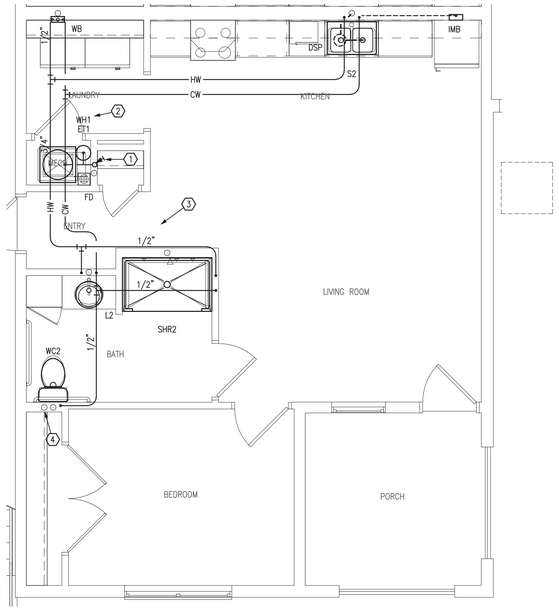
REVISIONS :

TITLE : **BLDG. 3 MECHANICAL PLAN**

SHEET : **M2** OF **M6**

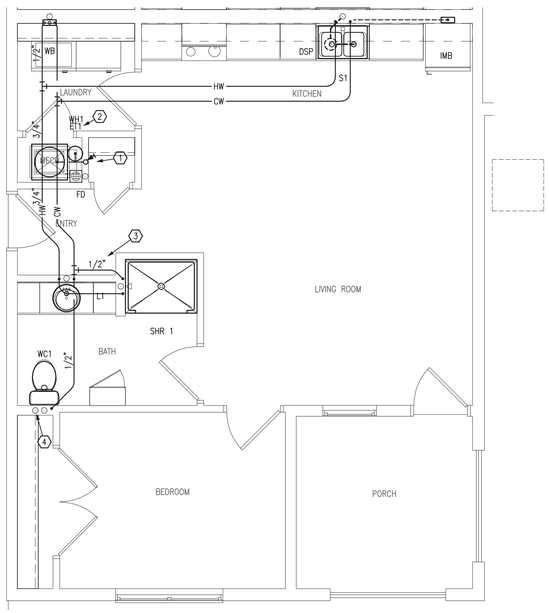
PROJECT : 22028

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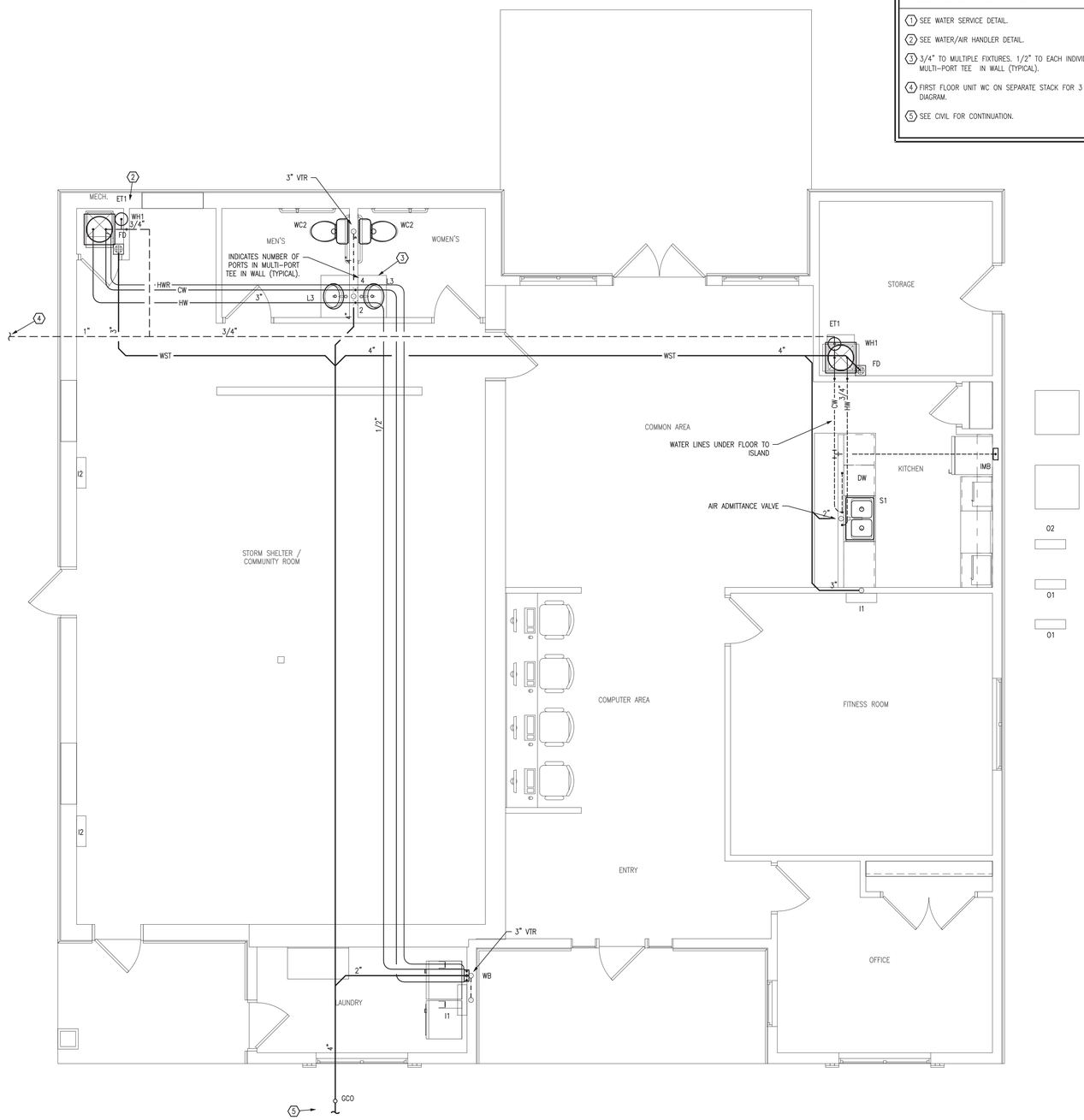
2 / M3 — 1BR UFAS PLUMBING PLAN

SCALE: 1/4" = 1'-0"



1 / M3 — 1BR FHA/TYPICAL PLUMBING PLAN

SCALE: 1/4" = 1'-0"



3 / M3 — COMMUNITY PLUMBING PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. 2009 IPC SECTIONS 913 "WASTE STACK VENTS" USED FOR ALL NON-WATER CLOSET PLUMBING FIXTURES. 917 "SINGLE STACK VENTS" USED FOR STACKED WATER CLOSETS.
3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING.

KEYED NOTES:

1. SEE WATER SERVICE DETAIL.
2. SEE WATER/AIR HANDLER DETAIL.
3. 3/4" TO MULTIPLE FIXTURES. 1/2" TO EACH INDIVIDUAL FIXTURE FROM TEE OR MULTI-PORT TEE IN WALL (TYPICAL).
4. FIRST FLOOR UNIT WC ON SEPARATE STACK FOR 3 STORY UNITS, SEE PLUMBING RISER DIAGRAM.
5. SEE CIVIL FOR CONTINUATION.

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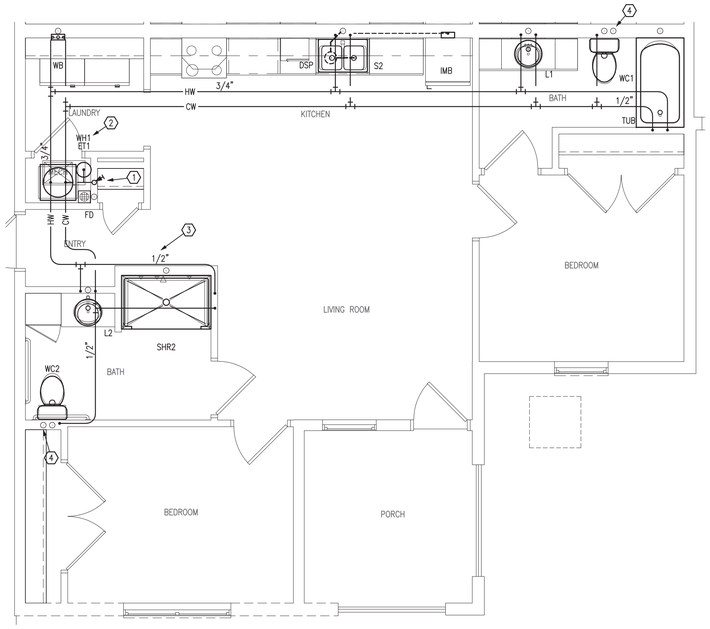
REVISIONS :

TITLE : 1BR & COMMUNITY BLDG PLUMBING PLANS

SHEET : M3 OF M6

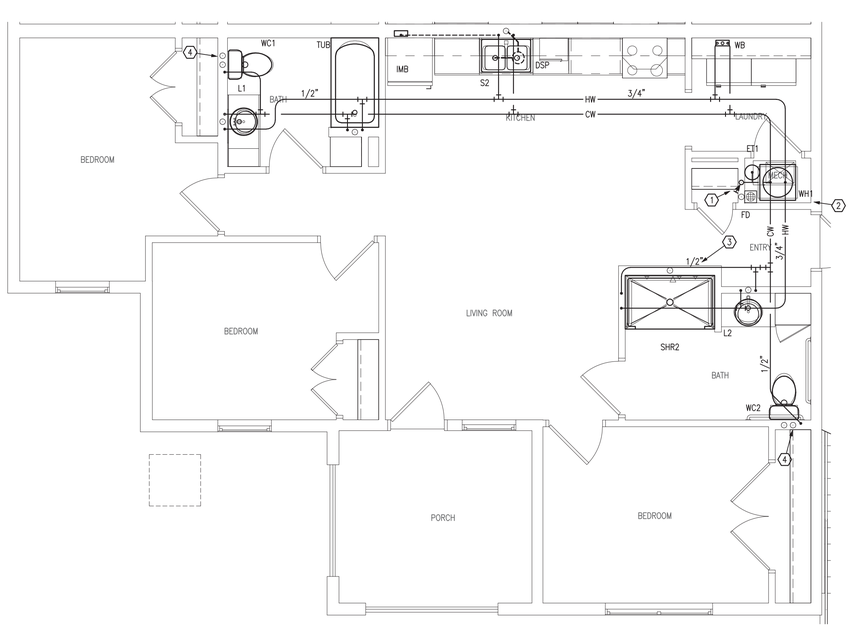
PROJECT : 22028

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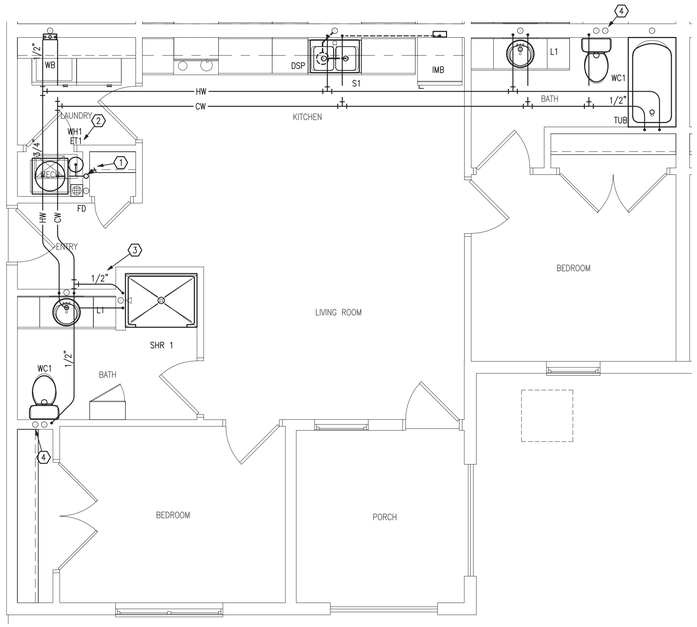
2 / M4 2BR UFAS PLUMBING PLAN

SCALE: 1/4" = 1'-0"



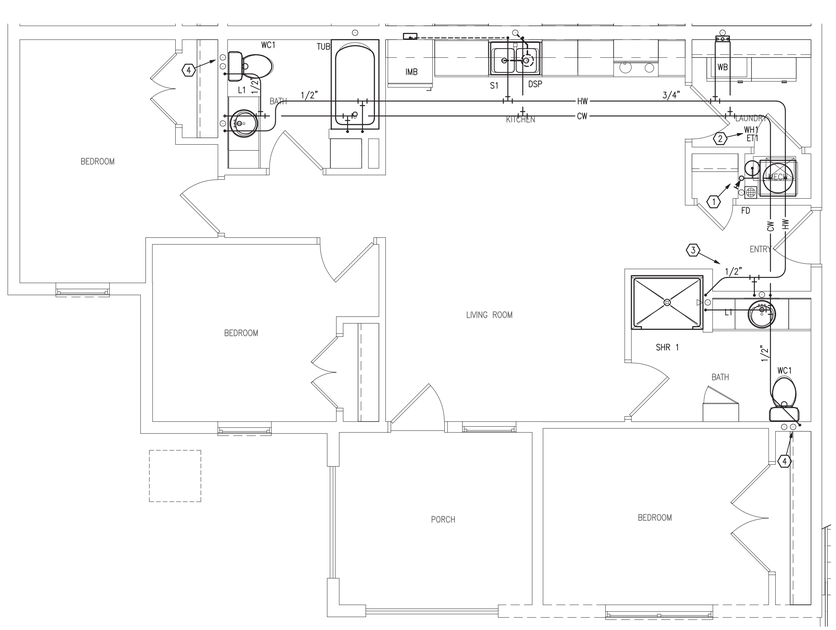
4 / M4 3BR UFAS PLUMBING PLAN

SCALE: 1/4" = 1'-0"



1 / M4 2BR FHA/TYPICAL PLUMBING PLAN

SCALE: 1/4" = 1'-0"



3 / M4 3BR FHA/TYPICAL PLUMBING PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. 2009 IPC SECTIONS 913 "WASTE STACK VENTS" USED FOR ALL NON-WATER CLOSET PLUMBING FIXTURES. 917 "SINGLE STACK VENTS" USED FOR STACKED WATER CLOSETS.
3. SEE PLUMBING RISER DIAGRAMS FOR TYPICAL PIPE SIZING.

KEYED NOTES:

1. SEE WATER SERVICE DETAIL.
2. SEE WATER/AIR HANDLER DETAIL.
3. 3/4" TO MULTIPLE FIXTURES. 1/2" TO EACH INDIVIDUAL FIXTURE FROM TEE OR MULTI-PORT TEE IN WALL (TYPICAL).
4. FIRST FLOOR UNIT WC ON SEPARATE STACK FOR 3 STORY UNITS, SEE PLUMBING RISER DIAGRAM.
5. SEE CIVIL FOR CONTINUATION.

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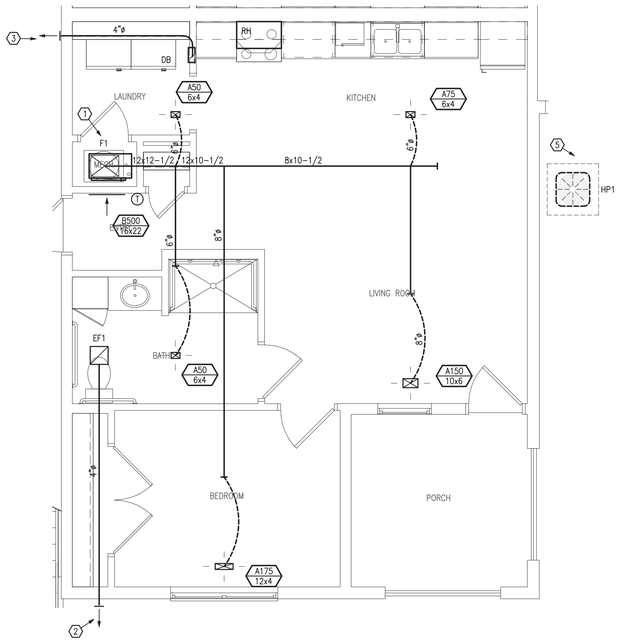
REVISIONS :

TITLE : **2 & 3 BR PLUMBING PLANS**

SHEET : **M4** OF **M6**

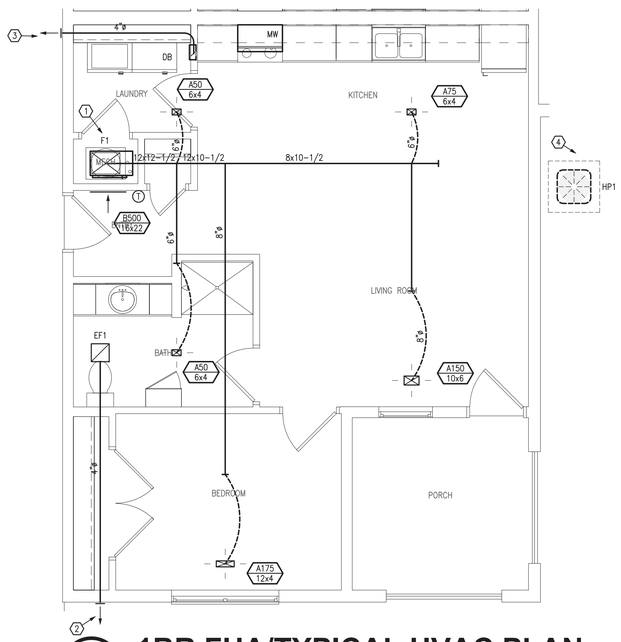
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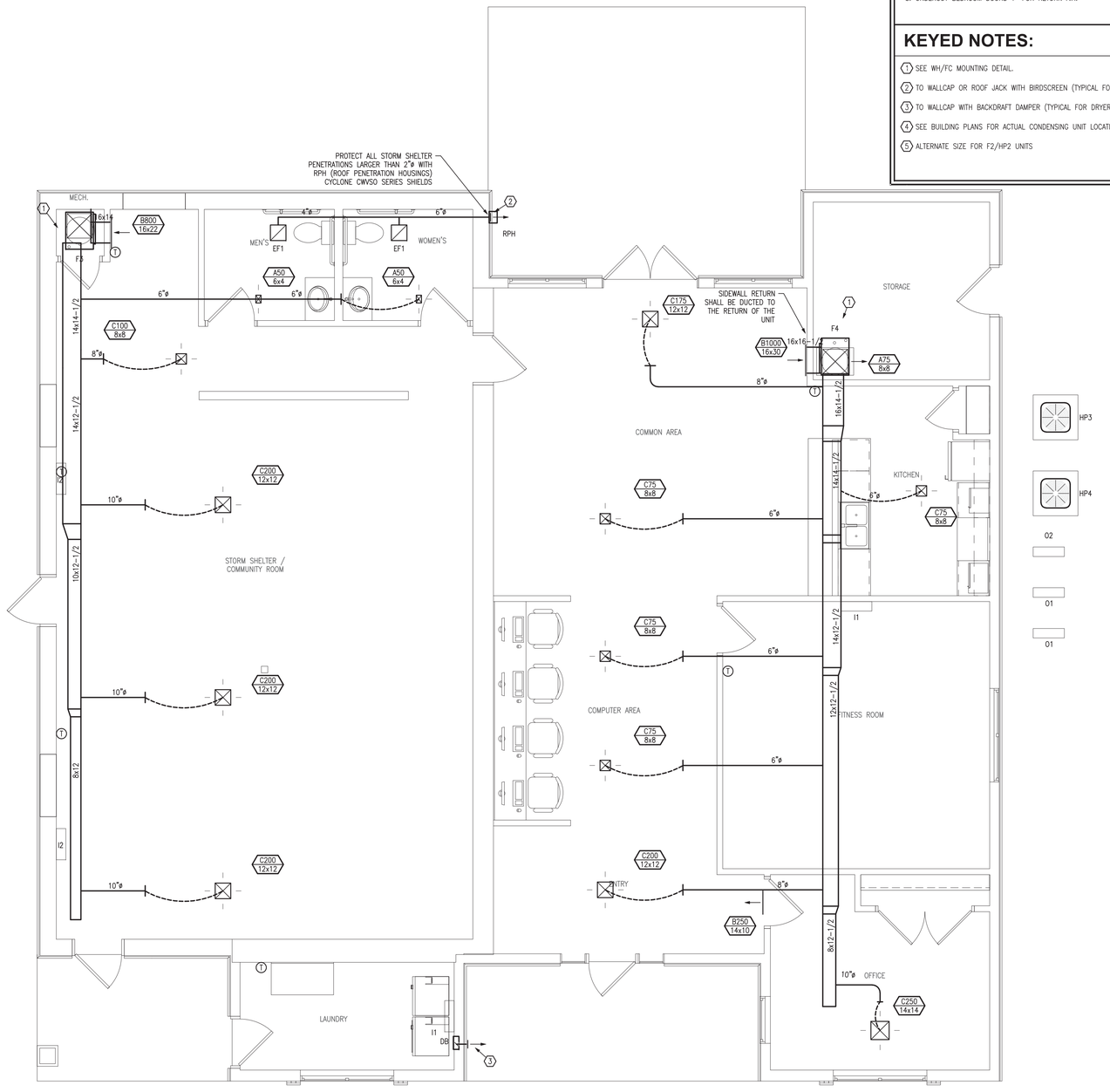
2 / M5 1BR UFAS HVAC PLAN

SCALE: 1/4" = 1'-0"



1 / M5 1BR FHA/TYPICAL HVAC PLAN

SCALE: 1/4" = 1'-0"



3 / M5 COMMUNITY HVAC PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY PER ARCHITECTURAL DRAWINGS.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
6. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH EITHER (A) FIREMASTER "DRYERWRAP" OR EQUAL, OR (B) 0.013" OR THICKER GALVANIZED STEEL, OR (C) 0.018" OR THICKER GALVANIZED ALUMINUM PER 2012 IMC 504.2 AND 603.4. USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
7. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.
8. UNDERCUT BEDROOM DOORS 1" FOR RETURN AIR.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER (TYPICAL FOR DRYERS).
4. SEE BUILDING PLANS FOR ACTUAL CONDENSING UNIT LOCATIONS.
5. ALTERNATE SIZE FOR F2/HP2 UNITS

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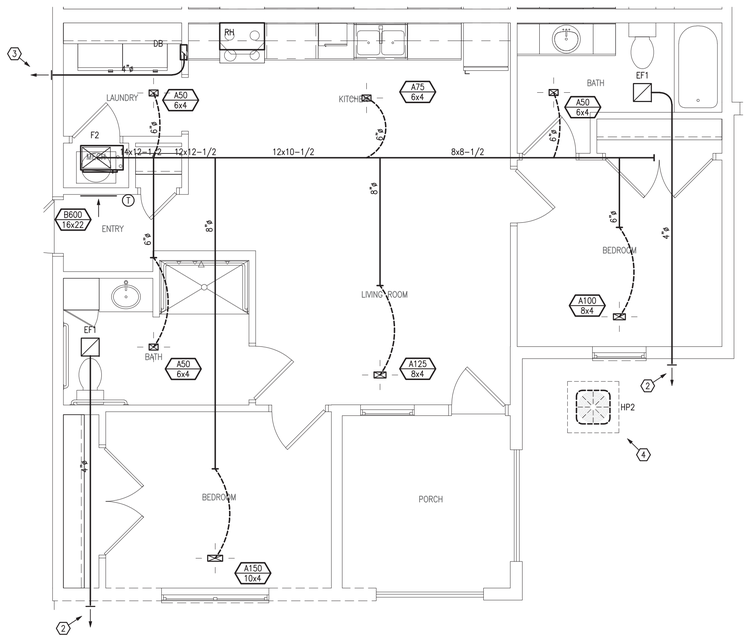
REVISIONS :

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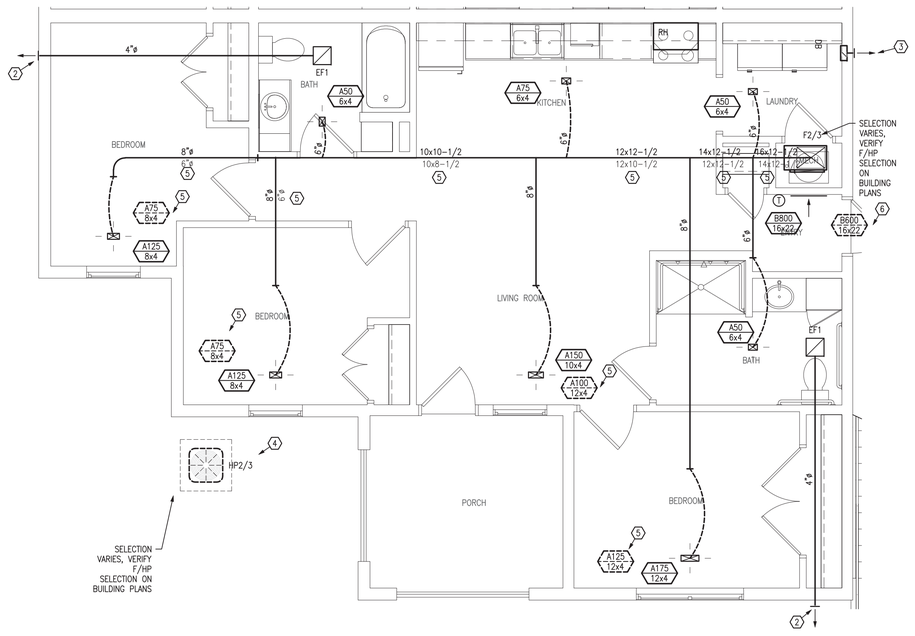
SHEET : M5 OF M6

PROJECT : 22028

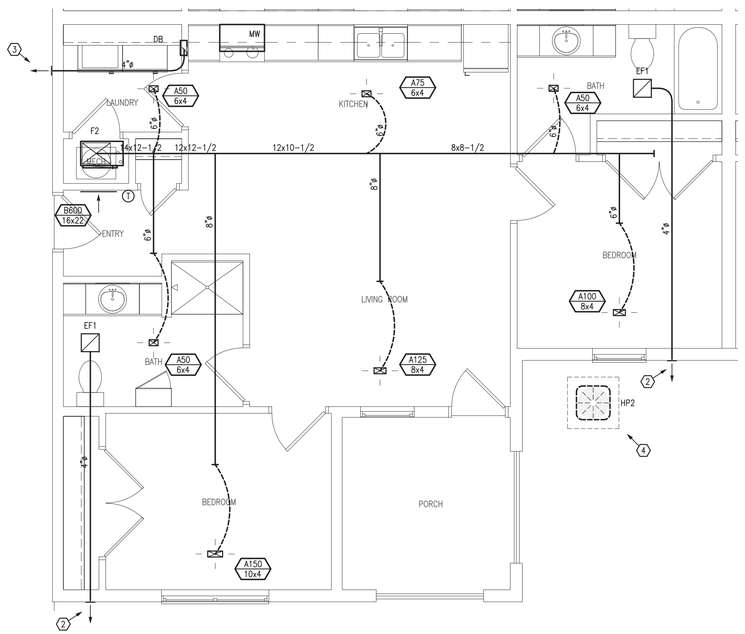
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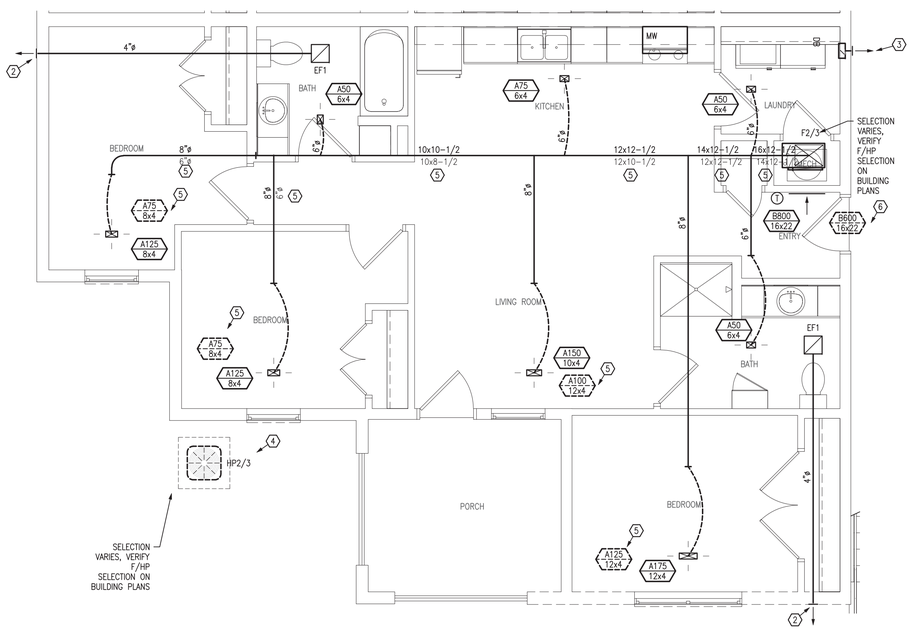
2 2BR UFAS HVAC PLAN
M6 SCALE: 1/4" = 1'-0"



4 3BR UFAS HVAC PLAN
M6 SCALE: 1/4" = 1'-0"



1 2BR FHA/TYPICAL HVAC PLAN
M6 SCALE: 1/4" = 1'-0"



3 3BR FHA/TYPICAL HVAC PLAN
M6 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. EXCEPT IN DRYER VENTS, INSTALL A FIRE DAMPER AT EVERY FIRE RATED ASSEMBLY PENETRATION TO MAINTAIN FIRE RATING OF ASSEMBLY PER ARCHITECTURAL DRAWINGS.
3. DRYER AND EXHAUST DUCTS SHALL BE METAL DUCT RUN IN FLOOR/CEILING ASSEMBLY WITH ANNULAR AREA FIRE CAULKED AT PENETRATIONS.
6. DRYER EXHAUST DUCTS SHALL BE 4" RIGID METAL WITH EITHER (A) FIREMASTER "DRYERWRAP" OR EQUAL, OR (B) 0.013" OR THICKER GALVANIZED STEEL, OR (C) 0.018" OR THICKER GALVANIZED ALUMINUM PER 2012 IMC 504.2 AND 603.4. USE IN-O-VATE "DRYER-ELL" OR EQUAL 10" RADIUS SMOOTH WALL ELBOWS FOR ALL TURNS.
7. TRUSS MANUFACTURER SHALL COORDINATE TRUSS DESIGN WITH MEP LAYOUT.
8. UNDERCUT BEDROOM DOORS 1" FOR RETURN AIR.

KEYED NOTES:

1. SEE WH/FC MOUNTING DETAIL.
2. TO WALLCAP OR ROOF JACK WITH BIRDSCREEN (TYPICAL FOR EXHAUST FANS).
3. TO WALLCAP WITH BACKDRAFT DAMPER (TYPICAL FOR DRYERS).
4. SEE BUILDING PLANS FOR ACTUAL CONDENSING UNIT LOCATIONS.
5. ALTERNATE SIZE FOR F2/HP2 UNITS

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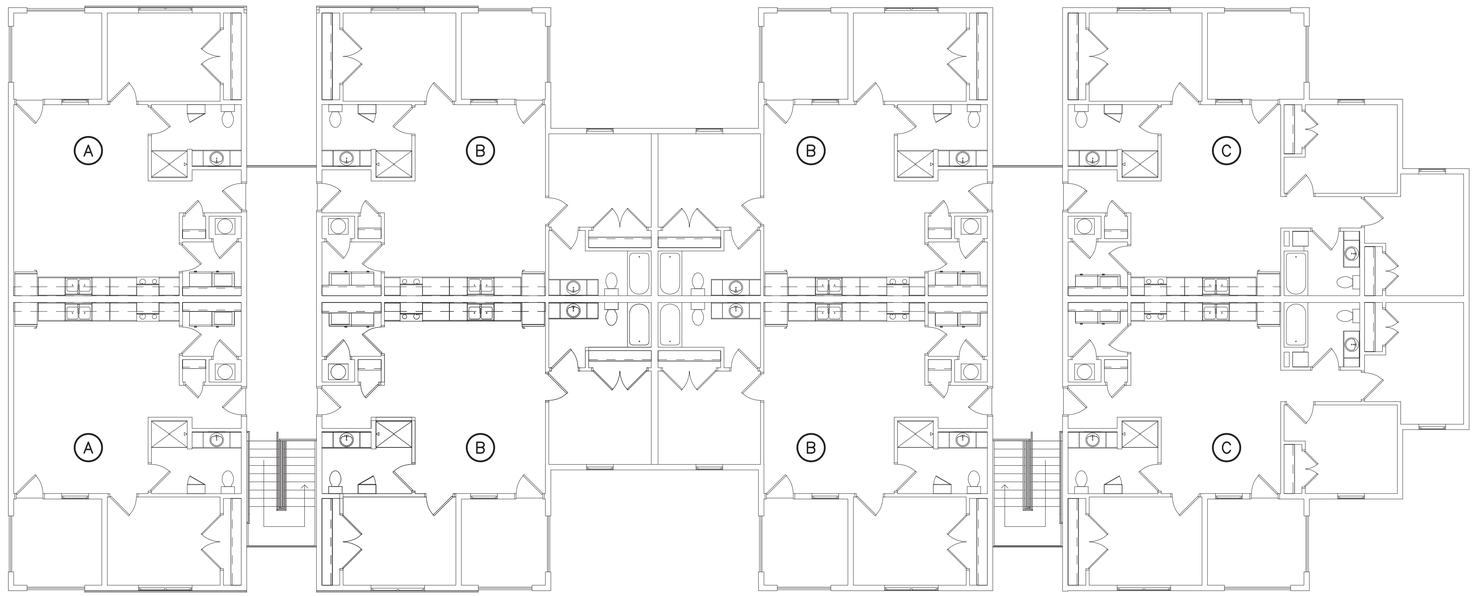
REVISIONS :

TITLE :
2 & 3 BR HVAC PLANS

SHEET :
M6
OF
M6

PROJECT : 22028

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2 / E1 **BLDG. 1 & 2 3RD FLOOR POWER PLAN**
SCALE: 1/8" = 1'-0" (2nd FLOOR SIMMILAR)

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	1 M3	1 M5	1 E5	1 E7	1 FA1
A UFAS	2 M3	2 M5	2 E5	2 E7	2 FA1
B	1 M4	1 M6	1 E6	1 E8	1 FA2
B UFAS	2 M4	2 M6	2 E6	2 E8	2 FA2
C	3 M4	3 M6	3 E6	3 E8	3 FA2
C UFAS	4 M4	4 M6	4 E6	4 E8	4 FA2
A V	1 M3	1 M5	1 E5	1 E7	2 FA3
B V	1 M4	1 M6	1 E6	1 E8	1 FA3

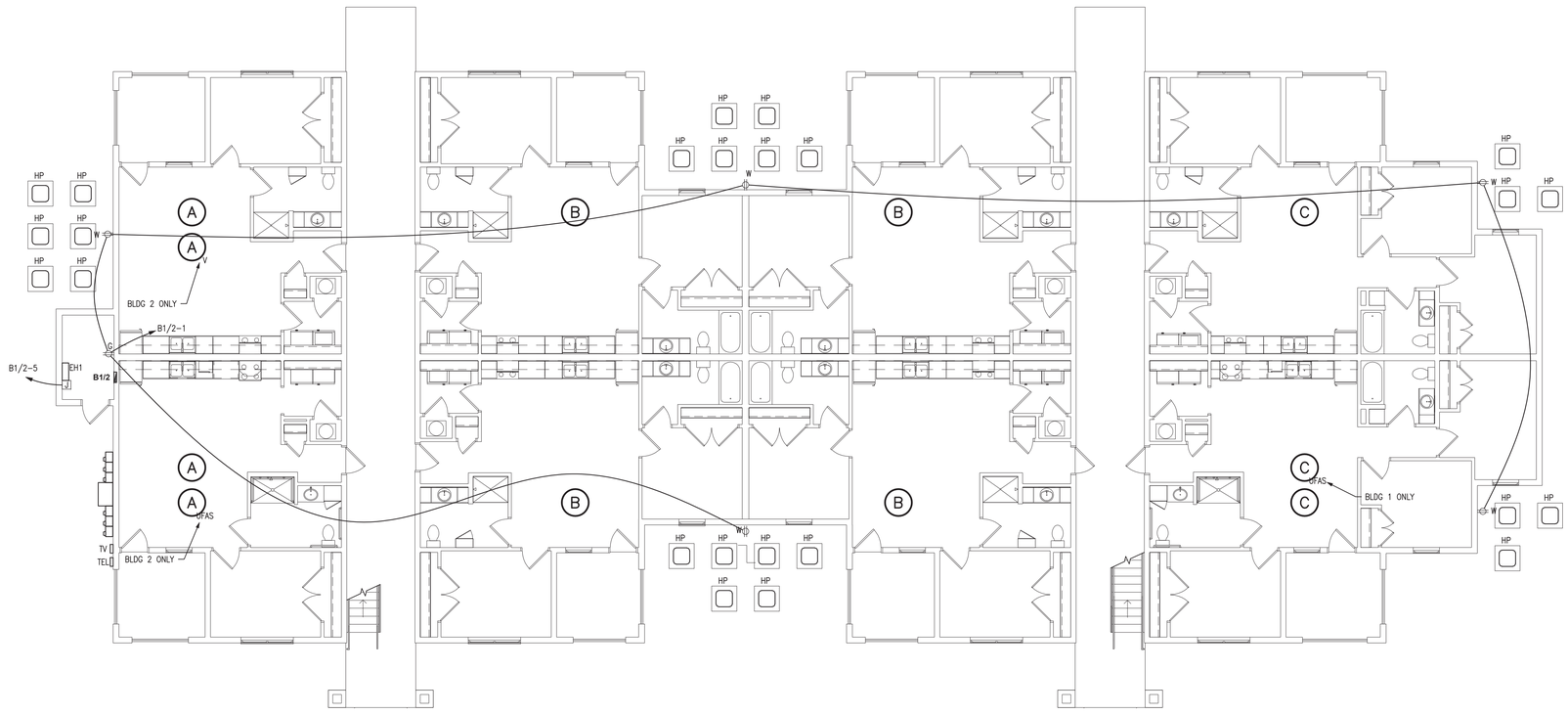
NOTES:
"V" INDICATES AN AUDIO/VISUAL IMPAIRED UNIT.

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER CONTRACTOR.
4. ALL 120v., 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.

KEYED NOTES:

1. TO LIGHTS/RECEPTACLE CIRCUIT ON FLOORS ABOVE/BELOW.
2. TO PHOTOCELL AND TIMER. USE SEPARATE PHOTOCELLS FOR BREEZEWAY AND EXTERIOR LIGHTS. LOCATE TIMER IN SPRINKLER CLOSET (VERIFY).
3. PROVIDE CONSTANT POWER TO EMERGENCY LIGHTING.



1 / E1 **BLDG. 1 & 2 1ST FLOOR POWER PLAN**
SCALE: 1/8" = 1'-0"

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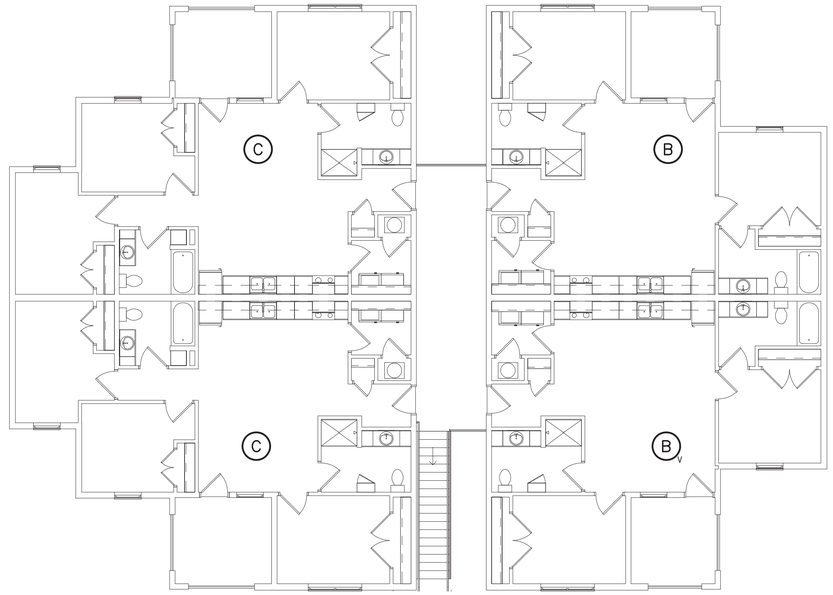
REVISIONS :

TITLE : **BLDG. 1 & 2 POWER PLAN**

SHEET : **E1** OF **E8**

PROJECT : 22028

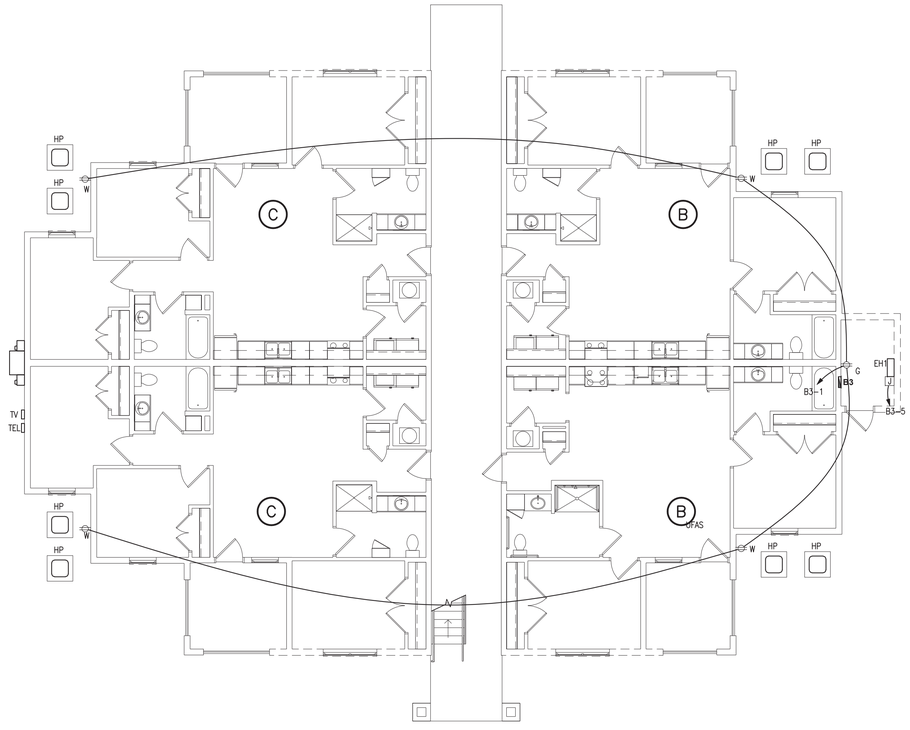
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BLDG. 3 2ND FLOOR POWER PLAN

2 / E2

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



BLDG. 3 1ST FLOOR POWER PLAN

1 / E2

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

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	1 M3	1 M5	1 E5	1 E7	1 FA1
A UFAS	2 M3	2 M5	2 E5	2 E7	2 FA1
B	1 M4	1 M6	1 E6	1 E8	1 FA2
B UFAS	2 M4	2 M6	2 E6	2 E8	2 FA2
C	3 M4	3 M6	3 E6	3 E8	3 FA2
C UFAS	4 M4	4 M6	4 E6	4 E8	4 FA2
A V	1 M3	1 M5	1 E5	1 E7	2 FA3
B V	1 M4	1 M6	1 E6	1 E8	1 FA3

NOTES:
"V" INDICATES AN AUDIO/VISUAL IMPAIRED UNIT.

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER CONTRACTOR.
4. ALL 120V., 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.

KEYED NOTES:

1. TO LIGHTS/RECEPTACLE CIRCUIT ON FLOORS ABOVE/BELOW.
2. TO PHOTOCELL AND TIMER. USE SEPARATE PHOTOCELLS FOR BREEZEWAY AND EXTERIOR LIGHTS. LOCATE TIMER IN SPRINKLER CLOSET (VERIFY).
3. PROVIDE CONSTANT POWER TO EMERGENCY LIGHTING.

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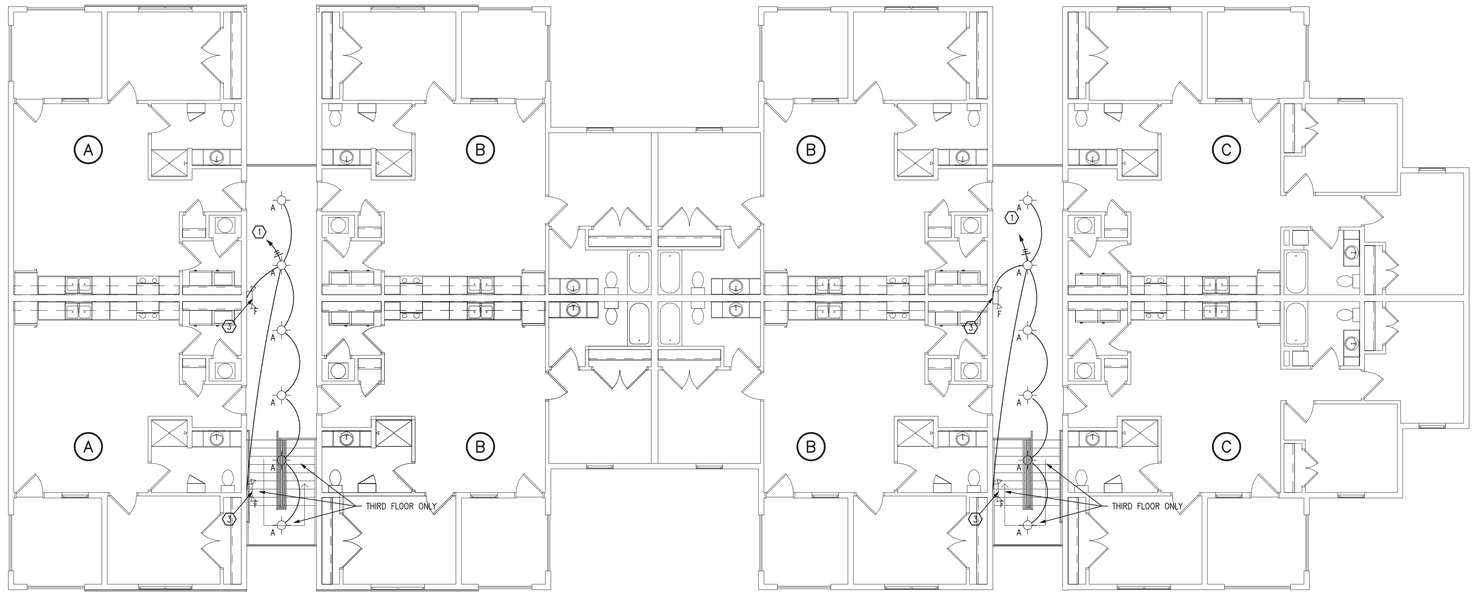
REVISIONS :

TITLE : BLDG. 3 POWER PLAN

SHEET : E2 OF E8

PROJECT : 22028

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BLDG. 1 & 2 3RD FLOOR LIGHTING PLAN

2 / E3

SCALE: 1/8" = 1'-0" (2nd FLOOR SIMMILAR)

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	1 M3	1 M5	1 E5	1 E7	1 FA1
A UFAS	2 M3	2 M5	2 E5	2 E7	2 FA1
B	1 M4	1 M6	1 E6	1 E8	1 FA2
B UFAS	2 M4	2 M6	2 E6	2 E8	2 FA2
C	3 M4	3 M6	3 E6	3 E8	3 FA2
C UFAS	4 M4	4 M6	4 E6	4 E8	4 FA2
A V	1 M3	1 M5	1 E5	1 E7	2 FA3
B V	1 M4	1 M6	1 E6	1 E8	1 FA3

NOTES:
"V" INDICATES AN AUDIO/VISUAL IMPAIRED UNIT.

GENERAL NOTES:

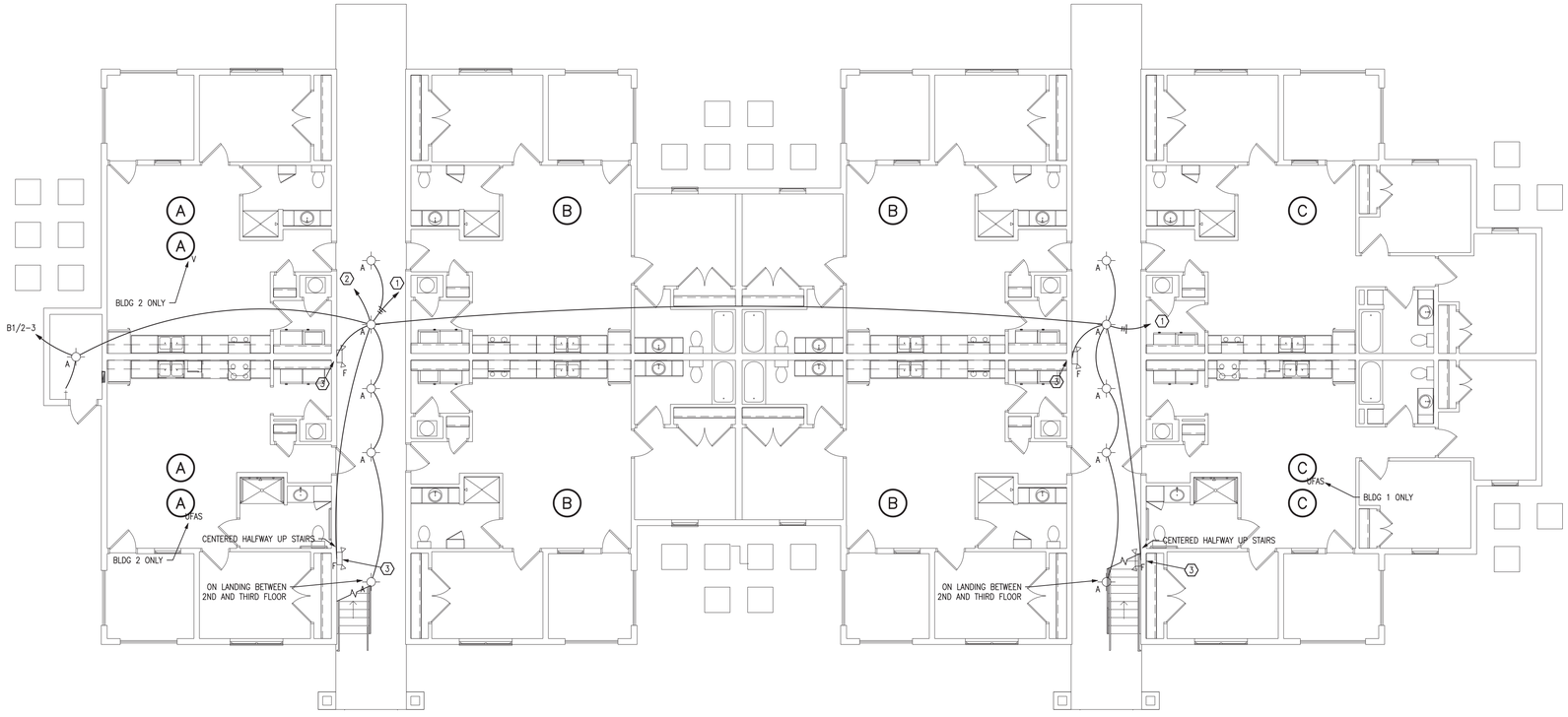
1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER CONTRACTOR.
4. ALL 120v., 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.

KEYED NOTES:

(1) TO LIGHTS/RECEPTACLE CIRCUIT ON FLOORS ABOVE/BELOW.

(2) TO PHOTOCELL AND TIMER. USE SEPARATE PHOTOCELLS FOR BREEZEWAY AND EXTERIOR LIGHTS. LOCATE TIMER IN SPRINKLER CLOSET (VERIFY).

(3) PROVIDE CONSTANT POWER TO EMERGENCY LIGHTING.



BLDG. 1 & 2 1ST FLOOR LIGHTING PLAN

1 / E3

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

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08-18-22

MALICOAT - WINSLOW ENGINEERS, INC.
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FAX 573-875-1305
FREDDIE MALICOAT, P.E.

CROSSROADS AT WESTCHESTER CIRCLE

WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08-18-22

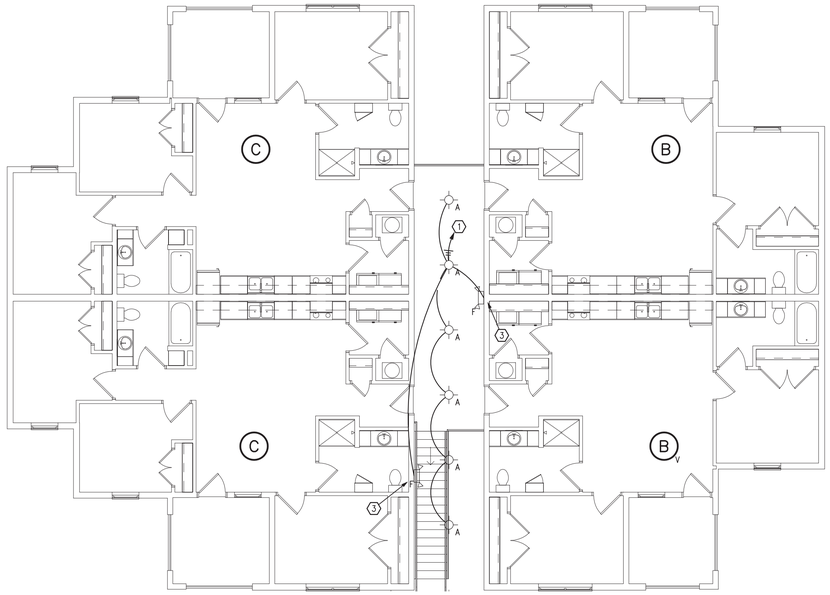
REVISIONS :

TITLE : BLDG. 1 & 2 LIGHTING PLAN

SHEET : E3 OF E8

PROJECT : 22028

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2 / E4 **BLDG. 3 2RD FLOOR LIGHTING PLAN**

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

APARTMENT PLAN SCHEDULE

APARTMENT TYPE	PLUMBING	HVAC	POWER	LIGHTING	FIRE ALARM
A	1 M3	1 M5	1 E5	1 E7	1 FA1
A UFAS	2 M3	2 M5	2 E5	2 E7	2 FA1
B	1 M4	1 M6	1 E6	1 E8	1 FA2
B UFAS	2 M4	2 M6	2 E6	2 E8	2 FA2
C	3 M4	3 M6	3 E6	3 E8	3 FA2
C UFAS	4 M4	4 M6	4 E6	4 E8	4 FA2
A V	1 M3	1 M5	1 E5	1 E7	2 FA3
B V	1 M4	1 M6	1 E6	1 E8	1 FA3

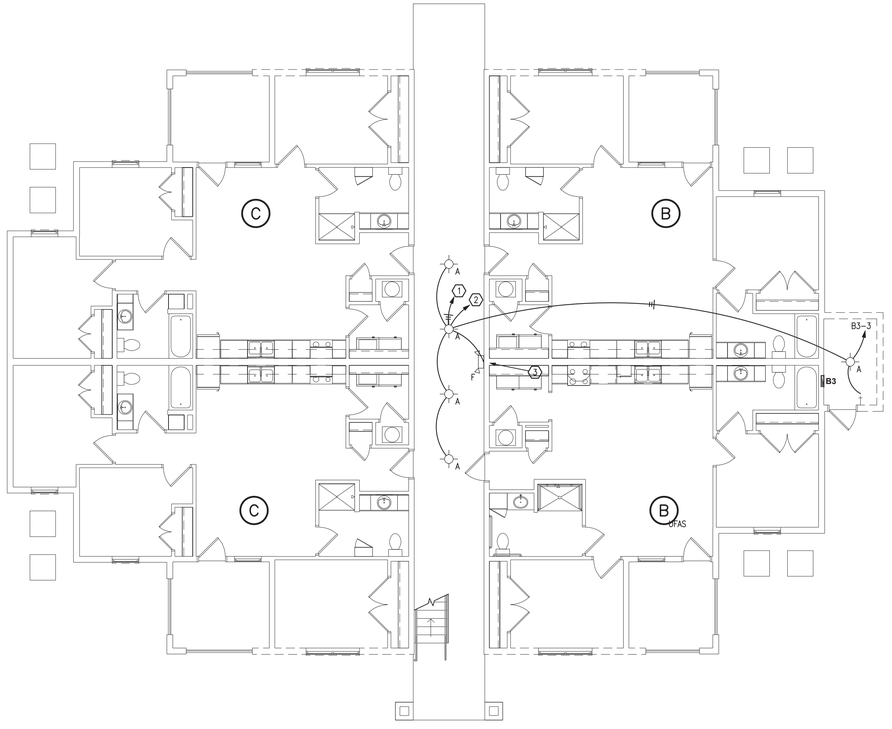
NOTES:
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GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. COORDINATE FIXTURE LOCATIONS WITH SPRINKLER CONTRACTOR.
4. ALL 120V., 20A LIGHTING AND RECEPTACLE CIRCUITS REQUIRING MORE THAN 100' OF CONDUCTORS (ONE WAY) SHALL BE #10 CONDUCTORS.

KEYED NOTES:

1. TO LIGHTS/RECEPTACLE CIRCUIT ON FLOORS ABOVE/BELOW.
2. TO PHOTOCELL AND TIMER. USE SEPARATE PHOTOCELLS FOR BREEZEWAY AND EXTERIOR LIGHTS. LOCATE TIMER IN SPRINKLER CLOSET (VERIFY).
3. PROVIDE CONSTANT POWER TO EMERGENCY LIGHTING.



1 / E4 **BLDG. 3 1ST FLOOR LIGHTING PLAN**

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

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08-18-22

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CROSSROADS AT WESTCHESTER CIRCLE

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LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

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DATE : 08-18-22

REVISIONS :

TITLE : **BLDG. 3 LIGHTING PLAN**

SHEET : **E4** OF **E8**

PROJECT : 22028

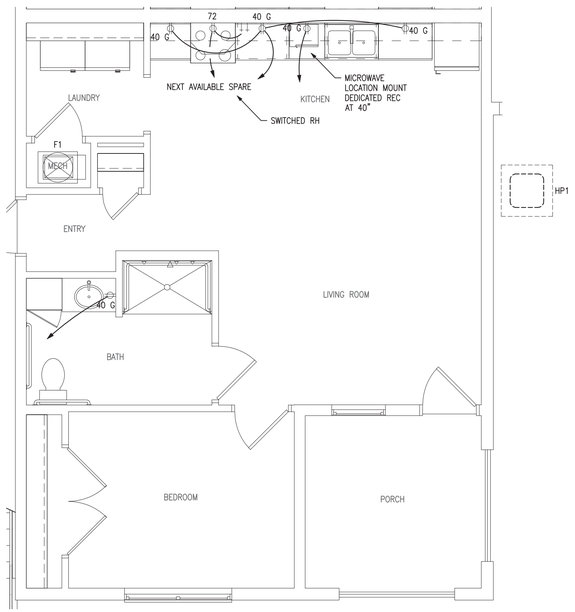
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GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. ALL 120 VOLT, SINGLE PHASE, 15 & 20 AMPERE BRANCH CIRCUITS SUPPLYING DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, KITCHENS, LAUNDRY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT PER NEC 210.12(A).
4. TAMPER RESISTANT RECEPTACLES IN ALL DWELLING UNITS IN AREAS SPECIFIED IN NEC 210.52, ALL NONLOCKING-TYPE 125 VOLT, 15 & 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.

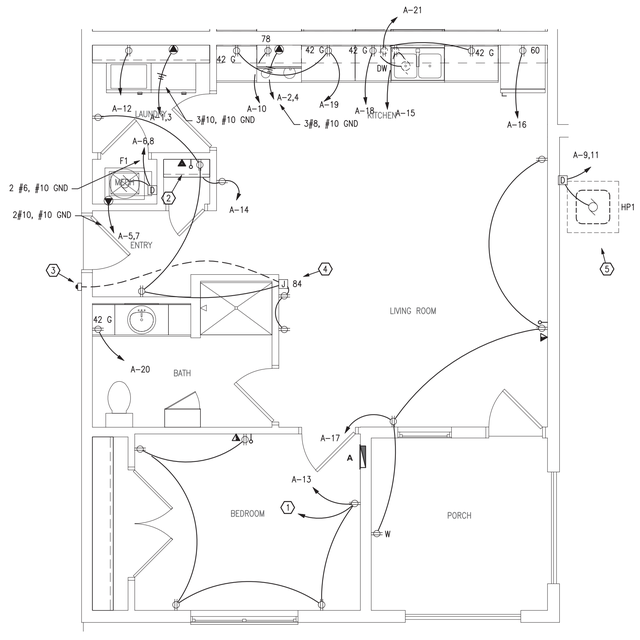
KEYED NOTES:

1. UP TO LIGHT (VIA "LINE" SIDE IF CONNECTING TO A GFI).
2. PHONE AND CATV SERVICE CONNECTION BOXES.
3. DOOR BELL. FOR A/V UNITS, SEE FIRE ALARM PLAN FOR DIFFERENT SYSTEM.
4. CHIME/TRANSFORMER. FOR A/V UNITS, SEE FIRE ALARM PLAN FOR DIFFERENT SYSTEM.
5. SEE BUILDING PLANS FOR ACTUAL CONDENSING UNIT LOCATIONS. MOUNT AND LABEL EACH DISCONNECT ON BUILDING WALL ADJACENT TO CONDENSING UNIT.



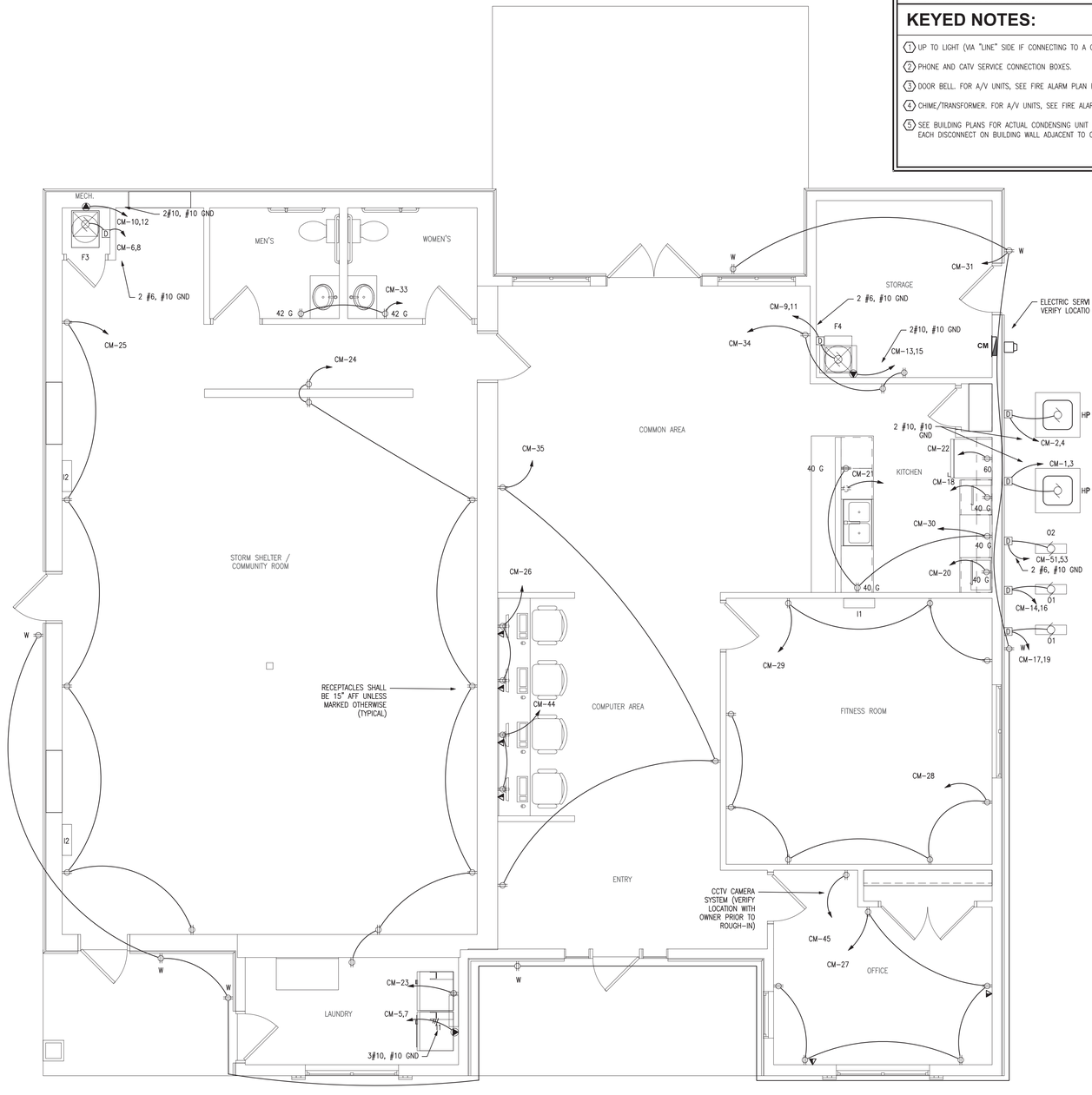
2 / E5 — 1BR UFAS POWER PLAN

SCALE: 1/4" = 1'-0" (DIFFERENCES SHOW)



1 / E5 — 1BR FHA/TYPICAL POWER PLAN

SCALE: 1/4" = 1'-0"



3 / E5 — COMMUNITY BLDG POWER PLAN

SCALE: 1/4" = 1'-0"

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LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

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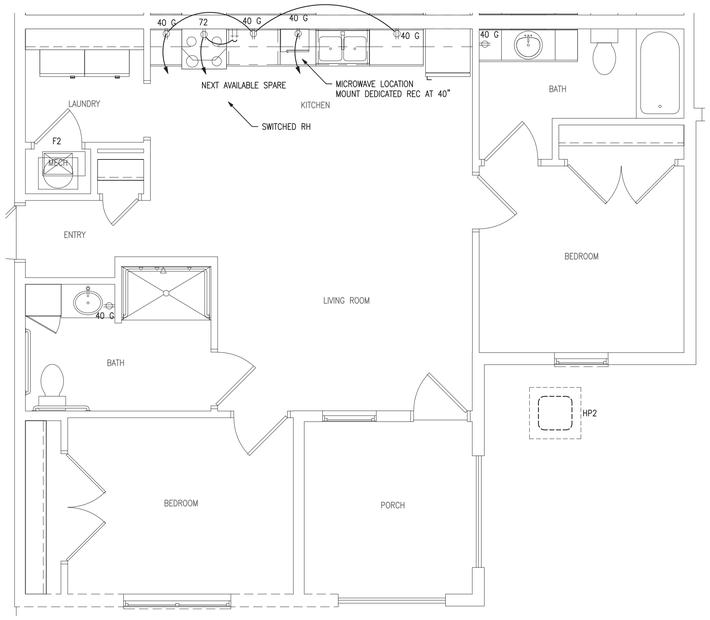
REVISIONS :

TITLE : **1BR & COMMUNITY BLDG POWER PLAN**

SHEET : **E5** OF **E8**

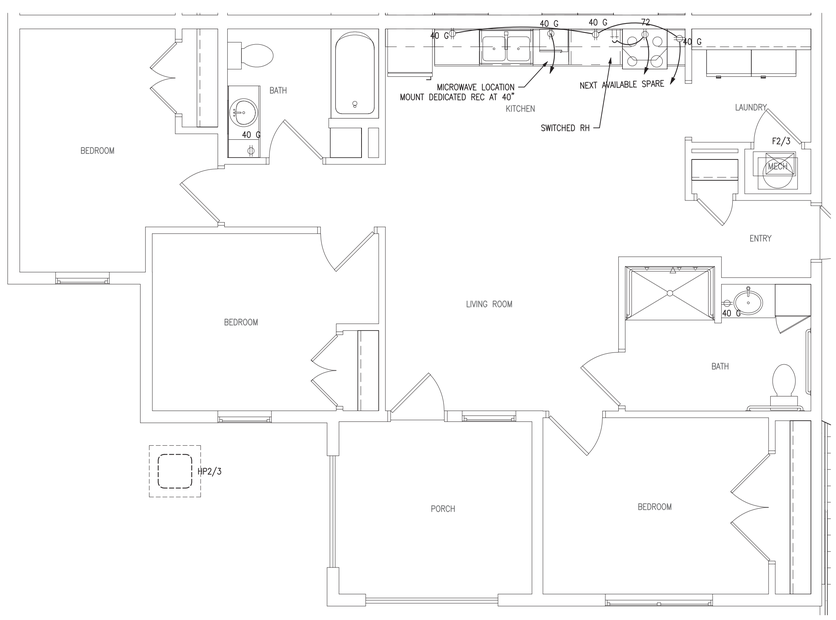
PROJECT : 22028

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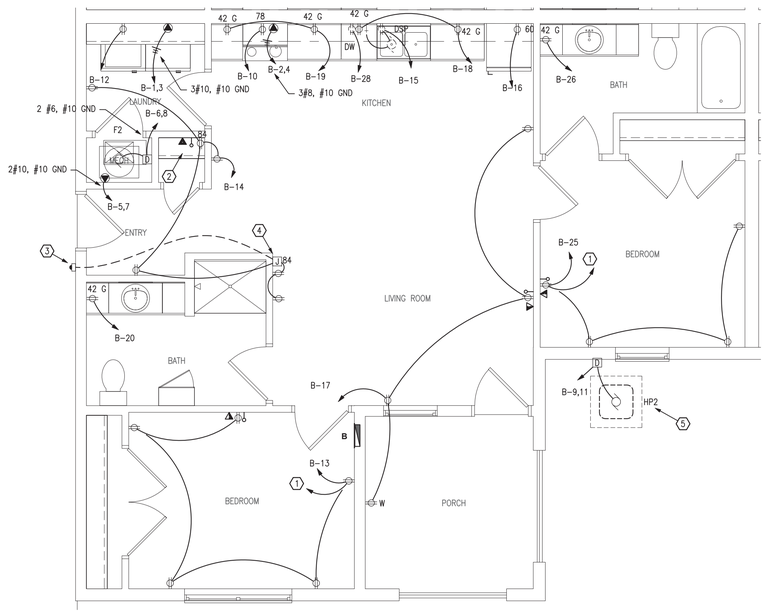
2 2BR UFAS POWER PLAN

E6 SCALE: 1/4" = 1'-0" (DIFFERENCES SHOWN)



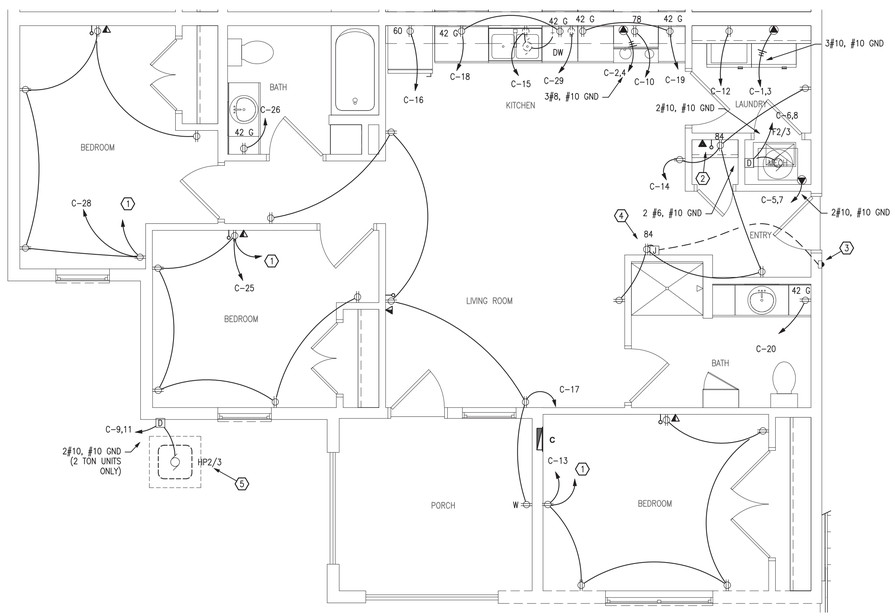
4 3BR UFAS POWER PLAN

E6 SCALE: 1/4" = 1'-0" (DIFFERENCES SHOWN)



1 2BR FHA/TYPICAL POWER PLAN

E6 SCALE: 1/4" = 1'-0"



3 3BR FHA/TYPICAL POWER PLAN

E6 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. ALL 120 VOLT, SINGLE PHASE, 15 & 20 AMPERE BRANCH CIRCUITS SUPPLYING DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, KITCHENS, LAUNDRY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT PER NEC 210.12(A).
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KEYED NOTES:

1. UP TO LIGHT (VIA "LINE" SIDE IF CONNECTING TO A GFI).
2. PHONE AND CATV SERVICE CONNECTION BOXES.
3. DOOR BELL. FOR A/V UNITS, SEE FIRE ALARM PLAN FOR DIFFERENT SYSTEM.
4. CHIME/TRANSFORMER. FOR A/V UNITS, SEE FIRE ALARM PLAN FOR DIFFERENT SYSTEM.
5. SEE BUILDING PLANS FOR ACTUAL CONDENSING UNIT LOCATIONS. MOUNT AND LABEL EACH DISCONNECT ON BUILDING WALL ADJACENT TO CONDENSING UNIT.

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OK# 17945
PROFESSIONAL ENGINEER
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17945
OKLAHOMA
REGISTERED
08-18-22

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FREDDIE MALICOAT, P.E.

CROSSROADS AT WESTCHESTER CIRCLE

WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08-18-22

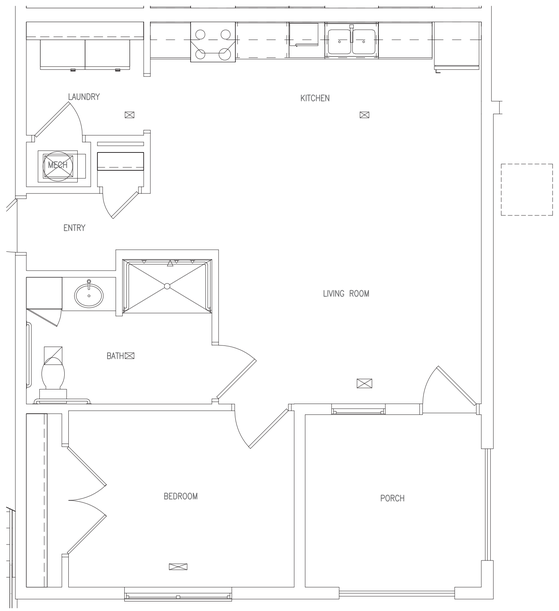
REVISIONS :

TITLE : **2 & 3 BR POWER PLANS**

SHEET : **E6** OF **E8**

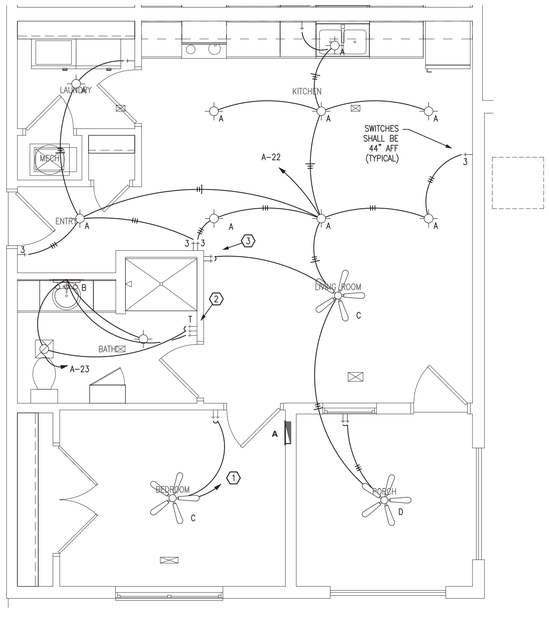
PROJECT : 22028

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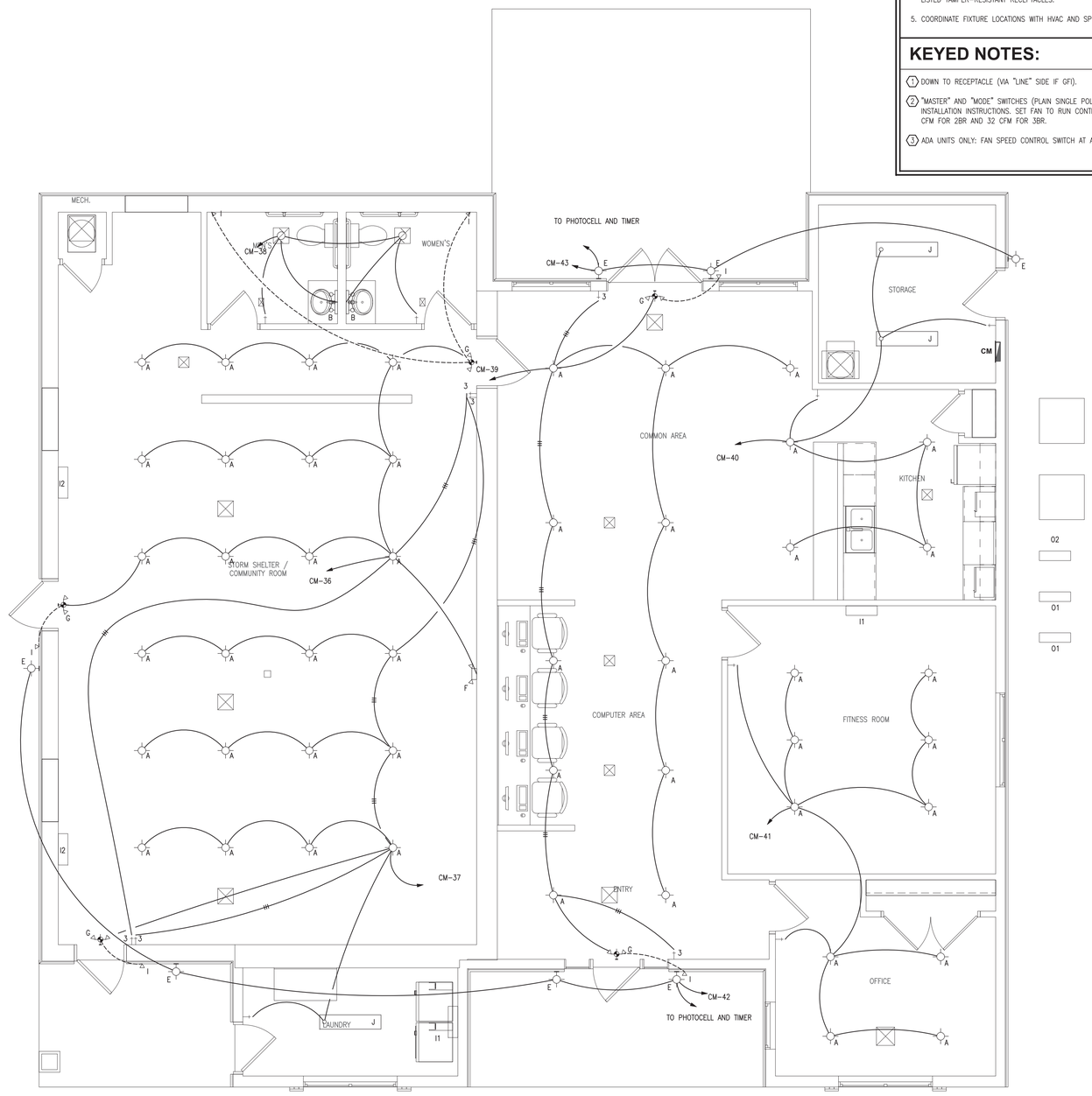
2 / E7 1BR UFAS LIGHTING PLAN

SCALE: 1/4" = 1'-0" SIMMILAR TO TYP. 1BR



1 / E7 1BR FHA/TYPICAL LIGHTING PLAN

SCALE: 1/4" = 1'-0"



3 / E7 COMMUNITY BLDG LIGHTING PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
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5. COORDINATE FIXTURE LOCATIONS WITH HVAC AND SPRINKLER CONTRACTORS.

KEYED NOTES:

1. DOWN TO RECEPTACLE (VIA "LINE" SIDE IF GFI).
2. "MASTER" AND "MODE" SWITCHES (PLAIN SINGLE POLE SWITCHES) WIRED PER FAN INSTALLATION INSTRUCTIONS. SET FAN TO RUN CONTINUOUS AT 40 CFM IN 1BR, 26 CFM FOR 2BR AND 32 CFM FOR 3BR.
3. ADA UNITS ONLY: FAN SPEED CONTROL SWITCH AT ACCESSIBLE HEIGHT.

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REGISTERED PROFESSIONAL ENGINEER
FREDDIE L MALICOAT 17945 OKLAHOMA
08-18-22

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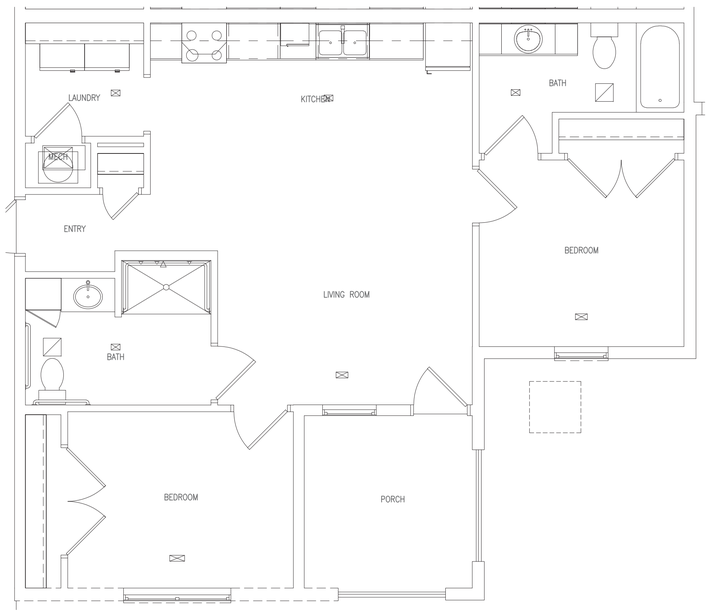
REVISIONS :

TITLE : 1BR & COMMUNITY BLDG LIGHTING PLAN

SHEET : E7 OF E8

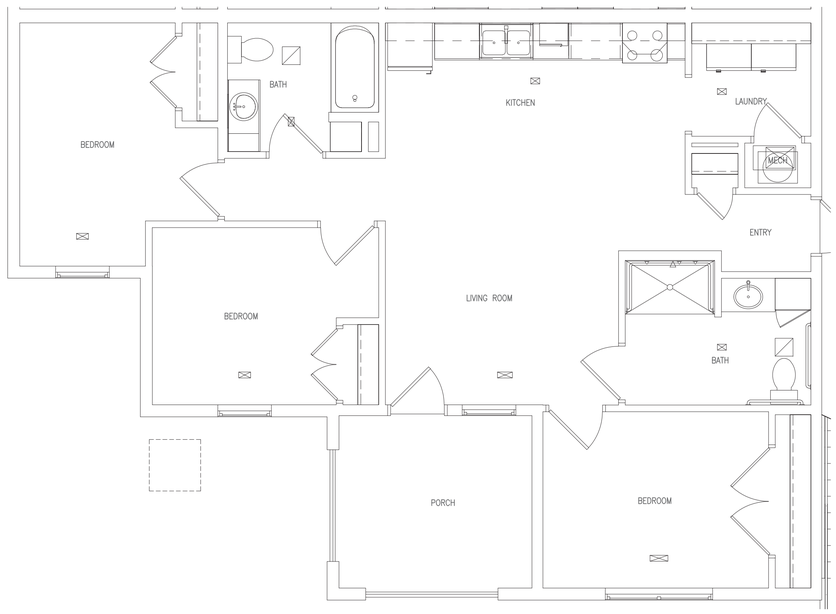
PROJECT : 22028

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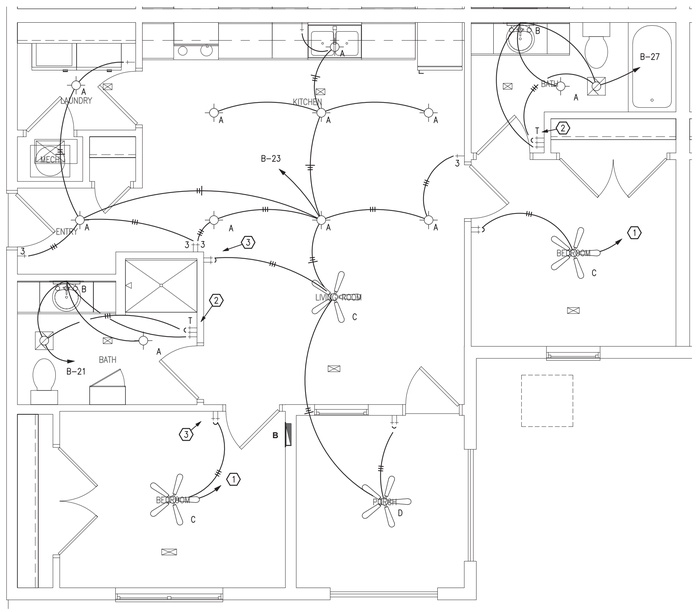
2 / E8 2BR UFAS LIGHTING PLAN

SCALE: 1/4" = 1'-0" SIMMILAR TO TYP. 2 BR



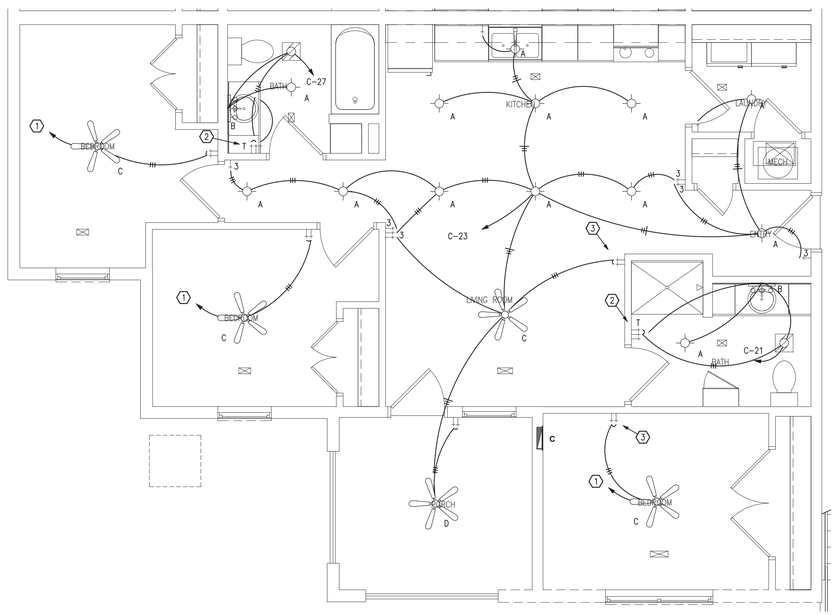
4 / E8 3BR UFAS LIGHTING PLAN

SCALE: 1/4" = 1'-0" SIMMILAR TO TYP. 3 BR



1 / E8 2BR FHA/TYPICAL LIGHTING PLAN

SCALE: 1/4" = 1'-0"



3 / E8 3BR FHA/TYPICAL LIGHTING PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. SEE SHEET ME1 NOTES FOR ALL SYSTEMS.
2. ALL LIGHT FIXTURE, SWITCH, AND RECEPTACLE LOCATIONS SHALL BE FIELD VERIFIED WITH OWNER FOR EACH TYPE OF UNIT BEFORE INSTALLATION.
3. ALL 120 VOLT, SINGLE PHASE, 15 & 20 AMPERE BRANCH CIRCUITS SUPPLYING DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, KITCHENS, LAUNDRY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT PER NEC 210.12(A).
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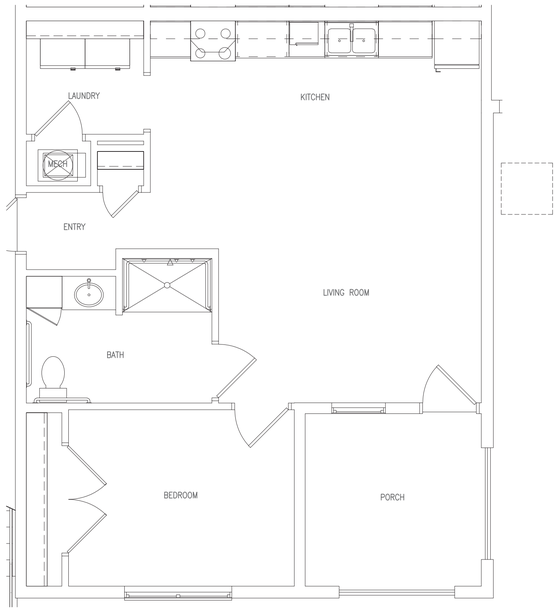
REVISIONS :

TITLE : 2 & 3 BR LIGHTING PLANS

SHEET : E8 OF E8

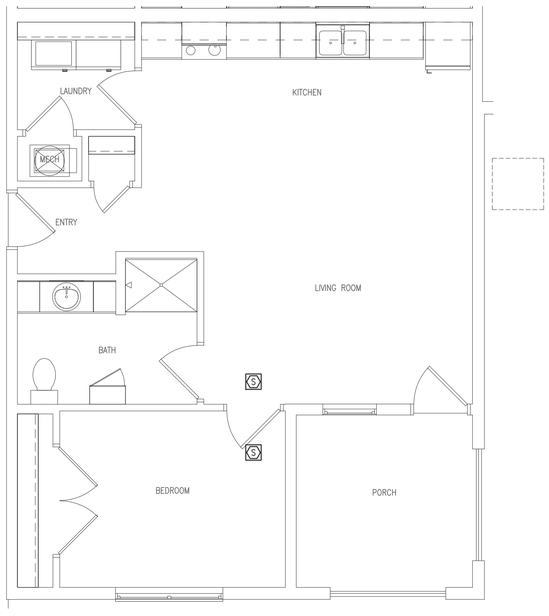
PROJECT : 22028

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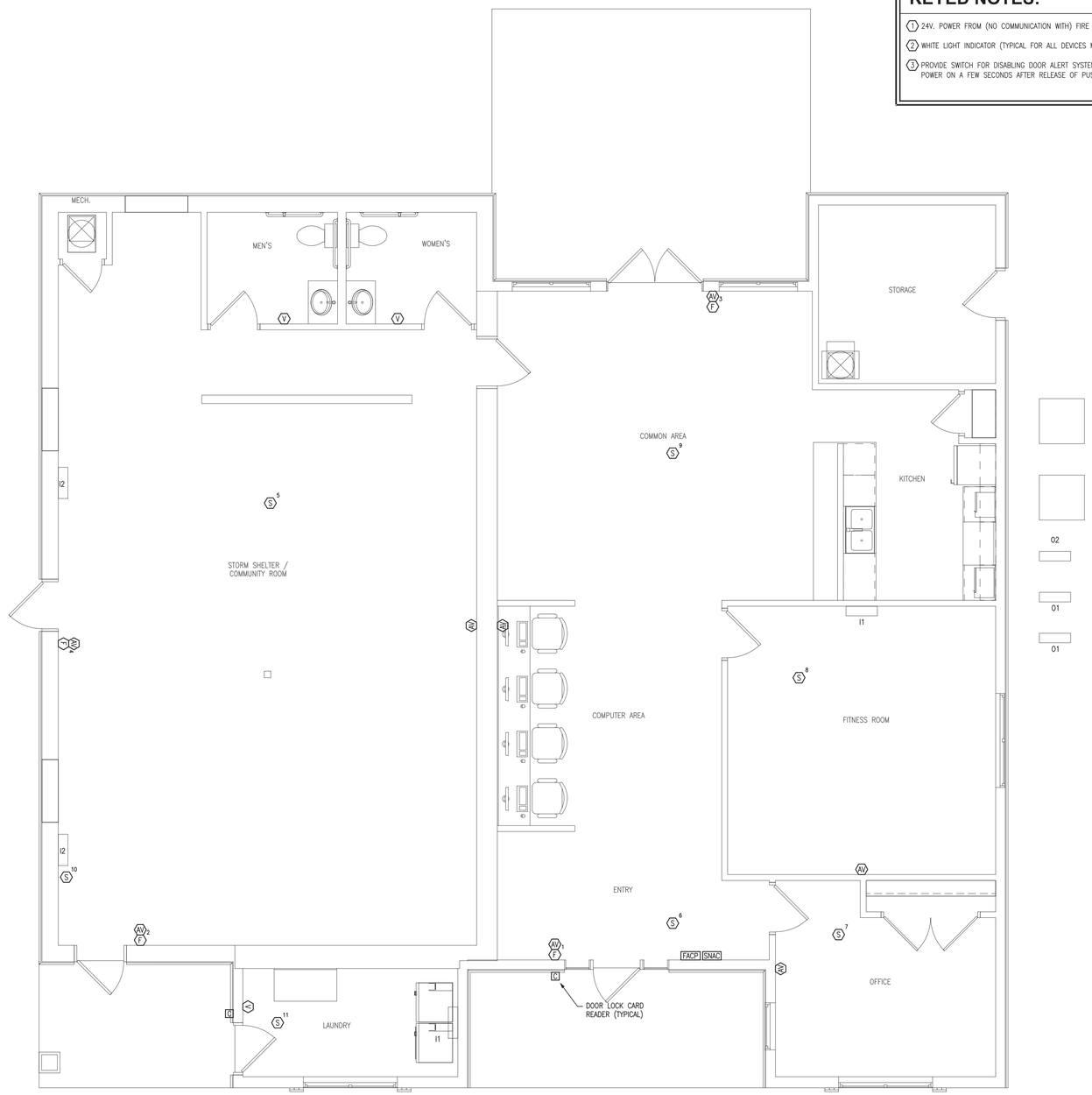
2 FA1 1BR UFAS FIRE ALARM PLAN

SCALE: 1/4" = 1'-0" (SAME AS TYPICAL)



1 FA1 1BR FHA/TYPICAL FIRE ALARM PLAN

SCALE: 1/4" = 1'-0"



3 FA1 COMMUNITY BLDG FIRE ALARM PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. PROVIDE VISUAL DEVICES SHOWN ONLY IN APARTMENTS MARKED AUDIO/VISUAL (A/V).
2. SUPPLY SEPARATE 20V DC POWER FOR ALL AUDIBLE SMOKE DETECTORS IN UNITS.
3. ALARMS AND TROUBLES SHALL ANNUNCIATE ON DISPLAY OF BUILDING FACP AND LEASING OFFICE MASTER FACP, LEASING OFFICE FACP TO INCLUDE DACT FOR ADDRESSABLE OFF PREMISE REPORTING.
4. ADJUST NUMBER OF CIRCUITS AND NUMBER OF DEVICES PER CIRCUIT AS NEEDED TO ENSURE 20% SPARE CAPACITY PER CIRCUIT (TYPICAL).

KEYED NOTES:

1. 24V. POWER FROM (NO COMMUNICATION WITH) FIRE ALARM CONTROL PANEL (FACP).
2. WHITE LIGHT INDICATOR (TYPICAL FOR ALL DEVICES MARKED "W").
3. PROVIDE SWITCH FOR DISABLING DOOR ALERT SYSTEM AND TIMED RELAY TO HOLD POWER ON A FEW SECONDS AFTER RELEASE OF PUSHBUTTON SWITCH (TYPICAL).

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OK# 17945

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FREDDIE L. MALICOAT 17945
OKLAHOMA
08-18-22

MALICOAT - WINSLOW ENGINEERS, INC.
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CROSSROADS AT WESTCHESTER CIRCLE

WEST GORE BLVD
LAWTON, COMANCHE COUNTY, OKLAHOMA, 73505

CONTRACTOR SHALL CHECK & VERIFY ALL DIMENSIONS & CONDITIONS AT JOB SITE.

DATE : 08-18-22

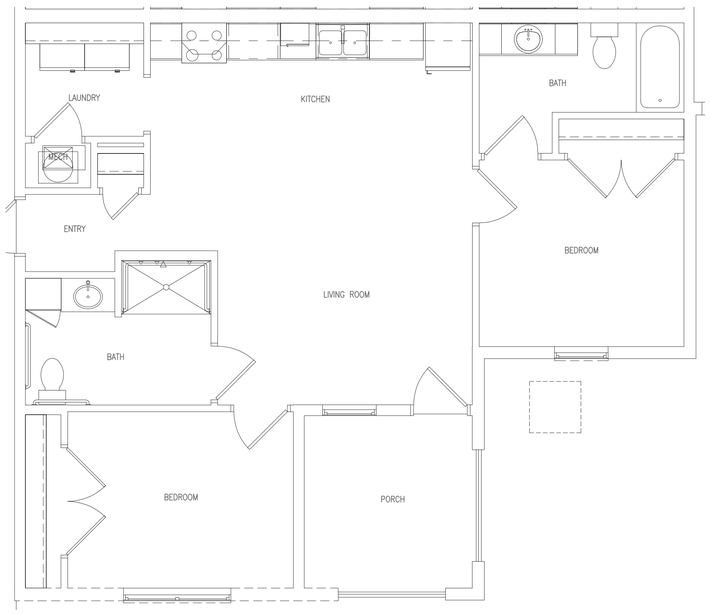
REVISIONS :

TITLE : 1BR & COMMUNITY BLDG FIRE ALARM PLAN

SHEET : FA1 OF FA4

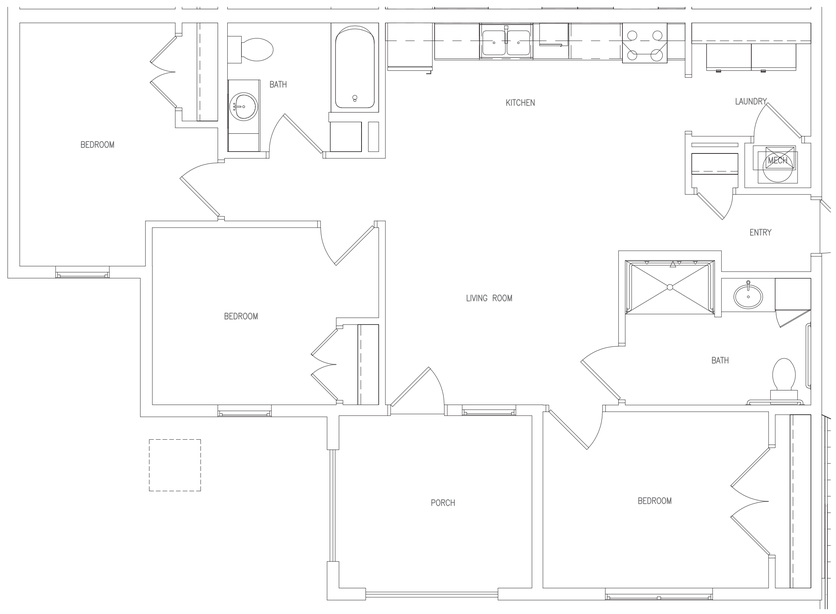
PROJECT : 22028

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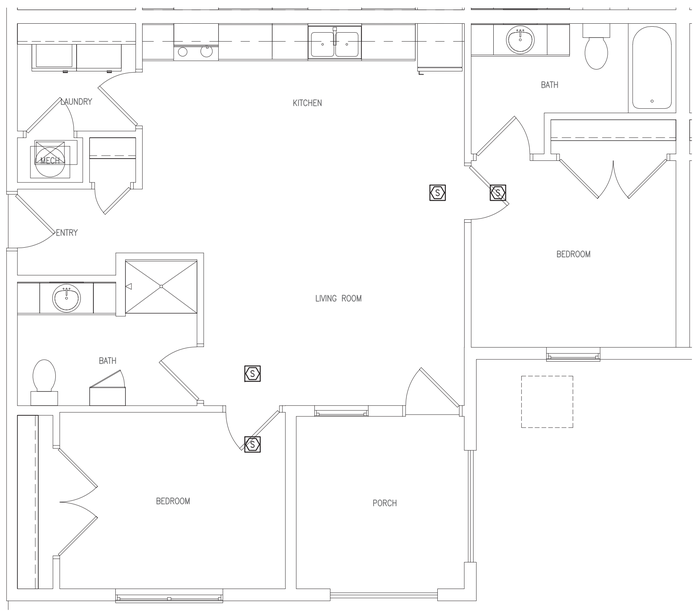
2BR UFAS FIRE ALARM PLAN

2 / FA2 SCALE: 1/4" = 1'-0" (SAME AS TYPICAL)



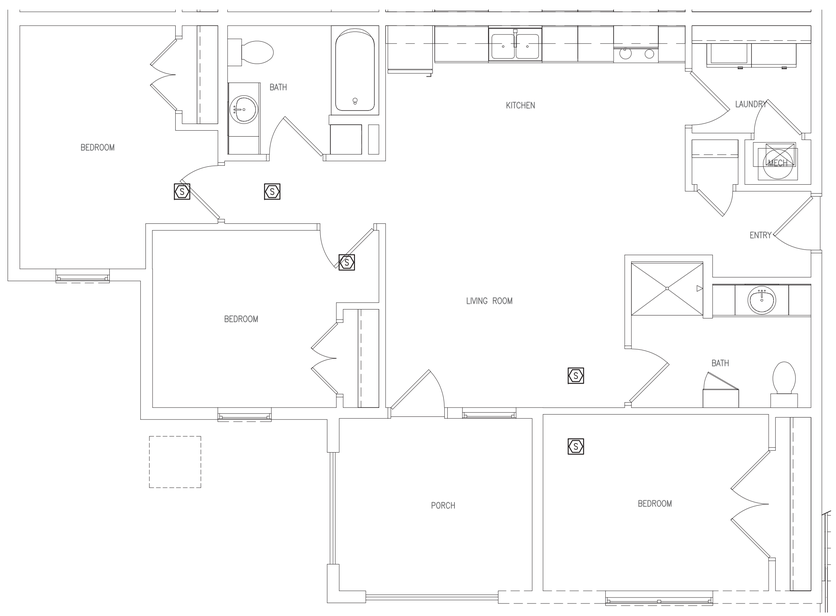
3BR UFAS FIRE ALARM PLAN

4 / FA2 SCALE: 1/4" = 1'-0" (SAME AS TYPICAL)



2BR FHA/TYPICAL FIRE ALARM PLAN

1 / FA2 SCALE: 1/4" = 1'-0"



3BR FHA/TYPICAL FIRE ALARM PLAN

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DATE : 08-18-22

REVISIONS :

TITLE : 2 & 3 BR FIRE ALARM PLAN

SHEET : FA2 OF FA4

PROJECT : 22028

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GENERAL NOTES:

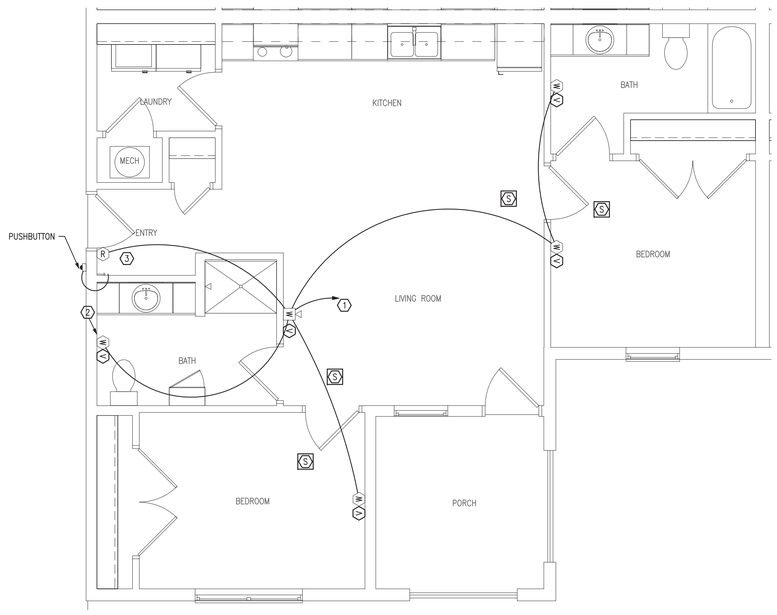
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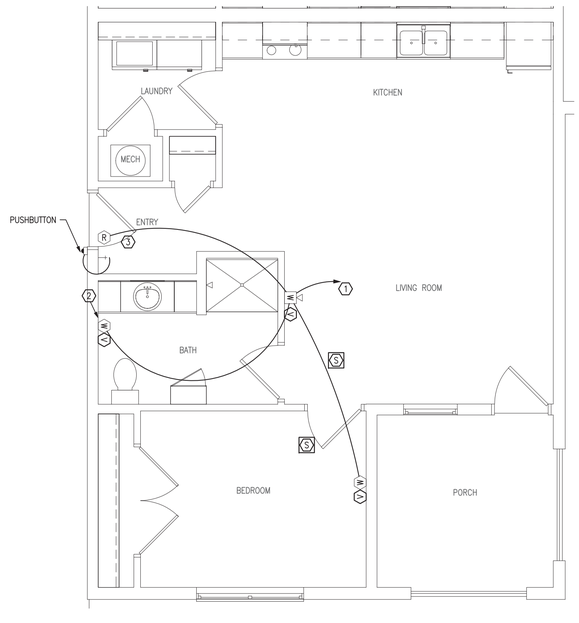
(1) 24V. POWER FROM (NO COMMUNICATION WITH) FIRE ALARM CONTROL PANEL (FACP).

(2) WHITE LIGHT INDICATOR (TYPICAL FOR ALL DEVICES MARKED "W").

(3) PROVIDE SWITCH FOR DISABLING DOOR ALERT SYSTEM AND TIMED RELAY TO HOLD POWER ON A FEW SECONDS AFTER RELEASE OF PUSHBUTTON SWITCH (TYPICAL).



1 FA3 **2 BR AV FIRE ALARM PLAN**
SCALE: 1/4" = 1'-0"



2 FA3 **1 BR AV FIRE ALARM PLAN**
SCALE: 1/4" = 1'-0"

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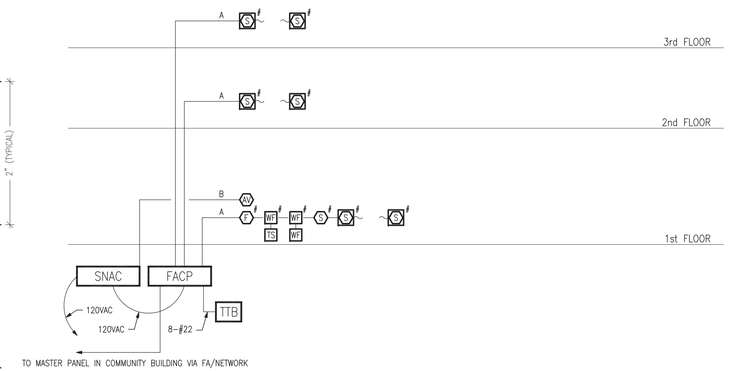
REVISIONS :

TITLE : **1 & 2 BR AV FIRE ALARM PLAN**

SHEET : **FA3** OF **FA4**

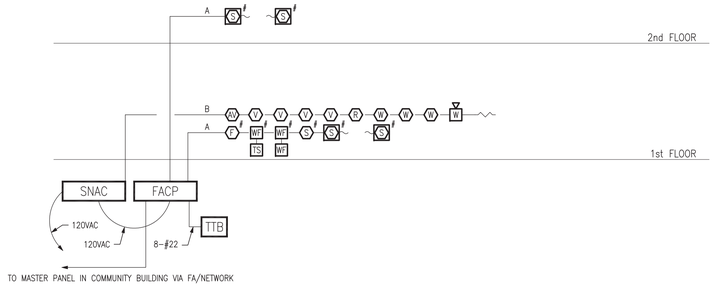
PROJECT : 22028

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1 FA4 **FIRE ALARM RISER DIAGRAM**

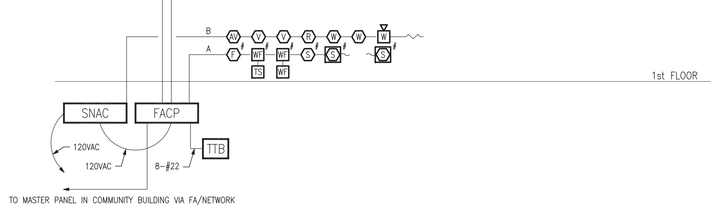
NO SCALE — BUILDING 1



2 FA4 **FIRE ALARM RISER DIAGRAM**

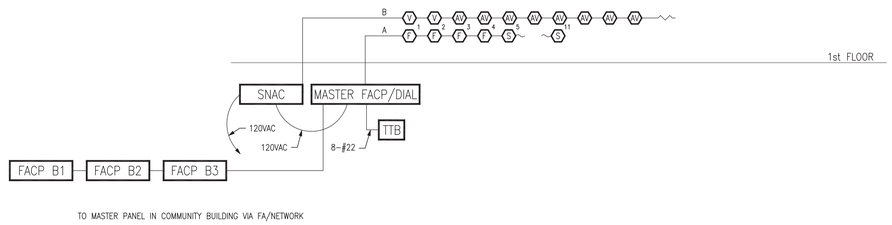
NO SCALE — BUILDING 3

VERIFY NUMBER OF DEVICES IN EACH BUILDING, ASSIGN UNIQUE ID TO EACH DEVICE



3 FA4 **FIRE ALARM RISER DIAGRAM**

NO SCALE — BUILDING 2



4 FA4 **FIRE ALARM RISER DIAGRAM**

NO SCALE — COMMUNITY BLDG.

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F.A. SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL MODEL: GW-FCI-S3
SNAC	AUXILIARY POWER SUPPLY
F	FCI ADDRESSABLE PULL STATION
S	FCI ADDRESSABLE SMOKE DETECTOR
S	FCI ADDRESSABLE SMOKE DETECTOR WITH MINI HORN (LOW FREQUENCY)
H	FCI ANALOG HEAT DETECTOR
M	MAGNETIC DOOR HOLD
AV	FCI AUDIO / VISUAL
V	FCI VISUAL
S	120V SMOKE DETECTOR WITH MINI HORN (LOW FREQUENCY) AND BATTERY BACKUP
V	FCI MINI HORN W/ STROBE
WF	WATERFLOW SWITCH
TS	TAMPER SWITCH
R	RELAY
CO	CARBON MONOXIDE DETECTOR
	CORNELL 4200 SERIES AREA OF REFUGE AUDIO/VISUAL INTERCOM BUTTON IN STAIRS, CONTROL PANEL IN LOBBY, WITH CONNECTION TO PUBLIC PHONE SYSTEM.
	RESISTOR
A	18/2 FPLP ANALOG ADDRESSABLE LOOP (PROVIDE 2 SEPARATE LOOPS)
B	14/2 FPLP AUDIO/VISUAL CIRCUIT
C	14/2 FPLP DOOR HOLDER CIRCUIT

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SHEET : **FA4** OF **FA4**

PROJECT : 22028

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